ANALYTICAL REPORT

Job Number: 410-22411-1

Job Description: fYNOP Monthly Surface Water

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

Attention: Christopher O'Neil

Approved for release.
Marrissa C Williams
Project Manager
12/7/2020 9:01 AM

Marrissa C Williams, Project Manager
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12/07/2020

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

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

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Qualifiers

GC/MS VOA

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

Glossary

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

Job Narrative
410-22411-1

Receipt
The samples were received on 12/1/2020 5:01 PM; the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 0.5°C

GC/MS VOA
Method 8260D_LL: The continuing calibration verification (CCV) associated with batch 410-73040 recovered outside acceptance criteria, low biased, for Acetone. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Non-detections of the affected analytes are reported. Any detections are considered estimated.

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

Detection Summary

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

Job ID: 410-22411-1

Client Sample ID: HD-COD-SW-6-0/1-0 — Lab Sample ID: 410-22411-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	3.0	J ^c	5.0	0.90	ug/L	1		8260D	Total/NA

Client Sample ID: HD-COD-SW-7-0/1-0 — Lab Sample ID: 410-22411-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	2.9	J	5.0	0.90	ug/L	1		8260D	Total/NA
Chloromethane	0.094	J	0.50	0.060	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.067	J	0.50	0.050	ug/L	1		8260D	Total/NA
Trichloroethene	0.082	J	0.50	0.060	ug/L	1		8260D	Total/NA

Client Sample ID: HD-COD-SW-8-0/1-0 — Lab Sample ID: 410-22411-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	2.7	J	5.0	0.90	ug/L	1		8260D	Total/NA
Chloromethane	0.072	J	0.50	0.060	ug/L	1		8260D	Total/NA
Toluene	0.079	J	0.50	0.070	ug/L	1		8260D	Total/NA

Client Sample ID: HD-COD-SW-9-0/1-0 — Lab Sample ID: 410-22411-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	3.2	J	5.0	0.90	ug/L	1		8260D	Total/NA
Chloromethane	0.063	J	0.50	0.060	ug/L	1		8260D	Total/NA
Toluene	0.89		0.50	0.070	ug/L	1		8260D	Total/NA

Client Sample ID: HD-COD-SW-13-0/1-0 — Lab Sample ID: 410-22411-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	3.5	J	5.0	0.90	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.056	J	0.50	0.050	ug/L	1		8260D	Total/NA

Client Sample ID: HD-COD-SW-15-0/1-0 — Lab Sample ID: 410-22411-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	2.6	J	5.0	0.90	ug/L	1		8260D	Total/NA
Chloroform	0.11	J	0.50	0.090	ug/L	1		8260D	Total/NA
Chloromethane	0.061	J	0.50	0.060	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.23	J	0.50	0.050	ug/L	1		8260D	Total/NA
Tetrachloroethene	0.64		0.50	0.060	ug/L	1		8260D	Total/NA
Trichloroethene	0.29	J	0.50	0.060	ug/L	1		8260D	Total/NA

Client Sample ID: HD-COD-SW-16-0/1-0 — Lab Sample ID: 410-22411-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	3.4	J ^c	5.0	0.90	ug/L	1		8260D	Total/NA

Client Sample ID: HD-COD-SW-17-0/1-0 — Lab Sample ID: 410-22411-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	3.0	J ^c	5.0	0.90	ug/L	1		8260D	Total/NA

Client Sample ID: HD-COD-SW-26-0/1-0 — Lab Sample ID: 410-22411-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	2.3	J ^c	5.0	0.90	ug/L	1		8260D	Total/NA
Chloroform	0.093	J	0.50	0.090	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: HD-COD-SW-26-0/1-0 (Continued)
Lab Sample ID: 410-22411-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	0.063	J	0.50	0.060	ug/L	1		8260D	Total/NA

Client Sample ID: HD-COD-SW-27-0/1-0
Lab Sample ID: 410-22411-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	4.2	J ^c	5.0	0.90	ug/L	1		8260D	Total/NA
Carbon disulfide	0.067	J	1.0	0.060	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.050	J	0.50	0.050	ug/L	1		8260D	Total/NA
Trichloroethene	0.072	J	0.50	0.060	ug/L	1		8260D	Total/NA

Client Sample ID: HD-COD-SW-28-0/1-0
Lab Sample ID: 410-22411-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	2.4	J ^c	5.0	0.90	ug/L	1		8260D	Total/NA
Toluene	0.87		0.50	0.070	ug/L	1		8260D	Total/NA

Client Sample ID: HD-COD-SW-29-0/1-0
Lab Sample ID: 410-22411-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	3.7	J ^c	5.0	0.90	ug/L	1		8260D	Total/NA
Toluene	0.13	J	0.50	0.070	ug/L	1		8260D	Total/NA

Client Sample ID: HD-QC1-0/1-1
Lab Sample ID: 410-22411-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	3.4	J ^c	5.0	0.90	ug/L	1		8260D	Total/NA

Client Sample ID: HD-QC1-0/1-2
Lab Sample ID: 410-22411-14

No Detections.

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

Lab Sample ID: 410-22411-1

Date Collected: 11/30/20 13:40

Matrix: Water

Date Received: 12/01/20 17:01

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			12/04/20 16:06	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			12/04/20 16:06	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			12/04/20 16:06	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			12/04/20 16:06	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			12/04/20 16:06	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			12/04/20 16:06	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			12/04/20 16:06	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			12/04/20 16:06	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			12/04/20 16:06	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			12/04/20 16:06	1
2-Hexanone	ND		5.0	0.60	ug/L			12/04/20 16:06	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			12/04/20 16:06	1
Acetone	**3.0**	**J ^c**	5.0	0.90	ug/L			12/04/20 16:06	1
Benzene	ND		0.50	0.050	ug/L			12/04/20 16:06	1
Bromochloromethane	ND		0.50	0.050	ug/L			12/04/20 16:06	1
Bromodichloromethane	ND		0.50	0.050	ug/L			12/04/20 16:06	1
Bromoform	ND		1.0	0.30	ug/L			12/04/20 16:06	1
Bromomethane	ND		0.50	0.070	ug/L			12/04/20 16:06	1
Carbon disulfide	ND		1.0	0.060	ug/L			12/04/20 16:06	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			12/04/20 16:06	1
Chlorobenzene	ND		0.50	0.060	ug/L			12/04/20 16:06	1
Chloroethane	ND		0.50	0.070	ug/L			12/04/20 16:06	1
Chloroform	ND		0.50	0.090	ug/L			12/04/20 16:06	1
Chloromethane	ND		0.50	0.060	ug/L			12/04/20 16:06	1
cis-1,2-Dichloroethene	ND		0.50	0.050	ug/L			12/04/20 16:06	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			12/04/20 16:06	1
Dibromochloromethane	ND		0.50	0.070	ug/L			12/04/20 16:06	1
Ethylbenzene	ND		0.50	0.060	ug/L			12/04/20 16:06	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			12/04/20 16:06	1
Methylene Chloride	ND		0.50	0.070	ug/L			12/04/20 16:06	1
Styrene	ND		0.50	0.050	ug/L			12/04/20 16:06	1
Tetrachloroethene	ND		0.50	0.060	ug/L			12/04/20 16:06	1
Toluene	ND		0.50	0.070	ug/L			12/04/20 16:06	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			12/04/20 16:06	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			12/04/20 16:06	1
Trichloroethene	ND		0.50	0.060	ug/L			12/04/20 16:06	1
Vinyl chloride	ND		0.50	0.10	ug/L			12/04/20 16:06	1
Xylenes, Total	ND		1.0	0.15	ug/L			12/04/20 16:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*80 - 120*		*12/04/20 16:06*	*1*
Dibromofluoromethane (Surr)	*100*		*80 - 120*		*12/04/20 16:06*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*12/04/20 16:06*	*1*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*12/04/20 16:06*	*1*

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

Lab Sample ID: 410-22411-2

Date Collected: 11/30/20 10:00

Matrix: Water

Date Received: 12/01/20 17:01

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			12/03/20 16:11	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			12/03/20 16:11	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			12/03/20 16:11	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			12/03/20 16:11	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			12/03/20 16:11	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			12/03/20 16:11	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			12/03/20 16:11	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			12/03/20 16:11	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			12/03/20 16:11	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			12/03/20 16:11	1
2-Hexanone	ND		5.0	0.60	ug/L			12/03/20 16:11	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			12/03/20 16:11	1
Acetone	**2.9**	**J**	5.0	0.90	ug/L			12/03/20 16:11	1
Benzene	ND		0.50	0.050	ug/L			12/03/20 16:11	1
Bromochloromethane	ND		0.50	0.050	ug/L			12/03/20 16:11	1
Bromodichloromethane	ND		0.50	0.050	ug/L			12/03/20 16:11	1
Bromoform	ND		1.0	0.30	ug/L			12/03/20 16:11	1
Bromomethane	ND		0.50	0.070	ug/L			12/03/20 16:11	1
Carbon disulfide	ND		1.0	0.060	ug/L			12/03/20 16:11	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			12/03/20 16:11	1
Chlorobenzene	ND		0.50	0.060	ug/L			12/03/20 16:11	1
Chloroethane	ND		0.50	0.070	ug/L			12/03/20 16:11	1
Chloroform	ND		0.50	0.090	ug/L			12/03/20 16:11	1
Chloromethane	**0.094**	**J**	0.50	0.060	ug/L			12/03/20 16:11	1
cis-1,2-Dichloroethene	**0.067**	**J**	0.50	0.050	ug/L			12/03/20 16:11	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			12/03/20 16:11	1
Dibromochloromethane	ND		0.50	0.070	ug/L			12/03/20 16:11	1
Ethylbenzene	ND		0.50	0.060	ug/L			12/03/20 16:11	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			12/03/20 16:11	1
Methylene Chloride	ND		0.50	0.070	ug/L			12/03/20 16:11	1
Styrene	ND		0.50	0.050	ug/L			12/03/20 16:11	1
Tetrachloroethene	ND		0.50	0.060	ug/L			12/03/20 16:11	1
Toluene	ND		0.50	0.070	ug/L			12/03/20 16:11	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			12/03/20 16:11	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			12/03/20 16:11	1
Trichloroethene	**0.082**	**J**	0.50	0.060	ug/L			12/03/20 16:11	1
Vinyl chloride	ND		0.50	0.10	ug/L			12/03/20 16:11	1
Xylenes, Total	ND		1.0	0.15	ug/L			12/03/20 16:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*80 - 120*		*12/03/20 16:11*	*1*
Dibromofluoromethane (Surr)	*100*		*80 - 120*		*12/03/20 16:11*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*12/03/20 16:11*	*1*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*12/03/20 16:11*	*1*

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

Lab Sample ID: 410-22411-3

Date Collected: 11/30/20 12:40

Matrix: Water

Date Received: 12/01/20 17:01

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			12/03/20 16:32	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			12/03/20 16:32	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			12/03/20 16:32	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			12/03/20 16:32	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			12/03/20 16:32	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			12/03/20 16:32	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			12/03/20 16:32	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			12/03/20 16:32	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			12/03/20 16:32	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			12/03/20 16:32	1
2-Hexanone	ND		5.0	0.60	ug/L			12/03/20 16:32	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			12/03/20 16:32	1
Acetone	**2.7**	**J**	5.0	0.90	ug/L			12/03/20 16:32	1
Benzene	ND		0.50	0.050	ug/L			12/03/20 16:32	1
Bromochloromethane	ND		0.50	0.050	ug/L			12/03/20 16:32	1
Bromodichloromethane	ND		0.50	0.050	ug/L			12/03/20 16:32	1
Bromoform	ND		1.0	0.30	ug/L			12/03/20 16:32	1
Bromomethane	ND		0.50	0.070	ug/L			12/03/20 16:32	1
Carbon disulfide	ND		1.0	0.060	ug/L			12/03/20 16:32	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			12/03/20 16:32	1
Chlorobenzene	ND		0.50	0.060	ug/L			12/03/20 16:32	1
Chloroethane	ND		0.50	0.070	ug/L			12/03/20 16:32	1
Chloroform	ND		0.50	0.090	ug/L			12/03/20 16:32	1
Chloromethane	**0.072**	**J**	0.50	0.060	ug/L			12/03/20 16:32	1
cis-1,2-Dichloroethene	ND		0.50	0.050	ug/L			12/03/20 16:32	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			12/03/20 16:32	1
Dibromochloromethane	ND		0.50	0.070	ug/L			12/03/20 16:32	1
Ethylbenzene	ND		0.50	0.060	ug/L			12/03/20 16:32	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			12/03/20 16:32	1
Methylene Chloride	ND		0.50	0.070	ug/L			12/03/20 16:32	1
Styrene	ND		0.50	0.050	ug/L			12/03/20 16:32	1
Tetrachloroethene	ND		0.50	0.060	ug/L			12/03/20 16:32	1
Toluene	**0.079**	**J**	0.50	0.070	ug/L			12/03/20 16:32	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			12/03/20 16:32	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			12/03/20 16:32	1
Trichloroethene	ND		0.50	0.060	ug/L			12/03/20 16:32	1
Vinyl chloride	ND		0.50	0.10	ug/L			12/03/20 16:32	1
Xylenes, Total	ND		1.0	0.15	ug/L			12/03/20 16:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*80 - 120*		*12/03/20 16:32*	*1*
Dibromofluoromethane (Surr)	*100*		*80 - 120*		*12/03/20 16:32*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*12/03/20 16:32*	*1*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*12/03/20 16:32*	*1*

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

Lab Sample ID: 410-22411-4

Date Collected: 11/30/20 11:00

Matrix: Water

Date Received: 12/01/20 17:01

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			12/03/20 16:53	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			12/03/20 16:53	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			12/03/20 16:53	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			12/03/20 16:53	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			12/03/20 16:53	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			12/03/20 16:53	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			12/03/20 16:53	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			12/03/20 16:53	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			12/03/20 16:53	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			12/03/20 16:53	1
2-Hexanone	ND		5.0	0.60	ug/L			12/03/20 16:53	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			12/03/20 16:53	1
Acetone	**3.2**	**J**	5.0	0.90	ug/L			12/03/20 16:53	1
Benzene	ND		0.50	0.050	ug/L			12/03/20 16:53	1
Bromochloromethane	ND		0.50	0.050	ug/L			12/03/20 16:53	1
Bromodichloromethane	ND		0.50	0.050	ug/L			12/03/20 16:53	1
Bromoform	ND		1.0	0.30	ug/L			12/03/20 16:53	1
Bromomethane	ND		0.50	0.070	ug/L			12/03/20 16:53	1
Carbon disulfide	ND		1.0	0.060	ug/L			12/03/20 16:53	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			12/03/20 16:53	1
Chlorobenzene	ND		0.50	0.060	ug/L			12/03/20 16:53	1
Chloroethane	ND		0.50	0.070	ug/L			12/03/20 16:53	1
Chloroform	ND		0.50	0.090	ug/L			12/03/20 16:53	1
Chloromethane	**0.063**	**J**	0.50	0.060	ug/L			12/03/20 16:53	1
cis-1,2-Dichloroethene	ND		0.50	0.050	ug/L			12/03/20 16:53	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			12/03/20 16:53	1
Dibromochloromethane	ND		0.50	0.070	ug/L			12/03/20 16:53	1
Ethylbenzene	ND		0.50	0.060	ug/L			12/03/20 16:53	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			12/03/20 16:53	1
Methylene Chloride	ND		0.50	0.070	ug/L			12/03/20 16:53	1
Styrene	ND		0.50	0.050	ug/L			12/03/20 16:53	1
Tetrachloroethene	ND		0.50	0.060	ug/L			12/03/20 16:53	1
Toluene	**0.89**		0.50	0.070	ug/L			12/03/20 16:53	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			12/03/20 16:53	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			12/03/20 16:53	1
Trichloroethene	ND		0.50	0.060	ug/L			12/03/20 16:53	1
Vinyl chloride	ND		0.50	0.10	ug/L			12/03/20 16:53	1
Xylenes, Total	ND		1.0	0.15	ug/L			12/03/20 16:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*80 - 120*		*12/03/20 16:53*	*1*
Dibromofluoromethane (Surr)	*102*		*80 - 120*		*12/03/20 16:53*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*12/03/20 16:53*	*1*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*12/03/20 16:53*	*1*

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

Lab Sample ID: 410-22411-5

Date Collected: 11/30/20 12:50

Matrix: Water

Date Received: 12/01/20 17:01

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			12/03/20 13:00	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			12/03/20 13:00	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			12/03/20 13:00	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			12/03/20 13:00	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			12/03/20 13:00	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			12/03/20 13:00	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			12/03/20 13:00	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			12/03/20 13:00	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			12/03/20 13:00	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			12/03/20 13:00	1
2-Hexanone	ND		5.0	0.60	ug/L			12/03/20 13:00	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			12/03/20 13:00	1
Acetone	**3.5**	**J**	5.0	0.90	ug/L			12/03/20 13:00	1
Benzene	ND		0.50	0.050	ug/L			12/03/20 13:00	1
Bromochloromethane	ND		0.50	0.050	ug/L			12/03/20 13:00	1
Bromodichloromethane	ND		0.50	0.050	ug/L			12/03/20 13:00	1
Bromoform	ND		1.0	0.30	ug/L			12/03/20 13:00	1
Bromomethane	ND		0.50	0.070	ug/L			12/03/20 13:00	1
Carbon disulfide	ND		1.0	0.060	ug/L			12/03/20 13:00	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			12/03/20 13:00	1
Chlorobenzene	ND		0.50	0.060	ug/L			12/03/20 13:00	1
Chloroethane	ND		0.50	0.070	ug/L			12/03/20 13:00	1
Chloroform	ND		0.50	0.090	ug/L			12/03/20 13:00	1
Chloromethane	ND		0.50	0.060	ug/L			12/03/20 13:00	1
cis-1,2-Dichloroethene	**0.056**	**J**	0.50	0.050	ug/L			12/03/20 13:00	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			12/03/20 13:00	1
Dibromochloromethane	ND		0.50	0.070	ug/L			12/03/20 13:00	1
Ethylbenzene	ND		0.50	0.060	ug/L			12/03/20 13:00	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			12/03/20 13:00	1
Methylene Chloride	ND		0.50	0.070	ug/L			12/03/20 13:00	1
Styrene	ND		0.50	0.050	ug/L			12/03/20 13:00	1
Tetrachloroethene	ND		0.50	0.060	ug/L			12/03/20 13:00	1
Toluene	ND		0.50	0.070	ug/L			12/03/20 13:00	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			12/03/20 13:00	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			12/03/20 13:00	1
Trichloroethene	ND		0.50	0.060	ug/L			12/03/20 13:00	1
Vinyl chloride	ND		0.50	0.10	ug/L			12/03/20 13:00	1
Xylenes, Total	ND		1.0	0.15	ug/L			12/03/20 13:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*80 - 120*		*12/03/20 13:00*	*1*
Dibromofluoromethane (Surr)	*101*		*80 - 120*		*12/03/20 13:00*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*12/03/20 13:00*	*1*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*12/03/20 13:00*	*1*

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

Lab Sample ID: 410-22411-6

Date Collected: 11/30/20 10:25

Matrix: Water

Date Received: 12/01/20 17:01

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			12/03/20 13:21	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			12/03/20 13:21	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			12/03/20 13:21	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			12/03/20 13:21	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			12/03/20 13:21	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			12/03/20 13:21	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			12/03/20 13:21	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			12/03/20 13:21	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			12/03/20 13:21	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			12/03/20 13:21	1
2-Hexanone	ND		5.0	0.60	ug/L			12/03/20 13:21	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			12/03/20 13:21	1
Acetone	**2.6**	**J**	5.0	0.90	ug/L			12/03/20 13:21	1
Benzene	ND		0.50	0.050	ug/L			12/03/20 13:21	1
Bromochloromethane	ND		0.50	0.050	ug/L			12/03/20 13:21	1
Bromodichloromethane	ND		0.50	0.050	ug/L			12/03/20 13:21	1
Bromoform	ND		1.0	0.30	ug/L			12/03/20 13:21	1
Bromomethane	ND		0.50	0.070	ug/L			12/03/20 13:21	1
Carbon disulfide	ND		1.0	0.060	ug/L			12/03/20 13:21	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			12/03/20 13:21	1
Chlorobenzene	ND		0.50	0.060	ug/L			12/03/20 13:21	1
Chloroethane	ND		0.50	0.070	ug/L			12/03/20 13:21	1
Chloroform	**0.11**	**J**	0.50	0.090	ug/L			12/03/20 13:21	1
Chloromethane	**0.061**	**J**	0.50	0.060	ug/L			12/03/20 13:21	1
cis-1,2-Dichloroethene	**0.23**	**J**	0.50	0.050	ug/L			12/03/20 13:21	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			12/03/20 13:21	1
Dibromochloromethane	ND		0.50	0.070	ug/L			12/03/20 13:21	1
Ethylbenzene	ND		0.50	0.060	ug/L			12/03/20 13:21	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			12/03/20 13:21	1
Methylene Chloride	ND		0.50	0.070	ug/L			12/03/20 13:21	1
Styrene	ND		0.50	0.050	ug/L			12/03/20 13:21	1
Tetrachloroethene	**0.64**		0.50	0.060	ug/L			12/03/20 13:21	1
Toluene	ND		0.50	0.070	ug/L			12/03/20 13:21	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			12/03/20 13:21	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			12/03/20 13:21	1
Trichloroethene	**0.29**	**J**	0.50	0.060	ug/L			12/03/20 13:21	1
Vinyl chloride	ND		0.50	0.10	ug/L			12/03/20 13:21	1
Xylenes, Total	ND		1.0	0.15	ug/L			12/03/20 13:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*80 - 120*		*12/03/20 13:21*	*1*
Dibromofluoromethane (Surr)	*101*		*80 - 120*		*12/03/20 13:21*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*12/03/20 13:21*	*1*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*12/03/20 13:21*	*1*

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

Lab Sample ID: 410-22411-7

Date Collected: 11/30/20 13:05

Matrix: Water

Date Received: 12/01/20 17:01

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			12/04/20 16:27	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			12/04/20 16:27	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			12/04/20 16:27	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			12/04/20 16:27	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			12/04/20 16:27	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			12/04/20 16:27	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			12/04/20 16:27	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			12/04/20 16:27	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			12/04/20 16:27	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			12/04/20 16:27	1
2-Hexanone	ND		5.0	0.60	ug/L			12/04/20 16:27	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			12/04/20 16:27	1
Acetone	**3.4**	**J ^c**	5.0	0.90	ug/L			12/04/20 16:27	1
Benzene	ND		0.50	0.050	ug/L			12/04/20 16:27	1
Bromochloromethane	ND		0.50	0.050	ug/L			12/04/20 16:27	1
Bromodichloromethane	ND		0.50	0.050	ug/L			12/04/20 16:27	1
Bromoform	ND		1.0	0.30	ug/L			12/04/20 16:27	1
Bromomethane	ND		0.50	0.070	ug/L			12/04/20 16:27	1
Carbon disulfide	ND		1.0	0.060	ug/L			12/04/20 16:27	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			12/04/20 16:27	1
Chlorobenzene	ND		0.50	0.060	ug/L			12/04/20 16:27	1
Chloroethane	ND		0.50	0.070	ug/L			12/04/20 16:27	1
Chloroform	ND		0.50	0.090	ug/L			12/04/20 16:27	1
Chloromethane	ND		0.50	0.060	ug/L			12/04/20 16:27	1
cis-1,2-Dichloroethene	ND		0.50	0.050	ug/L			12/04/20 16:27	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			12/04/20 16:27	1
Dibromochloromethane	ND		0.50	0.070	ug/L			12/04/20 16:27	1
Ethylbenzene	ND		0.50	0.060	ug/L			12/04/20 16:27	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			12/04/20 16:27	1
Methylene Chloride	ND		0.50	0.070	ug/L			12/04/20 16:27	1
Styrene	ND		0.50	0.050	ug/L			12/04/20 16:27	1
Tetrachloroethene	ND		0.50	0.060	ug/L			12/04/20 16:27	1
Toluene	ND		0.50	0.070	ug/L			12/04/20 16:27	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			12/04/20 16:27	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			12/04/20 16:27	1
Trichloroethene	ND		0.50	0.060	ug/L			12/04/20 16:27	1
Vinyl chloride	ND		0.50	0.10	ug/L			12/04/20 16:27	1
Xylenes, Total	ND		1.0	0.15	ug/L			12/04/20 16:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*80 - 120*		*12/04/20 16:27*	*1*
Dibromofluoromethane (Surr)	*101*		*80 - 120*		*12/04/20 16:27*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*12/04/20 16:27*	*1*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*12/04/20 16:27*	*1*

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

Lab Sample ID: 410-22411-8

Date Collected: 11/30/20 13:30

Matrix: Water

Date Received: 12/01/20 17:01

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			12/04/20 16:49	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			12/04/20 16:49	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			12/04/20 16:49	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			12/04/20 16:49	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			12/04/20 16:49	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			12/04/20 16:49	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			12/04/20 16:49	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			12/04/20 16:49	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			12/04/20 16:49	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			12/04/20 16:49	1
2-Hexanone	ND		5.0	0.60	ug/L			12/04/20 16:49	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			12/04/20 16:49	1
Acetone	**3.0**	**J ^c**	5.0	0.90	ug/L			12/04/20 16:49	1
Benzene	ND		0.50	0.050	ug/L			12/04/20 16:49	1
Bromochloromethane	ND		0.50	0.050	ug/L			12/04/20 16:49	1
Bromodichloromethane	ND		0.50	0.050	ug/L			12/04/20 16:49	1
Bromoform	ND		1.0	0.30	ug/L			12/04/20 16:49	1
Bromomethane	ND		0.50	0.070	ug/L			12/04/20 16:49	1
Carbon disulfide	ND		1.0	0.060	ug/L			12/04/20 16:49	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			12/04/20 16:49	1
Chlorobenzene	ND		0.50	0.060	ug/L			12/04/20 16:49	1
Chloroethane	ND		0.50	0.070	ug/L			12/04/20 16:49	1
Chloroform	ND		0.50	0.090	ug/L			12/04/20 16:49	1
Chloromethane	ND		0.50	0.060	ug/L			12/04/20 16:49	1
cis-1,2-Dichloroethene	ND		0.50	0.050	ug/L			12/04/20 16:49	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			12/04/20 16:49	1
Dibromochloromethane	ND		0.50	0.070	ug/L			12/04/20 16:49	1
Ethylbenzene	ND		0.50	0.060	ug/L			12/04/20 16:49	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			12/04/20 16:49	1
Methylene Chloride	ND		0.50	0.070	ug/L			12/04/20 16:49	1
Styrene	ND		0.50	0.050	ug/L			12/04/20 16:49	1
Tetrachloroethene	ND		0.50	0.060	ug/L			12/04/20 16:49	1
Toluene	ND		0.50	0.070	ug/L			12/04/20 16:49	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			12/04/20 16:49	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			12/04/20 16:49	1
Trichloroethene	ND		0.50	0.060	ug/L			12/04/20 16:49	1
Vinyl chloride	ND		0.50	0.10	ug/L			12/04/20 16:49	1
Xylenes, Total	ND		1.0	0.15	ug/L			12/04/20 16:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*80 - 120*		*12/04/20 16:49*	*1*
Dibromofluoromethane (Surr)	*101*		*80 - 120*		*12/04/20 16:49*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*12/04/20 16:49*	*1*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*12/04/20 16:49*	*1*

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

Lab Sample ID: 410-22411-9

Date Collected: 11/30/20 09:30

Matrix: Water

Date Received: 12/01/20 17:01

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			12/04/20 17:10	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			12/04/20 17:10	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			12/04/20 17:10	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			12/04/20 17:10	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			12/04/20 17:10	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			12/04/20 17:10	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			12/04/20 17:10	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			12/04/20 17:10	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			12/04/20 17:10	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			12/04/20 17:10	1
2-Hexanone	ND		5.0	0.60	ug/L			12/04/20 17:10	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			12/04/20 17:10	1
Acetone	**2.3**	**J ^c**	5.0	0.90	ug/L			12/04/20 17:10	1
Benzene	ND		0.50	0.050	ug/L			12/04/20 17:10	1
Bromochloromethane	ND		0.50	0.050	ug/L			12/04/20 17:10	1
Bromodichloromethane	ND		0.50	0.050	ug/L			12/04/20 17:10	1
Bromoform	ND		1.0	0.30	ug/L			12/04/20 17:10	1
Bromomethane	ND		0.50	0.070	ug/L			12/04/20 17:10	1
Carbon disulfide	ND		1.0	0.060	ug/L			12/04/20 17:10	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			12/04/20 17:10	1
Chlorobenzene	ND		0.50	0.060	ug/L			12/04/20 17:10	1
Chloroethane	ND		0.50	0.070	ug/L			12/04/20 17:10	1
Chloroform	**0.093**	**J**	0.50	0.090	ug/L			12/04/20 17:10	1
Chloromethane	ND		0.50	0.060	ug/L			12/04/20 17:10	1
cis-1,2-Dichloroethene	ND		0.50	0.050	ug/L			12/04/20 17:10	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			12/04/20 17:10	1
Dibromochloromethane	ND		0.50	0.070	ug/L			12/04/20 17:10	1
Ethylbenzene	ND		0.50	0.060	ug/L			12/04/20 17:10	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			12/04/20 17:10	1
Methylene Chloride	ND		0.50	0.070	ug/L			12/04/20 17:10	1
Styrene	ND		0.50	0.050	ug/L			12/04/20 17:10	1
Tetrachloroethene	ND		0.50	0.060	ug/L			12/04/20 17:10	1
Toluene	ND		0.50	0.070	ug/L			12/04/20 17:10	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			12/04/20 17:10	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			12/04/20 17:10	1
Trichloroethene	**0.063**	**J**	0.50	0.060	ug/L			12/04/20 17:10	1
Vinyl chloride	ND		0.50	0.10	ug/L			12/04/20 17:10	1
Xylenes, Total	ND		1.0	0.15	ug/L			12/04/20 17:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*80 - 120*		*12/04/20 17:10*	*1*
Dibromofluoromethane (Surr)	*100*		*80 - 120*		*12/04/20 17:10*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*12/04/20 17:10*	*1*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*12/04/20 17:10*	*1*

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

Lab Sample ID: 410-22411-10

Date Collected: 11/30/20 10:15

Matrix: Water

Date Received: 12/01/20 17:01

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			12/04/20 17:31	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			12/04/20 17:31	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			12/04/20 17:31	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			12/04/20 17:31	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			12/04/20 17:31	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			12/04/20 17:31	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			12/04/20 17:31	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			12/04/20 17:31	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			12/04/20 17:31	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			12/04/20 17:31	1
2-Hexanone	ND		5.0	0.60	ug/L			12/04/20 17:31	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			12/04/20 17:31	1
Acetone	**4.2**	**J ^c**	5.0	0.90	ug/L			12/04/20 17:31	1
Benzene	ND		0.50	0.050	ug/L			12/04/20 17:31	1
Bromochloromethane	ND		0.50	0.050	ug/L			12/04/20 17:31	1
Bromodichloromethane	ND		0.50	0.050	ug/L			12/04/20 17:31	1
Bromoform	ND		1.0	0.30	ug/L			12/04/20 17:31	1
Bromomethane	ND		0.50	0.070	ug/L			12/04/20 17:31	1
Carbon disulfide	**0.067**	**J**	1.0	0.060	ug/L			12/04/20 17:31	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			12/04/20 17:31	1
Chlorobenzene	ND		0.50	0.060	ug/L			12/04/20 17:31	1
Chloroethane	ND		0.50	0.070	ug/L			12/04/20 17:31	1
Chloroform	ND		0.50	0.090	ug/L			12/04/20 17:31	1
Chloromethane	ND		0.50	0.060	ug/L			12/04/20 17:31	1
cis-1,2-Dichloroethene	**0.050**	**J**	0.50	0.050	ug/L			12/04/20 17:31	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			12/04/20 17:31	1
Dibromochloromethane	ND		0.50	0.070	ug/L			12/04/20 17:31	1
Ethylbenzene	ND		0.50	0.060	ug/L			12/04/20 17:31	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			12/04/20 17:31	1
Methylene Chloride	ND		0.50	0.070	ug/L			12/04/20 17:31	1
Styrene	ND		0.50	0.050	ug/L			12/04/20 17:31	1
Tetrachloroethene	ND		0.50	0.060	ug/L			12/04/20 17:31	1
Toluene	ND		0.50	0.070	ug/L			12/04/20 17:31	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			12/04/20 17:31	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			12/04/20 17:31	1
Trichloroethene	**0.072**	**J**	0.50	0.060	ug/L			12/04/20 17:31	1
Vinyl chloride	ND		0.50	0.10	ug/L			12/04/20 17:31	1
Xylenes, Total	ND		1.0	0.15	ug/L			12/04/20 17:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*80 - 120*		*12/04/20 17:31*	*1*
Dibromofluoromethane (Surr)	*101*		*80 - 120*		*12/04/20 17:31*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*12/04/20 17:31*	*1*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*12/04/20 17:31*	*1*

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

Lab Sample ID: 410-22411-11

Date Collected: 11/30/20 11:30

Matrix: Water

Date Received: 12/01/20 17:01

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			12/04/20 17:52	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			12/04/20 17:52	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			12/04/20 17:52	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			12/04/20 17:52	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			12/04/20 17:52	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			12/04/20 17:52	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			12/04/20 17:52	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			12/04/20 17:52	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			12/04/20 17:52	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			12/04/20 17:52	1
2-Hexanone	ND		5.0	0.60	ug/L			12/04/20 17:52	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			12/04/20 17:52	1
Acetone	**2.4**	**J ^c**	5.0	0.90	ug/L			12/04/20 17:52	1
Benzene	ND		0.50	0.050	ug/L			12/04/20 17:52	1
Bromochloromethane	ND		0.50	0.050	ug/L			12/04/20 17:52	1
Bromodichloromethane	ND		0.50	0.050	ug/L			12/04/20 17:52	1
Bromoform	ND		1.0	0.30	ug/L			12/04/20 17:52	1
Bromomethane	ND		0.50	0.070	ug/L			12/04/20 17:52	1
Carbon disulfide	ND		1.0	0.060	ug/L			12/04/20 17:52	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			12/04/20 17:52	1
Chlorobenzene	ND		0.50	0.060	ug/L			12/04/20 17:52	1
Chloroethane	ND		0.50	0.070	ug/L			12/04/20 17:52	1
Chloroform	ND		0.50	0.090	ug/L			12/04/20 17:52	1
Chloromethane	ND		0.50	0.060	ug/L			12/04/20 17:52	1
cis-1,2-Dichloroethene	ND		0.50	0.050	ug/L			12/04/20 17:52	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			12/04/20 17:52	1
Dibromochloromethane	ND		0.50	0.070	ug/L			12/04/20 17:52	1
Ethylbenzene	ND		0.50	0.060	ug/L			12/04/20 17:52	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			12/04/20 17:52	1
Methylene Chloride	ND		0.50	0.070	ug/L			12/04/20 17:52	1
Styrene	ND		0.50	0.050	ug/L			12/04/20 17:52	1
Tetrachloroethene	ND		0.50	0.060	ug/L			12/04/20 17:52	1
Toluene	**0.87**		0.50	0.070	ug/L			12/04/20 17:52	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			12/04/20 17:52	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			12/04/20 17:52	1
Trichloroethene	ND		0.50	0.060	ug/L			12/04/20 17:52	1
Vinyl chloride	ND		0.50	0.10	ug/L			12/04/20 17:52	1
Xylenes, Total	ND		1.0	0.15	ug/L			12/04/20 17:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*80 - 120*		*12/04/20 17:52*	*1*
Dibromofluoromethane (Surr)	*101*		*80 - 120*		*12/04/20 17:52*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*12/04/20 17:52*	*1*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*12/04/20 17:52*	*1*

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

Lab Sample ID: 410-22411-12

Date Collected: 11/30/20 12:25

Matrix: Water

Date Received: 12/01/20 17:01

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			12/04/20 18:13	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			12/04/20 18:13	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			12/04/20 18:13	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			12/04/20 18:13	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			12/04/20 18:13	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			12/04/20 18:13	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			12/04/20 18:13	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			12/04/20 18:13	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			12/04/20 18:13	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			12/04/20 18:13	1
2-Hexanone	ND		5.0	0.60	ug/L			12/04/20 18:13	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			12/04/20 18:13	1
Acetone	**3.7**	**J ^c**	5.0	0.90	ug/L			12/04/20 18:13	1
Benzene	ND		0.50	0.050	ug/L			12/04/20 18:13	1
Bromochloromethane	ND		0.50	0.050	ug/L			12/04/20 18:13	1
Bromodichloromethane	ND		0.50	0.050	ug/L			12/04/20 18:13	1
Bromoform	ND		1.0	0.30	ug/L			12/04/20 18:13	1
Bromomethane	ND		0.50	0.070	ug/L			12/04/20 18:13	1
Carbon disulfide	ND		1.0	0.060	ug/L			12/04/20 18:13	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			12/04/20 18:13	1
Chlorobenzene	ND		0.50	0.060	ug/L			12/04/20 18:13	1
Chloroethane	ND		0.50	0.070	ug/L			12/04/20 18:13	1
Chloroform	ND		0.50	0.090	ug/L			12/04/20 18:13	1
Chloromethane	ND		0.50	0.060	ug/L			12/04/20 18:13	1
cis-1,2-Dichloroethene	ND		0.50	0.050	ug/L			12/04/20 18:13	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			12/04/20 18:13	1
Dibromochloromethane	ND		0.50	0.070	ug/L			12/04/20 18:13	1
Ethylbenzene	ND		0.50	0.060	ug/L			12/04/20 18:13	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			12/04/20 18:13	1
Methylene Chloride	ND		0.50	0.070	ug/L			12/04/20 18:13	1
Styrene	ND		0.50	0.050	ug/L			12/04/20 18:13	1
Tetrachloroethene	ND		0.50	0.060	ug/L			12/04/20 18:13	1
Toluene	**0.13**	**J**	0.50	0.070	ug/L			12/04/20 18:13	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			12/04/20 18:13	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			12/04/20 18:13	1
Trichloroethene	ND		0.50	0.060	ug/L			12/04/20 18:13	1
Vinyl chloride	ND		0.50	0.10	ug/L			12/04/20 18:13	1
Xylenes, Total	ND		1.0	0.15	ug/L			12/04/20 18:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*80 - 120*		*12/04/20 18:13*	*1*
Dibromofluoromethane (Surr)	*100*		*80 - 120*		*12/04/20 18:13*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*12/04/20 18:13*	*1*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*12/04/20 18:13*	*1*

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

Lab Sample ID: 410-22411-13

Date Collected: 11/30/20 12:00

Matrix: Water

Date Received: 12/01/20 17:01

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			12/04/20 18:35	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			12/04/20 18:35	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			12/04/20 18:35	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			12/04/20 18:35	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			12/04/20 18:35	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			12/04/20 18:35	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			12/04/20 18:35	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			12/04/20 18:35	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			12/04/20 18:35	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			12/04/20 18:35	1
2-Hexanone	ND		5.0	0.60	ug/L			12/04/20 18:35	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			12/04/20 18:35	1
Acetone	**3.4**	**J ^c**	5.0	0.90	ug/L			12/04/20 18:35	1
Benzene	ND		0.50	0.050	ug/L			12/04/20 18:35	1
Bromochloromethane	ND		0.50	0.050	ug/L			12/04/20 18:35	1
Bromodichloromethane	ND		0.50	0.050	ug/L			12/04/20 18:35	1
Bromoform	ND		1.0	0.30	ug/L			12/04/20 18:35	1
Bromomethane	ND		0.50	0.070	ug/L			12/04/20 18:35	1
Carbon disulfide	ND		1.0	0.060	ug/L			12/04/20 18:35	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			12/04/20 18:35	1
Chlorobenzene	ND		0.50	0.060	ug/L			12/04/20 18:35	1
Chloroethane	ND		0.50	0.070	ug/L			12/04/20 18:35	1
Chloroform	ND		0.50	0.090	ug/L			12/04/20 18:35	1
Chloromethane	ND		0.50	0.060	ug/L			12/04/20 18:35	1
cis-1,2-Dichloroethene	ND		0.50	0.050	ug/L			12/04/20 18:35	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			12/04/20 18:35	1
Dibromochloromethane	ND		0.50	0.070	ug/L			12/04/20 18:35	1
Ethylbenzene	ND		0.50	0.060	ug/L			12/04/20 18:35	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			12/04/20 18:35	1
Methylene Chloride	ND		0.50	0.070	ug/L			12/04/20 18:35	1
Styrene	ND		0.50	0.050	ug/L			12/04/20 18:35	1
Tetrachloroethene	ND		0.50	0.060	ug/L			12/04/20 18:35	1
Toluene	ND		0.50	0.070	ug/L			12/04/20 18:35	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			12/04/20 18:35	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			12/04/20 18:35	1
Trichloroethene	ND		0.50	0.060	ug/L			12/04/20 18:35	1
Vinyl chloride	ND		0.50	0.10	ug/L			12/04/20 18:35	1
Xylenes, Total	ND		1.0	0.15	ug/L			12/04/20 18:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*80 - 120*		*12/04/20 18:35*	*1*
Dibromofluoromethane (Surr)	*101*		*80 - 120*		*12/04/20 18:35*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*12/04/20 18:35*	*1*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*12/04/20 18:35*	*1*

Client Sample ID: HD-QC1-0/1-2
Lab Sample ID: 410-22411-14

Date Collected: 11/30/20 00:00
Matrix: Water
Date Received: 12/01/20 17:01

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			12/04/20 18:56	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			12/04/20 18:56	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			12/04/20 18:56	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			12/04/20 18:56	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			12/04/20 18:56	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			12/04/20 18:56	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			12/04/20 18:56	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			12/04/20 18:56	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			12/04/20 18:56	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			12/04/20 18:56	1
2-Hexanone	ND		5.0	0.60	ug/L			12/04/20 18:56	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			12/04/20 18:56	1
Acetone	ND	^c	5.0	0.90	ug/L			12/04/20 18:56	1
Benzene	ND		0.50	0.050	ug/L			12/04/20 18:56	1
Bromochloromethane	ND		0.50	0.050	ug/L			12/04/20 18:56	1
Bromodichloromethane	ND		0.50	0.050	ug/L			12/04/20 18:56	1
Bromoform	ND		1.0	0.30	ug/L			12/04/20 18:56	1
Bromomethane	ND		0.50	0.070	ug/L			12/04/20 18:56	1
Carbon disulfide	ND		1.0	0.060	ug/L			12/04/20 18:56	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			12/04/20 18:56	1
Chlorobenzene	ND		0.50	0.060	ug/L			12/04/20 18:56	1
Chloroethane	ND		0.50	0.070	ug/L			12/04/20 18:56	1
Chloroform	ND		0.50	0.090	ug/L			12/04/20 18:56	1
Chloromethane	ND		0.50	0.060	ug/L			12/04/20 18:56	1
cis-1,2-Dichloroethene	ND		0.50	0.050	ug/L			12/04/20 18:56	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			12/04/20 18:56	1
Dibromochloromethane	ND		0.50	0.070	ug/L			12/04/20 18:56	1
Ethylbenzene	ND		0.50	0.060	ug/L			12/04/20 18:56	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			12/04/20 18:56	1
Methylene Chloride	ND		0.50	0.070	ug/L			12/04/20 18:56	1
Styrene	ND		0.50	0.050	ug/L			12/04/20 18:56	1
Tetrachloroethene	ND		0.50	0.060	ug/L			12/04/20 18:56	1
Toluene	ND		0.50	0.070	ug/L			12/04/20 18:56	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			12/04/20 18:56	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			12/04/20 18:56	1
Trichloroethene	ND		0.50	0.060	ug/L			12/04/20 18:56	1
Vinyl chloride	ND		0.50	0.10	ug/L			12/04/20 18:56	1
Xylenes, Total	ND		1.0	0.15	ug/L			12/04/20 18:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*80 - 120*		*12/04/20 18:56*	*1*
Dibromofluoromethane (Surr)	*100*		*80 - 120*		*12/04/20 18:56*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*12/04/20 18:56*	*1*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*12/04/20 18:56*	*1*

Default Detection Limits

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

Job ID: 410-22411-1

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

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

Surrogate Summary

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

Job ID: 410-22411-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	DBFM	TOL	BFB
Lab Sample ID	Client Sample ID	(80-120)	(80-120)	(80-120)	(80-120)
410-22411-1	HD-COD-SW-6-0/1-0	101	100	98	99
410-22411-2	HD-COD-SW-7-0/1-0	102	100	98	99
410-22411-3	HD-COD-SW-8-0/1-0	103	100	98	98
410-22411-4	HD-COD-SW-9-0/1-0	102	102	97	99
410-22411-5	HD-COD-SW-13-0/1-0	105	101	98	99
410-22411-6	HD-COD-SW-15-0/1-0	104	101	98	99
410-22411-6 MS	HD-COD-SW-15-0/1-0 MS	99	99	100	101
410-22411-6 MSD	HD-COD-SW-15-0/1-0 MSD	100	100	98	99
410-22411-7	HD-COD-SW-16-0/1-0	102	101	97	100
410-22411-8	HD-COD-SW-17-0/1-0	104	101	99	100
410-22411-9	HD-COD-SW-26-0/1-0	102	100	98	99
410-22411-10	HD-COD-SW-27-0/1-0	101	101	98	99
410-22411-11	HD-COD-SW-28-0/1-0	102	101	98	99
410-22411-12	HD-COD-SW-29-0/1-0	102	100	98	98
410-22411-13	HD-QC1-0/1-1	102	101	98	99
410-22411-14	HD-QC1-0/1-2	103	100	99	98
LCS 410-72509/4	Lab Control Sample	100	99	98	99
LCS 410-73040/4	Lab Control Sample	101	100	99	100
LCSD 410-72509/5	Lab Control Sample Dup	101	100	98	99
LCSD 410-73040/5	Lab Control Sample Dup	99	99	98	100
MB 410-72509/7	Method Blank	101	101	98	98
MB 410-73040/7	Method Blank	101	100	98	99

Surrogate Legend

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

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

Lab Sample ID: MB 410-72509/7
Matrix: Water
Analysis Batch: 72509

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			12/03/20 11:08	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			12/03/20 11:08	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			12/03/20 11:08	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			12/03/20 11:08	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			12/03/20 11:08	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			12/03/20 11:08	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			12/03/20 11:08	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			12/03/20 11:08	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			12/03/20 11:08	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			12/03/20 11:08	1
2-Hexanone	ND		5.0	0.60	ug/L			12/03/20 11:08	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			12/03/20 11:08	1
Acetone	ND		5.0	0.90	ug/L			12/03/20 11:08	1
Benzene	ND		0.50	0.050	ug/L			12/03/20 11:08	1
Bromochloromethane	ND		0.50	0.050	ug/L			12/03/20 11:08	1
Bromodichloromethane	ND		0.50	0.050	ug/L			12/03/20 11:08	1
Bromoform	ND		1.0	0.30	ug/L			12/03/20 11:08	1
Bromomethane	ND		0.50	0.070	ug/L			12/03/20 11:08	1
Carbon disulfide	ND		1.0	0.060	ug/L			12/03/20 11:08	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			12/03/20 11:08	1
Chlorobenzene	ND		0.50	0.060	ug/L			12/03/20 11:08	1
Chloroethane	ND		0.50	0.070	ug/L			12/03/20 11:08	1
Chloroform	ND		0.50	0.090	ug/L			12/03/20 11:08	1
Chloromethane	ND		0.50	0.060	ug/L			12/03/20 11:08	1
cis-1,2-Dichloroethene	ND		0.50	0.050	ug/L			12/03/20 11:08	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			12/03/20 11:08	1
Dibromochloromethane	ND		0.50	0.070	ug/L			12/03/20 11:08	1
Ethylbenzene	ND		0.50	0.060	ug/L			12/03/20 11:08	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			12/03/20 11:08	1
Methylene Chloride	ND		0.50	0.070	ug/L			12/03/20 11:08	1
Styrene	ND		0.50	0.050	ug/L			12/03/20 11:08	1
Tetrachloroethene	ND		0.50	0.060	ug/L			12/03/20 11:08	1
Toluene	ND		0.50	0.070	ug/L			12/03/20 11:08	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			12/03/20 11:08	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			12/03/20 11:08	1
Trichloroethene	ND		0.50	0.060	ug/L			12/03/20 11:08	1
Vinyl chloride	ND		0.50	0.10	ug/L			12/03/20 11:08	1
Xylenes, Total	ND		1.0	0.15	ug/L			12/03/20 11:08	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*80 - 120*		*12/03/20 11:08*	*1*
Dibromofluoromethane (Surr)	*101*		*80 - 120*		*12/03/20 11:08*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*12/03/20 11:08*	*1*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*12/03/20 11:08*	*1*

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

Lab Sample ID: LCS 410-72509/4
Matrix: Water
Analysis Batch: 72509

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	5.00	4.97		ug/L		99	71 - 134
1,1,1-Trichloroethane	5.00	4.75		ug/L		95	78 - 126
1,1,2,2-Tetrachloroethane	5.00	4.76		ug/L		95	75 - 123
1,1,2-Trichloroethane	5.00	5.01		ug/L		100	80 - 120
1,1-Dichloroethane	5.00	4.83		ug/L		97	74 - 120
1,1-Dichloroethene	5.00	4.67		ug/L		93	80 - 131
1,2-Dibromoethane (EDB)	5.00	4.87		ug/L		97	80 - 120
1,2-Dichloroethane	5.00	4.83		ug/L		97	69 - 122
1,2-Dichloropropane	5.00	5.10		ug/L		102	80 - 120
2-Butanone (MEK)	37.5	36.9		ug/L		98	59 - 141
2-Hexanone	25.0	25.4		ug/L		102	52 - 140
4-Methyl-2-pentanone (MIBK)	25.0	24.4		ug/L		98	55 - 140
Acetone	37.5	32.1		ug/L		86	60 - 146
Benzene	5.00	4.80		ug/L		96	80 - 120
Bromochloromethane	5.00	4.77		ug/L		95	80 - 120
Bromodichloromethane	5.00	4.95		ug/L		99	73 - 124
Bromoform	5.00	4.79		ug/L		96	49 - 144
Bromomethane	5.00	4.71		ug/L		94	60 - 136
Carbon disulfide	5.00	4.25		ug/L		85	67 - 130
Carbon tetrachloride	5.00	4.89		ug/L		98	64 - 141
Chlorobenzene	5.00	4.92		ug/L		98	80 - 120
Chloroethane	5.00	4.53		ug/L		91	63 - 120
Chloroform	5.00	4.92		ug/L		98	80 - 120
Chloromethane	5.00	4.49		ug/L		90	56 - 124
cis-1,2-Dichloroethene	5.00	5.11		ug/L		102	80 - 122
cis-1,3-Dichloropropene	5.00	4.91		ug/L		98	67 - 121
Dibromochloromethane	5.00	4.83		ug/L		97	64 - 138
Ethylbenzene	5.00	4.83		ug/L		97	80 - 120
Methyl tert-butyl ether	5.00	4.68		ug/L		94	69 - 120
Methylene Chloride	5.00	4.78		ug/L		96	80 - 120
Styrene	5.00	5.02		ug/L		100	80 - 120
Tetrachloroethene	5.00	4.91		ug/L		98	80 - 120
Toluene	5.00	4.75		ug/L		95	80 - 120
trans-1,2-Dichloroethene	5.00	4.76		ug/L		95	80 - 122
trans-1,3-Dichloropropene	5.00	4.79		ug/L		96	61 - 129
Trichloroethene	5.00	4.86		ug/L		97	80 - 120
Vinyl chloride	5.00	4.76		ug/L		95	60 - 125
Xylenes, Total	15.0	14.8		ug/L		99	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*80 - 120*
Dibromofluoromethane (Surr)	*99*		*80 - 120*
Toluene-d8 (Surr)	*98*		*80 - 120*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*

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

Lab Sample ID: LCSD 410-72509/5
Matrix: Water
Analysis Batch: 72509

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	5.00	4.92		ug/L		98	71 - 134	1	30
1,1,1-Trichloroethane	5.00	4.81		ug/L		96	78 - 126	1	30
1,1,2,2-Tetrachloroethane	5.00	4.80		ug/L		96	75 - 123	1	30
1,1,2-Trichloroethane	5.00	5.06		ug/L		101	80 - 120	1	30
1,1-Dichloroethane	5.00	4.81		ug/L		96	74 - 120	0	30
1,1-Dichloroethene	5.00	4.68		ug/L		94	80 - 131	0	30
1,2-Dibromoethane (EDB)	5.00	4.97		ug/L		99	80 - 120	2	30
1,2-Dichloroethane	5.00	4.88		ug/L		98	69 - 122	1	30
1,2-Dichloropropane	5.00	5.09		ug/L		102	80 - 120	0	30
2-Butanone (MEK)	37.5	34.8		ug/L		93	59 - 141	6	30
2-Hexanone	25.0	24.1		ug/L		96	52 - 140	5	30
4-Methyl-2-pentanone (MIBK)	25.0	23.4		ug/L		94	55 - 140	4	30
Acetone	37.5	30.0		ug/L		80	60 - 146	7	30
Benzene	5.00	4.83		ug/L		97	80 - 120	1	30
Bromochloromethane	5.00	4.77		ug/L		95	80 - 120	0	30
Bromodichloromethane	5.00	4.91		ug/L		98	73 - 124	1	30
Bromoform	5.00	4.65		ug/L		93	49 - 144	3	30
Bromomethane	5.00	4.71		ug/L		94	60 - 136	0	30
Carbon disulfide	5.00	4.26		ug/L		85	67 - 130	0	30
Carbon tetrachloride	5.00	4.93		ug/L		99	64 - 141	1	30
Chlorobenzene	5.00	4.89		ug/L		98	80 - 120	1	30
Chloroethane	5.00	4.52		ug/L		90	63 - 120	0	30
Chloroform	5.00	4.91		ug/L		98	80 - 120	0	30
Chloromethane	5.00	4.48		ug/L		90	56 - 124	0	30
cis-1,2-Dichloroethene	5.00	5.09		ug/L		102	80 - 122	0	30
cis-1,3-Dichloropropene	5.00	4.88		ug/L		98	67 - 121	1	30
Dibromochloromethane	5.00	4.78		ug/L		96	64 - 138	1	30
Ethylbenzene	5.00	4.84		ug/L		97	80 - 120	0	30
Methyl tert-butyl ether	5.00	4.65		ug/L		93	69 - 120	1	30
Methylene Chloride	5.00	4.80		ug/L		96	80 - 120	0	30
Styrene	5.00	5.04		ug/L		101	80 - 120	0	30
Tetrachloroethene	5.00	4.87		ug/L		97	80 - 120	1	30
Toluene	5.00	4.78		ug/L		96	80 - 120	1	30
trans-1,2-Dichloroethene	5.00	4.79		ug/L		96	80 - 122	1	30
trans-1,3-Dichloropropene	5.00	4.75		ug/L		95	61 - 129	1	30
Trichloroethene	5.00	4.82		ug/L		96	80 - 120	1	30
Vinyl chloride	5.00	4.85		ug/L		97	60 - 125	2	30
Xylenes, Total	15.0	14.7		ug/L		98	80 - 120	0	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*80 - 120*
Dibromofluoromethane (Surr)	*100*		*80 - 120*
Toluene-d8 (Surr)	*98*		*80 - 120*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*

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

Lab Sample ID: 410-22411-6 MS
Matrix: Water
Analysis Batch: 72509

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		5.02	5.23		ug/L		104	71 - 134
1,1,1-Trichloroethane	ND		5.02	5.29		ug/L		105	78 - 126
1,1,2,2-Tetrachloroethane	ND		5.02	5.02		ug/L		100	75 - 123
1,1,2-Trichloroethane	ND		5.02	5.32		ug/L		106	80 - 120
1,1-Dichloroethane	ND		5.02	5.24		ug/L		104	74 - 120
1,1-Dichloroethene	ND		5.02	5.26		ug/L		105	80 - 131
1,2-Dibromoethane (EDB)	ND		5.02	5.10		ug/L		101	80 - 120
1,2-Dichloroethane	ND		5.02	5.10		ug/L		101	69 - 122
1,2-Dichloropropane	ND		5.02	5.33		ug/L		106	80 - 120
2-Butanone (MEK)	ND		37.7	36.0		ug/L		96	59 - 141
2-Hexanone	ND		25.1	25.1		ug/L		100	52 - 140
4-Methyl-2-pentanone (MIBK)	ND		25.1	24.1		ug/L		96	55 - 140
Acetone	2.6	J	37.7	33.6		ug/L		82	60 - 146
Benzene	ND		5.02	5.18		ug/L		103	80 - 120
Bromochloromethane	ND		5.02	5.04		ug/L		100	80 - 120
Bromodichloromethane	ND		5.02	5.20		ug/L		103	73 - 124
Bromoform	ND		5.02	4.94		ug/L		98	49 - 144
Bromomethane	ND		5.02	5.08		ug/L		101	60 - 136
Carbon disulfide	ND		5.02	4.69		ug/L		93	67 - 130
Carbon tetrachloride	ND		5.02	5.46		ug/L		109	64 - 141
Chlorobenzene	ND		5.02	5.27		ug/L		105	80 - 120
Chloroethane	ND		5.02	5.05		ug/L		101	63 - 120
Chloroform	0.11	J	5.02	5.33		ug/L		104	80 - 120
Chloromethane	0.061	J	5.02	4.86		ug/L		95	80 - 120
cis-1,2-Dichloroethene	0.23	J	5.02	5.64		ug/L		108	80 - 122
cis-1,3-Dichloropropene	ND		5.02	5.05		ug/L		100	67 - 121
Dibromochloromethane	ND		5.02	5.03		ug/L		100	64 - 138
Ethylbenzene	ND		5.02	5.29		ug/L		105	80 - 120
Methyl tert-butyl ether	ND		5.02	4.79		ug/L		95	69 - 120
Methylene Chloride	ND		5.02	5.09		ug/L		101	80 - 120
Styrene	ND		5.02	5.38		ug/L		107	80 - 120
Tetrachloroethene	0.64		5.02	6.00		ug/L		107	80 - 120
Toluene	ND		5.02	5.22		ug/L		104	80 - 120
trans-1,2-Dichloroethene	ND		5.02	5.19		ug/L		103	80 - 122
trans-1,3-Dichloropropene	ND		5.02	4.90		ug/L		98	61 - 129
Trichloroethene	0.29	J	5.02	5.59		ug/L		106	80 - 120
Vinyl chloride	ND		5.02	5.37		ug/L		107	60 - 125
Xylenes, Total	ND		15.1	16.0		ug/L		106	80 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*80 - 120*
Dibromofluoromethane (Surr)	*99*		*80 - 120*
Toluene-d8 (Surr)	*100*		*80 - 120*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*

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

Lab Sample ID: 410-22411-6 MSD
Matrix: Water
Analysis Batch: 72509

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		5.02	5.30		ug/L		106	71 - 134	1	30
1,1,1-Trichloroethane	ND		5.02	5.41		ug/L		108	78 - 126	2	30
1,1,2,2-Tetrachloroethane	ND		5.02	5.10		ug/L		102	75 - 123	2	30
1,1,2-Trichloroethane	ND		5.02	5.35		ug/L		107	80 - 120	1	30
1,1-Dichloroethane	ND		5.02	5.34		ug/L		106	74 - 120	2	30
1,1-Dichloroethene	ND		5.02	5.37		ug/L		107	80 - 131	2	30
1,2-Dibromoethane (EDB)	ND		5.02	5.19		ug/L		103	80 - 120	2	30
1,2-Dichloroethane	ND		5.02	5.14		ug/L		102	69 - 122	1	30
1,2-Dichloropropane	ND		5.02	5.45		ug/L		108	80 - 120	2	30
2-Butanone (MEK)	ND		37.7	36.6		ug/L		97	59 - 141	2	30
2-Hexanone	ND		25.1	25.4		ug/L		101	52 - 140	1	30
4-Methyl-2-pentanone (MIBK)	ND		25.1	24.7		ug/L		98	55 - 140	3	30
Acetone	2.6	J	37.7	36.9		ug/L		91	60 - 146	9	30
Benzene	ND		5.02	5.27		ug/L		105	80 - 120	2	30
Bromochloromethane	ND		5.02	5.06		ug/L		101	80 - 120	0	30
Bromodichloromethane	ND		5.02	5.25		ug/L		105	73 - 124	1	30
Bromoform	ND		5.02	4.93		ug/L		98	49 - 144	0	30
Bromomethane	ND		5.02	5.09		ug/L		101	60 - 136	0	30
Carbon disulfide	ND		5.02	4.85		ug/L		96	67 - 130	3	30
Carbon tetrachloride	ND		5.02	5.60		ug/L		111	64 - 141	3	30
Chlorobenzene	ND		5.02	5.34		ug/L		106	80 - 120	1	30
Chloroethane	ND		5.02	5.04		ug/L		100	63 - 120	0	30
Chloroform	0.11	J	5.02	5.44		ug/L		106	80 - 120	2	30
Chloromethane	0.061	J	5.02	4.95		ug/L		97	80 - 120	2	30
cis-1,2-Dichloroethene	0.23	J	5.02	5.81		ug/L		111	80 - 122	3	30
cis-1,3-Dichloropropene	ND		5.02	5.18		ug/L		103	67 - 121	2	30
Dibromochloromethane	ND		5.02	5.14		ug/L		102	64 - 138	2	30
Ethylbenzene	ND		5.02	5.37		ug/L		107	80 - 120	1	30
Methyl tert-butyl ether	ND		5.02	4.91		ug/L		98	69 - 120	3	30
Methylene Chloride	ND		5.02	5.12		ug/L		102	80 - 120	1	30
Styrene	ND		5.02	5.40		ug/L		107	80 - 120	0	30
Tetrachloroethene	0.64		5.02	6.17		ug/L		110	80 - 120	3	30
Toluene	ND		5.02	5.27		ug/L		105	80 - 120	1	30
trans-1,2-Dichloroethene	ND		5.02	5.38		ug/L		107	80 - 122	4	30
trans-1,3-Dichloropropene	ND		5.02	5.05		ug/L		100	61 - 129	3	30
Trichloroethene	0.29	J	5.02	5.73		ug/L		108	80 - 120	3	30
Vinyl chloride	ND		5.02	5.42		ug/L		108	60 - 125	1	30
Xylenes, Total	ND		15.1	16.3		ug/L		108	80 - 120	1	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*80 - 120*
Dibromofluoromethane (Surr)	*100*		*80 - 120*
Toluene-d8 (Surr)	*98*		*80 - 120*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*

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

Lab Sample ID: MB 410-73040/7
Matrix: Water
Analysis Batch: 73040

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			12/04/20 11:34	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			12/04/20 11:34	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			12/04/20 11:34	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			12/04/20 11:34	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			12/04/20 11:34	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			12/04/20 11:34	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			12/04/20 11:34	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			12/04/20 11:34	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			12/04/20 11:34	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			12/04/20 11:34	1
2-Hexanone	ND		5.0	0.60	ug/L			12/04/20 11:34	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			12/04/20 11:34	1
Acetone	ND		5.0	0.90	ug/L			12/04/20 11:34	1
Benzene	ND		0.50	0.050	ug/L			12/04/20 11:34	1
Bromochloromethane	ND		0.50	0.050	ug/L			12/04/20 11:34	1
Bromodichloromethane	ND		0.50	0.050	ug/L			12/04/20 11:34	1
Bromoform	ND		1.0	0.30	ug/L			12/04/20 11:34	1
Bromomethane	ND		0.50	0.070	ug/L			12/04/20 11:34	1
Carbon disulfide	ND		1.0	0.060	ug/L			12/04/20 11:34	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			12/04/20 11:34	1
Chlorobenzene	ND		0.50	0.060	ug/L			12/04/20 11:34	1
Chloroethane	ND		0.50	0.070	ug/L			12/04/20 11:34	1
Chloroform	ND		0.50	0.090	ug/L			12/04/20 11:34	1
Chloromethane	ND		0.50	0.060	ug/L			12/04/20 11:34	1
cis-1,2-Dichloroethene	ND		0.50	0.050	ug/L			12/04/20 11:34	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			12/04/20 11:34	1
Dibromochloromethane	ND		0.50	0.070	ug/L			12/04/20 11:34	1
Ethylbenzene	ND		0.50	0.060	ug/L			12/04/20 11:34	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			12/04/20 11:34	1
Methylene Chloride	ND		0.50	0.070	ug/L			12/04/20 11:34	1
Styrene	ND		0.50	0.050	ug/L			12/04/20 11:34	1
Tetrachloroethene	ND		0.50	0.060	ug/L			12/04/20 11:34	1
Toluene	ND		0.50	0.070	ug/L			12/04/20 11:34	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			12/04/20 11:34	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			12/04/20 11:34	1
Trichloroethene	ND		0.50	0.060	ug/L			12/04/20 11:34	1
Vinyl chloride	ND		0.50	0.10	ug/L			12/04/20 11:34	1
Xylenes, Total	ND		1.0	0.15	ug/L			12/04/20 11:34	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*80 - 120*		*12/04/20 11:34*	*1*
Dibromofluoromethane (Surr)	*100*		*80 - 120*		*12/04/20 11:34*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*12/04/20 11:34*	*1*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*12/04/20 11:34*	*1*

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

Lab Sample ID: LCS 410-73040/4
Matrix: Water
Analysis Batch: 73040

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	5.00	4.92		ug/L		98	71 - 134
1,1,1-Trichloroethane	5.00	4.71		ug/L		94	78 - 126
1,1,2,2-Tetrachloroethane	5.00	4.96		ug/L		99	75 - 123
1,1,2-Trichloroethane	5.00	5.04		ug/L		101	80 - 120
1,1-Dichloroethane	5.00	4.78		ug/L		96	74 - 120
1,1-Dichloroethene	5.00	4.54		ug/L		91	80 - 131
1,2-Dibromoethane (EDB)	5.00	4.89		ug/L		98	80 - 120
1,2-Dichloroethane	5.00	4.71		ug/L		94	69 - 122
1,2-Dichloropropane	5.00	4.98		ug/L		100	80 - 120
2-Butanone (MEK)	37.5	35.3		ug/L		94	59 - 141
2-Hexanone	25.0	24.4		ug/L		97	52 - 140
4-Methyl-2-pentanone (MIBK)	25.0	23.4		ug/L		94	55 - 140
Acetone	37.5	30.2		ug/L		80	60 - 146
Benzene	5.00	4.71		ug/L		94	80 - 120
Bromochloromethane	5.00	4.73		ug/L		95	80 - 120
Bromodichloromethane	5.00	4.86		ug/L		97	73 - 124
Bromoform	5.00	4.71		ug/L		94	49 - 144
Bromomethane	5.00	4.83		ug/L		97	60 - 136
Carbon disulfide	5.00	4.15		ug/L		83	67 - 130
Carbon tetrachloride	5.00	4.77		ug/L		95	64 - 141
Chlorobenzene	5.00	4.88		ug/L		98	80 - 120
Chloroethane	5.00	4.60		ug/L		92	63 - 120
Chloroform	5.00	4.88		ug/L		98	80 - 120
Chloromethane	5.00	4.54		ug/L		91	56 - 124
cis-1,2-Dichloroethene	5.00	5.03		ug/L		101	80 - 122
cis-1,3-Dichloropropene	5.00	4.85		ug/L		97	67 - 121
Dibromochloromethane	5.00	4.82		ug/L		96	64 - 138
Ethylbenzene	5.00	4.80		ug/L		96	80 - 120
Methyl tert-butyl ether	5.00	4.66		ug/L		93	69 - 120
Methylene Chloride	5.00	4.70		ug/L		94	80 - 120
Styrene	5.00	4.98		ug/L		100	80 - 120
Tetrachloroethene	5.00	4.80		ug/L		96	80 - 120
Toluene	5.00	4.71		ug/L		94	80 - 120
trans-1,2-Dichloroethene	5.00	4.69		ug/L		94	80 - 122
trans-1,3-Dichloropropene	5.00	4.76		ug/L		95	61 - 129
Trichloroethene	5.00	4.76		ug/L		95	80 - 120
Vinyl chloride	5.00	4.91		ug/L		98	60 - 125
Xylenes, Total	15.0	14.6		ug/L		97	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*80 - 120*
Dibromofluoromethane (Surr)	*100*		*80 - 120*
Toluene-d8 (Surr)	*99*		*80 - 120*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*

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

Lab Sample ID: LCSD 410-73040/5
Matrix: Water
Analysis Batch: 73040

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	5.00	4.89		ug/L		98	71 - 134	1	30
1,1,1-Trichloroethane	5.00	4.73		ug/L		95	78 - 126	1	30
1,1,2,2-Tetrachloroethane	5.00	4.79		ug/L		96	75 - 123	4	30
1,1,2-Trichloroethane	5.00	5.05		ug/L		101	80 - 120	0	30
1,1-Dichloroethane	5.00	4.84		ug/L		97	74 - 120	1	30
1,1-Dichloroethene	5.00	4.54		ug/L		91	80 - 131	0	30
1,2-Dibromoethane (EDB)	5.00	4.89		ug/L		98	80 - 120	0	30
1,2-Dichloroethane	5.00	4.64		ug/L		93	69 - 122	1	30
1,2-Dichloropropane	5.00	5.01		ug/L		100	80 - 120	1	30
2-Butanone (MEK)	37.5	35.4		ug/L		95	59 - 141	0	30
2-Hexanone	25.0	24.8		ug/L		99	52 - 140	2	30
4-Methyl-2-pentanone (MIBK)	25.0	23.7		ug/L		95	55 - 140	1	30
Acetone	37.5	30.8		ug/L		82	60 - 146	2	30
Benzene	5.00	4.73		ug/L		95	80 - 120	0	30
Bromochloromethane	5.00	4.67		ug/L		93	80 - 120	1	30
Bromodichloromethane	5.00	4.89		ug/L		98	73 - 124	1	30
Bromoform	5.00	4.63		ug/L		93	49 - 144	2	30
Bromomethane	5.00	4.79		ug/L		96	60 - 136	1	30
Carbon disulfide	5.00	4.16		ug/L		83	67 - 130	0	30
Carbon tetrachloride	5.00	4.83		ug/L		97	64 - 141	1	30
Chlorobenzene	5.00	4.88		ug/L		98	80 - 120	0	30
Chloroethane	5.00	4.65		ug/L		93	63 - 120	1	30
Chloroform	5.00	4.84		ug/L		97	80 - 120	1	30
Chloromethane	5.00	4.67		ug/L		93	56 - 124	3	30
cis-1,2-Dichloroethene	5.00	5.01		ug/L		100	80 - 122	0	30
cis-1,3-Dichloropropene	5.00	4.81		ug/L		96	67 - 121	1	30
Dibromochloromethane	5.00	4.77		ug/L		95	64 - 138	1	30
Ethylbenzene	5.00	4.79		ug/L		96	80 - 120	0	30
Methyl tert-butyl ether	5.00	4.63		ug/L		93	69 - 120	1	30
Methylene Chloride	5.00	4.75		ug/L		95	80 - 120	1	30
Styrene	5.00	4.97		ug/L		99	80 - 120	0	30
Tetrachloroethene	5.00	4.82		ug/L		96	80 - 120	0	30
Toluene	5.00	4.73		ug/L		95	80 - 120	0	30
trans-1,2-Dichloroethene	5.00	4.74		ug/L		95	80 - 122	1	30
trans-1,3-Dichloropropene	5.00	4.71		ug/L		94	61 - 129	1	30
Trichloroethene	5.00	4.75		ug/L		95	80 - 120	0	30
Vinyl chloride	5.00	4.93		ug/L		99	60 - 125	0	30
Xylenes, Total	15.0	14.7		ug/L		98	80 - 120	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*80 - 120*
Dibromofluoromethane (Surr)	*99*		*80 - 120*
Toluene-d8 (Surr)	*98*		*80 - 120*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*

GC/MS VOA

Analysis Batch: 72509

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-22411-2	HD-COD-SW-7-0/1-0	Total/NA	Water	8260D	
410-22411-3	HD-COD-SW-8-0/1-0	Total/NA	Water	8260D	
410-22411-4	HD-COD-SW-9-0/1-0	Total/NA	Water	8260D	
410-22411-5	HD-COD-SW-13-0/1-0	Total/NA	Water	8260D	
410-22411-6	HD-COD-SW-15-0/1-0	Total/NA	Water	8260D	
MB 410-72509/7	Method Blank	Total/NA	Water	8260D	
LCS 410-72509/4	Lab Control Sample	Total/NA	Water	8260D	
LCSD 410-72509/5	Lab Control Sample Dup	Total/NA	Water	8260D	
410-22411-6 MS	HD-COD-SW-15-0/1-0 MS	Total/NA	Water	8260D	
410-22411-6 MSD	HD-COD-SW-15-0/1-0 MSD	Total/NA	Water	8260D	

Analysis Batch: 73040

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-22411-1	HD-COD-SW-6-0/1-0	Total/NA	Water	8260D	
410-22411-7	HD-COD-SW-16-0/1-0	Total/NA	Water	8260D	
410-22411-8	HD-COD-SW-17-0/1-0	Total/NA	Water	8260D	
410-22411-9	HD-COD-SW-26-0/1-0	Total/NA	Water	8260D	
410-22411-10	HD-COD-SW-27-0/1-0	Total/NA	Water	8260D	
410-22411-11	HD-COD-SW-28-0/1-0	Total/NA	Water	8260D	
410-22411-12	HD-COD-SW-29-0/1-0	Total/NA	Water	8260D	
410-22411-13	HD-QC1-0/1-1	Total/NA	Water	8260D	
410-22411-14	HD-QC1-0/1-2	Total/NA	Water	8260D	
MB 410-73040/7	Method Blank	Total/NA	Water	8260D	
LCS 410-73040/4	Lab Control Sample	Total/NA	Water	8260D	
LCSD 410-73040/5	Lab Control Sample Dup	Total/NA	Water	8260D	

Client Sample ID: HD-COD-SW-6-0/1-0
Lab Sample ID: 410-22411-1

Date Collected: 11/30/20 13:40
Matrix: Water
Date Received: 12/01/20 17:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	73040	12/04/20 16:06	UKAD	ELLE

Client Sample ID: HD-COD-SW-7-0/1-0
Lab Sample ID: 410-22411-2

Date Collected: 11/30/20 10:00
Matrix: Water
Date Received: 12/01/20 17:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	72509	12/03/20 16:11	K4WN	ELLE

Client Sample ID: HD-COD-SW-8-0/1-0
Lab Sample ID: 410-22411-3

Date Collected: 11/30/20 12:40
Matrix: Water
Date Received: 12/01/20 17:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	72509	12/03/20 16:32	K4WN	ELLE

Client Sample ID: HD-COD-SW-9-0/1-0
Lab Sample ID: 410-22411-4

Date Collected: 11/30/20 11:00
Matrix: Water
Date Received: 12/01/20 17:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	72509	12/03/20 16:53	K4WN	ELLE

Client Sample ID: HD-COD-SW-13-0/1-0
Lab Sample ID: 410-22411-5

Date Collected: 11/30/20 12:50
Matrix: Water
Date Received: 12/01/20 17:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	72509	12/03/20 13:00	K4WN	ELLE

Client Sample ID: HD-COD-SW-15-0/1-0
Lab Sample ID: 410-22411-6

Date Collected: 11/30/20 10:25
Matrix: Water
Date Received: 12/01/20 17:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	72509	12/03/20 13:21	K4WN	ELLE

Client Sample ID: HD-COD-SW-16-0/1-0
Lab Sample ID: 410-22411-7

Date Collected: 11/30/20 13:05
Matrix: Water
Date Received: 12/01/20 17:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	73040	12/04/20 16:27	UKAD	ELLE

Client Sample ID: HD-COD-SW-17-0/1-0
Lab Sample ID: 410-22411-8

Date Collected: 11/30/20 13:30
Matrix: Water
Date Received: 12/01/20 17:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	73040	12/04/20 16:49	UKAD	ELLE

Client Sample ID: HD-COD-SW-26-0/1-0
Lab Sample ID: 410-22411-9

Date Collected: 11/30/20 09:30
Matrix: Water
Date Received: 12/01/20 17:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	73040	12/04/20 17:10	UKAD	ELLE

Client Sample ID: HD-COD-SW-27-0/1-0
Lab Sample ID: 410-22411-10

Date Collected: 11/30/20 10:15
Matrix: Water
Date Received: 12/01/20 17:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	73040	12/04/20 17:31	UKAD	ELLE

Client Sample ID: HD-COD-SW-28-0/1-0
Lab Sample ID: 410-22411-11

Date Collected: 11/30/20 11:30
Matrix: Water
Date Received: 12/01/20 17:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	73040	12/04/20 17:52	UKAD	ELLE

Client Sample ID: HD-COD-SW-29-0/1-0
Lab Sample ID: 410-22411-12

Date Collected: 11/30/20 12:25
Matrix: Water
Date Received: 12/01/20 17:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	73040	12/04/20 18:13	UKAD	ELLE

Client Sample ID: HD-QC1-0/1-1
Lab Sample ID: 410-22411-13

Date Collected: 11/30/20 12:00
Matrix: Water
Date Received: 12/01/20 17:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	73040	12/04/20 18:35	UKAD	ELLE

Client Sample ID: HD-QC1-0/1-2
Lab Sample ID: 410-22411-14

Date Collected: 11/30/20 00:00
Matrix: Water
Date Received: 12/01/20 17:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	73040	12/04/20 18:56	UKAD	ELLE

Laboratory References:

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

Accreditation/Certification Summary

Client: Groundwater Sciences Corporation
Job ID: 410-22411-1
Project/Site: fYNOP Monthly Surface Water

Laboratory: Eurofins Lancaster Laboratories Env, LLC

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

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	36-00037	01-31-21

Method Summary

Client: Groundwater Sciences Corporation
Job ID: 410-22411-1
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 Env, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Sample Summary

Client: Groundwater Sciences Corporation
Job ID: 410-22411-1
Project/Site: fYNOP Monthly Surface Water

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
410-22411-1	HD-COD-SW-6-0/1-0	Water	11/30/20 13:40	12/01/20 17:01	
410-22411-2	HD-COD-SW-7-0/1-0	Water	11/30/20 10:00	12/01/20 17:01	
410-22411-3	HD-COD-SW-8-0/1-0	Water	11/30/20 12:40	12/01/20 17:01	
410-22411-4	HD-COD-SW-9-0/1-0	Water	11/30/20 11:00	12/01/20 17:01	
410-22411-5	HD-COD-SW-13-0/1-0	Water	11/30/20 12:50	12/01/20 17:01	
410-22411-6	HD-COD-SW-15-0/1-0	Water	11/30/20 10:25	12/01/20 17:01	
410-22411-7	HD-COD-SW-16-0/1-0	Water	11/30/20 13:05	12/01/20 17:01	
410-22411-8	HD-COD-SW-17-0/1-0	Water	11/30/20 13:30	12/01/20 17:01	
410-22411-9	HD-COD-SW-26-0/1-0	Water	11/30/20 09:30	12/01/20 17:01	
410-22411-10	HD-COD-SW-27-0/1-0	Water	11/30/20 10:15	12/01/20 17:01	
410-22411-11	HD-COD-SW-28-0/1-0	Water	11/30/20 11:30	12/01/20 17:01	
410-22411-12	HD-COD-SW-29-0/1-0	Water	11/30/20 12:25	12/01/20 17:01	
410-22411-13	HD-QC1-0/1-1	Water	11/30/20 12:00	12/01/20 17:01	
410-22411-14	HD-QC1-0/1-2	Water	11/30/20 00:00	12/01/20 17:01	

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-22411-1

SDG No.:

Instrument ID: 19930 Analysis Batch Number: 69397

Lab Sample ID: IC 410-69397/3 Client Sample ID:

Date Analyzed: 11/23/20 12:45 Lab File ID: IN23I01.D GC Column: R-624SilMS 30m ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	1.98	Incomplete Integration	campbellme	11/23/20 18:24
t-Butyl alcohol-d10 (IS)	4.26	Incomplete Integration	campbellme	11/23/20 18:45
1,4-Dioxane	8.64	Incomplete Integration	campbellme	11/23/20 18:45

Lab Sample ID: ICIS 410-69397/4 Client Sample ID:

Date Analyzed: 11/23/20 13:06 Lab File ID: IN23I02.D GC Column: R-624SilMS 30m ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetone	3.61	Incomplete Integration	campbellme	11/23/20 18:34
Methyl acetate	4.04	Incomplete Integration	campbellme	11/23/20 18:25
t-Butyl alcohol-d10 (IS)	4.26	Incomplete Integration	campbellme	11/23/20 18:26
n-Butanol	8.10	Incomplete Integration	campbellme	11/23/20 18:26
1,4-Dioxane	8.64	Incomplete Integration	campbellme	11/23/20 18:26

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-22411-1

SDG No.:

Instrument ID: 19930 Analysis Batch Number: 69397

Lab Sample ID: IC 410-69397/5 Client Sample ID:

Date Analyzed: 11/23/20 13:28 Lab File ID: IN23I03.D GC Column: R-624SilMS 30m ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Bromomethane	2.62	Incomplete Integration	campbellme	11/23/20 18:30
Methyl acetate	4.04	Incomplete Integration	campbellme	11/23/20 18:30
t-Butyl alcohol-d10 (IS)	4.26	Incomplete Integration	campbellme	11/23/20 18:44
n-Butanol	8.10	Incomplete Integration	campbellme	11/23/20 18:31
1,4-Dioxane	8.64	Incomplete Integration	campbellme	11/23/20 18:31

Lab Sample ID: IC 410-69397/6 Client Sample ID:

Date Analyzed: 11/23/20 13:49 Lab File ID: IN23I04.D GC Column: R-624SilMS 30m ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Vinyl chloride	2.30	Incomplete Integration	campbellme	11/23/20 18:34
Methyl acetate	4.04	Incomplete Integration	campbellme	11/23/20 18:35
t-Butyl alcohol-d10 (IS)	4.26	Incomplete Integration	campbellme	11/23/20 18:43
1,4-Dioxane	8.64	Incomplete Integration	campbellme	11/23/20 18:35

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-22411-1

SDG No.:

Instrument ID: 19930 Analysis Batch Number: 69397

Lab Sample ID: IC 410-69397/7 Client Sample ID:

Date Analyzed: 11/23/20 14:10 Lab File ID: IN23I05.D GC Column: R-624SilMS 30m ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methyl acetate	4.03	Incomplete Integration	campbellme	11/23/20 18:36
t-Butyl alcohol-d10 (IS)	4.27	Incomplete Integration	campbellme	11/23/20 18:43
n-Butanol	8.10	Incomplete Integration	campbellme	11/23/20 18:37
1,4-Dioxane	8.67	Incomplete Integration	campbellme	11/23/20 18:37

Lab Sample ID: IC 410-69397/8 Client Sample ID:

Date Analyzed: 11/23/20 14:31 Lab File ID: IN23I06.D GC Column: R-624SilMS 30m ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Vinyl chloride	2.29	Incomplete Integration	campbellme	11/23/20 18:38
Acetone	3.61	Incomplete Integration	campbellme	11/23/20 18:38
Methyl acetate	4.04	Incomplete Integration	campbellme	11/23/20 18:38
t-Butyl alcohol-d10 (IS)	4.25	Incomplete Integration	campbellme	11/23/20 18:43
Tetrahydrofuran	6.50	Incomplete Integration	campbellme	11/23/20 18:38
n-Butanol	8.11	Incomplete Integration	campbellme	11/23/20 18:38
1,4-Dioxane	8.63	Incomplete Integration	campbellme	11/23/20 18:38

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-22411-1

SDG No.:

Instrument ID: 19930 Analysis Batch Number: 69397

Lab Sample ID: IC 410-69397/9 Client Sample ID:

Date Analyzed: 11/23/20 14:53 Lab File ID: IN23I07.D GC Column: R-624SilMS 30m ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,3-Butadiene	2.28	Incomplete Integration	campbellme	11/23/20 18:39
t-Butyl alcohol-d10 (IS)	4.27	Incomplete Integration	campbellme	11/23/20 18:42
Acrylonitrile	4.61	Incomplete Integration	campbellme	11/23/20 18:39
trans-1,2-Dichloroethene	4.67	Incomplete Integration	campbellme	11/23/20 18:39
Propionitrile	6.23	Incomplete Integration	campbellme	11/23/20 18:39
n-Butanol	8.12	Incomplete Integration	campbellme	11/23/20 18:40
1,4-Dioxane	8.65	Incomplete Integration	campbellme	11/23/20 18:40
Dibromomethane	8.66	Incomplete Integration	campbellme	11/23/20 18:40

Lab Sample ID: ICV 410-69397/10 Client Sample ID:

Date Analyzed: 11/23/20 15:14 Lab File ID: IN23V01.D GC Column: R-624SilMS 30m ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methyl acetate	4.03	Incomplete Integration	campbellme	11/23/20 18:56
n-Butanol	8.10	Incomplete Integration	campbellme	11/23/20 18:56
1,4-Dioxane	8.64	Incomplete Integration	campbellme	11/23/20 18:57

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-22411-1

SDG No.:

Instrument ID: 19930 Analysis Batch Number: 72509

Lab Sample ID: CCVIS 410-72509/3 Client Sample ID:

Date Analyzed: 12/03/20 09:44 Lab File ID: ID03X03.D GC Column: R-624SilMS 30m ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.64	Incomplete Integration	spositok	12/03/20 10:20

Lab Sample ID: 410-22411-5 Client Sample ID: HD-COD-SW-13-0/1-0

Date Analyzed: 12/03/20 13:00 Lab File ID: ID03X08.D GC Column: R-624SilMS 30m ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloroform	6.64	Peak assignment corrected	campbellme	12/03/20 18:35
Benzene	7.32	Incomplete Integration	campbellme	12/03/20 18:35
Trichloroethene	8.20	Incomplete Integration	campbellme	12/03/20 18:35

Lab Sample ID: 410-22411-6 Client Sample ID: HD-COD-SW-15-0/1-0

Date Analyzed: 12/03/20 13:21 Lab File ID: ID03X09.D GC Column: R-624SilMS 30m ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloroform	6.64	Incomplete Integration	campbellme	12/03/20 18:36
Toluene	9.82	Incomplete Integration	campbellme	12/03/20 18:37

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-22411-1

SDG No.:

Instrument ID: 19930 Analysis Batch Number: 72509

Lab Sample ID: 410-22411-2 Client Sample ID: HD-COD-SW-7-0/1-0

Date Analyzed: 12/03/20 16:11 Lab File ID: ID03X17.D GC Column: R-624SilMS 30m ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
cis-1,2-Dichloroethene	6.15	Peak assignment corrected	campbellme	12/03/20 20:12
Benzene	7.34	Incomplete Integration	campbellme	12/03/20 20:12

Lab Sample ID: 410-22411-3 Client Sample ID: HD-COD-SW-8-0/1-0

Date Analyzed: 12/03/20 16:32 Lab File ID: ID03X18.D GC Column: R-624SilMS 30m ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
cis-1,2-Dichloroethene	6.15	Peak assignment corrected	campbellme	12/03/20 20:12
Chloroform	6.65	Peak assignment corrected	campbellme	12/03/20 20:13
Styrene	11.77	Peak assignment corrected	campbellme	12/03/20 20:13

Lab Sample ID: 410-22411-4 Client Sample ID: HD-COD-SW-9-0/1-0

Date Analyzed: 12/03/20 16:53 Lab File ID: ID03X19.D GC Column: R-624SilMS 30m ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
cis-1,2-Dichloroethene	6.15	Peak assignment corrected	campbellme	12/03/20 20:13
Trichloroethene	8.22	Incomplete Integration	campbellme	12/03/20 20:13

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-22411-1

SDG No.:

Instrument ID: 19930 Analysis Batch Number: 73040

Lab Sample ID: CCVIS 410-73040/3 Client Sample ID:

Date Analyzed: 12/04/20 10:09 Lab File ID: ID04X03.D GC Column: R-624SilMS 30m ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.63	Incomplete Integration	spositok	12/04/20 10:39

Lab Sample ID: 410-22411-1 Client Sample ID: HD-COD-SW-6-0/1-0

Date Analyzed: 12/04/20 16:06 Lab File ID: ID04X18.D GC Column: R-624SilMS 30m ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzene	7.35	Incomplete Integration	campbellme	12/04/20 22:45
2-Butanone (MEK)		Invalid Compound ID	campbellme	12/04/20 22:45

Lab Sample ID: 410-22411-7 Client Sample ID: HD-COD-SW-16-0/1-0

Date Analyzed: 12/04/20 16:27 Lab File ID: ID04X19.D GC Column: R-624SilMS 30m ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloroform	6.65	Peak assignment corrected	campbellme	12/04/20 22:45
Benzene	7.34	Incomplete Integration	campbellme	12/04/20 22:46
Trichloroethene	8.21	Incomplete Integration	campbellme	12/04/20 22:46

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-22411-1

SDG No.:

Instrument ID: 19930 Analysis Batch Number: 73040

Lab Sample ID: 410-22411-8 Client Sample ID: HD-COD-SW-17-0/1-0

Date Analyzed: 12/04/20 16:49 Lab File ID: ID04X20.D GC Column: R-624SilMS 30m ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloroform	6.65	Peak assignment corrected	campbellme	12/04/20 23:32
Benzene	7.34	Incomplete Integration	campbellme	12/04/20 23:33

Lab Sample ID: 410-22411-9 Client Sample ID: HD-COD-SW-26-0/1-0

Date Analyzed: 12/04/20 17:10 Lab File ID: ID04X21.D GC Column: R-624SilMS 30m ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Bromodichloromethane	8.90	Incomplete Integration	campbellme	12/04/20 23:39

Lab Sample ID: 410-22411-10 Client Sample ID: HD-COD-SW-27-0/1-0

Date Analyzed: 12/04/20 17:31 Lab File ID: ID04X22.D GC Column: R-624SilMS 30m ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
cis-1,2-Dichloroethene	6.16	Peak assignment corrected	campbellme	12/04/20 23:39
Benzene	7.34	Incomplete Integration	campbellme	12/04/20 23:39

Lab Sample ID: 410-22411-11 Client Sample ID: HD-COD-SW-28-0/1-0

Date Analyzed: 12/04/20 17:52 Lab File ID: ID04X23.D GC Column: R-624SilMS 30m ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
cis-1,2-Dichloroethene	6.15	Peak assignment corrected	campbellme	12/04/20 23:39

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-22411-1

SDG No.:

Instrument ID: 19930 Analysis Batch Number: 73040

Lab Sample ID: 410-22411-12 Client Sample ID: HD-COD-SW-29-0/1-0

Date Analyzed: 12/04/20 18:13 Lab File ID: ID04X24.D GC Column: R-624SilMS 30m ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
cis-1,2-Dichloroethene	6.16	Peak assignment corrected	campbellme	12/04/20 23:40
Chloroform	6.65	Peak assignment corrected	campbellme	12/04/20 23:40
Trichloroethene	8.23	Incomplete Integration	campbellme	12/04/20 23:40

Lab Sample ID: 410-22411-13 Client Sample ID: HD-QC1-0/1-1

Date Analyzed: 12/04/20 18:35 Lab File ID: ID04X25.D GC Column: R-624SilMS 30m ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
cis-1,2-Dichloroethene	6.16	Peak assignment corrected	campbellme	12/04/20 23:40
Chloroform	6.65	Peak assignment corrected	campbellme	12/04/20 23:40
Trichloroethene	8.24	Incomplete Integration	campbellme	12/04/20 23:41
2-Butanone (MEK)		Invalid Compound ID	campbellme	12/04/20 23:40

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
MSV_31_826ISS_00003	01/27/21	07/27/20	Methanol, Lot DX212	50 mL	MSV_8260_SS_00160	1 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							4-Bromofluorobenzene (Surr)	50 ug/mL
							Dibromofluoromethane (Surr)	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL
					MSV_Cus826_IS_00099	1 mL	1,4-Dichlorobenzene-d4	50 ug/mL
							Chlorobenzene-d5 (IS)	50 ug/mL
							Fluorobenzene (IS)	50 ug/mL
							t-Butyl alcohol-d10 (IS)	250 ug/mL
.MSV_8260_SS_00160	03/31/22		Restek, Lot A0146938		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
.MSV_Cus826_IS_00099	05/31/21		Restek, Lot A0138205		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2500 ug/mL
							Chlorobenzene-d5 (IS)	2500 ug/mL
							Fluorobenzene (IS)	2500 ug/mL
							t-Butyl alcohol-d10 (IS)	12500 ug/mL
MSV_Q_QVOA1_00056	12/23/20	11/23/20	Methanol, Lot DZ644	25 mL	MSV_Q#1B_00070	1 mL	1,1,1,2-Tetrachloroethane	40 mg/L
							1,1,1-Trichloroethane	40 mg/L
							1,1,2,2-Tetrachloroethane	40 mg/L
							1,1,2-Trichloroethane	40 mg/L
							1,1-Dichloroethane	40 mg/L
							1,1-Dichloroethene	40 mg/L
							1,2-Dibromoethane (EDB)	40 mg/L
							1,2-Dichloroethane	40 mg/L
							1,2-Dichloropropane	40 mg/L
							Benzene	40 mg/L
							Bromodichloromethane	40 mg/L
							Bromoform	40 mg/L
							Carbon tetrachloride	40 mg/L
							Chlorobenzene	40 mg/L
							Chloroform	40 mg/L
							cis-1,2-Dichloroethene	40 mg/L
							cis-1,3-Dichloropropene	40 mg/L
							Dibromochloromethane	40 mg/L
							Ethylbenzene	40 mg/L
							Methylene Chloride	40 mg/L
							Styrene	40 mg/L
							Tetrachloroethene	40 mg/L
							Toluene	40 mg/L
							trans-1,2-Dichloroethene	40 mg/L
							trans-1,3-Dichloropropene	40 mg/L
							Trichloroethene	40 mg/L
					MSV_Q#3B_00062	1 mL	2-Butanone (MEK)	300 mg/L
							2-Hexanone	200 mg/L
							4-Methyl-2-pentanone (MIBK)	200 mg/L
							Acetone	300 mg/L
					MSV_Q#4C_00065	1 mL	Carbon disulfide	40 mg/L

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methyl tert-butyl ether	40 mg/L
.MSV_Q#1B_00070	04/30/22		Restek, Lot A0148625		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	1000 ug/mL
							1,1,1-Trichloroethane	1000 ug/mL
							1,1,2,2-Tetrachloroethane	1000 ug/mL
							1,1,2-Trichloroethane	1000 ug/mL
							1,1-Dichloroethane	1000 ug/mL
							1,1-Dichloroethene	1000 ug/mL
							1,2-Dibromoethane (EDB)	1000 ug/mL
							1,2-Dichloroethane	1000 ug/mL
							1,2-Dichloropropane	1000 ug/mL
							Benzene	1000 ug/mL
							Bromodichloromethane	1000 ug/mL
							Bromoform	1000 ug/mL
							Carbon tetrachloride	1000 ug/mL
							Chlorobenzene	1000 ug/mL
							Chloroform	1000 ug/mL
							cis-1,2-Dichloroethene	1000 ug/mL
							cis-1,3-Dichloropropene	1000 ug/mL
							Dibromochloromethane	1000 ug/mL
							Ethylbenzene	1000 ug/mL
							Methylene Chloride	1000 ug/mL
							Styrene	1000 ug/mL
							Tetrachloroethene	1000 ug/mL
							Toluene	1000 ug/mL
							trans-1,2-Dichloroethene	1000 ug/mL
							trans-1,3-Dichloropropene	1000 ug/mL
							Trichloroethene	1000 ug/mL
.MSV_Q#3B_00062	09/30/21		Restek, Lot A0158722		(Purchased Reagent)		2-Butanone (MEK)	7500 ug/mL
							2-Hexanone	5000 ug/mL
							4-Methyl-2-pentanone (MIBK)	5000 ug/mL
							Acetone	7500 ug/mL
.MSV_Q#4C_00065	03/31/21		Restek, Lot A0158704		(Purchased Reagent)		Carbon disulfide	1000 ug/mL
							Methyl tert-butyl ether	1000 ug/mL
MSV_Q_QVOA1_00057	12/30/20	11/30/20	Methanol, Lot DZ644	25 mL	MSV_Q#1B_00071	1 mL	1,1,1,2-Tetrachloroethane	40 mg/L
							1,1,1-Trichloroethane	40 mg/L
							1,1,2,2-Tetrachloroethane	40 mg/L
							1,1,2-Trichloroethane	40 mg/L
							1,1-Dichloroethane	40 mg/L
							1,1-Dichloroethene	40 mg/L
							1,2-Dibromoethane (EDB)	40 mg/L
							1,2-Dichloroethane	40 mg/L
							1,2-Dichloropropane	40 mg/L
							Benzene	40 mg/L
							Bromodichloromethane	40 mg/L
							Bromoform	40 mg/L
							Carbon tetrachloride	40 mg/L
							Chlorobenzene	40 mg/L

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chloroform	40 mg/L
							cis-1,2-Dichloroethene	40 mg/L
							cis-1,3-Dichloropropene	40 mg/L
							Dibromochloromethane	40 mg/L
							Ethylbenzene	40 mg/L
							Methylene Chloride	40 mg/L
							Styrene	40 mg/L
							Tetrachloroethene	40 mg/L
							Toluene	40 mg/L
							trans-1,2-Dichloroethene	40 mg/L
							trans-1,3-Dichloropropene	40 mg/L
							Trichloroethene	40 mg/L
					MSV_Q#3B_00063	1 mL	2-Butanone (MEK)	300 mg/L
							2-Hexanone	200 mg/L
							4-Methyl-2-pentanone (MIBK)	200 mg/L
							Acetone	300 mg/L
					MSV_Q#4C_00066	1 mL	Carbon disulfide	40 mg/L
							Methyl tert-butyl ether	40 mg/L
.MSV_Q#1B_00071	04/30/22		Restek, Lot A0148625		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	1000 ug/mL
							1,1,1-Trichloroethane	1000 ug/mL
							1,1,2,2-Tetrachloroethane	1000 ug/mL
							1,1,2-Trichloroethane	1000 ug/mL
							1,1-Dichloroethane	1000 ug/mL
							1,1-Dichloroethene	1000 ug/mL
							1,2-Dibromoethane (EDB)	1000 ug/mL
							1,2-Dichloroethane	1000 ug/mL
							1,2-Dichloropropane	1000 ug/mL
							Benzene	1000 ug/mL
							Bromodichloromethane	1000 ug/mL
							Bromoform	1000 ug/mL
							Carbon tetrachloride	1000 ug/mL
							Chlorobenzene	1000 ug/mL
							Chloroform	1000 ug/mL
							cis-1,2-Dichloroethene	1000 ug/mL
							cis-1,3-Dichloropropene	1000 ug/mL
							Dibromochloromethane	1000 ug/mL
							Ethylbenzene	1000 ug/mL
							Methylene Chloride	1000 ug/mL
							Styrene	1000 ug/mL
							Tetrachloroethene	1000 ug/mL
							Toluene	1000 ug/mL
							trans-1,2-Dichloroethene	1000 ug/mL
							trans-1,3-Dichloropropene	1000 ug/mL
							Trichloroethene	1000 ug/mL
.MSV_Q#3B_00063	09/30/21		Restek, Lot A0158722		(Purchased Reagent)		2-Butanone (MEK)	7500 ug/mL
							2-Hexanone	5000 ug/mL
							4-Methyl-2-pentanone (MIBK)	5000 ug/mL
							Acetone	7500 ug/mL

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.MSV_Q#4C_00066	03/31/21		Restek, Lot A0158704		(Purchased Reagent)		Carbon disulfide	1000 ug/mL
							Methyl tert-butyl ether	1000 ug/mL
MSV_Q_QVOA6_00053	12/19/20	11/19/20	Methanol, Lot DZ644	25 mL	MSV_QCS#6Std_00064	1 mL	Bromochloromethane	40 ug/mL
.MSV_QCS#6Std_00064	12/19/20		Restek, Lot A0158906		(Purchased Reagent)		Bromochloromethane	1000 ug/mL
MSV_Q_QVOA6_00055	01/02/21	12/03/20	Methanol, Lot DZ644	25 mL	MSV_QCS#6Std_00067	1 mL	Bromochloromethane	40 ug/mL
.MSV_QCS#6Std_00067	01/02/21		Restek, Lot A0158906		(Purchased Reagent)		Bromochloromethane	1000 ug/mL
MSV_QGAS_826_00092	11/30/20	11/23/20	Methanol, Lot DZ644	1 mL	MSV_502QGas_00119	20 uL	Bromomethane	40 ug/mL
							Chloroethane	40 ug/mL
							Chloromethane	40 ug/mL
							Vinyl chloride	40 ug/mL
.MSV_502QGas_00119	11/30/20		Restek, Lot A0155823		(Purchased Reagent)		Bromomethane	2000 ug/mL
							Chloroethane	2000 ug/mL
							Chloromethane	2000 ug/mL
							Vinyl chloride	2000 ug/mL
MSV_QGAS_826_00093	12/07/20	11/30/20	Methanol, Lot DZ644	1 mL	MSV_502QGas_00120	20 uL	Bromomethane	40 ug/mL
							Chloroethane	40 ug/mL
							Chloromethane	40 ug/mL
							Vinyl chloride	40 ug/mL
.MSV_502QGas_00120	12/07/20		Restek, Lot A0155823		(Purchased Reagent)		Bromomethane	2000 ug/mL
							Chloroethane	2000 ug/mL
							Chloromethane	2000 ug/mL
							Vinyl chloride	2000 ug/mL
MSV_RV1_826_00030	12/23/20	11/23/20	Methanol, Lot DZ644	1 mL	MSV_V#1B_00126	10 uL	1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dibromoethane (EDB)	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3,5-Trichlorobenzene	50 ug/mL
							1,3,5-Trimethylbenzene	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							1-Chlorohexane	50 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Chlorotoluene	50 ug/mL
							4-Isopropyltoluene	50 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromodichloromethane	50 ug/mL
							Bromoform	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Dibromochloromethane	50 ug/mL
							Dibromomethane	50 ug/mL
							Ethylbenzene	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	100 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							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
					MSV_V#2B_00159	10 uL	1,4-Dioxane	2500 ug/mL
							2-Methyl-2-propanol	1000 ug/mL
							Isobutyl alcohol	2500 ug/mL
							Methacrylonitrile	500 ug/mL
							n-Butanol	5000 ug/mL
							Propionitrile	1000 ug/mL
							trans-1,4-Dichloro-2-butene	500 ug/mL
					MSV_V#4C_00106	10 uL	1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,2-Dichloro-1,1,2-trifluoroethane	50 ug/mL
							2-Chloro-1,3-butadiene	50 ug/mL
							Benzyl chloride	50 ug/mL
							Butadiene	50 ug/mL
							Carbon disulfide	50 ug/mL
							Cyclohexane	50 ug/mL
							Ethyl methacrylate	50 ug/mL
							Hexane	50 ug/mL

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Iodomethane	50 ug/mL
							Isopropyl ether	50 ug/mL
							Methyl methacrylate	50 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							n-Heptane	50 ug/mL
							Tert-amyl methyl ether	50 ug/mL
							Tert-butyl ethyl ether	50 ug/mL
					MSV_V_VOA2_00059	150 uL	1,4-Dioxane	2500 ug/mL
							2-Methyl-2-propanol	1000 ug/mL
							Isobutyl alcohol	2500 ug/mL
							Methacrylonitrile	500 ug/mL
							n-Butanol	5000 ug/mL
							Propionitrile	1000 ug/mL
							trans-1,4-Dichloro-2-butene	500 ug/mL
					MSV_V_VOA3_00056	100 uL	2-Butanone (MEK)	500 ug/mL
							2-Hexanone	500 ug/mL
							2-Nitropropane	500 ug/mL
							4-Methyl-2-pentanone (MIBK)	500 ug/mL
							Acetone	500 ug/mL
							Acrylonitrile	250 ug/mL
							Tetrahydrofuran	500 ug/mL
							Acrolein	2500.07 ug/mL
.MSV_V#1B_00126	12/23/20		Restek, Lot A0158586		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	5000 ug/mL
							1,1,1-Trichloroethane	5000 ug/mL
							1,1,2,2-Tetrachloroethane	5000 ug/mL
							1,1,2-Trichloroethane	5000 ug/mL
							1,1-Dichloroethane	5000 ug/mL
							1,1-Dichloroethene	5000 ug/mL
							1,1-Dichloropropene	5000 ug/mL
							1,2,3-Trichlorobenzene	5000 ug/mL
							1,2,3-Trichloropropane	5000 ug/mL
							1,2,4-Trichlorobenzene	5000 ug/mL
							1,2,4-Trimethylbenzene	5000 ug/mL
							1,2-Dibromo-3-Chloropropane	5000 ug/mL
							1,2-Dibromoethane (EDB)	5000 ug/mL
							1,2-Dichlorobenzene	5000 ug/mL
							1,2-Dichloroethane	5000 ug/mL
							1,2-Dichloropropane	5000 ug/mL
							1,3,5-Trichlorobenzene	5000 ug/mL
							1,3,5-Trimethylbenzene	5000 ug/mL
							1,3-Dichlorobenzene	5000 ug/mL
							1,3-Dichloropropane	5000 ug/mL
							1,4-Dichlorobenzene	5000 ug/mL
							1-Chlorohexane	5000 ug/mL
							2,2-Dichloropropane	5000 ug/mL
							2-Chlorotoluene	5000 ug/mL
							4-Chlorotoluene	5000 ug/mL
							4-Isopropyltoluene	5000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzene	5000 ug/mL
							Bromobenzene	5000 ug/mL
							Bromodichloromethane	5000 ug/mL
							Bromoform	5000 ug/mL
							Carbon tetrachloride	5000 ug/mL
							Chlorobenzene	5000 ug/mL
							Chloroform	5000 ug/mL
							cis-1,2-Dichloroethene	5000 ug/mL
							cis-1,3-Dichloropropene	5000 ug/mL
							Dibromochloromethane	5000 ug/mL
							Dibromomethane	5000 ug/mL
							Ethylbenzene	5000 ug/mL
							Hexachlorobutadiene	5000 ug/mL
							Isopropylbenzene	5000 ug/mL
							m-Xylene & p-Xylene	10000 ug/mL
							Methylene Chloride	5000 ug/mL
							n-Butylbenzene	5000 ug/mL
							N-Propylbenzene	5000 ug/mL
							Naphthalene	5000 ug/mL
							o-Xylene	5000 ug/mL
							sec-Butylbenzene	5000 ug/mL
							Styrene	5000 ug/mL
							tert-Butylbenzene	5000 ug/mL
							Tetrachloroethene	5000 ug/mL
							Toluene	5000 ug/mL
							trans-1,2-Dichloroethene	5000 ug/mL
							trans-1,3-Dichloropropene	5000 ug/mL
							Trichloroethene	5000 ug/mL
.MSV_V#2B_00159	12/23/20		Restek, Lot A0159694		(Purchased Reagent)		1,4-Dioxane	62500 ug/mL
							2-Methyl-2-propanol	25000 ug/mL
							Isobutyl alcohol	62500 ug/mL
							Methacrylonitrile	12500 ug/mL
							n-Butanol	125000 ug/mL
							Propionitrile	25000 ug/mL
							trans-1,4-Dichloro-2-butene	12500 ug/mL
.MSV_V#4C_00106	12/23/20		Restek, Lot A0158660		(Purchased Reagent)		1,1,2-Trichloro-1,2,2-trifluoroethane	5000 ug/mL
							1,2-Dichloro-1,1,2-trifluoroethane	5000 ug/mL
							2-Chloro-1,3-butadiene	5000 ug/mL
							Benzyl chloride	5000 ug/mL
							Butadiene	5000 ug/mL
							Carbon disulfide	5000 ug/mL
							Cyclohexane	5000 ug/mL
							Ethyl methacrylate	5000 ug/mL
							Hexane	5000 ug/mL
							Iodomethane	5000 ug/mL
							Isopropyl ether	5000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methyl methacrylate	5000 ug/mL
							Methyl tert-butyl ether	5000 ug/mL
							n-Heptane	5000 ug/mL
							Tert-amyl methyl ether	5000 ug/mL
							Tert-butyl ethyl ether	5000 ug/mL
.MSV_V_VOA2_00059	12/23/20	11/23/20	Methanol, Lot DZ644	5 mL	MSV_V#2B_00159	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_00159	12/23/20		Restek, Lot A0159694		(Purchased Reagent)		1,4-Dioxane	62500 ug/mL
							2-Methyl-2-propanol	25000 ug/mL
							Isobutyl alcohol	62500 ug/mL
							Methacrylonitrile	12500 ug/mL
							n-Butanol	125000 ug/mL
							Propionitrile	25000 ug/mL
							trans-1,4-Dichloro-2-butene	12500 ug/mL
.MSV_V_VOA3_00056	12/23/20	11/23/20	Methanol, Lot DZ644	5 mL	MSV_V#3B_00069	1 mL	2-Butanone (MEK)	5000 ug/mL
							2-Hexanone	5000 ug/mL
							2-Nitropropane	5000 ug/mL
							4-Methyl-2-pentanone (MIBK)	5000 ug/mL
							Acetone	5000 ug/mL
							Acrylonitrile	2500 ug/mL
							Tetrahydrofuran	5000 ug/mL
					MSV_VACR_00013	1 mL	Acrolein	25000.7 ug/mL
..MSV_V#3B_00069	12/23/20		Restek, Lot A0158677		(Purchased Reagent)		2-Butanone (MEK)	25000 ug/mL
							2-Hexanone	25000 ug/mL
							2-Nitropropane	25000 ug/mL
							4-Methyl-2-pentanone (MIBK)	25000 ug/mL
							Acetone	25000 ug/mL
							Acrylonitrile	12500 ug/mL
							Tetrahydrofuran	25000 ug/mL
..MSV_VACR_00013	12/26/20	10/27/20	Methanol, Lot DX212	10 mL	MSV_VACR_STK_00015	9.067 mL	Acrolein	125004 ug/mL
...MSV_VACR_STK_00015	12/26/20	10/27/20	Methanol, Lot DX212	10 mL	MSV_ACROLEIN_00008	1.462 g	Acrolein	137867 ug/mL
....MSV_ACROLEIN_00008	12/31/20		Chem Service, Lot 10410200		(Purchased Reagent)		Acrolein	0.943 g/g
MSV_RV1_826_00031	12/26/20	11/30/20	Methanol, Lot DZ644	1 mL	MSV_V#1B_00127	10 uL	1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,2-Dibromoethane (EDB)	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							Benzene	50 ug/mL

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
					MSV_V#4C_00107	10 uL	Carbon disulfide	50 ug/mL
							Methyl tert-butyl ether	50 ug/mL
					MSV_V_VOA3_00057	100 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_V#1B_00127	12/30/20		Restek, Lot A0158586		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	5000 ug/mL
							1,1,1-Trichloroethane	5000 ug/mL
							1,1,2,2-Tetrachloroethane	5000 ug/mL
							1,1,2-Trichloroethane	5000 ug/mL
							1,1-Dichloroethane	5000 ug/mL
							1,1-Dichloroethene	5000 ug/mL
							1,2-Dibromoethane (EDB)	5000 ug/mL
							1,2-Dichloroethane	5000 ug/mL
							1,2-Dichloropropane	5000 ug/mL
							Benzene	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

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.MSV_V#4C_00107	12/30/20		Restek, Lot A0158660		(Purchased Reagent)		Carbon disulfide	5000 ug/mL
							Methyl tert-butyl ether	5000 ug/mL
.MSV_V_VOA3_00057	12/26/20	11/30/20	Methanol, Lot DZ644	5 mL	MSV_V#3B_00070	1 mL	2-Butanone (MEK)	5000 ug/mL
							2-Hexanone	5000 ug/mL
							4-Methyl-2-pentanone (MIBK)	5000 ug/mL
							Acetone	5000 ug/mL
..MSV_V#3B_00070	12/30/20		Restek, Lot A0158677		(Purchased Reagent)		2-Butanone (MEK)	25000 ug/mL
							2-Hexanone	25000 ug/mL
							4-Methyl-2-pentanone (MIBK)	25000 ug/mL
							Acetone	25000 ug/mL
MSV_RV4_826_00034	12/19/20	11/23/20	Methanol, Lot DZ644	1 mL	MSV_V_EE_00004	50 uL	Ethyl ether	50.0108 ug/mL
					MSV_V_VOA6_00062	50 uL	1,2,3-Trimethylbenzene	50 ug/mL
							3-Chloro-1-propene	50 ug/mL
							Bromochloromethane	50 ug/mL
							Methyl acetate	50 ug/mL
							Methylcyclohexane	50 ug/mL
							Pentachloroethane	50 ug/mL
.MSV_V_EE_00004	04/21/21	10/21/20	Methanol, Lot DX212	100 mL	MSV_EE_MISCSK_00005	1.434 mL	Ethyl ether	1000.22 ug/mL
..MSV_EE_MISCSK_00005	04/21/21	10/21/20	Methanol, Lot DX212	10 mL	MSV_EE_Neat_00003	0.6975 g	Ethyl ether	69750 ug/mL
...MSV_EE_Neat_00003	11/30/21		Chem Service, Lot 7967000		(Purchased Reagent)		Ethyl ether	1 g/g
.MSV_V_VOA6_00062	12/19/20	11/19/20	Methanol, Lot DZ644	5 mL	MSV_V#6_00045	1 mL	1,2,3-Trimethylbenzene	1000 ug/mL
							3-Chloro-1-propene	1000 ug/mL
							Bromochloromethane	1000 ug/mL
							Methyl acetate	1000 ug/mL
							Methylcyclohexane	1000 ug/mL
							Pentachloroethane	1000 ug/mL
..MSV_V#6_00045	12/19/20		Restek, Lot A0158625		(Purchased Reagent)		1,2,3-Trimethylbenzene	5000 ug/mL
							3-Chloro-1-propene	5000 ug/mL
							Bromochloromethane	5000 ug/mL
							Methyl acetate	5000 ug/mL
							Methylcyclohexane	5000 ug/mL
							Pentachloroethane	5000 ug/mL
MSV_RV4_826_00035	12/19/20	11/30/20	Methanol, Lot DZ644	1 mL	MSV_V_VOA6_00063	50 uL	Bromochloromethane	50 ug/mL
.MSV_V_VOA6_00063	12/25/20	11/25/20	Methanol, Lot DZ644	5 mL	MSV_V#6_00046	1 mL	Bromochloromethane	1000 ug/mL
..MSV_V#6_00046	12/25/20		Restek, Lot A0158625		(Purchased Reagent)		Bromochloromethane	5000 ug/mL
MSV_RV4GAS826_00096	11/30/20	11/23/20	Methanol, Lot DZ644	1 mL	MSV_DCFM_00030	25 uL	Dichlorofluoromethane	50 ug/mL
					MSV_V_Gas_00175	25 uL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.MSV_DCFM_00030	12/19/20		AccuStandard, Lot 220101035		(Purchased Reagent)		Dichlorofluoromethane	2000 ug/mL
.MSV_V_Gas_00175	11/30/20		Restek, Lot A0159812		(Purchased Reagent)		Bromomethane	2000 ug/mL
							Chloroethane	2000 ug/mL
							Chloromethane	2000 ug/mL
							Dichlorodifluoromethane	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Trichlorofluoromethane	2000 ug/mL
							Vinyl chloride	2000 ug/mL
MSV_RV4GAS826_00097	12/07/20	11/30/20	Methanol, Lot DZ644	1 mL	MSV_V_Gas_00176	25 uL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.MSV_V_Gas_00176	12/07/20		Restek, Lot A0159812		(Purchased Reagent)		Bromomethane	2000 ug/mL
							Chloroethane	2000 ug/mL
							Chloromethane	2000 ug/mL
							Vinyl chloride	2000 ug/mL
MSV_V_BFB_00003							1,2-Dichloroethene, Total	
							1,3-Dichloropropene, Total	
							Tentatively Identified Compound	
							Xylenes, Total	
					MSV_VBFB_STK_00004	0.117 mL	BFB	50.0245 ug/mL
.MSV_VBFB_STK_00004	01/22/21	07/22/20	Methanol, Lot DX212	10 mL	MSV_4BFB_NEAT_00002	1.0689 g	BFB	106890 ug/mL
..MSV_4BFB_NEAT_00002	01/31/21		Chem Service, Lot 8601300		(Purchased Reagent)		BFB	1 g/g

Reagent

MSV_4BFB_NEAT_00002

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

CERTIFICATE OF ANALYSIS

4-Bromofluorobenzene

CATALOG NUMBER	N-10809-1G
LOT NUMBER	8601300
DATE CERTIFIED	01/06/16
EXPIRATION DATE	01/31/21
CAS NUMBER	460-00-4
MOLECULAR FORMULA	C6H4BrF
MOLECULAR WEIGHT	175.00
STORAGE	Store in a cool dry place.
HANDLING	See Safety Data Sheet
INTENDED USE	For laboratory use only.
ISO GUIDE 34 CERTIFIED	[ ]

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

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

Certified By:

Mary Beth O'Donnell

Mary Beth O'Donnell
CSM/TC

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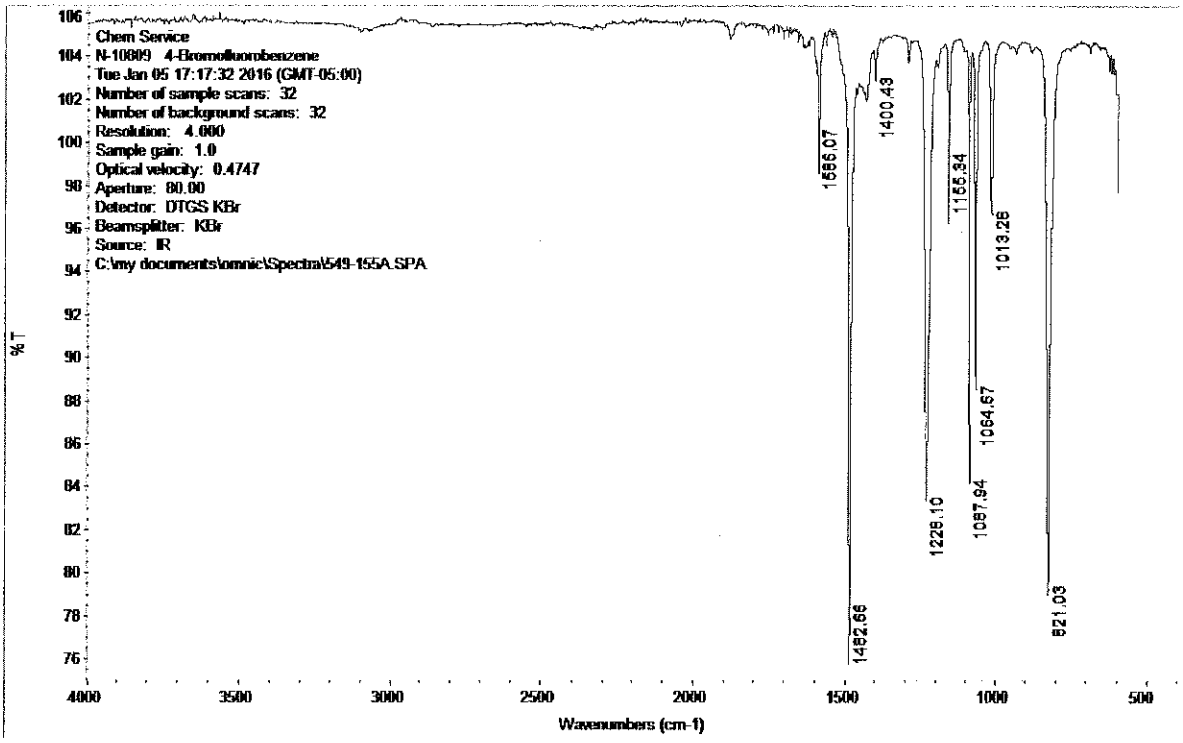
1-800-452-9994 • 1-610-692-3026 • Fax 1-610-692-8729
info@chemservice.com • www.chemservice.com

CERTIFICATE OF ANALYSIS

Analysis Method: FTIR- Spectroscopy

Catalog Number:	N-10809-1G
Description:	4-Bromofluorobenzene
Lot Number:	8601300
Expiration Date:	01/31/21



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1-800-452-9994 • 1-610-692-3026 • Fax 1-610-692-8729
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CERTIFICATE OF ANALYSIS

Analysis Method:

Catalog Number:	N-10809-1G
Description:	4-Bromofluorobenzene
Lot Number:	8601300
Expiration Date:	01/31/21

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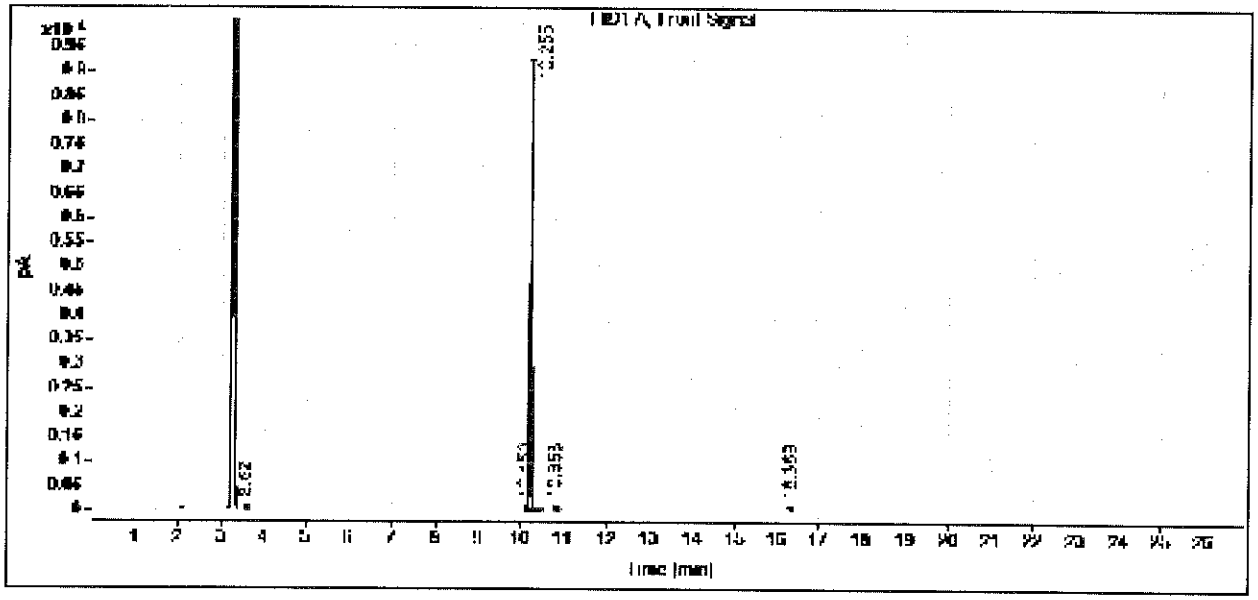
CERTIFICATE OF ANALYSIS

Gas Chromatography / Flame Ionization Detector (GC/FID)

Data file: C:\CHEM32\1\DATA\1215\SIG1007347.D

Sample name: N-10809/CH2CL2

Instrument:	GC 1	**Sample type:**	Sample
Injection date:	1/5/2016 4:20:37 PM	**Location:**	Vial 5
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%
3.620	BB	0.0403	3.8748	1.1723	0.0145
10.156	BV	0.0195	0.7424	0.4869	0.0028
10.255	VB S	0.0437	26687.6328	9172.4229	99.7795
10.853	BB	0.0583	54.3345	12.3602	0.2031
16.369	BB	0.0034	0.0123	0.0605	0.0000
		Sum	26746.5968		

Reagent

MSV_502QGas_00119

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : Custom 502.2 "Q" Gas Mix

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

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

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

CERTIFIED VALUES

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

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

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

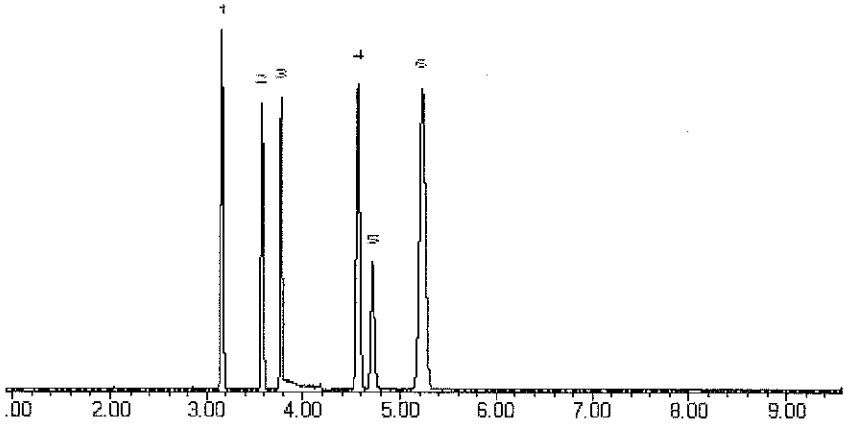
Carrier Gas:
helium-constant flow 2.0 mL/min.

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

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



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

Lane Kibe - Mix Technician

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

Amanda Miller - Operations Tech-ARM QC

Date Passed: 27-Dec-2019

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

MSV_502QGas_00120

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : Custom 502.2 "Q" Gas Mix

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

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

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

CERTIFIED VALUES

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

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

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

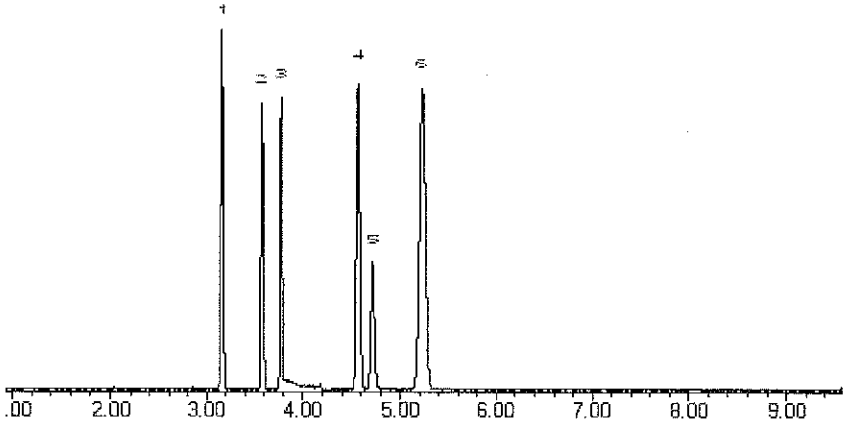
Carrier Gas:
helium-constant flow 2.0 mL/min.

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

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



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

Lane Kibe - Mix Technician

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

Amanda Miller - Operations Tech-ARM QC

Date Passed: 27-Dec-2019

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

MSV_8260_SS_00160

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : 8260A Surrogate Mix

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

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

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

CERTIFIED VALUES

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

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

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

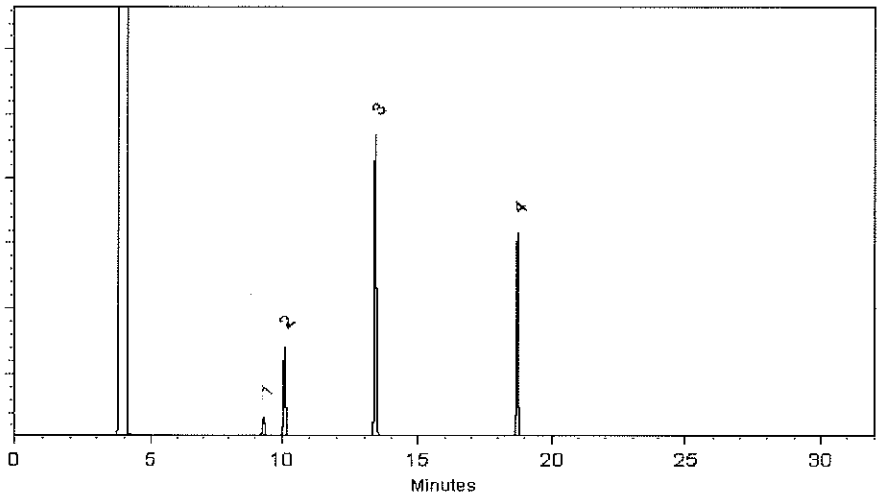
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



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

Maggie Wang
Maggie Wang - Operations Technician I

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

Jennifer J Pollino
Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 15-Mar-2019

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

MSV_ACROLEIN_00008

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

CERTIFICATE OF ANALYSIS

Acrolein

CATALOG NUMBER	RPN-11030-1G
LOT NUMBER	10410200
DATE CERTIFIED	12/06/19
EXPIRATION DATE	12/31/20
CAS NUMBER	107-02-8
MOLECULAR FORMULA	C3H4O
MOLECULAR WEIGHT	56.06
STORAGE	Refrigerator storage (2 - 8 °C)
HANDLING	See Safety Data Sheet
INTENDED USE	For laboratory use only.
NOTES	Contains water and hydroquinone as an inhibitor.

Analytical Test	Value
% PURITY (GC/TCD)	94.3
% WATER (KARL FISCHER)	1.9

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

Certified By:

Mary Beth O'Donnell

Mary Beth O'Donnell
CSM/TC

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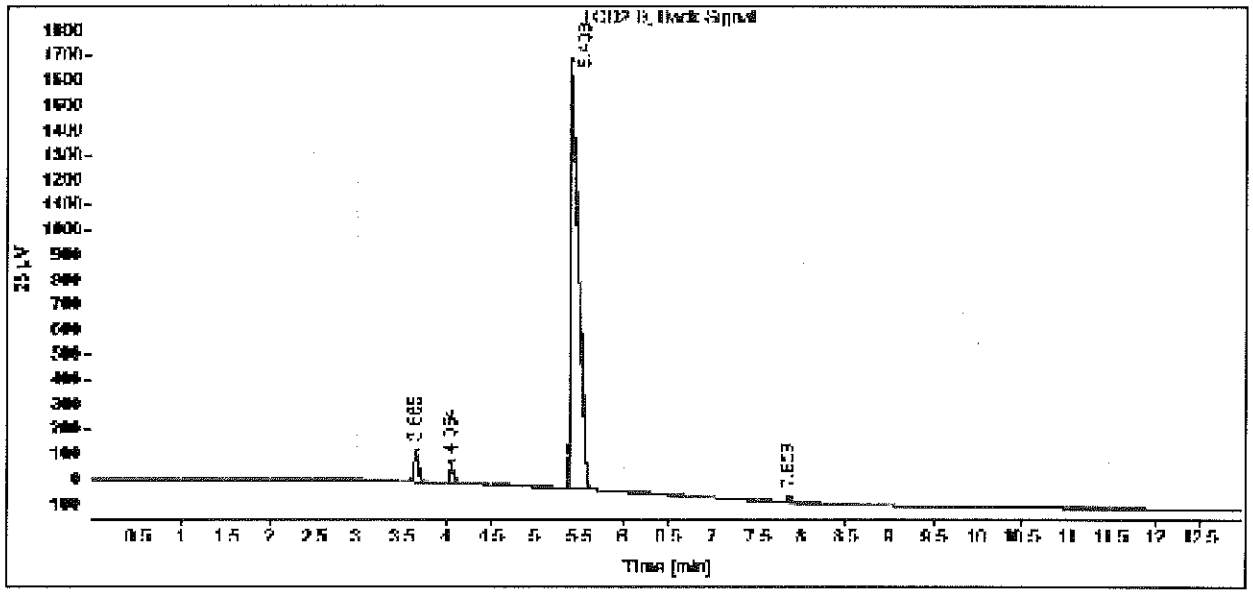
CERTIFICATE OF ANALYSIS

Gas Chromatography / Thermal Conductivity Detector (GC/TCD)

Data file:	C:\CHEM32\1\DATA\2019 DATA\1219\SIG2022867.D		
Sample name:	Acrolein		
Instrument:	GC 1	**Sample type:**	Sample
Injection date:	12/8/2019 10:34:12 AM	**Location:**	Vial 11
Acq. method:	GASBOMB_TCD.M	**Injection volume:**	1.0uL
Column name:	DB-624 (30m x 0.53mm x 3.0um)		



Signal: TCD2 B, Back Signal

RT [min]	Type	Width [min]	Area	Height	Area%
3.665	BB	0.0554	405.7875	114.3327	3.5675
4.064	BB	0.0475	217.2787	71.5037	1.9102
5.408	BV	0.0795	10720.3574	1725.6987	94.2472
7.859	BB	0.1249	31.2959	3.7665	0.2751
		Sum	11374.7176		

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1-800-452-9994 • 1-610-692-3026 • Fax 1-610-692-8729
info@chemservice.com • www.chemservice.com

CERTIFICATE OF ANALYSIS

Analysis Method:

Catalog Number:	RPN-11030-1G
Description:	Acrolein
Lot Number:	10410200
Expiration Date:	12/31/20

Reagent

MSV_Cus826_IS_00099

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 558267 **Lot No.:** A0138205

Description : Custom 8260A IS Mix

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

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

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

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)		Expanded Uncertainty (95% C.L.; K=2)		
1	tert-Butyl Alcohol-d10		12,613.8	µg/mL	+/- 73.3376	µg/mL	Gravimetric
	CAS # 53001-22-2	(Lot PR-29485)			+/- 270.0624	µg/mL	Unstressed
	Purity 98%				+/- 277.9136	µg/mL	Stressed
2	Fluorobenzene		2,517.8	µg/mL	+/- 14.6387	µg/mL	Gravimetric
	CAS # 462-06-6	(Lot BCBK8171V)			+/- 53.9064	µg/mL	Unstressed
	Purity 99%				+/- 55.4736	µg/mL	Stressed
3	Chlorobenzene-d5		2,518.8	µg/mL	+/- 14.6445	µg/mL	Gravimetric
	CAS # 3114-55-4	(Lot PR-22736)			+/- 53.9278	µg/mL	Unstressed
	Purity 99%				+/- 55.4956	µg/mL	Stressed
4	1,4-Dichlorobenzene-d4		2,511.0	µg/mL	+/- 14.5992	µg/mL	Gravimetric
	CAS # 3855-82-1	(Lot PR-18488)			+/- 53.7608	µg/mL	Unstressed
	Purity 99%				+/- 55.3237	µg/mL	Stressed

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

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

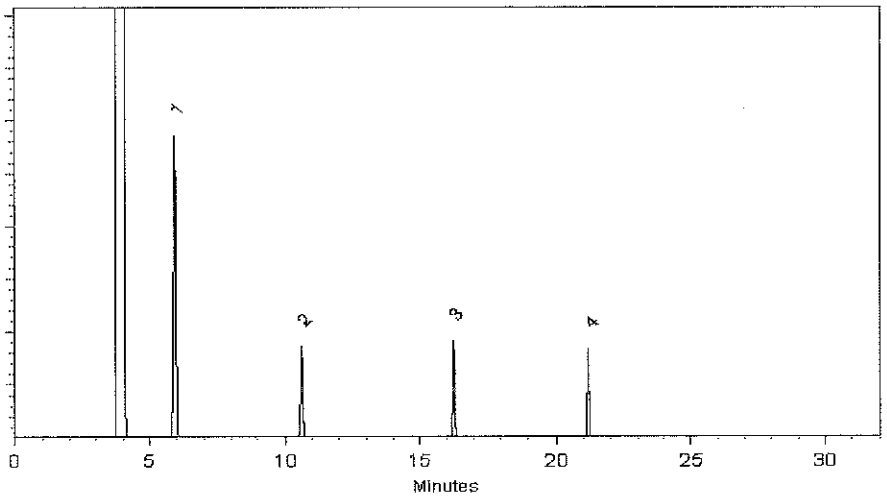
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



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

Tom Suckar - Mix Technician

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

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 23-May-2018

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
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0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

MSV_DCFM_00030

125 Market Street
New Haven, CT 06513
USA

AccuStandard® Inc.

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

CERTIFICATE OF ANALYSIS

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

Signal Word: Danger

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

Certified Reference Material

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER AR-1463

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY AT-1339

ilac-MRA

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

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

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

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

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

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

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

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

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

1. **Quality Standards:**

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

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

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

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

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

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

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

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

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

Reagent

MSV_EE_Neat_00003

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

CERTIFICATE OF ANALYSIS

Ethyl ether

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

Analytical Test	Value
% PURITY (GC/TCD)	99.5

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

Certified By:

Mary Beth O'Donnell

Mary Beth O'Donnell
CSM/TC

660 Tower Lane • P.O. Box 599 • West Chester, PA 19381-0599
1-800-452-9994 • 1-610-692-3026 • Fax 1-610-692-8729
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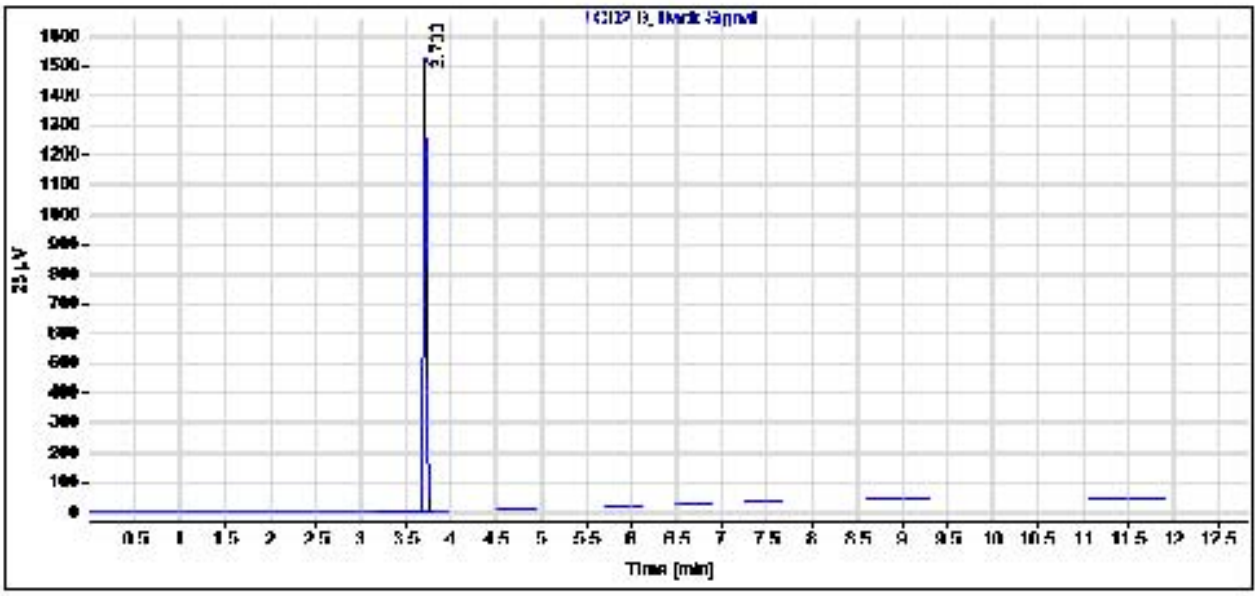
CERTIFICATE OF ANALYSIS

Gas Chromatography / Thermal Conductivity Detector (GC/TCD)

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

Sample name: Ethyl ether

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



Signal: TCD2 B, Back Signal

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

Reagent

MSV_Q#1B_00070

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 569936-1.sec **Lot No.:** A0148625

Description : Custom Revised Q #1B Standard

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

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

Expiration Date : April 30, 2022 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	1,1-Dichloroethene	1,005.5 µg/mL	+/- 7.1750 µg/mL	Gravimetric
	CAS # 75-35-4.SEC (Lot 5111300)		+/- 56.5279 µg/mL	Unstressed
	Purity 99%		+/- 57.8435 µg/mL	Stressed
2	Methylene chloride (dichloromethane)	1,004.5 µg/mL	+/- 7.1682 µg/mL	Gravimetric
	CAS # 75-09-2.SEC (Lot FGM02)		+/- 56.4745 µg/mL	Unstressed
	Purity 99%		+/- 57.7888 µg/mL	Stressed
3	trans-1,2-Dichloroethene	1,002.8 µg/mL	+/- 7.1558 µg/mL	Gravimetric
	CAS # 156-60-5.SEC (Lot TS5UB)		+/- 56.3767 µg/mL	Unstressed
	Purity 97%		+/- 57.6888 µg/mL	Stressed
4	1,1-Dichloroethane	1,006.8 µg/mL	+/- 7.1846 µg/mL	Gravimetric
	CAS # 75-34-3.SEC (Lot 5379000)		+/- 56.6038 µg/mL	Unstressed
	Purity 99%		+/- 57.9211 µg/mL	Stressed
5	2,2-Dichloropropane	1,003.2 µg/mL	+/- 7.7659 µg/mL	Gravimetric
	CAS # 594-20-7.SEC (Lot I7E8E)		+/- 56.4820 µg/mL	Unstressed
	Purity 98%		+/- 57.7928 µg/mL	Stressed
6	cis-1,2-Dichloroethene	1,001.2 µg/mL	+/- 7.7507 µg/mL	Gravimetric
	CAS # 156-59-2.SEC (Lot HGC01-BLKT)		+/- 56.3716 µg/mL	Unstressed
	Purity 98%		+/- 57.6799 µg/mL	Stressed
7	Chloroform	1,004.5 µg/mL	+/- 7.1684 µg/mL	Gravimetric
	CAS # 67-66-3.SEC (Lot 1297547)		+/- 56.4759 µg/mL	Unstressed
	Purity 99%		+/- 57.7903 µg/mL	Stressed

8	1,1,1-trichloroethane		1,000.9	µg/mL	+/-	7.1427	µg/mL	Gravimetric
	CAS # 71-55-6 *	(Lot B15W12061)			+/-	56.2735	µg/mL	Unstressed
	Purity 99%				+/-	57.5832	µg/mL	Stressed
9	1,1-Dichloropropene		1,005.1	µg/mL	+/-	7.7804	µg/mL	Gravimetric
	CAS # 563-58-6.SEC	(Lot 4672600)			+/-	56.5876	µg/mL	Unstressed
	Purity 96%				+/-	57.9008	µg/mL	Stressed
10	Carbon tetrachloride		1,006.6	µg/mL	+/-	7.1828	µg/mL	Gravimetric
	CAS # 56-23-5.SEC	(Lot 11466)			+/-	56.5897	µg/mL	Unstressed
	Purity 99%				+/-	57.9068	µg/mL	Stressed
11	1,2-Dichloroethane		1,003.3	µg/mL	+/-	7.1598	µg/mL	Gravimetric
	CAS # 107-06-2.SEC	(Lot FO6PK)			+/-	56.4084	µg/mL	Unstressed
	Purity 99%				+/-	57.7212	µg/mL	Stressed
12	Benzene		1,003.5	µg/mL	+/-	7.7683	µg/mL	Gravimetric
	CAS # 71-43-2.SEC	(Lot B28Y008)			+/-	56.4996	µg/mL	Unstressed
	Purity 99%				+/-	57.8109	µg/mL	Stressed
13	Trichloroethene		1,005.6	µg/mL	+/-	7.1760	µg/mL	Gravimetric
	CAS # 79-01-6.SEC	(Lot H04X050)			+/-	56.5363	µg/mL	Unstressed
	Purity 99%				+/-	57.8521	µg/mL	Stressed
14	1,2-Dichloropropane		1,004.3	µg/mL	+/-	7.1666	µg/mL	Gravimetric
	CAS # 78-87-5.SEC	(Lot OGG01)			+/-	56.4618	µg/mL	Unstressed
	Purity 99%				+/-	57.7759	µg/mL	Stressed
15	Bromodichloromethane		1,006.2	µg/mL	+/-	7.1801	µg/mL	Gravimetric
	CAS # 75-27-4.SEC	(Lot 10171168)			+/-	56.5686	µg/mL	Unstressed
	Purity 99%				+/-	57.8852	µg/mL	Stressed
16	Dibromomethane		1,006.1	µg/mL	+/-	7.7881	µg/mL	Gravimetric
	CAS # 74-95-3.SEC	(Lot FGI01-OICH)			+/-	56.6438	µg/mL	Unstressed
	Purity 99%				+/-	57.9584	µg/mL	Stressed
17	cis-1,3-Dichloropropene		1,001.9	µg/mL	+/-	7.1498	µg/mL	Gravimetric
	CAS # 10061-01-5.SEC	(Lot 4870A)			+/-	56.3297	µg/mL	Unstressed
	Purity 99%				+/-	57.6407	µg/mL	Stressed
18	Toluene		1,004.8	µg/mL	+/-	7.7782	µg/mL	Gravimetric
	CAS # 108-88-3.SEC	(Lot YND2B-BD)			+/-	56.5717	µg/mL	Unstressed
	Purity 99%				+/-	57.8846	µg/mL	Stressed
19	trans-1,3-Dichloropropene		1,002.6	µg/mL	+/-	7.1548	µg/mL	Gravimetric
	CAS # 10061-02-6.SEC	(Lot ZDMSL)			+/-	56.3691	µg/mL	Unstressed
	Purity 99%				+/-	57.6810	µg/mL	Stressed
20	1,1,2-Trichloroethane		1,007.8	µg/mL	+/-	7.1920	µg/mL	Gravimetric
	CAS # 79-00-5.SEC	(Lot 3440900)			+/-	56.6618	µg/mL	Unstressed
	Purity 98%				+/-	57.9805	µg/mL	Stressed
21	1,3-Dichloropropane		1,003.8	µg/mL	+/-	7.7708	µg/mL	Gravimetric
	CAS # 142-28-9.SEC	(Lot AGN01-EFPC)			+/-	56.5177	µg/mL	Unstressed
	Purity 99%				+/-	57.8293	µg/mL	Stressed
22	Tetrachloroethene		1,004.1	µg/mL	+/-	7.1652	µg/mL	Gravimetric
	CAS # 127-18-4.SEC	(Lot F09W014)			+/-	56.4506	µg/mL	Unstressed
	Purity 99%				+/-	57.7644	µg/mL	Stressed
23	Dibromochloromethane		1,009.5	µg/mL	+/-	7.2035	µg/mL	Gravimetric
	CAS # 124-48-1.SEC	(Lot 10181507)			+/-	56.7530	µg/mL	Unstressed
	Purity 97%				+/-	58.0739	µg/mL	Stressed

24	1,2-Dibromoethane (EDB)		1,007.8	µg/mL	+/-	7.8017	µg/mL	Gravimetric
	CAS # 106-93-4.SEC	(Lot 3505900)			+/-	56.7429	µg/mL	Unstressed
	Purity 99%				+/-	58.0598	µg/mL	Stressed
25	1-Chlorohexane		1,001.0	µg/mL	+/-	5.8744	µg/mL	Gravimetric
	CAS # 544-10-5.SEC	(Lot 8171700)			+/-	56.1308	µg/mL	Unstressed
	Purity 99%				+/-	57.4439	µg/mL	Stressed
26	Chlorobenzene		1,004.8	µg/mL	+/-	7.1703	µg/mL	Gravimetric
	CAS # 108-90-7.SEC	(Lot 1161936)			+/-	56.4913	µg/mL	Unstressed
	Purity 99%				+/-	57.8061	µg/mL	Stressed
27	1,1,1,2-Tetrachloroethane		1,003.4	µg/mL	+/-	7.7677	µg/mL	Gravimetric
	CAS # 630-20-6.SEC	(Lot GC01)			+/-	56.4951	µg/mL	Unstressed
	Purity 99%				+/-	57.8063	µg/mL	Stressed
28	Ethylbenzene		1,003.4	µg/mL	+/-	7.7677	µg/mL	Gravimetric
	CAS # 100-41-4.SEC	(Lot PI4SE)			+/-	56.4951	µg/mL	Unstressed
	Purity 99%				+/-	57.8063	µg/mL	Stressed
29	m-Xylene		1,005.9	µg/mL	+/-	7.7869	µg/mL	Gravimetric
	CAS # 108-38-3.SEC	(Lot OUKMG-GB)			+/-	56.6348	µg/mL	Unstressed
	Purity 99%				+/-	57.9491	µg/mL	Stressed
30	p-Xylene		1,008.3	µg/mL	+/-	7.8054	µg/mL	Gravimetric
	CAS # 106-42-3.SEC	(Lot GM01)			+/-	56.7699	µg/mL	Unstressed
	Purity 99%				+/-	58.0874	µg/mL	Stressed
31	o-Xylene		1,005.8	µg/mL	+/-	7.7862	µg/mL	Gravimetric
	CAS # 95-47-6.SEC	(Lot FGL01)			+/-	56.6303	µg/mL	Unstressed
	Purity 99%				+/-	57.9445	µg/mL	Stressed
32	Styrene		1,001.1	µg/mL	+/-	7.7497	µg/mL	Gravimetric
	CAS # 100-42-5.SEC	(Lot QGQ7F)			+/-	56.3645	µg/mL	Unstressed
	Purity 99%				+/-	57.6726	µg/mL	Stressed
33	Isopropylbenzene (cumene)		1,004.3	µg/mL	+/-	7.7745	µg/mL	Gravimetric
	CAS # 98-82-8.SEC	(Lot WVREC)			+/-	56.5447	µg/mL	Unstressed
	Purity 99%				+/-	57.8570	µg/mL	Stressed
34	Bromoform		1,005.7	µg/mL	+/-	7.1764	µg/mL	Gravimetric
	CAS # 75-25-2.SEC	(Lot 5197400)			+/-	56.5392	µg/mL	Unstressed
	Purity 98%				+/-	57.8551	µg/mL	Stressed
35	1,1,2,2-Tetrachloroethane		1,006.8	µg/mL	+/-	7.1848	µg/mL	Gravimetric
	CAS # 79-34-5.SEC	(Lot CFA4D-AQ)			+/-	56.6052	µg/mL	Unstressed
	Purity 99%				+/-	57.9226	µg/mL	Stressed
36	1,2,3-Trichloropropane		1,002.4	µg/mL	+/-	7.7598	µg/mL	Gravimetric
	CAS # 96-18-4.SEC	(Lot OGI01)			+/-	56.4378	µg/mL	Unstressed
	Purity 98%				+/-	57.7477	µg/mL	Stressed
37	n-Propylbenzene		1,007.8	µg/mL	+/-	7.8011	µg/mL	Gravimetric
	CAS # 103-65-1.SEC	(Lot T2HFC)			+/-	56.7384	µg/mL	Unstressed
	Purity 99%				+/-	58.0551	µg/mL	Stressed
38	Bromobenzene		1,004.8	µg/mL	+/-	7.7782	µg/mL	Gravimetric
	CAS # 108-86-1.SEC	(Lot 2FUHG-EM)			+/-	56.5717	µg/mL	Unstressed
	Purity 99%				+/-	57.8846	µg/mL	Stressed
39	1,3,5-Trichlorobenzene		1,002.0	µg/mL	+/-	5.8803	µg/mL	Gravimetric
	CAS # 108-70-3.SEC	(Lot I28U021)			+/-	56.1868	µg/mL	Unstressed
	Purity 99%				+/-	57.5013	µg/mL	Stressed

40	2-Chlorotoluene		1,008.1	µg/mL	+/-	7.8036	µg/mL	Gravimetric
	CAS # 95-49-8.SEC	(Lot SW8QG-AO)			+/-	56.7564	µg/mL	Unstressed
	Purity 99%				+/-	58.0736	µg/mL	Stressed
41	4-Chlorotoluene		1,002.1	µg/mL	+/-	7.7571	µg/mL	Gravimetric
	CAS # 106-43-4.SEC	(Lot P4XHJ-AO)			+/-	56.4186	µg/mL	Unstressed
	Purity 99%				+/-	57.7279	µg/mL	Stressed
42	tert-Butylbenzene		1,004.2	µg/mL	+/-	7.7732	µg/mL	Gravimetric
	CAS # 98-06-6.SEC	(Lot D6OHC)			+/-	56.5357	µg/mL	Unstressed
	Purity 99%				+/-	57.8478	µg/mL	Stressed
43	1,2,4-Trimethylbenzene		1,009.5	µg/mL	+/-	7.8147	µg/mL	Gravimetric
	CAS # 95-63-6.SEC	(Lot SC7LO-QA)			+/-	56.8374	µg/mL	Unstressed
	Purity 99%				+/-	58.1565	µg/mL	Stressed
44	sec-Butylbenzene		1,006.9	µg/mL	+/-	7.7943	µg/mL	Gravimetric
	CAS # 135-98-8.SEC	(Lot O4HRF)			+/-	56.6888	µg/mL	Unstressed
	Purity 99%				+/-	58.0044	µg/mL	Stressed
45	4-Isopropyltoluene (p-cymene)		1,000.0	µg/mL	+/-	7.7410	µg/mL	Gravimetric
	CAS # 99-87-6.SEC	(Lot 1195000)			+/-	56.3015	µg/mL	Unstressed
	Purity 96%				+/-	57.6081	µg/mL	Stressed
46	1,3-Dichlorobenzene		1,003.3	µg/mL	+/-	7.1593	µg/mL	Gravimetric
	CAS # 541-73-1.SEC	(Lot FMDFD)			+/-	56.4042	µg/mL	Unstressed
	Purity 99%				+/-	57.7169	µg/mL	Stressed
47	1,4-Dichlorobenzene		1,008.5	µg/mL	+/-	7.1967	µg/mL	Gravimetric
	CAS # 106-46-7.SEC	(Lot 4Y5DC)			+/-	56.6994	µg/mL	Unstressed
	Purity 99%				+/-	58.0189	µg/mL	Stressed
48	n-Butylbenzene		1,005.4	µg/mL	+/-	7.7825	µg/mL	Gravimetric
	CAS # 104-51-8.SEC	(Lot MMPGA)			+/-	56.6032	µg/mL	Unstressed
	Purity 99%				+/-	57.9169	µg/mL	Stressed
49	1,2-Dichlorobenzene		1,006.8	µg/mL	+/-	7.1842	µg/mL	Gravimetric
	CAS # 95-50-1.SEC	(Lot 4NRGF-OT)			+/-	56.6010	µg/mL	Unstressed
	Purity 99%				+/-	57.9183	µg/mL	Stressed
50	1,2-Dibromo-3-chloropropane		1,002.7	µg/mL	+/-	7.7616	µg/mL	Gravimetric
	CAS # 96-12-8.SEC	(Lot LC00408V)			+/-	56.4511	µg/mL	Unstressed
	Purity 98%				+/-	57.7612	µg/mL	Stressed
51	1,3,5-Trimethylbenzene		1,002.2	µg/mL	+/-	7.7584	µg/mL	Gravimetric
	CAS # 108-67-8.SEC	(Lot FGH02-CMLN)			+/-	56.4276	µg/mL	Unstressed
	Purity 99%				+/-	57.7371	µg/mL	Stressed
52	1,2,4-Trichlorobenzene		1,007.2	µg/mL	+/-	7.7968	µg/mL	Gravimetric
	CAS # 120-82-1.SEC	(Lot 3LYYC)			+/-	56.7068	µg/mL	Unstressed
	Purity 99%				+/-	58.0229	µg/mL	Stressed
53	Hexachlorobutadiene		1,005.8	µg/mL	+/-	7.7857	µg/mL	Gravimetric
	CAS # 87-68-3.SEC	(Lot 5526800)			+/-	56.6265	µg/mL	Unstressed
	Purity 97%				+/-	57.9407	µg/mL	Stressed
54	Naphthalene		1,001.8	µg/mL	+/-	7.7553	µg/mL	Gravimetric
	CAS # 91-20-3.SEC	(Lot SKZ5N)			+/-	56.4050	µg/mL	Unstressed
	Purity 99%				+/-	57.7141	µg/mL	Stressed
55	1,2,3-Trichlorobenzene		1,005.9	µg/mL	+/-	7.7865	µg/mL	Gravimetric
	CAS # 87-61-6.SEC	(Lot A0043055)			+/-	56.6321	µg/mL	Unstressed
	Purity 98%				+/-	57.9464	µg/mL	Stressed

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

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

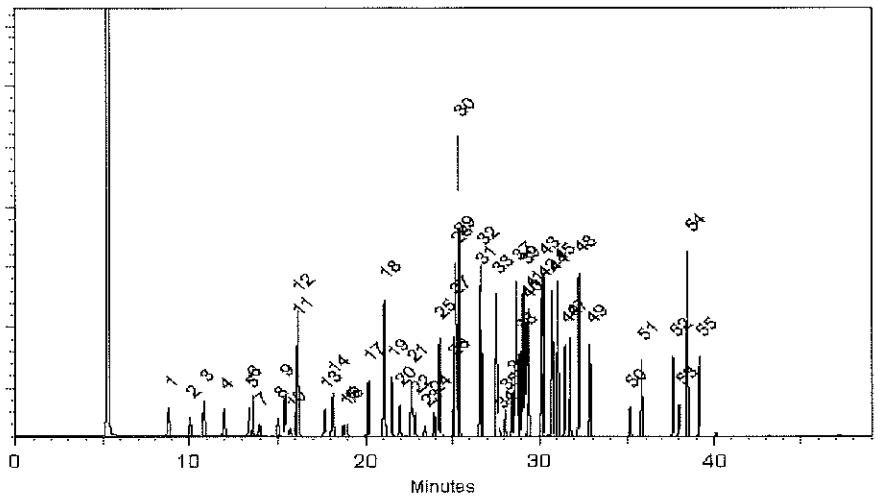
Carrier Gas:
hydrogen-constant pressure 8.0 psi.

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

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



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

Michael J Maye

Date Mixed: 26-Apr-2019 **Balance:** 1127510105

Jennifer Pollino
Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 30-Apr-2019

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

MSV_Q#1B_00071

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 569936-1.sec **Lot No.:** A0148625

Description : Custom Revised Q #1B Standard

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

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

Expiration Date : April 30, 2022 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	1,1-Dichloroethene	1,005.5 µg/mL	+/- 7.1750 µg/mL	Gravimetric
	CAS # 75-35-4.SEC (Lot 5111300)		+/- 56.5279 µg/mL	Unstressed
	Purity 99%		+/- 57.8435 µg/mL	Stressed
2	Methylene chloride (dichloromethane)	1,004.5 µg/mL	+/- 7.1682 µg/mL	Gravimetric
	CAS # 75-09-2.SEC (Lot FGM02)		+/- 56.4745 µg/mL	Unstressed
	Purity 99%		+/- 57.7888 µg/mL	Stressed
3	trans-1,2-Dichloroethene	1,002.8 µg/mL	+/- 7.1558 µg/mL	Gravimetric
	CAS # 156-60-5.SEC (Lot TS5UB)		+/- 56.3767 µg/mL	Unstressed
	Purity 97%		+/- 57.6888 µg/mL	Stressed
4	1,1-Dichloroethane	1,006.8 µg/mL	+/- 7.1846 µg/mL	Gravimetric
	CAS # 75-34-3.SEC (Lot 5379000)		+/- 56.6038 µg/mL	Unstressed
	Purity 99%		+/- 57.9211 µg/mL	Stressed
5	2,2-Dichloropropane	1,003.2 µg/mL	+/- 7.7659 µg/mL	Gravimetric
	CAS # 594-20-7.SEC (Lot I7E8E)		+/- 56.4820 µg/mL	Unstressed
	Purity 98%		+/- 57.7928 µg/mL	Stressed
6	cis-1,2-Dichloroethene	1,001.2 µg/mL	+/- 7.7507 µg/mL	Gravimetric
	CAS # 156-59-2.SEC (Lot HGC01-BLKT)		+/- 56.3716 µg/mL	Unstressed
	Purity 98%		+/- 57.6799 µg/mL	Stressed
7	Chloroform	1,004.5 µg/mL	+/- 7.1684 µg/mL	Gravimetric
	CAS # 67-66-3.SEC (Lot 1297547)		+/- 56.4759 µg/mL	Unstressed
	Purity 99%		+/- 57.7903 µg/mL	Stressed

8	1,1,1-trichloroethane		1,000.9	µg/mL	+/-	7.1427	µg/mL	Gravimetric
	CAS # 71-55-6 *	(Lot B15W12061)			+/-	56.2735	µg/mL	Unstressed
	Purity 99%				+/-	57.5832	µg/mL	Stressed
9	1,1-Dichloropropene		1,005.1	µg/mL	+/-	7.7804	µg/mL	Gravimetric
	CAS # 563-58-6.SEC	(Lot 4672600)			+/-	56.5876	µg/mL	Unstressed
	Purity 96%				+/-	57.9008	µg/mL	Stressed
10	Carbon tetrachloride		1,006.6	µg/mL	+/-	7.1828	µg/mL	Gravimetric
	CAS # 56-23-5.SEC	(Lot 11466)			+/-	56.5897	µg/mL	Unstressed
	Purity 99%				+/-	57.9068	µg/mL	Stressed
11	1,2-Dichloroethane		1,003.3	µg/mL	+/-	7.1598	µg/mL	Gravimetric
	CAS # 107-06-2.SEC	(Lot FO6PK)			+/-	56.4084	µg/mL	Unstressed
	Purity 99%				+/-	57.7212	µg/mL	Stressed
12	Benzene		1,003.5	µg/mL	+/-	7.7683	µg/mL	Gravimetric
	CAS # 71-43-2.SEC	(Lot B28Y008)			+/-	56.4996	µg/mL	Unstressed
	Purity 99%				+/-	57.8109	µg/mL	Stressed
13	Trichloroethene		1,005.6	µg/mL	+/-	7.1760	µg/mL	Gravimetric
	CAS # 79-01-6.SEC	(Lot H04X050)			+/-	56.5363	µg/mL	Unstressed
	Purity 99%				+/-	57.8521	µg/mL	Stressed
14	1,2-Dichloropropane		1,004.3	µg/mL	+/-	7.1666	µg/mL	Gravimetric
	CAS # 78-87-5.SEC	(Lot OGG01)			+/-	56.4618	µg/mL	Unstressed
	Purity 99%				+/-	57.7759	µg/mL	Stressed
15	Bromodichloromethane		1,006.2	µg/mL	+/-	7.1801	µg/mL	Gravimetric
	CAS # 75-27-4.SEC	(Lot 10171168)			+/-	56.5686	µg/mL	Unstressed
	Purity 99%				+/-	57.8852	µg/mL	Stressed
16	Dibromomethane		1,006.1	µg/mL	+/-	7.7881	µg/mL	Gravimetric
	CAS # 74-95-3.SEC	(Lot FGI01-OICH)			+/-	56.6438	µg/mL	Unstressed
	Purity 99%				+/-	57.9584	µg/mL	Stressed
17	cis-1,3-Dichloropropene		1,001.9	µg/mL	+/-	7.1498	µg/mL	Gravimetric
	CAS # 10061-01-5.SEC	(Lot 4870A)			+/-	56.3297	µg/mL	Unstressed
	Purity 99%				+/-	57.6407	µg/mL	Stressed
18	Toluene		1,004.8	µg/mL	+/-	7.7782	µg/mL	Gravimetric
	CAS # 108-88-3.SEC	(Lot YND2B-BD)			+/-	56.5717	µg/mL	Unstressed
	Purity 99%				+/-	57.8846	µg/mL	Stressed
19	trans-1,3-Dichloropropene		1,002.6	µg/mL	+/-	7.1548	µg/mL	Gravimetric
	CAS # 10061-02-6.SEC	(Lot ZDMSL)			+/-	56.3691	µg/mL	Unstressed
	Purity 99%				+/-	57.6810	µg/mL	Stressed
20	1,1,2-Trichloroethane		1,007.8	µg/mL	+/-	7.1920	µg/mL	Gravimetric
	CAS # 79-00-5.SEC	(Lot 3440900)			+/-	56.6618	µg/mL	Unstressed
	Purity 98%				+/-	57.9805	µg/mL	Stressed
21	1,3-Dichloropropane		1,003.8	µg/mL	+/-	7.7708	µg/mL	Gravimetric
	CAS # 142-28-9.SEC	(Lot AGN01-EFPC)			+/-	56.5177	µg/mL	Unstressed
	Purity 99%				+/-	57.8293	µg/mL	Stressed
22	Tetrachloroethene		1,004.1	µg/mL	+/-	7.1652	µg/mL	Gravimetric
	CAS # 127-18-4.SEC	(Lot F09W014)			+/-	56.4506	µg/mL	Unstressed
	Purity 99%				+/-	57.7644	µg/mL	Stressed
23	Dibromochloromethane		1,009.5	µg/mL	+/-	7.2035	µg/mL	Gravimetric
	CAS # 124-48-1.SEC	(Lot 10181507)			+/-	56.7530	µg/mL	Unstressed
	Purity 97%				+/-	58.0739	µg/mL	Stressed

24	1,2-Dibromoethane (EDB)		1,007.8	µg/mL	+/-	7.8017	µg/mL	Gravimetric
	CAS # 106-93-4.SEC	(Lot 3505900)			+/-	56.7429	µg/mL	Unstressed
	Purity 99%				+/-	58.0598	µg/mL	Stressed
25	1-Chlorohexane		1,001.0	µg/mL	+/-	5.8744	µg/mL	Gravimetric
	CAS # 544-10-5.SEC	(Lot 8171700)			+/-	56.1308	µg/mL	Unstressed
	Purity 99%				+/-	57.4439	µg/mL	Stressed
26	Chlorobenzene		1,004.8	µg/mL	+/-	7.1703	µg/mL	Gravimetric
	CAS # 108-90-7.SEC	(Lot 1161936)			+/-	56.4913	µg/mL	Unstressed
	Purity 99%				+/-	57.8061	µg/mL	Stressed
27	1,1,1,2-Tetrachloroethane		1,003.4	µg/mL	+/-	7.7677	µg/mL	Gravimetric
	CAS # 630-20-6.SEC	(Lot GC01)			+/-	56.4951	µg/mL	Unstressed
	Purity 99%				+/-	57.8063	µg/mL	Stressed
28	Ethylbenzene		1,003.4	µg/mL	+/-	7.7677	µg/mL	Gravimetric
	CAS # 100-41-4.SEC	(Lot PI4SE)			+/-	56.4951	µg/mL	Unstressed
	Purity 99%				+/-	57.8063	µg/mL	Stressed
29	m-Xylene		1,005.9	µg/mL	+/-	7.7869	µg/mL	Gravimetric
	CAS # 108-38-3.SEC	(Lot OUKMG-GB)			+/-	56.6348	µg/mL	Unstressed
	Purity 99%				+/-	57.9491	µg/mL	Stressed
30	p-Xylene		1,008.3	µg/mL	+/-	7.8054	µg/mL	Gravimetric
	CAS # 106-42-3.SEC	(Lot GM01)			+/-	56.7699	µg/mL	Unstressed
	Purity 99%				+/-	58.0874	µg/mL	Stressed
31	o-Xylene		1,005.8	µg/mL	+/-	7.7862	µg/mL	Gravimetric
	CAS # 95-47-6.SEC	(Lot FGL01)			+/-	56.6303	µg/mL	Unstressed
	Purity 99%				+/-	57.9445	µg/mL	Stressed
32	Styrene		1,001.1	µg/mL	+/-	7.7497	µg/mL	Gravimetric
	CAS # 100-42-5.SEC	(Lot QGQ7F)			+/-	56.3645	µg/mL	Unstressed
	Purity 99%				+/-	57.6726	µg/mL	Stressed
33	Isopropylbenzene (cumene)		1,004.3	µg/mL	+/-	7.7745	µg/mL	Gravimetric
	CAS # 98-82-8.SEC	(Lot WVREC)			+/-	56.5447	µg/mL	Unstressed
	Purity 99%				+/-	57.8570	µg/mL	Stressed
34	Bromoform		1,005.7	µg/mL	+/-	7.1764	µg/mL	Gravimetric
	CAS # 75-25-2.SEC	(Lot 5197400)			+/-	56.5392	µg/mL	Unstressed
	Purity 98%				+/-	57.8551	µg/mL	Stressed
35	1,1,2,2-Tetrachloroethane		1,006.8	µg/mL	+/-	7.1848	µg/mL	Gravimetric
	CAS # 79-34-5.SEC	(Lot CFA4D-AQ)			+/-	56.6052	µg/mL	Unstressed
	Purity 99%				+/-	57.9226	µg/mL	Stressed
36	1,2,3-Trichloropropane		1,002.4	µg/mL	+/-	7.7598	µg/mL	Gravimetric
	CAS # 96-18-4.SEC	(Lot OGI01)			+/-	56.4378	µg/mL	Unstressed
	Purity 98%				+/-	57.7477	µg/mL	Stressed
37	n-Propylbenzene		1,007.8	µg/mL	+/-	7.8011	µg/mL	Gravimetric
	CAS # 103-65-1.SEC	(Lot T2HFC)			+/-	56.7384	µg/mL	Unstressed
	Purity 99%				+/-	58.0551	µg/mL	Stressed
38	Bromobenzene		1,004.8	µg/mL	+/-	7.7782	µg/mL	Gravimetric
	CAS # 108-86-1.SEC	(Lot 2FUHG-EM)			+/-	56.5717	µg/mL	Unstressed
	Purity 99%				+/-	57.8846	µg/mL	Stressed
39	1,3,5-Trichlorobenzene		1,002.0	µg/mL	+/-	5.8803	µg/mL	Gravimetric
	CAS # 108-70-3.SEC	(Lot I28U021)			+/-	56.1868	µg/mL	Unstressed
	Purity 99%				+/-	57.5013	µg/mL	Stressed

40	2-Chlorotoluene		1,008.1	µg/mL	+/-	7.8036	µg/mL	Gravimetric
	CAS # 95-49-8.SEC	(Lot SW8QG-AO)			+/-	56.7564	µg/mL	Unstressed
	Purity 99%				+/-	58.0736	µg/mL	Stressed
41	4-Chlorotoluene		1,002.1	µg/mL	+/-	7.7571	µg/mL	Gravimetric
	CAS # 106-43-4.SEC	(Lot P4XHJ-AO)			+/-	56.4186	µg/mL	Unstressed
	Purity 99%				+/-	57.7279	µg/mL	Stressed
42	tert-Butylbenzene		1,004.2	µg/mL	+/-	7.7732	µg/mL	Gravimetric
	CAS # 98-06-6.SEC	(Lot D6OHC)			+/-	56.5357	µg/mL	Unstressed
	Purity 99%				+/-	57.8478	µg/mL	Stressed
43	1,2,4-Trimethylbenzene		1,009.5	µg/mL	+/-	7.8147	µg/mL	Gravimetric
	CAS # 95-63-6.SEC	(Lot SC7LO-QA)			+/-	56.8374	µg/mL	Unstressed
	Purity 99%				+/-	58.1565	µg/mL	Stressed
44	sec-Butylbenzene		1,006.9	µg/mL	+/-	7.7943	µg/mL	Gravimetric
	CAS # 135-98-8.SEC	(Lot O4HRF)			+/-	56.6888	µg/mL	Unstressed
	Purity 99%				+/-	58.0044	µg/mL	Stressed
45	4-Isopropyltoluene (p-cymene)		1,000.0	µg/mL	+/-	7.7410	µg/mL	Gravimetric
	CAS # 99-87-6.SEC	(Lot 1195000)			+/-	56.3015	µg/mL	Unstressed
	Purity 96%				+/-	57.6081	µg/mL	Stressed
46	1,3-Dichlorobenzene		1,003.3	µg/mL	+/-	7.1593	µg/mL	Gravimetric
	CAS # 541-73-1.SEC	(Lot FMDFD)			+/-	56.4042	µg/mL	Unstressed
	Purity 99%				+/-	57.7169	µg/mL	Stressed
47	1,4-Dichlorobenzene		1,008.5	µg/mL	+/-	7.1967	µg/mL	Gravimetric
	CAS # 106-46-7.SEC	(Lot 4Y5DC)			+/-	56.6994	µg/mL	Unstressed
	Purity 99%				+/-	58.0189	µg/mL	Stressed
48	n-Butylbenzene		1,005.4	µg/mL	+/-	7.7825	µg/mL	Gravimetric
	CAS # 104-51-8.SEC	(Lot MMPGA)			+/-	56.6032	µg/mL	Unstressed
	Purity 99%				+/-	57.9169	µg/mL	Stressed
49	1,2-Dichlorobenzene		1,006.8	µg/mL	+/-	7.1842	µg/mL	Gravimetric
	CAS # 95-50-1.SEC	(Lot 4NRGF-OT)			+/-	56.6010	µg/mL	Unstressed
	Purity 99%				+/-	57.9183	µg/mL	Stressed
50	1,2-Dibromo-3-chloropropane		1,002.7	µg/mL	+/-	7.7616	µg/mL	Gravimetric
	CAS # 96-12-8.SEC	(Lot LC00408V)			+/-	56.4511	µg/mL	Unstressed
	Purity 98%				+/-	57.7612	µg/mL	Stressed
51	1,3,5-Trimethylbenzene		1,002.2	µg/mL	+/-	7.7584	µg/mL	Gravimetric
	CAS # 108-67-8.SEC	(Lot FGH02-CMLN)			+/-	56.4276	µg/mL	Unstressed
	Purity 99%				+/-	57.7371	µg/mL	Stressed
52	1,2,4-Trichlorobenzene		1,007.2	µg/mL	+/-	7.7968	µg/mL	Gravimetric
	CAS # 120-82-1.SEC	(Lot 3LYYC)			+/-	56.7068	µg/mL	Unstressed
	Purity 99%				+/-	58.0229	µg/mL	Stressed
53	Hexachlorobutadiene		1,005.8	µg/mL	+/-	7.7857	µg/mL	Gravimetric
	CAS # 87-68-3.SEC	(Lot 5526800)			+/-	56.6265	µg/mL	Unstressed
	Purity 97%				+/-	57.9407	µg/mL	Stressed
54	Naphthalene		1,001.8	µg/mL	+/-	7.7553	µg/mL	Gravimetric
	CAS # 91-20-3.SEC	(Lot SKZ5N)			+/-	56.4050	µg/mL	Unstressed
	Purity 99%				+/-	57.7141	µg/mL	Stressed
55	1,2,3-Trichlorobenzene		1,005.9	µg/mL	+/-	7.7865	µg/mL	Gravimetric
	CAS # 87-61-6.SEC	(Lot A0043055)			+/-	56.6321	µg/mL	Unstressed
	Purity 98%				+/-	57.9464	µg/mL	Stressed

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

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

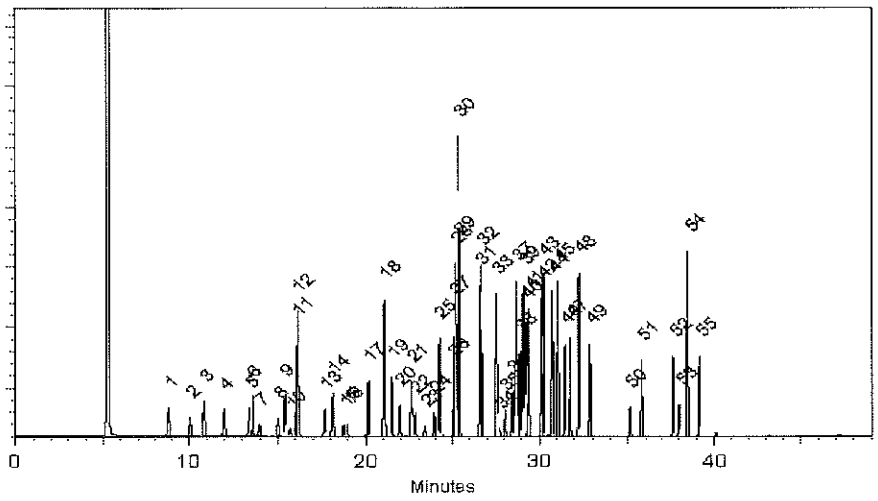
Carrier Gas:
hydrogen-constant pressure 8.0 psi.

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

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



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

Michael J Maye

Date Mixed: 26-Apr-2019 **Balance:** 1127510105

Jennifer Pollino
Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 30-Apr-2019

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

MSV_Q#3B_00062

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : Custom Q #3B Standard

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

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

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

CERTIFIED VALUES

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

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

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

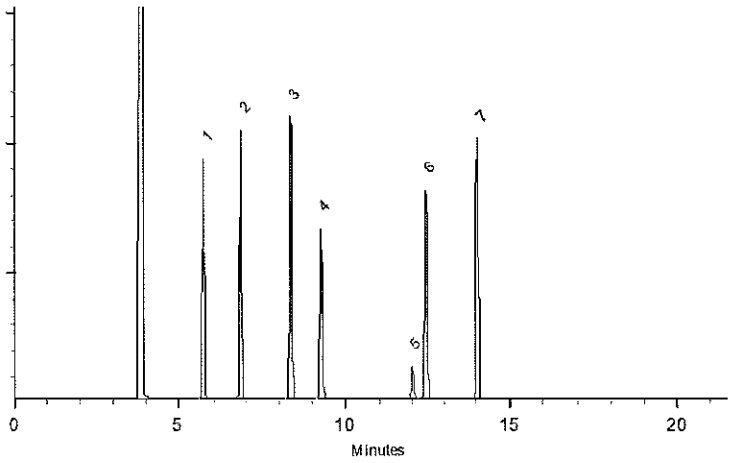
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



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

Brandon Reish - Mix Technician

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

Justine Albertson - Operations Tech-ARM QC

Date Passed: 19-Mar-2020

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

MSV_Q#3B_00063

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : Custom Q #3B Standard

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

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

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

CERTIFIED VALUES

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

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

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

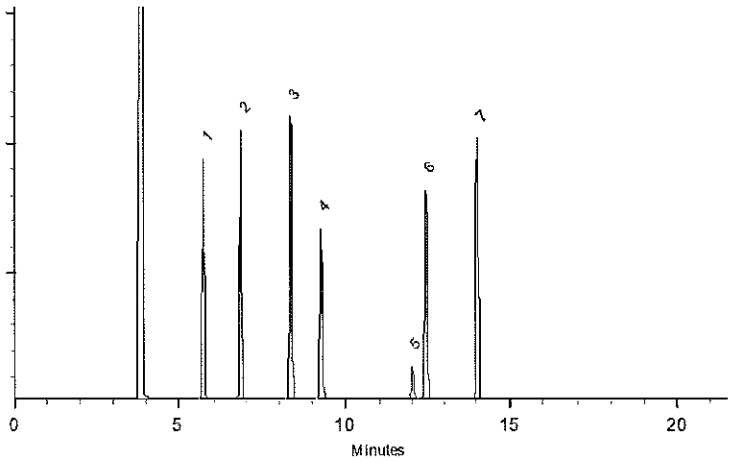
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



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

Brandon Reish - Mix Technician

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

Justine Albertson - Operations Tech-ARM QC

Date Passed: 19-Mar-2020

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

MSV_Q#4C_00065

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

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

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

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

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

CERTIFIED VALUES

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

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

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

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

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

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

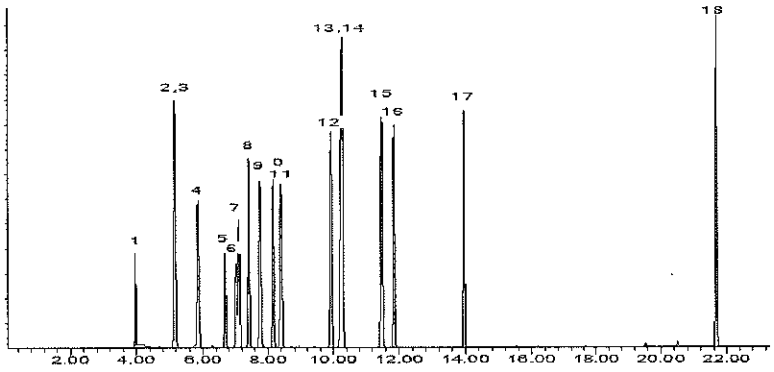
Carrier Gas:
helium-constant pressure 30 psi

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

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



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

Matt Fragassi - Mix Technician

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

Feng-Yun Lo – QC Analyst

Date Passed: 25-Mar-2020

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

MSV_Q#4C_00066

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

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

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

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

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

CERTIFIED VALUES

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

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

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

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

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

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

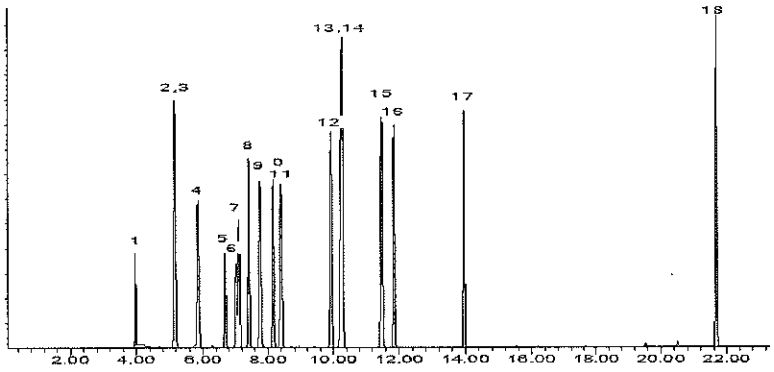
Carrier Gas:
helium-constant pressure 30 psi

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

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



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

Matt Fragassi - Mix Technician

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

Feng-Yun Lo – QC Analyst

Date Passed: 25-Mar-2020

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

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

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
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0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

MSV_QCS#6Std_00064

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Fax: (814)353-1309

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : Custom QCS #6 Standard

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

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

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

CERTIFIED VALUES

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

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

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

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

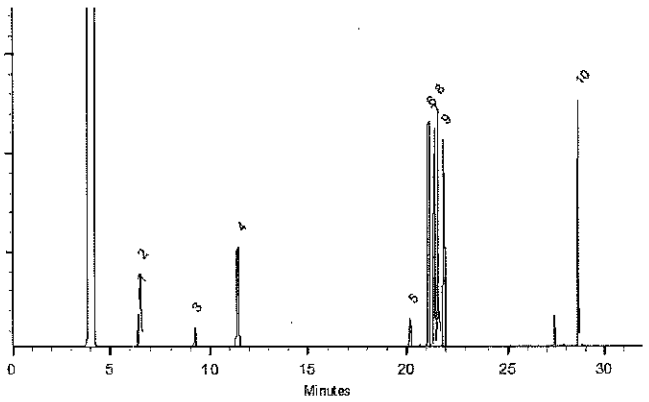
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



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

Dalton Stover - Operations Technician I

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

Feng-Yun Lo - QC Analyst

Date Passed: 20-Mar-2020

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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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_QCS#6Std_00067

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

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Description : Custom QCS #6 Standard

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

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Inj. Temp:
200°C

Det. Temp:
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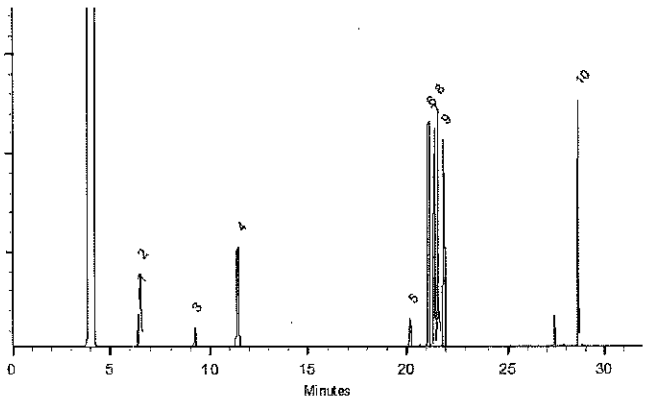
Det. Type:
FID



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Dalton Stover - Operations Technician I

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

Feng-Yun Lo - QC Analyst

Date Passed: 20-Mar-2020

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

General Certified Reference Material Notes

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Reagent

MSV_V#1B_00126

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Certificate #3222.02

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

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

Description : Custom Revised V #1B Standard

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

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

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

CERTIFIED VALUES

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

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

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

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

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

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

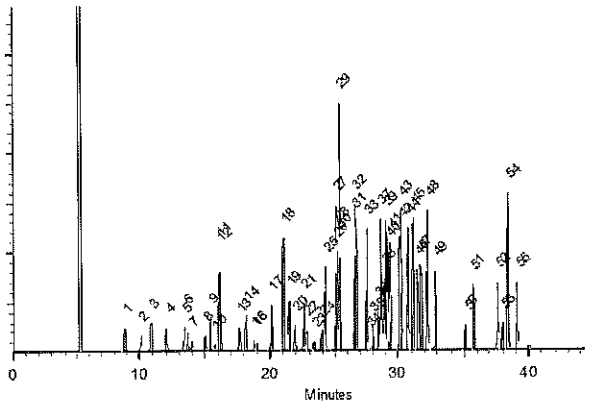
Carrier Gas:
hydrogen-constant pressure 8.0 psi.

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

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



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

Cydnei L. Crust - Mix Technician

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

Feng-Yun Lo - QC Analyst

Date Passed: 11-Mar-2020

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

MSV_V#1B_00127

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : Custom Revised V #1B Standard

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

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

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

CERTIFIED VALUES

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

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

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

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

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

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

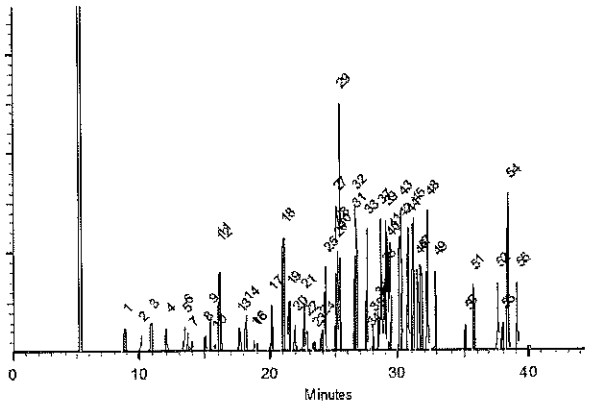
Carrier Gas:
hydrogen-constant pressure 8.0 psi.

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

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



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

Cydnei L. Crust - Mix Technician

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

Feng-Yun Lo - QC Analyst

Date Passed: 11-Mar-2020

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

MSV_V#3B_00069

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : Custom V # 3B Standard

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

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

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

CERTIFIED VALUES

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

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

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

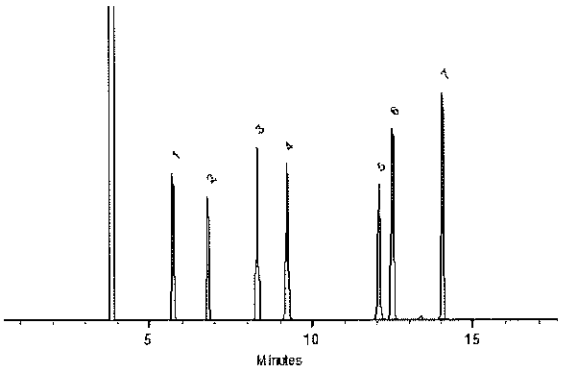
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



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

Kylie Struble - Operations Technician I

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

Feng-Yun Lo - QC Analyst

Date Passed: 12-Mar-2020

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

MSV_V#3B_00070

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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Certificate #3222.01

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ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : Custom V # 3B Standard

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

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

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

CERTIFIED VALUES

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

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

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

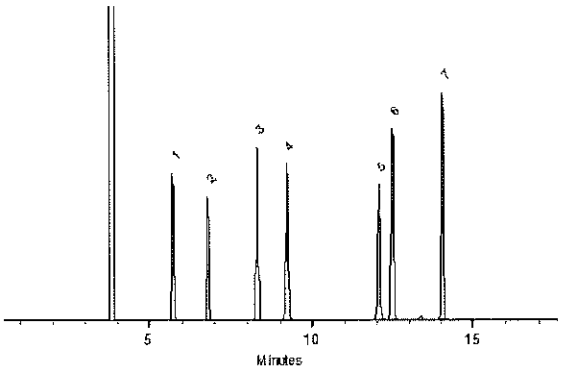
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



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

Kylie Struble - Operations Technician I

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

Feng-Yun Lo - QC Analyst

Date Passed: 12-Mar-2020

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

MSV_V#4C_00106

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

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

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

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

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

Handling: This product is photosensitive.

CERTIFIED VALUES

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

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

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

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

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

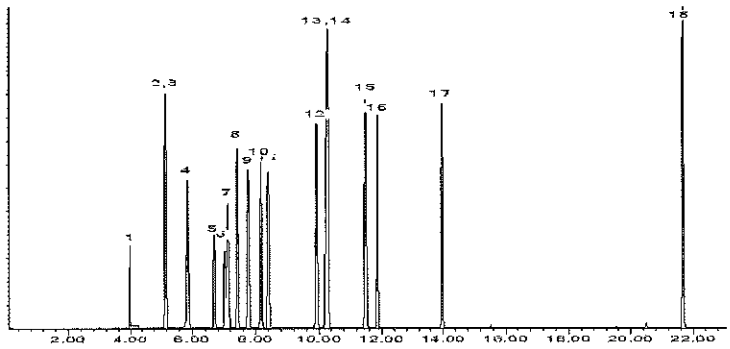
Carrier Gas:
helium-constant pressure 30 psi

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

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



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

Tom Suckar - Mix Technician

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

Fang-Yun Lo - QC Analyst

Date Passed: 25-Mar-2020

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
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Reference Material Producer
Certificate #3222.01

ilac-MRA

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ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

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

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

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

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

Handling: This product is photosensitive.

CERTIFIED VALUES

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

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

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

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

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

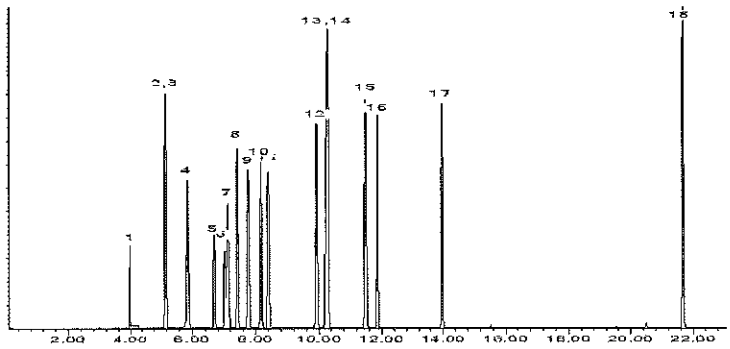
Carrier Gas:
helium-constant pressure 30 psi

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

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



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

Tom Suckar - Mix Technician

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

Fang-Yun Lo - QC Analyst

Date Passed: 25-Mar-2020

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

MSV_V#6_00045

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 558268 **Lot No.:** A0158625

Description : Custom CS#6 Standard

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

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

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

CERTIFIED VALUES

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

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

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

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

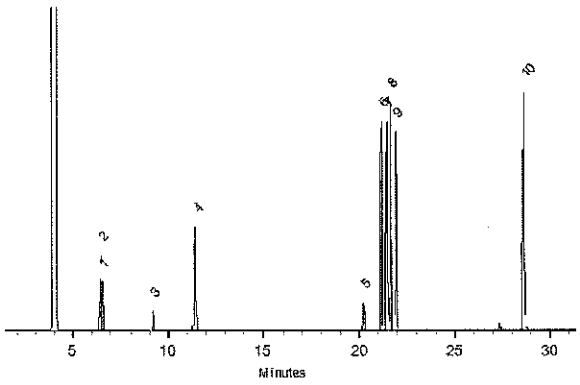
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



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

Tom Suckar - Mix Technician

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

Feng-Yue Lu - QC Analyst

Date Passed: 12-Mar-2020

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
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- 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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Reagent

MSV_V#6_00046

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 558268 **Lot No.:** A0158625

Description : Custom CS#6 Standard

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

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

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

CERTIFIED VALUES

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

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

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

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

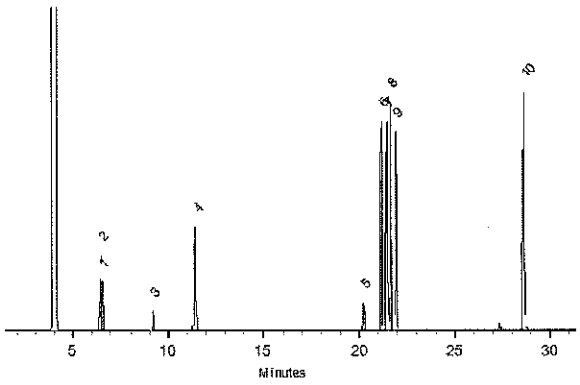
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



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

Tom Suckar - Mix Technician

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

Feng-Yue Lu - QC Analyst

Date Passed: 12-Mar-2020

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

MSV_V_Gas_00175

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

Description : Custom 502.2 "V" Gas Mix

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

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

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

CERTIFIED VALUES

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

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

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

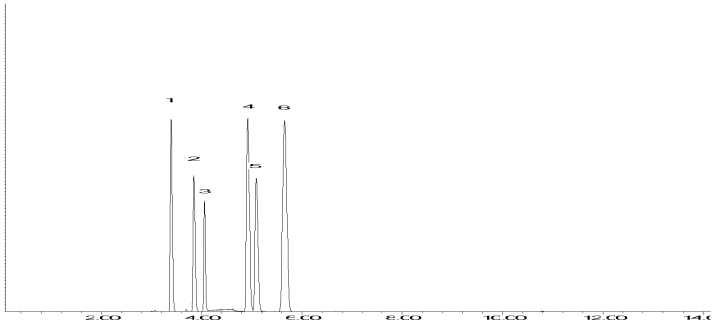
Carrier Gas:
helium-constant flow 2.0 mL/min.

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

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



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

Tom Suckar - Mix Technician

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

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 06-May-2020

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
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- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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

Handling Notes:

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

Reagent

MSV_V_Gas_00176

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

Description : Custom 502.2 "V" Gas Mix

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

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

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

CERTIFIED VALUES

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

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

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

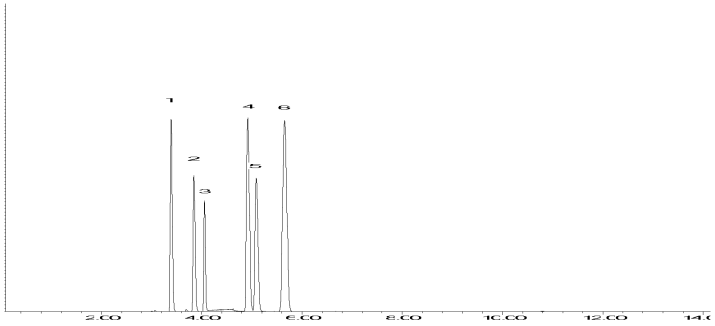
Carrier Gas:
helium-constant flow 2.0 mL/min.

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

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



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Tom Suckar - Mix Technician

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

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 06-May-2020

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

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
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Purity Notes:

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- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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

Handling Notes:

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

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.: 410-22411-1

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	410-22411-1	100	101	98	99
HD-COD-SW-7-0/1-0	410-22411-2	100	102	98	99
HD-COD-SW-8-0/1-0	410-22411-3	100	103	98	98
HD-COD-SW-9-0/1-0	410-22411-4	102	102	97	99
HD-COD-SW-13-0/1-0	410-22411-5	101	105	98	99
HD-COD-SW-15-0/1-0	410-22411-6	101	104	98	99
HD-COD-SW-16-0/1-0	410-22411-7	101	102	97	100
HD-COD-SW-17-0/1-0	410-22411-8	101	104	99	100
HD-COD-SW-26-0/1-0	410-22411-9	100	102	98	99
HD-COD-SW-27-0/1-0	410-22411-10	101	101	98	99
HD-COD-SW-28-0/1-0	410-22411-11	101	102	98	99
HD-COD-SW-29-0/1-0	410-22411-12	100	102	98	98
HD-QC1-0/1-1	410-22411-13	101	102	98	99
HD-QC1-0/1-2	410-22411-14	100	103	99	98
	MB 410-72509/7	101	101	98	98
	MB 410-73040/7	100	101	98	99
	LCS 410-72509/4	99	100	98	99
	LCS 410-73040/4	100	101	99	100
	LCSD 410-72509/5	100	101	98	99
	LCSD 410-73040/5	99	99	98	100
HD-COD-SW-15-0/1-0 MS MS	410-22411-6 MS	99	99	100	101
HD-COD-SW-15-0/1-0 MSD MSD	410-22411-6 MSD	100	100	98	99

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

Column to be used to flag recovery values

FORM II 8260D

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Lancaster Laboratories En Job No.: 410-22411-1

SDG No.:

Matrix: Water Level: Low Lab File ID: ID03X04.D

Lab ID: LCS 410-72509/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	5.00	4.97	99	71-134	
1,1,1-Trichloroethane	5.00	4.75	95	78-126	
1,1,2,2-Tetrachloroethane	5.00	4.76	95	75-123	
1,1,2-Trichloroethane	5.00	5.01	100	80-120	
1,1-Dichloroethane	5.00	4.83	97	74-120	
1,1-Dichloroethene	5.00	4.67	93	80-131	
1,2-Dibromoethane (EDB)	5.00	4.87	97	80-120	
1,2-Dichloroethane	5.00	4.83	97	69-122	
1,2-Dichloropropane	5.00	5.10	102	80-120	
2-Butanone (MEK)	37.5	36.9	98	59-141	
2-Hexanone	25.0	25.4	102	52-140	
4-Methyl-2-pentanone (MIBK)	25.0	24.4	98	55-140	
Acetone	37.5	32.1	86	60-146	
Benzene	5.00	4.80	96	80-120	
Bromochloromethane	5.00	4.77	95	80-120	
Bromodichloromethane	5.00	4.95	99	73-124	
Bromoform	5.00	4.79	96	49-144	
Bromomethane	5.00	4.71	94	60-136	
Carbon disulfide	5.00	4.25	85	67-130	
Carbon tetrachloride	5.00	4.89	98	64-141	
Chlorobenzene	5.00	4.92	98	80-120	
Chloroethane	5.00	4.53	91	63-120	
Chloroform	5.00	4.92	98	80-120	
Chloromethane	5.00	4.49	90	56-124	
cis-1,2-Dichloroethene	5.00	5.11	102	80-122	
cis-1,3-Dichloropropene	5.00	4.91	98	67-121	
Dibromochloromethane	5.00	4.83	97	64-138	
Ethylbenzene	5.00	4.83	97	80-120	
Methyl tert-butyl ether	5.00	4.68	94	69-120	
Methylene Chloride	5.00	4.78	96	80-120	
Styrene	5.00	5.02	100	80-120	
Tetrachloroethene	5.00	4.91	98	80-120	
Toluene	5.00	4.75	95	80-120	
trans-1,2-Dichloroethene	5.00	4.76	95	80-122	
trans-1,3-Dichloropropene	5.00	4.79	96	61-129	
Trichloroethene	5.00	4.86	97	80-120	
Vinyl chloride	5.00	4.76	95	60-125	
Xylenes, Total	15.0	14.8	99	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 En Job No.: 410-22411-1

SDG No.:

Matrix: Water Level: Low Lab File ID: ID04X04.D

Lab ID: LCS 410-73040/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	5.00	4.92	98	71-134	
1,1,1-Trichloroethane	5.00	4.71	94	78-126	
1,1,2,2-Tetrachloroethane	5.00	4.96	99	75-123	
1,1,2-Trichloroethane	5.00	5.04	101	80-120	
1,1-Dichloroethane	5.00	4.78	96	74-120	
1,1-Dichloroethene	5.00	4.54	91	80-131	
1,2-Dibromoethane (EDB)	5.00	4.89	98	80-120	
1,2-Dichloroethane	5.00	4.71	94	69-122	
1,2-Dichloropropane	5.00	4.98	100	80-120	
2-Butanone (MEK)	37.5	35.3	94	59-141	
2-Hexanone	25.0	24.4	97	52-140	
4-Methyl-2-pentanone (MIBK)	25.0	23.4	94	55-140	
Acetone	37.5	30.2	80	60-146	
Benzene	5.00	4.71	94	80-120	
Bromochloromethane	5.00	4.73	95	80-120	
Bromodichloromethane	5.00	4.86	97	73-124	
Bromoform	5.00	4.71	94	49-144	
Bromomethane	5.00	4.83	97	60-136	
Carbon disulfide	5.00	4.15	83	67-130	
Carbon tetrachloride	5.00	4.77	95	64-141	
Chlorobenzene	5.00	4.88	98	80-120	
Chloroethane	5.00	4.60	92	63-120	
Chloroform	5.00	4.88	98	80-120	
Chloromethane	5.00	4.54	91	56-124	
cis-1,2-Dichloroethene	5.00	5.03	101	80-122	
cis-1,3-Dichloropropene	5.00	4.85	97	67-121	
Dibromochloromethane	5.00	4.82	96	64-138	
Ethylbenzene	5.00	4.80	96	80-120	
Methyl tert-butyl ether	5.00	4.66	93	69-120	
Methylene Chloride	5.00	4.70	94	80-120	
Styrene	5.00	4.98	100	80-120	
Tetrachloroethene	5.00	4.80	96	80-120	
Toluene	5.00	4.71	94	80-120	
trans-1,2-Dichloroethene	5.00	4.69	94	80-122	
trans-1,3-Dichloropropene	5.00	4.76	95	61-129	
Trichloroethene	5.00	4.76	95	80-120	
Vinyl chloride	5.00	4.91	98	60-125	
Xylenes, Total	15.0	14.6	97	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 En Job No.: 410-22411-1

SDG No.:

Matrix: Water Level: Low Lab File ID: ID03X05.D

Lab ID: LCSD 410-72509/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	5.00	4.92	98	1	30	71-134	
1,1,1-Trichloroethane	5.00	4.81	96	1	30	78-126	
1,1,2,2-Tetrachloroethane	5.00	4.80	96	1	30	75-123	
1,1,2-Trichloroethane	5.00	5.06	101	1	30	80-120	
1,1-Dichloroethane	5.00	4.81	96	0	30	74-120	
1,1-Dichloroethene	5.00	4.68	94	0	30	80-131	
1,2-Dibromoethane (EDB)	5.00	4.97	99	2	30	80-120	
1,2-Dichloroethane	5.00	4.88	98	1	30	69-122	
1,2-Dichloropropane	5.00	5.09	102	0	30	80-120	
2-Butanone (MEK)	37.5	34.8	93	6	30	59-141	
2-Hexanone	25.0	24.1	96	5	30	52-140	
4-Methyl-2-pentanone (MIBK)	25.0	23.4	94	4	30	55-140	
Acetone	37.5	30.0	80	7	30	60-146	
Benzene	5.00	4.83	97	1	30	80-120	
Bromochloromethane	5.00	4.77	95	0	30	80-120	
Bromodichloromethane	5.00	4.91	98	1	30	73-124	
Bromoform	5.00	4.65	93	3	30	49-144	
Bromomethane	5.00	4.71	94	0	30	60-136	
Carbon disulfide	5.00	4.26	85	0	30	67-130	
Carbon tetrachloride	5.00	4.93	99	1	30	64-141	
Chlorobenzene	5.00	4.89	98	1	30	80-120	
Chloroethane	5.00	4.52	90	0	30	63-120	
Chloroform	5.00	4.91	98	0	30	80-120	
Chloromethane	5.00	4.48	90	0	30	56-124	
cis-1,2-Dichloroethene	5.00	5.09	102	0	30	80-122	
cis-1,3-Dichloropropene	5.00	4.88	98	1	30	67-121	
Dibromochloromethane	5.00	4.78	96	1	30	64-138	
Ethylbenzene	5.00	4.84	97	0	30	80-120	
Methyl tert-butyl ether	5.00	4.65	93	1	30	69-120	
Methylene Chloride	5.00	4.80	96	0	30	80-120	
Styrene	5.00	5.04	101	0	30	80-120	
Tetrachloroethene	5.00	4.87	97	1	30	80-120	
Toluene	5.00	4.78	96	1	30	80-120	
trans-1,2-Dichloroethene	5.00	4.79	96	1	30	80-122	
trans-1,3-Dichloropropene	5.00	4.75	95	1	30	61-129	
Trichloroethene	5.00	4.82	96	1	30	80-120	
Vinyl chloride	5.00	4.85	97	2	30	60-125	
Xylenes, Total	15.0	14.7	98	0	30	80-120	

Column to be used to flag recovery and RPD values

FORM III 8260D

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins Lancaster Laboratories En Job No.: 410-22411-1

SDG No.:

Matrix: Water Level: Low Lab File ID: ID04X05.D

Lab ID: LCSD 410-73040/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	5.00	4.89	98	1	30	71-134	
1,1,1-Trichloroethane	5.00	4.73	95	1	30	78-126	
1,1,2,2-Tetrachloroethane	5.00	4.79	96	4	30	75-123	
1,1,2-Trichloroethane	5.00	5.05	101	0	30	80-120	
1,1-Dichloroethane	5.00	4.84	97	1	30	74-120	
1,1-Dichloroethene	5.00	4.54	91	0	30	80-131	
1,2-Dibromoethane (EDB)	5.00	4.89	98	0	30	80-120	
1,2-Dichloroethane	5.00	4.64	93	1	30	69-122	
1,2-Dichloropropane	5.00	5.01	100	1	30	80-120	
2-Butanone (MEK)	37.5	35.4	95	0	30	59-141	
2-Hexanone	25.0	24.8	99	2	30	52-140	
4-Methyl-2-pentanone (MIBK)	25.0	23.7	95	1	30	55-140	
Acetone	37.5	30.8	82	2	30	60-146	
Benzene	5.00	4.73	95	0	30	80-120	
Bromochloromethane	5.00	4.67	93	1	30	80-120	
Bromodichloromethane	5.00	4.89	98	1	30	73-124	
Bromoform	5.00	4.63	93	2	30	49-144	
Bromomethane	5.00	4.79	96	1	30	60-136	
Carbon disulfide	5.00	4.16	83	0	30	67-130	
Carbon tetrachloride	5.00	4.83	97	1	30	64-141	
Chlorobenzene	5.00	4.88	98	0	30	80-120	
Chloroethane	5.00	4.65	93	1	30	63-120	
Chloroform	5.00	4.84	97	1	30	80-120	
Chloromethane	5.00	4.67	93	3	30	56-124	
cis-1,2-Dichloroethene	5.00	5.01	100	0	30	80-122	
cis-1,3-Dichloropropene	5.00	4.81	96	1	30	67-121	
Dibromochloromethane	5.00	4.77	95	1	30	64-138	
Ethylbenzene	5.00	4.79	96	0	30	80-120	
Methyl tert-butyl ether	5.00	4.63	93	1	30	69-120	
Methylene Chloride	5.00	4.75	95	1	30	80-120	
Styrene	5.00	4.97	99	0	30	80-120	
Tetrachloroethene	5.00	4.82	96	0	30	80-120	
Toluene	5.00	4.73	95	0	30	80-120	
trans-1,2-Dichloroethene	5.00	4.74	95	1	30	80-122	
trans-1,3-Dichloropropene	5.00	4.71	94	1	30	61-129	
Trichloroethene	5.00	4.75	95	0	30	80-120	
Vinyl chloride	5.00	4.93	99	0	30	60-125	
Xylenes, Total	15.0	14.7	98	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 En Job No.: 410-22411-1

SDG No.:

Matrix: Water Level: Low Lab File ID: ID03X10.D

Lab ID: 410-22411-6 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	5.02	ND	5.23	104	71-134	
1,1,1-Trichloroethane	5.02	ND	5.29	105	78-126	
1,1,2,2-Tetrachloroethane	5.02	ND	5.02	100	75-123	
1,1,2-Trichloroethane	5.02	ND	5.32	106	80-120	
1,1-Dichloroethane	5.02	ND	5.24	104	74-120	
1,1-Dichloroethene	5.02	ND	5.26	105	80-131	
1,2-Dibromoethane (EDB)	5.02	ND	5.10	101	80-120	
1,2-Dichloroethane	5.02	ND	5.10	101	69-122	
1,2-Dichloropropane	5.02	ND	5.33	106	80-120	
2-Butanone (MEK)	37.7	ND	36.0	96	59-141	
2-Hexanone	25.1	ND	25.1	100	52-140	
4-Methyl-2-pentanone (MIBK)	25.1	ND	24.1	96	55-140	
Acetone	37.7	2.6 J	33.6	82	60-146	
Benzene	5.02	ND	5.18	103	80-120	
Bromochloromethane	5.02	ND	5.04	100	80-120	
Bromodichloromethane	5.02	ND	5.20	103	73-124	
Bromoform	5.02	ND	4.94	98	49-144	
Bromomethane	5.02	ND	5.08	101	60-136	
Carbon disulfide	5.02	ND	4.69	93	67-130	
Carbon tetrachloride	5.02	ND	5.46	109	64-141	
Chlorobenzene	5.02	ND	5.27	105	80-120	
Chloroethane	5.02	ND	5.05	101	63-120	
Chloroform	5.02	0.11 J	5.33	104	80-120	
Chloromethane	5.02	0.061 J	4.86	95	80-120	
cis-1,2-Dichloroethene	5.02	0.23 J	5.64	108	80-122	
cis-1,3-Dichloropropene	5.02	ND	5.05	100	67-121	
Dibromochloromethane	5.02	ND	5.03	100	64-138	
Ethylbenzene	5.02	ND	5.29	105	80-120	
Methyl tert-butyl ether	5.02	ND	4.79	95	69-120	
Methylene Chloride	5.02	ND	5.09	101	80-120	
Styrene	5.02	ND	5.38	107	80-120	
Tetrachloroethene	5.02	0.64	6.00	107	80-120	
Toluene	5.02	ND	5.22	104	80-120	
trans-1,2-Dichloroethene	5.02	ND	5.19	103	80-122	
trans-1,3-Dichloropropene	5.02	ND	4.90	98	61-129	
Trichloroethene	5.02	0.29 J	5.59	106	80-120	
Vinyl chloride	5.02	ND	5.37	107	60-125	
Xylenes, Total	15.1	ND	16.0	106	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 En Job No.: 410-22411-1

SDG No.:

Matrix: Water Level: Low Lab File ID: ID03X11.D

Lab ID: 410-22411-6 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	5.02	5.30	106	1	30	71-134	
1,1,1-Trichloroethane	5.02	5.41	108	2	30	78-126	
1,1,2,2-Tetrachloroethane	5.02	5.10	102	2	30	75-123	
1,1,2-Trichloroethane	5.02	5.35	107	1	30	80-120	
1,1-Dichloroethane	5.02	5.34	106	2	30	74-120	
1,1-Dichloroethene	5.02	5.37	107	2	30	80-131	
1,2-Dibromoethane (EDB)	5.02	5.19	103	2	30	80-120	
1,2-Dichloroethane	5.02	5.14	102	1	30	69-122	
1,2-Dichloropropane	5.02	5.45	108	2	30	80-120	
2-Butanone (MEK)	37.7	36.6	97	2	30	59-141	
2-Hexanone	25.1	25.4	101	1	30	52-140	
4-Methyl-2-pentanone (MIBK)	25.1	24.7	98	3	30	55-140	
Acetone	37.7	36.9	91	9	30	60-146	
Benzene	5.02	5.27	105	2	30	80-120	
Bromochloromethane	5.02	5.06	101	0	30	80-120	
Bromodichloromethane	5.02	5.25	105	1	30	73-124	
Bromoform	5.02	4.93	98	0	30	49-144	
Bromomethane	5.02	5.09	101	0	30	60-136	
Carbon disulfide	5.02	4.85	96	3	30	67-130	
Carbon tetrachloride	5.02	5.60	111	3	30	64-141	
Chlorobenzene	5.02	5.34	106	1	30	80-120	
Chloroethane	5.02	5.04	100	0	30	63-120	
Chloroform	5.02	5.44	106	2	30	80-120	
Chloromethane	5.02	4.95	97	2	30	80-120	
cis-1,2-Dichloroethene	5.02	5.81	111	3	30	80-122	
cis-1,3-Dichloropropene	5.02	5.18	103	2	30	67-121	
Dibromochloromethane	5.02	5.14	102	2	30	64-138	
Ethylbenzene	5.02	5.37	107	1	30	80-120	
Methyl tert-butyl ether	5.02	4.91	98	3	30	69-120	
Methylene Chloride	5.02	5.12	102	1	30	80-120	
Styrene	5.02	5.40	107	0	30	80-120	
Tetrachloroethene	5.02	6.17	110	3	30	80-120	
Toluene	5.02	5.27	105	1	30	80-120	
trans-1,2-Dichloroethene	5.02	5.38	107	4	30	80-122	
trans-1,3-Dichloropropene	5.02	5.05	100	3	30	61-129	
Trichloroethene	5.02	5.73	108	3	30	80-120	
Vinyl chloride	5.02	5.42	108	1	30	60-125	
Xylenes, Total	15.1	16.3	108	1	30	80-120	

Column to be used to flag recovery and RPD values

FORM III 8260D

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins Lancaster Laboratories En Job No.: 410-22411-1

SDG No.:

Lab File ID: ID03X07.D Lab Sample ID: MB 410-72509/7

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

Instrument ID: 19930 Date Analyzed: 12/03/2020 11:08

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 410-72509/4	ID03X04.D	12/03/2020 10:05
	LCSD 410-72509/5	ID03X05.D	12/03/2020 10:26
HD-COD-SW-13-0/1-0	410-22411-5	ID03X08.D	12/03/2020 13:00
HD-COD-SW-15-0/1-0	410-22411-6	ID03X09.D	12/03/2020 13:21
HD-COD-SW-15-0/1-0 MS MS	410-22411-6 MS	ID03X10.D	12/03/2020 13:43
HD-COD-SW-15-0/1-0 MSD MSD	410-22411-6 MSD	ID03X11.D	12/03/2020 14:04
HD-COD-SW-7-0/1-0	410-22411-2	ID03X17.D	12/03/2020 16:11
HD-COD-SW-8-0/1-0	410-22411-3	ID03X18.D	12/03/2020 16:32
HD-COD-SW-9-0/1-0	410-22411-4	ID03X19.D	12/03/2020 16:53

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins Lancaster Laboratories En Job No.: 410-22411-1

SDG No.:

Lab File ID: ID04X07.D Lab Sample ID: MB 410-73040/7

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

Instrument ID: 19930 Date Analyzed: 12/04/2020 11:34

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 410-73040/4	ID04X04.D	12/04/2020 10:30
	LCSD 410-73040/5	ID04X05.D	12/04/2020 10:51
HD-COD-SW-6-0/1-0	410-22411-1	ID04X18.D	12/04/2020 16:06
HD-COD-SW-16-0/1-0	410-22411-7	ID04X19.D	12/04/2020 16:27
HD-COD-SW-17-0/1-0	410-22411-8	ID04X20.D	12/04/2020 16:49
HD-COD-SW-26-0/1-0	410-22411-9	ID04X21.D	12/04/2020 17:10
HD-COD-SW-27-0/1-0	410-22411-10	ID04X22.D	12/04/2020 17:31
HD-COD-SW-28-0/1-0	410-22411-11	ID04X23.D	12/04/2020 17:52
HD-COD-SW-29-0/1-0	410-22411-12	ID04X24.D	12/04/2020 18:13
HD-QC1-0/1-1	410-22411-13	ID04X25.D	12/04/2020 18:35
HD-QC1-0/1-2	410-22411-14	ID04X26.D	12/04/2020 18:56

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

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1

SDG No.:

Lab File ID: IN23T01.D BFB Injection Date: 11/23/2020

Instrument ID: 19930 BFB Injection Time: 11:57

Analysis Batch No.: 69397

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	15.4	
75	30.0 - 60.0 % of mass 95	46.0	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.8	
173	Less than 2.0 % of mass 174	0.8	(0.9) 1
174	Greater than 50% of mass 95	85.9	
175	5.0 - 9.0 % of mass 174	6.4	(7.4) 1
176	95.0 - 101.0 % of mass 174	83.0	(96.6) 1
177	5.0 - 9.0 % of mass 176	5.6	(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
	IC 410-69397/3	IN23I01.D	11/23/2020	12:45
	ICIS 410-69397/4	IN23I02.D	11/23/2020	13:06
	IC 410-69397/5	IN23I03.D	11/23/2020	13:28
	IC 410-69397/6	IN23I04.D	11/23/2020	13:49
	IC 410-69397/7	IN23I05.D	11/23/2020	14:10
	IC 410-69397/8	IN23I06.D	11/23/2020	14:31
	IC 410-69397/9	IN23I07.D	11/23/2020	14:53
	ICV 410-69397/10	IN23V01.D	11/23/2020	15:14

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

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1

SDG No.:

Lab File ID: ID03T01.D BFB Injection Date: 12/03/2020

Instrument ID: 19930 BFB Injection Time: 09:05

Analysis Batch No.: 72509

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	15.6	
75	30.0 - 60.0 % of mass 95	45.1	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.8	
173	Less than 2.0 % of mass 174	0.9	(1.0) 1
174	Greater than 50% of mass 95	85.3	
175	5.0 - 9.0 % of mass 174	6.1	(7.1) 1
176	95.0 - 101.0 % of mass 174	82.8	(97.1) 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 410-72509/3	ID03X03.D	12/03/2020	9:44
	LCS 410-72509/4	ID03X04.D	12/03/2020	10:05
	LCSD 410-72509/5	ID03X05.D	12/03/2020	10:26
	MB 410-72509/7	ID03X07.D	12/03/2020	11:08
HD-COD-SW-13-0/1-0	410-22411-5	ID03X08.D	12/03/2020	13:00
HD-COD-SW-15-0/1-0	410-22411-6	ID03X09.D	12/03/2020	13:21
HD-COD-SW-15-0/1-0 MS MS	410-22411-6 MS	ID03X10.D	12/03/2020	13:43
HD-COD-SW-15-0/1-0 MSD MSD	410-22411-6 MSD	ID03X11.D	12/03/2020	14:04
HD-COD-SW-7-0/1-0	410-22411-2	ID03X17.D	12/03/2020	16:11
HD-COD-SW-8-0/1-0	410-22411-3	ID03X18.D	12/03/2020	16:32
HD-COD-SW-9-0/1-0	410-22411-4	ID03X19.D	12/03/2020	16:53

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

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1

SDG No.:

Lab File ID: ID04T01.D BFB Injection Date: 12/04/2020

Instrument ID: 19930 BFB Injection Time: 09:11

Analysis Batch No.: 73040

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	15.2	
75	30.0 - 60.0 % of mass 95	43.8	
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	0.5	(0.5) 1
174	Greater than 50% of mass 95	83.8	
175	5.0 - 9.0 % of mass 174	6.6	(7.9) 1
176	95.0 - 101.0 % of mass 174	82.7	(98.7) 1
177	5.0 - 9.0 % of mass 176	5.0	(6.1) 2

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

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 410-73040/3	ID04X03.D	12/04/2020	10:09
	LCS 410-73040/4	ID04X04.D	12/04/2020	10:30
	LCSD 410-73040/5	ID04X05.D	12/04/2020	10:51
	MB 410-73040/7	ID04X07.D	12/04/2020	11:34
HD-COD-SW-6-0/1-0	410-22411-1	ID04X18.D	12/04/2020	16:06
HD-COD-SW-16-0/1-0	410-22411-7	ID04X19.D	12/04/2020	16:27
HD-COD-SW-17-0/1-0	410-22411-8	ID04X20.D	12/04/2020	16:49
HD-COD-SW-26-0/1-0	410-22411-9	ID04X21.D	12/04/2020	17:10
HD-COD-SW-27-0/1-0	410-22411-10	ID04X22.D	12/04/2020	17:31
HD-COD-SW-28-0/1-0	410-22411-11	ID04X23.D	12/04/2020	17:52
HD-COD-SW-29-0/1-0	410-22411-12	ID04X24.D	12/04/2020	18:13
HD-QC1-0/1-1	410-22411-13	ID04X25.D	12/04/2020	18:35
HD-QC1-0/1-2	410-22411-14	ID04X26.D	12/04/2020	18:56

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

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1

SDG No.:

Sample No.: ICIS 410-69397/4 Date Analyzed: 11/23/2020 13:06

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

Lab File ID (Standard): IN23I02.D Heated Purge: (Y/N) N

Calibration ID: 16044

		TBAd10		FB		CBZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		174562	4.26	2065893	7.74	1570516	11.19
UPPER LIMIT		349124	4.76	4131786	8.24	3141032	11.69
LOWER LIMIT		87281	3.76	1032947	7.24	785258	10.69
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 410-69397/10		161987	4.27	1977703	7.74	1497197	11.19
CCVIS 410-72509/3		175919	4.29	2054189	7.75	1605469	11.19
CCVIS 410-73040/3		171101	4.28	1923449	7.74	1485477	11.19

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

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

Column used to flag values outside QC limits

FORM VIII 8260D

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

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1

SDG No.:

Sample No.: ICIS 410-69397/4 Date Analyzed: 11/23/2020 13:06

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

Lab File ID (Standard): IN23I02.D Heated Purge: (Y/N) N

Calibration ID: 16044

		DCBd4					
		AREA #	RT #	#	RT #	#	RT #
INITIAL CALIBRATION MID-POINT		891775	13.07				
UPPER LIMIT		1783550	13.57				
LOWER LIMIT		445888	12.57				
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 410-69397/10		852390	13.07				
CCVIS 410-72509/3		947080	13.07				
CCVIS 410-73040/3		861629	13.07				

DCBd4 = 1,4-Dichlorobenzene-d4

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

Column used to flag values outside QC limits

FORM VIII 8260D

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

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1

SDG No.:

Sample No.: CCVIS 410-72509/3 Date Analyzed: 12/03/2020 09:44

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

Lab File ID (Standard): ID03X03.D Heated Purge: (Y/N) N

Calibration ID: 16047

		TBAd10		FB		CBZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		175919	4.29	2054189	7.75	1605469	11.19
UPPER LIMIT		351838	4.79	4108378	8.25	3210938	11.69
LOWER LIMIT		87960	3.79	1027095	7.25	802735	10.69
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 410-72509/4		165591	4.28	1924947	7.74	1493846	11.19
LCSD 410-72509/5		173741	4.27	1917550	7.74	1488380	11.19
MB 410-72509/7		164012	4.27	1907923	7.74	1461662	11.19
410-22411-5	HD-COD-SW-13-0/1-0	186401	4.25	1997175	7.73	1540938	11.19
410-22411-6	HD-COD-SW-15-0/1-0	187355	4.28	2064529	7.74	1588365	11.19
410-22411-6 MS	HD-COD-SW-15-0/1-0 MS MS	171453	4.29	1910778	7.74	1467267	11.19
410-22411-6 MSD	HD-COD-SW-15-0/1-0 MSD MSD	171422	4.26	1901051	7.74	1463047	11.19
410-22411-2	HD-COD-SW-7-0/1-0	160206	4.27	1879641	7.74	1442231	11.19
410-22411-3	HD-COD-SW-8-0/1-0	167523	4.28	1877794	7.74	1444801	11.19
410-22411-4	HD-COD-SW-9-0/1-0	168777	4.28	1857492	7.74	1437767	11.19

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

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

Column used to flag values outside QC limits

FORM VIII 8260D

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

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1

SDG No.:

Sample No.: CCVIS 410-72509/3 Date Analyzed: 12/03/2020 09:44

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

Lab File ID (Standard): ID03X03.D Heated Purge: (Y/N) N

Calibration ID: 16047

		DCBd4					
		AREA #	RT #	#	RT #	#	RT #
12/24 HOUR STD		947080	13.07				
UPPER LIMIT		1894160	13.57				
LOWER LIMIT		473540	12.57				
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 410-72509/4		870795	13.07				
LCSD 410-72509/5		862169	13.07				
MB 410-72509/7		842783	13.07				
410-22411-5	HD-COD-SW-13-0/1-0	912263	13.07				
410-22411-6	HD-COD-SW-15-0/1-0	935087	13.07				
410-22411-6 MS	HD-COD-SW-15-0/1-0 MS MS	854262	13.07				
410-22411-6 MSD	HD-COD-SW-15-0/1-0 MSD MSD	838031	13.07				
410-22411-2	HD-COD-SW-7-0/1-0	833911	13.07				
410-22411-3	HD-COD-SW-8-0/1-0	831443	13.07				
410-22411-4	HD-COD-SW-9-0/1-0	828015	13.07				

DCBd4 = 1,4-Dichlorobenzene-d4

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

Column used to flag values outside QC limits

FORM VIII 8260D

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

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1

SDG No.:

Sample No.: CCVIS 410-73040/3 Date Analyzed: 12/04/2020 10:09

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

Lab File ID (Standard): ID04X03.D Heated Purge: (Y/N) N

Calibration ID: 16047

		TBAd10		FB		CBZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		171101	4.28	1923449	7.74	1485477	11.19
UPPER LIMIT		342202	4.78	3846898	8.24	2970954	11.69
LOWER LIMIT		85551	3.78	961725	7.24	742739	10.69
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 410-73040/4		176924	4.28	1934445	7.74	1489829	11.19
LCSD 410-73040/5		171240	4.26	1942323	7.74	1495854	11.19
MB 410-73040/7		168581	4.27	1912525	7.74	1460515	11.19
410-22411-1	HD-COD-SW-6-0/1-0	169016	4.28	1912201	7.75	1463369	11.19
410-22411-7	HD-COD-SW-16-0/1-0	170804	4.26	1934179	7.74	1486500	11.19
410-22411-8	HD-COD-SW-17-0/1-0	177483	4.27	1938661	7.75	1487861	11.19
410-22411-9	HD-COD-SW-26-0/1-0	168525	4.26	1842820	7.74	1418224	11.19
410-22411-10	HD-COD-SW-27-0/1-0	164597	4.28	1863973	7.74	1431125	11.19
410-22411-11	HD-COD-SW-28-0/1-0	177493	4.28	1924155	7.74	1474836	11.19
410-22411-12	HD-COD-SW-29-0/1-0	162931	4.28	1843358	7.74	1414941	11.19
410-22411-13	HD-QC1-0/1-1	162841	4.28	1859016	7.74	1429318	11.19
410-22411-14	HD-QC1-0/1-2	159239	4.28	1870215	7.74	1429075	11.19

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

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

Column used to flag values outside QC limits

FORM VIII 8260D

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

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1

SDG No.:

Sample No.: CCVIS 410-73040/3 Date Analyzed: 12/04/2020 10:09

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

Lab File ID (Standard): ID04X03.D Heated Purge: (Y/N) N

Calibration ID: 16047

		DCBd4					
		AREA #	RT #	#	RT #	#	RT #
12/24 HOUR STD		861629	13.07				
UPPER LIMIT		1723258	13.57				
LOWER LIMIT		430815	12.57				
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 410-73040/4		861004	13.07				
LCSD 410-73040/5		864761	13.07				
MB 410-73040/7		846314	13.07				
410-22411-1	HD-COD-SW-6-0/1-0	849475	13.07				
410-22411-7	HD-COD-SW-16-0/1-0	861526	13.07				
410-22411-8	HD-COD-SW-17-0/1-0	866471	13.07				
410-22411-9	HD-COD-SW-26-0/1-0	822891	13.07				
410-22411-10	HD-COD-SW-27-0/1-0	834890	13.07				
410-22411-11	HD-COD-SW-28-0/1-0	854458	13.07				
410-22411-12	HD-COD-SW-29-0/1-0	823116	13.07				
410-22411-13	HD-QC1-0/1-1	829225	13.07				
410-22411-14	HD-QC1-0/1-2	830219	13.07				

DCBd4 = 1,4-Dichlorobenzene-d4

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

Column used to flag values outside QC limits

FORM VIII 8260D

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1

SDG No.:

Client Sample ID: HD-COD-SW-6-0/1-0 Lab Sample ID: 410-22411-1

Matrix: Water Lab File ID: ID04X18.D

Analysis Method: 8260D Date Collected: 11/30/2020 13:40

Sample wt/vol: 25(mL) Date Analyzed: 12/04/2020 16:06

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 73040 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.070
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.060
75-34-3	1,1-Dichloroethane	ND		0.50	0.070
75-35-4	1,1-Dichloroethene	ND		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.060
107-06-2	1,2-Dichloroethane	ND		0.50	0.050
78-87-5	1,2-Dichloropropane	ND		0.50	0.060
78-93-3	2-Butanone (MEK)	ND		5.0	0.60
591-78-6	2-Hexanone	ND		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70
67-64-1	Acetone	3.0	J ^c	5.0	0.90
71-43-2	Benzene	ND		0.50	0.050
74-97-5	Bromochloromethane	ND		0.50	0.050
75-27-4	Bromodichloromethane	ND		0.50	0.050
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.070
75-15-0	Carbon disulfide	ND		1.0	0.060
56-23-5	Carbon tetrachloride	ND		0.50	0.070
108-90-7	Chlorobenzene	ND		0.50	0.060
75-00-3	Chloroethane	ND		0.50	0.070
67-66-3	Chloroform	ND		0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	ND		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.050
124-48-1	Dibromochloromethane	ND		0.50	0.070
100-41-4	Ethylbenzene	ND		0.50	0.060
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.050
75-09-2	Methylene Chloride	ND		0.50	0.070
100-42-5	Styrene	ND		0.50	0.050
127-18-4	Tetrachloroethene	ND		0.50	0.060
108-88-3	Toluene	ND		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	ND		0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1

SDG No.:

Client Sample ID: HD-COD-SW-6-0/1-0 Lab Sample ID: 410-22411-1

Matrix: Water Lab File ID: ID04X18.D

Analysis Method: 8260D Date Collected: 11/30/2020 13:40

Sample wt/vol: 25(mL) Date Analyzed: 12/04/2020 16:06

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 73040 Units: ug/L

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

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		80-120
1868-53-7	Dibromofluoromethane (Surr)	100		80-120
2037-26-5	Toluene-d8 (Surr)	98		80-120
460-00-4	4-Bromofluorobenzene (Surr)	99		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20201204-17111.b\ID04X18.D
Lims ID: 410-22411-A-1
Client ID: HD-COD-SW-6-0/1-0
Sample Type: Client
Inject. Date: 04-Dec-2020 16:06:30 ALS Bottle#: 18 Worklist Smp#: 18
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0017111-018
Operator ID: kas02648 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20201204-17111.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 05-Dec-2020 10:06:04 Calib Date: 23-Nov-2020 18:05:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1645

First Level Reviewer: campbellme Date: 04-Dec-2020 22:45:42

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
	4 Chloromethane	50	2.178	2.178	0.000	96	4212	0.0532	
	5 Vinyl chloride	62		2.300				ND	
	7 Bromomethane	94		2.623				ND	
	8 Chloroethane	64		2.703				ND	
	14 1,1-Dichloroethene	96		3.574				ND	
	15 Acetone	43	3.617	3.605	0.012	99	27412	2.97	
	19 Carbon disulfide	76		3.879				ND	7
	23 Methylene Chloride	84		4.245				ND	7
*	24 t-Butyl alcohol-d10 (IS)	65	4.281	4.282	-0.001	0	169016	50.0	
	27 Methyl tert-butyl ether	73		4.659				ND	
	28 trans-1,2-Dichloroethene	96		4.672				ND	
	31 1,1-Dichloroethane	63		5.330				ND	
	36 2-Butanone (MEK)	43		6.123				ND	U
	37 cis-1,2-Dichloroethene	96		6.159				ND	
	43 Chlorobromomethane	128		6.488				ND	
	45 Chloroform	83	6.641	6.635	0.006	88	5306	0.0529	
$	46 Dibromofluoromethane (Surr)	113	6.860	6.854	0.006	94	473131	10.0	
	47 1,1,1-Trichloroethane	97		6.866				ND	
	50 Carbon tetrachloride	117		7.080				ND	
$	53 1,2-Dichloroethane-d4 (Surr)	102	7.311	7.305	0.006	0	96485	10.1	
	54 Benzene	78	7.348	7.336	0.012	41	2222	0.009171	7M
	56 1,2-Dichloroethane	62		7.409				ND	
*	58 Fluorobenzene (IS)	96	7.750	7.738	0.012	99	1912201	10.0	
	61 Trichloroethene	95		8.220				ND	7
	63 1,2-Dichloropropane	63		8.549				ND	
	68 Dichlorobromomethane	83		8.890				ND	7
	73 cis-1,3-Dichloropropene	75		9.433				ND	
	74 4-Methyl-2-pentanone (MIBK)	43		9.604				ND	7
$	75 Toluene-d8 (Surr)	98	9.744	9.744	0.000	93	1872731	9.80	
	76 Toluene	92	9.823	9.817	0.006	99	9179	0.0575	
	78 trans-1,3-Dichloropropene	75		10.067				ND	
	80 1,1,2-Trichloroethane	97		10.274				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
81 Tetrachloroethene	166		10.366				ND	7
83 2-Hexanone	43		10.482				ND	7
85 Chlorodibromomethane	129		10.652				ND	
86 Ethylene Dibromide	107		10.762				ND	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.189	-0.001	84	1463369	10.0	
90 Chlorobenzene	112		11.213				ND	
S 89 Xylenes, Total	106		11.245				ND	7
91 1,1,1,2-Tetrachloroethane	131		11.298				ND	
92 Ethylbenzene	91		11.298				ND	7
93 m-Xylene & p-Xylene	106	11.420	11.414	0.006	0	5510	0.0453	
94 o-Xylene	106		11.743				ND	7
95 Styrene	104		11.756				ND	7
96 Bromoform	173		11.914				ND	
$ 100 4-Bromofluorobenzene (Surr)	95	12.188	12.189	0.000	94	697415	9.85	
101 1,1,2,2-Tetrachloroethane	83		12.286				ND	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	94	849475	10.0	

QC Flag Legend

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

Reagents:

MSV_31_826ISS_00003 Amount Added: 5.00 Units: uL Run Reagent

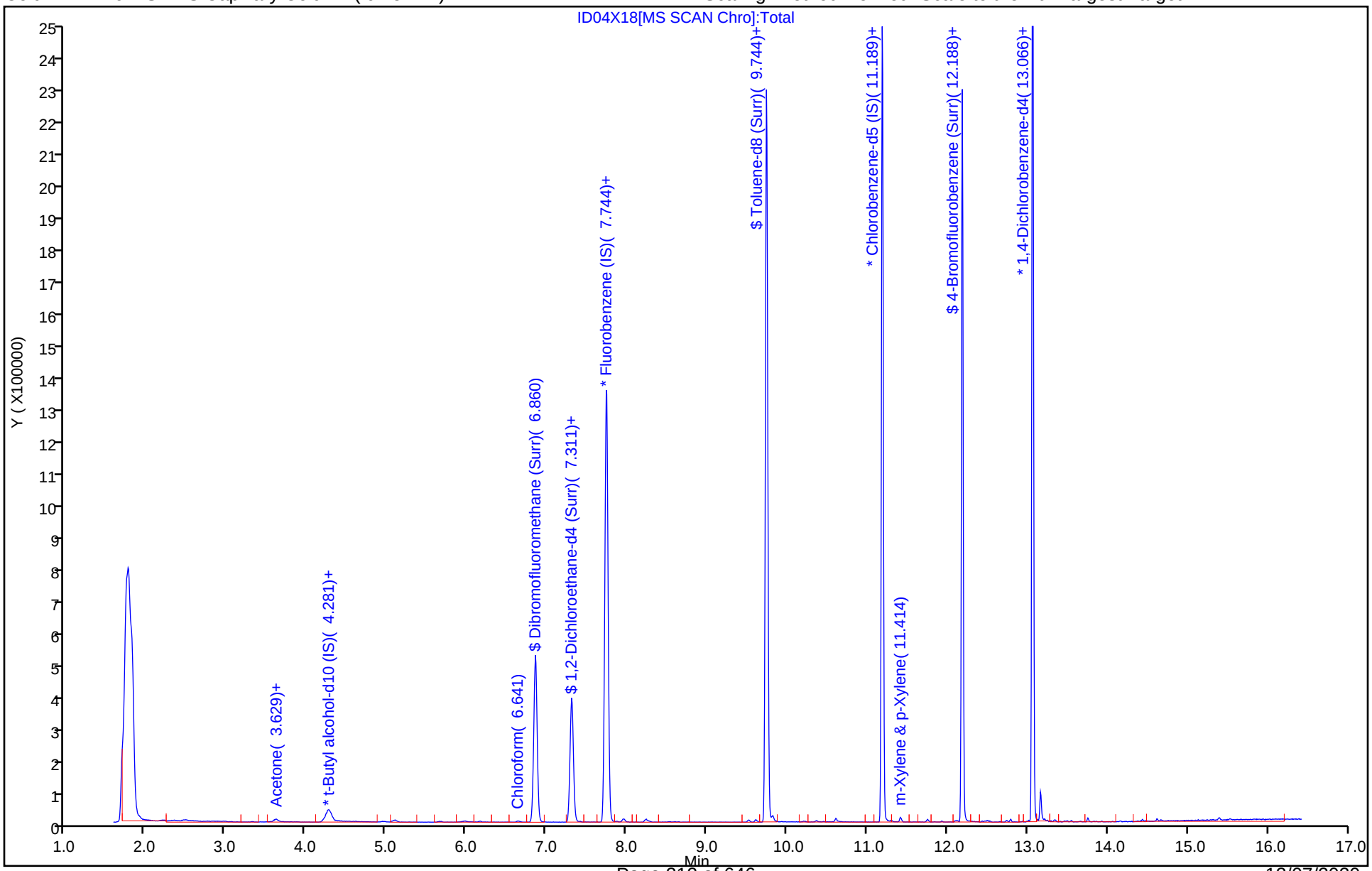
Report Date: 05-Dec-2020 10:06:29 Chrom Revision: 2.3 13-Nov-2020 01:23:02

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20201204-17111.b\ID04X18.D

Injection Date:	04-Dec-2020 16:06:30	Instrument ID:	19930	Operator ID:	kas02648
Lims ID:	410-22411-A-1	Lab Sample ID:	410-22411-1	Worklist Smp#:	18
Client ID:	HD-COD-SW-6-0/1-0				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19930\20201204-17111.b\ID04X18.D
Lims ID: 410-22411-A-1
Client ID: HD-COD-SW-6-0/1-0
Sample Type: Client
Inject. Date: 04-Dec-2020 16:06:30 ALS Bottle#: 18 Worklist Smp#: 18
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0017111-018
Operator ID: kas02648 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20201204-17111.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 05-Dec-2020 10:06:04 Calib Date: 23-Nov-2020 18:05:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1645

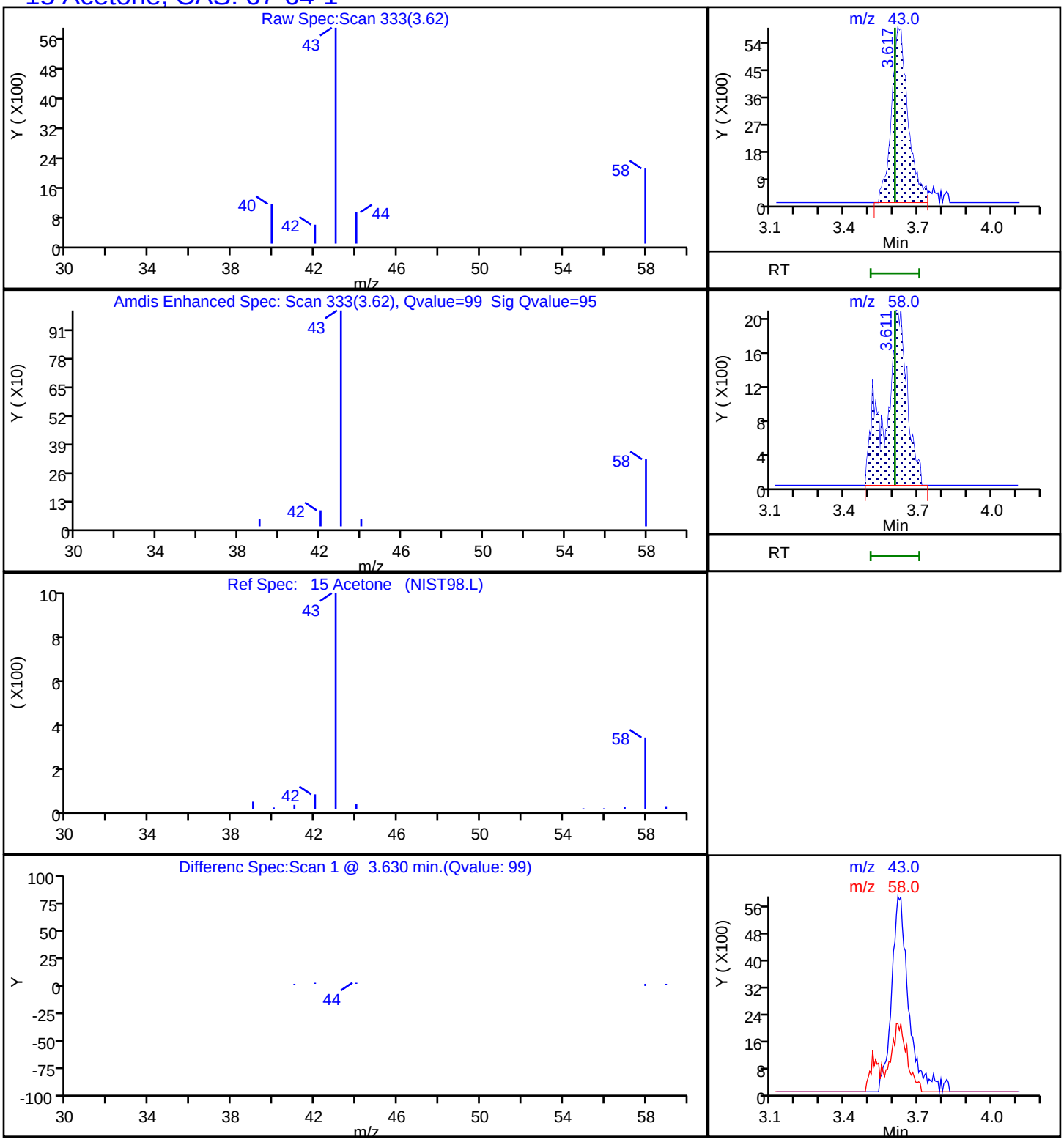
First Level Reviewer: campbellme Date: 04-Dec-2020 22:45:42

Compound	Amount Added	Amount Recovered	% Rec.
$ 46 Dibromofluoromethane (Surr)	10.0	10.0	100.21
$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	10.1	101.36
$ 75 Toluene-d8 (Surr)	10.0	9.80	97.99
$ 100 4-Bromofluorobenzene (Surr)	10.0	9.85	98.54

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20201204-17111.b\ID04X18.D				
Injection Date:	04-Dec-2020 16:06:30	Instrument ID:	19930		
Lims ID:	410-22411-A-1	Lab Sample ID:	410-22411-1		
Client ID:	HD-COD-SW-6-0/1-0				
Operator ID:	kas02648	ALS Bottle#:	18	Worklist Smp#:	18
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

15 Acetone, CAS: 67-64-1



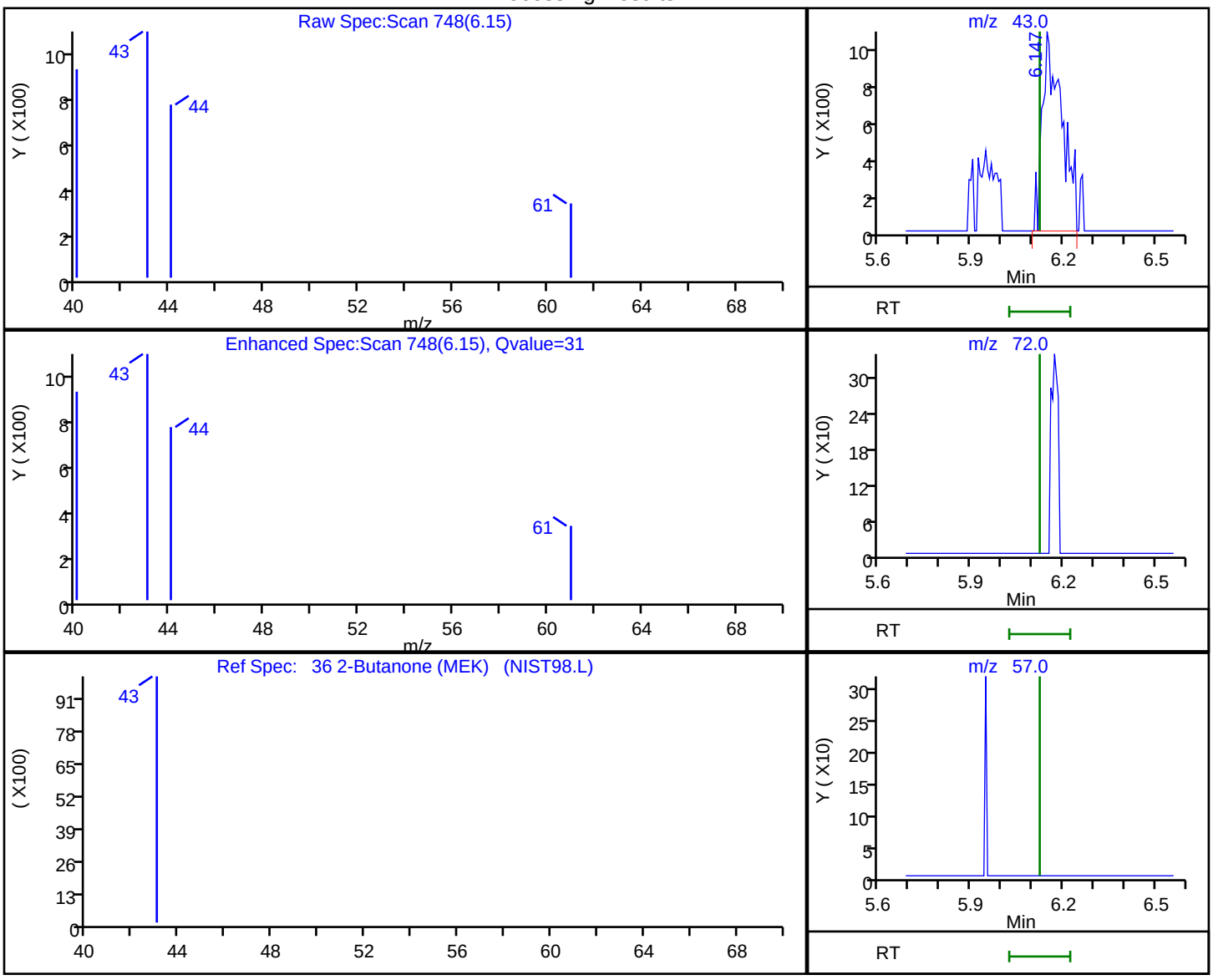
User Disabled Compound Report

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20201204-17111.b\ID04X18.D				
Injection Date:	04-Dec-2020 16:06:30	Instrument ID:	19930		
Lims ID:	410-22411-A-1	Lab Sample ID:	410-22411-1		
Client ID:	HD-COD-SW-6-0/1-0				
Operator ID:	kas02648	ALS Bottle#:	18	Worklist Smp#:	18
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

36 2-Butanone (MEK), CAS: 78-93-3

Processing Results



RT	Mass	Response	Amount
6.15	43.00	4698	0.304770
6.12	72.00	0	
6.12	57.00	0	

Reviewer: campbellme, 04-Dec-2020 22:45:20

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

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

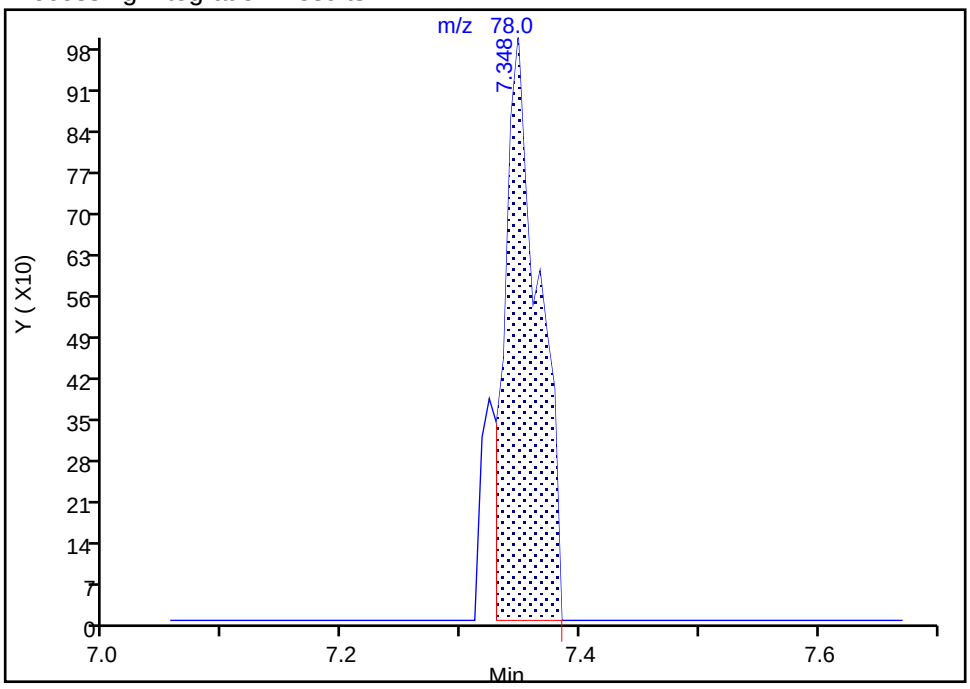
Data File:	\\chromfs\Lancaster\ChromData\19930\20201204-17111.b\ID04X18.D				
Injection Date:	04-Dec-2020 16:06:30	Instrument ID:	19930		
Lims ID:	410-22411-A-1	Lab Sample ID:	410-22411-1		
Client ID:	HD-COD-SW-6-0/1-0				
Operator ID:	kas02648	ALS Bottle#:	18	Worklist Smp#:	18
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

54 Benzene, CAS: 71-43-2

Signal: 1

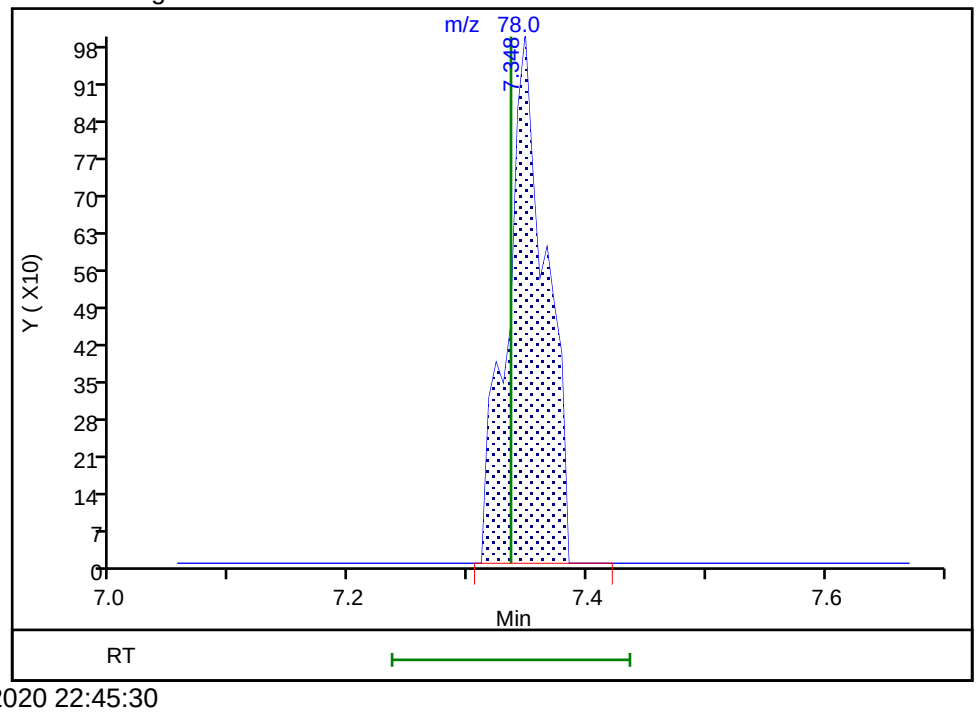
Processing Integration Results

RT: 7.35
Area: 1969
Amount: 0.008127
Amount Units: ug/l



Manual Integration Results

RT: 7.35
Area: 2222
Amount: 0.009171
Amount Units: ug/l



Reviewer: campbellme, 04-Dec-2020 22:45:30
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1

SDG No.:

Client Sample ID: HD-COD-SW-7-0/1-0 Lab Sample ID: 410-22411-2

Matrix: Water Lab File ID: ID03X17.D

Analysis Method: 8260D Date Collected: 11/30/2020 10:00

Sample wt/vol: 25(mL) Date Analyzed: 12/03/2020 16:11

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 72509 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.070
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.060
75-34-3	1,1-Dichloroethane	ND		0.50	0.070
75-35-4	1,1-Dichloroethene	ND		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.060
107-06-2	1,2-Dichloroethane	ND		0.50	0.050
78-87-5	1,2-Dichloropropane	ND		0.50	0.060
78-93-3	2-Butanone (MEK)	ND		5.0	0.60
591-78-6	2-Hexanone	ND		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70
67-64-1	Acetone	2.9	J	5.0	0.90
71-43-2	Benzene	ND		0.50	0.050
74-97-5	Bromochloromethane	ND		0.50	0.050
75-27-4	Bromodichloromethane	ND		0.50	0.050
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.070
75-15-0	Carbon disulfide	ND		1.0	0.060
56-23-5	Carbon tetrachloride	ND		0.50	0.070
108-90-7	Chlorobenzene	ND		0.50	0.060
75-00-3	Chloroethane	ND		0.50	0.070
67-66-3	Chloroform	ND		0.50	0.090
74-87-3	Chloromethane	0.094	J	0.50	0.060
156-59-2	cis-1,2-Dichloroethene	0.067	J	0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.050
124-48-1	Dibromochloromethane	ND		0.50	0.070
100-41-4	Ethylbenzene	ND		0.50	0.060
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.050
75-09-2	Methylene Chloride	ND		0.50	0.070
100-42-5	Styrene	ND		0.50	0.050
127-18-4	Tetrachloroethene	ND		0.50	0.060
108-88-3	Toluene	ND		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	0.082	J	0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1

SDG No.:

Client Sample ID: HD-COD-SW-7-0/1-0 Lab Sample ID: 410-22411-2

Matrix: Water Lab File ID: ID03X17.D

Analysis Method: 8260D Date Collected: 11/30/2020 10:00

Sample wt/vol: 25(mL) Date Analyzed: 12/03/2020 16:11

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 72509 Units: ug/L

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

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		80-120
1868-53-7	Dibromofluoromethane (Surr)	100		80-120
2037-26-5	Toluene-d8 (Surr)	98		80-120
460-00-4	4-Bromofluorobenzene (Surr)	99		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20201203-16986.b\ID03X17.D
Lims ID: 410-22411-A-2
Client ID: HD-COD-SW-7-0/1-0
Sample Type: Client
Inject. Date: 03-Dec-2020 16:11:30 ALS Bottle#: 17 Worklist Smp#: 17
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0016986-017
Operator ID: kas02648 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20201203-16986.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 05-Dec-2020 08:26:54 Calib Date: 23-Nov-2020 18:05:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1645

First Level Reviewer: campbellme Date: 03-Dec-2020 18:49:40

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
4 Chloromethane	50	2.178	2.190	-0.012	95	7319	0.0940	
5 Vinyl chloride	62		2.312				ND	
7 Bromomethane	94		2.635				ND	
8 Chloroethane	64		2.715				ND	
14 1,1-Dichloroethene	96		3.586				ND	
15 Acetone	43	3.617	3.617	0.000	100	25649	2.94	
19 Carbon disulfide	76	3.873	3.891	-0.018	97	7138	0.0491	
23 Methylene Chloride	84		4.263				ND	
* 24 t-Butyl alcohol-d10 (IS)	65	4.269	4.288	-0.019	0	160206	50.0	
27 Methyl tert-butyl ether	73		4.672				ND	
28 trans-1,2-Dichloroethene	96		4.678				ND	
31 1,1-Dichloroethane	63		5.342				ND	
36 2-Butanone (MEK)	43	6.159	6.141	0.018	59	5334	0.3651	
37 cis-1,2-Dichloroethene	96	6.153	6.165	-0.012	76	4284	0.0666	a
43 Chlorobromomethane	128		6.500				ND	
45 Chloroform	83	6.635	6.647	-0.012	87	6292	0.0638	
$ 46 Dibromofluoromethane (Surr)	113	6.854	6.860	-0.006	94	463854	10.0	
47 1,1,1-Trichloroethane	97		6.872				ND	
50 Carbon tetrachloride	117		7.086				ND	
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.311	7.317	-0.006	0	95341	10.2	
54 Benzene	78	7.342	7.348	-0.006	87	3279	0.0138	7M
56 1,2-Dichloroethane	62		7.421				ND	
* 58 Fluorobenzene (IS)	96	7.744	7.750	-0.006	99	1879641	10.0	
61 Trichloroethene	95	8.226	8.226	0.000	91	5092	0.0817	
63 1,2-Dichloropropane	63		8.555				ND	
68 Dichlorobromomethane	83		8.896				ND	7
73 cis-1,3-Dichloropropene	75		9.439				ND	
74 4-Methyl-2-pentanone (MIBK)	43		9.604				ND	7
$ 75 Toluene-d8 (Surr)	98	9.744	9.744	0.000	93	1851620	9.83	
76 Toluene	92	9.823	9.823	0.000	96	9538	0.0607	
78 trans-1,3-Dichloropropene	75		10.073				ND	
80 1,1,2-Trichloroethane	97		10.274				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
81 Tetrachloroethene	166		10.366				ND	7
83 2-Hexanone	43		10.488				ND	7
85 Chlorodibromomethane	129		10.652				ND	
86 Ethylene Dibromide	107		10.762				ND	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.189	0.000	84	1442231	10.0	
90 Chlorobenzene	112		11.219				ND	
S 89 Xylenes, Total	106		11.245				ND	7
91 1,1,1,2-Tetrachloroethane	131		11.298				ND	
92 Ethylbenzene	91		11.304				ND	7
93 m-Xylene & p-Xylene	106	11.414	11.414	0.000	0	6192	0.0517	
94 o-Xylene	106		11.743				ND	7
95 Styrene	104		11.762				ND	7
96 Bromoform	173		11.920				ND	
$ 100 4-Bromofluorobenzene (Surr)	95	12.188	12.188	0.000	94	687384	9.85	
101 1,1,2,2-Tetrachloroethane	83		12.286				ND	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	94	833911	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MSV_31_826ISS_00003 Amount Added: 5.00 Units: uL Run Reagent

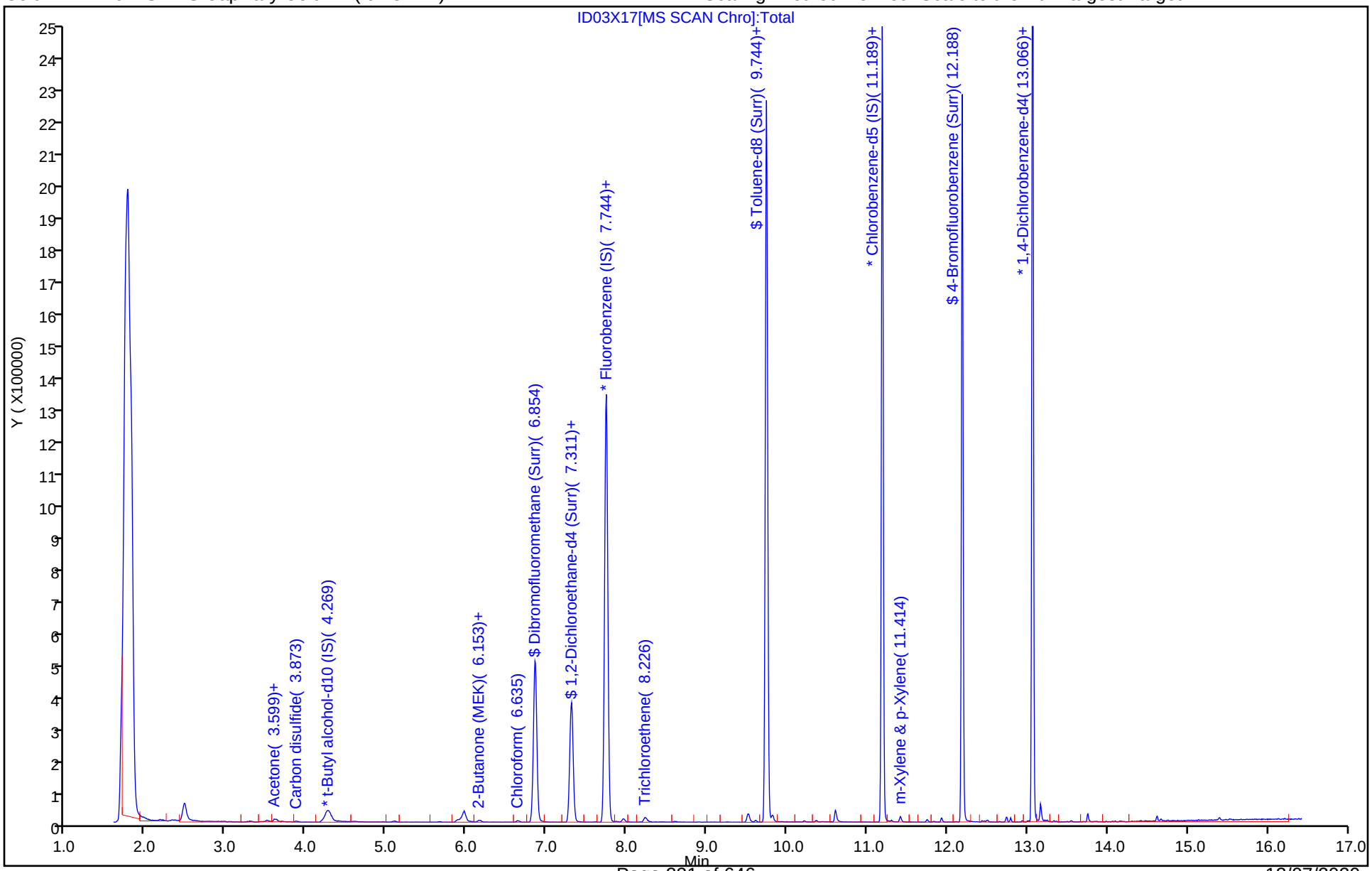
Report Date: 05-Dec-2020 08:27:14 Chrom Revision: 2.3 13-Nov-2020 01:23:02

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20201203-16986.b\ID03X17.D

Injection Date:	03-Dec-2020 16:11:30	Instrument ID:	19930	Operator ID:	kas02648
Lims ID:	410-22411-A-2	Lab Sample ID:	410-22411-2	Worklist Smp#:	17
Client ID:	HD-COD-SW-7-0/1-0				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19930\20201203-16986.b\ID03X17.D
Lims ID: 410-22411-A-2
Client ID: HD-COD-SW-7-0/1-0
Sample Type: Client
Inject. Date: 03-Dec-2020 16:11:30 ALS Bottle#: 17 Worklist Smp#: 17
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0016986-017
Operator ID: kas02648 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20201203-16986.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 05-Dec-2020 08:26:54 Calib Date: 23-Nov-2020 18:05:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1645

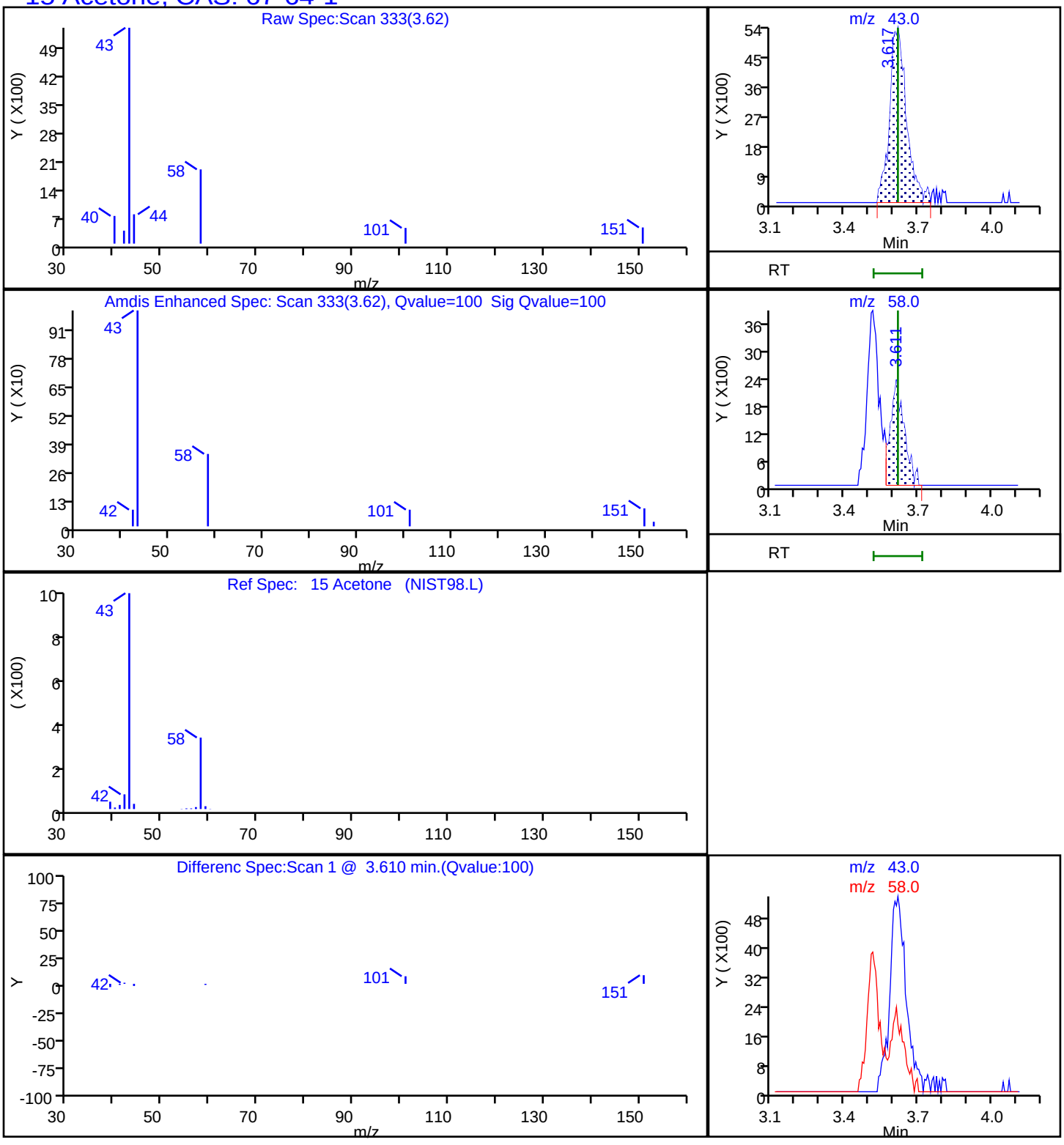
First Level Reviewer: campbellme Date: 03-Dec-2020 18:49:40

Compound	Amount Added	Amount Recovered	% Rec.
$ 46 Dibromofluoromethane (Surr)	10.0	10.0	99.95
$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	10.2	101.89
$ 75 Toluene-d8 (Surr)	10.0	9.83	98.31
$ 100 4-Bromofluorobenzene (Surr)	10.0	9.85	98.55

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20201203-16986.b\ID03X17.D				
Injection Date:	03-Dec-2020 16:11:30	Instrument ID:	19930		
Lims ID:	410-22411-A-2	Lab Sample ID:	410-22411-2		
Client ID:	HD-COD-SW-7-0/1-0				
Operator ID:	kas02648	ALS Bottle#:	17	Worklist Smp#:	17
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

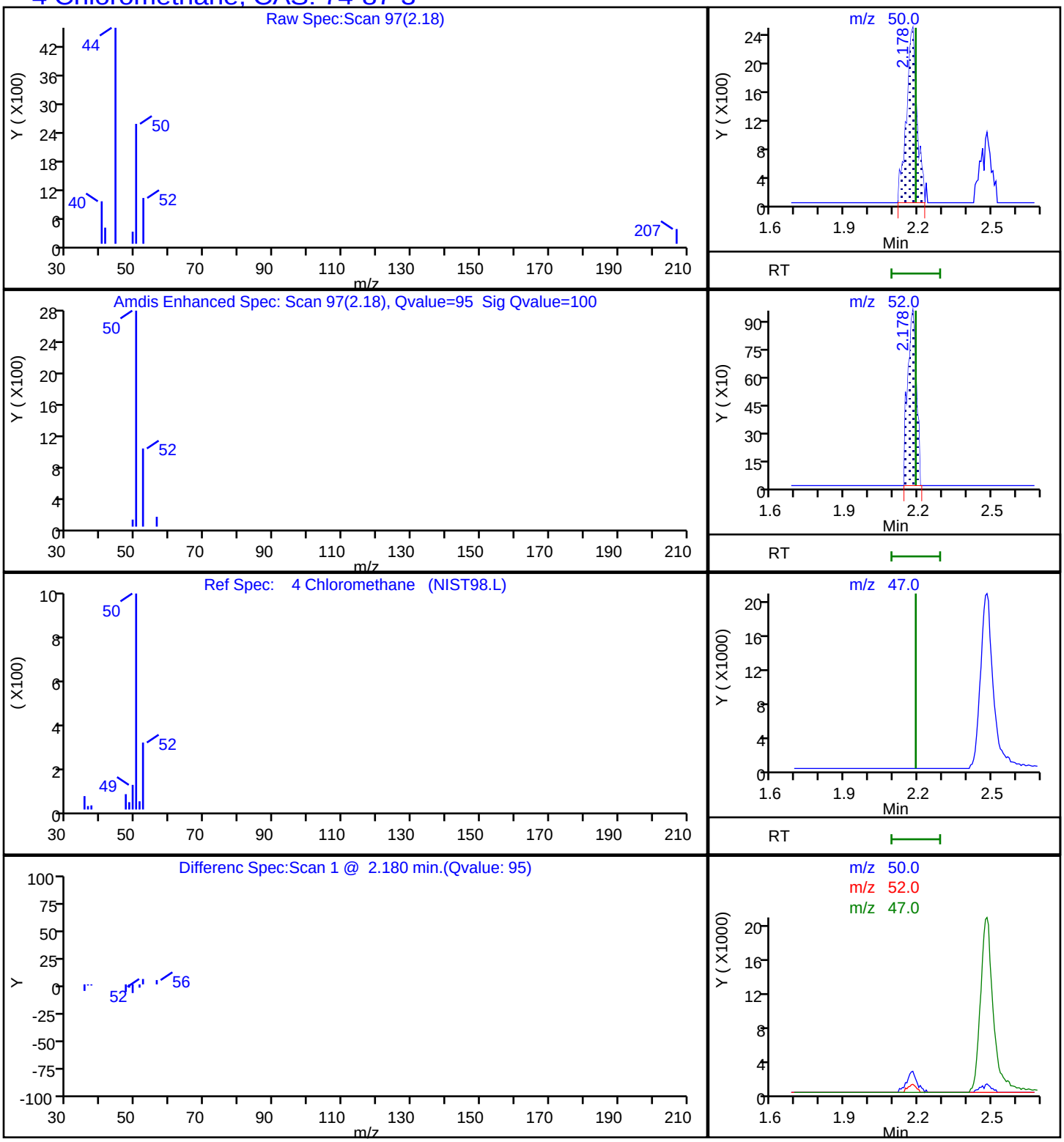
15 Acetone, CAS: 67-64-1



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20201203-16986.b\ID03X17.D				
Injection Date:	03-Dec-2020 16:11:30	Instrument ID:	19930		
Lims ID:	410-22411-A-2	Lab Sample ID:	410-22411-2		
Client ID:	HD-COD-SW-7-0/1-0				
Operator ID:	kas02648	ALS Bottle#:	17	Worklist Smp#:	17
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

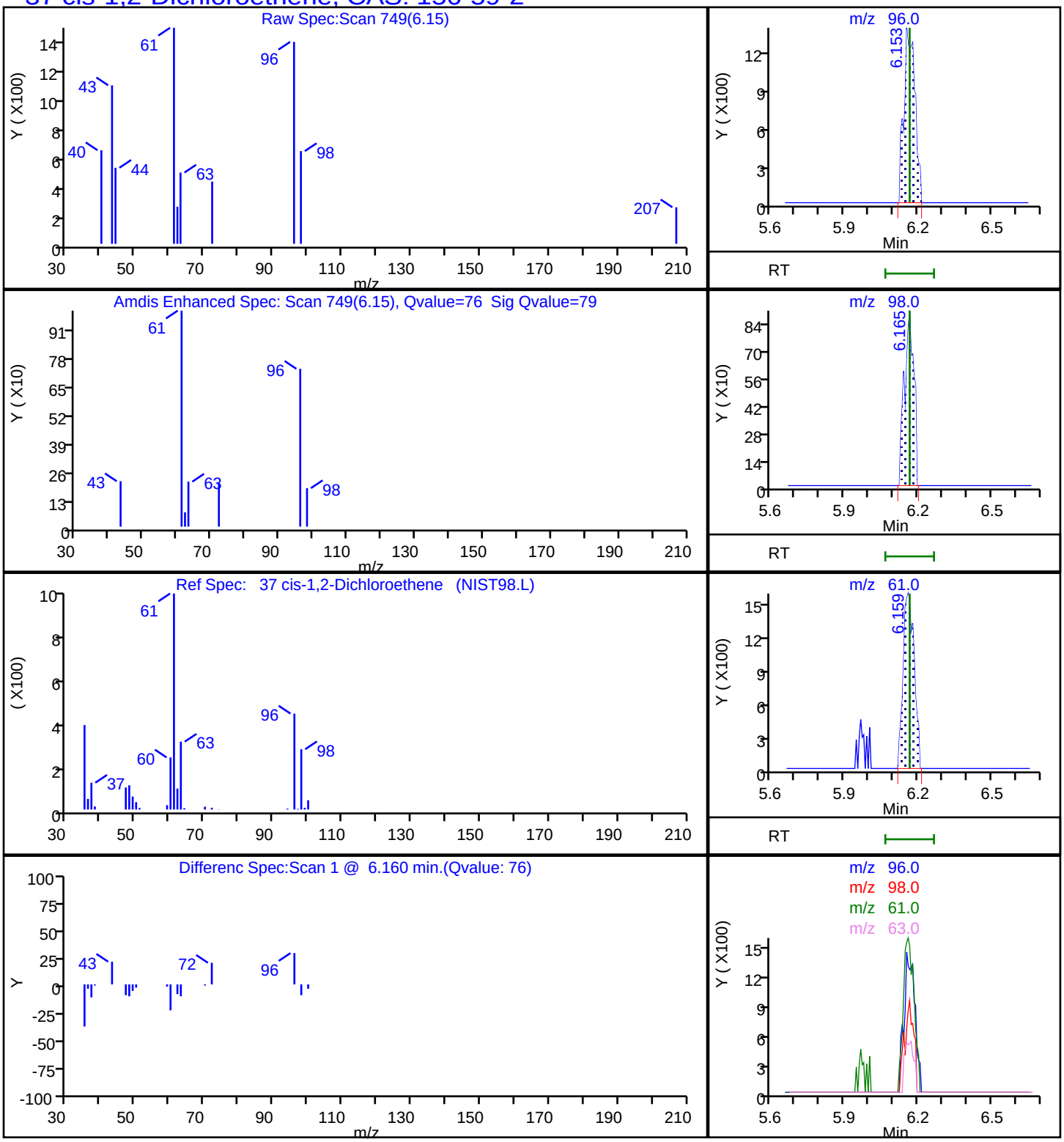
4 Chloromethane, CAS: 74-87-3



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20201203-16986.b\ID03X17.D				
Injection Date:	03-Dec-2020 16:11:30	Instrument ID:	19930		
Lims ID:	410-22411-A-2	Lab Sample ID:	410-22411-2		
Client ID:	HD-COD-SW-7-0/1-0				
Operator ID:	kas02648	ALS Bottle#:	17	Worklist Smp#:	17
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

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

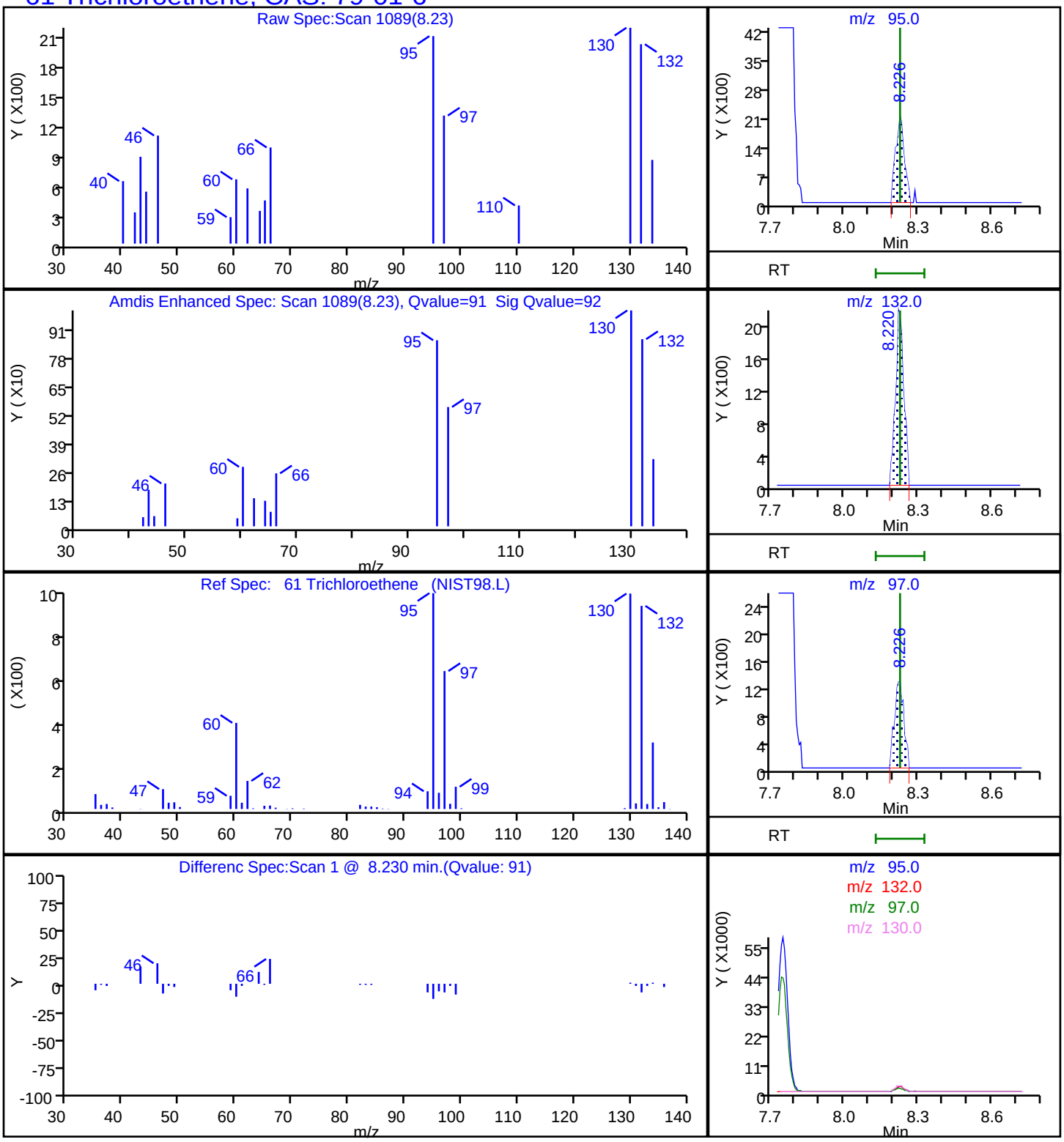


Report Date: 05-Dec-2020 08:27:14 Chrom Revision: 2.3 13-Nov-2020 01:23:02

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20201203-16986.b\ID03X17.D				
Injection Date:	03-Dec-2020 16:11:30	Instrument ID:	19930		
Lims ID:	410-22411-A-2	Lab Sample ID:	410-22411-2		
Client ID:	HD-COD-SW-7-0/1-0				
Operator ID:	kas02648	ALS Bottle#:	17	Worklist Smp#:	17
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

61 Trichloroethene, CAS: 79-01-6



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

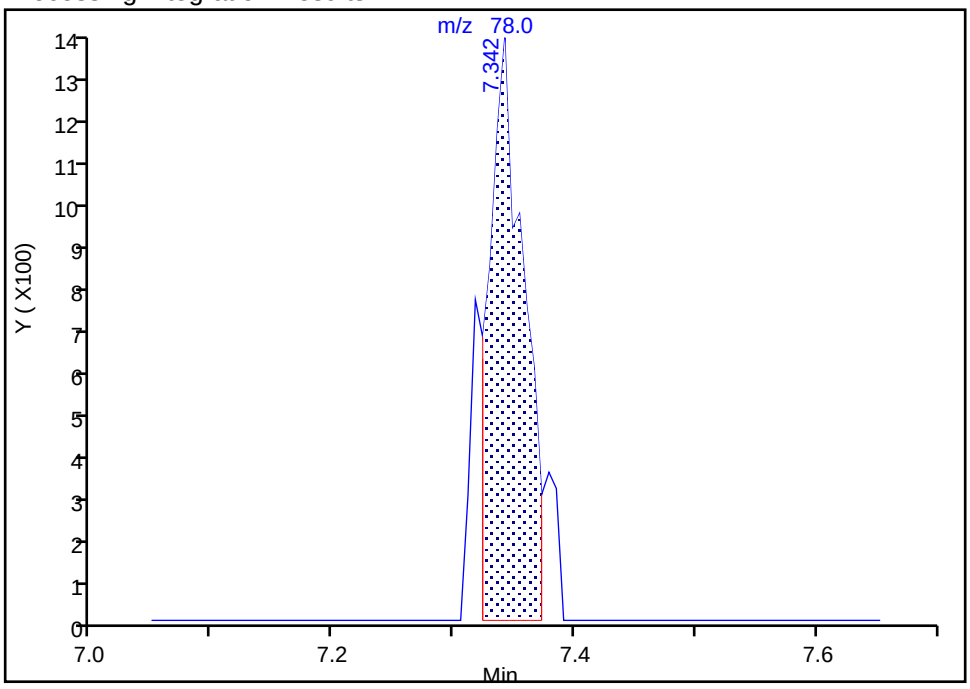
Data File:	\\chromfs\Lancaster\ChromData\19930\20201203-16986.b\ID03X17.D				
Injection Date:	03-Dec-2020 16:11:30	Instrument ID:	19930		
Lims ID:	410-22411-A-2	Lab Sample ID:	410-22411-2		
Client ID:	HD-COD-SW-7-0/1-0				
Operator ID:	kas02648	ALS Bottle#:	17	Worklist Smp#:	17
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

54 Benzene, CAS: 71-43-2

Signal: 1

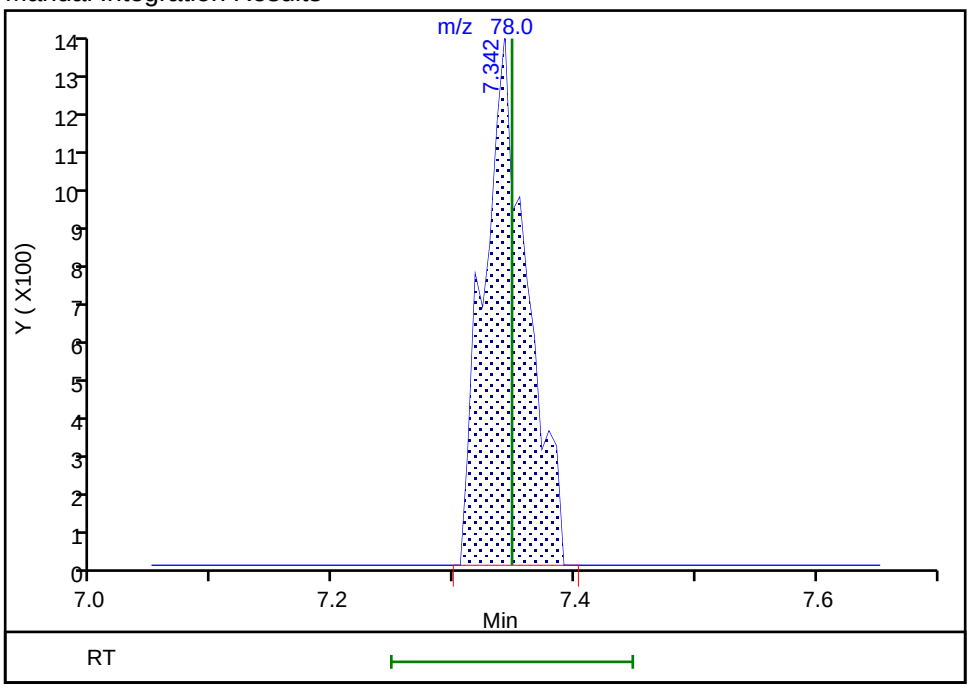
Processing Integration Results

RT: 7.34
Area: 2673
Amount: 0.011224
Amount Units: ug/l



Manual Integration Results

RT: 7.34
Area: 3279
Amount: 0.013768
Amount Units: ug/l



Reviewer: campbellme, 03-Dec-2020 20:12:37
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

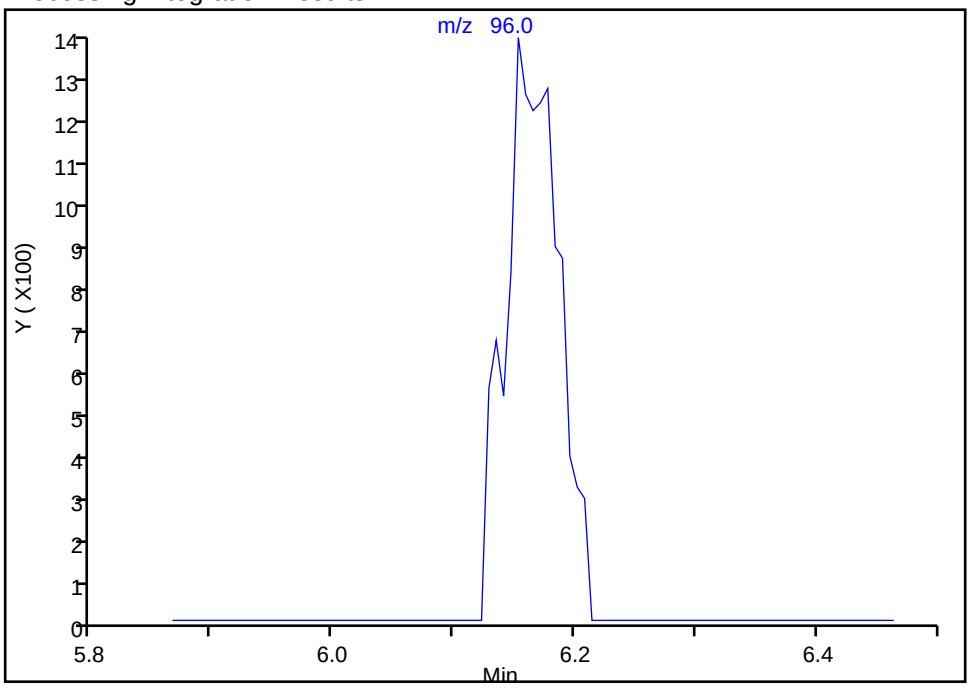
Data File:	\\chromfs\Lancaster\ChromData\19930\20201203-16986.b\ID03X17.D				
Injection Date:	03-Dec-2020 16:11:30	Instrument ID:	19930		
Lims ID:	410-22411-A-2	Lab Sample ID:	410-22411-2		
Client ID:	HD-COD-SW-7-0/1-0				
Operator ID:	kas02648	ALS Bottle#:	17	Worklist Smp#:	17
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

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

Signal: 1

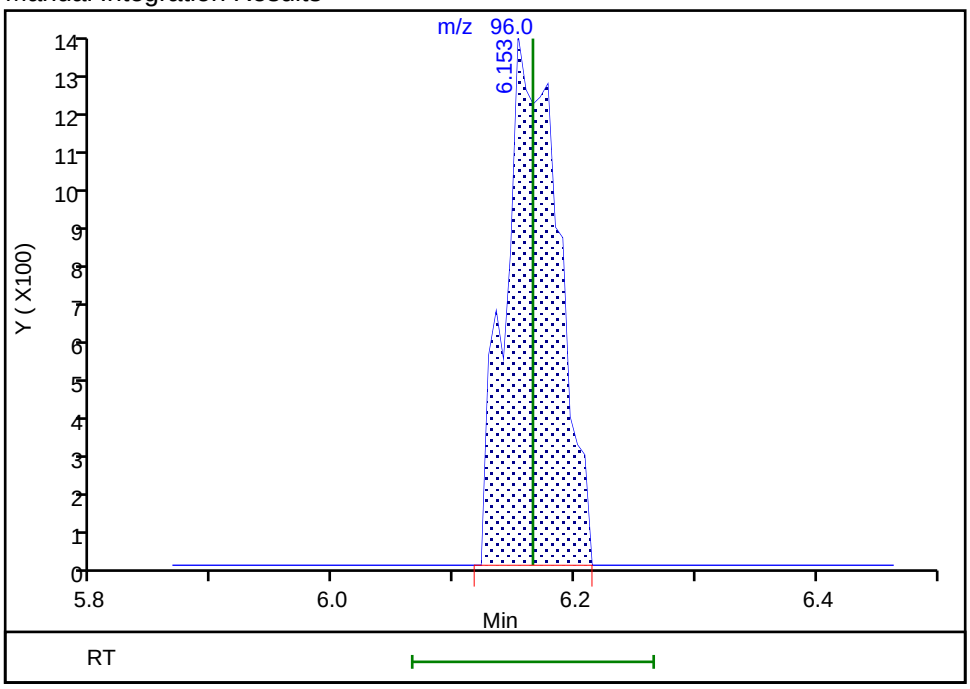
Not Detected
Expected RT: 6.17

Processing Integration Results



Manual Integration Results

RT: 6.15
Area: 4284
Amount: 0.066636
Amount Units: ug/l



Reviewer: campbellme, 03-Dec-2020 20:12:29
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1

SDG No.:

Client Sample ID: HD-COD-SW-8-0/1-0 Lab Sample ID: 410-22411-3

Matrix: Water Lab File ID: ID03X18.D

Analysis Method: 8260D Date Collected: 11/30/2020 12:40

Sample wt/vol: 25(mL) Date Analyzed: 12/03/2020 16:32

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 72509 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.070
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.060
75-34-3	1,1-Dichloroethane	ND		0.50	0.070
75-35-4	1,1-Dichloroethene	ND		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.060
107-06-2	1,2-Dichloroethane	ND		0.50	0.050
78-87-5	1,2-Dichloropropane	ND		0.50	0.060
78-93-3	2-Butanone (MEK)	ND		5.0	0.60
591-78-6	2-Hexanone	ND		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70
67-64-1	Acetone	2.7	J	5.0	0.90
71-43-2	Benzene	ND		0.50	0.050
74-97-5	Bromochloromethane	ND		0.50	0.050
75-27-4	Bromodichloromethane	ND		0.50	0.050
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.070
75-15-0	Carbon disulfide	ND		1.0	0.060
56-23-5	Carbon tetrachloride	ND		0.50	0.070
108-90-7	Chlorobenzene	ND		0.50	0.060
75-00-3	Chloroethane	ND		0.50	0.070
67-66-3	Chloroform	ND		0.50	0.090
74-87-3	Chloromethane	0.072	J	0.50	0.060
156-59-2	cis-1,2-Dichloroethene	ND		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.050
124-48-1	Dibromochloromethane	ND		0.50	0.070
100-41-4	Ethylbenzene	ND		0.50	0.060
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.050
75-09-2	Methylene Chloride	ND		0.50	0.070
100-42-5	Styrene	ND		0.50	0.050
127-18-4	Tetrachloroethene	ND		0.50	0.060
108-88-3	Toluene	0.079	J	0.50	0.070
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	ND		0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1

SDG No.:

Client Sample ID: HD-COD-SW-8-0/1-0 Lab Sample ID: 410-22411-3

Matrix: Water Lab File ID: ID03X18.D

Analysis Method: 8260D Date Collected: 11/30/2020 12:40

Sample wt/vol: 25(mL) Date Analyzed: 12/03/2020 16:32

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 72509 Units: ug/L

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

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		80-120
1868-53-7	Dibromofluoromethane (Surr)	100		80-120
2037-26-5	Toluene-d8 (Surr)	98		80-120
460-00-4	4-Bromofluorobenzene (Surr)	98		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20201203-16986.b\ID03X18.D
Lims ID: 410-22411-A-3
Client ID: HD-COD-SW-8-0/1-0
Sample Type: Client
Inject. Date: 03-Dec-2020 16:32:30 ALS Bottle#: 18 Worklist Smp#: 18
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0016986-018
Operator ID: kas02648 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20201203-16986.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 05-Dec-2020 08:26:54 Calib Date: 23-Nov-2020 18:05:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1645

First Level Reviewer: campbellme Date: 03-Dec-2020 20:13:21

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
4 Chloromethane	50	2.178	2.190	-0.012	94	5636	0.0725	
5 Vinyl chloride	62		2.312				ND	
7 Bromomethane	94		2.635				ND	
8 Chloroethane	64		2.715				ND	
14 1,1-Dichloroethene	96		3.586				ND	
15 Acetone	43	3.611	3.617	-0.006	100	25046	2.74	
19 Carbon disulfide	76	3.885	3.891	-0.006	52	4737	0.0326	
23 Methylene Chloride	84		4.263				ND	
* 24 t-Butyl alcohol-d10 (IS)	65	4.281	4.288	-0.007	0	167523	50.0	
27 Methyl tert-butyl ether	73		4.672				ND	
28 trans-1,2-Dichloroethene	96		4.678				ND	
31 1,1-Dichloroethane	63		5.342				ND	
36 2-Butanone (MEK)	43		6.141				ND	7
37 cis-1,2-Dichloroethene	96	6.153	6.165	-0.012	74	3141	0.0489	a
43 Chlorobromomethane	128		6.500				ND	
45 Chloroform	83	6.647	6.647	0.000	83	2355	0.0239	a
$ 46 Dibromofluoromethane (Surr)	113	6.860	6.860	0.000	94	464460	10.0	
47 1,1,1-Trichloroethane	97		6.872				ND	
50 Carbon tetrachloride	117		7.086				ND	
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.311	7.317	-0.006	0	96011	10.3	
54 Benzene	78		7.348				ND	7
56 1,2-Dichloroethane	62		7.421				ND	
* 58 Fluorobenzene (IS)	96	7.744	7.750	-0.006	99	1877794	10.0	
61 Trichloroethene	95	8.226	8.226	0.000	88	3001	0.0482	
63 1,2-Dichloropropane	63		8.555				ND	
68 Dichlorobromomethane	83		8.896				ND	
73 cis-1,3-Dichloropropene	75		9.439				ND	
74 4-Methyl-2-pentanone (MIBK)	43		9.604				ND	7
$ 75 Toluene-d8 (Surr)	98	9.744	9.744	0.000	93	1848017	9.79	
76 Toluene	92	9.823	9.823	0.000	98	12463	0.0791	
78 trans-1,3-Dichloropropene	75		10.073				ND	
80 1,1,2-Trichloroethane	97		10.274				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
81 Tetrachloroethene	166		10.366				ND	7
83 2-Hexanone	43		10.488				ND	7
85 Chlorodibromomethane	129		10.652				ND	
86 Ethylene Dibromide	107		10.762				ND	
* 87 Chlorobenzene-d5 (IS)	117	11.188	11.189	-0.001	84	1444801	10.0	
90 Chlorobenzene	112		11.219				ND	
S 89 Xylenes, Total	106		11.245				ND	7
91 1,1,1,2-Tetrachloroethane	131		11.298				ND	
92 Ethylbenzene	91		11.304				ND	7
93 m-Xylene & p-Xylene	106	11.420	11.414	0.006	0	7188	0.0599	
94 o-Xylene	106		11.743				ND	7
95 Styrene	104	11.768	11.762	0.006	55	2779	0.0149	a
96 Bromoform	173		11.920				ND	
$ 100 4-Bromofluorobenzene (Surr)	95	12.188	12.188	0.000	94	685416	9.81	
101 1,1,2,2-Tetrachloroethane	83		12.286				ND	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	94	831443	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

a - User Assigned ID

Reagents:

MSV_31_826ISS_00003 Amount Added: 5.00 Units: uL Run Reagent

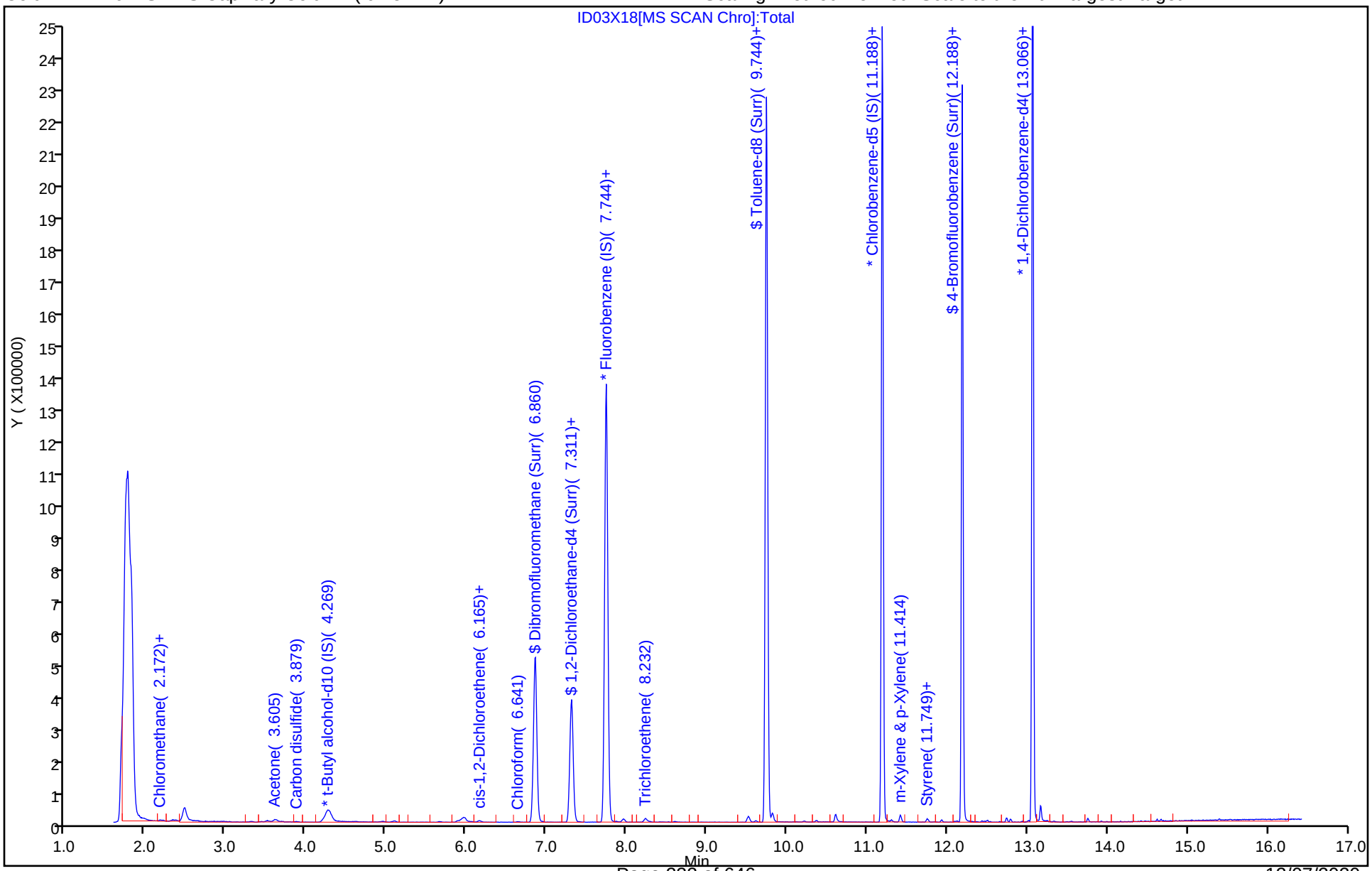
Report Date: 05-Dec-2020 08:27:15 Chrom Revision: 2.3 13-Nov-2020 01:23:02

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20201203-16986.b\ID03X18.D

Injection Date:	03-Dec-2020 16:32:30	Instrument ID:	19930	Operator ID:	kas02648
Lims ID:	410-22411-A-3	Lab Sample ID:	410-22411-3	Worklist Smp#:	18
Client ID:	HD-COD-SW-8-0/1-0				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19930\20201203-16986.b\ID03X18.D
Lims ID: 410-22411-A-3
Client ID: HD-COD-SW-8-0/1-0
Sample Type: Client
Inject. Date: 03-Dec-2020 16:32:30 ALS Bottle#: 18 Worklist Smp#: 18
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0016986-018
Operator ID: kas02648 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20201203-16986.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 05-Dec-2020 08:26:54 Calib Date: 23-Nov-2020 18:05:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1645

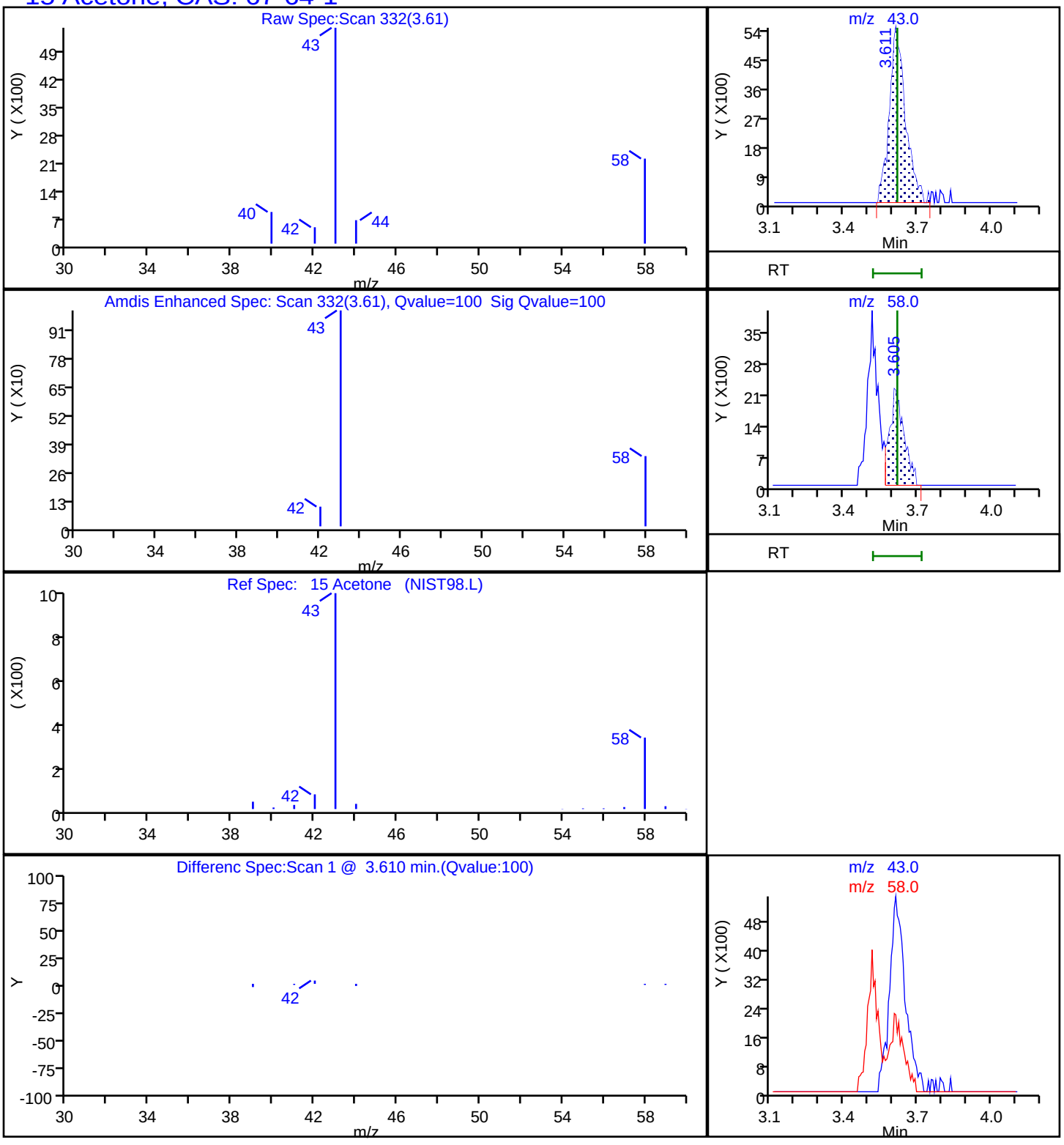
First Level Reviewer: campbellme Date: 03-Dec-2020 20:13:21

Compound	Amount Added	Amount Recovered	% Rec.
$ 46 Dibromofluoromethane (Surr)	10.0	10.0	100.17
$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	10.3	102.71
$ 75 Toluene-d8 (Surr)	10.0	9.79	97.94
$ 100 4-Bromofluorobenzene (Surr)	10.0	9.81	98.09

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20201203-16986.b\ID03X18.D				
Injection Date:	03-Dec-2020 16:32:30	Instrument ID:	19930		
Lims ID:	410-22411-A-3	Lab Sample ID:	410-22411-3		
Client ID:	HD-COD-SW-8-0/1-0				
Operator ID:	kas02648	ALS Bottle#:	18	Worklist Smp#:	18
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

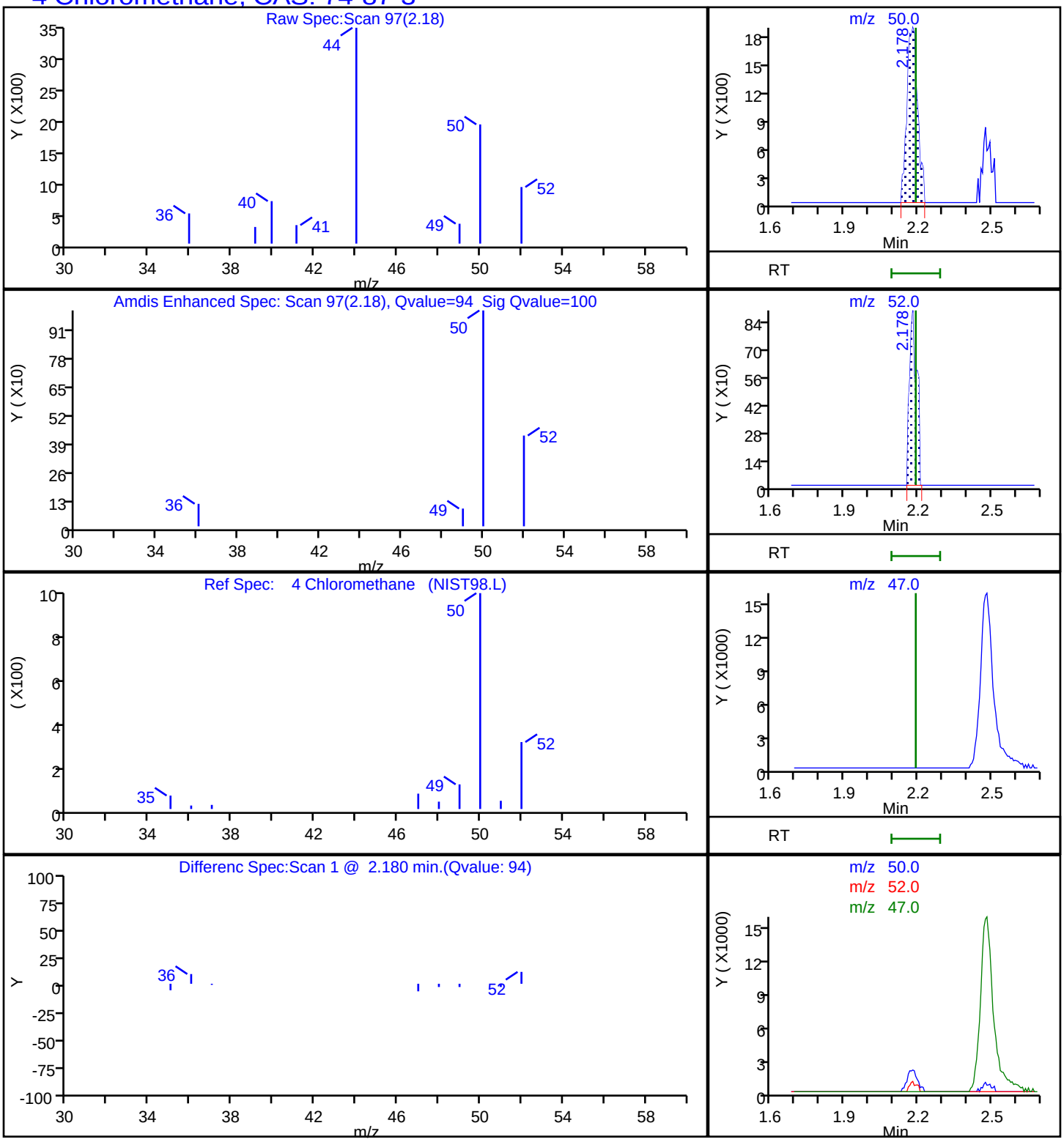
15 Acetone, CAS: 67-64-1



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20201203-16986.b\ID03X18.D				
Injection Date:	03-Dec-2020 16:32:30	Instrument ID:	19930		
Lims ID:	410-22411-A-3	Lab Sample ID:	410-22411-3		
Client ID:	HD-COD-SW-8-0/1-0				
Operator ID:	kas02648	ALS Bottle#:	18	Worklist Smp#:	18
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

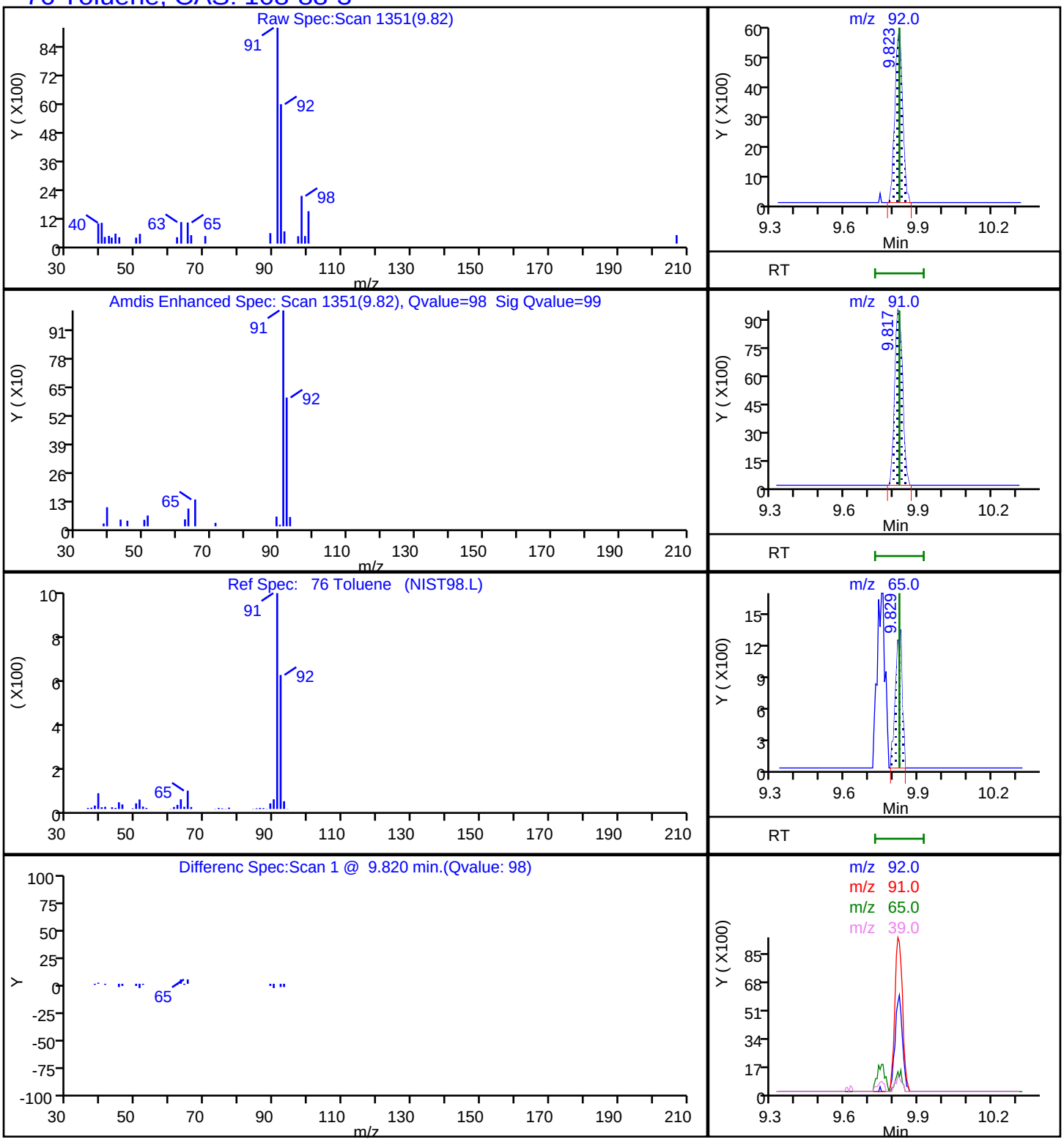
4 Chloromethane, CAS: 74-87-3



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20201203-16986.b\ID03X18.D				
Injection Date:	03-Dec-2020 16:32:30	Instrument ID:	19930		
Lims ID:	410-22411-A-3	Lab Sample ID:	410-22411-3		
Client ID:	HD-COD-SW-8-0/1-0				
Operator ID:	kas02648	ALS Bottle#:	18	Worklist Smp#:	18
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

76 Toluene, CAS: 108-88-3



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

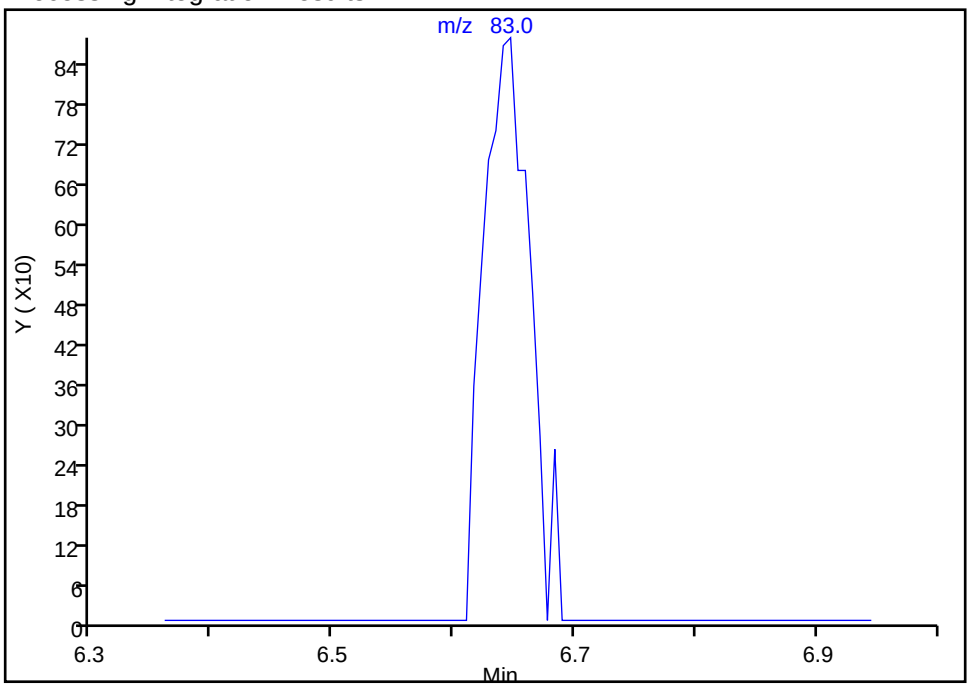
Data File:	\\chromfs\Lancaster\ChromData\19930\20201203-16986.b\ID03X18.D				
Injection Date:	03-Dec-2020 16:32:30	Instrument ID:	19930		
Lims ID:	410-22411-A-3	Lab Sample ID:	410-22411-3		
Client ID:	HD-COD-SW-8-0/1-0				
Operator ID:	kas02648	ALS Bottle#:	18	Worklist Smp#:	18
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

45 Chloroform, CAS: 67-66-3

Signal: 1

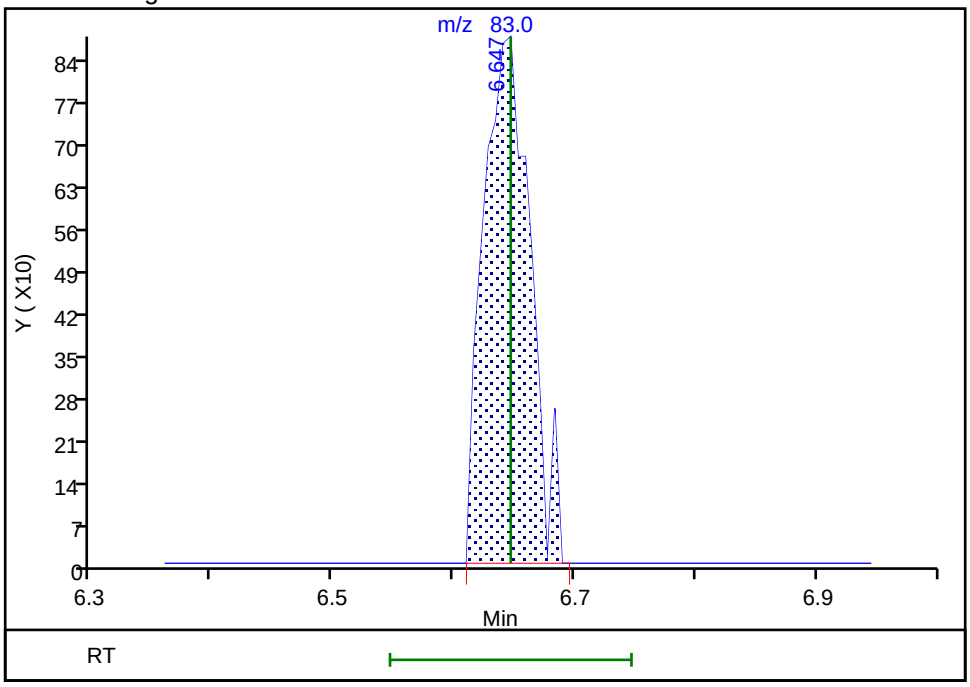
Not Detected
Expected RT: 6.65

Processing Integration Results



Manual Integration Results

RT: 6.65
Area: 2355
Amount: 0.023910
Amount Units: ug/l



Reviewer: campbellme, 03-Dec-2020 20:13:02
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

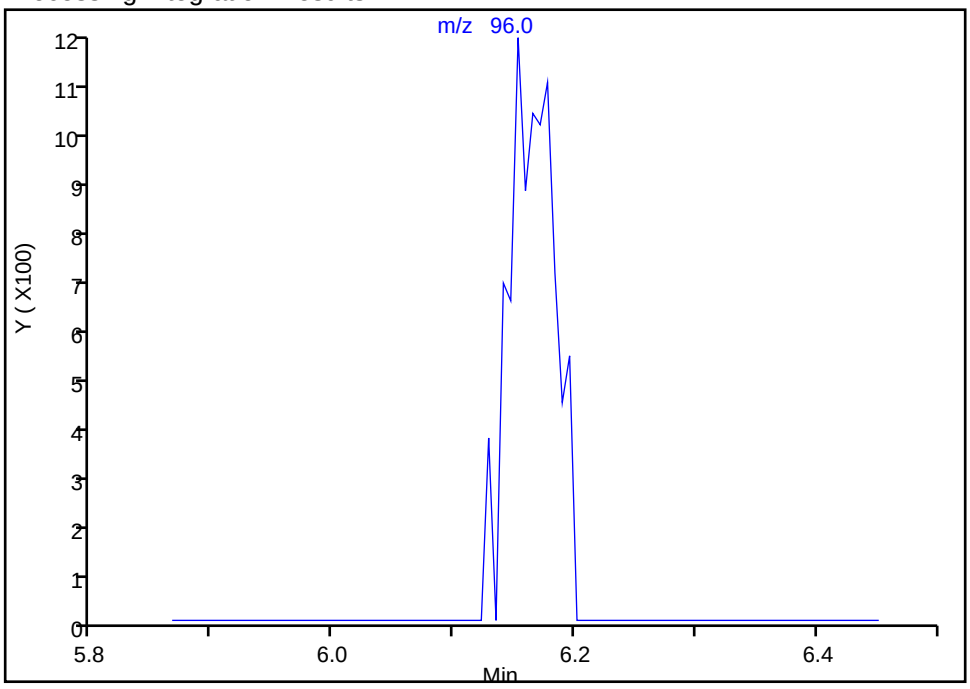
Data File:	\\chromfs\Lancaster\ChromData\19930\20201203-16986.b\ID03X18.D				
Injection Date:	03-Dec-2020 16:32:30	Instrument ID:	19930		
Lims ID:	410-22411-A-3	Lab Sample ID:	410-22411-3		
Client ID:	HD-COD-SW-8-0/1-0				
Operator ID:	kas02648	ALS Bottle#:	18	Worklist Smp#:	18
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

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

Signal: 1

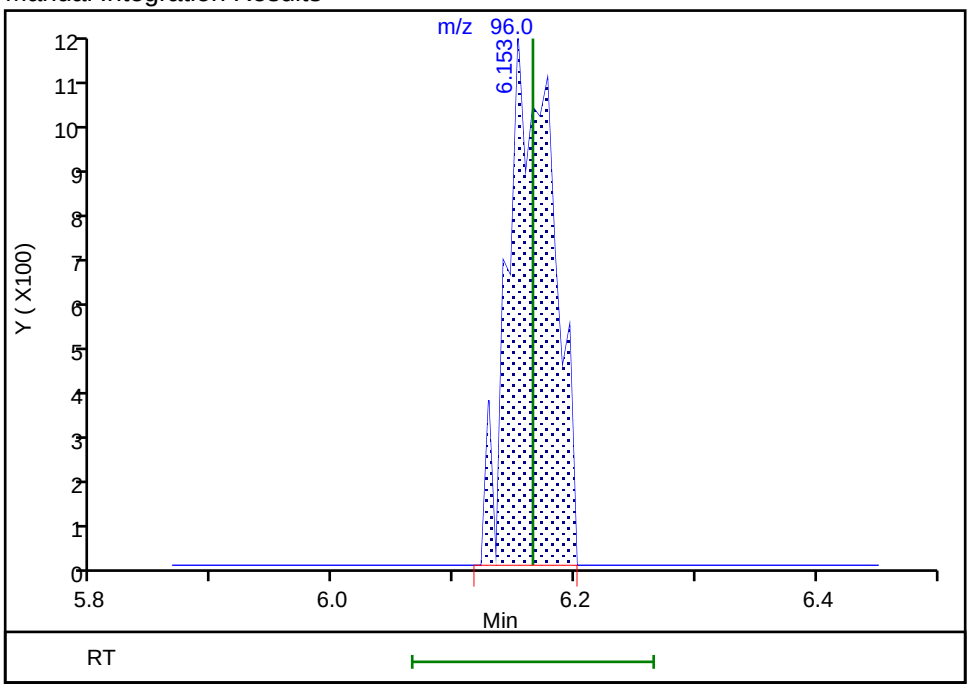
Not Detected
Expected RT: 6.17

Processing Integration Results



Manual Integration Results

RT: 6.15
Area: 3141
Amount: 0.048905
Amount Units: ug/l



Reviewer: campbellme, 03-Dec-2020 20:12:58
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

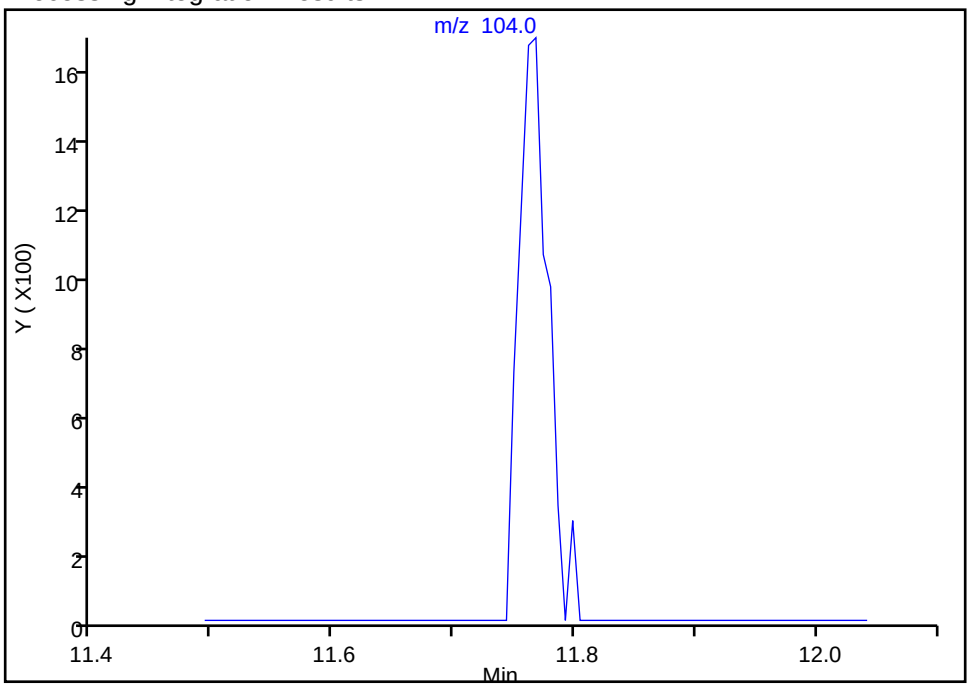
Data File:	\\chromfs\Lancaster\ChromData\19930\20201203-16986.b\ID03X18.D				
Injection Date:	03-Dec-2020 16:32:30	Instrument ID:	19930		
Lims ID:	410-22411-A-3	Lab Sample ID:	410-22411-3		
Client ID:	HD-COD-SW-8-0/1-0				
Operator ID:	kas02648	ALS Bottle#:	18	Worklist Smp#:	18
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

95 Styrene, CAS: 100-42-5

Signal: 1

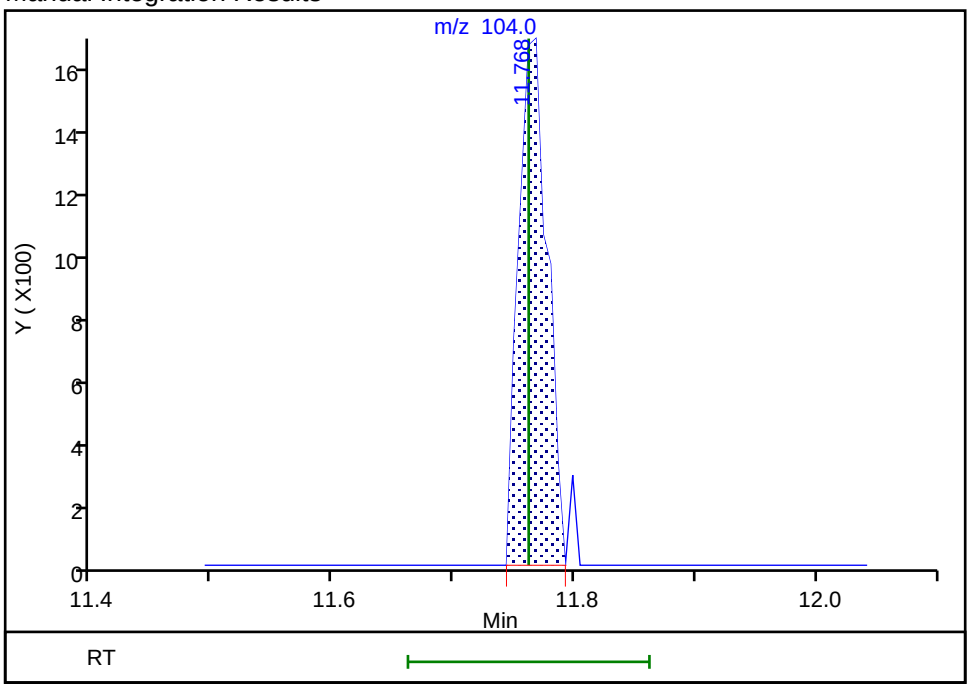
Not Detected
Expected RT: 11.76

Processing Integration Results



Manual Integration Results

RT: 11.77
Area: 2779
Amount: 0.014872
Amount Units: ug/l



Reviewer: campbellme, 03-Dec-2020 20:13:13
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1

SDG No.:

Client Sample ID: HD-COD-SW-9-0/1-0 Lab Sample ID: 410-22411-4

Matrix: Water Lab File ID: ID03X19.D

Analysis Method: 8260D Date Collected: 11/30/2020 11:00

Sample wt/vol: 25(mL) Date Analyzed: 12/03/2020 16:53

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 72509 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.070
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.060
75-34-3	1,1-Dichloroethane	ND		0.50	0.070
75-35-4	1,1-Dichloroethene	ND		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.060
107-06-2	1,2-Dichloroethane	ND		0.50	0.050
78-87-5	1,2-Dichloropropane	ND		0.50	0.060
78-93-3	2-Butanone (MEK)	ND		5.0	0.60
591-78-6	2-Hexanone	ND		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70
67-64-1	Acetone	3.2	J	5.0	0.90
71-43-2	Benzene	ND		0.50	0.050
74-97-5	Bromochloromethane	ND		0.50	0.050
75-27-4	Bromodichloromethane	ND		0.50	0.050
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.070
75-15-0	Carbon disulfide	ND		1.0	0.060
56-23-5	Carbon tetrachloride	ND		0.50	0.070
108-90-7	Chlorobenzene	ND		0.50	0.060
75-00-3	Chloroethane	ND		0.50	0.070
67-66-3	Chloroform	ND		0.50	0.090
74-87-3	Chloromethane	0.063	J	0.50	0.060
156-59-2	cis-1,2-Dichloroethene	ND		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.050
124-48-1	Dibromochloromethane	ND		0.50	0.070
100-41-4	Ethylbenzene	ND		0.50	0.060
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.050
75-09-2	Methylene Chloride	ND		0.50	0.070
100-42-5	Styrene	ND		0.50	0.050
127-18-4	Tetrachloroethene	ND		0.50	0.060
108-88-3	Toluene	0.89		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	ND		0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1

SDG No.:

Client Sample ID: HD-COD-SW-9-0/1-0 Lab Sample ID: 410-22411-4

Matrix: Water Lab File ID: ID03X19.D

Analysis Method: 8260D Date Collected: 11/30/2020 11:00

Sample wt/vol: 25(mL) Date Analyzed: 12/03/2020 16:53

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 72509 Units: ug/L

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

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		80-120
1868-53-7	Dibromofluoromethane (Surr)	102		80-120
2037-26-5	Toluene-d8 (Surr)	97		80-120
460-00-4	4-Bromofluorobenzene (Surr)	99		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20201203-16986.b\ID03X19.D
Lims ID: 410-22411-A-4
Client ID: HD-COD-SW-9-0/1-0
Sample Type: Client
Inject. Date: 03-Dec-2020 16:53:30 ALS Bottle#: 19 Worklist Smp#: 19
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0016986-019
Operator ID: kas02648 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20201203-16986.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 05-Dec-2020 08:26:54 Calib Date: 23-Nov-2020 18:05:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1645

First Level Reviewer: campbellme Date: 03-Dec-2020 20:13:49

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
4 Chloromethane	50	2.178	2.190	-0.012	96	4813	0.0626	
5 Vinyl chloride	62		2.312				ND	
7 Bromomethane	94		2.635				ND	
8 Chloroethane	64		2.715				ND	
14 1,1-Dichloroethene	96		3.586				ND	
15 Acetone	43	3.605	3.617	-0.012	100	29350	3.19	
19 Carbon disulfide	76	3.873	3.891	-0.018	94	5564	0.0387	
23 Methylene Chloride	84		4.263				ND	7
* 24 t-Butyl alcohol-d10 (IS)	65	4.275	4.288	-0.013	0	168777	50.0	
27 Methyl tert-butyl ether	73		4.672				ND	
28 trans-1,2-Dichloroethene	96		4.678				ND	
31 1,1-Dichloroethane	63		5.342				ND	
36 2-Butanone (MEK)	43	6.159	6.141	0.018	64	5116	0.3324	
37 cis-1,2-Dichloroethene	96	6.153	6.165	-0.012	67	2505	0.0394	a
43 Chlorobromomethane	128		6.500				ND	
45 Chloroform	83	6.641	6.647	-0.006	89	5911	0.0607	
$ 46 Dibromofluoromethane (Surr)	113	6.854	6.860	-0.006	94	465730	10.2	
47 1,1,1-Trichloroethane	97		6.872				ND	
50 Carbon tetrachloride	117		7.086				ND	
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.305	7.317	-0.012	0	94577	10.2	
54 Benzene	78		7.348				ND	
56 1,2-Dichloroethane	62		7.421				ND	
* 58 Fluorobenzene (IS)	96	7.744	7.750	-0.006	99	1857492	10.0	
61 Trichloroethene	95	8.220	8.226	-0.006	83	2919	0.0474	M
63 1,2-Dichloropropane	63		8.555				ND	
68 Dichlorobromomethane	83		8.896				ND	7
73 cis-1,3-Dichloropropene	75		9.439				ND	
74 4-Methyl-2-pentanone (MIBK)	43		9.604				ND	7
$ 75 Toluene-d8 (Surr)	98	9.744	9.744	0.000	93	1825775	9.72	
76 Toluene	92	9.823	9.823	0.000	98	139779	0.8916	
78 trans-1,3-Dichloropropene	75		10.073				ND	
80 1,1,2-Trichloroethane	97		10.274				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
81 Tetrachloroethene	166		10.366				ND	7
83 2-Hexanone	43		10.488				ND	
85 Chlorodibromomethane	129		10.652				ND	
86 Ethylene Dibromide	107		10.762				ND	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.189	0.000	84	1437767	10.0	
90 Chlorobenzene	112		11.219				ND	
S 89 Xylenes, Total	106		11.245				ND	7
91 1,1,1,2-Tetrachloroethane	131		11.298				ND	
92 Ethylbenzene	91		11.304				ND	7
93 m-Xylene & p-Xylene	106		11.414				ND	7
94 o-Xylene	106		11.743				ND	7
95 Styrene	104		11.762				ND	
96 Bromoform	173		11.920				ND	
$ 100 4-Bromofluorobenzene (Surr)	95	12.188	12.188	0.000	94	687117	9.88	
101 1,1,2,2-Tetrachloroethane	83		12.286				ND	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	94	828015	10.0	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection
Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

MSV_31_826ISS_00003 Amount Added: 5.00 Units: uL Run Reagent

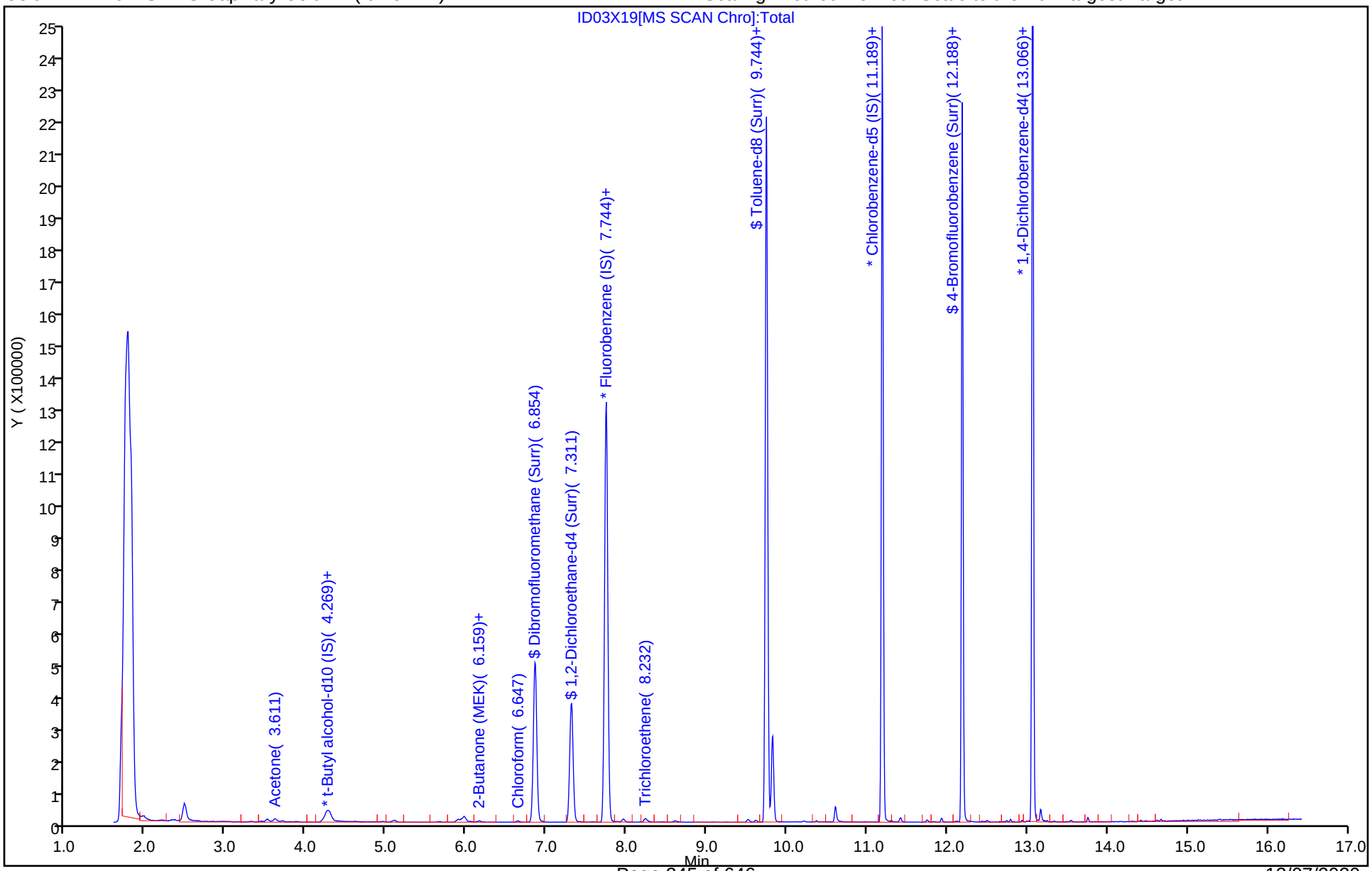
Report Date: 05-Dec-2020 08:27:17 Chrom Revision: 2.3 13-Nov-2020 01:23:02

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20201203-16986.b\ID03X19.D

Injection Date:	03-Dec-2020 16:53:30	Instrument ID:	19930	Operator ID:	kas02648
Lims ID:	410-22411-A-4	Lab Sample ID:	410-22411-4	Worklist Smp#:	19
Client ID:	HD-COD-SW-9-0/1-0				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19930\20201203-16986.b\ID03X19.D
Lims ID: 410-22411-A-4
Client ID: HD-COD-SW-9-0/1-0
Sample Type: Client
Inject. Date: 03-Dec-2020 16:53:30 ALS Bottle#: 19 Worklist Smp#: 19
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0016986-019
Operator ID: kas02648 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20201203-16986.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 05-Dec-2020 08:26:54 Calib Date: 23-Nov-2020 18:05:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1645

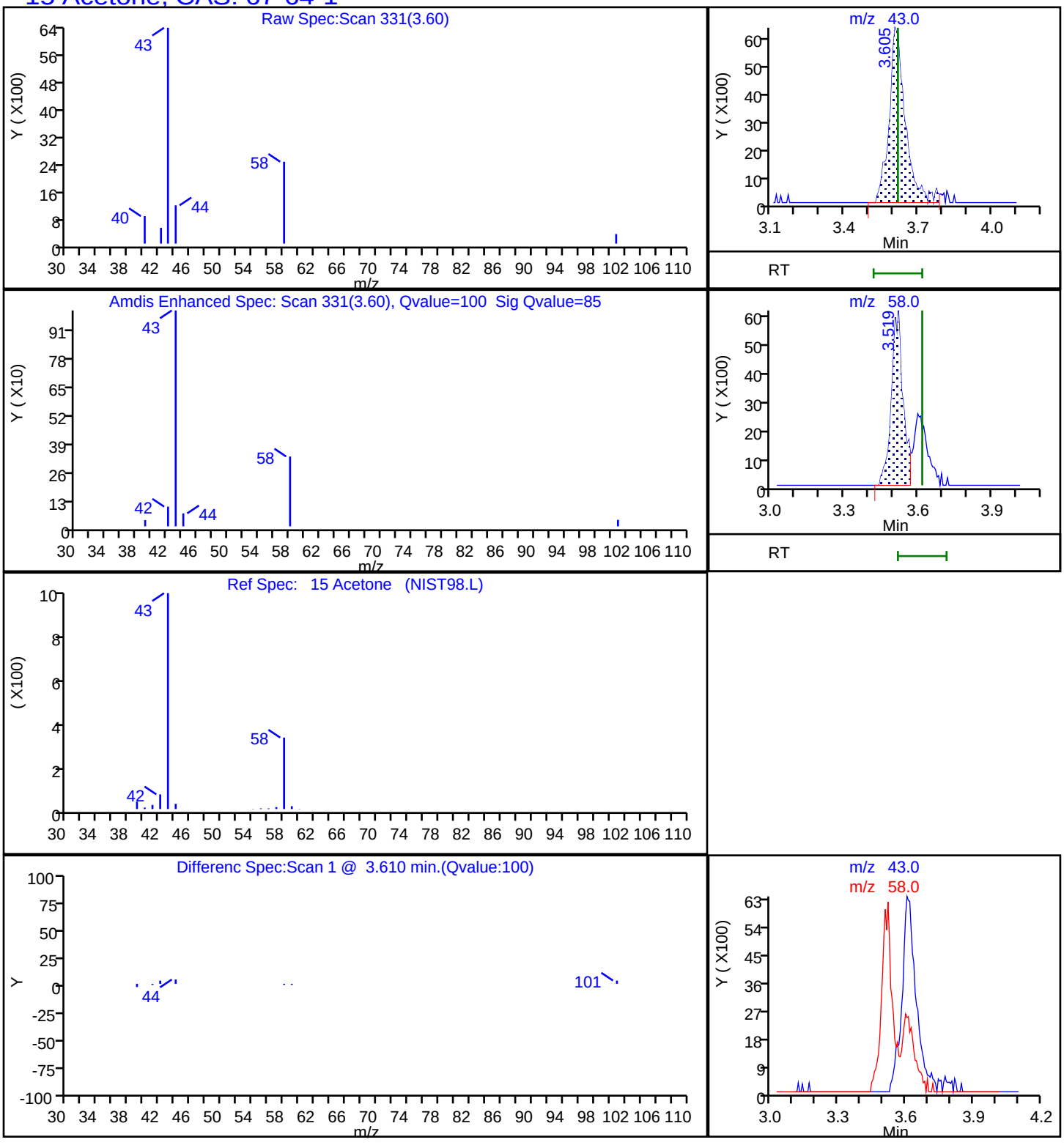
First Level Reviewer: campbellme Date: 03-Dec-2020 20:13:49

Compound	Amount Added	Amount Recovered	% Rec.
$ 46 Dibromofluoromethane (Surr)	10.0	10.2	101.55
$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	10.2	102.28
$ 75 Toluene-d8 (Surr)	10.0	9.72	97.24
$ 100 4-Bromofluorobenzene (Surr)	10.0	9.88	98.82

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20201203-16986.b\ID03X19.D				
Injection Date:	03-Dec-2020 16:53:30	Instrument ID:	19930		
Lims ID:	410-22411-A-4	Lab Sample ID:	410-22411-4		
Client ID:	HD-COD-SW-9-0/1-0				
Operator ID:	kas02648	ALS Bottle#:	19	Worklist Smp#:	19
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

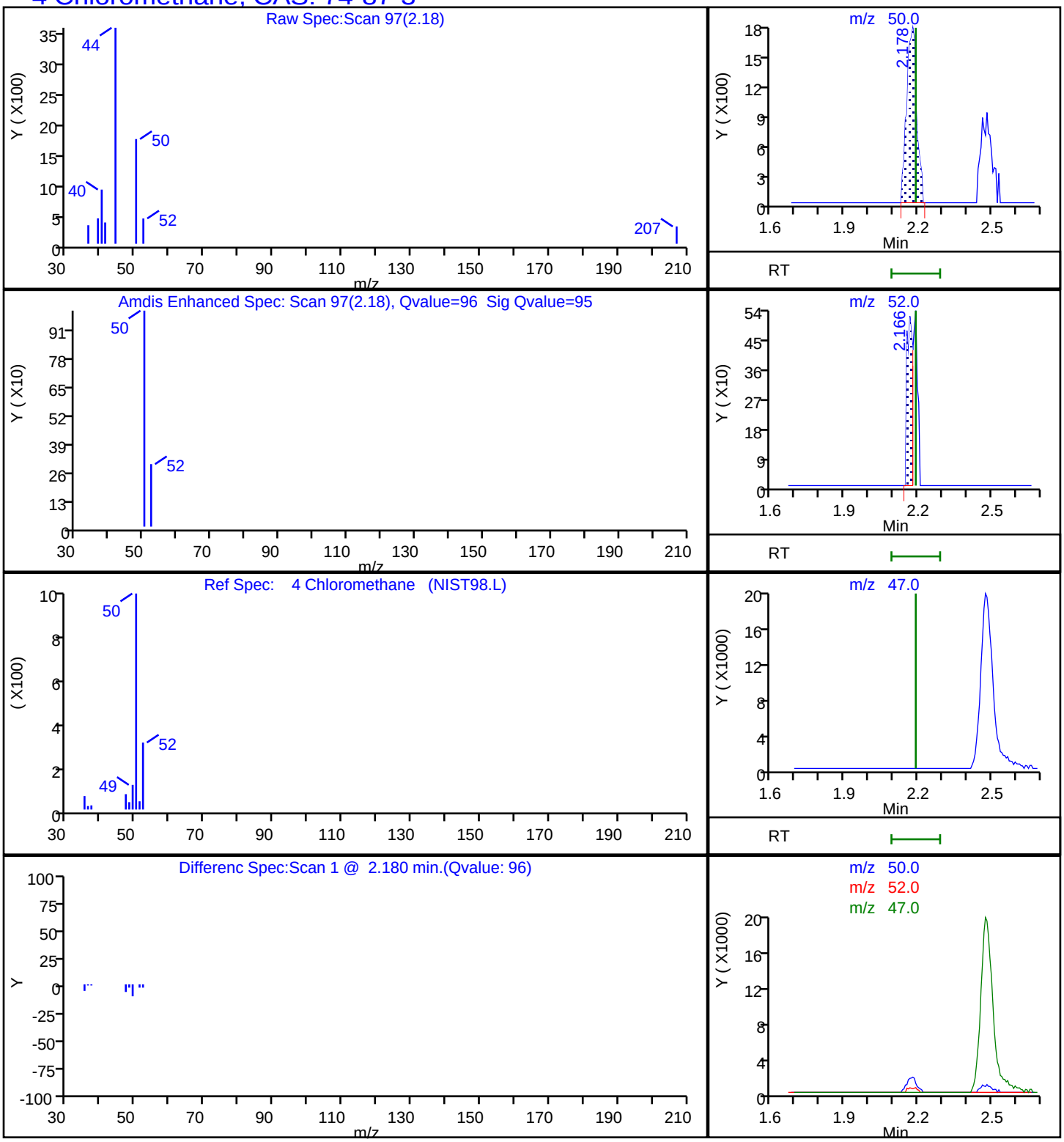
15 Acetone, CAS: 67-64-1



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20201203-16986.b\ID03X19.D				
Injection Date:	03-Dec-2020 16:53:30	Instrument ID:	19930		
Lims ID:	410-22411-A-4	Lab Sample ID:	410-22411-4		
Client ID:	HD-COD-SW-9-0/1-0				
Operator ID:	kas02648	ALS Bottle#:	19	Worklist Smp#:	19
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

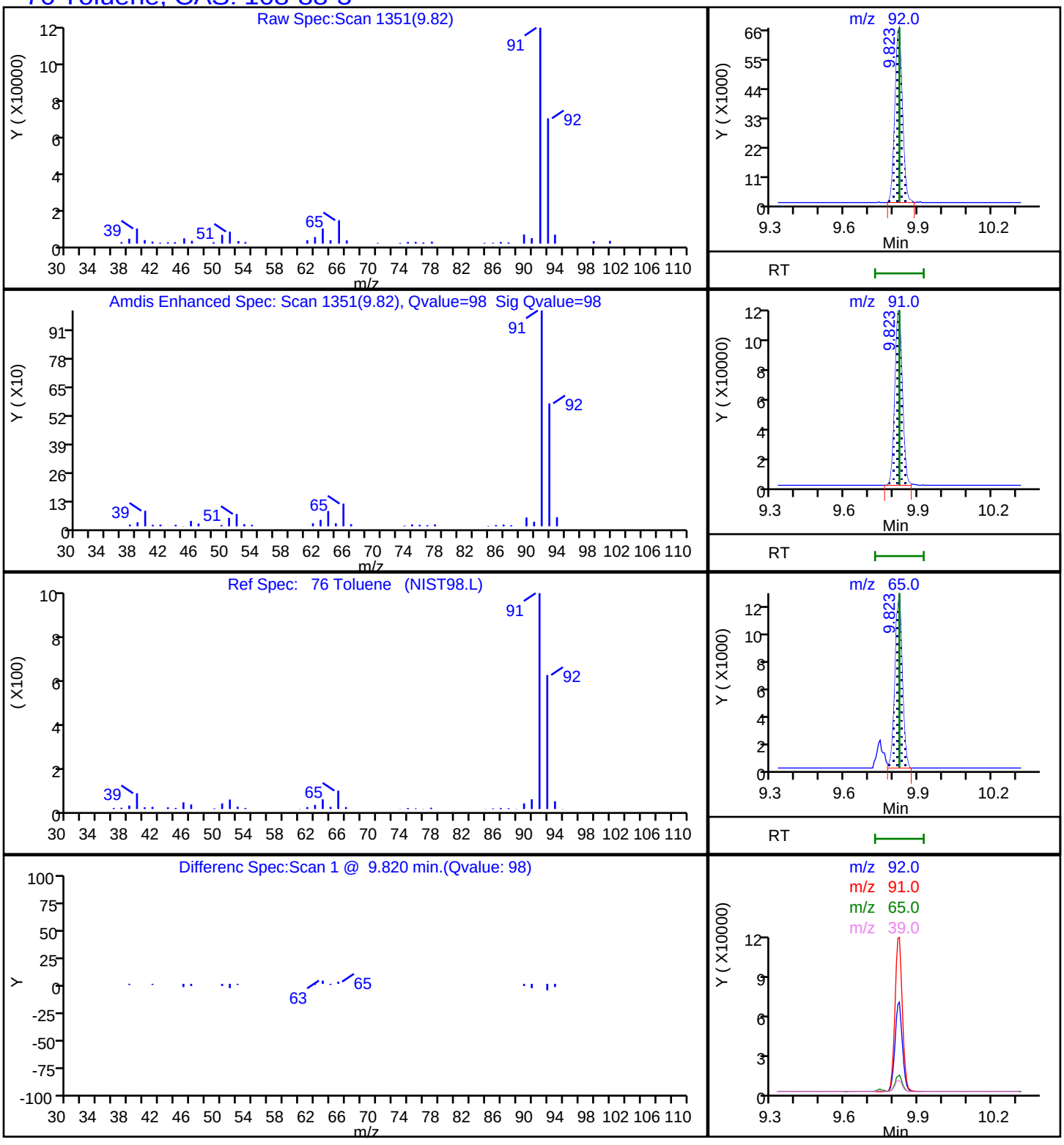
4 Chloromethane, CAS: 74-87-3



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20201203-16986.b\ID03X19.D				
Injection Date:	03-Dec-2020 16:53:30	Instrument ID:	19930		
Lims ID:	410-22411-A-4	Lab Sample ID:	410-22411-4		
Client ID:	HD-COD-SW-9-0/1-0				
Operator ID:	kas02648	ALS Bottle#:	19	Worklist Smp#:	19
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

76 Toluene, CAS: 108-88-3



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

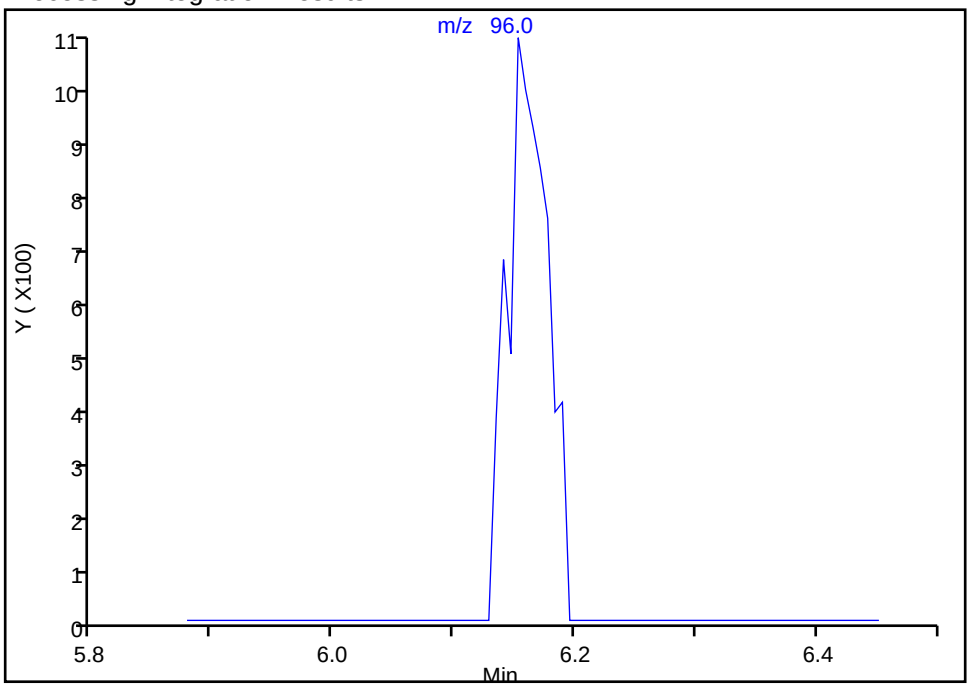
Data File:	\\chromfs\Lancaster\ChromData\19930\20201203-16986.b\ID03X19.D				
Injection Date:	03-Dec-2020 16:53:30	Instrument ID:	19930		
Lims ID:	410-22411-A-4	Lab Sample ID:	410-22411-4		
Client ID:	HD-COD-SW-9-0/1-0				
Operator ID:	kas02648	ALS Bottle#:	19	Worklist Smp#:	19
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

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

Signal: 1

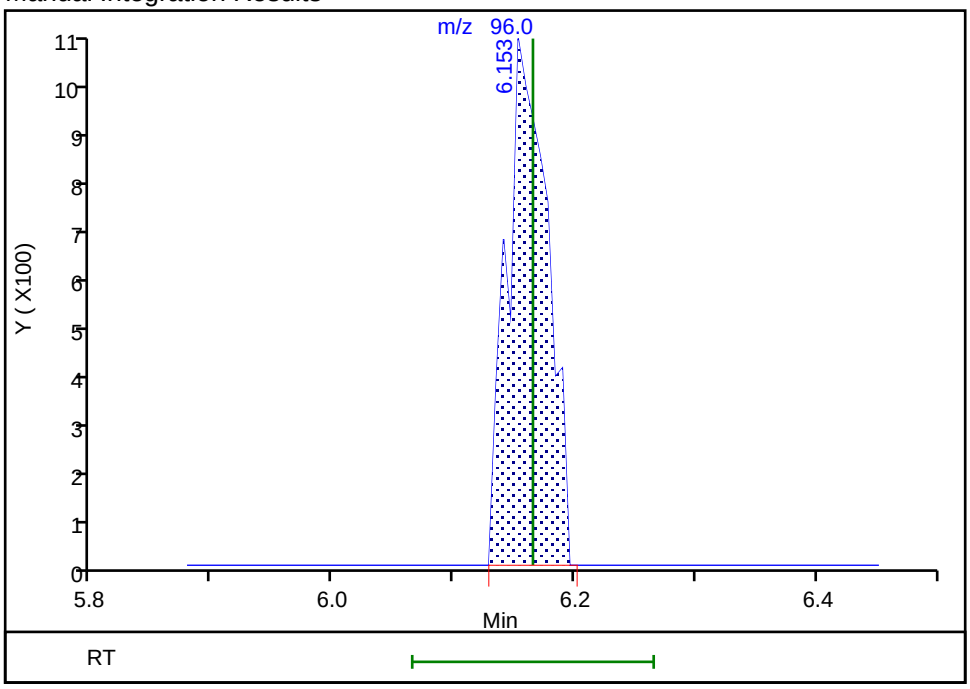
Not Detected
Expected RT: 6.17

Processing Integration Results



Manual Integration Results

RT: 6.15
Area: 2505
Amount: 0.039429
Amount Units: ug/l



Reviewer: campbellme, 03-Dec-2020 20:13:31
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

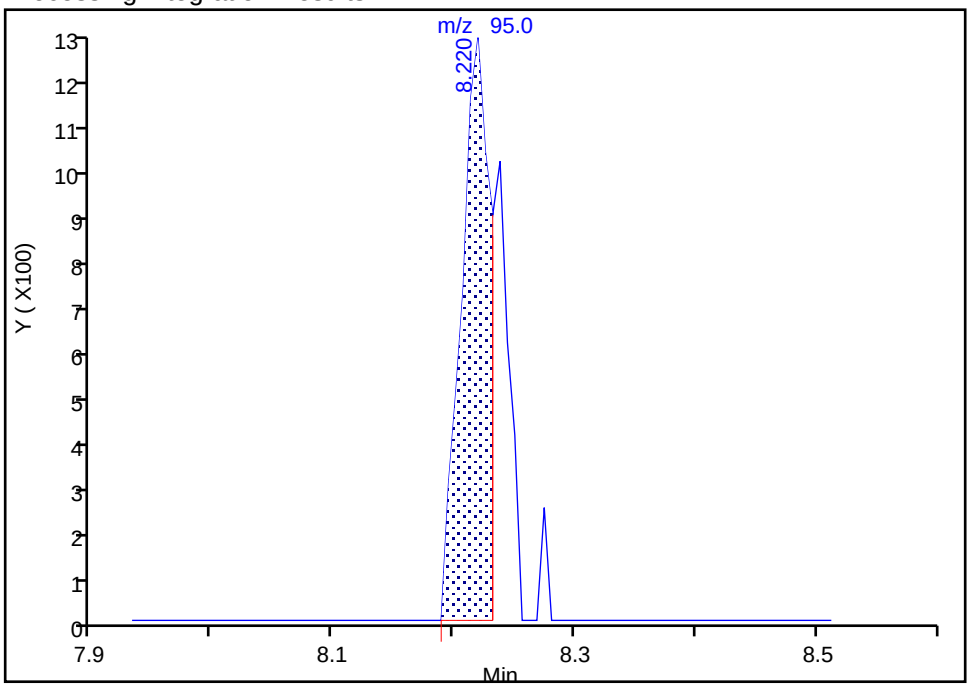
Data File:	\\chromfs\Lancaster\ChromData\19930\20201203-16986.b\ID03X19.D				
Injection Date:	03-Dec-2020 16:53:30	Instrument ID:	19930		
Lims ID:	410-22411-A-4	Lab Sample ID:	410-22411-4		
Client ID:	HD-COD-SW-9-0/1-0				
Operator ID:	kas02648	ALS Bottle#:	19	Worklist Smp#:	19
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

61 Trichloroethene, CAS: 79-01-6

Signal: 1

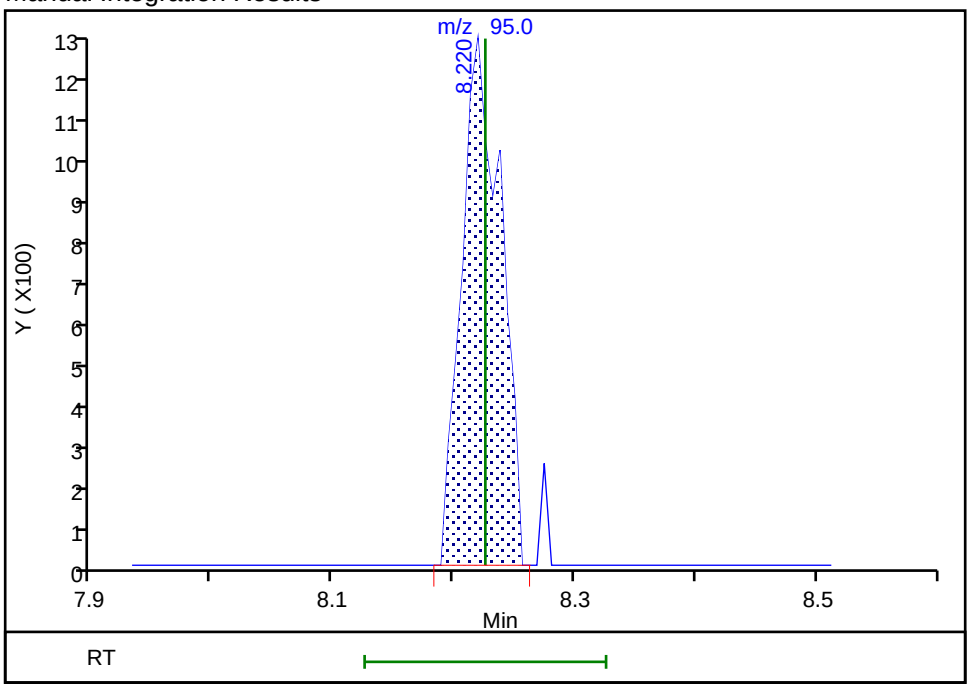
Processing Integration Results

RT: 8.22
Area: 2172
Amount: 0.035258
Amount Units: ug/l



Manual Integration Results

RT: 8.22
Area: 2919
Amount: 0.047384
Amount Units: ug/l



Reviewer: campbellme, 03-Dec-2020 20:13:41

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1

SDG No.:

Client Sample ID: HD-COD-SW-13-0/1-0 Lab Sample ID: 410-22411-5

Matrix: Water Lab File ID: ID03X08.D

Analysis Method: 8260D Date Collected: 11/30/2020 12:50

Sample wt/vol: 25(mL) Date Analyzed: 12/03/2020 13:00

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 72509 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.070
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.060
75-34-3	1,1-Dichloroethane	ND		0.50	0.070
75-35-4	1,1-Dichloroethene	ND		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.060
107-06-2	1,2-Dichloroethane	ND		0.50	0.050
78-87-5	1,2-Dichloropropane	ND		0.50	0.060
78-93-3	2-Butanone (MEK)	ND		5.0	0.60
591-78-6	2-Hexanone	ND		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70
67-64-1	Acetone	3.5	J	5.0	0.90
71-43-2	Benzene	ND		0.50	0.050
74-97-5	Bromochloromethane	ND		0.50	0.050
75-27-4	Bromodichloromethane	ND		0.50	0.050
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.070
75-15-0	Carbon disulfide	ND		1.0	0.060
56-23-5	Carbon tetrachloride	ND		0.50	0.070
108-90-7	Chlorobenzene	ND		0.50	0.060
75-00-3	Chloroethane	ND		0.50	0.070
67-66-3	Chloroform	ND		0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	0.056	J	0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.050
124-48-1	Dibromochloromethane	ND		0.50	0.070
100-41-4	Ethylbenzene	ND		0.50	0.060
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.050
75-09-2	Methylene Chloride	ND		0.50	0.070
100-42-5	Styrene	ND		0.50	0.050
127-18-4	Tetrachloroethene	ND		0.50	0.060
108-88-3	Toluene	ND		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	ND		0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1

SDG No.:

Client Sample ID: HD-COD-SW-13-0/1-0 Lab Sample ID: 410-22411-5

Matrix: Water Lab File ID: ID03X08.D

Analysis Method: 8260D Date Collected: 11/30/2020 12:50

Sample wt/vol: 25(mL) Date Analyzed: 12/03/2020 13:00

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 72509 Units: ug/L

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

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		80-120
1868-53-7	Dibromofluoromethane (Surr)	101		80-120
2037-26-5	Toluene-d8 (Surr)	98		80-120
460-00-4	4-Bromofluorobenzene (Surr)	99		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20201203-16986.b\ID03X08.D
Lims ID: 410-22411-A-5
Client ID: HD-COD-SW-13-0/1-0
Sample Type: Client
Inject. Date: 03-Dec-2020 13:00:30 ALS Bottle#: 8 Worklist Smp#: 8
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0016986-008
Operator ID: kas02648 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20201203-16986.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 05-Dec-2020 08:26:54 Calib Date: 23-Nov-2020 18:05:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1645

First Level Reviewer: campbellme Date: 03-Dec-2020 18:35:51

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
4 Chloromethane	50	2.172	2.190	-0.018	26	3240	0.0392	
5 Vinyl chloride	62		2.312				ND	
7 Bromomethane	94		2.635				ND	
8 Chloroethane	64		2.715				ND	
14 1,1-Dichloroethene	96		3.586				ND	7
15 Acetone	43	3.593	3.617	-0.024	100	35754	3.52	
19 Carbon disulfide	76	3.861	3.891	-0.030	59	8097	0.0524	
23 Methylene Chloride	84		4.263				ND	7
* 24 t-Butyl alcohol-d10 (IS)	65	4.245	4.288	-0.043	0	186401	50.0	
27 Methyl tert-butyl ether	73		4.672				ND	
28 trans-1,2-Dichloroethene	96		4.678				ND	
31 1,1-Dichloroethane	63		5.342				ND	
36 2-Butanone (MEK)	43	6.116	6.141	-0.025	66	5633	0.3313	
37 cis-1,2-Dichloroethene	96	6.141	6.165	-0.024	71	3823	0.0560	
43 Chlorobromomethane	128		6.500				ND	
45 Chloroform	83	6.635	6.647	-0.012	71	2408	0.0230	a
$ 46 Dibromofluoromethane (Surr)	113	6.836	6.860	-0.024	94	497829	10.1	
47 1,1,1-Trichloroethane	97		6.872				ND	
50 Carbon tetrachloride	117		7.086				ND	
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.293	7.317	-0.024	0	104012	10.5	
54 Benzene	78	7.324	7.348	-0.024	41	3070	0.0121	7M
56 1,2-Dichloroethane	62		7.421				ND	
* 58 Fluorobenzene (IS)	96	7.726	7.750	-0.024	99	1997175	10.0	
61 Trichloroethene	95	8.195	8.226	-0.031	81	3832	0.0579	M
63 1,2-Dichloropropane	63		8.555				ND	
68 Dichlorobromomethane	83		8.896				ND	
73 cis-1,3-Dichloropropene	75		9.439				ND	
74 4-Methyl-2-pentanone (MIBK)	43		9.604				ND	7
$ 75 Toluene-d8 (Surr)	98	9.738	9.744	-0.006	93	1976046	9.82	
76 Toluene	92	9.805	9.823	-0.018	97	9439	0.0562	
78 trans-1,3-Dichloropropene	75		10.073				ND	
80 1,1,2-Trichloroethane	97		10.274				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
81 Tetrachloroethene	166		10.366				ND	7
83 2-Hexanone	43		10.488				ND	7
85 Chlorodibromomethane	129		10.652				ND	
86 Ethylene Dibromide	107		10.762				ND	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.189	0.000	84	1540938	10.0	
90 Chlorobenzene	112		11.219				ND	
S 89 Xylenes, Total	106		11.245				ND	7
91 1,1,1,2-Tetrachloroethane	131		11.298				ND	
92 Ethylbenzene	91		11.304				ND	7
93 m-Xylene & p-Xylene	106		11.414				ND	7
94 o-Xylene	106		11.743				ND	7
95 Styrene	104		11.762				ND	7
96 Bromoform	173		11.920				ND	
$ 100 4-Bromofluorobenzene (Surr)	95	12.188	12.188	0.000	95	738233	9.91	
101 1,1,2,2-Tetrachloroethane	83		12.286				ND	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	94	912263	10.0	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection
Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

MSV_31_826ISS_00003 Amount Added: 5.00 Units: uL Run Reagent

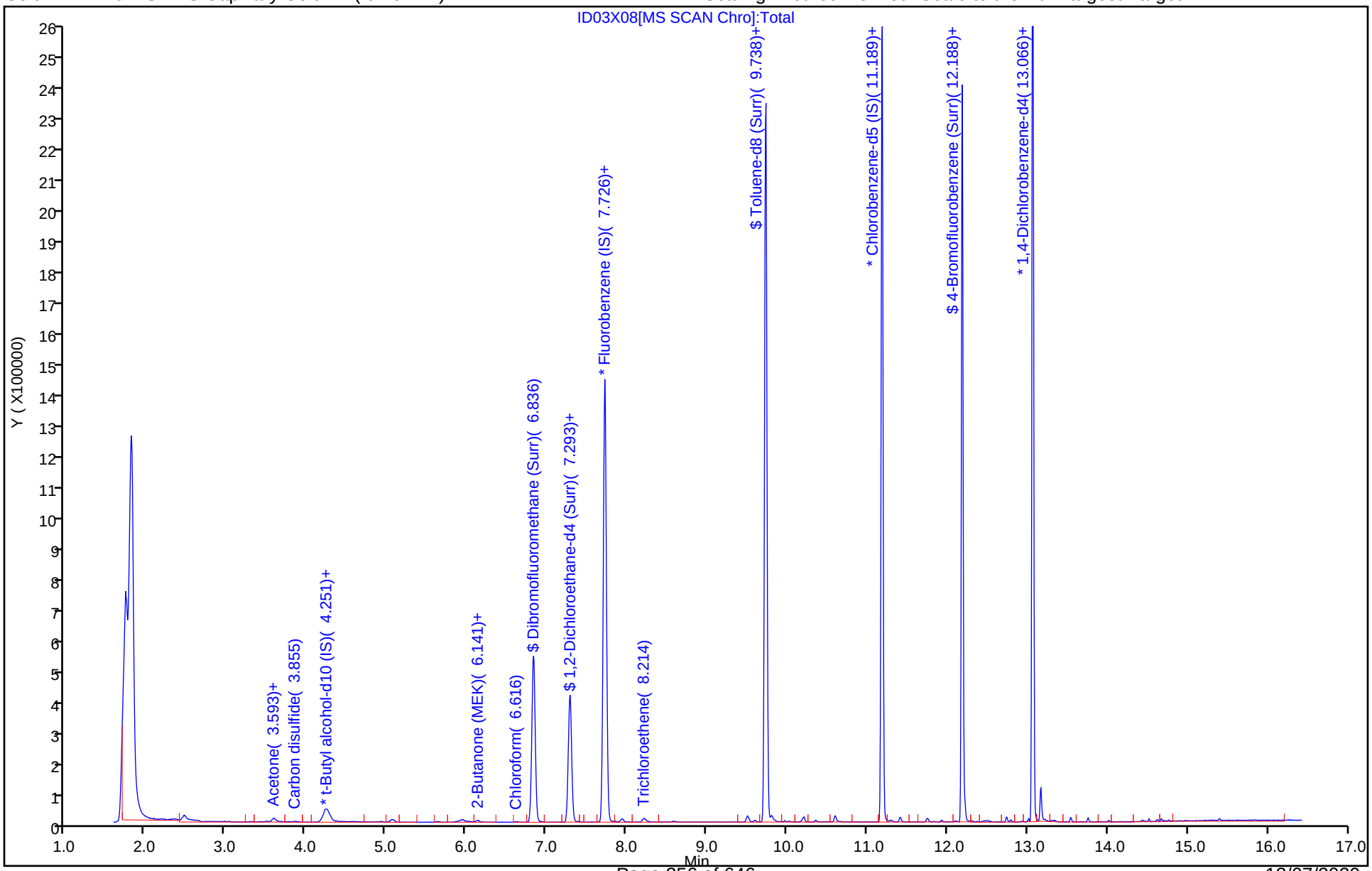
Report Date: 05-Dec-2020 08:27:19 Chrom Revision: 2.3 13-Nov-2020 01:23:02

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20201203-16986.b\ID03X08.D

Injection Date:	03-Dec-2020 13:00:30	Instrument ID:	19930	Operator ID:	kas02648
Lims ID:	410-22411-A-5	Lab Sample ID:	410-22411-5	Worklist Smp#:	8
Client ID:	HD-COD-SW-13-0/1-0				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19930\20201203-16986.b\ID03X08.D
Lims ID: 410-22411-A-5
Client ID: HD-COD-SW-13-0/1-0
Sample Type: Client
Inject. Date: 03-Dec-2020 13:00:30 ALS Bottle#: 8 Worklist Smp#: 8
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0016986-008
Operator ID: kas02648 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20201203-16986.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 05-Dec-2020 08:26:54 Calib Date: 23-Nov-2020 18:05:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1645

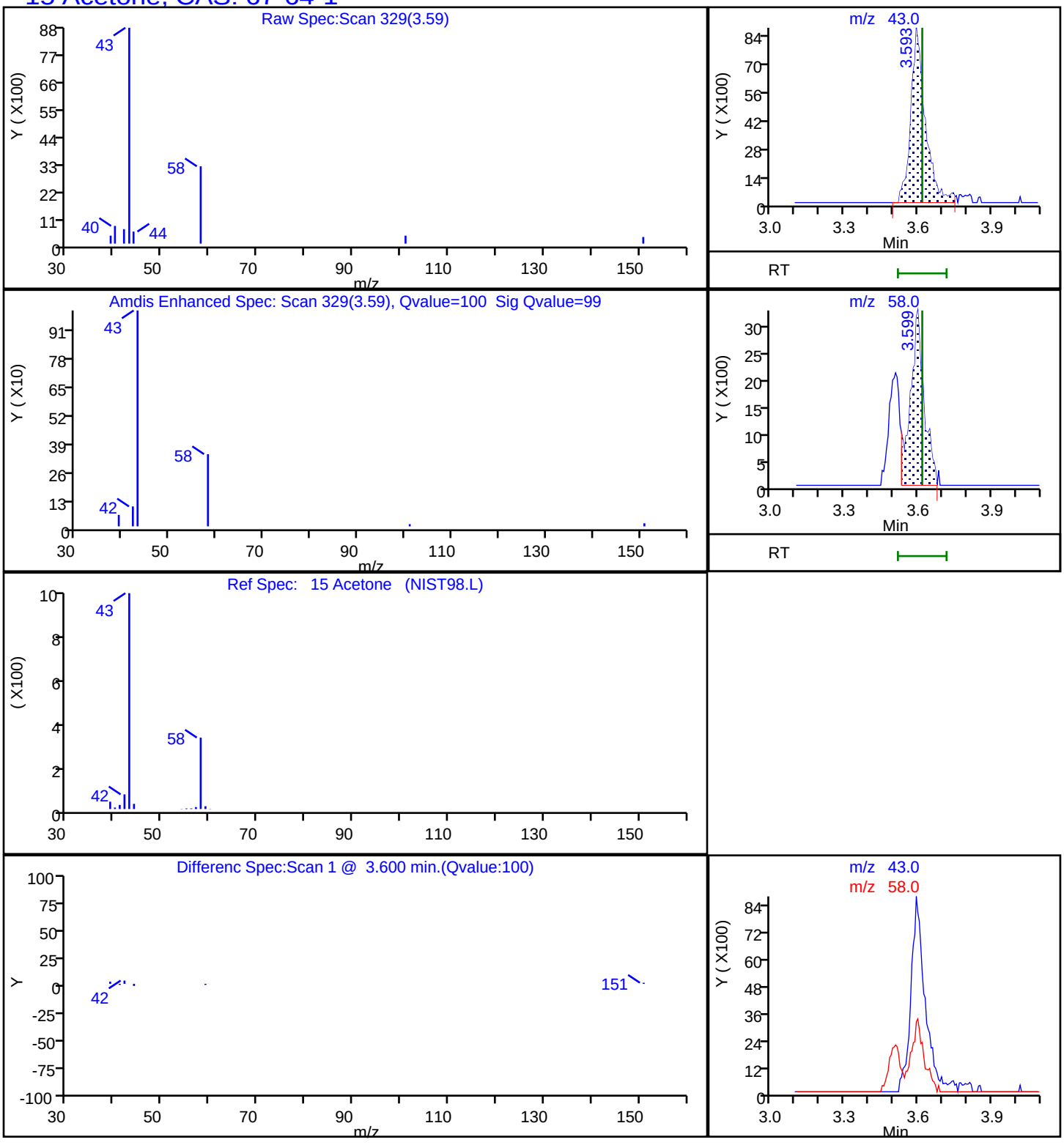
First Level Reviewer: campbellme Date: 03-Dec-2020 18:35:51

Compound	Amount Added	Amount Recovered	% Rec.
$ 46 Dibromofluoromethane (Surr)	10.0	10.1	100.95
$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	10.5	104.62
$ 75 Toluene-d8 (Surr)	10.0	9.82	98.20
$ 100 4-Bromofluorobenzene (Surr)	10.0	9.91	99.06

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20201203-16986.b\ID03X08.D
Injection Date: 03-Dec-2020 13:00:30 Instrument ID: 19930
Lims ID: 410-22411-A-5 Lab Sample ID: 410-22411-5
Client ID: HD-COD-SW-13-0/1-0
Operator ID: kas02648 ALS Bottle#: 8 Worklist Smp#: 8
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25 mm) Detector MS Quad

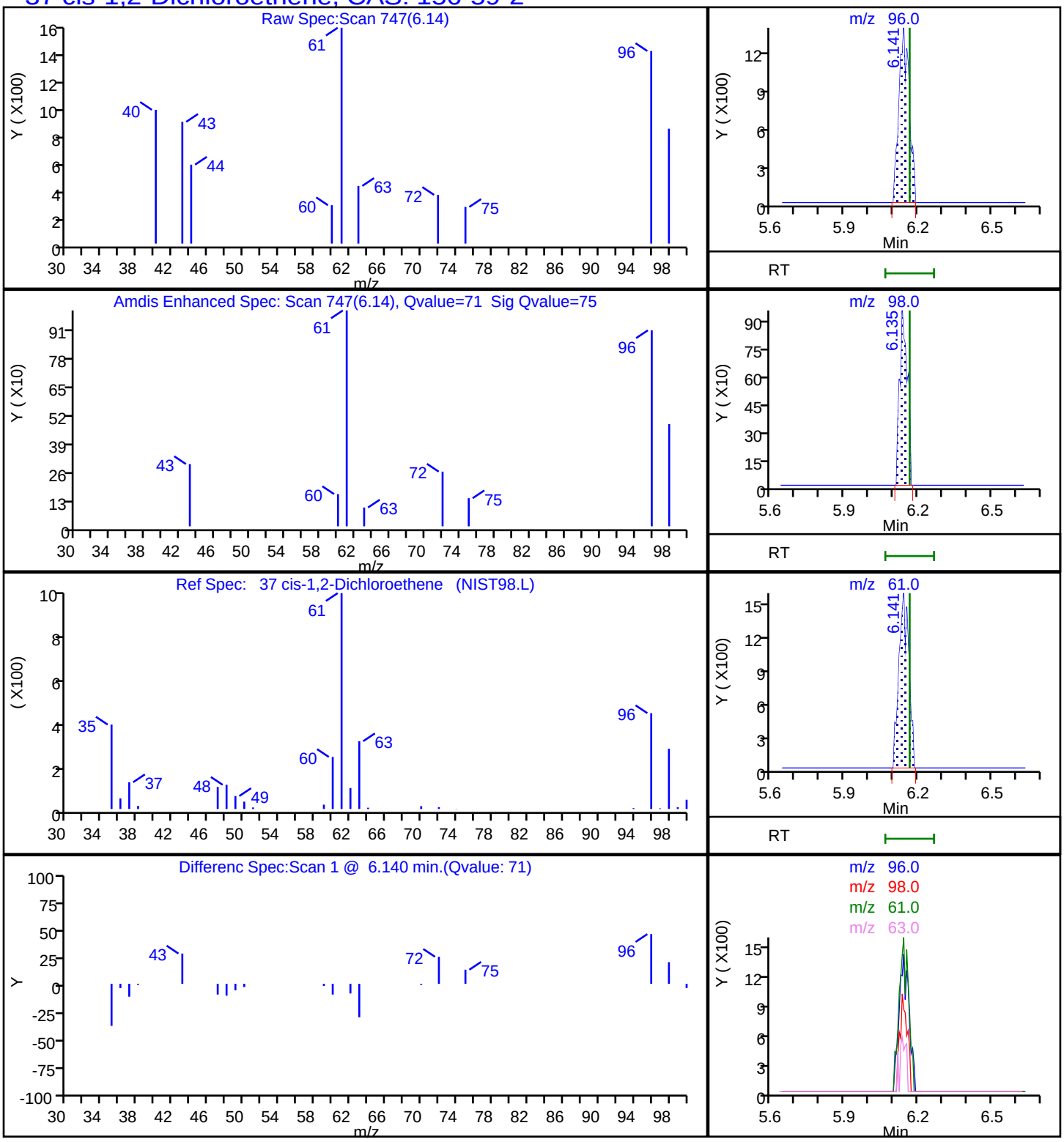
15 Acetone, CAS: 67-64-1



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20201203-16986.b\ID03X08.D				
Injection Date:	03-Dec-2020 13:00:30	Instrument ID:	19930		
Lims ID:	410-22411-A-5	Lab Sample ID:	410-22411-5		
Client ID:	HD-COD-SW-13-0/1-0				
Operator ID:	kas02648	ALS Bottle#:	8	Worklist Smp#:	8
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

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



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

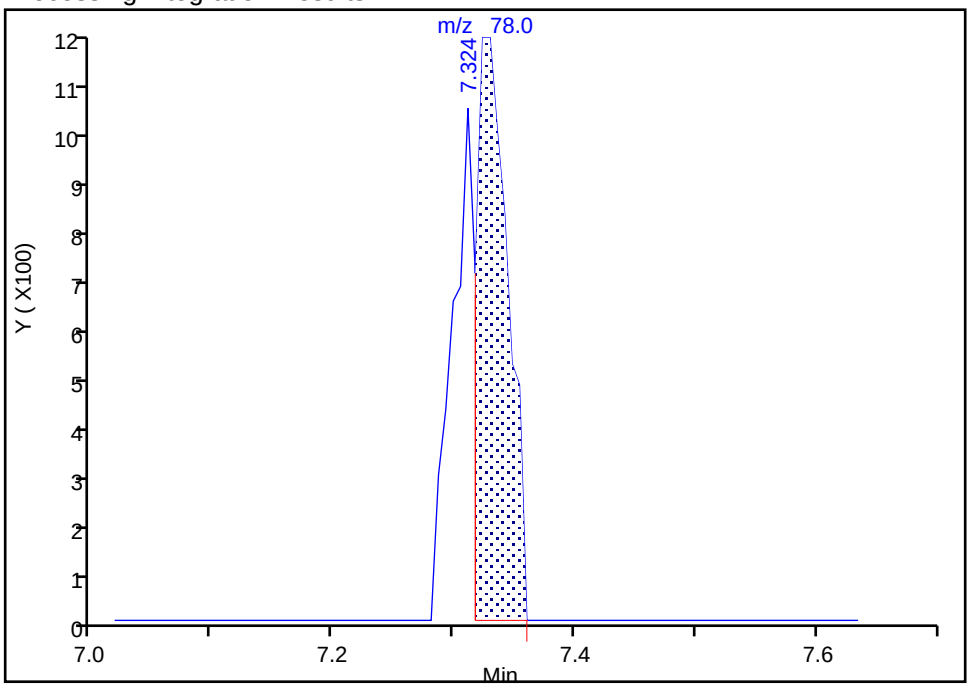
Data File:	\\chromfs\Lancaster\ChromData\19930\20201203-16986.b\ID03X08.D				
Injection Date:	03-Dec-2020 13:00:30	Instrument ID:	19930		
Lims ID:	410-22411-A-5	Lab Sample ID:	410-22411-5		
Client ID:	HD-COD-SW-13-0/1-0				
Operator ID:	kas02648	ALS Bottle#:	8	Worklist Smp#:	8
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

54 Benzene, CAS: 71-43-2

Signal: 1

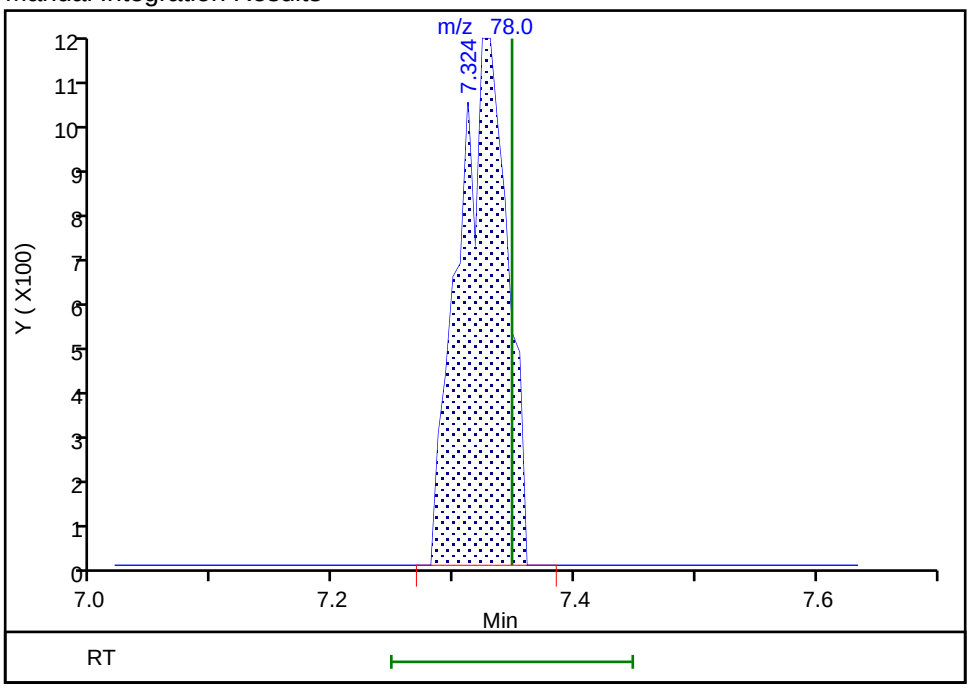
Processing Integration Results

RT: 7.32
Area: 2013
Amount: 0.007955
Amount Units: ug/l



Manual Integration Results

RT: 7.32
Area: 3070
Amount: 0.012132
Amount Units: ug/l



Reviewer: campbellme, 03-Dec-2020 18:35:35

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

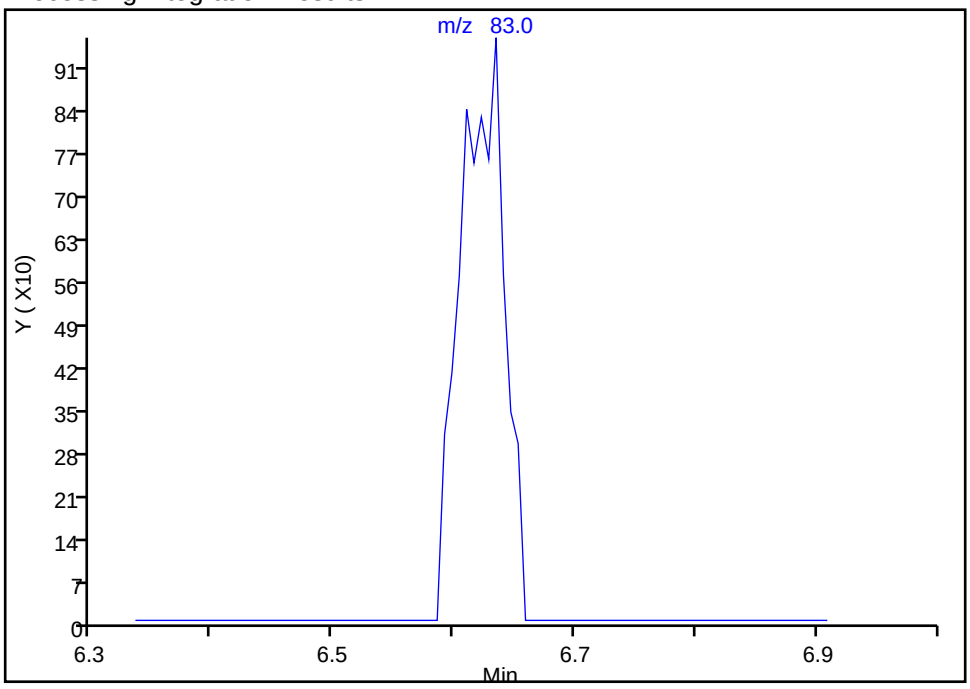
Data File:	\\chromfs\Lancaster\ChromData\19930\20201203-16986.b\ID03X08.D				
Injection Date:	03-Dec-2020 13:00:30	Instrument ID:	19930		
Lims ID:	410-22411-A-5	Lab Sample ID:	410-22411-5		
Client ID:	HD-COD-SW-13-0/1-0				
Operator ID:	kas02648	ALS Bottle#:	8	Worklist Smp#:	8
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

45 Chloroform, CAS: 67-66-3

Signal: 1

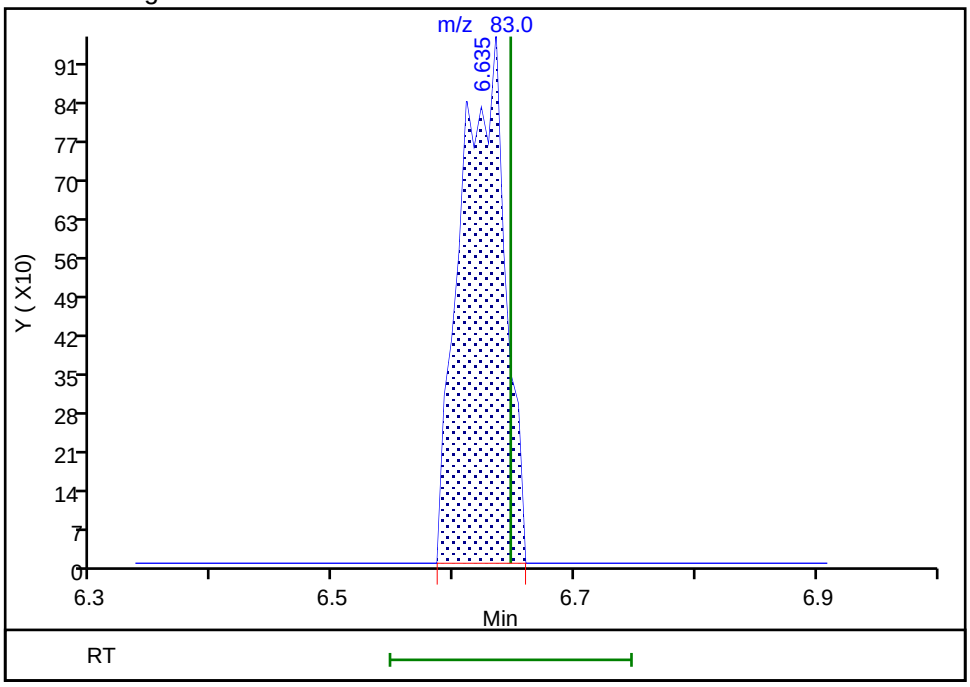
Not Detected
Expected RT: 6.65

Processing Integration Results



Manual Integration Results

RT: 6.63
Area: 2408
Amount: 0.022987
Amount Units: ug/l



Reviewer: campbellme, 03-Dec-2020 18:35:26
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

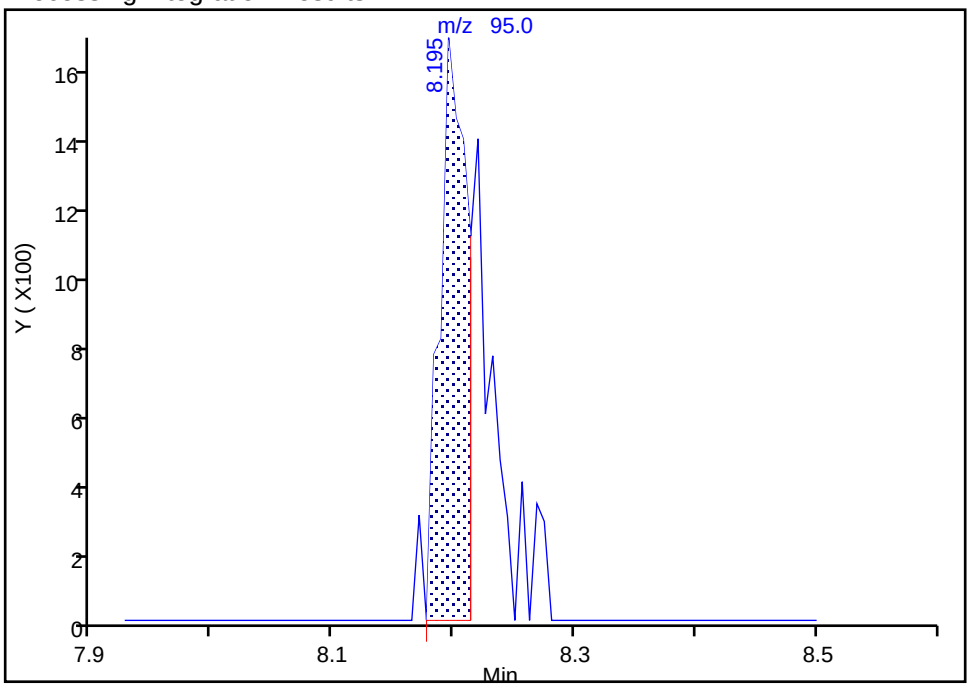
Data File:	\\chromfs\Lancaster\ChromData\19930\20201203-16986.b\ID03X08.D				
Injection Date:	03-Dec-2020 13:00:30	Instrument ID:	19930		
Lims ID:	410-22411-A-5	Lab Sample ID:	410-22411-5		
Client ID:	HD-COD-SW-13-0/1-0				
Operator ID:	kas02648	ALS Bottle#:	8	Worklist Smp#:	8
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

61 Trichloroethene, CAS: 79-01-6

Signal: 1

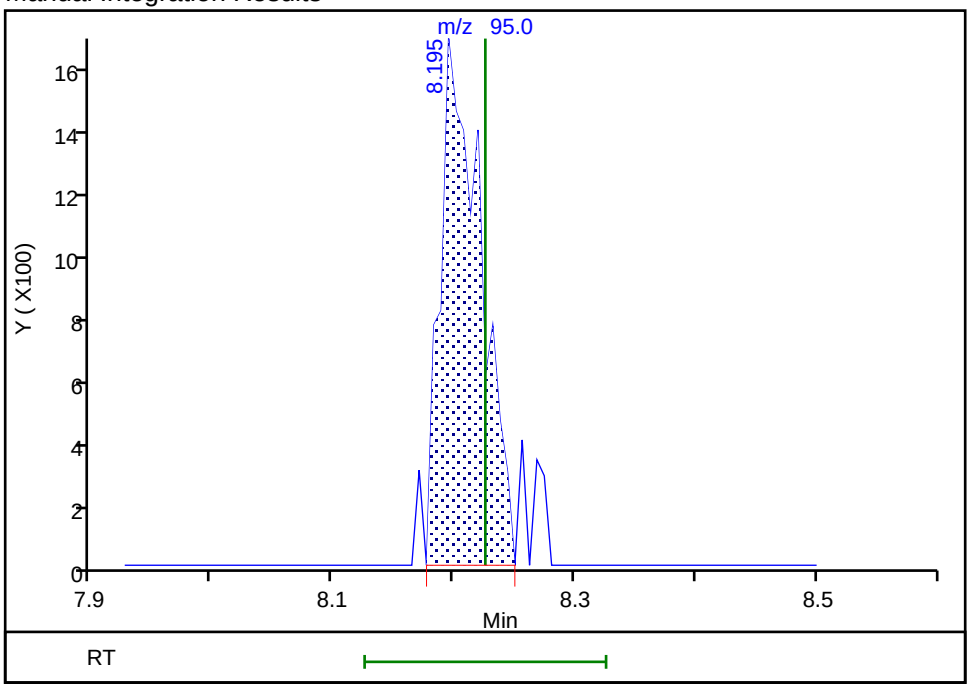
Processing Integration Results

RT: 8.20
Area: 2576
Amount: 0.038891
Amount Units: ug/l



Manual Integration Results

RT: 8.20
Area: 3832
Amount: 0.057854
Amount Units: ug/l



Reviewer: campbellme, 03-Dec-2020 18:35:43

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1

SDG No.:

Client Sample ID: HD-COD-SW-15-0/1-0 Lab Sample ID: 410-22411-6

Matrix: Water Lab File ID: ID03X09.D

Analysis Method: 8260D Date Collected: 11/30/2020 10:25

Sample wt/vol: 25(mL) Date Analyzed: 12/03/2020 13:21

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 72509 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.070
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.060
75-34-3	1,1-Dichloroethane	ND		0.50	0.070
75-35-4	1,1-Dichloroethene	ND		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.060
107-06-2	1,2-Dichloroethane	ND		0.50	0.050
78-87-5	1,2-Dichloropropane	ND		0.50	0.060
78-93-3	2-Butanone (MEK)	ND		5.0	0.60
591-78-6	2-Hexanone	ND		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70
67-64-1	Acetone	2.6	J	5.0	0.90
71-43-2	Benzene	ND		0.50	0.050
74-97-5	Bromochloromethane	ND		0.50	0.050
75-27-4	Bromodichloromethane	ND		0.50	0.050
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.070
75-15-0	Carbon disulfide	ND		1.0	0.060
56-23-5	Carbon tetrachloride	ND		0.50	0.070
108-90-7	Chlorobenzene	ND		0.50	0.060
75-00-3	Chloroethane	ND		0.50	0.070
67-66-3	Chloroform	0.11	J	0.50	0.090
74-87-3	Chloromethane	0.061	J	0.50	0.060
156-59-2	cis-1,2-Dichloroethene	0.23	J	0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.050
124-48-1	Dibromochloromethane	ND		0.50	0.070
100-41-4	Ethylbenzene	ND		0.50	0.060
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.050
75-09-2	Methylene Chloride	ND		0.50	0.070
100-42-5	Styrene	ND		0.50	0.050
127-18-4	Tetrachloroethene	0.64		0.50	0.060
108-88-3	Toluene	ND		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	0.29	J	0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1

SDG No.:

Client Sample ID: HD-COD-SW-15-0/1-0 Lab Sample ID: 410-22411-6

Matrix: Water Lab File ID: ID03X09.D

Analysis Method: 8260D Date Collected: 11/30/2020 10:25

Sample wt/vol: 25(mL) Date Analyzed: 12/03/2020 13:21

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 72509 Units: ug/L

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

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		80-120
1868-53-7	Dibromofluoromethane (Surr)	101		80-120
2037-26-5	Toluene-d8 (Surr)	98		80-120
460-00-4	4-Bromofluorobenzene (Surr)	99		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20201203-16986.b\ID03X09.D
Lims ID: 410-22411-A-6
Client ID: HD-COD-SW-15-0/1-0
Sample Type: Client
Inject. Date: 03-Dec-2020 13:21:30 ALS Bottle#: 9 Worklist Smp#: 9
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0016986-009
Operator ID: kas02648 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20201203-16986.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 05-Dec-2020 08:26:54 Calib Date: 23-Nov-2020 18:05:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1645

First Level Reviewer: campbellme Date: 03-Dec-2020 18:37:29

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
2 Chlorodifluoromethane	51		1.983				ND	
1 Dichlorodifluoromethane	85		1.989				ND	
3 Dimethyl ether	45		2.050				ND	
4 Chloromethane	50	2.196	2.190	0.006	96	5175	0.0605	
6 Butadiene	39		2.300				ND	7
5 Vinyl chloride	62		2.312				ND	
7 Bromomethane	94		2.635				ND	
8 Chloroethane	64		2.715				ND	
9 Dichlorofluoromethane	67		2.958				ND	
10 Trichlorofluoromethane	101		3.032				ND	
11 Ethyl ether	59		3.276				ND	
T 200 Ethanol TIC	45		3.288				ND	7
12 1,2-Dichloro-1,1,2-trifluoroetha	67		3.349				ND	
13 Acrolein	56	3.464	3.446	0.018	4	1428	0.1739	7M
14 1,1-Dichloroethene	96		3.586				ND	7
15 Acetone	43	3.629	3.617	0.012	98	26471	2.59	
16 112TCTFE	101		3.629				ND	
17 Iodomethane	142		3.782				ND	
18 Ethyl bromide	108		3.818				ND	
19 Carbon disulfide	76		3.891				ND	7
20 Acetonitrile	41		3.989				ND	
21 Methyl acetate	43		4.044				ND	
22 3-Chloro-1-propene	41		4.068				ND	
23 Methylene Chloride	84		4.263				ND	7
* 24 t-Butyl alcohol-d10 (IS)	65	4.281	4.288	-0.007	0	187355	50.0	
25 2-Methyl-2-propanol	59		4.416				ND	
26 Acrylonitrile	53		4.605				ND	
27 Methyl tert-butyl ether	73		4.672				ND	7
28 trans-1,2-Dichloroethene	96		4.678				ND	
29 Hexane	57	5.110	5.104	0.006	94	8677	0.1043	
30 Vinyl acetate	43		5.336				ND	
31 1,1-Dichloroethane	63		5.342				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
32 Isopropyl ether	45		5.397				ND	
33 2-Chloro-1,3-butadiene	53		5.452				ND	
34 Tert-butyl ethyl ether	59	5.964	5.921	0.043	83	3601	0.0210	7M
36 2-Butanone (MEK)	43		6.141				ND	7
S 35 1,2-Dichloroethene, Total	100				0		0.2336	
37 cis-1,2-Dichloroethene	96	6.165	6.165	0.000	75	16496	0.2336	
38 2,2-Dichloropropane	77		6.177				ND	
39 Ethyl acetate	43	6.141	6.196	-0.055	18	4853	0.1266	
40 Propionitrile	54		6.232				ND	
41 Methyl acrylate	55		6.263				ND	
42 Methacrylonitrile	67		6.440				ND	
43 Chlorobromomethane	128		6.500				ND	
44 Tetrahydrofuran	71		6.513				ND	
45 Chloroform	83	6.641	6.647	-0.006	91	12146	0.1122	a
$ 46 Dibromofluoromethane (Surr)	113	6.854	6.860	-0.006	94	514408	10.1	
47 1,1,1-Trichloroethane	97		6.872				ND	7
48 Cyclohexane	56		6.970				ND	
49 1-Chlorobutane	56		7.025				ND	
50 Carbon tetrachloride	117		7.086				ND	
51 1,1-Dichloropropene	75		7.086				ND	
52 Isobutyl alcohol	41		7.232				ND	
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.305	7.317	-0.012	0	107168	10.4	
54 Benzene	78		7.348				ND	
56 1,2-Dichloroethane	62		7.421				ND	
55 Isopropyl acetate	43		7.421				ND	
57 Tert-amyl methyl ether	73		7.531				ND	
* 58 Fluorobenzene (IS)	96	7.744	7.750	-0.006	99	2064529	10.0	
59 n-Heptane	43		7.756				ND	7
60 n-Butanol	56		8.104				ND	
61 Trichloroethene	95	8.220	8.226	-0.006	96	19545	0.2855	
62 Methylcyclohexane	83		8.531				ND	
63 1,2-Dichloropropane	63		8.555				ND	
64 Methyl methacrylate	69		8.634				ND	
65 1,4-Dioxane	88		8.640				ND	
66 Dibromomethane	93		8.665				ND	
67 n-Propyl acetate	43		8.714				ND	
68 Dichlorobromomethane	83		8.896				ND	
69 2-Nitropropane	41		9.165				ND	
70 Chloroacetonitrile	75		9.232				ND	
71 2-Chloroethyl vinyl ether	63		9.250				ND	
72 1-Bromo-2-chloroethane	63		9.287				ND	
73 cis-1,3-Dichloropropene	75		9.439				ND	
74 4-Methyl-2-pentanone (MIBK)	43		9.604				ND	7
$ 75 Toluene-d8 (Surr)	98	9.744	9.744	0.000	93	2038699	9.83	
76 Toluene	92	9.817	9.823	-0.006	97	7100	0.0410	a
T 155 Ethylene oxide TIC	44		10.000				ND	
T 154 2-Bromo-3-chloropropene TIC	75		10.000				ND	U
T 153 Epichlorohydrin TIC	57		10.000				ND	U
T 152 Vinyl bromide TIC	106		10.000				ND	U
T 148 Monochloroacetic acid TIC	50		10.000				ND	
T 150 Epibromohydrin TIC	57		10.000				ND	U
T 149 2-Chloroethanol TIC	44		10.000				ND	U

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
T 156 2,3-Dibromopropene TIC	119		10.000				ND	U
T 147 2-Bromoethanol TIC	45		10.000				ND	U
T 151 Chloroacetaldehyde TIC	50		10.000				ND	
T 146 2,3-Dibromo-1-propanol TIC	57		10.000				ND	
T 157 3-Chloro-1,2-propanediol TIC	44		10.000				ND	
S 77 1,3-Dichloropropene, Total	100		10.060				ND	7
78 trans-1,3-Dichloropropene	75		10.073				ND	
79 Ethyl methacrylate	69		10.134				ND	
80 1,1,2-Trichloroethane	97		10.274				ND	
81 Tetrachloroethene	166	10.365	10.366	-0.001	97	53743	0.6410	
82 1,3-Dichloropropane	76		10.439				ND	
83 2-Hexanone	43		10.488				ND	7
84 n-Butyl acetate	43		10.610				ND	
85 Chlorodibromomethane	129		10.652				ND	
86 Ethylene Dibromide	107		10.762				ND	
* 87 Chlorobenzene-d5 (IS)	117	11.188	11.189	-0.001	84	1588365	10.0	
88 1-Chlorohexane	91		11.201				ND	7
90 Chlorobenzene	112		11.219				ND	
S 89 Xylenes, Total	106		11.245				ND	7
91 1,1,1,2-Tetrachloroethane	131		11.298				ND	
92 Ethylbenzene	91		11.304				ND	7
93 m-Xylene & p-Xylene	106		11.414				ND	7
94 o-Xylene	106		11.743				ND	7
95 Styrene	104		11.762				ND	
96 Bromoform	173		11.920				ND	
97 Isopropylbenzene	105		12.042				ND	
98 cis-1,4-Dichloro-2-butene	88		12.085				ND	
99 Cyclohexanone	55		12.121				ND	
$ 100 4-Bromofluorobenzene (Surr)	95	12.188	12.188	0.000	94	760048	9.89	
101 1,1,2,2-Tetrachloroethane	83		12.286				ND	
102 Bromobenzene	156		12.304				ND	
103 trans-1,4-Dichloro-2-butene	53		12.310				ND	
104 1,2,3-Trichloropropane	110		12.335				ND	
105 N-Propylbenzene	91		12.371				ND	
106 2-Chlorotoluene	126		12.451				ND	
107 1,3,5-Trimethylbenzene	105		12.505				ND	7
108 4-Chlorotoluene	126		12.542				ND	
109 tert-Butylbenzene	134		12.749				ND	
110 Pentachloroethane	167		12.780				ND	
111 1,2,4-Trimethylbenzene	105		12.792				ND	7
112 sec-Butylbenzene	105		12.914				ND	
113 1,3-Dichlorobenzene	146		13.011				ND	
114 4-Isopropyltoluene	119		13.018				ND	7
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	94	935087	10.0	
116 1,4-Dichlorobenzene	146		13.085				ND	
117 1,2,3-Trimethylbenzene	120		13.097				ND	7
118 Benzyl chloride	126		13.158				ND	
119 n-Butylbenzene	92		13.310				ND	
120 1,2-Dichlorobenzene	146		13.341				ND	
121 Hexachloroethane	117		13.542				ND	
122 1,2-Dibromo-3-Chloropropane	155		13.883				ND	
123 1,3,5-Trichlorobenzene	180		14.011				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
124 1,2,4-Trichlorobenzene	180		14.432				ND	
125 Hexachlorobutadiene	225		14.517				ND	
126 Naphthalene	128		14.615				ND	7
127 1,2,3-Trichlorobenzene	180		14.755				ND	
128 Dodecane	57		0.000				ND	
206 Pentachloroethane TIC	1		0.000				ND	
142 2-Bromo-1-chloropropane	1		0.000				ND	
131 tert-Butyl Formate	1		0.000				ND	
132 Methylal	1		0.000				ND	
133 t-Amyl alcohol	1		0.000				ND	
T 201 Isopropyl alcohol TIC	45		0.000				ND	U
134 Isopropyl alcohol	45		0.000				ND	
141 1-Chloropropane	1		0.000				ND	
129 Propene oxide	1		0.000				ND	
130 Chlorotrifluoroethene	1		0.000				ND	
139 1-Bromo-3-Chloropropane	1		0.000				ND	
143 n-Decane	57		0.000				ND	
205 1,1-Dichloroacetone	1		0.000				ND	
144 2-ethoxy-2-methyl butane	1		0.000				ND	
136 2-Chloro-1,1,1-Trifluoroethane	1		0.000				ND	
135 p-Diethylbenzene	1		0.000				ND	
137 2-Methylnaphthalene	142		0.000				ND	
138 1,1-Dichloro-1-fluoroethane	1		0.000				ND	
202 1,3-Dichloro-2-propanol TIC	1		0.000				ND	
203 Propargyl alcohol TIC	1		0.000				ND	
204 Pentane	43		0.000				ND	
140 Ethanol	45		3.288				ND	

QC Flag Legend

Processing Flags
- 7 - Failed Limit of Detection

Review Flags
- M - Manually Integrated
- U - Marked Undetected
- a - User Assigned ID

Reagents:

MSV_31_826ISS_00003 Amount Added: 5.00 Units: uL Run Reagent

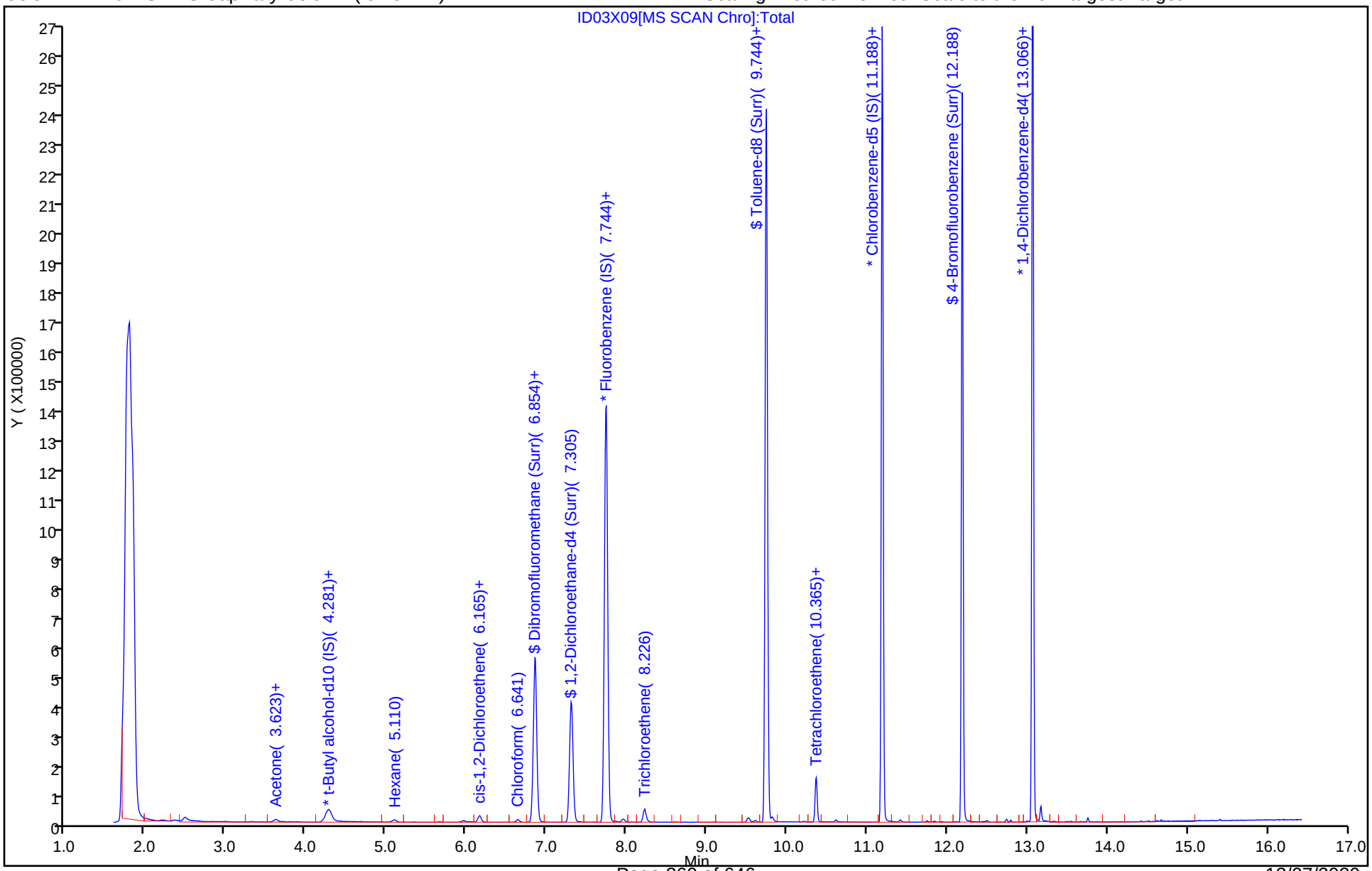
Report Date: 05-Dec-2020 08:27:21 Chrom Revision: 2.3 13-Nov-2020 01:23:02

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20201203-16986.b\ID03X09.D

Injection Date:	03-Dec-2020 13:21:30	Instrument ID:	19930	Operator ID:	kas02648
Lims ID:	410-22411-A-6	Lab Sample ID:	410-22411-6	Worklist Smp#:	9
Client ID:	HD-COD-SW-15-0/1-0				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19930\20201203-16986.b\ID03X09.D
Lims ID: 410-22411-A-6
Client ID: HD-COD-SW-15-0/1-0
Sample Type: Client
Inject. Date: 03-Dec-2020 13:21:30 ALS Bottle#: 9 Worklist Smp#: 9
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0016986-009
Operator ID: kas02648 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20201203-16986.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 05-Dec-2020 08:26:54 Calib Date: 23-Nov-2020 18:05:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1645

First Level Reviewer: campbellme Date: 03-Dec-2020 18:37:29

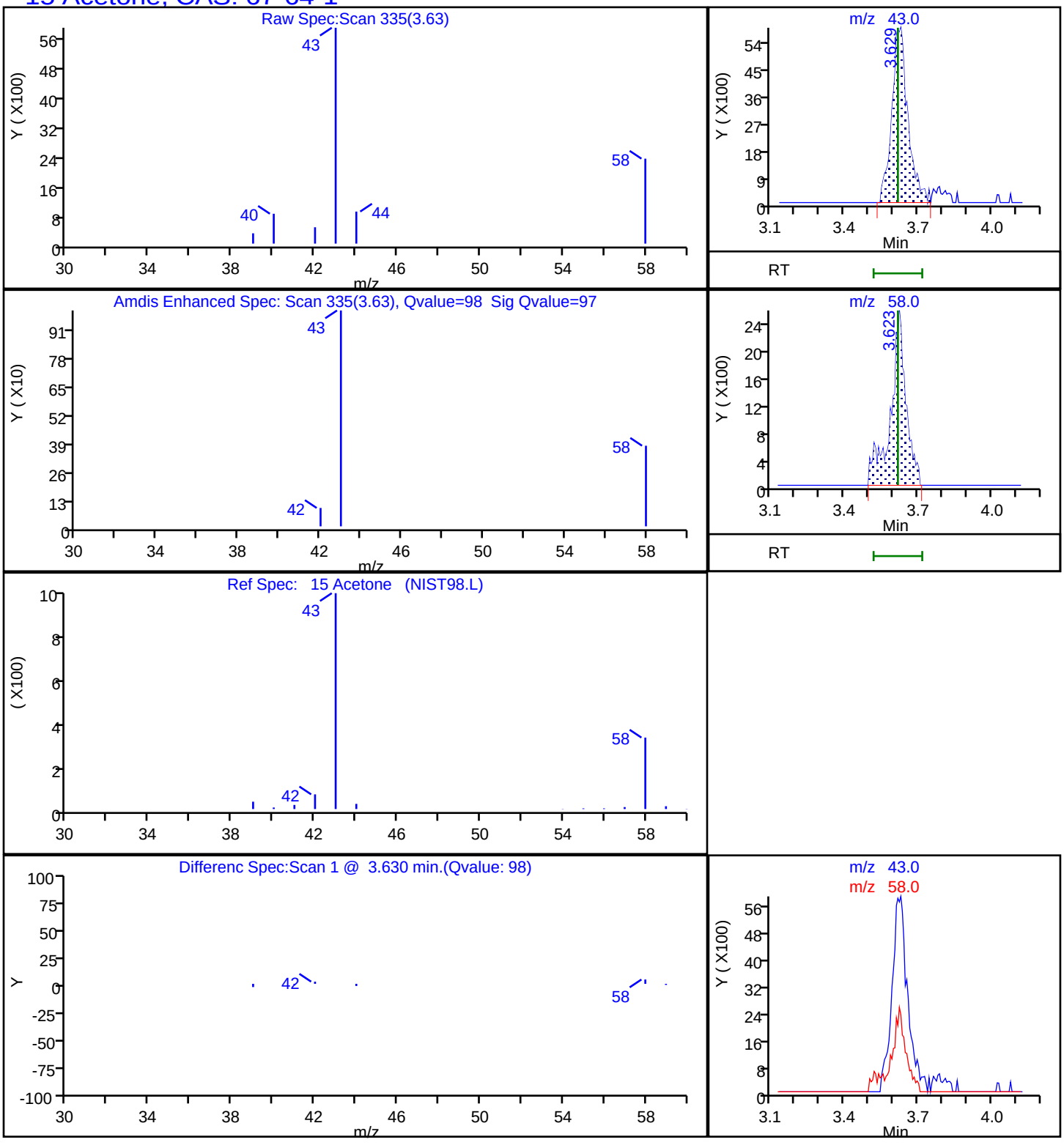
Compound	Amount Added	Amount Recovered	% Rec.
$ 46 Dibromofluoromethane (Surr)	10.0	10.1	100.91
$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	10.4	104.27
$ 75 Toluene-d8 (Surr)	10.0	9.83	98.28
$ 100 4-Bromofluorobenzene (Surr)	10.0	9.89	98.94

Report Date: 05-Dec-2020 08:27:21 Chrom Revision: 2.3 13-Nov-2020 01:23:02

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20201203-16986.b\ID03X09.D				
Injection Date:	03-Dec-2020 13:21:30	Instrument ID:	19930		
Lims ID:	410-22411-A-6	Lab Sample ID:	410-22411-6		
Client ID:	HD-COD-SW-15-0/1-0				
Operator ID:	kas02648	ALS Bottle#:	9	Worklist Smp#:	9
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

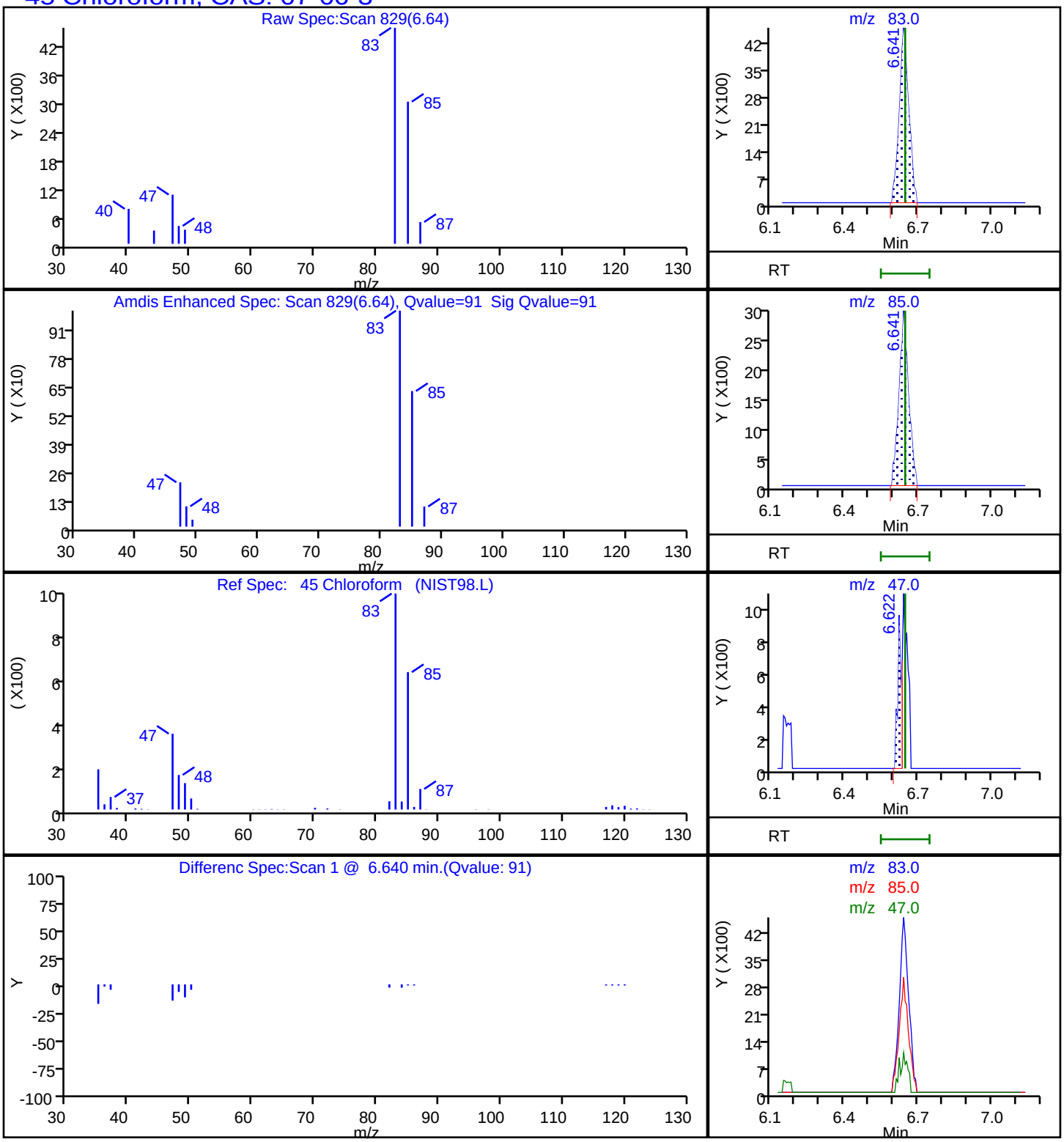
15 Acetone, CAS: 67-64-1



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20201203-16986.b\ID03X09.D				
Injection Date:	03-Dec-2020 13:21:30	Instrument ID:	19930		
Lims ID:	410-22411-A-6	Lab Sample ID:	410-22411-6		
Client ID:	HD-COD-SW-15-0/1-0				
Operator ID:	kas02648	ALS Bottle#:	9	Worklist Smp#:	9
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

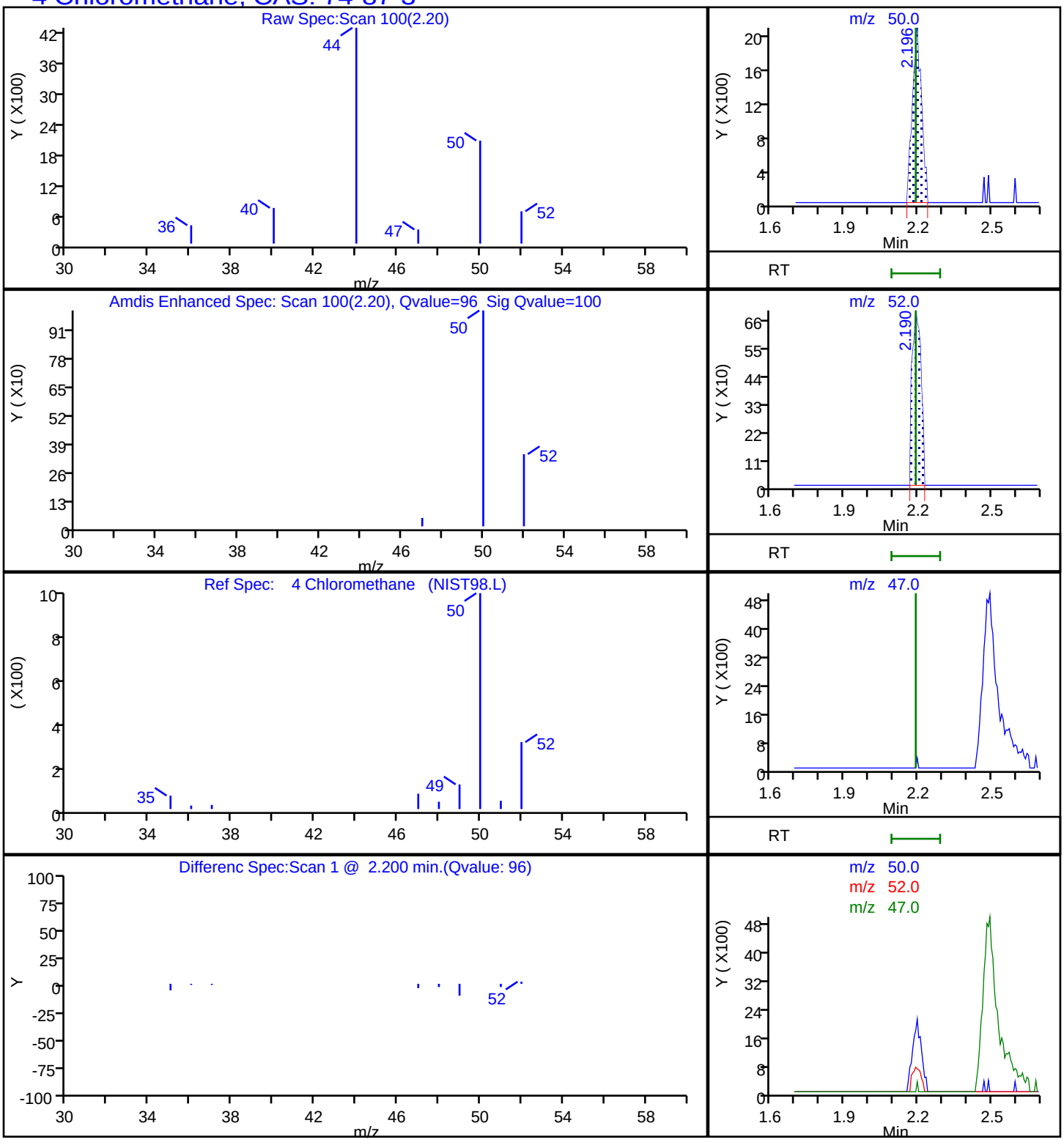
45 Chloroform, CAS: 67-66-3



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20201203-16986.b\ID03X09.D				
Injection Date:	03-Dec-2020 13:21:30	Instrument ID:	19930		
Lims ID:	410-22411-A-6	Lab Sample ID:	410-22411-6		
Client ID:	HD-COD-SW-15-0/1-0				
Operator ID:	kas02648	ALS Bottle#:	9	Worklist Smp#:	9
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

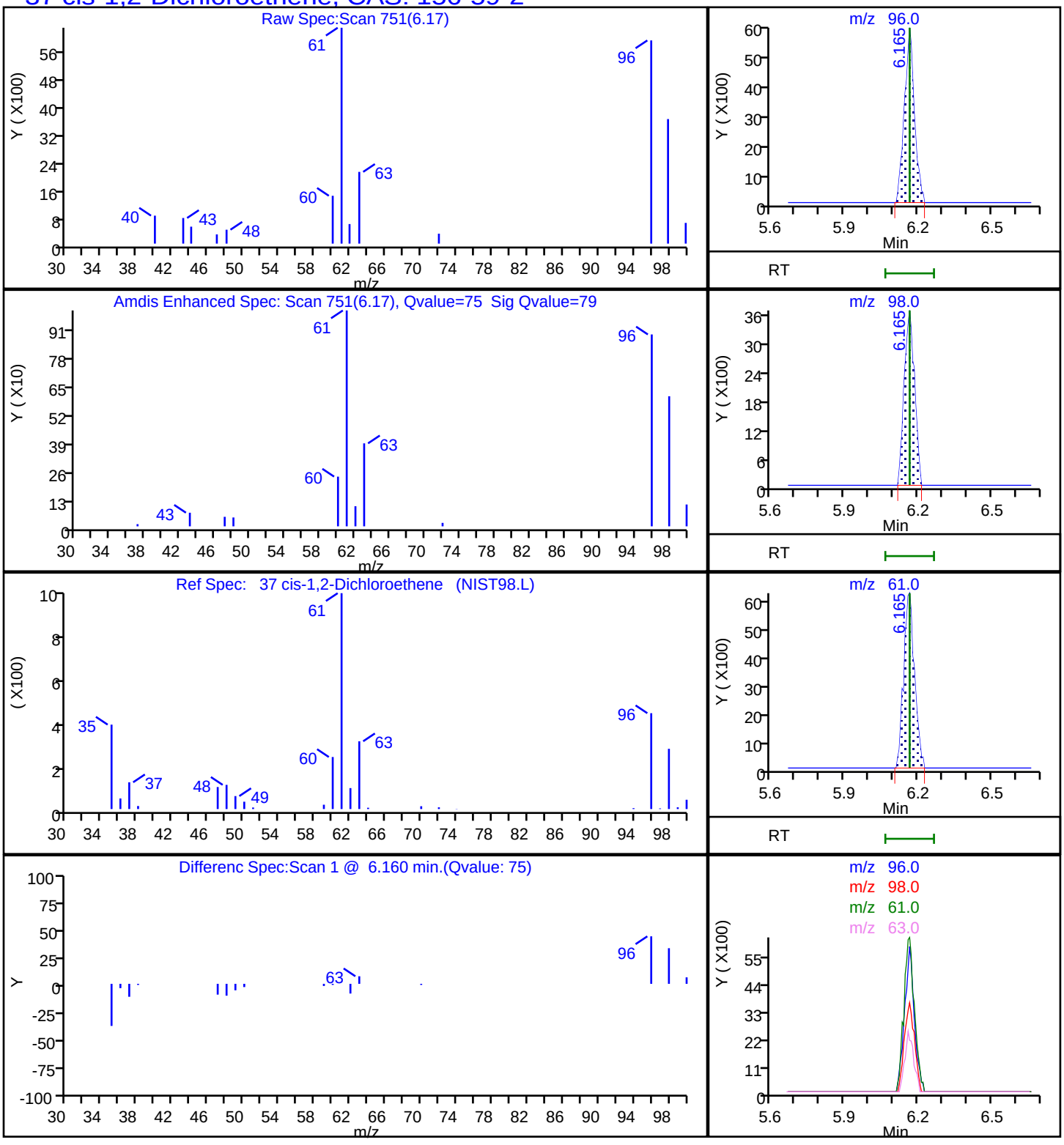
4 Chloromethane, CAS: 74-87-3



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20201203-16986.b\ID03X09.D				
Injection Date:	03-Dec-2020 13:21:30	Instrument ID:	19930		
Lims ID:	410-22411-A-6	Lab Sample ID:	410-22411-6		
Client ID:	HD-COD-SW-15-0/1-0				
Operator ID:	kas02648	ALS Bottle#:	9	Worklist Smp#:	9
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

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



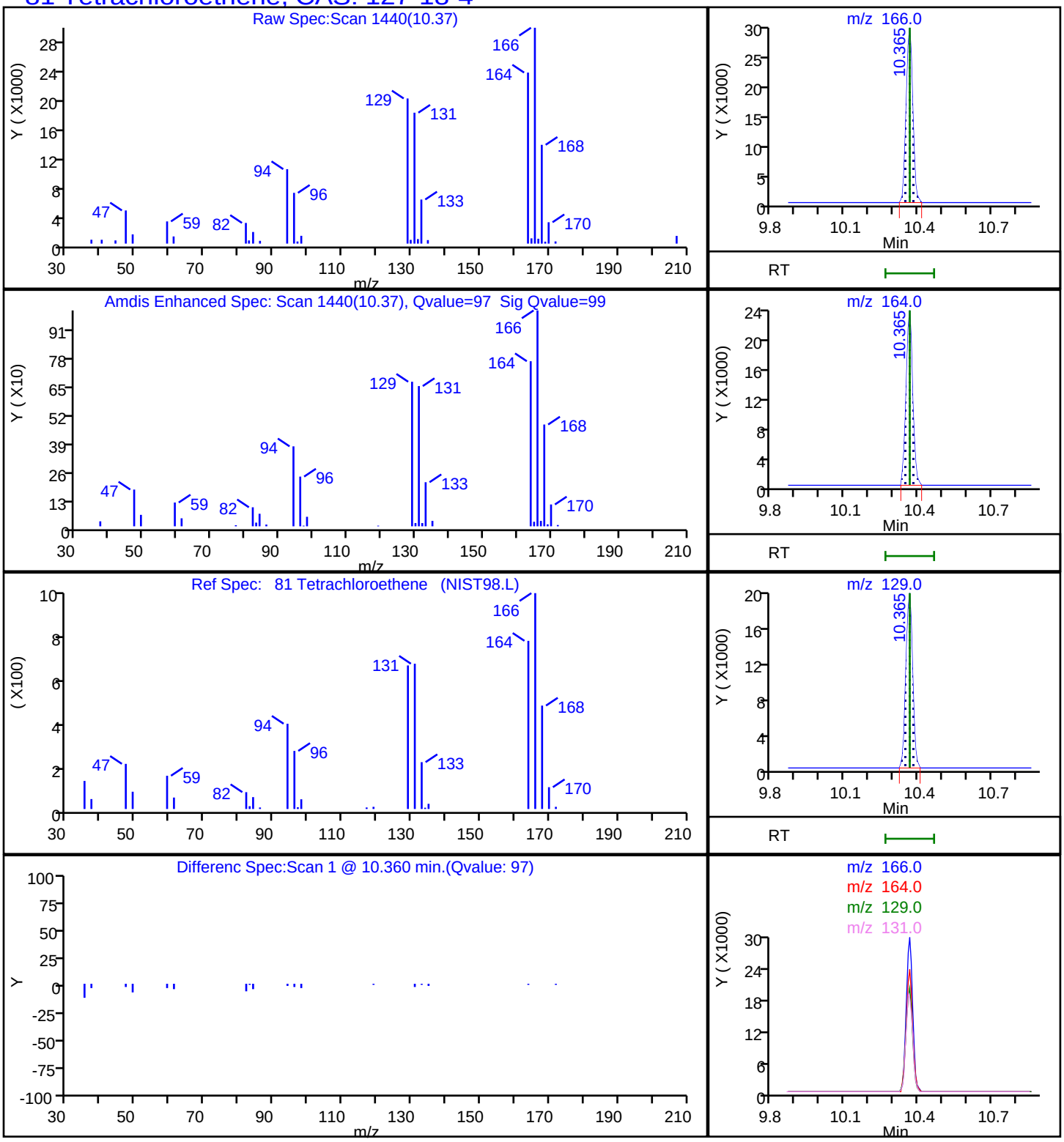
Report Date: 05-Dec-2020 08:27:22 Chrom Revision: 2.3 13-Nov-2020 01:23:02

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20201203-16986.b\ID03X09.D

Injection Date:	03-Dec-2020 13:21:30	Instrument ID:	19930		
Lims ID:	410-22411-A-6	Lab Sample ID:	410-22411-6		
Client ID:	HD-COD-SW-15-0/1-0				
Operator ID:	kas02648	ALS Bottle#:	9	Worklist Smp#:	9
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

81 Tetrachloroethene, CAS: 127-18-4



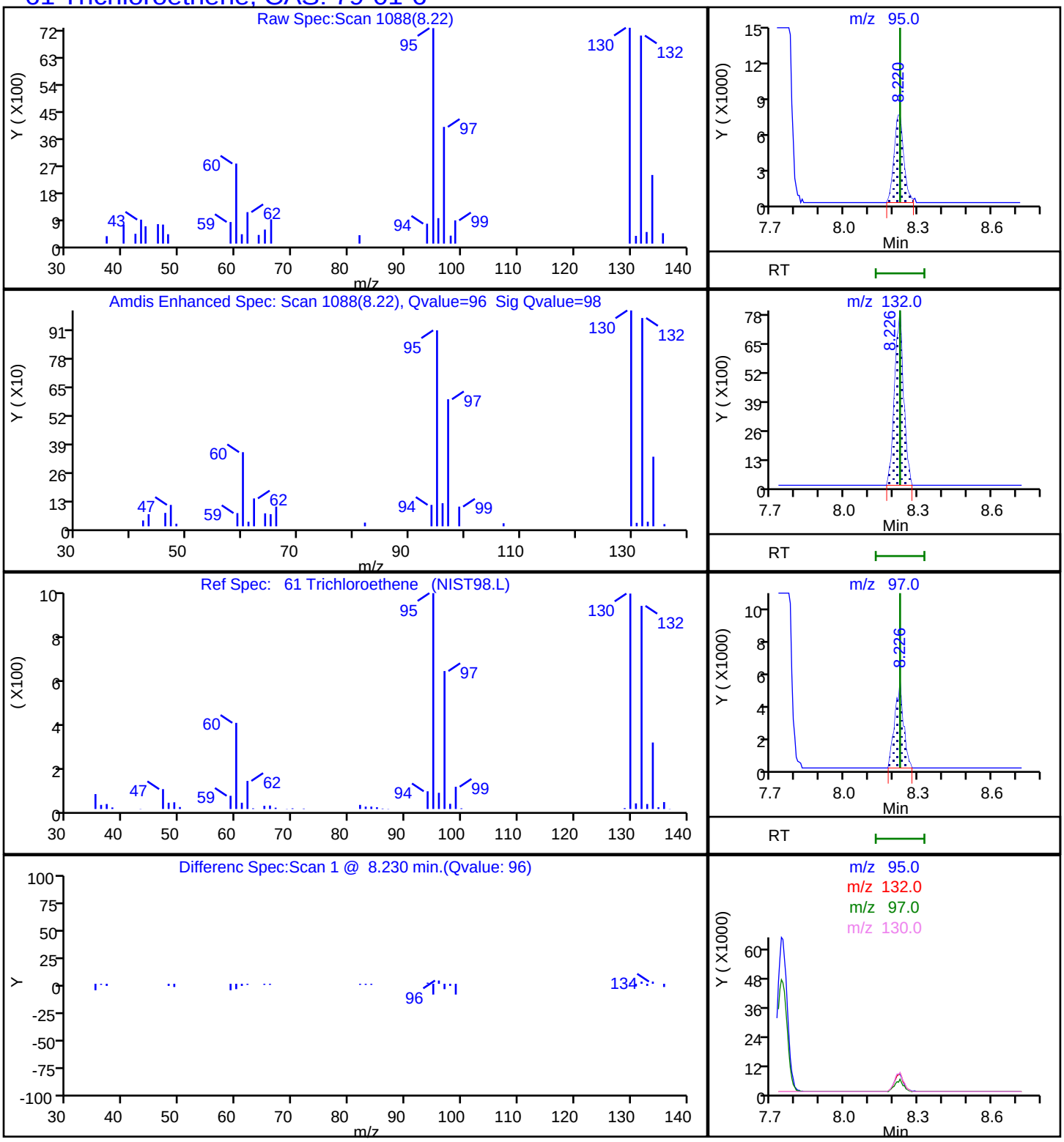
Report Date: 05-Dec-2020 08:27:21 Chrom Revision: 2.3 13-Nov-2020 01:23:02

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20201203-16986.b\ID03X09.D

Injection Date:	03-Dec-2020 13:21:30	Instrument ID:	19930		
Lims ID:	410-22411-A-6	Lab Sample ID:	410-22411-6		
Client ID:	HD-COD-SW-15-0/1-0				
Operator ID:	kas02648	ALS Bottle#:	9	Worklist Smp#:	9
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

61 Trichloroethene, CAS: 79-01-6



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

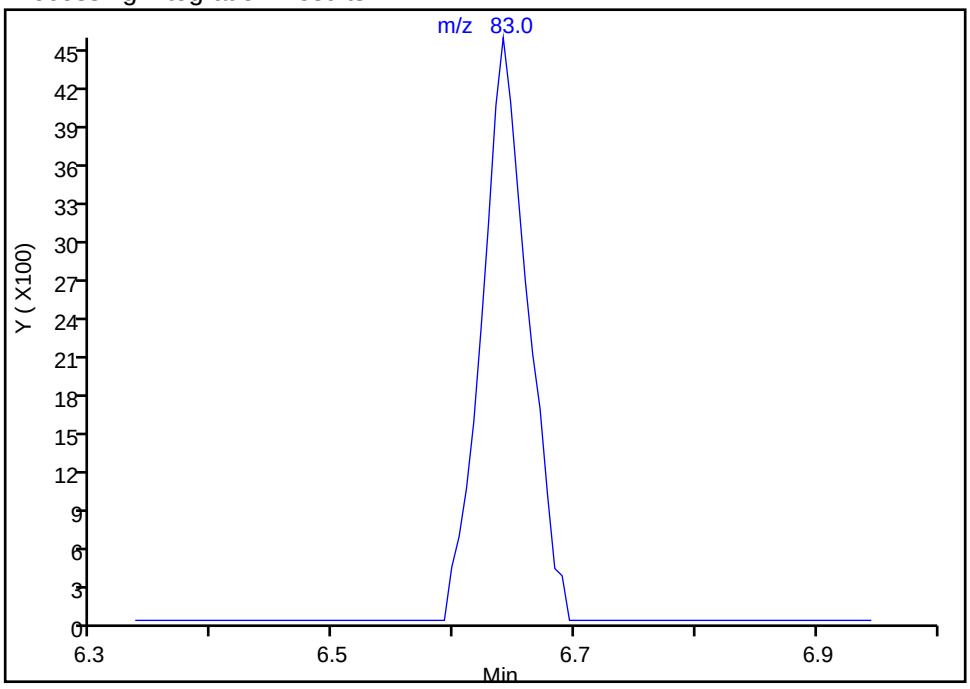
Data File:	\\chromfs\Lancaster\ChromData\19930\20201203-16986.b\ID03X09.D				
Injection Date:	03-Dec-2020 13:21:30	Instrument ID:	19930		
Lims ID:	410-22411-A-6	Lab Sample ID:	410-22411-6		
Client ID:	HD-COD-SW-15-0/1-0				
Operator ID:	kas02648	ALS Bottle#:	9	Worklist Smp#:	9
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

45 Chloroform, CAS: 67-66-3

Signal: 1

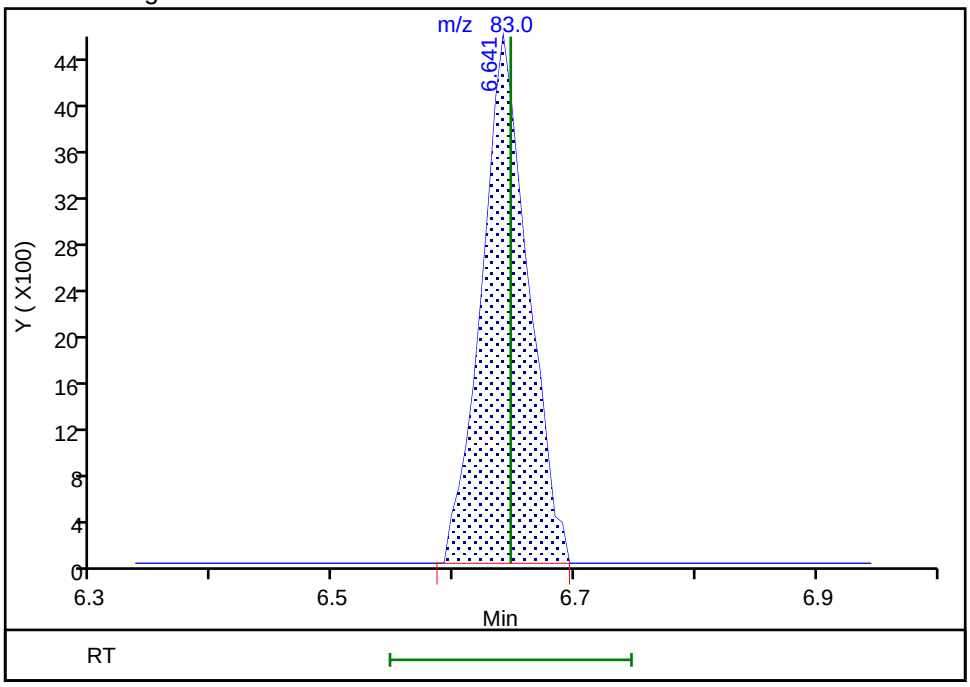
Not Detected
Expected RT: 6.65

Processing Integration Results



Manual Integration Results

RT: 6.64
Area: 12146
Amount: 0.112164
Amount Units: ug/l



Reviewer: campbellme, 03-Dec-2020 18:36:52
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

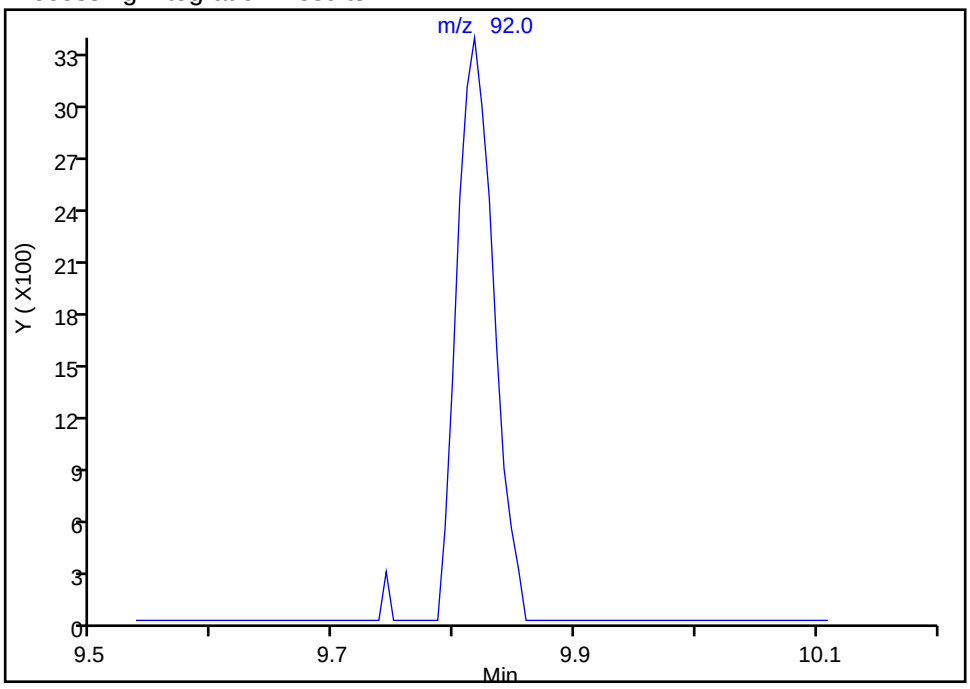
Data File:	\\chromfs\Lancaster\ChromData\19930\20201203-16986.b\ID03X09.D				
Injection Date:	03-Dec-2020 13:21:30	Instrument ID:	19930		
Lims ID:	410-22411-A-6	Lab Sample ID:	410-22411-6		
Client ID:	HD-COD-SW-15-0/1-0				
Operator ID:	kas02648	ALS Bottle#:	9	Worklist Smp#:	9
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

76 Toluene, CAS: 108-88-3

Signal: 1

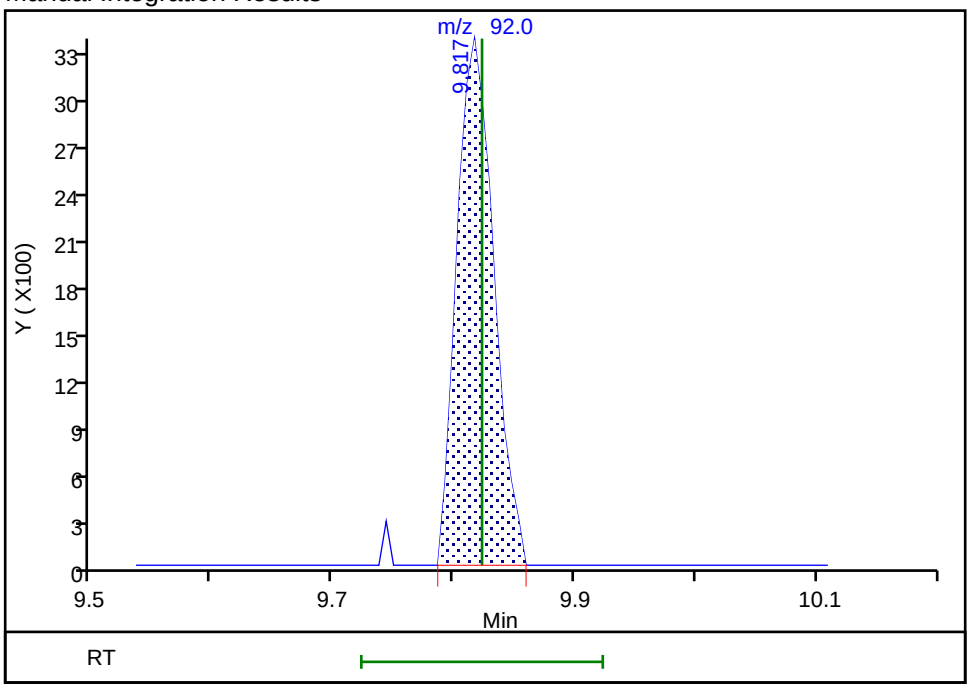
Not Detected
Expected RT: 9.82

Processing Integration Results



Manual Integration Results

RT: 9.82
Area: 7100
Amount: 0.040995
Amount Units: ug/l



Reviewer: campbellme, 03-Dec-2020 18:37:03
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1

SDG No.:

Client Sample ID: HD-COD-SW-16-0/1-0 Lab Sample ID: 410-22411-7

Matrix: Water Lab File ID: ID04X19.D

Analysis Method: 8260D Date Collected: 11/30/2020 13:05

Sample wt/vol: 25(mL) Date Analyzed: 12/04/2020 16:27

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 73040 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.070
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.060
75-34-3	1,1-Dichloroethane	ND		0.50	0.070
75-35-4	1,1-Dichloroethene	ND		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.060
107-06-2	1,2-Dichloroethane	ND		0.50	0.050
78-87-5	1,2-Dichloropropane	ND		0.50	0.060
78-93-3	2-Butanone (MEK)	ND		5.0	0.60
591-78-6	2-Hexanone	ND		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70
67-64-1	Acetone	3.4	J ^c	5.0	0.90
71-43-2	Benzene	ND		0.50	0.050
74-97-5	Bromochloromethane	ND		0.50	0.050
75-27-4	Bromodichloromethane	ND		0.50	0.050
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.070
75-15-0	Carbon disulfide	ND		1.0	0.060
56-23-5	Carbon tetrachloride	ND		0.50	0.070
108-90-7	Chlorobenzene	ND		0.50	0.060
75-00-3	Chloroethane	ND		0.50	0.070
67-66-3	Chloroform	ND		0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	ND		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.050
124-48-1	Dibromochloromethane	ND		0.50	0.070
100-41-4	Ethylbenzene	ND		0.50	0.060
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.050
75-09-2	Methylene Chloride	ND		0.50	0.070
100-42-5	Styrene	ND		0.50	0.050
127-18-4	Tetrachloroethene	ND		0.50	0.060
108-88-3	Toluene	ND		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	ND		0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1

SDG No.:

Client Sample ID: HD-COD-SW-16-0/1-0 Lab Sample ID: 410-22411-7

Matrix: Water Lab File ID: ID04X19.D

Analysis Method: 8260D Date Collected: 11/30/2020 13:05

Sample wt/vol: 25(mL) Date Analyzed: 12/04/2020 16:27

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 73040 Units: ug/L

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

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		80-120
1868-53-7	Dibromofluoromethane (Surr)	101		80-120
2037-26-5	Toluene-d8 (Surr)	97		80-120
460-00-4	4-Bromofluorobenzene (Surr)	100		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20201204-17111.b\ID04X19.D
Lims ID: 410-22411-A-7
Client ID: HD-COD-SW-16-0/1-0
Sample Type: Client
Inject. Date: 04-Dec-2020 16:27:30 ALS Bottle#: 19 Worklist Smp#: 19
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0017111-019
Operator ID: kas02648 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20201204-17111.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 05-Dec-2020 10:06:04 Calib Date: 23-Nov-2020 18:05:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1645

First Level Reviewer: campbellme Date: 04-Dec-2020 22:46:19

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
4 Chloromethane	50		2.178				ND	
5 Vinyl chloride	62		2.300				ND	
7 Bromomethane	94		2.623				ND	
8 Chloroethane	64		2.703				ND	
14 1,1-Dichloroethene	96		3.574				ND	
15 Acetone	43	3.617	3.605	0.012	99	31831	3.42	
19 Carbon disulfide	76	3.885	3.879	0.006	97	5962	0.0399	
23 Methylene Chloride	84		4.245				ND	7
* 24 t-Butyl alcohol-d10 (IS)	65	4.257	4.282	-0.025	0	170804	50.0	
27 Methyl tert-butyl ether	73		4.659				ND	
28 trans-1,2-Dichloroethene	96		4.672				ND	
31 1,1-Dichloroethane	63		5.330				ND	
36 2-Butanone (MEK)	43	6.153	6.123	0.030	68	5120	0.3287	
37 cis-1,2-Dichloroethene	96	6.153	6.159	-0.006	73	2734	0.0413	
43 Chlorobromomethane	128		6.488				ND	
45 Chloroform	83	6.647	6.635	0.012	83	2886	0.0284	a
$ 46 Dibromofluoromethane (Surr)	113	6.854	6.854	0.000	94	480145	10.1	
47 1,1,1-Trichloroethane	97		6.866				ND	
50 Carbon tetrachloride	117		7.080				ND	
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.305	7.305	0.000	0	98313	10.2	
54 Benzene	78	7.342	7.336	0.006	41	2709	0.0111	7M
56 1,2-Dichloroethane	62		7.409				ND	
* 58 Fluorobenzene (IS)	96	7.744	7.738	0.006	99	1934179	10.0	
61 Trichloroethene	95	8.214	8.220	-0.006	71	3256	0.0508	M
63 1,2-Dichloropropane	63		8.549				ND	
68 Dichlorobromomethane	83		8.890				ND	
73 cis-1,3-Dichloropropene	75		9.433				ND	
74 4-Methyl-2-pentanone (MIBK)	43		9.604				ND	7
$ 75 Toluene-d8 (Surr)	98	9.744	9.744	0.000	93	1892697	9.75	
76 Toluene	92	9.823	9.817	0.006	98	8264	0.0510	
78 trans-1,3-Dichloropropene	75		10.067				ND	
80 1,1,2-Trichloroethane	97		10.274				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
81 Tetrachloroethene	166		10.366				ND	7
83 2-Hexanone	43		10.482				ND	7
85 Chlorodibromomethane	129		10.652				ND	
86 Ethylene Dibromide	107		10.762				ND	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.189	0.000	84	1486500	10.0	
90 Chlorobenzene	112		11.213				ND	
S 89 Xylenes, Total	106		11.245				ND	7
91 1,1,1,2-Tetrachloroethane	131		11.298				ND	
92 Ethylbenzene	91		11.298				ND	7
93 m-Xylene & p-Xylene	106		11.414				ND	7
94 o-Xylene	106		11.743				ND	7
95 Styrene	104		11.756				ND	7
96 Bromoform	173		11.914				ND	
$ 100 4-Bromofluorobenzene (Surr)	95	12.188	12.189	0.000	94	718975	10.0	
101 1,1,2,2-Tetrachloroethane	83		12.286				ND	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	94	861526	10.0	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection
Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

MSV_31_826ISS_00003 Amount Added: 5.00 Units: uL Run Reagent

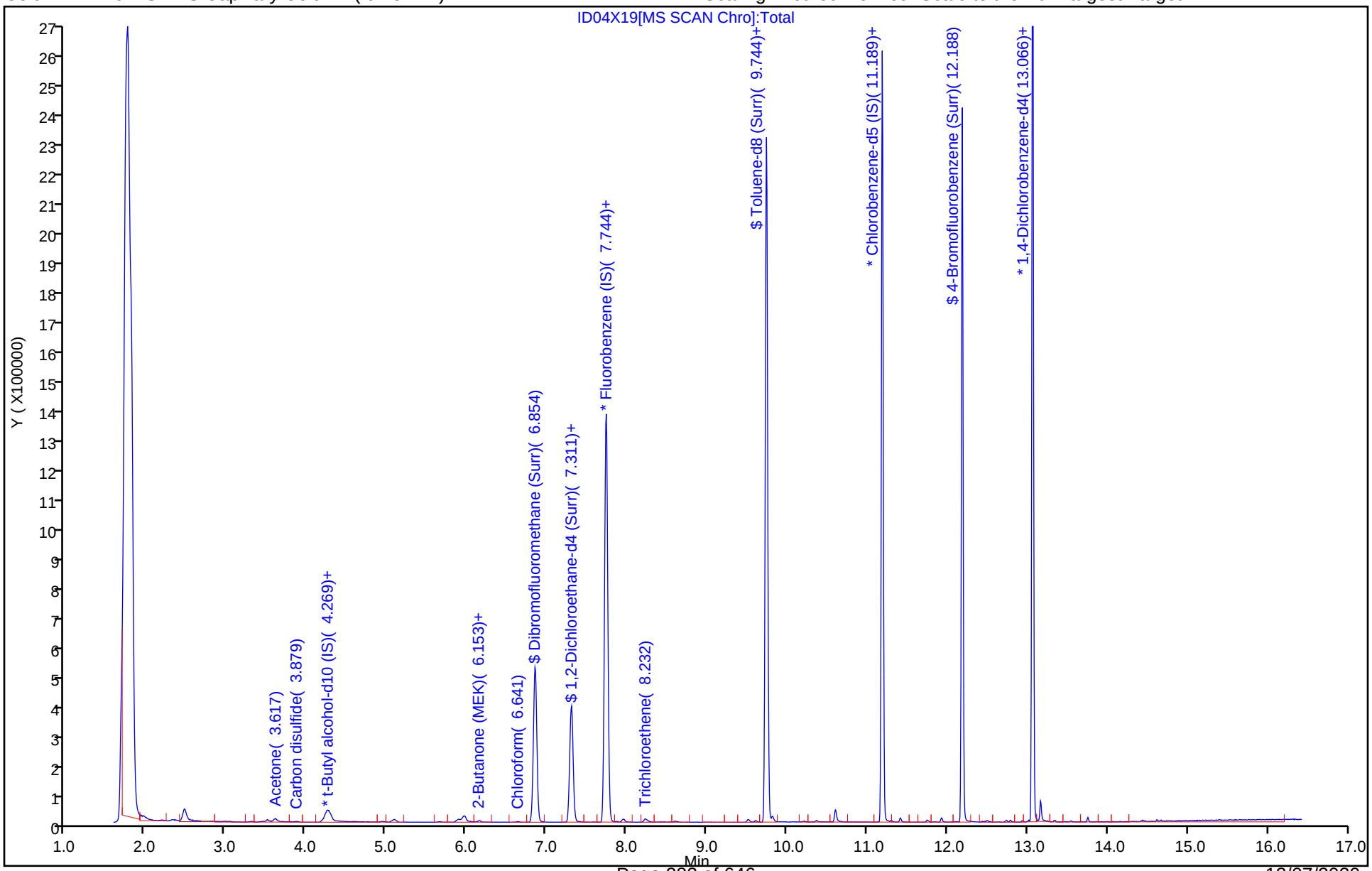
Report Date: 05-Dec-2020 10:06:30 Chrom Revision: 2.3 13-Nov-2020 01:23:02

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20201204-17111.b\ID04X19.D

Injection Date:	04-Dec-2020 16:27:30	Instrument ID:	19930	Operator ID:	kas02648
Lims ID:	410-22411-A-7	Lab Sample ID:	410-22411-7	Worklist Smp#:	19
Client ID:	HD-COD-SW-16-0/1-0				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\19930\20201204-17111.b\ID04X19.D				
Lims ID:	410-22411-A-7				
Client ID:	HD-COD-SW-16-0/1-0				
Sample Type:	Client				
Inject. Date:	04-Dec-2020 16:27:30	ALS Bottle#:	19	Worklist Smp#:	19
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Sample Info:	410-0017111-019				
Operator ID:	kas02648	Instrument ID:	19930		
Method:	\\chromfs\Lancaster\ChromData\19930\20201204-17111.b\8260 25ml HP31.m				
Limit Group:	MSV - 8260C_D				
Last Update:	05-Dec-2020 10:06:04	Calib Date:	23-Nov-2020 18:05:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I17.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1645				

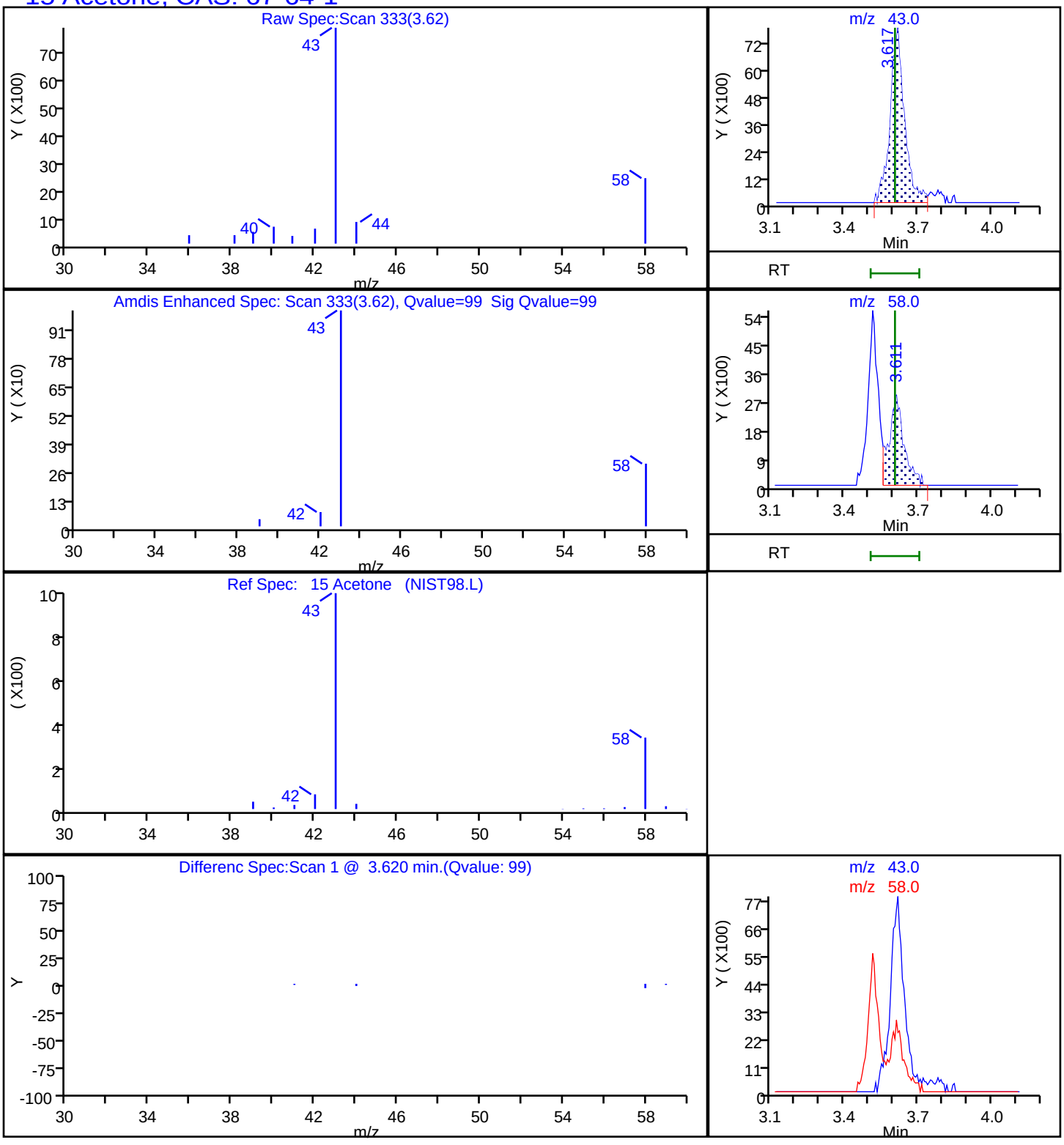
First Level Reviewer: campbellme Date: 04-Dec-2020 22:46:19

Compound	Amount Added	Amount Recovered	% Rec.
$ 46 Dibromofluoromethane (Surr)	10.0	10.1	100.54
$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	10.2	102.10
$ 75 Toluene-d8 (Surr)	10.0	9.75	97.50
$ 100 4-Bromofluorobenzene (Surr)	10.0	10.0	100.01

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20201204-17111.b\ID04X19.D				
Injection Date:	04-Dec-2020 16:27:30	Instrument ID:	19930		
Lims ID:	410-22411-A-7	Lab Sample ID:	410-22411-7		
Client ID:	HD-COD-SW-16-0/1-0				
Operator ID:	kas02648	ALS Bottle#:	19	Worklist Smp#:	19
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

15 Acetone, CAS: 67-64-1



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

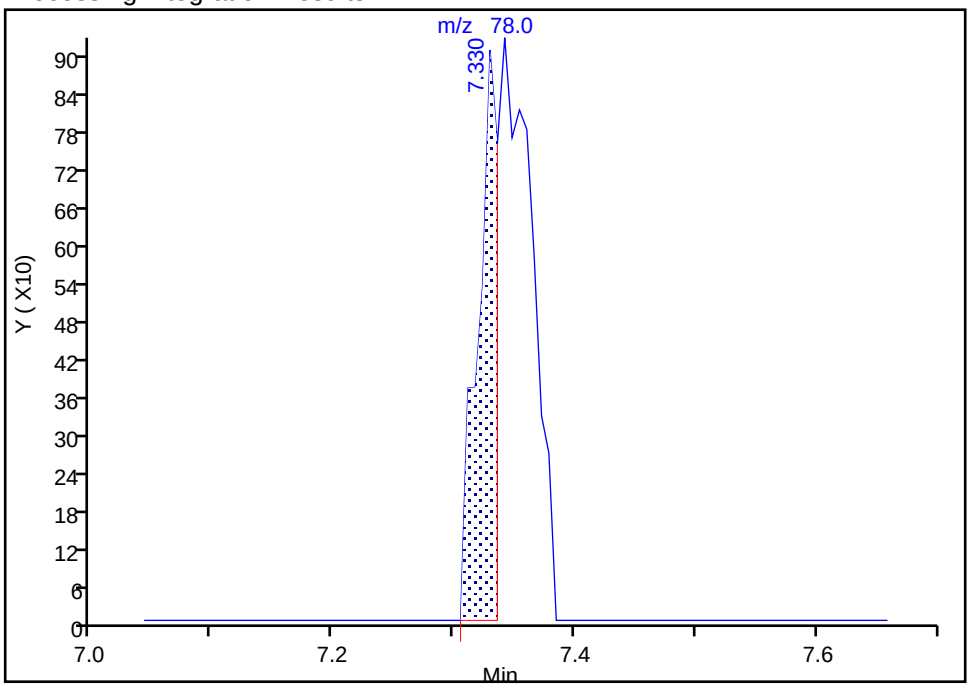
Data File:	\\chromfs\Lancaster\ChromData\19930\20201204-17111.b\ID04X19.D				
Injection Date:	04-Dec-2020 16:27:30	Instrument ID:	19930		
Lims ID:	410-22411-A-7	Lab Sample ID:	410-22411-7		
Client ID:	HD-COD-SW-16-0/1-0				
Operator ID:	kas02648	ALS Bottle#:	19	Worklist Smp#:	19
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

54 Benzene, CAS: 71-43-2

Signal: 1

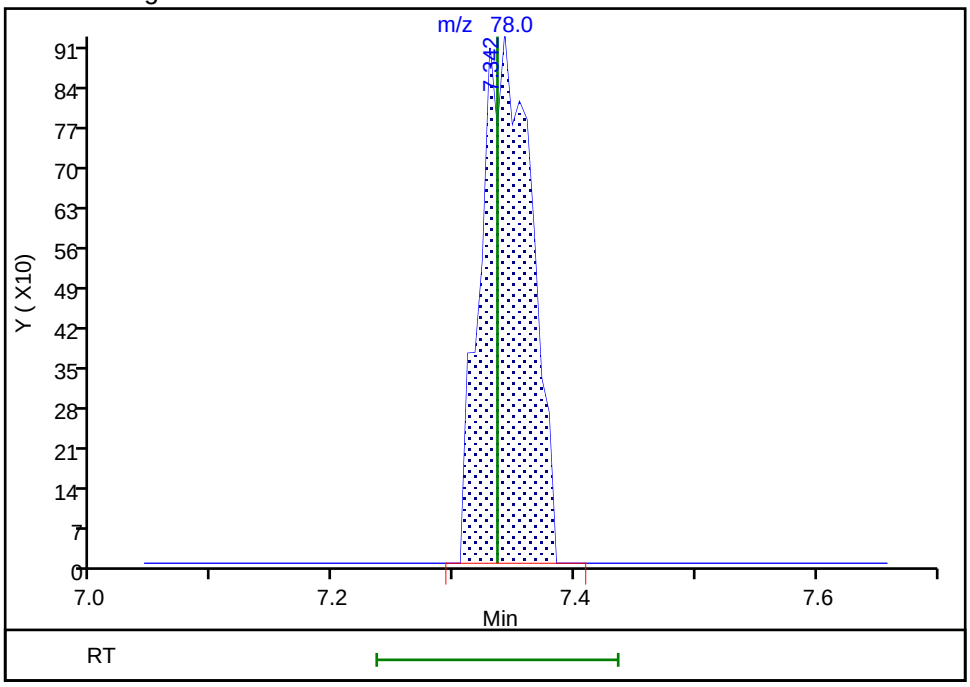
Processing Integration Results

RT: 7.33
Area: 1077
Amount: 0.004395
Amount Units: ug/l



Manual Integration Results

RT: 7.34
Area: 2709
Amount: 0.011054
Amount Units: ug/l



Reviewer: campbellme, 04-Dec-2020 22:46:05

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

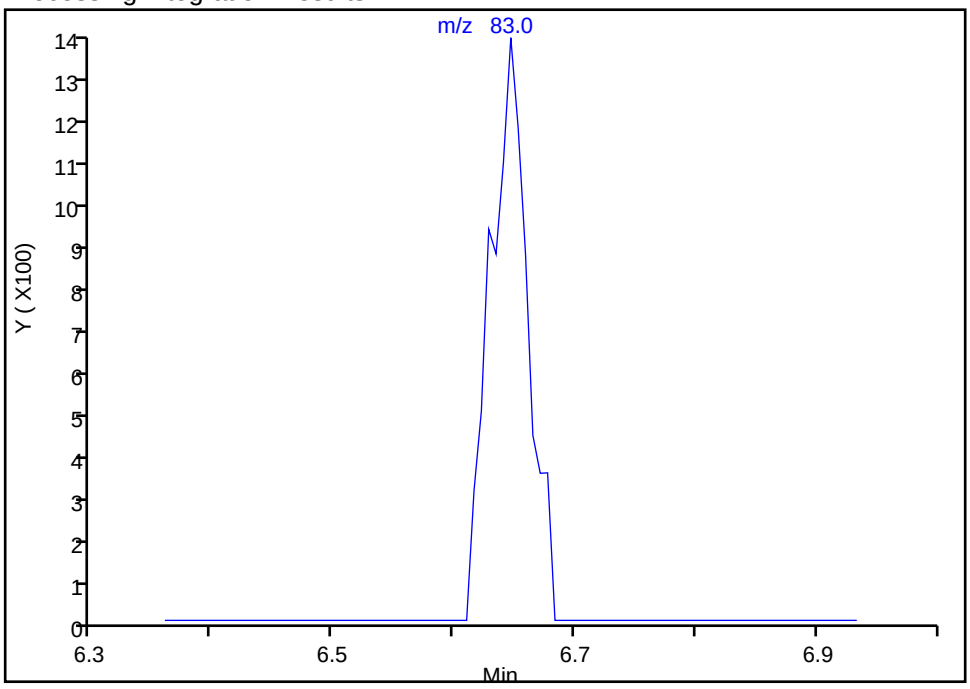
Data File:	\\chromfs\Lancaster\ChromData\19930\20201204-17111.b\ID04X19.D				
Injection Date:	04-Dec-2020 16:27:30	Instrument ID:	19930		
Lims ID:	410-22411-A-7	Lab Sample ID:	410-22411-7		
Client ID:	HD-COD-SW-16-0/1-0				
Operator ID:	kas02648	ALS Bottle#:	19	Worklist Smp#:	19
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

45 Chloroform, CAS: 67-66-3

Signal: 1

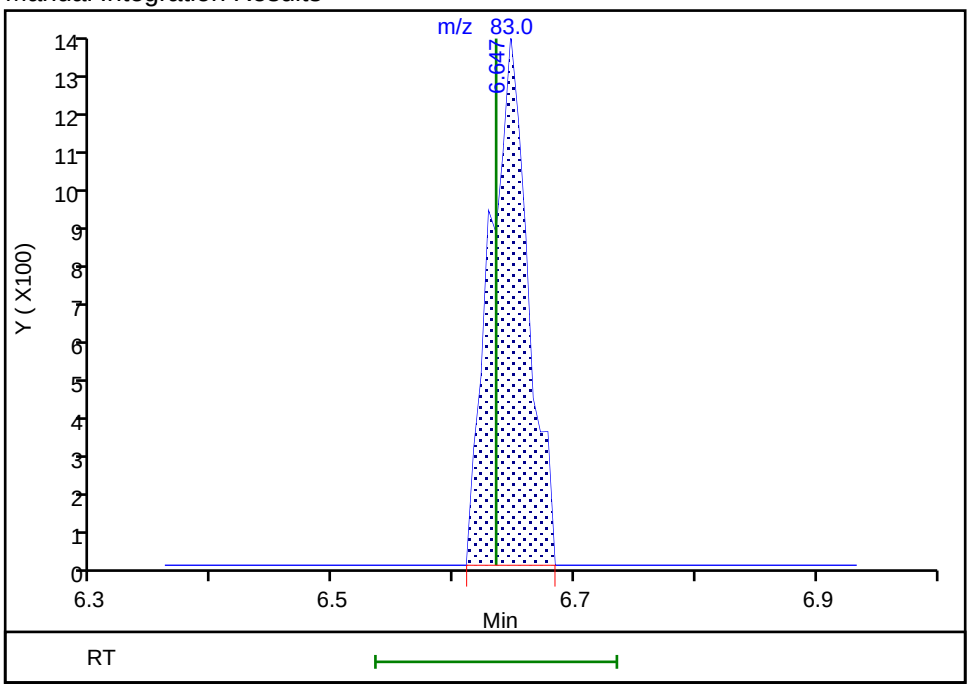
Not Detected
Expected RT: 6.63

Processing Integration Results



Manual Integration Results

RT: 6.65
Area: 2886
Amount: 0.028447
Amount Units: ug/l



Reviewer: campbellme, 04-Dec-2020 22:45:58
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

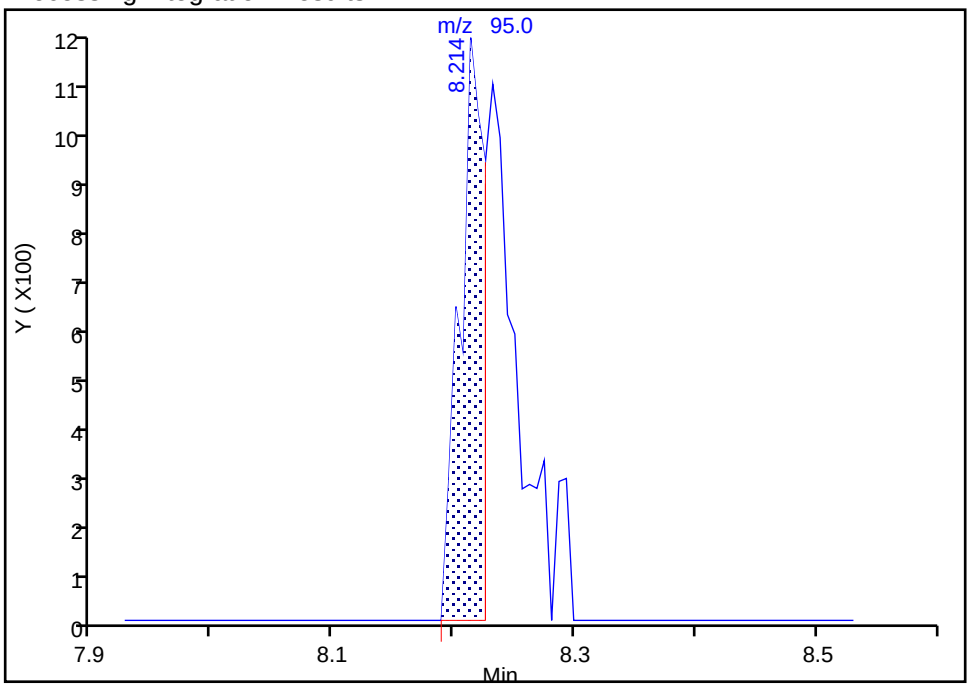
Data File:	\\chromfs\Lancaster\ChromData\19930\20201204-17111.b\ID04X19.D				
Injection Date:	04-Dec-2020 16:27:30	Instrument ID:	19930		
Lims ID:	410-22411-A-7	Lab Sample ID:	410-22411-7		
Client ID:	HD-COD-SW-16-0/1-0				
Operator ID:	kas02648	ALS Bottle#:	19	Worklist Smp#:	19
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

61 Trichloroethene, CAS: 79-01-6

Signal: 1

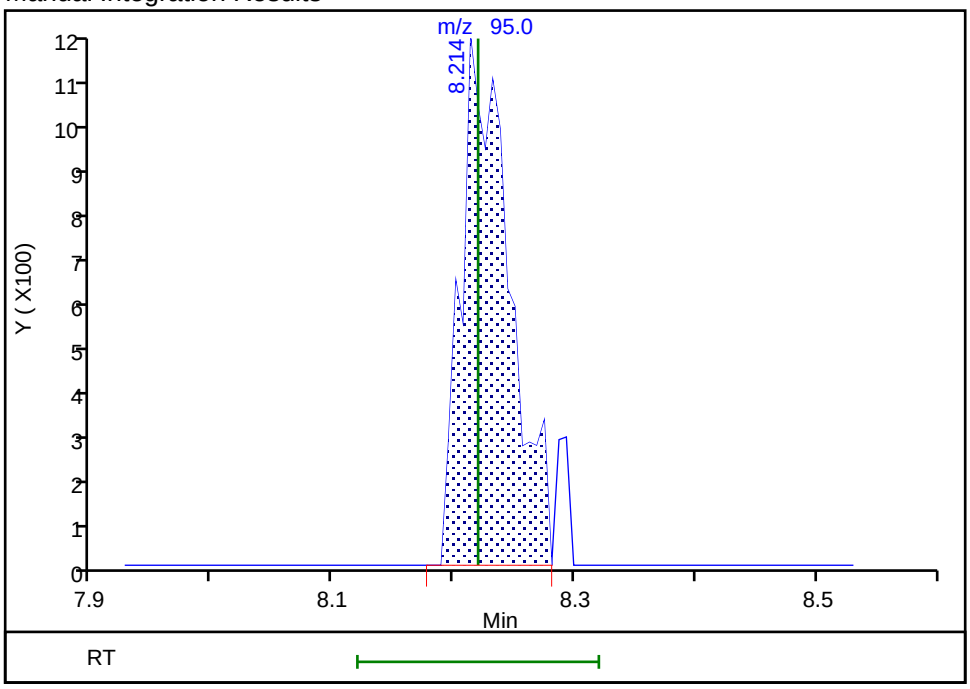
Processing Integration Results

RT: 8.21
Area: 1662
Amount: 0.025909
Amount Units: ug/l



Manual Integration Results

RT: 8.21
Area: 3256
Amount: 0.050759
Amount Units: ug/l



Reviewer: campbellme, 04-Dec-2020 22:46:11

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1

SDG No.:

Client Sample ID: HD-COD-SW-17-0/1-0 Lab Sample ID: 410-22411-8

Matrix: Water Lab File ID: ID04X20.D

Analysis Method: 8260D Date Collected: 11/30/2020 13:30

Sample wt/vol: 25(mL) Date Analyzed: 12/04/2020 16:49

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 73040 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.070
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.060
75-34-3	1,1-Dichloroethane	ND		0.50	0.070
75-35-4	1,1-Dichloroethene	ND		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.060
107-06-2	1,2-Dichloroethane	ND		0.50	0.050
78-87-5	1,2-Dichloropropane	ND		0.50	0.060
78-93-3	2-Butanone (MEK)	ND		5.0	0.60
591-78-6	2-Hexanone	ND		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70
67-64-1	Acetone	3.0	J ^c	5.0	0.90
71-43-2	Benzene	ND		0.50	0.050
74-97-5	Bromochloromethane	ND		0.50	0.050
75-27-4	Bromodichloromethane	ND		0.50	0.050
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.070
75-15-0	Carbon disulfide	ND		1.0	0.060
56-23-5	Carbon tetrachloride	ND		0.50	0.070
108-90-7	Chlorobenzene	ND		0.50	0.060
75-00-3	Chloroethane	ND		0.50	0.070
67-66-3	Chloroform	ND		0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	ND		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.050
124-48-1	Dibromochloromethane	ND		0.50	0.070
100-41-4	Ethylbenzene	ND		0.50	0.060
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.050
75-09-2	Methylene Chloride	ND		0.50	0.070
100-42-5	Styrene	ND		0.50	0.050
127-18-4	Tetrachloroethene	ND		0.50	0.060
108-88-3	Toluene	ND		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	ND		0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1

SDG No.:

Client Sample ID: HD-COD-SW-17-0/1-0 Lab Sample ID: 410-22411-8

Matrix: Water Lab File ID: ID04X20.D

Analysis Method: 8260D Date Collected: 11/30/2020 13:30

Sample wt/vol: 25(mL) Date Analyzed: 12/04/2020 16:49

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 73040 Units: ug/L

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

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		80-120
1868-53-7	Dibromofluoromethane (Surr)	101		80-120
2037-26-5	Toluene-d8 (Surr)	99		80-120
460-00-4	4-Bromofluorobenzene (Surr)	100		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20201204-17111.b\ID04X20.D
Lims ID: 410-22411-A-8
Client ID: HD-COD-SW-17-0/1-0
Sample Type: Client
Inject. Date: 04-Dec-2020 16:49:30 ALS Bottle#: 20 Worklist Smp#: 20
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0017111-020
Operator ID: kas02648 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20201204-17111.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 05-Dec-2020 10:06:04 Calib Date: 23-Nov-2020 18:05:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1645

First Level Reviewer: campbellme Date: 04-Dec-2020 22:47:03

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
4 Chloromethane	50		2.178				ND	7
5 Vinyl chloride	62		2.300				ND	
7 Bromomethane	94		2.623				ND	
8 Chloroethane	64		2.703				ND	
14 1,1-Dichloroethene	96		3.574				ND	
15 Acetone	43	3.623	3.605	0.018	100	28983	3.00	
19 Carbon disulfide	76		3.879				ND	7
23 Methylene Chloride	84		4.245				ND	7
* 24 t-Butyl alcohol-d10 (IS)	65	4.269	4.282	-0.013	0	177483	50.0	
27 Methyl tert-butyl ether	73		4.659				ND	
28 trans-1,2-Dichloroethene	96		4.672				ND	
31 1,1-Dichloroethane	63		5.330				ND	
36 2-Butanone (MEK)	43		6.123				ND	7
37 cis-1,2-Dichloroethene	96	6.171	6.159	0.012	73	2094	0.0316	
43 Chlorobromomethane	128		6.488				ND	
45 Chloroform	83	6.647	6.635	0.012	67	2683	0.0264	a
$ 46 Dibromofluoromethane (Surr)	113	6.860	6.854	0.006	94	481191	10.1	
47 1,1,1-Trichloroethane	97		6.866				ND	
50 Carbon tetrachloride	117		7.080				ND	
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.317	7.305	0.012	0	100024	10.4	
54 Benzene	78	7.342	7.336	0.006	41	2398	0.009762	7M
56 1,2-Dichloroethane	62		7.409				ND	
* 58 Fluorobenzene (IS)	96	7.750	7.738	0.012	99	1938661	10.0	
61 Trichloroethene	95	8.226	8.220	0.006	81	2592	0.0403	
63 1,2-Dichloropropane	63		8.549				ND	
68 Dichlorobromomethane	83		8.890				ND	
73 cis-1,3-Dichloropropene	75		9.433				ND	
74 4-Methyl-2-pentanone (MIBK)	43		9.604				ND	7
$ 75 Toluene-d8 (Surr)	98	9.744	9.744	0.000	93	1914507	9.85	
76 Toluene	92	9.823	9.817	0.006	98	8545	0.0527	
78 trans-1,3-Dichloropropene	75		10.067				ND	
80 1,1,2-Trichloroethane	97		10.274				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
81 Tetrachloroethene	166	10.366	10.366	0.000	89	2296	0.0292	
83 2-Hexanone	43		10.482				ND	7
85 Chlorodibromomethane	129		10.652				ND	
86 Ethylene Dibromide	107		10.762				ND	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.189	0.000	84	1487861	10.0	
90 Chlorobenzene	112		11.213				ND	
S 89 Xylenes, Total	106		11.245				ND	7
91 1,1,1,2-Tetrachloroethane	131		11.298				ND	
92 Ethylbenzene	91		11.298				ND	7
93 m-Xylene & p-Xylene	106		11.414				ND	7
94 o-Xylene	106		11.743				ND	7
95 Styrene	104		11.756				ND	7
96 Bromoform	173		11.914				ND	
$ 100 4-Bromofluorobenzene (Surr)	95	12.188	12.189	0.000	94	716051	9.95	
101 1,1,2,2-Tetrachloroethane	83		12.286				ND	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	94	866471	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MSV_31_826ISS_00003 Amount Added: 5.00 Units: uL Run Reagent

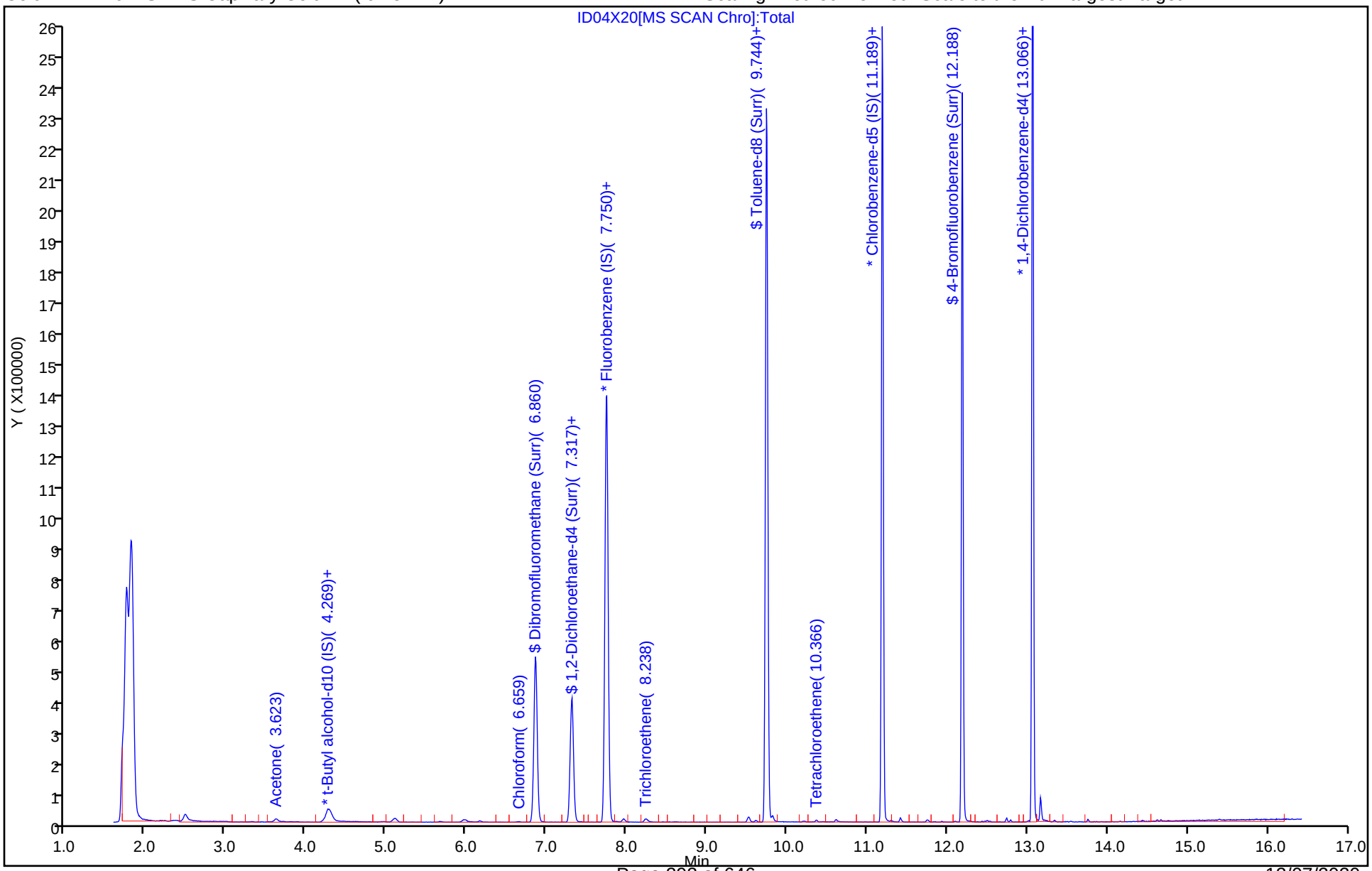
Report Date: 05-Dec-2020 10:06:31 Chrom Revision: 2.3 13-Nov-2020 01:23:02

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20201204-17111.b\ID04X20.D

Injection Date:	04-Dec-2020 16:49:30	Instrument ID:	19930	Operator ID:	kas02648
Lims ID:	410-22411-A-8	Lab Sample ID:	410-22411-8	Worklist Smp#:	20
Client ID:	HD-COD-SW-17-0/1-0				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19930\20201204-17111.b\ID04X20.D
Lims ID: 410-22411-A-8
Client ID: HD-COD-SW-17-0/1-0
Sample Type: Client
Inject. Date: 04-Dec-2020 16:49:30 ALS Bottle#: 20 Worklist Smp#: 20
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0017111-020
Operator ID: kas02648 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20201204-17111.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 05-Dec-2020 10:06:04 Calib Date: 23-Nov-2020 18:05:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1645

First Level Reviewer: campbellme Date: 04-Dec-2020 22:47:03

Compound	Amount Added	Amount Recovered	% Rec.
$ 46 Dibromofluoromethane (Surr)	10.0	10.1	100.52
$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	10.4	103.64
$ 75 Toluene-d8 (Surr)	10.0	9.85	98.53
$ 100 4-Bromofluorobenzene (Surr)	10.0	9.95	99.51

Report Date: 05-Dec-2020 10:06:31 Chrom Revision: 2.3 13-Nov-2020 01:23:02

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20201204-17111.b\ID04X20.D

Injection Date: 04-Dec-2020 16:49:30 Instrument ID: 19930

Lims ID: 410-22411-A-8 Lab Sample ID: 410-22411-8

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

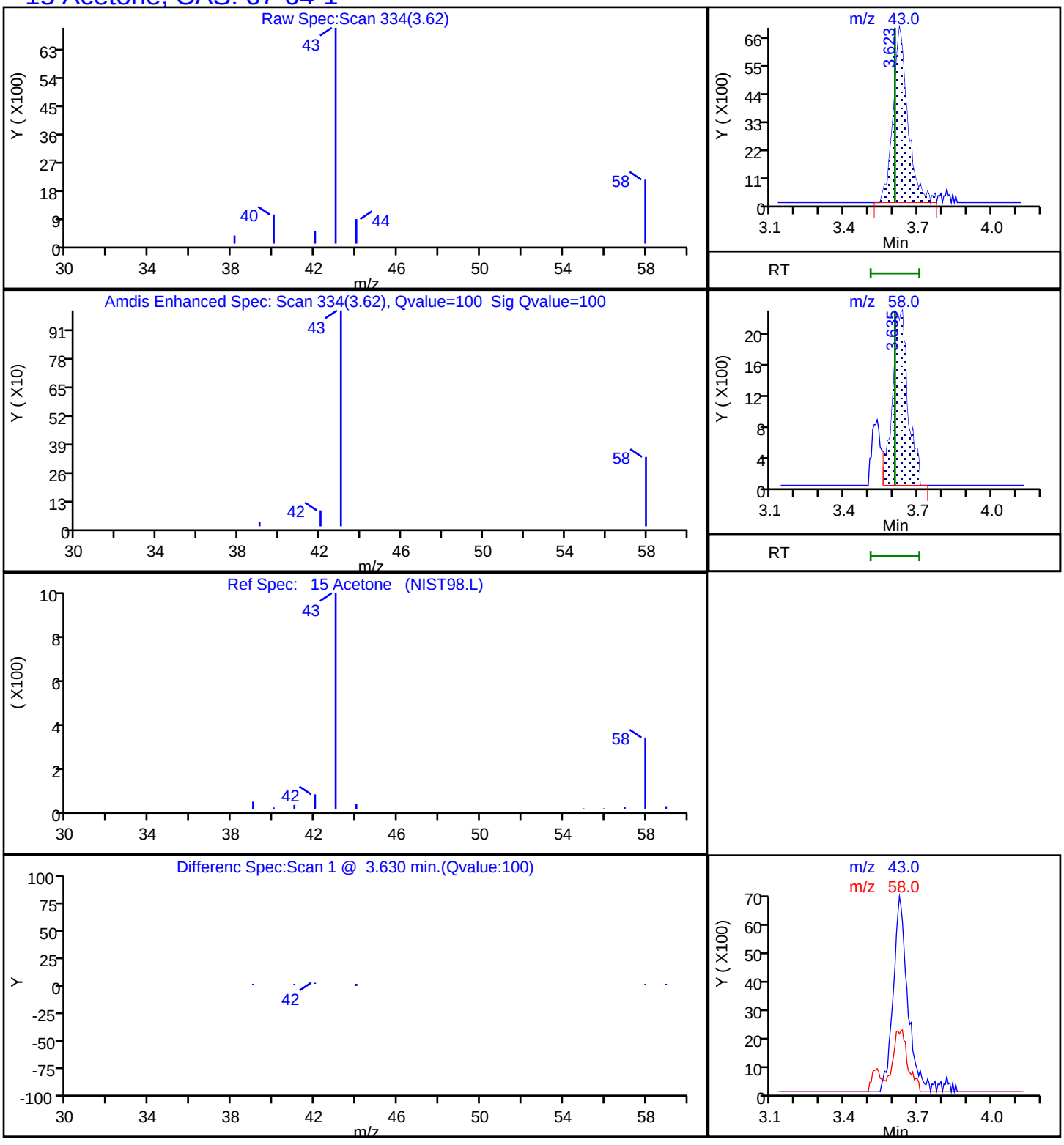
Operator ID: kas02648 ALS Bottle#: 20 Worklist Smp#: 20

Purge Vol: 25.000 mL Dil. Factor: 1.0000

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

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

15 Acetone, CAS: 67-64-1



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

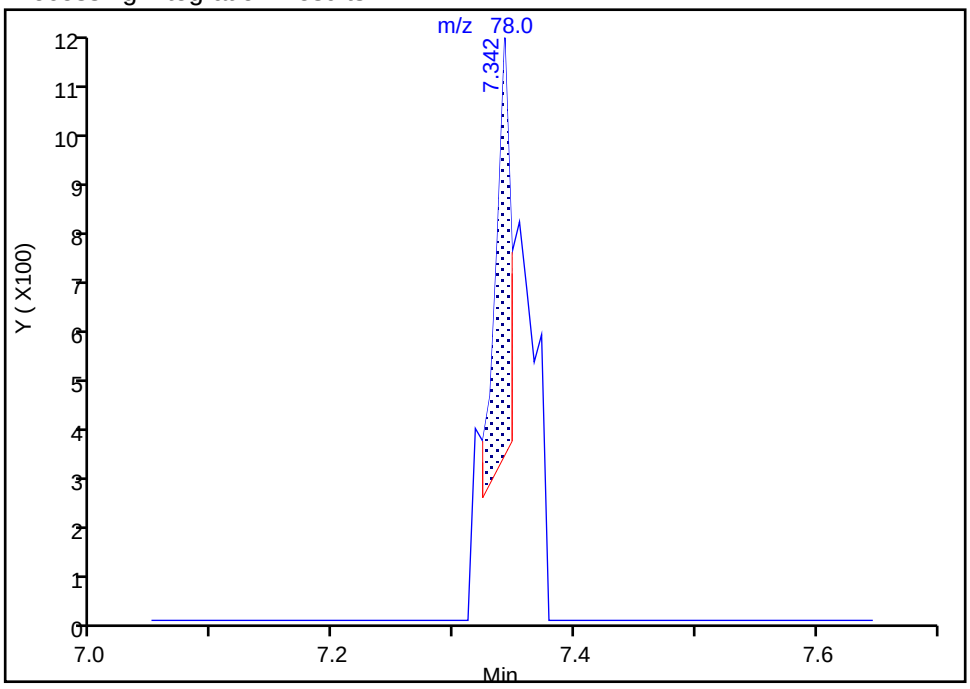
Data File:	\\chromfs\Lancaster\ChromData\19930\20201204-17111.b\ID04X20.D				
Injection Date:	04-Dec-2020 16:49:30	Instrument ID:	19930		
Lims ID:	410-22411-A-8	Lab Sample ID:	410-22411-8		
Client ID:	HD-COD-SW-17-0/1-0				
Operator ID:	kas02648	ALS Bottle#:	20	Worklist Smp#:	20
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

54 Benzene, CAS: 71-43-2

Signal: 1

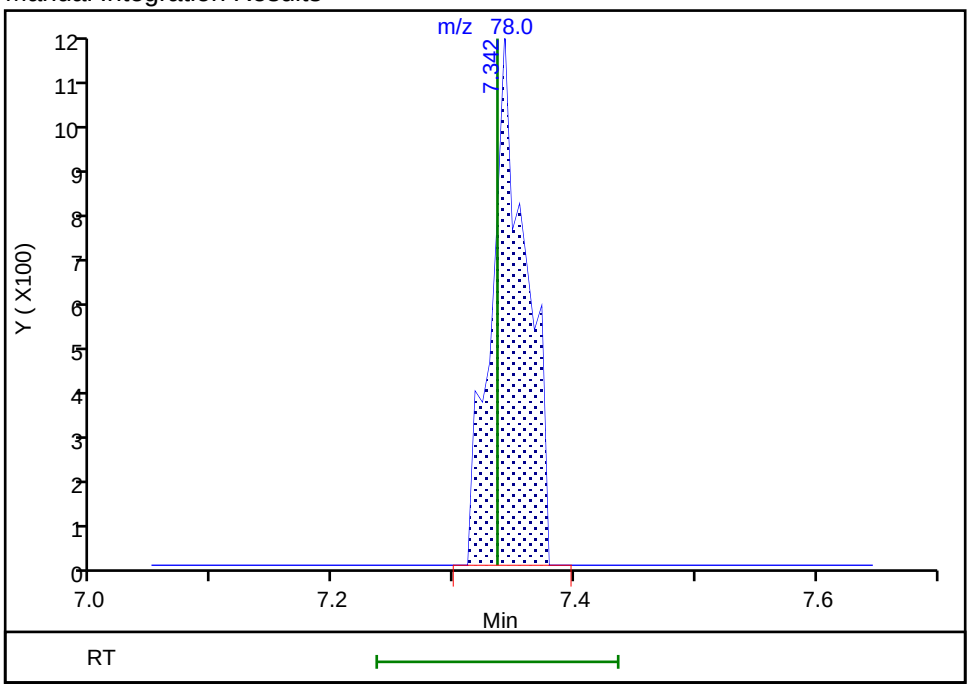
Processing Integration Results

RT: 7.34
Area: 736
Amount: 0.002996
Amount Units: ug/l



Manual Integration Results

RT: 7.34
Area: 2398
Amount: 0.009762
Amount Units: ug/l



Reviewer: campbellme, 04-Dec-2020 23:33:07
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

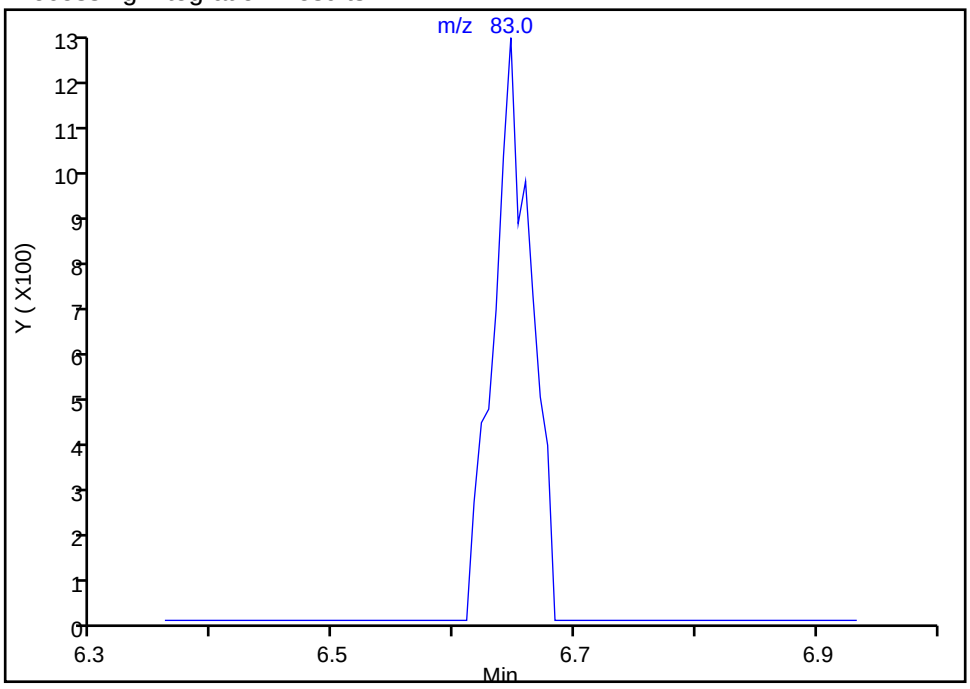
Data File:	\\chromfs\Lancaster\ChromData\19930\20201204-17111.b\ID04X20.D				
Injection Date:	04-Dec-2020 16:49:30	Instrument ID:	19930		
Lims ID:	410-22411-A-8	Lab Sample ID:	410-22411-8		
Client ID:	HD-COD-SW-17-0/1-0				
Operator ID:	kas02648	ALS Bottle#:	20	Worklist Smp#:	20
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

45 Chloroform, CAS: 67-66-3

Signal: 1

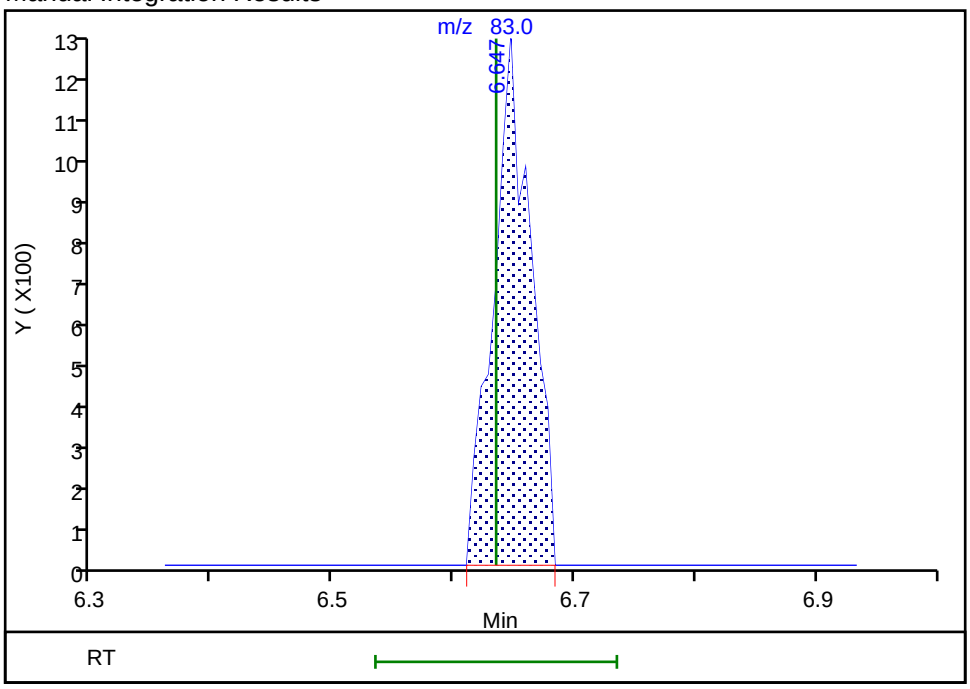
Not Detected
Expected RT: 6.63

Processing Integration Results



Manual Integration Results

RT: 6.65
Area: 2683
Amount: 0.026385
Amount Units: ug/l



Reviewer: campbellme, 04-Dec-2020 23:32:58
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1

SDG No.:

Client Sample ID: HD-COD-SW-26-0/1-0 Lab Sample ID: 410-22411-9

Matrix: Water Lab File ID: ID04X21.D

Analysis Method: 8260D Date Collected: 11/30/2020 09:30

Sample wt/vol: 25(mL) Date Analyzed: 12/04/2020 17:10

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 73040 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.070
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.060
75-34-3	1,1-Dichloroethane	ND		0.50	0.070
75-35-4	1,1-Dichloroethene	ND		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.060
107-06-2	1,2-Dichloroethane	ND		0.50	0.050
78-87-5	1,2-Dichloropropane	ND		0.50	0.060
78-93-3	2-Butanone (MEK)	ND		5.0	0.60
591-78-6	2-Hexanone	ND		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70
67-64-1	Acetone	2.3	J ^c	5.0	0.90
71-43-2	Benzene	ND		0.50	0.050
74-97-5	Bromochloromethane	ND		0.50	0.050
75-27-4	Bromodichloromethane	ND		0.50	0.050
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.070
75-15-0	Carbon disulfide	ND		1.0	0.060
56-23-5	Carbon tetrachloride	ND		0.50	0.070
108-90-7	Chlorobenzene	ND		0.50	0.060
75-00-3	Chloroethane	ND		0.50	0.070
67-66-3	Chloroform	0.093	J	0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	ND		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.050
124-48-1	Dibromochloromethane	ND		0.50	0.070
100-41-4	Ethylbenzene	ND		0.50	0.060
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.050
75-09-2	Methylene Chloride	ND		0.50	0.070
100-42-5	Styrene	ND		0.50	0.050
127-18-4	Tetrachloroethene	ND		0.50	0.060
108-88-3	Toluene	ND		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	0.063	J	0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1

SDG No.:

Client Sample ID: HD-COD-SW-26-0/1-0 Lab Sample ID: 410-22411-9

Matrix: Water Lab File ID: ID04X21.D

Analysis Method: 8260D Date Collected: 11/30/2020 09:30

Sample wt/vol: 25(mL) Date Analyzed: 12/04/2020 17:10

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 73040 Units: ug/L

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

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		80-120
1868-53-7	Dibromofluoromethane (Surr)	100		80-120
2037-26-5	Toluene-d8 (Surr)	98		80-120
460-00-4	4-Bromofluorobenzene (Surr)	99		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20201204-17111.b\ID04X21.D
Lims ID: 410-22411-A-9
Client ID: HD-COD-SW-26-0/1-0
Sample Type: Client
Inject. Date: 04-Dec-2020 17:10:30 ALS Bottle#: 21 Worklist Smp#: 21
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0017111-021
Operator ID: kas02648 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20201204-17111.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 05-Dec-2020 10:06:04 Calib Date: 23-Nov-2020 18:05:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1645

First Level Reviewer: campbellme Date: 04-Dec-2020 23:39:11

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
4 Chloromethane	50		2.178				ND	
5 Vinyl chloride	62		2.300				ND	
7 Bromomethane	94		2.623				ND	
8 Chloroethane	64		2.703				ND	
14 1,1-Dichloroethene	96		3.574				ND	
15 Acetone	43	3.605	3.605	0.000	99	21051	2.29	
19 Carbon disulfide	76		3.879				ND	7
23 Methylene Chloride	84		4.245				ND	7
* 24 t-Butyl alcohol-d10 (IS)	65	4.263	4.282	-0.019	0	168525	50.0	
27 Methyl tert-butyl ether	73		4.659				ND	
28 trans-1,2-Dichloroethene	96		4.672				ND	
31 1,1-Dichloroethane	63		5.330				ND	
36 2-Butanone (MEK)	43		6.123				ND	7
37 cis-1,2-Dichloroethene	96	6.165	6.159	0.006	75	2896	0.0459	
43 Chlorobromomethane	128		6.488				ND	
45 Chloroform	83	6.641	6.635	0.006	91	8965	0.0927	
$ 46 Dibromofluoromethane (Surr)	113	6.854	6.854	0.000	94	454985	10.0	
47 1,1,1-Trichloroethane	97		6.866				ND	
50 Carbon tetrachloride	117		7.080				ND	
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.305	7.305	0.000	0	93729	10.2	
54 Benzene	78		7.336				ND	
56 1,2-Dichloroethane	62		7.409				ND	
* 58 Fluorobenzene (IS)	96	7.744	7.738	0.006	99	1842820	10.0	
61 Trichloroethene	95	8.232	8.220	0.012	94	3820	0.0625	
63 1,2-Dichloropropane	63		8.549				ND	
68 Dichlorobromomethane	83	8.896	8.890	0.006	68	1376	0.0200	7M
73 cis-1,3-Dichloropropene	75		9.433				ND	
74 4-Methyl-2-pentanone (MIBK)	43		9.604				ND	7
$ 75 Toluene-d8 (Surr)	98	9.744	9.744	0.000	93	1812476	9.79	
76 Toluene	92	9.817	9.817	0.000	98	7209	0.0466	
78 trans-1,3-Dichloropropene	75		10.067				ND	
80 1,1,2-Trichloroethane	97		10.274				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
81 Tetrachloroethene	166		10.366				ND	7
83 2-Hexanone	43		10.482				ND	7
85 Chlorodibromomethane	129		10.652				ND	
86 Ethylene Dibromide	107		10.762				ND	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.189	0.000	84	1418224	10.0	
90 Chlorobenzene	112		11.213				ND	
S 89 Xylenes, Total	106		11.245				ND	7
91 1,1,1,2-Tetrachloroethane	131		11.298				ND	
92 Ethylbenzene	91		11.298				ND	7
93 m-Xylene & p-Xylene	106		11.414				ND	7
94 o-Xylene	106		11.743				ND	7
95 Styrene	104		11.756				ND	
96 Bromoform	173		11.914				ND	
$ 100 4-Bromofluorobenzene (Surr)	95	12.188	12.189	0.000	95	682421	9.95	
101 1,1,2,2-Tetrachloroethane	83		12.286				ND	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	94	822891	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

Reagents:

MSV_31_826ISS_00003 Amount Added: 5.00 Units: uL Run Reagent

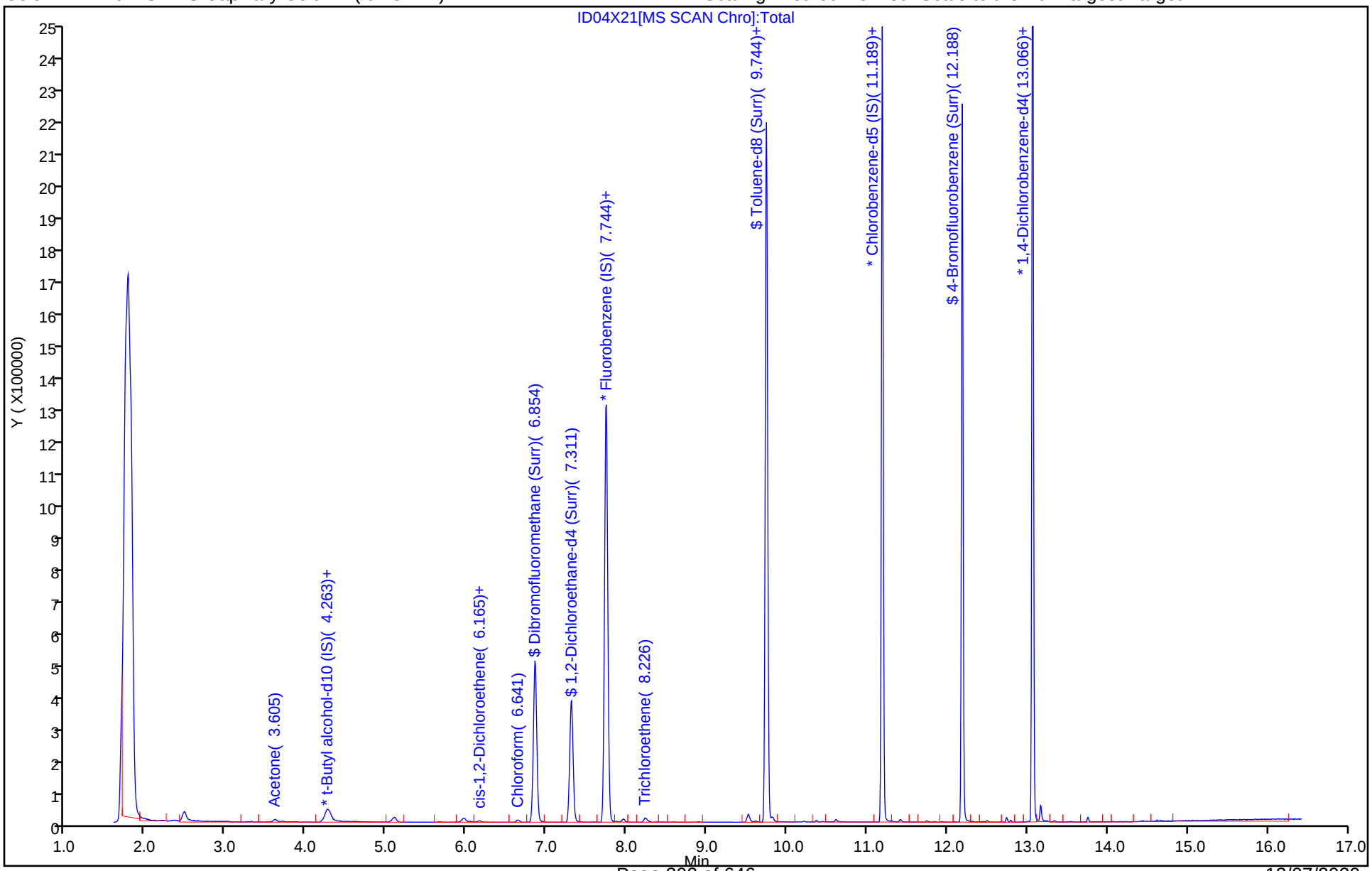
Report Date: 05-Dec-2020 10:06:33 Chrom Revision: 2.3 13-Nov-2020 01:23:02

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20201204-17111.b\ID04X21.D

Injection Date:	04-Dec-2020 17:10:30	Instrument ID:	19930	Operator ID:	kas02648
Lims ID:	410-22411-A-9	Lab Sample ID:	410-22411-9	Worklist Smp#:	21
Client ID:	HD-COD-SW-26-0/1-0				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\19930\20201204-17111.b\ID04X21.D				
Lims ID:	410-22411-A-9				
Client ID:	HD-COD-SW-26-0/1-0				
Sample Type:	Client				
Inject. Date:	04-Dec-2020 17:10:30	ALS Bottle#:	21	Worklist Smp#:	21
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Sample Info:	410-0017111-021				
Operator ID:	kas02648	Instrument ID:	19930		
Method:	\\chromfs\Lancaster\ChromData\19930\20201204-17111.b\8260 25ml HP31.m				
Limit Group:	MSV - 8260C_D				
Last Update:	05-Dec-2020 10:06:04	Calib Date:	23-Nov-2020 18:05:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I17.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1645				

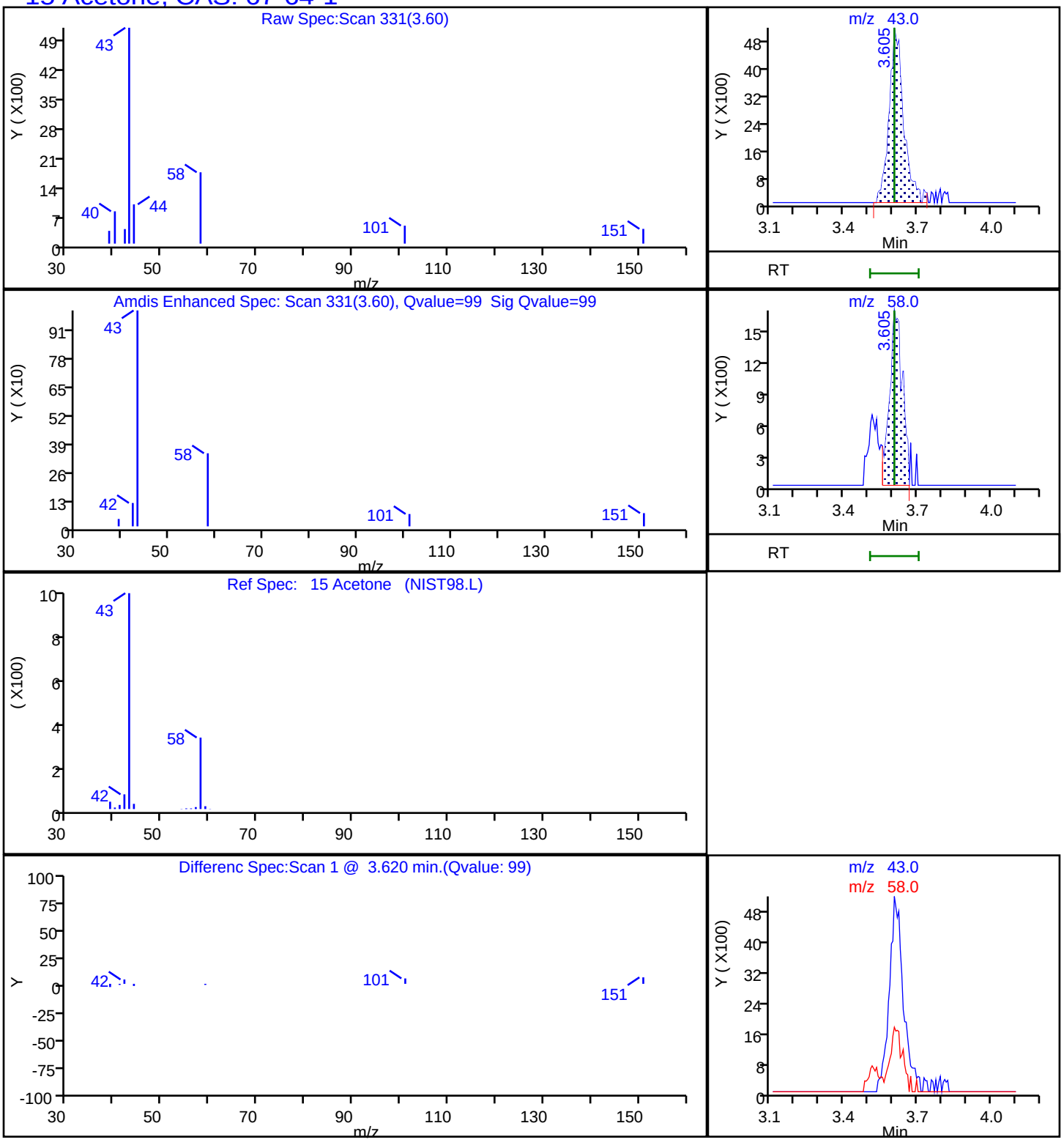
First Level Reviewer: campbellme Date: 04-Dec-2020 23:39:11

Compound	Amount Added	Amount Recovered	% Rec.
$ 46 Dibromofluoromethane (Surr)	10.0	10.0	99.99
$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	10.2	102.17
$ 75 Toluene-d8 (Surr)	10.0	9.79	97.86
$ 100 4-Bromofluorobenzene (Surr)	10.0	9.95	99.49

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20201204-17111.b\ID04X21.D				
Injection Date:	04-Dec-2020 17:10:30	Instrument ID:	19930		
Lims ID:	410-22411-A-9	Lab Sample ID:	410-22411-9		
Client ID:	HD-COD-SW-26-0/1-0				
Operator ID:	kas02648	ALS Bottle#:	21	Worklist Smp#:	21
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

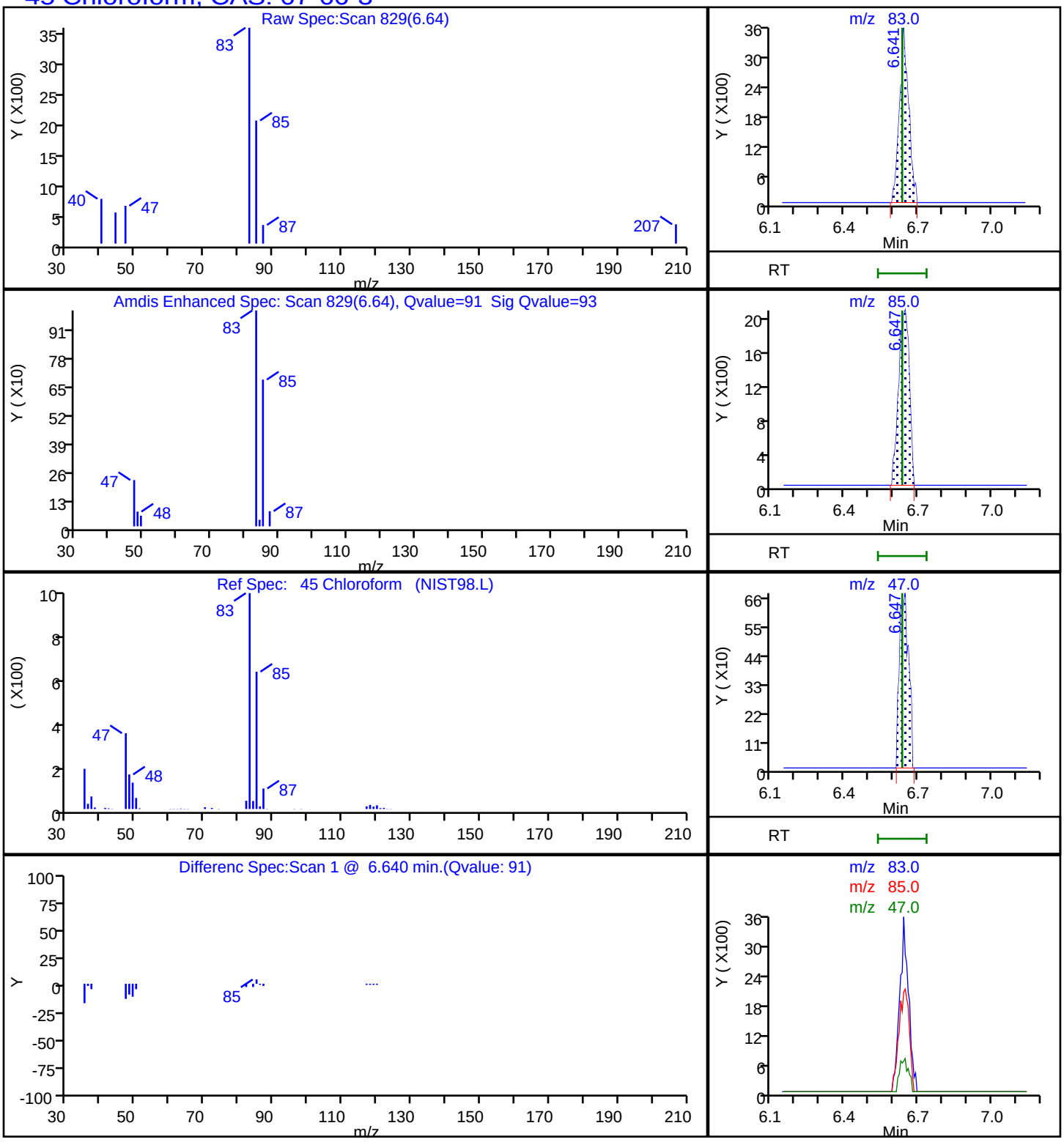
15 Acetone, CAS: 67-64-1



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20201204-17111.b\ID04X21.D				
Injection Date:	04-Dec-2020 17:10:30	Instrument ID:	19930		
Lims ID:	410-22411-A-9	Lab Sample ID:	410-22411-9		
Client ID:	HD-COD-SW-26-0/1-0				
Operator ID:	kas02648	ALS Bottle#:	21	Worklist Smp#:	21
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

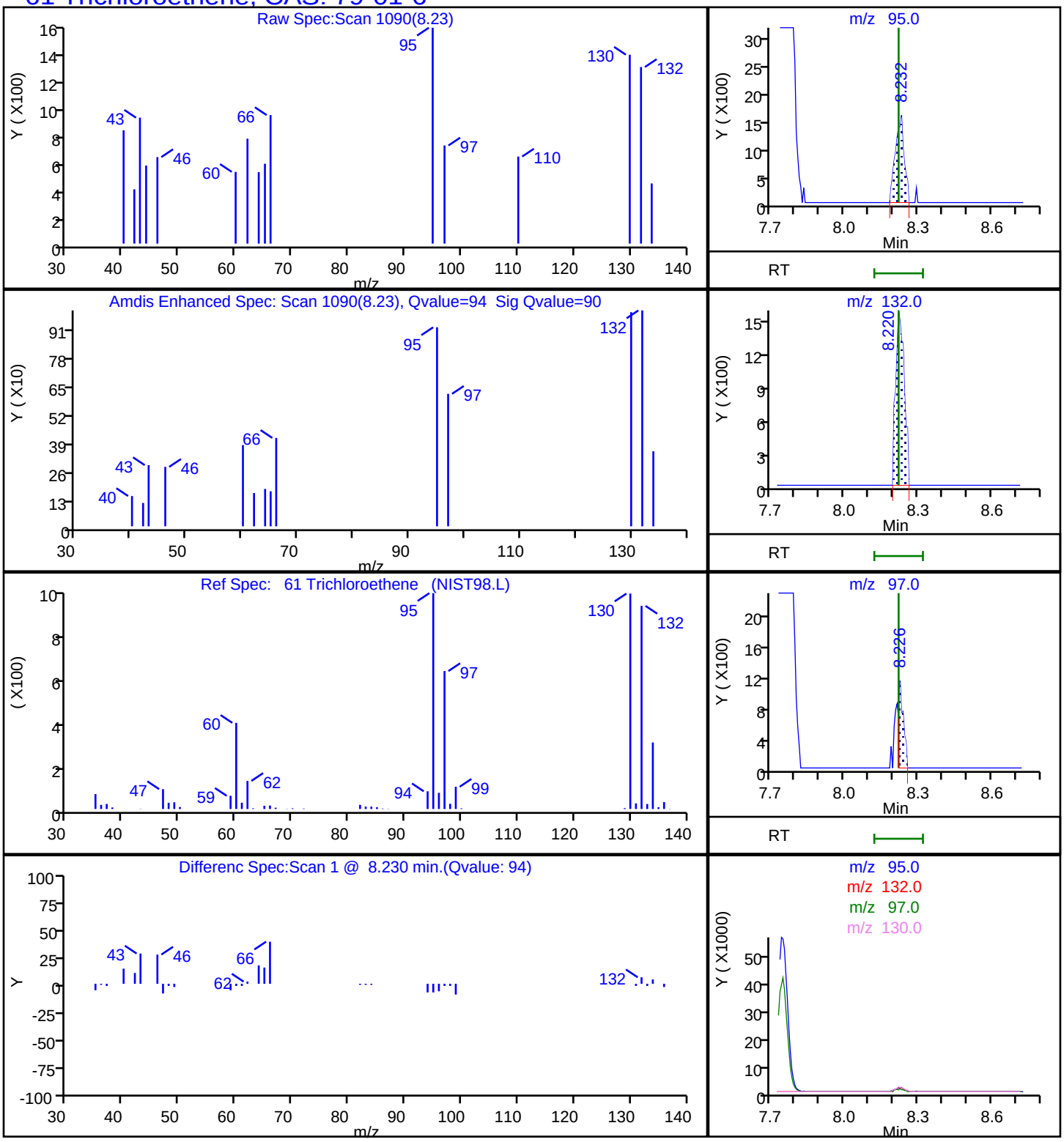
45 Chloroform, CAS: 67-66-3



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20201204-17111.b\ID04X21.D				
Injection Date:	04-Dec-2020 17:10:30	Instrument ID:	19930		
Lims ID:	410-22411-A-9	Lab Sample ID:	410-22411-9		
Client ID:	HD-COD-SW-26-0/1-0				
Operator ID:	kas02648	ALS Bottle#:	21	Worklist Smp#:	21
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

61 Trichloroethene, CAS: 79-01-6



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

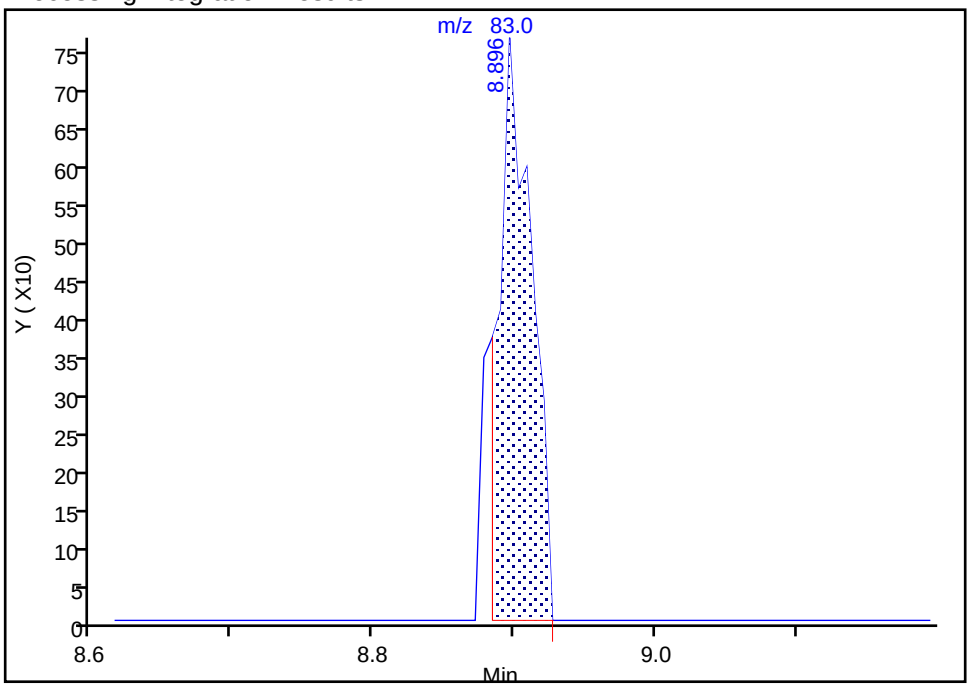
Data File:	\\chromfs\Lancaster\ChromData\19930\20201204-17111.b\ID04X21.D				
Injection Date:	04-Dec-2020 17:10:30	Instrument ID:	19930		
Lims ID:	410-22411-A-9	Lab Sample ID:	410-22411-9		
Client ID:	HD-COD-SW-26-0/1-0				
Operator ID:	kas02648	ALS Bottle#:	21	Worklist Smp#:	21
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

68 Dichlorobromomethane, CAS: 75-27-4

Signal: 1

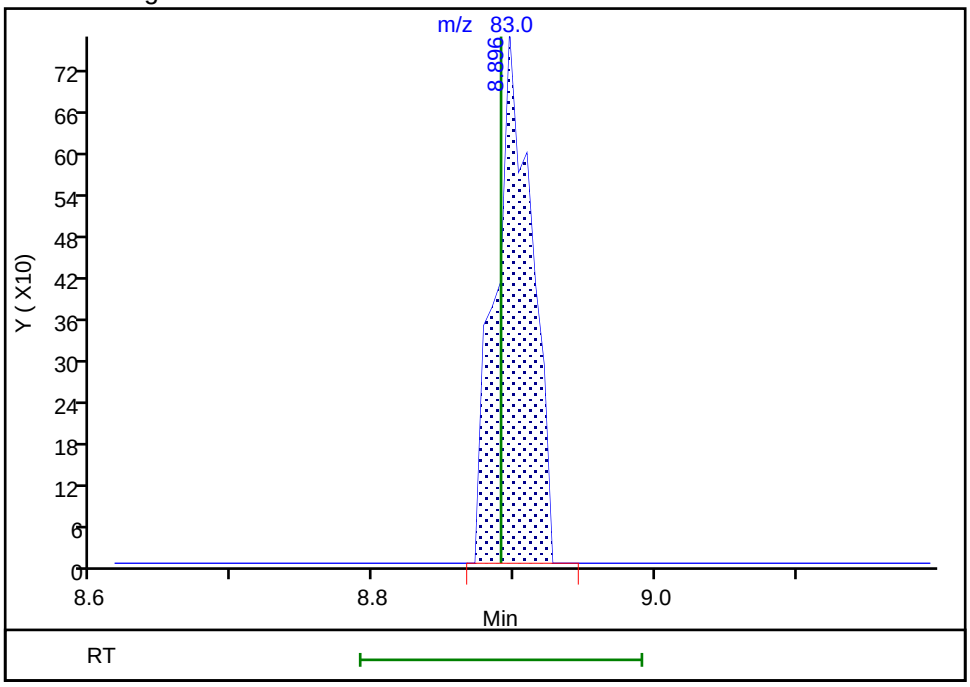
Processing Integration Results

RT: 8.90
Area: 1249
Amount: 0.018160
Amount Units: ug/l



Manual Integration Results

RT: 8.90
Area: 1376
Amount: 0.020006
Amount Units: ug/l



Reviewer: campbellme, 04-Dec-2020 23:39:02
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1

SDG No.:

Client Sample ID: HD-COD-SW-27-0/1-0 Lab Sample ID: 410-22411-10

Matrix: Water Lab File ID: ID04X22.D

Analysis Method: 8260D Date Collected: 11/30/2020 10:15

Sample wt/vol: 25(mL) Date Analyzed: 12/04/2020 17:31

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 73040 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.070
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.060
75-34-3	1,1-Dichloroethane	ND		0.50	0.070
75-35-4	1,1-Dichloroethene	ND		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.060
107-06-2	1,2-Dichloroethane	ND		0.50	0.050
78-87-5	1,2-Dichloropropane	ND		0.50	0.060
78-93-3	2-Butanone (MEK)	ND		5.0	0.60
591-78-6	2-Hexanone	ND		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70
67-64-1	Acetone	4.2	J ^c	5.0	0.90
71-43-2	Benzene	ND		0.50	0.050
74-97-5	Bromochloromethane	ND		0.50	0.050
75-27-4	Bromodichloromethane	ND		0.50	0.050
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.070
75-15-0	Carbon disulfide	0.067	J	1.0	0.060
56-23-5	Carbon tetrachloride	ND		0.50	0.070
108-90-7	Chlorobenzene	ND		0.50	0.060
75-00-3	Chloroethane	ND		0.50	0.070
67-66-3	Chloroform	ND		0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	0.050	J	0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.050
124-48-1	Dibromochloromethane	ND		0.50	0.070
100-41-4	Ethylbenzene	ND		0.50	0.060
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.050
75-09-2	Methylene Chloride	ND		0.50	0.070
100-42-5	Styrene	ND		0.50	0.050
127-18-4	Tetrachloroethene	ND		0.50	0.060
108-88-3	Toluene	ND		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	0.072	J	0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1

SDG No.:

Client Sample ID: HD-COD-SW-27-0/1-0 Lab Sample ID: 410-22411-10

Matrix: Water Lab File ID: ID04X22.D

Analysis Method: 8260D Date Collected: 11/30/2020 10:15

Sample wt/vol: 25(mL) Date Analyzed: 12/04/2020 17:31

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 73040 Units: ug/L

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

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

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20201204-17111.b\ID04X22.D
Lims ID: 410-22411-A-10
Client ID: HD-COD-SW-27-0/1-0
Sample Type: Client
Inject. Date: 04-Dec-2020 17:31:30 ALS Bottle#: 22 Worklist Smp#: 22
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0017111-022
Operator ID: kas02648 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20201204-17111.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 05-Dec-2020 10:06:04 Calib Date: 23-Nov-2020 18:05:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1645

First Level Reviewer: campbellme Date: 04-Dec-2020 23:39:40

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
4 Chloromethane	50	2.178	2.178	0.000	85	4185	0.0542	
5 Vinyl chloride	62		2.300				ND	
7 Bromomethane	94		2.623				ND	
8 Chloroethane	64		2.703				ND	
14 1,1-Dichloroethene	96		3.574				ND	
15 Acetone	43	3.617	3.605	0.012	99	37909	4.22	
19 Carbon disulfide	76	3.891	3.879	0.012	97	9680	0.0672	
23 Methylene Chloride	84		4.245				ND	7
* 24 t-Butyl alcohol-d10 (IS)	65	4.275	4.282	-0.007	0	164597	50.0	
27 Methyl tert-butyl ether	73		4.659				ND	
28 trans-1,2-Dichloroethene	96		4.672				ND	
31 1,1-Dichloroethane	63		5.330				ND	
36 2-Butanone (MEK)	43	6.147	6.123	0.024	66	6656	0.4434	
37 cis-1,2-Dichloroethene	96	6.159	6.159	0.000	71	3190	0.0500	a
43 Chlorobromomethane	128		6.488				ND	
45 Chloroform	83	6.647	6.635	0.012	89	4392	0.0449	
$ 46 Dibromofluoromethane (Surr)	113	6.860	6.854	0.006	94	464319	10.1	
47 1,1,1-Trichloroethane	97		6.866				ND	
50 Carbon tetrachloride	117		7.080				ND	
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.311	7.305	0.006	0	94024	10.1	
54 Benzene	78	7.336	7.336	0.000	41	3474	0.0147	7M
56 1,2-Dichloroethane	62		7.409				ND	
* 58 Fluorobenzene (IS)	96	7.744	7.738	0.006	99	1863973	10.0	
61 Trichloroethene	95	8.226	8.220	0.006	91	4455	0.0721	
63 1,2-Dichloropropane	63		8.549				ND	
68 Dichlorobromomethane	83		8.890				ND	7
73 cis-1,3-Dichloropropene	75		9.433				ND	
74 4-Methyl-2-pentanone (MIBK)	43		9.604				ND	7
$ 75 Toluene-d8 (Surr)	98	9.744	9.744	0.000	93	1828613	9.78	
76 Toluene	92	9.823	9.817	0.006	98	8983	0.0576	
78 trans-1,3-Dichloropropene	75		10.067				ND	
80 1,1,2-Trichloroethane	97		10.274				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
81 Tetrachloroethene	166		10.366				ND	7
83 2-Hexanone	43		10.482				ND	7
85 Chlorodibromomethane	129		10.652				ND	
86 Ethylene Dibromide	107		10.762				ND	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.189	0.000	84	1431125	10.0	
90 Chlorobenzene	112		11.213				ND	
S 89 Xylenes, Total	106		11.245				ND	7
91 1,1,1,2-Tetrachloroethane	131		11.298				ND	
92 Ethylbenzene	91		11.298				ND	7
93 m-Xylene & p-Xylene	106		11.414				ND	7
94 o-Xylene	106		11.743				ND	7
95 Styrene	104		11.756				ND	
96 Bromoform	173		11.914				ND	
$ 100 4-Bromofluorobenzene (Surr)	95	12.188	12.189	0.000	94	688671	9.95	
101 1,1,2,2-Tetrachloroethane	83		12.286				ND	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	94	834890	10.0	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection
Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

MSV_31_826ISS_00003 Amount Added: 5.00 Units: uL Run Reagent

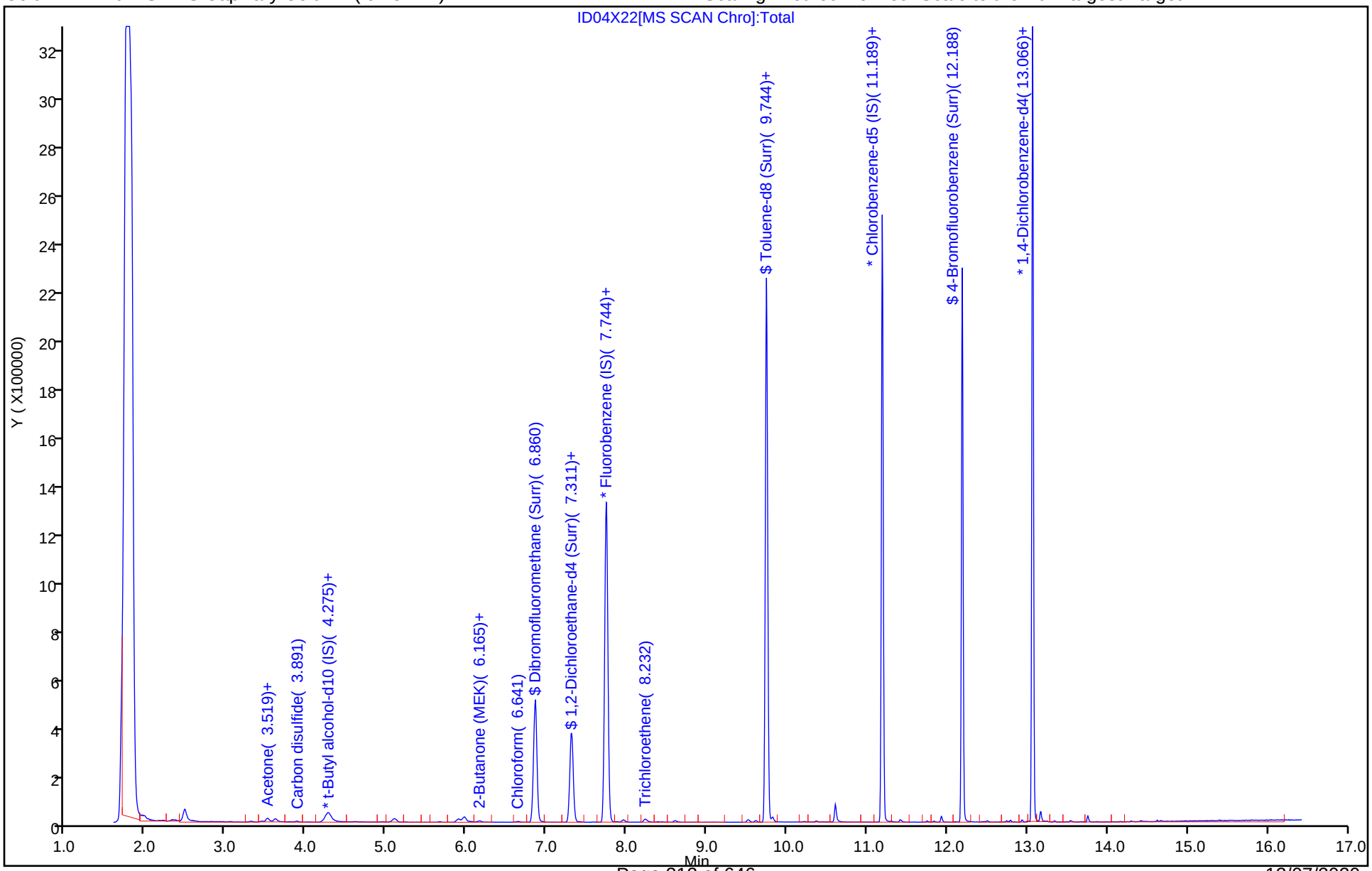
Report Date: 05-Dec-2020 10:06:34 Chrom Revision: 2.3 13-Nov-2020 01:23:02

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20201204-17111.b\ID04X22.D

Injection Date:	04-Dec-2020 17:31:30	Instrument ID:	19930	Operator ID:	kas02648
Lims ID:	410-22411-A-10	Lab Sample ID:	410-22411-10	Worklist Smp#:	22
Client ID:	HD-COD-SW-27-0/1-0				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\19930\20201204-17111.b\ID04X22.D				
Lims ID:	410-22411-A-10				
Client ID:	HD-COD-SW-27-0/1-0				
Sample Type:	Client				
Inject. Date:	04-Dec-2020 17:31:30	ALS Bottle#:	22	Worklist Smp#:	22
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Sample Info:	410-0017111-022				
Operator ID:	kas02648	Instrument ID:	19930		
Method:	\\chromfs\Lancaster\ChromData\19930\20201204-17111.b\8260 25ml HP31.m				
Limit Group:	MSV - 8260C_D				
Last Update:	05-Dec-2020 10:06:04	Calib Date:	23-Nov-2020 18:05:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I17.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1645				

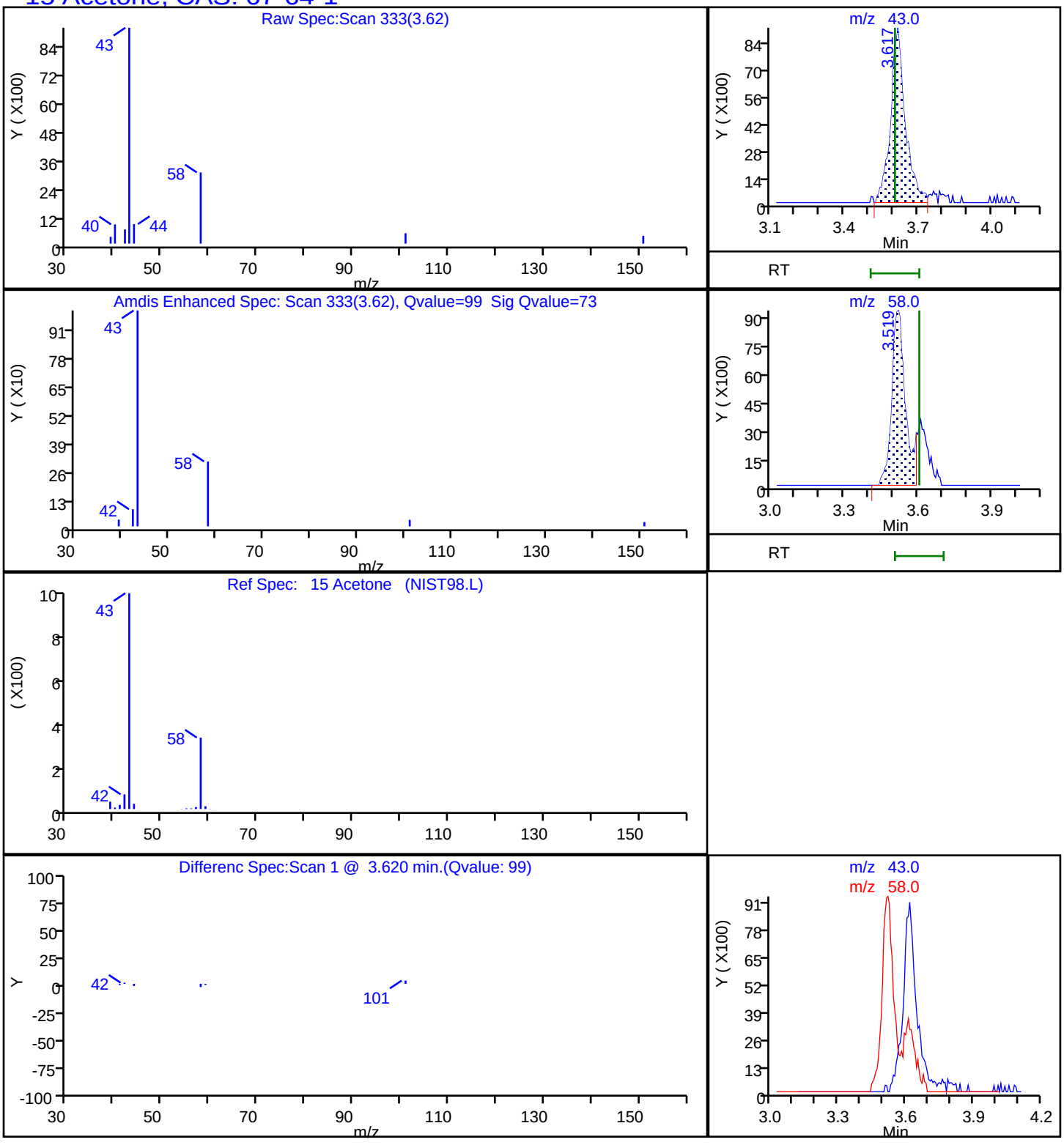
First Level Reviewer: campbellme Date: 04-Dec-2020 23:39:40

Compound	Amount Added	Amount Recovered	% Rec.
$ 46 Dibromofluoromethane (Surr)	10.0	10.1	100.89
$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	10.1	101.33
$ 75 Toluene-d8 (Surr)	10.0	9.78	97.84
$ 100 4-Bromofluorobenzene (Surr)	10.0	9.95	99.50

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20201204-17111.b\ID04X22.D				
Injection Date:	04-Dec-2020 17:31:30	Instrument ID:	19930		
Lims ID:	410-22411-A-10	Lab Sample ID:	410-22411-10		
Client ID:	HD-COD-SW-27-0/1-0				
Operator ID:	kas02648	ALS Bottle#:	22	Worklist Smp#:	22
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

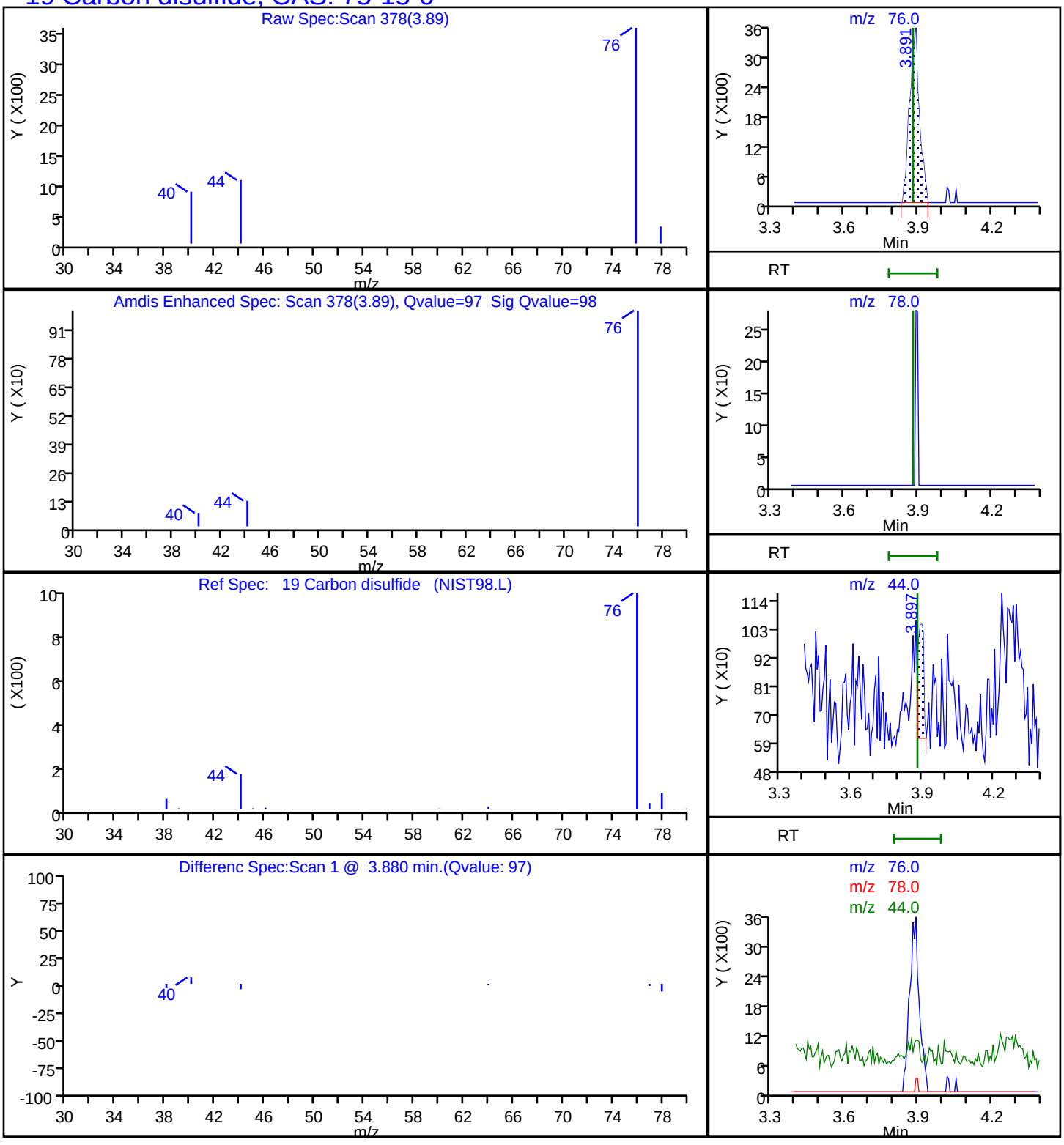
15 Acetone, CAS: 67-64-1



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20201204-17111.b\ID04X22.D
Injection Date: 04-Dec-2020 17:31:30 Instrument ID: 19930
Lims ID: 410-22411-A-10 Lab Sample ID: 410-22411-10
Client ID: HD-COD-SW-27-0/1-0
Operator ID: kas02648 ALS Bottle#: 22 Worklist Smp#: 22
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25 mm) Detector MS Quad

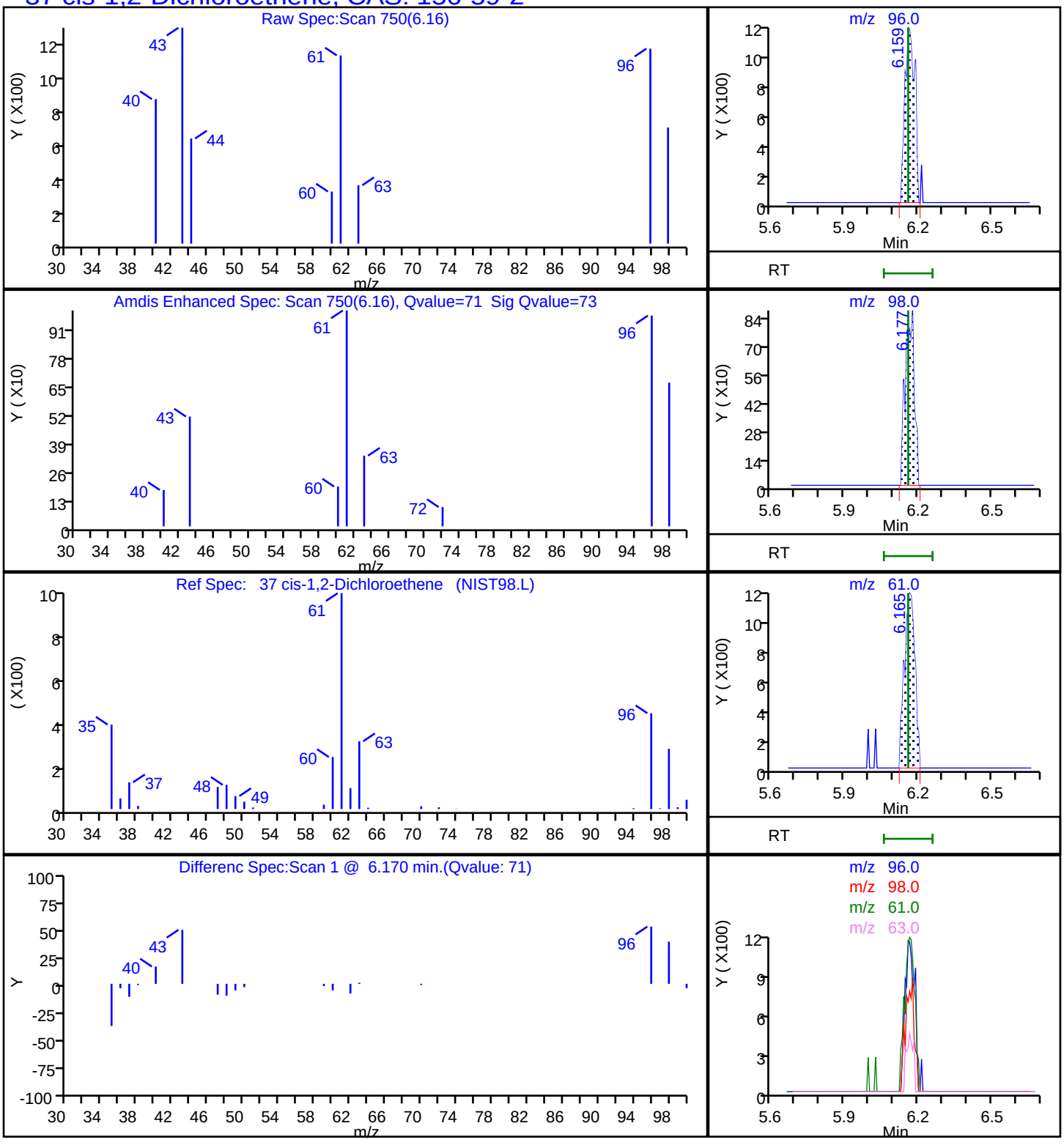
19 Carbon disulfide, CAS: 75-15-0



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20201204-17111.b\ID04X22.D				
Injection Date:	04-Dec-2020 17:31:30	Instrument ID:	19930		
Lims ID:	410-22411-A-10	Lab Sample ID:	410-22411-10		
Client ID:	HD-COD-SW-27-0/1-0				
Operator ID:	kas02648	ALS Bottle#:	22	Worklist Smp#:	22
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

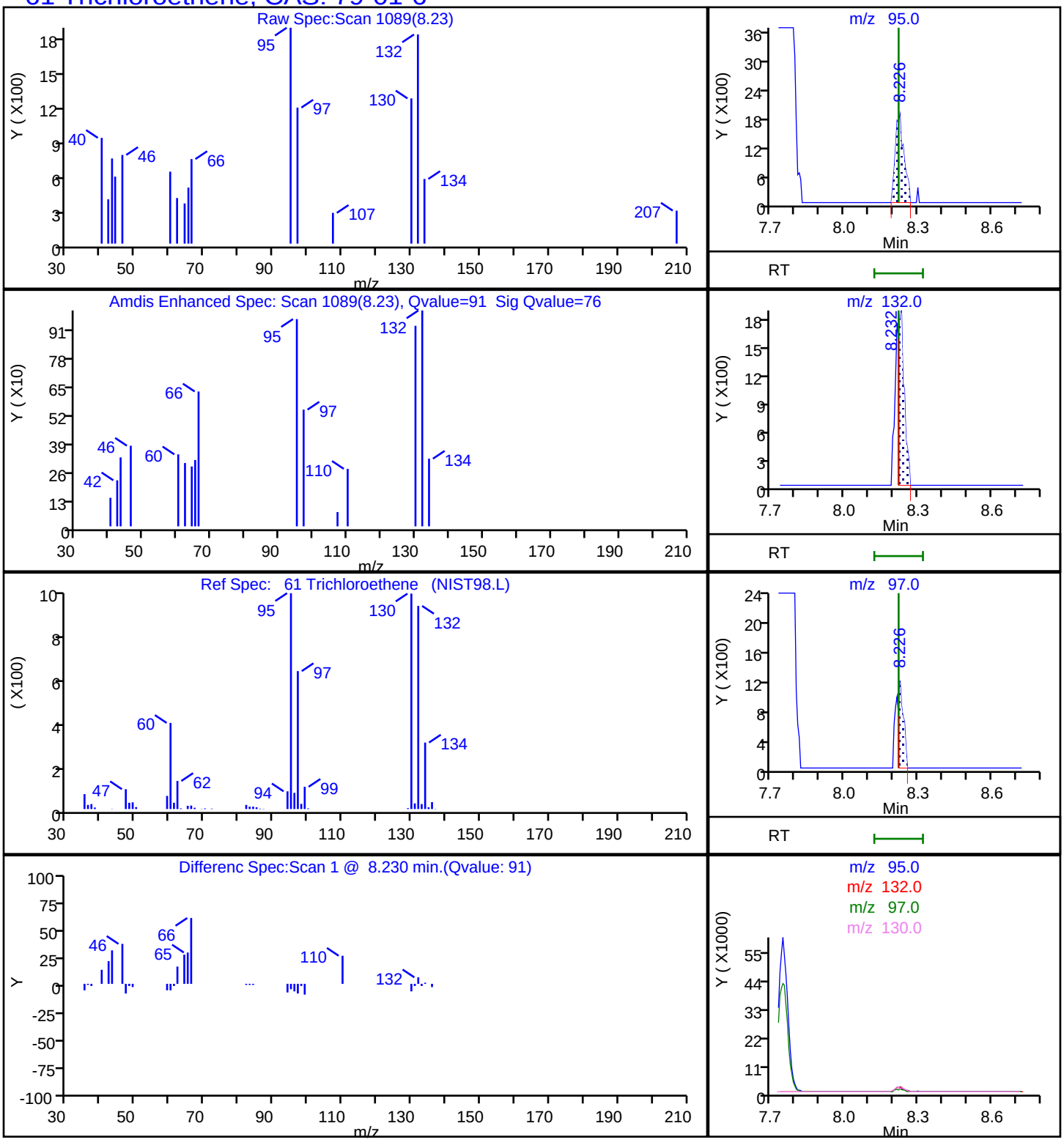
37 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20201204-17111.b\ID04X22.D				
Injection Date:	04-Dec-2020 17:31:30	Instrument ID:	19930		
Lims ID:	410-22411-A-10	Lab Sample ID:	410-22411-10		
Client ID:	HD-COD-SW-27-0/1-0				
Operator ID:	kas02648	ALS Bottle#:	22	Worklist Smp#:	22
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

61 Trichloroethene, CAS: 79-01-6



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

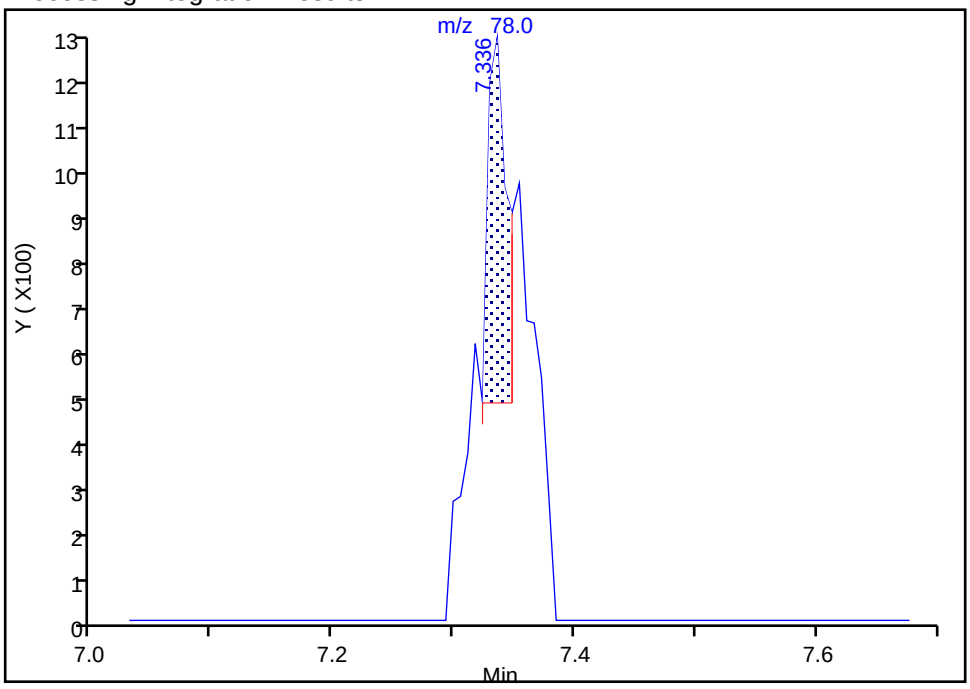
Data File:	\\chromfs\Lancaster\ChromData\19930\20201204-17111.b\ID04X22.D				
Injection Date:	04-Dec-2020 17:31:30	Instrument ID:	19930		
Lims ID:	410-22411-A-10	Lab Sample ID:	410-22411-10		
Client ID:	HD-COD-SW-27-0/1-0				
Operator ID:	kas02648	ALS Bottle#:	22	Worklist Smp#:	22
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

54 Benzene, CAS: 71-43-2

Signal: 1

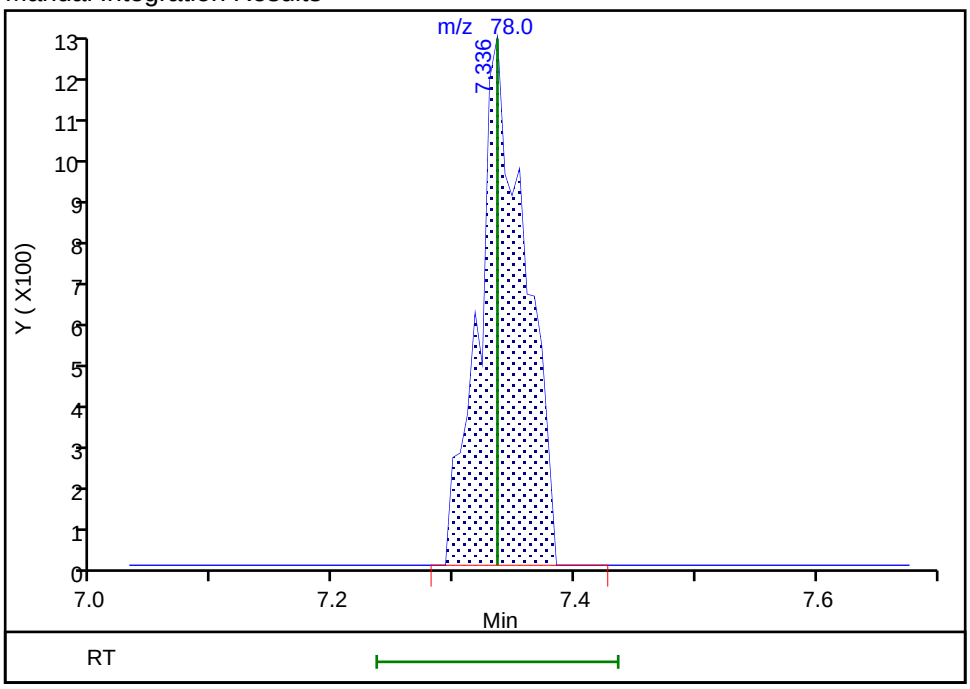
Processing Integration Results

RT: 7.34
Area: 888
Amount: 0.003760
Amount Units: ug/l



Manual Integration Results

RT: 7.34
Area: 3474
Amount: 0.014710
Amount Units: ug/l



Reviewer: campbellme, 04-Dec-2020 23:39:32
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

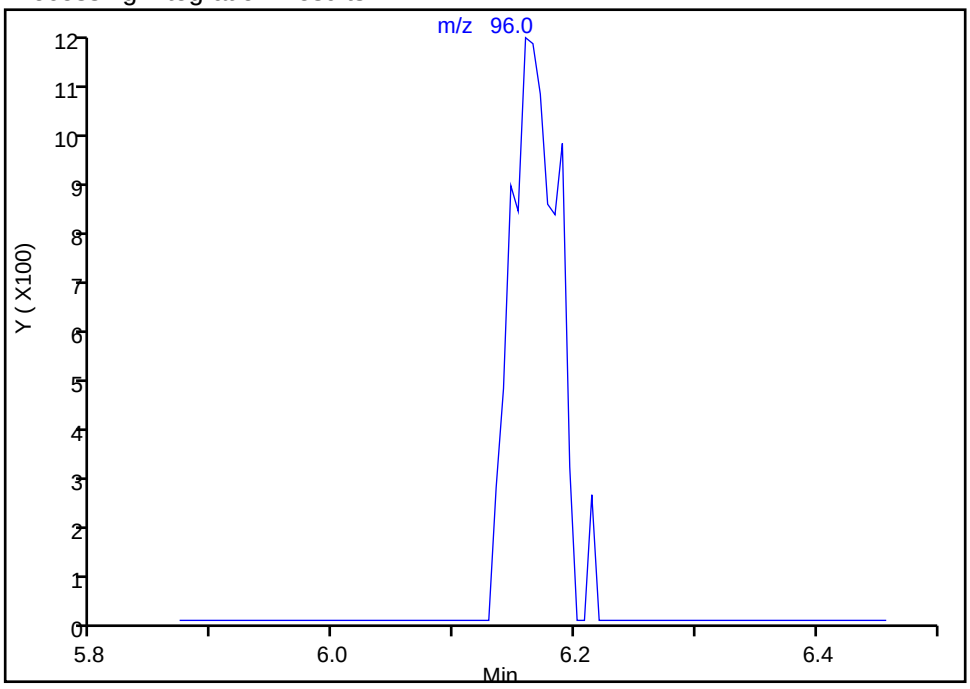
Data File:	\\chromfs\Lancaster\ChromData\19930\20201204-17111.b\ID04X22.D				
Injection Date:	04-Dec-2020 17:31:30	Instrument ID:	19930		
Lims ID:	410-22411-A-10	Lab Sample ID:	410-22411-10		
Client ID:	HD-COD-SW-27-0/1-0				
Operator ID:	kas02648	ALS Bottle#:	22	Worklist Smp#:	22
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

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

Signal: 1

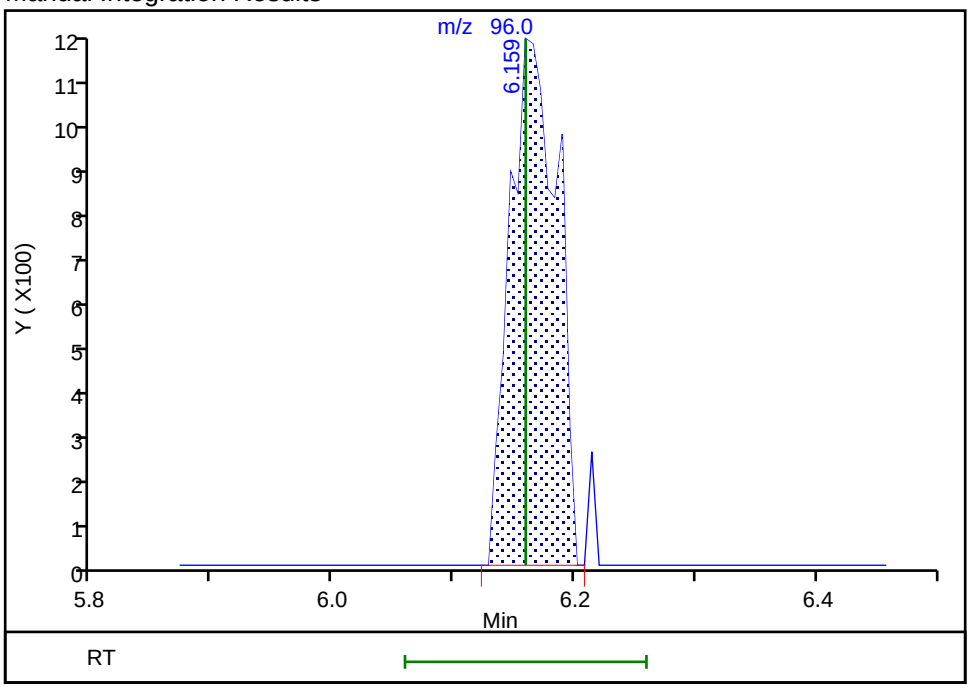
Not Detected
Expected RT: 6.16

Processing Integration Results



Manual Integration Results

RT: 6.16
Area: 3190
Amount: 0.050036
Amount Units: ug/l



Reviewer: campbellme, 04-Dec-2020 23:39:21
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1

SDG No.:

Client Sample ID: HD-COD-SW-28-0/1-0 Lab Sample ID: 410-22411-11

Matrix: Water Lab File ID: ID04X23.D

Analysis Method: 8260D Date Collected: 11/30/2020 11:30

Sample wt/vol: 25(mL) Date Analyzed: 12/04/2020 17:52

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 73040 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.070
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.060
75-34-3	1,1-Dichloroethane	ND		0.50	0.070
75-35-4	1,1-Dichloroethene	ND		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.060
107-06-2	1,2-Dichloroethane	ND		0.50	0.050
78-87-5	1,2-Dichloropropane	ND		0.50	0.060
78-93-3	2-Butanone (MEK)	ND		5.0	0.60
591-78-6	2-Hexanone	ND		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70
67-64-1	Acetone	2.4	J ^c	5.0	0.90
71-43-2	Benzene	ND		0.50	0.050
74-97-5	Bromochloromethane	ND		0.50	0.050
75-27-4	Bromodichloromethane	ND		0.50	0.050
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.070
75-15-0	Carbon disulfide	ND		1.0	0.060
56-23-5	Carbon tetrachloride	ND		0.50	0.070
108-90-7	Chlorobenzene	ND		0.50	0.060
75-00-3	Chloroethane	ND		0.50	0.070
67-66-3	Chloroform	ND		0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	ND		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.050
124-48-1	Dibromochloromethane	ND		0.50	0.070
100-41-4	Ethylbenzene	ND		0.50	0.060
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.050
75-09-2	Methylene Chloride	ND		0.50	0.070
100-42-5	Styrene	ND		0.50	0.050
127-18-4	Tetrachloroethene	ND		0.50	0.060
108-88-3	Toluene	0.87		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	ND		0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1

SDG No.:

Client Sample ID: HD-COD-SW-28-0/1-0 Lab Sample ID: 410-22411-11

Matrix: Water Lab File ID: ID04X23.D

Analysis Method: 8260D Date Collected: 11/30/2020 11:30

Sample wt/vol: 25(mL) Date Analyzed: 12/04/2020 17:52

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 73040 Units: ug/L

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

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		80-120
1868-53-7	Dibromofluoromethane (Surr)	101		80-120
2037-26-5	Toluene-d8 (Surr)	98		80-120
460-00-4	4-Bromofluorobenzene (Surr)	99		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20201204-17111.b\ID04X23.D
Lims ID: 410-22411-A-11
Client ID: HD-COD-SW-28-0/1-0
Sample Type: Client
Inject. Date: 04-Dec-2020 17:52:30 ALS Bottle#: 23 Worklist Smp#: 23
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0017111-023
Operator ID: kas02648 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20201204-17111.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 05-Dec-2020 10:06:04 Calib Date: 23-Nov-2020 18:05:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1645

First Level Reviewer: campbellme Date: 04-Dec-2020 23:40:01

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
4 Chloromethane	50	2.172	2.178	-0.006	2	3648	0.0458	
5 Vinyl chloride	62		2.300				ND	
7 Bromomethane	94		2.623				ND	
8 Chloroethane	64		2.703				ND	
14 1,1-Dichloroethene	96		3.574				ND	
15 Acetone	43	3.617	3.605	0.012	99	22955	2.37	
19 Carbon disulfide	76		3.879				ND	7
23 Methylene Chloride	84		4.245				ND	
* 24 t-Butyl alcohol-d10 (IS)	65	4.275	4.282	-0.007	0	177493	50.0	
27 Methyl tert-butyl ether	73		4.659				ND	
28 trans-1,2-Dichloroethene	96		4.672				ND	
31 1,1-Dichloroethane	63		5.330				ND	
36 2-Butanone (MEK)	43		6.123				ND	7
37 cis-1,2-Dichloroethene	96	6.153	6.159	-0.006	68	1746	0.0265	a
43 Chlorobromomethane	128		6.488				ND	
45 Chloroform	83	6.641	6.635	0.006	88	6882	0.0682	
$ 46 Dibromofluoromethane (Surr)	113	6.854	6.854	0.000	94	477786	10.1	
47 1,1,1-Trichloroethane	97		6.866				ND	
50 Carbon tetrachloride	117		7.080				ND	
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.305	7.305	0.000	0	98077	10.2	
54 Benzene	78		7.336				ND	
56 1,2-Dichloroethane	62		7.409				ND	
* 58 Fluorobenzene (IS)	96	7.744	7.738	0.006	99	1924155	10.0	
61 Trichloroethene	95	8.226	8.220	0.006	93	2554	0.0400	
63 1,2-Dichloropropane	63		8.549				ND	
68 Dichlorobromomethane	83		8.890				ND	7
73 cis-1,3-Dichloropropene	75		9.433				ND	
74 4-Methyl-2-pentanone (MIBK)	43		9.604				ND	7
$ 75 Toluene-d8 (Surr)	98	9.744	9.744	0.000	93	1885244	9.79	
76 Toluene	92	9.817	9.817	0.000	98	140407	0.8731	
78 trans-1,3-Dichloropropene	75		10.067				ND	
80 1,1,2-Trichloroethane	97		10.274				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
81 Tetrachloroethene	166		10.366				ND	7
83 2-Hexanone	43		10.482				ND	7
85 Chlorodibromomethane	129		10.652				ND	
86 Ethylene Dibromide	107		10.762				ND	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.189	0.000	84	1474836	10.0	
90 Chlorobenzene	112		11.213				ND	
S 89 Xylenes, Total	106		11.245				ND	7
91 1,1,1,2-Tetrachloroethane	131		11.298				ND	
92 Ethylbenzene	91		11.298				ND	7
93 m-Xylene & p-Xylene	106		11.414				ND	7
94 o-Xylene	106		11.743				ND	7
95 Styrene	104		11.756				ND	7
96 Bromoform	173		11.914				ND	
$ 100 4-Bromofluorobenzene (Surr)	95	12.188	12.189	0.000	94	709229	9.94	
101 1,1,2,2-Tetrachloroethane	83		12.286				ND	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	94	854458	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

a - User Assigned ID

Reagents:

MSV_31_826ISS_00003 Amount Added: 5.00 Units: uL Run Reagent

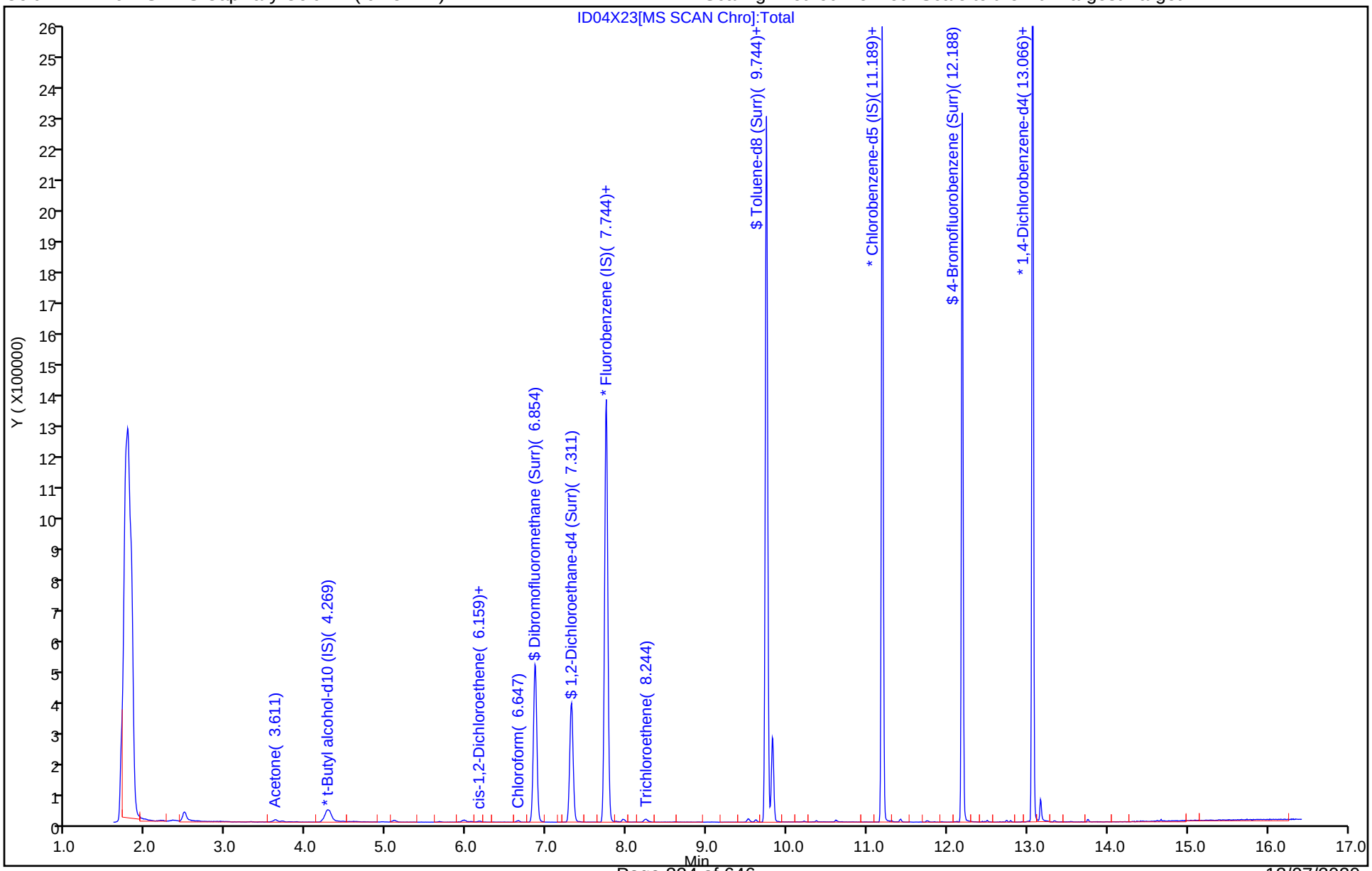
Report Date: 05-Dec-2020 10:06:36 Chrom Revision: 2.3 13-Nov-2020 01:23:02

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20201204-17111.b\ID04X23.D

Injection Date:	04-Dec-2020 17:52:30	Instrument ID:	19930	Operator ID:	kas02648
Lims ID:	410-22411-A-11	Lab Sample ID:	410-22411-11	Worklist Smp#:	23
Client ID:	HD-COD-SW-28-0/1-0				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\19930\20201204-17111.b\ID04X23.D				
Lims ID:	410-22411-A-11				
Client ID:	HD-COD-SW-28-0/1-0				
Sample Type:	Client				
Inject. Date:	04-Dec-2020 17:52:30	ALS Bottle#:	23	Worklist Smp#:	23
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Sample Info:	410-0017111-023				
Operator ID:	kas02648	Instrument ID:	19930		
Method:	\\chromfs\Lancaster\ChromData\19930\20201204-17111.b\8260 25ml HP31.m				
Limit Group:	MSV - 8260C_D				
Last Update:	05-Dec-2020 10:06:04	Calib Date:	23-Nov-2020 18:05:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I17.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1645				

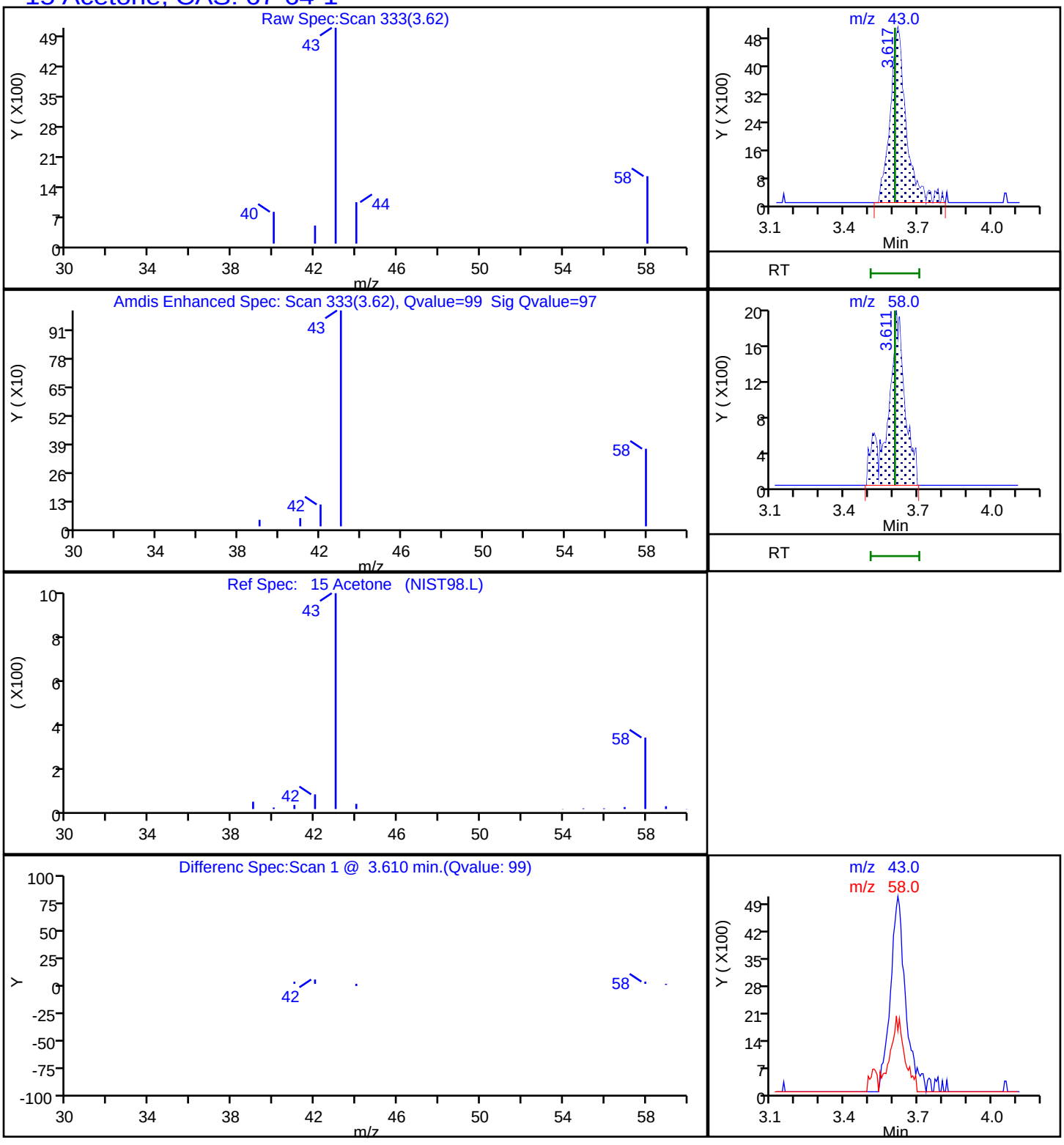
First Level Reviewer: campbellme Date: 04-Dec-2020 23:40:01

Compound	Amount Added	Amount Recovered	% Rec.
$ 46 Dibromofluoromethane (Surr)	10.0	10.1	100.57
$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	10.2	102.39
$ 75 Toluene-d8 (Surr)	10.0	9.79	97.88
$ 100 4-Bromofluorobenzene (Surr)	10.0	9.94	99.43

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20201204-17111.b\ID04X23.D				
Injection Date:	04-Dec-2020 17:52:30	Instrument ID:	19930		
Lims ID:	410-22411-A-11	Lab Sample ID:	410-22411-11		
Client ID:	HD-COD-SW-28-0/1-0				
Operator ID:	kas02648	ALS Bottle#:	23	Worklist Smp#:	23
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

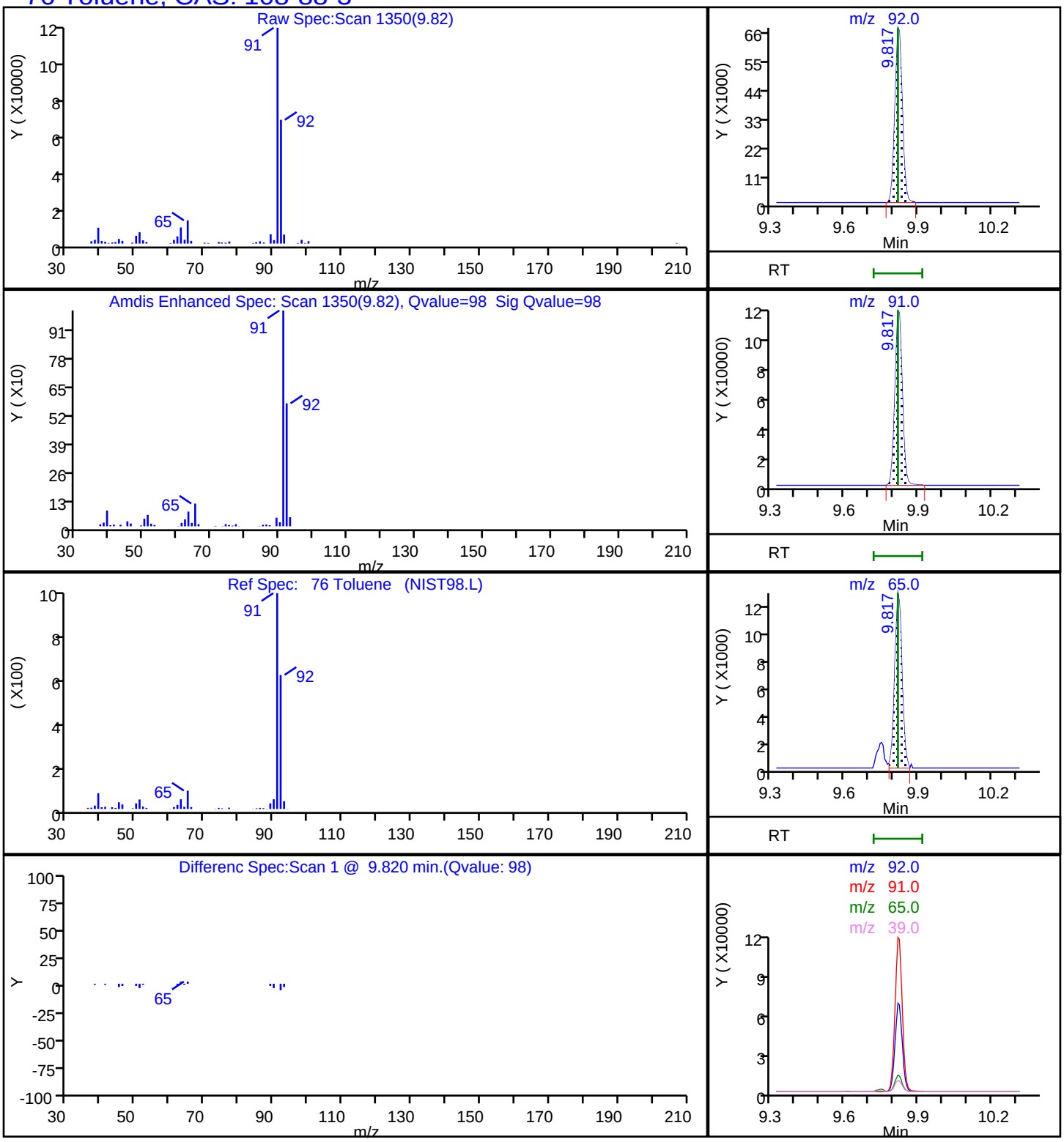
15 Acetone, CAS: 67-64-1



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20201204-17111.b\ID04X23.D				
Injection Date:	04-Dec-2020 17:52:30	Instrument ID:	19930		
Lims ID:	410-22411-A-11	Lab Sample ID:	410-22411-11		
Client ID:	HD-COD-SW-28-0/1-0				
Operator ID:	kas02648	ALS Bottle#:	23	Worklist Smp#:	23
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

76 Toluene, CAS: 108-88-3



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

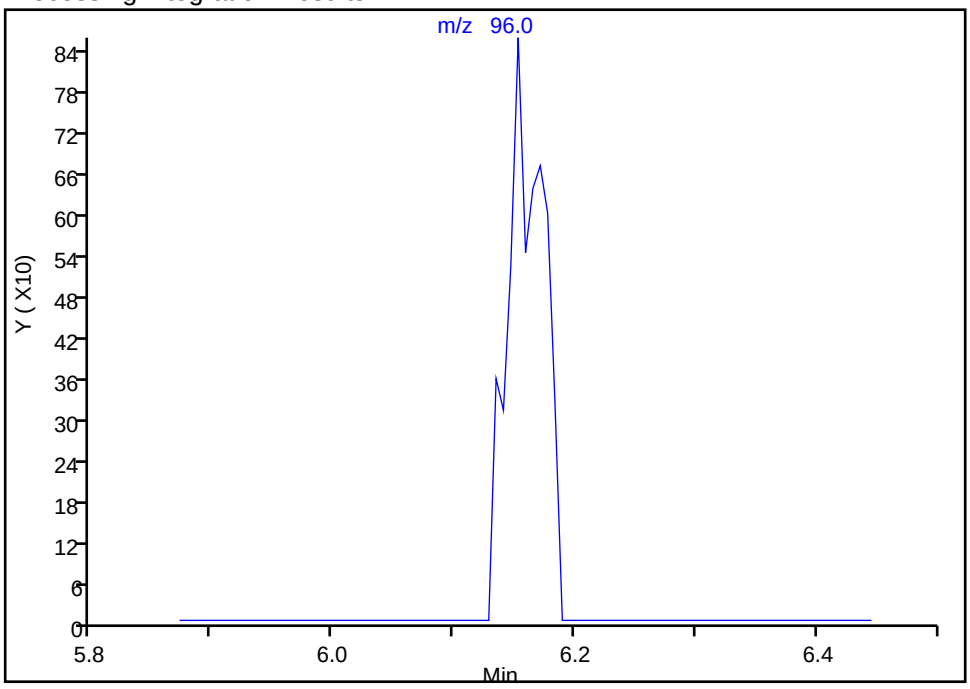
Data File:	\\chromfs\Lancaster\ChromData\19930\20201204-17111.b\ID04X23.D				
Injection Date:	04-Dec-2020 17:52:30	Instrument ID:	19930		
Lims ID:	410-22411-A-11	Lab Sample ID:	410-22411-11		
Client ID:	HD-COD-SW-28-0/1-0				
Operator ID:	kas02648	ALS Bottle#:	23	Worklist Smp#:	23
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

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

Signal: 1

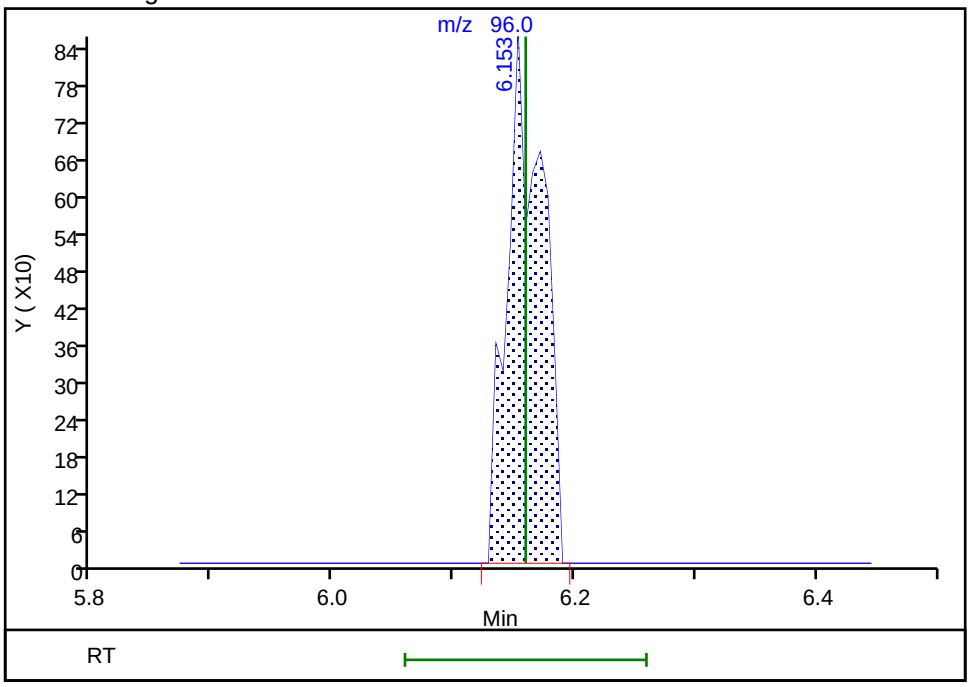
Not Detected
Expected RT: 6.16

Processing Integration Results



Manual Integration Results

RT: 6.15
Area: 1746
Amount: 0.026530
Amount Units: ug/l



Reviewer: campbellme, 04-Dec-2020 23:39:50
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1

SDG No.:

Client Sample ID: HD-COD-SW-29-0/1-0 Lab Sample ID: 410-22411-12

Matrix: Water Lab File ID: ID04X24.D

Analysis Method: 8260D Date Collected: 11/30/2020 12:25

Sample wt/vol: 25(mL) Date Analyzed: 12/04/2020 18:13

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 73040 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.070
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.060
75-34-3	1,1-Dichloroethane	ND		0.50	0.070
75-35-4	1,1-Dichloroethene	ND		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.060
107-06-2	1,2-Dichloroethane	ND		0.50	0.050
78-87-5	1,2-Dichloropropane	ND		0.50	0.060
78-93-3	2-Butanone (MEK)	ND		5.0	0.60
591-78-6	2-Hexanone	ND		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70
67-64-1	Acetone	3.7	J ^c	5.0	0.90
71-43-2	Benzene	ND		0.50	0.050
74-97-5	Bromochloromethane	ND		0.50	0.050
75-27-4	Bromodichloromethane	ND		0.50	0.050
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.070
75-15-0	Carbon disulfide	ND		1.0	0.060
56-23-5	Carbon tetrachloride	ND		0.50	0.070
108-90-7	Chlorobenzene	ND		0.50	0.060
75-00-3	Chloroethane	ND		0.50	0.070
67-66-3	Chloroform	ND		0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	ND		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.050
124-48-1	Dibromochloromethane	ND		0.50	0.070
100-41-4	Ethylbenzene	ND		0.50	0.060
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.050
75-09-2	Methylene Chloride	ND		0.50	0.070
100-42-5	Styrene	ND		0.50	0.050
127-18-4	Tetrachloroethene	ND		0.50	0.060
108-88-3	Toluene	0.13	J	0.50	0.070
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	ND		0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1

SDG No.:

Client Sample ID: HD-COD-SW-29-0/1-0 Lab Sample ID: 410-22411-12

Matrix: Water Lab File ID: ID04X24.D

Analysis Method: 8260D Date Collected: 11/30/2020 12:25

Sample wt/vol: 25(mL) Date Analyzed: 12/04/2020 18:13

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 73040 Units: ug/L

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

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		80-120
1868-53-7	Dibromofluoromethane (Surr)	100		80-120
2037-26-5	Toluene-d8 (Surr)	98		80-120
460-00-4	4-Bromofluorobenzene (Surr)	98		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20201204-17111.b\ID04X24.D
Lims ID: 410-22411-A-12
Client ID: HD-COD-SW-29-0/1-0
Sample Type: Client
Inject. Date: 04-Dec-2020 18:13:30 ALS Bottle#: 24 Worklist Smp#: 24
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0017111-024
Operator ID: kas02648 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20201204-17111.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 05-Dec-2020 10:06:04 Calib Date: 23-Nov-2020 18:05:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1645

First Level Reviewer: campbellme Date: 04-Dec-2020 23:40:37

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
4 Chloromethane	50	2.172	2.178	-0.006	1	3016	0.0395	
5 Vinyl chloride	62		2.300				ND	
7 Bromomethane	94		2.623				ND	
8 Chloroethane	64		2.703				ND	
14 1,1-Dichloroethene	96		3.574				ND	
15 Acetone	43	3.623	3.605	0.018	98	33277	3.75	
19 Carbon disulfide	76		3.879				ND	7
23 Methylene Chloride	84		4.245				ND	
* 24 t-Butyl alcohol-d10 (IS)	65	4.281	4.282	-0.001	0	162931	50.0	
27 Methyl tert-butyl ether	73		4.659				ND	
28 trans-1,2-Dichloroethene	96		4.672				ND	
31 1,1-Dichloroethane	63		5.330				ND	
36 2-Butanone (MEK)	43	6.141	6.123	0.018	52	6184	0.4162	
37 cis-1,2-Dichloroethene	96	6.159	6.159	0.000	77	2697	0.0428	a
43 Chlorobromomethane	128		6.488				ND	
45 Chloroform	83	6.647	6.635	0.012	1	2377	0.0246	a
$ 46 Dibromofluoromethane (Surr)	113	6.860	6.854	0.006	94	456267	10.0	
47 1,1,1-Trichloroethane	97		6.866				ND	
50 Carbon tetrachloride	117		7.080				ND	
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.311	7.305	0.006	0	93783	10.2	
54 Benzene	78		7.336				ND	
56 1,2-Dichloroethane	62		7.409				ND	
* 58 Fluorobenzene (IS)	96	7.744	7.738	0.006	99	1843358	10.0	
61 Trichloroethene	95	8.226	8.220	0.006	90	3162	0.0517	M
63 1,2-Dichloropropane	63		8.549				ND	
68 Dichlorobromomethane	83		8.890				ND	
73 cis-1,3-Dichloropropene	75		9.433				ND	
74 4-Methyl-2-pentanone (MIBK)	43		9.604				ND	7
$ 75 Toluene-d8 (Surr)	98	9.744	9.744	0.000	93	1802967	9.76	
76 Toluene	92	9.823	9.817	0.006	98	19692	0.1276	
78 trans-1,3-Dichloropropene	75		10.067				ND	
80 1,1,2-Trichloroethane	97		10.274				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
81 Tetrachloroethene	166		10.366				ND	7
83 2-Hexanone	43		10.482				ND	7
85 Chlorodibromomethane	129		10.652				ND	
86 Ethylene Dibromide	107		10.762				ND	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.189	0.000	84	1414941	10.0	
90 Chlorobenzene	112		11.213				ND	
S 89 Xylenes, Total	106		11.245				ND	7
91 1,1,1,2-Tetrachloroethane	131		11.298				ND	
92 Ethylbenzene	91		11.298				ND	7
93 m-Xylene & p-Xylene	106	11.414	11.414	0.000	0	5328	0.0453	
94 o-Xylene	106		11.743				ND	7
95 Styrene	104		11.756				ND	7
96 Bromoform	173		11.914				ND	
$ 100 4-Bromofluorobenzene (Surr)	95	12.188	12.189	0.000	95	673410	9.84	
101 1,1,2,2-Tetrachloroethane	83		12.286				ND	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	94	823116	10.0	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection
Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

MSV_31_826ISS_00003 Amount Added: 5.00 Units: uL Run Reagent

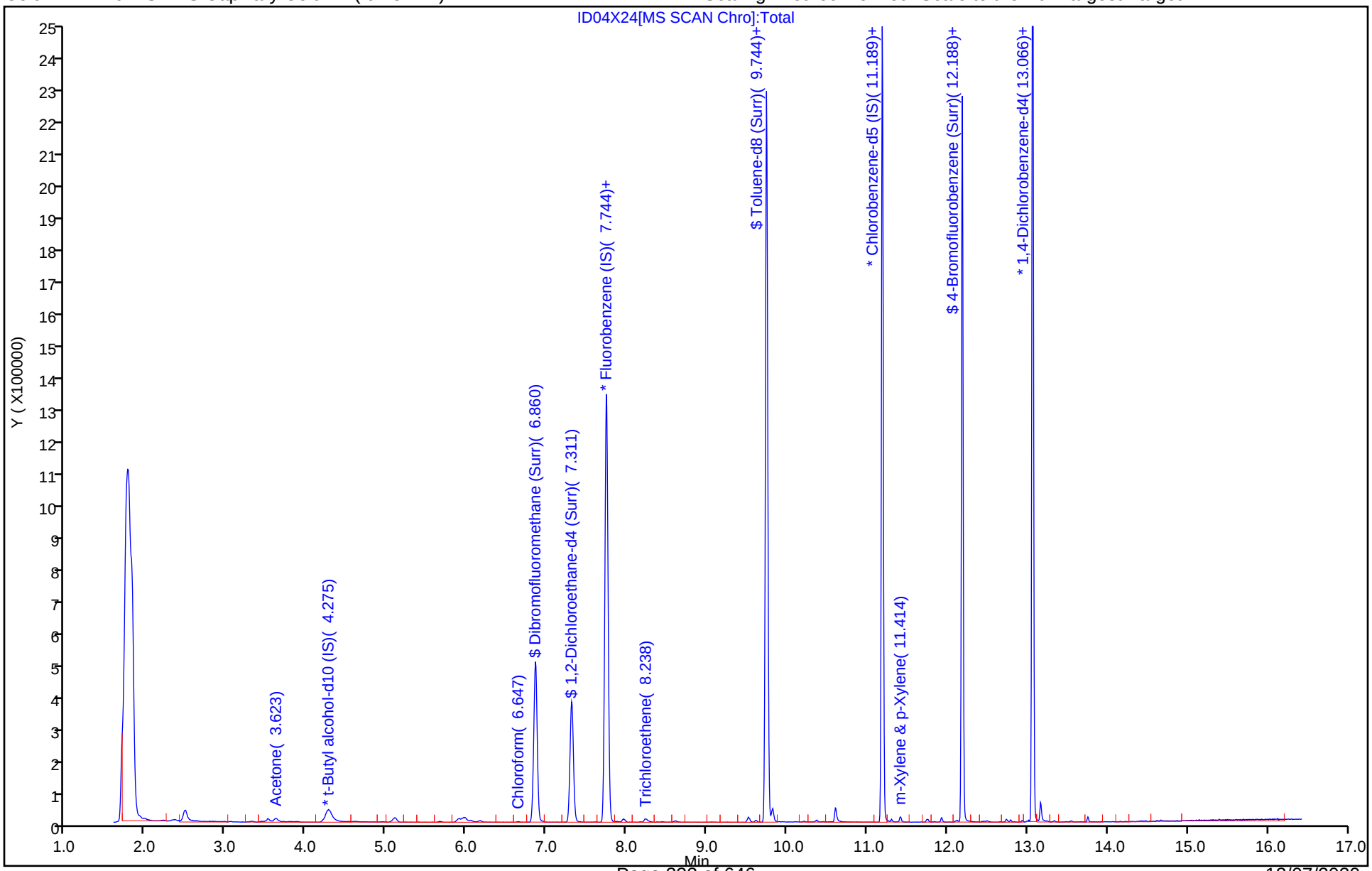
Report Date: 05-Dec-2020 10:06:38 Chrom Revision: 2.3 13-Nov-2020 01:23:02

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20201204-17111.b\ID04X24.D

Injection Date:	04-Dec-2020 18:13:30	Instrument ID:	19930	Operator ID:	kas02648
Lims ID:	410-22411-A-12	Lab Sample ID:	410-22411-12	Worklist Smp#:	24
Client ID:	HD-COD-SW-29-0/1-0				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19930\20201204-17111.b\ID04X24.D
Lims ID: 410-22411-A-12
Client ID: HD-COD-SW-29-0/1-0
Sample Type: Client
Inject. Date: 04-Dec-2020 18:13:30 ALS Bottle#: 24 Worklist Smp#: 24
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0017111-024
Operator ID: kas02648 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20201204-17111.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 05-Dec-2020 10:06:04 Calib Date: 23-Nov-2020 18:05:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1645

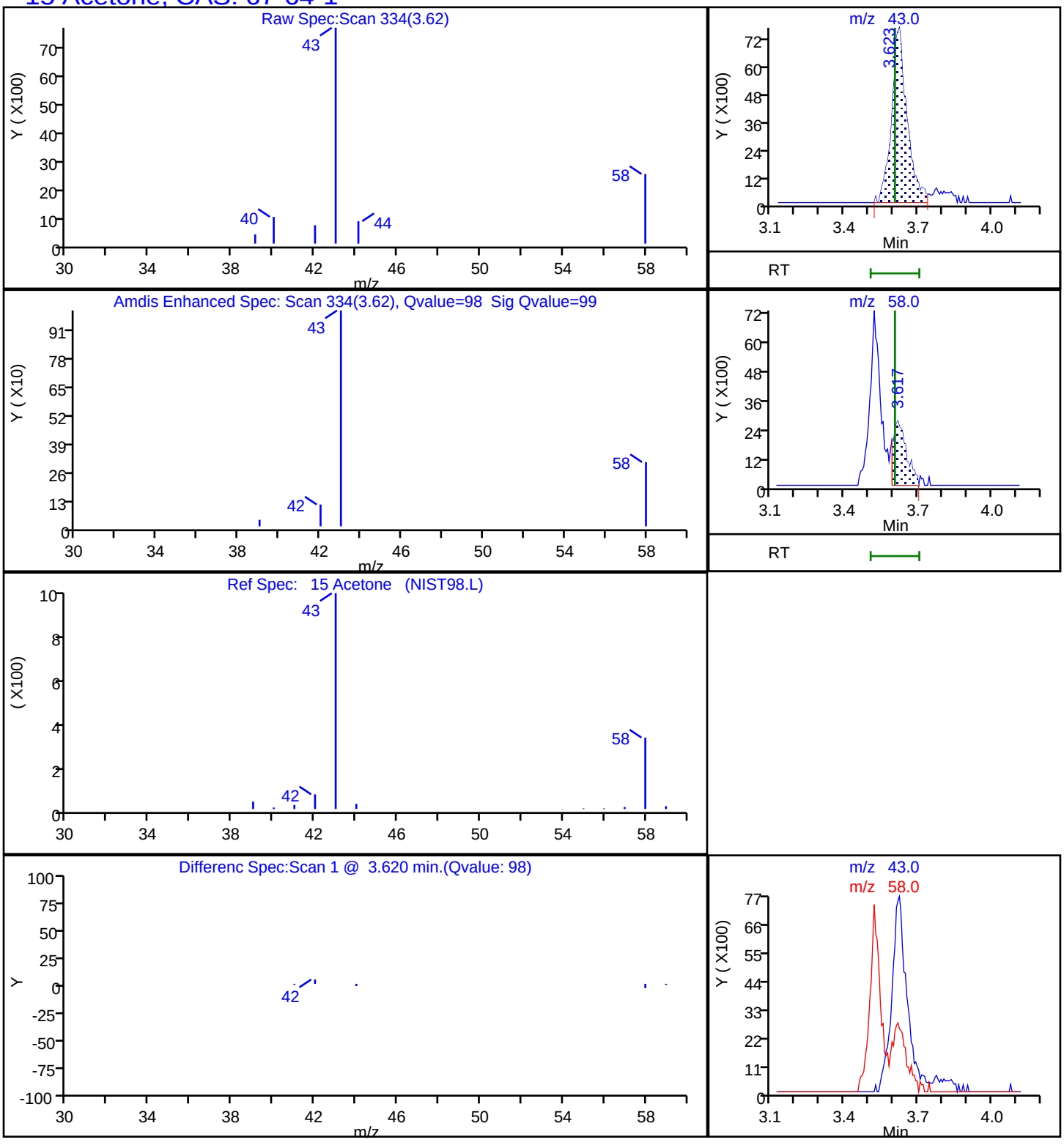
First Level Reviewer: campbellme Date: 04-Dec-2020 23:40:37

Compound	Amount Added	Amount Recovered	% Rec.
$ 46 Dibromofluoromethane (Surr)	10.0	10.0	100.25
$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	10.2	102.20
$ 75 Toluene-d8 (Surr)	10.0	9.76	97.57
$ 100 4-Bromofluorobenzene (Surr)	10.0	9.84	98.41

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20201204-17111.b\ID04X24.D				
Injection Date:	04-Dec-2020 18:13:30	Instrument ID:	19930		
Lims ID:	410-22411-A-12	Lab Sample ID:	410-22411-12		
Client ID:	HD-COD-SW-29-0/1-0				
Operator ID:	kas02648	ALS Bottle#:	24	Worklist Smp#:	24
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

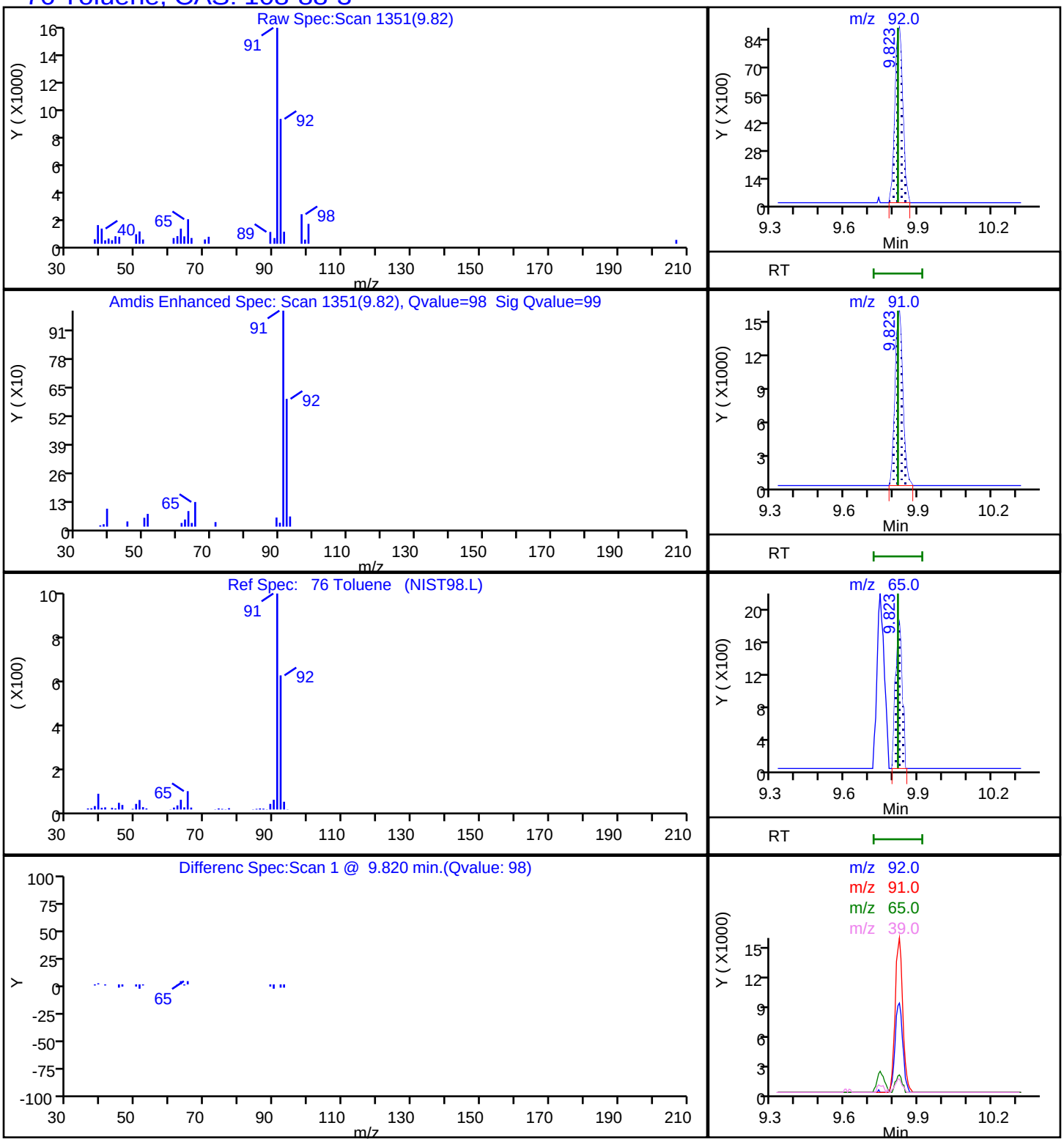
15 Acetone, CAS: 67-64-1



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20201204-17111.b\ID04X24.D				
Injection Date:	04-Dec-2020 18:13:30	Instrument ID:	19930		
Lims ID:	410-22411-A-12	Lab Sample ID:	410-22411-12		
Client ID:	HD-COD-SW-29-0/1-0				
Operator ID:	kas02648	ALS Bottle#:	24	Worklist Smp#:	24
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

76 Toluene, CAS: 108-88-3



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

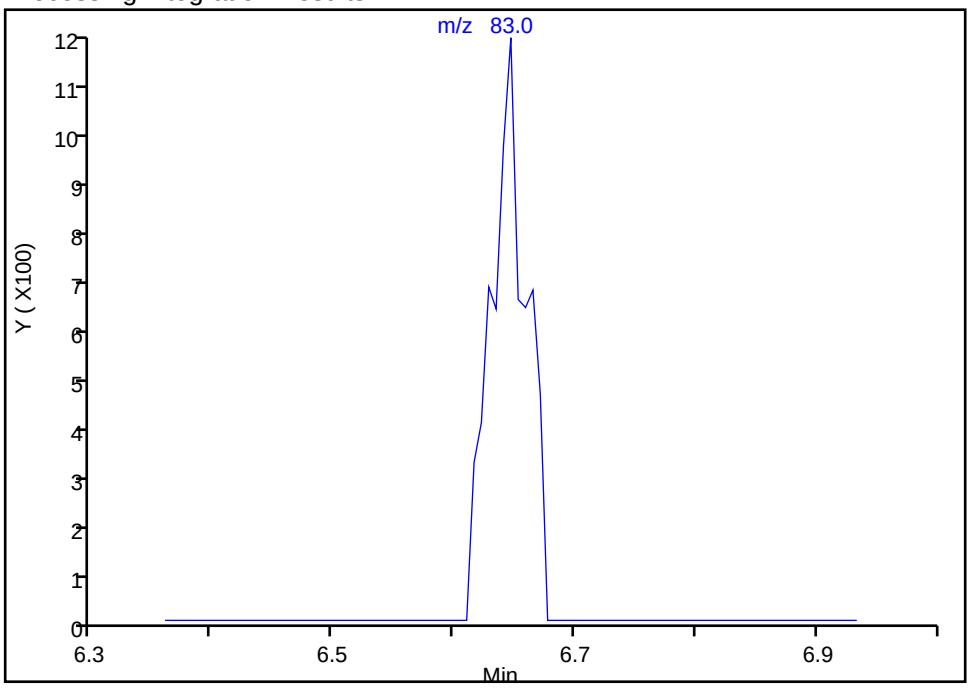
Data File:	\\chromfs\Lancaster\ChromData\19930\20201204-17111.b\ID04X24.D				
Injection Date:	04-Dec-2020 18:13:30	Instrument ID:	19930		
Lims ID:	410-22411-A-12	Lab Sample ID:	410-22411-12		
Client ID:	HD-COD-SW-29-0/1-0				
Operator ID:	kas02648	ALS Bottle#:	24	Worklist Smp#:	24
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

45 Chloroform, CAS: 67-66-3

Signal: 1

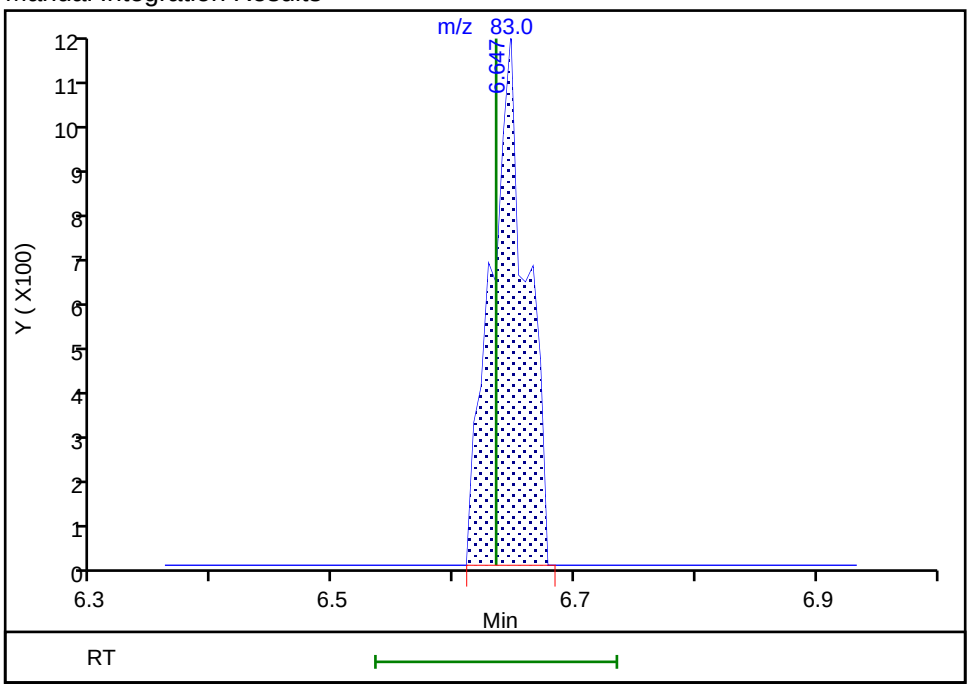
Not Detected
Expected RT: 6.63

Processing Integration Results



Manual Integration Results

RT: 6.65
Area: 2377
Amount: 0.024585
Amount Units: ug/l



Reviewer: campbellme, 04-Dec-2020 23:40:16
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

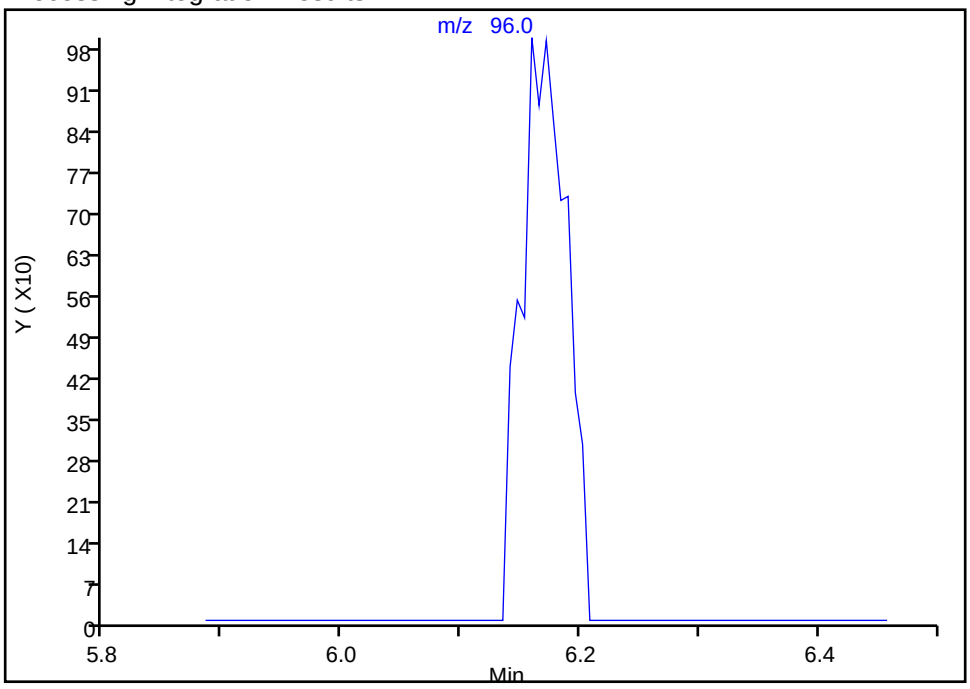
Data File:	\\chromfs\Lancaster\ChromData\19930\20201204-17111.b\ID04X24.D				
Injection Date:	04-Dec-2020 18:13:30	Instrument ID:	19930		
Lims ID:	410-22411-A-12	Lab Sample ID:	410-22411-12		
Client ID:	HD-COD-SW-29-0/1-0				
Operator ID:	kas02648	ALS Bottle#:	24	Worklist Smp#:	24
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

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

Signal: 1

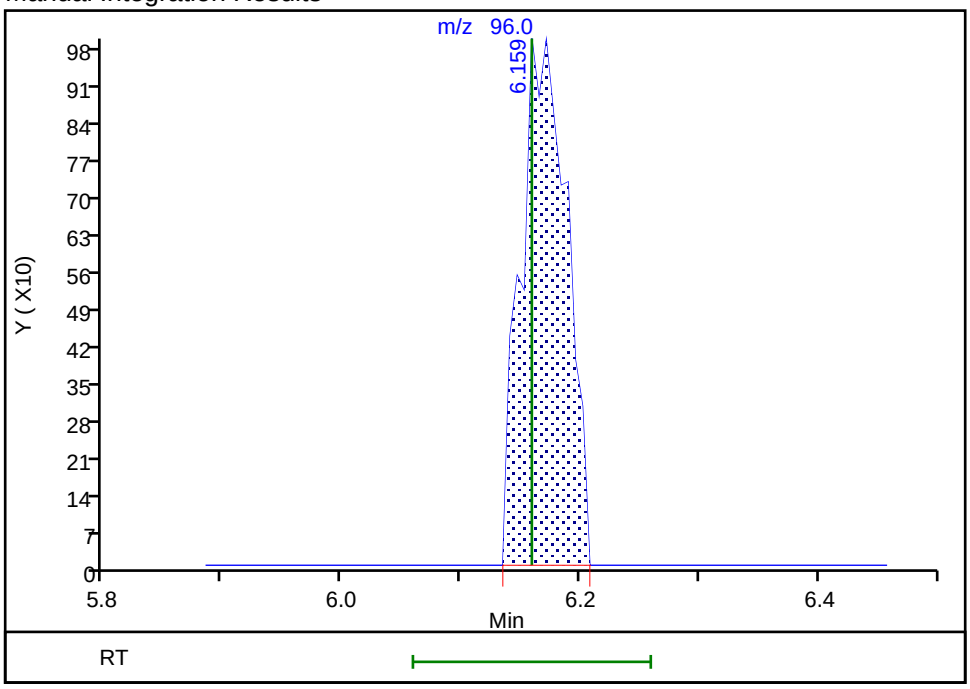
Not Detected
Expected RT: 6.16

Processing Integration Results



Manual Integration Results

RT: 6.16
Area: 2697
Amount: 0.042776
Amount Units: ug/l



Reviewer: campbellme, 04-Dec-2020 23:40:12
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

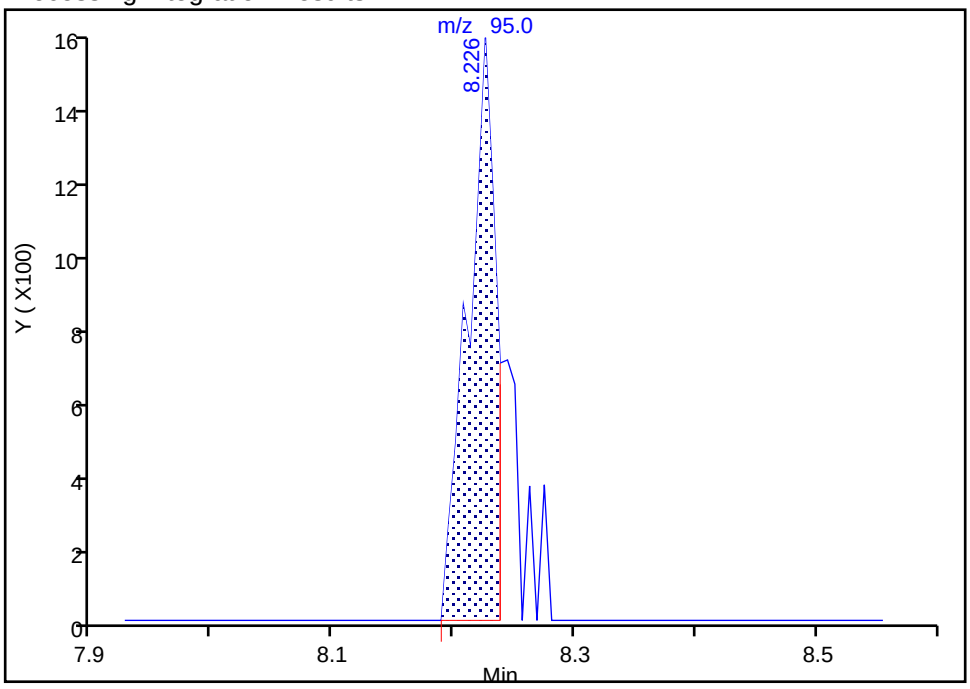
Data File:	\\chromfs\Lancaster\ChromData\19930\20201204-17111.b\ID04X24.D				
Injection Date:	04-Dec-2020 18:13:30	Instrument ID:	19930		
Lims ID:	410-22411-A-12	Lab Sample ID:	410-22411-12		
Client ID:	HD-COD-SW-29-0/1-0				
Operator ID:	kas02648	ALS Bottle#:	24	Worklist Smp#:	24
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

61 Trichloroethene, CAS: 79-01-6

Signal: 1

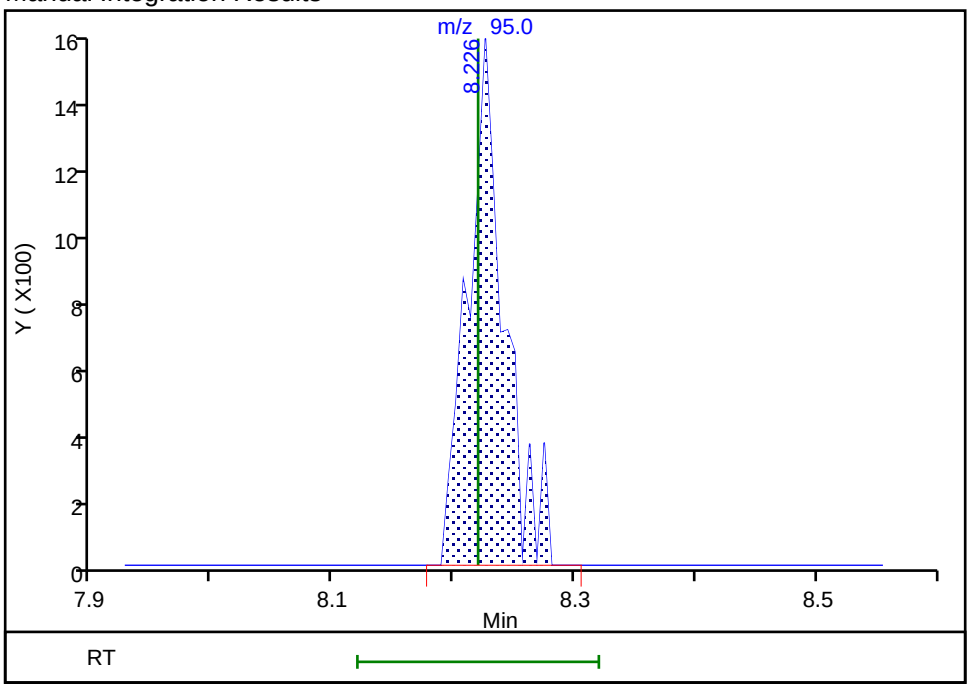
Processing Integration Results

RT: 8.23
Area: 2433
Amount: 0.039797
Amount Units: ug/l



Manual Integration Results

RT: 8.23
Area: 3162
Amount: 0.051722
Amount Units: ug/l



Reviewer: campbellme, 04-Dec-2020 23:40:27

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1

SDG No.:

Client Sample ID: HD-QC1-0/1-1 Lab Sample ID: 410-22411-13

Matrix: Water Lab File ID: ID04X25.D

Analysis Method: 8260D Date Collected: 11/30/2020 12:00

Sample wt/vol: 25(mL) Date Analyzed: 12/04/2020 18:35

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 73040 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.070
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.060
75-34-3	1,1-Dichloroethane	ND		0.50	0.070
75-35-4	1,1-Dichloroethene	ND		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.060
107-06-2	1,2-Dichloroethane	ND		0.50	0.050
78-87-5	1,2-Dichloropropane	ND		0.50	0.060
78-93-3	2-Butanone (MEK)	ND		5.0	0.60
591-78-6	2-Hexanone	ND		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70
67-64-1	Acetone	3.4	J ^c	5.0	0.90
71-43-2	Benzene	ND		0.50	0.050
74-97-5	Bromochloromethane	ND		0.50	0.050
75-27-4	Bromodichloromethane	ND		0.50	0.050
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.070
75-15-0	Carbon disulfide	ND		1.0	0.060
56-23-5	Carbon tetrachloride	ND		0.50	0.070
108-90-7	Chlorobenzene	ND		0.50	0.060
75-00-3	Chloroethane	ND		0.50	0.070
67-66-3	Chloroform	ND		0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	ND		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.050
124-48-1	Dibromochloromethane	ND		0.50	0.070
100-41-4	Ethylbenzene	ND		0.50	0.060
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.050
75-09-2	Methylene Chloride	ND		0.50	0.070
100-42-5	Styrene	ND		0.50	0.050
127-18-4	Tetrachloroethene	ND		0.50	0.060
108-88-3	Toluene	ND		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	ND		0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1

SDG No.:

Client Sample ID: HD-QC1-0/1-1 Lab Sample ID: 410-22411-13

Matrix: Water Lab File ID: ID04X25.D

Analysis Method: 8260D Date Collected: 11/30/2020 12:00

Sample wt/vol: 25(mL) Date Analyzed: 12/04/2020 18:35

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 73040 Units: ug/L

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

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		80-120
1868-53-7	Dibromofluoromethane (Surr)	101		80-120
2037-26-5	Toluene-d8 (Surr)	98		80-120
460-00-4	4-Bromofluorobenzene (Surr)	99		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20201204-17111.b\ID04X25.D
Lims ID: 410-22411-A-13
Client ID: HD-QC1-0/1-1
Sample Type: Client
Inject. Date: 04-Dec-2020 18:35:30 ALS Bottle#: 25 Worklist Smp#: 25
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0017111-025
Operator ID: kas02648 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20201204-17111.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 05-Dec-2020 10:06:04 Calib Date: 23-Nov-2020 18:05:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1645

First Level Reviewer: campbellme Date: 04-Dec-2020 23:41:09

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
	4 Chloromethane	50		2.178				ND	
	5 Vinyl chloride	62		2.300				ND	
	7 Bromomethane	94		2.623				ND	
	8 Chloroethane	64		2.703				ND	
	14 1,1-Dichloroethene	96		3.574				ND	
	15 Acetone	43	3.617	3.605	0.012	100	29865	3.36	
	19 Carbon disulfide	76		3.879				ND	7
	23 Methylene Chloride	84		4.245				ND	7
*	24 t-Butyl alcohol-d10 (IS)	65	4.275	4.282	-0.007	0	162841	50.0	
	27 Methyl tert-butyl ether	73		4.659				ND	
	28 trans-1,2-Dichloroethene	96		4.672				ND	
	31 1,1-Dichloroethane	63		5.330				ND	
	36 2-Butanone (MEK)	43		6.123				ND	U
	37 cis-1,2-Dichloroethene	96	6.159	6.159	0.000	78	2374	0.0373	a
	43 Chlorobromomethane	128		6.488				ND	
	45 Chloroform	83	6.653	6.635	0.018	86	2953	0.0303	a
$	46 Dibromofluoromethane (Surr)	113	6.860	6.854	0.006	94	461697	10.1	
	47 1,1,1-Trichloroethane	97		6.866				ND	
	50 Carbon tetrachloride	117		7.080				ND	
$	53 1,2-Dichloroethane-d4 (Surr)	102	7.317	7.305	0.012	0	94045	10.2	
	54 Benzene	78		7.336				ND	7
	56 1,2-Dichloroethane	62		7.409				ND	
*	58 Fluorobenzene (IS)	96	7.744	7.738	0.006	99	1859016	10.0	
	61 Trichloroethene	95	8.238	8.220	0.018	84	3040	0.0493	M
	63 1,2-Dichloropropane	63		8.549				ND	
	68 Dichlorobromomethane	83		8.890				ND	
	73 cis-1,3-Dichloropropene	75		9.433				ND	
	74 4-Methyl-2-pentanone (MIBK)	43		9.604				ND	7
$	75 Toluene-d8 (Surr)	98	9.744	9.744	0.000	93	1831129	9.81	
	76 Toluene	92	9.823	9.817	0.006	96	8395	0.0539	
	78 trans-1,3-Dichloropropene	75		10.067				ND	
	80 1,1,2-Trichloroethane	97		10.274				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
81 Tetrachloroethene	166	10.372	10.366	0.006	93	2249	0.0298	
83 2-Hexanone	43		10.482				ND	7
85 Chlorodibromomethane	129		10.652				ND	
86 Ethylene Dibromide	107		10.762				ND	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.189	0.000	84	1429318	10.0	
90 Chlorobenzene	112		11.213				ND	
S 89 Xylenes, Total	106		11.245				ND	7
91 1,1,1,2-Tetrachloroethane	131		11.298				ND	
92 Ethylbenzene	91		11.298				ND	7
93 m-Xylene & p-Xylene	106	11.414	11.414	0.000	0	4762	0.0401	
94 o-Xylene	106		11.743				ND	7
95 Styrene	104		11.756				ND	7
96 Bromoform	173		11.914				ND	
$ 100 4-Bromofluorobenzene (Surr)	95	12.188	12.189	0.000	94	683108	9.88	
101 1,1,2,2-Tetrachloroethane	83		12.286				ND	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	94	829225	10.0	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection
Review Flags
M - Manually Integrated
U - Marked Undetected
a - User Assigned ID

Reagents:

MSV_31_826ISS_00003 Amount Added: 5.00 Units: uL Run Reagent

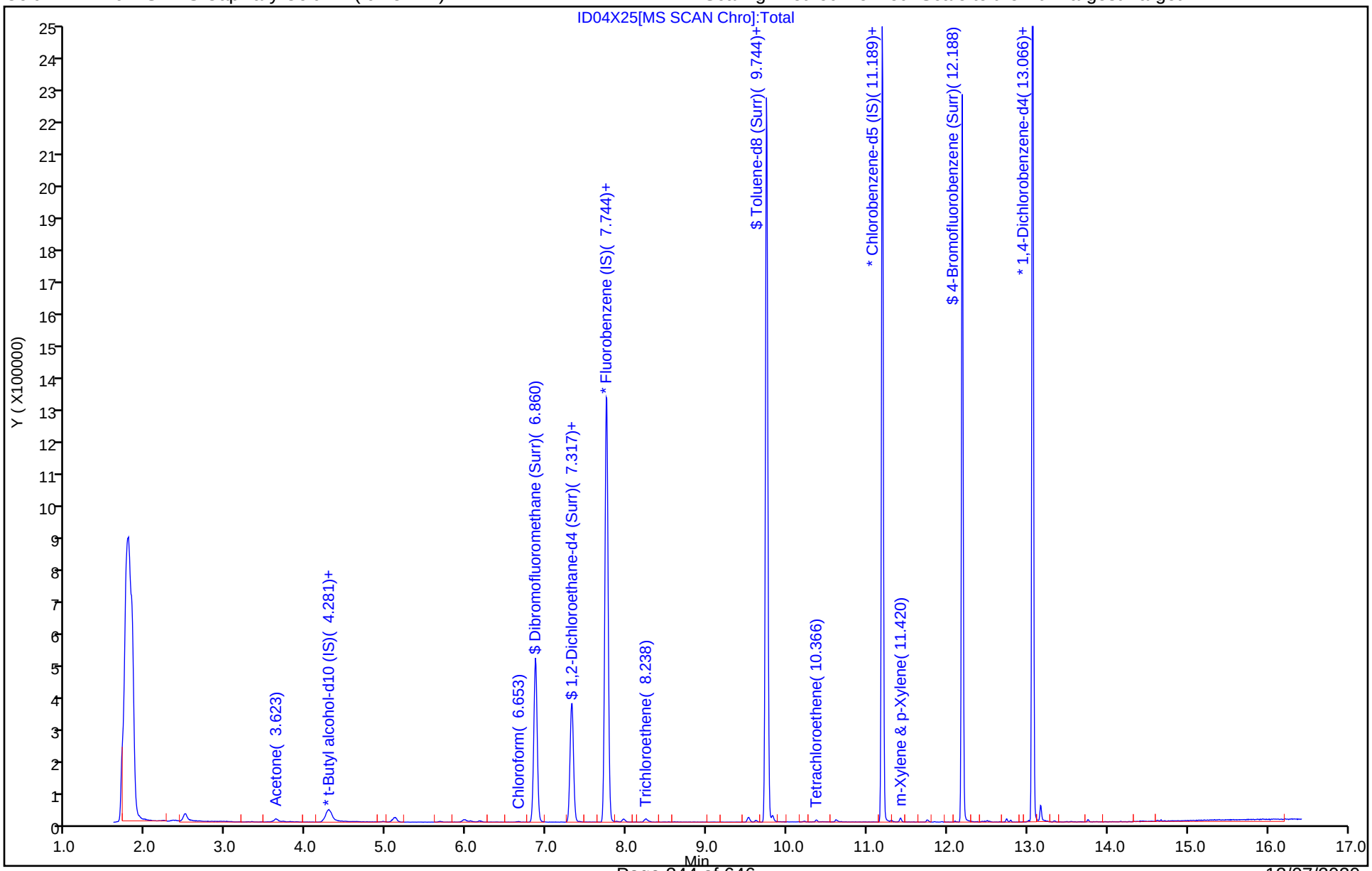
Report Date: 05-Dec-2020 10:06:39 Chrom Revision: 2.3 13-Nov-2020 01:23:02

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20201204-17111.b\ID04X25.D

Injection Date:	04-Dec-2020 18:35:30	Instrument ID:	19930	Operator ID:	kas02648
Lims ID:	410-22411-A-13	Lab Sample ID:	410-22411-13	Worklist Smp#:	25
Client ID:	HD-QC1-0/1-1				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\19930\20201204-17111.b\ID04X25.D				
Lims ID:	410-22411-A-13				
Client ID:	HD-QC1-0/1-1				
Sample Type:	Client				
Inject. Date:	04-Dec-2020 18:35:30	ALS Bottle#:	25	Worklist Smp#:	25
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Sample Info:	410-0017111-025				
Operator ID:	kas02648	Instrument ID:	19930		
Method:	\\chromfs\Lancaster\ChromData\19930\20201204-17111.b\8260 25ml HP31.m				
Limit Group:	MSV - 8260C_D				
Last Update:	05-Dec-2020 10:06:04	Calib Date:	23-Nov-2020 18:05:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I17.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1645				

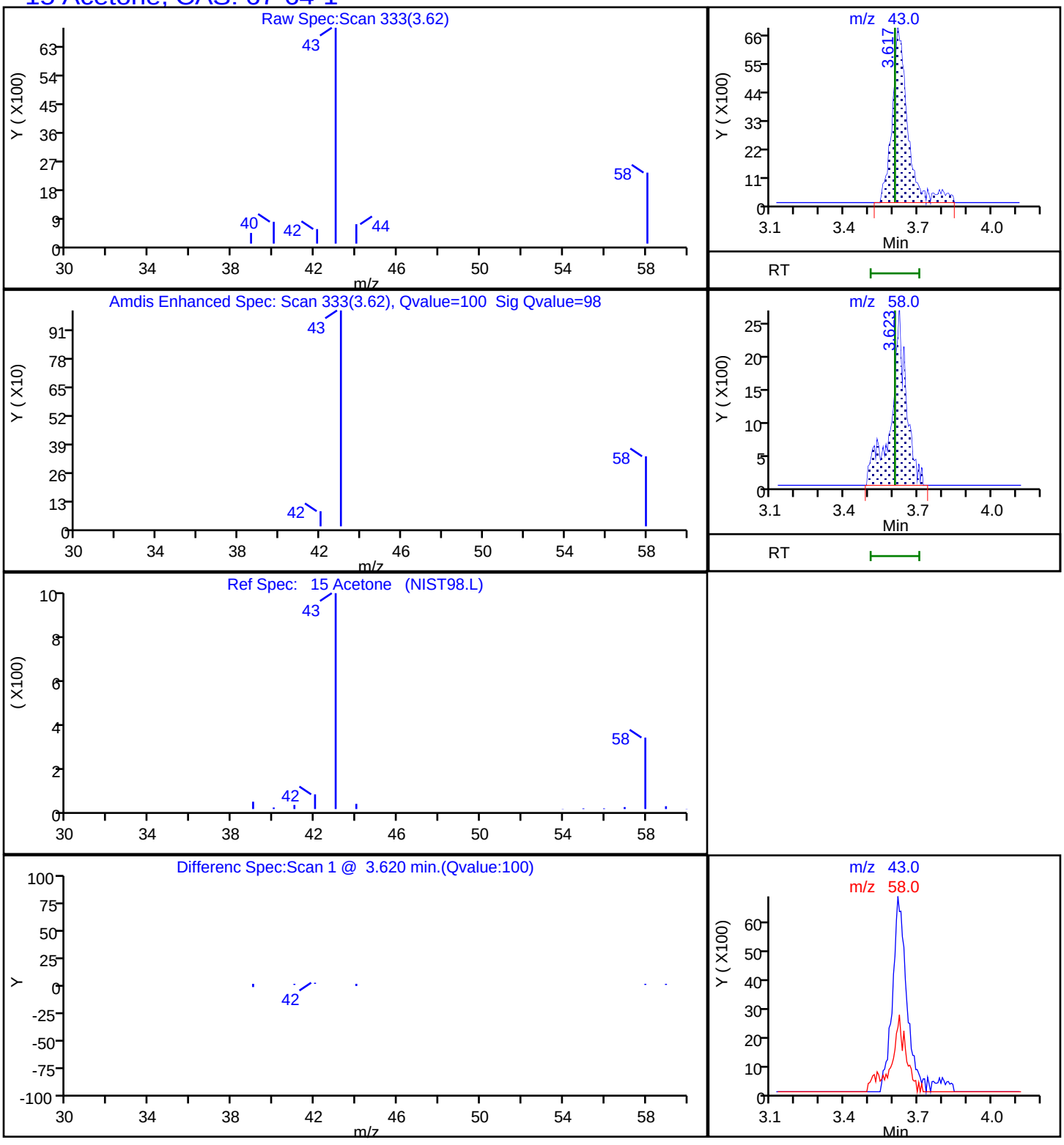
First Level Reviewer: campbellme Date: 04-Dec-2020 23:41:09

Compound	Amount Added	Amount Recovered	% Rec.
$ 46 Dibromofluoromethane (Surr)	10.0	10.1	100.58
$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	10.2	101.62
$ 75 Toluene-d8 (Surr)	10.0	9.81	98.10
$ 100 4-Bromofluorobenzene (Surr)	10.0	9.88	98.82

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20201204-17111.b\ID04X25.D				
Injection Date:	04-Dec-2020 18:35:30	Instrument ID:	19930		
Lims ID:	410-22411-A-13	Lab Sample ID:	410-22411-13		
Client ID:	HD-QC1-0/1-1				
Operator ID:	kas02648	ALS Bottle#:	25	Worklist Smp#:	25
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

15 Acetone, CAS: 67-64-1



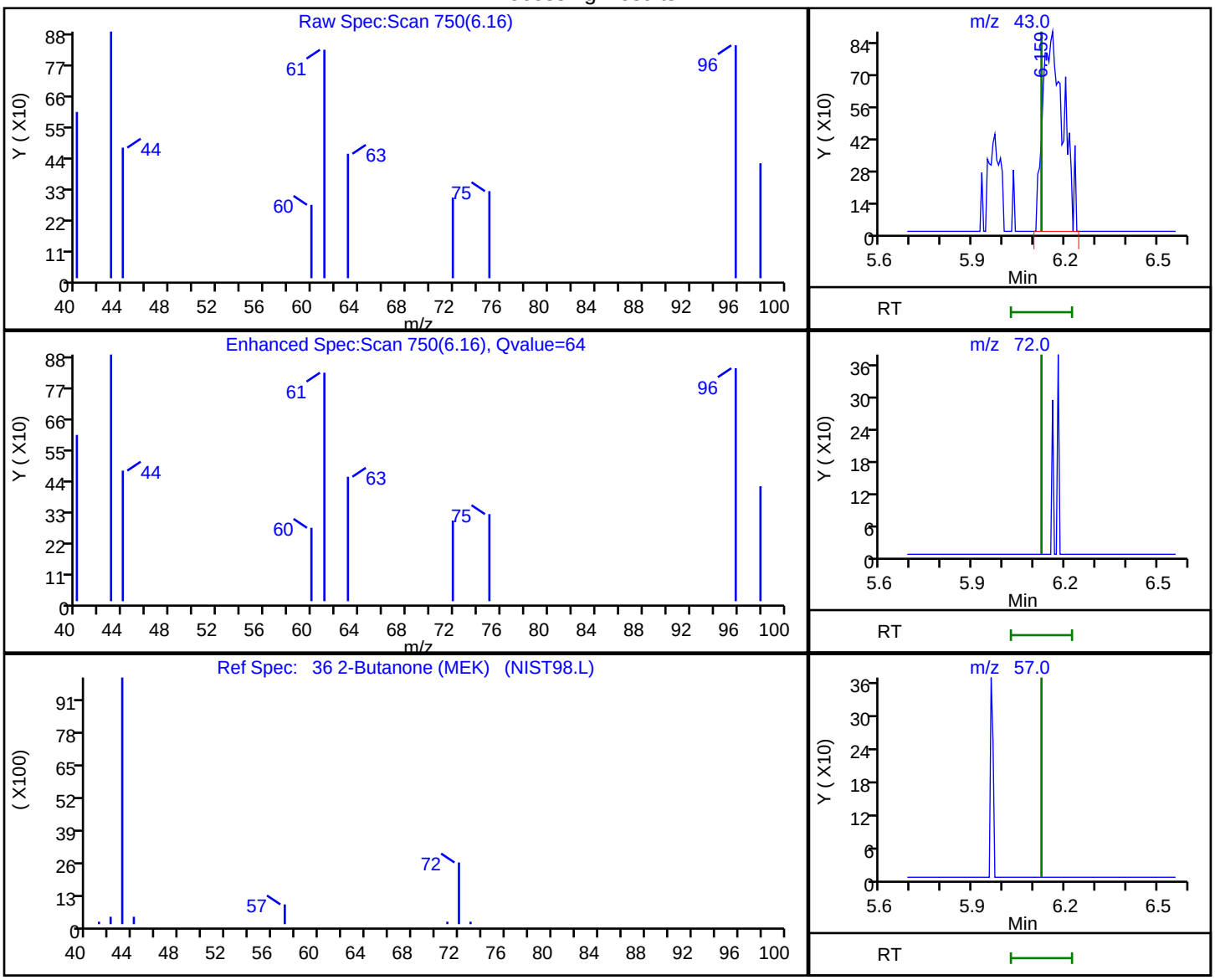
User Disabled Compound Report

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20201204-17111.b\ID04X25.D				
Injection Date:	04-Dec-2020 18:35:30	Instrument ID:	19930		
Lims ID:	410-22411-A-13	Lab Sample ID:	410-22411-13		
Client ID:	HD-QC1-0/1-1				
Operator ID:	kas02648	ALS Bottle#:	25	Worklist Smp#:	25
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

36 2-Butanone (MEK), CAS: 78-93-3

Processing Results



RT	Mass	Response	Amount
6.16	43.00	4107	0.276534
6.12	72.00	0	
6.12	57.00	0	

Reviewer: campbellme, 04-Dec-2020 23:40:46

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

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

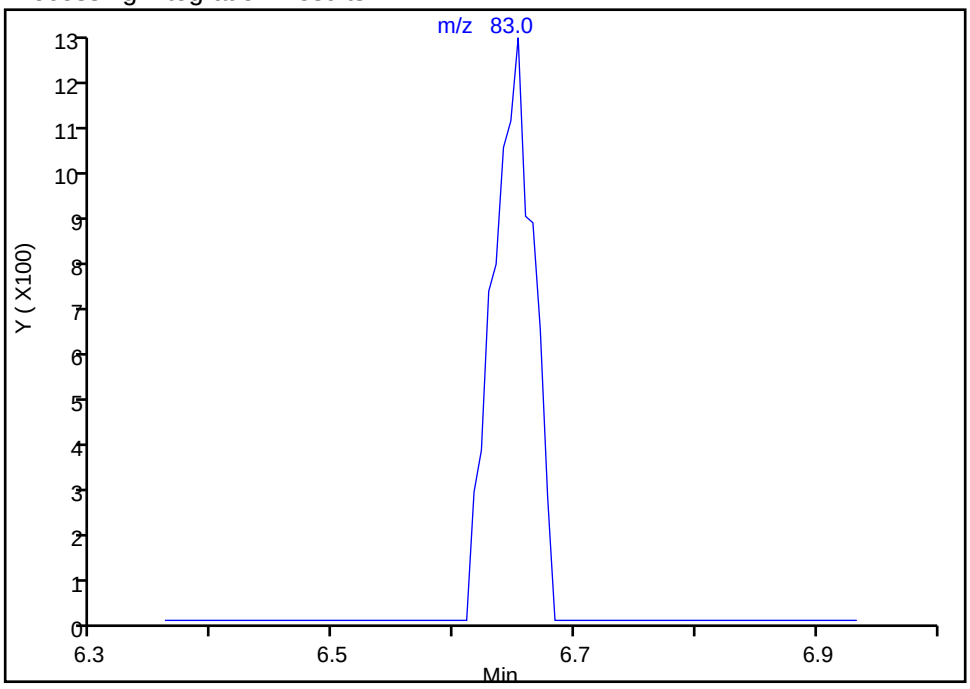
Data File:	\\chromfs\Lancaster\ChromData\19930\20201204-17111.b\ID04X25.D				
Injection Date:	04-Dec-2020 18:35:30	Instrument ID:	19930		
Lims ID:	410-22411-A-13	Lab Sample ID:	410-22411-13		
Client ID:	HD-QC1-0/1-1				
Operator ID:	kas02648	ALS Bottle#:	25	Worklist Smp#:	25
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

45 Chloroform, CAS: 67-66-3

Signal: 1

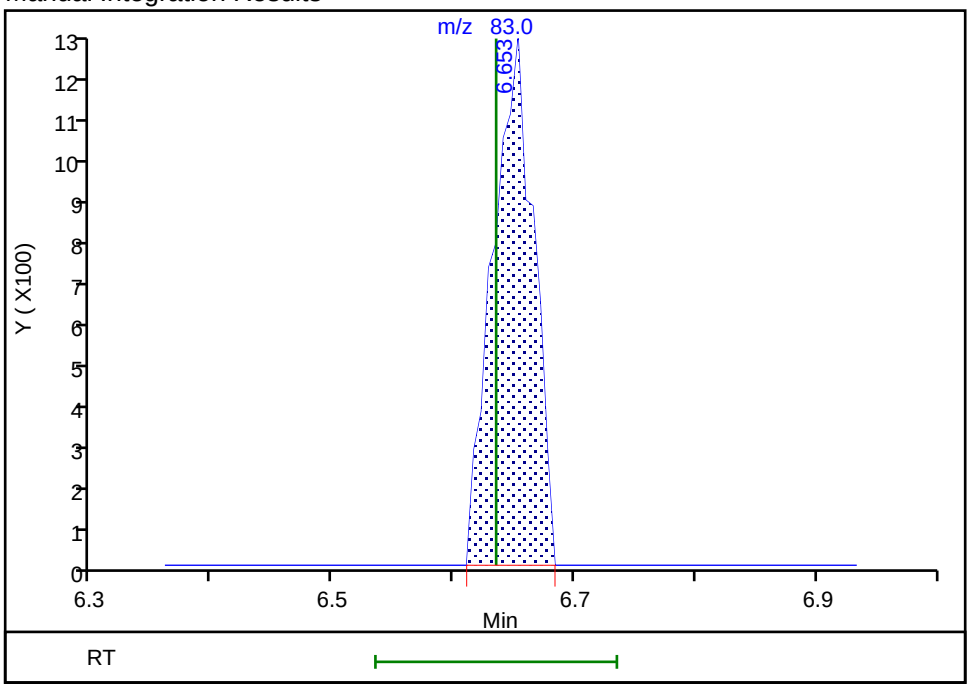
Not Detected
Expected RT: 6.63

Processing Integration Results



Manual Integration Results

RT: 6.65
Area: 2953
Amount: 0.030285
Amount Units: ug/l



Reviewer: campbellme, 04-Dec-2020 23:40:53
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

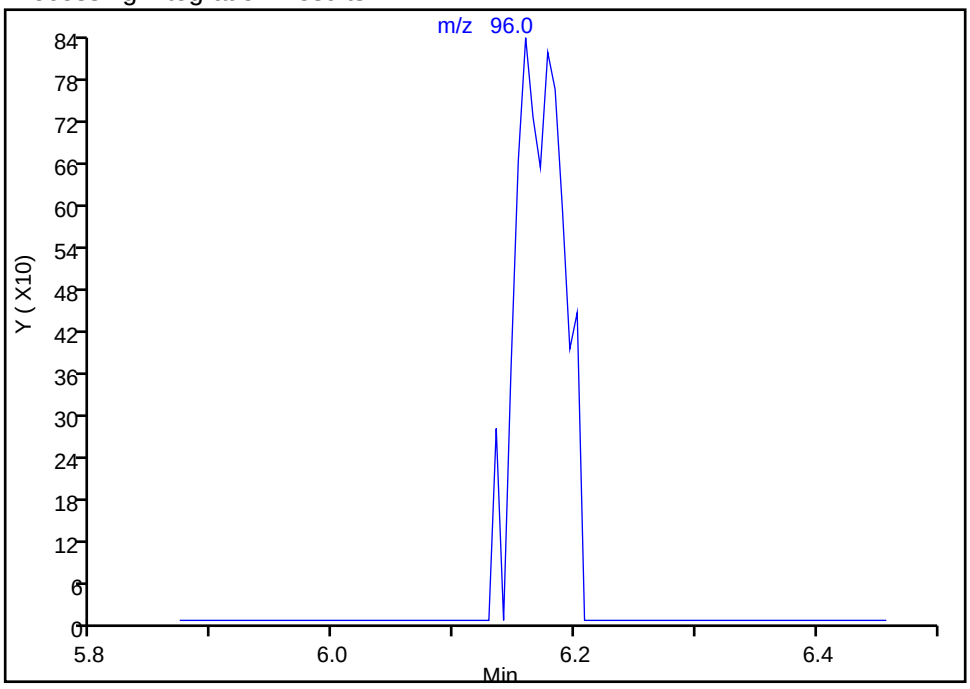
Data File:	\\chromfs\Lancaster\ChromData\19930\20201204-17111.b\ID04X25.D				
Injection Date:	04-Dec-2020 18:35:30	Instrument ID:	19930		
Lims ID:	410-22411-A-13	Lab Sample ID:	410-22411-13		
Client ID:	HD-QC1-0/1-1				
Operator ID:	kas02648	ALS Bottle#:	25	Worklist Smp#:	25
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

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

Signal: 1

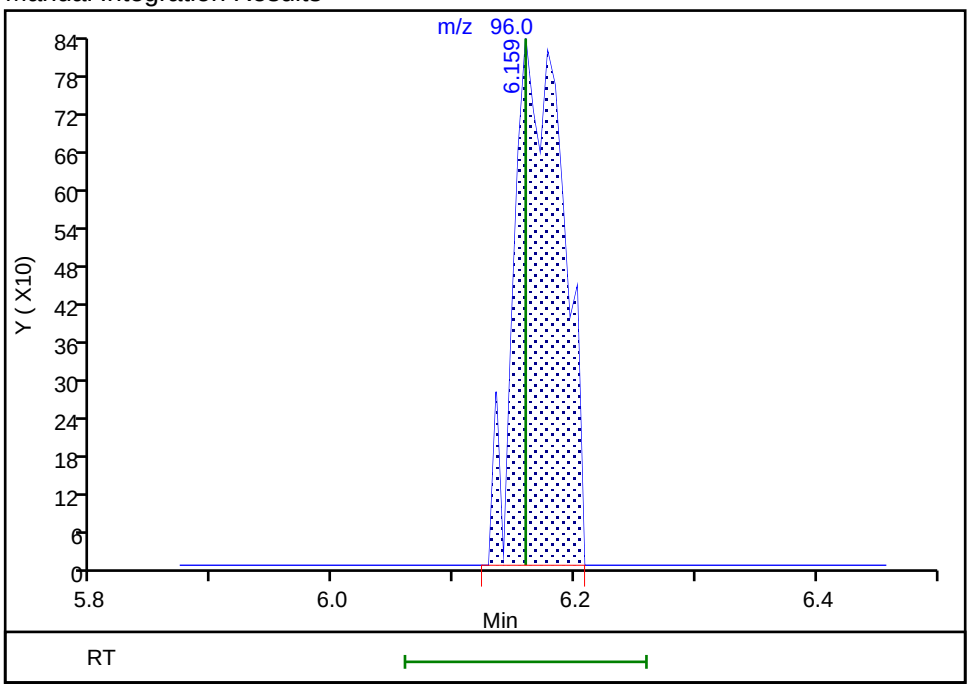
Not Detected
Expected RT: 6.16

Processing Integration Results



Manual Integration Results

RT: 6.16
Area: 2374
Amount: 0.037336
Amount Units: ug/l



Reviewer: campbellme, 04-Dec-2020 23:40:49
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

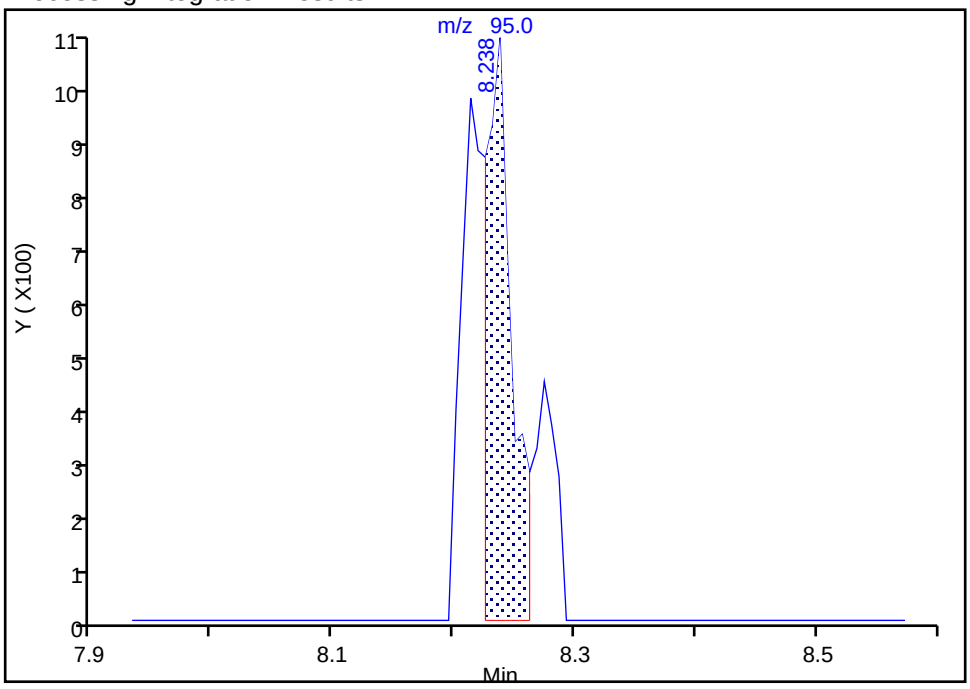
Data File:	\\chromfs\Lancaster\ChromData\19930\20201204-17111.b\ID04X25.D				
Injection Date:	04-Dec-2020 18:35:30	Instrument ID:	19930		
Lims ID:	410-22411-A-13	Lab Sample ID:	410-22411-13		
Client ID:	HD-QC1-0/1-1				
Operator ID:	kas02648	ALS Bottle#:	25	Worklist Smp#:	25
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

61 Trichloroethene, CAS: 79-01-6

Signal: 1

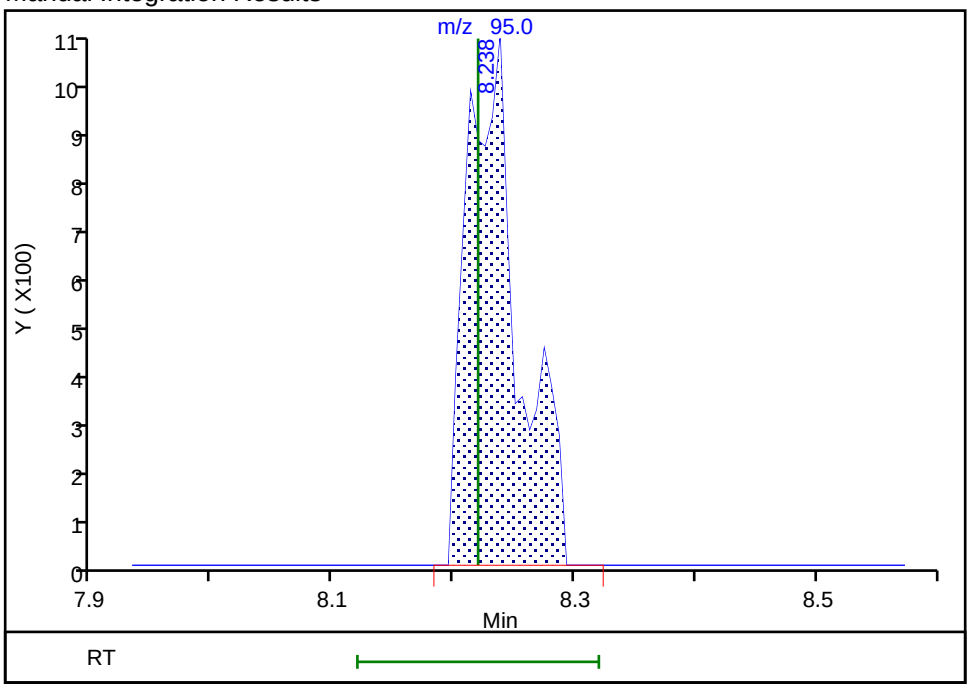
Processing Integration Results

RT: 8.24
Area: 1550
Amount: 0.025140
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 3040
Amount: 0.049307
Amount Units: ug/l



Reviewer: campbellme, 04-Dec-2020 23:41:01
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1

SDG No.:

Client Sample ID: HD-QC1-0/1-2 Lab Sample ID: 410-22411-14

Matrix: Water Lab File ID: ID04X26.D

Analysis Method: 8260D Date Collected: 11/30/2020 00:00

Sample wt/vol: 25(mL) Date Analyzed: 12/04/2020 18:56

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 73040 Units: ug/L

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

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1

SDG No.:

Client Sample ID: HD-QC1-0/1-2 Lab Sample ID: 410-22411-14

Matrix: Water Lab File ID: ID04X26.D

Analysis Method: 8260D Date Collected: 11/30/2020 00:00

Sample wt/vol: 25(mL) Date Analyzed: 12/04/2020 18:56

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 73040 Units: ug/L

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

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		80-120
1868-53-7	Dibromofluoromethane (Surr)	100		80-120
2037-26-5	Toluene-d8 (Surr)	99		80-120
460-00-4	4-Bromofluorobenzene (Surr)	98		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20201204-17111.b\ID04X26.D
Lims ID: 410-22411-A-14
Client ID: HD-QC1-0/1-2
Sample Type: Client
Inject. Date: 04-Dec-2020 18:56:30 ALS Bottle#: 26 Worklist Smp#: 26
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0017111-026
Operator ID: kas02648 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20201204-17111.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 05-Dec-2020 10:06:04 Calib Date: 23-Nov-2020 18:05:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1645

First Level Reviewer: campbellme Date: 04-Dec-2020 23:41:26

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
	4 Chloromethane	50		2.178				ND	
	5 Vinyl chloride	62		2.300				ND	
	7 Bromomethane	94		2.623				ND	
	8 Chloroethane	64		2.703				ND	
	14 1,1-Dichloroethene	96		3.574				ND	
	15 Acetone	43	3.617	3.605	0.012	94	3950	0.4550	
	19 Carbon disulfide	76		3.879				ND	7
	23 Methylene Chloride	84	4.251	4.245	0.006	63	1682	0.0304	
*	24 t-Butyl alcohol-d10 (IS)	65	4.275	4.282	-0.007	0	159239	50.0	
	27 Methyl tert-butyl ether	73		4.659				ND	
	28 trans-1,2-Dichloroethene	96		4.672				ND	
	31 1,1-Dichloroethane	63		5.330				ND	
	36 2-Butanone (MEK)	43		6.123				ND	
	37 cis-1,2-Dichloroethene	96		6.159				ND	
	43 Chlorobromomethane	128		6.488				ND	
	45 Chloroform	83		6.635				ND	
$	46 Dibromofluoromethane (Surr)	113	6.854	6.854	0.000	94	463439	10.0	
	47 1,1,1-Trichloroethane	97		6.866				ND	
	50 Carbon tetrachloride	117		7.080				ND	
$	53 1,2-Dichloroethane-d4 (Surr)	102	7.311	7.305	0.006	0	96283	10.3	
	54 Benzene	78		7.336				ND	
	56 1,2-Dichloroethane	62		7.409				ND	
*	58 Fluorobenzene (IS)	96	7.744	7.738	0.006	99	1870215	10.0	
	61 Trichloroethene	95		8.220				ND	
	63 1,2-Dichloropropane	63		8.549				ND	
	68 Dichlorobromomethane	83		8.890				ND	
	73 cis-1,3-Dichloropropene	75		9.433				ND	
	74 4-Methyl-2-pentanone (MIBK)	43		9.604				ND	
$	75 Toluene-d8 (Surr)	98	9.744	9.744	0.000	93	1838850	9.85	
	76 Toluene	92		9.817				ND	7
	78 trans-1,3-Dichloropropene	75		10.067				ND	
	80 1,1,2-Trichloroethane	97		10.274				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
81 Tetrachloroethene	166		10.366				ND	
83 2-Hexanone	43		10.482				ND	
85 Chlorodibromomethane	129		10.652				ND	
86 Ethylene Dibromide	107		10.762				ND	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.189	0.000	84	1429075	10.0	
90 Chlorobenzene	112		11.213				ND	
S 89 Xylenes, Total	106		11.245				ND	7
91 1,1,1,2-Tetrachloroethane	131		11.298				ND	
92 Ethylbenzene	91		11.298				ND	
93 m-Xylene & p-Xylene	106		11.414				ND	
94 o-Xylene	106		11.743				ND	
95 Styrene	104		11.756				ND	
96 Bromoform	173		11.914				ND	
$ 100 4-Bromofluorobenzene (Surr)	95	12.189	12.189	0.001	95	678264	9.81	
101 1,1,2,2-Tetrachloroethane	83		12.286				ND	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	94	830219	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

MSV_31_826ISS_00003 Amount Added: 5.00 Units: uL Run Reagent

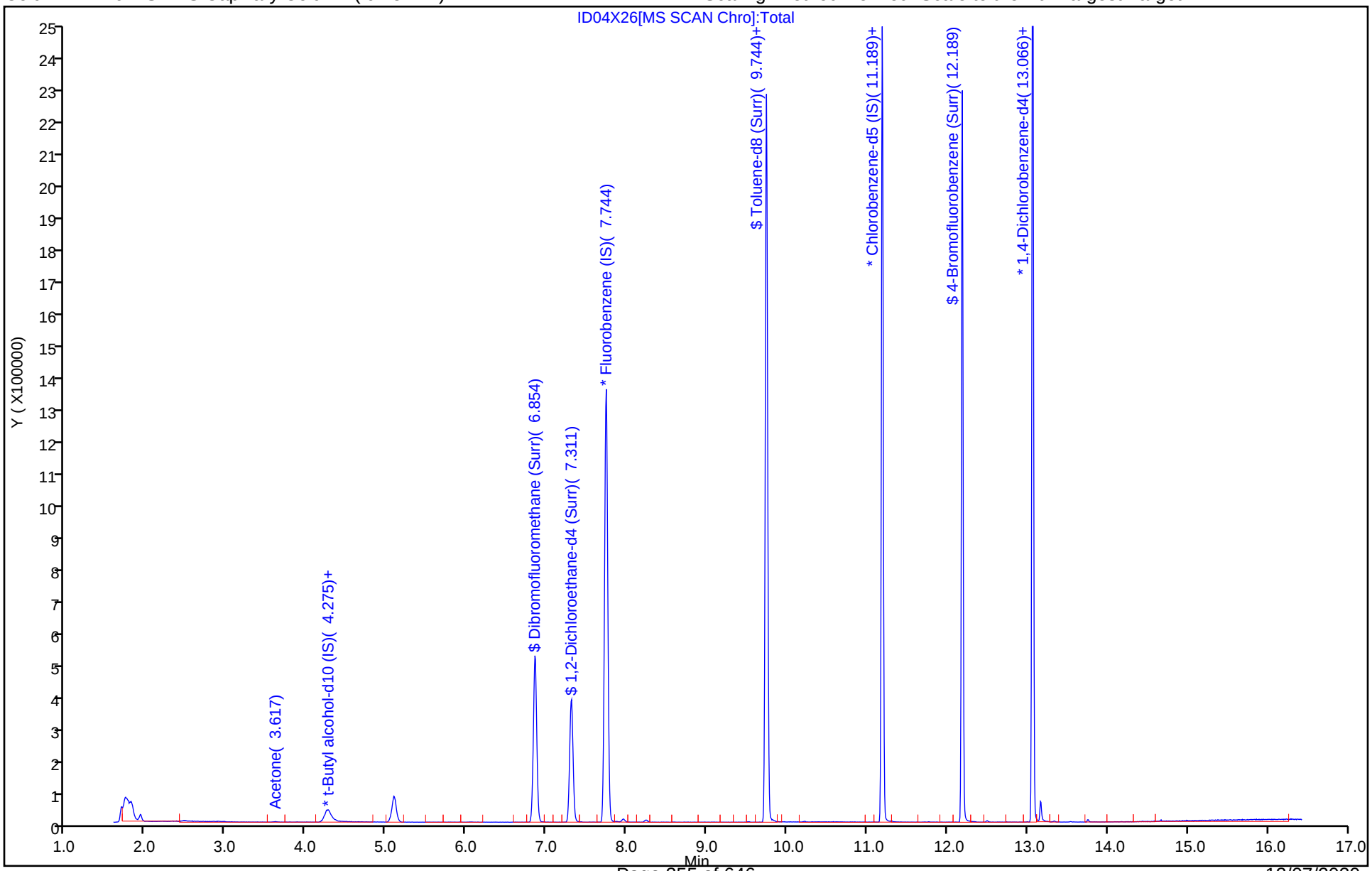
Report Date: 05-Dec-2020 10:06:41 Chrom Revision: 2.3 13-Nov-2020 01:23:02

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20201204-17111.b\ID04X26.D

Injection Date:	04-Dec-2020 18:56:30	Instrument ID:	19930	Operator ID:	kas02648
Lims ID:	410-22411-A-14	Lab Sample ID:	410-22411-14	Worklist Smp#:	26
Client ID:	HD-QC1-0/1-2				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\19930\20201204-17111.b\ID04X26.D				
Lims ID:	410-22411-A-14				
Client ID:	HD-QC1-0/1-2				
Sample Type:	Client				
Inject. Date:	04-Dec-2020 18:56:30	ALS Bottle#:	26	Worklist Smp#:	26
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Sample Info:	410-0017111-026				
Operator ID:	kas02648	Instrument ID:	19930		
Method:	\\chromfs\Lancaster\ChromData\19930\20201204-17111.b\8260 25ml HP31.m				
Limit Group:	MSV - 8260C_D				
Last Update:	05-Dec-2020 10:06:04	Calib Date:	23-Nov-2020 18:05:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I17.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1645				

First Level Reviewer: campbellme Date: 04-Dec-2020 23:41:26

Compound	Amount Added	Amount Recovered	% Rec.
$ 46 Dibromofluoromethane (Surr)	10.0	10.0	100.36
$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	10.3	103.42
$ 75 Toluene-d8 (Surr)	10.0	9.85	98.53
$ 100 4-Bromofluorobenzene (Surr)	10.0	9.81	98.14

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1 Analy Batch No.: 69397

SDG No.:

Instrument ID: 19930 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/23/2020 12:45 Calibration End Date: 11/23/2020 14:53 Calibration ID: 16044

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-69397/9	IN23I07.D
Level 2	IC 410-69397/8	IN23I06.D
Level 3	IC 410-69397/7	IN23I05.D
Level 4	IC 410-69397/6	IN23I04.D
Level 5	IC 410-69397/5	IN23I03.D
Level 6	ICIS 410-69397/4	IN23I02.D
Level 7	IC 410-69397/3	IN23I01.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.3607 0.3693	0.3443 0.3613	0.3491	0.3467	0.3668	Ave		0.3569			0.1000	2.8		20.0			
Chloromethane	0.4315 0.4102	0.4125 0.3961	0.4191	0.4222	0.4074	Ave		0.4141			0.1000	2.8		20.0			
1,3-Butadiene	0.4408 0.3172	0.3851 0.3000	0.3643	0.3276	0.3405	Ave		0.3536				13.5		20.0			
Vinyl chloride	0.3994 0.3784	0.3665 0.3697	0.3801	0.3921	0.3824	Ave		0.3812			0.1000	3.0		20.0			
Bromomethane	0.2855 0.2712	0.2809 0.2612	0.2791	0.2861	0.2711	Ave		0.2764			0.1000	3.3		20.0			
Chloroethane	0.2486 0.2305	0.2284 0.2245	0.2380	0.2383	0.2320	Ave		0.2343			0.1000	3.4		20.0			
Dichlorofluoromethane	0.5406 0.5172	0.5160 0.5011	0.5399	0.5385	0.5215	Ave		0.5249			0.1000	2.9		20.0			
Trichlorofluoromethane	0.5316 0.4851	0.4934 0.4690	0.4894	0.4922	0.4935	Ave		0.4935			0.1000	3.8		20.0			
Ethyl ether	0.2178 0.2235	0.2254 0.2169	0.2165	0.2247	0.2222	Ave		0.2210				1.7		20.0			
Freon 123a	0.3613 0.3458	0.3509 0.3341	0.3459	0.3338	0.3511	Ave		0.3461				2.8		20.0			
Acrolein	2.2212 2.1445	2.2354 2.1316	2.2940	2.1390	2.1774	Ave		2.1919				2.8		20.0			
1,1-Dichloroethene	0.2688 0.2684	0.2691 0.2596	0.2698	0.2604	0.2701	Ave		0.2666			0.1000	1.7		20.0			
Acetone	3.2304 2.4485	2.9420 2.4033	2.8790	2.6067	2.5718	Ave		2.7259			0.1000	11.0		20.0			
Freon 113	0.2816 0.2866	0.2809 0.2814	0.2835	0.2646	0.2944	Ave		0.2819			0.1000	3.2		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1 Analy Batch No.: 69397

SDG No.:

Instrument ID: 19930 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/23/2020 12:45 Calibration End Date: 11/23/2020 14:53 Calibration ID: 16044

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Methyl iodide	0.5162 0.5263	0.5233 0.5129	0.5277	0.5126	0.5284	Ave		0.5211				1.3		20.0			
Carbon disulfide	0.8367 0.7635	0.7753 0.7493	0.7713	0.7407	0.7743	Ave		0.7730			0.1000	4.0		20.0			
Methyl acetate	6.6934 7.0637	7.8022 8.0998	7.6625	7.5562	7.1775	Ave		7.4365			0.1000	6.5		20.0			
Allyl chloride	0.4047 0.4117	0.4018 0.3988	0.4007	0.4153	0.4043	Ave		0.4053				1.5		20.0			
Methylene Chloride	0.3128 0.2909	0.3032 0.2800	0.3017	0.2877	0.2922	Ave		0.2955			0.1000	3.7		20.0			
t-Butyl alcohol	1.1481 1.0257	1.0274 0.9520	1.1531	1.0833	1.0725	Ave		1.0660				6.7		20.0			
Acrylonitrile	3.6240 3.4877	3.5908 3.5376	3.5903	3.5261	3.5511	Ave		3.5582				1.3		20.0			
Methyl tert-butyl ether	0.7214 0.7248	0.7003 0.7026	0.7096	0.7104	0.7269	Ave		0.7137			0.1000	1.5		20.0			
trans-1,2-Dichloroethene	0.2992 0.2966	0.2941 0.2867	0.2985	0.2867	0.2993	Ave		0.2944			0.1000	1.9		20.0			
n-Hexane	0.3910 0.4294	0.3750 0.4213	0.3885	0.3804	0.4346	Ave		0.4029				6.1		20.0			
1,1-Dichloroethane	0.5289 0.5373	0.5387 0.5218	0.5378	0.5223	0.5389	Ave		0.5323			0.2000	1.5		20.0			
di-Isopropyl ether	0.8780 0.8925	0.8803 0.8673	0.8822	0.8653	0.8928	Ave		0.8798				1.2		20.0			
2-Chloro-1,3-butadiene	0.4216 0.4386	0.4257 0.4264	0.4213	0.4183	0.4391	Ave		0.4273				2.0		20.0			
Ethyl t-butyl ether	0.8084 0.8567	0.8218 0.8249	0.8295	0.8237	0.8495	Ave		0.8307				2.0		20.0			
2-Butanone (MEK)	4.5524 4.4713	4.4984 4.5520	4.8543	4.4758	4.5171	Ave		4.5602			0.1000	2.9		20.0			
cis-1,2-Dichloroethene	0.3554 0.3420	0.3520 0.3305	0.3377	0.3338	0.3430	Ave		0.3420			0.1000	2.7		20.0			
2,2-Dichloropropane	0.4196 0.4410	0.4258 0.4302	0.4239	0.4170	0.4383	Ave		0.4280				2.1		20.0			
Propionitrile	1.3836 1.2371	1.3672 1.3054	1.3990	1.3009	1.3416	Ave		1.3335				4.2		20.0			
Methacrylonitrile	4.5971 4.6314	4.7705 4.6971	4.9523	4.5510	4.6706	Ave		4.6957				2.8		20.0			
Bromochloromethane	0.1466 0.1504	0.1481 0.1470	0.1535	0.1548	0.1545	Ave		0.1507				2.4		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1 Analy Batch No.: 69397

SDG No.:

Instrument ID: 19930 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/23/2020 12:45 Calibration End Date: 11/23/2020 14:53 Calibration ID: 16044

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Tetrahydrofuran	1.3541 1.3473	1.4107 1.3762	1.4473	1.3631	1.3821	Ave		1.3830				2.5		20.0			
Chloroform	0.5335 0.5244	0.5341 0.5066	0.5299	0.5137	0.5295	Ave		0.5245			0.2000	2.0		20.0			
1,1,1-Trichloroethane	0.4728 0.4750	0.4744 0.4653	0.4720	0.4624	0.4768	Ave		0.4712			0.1000	1.1		20.0			
Cyclohexane	0.4660 0.5041	0.4771 0.4959	0.4923	0.4717	0.5119	Ave		0.4884			0.1000	3.5		20.0			
Carbon tetrachloride	0.4232 0.4294	0.4166 0.4228	0.4133	0.4122	0.4351	Ave		0.4218			0.1000	2.0		20.0			
1,1-Dichloropropene	0.4077 0.4271	0.4064 0.4203	0.4219	0.4151	0.4293	Ave		0.4182				2.1		20.0			
Isobutyl alcohol	0.3704 0.3157	0.3200 0.3294	0.3652	0.3491	0.3503	Ave		0.3429				6.3		20.0			
Benzene	1.2836 1.2710	1.2815 1.2375	1.2837	1.2402	1.2718	Ave		1.2670			0.5000	1.6		20.0			
1,2-Dichloroethane	0.3341 0.3048	0.3141 0.2979	0.3139	0.3004	0.3003	Ave		0.3094			0.1000	4.1		20.0			
t-Amyl methyl ether	0.7306 0.7880	0.7514 0.7661	0.7539	0.7486	0.7884	Ave		0.7610				2.8		20.0			
n-Heptane	0.4050 0.4228	0.3844 0.4175	0.3968	0.3865	0.4191	Ave		0.4046				3.9		20.0			
n-Butanol	0.2834 0.3525	0.3153 0.3344	0.3237	0.3223	0.3370	Ave		0.3241				6.7		20.0			
Trichloroethene	0.3350 0.3332	0.3357 0.3278	0.3352	0.3206	0.3341	Ave		0.3316			0.2000	1.7		20.0			
Methylcyclohexane	0.5073 0.5633	0.5099 0.5518	0.5427	0.5275	0.5684	Ave		0.5387			0.1000	4.6		20.0			
1,2-Dichloropropane	0.3031 0.3179	0.3146 0.3113	0.3118	0.3076	0.3136	Ave		0.3114			0.1000	1.6		20.0			
Methyl methacrylate	7.9156 9.1158	8.6260 9.2885	8.8793	8.5179	8.8590	Ave		8.7432				5.2		20.0			
1,4-Dioxane	+++++ 0.0850	0.0896 0.0759	0.0919	0.0867	0.0785	Ave		0.0846			0.0050	7.4		20.0			
Dibromomethane	0.1433 0.1484	0.1510 0.1471	0.1467	0.1445	0.1495	Ave		0.1472				1.8		20.0			
Bromodichloromethane	0.3741 0.3849	0.3645 0.3799	0.3707	0.3601	0.3783	Ave		0.3732			0.2000	2.3		20.0			
2-Nitropropane	2.0575 2.2292	2.1525 2.3209	2.2556	2.1373	2.2324	Ave		2.1979				4.0		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1 Analy Batch No.: 69397

SDG No.:

Instrument ID: 19930 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/23/2020 12:45 Calibration End Date: 11/23/2020 14:53 Calibration ID: 16044

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
cis-1,3-Dichloropropene	0.4116 0.4774	0.4299 0.4721	0.4439	0.4343	0.4648	Ave		0.4477			0.2000	5.5		20.0			
4-Methyl-2-pentanone (MIBK)	10.766 11.306	11.306 11.412	11.819	11.192	11.602	Ave		11.343			0.1000	2.9		20.0			
Toluene	1.1381 1.0799	1.1173 1.0466	1.1002	1.0592	1.0913	Ave		1.0904			0.4000	2.9		20.0			
trans-1,3-Dichloropropene	0.4238 0.5046	0.4609 0.4964	0.4495	0.4654	0.4948	Ave		0.4707			0.1000	6.2		20.0			
Ethyl methacrylate	0.3392 0.4294	0.3709 0.4240	0.3809	0.3871	0.4260	Ave		0.3939				8.6		20.0			
1,1,2-Trichloroethane	0.2992 0.2946	0.2884 0.2862	0.2908	0.2832	0.2945	Ave		0.2910			0.1000	1.9		20.0			
Tetrachloroethene	0.5352 0.5301	0.5359 0.5162	0.5278	0.5096	0.5399	Ave		0.5278			0.2000	2.1		20.0			
1,3-Dichloropropane	0.4974 0.5093	0.4881 0.4889	0.4982	0.4891	0.5089	Ave		0.4971				1.8		20.0			
2-Hexanone	6.8039 8.1616	7.3765 8.0901	8.0113	7.7935	8.0511	Ave		7.7554			0.1000	6.4		20.0			
Dibromochloromethane	0.3529 0.3809	0.3471 0.3797	0.3600	0.3574	0.3809	Ave		0.3656				4.0		20.0			
1,2-Dibromoethane (EDB)	0.2742 0.2883	0.2652 0.2818	0.2825	0.2713	0.2876	Ave		0.2787			0.1000	3.1		20.0			
1-Chlorohexane	0.6943 0.6283	0.6314 0.6164	0.6209	0.6022	0.6327	Ave		0.6323				4.6		20.0			
Chlorobenzene	1.2281 1.2035	1.2296 1.1689	1.2157	1.1736	1.2184	Ave		1.2054			0.5000	2.1		20.0			
1,1,1,2-Tetrachloroethane	0.4080 0.4350	0.4012 0.4218	0.4207	0.4108	0.4324	Ave		0.4185				3.0		20.0			
Ethylbenzene	2.0768 2.1349	2.1331 2.0403	2.1324	2.0730	2.1505	Ave		2.1059			0.1000	2.0		20.0			
m&p-Xylene	0.8220 0.8424	0.8237 0.8162	0.8372	0.8273	0.8495	Ave		0.8312			0.1000	1.5		20.0			
o-Xylene	0.7726 0.8307	0.8015 0.8090	0.8137	0.7970	0.8309	Ave		0.8079			0.3000	2.5		20.0			
Styrene	1.2122 1.3553	1.2338 1.3195	1.2992	1.2811	1.3521	Ave		1.2933			0.3000	4.3		20.0			
Bromoform	0.1988 0.2394	0.2109 0.2414	0.2107	0.2155	0.2300	Ave		0.2210			0.1000	7.3		20.0			
Isopropylbenzene	2.0663 2.2066	2.1292 2.1070	2.1515	2.1354	2.2254	Ave		2.1459			0.1000	2.6		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1 Analy Batch No.: 69397

SDG No.:

Instrument ID: 19930 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/23/2020 12:45 Calibration End Date: 11/23/2020 14:53 Calibration ID: 16044

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,1,2,2-Tetrachloroethane	0.6359 0.6805	0.6321 0.6597	0.6447	0.6359	0.6820	Ave		0.6530			0.3000	3.3		20.0			
Bromobenzene	0.8840 0.9107	0.8918 0.8992	0.9136	0.8848	0.9189	Ave		0.9004				1.6		20.0			
trans-1,4-Dichloro-2-butene	3.2721 4.0130	3.5120 4.1257	3.7140	3.5871	3.8147	Ave		3.7198				7.9		20.0			
1,2,3-Trichloropropane	0.1902 0.1814	0.1703 0.1758	0.1796	0.1742	0.1827	Ave		0.1792				3.6		20.0			
N-Propylbenzene	4.3339 4.5240	4.4448 4.2406	4.4706	4.3419	4.5335	Ave		4.4128				2.5		20.0			
2-Chlorotoluene	0.8901 0.9152	0.8872 0.8914	0.9197	0.8868	0.9256	Ave		0.9023				1.9		20.0			
1,3,5-Trimethylbenzene	3.0102 3.2697	3.1536 3.1368	3.1716	3.1018	3.2493	Ave		3.1562				2.8		20.0			
4-Chlorotoluene	0.8953 0.9316	0.8948 0.9055	0.9436	0.8819	0.9256	Ave		0.9112				2.5		20.0			
tert-Butylbenzene	0.7284 0.7354	0.6826 0.7175	0.7184	0.6792	0.7288	Ave		0.7129				3.2		20.0			
Pentachloroethane	0.4880 0.6069	0.5450 0.5912	0.5569	0.5792	0.5875	Ave		0.5650				7.1		20.0			
1,2,4-Trimethylbenzene	2.9984 3.3452	3.1735 3.1936	3.2564	3.1604	3.3399	Ave		3.2096				3.7		20.0			
sec-Butylbenzene	3.9871 4.3064	4.0643 4.0853	4.1669	4.0751	4.2908	Ave		4.1394				2.9		20.0			
1,3-Dichlorobenzene	1.8457 1.8430	1.7877 1.8053	1.8138	1.7659	1.8315	Ave		1.8133			0.6000	1.6		20.0			
p-Isopropyltoluene	3.2730 3.6981	3.4737 3.5470	3.5189	3.5132	3.6826	Ave		3.5295				4.0		20.0			
1,4-Dichlorobenzene	1.8404 1.8397	1.7863 1.7954	1.8310	1.7595	1.8366	Ave		1.8127			0.5000	1.8		20.0			
1,2,3-Trimethylbenzene	1.4231 1.4415	1.3869 1.3941	1.4342	1.4454	1.4414	Ave		1.4238				1.7		20.0			
Benzyl chloride	0.1886 0.2884	0.2109 0.2925	0.2319	0.2491	0.2665	Ave		0.2469				15.8		20.0			
n-Butylbenzene	1.6444 1.8013	1.6762 1.7652	1.7140	1.6962	1.7688	Ave		1.7237				3.3		20.0			
1,2-Dichlorobenzene	1.6592 1.6859	1.6311 1.6263	1.7008	1.6003	1.6743	Ave		1.6540			0.4000	2.2		20.0			
1,2-Dibromo-3-Chloropropane	0.0884 0.1092	0.0957 0.1070	0.0988	0.0961	0.1066	Ave		0.1003			0.0500	7.6		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1 Analy Batch No.: 69397

SDG No.:

Instrument ID: 19930 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/23/2020 12:45 Calibration End Date: 11/23/2020 14:53 Calibration ID: 16044

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,3,5-Trichlorobenzene	1.2569 1.3750	1.2893 1.3467	1.2786	1.2588	1.3372	Ave		1.3061				3.6		20.0			
1,2,4-Trichlorobenzene	1.0255 1.1703	1.0502 1.1316	1.0568	1.0419	1.1263	Ave		1.0861			0.2000	5.1		20.0			
Hexachlorobutadiene	0.4940 0.4716	0.4744 0.4779	0.4669	0.4527	0.4685	Ave		0.4723				2.6		20.0			
Naphthalene	1.9068 2.1982	1.9274 2.0411	1.9586	2.0221	2.1536	Ave		2.0297				5.5		20.0			
1,2,3-Trichlorobenzene	0.9020 0.9970	0.8999 0.9398	0.9266	0.9202	0.9750	Ave		0.9372				3.9		20.0			
Dibromofluoromethane (Surr)	0.2464 0.2458	0.2477 0.2445	0.2490	0.2468	0.2481	Ave		0.2469				0.6		20.0			
1,2-Dichloroethane-d4 (Surr)	0.0495 0.0501	0.0498 0.0499	0.0493	0.0497	0.0501	Ave		0.0498				0.6		20.0			
Toluene-d8 (Surr)	1.3117 1.2971	1.3204 1.2778	1.3114	1.3104	1.3126	Ave		1.3059				1.1		20.0			
4-Bromofluorobenzene (Surr)	0.4831 0.4774	0.4866 0.4818	0.4852	0.4849	0.4864	Ave		0.4836				0.7		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1 Analy Batch No.: 69397

SDG No.:

Instrument ID: 19930 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/23/2020 12:45 Calibration End Date: 11/23/2020 14:53 Calibration ID: 16044

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-69397/9	IN23I07.D
Level 2	IC 410-69397/8	IN23I06.D
Level 3	IC 410-69397/7	IN23I05.D
Level 4	IC 410-69397/6	IN23I04.D
Level 5	IC 410-69397/5	IN23I03.D
Level 6	ICIS 410-69397/4	IN23I02.D
Level 7	IC 410-69397/3	IN23I01.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	14289 762848	34344 1853609	69362	137035	362905	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Chloromethane	FB	Ave	17096 847456	41148 2031747	83265	166854	403049	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,3-Butadiene	FB	Ave	17464 655274	38419 1538926	72377	129463	336874	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Vinyl chloride	FB	Ave	15824 781821	36555 1896588	75517	154985	378321	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Bromomethane	FB	Ave	11310 560203	28022 1339972	55449	113059	268205	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Chloroethane	FB	Ave	9848 476273	22787 1151471	47287	94172	229528	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Dichlorofluoromethane	FB	Ave	21416 1068389	51472 2570362	107260	212826	515898	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Trichlorofluoromethane	FB	Ave	21060 1002094	49221 2406078	97236	194532	488244	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Ethyl ether	FB	Ave	8629 461858	22487 1112739	43027	88826	219835	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Freon 123a	FB	Ave	14313 714488	35000 1713909	68727	131936	347378	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Acrolein	TBAd10	Ave	69971 3743531	175165 8955401	356505	701877	1828205	10.0 500	25.0 1250	50.0	100	250
1,1-Dichloroethene	FB	Ave	10648 554501	26846 1331438	53597	102917	267271	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Acetone	TBAd10	Ave	20352 854846	46105 2019299	89478	171065	431846	2.00 100	5.00 250	10.0	20.0	50.0
Freon 113	FB	Ave	11156 592097	28017 1443706	56328	104592	291222	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Methyl iodide	FB	Ave	20453	52202	104837	202587	522756	0.200	0.500	1.00	2.00	5.00

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1 Analy Batch No.: 69397

SDG No.:

Instrument ID: 19930 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/23/2020 12:45 Calibration End Date: 11/23/2020 14:53 Calibration ID: 16044

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
			1087214	2631223				10.0	25.0			
Carbon disulfide	FB	Ave	33150 1577401	77344 3843896	153230	292763	766074	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Methyl acetate	TBAd10	Ave	4217 246609	12227 680563	23815	49588	120524	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Allyl chloride	FB	Ave	16032 850587	40080 2045690	79611	164133	400038	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Methylene Chloride	FB	Ave	12391 601040	30241 1436509	59944	113711	289040	0.200 10.0	0.500 25.0	1.00	2.00	5.00
t-Butyl alcohol	TBAd10	Ave	14466 716161	32201 1599739	71679	142185	360171	4.00 200	10.0 500	20.0	40.0	100
Acrylonitrile	TBAd10	Ave	11416 608812	28136 1486195	55793	115701	298145	1.00 50.0	2.50 125	5.00	10.0	25.0
Methyl tert-butyl ether	FB	Ave	28583 1497268	69855 3604322	140981	280757	719156	0.200 10.0	0.500 25.0	1.00	2.00	5.00
trans-1,2-Dichloroethene	FB	Ave	11853 612688	29336 1470445	59305	113298	296112	0.200 10.0	0.500 25.0	1.00	2.00	5.00
n-Hexane	FB	Ave	15492 887151	37410 2161387	77187	150330	429931	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,1-Dichloroethane	FB	Ave	20953 1110105	53737 2676667	106846	206444	533155	0.200 10.0	0.500 25.0	1.00	2.00	5.00
di-Isopropyl ether	FB	Ave	34785 1843818	87812 4448853	175266	342003	883301	0.200 10.0	0.500 25.0	1.00	2.00	5.00
2-Chloro-1,3-butadiene	FB	Ave	16705 906198	42465 2187566	83699	165305	434378	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Ethyl t-butyl ether	FB	Ave	32027 1769941	81982 4231563	164798	325561	840400	0.200 10.0	0.500 25.0	1.00	2.00	5.00
2-Butanone (MEK)	TBAd10	Ave	28681 1561053	70495 3824682	150873	293727	758501	2.00 100	5.00 250	10.0	20.0	50.0
cis-1,2-Dichloroethene	FB	Ave	14079 706462	35111 1695323	67080	131926	339325	0.200 10.0	0.500 25.0	1.00	2.00	5.00
2,2-Dichloropropane	FB	Ave	16623 911060	42478 2206838	84205	164796	433655	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Propionitrile	TBAd10	Ave	17434 863833	42851 2193579	86963	170750	450559	4.00 200	10.0 500	20.0	40.0	100
Methacrylonitrile	TBAd10	Ave	28963	74760	153916	298659	784279	2.00	5.00	10.0	20.0	50.0

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1 Analy Batch No.: 69397

SDG No.:

Instrument ID: 19930 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/23/2020 12:45 Calibration End Date: 11/23/2020 14:53 Calibration ID: 16044

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
			1616918	3946564				100	250			
Bromochloromethane	FB	Ave	5808 310784	14772 753858	30494	61198	152825	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Tetrahydrofuran	TBAd10	Ave	8531 470375	22107 1156304	44982	89453	232086	2.00 100	5.00 250	10.0	20.0	50.0
Chloroform	FB	Ave	21135 1083255	53281 2598659	105267	203027	523866	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,1,1-Trichloroethane	FB	Ave	18731 981285	47326 2386922	93768	182755	471715	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Cyclohexane	FB	Ave	18461 1041428	47588 2543910	97796	186444	506440	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Carbon tetrachloride	FB	Ave	16767 887161	41561 2168824	82099	162919	430415	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,1-Dichloropropene	FB	Ave	16151 882438	40536 2155973	83811	164045	424728	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Isobutyl alcohol	TBAd10	Ave	11668 551150	25076 1383991	56751	114540	294140	10.0 500	25.0 1250	50.0	100	250
Benzene	FB	Ave	50855 2625721	127834 6348099	255028	490160	1258244	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2-Dichloroethane	FB	Ave	13237 629666	31335 1528196	62354	118739	297074	0.200 10.0	0.500 25.0	1.00	2.00	5.00
t-Amyl methyl ether	FB	Ave	28945 1627872	74955 3929679	149782	295847	780037	0.200 10.0	0.500 25.0	1.00	2.00	5.00
n-Heptane	FB	Ave	16047 873361	38350 2141721	78839	152765	414595	0.200 10.0	0.500 25.0	1.00	2.00	5.00
n-Butanol	TBAd10	Ave	17858 1230757	49414 2809489	100598	211478	565829	20.0 1000	50.0 2500	100	200	500
Trichloroethene	FB	Ave	13273 688361	33485 1681778	66585	126694	330514	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Methylcyclohexane	FB	Ave	20100 1163763	50862 2830707	107810	208498	562317	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2-Dichloropropane	FB	Ave	12009 656764	31387 1596660	61945	121570	310291	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Methyl methacrylate	TBAd10	Ave	4987 318254	13518 780437	27597	55899	148760	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,4-Dioxane	TBAd10	Ave	+++++ 148345	7023 318662	14289	28458	65884	+++++ 500	25.0 1250	50.0	100	250

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1 Analy Batch No.: 69397

SDG No.:

Instrument ID: 19930 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/23/2020 12:45 Calibration End Date: 11/23/2020 14:53 Calibration ID: 16044

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
Dibromomethane	FB	Ave	5679 306542	15063 754336	29139	57091	147921	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Bromodichloromethane	FB	Ave	14820 795099	36362 1948970	73650	142334	374289	0.200 10.0	0.500 25.0	1.00	2.00	5.00
2-Nitropropane	TBAd10	Ave	12963 778258	33733 1950037	70105	140261	374854	2.00 100	5.00 250	10.0	20.0	50.0
cis-1,3-Dichloropropene	FB	Ave	16306 986321	42882 2421802	88193	171644	459853	0.200 10.0	0.500 25.0	1.00	2.00	5.00
4-Methyl-2-pentanone (MIBK)	TBAd10	Ave	67829 3947176	177180 9588763	367338	734468	1948125	2.00 100	5.00 250	10.0	20.0	50.0
Toluene	CBZd5	Ave	33538 1696057	83094 4131675	163309	313899	811376	0.200 10.0	0.500 25.0	1.00	2.00	5.00
trans-1,3-Dichloropropene	CBZd5	Ave	12488 792406	34273 1959641	66719	137933	367862	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Ethyl methacrylate	CBZd5	Ave	9995 674454	27584 1673846	56537	114724	316728	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,1,2-Trichloroethane	CBZd5	Ave	8818 462694	21447 1129761	43173	83917	218945	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Tetrachloroethene	CBZd5	Ave	15772 832486	39857 2037894	78353	151027	401439	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,3-Dichloropropane	CBZd5	Ave	14656 799899	36303 1930028	73951	144948	378398	0.200 10.0	0.500 25.0	1.00	2.00	5.00
2-Hexanone	TBAd10	Ave	42866 2849426	115600 6797458	248990	511453	1351932	2.00 100	5.00 250	10.0	20.0	50.0
Dibromochloromethane	CBZd5	Ave	10400 598262	25811 1498853	53438	105930	283207	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2-Dibromoethane (EDB)	CBZd5	Ave	8081 452788	19726 1112590	41931	80415	213803	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1-Chlorohexane	CBZd5	Ave	20461 986757	46957 2433335	92173	178481	470375	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Chlorobenzene	CBZd5	Ave	36190 1890048	91441 4614383	180463	347796	905888	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,1,1,2-Tetrachloroethane	CBZd5	Ave	12023 683105	29836 1665026	62455	121733	321476	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Ethylbenzene	CBZd5	Ave	61200 3352863	158639 8054835	316536	614346	1598931	0.200 10.0	0.500 25.0	1.00	2.00	5.00
m&p-Xylene	CBZd5	Ave	48448 2646088	122512 6444517	248538	490346	1263230	0.400 20.0	1.00 50.0	2.00	4.00	10.0
o-Xylene	CBZd5	Ave	22768	59608	120780	236196	617748	0.200	0.500	1.00	2.00	5.00

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1 Analy Batch No.: 69397

SDG No.:

Instrument ID: 19930 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/23/2020 12:45 Calibration End Date: 11/23/2020 14:53 Calibration ID: 16044

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
			1304564	3193696				10.0	25.0			
Styrene	CBZd5	Ave	35720 2128541	91755 5209128	192855	379665	1005274	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Bromoform	CBZd5	Ave	5858 376053	15681 952842	31282	63856	171030	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Isopropylbenzene	CBZd5	Ave	60889 3465538	158348 8318129	319375	632848	1654564	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,1,2,2-Tetrachloroethane	DCBd4	Ave	10791 606886	27114 1482521	54415	107901	288446	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Bromobenzene	DCBd4	Ave	15002 812183	38254 2020744	77108	150137	388628	0.200 10.0	0.500 25.0	1.00	2.00	5.00
trans-1,4-Dichloro-2-butene	TBAd10	Ave	20615 1401018	55037 3466483	115432	235404	640566	2.00 100	5.00 250	10.0	20.0	50.0
1,2,3-Trichloropropane	DCBd4	Ave	3227 161724	7306 395151	15158	29565	77284	0.200 10.0	0.500 25.0	1.00	2.00	5.00
N-Propylbenzene	DCBd4	Ave	73549 4034433	190665 9529514	377314	736780	1917309	0.200 10.0	0.500 25.0	1.00	2.00	5.00
2-Chlorotoluene	DCBd4	Ave	15105 816131	38057 2003162	77621	150481	391437	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,3,5-Trimethylbenzene	DCBd4	Ave	51085 2915864	135280 7049093	267681	526346	1374177	0.200 10.0	0.500 25.0	1.00	2.00	5.00
4-Chlorotoluene	DCBd4	Ave	15194 830797	38382 2034840	79642	149649	391457	0.200 10.0	0.500 25.0	1.00	2.00	5.00
tert-Butylbenzene	DCBd4	Ave	12362 655812	29282 1612321	60636	115253	308232	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Pentachloroethane	DCBd4	Ave	8281 541224	23377 1328610	46998	98293	248476	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2,4-Trimethylbenzene	DCBd4	Ave	50885 2983176	136133 7176599	274837	536289	1412501	0.200 10.0	0.500 25.0	1.00	2.00	5.00
sec-Butylbenzene	DCBd4	Ave	67663 3840352	174344 9180439	351677	691511	1814658	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,3-Dichlorobenzene	DCBd4	Ave	31322 1643503	76688 4056868	153078	299667	774588	0.200 10.0	0.500 25.0	1.00	2.00	5.00
p-Isopropyltoluene	DCBd4	Ave	55545 3297888	149012 7970833	296994	596157	1557438	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,4-Dichlorobenzene	DCBd4	Ave	31232 1640637	76626 4034569	154536	298581	776711	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2,3-Trimethylbenzene	DCBd4	Ave	24151 1285454	59495 3132852	121041	245278	609602	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Benzyl chloride	DCBd4	Ave	3201 257164	9048 657275	19573	42275	112713	0.200 10.0	0.500 25.0	1.00	2.00	5.00

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1 Analy Batch No.: 69397

SDG No.:

Instrument ID: 19930 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/23/2020 12:45 Calibration End Date: 11/23/2020 14:53 Calibration ID: 16044

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
n-Butylbenzene	DCBd4	Ave	27906 1606360	71903 3966634	144659	287834	748043	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2-Dichlorobenzene	DCBd4	Ave	28158 1503421	69967 3654497	143545	271564	708104	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2-Dibromo-3-Chloropropane	DCBd4	Ave	1501 97400	4105 240531	8336	16302	45090	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,3,5-Trichlorobenzene	DCBd4	Ave	21330 1226210	55307 3026395	107909	213605	565506	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2,4-Trichlorobenzene	DCBd4	Ave	17403 1043686	45049 2542954	89195	176796	476320	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Hexachlorobutadiene	DCBd4	Ave	8383 420536	20349 1074015	39405	76823	198152	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Naphthalene	DCBd4	Ave	32359 1960339	82677 4586641	165305	343142	910778	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2,3-Trichlorobenzene	DCBd4	Ave	15307 889058	38602 2111946	78201	156150	412357	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Dibromofluoromethane (Surr)	FB	Ave	488089 507861	494112 501720	494666	487807	490996	10.0 10.0	10.0 10.0	10.0	10.0	10.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	98119 103491	99445 102305	97982	98235	99154	10.0 10.0	10.0 10.0	10.0	10.0	10.0
Toluene-d8 (Surr)	CBZd5	Ave	1932681 2037192	1963991 2017789	1946658	1941813	1951818	10.0 10.0	10.0 10.0	10.0	10.0	10.0
4-Bromofluorobenzene (Surr)	CBZd5	Ave	711806 749783	723803 760845	720224	718478	723239	10.0 10.0	10.0 10.0	10.0	10.0	10.0

Curve Type Legend:
Ave = Average ISTD

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I01.D
Lims ID: IC std7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 23-Nov-2020 12:45:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0016280-003
Misc. Info.: IC STD7
Operator ID: dvv10203 Instrument ID: 19930
Sublist: chrom-8260 25ml HP31*sub2

Method: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 23-Nov-2020 19:10:35 Calib Date: 23-Nov-2020 18:05:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1632

First Level Reviewer: campbellme Date: 23-Nov-2020 18:24:27

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.983	1.977	0.006	99	1853609	25.0	25.3	M
4 Chloromethane	50	2.184	2.178	0.006	99	2031747	25.0	23.9	
6 Butadiene	39	2.294	2.288	0.006	90	1538926	25.0	21.2	
5 Vinyl chloride	62	2.306	2.300	0.006	98	1896588	25.0	24.2	
7 Bromomethane	94	2.629	2.623	0.006	90	1339972	25.0	23.6	
8 Chloroethane	64	2.709	2.702	0.007	100	1151471	25.0	23.9	
9 Dichlorofluoromethane	67	2.953	2.946	0.006	97	2570362	25.0	23.9	
10 Trichlorofluoromethane	101	3.026	3.019	0.007	98	2406078	25.0	23.8	
11 Ethyl ether	59	3.270	3.263	0.007	90	1112739	25.0	24.5	
12 1,2-Dichloro-1,1,2-trifluoroetha	67	3.355	3.343	0.012	91	1713909	25.0	24.1	
13 Acrolein	56	3.440	3.434	0.006	100	8955401	1250.0	1215.7	
14 1,1-Dichloroethene	96	3.580	3.574	0.006	97	1331438	25.0	24.3	
15 Acetone	43	3.611	3.611	0.000	100	2019299	250.0	220.4	
16 112TCTFE	101	3.623	3.617	0.006	89	1443706	25.0	25.0	
17 Iodomethane	142	3.782	3.775	0.007	98	2631223	25.0	24.6	
18 Ethyl bromide	108	3.812	3.800	0.012	98	1210431	25.0	24.3	
19 Carbon disulfide	76	3.891	3.879	0.012	98	3843896	25.0	24.2	
21 Methyl acetate	43	4.044	4.038	0.006	97	680563	25.0	27.2	
22 3-Chloro-1-propene	41	4.062	4.056	0.006	93	2045690	25.0	24.6	
23 Methylene Chloride	84	4.257	4.251	0.006	90	1436509	25.0	23.7	
* 24 t-Butyl alcohol-d10 (IS)	65	4.263	4.263	0.000	0	168044	50.0	50.0	M
25 2-Methyl-2-propanol	59	4.397	4.391	0.006	100	1599739	500.0	446.5	
26 Acrylonitrile	53	4.599	4.592	0.007	98	1486195	125.0	124.3	
27 Methyl tert-butyl ether	73	4.666	4.659	0.007	94	3604322	25.0	24.6	
28 trans-1,2-Dichloroethene	96	4.678	4.672	0.006	99	1470445	25.0	24.3	
29 Hexane	57	5.098	5.098	0.000	89	2161387	25.0	26.1	
31 1,1-Dichloroethane	63	5.336	5.336	0.000	96	2676667	25.0	24.5	
32 Isopropyl ether	45	5.391	5.391	0.000	94	4448853	25.0	24.6	
33 2-Chloro-1,3-butadiene	53	5.446	5.440	0.006	89	2187566	25.0	25.0	
34 Tert-butyl ethyl ether	59	5.921	5.921	0.000	97	4231563	25.0	24.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 2-Butanone (MEK)	43	6.141	6.135	0.006	99	3824682	250.0	249.6	
S 35 1,2-Dichloroethene, Total	100				0			48.5	
37 cis-1,2-Dichloroethene	96	6.165	6.165	0.000	81	1695323	25.0	24.2	
38 2,2-Dichloropropane	77	6.184	6.177	0.007	85	2206838	25.0	25.1	
40 Propionitrile	54	6.220	6.220	0.000	99	2193579	500.0	489.4	
42 Methacrylonitrile	67	6.440	6.433	0.007	89	3946564	250.0	250.1	
43 Chlorobromomethane	128	6.494	6.494	0.000	89	753858	25.0	24.4	
44 Tetrahydrofuran	71	6.507	6.507	0.000	84	1156304	250.0	248.8	
45 Chloroform	83	6.641	6.641	0.000	92	2598659	25.0	24.1	
$ 46 Dibromofluoromethane (Surr)	113	6.860	6.854	0.006	94	501720	10.0	9.90	
47 1,1,1-Trichloroethane	97	6.872	6.866	0.006	98	2386922	25.0	24.7	
48 Cyclohexane	56	6.970	6.970	0.000	88	2543910	25.0	25.4	
50 Carbon tetrachloride	117	7.080	7.080	0.000	96	2168824	25.0	25.1	
51 1,1-Dichloropropene	75	7.080	7.080	0.000	98	2155973	25.0	25.1	
52 Isobutyl alcohol	41	7.232	7.226	0.006	96	1383991	1250.0	1201.0	
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.318	7.311	0.007	0	102305	10.0	10.0	
54 Benzene	78	7.342	7.342	0.000	95	6348099	25.0	24.4	
56 1,2-Dichloroethane	62	7.415	7.415	0.000	97	1528196	25.0	24.1	
57 Tert-amyl methyl ether	73	7.531	7.531	0.000	99	3929679	25.0	25.2	
* 58 Fluorobenzene (IS)	96	7.744	7.744	0.000	100	2051897	10.0	10.0	
59 n-Heptane	43	7.756	7.750	0.006	89	2141721	25.0	25.8	
60 n-Butanol	56	8.098	8.098	0.000	85	2809489	2500.0	2579.4	
61 Trichloroethene	95	8.220	8.220	0.000	97	1681778	25.0	24.7	
62 Methylcyclohexane	83	8.531	8.525	0.007	94	2830707	25.0	25.6	
63 1,2-Dichloropropane	63	8.555	8.549	0.006	84	1596660	25.0	25.0	
64 Methyl methacrylate	69	8.628	8.634	-0.006	88	780437	25.0	26.6	
65 1,4-Dioxane	88	8.640	8.640	0.000	70	318662	1250.0	1120.7	M
66 Dibromomethane	93	8.665	8.659	0.006	95	754336	25.0	25.0	
68 Dichlorobromomethane	83	8.896	8.896	0.000	99	1948970	25.0	25.4	
69 2-Nitropropane	41	9.165	9.159	0.006	96	1950037	250.0	264.0	
72 1-Bromo-2-chloroethane	63	9.287	9.287	0.000	98	1655992	25.0	25.2	
73 cis-1,3-Dichloropropene	75	9.439	9.439	0.000	98	2421802	25.0	26.4	
74 4-Methyl-2-pentanone (MIBK)	43	9.604	9.604	0.000	94	9588763	250.0	251.5	
$ 75 Toluene-d8 (Surr)	98	9.744	9.744	0.000	93	2017789	10.0	9.78	
76 Toluene	92	9.817	9.817	0.000	99	4131675	25.0	24.0	
S 77 1,3-Dichloropropene, Total	100				0			52.7	
78 trans-1,3-Dichloropropene	75	10.073	10.073	0.000	90	1959641	25.0	26.4	
79 Ethyl methacrylate	69	10.128	10.134	-0.006	87	1673846	25.0	26.9	
80 1,1,2-Trichloroethane	97	10.274	10.274	0.000	89	1129761	25.0	24.6	
81 Tetrachloroethene	166	10.366	10.366	0.000	98	2037894	25.0	24.4	
82 1,3-Dichloropropane	76	10.439	10.439	0.000	87	1930028	25.0	24.6	
83 2-Hexanone	43	10.482	10.481	0.001	95	6797458	250.0	260.8	
85 Chlorodibromomethane	129	10.652	10.652	0.000	89	1498853	25.0	26.0	
86 Ethylene Dibromide	107	10.762	10.762	0.000	98	1112590	25.0	25.3	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.189	0.000	84	1579118	10.0	10.0	
88 1-Chlorohexane	91	11.195	11.195	0.000	95	2433335	25.0	24.4	
90 Chlorobenzene	112	11.219	11.213	0.006	96	4614383	25.0	24.2	
S 89 Xylenes, Total	106				0			74.1	
92 Ethylbenzene	91	11.298	11.298	0.000	98	8054835	25.0	24.2	
91 1,1,1,2-Tetrachloroethane	131	11.298	11.298	0.000	97	1665026	25.0	25.2	
93 m-Xylene & p-Xylene	106	11.414	11.414	0.000	99	6444517	50.0	49.1	
94 o-Xylene	106	11.743	11.743	0.000	95	3193696	25.0	25.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
95 Styrene	104	11.756	11.756	0.000	95	5209128	25.0	25.5	
96 Bromoform	173	11.914	11.920	-0.006	98	952842	25.0	27.3	
97 Isopropylbenzene	105	12.042	12.042	0.000	95	8318129	25.0	24.5	
$ 100 4-Bromofluorobenzene (Surr)	95	12.189	12.188	0.000	95	760845	10.0	9.96	
101 1,1,2,2-Tetrachloroethane	83	12.286	12.286	0.000	92	1482521	25.0	25.3	
102 Bromobenzene	156	12.304	12.304	0.000	96	2020744	25.0	25.0	
103 trans-1,4-Dichloro-2-butene	53	12.310	12.310	0.000	90	3466483	250.0	277.3	
104 1,2,3-Trichloropropane	110	12.335	12.335	0.000	82	395151	25.0	24.5	
105 N-Propylbenzene	91	12.371	12.371	0.000	98	9529514	25.0	24.0	
106 2-Chlorotoluene	126	12.451	12.451	0.000	98	2003162	25.0	24.7	
107 1,3,5-Trimethylbenzene	105	12.506	12.505	0.001	94	7049093	25.0	24.8	
108 4-Chlorotoluene	126	12.542	12.542	0.000	96	2034840	25.0	24.8	
109 tert-Butylbenzene	134	12.749	12.749	0.000	93	1612321	25.0	25.2	
110 Pentachloroethane	167	12.780	12.780	0.000	93	1328610	25.0	26.2	
111 1,2,4-Trimethylbenzene	105	12.786	12.792	-0.006	96	7176599	25.0	24.9	
112 sec-Butylbenzene	105	12.914	12.914	0.000	94	9180439	25.0	24.7	
113 1,3-Dichlorobenzene	146	13.012	13.011	0.001	98	4056868	25.0	24.9	
114 4-Isopropyltoluene	119	13.018	13.018	0.000	97	7970833	25.0	25.1	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	92	898877	10.0	10.0	
116 1,4-Dichlorobenzene	146	13.085	13.085	0.000	95	4034569	25.0	24.8	
117 1,2,3-Trimethylbenzene	120	13.097	13.091	0.006	98	3132852	25.0	24.5	
118 Benzyl chloride	126	13.158	13.158	0.000	98	657275	25.0	29.6	
119 n-Butylbenzene	92	13.310	13.310	0.000	97	3966634	25.0	25.6	
120 1,2-Dichlorobenzene	146	13.341	13.341	0.000	99	3654497	25.0	24.6	
122 1,2-Dibromo-3-Chloropropane	155	13.883	13.883	0.000	91	240531	25.0	26.7	
123 1,3,5-Trichlorobenzene	180	14.011	14.011	0.000	98	3026395	25.0	25.8	
124 1,2,4-Trichlorobenzene	180	14.432	14.432	0.000	94	2542954	25.0	26.0	
125 Hexachlorobutadiene	225	14.517	14.517	0.000	96	1074015	25.0	25.3	
126 Naphthalene	128	14.615	14.615	0.000	97	4586641	25.0	25.1	
127 1,2,3-Trichlorobenzene	180	14.755	14.755	0.000	96	2111946	25.0	25.1	
134 Isopropyl alcohol	45		0.000				ND	ND	
144 2-ethoxy-2-methyl butane	1		0.000				ND	ND	
135 p-Diethylbenzene	1		0.000				ND	ND	
137 2-Methylnaphthalene	142		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

MSV_RV1_826_00030	Amount Added: 25.00	Units: uL	
MSV_RV4GAS826_00096	Amount Added: 25.00	Units: uL	
MSV_RV4_826_00034	Amount Added: 25.00	Units: uL	
MSV_31_826ISS_00003	Amount Added: 5.00	Units: uL	Run Reagent

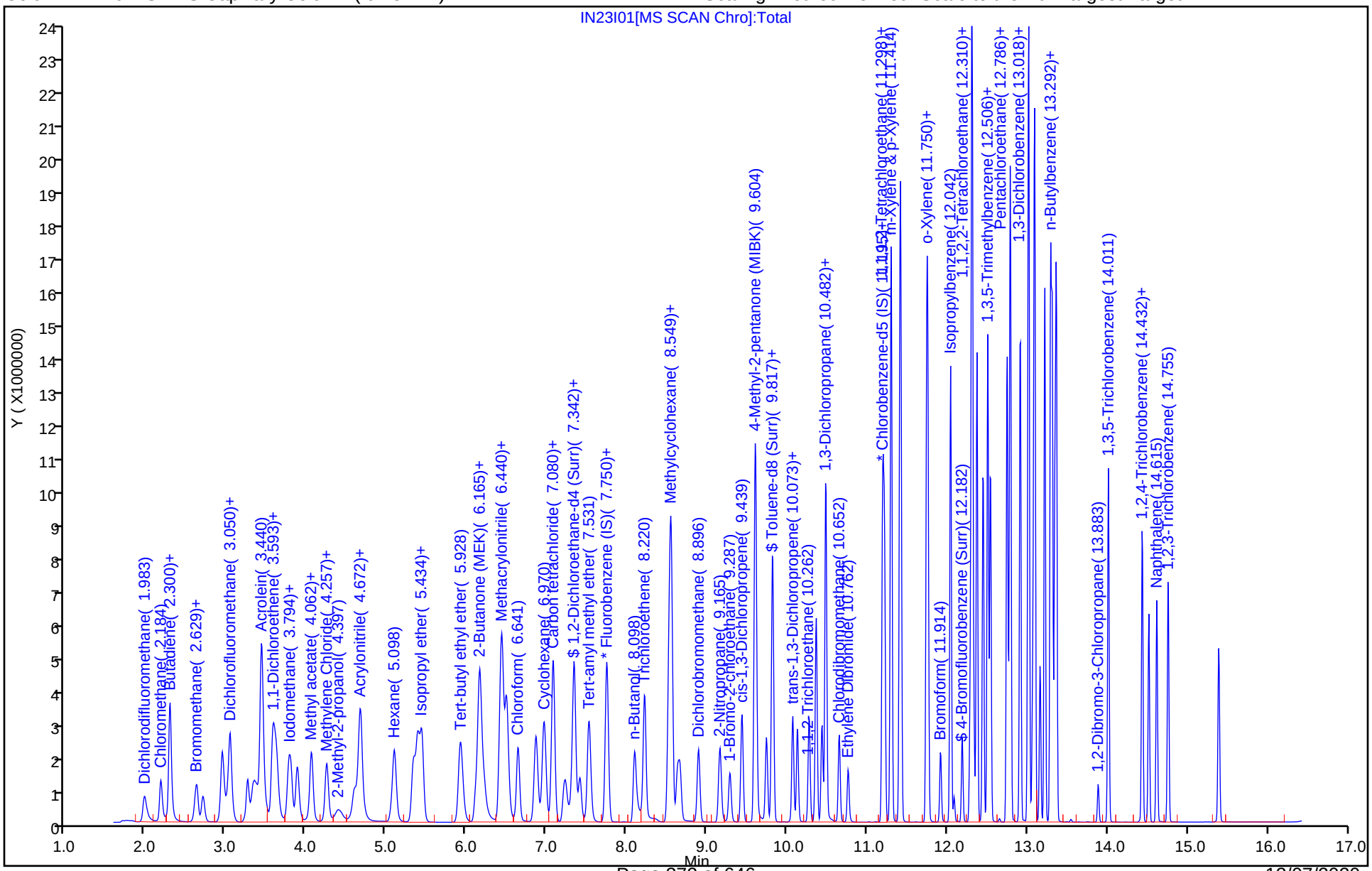
Report Date: 23-Nov-2020 19:10:36 Chrom Revision: 2.3 13-Nov-2020 01:23:02

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I01.D

Injection Date:	23-Nov-2020 12:45:30	Instrument ID:	19930	Operator ID:	dvv10203
Lims ID:	IC std7			Worklist Smp#:	3
Client ID:					
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

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



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

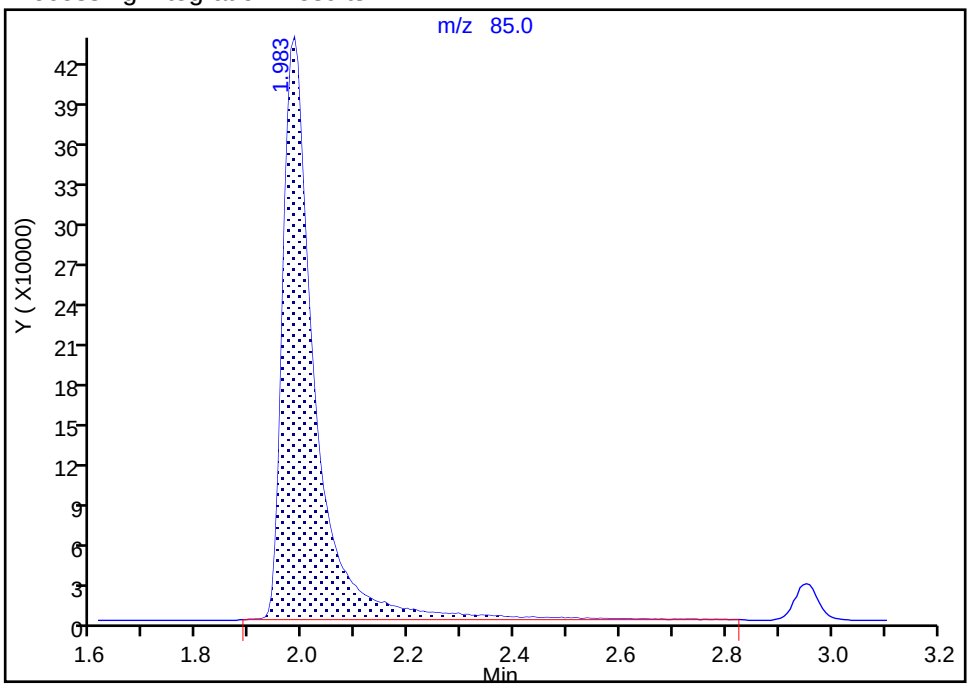
Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I01.D
Injection Date: 23-Nov-2020 12:45:30 Instrument ID: 19930
Lims ID: IC std7
Client ID:
Operator ID: dvv10203 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

1 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

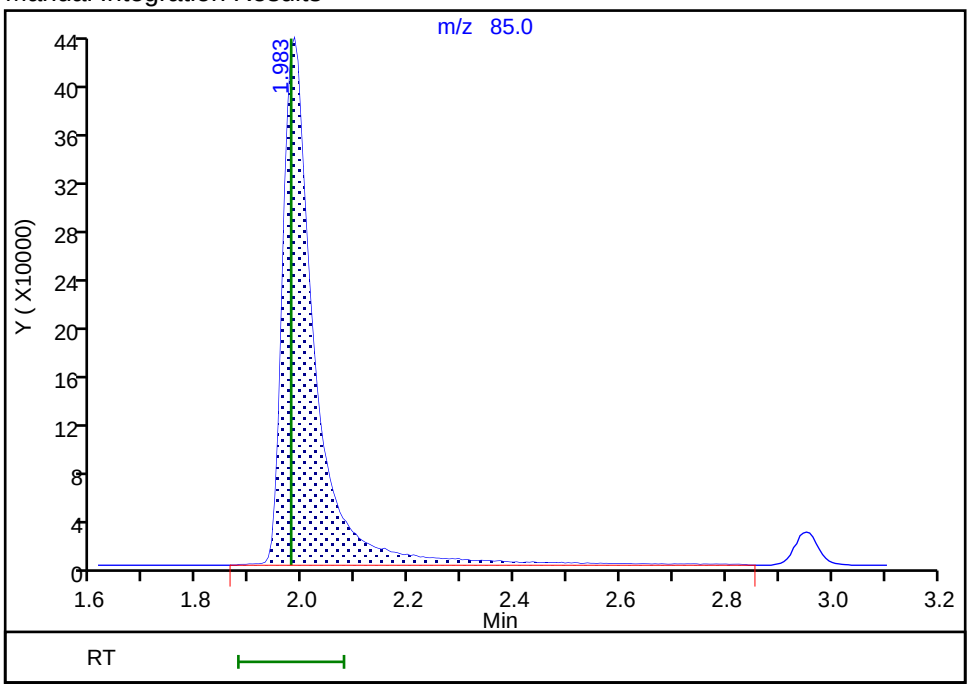
Processing Integration Results

RT: 1.98
Area: 1822259
Amount: 24.944995
Amount Units: ug/l



Manual Integration Results

RT: 1.98
Area: 1853609
Amount: 25.312074
Amount Units: ug/l



Reviewer: campbellme, 23-Nov-2020 18:24:20
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

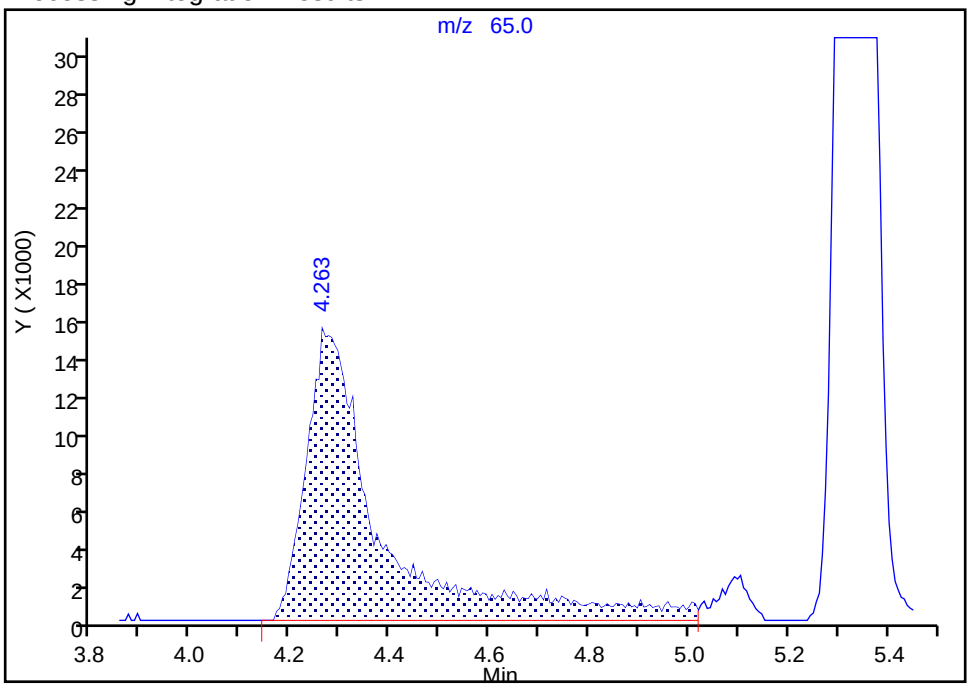
Data File:	\\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I01.D				
Injection Date:	23-Nov-2020 12:45:30	Instrument ID:	19930		
Lims ID:	IC std7				
Client ID:					
Operator ID:	dvv10203	ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

* 24 t-Butyl alcohol-d10 (IS), CAS: 53001-22-2

Signal: 1

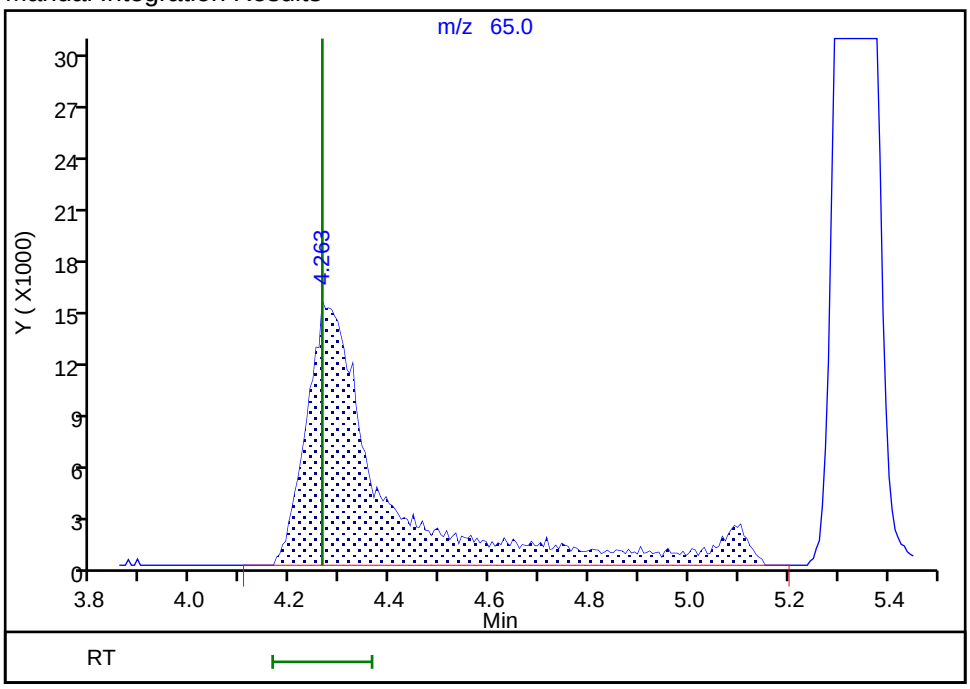
Processing Integration Results

RT: 4.26
Area: 158190
Amount: 50.000000
Amount Units: ug/l



Manual Integration Results

RT: 4.26
Area: 168044
Amount: 50.000000
Amount Units: ug/l



Reviewer: campbellme, 23-Nov-2020 18:45:34
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

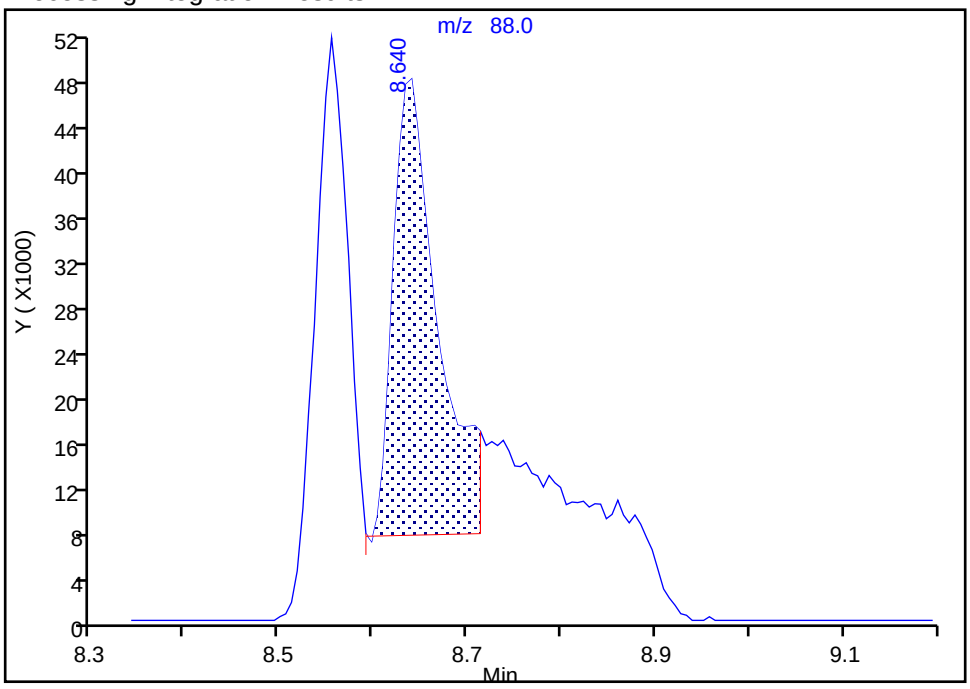
Data File:	\\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I01.D				
Injection Date:	23-Nov-2020 12:45:30	Instrument ID:	19930		
Lims ID:	IC std7				
Client ID:					
Operator ID:	dvv10203	ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

65 1,4-Dioxane, CAS: 123-91-1

Signal: 1

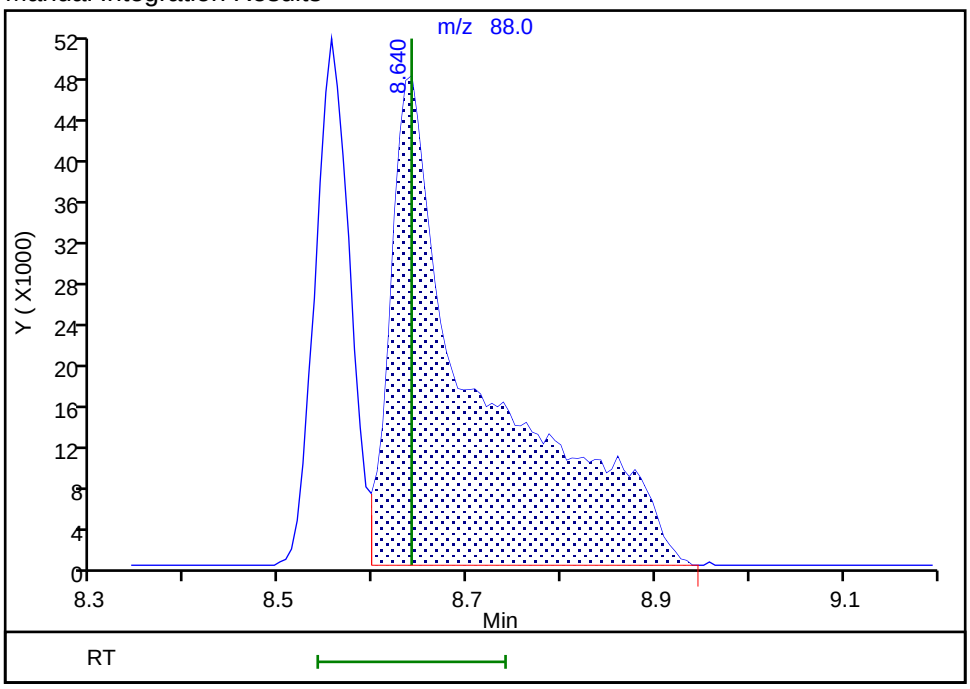
Processing Integration Results

RT: 8.64
Area: 133500
Amount: 587.6212
Amount Units: ug/l



Manual Integration Results

RT: 8.64
Area: 318662
Amount: 1120.7188
Amount Units: ug/l



Reviewer: campbellme, 23-Nov-2020 18:45:22

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

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I02.D
Lims ID: ICIS - LG
Client ID:
Sample Type: ICIS Calib Level: 6
Inject. Date: 23-Nov-2020 13:06:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0016280-004
Misc. Info.: ICIS - LG
Operator ID: dvv10203 Instrument ID: 19930
Sublist: chrom-8260 25ml HP31*sub2

Method: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 23-Nov-2020 19:10:46 Calib Date: 23-Nov-2020 18:05:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1632

First Level Reviewer: campbellme Date: 23-Nov-2020 18:29:34

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.977	1.977	0.000	99	762848	10.0	10.3	
4 Chloromethane	50	2.178	2.178	0.000	99	847456	10.0	9.91	
6 Butadiene	39	2.288	2.288	0.000	89	655274	10.0	8.97	
5 Vinyl chloride	62	2.300	2.300	0.000	98	781821	10.0	9.93	
7 Bromomethane	94	2.623	2.623	0.000	90	560203	10.0	9.81	
8 Chloroethane	64	2.702	2.702	0.000	99	476273	10.0	9.84	
9 Dichlorofluoromethane	67	2.946	2.946	0.000	97	1068389	10.0	9.85	
10 Trichlorofluoromethane	101	3.019	3.019	0.000	98	1002094	10.0	9.83	
11 Ethyl ether	59	3.263	3.263	0.000	89	461858	10.0	10.1	
12 1,2-Dichloro-1,1,2-trifluoroetha	67	3.343	3.343	0.000	93	714488	10.0	10.0	
13 Acrolein	56	3.434	3.434	0.000	100	3743531	500.0	489.2	
14 1,1-Dichloroethene	96	3.574	3.574	0.000	97	554501	10.0	10.1	
15 Acetone	43	3.611	3.611	0.000	100	854846	100.0	89.8	M
16 112TCTFE	101	3.617	3.617	0.000	90	592097	10.0	10.2	
17 Iodomethane	142	3.775	3.775	0.000	98	1087214	10.0	10.1	
18 Ethyl bromide	108	3.800	3.800	0.000	98	500672	10.0	10.0	
19 Carbon disulfide	76	3.879	3.879	0.000	99	1577401	10.0	9.88	
21 Methyl acetate	43	4.038	4.038	0.000	97	246609	10.0	9.50	M
22 3-Chloro-1-propene	41	4.056	4.056	0.000	93	850587	10.0	10.2	
23 Methylene Chloride	84	4.251	4.251	0.000	90	601040	10.0	9.85	
* 24 t-Butyl alcohol-d10 (IS)	65	4.257	4.257	0.000	0	174562	50.0	50.0	M
25 2-Methyl-2-propanol	59	4.391	4.391	0.000	100	716161	200.0	192.4	
26 Acrylonitrile	53	4.592	4.592	0.000	99	608812	50.0	49.0	
27 Methyl tert-butyl ether	73	4.659	4.659	0.000	94	1497268	10.0	10.2	
28 trans-1,2-Dichloroethene	96	4.672	4.672	0.000	99	612688	10.0	10.1	
29 Hexane	57	5.098	5.098	0.000	89	887151	10.0	10.7	
31 1,1-Dichloroethane	63	5.336	5.336	0.000	96	1110105	10.0	10.1	
32 Isopropyl ether	45	5.391	5.391	0.000	95	1843818	10.0	10.1	
33 2-Chloro-1,3-butadiene	53	5.440	5.440	0.000	89	906198	10.0	10.3	
34 Tert-butyl ethyl ether	59	5.921	5.921	0.000	97	1769941	10.0	10.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 2-Butanone (MEK)	43	6.135	6.135	0.000	99	1561053	100.0	98.1	
37 cis-1,2-Dichloroethene	96	6.165	6.165	0.000	81	706462	10.0	10.0	
38 2,2-Dichloropropane	77	6.177	6.177	0.000	86	911060	10.0	10.3	
40 Propionitrile	54	6.220	6.220	0.000	99	863833	200.0	185.5	
42 Methacrylonitrile	67	6.433	6.433	0.000	89	1616918	100.0	98.6	
43 Chlorobromomethane	128	6.494	6.494	0.000	89	310784	10.0	9.98	
44 Tetrahydrofuran	71	6.507	6.507	0.000	84	470375	100.0	97.4	
45 Chloroform	83	6.641	6.641	0.000	92	1083255	10.0	10.0	
$ 46 Dibromofluoromethane (Surr)	113	6.854	6.854	0.000	94	507861	10.0	9.96	
47 1,1,1-Trichloroethane	97	6.866	6.866	0.000	98	981285	10.0	10.1	
48 Cyclohexane	56	6.970	6.970	0.000	88	1041428	10.0	10.3	
50 Carbon tetrachloride	117	7.080	7.080	0.000	97	887161	10.0	10.2	
51 1,1-Dichloropropene	75	7.080	7.080	0.000	98	882438	10.0	10.2	
52 Isobutyl alcohol	41	7.226	7.226	0.000	95	551150	500.0	460.4	
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.311	7.311	0.000	0	103491	10.0	10.1	
54 Benzene	78	7.342	7.342	0.000	95	2625721	10.0	10.0	
56 1,2-Dichloroethane	62	7.415	7.415	0.000	97	629666	10.0	9.85	
57 Tert-amyl methyl ether	73	7.531	7.531	0.000	99	1627872	10.0	10.4	
* 58 Fluorobenzene (IS)	96	7.744	7.744	0.000	99	2065893	10.0	10.0	
59 n-Heptane	43	7.750	7.750	0.000	90	873361	10.0	10.4	
60 n-Butanol	56	8.098	8.098	0.000	84	1230757	1000.0	1087.8	M
61 Trichloroethene	95	8.220	8.220	0.000	97	688361	10.0	10.0	
62 Methylcyclohexane	83	8.525	8.525	0.000	94	1163763	10.0	10.5	
63 1,2-Dichloropropane	63	8.549	8.549	0.000	87	656764	10.0	10.2	
64 Methyl methacrylate	69	8.634	8.634	0.000	88	318254	10.0	10.4	
65 1,4-Dioxane	88	8.640	8.640	0.000	35	148345	500.0	502.2	M
66 Dibromomethane	93	8.659	8.659	0.000	94	306542	10.0	10.1	
68 Dichlorobromomethane	83	8.896	8.896	0.000	99	795099	10.0	10.3	
69 2-Nitropropane	41	9.159	9.159	0.000	96	778258	100.0	101.4	
72 1-Bromo-2-chloroethane	63	9.287	9.287	0.000	98	675088	10.0	10.2	
73 cis-1,3-Dichloropropene	75	9.439	9.439	0.000	98	986321	10.0	10.7	
74 4-Methyl-2-pentanone (MIBK)	43	9.604	9.604	0.000	95	3947176	100.0	99.7	
$ 75 Toluene-d8 (Surr)	98	9.744	9.744	0.000	93	2037192	10.0	9.93	
76 Toluene	92	9.817	9.817	0.000	99	1696057	10.0	9.90	
78 trans-1,3-Dichloropropene	75	10.073	10.073	0.000	90	792406	10.0	10.7	
79 Ethyl methacrylate	69	10.134	10.134	0.000	87	674454	10.0	10.9	
80 1,1,2-Trichloroethane	97	10.274	10.274	0.000	90	462694	10.0	10.1	
81 Tetrachloroethene	166	10.366	10.366	0.000	97	832486	10.0	10.0	
82 1,3-Dichloropropane	76	10.439	10.439	0.000	86	799899	10.0	10.2	
83 2-Hexanone	43	10.481	10.481	0.000	95	2849426	100.0	105.2	
85 Chlorodibromomethane	129	10.652	10.652	0.000	90	598262	10.0	10.4	
86 Ethylene Dibromide	107	10.762	10.762	0.000	99	452788	10.0	10.3	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.189	0.000	84	1570516	10.0	10.0	
88 1-Chlorohexane	91	11.195	11.195	0.000	95	986757	10.0	9.94	
90 Chlorobenzene	112	11.213	11.213	0.000	96	1890048	10.0	9.98	
92 Ethylbenzene	91	11.298	11.298	0.000	98	3352863	10.0	10.1	
91 1,1,1,2-Tetrachloroethane	131	11.298	11.298	0.000	96	683105	10.0	10.4	
93 m-Xylene & p-Xylene	106	11.414	11.414	0.000	100	2646088	20.0	20.3	
94 o-Xylene	106	11.743	11.743	0.000	96	1304564	10.0	10.3	
95 Styrene	104	11.756	11.756	0.000	95	2128541	10.0	10.5	
96 Bromoform	173	11.920	11.920	0.000	99	376053	10.0	10.8	
97 Isopropylbenzene	105	12.042	12.042	0.000	95	3465538	10.0	10.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 100 4-Bromofluorobenzene (Surr)	95	12.188	12.188	0.000	94	749783	10.0	9.87	
101 1,1,2,2-Tetrachloroethane	83	12.286	12.286	0.000	92	606886	10.0	10.4	
102 Bromobenzene	156	12.304	12.304	0.000	95	812183	10.0	10.1	
103 trans-1,4-Dichloro-2-butene	53	12.310	12.310	0.000	91	1401018	100.0	107.9	
104 1,2,3-Trichloropropane	110	12.335	12.335	0.000	82	161724	10.0	10.1	
105 N-Propylbenzene	91	12.371	12.371	0.000	99	4034433	10.0	10.3	
106 2-Chlorotoluene	126	12.451	12.451	0.000	97	816131	10.0	10.1	
107 1,3,5-Trimethylbenzene	105	12.505	12.505	0.000	94	2915864	10.0	10.4	
108 4-Chlorotoluene	126	12.542	12.542	0.000	96	830797	10.0	10.2	
109 tert-Butylbenzene	134	12.749	12.749	0.000	93	655812	10.0	10.3	
110 Pentachloroethane	167	12.780	12.780	0.000	93	541224	10.0	10.7	
111 1,2,4-Trimethylbenzene	105	12.792	12.792	0.000	96	2983176	10.0	10.4	
112 sec-Butylbenzene	105	12.914	12.914	0.000	93	3840352	10.0	10.4	
113 1,3-Dichlorobenzene	146	13.011	13.011	0.000	98	1643503	10.0	10.2	
114 4-Isopropyltoluene	119	13.018	13.018	0.000	97	3297888	10.0	10.5	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	93	891775	10.0	10.0	
116 1,4-Dichlorobenzene	146	13.085	13.085	0.000	95	1640637	10.0	10.1	
117 1,2,3-Trimethylbenzene	120	13.091	13.091	0.000	98	1285454	10.0	10.1	
118 Benzyl chloride	126	13.158	13.158	0.000	98	257164	10.0	11.7	
119 n-Butylbenzene	92	13.310	13.310	0.000	97	1606360	10.0	10.5	
120 1,2-Dichlorobenzene	146	13.341	13.341	0.000	99	1503421	10.0	10.2	
122 1,2-Dibromo-3-Chloropropane	155	13.883	13.883	0.000	91	97400	10.0	10.9	
123 1,3,5-Trichlorobenzene	180	14.011	14.011	0.000	98	1226210	10.0	10.5	
124 1,2,4-Trichlorobenzene	180	14.432	14.432	0.000	94	1043686	10.0	10.8	
125 Hexachlorobutadiene	225	14.517	14.517	0.000	96	420536	10.0	9.98	
126 Naphthalene	128	14.615	14.615	0.000	97	1960339	10.0	10.8	
127 1,2,3-Trichlorobenzene	180	14.755	14.755	0.000	96	889058	10.0	10.6	
134 Isopropyl alcohol	45		0.000				ND	ND	
144 2-ethoxy-2-methyl butane	1		0.000				ND	ND	
135 p-Diethylbenzene	1		0.000				ND	ND	
137 2-Methylnaphthalene	142		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

MSV_RV1_826_00030	Amount Added:	10.00	Units: uL	
MSV_RV4GAS826_00096	Amount Added:	10.00	Units: uL	
MSV_RV4_826_00034	Amount Added:	10.00	Units: uL	
MSV_31_826ISS_00003	Amount Added:	5.00	Units: uL	Run Reagent

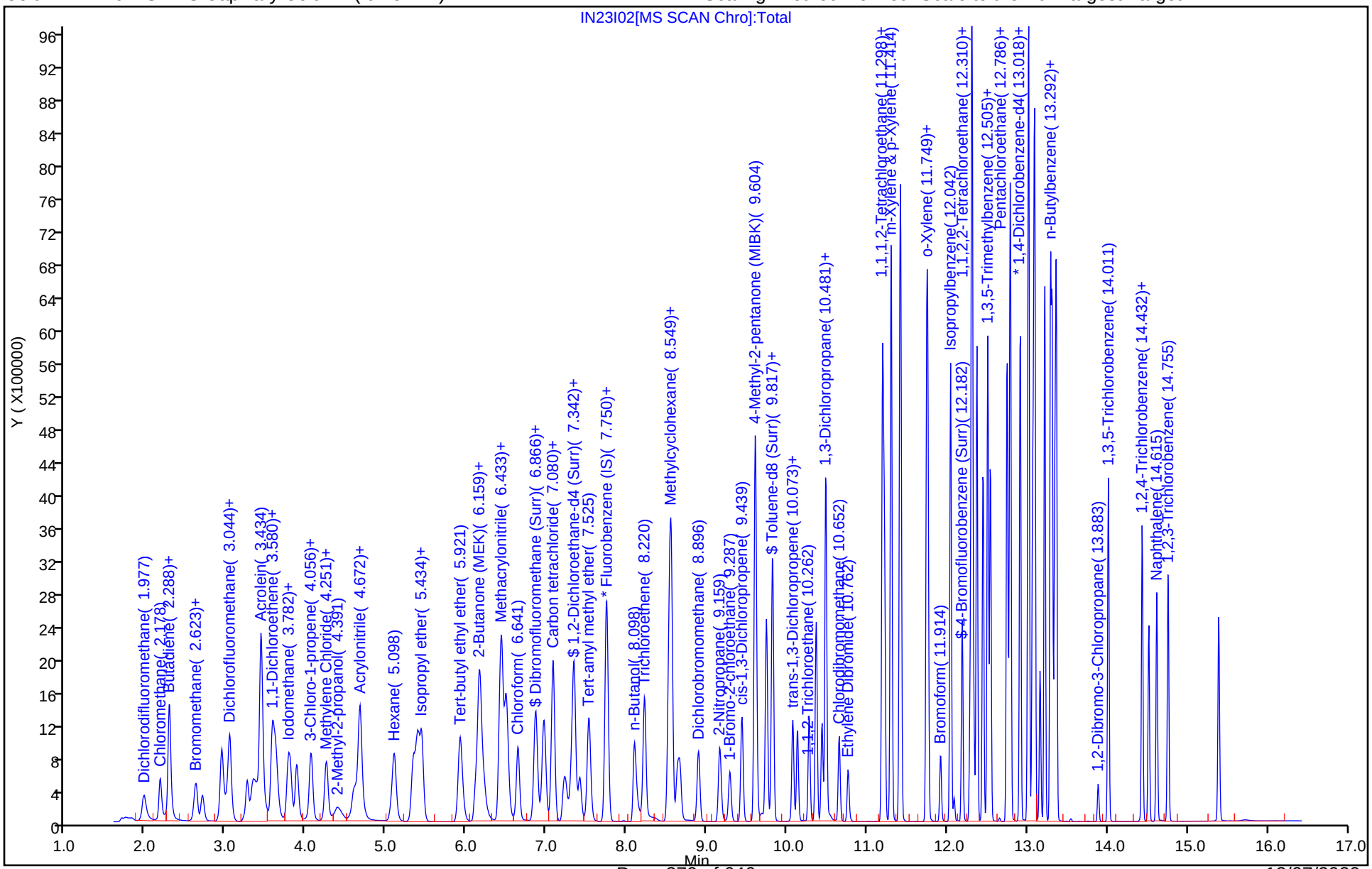
Report Date: 23-Nov-2020 19:10:48 Chrom Revision: 2.3 13-Nov-2020 01:23:02

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I02.D

Injection Date:	23-Nov-2020 13:06:30	Instrument ID:	19930	Operator ID:	dvv10203
Lims ID:	ICIS - LG			Worklist Smp#:	4
Client ID:					
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

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



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

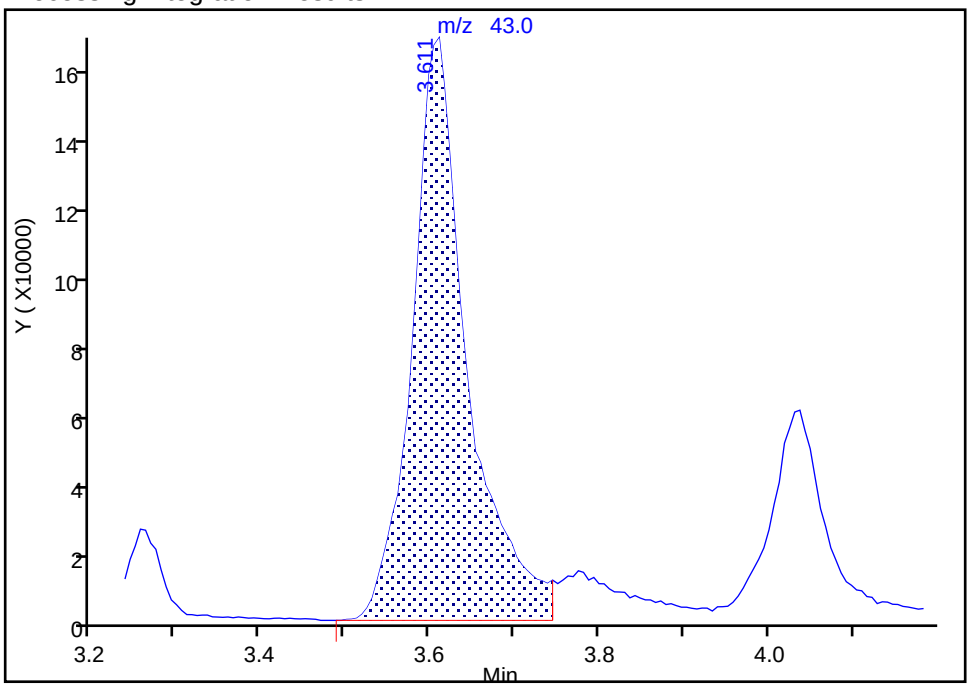
Data File:	\\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I02.D				
Injection Date:	23-Nov-2020 13:06:30	Instrument ID:	19930		
Lims ID:	ICIS - LG				
Client ID:					
Operator ID:	dvv10203	ALS Bottle#:	3	Worklist Smp#:	4
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

15 Acetone, CAS: 67-64-1

Signal: 1

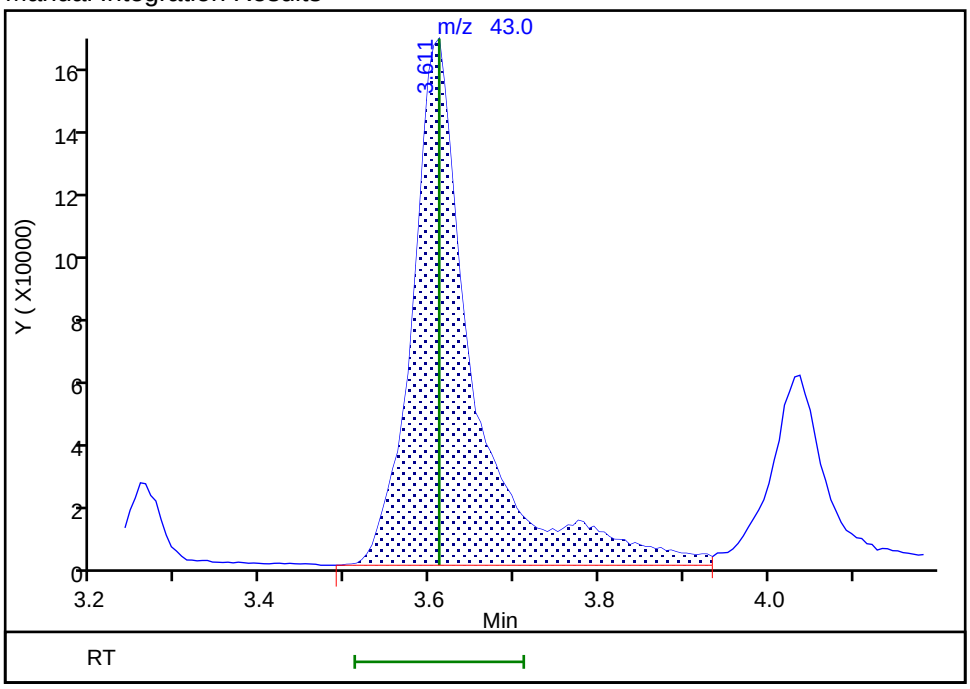
Processing Integration Results

RT: 3.61
Area: 768094
Amount: 81.267546
Amount Units: ug/l



Manual Integration Results

RT: 3.61
Area: 854846
Amount: 89.823778
Amount Units: ug/l



Reviewer: campbellme, 23-Nov-2020 18:34:10
Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

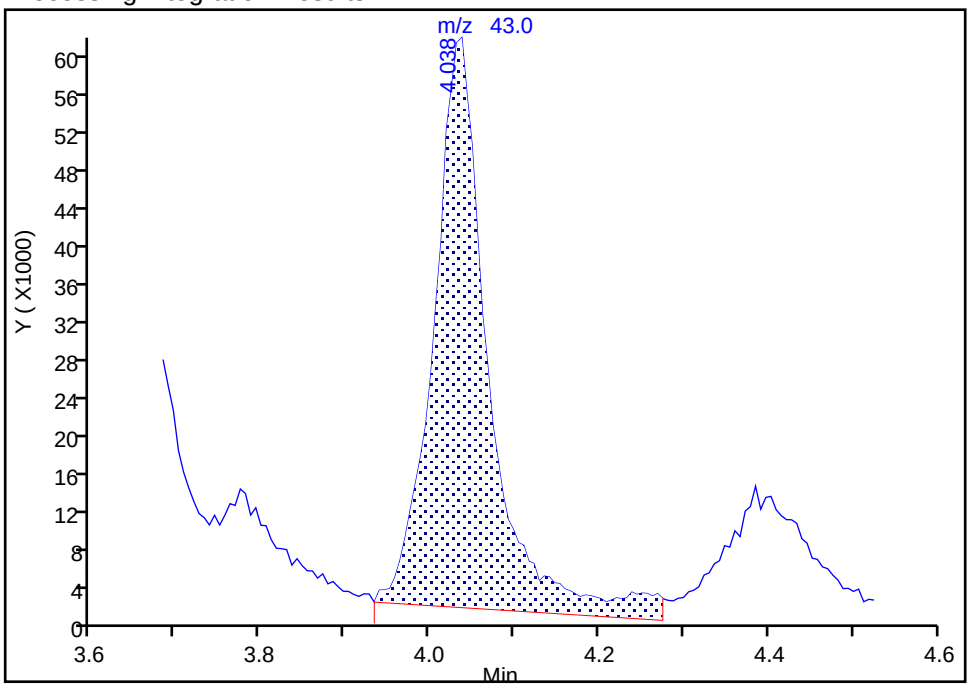
Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I02.D
Injection Date: 23-Nov-2020 13:06:30 Instrument ID: 19930
Lims ID: ICIS - LG
Client ID:
Operator ID: dvv10203 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

21 Methyl acetate, CAS: 79-20-9

Signal: 1

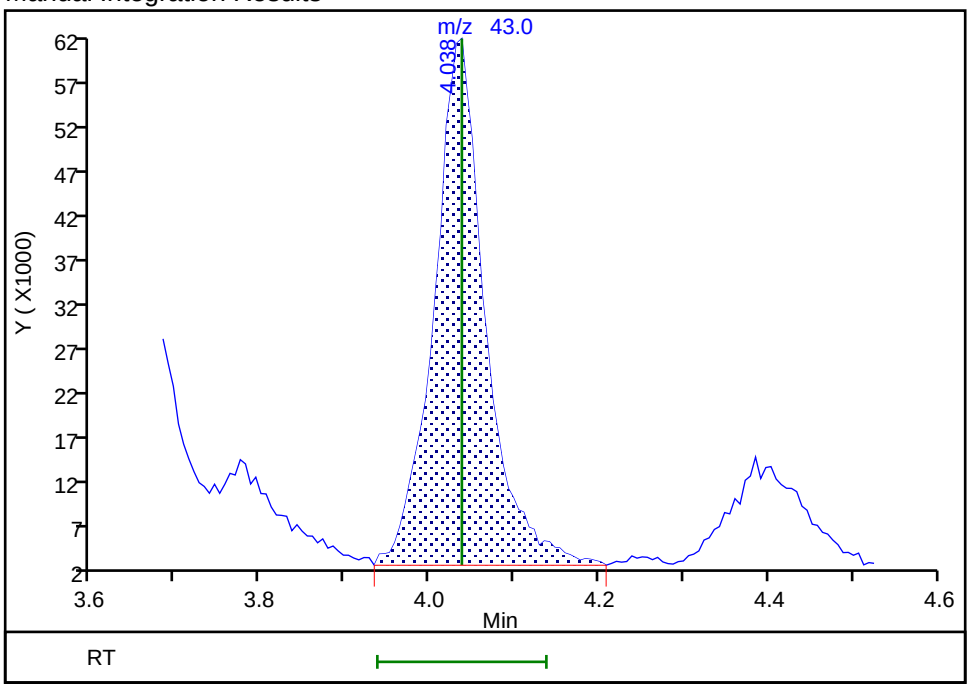
Processing Integration Results

RT: 4.04
Area: 268835
Amount: 11.947469
Amount Units: ug/l



Manual Integration Results

RT: 4.04
Area: 246609
Amount: 9.498666
Amount Units: ug/l



Reviewer: campbellme, 23-Nov-2020 18:25:41
Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

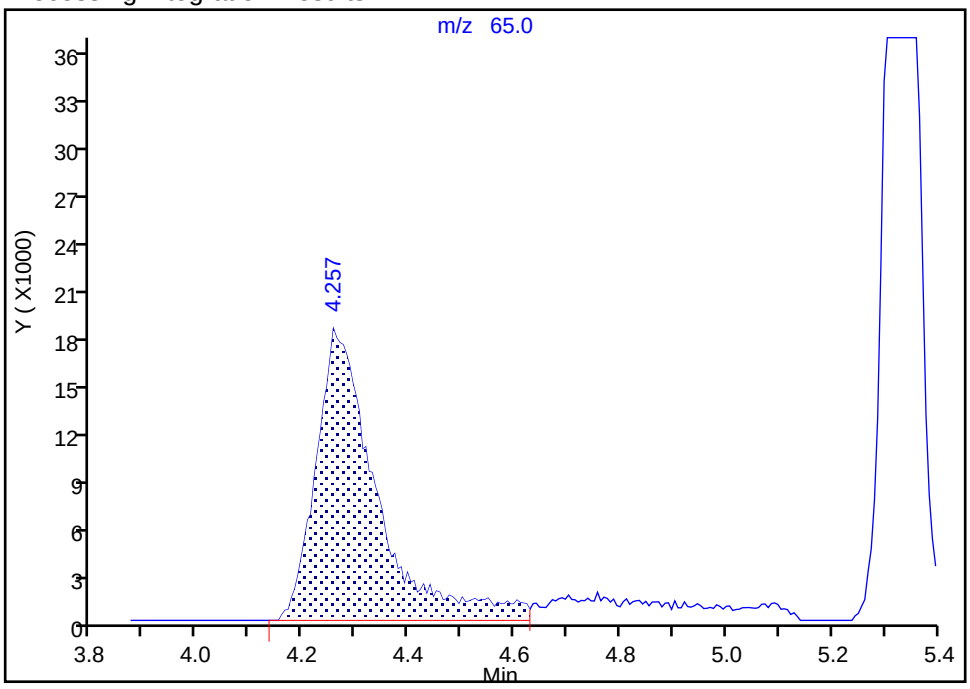
Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I02.D
Injection Date: 23-Nov-2020 13:06:30 Instrument ID: 19930
Lims ID: ICIS - LG
Client ID:
Operator ID: dvv10203 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

* 24 t-Butyl alcohol-d10 (IS), CAS: 53001-22-2

Signal: 1

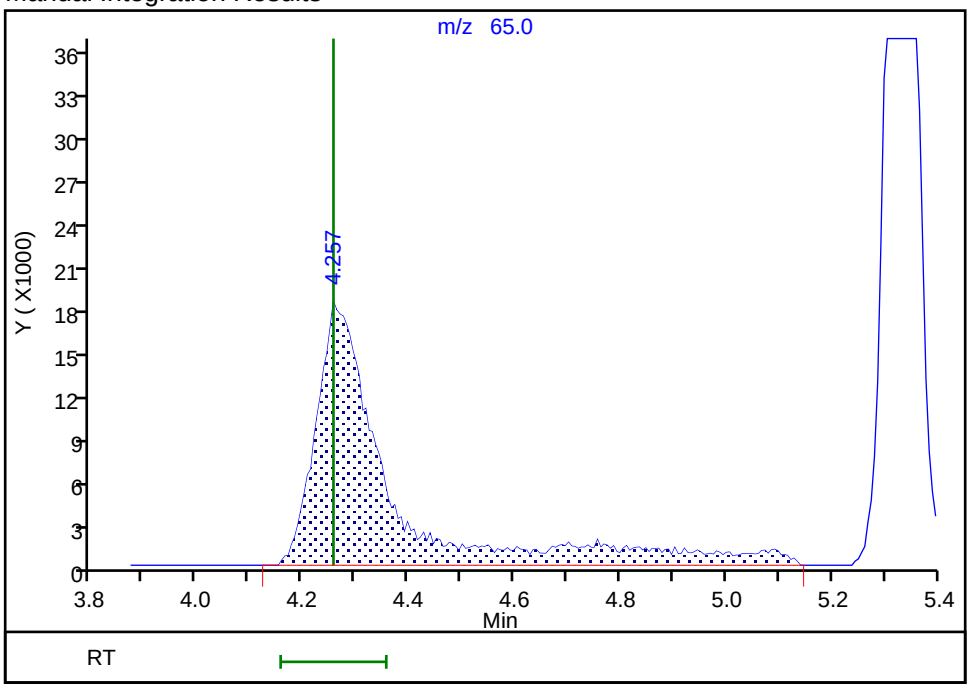
Processing Integration Results

RT: 4.26
Area: 144274
Amount: 50.000000
Amount Units: ug/l



Manual Integration Results

RT: 4.26
Area: 174562
Amount: 50.000000
Amount Units: ug/l



Reviewer: campbellme, 23-Nov-2020 18:26:02
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

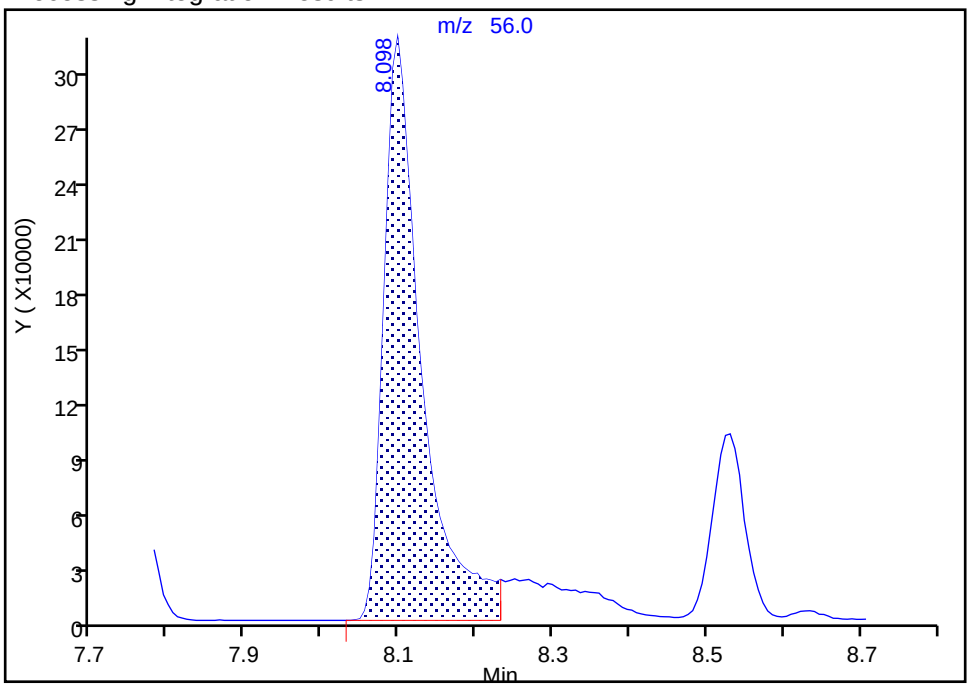
Data File:	\\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I02.D				
Injection Date:	23-Nov-2020 13:06:30	Instrument ID:	19930		
Lims ID:	ICIS - LG				
Client ID:					
Operator ID:	dvv10203	ALS Bottle#:	3	Worklist Smp#:	4
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

60 n-Butanol, CAS: 71-36-3

Signal: 1

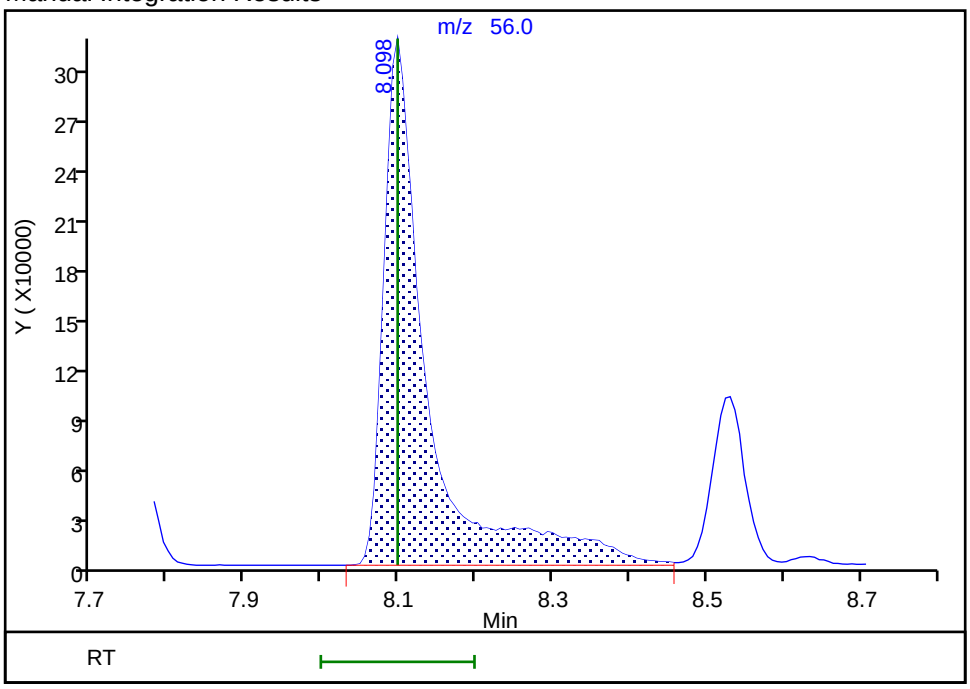
Processing Integration Results

RT: 8.10
Area: 1060901
Amount: 1017.5840
Amount Units: ug/l



Manual Integration Results

RT: 8.10
Area: 1230757
Amount: 1087.7790
Amount Units: ug/l



Reviewer: campbellme, 23-Nov-2020 18:26:30

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

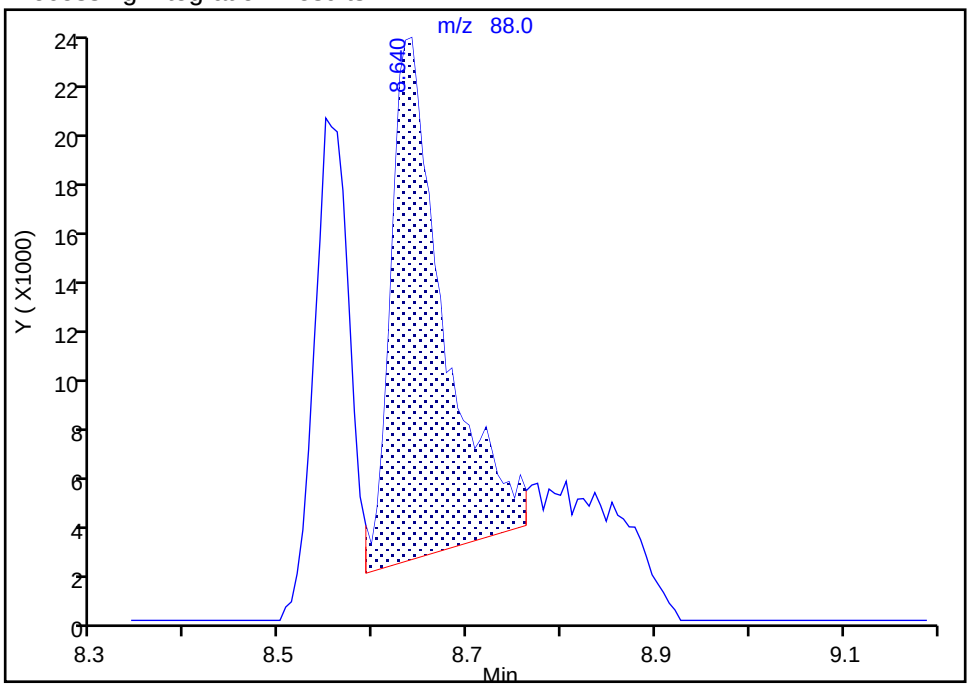
Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I02.D
Injection Date: 23-Nov-2020 13:06:30 Instrument ID: 19930
Lims ID: ICIS - LG
Client ID:
Operator ID: dvv10203 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

65 1,4-Dioxane, CAS: 123-91-1

Signal: 1

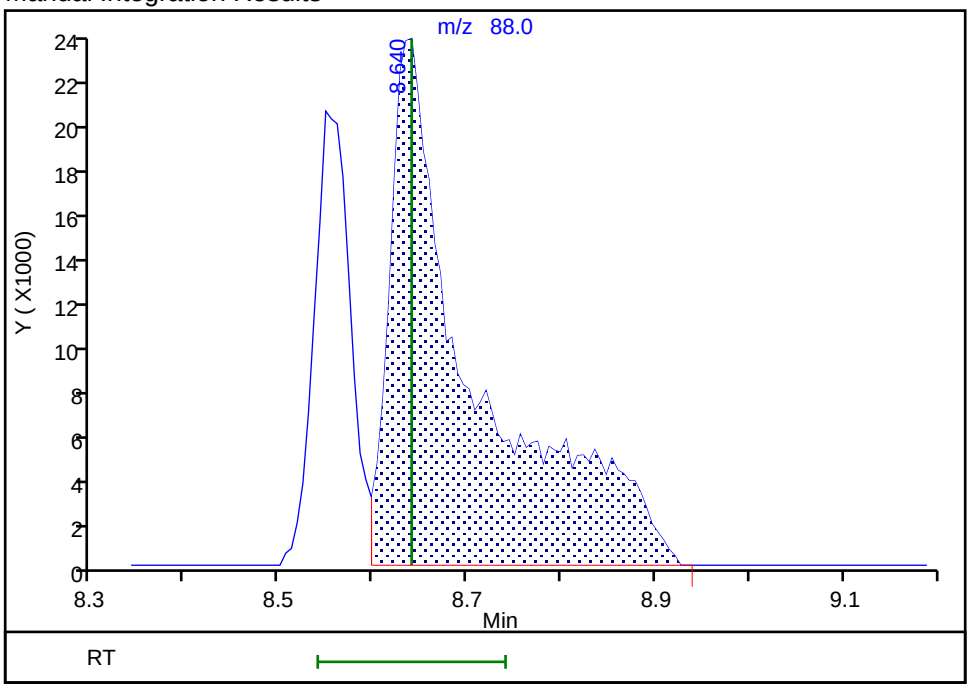
Processing Integration Results

RT: 8.64
Area: 82249
Amount: 529.1983
Amount Units: ug/l



Manual Integration Results

RT: 8.64
Area: 148345
Amount: 502.2415
Amount Units: ug/l



Reviewer: campbellme, 23-Nov-2020 18:26:46
Audit Action: Split an Integrated Peak Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I03.D
Lims ID: IC std5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 23-Nov-2020 13:28:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0016280-005
Misc. Info.: IC STD5
Operator ID: dvv10203 Instrument ID: 19930
Sublist: chrom-8260 25ml HP31*sub2

Method: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 23-Nov-2020 19:10:58 Calib Date: 23-Nov-2020 18:05:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1632

First Level Reviewer: campbellme Date: 23-Nov-2020 18:32:00

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.971	1.977	-0.006	99	362905	5.00	5.14	
4 Chloromethane	50	2.178	2.178	0.000	99	403049	5.00	4.92	
6 Butadiene	39	2.288	2.288	0.000	91	336874	5.00	4.81	
5 Vinyl chloride	62	2.300	2.300	0.000	98	378321	5.00	5.02	
7 Bromomethane	94	2.623	2.623	0.000	90	268205	5.00	4.90	M
8 Chloroethane	64	2.709	2.702	0.007	100	229528	5.00	4.95	
9 Dichlorofluoromethane	67	2.946	2.946	0.000	96	515898	5.00	4.97	
10 Trichlorofluoromethane	101	3.020	3.019	0.001	98	488244	5.00	5.00	
11 Ethyl ether	59	3.269	3.263	0.006	90	219835	5.00	5.03	
12 1,2-Dichloro-1,1,2-trifluoroetha	67	3.349	3.343	0.006	91	347378	5.00	5.07	
13 Acrolein	56	3.434	3.434	0.000	100	1828205	250.0	248.4	
14 1,1-Dichloroethene	96	3.580	3.574	0.006	97	267271	5.00	5.07	
15 Acetone	43	3.611	3.611	0.000	100	431846	50.0	47.2	
16 112TCTFE	101	3.623	3.617	0.006	89	291222	5.00	5.22	
17 Iodomethane	142	3.782	3.775	0.007	98	522756	5.00	5.07	
18 Ethyl bromide	108	3.806	3.800	0.006	98	239974	5.00	5.00	
19 Carbon disulfide	76	3.885	3.879	0.006	98	766074	5.00	5.01	
21 Methyl acetate	43	4.038	4.038	0.000	99	120524	5.00	4.83	M
22 3-Chloro-1-propene	41	4.062	4.056	0.006	92	400038	5.00	4.99	
23 Methylene Chloride	84	4.251	4.251	0.000	89	289040	5.00	4.94	
* 24 t-Butyl alcohol-d10 (IS)	65	4.263	4.257	0.006	0	167919	50.0	50.0	M
25 2-Methyl-2-propanol	59	4.391	4.391	0.000	99	360171	100.0	100.6	
26 Acrylonitrile	53	4.598	4.592	0.006	98	298145	25.0	24.9	
27 Methyl tert-butyl ether	73	4.659	4.659	0.000	94	719156	5.00	5.09	
28 trans-1,2-Dichloroethene	96	4.678	4.672	0.006	99	296112	5.00	5.08	
29 Hexane	57	5.104	5.098	0.006	89	429931	5.00	5.39	
31 1,1-Dichloroethane	63	5.330	5.336	-0.006	96	533155	5.00	5.06	
32 Isopropyl ether	45	5.391	5.391	0.000	95	883301	5.00	5.07	
33 2-Chloro-1,3-butadiene	53	5.446	5.440	0.006	89	434378	5.00	5.14	
34 Tert-butyl ethyl ether	59	5.921	5.921	0.000	97	840400	5.00	5.11	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 2-Butanone (MEK)	43	6.129	6.135	-0.006	99	758501	50.0	49.5	
S 35 1,2-Dichloroethene, Total	100				0			10.1	
37 cis-1,2-Dichloroethene	96	6.165	6.165	0.000	81	339325	5.00	5.01	
38 2,2-Dichloropropane	77	6.177	6.177	0.000	86	433655	5.00	5.12	
40 Propionitrile	54	6.220	6.220	0.000	99	450559	100.0	100.6	
42 Methacrylonitrile	67	6.433	6.433	0.000	89	784279	50.0	49.7	
43 Chlorobromomethane	128	6.494	6.494	0.000	89	152825	5.00	5.13	
44 Tetrahydrofuran	71	6.507	6.507	0.000	84	232086	50.0	50.0	
45 Chloroform	83	6.641	6.641	0.000	92	523866	5.00	5.05	
$ 46 Dibromofluoromethane (Surr)	113	6.854	6.854	0.000	94	490996	10.0	10.0	
47 1,1,1-Trichloroethane	97	6.872	6.866	0.006	97	471715	5.00	5.06	
48 Cyclohexane	56	6.964	6.970	-0.006	88	506440	5.00	5.24	
50 Carbon tetrachloride	117	7.080	7.080	0.000	88	430415	5.00	5.16	
51 1,1-Dichloropropene	75	7.080	7.080	0.000	97	424728	5.00	5.13	
52 Isobutyl alcohol	41	7.226	7.226	0.000	95	294140	250.0	255.4	
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.311	7.311	0.000	0	99154	10.0	10.1	
54 Benzene	78	7.342	7.342	0.000	96	1258244	5.00	5.02	
56 1,2-Dichloroethane	62	7.415	7.415	0.000	97	297074	5.00	4.85	
57 Tert-amyl methyl ether	73	7.531	7.531	0.000	99	780037	5.00	5.18	
* 58 Fluorobenzene (IS)	96	7.744	7.744	0.000	99	1978687	10.0	10.0	
59 n-Heptane	43	7.750	7.750	0.000	90	414595	5.00	5.18	
60 n-Butanol	56	8.098	8.098	0.000	84	565829	500.0	519.9	M
61 Trichloroethene	95	8.220	8.220	0.000	97	330514	5.00	5.04	
62 Methylcyclohexane	83	8.531	8.525	0.007	94	562317	5.00	5.28	
63 1,2-Dichloropropane	63	8.555	8.549	0.006	91	310291	5.00	5.04	
64 Methyl methacrylate	69	8.634	8.634	0.000	87	148760	5.00	5.07	
65 1,4-Dioxane	88	8.640	8.640	0.000	35	65884	250.0	231.9	M
66 Dibromomethane	93	8.665	8.659	0.006	94	147921	5.00	5.08	
68 Dichlorobromomethane	83	8.896	8.896	0.000	99	374289	5.00	5.07	
69 2-Nitropropane	41	9.165	9.159	0.006	96	374854	50.0	50.8	
72 1-Bromo-2-chloroethane	63	9.287	9.287	0.000	98	322620	5.00	5.09	
73 cis-1,3-Dichloropropene	75	9.439	9.439	0.000	98	459853	5.00	5.19	
74 4-Methyl-2-pentanone (MIBK)	43	9.604	9.604	0.000	95	1948125	50.0	51.1	
$ 75 Toluene-d8 (Surr)	98	9.744	9.744	0.000	93	1951818	10.0	10.1	
76 Toluene	92	9.823	9.817	0.006	98	811376	5.00	5.00	
S 77 1,3-Dichloropropene, Total	100				0			10.4	
78 trans-1,3-Dichloropropene	75	10.073	10.073	0.000	90	367862	5.00	5.26	
79 Ethyl methacrylate	69	10.134	10.134	0.000	88	316728	5.00	5.41	
80 1,1,2-Trichloroethane	97	10.274	10.274	0.000	90	218945	5.00	5.06	
81 Tetrachloroethene	166	10.366	10.366	0.000	97	401439	5.00	5.11	
82 1,3-Dichloropropane	76	10.439	10.439	0.000	87	378398	5.00	5.12	
83 2-Hexanone	43	10.488	10.481	0.007	96	1351932	50.0	51.9	
85 Chlorodibromomethane	129	10.652	10.652	0.000	89	283207	5.00	5.21	
86 Ethylene Dibromide	107	10.762	10.762	0.000	98	213803	5.00	5.16	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.189	0.000	84	1486999	10.0	10.0	
88 1-Chlorohexane	91	11.195	11.195	0.000	95	470375	5.00	5.00	
90 Chlorobenzene	112	11.219	11.213	0.006	96	905888	5.00	5.05	
S 89 Xylenes, Total	106				0			15.4	
92 Ethylbenzene	91	11.304	11.298	0.006	98	1598931	5.00	5.11	
91 1,1,1,2-Tetrachloroethane	131	11.298	11.298	0.000	97	321476	5.00	5.17	
93 m-Xylene & p-Xylene	106	11.414	11.414	0.000	100	1263230	10.0	10.2	
94 o-Xylene	106	11.743	11.743	0.000	96	617748	5.00	5.14	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
95 Styrene	104	11.762	11.756	0.006	95	1005274	5.00	5.23	
96 Bromoform	173	11.920	11.920	0.000	98	171030	5.00	5.21	
97 Isopropylbenzene	105	12.042	12.042	0.000	95	1654564	5.00	5.19	
$ 100 4-Bromofluorobenzene (Surr)	95	12.188	12.188	0.000	94	723239	10.0	10.1	
101 1,1,2,2-Tetrachloroethane	83	12.286	12.286	0.000	92	288446	5.00	5.22	
102 Bromobenzene	156	12.304	12.304	0.000	95	388628	5.00	5.10	
103 trans-1,4-Dichloro-2-butene	53	12.310	12.310	0.000	91	640566	50.0	51.3	
104 1,2,3-Trichloropropane	110	12.335	12.335	0.000	82	77284	5.00	5.10	
105 N-Propylbenzene	91	12.371	12.371	0.000	99	1917309	5.00	5.14	
106 2-Chlorotoluene	126	12.451	12.451	0.000	97	391437	5.00	5.13	
107 1,3,5-Trimethylbenzene	105	12.505	12.505	0.000	94	1374177	5.00	5.15	
108 4-Chlorotoluene	126	12.542	12.542	0.000	96	391457	5.00	5.08	
109 tert-Butylbenzene	134	12.749	12.749	0.000	93	308232	5.00	5.11	
110 Pentachloroethane	167	12.780	12.780	0.000	92	248476	5.00	5.20	
111 1,2,4-Trimethylbenzene	105	12.792	12.792	0.000	96	1412501	5.00	5.20	
112 sec-Butylbenzene	105	12.908	12.914	-0.006	94	1814658	5.00	5.18	
113 1,3-Dichlorobenzene	146	13.011	13.011	0.000	98	774588	5.00	5.05	
114 4-Isopropyltoluene	119	13.018	13.018	0.000	97	1557438	5.00	5.22	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	94	845833	10.0	10.0	
116 1,4-Dichlorobenzene	146	13.085	13.085	0.000	96	776711	5.00	5.07	
117 1,2,3-Trimethylbenzene	120	13.097	13.091	0.006	98	609602	5.00	5.06	
118 Benzyl chloride	126	13.158	13.158	0.000	98	112713	5.00	5.40	
119 n-Butylbenzene	92	13.310	13.310	0.000	97	748043	5.00	5.13	
120 1,2-Dichlorobenzene	146	13.341	13.341	0.000	99	708104	5.00	5.06	
122 1,2-Dibromo-3-Chloropropane	155	13.889	13.883	0.006	90	45090	5.00	5.32	
123 1,3,5-Trichlorobenzene	180	14.011	14.011	0.000	98	565506	5.00	5.12	
124 1,2,4-Trichlorobenzene	180	14.432	14.432	0.000	94	476320	5.00	5.19	
125 Hexachlorobutadiene	225	14.517	14.517	0.000	96	198152	5.00	4.96	
126 Naphthalene	128	14.615	14.615	0.000	97	910778	5.00	5.31	
127 1,2,3-Trichlorobenzene	180	14.755	14.755	0.000	96	412357	5.00	5.20	
134 Isopropyl alcohol	45		0.000				ND	ND	
135 p-Diethylbenzene	1		0.000				ND	ND	
137 2-Methylnaphthalene	142		0.000				ND	ND	
144 2-ethoxy-2-methyl butane	1		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

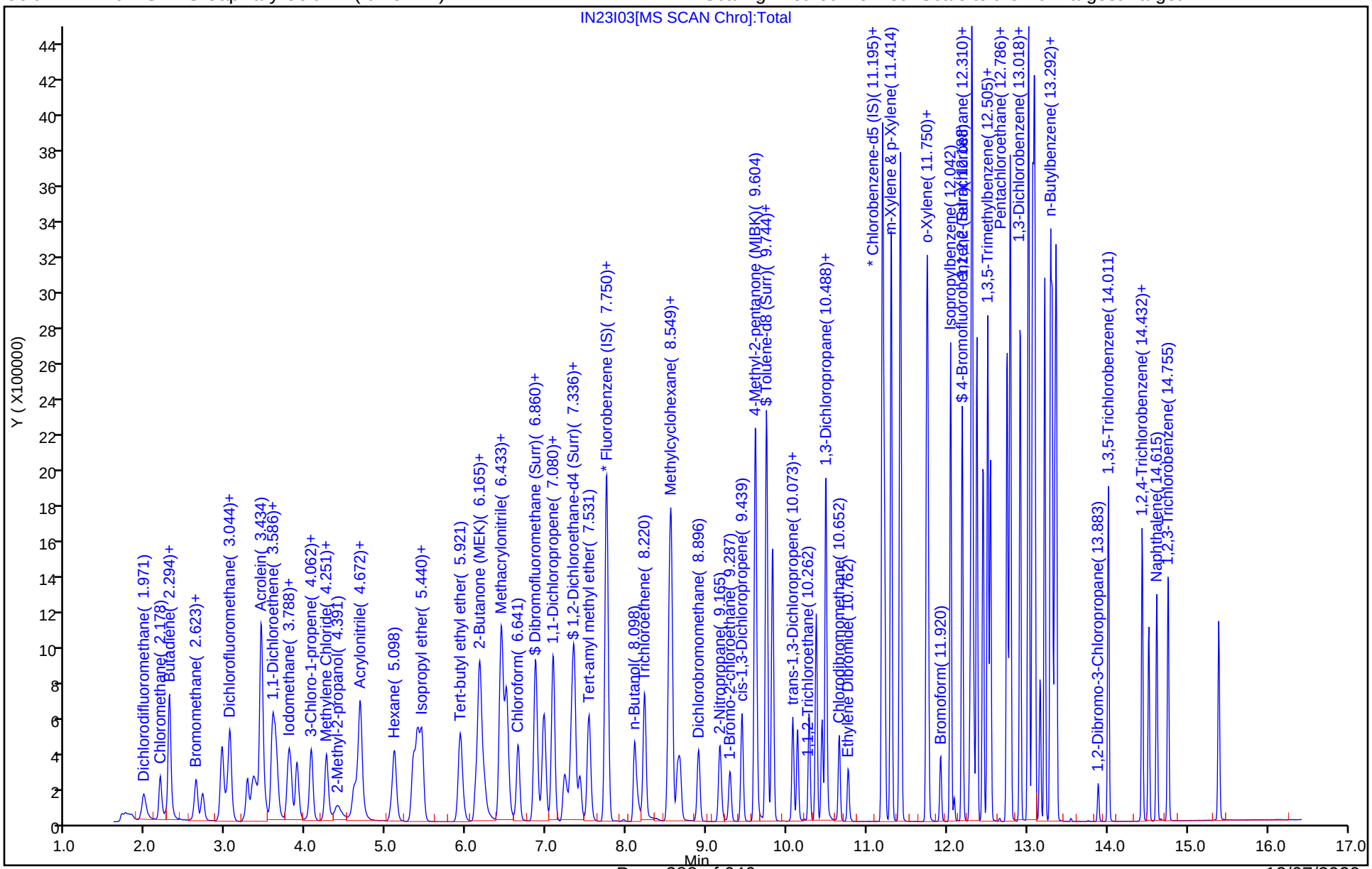
MSV_RV1_826_00030	Amount Added:	5.00	Units: uL	
MSV_RV4GAS826_00096	Amount Added:	5.00	Units: uL	
MSV_RV4_826_00034	Amount Added:	5.00	Units: uL	
MSV_31_826ISS_00003	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 23-Nov-2020 19:11:00 Chrom Revision: 2.3 13-Nov-2020 01:23:02

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I03.D				
Injection Date:	23-Nov-2020 13:28:30	Instrument ID:	19930	Operator ID:	dvv10203
Lims ID:	IC std5			Worklist Smp#:	5
Client ID:					
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

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



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

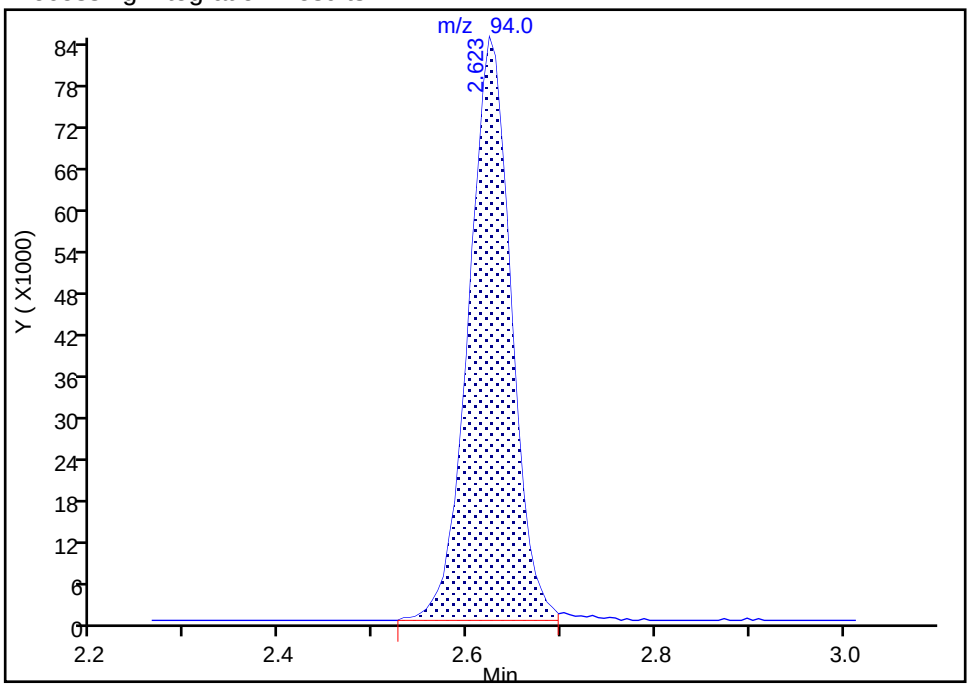
Data File:	\\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I03.D				
Injection Date:	23-Nov-2020 13:28:30	Instrument ID:	19930		
Lims ID:	IC std5				
Client ID:					
Operator ID:	dvv10203	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

7 Bromomethane, CAS: 74-83-9

Signal: 1

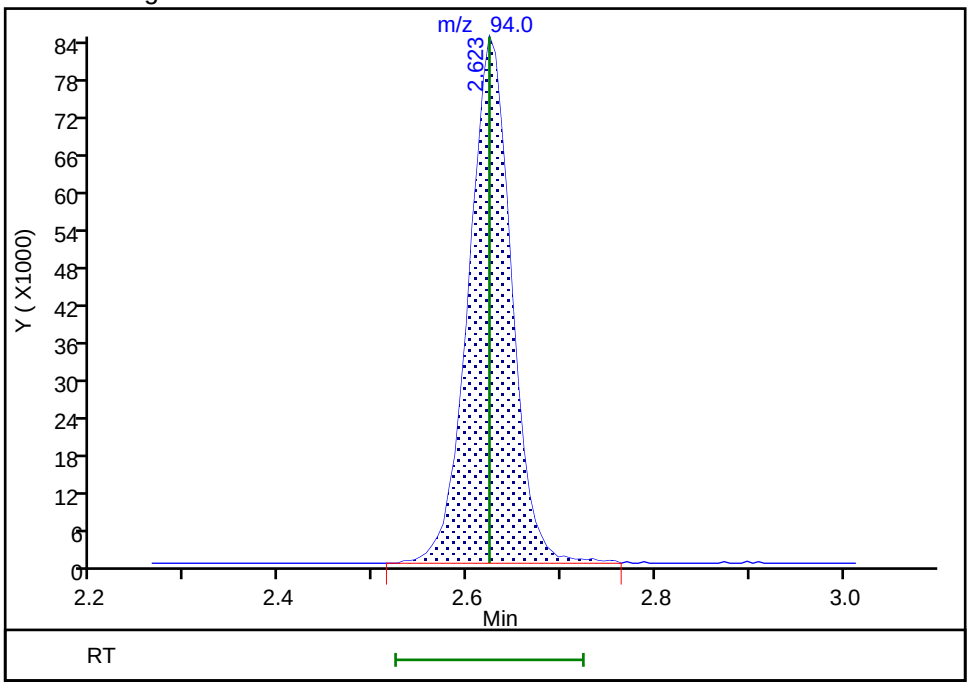
Processing Integration Results

RT: 2.62
Area: 266042
Amount: 4.869391
Amount Units: ug/l



Manual Integration Results

RT: 2.62
Area: 268205
Amount: 4.903435
Amount Units: ug/l



Reviewer: campbellme, 23-Nov-2020 18:30:20

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

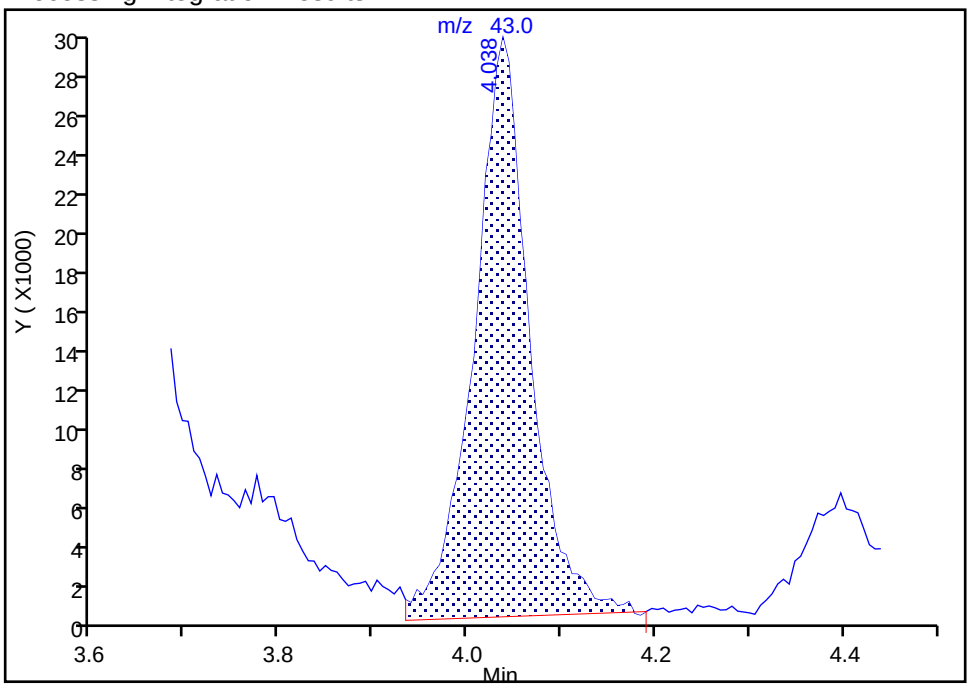
Data File:	\\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I03.D				
Injection Date:	23-Nov-2020 13:28:30	Instrument ID:	19930		
Lims ID:	IC std5				
Client ID:					
Operator ID:	dvv10203	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

21 Methyl acetate, CAS: 79-20-9

Signal: 1

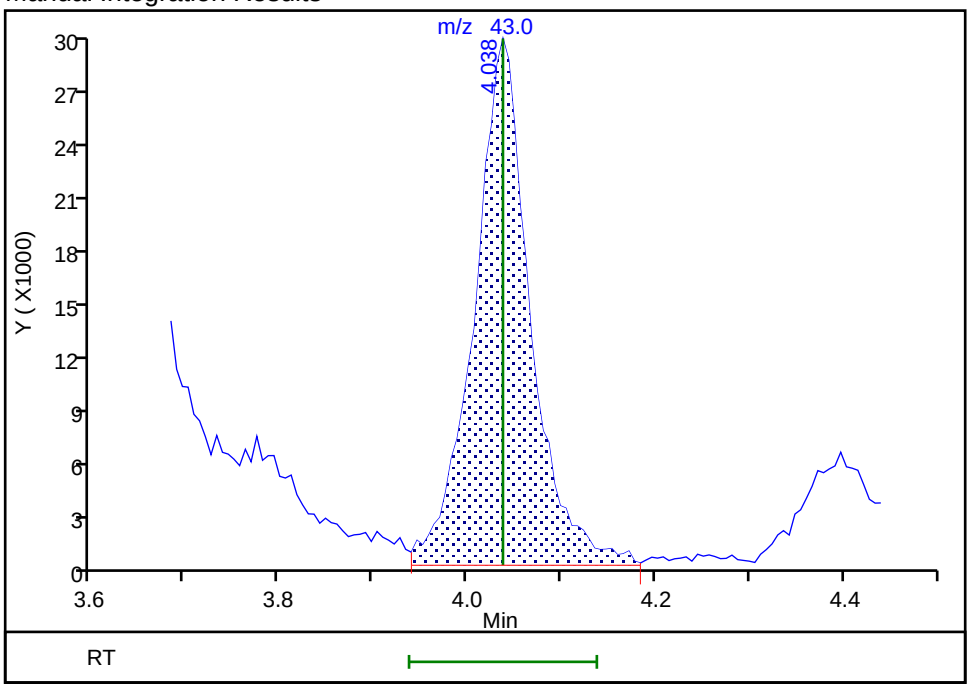
Processing Integration Results

RT: 4.04
Area: 119876
Amount: 4.897701
Amount Units: ug/l



Manual Integration Results

RT: 4.04
Area: 120524
Amount: 4.825887
Amount Units: ug/l



Reviewer: campbellme, 23-Nov-2020 18:30:53
Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

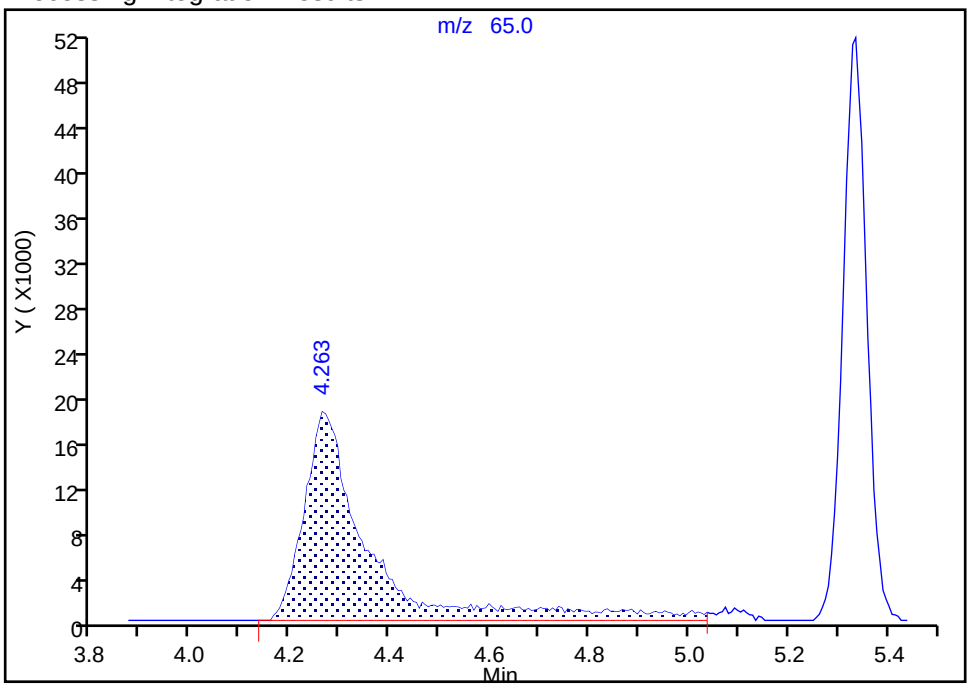
Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I03.D
Injection Date: 23-Nov-2020 13:28:30 Instrument ID: 19930
Lims ID: IC std5
Client ID:
Operator ID: dvv10203 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

* 24 t-Butyl alcohol-d10 (IS), CAS: 53001-22-2

Signal: 1

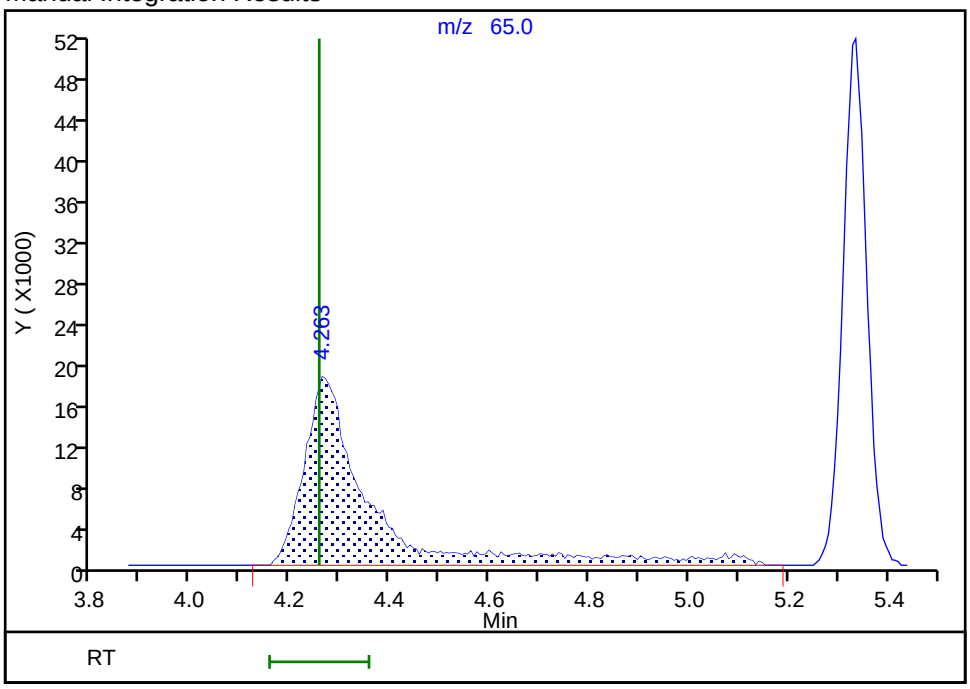
Processing Integration Results

RT: 4.26
Area: 163691
Amount: 50.000000
Amount Units: ug/l



Manual Integration Results

RT: 4.26
Area: 167919
Amount: 50.000000
Amount Units: ug/l



Reviewer: campbellme, 23-Nov-2020 18:44:26
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

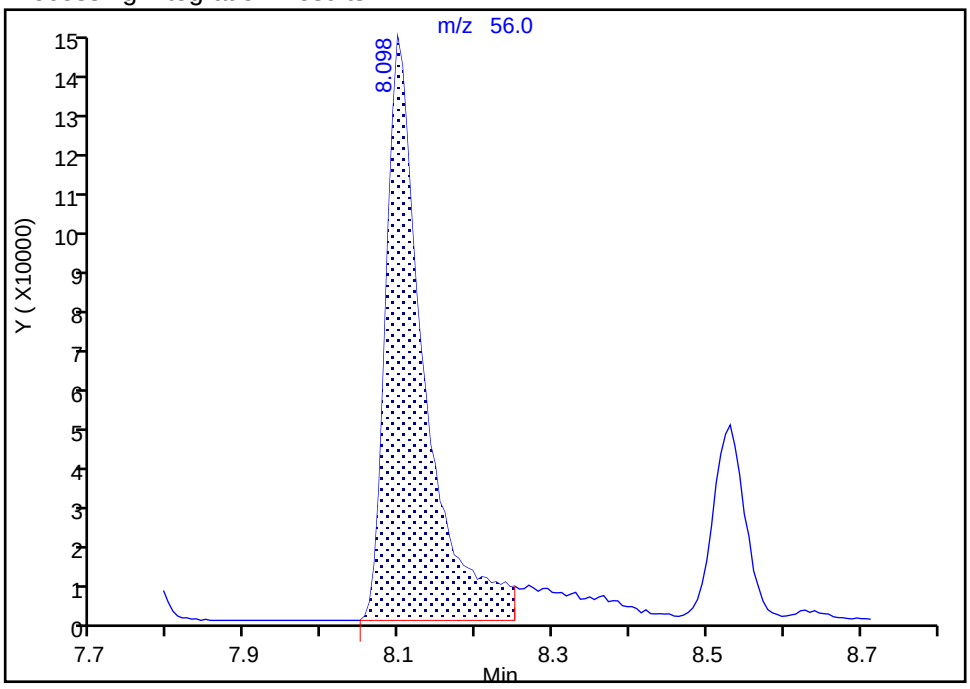
Data File:	\\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I03.D				
Injection Date:	23-Nov-2020 13:28:30	Instrument ID:	19930		
Lims ID:	IC std5				
Client ID:					
Operator ID:	dvv10203	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

60 n-Butanol, CAS: 71-36-3

Signal: 1

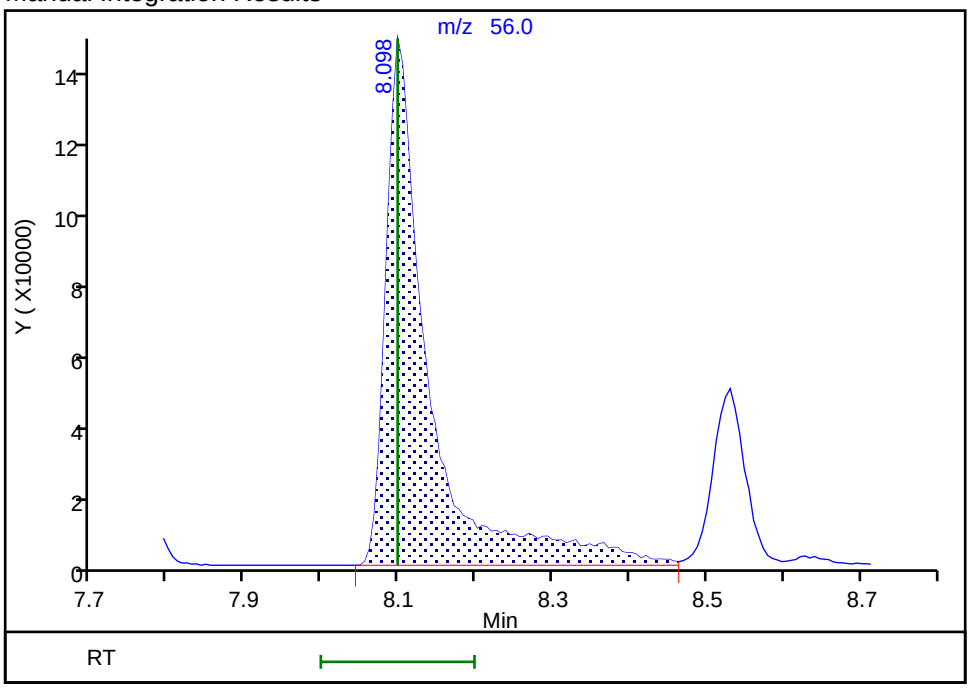
Processing Integration Results

RT: 8.10
Area: 502560
Amount: 499.1696
Amount Units: ug/l



Manual Integration Results

RT: 8.10
Area: 565829
Amount: 519.8804
Amount Units: ug/l



Reviewer: campbellme, 23-Nov-2020 18:31:22

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

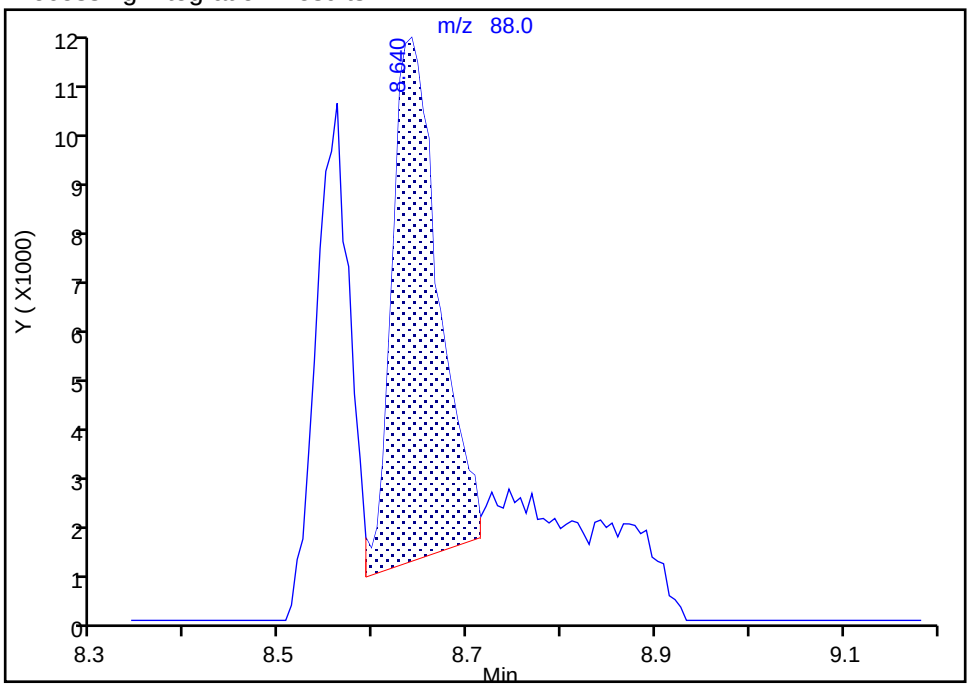
Data File:	\\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I03.D				
Injection Date:	23-Nov-2020 13:28:30	Instrument ID:	19930		
Lims ID:	IC std5				
Client ID:					
Operator ID:	dvv10203	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

65 1,4-Dioxane, CAS: 123-91-1

Signal: 1

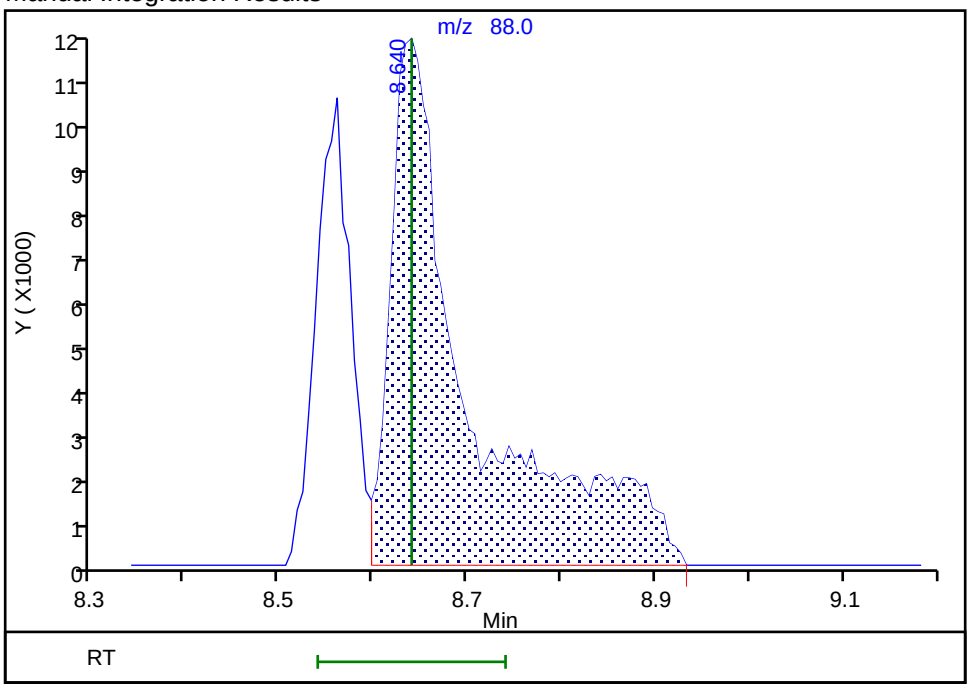
Processing Integration Results

RT: 8.64
Area: 34674
Amount: 195.3602
Amount Units: ug/l



Manual Integration Results

RT: 8.64
Area: 65884
Amount: 231.8833
Amount Units: ug/l



Reviewer: campbellme, 23-Nov-2020 18:31:40

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

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I04.D
Lims ID: IC std4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 23-Nov-2020 13:49:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0016280-006
Misc. Info.: IC STD4
Operator ID: dvv10203 Instrument ID: 19930
Sublist: chrom-8260 25ml HP31*sub2

Method: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 23-Nov-2020 19:11:11 Calib Date: 23-Nov-2020 18:05:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1632

First Level Reviewer: campbellme Date: 23-Nov-2020 18:35:53

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.971	1.971	0.000	99	137035	2.00	1.94	
4 Chloromethane	50	2.172	2.172	0.000	99	166854	2.00	2.04	
6 Butadiene	39	2.288	2.288	0.000	88	129463	2.00	1.85	
5 Vinyl chloride	62	2.300	2.300	0.000	98	154985	2.00	2.06	M
7 Bromomethane	94	2.623	2.623	0.000	90	113059	2.00	2.07	
8 Chloroethane	64	2.709	2.709	0.000	99	94172	2.00	2.03	
9 Dichlorofluoromethane	67	2.940	2.940	0.000	97	212826	2.00	2.05	
10 Trichlorofluoromethane	101	3.019	3.019	0.000	98	194532	2.00	1.99	
11 Ethyl ether	59	3.269	3.269	0.000	90	88826	2.00	2.03	
12 1,2-Dichloro-1,1,2-trifluoroetha	67	3.336	3.336	0.000	91	131936	2.00	1.93	
13 Acrolein	56	3.440	3.440	0.000	100	701877	100.0	97.6	
14 1,1-Dichloroethene	96	3.580	3.580	0.000	97	102917	2.00	1.95	
15 Acetone	43	3.605	3.605	0.000	100	171065	20.0	19.1	
16 112TCTFE	101	3.617	3.617	0.000	87	104592	2.00	1.88	
17 Iodomethane	142	3.775	3.775	0.000	98	202587	2.00	1.97	
18 Ethyl bromide	108	3.806	3.806	0.000	98	98342	2.00	2.05	
19 Carbon disulfide	76	3.885	3.885	0.000	99	292763	2.00	1.92	
21 Methyl acetate	43	4.038	4.038	0.000	97	49588	2.00	2.03	M
22 3-Chloro-1-propene	41	4.062	4.062	0.000	93	164133	2.00	2.05	
23 Methylene Chloride	84	4.251	4.251	0.000	90	113711	2.00	1.95	
* 24 t-Butyl alcohol-d10 (IS)	65	4.257	4.257	0.000	0	164063	50.0	50.0	M
25 2-Methyl-2-propanol	59	4.385	4.385	0.000	98	142185	40.0	40.6	
26 Acrylonitrile	53	4.592	4.592	0.000	99	115701	10.0	9.91	
27 Methyl tert-butyl ether	73	4.659	4.659	0.000	94	280757	2.00	1.99	
28 trans-1,2-Dichloroethene	96	4.678	4.678	0.000	99	113298	2.00	1.95	
29 Hexane	57	5.104	5.104	0.000	89	150330	2.00	1.89	
31 1,1-Dichloroethane	63	5.336	5.336	0.000	96	206444	2.00	1.96	
32 Isopropyl ether	45	5.391	5.391	0.000	95	342003	2.00	1.97	
33 2-Chloro-1,3-butadiene	53	5.446	5.446	0.000	89	165305	2.00	1.96	
34 Tert-butyl ethyl ether	59	5.921	5.921	0.000	97	325561	2.00	1.98	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 2-Butanone (MEK)	43	6.135	6.135	0.000	99	293727	20.0	19.6	
S 35 1,2-Dichloroethene, Total	100				0			3.90	
37 cis-1,2-Dichloroethene	96	6.165	6.165	0.000	80	131926	2.00	1.95	
38 2,2-Dichloropropane	77	6.177	6.177	0.000	86	164796	2.00	1.95	
40 Propionitrile	54	6.220	6.220	0.000	99	170750	40.0	39.0	
42 Methacrylonitrile	67	6.433	6.433	0.000	90	298659	20.0	19.4	
43 Chlorobromomethane	128	6.494	6.494	0.000	89	61198	2.00	2.06	
44 Tetrahydrofuran	71	6.507	6.507	0.000	84	89453	20.0	19.7	
45 Chloroform	83	6.647	6.647	0.000	92	203027	2.00	1.96	
$ 46 Dibromofluoromethane (Surr)	113	6.860	6.860	0.000	94	487807	10.0	10.0	
47 1,1,1-Trichloroethane	97	6.866	6.866	0.000	97	182755	2.00	1.96	
48 Cyclohexane	56	6.964	6.964	0.000	88	186444	2.00	1.93	
50 Carbon tetrachloride	117	7.080	7.080	0.000	94	162919	2.00	1.95	
51 1,1-Dichloropropene	75	7.080	7.080	0.000	97	164045	2.00	1.98	
52 Isobutyl alcohol	41	7.232	7.232	0.000	96	114540	100.0	101.8	
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.311	7.311	0.000	0	98235	10.0	9.99	
54 Benzene	78	7.342	7.342	0.000	96	490160	2.00	1.96	
56 1,2-Dichloroethane	62	7.415	7.415	0.000	97	118739	2.00	1.94	
57 Tert-amyl methyl ether	73	7.531	7.531	0.000	99	295847	2.00	1.97	
* 58 Fluorobenzene (IS)	96	7.744	7.744	0.000	99	1976128	10.0	10.0	
59 n-Heptane	43	7.756	7.756	0.000	90	152765	2.00	1.91	
60 n-Butanol	56	8.104	8.104	0.000	87	211478	200.0	198.9	
61 Trichloroethene	95	8.220	8.220	0.000	97	126694	2.00	1.93	
62 Methylcyclohexane	83	8.531	8.531	0.000	92	208498	2.00	1.96	
63 1,2-Dichloropropane	63	8.555	8.555	0.000	87	121570	2.00	1.98	
64 Methyl methacrylate	69	8.634	8.634	0.000	86	55899	2.00	1.95	
65 1,4-Dioxane	88	8.640	8.640	0.000	39	28458	100.0	102.5	M
66 Dibromomethane	93	8.665	8.665	0.000	94	57091	2.00	1.96	
68 Dichlorobromomethane	83	8.896	8.896	0.000	99	142334	2.00	1.93	
69 2-Nitropropane	41	9.165	9.165	0.000	98	140261	20.0	19.4	
72 1-Bromo-2-chloroethane	63	9.287	9.287	0.000	98	129870	2.00	2.05	
73 cis-1,3-Dichloropropene	75	9.439	9.439	0.000	98	171644	2.00	1.94	
74 4-Methyl-2-pentanone (MIBK)	43	9.604	9.604	0.000	95	734468	20.0	19.7	
$ 75 Toluene-d8 (Surr)	98	9.744	9.744	0.000	93	1941813	10.0	10.0	
76 Toluene	92	9.817	9.817	0.000	98	313899	2.00	1.94	
S 77 1,3-Dichloropropene, Total	100				0			3.92	
78 trans-1,3-Dichloropropene	75	10.073	10.073	0.000	90	137933	2.00	1.98	
79 Ethyl methacrylate	69	10.134	10.134	0.000	88	114724	2.00	1.97	
80 1,1,2-Trichloroethane	97	10.280	10.280	0.000	90	83917	2.00	1.95	
81 Tetrachloroethene	166	10.366	10.366	0.000	97	151027	2.00	1.93	
82 1,3-Dichloropropane	76	10.439	10.439	0.000	87	144948	2.00	1.97	
83 2-Hexanone	43	10.488	10.488	0.000	95	511453	20.0	20.1	
85 Chlorodibromomethane	129	10.652	10.652	0.000	89	105930	2.00	1.96	
86 Ethylene Dibromide	107	10.762	10.762	0.000	98	80415	2.00	1.95	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.189	0.000	85	1481807	10.0	10.0	
88 1-Chlorohexane	91	11.195	11.195	0.000	95	178481	2.00	1.90	
90 Chlorobenzene	112	11.219	11.219	0.000	97	347796	2.00	1.95	
S 89 Xylenes, Total	106				0			5.95	
92 Ethylbenzene	91	11.304	11.304	0.000	98	614346	2.00	1.97	
91 1,1,1,2-Tetrachloroethane	131	11.298	11.298	0.000	97	121733	2.00	1.96	
93 m-Xylene & p-Xylene	106	11.414	11.414	0.000	100	490346	4.00	3.98	
94 o-Xylene	106	11.743	11.743	0.000	96	236196	2.00	1.97	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
95 Styrene	104	11.762	11.762	0.000	94	379665	2.00	1.98	
96 Bromoform	173	11.920	11.920	0.000	98	63856	2.00	1.95	
97 Isopropylbenzene	105	12.042	12.042	0.000	95	632848	2.00	1.99	
$ 100 4-Bromofluorobenzene (Surr)	95	12.188	12.188	0.000	94	718478	10.0	10.0	
101 1,1,2,2-Tetrachloroethane	83	12.286	12.286	0.000	93	107901	2.00	1.95	
102 Bromobenzene	156	12.304	12.304	0.000	97	150137	2.00	1.97	
103 trans-1,4-Dichloro-2-butene	53	12.310	12.310	0.000	92	235404	20.0	19.3	
104 1,2,3-Trichloropropane	110	12.335	12.335	0.000	82	29565	2.00	1.94	
105 N-Propylbenzene	91	12.371	12.371	0.000	99	736780	2.00	1.97	
106 2-Chlorotoluene	126	12.451	12.451	0.000	97	150481	2.00	1.97	
107 1,3,5-Trimethylbenzene	105	12.505	12.505	0.000	94	526346	2.00	1.97	
108 4-Chlorotoluene	126	12.542	12.542	0.000	96	149649	2.00	1.94	
109 tert-Butylbenzene	134	12.749	12.749	0.000	92	115253	2.00	1.91	
110 Pentachloroethane	167	12.780	12.780	0.000	93	98293	2.00	2.05	
111 1,2,4-Trimethylbenzene	105	12.792	12.792	0.000	96	536289	2.00	1.97	
112 sec-Butylbenzene	105	12.914	12.914	0.000	94	691511	2.00	1.97	
113 1,3-Dichlorobenzene	146	13.011	13.011	0.000	98	299667	2.00	1.95	
114 4-Isopropyltoluene	119	13.018	13.018	0.000	97	596157	2.00	1.99	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	94	848463	10.0	10.0	
116 1,4-Dichlorobenzene	146	13.085	13.085	0.000	96	298581	2.00	1.94	
117 1,2,3-Trimethylbenzene	120	13.097	13.097	0.000	98	245278	2.00	2.03	
118 Benzyl chloride	126	13.164	13.164	0.000	98	42275	2.00	2.02	
119 n-Butylbenzene	92	13.310	13.310	0.000	96	287834	2.00	1.97	
120 1,2-Dichlorobenzene	146	13.347	13.347	0.000	99	271564	2.00	1.94	
122 1,2-Dibromo-3-Chloropropane	155	13.883	13.883	0.000	88	16302	2.00	1.92	
123 1,3,5-Trichlorobenzene	180	14.011	14.011	0.000	97	213605	2.00	1.93	
124 1,2,4-Trichlorobenzene	180	14.438	14.438	0.000	94	176796	2.00	1.92	
125 Hexachlorobutadiene	225	14.517	14.517	0.000	96	76823	2.00	1.92	
126 Naphthalene	128	14.615	14.615	0.000	96	343142	2.00	1.99	
127 1,2,3-Trichlorobenzene	180	14.761	14.761	0.000	96	156150	2.00	1.96	
134 Isopropyl alcohol	45		0.000				ND	ND	
144 2-ethoxy-2-methyl butane	1		0.000				ND	ND	
135 p-Diethylbenzene	1		0.000				ND	ND	
137 2-Methylnaphthalene	142		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

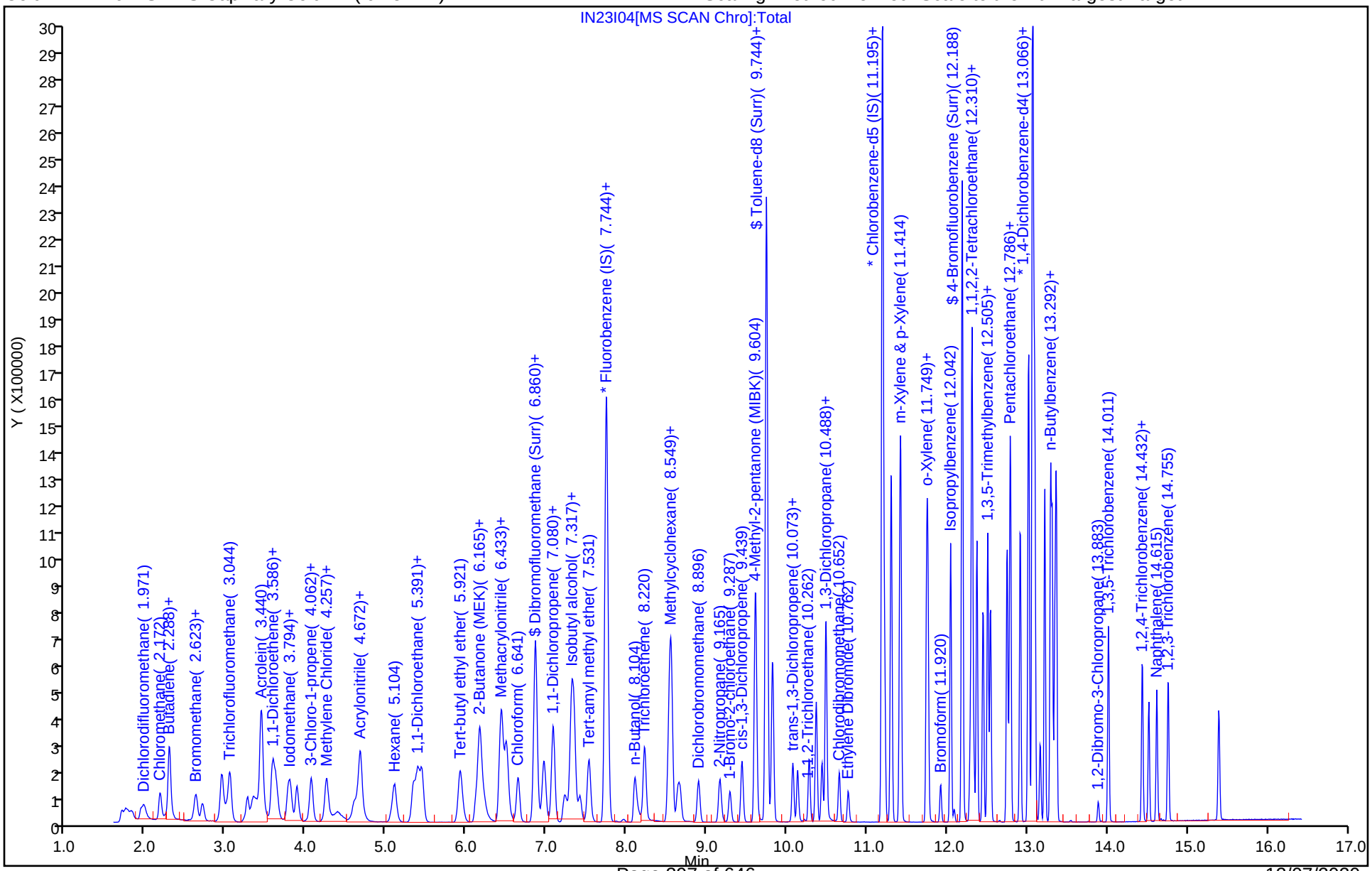
MSV_RV1_826_00030	Amount Added:	2.00	Units: uL	
MSV_RV4GAS826_00096	Amount Added:	2.00	Units: uL	
MSV_RV4_826_00034	Amount Added:	2.00	Units: uL	
MSV_31_826ISS_00003	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 23-Nov-2020 19:11:12 Chrom Revision: 2.3 13-Nov-2020 01:23:02

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I04.D				
Injection Date:	23-Nov-2020 13:49:30	Instrument ID:	19930	Operator ID:	dvv10203
Lims ID:	IC std4			Worklist Smp#:	6
Client ID:					
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

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



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

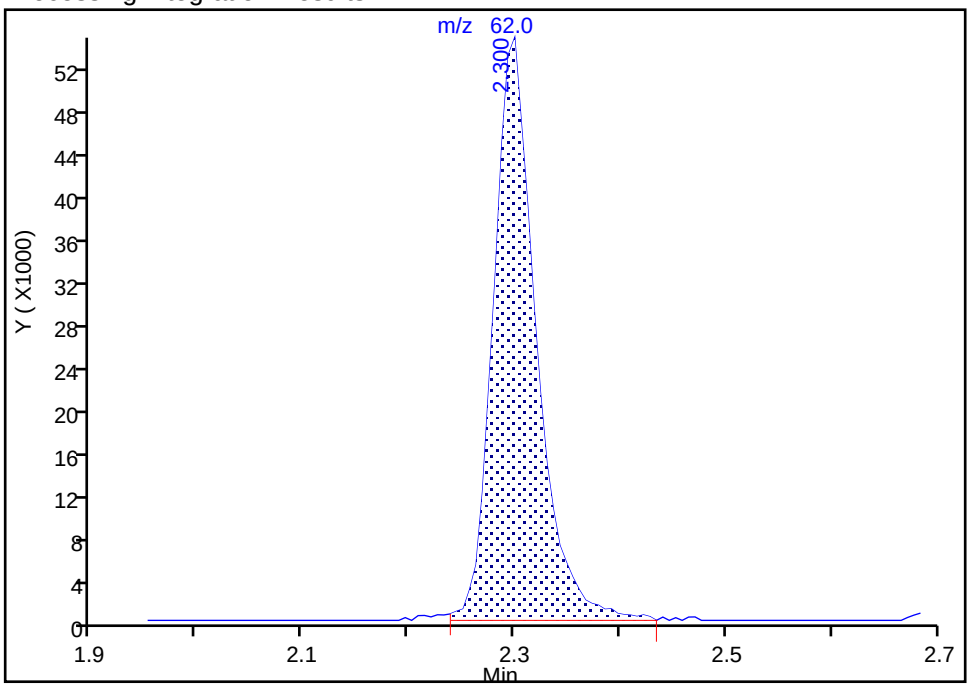
Data File:	\\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I04.D				
Injection Date:	23-Nov-2020 13:49:30	Instrument ID:	19930		
Lims ID:	IC std4				
Client ID:					
Operator ID:	dvv10203	ALS Bottle#:	5	Worklist Smp#:	6
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

5 Vinyl chloride, CAS: 75-01-4

Signal: 1

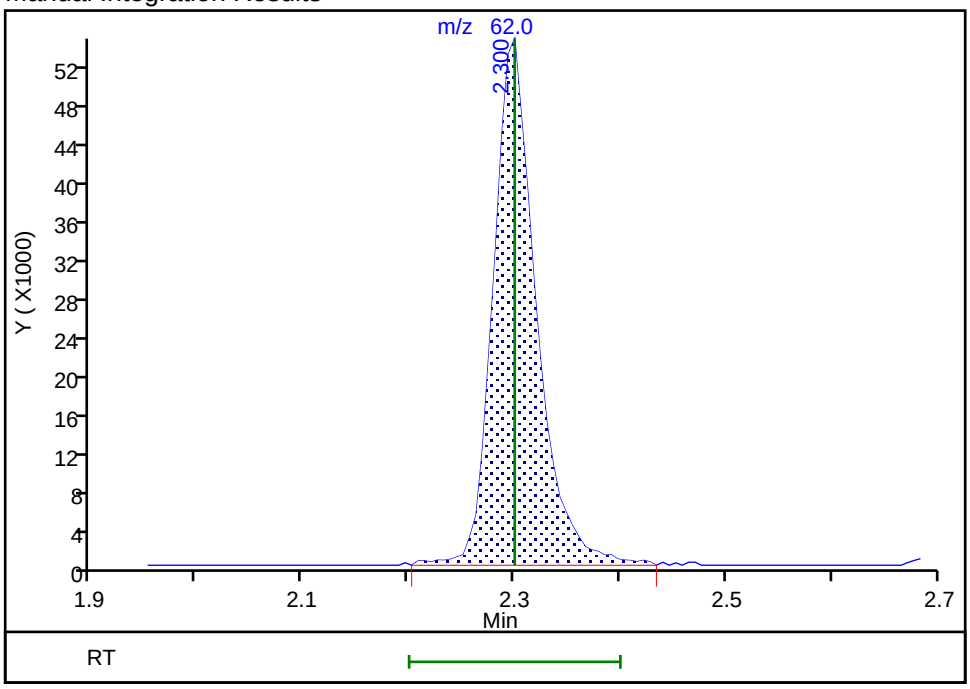
Processing Integration Results

RT: 2.30
Area: 154150
Amount: 2.050762
Amount Units: ug/l



Manual Integration Results

RT: 2.30
Area: 154985
Amount: 2.057195
Amount Units: ug/l



Reviewer: campbellme, 23-Nov-2020 18:34:45

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

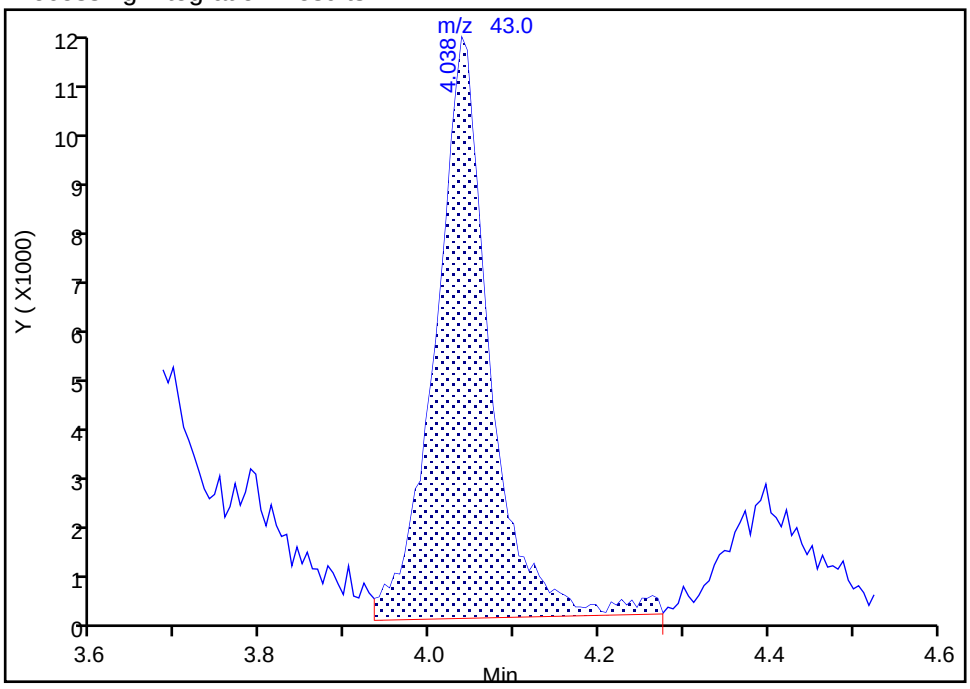
Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I04.D
Injection Date: 23-Nov-2020 13:49:30 Instrument ID: 19930
Lims ID: IC std4
Client ID:
Operator ID: dvv10203 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

21 Methyl acetate, CAS: 79-20-9

Signal: 1

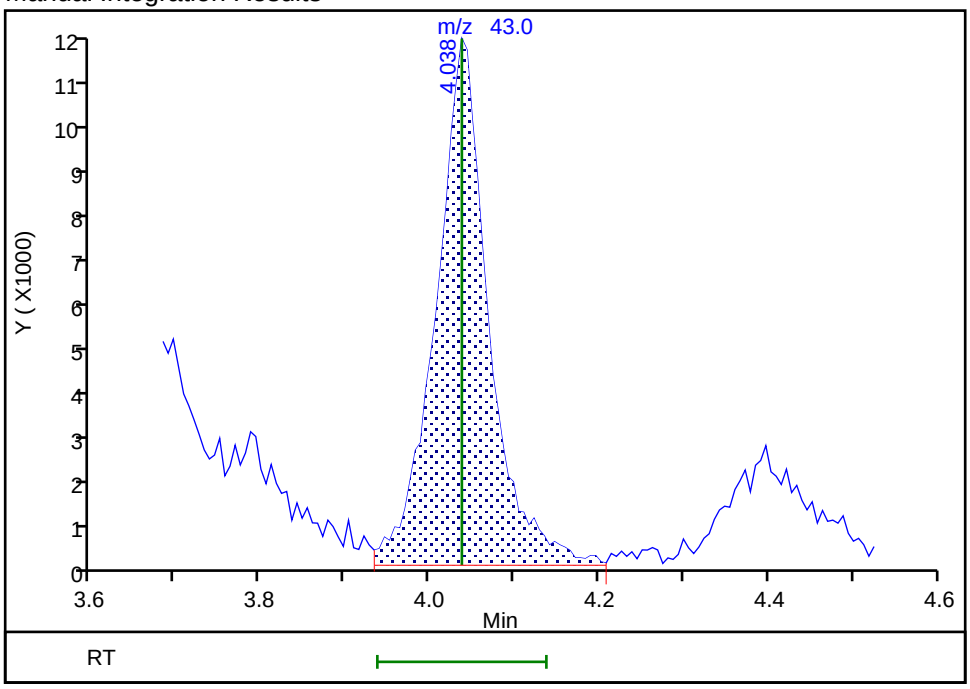
Processing Integration Results

RT: 4.04
Area: 51391
Amount: 2.103964
Amount Units: ug/l



Manual Integration Results

RT: 4.04
Area: 49588
Amount: 2.032214
Amount Units: ug/l



Reviewer: campbellme, 23-Nov-2020 18:35:10
Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

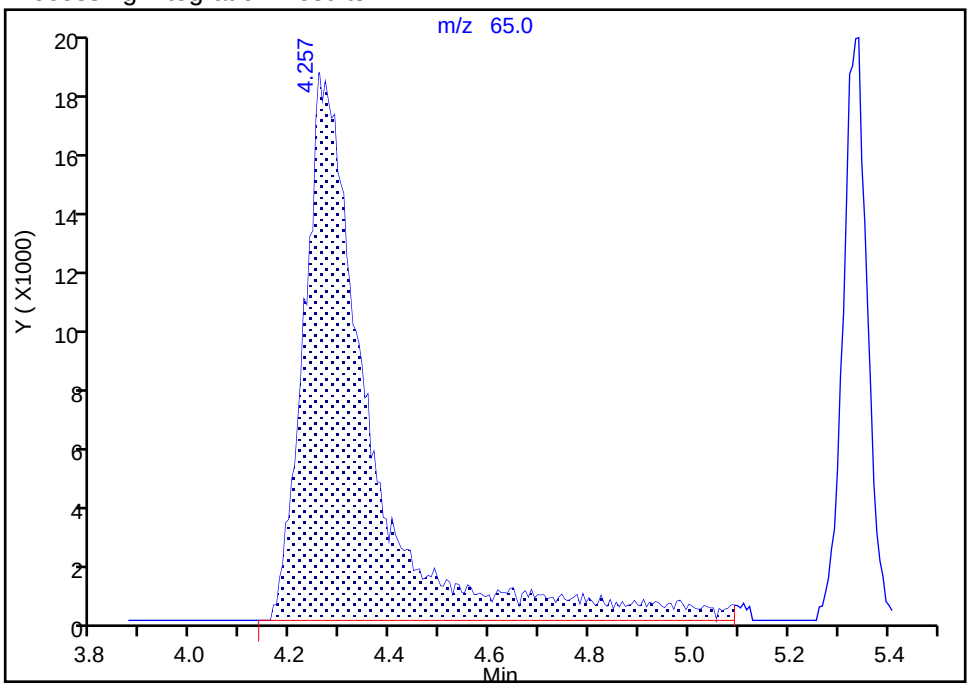
Data File:	\\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I04.D				
Injection Date:	23-Nov-2020 13:49:30	Instrument ID:	19930		
Lims ID:	IC std4				
Client ID:					
Operator ID:	dvv10203	ALS Bottle#:	5	Worklist Smp#:	6
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

* 24 t-Butyl alcohol-d10 (IS), CAS: 53001-22-2

Signal: 1

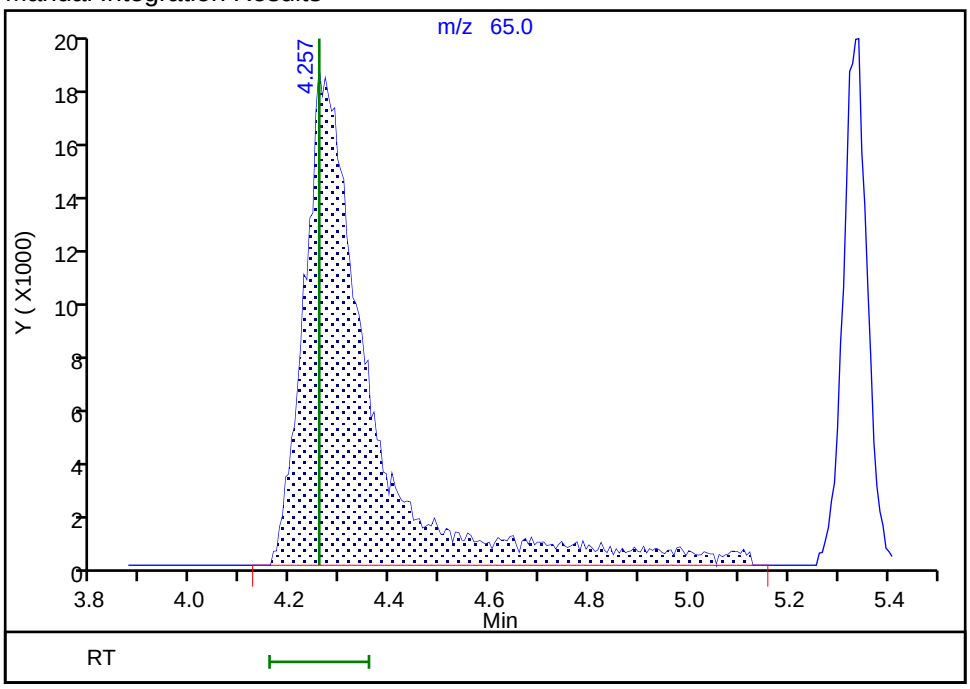
Processing Integration Results

RT: 4.26
Area: 163232
Amount: 50.000000
Amount Units: ug/l



Manual Integration Results

RT: 4.26
Area: 164063
Amount: 50.000000
Amount Units: ug/l



Reviewer: campbellme, 23-Nov-2020 18:43:52
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

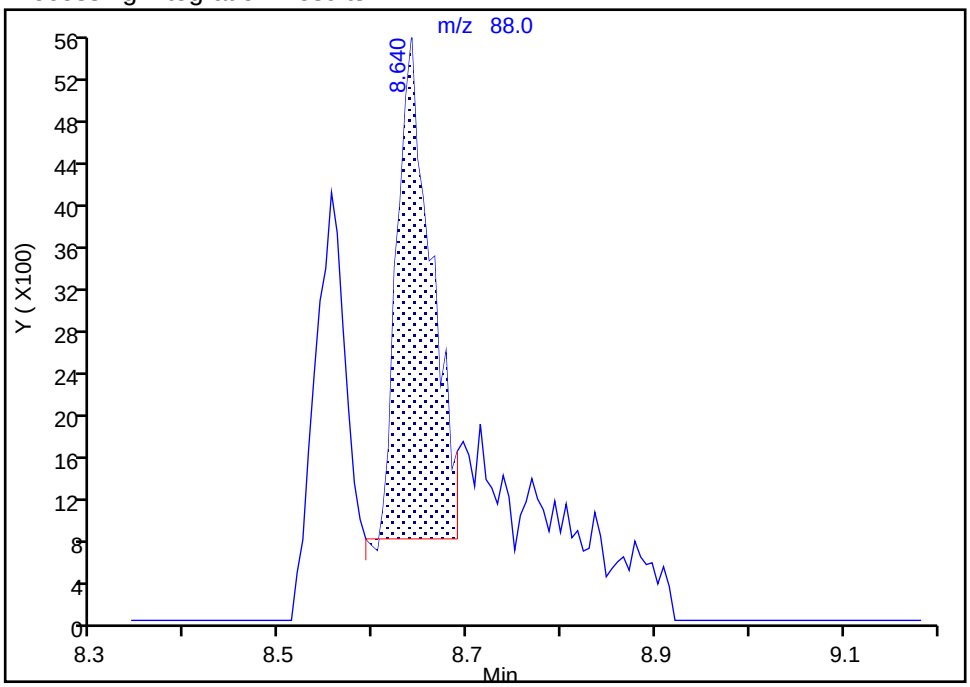
Data File:	\\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I04.D				
Injection Date:	23-Nov-2020 13:49:30	Instrument ID:	19930		
Lims ID:	IC std4				
Client ID:					
Operator ID:	dvv10203	ALS Bottle#:	5	Worklist Smp#:	6
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

65 1,4-Dioxane, CAS: 123-91-1

Signal: 1

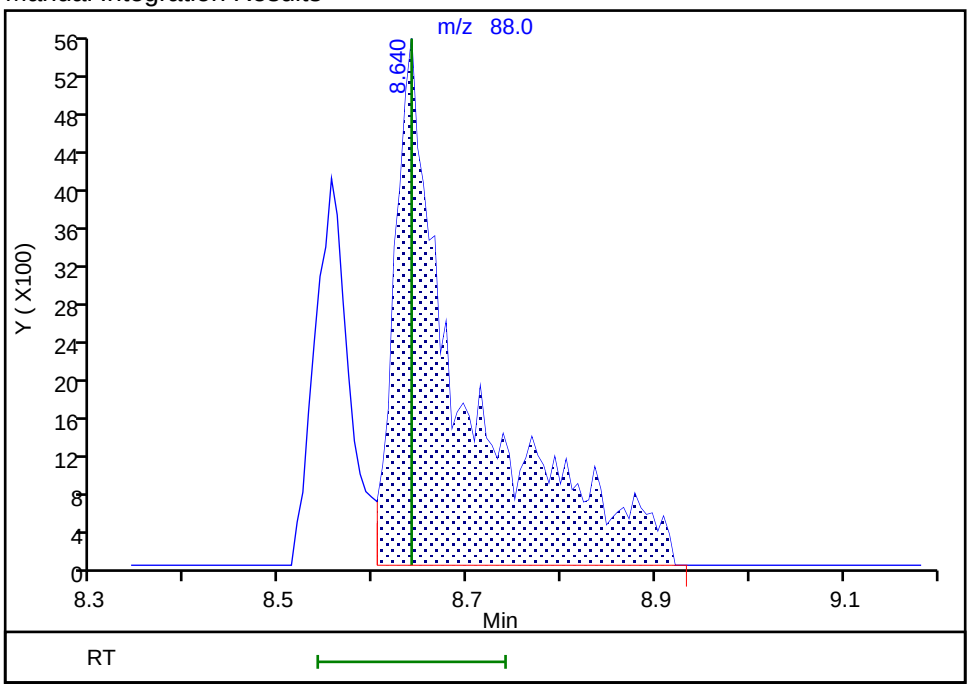
Processing Integration Results

RT: 8.64
Area: 11861
Amount: 59.983350
Amount Units: ug/l



Manual Integration Results

RT: 8.64
Area: 28458
Amount: 102.5140
Amount Units: ug/l



Reviewer: campbellme, 23-Nov-2020 18:35:36

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

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I05.D
Lims ID: IC std3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 23-Nov-2020 14:10:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0016280-007
Misc. Info.: IC STD3
Operator ID: dvv10203 Instrument ID: 19930
Sublist: chrom-8260 25ml HP31*sub2

Method: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 23-Nov-2020 19:11:21 Calib Date: 23-Nov-2020 18:05:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1632

First Level Reviewer: campbellme Date: 23-Nov-2020 18:37:38

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.965	1.971	-0.006	99	69362	1.00	0.9783	
4 Chloromethane	50	2.172	2.172	0.000	99	83265	1.00	1.01	
6 Butadiene	39	2.288	2.288	0.000	88	72377	1.00	1.03	
5 Vinyl chloride	62	2.294	2.300	-0.006	83	75517	1.00	1.00	
7 Bromomethane	94	2.623	2.623	0.000	90	55449	1.00	1.01	
8 Chloroethane	64	2.709	2.709	0.000	99	47287	1.00	1.02	
9 Dichlorofluoromethane	67	2.940	2.940	0.000	97	107260	1.00	1.03	
10 Trichlorofluoromethane	101	3.026	3.019	0.007	96	97236	1.00	0.99	
11 Ethyl ether	59	3.263	3.269	-0.006	91	43027	1.00	0.9801	
12 1,2-Dichloro-1,1,2-trifluoroetha	67	3.349	3.336	0.013	92	68727	1.00	1.00	
13 Acrolein	56	3.434	3.440	-0.006	99	356505	50.0	52.3	
14 1,1-Dichloroethene	96	3.574	3.580	-0.006	97	53597	1.00	1.01	
15 Acetone	43	3.611	3.605	0.006	99	89478	10.0	10.6	
16 112TCTFE	101	3.617	3.617	0.000	87	56328	1.00	1.01	
17 Iodomethane	142	3.776	3.775	0.001	99	104837	1.00	1.01	
18 Ethyl bromide	108	3.800	3.806	-0.006	98	48514	1.00	1.01	
19 Carbon disulfide	76	3.879	3.885	-0.006	99	153230	1.00	1.00	
21 Methyl acetate	43	4.026	4.038	-0.012	96	23815	1.00	1.03	M
22 3-Chloro-1-propene	41	4.062	4.062	0.000	92	79611	1.00	0.9886	
23 Methylene Chloride	84	4.245	4.251	-0.006	92	59944	1.00	1.02	
* 24 t-Butyl alcohol-d10 (IS)	65	4.269	4.257	0.012	0	155400	50.0	50.0	M
25 2-Methyl-2-propanol	59	4.397	4.385	0.012	99	71679	20.0	21.6	
26 Acrylonitrile	53	4.605	4.592	0.013	99	55793	5.00	5.05	
27 Methyl tert-butyl ether	73	4.660	4.659	0.001	93	140981	1.00	0.99	
28 trans-1,2-Dichloroethene	96	4.672	4.678	-0.006	99	59305	1.00	1.01	
29 Hexane	57	5.098	5.104	-0.006	91	77187	1.00	0.9643	
31 1,1-Dichloroethane	63	5.336	5.336	0.000	96	106846	1.00	1.01	
32 Isopropyl ether	45	5.385	5.391	-0.006	94	175266	1.00	1.00	
33 2-Chloro-1,3-butadiene	53	5.446	5.446	0.000	89	83699	1.00	0.9860	
34 Tert-butyl ethyl ether	59	5.921	5.921	0.000	97	164798	1.00	1.00	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 2-Butanone (MEK)	43	6.129	6.135	-0.006	99	150873	10.0	10.6	
S 35 1,2-Dichloroethene, Total	100				0			2.00	
37 cis-1,2-Dichloroethene	96	6.165	6.165	0.000	82	67080	1.00	0.9872	
38 2,2-Dichloropropane	77	6.171	6.177	-0.006	85	84205	1.00	0.99	
40 Propionitrile	54	6.232	6.220	0.012	99	86963	20.0	21.0	
42 Methacrylonitrile	67	6.434	6.433	0.001	90	153916	10.0	10.5	
43 Chlorobromomethane	128	6.495	6.494	0.001	90	30494	1.00	1.02	
44 Tetrahydrofuran	71	6.507	6.507	0.000	81	44982	10.0	10.5	
45 Chloroform	83	6.641	6.647	-0.006	93	105267	1.00	1.01	
$ 46 Dibromofluoromethane (Surr)	113	6.854	6.860	-0.006	94	494666	10.0	10.1	
47 1,1,1-Trichloroethane	97	6.866	6.866	0.000	98	93768	1.00	1.00	
48 Cyclohexane	56	6.964	6.964	0.000	88	97796	1.00	1.01	
50 Carbon tetrachloride	117	7.080	7.080	0.000	89	82099	1.00	0.9797	
51 1,1-Dichloropropene	75	7.080	7.080	0.000	97	83811	1.00	1.01	
52 Isobutyl alcohol	41	7.238	7.232	0.006	96	56751	50.0	53.3	
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.311	7.311	0.000	0	97982	10.0	9.91	
54 Benzene	78	7.342	7.342	0.000	95	255028	1.00	1.01	
56 1,2-Dichloroethane	62	7.415	7.415	0.000	97	62354	1.00	1.01	
57 Tert-amyl methyl ether	73	7.531	7.531	0.000	99	149782	1.00	0.99	
* 58 Fluorobenzene (IS)	96	7.744	7.744	0.000	99	1986644	10.0	10.0	
59 n-Heptane	43	7.756	7.756	0.000	89	78839	1.00	0.9808	
60 n-Butanol	56	8.104	8.104	0.000	86	100598	100.0	99.9	M
61 Trichloroethene	95	8.220	8.220	0.000	97	66585	1.00	1.01	
62 Methylcyclohexane	83	8.531	8.531	0.000	94	107810	1.00	1.01	
63 1,2-Dichloropropane	63	8.555	8.555	0.000	74	61945	1.00	1.00	
64 Methyl methacrylate	69	8.640	8.634	0.006	88	27597	1.00	1.02	
65 1,4-Dioxane	88	8.665	8.640	0.025	38	14289	50.0	54.3	M
66 Dibromomethane	93	8.665	8.665	0.000	93	29139	1.00	1.00	
68 Dichlorobromomethane	83	8.897	8.896	0.000	99	73650	1.00	0.99	
69 2-Nitropropane	41	9.165	9.165	0.000	98	70105	10.0	10.3	
72 1-Bromo-2-chloroethane	63	9.287	9.287	0.000	98	61799	1.00	0.9706	
73 cis-1,3-Dichloropropene	75	9.439	9.439	0.000	98	88193	1.00	0.99	
74 4-Methyl-2-pentanone (MIBK)	43	9.604	9.604	0.000	95	367338	10.0	10.4	
$ 75 Toluene-d8 (Surr)	98	9.744	9.744	0.000	93	1946658	10.0	10.0	
76 Toluene	92	9.817	9.817	0.000	98	163309	1.00	1.01	
S 77 1,3-Dichloropropene, Total	100				0			1.95	
78 trans-1,3-Dichloropropene	75	10.073	10.073	0.000	91	66719	1.00	0.9548	
79 Ethyl methacrylate	69	10.134	10.134	0.000	87	56537	1.00	0.9669	
80 1,1,2-Trichloroethane	97	10.274	10.280	-0.006	90	43173	1.00	1.00	
81 Tetrachloroethene	166	10.366	10.366	0.000	97	78353	1.00	1.00	
82 1,3-Dichloropropane	76	10.439	10.439	0.000	88	73951	1.00	1.00	
83 2-Hexanone	43	10.488	10.488	0.000	96	248990	10.0	10.3	
85 Chlorodibromomethane	129	10.652	10.652	0.000	89	53438	1.00	0.9848	
86 Ethylene Dibromide	107	10.762	10.762	0.000	99	41931	1.00	1.01	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.189	0.000	86	1484400	10.0	10.0	
88 1-Chlorohexane	91	11.195	11.195	0.000	94	92173	1.00	0.9820	
90 Chlorobenzene	112	11.219	11.219	0.000	96	180463	1.00	1.01	
S 89 Xylenes, Total	106				0			3.02	
91 1,1,1,2-Tetrachloroethane	131	11.298	11.298	0.000	94	62455	1.00	1.01	
92 Ethylbenzene	91	11.305	11.304	0.001	98	316536	1.00	1.01	
93 m-Xylene & p-Xylene	106	11.414	11.414	0.000	100	248538	2.00	2.01	
94 o-Xylene	106	11.744	11.743	0.001	96	120780	1.00	1.01	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
95 Styrene	104	11.762	11.762	0.000	94	192855	1.00	1.00	
96 Bromoform	173	11.920	11.920	0.000	96	31282	1.00	0.9538	
97 Isopropylbenzene	105	12.042	12.042	0.000	95	319375	1.00	1.00	
$ 100 4-Bromofluorobenzene (Surr)	95	12.189	12.188	0.001	94	720224	10.0	10.0	
101 1,1,2,2-Tetrachloroethane	83	12.286	12.286	0.000	93	54415	1.00	0.9874	
102 Bromobenzene	156	12.304	12.304	0.000	96	77108	1.00	1.01	
103 trans-1,4-Dichloro-2-butene	53	12.310	12.310	0.000	92	115432	10.0	9.98	
104 1,2,3-Trichloropropane	110	12.335	12.335	0.000	82	15158	1.00	1.00	
105 N-Propylbenzene	91	12.371	12.371	0.000	99	377314	1.00	1.01	
106 2-Chlorotoluene	126	12.445	12.451	-0.006	97	77621	1.00	1.02	
107 1,3,5-Trimethylbenzene	105	12.506	12.505	0.001	94	267681	1.00	1.00	
108 4-Chlorotoluene	126	12.542	12.542	0.000	96	79642	1.00	1.04	
109 tert-Butylbenzene	134	12.749	12.749	0.000	93	60636	1.00	1.01	
110 Pentachloroethane	167	12.780	12.780	0.000	92	46998	1.00	0.9857	
111 1,2,4-Trimethylbenzene	105	12.792	12.792	0.000	97	274837	1.00	1.01	
112 sec-Butylbenzene	105	12.914	12.914	0.000	94	351677	1.00	1.01	
113 1,3-Dichlorobenzene	146	13.012	13.011	0.001	98	153078	1.00	1.00	
114 4-Isopropyltoluene	119	13.018	13.018	0.000	97	296994	1.00	1.00	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	94	843985	10.0	10.0	
116 1,4-Dichlorobenzene	146	13.085	13.085	0.000	95	154536	1.00	1.01	
117 1,2,3-Trimethylbenzene	120	13.091	13.097	-0.006	98	121041	1.00	1.01	
118 Benzyl chloride	126	13.158	13.164	-0.006	98	19573	1.00	0.9395	
119 n-Butylbenzene	92	13.310	13.310	0.000	97	144659	1.00	0.99	
120 1,2-Dichlorobenzene	146	13.347	13.347	0.000	99	143545	1.00	1.03	
122 1,2-Dibromo-3-Chloropropane	155	13.883	13.883	0.000	90	8336	1.00	0.9851	
123 1,3,5-Trichlorobenzene	180	14.011	14.011	0.000	98	107909	1.00	0.9789	
124 1,2,4-Trichlorobenzene	180	14.432	14.438	-0.006	94	89195	1.00	0.9731	
125 Hexachlorobutadiene	225	14.517	14.517	0.000	96	39405	1.00	0.9886	
126 Naphthalene	128	14.615	14.615	0.000	96	165305	1.00	0.9650	
127 1,2,3-Trichlorobenzene	180	14.755	14.761	-0.006	96	78201	1.00	0.9887	
134 Isopropyl alcohol	45		0.000				ND	ND	
144 2-ethoxy-2-methyl butane	1		0.000				ND	ND	
135 p-Diethylbenzene	1		0.000				ND	ND	
137 2-Methylnaphthalene	142		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

MSV_RV1_826_00030	Amount Added:	2.00	Units: uL	
MSV_RV4GAS826_00096	Amount Added:	2.00	Units: uL	
MSV_RV4_826_00034	Amount Added:	2.00	Units: uL	
MSV_31_826ISS_00003	Amount Added:	5.00	Units: uL	Run Reagent

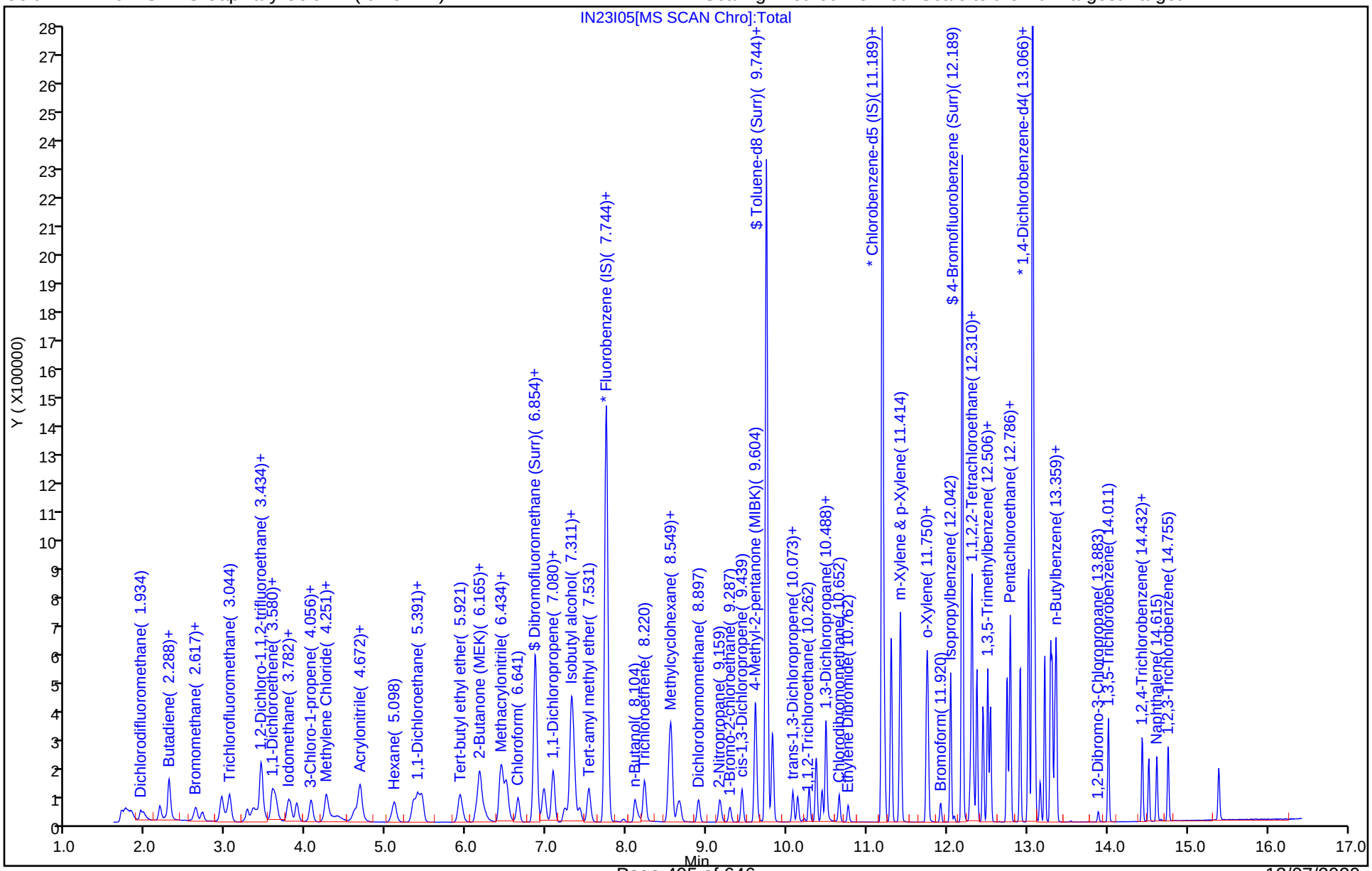
Report Date: 23-Nov-2020 19:11:23 Chrom Revision: 2.3 13-Nov-2020 01:23:02

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I05.D

Injection Date:	23-Nov-2020 14:10:30	Instrument ID:	19930	Operator ID:	dvv10203
Lims ID:	IC std3			Worklist Smp#:	7
Client ID:					
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Env, LLC

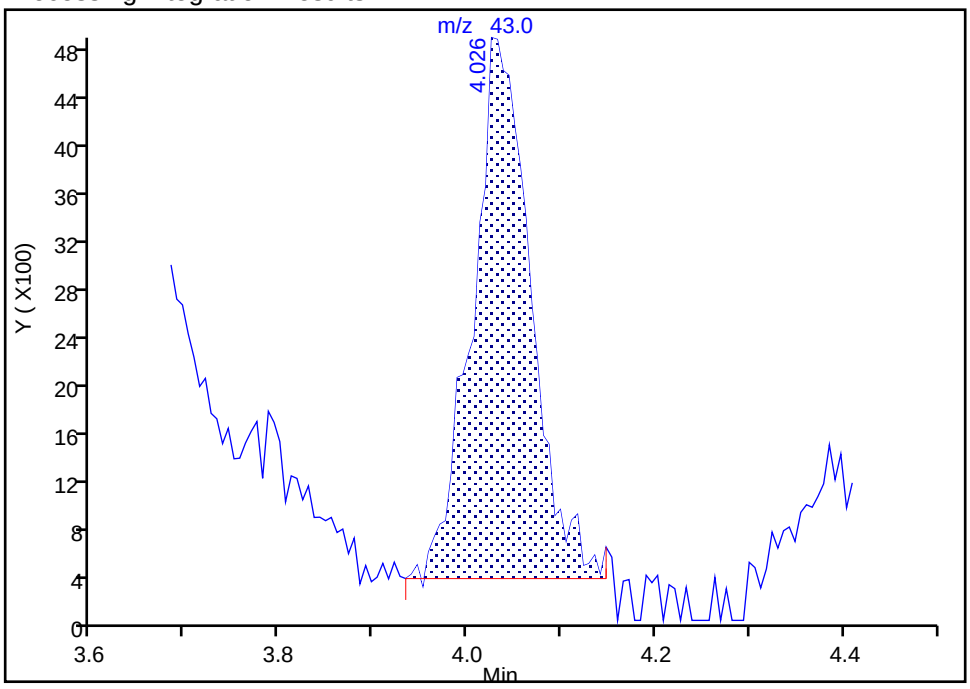
Data File:	\\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I05.D				
Injection Date:	23-Nov-2020 14:10:30	Instrument ID:	19930		
Lims ID:	IC std3				
Client ID:					
Operator ID:	dvv10203	ALS Bottle#:	6	Worklist Smp#:	7
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

21 Methyl acetate, CAS: 79-20-9

Signal: 1

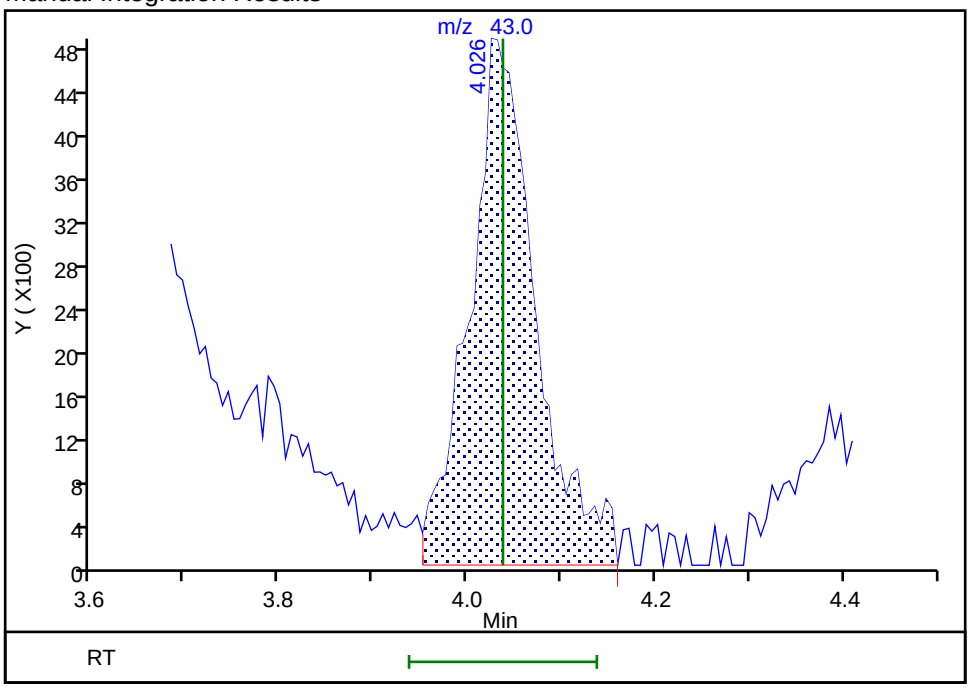
Processing Integration Results

RT: 4.03
Area: 19487
Amount: 0.861588
Amount Units: ug/l



Manual Integration Results

RT: 4.03
Area: 23815
Amount: 1.030393
Amount Units: ug/l



Reviewer: campbellme, 23-Nov-2020 18:36:34
Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

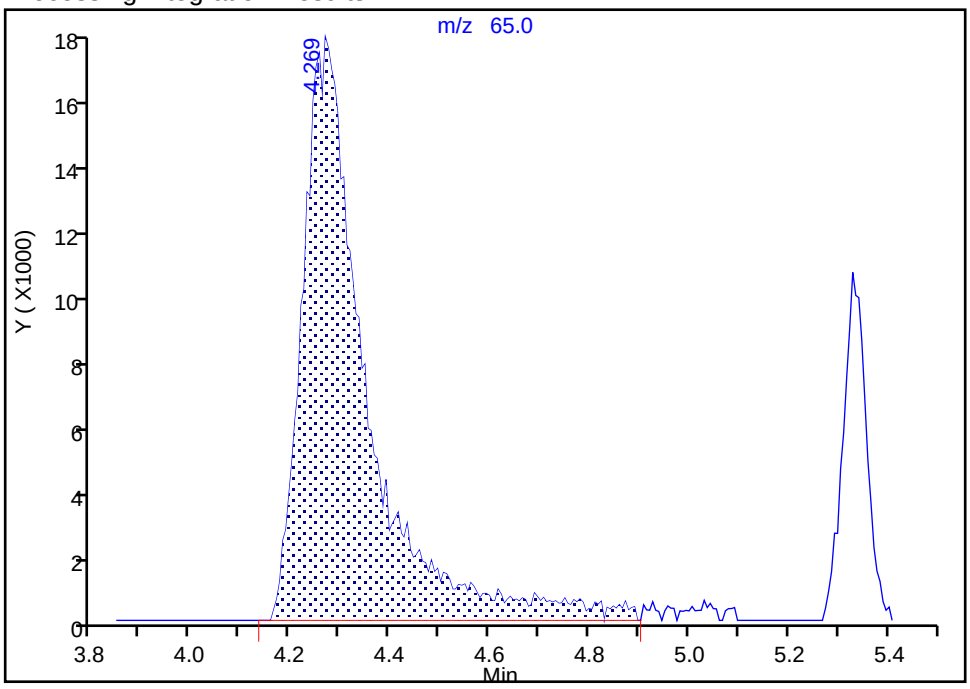
Data File:	\\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I05.D				
Injection Date:	23-Nov-2020 14:10:30	Instrument ID:	19930		
Lims ID:	IC std3				
Client ID:					
Operator ID:	dvv10203	ALS Bottle#:	6	Worklist Smp#:	7
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

* 24 t-Butyl alcohol-d10 (IS), CAS: 53001-22-2

Signal: 1

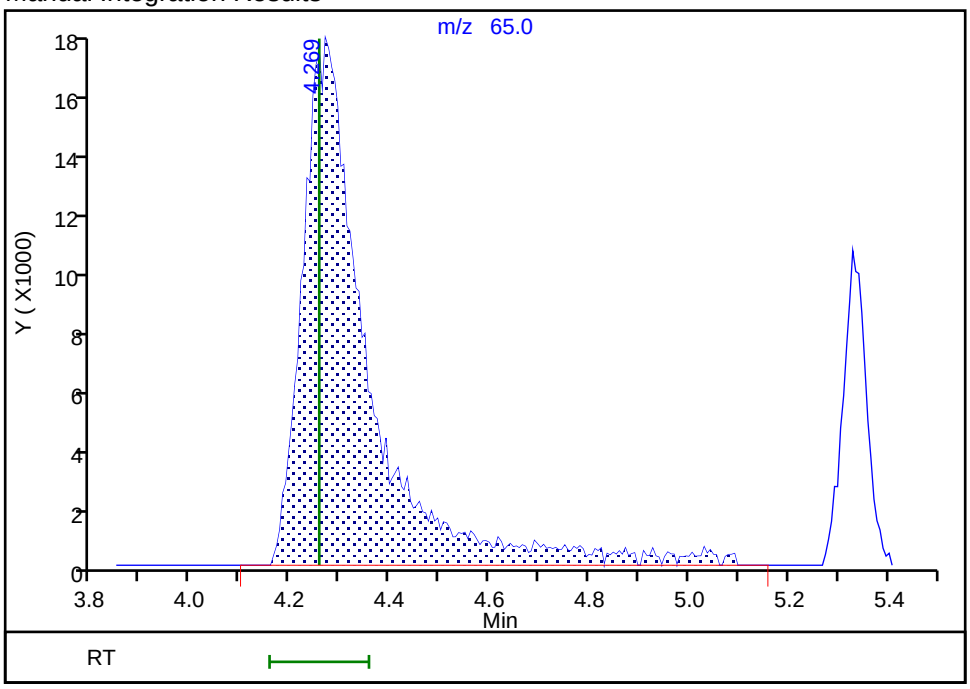
Processing Integration Results

RT: 4.27
Area: 151949
Amount: 50.000000
Amount Units: ug/l



Manual Integration Results

RT: 4.27
Area: 155400
Amount: 50.000000
Amount Units: ug/l



Reviewer: campbellme, 23-Nov-2020 18:43:30

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

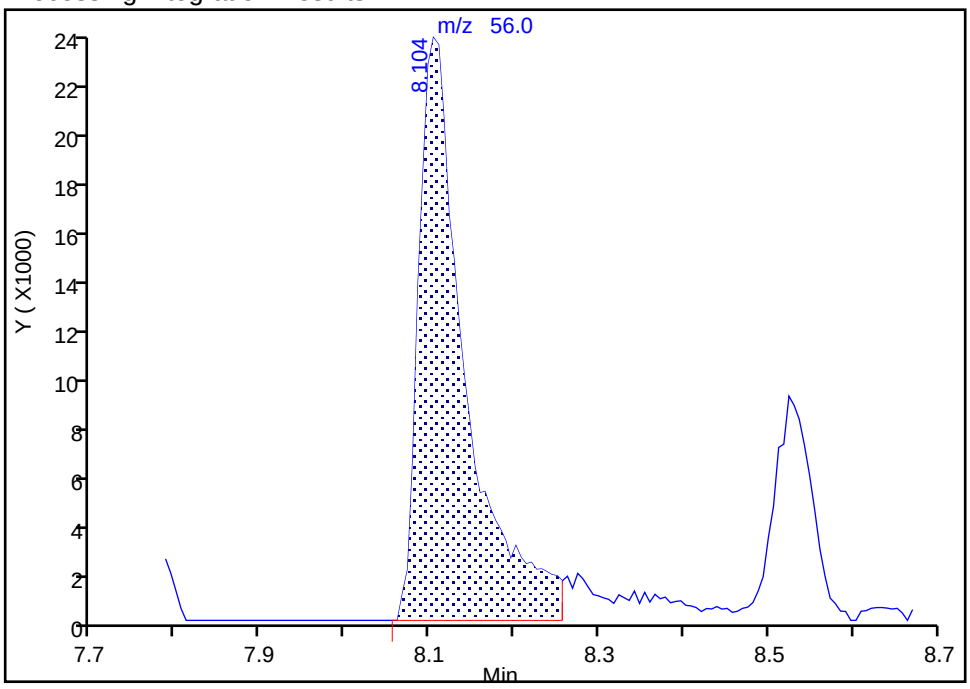
Data File:	\\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I05.D				
Injection Date:	23-Nov-2020 14:10:30	Instrument ID:	19930		
Lims ID:	IC std3				
Client ID:					
Operator ID:	dvv10203	ALS Bottle#:	6	Worklist Smp#:	7
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

60 n-Butanol, CAS: 71-36-3

Signal: 1

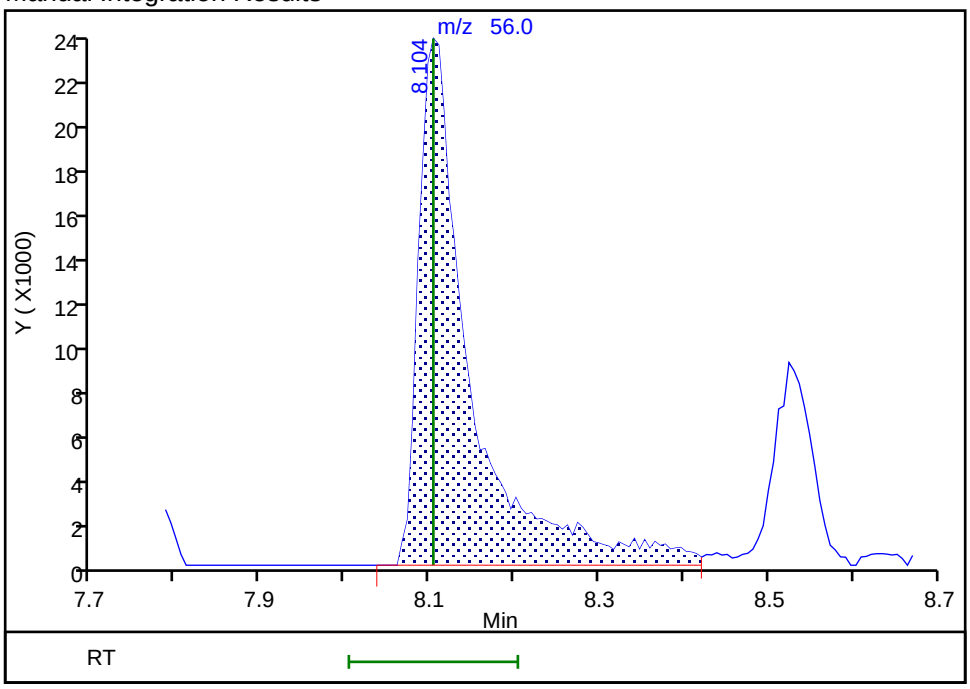
Processing Integration Results

RT: 8.10
Area: 91048
Amount: 95.703762
Amount Units: ug/l



Manual Integration Results

RT: 8.10
Area: 100598
Amount: 99.874913
Amount Units: ug/l



Reviewer: campbellme, 23-Nov-2020 18:37:04

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

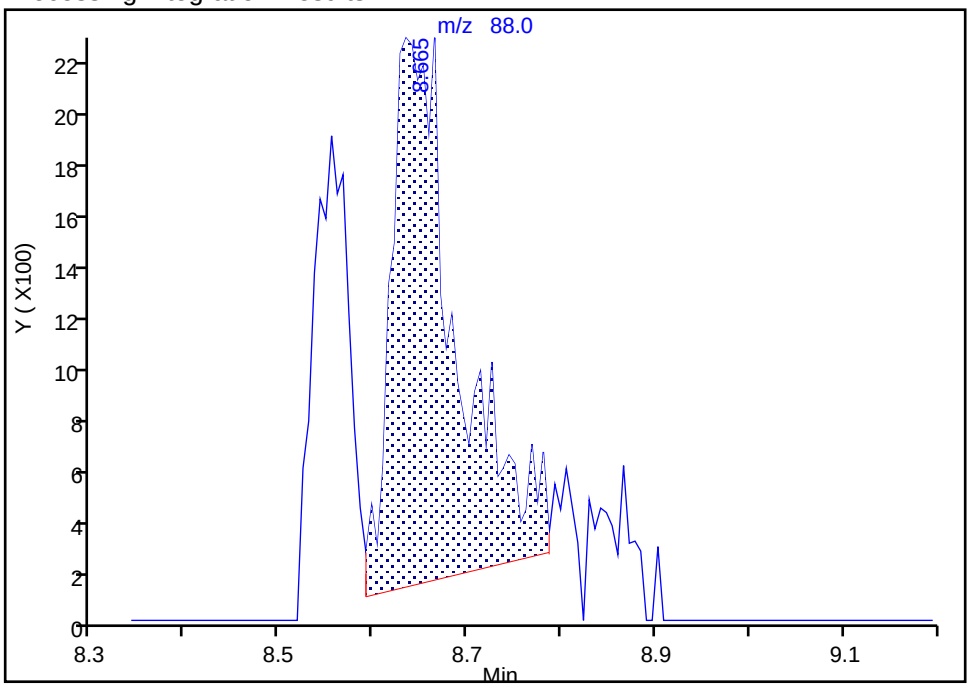
Data File:	\\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I05.D				
Injection Date:	23-Nov-2020 14:10:30	Instrument ID:	19930		
Lims ID:	IC std3				
Client ID:					
Operator ID:	dvv10203	ALS Bottle#:	6	Worklist Smp#:	7
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

65 1,4-Dioxane, CAS: 123-91-1

Signal: 1

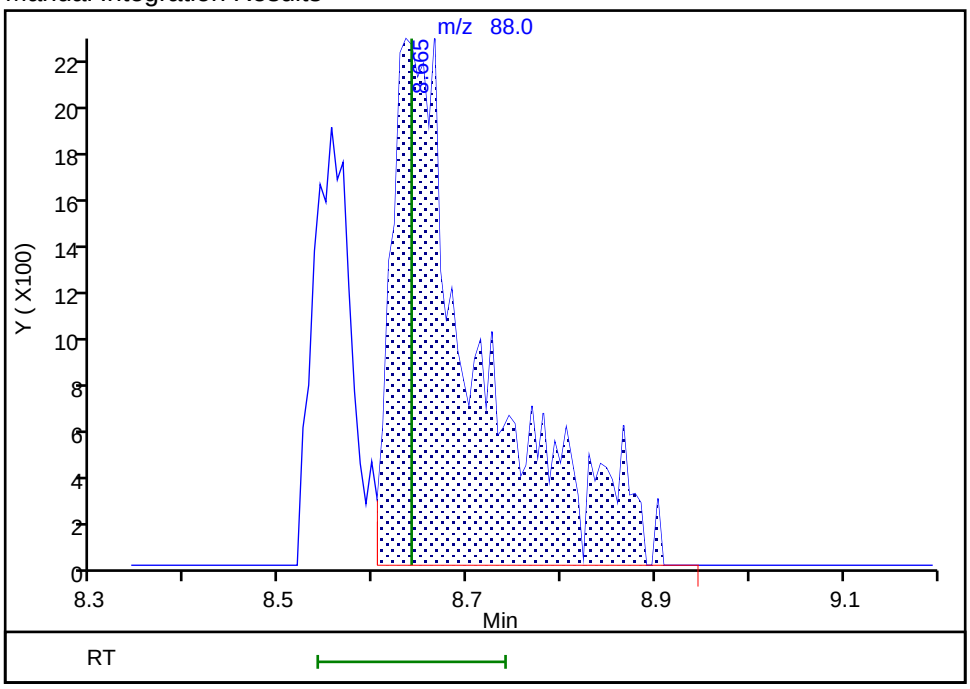
Processing Integration Results

RT: 8.66
Area: 10152
Amount: 48.384404
Amount Units: ug/l



Manual Integration Results

RT: 8.66
Area: 14289
Amount: 54.342576
Amount Units: ug/l



Reviewer: campbellme, 23-Nov-2020 18:37:22

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

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I06.D
Lims ID: IC std2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 23-Nov-2020 14:31:30 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0016280-008
Misc. Info.: IC STD2
Operator ID: dvv10203 Instrument ID: 19930
Sublist: chrom-8260 25ml HP31*sub2

Method: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 23-Nov-2020 19:11:31 Calib Date: 23-Nov-2020 18:05:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1632

First Level Reviewer: campbellme Date: 23-Nov-2020 18:39:05

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.977	1.971	0.006	98	34344	0.5000	0.4823	
4 Chloromethane	50	2.172	2.172	0.000	99	41148	0.5000	0.4980	
6 Butadiene	39	2.288	2.288	0.000	89	38419	0.5000	0.5445	
5 Vinyl chloride	62	2.294	2.300	-0.006	87	36555	0.5000	0.4806	M
7 Bromomethane	94	2.617	2.623	-0.006	90	28022	0.5000	0.5081	
8 Chloroethane	64	2.703	2.709	-0.006	99	22787	0.5000	0.4874	
9 Dichlorofluoromethane	67	2.946	2.940	0.006	97	51472	0.5000	0.4915	
10 Trichlorofluoromethane	101	3.007	3.019	-0.012	96	49221	0.5000	0.5000	
11 Ethyl ether	59	3.263	3.269	-0.006	89	22487	0.5001	0.5100	
12 1,2-Dichloro-1,1,2-trifluoroetha	67	3.349	3.336	0.013	94	35000	0.5000	0.5068	
13 Acrolein	56	3.434	3.440	-0.006	100	175165	25.0	25.5	
14 1,1-Dichloroethene	96	3.580	3.580	0.000	96	26846	0.5000	0.5047	
15 Acetone	43	3.611	3.605	0.006	99	46105	5.00	5.40	M
16 112TCTFE	101	3.611	3.617	-0.006	88	28017	0.5000	0.4982	
17 Iodomethane	142	3.776	3.775	0.001	98	52202	0.5000	0.5022	
18 Ethyl bromide	108	3.806	3.806	0.000	91	24475	0.5000	0.5060	
19 Carbon disulfide	76	3.885	3.885	0.000	98	77344	0.5000	0.5015	
21 Methyl acetate	43	4.038	4.038	0.000	99	12227	0.5000	0.5246	M
22 3-Chloro-1-propene	41	4.062	4.062	0.000	92	40080	0.5000	0.4956	
23 Methylene Chloride	84	4.251	4.251	0.000	92	30241	0.5000	0.5130	
* 24 t-Butyl alcohol-d10 (IS)	65	4.251	4.257	-0.006	0	156713	50.0	50.0	M
25 2-Methyl-2-propanol	59	4.397	4.385	0.012	97	32201	10.0	9.64	
26 Acrylonitrile	53	4.605	4.592	0.013	98	28136	2.50	2.52	
27 Methyl tert-butyl ether	73	4.666	4.659	0.007	95	69855	0.5000	0.4906	
28 trans-1,2-Dichloroethene	96	4.678	4.678	0.000	98	29336	0.5000	0.4994	
29 Hexane	57	5.098	5.104	-0.006	90	37410	0.5000	0.4654	
31 1,1-Dichloroethane	63	5.330	5.336	-0.006	96	53737	0.5000	0.5061	
32 Isopropyl ether	45	5.397	5.391	0.006	93	87812	0.5000	0.5003	
33 2-Chloro-1,3-butadiene	53	5.446	5.446	0.000	89	42465	0.5000	0.4981	
34 Tert-butyl ethyl ether	59	5.921	5.921	0.000	97	81982	0.5000	0.4947	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 2-Butanone (MEK)	43	6.129	6.135	-0.006	99	70495	5.00	4.93	
S 35 1,2-Dichloroethene, Total	100				0			1.01	
37 cis-1,2-Dichloroethene	96	6.159	6.165	-0.006	79	35111	0.5000	0.5145	
38 2,2-Dichloropropane	77	6.190	6.177	0.013	84	42478	0.5000	0.4975	
40 Propionitrile	54	6.226	6.220	0.006	99	42851	10.0	10.3	
42 Methacrylonitrile	67	6.434	6.433	0.001	90	74760	5.00	5.08	
43 Chlorobromomethane	128	6.494	6.494	0.000	78	14772	0.5000	0.4913	
44 Tetrahydrofuran	71	6.501	6.507	-0.006	87	22107	5.00	5.10	a
45 Chloroform	83	6.641	6.647	-0.006	93	53281	0.5000	0.5092	
$ 46 Dibromofluoromethane (Surr)	113	6.854	6.860	-0.006	94	494112	10.0	10.0	
47 1,1,1-Trichloroethane	97	6.872	6.866	0.006	96	47326	0.5000	0.5034	
48 Cyclohexane	56	6.964	6.964	0.000	89	47588	0.5000	0.4884	
50 Carbon tetrachloride	117	7.080	7.080	0.000	93	41561	0.5000	0.4939	
51 1,1-Dichloropropene	75	7.086	7.080	0.006	95	40536	0.5000	0.4858	
52 Isobutyl alcohol	41	7.226	7.232	-0.006	95	25076	25.0	23.3	
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.311	7.311	0.000	0	99445	10.0	10.0	
54 Benzene	78	7.342	7.342	0.000	92	127834	0.5000	0.5057	
56 1,2-Dichloroethane	62	7.415	7.415	0.000	97	31335	0.5000	0.5077	
57 Tert-amyl methyl ether	73	7.525	7.531	-0.006	99	74955	0.5000	0.4937	
* 58 Fluorobenzene (IS)	96	7.744	7.744	0.000	99	1995085	10.0	10.0	
59 n-Heptane	43	7.750	7.756	-0.006	66	38350	0.5000	0.4751	
60 n-Butanol	56	8.110	8.104	0.006	88	49414	50.0	48.6	M
61 Trichloroethene	95	8.220	8.220	0.000	96	33485	0.5000	0.5061	
62 Methylcyclohexane	83	8.525	8.531	-0.006	89	50862	0.5000	0.4732	
63 1,2-Dichloropropane	63	8.549	8.555	-0.006	75	31387	0.5000	0.5052	
64 Methyl methacrylate	69	8.634	8.634	0.000	89	13518	0.5000	0.4933	
65 1,4-Dioxane	88	8.634	8.640	-0.006	39	7023	25.0	26.5	M
66 Dibromomethane	93	8.653	8.665	-0.012	95	15063	0.5000	0.5129	
68 Dichlorobromomethane	83	8.896	8.896	0.000	99	36362	0.5000	0.4883	
69 2-Nitropropane	41	9.159	9.165	-0.006	100	33733	5.00	4.90	
72 1-Bromo-2-chloroethane	63	9.287	9.287	0.000	98	31186	0.5000	0.4877	
73 cis-1,3-Dichloropropene	75	9.445	9.439	0.006	98	42882	0.5000	0.4801	
74 4-Methyl-2-pentanone (MIBK)	43	9.610	9.604	0.006	95	177180	5.00	4.98	
$ 75 Toluene-d8 (Surr)	98	9.744	9.744	0.000	93	1963991	10.0	10.1	
76 Toluene	92	9.823	9.817	0.006	99	83094	0.5000	0.5124	
S 77 1,3-Dichloropropene, Total	100				0			0.9696	
78 trans-1,3-Dichloropropene	75	10.073	10.073	0.000	90	34273	0.5000	0.4895	
79 Ethyl methacrylate	69	10.134	10.134	0.000	86	27584	0.5000	0.4708	
80 1,1,2-Trichloroethane	97	10.280	10.280	0.000	90	21447	0.5000	0.4955	
81 Tetrachloroethene	166	10.366	10.366	0.000	97	39857	0.5000	0.5077	
82 1,3-Dichloropropane	76	10.439	10.439	0.000	86	36303	0.5000	0.4910	
83 2-Hexanone	43	10.488	10.488	0.000	95	115600	5.00	4.76	
85 Chlorodibromomethane	129	10.652	10.652	0.000	90	25811	0.5000	0.4747	
86 Ethylene Dibromide	107	10.762	10.762	0.000	98	19726	0.5000	0.4758	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.189	0.000	85	1487373	10.0	10.0	
88 1-Chlorohexane	91	11.195	11.195	0.000	94	46957	0.5000	0.4993	
90 Chlorobenzene	112	11.219	11.219	0.000	96	91441	0.5000	0.5100	
S 89 Xylenes, Total	106				0			1.49	
91 1,1,1,2-Tetrachloroethane	131	11.298	11.298	0.000	96	29836	0.5000	0.4793	
92 Ethylbenzene	91	11.305	11.304	0.001	98	158639	0.5000	0.5065	
93 m-Xylene & p-Xylene	106	11.420	11.414	0.006	100	122512	1.00	0.99	
94 o-Xylene	106	11.743	11.743	0.000	96	59608	0.5000	0.4961	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
95 Styrene	104	11.762	11.762	0.000	94	91755	0.5000	0.4770	
96 Bromoform	173	11.920	11.920	0.000	97	15681	0.5000	0.4771	
97 Isopropylbenzene	105	12.042	12.042	0.000	95	158348	0.5000	0.4961	
$ 100 4-Bromofluorobenzene (Surr)	95	12.189	12.188	0.000	94	723803	10.0	10.1	
101 1,1,2,2-Tetrachloroethane	83	12.286	12.286	0.000	94	27114	0.5000	0.4840	
102 Bromobenzene	156	12.304	12.304	0.000	97	38254	0.5000	0.4952	
103 trans-1,4-Dichloro-2-butene	53	12.310	12.310	0.000	94	55037	5.00	4.72	
104 1,2,3-Trichloropropane	110	12.335	12.335	0.000	79	7306	0.5000	0.4753	
105 N-Propylbenzene	91	12.371	12.371	0.000	98	190665	0.5000	0.5036	
106 2-Chlorotoluene	126	12.445	12.451	-0.006	97	38057	0.5000	0.4916	
107 1,3,5-Trimethylbenzene	105	12.506	12.505	0.001	93	135280	0.5000	0.4996	
108 4-Chlorotoluene	126	12.542	12.542	0.000	96	38382	0.5000	0.4910	
109 tert-Butylbenzene	134	12.749	12.749	0.000	93	29282	0.5000	0.4788	
110 Pentachloroethane	167	12.780	12.780	0.000	79	23377	0.5000	0.4823	
111 1,2,4-Trimethylbenzene	105	12.792	12.792	0.000	97	136133	0.5000	0.4944	
112 sec-Butylbenzene	105	12.908	12.914	-0.006	93	174344	0.5000	0.4909	
113 1,3-Dichlorobenzene	146	13.012	13.011	0.001	98	76688	0.5000	0.4930	
114 4-Isopropyltoluene	119	13.018	13.018	0.000	97	149012	0.5000	0.4921	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	94	857933	10.0	10.0	
116 1,4-Dichlorobenzene	146	13.085	13.085	0.000	93	76626	0.5000	0.4927	
117 1,2,3-Trimethylbenzene	120	13.097	13.097	0.000	97	59495	0.5000	0.4871	
118 Benzyl chloride	126	13.164	13.164	0.000	98	9048	0.5000	0.4272	
119 n-Butylbenzene	92	13.310	13.310	0.000	97	71903	0.5000	0.4862	
120 1,2-Dichlorobenzene	146	13.347	13.347	0.000	98	69967	0.5000	0.4931	
122 1,2-Dibromo-3-Chloropropane	155	13.889	13.883	0.006	89	4105	0.5000	0.4772	
123 1,3,5-Trichlorobenzene	180	14.011	14.011	0.000	97	55307	0.5000	0.4936	
124 1,2,4-Trichlorobenzene	180	14.432	14.438	-0.006	94	45049	0.5000	0.4835	
125 Hexachlorobutadiene	225	14.517	14.517	0.000	96	20349	0.5000	0.5022	
126 Naphthalene	128	14.615	14.615	0.000	97	82677	0.5000	0.4748	
127 1,2,3-Trichlorobenzene	180	14.755	14.761	-0.006	95	38602	0.5000	0.4801	
134 Isopropyl alcohol	45		0.000				ND	ND	
144 2-ethoxy-2-methyl butane	1		0.000				ND	ND	
135 p-Diethylbenzene	1		0.000				ND	ND	
137 2-Methylnaphthalene	142		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MSV_RV1_826_00030	Amount Added:	2.00	Units: uL	
MSV_RV4GAS826_00096	Amount Added:	2.00	Units: uL	
MSV_RV4_826_00034	Amount Added:	2.00	Units: uL	
MSV_31_826ISS_00003	Amount Added:	5.00	Units: uL	Run Reagent

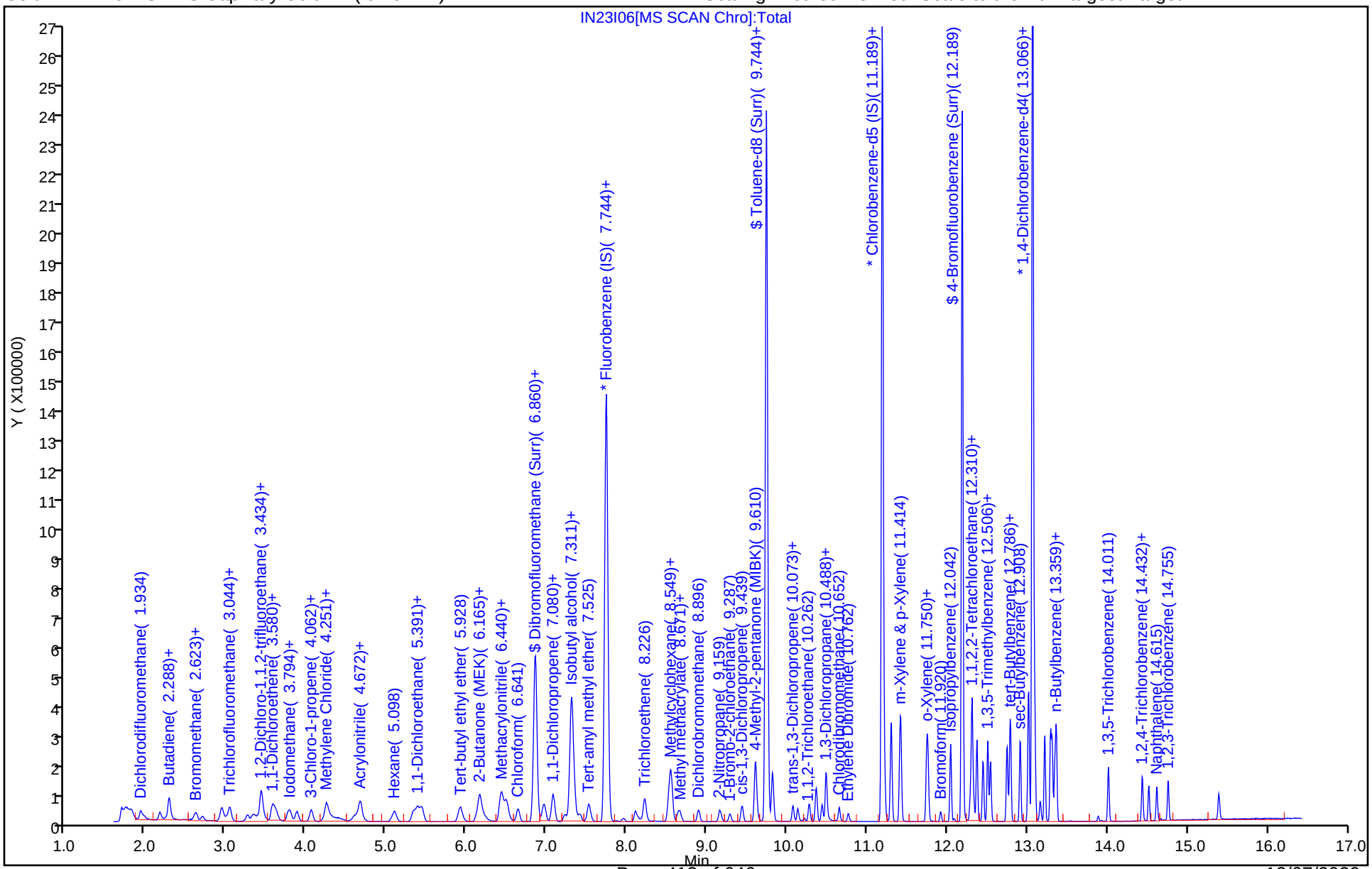
Report Date: 23-Nov-2020 19:11:32 Chrom Revision: 2.3 13-Nov-2020 01:23:02

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I06.D

Injection Date:	23-Nov-2020 14:31:30	Instrument ID:	19930	Operator ID:	dvv10203
Lims ID:	IC std2			Worklist Smp#:	8
Client ID:					
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

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



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

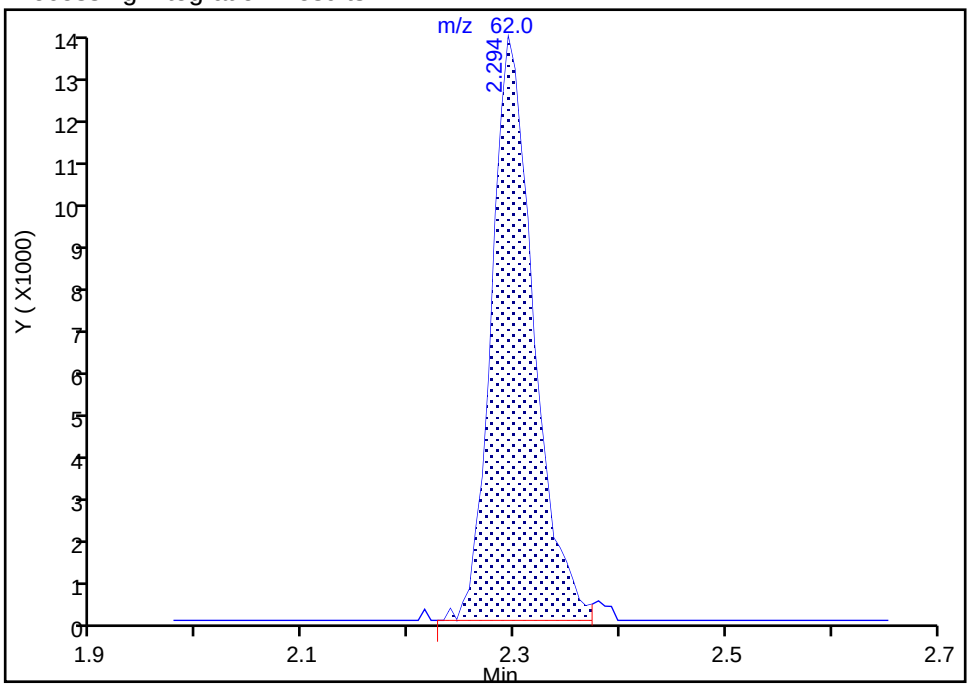
Data File:	\\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I06.D				
Injection Date:	23-Nov-2020 14:31:30	Instrument ID:	19930		
Lims ID:	IC std2				
Client ID:					
Operator ID:	dvv10203	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

5 Vinyl chloride, CAS: 75-01-4

Signal: 1

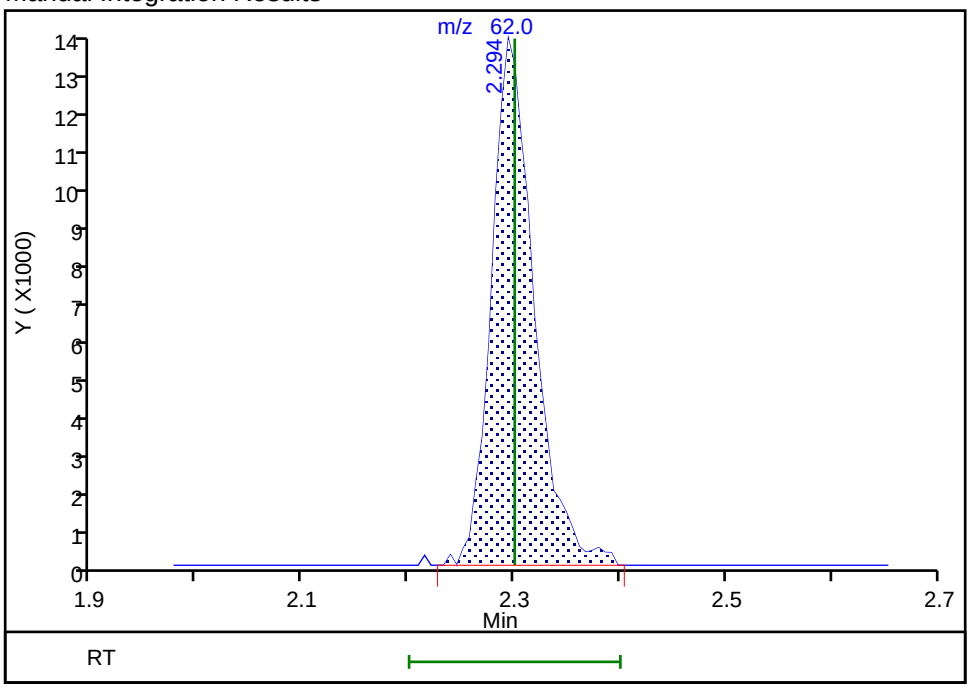
Processing Integration Results

RT: 2.29
Area: 36162
Amount: 0.476139
Amount Units: ug/l



Manual Integration Results

RT: 2.29
Area: 36555
Amount: 0.480603
Amount Units: ug/l



Reviewer: campbellme, 23-Nov-2020 18:38:03
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

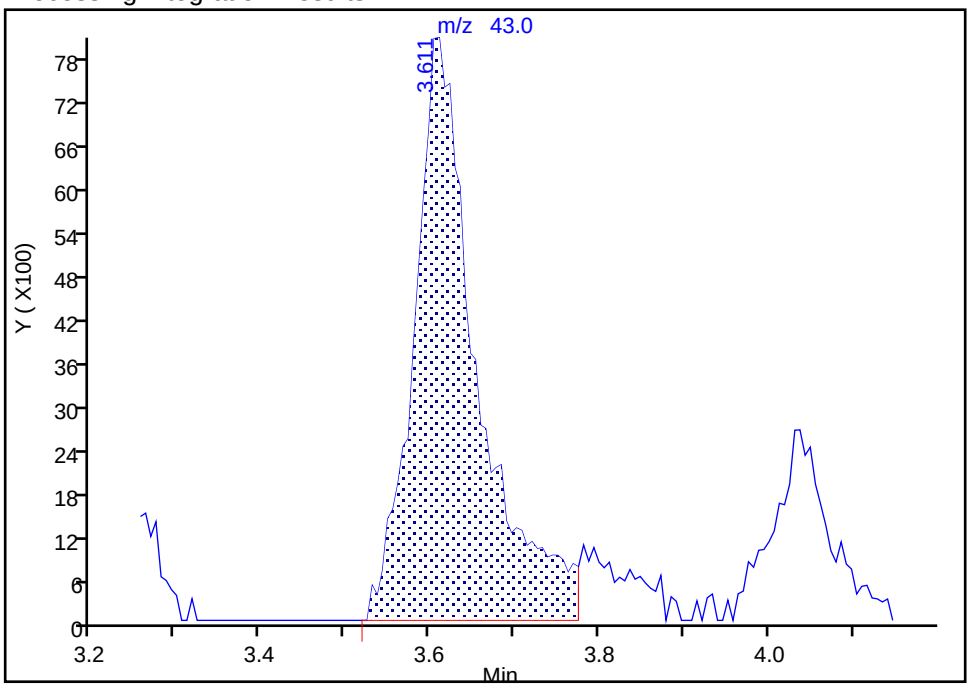
Data File:	\\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I06.D				
Injection Date:	23-Nov-2020 14:31:30	Instrument ID:	19930		
Lims ID:	IC std2				
Client ID:					
Operator ID:	dvv10203	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

15 Acetone, CAS: 67-64-1

Signal: 1

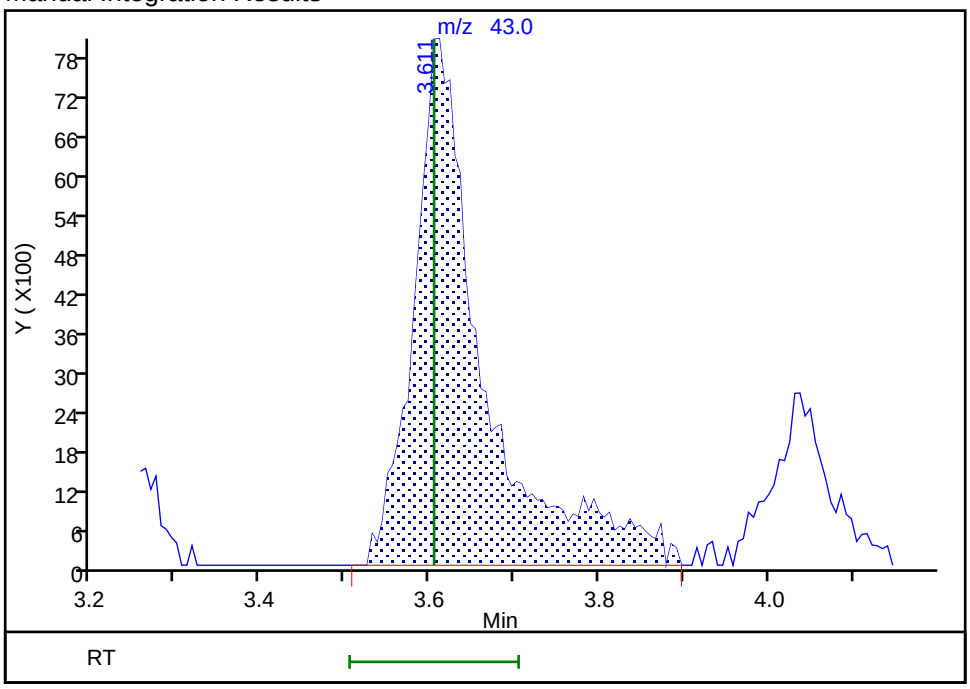
Processing Integration Results

RT: 3.61
Area: 41942
Amount: 4.939769
Amount Units: ug/l



Manual Integration Results

RT: 3.61
Area: 46105
Amount: 5.396301
Amount Units: ug/l



Reviewer: campbellme, 23-Nov-2020 18:38:11

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

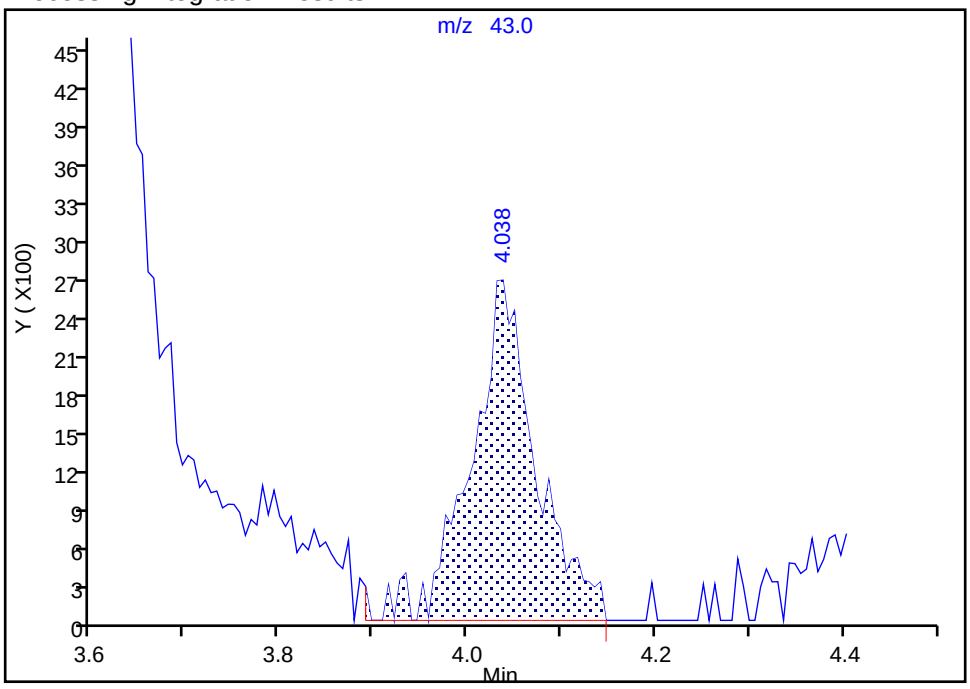
Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I06.D
Injection Date: 23-Nov-2020 14:31:30 Instrument ID: 19930
Lims ID: IC std2
Client ID:
Operator ID: dvv10203 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

21 Methyl acetate, CAS: 79-20-9

Signal: 1

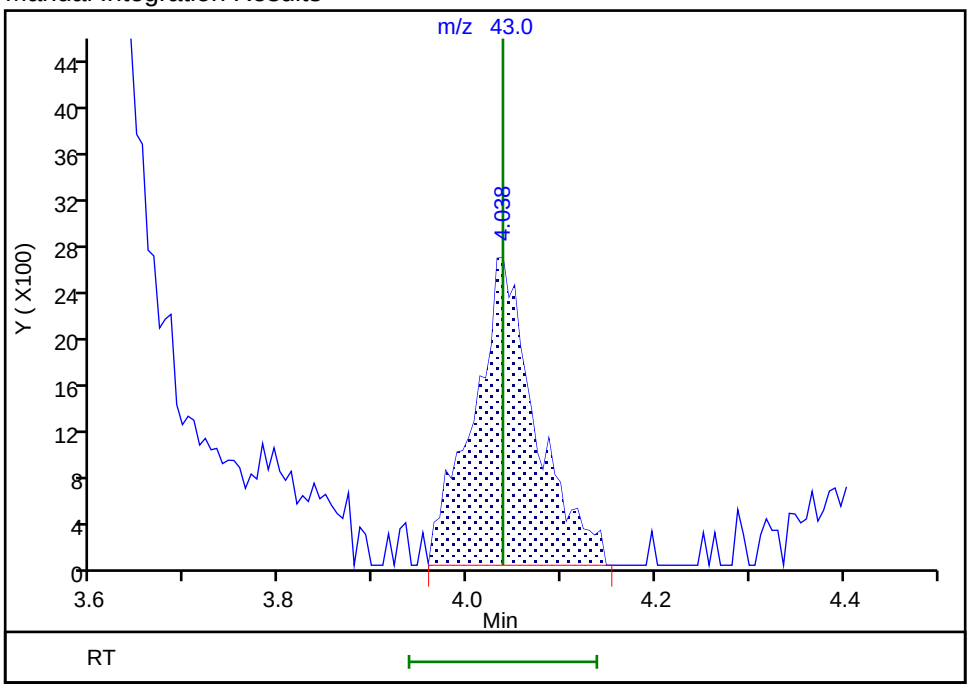
Processing Integration Results

RT: 4.04
Area: 12774
Amount: 0.539671
Amount Units: ug/l



Manual Integration Results

RT: 4.04
Area: 12227
Amount: 0.524588
Amount Units: ug/l



Reviewer: campbellme, 23-Nov-2020 18:38:19
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

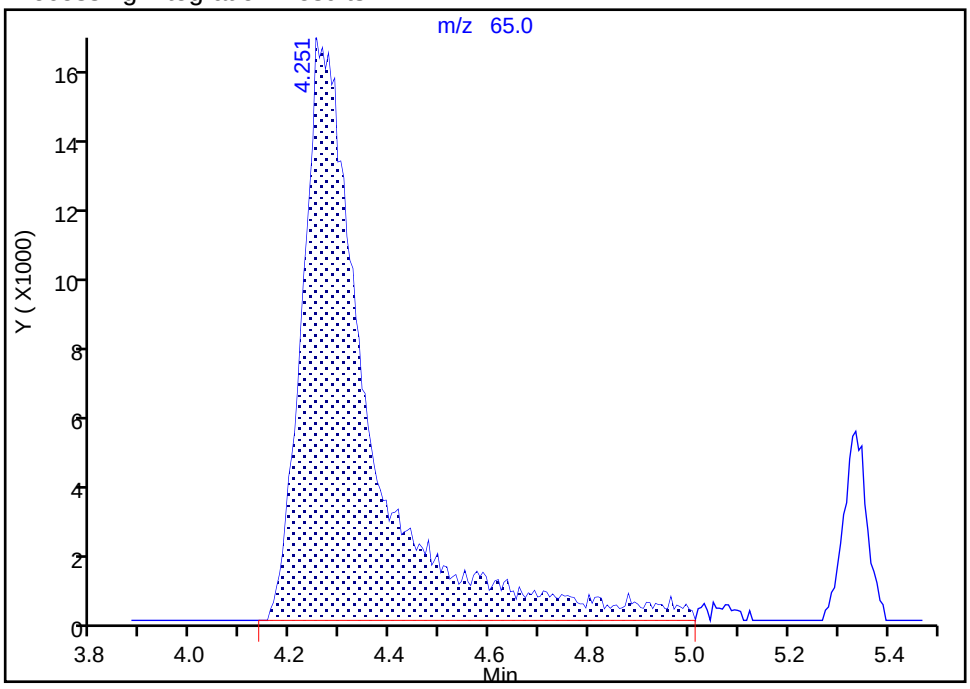
Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I06.D
Injection Date: 23-Nov-2020 14:31:30 Instrument ID: 19930
Lims ID: IC std2
Client ID:
Operator ID: dvv10203 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

* 24 t-Butyl alcohol-d10 (IS), CAS: 53001-22-2

Signal: 1

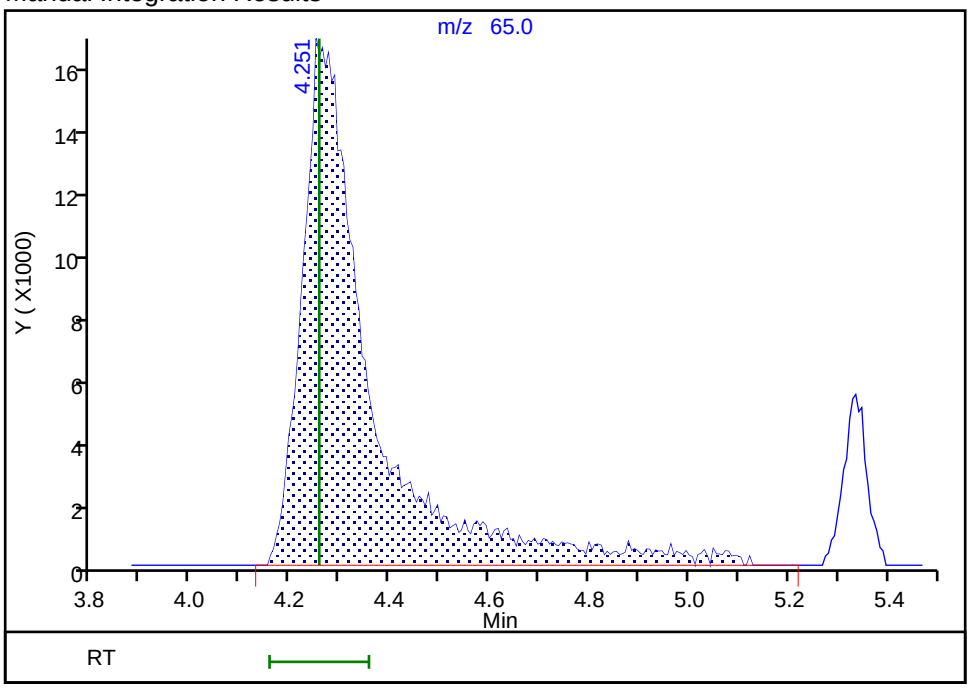
Processing Integration Results

RT: 4.25
Area: 154788
Amount: 50.000000
Amount Units: ug/l



Manual Integration Results

RT: 4.25
Area: 156713
Amount: 50.000000
Amount Units: ug/l



Reviewer: campbellme, 23-Nov-2020 18:43:04
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

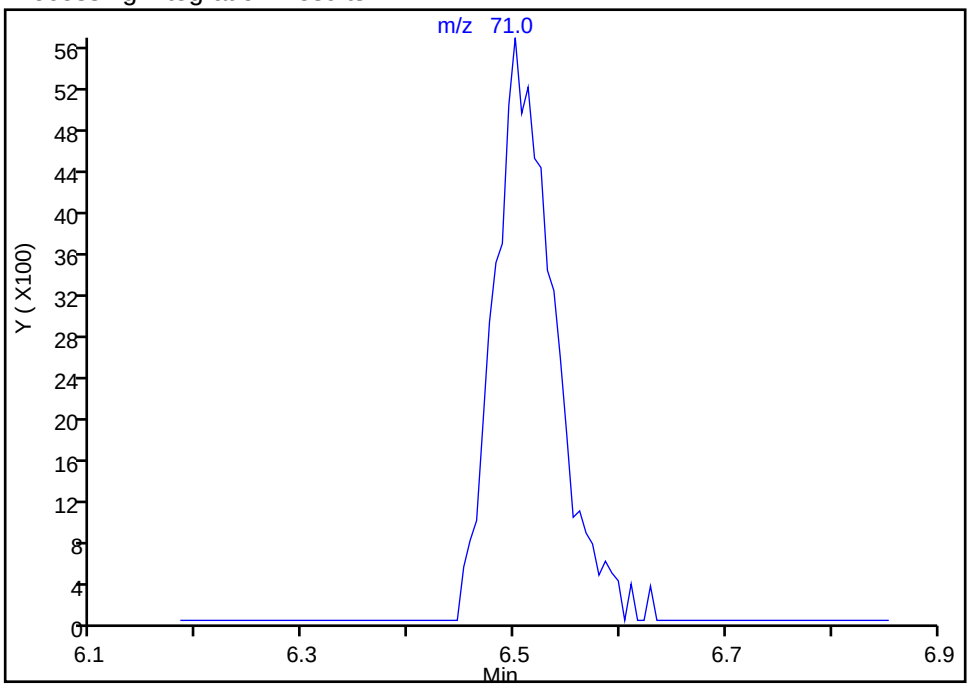
Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I06.D
Injection Date: 23-Nov-2020 14:31:30 Instrument ID: 19930
Lims ID: IC std2
Client ID:
Operator ID: dvv10203 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

44 Tetrahydrofuran, CAS: 109-99-9

Signal: 1

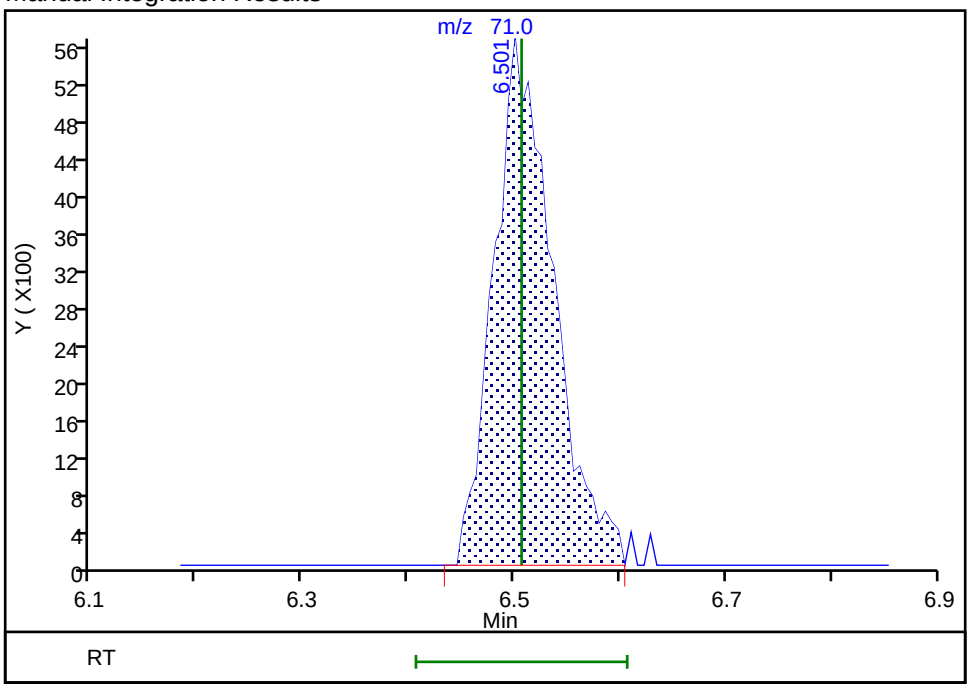
Not Detected
Expected RT: 6.51

Processing Integration Results



Manual Integration Results

RT: 6.50
Area: 22107
Amount: 5.100159
Amount Units: ug/l



Reviewer: campbellme, 23-Nov-2020 18:38:29
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

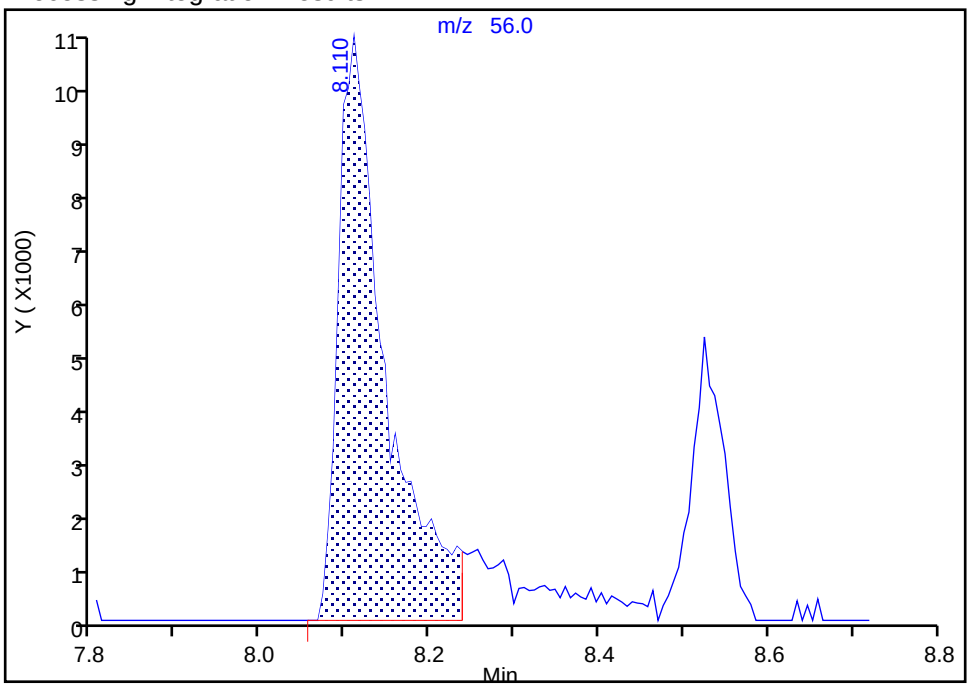
Data File:	\\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I06.D				
Injection Date:	23-Nov-2020 14:31:30	Instrument ID:	19930		
Lims ID:	IC std2				
Client ID:					
Operator ID:	dvv10203	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

60 n-Butanol, CAS: 71-36-3

Signal: 1

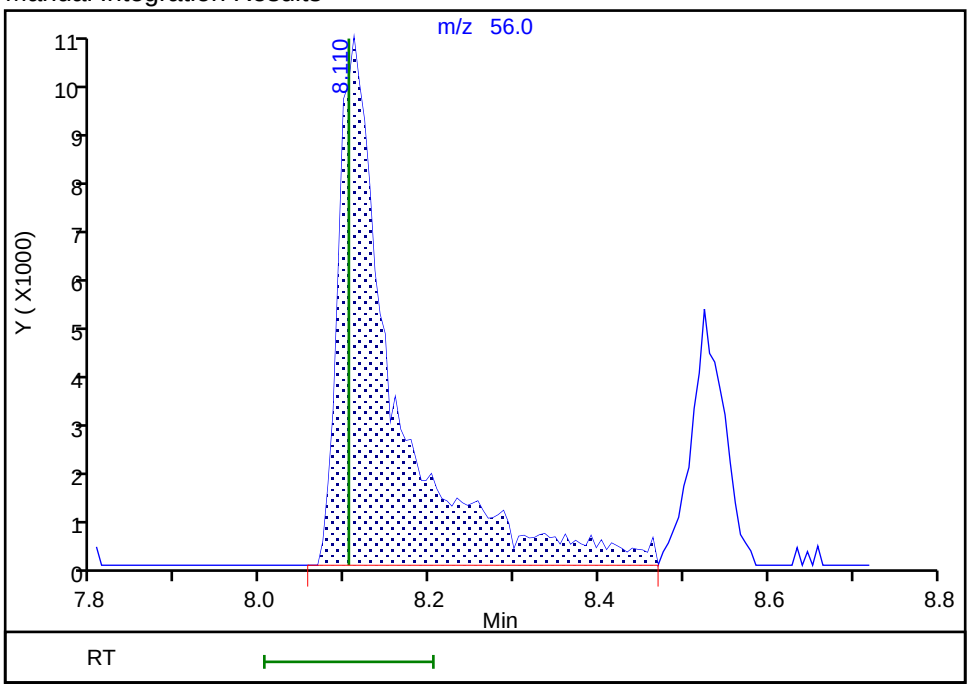
Processing Integration Results

RT: 8.11
Area: 41235
Amount: 41.947047
Amount Units: ug/l



Manual Integration Results

RT: 8.11
Area: 49414
Amount: 48.647785
Amount Units: ug/l



Reviewer: campbellme, 23-Nov-2020 18:38:42

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

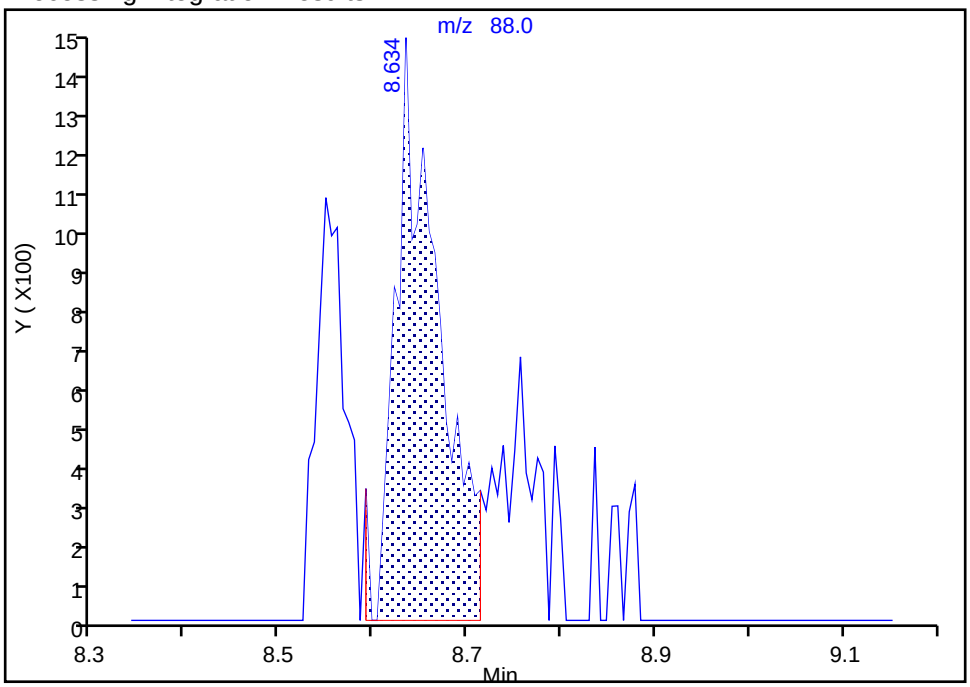
Data File:	\\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I06.D				
Injection Date:	23-Nov-2020 14:31:30	Instrument ID:	19930		
Lims ID:	IC std2				
Client ID:					
Operator ID:	dvv10203	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

65 1,4-Dioxane, CAS: 123-91-1

Signal: 1

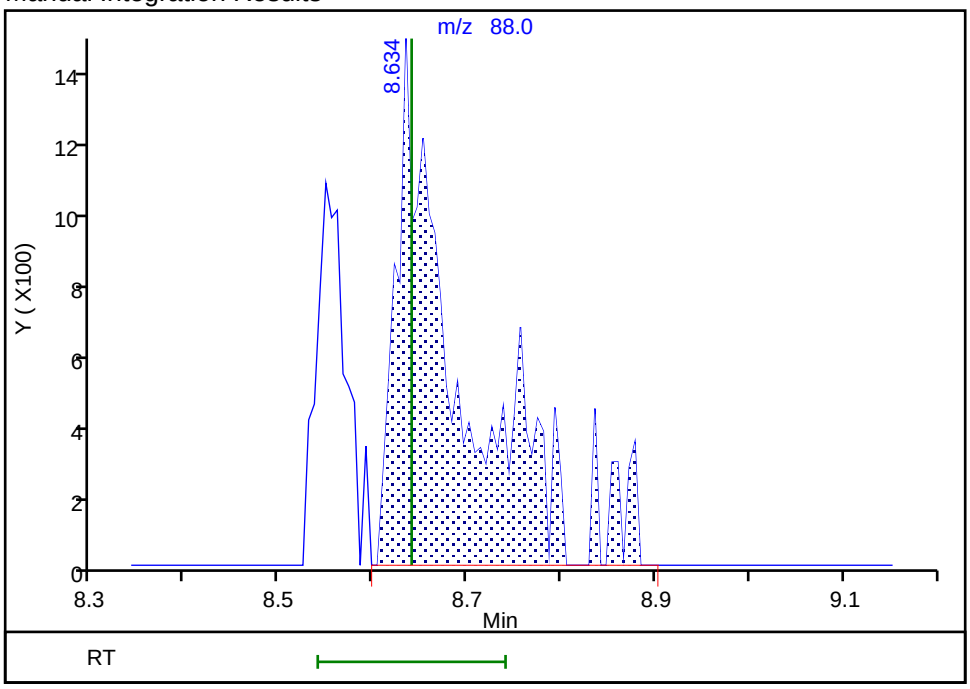
Processing Integration Results

RT: 8.63
Area: 4724
Amount: 20.738620
Amount Units: ug/l



Manual Integration Results

RT: 8.63
Area: 7023
Amount: 26.485431
Amount Units: ug/l



Reviewer: campbellme, 23-Nov-2020 18:38:50
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I07.D
Lims ID: IC std1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 23-Nov-2020 14:53:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0016280-009
Misc. Info.: IC STD1
Operator ID: dvv10203 Instrument ID: 19930
Sublist: chrom-8260 25ml HP31*sub2

Method: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 23-Nov-2020 19:11:42 Calib Date: 23-Nov-2020 18:05:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1632

First Level Reviewer: campbellme Date: 23-Nov-2020 18:42:29

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.971	1.971	0.000	97	14289	0.2000	0.2021	
4 Chloromethane	50	2.172	2.172	0.000	97	17096	0.2000	0.2084	
6 Butadiene	39	2.282	2.288	-0.006	91	17464	0.2000	0.2493	M
5 Vinyl chloride	62	2.294	2.300	-0.006	94	15824	0.2000	0.2095	
7 Bromomethane	94	2.629	2.623	0.006	90	11310	0.2000	0.2065	
8 Chloroethane	64	2.702	2.709	-0.007	98	9848	0.2000	0.2122	
9 Dichlorofluoromethane	67	2.952	2.940	0.012	96	21416	0.2000	0.2059	
10 Trichlorofluoromethane	101	3.019	3.019	0.000	94	21060	0.2000	0.2154	
11 Ethyl ether	59	3.263	3.269	-0.006	91	8629	0.2000	0.1971	
12 1,2-Dichloro-1,1,2-trifluoroetha	67	3.349	3.336	0.013	90	14313	0.2000	0.2087	
13 Acrolein	56	3.440	3.440	0.000	98	69971	10.0	10.1	
14 1,1-Dichloroethene	96	3.574	3.580	-0.006	97	10648	0.2000	0.2016	
15 Acetone	43	3.611	3.605	0.006	99	20352	2.00	2.37	
16 112TCTFE	101	3.611	3.617	-0.006	85	11156	0.2000	0.1998	
17 Iodomethane	142	3.775	3.775	0.000	97	20453	0.2000	0.1982	
18 Ethyl bromide	108	3.806	3.806	0.000	90	9416	0.2000	0.1961	
19 Carbon disulfide	76	3.879	3.885	-0.006	98	33150	0.2000	0.2165	
21 Methyl acetate	43	4.044	4.038	0.006	24	4217	0.2000	0.1800	
22 3-Chloro-1-propene	41	4.062	4.062	0.000	94	16032	0.2000	0.1997	
23 Methylene Chloride	84	4.239	4.251	-0.012	58	12391	0.2000	0.2117	
* 24 t-Butyl alcohol-d10 (IS)	65	4.269	4.257	0.012	0	157506	50.0	50.0	M
25 2-Methyl-2-propanol	59	4.397	4.385	0.012	94	14466	4.00	4.31	
26 Acrylonitrile	53	4.611	4.592	0.019	72	11416	1.00	1.02	a
27 Methyl tert-butyl ether	73	4.659	4.659	0.000	95	28583	0.2000	0.2022	
28 trans-1,2-Dichloroethene	96	4.665	4.678	-0.013	98	11853	0.2000	0.2032	M
29 Hexane	57	5.092	5.104	-0.012	87	15492	0.2000	0.1941	
31 1,1-Dichloroethane	63	5.330	5.336	-0.006	93	20953	0.2000	0.1987	
32 Isopropyl ether	45	5.391	5.391	0.000	95	34785	0.2000	0.1996	
33 2-Chloro-1,3-butadiene	53	5.452	5.446	0.006	88	16705	0.2000	0.1974	
34 Tert-butyl ethyl ether	59	5.934	5.921	0.013	98	32027	0.2000	0.1946	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 2-Butanone (MEK)	43	6.147	6.135	0.012	97	28681	2.00	2.00	
S 35 1,2-Dichloroethene, Total	100				0			0.4110	
37 cis-1,2-Dichloroethene	96	6.165	6.165	0.000	79	14079	0.2000	0.2078	
38 2,2-Dichloropropane	77	6.171	6.177	-0.006	63	16623	0.2000	0.1961	
40 Propionitrile	54	6.232	6.220	0.012	97	17434	4.00	4.15	M
42 Methacrylonitrile	67	6.440	6.433	0.007	89	28963	2.00	1.96	
43 Chlorobromomethane	128	6.494	6.494	0.000	79	5808	0.2000	0.1946	
44 Tetrahydrofuran	71	6.500	6.507	-0.007	83	8531	2.00	1.96	
45 Chloroform	83	6.647	6.647	0.000	93	21135	0.2000	0.2034	
$ 46 Dibromofluoromethane (Surr)	113	6.860	6.860	0.000	94	488089	10.0	9.98	
47 1,1,1-Trichloroethane	97	6.878	6.866	0.012	97	18731	0.2000	0.2007	
48 Cyclohexane	56	6.958	6.964	-0.006	86	18461	0.2000	0.1908	
50 Carbon tetrachloride	117	7.080	7.080	0.000	93	16767	0.2000	0.2007	
51 1,1-Dichloropropene	75	7.092	7.080	0.012	94	16151	0.2000	0.1949	
52 Isobutyl alcohol	41	7.232	7.232	0.000	92	11668	10.0	10.8	
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.311	7.311	0.000	0	98119	10.0	9.95	
54 Benzene	78	7.348	7.342	0.006	92	50855	0.2000	0.2026	
56 1,2-Dichloroethane	62	7.409	7.415	-0.006	97	13237	0.2000	0.2160	
57 Tert-amyl methyl ether	73	7.525	7.531	-0.006	98	28945	0.2000	0.1920	
* 58 Fluorobenzene (IS)	96	7.744	7.744	0.000	99	1980944	10.0	10.0	
59 n-Heptane	43	7.756	7.756	0.000	36	16047	0.2000	0.2002	
60 n-Butanol	56	8.116	8.104	0.012	87	17858	20.0	17.5	M
61 Trichloroethene	95	8.226	8.220	0.006	95	13273	0.2000	0.2020	
62 Methylcyclohexane	83	8.531	8.531	0.000	93	20100	0.2000	0.1884	
63 1,2-Dichloropropane	63	8.561	8.555	0.006	73	12009	0.2000	0.1947	
64 Methyl methacrylate	69	8.634	8.634	0.000	78	4987	0.2000	0.1811	
65 1,4-Dioxane	88	8.646	8.640	0.006	0	1170	10.0	4.39	M
66 Dibromomethane	93	8.659	8.665	-0.006	93	5679	0.2000	0.1948	M
68 Dichlorobromomethane	83	8.896	8.896	0.000	98	14820	0.2000	0.2005	
69 2-Nitropropane	41	9.165	9.165	0.000	97	12963	2.00	1.87	
72 1-Bromo-2-chloroethane	63	9.287	9.287	0.000	95	12498	0.2000	0.1969	
73 cis-1,3-Dichloropropene	75	9.445	9.439	0.006	96	16306	0.2000	0.1839	
74 4-Methyl-2-pentanone (MIBK)	43	9.610	9.604	0.006	94	67829	2.00	1.90	
$ 75 Toluene-d8 (Surr)	98	9.744	9.744	0.000	93	1932681	10.0	10.0	
76 Toluene	92	9.823	9.817	0.006	99	33538	0.2000	0.2088	
S 77 1,3-Dichloropropene, Total	100				0			0.3639	
78 trans-1,3-Dichloropropene	75	10.079	10.073	0.006	90	12488	0.2000	0.1800	
79 Ethyl methacrylate	69	10.140	10.134	0.006	85	9995	0.2000	0.1722	
80 1,1,2-Trichloroethane	97	10.280	10.280	0.000	85	8818	0.2000	0.2057	
81 Tetrachloroethene	166	10.366	10.366	0.000	96	15772	0.2000	0.2028	
82 1,3-Dichloropropane	76	10.439	10.439	0.000	87	14656	0.2000	0.2001	
83 2-Hexanone	43	10.494	10.488	0.006	95	42866	2.00	1.75	
85 Chlorodibromomethane	129	10.658	10.652	0.006	87	10400	0.2000	0.1931	
86 Ethylene Dibromide	107	10.768	10.762	0.006	94	8081	0.2000	0.1968	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.189	0.000	85	1473403	10.0	10.0	
88 1-Chlorohexane	91	11.201	11.195	0.006	62	20461	0.2000	0.2196	
90 Chlorobenzene	112	11.219	11.219	0.000	98	36190	0.2000	0.2038	
S 89 Xylenes, Total	106				0			0.5869	
91 1,1,1,2-Tetrachloroethane	131	11.298	11.298	0.000	92	12023	0.2000	0.1950	
92 Ethylbenzene	91	11.304	11.304	0.000	98	61200	0.2000	0.1972	
93 m-Xylene & p-Xylene	106	11.420	11.414	0.006	100	48448	0.4000	0.3956	
94 o-Xylene	106	11.743	11.743	0.000	96	22768	0.2000	0.1913	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
95 Styrene	104	11.762	11.762	0.000	95	35720	0.2000	0.1875	
96 Bromoform	173	11.920	11.920	0.000	97	5858	0.2000	0.1799	
97 Isopropylbenzene	105	12.042	12.042	0.000	95	60889	0.2000	0.1926	
$ 100 4-Bromofluorobenzene (Surr)	95	12.188	12.188	0.000	94	711806	10.0	9.99	
101 1,1,2,2-Tetrachloroethane	83	12.286	12.286	0.000	93	10791	0.2000	0.1948	
102 Bromobenzene	156	12.304	12.304	0.000	92	15002	0.2000	0.1963	
103 trans-1,4-Dichloro-2-butene	53	12.310	12.310	0.000	95	20615	2.00	1.76	
104 1,2,3-Trichloropropane	110	12.335	12.335	0.000	63	3227	0.2000	0.2123	
105 N-Propylbenzene	91	12.371	12.371	0.000	99	73549	0.2000	0.1964	
106 2-Chlorotoluene	126	12.451	12.451	0.000	97	15105	0.2000	0.1973	
107 1,3,5-Trimethylbenzene	105	12.505	12.505	0.000	94	51085	0.2000	0.1908	
108 4-Chlorotoluene	126	12.542	12.542	0.000	96	15194	0.2000	0.1965	
109 tert-Butylbenzene	134	12.749	12.749	0.000	92	12362	0.2000	0.2044	
110 Pentachloroethane	167	12.780	12.780	0.000	79	8281	0.2000	0.1727	
111 1,2,4-Trimethylbenzene	105	12.792	12.792	0.000	96	50885	0.2000	0.1868	
112 sec-Butylbenzene	105	12.914	12.914	0.000	94	67663	0.2000	0.1926	
113 1,3-Dichlorobenzene	146	13.011	13.011	0.000	97	31322	0.2000	0.2036	
114 4-Isopropyltoluene	119	13.017	13.018	-0.001	97	55545	0.2000	0.1855	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	94	848529	10.0	10.0	
116 1,4-Dichlorobenzene	146	13.085	13.085	0.000	93	31232	0.2000	0.2031	
117 1,2,3-Trimethylbenzene	120	13.091	13.097	-0.006	96	24151	0.2000	0.1999	
118 Benzyl chloride	126	13.164	13.164	0.000	98	3201	0.2000	0.1528	
119 n-Butylbenzene	92	13.310	13.310	0.000	97	27906	0.2000	0.1908	
120 1,2-Dichlorobenzene	146	13.341	13.347	-0.006	98	28158	0.2000	0.2006	
122 1,2-Dibromo-3-Chloropropane	155	13.889	13.883	0.006	80	1501	0.2000	0.1764	
123 1,3,5-Trichlorobenzene	180	14.011	14.011	0.000	97	21330	0.2000	0.1925	
124 1,2,4-Trichlorobenzene	180	14.438	14.438	0.000	92	17403	0.2000	0.1888	
125 Hexachlorobutadiene	225	14.517	14.517	0.000	96	8383	0.2000	0.2092	
126 Naphthalene	128	14.615	14.615	0.000	97	32359	0.2000	0.1879	
127 1,2,3-Trichlorobenzene	180	14.761	14.761	0.000	96	15307	0.2000	0.1925	
134 Isopropyl alcohol	45		0.000				ND	ND	
135 p-Diethylbenzene	1		0.000				ND	ND	
137 2-Methylnaphthalene	142		0.000				ND	ND	
144 2-ethoxy-2-methyl butane	1		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MSV_RV1_826_00030	Amount Added:	2.00	Units: uL	
MSV_RV4GAS826_00096	Amount Added:	2.00	Units: uL	
MSV_RV4_826_00034	Amount Added:	2.00	Units: uL	
MSV_31_826ISS_00003	Amount Added:	5.00	Units: uL	Run Reagent

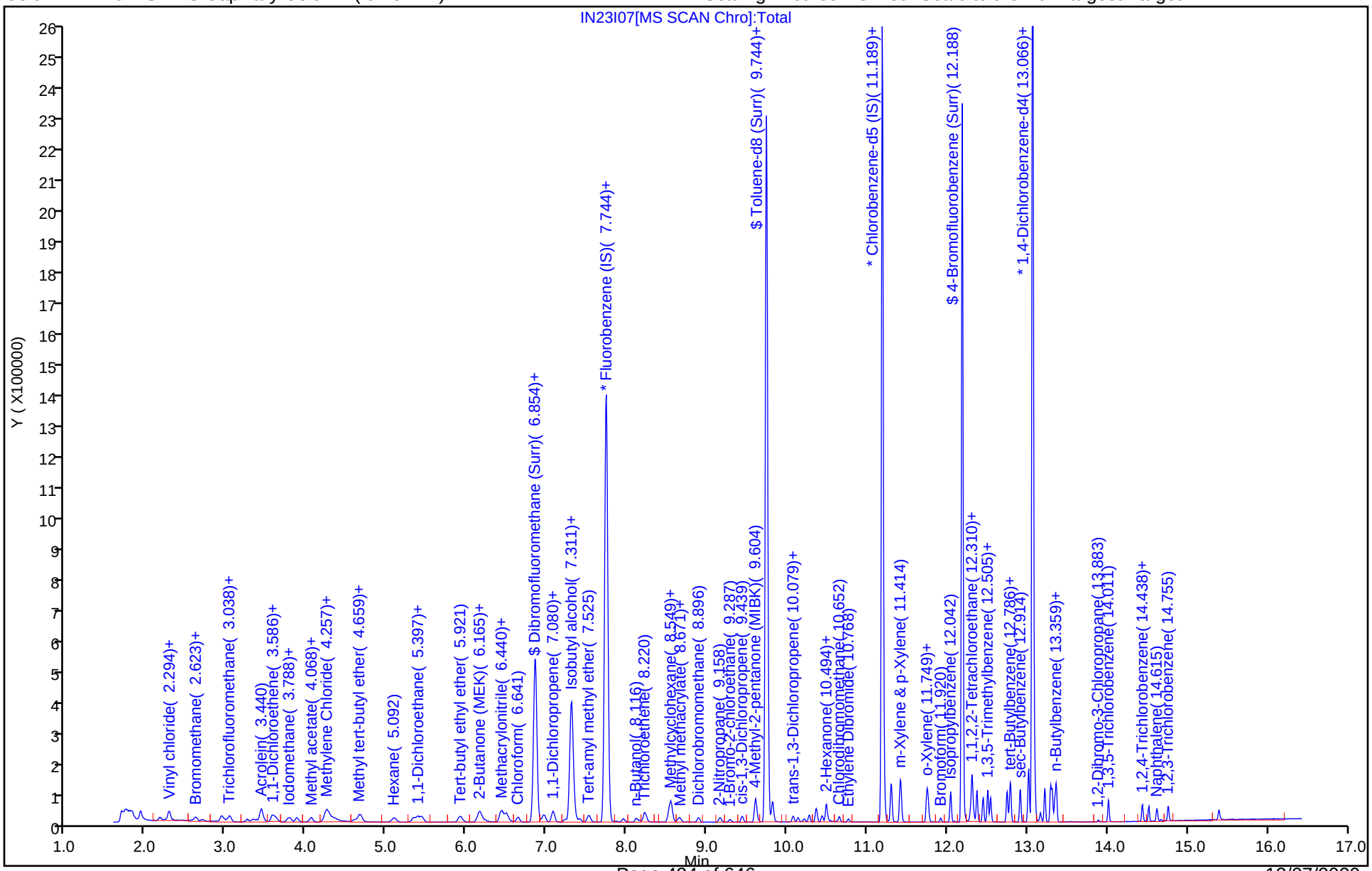
Report Date: 23-Nov-2020 19:11:43 Chrom Revision: 2.3 13-Nov-2020 01:23:02

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I07.D

Injection Date:	23-Nov-2020 14:53:30	Instrument ID:	19930	Operator ID:	dvv10203
Lims ID:	IC std1			Worklist Smp#:	9
Client ID:					
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

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



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

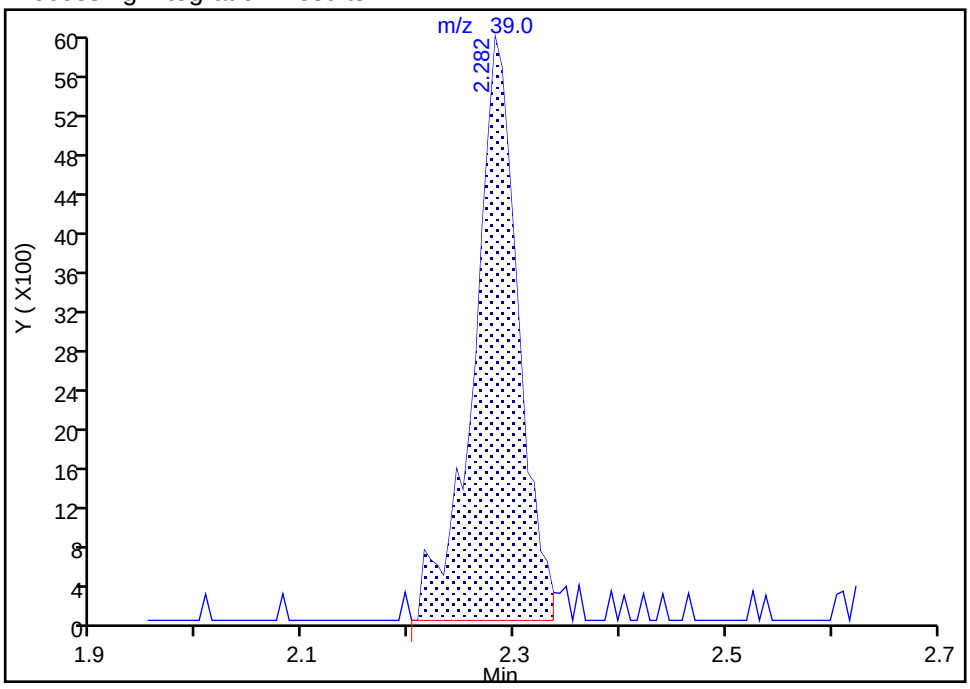
Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I07.D
Injection Date: 23-Nov-2020 14:53:30 Instrument ID: 19930
Lims ID: IC std1
Client ID:
Operator ID: dvv10203 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

6 Butadiene, CAS: 106-99-0

Signal: 1

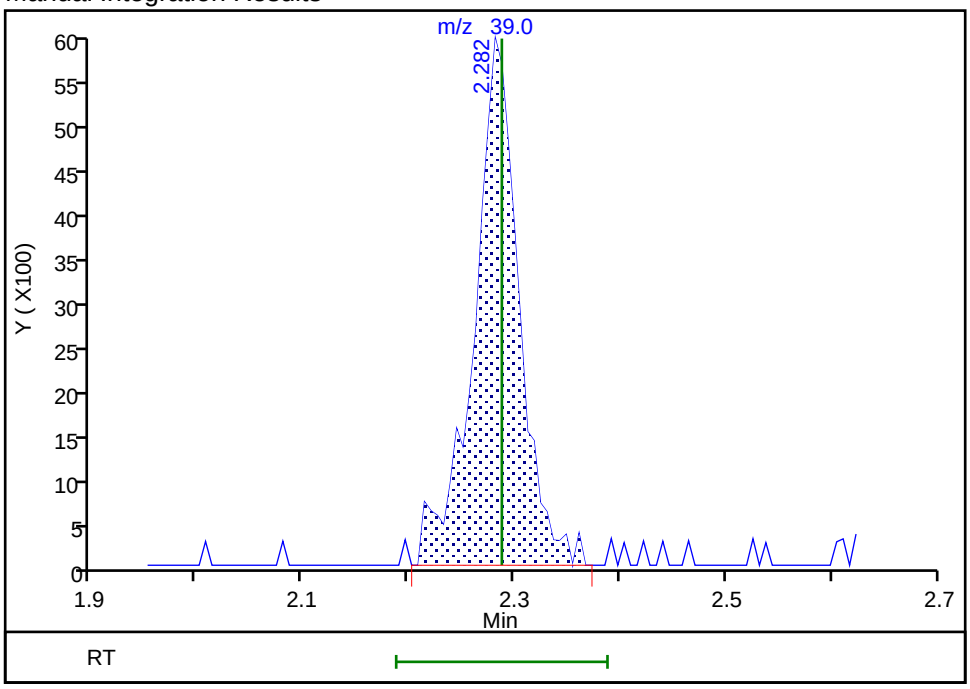
Processing Integration Results

RT: 2.28
Area: 17108
Amount: 0.245098
Amount Units: ug/l



Manual Integration Results

RT: 2.28
Area: 17464
Amount: 0.249290
Amount Units: ug/l



Reviewer: campbellme, 23-Nov-2020 18:39:30
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

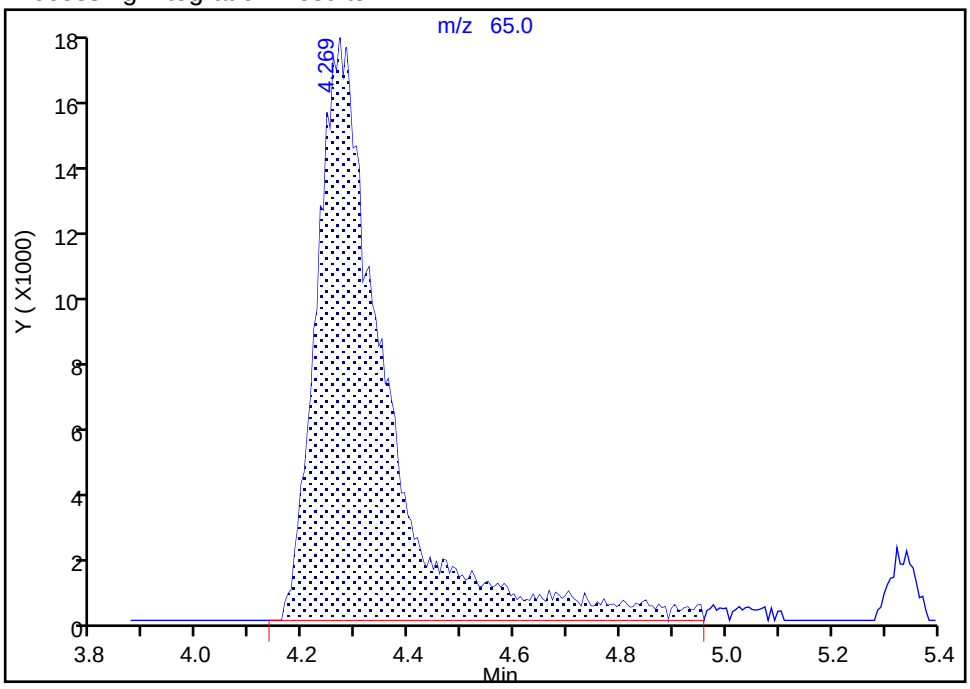
Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I07.D
Injection Date: 23-Nov-2020 14:53:30 Instrument ID: 19930
Lims ID: IC std1
Client ID:
Operator ID: dvv10203 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

* 24 t-Butyl alcohol-d10 (IS), CAS: 53001-22-2

Signal: 1

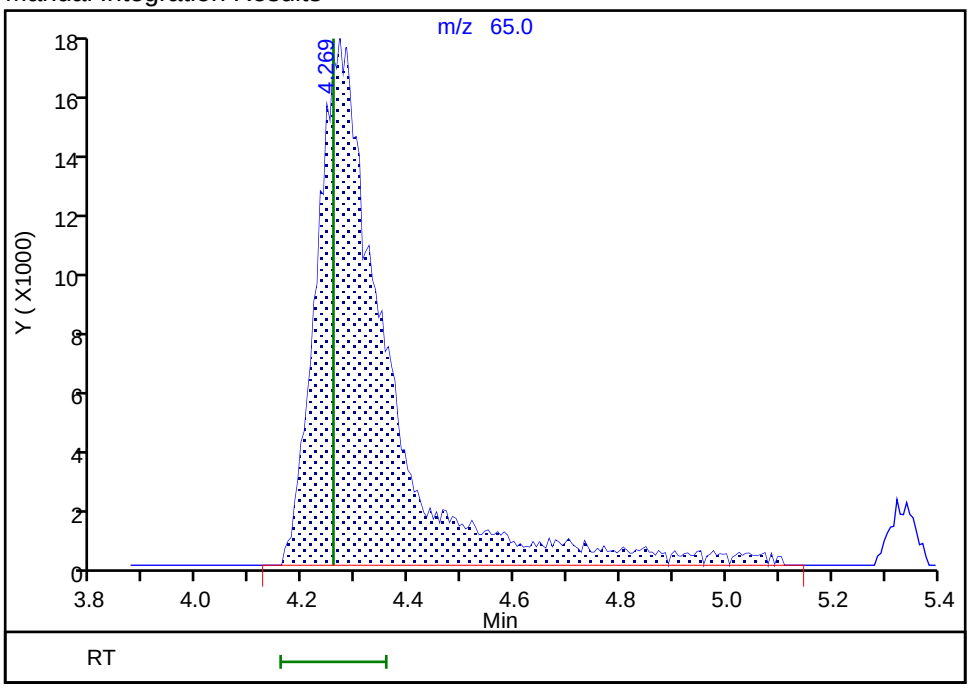
Processing Integration Results

RT: 4.27
Area: 154882
Amount: 50.000000
Amount Units: ug/l



Manual Integration Results

RT: 4.27
Area: 157506
Amount: 50.000000
Amount Units: ug/l



Reviewer: campbellme, 23-Nov-2020 18:42:23
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

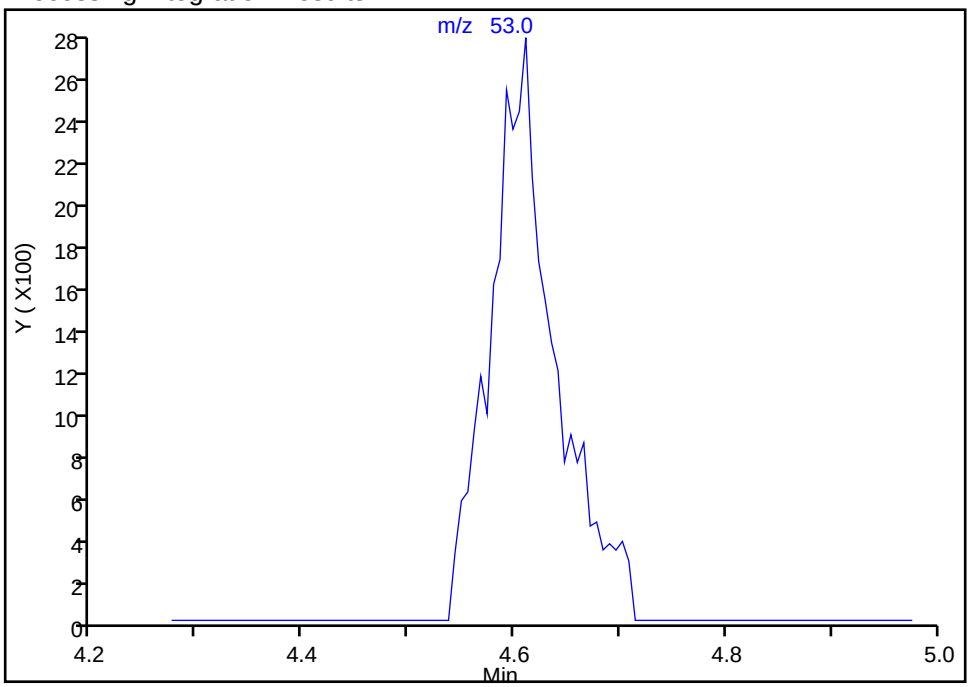
Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I07.D
Injection Date: 23-Nov-2020 14:53:30 Instrument ID: 19930
Lims ID: IC std1
Client ID:
Operator ID: dvv10203 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

26 Acrylonitrile, CAS: 107-13-1

Signal: 1

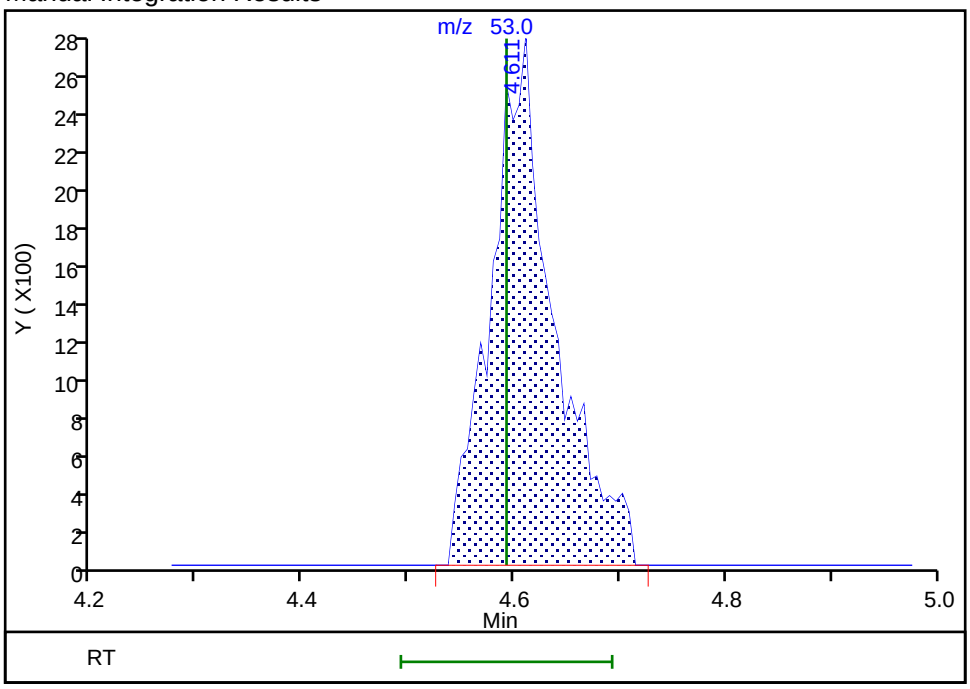
Not Detected
Expected RT: 4.59

Processing Integration Results



Manual Integration Results

RT: 4.61
Area: 11416
Amount: 1.018485
Amount Units: ug/l



Reviewer: campbellme, 23-Nov-2020 18:39:42
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

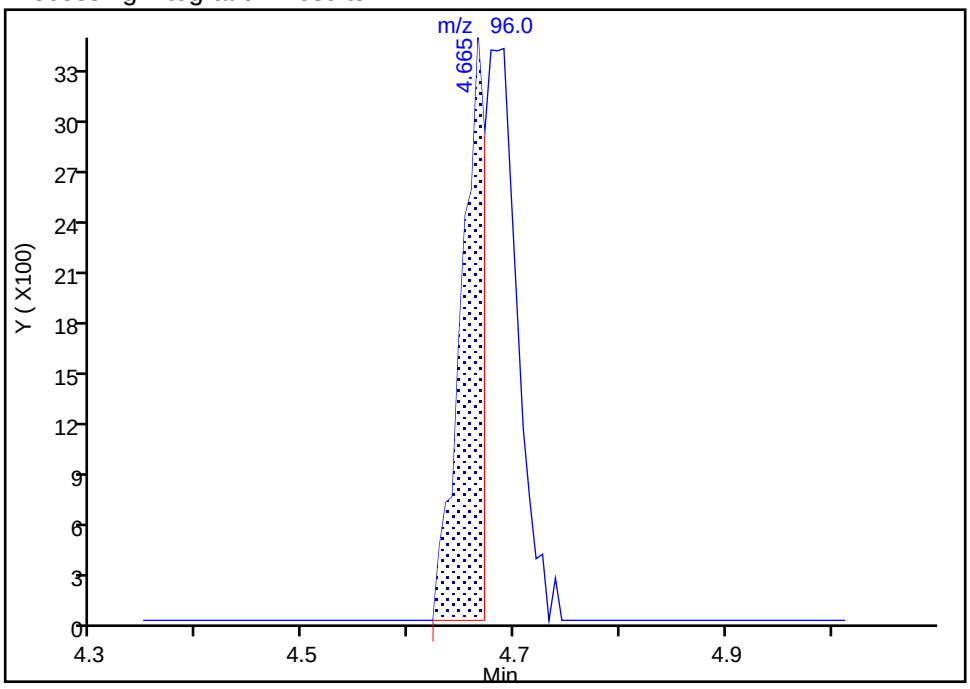
Data File:	\\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I07.D				
Injection Date:	23-Nov-2020 14:53:30	Instrument ID:	19930		
Lims ID:	IC std1				
Client ID:					
Operator ID:	dvv10203	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

28 trans-1,2-Dichloroethene, CAS: 156-60-5

Signal: 1

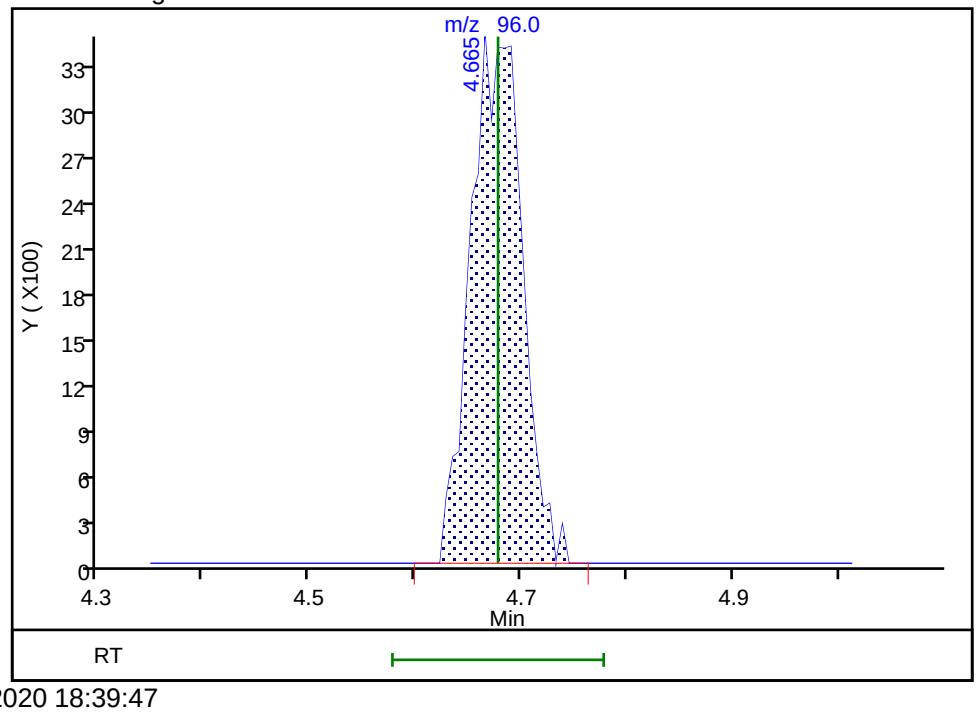
Processing Integration Results

RT: 4.67
Area: 5427
Amount: 0.039292
Amount Units: ug/l



Manual Integration Results

RT: 4.67
Area: 11853
Amount: 0.203228
Amount Units: ug/l



Reviewer: campbellme, 23-Nov-2020 18:39:47

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

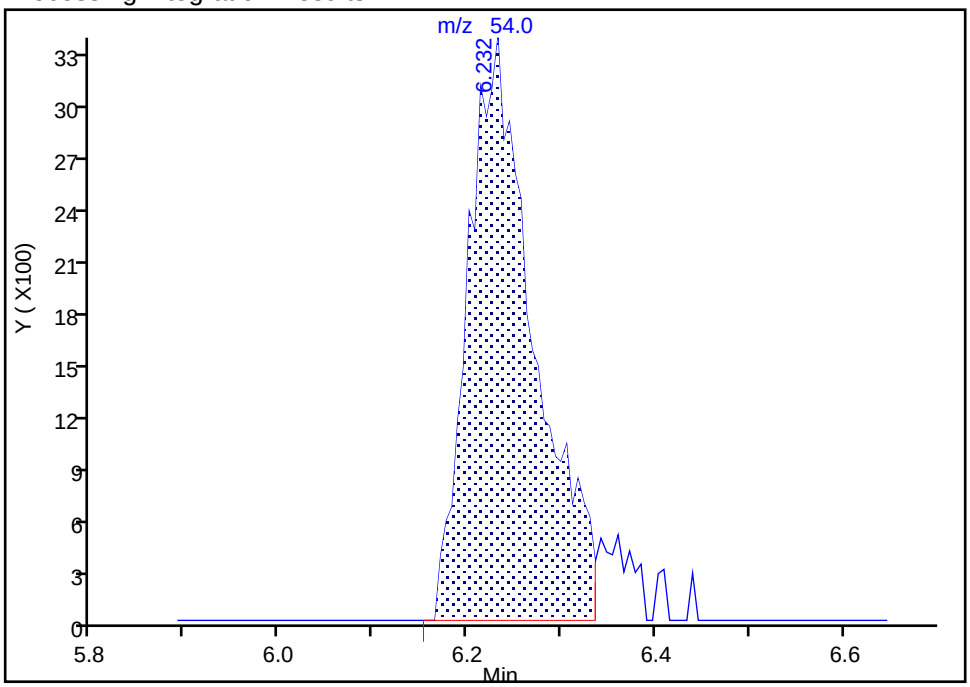
Data File:	\\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I07.D				
Injection Date:	23-Nov-2020 14:53:30	Instrument ID:	19930		
Lims ID:	IC std1				
Client ID:					
Operator ID:	dvv10203	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

40 Propionitrile, CAS: 107-12-0

Signal: 1

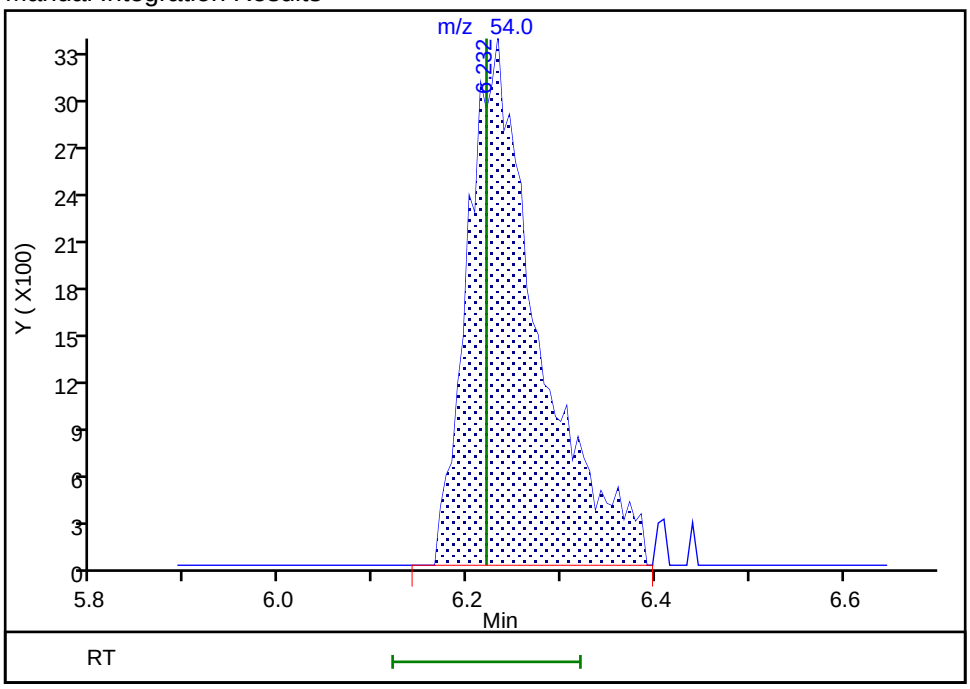
Processing Integration Results

RT: 6.23
Area: 16336
Amount: 3.910148
Amount Units: ug/l



Manual Integration Results

RT: 6.23
Area: 17434
Amount: 4.150122
Amount Units: ug/l



Reviewer: campbellme, 23-Nov-2020 18:39:55

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

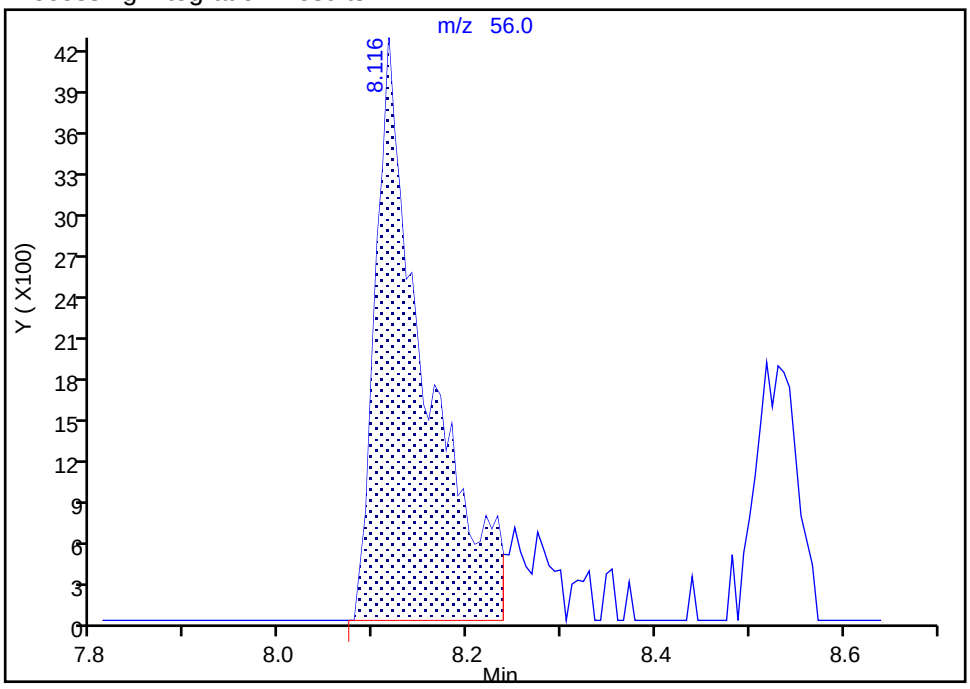
Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I07.D
Injection Date: 23-Nov-2020 14:53:30 Instrument ID: 19930
Lims ID: IC std1
Client ID:
Operator ID: dvv10203 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

60 n-Butanol, CAS: 71-36-3

Signal: 1

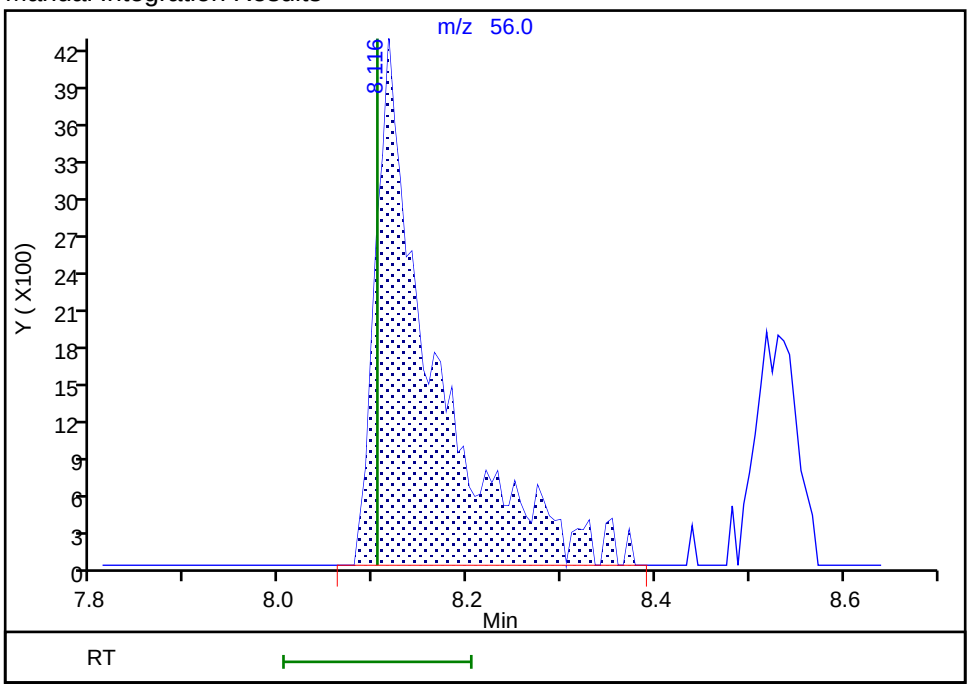
Processing Integration Results

RT: 8.12
Area: 15368
Amount: 15.261099
Amount Units: ug/l



Manual Integration Results

RT: 8.12
Area: 17858
Amount: 17.492577
Amount Units: ug/l



Reviewer: campbellme, 23-Nov-2020 18:40:07
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

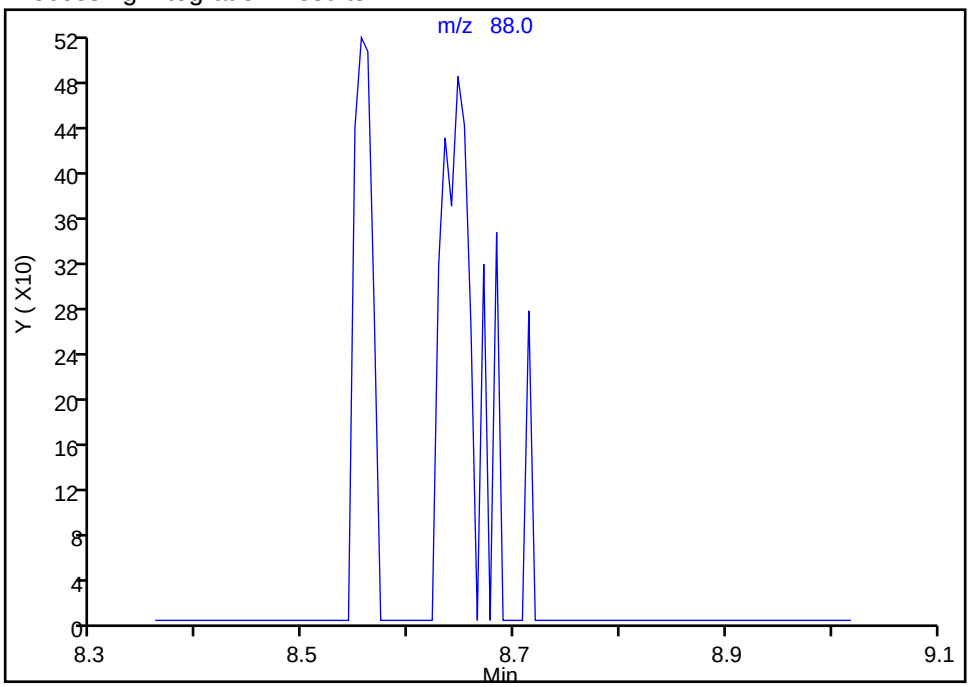
Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I07.D
Injection Date: 23-Nov-2020 14:53:30 Instrument ID: 19930
Lims ID: IC std1
Client ID:
Operator ID: dvv10203 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

65 1,4-Dioxane, CAS: 123-91-1

Signal: 1

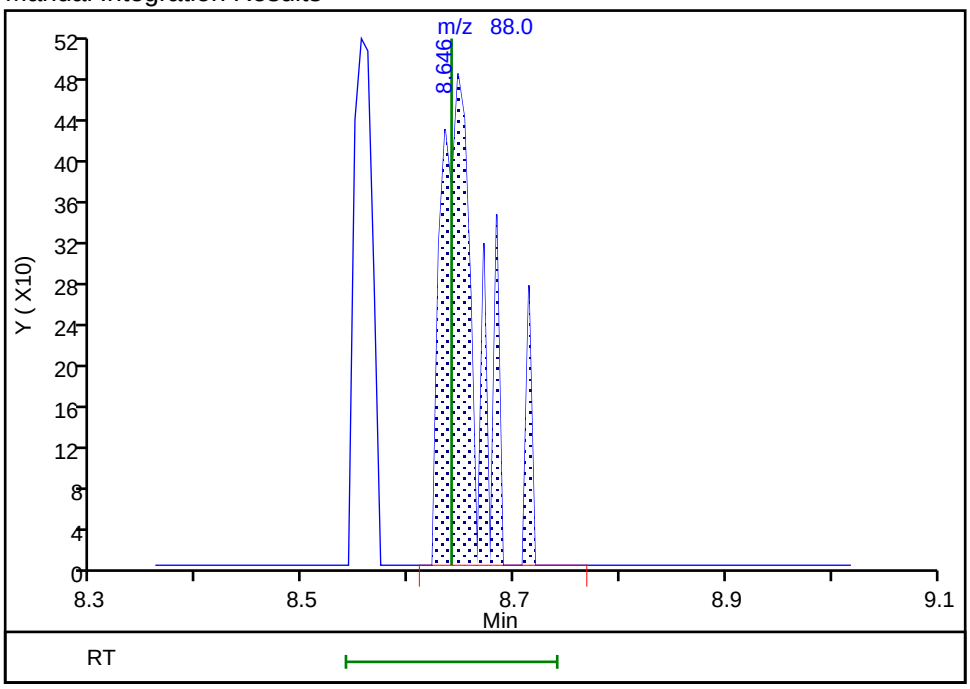
Not Detected
Expected RT: 8.64

Processing Integration Results



Manual Integration Results

RT: 8.65
Area: 1170
Amount: 4.390138
Amount Units: ug/l



Reviewer: campbellme, 23-Nov-2020 18:40:12
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

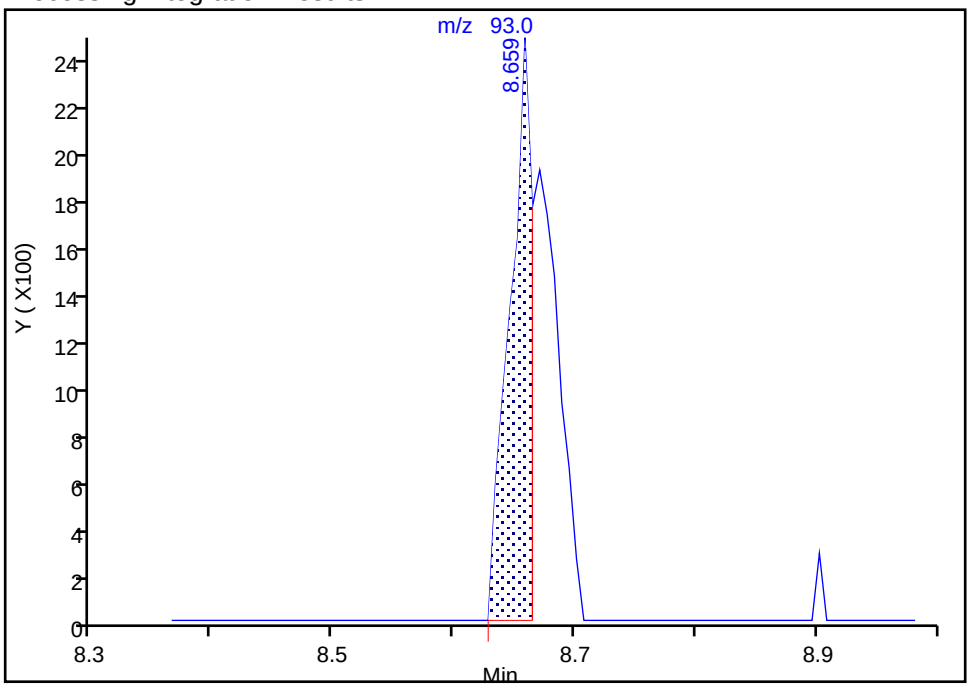
Data File:	\\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I07.D				
Injection Date:	23-Nov-2020 14:53:30	Instrument ID:	19930		
Lims ID:	IC std1				
Client ID:					
Operator ID:	dvv10203	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

66 Dibromomethane, CAS: 74-95-3

Signal: 1

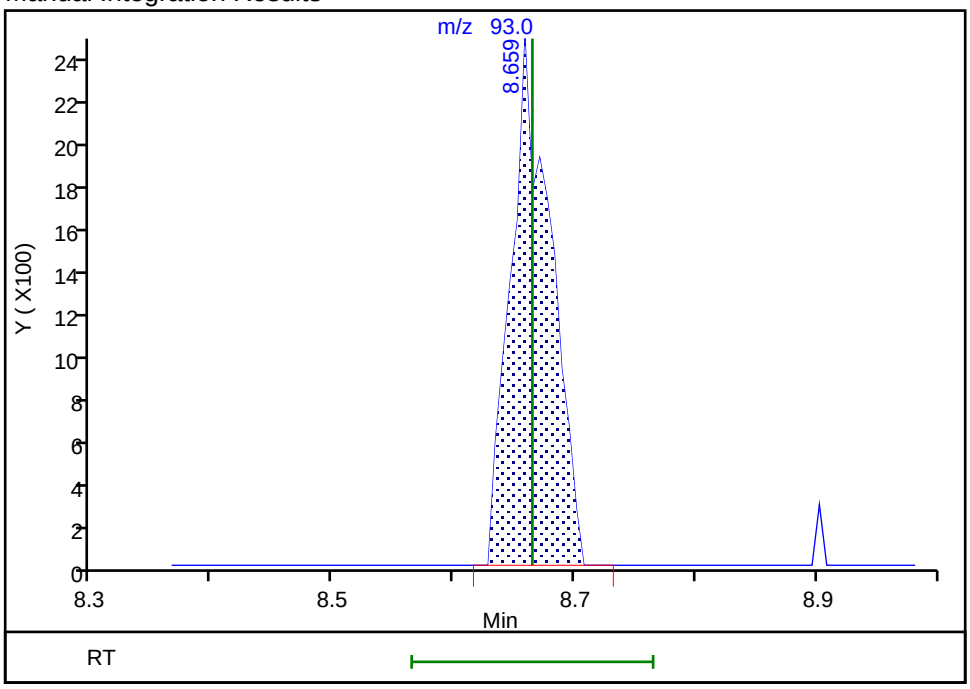
Processing Integration Results

RT: 8.66
Area: 3169
Amount: 0.115796
Amount Units: ug/l



Manual Integration Results

RT: 8.66
Area: 5679
Amount: 0.194753
Amount Units: ug/l



Reviewer: campbellme, 23-Nov-2020 18:40:17
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Calibration / Dichlorodifluoromethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

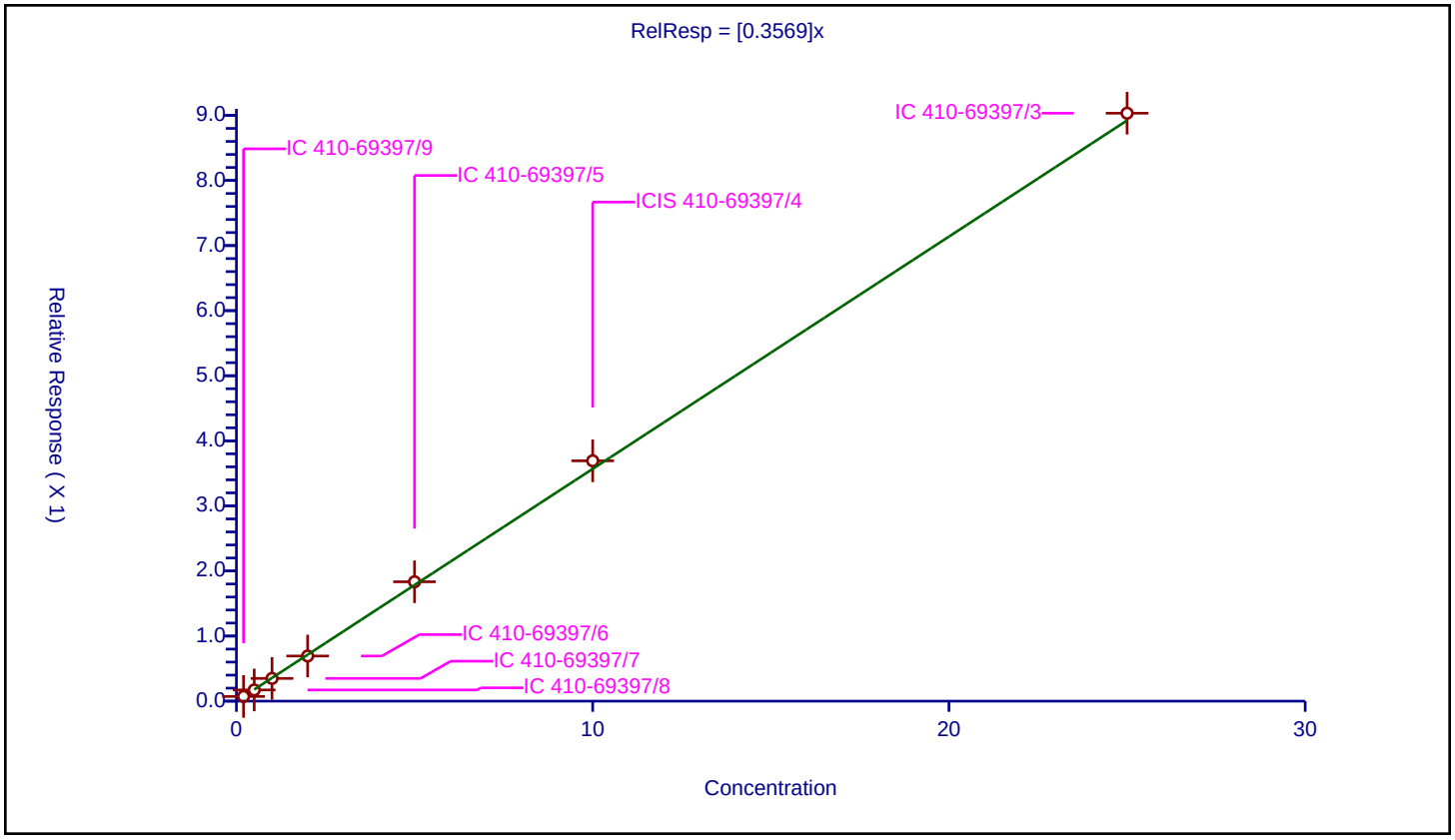
Curve Coefficients

Intercept:	0
Slope:	0.3569

Error Coefficients

Standard Error:	834000
Relative Standard Error:	2.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.072132	10.0	1980944.0	0.360661	Y
2	IC 410-69397/8	0.5	0.172143	10.0	1995085.0	0.344286	Y
3	IC 410-69397/7	1.0	0.349142	10.0	1986644.0	0.349142	Y
4	IC 410-69397/6	2.0	0.693452	10.0	1976128.0	0.346726	Y
5	IC 410-69397/5	5.0	1.83407	10.0	1978687.0	0.366814	Y
6	ICIS 410-69397/4	10.0	3.692582	10.0	2065893.0	0.369258	Y
7	IC 410-69397/3	25.0	9.033636	10.0	2051897.0	0.361345	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

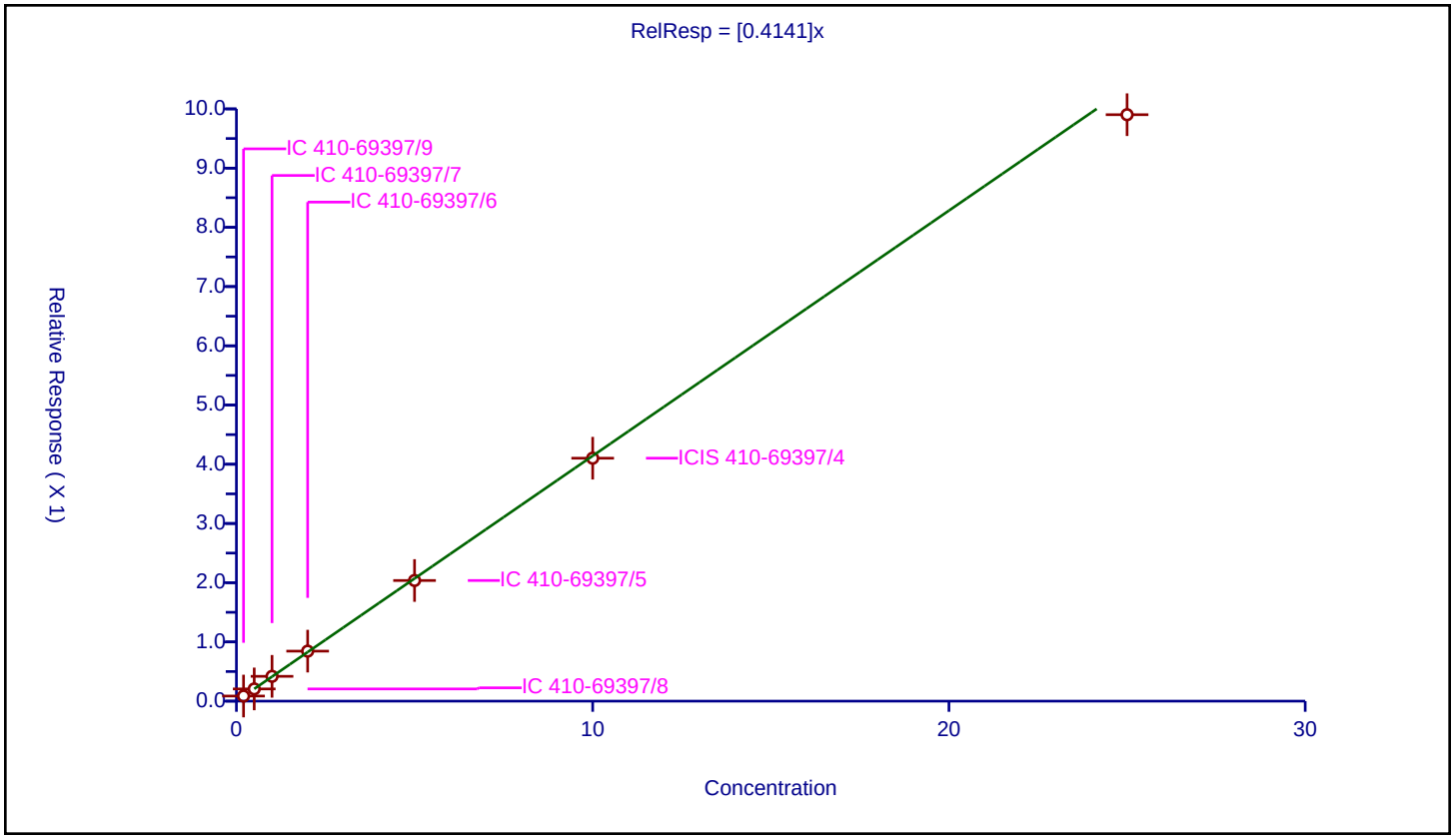
Curve Coefficients

Intercept:	0
Slope:	0.4141

Error Coefficients

Standard Error:	917000
Relative Standard Error:	2.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.086302	10.0	1980944.0	0.431511	Y
2	IC 410-69397/8	0.5	0.206247	10.0	1995085.0	0.412494	Y
3	IC 410-69397/7	1.0	0.419124	10.0	1986644.0	0.419124	Y
4	IC 410-69397/6	2.0	0.844348	10.0	1976128.0	0.422174	Y
5	IC 410-69397/5	5.0	2.036952	10.0	1978687.0	0.40739	Y
6	ICIS 410-69397/4	10.0	4.102129	10.0	2065893.0	0.410213	Y
7	IC 410-69397/3	25.0	9.901798	10.0	2051897.0	0.396072	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

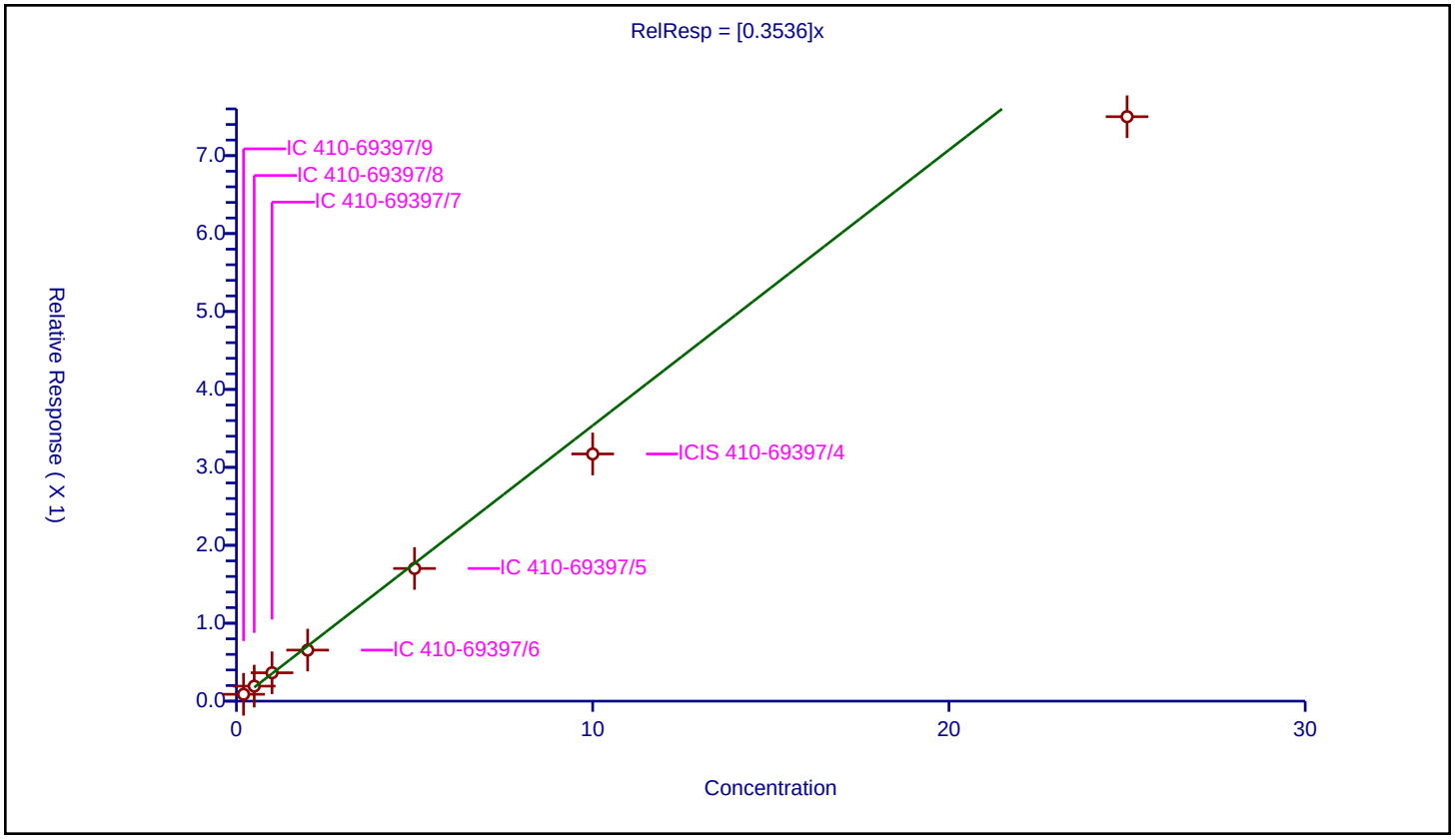
Curve Coefficients

Intercept:	0
Slope:	0.3536

Error Coefficients

Standard Error:	699000
Relative Standard Error:	13.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.970

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.08816	10.0	1980944.0	0.4408	Y
2	IC 410-69397/8	0.5	0.192568	10.0	1995085.0	0.385136	Y
3	IC 410-69397/7	1.0	0.364318	10.0	1986644.0	0.364318	Y
4	IC 410-69397/6	2.0	0.655135	10.0	1976128.0	0.327567	Y
5	IC 410-69397/5	5.0	1.702513	10.0	1978687.0	0.340503	Y
6	ICIS 410-69397/4	10.0	3.171868	10.0	2065893.0	0.317187	Y
7	IC 410-69397/3	25.0	7.500016	10.0	2051897.0	0.300001	Y



Calibration / Vinyl chloride

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

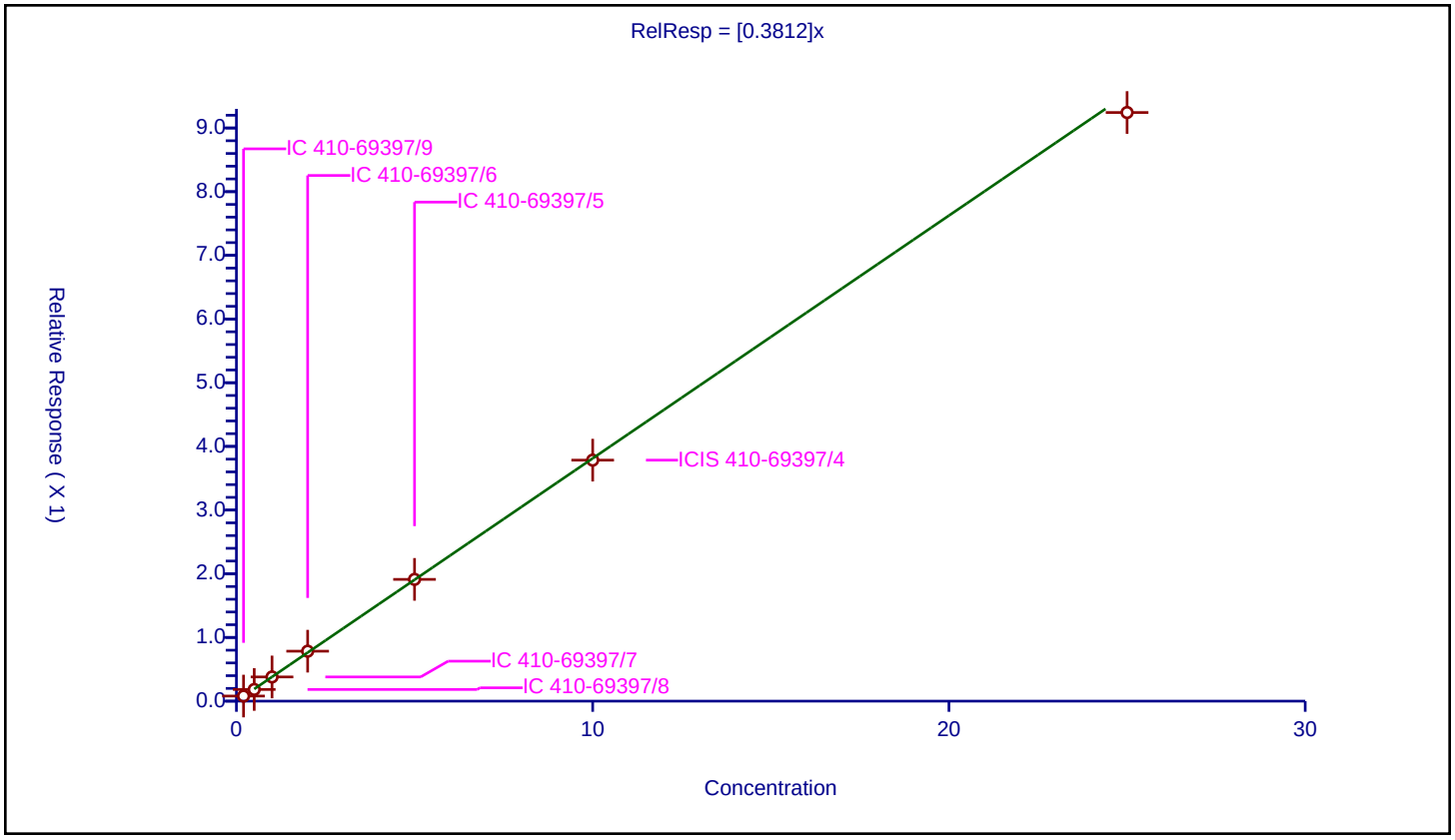
Curve Coefficients

Intercept:	0
Slope:	0.3812

Error Coefficients

Standard Error:	855000
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 410-69397/9	0.2	0.079881	10.0	1980944.0	0.399406	Y
2	IC 410-69397/8	0.5	0.183225	10.0	1995085.0	0.366451	Y
3	IC 410-69397/7	1.0	0.380123	10.0	1986644.0	0.380123	Y
4	IC 410-69397/6	2.0	0.784286	10.0	1976128.0	0.392143	Y
5	IC 410-69397/5	5.0	1.91198	10.0	1978687.0	0.382396	Y
6	ICIS 410-69397/4	10.0	3.784422	10.0	2065893.0	0.378442	Y
7	IC 410-69397/3	25.0	9.243096	10.0	2051897.0	0.369724	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

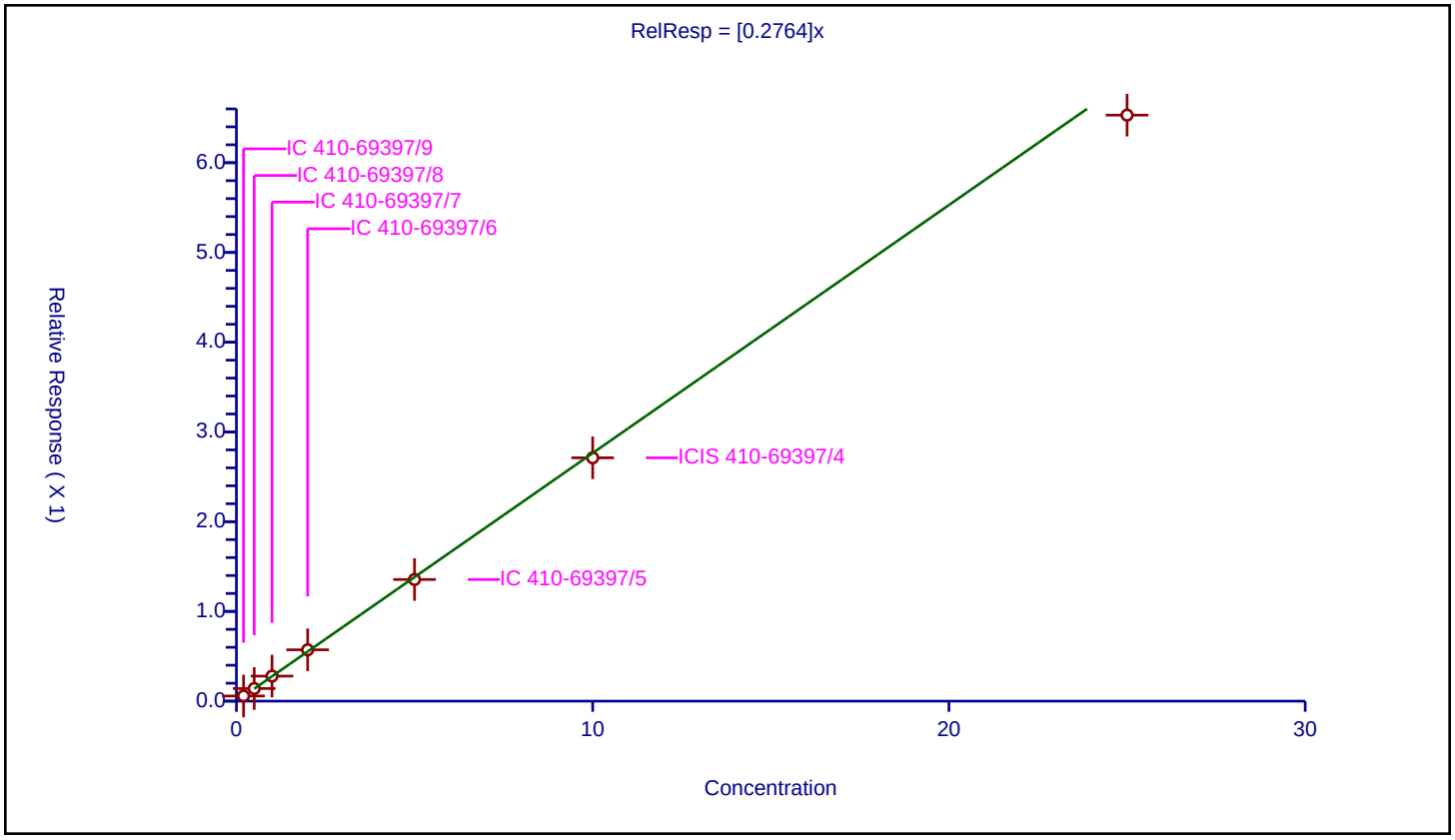
Curve Coefficients

Intercept:	0
Slope:	0.2764

Error Coefficients

Standard Error:	605000
Relative Standard Error:	3.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.057094	10.0	1980944.0	0.28547	Y
2	IC 410-69397/8	0.5	0.140455	10.0	1995085.0	0.28091	Y
3	IC 410-69397/7	1.0	0.279109	10.0	1986644.0	0.279109	Y
4	IC 410-69397/6	2.0	0.572124	10.0	1976128.0	0.286062	Y
5	IC 410-69397/5	5.0	1.35547	10.0	1978687.0	0.271094	Y
6	ICIS 410-69397/4	10.0	2.711675	10.0	2065893.0	0.271167	Y
7	IC 410-69397/3	25.0	6.530406	10.0	2051897.0	0.261216	Y



Calibration / Chloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

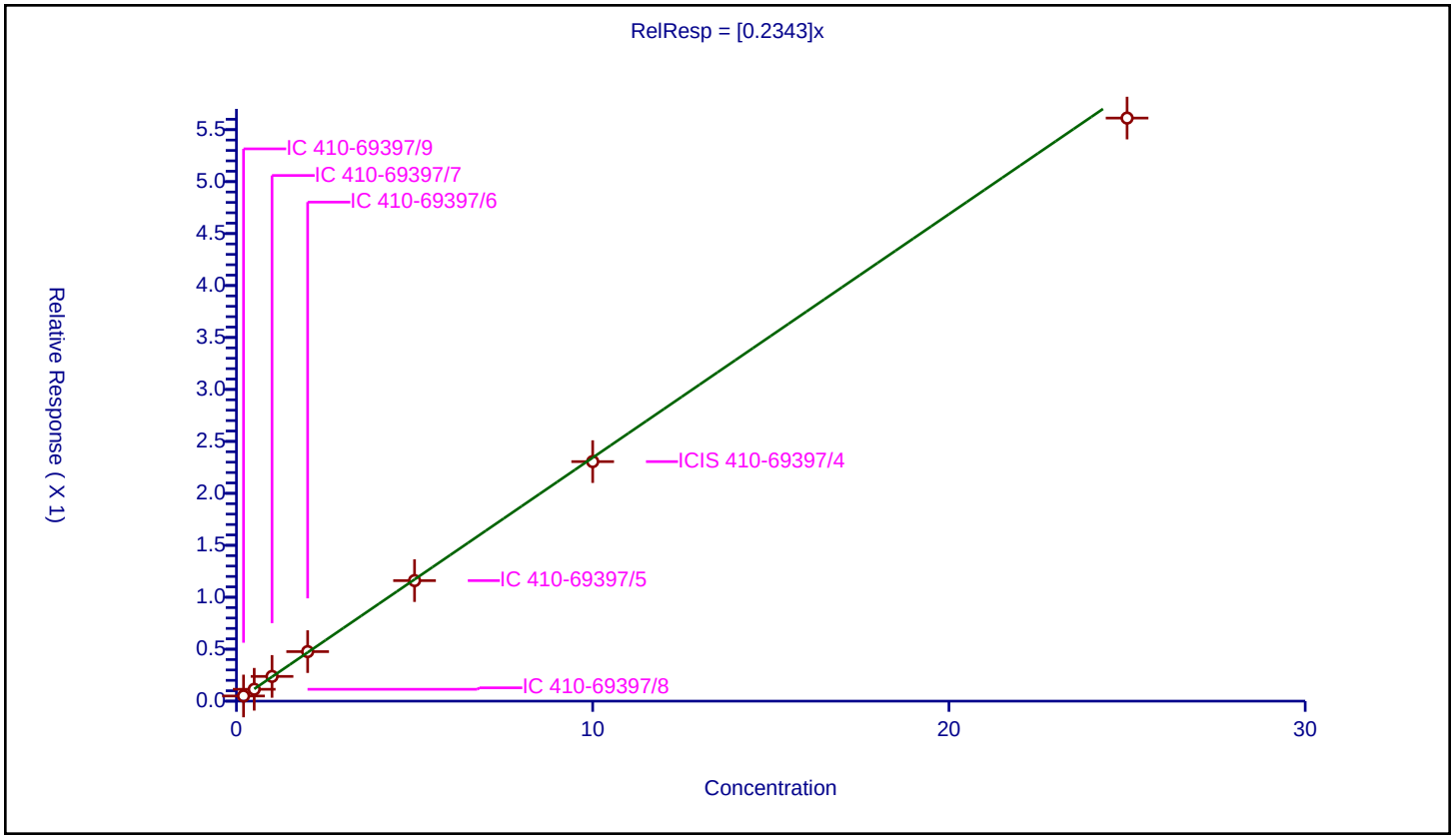
Curve Coefficients

Intercept:	0
Slope:	0.2343

Error Coefficients

Standard Error:	519000
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 410-69397/9	0.2	0.049714	10.0	1980944.0	0.248568	Y
2	IC 410-69397/8	0.5	0.114216	10.0	1995085.0	0.228431	Y
3	IC 410-69397/7	1.0	0.238025	10.0	1986644.0	0.238025	Y
4	IC 410-69397/6	2.0	0.476548	10.0	1976128.0	0.238274	Y
5	IC 410-69397/5	5.0	1.160002	10.0	1978687.0	0.232	Y
6	ICIS 410-69397/4	10.0	2.30541	10.0	2065893.0	0.230541	Y
7	IC 410-69397/3	25.0	5.611739	10.0	2051897.0	0.22447	Y



Calibration / Dichlorofluoromethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

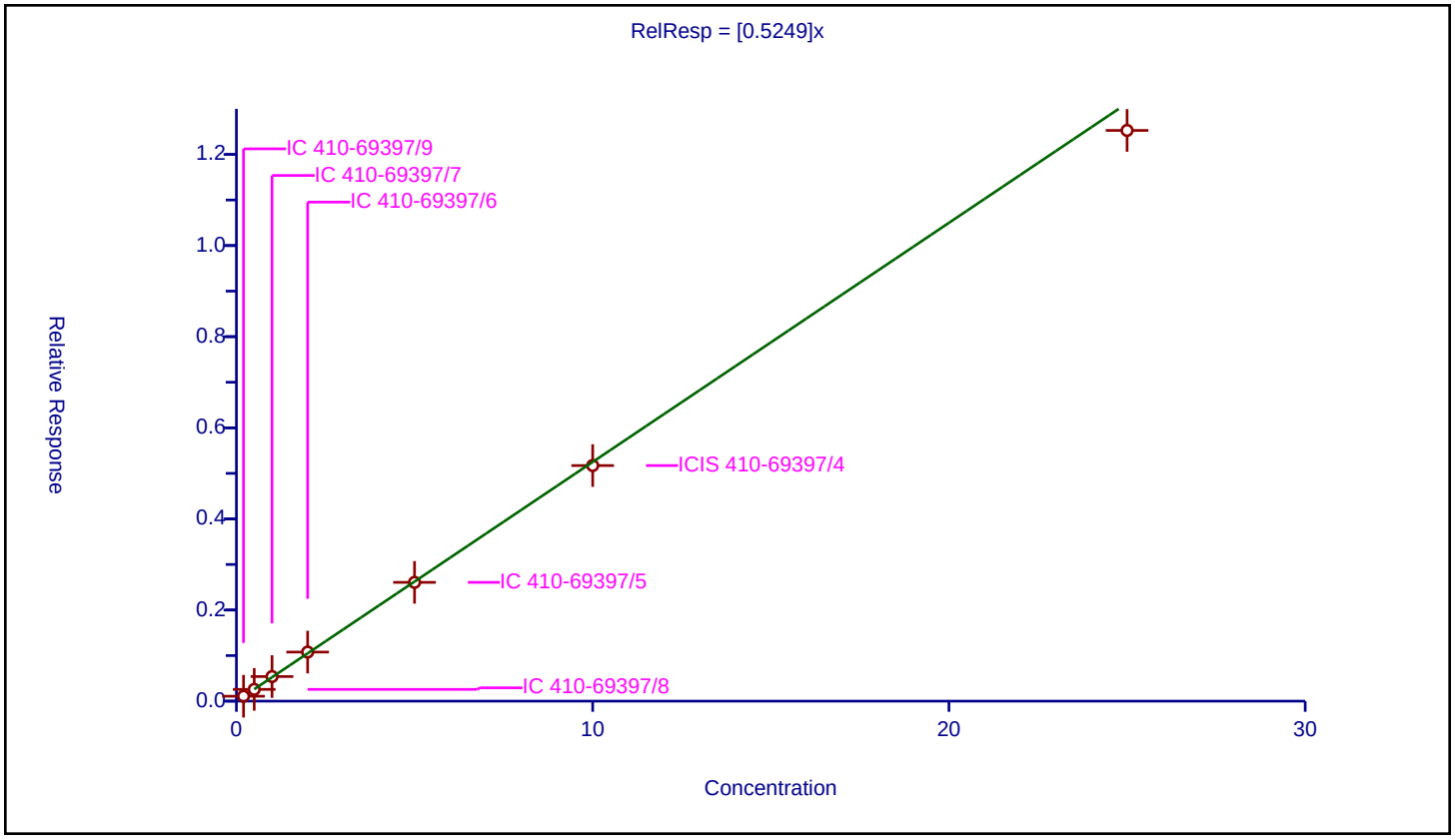
Curve Coefficients

Intercept:	0
Slope:	0.5249

Error Coefficients

Standard Error:	1160000
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 410-69397/9	0.2	0.10811	10.0	1980944.0	0.54055	Y
2	IC 410-69397/8	0.5	0.257994	10.0	1995085.0	0.515988	Y
3	IC 410-69397/7	1.0	0.539905	10.0	1986644.0	0.539905	Y
4	IC 410-69397/6	2.0	1.076985	10.0	1976128.0	0.538492	Y
5	IC 410-69397/5	5.0	2.607274	10.0	1978687.0	0.521455	Y
6	ICIS 410-69397/4	10.0	5.17156	10.0	2065893.0	0.517156	Y
7	IC 410-69397/3	25.0	12.526759	10.0	2051897.0	0.50107	Y



Calibration / Trichlorofluoromethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

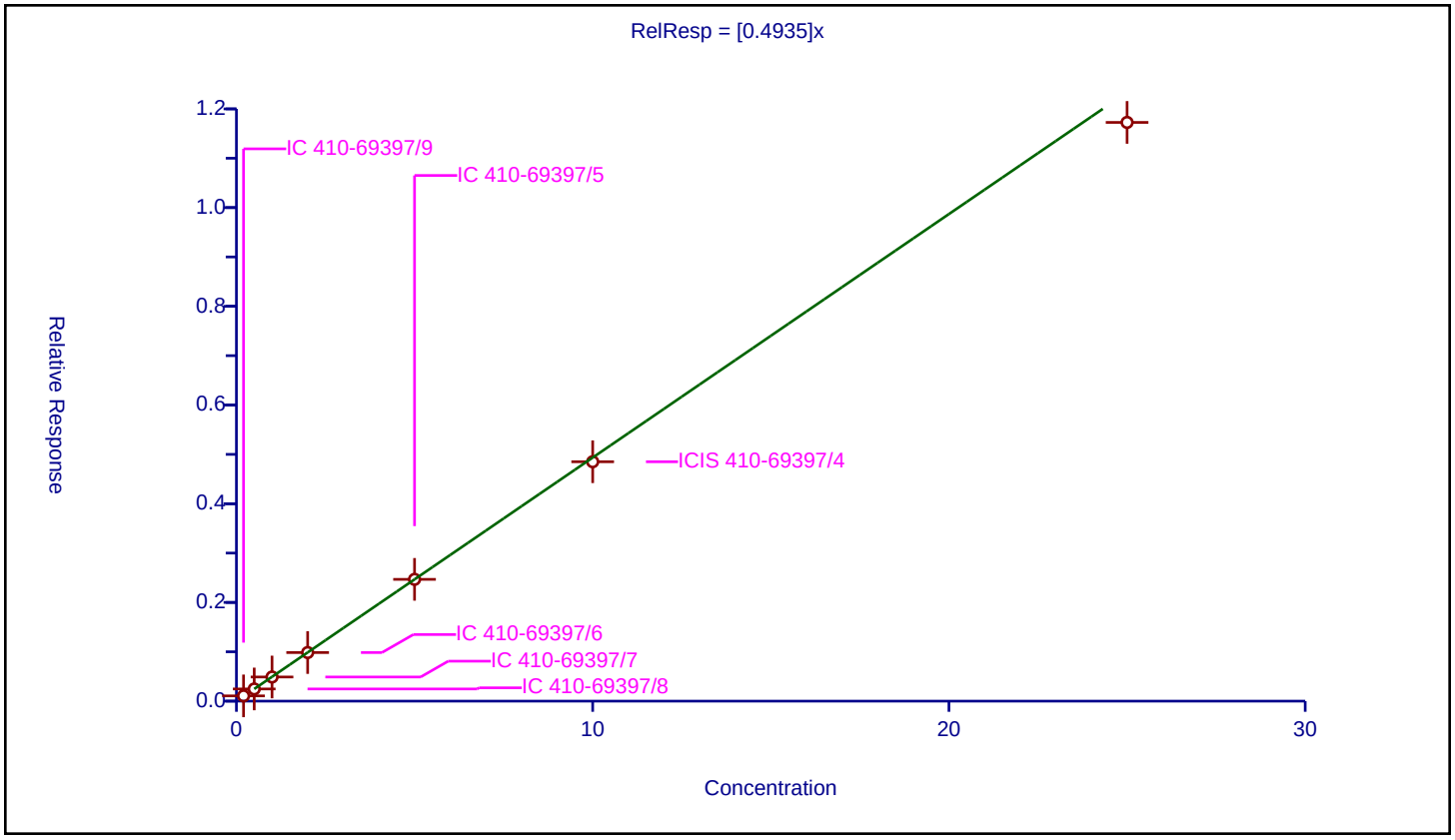
Curve Coefficients

Intercept:	0
Slope:	0.4935

Error Coefficients

Standard Error:	1090000
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 410-69397/9	0.2	0.106313	10.0	1980944.0	0.531565	Y
2	IC 410-69397/8	0.5	0.246711	10.0	1995085.0	0.493423	Y
3	IC 410-69397/7	1.0	0.489449	10.0	1986644.0	0.489449	Y
4	IC 410-69397/6	2.0	0.98441	10.0	1976128.0	0.492205	Y
5	IC 410-69397/5	5.0	2.467515	10.0	1978687.0	0.493503	Y
6	ICIS 410-69397/4	10.0	4.850658	10.0	2065893.0	0.485066	Y
7	IC 410-69397/3	25.0	11.726115	10.0	2051897.0	0.469045	Y



Calibration / Ethyl ether

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

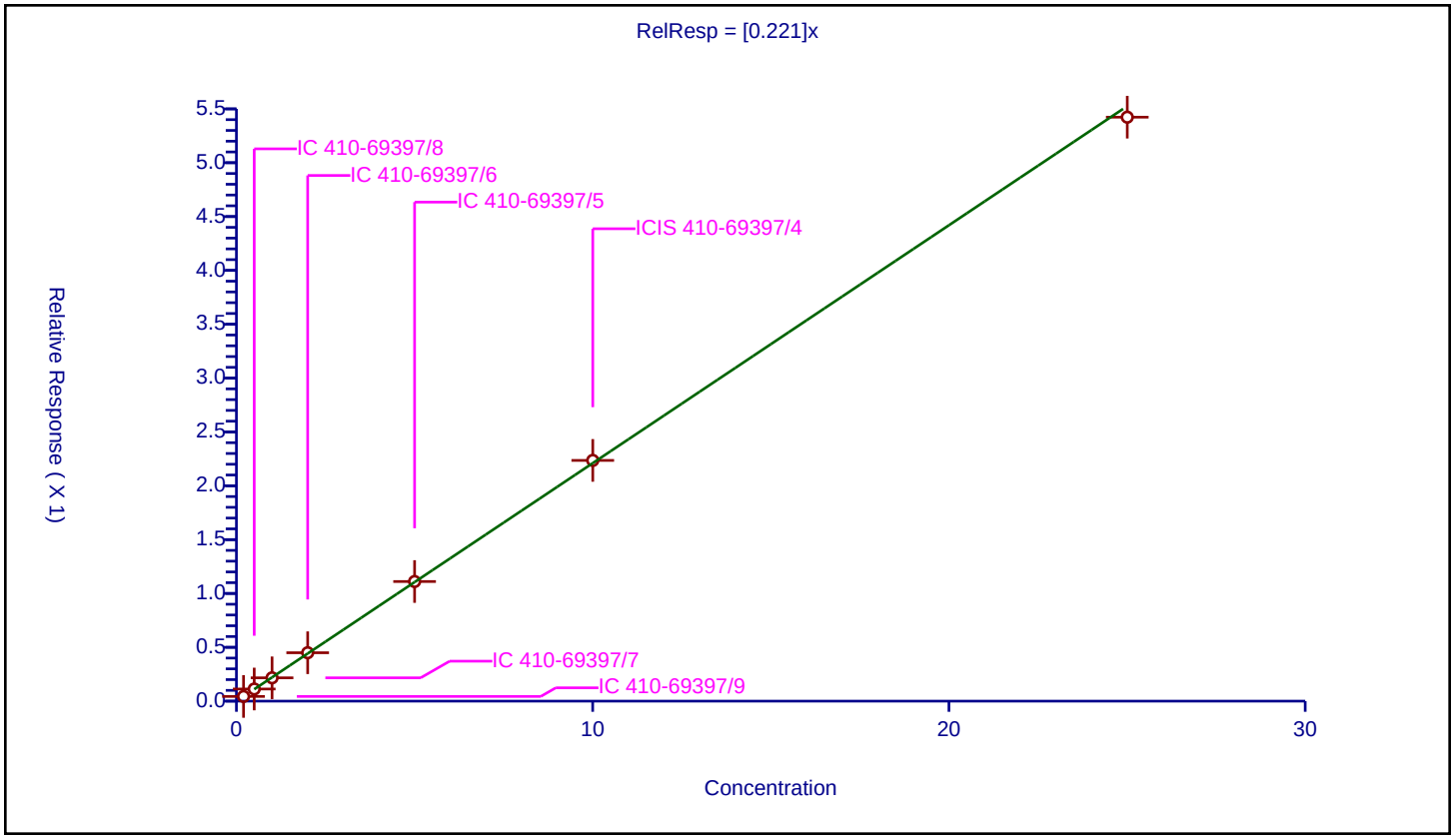
Curve Coefficients

Intercept:	0
Slope:	0.221

Error Coefficients

Standard Error:	502000
Relative Standard Error:	1.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.200043	0.04356	10.0	1980944.0	0.217753	Y
2	IC 410-69397/8	0.500108	0.112712	10.0	1995085.0	0.225376	Y
3	IC 410-69397/7	1.000215	0.216581	10.0	1986644.0	0.216535	Y
4	IC 410-69397/6	2.00043	0.449495	10.0	1976128.0	0.224699	Y
5	IC 410-69397/5	5.001075	1.111015	10.0	1978687.0	0.222155	Y
6	ICIS 410-69397/4	10.00215	2.235634	10.0	2065893.0	0.223515	Y
7	IC 410-69397/3	25.005375	5.422977	10.0	2051897.0	0.216872	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

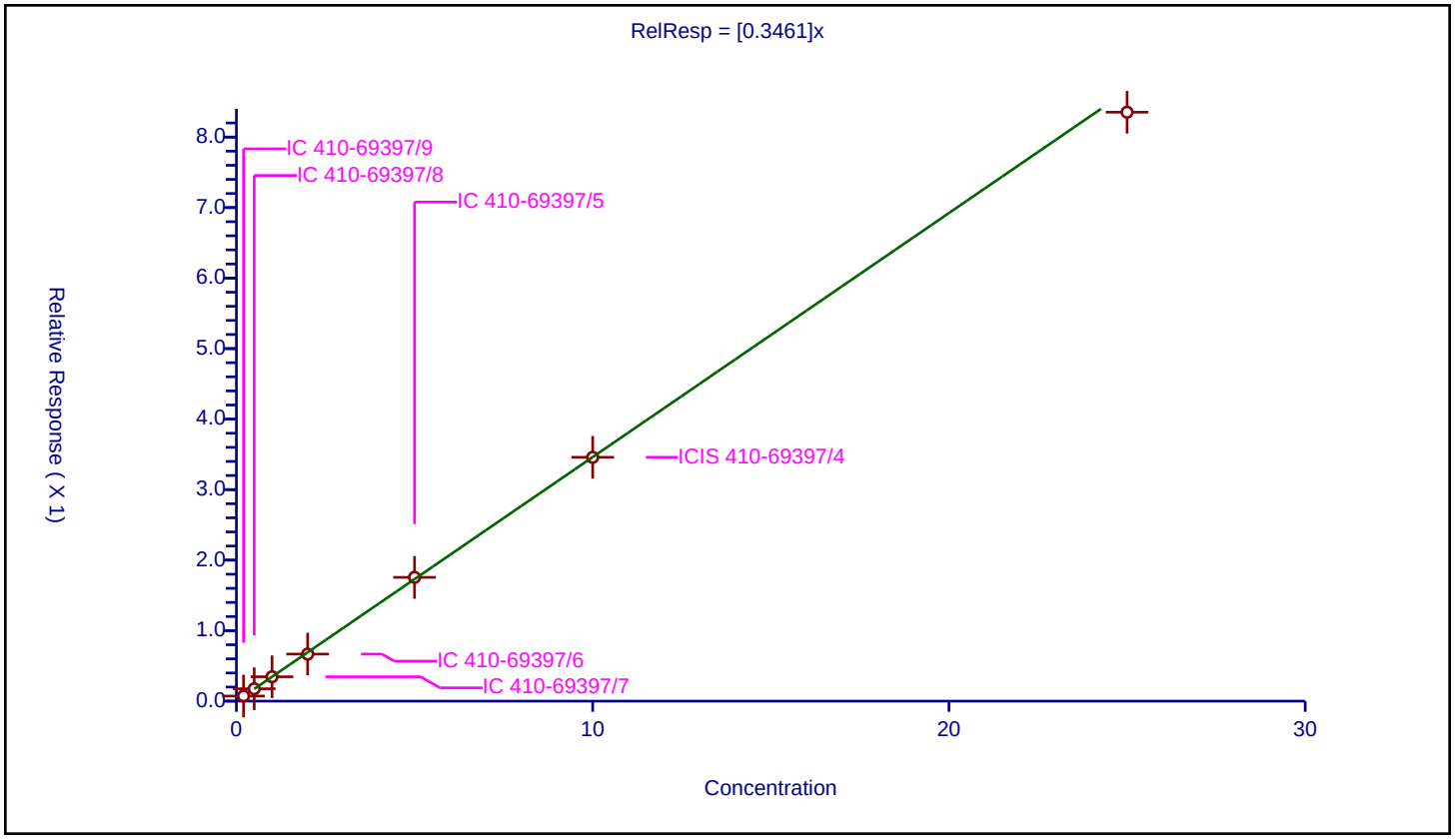
Curve Coefficients

Intercept:	0
Slope:	0.3461

Error Coefficients

Standard Error:	774000
Relative Standard Error:	2.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.072253	10.0	1980944.0	0.361267	Y
2	IC 410-69397/8	0.5	0.175431	10.0	1995085.0	0.350862	Y
3	IC 410-69397/7	1.0	0.345945	10.0	1986644.0	0.345945	Y
4	IC 410-69397/6	2.0	0.667649	10.0	1976128.0	0.333825	Y
5	IC 410-69397/5	5.0	1.755599	10.0	1978687.0	0.35112	Y
6	ICIS 410-69397/4	10.0	3.458495	10.0	2065893.0	0.345849	Y
7	IC 410-69397/3	25.0	8.352802	10.0	2051897.0	0.334112	Y



Calibration / Acrolein

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

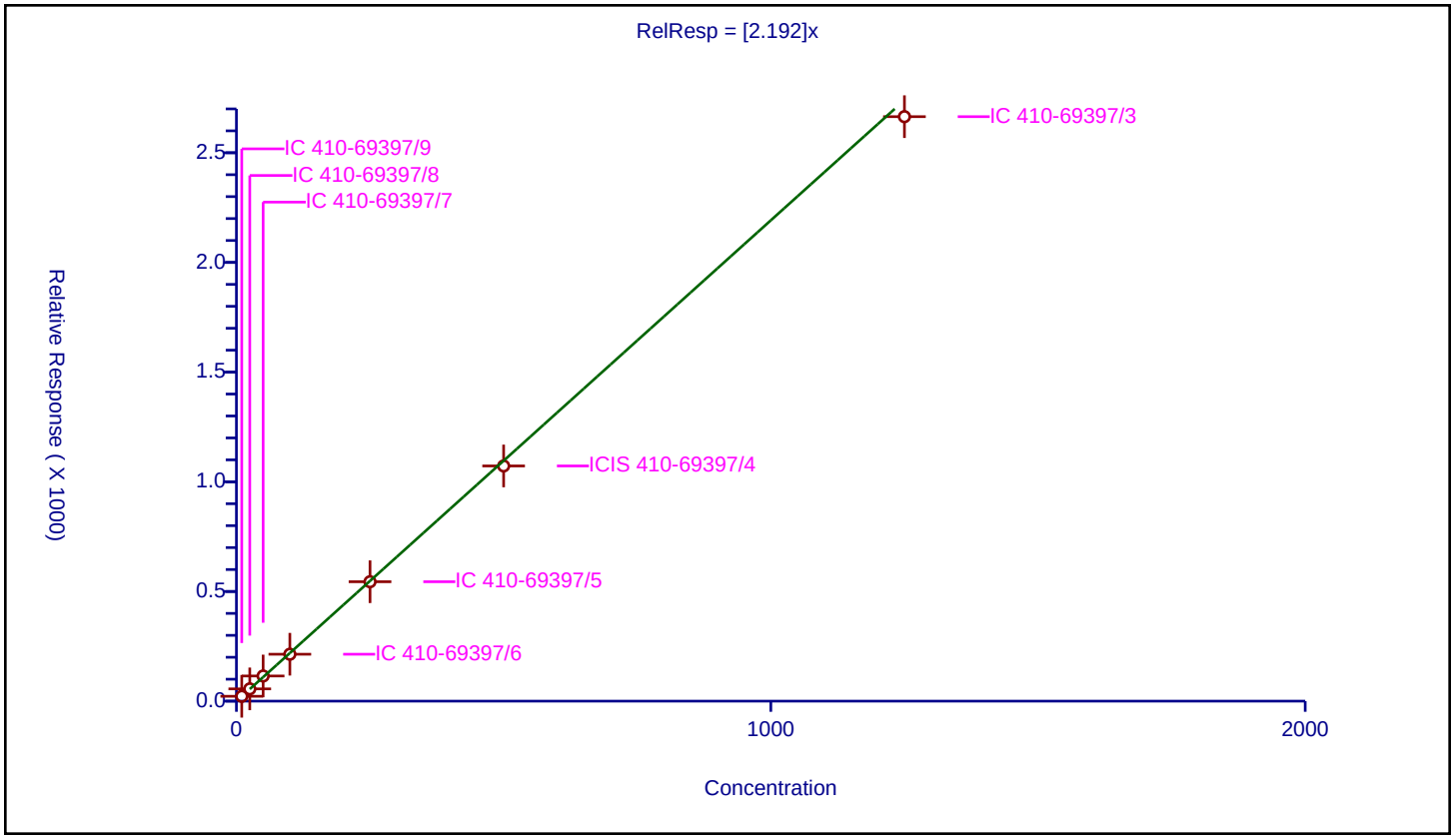
Curve Coefficients

Intercept:	0
Slope:	2.192

Error Coefficients

Standard Error:	4040000
Relative Standard Error:	2.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	10.000292	22.21217	50.0	157506.0	2.221152	Y
2	IC 410-69397/8	25.000729	55.887195	50.0	156713.0	2.235423	Y
3	IC 410-69397/7	50.001458	114.705598	50.0	155400.0	2.294045	Y
4	IC 410-69397/6	100.002917	213.90472	50.0	164063.0	2.138985	Y
5	IC 410-69397/5	250.007292	544.371096	50.0	167919.0	2.177421	Y
6	ICIS 410-69397/4	500.014585	1072.264009	50.0	174562.0	2.144465	Y
7	IC 410-69397/3	1250.036462	2664.600045	50.0	168044.0	2.131618	Y



Calibration / 1,1-Dichloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

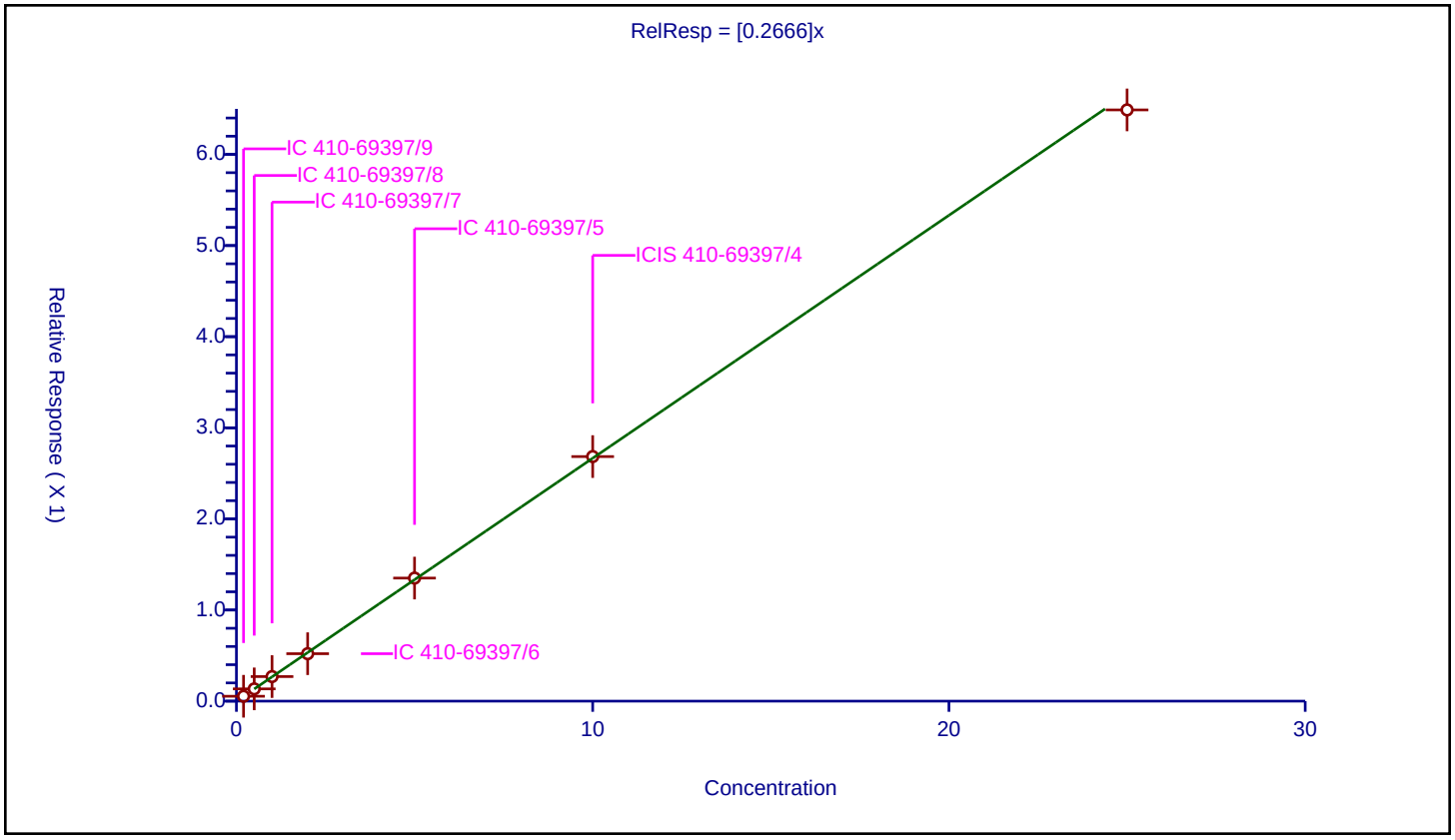
Curve Coefficients

Intercept:	0
Slope:	0.2666

Error Coefficients

Standard Error:	601000
Relative Standard Error:	1.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.053752	10.0	1980944.0	0.268761	Y
2	IC 410-69397/8	0.5	0.134561	10.0	1995085.0	0.269121	Y
3	IC 410-69397/7	1.0	0.269787	10.0	1986644.0	0.269787	Y
4	IC 410-69397/6	2.0	0.520801	10.0	1976128.0	0.260401	Y
5	IC 410-69397/5	5.0	1.350749	10.0	1978687.0	0.27015	Y
6	ICIS 410-69397/4	10.0	2.684074	10.0	2065893.0	0.268407	Y
7	IC 410-69397/3	25.0	6.488815	10.0	2051897.0	0.259553	Y



Calibration / Acetone

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

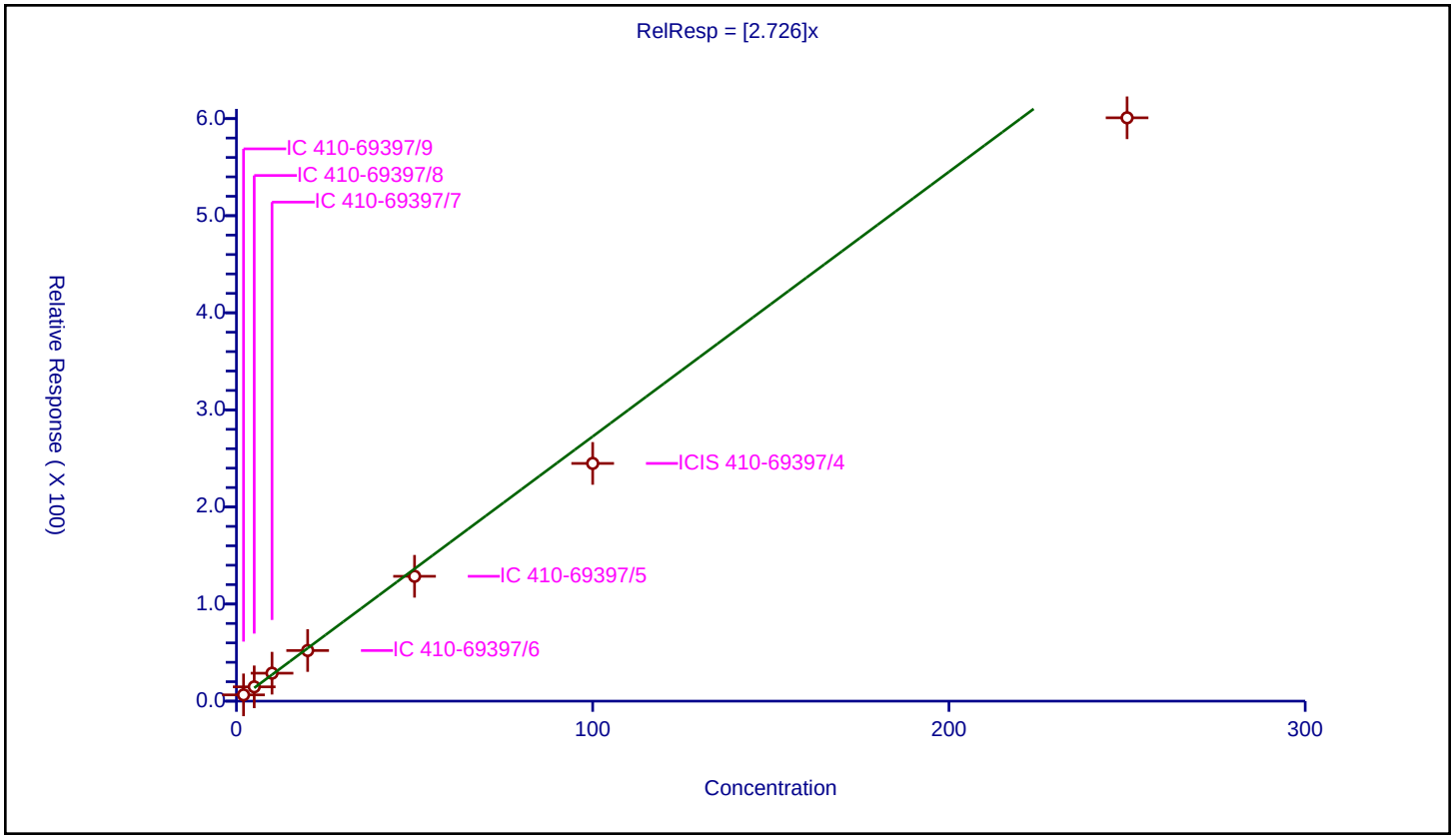
Curve Coefficients

Intercept:	0
Slope:	2.726

Error Coefficients

Standard Error:	916000
Relative Standard Error:	11.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.981

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	2.0	6.460706	50.0	157506.0	3.230353	Y
2	IC 410-69397/8	5.0	14.710011	50.0	156713.0	2.942002	Y
3	IC 410-69397/7	10.0	28.789575	50.0	155400.0	2.878958	Y
4	IC 410-69397/6	20.0	52.133936	50.0	164063.0	2.606697	Y
5	IC 410-69397/5	50.0	128.587593	50.0	167919.0	2.571752	Y
6	ICIS 410-69397/4	100.0	244.85455	50.0	174562.0	2.448546	Y
7	IC 410-69397/3	250.0	600.824486	50.0	168044.0	2.403298	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

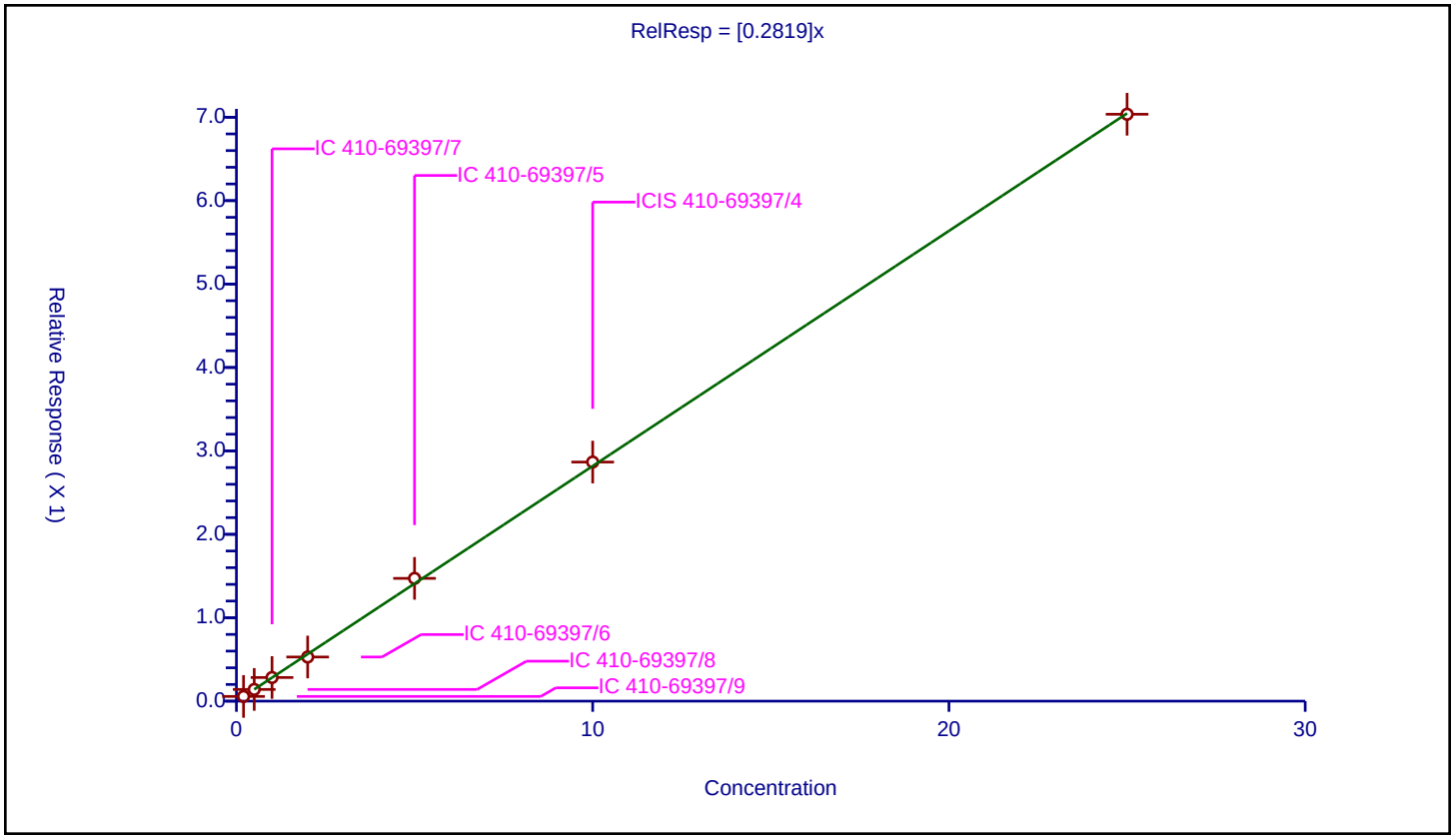
Curve Coefficients

Intercept:	0
Slope:	0.2819

Error Coefficients

Standard Error:	650000
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 410-69397/9	0.2	0.056317	10.0	1980944.0	0.281583	Y
2	IC 410-69397/8	0.5	0.14043	10.0	1995085.0	0.28086	Y
3	IC 410-69397/7	1.0	0.283533	10.0	1986644.0	0.283533	Y
4	IC 410-69397/6	2.0	0.529277	10.0	1976128.0	0.264639	Y
5	IC 410-69397/5	5.0	1.471794	10.0	1978687.0	0.294359	Y
6	ICIS 410-69397/4	10.0	2.866058	10.0	2065893.0	0.286606	Y
7	IC 410-69397/3	25.0	7.035957	10.0	2051897.0	0.281438	Y



Calibration / Iodomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

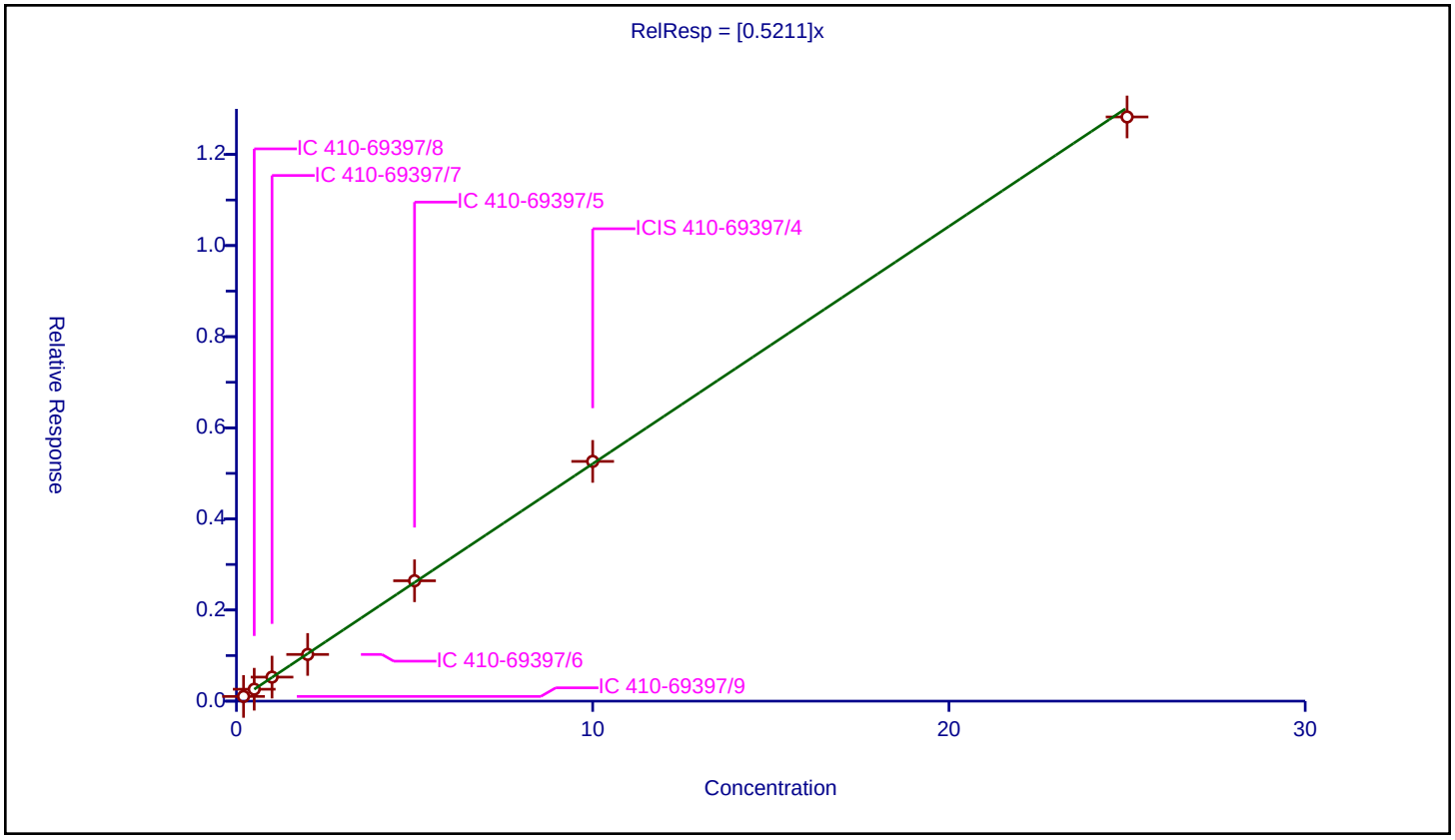
Curve Coefficients

Intercept:	0
Slope:	0.5211

Error Coefficients

Standard Error:	1190000
Relative Standard Error:	1.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.103249	10.0	1980944.0	0.516244	Y
2	IC 410-69397/8	0.5	0.261653	10.0	1995085.0	0.523306	Y
3	IC 410-69397/7	1.0	0.527709	10.0	1986644.0	0.527709	Y
4	IC 410-69397/6	2.0	1.025171	10.0	1976128.0	0.512586	Y
5	IC 410-69397/5	5.0	2.641934	10.0	1978687.0	0.528387	Y
6	ICIS 410-69397/4	10.0	5.262683	10.0	2065893.0	0.526268	Y
7	IC 410-69397/3	25.0	12.823368	10.0	2051897.0	0.512935	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

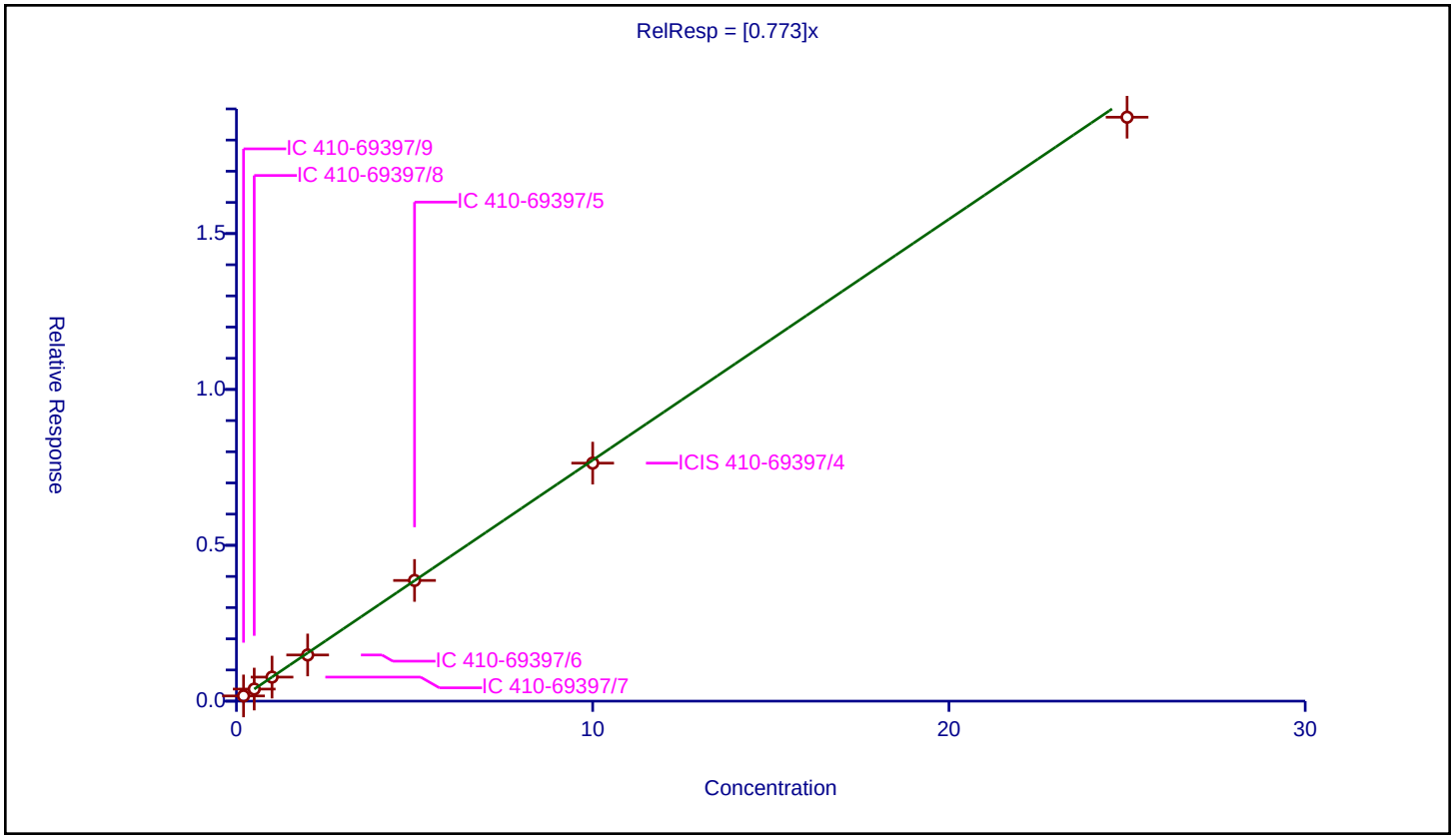
Curve Coefficients

Intercept:	0
Slope:	0.773

Error Coefficients

Standard Error:	1730000
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 410-69397/9	0.2	0.167344	10.0	1980944.0	0.836722	Y
2	IC 410-69397/8	0.5	0.387673	10.0	1995085.0	0.775345	Y
3	IC 410-69397/7	1.0	0.771301	10.0	1986644.0	0.771301	Y
4	IC 410-69397/6	2.0	1.481498	10.0	1976128.0	0.740749	Y
5	IC 410-69397/5	5.0	3.871628	10.0	1978687.0	0.774326	Y
6	ICIS 410-69397/4	10.0	7.635444	10.0	2065893.0	0.763544	Y
7	IC 410-69397/3	25.0	18.733377	10.0	2051897.0	0.749335	Y



Calibration / Methyl acetate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

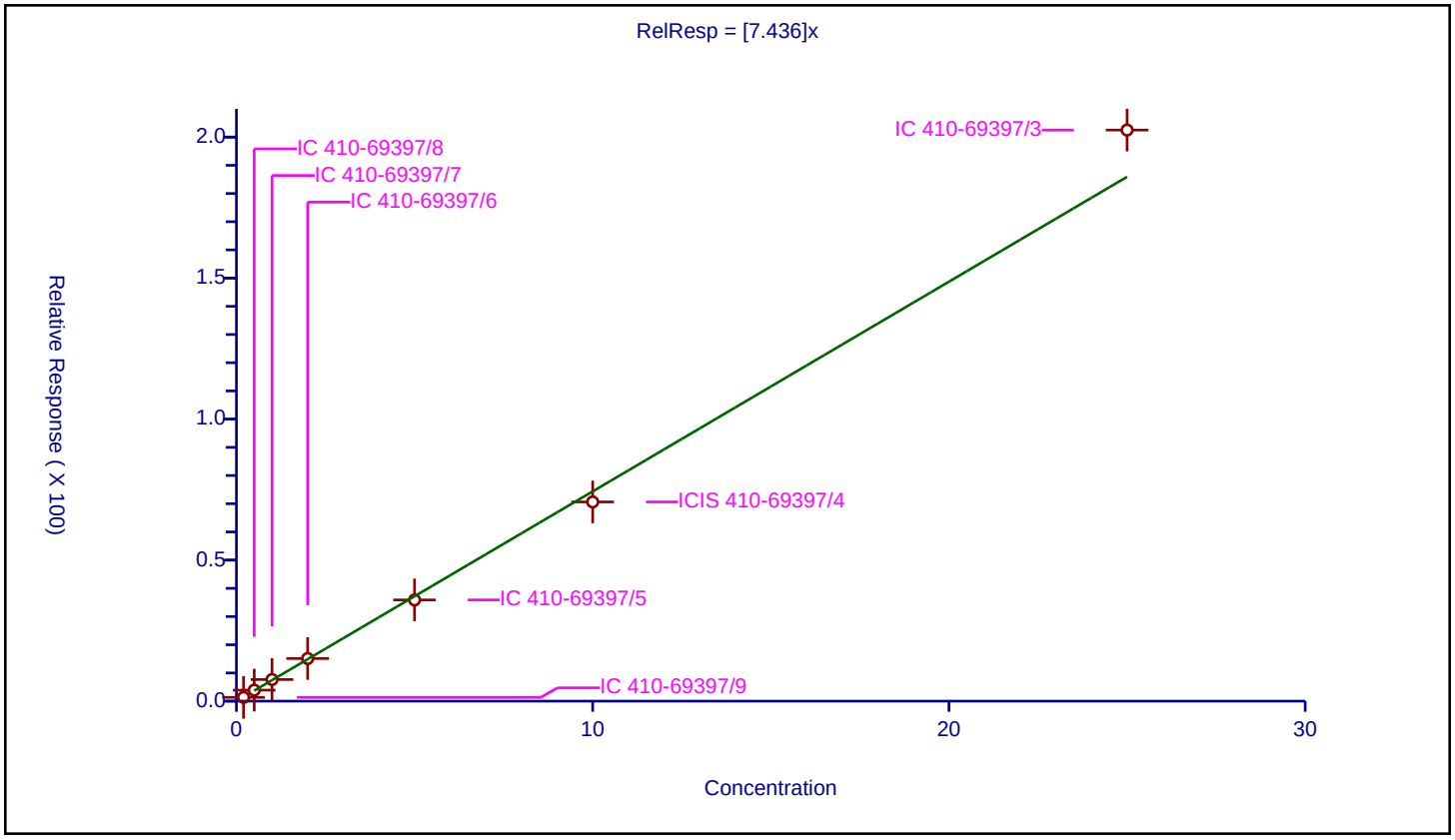
Curve Coefficients

Intercept:	0
Slope:	7.436

Error Coefficients

Standard Error:	300000
Relative Standard Error:	6.5
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	1.338679	50.0	157506.0	6.693396	Y
2	IC 410-69397/8	0.5	3.90108	50.0	156713.0	7.802161	Y
3	IC 410-69397/7	1.0	7.662484	50.0	155400.0	7.662484	Y
4	IC 410-69397/6	2.0	15.112487	50.0	164063.0	7.556244	Y
5	IC 410-69397/5	5.0	35.887541	50.0	167919.0	7.177508	Y
6	ICIS 410-69397/4	10.0	70.636507	50.0	174562.0	7.063651	Y
7	IC 410-69397/3	25.0	202.495477	50.0	168044.0	8.099819	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

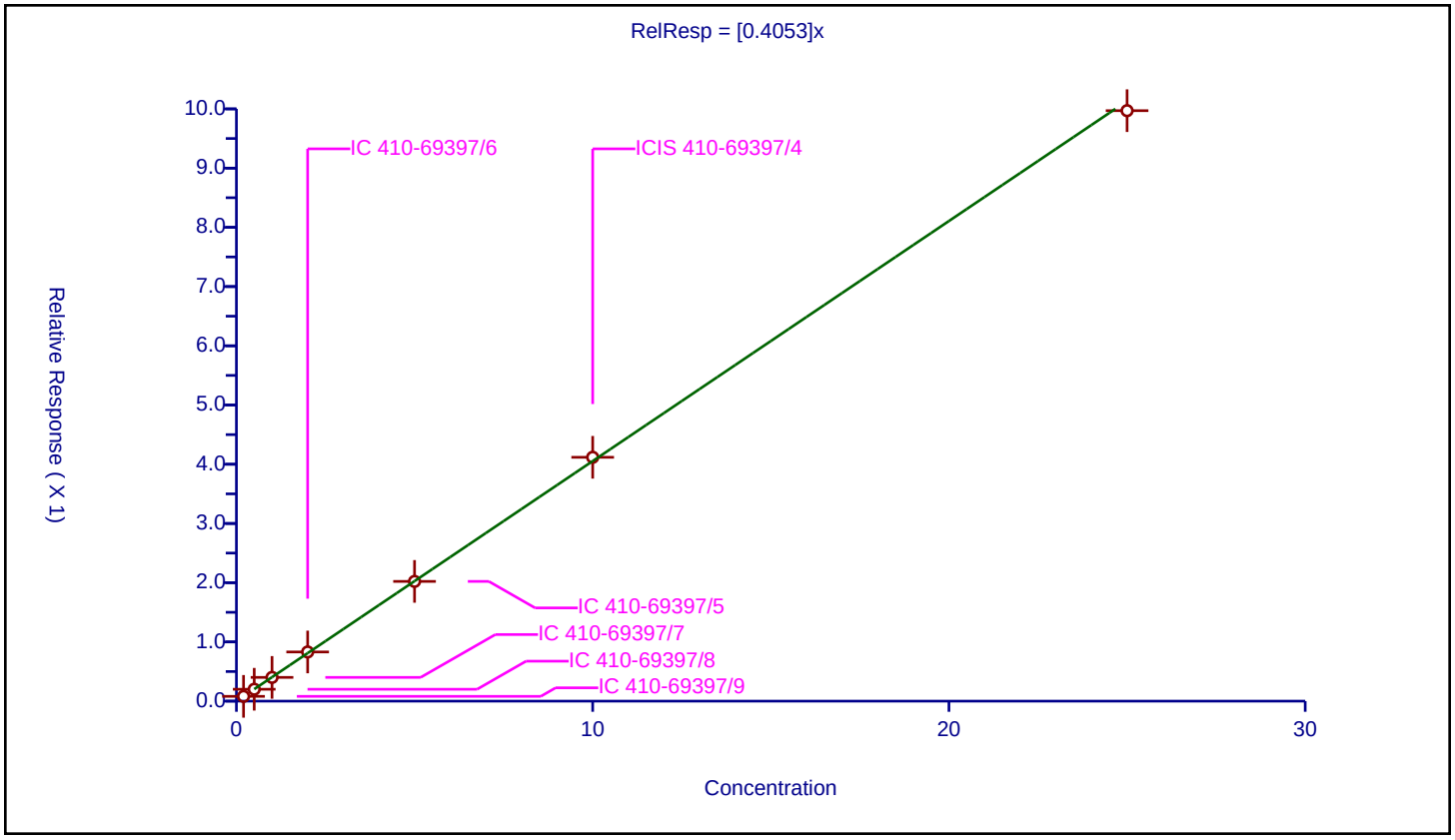
Curve Coefficients

Intercept:	0
Slope:	0.4053

Error Coefficients

Standard Error:	922000
Relative Standard Error:	1.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.080931	10.0	1980944.0	0.404656	Y
2	IC 410-69397/8	0.5	0.200894	10.0	1995085.0	0.401787	Y
3	IC 410-69397/7	1.0	0.400731	10.0	1986644.0	0.400731	Y
4	IC 410-69397/6	2.0	0.830579	10.0	1976128.0	0.415289	Y
5	IC 410-69397/5	5.0	2.021735	10.0	1978687.0	0.404347	Y
6	ICIS 410-69397/4	10.0	4.117285	10.0	2065893.0	0.411728	Y
7	IC 410-69397/3	25.0	9.96975	10.0	2051897.0	0.39879	Y



Calibration / Methylene Chloride

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

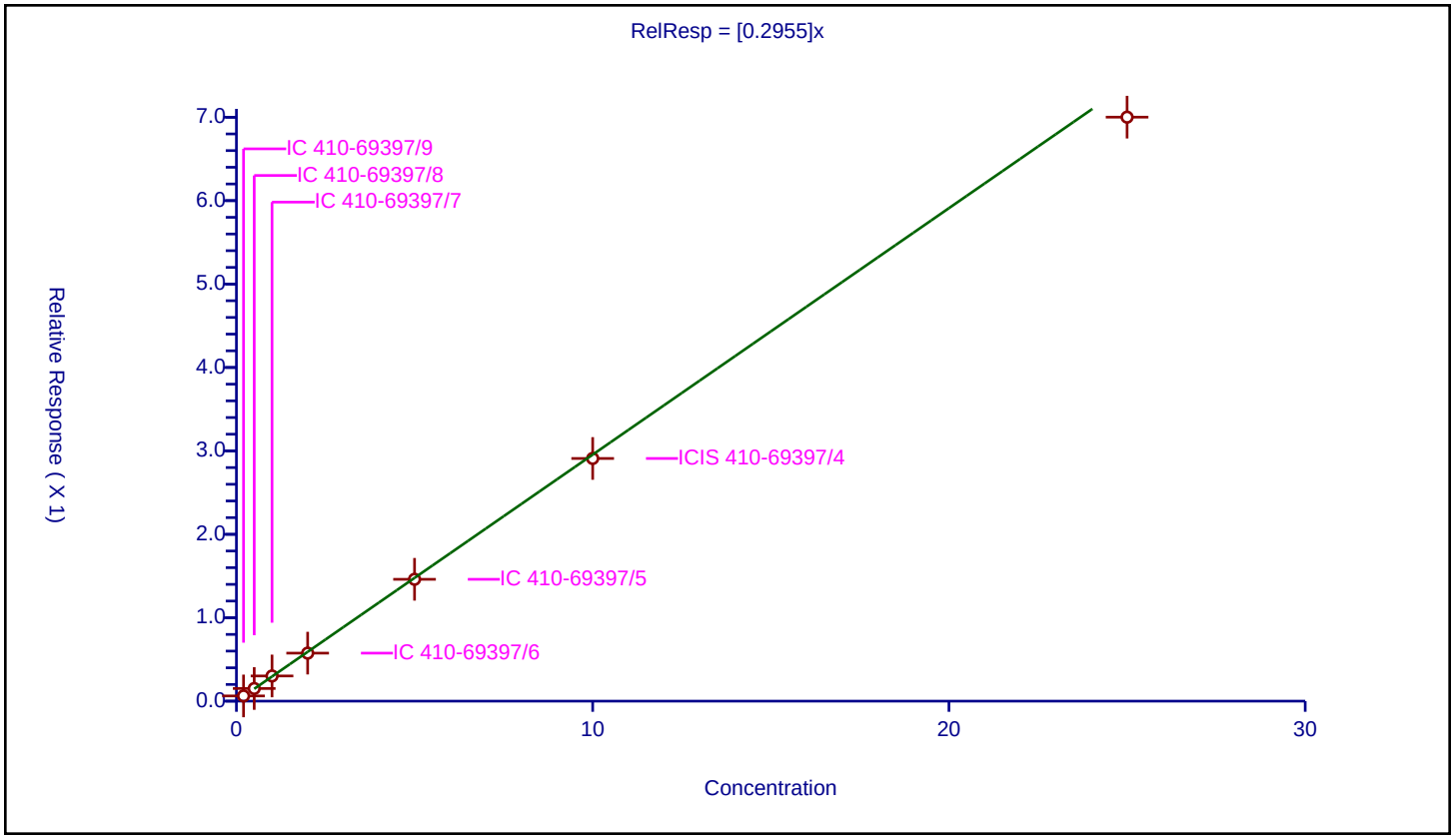
Curve Coefficients

Intercept:	0
Slope:	0.2955

Error Coefficients

Standard Error:	649000
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 410-69397/9	0.2	0.062551	10.0	1980944.0	0.312755	Y
2	IC 410-69397/8	0.5	0.151578	10.0	1995085.0	0.303155	Y
3	IC 410-69397/7	1.0	0.301735	10.0	1986644.0	0.301735	Y
4	IC 410-69397/6	2.0	0.575423	10.0	1976128.0	0.287712	Y
5	IC 410-69397/5	5.0	1.460767	10.0	1978687.0	0.292153	Y
6	ICIS 410-69397/4	10.0	2.909347	10.0	2065893.0	0.290935	Y
7	IC 410-69397/3	25.0	7.000883	10.0	2051897.0	0.280035	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

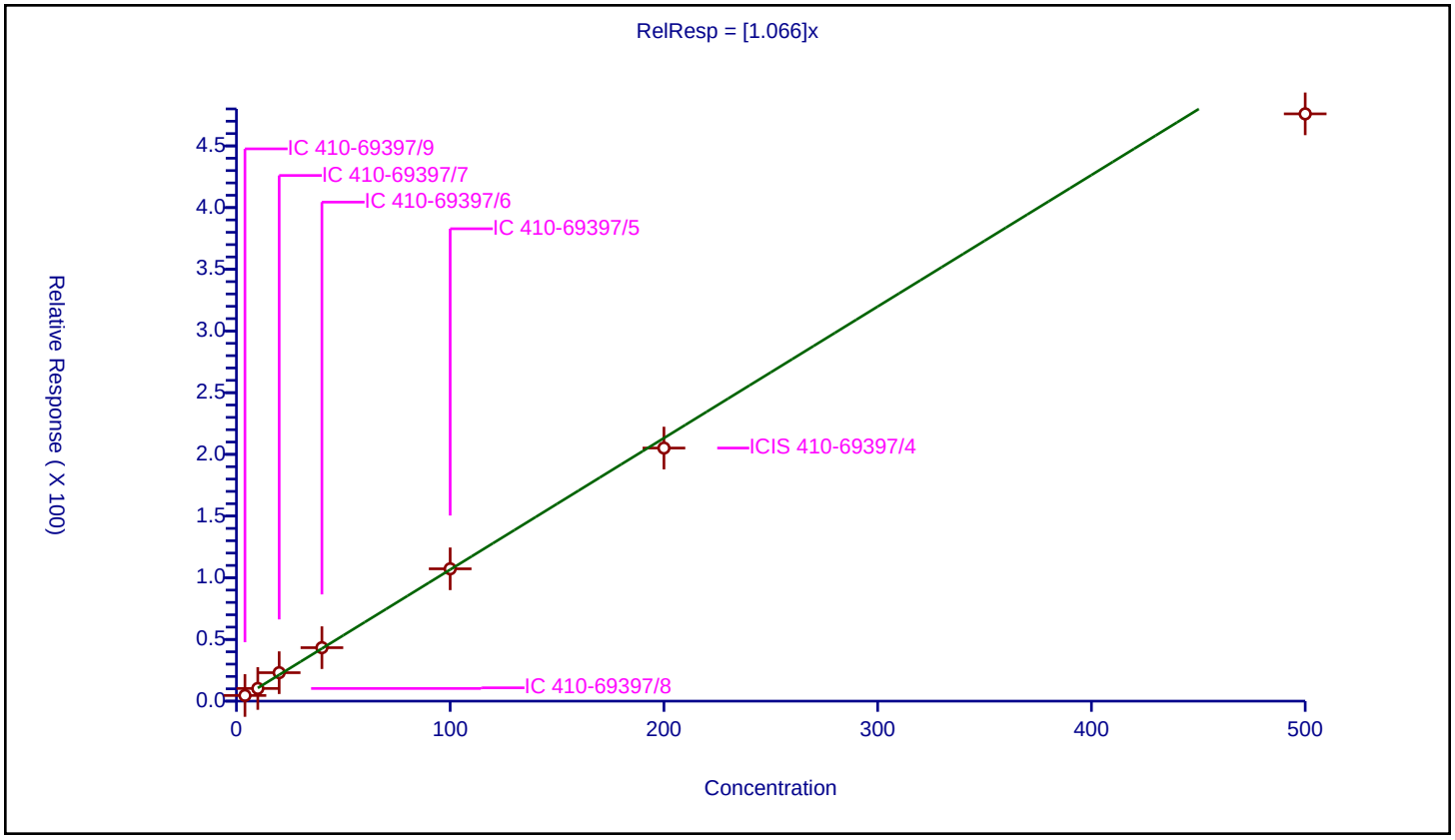
Curve Coefficients

Intercept:	0
Slope:	1.066

Error Coefficients

Standard Error:	733000
Relative Standard Error:	6.7
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	4.0	4.592206	50.0	157506.0	1.148052	Y
2	IC 410-69397/8	10.0	10.273876	50.0	156713.0	1.027388	Y
3	IC 410-69397/7	20.0	23.062741	50.0	155400.0	1.153137	Y
4	IC 410-69397/6	40.0	43.332439	50.0	164063.0	1.083311	Y
5	IC 410-69397/5	100.0	107.245458	50.0	167919.0	1.072455	Y
6	ICIS 410-69397/4	200.0	205.130842	50.0	174562.0	1.025654	Y
7	IC 410-69397/3	500.0	475.988134	50.0	168044.0	0.951976	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

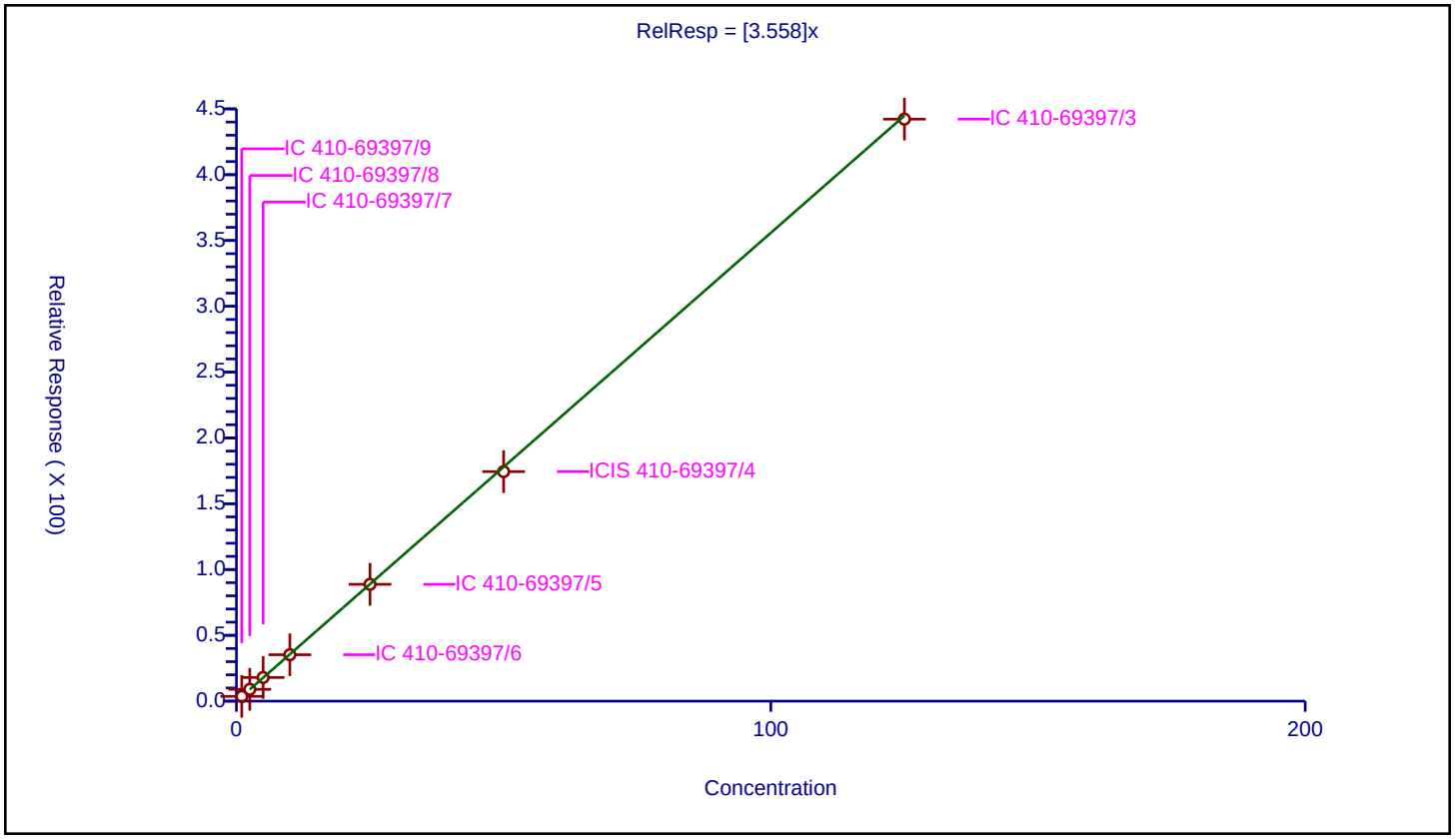
Curve Coefficients

Intercept:	0
Slope:	3.558

Error Coefficients

Standard Error:	669000
Relative Standard Error:	1.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	1.0	3.623989	50.0	157506.0	3.623989	Y
2	IC 410-69397/8	2.5	8.97692	50.0	156713.0	3.590768	Y
3	IC 410-69397/7	5.0	17.951416	50.0	155400.0	3.590283	Y
4	IC 410-69397/6	10.0	35.26115	50.0	164063.0	3.526115	Y
5	IC 410-69397/5	25.0	88.776434	50.0	167919.0	3.551057	Y
6	ICIS 410-69397/4	50.0	174.382741	50.0	174562.0	3.487655	Y
7	IC 410-69397/3	125.0	442.204125	50.0	168044.0	3.537633	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

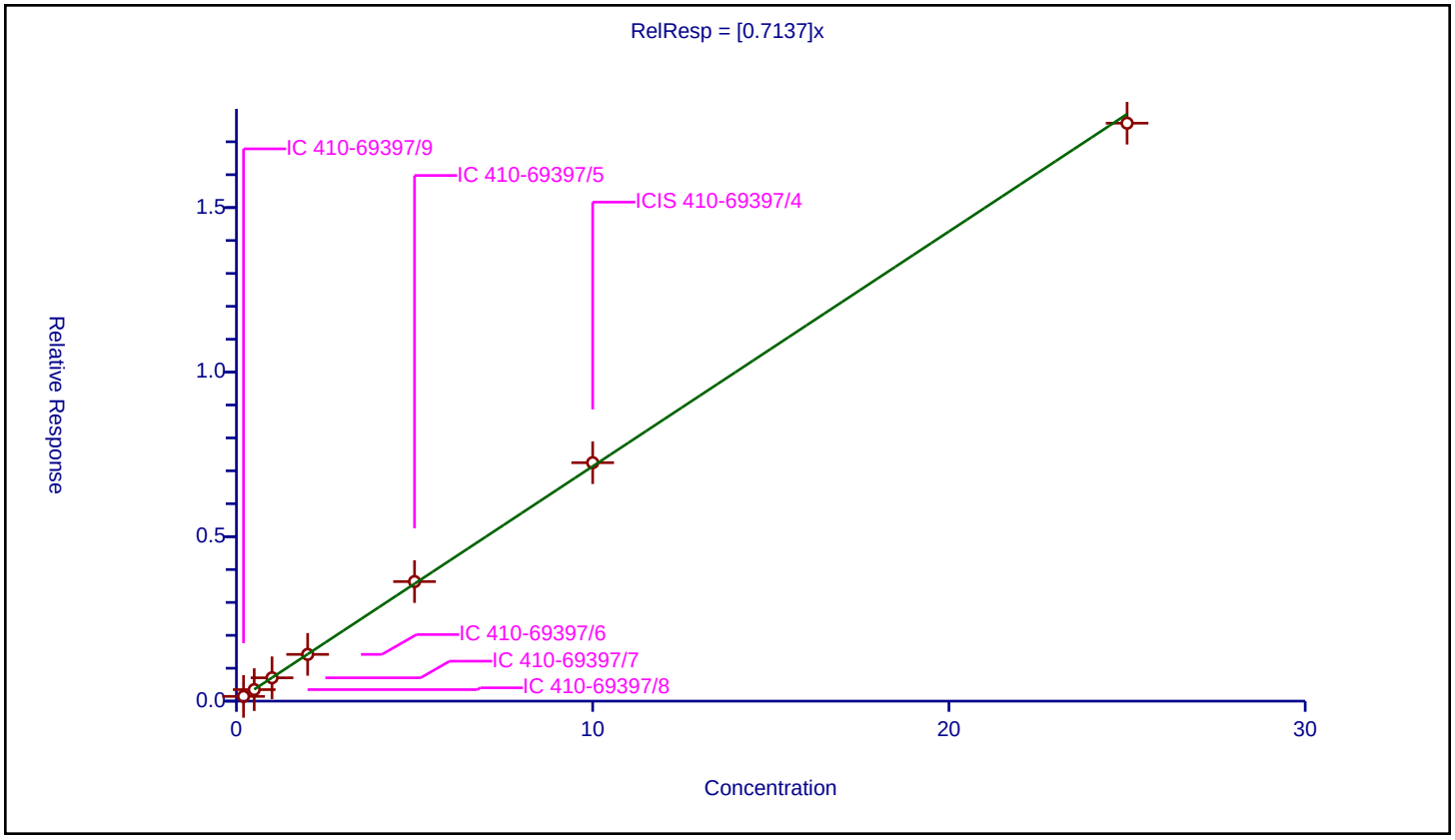
Curve Coefficients

Intercept:	0
Slope:	0.7137

Error Coefficients

Standard Error:	1630000
Relative Standard Error:	1.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.14429	10.0	1980944.0	0.721449	Y
2	IC 410-69397/8	0.5	0.350135	10.0	1995085.0	0.700271	Y
3	IC 410-69397/7	1.0	0.709644	10.0	1986644.0	0.709644	Y
4	IC 410-69397/6	2.0	1.420743	10.0	1976128.0	0.710371	Y
5	IC 410-69397/5	5.0	3.634511	10.0	1978687.0	0.726902	Y
6	ICIS 410-69397/4	10.0	7.247558	10.0	2065893.0	0.724756	Y
7	IC 410-69397/3	25.0	17.565804	10.0	2051897.0	0.702632	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

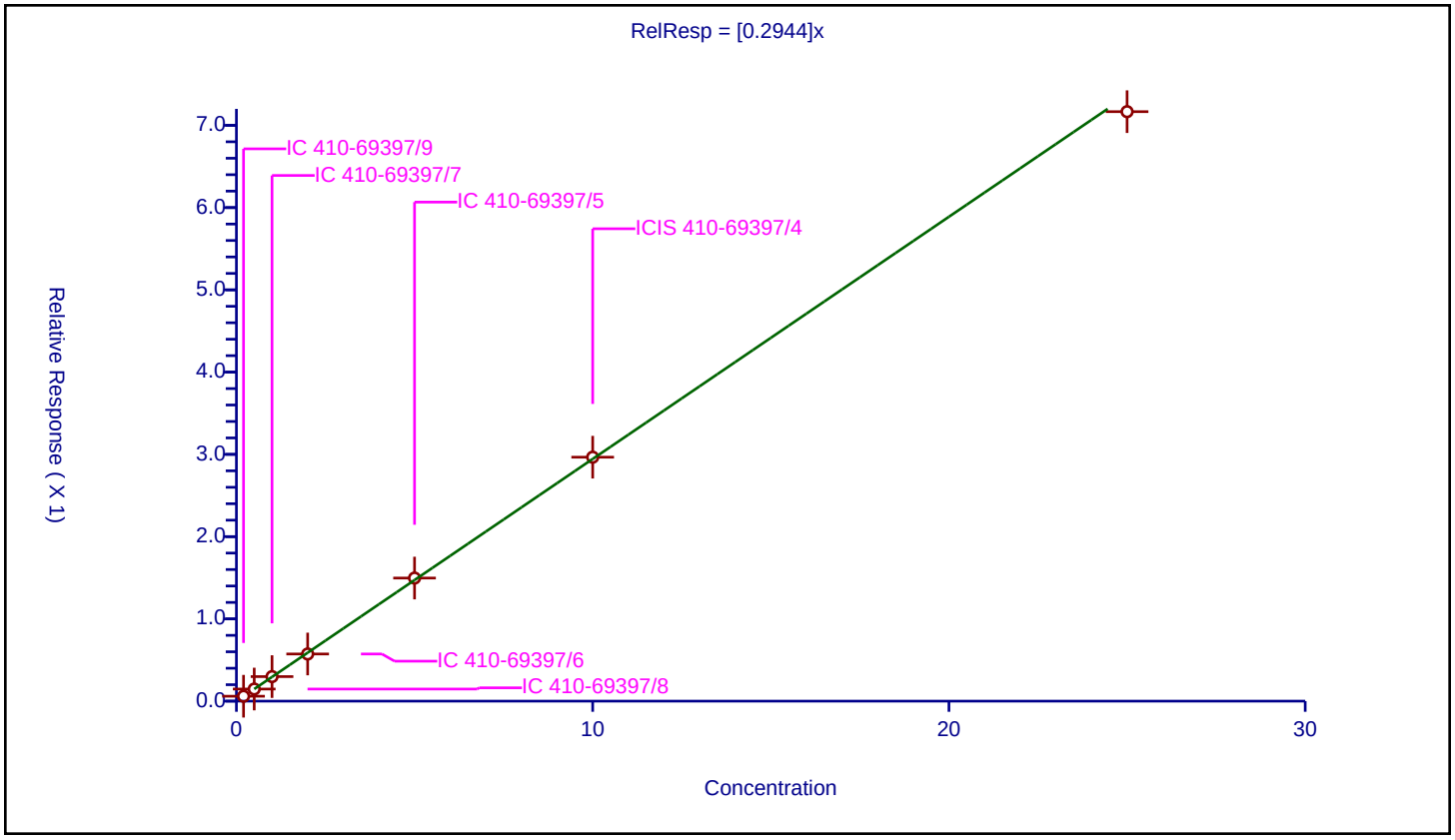
Curve Coefficients

Intercept:	0
Slope:	0.2944

Error Coefficients

Standard Error:	664000
Relative Standard Error:	1.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.059835	10.0	1980944.0	0.299176	Y
2	IC 410-69397/8	0.5	0.147041	10.0	1995085.0	0.294083	Y
3	IC 410-69397/7	1.0	0.298519	10.0	1986644.0	0.298519	Y
4	IC 410-69397/6	2.0	0.573333	10.0	1976128.0	0.286667	Y
5	IC 410-69397/5	5.0	1.496508	10.0	1978687.0	0.299302	Y
6	ICIS 410-69397/4	10.0	2.96573	10.0	2065893.0	0.296573	Y
7	IC 410-69397/3	25.0	7.166271	10.0	2051897.0	0.286651	Y



Calibration / Hexane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

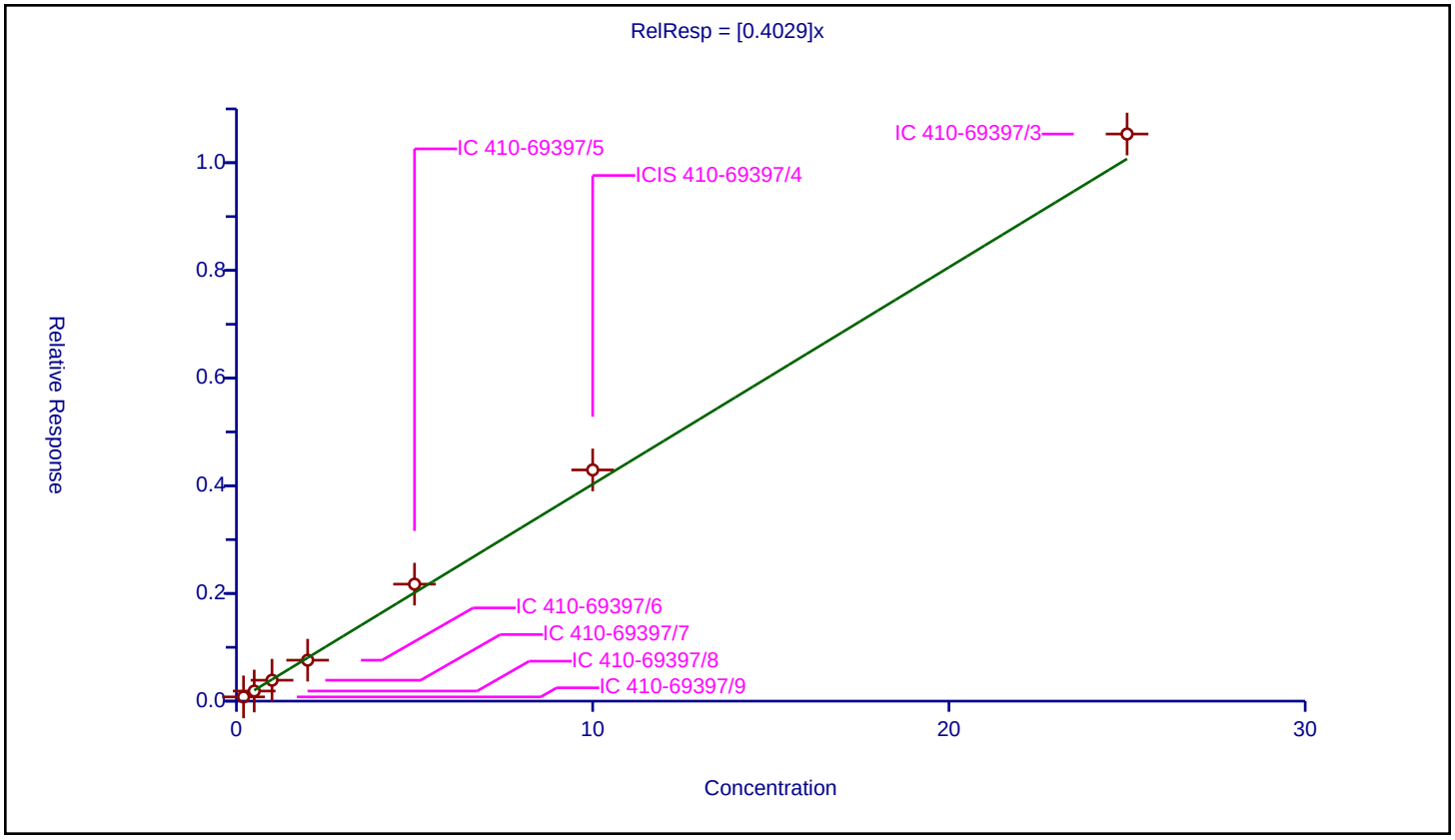
Curve Coefficients

Intercept:	0
Slope:	0.4029

Error Coefficients

Standard Error:	972000
Relative Standard Error:	6.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.078205	10.0	1980944.0	0.391026	Y
2	IC 410-69397/8	0.5	0.187511	10.0	1995085.0	0.375022	Y
3	IC 410-69397/7	1.0	0.38853	10.0	1986644.0	0.38853	Y
4	IC 410-69397/6	2.0	0.76073	10.0	1976128.0	0.380365	Y
5	IC 410-69397/5	5.0	2.17281	10.0	1978687.0	0.434562	Y
6	ICIS 410-69397/4	10.0	4.294274	10.0	2065893.0	0.429427	Y
7	IC 410-69397/3	25.0	10.533604	10.0	2051897.0	0.421344	Y



Calibration / 1,1-Dichloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

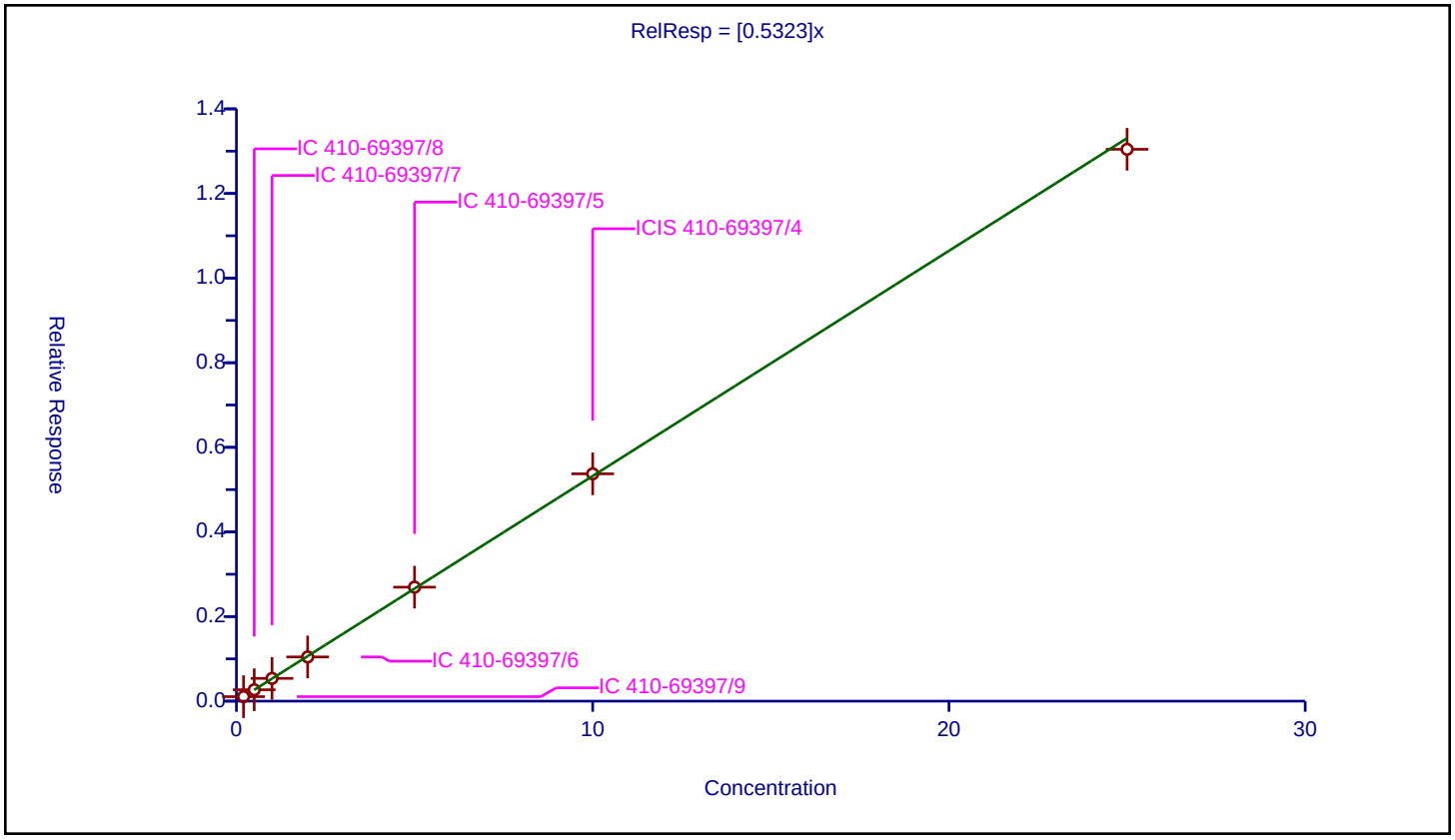
Curve Coefficients

Intercept:	0
Slope:	0.5323

Error Coefficients

Standard Error:	1210000
Relative Standard Error:	1.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.105773	10.0	1980944.0	0.528864	Y
2	IC 410-69397/8	0.5	0.269347	10.0	1995085.0	0.538694	Y
3	IC 410-69397/7	1.0	0.537822	10.0	1986644.0	0.537822	Y
4	IC 410-69397/6	2.0	1.044689	10.0	1976128.0	0.522345	Y
5	IC 410-69397/5	5.0	2.694489	10.0	1978687.0	0.538898	Y
6	ICIS 410-69397/4	10.0	5.373487	10.0	2065893.0	0.537349	Y
7	IC 410-69397/3	25.0	13.044841	10.0	2051897.0	0.521794	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

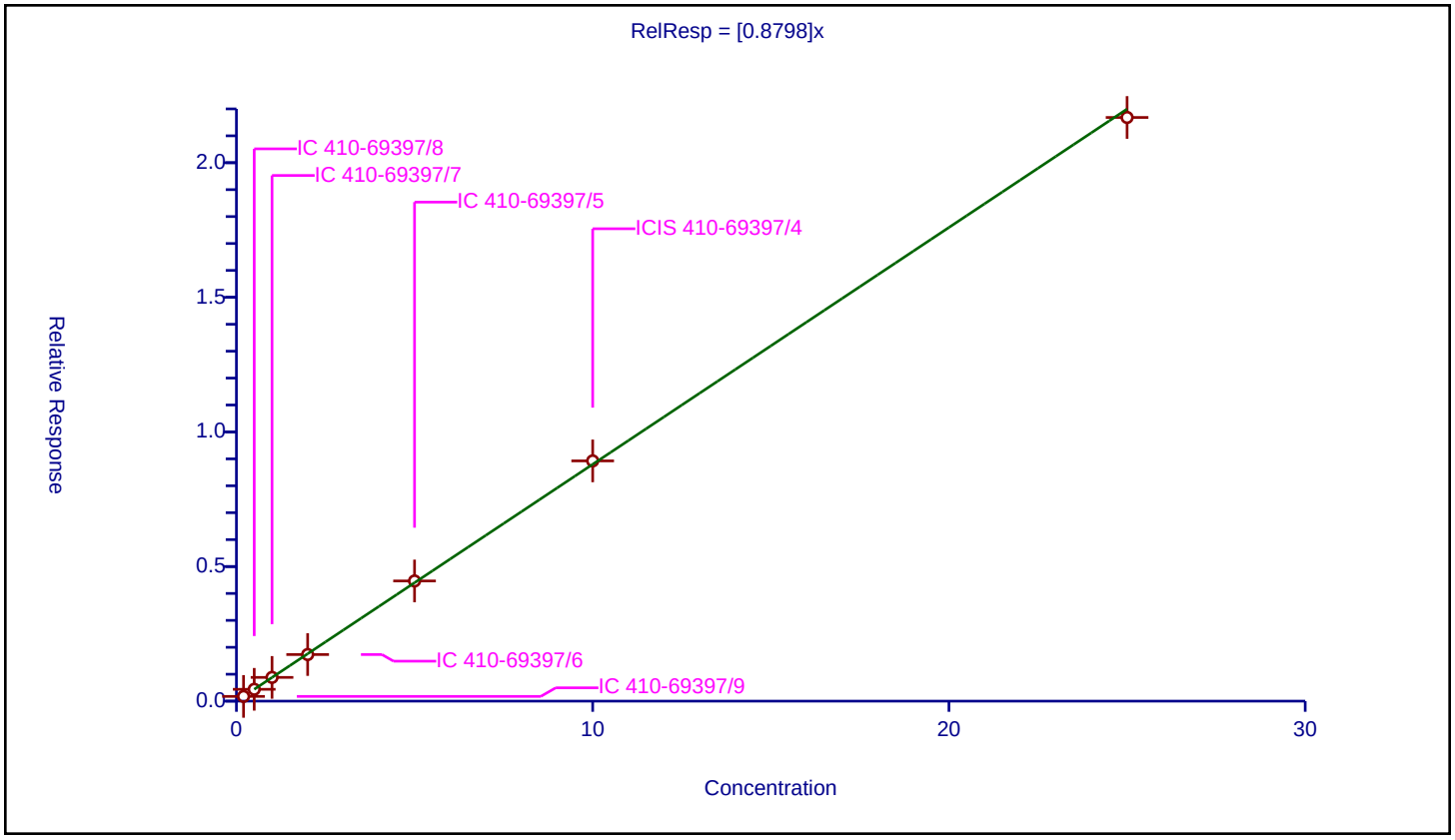
Curve Coefficients

Intercept:	0
Slope:	0.8798

Error Coefficients

Standard Error:	2010000
Relative Standard Error:	1.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.175598	10.0	1980944.0	0.87799	Y
2	IC 410-69397/8	0.5	0.440142	10.0	1995085.0	0.880283	Y
3	IC 410-69397/7	1.0	0.882221	10.0	1986644.0	0.882221	Y
4	IC 410-69397/6	2.0	1.730672	10.0	1976128.0	0.865336	Y
5	IC 410-69397/5	5.0	4.464076	10.0	1978687.0	0.892815	Y
6	ICIS 410-69397/4	10.0	8.925041	10.0	2065893.0	0.892504	Y
7	IC 410-69397/3	25.0	21.681658	10.0	2051897.0	0.867266	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

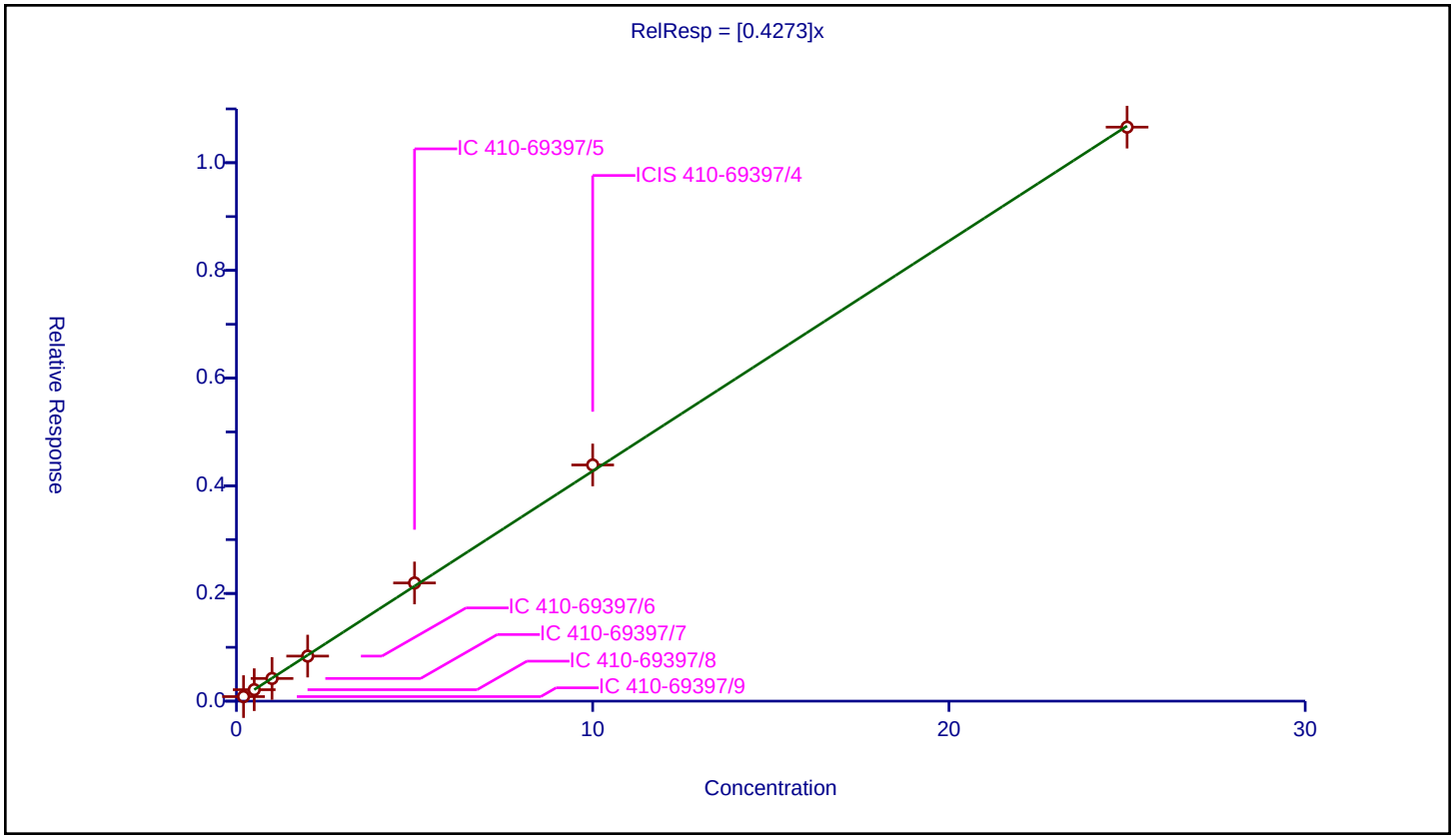
Curve Coefficients

Intercept:	0
Slope:	0.4273

Error Coefficients

Standard Error:	986000
Relative Standard Error:	2.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.084328	10.0	1980944.0	0.421642	Y
2	IC 410-69397/8	0.5	0.212848	10.0	1995085.0	0.425696	Y
3	IC 410-69397/7	1.0	0.421308	10.0	1986644.0	0.421308	Y
4	IC 410-69397/6	2.0	0.83651	10.0	1976128.0	0.418255	Y
5	IC 410-69397/5	5.0	2.195284	10.0	1978687.0	0.439057	Y
6	ICIS 410-69397/4	10.0	4.386471	10.0	2065893.0	0.438647	Y
7	IC 410-69397/3	25.0	10.661188	10.0	2051897.0	0.426448	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

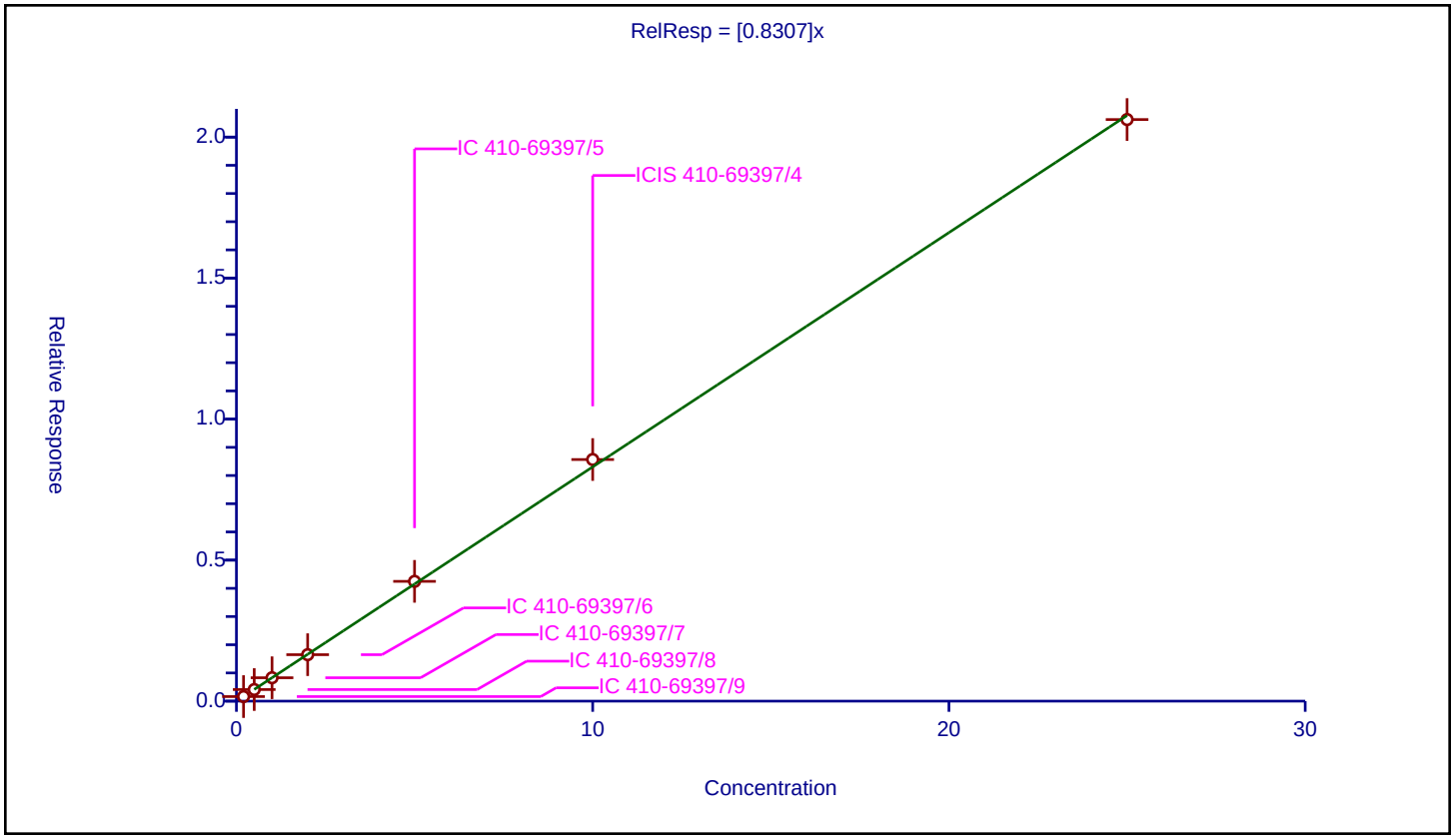
Curve Coefficients

Intercept:	0
Slope:	0.8307

Error Coefficients

Standard Error:	1910000
Relative Standard Error:	2.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.161675	10.0	1980944.0	0.808377	Y
2	IC 410-69397/8	0.5	0.41092	10.0	1995085.0	0.82184	Y
3	IC 410-69397/7	1.0	0.82953	10.0	1986644.0	0.82953	Y
4	IC 410-69397/6	2.0	1.647469	10.0	1976128.0	0.823735	Y
5	IC 410-69397/5	5.0	4.247261	10.0	1978687.0	0.849452	Y
6	ICIS 410-69397/4	10.0	8.567438	10.0	2065893.0	0.856744	Y
7	IC 410-69397/3	25.0	20.622687	10.0	2051897.0	0.824907	Y



Calibration / 2-Butanone (MEK)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

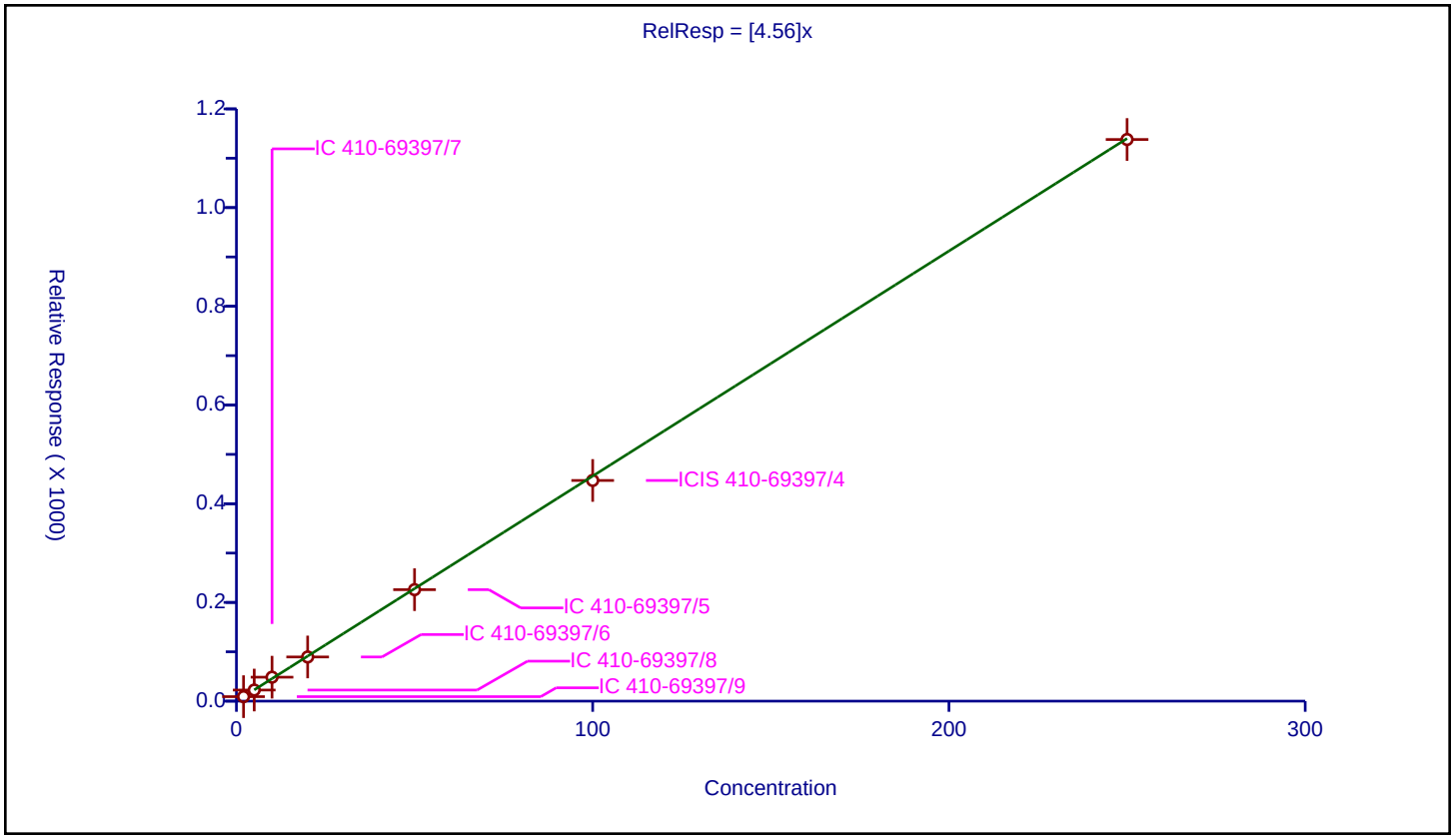
Curve Coefficients

Intercept:	0
Slope:	4.56

Error Coefficients

Standard Error:	1720000
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 410-69397/9	2.0	9.104733	50.0	157506.0	4.552366	Y
2	IC 410-69397/8	5.0	22.491752	50.0	156713.0	4.49835	Y
3	IC 410-69397/7	10.0	48.543436	50.0	155400.0	4.854344	Y
4	IC 410-69397/6	20.0	89.516527	50.0	164063.0	4.475826	Y
5	IC 410-69397/5	50.0	225.853239	50.0	167919.0	4.517065	Y
6	ICIS 410-69397/4	100.0	447.134256	50.0	174562.0	4.471343	Y
7	IC 410-69397/3	250.0	1138.000167	50.0	168044.0	4.552001	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

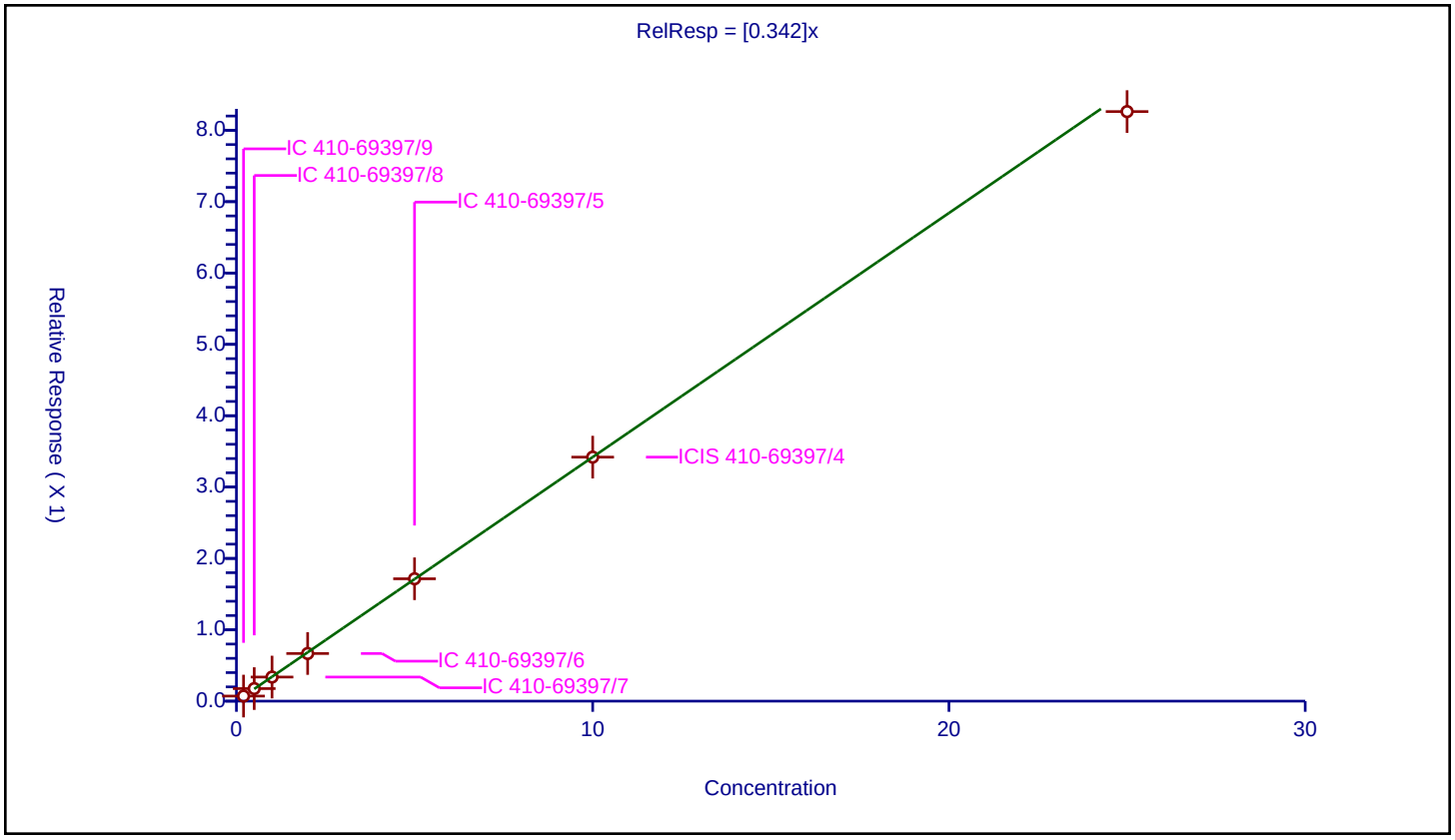
Curve Coefficients

Intercept:	0
Slope:	0.342

Error Coefficients

Standard Error:	765000
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 410-69397/9	0.2	0.071072	10.0	1980944.0	0.355361	Y
2	IC 410-69397/8	0.5	0.175987	10.0	1995085.0	0.351975	Y
3	IC 410-69397/7	1.0	0.337655	10.0	1986644.0	0.337655	Y
4	IC 410-69397/6	2.0	0.667598	10.0	1976128.0	0.333799	Y
5	IC 410-69397/5	5.0	1.7149	10.0	1978687.0	0.34298	Y
6	ICIS 410-69397/4	10.0	3.419645	10.0	2065893.0	0.341964	Y
7	IC 410-69397/3	25.0	8.262223	10.0	2051897.0	0.330489	Y



Calibration / 2,2-Dichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

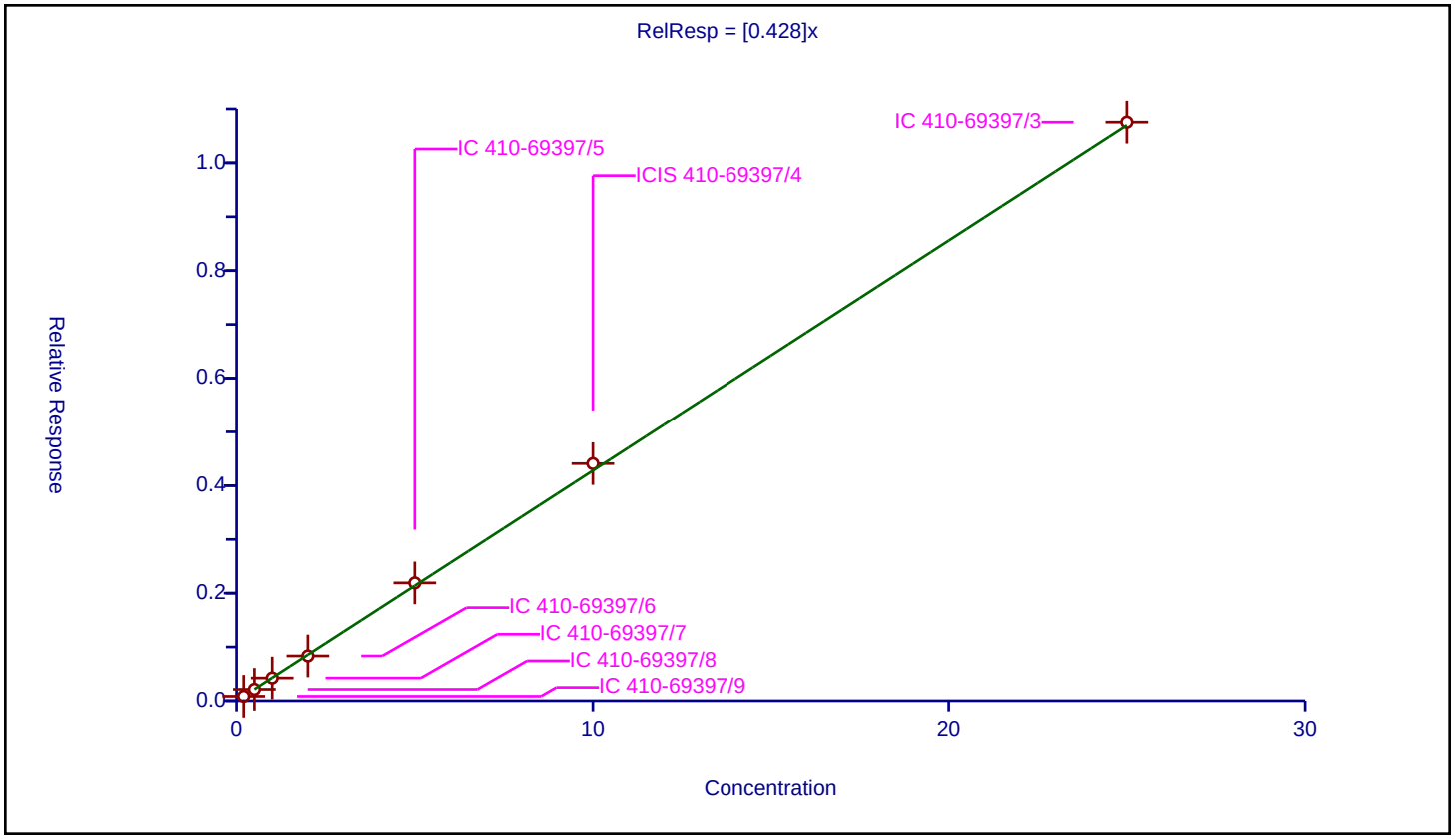
Curve Coefficients

Intercept:	0
Slope:	0.428

Error Coefficients

Standard Error:	994000
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 410-69397/9	0.2	0.083915	10.0	1980944.0	0.419573	Y
2	IC 410-69397/8	0.5	0.212913	10.0	1995085.0	0.425826	Y
3	IC 410-69397/7	1.0	0.423856	10.0	1986644.0	0.423856	Y
4	IC 410-69397/6	2.0	0.833934	10.0	1976128.0	0.416967	Y
5	IC 410-69397/5	5.0	2.19163	10.0	1978687.0	0.438326	Y
6	ICIS 410-69397/4	10.0	4.410006	10.0	2065893.0	0.441001	Y
7	IC 410-69397/3	25.0	10.755111	10.0	2051897.0	0.430204	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

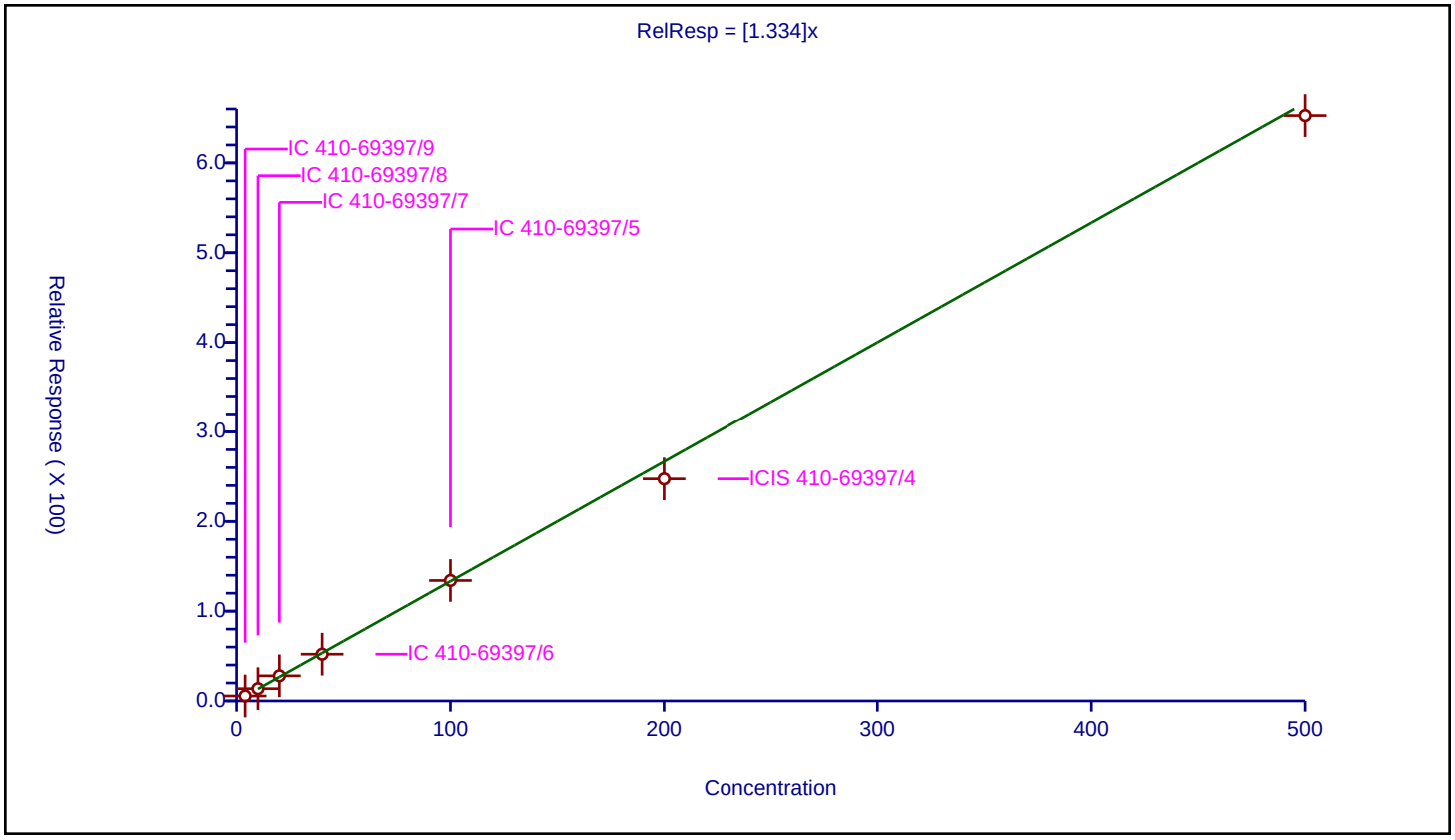
Curve Coefficients

Intercept:	0
Slope:	1.334

Error Coefficients

Standard Error:	983000
Relative Standard Error:	4.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	4.0	5.534392	50.0	157506.0	1.383598	Y
2	IC 410-69397/8	10.0	13.671808	50.0	156713.0	1.367181	Y
3	IC 410-69397/7	20.0	27.980373	50.0	155400.0	1.399019	Y
4	IC 410-69397/6	40.0	52.037937	50.0	164063.0	1.300948	Y
5	IC 410-69397/5	100.0	134.159625	50.0	167919.0	1.341596	Y
6	ICIS 410-69397/4	200.0	247.428707	50.0	174562.0	1.237144	Y
7	IC 410-69397/3	500.0	652.679953	50.0	168044.0	1.30536	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

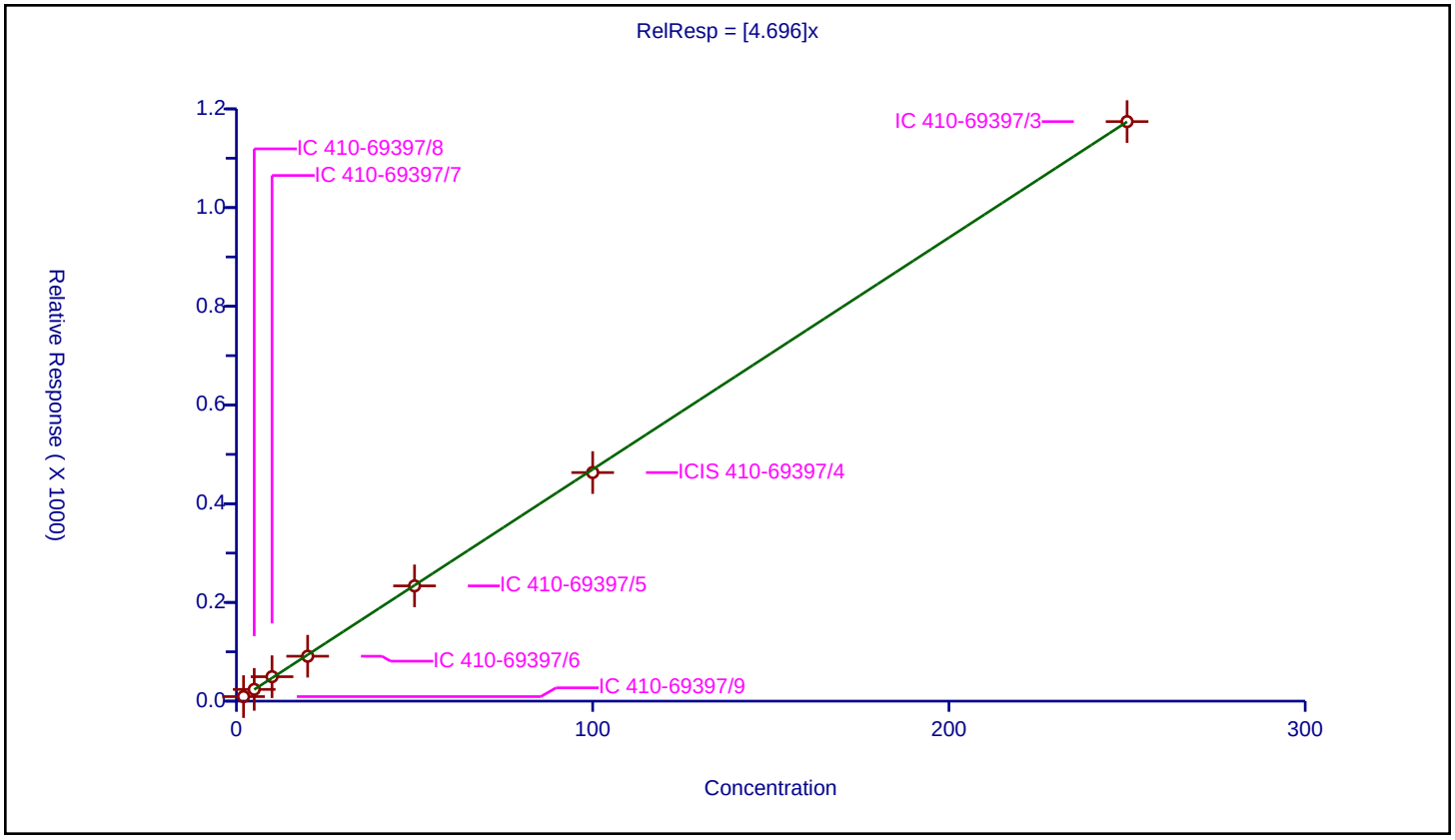
Curve Coefficients

Intercept:	0
Slope:	4.696

Error Coefficients

Standard Error:	1780000
Relative Standard Error:	2.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	2.0	9.194253	50.0	157506.0	4.597126	Y
2	IC 410-69397/8	5.0	23.85252	50.0	156713.0	4.770504	Y
3	IC 410-69397/7	10.0	49.522523	50.0	155400.0	4.952252	Y
4	IC 410-69397/6	20.0	91.019608	50.0	164063.0	4.55098	Y
5	IC 410-69397/5	50.0	233.528963	50.0	167919.0	4.670579	Y
6	ICIS 410-69397/4	100.0	463.135734	50.0	174562.0	4.631357	Y
7	IC 410-69397/3	250.0	1174.265073	50.0	168044.0	4.69706	Y



Calibration / Chlorobromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

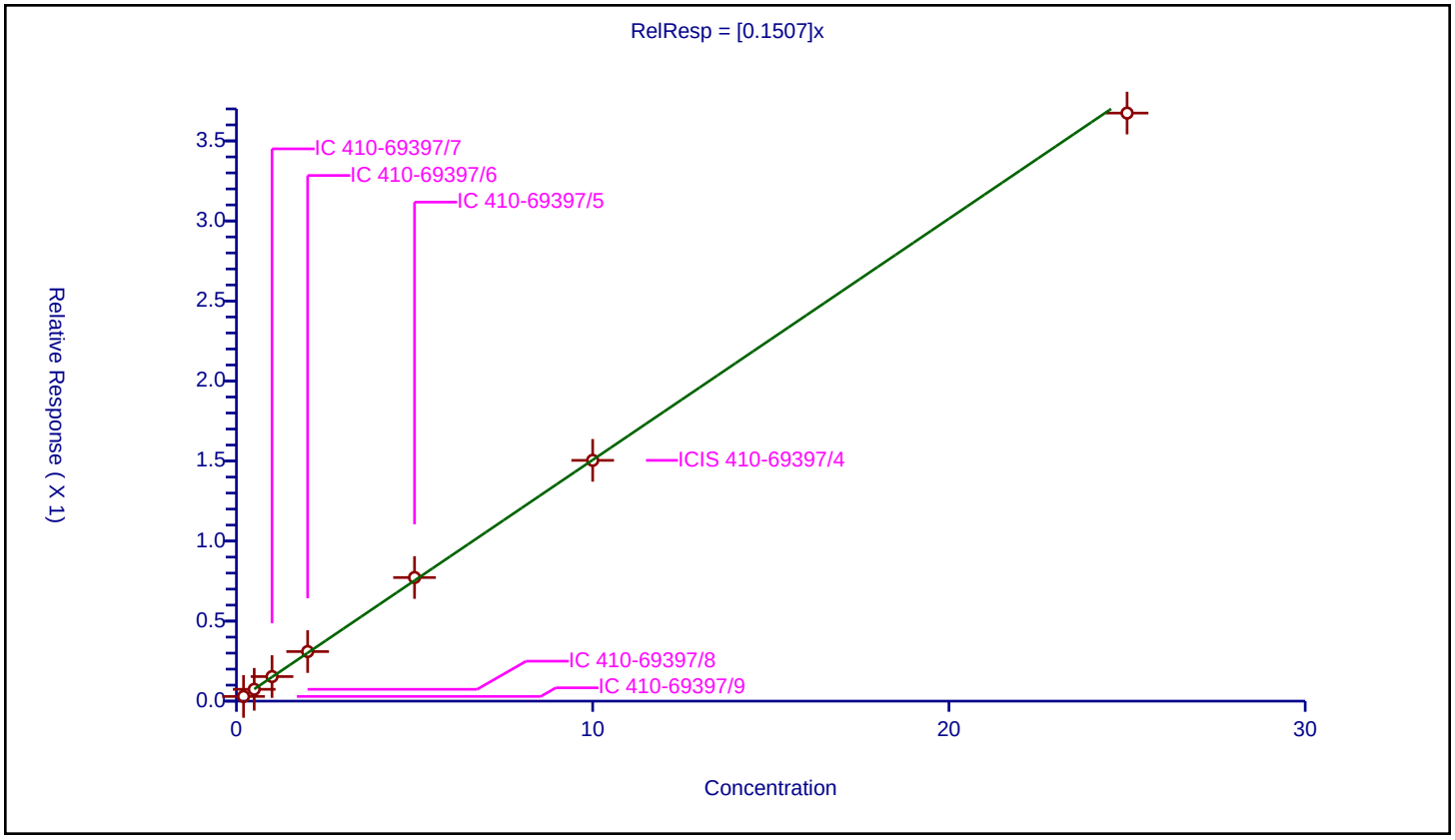
Curve Coefficients

Intercept:	0
Slope:	0.1507

Error Coefficients

Standard Error:	340000
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 410-69397/9	0.2	0.029319	10.0	1980944.0	0.146597	Y
2	IC 410-69397/8	0.5	0.074042	10.0	1995085.0	0.148084	Y
3	IC 410-69397/7	1.0	0.153495	10.0	1986644.0	0.153495	Y
4	IC 410-69397/6	2.0	0.309686	10.0	1976128.0	0.154843	Y
5	IC 410-69397/5	5.0	0.772356	10.0	1978687.0	0.154471	Y
6	ICIS 410-69397/4	10.0	1.504357	10.0	2065893.0	0.150436	Y
7	IC 410-69397/3	25.0	3.673956	10.0	2051897.0	0.146958	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

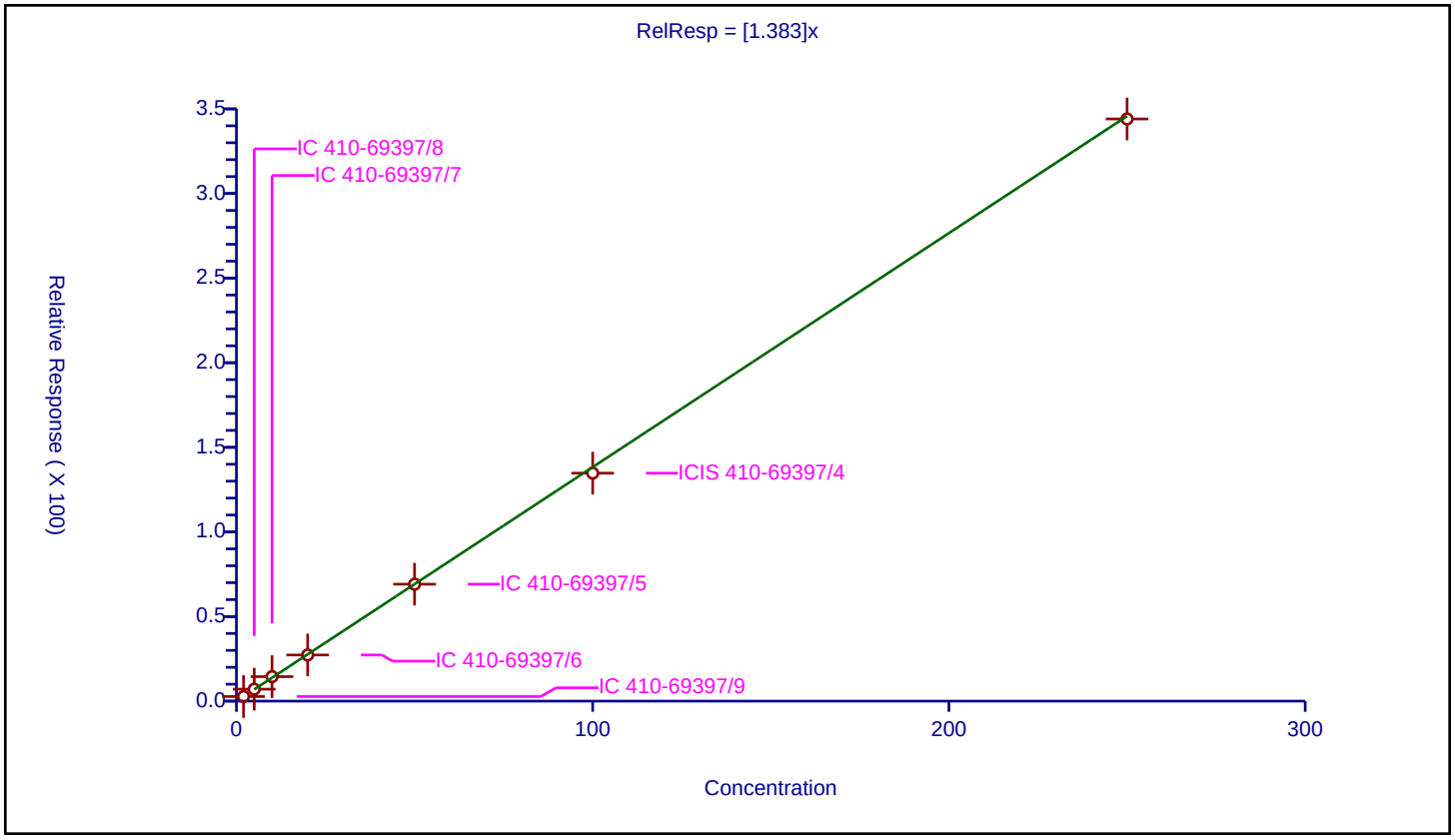
Curve Coefficients

Intercept:	0
Slope:	1.383

Error Coefficients

Standard Error:	520000
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 410-69397/9	2.0	2.708151	50.0	157506.0	1.354075	Y
2	IC 410-69397/8	5.0	7.05334	50.0	156713.0	1.410668	Y
3	IC 410-69397/7	10.0	14.472973	50.0	155400.0	1.447297	Y
4	IC 410-69397/6	20.0	27.261784	50.0	164063.0	1.363089	Y
5	IC 410-69397/5	50.0	69.106534	50.0	167919.0	1.382131	Y
6	ICIS 410-69397/4	100.0	134.730067	50.0	174562.0	1.347301	Y
7	IC 410-69397/3	250.0	344.047987	50.0	168044.0	1.376192	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

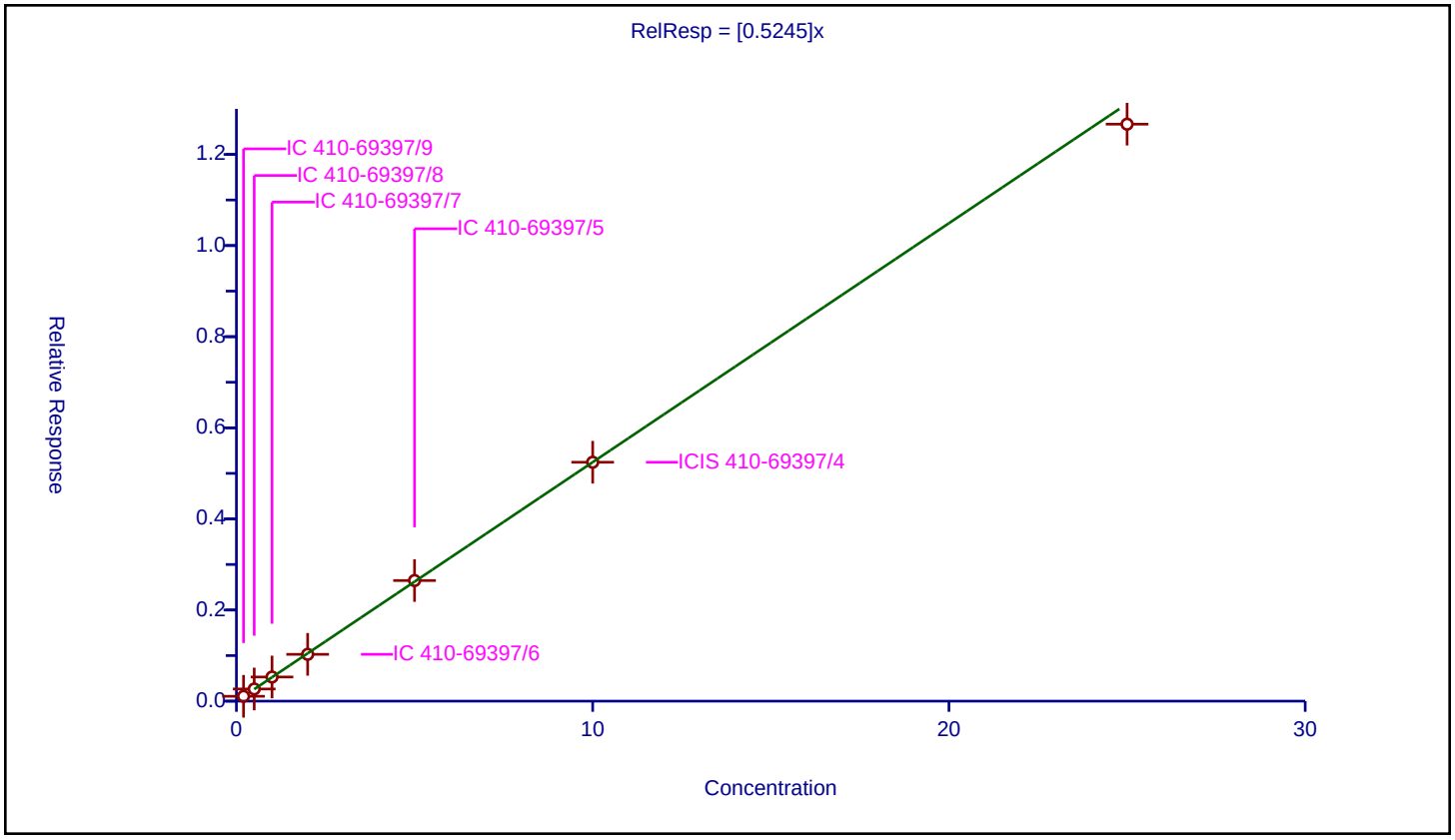
Curve Coefficients

Intercept:	0
Slope:	0.5245

Error Coefficients

Standard Error:	1170000
Relative Standard Error:	2.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.106692	10.0	1980944.0	0.533458	Y
2	IC 410-69397/8	0.5	0.267061	10.0	1995085.0	0.534123	Y
3	IC 410-69397/7	1.0	0.529873	10.0	1986644.0	0.529873	Y
4	IC 410-69397/6	2.0	1.027398	10.0	1976128.0	0.513699	Y
5	IC 410-69397/5	5.0	2.647544	10.0	1978687.0	0.529509	Y
6	ICIS 410-69397/4	10.0	5.243519	10.0	2065893.0	0.524352	Y
7	IC 410-69397/3	25.0	12.664666	10.0	2051897.0	0.506587	Y



Calibration / Dibromofluoromethane (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

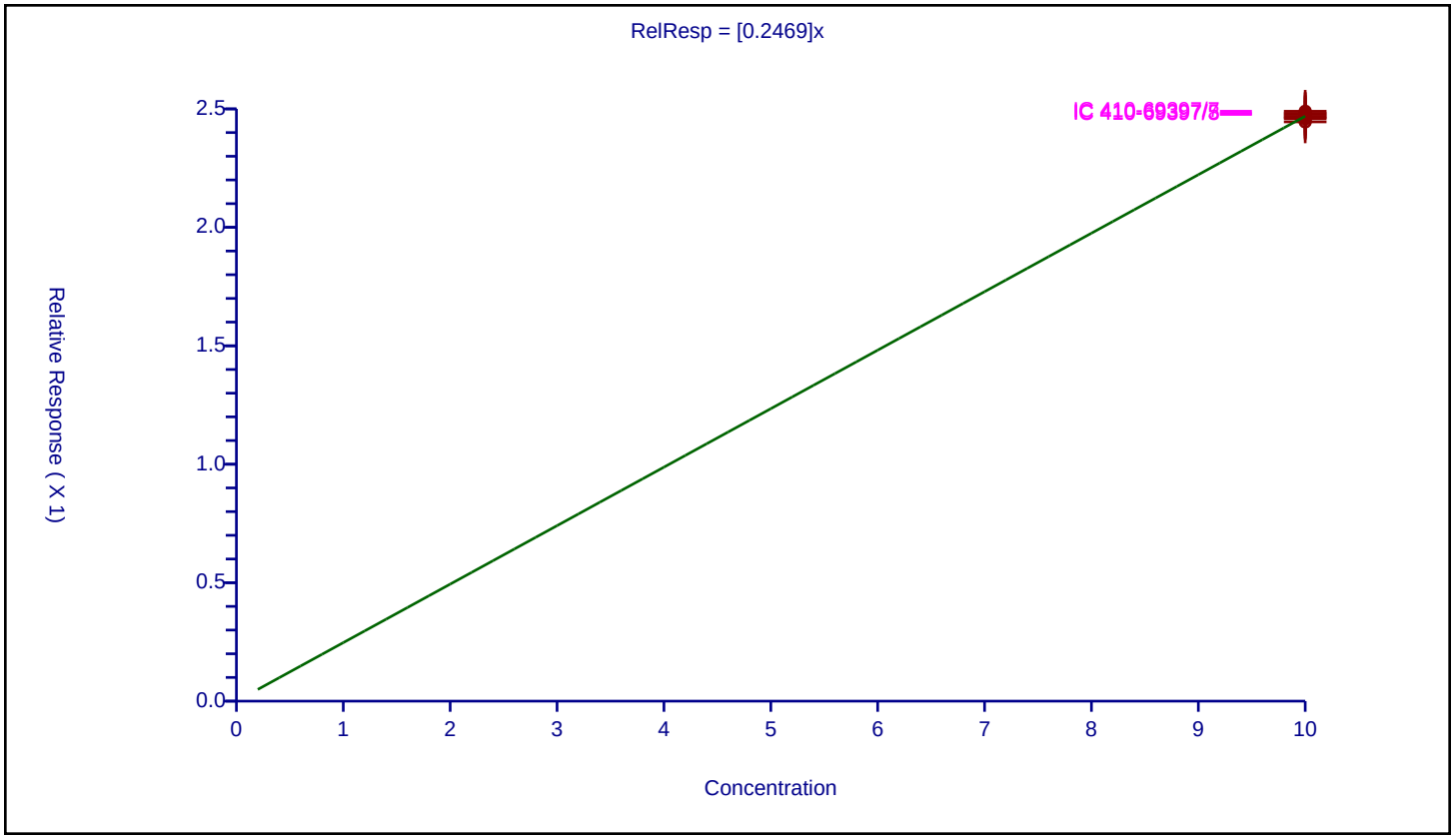
Curve Coefficients

Intercept:	0
Slope:	0.2469

Error Coefficients

Standard Error:	535000
Relative Standard Error:	0.6
Correlation Coefficient:	NA
Coefficient of Determination (Adjusted):	0.000000000000000111

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/3	10.0	2.445152	10.0	2051897.0	0.244515	Y
2	ICIS 410-69397/4	10.0	2.458312	10.0	2065893.0	0.245831	Y
3	IC 410-69397/5	10.0	2.481423	10.0	1978687.0	0.248142	Y
4	IC 410-69397/6	10.0	2.468499	10.0	1976128.0	0.24685	Y
5	IC 410-69397/7	10.0	2.489958	10.0	1986644.0	0.248996	Y
6	IC 410-69397/8	10.0	2.476646	10.0	1995085.0	0.247665	Y
7	IC 410-69397/9	10.0	2.463921	10.0	1980944.0	0.246392	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

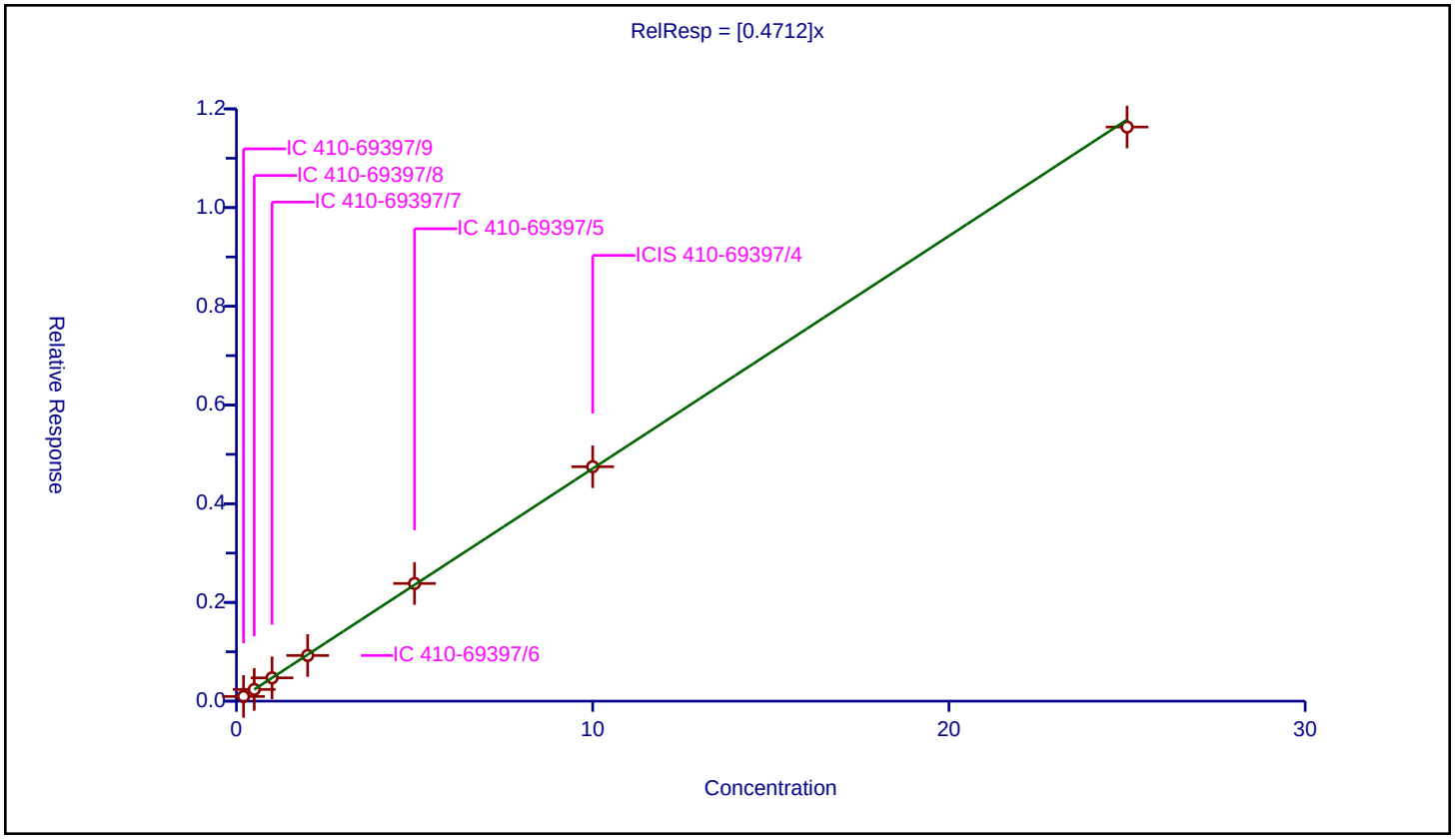
Curve Coefficients

Intercept:	0
Slope:	0.4712

Error Coefficients

Standard Error:	1070000
Relative Standard Error:	1.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.094556	10.0	1980944.0	0.47278	Y
2	IC 410-69397/8	0.5	0.237213	10.0	1995085.0	0.474426	Y
3	IC 410-69397/7	1.0	0.471992	10.0	1986644.0	0.471992	Y
4	IC 410-69397/6	2.0	0.924814	10.0	1976128.0	0.462407	Y
5	IC 410-69397/5	5.0	2.38398	10.0	1978687.0	0.476796	Y
6	ICIS 410-69397/4	10.0	4.749931	10.0	2065893.0	0.474993	Y
7	IC 410-69397/3	25.0	11.632757	10.0	2051897.0	0.46531	Y



Calibration / Cyclohexane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

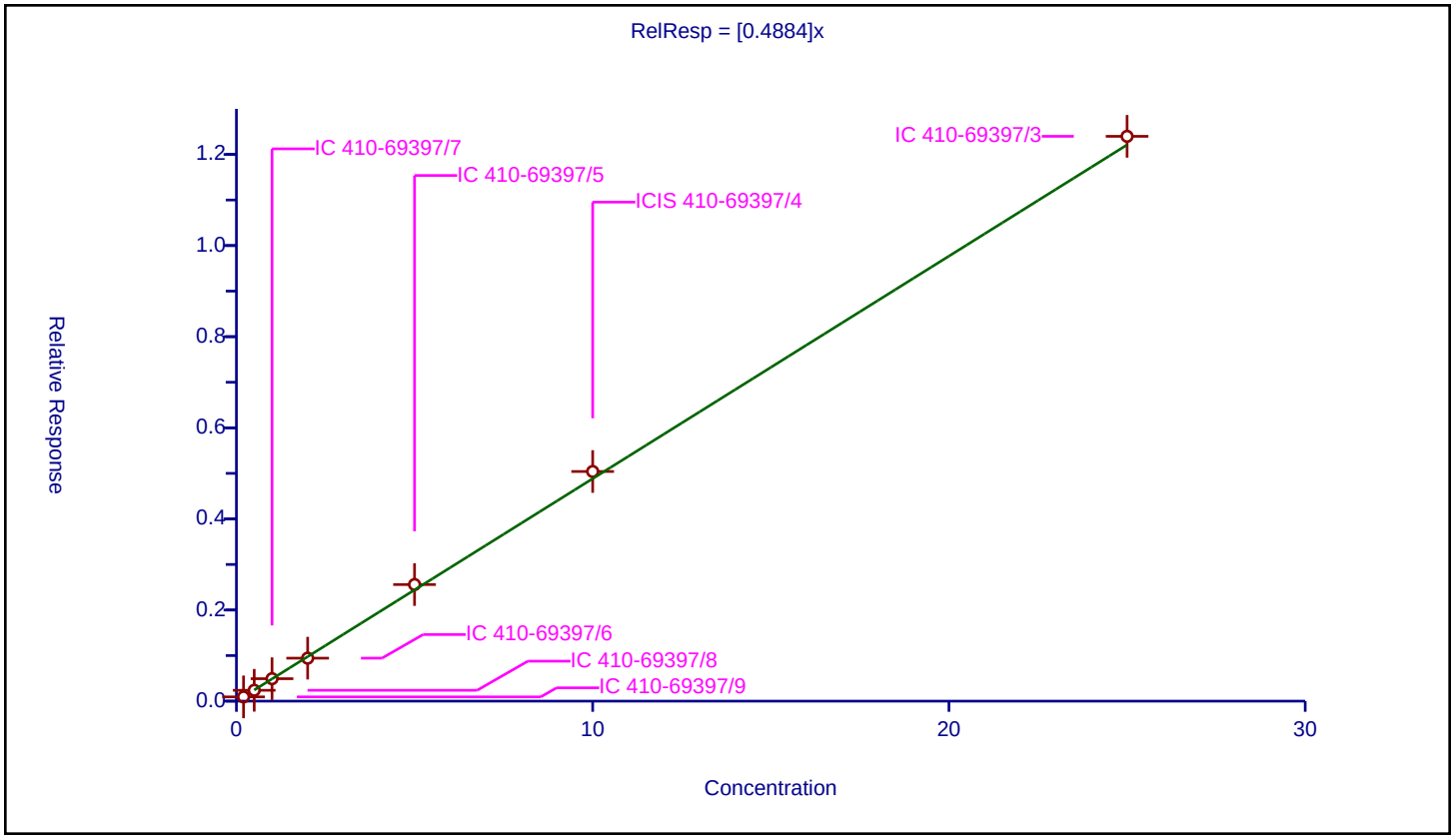
Curve Coefficients

Intercept:	0
Slope:	0.4884

Error Coefficients

Standard Error:	1140000
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 410-69397/9	0.2	0.093193	10.0	1980944.0	0.465965	Y
2	IC 410-69397/8	0.5	0.238526	10.0	1995085.0	0.477052	Y
3	IC 410-69397/7	1.0	0.492267	10.0	1986644.0	0.492267	Y
4	IC 410-69397/6	2.0	0.943481	10.0	1976128.0	0.471741	Y
5	IC 410-69397/5	5.0	2.559475	10.0	1978687.0	0.511895	Y
6	ICIS 410-69397/4	10.0	5.041055	10.0	2065893.0	0.504105	Y
7	IC 410-69397/3	25.0	12.397845	10.0	2051897.0	0.495914	Y



Calibration / 1,1-Dichloropropene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

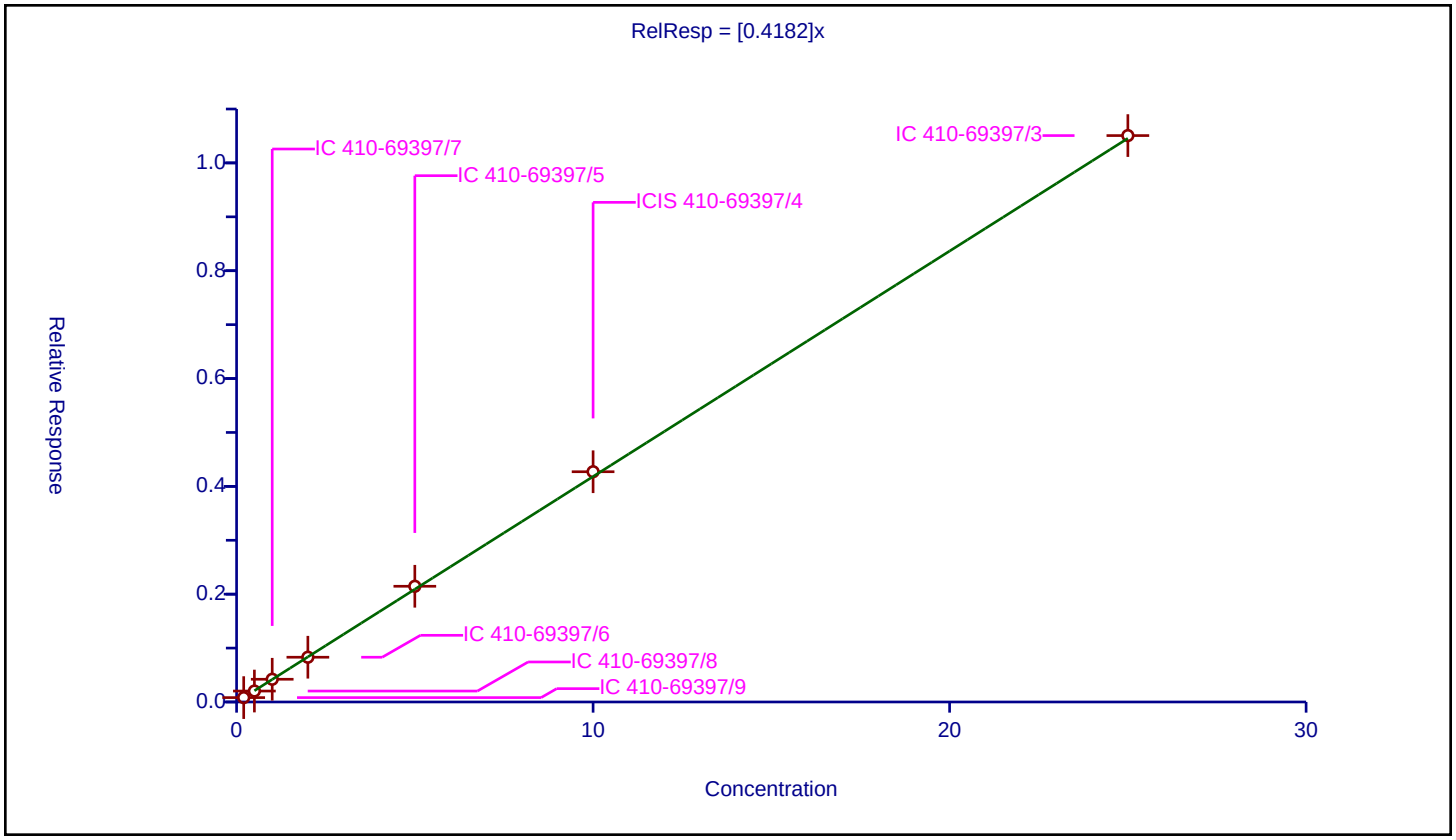
Curve Coefficients

Intercept:	0
Slope:	0.4182

Error Coefficients

Standard Error:	970000
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 410-69397/9	0.2	0.081532	10.0	1980944.0	0.407659	Y
2	IC 410-69397/8	0.5	0.203179	10.0	1995085.0	0.406359	Y
3	IC 410-69397/7	1.0	0.421872	10.0	1986644.0	0.421872	Y
4	IC 410-69397/6	2.0	0.830133	10.0	1976128.0	0.415067	Y
5	IC 410-69397/5	5.0	2.146514	10.0	1978687.0	0.429303	Y
6	ICIS 410-69397/4	10.0	4.27146	10.0	2065893.0	0.427146	Y
7	IC 410-69397/3	25.0	10.507218	10.0	2051897.0	0.420289	Y



Calibration / Carbon tetrachloride

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

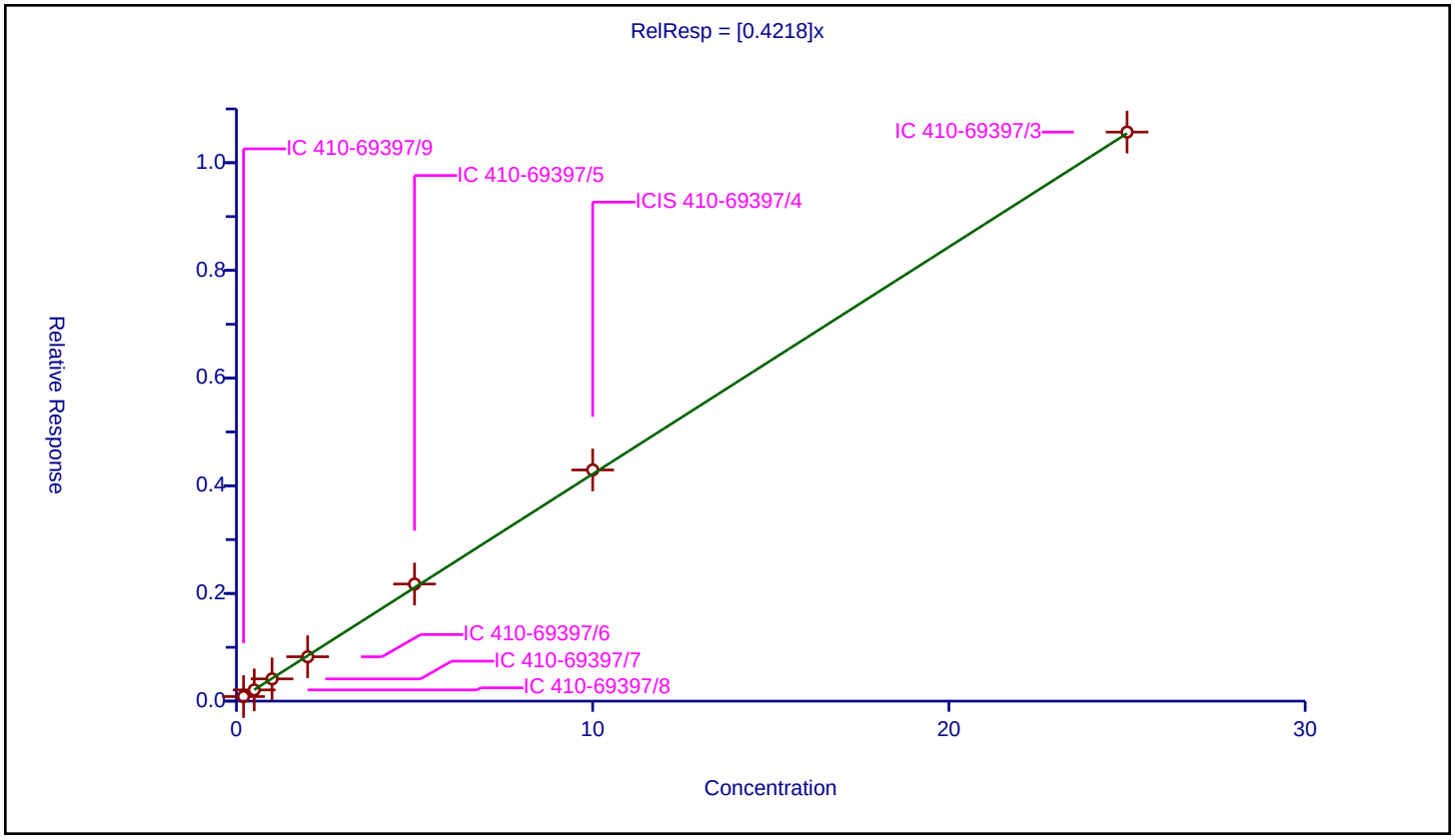
Curve Coefficients

Intercept:	0
Slope:	0.4218

Error Coefficients

Standard Error:	976000
Relative Standard Error:	2.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.084641	10.0	1980944.0	0.423207	Y
2	IC 410-69397/8	0.5	0.208317	10.0	1995085.0	0.416634	Y
3	IC 410-69397/7	1.0	0.413255	10.0	1986644.0	0.413255	Y
4	IC 410-69397/6	2.0	0.824435	10.0	1976128.0	0.412218	Y
5	IC 410-69397/5	5.0	2.175256	10.0	1978687.0	0.435051	Y
6	ICIS 410-69397/4	10.0	4.294322	10.0	2065893.0	0.429432	Y
7	IC 410-69397/3	25.0	10.569848	10.0	2051897.0	0.422794	Y



Calibration / Isobutyl alcohol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

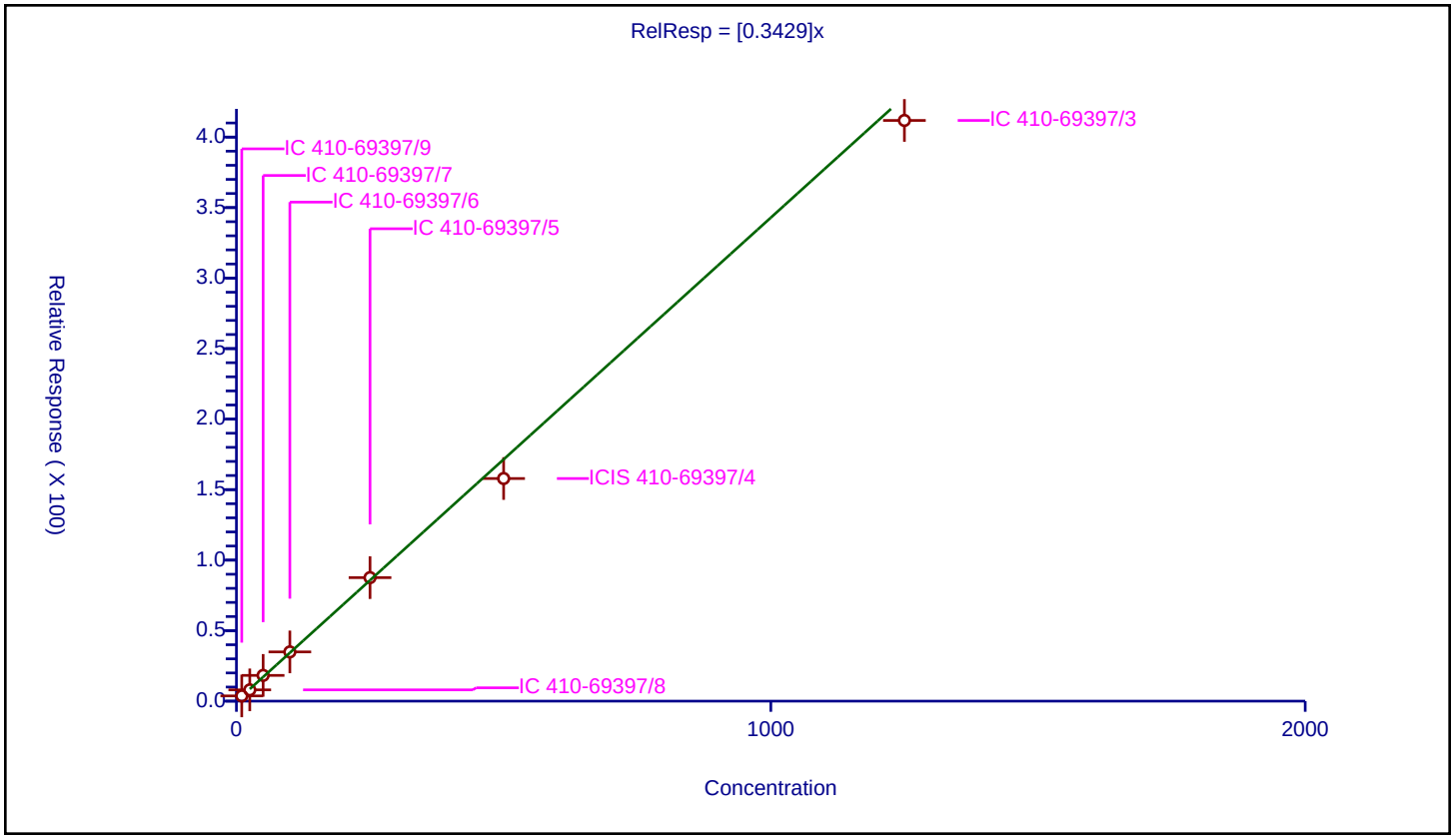
Curve Coefficients

Intercept:	0
Slope:	0.3429

Error Coefficients

Standard Error:	622000
Relative Standard Error:	6.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	10.0	3.703986	50.0	157506.0	0.370399	Y
2	IC 410-69397/8	25.0	8.000613	50.0	156713.0	0.320025	Y
3	IC 410-69397/7	50.0	18.259653	50.0	155400.0	0.365193	Y
4	IC 410-69397/6	100.0	34.907322	50.0	164063.0	0.349073	Y
5	IC 410-69397/5	250.0	87.583895	50.0	167919.0	0.350336	Y
6	ICIS 410-69397/4	500.0	157.866546	50.0	174562.0	0.315733	Y
7	IC 410-69397/3	1250.0	411.794232	50.0	168044.0	0.329435	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

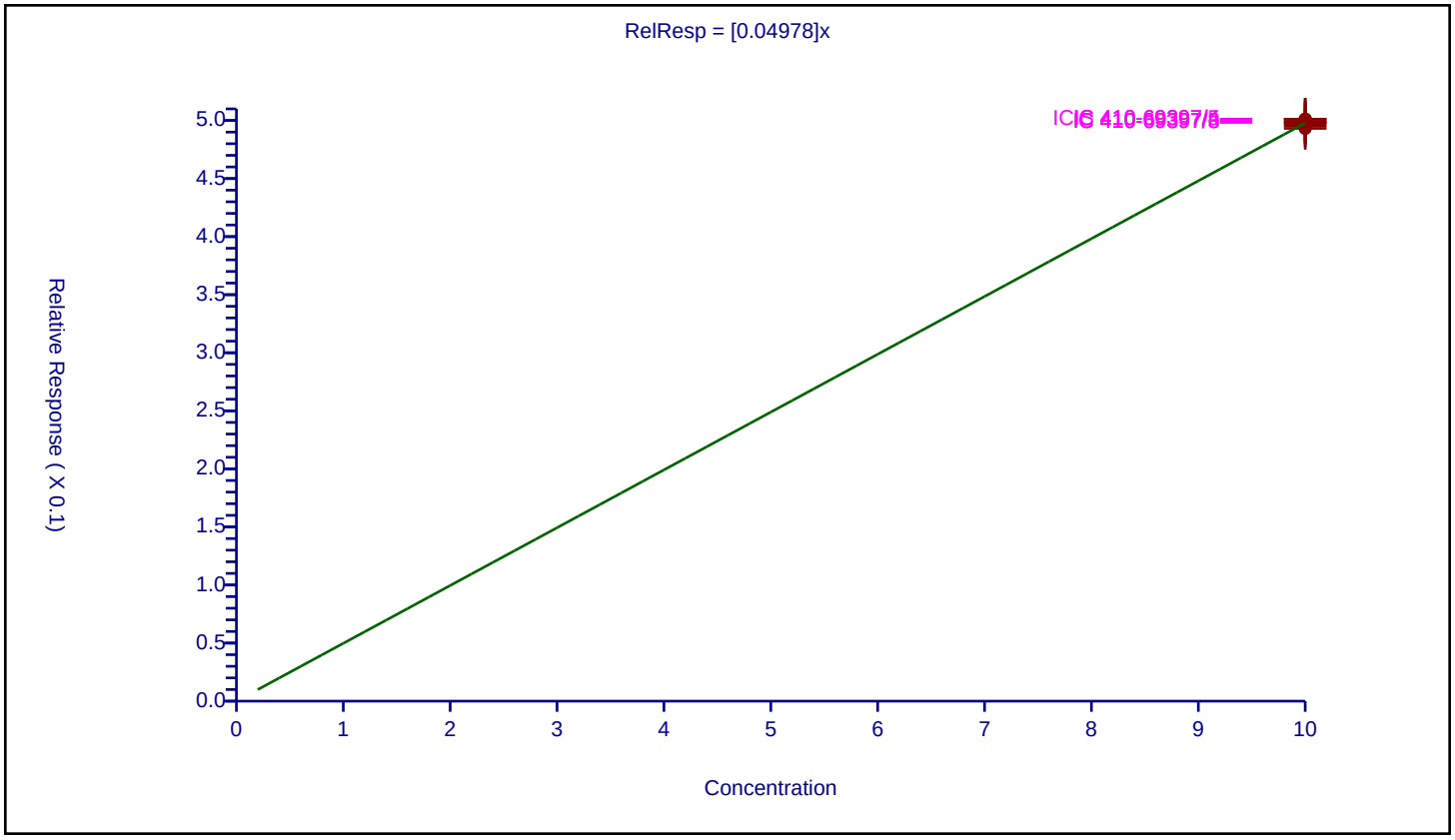
Curve Coefficients

Intercept:	0
Slope:	0.04978

Error Coefficients

Standard Error:	108000
Relative Standard Error:	0.6
Correlation Coefficient:	0.00000000000000000000
Coefficient of Determination (Adjusted):	0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/3	10.0	0.498587	10.0	2051897.0	0.049859	Y
2	ICIS 410-69397/4	10.0	0.50095	10.0	2065893.0	0.050095	Y
3	IC 410-69397/5	10.0	0.50111	10.0	1978687.0	0.050111	Y
4	IC 410-69397/6	10.0	0.497108	10.0	1976128.0	0.049711	Y
5	IC 410-69397/7	10.0	0.493204	10.0	1986644.0	0.04932	Y
6	IC 410-69397/8	10.0	0.49845	10.0	1995085.0	0.049845	Y
7	IC 410-69397/9	10.0	0.495314	10.0	1980944.0	0.049531	Y



Calibration / Benzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

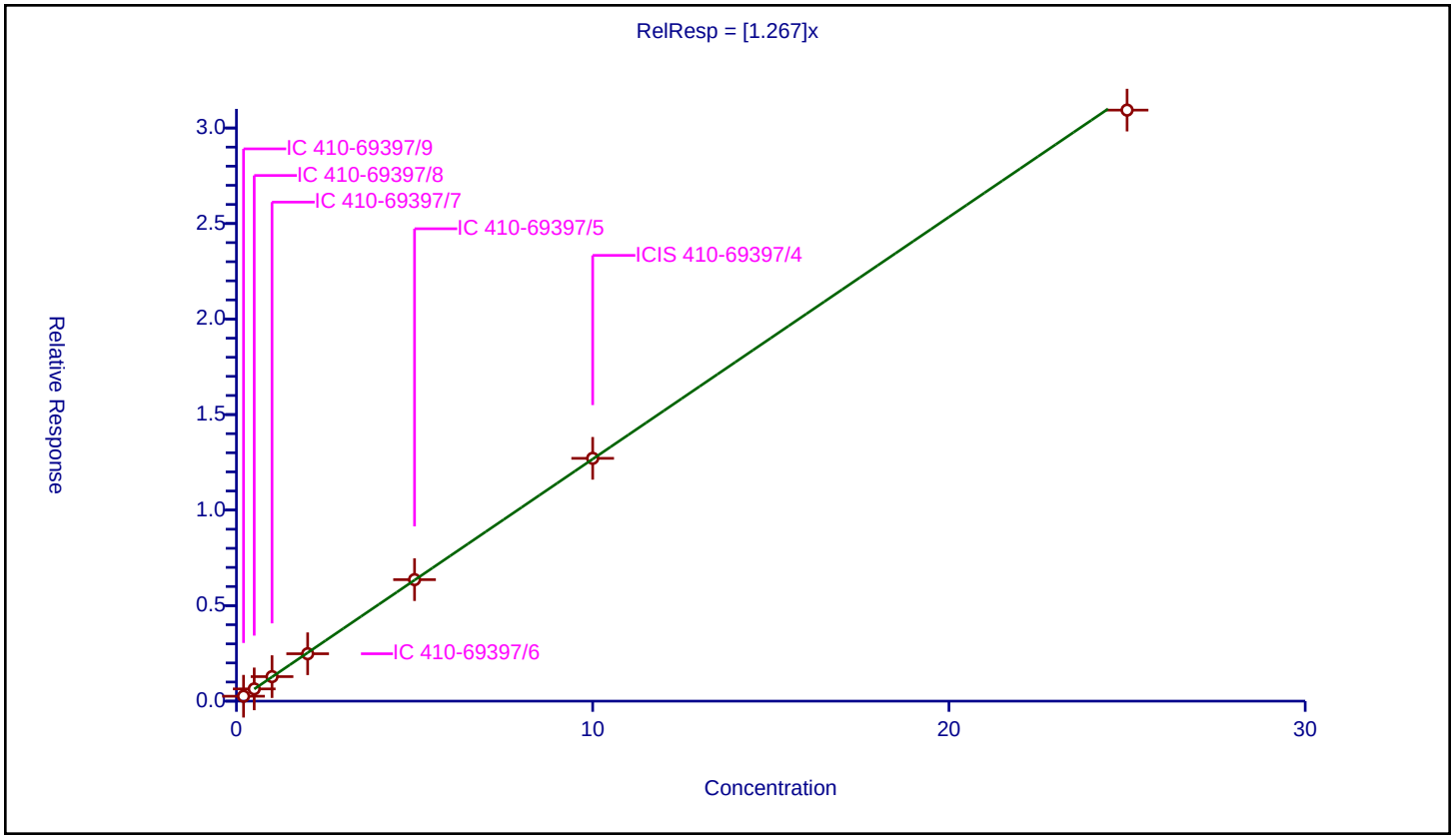
Curve Coefficients

Intercept:	0
Slope:	1.267

Error Coefficients

Standard Error:	2860000
Relative Standard Error:	1.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.256721	10.0	1980944.0	1.283605	Y
2	IC 410-69397/8	0.5	0.640745	10.0	1995085.0	1.281489	Y
3	IC 410-69397/7	1.0	1.283713	10.0	1986644.0	1.283713	Y
4	IC 410-69397/6	2.0	2.480406	10.0	1976128.0	1.240203	Y
5	IC 410-69397/5	5.0	6.358985	10.0	1978687.0	1.271797	Y
6	ICIS 410-69397/4	10.0	12.70986	10.0	2065893.0	1.270986	Y
7	IC 410-69397/3	25.0	30.937708	10.0	2051897.0	1.237508	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

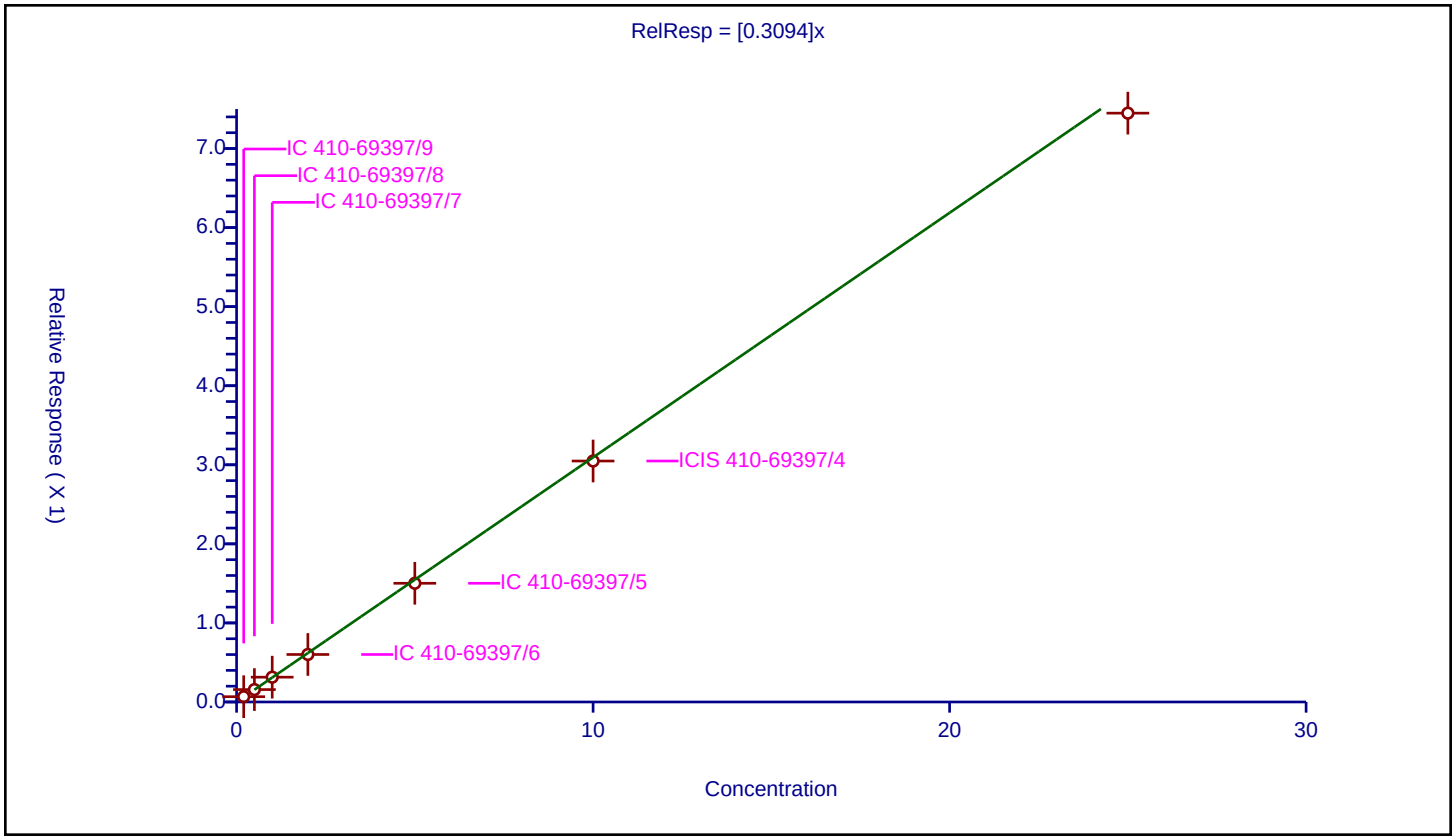
Curve Coefficients

Intercept:	0
Slope:	0.3094

Error Coefficients

Standard Error:	688000
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 410-69397/9	0.2	0.066822	10.0	1980944.0	0.334108	Y
2	IC 410-69397/8	0.5	0.157061	10.0	1995085.0	0.314122	Y
3	IC 410-69397/7	1.0	0.313866	10.0	1986644.0	0.313866	Y
4	IC 410-69397/6	2.0	0.600867	10.0	1976128.0	0.300433	Y
5	IC 410-69397/5	5.0	1.501369	10.0	1978687.0	0.300274	Y
6	ICIS 410-69397/4	10.0	3.047912	10.0	2065893.0	0.304791	Y
7	IC 410-69397/3	25.0	7.447723	10.0	2051897.0	0.297909	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

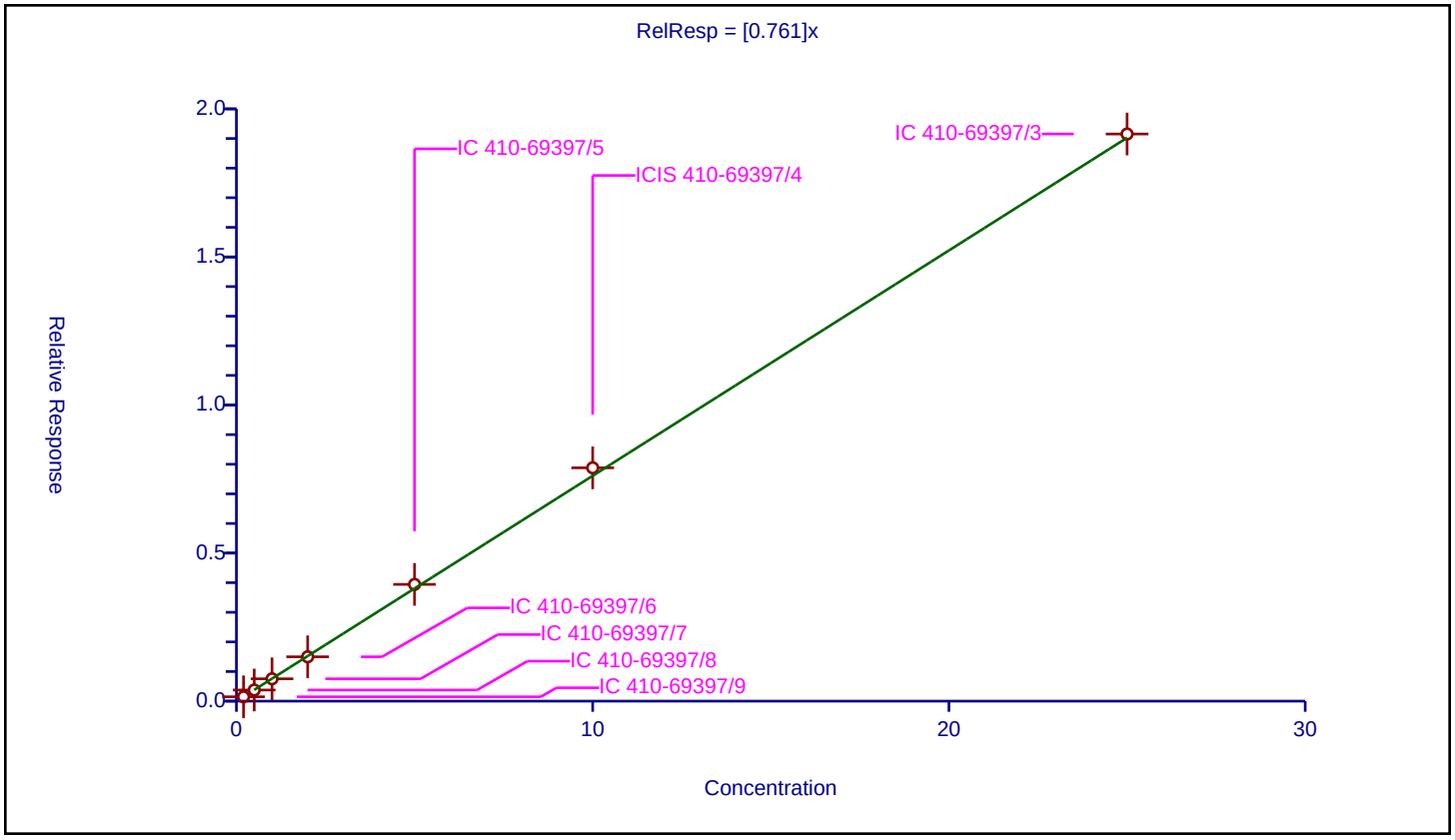
Curve Coefficients

Intercept:	0
Slope:	0.761

Error Coefficients

Standard Error:	1770000
Relative Standard Error:	2.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.146117	10.0	1980944.0	0.730586	Y
2	IC 410-69397/8	0.5	0.375698	10.0	1995085.0	0.751397	Y
3	IC 410-69397/7	1.0	0.753945	10.0	1986644.0	0.753945	Y
4	IC 410-69397/6	2.0	1.497104	10.0	1976128.0	0.748552	Y
5	IC 410-69397/5	5.0	3.942195	10.0	1978687.0	0.788439	Y
6	ICIS 410-69397/4	10.0	7.87975	10.0	2065893.0	0.787975	Y
7	IC 410-69397/3	25.0	19.151444	10.0	2051897.0	0.766058	Y



Calibration / n-Heptane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

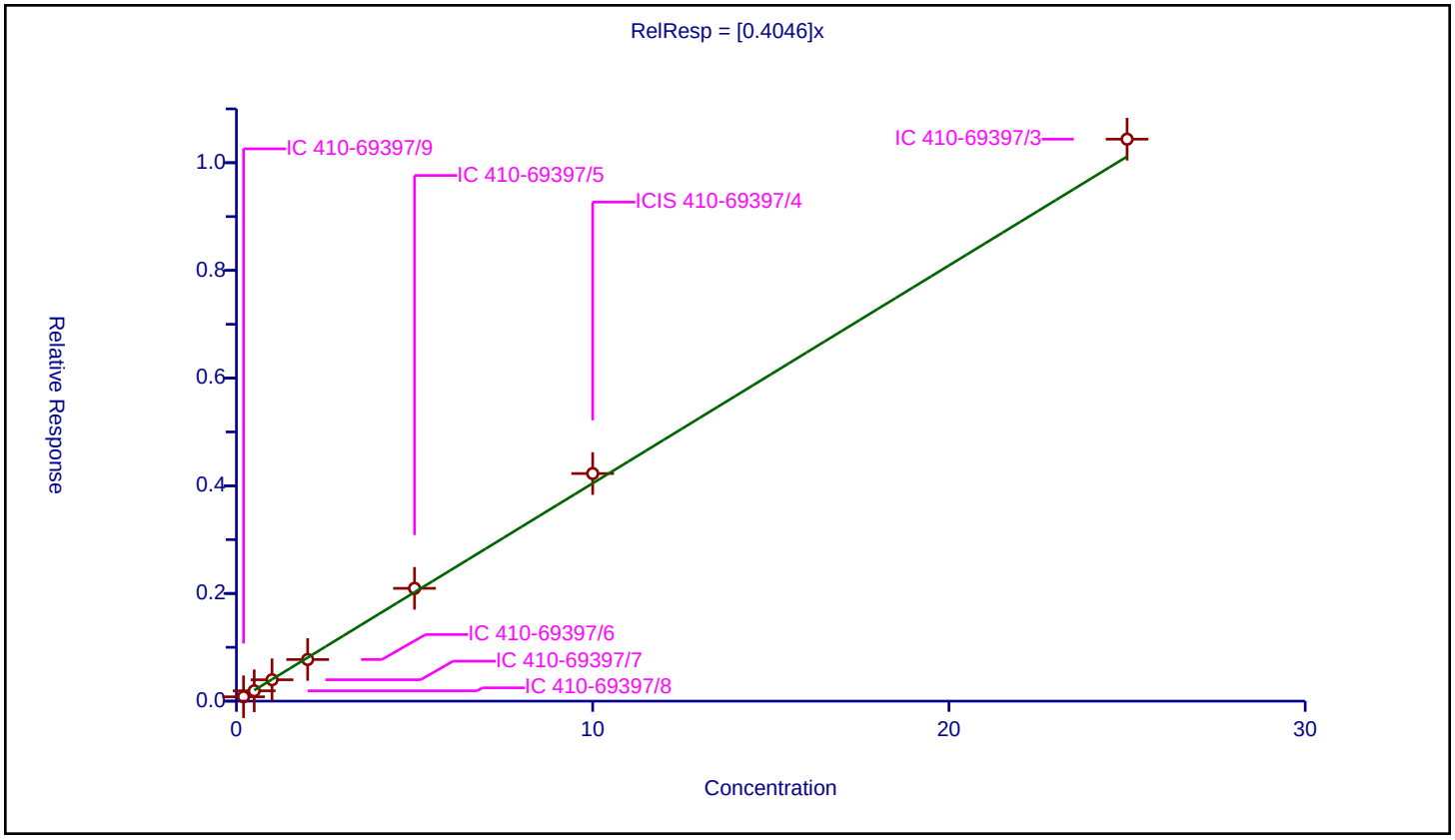
Curve Coefficients

Intercept:	0
Slope:	0.4046

Error Coefficients

Standard Error:	962000
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 410-69397/9	0.2	0.081007	10.0	1980944.0	0.405034	Y
2	IC 410-69397/8	0.5	0.192222	10.0	1995085.0	0.384445	Y
3	IC 410-69397/7	1.0	0.396845	10.0	1986644.0	0.396845	Y
4	IC 410-69397/6	2.0	0.773052	10.0	1976128.0	0.386526	Y
5	IC 410-69397/5	5.0	2.095304	10.0	1978687.0	0.419061	Y
6	ICIS 410-69397/4	10.0	4.227523	10.0	2065893.0	0.422752	Y
7	IC 410-69397/3	25.0	10.437761	10.0	2051897.0	0.41751	Y



Calibration / n-Butanol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

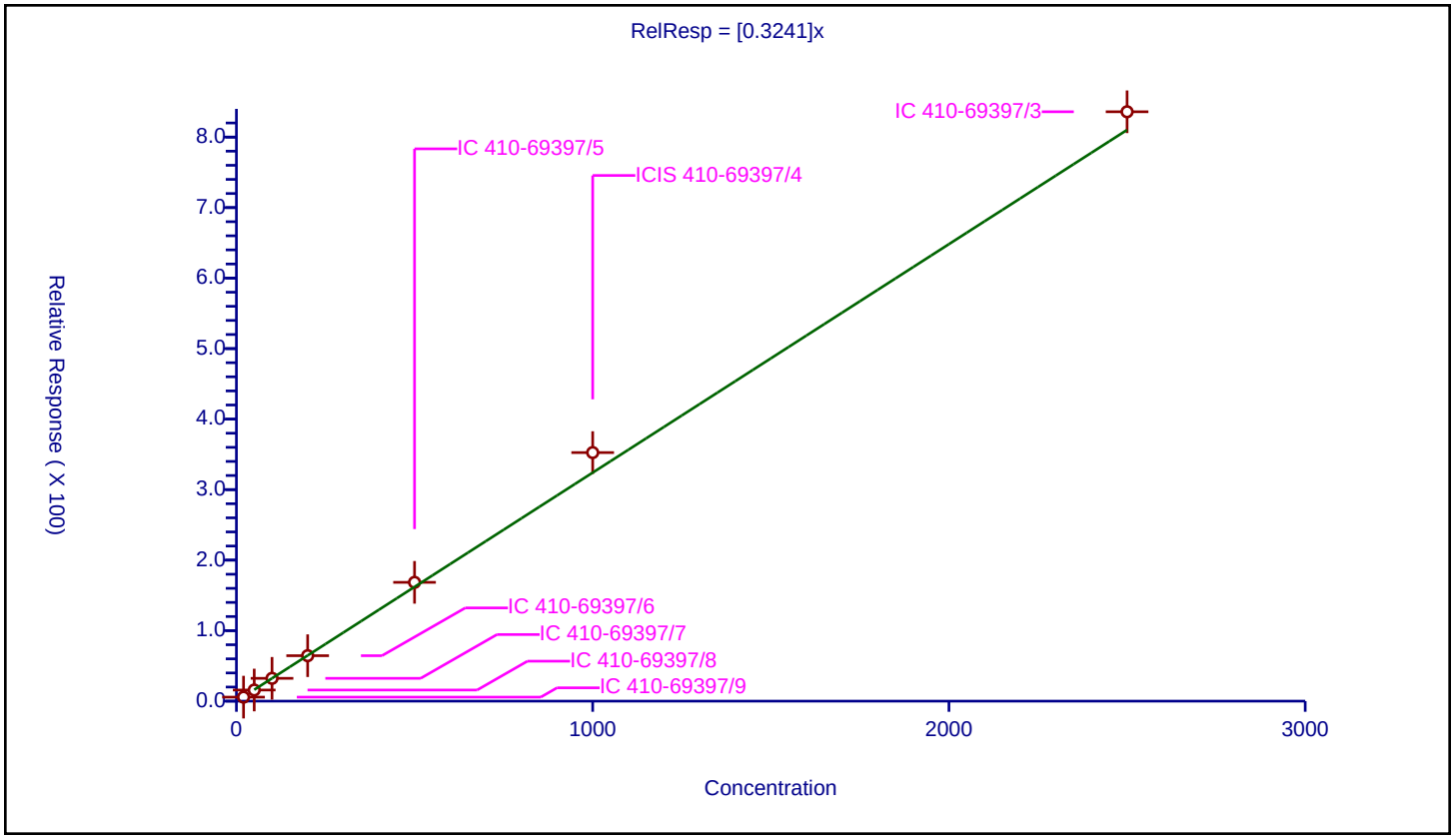
Curve Coefficients

Intercept:	0
Slope:	0.3241

Error Coefficients

Standard Error:	1280000
Relative Standard Error:	6.7
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	20.0	5.66899	50.0	157506.0	0.28345	Y
2	IC 410-69397/8	50.0	15.765763	50.0	156713.0	0.315315	Y
3	IC 410-69397/7	100.0	32.367439	50.0	155400.0	0.323674	Y
4	IC 410-69397/6	200.0	64.450242	50.0	164063.0	0.322251	Y
5	IC 410-69397/5	500.0	168.482721	50.0	167919.0	0.336965	Y
6	ICIS 410-69397/4	1000.0	352.527182	50.0	174562.0	0.352527	Y
7	IC 410-69397/3	2500.0	835.938504	50.0	168044.0	0.334375	Y



Calibration / Trichloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

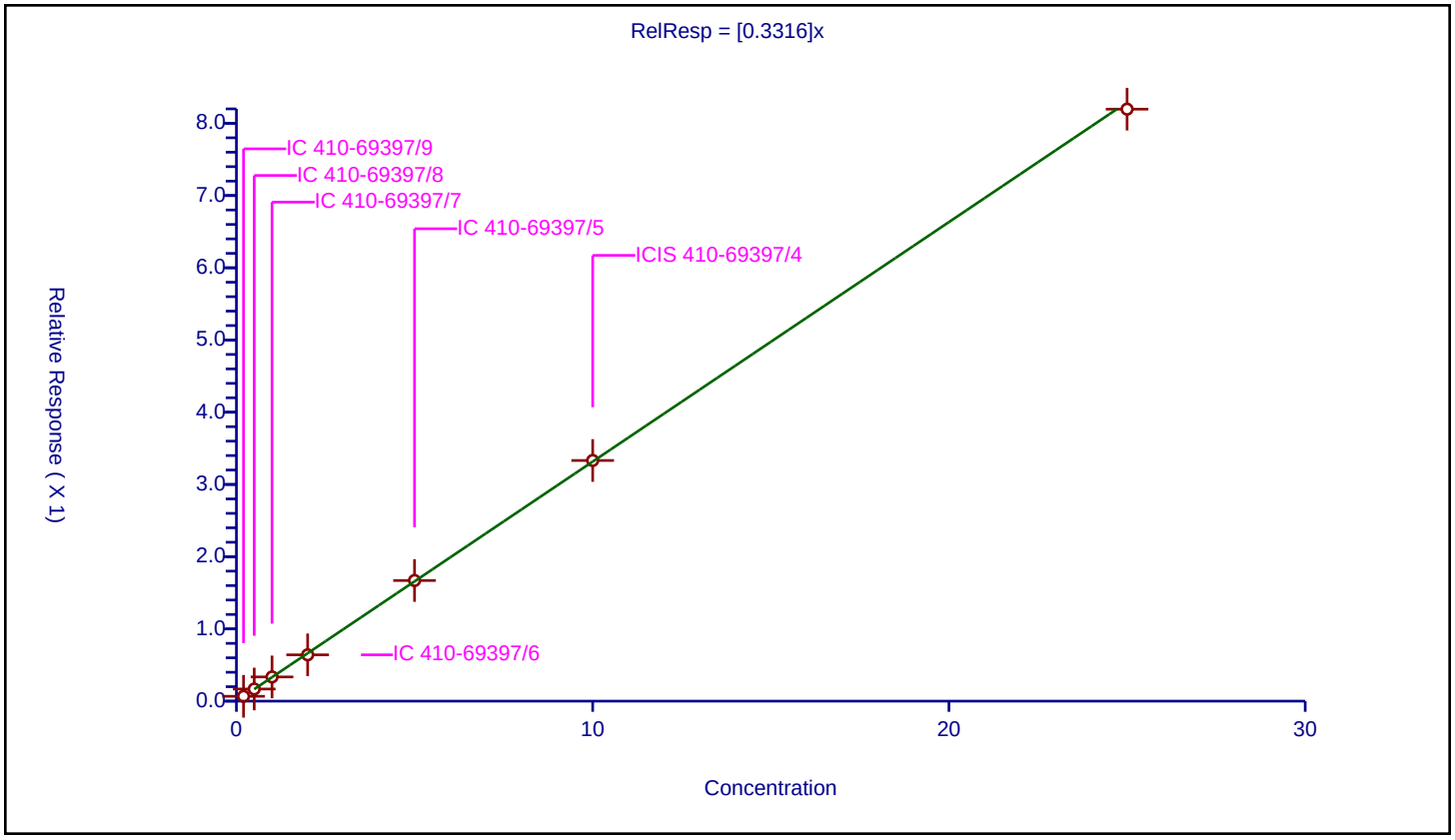
Curve Coefficients

Intercept:	0
Slope:	0.3316

Error Coefficients

Standard Error:	756000
Relative Standard Error:	1.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.067003	10.0	1980944.0	0.335017	Y
2	IC 410-69397/8	0.5	0.167837	10.0	1995085.0	0.335675	Y
3	IC 410-69397/7	1.0	0.335163	10.0	1986644.0	0.335163	Y
4	IC 410-69397/6	2.0	0.641122	10.0	1976128.0	0.320561	Y
5	IC 410-69397/5	5.0	1.67037	10.0	1978687.0	0.334074	Y
6	ICIS 410-69397/4	10.0	3.332026	10.0	2065893.0	0.333203	Y
7	IC 410-69397/3	25.0	8.196211	10.0	2051897.0	0.327848	Y



Calibration / Methylcyclohexane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

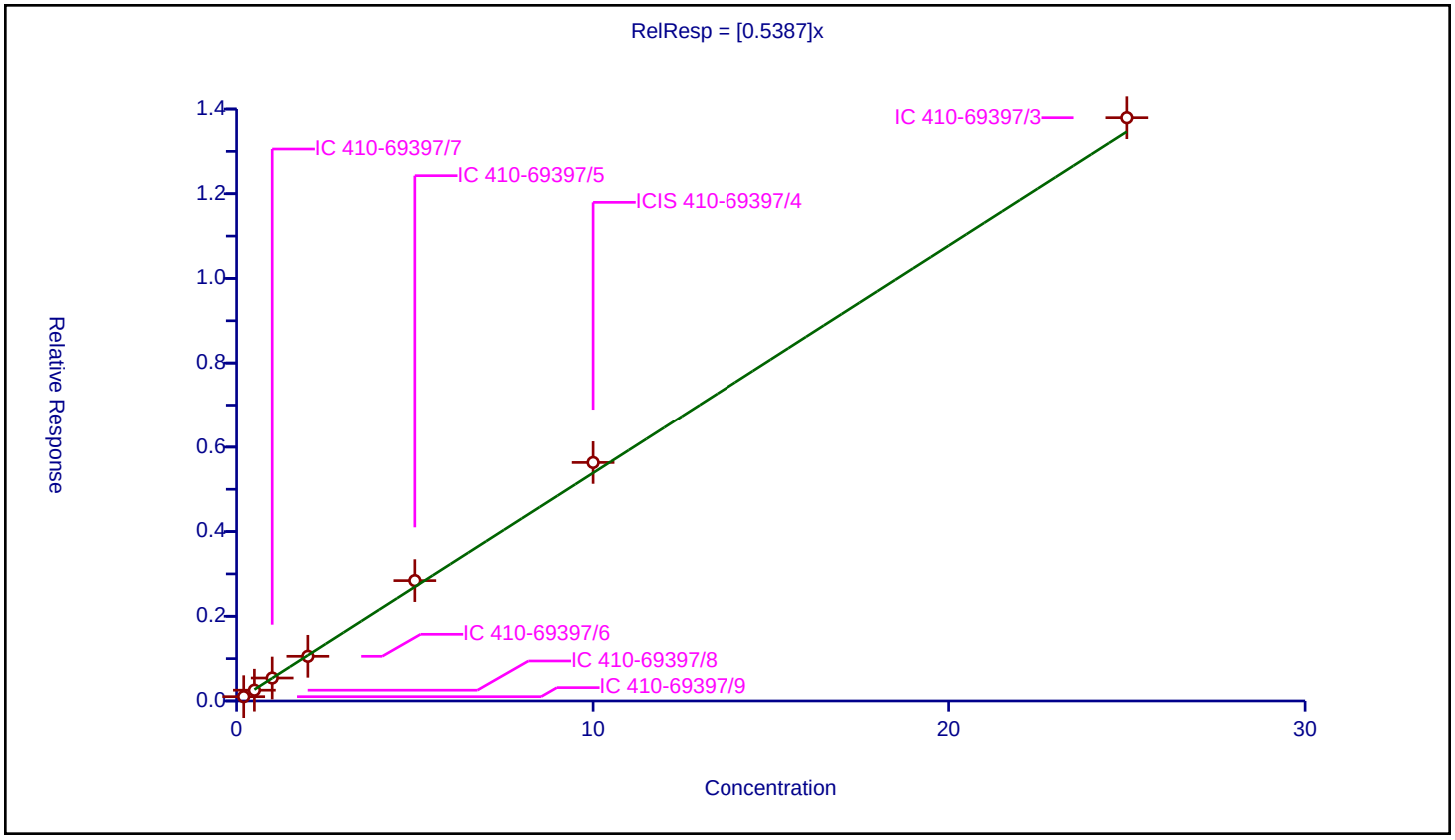
Curve Coefficients

Intercept:	0
Slope:	0.5387

Error Coefficients

Standard Error:	1270000
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 410-69397/9	0.2	0.101467	10.0	1980944.0	0.507334	Y
2	IC 410-69397/8	0.5	0.254937	10.0	1995085.0	0.509873	Y
3	IC 410-69397/7	1.0	0.542674	10.0	1986644.0	0.542674	Y
4	IC 410-69397/6	2.0	1.055083	10.0	1976128.0	0.527542	Y
5	IC 410-69397/5	5.0	2.841869	10.0	1978687.0	0.568374	Y
6	ICIS 410-69397/4	10.0	5.63322	10.0	2065893.0	0.563322	Y
7	IC 410-69397/3	25.0	13.795561	10.0	2051897.0	0.551822	Y



Calibration / 1,2-Dichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

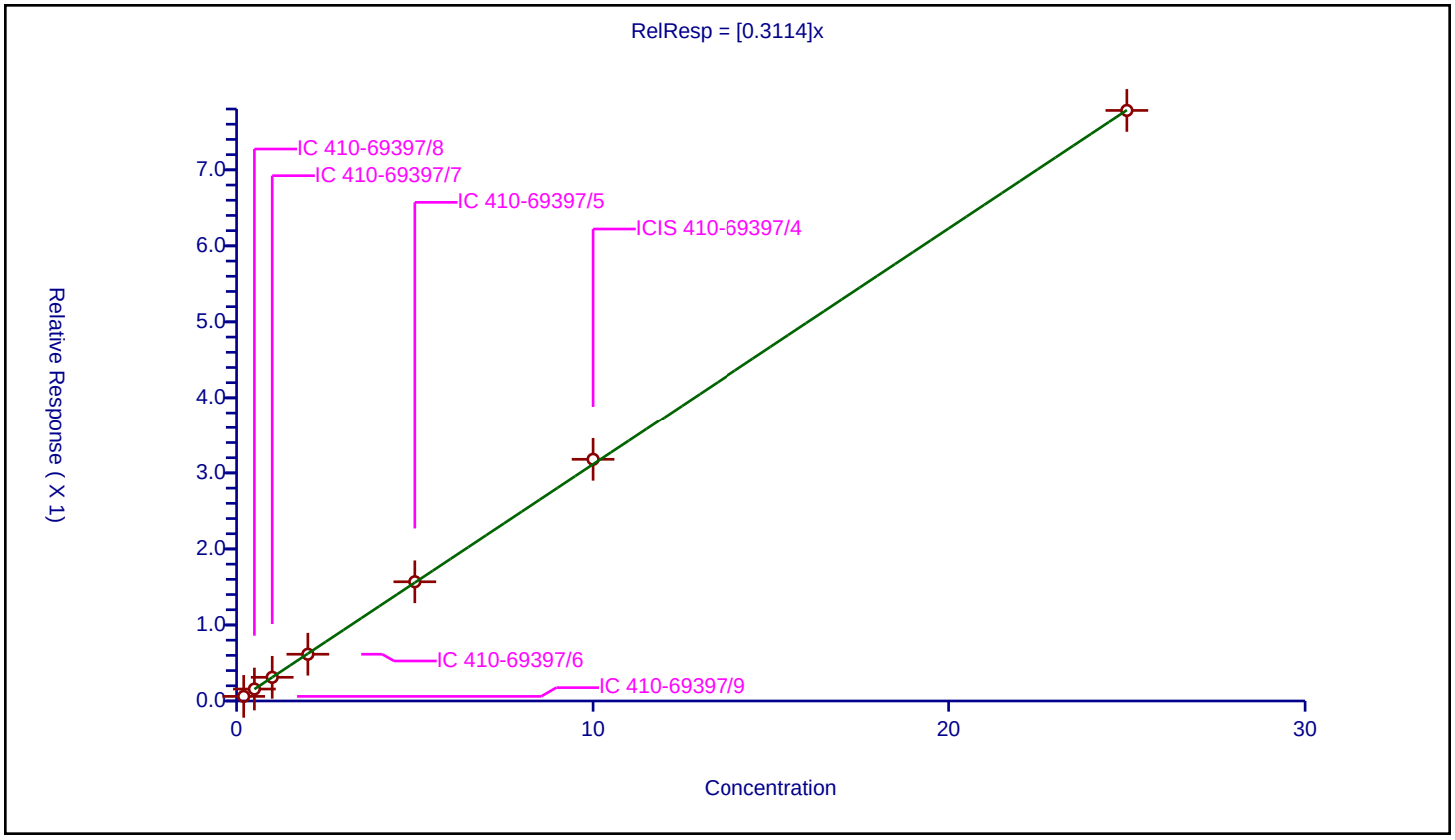
Curve Coefficients

Intercept:	0
Slope:	0.3114

Error Coefficients

Standard Error:	718000
Relative Standard Error:	1.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.060623	10.0	1980944.0	0.303113	Y
2	IC 410-69397/8	0.5	0.157322	10.0	1995085.0	0.314643	Y
3	IC 410-69397/7	1.0	0.311807	10.0	1986644.0	0.311807	Y
4	IC 410-69397/6	2.0	0.615193	10.0	1976128.0	0.307596	Y
5	IC 410-69397/5	5.0	1.568166	10.0	1978687.0	0.313633	Y
6	ICIS 410-69397/4	10.0	3.17908	10.0	2065893.0	0.317908	Y
7	IC 410-69397/3	25.0	7.781385	10.0	2051897.0	0.311255	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

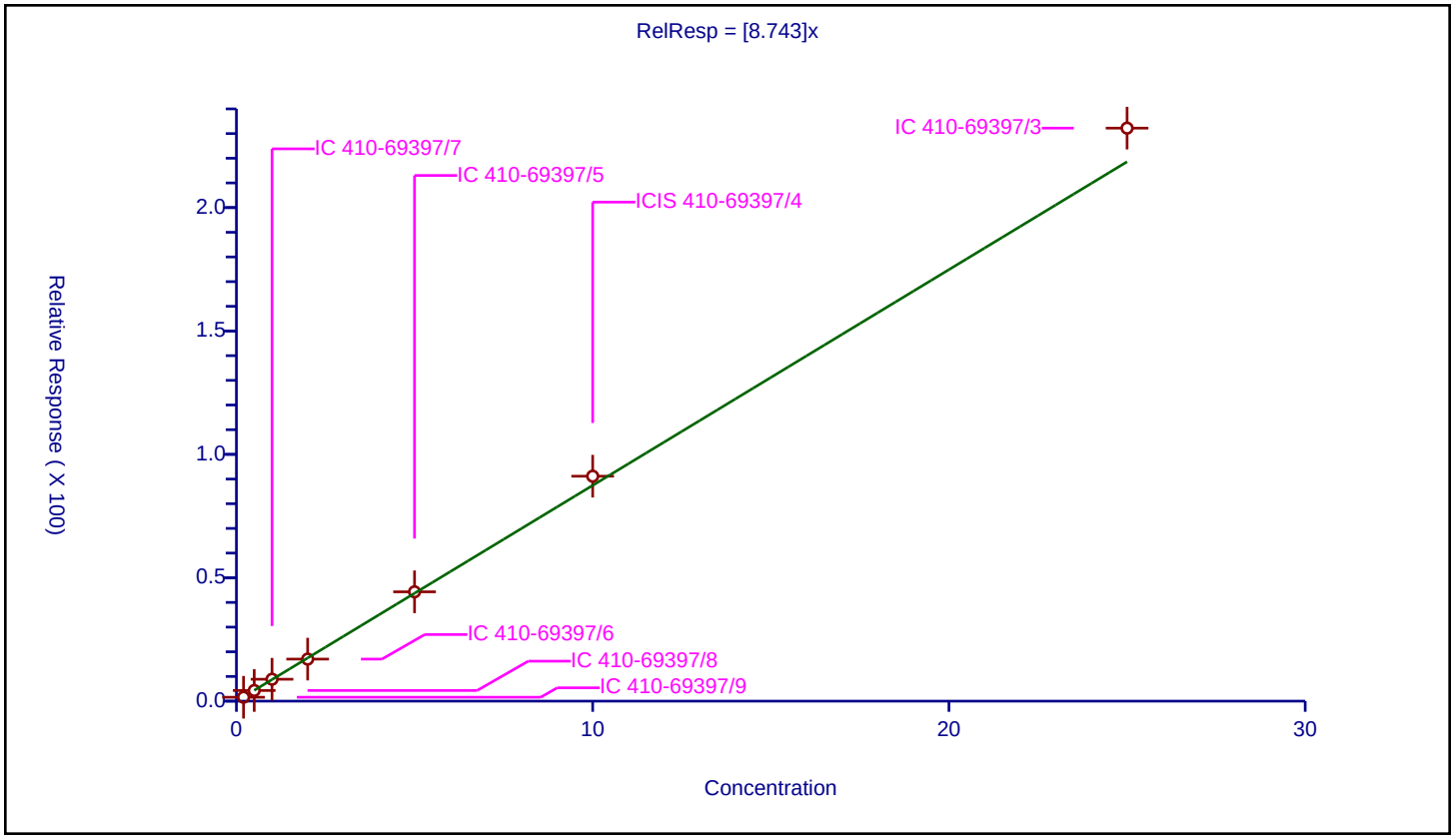
Curve Coefficients

Intercept:	0
Slope:	8.743

Error Coefficients

Standard Error:	350000
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 410-69397/9	0.2	1.583114	50.0	157506.0	7.915571	Y
2	IC 410-69397/8	0.5	4.31298	50.0	156713.0	8.62596	Y
3	IC 410-69397/7	1.0	8.879344	50.0	155400.0	8.879344	Y
4	IC 410-69397/6	2.0	17.035834	50.0	164063.0	8.517917	Y
5	IC 410-69397/5	5.0	44.295166	50.0	167919.0	8.859033	Y
6	ICIS 410-69397/4	10.0	91.157869	50.0	174562.0	9.115787	Y
7	IC 410-69397/3	25.0	232.212099	50.0	168044.0	9.288484	Y



Calibration / 1,4-Dioxane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

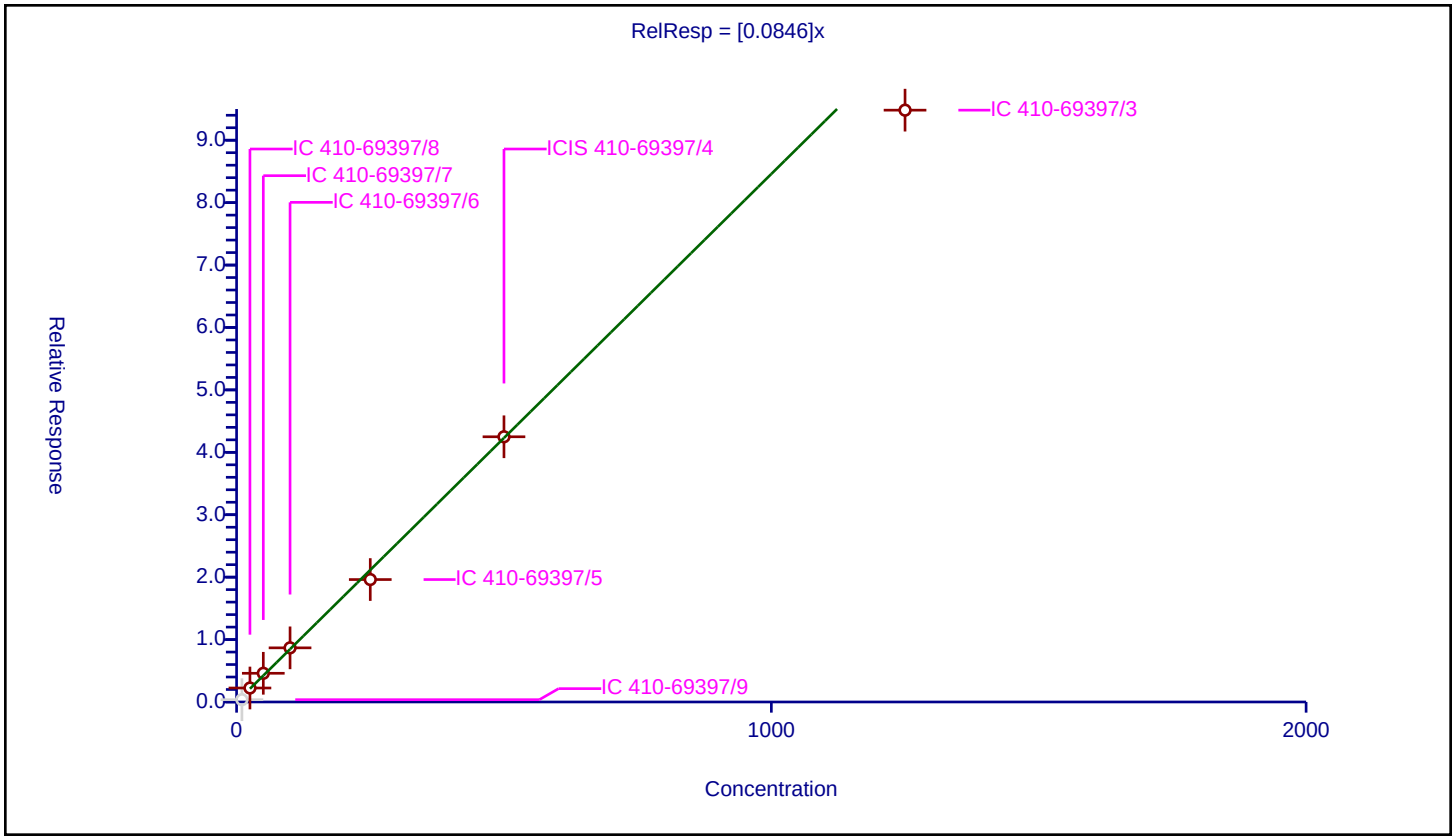
Curve Coefficients

Intercept:	0
Slope:	0.0846

Error Coefficients

Standard Error:	161000
Relative Standard Error:	7.4
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	10.0	0.371414	50.0	157506.0	0.037141	N
2	IC 410-69397/8	25.0	2.24072	50.0	156713.0	0.089629	Y
3	IC 410-69397/7	50.0	4.59749	50.0	155400.0	0.09195	Y
4	IC 410-69397/6	100.0	8.672888	50.0	164063.0	0.086729	Y
5	IC 410-69397/5	250.0	19.617792	50.0	167919.0	0.078471	Y
6	ICIS 410-69397/4	500.0	42.490634	50.0	174562.0	0.084981	Y
7	IC 410-69397/3	1250.0	94.815048	50.0	168044.0	0.075852	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

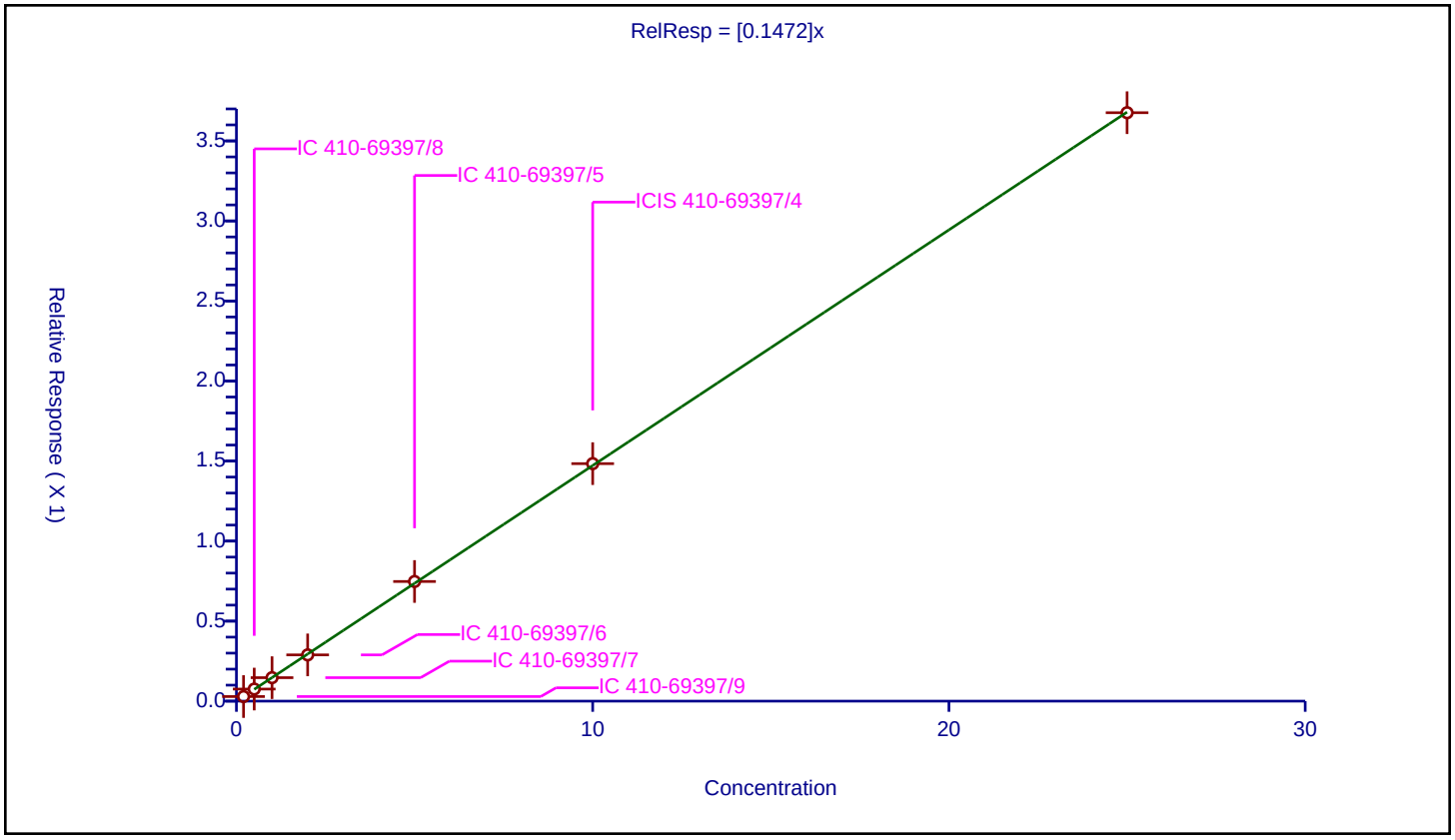
Curve Coefficients

Intercept:	0
Slope:	0.1472

Error Coefficients

Standard Error:	339000
Relative Standard Error:	1.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.028668	10.0	1980944.0	0.143341	Y
2	IC 410-69397/8	0.5	0.075501	10.0	1995085.0	0.151001	Y
3	IC 410-69397/7	1.0	0.146674	10.0	1986644.0	0.146674	Y
4	IC 410-69397/6	2.0	0.288903	10.0	1976128.0	0.144452	Y
5	IC 410-69397/5	5.0	0.747571	10.0	1978687.0	0.149514	Y
6	ICIS 410-69397/4	10.0	1.483823	10.0	2065893.0	0.148382	Y
7	IC 410-69397/3	25.0	3.676286	10.0	2051897.0	0.147051	Y



Calibration / Dichlorobromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

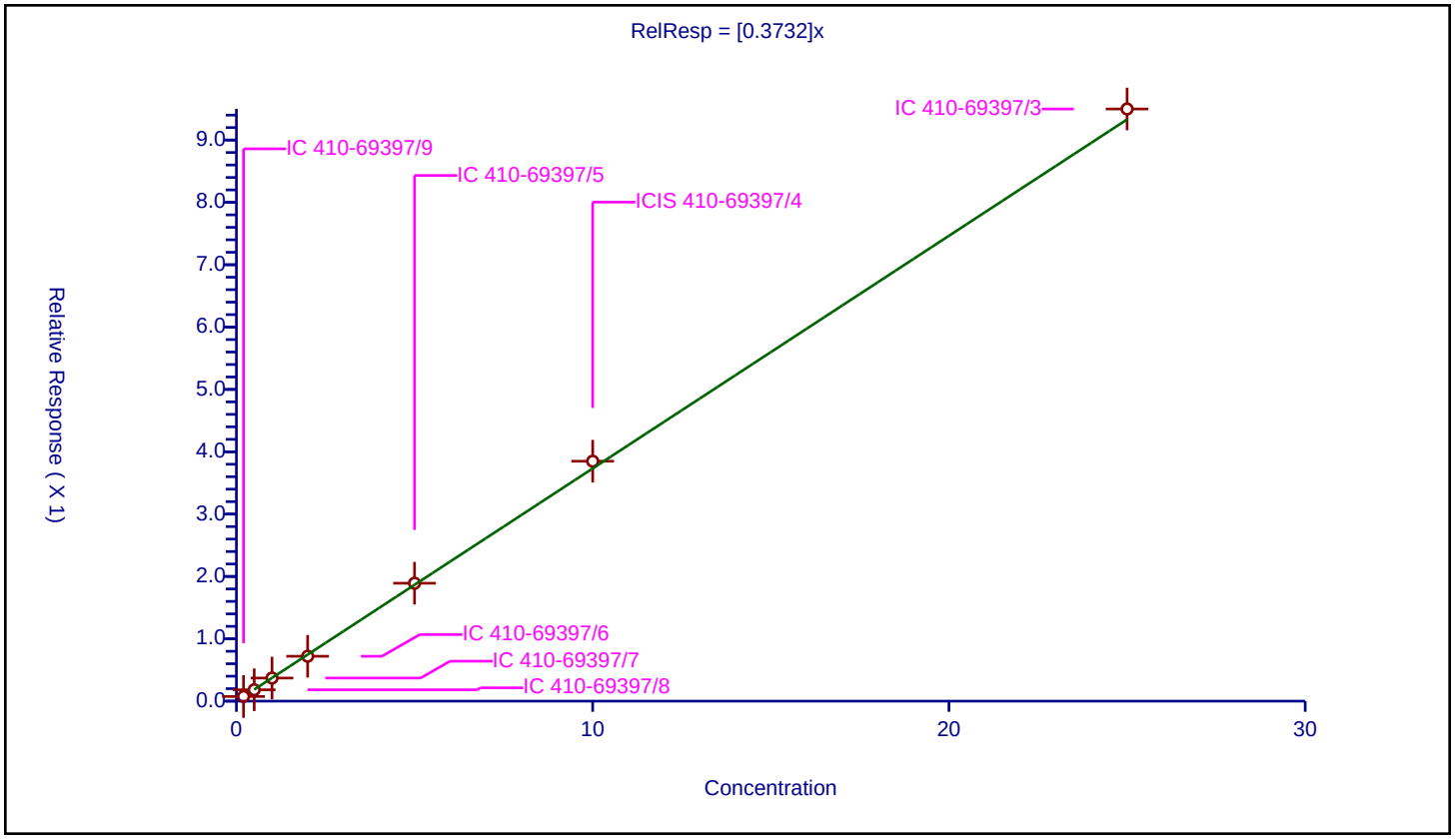
Curve Coefficients

Intercept:	0
Slope:	0.3732

Error Coefficients

Standard Error:	875000
Relative Standard Error:	2.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.074813	10.0	1980944.0	0.374064	Y
2	IC 410-69397/8	0.5	0.182258	10.0	1995085.0	0.364516	Y
3	IC 410-69397/7	1.0	0.370726	10.0	1986644.0	0.370726	Y
4	IC 410-69397/6	2.0	0.720267	10.0	1976128.0	0.360134	Y
5	IC 410-69397/5	5.0	1.891603	10.0	1978687.0	0.378321	Y
6	ICIS 410-69397/4	10.0	3.848694	10.0	2065893.0	0.384869	Y
7	IC 410-69397/3	25.0	9.498381	10.0	2051897.0	0.379935	Y



Calibration / 2-Nitropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

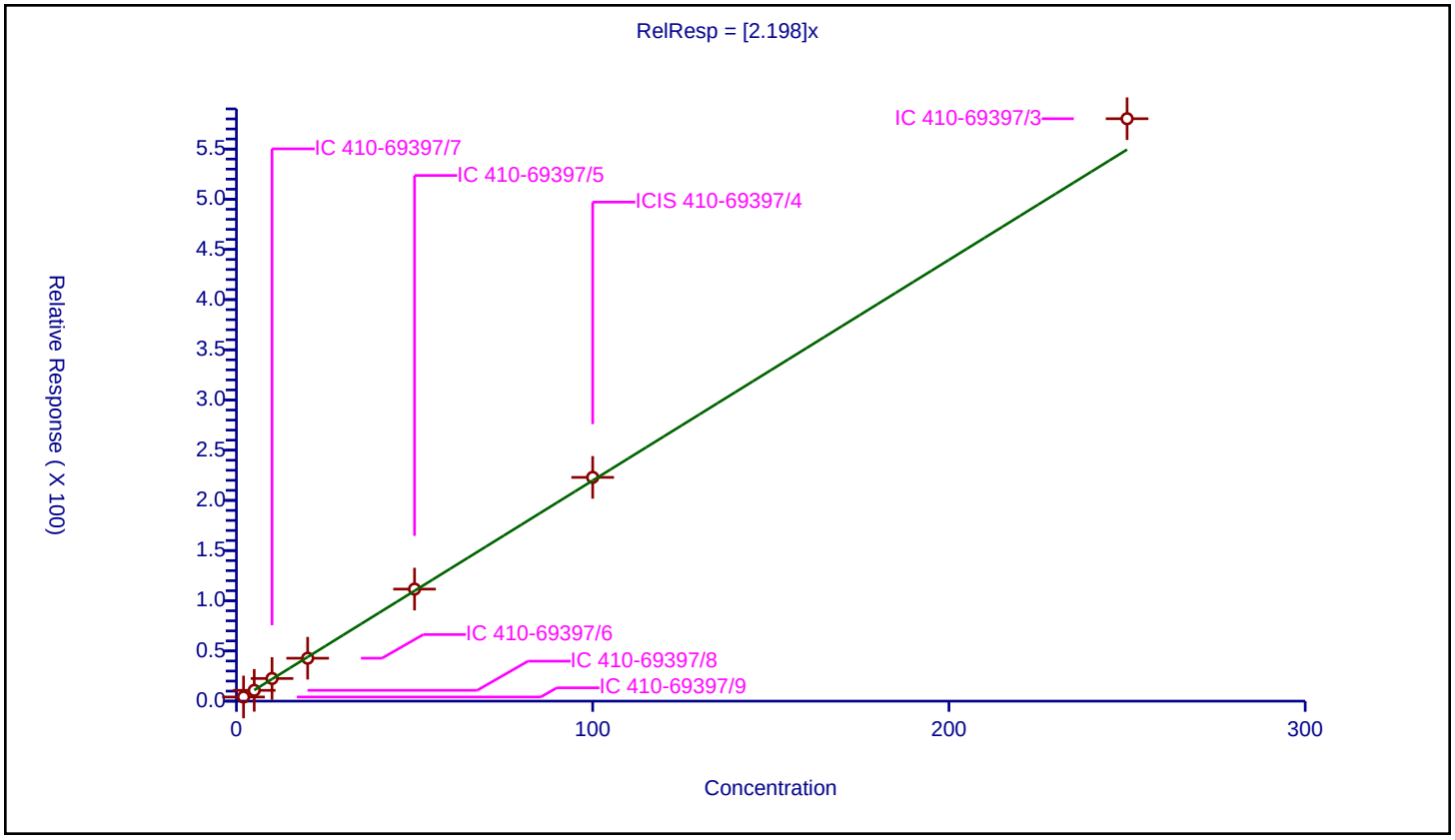
Curve Coefficients

Intercept:	0
Slope:	2.198

Error Coefficients

Standard Error:	873000
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 410-69397/9	2.0	4.115081	50.0	157506.0	2.057541	Y
2	IC 410-69397/8	5.0	10.762668	50.0	156713.0	2.152534	Y
3	IC 410-69397/7	10.0	22.556306	50.0	155400.0	2.255631	Y
4	IC 410-69397/6	20.0	42.746079	50.0	164063.0	2.137304	Y
5	IC 410-69397/5	50.0	111.617506	50.0	167919.0	2.23235	Y
6	ICIS 410-69397/4	100.0	222.917359	50.0	174562.0	2.229174	Y
7	IC 410-69397/3	250.0	580.216193	50.0	168044.0	2.320865	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

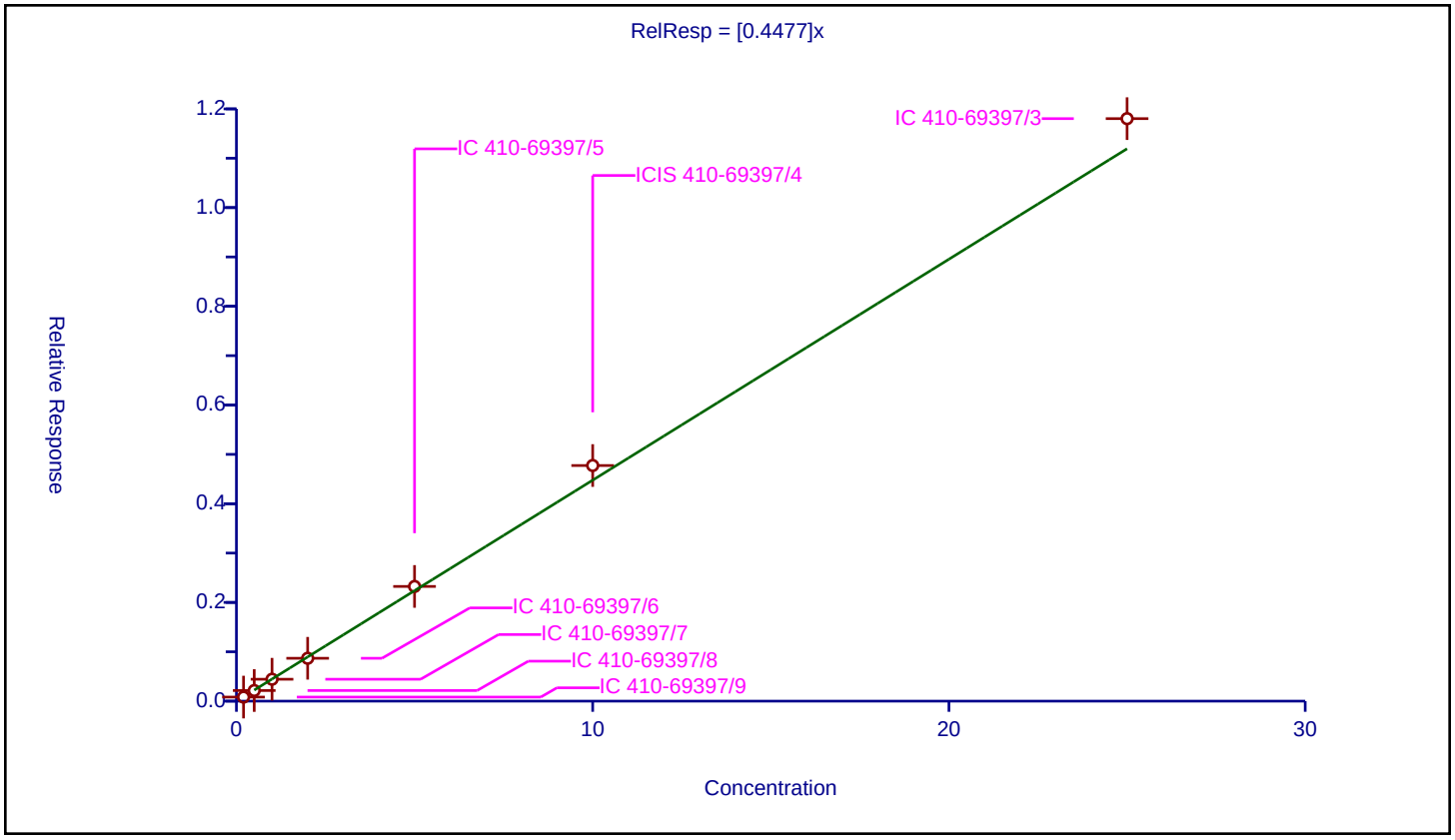
Curve Coefficients

Intercept:	0
Slope:	0.4477

Error Coefficients

Standard Error:	1090000
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 410-69397/9	0.2	0.082314	10.0	1980944.0	0.411571	Y
2	IC 410-69397/8	0.5	0.214938	10.0	1995085.0	0.429876	Y
3	IC 410-69397/7	1.0	0.44393	10.0	1986644.0	0.44393	Y
4	IC 410-69397/6	2.0	0.868587	10.0	1976128.0	0.434294	Y
5	IC 410-69397/5	5.0	2.324031	10.0	1978687.0	0.464806	Y
6	ICIS 410-69397/4	10.0	4.774308	10.0	2065893.0	0.477431	Y
7	IC 410-69397/3	25.0	11.802746	10.0	2051897.0	0.47211	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

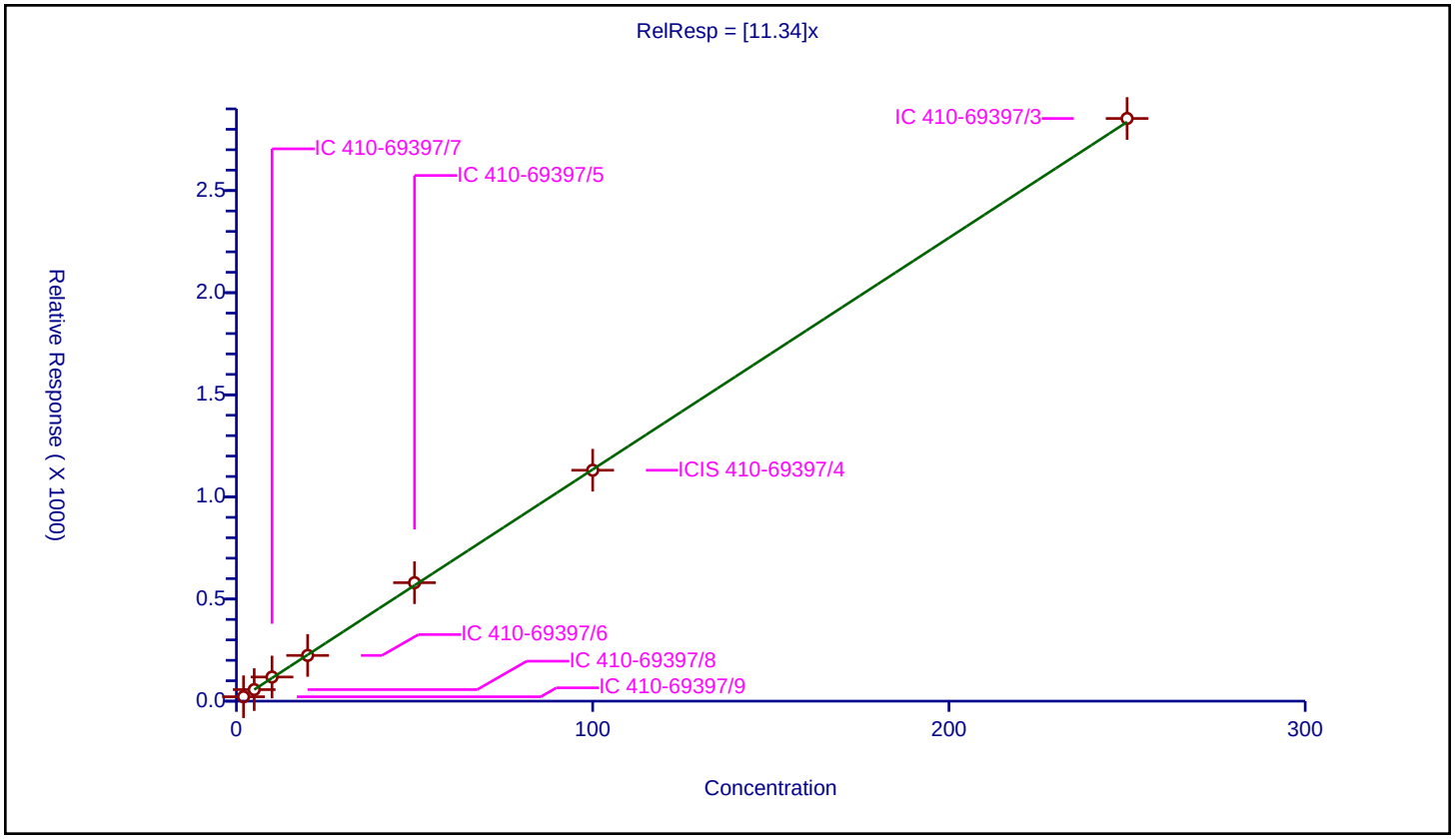
Curve Coefficients

Intercept:	0
Slope:	11.34

Error Coefficients

Standard Error:	4320000
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 410-69397/9	2.0	21.532196	50.0	157506.0	10.766098	Y
2	IC 410-69397/8	5.0	56.53009	50.0	156713.0	11.306018	Y
3	IC 410-69397/7	10.0	118.19112	50.0	155400.0	11.819112	Y
4	IC 410-69397/6	20.0	223.837184	50.0	164063.0	11.191859	Y
5	IC 410-69397/5	50.0	580.078788	50.0	167919.0	11.601576	Y
6	ICIS 410-69397/4	100.0	1130.594287	50.0	174562.0	11.305943	Y
7	IC 410-69397/3	250.0	2853.051284	50.0	168044.0	11.412205	Y



Calibration / Toluene-d8 (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

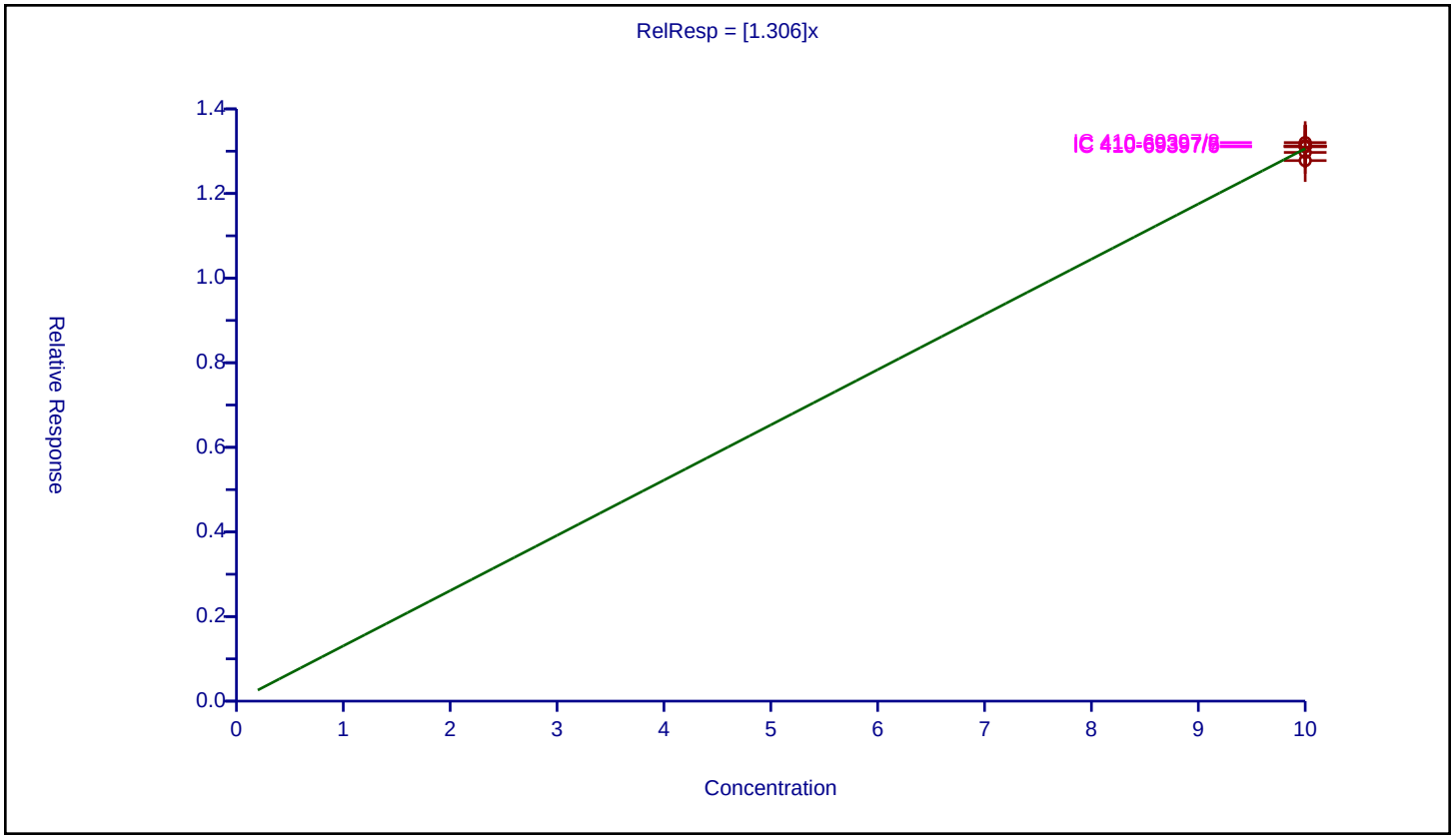
Curve Coefficients

Intercept:	0
Slope:	1.306

Error Coefficients

Standard Error:	2130000
Relative Standard Error:	1.1
Correlation Coefficient:	0.00000000000000000000
Coefficient of Determination (Adjusted):	0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/3	10.0	12.777949	10.0	1579118.0	1.277795	Y
2	ICIS 410-69397/4	10.0	12.971482	10.0	1570516.0	1.297148	Y
3	IC 410-69397/5	10.0	13.125886	10.0	1486999.0	1.312589	Y
4	IC 410-69397/6	10.0	13.104358	10.0	1481807.0	1.310436	Y
5	IC 410-69397/7	10.0	13.114107	10.0	1484400.0	1.311411	Y
6	IC 410-69397/8	10.0	13.204428	10.0	1487373.0	1.320443	Y
7	IC 410-69397/9	10.0	13.117124	10.0	1473403.0	1.311712	Y



Calibration / Toluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

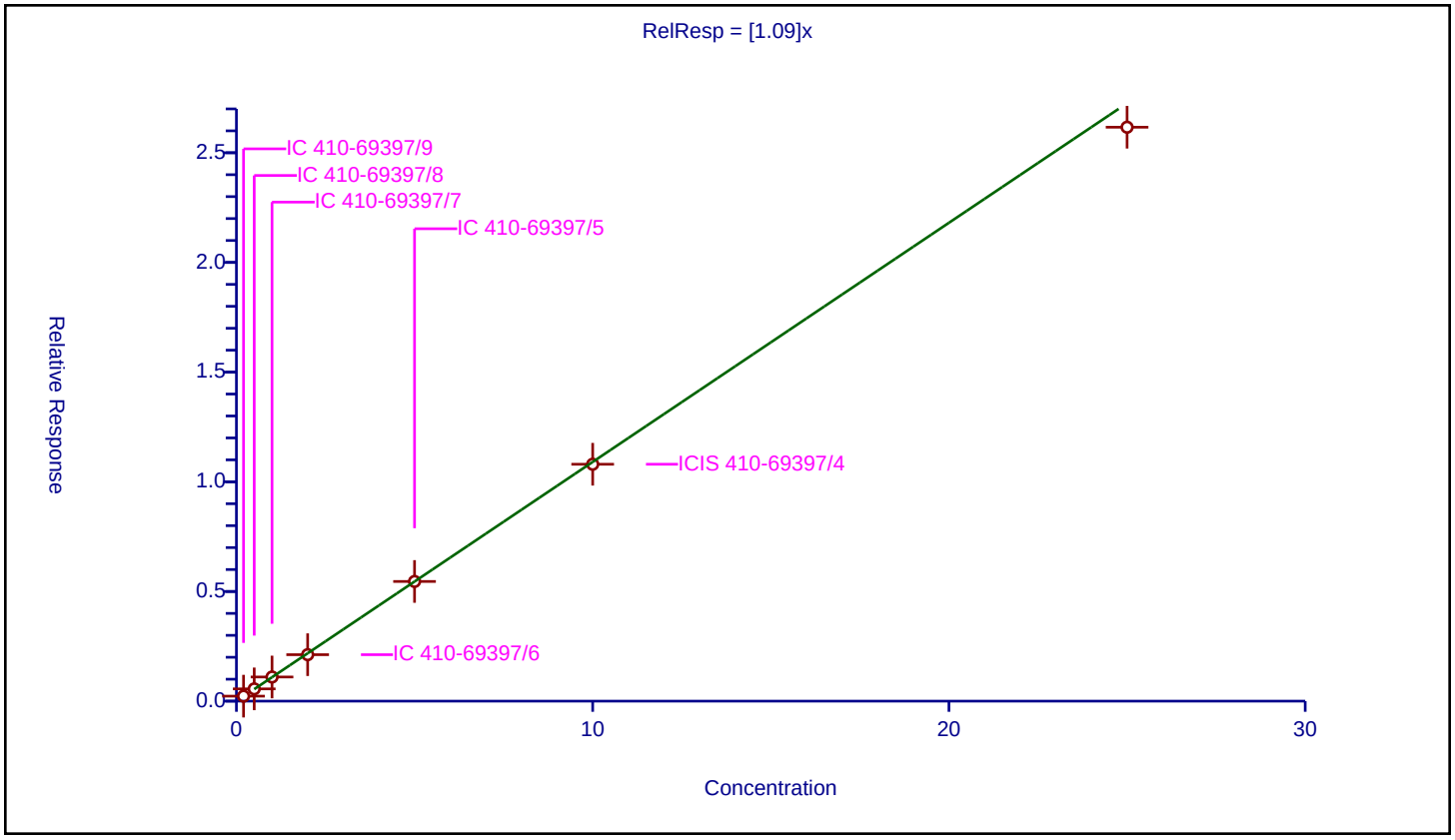
Curve Coefficients

Intercept:	0
Slope:	1.09

Error Coefficients

Standard Error:	1860000
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 410-69397/9	0.2	0.227623	10.0	1473403.0	1.138114	Y
2	IC 410-69397/8	0.5	0.558663	10.0	1487373.0	1.117326	Y
3	IC 410-69397/7	1.0	1.100168	10.0	1484400.0	1.100168	Y
4	IC 410-69397/6	2.0	2.118353	10.0	1481807.0	1.059176	Y
5	IC 410-69397/5	5.0	5.456466	10.0	1486999.0	1.091293	Y
6	ICIS 410-69397/4	10.0	10.799361	10.0	1570516.0	1.079936	Y
7	IC 410-69397/3	25.0	26.164447	10.0	1579118.0	1.046578	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

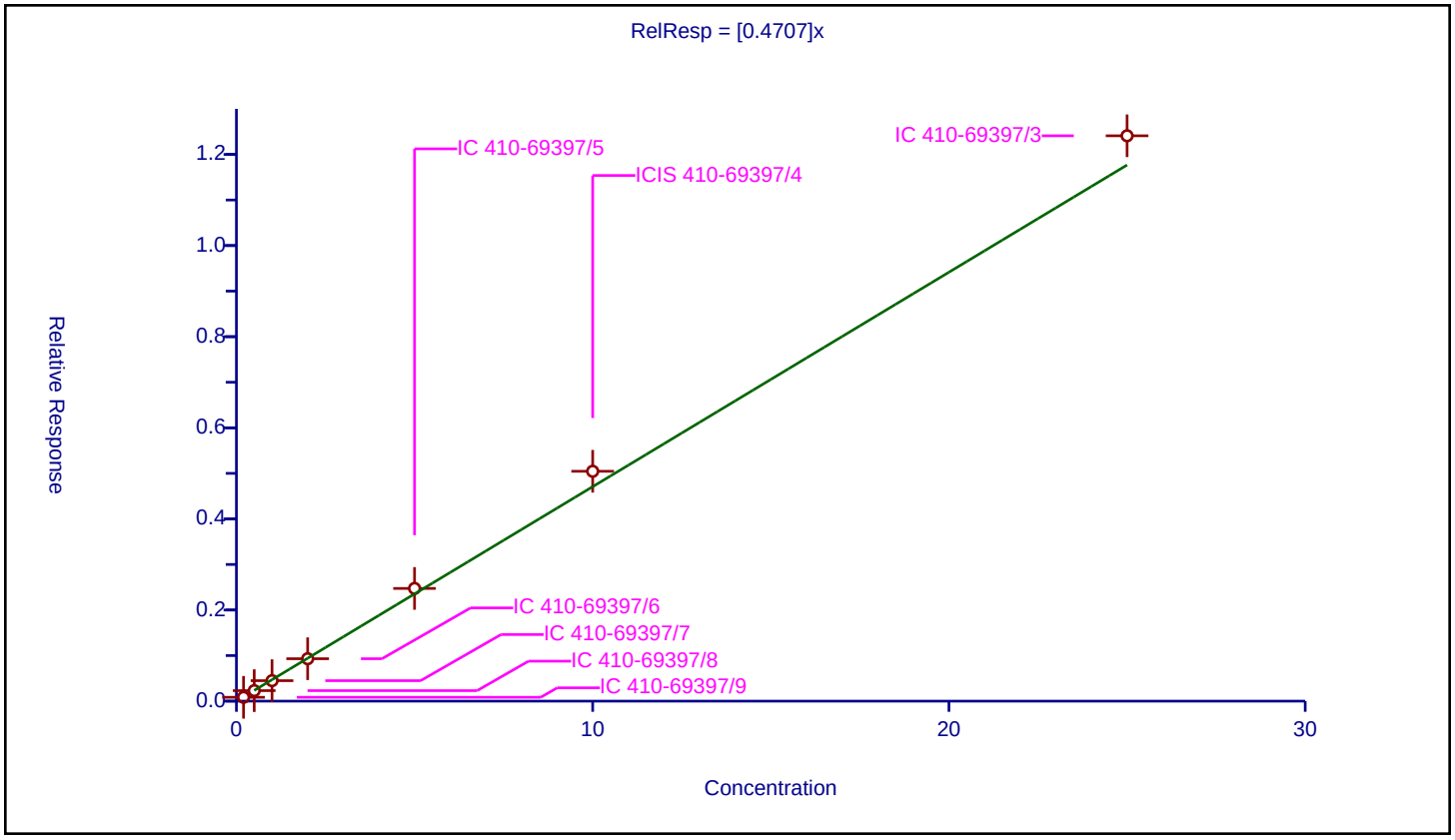
Curve Coefficients

Intercept:	0
Slope:	0.4707

Error Coefficients

Standard Error:	878000
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 410-69397/9	0.2	0.084756	10.0	1473403.0	0.423781	Y
2	IC 410-69397/8	0.5	0.230426	10.0	1487373.0	0.460853	Y
3	IC 410-69397/7	1.0	0.449468	10.0	1484400.0	0.449468	Y
4	IC 410-69397/6	2.0	0.930843	10.0	1481807.0	0.465422	Y
5	IC 410-69397/5	5.0	2.473855	10.0	1486999.0	0.494771	Y
6	ICIS 410-69397/4	10.0	5.045514	10.0	1570516.0	0.504551	Y
7	IC 410-69397/3	25.0	12.409719	10.0	1579118.0	0.496389	Y



Calibration / Ethyl methacrylate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

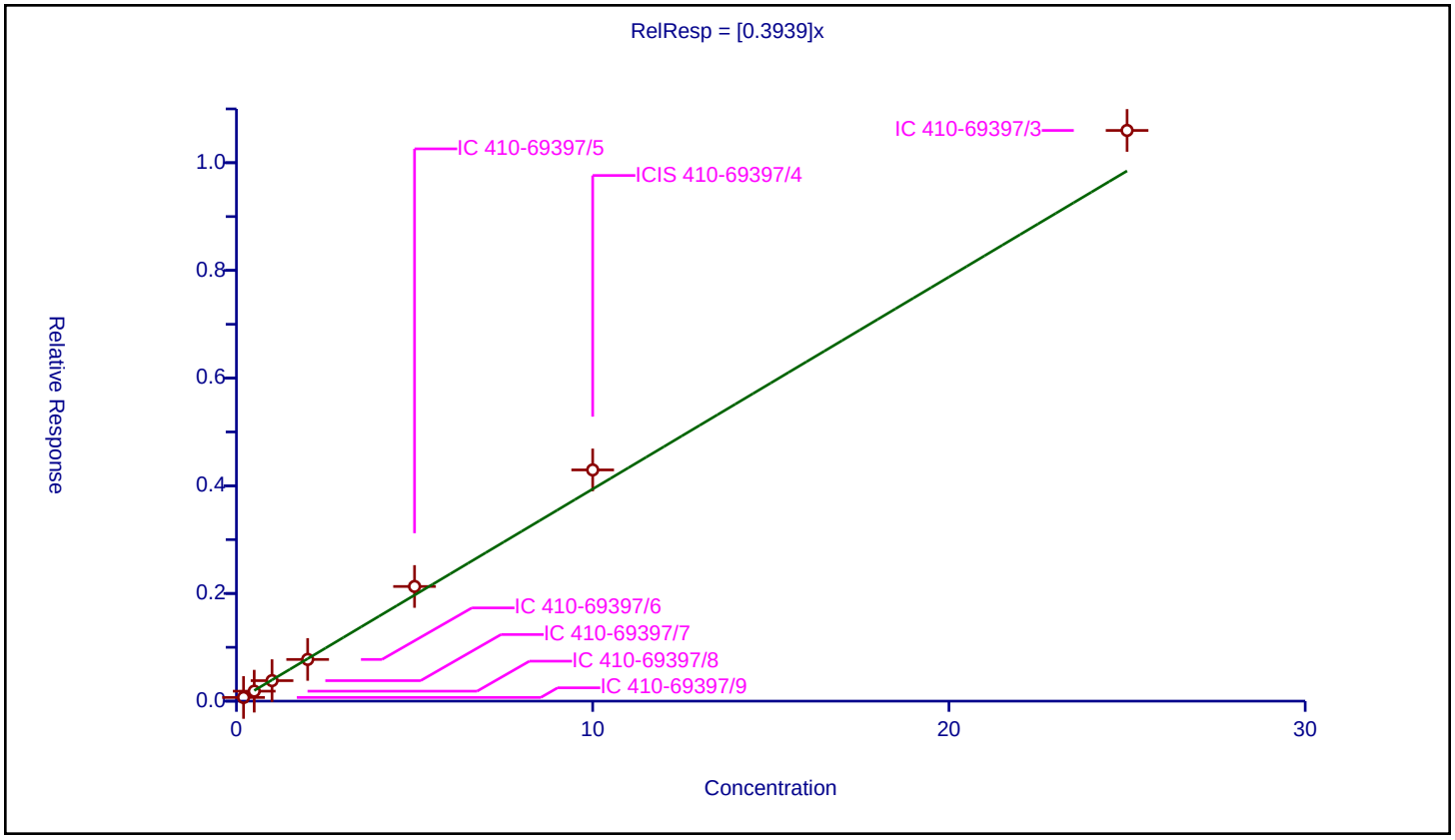
Curve Coefficients

Intercept:	0
Slope:	0.3939

Error Coefficients

Standard Error:	750000
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 410-69397/9	0.2	0.067836	10.0	1473403.0	0.339181	Y
2	IC 410-69397/8	0.5	0.185454	10.0	1487373.0	0.370909	Y
3	IC 410-69397/7	1.0	0.380874	10.0	1484400.0	0.380874	Y
4	IC 410-69397/6	2.0	0.774217	10.0	1481807.0	0.387108	Y
5	IC 410-69397/5	5.0	2.129981	10.0	1486999.0	0.425996	Y
6	ICIS 410-69397/4	10.0	4.294474	10.0	1570516.0	0.429447	Y
7	IC 410-69397/3	25.0	10.599879	10.0	1579118.0	0.423995	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

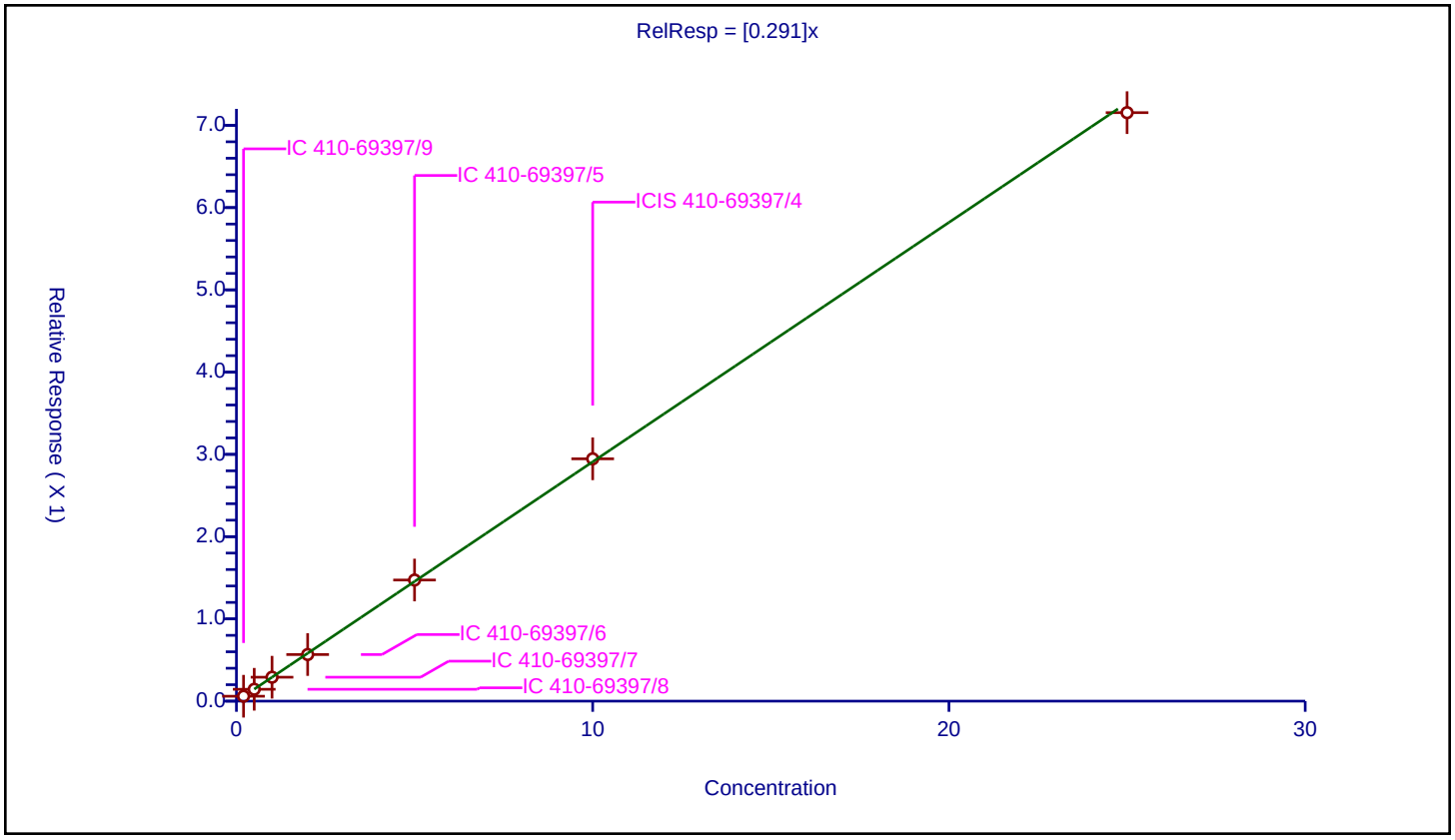
Curve Coefficients

Intercept:	0
Slope:	0.291

Error Coefficients

Standard Error:	508000
Relative Standard Error:	1.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.059848	10.0	1473403.0	0.299239	Y
2	IC 410-69397/8	0.5	0.144194	10.0	1487373.0	0.288388	Y
3	IC 410-69397/7	1.0	0.290845	10.0	1484400.0	0.290845	Y
4	IC 410-69397/6	2.0	0.566315	10.0	1481807.0	0.283158	Y
5	IC 410-69397/5	5.0	1.472395	10.0	1486999.0	0.294479	Y
6	ICIS 410-69397/4	10.0	2.946127	10.0	1570516.0	0.294613	Y
7	IC 410-69397/3	25.0	7.15438	10.0	1579118.0	0.286175	Y



Calibration / Tetrachloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

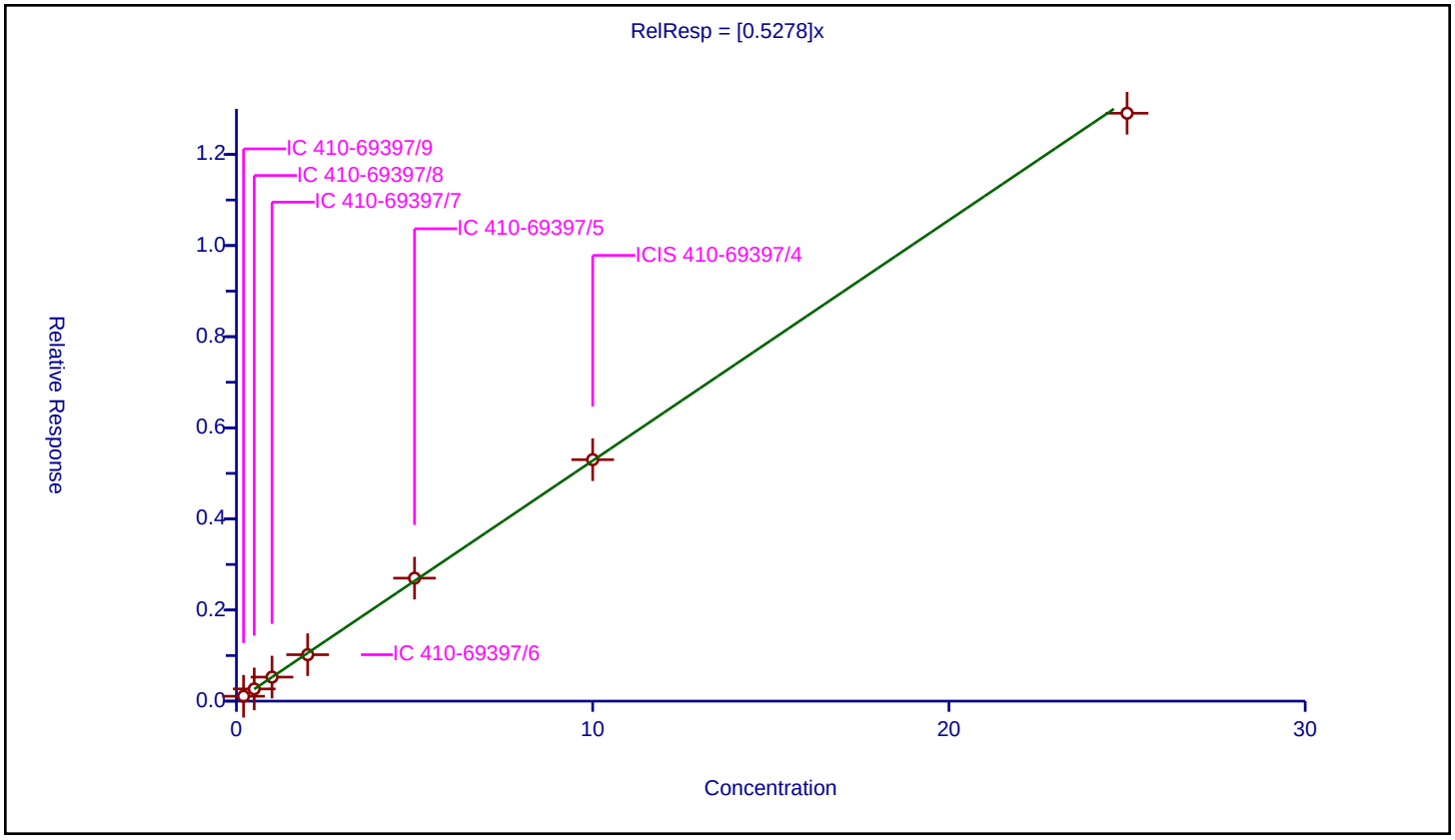
Curve Coefficients

Intercept:	0
Slope:	0.5278

Error Coefficients

Standard Error:	916000
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 410-69397/9	0.2	0.107045	10.0	1473403.0	0.535224	Y
2	IC 410-69397/8	0.5	0.267969	10.0	1487373.0	0.535938	Y
3	IC 410-69397/7	1.0	0.527843	10.0	1484400.0	0.527843	Y
4	IC 410-69397/6	2.0	1.019208	10.0	1481807.0	0.509604	Y
5	IC 410-69397/5	5.0	2.699659	10.0	1486999.0	0.539932	Y
6	ICIS 410-69397/4	10.0	5.300716	10.0	1570516.0	0.530072	Y
7	IC 410-69397/3	25.0	12.905267	10.0	1579118.0	0.516211	Y



Calibration / 1,3-Dichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

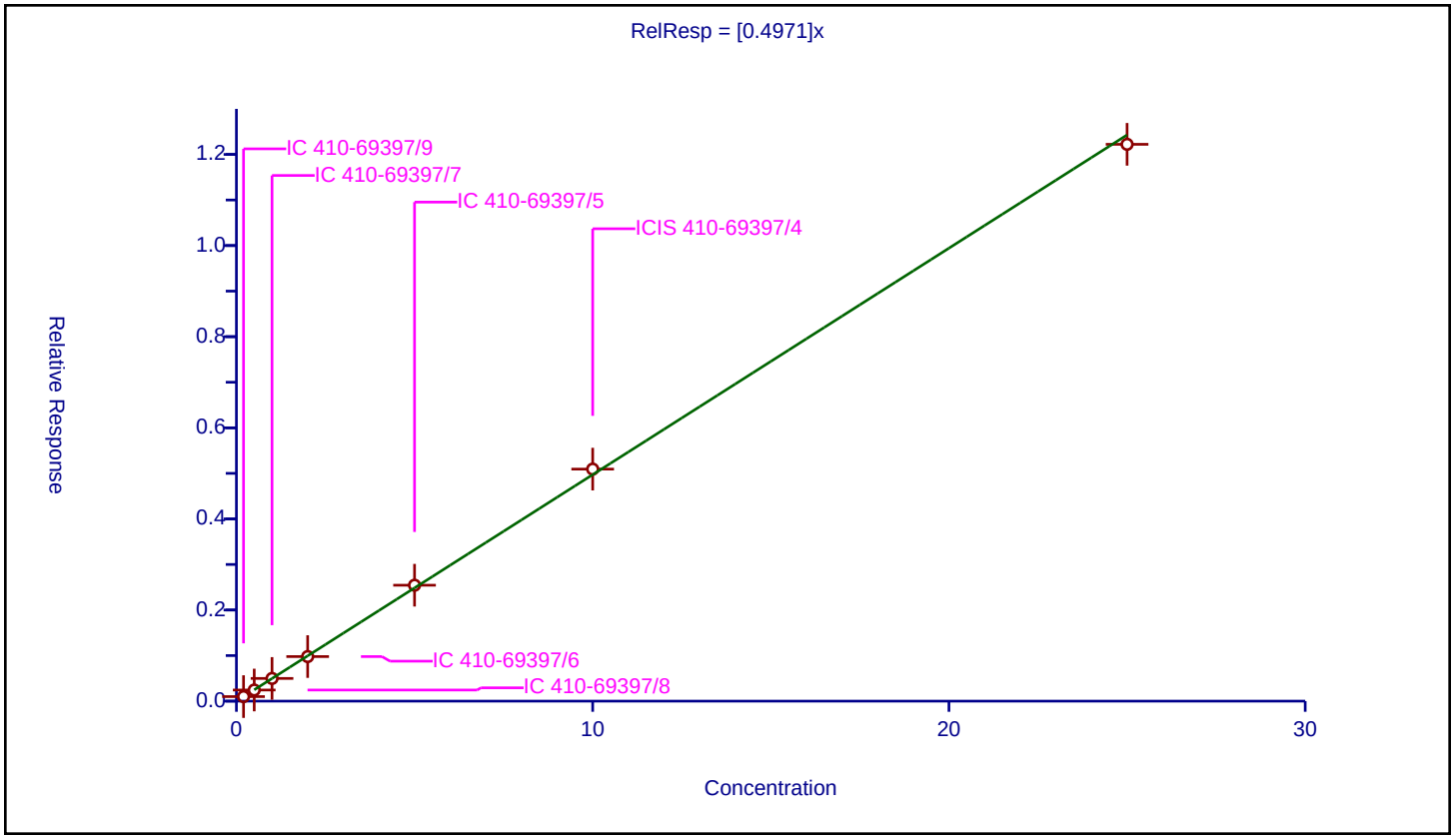
Curve Coefficients

Intercept:	0
Slope:	0.4971

Error Coefficients

Standard Error:	869000
Relative Standard Error:	1.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.09947	10.0	1473403.0	0.497352	Y
2	IC 410-69397/8	0.5	0.244075	10.0	1487373.0	0.488149	Y
3	IC 410-69397/7	1.0	0.498188	10.0	1484400.0	0.498188	Y
4	IC 410-69397/6	2.0	0.978184	10.0	1481807.0	0.489092	Y
5	IC 410-69397/5	5.0	2.544709	10.0	1486999.0	0.508942	Y
6	ICIS 410-69397/4	10.0	5.093224	10.0	1570516.0	0.509322	Y
7	IC 410-69397/3	25.0	12.22219	10.0	1579118.0	0.488888	Y



Calibration / 2-Hexanone

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

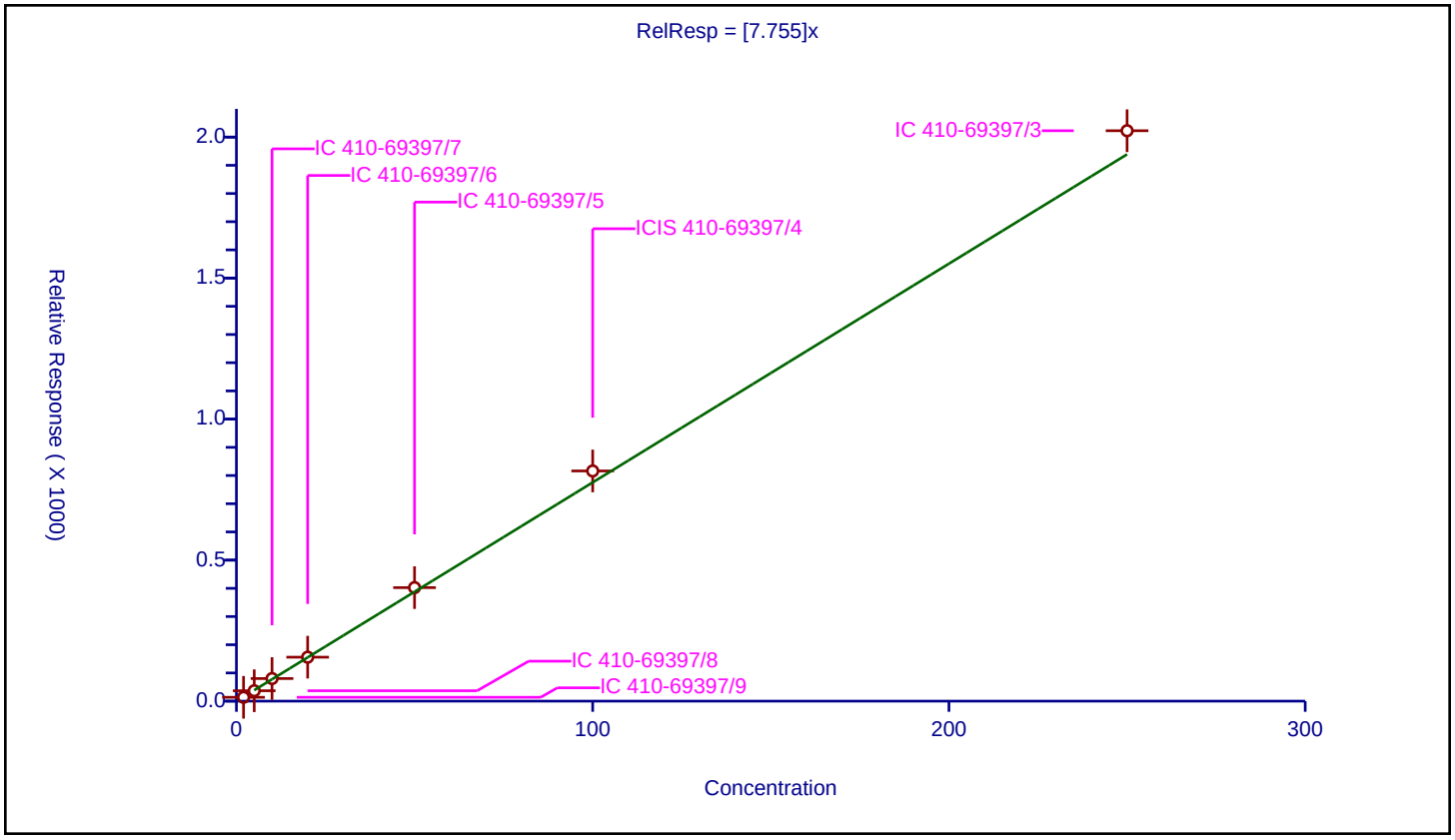
Curve Coefficients

Intercept:	0
Slope:	7.755

Error Coefficients

Standard Error:	3070000
Relative Standard Error:	6.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	2.0	13.607736	50.0	157506.0	6.803868	Y
2	IC 410-69397/8	5.0	36.882709	50.0	156713.0	7.376542	Y
3	IC 410-69397/7	10.0	80.112613	50.0	155400.0	8.011261	Y
4	IC 410-69397/6	20.0	155.870915	50.0	164063.0	7.793546	Y
5	IC 410-69397/5	50.0	402.554803	50.0	167919.0	8.051096	Y
6	ICIS 410-69397/4	100.0	816.164457	50.0	174562.0	8.161645	Y
7	IC 410-69397/3	250.0	2022.523268	50.0	168044.0	8.090093	Y



Calibration / Chlorodibromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

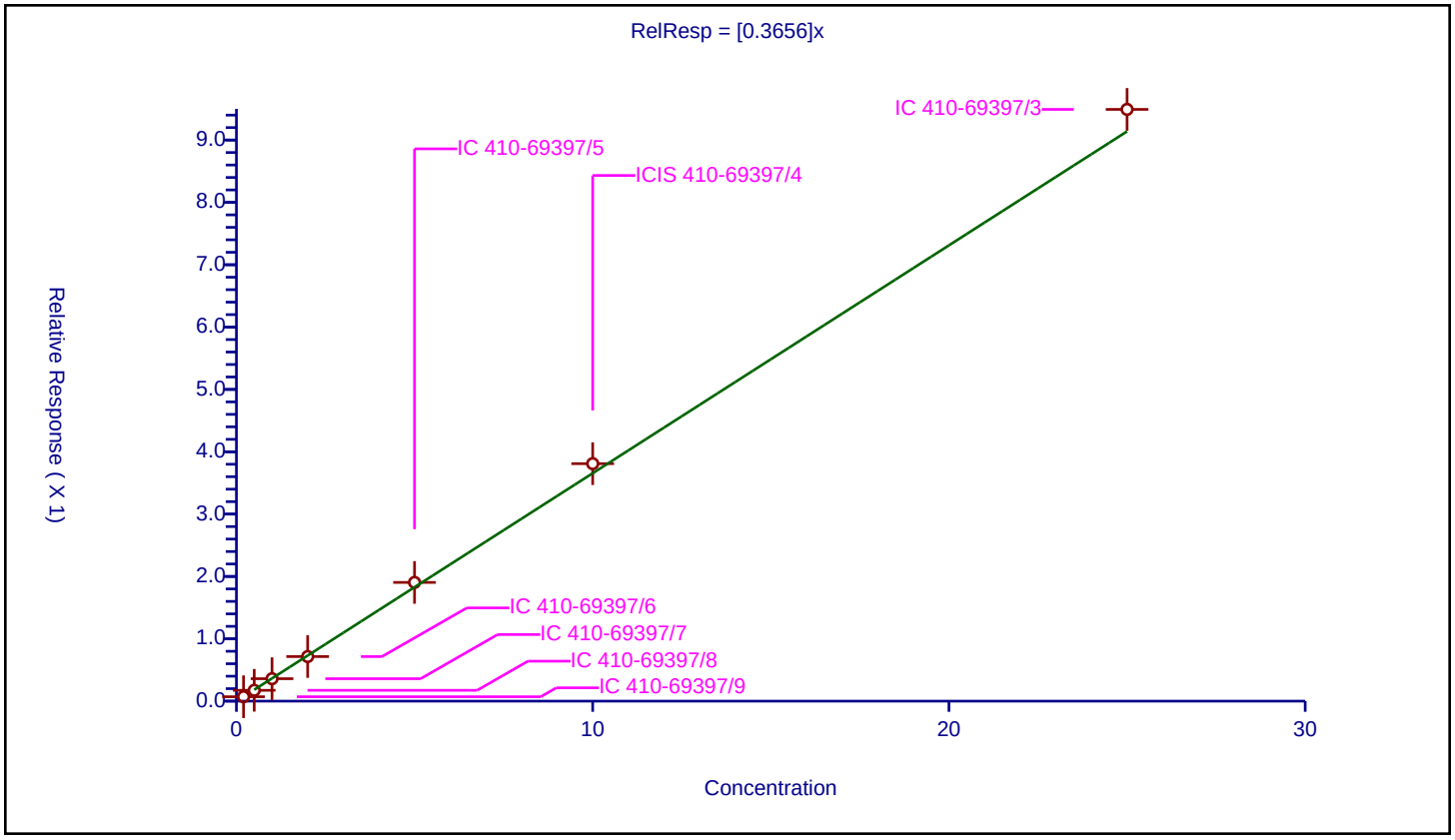
Curve Coefficients

Intercept:	0
Slope:	0.3656

Error Coefficients

Standard Error:	671000
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 410-69397/9	0.2	0.070585	10.0	1473403.0	0.352924	Y
2	IC 410-69397/8	0.5	0.173534	10.0	1487373.0	0.347068	Y
3	IC 410-69397/7	1.0	0.359997	10.0	1484400.0	0.359997	Y
4	IC 410-69397/6	2.0	0.71487	10.0	1481807.0	0.357435	Y
5	IC 410-69397/5	5.0	1.904554	10.0	1486999.0	0.380911	Y
6	ICIS 410-69397/4	10.0	3.809334	10.0	1570516.0	0.380933	Y
7	IC 410-69397/3	25.0	9.49171	10.0	1579118.0	0.379668	Y



Calibration / Ethylene Dibromide

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

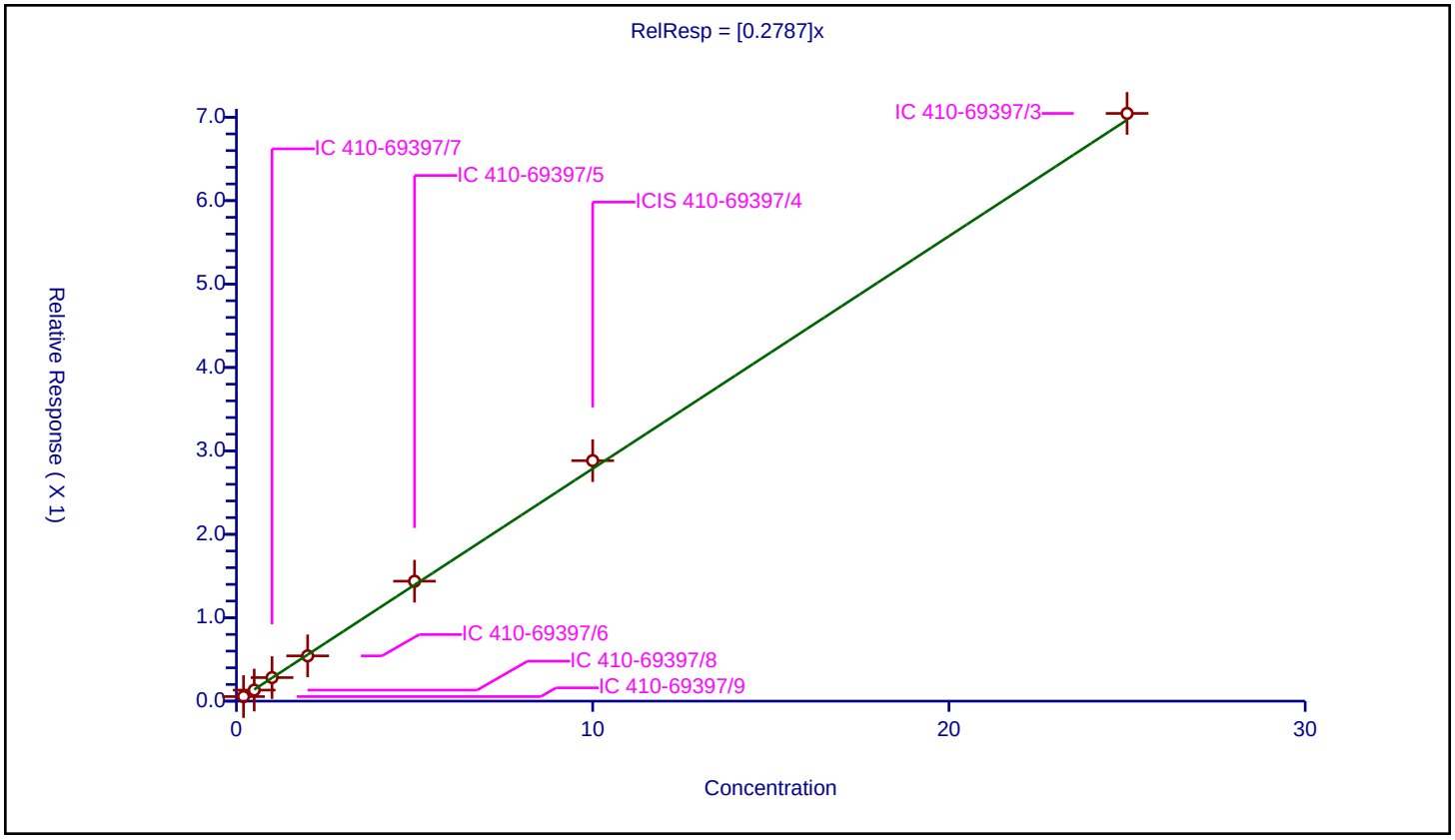
Curve Coefficients

Intercept:	0
Slope:	0.2787

Error Coefficients

Standard Error:	500000
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 410-69397/9	0.2	0.054846	10.0	1473403.0	0.274229	Y
2	IC 410-69397/8	0.5	0.132623	10.0	1487373.0	0.265246	Y
3	IC 410-69397/7	1.0	0.282478	10.0	1484400.0	0.282478	Y
4	IC 410-69397/6	2.0	0.542682	10.0	1481807.0	0.271341	Y
5	IC 410-69397/5	5.0	1.437815	10.0	1486999.0	0.287563	Y
6	ICIS 410-69397/4	10.0	2.883052	10.0	1570516.0	0.288305	Y
7	IC 410-69397/3	25.0	7.045642	10.0	1579118.0	0.281826	Y



Calibration / 1-Chlorohexane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

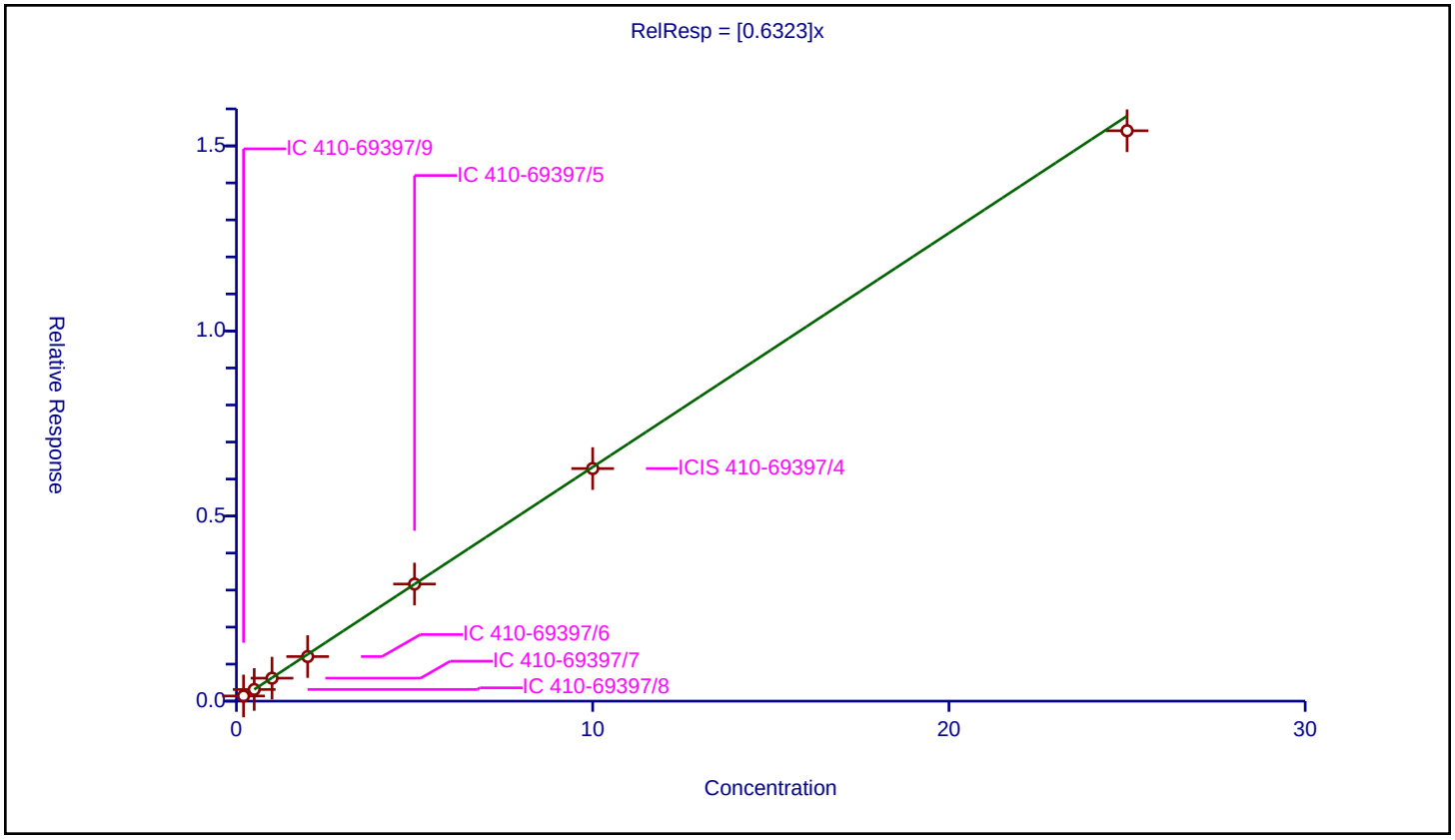
Curve Coefficients

Intercept:	0
Slope:	0.6323

Error Coefficients

Standard Error:	1090000
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 410-69397/9	0.2	0.138869	10.0	1473403.0	0.694345	Y
2	IC 410-69397/8	0.5	0.315704	10.0	1487373.0	0.631409	Y
3	IC 410-69397/7	1.0	0.620944	10.0	1484400.0	0.620944	Y
4	IC 410-69397/6	2.0	1.204482	10.0	1481807.0	0.602241	Y
5	IC 410-69397/5	5.0	3.16325	10.0	1486999.0	0.63265	Y
6	ICIS 410-69397/4	10.0	6.283011	10.0	1570516.0	0.628301	Y
7	IC 410-69397/3	25.0	15.409456	10.0	1579118.0	0.616378	Y



Calibration / Chlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

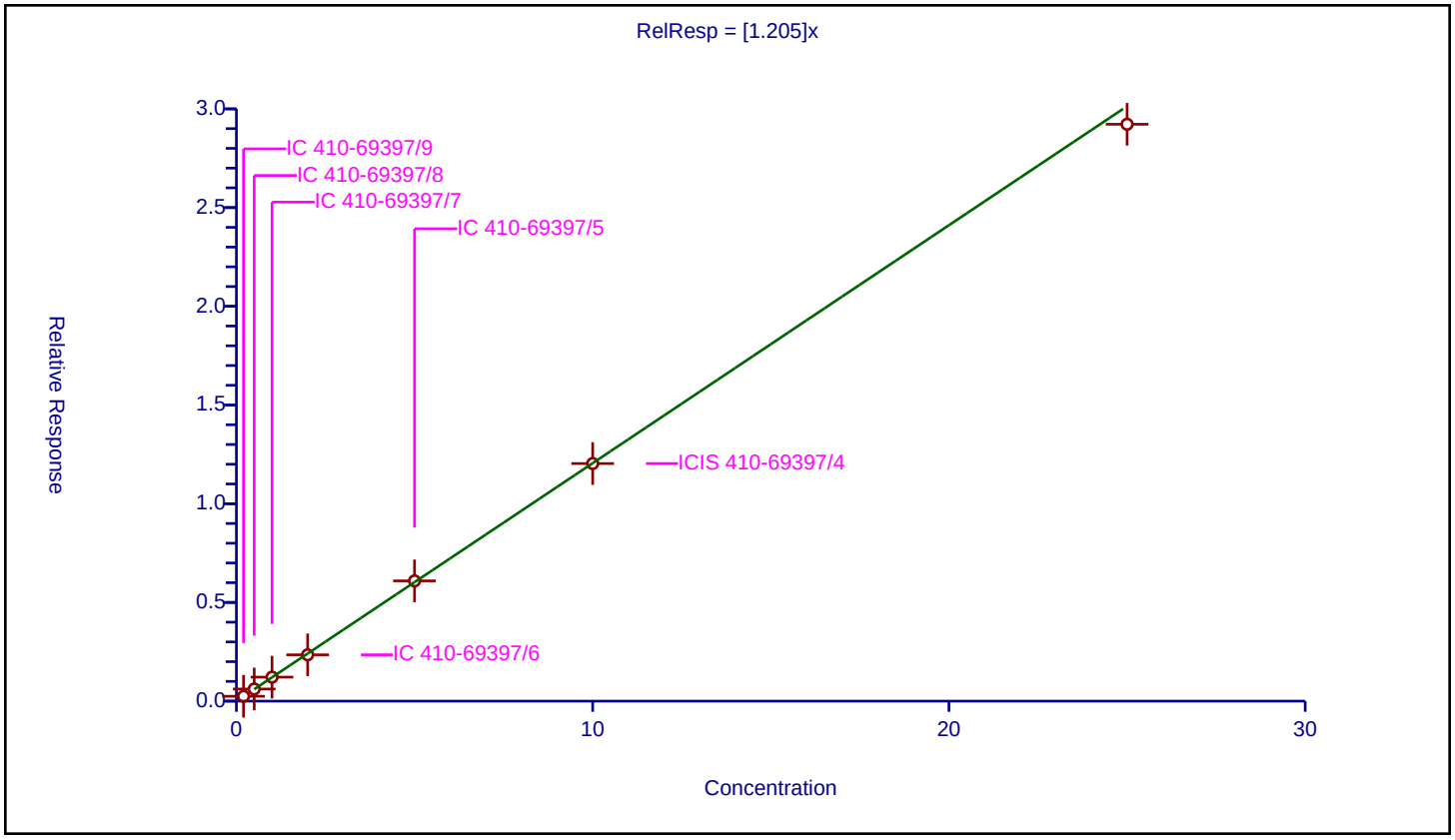
Curve Coefficients

Intercept:	0
Slope:	1.205

Error Coefficients

Standard Error:	2080000
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 410-69397/9	0.2	0.245622	10.0	1473403.0	1.228109	Y
2	IC 410-69397/8	0.5	0.614782	10.0	1487373.0	1.229564	Y
3	IC 410-69397/7	1.0	1.21573	10.0	1484400.0	1.21573	Y
4	IC 410-69397/6	2.0	2.347107	10.0	1481807.0	1.173554	Y
5	IC 410-69397/5	5.0	6.092055	10.0	1486999.0	1.218411	Y
6	ICIS 410-69397/4	10.0	12.034567	10.0	1570516.0	1.203457	Y
7	IC 410-69397/3	25.0	29.221268	10.0	1579118.0	1.168851	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

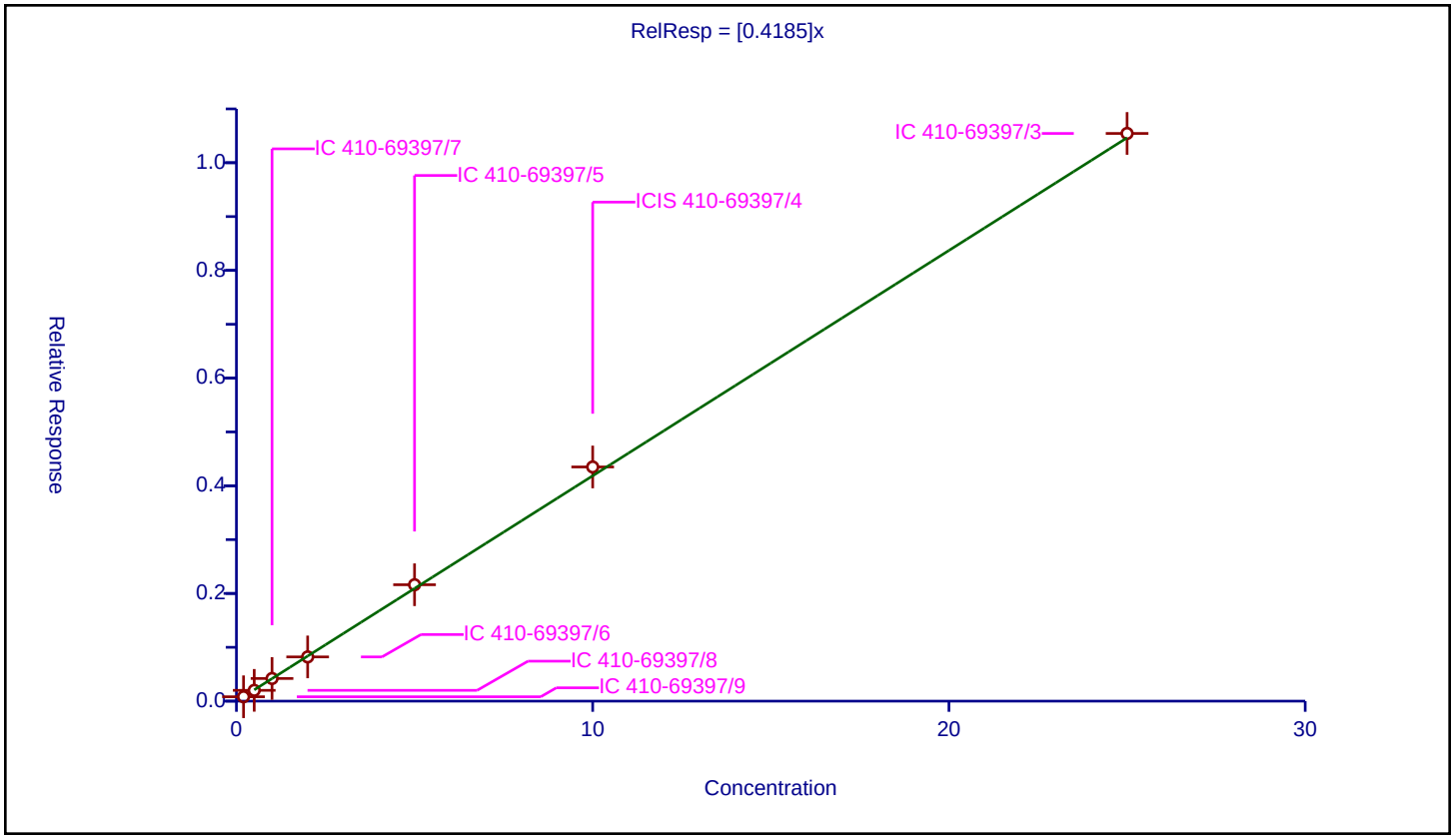
Curve Coefficients

Intercept:	0
Slope:	0.4185

Error Coefficients

Standard Error:	749000
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 410-69397/9	0.2	0.0816	10.0	1473403.0	0.408001	Y
2	IC 410-69397/8	0.5	0.200595	10.0	1487373.0	0.401191	Y
3	IC 410-69397/7	1.0	0.420742	10.0	1484400.0	0.420742	Y
4	IC 410-69397/6	2.0	0.821517	10.0	1481807.0	0.410759	Y
5	IC 410-69397/5	5.0	2.161911	10.0	1486999.0	0.432382	Y
6	ICIS 410-69397/4	10.0	4.349558	10.0	1570516.0	0.434956	Y
7	IC 410-69397/3	25.0	10.544025	10.0	1579118.0	0.421761	Y



Calibration / Ethylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

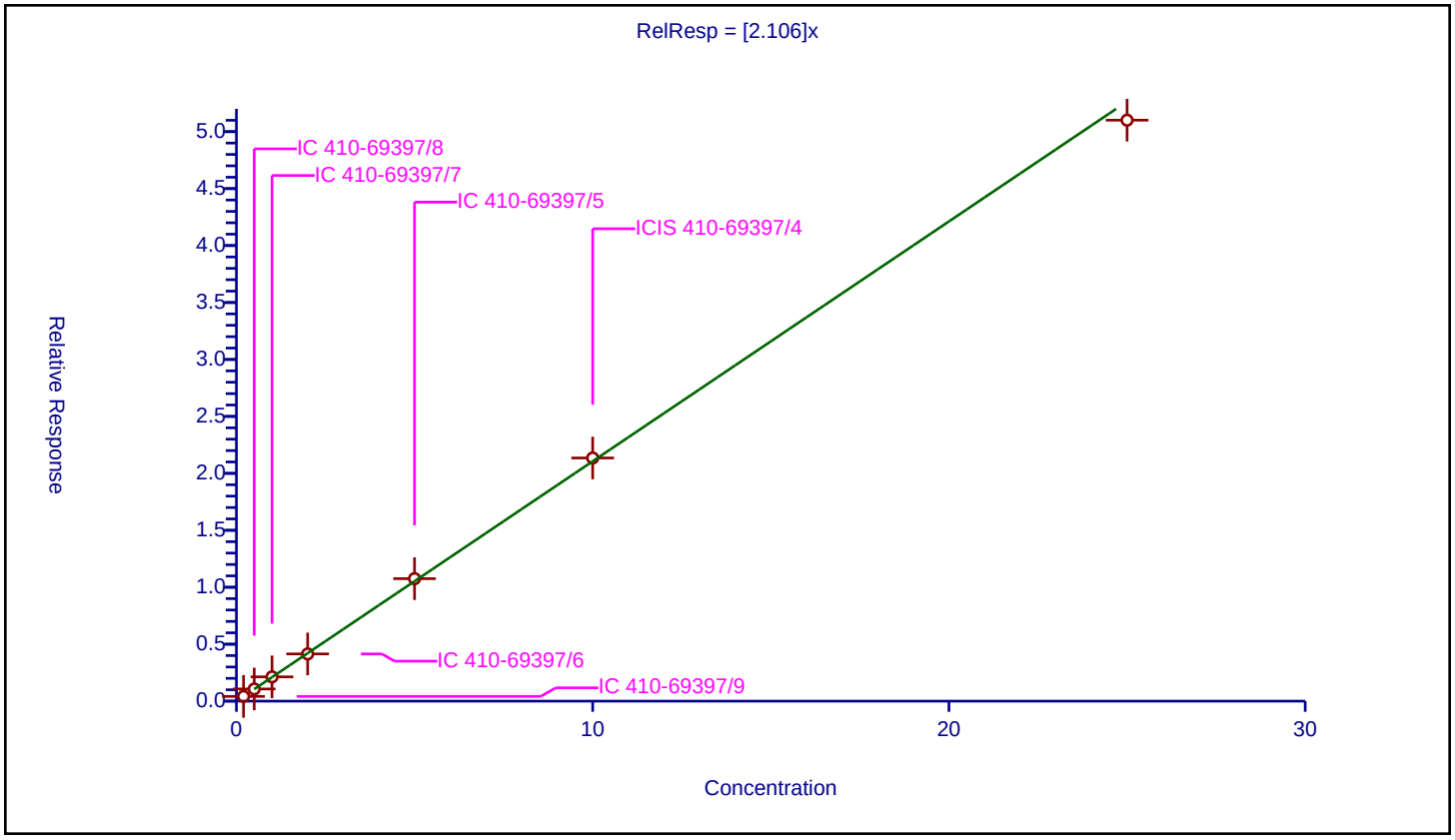
Curve Coefficients

Intercept:	0
Slope:	2.106

Error Coefficients

Standard Error:	3630000
Relative Standard Error:	2.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.415365	10.0	1473403.0	2.076825	Y
2	IC 410-69397/8	0.5	1.066572	10.0	1487373.0	2.133143	Y
3	IC 410-69397/7	1.0	2.132417	10.0	1484400.0	2.132417	Y
4	IC 410-69397/6	2.0	4.145925	10.0	1481807.0	2.072962	Y
5	IC 410-69397/5	5.0	10.752738	10.0	1486999.0	2.150548	Y
6	ICIS 410-69397/4	10.0	21.348799	10.0	1570516.0	2.13488	Y
7	IC 410-69397/3	25.0	51.008443	10.0	1579118.0	2.040338	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

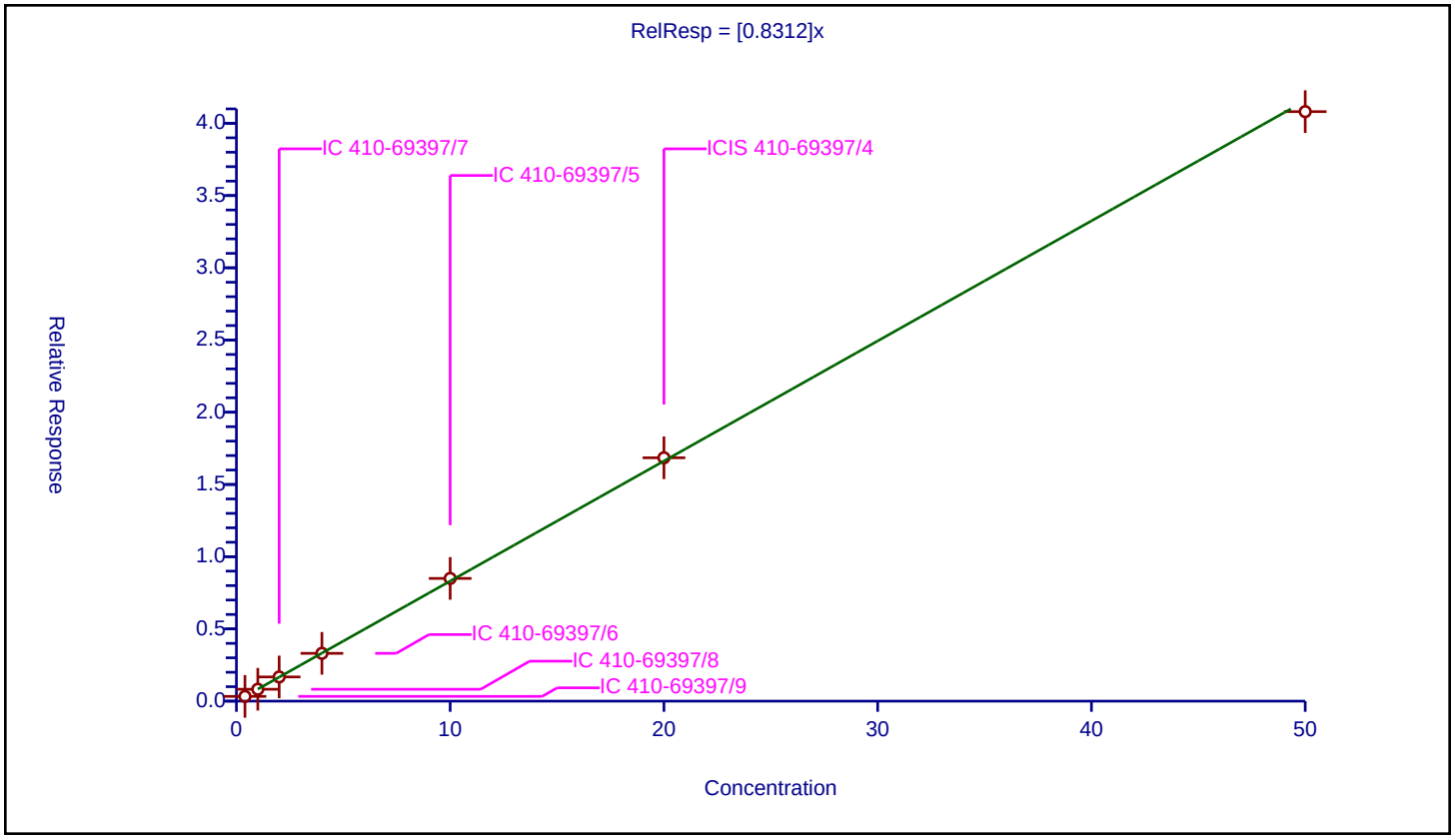
Curve Coefficients

Intercept:	0
Slope:	0.8312

Error Coefficients

Standard Error:	2900000
Relative Standard Error:	1.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.4	0.328817	10.0	1473403.0	0.822043	Y
2	IC 410-69397/8	1.0	0.82368	10.0	1487373.0	0.82368	Y
3	IC 410-69397/7	2.0	1.674333	10.0	1484400.0	0.837167	Y
4	IC 410-69397/6	4.0	3.309108	10.0	1481807.0	0.827277	Y
5	IC 410-69397/5	10.0	8.495164	10.0	1486999.0	0.849516	Y
6	ICIS 410-69397/4	20.0	16.848526	10.0	1570516.0	0.842426	Y
7	IC 410-69397/3	50.0	40.810864	10.0	1579118.0	0.816217	Y



Calibration / o-Xylene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

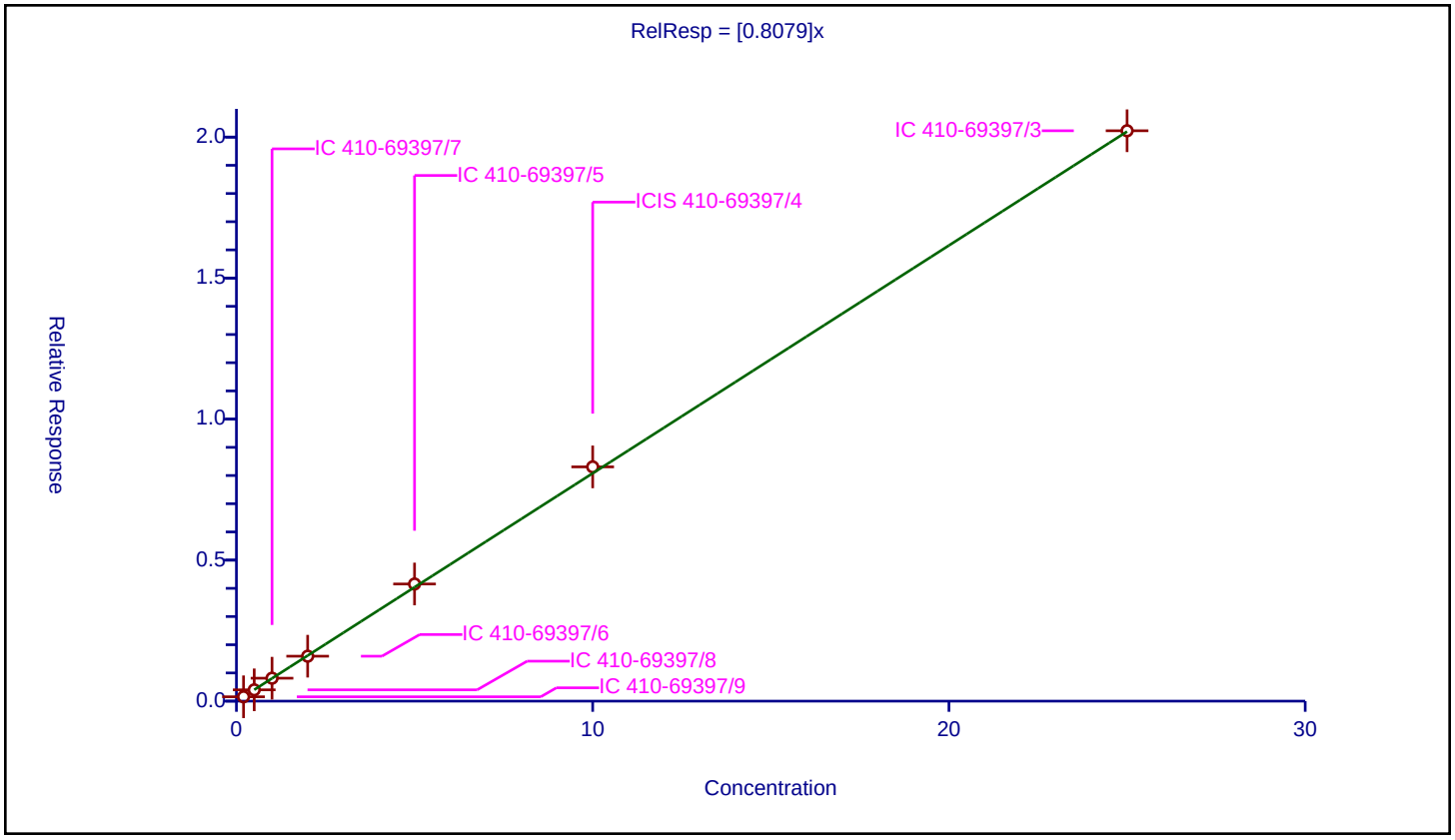
Curve Coefficients

Intercept:	0
Slope:	0.8079

Error Coefficients

Standard Error:	1440000
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 410-69397/9	0.2	0.154527	10.0	1473403.0	0.772633	Y
2	IC 410-69397/8	0.5	0.40076	10.0	1487373.0	0.801521	Y
3	IC 410-69397/7	1.0	0.813662	10.0	1484400.0	0.813662	Y
4	IC 410-69397/6	2.0	1.593973	10.0	1481807.0	0.796986	Y
5	IC 410-69397/5	5.0	4.154327	10.0	1486999.0	0.830865	Y
6	ICIS 410-69397/4	10.0	8.306595	10.0	1570516.0	0.830659	Y
7	IC 410-69397/3	25.0	20.224556	10.0	1579118.0	0.808982	Y



Calibration / Styrene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

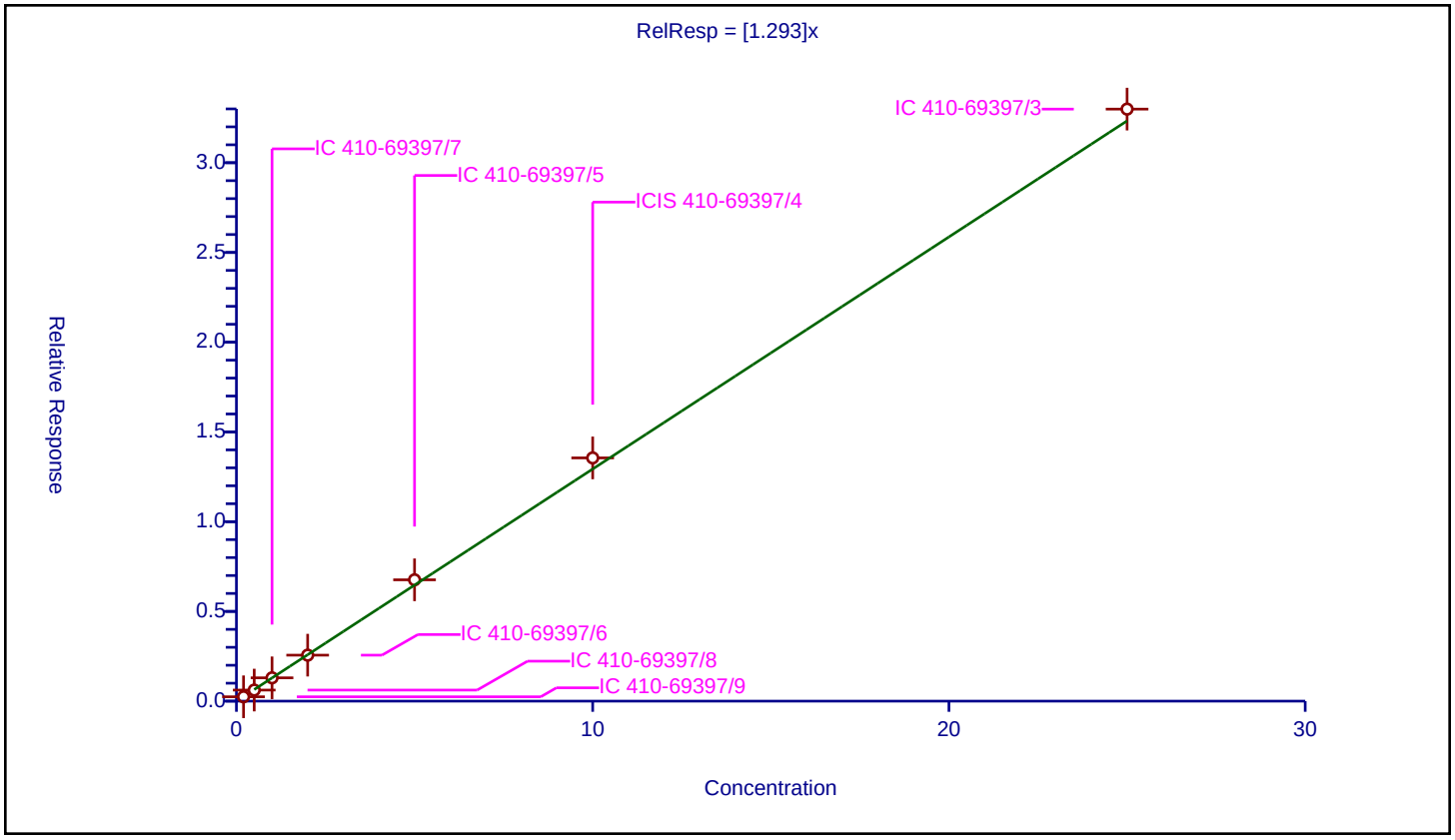
Curve Coefficients

Intercept:	0
Slope:	1.293

Error Coefficients

Standard Error:	2340000
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 410-69397/9	0.2	0.242432	10.0	1473403.0	1.21216	Y
2	IC 410-69397/8	0.5	0.616893	10.0	1487373.0	1.233786	Y
3	IC 410-69397/7	1.0	1.299212	10.0	1484400.0	1.299212	Y
4	IC 410-69397/6	2.0	2.562176	10.0	1481807.0	1.281088	Y
5	IC 410-69397/5	5.0	6.760421	10.0	1486999.0	1.352084	Y
6	ICIS 410-69397/4	10.0	13.553132	10.0	1570516.0	1.355313	Y
7	IC 410-69397/3	25.0	32.987579	10.0	1579118.0	1.319503	Y



Calibration / Bromoform

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

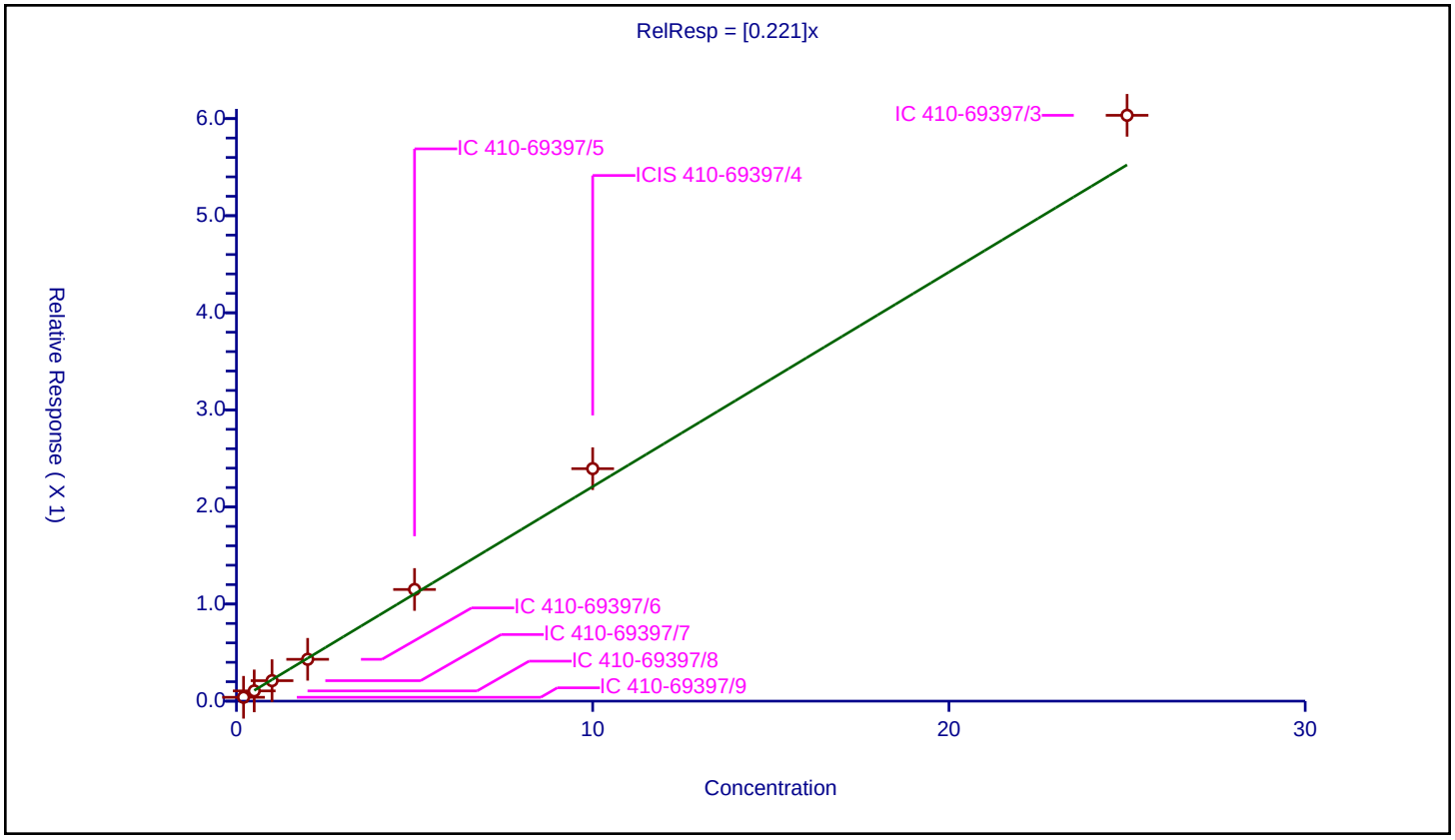
Curve Coefficients

Intercept:	0
Slope:	0.221

Error Coefficients

Standard Error:	425000
Relative Standard Error:	7.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.039758	10.0	1473403.0	0.198792	Y
2	IC 410-69397/8	0.5	0.105427	10.0	1487373.0	0.210855	Y
3	IC 410-69397/7	1.0	0.210738	10.0	1484400.0	0.210738	Y
4	IC 410-69397/6	2.0	0.430933	10.0	1481807.0	0.215467	Y
5	IC 410-69397/5	5.0	1.150169	10.0	1486999.0	0.230034	Y
6	ICIS 410-69397/4	10.0	2.394455	10.0	1570516.0	0.239446	Y
7	IC 410-69397/3	25.0	6.034014	10.0	1579118.0	0.241361	Y



Calibration / Isopropylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

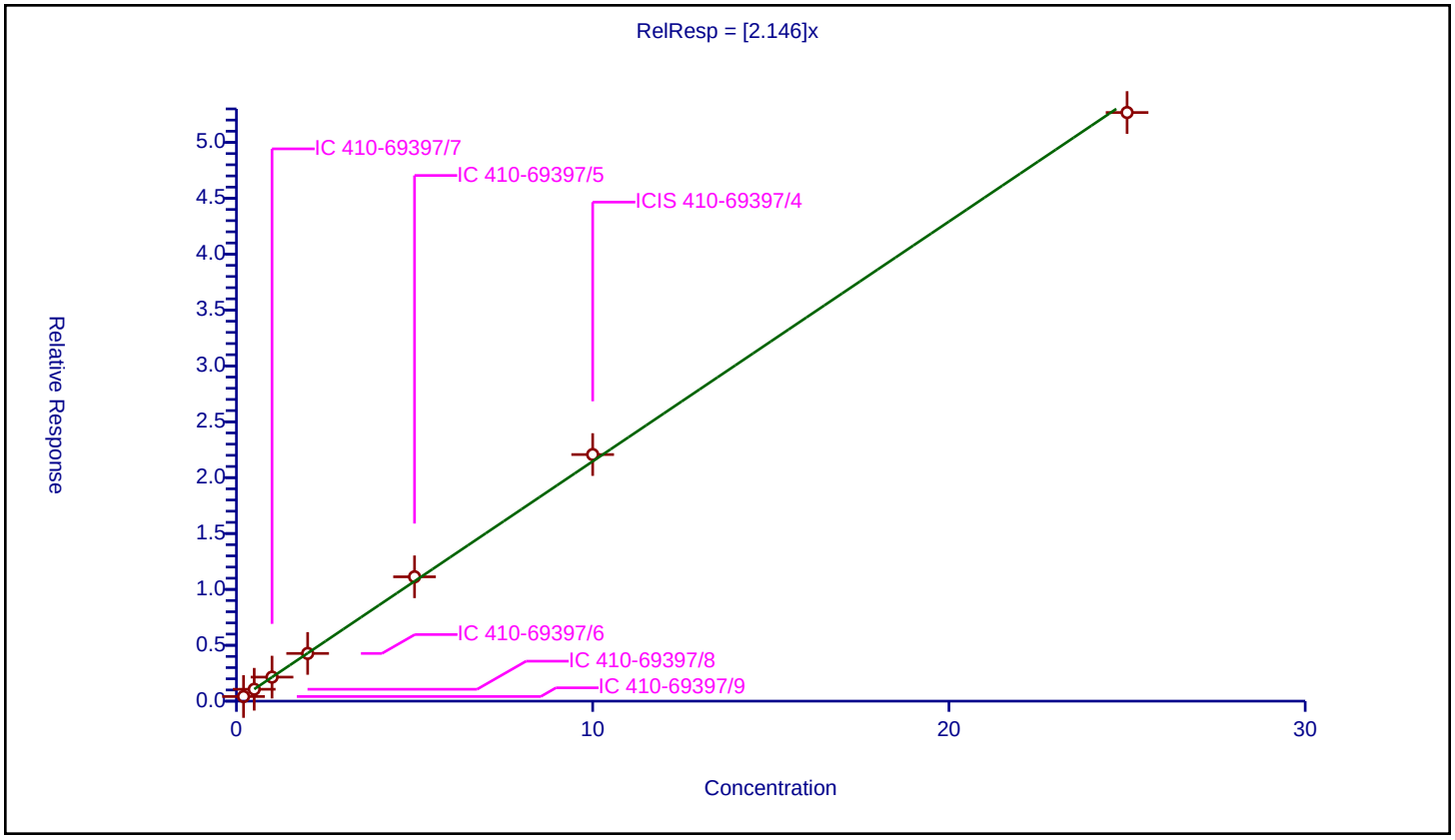
Curve Coefficients

Intercept:	0
Slope:	2.146

Error Coefficients

Standard Error:	3750000
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 410-69397/9	0.2	0.413254	10.0	1473403.0	2.066271	Y
2	IC 410-69397/8	0.5	1.064615	10.0	1487373.0	2.129231	Y
3	IC 410-69397/7	1.0	2.151543	10.0	1484400.0	2.151543	Y
4	IC 410-69397/6	2.0	4.270786	10.0	1481807.0	2.135393	Y
5	IC 410-69397/5	5.0	11.126867	10.0	1486999.0	2.225373	Y
6	ICIS 410-69397/4	10.0	22.066238	10.0	1570516.0	2.206624	Y
7	IC 410-69397/3	25.0	52.675791	10.0	1579118.0	2.107032	Y



Calibration / 4-Bromofluorobenzene (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

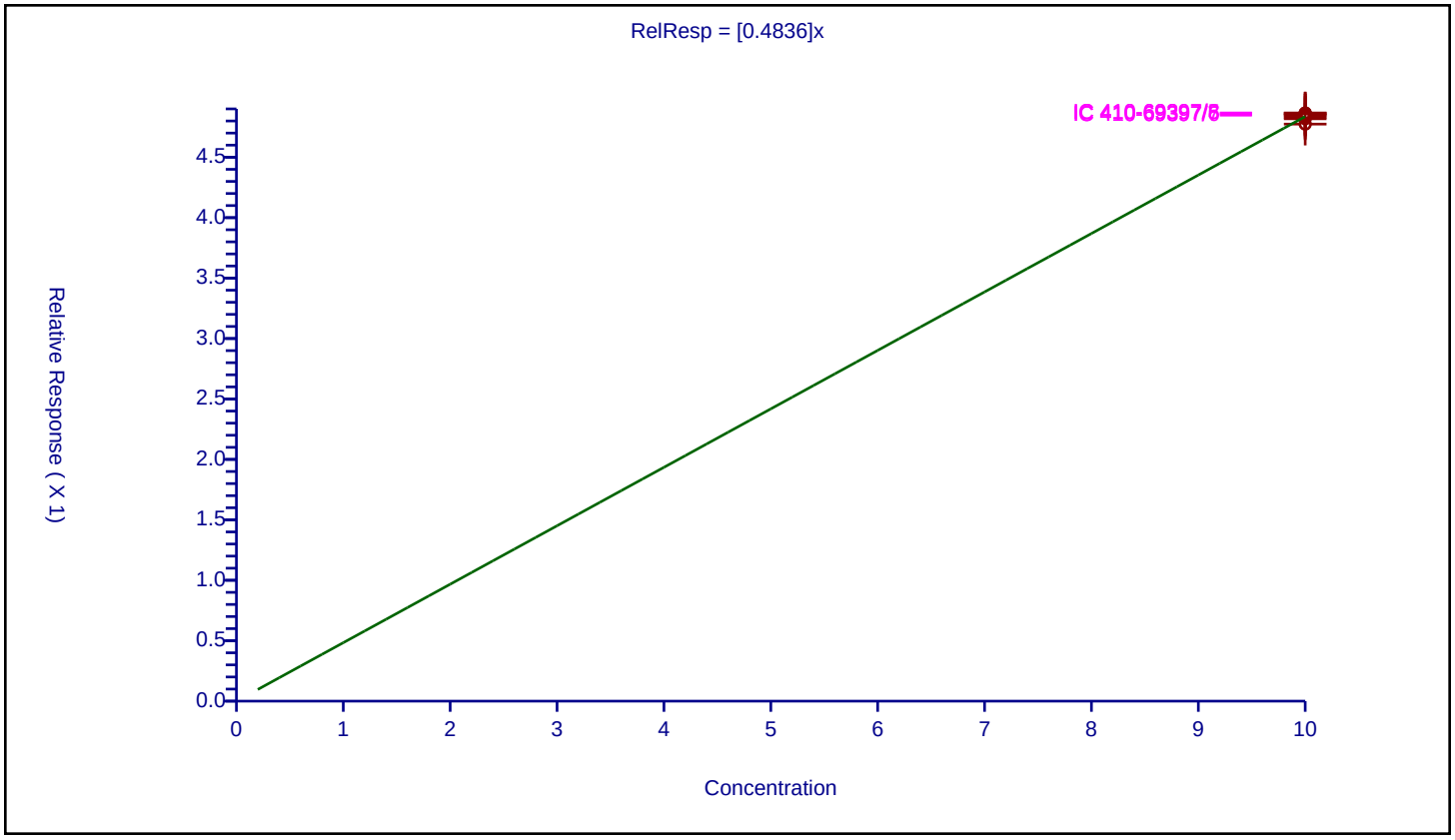
Curve Coefficients

Intercept:	0
Slope:	0.4836

Error Coefficients

Standard Error:	788000
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 410-69397/3	10.0	4.818164	10.0	1579118.0	0.481816	Y
2	ICIS 410-69397/4	10.0	4.774119	10.0	1570516.0	0.477412	Y
3	IC 410-69397/5	10.0	4.863749	10.0	1486999.0	0.486375	Y
4	IC 410-69397/6	10.0	4.848661	10.0	1481807.0	0.484866	Y
5	IC 410-69397/7	10.0	4.851954	10.0	1484400.0	0.485195	Y
6	IC 410-69397/8	10.0	4.866318	10.0	1487373.0	0.486632	Y
7	IC 410-69397/9	10.0	4.831034	10.0	1473403.0	0.483103	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

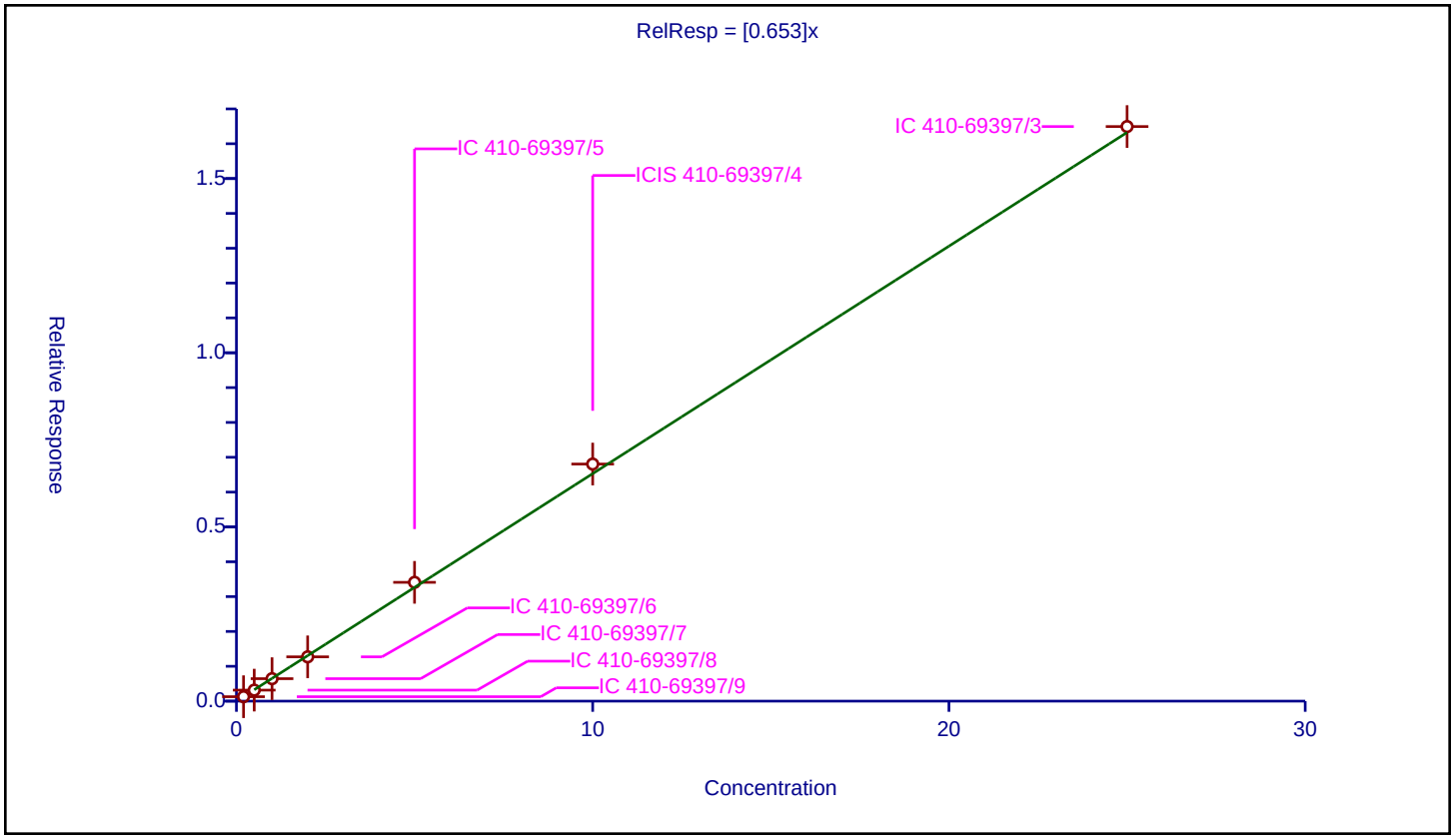
Curve Coefficients

Intercept:	0
Slope:	0.653

Error Coefficients

Standard Error:	666000
Relative Standard Error:	3.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.127173	10.0	848529.0	0.635865	Y
2	IC 410-69397/8	0.5	0.316039	10.0	857933.0	0.632077	Y
3	IC 410-69397/7	1.0	0.644739	10.0	843985.0	0.644739	Y
4	IC 410-69397/6	2.0	1.271723	10.0	848463.0	0.635862	Y
5	IC 410-69397/5	5.0	3.4102	10.0	845833.0	0.68204	Y
6	ICIS 410-69397/4	10.0	6.805371	10.0	891775.0	0.680537	Y
7	IC 410-69397/3	25.0	16.493035	10.0	898877.0	0.659721	Y



Calibration / Bromobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

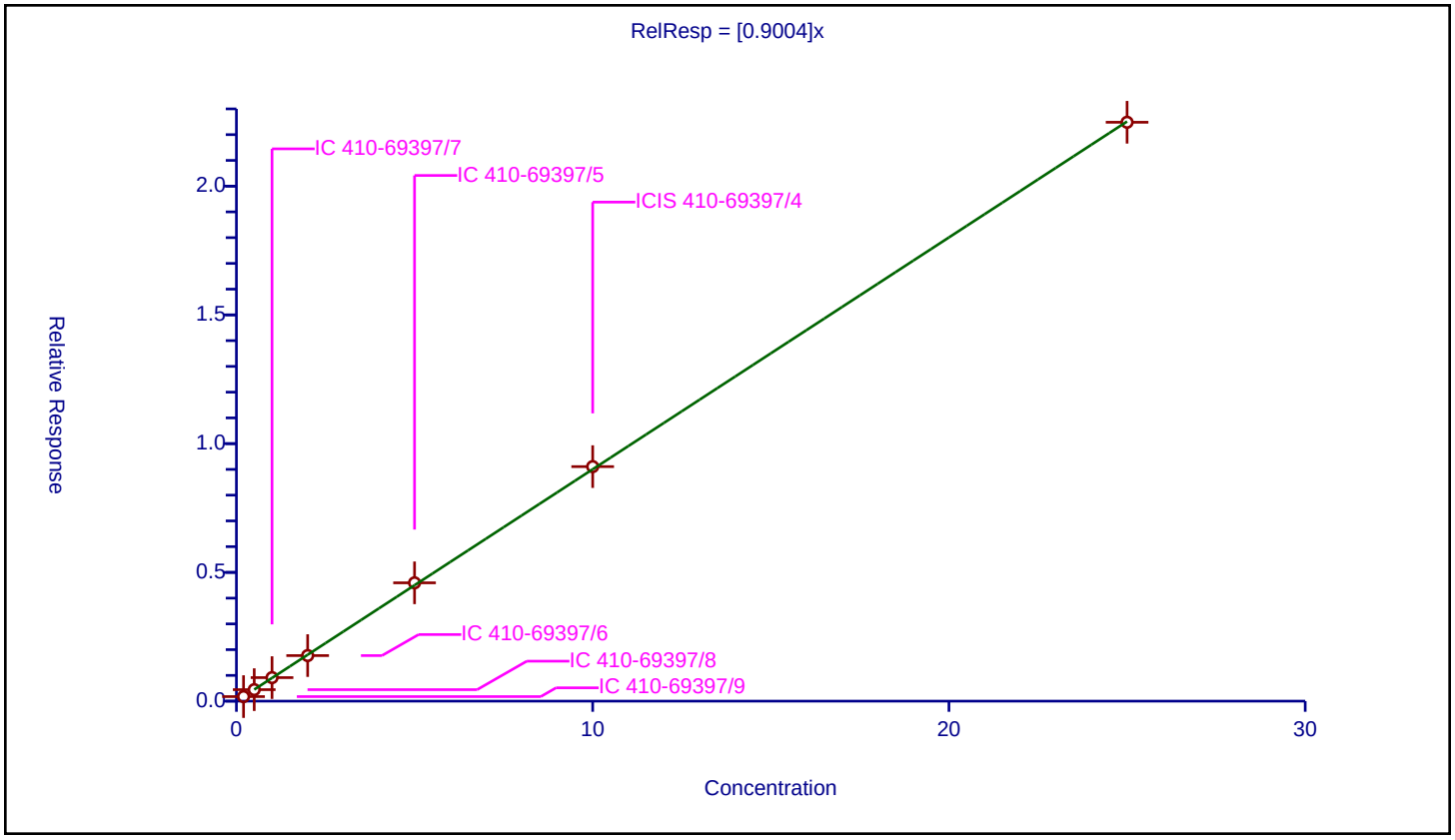
Curve Coefficients

Intercept:	0
Slope:	0.9004

Error Coefficients

Standard Error:	906000
Relative Standard Error:	1.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.1768	10.0	848529.0	0.884	Y
2	IC 410-69397/8	0.5	0.445886	10.0	857933.0	0.891771	Y
3	IC 410-69397/7	1.0	0.913618	10.0	843985.0	0.913618	Y
4	IC 410-69397/6	2.0	1.769517	10.0	848463.0	0.884759	Y
5	IC 410-69397/5	5.0	4.594619	10.0	845833.0	0.918924	Y
6	ICIS 410-69397/4	10.0	9.107488	10.0	891775.0	0.910749	Y
7	IC 410-69397/3	25.0	22.480762	10.0	898877.0	0.89923	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

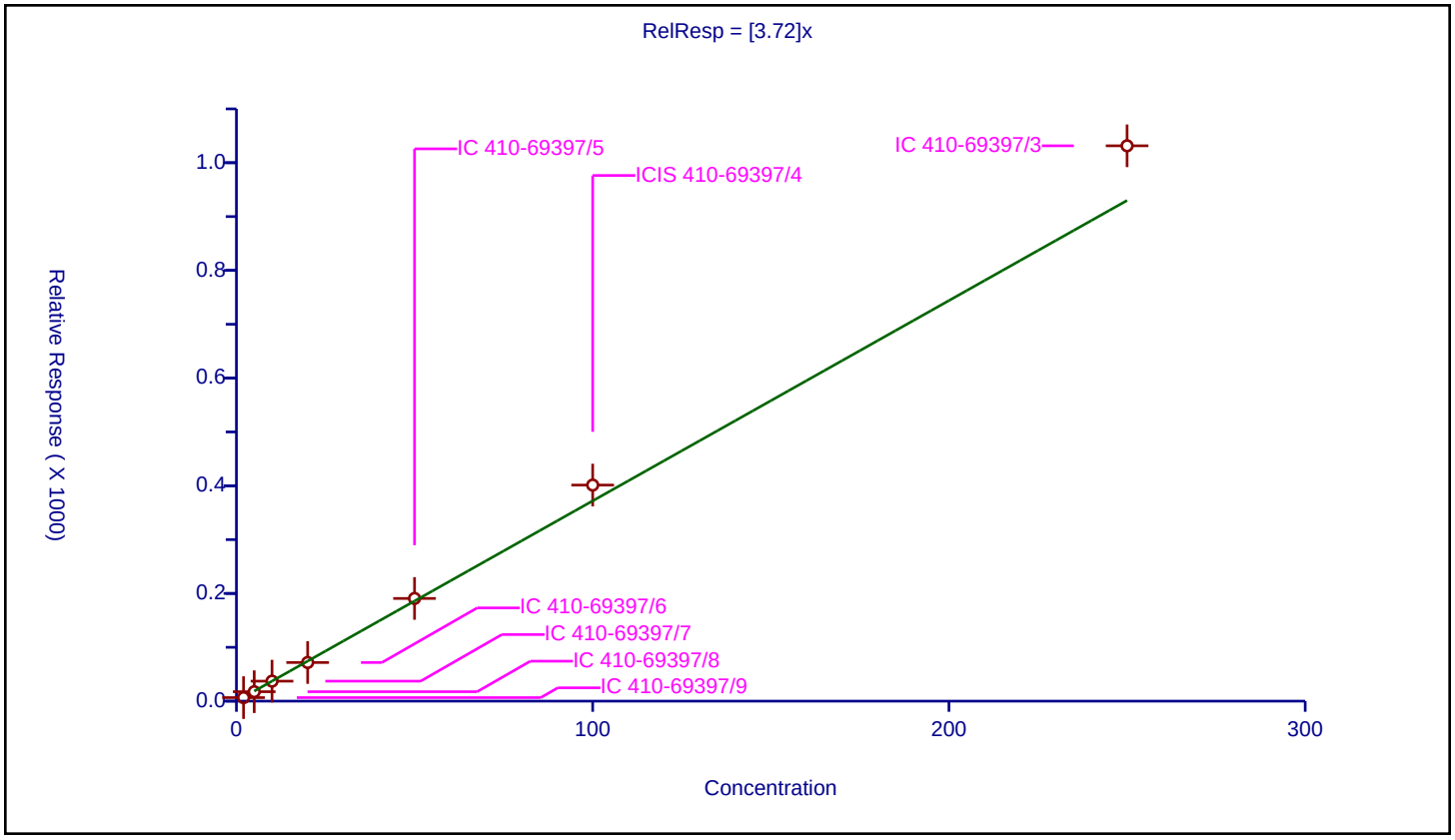
Curve Coefficients

Intercept:	0
Slope:	3.72

Error Coefficients

Standard Error:	1550000
Relative Standard Error:	7.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	2.0	6.544195	50.0	157506.0	3.272098	Y
2	IC 410-69397/8	5.0	17.559807	50.0	156713.0	3.511961	Y
3	IC 410-69397/7	10.0	37.140283	50.0	155400.0	3.714028	Y
4	IC 410-69397/6	20.0	71.741953	50.0	164063.0	3.587098	Y
5	IC 410-69397/5	50.0	190.736605	50.0	167919.0	3.814732	Y
6	ICIS 410-69397/4	100.0	401.295242	50.0	174562.0	4.012952	Y
7	IC 410-69397/3	250.0	1031.421235	50.0	168044.0	4.125685	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

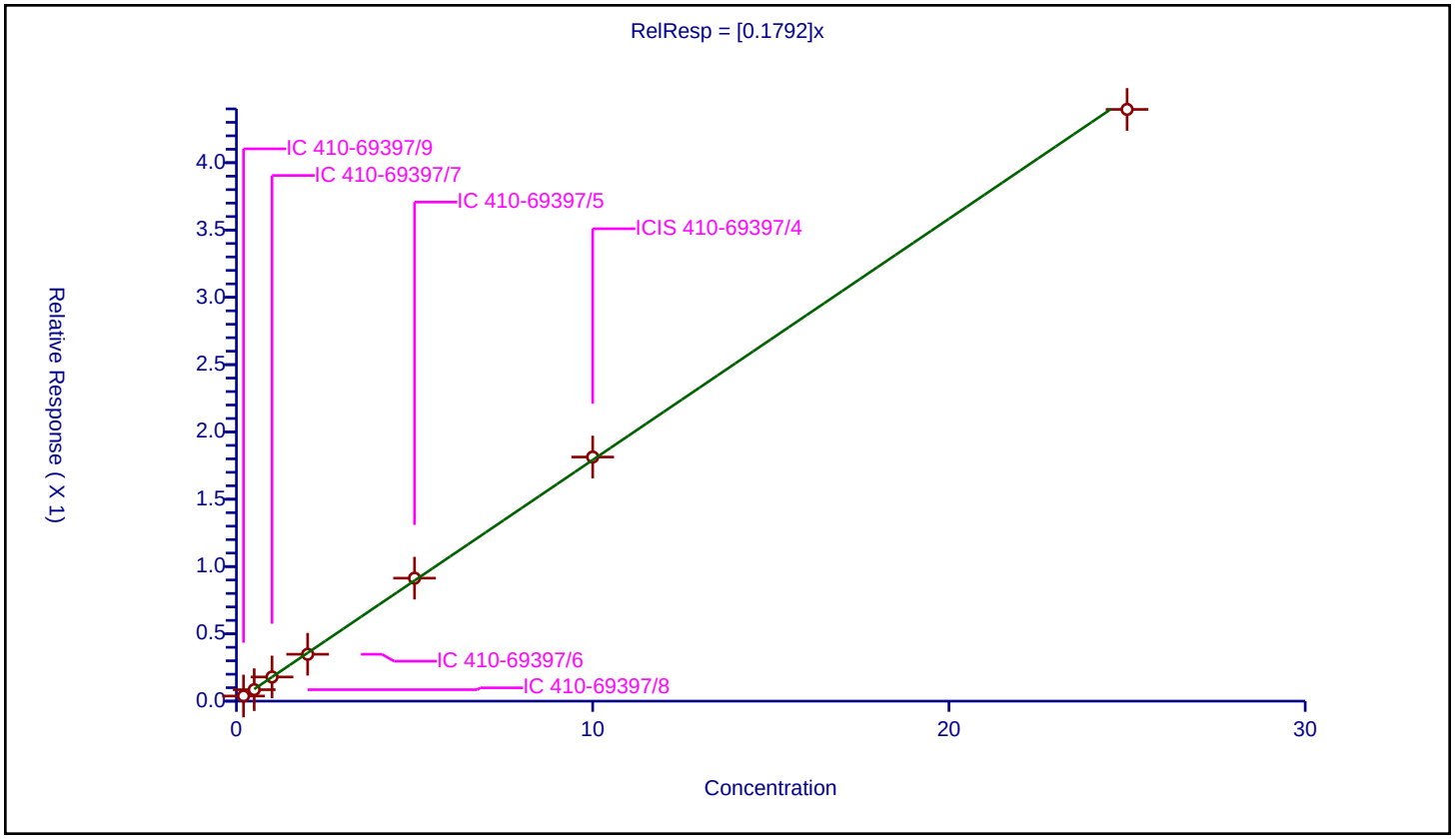
Curve Coefficients

Intercept:	0
Slope:	0.1792

Error Coefficients

Standard Error:	178000
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 410-69397/9	0.2	0.038031	10.0	848529.0	0.190153	Y
2	IC 410-69397/8	0.5	0.085158	10.0	857933.0	0.170316	Y
3	IC 410-69397/7	1.0	0.1796	10.0	843985.0	0.1796	Y
4	IC 410-69397/6	2.0	0.348454	10.0	848463.0	0.174227	Y
5	IC 410-69397/5	5.0	0.913703	10.0	845833.0	0.182741	Y
6	ICIS 410-69397/4	10.0	1.813507	10.0	891775.0	0.181351	Y
7	IC 410-69397/3	25.0	4.396052	10.0	898877.0	0.175842	Y



Calibration / N-Propylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

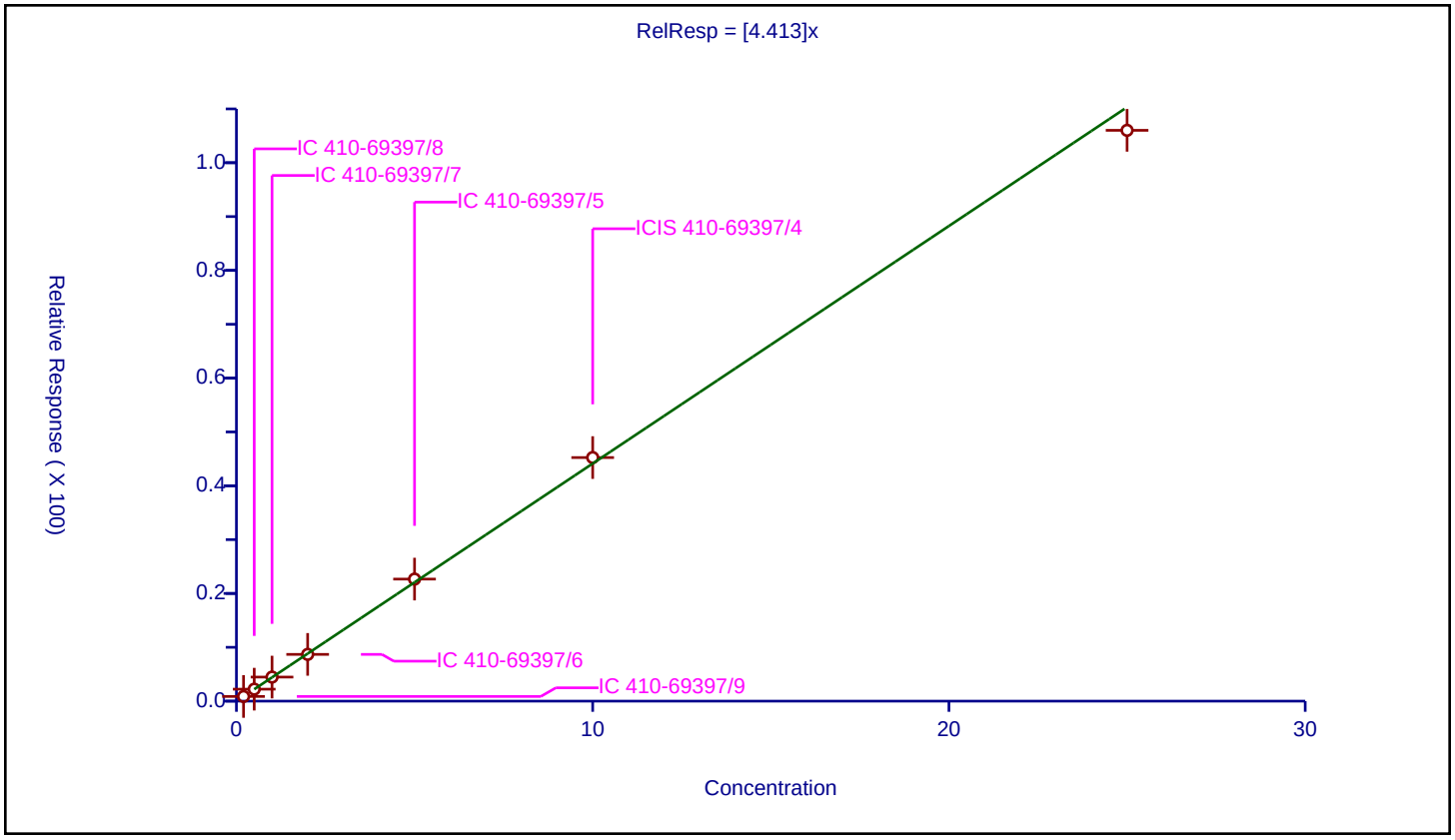
Curve Coefficients

Intercept:	0
Slope:	4.413

Error Coefficients

Standard Error:	4310000
Relative Standard Error:	2.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.866782	10.0	848529.0	4.333912	Y
2	IC 410-69397/8	0.5	2.222376	10.0	857933.0	4.444753	Y
3	IC 410-69397/7	1.0	4.470624	10.0	843985.0	4.470624	Y
4	IC 410-69397/6	2.0	8.683702	10.0	848463.0	4.341851	Y
5	IC 410-69397/5	5.0	22.667702	10.0	845833.0	4.53354	Y
6	ICIS 410-69397/4	10.0	45.240481	10.0	891775.0	4.524048	Y
7	IC 410-69397/3	25.0	106.015773	10.0	898877.0	4.240631	Y



Calibration / 2-Chlorotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

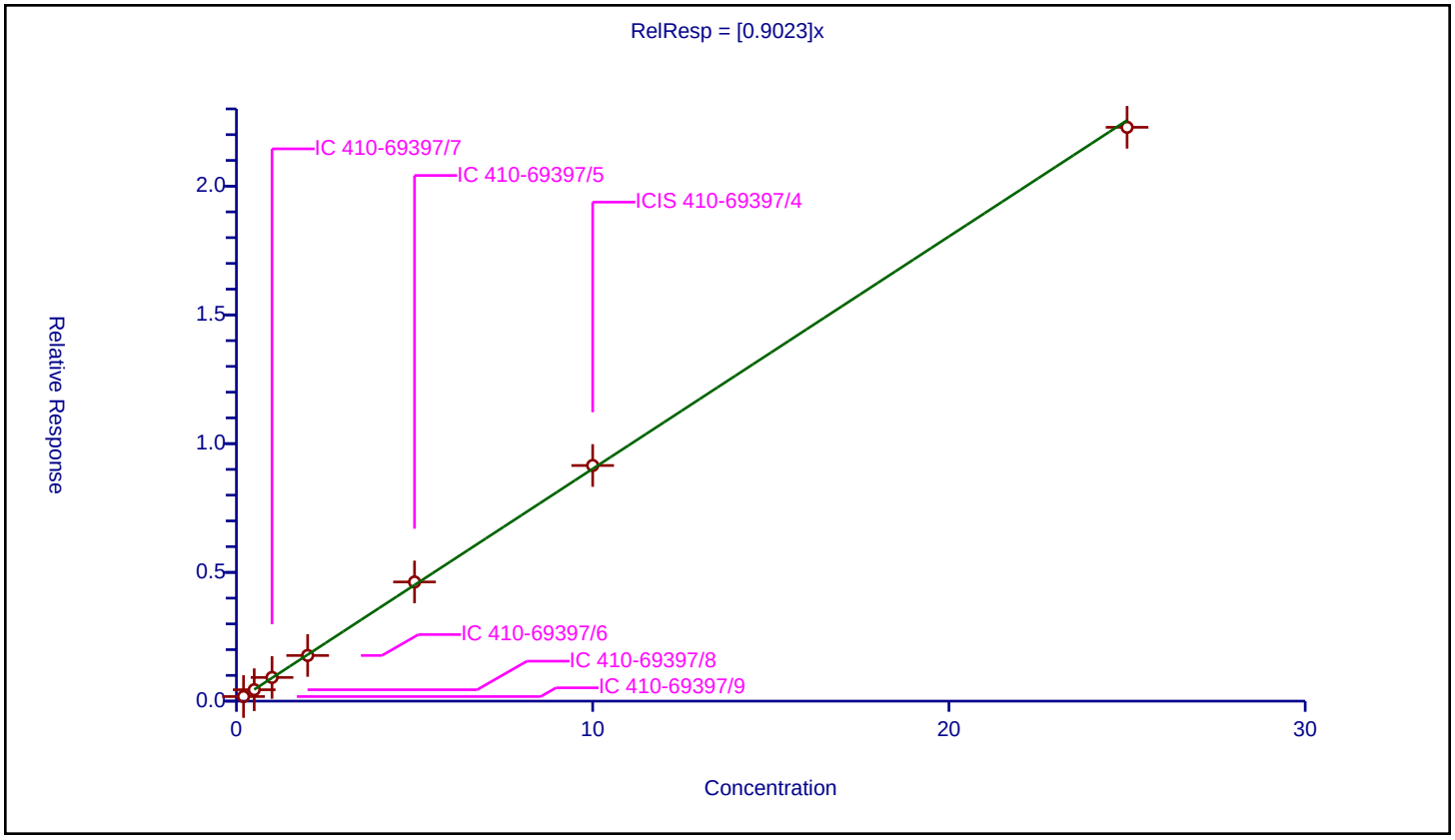
Curve Coefficients

Intercept:	0
Slope:	0.9023

Error Coefficients

Standard Error:	900000
Relative Standard Error:	1.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.178014	10.0	848529.0	0.89007	Y
2	IC 410-69397/8	0.5	0.443589	10.0	857933.0	0.887179	Y
3	IC 410-69397/7	1.0	0.919696	10.0	843985.0	0.919696	Y
4	IC 410-69397/6	2.0	1.773572	10.0	848463.0	0.886786	Y
5	IC 410-69397/5	5.0	4.627828	10.0	845833.0	0.925566	Y
6	ICIS 410-69397/4	10.0	9.151759	10.0	891775.0	0.915176	Y
7	IC 410-69397/3	25.0	22.285162	10.0	898877.0	0.891406	Y



Calibration / 1,3,5-Trimethylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

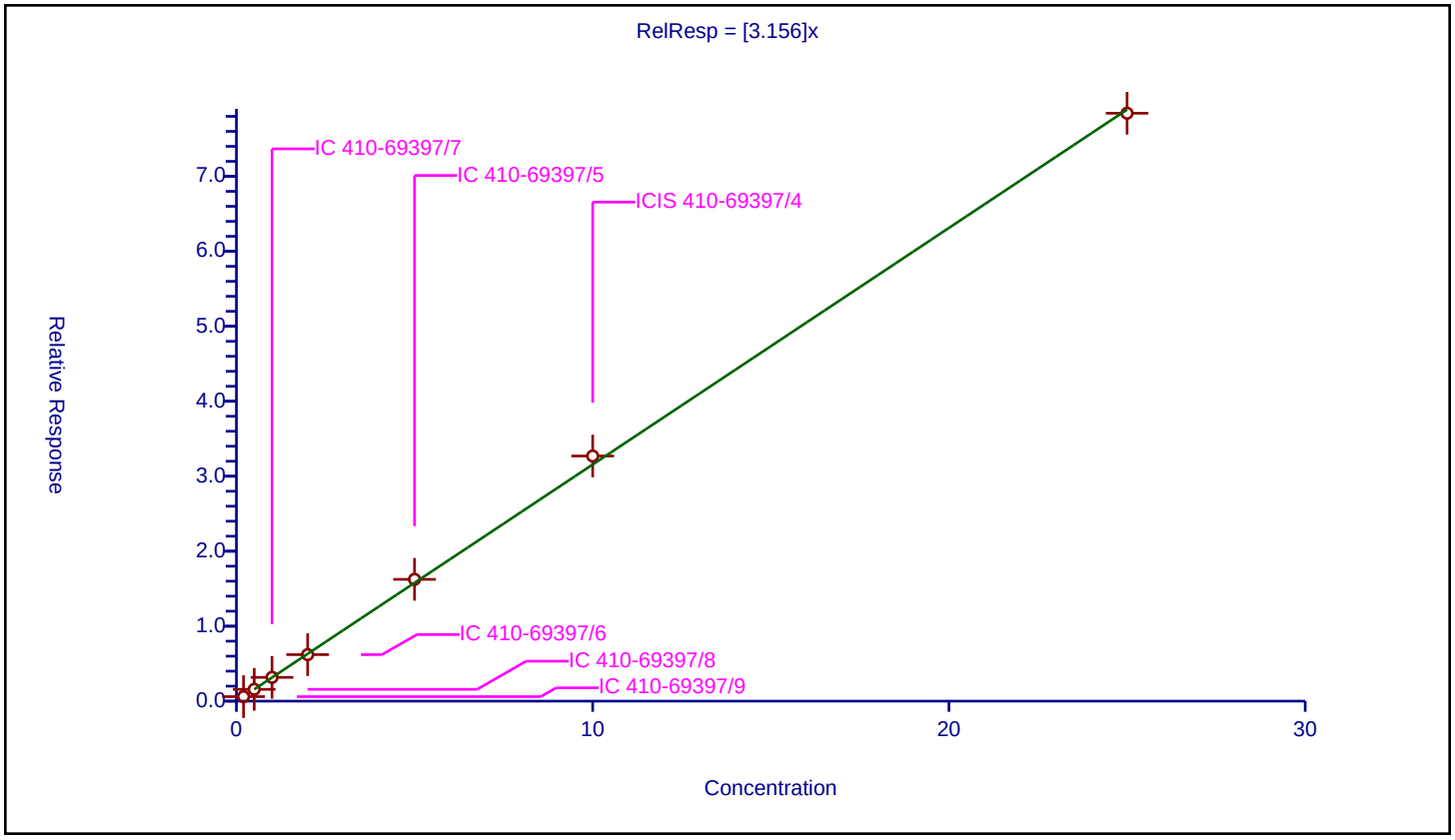
Curve Coefficients

Intercept:	0
Slope:	3.156

Error Coefficients

Standard Error:	3170000
Relative Standard Error:	2.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.602042	10.0	848529.0	3.010209	Y
2	IC 410-69397/8	0.5	1.576813	10.0	857933.0	3.153626	Y
3	IC 410-69397/7	1.0	3.171632	10.0	843985.0	3.171632	Y
4	IC 410-69397/6	2.0	6.203523	10.0	848463.0	3.101762	Y
5	IC 410-69397/5	5.0	16.246434	10.0	845833.0	3.249287	Y
6	ICIS 410-69397/4	10.0	32.697306	10.0	891775.0	3.269731	Y
7	IC 410-69397/3	25.0	78.421108	10.0	898877.0	3.136844	Y



Calibration / 4-Chlorotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

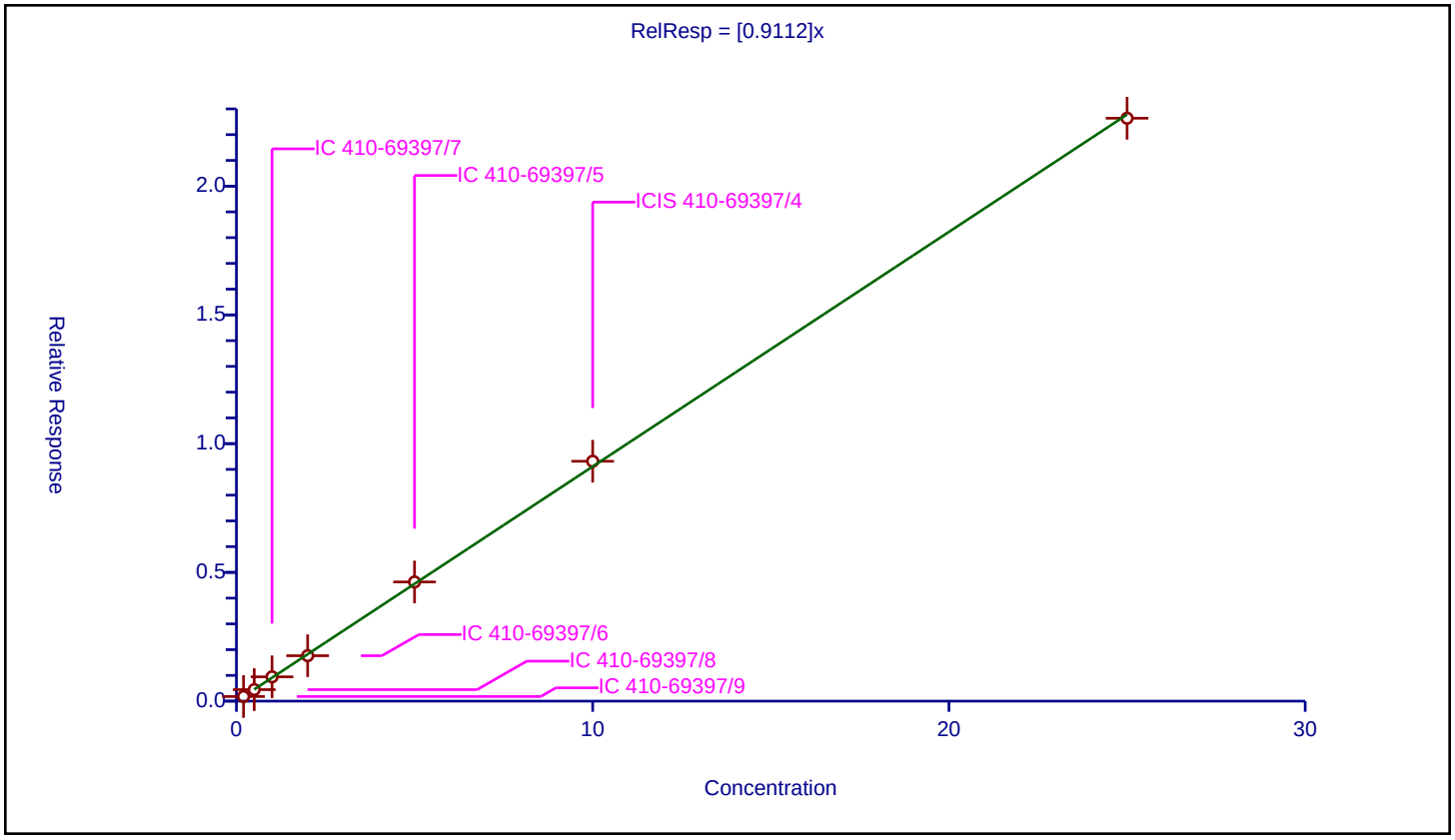
Curve Coefficients

Intercept:	0
Slope:	0.9112

Error Coefficients

Standard Error:	914000
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 410-69397/9	0.2	0.179063	10.0	848529.0	0.895314	Y
2	IC 410-69397/8	0.5	0.447378	10.0	857933.0	0.894755	Y
3	IC 410-69397/7	1.0	0.943642	10.0	843985.0	0.943642	Y
4	IC 410-69397/6	2.0	1.763766	10.0	848463.0	0.881883	Y
5	IC 410-69397/5	5.0	4.628065	10.0	845833.0	0.925613	Y
6	ICIS 410-69397/4	10.0	9.316218	10.0	891775.0	0.931622	Y
7	IC 410-69397/3	25.0	22.63758	10.0	898877.0	0.905503	Y



Calibration / tert-Butylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

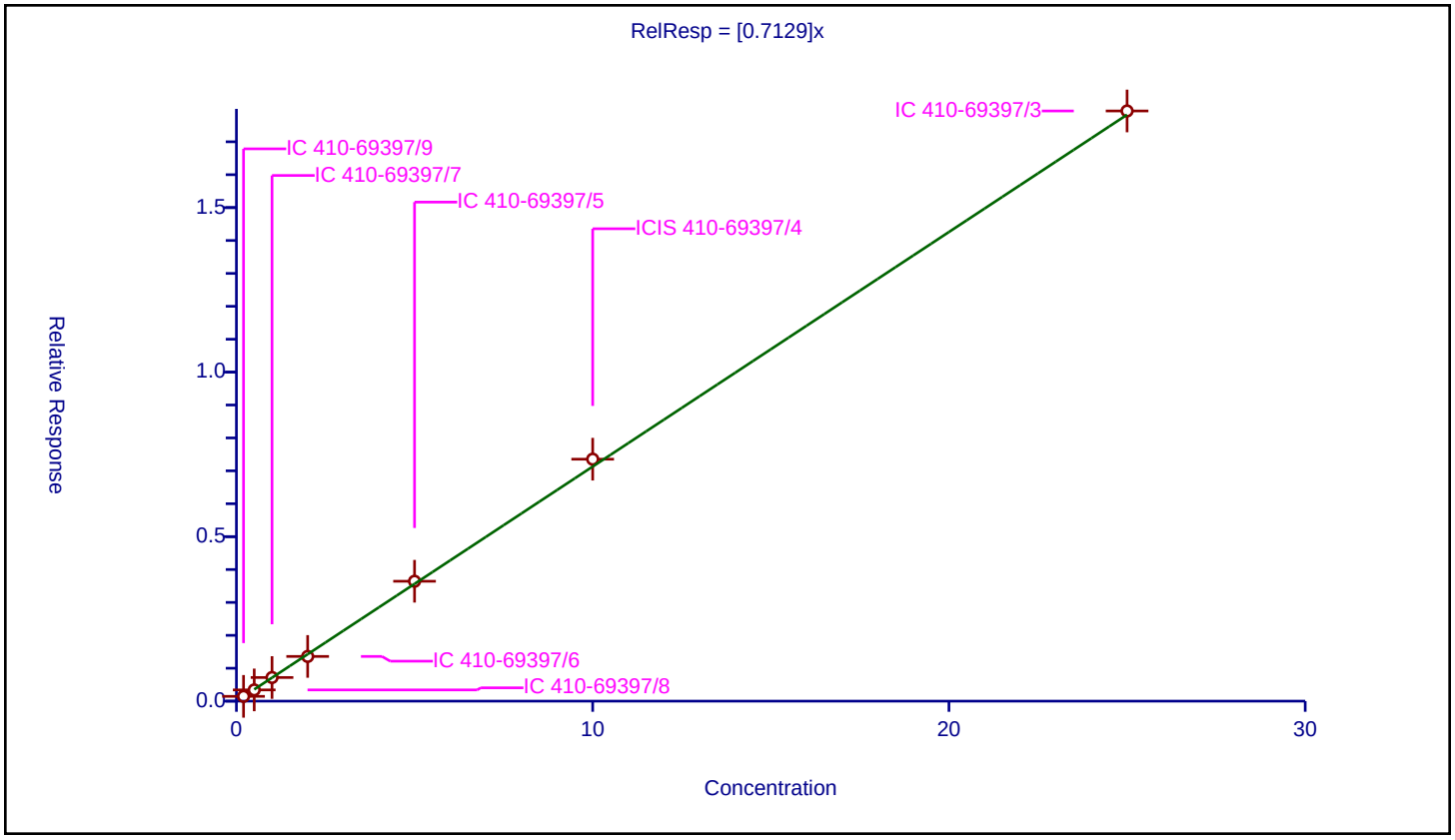
Curve Coefficients

Intercept:	0
Slope:	0.7129

Error Coefficients

Standard Error:	724000
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 410-69397/9	0.2	0.145687	10.0	848529.0	0.728437	Y
2	IC 410-69397/8	0.5	0.341309	10.0	857933.0	0.682617	Y
3	IC 410-69397/7	1.0	0.718449	10.0	843985.0	0.718449	Y
4	IC 410-69397/6	2.0	1.358374	10.0	848463.0	0.679187	Y
5	IC 410-69397/5	5.0	3.644124	10.0	845833.0	0.728825	Y
6	ICIS 410-69397/4	10.0	7.354007	10.0	891775.0	0.735401	Y
7	IC 410-69397/3	25.0	17.937059	10.0	898877.0	0.717482	Y



Calibration / Pentachloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

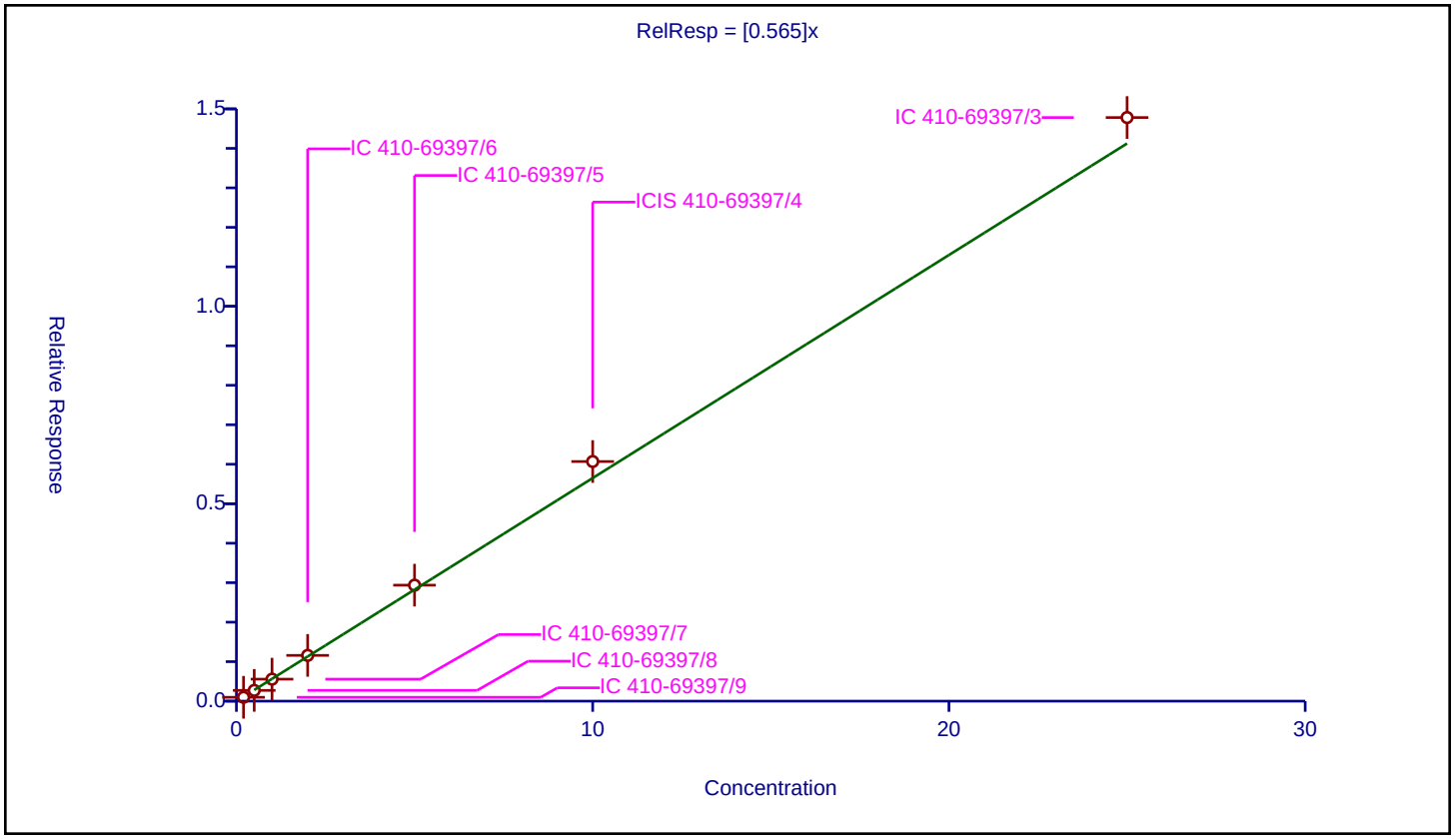
Curve Coefficients

Intercept:	0
Slope:	0.565

Error Coefficients

Standard Error:	596000
Relative Standard Error:	7.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.097592	10.0	848529.0	0.487962	Y
2	IC 410-69397/8	0.5	0.27248	10.0	857933.0	0.544961	Y
3	IC 410-69397/7	1.0	0.556858	10.0	843985.0	0.556858	Y
4	IC 410-69397/6	2.0	1.158483	10.0	848463.0	0.579242	Y
5	IC 410-69397/5	5.0	2.937648	10.0	845833.0	0.58753	Y
6	ICIS 410-69397/4	10.0	6.069065	10.0	891775.0	0.606906	Y
7	IC 410-69397/3	25.0	14.780776	10.0	898877.0	0.591231	Y



Calibration / 1,2,4-Trimethylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

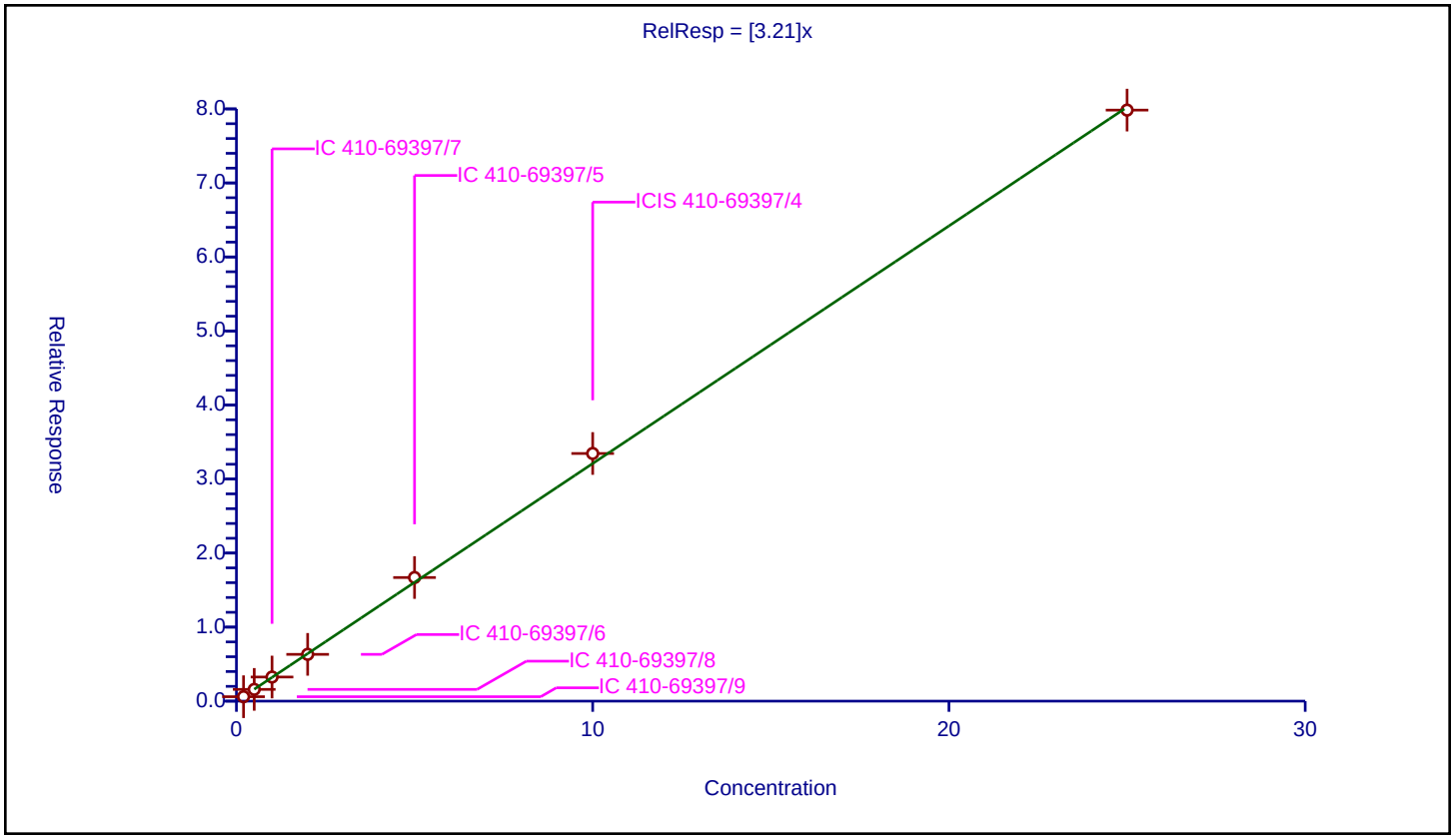
Curve Coefficients

Intercept:	0
Slope:	3.21

Error Coefficients

Standard Error:	3230000
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 410-69397/9	0.2	0.599685	10.0	848529.0	2.998424	Y
2	IC 410-69397/8	0.5	1.586756	10.0	857933.0	3.173511	Y
3	IC 410-69397/7	1.0	3.25642	10.0	843985.0	3.25642	Y
4	IC 410-69397/6	2.0	6.320712	10.0	848463.0	3.160356	Y
5	IC 410-69397/5	5.0	16.699526	10.0	845833.0	3.339905	Y
6	ICIS 410-69397/4	10.0	33.452115	10.0	891775.0	3.345212	Y
7	IC 410-69397/3	25.0	79.839611	10.0	898877.0	3.193584	Y



Calibration / sec-Butylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

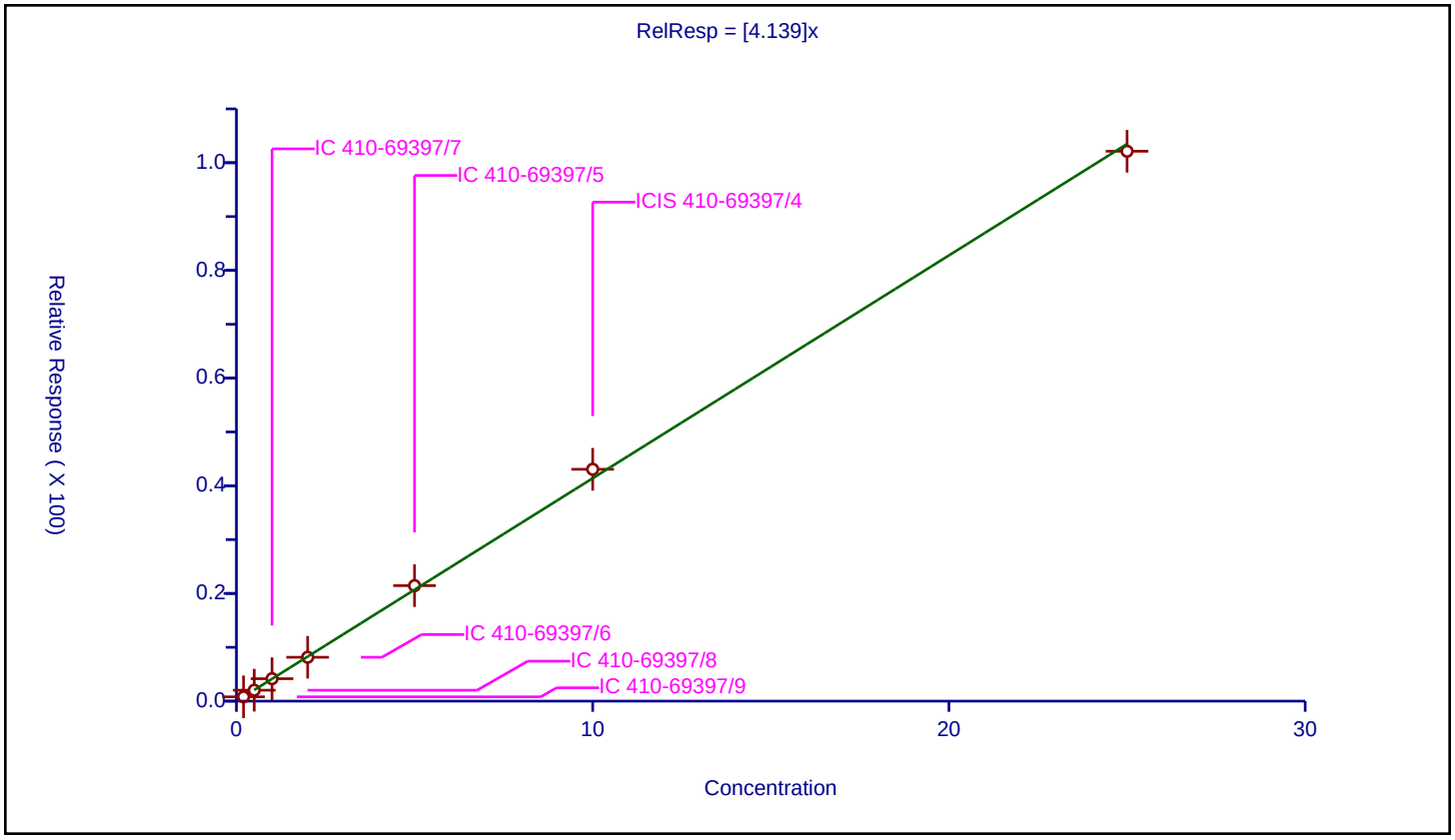
Curve Coefficients

Intercept:	0
Slope:	4.139

Error Coefficients

Standard Error:	4140000
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 410-69397/9	0.2	0.797415	10.0	848529.0	3.987076	Y
2	IC 410-69397/8	0.5	2.03214	10.0	857933.0	4.06428	Y
3	IC 410-69397/7	1.0	4.166863	10.0	843985.0	4.166863	Y
4	IC 410-69397/6	2.0	8.150161	10.0	848463.0	4.07508	Y
5	IC 410-69397/5	5.0	21.454093	10.0	845833.0	4.290819	Y
6	ICIS 410-69397/4	10.0	43.064136	10.0	891775.0	4.306414	Y
7	IC 410-69397/3	25.0	102.132316	10.0	898877.0	4.085293	Y



Calibration / 1,3-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

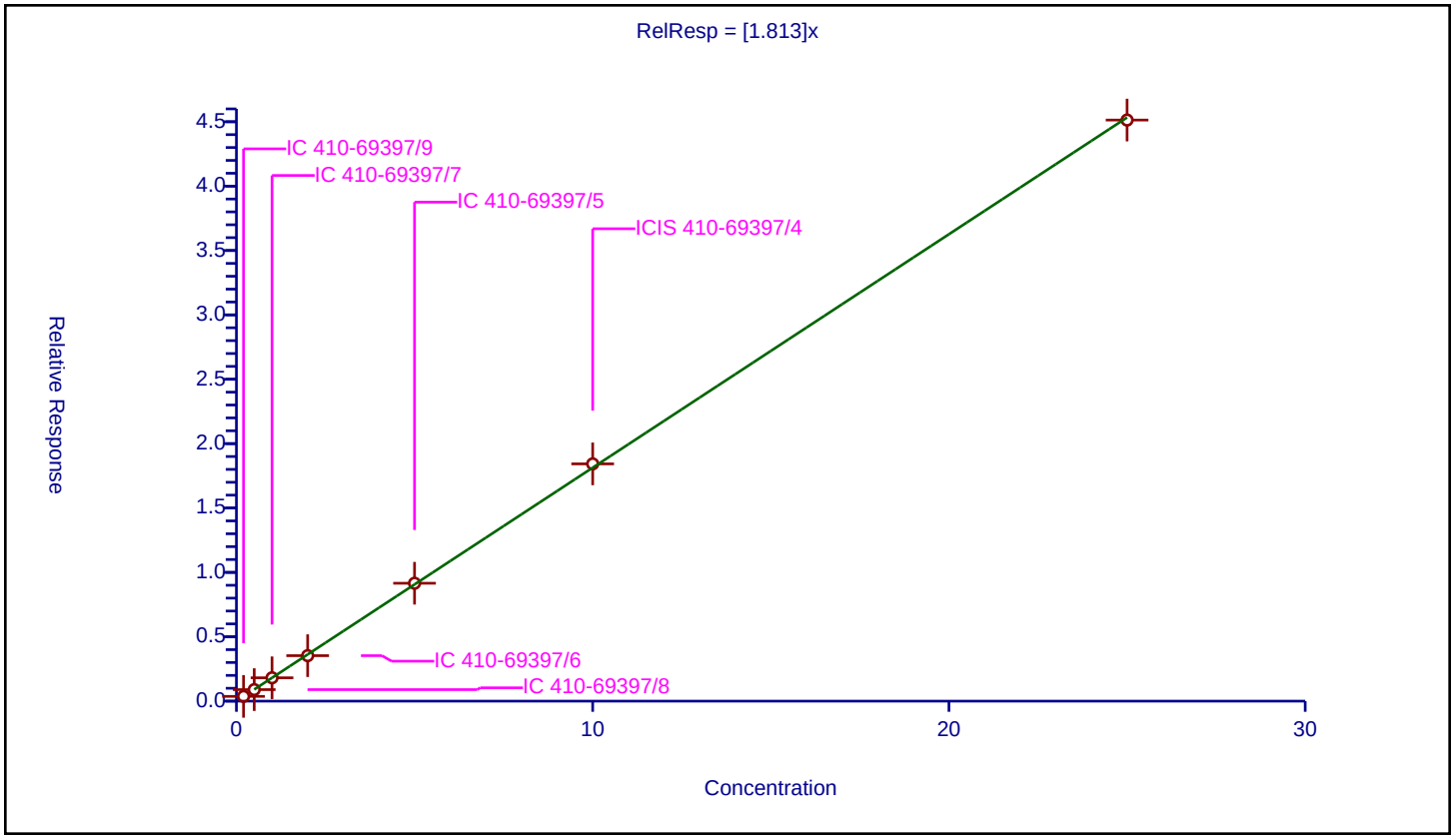
Curve Coefficients

Intercept:	0
Slope:	1.813

Error Coefficients

Standard Error:	1820000
Relative Standard Error:	1.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.369133	10.0	848529.0	1.845665	Y
2	IC 410-69397/8	0.5	0.893869	10.0	857933.0	1.787739	Y
3	IC 410-69397/7	1.0	1.813753	10.0	843985.0	1.813753	Y
4	IC 410-69397/6	2.0	3.531881	10.0	848463.0	1.76594	Y
5	IC 410-69397/5	5.0	9.157694	10.0	845833.0	1.831539	Y
6	ICIS 410-69397/4	10.0	18.42957	10.0	891775.0	1.842957	Y
7	IC 410-69397/3	25.0	45.132627	10.0	898877.0	1.805305	Y



Calibration / 4-Isopropyltoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

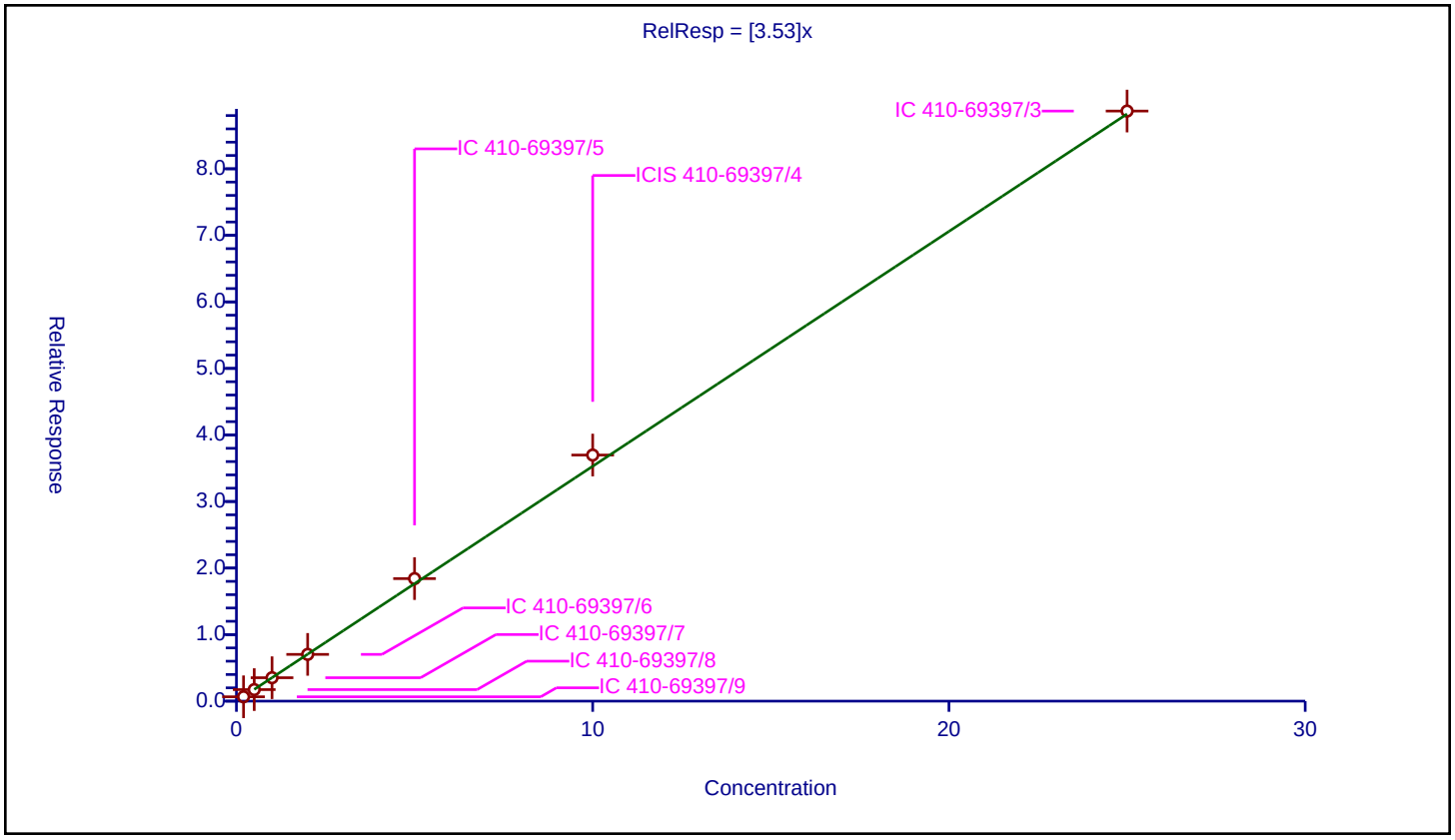
Curve Coefficients

Intercept:	0
Slope:	3.53

Error Coefficients

Standard Error:	3590000
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 410-69397/9	0.2	0.654603	10.0	848529.0	3.273017	Y
2	IC 410-69397/8	0.5	1.736872	10.0	857933.0	3.473744	Y
3	IC 410-69397/7	1.0	3.518949	10.0	843985.0	3.518949	Y
4	IC 410-69397/6	2.0	7.026317	10.0	848463.0	3.513158	Y
5	IC 410-69397/5	5.0	18.413067	10.0	845833.0	3.682613	Y
6	ICIS 410-69397/4	10.0	36.981167	10.0	891775.0	3.698117	Y
7	IC 410-69397/3	25.0	88.675458	10.0	898877.0	3.547018	Y



Calibration / 1,4-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

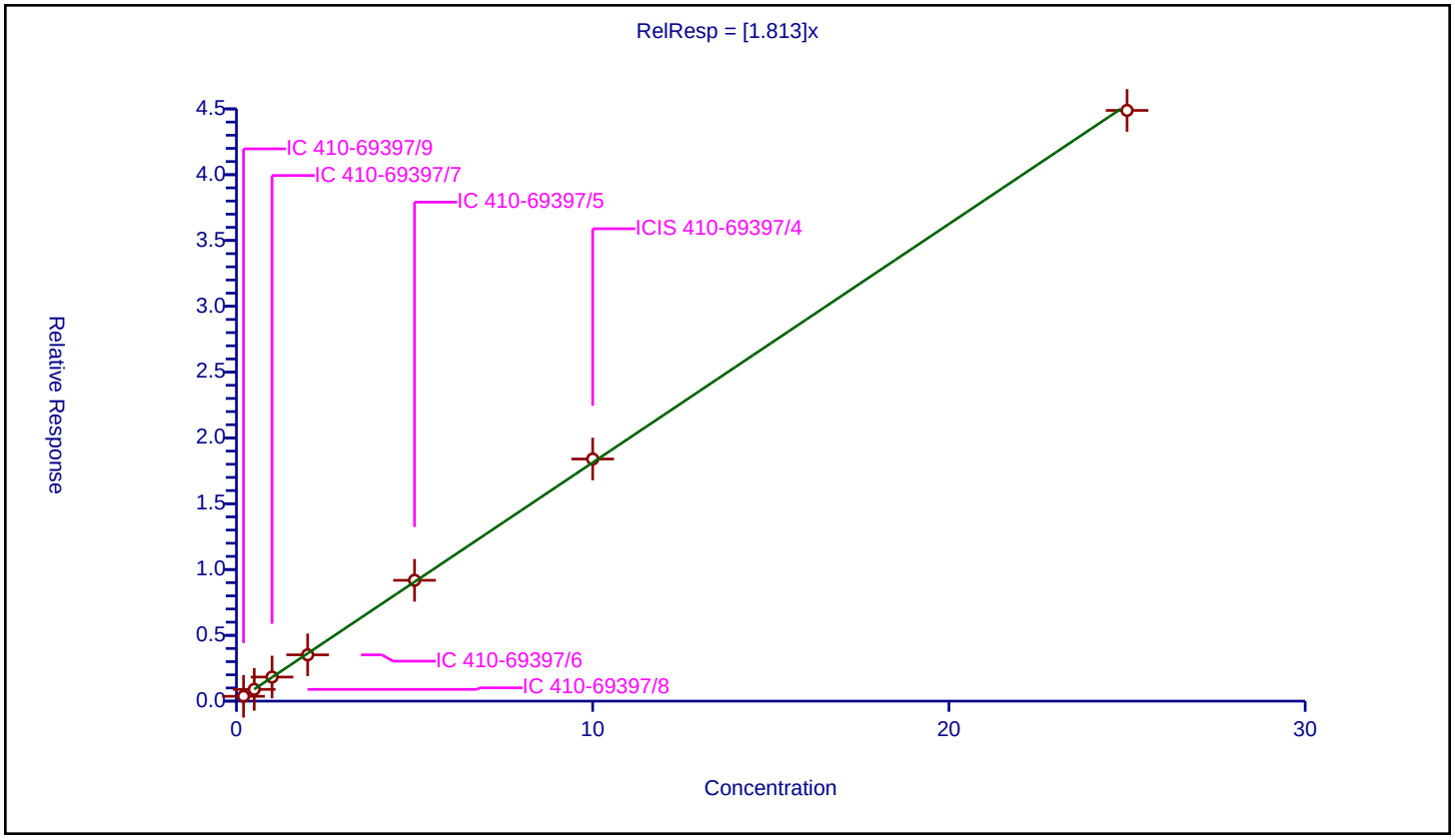
Curve Coefficients

Intercept:	0
Slope:	1.813

Error Coefficients

Standard Error:	1810000
Relative Standard Error:	1.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.368072	10.0	848529.0	1.840361	Y
2	IC 410-69397/8	0.5	0.893147	10.0	857933.0	1.786293	Y
3	IC 410-69397/7	1.0	1.831028	10.0	843985.0	1.831028	Y
4	IC 410-69397/6	2.0	3.519081	10.0	848463.0	1.75954	Y
5	IC 410-69397/5	5.0	9.182794	10.0	845833.0	1.836559	Y
6	ICIS 410-69397/4	10.0	18.397432	10.0	891775.0	1.839743	Y
7	IC 410-69397/3	25.0	44.88455	10.0	898877.0	1.795382	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

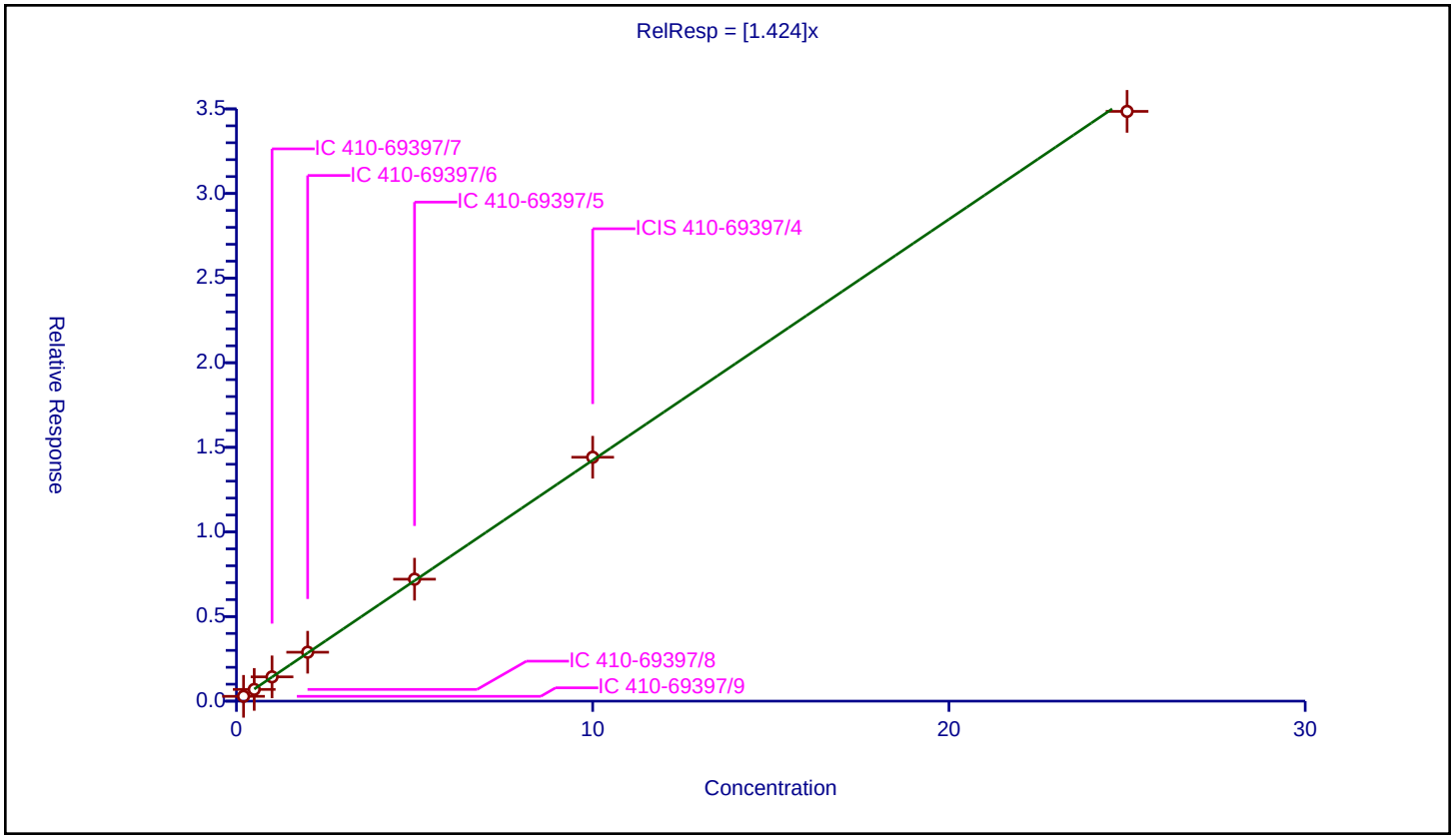
Curve Coefficients

Intercept:	0
Slope:	1.424

Error Coefficients

Standard Error:	1410000
Relative Standard Error:	1.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.284622	10.0	848529.0	1.42311	Y
2	IC 410-69397/8	0.5	0.693469	10.0	857933.0	1.386938	Y
3	IC 410-69397/7	1.0	1.434161	10.0	843985.0	1.434161	Y
4	IC 410-69397/6	2.0	2.890851	10.0	848463.0	1.445425	Y
5	IC 410-69397/5	5.0	7.20712	10.0	845833.0	1.441424	Y
6	ICIS 410-69397/4	10.0	14.414555	10.0	891775.0	1.441456	Y
7	IC 410-69397/3	25.0	34.852955	10.0	898877.0	1.394118	Y



Calibration / Benzyl chloride

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

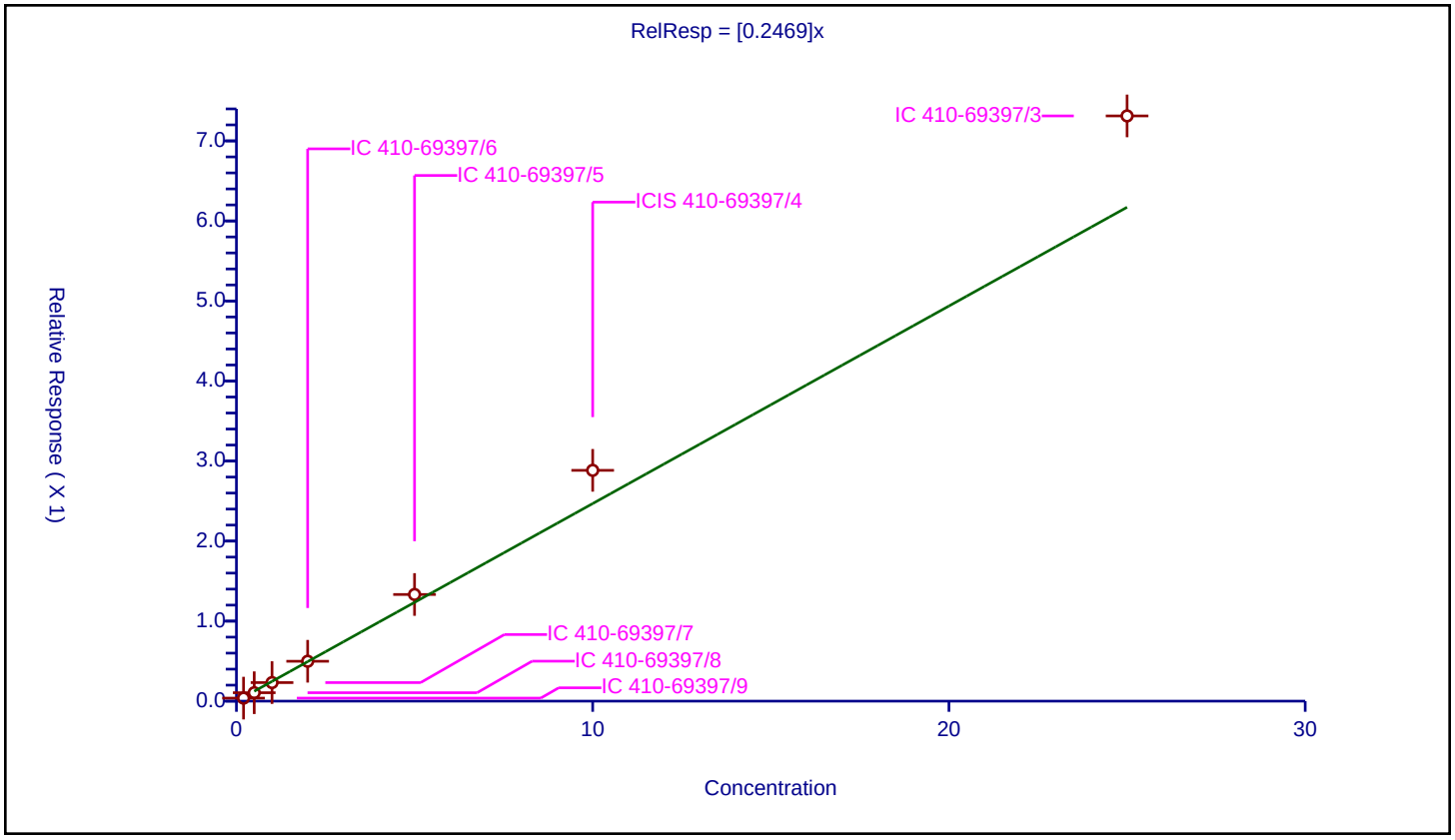
Curve Coefficients

Intercept:	0
Slope:	0.2469

Error Coefficients

Standard Error:	292000
Relative Standard Error:	15.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.972

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.037724	10.0	848529.0	0.188621	Y
2	IC 410-69397/8	0.5	0.105463	10.0	857933.0	0.210926	Y
3	IC 410-69397/7	1.0	0.231912	10.0	843985.0	0.231912	Y
4	IC 410-69397/6	2.0	0.498254	10.0	848463.0	0.249127	Y
5	IC 410-69397/5	5.0	1.332568	10.0	845833.0	0.266514	Y
6	ICIS 410-69397/4	10.0	2.883732	10.0	891775.0	0.288373	Y
7	IC 410-69397/3	25.0	7.31218	10.0	898877.0	0.292487	Y



Calibration / n-Butylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

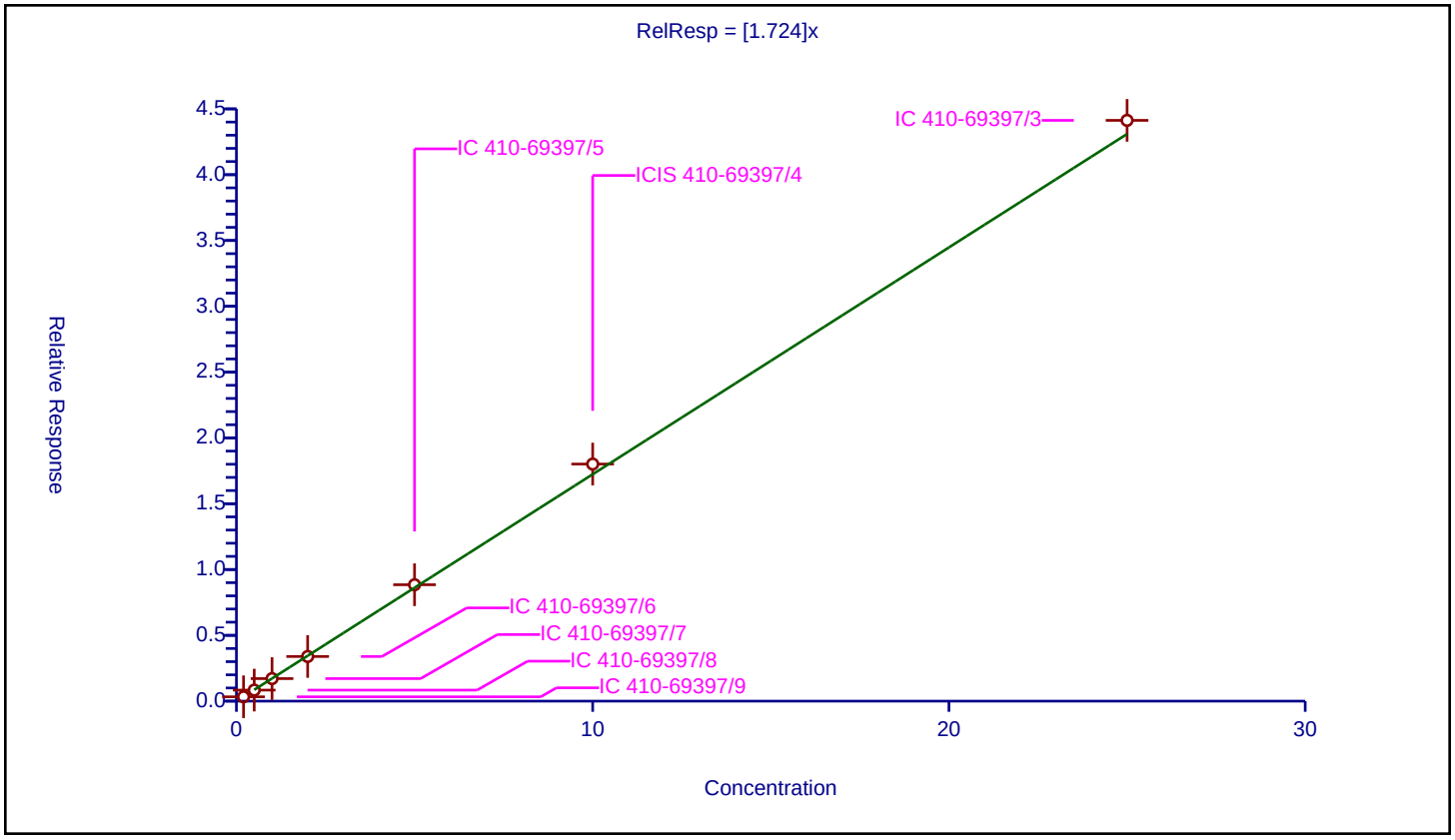
Curve Coefficients

Intercept:	0
Slope:	1.724

Error Coefficients

Standard Error:	1780000
Relative Standard Error:	3.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.328875	10.0	848529.0	1.644375	Y
2	IC 410-69397/8	0.5	0.838096	10.0	857933.0	1.676191	Y
3	IC 410-69397/7	1.0	1.714	10.0	843985.0	1.714	Y
4	IC 410-69397/6	2.0	3.392417	10.0	848463.0	1.696208	Y
5	IC 410-69397/5	5.0	8.843862	10.0	845833.0	1.768772	Y
6	ICIS 410-69397/4	10.0	18.013064	10.0	891775.0	1.801306	Y
7	IC 410-69397/3	25.0	44.128774	10.0	898877.0	1.765151	Y



Calibration / 1,2-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

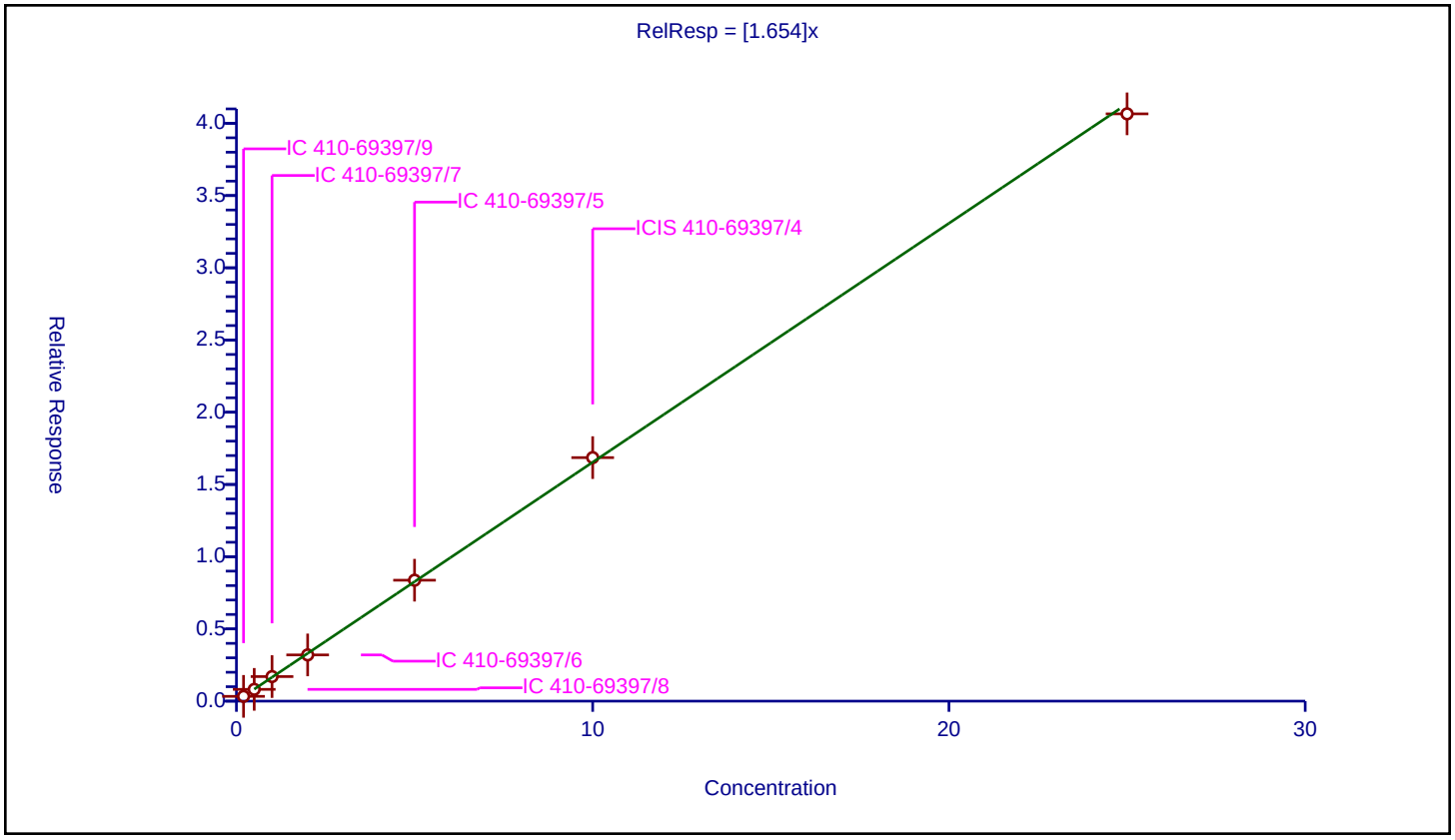
Curve Coefficients

Intercept:	0
Slope:	1.654

Error Coefficients

Standard Error:	1640000
Relative Standard Error:	2.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.331845	10.0	848529.0	1.659224	Y
2	IC 410-69397/8	0.5	0.81553	10.0	857933.0	1.63106	Y
3	IC 410-69397/7	1.0	1.7008	10.0	843985.0	1.7008	Y
4	IC 410-69397/6	2.0	3.200658	10.0	848463.0	1.600329	Y
5	IC 410-69397/5	5.0	8.371676	10.0	845833.0	1.674335	Y
6	ICIS 410-69397/4	10.0	16.858748	10.0	891775.0	1.685875	Y
7	IC 410-69397/3	25.0	40.656252	10.0	898877.0	1.62625	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

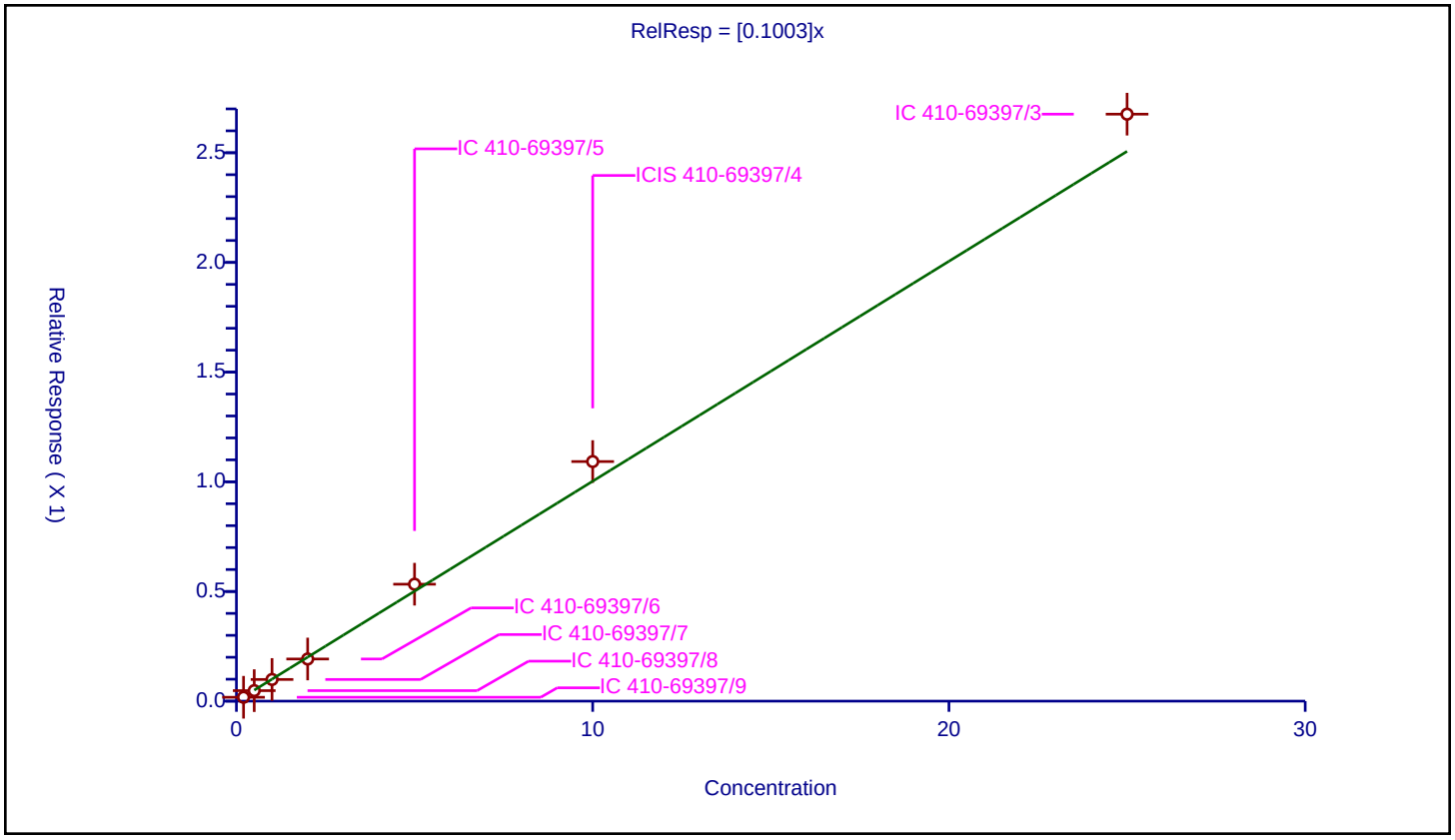
Curve Coefficients

Intercept:	0
Slope:	0.1003

Error Coefficients

Standard Error:	108000
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 410-69397/9	0.2	0.017689	10.0	848529.0	0.088447	Y
2	IC 410-69397/8	0.5	0.047848	10.0	857933.0	0.095695	Y
3	IC 410-69397/7	1.0	0.09877	10.0	843985.0	0.09877	Y
4	IC 410-69397/6	2.0	0.192136	10.0	848463.0	0.096068	Y
5	IC 410-69397/5	5.0	0.533084	10.0	845833.0	0.106617	Y
6	ICIS 410-69397/4	10.0	1.092204	10.0	891775.0	0.10922	Y
7	IC 410-69397/3	25.0	2.675906	10.0	898877.0	0.107036	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

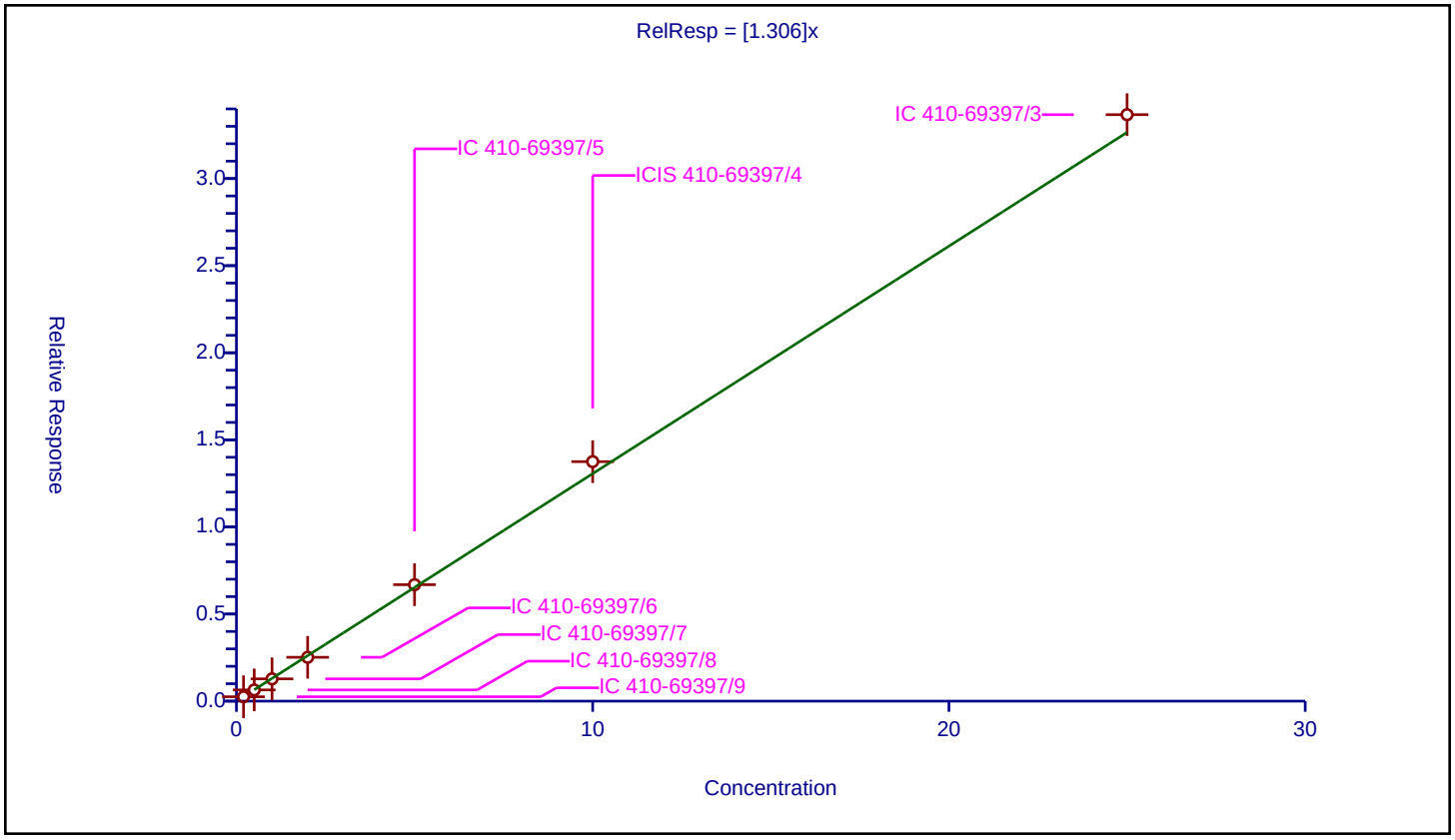
Curve Coefficients

Intercept:	0
Slope:	1.306

Error Coefficients

Standard Error:	1360000
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 410-69397/9	0.2	0.251376	10.0	848529.0	1.256881	Y
2	IC 410-69397/8	0.5	0.644654	10.0	857933.0	1.289308	Y
3	IC 410-69397/7	1.0	1.278565	10.0	843985.0	1.278565	Y
4	IC 410-69397/6	2.0	2.517552	10.0	848463.0	1.258776	Y
5	IC 410-69397/5	5.0	6.685788	10.0	845833.0	1.337158	Y
6	ICIS 410-69397/4	10.0	13.750217	10.0	891775.0	1.375022	Y
7	IC 410-69397/3	25.0	33.668622	10.0	898877.0	1.346745	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

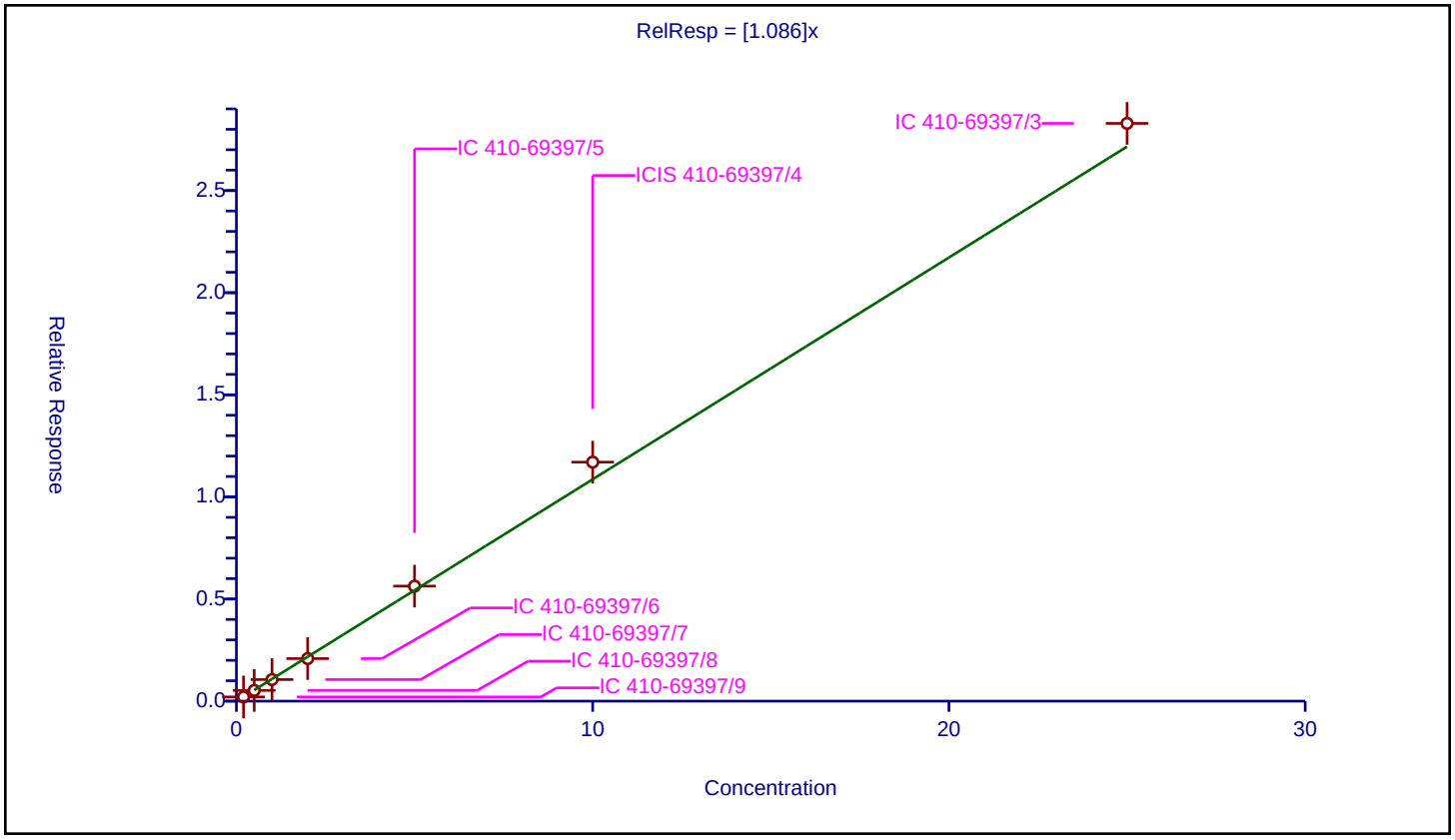
Curve Coefficients

Intercept:	0
Slope:	1.086

Error Coefficients

Standard Error:	1140000
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 410-69397/9	0.2	0.205096	10.0	848529.0	1.025481	Y
2	IC 410-69397/8	0.5	0.525088	10.0	857933.0	1.050175	Y
3	IC 410-69397/7	1.0	1.056832	10.0	843985.0	1.056832	Y
4	IC 410-69397/6	2.0	2.083721	10.0	848463.0	1.04186	Y
5	IC 410-69397/5	5.0	5.631372	10.0	845833.0	1.126274	Y
6	ICIS 410-69397/4	10.0	11.703468	10.0	891775.0	1.170347	Y
7	IC 410-69397/3	25.0	28.290345	10.0	898877.0	1.131614	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

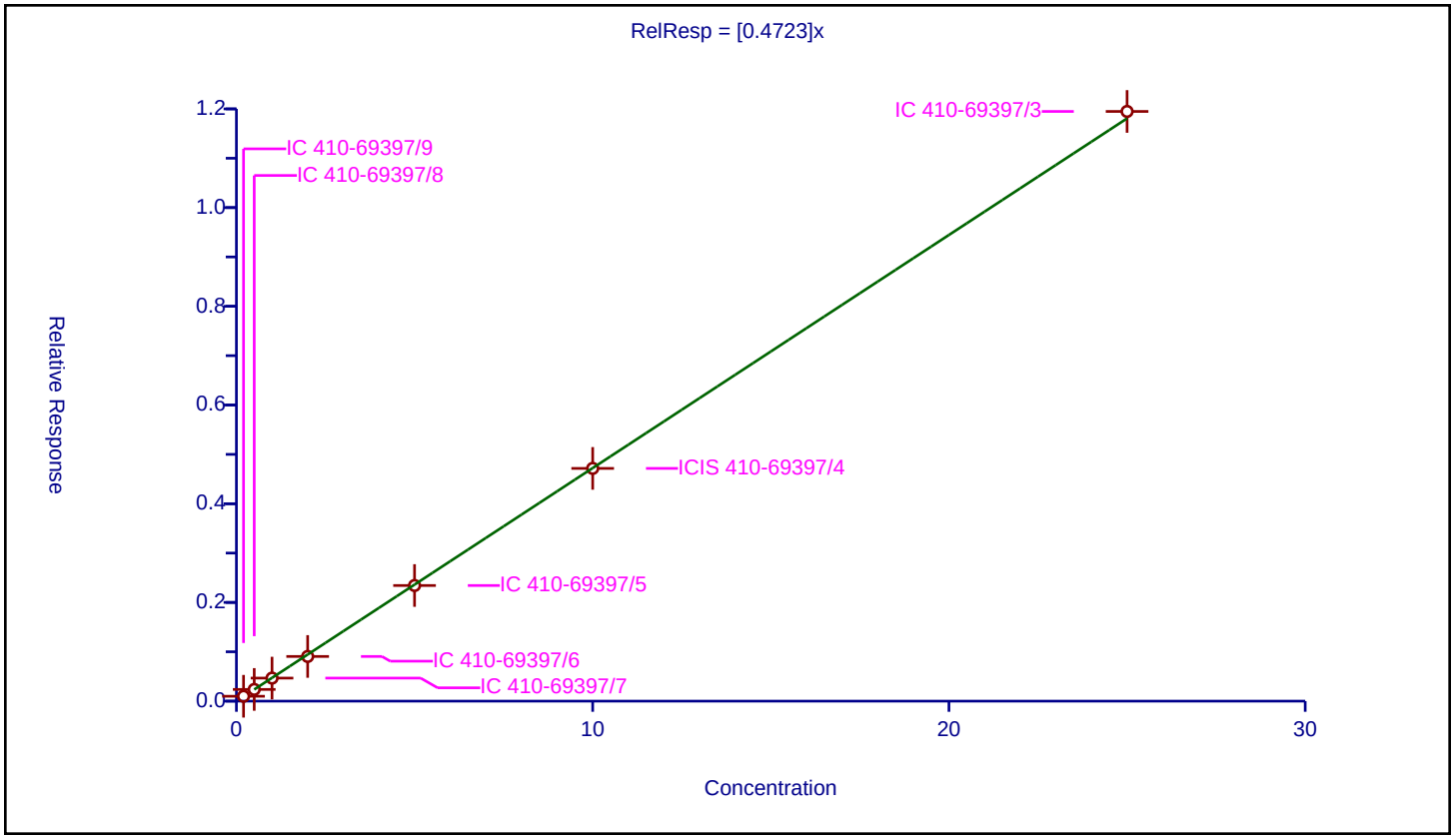
Curve Coefficients

Intercept:	0
Slope:	0.4723

Error Coefficients

Standard Error:	479000
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 410-69397/9	0.2	0.098795	10.0	848529.0	0.493973	Y
2	IC 410-69397/8	0.5	0.237186	10.0	857933.0	0.474373	Y
3	IC 410-69397/7	1.0	0.466892	10.0	843985.0	0.466892	Y
4	IC 410-69397/6	2.0	0.905437	10.0	848463.0	0.452719	Y
5	IC 410-69397/5	5.0	2.342685	10.0	845833.0	0.468537	Y
6	ICIS 410-69397/4	10.0	4.715719	10.0	891775.0	0.471572	Y
7	IC 410-69397/3	25.0	11.948409	10.0	898877.0	0.477936	Y



Calibration / Naphthalene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

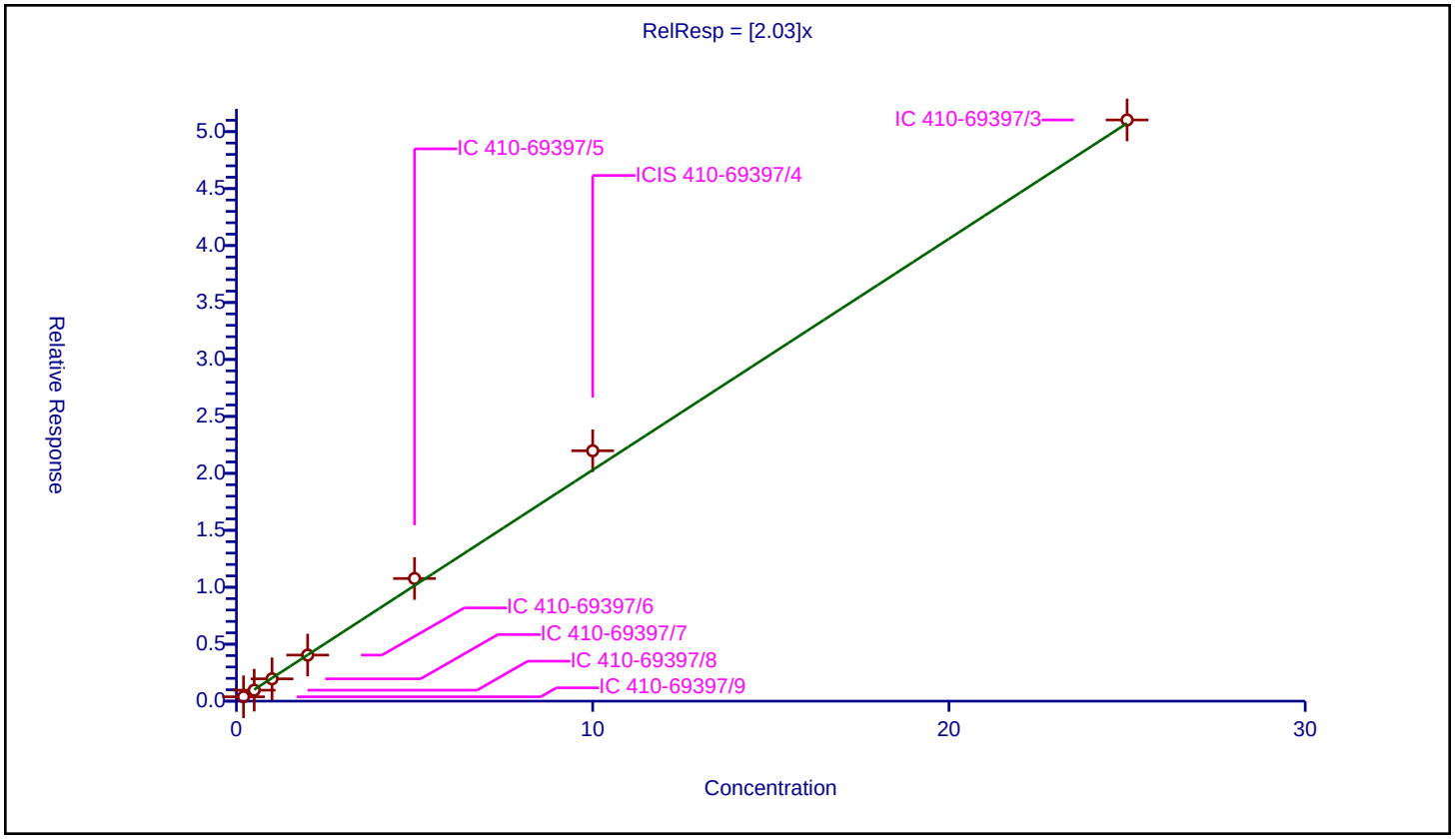
Curve Coefficients

Intercept:	0
Slope:	2.03

Error Coefficients

Standard Error:	2080000
Relative Standard Error:	5.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.381354	10.0	848529.0	1.90677	Y
2	IC 410-69397/8	0.5	0.963677	10.0	857933.0	1.927353	Y
3	IC 410-69397/7	1.0	1.958625	10.0	843985.0	1.958625	Y
4	IC 410-69397/6	2.0	4.044278	10.0	848463.0	2.022139	Y
5	IC 410-69397/5	5.0	10.767823	10.0	845833.0	2.153565	Y
6	ICIS 410-69397/4	10.0	21.98244	10.0	891775.0	2.198244	Y
7	IC 410-69397/3	25.0	51.026347	10.0	898877.0	2.041054	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

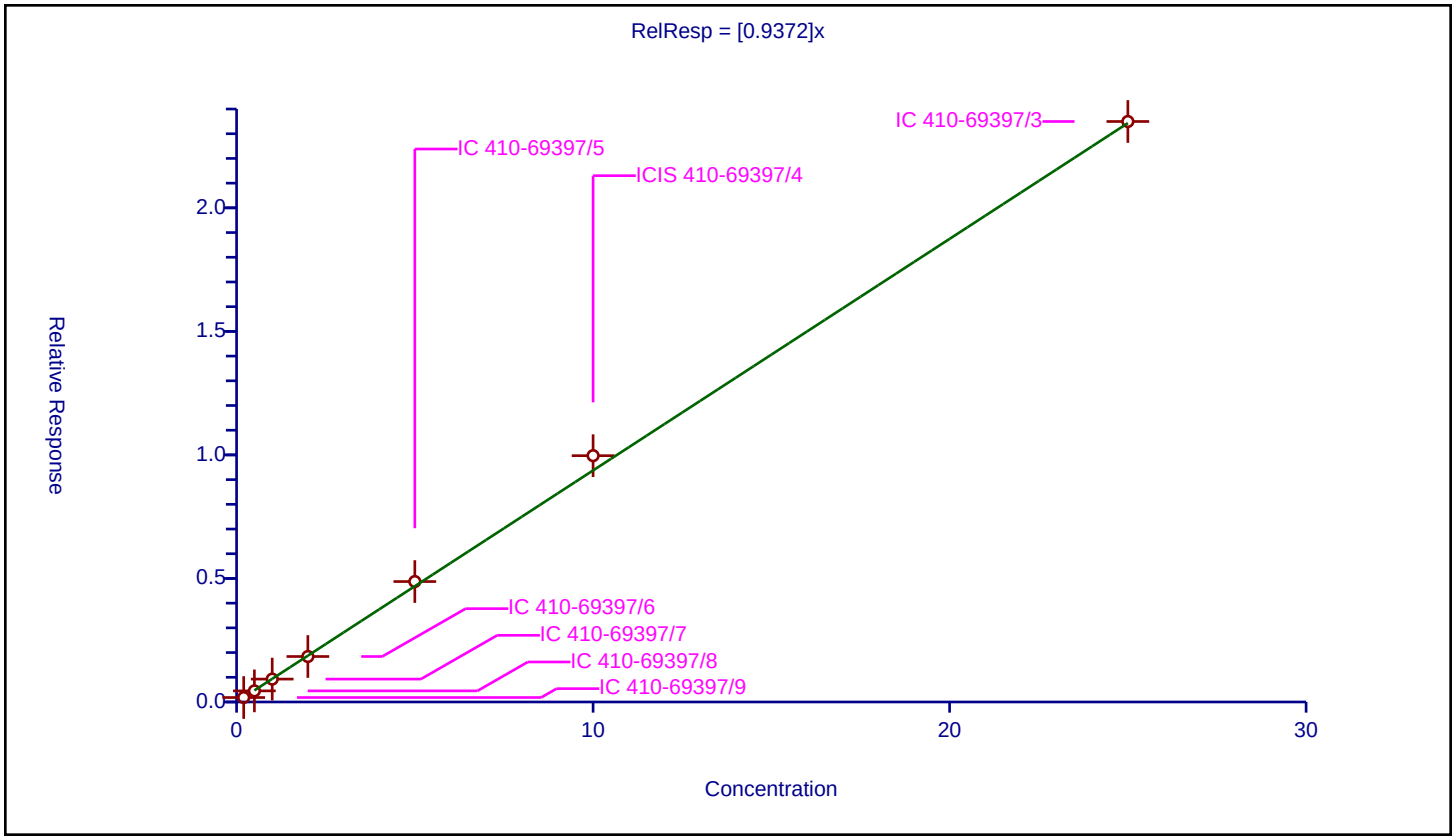
Curve Coefficients

Intercept:	0
Slope:	0.9372

Error Coefficients

Standard Error:	953000
Relative Standard Error:	3.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.180395	10.0	848529.0	0.901973	Y
2	IC 410-69397/8	0.5	0.449942	10.0	857933.0	0.899884	Y
3	IC 410-69397/7	1.0	0.926569	10.0	843985.0	0.926569	Y
4	IC 410-69397/6	2.0	1.840387	10.0	848463.0	0.920193	Y
5	IC 410-69397/5	5.0	4.875159	10.0	845833.0	0.975032	Y
6	ICIS 410-69397/4	10.0	9.969533	10.0	891775.0	0.996953	Y
7	IC 410-69397/3	25.0	23.495384	10.0	898877.0	0.939815	Y



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1

SDG No.:

Lab Sample ID: ICV 410-69397/10 Calibration Date: 11/23/2020 15:14

Instrument ID: 19930 Calib Start Date: 11/23/2020 12:45

GC Column: R-624SilMS 30m ID: 0.25(mm) Calib End Date: 11/23/2020 14:53

Lab File ID: IN23V01.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	0.3569	0.2943	0.1000	4.12	5.00	-17.5	30.0
Chloromethane	Ave	0.4141	0.3823	0.1000	4.62	5.00	-7.7	30.0
1,3-Butadiene	Ave	0.3536	0.3121		4.41	5.00	-11.8	30.0
Vinyl chloride	Ave	0.3812	0.3783	0.1000	4.96	5.00	-0.8	30.0
Bromomethane	Ave	0.2764	0.2693	0.1000	4.87	5.00	-2.6	30.0
Chloroethane	Ave	0.2343	0.2223	0.1000	4.74	5.00	-5.1	30.0
Dichlorofluoromethane	Ave	0.5249	0.5136		4.89	5.00	-2.2	30.0
Trichlorofluoromethane	Ave	0.4935	0.4599	0.1000	4.66	5.00	-6.8	30.0
Ethyl ether	Ave	0.2210	0.2357		5.33	5.00	6.7	30.0
Freon 123a	Ave	0.3461	0.3375		4.88	5.00	-2.5	30.0
Acrolein	Ave	2.192	2.048		35.0	37.5	-6.6	30.0
1,1-Dichloroethene	Ave	0.2666	0.2658	0.1000	4.98	5.00	-0.3	30.0
Acetone	Ave	2.726	2.486	0.1000	34.2	37.5	-8.8	30.0
Freon 113	Ave	0.2819	0.2556	0.1000	4.53	5.00	-9.3	30.0
Methyl iodide	Ave	0.5211	0.4961		4.76	5.00	-4.8	30.0
Ethyl bromide	Ave	0.2424	0.2277		4.71	5.01	-6.1	30.0
Carbon disulfide	Ave	0.7730	0.7318	0.1000	4.73	5.00	-5.3	30.0
Methyl acetate	Ave	7.436	6.809	0.1000	4.58	5.00	-8.4	30.0
Allyl chloride	Ave	0.4053	0.3854		4.75	5.00	-4.9	30.0
Methylene Chloride	Ave	0.2955	0.2867	0.1000	4.85	5.00	-3.0	30.0
t-Butyl alcohol	Ave	1.066	1.066		50.0	50.0	-0.0	30.0
Acrylonitrile	Ave	3.558	3.539		24.9	25.0	-0.5	30.0
Methyl tert-butyl ether	Ave	0.7137	0.6713	0.1000	4.70	5.00	-5.9	30.0
trans-1,2-Dichloroethene	Ave	0.2944	0.2872	0.1000	4.88	5.00	-2.5	30.0
n-Hexane	Ave	0.4029	0.3867		4.80	5.00	-4.0	30.0
1,1-Dichloroethane	Ave	0.5323	0.5231	0.2000	4.91	5.00	-1.7	30.0
di-Isopropyl ether	Ave	0.8798	0.8496		4.83	5.00	-3.4	30.0
2-Chloro-1,3-butadiene	Ave	0.4273	0.4204		4.92	5.00	-1.6	30.0
Ethyl t-butyl ether	Ave	0.8307	0.8078		4.86	5.00	-2.7	30.0
2-Butanone (MEK)	Ave	4.560	4.401	0.1000	36.2	37.5	-3.5	30.0
cis-1,2-Dichloroethene	Ave	0.3420	0.3466	0.1000	5.07	5.00	1.3	30.0
2,2-Dichloropropane	Ave	0.4280	0.4315		5.04	5.00	0.8	30.0
Propionitrile	Ave	1.334	1.364		38.4	37.5	2.3	30.0
Methacrylonitrile	Ave	4.696	4.600		36.7	37.5	-2.0	30.0
Bromochloromethane	Ave	0.1507	0.1407		4.67	5.00	-6.6	30.0
Tetrahydrofuran	Ave	1.383	1.401		25.3	25.0	1.3	30.0
Chloroform	Ave	0.5245	0.5161	0.2000	4.92	5.00	-1.6	30.0
1,1,1-Trichloroethane	Ave	0.4712	0.4575	0.1000	4.85	5.00	-2.9	30.0
Cyclohexane	Ave	0.4884	0.4708	0.1000	4.82	5.00	-3.6	30.0
1,1-Dichloropropene	Ave	0.4182	0.4127		4.93	5.00	-1.3	30.0
Carbon tetrachloride	Ave	0.4218	0.4101	0.1000	4.86	5.00	-2.8	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1

SDG No.:

Lab Sample ID: ICV 410-69397/10 Calibration Date: 11/23/2020 15:14

Instrument ID: 19930 Calib Start Date: 11/23/2020 12:45

GC Column: R-624SilMS 30m ID: 0.25(mm) Calib End Date: 11/23/2020 14:53

Lab File ID: IN23V01.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	0.3429	0.3263		119	125	-4.8	30.0
Benzene	Ave	1.267	1.218	0.5000	4.81	5.00	-3.8	30.0
1,2-Dichloroethane	Ave	0.3094	0.2997	0.1000	4.84	5.00	-3.1	30.0
t-Amyl methyl ether	Ave	0.7610	0.7447		4.89	5.00	-2.1	30.0
n-Heptane	Ave	0.4046	0.3828		4.73	5.00	-5.4	30.0
n-Butanol	Ave	0.3241	0.3115		240	250	-3.9	30.0
Trichloroethene	Ave	0.3316	0.3187	0.2000	4.80	5.00	-3.9	30.0
Methylcyclohexane	Ave	0.5387	0.5102	0.1000	4.74	5.00	-5.3	30.0
1,2-Dichloropropane	Ave	0.3114	0.3105	0.1000	4.99	5.00	-0.3	30.0
Methyl methacrylate	Ave	8.743	8.609		4.92	5.00	-1.5	30.0
1,4-Dioxane	Ave	0.0846	0.0778	0.0050	115	125	-8.0	30.0
Dibromomethane	Ave	0.1472	0.1406		4.78	5.00	-4.5	30.0
Bromodichloromethane	Ave	0.3732	0.3644	0.2000	4.88	5.00	-2.4	30.0
2-Nitropropane	Ave	2.198	2.103		4.78	5.00	-4.3	30.0
1-Bromo-2-chloroethane	Ave	0.3205	0.3144		4.91	5.00	-1.9	30.0
cis-1,3-Dichloropropene	Ave	0.4477	0.4341	0.2000	4.85	5.00	-3.0	30.0
4-Methyl-2-pentanone (MIBK)	Ave	11.34	11.28	0.1000	24.9	25.0	-0.5	30.0
Toluene	Ave	1.090	1.041	0.4000	4.77	5.00	-4.5	30.0
trans-1,3-Dichloropropene	Ave	0.4707	0.4601	0.1000	4.89	5.00	-2.3	30.0
Ethyl methacrylate	Ave	0.3939	0.4006		5.09	5.00	1.7	30.0
1,1,2-Trichloroethane	Ave	0.2910	0.2915	0.1000	5.01	5.00	0.2	30.0
Tetrachloroethene	Ave	0.5278	0.5107	0.2000	4.84	5.00	-3.2	30.0
1,3-Dichloropropane	Ave	0.4971	0.4800		4.83	5.00	-3.4	30.0
2-Hexanone	Ave	7.755	7.908	0.1000	25.5	25.0	2.0	30.0
Dibromochloromethane	Ave	0.3656	0.3629		4.96	5.00	-0.7	30.0
1,2-Dibromoethane (EDB)	Ave	0.2787	0.2652	0.1000	4.76	5.00	-4.8	30.0
1-Chlorohexane	Ave	0.6323	0.5824		4.61	5.00	-7.9	30.0
Chlorobenzene	Ave	1.205	1.182	0.5000	4.90	5.00	-1.9	30.0
1,1,1,2-Tetrachloroethane	Ave	0.4185	0.4104		4.90	5.00	-2.0	30.0
Ethylbenzene	Ave	2.106	2.045	0.1000	4.86	5.00	-2.9	30.0
m&p-Xylene	Ave	0.8312	0.8083	0.1000	9.72	10.0	-2.8	30.0
o-Xylene	Ave	0.8079	0.7959	0.3000	4.93	5.00	-1.5	30.0
Styrene	Ave	1.293	1.278	0.3000	4.94	5.00	-1.2	30.0
Bromoform	Ave	0.2210	0.2148	0.1000	4.86	5.00	-2.8	30.0
Isopropylbenzene	Ave	2.146	2.116	0.1000	4.93	5.00	-1.4	30.0
1,1,2,2-Tetrachloroethane	Ave	0.6530	0.6302	0.3000	4.83	5.00	-3.5	30.0
Bromobenzene	Ave	0.9004	0.8772		4.87	5.00	-2.6	30.0
trans-1,4-Dichloro-2-butene	Ave	3.720	3.643		24.5	25.0	-2.1	30.0
1,2,3-Trichloropropane	Ave	0.1792	0.1752		4.89	5.00	-2.2	30.0
N-Propylbenzene	Ave	4.413	4.339		4.92	5.00	-1.7	30.0
2-Chlorotoluene	Ave	0.9023	0.8811		4.88	5.00	-2.3	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1

SDG No.:

Lab Sample ID: ICV 410-69397/10 Calibration Date: 11/23/2020 15:14

Instrument ID: 19930 Calib Start Date: 11/23/2020 12:45

GC Column: R-624SilMS 30m ID: 0.25(mm) Calib End Date: 11/23/2020 14:53

Lab File ID: IN23V01.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,3,5-Trimethylbenzene	Ave	3.156	3.109		4.93	5.00	-1.5	30.0
4-Chlorotoluene	Ave	0.9112	0.8807		4.83	5.00	-3.3	30.0
tert-Butylbenzene	Ave	0.7129	0.6882		4.83	5.00	-3.5	30.0
Pentachloroethane	Ave	0.5650	0.5554		4.92	5.00	-1.7	30.0
1,2,4-Trimethylbenzene	Ave	3.210	3.163		4.93	5.00	-1.4	30.0
sec-Butylbenzene	Ave	4.139	4.082		4.93	5.00	-1.4	30.0
1,3-Dichlorobenzene	Ave	1.813	1.742	0.6000	4.80	5.00	-3.9	30.0
p-Isopropyltoluene	Ave	3.530	3.549		5.03	5.00	0.6	30.0
1,4-Dichlorobenzene	Ave	1.813	1.753	0.5000	4.84	5.00	-3.3	30.0
1,2,3-Trimethylbenzene	Ave	1.424	1.438		5.05	5.00	1.0	30.0
Benzyl chloride	Ave	0.2469	0.2647		5.36	5.00	7.2	30.0
n-Butylbenzene	Ave	1.724	1.687		4.89	5.00	-2.2	30.0
1,2-Dichlorobenzene	Ave	1.654	1.613	0.4000	4.88	5.00	-2.4	30.0
1,2-Dibromo-3-Chloropropane	Ave	0.1003	0.1017	0.0500	5.07	5.00	1.4	30.0
1,3,5-Trichlorobenzene	Ave	1.306	1.267		4.85	5.00	-3.0	30.0
1,2,4-Trichlorobenzene	Ave	1.086	1.066	0.2000	4.91	5.00	-1.9	30.0
Hexachlorobutadiene	Ave	0.4723	0.4467		4.73	5.00	-5.4	30.0
Naphthalene	Ave	2.030	1.940		4.78	5.00	-4.4	30.0
1,2,3-Trichlorobenzene	Ave	0.9372	0.8996		4.80	5.00	-4.0	30.0
Dibromofluoromethane (Surr)	Ave	0.2469	0.2460		9.96	10.0	-0.4	30.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.0498	0.0489		9.82	10.0	-1.8	30.0
Toluene-d8 (Surr)	Ave	1.306	1.301		9.96	10.0	-0.4	30.0
4-Bromofluorobenzene (Surr)	Ave	0.4836	0.4836		10.0	10.0	-0.0	30.0

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23V01.D
Lims ID: ICV LG
Client ID:
Sample Type: ICV
Inject. Date: 23-Nov-2020 15:14:30 ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0016280-010
Misc. Info.: ICV LG
Operator ID: dvv10203 Instrument ID: 19930
Sublist:

Method: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 23-Nov-2020 19:12:23 Calib Date: 23-Nov-2020 18:05:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1632

First Level Reviewer: campbellme Date: 23-Nov-2020 18:58:48

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.971	1.971	0.000	99	290999	5.00	4.12	
4 Chloromethane	50	2.172	2.172	0.000	99	378017	5.00	4.62	
6 Butadiene	39	2.288	2.288	0.000	89	308587	5.00	4.41	
5 Vinyl chloride	62	2.294	2.300	-0.006	98	374046	5.00	4.96	
7 Bromomethane	94	2.617	2.623	-0.006	90	266255	5.00	4.87	
8 Chloroethane	64	2.702	2.709	-0.007	100	219813	5.00	4.74	
9 Dichlorofluoromethane	67	2.940	2.940	0.000	97	507901	5.00	4.89	
10 Trichlorofluoromethane	101	3.013	3.019	-0.006	98	454773	5.00	4.66	
11 Ethyl ether	59	3.263	3.269	-0.006	90	233101	5.00	5.33	
12 1,2-Dichloro-1,1,2-trifluoroetha	67	3.337	3.336	0.000	95	333750	5.00	4.88	
13 Acrolein	56	3.440	3.440	0.000	99	248745	37.5	35.0	
14 1,1-Dichloroethene	96	3.574	3.580	-0.006	98	262792	5.00	4.98	
15 Acetone	43	3.605	3.605	0.000	100	302015	37.5	34.2	
16 112TCTFE	101	3.617	3.617	0.000	90	252796	5.00	4.53	
17 Iodomethane	142	3.769	3.775	-0.006	98	490572	5.00	4.76	
18 Ethyl bromide	108	3.806	3.806	0.000	98	225652	5.01	4.71	
19 Carbon disulfide	76	3.879	3.885	-0.006	99	723688	5.00	4.73	
21 Methyl acetate	43	4.031	4.038	-0.007	98	110295	5.00	4.58	M
22 3-Chloro-1-propene	41	4.056	4.062	-0.006	93	381111	5.00	4.75	
23 Methylene Chloride	84	4.251	4.251	0.000	90	283503	5.00	4.85	
* 24 t-Butyl alcohol-d10 (IS)	65	4.269	4.263	0.006	0	161987	50.0	50.0	M
25 2-Methyl-2-propanol	59	4.397	4.385	0.012	99	172665	50.0	50.0	
26 Acrylonitrile	53	4.586	4.592	-0.006	99	286671	25.0	24.9	
27 Methyl tert-butyl ether	73	4.653	4.659	-0.006	94	663864	5.00	4.70	
28 trans-1,2-Dichloroethene	96	4.678	4.678	0.000	99	283953	5.00	4.88	
29 Hexane	57	5.098	5.104	-0.006	90	382368	5.00	4.80	
31 1,1-Dichloroethane	63	5.330	5.336	-0.006	96	517268	5.00	4.91	
32 Isopropyl ether	45	5.391	5.391	0.000	95	840092	5.00	4.83	
33 2-Chloro-1,3-butadiene	53	5.440	5.446	-0.006	89	415706	5.00	4.92	
34 Tert-butyl ethyl ether	59	5.921	5.921	0.000	97	798827	5.00	4.86	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 2-Butanone (MEK)	43	6.129	6.135	-0.006	99	534646	37.5	36.2	
37 cis-1,2-Dichloroethene	96	6.159	6.165	-0.006	81	342704	5.00	5.07	
38 2,2-Dichloropropane	77	6.177	6.177	0.000	88	426724	5.00	5.04	
40 Propionitrile	54	6.220	6.220	0.000	98	165712	37.5	38.4	
42 Methacrylonitrile	67	6.427	6.433	-0.006	89	558808	37.5	36.7	
43 Chlorobromomethane	128	6.494	6.494	0.000	91	139169	5.00	4.67	
44 Tetrahydrofuran	71	6.501	6.507	-0.006	77	113499	25.0	25.3	
45 Chloroform	83	6.647	6.647	0.000	93	510311	5.00	4.92	
$ 46 Dibromofluoromethane (Surr)	113	6.854	6.860	-0.006	94	486520	10.0	9.96	
47 1,1,1-Trichloroethane	97	6.866	6.866	0.000	98	452418	5.00	4.85	
48 Cyclohexane	56	6.970	6.964	0.006	88	465588	5.00	4.82	
50 Carbon tetrachloride	117	7.080	7.080	0.000	95	405577	5.00	4.86	
51 1,1-Dichloropropene	75	7.080	7.080	0.000	98	408111	5.00	4.93	
52 Isobutyl alcohol	41	7.226	7.232	-0.006	95	132145	125.0	119.0	
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.317	7.311	0.006	0	96656	10.0	9.82	
54 Benzene	78	7.342	7.342	0.000	96	1204860	5.00	4.81	
56 1,2-Dichloroethane	62	7.409	7.415	-0.006	98	296399	5.00	4.84	
57 Tert-amyl methyl ether	73	7.525	7.531	-0.006	100	736358	5.00	4.89	
* 58 Fluorobenzene (IS)	96	7.744	7.744	0.000	99	1977703	10.0	10.0	
59 n-Heptane	43	7.750	7.756	-0.006	90	378491	5.00	4.73	
60 n-Butanol	56	8.104	8.104	0.000	85	252286	250.0	240.3	M
61 Trichloroethene	95	8.220	8.220	0.000	97	315102	5.00	4.80	
62 Methylcyclohexane	83	8.531	8.531	0.000	94	504512	5.00	4.74	
63 1,2-Dichloropropane	63	8.549	8.555	-0.006	90	307071	5.00	4.99	
64 Methyl methacrylate	69	8.634	8.634	0.000	87	139459	5.00	4.92	
65 1,4-Dioxane	88	8.640	8.640	0.000	30	31516	125.0	115.0	M
66 Dibromomethane	93	8.665	8.665	0.000	94	139012	5.00	4.78	
68 Dichlorobromomethane	83	8.896	8.896	0.000	99	360307	5.00	4.88	
69 2-Nitropropane	41	9.159	9.165	-0.006	98	34061	5.00	4.78	
71 2-Chloroethyl vinyl ether	63		9.250				ND	ND	
72 1-Bromo-2-chloroethane	63	9.287	9.287	0.000	98	310914	5.00	4.91	
73 cis-1,3-Dichloropropene	75	9.439	9.439	0.000	98	429301	5.00	4.85	
74 4-Methyl-2-pentanone (MIBK)	43	9.604	9.604	0.000	95	913922	25.0	24.9	
$ 75 Toluene-d8 (Surr)	98	9.744	9.744	0.000	93	1947874	10.0	9.96	
76 Toluene	92	9.817	9.817	0.000	98	779388	5.00	4.77	
78 trans-1,3-Dichloropropene	75	10.073	10.073	0.000	90	344464	5.00	4.89	
79 Ethyl methacrylate	69	10.134	10.134	0.000	87	299917	5.00	5.09	
80 1,1,2-Trichloroethane	97	10.274	10.280	-0.006	89	218208	5.00	5.01	
81 Tetrachloroethene	166	10.366	10.366	0.000	97	382345	5.00	4.84	
82 1,3-Dichloropropane	76	10.439	10.439	0.000	86	359323	5.00	4.83	
83 2-Hexanone	43	10.488	10.488	0.000	95	640458	25.0	25.5	
85 Chlorodibromomethane	129	10.652	10.652	0.000	90	271651	5.00	4.96	
86 Ethylene Dibromide	107	10.762	10.762	0.000	99	198542	5.00	4.76	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.189	0.000	85	1497197	10.0	10.0	
88 1-Chlorohexane	91	11.195	11.195	0.000	95	435966	5.00	4.61	
90 Chlorobenzene	112	11.219	11.219	0.000	96	884797	5.00	4.90	
91 1,1,1,2-Tetrachloroethane	131	11.298	11.298	0.000	96	307198	5.00	4.90	
92 Ethylbenzene	91	11.298	11.304	-0.006	98	1530870	5.00	4.86	
93 m-Xylene & p-Xylene	106	11.414	11.414	0.000	100	1210183	10.0	9.72	
94 o-Xylene	106	11.743	11.743	0.000	96	595836	5.00	4.93	
95 Styrene	104	11.762	11.762	0.000	95	956882	5.00	4.94	
96 Bromoform	173	11.920	11.920	0.000	98	160812	5.00	4.86	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
97 Isopropylbenzene	105	12.042	12.042	0.000	95	1583732	5.00	4.93	
$ 100 4-Bromofluorobenzene (Surr)	95	12.188	12.188	0.000	93	723999	10.0	10.0	
101 1,1,2,2-Tetrachloroethane	83	12.286	12.286	0.000	93	268576	5.00	4.83	
102 Bromobenzene	156	12.304	12.304	0.000	94	373871	5.00	4.87	
103 trans-1,4-Dichloro-2-butene	53	12.310	12.310	0.000	91	295070	25.0	24.5	
104 1,2,3-Trichloropropane	110	12.335	12.335	0.000	83	74668	5.00	4.89	
105 N-Propylbenzene	91	12.371	12.371	0.000	99	1849241	5.00	4.92	
106 2-Chlorotoluene	126	12.451	12.451	0.000	97	375532	5.00	4.88	
107 1,3,5-Trimethylbenzene	105	12.505	12.505	0.000	94	1325215	5.00	4.93	
108 4-Chlorotoluene	126	12.542	12.542	0.000	96	375339	5.00	4.83	
109 tert-Butylbenzene	134	12.749	12.749	0.000	92	293304	5.00	4.83	
110 Pentachloroethane	167	12.780	12.780	0.000	93	236718	5.00	4.92	
111 1,2,4-Trimethylbenzene	105	12.792	12.792	0.000	96	1348219	5.00	4.93	
112 sec-Butylbenzene	105	12.908	12.914	-0.006	94	1739936	5.00	4.93	
113 1,3-Dichlorobenzene	146	13.011	13.011	0.000	98	742550	5.00	4.80	
114 4-Isopropyltoluene	119	13.018	13.018	0.000	97	1512773	5.00	5.03	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	93	852390	10.0	10.0	
116 1,4-Dichlorobenzene	146	13.085	13.085	0.000	96	747293	5.00	4.84	
117 1,2,3-Trimethylbenzene	120	13.091	13.097	-0.006	98	613024	5.00	5.05	
118 Benzyl chloride	126	13.158	13.164	-0.006	98	112793	5.00	5.36	
119 n-Butylbenzene	92	13.310	13.310	0.000	98	718835	5.00	4.89	
120 1,2-Dichlorobenzene	146	13.341	13.347	-0.006	99	687650	5.00	4.88	
122 1,2-Dibromo-3-Chloropropane	155	13.889	13.883	0.006	90	43334	5.00	5.07	
123 1,3,5-Trichlorobenzene	180	14.011	14.011	0.000	98	539931	5.00	4.85	
124 1,2,4-Trichlorobenzene	180	14.432	14.438	-0.006	94	454274	5.00	4.91	
125 Hexachlorobutadiene	225	14.517	14.517	0.000	96	190387	5.00	4.73	
126 Naphthalene	128	14.615	14.615	0.000	97	826853	5.00	4.78	
127 1,2,3-Trichlorobenzene	180	14.755	14.761	-0.006	96	383391	5.00	4.80	
134 Isopropyl alcohol	45		0.000				ND	ND	
144 2-ethoxy-2-methyl butane	1		0.000				ND	ND	
135 p-Diethylbenzene	1		0.000				ND	ND	
137 2-Methylnaphthalene	142		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

MSV_Q_EE_00003	Amount Added:	12.50	Units: uL	
MSV_Q_QVOA1_00056	Amount Added:	12.50	Units: uL	
MSV_Q_QARC_00055	Amount Added:	12.50	Units: uL	
MSV_Q_QVOA6_00053	Amount Added:	12.50	Units: uL	
MSV_QGAS_826_00092	Amount Added:	12.50	Units: uL	
MSV_Q_ETBR_00005	Amount Added:	12.50	Units: uL	
MSV_31_826ISS_00003	Amount Added:	5.00	Units: uL	Run Reagent

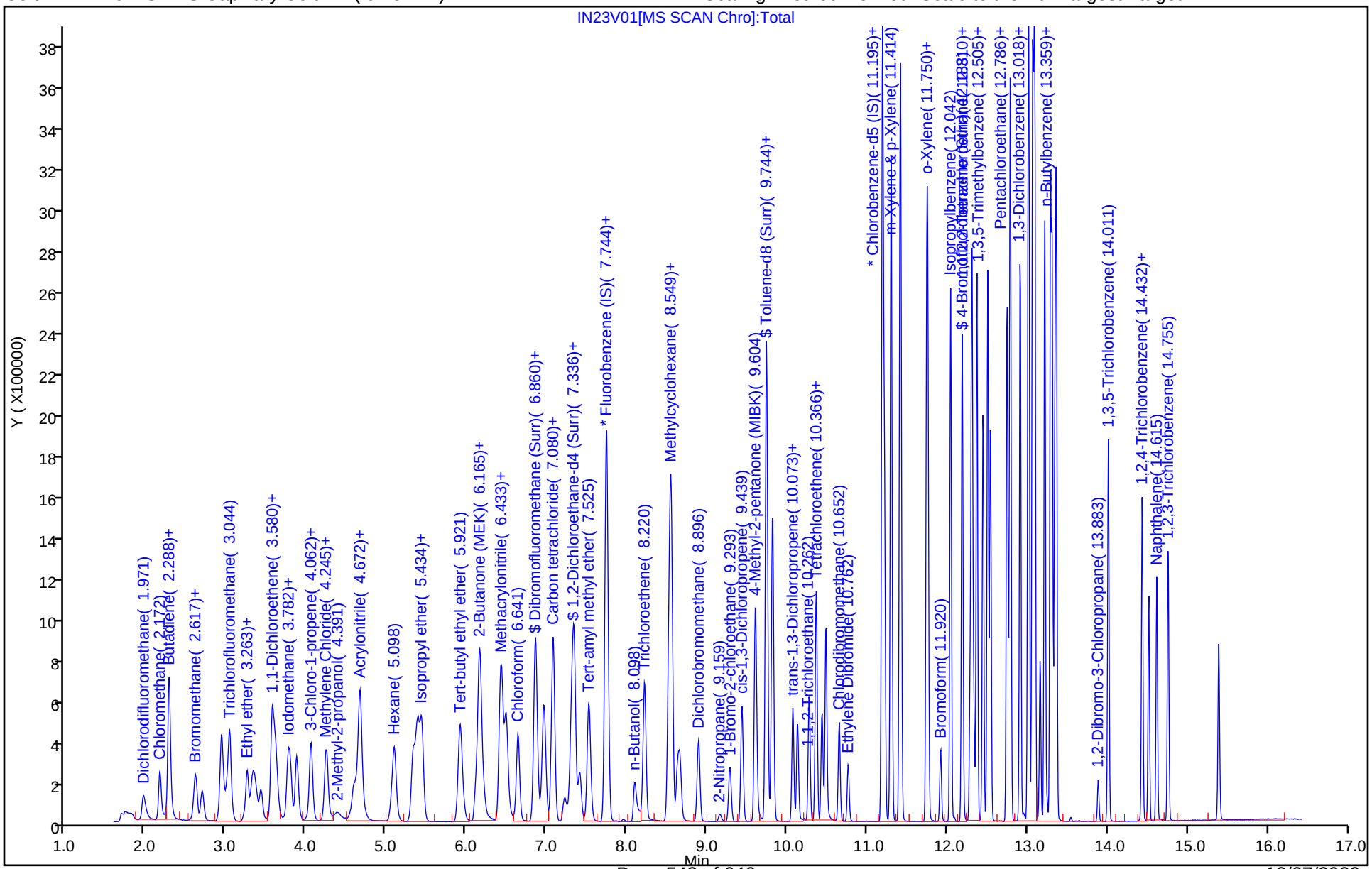
Report Date: 23-Nov-2020 19:12:27 Chrom Revision: 2.3 13-Nov-2020 01:23:02

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23V01.D

Injection Date:	23-Nov-2020 15:14:30	Instrument ID:	19930	Operator ID:	dvv10203
Lims ID:	ICV LG			Worklist Smp#:	10
Client ID:					
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

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



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

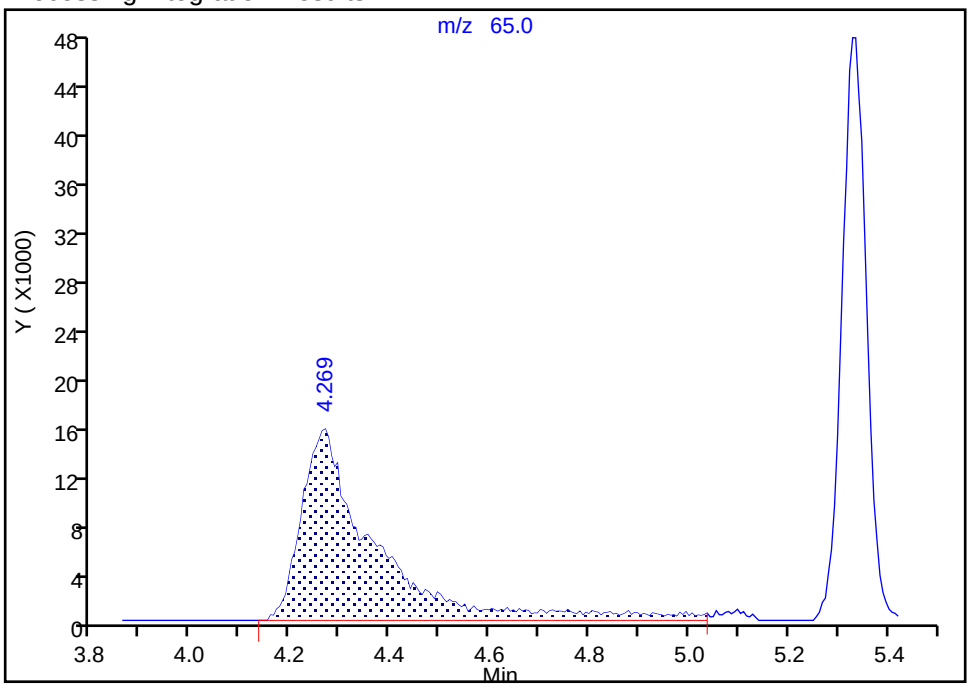
Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23V01.D
Injection Date: 23-Nov-2020 15:14:30 Instrument ID: 19930
Lims ID: ICV LG
Client ID:
Operator ID: dvv10203 ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

* 24 t-Butyl alcohol-d10 (IS), CAS: 53001-22-2

Signal: 1

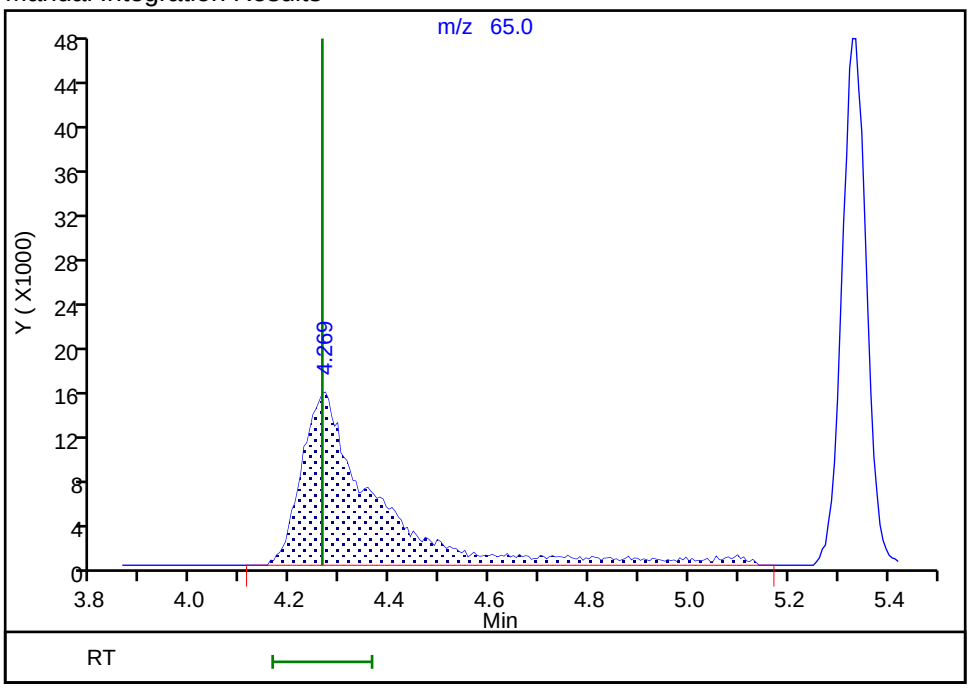
Processing Integration Results

RT: 4.27
Area: 158853
Amount: 50.000000
Amount Units: ug/l



Manual Integration Results

RT: 4.27
Area: 161987
Amount: 50.000000
Amount Units: ug/l



Reviewer: campbellme, 23-Nov-2020 18:56:25
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

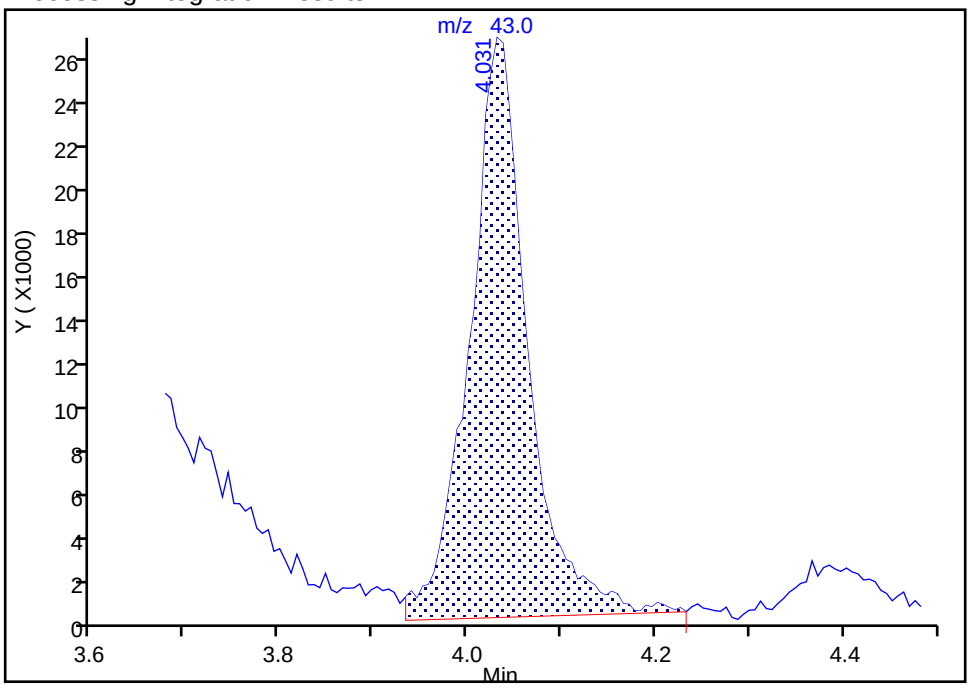
Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23V01.D
Injection Date: 23-Nov-2020 15:14:30 Instrument ID: 19930
Lims ID: ICV LG
Client ID:
Operator ID: dvv10203 ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

21 Methyl acetate, CAS: 79-20-9

Signal: 1

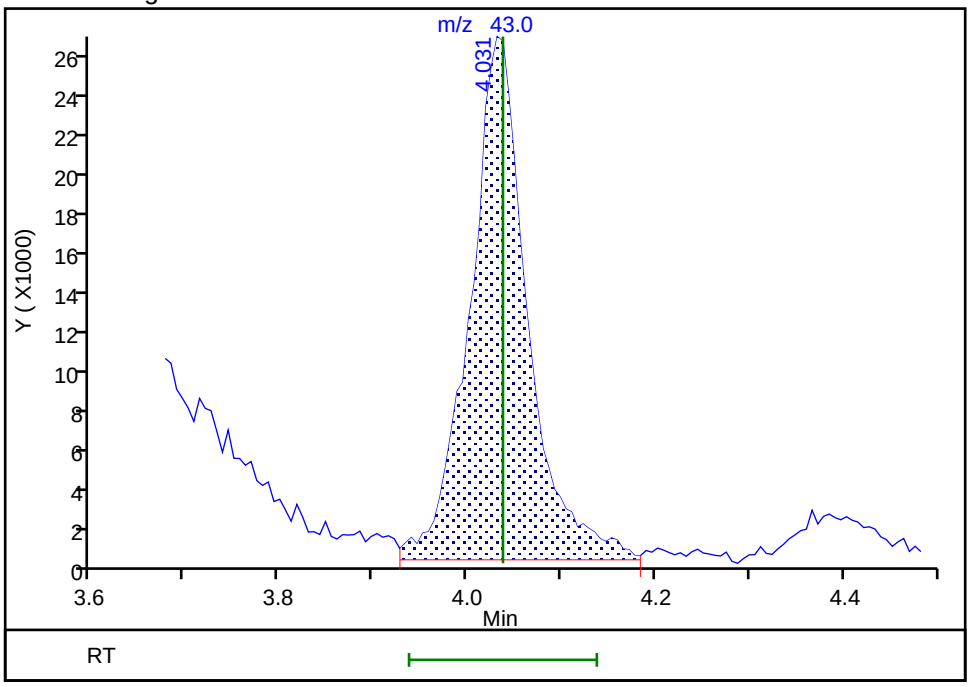
Processing Integration Results

RT: 4.03
Area: 111558
Amount: 4.721812
Amount Units: ug/l



Manual Integration Results

RT: 4.03
Area: 110295
Amount: 4.578035
Amount Units: ug/l



Reviewer: campbellme, 23-Nov-2020 18:56:15
Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

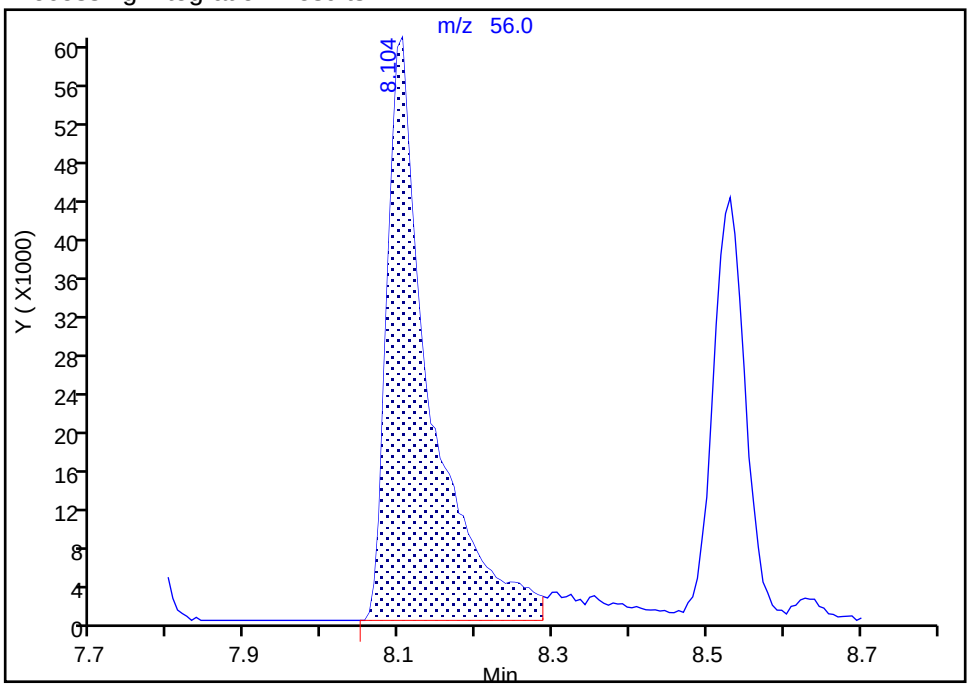
Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23V01.D
Injection Date: 23-Nov-2020 15:14:30 Instrument ID: 19930
Lims ID: ICV LG
Client ID:
Operator ID: dvv10203 ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

60 n-Butanol, CAS: 71-36-3

Signal: 1

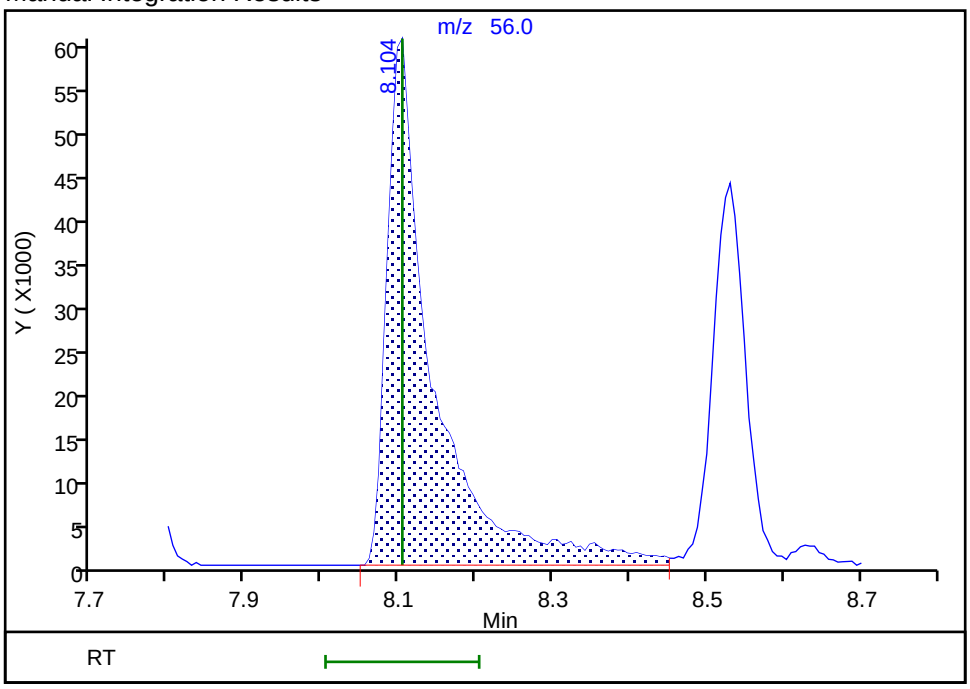
Processing Integration Results

RT: 8.10
Area: 234717
Amount: 223.5540
Amount Units: ug/l



Manual Integration Results

RT: 8.10
Area: 252286
Amount: 240.2874
Amount Units: ug/l



Reviewer: campbellme, 23-Nov-2020 18:56:56
Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

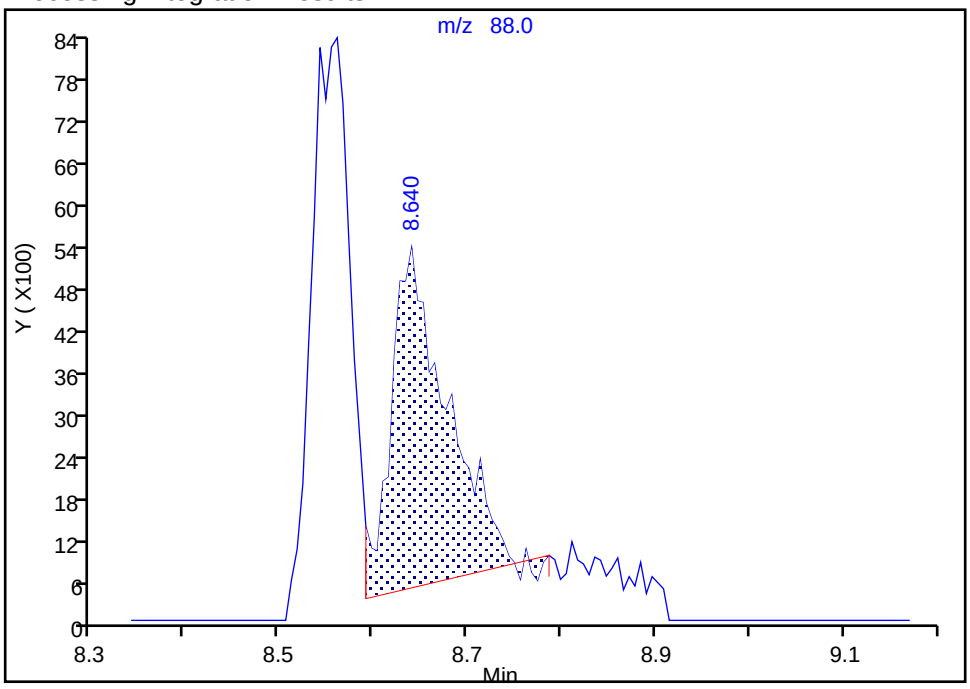
Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23V01.D
Injection Date: 23-Nov-2020 15:14:30 Instrument ID: 19930
Lims ID: ICV LG
Client ID:
Operator ID: dvv10203 ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

65 1,4-Dioxane, CAS: 123-91-1

Signal: 1

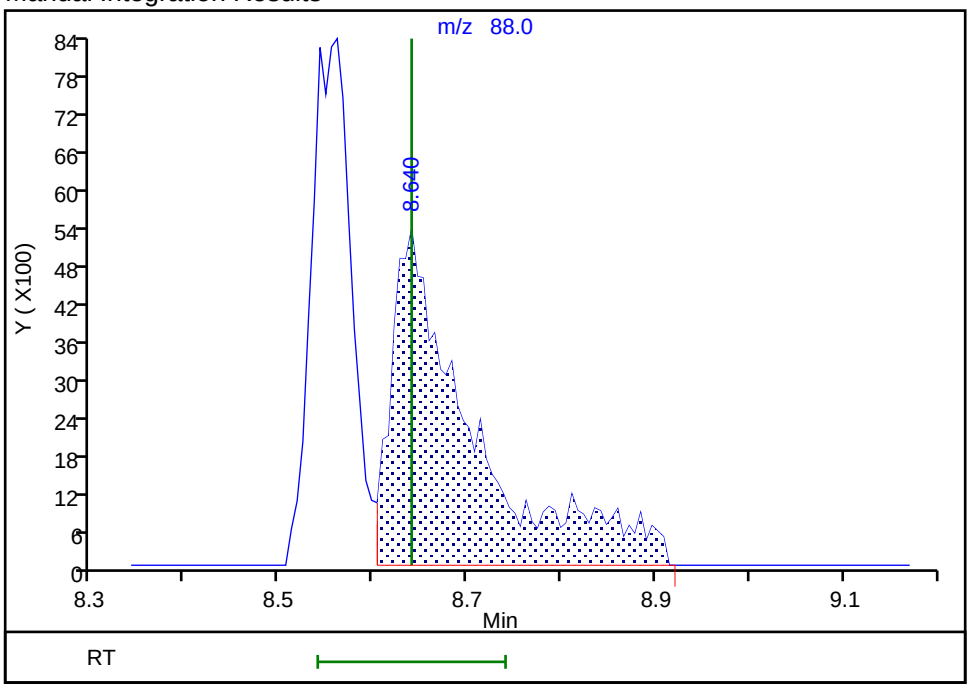
Processing Integration Results

RT: 8.64
Area: 19819
Amount: 72.308770
Amount Units: ug/l



Manual Integration Results

RT: 8.64
Area: 31516
Amount: 114.9848
Amount Units: ug/l



Reviewer: campbellme, 23-Nov-2020 18:57:13
Audit Action: Split an Integrated Peak Audit Reason: Incomplete Integration

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1

SDG No.:

Lab Sample ID: CCVIS 410-72509/3 Calibration Date: 12/03/2020 09:44

Instrument ID: 19930 Calib Start Date: 11/23/2020 12:45

GC Column: R-624SilMS 30m ID: 0.25(mm) Calib End Date: 11/23/2020 14:53

Lab File ID: ID03X03.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	0.3569	0.3710	0.1000	10.4	10.0	4.0	20.0
Chloromethane	Ave	0.4141	0.3986	0.1000	9.62	10.0	-3.8	20.0
1,3-Butadiene	Ave	0.3536	0.4578		12.9	10.0	29.4*	20.0
Vinyl chloride	Ave	0.3812	0.3751	0.1000	9.84	10.0	-1.6	20.0
Bromomethane	Ave	0.2764	0.2679	0.1000	9.69	10.0	-3.1	20.0
Chloroethane	Ave	0.2343	0.2268	0.1000	9.68	10.0	-3.2	20.0
Dichlorofluoromethane	Ave	0.5249	0.5060		9.64	10.0	-3.6	20.0
Trichlorofluoromethane	Ave	0.4935	0.5116	0.1000	10.4	10.0	3.7	20.0
Ethyl ether	Ave	0.2210	0.2181		9.87	10.0	-1.3	20.0
Freon 123a	Ave	0.3461	0.3604		10.4	10.0	4.1	20.0
Acrolein	Ave	2.192	1.932		441	500	-11.8	20.0
1,1-Dichloroethene	Ave	0.2666	0.2694	0.1000	10.1	10.0	1.0	20.0
Acetone	Ave	2.726	2.241	0.1000	82.2	100	-17.8	20.0
Freon 113	Ave	0.2819	0.3241	0.1000	11.5	10.0	15.0	20.0
Methyl iodide	Ave	0.5211	0.5356		10.3	10.0	2.8	20.0
Ethyl bromide	Ave	0.2424	0.2413		9.95	10.0	-0.5	20.0
Carbon disulfide	Ave	0.7730	0.7614	0.1000	9.85	10.0	-1.5	20.0
Methyl acetate	Ave	7.436	7.451	0.1000	10.0	10.0	0.2	20.0
Allyl chloride	Ave	0.4053	0.3843		9.48	10.0	-5.2	20.0
Methylene Chloride	Ave	0.2955	0.2901	0.1000	9.82	10.0	-1.8	20.0
t-Butyl alcohol	Ave	1.066	1.072		201	200	0.6	20.0
Acrylonitrile	Ave	3.558	3.444		48.4	50.0	-3.2	20.0
Methyl tert-butyl ether	Ave	0.7137	0.7111	0.1000	9.96	10.0	-0.4	20.0
trans-1,2-Dichloroethene	Ave	0.2944	0.2934	0.1000	9.96	10.0	-0.4	20.0
n-Hexane	Ave	0.4029	0.4768		11.8	10.0	18.3	20.0
1,1-Dichloroethane	Ave	0.5323	0.5367	0.2000	10.1	10.0	0.8	20.0
di-Isopropyl ether	Ave	0.8798	0.9092		10.3	10.0	3.3	20.0
2-Chloro-1,3-butadiene	Ave	0.4273	0.4383		10.3	10.0	2.6	20.0
Ethyl t-butyl ether	Ave	0.8307	0.8365		10.1	10.0	0.7	20.0
2-Butanone (MEK)	Ave	4.560	4.450	0.1000	97.6	100	-2.4	20.0
cis-1,2-Dichloroethene	Ave	0.3420	0.3446	0.1000	10.1	10.0	0.7	20.0
2,2-Dichloropropane	Ave	0.4280	0.4470		10.4	10.0	4.4	20.0
Propionitrile	Ave	1.334	1.358		204	200	1.8	20.0
Methacrylonitrile	Ave	4.696	4.563		97.2	100	-2.8	20.0
Bromochloromethane	Ave	0.1507	0.1488		9.87	10.0	-1.3	20.0
Tetrahydrofuran	Ave	1.383	1.334		96.5	100	-3.5	20.0
Chloroform	Ave	0.5245	0.5260	0.2000	10.0	10.0	0.3	20.0
1,1,1-Trichloroethane	Ave	0.4712	0.4757	0.1000	10.1	10.0	0.9	20.0
Cyclohexane	Ave	0.4884	0.5543	0.1000	11.3	10.0	13.5	20.0
1,1-Dichloropropene	Ave	0.4182	0.4299		10.3	10.0	2.8	20.0
Carbon tetrachloride	Ave	0.4218	0.4362	0.1000	10.3	10.0	3.4	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1

SDG No.:

Lab Sample ID: CCVIS 410-72509/3 Calibration Date: 12/03/2020 09:44

Instrument ID: 19930 Calib Start Date: 11/23/2020 12:45

GC Column: R-624SilMS 30m ID: 0.25(mm) Calib End Date: 11/23/2020 14:53

Lab File ID: ID03X03.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	0.3429	0.3608		526	500	5.2	20.0
Benzene	Ave	1.267	1.275	0.5000	10.1	10.0	0.7	20.0
1,2-Dichloroethane	Ave	0.3094	0.3034	0.1000	9.81	10.0	-1.9	20.0
t-Amyl methyl ether	Ave	0.7610	0.7753		10.2	10.0	1.9	20.0
n-Heptane	Ave	0.4046	0.4814		11.9	10.0	19.0	20.0
n-Butanol	Ave	0.3241	0.3534		1090	1000	9.1	20.0
Trichloroethene	Ave	0.3316	0.3333	0.2000	10.0	10.0	0.5	20.0
Methylcyclohexane	Ave	0.5387	0.5973	0.1000	11.1	10.0	10.9	20.0
1,2-Dichloropropane	Ave	0.3114	0.3206	0.1000	10.3	10.0	3.0	20.0
Methyl methacrylate	Ave	8.743	8.885		10.2	10.0	1.6	20.0
1,4-Dioxane	Ave	0.0846	0.0851	0.0050	503	500	0.5	20.0
Dibromomethane	Ave	0.1472	0.1477		10.0	10.0	0.3	20.0
Bromodichloromethane	Ave	0.3732	0.3808	0.2000	10.2	10.0	2.0	20.0
2-Nitropropane	Ave	2.198	2.067		94.0	100	-6.0	20.0
1-Bromo-2-chloroethane	Ave	0.3205	0.3269		10.2	10.0	2.0	20.0
cis-1,3-Dichloropropene	Ave	0.4477	0.4725	0.2000	10.6	10.0	5.5	20.0
4-Methyl-2-pentanone (MIBK)	Ave	11.34	11.27	0.1000	99.3	100	-0.7	20.0
Toluene	Ave	1.090	1.069	0.4000	9.80	10.0	-2.0	20.0
trans-1,3-Dichloropropene	Ave	0.4707	0.4855	0.1000	10.3	10.0	3.1	20.0
Ethyl methacrylate	Ave	0.3939	0.4143		10.5	10.0	5.2	20.0
1,1,2-Trichloroethane	Ave	0.2910	0.2870	0.1000	9.86	10.0	-1.4	20.0
Tetrachloroethene	Ave	0.5278	0.5305	0.2000	10.1	10.0	0.5	20.0
1,3-Dichloropropane	Ave	0.4971	0.4916		9.89	10.0	-1.1	20.0
2-Hexanone	Ave	7.755	7.833	0.1000	101	100	1.0	20.0
Dibromochloromethane	Ave	0.3656	0.3660		10.0	10.0	0.1	20.0
1,2-Dibromoethane (EDB)	Ave	0.2787	0.2780	0.1000	9.97	10.0	-0.3	20.0
1-Chlorohexane	Ave	0.6323	0.6326		10.0	10.0	0.0	20.0
Chlorobenzene	Ave	1.205	1.204	0.5000	9.99	10.0	-0.1	20.0
1,1,1,2-Tetrachloroethane	Ave	0.4185	0.4283		10.2	10.0	2.3	20.0
Ethylbenzene	Ave	2.106	2.100	0.1000	9.97	10.0	-0.3	20.0
m&p-Xylene	Ave	0.8312	0.8353	0.1000	20.1	20.0	0.5	20.0
o-Xylene	Ave	0.8079	0.8244	0.3000	10.2	10.0	2.0	20.0
Styrene	Ave	1.293	1.335	0.3000	10.3	10.0	3.2	20.0
Bromoform	Ave	0.2210	0.2267	0.1000	10.3	10.0	2.6	20.0
Isopropylbenzene	Ave	2.146	2.196	0.1000	10.2	10.0	2.3	20.0
1,1,2,2-Tetrachloroethane	Ave	0.6530	0.6294	0.3000	9.64	10.0	-3.6	20.0
Bromobenzene	Ave	0.9004	0.8925		9.91	10.0	-0.9	20.0
trans-1,4-Dichloro-2-butene	Ave	3.720	3.449		92.7	100	-7.3	20.0
1,2,3-Trichloropropane	Ave	0.1792	0.1704		9.51	10.0	-4.9	20.0
N-Propylbenzene	Ave	4.413	4.311		9.77	10.0	-2.3	20.0
2-Chlorotoluene	Ave	0.9023	0.8831		9.79	10.0	-2.1	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1

SDG No.:

Lab Sample ID: CCVIS 410-72509/3 Calibration Date: 12/03/2020 09:44

Instrument ID: 19930 Calib Start Date: 11/23/2020 12:45

GC Column: R-624SilMS 30m ID: 0.25(mm) Calib End Date: 11/23/2020 14:53

Lab File ID: ID03X03.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,3,5-Trimethylbenzene	Ave	3.156	3.145		9.97	10.0	-0.3	20.0
4-Chlorotoluene	Ave	0.9112	0.9068		9.95	10.0	-0.5	20.0
tert-Butylbenzene	Ave	0.7129	0.7078		9.93	10.0	-0.7	20.0
Pentachloroethane	Ave	0.5650	0.5691		10.1	10.0	0.7	20.0
1,2,4-Trimethylbenzene	Ave	3.210	3.246		10.1	10.0	1.1	20.0
sec-Butylbenzene	Ave	4.139	4.186		10.1	10.0	1.1	20.0
1,3-Dichlorobenzene	Ave	1.813	1.811	0.6000	9.99	10.0	-0.1	20.0
p-Isopropyltoluene	Ave	3.530	3.590		10.2	10.0	1.7	20.0
1,4-Dichlorobenzene	Ave	1.813	1.788	0.5000	9.86	10.0	-1.4	20.0
1,2,3-Trimethylbenzene	Ave	1.424	1.392		9.78	10.0	-2.2	20.0
Benzyl chloride	Ave	0.2469	0.2794		11.3	10.0	13.2	20.0
n-Butylbenzene	Ave	1.724	1.765		10.2	10.0	2.4	20.0
1,2-Dichlorobenzene	Ave	1.654	1.633	0.4000	9.87	10.0	-1.3	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.1003	0.1026	0.0500	10.2	10.0	2.4	20.0
1,3,5-Trichlorobenzene	Ave	1.306	1.324		10.1	10.0	1.3	20.0
1,2,4-Trichlorobenzene	Ave	1.086	1.104	0.2000	10.2	10.0	1.7	20.0
Hexachlorobutadiene	Ave	0.4723	0.4732		10.0	10.0	0.2	20.0
Naphthalene	Ave	2.030	2.012		9.92	10.0	-0.8	20.0
1,2,3-Trichlorobenzene	Ave	0.9372	0.9177		9.79	10.0	-2.1	20.0
Dibromofluoromethane (Surr)	Ave	0.2469	0.2459		9.96	10.0	-0.4	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.0498	0.0495		9.94	10.0	-0.6	20.0
Toluene-d8 (Surr)	Ave	1.306	1.273		9.75	10.0	-2.5	20.0
4-Bromofluorobenzene (Surr)	Ave	0.4836	0.4836		10.0	10.0	0.0	20.0

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20201203-16986.b\ID03X03.D
Lims ID: CCVIS VSTD10
Client ID:
Sample Type: CCVIS
Inject. Date: 03-Dec-2020 09:44:30 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0016986-003
Misc. Info.: CCVIS VSTD10
Operator ID: kas02648 Instrument ID: 19930
Sublist: chrom-8260 25ml HP31*sub2

Method: \\chromfs\Lancaster\ChromData\19930\20201203-16986.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 05-Dec-2020 08:25:02 Calib Date: 23-Nov-2020 18:05:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1645

First Level Reviewer: spositok Date: 03-Dec-2020 11:05:57

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.989	1.989	0.000	99	762106	10.0	10.4	
4 Chloromethane	50	2.190	2.190	0.000	99	818748	10.0	9.62	
6 Butadiene	39	2.300	2.300	0.000	90	940316	10.0	12.9	
5 Vinyl chloride	62	2.312	2.312	0.000	98	770558	10.0	9.84	
7 Bromomethane	94	2.635	2.635	0.000	90	550285	10.0	9.69	
8 Chloroethane	64	2.715	2.715	0.000	99	465829	10.0	9.68	
9 Dichlorofluoromethane	67	2.958	2.958	0.000	97	1039445	10.0	9.64	
10 Trichlorofluoromethane	101	3.032	3.032	0.000	98	1050943	10.0	10.4	
11 Ethyl ether	59	3.276	3.276	0.000	91	448031	10.0	9.87	
12 1,2-Dichloro-1,1,2-trifluoroetha	67	3.349	3.349	0.000	94	740311	10.0	10.4	
13 Acrolein	56	3.446	3.446	0.000	100	3399590	500.0	440.8	
14 1,1-Dichloroethene	96	3.586	3.586	0.000	97	553333	10.0	10.1	
15 Acetone	43	3.617	3.617	0.000	100	788596	100.0	82.2	
16 112TCTFE	101	3.629	3.629	0.000	89	665831	10.0	11.5	
17 Iodomethane	142	3.782	3.782	0.000	98	1100255	10.0	10.3	
18 Ethyl bromide	108	3.818	3.818	0.000	98	495623	10.0	9.95	
19 Carbon disulfide	76	3.891	3.891	0.000	99	1564105	10.0	9.85	
21 Methyl acetate	43	4.044	4.044	0.000	97	262145	10.0	10.0	
22 3-Chloro-1-propene	41	4.068	4.068	0.000	93	789361	10.0	9.48	
23 Methylene Chloride	84	4.263	4.263	0.000	90	596020	10.0	9.82	
* 24 t-Butyl alcohol-d10 (IS)	65	4.288	4.288	0.000	0	175919	50.0	50.0	
25 2-Methyl-2-propanol	59	4.416	4.416	0.000	100	754684	200.0	201.2	
26 Acrylonitrile	53	4.605	4.605	0.000	99	605851	50.0	48.4	
27 Methyl tert-butyl ether	73	4.672	4.672	0.000	94	1460762	10.0	9.96	
28 trans-1,2-Dichloroethene	96	4.678	4.678	0.000	99	602626	10.0	9.96	
29 Hexane	57	5.104	5.104	0.000	90	979397	10.0	11.8	
31 1,1-Dichloroethane	63	5.342	5.342	0.000	96	1102506	10.0	10.1	
32 Isopropyl ether	45	5.397	5.397	0.000	95	1867668	10.0	10.3	
33 2-Chloro-1,3-butadiene	53	5.452	5.452	0.000	89	900413	10.0	10.3	
34 Tert-butyl ethyl ether	59	5.921	5.921	0.000	97	1718257	10.0	10.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 2-Butanone (MEK)	43	6.141	6.141	0.000	99	1565593	100.0	97.6	
37 cis-1,2-Dichloroethene	96	6.165	6.165	0.000	82	707806	10.0	10.1	
38 2,2-Dichloropropane	77	6.177	6.177	0.000	86	918203	10.0	10.4	
40 Propionitrile	54	6.232	6.232	0.000	99	955336	200.0	203.6	
42 Methacrylonitrile	67	6.440	6.440	0.000	90	1605449	100.0	97.2	
43 Chlorobromomethane	128	6.500	6.500	0.000	88	305674	10.0	9.87	
44 Tetrahydrofuran	71	6.513	6.513	0.000	86	469387	100.0	96.5	
45 Chloroform	83	6.647	6.647	0.000	93	1080480	10.0	10.0	
$ 46 Dibromofluoromethane (Surr)	113	6.860	6.860	0.000	94	505067	10.0	9.96	
47 1,1,1-Trichloroethane	97	6.872	6.872	0.000	98	977201	10.0	10.1	
48 Cyclohexane	56	6.970	6.970	0.000	88	1138722	10.0	11.3	
50 Carbon tetrachloride	117	7.086	7.086	0.000	96	896113	10.0	10.3	
51 1,1-Dichloropropene	75	7.086	7.086	0.000	97	883074	10.0	10.3	
52 Isobutyl alcohol	41	7.232	7.232	0.000	96	634663	500.0	526.1	
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.317	7.317	0.000	0	101685	10.0	9.94	
54 Benzene	78	7.348	7.348	0.000	95	2619696	10.0	10.1	
56 1,2-Dichloroethane	62	7.421	7.421	0.000	97	623161	10.0	9.81	
57 Tert-amyl methyl ether	73	7.531	7.531	0.000	99	1592561	10.0	10.2	
* 58 Fluorobenzene (IS)	96	7.750	7.750	0.000	99	2054189	10.0	10.0	
59 n-Heptane	43	7.756	7.756	0.000	90	988985	10.0	11.9	
60 n-Butanol	56	8.104	8.104	0.000	85	1243428	1000.0	1090.5	
61 Trichloroethene	95	8.226	8.226	0.000	97	684626	10.0	10.0	
62 Methylcyclohexane	83	8.531	8.531	0.000	94	1227003	10.0	11.1	
63 1,2-Dichloropropane	63	8.555	8.555	0.000	89	658621	10.0	10.3	
64 Methyl methacrylate	69	8.634	8.634	0.000	88	312607	10.0	10.2	
65 1,4-Dioxane	88	8.640	8.640	0.000	38	149645	500.0	502.7	M
66 Dibromomethane	93	8.665	8.665	0.000	93	303434	10.0	10.0	
68 Dichlorobromomethane	83	8.896	8.896	0.000	99	782214	10.0	10.2	
69 2-Nitropropane	41	9.165	9.165	0.000	96	727263	100.0	94.0	
72 1-Bromo-2-chloroethane	63	9.287	9.287	0.000	98	671501	10.0	10.2	
73 cis-1,3-Dichloropropene	75	9.439	9.439	0.000	98	970524	10.0	10.6	
74 4-Methyl-2-pentanone (MIBK)	43	9.604	9.604	0.000	95	3964973	100.0	99.3	
$ 75 Toluene-d8 (Surr)	98	9.744	9.744	0.000	93	2044074	10.0	9.75	
76 Toluene	92	9.823	9.823	0.000	98	1715583	10.0	9.80	
78 trans-1,3-Dichloropropene	75	10.073	10.073	0.000	90	779382	10.0	10.3	
79 Ethyl methacrylate	69	10.134	10.134	0.000	87	665161	10.0	10.5	
80 1,1,2-Trichloroethane	97	10.274	10.274	0.000	90	460845	10.0	9.86	
81 Tetrachloroethene	166	10.366	10.366	0.000	97	851721	10.0	10.1	
82 1,3-Dichloropropane	76	10.439	10.439	0.000	86	789285	10.0	9.89	
83 2-Hexanone	43	10.488	10.488	0.000	95	2755926	100.0	101.0	
85 Chlorodibromomethane	129	10.652	10.652	0.000	90	587606	10.0	10.0	
86 Ethylene Dibromide	107	10.762	10.762	0.000	99	446287	10.0	9.97	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.189	0.000	84	1605469	10.0	10.0	
88 1-Chlorohexane	91	11.201	11.201	0.000	95	1015630	10.0	10.0	
90 Chlorobenzene	112	11.219	11.219	0.000	97	1932430	10.0	9.99	
91 1,1,1,2-Tetrachloroethane	131	11.298	11.298	0.000	97	687655	10.0	10.2	
92 Ethylbenzene	91	11.304	11.304	0.000	98	3371613	10.0	9.97	
93 m-Xylene & p-Xylene	106	11.414	11.414	0.000	0	2681975	20.0	20.1	
94 o-Xylene	106	11.743	11.743	0.000	96	1323576	10.0	10.2	
95 Styrene	104	11.762	11.762	0.000	95	2143405	10.0	10.3	
96 Bromoform	173	11.920	11.920	0.000	99	364037	10.0	10.3	
97 Isopropylbenzene	105	12.042	12.042	0.000	95	3526104	10.0	10.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 100 4-Bromofluorobenzene (Surr)	95	12.188	12.188	0.000	95	776483	10.0	10.0	
101 1,1,2,2-Tetrachloroethane	83	12.286	12.286	0.000	92	596102	10.0	9.64	
102 Bromobenzene	156	12.304	12.304	0.000	97	845305	10.0	9.91	
103 trans-1,4-Dichloro-2-butene	53	12.310	12.310	0.000	90	1213625	100.0	92.7	
104 1,2,3-Trichloropropane	110	12.335	12.335	0.000	82	161350	10.0	9.51	
105 N-Propylbenzene	91	12.371	12.371	0.000	99	4082700	10.0	9.77	
106 2-Chlorotoluene	126	12.451	12.451	0.000	98	836382	10.0	9.79	
107 1,3,5-Trimethylbenzene	105	12.505	12.505	0.000	94	2978843	10.0	9.97	
108 4-Chlorotoluene	126	12.542	12.542	0.000	96	858825	10.0	9.95	
109 tert-Butylbenzene	134	12.749	12.749	0.000	92	670313	10.0	9.93	
110 Pentachloroethane	167	12.780	12.780	0.000	92	538948	10.0	10.1	
111 1,2,4-Trimethylbenzene	105	12.792	12.792	0.000	96	3074354	10.0	10.1	
112 sec-Butylbenzene	105	12.914	12.914	0.000	93	3964572	10.0	10.1	
113 1,3-Dichlorobenzene	146	13.011	13.011	0.000	98	1715563	10.0	9.99	
114 4-Isopropyltoluene	119	13.018	13.018	0.000	97	3399942	10.0	10.2	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	95	947080	10.0	10.0	
116 1,4-Dichlorobenzene	146	13.085	13.085	0.000	95	1693407	10.0	9.86	
117 1,2,3-Trimethylbenzene	120	13.097	13.097	0.000	98	1318624	10.0	9.78	
118 Benzyl chloride	126	13.158	13.158	0.000	98	264626	10.0	11.3	
119 n-Butylbenzene	92	13.310	13.310	0.000	96	1671718	10.0	10.2	
120 1,2-Dichlorobenzene	146	13.341	13.341	0.000	99	1546527	10.0	9.87	
122 1,2-Dibromo-3-Chloropropane	155	13.883	13.883	0.000	91	97201	10.0	10.2	
123 1,3,5-Trichlorobenzene	180	14.011	14.011	0.000	98	1253593	10.0	10.1	
124 1,2,4-Trichlorobenzene	180	14.432	14.432	0.000	94	1045756	10.0	10.2	
125 Hexachlorobutadiene	225	14.517	14.517	0.000	96	448137	10.0	10.0	
126 Naphthalene	128	14.615	14.615	0.000	97	1905942	10.0	9.92	
127 1,2,3-Trichlorobenzene	180	14.755	14.755	0.000	96	869113	10.0	9.79	
134 Isopropyl alcohol	45		0.000				ND	ND	
144 2-ethoxy-2-methyl butane	1		0.000				ND	ND	
135 p-Diethylbenzene	1		0.000				ND	ND	
137 2-Methylnaphthalene	142		0.000				ND	ND	
204 Pentane	43		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

MSV_RV4GAS826_00097	Amount Added: 10.00	Units: uL	
MSV_RV1_826_00031	Amount Added: 10.00	Units: uL	
MSV_RV4_826_00035	Amount Added: 10.00	Units: uL	
MSV_31_826ISS_00003	Amount Added: 5.00	Units: uL	Run Reagent

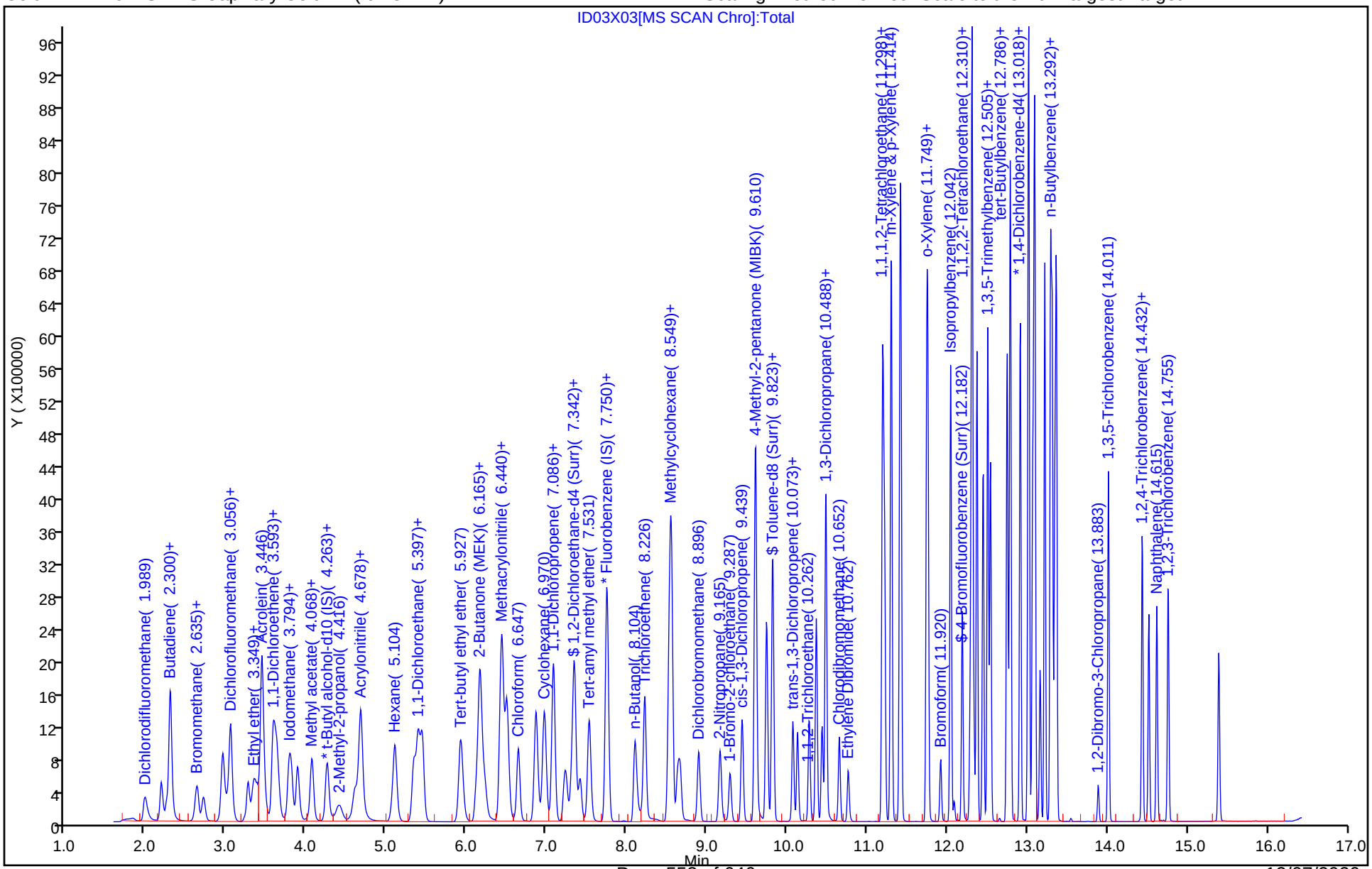
Report Date: 05-Dec-2020 08:25:04 Chrom Revision: 2.3 13-Nov-2020 01:23:02

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20201203-16986.b\ID03X03.D

Injection Date:	03-Dec-2020 09:44:30	Instrument ID:	19930	Operator ID:	kas02648
Lims ID:	CCVIS VSTD10			Worklist Smp#:	3
Client ID:					
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

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



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

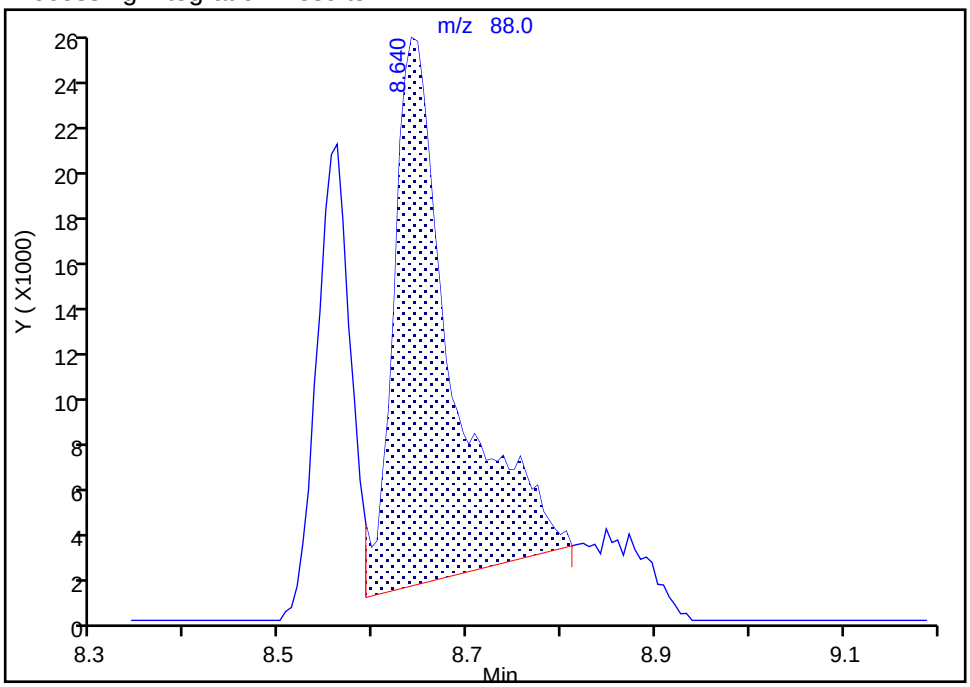
Data File:	\\chromfs\Lancaster\ChromData\19930\20201203-16986.b\ID03X03.D				
Injection Date:	03-Dec-2020 09:44:30	Instrument ID:	19930		
Lims ID:	CCVIS VSTD10				
Client ID:					
Operator ID:	kas02648	ALS Bottle#:	3	Worklist Smp#:	3
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

65 1,4-Dioxane, CAS: 123-91-1

Signal: 1

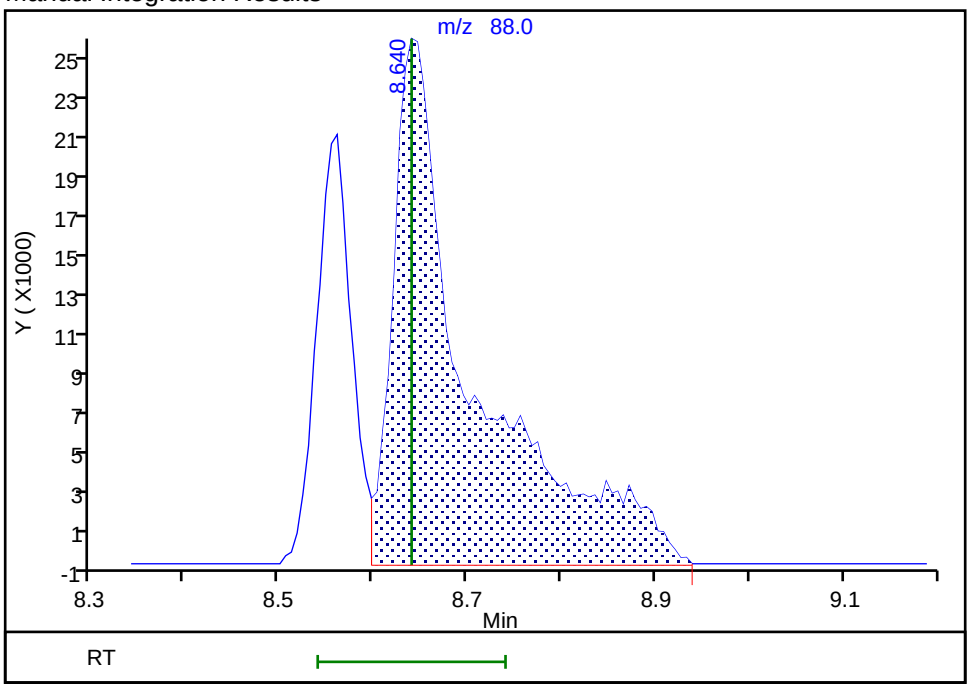
Processing Integration Results

RT: 8.64
Area: 103097
Amount: 346.3560
Amount Units: ug/l



Manual Integration Results

RT: 8.64
Area: 149645
Amount: 502.7347
Amount Units: ug/l



Reviewer: spositok, 03-Dec-2020 10:20:43

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1

SDG No.:

Lab Sample ID: CCVIS 410-73040/3 Calibration Date: 12/04/2020 10:09

Instrument ID: 19930 Calib Start Date: 11/23/2020 12:45

GC Column: R-624SilMS 30m ID: 0.25(mm) Calib End Date: 11/23/2020 14:53

Lab File ID: ID04X03.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	0.3569	0.2069	0.1000	5.80	10.0	-42.0*	20.0
Chloromethane	Ave	0.4141	0.3362	0.1000	8.12	10.0	-18.8	20.0
1,3-Butadiene	Ave	0.3536	0.3785		10.7	10.0	7.0	20.0
Vinyl chloride	Ave	0.3812	0.3126	0.1000	8.20	10.0	-18.0	20.0
Bromomethane	Ave	0.2764	0.2336	0.1000	8.45	10.0	-15.5	20.0
Chloroethane	Ave	0.2343	0.1981	0.1000	8.45	10.0	-15.5	20.0
Dichlorofluoromethane	Ave	0.5249	0.4388		8.36	10.0	-16.4	20.0
Trichlorofluoromethane	Ave	0.4935	0.3611	0.1000	7.32	10.0	-26.8*	20.0
Ethyl ether	Ave	0.2210	0.1959		8.87	10.0	-11.3	20.0
Freon 123a	Ave	0.3461	0.2919		8.43	10.0	-15.7	20.0
Acrolein	Ave	2.192	1.681		383	500	-23.3*	20.0
1,1-Dichloroethene	Ave	0.2666	0.2260	0.1000	8.48	10.0	-15.2	20.0
Acetone	Ave	2.726	2.011	0.1000	73.8	100	-26.2*	20.0
Freon 113	Ave	0.2819	0.2038	0.1000	7.23	10.0	-27.7*	20.0
Methyl iodide	Ave	0.5211	0.4628		8.88	10.0	-11.2	20.0
Ethyl bromide	Ave	0.2424	0.2106		8.69	10.0	-13.1	20.0
Carbon disulfide	Ave	0.7730	0.6436	0.1000	8.33	10.0	-16.7	20.0
Methyl acetate	Ave	7.436	6.046	0.1000	8.13	10.0	-18.7	20.0
Allyl chloride	Ave	0.4053	0.3386		8.35	10.0	-16.5	20.0
Methylene Chloride	Ave	0.2955	0.2563	0.1000	8.67	10.0	-13.3	20.0
t-Butyl alcohol	Ave	1.066	0.9838		185	200	-7.7	20.0
Acrylonitrile	Ave	3.558	3.046		42.8	50.0	-14.4	20.0
Methyl tert-butyl ether	Ave	0.7137	0.6442	0.1000	9.03	10.0	-9.7	20.0
trans-1,2-Dichloroethene	Ave	0.2944	0.2588	0.1000	8.79	10.0	-12.1	20.0
n-Hexane	Ave	0.4029	0.2778		6.89	10.0	-31.1*	20.0
1,1-Dichloroethane	Ave	0.5323	0.4741	0.2000	8.91	10.0	-10.9	20.0
di-Isopropyl ether	Ave	0.8798	0.8072		9.17	10.0	-8.3	20.0
2-Chloro-1,3-butadiene	Ave	0.4273	0.3780		8.85	10.0	-11.5	20.0
Ethyl t-butyl ether	Ave	0.8307	0.7461		8.98	10.0	-10.2	20.0
2-Butanone (MEK)	Ave	4.560	3.896	0.1000	85.4	100	-14.6	20.0
cis-1,2-Dichloroethene	Ave	0.3420	0.3008	0.1000	8.80	10.0	-12.0	20.0
2,2-Dichloropropane	Ave	0.4280	0.3830		8.95	10.0	-10.5	20.0
Propionitrile	Ave	1.334	1.250		188	200	-6.2	20.0
Methacrylonitrile	Ave	4.696	3.978		84.7	100	-15.3	20.0
Bromochloromethane	Ave	0.1507	0.1328		8.81	10.0	-11.9	20.0
Tetrahydrofuran	Ave	1.383	1.173		84.8	100	-15.2	20.0
Chloroform	Ave	0.5245	0.4629	0.2000	8.83	10.0	-11.7	20.0
1,1,1-Trichloroethane	Ave	0.4712	0.4086	0.1000	8.67	10.0	-13.3	20.0
Cyclohexane	Ave	0.4884	0.3679	0.1000	7.53	10.0	-24.7*	20.0
1,1-Dichloropropene	Ave	0.4182	0.3626		8.67	10.0	-13.3	20.0
Carbon tetrachloride	Ave	0.4218	0.3554	0.1000	8.42	10.0	-15.8	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1

SDG No.:

Lab Sample ID: CCVIS 410-73040/3 Calibration Date: 12/04/2020 10:09

Instrument ID: 19930 Calib Start Date: 11/23/2020 12:45

GC Column: R-624SilMS 30m ID: 0.25(mm) Calib End Date: 11/23/2020 14:53

Lab File ID: ID04X03.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	0.3429	0.3248		474	500	-5.3	20.0
Benzene	Ave	1.267	1.119	0.5000	8.83	10.0	-11.7	20.0
1,2-Dichloroethane	Ave	0.3094	0.2719	0.1000	8.79	10.0	-12.1	20.0
t-Amyl methyl ether	Ave	0.7610	0.6978		9.17	10.0	-8.3	20.0
n-Heptane	Ave	0.4046	0.2775		6.86	10.0	-31.4*	20.0
n-Butanol	Ave	0.3241	0.3177		980	1000	-2.0	20.0
Trichloroethene	Ave	0.3316	0.2911	0.2000	8.78	10.0	-12.2	20.0
Methylcyclohexane	Ave	0.5387	0.3748	0.1000	6.96	10.0	-30.4*	20.0
1,2-Dichloropropane	Ave	0.3114	0.2817	0.1000	9.04	10.0	-9.6	20.0
Methyl methacrylate	Ave	8.743	7.658		8.76	10.0	-12.4	20.0
1,4-Dioxane	Ave	0.0846	0.0773	0.0050	457	500	-8.7	20.0
Dibromomethane	Ave	0.1472	0.1334		9.06	10.0	-9.4	20.0
Bromodichloromethane	Ave	0.3732	0.3360	0.2000	9.00	10.0	-10.0	20.0
2-Nitropropane	Ave	2.198	1.834		83.4	100	-16.6	20.0
1-Bromo-2-chloroethane	Ave	0.3205	0.2898		9.04	10.0	-9.6	20.0
cis-1,3-Dichloropropene	Ave	0.4477	0.4172	0.2000	9.32	10.0	-6.8	20.0
4-Methyl-2-pentanone (MIBK)	Ave	11.34	9.869	0.1000	87.0	100	-13.0	20.0
Toluene	Ave	1.090	0.9424	0.4000	8.64	10.0	-13.6	20.0
trans-1,3-Dichloropropene	Ave	0.4707	0.4324	0.1000	9.19	10.0	-8.1	20.0
Ethyl methacrylate	Ave	0.3939	0.3765		9.56	10.0	-4.4	20.0
1,1,2-Trichloroethane	Ave	0.2910	0.2600	0.1000	8.94	10.0	-10.6	20.0
Tetrachloroethene	Ave	0.5278	0.4500	0.2000	8.53	10.0	-14.7	20.0
1,3-Dichloropropane	Ave	0.4971	0.4452		8.96	10.0	-10.4	20.0
2-Hexanone	Ave	7.755	6.909	0.1000	89.1	100	-10.9	20.0
Dibromochloromethane	Ave	0.3656	0.3240		8.86	10.0	-11.4	20.0
1,2-Dibromoethane (EDB)	Ave	0.2787	0.2500	0.1000	8.97	10.0	-10.3	20.0
1-Chlorohexane	Ave	0.6323	0.5225		8.26	10.0	-17.4	20.0
Chlorobenzene	Ave	1.205	1.062	0.5000	8.81	10.0	-11.9	20.0
1,1,1,2-Tetrachloroethane	Ave	0.4185	0.3793		9.06	10.0	-9.4	20.0
Ethylbenzene	Ave	2.106	1.854	0.1000	8.81	10.0	-11.9	20.0
m&p-Xylene	Ave	0.8312	0.7354	0.1000	17.7	20.0	-11.5	20.0
o-Xylene	Ave	0.8079	0.7260	0.3000	8.99	10.0	-10.1	20.0
Styrene	Ave	1.293	1.183	0.3000	9.14	10.0	-8.6	20.0
Bromoform	Ave	0.2210	0.2002	0.1000	9.06	10.0	-9.4	20.0
Isopropylbenzene	Ave	2.146	1.911	0.1000	8.90	10.0	-11.0	20.0
1,1,2,2-Tetrachloroethane	Ave	0.6530	0.5771	0.3000	8.84	10.0	-11.6	20.0
Bromobenzene	Ave	0.9004	0.8035		8.92	10.0	-10.8	20.0
trans-1,4-Dichloro-2-butene	Ave	3.720	2.991		80.4	100	-19.6	20.0
1,2,3-Trichloropropane	Ave	0.1792	0.1602		8.94	10.0	-10.6	20.0
N-Propylbenzene	Ave	4.413	3.794		8.60	10.0	-14.0	20.0
2-Chlorotoluene	Ave	0.9023	0.7984		8.85	10.0	-11.5	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1

SDG No.:

Lab Sample ID: CCVIS 410-73040/3 Calibration Date: 12/04/2020 10:09

Instrument ID: 19930 Calib Start Date: 11/23/2020 12:45

GC Column: R-624SilMS 30m ID: 0.25(mm) Calib End Date: 11/23/2020 14:53

Lab File ID: ID04X03.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,3,5-Trimethylbenzene	Ave	3.156	2.800		8.87	10.0	-11.3	20.0
4-Chlorotoluene	Ave	0.9112	0.8115		8.91	10.0	-10.9	20.0
tert-Butylbenzene	Ave	0.7129	0.6263		8.79	10.0	-12.1	20.0
Pentachloroethane	Ave	0.5650	0.5142		9.10	10.0	-9.0	20.0
1,2,4-Trimethylbenzene	Ave	3.210	2.882		8.98	10.0	-10.2	20.0
sec-Butylbenzene	Ave	4.139	3.619		8.74	10.0	-12.6	20.0
1,3-Dichlorobenzene	Ave	1.813	1.602	0.6000	8.84	10.0	-11.6	20.0
p-Isopropyltoluene	Ave	3.530	3.162		8.96	10.0	-10.4	20.0
1,4-Dichlorobenzene	Ave	1.813	1.595	0.5000	8.80	10.0	-12.0	20.0
1,2,3-Trimethylbenzene	Ave	1.424	1.255		8.82	10.0	-11.8	20.0
Benzyl chloride	Ave	0.2469	0.2503		10.1	10.0	1.4	20.0
n-Butylbenzene	Ave	1.724	1.524		8.84	10.0	-11.6	20.0
1,2-Dichlorobenzene	Ave	1.654	1.466	0.4000	8.86	10.0	-11.4	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.1003	0.0939	0.0500	9.36	10.0	-6.4	20.0
1,3,5-Trichlorobenzene	Ave	1.306	1.168		8.94	10.0	-10.6	20.0
1,2,4-Trichlorobenzene	Ave	1.086	0.9892	0.2000	9.11	10.0	-8.9	20.0
Hexachlorobutadiene	Ave	0.4723	0.3947		8.36	10.0	-16.4	20.0
Naphthalene	Ave	2.030	1.845		9.09	10.0	-9.1	20.0
1,2,3-Trichlorobenzene	Ave	0.9372	0.8264		8.82	10.0	-11.8	20.0
Dibromofluoromethane (Surr)	Ave	0.2469	0.2463		9.97	10.0	-0.3	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.0498	0.0488		9.80	10.0	-2.0	20.0
Toluene-d8 (Surr)	Ave	1.306	1.284		9.83	10.0	-1.7	20.0
4-Bromofluorobenzene (Surr)	Ave	0.4836	0.4805		9.94	10.0	-0.6	20.0

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20201204-17111.b\ID04X03.D
Lims ID: CCVIS VSTD10
Client ID:
Sample Type: CCVIS
Inject. Date: 04-Dec-2020 10:09:30 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0017111-003
Misc. Info.: CCVIS VSTD10
Operator ID: kas02648 Instrument ID: 19930
Sublist: chrom-8260 25ml HP31*sub2

Method: \\chromfs\Lancaster\ChromData\19930\20201204-17111.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 05-Dec-2020 10:02:39 Calib Date: 23-Nov-2020 18:05:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1645

First Level Reviewer: spositok Date: 04-Dec-2020 11:17:39

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.971	1.971	0.000	99	397891	10.0	5.80	
4 Chloromethane	50	2.178	2.178	0.000	99	646759	10.0	8.12	
6 Butadiene	39	2.288	2.288	0.000	89	728044	10.0	10.7	
5 Vinyl chloride	62	2.300	2.300	0.000	98	601245	10.0	8.20	
7 Bromomethane	94	2.623	2.623	0.000	90	449270	10.0	8.45	
8 Chloroethane	64	2.703	2.703	0.000	100	381002	10.0	8.45	
9 Dichlorofluoromethane	67	2.940	2.940	0.000	96	844031	10.0	8.36	
10 Trichlorofluoromethane	101	3.013	3.013	0.000	97	694634	10.0	7.32	
11 Ethyl ether	59	3.263	3.263	0.000	90	376916	10.0	8.87	
12 1,2-Dichloro-1,1,2-trifluoroetha	67	3.337	3.337	0.000	93	561363	10.0	8.43	
13 Acrolein	56	3.434	3.434	0.000	100	2875799	500.0	383.4	
14 1,1-Dichloroethene	96	3.574	3.574	0.000	97	434726	10.0	8.48	
15 Acetone	43	3.605	3.605	0.000	100	688235	100.0	73.8	
16 112TCTFE	101	3.617	3.617	0.000	90	391906	10.0	7.23	
17 Iodomethane	142	3.769	3.769	0.000	98	890120	10.0	8.88	
18 Ethyl bromide	108	3.800	3.800	0.000	98	405114	10.0	8.69	
19 Carbon disulfide	76	3.879	3.879	0.000	98	1237928	10.0	8.33	
21 Methyl acetate	43	4.032	4.032	0.000	97	206889	10.0	8.13	
22 3-Chloro-1-propene	41	4.056	4.056	0.000	93	651283	10.0	8.35	
23 Methylene Chloride	84	4.245	4.245	0.000	90	492897	10.0	8.67	
* 24 t-Butyl alcohol-d10 (IS)	65	4.282	4.282	0.000	0	171101	50.0	50.0	
25 2-Methyl-2-propanol	59	4.397	4.397	0.000	100	673328	200.0	184.6	
26 Acrylonitrile	53	4.592	4.592	0.000	99	521112	50.0	42.8	
27 Methyl tert-butyl ether	73	4.659	4.659	0.000	94	1239011	10.0	9.03	
28 trans-1,2-Dichloroethene	96	4.672	4.672	0.000	99	497807	10.0	8.79	
29 Hexane	57	5.092	5.092	0.000	89	534245	10.0	6.89	
31 1,1-Dichloroethane	63	5.330	5.330	0.000	96	911951	10.0	8.91	
32 Isopropyl ether	45	5.385	5.385	0.000	95	1552592	10.0	9.17	
33 2-Chloro-1,3-butadiene	53	5.440	5.440	0.000	89	727153	10.0	8.85	
34 Tert-butyl ethyl ether	59	5.915	5.915	0.000	97	1435073	10.0	8.98	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 2-Butanone (MEK)	43	6.123	6.123	0.000	99	1333195	100.0	85.4	
37 cis-1,2-Dichloroethene	96	6.159	6.159	0.000	80	578610	10.0	8.80	
38 2,2-Dichloropropane	77	6.171	6.171	0.000	85	736714	10.0	8.95	
40 Propionitrile	54	6.220	6.220	0.000	99	855791	200.0	187.5	
42 Methacrylonitrile	67	6.427	6.427	0.000	89	1361392	100.0	84.7	
43 Chlorobromomethane	128	6.488	6.488	0.000	89	255418	10.0	8.81	
44 Tetrahydrofuran	71	6.494	6.494	0.000	85	401239	100.0	84.8	
45 Chloroform	83	6.635	6.635	0.000	92	890374	10.0	8.83	
$ 46 Dibromofluoromethane (Surr)	113	6.854	6.854	0.000	94	473690	10.0	9.97	
47 1,1,1-Trichloroethane	97	6.866	6.866	0.000	98	785872	10.0	8.67	
48 Cyclohexane	56	6.964	6.964	0.000	88	707642	10.0	7.53	
51 1,1-Dichloropropene	75	7.074	7.074	0.000	98	697406	10.0	8.67	
50 Carbon tetrachloride	117	7.080	7.080	0.000	97	683500	10.0	8.42	
52 Isobutyl alcohol	41	7.226	7.226	0.000	96	555750	500.0	473.6	
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.305	7.305	0.000	0	93831	10.0	9.80	
54 Benzene	78	7.336	7.336	0.000	96	2151805	10.0	8.83	
56 1,2-Dichloroethane	62	7.409	7.409	0.000	97	522896	10.0	8.79	
57 Tert-amyl methyl ether	73	7.525	7.525	0.000	99	1342236	10.0	9.17	
* 58 Fluorobenzene (IS)	96	7.738	7.738	0.000	99	1923449	10.0	10.0	
59 n-Heptane	43	7.750	7.750	0.000	91	533747	10.0	6.86	
60 n-Butanol	56	8.098	8.098	0.000	86	1087272	1000.0	980.4	
61 Trichloroethene	95	8.220	8.220	0.000	97	559991	10.0	8.78	
62 Methylcyclohexane	83	8.525	8.525	0.000	93	721002	10.0	6.96	
63 1,2-Dichloropropane	63	8.549	8.549	0.000	87	541773	10.0	9.04	
64 Methyl methacrylate	69	8.628	8.628	0.000	90	262070	10.0	8.76	
65 1,4-Dioxane	88	8.634	8.634	0.000	81	132188	500.0	456.6	M
66 Dibromomethane	93	8.659	8.659	0.000	94	256505	10.0	9.06	
68 Dichlorobromomethane	83	8.890	8.890	0.000	99	646363	10.0	9.00	
69 2-Nitropropane	41	9.159	9.159	0.000	96	627643	100.0	83.4	
72 1-Bromo-2-chloroethane	63	9.287	9.287	0.000	98	557380	10.0	9.04	
73 cis-1,3-Dichloropropene	75	9.433	9.433	0.000	98	802402	10.0	9.32	
74 4-Methyl-2-pentanone (MIBK)	43	9.604	9.604	0.000	95	3377191	100.0	87.0	
$ 75 Toluene-d8 (Surr)	98	9.744	9.744	0.000	93	1907551	10.0	9.83	
76 Toluene	92	9.817	9.817	0.000	99	1399921	10.0	8.64	
78 trans-1,3-Dichloropropene	75	10.067	10.067	0.000	90	642385	10.0	9.19	
79 Ethyl methacrylate	69	10.128	10.128	0.000	88	559321	10.0	9.56	
80 1,1,2-Trichloroethane	97	10.274	10.274	0.000	90	386277	10.0	8.94	
81 Tetrachloroethene	166	10.366	10.366	0.000	97	668433	10.0	8.53	
82 1,3-Dichloropropane	76	10.439	10.439	0.000	86	661388	10.0	8.96	
83 2-Hexanone	43	10.482	10.482	0.000	95	2364132	100.0	89.1	
85 Chlorodibromomethane	129	10.652	10.652	0.000	90	481307	10.0	8.86	
86 Ethylene Dibromide	107	10.762	10.762	0.000	99	371390	10.0	8.97	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.189	0.000	85	1485477	10.0	10.0	
88 1-Chlorohexane	91	11.195	11.195	0.000	95	776139	10.0	8.26	
90 Chlorobenzene	112	11.213	11.213	0.000	98	1577971	10.0	8.81	
91 1,1,1,2-Tetrachloroethane	131	11.298	11.298	0.000	96	563461	10.0	9.06	
92 Ethylbenzene	91	11.298	11.298	0.000	98	2754445	10.0	8.81	
93 m-Xylene & p-Xylene	106	11.414	11.414	0.000	0	2184698	20.0	17.7	
94 o-Xylene	106	11.743	11.743	0.000	96	1078422	10.0	8.99	
95 Styrene	104	11.756	11.756	0.000	95	1756820	10.0	9.14	
96 Bromoform	173	11.914	11.914	0.000	98	297440	10.0	9.06	
97 Isopropylbenzene	105	12.042	12.042	0.000	95	2838239	10.0	8.90	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 100 4-Bromofluorobenzene (Surr)	95	12.189	12.189	0.000	96	713775	10.0	9.94	
101 1,1,2,2-Tetrachloroethane	83	12.286	12.286	0.000	93	497281	10.0	8.84	
102 Bromobenzene	156	12.304	12.304	0.000	96	692357	10.0	8.92	
103 trans-1,4-Dichloro-2-butene	53	12.310	12.310	0.000	90	1023680	100.0	80.4	
104 1,2,3-Trichloropropane	110	12.335	12.335	0.000	83	138058	10.0	8.94	
105 N-Propylbenzene	91	12.371	12.371	0.000	99	3269428	10.0	8.60	
106 2-Chlorotoluene	126	12.445	12.445	0.000	97	687898	10.0	8.85	
107 1,3,5-Trimethylbenzene	105	12.506	12.506	0.000	94	2412674	10.0	8.87	
108 4-Chlorotoluene	126	12.542	12.542	0.000	96	699221	10.0	8.91	
109 tert-Butylbenzene	134	12.749	12.749	0.000	92	539639	10.0	8.79	
110 Pentachloroethane	167	12.780	12.780	0.000	92	443078	10.0	9.10	
111 1,2,4-Trimethylbenzene	105	12.786	12.786	0.000	96	2482913	10.0	8.98	
112 sec-Butylbenzene	105	12.914	12.914	0.000	93	3118624	10.0	8.74	
113 1,3-Dichlorobenzene	146	13.012	13.012	0.000	98	1380710	10.0	8.84	
114 4-Isopropyltoluene	119	13.018	13.018	0.000	97	2724663	10.0	8.96	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	95	861629	10.0	10.0	
116 1,4-Dichlorobenzene	146	13.085	13.085	0.000	95	1374407	10.0	8.80	
117 1,2,3-Trimethylbenzene	120	13.091	13.091	0.000	98	1081768	10.0	8.82	
118 Benzyl chloride	126	13.158	13.158	0.000	98	215623	10.0	10.1	
119 n-Butylbenzene	92	13.310	13.310	0.000	97	1313396	10.0	8.84	
120 1,2-Dichlorobenzene	146	13.341	13.341	0.000	99	1263084	10.0	8.86	
122 1,2-Dibromo-3-Chloropropane	155	13.883	13.883	0.000	93	80893	10.0	9.36	
123 1,3,5-Trichlorobenzene	180	14.011	14.011	0.000	98	1006606	10.0	8.94	
124 1,2,4-Trichlorobenzene	180	14.432	14.432	0.000	94	852333	10.0	9.11	
125 Hexachlorobutadiene	225	14.517	14.517	0.000	96	340045	10.0	8.36	
126 Naphthalene	128	14.615	14.615	0.000	97	1589893	10.0	9.09	
127 1,2,3-Trichlorobenzene	180	14.761	14.761	0.000	96	712087	10.0	8.82	
134 Isopropyl alcohol	45		0.000				ND	ND	
144 2-ethoxy-2-methyl butane	1		0.000				ND	ND	
135 p-Diethylbenzene	1		0.000				ND	ND	
137 2-Methylnaphthalene	142		0.000				ND	ND	
204 Pentane	43		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

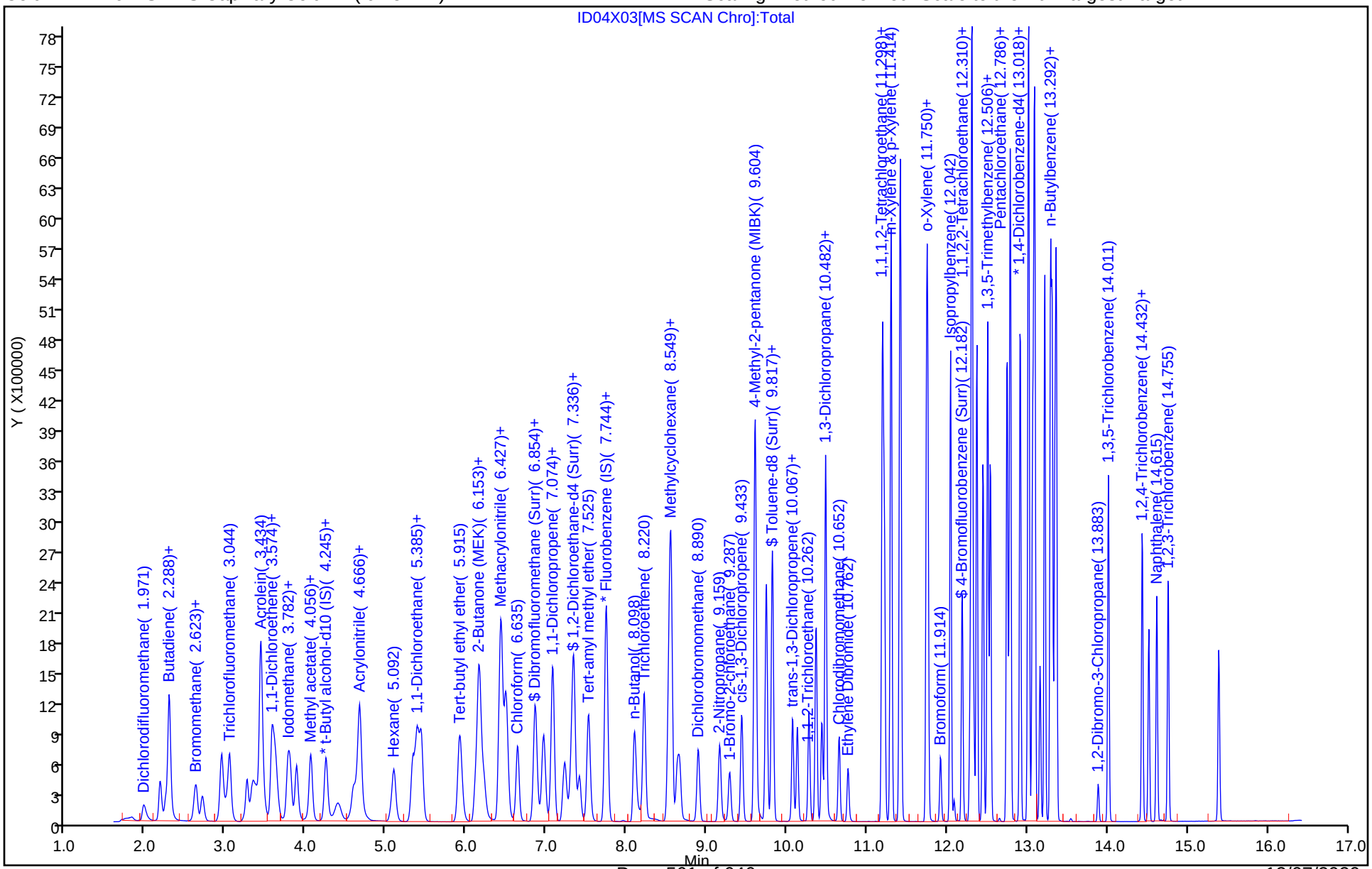
MSV_RV4GAS826_00097	Amount Added: 10.00	Units: uL	
MSV_RV1_826_00031	Amount Added: 10.00	Units: uL	
MSV_RV4_826_00035	Amount Added: 10.00	Units: uL	
MSV_31_826ISS_00003	Amount Added: 5.00	Units: uL	Run Reagent

Report Date: 05-Dec-2020 10:02:41 Chrom Revision: 2.3 13-Nov-2020 01:23:02

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20201204-17111.b\ID04X03.D				
Injection Date:	04-Dec-2020 10:09:30	Instrument ID:	19930	Operator ID:	kas02648
Lims ID:	CCVIS VSTD10			Worklist Smp#:	3
Client ID:					
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

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



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

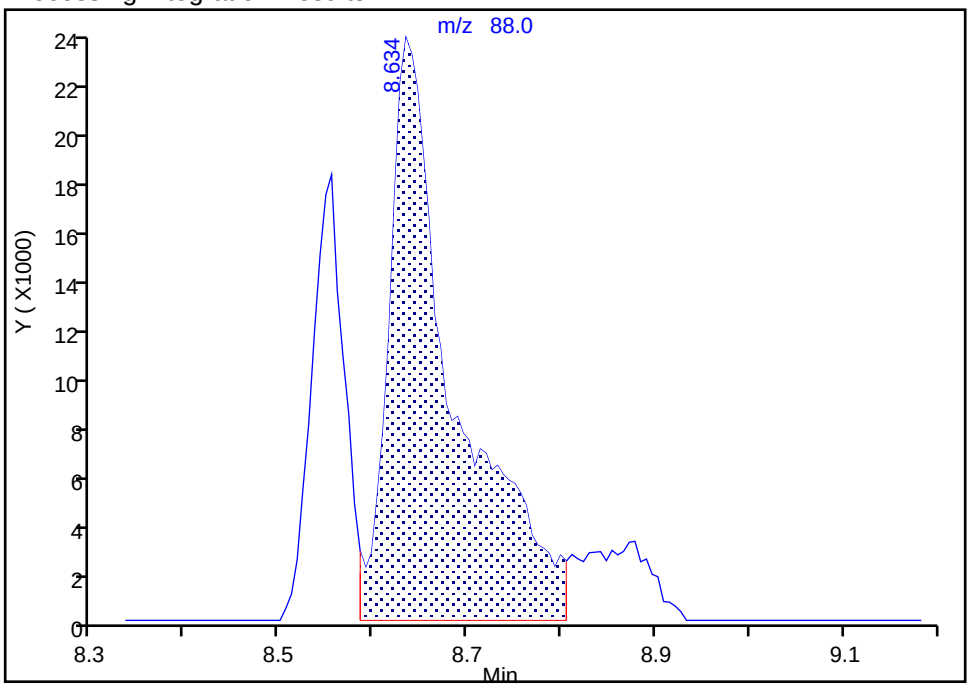
Data File:	\\chromfs\Lancaster\ChromData\19930\20201204-17111.b\ID04X03.D				
Injection Date:	04-Dec-2020 10:09:30	Instrument ID:	19930		
Lims ID:	CCVIS VSTD10				
Client ID:					
Operator ID:	kas02648	ALS Bottle#:	3	Worklist Smp#:	3
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

65 1,4-Dioxane, CAS: 123-91-1

Signal: 1

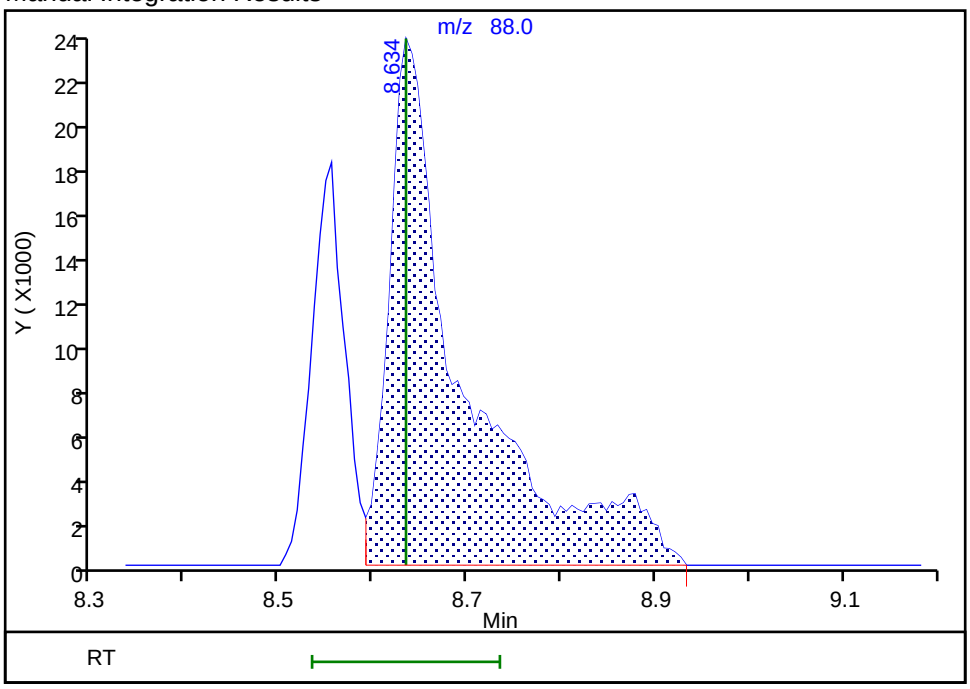
Processing Integration Results

RT: 8.63
Area: 117069
Amount: 404.3698
Amount Units: ug/l



Manual Integration Results

RT: 8.63
Area: 132188
Amount: 456.5926
Amount Units: ug/l



Reviewer: spositok, 04-Dec-2020 10:39:33
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23T01.D				
Lims ID:	bfb				
Client ID:					
Sample Type:	BFB				
Inject. Date:	23-Nov-2020 11:57:30	ALS Bottle#:	1	Worklist Smp#:	1
Injection Vol:	1.0 uL	Dil. Factor:	1.0000		
Sample Info:	410-0016280-001				
Misc. Info.:	BFB				
Operator ID:	dvv10203	Instrument ID:	19930		
Method:	\\chromfs\Lancaster\ChromData\19930\20201123-16280.b\8260 25ml HP31.m				
Limit Group:	MSV - 8260C_D				
Last Update:	23-Nov-2020 19:12:23	Calib Date:	23-Nov-2020 18:05:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I17.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1632				
First Level Reviewer: virayd		Date:	23-Nov-2020 12:07:57		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 145 BFB	95	5.190	5.190	0.000	0	250527	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

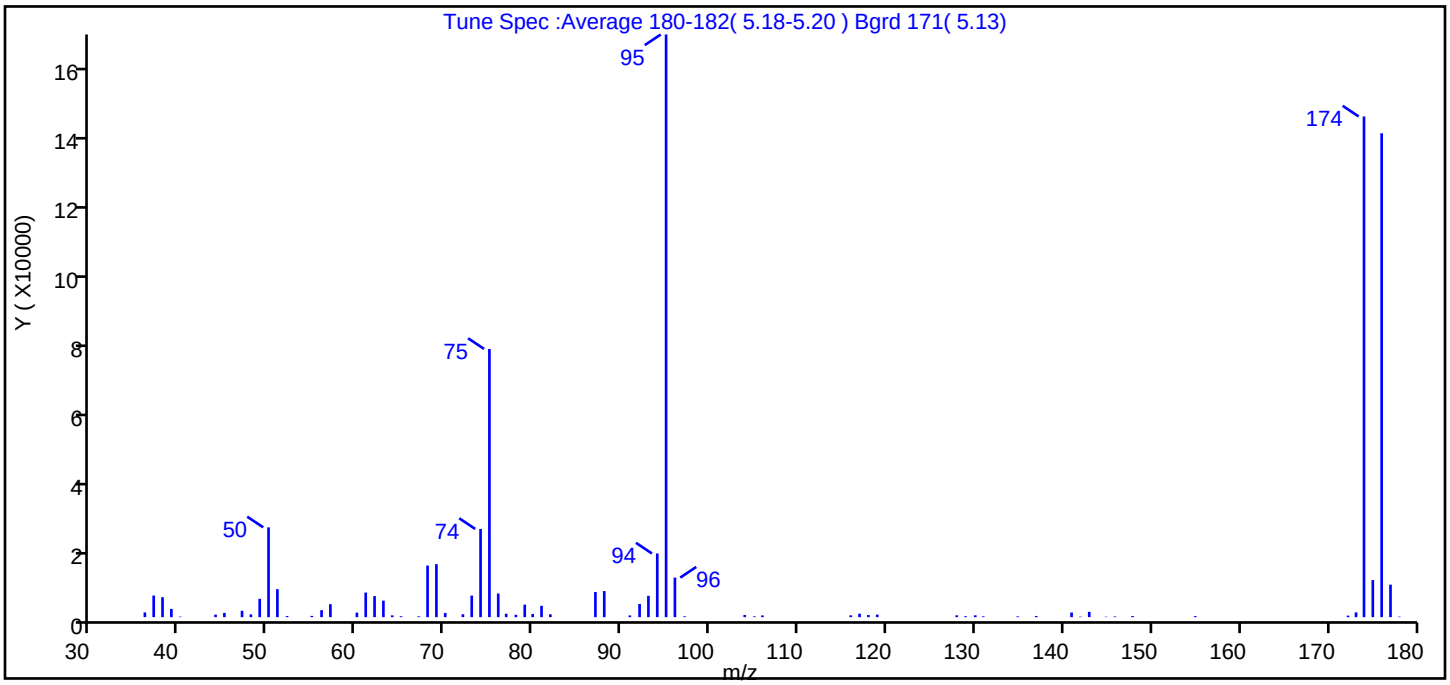
MSV_V_BFB_00003 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23T01.D				
Injection Date:	23-Nov-2020 11:57:30	Instrument ID:	19930		
Lims ID:	bfb				
Client ID:					
Operator ID:	dvv10203	ALS Bottle#:	1	Worklist Smp#:	1
Injection Vol:	1.0 uL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Tune Method:	BFB Method 8260				

$ 145 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	15.4
75	30 to 60% of m/z 95	46.0
96	5 to 9% of m/z 95	6.8
173	Less than 2% of m/z 174	0.8 (0.9)
174	50 to 120% of m/z 95	85.9
175	5 to 9% of m/z 174	6.4 (7.4)
176	Greater than 95% but less than 101% of m/z 174	83.0 (96.6)
177	5 to 9% of m/z 176	5.6 (6.7)

Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23T01.D\8260 25ml HP31.rslt\spectra.d
Injection Date: 23-Nov-2020 11:57:30
Spectrum: Tune Spec :Average 180-182(5.18-5.20) Bgrd 171(5.13)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 73

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1313	63.00	4581	88.00	7255	135.00	208
37.00	6006	64.00	499	91.00	477	137.00	331
38.00	5541	65.00	245	92.00	3667	141.00	1291
39.00	2285	67.00	217	93.00	5918	142.00	135
40.00	143	68.00	14328	94.00	17696	143.00	1478
44.00	706	69.00	14730	95.00	161920	145.00	118
45.00	1180	70.00	1164	96.00	10989	146.00	193
47.00	1767	72.00	795	97.00	225	148.00	300
48.00	774	73.00	5993	104.00	608	155.00	291
49.00	5093	74.00	24504	105.00	210	172.00	424
50.00	24952	75.00	74536	106.00	478	173.00	1314
51.00	7780	76.00	6564	116.00	501	174.00	139136
52.00	307	77.00	946	117.00	962	175.00	10294
55.00	348	78.00	648	118.00	596	176.00	134464
56.00	1950	79.00	3480	119.00	713	177.00	9030
57.00	3607	80.00	882	128.00	503	178.00	135
60.00	1259	81.00	3145	129.00	259		
61.00	6839	82.00	786	130.00	514		
62.00	5847	87.00	6985	131.00	222		

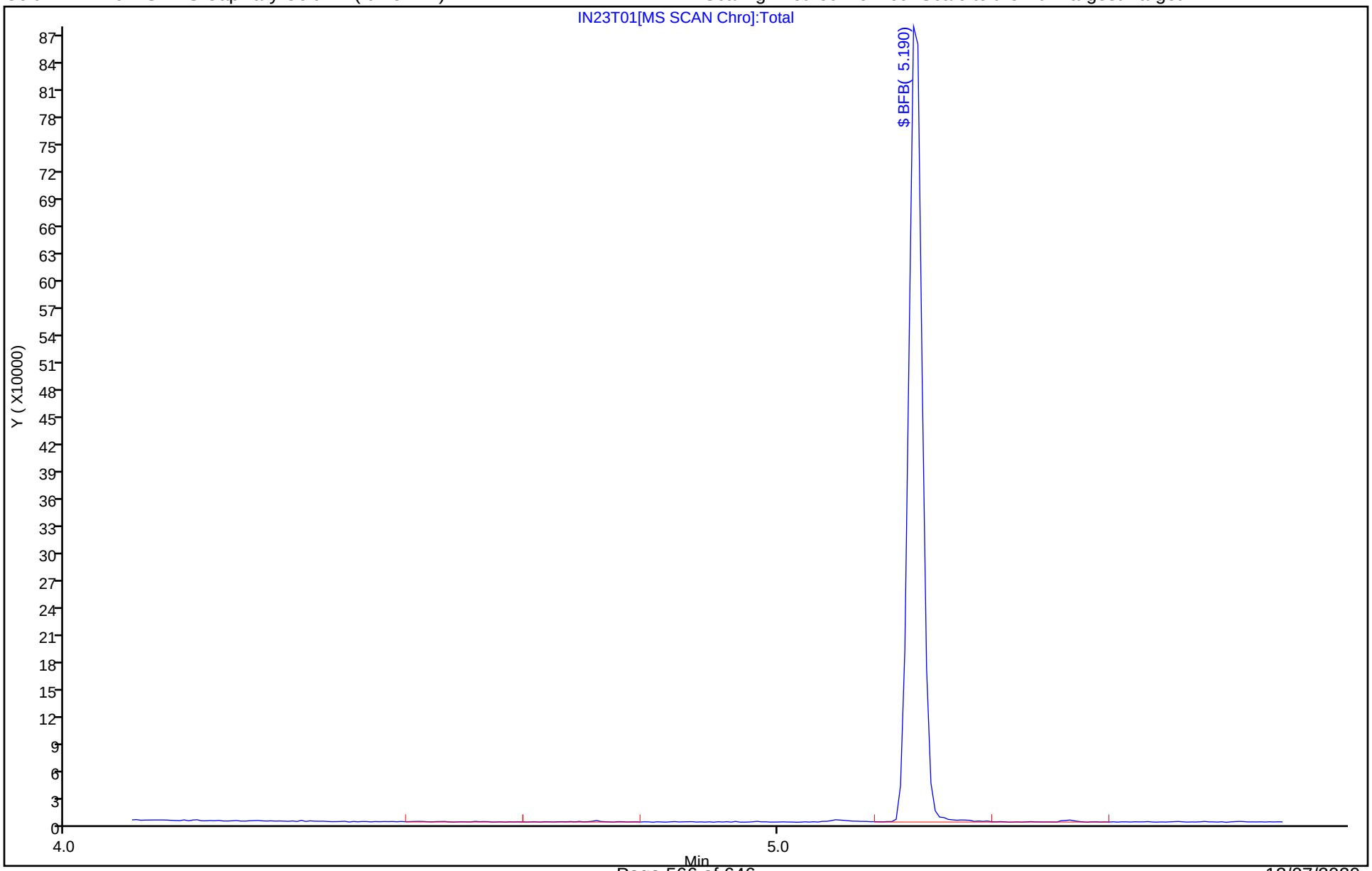
Report Date: 23-Nov-2020 19:12:23 Chrom Revision: 2.3 13-Nov-2020 01:23:02

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23T01.D

Injection Date:	23-Nov-2020 11:57:30	Instrument ID:	19930	Operator ID:	dvv10203
Lims ID:	bfb			Worklist Smp#:	1
Client ID:					
Injection Vol:	1.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\19930\20201203-16986.b\ID03T01.D				
Lims ID:	bfb				
Client ID:					
Sample Type:	BFB				
Inject. Date:	03-Dec-2020 09:05:30	ALS Bottle#:	1	Worklist Smp#:	1
Injection Vol:	1.0 uL	Dil. Factor:	1.0000		
Sample Info:	410-0016986-001				
Misc. Info.:	BFB				
Operator ID:	kas02648	Instrument ID:	19930		
Method:	\\chromfs\Lancaster\ChromData\19930\20201203-16986.b\8260 25ml HP31.m				
Limit Group:	MSV - 8260C_D				
Last Update:	03-Dec-2020 12:31:30	Calib Date:	23-Nov-2020 18:05:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I17.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1682				
First Level Reviewer: spositok		Date:	03-Dec-2020 09:18:42		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 145 BFB	95	5.184	5.184	0.000	0	182026	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

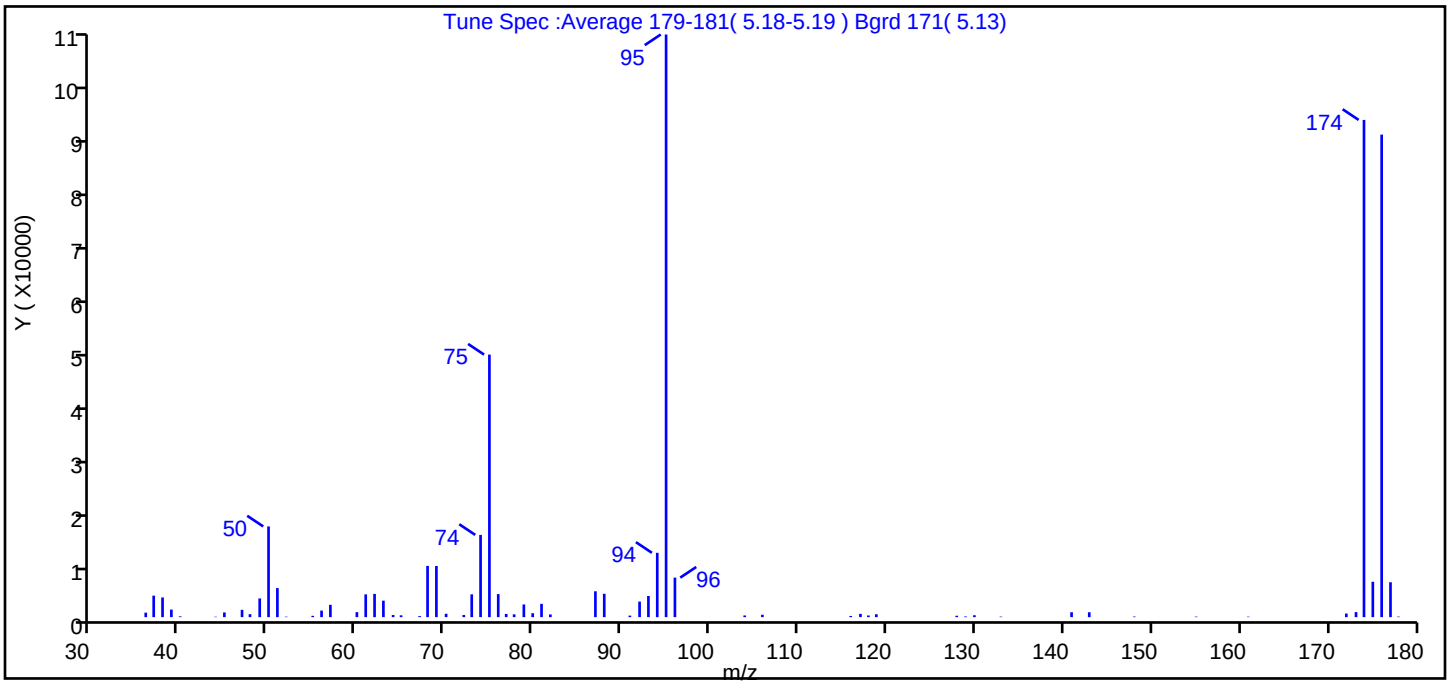
MSV_V_BFB_00003 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20201203-16986.b\ID03T01.D
Injection Date: 03-Dec-2020 09:05:30 Instrument ID: 19930
Lims ID: bfb
Client ID:
Operator ID: kas02648 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Tune Method: BFB Method 8260

$ 145 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	15.6
75	30 to 60% of m/z 95	45.1
96	5 to 9% of m/z 95	6.8
173	Less than 2% of m/z 174	0.9 (1.0)
174	50 to 120% of m/z 95	85.3
175	5 to 9% of m/z 174	6.1 (7.1)
176	Greater than 95% but less than 101% of m/z 174	82.8 (97.1)
177	5 to 9% of m/z 176	6.0 (7.2)

Data File: \\chromfs\Lancaster\ChromData\19930\20201203-16986.b\ID03T01.D\8260 25ml HP31.rslt\spectra.d
Injection Date: 03-Dec-2020 09:05:30
Spectrum: Tune Spec :Average 179-181(5.18-5.19) Bgrd 171(5.13)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 67

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	836	61.00	4236	80.00	731	128.00	261
37.00	3998	62.00	4324	81.00	2479	129.00	128
38.00	3665	63.00	3069	82.00	501	130.00	357
39.00	1407	64.00	395	87.00	4810	133.00	100
40.00	146	65.00	340	88.00	4349	141.00	913
44.00	78	67.00	191	91.00	286	143.00	908
45.00	876	68.00	9531	92.00	2898	148.00	111
47.00	1362	69.00	9520	93.00	3934	155.00	99
48.00	554	70.00	627	94.00	11967	161.00	87
49.00	3480	72.00	399	95.00	108392	172.00	669
50.00	16872	73.00	4241	96.00	7349	173.00	944
51.00	5411	74.00	15299	104.00	313	174.00	92496
52.00	90	75.00	48840	106.00	440	175.00	6582
55.00	246	76.00	4290	116.00	223	176.00	89768
56.00	1222	77.00	598	117.00	612	177.00	6492
57.00	2294	78.00	520	118.00	312	178.00	100
60.00	929	79.00	2358	119.00	537		

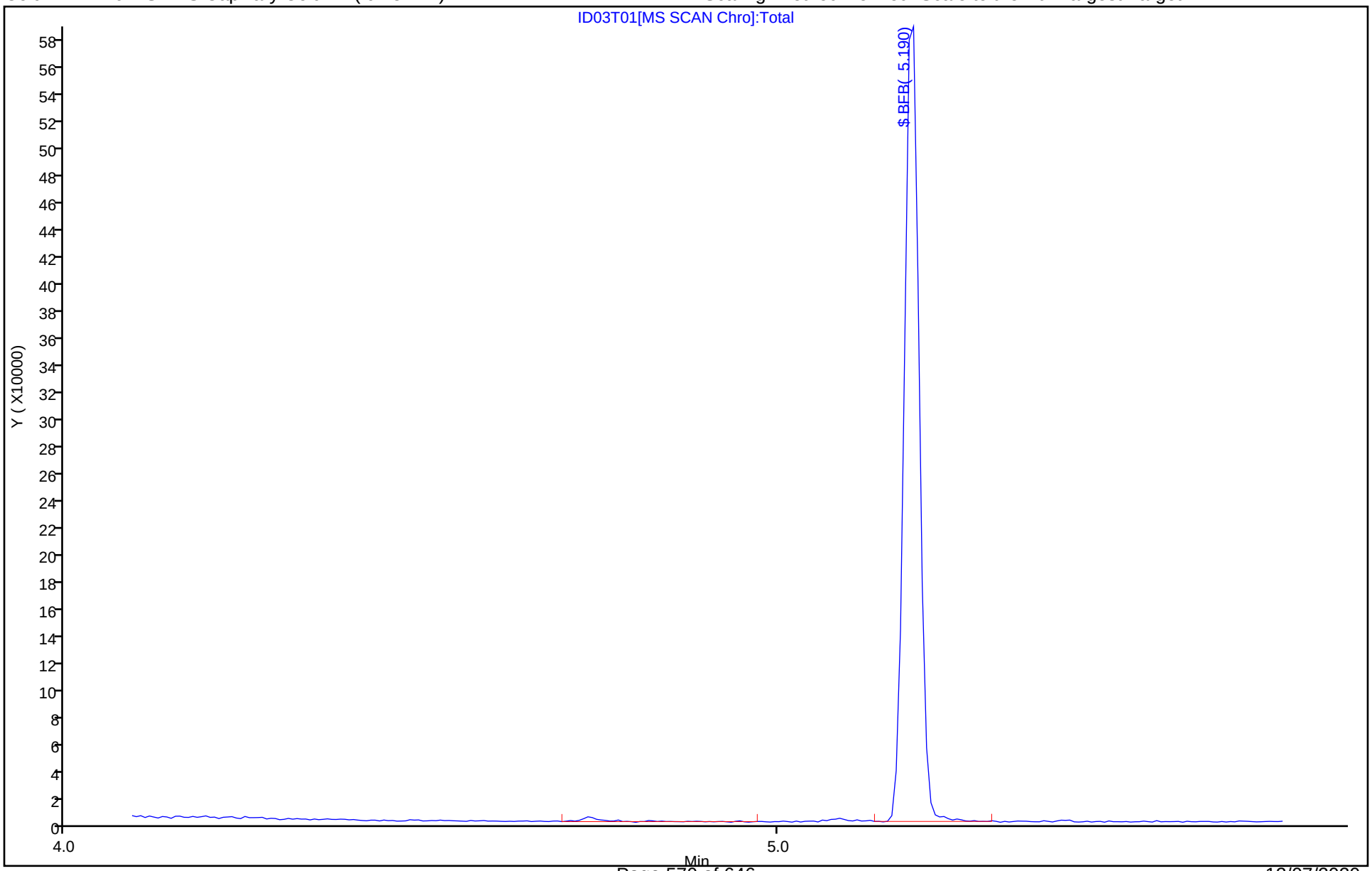
Report Date: 03-Dec-2020 12:31:31 Chrom Revision: 2.3 13-Nov-2020 01:23:02

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20201203-16986.b\ID03T01.D

Injection Date:	03-Dec-2020 09:05:30	Instrument ID:	19930	Operator ID:	kas02648
Lims ID:	bfb			Worklist Smp#:	1
Client ID:					
Injection Vol:	1.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\19930\20201204-17111.b\ID04T01.D				
Lims ID:	bfb				
Client ID:					
Sample Type:	BFB				
Inject. Date:	04-Dec-2020 09:11:30	ALS Bottle#:	1	Worklist Smp#:	1
Injection Vol:	1.0 uL	Dil. Factor:	1.0000		
Sample Info:	410-0017111-001				
Misc. Info.:	BFB				
Operator ID:	kas02648	Instrument ID:	19930		
Method:	\\chromfs\Lancaster\ChromData\19930\20201204-17111.b\8260 25ml HP31.m				
Limit Group:	MSV - 8260C_D				
Last Update:	04-Dec-2020 11:34:52	Calib Date:	23-Nov-2020 18:05:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I17.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1616				
First Level Reviewer: spositok		Date:	04-Dec-2020 10:22:54		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 145 BFB	95	5.190	5.190	0.000	0	41690	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

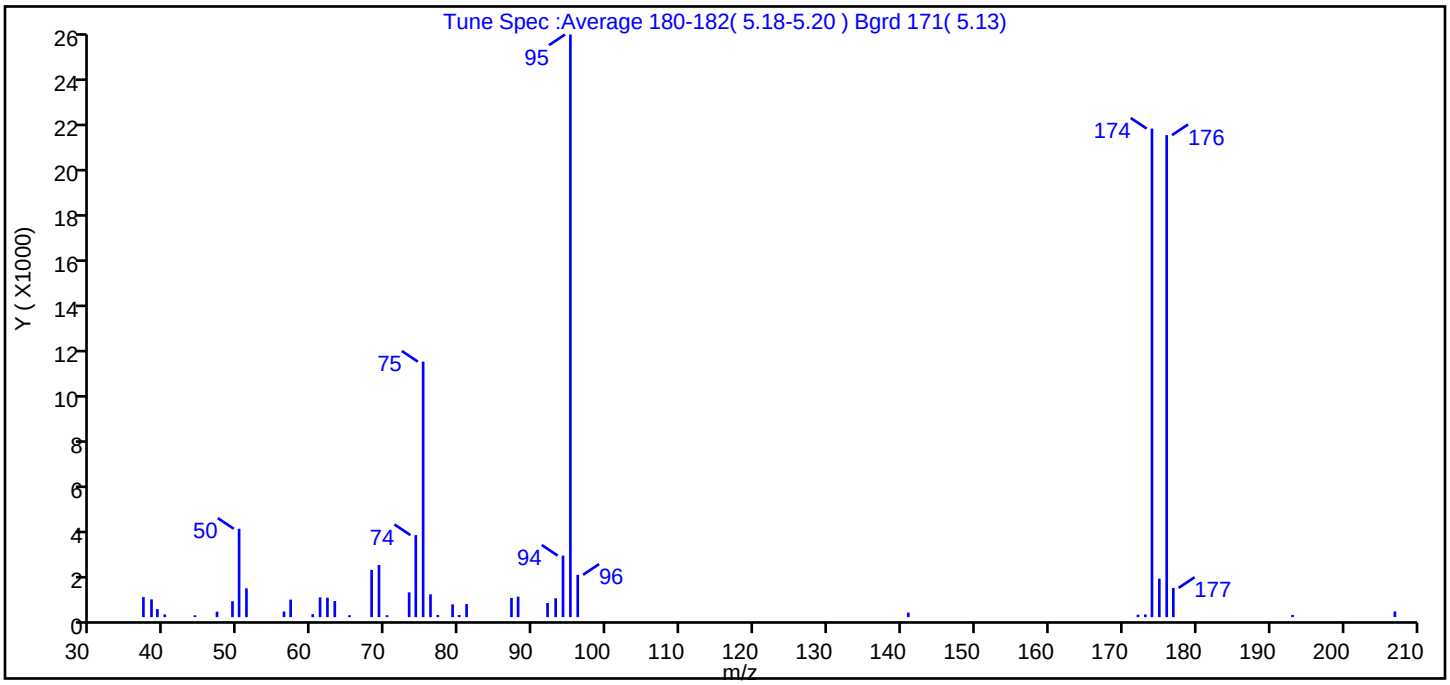
MSV_V_BFB_00003 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20201204-17111.b\ID04T01.D
Injection Date: 04-Dec-2020 09:11:30 Instrument ID: 19930
Lims ID: bfb
Client ID:
Operator ID: kas02648 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Tune Method: BFB Method 8260

$ 145 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	15.2
75	30 to 60% of m/z 95	43.8
96	5 to 9% of m/z 95	7.3
173	Less than 2% of m/z 174	0.5 (0.5)
174	50 to 120% of m/z 95	83.8
175	5 to 9% of m/z 174	6.6 (7.9)
176	Greater than 95% but less than 101% of m/z 174	82.7 (98.7)
177	5 to 9% of m/z 176	5.0 (6.1)

Data File: \\chromfs\Lancaster\ChromData\19930\20201204-17111.b\ID04T01.D\8260 25ml HP31.rslt\spectra.d
Injection Date: 04-Dec-2020 09:11:30
Spectrum: Tune Spec :Average 180-182(5.18-5.20) Bgrd 171(5.13)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 43

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	885	60.00	131	76.00	1007	96.00	1868
38.00	785	61.00	873	77.00	97	141.00	201
39.00	355	62.00	859	79.00	564	172.00	108
40.00	120	63.00	710	80.00	94	173.00	118
44.00	82	65.00	87	81.00	576	174.00	21552
47.00	242	68.00	2086	87.00	847	175.00	1700
49.00	704	69.00	2299	88.00	904	176.00	21264
50.00	3899	70.00	87	92.00	623	177.00	1291
51.00	1270	73.00	1094	93.00	832	193.00	98
56.00	247	74.00	3618	94.00	2714	207.00	252
57.00	774	75.00	11271	95.00	25704		

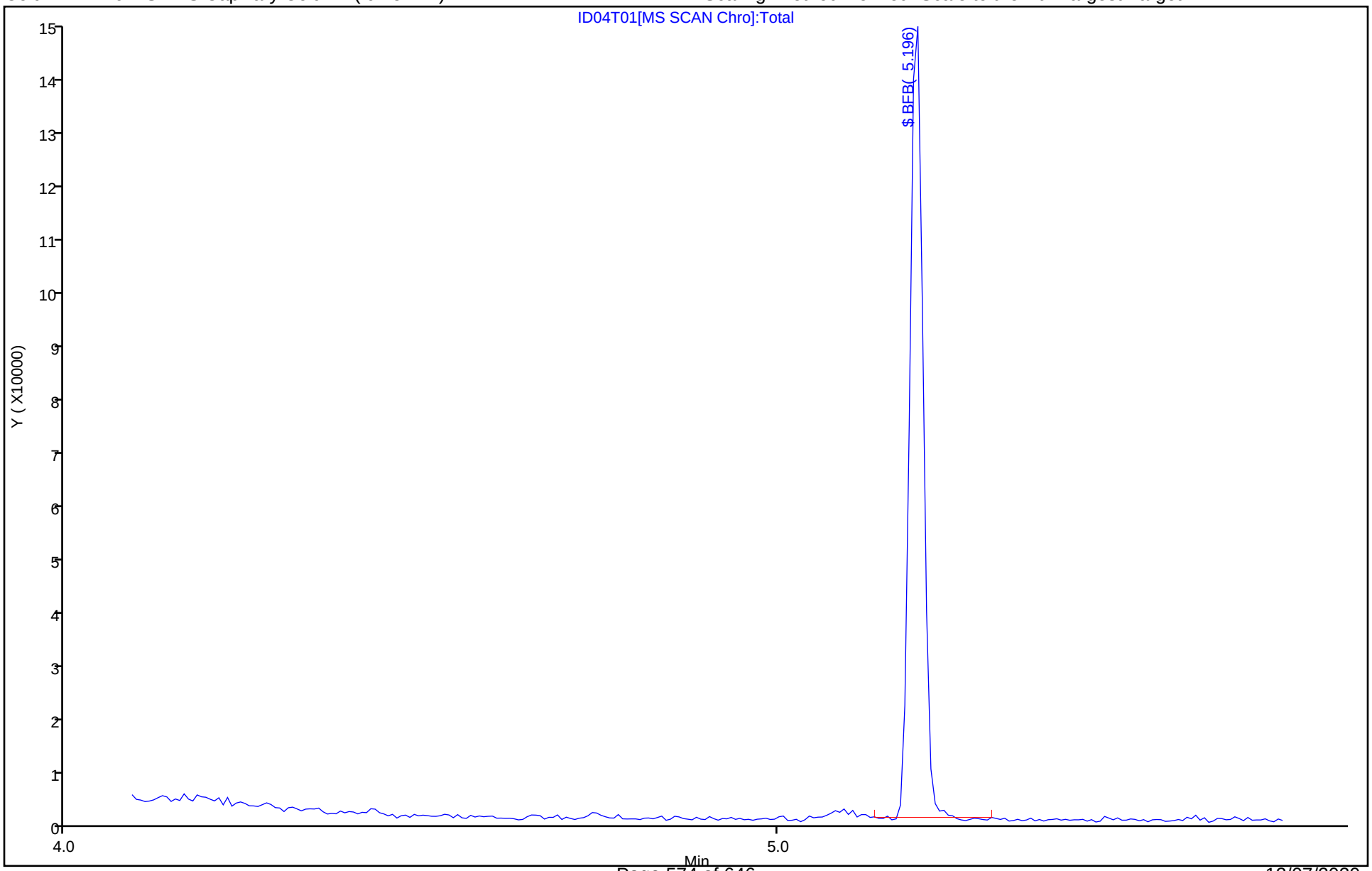
Report Date: 04-Dec-2020 11:34:52 Chrom Revision: 2.3 13-Nov-2020 01:23:02

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20201204-17111.b\ID04T01.D

Injection Date:	04-Dec-2020 09:11:30	Instrument ID:	19930	Operator ID:	kas02648
Lims ID:	bfb			Worklist Smp#:	1
Client ID:					
Injection Vol:	1.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

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



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 410-72509/7

Matrix: Water Lab File ID: ID03X07.D

Analysis Method: 8260D Date Collected:

Sample wt/vol: 25(mL) Date Analyzed: 12/03/2020 11:08

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 72509 Units: ug/L

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

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 410-72509/7

Matrix: Water Lab File ID: ID03X07.D

Analysis Method: 8260D Date Collected:

Sample wt/vol: 25(mL) Date Analyzed: 12/03/2020 11:08

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 72509 Units: ug/L

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

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

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20201203-16986.b\ID03X07.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 03-Dec-2020 11:08:30 ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0016986-007
Misc. Info.: MB
Operator ID: kas02648 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20201203-16986.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 03-Dec-2020 12:31:30 Calib Date: 23-Nov-2020 18:05:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1682

First Level Reviewer: spositok Date: 03-Dec-2020 12:30:33

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Chlorodifluoromethane	51		1.983					ND	
1 Dichlorodifluoromethane	85		1.989					ND	
3 Dimethyl ether	45		2.050					ND	
4 Chloromethane	50		2.190					ND	
6 Butadiene	39		2.300					ND	
5 Vinyl chloride	62		2.312					ND	
7 Bromomethane	94		2.635					ND	
8 Chloroethane	64		2.715					ND	
9 Dichlorofluoromethane	67		2.958					ND	
10 Trichlorofluoromethane	101		3.032					ND	
11 Ethyl ether	59		3.276					ND	
12 1,2-Dichloro-1,1,2-trifluoroetha	67		3.349					ND	
13 Acrolein	56		3.446					ND	7
14 1,1-Dichloroethene	96		3.586					ND	
15 Acetone	43		3.617					ND	7
16 112TCTFE	101		3.629					ND	
17 Iodomethane	142		3.782					ND	
18 Ethyl bromide	108		3.818					ND	
19 Carbon disulfide	76		3.891					ND	7
20 Acetonitrile	41		3.989					ND	
21 Methyl acetate	43		4.044					ND	
22 3-Chloro-1-propene	41		4.068					ND	
23 Methylene Chloride	84		4.263					ND	
* 24 t-Butyl alcohol-d10 (IS)	65	4.269	4.288	-0.019	0	164012	50.0	50.0	
25 2-Methyl-2-propanol	59		4.416					ND	
26 Acrylonitrile	53		4.605					ND	
27 Methyl tert-butyl ether	73		4.672					ND	
28 trans-1,2-Dichloroethene	96		4.678					ND	
29 Hexane	57		5.104					ND	
30 Vinyl acetate	43		5.336					ND	
31 1,1-Dichloroethane	63		5.342					ND	

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
	32 Isopropyl ether	45		5.397				ND		
	33 2-Chloro-1,3-butadiene	53		5.452				ND		
	34 Tert-butyl ethyl ether	59		5.921				ND		
	36 2-Butanone (MEK)	43		6.141				ND		
S	35 1,2-Dichloroethene, Total	100		6.155				ND		7
	37 cis-1,2-Dichloroethene	96		6.165				ND		
	38 2,2-Dichloropropane	77		6.177				ND		
	39 Ethyl acetate	43		6.196				ND		
	40 Propionitrile	54		6.232				ND		
	41 Methyl acrylate	55		6.263				ND		
	42 Methacrylonitrile	67		6.440				ND		
	43 Chlorobromomethane	128		6.500				ND		
	44 Tetrahydrofuran	71		6.513				ND		
	45 Chloroform	83		6.647				ND		
$	46 Dibromofluoromethane (Surr)	113	6.860	6.860	0.000	94	476036	10.0	10.1	
	47 1,1,1-Trichloroethane	97		6.872				ND		
	48 Cyclohexane	56		6.970				ND		
	49 1-Chlorobutane	56		7.025				ND		
	50 Carbon tetrachloride	117		7.086				ND		
	51 1,1-Dichloropropene	75		7.086				ND		
	52 Isobutyl alcohol	41		7.232				ND		
$	53 1,2-Dichloroethane-d4 (Surr)	102	7.317	7.317	0.000	0	95680	10.0	10.1	
	54 Benzene	78		7.348				ND		
	56 1,2-Dichloroethane	62		7.421				ND		
	55 Isopropyl acetate	43		7.421				ND		
	57 Tert-amyl methyl ether	73		7.531				ND		
*	58 Fluorobenzene (IS)	96	7.744	7.750	-0.006	99	1907923	10.0	10.0	
	59 n-Heptane	43		7.756				ND		7
	60 n-Butanol	56		8.104				ND		
	61 Trichloroethene	95		8.226				ND		
	62 Methylcyclohexane	83		8.531				ND		
	63 1,2-Dichloropropane	63		8.555				ND		
	64 Methyl methacrylate	69		8.634				ND		
	65 1,4-Dioxane	88		8.640				ND		
	66 Dibromomethane	93		8.665				ND		
	67 n-Propyl acetate	43		8.714				ND		
	68 Dichlorobromomethane	83		8.896				ND		
	69 2-Nitropropane	41		9.165				ND		
	70 Chloroacetonitrile	75		9.232				ND		
	71 2-Chloroethyl vinyl ether	63		9.250				ND		
	72 1-Bromo-2-chloroethane	63		9.287				ND		
	73 cis-1,3-Dichloropropene	75		9.439				ND		
	74 4-Methyl-2-pentanone (MIBK)	43		9.604				ND		
$	75 Toluene-d8 (Surr)	98	9.744	9.744	0.000	93	1878755	10.0	9.84	
	76 Toluene	92		9.823				ND		7
S	77 1,3-Dichloropropene, Total	100		10.060				ND		7
	78 trans-1,3-Dichloropropene	75		10.073				ND		
	79 Ethyl methacrylate	69		10.134				ND		
	80 1,1,2-Trichloroethane	97		10.274				ND		
	81 Tetrachloroethene	166		10.366				ND		
	82 1,3-Dichloropropane	76		10.439				ND		
	83 2-Hexanone	43		10.488				ND		

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
	84 n-Butyl acetate	43		10.610				ND		
	85 Chlorodibromomethane	129		10.652				ND		
	86 Ethylene Dibromide	107		10.762				ND		
*	87 Chlorobenzene-d5 (IS)	117	11.189	11.189	0.000	84	1461662	10.0	10.0	
	88 1-Chlorohexane	91		11.201				ND		7
	90 Chlorobenzene	112		11.219				ND		
S	89 Xylenes, Total	106		11.245				ND		7
	91 1,1,1,2-Tetrachloroethane	131		11.298				ND		
	92 Ethylbenzene	91		11.304				ND		
	93 m-Xylene & p-Xylene	106		11.414				ND		
	94 o-Xylene	106		11.743				ND		
	95 Styrene	104		11.762				ND		
	96 Bromoform	173		11.920				ND		
	97 Isopropylbenzene	105		12.042				ND		
	98 cis-1,4-Dichloro-2-butene	88		12.085				ND		
	99 Cyclohexanone	55		12.121				ND		
$	100 4-Bromofluorobenzene (Surr)	95	12.188	12.188	0.000	94	696146	10.0	9.85	
	101 1,1,2,2-Tetrachloroethane	83		12.286				ND		
	102 Bromobenzene	156		12.304				ND		
	103 trans-1,4-Dichloro-2-butene	53		12.310				ND		
	104 1,2,3-Trichloropropane	110		12.335				ND		
	105 N-Propylbenzene	91		12.371				ND		
	106 2-Chlorotoluene	126		12.451				ND		
	107 1,3,5-Trimethylbenzene	105		12.505				ND		
	108 4-Chlorotoluene	126		12.542				ND		
	109 tert-Butylbenzene	134		12.749				ND		
	110 Pentachloroethane	167		12.780				ND		
	111 1,2,4-Trimethylbenzene	105		12.792				ND		
	112 sec-Butylbenzene	105		12.914				ND		
	113 1,3-Dichlorobenzene	146		13.011				ND		
	114 4-Isopropyltoluene	119		13.018				ND		
*	115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	94	842783	10.0	10.0	
	116 1,4-Dichlorobenzene	146		13.085				ND		7
	117 1,2,3-Trimethylbenzene	120		13.097				ND		7
	118 Benzyl chloride	126		13.158				ND		
	119 n-Butylbenzene	92		13.310				ND		7
	120 1,2-Dichlorobenzene	146		13.341				ND		
	121 Hexachloroethane	117		13.542				ND		
	122 1,2-Dibromo-3-Chloropropane	155		13.883				ND		
	123 1,3,5-Trichlorobenzene	180		14.011				ND		7
	124 1,2,4-Trichlorobenzene	180		14.432				ND		7
	125 Hexachlorobutadiene	225		14.517				ND		U
	126 Naphthalene	128		14.615				ND		7
	127 1,2,3-Trichlorobenzene	180		14.755				ND		
	128 Dodecane	57		0.000				ND		
	134 Isopropyl alcohol	45		0.000				ND		
	141 1-Chloropropane	1		0.000				ND		
	129 Propene oxide	1		0.000				ND		
	130 Chlorotrifluoroethene	1		0.000				ND		
	131 tert-Butyl Formate	1		0.000				ND		
	132 Methylal	1		0.000				ND		
	133 t-Amyl alcohol	1		0.000				ND		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
136 2-Chloro-1,1,1-Trifluoroethane	1		0.000					ND	
135 p-Diethylbenzene	1		0.000					ND	
137 2-Methylnaphthalene	142		0.000					ND	
138 1,1-Dichloro-1-fluoroethane	1		0.000					ND	
139 1-Bromo-3-Chloropropane	1		0.000					ND	
142 2-Bromo-1-chloropropane	1		0.000					ND	
143 n-Decane	57		0.000					ND	
144 2-ethoxy-2-methyl butane	1		0.000					ND	
140 Ethanol	45		3.288					ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

MSV_31_826ISS_00003 Amount Added: 5.00 Units: uL Run Reagent

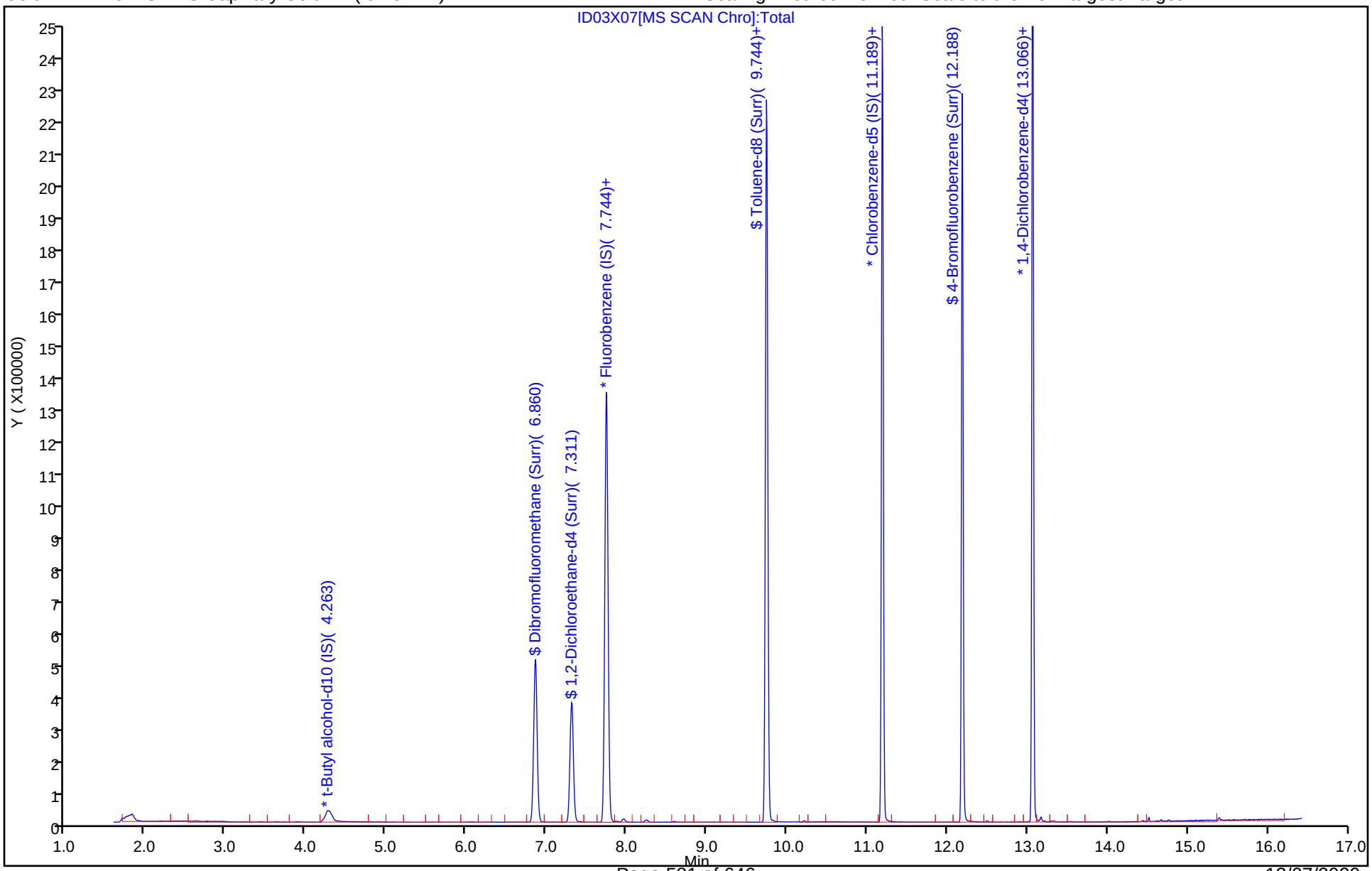
Report Date: 03-Dec-2020 12:31:33 Chrom Revision: 2.3 13-Nov-2020 01:23:02

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20201203-16986.b\ID03X07.D

Injection Date:	03-Dec-2020 11:08:30	Instrument ID:	19930	Operator ID:	kas02648
Lims ID:	MB			Worklist Smp#:	7
Client ID:					
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\19930\20201203-16986.b\ID03X07.D				
Lims ID:	MB				
Client ID:					
Sample Type:	MB				
Inject. Date:	03-Dec-2020 11:08:30	ALS Bottle#:	7	Worklist Smp#:	7
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Sample Info:	410-0016986-007				
Misc. Info.:	MB				
Operator ID:	kas02648	Instrument ID:	19930		
Method:	\\chromfs\Lancaster\ChromData\19930\20201203-16986.b\8260 25ml HP31.m				
Limit Group:	MSV - 8260C_D				
Last Update:	03-Dec-2020 12:31:30	Calib Date:	23-Nov-2020 18:05:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I17.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1682				

First Level Reviewer: spositok Date: 03-Dec-2020 12:30:33

Compound	Amount Added	Amount Recovered	% Rec.
$ 46 Dibromofluoromethane (Surr)	10.0	10.1	101.05
$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	10.1	100.74
$ 75 Toluene-d8 (Surr)	10.0	9.84	98.42
$ 100 4-Bromofluorobenzene (Surr)	10.0	9.85	98.48

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 410-73040/7

Matrix: Water Lab File ID: ID04X07.D

Analysis Method: 8260D Date Collected:

Sample wt/vol: 25(mL) Date Analyzed: 12/04/2020 11:34

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 73040 Units: ug/L

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

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 410-73040/7

Matrix: Water Lab File ID: ID04X07.D

Analysis Method: 8260D Date Collected:

Sample wt/vol: 25(mL) Date Analyzed: 12/04/2020 11:34

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 73040 Units: ug/L

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

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		80-120
1868-53-7	Dibromofluoromethane (Surr)	100		80-120
2037-26-5	Toluene-d8 (Surr)	98		80-120
460-00-4	4-Bromofluorobenzene (Surr)	99		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20201204-17111.b\ID04X07.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 04-Dec-2020 11:34:30 ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0017111-007
Misc. Info.: MB
Operator ID: kas02648 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20201204-17111.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 04-Dec-2020 22:46:19 Calib Date: 23-Nov-2020 18:05:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1685

First Level Reviewer: spositok Date: 04-Dec-2020 13:28:58

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85		1.971					ND	
2 Chlorodifluoromethane	51		1.983					ND	
3 Dimethyl ether	45		2.050					ND	
4 Chloromethane	50		2.178					ND	
6 Butadiene	39		2.288					ND	7
5 Vinyl chloride	62		2.300					ND	
7 Bromomethane	94		2.623					ND	
8 Chloroethane	64		2.703					ND	
9 Dichlorofluoromethane	67		2.940					ND	
10 Trichlorofluoromethane	101		3.013					ND	
11 Ethyl ether	59		3.263					ND	
12 1,2-Dichloro-1,1,2-trifluoroetha	67		3.337					ND	
13 Acrolein	56		3.434					ND	7
14 1,1-Dichloroethene	96		3.574					ND	
15 Acetone	43		3.605					ND	7
16 112TCTFE	101		3.617					ND	
17 Iodomethane	142		3.769					ND	
18 Ethyl bromide	108		3.800					ND	
19 Carbon disulfide	76		3.879					ND	7
20 Acetonitrile	41		3.989					ND	
21 Methyl acetate	43		4.032					ND	
22 3-Chloro-1-propene	41		4.056					ND	
23 Methylene Chloride	84		4.245					ND	
* 24 t-Butyl alcohol-d10 (IS)	65	4.269	4.282	-0.013	0	168581	50.0	50.0	
25 2-Methyl-2-propanol	59		4.397					ND	
26 Acrylonitrile	53		4.592					ND	
27 Methyl tert-butyl ether	73		4.659					ND	
28 trans-1,2-Dichloroethene	96		4.672					ND	
29 Hexane	57		5.092					ND	
31 1,1-Dichloroethane	63		5.330					ND	
30 Vinyl acetate	43		5.336					ND	

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
	32 Isopropyl ether	45		5.385				ND		
	33 2-Chloro-1,3-butadiene	53		5.440				ND		
	34 Tert-butyl ethyl ether	59		5.915				ND		
	36 2-Butanone (MEK)	43		6.123				ND		
S	35 1,2-Dichloroethene, Total	100		6.155				ND		7
	37 cis-1,2-Dichloroethene	96		6.159				ND		
	38 2,2-Dichloropropane	77		6.171				ND		
	39 Ethyl acetate	43		6.196				ND		
	40 Propionitrile	54		6.220				ND		
	41 Methyl acrylate	55		6.263				ND		
	42 Methacrylonitrile	67		6.427				ND		
	43 Chlorobromomethane	128		6.488				ND		
	44 Tetrahydrofuran	71		6.494				ND		
	45 Chloroform	83		6.635				ND		
$	46 Dibromofluoromethane (Surr)	113	6.860	6.854	0.006	94	472231	10.0	10.0	
	47 1,1,1-Trichloroethane	97		6.866				ND		
	48 Cyclohexane	56		6.964				ND		
	49 1-Chlorobutane	56		7.025				ND		
	51 1,1-Dichloropropene	75		7.074				ND		
	50 Carbon tetrachloride	117		7.080				ND		
	52 Isobutyl alcohol	41		7.226				ND		
$	53 1,2-Dichloroethane-d4 (Surr)	102	7.311	7.305	0.006	0	95843	10.0	10.1	
	54 Benzene	78		7.336				ND		
	56 1,2-Dichloroethane	62		7.409				ND		
	55 Isopropyl acetate	43		7.421				ND		
	57 Tert-amyl methyl ether	73		7.525				ND		
*	58 Fluorobenzene (IS)	96	7.744	7.738	0.006	99	1912525	10.0	10.0	
	59 n-Heptane	43		7.750				ND		7
	60 n-Butanol	56		8.098				ND		
	61 Trichloroethene	95		8.220				ND		
	62 Methylcyclohexane	83		8.525				ND		
	63 1,2-Dichloropropane	63		8.549				ND		
	64 Methyl methacrylate	69		8.628				ND		
	65 1,4-Dioxane	88		8.634				ND		
	66 Dibromomethane	93		8.659				ND		
	67 n-Propyl acetate	43		8.714				ND		
	68 Dichlorobromomethane	83		8.890				ND		
	69 2-Nitropropane	41		9.159				ND		
	70 Chloroacetonitrile	75		9.232				ND		
	71 2-Chloroethyl vinyl ether	63		9.250				ND		
	72 1-Bromo-2-chloroethane	63		9.287				ND		
	73 cis-1,3-Dichloropropene	75		9.433				ND		
	74 4-Methyl-2-pentanone (MIBK)	43		9.604				ND		
$	75 Toluene-d8 (Surr)	98	9.744	9.744	0.000	93	1873187	10.0	9.82	
	76 Toluene	92		9.817				ND		7
S	77 1,3-Dichloropropene, Total	100		10.060				ND		7
	78 trans-1,3-Dichloropropene	75		10.067				ND		
	79 Ethyl methacrylate	69		10.128				ND		
	80 1,1,2-Trichloroethane	97		10.274				ND		
	81 Tetrachloroethene	166		10.366				ND		
	82 1,3-Dichloropropane	76		10.439				ND		
	83 2-Hexanone	43		10.482				ND		

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
	84 n-Butyl acetate	43		10.610				ND		
	85 Chlorodibromomethane	129		10.652				ND		
	86 Ethylene Dibromide	107		10.762				ND		
*	87 Chlorobenzene-d5 (IS)	117	11.189	11.189	0.000	84	1460515	10.0	10.0	
	88 1-Chlorohexane	91		11.195				ND		7
	90 Chlorobenzene	112		11.213				ND		
S	89 Xylenes, Total	106		11.245				ND		7
	91 1,1,1,2-Tetrachloroethane	131		11.298				ND		
	92 Ethylbenzene	91		11.298				ND		
	93 m-Xylene & p-Xylene	106		11.414				ND		
	94 o-Xylene	106		11.743				ND		
	95 Styrene	104		11.756				ND		
	96 Bromoform	173		11.914				ND		
	97 Isopropylbenzene	105		12.042				ND		
	98 cis-1,4-Dichloro-2-butene	88		12.085				ND		
	99 Cyclohexanone	55		12.121				ND		
$	100 4-Bromofluorobenzene (Surr)	95	12.188	12.189	0.000	94	696358	10.0	9.86	
	101 1,1,2,2-Tetrachloroethane	83		12.286				ND		
	102 Bromobenzene	156		12.304				ND		
	103 trans-1,4-Dichloro-2-butene	53		12.310				ND		
	104 1,2,3-Trichloropropane	110		12.335				ND		
	105 N-Propylbenzene	91		12.371				ND		
	106 2-Chlorotoluene	126		12.445				ND		
	107 1,3,5-Trimethylbenzene	105		12.506				ND		
	108 4-Chlorotoluene	126		12.542				ND		
	109 tert-Butylbenzene	134		12.749				ND		
	110 Pentachloroethane	167		12.780				ND		
	111 1,2,4-Trimethylbenzene	105		12.786				ND		
	112 sec-Butylbenzene	105		12.914				ND		
	113 1,3-Dichlorobenzene	146		13.012				ND		7
	114 4-Isopropyltoluene	119		13.018				ND		
*	115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	94	846314	10.0	10.0	
	116 1,4-Dichlorobenzene	146		13.085				ND		7
	117 1,2,3-Trimethylbenzene	120		13.091				ND		7
	118 Benzyl chloride	126		13.158				ND		
	119 n-Butylbenzene	92		13.310				ND		7
	120 1,2-Dichlorobenzene	146		13.341				ND		
	121 Hexachloroethane	117		13.542				ND		
	122 1,2-Dibromo-3-Chloropropane	155		13.883				ND		
	123 1,3,5-Trichlorobenzene	180		14.011				ND		7
	124 1,2,4-Trichlorobenzene	180		14.432				ND		7
	125 Hexachlorobutadiene	225		14.517				ND		U
	126 Naphthalene	128		14.615				ND		7
	127 1,2,3-Trichlorobenzene	180		14.761				ND		7
	128 Dodecane	57		0.000				ND		
	206 Pentachloroethane TIC	1		0.000				ND		
	142 2-Bromo-1-chloropropane	1		0.000				ND		
	131 tert-Butyl Formate	1		0.000				ND		
	132 Methylal	1		0.000				ND		
	133 t-Amyl alcohol	1		0.000				ND		
	134 Isopropyl alcohol	45		0.000				ND		
	141 1-Chloropropane	1		0.000				ND		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
129 Propene oxide	1		0.000					ND	
130 Chlorotrifluoroethene	1		0.000					ND	
139 1-Bromo-3-Chloropropane	1		0.000					ND	
143 n-Decane	57		0.000					ND	
205 1,1-Dichloroacetone	1		0.000					ND	
144 2-ethoxy-2-methyl butane	1		0.000					ND	
136 2-Chloro-1,1,1-Trifluoroethane	1		0.000					ND	
135 p-Diethylbenzene	1		0.000					ND	
137 2-Methylnaphthalene	142		0.000					ND	
138 1,1-Dichloro-1-fluoroethane	1		0.000					ND	
202 1,3-Dichloro-2-propanol TIC	1		0.000					ND	
203 Propargyl alcohol TIC	1		0.000					ND	
204 Pentane	43		0.000					ND	
140 Ethanol	45		3.288					ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

MSV_31_826ISS_00003 Amount Added: 5.00 Units: uL Run Reagent

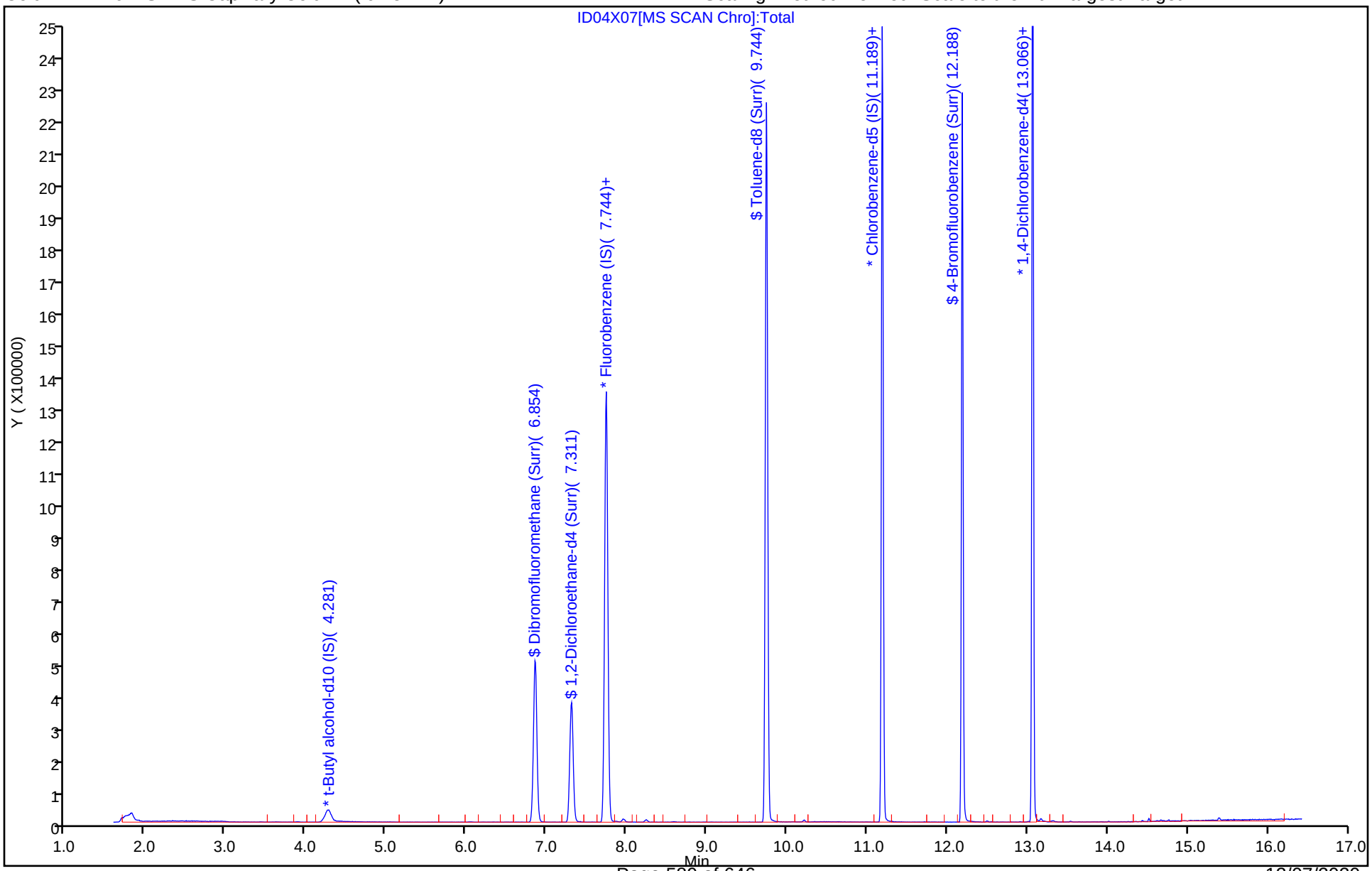
Report Date: 04-Dec-2020 22:46:40 Chrom Revision: 2.3 13-Nov-2020 01:23:02

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20201204-17111.b\ID04X07.D

Injection Date:	04-Dec-2020 11:34:30	Instrument ID:	19930	Operator ID:	kas02648
Lims ID:	MB			Worklist Smp#:	7
Client ID:					
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19930\20201204-17111.b\ID04X07.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 04-Dec-2020 11:34:30 ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0017111-007
Misc. Info.: MB
Operator ID: kas02648 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20201204-17111.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 04-Dec-2020 22:46:19 Calib Date: 23-Nov-2020 18:05:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1685

First Level Reviewer: spositok Date: 04-Dec-2020 13:28:58

Compound	Amount Added	Amount Recovered	% Rec.
$ 46 Dibromofluoromethane (Surr)	10.0	10.0	100.00
$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	10.1	100.67
$ 75 Toluene-d8 (Surr)	10.0	9.82	98.21
$ 100 4-Bromofluorobenzene (Surr)	10.0	9.86	98.59

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 410-72509/4

Matrix: Water Lab File ID: ID03X04.D

Analysis Method: 8260D Date Collected:

Sample wt/vol: 25(mL) Date Analyzed: 12/03/2020 10:05

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 72509 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	4.97		0.50	0.070
71-55-6	1,1,1-Trichloroethane	4.75		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	4.76		0.50	0.070
79-00-5	1,1,2-Trichloroethane	5.01		0.50	0.060
75-34-3	1,1-Dichloroethane	4.83		0.50	0.070
75-35-4	1,1-Dichloroethene	4.67		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	4.87		0.50	0.060
107-06-2	1,2-Dichloroethane	4.83		0.50	0.050
78-87-5	1,2-Dichloropropane	5.10		0.50	0.060
78-93-3	2-Butanone (MEK)	36.9		5.0	0.60
591-78-6	2-Hexanone	25.4		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	24.4		5.0	0.70
67-64-1	Acetone	32.1		5.0	0.90
71-43-2	Benzene	4.80		0.50	0.050
74-97-5	Bromochloromethane	4.77		0.50	0.050
75-27-4	Bromodichloromethane	4.95		0.50	0.050
75-25-2	Bromoform	4.79		1.0	0.30
74-83-9	Bromomethane	4.71		0.50	0.070
75-15-0	Carbon disulfide	4.25		1.0	0.060
56-23-5	Carbon tetrachloride	4.89		0.50	0.070
108-90-7	Chlorobenzene	4.92		0.50	0.060
75-00-3	Chloroethane	4.53		0.50	0.070
67-66-3	Chloroform	4.92		0.50	0.090
74-87-3	Chloromethane	4.49		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	5.11		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	4.91		0.50	0.050
124-48-1	Dibromochloromethane	4.83		0.50	0.070
100-41-4	Ethylbenzene	4.83		0.50	0.060
1634-04-4	Methyl tert-butyl ether	4.68		0.50	0.050
75-09-2	Methylene Chloride	4.78		0.50	0.070
100-42-5	Styrene	5.02		0.50	0.050
127-18-4	Tetrachloroethene	4.91		0.50	0.060
108-88-3	Toluene	4.75		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	4.76		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	4.79		0.50	0.060
79-01-6	Trichloroethene	4.86		0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 410-72509/4

Matrix: Water Lab File ID: ID03X04.D

Analysis Method: 8260D Date Collected:

Sample wt/vol: 25(mL) Date Analyzed: 12/03/2020 10:05

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 72509 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-01-4	Vinyl chloride	4.76		0.50	0.10
1330-20-7	Xylenes, Total	14.8		1.0	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		80-120
1868-53-7	Dibromofluoromethane (Surr)	99		80-120
2037-26-5	Toluene-d8 (Surr)	98		80-120
460-00-4	4-Bromofluorobenzene (Surr)	99		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20201203-16986.b\ID03X04.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 03-Dec-2020 10:05:30 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0016986-004
Misc. Info.: LCS
Operator ID: kas02648 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20201203-16986.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 03-Dec-2020 12:30:55 Calib Date: 23-Nov-2020 18:05:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1682

First Level Reviewer: spositok Date: 03-Dec-2020 12:07:12

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.983	1.989	-0.006	99	295025	5.00	4.29	
4 Chloromethane	50	2.184	2.190	-0.006	99	358250	5.00	4.49	
6 Butadiene	39	2.294	2.300	-0.006	89	318797	5.00	4.68	
5 Vinyl chloride	62	2.306	2.312	-0.006	98	349330	5.00	4.76	
7 Bromomethane	94	2.629	2.635	-0.006	90	250780	5.00	4.71	
8 Chloroethane	64	2.714	2.715	-0.001	100	204277	5.00	4.53	
9 Dichlorofluoromethane	67	2.946	2.958	-0.012	97	455448	5.00	4.51	
10 Trichlorofluoromethane	101	3.025	3.032	-0.007	97	454317	5.00	4.78	
11 Ethyl ether	59	3.269	3.276	-0.007	90	233295	5.00	5.48	
12 1,2-Dichloro-1,1,2-trifluoroetha	67	3.348	3.349	-0.001	91	326646	5.00	4.90	
13 Acrolein	56	3.446	3.446	0.000	99	223067	37.5	30.7	
14 1,1-Dichloroethene	96	3.580	3.586	-0.006	97	239752	5.00	4.67	
15 Acetone	43	3.611	3.617	-0.006	100	289612	37.5	32.1	
16 112TCTFE	101	3.623	3.629	-0.006	90	257376	5.00	4.74	
17 Iodomethane	142	3.781	3.782	-0.001	98	447950	5.00	4.47	
18 Ethyl bromide	108	3.812	3.818	-0.006	98	224770	5.01	4.82	
19 Carbon disulfide	76	3.885	3.891	-0.006	99	632613	5.00	4.25	
21 Methyl acetate	43	4.043	4.044	-0.001	97	116006	5.00	4.71	
22 3-Chloro-1-propene	41	4.068	4.068	0.000	93	365935	5.00	4.69	
23 Methylene Chloride	84	4.257	4.263	-0.006	90	271859	5.00	4.78	
* 24 t-Butyl alcohol-d10 (IS)	65	4.281	4.288	-0.007	0	165591	50.0	50.0	
25 2-Methyl-2-propanol	59	4.415	4.416	-0.001	100	181528	50.0	51.4	
26 Acrylonitrile	53	4.604	4.605	0.000	100	288569	25.0	24.5	
27 Methyl tert-butyl ether	73	4.671	4.672	-0.001	94	642749	5.00	4.68	
28 trans-1,2-Dichloroethene	96	4.677	4.678	-0.001	99	269828	5.00	4.76	
29 Hexane	57	5.104	5.104	0.000	89	392357	5.00	5.06	
31 1,1-Dichloroethane	63	5.336	5.342	-0.006	96	495266	5.00	4.83	
32 Isopropyl ether	45	5.397	5.397	0.000	94	827798	5.00	4.89	
33 2-Chloro-1,3-butadiene	53	5.446	5.452	-0.006	89	390870	5.00	4.75	
34 Tert-butyl ethyl ether	59	5.921	5.921	0.000	97	769624	5.00	4.81	
36 2-Butanone (MEK)	43	6.135	6.141	-0.007	99	557696	37.5	36.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
37 cis-1,2-Dichloroethene	96	6.165	6.165	0.000	80	336493	5.00	5.11	
38 2,2-Dichloropropane	77	6.177	6.177	0.000	85	416241	5.00	5.05	
40 Propionitrile	54	6.226	6.232	-0.006	99	161609	37.5	36.6	
42 Methacrylonitrile	67	6.439	6.440	-0.001	89	569385	37.5	36.6	
43 Chlorobromomethane	128	6.500	6.500	0.000	91	138503	5.00	4.77	
44 Tetrahydrofuran	71	6.512	6.513	-0.001	85	109588	25.0	23.9	
45 Chloroform	83	6.647	6.647	0.000	92	496287	5.00	4.92	
$ 46 Dibromofluoromethane (Surr)	113	6.860	6.860	0.000	95	472553	10.0	9.94	
47 1,1,1-Trichloroethane	97	6.872	6.872	0.000	98	431207	5.00	4.75	
48 Cyclohexane	56	6.970	6.970	0.000	88	476568	5.00	5.07	
50 Carbon tetrachloride	117	7.079	7.086	-0.007	94	397181	5.00	4.89	
51 1,1-Dichloropropene	75	7.086	7.086	0.000	98	391758	5.00	4.87	
52 Isobutyl alcohol	41	7.238	7.232	0.006	95	153830	125.0	135.5	
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.311	7.317	-0.006	0	96270	10.0	10.0	
54 Benzene	78	7.342	7.348	-0.006	96	1169553	5.00	4.80	
56 1,2-Dichloroethane	62	7.421	7.421	0.000	97	287337	5.00	4.83	
57 Tert-amyl methyl ether	73	7.531	7.531	0.000	100	728773	5.00	4.97	
* 58 Fluorobenzene (IS)	96	7.744	7.750	-0.006	99	1924947	10.0	10.0	
59 n-Heptane	43	7.756	7.756	0.000	89	417953	5.00	5.37	
60 n-Butanol	56	8.104	8.104	0.000	86	276357	250.0	257.5	
61 Trichloroethene	95	8.226	8.226	0.000	97	310357	5.00	4.86	
62 Methylcyclohexane	83	8.530	8.531	-0.001	94	549366	5.00	5.30	
63 1,2-Dichloropropane	63	8.555	8.555	0.000	94	305851	5.00	5.10	
64 Methyl methacrylate	69	8.634	8.634	0.000	88	140518	5.00	4.85	
65 1,4-Dioxane	88	8.640	8.640	0.000	34	36594	125.0	130.6	M
66 Dibromomethane	93	8.665	8.665	-0.001	93	140104	5.00	4.94	
68 Dichlorobromomethane	83	8.896	8.896	0.000	99	355483	5.00	4.95	
69 2-Nitropropane	41	9.171	9.165	0.005	98	32269	5.00	4.43	
71 2-Chloroethyl vinyl ether	63		9.250				ND	ND	
72 1-Bromo-2-chloroethane	63	9.286	9.287	-0.001	98	304723	5.00	4.94	
73 cis-1,3-Dichloropropene	75	9.439	9.439	0.000	98	423563	5.00	4.91	
74 4-Methyl-2-pentanone (MIBK)	43	9.603	9.604	-0.001	95	917610	25.0	24.4	
$ 75 Toluene-d8 (Surr)	98	9.744	9.744	0.000	93	1917878	10.0	9.83	
76 Toluene	92	9.823	9.823	0.000	99	772928	5.00	4.75	
78 trans-1,3-Dichloropropene	75	10.073	10.073	0.000	90	336899	5.00	4.79	
79 Ethyl methacrylate	69	10.134	10.134	0.000	87	298316	5.00	5.07	
80 1,1,2-Trichloroethane	97	10.274	10.274	0.000	90	217765	5.00	5.01	
81 Tetrachloroethene	166	10.365	10.366	-0.001	97	386868	5.00	4.91	
82 1,3-Dichloropropane	76	10.439	10.439	0.000	86	359170	5.00	4.84	
83 2-Hexanone	43	10.487	10.488	-0.001	95	652743	25.0	25.4	
85 Chlorodibromomethane	129	10.652	10.652	0.000	90	264023	5.00	4.83	
86 Ethylene Dibromide	107	10.762	10.762	0.000	98	202794	5.00	4.87	
* 87 Chlorobenzene-d5 (IS)	117	11.188	11.189	-0.001	84	1493846	10.0	10.0	
88 1-Chlorohexane	91	11.194	11.201	-0.007	96	441327	5.00	4.67	
90 Chlorobenzene	112	11.219	11.219	0.000	97	886532	5.00	4.92	
91 1,1,1,2-Tetrachloroethane	131	11.298	11.298	0.000	96	310521	5.00	4.97	
92 Ethylbenzene	91	11.304	11.304	0.000	98	1519386	5.00	4.83	
93 m-Xylene & p-Xylene	106	11.414	11.414	0.000	0	1216019	10.0	9.79	
94 o-Xylene	106	11.743	11.743	0.000	96	601784	5.00	4.99	
95 Styrene	104	11.761	11.762	-0.001	95	970296	5.00	5.02	
96 Bromoform	173	11.920	11.920	0.000	98	158002	5.00	4.79	
97 Isopropylbenzene	105	12.042	12.042	0.000	95	1585862	5.00	4.95	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 100 4-Bromofluorobenzene (Surr)	95	12.188	12.188	0.000	95	715358	10.0	9.90	
101 1,1,2,2-Tetrachloroethane	83	12.286	12.286	0.000	93	270393	5.00	4.76	
102 Bromobenzene	156	12.304	12.304	0.000	94	385186	5.00	4.91	
103 trans-1,4-Dichloro-2-butene	53	12.310	12.310	0.000	91	262077	25.0	21.3	
104 1,2,3-Trichloropropane	110	12.335	12.335	0.000	82	75053	5.00	4.81	
105 N-Propylbenzene	91	12.371	12.371	0.000	99	1872733	5.00	4.87	
106 2-Chlorotoluene	126	12.450	12.451	-0.001	97	380054	5.00	4.84	
107 1,3,5-Trimethylbenzene	105	12.505	12.505	0.000	94	1346526	5.00	4.90	
108 4-Chlorotoluene	126	12.542	12.542	0.000	96	389792	5.00	4.91	
109 tert-Butylbenzene	134	12.749	12.749	0.000	92	300824	5.00	4.85	
110 Pentachloroethane	167	12.780	12.780	0.000	91	238123	5.00	4.84	
111 1,2,4-Trimethylbenzene	105	12.792	12.792	0.000	96	1372822	5.00	4.91	
112 sec-Butylbenzene	105	12.914	12.914	0.000	93	1790369	5.00	4.97	
113 1,3-Dichlorobenzene	146	13.011	13.011	0.000	98	774208	5.00	4.90	
114 4-Isopropyltoluene	119	13.017	13.018	-0.001	97	1555541	5.00	5.06	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	94	870795	10.0	10.0	
116 1,4-Dichlorobenzene	146	13.084	13.085	-0.001	96	777520	5.00	4.93	
117 1,2,3-Trimethylbenzene	120	13.097	13.097	0.000	97	619950	5.00	5.00	
118 Benzyl chloride	126	13.158	13.158	0.000	98	116538	5.00	5.42	
119 n-Butylbenzene	92	13.310	13.310	0.000	97	745079	5.00	4.96	
120 1,2-Dichlorobenzene	146	13.347	13.341	0.006	99	706720	5.00	4.91	
122 1,2-Dibromo-3-Chloropropane	155	13.883	13.883	0.000	90	43815	5.00	5.02	
123 1,3,5-Trichlorobenzene	180	14.011	14.011	0.000	98	571531	5.00	5.03	
124 1,2,4-Trichlorobenzene	180	14.432	14.432	0.000	94	487209	5.00	5.15	
125 Hexachlorobutadiene	225	14.517	14.517	0.000	96	208447	5.00	5.07	
126 Naphthalene	128	14.615	14.615	0.000	96	887745	5.00	5.02	
127 1,2,3-Trichlorobenzene	180	14.755	14.755	0.000	96	417985	5.00	5.12	
134 Isopropyl alcohol	45		0.000				ND	ND	
144 2-ethoxy-2-methyl butane	1		0.000				ND	ND	
135 p-Diethylbenzene	1		0.000				ND	ND	
137 2-Methylnaphthalene	142		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

MSV_Q_QVOA1_00057	Amount Added:	12.50	Units: uL	
MSV_Q_QARC_00056	Amount Added:	12.50	Units: uL	
MSV_Q_QVOA6_00055	Amount Added:	12.50	Units: uL	
MSV_Q_ETBR_00005	Amount Added:	12.50	Units: uL	
MSV_Q_EE_00003	Amount Added:	12.50	Units: uL	
MSV_QGAS_826_00093	Amount Added:	12.50	Units: uL	
MSV_31_826ISS_00003	Amount Added:	5.00	Units: uL	Run Reagent

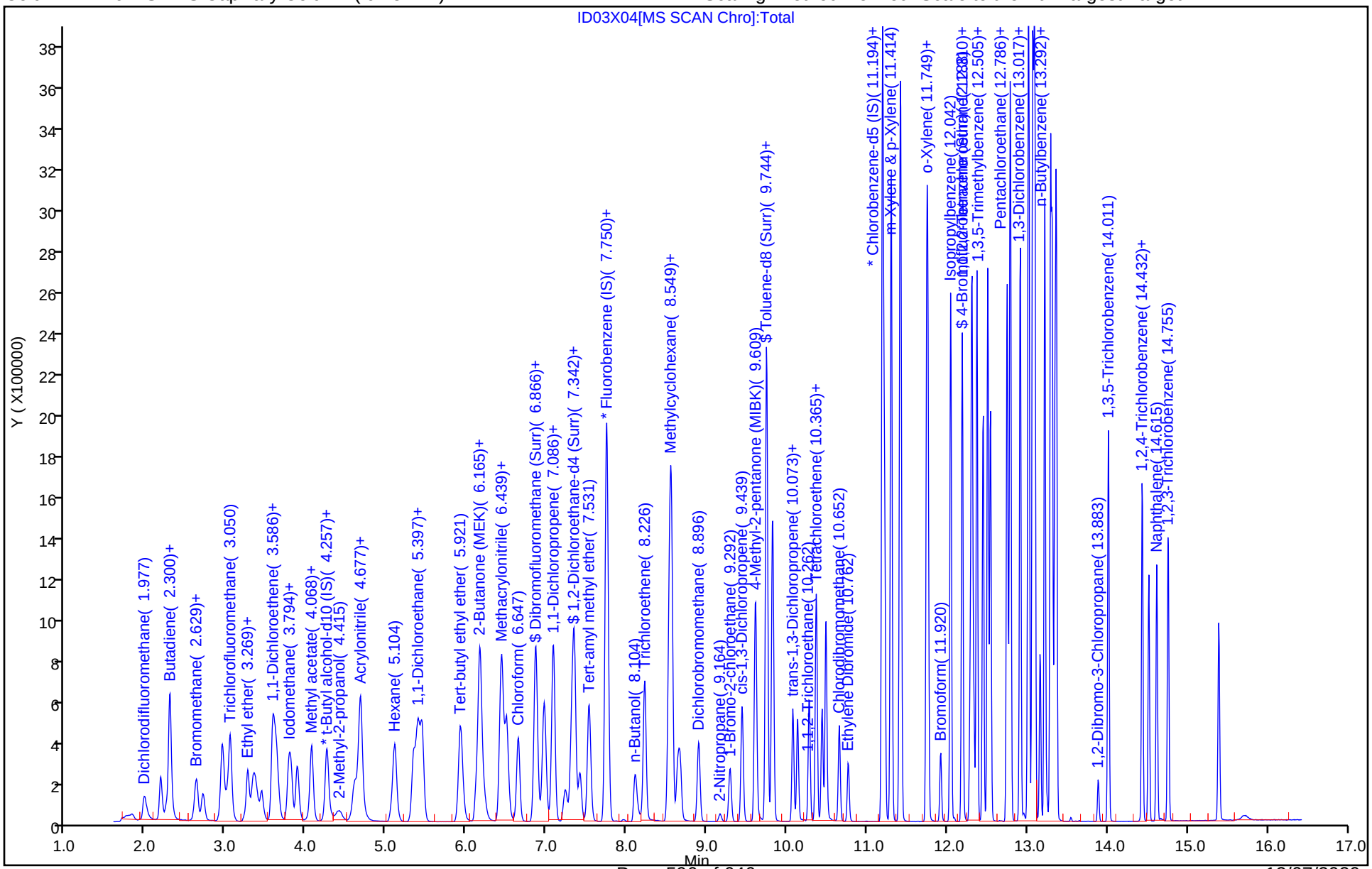
Report Date: 03-Dec-2020 12:31:09 Chrom Revision: 2.3 13-Nov-2020 01:23:02

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20201203-16986.b\ID03X04.D

Injection Date:	03-Dec-2020 10:05:30	Instrument ID:	19930	Operator ID:	kas02648
Lims ID:	LCS			Worklist Smp#:	4
Client ID:					
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\19930\20201203-16986.b\ID03X04.D				
Lims ID:	LCS				
Client ID:					
Sample Type:	LCS				
Inject. Date:	03-Dec-2020 10:05:30	ALS Bottle#:	4	Worklist Smp#:	4
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Sample Info:	410-0016986-004				
Misc. Info.:	LCS				
Operator ID:	kas02648	Instrument ID:	19930		
Method:	\\chromfs\Lancaster\ChromData\19930\20201203-16986.b\8260 25ml HP31.m				
Limit Group:	MSV - 8260C_D				
Last Update:	03-Dec-2020 12:30:55	Calib Date:	23-Nov-2020 18:05:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I17.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1682				

First Level Reviewer: spositok Date: 03-Dec-2020 12:07:12

Compound	Amount Added	Amount Recovered	% Rec.
$ 46 Dibromofluoromethane (Surr)	10.0	9.94	99.42
$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	10.0	100.46
$ 75 Toluene-d8 (Surr)	10.0	9.83	98.31
$ 100 4-Bromofluorobenzene (Surr)	10.0	9.90	99.02

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 410-73040/4

Matrix: Water Lab File ID: ID04X04.D

Analysis Method: 8260D Date Collected:

Sample wt/vol: 25(mL) Date Analyzed: 12/04/2020 10:30

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 73040 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	4.92		0.50	0.070
71-55-6	1,1,1-Trichloroethane	4.71		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	4.96		0.50	0.070
79-00-5	1,1,2-Trichloroethane	5.04		0.50	0.060
75-34-3	1,1-Dichloroethane	4.78		0.50	0.070
75-35-4	1,1-Dichloroethene	4.54		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	4.89		0.50	0.060
107-06-2	1,2-Dichloroethane	4.71		0.50	0.050
78-87-5	1,2-Dichloropropane	4.98		0.50	0.060
78-93-3	2-Butanone (MEK)	35.3		5.0	0.60
591-78-6	2-Hexanone	24.4		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	23.4		5.0	0.70
67-64-1	Acetone	30.2		5.0	0.90
71-43-2	Benzene	4.71		0.50	0.050
74-97-5	Bromochloromethane	4.73		0.50	0.050
75-27-4	Bromodichloromethane	4.86		0.50	0.050
75-25-2	Bromoform	4.71		1.0	0.30
74-83-9	Bromomethane	4.83		0.50	0.070
75-15-0	Carbon disulfide	4.15		1.0	0.060
56-23-5	Carbon tetrachloride	4.77		0.50	0.070
108-90-7	Chlorobenzene	4.88		0.50	0.060
75-00-3	Chloroethane	4.60		0.50	0.070
67-66-3	Chloroform	4.88		0.50	0.090
74-87-3	Chloromethane	4.54		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	5.03		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	4.85		0.50	0.050
124-48-1	Dibromochloromethane	4.82		0.50	0.070
100-41-4	Ethylbenzene	4.80		0.50	0.060
1634-04-4	Methyl tert-butyl ether	4.66		0.50	0.050
75-09-2	Methylene Chloride	4.70		0.50	0.070
100-42-5	Styrene	4.98		0.50	0.050
127-18-4	Tetrachloroethene	4.80		0.50	0.060
108-88-3	Toluene	4.71		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	4.69		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	4.76		0.50	0.060
79-01-6	Trichloroethene	4.76		0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 410-73040/4

Matrix: Water Lab File ID: ID04X04.D

Analysis Method: 8260D Date Collected:

Sample wt/vol: 25(mL) Date Analyzed: 12/04/2020 10:30

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 73040 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-01-4	Vinyl chloride	4.91		0.50	0.10
1330-20-7	Xylenes, Total	14.6		1.0	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		80-120
1868-53-7	Dibromofluoromethane (Surr)	100		80-120
2037-26-5	Toluene-d8 (Surr)	99		80-120
460-00-4	4-Bromofluorobenzene (Surr)	100		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20201204-17111.b\ID04X04.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 04-Dec-2020 10:30:30 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0017111-004
Misc. Info.: LCS
Operator ID: kas02648 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20201204-17111.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 04-Dec-2020 11:34:19 Calib Date: 23-Nov-2020 18:05:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1616

First Level Reviewer: spositok Date: 04-Dec-2020 11:19:32

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.971	1.971	0.000	99	322180	5.00	4.67	
4 Chloromethane	50	2.178	2.178	0.000	99	363569	5.00	4.54	
6 Butadiene	39	2.288	2.288	0.000	89	322478	5.00	4.71	
5 Vinyl chloride	62	2.300	2.300	0.000	98	361979	5.00	4.91	
7 Bromomethane	94	2.623	2.623	0.000	90	258017	5.00	4.83	
8 Chloroethane	64	2.702	2.703	-0.001	100	208610	5.00	4.60	
9 Dichlorofluoromethane	67	2.940	2.940	0.000	96	442183	5.00	4.35	
10 Trichlorofluoromethane	101	3.019	3.013	0.006	98	465909	5.00	4.88	
11 Ethyl ether	59	3.263	3.263	0.000	90	227251	5.00	5.32	
12 1,2-Dichloro-1,1,2-trifluoroetha	67	3.342	3.337	0.005	94	320516	5.00	4.79	
13 Acrolein	56	3.440	3.434	0.006	100	215240	37.5	27.8	
14 1,1-Dichloroethene	96	3.574	3.574	0.000	97	234015	5.00	4.54	
15 Acetone	43	3.605	3.605	0.000	100	291025	37.5	30.2	
16 112TCTFE	101	3.617	3.617	0.000	90	253516	5.00	4.65	
17 Iodomethane	142	3.775	3.769	0.006	98	445741	5.00	4.42	
18 Ethyl bromide	108	3.800	3.800	0.000	98	215581	5.01	4.60	
19 Carbon disulfide	76	3.879	3.879	0.000	98	620261	5.00	4.15	
21 Methyl acetate	43	4.037	4.032	0.005	97	114771	5.00	4.36	
22 3-Chloro-1-propene	41	4.062	4.056	0.006	93	360684	5.00	4.60	
23 Methylene Chloride	84	4.251	4.245	0.006	90	268944	5.00	4.70	
* 24 t-Butyl alcohol-d10 (IS)	65	4.281	4.282	-0.001	0	176924	50.0	50.0	
25 2-Methyl-2-propanol	59	4.397	4.397	0.000	100	194839	50.0	51.7	
26 Acrylonitrile	53	4.592	4.592	0.000	98	291731	25.0	23.2	
27 Methyl tert-butyl ether	73	4.659	4.659	0.000	94	643995	5.00	4.66	
28 trans-1,2-Dichloroethene	96	4.671	4.672	-0.001	99	267112	5.00	4.69	
29 Hexane	57	5.098	5.092	0.006	89	388932	5.00	4.99	
31 1,1-Dichloroethane	63	5.336	5.330	0.006	96	491723	5.00	4.78	
32 Isopropyl ether	45	5.385	5.385	0.000	95	826685	5.00	4.86	
33 2-Chloro-1,3-butadiene	53	5.440	5.440	0.000	89	383070	5.00	4.63	
34 Tert-butyl ethyl ether	59	5.915	5.915	0.000	98	772724	5.00	4.81	
36 2-Butanone (MEK)	43	6.128	6.123	0.005	99	569706	37.5	35.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
37 cis-1,2-Dichloroethene	96	6.159	6.159	0.000	81	332709	5.00	5.03	
38 2,2-Dichloropropane	77	6.171	6.171	0.000	85	410043	5.00	4.95	
40 Propionitrile	54	6.226	6.220	0.006	98	164581	37.5	34.9	
42 Methacrylonitrile	67	6.433	6.427	0.006	91	573611	37.5	34.5	
43 Chlorobromomethane	128	6.494	6.488	0.006	92	137981	5.00	4.73	
44 Tetrahydrofuran	71	6.513	6.494	0.019	83	115563	25.0	23.6	
45 Chloroform	83	6.641	6.635	0.006	92	494827	5.00	4.88	
$ 46 Dibromofluoromethane (Surr)	113	6.854	6.854	0.000	94	477723	10.0	10.0	
47 1,1,1-Trichloroethane	97	6.866	6.866	0.000	97	429288	5.00	4.71	
48 Cyclohexane	56	6.964	6.964	0.000	88	465568	5.00	4.93	
51 1,1-Dichloropropene	75	7.080	7.074	0.006	97	382946	5.00	4.73	
50 Carbon tetrachloride	117	7.080	7.080	0.000	96	389383	5.00	4.77	
52 Isobutyl alcohol	41	7.232	7.226	0.006	95	158320	125.0	130.5	
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.311	7.305	0.006	0	97131	10.0	10.1	
54 Benzene	78	7.342	7.336	0.006	96	1154862	5.00	4.71	
56 1,2-Dichloroethane	62	7.415	7.409	0.006	97	281703	5.00	4.71	
57 Tert-amyl methyl ether	73	7.525	7.525	0.000	99	734678	5.00	4.99	
* 58 Fluorobenzene (IS)	96	7.744	7.738	0.006	99	1934445	10.0	10.0	
59 n-Heptane	43	7.756	7.750	0.006	90	408980	5.00	5.23	
60 n-Butanol	56	8.104	8.098	0.006	87	279218	250.0	243.5	
61 Trichloroethene	95	8.220	8.220	0.000	97	305280	5.00	4.76	
62 Methylcyclohexane	83	8.524	8.525	-0.001	94	535015	5.00	5.13	
63 1,2-Dichloropropane	63	8.555	8.549	0.006	89	300136	5.00	4.98	
64 Methyl methacrylate	69	8.628	8.628	0.000	88	143559	5.00	4.64	
65 1,4-Dioxane	88	8.640	8.634	0.006	34	39182	125.0	130.9	M
66 Dibromomethane	93	8.658	8.659	-0.001	94	141477	5.00	4.97	
68 Dichlorobromomethane	83	8.896	8.890	0.006	99	350575	5.00	4.86	
69 2-Nitropropane	41	9.164	9.159	0.005	99	34120	5.00	4.39	
71 2-Chloroethyl vinyl ether	63		9.250				ND	ND	
72 1-Bromo-2-chloroethane	63	9.286	9.287	-0.001	98	306146	5.00	4.94	
73 cis-1,3-Dichloropropene	75	9.439	9.433	0.006	98	419943	5.00	4.85	
74 4-Methyl-2-pentanone (MIBK)	43	9.603	9.604	-0.001	95	940254	25.0	23.4	
$ 75 Toluene-d8 (Surr)	98	9.744	9.744	0.000	93	1931533	10.0	9.93	
76 Toluene	92	9.817	9.817	0.000	99	764565	5.00	4.71	
78 trans-1,3-Dichloropropene	75	10.073	10.067	0.006	90	333997	5.00	4.76	
79 Ethyl methacrylate	69	10.134	10.128	0.006	87	301170	5.00	5.13	
80 1,1,2-Trichloroethane	97	10.274	10.274	0.000	90	218708	5.00	5.04	
81 Tetrachloroethene	166	10.365	10.366	-0.001	97	377320	5.00	4.80	
82 1,3-Dichloropropane	76	10.439	10.439	0.000	86	358431	5.00	4.84	
83 2-Hexanone	43	10.487	10.482	0.005	96	668380	25.0	24.4	
85 Chlorodibromomethane	129	10.652	10.652	0.000	90	262269	5.00	4.82	
86 Ethylene Dibromide	107	10.762	10.762	0.000	98	203239	5.00	4.89	
* 87 Chlorobenzene-d5 (IS)	117	11.188	11.189	-0.001	85	1489829	10.0	10.0	
88 1-Chlorohexane	91	11.195	11.195	0.000	95	435041	5.00	4.62	
90 Chlorobenzene	112	11.219	11.213	0.006	96	875884	5.00	4.88	
91 1,1,1,2-Tetrachloroethane	131	11.298	11.298	0.000	96	306814	5.00	4.92	
92 Ethylbenzene	91	11.304	11.298	0.006	98	1506399	5.00	4.80	
93 m-Xylene & p-Xylene	106	11.414	11.414	0.000	0	1198370	10.0	9.68	
94 o-Xylene	106	11.743	11.743	0.000	96	588892	5.00	4.89	
95 Styrene	104	11.762	11.756	0.006	95	960200	5.00	4.98	
96 Bromoform	173	11.920	11.914	0.006	99	154945	5.00	4.71	
97 Isopropylbenzene	105	12.042	12.042	0.000	95	1577740	5.00	4.93	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 100 4-Bromofluorobenzene (Surr)	95	12.188	12.189	0.000	94	719584	10.0	9.99	
101 1,1,2,2-Tetrachloroethane	83	12.286	12.286	0.000	93	278739	5.00	4.96	
102 Bromobenzene	156	12.304	12.304	0.000	94	379349	5.00	4.89	
103 trans-1,4-Dichloro-2-butene	53	12.310	12.310	0.000	90	266776	25.0	20.3	
104 1,2,3-Trichloropropane	110	12.335	12.335	0.000	83	78134	5.00	5.06	
105 N-Propylbenzene	91	12.371	12.371	0.000	99	1857444	5.00	4.89	
106 2-Chlorotoluene	126	12.450	12.445	0.005	98	379574	5.00	4.89	
107 1,3,5-Trimethylbenzene	105	12.505	12.506	-0.001	94	1323474	5.00	4.87	
108 4-Chlorotoluene	126	12.542	12.542	0.000	96	381026	5.00	4.86	
109 tert-Butylbenzene	134	12.749	12.749	0.000	92	295994	5.00	4.82	
110 Pentachloroethane	167	12.780	12.780	0.000	93	236436	5.00	4.86	
111 1,2,4-Trimethylbenzene	105	12.792	12.786	0.006	96	1351662	5.00	4.89	
112 sec-Butylbenzene	105	12.914	12.914	0.000	93	1755339	5.00	4.93	
113 1,3-Dichlorobenzene	146	13.011	13.012	-0.001	98	761777	5.00	4.88	
114 4-Isopropyltoluene	119	13.017	13.018	-0.001	97	1521802	5.00	5.01	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	93	861004	10.0	10.0	
116 1,4-Dichlorobenzene	146	13.084	13.085	-0.001	96	769315	5.00	4.93	
117 1,2,3-Trimethylbenzene	120	13.097	13.091	0.006	98	612096	5.00	4.99	
118 Benzyl chloride	126	13.158	13.158	0.000	98	118362	5.00	5.57	
119 n-Butylbenzene	92	13.310	13.310	0.000	97	738166	5.00	4.97	
120 1,2-Dichlorobenzene	146	13.347	13.341	0.006	99	705344	5.00	4.95	
122 1,2-Dibromo-3-Chloropropane	155	13.883	13.883	0.000	90	44284	5.00	5.13	
123 1,3,5-Trichlorobenzene	180	14.011	14.011	0.000	98	560128	5.00	4.98	
124 1,2,4-Trichlorobenzene	180	14.432	14.432	0.000	94	477701	5.00	5.11	
125 Hexachlorobutadiene	225	14.517	14.517	0.000	96	204199	5.00	5.02	
126 Naphthalene	128	14.615	14.615	0.000	97	886674	5.00	5.07	
127 1,2,3-Trichlorobenzene	180	14.755	14.761	-0.006	96	413100	5.00	5.12	
134 Isopropyl alcohol	45		0.000				ND	ND	
144 2-ethoxy-2-methyl butane	1		0.000				ND	ND	
135 p-Diethylbenzene	1		0.000				ND	ND	
137 2-Methylnaphthalene	142		0.000				ND	ND	
204 Pentane	43		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

MSV_Q_QVOA1_00057	Amount Added:	12.50	Units: uL	
MSV_Q_QARC_00056	Amount Added:	12.50	Units: uL	
MSV_Q_QVOA6_00055	Amount Added:	12.50	Units: uL	
MSV_Q_ETBR_00005	Amount Added:	12.50	Units: uL	
MSV_Q_EE_00003	Amount Added:	12.50	Units: uL	
MSV_QGAS_826_00093	Amount Added:	12.50	Units: uL	
MSV_31_826ISS_00003	Amount Added:	5.00	Units: uL	Run Reagent

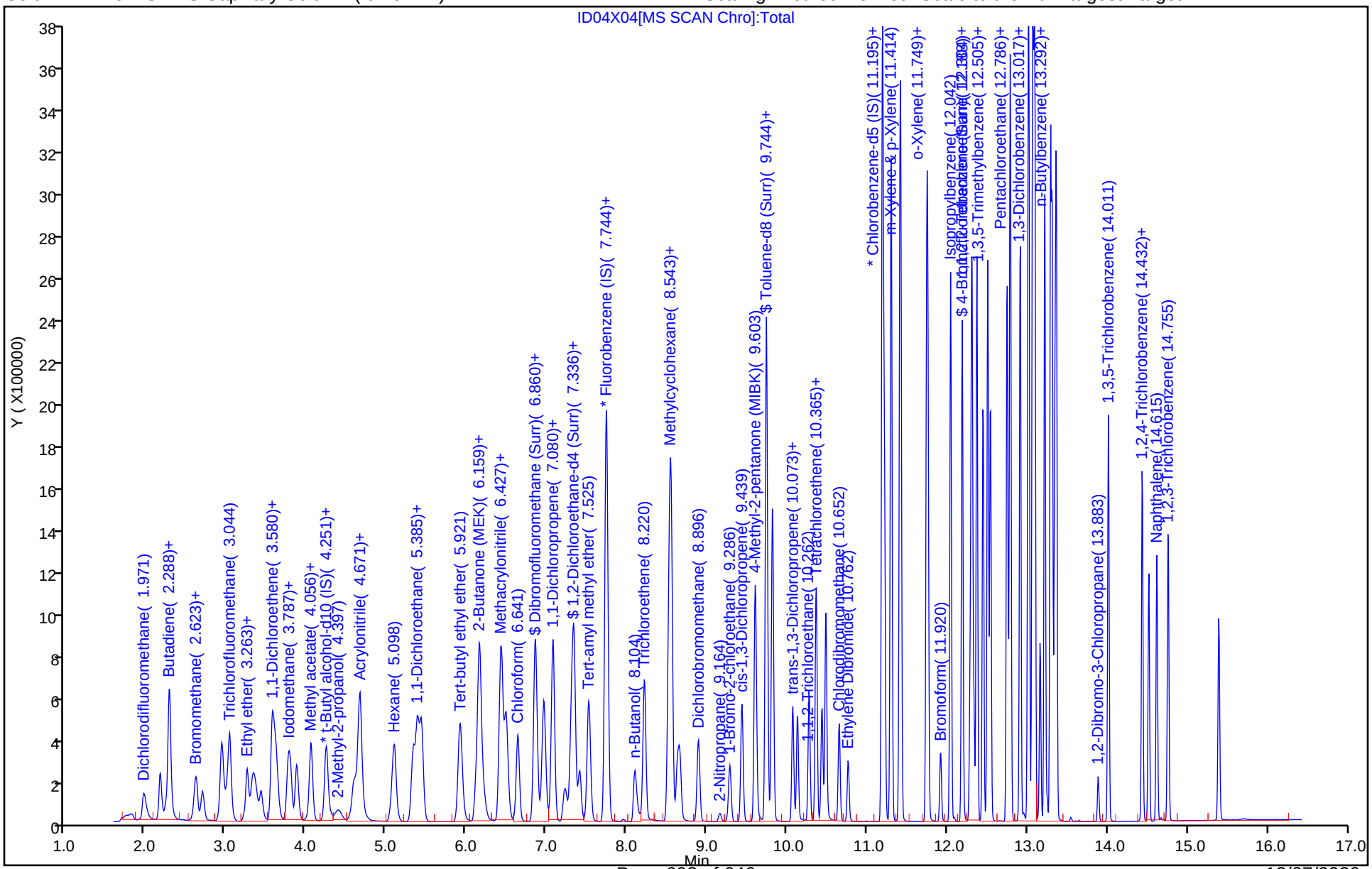
Report Date: 04-Dec-2020 11:34:33 Chrom Revision: 2.3 13-Nov-2020 01:23:02

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20201204-17111.b\ID04X04.D

Injection Date:	04-Dec-2020 10:30:30	Instrument ID:	19930	Operator ID:	kas02648
Lims ID:	LCS			Worklist Smp#:	4
Client ID:					
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19930\20201204-17111.b\ID04X04.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 04-Dec-2020 10:30:30 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0017111-004
Misc. Info.: LCS
Operator ID: kas02648 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20201204-17111.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 04-Dec-2020 11:34:19 Calib Date: 23-Nov-2020 18:05:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1616

First Level Reviewer: spositok Date: 04-Dec-2020 11:19:32

Compound	Amount Added	Amount Recovered	% Rec.
$ 46 Dibromofluoromethane (Surr)	10.0	10.0	100.02
$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	10.1	100.86
$ 75 Toluene-d8 (Surr)	10.0	9.93	99.28
$ 100 4-Bromofluorobenzene (Surr)	10.0	9.99	99.87

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 410-72509/5

Matrix: Water Lab File ID: ID03X05.D

Analysis Method: 8260D Date Collected:

Sample wt/vol: 25(mL) Date Analyzed: 12/03/2020 10:26

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 72509 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	4.92		0.50	0.070
71-55-6	1,1,1-Trichloroethane	4.81		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	4.80		0.50	0.070
79-00-5	1,1,2-Trichloroethane	5.06		0.50	0.060
75-34-3	1,1-Dichloroethane	4.81		0.50	0.070
75-35-4	1,1-Dichloroethene	4.68		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	4.97		0.50	0.060
107-06-2	1,2-Dichloroethane	4.88		0.50	0.050
78-87-5	1,2-Dichloropropane	5.09		0.50	0.060
78-93-3	2-Butanone (MEK)	34.8		5.0	0.60
591-78-6	2-Hexanone	24.1		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	23.4		5.0	0.70
67-64-1	Acetone	30.0		5.0	0.90
71-43-2	Benzene	4.83		0.50	0.050
74-97-5	Bromochloromethane	4.77		0.50	0.050
75-27-4	Bromodichloromethane	4.91		0.50	0.050
75-25-2	Bromoform	4.65		1.0	0.30
74-83-9	Bromomethane	4.71		0.50	0.070
75-15-0	Carbon disulfide	4.26		1.0	0.060
56-23-5	Carbon tetrachloride	4.93		0.50	0.070
108-90-7	Chlorobenzene	4.89		0.50	0.060
75-00-3	Chloroethane	4.52		0.50	0.070
67-66-3	Chloroform	4.91		0.50	0.090
74-87-3	Chloromethane	4.48		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	5.09		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	4.88		0.50	0.050
124-48-1	Dibromochloromethane	4.78		0.50	0.070
100-41-4	Ethylbenzene	4.84		0.50	0.060
1634-04-4	Methyl tert-butyl ether	4.65		0.50	0.050
75-09-2	Methylene Chloride	4.80		0.50	0.070
100-42-5	Styrene	5.04		0.50	0.050
127-18-4	Tetrachloroethene	4.87		0.50	0.060
108-88-3	Toluene	4.78		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	4.79		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	4.75		0.50	0.060
79-01-6	Trichloroethene	4.82		0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 410-72509/5

Matrix: Water Lab File ID: ID03X05.D

Analysis Method: 8260D Date Collected:

Sample wt/vol: 25(mL) Date Analyzed: 12/03/2020 10:26

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 72509 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-01-4	Vinyl chloride	4.85		0.50	0.10
1330-20-7	Xylenes, Total	14.7		1.0	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		80-120
1868-53-7	Dibromofluoromethane (Surr)	100		80-120
2037-26-5	Toluene-d8 (Surr)	98		80-120
460-00-4	4-Bromofluorobenzene (Surr)	99		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20201203-16986.b\ID03X05.D
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 03-Dec-2020 10:26:30 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0016986-005
Misc. Info.: LCSD
Operator ID: kas02648 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20201203-16986.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 03-Dec-2020 12:30:55 Calib Date: 23-Nov-2020 18:05:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1682

First Level Reviewer: spositok Date: 03-Dec-2020 12:10:28

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.971	1.989	-0.018	99	295800	5.00	4.32	
4 Chloromethane	50	2.172	2.190	-0.018	99	355689	5.00	4.48	
6 Butadiene	39	2.282	2.300	-0.018	88	330672	5.00	4.88	
5 Vinyl chloride	62	2.294	2.312	-0.018	98	354895	5.00	4.85	
7 Bromomethane	94	2.617	2.635	-0.018	90	249723	5.00	4.71	
8 Chloroethane	64	2.702	2.715	-0.013	100	203108	5.00	4.52	
9 Dichlorofluoromethane	67	2.940	2.958	-0.018	96	454075	5.00	4.51	
10 Trichlorofluoromethane	101	3.013	3.032	-0.019	98	467544	5.00	4.94	
11 Ethyl ether	59	3.263	3.276	-0.013	89	232260	5.00	5.48	
12 1,2-Dichloro-1,1,2-trifluoroetha	67	3.336	3.349	-0.013	93	330286	5.00	4.98	
13 Acrolein	56	3.440	3.446	-0.006	99	223822	37.5	29.4	
14 1,1-Dichloroethene	96	3.574	3.586	-0.012	97	239357	5.00	4.68	
15 Acetone	43	3.605	3.617	-0.013	100	283905	37.5	30.0	
16 112TCTFE	101	3.617	3.629	-0.012	89	254256	5.00	4.70	
17 Iodomethane	142	3.769	3.782	-0.013	98	445080	5.00	4.45	
18 Ethyl bromide	108	3.800	3.818	-0.018	98	224602	5.01	4.83	
19 Carbon disulfide	76	3.879	3.891	-0.012	99	630972	5.00	4.26	
21 Methyl acetate	43	4.025	4.044	-0.019	97	110034	5.00	4.26	
22 3-Chloro-1-propene	41	4.056	4.068	-0.012	94	368041	5.00	4.74	
23 Methylene Chloride	84	4.251	4.263	-0.012	90	271991	5.00	4.80	
* 24 t-Butyl alcohol-d10 (IS)	65	4.269	4.288	-0.019	0	173741	50.0	50.0	
25 2-Methyl-2-propanol	59	4.397	4.416	-0.019	99	183471	50.0	49.5	
26 Acrylonitrile	53	4.586	4.605	-0.018	100	284687	25.0	23.0	
27 Methyl tert-butyl ether	73	4.653	4.672	-0.019	95	635748	5.00	4.65	
28 trans-1,2-Dichloroethene	96	4.671	4.678	-0.007	99	270622	5.00	4.79	
29 Hexane	57	5.098	5.104	-0.006	90	393197	5.00	5.09	
31 1,1-Dichloroethane	63	5.330	5.342	-0.012	96	491307	5.00	4.81	
32 Isopropyl ether	45	5.391	5.397	-0.006	94	819643	5.00	4.86	
33 2-Chloro-1,3-butadiene	53	5.446	5.452	-0.006	89	389886	5.00	4.76	
34 Tert-butyl ethyl ether	59	5.915	5.921	-0.006	97	769094	5.00	4.83	
36 2-Butanone (MEK)	43	6.128	6.141	-0.013	99	552163	37.5	34.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
37 cis-1,2-Dichloroethene	96	6.159	6.165	-0.006	81	334069	5.00	5.09	
38 2,2-Dichloropropane	77	6.171	6.177	-0.006	84	410625	5.00	5.00	
40 Propionitrile	54	6.214	6.232	-0.018	98	167166	37.5	36.1	
42 Methacrylonitrile	67	6.433	6.440	-0.007	90	565477	37.5	34.7	
43 Chlorobromomethane	128	6.494	6.500	-0.006	91	137983	5.00	4.77	
44 Tetrahydrofuran	71	6.506	6.513	-0.007	83	112631	25.0	23.4	
45 Chloroform	83	6.641	6.647	-0.007	92	493398	5.00	4.91	
$ 46 Dibromofluoromethane (Surr)	113	6.854	6.860	-0.006	94	472943	10.0	9.99	
47 1,1,1-Trichloroethane	97	6.866	6.872	-0.006	97	434725	5.00	4.81	
48 Cyclohexane	56	6.964	6.970	-0.006	88	480199	5.00	5.13	
50 Carbon tetrachloride	117	7.079	7.086	-0.007	96	398565	5.00	4.93	
51 1,1-Dichloropropene	75	7.079	7.086	-0.007	97	391259	5.00	4.88	
52 Isobutyl alcohol	41	7.232	7.232	0.000	95	155455	125.0	130.5	
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.311	7.317	-0.006	0	96614	10.0	10.1	
54 Benzene	78	7.342	7.348	-0.006	96	1172319	5.00	4.83	
56 1,2-Dichloroethane	62	7.415	7.421	-0.006	97	289731	5.00	4.88	
57 Tert-amyl methyl ether	73	7.524	7.531	-0.007	99	727911	5.00	4.99	
* 58 Fluorobenzene (IS)	96	7.744	7.750	-0.006	99	1917550	10.0	10.0	
59 n-Heptane	43	7.756	7.756	0.000	89	415720	5.00	5.36	
60 n-Butanol	56	8.104	8.104	0.000	86	276357	250.0	245.4	
61 Trichloroethene	95	8.219	8.226	-0.007	97	306546	5.00	4.82	
62 Methylcyclohexane	83	8.530	8.531	-0.001	94	547686	5.00	5.30	
63 1,2-Dichloropropane	63	8.555	8.555	0.000	92	303825	5.00	5.09	
64 Methyl methacrylate	69	8.634	8.634	0.000	88	142594	5.00	4.69	
65 1,4-Dioxane	88	8.640	8.640	0.000	33	38488	125.0	130.9	M
66 Dibromomethane	93	8.658	8.665	-0.007	93	139667	5.00	4.95	
68 Dichlorobromomethane	83	8.896	8.896	0.000	99	351262	5.00	4.91	
69 2-Nitropropane	41	9.164	9.165	-0.001	99	32893	5.00	4.31	
71 2-Chloroethyl vinyl ether	63		9.250				ND	ND	
72 1-Bromo-2-chloroethane	63	9.286	9.287	-0.001	98	296516	5.00	4.82	
73 cis-1,3-Dichloropropene	75	9.439	9.439	0.000	98	419225	5.00	4.88	
74 4-Methyl-2-pentanone (MIBK)	43	9.603	9.604	-0.001	95	921822	25.0	23.4	
$ 75 Toluene-d8 (Surr)	98	9.744	9.744	0.000	93	1909131	10.0	9.82	
76 Toluene	92	9.817	9.823	-0.006	98	775186	5.00	4.78	
78 trans-1,3-Dichloropropene	75	10.073	10.073	0.000	90	332926	5.00	4.75	
79 Ethyl methacrylate	69	10.134	10.134	0.000	88	296316	5.00	5.05	
80 1,1,2-Trichloroethane	97	10.274	10.274	0.000	90	219134	5.00	5.06	
81 Tetrachloroethene	166	10.365	10.366	-0.001	97	382223	5.00	4.87	
82 1,3-Dichloropropane	76	10.439	10.439	0.000	87	357793	5.00	4.84	
83 2-Hexanone	43	10.487	10.488	-0.001	95	649692	25.0	24.1	
85 Chlorodibromomethane	129	10.652	10.652	0.000	89	260042	5.00	4.78	
86 Ethylene Dibromide	107	10.762	10.762	0.000	98	206283	5.00	4.97	
* 87 Chlorobenzene-d5 (IS)	117	11.188	11.189	-0.001	85	1488380	10.0	10.0	
88 1-Chlorohexane	91	11.194	11.201	-0.007	95	445383	5.00	4.73	
90 Chlorobenzene	112	11.219	11.219	0.000	96	877398	5.00	4.89	
91 1,1,1,2-Tetrachloroethane	131	11.298	11.298	0.000	96	306558	5.00	4.92	
92 Ethylbenzene	91	11.298	11.304	-0.006	98	1517289	5.00	4.84	
93 m-Xylene & p-Xylene	106	11.414	11.414	0.000	0	1211177	10.0	9.79	
94 o-Xylene	106	11.743	11.743	0.000	96	594795	5.00	4.95	
95 Styrene	104	11.761	11.762	-0.001	96	969259	5.00	5.04	
96 Bromoform	173	11.920	11.920	0.000	98	152781	5.00	4.65	
97 Isopropylbenzene	105	12.042	12.042	0.000	95	1603352	5.00	5.02	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 100 4-Bromofluorobenzene (Surr)	95	12.188	12.188	0.000	95	713670	10.0	9.91	
101 1,1,2,2-Tetrachloroethane	83	12.286	12.286	0.000	94	270152	5.00	4.80	
102 Bromobenzene	156	12.304	12.304	0.000	94	384115	5.00	4.95	
103 trans-1,4-Dichloro-2-butene	53	12.310	12.310	0.000	89	257836	25.0	19.9	
104 1,2,3-Trichloropropane	110	12.335	12.335	0.000	83	76303	5.00	4.94	
105 N-Propylbenzene	91	12.371	12.371	0.000	99	1869465	5.00	4.91	
106 2-Chlorotoluene	126	12.444	12.451	-0.007	97	379196	5.00	4.87	
107 1,3,5-Trimethylbenzene	105	12.505	12.505	0.000	94	1337094	5.00	4.91	
108 4-Chlorotoluene	126	12.542	12.542	0.000	96	384670	5.00	4.90	
109 tert-Butylbenzene	134	12.749	12.749	0.000	92	298548	5.00	4.86	
110 Pentachloroethane	167	12.780	12.780	0.000	91	238466	5.00	4.90	
111 1,2,4-Trimethylbenzene	105	12.792	12.792	0.000	96	1356262	5.00	4.90	
112 sec-Butylbenzene	105	12.914	12.914	0.000	93	1769389	5.00	4.96	
113 1,3-Dichlorobenzene	146	13.011	13.011	0.000	98	761951	5.00	4.87	
114 4-Isopropyltoluene	119	13.017	13.018	-0.001	97	1539527	5.00	5.06	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	94	862169	10.0	10.0	
116 1,4-Dichlorobenzene	146	13.084	13.085	-0.001	96	759420	5.00	4.86	
117 1,2,3-Trimethylbenzene	120	13.097	13.097	0.000	98	610753	5.00	4.98	
118 Benzyl chloride	126	13.158	13.158	0.000	98	114829	5.00	5.40	
119 n-Butylbenzene	92	13.310	13.310	0.000	96	732939	5.00	4.93	
120 1,2-Dichlorobenzene	146	13.347	13.341	0.005	99	702216	5.00	4.92	
122 1,2-Dibromo-3-Chloropropane	155	13.889	13.883	0.006	95	42829	5.00	4.95	
123 1,3,5-Trichlorobenzene	180	14.011	14.011	0.000	98	558057	5.00	4.96	
124 1,2,4-Trichlorobenzene	180	14.432	14.432	0.000	94	472740	5.00	5.05	
125 Hexachlorobutadiene	225	14.517	14.517	0.000	96	201370	5.00	4.95	
126 Naphthalene	128	14.615	14.615	0.000	97	863778	5.00	4.94	
127 1,2,3-Trichlorobenzene	180	14.755	14.755	0.000	96	404919	5.00	5.01	
134 Isopropyl alcohol	45		0.000				ND	ND	
144 2-ethoxy-2-methyl butane	1		0.000				ND	ND	
135 p-Diethylbenzene	1		0.000				ND	ND	
137 2-Methylnaphthalene	142		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

MSV_Q_QVOA1_00057	Amount Added:	12.50	Units: uL	
MSV_Q_QARC_00056	Amount Added:	12.50	Units: uL	
MSV_Q_QVOA6_00055	Amount Added:	12.50	Units: uL	
MSV_Q_ETBR_00005	Amount Added:	12.50	Units: uL	
MSV_Q_EE_00003	Amount Added:	12.50	Units: uL	
MSV_QGAS_826_00093	Amount Added:	12.50	Units: uL	
MSV_31_826ISS_00003	Amount Added:	5.00	Units: uL	Run Reagent

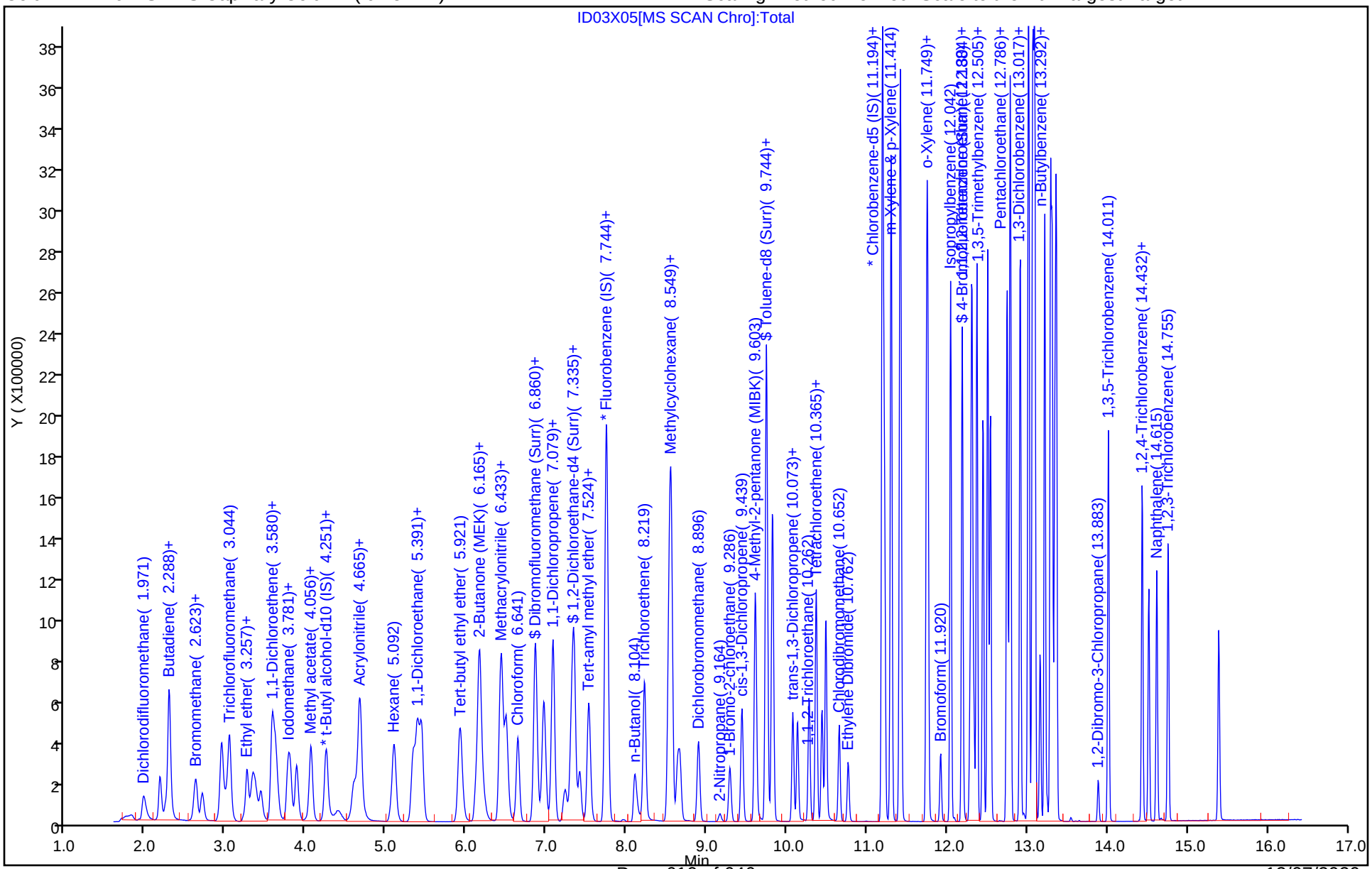
Report Date: 03-Dec-2020 12:31:22 Chrom Revision: 2.3 13-Nov-2020 01:23:02

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20201203-16986.b\ID03X05.D

Injection Date:	03-Dec-2020 10:26:30	Instrument ID:	19930	Operator ID:	kas02648
Lims ID:	LCSD			Worklist Smp#:	5
Client ID:					
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19930\20201203-16986.b\ID03X05.D
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 03-Dec-2020 10:26:30 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0016986-005
Misc. Info.: LCSD
Operator ID: kas02648 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20201203-16986.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 03-Dec-2020 12:30:55 Calib Date: 23-Nov-2020 18:05:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1682

First Level Reviewer: spositok Date: 03-Dec-2020 12:10:28

Compound	Amount Added	Amount Recovered	% Rec.
$ 46 Dibromofluoromethane (Surr)	10.0	9.99	99.89
$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	10.1	101.21
$ 75 Toluene-d8 (Surr)	10.0	9.82	98.22
$ 100 4-Bromofluorobenzene (Surr)	10.0	9.91	99.15

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 410-73040/5

Matrix: Water Lab File ID: ID04X05.D

Analysis Method: 8260D Date Collected:

Sample wt/vol: 25(mL) Date Analyzed: 12/04/2020 10:51

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 73040 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	4.89		0.50	0.070
71-55-6	1,1,1-Trichloroethane	4.73		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	4.79		0.50	0.070
79-00-5	1,1,2-Trichloroethane	5.05		0.50	0.060
75-34-3	1,1-Dichloroethane	4.84		0.50	0.070
75-35-4	1,1-Dichloroethene	4.54		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	4.89		0.50	0.060
107-06-2	1,2-Dichloroethane	4.64		0.50	0.050
78-87-5	1,2-Dichloropropane	5.01		0.50	0.060
78-93-3	2-Butanone (MEK)	35.4		5.0	0.60
591-78-6	2-Hexanone	24.8		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	23.7		5.0	0.70
67-64-1	Acetone	30.8		5.0	0.90
71-43-2	Benzene	4.73		0.50	0.050
74-97-5	Bromochloromethane	4.67		0.50	0.050
75-27-4	Bromodichloromethane	4.89		0.50	0.050
75-25-2	Bromoform	4.63		1.0	0.30
74-83-9	Bromomethane	4.79		0.50	0.070
75-15-0	Carbon disulfide	4.16		1.0	0.060
56-23-5	Carbon tetrachloride	4.83		0.50	0.070
108-90-7	Chlorobenzene	4.88		0.50	0.060
75-00-3	Chloroethane	4.65		0.50	0.070
67-66-3	Chloroform	4.84		0.50	0.090
74-87-3	Chloromethane	4.67		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	5.01		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	4.81		0.50	0.050
124-48-1	Dibromochloromethane	4.77		0.50	0.070
100-41-4	Ethylbenzene	4.79		0.50	0.060
1634-04-4	Methyl tert-butyl ether	4.63		0.50	0.050
75-09-2	Methylene Chloride	4.75		0.50	0.070
100-42-5	Styrene	4.97		0.50	0.050
127-18-4	Tetrachloroethene	4.82		0.50	0.060
108-88-3	Toluene	4.73		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	4.74		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	4.71		0.50	0.060
79-01-6	Trichloroethene	4.75		0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 410-73040/5

Matrix: Water Lab File ID: ID04X05.D

Analysis Method: 8260D Date Collected:

Sample wt/vol: 25(mL) Date Analyzed: 12/04/2020 10:51

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 73040 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-01-4	Vinyl chloride	4.93		0.50	0.10
1330-20-7	Xylenes, Total	14.7		1.0	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		80-120
1868-53-7	Dibromofluoromethane (Surr)	99		80-120
2037-26-5	Toluene-d8 (Surr)	98		80-120
460-00-4	4-Bromofluorobenzene (Surr)	100		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20201204-17111.b\ID04X05.D
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 04-Dec-2020 10:51:30 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0017111-005
Misc. Info.: LCSD
Operator ID: kas02648 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20201204-17111.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 04-Dec-2020 11:34:19 Calib Date: 23-Nov-2020 18:05:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1616

First Level Reviewer: spositok Date: 04-Dec-2020 11:21:48

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.971	1.971	0.000	99	324773	5.00	4.69	
4 Chloromethane	50	2.172	2.178	-0.006	99	375684	5.00	4.67	
6 Butadiene	39	2.288	2.288	0.000	90	331152	5.00	4.82	
5 Vinyl chloride	62	2.294	2.300	-0.006	98	365004	5.00	4.93	
7 Bromomethane	94	2.617	2.623	-0.006	90	257363	5.00	4.79	
8 Chloroethane	64	2.702	2.703	-0.001	99	211649	5.00	4.65	
9 Dichlorofluoromethane	67	2.940	2.940	0.000	97	440308	5.00	4.32	
10 Trichlorofluoromethane	101	3.019	3.013	0.006	97	474195	5.00	4.95	
11 Ethyl ether	59	3.263	3.263	0.000	89	228785	5.00	5.33	
12 1,2-Dichloro-1,1,2-trifluoroetha	67	3.330	3.337	-0.007	91	323956	5.00	4.82	
13 Acrolein	56	3.434	3.434	0.000	100	211325	37.5	28.2	
14 1,1-Dichloroethene	96	3.574	3.574	0.000	97	234895	5.00	4.54	
15 Acetone	43	3.611	3.605	0.006	100	288002	37.5	30.8	
16 112TCTFE	101	3.617	3.617	0.000	89	252483	5.00	4.61	
17 Iodomethane	142	3.769	3.769	0.000	98	445753	5.00	4.40	
18 Ethyl bromide	108	3.800	3.800	0.000	98	218655	5.01	4.64	
19 Carbon disulfide	76	3.879	3.879	0.000	98	625031	5.00	4.16	
21 Methyl acetate	43	4.031	4.032	-0.001	98	121894	5.00	4.79	
22 3-Chloro-1-propene	41	4.062	4.056	0.006	93	366079	5.00	4.65	
23 Methylene Chloride	84	4.251	4.245	0.006	90	272509	5.00	4.75	
* 24 t-Butyl alcohol-d10 (IS)	65	4.263	4.282	-0.019	0	171240	50.0	50.0	
25 2-Methyl-2-propanol	59	4.397	4.397	0.000	99	184824	50.0	50.6	
26 Acrylonitrile	53	4.586	4.592	-0.006	99	285619	25.0	23.4	
27 Methyl tert-butyl ether	73	4.659	4.659	0.000	94	641681	5.00	4.63	
28 trans-1,2-Dichloroethene	96	4.672	4.672	0.000	99	271281	5.00	4.74	
29 Hexane	57	5.098	5.092	0.006	90	393251	5.00	5.03	
31 1,1-Dichloroethane	63	5.336	5.330	0.006	96	500160	5.00	4.84	
32 Isopropyl ether	45	5.391	5.385	0.006	95	831019	5.00	4.86	
33 2-Chloro-1,3-butadiene	53	5.440	5.440	0.000	89	388373	5.00	4.68	
34 Tert-butyl ethyl ether	59	5.921	5.915	0.006	97	775626	5.00	4.81	
36 2-Butanone (MEK)	43	6.129	6.123	0.006	99	553578	37.5	35.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
37 cis-1,2-Dichloroethene	96	6.159	6.159	0.000	80	333080	5.00	5.01	
38 2,2-Dichloropropane	77	6.165	6.171	-0.006	85	411444	5.00	4.95	
40 Propionitrile	54	6.220	6.220	0.000	98	167592	37.5	36.7	
42 Methacrylonitrile	67	6.433	6.427	0.006	90	562928	37.5	35.0	
43 Chlorobromomethane	128	6.488	6.488	0.000	92	136669	5.00	4.67	
44 Tetrahydrofuran	71	6.500	6.494	0.006	88	110572	25.0	23.3	
45 Chloroform	83	6.641	6.635	0.006	92	492883	5.00	4.84	
$ 46 Dibromofluoromethane (Surr)	113	6.854	6.854	0.000	94	477072	10.0	9.95	
47 1,1,1-Trichloroethane	97	6.872	6.866	0.006	98	433286	5.00	4.73	
48 Cyclohexane	56	6.964	6.964	0.000	88	471489	5.00	4.97	
51 1,1-Dichloropropene	75	7.080	7.074	0.006	98	390102	5.00	4.80	
50 Carbon tetrachloride	117	7.074	7.080	-0.006	96	395736	5.00	4.83	
52 Isobutyl alcohol	41	7.232	7.226	0.006	95	153179	125.0	130.4	
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.311	7.305	0.006	0	95243	10.0	9.85	
54 Benzene	78	7.342	7.336	0.006	96	1164957	5.00	4.73	
56 1,2-Dichloroethane	62	7.415	7.409	0.006	97	278700	5.00	4.64	
57 Tert-amyl methyl ether	73	7.525	7.525	0.000	99	732351	5.00	4.95	
* 58 Fluorobenzene (IS)	96	7.744	7.738	0.006	99	1942323	10.0	10.0	
59 n-Heptane	43	7.750	7.750	0.000	91	415344	5.00	5.29	
60 n-Butanol	56	8.104	8.098	0.006	88	266471	250.0	240.1	
61 Trichloroethene	95	8.220	8.220	0.000	96	306099	5.00	4.75	
62 Methylcyclohexane	83	8.524	8.525	-0.001	94	540629	5.00	5.17	
63 1,2-Dichloropropane	63	8.555	8.549	0.006	92	303162	5.00	5.01	
64 Methyl methacrylate	69	8.634	8.628	0.006	89	138379	5.00	4.62	
65 1,4-Dioxane	88	8.634	8.634	0.000	33	36551	125.0	126.1	M
66 Dibromomethane	93	8.665	8.659	0.006	94	140988	5.00	4.93	
68 Dichlorobromomethane	83	8.896	8.890	0.006	99	354293	5.00	4.89	
69 2-Nitropropane	41	9.165	9.159	0.006	98	32407	5.00	4.31	
71 2-Chloroethyl vinyl ether	63		9.250				ND	ND	
72 1-Bromo-2-chloroethane	63	9.287	9.287	-0.001	98	301609	5.00	4.85	
73 cis-1,3-Dichloropropene	75	9.439	9.433	0.006	97	417948	5.00	4.81	
74 4-Methyl-2-pentanone (MIBK)	43	9.604	9.604	0.000	95	921695	25.0	23.7	
$ 75 Toluene-d8 (Surr)	98	9.744	9.744	0.000	93	1922028	10.0	9.84	
76 Toluene	92	9.817	9.817	0.000	98	771468	5.00	4.73	
78 trans-1,3-Dichloropropene	75	10.073	10.067	0.006	90	331929	5.00	4.71	
79 Ethyl methacrylate	69	10.128	10.128	0.000	88	301247	5.00	5.11	
80 1,1,2-Trichloroethane	97	10.274	10.274	0.000	90	219956	5.00	5.05	
81 Tetrachloroethene	166	10.366	10.366	0.000	98	380420	5.00	4.82	
82 1,3-Dichloropropane	76	10.439	10.439	0.000	86	359768	5.00	4.84	
83 2-Hexanone	43	10.487	10.482	0.005	96	659861	25.0	24.8	
85 Chlorodibromomethane	129	10.652	10.652	0.000	90	260729	5.00	4.77	
86 Ethylene Dibromide	107	10.762	10.762	0.000	98	203744	5.00	4.89	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.189	0.000	84	1495854	10.0	10.0	
88 1-Chlorohexane	91	11.195	11.195	0.000	95	444472	5.00	4.70	
90 Chlorobenzene	112	11.219	11.213	0.006	97	880703	5.00	4.88	
91 1,1,1,2-Tetrachloroethane	131	11.298	11.298	0.000	97	305912	5.00	4.89	
92 Ethylbenzene	91	11.298	11.298	0.000	98	1509661	5.00	4.79	
93 m-Xylene & p-Xylene	106	11.414	11.414	0.000	0	1214845	10.0	9.77	
94 o-Xylene	106	11.743	11.743	0.000	96	593356	5.00	4.91	
95 Styrene	104	11.762	11.756	0.006	95	962223	5.00	4.97	
96 Bromoform	173	11.920	11.914	0.006	98	152923	5.00	4.63	
97 Isopropylbenzene	105	12.042	12.042	0.000	95	1583529	5.00	4.93	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 100 4-Bromofluorobenzene (Surr)	95	12.188	12.189	0.000	95	719980	10.0	9.95	
101 1,1,2,2-Tetrachloroethane	83	12.286	12.286	0.000	93	270294	5.00	4.79	
102 Bromobenzene	156	12.304	12.304	0.000	94	380341	5.00	4.88	
103 trans-1,4-Dichloro-2-butene	53	12.310	12.310	0.000	90	258151	25.0	20.3	
104 1,2,3-Trichloropropane	110	12.335	12.335	0.000	83	74544	5.00	4.81	
105 N-Propylbenzene	91	12.371	12.371	0.000	99	1853657	5.00	4.86	
106 2-Chlorotoluene	126	12.444	12.445	-0.001	97	379230	5.00	4.86	
107 1,3,5-Trimethylbenzene	105	12.505	12.506	-0.001	94	1340445	5.00	4.91	
108 4-Chlorotoluene	126	12.542	12.542	0.000	96	388013	5.00	4.92	
109 tert-Butylbenzene	134	12.749	12.749	0.000	92	296639	5.00	4.81	
110 Pentachloroethane	167	12.780	12.780	0.000	94	238695	5.00	4.89	
111 1,2,4-Trimethylbenzene	105	12.792	12.786	0.006	96	1358904	5.00	4.90	
112 sec-Butylbenzene	105	12.908	12.914	-0.006	93	1762816	5.00	4.92	
113 1,3-Dichlorobenzene	146	13.011	13.012	-0.001	99	761722	5.00	4.86	
114 4-Isopropyltoluene	119	13.017	13.018	-0.001	97	1541426	5.00	5.05	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	93	864761	10.0	10.0	
116 1,4-Dichlorobenzene	146	13.085	13.085	0.000	95	767191	5.00	4.89	
117 1,2,3-Trimethylbenzene	120	13.091	13.091	0.000	98	623955	5.00	5.07	
118 Benzyl chloride	126	13.158	13.158	0.000	98	116016	5.00	5.43	
119 n-Butylbenzene	92	13.310	13.310	0.000	96	730991	5.00	4.90	
120 1,2-Dichlorobenzene	146	13.347	13.341	0.006	99	704081	5.00	4.92	
122 1,2-Dibromo-3-Chloropropane	155	13.883	13.883	0.000	91	44339	5.00	5.11	
123 1,3,5-Trichlorobenzene	180	14.011	14.011	0.000	98	556692	5.00	4.93	
124 1,2,4-Trichlorobenzene	180	14.438	14.432	0.006	94	473869	5.00	5.05	
125 Hexachlorobutadiene	225	14.517	14.517	0.000	96	200976	5.00	4.92	
126 Naphthalene	128	14.615	14.615	0.000	97	872984	5.00	4.97	
127 1,2,3-Trichlorobenzene	180	14.761	14.761	0.000	96	403385	5.00	4.98	
134 Isopropyl alcohol	45		0.000				ND	ND	
144 2-ethoxy-2-methyl butane	1		0.000				ND	ND	
135 p-Diethylbenzene	1		0.000				ND	ND	
137 2-Methylnaphthalene	142		0.000				ND	ND	
204 Pentane	43		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

MSV_Q_QVOA1_00057	Amount Added:	12.50	Units: uL	
MSV_Q_QARC_00056	Amount Added:	12.50	Units: uL	
MSV_Q_QVOA6_00055	Amount Added:	12.50	Units: uL	
MSV_Q_ETBR_00005	Amount Added:	12.50	Units: uL	
MSV_Q_EE_00003	Amount Added:	12.50	Units: uL	
MSV_QGAS_826_00093	Amount Added:	12.50	Units: uL	
MSV_31_826ISS_00003	Amount Added:	5.00	Units: uL	Run Reagent

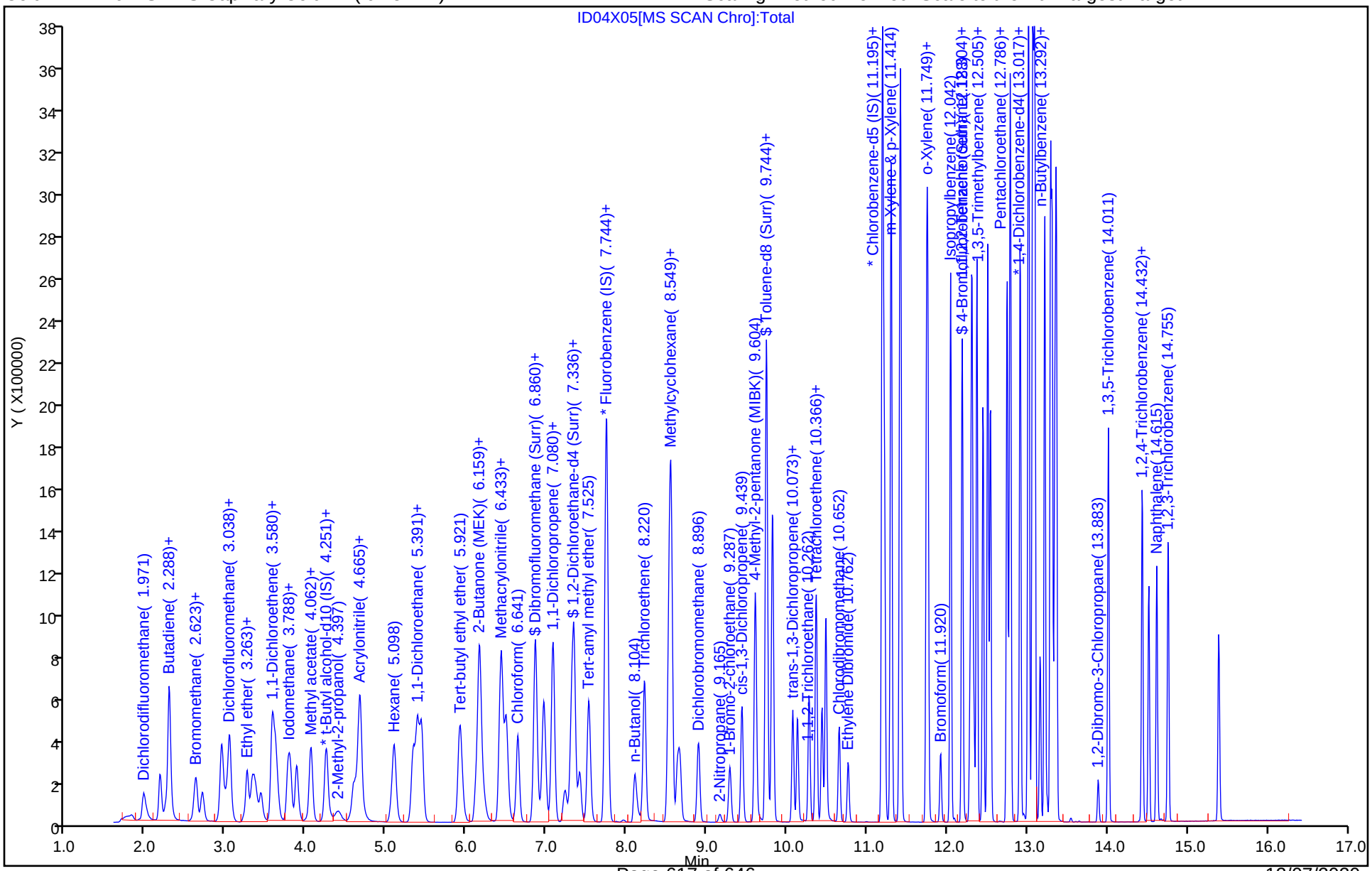
Report Date: 04-Dec-2020 11:34:45 Chrom Revision: 2.3 13-Nov-2020 01:23:02

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20201204-17111.b\ID04X05.D

Injection Date:	04-Dec-2020 10:51:30	Instrument ID:	19930	Operator ID:	kas02648
Lims ID:	LCSD			Worklist Smp#:	5
Client ID:					
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19930\20201204-17111.b\ID04X05.D
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 04-Dec-2020 10:51:30 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0017111-005
Misc. Info.: LCSD
Operator ID: kas02648 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20201204-17111.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 04-Dec-2020 11:34:19 Calib Date: 23-Nov-2020 18:05:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1616

First Level Reviewer: spositok Date: 04-Dec-2020 11:21:48

Compound	Amount Added	Amount Recovered	% Rec.
$ 46 Dibromofluoromethane (Surr)	10.0	9.95	99.48
$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	9.85	98.50
$ 75 Toluene-d8 (Surr)	10.0	9.84	98.39
$ 100 4-Bromofluorobenzene (Surr)	10.0	9.95	99.52

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1

SDG No.:

Client Sample ID: HD-COD-SW-15-0/1-0 MS MS Lab Sample ID: 410-22411-6 MS

Matrix: Water Lab File ID: ID03X10.D

Analysis Method: 8260D Date Collected: 11/30/2020 10:25

Sample wt/vol: 25(mL) Date Analyzed: 12/03/2020 13:43

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 72509 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	5.23		0.50	0.070
71-55-6	1,1,1-Trichloroethane	5.29		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	5.02		0.50	0.070
79-00-5	1,1,2-Trichloroethane	5.32		0.50	0.060
75-34-3	1,1-Dichloroethane	5.24		0.50	0.070
75-35-4	1,1-Dichloroethene	5.26		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	5.10		0.50	0.060
107-06-2	1,2-Dichloroethane	5.10		0.50	0.050
78-87-5	1,2-Dichloropropane	5.33		0.50	0.060
78-93-3	2-Butanone (MEK)	36.0		5.0	0.60
591-78-6	2-Hexanone	25.1		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	24.1		5.0	0.70
67-64-1	Acetone	33.6		5.0	0.90
71-43-2	Benzene	5.18		0.50	0.050
74-97-5	Bromochloromethane	5.04		0.50	0.050
75-27-4	Bromodichloromethane	5.20		0.50	0.050
75-25-2	Bromoform	4.94		1.0	0.30
74-83-9	Bromomethane	5.08		0.50	0.070
75-15-0	Carbon disulfide	4.69		1.0	0.060
56-23-5	Carbon tetrachloride	5.46		0.50	0.070
108-90-7	Chlorobenzene	5.27		0.50	0.060
75-00-3	Chloroethane	5.05		0.50	0.070
67-66-3	Chloroform	5.33		0.50	0.090
74-87-3	Chloromethane	4.86		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	5.64		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	5.05		0.50	0.050
124-48-1	Dibromochloromethane	5.03		0.50	0.070
100-41-4	Ethylbenzene	5.29		0.50	0.060
1634-04-4	Methyl tert-butyl ether	4.79		0.50	0.050
75-09-2	Methylene Chloride	5.09		0.50	0.070
100-42-5	Styrene	5.38		0.50	0.050
127-18-4	Tetrachloroethene	6.00		0.50	0.060
108-88-3	Toluene	5.22		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	5.19		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	4.90		0.50	0.060
79-01-6	Trichloroethene	5.59		0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1

SDG No.:

Client Sample ID: HD-COD-SW-15-0/1-0 MS MS Lab Sample ID: 410-22411-6 MS

Matrix: Water Lab File ID: ID03X10.D

Analysis Method: 8260D Date Collected: 11/30/2020 10:25

Sample wt/vol: 25(mL) Date Analyzed: 12/03/2020 13:43

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 72509 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-01-4	Vinyl chloride	5.37		0.50	0.10
1330-20-7	Xylenes, Total	16.0		1.0	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		80-120
1868-53-7	Dibromofluoromethane (Surr)	99		80-120
2037-26-5	Toluene-d8 (Surr)	100		80-120
460-00-4	4-Bromofluorobenzene (Surr)	101		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20201203-16986.b\ID03X10.D
Lims ID: 410-22411-A-6 MS
Client ID: HD-COD-SW-15-0/1-0 MS
Sample Type: MS
Inject. Date: 03-Dec-2020 13:43:30 ALS Bottle#: 10 Worklist Smp#: 10
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0016986-010
Operator ID: kas02648 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20201203-16986.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 04-Dec-2020 08:49:27 Calib Date: 23-Nov-2020 18:05:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1657

First Level Reviewer: campbellme Date: 03-Dec-2020 18:38:17

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.983	1.989	-0.006	99	312565	5.02	4.58	
4 Chloromethane	50	2.184	2.190	-0.006	99	384319	5.02	4.86	
6 Butadiene	39	2.294	2.300	-0.006	89	367920	5.02	5.44	
5 Vinyl chloride	62	2.306	2.312	-0.006	98	391208	5.02	5.37	
7 Bromomethane	94	2.629	2.635	-0.006	90	268317	5.02	5.08	
8 Chloroethane	64	2.715	2.715	0.000	100	226151	5.02	5.05	
9 Dichlorofluoromethane	67	2.952	2.958	-0.006	97	507581	5.02	5.06	
10 Trichlorofluoromethane	101	3.026	3.032	-0.006	97	523370	5.02	5.55	
11 Ethyl ether	59	3.269	3.276	-0.007	90	240825	5.02	5.70	
12 1,2-Dichloro-1,1,2-trifluoroetha	67	3.349	3.349	0.000	90	365958	5.02	5.53	
13 Acrolein	56	3.440	3.446	-0.006	100	223139	37.7	29.7	
14 1,1-Dichloroethene	96	3.586	3.586	0.000	97	267996	5.02	5.26	
15 Acetone	43	3.617	3.617	0.000	100	314246	37.7	33.6	
16 112TCTFE	101	3.623	3.629	-0.006	90	290543	5.02	5.39	
17 Iodomethane	142	3.782	3.782	0.000	98	479363	5.02	4.81	
18 Ethyl bromide	108	3.806	3.818	-0.012	98	243311	5.03	5.25	
19 Carbon disulfide	76	3.885	3.891	-0.006	98	693219	5.02	4.69	
21 Methyl acetate	43	4.044	4.044	0.000	97	118569	5.02	4.65	
22 3-Chloro-1-propene	41	4.068	4.068	0.000	92	391470	5.02	5.05	
23 Methylene Chloride	84	4.257	4.263	-0.006	91	287287	5.02	5.09	
* 24 t-Butyl alcohol-d10 (IS)	65	4.288	4.288	0.000	0	171453	50.0	50.0	
25 2-Methyl-2-propanol	59	4.409	4.416	-0.007	99	193436	50.2	52.9	
26 Acrylonitrile	53	4.605	4.605	0.000	98	288838	25.1	23.7	
27 Methyl tert-butyl ether	73	4.672	4.672	0.000	94	653280	5.02	4.79	
28 trans-1,2-Dichloroethene	96	4.678	4.678	0.000	99	291875	5.02	5.19	
29 Hexane	57	5.104	5.104	0.000	90	444779	5.02	5.78	
31 1,1-Dichloroethane	63	5.336	5.342	-0.006	96	533209	5.02	5.24	
32 Isopropyl ether	45	5.391	5.397	-0.006	94	850998	5.02	5.06	
33 2-Chloro-1,3-butadiene	53	5.446	5.452	-0.006	89	428192	5.02	5.24	
34 Tert-butyl ethyl ether	59	5.927	5.921	0.006	97	790117	5.02	4.98	
36 2-Butanone (MEK)	43	6.135	6.141	-0.006	99	563517	37.7	36.0	
37 cis-1,2-Dichloroethene	96	6.165	6.165	0.000	82	368702	5.02	5.64	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
38 2,2-Dichloropropane	77	6.177	6.177	0.000	85	452860	5.02	5.54	
40 Propionitrile	54	6.226	6.232	-0.006	98	165619	37.7	36.2	
42 Methacrylonitrile	67	6.433	6.440	-0.007	89	567591	37.7	35.3	
43 Chlorobromomethane	128	6.494	6.500	-0.006	92	145199	5.02	5.04	
44 Tetrahydrofuran	71	6.507	6.513	-0.006	83	114223	25.1	24.1	
45 Chloroform	83	6.647	6.647	0.000	93	534315	5.02	5.33	
$ 46 Dibromofluoromethane (Surr)	113	6.860	6.860	0.000	94	468883	10.0	9.94	
47 1,1,1-Trichloroethane	97	6.872	6.872	0.000	98	476505	5.02	5.29	
48 Cyclohexane	56	6.964	6.970	-0.006	88	538984	5.02	5.78	
50 Carbon tetrachloride	117	7.080	7.086	-0.006	87	439705	5.02	5.46	
51 1,1-Dichloropropene	75	7.086	7.086	0.000	97	435971	5.02	5.46	
52 Isobutyl alcohol	41	7.232	7.232	0.000	96	148219	125.6	126.1	
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.311	7.317	-0.006	0	93751	10.0	9.86	
54 Benzene	78	7.348	7.348	0.000	96	1253638	5.02	5.18	
56 1,2-Dichloroethane	62	7.415	7.421	-0.006	97	301237	5.02	5.10	
57 Tert-amyl methyl ether	73	7.525	7.531	-0.006	100	744676	5.02	5.12	
* 58 Fluorobenzene (IS)	96	7.744	7.750	-0.006	99	1910778	10.0	10.0	
59 n-Heptane	43	7.756	7.756	0.000	90	463351	5.02	5.99	
60 n-Butanol	56	8.104	8.104	0.000	87	293542	251.2	264.1	
61 Trichloroethene	95	8.220	8.226	-0.006	96	354129	5.02	5.59	
62 Methylcyclohexane	83	8.524	8.531	-0.007	94	613376	5.02	5.96	
63 1,2-Dichloropropane	63	8.555	8.555	0.000	84	317004	5.02	5.33	
64 Methyl methacrylate	69	8.628	8.634	-0.006	87	143687	5.02	4.79	
65 1,4-Dioxane	88	8.640	8.640	0.000	32	40553	125.6	139.8	M
66 Dibromomethane	93	8.659	8.665	-0.006	93	144244	5.02	5.13	
68 Dichlorobromomethane	83	8.896	8.896	0.000	99	370679	5.02	5.20	
69 2-Nitropropane	41	9.165	9.165	0.000	99	30824	5.02	4.09	
71 2-Chloroethyl vinyl ether	63		9.250				ND	ND	
72 1-Bromo-2-chloroethane	63	9.287	9.287	0.000	98	314735	5.02	5.14	
73 cis-1,3-Dichloropropene	75	9.439	9.439	0.000	98	431862	5.02	5.05	
74 4-Methyl-2-pentanone (MIBK)	43	9.604	9.604	0.000	95	936059	25.1	24.1	
$ 75 Toluene-d8 (Surr)	98	9.744	9.744	0.000	93	1908360	10.0	9.96	
76 Toluene	92	9.823	9.823	0.000	98	835661	5.02	5.22	
78 trans-1,3-Dichloropropene	75	10.073	10.073	0.000	90	338370	5.02	4.90	
79 Ethyl methacrylate	69	10.134	10.134	0.000	88	307974	5.02	5.33	
80 1,1,2-Trichloroethane	97	10.274	10.274	0.000	89	227351	5.02	5.32	
81 Tetrachloroethene	166	10.366	10.366	0.000	97	464874	5.02	6.00	
82 1,3-Dichloropropane	76	10.439	10.439	0.000	87	368607	5.02	5.05	
83 2-Hexanone	43	10.488	10.488	0.000	95	666925	25.1	25.1	
85 Chlorodibromomethane	129	10.652	10.652	0.000	90	270057	5.02	5.03	
86 Ethylene Dibromide	107	10.762	10.762	0.000	99	208378	5.02	5.10	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.189	0.000	85	1467267	10.0	10.0	
88 1-Chlorohexane	91	11.195	11.201	-0.006	94	492832	5.02	5.31	
90 Chlorobenzene	112	11.219	11.219	0.000	97	932654	5.02	5.27	
91 1,1,1,2-Tetrachloroethane	131	11.298	11.298	0.000	95	321293	5.02	5.23	
92 Ethylbenzene	91	11.304	11.304	0.000	98	1634764	5.02	5.29	
93 m-Xylene & p-Xylene	106	11.414	11.414	0.000	0	1303259	10.0	10.7	
94 o-Xylene	106	11.743	11.743	0.000	96	629122	5.02	5.31	
95 Styrene	104	11.762	11.762	0.000	95	1020028	5.02	5.38	
96 Bromoform	173	11.920	11.920	0.000	98	160086	5.02	4.94	
97 Isopropylbenzene	105	12.042	12.042	0.000	95	1712443	5.02	5.44	
$ 100 4-Bromofluorobenzene (Surr)	95	12.188	12.188	0.000	94	715595	10.0	10.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
101 1,1,2,2-Tetrachloroethane	83	12.286	12.286	0.000	93	279957	5.02	5.02	
102 Bromobenzene	156	12.304	12.304	0.000	93	402109	5.02	5.23	
103 trans-1,4-Dichloro-2-butene	53	12.310	12.310	0.000	92	267371	25.1	21.0	
104 1,2,3-Trichloropropane	110	12.335	12.335	0.000	82	77254	5.02	5.05	
105 N-Propylbenzene	91	12.371	12.371	0.000	99	2016322	5.02	5.35	
106 2-Chlorotoluene	126	12.451	12.451	0.000	98	412309	5.02	5.35	
107 1,3,5-Trimethylbenzene	105	12.505	12.505	0.000	94	1435572	5.02	5.32	
108 4-Chlorotoluene	126	12.542	12.542	0.000	96	411582	5.02	5.29	
109 tert-Butylbenzene	134	12.749	12.749	0.000	92	328423	5.02	5.39	
110 Pentachloroethane	167	12.780	12.780	0.000	92	249805	5.02	5.18	
111 1,2,4-Trimethylbenzene	105	12.792	12.792	0.000	96	1455334	5.02	5.31	
112 sec-Butylbenzene	105	12.914	12.914	0.000	93	1937157	5.02	5.48	
113 1,3-Dichlorobenzene	146	13.011	13.011	0.000	99	808380	5.02	5.22	
114 4-Isopropyltoluene	119	13.018	13.018	0.000	97	1678505	5.02	5.57	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	93	854262	10.0	10.0	
116 1,4-Dichlorobenzene	146	13.085	13.085	0.000	96	811509	5.02	5.24	
117 1,2,3-Trimethylbenzene	120	13.091	13.097	-0.006	98	648759	5.02	5.33	
118 Benzyl chloride	126	13.158	13.158	0.000	98	120388	5.02	5.71	
119 n-Butylbenzene	92	13.310	13.310	0.000	97	807354	5.02	5.48	
120 1,2-Dichlorobenzene	146	13.347	13.341	0.006	99	739073	5.02	5.23	
122 1,2-Dibromo-3-Chloropropane	155	13.883	13.883	0.000	90	44427	5.02	5.19	
123 1,3,5-Trichlorobenzene	180	14.011	14.011	0.000	98	592102	5.02	5.31	
124 1,2,4-Trichlorobenzene	180	14.432	14.432	0.000	94	497598	5.02	5.36	
125 Hexachlorobutadiene	225	14.517	14.517	0.000	96	232253	5.02	5.76	
126 Naphthalene	128	14.615	14.615	0.000	97	888956	5.02	5.13	
127 1,2,3-Trichlorobenzene	180	14.755	14.755	0.000	95	419468	5.02	5.24	
134 Isopropyl alcohol	45		0.000				ND	ND	
144 2-ethoxy-2-methyl butane	1		0.000				ND	ND	
135 p-Diethylbenzene	1		0.000				ND	ND	
137 2-Methylnaphthalene	142		0.000				ND	ND	
204 Pentane	43		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

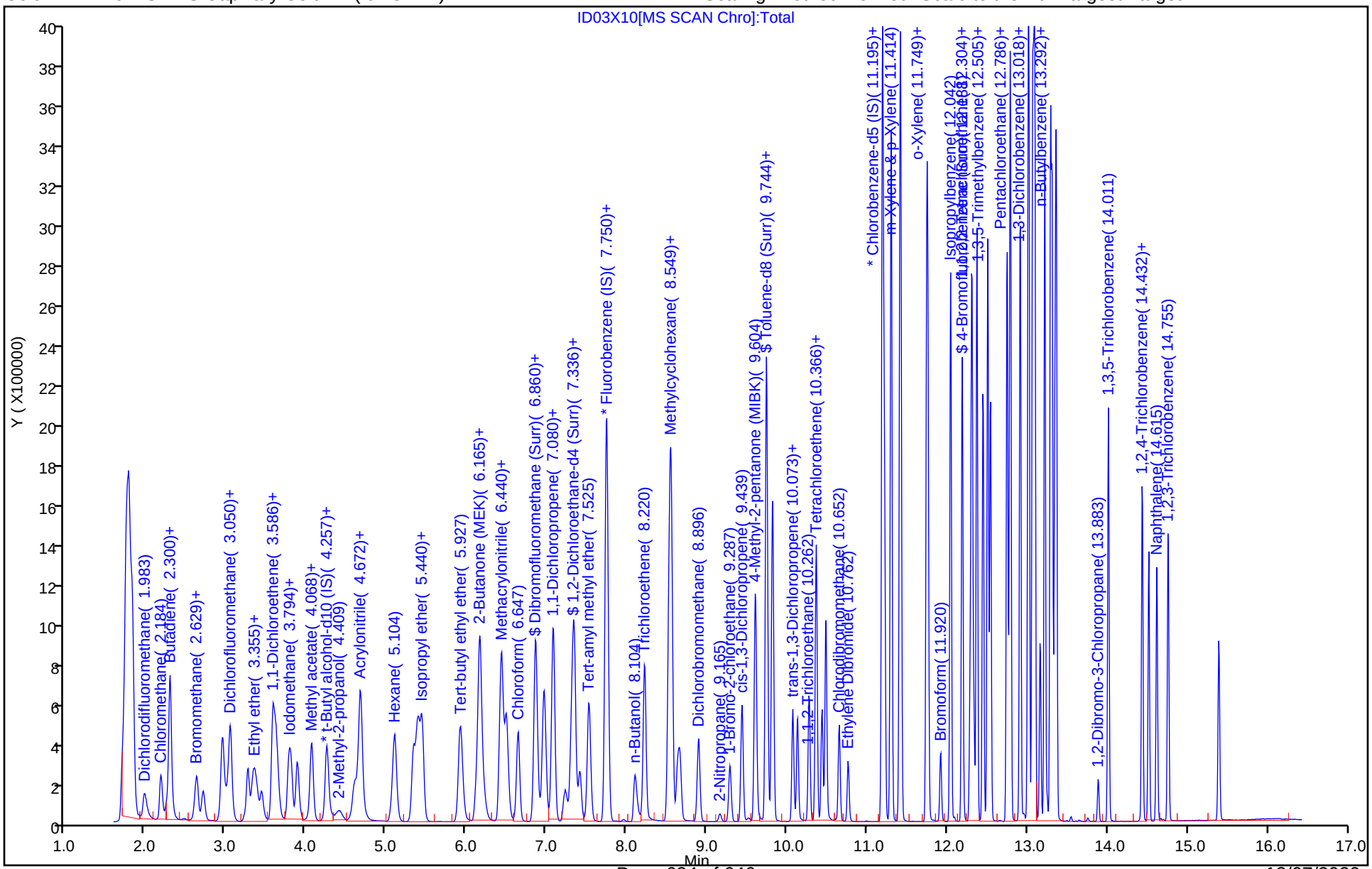
MSV_Q_QVOA1_00057	Amount Added:	5.40	Units: uL	
MSV_Q_QARC_00056	Amount Added:	5.40	Units: uL	
MSV_Q_ETBR_00005	Amount Added:	5.40	Units: uL	
MSV_Q_EE_00003	Amount Added:	5.40	Units: uL	
MSV_QGAS_826_00093	Amount Added:	5.40	Units: uL	
MSV_Q_QVOA6_00055	Amount Added:	5.40	Units: uL	
MSV_31_826ISS_00003	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 04-Dec-2020 08:50:07 Chrom Revision: 2.3 13-Nov-2020 01:23:02

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20201203-16986.b\ID03X10.D				
Injection Date:	03-Dec-2020 13:43:30	Instrument ID:	19930	Operator ID:	kas02648
Lims ID:	410-22411-A-6 MS			Worklist Smp#:	10
Client ID:	HD-COD-SW-15-0/1-0 MS				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\19930\20201203-16986.b\ID03X10.D				
Lims ID:	410-22411-A-6 MS				
Client ID:	HD-COD-SW-15-0/1-0 MS				
Sample Type:	MS				
Inject. Date:	03-Dec-2020 13:43:30	ALS Bottle#:	10	Worklist Smp#:	10
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Sample Info:	410-0016986-010				
Operator ID:	kas02648	Instrument ID:	19930		
Method:	\\chromfs\Lancaster\ChromData\19930\20201203-16986.b\8260 25ml HP31.m				
Limit Group:	MSV - 8260C_D				
Last Update:	04-Dec-2020 08:49:27	Calib Date:	23-Nov-2020 18:05:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I17.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1657				

First Level Reviewer: campbellme Date: 03-Dec-2020 18:38:17

Compound	Amount Added	Amount Recovered	% Rec.
$ 46 Dibromofluoromethane (Surr)	10.0	9.94	99.38
$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	9.86	98.56
$ 75 Toluene-d8 (Surr)	10.0	9.96	99.59
$ 100 4-Bromofluorobenzene (Surr)	10.0	10.1	100.84

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1

SDG No.:

Client Sample ID: HD-COD-SW-15-0/1-0 MSD MSD Lab Sample ID: 410-22411-6 MSD

Matrix: Water Lab File ID: ID03X11.D

Analysis Method: 8260D Date Collected: 11/30/2020 10:25

Sample wt/vol: 25(mL) Date Analyzed: 12/03/2020 14:04

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 72509 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	5.30		0.50	0.070
71-55-6	1,1,1-Trichloroethane	5.41		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	5.10		0.50	0.070
79-00-5	1,1,2-Trichloroethane	5.35		0.50	0.060
75-34-3	1,1-Dichloroethane	5.34		0.50	0.070
75-35-4	1,1-Dichloroethene	5.37		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	5.19		0.50	0.060
107-06-2	1,2-Dichloroethane	5.14		0.50	0.050
78-87-5	1,2-Dichloropropane	5.45		0.50	0.060
78-93-3	2-Butanone (MEK)	36.6		5.0	0.60
591-78-6	2-Hexanone	25.4		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	24.7		5.0	0.70
67-64-1	Acetone	36.9		5.0	0.90
71-43-2	Benzene	5.27		0.50	0.050
74-97-5	Bromochloromethane	5.06		0.50	0.050
75-27-4	Bromodichloromethane	5.25		0.50	0.050
75-25-2	Bromoform	4.93		1.0	0.30
74-83-9	Bromomethane	5.09		0.50	0.070
75-15-0	Carbon disulfide	4.85		1.0	0.060
56-23-5	Carbon tetrachloride	5.60		0.50	0.070
108-90-7	Chlorobenzene	5.34		0.50	0.060
75-00-3	Chloroethane	5.04		0.50	0.070
67-66-3	Chloroform	5.44		0.50	0.090
74-87-3	Chloromethane	4.95		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	5.81		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	5.18		0.50	0.050
124-48-1	Dibromochloromethane	5.14		0.50	0.070
100-41-4	Ethylbenzene	5.37		0.50	0.060
1634-04-4	Methyl tert-butyl ether	4.91		0.50	0.050
75-09-2	Methylene Chloride	5.12		0.50	0.070
100-42-5	Styrene	5.40		0.50	0.050
127-18-4	Tetrachloroethene	6.17		0.50	0.060
108-88-3	Toluene	5.27		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	5.38		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	5.05		0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1

SDG No.:

Client Sample ID: HD-COD-SW-15-0/1-0 MSD MSD Lab Sample ID: 410-22411-6 MSD

Matrix: Water Lab File ID: ID03X11.D

Analysis Method: 8260D Date Collected: 11/30/2020 10:25

Sample wt/vol: 25(mL) Date Analyzed: 12/03/2020 14:04

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 72509 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-01-6	Trichloroethene	5.73		0.50	0.060
75-01-4	Vinyl chloride	5.42		0.50	0.10
1330-20-7	Xylenes, Total	16.3		1.0	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		80-120
1868-53-7	Dibromofluoromethane (Surr)	100		80-120
2037-26-5	Toluene-d8 (Surr)	98		80-120
460-00-4	4-Bromofluorobenzene (Surr)	99		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20201203-16986.b\ID03X11.D
Lims ID: 410-22411-A-6 MSD
Client ID: HD-COD-SW-15-0/1-0 MSD
Sample Type: MSD
Inject. Date: 03-Dec-2020 14:04:30 ALS Bottle#: 11 Worklist Smp#: 11
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0016986-011
Operator ID: kas02648 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20201203-16986.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 04-Dec-2020 08:49:27 Calib Date: 23-Nov-2020 18:05:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1657

First Level Reviewer: campbellme Date: 03-Dec-2020 18:41:48

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.971	1.989	-0.018	99	314523	5.02	4.64	
4 Chloromethane	50	2.172	2.190	-0.018	99	389593	5.02	4.95	
6 Butadiene	39	2.288	2.300	-0.012	89	369196	5.02	5.49	
5 Vinyl chloride	62	2.294	2.312	-0.018	98	393173	5.02	5.42	
7 Bromomethane	94	2.623	2.635	-0.012	90	267299	5.02	5.09	
8 Chloroethane	64	2.702	2.715	-0.013	100	224613	5.02	5.04	
9 Dichlorofluoromethane	67	2.940	2.958	-0.018	97	509996	5.02	5.11	
10 Trichlorofluoromethane	101	3.013	3.032	-0.019	97	516476	5.02	5.51	
11 Ethyl ether	59	3.263	3.276	-0.013	89	244454	5.02	5.82	
12 1,2-Dichloro-1,1,2-trifluoroetha	67	3.336	3.349	-0.013	92	373625	5.02	5.68	
13 Acrolein	56	3.434	3.446	-0.012	98	222461	37.7	29.6	
14 1,1-Dichloroethene	96	3.574	3.586	-0.012	97	272166	5.02	5.37	
15 Acetone	43	3.605	3.617	-0.012	100	344446	37.7	36.9	
16 112TCTFE	101	3.617	3.629	-0.012	90	292598	5.02	5.46	
17 Iodomethane	142	3.769	3.782	-0.013	98	485107	5.02	4.90	
18 Ethyl bromide	108	3.800	3.818	-0.018	98	248135	5.03	5.38	
19 Carbon disulfide	76	3.879	3.891	-0.012	98	712357	5.02	4.85	
21 Methyl acetate	43	4.031	4.044	-0.013	97	117615	5.02	4.61	
22 3-Chloro-1-propene	41	4.056	4.068	-0.012	94	403627	5.02	5.24	
23 Methylene Chloride	84	4.245	4.263	-0.018	90	287849	5.02	5.12	
* 24 t-Butyl alcohol-d10 (IS)	65	4.257	4.288	-0.031	0	171422	50.0	50.0	
25 2-Methyl-2-propanol	59	4.391	4.416	-0.025	99	193394	50.2	52.9	
26 Acrylonitrile	53	4.592	4.605	-0.012	100	300423	25.1	24.6	
27 Methyl tert-butyl ether	73	4.653	4.672	-0.019	94	666417	5.02	4.91	
28 trans-1,2-Dichloroethene	96	4.672	4.678	-0.006	100	301119	5.02	5.38	
29 Hexane	57	5.092	5.104	-0.012	89	449692	5.02	5.87	
31 1,1-Dichloroethane	63	5.330	5.342	-0.012	96	540540	5.02	5.34	
32 Isopropyl ether	45	5.385	5.397	-0.012	94	857694	5.02	5.13	
33 2-Chloro-1,3-butadiene	53	5.434	5.452	-0.018	89	435928	5.02	5.37	
34 Tert-butyl ethyl ether	59	5.921	5.921	0.000	97	794122	5.02	5.03	
36 2-Butanone (MEK)	43	6.135	6.141	-0.006	99	572198	37.7	36.6	
37 cis-1,2-Dichloroethene	96	6.159	6.165	-0.006	80	378074	5.02	5.81	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
38 2,2-Dichloropropane	77	6.171	6.177	-0.006	85	457089	5.02	5.62	
40 Propionitrile	54	6.220	6.232	-0.012	98	169455	37.7	37.1	
42 Methacrylonitrile	67	6.433	6.440	-0.007	90	581089	37.7	36.1	
43 Chlorobromomethane	128	6.488	6.500	-0.012	91	144894	5.02	5.06	
44 Tetrahydrofuran	71	6.500	6.513	-0.013	82	116038	25.1	24.5	
45 Chloroform	83	6.641	6.647	-0.006	92	542399	5.02	5.44	
$ 46 Dibromofluoromethane (Surr)	113	6.854	6.860	-0.006	94	467632	10.0	9.96	
47 1,1,1-Trichloroethane	97	6.860	6.872	-0.012	98	484379	5.02	5.41	
48 Cyclohexane	56	6.964	6.970	-0.006	88	543716	5.02	5.86	
50 Carbon tetrachloride	117	7.080	7.086	-0.006	96	448671	5.02	5.60	
51 1,1-Dichloropropene	75	7.080	7.086	-0.006	97	440070	5.02	5.53	
52 Isobutyl alcohol	41	7.232	7.232	0.000	95	158698	125.6	135.0	
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.305	7.317	-0.012	0	94406	10.0	9.98	
54 Benzene	78	7.342	7.348	-0.006	96	1268442	5.02	5.27	
56 1,2-Dichloroethane	62	7.409	7.421	-0.012	97	302147	5.02	5.14	
57 Tert-amyl methyl ether	73	7.525	7.531	-0.006	99	753591	5.02	5.21	
* 58 Fluorobenzene (IS)	96	7.744	7.750	-0.006	99	1901051	10.0	10.0	
59 n-Heptane	43	7.750	7.756	-0.006	90	460346	5.02	5.99	
60 n-Butanol	56	8.098	8.104	-0.006	86	292073	251.2	262.9	
61 Trichloroethene	95	8.220	8.226	-0.006	97	361545	5.02	5.73	
62 Methylcyclohexane	83	8.524	8.531	-0.007	95	615346	5.02	6.01	
63 1,2-Dichloropropane	63	8.549	8.555	-0.006	89	322403	5.02	5.45	
64 Methyl methacrylate	69	8.628	8.634	-0.006	87	144209	5.02	4.81	
65 1,4-Dioxane	88	8.646	8.640	0.006	33	39231	125.6	135.3	M
66 Dibromomethane	93	8.665	8.665	0.000	94	145159	5.02	5.19	
68 Dichlorobromomethane	83	8.896	8.896	0.000	99	372702	5.02	5.25	
69 2-Nitropropane	41	9.165	9.165	0.000	97	32905	5.02	4.37	
71 2-Chloroethyl vinyl ether	63		9.250				ND	ND	
72 1-Bromo-2-chloroethane	63	9.287	9.287	-0.001	98	317206	5.02	5.21	
73 cis-1,3-Dichloropropene	75	9.439	9.439	0.000	98	440540	5.02	5.18	
74 4-Methyl-2-pentanone (MIBK)	43	9.604	9.604	0.000	95	961722	25.1	24.7	
$ 75 Toluene-d8 (Surr)	98	9.744	9.744	0.000	93	1879014	10.0	9.83	
76 Toluene	92	9.817	9.823	-0.006	98	840830	5.02	5.27	
78 trans-1,3-Dichloropropene	75	10.073	10.073	0.000	90	347586	5.02	5.05	
79 Ethyl methacrylate	69	10.134	10.134	0.000	87	311926	5.02	5.41	
80 1,1,2-Trichloroethane	97	10.274	10.274	0.000	89	227861	5.02	5.35	
81 Tetrachloroethene	166	10.366	10.366	0.000	98	476660	5.02	6.17	
82 1,3-Dichloropropane	76	10.439	10.439	0.000	87	371099	5.02	5.10	
83 2-Hexanone	43	10.481	10.488	-0.007	96	674785	25.1	25.4	
85 Chlorodibromomethane	129	10.652	10.652	0.000	90	274758	5.02	5.14	
86 Ethylene Dibromide	107	10.762	10.762	0.000	98	211464	5.02	5.19	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.189	0.000	85	1463047	10.0	10.0	
88 1-Chlorohexane	91	11.195	11.201	-0.006	95	493655	5.02	5.34	
90 Chlorobenzene	112	11.213	11.219	-0.006	96	941947	5.02	5.34	
91 1,1,1,2-Tetrachloroethane	131	11.298	11.298	0.000	97	324728	5.02	5.30	
92 Ethylbenzene	91	11.298	11.304	-0.006	98	1653749	5.02	5.37	
93 m-Xylene & p-Xylene	106	11.414	11.414	0.000	0	1322910	10.0	10.9	
94 o-Xylene	106	11.743	11.743	0.000	96	632406	5.02	5.35	
95 Styrene	104	11.756	11.762	-0.006	95	1021472	5.02	5.40	
96 Bromoform	173	11.914	11.920	-0.006	98	159529	5.02	4.93	
97 Isopropylbenzene	105	12.042	12.042	0.000	95	1731510	5.02	5.52	
$ 100 4-Bromofluorobenzene (Surr)	95	12.188	12.188	0.000	95	701405	10.0	9.91	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
101 1,1,2,2-Tetrachloroethane	83	12.286	12.286	0.000	93	279350	5.02	5.10	
102 Bromobenzene	156	12.304	12.304	0.000	93	404514	5.02	5.36	
103 trans-1,4-Dichloro-2-butene	53	12.310	12.310	0.000	90	268841	25.1	21.1	
104 1,2,3-Trichloropropane	110	12.335	12.335	0.000	82	77462	5.02	5.16	
105 N-Propylbenzene	91	12.371	12.371	0.000	99	2038697	5.02	5.51	
106 2-Chlorotoluene	126	12.444	12.451	-0.007	97	405688	5.02	5.37	
107 1,3,5-Trimethylbenzene	105	12.505	12.505	0.000	94	1432820	5.02	5.42	
108 4-Chlorotoluene	126	12.542	12.542	0.000	96	408068	5.02	5.34	
109 tert-Butylbenzene	134	12.749	12.749	0.000	92	324166	5.02	5.43	
110 Pentachloroethane	167	12.780	12.780	0.000	92	251152	5.02	5.30	
111 1,2,4-Trimethylbenzene	105	12.792	12.792	0.000	96	1447624	5.02	5.38	
112 sec-Butylbenzene	105	12.908	12.914	-0.006	94	1930684	5.02	5.57	
113 1,3-Dichlorobenzene	146	13.011	13.011	0.000	99	809027	5.02	5.32	
114 4-Isopropyltoluene	119	13.017	13.018	-0.001	97	1666145	5.02	5.63	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	93	838031	10.0	10.0	
116 1,4-Dichlorobenzene	146	13.085	13.085	0.000	96	815415	5.02	5.37	
117 1,2,3-Trimethylbenzene	120	13.091	13.097	-0.006	98	651450	5.02	5.46	
118 Benzyl chloride	126	13.158	13.158	0.000	98	121354	5.02	5.87	
119 n-Butylbenzene	92	13.310	13.310	0.000	97	801864	5.02	5.55	
120 1,2-Dichlorobenzene	146	13.341	13.341	0.000	99	735790	5.02	5.31	
122 1,2-Dibromo-3-Chloropropane	155	13.889	13.883	0.006	94	44367	5.02	5.28	
123 1,3,5-Trichlorobenzene	180	14.011	14.011	0.000	98	596516	5.02	5.45	
124 1,2,4-Trichlorobenzene	180	14.432	14.432	0.000	94	503803	5.02	5.54	
125 Hexachlorobutadiene	225	14.517	14.517	0.000	96	223724	5.02	5.65	
126 Naphthalene	128	14.615	14.615	0.000	97	911110	5.02	5.36	
127 1,2,3-Trichlorobenzene	180	14.755	14.755	0.000	96	426670	5.02	5.43	
134 Isopropyl alcohol	45		0.000				ND	ND	
144 2-ethoxy-2-methyl butane	1		0.000				ND	ND	
135 p-Diethylbenzene	1		0.000				ND	ND	
137 2-Methylnaphthalene	142		0.000				ND	ND	
204 Pentane	43		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

MSV_Q_QARC_00056	Amount Added:	5.40	Units: uL	
MSV_Q_ETBR_00005	Amount Added:	5.40	Units: uL	
MSV_Q_EE_00003	Amount Added:	5.40	Units: uL	
MSV_QGAS_826_00093	Amount Added:	5.40	Units: uL	
MSV_Q_QVOA6_00055	Amount Added:	5.40	Units: uL	
MSV_Q_QVOA1_00057	Amount Added:	5.40	Units: uL	
MSV_31_826ISS_00003	Amount Added:	5.00	Units: uL	Run Reagent

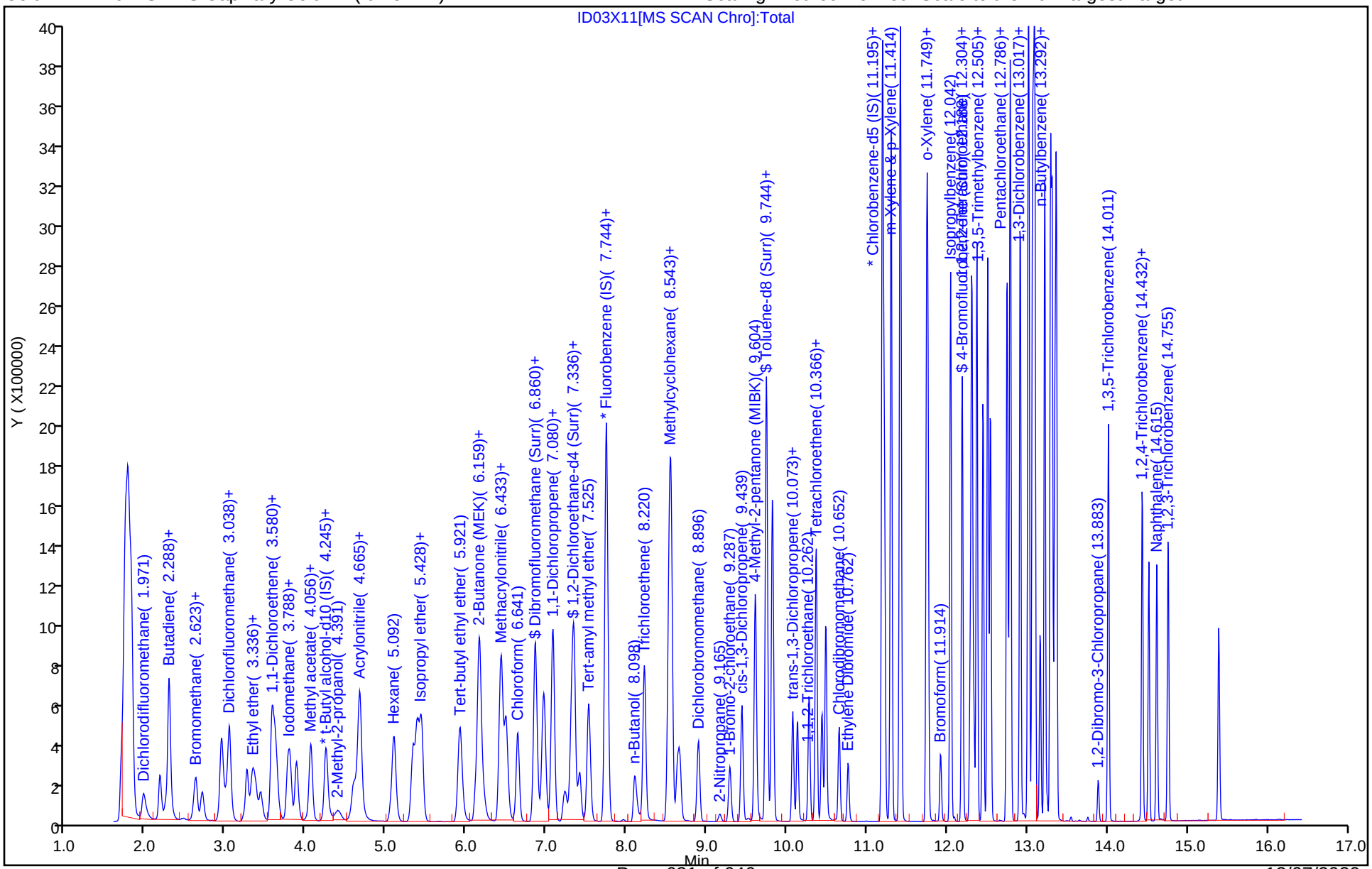
Report Date: 04-Dec-2020 08:50:14 Chrom Revision: 2.3 13-Nov-2020 01:23:02

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20201203-16986.b\ID03X11.D

Injection Date:	03-Dec-2020 14:04:30	Instrument ID:	19930	Operator ID:	kas02648
Lims ID:	410-22411-A-6 MSD			Worklist Smp#:	11
Client ID:	HD-COD-SW-15-0/1-0 MSD				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\19930\20201203-16986.b\ID03X11.D				
Lims ID:	410-22411-A-6 MSD				
Client ID:	HD-COD-SW-15-0/1-0 MSD				
Sample Type:	MSD				
Inject. Date:	03-Dec-2020 14:04:30	ALS Bottle#:	11	Worklist Smp#:	11
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Sample Info:	410-0016986-011				
Operator ID:	kas02648	Instrument ID:	19930		
Method:	\\chromfs\Lancaster\ChromData\19930\20201203-16986.b\8260 25ml HP31.m				
Limit Group:	MSV - 8260C_D				
Last Update:	04-Dec-2020 08:49:27	Calib Date:	23-Nov-2020 18:05:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I17.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1657				

First Level Reviewer: campbellme Date: 03-Dec-2020 18:41:48

Compound	Amount Added	Amount Recovered	% Rec.
$ 46 Dibromofluoromethane (Surr)	10.0	9.96	99.62
$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	9.98	99.76
$ 75 Toluene-d8 (Surr)	10.0	9.83	98.34
$ 100 4-Bromofluorobenzene (Surr)	10.0	9.91	99.13

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1

SDG No.:

Instrument ID: 19930 Start Date: 11/23/2020 11:57

Analysis Batch Number: 69397 End Date: 11/23/2020 18:26

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 410-69397/1		11/23/2020 11:57	1	IN23T01.D	R-624SilMS 30m 0.25(mm)
IC 410-69397/3		11/23/2020 12:45	1	IN23I01.D	R-624SilMS 30m 0.25(mm)
ICIS 410-69397/4		11/23/2020 13:06	1	IN23I02.D	R-624SilMS 30m 0.25(mm)
IC 410-69397/5		11/23/2020 13:28	1	IN23I03.D	R-624SilMS 30m 0.25(mm)
IC 410-69397/6		11/23/2020 13:49	1	IN23I04.D	R-624SilMS 30m 0.25(mm)
IC 410-69397/7		11/23/2020 14:10	1	IN23I05.D	R-624SilMS 30m 0.25(mm)
IC 410-69397/8		11/23/2020 14:31	1	IN23I06.D	R-624SilMS 30m 0.25(mm)
IC 410-69397/9		11/23/2020 14:53	1	IN23I07.D	R-624SilMS 30m 0.25(mm)
ICV 410-69397/10		11/23/2020 15:14	1	IN23V01.D	R-624SilMS 30m 0.25(mm)
IC 410-69397/12		11/23/2020 15:56	1		R-624SilMS 30m 0.25(mm)
IC 410-69397/13		11/23/2020 16:17	1		R-624SilMS 30m 0.25(mm)
IC 410-69397/14		11/23/2020 16:39	1		R-624SilMS 30m 0.25(mm)
IC 410-69397/15		11/23/2020 17:01	1		R-624SilMS 30m 0.25(mm)
IC 410-69397/16		11/23/2020 17:22	1		R-624SilMS 30m 0.25(mm)
IC 410-69397/17		11/23/2020 17:43	1		R-624SilMS 30m 0.25(mm)
IC 410-69397/18		11/23/2020 18:05	1		R-624SilMS 30m 0.25(mm)
ICV 410-69397/19		11/23/2020 18:26	1		R-624SilMS 30m 0.25(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1

SDG No.:

Instrument ID: 19930 Start Date: 12/03/2020 09:05

Analysis Batch Number: 72509 End Date: 12/03/2020 21:09

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 410-72509/1		12/03/2020 09:05	1	ID03T01.D	R-624SilMS 30m 0.25(mm)
CCVIS 410-72509/3		12/03/2020 09:44	1	ID03X03.D	R-624SilMS 30m 0.25(mm)
LCS 410-72509/4		12/03/2020 10:05	1	ID03X04.D	R-624SilMS 30m 0.25(mm)
LCSD 410-72509/5		12/03/2020 10:26	1	ID03X05.D	R-624SilMS 30m 0.25(mm)
MB 410-72509/7		12/03/2020 11:08	1	ID03X07.D	R-624SilMS 30m 0.25(mm)
410-22411-5	HD-COD-SW-13-0/1-0	12/03/2020 13:00	1	ID03X08.D	R-624SilMS 30m 0.25(mm)
410-22411-6	HD-COD-SW-15-0/1-0	12/03/2020 13:21	1	ID03X09.D	R-624SilMS 30m 0.25(mm)
410-22411-6 MS	HD-COD-SW-15-0/1-0 MS MS	12/03/2020 13:43	1	ID03X10.D	R-624SilMS 30m 0.25(mm)
410-22411-6 MSD	HD-COD-SW-15-0/1-0 MSD MSD	12/03/2020 14:04	1	ID03X11.D	R-624SilMS 30m 0.25(mm)
ZZZZZ		12/03/2020 14:46	1		R-624SilMS 30m 0.25(mm)
ZZZZZ		12/03/2020 15:07	10		R-624SilMS 30m 0.25(mm)
ZZZZZ		12/03/2020 15:28	20		R-624SilMS 30m 0.25(mm)
ZZZZZ		12/03/2020 15:49	200		R-624SilMS 30m 0.25(mm)
410-22411-2	HD-COD-SW-7-0/1-0	12/03/2020 16:11	1	ID03X17.D	R-624SilMS 30m 0.25(mm)
410-22411-3	HD-COD-SW-8-0/1-0	12/03/2020 16:32	1	ID03X18.D	R-624SilMS 30m 0.25(mm)
410-22411-4	HD-COD-SW-9-0/1-0	12/03/2020 16:53	1	ID03X19.D	R-624SilMS 30m 0.25(mm)
ZZZZZ		12/03/2020 17:15	200		R-624SilMS 30m 0.25(mm)
ZZZZZ		12/03/2020 17:36	100		R-624SilMS 30m 0.25(mm)
ZZZZZ		12/03/2020 17:57	50		R-624SilMS 30m 0.25(mm)
ZZZZZ		12/03/2020 18:18	50		R-624SilMS 30m 0.25(mm)
ZZZZZ		12/03/2020 18:39	20		R-624SilMS 30m 0.25(mm)
ZZZZZ		12/03/2020 19:00	10		R-624SilMS 30m 0.25(mm)
ZZZZZ		12/03/2020 19:22	1		R-624SilMS 30m 0.25(mm)
ZZZZZ		12/03/2020 19:43	1		R-624SilMS 30m 0.25(mm)
ZZZZZ		12/03/2020 20:04	10		R-624SilMS 30m 0.25(mm)
ZZZZZ		12/03/2020 20:26	100		R-624SilMS 30m 0.25(mm)
ZZZZZ		12/03/2020 20:48	20		R-624SilMS 30m 0.25(mm)
ZZZZZ		12/03/2020 21:09	200		R-624SilMS 30m 0.25(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-22411-1

SDG No.:

Instrument ID: 19930 Start Date: 12/04/2020 09:11

Analysis Batch Number: 73040 End Date: 12/04/2020 20:21

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 410-73040/1		12/04/2020 09:11	1	ID04T01.D	R-624SilMS 30m 0.25(mm)
ZZZZZ		12/04/2020 09:48	1		R-624SilMS 30m 0.25(mm)
CCVIS 410-73040/3		12/04/2020 10:09	1	ID04X03.D	R-624SilMS 30m 0.25(mm)
LCS 410-73040/4		12/04/2020 10:30	1	ID04X04.D	R-624SilMS 30m 0.25(mm)
LCSD 410-73040/5		12/04/2020 10:51	1	ID04X05.D	R-624SilMS 30m 0.25(mm)
ZZZZZ		12/04/2020 11:12	1		R-624SilMS 30m 0.25(mm)
MB 410-73040/7		12/04/2020 11:34	1	ID04X07.D	R-624SilMS 30m 0.25(mm)
ZZZZZ		12/04/2020 12:26	20		R-624SilMS 30m 0.25(mm)
ZZZZZ		12/04/2020 12:47	200		R-624SilMS 30m 0.25(mm)
ZZZZZ		12/04/2020 13:08	1		R-624SilMS 30m 0.25(mm)
ZZZZZ		12/04/2020 13:30	1		R-624SilMS 30m 0.25(mm)
ZZZZZ		12/04/2020 13:59	20		R-624SilMS 30m 0.25(mm)
ZZZZZ		12/04/2020 14:20	20		R-624SilMS 30m 0.25(mm)
ZZZZZ		12/04/2020 15:02	100		R-624SilMS 30m 0.25(mm)
ZZZZZ		12/04/2020 15:23	1000		R-624SilMS 30m 0.25(mm)
ZZZZZ		12/04/2020 15:45	200		R-624SilMS 30m 0.25(mm)
410-22411-1	HD-COD-SW-6-0/1-0	12/04/2020 16:06	1	ID04X18.D	R-624SilMS 30m 0.25(mm)
410-22411-7	HD-COD-SW-16-0/1-0	12/04/2020 16:27	1	ID04X19.D	R-624SilMS 30m 0.25(mm)
410-22411-8	HD-COD-SW-17-0/1-0	12/04/2020 16:49	1	ID04X20.D	R-624SilMS 30m 0.25(mm)
410-22411-9	HD-COD-SW-26-0/1-0	12/04/2020 17:10	1	ID04X21.D	R-624SilMS 30m 0.25(mm)
410-22411-10	HD-COD-SW-27-0/1-0	12/04/2020 17:31	1	ID04X22.D	R-624SilMS 30m 0.25(mm)
410-22411-11	HD-COD-SW-28-0/1-0	12/04/2020 17:52	1	ID04X23.D	R-624SilMS 30m 0.25(mm)
410-22411-12	HD-COD-SW-29-0/1-0	12/04/2020 18:13	1	ID04X24.D	R-624SilMS 30m 0.25(mm)
410-22411-13	HD-QC1-0/1-1	12/04/2020 18:35	1	ID04X25.D	R-624SilMS 30m 0.25(mm)
410-22411-14	HD-QC1-0/1-2	12/04/2020 18:56	1	ID04X26.D	R-624SilMS 30m 0.25(mm)
ZZZZZ		12/04/2020 19:17	100		R-624SilMS 30m 0.25(mm)
ZZZZZ		12/04/2020 19:38	100		R-624SilMS 30m 0.25(mm)
ZZZZZ		12/04/2020 20:00	100		R-624SilMS 30m 0.25(mm)
ZZZZZ		12/04/2020 20:21	1000		R-624SilMS 30m 0.25(mm)

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-22411-1

SDG No.:

Batch Number: 69397 Batch Start Date: 11/23/20 11:57 Batch Analyst: Campbell, Miranda E

Batch Method: 8260D Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MSV_31_826ISS 00003	MSV_Q_EE 00003	MSV_Q_ETBR 00005	MSV_Q_QARC 00055
BFB 410-69397/1		8260D		1 uL	1 uL				
IC 410-69397/3		8260D		25 mL	25 mL	5 uL			
ICIS 410-69397/4		8260D		25 mL	25 mL	5 uL			
IC 410-69397/5		8260D		25 mL	25 mL	5 uL			
IC 410-69397/6		8260D		25 mL	25 mL	5 uL			
IC 410-69397/7		8260D		25 mL	25 mL	5 uL			
IC 410-69397/8		8260D		25 mL	25 mL	5 uL			
IC 410-69397/9		8260D		25 mL	25 mL	5 uL			
ICV 410-69397/10		8260D		25 mL	25 mL	5 uL	12.5 uL	12.5 uL	12.5 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_Q_QVOA1 00056	MSV_Q_QVOA6 00053	MSV_QGAS_826 00092	MSV_RV1_826 00030	MSV_RV4_826 00034	MSV_RV4GAS826 00096
BFB 410-69397/1		8260D							
IC 410-69397/3		8260D					25 uL	25 uL	25 uL
ICIS 410-69397/4		8260D					10 uL	10 uL	10 uL
IC 410-69397/5		8260D					5 uL	5 uL	5 uL
IC 410-69397/6		8260D					2 uL	2 uL	2 uL
IC 410-69397/7		8260D					2 uL	2 uL	2 uL
IC 410-69397/8		8260D					2 uL	2 uL	2 uL
IC 410-69397/9		8260D					2 uL	2 uL	2 uL
ICV 410-69397/10		8260D		12.5 uL	12.5 uL	12.5 uL			

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_V_BFB 00003					
BFB 410-69397/1		8260D		1 uL					
IC 410-69397/3		8260D							
ICIS 410-69397/4		8260D							
IC 410-69397/5		8260D							
IC 410-69397/6		8260D							

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.: 410-22411-1

SDG No.:

Batch Number: 69397 Batch Start Date: 11/23/20 11:57 Batch Analyst: Campbell, Miranda E

Batch Method: 8260D Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_V_BFB 00003					
IC 410-69397/7		8260D							
IC 410-69397/8		8260D							
IC 410-69397/9		8260D							
ICV 410-69397/10		8260D							

Batch Notes	

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratories | Job No.: 410-22411-1

SDG No.:

Batch Number: 72509 | Batch Start Date: 12/03/20 09:05 | Batch Analyst: Campbell, Miranda E

Batch Method: 8260D | Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	ResidualChloCheck	Headspace	MSV_31_826ISS 00003
BFB 410-72509/1		8260D		1 uL	1 uL				
CCVIS 410-72509/3		8260D		25 mL	25 mL				5 uL
LCS 410-72509/4		8260D		25 mL	25 mL				5 uL
LCSD 410-72509/5		8260D		25 mL	25 mL				5 uL
MB 410-72509/7		8260D		25 mL	25 mL				5 uL
410-22411-A-5	HD-COD-SW-13-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	5 uL
410-22411-A-6	HD-COD-SW-15-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	5 uL
410-22411-A-6 MS	HD-COD-SW-15-0/1-0 MS	8260D	T	25 mL	25 mL	<2 SU	N	N	5 uL
410-22411-A-6 MSD	HD-COD-SW-15-0/1-0 MSD	8260D	T	25 mL	25 mL	<2 SU	N	N	5 uL
410-22411-A-2	HD-COD-SW-7-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	5 uL
410-22411-A-3	HD-COD-SW-8-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	5 uL
410-22411-A-4	HD-COD-SW-9-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	5 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_Q_EE 00003	MSV_Q_ETBR 00005	MSV_Q_QARC 00056	MSV_Q_QVOA1 00057	MSV_Q_QVOA6 00055	MSV_QGAS_826 00093
BFB 410-72509/1		8260D							
CCVIS 410-72509/3		8260D							
LCS 410-72509/4		8260D		12.5 uL	12.5 uL	12.5 uL	12.5 uL	12.5 uL	12.5 uL
LCSD 410-72509/5		8260D		12.5 uL	12.5 uL	12.5 uL	12.5 uL	12.5 uL	12.5 uL
MB 410-72509/7		8260D							
410-22411-A-5	HD-COD-SW-13-0/1-0	8260D	T						
410-22411-A-6	HD-COD-SW-15-0/1-0	8260D	T						
410-22411-A-6 MS	HD-COD-SW-15-0/1-0 MS	8260D	T	5.4 uL	5.4 uL	5.4 uL	5.4 uL	5.4 uL	5.4 uL
410-22411-A-6 MSD	HD-COD-SW-15-0/1-0 MSD	8260D	T	5.4 uL	5.4 uL	5.4 uL	5.4 uL	5.4 uL	5.4 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.: 410-22411-1

SDG No.:

Batch Number: 72509 | Batch Start Date: 12/03/20 09:05 | Batch Analyst: Campbell, Miranda E

Batch Method: 8260D | Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_Q_EE 00003	MSV_Q_ETBR 00005	MSV_Q_QARC 00056	MSV_Q_QVOA1 00057	MSV_Q_QVOA6 00055	MSV_QGAS_826 00093
410-22411-A-2	HD-COD-SW-7-0/1-0	8260D	T						
410-22411-A-3	HD-COD-SW-8-0/1-0	8260D	T						
410-22411-A-4	HD-COD-SW-9-0/1-0	8260D	T						

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_RV1_826 00031	MSV_RV4_826 00035	MSV_RV4GAS826 00097	MSV_V_BFB 00003		
BFB 410-72509/1		8260D					1 uL		
CCVIS 410-72509/3		8260D		10 uL	10 uL	10 uL			
LCS 410-72509/4		8260D							
LCSD 410-72509/5		8260D							
MB 410-72509/7		8260D							
410-22411-A-5	HD-COD-SW-13-0/1-0	8260D	T						
410-22411-A-6	HD-COD-SW-15-0/1-0	8260D	T						
410-22411-A-6 MS	HD-COD-SW-15-0/1-0 MS	8260D	T						
410-22411-A-6 MSD	HD-COD-SW-15-0/1-0 MSD	8260D	T						
410-22411-A-2	HD-COD-SW-7-0/1-0	8260D	T						
410-22411-A-3	HD-COD-SW-8-0/1-0	8260D	T						
410-22411-A-4	HD-COD-SW-9-0/1-0	8260D	T						

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratories | Job No.: 410-22411-1

SDG No.:

Batch Number: 73040 | Batch Start Date: 12/04/20 09:11 | Batch Analyst: Sposito, Kevin A

Batch Method: 8260D | Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	ResidualChloCheck	Headspace	Lot#Vial
BFB 410-73040/1		8260D		1 uL	1 uL				
CCVIS 410-73040/3		8260D		25 mL	25 mL				0126201f
LCS 410-73040/4		8260D		25 mL	25 mL				0126201F
LCSD 410-73040/5		8260D		25 mL	25 mL				0126201F
MB 410-73040/7		8260D		25 mL	25 mL				0126201F
410-22411-A-1	HD-COD-SW-6-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-22411-A-7	HD-COD-SW-16-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-22411-A-8	HD-COD-SW-17-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-22411-A-9	HD-COD-SW-26-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-22411-A-10	HD-COD-SW-27-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-22411-A-11	HD-COD-SW-28-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-22411-A-12	HD-COD-SW-29-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-22411-A-13	HD-QC1-0/1-1	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-22411-A-14	HD-QC1-0/1-2	8260D	T	25 mL	25 mL	<2 SU	N	N	

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_31_826ISS 00003	MSV_Q_EE 00003	MSV_Q_ETBR 00005	MSV_Q_QARC 00056	MSV_Q_QVOA1 00057	MSV_Q_QVOA6 00055
BFB 410-73040/1		8260D							
CCVIS 410-73040/3		8260D		5 uL					
LCS 410-73040/4		8260D		5 uL	12.5 uL	12.5 uL	12.5 uL	12.5 uL	12.5 uL
LCSD 410-73040/5		8260D		5 uL	12.5 uL	12.5 uL	12.5 uL	12.5 uL	12.5 uL
MB 410-73040/7		8260D		5 uL					
410-22411-A-1	HD-COD-SW-6-0/1-0	8260D	T	5 uL					
410-22411-A-7	HD-COD-SW-16-0/1-0	8260D	T	5 uL					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratories | Job No.: 410-22411-1

SDG No.:

Batch Number: 73040 | Batch Start Date: 12/04/20 09:11 | Batch Analyst: Sposito, Kevin A

Batch Method: 8260D | Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_31_826ISS 00003	MSV_Q_EE 00003	MSV_Q_ETBR 00005	MSV_Q_QARC 00056	MSV_Q_QVOA1 00057	MSV_Q_QVOA6 00055
410-22411-A-8	HD-COD-SW-17-0/1-0	8260D	T	5 uL					
410-22411-A-9	HD-COD-SW-26-0/1-0	8260D	T	5 uL					
410-22411-A-10	HD-COD-SW-27-0/1-0	8260D	T	5 uL					
410-22411-A-11	HD-COD-SW-28-0/1-0	8260D	T	5 uL					
410-22411-A-12	HD-COD-SW-29-0/1-0	8260D	T	5 uL					
410-22411-A-13	HD-QC1-0/1-1	8260D	T	5 uL					
410-22411-A-14	HD-QC1-0/1-2	8260D	T	5 uL					

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_QGAS_826 00093	MSV_RV1_826 00031	MSV_RV4_826 00035	MSV_RV4GAS826 00097	MSV_V_BFB 00003	
BFB 410-73040/1		8260D						1 uL	
CCVIS 410-73040/3		8260D			10 uL	10 uL	10 uL		
LCS 410-73040/4		8260D		12.5 uL					
LCSD 410-73040/5		8260D		12.5 uL					
MB 410-73040/7		8260D							
410-22411-A-1	HD-COD-SW-6-0/1-0	8260D	T						
410-22411-A-7	HD-COD-SW-16-0/1-0	8260D	T						
410-22411-A-8	HD-COD-SW-17-0/1-0	8260D	T						
410-22411-A-9	HD-COD-SW-26-0/1-0	8260D	T						
410-22411-A-10	HD-COD-SW-27-0/1-0	8260D	T						
410-22411-A-11	HD-COD-SW-28-0/1-0	8260D	T						
410-22411-A-12	HD-COD-SW-29-0/1-0	8260D	T						
410-22411-A-13	HD-QC1-0/1-1	8260D	T						
410-22411-A-14	HD-QC1-0/1-2	8260D	T						

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratories | Job No.: 410-22411-1

SDG No.:

Batch Number: 73040 | Batch Start Date: 12/04/20 09:11 | Batch Analyst: Sposito, Kevin A

Batch Method: 8260D | Batch End Date:

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Shipping and Receiving Documents

Environmental Ana [barcode] in of Custody

eurofins | Lancaster Laboratories Environmental

Acct. # _____ Group # _____ 410-22411 Chain of Custody _____ Page 1 of 2

Client:	Groundwater Sciences Corporation		
Project Name/#:	fYNOP Monthly Surface Water	Site ID #:	fYNOP, York PA
Project Manager:	Chris O'Neil	P.O. #:	10012.42
Sampler:	Erin Peeling	PWSID #:	N/A
Phone #:	(717) 901-8176 / (717) 756-1246	Quote #:	
State where samples were collected: York, PA	For Compliance: Yes ☐ No ☑		

Sample Identification	Collection Date	Collection Time	Grab	Composite	Matrix: Soil	Sediment	Tissue	Water: Potable	Ground	Surface	NPDES	Other:	Total # of Containers	Analyses Requested: Aqueous VOCs via 8260C (low level - 25 ml purge) 8260D (no acrylonitrile)	Preservation Codes: H	For Lab Use Only: Remarks
HD-COD-SW-6-0/1-0	11/30/20	1340	X					X					3	X		
HD-COD-SW-7-0/1-0		1000	X					X					3	X		
HD-COD-SW-8-0/1-0		1240	X					X					3	X		
HD-COD-SW-9-0/1-0		1100	X					X					3	X		
HD-COD-SW-13-0/1-0		1250	X					X					3	X		
HD-COD-SW-15-0/1-0		1025	X					X					3	X		
HD-COD-SW-15-0/1-0 MS		1025	X					X					3	X		
HD-COD-SW-15-0/1-0 MSD		1025	X					X					3	X		
HD-COD-SW-16-0/1-0		1305	X					X					3	X		
HD-COD-SW-17-0/1-0		1330	X					X					3	X		

Preservation Codes: H = HCl; T = Thiosulfate; N = HNO_3; B = NaOH; S = H_2SO_4; P = H_3PO_4; O = Other

Turnaround Time Requested (TAT) (please check): Standard ☑ Rush ☐

(Rush TAT is subject to laboratory approval and surcharges.)

Date results are needed:

Rush results requested by (please check): E-Mail ☐ Phone ☐

E-mail Address:

Phone:

Data Package Options (please check if required)

Type I (Validation/non-CLP) ☐ MA MCP ☐

Type III (Reduced non-CLP) ☐ CT RCP ☐

Type VI (Raw Data Only) ☐ TX TRRP-13 ☐

NJ DKQP ☐ NYSDEC Category ☐ A or ☐ B

EDD Required? Yes ☑ No ☐ If yes, format: _ CLP Like Deliverables, Project Specific Analyte List

Relinquished by:	Date	Time	Received by:	Date	Time
Erin Peeling	11/30/20	15:50	Christopher D. O'Neil	11/30/20	15:50
Christopher D. O'Neil	12/1/20	0913		12/1/20	0913
	12/1/20	1647		12-1-20	1701

Relinquished by Commercial Carrier:

UPS _____ FedEx _____ Other _____

Temperature upon receipt 0.5 °C

Environmental Analysis Request/Chain of Custody

eurofins | Lancaster Laboratories Environmental

Acct. # _____ Group # _____ Sample # _____

Client:	Groundwater Sciences Corporation		
Project Name/#:	fYNOP Monthly Surface Water	Site ID #:	fYNOP, York PA
Project Manager:	Chris O'Neil	P.O. #:	10012.42
Sampler:	Erin Peeling	PWSID #:	N/A
Phone #:	(717) 901-8176 / (717) 756-1246	Quote #:	
State where samples were collected: York, PA		For Compliance: Yes ☐ No ☑	

Sample Identification	Collection Date	Collection Time	Grab	Composite	Matrix: Soil	Sediment	Tissue	Water: Potable	Ground	Surface	NPDES	Other: Trip Blank	Total # of Containers	Analyses Requested: Aqueous VOCs via ~~8260C~~ (low level - 25 ml purge) 8260D (no acrylonitrile)	Preservation Codes: H	Remarks
HD-COD-SW-26-0/1-0	11/30/20	0930	X					X					3	X		
HD-COD-SW-27-0/1-0		1015	X					X					3	X		
HD-COD-SW-28-0/1-0		1130	X					X					3	X		
HD-COD-SW-29-0/1-0		1225	X					X					3	X		
HD-QC1-0/1-1		1200	X					X					3	X		
HD-QC1-0/1-2		—	X									X	2 3	X		1 vial ~~received~~ w/ air bubble

EVP 11/30/20

For Lab Use Only

SF #: _____

SCR #: _____

Preservation Codes

H = HCl; T = Thiosulfate; N = HNO_3; B = NaOH; S = H_2SO_4; P = H_3PO_4; O = Other

Turnaround Time Requested (TAT) (please check): Standard ☑ Rush ☐

(Rush TAT is subject to laboratory approval and surcharges.)

Date results are needed:

Rush results requested by (please check): E-Mail ☐ Phone ☐

E-mail Address:

Phone:

Data Package Options (please check if required)

Type I (Validation/non-CLP)	☐	MA MCP	☐
Type III (Reduced non-CLP)	☐	CT RCP	☐
Type VI (Raw Data Only)	☐	TX TRRP-13	☐
NJ DKQP	☐	NYSDEC Category	☐ A or ☐ B

EDD Required? Yes ☑ No ☐ If yes, format: _ CLP Like Deliverables, Project Specific Analyte List

Relinquished by:	Date	Time	Received by:	Date	Time
Erin Peeling	11/30/20	15:50	Christopher D. O'Neil	11/30/20	15:50
Christopher D. O'Neil	12/1/20	0913		12/1/20	0913
	12/1/20	1647		12-1-20	1701

Relinquished by Commercial Carrier:

UPS _____ FedEx _____ Other _____

Temperature upon receipt 0.5 °C

Login Sample Receipt Checklist

Client: Groundwater Sciences Corporation

Job Number: 410-22411-1

Login Number: 22411

List Source: Eurofins Lancaster Laboratories Env

List Number: 1

Creator: Sanchez, Melvin E

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal is intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable (</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV: Container Temperature is acceptable (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	N/A	
Is the Field Sampler's name present on COC?	True	
Sample Preservation Verified.	N/A	
Residual Chlorine Checked.	N/A	
Sample custody seals are intact.	True	