

ANALYTICAL REPORT

Job Number: 410-37501-1

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.
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Project Manager
5/3/2021 4:28 PM

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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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Definitions/Glossary

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

Job ID: 410-37501-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
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.
α	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
410-37501-1

Receipt

The samples were received on 4/27/2021 4:47 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 0.6°C

GC/MS VOA

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: 410-37501-1

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

Lab Sample ID: 410-37501-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.98	J	5.0	0.90	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.059	J	0.50	0.050	ug/L	1		8260D	Total/NA

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

Lab Sample ID: 410-37501-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	1.0	J	5.0	0.90	ug/L	1		8260D	Total/NA
Carbon disulfide	0.075	J	1.0	0.060	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.065	J	0.50	0.050	ug/L	1		8260D	Total/NA
Tetrachloroethene	0.075	J	0.50	0.060	ug/L	1		8260D	Total/NA
Trichloroethene	0.089	J	0.50	0.060	ug/L	1		8260D	Total/NA

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

Lab Sample ID: 410-37501-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.95	J	5.0	0.90	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.069	J	0.50	0.050	ug/L	1		8260D	Total/NA
Trichloroethene	0.075	J	0.50	0.060	ug/L	1		8260D	Total/NA

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

Lab Sample ID: 410-37501-4

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
Tetrachloroethene	0.090	J	0.50	0.060	ug/L	1		8260D	Total/NA
Toluene	0.088	J	0.50	0.070	ug/L	1		8260D	Total/NA
Trichloroethene	0.063	J	0.50	0.060	ug/L	1		8260D	Total/NA

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

Lab Sample ID: 410-37501-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.97	J	5.0	0.90	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.075	J	0.50	0.050	ug/L	1		8260D	Total/NA
Trichloroethene	0.071	J	0.50	0.060	ug/L	1		8260D	Total/NA

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

Lab Sample ID: 410-37501-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.12	J	0.50	0.060	ug/L	1		8260D	Total/NA
1,1-Dichloroethene	0.087	J	0.50	0.060	ug/L	1		8260D	Total/NA
Chloroform	0.27	J	0.50	0.090	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.69	J	0.50	0.050	ug/L	1		8260D	Total/NA
Tetrachloroethene	2.4	J	0.50	0.060	ug/L	1		8260D	Total/NA
Trichloroethene	0.86	J	0.50	0.060	ug/L	1		8260D	Total/NA

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

Lab Sample ID: 410-37501-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	1.8	J	5.0	0.90	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.076	J	0.50	0.050	ug/L	1		8260D	Total/NA
Tetrachloroethene	0.065	J	0.50	0.060	ug/L	1		8260D	Total/NA
Trichloroethene	0.081	J	0.50	0.060	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

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

Job ID: 410-37501-1

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

Lab Sample ID: 410-37501-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.071	J	0.50	0.060	ug/L	1		8260D	Total/NA
1,1-Dichloroethene	0.063	J	0.50	0.060	ug/L	1		8260D	Total/NA
Chloroform	0.13	J	0.50	0.090	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.80		0.50	0.050	ug/L	1		8260D	Total/NA
Tetrachloroethene	2.4		0.50	0.060	ug/L	1		8260D	Total/NA
Trichloroethene	0.98		0.50	0.060	ug/L	1		8260D	Total/NA

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

Lab Sample ID: 410-37501-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	0.19	J	0.50	0.060	ug/L	1		8260D	Total/NA
Chloroform	0.58		0.50	0.090	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.067	J	0.50	0.050	ug/L	1		8260D	Total/NA
Tetrachloroethene	4.5		0.50	0.060	ug/L	1		8260D	Total/NA
Trichloroethene	0.18	J	0.50	0.060	ug/L	1		8260D	Total/NA

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

Lab Sample ID: 410-37501-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	1.5	J	5.0	0.90	ug/L	1		8260D	Total/NA
Carbon disulfide	0.073	J	1.0	0.060	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.066	J	0.50	0.050	ug/L	1		8260D	Total/NA
Tetrachloroethene	0.064	J	0.50	0.060	ug/L	1		8260D	Total/NA
Trichloroethene	0.072	J	0.50	0.060	ug/L	1		8260D	Total/NA

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

Lab Sample ID: 410-37501-11

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
Chloromethane	0.070	J	0.50	0.060	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.059	J	0.50	0.050	ug/L	1		8260D	Total/NA
Tetrachloroethene	0.11	J	0.50	0.060	ug/L	1		8260D	Total/NA
Toluene	0.089	J	0.50	0.070	ug/L	1		8260D	Total/NA
Trichloroethene	0.070	J	0.50	0.060	ug/L	1		8260D	Total/NA

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

Lab Sample ID: 410-37501-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	1.9	J	5.0	0.90	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.076	J	0.50	0.050	ug/L	1		8260D	Total/NA
Trichloroethene	0.075	J	0.50	0.060	ug/L	1		8260D	Total/NA

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

Lab Sample ID: 410-37501-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.068	J	0.50	0.060	ug/L	1		8260D	Total/NA
Chloroform	0.12	J	0.50	0.090	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.81		0.50	0.050	ug/L	1		8260D	Total/NA
Tetrachloroethene	2.4		0.50	0.060	ug/L	1		8260D	Total/NA
Trichloroethene	0.97		0.50	0.060	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

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

Job ID: 410-37501-1

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

Lab Sample ID: 410-37501-14

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

This Detection Summary does not include radiochemical test results.

Client Sample Results

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

Job ID: 410-37501-1

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

Lab Sample ID: 410-37501-1

Date Collected: 04/26/21 11:00

Matrix: Water

Date Received: 04/27/21 16:47

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			04/30/21 16:37	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			04/30/21 16:37	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			04/30/21 16:37	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			04/30/21 16:37	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			04/30/21 16:37	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			04/30/21 16:37	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			04/30/21 16:37	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			04/30/21 16:37	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			04/30/21 16:37	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			04/30/21 16:37	1
2-Hexanone	ND		5.0	0.60	ug/L			04/30/21 16:37	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			04/30/21 16:37	1
Acetone	0.98	J	5.0	0.90	ug/L			04/30/21 16:37	1
Benzene	ND		0.50	0.050	ug/L			04/30/21 16:37	1
Bromochloromethane	ND		0.50	0.050	ug/L			04/30/21 16:37	1
Bromodichloromethane	ND		0.50	0.050	ug/L			04/30/21 16:37	1
Bromoform	ND		1.0	0.30	ug/L			04/30/21 16:37	1
Bromomethane	ND		0.50	0.070	ug/L			04/30/21 16:37	1
Carbon disulfide	ND		1.0	0.060	ug/L			04/30/21 16:37	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			04/30/21 16:37	1
Chlorobenzene	ND		0.50	0.060	ug/L			04/30/21 16:37	1
Chloroethane	ND		0.50	0.070	ug/L			04/30/21 16:37	1
Chloroform	ND		0.50	0.090	ug/L			04/30/21 16:37	1
Chloromethane	ND		0.50	0.060	ug/L			04/30/21 16:37	1
cis-1,2-Dichloroethene	0.059	J	0.50	0.050	ug/L			04/30/21 16:37	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			04/30/21 16:37	1
Dibromochloromethane	ND		0.50	0.070	ug/L			04/30/21 16:37	1
Ethylbenzene	ND		0.50	0.060	ug/L			04/30/21 16:37	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			04/30/21 16:37	1
Methylene Chloride	ND		0.50	0.070	ug/L			04/30/21 16:37	1
Styrene	ND		0.50	0.050	ug/L			04/30/21 16:37	1
Tetrachloroethene	ND		0.50	0.060	ug/L			04/30/21 16:37	1
Toluene	ND		0.50	0.070	ug/L			04/30/21 16:37	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			04/30/21 16:37	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			04/30/21 16:37	1
Trichloroethene	ND		0.50	0.060	ug/L			04/30/21 16:37	1
Vinyl chloride	ND		0.50	0.10	ug/L			04/30/21 16:37	1
Xylenes, Total	ND		1.0	0.15	ug/L			04/30/21 16:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		80 - 120		04/30/21 16:37	1
4-Bromofluorobenzene (Surr)	93		80 - 120		04/30/21 16:37	1
Dibromofluoromethane (Surr)	99		80 - 120		04/30/21 16:37	1
Toluene-d8 (Surr)	100		80 - 120		04/30/21 16:37	1

Client Sample Results

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

Job ID: 410-37501-1

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

Lab Sample ID: 410-37501-2

Date Collected: 04/26/21 11:40

Matrix: Water

Date Received: 04/27/21 16:47

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			04/30/21 16:59	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			04/30/21 16:59	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			04/30/21 16:59	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			04/30/21 16:59	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			04/30/21 16:59	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			04/30/21 16:59	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			04/30/21 16:59	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			04/30/21 16:59	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			04/30/21 16:59	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			04/30/21 16:59	1
2-Hexanone	ND		5.0	0.60	ug/L			04/30/21 16:59	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			04/30/21 16:59	1
Acetone	1.0	J	5.0	0.90	ug/L			04/30/21 16:59	1
Benzene	ND		0.50	0.050	ug/L			04/30/21 16:59	1
Bromochloromethane	ND		0.50	0.050	ug/L			04/30/21 16:59	1
Bromodichloromethane	ND		0.50	0.050	ug/L			04/30/21 16:59	1
Bromoform	ND		1.0	0.30	ug/L			04/30/21 16:59	1
Bromomethane	ND		0.50	0.070	ug/L			04/30/21 16:59	1
Carbon disulfide	0.075	J	1.0	0.060	ug/L			04/30/21 16:59	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			04/30/21 16:59	1
Chlorobenzene	ND		0.50	0.060	ug/L			04/30/21 16:59	1
Chloroethane	ND		0.50	0.070	ug/L			04/30/21 16:59	1
Chloroform	ND		0.50	0.090	ug/L			04/30/21 16:59	1
Chloromethane	ND		0.50	0.060	ug/L			04/30/21 16:59	1
cis-1,2-Dichloroethene	0.065	J	0.50	0.050	ug/L			04/30/21 16:59	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			04/30/21 16:59	1
Dibromochloromethane	ND		0.50	0.070	ug/L			04/30/21 16:59	1
Ethylbenzene	ND		0.50	0.060	ug/L			04/30/21 16:59	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			04/30/21 16:59	1
Methylene Chloride	ND		0.50	0.070	ug/L			04/30/21 16:59	1
Styrene	ND		0.50	0.050	ug/L			04/30/21 16:59	1
Tetrachloroethene	0.075	J	0.50	0.060	ug/L			04/30/21 16:59	1
Toluene	ND		0.50	0.070	ug/L			04/30/21 16:59	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			04/30/21 16:59	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			04/30/21 16:59	1
Trichloroethene	0.089	J	0.50	0.060	ug/L			04/30/21 16:59	1
Vinyl chloride	ND		0.50	0.10	ug/L			04/30/21 16:59	1
Xylenes, Total	ND		1.0	0.15	ug/L			04/30/21 16:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		80 - 120		04/30/21 16:59	1
4-Bromofluorobenzene (Surr)	93		80 - 120		04/30/21 16:59	1
Dibromofluoromethane (Surr)	99		80 - 120		04/30/21 16:59	1
Toluene-d8 (Surr)	101		80 - 120		04/30/21 16:59	1

Client Sample Results

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

Job ID: 410-37501-1

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

Lab Sample ID: 410-37501-3

Date Collected: 04/26/21 09:45

Matrix: Water

Date Received: 04/27/21 16:47

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			04/30/21 17:20	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			04/30/21 17:20	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			04/30/21 17:20	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			04/30/21 17:20	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			04/30/21 17:20	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			04/30/21 17:20	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			04/30/21 17:20	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			04/30/21 17:20	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			04/30/21 17:20	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			04/30/21 17:20	1
2-Hexanone	ND		5.0	0.60	ug/L			04/30/21 17:20	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			04/30/21 17:20	1
Acetone	0.95	J	5.0	0.90	ug/L			04/30/21 17:20	1
Benzene	ND		0.50	0.050	ug/L			04/30/21 17:20	1
Bromochloromethane	ND		0.50	0.050	ug/L			04/30/21 17:20	1
Bromodichloromethane	ND		0.50	0.050	ug/L			04/30/21 17:20	1
Bromoform	ND		1.0	0.30	ug/L			04/30/21 17:20	1
Bromomethane	ND		0.50	0.070	ug/L			04/30/21 17:20	1
Carbon disulfide	ND		1.0	0.060	ug/L			04/30/21 17:20	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			04/30/21 17:20	1
Chlorobenzene	ND		0.50	0.060	ug/L			04/30/21 17:20	1
Chloroethane	ND		0.50	0.070	ug/L			04/30/21 17:20	1
Chloroform	ND		0.50	0.090	ug/L			04/30/21 17:20	1
Chloromethane	ND		0.50	0.060	ug/L			04/30/21 17:20	1
cis-1,2-Dichloroethene	0.069	J	0.50	0.050	ug/L			04/30/21 17:20	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			04/30/21 17:20	1
Dibromochloromethane	ND		0.50	0.070	ug/L			04/30/21 17:20	1
Ethylbenzene	ND		0.50	0.060	ug/L			04/30/21 17:20	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			04/30/21 17:20	1
Methylene Chloride	ND		0.50	0.070	ug/L			04/30/21 17:20	1
Styrene	ND		0.50	0.050	ug/L			04/30/21 17:20	1
Tetrachloroethene	ND		0.50	0.060	ug/L			04/30/21 17:20	1
Toluene	ND		0.50	0.070	ug/L			04/30/21 17:20	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			04/30/21 17:20	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			04/30/21 17:20	1
Trichloroethene	0.075	J	0.50	0.060	ug/L			04/30/21 17:20	1
Vinyl chloride	ND		0.50	0.10	ug/L			04/30/21 17:20	1
Xylenes, Total	ND		1.0	0.15	ug/L			04/30/21 17:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		80 - 120		04/30/21 17:20	1
4-Bromofluorobenzene (Surr)	93		80 - 120		04/30/21 17:20	1
Dibromofluoromethane (Surr)	98		80 - 120		04/30/21 17:20	1
Toluene-d8 (Surr)	101		80 - 120		04/30/21 17:20	1

Client Sample Results

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

Job ID: 410-37501-1

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

Lab Sample ID: 410-37501-4

Date Collected: 04/26/21 13:25

Matrix: Water

Date Received: 04/27/21 16:47

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			04/30/21 17:41	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			04/30/21 17:41	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			04/30/21 17:41	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			04/30/21 17:41	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			04/30/21 17:41	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			04/30/21 17:41	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			04/30/21 17:41	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			04/30/21 17:41	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			04/30/21 17:41	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			04/30/21 17:41	1
2-Hexanone	ND		5.0	0.60	ug/L			04/30/21 17:41	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			04/30/21 17:41	1
Acetone	2.7	J	5.0	0.90	ug/L			04/30/21 17:41	1
Benzene	ND		0.50	0.050	ug/L			04/30/21 17:41	1
Bromochloromethane	ND		0.50	0.050	ug/L			04/30/21 17:41	1
Bromodichloromethane	ND		0.50	0.050	ug/L			04/30/21 17:41	1
Bromoform	ND		1.0	0.30	ug/L			04/30/21 17:41	1
Bromomethane	ND		0.50	0.070	ug/L			04/30/21 17:41	1
Carbon disulfide	ND		1.0	0.060	ug/L			04/30/21 17:41	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			04/30/21 17:41	1
Chlorobenzene	ND		0.50	0.060	ug/L			04/30/21 17:41	1
Chloroethane	ND		0.50	0.070	ug/L			04/30/21 17:41	1
Chloroform	ND		0.50	0.090	ug/L			04/30/21 17:41	1
Chloromethane	ND		0.50	0.060	ug/L			04/30/21 17:41	1
cis-1,2-Dichloroethene	ND		0.50	0.050	ug/L			04/30/21 17:41	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			04/30/21 17:41	1
Dibromochloromethane	ND		0.50	0.070	ug/L			04/30/21 17:41	1
Ethylbenzene	ND		0.50	0.060	ug/L			04/30/21 17:41	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			04/30/21 17:41	1
Methylene Chloride	ND		0.50	0.070	ug/L			04/30/21 17:41	1
Styrene	ND		0.50	0.050	ug/L			04/30/21 17:41	1
Tetrachloroethene	0.090	J	0.50	0.060	ug/L			04/30/21 17:41	1
Toluene	0.088	J	0.50	0.070	ug/L			04/30/21 17:41	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			04/30/21 17:41	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			04/30/21 17:41	1
Trichloroethene	0.063	J	0.50	0.060	ug/L			04/30/21 17:41	1
Vinyl chloride	ND		0.50	0.10	ug/L			04/30/21 17:41	1
Xylenes, Total	ND		1.0	0.15	ug/L			04/30/21 17:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		80 - 120		04/30/21 17:41	1
4-Bromofluorobenzene (Surr)	94		80 - 120		04/30/21 17:41	1
Dibromofluoromethane (Surr)	99		80 - 120		04/30/21 17:41	1
Toluene-d8 (Surr)	100		80 - 120		04/30/21 17:41	1

Client Sample Results

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

Job ID: 410-37501-1

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

Lab Sample ID: 410-37501-5

Date Collected: 04/26/21 10:05

Matrix: Water

Date Received: 04/27/21 16:47

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			04/30/21 18:02	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			04/30/21 18:02	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			04/30/21 18:02	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			04/30/21 18:02	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			04/30/21 18:02	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			04/30/21 18:02	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			04/30/21 18:02	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			04/30/21 18:02	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			04/30/21 18:02	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			04/30/21 18:02	1
2-Hexanone	ND		5.0	0.60	ug/L			04/30/21 18:02	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			04/30/21 18:02	1
Acetone	0.97	J	5.0	0.90	ug/L			04/30/21 18:02	1
Benzene	ND		0.50	0.050	ug/L			04/30/21 18:02	1
Bromochloromethane	ND		0.50	0.050	ug/L			04/30/21 18:02	1
Bromodichloromethane	ND		0.50	0.050	ug/L			04/30/21 18:02	1
Bromoform	ND		1.0	0.30	ug/L			04/30/21 18:02	1
Bromomethane	ND		0.50	0.070	ug/L			04/30/21 18:02	1
Carbon disulfide	ND		1.0	0.060	ug/L			04/30/21 18:02	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			04/30/21 18:02	1
Chlorobenzene	ND		0.50	0.060	ug/L			04/30/21 18:02	1
Chloroethane	ND		0.50	0.070	ug/L			04/30/21 18:02	1
Chloroform	ND		0.50	0.090	ug/L			04/30/21 18:02	1
Chloromethane	ND		0.50	0.060	ug/L			04/30/21 18:02	1
cis-1,2-Dichloroethene	0.075	J	0.50	0.050	ug/L			04/30/21 18:02	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			04/30/21 18:02	1
Dibromochloromethane	ND		0.50	0.070	ug/L			04/30/21 18:02	1
Ethylbenzene	ND		0.50	0.060	ug/L			04/30/21 18:02	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			04/30/21 18:02	1
Methylene Chloride	ND		0.50	0.070	ug/L			04/30/21 18:02	1
Styrene	ND		0.50	0.050	ug/L			04/30/21 18:02	1
Tetrachloroethene	ND		0.50	0.060	ug/L			04/30/21 18:02	1
Toluene	ND		0.50	0.070	ug/L			04/30/21 18:02	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			04/30/21 18:02	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			04/30/21 18:02	1
Trichloroethene	0.071	J	0.50	0.060	ug/L			04/30/21 18:02	1
Vinyl chloride	ND		0.50	0.10	ug/L			04/30/21 18:02	1
Xylenes, Total	ND		1.0	0.15	ug/L			04/30/21 18:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		80 - 120		04/30/21 18:02	1
4-Bromofluorobenzene (Surr)	94		80 - 120		04/30/21 18:02	1
Dibromofluoromethane (Surr)	98		80 - 120		04/30/21 18:02	1
Toluene-d8 (Surr)	101		80 - 120		04/30/21 18:02	1

Client Sample Results

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

Job ID: 410-37501-1

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

Lab Sample ID: 410-37501-6

Date Collected: 04/26/21 12:05

Matrix: Water

Date Received: 04/27/21 16:47

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			04/30/21 14:08	1
1,1,1-Trichloroethane	0.12	J	0.50	0.060	ug/L			04/30/21 14:08	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			04/30/21 14:08	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			04/30/21 14:08	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			04/30/21 14:08	1
1,1-Dichloroethene	0.087	J	0.50	0.060	ug/L			04/30/21 14:08	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			04/30/21 14:08	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			04/30/21 14:08	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			04/30/21 14:08	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			04/30/21 14:08	1
2-Hexanone	ND		5.0	0.60	ug/L			04/30/21 14:08	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			04/30/21 14:08	1
Acetone	ND		5.0	0.90	ug/L			04/30/21 14:08	1
Benzene	ND		0.50	0.050	ug/L			04/30/21 14:08	1
Bromochloromethane	ND		0.50	0.050	ug/L			04/30/21 14:08	1
Bromodichloromethane	ND		0.50	0.050	ug/L			04/30/21 14:08	1
Bromoform	ND		1.0	0.30	ug/L			04/30/21 14:08	1
Bromomethane	ND		0.50	0.070	ug/L			04/30/21 14:08	1
Carbon disulfide	ND		1.0	0.060	ug/L			04/30/21 14:08	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			04/30/21 14:08	1
Chlorobenzene	ND		0.50	0.060	ug/L			04/30/21 14:08	1
Chloroethane	ND		0.50	0.070	ug/L			04/30/21 14:08	1
Chloroform	0.27	J	0.50	0.090	ug/L			04/30/21 14:08	1
Chloromethane	ND		0.50	0.060	ug/L			04/30/21 14:08	1
cis-1,2-Dichloroethene	0.69		0.50	0.050	ug/L			04/30/21 14:08	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			04/30/21 14:08	1
Dibromochloromethane	ND		0.50	0.070	ug/L			04/30/21 14:08	1
Ethylbenzene	ND		0.50	0.060	ug/L			04/30/21 14:08	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			04/30/21 14:08	1
Methylene Chloride	ND		0.50	0.070	ug/L			04/30/21 14:08	1
Styrene	ND		0.50	0.050	ug/L			04/30/21 14:08	1
Tetrachloroethene	2.4		0.50	0.060	ug/L			04/30/21 14:08	1
Toluene	ND		0.50	0.070	ug/L			04/30/21 14:08	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			04/30/21 14:08	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			04/30/21 14:08	1
Trichloroethene	0.86		0.50	0.060	ug/L			04/30/21 14:08	1
Vinyl chloride	ND		0.50	0.10	ug/L			04/30/21 14:08	1
Xylenes, Total	ND		1.0	0.15	ug/L			04/30/21 14:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		80 - 120		04/30/21 14:08	1
4-Bromofluorobenzene (Surr)	94		80 - 120		04/30/21 14:08	1
Dibromofluoromethane (Surr)	99		80 - 120		04/30/21 14:08	1
Toluene-d8 (Surr)	100		80 - 120		04/30/21 14:08	1

Client Sample Results

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

Job ID: 410-37501-1

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

Lab Sample ID: 410-37501-7

Date Collected: 04/26/21 10:30

Matrix: Water

Date Received: 04/27/21 16:47

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			04/30/21 13:12	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			04/30/21 13:12	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			04/30/21 13:12	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			04/30/21 13:12	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			04/30/21 13:12	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			04/30/21 13:12	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			04/30/21 13:12	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			04/30/21 13:12	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			04/30/21 13:12	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			04/30/21 13:12	1
2-Hexanone	ND		5.0	0.60	ug/L			04/30/21 13:12	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			04/30/21 13:12	1
Acetone	1.8	J	5.0	0.90	ug/L			04/30/21 13:12	1
Benzene	ND		0.50	0.050	ug/L			04/30/21 13:12	1
Bromochloromethane	ND		0.50	0.050	ug/L			04/30/21 13:12	1
Bromodichloromethane	ND		0.50	0.050	ug/L			04/30/21 13:12	1
Bromoform	ND		1.0	0.30	ug/L			04/30/21 13:12	1
Bromomethane	ND		0.50	0.070	ug/L			04/30/21 13:12	1
Carbon disulfide	ND		1.0	0.060	ug/L			04/30/21 13:12	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			04/30/21 13:12	1
Chlorobenzene	ND		0.50	0.060	ug/L			04/30/21 13:12	1
Chloroethane	ND		0.50	0.070	ug/L			04/30/21 13:12	1
Chloroform	ND		0.50	0.090	ug/L			04/30/21 13:12	1
Chloromethane	ND		0.50	0.060	ug/L			04/30/21 13:12	1
cis-1,2-Dichloroethene	0.076	J	0.50	0.050	ug/L			04/30/21 13:12	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			04/30/21 13:12	1
Dibromochloromethane	ND		0.50	0.070	ug/L			04/30/21 13:12	1
Ethylbenzene	ND		0.50	0.060	ug/L			04/30/21 13:12	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			04/30/21 13:12	1
Methylene Chloride	ND		0.50	0.070	ug/L			04/30/21 13:12	1
Styrene	ND		0.50	0.050	ug/L			04/30/21 13:12	1
Tetrachloroethene	0.065	J	0.50	0.060	ug/L			04/30/21 13:12	1
Toluene	ND		0.50	0.070	ug/L			04/30/21 13:12	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			04/30/21 13:12	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			04/30/21 13:12	1
Trichloroethene	0.081	J	0.50	0.060	ug/L			04/30/21 13:12	1
Vinyl chloride	ND		0.50	0.10	ug/L			04/30/21 13:12	1
Xylenes, Total	ND		1.0	0.15	ug/L			04/30/21 13:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		80 - 120		04/30/21 13:12	1
4-Bromofluorobenzene (Surr)	89		80 - 120		04/30/21 13:12	1
Dibromofluoromethane (Surr)	103		80 - 120		04/30/21 13:12	1
Toluene-d8 (Surr)	93		80 - 120		04/30/21 13:12	1

Client Sample Results

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

Job ID: 410-37501-1

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

Lab Sample ID: 410-37501-8

Date Collected: 04/26/21 10:40

Matrix: Water

Date Received: 04/27/21 16:47

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			04/30/21 13:34	1
1,1,1-Trichloroethane	0.071	J	0.50	0.060	ug/L			04/30/21 13:34	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			04/30/21 13:34	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			04/30/21 13:34	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			04/30/21 13:34	1
1,1-Dichloroethene	0.063	J	0.50	0.060	ug/L			04/30/21 13:34	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			04/30/21 13:34	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			04/30/21 13:34	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			04/30/21 13:34	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			04/30/21 13:34	1
2-Hexanone	ND		5.0	0.60	ug/L			04/30/21 13:34	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			04/30/21 13:34	1
Acetone	ND		5.0	0.90	ug/L			04/30/21 13:34	1
Benzene	ND		0.50	0.050	ug/L			04/30/21 13:34	1
Bromochloromethane	ND		0.50	0.050	ug/L			04/30/21 13:34	1
Bromodichloromethane	ND		0.50	0.050	ug/L			04/30/21 13:34	1
Bromoform	ND		1.0	0.30	ug/L			04/30/21 13:34	1
Bromomethane	ND		0.50	0.070	ug/L			04/30/21 13:34	1
Carbon disulfide	ND		1.0	0.060	ug/L			04/30/21 13:34	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			04/30/21 13:34	1
Chlorobenzene	ND		0.50	0.060	ug/L			04/30/21 13:34	1
Chloroethane	ND		0.50	0.070	ug/L			04/30/21 13:34	1
Chloroform	0.13	J	0.50	0.090	ug/L			04/30/21 13:34	1
Chloromethane	ND		0.50	0.060	ug/L			04/30/21 13:34	1
cis-1,2-Dichloroethene	0.80		0.50	0.050	ug/L			04/30/21 13:34	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			04/30/21 13:34	1
Dibromochloromethane	ND		0.50	0.070	ug/L			04/30/21 13:34	1
Ethylbenzene	ND		0.50	0.060	ug/L			04/30/21 13:34	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			04/30/21 13:34	1
Methylene Chloride	ND		0.50	0.070	ug/L			04/30/21 13:34	1
Styrene	ND		0.50	0.050	ug/L			04/30/21 13:34	1
Tetrachloroethene	2.4		0.50	0.060	ug/L			04/30/21 13:34	1
Toluene	ND		0.50	0.070	ug/L			04/30/21 13:34	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			04/30/21 13:34	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			04/30/21 13:34	1
Trichloroethene	0.98		0.50	0.060	ug/L			04/30/21 13:34	1
Vinyl chloride	ND		0.50	0.10	ug/L			04/30/21 13:34	1
Xylenes, Total	ND		1.0	0.15	ug/L			04/30/21 13:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		80 - 120		04/30/21 13:34	1
4-Bromofluorobenzene (Surr)	88		80 - 120		04/30/21 13:34	1
Dibromofluoromethane (Surr)	103		80 - 120		04/30/21 13:34	1
Toluene-d8 (Surr)	93		80 - 120		04/30/21 13:34	1

Client Sample Results

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

Job ID: 410-37501-1

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

Lab Sample ID: 410-37501-9

Date Collected: 04/26/21 11:20

Matrix: Water

Date Received: 04/27/21 16:47

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			04/30/21 13:56	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			04/30/21 13:56	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			04/30/21 13:56	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			04/30/21 13:56	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			04/30/21 13:56	1
1,1-Dichloroethene	0.19	J	0.50	0.060	ug/L			04/30/21 13:56	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			04/30/21 13:56	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			04/30/21 13:56	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			04/30/21 13:56	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			04/30/21 13:56	1
2-Hexanone	ND		5.0	0.60	ug/L			04/30/21 13:56	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			04/30/21 13:56	1
Acetone	ND		5.0	0.90	ug/L			04/30/21 13:56	1
Benzene	ND		0.50	0.050	ug/L			04/30/21 13:56	1
Bromochloromethane	ND		0.50	0.050	ug/L			04/30/21 13:56	1
Bromodichloromethane	ND		0.50	0.050	ug/L			04/30/21 13:56	1
Bromoform	ND		1.0	0.30	ug/L			04/30/21 13:56	1
Bromomethane	ND		0.50	0.070	ug/L			04/30/21 13:56	1
Carbon disulfide	ND		1.0	0.060	ug/L			04/30/21 13:56	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			04/30/21 13:56	1
Chlorobenzene	ND		0.50	0.060	ug/L			04/30/21 13:56	1
Chloroethane	ND		0.50	0.070	ug/L			04/30/21 13:56	1
Chloroform	0.58		0.50	0.090	ug/L			04/30/21 13:56	1
Chloromethane	ND		0.50	0.060	ug/L			04/30/21 13:56	1
cis-1,2-Dichloroethene	0.067	J	0.50	0.050	ug/L			04/30/21 13:56	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			04/30/21 13:56	1
Dibromochloromethane	ND		0.50	0.070	ug/L			04/30/21 13:56	1
Ethylbenzene	ND		0.50	0.060	ug/L			04/30/21 13:56	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			04/30/21 13:56	1
Methylene Chloride	ND		0.50	0.070	ug/L			04/30/21 13:56	1
Styrene	ND		0.50	0.050	ug/L			04/30/21 13:56	1
Tetrachloroethene	4.5		0.50	0.060	ug/L			04/30/21 13:56	1
Toluene	ND		0.50	0.070	ug/L			04/30/21 13:56	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			04/30/21 13:56	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			04/30/21 13:56	1
Trichloroethene	0.18	J	0.50	0.060	ug/L			04/30/21 13:56	1
Vinyl chloride	ND		0.50	0.10	ug/L			04/30/21 13:56	1
Xylenes, Total	ND		1.0	0.15	ug/L			04/30/21 13:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		80 - 120		04/30/21 13:56	1
4-Bromofluorobenzene (Surr)	88		80 - 120		04/30/21 13:56	1
Dibromofluoromethane (Surr)	103		80 - 120		04/30/21 13:56	1
Toluene-d8 (Surr)	92		80 - 120		04/30/21 13:56	1

Client Sample Results

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

Job ID: 410-37501-1

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

Lab Sample ID: 410-37501-10

Date Collected: 04/26/21 11:55

Matrix: Water

Date Received: 04/27/21 16:47

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			04/30/21 14:18	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			04/30/21 14:18	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			04/30/21 14:18	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			04/30/21 14:18	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			04/30/21 14:18	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			04/30/21 14:18	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			04/30/21 14:18	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			04/30/21 14:18	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			04/30/21 14:18	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			04/30/21 14:18	1
2-Hexanone	ND		5.0	0.60	ug/L			04/30/21 14:18	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			04/30/21 14:18	1
Acetone	1.5	J	5.0	0.90	ug/L			04/30/21 14:18	1
Benzene	ND		0.50	0.050	ug/L			04/30/21 14:18	1
Bromochloromethane	ND		0.50	0.050	ug/L			04/30/21 14:18	1
Bromodichloromethane	ND		0.50	0.050	ug/L			04/30/21 14:18	1
Bromoform	ND		1.0	0.30	ug/L			04/30/21 14:18	1
Bromomethane	ND		0.50	0.070	ug/L			04/30/21 14:18	1
Carbon disulfide	0.073	J	1.0	0.060	ug/L			04/30/21 14:18	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			04/30/21 14:18	1
Chlorobenzene	ND		0.50	0.060	ug/L			04/30/21 14:18	1
Chloroethane	ND		0.50	0.070	ug/L			04/30/21 14:18	1
Chloroform	ND		0.50	0.090	ug/L			04/30/21 14:18	1
Chloromethane	ND		0.50	0.060	ug/L			04/30/21 14:18	1
cis-1,2-Dichloroethene	0.066	J	0.50	0.050	ug/L			04/30/21 14:18	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			04/30/21 14:18	1
Dibromochloromethane	ND		0.50	0.070	ug/L			04/30/21 14:18	1
Ethylbenzene	ND		0.50	0.060	ug/L			04/30/21 14:18	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			04/30/21 14:18	1
Methylene Chloride	ND		0.50	0.070	ug/L			04/30/21 14:18	1
Styrene	ND		0.50	0.050	ug/L			04/30/21 14:18	1
Tetrachloroethene	0.064	J	0.50	0.060	ug/L			04/30/21 14:18	1
Toluene	ND		0.50	0.070	ug/L			04/30/21 14:18	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			04/30/21 14:18	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			04/30/21 14:18	1
Trichloroethene	0.072	J	0.50	0.060	ug/L			04/30/21 14:18	1
Vinyl chloride	ND		0.50	0.10	ug/L			04/30/21 14:18	1
Xylenes, Total	ND		1.0	0.15	ug/L			04/30/21 14:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		80 - 120		04/30/21 14:18	1
4-Bromofluorobenzene (Surr)	89		80 - 120		04/30/21 14:18	1
Dibromofluoromethane (Surr)	103		80 - 120		04/30/21 14:18	1
Toluene-d8 (Surr)	93		80 - 120		04/30/21 14:18	1

Client Sample Results

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

Job ID: 410-37501-1

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

Lab Sample ID: 410-37501-11

Date Collected: 04/26/21 13:45

Matrix: Water

Date Received: 04/27/21 16:47

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			04/30/21 14:40	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			04/30/21 14:40	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			04/30/21 14:40	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			04/30/21 14:40	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			04/30/21 14:40	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			04/30/21 14:40	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			04/30/21 14:40	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			04/30/21 14:40	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			04/30/21 14:40	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			04/30/21 14:40	1
2-Hexanone	ND		5.0	0.60	ug/L			04/30/21 14:40	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			04/30/21 14:40	1
Acetone	2.6	J	5.0	0.90	ug/L			04/30/21 14:40	1
Benzene	ND		0.50	0.050	ug/L			04/30/21 14:40	1
Bromochloromethane	ND		0.50	0.050	ug/L			04/30/21 14:40	1
Bromodichloromethane	ND		0.50	0.050	ug/L			04/30/21 14:40	1
Bromoform	ND		1.0	0.30	ug/L			04/30/21 14:40	1
Bromomethane	ND		0.50	0.070	ug/L			04/30/21 14:40	1
Carbon disulfide	ND		1.0	0.060	ug/L			04/30/21 14:40	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			04/30/21 14:40	1
Chlorobenzene	ND		0.50	0.060	ug/L			04/30/21 14:40	1
Chloroethane	ND		0.50	0.070	ug/L			04/30/21 14:40	1
Chloroform	ND		0.50	0.090	ug/L			04/30/21 14:40	1
Chloromethane	0.070	J	0.50	0.060	ug/L			04/30/21 14:40	1
cis-1,2-Dichloroethene	0.059	J	0.50	0.050	ug/L			04/30/21 14:40	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			04/30/21 14:40	1
Dibromochloromethane	ND		0.50	0.070	ug/L			04/30/21 14:40	1
Ethylbenzene	ND		0.50	0.060	ug/L			04/30/21 14:40	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			04/30/21 14:40	1
Methylene Chloride	ND		0.50	0.070	ug/L			04/30/21 14:40	1
Styrene	ND		0.50	0.050	ug/L			04/30/21 14:40	1
Tetrachloroethene	0.11	J	0.50	0.060	ug/L			04/30/21 14:40	1
Toluene	0.089	J	0.50	0.070	ug/L			04/30/21 14:40	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			04/30/21 14:40	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			04/30/21 14:40	1
Trichloroethene	0.070	J	0.50	0.060	ug/L			04/30/21 14:40	1
Vinyl chloride	ND		0.50	0.10	ug/L			04/30/21 14:40	1
Xylenes, Total	ND		1.0	0.15	ug/L			04/30/21 14:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		80 - 120		04/30/21 14:40	1
4-Bromofluorobenzene (Surr)	89		80 - 120		04/30/21 14:40	1
Dibromofluoromethane (Surr)	103		80 - 120		04/30/21 14:40	1
Toluene-d8 (Surr)	93		80 - 120		04/30/21 14:40	1

Client Sample Results

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

Job ID: 410-37501-1

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

Lab Sample ID: 410-37501-12

Date Collected: 04/26/21 09:30

Matrix: Water

Date Received: 04/27/21 16:47

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			04/30/21 15:02	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			04/30/21 15:02	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			04/30/21 15:02	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			04/30/21 15:02	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			04/30/21 15:02	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			04/30/21 15:02	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			04/30/21 15:02	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			04/30/21 15:02	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			04/30/21 15:02	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			04/30/21 15:02	1
2-Hexanone	ND		5.0	0.60	ug/L			04/30/21 15:02	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			04/30/21 15:02	1
Acetone	1.9	J	5.0	0.90	ug/L			04/30/21 15:02	1
Benzene	ND		0.50	0.050	ug/L			04/30/21 15:02	1
Bromochloromethane	ND		0.50	0.050	ug/L			04/30/21 15:02	1
Bromodichloromethane	ND		0.50	0.050	ug/L			04/30/21 15:02	1
Bromoform	ND		1.0	0.30	ug/L			04/30/21 15:02	1
Bromomethane	ND		0.50	0.070	ug/L			04/30/21 15:02	1
Carbon disulfide	ND		1.0	0.060	ug/L			04/30/21 15:02	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			04/30/21 15:02	1
Chlorobenzene	ND		0.50	0.060	ug/L			04/30/21 15:02	1
Chloroethane	ND		0.50	0.070	ug/L			04/30/21 15:02	1
Chloroform	ND		0.50	0.090	ug/L			04/30/21 15:02	1
Chloromethane	ND		0.50	0.060	ug/L			04/30/21 15:02	1
cis-1,2-Dichloroethene	0.076	J	0.50	0.050	ug/L			04/30/21 15:02	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			04/30/21 15:02	1
Dibromochloromethane	ND		0.50	0.070	ug/L			04/30/21 15:02	1
Ethylbenzene	ND		0.50	0.060	ug/L			04/30/21 15:02	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			04/30/21 15:02	1
Methylene Chloride	ND		0.50	0.070	ug/L			04/30/21 15:02	1
Styrene	ND		0.50	0.050	ug/L			04/30/21 15:02	1
Tetrachloroethene	ND		0.50	0.060	ug/L			04/30/21 15:02	1
Toluene	ND		0.50	0.070	ug/L			04/30/21 15:02	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			04/30/21 15:02	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			04/30/21 15:02	1
Trichloroethene	0.075	J	0.50	0.060	ug/L			04/30/21 15:02	1
Vinyl chloride	ND		0.50	0.10	ug/L			04/30/21 15:02	1
Xylenes, Total	ND		1.0	0.15	ug/L			04/30/21 15:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		80 - 120		04/30/21 15:02	1
4-Bromofluorobenzene (Surr)	89		80 - 120		04/30/21 15:02	1
Dibromofluoromethane (Surr)	103		80 - 120		04/30/21 15:02	1
Toluene-d8 (Surr)	93		80 - 120		04/30/21 15:02	1

Client Sample Results

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

Job ID: 410-37501-1

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

Lab Sample ID: 410-37501-13

Date Collected: 04/26/21 12:00

Matrix: Water

Date Received: 04/27/21 16:47

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			04/30/21 12:28	1
1,1,1-Trichloroethane	0.068	J	0.50	0.060	ug/L			04/30/21 12:28	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			04/30/21 12:28	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			04/30/21 12:28	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			04/30/21 12:28	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			04/30/21 12:28	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			04/30/21 12:28	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			04/30/21 12:28	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			04/30/21 12:28	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			04/30/21 12:28	1
2-Hexanone	ND		5.0	0.60	ug/L			04/30/21 12:28	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			04/30/21 12:28	1
Acetone	ND		5.0	0.90	ug/L			04/30/21 12:28	1
Benzene	ND		0.50	0.050	ug/L			04/30/21 12:28	1
Bromochloromethane	ND		0.50	0.050	ug/L			04/30/21 12:28	1
Bromodichloromethane	ND		0.50	0.050	ug/L			04/30/21 12:28	1
Bromoform	ND		1.0	0.30	ug/L			04/30/21 12:28	1
Bromomethane	ND		0.50	0.070	ug/L			04/30/21 12:28	1
Carbon disulfide	ND		1.0	0.060	ug/L			04/30/21 12:28	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			04/30/21 12:28	1
Chlorobenzene	ND		0.50	0.060	ug/L			04/30/21 12:28	1
Chloroethane	ND		0.50	0.070	ug/L			04/30/21 12:28	1
Chloroform	0.12	J	0.50	0.090	ug/L			04/30/21 12:28	1
Chloromethane	ND		0.50	0.060	ug/L			04/30/21 12:28	1
cis-1,2-Dichloroethene	0.81		0.50	0.050	ug/L			04/30/21 12:28	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			04/30/21 12:28	1
Dibromochloromethane	ND		0.50	0.070	ug/L			04/30/21 12:28	1
Ethylbenzene	ND		0.50	0.060	ug/L			04/30/21 12:28	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			04/30/21 12:28	1
Methylene Chloride	ND		0.50	0.070	ug/L			04/30/21 12:28	1
Styrene	ND		0.50	0.050	ug/L			04/30/21 12:28	1
Tetrachloroethene	2.4		0.50	0.060	ug/L			04/30/21 12:28	1
Toluene	ND		0.50	0.070	ug/L			04/30/21 12:28	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			04/30/21 12:28	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			04/30/21 12:28	1
Trichloroethene	0.97		0.50	0.060	ug/L			04/30/21 12:28	1
Vinyl chloride	ND		0.50	0.10	ug/L			04/30/21 12:28	1
Xylenes, Total	ND		1.0	0.15	ug/L			04/30/21 12:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		80 - 120		04/30/21 12:28	1
4-Bromofluorobenzene (Surr)	89		80 - 120		04/30/21 12:28	1
Dibromofluoromethane (Surr)	102		80 - 120		04/30/21 12:28	1
Toluene-d8 (Surr)	93		80 - 120		04/30/21 12:28	1

Client Sample Results

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

Job ID: 410-37501-1

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

Lab Sample ID: 410-37501-14

Date Collected: 04/26/21 00:00

Matrix: Water

Date Received: 04/27/21 16:47

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			04/30/21 12:50	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			04/30/21 12:50	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			04/30/21 12:50	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			04/30/21 12:50	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			04/30/21 12:50	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			04/30/21 12:50	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			04/30/21 12:50	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			04/30/21 12:50	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			04/30/21 12:50	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			04/30/21 12:50	1
2-Hexanone	ND		5.0	0.60	ug/L			04/30/21 12:50	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			04/30/21 12:50	1
Acetone	2.3	J	5.0	0.90	ug/L			04/30/21 12:50	1
Benzene	ND		0.50	0.050	ug/L			04/30/21 12:50	1
Bromochloromethane	ND		0.50	0.050	ug/L			04/30/21 12:50	1
Bromodichloromethane	ND		0.50	0.050	ug/L			04/30/21 12:50	1
Bromoform	ND		1.0	0.30	ug/L			04/30/21 12:50	1
Bromomethane	ND		0.50	0.070	ug/L			04/30/21 12:50	1
Carbon disulfide	ND		1.0	0.060	ug/L			04/30/21 12:50	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			04/30/21 12:50	1
Chlorobenzene	ND		0.50	0.060	ug/L			04/30/21 12:50	1
Chloroethane	ND		0.50	0.070	ug/L			04/30/21 12:50	1
Chloroform	ND		0.50	0.090	ug/L			04/30/21 12:50	1
Chloromethane	ND		0.50	0.060	ug/L			04/30/21 12:50	1
cis-1,2-Dichloroethene	ND		0.50	0.050	ug/L			04/30/21 12:50	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			04/30/21 12:50	1
Dibromochloromethane	ND		0.50	0.070	ug/L			04/30/21 12:50	1
Ethylbenzene	ND		0.50	0.060	ug/L			04/30/21 12:50	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			04/30/21 12:50	1
Methylene Chloride	ND		0.50	0.070	ug/L			04/30/21 12:50	1
Styrene	ND		0.50	0.050	ug/L			04/30/21 12:50	1
Tetrachloroethene	ND		0.50	0.060	ug/L			04/30/21 12:50	1
Toluene	ND		0.50	0.070	ug/L			04/30/21 12:50	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			04/30/21 12:50	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			04/30/21 12:50	1
Trichloroethene	ND		0.50	0.060	ug/L			04/30/21 12:50	1
Vinyl chloride	ND		0.50	0.10	ug/L			04/30/21 12:50	1
Xylenes, Total	ND		1.0	0.15	ug/L			04/30/21 12:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		80 - 120		04/30/21 12:50	1
4-Bromofluorobenzene (Surr)	88		80 - 120		04/30/21 12:50	1
Dibromofluoromethane (Surr)	103		80 - 120		04/30/21 12:50	1
Toluene-d8 (Surr)	92		80 - 120		04/30/21 12:50	1

Default Detection Limits

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

Job ID: 410-37501-1

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: 410-37501-1

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (80-120)	BFB (80-120)	DBFM (80-120)	TOL (80-120)
410-37501-1	HD-COD-SW-6-0/1-0	102	93	99	100
410-37501-2	HD-COD-SW-7-0/1-0	101	93	99	101
410-37501-3	HD-COD-SW-8-0/1-0	102	93	98	101
410-37501-4	HD-COD-SW-9-0/1-0	104	94	99	100
410-37501-5	HD-COD-SW-13-0/1-0	104	94	98	101
410-37501-6	HD-COD-SW-15-0/1-0	104	94	99	100
410-37501-6 MS	HD-COD-SW-15-0/1-0 MS	102	97	98	100
410-37501-6 MSD	HD-COD-SW-15-0/1-0 MSD	101	95	98	100
410-37501-7	HD-COD-SW-16-0/1-0	99	89	103	93
410-37501-8	HD-COD-SW-17-0/1-0	96	88	103	93
410-37501-9	HD-COD-SW-26-0/1-0	96	88	103	92
410-37501-10	HD-COD-SW-27-0/1-0	98	89	103	93
410-37501-11	HD-COD-SW-28-0/1-0	99	89	103	93
410-37501-12	HD-COD-SW-29-0/1-0	97	89	103	93
410-37501-13	HD-QC1-0/1-1	97	89	102	93
410-37501-14	HD-QC1-0/1-2	97	88	103	92
LCS 410-120935/4	Lab Control Sample	104	96	98	100
LCS 410-120958/4	Lab Control Sample	97	90	101	93
LCSD 410-120935/5	Lab Control Sample Dup	104	96	98	100
LCSD 410-120958/5	Lab Control Sample Dup	97	90	100	93
MB 410-120935/10	Method Blank	105	93	100	99
MB 410-120958/7	Method Blank	100	89	102	93

Surrogate Legend

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

QC Sample Results

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

Job ID: 410-37501-1

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

Lab Sample ID: MB 410-120935/10

Matrix: Water

Analysis Batch: 120935

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			04/30/21 12:43	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			04/30/21 12:43	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			04/30/21 12:43	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			04/30/21 12:43	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			04/30/21 12:43	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			04/30/21 12:43	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			04/30/21 12:43	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			04/30/21 12:43	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			04/30/21 12:43	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			04/30/21 12:43	1
2-Hexanone	ND		5.0	0.60	ug/L			04/30/21 12:43	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			04/30/21 12:43	1
Acetone	ND		5.0	0.90	ug/L			04/30/21 12:43	1
Benzene	ND		0.50	0.050	ug/L			04/30/21 12:43	1
Bromochloromethane	ND		0.50	0.050	ug/L			04/30/21 12:43	1
Bromodichloromethane	ND		0.50	0.050	ug/L			04/30/21 12:43	1
Bromoform	ND		1.0	0.30	ug/L			04/30/21 12:43	1
Bromomethane	ND		0.50	0.070	ug/L			04/30/21 12:43	1
Carbon disulfide	ND		1.0	0.060	ug/L			04/30/21 12:43	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			04/30/21 12:43	1
Chlorobenzene	ND		0.50	0.060	ug/L			04/30/21 12:43	1
Chloroethane	ND		0.50	0.070	ug/L			04/30/21 12:43	1
Chloroform	ND		0.50	0.090	ug/L			04/30/21 12:43	1
Chloromethane	ND		0.50	0.060	ug/L			04/30/21 12:43	1
cis-1,2-Dichloroethene	ND		0.50	0.050	ug/L			04/30/21 12:43	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			04/30/21 12:43	1
Dibromochloromethane	ND		0.50	0.070	ug/L			04/30/21 12:43	1
Ethylbenzene	ND		0.50	0.060	ug/L			04/30/21 12:43	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			04/30/21 12:43	1
Methylene Chloride	ND		0.50	0.070	ug/L			04/30/21 12:43	1
Styrene	ND		0.50	0.050	ug/L			04/30/21 12:43	1
Tetrachloroethene	ND		0.50	0.060	ug/L			04/30/21 12:43	1
Toluene	ND		0.50	0.070	ug/L			04/30/21 12:43	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			04/30/21 12:43	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			04/30/21 12:43	1
Trichloroethene	ND		0.50	0.060	ug/L			04/30/21 12:43	1
Vinyl chloride	ND		0.50	0.10	ug/L			04/30/21 12:43	1
Xylenes, Total	ND		1.0	0.15	ug/L			04/30/21 12:43	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	105		80 - 120		04/30/21 12:43	1
4-Bromofluorobenzene (Surr)	93		80 - 120		04/30/21 12:43	1
Dibromofluoromethane (Surr)	100		80 - 120		04/30/21 12:43	1
Toluene-d8 (Surr)	99		80 - 120		04/30/21 12:43	1

QC Sample Results

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

Job ID: 410-37501-1

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

Lab Sample ID: LCS 410-120935/4

Matrix: Water

Analysis Batch: 120935

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	4.47		ug/L		89	71 - 134
1,1,1-Trichloroethane	5.00	4.55		ug/L		91	78 - 126
1,1,2,2-Tetrachloroethane	5.00	5.39		ug/L		108	75 - 123
1,1,2-Trichloroethane	5.00	5.11		ug/L		102	80 - 120
1,1-Dichloroethane	5.00	4.66		ug/L		93	74 - 120
1,1-Dichloroethene	5.00	4.69		ug/L		94	80 - 131
1,2-Dibromoethane (EDB)	5.00	5.07		ug/L		101	80 - 120
1,2-Dichloroethane	5.00	5.15		ug/L		103	69 - 122
1,2-Dichloropropane	5.00	4.89		ug/L		98	80 - 120
2-Butanone (MEK)	37.5	35.4		ug/L		94	59 - 141
2-Hexanone	25.0	23.1		ug/L		92	52 - 140
4-Methyl-2-pentanone (MIBK)	25.0	22.1		ug/L		88	55 - 140
Acetone	37.5	30.9		ug/L		82	60 - 146
Benzene	5.00	4.72		ug/L		94	80 - 120
Bromochloromethane	5.00	4.51		ug/L		90	80 - 120
Bromodichloromethane	5.00	4.74		ug/L		95	73 - 124
Bromoform	5.00	3.91		ug/L		78	49 - 144
Bromomethane	5.00	4.34		ug/L		87	60 - 136
Carbon disulfide	5.00	4.36		ug/L		87	67 - 130
Carbon tetrachloride	5.00	4.49		ug/L		90	64 - 141
Chlorobenzene	5.00	4.82		ug/L		96	80 - 120
Chloroethane	5.00	4.33		ug/L		87	63 - 120
Chloroform	5.00	4.80		ug/L		96	80 - 120
Chloromethane	5.00	4.67		ug/L		93	56 - 124
cis-1,2-Dichloroethene	5.00	4.64		ug/L		93	80 - 122
cis-1,3-Dichloropropene	5.00	4.55		ug/L		91	67 - 121
Dibromochloromethane	5.00	4.57		ug/L		91	64 - 138
Ethylbenzene	5.00	4.67		ug/L		93	80 - 120
Methyl tert-butyl ether	5.00	4.27		ug/L		85	69 - 120
Methylene Chloride	5.00	4.68		ug/L		94	80 - 120
Styrene	5.00	4.61		ug/L		92	80 - 120
Tetrachloroethene	5.00	4.66		ug/L		93	80 - 120
Toluene	5.00	4.65		ug/L		93	80 - 120
trans-1,2-Dichloroethene	5.00	4.50		ug/L		90	80 - 122
trans-1,3-Dichloropropene	5.00	4.86		ug/L		97	61 - 129
Trichloroethene	5.00	4.78		ug/L		96	80 - 120
Vinyl chloride	5.00	4.69		ug/L		94	60 - 125
Xylenes, Total	15.0	13.7		ug/L		91	80 - 120

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	104		80 - 120
4-Bromofluorobenzene (Surr)	96		80 - 120
Dibromofluoromethane (Surr)	98		80 - 120
Toluene-d8 (Surr)	100		80 - 120

QC Sample Results

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

Job ID: 410-37501-1

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

Lab Sample ID: LCSD 410-120935/5

Matrix: Water

Analysis Batch: 120935

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	4.50		ug/L		90	71 - 134	1	30
1,1,1-Trichloroethane	5.00	4.55		ug/L		91	78 - 126	0	30
1,1,2,2-Tetrachloroethane	5.00	5.35		ug/L		107	75 - 123	1	30
1,1,2-Trichloroethane	5.00	5.02		ug/L		100	80 - 120	2	30
1,1-Dichloroethane	5.00	4.75		ug/L		95	74 - 120	2	30
1,1-Dichloroethene	5.00	4.67		ug/L		93	80 - 131	1	30
1,2-Dibromoethane (EDB)	5.00	4.86		ug/L		97	80 - 120	4	30
1,2-Dichloroethane	5.00	5.05		ug/L		101	69 - 122	2	30
1,2-Dichloropropane	5.00	4.98		ug/L		100	80 - 120	2	30
2-Butanone (MEK)	37.5	34.7		ug/L		92	59 - 141	2	30
2-Hexanone	25.0	23.2		ug/L		93	52 - 140	0	30
4-Methyl-2-pentanone (MIBK)	25.0	22.0		ug/L		88	55 - 140	1	30
Acetone	37.5	31.8		ug/L		85	60 - 146	3	30
Benzene	5.00	4.75		ug/L		95	80 - 120	1	30
Bromochloromethane	5.00	4.54		ug/L		91	80 - 120	1	30
Bromodichloromethane	5.00	4.73		ug/L		95	73 - 124	0	30
Bromoform	5.00	3.91		ug/L		78	49 - 144	0	30
Bromomethane	5.00	4.20		ug/L		84	60 - 136	3	30
Carbon disulfide	5.00	4.39		ug/L		88	67 - 130	1	30
Carbon tetrachloride	5.00	4.50		ug/L		90	64 - 141	0	30
Chlorobenzene	5.00	4.81		ug/L		96	80 - 120	0	30
Chloroethane	5.00	4.40		ug/L		88	63 - 120	2	30
Chloroform	5.00	4.87		ug/L		97	80 - 120	2	30
Chloromethane	5.00	4.62		ug/L		92	56 - 124	1	30
cis-1,2-Dichloroethene	5.00	4.66		ug/L		93	80 - 122	0	30
cis-1,3-Dichloropropene	5.00	4.54		ug/L		91	67 - 121	0	30
Dibromochloromethane	5.00	4.52		ug/L		90	64 - 138	1	30
Ethylbenzene	5.00	4.70		ug/L		94	80 - 120	1	30
Methyl tert-butyl ether	5.00	4.45		ug/L		89	69 - 120	4	30
Methylene Chloride	5.00	4.73		ug/L		95	80 - 120	1	30
Styrene	5.00	4.62		ug/L		92	80 - 120	0	30
Tetrachloroethene	5.00	4.55		ug/L		91	80 - 120	2	30
Toluene	5.00	4.66		ug/L		93	80 - 120	0	30
trans-1,2-Dichloroethene	5.00	4.57		ug/L		91	80 - 122	2	30
trans-1,3-Dichloropropene	5.00	4.83		ug/L		97	61 - 129	1	30
Trichloroethene	5.00	4.74		ug/L		95	80 - 120	1	30
Vinyl chloride	5.00	4.77		ug/L		95	60 - 125	2	30
Xylenes, Total	15.0	13.8		ug/L		92	80 - 120	1	30

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	104		80 - 120
4-Bromofluorobenzene (Surr)	96		80 - 120
Dibromofluoromethane (Surr)	98		80 - 120
Toluene-d8 (Surr)	100		80 - 120

QC Sample Results

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

Job ID: 410-37501-1

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

Lab Sample ID: 410-37501-6 MS

Matrix: Water

Analysis Batch: 120935

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

Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				
1,1,1,2-Tetrachloroethane	ND		5.00	4.75		ug/L		95	71 - 134
1,1,1-Trichloroethane	0.12	J	5.00	5.21		ug/L		102	78 - 126
1,1,2,2-Tetrachloroethane	ND		5.00	5.50		ug/L		110	75 - 123
1,1,2-Trichloroethane	ND		5.00	5.38		ug/L		108	80 - 120
1,1-Dichloroethane	ND		5.00	5.15		ug/L		103	74 - 120
1,1-Dichloroethene	0.087	J	5.00	5.38		ug/L		106	80 - 131
1,2-Dibromoethane (EDB)	ND		5.00	5.10		ug/L		102	80 - 120
1,2-Dichloroethane	ND		5.00	5.31		ug/L		106	69 - 122
1,2-Dichloropropane	ND		5.00	5.33		ug/L		106	80 - 120
2-Butanone (MEK)	ND		37.5	36.2		ug/L		96	59 - 141
2-Hexanone	ND		25.0	23.9		ug/L		95	52 - 140
4-Methyl-2-pentanone (MIBK)	ND		25.0	22.8		ug/L		91	55 - 140
Acetone	ND		37.5	28.6		ug/L		76	60 - 146
Benzene	ND		5.00	5.11		ug/L		102	80 - 120
Bromochloromethane	ND		5.00	4.79		ug/L		96	80 - 120
Bromodichloromethane	ND		5.00	5.04		ug/L		101	73 - 124
Bromoform	ND		5.00	3.95		ug/L		79	49 - 144
Bromomethane	ND		5.00	4.68		ug/L		93	60 - 136
Carbon disulfide	ND		5.00	4.85		ug/L		97	67 - 130
Carbon tetrachloride	ND		5.00	5.20		ug/L		104	64 - 141
Chlorobenzene	ND		5.00	5.15		ug/L		103	80 - 120
Chloroethane	ND		5.00	4.90		ug/L		98	63 - 120
Chloroform	0.27	J	5.00	5.41		ug/L		103	80 - 120
Chloromethane	ND		5.00	5.15		ug/L		103	80 - 120
cis-1,2-Dichloroethene	0.69		5.00	5.62		ug/L		99	80 - 122
cis-1,3-Dichloropropene	ND		5.00	4.75		ug/L		95	67 - 121
Dibromochloromethane	ND		5.00	4.66		ug/L		93	64 - 138
Ethylbenzene	ND		5.00	5.11		ug/L		102	80 - 120
Methyl tert-butyl ether	ND		5.00	4.61		ug/L		92	69 - 120
Methylene Chloride	ND		5.00	4.97		ug/L		99	80 - 120
Styrene	ND		5.00	4.89		ug/L		98	80 - 120
Tetrachloroethene	2.4		5.00	7.48		ug/L		101	80 - 120
Toluene	ND		5.00	5.13		ug/L		102	80 - 120
trans-1,2-Dichloroethene	ND		5.00	5.03		ug/L		100	80 - 122
trans-1,3-Dichloropropene	ND		5.00	4.98		ug/L		99	61 - 129
Trichloroethene	0.86		5.00	6.07		ug/L		104	80 - 120
Vinyl chloride	ND		5.00	5.30		ug/L		106	60 - 125
Xylenes, Total	ND		15.0	14.9		ug/L		99	80 - 120

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	102		80 - 120
4-Bromofluorobenzene (Surr)	97		80 - 120
Dibromofluoromethane (Surr)	98		80 - 120
Toluene-d8 (Surr)	100		80 - 120

QC Sample Results

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

Job ID: 410-37501-1

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

Lab Sample ID: 410-37501-6 MSD

Matrix: Water

Analysis Batch: 120935

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

Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier				Limits		
1,1,1,2-Tetrachloroethane	ND		5.00	4.70		ug/L		94	71 - 134	1	30
1,1,1-Trichloroethane	0.12	J	5.00	5.20		ug/L		101	78 - 126	0	30
1,1,2,2-Tetrachloroethane	ND		5.00	5.41		ug/L		108	75 - 123	1	30
1,1,2-Trichloroethane	ND		5.00	5.18		ug/L		103	80 - 120	4	30
1,1-Dichloroethane	ND		5.00	5.15		ug/L		103	74 - 120	0	30
1,1-Dichloroethene	0.087	J	5.00	5.37		ug/L		106	80 - 131	0	30
1,2-Dibromoethane (EDB)	ND		5.00	5.09		ug/L		102	80 - 120	0	30
1,2-Dichloroethane	ND		5.00	5.15		ug/L		103	69 - 122	3	30
1,2-Dichloropropane	ND		5.00	5.23		ug/L		105	80 - 120	2	30
2-Butanone (MEK)	ND		37.5	34.9		ug/L		93	59 - 141	4	30
2-Hexanone	ND		25.0	23.3		ug/L		93	52 - 140	2	30
4-Methyl-2-pentanone (MIBK)	ND		25.0	22.1		ug/L		88	55 - 140	3	30
Acetone	ND		37.5	27.9		ug/L		74	60 - 146	3	30
Benzene	ND		5.00	5.06		ug/L		101	80 - 120	1	30
Bromochloromethane	ND		5.00	4.64		ug/L		93	80 - 120	3	30
Bromodichloromethane	ND		5.00	5.01		ug/L		100	73 - 124	0	30
Bromoform	ND		5.00	3.92		ug/L		78	49 - 144	1	30
Bromomethane	ND		5.00	4.50		ug/L		90	60 - 136	4	30
Carbon disulfide	ND		5.00	4.82		ug/L		96	67 - 130	1	30
Carbon tetrachloride	ND		5.00	5.17		ug/L		103	64 - 141	1	30
Chlorobenzene	ND		5.00	5.03		ug/L		101	80 - 120	2	30
Chloroethane	ND		5.00	4.67		ug/L		93	63 - 120	5	30
Chloroform	0.27	J	5.00	5.44		ug/L		103	80 - 120	1	30
Chloromethane	ND		5.00	4.82		ug/L		96	80 - 120	7	30
cis-1,2-Dichloroethene	0.69		5.00	5.68		ug/L		100	80 - 122	1	30
cis-1,3-Dichloropropene	ND		5.00	4.79		ug/L		96	67 - 121	1	30
Dibromochloromethane	ND		5.00	4.63		ug/L		93	64 - 138	1	30
Ethylbenzene	ND		5.00	5.01		ug/L		100	80 - 120	2	30
Methyl tert-butyl ether	ND		5.00	4.52		ug/L		90	69 - 120	2	30
Methylene Chloride	ND		5.00	4.89		ug/L		98	80 - 120	2	30
Styrene	ND		5.00	4.79		ug/L		96	80 - 120	2	30
Tetrachloroethene	2.4		5.00	7.44		ug/L		100	80 - 120	1	30
Toluene	ND		5.00	5.01		ug/L		100	80 - 120	2	30
trans-1,2-Dichloroethene	ND		5.00	5.07		ug/L		101	80 - 122	1	30
trans-1,3-Dichloropropene	ND		5.00	5.04		ug/L		101	61 - 129	1	30
Trichloroethene	0.86		5.00	6.04		ug/L		103	80 - 120	1	30
Vinyl chloride	ND		5.00	5.20		ug/L		104	60 - 125	2	30
Xylenes, Total	ND		15.0	14.6		ug/L		97	80 - 120	2	30

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	101		80 - 120
4-Bromofluorobenzene (Surr)	95		80 - 120
Dibromofluoromethane (Surr)	98		80 - 120
Toluene-d8 (Surr)	100		80 - 120

QC Sample Results

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

Job ID: 410-37501-1

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

Lab Sample ID: MB 410-120958/7

Matrix: Water

Analysis Batch: 120958

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			04/30/21 10:37	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			04/30/21 10:37	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			04/30/21 10:37	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			04/30/21 10:37	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			04/30/21 10:37	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			04/30/21 10:37	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			04/30/21 10:37	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			04/30/21 10:37	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			04/30/21 10:37	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			04/30/21 10:37	1
2-Hexanone	ND		5.0	0.60	ug/L			04/30/21 10:37	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			04/30/21 10:37	1
Acetone	ND		5.0	0.90	ug/L			04/30/21 10:37	1
Benzene	ND		0.50	0.050	ug/L			04/30/21 10:37	1
Bromochloromethane	ND		0.50	0.050	ug/L			04/30/21 10:37	1
Bromodichloromethane	ND		0.50	0.050	ug/L			04/30/21 10:37	1
Bromoform	ND		1.0	0.30	ug/L			04/30/21 10:37	1
Bromomethane	ND		0.50	0.070	ug/L			04/30/21 10:37	1
Carbon disulfide	ND		1.0	0.060	ug/L			04/30/21 10:37	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			04/30/21 10:37	1
Chlorobenzene	ND		0.50	0.060	ug/L			04/30/21 10:37	1
Chloroethane	ND		0.50	0.070	ug/L			04/30/21 10:37	1
Chloroform	ND		0.50	0.090	ug/L			04/30/21 10:37	1
Chloromethane	ND		0.50	0.060	ug/L			04/30/21 10:37	1
cis-1,2-Dichloroethene	ND		0.50	0.050	ug/L			04/30/21 10:37	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			04/30/21 10:37	1
Dibromochloromethane	ND		0.50	0.070	ug/L			04/30/21 10:37	1
Ethylbenzene	ND		0.50	0.060	ug/L			04/30/21 10:37	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			04/30/21 10:37	1
Methylene Chloride	ND		0.50	0.070	ug/L			04/30/21 10:37	1
Styrene	ND		0.50	0.050	ug/L			04/30/21 10:37	1
Tetrachloroethene	ND		0.50	0.060	ug/L			04/30/21 10:37	1
Toluene	ND		0.50	0.070	ug/L			04/30/21 10:37	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			04/30/21 10:37	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			04/30/21 10:37	1
Trichloroethene	ND		0.50	0.060	ug/L			04/30/21 10:37	1
Vinyl chloride	ND		0.50	0.10	ug/L			04/30/21 10:37	1
Xylenes, Total	ND		1.0	0.15	ug/L			04/30/21 10:37	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	100		80 - 120		04/30/21 10:37	1
4-Bromofluorobenzene (Surr)	89		80 - 120		04/30/21 10:37	1
Dibromofluoromethane (Surr)	102		80 - 120		04/30/21 10:37	1
Toluene-d8 (Surr)	93		80 - 120		04/30/21 10:37	1

QC Sample Results

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

Job ID: 410-37501-1

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

Lab Sample ID: LCS 410-120958/4

Matrix: Water

Analysis Batch: 120958

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	4.79		ug/L		96	71 - 134
1,1,1-Trichloroethane	5.00	4.59		ug/L		92	78 - 126
1,1,2,2-Tetrachloroethane	5.00	4.42		ug/L		88	75 - 123
1,1,2-Trichloroethane	5.00	4.82		ug/L		96	80 - 120
1,1-Dichloroethane	5.00	4.22		ug/L		84	74 - 120
1,1-Dichloroethene	5.00	4.74		ug/L		95	80 - 131
1,2-Dibromoethane (EDB)	5.00	4.60		ug/L		92	80 - 120
1,2-Dichloroethane	5.00	4.28		ug/L		86	69 - 122
1,2-Dichloropropane	5.00	4.37		ug/L		87	80 - 120
2-Butanone (MEK)	37.5	38.4		ug/L		102	59 - 141
2-Hexanone	25.0	25.6		ug/L		102	52 - 140
4-Methyl-2-pentanone (MIBK)	25.0	24.9		ug/L		100	55 - 140
Acetone	37.5	36.8		ug/L		98	60 - 146
Benzene	5.00	4.46		ug/L		89	80 - 120
Bromochloromethane	5.00	4.83		ug/L		97	80 - 120
Bromodichloromethane	5.00	4.54		ug/L		91	73 - 124
Bromoform	5.00	4.69		ug/L		94	49 - 144
Bromomethane	5.00	4.81		ug/L		96	60 - 136
Carbon disulfide	5.00	4.33		ug/L		87	67 - 130
Carbon tetrachloride	5.00	4.67		ug/L		93	64 - 141
Chlorobenzene	5.00	4.75		ug/L		95	80 - 120
Chloroethane	5.00	4.38		ug/L		88	63 - 120
Chloroform	5.00	4.60		ug/L		92	80 - 120
Chloromethane	5.00	4.28		ug/L		86	56 - 124
cis-1,2-Dichloroethene	5.00	4.71		ug/L		94	80 - 122
cis-1,3-Dichloropropene	5.00	4.04		ug/L		81	67 - 121
Dibromochloromethane	5.00	4.60		ug/L		92	64 - 138
Ethylbenzene	5.00	4.47		ug/L		89	80 - 120
Methyl tert-butyl ether	5.00	4.32		ug/L		86	69 - 120
Methylene Chloride	5.00	4.69		ug/L		94	80 - 120
Styrene	5.00	4.56		ug/L		91	80 - 120
Tetrachloroethene	5.00	4.91		ug/L		98	80 - 120
Toluene	5.00	4.44		ug/L		89	80 - 120
trans-1,2-Dichloroethene	5.00	4.62		ug/L		92	80 - 122
trans-1,3-Dichloropropene	5.00	4.03		ug/L		81	61 - 129
Trichloroethene	5.00	4.71		ug/L		94	80 - 120
Vinyl chloride	5.00	4.53		ug/L		91	60 - 125
Xylenes, Total	15.0	13.7		ug/L		91	80 - 120

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	97		80 - 120
4-Bromofluorobenzene (Surr)	90		80 - 120
Dibromofluoromethane (Surr)	101		80 - 120
Toluene-d8 (Surr)	93		80 - 120

QC Sample Results

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

Job ID: 410-37501-1

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

Lab Sample ID: LCSD 410-120958/5

Matrix: Water

Analysis Batch: 120958

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	2	30
1,1,1-Trichloroethane	5.00	4.64		ug/L		93	78 - 126	1	30
1,1,2,2-Tetrachloroethane	5.00	4.42		ug/L		88	75 - 123	0	30
1,1,2-Trichloroethane	5.00	4.81		ug/L		96	80 - 120	0	30
1,1-Dichloroethane	5.00	4.25		ug/L		85	74 - 120	1	30
1,1-Dichloroethene	5.00	4.81		ug/L		96	80 - 131	1	30
1,2-Dibromoethane (EDB)	5.00	4.67		ug/L		93	80 - 120	1	30
1,2-Dichloroethane	5.00	4.28		ug/L		86	69 - 122	0	30
1,2-Dichloropropane	5.00	4.34		ug/L		87	80 - 120	1	30
2-Butanone (MEK)	37.5	39.4		ug/L		105	59 - 141	3	30
2-Hexanone	25.0	26.5		ug/L		106	52 - 140	3	30
4-Methyl-2-pentanone (MIBK)	25.0	26.0		ug/L		104	55 - 140	4	30
Acetone	37.5	37.1		ug/L		99	60 - 146	1	30
Benzene	5.00	4.51		ug/L		90	80 - 120	1	30
Bromochloromethane	5.00	4.87		ug/L		97	80 - 120	1	30
Bromodichloromethane	5.00	4.59		ug/L		92	73 - 124	1	30
Bromoform	5.00	4.72		ug/L		94	49 - 144	1	30
Bromomethane	5.00	4.86		ug/L		97	60 - 136	1	30
Carbon disulfide	5.00	4.39		ug/L		88	67 - 130	1	30
Carbon tetrachloride	5.00	4.75		ug/L		95	64 - 141	2	30
Chlorobenzene	5.00	4.77		ug/L		95	80 - 120	0	30
Chloroethane	5.00	4.35		ug/L		87	63 - 120	1	30
Chloroform	5.00	4.68		ug/L		94	80 - 120	2	30
Chloromethane	5.00	4.33		ug/L		87	56 - 124	1	30
cis-1,2-Dichloroethene	5.00	4.77		ug/L		95	80 - 122	1	30
cis-1,3-Dichloropropene	5.00	4.06		ug/L		81	67 - 121	0	30
Dibromochloromethane	5.00	4.62		ug/L		92	64 - 138	0	30
Ethylbenzene	5.00	4.50		ug/L		90	80 - 120	1	30
Methyl tert-butyl ether	5.00	4.32		ug/L		86	69 - 120	0	30
Methylene Chloride	5.00	4.73		ug/L		95	80 - 120	1	30
Styrene	5.00	4.66		ug/L		93	80 - 120	2	30
Tetrachloroethene	5.00	5.02		ug/L		100	80 - 120	2	30
Toluene	5.00	4.52		ug/L		90	80 - 120	2	30
trans-1,2-Dichloroethene	5.00	4.66		ug/L		93	80 - 122	1	30
trans-1,3-Dichloropropene	5.00	4.07		ug/L		81	61 - 129	1	30
Trichloroethene	5.00	4.74		ug/L		95	80 - 120	1	30
Vinyl chloride	5.00	4.62		ug/L		92	60 - 125	2	30
Xylenes, Total	15.0	14.0		ug/L		93	80 - 120	2	30

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	97		80 - 120
4-Bromofluorobenzene (Surr)	90		80 - 120
Dibromofluoromethane (Surr)	100		80 - 120
Toluene-d8 (Surr)	93		80 - 120

QC Association Summary

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

Job ID: 410-37501-1

GC/MS VOA

Analysis Batch: 120935

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-37501-1	HD-COD-SW-6-0/1-0	Total/NA	Water	8260D	
410-37501-2	HD-COD-SW-7-0/1-0	Total/NA	Water	8260D	
410-37501-3	HD-COD-SW-8-0/1-0	Total/NA	Water	8260D	
410-37501-4	HD-COD-SW-9-0/1-0	Total/NA	Water	8260D	
410-37501-5	HD-COD-SW-13-0/1-0	Total/NA	Water	8260D	
410-37501-6	HD-COD-SW-15-0/1-0	Total/NA	Water	8260D	
MB 410-120935/10	Method Blank	Total/NA	Water	8260D	
LCS 410-120935/4	Lab Control Sample	Total/NA	Water	8260D	
LCSD 410-120935/5	Lab Control Sample Dup	Total/NA	Water	8260D	
410-37501-6 MS	HD-COD-SW-15-0/1-0 MS	Total/NA	Water	8260D	
410-37501-6 MSD	HD-COD-SW-15-0/1-0 MSD	Total/NA	Water	8260D	

Analysis Batch: 120958

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-37501-7	HD-COD-SW-16-0/1-0	Total/NA	Water	8260D	
410-37501-8	HD-COD-SW-17-0/1-0	Total/NA	Water	8260D	
410-37501-9	HD-COD-SW-26-0/1-0	Total/NA	Water	8260D	
410-37501-10	HD-COD-SW-27-0/1-0	Total/NA	Water	8260D	
410-37501-11	HD-COD-SW-28-0/1-0	Total/NA	Water	8260D	
410-37501-12	HD-COD-SW-29-0/1-0	Total/NA	Water	8260D	
410-37501-13	HD-QC1-0/1-1	Total/NA	Water	8260D	
410-37501-14	HD-QC1-0/1-2	Total/NA	Water	8260D	
MB 410-120958/7	Method Blank	Total/NA	Water	8260D	
LCS 410-120958/4	Lab Control Sample	Total/NA	Water	8260D	
LCSD 410-120958/5	Lab Control Sample Dup	Total/NA	Water	8260D	

Lab Chronicle

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

Job ID: 410-37501-1

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

Lab Sample ID: 410-37501-1

Date Collected: 04/26/21 11:00

Matrix: Water

Date Received: 04/27/21 16:47

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	120935	04/30/21 16:37	K4WN	ELLE

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

Lab Sample ID: 410-37501-2

Date Collected: 04/26/21 11:40

Matrix: Water

Date Received: 04/27/21 16:47

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	120935	04/30/21 16:59	K4WN	ELLE

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

Lab Sample ID: 410-37501-3

Date Collected: 04/26/21 09:45

Matrix: Water

Date Received: 04/27/21 16:47

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	120935	04/30/21 17:20	K4WN	ELLE

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

Lab Sample ID: 410-37501-4

Date Collected: 04/26/21 13:25

Matrix: Water

Date Received: 04/27/21 16:47

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	120935	04/30/21 17:41	K4WN	ELLE

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

Lab Sample ID: 410-37501-5

Date Collected: 04/26/21 10:05

Matrix: Water

Date Received: 04/27/21 16:47

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	120935	04/30/21 18:02	K4WN	ELLE

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

Lab Sample ID: 410-37501-6

Date Collected: 04/26/21 12:05

Matrix: Water

Date Received: 04/27/21 16:47

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	120935	04/30/21 14:08	K4WN	ELLE

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

Lab Sample ID: 410-37501-7

Date Collected: 04/26/21 10:30

Matrix: Water

Date Received: 04/27/21 16:47

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	120958	04/30/21 13:12	K4WN	ELLE

Lab Chronicle

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

Job ID: 410-37501-1

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

Lab Sample ID: 410-37501-8

Date Collected: 04/26/21 10:40

Matrix: Water

Date Received: 04/27/21 16:47

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	120958	04/30/21 13:34	K4WN	ELLE

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

Lab Sample ID: 410-37501-9

Date Collected: 04/26/21 11:20

Matrix: Water

Date Received: 04/27/21 16:47

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	120958	04/30/21 13:56	K4WN	ELLE

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

Lab Sample ID: 410-37501-10

Date Collected: 04/26/21 11:55

Matrix: Water

Date Received: 04/27/21 16:47

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	120958	04/30/21 14:18	K4WN	ELLE

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

Lab Sample ID: 410-37501-11

Date Collected: 04/26/21 13:45

Matrix: Water

Date Received: 04/27/21 16:47

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	120958	04/30/21 14:40	K4WN	ELLE

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

Lab Sample ID: 410-37501-12

Date Collected: 04/26/21 09:30

Matrix: Water

Date Received: 04/27/21 16:47

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	120958	04/30/21 15:02	K4WN	ELLE

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

Lab Sample ID: 410-37501-13

Date Collected: 04/26/21 12:00

Matrix: Water

Date Received: 04/27/21 16:47

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	120958	04/30/21 12:28	K4WN	ELLE

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

Lab Sample ID: 410-37501-14

Date Collected: 04/26/21 00:00

Matrix: Water

Date Received: 04/27/21 16:47

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	120958	04/30/21 12:50	K4WN	ELLE

Laboratory References:

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

Accreditation/Certification Summary

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

Job ID: 410-37501-1

Laboratory: Eurofins Lancaster Laboratories Env, LLC

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

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

Method Summary

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

Job ID: 410-37501-1

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

Protocol References:

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

Laboratory References:

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

Sample Summary

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

Job ID: 410-37501-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
410-37501-1	HD-COD-SW-6-0/1-0	Water	04/26/21 11:00	04/27/21 16:47	
410-37501-2	HD-COD-SW-7-0/1-0	Water	04/26/21 11:40	04/27/21 16:47	
410-37501-3	HD-COD-SW-8-0/1-0	Water	04/26/21 09:45	04/27/21 16:47	
410-37501-4	HD-COD-SW-9-0/1-0	Water	04/26/21 13:25	04/27/21 16:47	
410-37501-5	HD-COD-SW-13-0/1-0	Water	04/26/21 10:05	04/27/21 16:47	
410-37501-6	HD-COD-SW-15-0/1-0	Water	04/26/21 12:05	04/27/21 16:47	
410-37501-7	HD-COD-SW-16-0/1-0	Water	04/26/21 10:30	04/27/21 16:47	
410-37501-8	HD-COD-SW-17-0/1-0	Water	04/26/21 10:40	04/27/21 16:47	
410-37501-9	HD-COD-SW-26-0/1-0	Water	04/26/21 11:20	04/27/21 16:47	
410-37501-10	HD-COD-SW-27-0/1-0	Water	04/26/21 11:55	04/27/21 16:47	
410-37501-11	HD-COD-SW-28-0/1-0	Water	04/26/21 13:45	04/27/21 16:47	
410-37501-12	HD-COD-SW-29-0/1-0	Water	04/26/21 09:30	04/27/21 16:47	
410-37501-13	HD-QC1-0/1-1	Water	04/26/21 12:00	04/27/21 16:47	
410-37501-14	HD-QC1-0/1-2	Water	04/26/21 00:00	04/27/21 16:47	

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-37501-1

SDG No.: _____

Instrument ID: 16334 Analysis Batch Number: 70996Lab Sample ID: IC 410-70996/3 Client Sample ID: _____Date Analyzed: 11/30/20 12:50 Lab File ID: GN30I01.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methyl acetate	3.95	Other	virayd	12/01/20 11:38
1,2-Dichloroethane	7.33	Other	virayd	12/01/20 11:38

Lab Sample ID: ICIS 410-70996/4 Client Sample ID: _____Date Analyzed: 11/30/20 13:12 Lab File ID: GN30I02.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.56	Other	virayd	12/01/20 11:45

Lab Sample ID: IC 410-70996/5 Client Sample ID: _____Date Analyzed: 11/30/20 13:34 Lab File ID: GN30I03.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
t-Butyl alcohol	4.31	Other	virayd	12/01/20 11:47
1,2-Dichloroethane	7.33	Other	virayd	12/01/20 11:47
1,4-Dioxane	8.57	Other	virayd	12/01/20 11:47

Lab Sample ID: IC 410-70996/6 Client Sample ID: _____Date Analyzed: 11/30/20 13:56 Lab File ID: GN30I04.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methyl acetate	3.97	Other	virayd	12/01/20 11:49
t-Butyl alcohol	4.34	Other	virayd	12/01/20 11:49
1,4-Dioxane	8.57	Other	virayd	12/01/20 11:49

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-37501-1

SDG No.: _____

Instrument ID: 16334 Analysis Batch Number: 70996Lab Sample ID: IC 410-70996/7 Client Sample ID: _____Date Analyzed: 11/30/20 14:19 Lab File ID: GN30I05.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methyl acetate	3.97	Other	virayd	12/01/20 11:51
n-Butanol	8.05	Other	virayd	12/01/20 11:51
1,4-Dioxane	8.57	Other	virayd	12/01/20 11:52

Lab Sample ID: IC 410-70996/8 Client Sample ID: _____Date Analyzed: 11/30/20 14:41 Lab File ID: GN30I06.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	1.96	Other	virayd	12/01/20 11:53
1,3-Butadiene	2.26	Other	virayd	12/01/20 11:53
Bromomethane	2.59	Other	virayd	12/01/20 11:53
Dichlorofluoromethane	2.90	Other	virayd	12/01/20 11:53
Ethyl ether	3.21	Other	virayd	12/01/20 11:53
Acetone	3.55	Other	virayd	12/01/20 11:54
Methyl iodide	3.71	Other	virayd	12/01/20 11:54
t-Butyl alcohol	4.34	Other	virayd	12/01/20 11:54
2,2-Dichloropropane	6.10	Other	virayd	12/01/20 11:54
Carbon tetrachloride	6.99	Other	virayd	12/01/20 11:55
1,4-Dioxane	8.57	Other	virayd	12/01/20 11:55
Dibromomethane	8.58	Other	virayd	12/01/20 11:55

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-37501-1

SDG No.: _____

Instrument ID: 16334 Analysis Batch Number: 70996Lab Sample ID: IC 410-70996/9 Client Sample ID: _____Date Analyzed: 11/30/20 15:03 Lab File ID: GN30I07.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,3-Butadiene	2.25	Other	virayd	12/01/20 11:56
Vinyl chloride	2.25	Other	virayd	12/01/20 11:57
Dichlorofluoromethane	2.90	Other	virayd	12/01/20 11:57
Trichlorofluoromethane	2.96	Other	virayd	12/01/20 11:57
Ethyl ether	3.20	Other	virayd	12/01/20 11:57
Acrolein	3.37	Other	virayd	12/01/20 11:57
Acetone	3.54	Other	virayd	12/01/20 11:58
Methyl acetate	3.96	Other	virayd	12/01/20 11:58
Allyl chloride	3.98	Other	virayd	12/01/20 11:58
Methylene Chloride	4.16	Other	virayd	12/01/20 11:58
t-Butyl alcohol	4.32	Other	virayd	12/01/20 11:58
2,2-Dichloropropane	6.08	Other	virayd	12/01/20 11:58
Methacrylonitrile	6.35	Other	virayd	12/01/20 11:58
1,1,1-Trichloroethane	6.79	Other	virayd	12/01/20 11:59
Cyclohexane	6.87	Other	virayd	12/01/20 11:59
Carbon tetrachloride	6.99	Other	virayd	12/01/20 11:59
Isobutyl alcohol	7.17	Other	virayd	12/01/20 11:59
Trichloroethene	8.14	Other	virayd	12/01/20 11:59
Methyl methacrylate	8.56	Other	virayd	12/01/20 11:59
1,4-Dioxane	8.57	Other	virayd	12/01/20 11:59

Lab Sample ID: ICV 410-70996/10 Client Sample ID: _____Date Analyzed: 11/30/20 15:26 Lab File ID: GN30V01.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dichloroethane	7.34	Other	virayd	12/01/20 12:02
1,4-Dioxane	8.57	Other	virayd	12/01/20 12:02

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-37501-1

SDG No.: _____

Instrument ID: 16334 Analysis Batch Number: 120958Lab Sample ID: 410-37501-13 Client Sample ID: HD-QC1-0/1-1Date Analyzed: 04/30/21 12:28 Lab File ID: GA30S05.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon disulfide	3.80	Incomplete Integration	campbellme	04/30/21 16:51
1,1-Dichloroethane	5.25	Incomplete Integration	campbellme	04/30/21 16:51
1,1,1-Trichloroethane	6.80	Incomplete Integration	campbellme	04/30/21 16:52

Lab Sample ID: 410-37501-7 Client Sample ID: HD-COD-SW-16-0/1-0Date Analyzed: 04/30/21 13:12 Lab File ID: GA30S07.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon disulfide	3.85	Incomplete Integration	campbellme	04/30/21 16:52
Chloroform	6.56	Incomplete Integration	campbellme	04/30/21 16:53

Lab Sample ID: 410-37501-8 Client Sample ID: HD-COD-SW-17-0/1-0Date Analyzed: 04/30/21 13:34 Lab File ID: GA30S08.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,1-Dichloroethene	3.53	Incomplete Integration	campbellme	04/30/21 16:53
Carbon disulfide	3.79	Incomplete Integration	campbellme	04/30/21 16:53
trans-1,2-Dichloroethene	4.57	Incomplete Integration	campbellme	04/30/21 16:53
Methyl tert-butyl ether	4.58	Incomplete Integration	campbellme	04/30/21 16:53
1,1-Dichloroethane	5.25	Incomplete Integration	campbellme	04/30/21 16:53

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-37501-1

SDG No.: _____

Instrument ID: 16334 Analysis Batch Number: 120958Lab Sample ID: 410-37501-9 Client Sample ID: HD-COD-SW-26-0/1-0Date Analyzed: 04/30/21 13:56 Lab File ID: GA30S09.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,1,1-Trichloroethane	6.78	Peak assignment corrected	campbellme	04/30/21 16:54
Bromodichloromethane	8.82	Incomplete Integration	campbellme	04/30/21 16:54

Lab Sample ID: 410-37501-10 Client Sample ID: HD-COD-SW-27-0/1-0Date Analyzed: 04/30/21 14:18 Lab File ID: GA30S10.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon disulfide	3.82	Incomplete Integration	campbellme	04/30/21 16:54
cis-1,2-Dichloroethene	6.09	Incomplete Integration	campbellme	04/30/21 16:54

Lab Sample ID: 410-37501-11 Client Sample ID: HD-COD-SW-28-0/1-0Date Analyzed: 04/30/21 14:40 Lab File ID: GA30S11.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon disulfide	3.79	Incomplete Integration	campbellme	04/30/21 16:55
Benzene	7.26	Incomplete Integration	campbellme	04/30/21 16:55

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-37501-1

SDG No.: _____

Instrument ID: 16334 Analysis Batch Number: 120958

Lab Sample ID: 410-37501-12 Client Sample ID: HD-COD-SW-29-0/1-0

Date Analyzed: 04/30/21 15:02 Lab File ID: GA30S12.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon disulfide	3.83	Incomplete Integration	campbellm e	04/30/21 16:55
Chloroform	6.56	Incomplete Integration	campbellm e	04/30/21 16:55

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-37501-1

SDG No.: _____

Instrument ID: 19930 Analysis Batch Number: 107390Lab Sample ID: IC 410-107390/12 Client Sample ID: _____Date Analyzed: 03/25/21 23:19 Lab File ID: IM25I01.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

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

Lab Sample ID: ICIS 410-107390/13 Client Sample ID: _____Date Analyzed: 03/25/21 23:41 Lab File ID: IM25I02.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

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

Lab Sample ID: IC 410-107390/14 Client Sample ID: _____Date Analyzed: 03/26/21 00:02 Lab File ID: IM25I03.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

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

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-37501-1

SDG No.: _____

Instrument ID: 19930 Analysis Batch Number: 107390Lab Sample ID: IC 410-107390/15 Client Sample ID: _____Date Analyzed: 03/26/21 00:23 Lab File ID: IM25I04.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

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

Lab Sample ID: IC 410-107390/16 Client Sample ID: _____Date Analyzed: 03/26/21 00:44 Lab File ID: IM25I05.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

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

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-37501-1

SDG No.: _____

Instrument ID: 19930 Analysis Batch Number: 107390Lab Sample ID: IC 410-107390/17 Client Sample ID: _____Date Analyzed: 03/26/21 01:05 Lab File ID: IM25I06.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

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

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-37501-1

SDG No.: _____

Instrument ID: 19930 Analysis Batch Number: 107390Lab Sample ID: IC 410-107390/18 Client Sample ID: _____Date Analyzed: 03/26/21 01:26 Lab File ID: IM25I07.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

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

Lab Sample ID: ICV 410-107390/19 Client Sample ID: _____Date Analyzed: 03/26/21 01:47 Lab File ID: IM25V01.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

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

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-37501-1

SDG No.: _____

Instrument ID: 19930 Analysis Batch Number: 120935Lab Sample ID: CCVIS 410-120935/3 Client Sample ID: _____Date Analyzed: 04/30/21 10:15 Lab File ID: IA30X02.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methyl iodide	3.82	Incomplete Integration	knouses	04/30/21 10:47
Methyl acetate	4.04	Baseline	knouses	04/30/21 10:48
1,4-Dioxane	8.63	Incomplete Integration	knouses	04/30/21 10:48

Lab Sample ID: LCS 410-120935/4 Client Sample ID: _____Date Analyzed: 04/30/21 10:36 Lab File ID: IA30X03.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloromethane	2.17	Incomplete Integration	knouses	04/30/21 11:43
Bromomethane	2.64	Baseline	knouses	04/30/21 11:43

Lab Sample ID: 410-37501-6 Client Sample ID: HD-COD-SW-15-0/1-0Date Analyzed: 04/30/21 14:08 Lab File ID: IA30X13.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,1-Dichloroethene	3.62	Incomplete Integration	campbellm e	04/30/21 17:37
t-Butyl alcohol-d10 (IS)	4.26	Incomplete Integration	campbellm e	04/30/21 17:37
1,1-Dichloroethane	5.34	Incomplete Integration	campbellm e	04/30/21 17:37

Lab Sample ID: 410-37501-1 Client Sample ID: HD-COD-SW-6-0/1-0Date Analyzed: 04/30/21 16:37 Lab File ID: IA30X20.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon disulfide	3.93	Incomplete Integration	campbellm e	04/30/21 17:42

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-37501-1

SDG No.: _____

Instrument ID: 19930 Analysis Batch Number: 120935Lab Sample ID: 410-37501-2 Client Sample ID: HD-COD-SW-7-0/1-0Date Analyzed: 04/30/21 16:59 Lab File ID: IA30X21.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon disulfide	3.96	Incomplete Integration	campbellme	04/30/21 17:42

Lab Sample ID: 410-37501-3 Client Sample ID: HD-COD-SW-8-0/1-0Date Analyzed: 04/30/21 17:20 Lab File ID: IA30X22.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon disulfide	3.91	Incomplete Integration	campbellme	04/30/21 18:04

Lab Sample ID: 410-37501-4 Client Sample ID: HD-COD-SW-9-0/1-0Date Analyzed: 04/30/21 17:41 Lab File ID: IA30X23.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon disulfide	3.89	Incomplete Integration	campbellme	04/30/21 18:55

Lab Sample ID: 410-37501-5 Client Sample ID: HD-COD-SW-13-0/1-0Date Analyzed: 04/30/21 18:02 Lab File ID: IA30X24.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon disulfide	3.88	Incomplete Integration	campbellme	04/30/21 18:55
Chloroform	6.64	Incomplete Integration	campbellme	04/30/21 18:55

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-37501-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration					
					Reagent ID	Volume Added							
MSV_29_826ISS_00013	05/16/21	11/16/20	Methanol, Lot DZ644	10 mL	MSV_8260_SS_00263	1 mL	1,2-Dichloroethane-d4 (Surr)	250 ug/mL					
							4-Bromofluorobenzene (Surr)	250 ug/mL					
							Dibromofluoromethane (Surr)	250 ug/mL					
											1 mL	1,4-Dichlorobenzene-d4	250 ug/mL
												Chlorobenzene-d5 (IS)	250 ug/mL
												Fluorobenzene (IS)	250 ug/mL
							t-Butyl alcohol-d10 (IS)	1250 ug/mL					
.MSV_8260_SS_00263	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_00151	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_29_826ISS_00017	05/31/21	04/19/21	Methanol, Lot DZ644	10 mL	MSV_Cus826_IS_00203	1 mL	1,4-Dichlorobenzene-d4	250 ug/mL					
							Chlorobenzene-d5 (IS)	250 ug/mL					
							Fluorobenzene (IS)	250 ug/mL					
							t-Butyl alcohol-d10 (IS)	1250 ug/mL					
.MSV_Cus826_IS_00203	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_29_826ISS_00017	05/31/21	04/19/21	Methanol, Lot DZ644	10 mL	MSV_8260_SS_00338	1 mL	1,2-Dichloroethane-d4 (Surr)	250 ug/mL					
							4-Bromofluorobenzene (Surr)	250 ug/mL					
							Dibromofluoromethane (Surr)	250 ug/mL					
							Toluene-d8 (Surr)	250 ug/mL					
.MSV_8260_SS_00338	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_31_826ISS_00004	05/31/21	01/26/21	Methanol, Lot DZ644	50 mL	MSV_8260_SS_00284	1 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL					
							4-Bromofluorobenzene (Surr)	50 ug/mL					
							Dibromofluoromethane (Surr)	50 ug/mL					
											1 mL	1,4-Dichlorobenzene-d4	50 ug/mL
												Chlorobenzene-d5 (IS)	50 ug/mL
												Fluorobenzene (IS)	50 ug/mL
							t-Butyl alcohol-d10 (IS)	250 ug/mL					
.MSV_8260_SS_00284	03/31/22		Restek, Lot A0146938				(Purchased Reagent)	1,2-Dichloroethane-d4 (Surr)	2500 ug/mL				
								4-Bromofluorobenzene (Surr)	2500 ug/mL				
								Dibromofluoromethane (Surr)	2500 ug/mL				
								Toluene-d8 (Surr)	2500 ug/mL				
.MSV_Cus826_IS_00173	05/31/21		Restek, Lot A0138205				(Purchased Reagent)	1,4-Dichlorobenzene-d4	2500 ug/mL				
								Chlorobenzene-d5 (IS)	2500 ug/mL				
								Fluorobenzene (IS)	2500 ug/mL				

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-37501-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							t-Butyl alcohol-d10 (IS)	12500 ug/mL
MSV_Q_OVOA1_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
							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	

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-37501-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
.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_QVOA1_00073	03/31/21	03/22/21	Methanol, Lot DZ644	25 mL	MSV_Q#1B_00092	1 mL	1,1,1,2-Tetrachloroethane	40 mg/L
							1,1,1-Trichloroethane	40 mg/L
							1,1,2,2-Tetrachloroethane	40 mg/L
							1,1,2-Trichloroethane	40 mg/L
							1,1-Dichloroethane	40 mg/L
							1,1-Dichloroethene	40 mg/L
							1,2-Dibromoethane (EDB)	40 mg/L
							1,2-Dichloroethane	40 mg/L
							1,2-Dichloropropane	40 mg/L
							Benzene	40 mg/L
							Bromodichloromethane	40 mg/L
							Bromoform	40 mg/L
							Carbon tetrachloride	40 mg/L
							Chlorobenzene	40 mg/L
							Chloroform	40 mg/L
							cis-1,2-Dichloroethene	40 mg/L
							cis-1,3-Dichloropropene	40 mg/L
							Dibromochloromethane	40 mg/L
							Ethylbenzene	40 mg/L
							Methylene Chloride	40 mg/L
							Styrene	40 mg/L
							Tetrachloroethene	40 mg/L
							Toluene	40 mg/L
							trans-1,2-Dichloroethene	40 mg/L
							trans-1,3-Dichloropropene	40 mg/L
							Trichloroethene	40 mg/L
					MSV_Q#3B_00081	1 mL	2-Butanone (MEK)	300 mg/L
							2-Hexanone	200 mg/L
							4-Methyl-2-pentanone (MIBK)	200 mg/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-37501-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					MSV_Q#4C_00088	1 mL	Acetone	300 mg/L
							Carbon disulfide	40 mg/L
							Methyl tert-butyl ether	40 mg/L
.MSV_Q#1B_00092	10/31/23		Restek, Lot A0165522		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	1000 ug/mL
							1,1,1-Trichloroethane	1000 ug/mL
							1,1,2,2-Tetrachloroethane	1000 ug/mL
							1,1,2-Trichloroethane	1000 ug/mL
							1,1-Dichloroethane	1000 ug/mL
							1,1-Dichloroethene	1000 ug/mL
							1,2-Dibromoethane (EDB)	1000 ug/mL
							1,2-Dichloroethane	1000 ug/mL
							1,2-Dichloropropane	1000 ug/mL
							Benzene	1000 ug/mL
							Bromodichloromethane	1000 ug/mL
							Bromoform	1000 ug/mL
							Carbon tetrachloride	1000 ug/mL
							Chlorobenzene	1000 ug/mL
							Chloroform	1000 ug/mL
							cis-1,2-Dichloroethene	1000 ug/mL
							cis-1,3-Dichloropropene	1000 ug/mL
							Dibromochloromethane	1000 ug/mL
							Ethylbenzene	1000 ug/mL
							Methylene Chloride	1000 ug/mL
							Styrene	1000 ug/mL
							Tetrachloroethene	1000 ug/mL
							Toluene	1000 ug/mL
							trans-1,2-Dichloroethene	1000 ug/mL
							trans-1,3-Dichloropropene	1000 ug/mL
							Trichloroethene	1000 ug/mL
.MSV_Q#3B_00081	09/30/21		Restek, Lot A0158722		(Purchased Reagent)		2-Butanone (MEK)	7500 ug/mL
							2-Hexanone	5000 ug/mL
							4-Methyl-2-pentanone (MIBK)	5000 ug/mL
							Acetone	7500 ug/mL
.MSV_Q#4C_00088	03/31/21		Restek, Lot A0158704		(Purchased Reagent)		Carbon disulfide	1000 ug/mL
							Methyl tert-butyl ether	1000 ug/mL
MSV_Q_QVOA1_00080	05/26/21	04/26/21	Methanol, Lot DZ644	25 mL	MSV_Q#1B_00098	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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-37501-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00088	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_00103	1 mL	Carbon disulfide	40 mg/L
							Methyl tert-butyl ether	40 mg/L
.MSV_Q#1B_00098	04/30/22		Restek, Lot A0165522			(Purchased Reagent)	1,1,1,2-Tetrachloroethane	1000 ug/mL
							1,1,1-Trichloroethane	1000 ug/mL
							1,1,2,2-Tetrachloroethane	1000 ug/mL
							1,1,2-Trichloroethane	1000 ug/mL
							1,1-Dichloroethane	1000 ug/mL
							1,1-Dichloroethene	1000 ug/mL
							1,2-Dibromoethane (EDB)	1000 ug/mL
							1,2-Dichloroethane	1000 ug/mL
							1,2-Dichloropropane	1000 ug/mL
							Benzene	1000 ug/mL
							Bromodichloromethane	1000 ug/mL
							Bromoform	1000 ug/mL
							Carbon tetrachloride	1000 ug/mL
							Chlorobenzene	1000 ug/mL
							Chloroform	1000 ug/mL
							cis-1,2-Dichloroethene	1000 ug/mL
							cis-1,3-Dichloropropene	1000 ug/mL
							Dibromochloromethane	1000 ug/mL
							Ethylbenzene	1000 ug/mL
							Methylene Chloride	1000 ug/mL
							Styrene	1000 ug/mL
							Tetrachloroethene	1000 ug/mL
							Toluene	1000 ug/mL
							trans-1,2-Dichloroethene	1000 ug/mL
							trans-1,3-Dichloropropene	1000 ug/mL
							Trichloroethene	1000 ug/mL
.MSV_Q#3B_00088	09/30/22		Restek, Lot A0169795			(Purchased Reagent)	2-Butanone (MEK)	7500 ug/mL
							2-Hexanone	5000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-37501-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Methyl-2-pentanone (MIBK)	5000 ug/mL
							Acetone	7500 ug/mL
.MSV_Q#4C_00103	03/31/22		Restek, Lot A0169843			(Purchased Reagent)	Carbon disulfide	1000 ug/mL
							Methyl tert-butyl ether	1000 ug/mL
MSV_Q_QVOA6_00054	12/25/20	11/25/20	Methanol, Lot DZ644	25 mL	MSV_QCS#6Std_00074	1 mL	Bromochloromethane	40 ug/mL
.MSV_QCS#6Std_00074	09/30/21		Restek, Lot A0158906			(Purchased Reagent)	Bromochloromethane	1000 ug/mL
MSV_Q_QVOA6_00071	04/21/21	03/22/21	Methanol, Lot DZ644	25 mL	MSV_QCS#6Std_00088	1 mL	Bromochloromethane	40 ug/mL
.MSV_QCS#6Std_00088	09/30/21		Restek, Lot A0158906			(Purchased Reagent)	Bromochloromethane	1000 ug/mL
MSV_Q_QVOA6_00076	05/26/21	04/26/21	Methanol, Lot DZ644	25 mL	MSV_QCS#6Std_00094	1 mL	Bromochloromethane	40 ug/mL
.MSV_QCS#6Std_00094	09/30/21		Restek, Lot A0158906			(Purchased Reagent)	Bromochloromethane	1000 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_QGAS_826_00118	04/01/21	03/25/21	Methanol, Lot DZ644	1 mL	MSV_502QGas_00160	20 uL	Bromomethane	40 ug/mL
							Chloroethane	40 ug/mL
							Chloromethane	40 ug/mL
							Vinyl chloride	40 ug/mL
.MSV_502QGas_00160	04/01/21		Restek, Lot A0155823			(Purchased Reagent)	Bromomethane	2000 ug/mL
							Chloroethane	2000 ug/mL
							Chloromethane	2000 ug/mL
							Vinyl chloride	2000 ug/mL
MSV_QGAS_826_00124	05/03/21	04/26/21	Methanol, Lot DZ644	1 mL	MSV_502QGas_00174	20 uL	Bromomethane	40 ug/mL
							Chloroethane	40 ug/mL
							Chloromethane	40 ug/mL
							Vinyl chloride	40 ug/mL
.MSV_502QGas_00174	05/03/21		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_00125	05/06/21	04/29/21	Methanol, Lot DZ644	1 mL	MSV_502QGas_00175	20 uL	Bromomethane	40 ug/mL
							Chloroethane	40 ug/mL
							Chloromethane	40 ug/mL
							Vinyl chloride	40 ug/mL
.MSV_502QGas_00175	05/06/21		Restek, Lot A0155823			(Purchased Reagent)	Bromomethane	2000 ug/mL
							Chloroethane	2000 ug/mL
							Chloromethane	2000 ug/mL
							Vinyl chloride	2000 ug/mL
MSV_RV1_826_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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-37501-1

SDG No.:

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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-37501-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							Trichloroethene	50 ug/mL
					MSV_V#2B_00161	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_00107	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
							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_00060	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_00057	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_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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-37501-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1-Dichloroethene	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
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-37501-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration			
					Reagent ID	Volume Added					
.MSV_V#2B_00161	12/30/20		Restek, Lot A0159694			(Purchased Reagent)	Trichloroethene	5000 ug/mL			
							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			
.MSV_V#4C_00107	12/30/20		Restek, Lot A0158660			(Purchased Reagent)	Propionitrile	25000 ug/mL			
							trans-1,4-Dichloro-2-butene	12500 ug/mL			
							1,1,2-Trichloro-1,2,2-trifluoroethane	5000 ug/mL			
							1,2-Dichloro-1,1,2-trifluoroethane	5000 ug/mL			
							2-Chloro-1,3-butadiene	5000 ug/mL			
							Benzyl chloride	5000 ug/mL			
							Butadiene	5000 ug/mL			
							Carbon disulfide	5000 ug/mL			
							Cyclohexane	5000 ug/mL			
							Ethyl methacrylate	5000 ug/mL			
							Hexane	5000 ug/mL			
							Iodomethane	5000 ug/mL			
							Isopropyl ether	5000 ug/mL			
							Methyl methacrylate	5000 ug/mL			
.MSV_V_VOA2_00060	12/30/20	11/30/20	Methanol, Lot DZ644		5 mL	MSV_V#2B_00161	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_00161	12/30/20		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_00057	12/26/20	11/30/20	Methanol, Lot DZ644	
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								

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-37501-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..MSV_V#3B_00070	12/30/20		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
..MSV_V#3B_00070	12/30/20		Restek, Lot A0158677				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_00042	03/31/21	03/25/21	Methanol, Lot DZ644	1 mL	MSV_V_VOA1_00134	50 uL	1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropene	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropene	50 ug/mL
							1,2-Dibromoethane (EDB)	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropene	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-Dichloropropene	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							1-Chlorohexane	50 ug/mL
							2,2-Dichloropropene	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							4-Isopropyltoluene	50 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromodichloromethane	50 ug/mL
							Bromoform	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
Chloroform	50 ug/mL							
cis-1,2-Dichloroethene	50 ug/mL							
cis-1,3-Dichloropropene	50 ug/mL							
Dibromochloromethane	50 ug/mL							
Dibromomethane	50 ug/mL							

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-37501-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Ethylbenzene	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	100 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							N-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							Trichloroethene	50 ug/mL
							1,4-Dioxane	2500 ug/mL
							2-Methyl-2-propanol	1000 ug/mL
							Isobutyl alcohol	2500 ug/mL
							Methacrylonitrile	500 ug/mL
							n-Butanol	5000 ug/mL
							Propionitrile	1000 ug/mL
							trans-1,4-Dichloro-2-butene	500 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,2-Dichloro-1,1,2-trifluoroethane	50 ug/mL
							2-Chloro-1,3-butadiene	50 ug/mL
							Benzyl chloride	50 ug/mL
							Butadiene	50 ug/mL
							Carbon disulfide	50 ug/mL
							Cyclohexane	50 ug/mL
							Ethyl methacrylate	50 ug/mL
							Hexane	50 ug/mL
							Iodomethane	50 ug/mL
							Isopropyl ether	50 ug/mL
							Methyl methacrylate	50 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							n-Heptane	50 ug/mL
							Tert-amyl methyl ether	50 ug/mL
							Tert-butyl ethyl ether	50 ug/mL
					MSV_V_VOA2_00076	150 uL	1,4-Dioxane	2500 ug/mL
							2-Methyl-2-propanol	1000 ug/mL
							Isobutyl alcohol	2500 ug/mL
							Methacrylonitrile	500 ug/mL
							n-Butanol	5000 ug/mL
							Propionitrile	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-37501-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					MSV_V_VOA3_00074	100 uL	trans-1,4-Dichloro-2-butene	500 ug/mL
							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
.MSV_V_VOA1_00134	03/31/21	03/22/21	Methanol, Lot DZ644	5 mL	MSV_V#1B_00148	1 mL	Acrolein	2499.89 ug/mL
							1,1,1,2-Tetrachloroethane	1000 ug/mL
							1,1,1-Trichloroethane	1000 ug/mL
							1,1,2,2-Tetrachloroethane	1000 ug/mL
							1,1,2-Trichloroethane	1000 ug/mL
							1,1-Dichloroethane	1000 ug/mL
							1,1-Dichloroethene	1000 ug/mL
							1,1-Dichloropropene	1000 ug/mL
							1,2,3-Trichlorobenzene	1000 ug/mL
							1,2,3-Trichloropropene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2,4-Trimethylbenzene	1000 ug/mL
							1,2-Dibromo-3-Chloropropene	1000 ug/mL
							1,2-Dibromoethane (EDB)	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Dichloroethane	1000 ug/mL
							1,2-Dichloropropene	1000 ug/mL
							1,3,5-Trichlorobenzene	1000 ug/mL
							1,3,5-Trimethylbenzene	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dichloropropene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1-Chlorohexane	1000 ug/mL
							2,2-Dichloropropene	1000 ug/mL
							2-Chlorotoluene	1000 ug/mL
							4-Chlorotoluene	1000 ug/mL
							4-Isopropyltoluene	1000 ug/mL
							Benzene	1000 ug/mL
							Bromobenzene	1000 ug/mL
							Bromodichloromethane	1000 ug/mL
							Bromoform	1000 ug/mL
							Carbon tetrachloride	1000 ug/mL
							Chlorobenzene	1000 ug/mL
							Chloroform	1000 ug/mL
							cis-1,2-Dichloroethene	1000 ug/mL
							cis-1,3-Dichloropropene	1000 ug/mL
							Dibromochloromethane	1000 ug/mL
							Dibromomethane	1000 ug/mL
							Ethylbenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-37501-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Isopropylbenzene	1000 ug/mL
							m-Xylene & p-Xylene	2000 ug/mL
							Methylene Chloride	1000 ug/mL
							n-Butylbenzene	1000 ug/mL
							N-Propylbenzene	1000 ug/mL
							Naphthalene	1000 ug/mL
							o-Xylene	1000 ug/mL
							sec-Butylbenzene	1000 ug/mL
							Styrene	1000 ug/mL
							tert-Butylbenzene	1000 ug/mL
							Tetrachloroethene	1000 ug/mL
							Toluene	1000 ug/mL
							trans-1,2-Dichloroethene	1000 ug/mL
							trans-1,3-Dichloropropene	1000 ug/mL
							Trichloroethene	1000 ug/mL
					MSV_V#2B_00201	1 mL	1,4-Dioxane	12500 ug/mL
							2-Methyl-2-propanol	5000 ug/mL
							Isobutyl alcohol	12500 ug/mL
							Methacrylonitrile	2500 ug/mL
							n-Butanol	25000 ug/mL
							Propionitrile	5000 ug/mL
					MSV_V#4C_00128	1 mL	trans-1,4-Dichloro-2-butene	2500 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	1000 ug/mL
							1,2-Dichloro-1,1,2-trifluoroethane	1000 ug/mL
							2-Chloro-1,3-butadiene	1000 ug/mL
							Benzyl chloride	1000 ug/mL
							Butadiene	1000 ug/mL
							Carbon disulfide	1000 ug/mL
							Cyclohexane	1000 ug/mL
							Ethyl methacrylate	1000 ug/mL
							Hexane	1000 ug/mL
							Iodomethane	1000 ug/mL
							Isopropyl ether	1000 ug/mL
..MSV_V#1B_00148	04/21/21		Restek, Lot A0158586		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	5000 ug/mL
							1,1,1-Trichloroethane	5000 ug/mL
							1,1,2,2-Tetrachloroethane	5000 ug/mL
							1,1,2-Trichloroethane	5000 ug/mL
							1,1-Dichloroethane	5000 ug/mL
							1,1-Dichloroethene	5000 ug/mL
							1,1-Dichloropropene	5000 ug/mL
							1,2,3-Trichlorobenzene	5000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-37501-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2,3-Trichloropropane	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
							Benzene	5000 ug/mL
							Bromobenzene	5000 ug/mL
							Bromodichloromethane	5000 ug/mL
							Bromoform	5000 ug/mL
							Carbon tetrachloride	5000 ug/mL
							Chlorobenzene	5000 ug/mL
							Chloroform	5000 ug/mL
							cis-1,2-Dichloroethene	5000 ug/mL
							cis-1,3-Dichloropropene	5000 ug/mL
							Dibromochloromethane	5000 ug/mL
							Dibromomethane	5000 ug/mL
							Ethylbenzene	5000 ug/mL
							Hexachlorobutadiene	5000 ug/mL
							Isopropylbenzene	5000 ug/mL
							m-Xylene & p-Xylene	10000 ug/mL
							Methylene Chloride	5000 ug/mL
							n-Butylbenzene	5000 ug/mL
							N-Propylbenzene	5000 ug/mL
							Naphthalene	5000 ug/mL
							o-Xylene	5000 ug/mL
							sec-Butylbenzene	5000 ug/mL
							Styrene	5000 ug/mL
							tert-Butylbenzene	5000 ug/mL
Tetrachloroethene	5000 ug/mL							
Toluene	5000 ug/mL							
trans-1,2-Dichloroethene	5000 ug/mL							
trans-1,3-Dichloropropene	5000 ug/mL							
Trichloroethene	5000 ug/mL							
..MSV_V#2B_00201	04/21/21		Restek, Lot A0159694		(Purchased Reagent)		1,4-Dioxane	62500 ug/mL
							2-Methyl-2-propanol	25000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-37501-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00128	03/31/21		Restek, Lot A0158660		(Purchased Reagent)		1,1,2-Trichloro-1,2,2-trifluoroethane	5000 ug/mL
							1,2-Dichloro-1,1,2-trifluoroethane	5000 ug/mL
							2-Chloro-1,3-butadiene	5000 ug/mL
							Benzyl chloride	5000 ug/mL
							Butadiene	5000 ug/mL
							Carbon disulfide	5000 ug/mL
							Cyclohexane	5000 ug/mL
							Ethyl methacrylate	5000 ug/mL
							Hexane	5000 ug/mL
							Iodomethane	5000 ug/mL
							Isopropyl ether	5000 ug/mL
							Methyl methacrylate	5000 ug/mL
							Methyl tert-butyl ether	5000 ug/mL
							n-Heptane	5000 ug/mL
							Tert-amyl methyl ether	5000 ug/mL
							Tert-butyl ethyl ether	5000 ug/mL
.MSV_V_VOA2_00076	04/21/21	03/22/21	Methanol, Lot DZ644	5 mL	MSV_V#2B_00202	1 mL	1,4-Dioxane	12500 ug/mL
							2-Methyl-2-propanol	5000 ug/mL
							Isobutyl alcohol	12500 ug/mL
							Methacrylonitrile	2500 ug/mL
							n-Butanol	25000 ug/mL
							Propionitrile	5000 ug/mL
							trans-1,4-Dichloro-2-butene	2500 ug/mL
..MSV_V#2B_00202	04/21/21		Restek, Lot A0159694		(Purchased Reagent)		1,4-Dioxane	62500 ug/mL
							2-Methyl-2-propanol	25000 ug/mL
							Isobutyl alcohol	62500 ug/mL
							Methacrylonitrile	12500 ug/mL
							n-Butanol	125000 ug/mL
							Propionitrile	25000 ug/mL
							trans-1,4-Dichloro-2-butene	12500 ug/mL
.MSV_V_VOA3_00074	04/11/21	03/22/21	Methanol, Lot DZ644	5 mL	MSV_V#3B_00087	1 mL	2-Butanone (MEK)	5000 ug/mL
							2-Hexanone	5000 ug/mL
							2-Nitropropane	5000 ug/mL
							4-Methyl-2-pentanone (MIBK)	5000 ug/mL
							Acetone	5000 ug/mL
							Acrylonitrile	2500 ug/mL
							Tetrahydrofuran	5000 ug/mL
					MSV_VACR_00015	1 mL	Acrolein	24998.9 ug/mL
..MSV_V#3B_00087	04/21/21		Restek, Lot A0158677		(Purchased Reagent)		2-Butanone (MEK)	25000 ug/mL
							2-Hexanone	25000 ug/mL
							2-Nitropropane	25000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-37501-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration	
					Reagent ID	Volume Added			
							4-Methyl-2-pentanone (MIBK)	25000 ug/mL	
							Acetone	25000 ug/mL	
							Acrylonitrile	12500 ug/mL	
							Tetrahydrofuran	25000 ug/mL	
..MSV VACR 00015	04/11/21	02/10/21	Methanol, Lot DZ644	10 mL	MSV VACR STK 00017	9.135 mL	Acrolein	124994 ug/mL	
...MSV VACR STK 00017	04/11/21	02/10/21	Methanol, Lot DZ644	10 mL	MSV ACROLEIN 00010	1.4603 g	Acrolein	136830 ug/mL	
...MSV ACROLEIN 00010	09/30/21		Chem Service, Lot 10804400			(Purchased Reagent)	Acrolein	0.937 g/g	
MSV_RV1_826_00045	05/26/21	04/26/21	Methanol, Lot DZ644	1 mL	MSV_V#1B_00153	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	
							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_00168				
						Methyl tert-butyl ether	50 ug/mL		
MSV_V_VOA3_00079					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_00153	05/26/21		Restek, Lot A0158586				(Purchased Reagent)	1,1,1,2-Tetrachloroethane	5000 ug/mL
								1,1,1-Trichloroethane	5000 ug/mL
								1,1,2,2-Tetrachloroethane	5000 ug/mL
								1,1,2-Trichloroethane	5000 ug/mL
								1,1-Dichloroethane	5000 ug/mL
								1,1-Dichloroethene	5000 ug/mL
								1,2-Dibromoethane (EDB)	5000 ug/mL
	1,2-Dichloroethane	5000 ug/mL							

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-37501-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2-Dichloropropane	5000 ug/mL
							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
.MSV_V#4C_00168	05/26/21		Restek, Lot A0170799			(Purchased Reagent)	Carbon disulfide	5000 ug/mL
							Methyl tert-butyl ether	5000 ug/mL
.MSV_V_VOA3_00079	05/26/21	04/26/21	Methanol, Lot DZ644	5 mL	MSV_V#3B_00094	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_00094	05/26/21		Restek, Lot A0169677			(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_00035	12/19/20	11/30/20	Methanol, Lot DZ644	1 mL	MSV_V_EE_00004	50 uL	Ethyl ether	50.0108 ug/mL
					MSV_V_VOA6_00063	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_00063	12/25/20	11/25/20	Methanol, Lot DZ644	5 mL	MSV_V#6_00046	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_00046	12/25/20		Restek, Lot A0158625			(Purchased Reagent)	1,2,3-Trimethylbenzene	5000 ug/mL
							3-Chloro-1-propene	5000 ug/mL
							Bromochloromethane	5000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-37501-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration	
					Reagent ID	Volume Added			
							Methyl acetate	5000 ug/mL	
							Methylcyclohexane	5000 ug/mL	
							Pentachloroethane	5000 ug/mL	
MSV_RV4_826_00048	04/21/21	03/24/21	Methanol, Lot DZ644	1 mL	MSV_V_EE_00004	50 uL	Ethyl ether	50.0108 ug/mL	
					MSV_V_VOA6_00080	50 uL	1,2,3-Trimethylbenzene	50 ug/mL	
							3-Chloro-1-propene	50 ug/mL	
							Bromochloromethane	50 ug/mL	
							Methyl acetate	50 ug/mL	
							Methylcyclohexane	50 ug/mL	
							Pentachloroethane	50 ug/mL	
.MSV_V_EE_00004	04/21/21	10/21/20	Methanol, Lot DX212	100 mL	MSV_EE_MISCSK_00005	1.434 mL	Ethyl ether	1000.22 ug/mL	
..MSV_EE_MISCSK_00005	04/21/21	10/21/20	Methanol, Lot DX212	10 mL	MSV_EE_Neat_00003	0.6975 g	Ethyl ether	69750 ug/mL	
...MSV_EE_Neat_00003	11/30/21		Chem Service, Lot 7967000				(Purchased Reagent)	Ethyl ether	1 g/g
.MSV_V_VOA6_00080	04/21/21	03/22/21	Methanol, Lot DZ644	5 mL	MSV_V#6_00064	1 mL	1,2,3-Trimethylbenzene	1000 ug/mL	
							3-Chloro-1-propene	1000 ug/mL	
							Bromochloromethane	1000 ug/mL	
							Methyl acetate	1000 ug/mL	
							Methylcyclohexane	1000 ug/mL	
							Pentachloroethane	1000 ug/mL	
..MSV_V#6_00064	04/21/21		Restek, Lot A0158625				(Purchased Reagent)	1,2,3-Trimethylbenzene	5000 ug/mL
								3-Chloro-1-propene	5000 ug/mL
								Bromochloromethane	5000 ug/mL
								Methyl acetate	5000 ug/mL
								Methylcyclohexane	5000 ug/mL
								Pentachloroethane	5000 ug/mL
MSV_RV4_826_00050	05/15/21	04/27/21	Methanol, Lot DZ644	1 mL	MSV_V_VOA6_00085	50 uL	Bromochloromethane	50 ug/mL	
.MSV_V_VOA6_00085	05/26/21	04/26/21	Methanol, Lot DZ644	5 mL	MSV_V#6_00067	1 mL	Bromochloromethane	1000 ug/mL	
..MSV_V#6_00067	05/26/21		Restek, Lot A0169789				(Purchased Reagent)	Bromochloromethane	5000 ug/mL
MSV_RV4GAS826_00097	12/07/20	11/30/20	Methanol, Lot DZ644	1 mL	MSV_DCFM_00030	25 uL	Dichlorofluoromethane	50 ug/mL	
					MSV_V_Gas_00176	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_00176	12/07/20		Restek, Lot A0159812				(Purchased Reagent)	Bromomethane	2000 ug/mL
								Chloroethane	2000 ug/mL
								Chloromethane	2000 ug/mL
								Dichlorodifluoromethane	2000 ug/mL
								Trichlorofluoromethane	2000 ug/mL
								Vinyl chloride	2000 ug/mL
MSV_RV4GAS826_00121	04/01/21	03/25/21	Methanol, Lot DZ644	1 mL	MSV_DCFM_00036	25 uL	Dichlorofluoromethane	50 ug/mL	
					MSV_V_Gas_00230	25 uL	Bromomethane	50 ug/mL	
								Chloroethane	50 ug/mL
								Chloromethane	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-37501-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dichlorodifluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.MSV_DCFM_00036	04/07/21		AccuStandard, Lot 220101035		(Purchased Reagent)		Dichlorofluoromethane	2000 ug/mL
.MSV_V_Gas_00230	04/01/21		Restek, Lot A0159812		(Purchased Reagent)		Bromomethane	2000 ug/mL
							Chloroethane	2000 ug/mL
							Chloromethane	2000 ug/mL
							Dichlorodifluoromethane	2000 ug/mL
							Trichlorofluoromethane	2000 ug/mL
							Vinyl chloride	2000 ug/mL
MSV_RV4GAS826_00127	05/02/21	04/25/21	Methanol, Lot DZ644	1 mL	MSV_V_Gas_00241	25 uL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.MSV_V_Gas_00241	05/02/21		Restek, Lot A0159812		(Purchased Reagent)		Bromomethane	2000 ug/mL
							Chloroethane	2000 ug/mL
							Chloromethane	2000 ug/mL
							Vinyl chloride	2000 ug/mL
MSV_RV4GAS826_00128	05/06/21	04/29/21	Methanol, Lot DZ644	1 mL	MSV_V_Gas_00245	25 uL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.MSV_V_Gas_00245	05/06/21		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-Dichlorobutene-2 (total)	
							1,3-Dichloropropene, Total	
							divinyl benzene	
							Tentatively Identified Compound	
							Total Diethylbenzene	
							Xylenes, Total	
.MSV_VBFB_STK_00004	01/22/21	07/22/20	Methanol, Lot DX212	10 mL	MSV_VBFB_STK_00004	0.117 mL	BFB	50.0245 ug/mL
..MSV_4BFB_NEAT_00002	01/31/21		Chem Service, Lot 8601300		MSV_4BFB_NEAT_00002	1.0689 g	BFB	106890 ug/mL
							(Purchased Reagent)	1 g/g
MSV_V_BFB_00004							1,2-Dichloroethene, Total	
							1,3-Dichloropropene, Total	
							Tentatively Identified Compound	
							Xylenes, Total	
							MSV_VBFB_STK_00005	0.124 mL
.MSV_VBFB_STK_00005	07/14/21	01/14/21	Methanol, Lot DZ644	10 mL	MSV_4BFB_NEAT_00004	1.0046 g	BFB	49.8282 ug/mL
..MSV_4BFB_NEAT_00004	02/28/25		Chem Service, Lot 10727100		(Purchased Reagent)		BFB	100460 ug/mL
							(Purchased Reagent)	1 g/g
MSV_V_BFB_00005							1,2-Dichloroethene, Total	

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-37501-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,3-Dichlorobutene-2 (total)	
							1,3-Dichloropropene, Total	
							divinyl benzene	
							Tentatively Identified Compound	
							Total BTEX	
							Total Diethylbenzene	
							Xylenes, Total	
.MSV VBFB STK 00005	07/14/21	01/14/21	Methanol, Lot DZ644	10 mL	MSV VBFB STK 00005	0.124 mL	BFB	49.8282 ug/mL
..MSV 4BFB NEAT 00004	02/28/25		Chem Service, Lot 10727100		MSV 4BFB NEAT 00004	1.0046 g	BFB	100460 ug/mL
						(Purchased Reagent)	BFB	1 g/g

Reagent

MSV_4BFB_NEAT_00002

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 []

<u>Analytical Test</u>	<u>Value</u>
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:

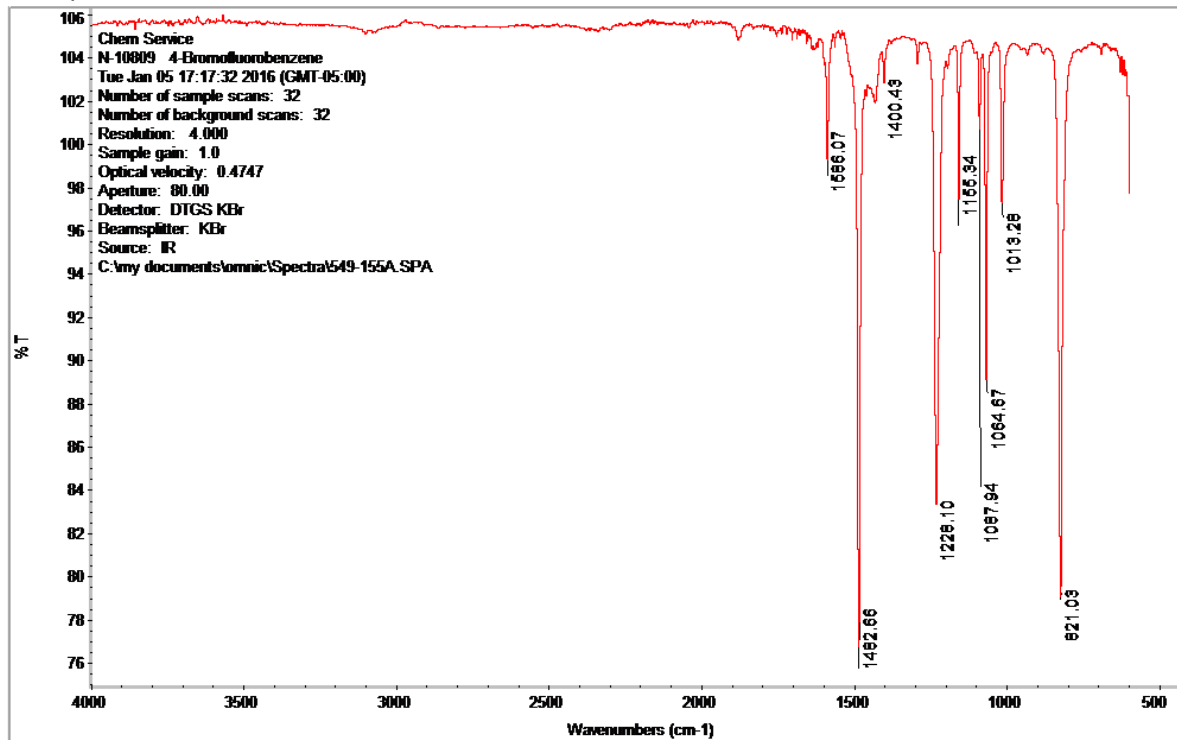


Mary Beth O'Donnell
CSM/TC

CERTIFICATE OF ANALYSIS

Analysis Method: FTIR- Spectroscopy

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



Chem Service, Inc. is accredited to ISO Guide 34:2009, ISO/IEC 17025:2005 and certified to ISO 9001:2008



CERTIFICATE OF ANALYSIS

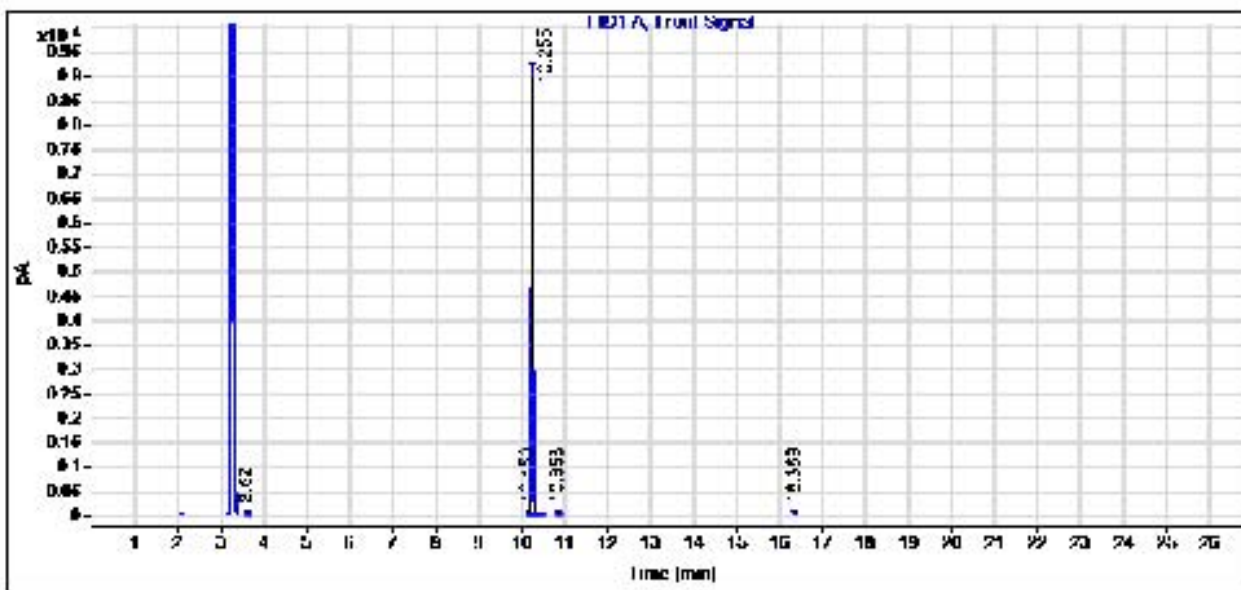
Analysis Method:

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

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
 Injection date: 1/5/2016 4:20:37 PM
 Acq. method: MIX1.M
 Column name: DB-624 (30m x 0.53mm x 3.0um)
 Sample type: Sample
 Location: Vial 5
 Injection volume: 1.0uL



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	28887.6328	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			28746.5968		

Reagent

MSV_502QGas_00120



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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)

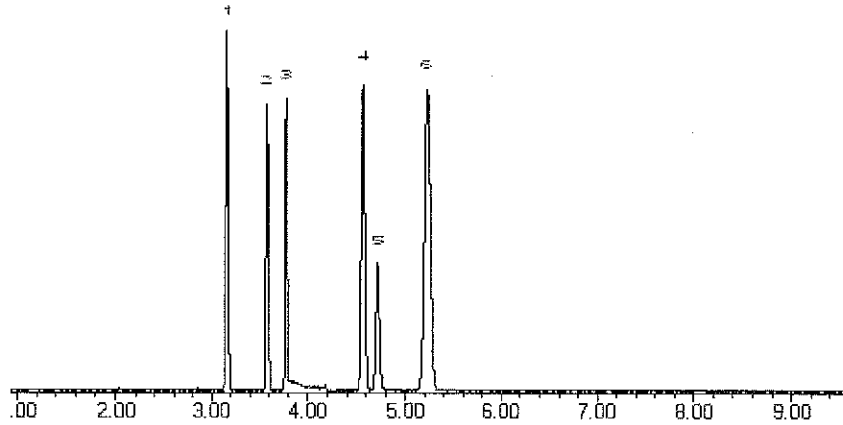
Carrier Gas:
helium-constant flow 2.0 mL/min.

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

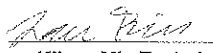
Inj. Temp:
200°C

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:

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

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_00160



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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)

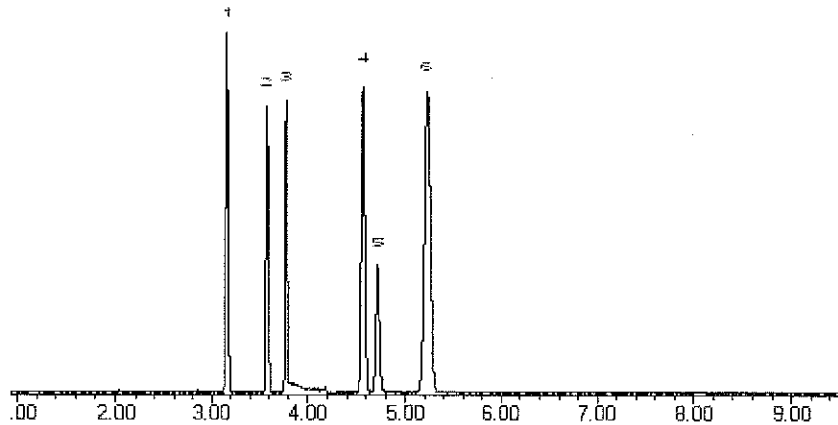
Carrier Gas:
helium-constant flow 2.0 mL/min.

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

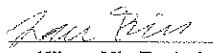
Inj. Temp:
200°C

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:

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

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_00174



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



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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. : 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)

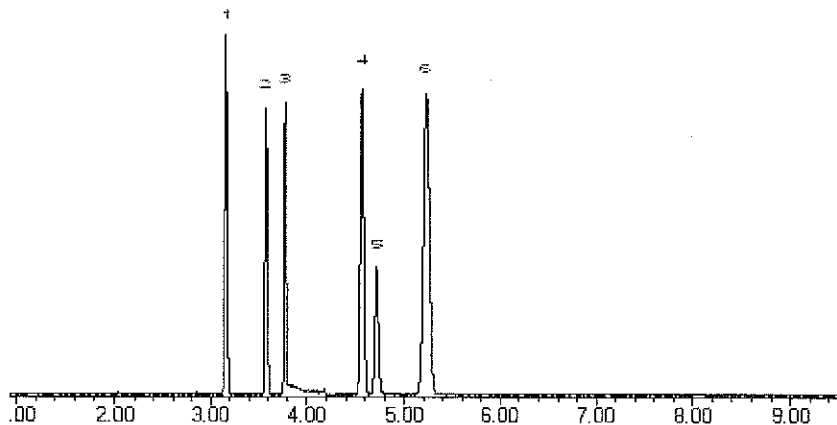
Carrier Gas:
helium-constant flow 2.0 mL/min.

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:

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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.
- 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_00175



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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)

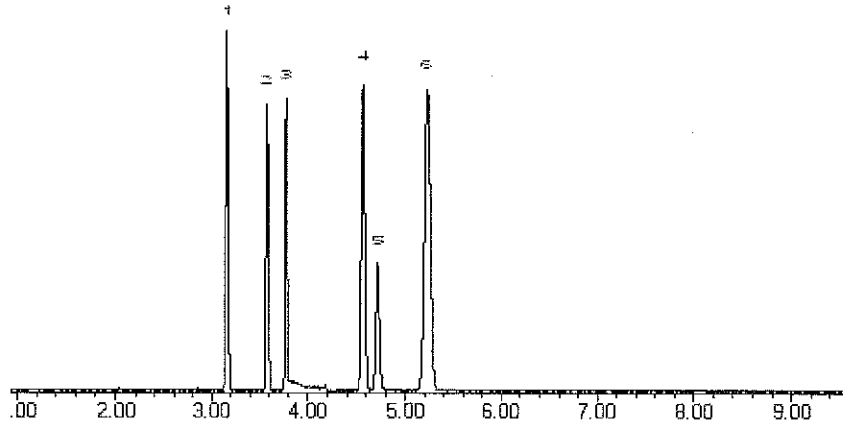
Carrier Gas:
helium-constant flow 2.0 mL/min.

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

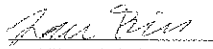
Inj. Temp:
200°C

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/ μ ECD, 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:

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

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_00263



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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:

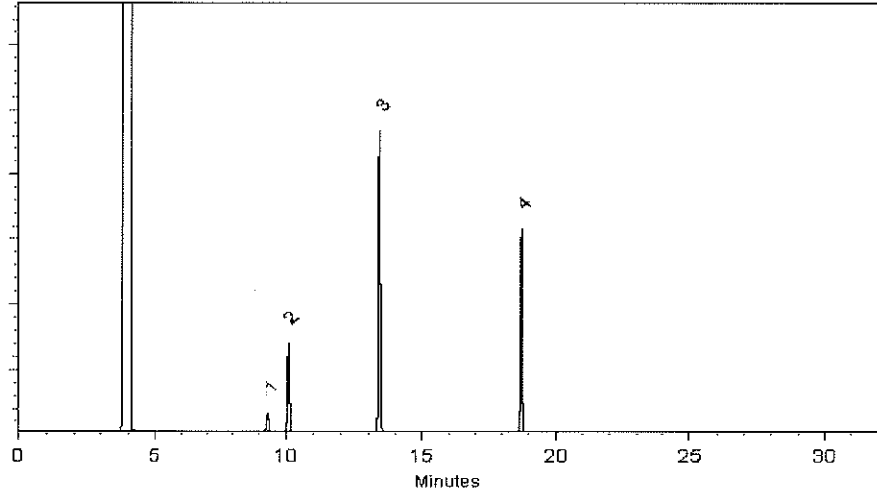
200°C

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:

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

MSV_8260_SS_00284



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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:

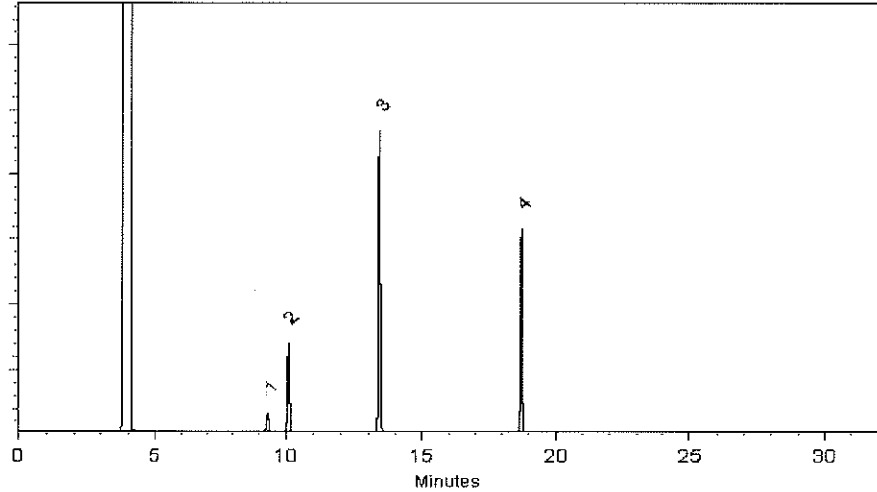
200°C

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/ μ ECD, 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:

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

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_00338



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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:

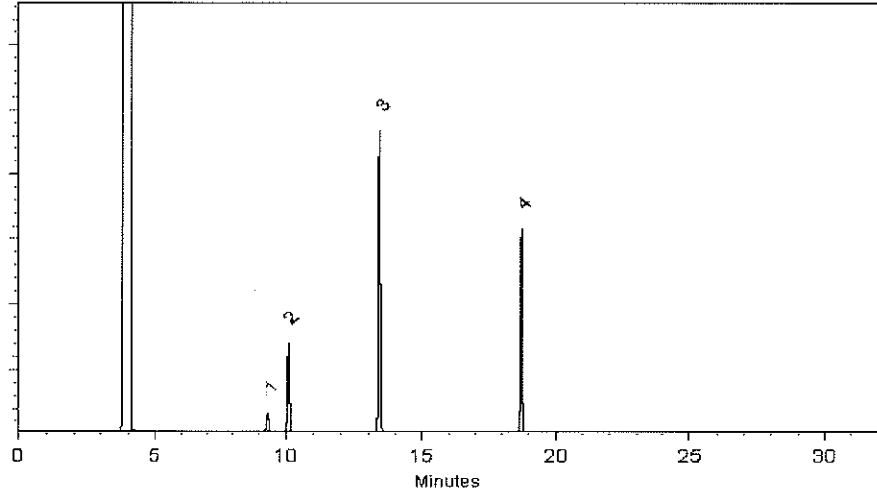
200°C

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

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- 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
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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_ACROLEIN_00008

CHEM SERVICE INC.

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

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



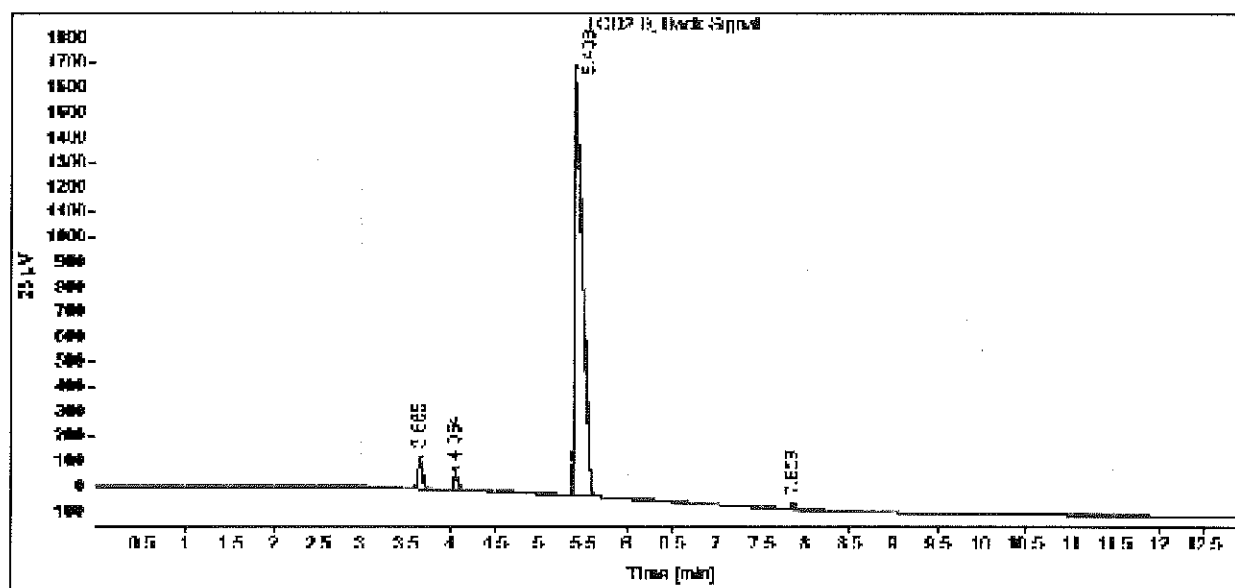
COA Form
Revision 3 (3/2015)

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

CERTIFICATE OF ANALYSIS

Gas Chromatography / Thermal Conductivity Detector (GC/TCD)

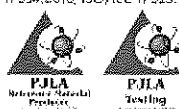
Data file: C:\CHEM32\1\DATA\2019 DATA\1219\SIG2022887.D
Sample name: Acrolein
Instrument: GC 1 **Sample type:** Sample
Injection date: 12/8/2018 10:34:12 AM **Location:** Vial 11
Acq. method: GASBOMB_TCD.M **Injection volume:** 1.0uL
Column name: DB-824 (30m x 0.53mm x 3.0um)



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	1.8102
5.408	BV	0.0795	10720.3574	1725.8987	84.2472
7.858	BB	0.1249	31.2959	3.7665	0.2751
Sum			11374.7178		

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





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

Analysis Method:

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

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



Reagent

MSV_Cus826_IS_00151



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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 CAS # 53001-22-2 (Lot PR-29485) Purity 98%	12,613.8 µg/mL	+/- 73.3376	µg/mL	Gravimetric
			+/- 270.0624	µg/mL	Unstressed
			+/- 277.9136	µg/mL	Stressed
2	Fluorobenzene CAS # 462-06-6 (Lot BCBK8171V) Purity 99%	2,517.8 µg/mL	+/- 14.6387	µg/mL	Gravimetric
			+/- 53.9064	µg/mL	Unstressed
			+/- 55.4736	µg/mL	Stressed
3	Chlorobenzene-d5 CAS # 3114-55-4 (Lot PR-22736) Purity 99%	2,518.8 µg/mL	+/- 14.6445	µg/mL	Gravimetric
			+/- 53.9278	µg/mL	Unstressed
			+/- 55.4956	µg/mL	Stressed
4	1,4-Dichlorobenzene-d4 CAS # 3855-82-1 (Lot PR-18488) Purity 99%	2,511.0 µg/mL	+/- 14.5992	µg/mL	Gravimetric
			+/- 53.7608	µg/mL	Unstressed
			+/- 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)

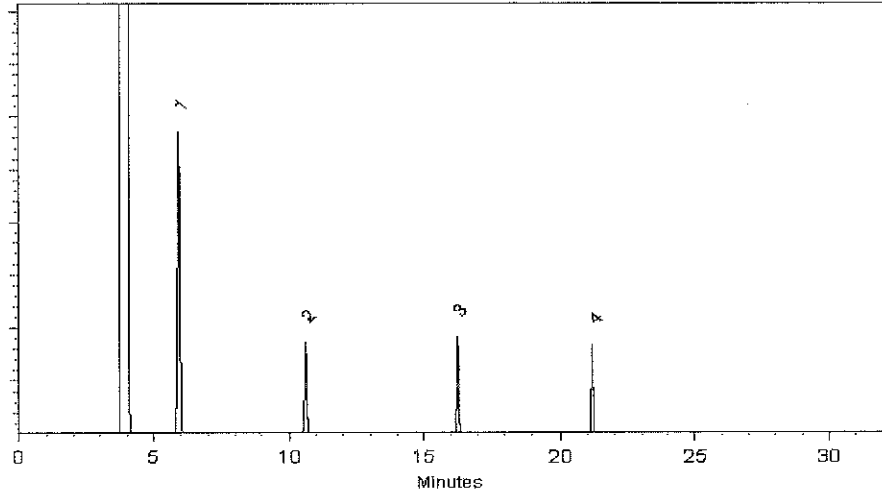
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

Inj. Temp:
200°C

Det. Temp:
250°C

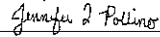
Det. Type:
FID



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/ μ ECD, 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:

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

MSV_Cus826_IS_00173



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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)

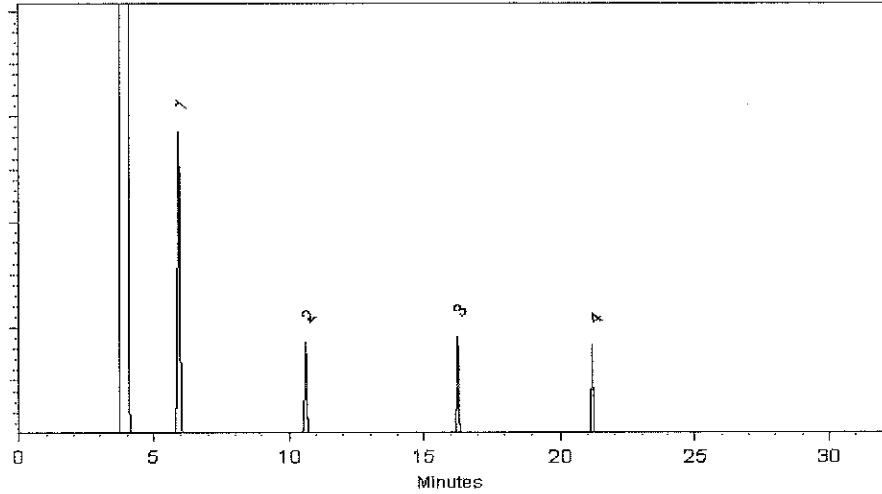
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

Inj. Temp:
200°C

Det. Temp:
250°C

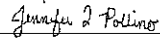
Det. Type:
FID



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/ μ ECD, 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:

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

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
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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_Cus826_IS_00203



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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)

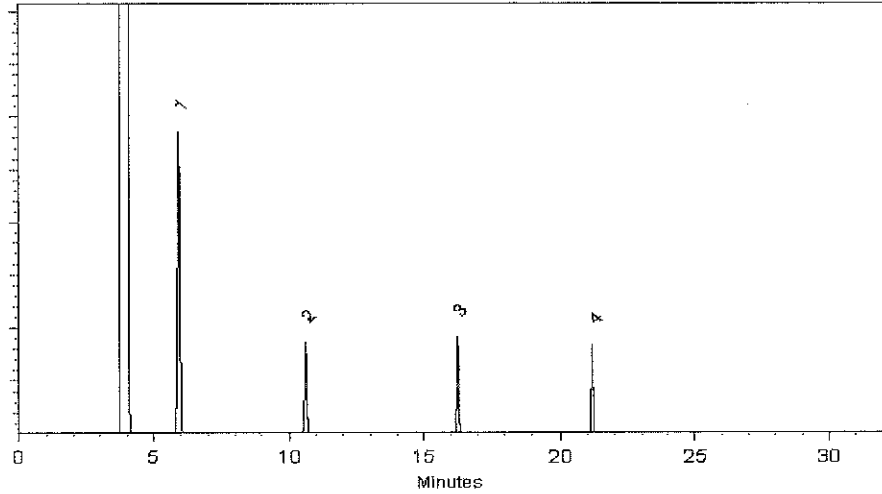
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

Inj. Temp:
200°C

Det. Temp:
250°C

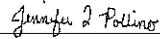
Det. Type:
FID



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/ μ ECD, 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:

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

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
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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



CERTIFICATE OF ANALYSIS

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

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



Signal Word: Danger

Certified Reference Material



Component	CAS #	Purity % (GC/MS)	Prepared Concentration ² (µg/mL)	Certified Analyte Concentration ¹ (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.

The information on this certificate may not be reproduced without the express permission of the manufacturer. See reverse side for additional information

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

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: $u_a = \sqrt{(u(V))^2 + (u(m))^2 + (u(IV))^2 + (u(RO))^2}$ 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_DCFM_00036



CERTIFICATE OF ANALYSIS

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

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



Signal Word: Danger

Certified Reference Material



Component	CAS #	Purity % (GC/MS)	Prepared Concentration ² (µg/mL)	Certified Analyte Concentration ¹ (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.

The information on this certificate may not be reproduced without the express permission of the manufacturer. See reverse side for additional information

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

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: $u_a = \sqrt{(u(V))^2 + (u(m))^2 + (u(IV))^2 + (u(RO))^2}$ 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

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:

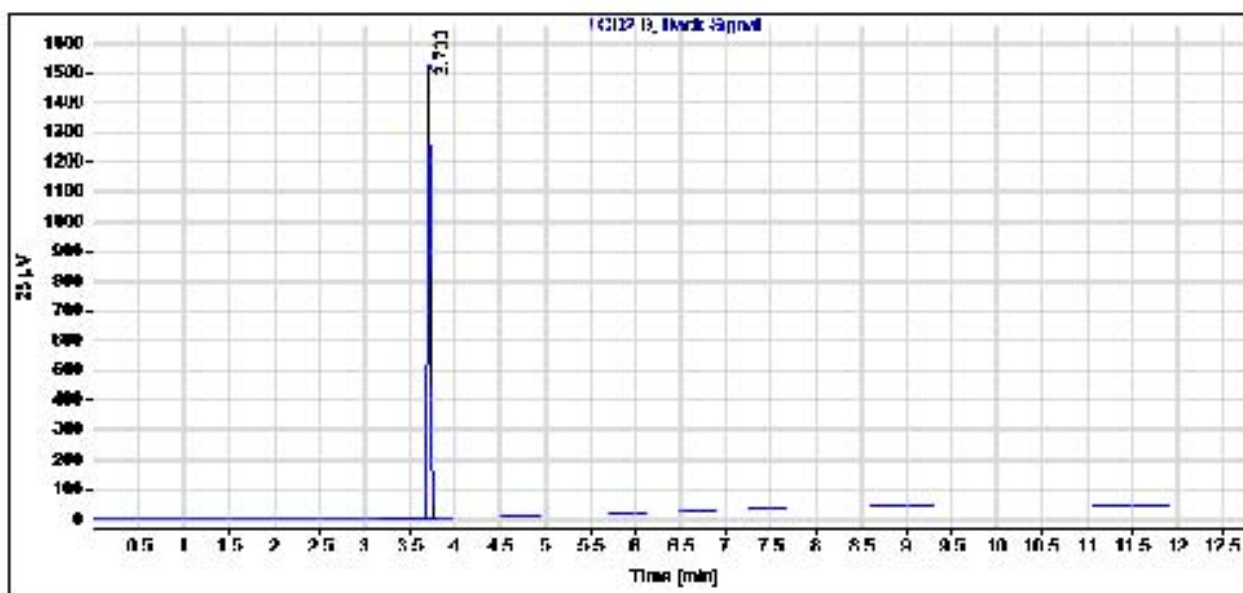
Mary Beth O'Donnell

Mary Beth O'Donnell
CSM/TC

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



Signal: TCD2 B, Back Signal

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

Reagent

MSV_Q#1B_00071



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No.: 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

Table with 7 columns: Elution Order, Compound, Grav. Conc. (weight/volume), Expanded Uncertainty (95% C.L.; K=2), and three additional columns for measurement details. Contains 7 rows of data for various compounds like 1,1-Dichloroethene, Methylene chloride, trans-1,2-Dichloroethene, etc.

8	1,1,1-trichloroethane CAS # 71-55-6 * Purity 99%	(Lot B15W12061)	1,000.9	µg/mL	+/- 7.1427 +/- 56.2735 +/- 57.5832	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	1,1-Dichloropropene CAS # 563-58-6.SEC Purity 96%	(Lot 4672600)	1,005.1	µg/mL	+/- 7.7804 +/- 56.5876 +/- 57.9008	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	Carbon tetrachloride CAS # 56-23-5.SEC Purity 99%	(Lot 11466)	1,006.6	µg/mL	+/- 7.1828 +/- 56.5897 +/- 57.9068	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	1,2-Dichloroethane CAS # 107-06-2.SEC Purity 99%	(Lot FO6PK)	1,003.3	µg/mL	+/- 7.1598 +/- 56.4084 +/- 57.7212	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	Benzene CAS # 71-43-2.SEC Purity 99%	(Lot B28Y008)	1,003.5	µg/mL	+/- 7.7683 +/- 56.4996 +/- 57.8109	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	Trichloroethene CAS # 79-01-6.SEC Purity 99%	(Lot H04X050)	1,005.6	µg/mL	+/- 7.1760 +/- 56.5363 +/- 57.8521	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	1,2-Dichloropropane CAS # 78-87-5.SEC Purity 99%	(Lot OGG01)	1,004.3	µg/mL	+/- 7.1666 +/- 56.4618 +/- 57.7759	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	Bromodichloromethane CAS # 75-27-4.SEC Purity 99%	(Lot 10171168)	1,006.2	µg/mL	+/- 7.1801 +/- 56.5686 +/- 57.8852	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	Dibromomethane CAS # 74-95-3.SEC Purity 99%	(Lot FGI01-OICH)	1,006.1	µg/mL	+/- 7.7881 +/- 56.6438 +/- 57.9584	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	cis-1,3-Dichloropropene CAS # 10061-01-5.SEC Purity 99%	(Lot 4870A)	1,001.9	µg/mL	+/- 7.1498 +/- 56.3297 +/- 57.6407	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
18	Toluene CAS # 108-88-3.SEC Purity 99%	(Lot YND2B-BD)	1,004.8	µg/mL	+/- 7.7782 +/- 56.5717 +/- 57.8846	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
19	trans-1,3-Dichloropropene CAS # 10061-02-6.SEC Purity 99%	(Lot ZDMSL)	1,002.6	µg/mL	+/- 7.1548 +/- 56.3691 +/- 57.6810	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
20	1,1,2-Trichloroethane CAS # 79-00-5.SEC Purity 98%	(Lot 3440900)	1,007.8	µg/mL	+/- 7.1920 +/- 56.6618 +/- 57.9805	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
21	1,3-Dichloropropane CAS # 142-28-9.SEC Purity 99%	(Lot AGN01-EFPC)	1,003.8	µg/mL	+/- 7.7708 +/- 56.5177 +/- 57.8293	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
22	Tetrachloroethene CAS # 127-18-4.SEC Purity 99%	(Lot F09W014)	1,004.1	µg/mL	+/- 7.1652 +/- 56.4506 +/- 57.7644	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
23	Dibromochloromethane CAS # 124-48-1.SEC Purity 97%	(Lot 10181507)	1,009.5	µg/mL	+/- 7.2035 +/- 56.7530 +/- 58.0739	µg/mL µg/mL µg/mL	Gravimetric Unstressed 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 CAS # 95-49-8.SEC Purity 99%	(Lot SW8QG-AO)	1,008.1	µg/mL	+/-	7.8036 56.7564 58.0736	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
41	4-Chlorotoluene CAS # 106-43-4.SEC Purity 99%	(Lot P4XHJ-AO)	1,002.1	µg/mL	+/-	7.7571 56.4186 57.7279	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
42	tert-Butylbenzene CAS # 98-06-6.SEC Purity 99%	(Lot D6OHC)	1,004.2	µg/mL	+/-	7.7732 56.5357 57.8478	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
43	1,2,4-Trimethylbenzene CAS # 95-63-6.SEC Purity 99%	(Lot SC7LO-QA)	1,009.5	µg/mL	+/-	7.8147 56.8374 58.1565	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
44	sec-Butylbenzene CAS # 135-98-8.SEC Purity 99%	(Lot O4HRF)	1,006.9	µg/mL	+/-	7.7943 56.6888 58.0044	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
45	4-Isopropyltoluene (p-cymene) CAS # 99-87-6.SEC Purity 96%	(Lot 1195000)	1,000.0	µg/mL	+/-	7.7410 56.3015 57.6081	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
46	1,3-Dichlorobenzene CAS # 541-73-1.SEC Purity 99%	(Lot FMDFD)	1,003.3	µg/mL	+/-	7.1593 56.4042 57.7169	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
47	1,4-Dichlorobenzene CAS # 106-46-7.SEC Purity 99%	(Lot 4Y5DC)	1,008.5	µg/mL	+/-	7.1967 56.6994 58.0189	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
48	n-Butylbenzene CAS # 104-51-8.SEC Purity 99%	(Lot MMPGA)	1,005.4	µg/mL	+/-	7.7825 56.6032 57.9169	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
49	1,2-Dichlorobenzene CAS # 95-50-1.SEC Purity 99%	(Lot 4NRGF-OT)	1,006.8	µg/mL	+/-	7.1842 56.6010 57.9183	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
50	1,2-Dibromo-3-chloropropane CAS # 96-12-8.SEC Purity 98%	(Lot LC00408V)	1,002.7	µg/mL	+/-	7.7616 56.4511 57.7612	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
51	1,3,5-Trimethylbenzene CAS # 108-67-8.SEC Purity 99%	(Lot FGH02-CMLN)	1,002.2	µg/mL	+/-	7.7584 56.4276 57.7371	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
52	1,2,4-Trichlorobenzene CAS # 120-82-1.SEC Purity 99%	(Lot 3LYYC)	1,007.2	µg/mL	+/-	7.7968 56.7068 58.0229	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
53	Hexachlorobutadiene CAS # 87-68-3.SEC Purity 97%	(Lot 5526800)	1,005.8	µg/mL	+/-	7.7857 56.6265 57.9407	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
54	Naphthalene CAS # 91-20-3.SEC Purity 99%	(Lot SKZ5N)	1,001.8	µg/mL	+/-	7.7553 56.4050 57.7141	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
55	1,2,3-Trichlorobenzene CAS # 87-61-6.SEC Purity 98%	(Lot A0043055)	1,005.9	µg/mL	+/-	7.7865 56.6321 57.9464	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)

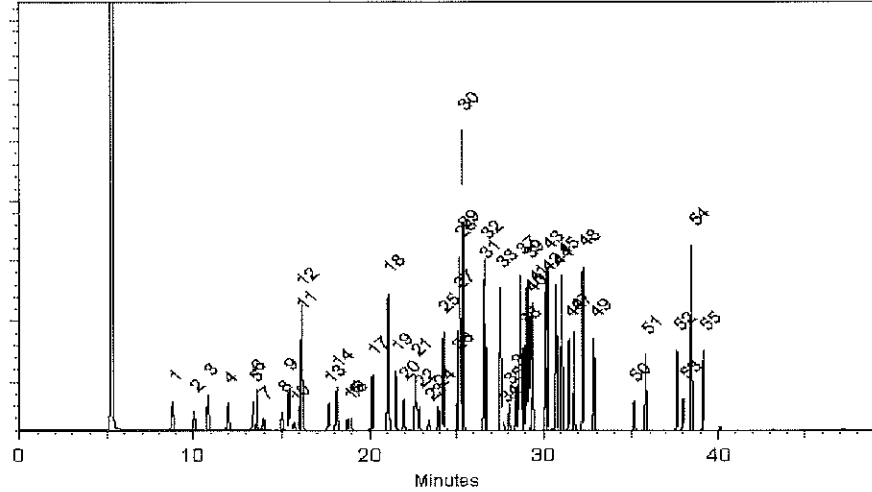
Carrier Gas:
hydrogen-constant pressure 8.0 psi.

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.

Michael Maje

Date Mixed: 26-Apr-2019 Balance: 1127510105

Jennifer J. 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/ μ ECD, 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:

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

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_00092



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description: Custom Revised Q #1B Standard

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

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

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

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	1,1-Dichloroethene	1,003.8 µg/mL	+/-	27.1548	µg/mL	Gravimetric
	CAS # 75-35-4.SEC (Lot 9201700)		+/-	62.2148	µg/mL	Unstressed
	Purity 99%		+/-	63.4085	µg/mL	Stressed
2	Methylene chloride (dichloromethane)	1,001.8 µg/mL	+/-	27.1007	µg/mL	Gravimetric
	CAS # 75-09-2.SEC (Lot FGM02)		+/-	62.0908	µg/mL	Unstressed
	Purity 99%		+/-	63.2822	µg/mL	Stressed
3	trans-1,2-Dichloroethene	1,000.3 µg/mL	+/-	27.0615	µg/mL	Gravimetric
	CAS # 156-60-5.SEC (Lot TS5UB)		+/-	62.0010	µg/mL	Unstressed
	Purity 99%		+/-	63.1906	µg/mL	Stressed
4	1,1-Dichloroethane	1,002.0 µg/mL	+/-	27.1075	µg/mL	Gravimetric
	CAS # 75-34-3.SEC (Lot 7482000)		+/-	62.1063	µg/mL	Unstressed
	Purity 99%		+/-	63.2980	µg/mL	Stressed
5	2,2-Dichloropropane	1,000.0 µg/mL	+/-	7.1361	µg/mL	Gravimetric
	CAS # 594-20-7.SEC (Lot I7E8E)		+/-	56.2215	µg/mL	Unstressed
	Purity 99%		+/-	57.5299	µg/mL	Stressed
6	cis-1,2-Dichloroethene	1,000.2 µg/mL	+/-	7.1372	µg/mL	Gravimetric
	CAS # 156-59-2.SEC (Lot YZ050)		+/-	56.2305	µg/mL	Unstressed
	Purity 99%		+/-	57.5391	µg/mL	Stressed
7	Chloroform	1,000.8 µg/mL	+/-	27.0736	µg/mL	Gravimetric
	CAS # 67-66-3.SEC (Lot 1297547)		+/-	62.0289	µg/mL	Unstressed
	Purity 99%		+/-	63.2190	µg/mL	Stressed

8	1,1,1-trichloroethane		1,000.3	µg/mL	+/-	27.0618	µg/mL	Gravimetric
	CAS # 71-55-6 *	(Lot 190123CG)			+/-	62.0018	µg/mL	Unstressed
	Purity 98%				+/-	63.1914	µg/mL	Stressed
9	1,1-Dichloropropene		1,000.4	µg/mL	+/-	7.1389	µg/mL	Gravimetric
	CAS # 563-58-6.SEC	(Lot 556500)			+/-	56.2440	µg/mL	Unstressed
	Purity 99%				+/-	57.5529	µg/mL	Stressed
10	Carbon tetrachloride		1,000.8	µg/mL	+/-	27.0736	µg/mL	Gravimetric
	CAS # 56-23-5.SEC	(Lot 11466)			+/-	62.0289	µg/mL	Unstressed
	Purity 99%				+/-	63.2190	µg/mL	Stressed
11	1,2-Dichloroethane		1,000.6	µg/mL	+/-	27.0707	µg/mL	Gravimetric
	CAS # 107-06-2.SEC	(Lot 00016165)			+/-	62.0222	µg/mL	Unstressed
	Purity 99%				+/-	63.2122	µg/mL	Stressed
12	Benzene		1,000.1	µg/mL	+/-	7.1366	µg/mL	Gravimetric
	CAS # 71-43-2.SEC	(Lot B28Y008)			+/-	56.2260	µg/mL	Unstressed
	Purity 99%				+/-	57.5345	µg/mL	Stressed
13	Trichloroethene		1,000.9	µg/mL	+/-	27.0771	µg/mL	Gravimetric
	CAS # 79-01-6.SEC	(Lot H04X050)			+/-	62.0368	µg/mL	Unstressed
	Purity 99%				+/-	63.2271	µg/mL	Stressed
14	1,2-Dichloropropane		1,000.1	µg/mL	+/-	27.0571	µg/mL	Gravimetric
	CAS # 78-87-5.SEC	(Lot ERRBI-RH)			+/-	61.9910	µg/mL	Unstressed
	Purity 99%				+/-	63.1805	µg/mL	Stressed
15	Bromodichloromethane		1,000.8	µg/mL	+/-	27.0749	µg/mL	Gravimetric
	CAS # 75-27-4.SEC	(Lot 13780)			+/-	62.0316	µg/mL	Unstressed
	Purity 99%				+/-	63.2218	µg/mL	Stressed
16	Dibromomethane		1,000.1	µg/mL	+/-	7.1366	µg/mL	Gravimetric
	CAS # 74-95-3.SEC	(Lot MOKKJ)			+/-	56.2260	µg/mL	Unstressed
	Purity 99%				+/-	57.5345	µg/mL	Stressed
17	cis-1,3-Dichloropropene		1,000.9	µg/mL	+/-	27.0778	µg/mL	Gravimetric
	CAS # 10061-01-5.SEC	(Lot 4870A)			+/-	62.0384	µg/mL	Unstressed
	Purity 98%				+/-	63.2287	µg/mL	Stressed
18	Toluene		1,000.1	µg/mL	+/-	7.1366	µg/mL	Gravimetric
	CAS # 108-88-3.SEC	(Lot YND2B-BD)			+/-	56.2260	µg/mL	Unstressed
	Purity 99%				+/-	57.5345	µg/mL	Stressed
19	trans-1,3-Dichloropropene		1,002.1	µg/mL	+/-	27.1112	µg/mL	Gravimetric
	CAS # 10061-02-6.SEC	(Lot ZDMSL)			+/-	62.1150	µg/mL	Unstressed
	Purity 96%				+/-	63.3068	µg/mL	Stressed
20	1,1,2-Trichloroethane		1,001.3	µg/mL	+/-	27.0872	µg/mL	Gravimetric
	CAS # 79-00-5.SEC	(Lot 7871500)			+/-	62.0598	µg/mL	Unstressed
	Purity 99%				+/-	63.2506	µg/mL	Stressed
21	1,3-Dichloropropane		1,000.1	µg/mL	+/-	7.1366	µg/mL	Gravimetric
	CAS # 142-28-9.SEC	(Lot IQCON)			+/-	56.2260	µg/mL	Unstressed
	Purity 99%				+/-	57.5345	µg/mL	Stressed
22	Tetrachloroethene		1,000.2	µg/mL	+/-	27.0598	µg/mL	Gravimetric
	CAS # 127-18-4.SEC	(Lot F09W014)			+/-	61.9972	µg/mL	Unstressed
	Purity 99%				+/-	63.1868	µg/mL	Stressed
23	Dibromochloromethane		1,000.5	µg/mL	+/-	27.0665	µg/mL	Gravimetric
	CAS # 124-48-1.SEC	(Lot 10206360)			+/-	62.0126	µg/mL	Unstressed
	Purity 97%				+/-	63.2024	µg/mL	Stressed

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

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

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

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

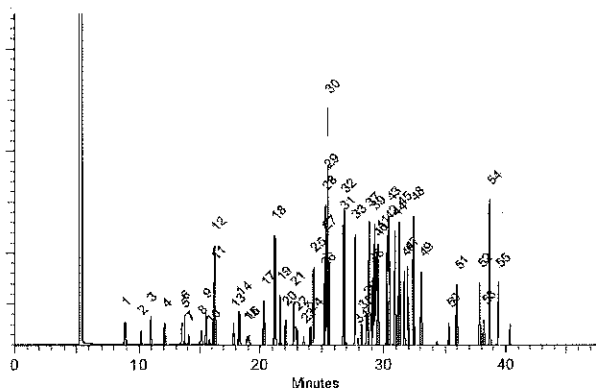
Carrier Gas:
hydrogen-constant pressure 8.0 psi.

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

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



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

Michael Mage

Date Mixed: 20-Oct-2020

Balance: 1128342314

Justin Albersen
Justin Albersen - Operations Tech-ARM GC

Date Passed: 23-Oct-2020

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

MSV_Q#1B_00098

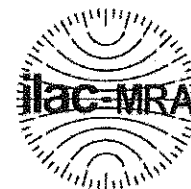


CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No.: 569936-1.SEC Lot No.: A0165522
Description: Custom Revised Q #1B Standard
Custom Revised Q #1B Standard 1,000µg/mL, P&T Methanol, 1mL/ampul
Container Size: 2 mL Pkg Amt: > 1 mL
Expiration Date: October 31, 2023 Storage: 0°C or colder
Ship: Ambient

CERTIFIED VALUES

Table with 4 main columns: Elution Order, Compound, Grav. Conc. (weight/volume), and Expanded Uncertainty (95% C.L.; K=2). It lists 7 compounds including 1,1-Dichloroethene, Methylene chloride, trans-1,2-Dichloroethene, cis-1,2-Dichloroethene, and Chloroform.

8	1,1,1-trichloroethane		1,000.3	µg/mL	+/-	27.0618	µg/mL	Gravimetric
	CAS # 71-55-6 *	(Lot 190123CG)			+/-	62.0018	µg/mL	Unstressed
	Purity 98%				+/-	63.1914	µg/mL	Stressed
9	1,1-Dichloropropene		1,000.4	µg/mL	+/-	7.1389	µg/mL	Gravimetric
	CAS # 563-58-6.SEC	(Lot 556500)			+/-	56.2440	µg/mL	Unstressed
	Purity 99%				+/-	57.5529	µg/mL	Stressed
10	Carbon tetrachloride		1,000.8	µg/mL	+/-	27.0736	µg/mL	Gravimetric
	CAS # 56-23-5.SEC	(Lot 11466)			+/-	62.0289	µg/mL	Unstressed
	Purity 99%				+/-	63.2190	µg/mL	Stressed
11	1,2-Dichloroethane		1,000.6	µg/mL	+/-	27.0707	µg/mL	Gravimetric
	CAS # 107-06-2.SEC	(Lot 00016165)			+/-	62.0222	µg/mL	Unstressed
	Purity 99%				+/-	63.2122	µg/mL	Stressed
12	Benzene		1,000.1	µg/mL	+/-	7.1366	µg/mL	Gravimetric
	CAS # 71-43-2.SEC	(Lot B28Y008)			+/-	56.2260	µg/mL	Unstressed
	Purity 99%				+/-	57.5345	µg/mL	Stressed
13	Trichloroethene		1,000.9	µg/mL	+/-	27.0771	µg/mL	Gravimetric
	CAS # 79-01-6.SEC	(Lot H04X050)			+/-	62.0368	µg/mL	Unstressed
	Purity 99%				+/-	63.2271	µg/mL	Stressed
14	1,2-Dichloropropane		1,000.1	µg/mL	+/-	27.0571	µg/mL	Gravimetric
	CAS # 78-87-5.SEC	(Lot ERRBI-RH)			+/-	61.9910	µg/mL	Unstressed
	Purity 99%				+/-	63.1805	µg/mL	Stressed
15	Bromodichloromethane		1,000.8	µg/mL	+/-	27.0749	µg/mL	Gravimetric
	CAS # 75-27-4.SEC	(Lot 13780)			+/-	62.0316	µg/mL	Unstressed
	Purity 99%				+/-	63.2218	µg/mL	Stressed
16	Dibromomethane		1,000.1	µg/mL	+/-	7.1366	µg/mL	Gravimetric
	CAS # 74-95-3.SEC	(Lot MOKKJ)			+/-	56.2260	µg/mL	Unstressed
	Purity 99%				+/-	57.5345	µg/mL	Stressed
17	cis-1,3-Dichloropropene		1,000.9	µg/mL	+/-	27.0778	µg/mL	Gravimetric
	CAS # 10061-01-5.SEC	(Lot 4870A)			+/-	62.0384	µg/mL	Unstressed
	Purity 98%				+/-	63.2287	µg/mL	Stressed
18	Toluene		1,000.1	µg/mL	+/-	7.1366	µg/mL	Gravimetric
	CAS # 108-88-3.SEC	(Lot YND2B-BD)			+/-	56.2260	µg/mL	Unstressed
	Purity 99%				+/-	57.5345	µg/mL	Stressed
19	trans-1,3-Dichloropropene		1,002.1	µg/mL	+/-	27.1112	µg/mL	Gravimetric
	CAS # 10061-02-6.SEC	(Lot ZDMSL)			+/-	62.1150	µg/mL	Unstressed
	Purity 96%				+/-	63.3068	µg/mL	Stressed
20	1,1,2-Trichloroethane		1,001.3	µg/mL	+/-	27.0872	µg/mL	Gravimetric
	CAS # 79-00-5.SEC	(Lot 7871500)			+/-	62.0598	µg/mL	Unstressed
	Purity 99%				+/-	63.2506	µg/mL	Stressed
21	1,3-Dichloropropane		1,000.1	µg/mL	+/-	7.1366	µg/mL	Gravimetric
	CAS # 142-28-9.SEC	(Lot IQCON)			+/-	56.2260	µg/mL	Unstressed
	Purity 99%				+/-	57.5345	µg/mL	Stressed
22	Tetrachloroethene		1,000.2	µg/mL	+/-	27.0598	µg/mL	Gravimetric
	CAS # 127-18-4.SEC	(Lot F09W014)			+/-	61.9972	µg/mL	Unstressed
	Purity 99%				+/-	63.1868	µg/mL	Stressed
23	Dibromochloromethane		1,000.5	µg/mL	+/-	27.0665	µg/mL	Gravimetric
	CAS # 124-48-1.SEC	(Lot 10206360)			+/-	62.0126	µg/mL	Unstressed
	Purity 97%				+/-	63.2024	µg/mL	Stressed

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

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

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

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

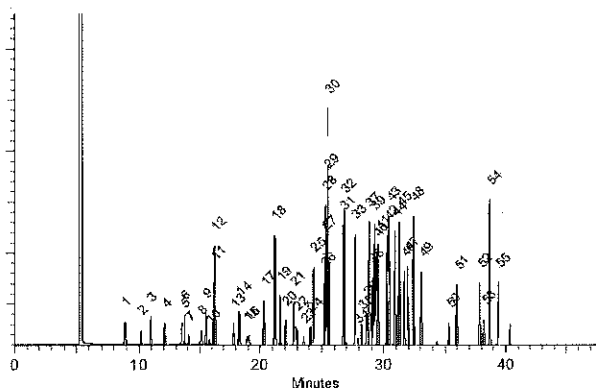
Carrier Gas:
hydrogen-constant pressure 8.0 psi.

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

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



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

Michael Mage

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

Justin Albers
Justin Albers - Operations Tech-ARM GC

Date Passed: 23-Oct-2020

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

MSV_Q#3B_00063



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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)

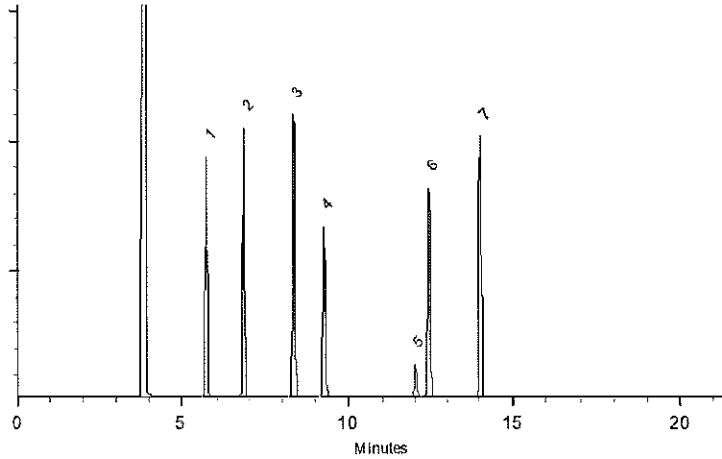
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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 Albarson - 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/ μ ECD, 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:

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

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_00081



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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 (Lot U13B039)	+/-	44.3076	µg/mL Gravimetric
	CAS # 67-64-1.SEC		+/-	373.5308	µg/mL Unstressed
	Purity 99%		+/-	382.8166	µg/mL Stressed
2	Acrylonitrile	5,003.0 µg/mL (Lot CCFKL-GL)	+/-	29.3604	µg/mL Gravimetric
	CAS # 107-13-1.SEC		+/-	247.5198	µg/mL Unstressed
	Purity 99%		+/-	253.6730	µg/mL Stressed
3	2-Butanone (MEK)	7,517.0 µg/mL (Lot RGZ2A)	+/-	44.1140	µg/mL Gravimetric
	CAS # 78-93-3.SEC		+/-	371.8982	µg/mL Unstressed
	Purity 99%		+/-	381.1434	µg/mL Stressed
4	Tetrahydrofuran	5,023.0 µg/mL (Lot 8DAOJ)	+/-	29.4778	µg/mL Gravimetric
	CAS # 109-99-9.SEC		+/-	248.5093	µg/mL Unstressed
	Purity 99%		+/-	254.6871	µg/mL Stressed
5	2-Nitropropane	1,000.6 µg/mL (Lot Y4YWD)	+/-	5.9431	µg/mL Gravimetric
	CAS # 79-46-9.SEC		+/-	49.5115	µg/mL Unstressed
	Purity 98%		+/-	50.7419	µg/mL Stressed
6	4-Methyl-2-pentanone (MIBK)	5,032.0 µg/mL (Lot E29T040)	+/-	29.5306	µg/mL Gravimetric
	CAS # 108-10-1.SEC		+/-	248.9546	µg/mL Unstressed
	Purity 99%		+/-	255.1435	µg/mL Stressed
7	2-Hexanone	5,036.2 µg/mL (Lot Y3TUO)	+/-	29.5554	µg/mL Gravimetric
	CAS # 591-78-6.SEC		+/-	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)

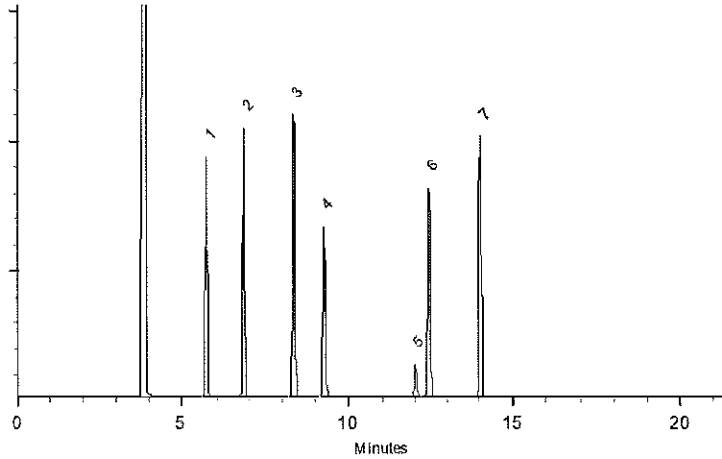
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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 Albaraton - 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/ μ ECD, 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:

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

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_00088



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 558268 **Lot No.:** A0169789

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, 2022 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Methyl acetate	5,006.0 µg/mL	+/-	29.3780	µg/mL	Gravimetric
	CAS # 79-20-9 (Lot SHBK5436)		+/-	302.0606	µg/mL	Unstressed
	Purity 99%		+/-	302.7776	µg/mL	Stressed
2	Allyl chloride (3-chloropropene)	5,036.0 µg/mL	+/-	29.5541	µg/mL	Gravimetric
	CAS # 107-05-1 (Lot D0865-0528)		+/-	303.8708	µg/mL	Unstressed
	Purity 99%		+/-	304.5921	µg/mL	Stressed
3	Bromochloromethane	5,018.0 µg/mL	+/-	29.4484	µg/mL	Gravimetric
	CAS # 74-97-5 (Lot 00008541)		+/-	302.7846	µg/mL	Unstressed
	Purity 99%		+/-	303.5034	µg/mL	Stressed
4	Methylcyclohexane	5,022.0 µg/mL	+/-	29.4719	µg/mL	Gravimetric
	CAS # 108-87-2 (Lot SHBL0078)		+/-	303.0260	µg/mL	Unstressed
	Purity 99%		+/-	303.7453	µg/mL	Stressed
5	Pentachloroethane	5,012.0 µg/mL	+/-	29.4132	µg/mL	Gravimetric
	CAS # 76-01-7 (Lot 10518800)		+/-	302.4226	µg/mL	Unstressed
	Purity 99%		+/-	303.1405	µg/mL	Stressed
6	1,2,3-Trimethylbenzene	5,029.4 µg/mL	+/-	29.5151	µg/mL	Gravimetric
	CAS # 526-73-8 (Lot 8776.10-36)		+/-	303.4701	µg/mL	Unstressed
	Purity 98%		+/-	304.1905	µg/mL	Stressed
7	1,3-Diethylbenzene	5,001.9 µg/mL	+/-	29.3541	µg/mL	Gravimetric
	CAS # 141-93-5 (Lot BCBT8967)		+/-	301.8144	µg/mL	Unstressed
	Purity 98%		+/-	302.5308	µg/mL	Stressed

8	1,4-Diethylbenzene CAS # 105-05-5 Purity 98%	(Lot RLHJK)	5,003.9 µg/mL	+/- 29.3656 +/- 301.9326 +/- 302.6494	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	1,2-Diethylbenzene CAS # 135-01-3 Purity 99%	(Lot ECH2970181)	5,010.0 µg/mL	+/- 29.4015 +/- 302.3019 +/- 303.0195	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	2-Methylnaphthalene CAS # 91-57-6 Purity 99%	(Lot STBG8884)	5,042.0 µg/mL	+/- 29.5893 +/- 304.2328 +/- 304.9550	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)

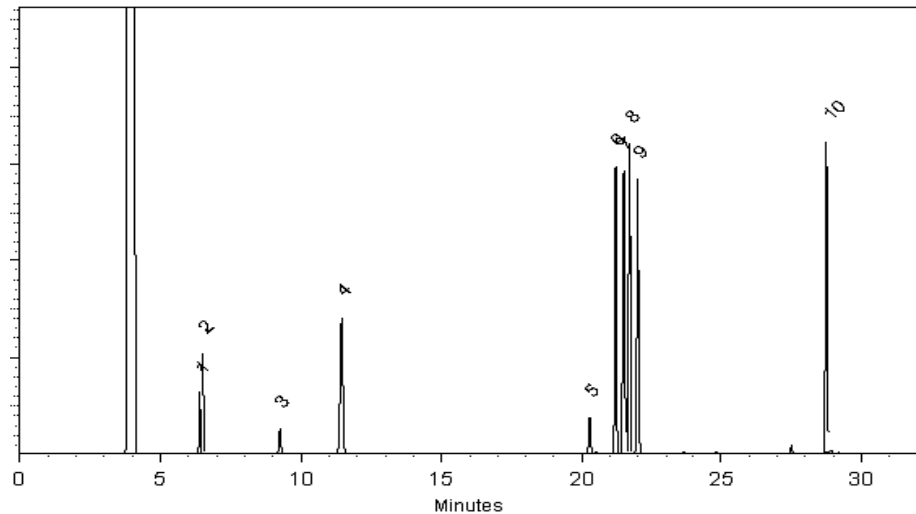
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



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

Sam Moodler
Sam Moodler - Operations Tech I

Date Mixed: 04-Mar-2021 **Balance:** B251644995

Alexis Shelow
Alexis Shelow - Operations Tech I

Date Passed: 08-Mar-2021

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 56736.SEC **Lot No.:** A0169795

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, 2022 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Acetone	7,544.0 µg/mL	+/-	44.2724	µg/mL	Gravimetric
	CAS # 67-64-1.SEC (Lot S25F025)		+/-	373.2340	µg/mL	Unstressed
	Purity 99%		+/-	382.5124	µg/mL	Stressed
2	Acrylonitrile	5,028.0 µg/mL	+/-	29.5071	µg/mL	Gravimetric
	CAS # 107-13-1.SEC (Lot V54AD)		+/-	248.7567	µg/mL	Unstressed
	Purity 99%		+/-	254.9406	µg/mL	Stressed
3	2-Butanone (MEK)	7,526.0 µg/mL	+/-	44.1668	µg/mL	Gravimetric
	CAS # 78-93-3.SEC (Lot RGZ2A)		+/-	372.3434	µg/mL	Unstressed
	Purity 99%		+/-	381.5997	µg/mL	Stressed
4	Tetrahydrofuran	5,022.0 µg/mL	+/-	29.4719	µg/mL	Gravimetric
	CAS # 109-99-9.SEC (Lot 3NYHE)		+/-	248.4598	µg/mL	Unstressed
	Purity 99%		+/-	254.6364	µg/mL	Stressed
5	2-Nitropropane	1,009.0 µg/mL	+/-	5.9932	µg/mL	Gravimetric
	CAS # 79-46-9.SEC (Lot F43IA)		+/-	49.9281	µg/mL	Unstressed
	Purity 99%		+/-	51.1689	µg/mL	Stressed
6	4-Methyl-2-pentanone (MIBK)	5,045.0 µg/mL	+/-	29.6069	µg/mL	Gravimetric
	CAS # 108-10-1.SEC (Lot E29T040)		+/-	249.5977	µg/mL	Unstressed
	Purity 99%		+/-	255.8026	µg/mL	Stressed
7	2-Hexanone	5,011.7 µg/mL	+/-	29.4116	µg/mL	Gravimetric
	CAS # 591-78-6.SEC (Lot Y3TUO)		+/-	247.9512	µg/mL	Unstressed
	Purity 98%		+/-	254.1152	µg/mL	Stressed

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

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

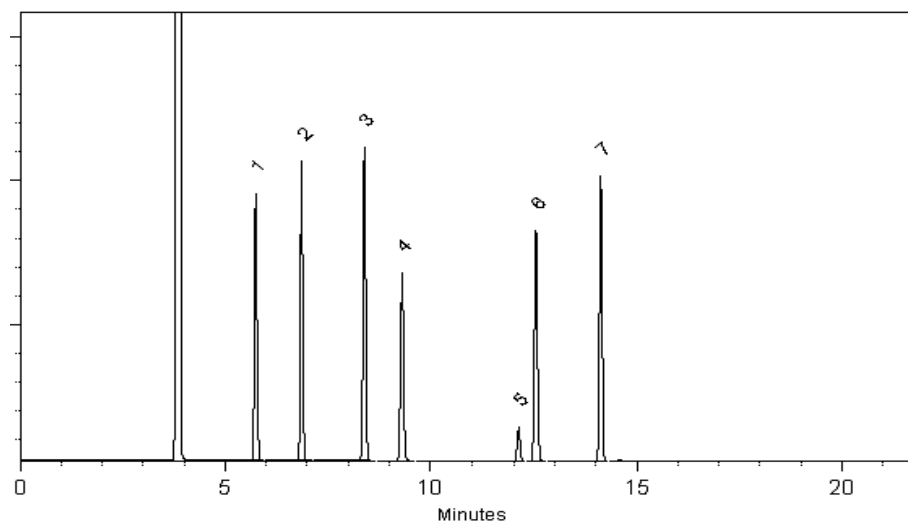
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



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


Cory Meyer - Operations Tech I

Date Mixed: 05-Mar-2021 **Balance:** 1128342314


Marlina Cowan - Operations Tech I

Date Passed: 10-Mar-2021

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

MSV_Q#4C_00066



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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)

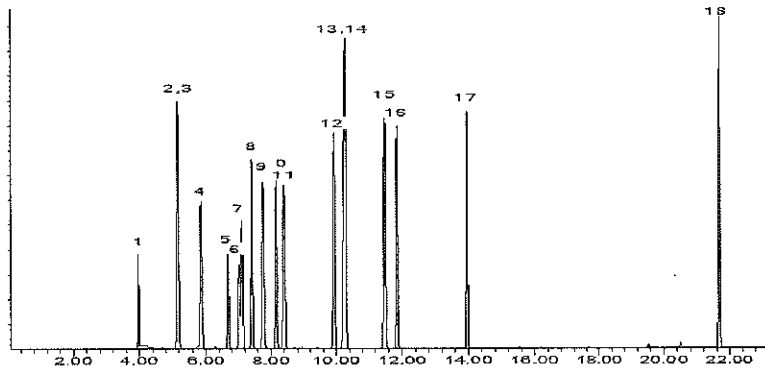
Carrier Gas:
helium-constant pressure 30 psi

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 - GC 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/ μ ECD, 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:

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

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.

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10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

MSV_Q#4C_00088



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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)

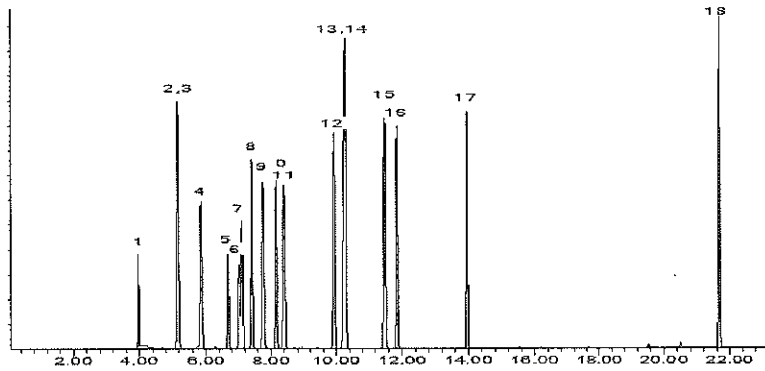
Carrier Gas:
helium-constant pressure 30 psi

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 - GC 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/ μ ECD, 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:

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

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_00103



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 572312.SEC **Lot No.:** A0169843

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, 2022 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	1,3-Butadiene	1,002.3 µg/mL	+/-	12.3939	µg/mL	Gravimetric
	CAS # 106-99-0.SEC (Lot 24033)		+/-	61.4516	µg/mL	Unstressed
	Purity 99%		+/-	61.5928	µg/mL	Stressed
2	1,2-Dichloro-1,1,2-trifluoroethane (CFC-123a)	1,005.3 µg/mL	+/-	24.2108	µg/mL	Gravimetric
	CAS # 354-23-4 * (Lot Q9B-64)		+/-	65.0478	µg/mL	Unstressed
	Purity 99%		+/-	65.1821	µg/mL	Stressed
3	n-Pentane (C5)	1,001.0 µg/mL	+/-	5.8744	µg/mL	Gravimetric
	CAS # 109-66-0.SEC (Lot FGH02)		+/-	60.4000	µg/mL	Unstressed
	Purity 99%		+/-	60.5434	µg/mL	Stressed
4	1,1,2-Trichlorotrifluoroethane (CFC-113)	1,007.5 µg/mL	+/-	5.9126	µg/mL	Gravimetric
	CAS # 76-13-1.SEC (Lot 18342)		+/-	60.7923	µg/mL	Unstressed
	Purity 99%		+/-	60.9366	µg/mL	Stressed
5	Iodomethane (methyl iodide)	1,002.5 µg/mL	+/-	5.8832	µg/mL	Gravimetric
	CAS # 74-88-4.SEC (Lot Y25A027)		+/-	60.4906	µg/mL	Unstressed
	Purity 99%		+/-	60.6341	µg/mL	Stressed
6	Carbon disulfide	1,007.5 µg/mL	+/-	5.9126	µg/mL	Gravimetric
	CAS # 75-15-0.SEC (Lot MKBL1376V)		+/-	60.7923	µg/mL	Unstressed
	Purity 99%		+/-	60.9366	µg/mL	Stressed
7	Methyl-tert-butyl ether (MTBE)	1,004.0 µg/mL	+/-	5.8920	µg/mL	Gravimetric
	CAS # 1634-04-4.SEC (Lot ZHKYA)		+/-	60.5811	µg/mL	Unstressed
	Purity 99%		+/-	60.7249	µg/mL	Stressed

8	n-Hexane (C6) CAS # 110-54-3.SEC Purity 99%	(Lot 10188491)	1,005.5	µg/mL	+/-	5.9008 60.6716 60.8156	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	Diisopropyl ether (DIPE) CAS # 108-20-3.SEC Purity 99%	(Lot LL7TN-SH)	1,007.5	µg/mL	+/-	5.9126 60.7923 60.9366	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	Chloroprene (2-chloro-1,3-butadiene) CAS # 126-99-8 * Purity 99%	(Lot 201117JLM)	1,009.0	µg/mL	+/-	5.9214 60.8828 61.0273	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	Ethyl-tert-butyl ether (ETBE) CAS # 637-92-3.SEC Purity 98%	(Lot UC15B)	998.6	µg/mL	+/-	5.8605 60.2564 60.3995	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	Cyclohexane CAS # 110-82-7.SEC Purity 99%	(Lot YADRA)	1,006.0	µg/mL	+/-	5.9038 60.7017 60.8458	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	tert-Amyl methyl ether (TAME) CAS # 994-05-8.SEC Purity 99%	(Lot 8471400)	1,001.5	µg/mL	+/-	5.8774 60.4302 60.5737	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	n-Heptane (C7) CAS # 142-82-5.SEC Purity 99%	(Lot OGM01)	1,002.0	µg/mL	+/-	5.8803 60.4604 60.6039	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	tert-Amyl ethyl ether (TAEE) CAS # 919-94-8.SEC Purity 99%	(Lot 6455100)	1,008.0	µg/mL	+/-	5.9155 60.8224 60.9668	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	Methyl methacrylate CAS # 80-62-6.SEC Purity 99%	(Lot G01X021)	1,006.0	µg/mL	+/-	5.9038 60.7017 60.8458	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	Ethyl methacrylate CAS # 97-63-2.SEC Purity 99%	(Lot MLWYK-LS)	1,005.0	µg/mL	+/-	5.8979 60.6414 60.7854	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
18	Benzyl chloride CAS # 100-44-7.SEC Purity 99%	(Lot H29N03)	1,005.0	µg/mL	+/-	5.8979 60.6414 60.7854	µg/mL µg/mL µg/mL	Gravimetric Unstressed 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)

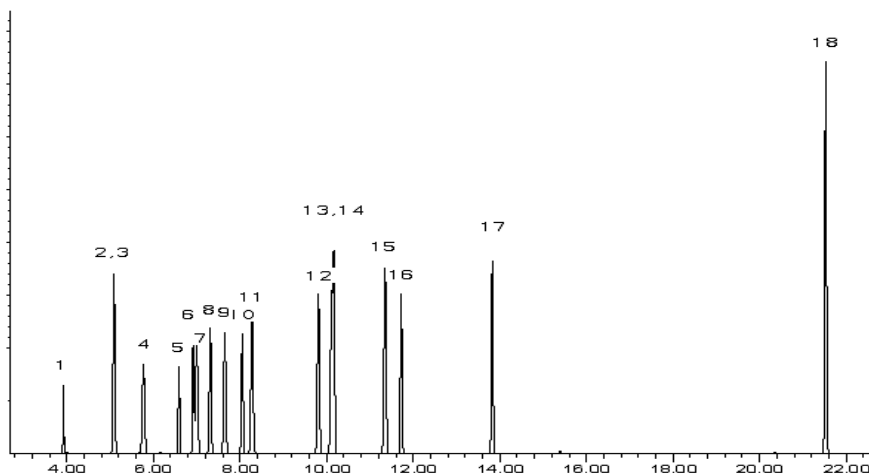
Carrier Gas:
helium-constant pressure 30 psi

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.

Brandon Reish - Mix Technician

Date Mixed: 08-Mar-2021 Balance: 1127510105

Marlina Cowan - Operations Tech I

Date Passed: 13-Apr-2021

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

MSV_QCS#6Std_00074



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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 (Lot 6WOXM-KD)	+/-	5.9714	µg/mL	Gravimetric
	CAS # 79-20-9.SEC		+/-	60.6685	µg/mL	Unstressed
	Purity 99%		+/-	60.8125	µg/mL	Stressed
2	Allyl chloride (3-chloropropene)	1,001.3 µg/mL (Lot H3HGC)	+/-	5.9476	µg/mL	Gravimetric
	CAS # 107-05-1.SEC		+/-	60.4271	µg/mL	Unstressed
	Purity 99%		+/-	60.5705	µg/mL	Stressed
3	Bromochloromethane	1,002.0 µg/mL (Lot 8529200)	+/-	5.9516	µg/mL	Gravimetric
	CAS # 74-97-5.SEC		+/-	60.4674	µg/mL	Unstressed
	Purity 99%		+/-	60.6109	µg/mL	Stressed
4	Methylcyclohexane	1,004.7 µg/mL (Lot 24MSD-CD)	+/-	5.9674	µg/mL	Gravimetric
	CAS # 108-87-2.SEC		+/-	60.6283	µg/mL	Unstressed
	Purity 99%		+/-	60.7722	µg/mL	Stressed
5	Pentachloroethane	1,004.7 µg/mL (Lot 8170200)	+/-	5.9674	µg/mL	Gravimetric
	CAS # 76-01-7.SEC		+/-	60.6283	µg/mL	Unstressed
	Purity 99%		+/-	60.7722	µg/mL	Stressed
6	1,2,3-Trimethylbenzene	1,004.6 µg/mL (Lot 7110200)	+/-	5.9673	µg/mL	Gravimetric
	CAS # 526-73-8.SEC		+/-	60.6267	µg/mL	Unstressed
	Purity 92%		+/-	60.7706	µg/mL	Stressed
7	1,3-Diethylbenzene	1,006.0 µg/mL (Lot 113566-1)	+/-	5.9753	µg/mL	Gravimetric
	CAS # 141-93-5.SEC		+/-	60.7087	µg/mL	Unstressed
	Purity 99%		+/-	60.8528	µg/mL	Stressed

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

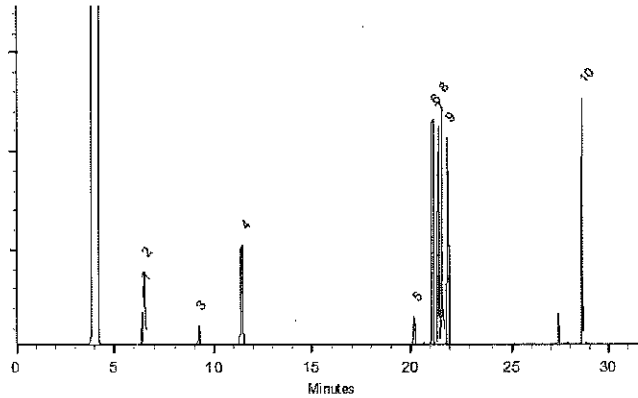
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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
Dalton Stover - Operations Technician I

Date Mixed: 17-Mar-2020 Balance: 1128342314

Feng-Yun Lo
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:

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

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_QCS#6Std_00088



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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 (Lot 6WOXM-KD)	+/-	5.9714	µg/mL	Gravimetric
	CAS # 79-20-9.SEC		+/-	60.6685	µg/mL	Unstressed
	Purity 99%		+/-	60.8125	µg/mL	Stressed
2	Allyl chloride (3-chloropropene)	1,001.3 µg/mL (Lot H3HGC)	+/-	5.9476	µg/mL	Gravimetric
	CAS # 107-05-1.SEC		+/-	60.4271	µg/mL	Unstressed
	Purity 99%		+/-	60.5705	µg/mL	Stressed
3	Bromochloromethane	1,002.0 µg/mL (Lot 8529200)	+/-	5.9516	µg/mL	Gravimetric
	CAS # 74-97-5.SEC		+/-	60.4674	µg/mL	Unstressed
	Purity 99%		+/-	60.6109	µg/mL	Stressed
4	Methylcyclohexane	1,004.7 µg/mL (Lot 24MSD-CD)	+/-	5.9674	µg/mL	Gravimetric
	CAS # 108-87-2.SEC		+/-	60.6283	µg/mL	Unstressed
	Purity 99%		+/-	60.7722	µg/mL	Stressed
5	Pentachloroethane	1,004.7 µg/mL (Lot 8170200)	+/-	5.9674	µg/mL	Gravimetric
	CAS # 76-01-7.SEC		+/-	60.6283	µg/mL	Unstressed
	Purity 99%		+/-	60.7722	µg/mL	Stressed
6	1,2,3-Trimethylbenzene	1,004.6 µg/mL (Lot 7110200)	+/-	5.9673	µg/mL	Gravimetric
	CAS # 526-73-8.SEC		+/-	60.6267	µg/mL	Unstressed
	Purity 92%		+/-	60.7706	µg/mL	Stressed
7	1,3-Diethylbenzene	1,006.0 µg/mL (Lot 113566-1)	+/-	5.9753	µg/mL	Gravimetric
	CAS # 141-93-5.SEC		+/-	60.7087	µg/mL	Unstressed
	Purity 99%		+/-	60.8528	µg/mL	Stressed

8	1,4-Diethylbenzene CAS # 105-05-5.SEC Purity 98%	(Lot FBQ02)	1,006.1 µg/mL	+/- 5.9761 +/- 60.7168 +/- 60.8609	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	1,2-Diethylbenzene CAS # 135-01-3.SEC Purity 99%	(Lot BCBF3667V)	1,008.7 µg/mL	+/- 5.9912 +/- 60.8697 +/- 61.0141	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	2-Methylnaphthalene CAS # 91-57-6.SEC Purity 99%	(Lot 76023-1)	1,006.0 µg/mL	+/- 5.9753 +/- 60.7087 +/- 60.8528	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 11.0 psi.

Temp. Program:

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

Inj. Temp:

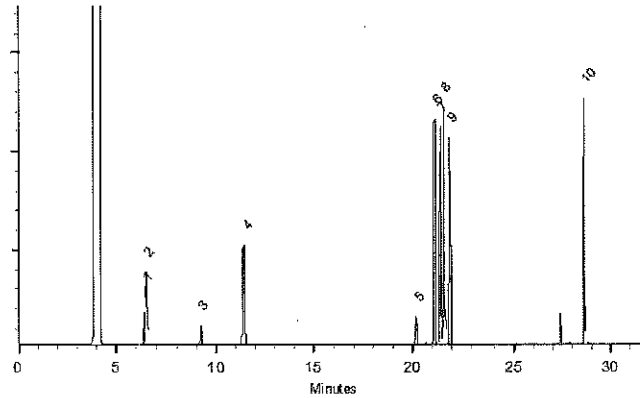
200°C

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
Dalton Stover - Operations Technician I

Date Mixed: 17-Mar-2020 Balance: 1128342314

Feng-Yun Lo
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:

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

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_QCS#6Std_00094



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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 CAS # 105-05-5.SEC Purity 98%	(Lot FBQ02)	1,006.1 µg/mL	+/- 5.9761 +/- 60.7168 +/- 60.8609	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	1,2-Diethylbenzene CAS # 135-01-3.SEC Purity 99%	(Lot BCBF3667V)	1,008.7 µg/mL	+/- 5.9912 +/- 60.8697 +/- 61.0141	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	2-Methylnaphthalene CAS # 91-57-6.SEC Purity 99%	(Lot 76023-1)	1,006.0 µg/mL	+/- 5.9753 +/- 60.7087 +/- 60.8528	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)

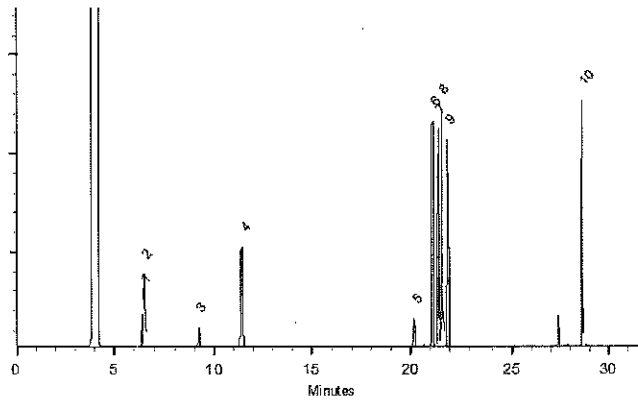
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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
Dalton Stover - Operations Technician I

Date Mixed: 17-Mar-2020 Balance: 1128342314

Feng-Yun Lo
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:

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

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



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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	Gravimetric	
			+/-	281.2901 µg/mL	Unstressed	
			+/-	287.8577 µg/mL	Stressed	
2	Methylene chloride (dichloromethane) CAS # 75-09-2 (Lot SHBL3107) Purity 99%	5,004.6 µg/mL	+/-	31.9213 µg/mL	Gravimetric	
			+/-	280.9112 µg/mL	Unstressed	
			+/-	287.4700 µg/mL	Stressed	
3	trans-1,2-Dichloroethene CAS # 156-60-5 (Lot MKBH9850V) Purity 99%	5,017.5 µg/mL	+/-	32.0035 µg/mL	Gravimetric	
			+/-	281.6339 µg/mL	Unstressed	
			+/-	288.2096 µg/mL	Stressed	
4	1,1-Dichloroethane CAS # 75-34-3 (Lot 580900) Purity 99%	5,020.4 µg/mL	+/-	32.0218 µg/mL	Gravimetric	
			+/-	281.7953 µg/mL	Unstressed	
			+/-	288.3747 µg/mL	Stressed	
5	2,2-Dichloropropane CAS # 594-20-7 (Lot BCBT5124) Purity 99%	5,050.0 µg/mL	+/-	32.0202 µg/mL	Gravimetric	
			+/-	283.4366 µg/mL	Unstressed	
			+/-	290.0553 µg/mL	Stressed	
6	cis-1,2-Dichloroethene CAS # 156-59-2 (Lot MKBX5945V) Purity 99%	5,046.5 µg/mL	+/-	31.9980 µg/mL	Gravimetric	
			+/-	283.2401 µg/mL	Unstressed	
			+/-	289.8543 µg/mL	Stressed	
7	chloroform CAS # 67-66-3 (Lot SHBJ9076) Purity 99%	5,034.3 µg/mL	+/-	32.1103 µg/mL	Gravimetric	
			+/-	282.5741 µg/mL	Unstressed	
			+/-	289.1717 µg/mL	Stressed	

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

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

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

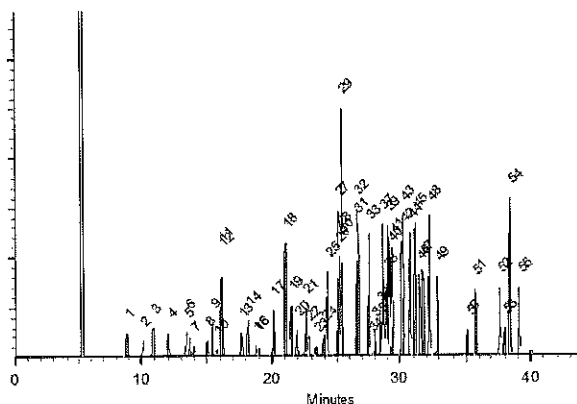
Carrier Gas:
hydrogen-constant pressure 8.0 psi.

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.

Cyndee L. Crust
Cyndee L. Crust - Mix Technician

Date Mixed: 09-Mar-2020 Balance: B251644995

Feng-Yan Lo
Feng-Yan Lo - GC 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:

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

MSV_V#1B_00148



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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 Purity 99% (Lot SHBK2437)	5,011.4 µg/mL	+/-	31.9644 µg/mL	Gravimetric	
			+/-	281.2901 µg/mL	Unstressed	
			+/-	287.8577 µg/mL	Stressed	
2	Methylene chloride (dichloromethane) CAS # 75-09-2 Purity 99% (Lot SHBL3107)	5,004.6 µg/mL	+/-	31.9213 µg/mL	Gravimetric	
			+/-	280.9112 µg/mL	Unstressed	
			+/-	287.4700 µg/mL	Stressed	
3	trans-1,2-Dichloroethene CAS # 156-60-5 Purity 99% (Lot MKBH9850V)	5,017.5 µg/mL	+/-	32.0035 µg/mL	Gravimetric	
			+/-	281.6339 µg/mL	Unstressed	
			+/-	288.2096 µg/mL	Stressed	
4	1,1-Dichloroethane CAS # 75-34-3 Purity 99% (Lot 580900)	5,020.4 µg/mL	+/-	32.0218 µg/mL	Gravimetric	
			+/-	281.7953 µg/mL	Unstressed	
			+/-	288.3747 µg/mL	Stressed	
5	2,2-Dichloropropane CAS # 594-20-7 Purity 99% (Lot BCBT5124)	5,050.0 µg/mL	+/-	32.0202 µg/mL	Gravimetric	
			+/-	283.4366 µg/mL	Unstressed	
			+/-	290.0553 µg/mL	Stressed	
6	cis-1,2-Dichloroethene CAS # 156-59-2 Purity 99% (Lot MKBX5945V)	5,046.5 µg/mL	+/-	31.9980 µg/mL	Gravimetric	
			+/-	283.2401 µg/mL	Unstressed	
			+/-	289.8543 µg/mL	Stressed	
7	chloroform CAS # 67-66-3 Purity 99% (Lot SHBJ9076)	5,034.3 µg/mL	+/-	32.1103 µg/mL	Gravimetric	
			+/-	282.5741 µg/mL	Unstressed	
			+/-	289.1717 µg/mL	Stressed	

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

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

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

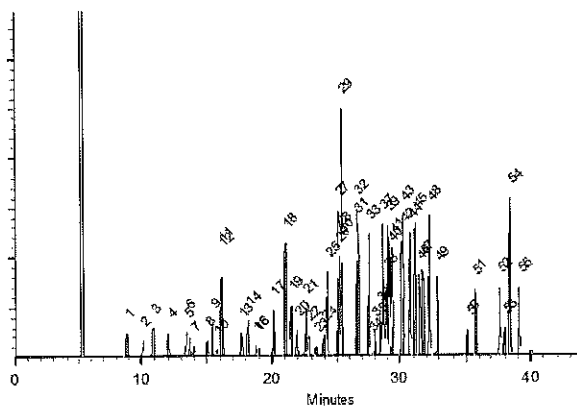
Carrier Gas:
hydrogen-constant pressure 8.0 psi.

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.

Cyndee L. Crust
Cyndee L. Crust - Mix Technician

Date Mixed: 09-Mar-2020 Balance: B251644995

Feng-Yan Lo
Feng-Yan Lo - GC 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/ μ ECD, 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:

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

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_00153



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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	5,011.4 µg/mL	+/-	31.9644	µg/mL	Gravimetric
	CAS # 75-35-4 (Lot SHBK2437)		+/-	281.2901	µg/mL	Unstressed
	Purity 99%		+/-	287.8577	µg/mL	Stressed
2	Methylene chloride (dichloromethane)	5,004.6 µg/mL	+/-	31.9213	µg/mL	Gravimetric
	CAS # 75-09-2 (Lot SHBL3107)		+/-	280.9112	µg/mL	Unstressed
	Purity 99%		+/-	287.4700	µg/mL	Stressed
3	trans-1,2-Dichloroethene	5,017.5 µg/mL	+/-	32.0035	µg/mL	Gravimetric
	CAS # 156-60-5 (Lot MKBH9850V)		+/-	281.6339	µg/mL	Unstressed
	Purity 99%		+/-	288.2096	µg/mL	Stressed
4	1,1-Dichloroethane	5,020.4 µg/mL	+/-	32.0218	µg/mL	Gravimetric
	CAS # 75-34-3 (Lot 580900)		+/-	281.7953	µg/mL	Unstressed
	Purity 99%		+/-	288.3747	µg/mL	Stressed
5	2,2-Dichloropropane	5,050.0 µg/mL	+/-	32.0202	µg/mL	Gravimetric
	CAS # 594-20-7 (Lot BCBT5124)		+/-	283.4366	µg/mL	Unstressed
	Purity 99%		+/-	290.0553	µg/mL	Stressed
6	cis-1,2-Dichloroethene	5,046.5 µg/mL	+/-	31.9980	µg/mL	Gravimetric
	CAS # 156-59-2 (Lot MKBX5945V)		+/-	283.2401	µg/mL	Unstressed
	Purity 99%		+/-	289.8543	µg/mL	Stressed
7	chloroform	5,034.3 µg/mL	+/-	32.1103	µg/mL	Gravimetric
	CAS # 67-66-3 (Lot SHBJ9076)		+/-	282.5741	µg/mL	Unstressed
	Purity 99%		+/-	289.1717	µg/mL	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)		5,037.4	µg/mL	+/-	31.9401	µg/mL	Gravimetric
	CAS #	106-93-4	(Lot BCBP2268V)		+/-	282.7280	µg/mL	Unstressed
	Purity	99%			+/-	289.3302	µg/mL	Stressed
25	1-Chlorohexane		5,010.7	µg/mL	+/-	29.3390	µg/mL	Gravimetric
	CAS #	544-10-5	(Lot BCBS3368V)		+/-	280.9687	µg/mL	Unstressed
	Purity	98%			+/-	287.5420	µg/mL	Stressed
26	Chlorobenzene		5,009.0	µg/mL	+/-	31.9493	µg/mL	Gravimetric
	CAS #	108-90-7	(Lot SHBJ0839)		+/-	281.1568	µg/mL	Unstressed
	Purity	99%			+/-	287.7213	µg/mL	Stressed
27	1,1,1,2-Tetrachloroethane		5,038.6	µg/mL	+/-	31.9481	µg/mL	Gravimetric
	CAS #	630-20-6	(Lot MKBS3769V)		+/-	282.7981	µg/mL	Unstressed
	Purity	99%			+/-	289.4020	µg/mL	Stressed
28	Ethylbenzene		5,029.3	µg/mL	+/-	31.8886	µg/mL	Gravimetric
	CAS #	100-41-4	(Lot SHBJ3183)		+/-	282.2719	µg/mL	Unstressed
	Purity	99%			+/-	288.8635	µg/mL	Stressed
29	m-Xylene		5,038.4	µg/mL	+/-	31.9465	µg/mL	Gravimetric
	CAS #	108-38-3	(Lot SHBH8323)		+/-	282.7841	µg/mL	Unstressed
	Purity	99%			+/-	289.3876	µg/mL	Stressed
30	p-Xylene		5,038.0	µg/mL	+/-	31.9441	µg/mL	Gravimetric
	CAS #	106-42-3	(Lot SHBJ0052)		+/-	282.7630	µg/mL	Unstressed
	Purity	99%			+/-	289.3661	µg/mL	Stressed
31	o-Xylene		5,046.4	µg/mL	+/-	31.9972	µg/mL	Gravimetric
	CAS #	95-47-6	(Lot SHBH3432V)		+/-	283.2331	µg/mL	Unstressed
	Purity	99%			+/-	289.8471	µg/mL	Stressed
32	Styrene		5,047.0	µg/mL	+/-	32.0012	µg/mL	Gravimetric
	CAS #	100-42-5	(Lot MKBV4061V)		+/-	283.2682	µg/mL	Unstressed
	Purity	99%			+/-	289.8830	µg/mL	Stressed
33	Isopropylbenzene (cumene)		5,035.3	µg/mL	+/-	31.9267	µg/mL	Gravimetric
	CAS #	98-82-8	(Lot 10185056)		+/-	282.6087	µg/mL	Unstressed
	Purity	99%			+/-	289.2081	µg/mL	Stressed
34	bromoform		5,013.0	µg/mL	+/-	31.9748	µg/mL	Gravimetric
	CAS #	75-25-2	(Lot SHBJ4835)		+/-	281.3813	µg/mL	Unstressed
	Purity	99%			+/-	287.9511	µg/mL	Stressed
35	1,1,2,2-Tetrachloroethane		5,016.0	µg/mL	+/-	31.9939	µg/mL	Gravimetric
	CAS #	79-34-5	(Lot CFA4D)		+/-	281.5497	µg/mL	Unstressed
	Purity	99%			+/-	288.1234	µg/mL	Stressed
36	1,2,3-Trichloropropane		5,033.4	µg/mL	+/-	31.9148	µg/mL	Gravimetric
	CAS #	96-18-4	(Lot BCBH8722V)		+/-	282.5035	µg/mL	Unstressed
	Purity	99%			+/-	289.1004	µg/mL	Stressed
37	n-Propylbenzene		5,032.4	µg/mL	+/-	31.9084	µg/mL	Gravimetric
	CAS #	103-65-1	(Lot MKBJ0332V)		+/-	282.4473	µg/mL	Unstressed
	Purity	99%			+/-	289.0430	µg/mL	Stressed
38	Bromobenzene		5,035.5	µg/mL	+/-	31.9282	µg/mL	Gravimetric
	CAS #	108-86-1	(Lot WXBC5147V)		+/-	282.6227	µg/mL	Unstressed
	Purity	99%			+/-	289.2225	µg/mL	Stressed
39	1,3,5-Trimethylbenzene		5,029.8	µg/mL	+/-	31.8918	µg/mL	Gravimetric
	CAS #	108-67-8	(Lot BCBS7648V)		+/-	282.3000	µg/mL	Unstressed
	Purity	99%			+/-	288.8922	µg/mL	Stressed

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

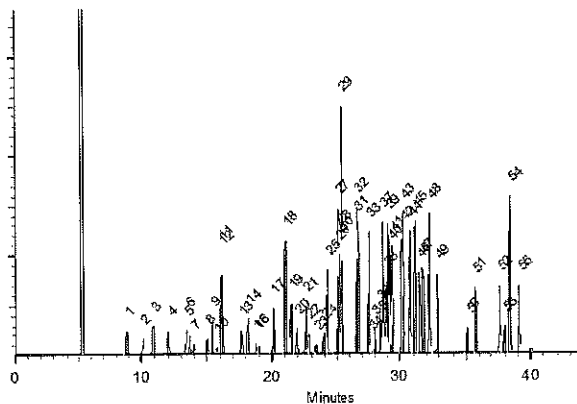
Carrier Gas:
hydrogen-constant pressure 8.0 psi.

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.

Cyndee L. Crust
Cyndee L. Crust - Mix Technician

Date Mixed: 09-Mar-2020 Balance: B251644995

Feng-Yan Lo
Feng-Yan Lo - GC 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/ μ ECD, 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:

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

MSV_V#2B_00161



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

Certificate of Analysis

www.restek.com

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 56734 **Lot No.:** A0159694
Description : Custom V # 2B Standard
Custom V #2B Standard 12,500-125,000µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : April 30, 2022 **Storage:** 0°C or colder

Elution Order	Compound	CAS #	Percent Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	2-Propanol (isopropanol)	67-63-0	99%	25,019.2 µg/mL	+/- 146.4929 µg/mL
2	tert-Butanol (TBA)	75-65-0	99%	25,022.4 µg/mL	+/- 146.5117 µg/mL
3	Propionitrile	107-12-0	99%	25,020.0 µg/mL	+/- 146.4976 µg/mL
4	Methacrylonitrile	126-98-7	99%	12,533.6 µg/mL	+/- 73.3870 µg/mL
5	Isobutanol (2-Methyl-1-propanol)	78-83-1	99%	62,702.0 µg/mL	+/- 367.1151 µg/mL
6	1-Butanol	71-36-3	99%	125,150.0 µg/mL	+/- 732.7430 µg/mL
7	1,4-Dioxane	123-91-1	99%	62,550.0 µg/mL	+/- 366.2251 µg/mL
8	trans-1,4-dichloro-2-butene	110-57-6	95%	12,549.5 µg/mL	+/- 73.4801 µg/mL
Solvent:	P&T Methanol	67-56-1	99%		

Specific Reference Material Notes:

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

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

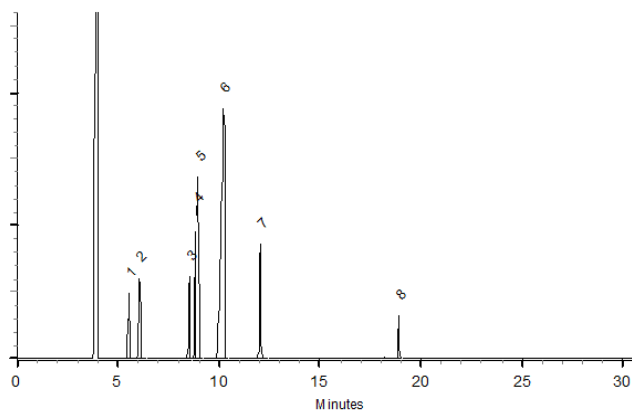
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



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


Clara Windle - Operations Technician I

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


Fang-Yun Lo - GC Analyst

Date Passed: 10-Apr-2020

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

General Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Uncertainty Value Notes:

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

MSV_V#2B_00201



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

Certificate of Analysis

www.restek.com

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 56734 **Lot No.:** A0159694
Description : Custom V # 2B Standard
Custom V #2B Standard 12,500-125,000µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : April 30, 2022 **Storage:** 0°C or colder

Elution Order	Compound	CAS #	Percent Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	2-Propanol (isopropanol)	67-63-0	99%	25,019.2 µg/mL	+/- 146.4929 µg/mL
2	tert-Butanol (TBA)	75-65-0	99%	25,022.4 µg/mL	+/- 146.5117 µg/mL
3	Propionitrile	107-12-0	99%	25,020.0 µg/mL	+/- 146.4976 µg/mL
4	Methacrylonitrile	126-98-7	99%	12,533.6 µg/mL	+/- 73.3870 µg/mL
5	Isobutanol (2-Methyl-1-propanol)	78-83-1	99%	62,702.0 µg/mL	+/- 367.1151 µg/mL
6	1-Butanol	71-36-3	99%	125,150.0 µg/mL	+/- 732.7430 µg/mL
7	1,4-Dioxane	123-91-1	99%	62,550.0 µg/mL	+/- 366.2251 µg/mL
8	trans-1,4-dichloro-2-butene	110-57-6	95%	12,549.5 µg/mL	+/- 73.4801 µg/mL
Solvent:	P&T Methanol	67-56-1	99%		

Specific Reference Material Notes:

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

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

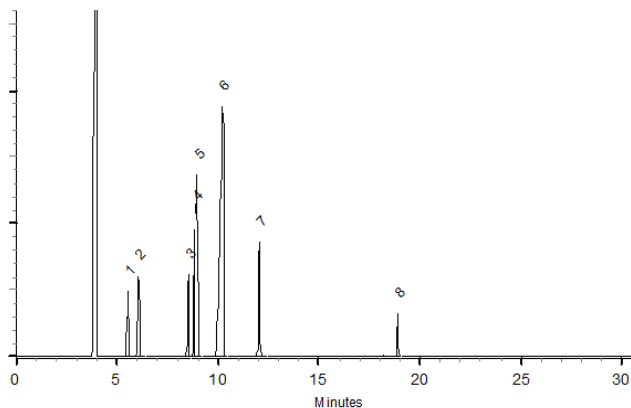
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



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


Clara Windle - Operations Technician I

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


Fang-Yun Lo - GC Analyst

Date Passed: 10-Apr-2020

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

General Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Uncertainty Value Notes:

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

MSV_V#2B_00202



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

Certificate of Analysis

www.restek.com

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 56734 **Lot No.:** A0159694
Description : Custom V # 2B Standard
Custom V #2B Standard 12,500-125,000µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : April 30, 2022 **Storage:** 0°C or colder

Elution Order	Compound	CAS #	Percent Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	2-Propanol (isopropanol)	67-63-0	99%	25,019.2 µg/mL	+/- 146.4929 µg/mL
2	tert-Butanol (TBA)	75-65-0	99%	25,022.4 µg/mL	+/- 146.5117 µg/mL
3	Propionitrile	107-12-0	99%	25,020.0 µg/mL	+/- 146.4976 µg/mL
4	Methacrylonitrile	126-98-7	99%	12,533.6 µg/mL	+/- 73.3870 µg/mL
5	Isobutanol (2-Methyl-1-propanol)	78-83-1	99%	62,702.0 µg/mL	+/- 367.1151 µg/mL
6	1-Butanol	71-36-3	99%	125,150.0 µg/mL	+/- 732.7430 µg/mL
7	1,4-Dioxane	123-91-1	99%	62,550.0 µg/mL	+/- 366.2251 µg/mL
8	trans-1,4-dichloro-2-butene	110-57-6	95%	12,549.5 µg/mL	+/- 73.4801 µg/mL
Solvent:	P&T Methanol	67-56-1	99%		

Specific Reference Material Notes:

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

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

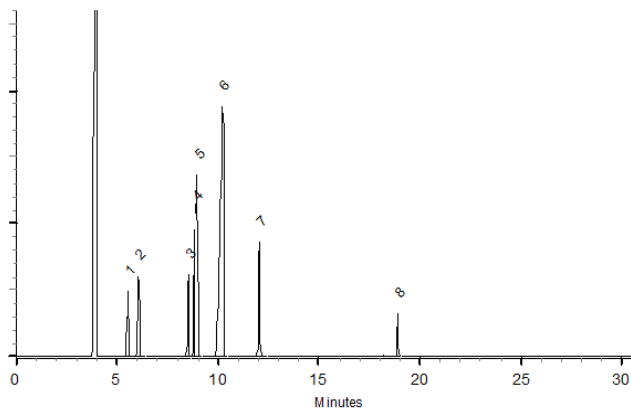
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



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


Clara Windle - Operations Technician I

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


Fang-Yun Lo - GC Analyst

Date Passed: 10-Apr-2020

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

General Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Uncertainty Value Notes:

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

MSV_V#3B_00070



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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 (Lot MKCK2598)	+/-	146.3864	µg/mL	Gravimetric
	CAS # 67-64-1		+/-	1,236.8670	µg/mL	Unstressed
	Purity 99%		+/-	1,267.6168	µg/mL	Stressed
2	Acrylonitrile	12,511.0 µg/mL (Lot A0387097)	+/-	73.2547	µg/mL	Gravimetric
	CAS # 107-13-1		+/-	618.9529	µg/mL	Unstressed
	Purity 99%		+/-	634.3408	µg/mL	Stressed
3	2-Butanone (MEK)	25,007.0 µg/mL (Lot SHBK9603)	+/-	146.4215	µg/mL	Gravimetric
	CAS # 78-93-3		+/-	1,237.1638	µg/mL	Unstressed
	Purity 99%		+/-	1,267.9210	µg/mL	Stressed
4	Tetrahydrofuran	25,049.0 µg/mL (Lot SHBK8926)	+/-	146.6674	µg/mL	Gravimetric
	CAS # 109-99-9		+/-	1,239.2417	µg/mL	Unstressed
	Purity 99%		+/-	1,270.0505	µg/mL	Stressed
5	2-Nitropropane	24,758.3 µg/mL (Lot BCCB9352)	+/-	144.9652	µg/mL	Gravimetric
	CAS # 79-46-9		+/-	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 (Lot SHBL5515)	+/-	146.4625	µg/mL	Gravimetric
	CAS # 108-10-1		+/-	1,237.5101	µg/mL	Unstressed
	Purity 99%		+/-	1,268.2759	µg/mL	Stressed
7	2-Hexanone	25,016.0 µg/mL (Lot MKCL1599)	+/-	146.4742	µg/mL	Gravimetric
	CAS # 591-78-6		+/-	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)

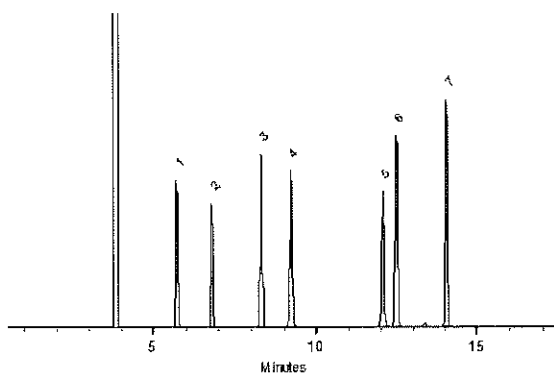
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

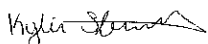
Inj. Temp:
200°C

Det. Temp:
250°C

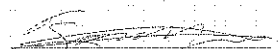
Det. Type:
FID



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.


Kyle 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:

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

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_00087



CERTIFIED REFERENCE MATERIAL

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

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Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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 CAS # 67-64-1 (Lot MKCK2598) Purity 99%	25,001.0 µg/mL	+/- 146.3864 µg/mL	+/- 1,236.8670 µg/mL	+/- 1,267.6168 µg/mL	Gravimetric Unstressed Stressed
2	Acrylonitrile CAS # 107-13-1 (Lot A0387097) Purity 99%	12,511.0 µg/mL	+/- 73.2547 µg/mL	+/- 618.9529 µg/mL	+/- 634.3408 µg/mL	Gravimetric Unstressed Stressed
3	2-Butanone (MEK) CAS # 78-93-3 (Lot SHBK9603) Purity 99%	25,007.0 µg/mL	+/- 146.4215 µg/mL	+/- 1,237.1638 µg/mL	+/- 1,267.9210 µg/mL	Gravimetric Unstressed Stressed
4	Tetrahydrofuran CAS # 109-99-9 (Lot SHBK8926) Purity 99%	25,049.0 µg/mL	+/- 146.6674 µg/mL	+/- 1,239.2417 µg/mL	+/- 1,270.0505 µg/mL	Gravimetric Unstressed Stressed
5	2-Nitropropane CAS # 79-46-9 (Lot BCCB9352) Purity 97%	24,758.3 µg/mL	+/- 144.9652 µg/mL	+/- 1,224.8589 µg/mL	+/- 1,255.3102 µg/mL	Gravimetric Unstressed Stressed
6	4-Methyl-2-pentanone (MIBK) CAS # 108-10-1 (Lot SHBL5515) Purity 99%	25,014.0 µg/mL	+/- 146.4625 µg/mL	+/- 1,237.5101 µg/mL	+/- 1,268.2759 µg/mL	Gravimetric Unstressed Stressed
7	2-Hexanone CAS # 591-78-6 (Lot MKCL1599) Purity 99%	25,016.0 µg/mL	+/- 146.4742 µg/mL	+/- 1,237.6091 µg/mL	+/- 1,268.3773 µg/mL	Gravimetric Unstressed 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)

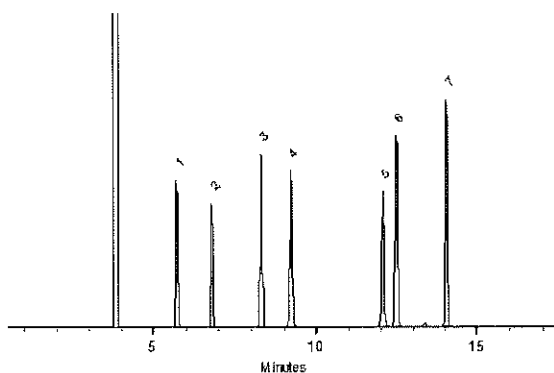
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

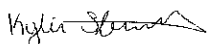
Inj. Temp:
200°C

Det. Temp:
250°C

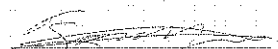
Det. Type:
FID



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.


Kyle 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:

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

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_00094



CERTIFIED REFERENCE MATERIAL

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Fax: (814)353-1309

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Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 56736 **Lot No.:** A0169677

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, 2024 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Acetone	25,082.0 µg/mL	+/- 146.8606 µg/mL Gravimetric	
	CAS # 67-64-1 (Lot SHBM6699)			+/- 1,240.8742 µg/mL Unstressed
	Purity 99%			+/- 1,271.7237 µg/mL Stressed
2	Acrylonitrile	12,557.0 µg/mL	+/- 73.5240 µg/mL Gravimetric	
	CAS # 107-13-1 (Lot M25F024)			+/- 621.2287 µg/mL Unstressed
	Purity 99%			+/- 636.6731 µg/mL Stressed
3	2-Butanone (MEK)	25,153.0 µg/mL	+/- 147.2763 µg/mL Gravimetric	
	CAS # 78-93-3 (Lot SHBL6194)			+/- 1,244.3868 µg/mL Unstressed
	Purity 99%			+/- 1,275.3236 µg/mL Stressed
4	Tetrahydrofuran	25,034.0 µg/mL	+/- 146.5796 µg/mL Gravimetric	
	CAS # 109-99-9 (Lot SHBM0434)			+/- 1,238.4996 µg/mL Unstressed
	Purity 99%			+/- 1,269.2900 µg/mL Stressed
5	2-Nitropropane	25,122.0 µg/mL	+/- 147.0950 µg/mL Gravimetric	
	CAS # 79-46-9 (Lot BCCB9352)			+/- 1,242.8546 µg/mL Unstressed
	Purity 97%			+/- 1,273.7533 µg/mL Stressed
6	4-Methyl-2-pentanone (MIBK)	25,179.0 µg/mL	+/- 147.4286 µg/mL Gravimetric	
	CAS # 108-10-1 (Lot SHBM2797)			+/- 1,245.6731 µg/mL Unstressed
	Purity 99%			+/- 1,276.6418 µg/mL Stressed
7	2-Hexanone	25,036.0 µg/mL	+/- 146.5913 µg/mL Gravimetric	
	CAS # 591-78-6 (Lot MKCG5905)			+/- 1,238.5985 µg/mL Unstressed
	Purity 99%			+/- 1,269.3914 µg/mL Stressed

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

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

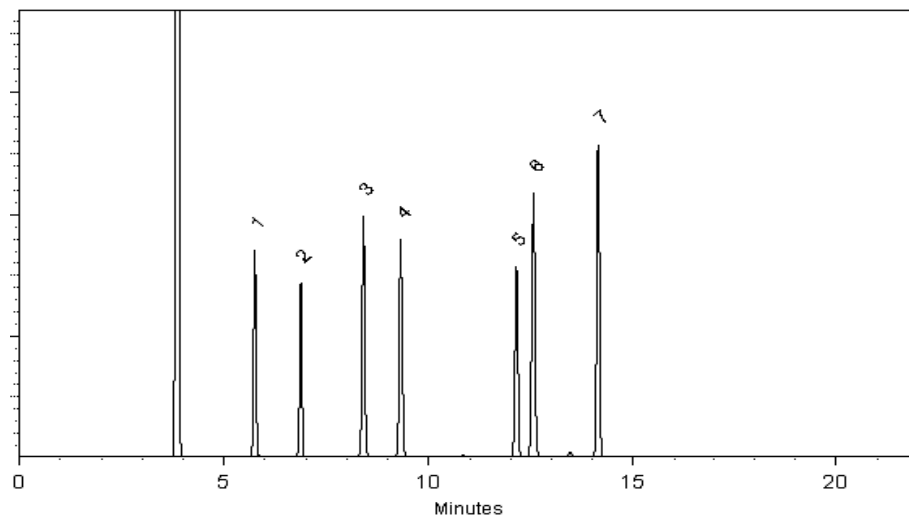
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



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

Sam Moodler
Sam Moodler - Operations Tech I

Date Mixed: 03-Mar-2021 **Balance:** B707717271

Alexis Shelow
Alexis Shelow - Operations Tech I

Date Passed: 05-Mar-2021

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

MSV_V#4C_00107



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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)

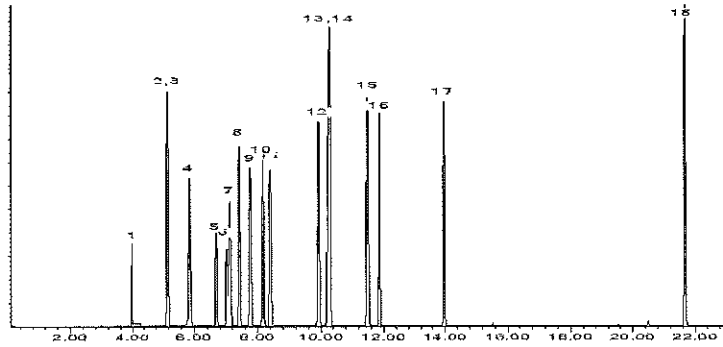
Carrier Gas:
helium-constant pressure 30 psi

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

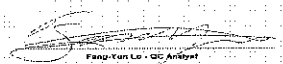


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Tom Suckar - Mix Technician

Date Mixed: 10-Mar-2020

Balance: B707717271


Fang-tun, Lo - GC 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/ μ ECD, 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:

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

MSV_V#4C_00128



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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)

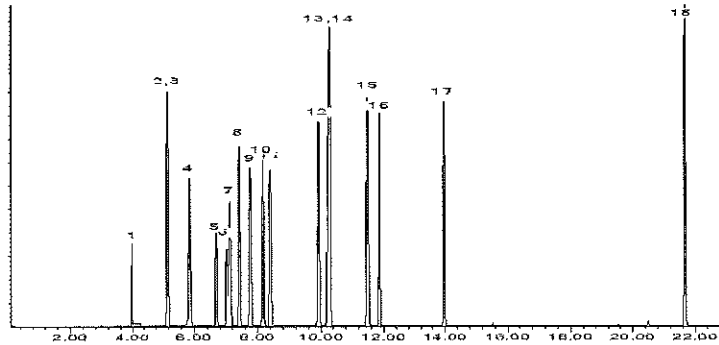
Carrier Gas:
helium-constant pressure 30 psi

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

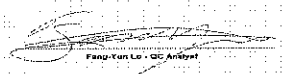


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Tom Suckal - Mix Technician

Date Mixed: 10-Mar-2020

Balance: B707717271


Fisher Scientific, LLC - GC 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/ μ ECD, 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:

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

MSV_V#4C_00168



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 572312 **Lot No.:** A0170799

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, 2022 **Storage:** 0°C or colder

Handling: This product is photosensitive. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	1,3-Butadiene	5,006.0 µg/mL	+/-	36.9427	µg/mL	Gravimetric
	CAS # 106-99-0 (Lot 00019375)		+/-	302.8917	µg/mL	Unstressed
	Purity 99%		+/-	303.6067	µg/mL	Stressed
2	1,2-Dichloro-1,1,2-trifluoroethane (CFC-123a)	5,004.5 µg/mL	+/-	40.4171	µg/mL	Gravimetric
	CAS # 354-23-4 (Lot Q9B-64)		+/-	303.2440	µg/mL	Unstressed
	Purity 99%		+/-	303.9578	µg/mL	Stressed
3	n-Pentane (C5)	5,010.4 µg/mL	+/-	29.3370	µg/mL	Gravimetric
	CAS # 109-66-0 (Lot SHBM2439)		+/-	302.3196	µg/mL	Unstressed
	Purity 99%		+/-	303.0372	µg/mL	Stressed
4	1,1,2-Trichlorotrifluoroethane (CFC-113)	5,005.6 µg/mL	+/-	29.3089	µg/mL	Gravimetric
	CAS # 76-13-1 (Lot 00016133)		+/-	302.0299	µg/mL	Unstressed
	Purity 99%		+/-	302.7469	µg/mL	Stressed
5	Iodomethane (methyl iodide)	5,021.2 µg/mL	+/-	29.4002	µg/mL	Gravimetric
	CAS # 74-88-4 (Lot RD200805)		+/-	302.9712	µg/mL	Unstressed
	Purity 99%		+/-	303.6904	µg/mL	Stressed
6	Carbon disulfide	5,016.0 µg/mL	+/-	29.3698	µg/mL	Gravimetric
	CAS # 75-15-0 (Lot U22D706)		+/-	302.6575	µg/mL	Unstressed
	Purity 99%		+/-	303.3759	µg/mL	Stressed
7	Methyl-tert-butyl ether (MTBE)	5,016.4 µg/mL	+/-	29.3721	µg/mL	Gravimetric
	CAS # 1634-04-4 (Lot SHBL7050)		+/-	302.6816	µg/mL	Unstressed
	Purity 99%		+/-	303.4001	µg/mL	Stressed

8	n-Hexane (C6) CAS # 110-54-3 Purity 99%	(Lot SHBL0924)	5,003.6	µg/mL	+/-	29.2972	µg/mL	Gravimetric
					+/-	301.9093	µg/mL	Unstressed
					+/-	302.6260	µg/mL	Stressed
9	Diisopropyl ether (DIPE) CAS # 108-20-3 Purity 99%	(Lot SHBH1927V)	5,008.4	µg/mL	+/-	29.3253	µg/mL	Gravimetric
					+/-	302.1989	µg/mL	Unstressed
					+/-	302.9163	µg/mL	Stressed
10	Chloroprene (2-chloro-1,3-butadiene) CAS # 126-99-8 Purity 99%	(Lot 210330JLM)	5,006.8	µg/mL	+/-	29.3159	µg/mL	Gravimetric
					+/-	302.1023	µg/mL	Unstressed
					+/-	302.8195	µg/mL	Stressed
11	Ethyl-tert-butyl ether (ETBE) CAS # 637-92-3 Purity 99%	(Lot MKCM3774)	5,008.8	µg/mL	+/-	29.3276	µg/mL	Gravimetric
					+/-	302.2230	µg/mL	Unstressed
					+/-	302.9405	µg/mL	Stressed
12	Cyclohexane CAS # 110-82-7 Purity 99%	(Lot MKCF5831)	5,006.0	µg/mL	+/-	29.3112	µg/mL	Gravimetric
					+/-	302.0541	µg/mL	Unstressed
					+/-	302.7711	µg/mL	Stressed
13	tert-Amyl methyl ether (TAME) CAS # 994-05-8 Purity 99%	(Lot HMBG7745V)	5,008.0	µg/mL	+/-	29.3229	µg/mL	Gravimetric
					+/-	302.1748	µg/mL	Unstressed
					+/-	302.8921	µg/mL	Stressed
14	n-Heptane (C7) CAS # 142-82-5 Purity 99%	(Lot SHBL9221)	5,004.4	µg/mL	+/-	29.3019	µg/mL	Gravimetric
					+/-	301.9575	µg/mL	Unstressed
					+/-	302.6743	µg/mL	Stressed
15	tert-Amyl ethyl ether (TAEE) CAS # 919-94-8 Purity 99%	(Lot 76U3A)	5,007.6	µg/mL	+/-	29.3206	µg/mL	Gravimetric
					+/-	302.1506	µg/mL	Unstressed
					+/-	302.8679	µg/mL	Stressed
16	Methyl methacrylate CAS # 80-62-6 Purity 99%	(Lot MKCG6589)	5,009.2	µg/mL	+/-	29.3300	µg/mL	Gravimetric
					+/-	302.2472	µg/mL	Unstressed
					+/-	302.9646	µg/mL	Stressed
17	Ethyl methacrylate CAS # 97-63-2 Purity 99%	(Lot MKCL0907)	5,015.6	µg/mL	+/-	29.3674	µg/mL	Gravimetric
					+/-	302.6333	µg/mL	Unstressed
					+/-	303.3517	µg/mL	Stressed
18	Benzyl chloride CAS # 100-44-7 Purity 99%	(Lot SHBH2102V)	5,008.0	µg/mL	+/-	29.3229	µg/mL	Gravimetric
					+/-	302.1748	µg/mL	Unstressed
					+/-	302.8921	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)

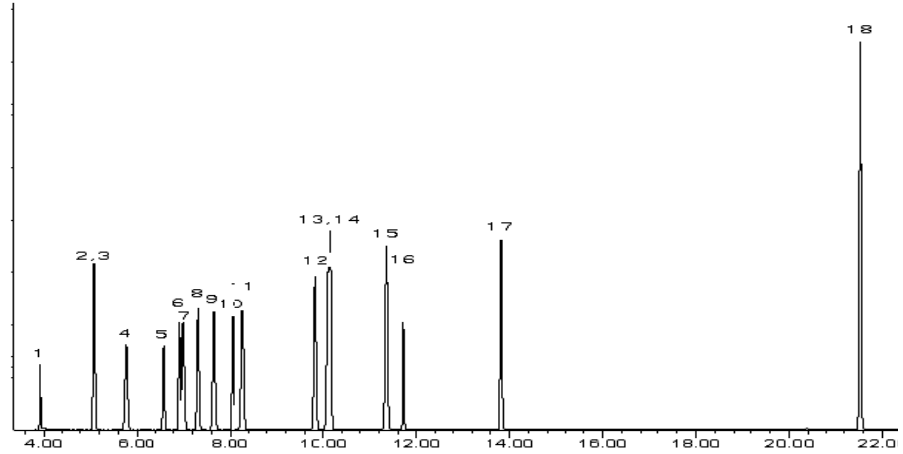
Carrier Gas:
helium-constant pressure 30 psi

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.

Miranda Kline

Miranda Kline - Operations Technician I

Date Mixed: 30-Mar-2021

Balance: B707717271

Marlina Cowan

Marlina Cowan - Operations Tech I

Date Passed: 13-Apr-2021

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

MSV_V#6_00046



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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 CAS # 79-20-9 (Lot SHBK5436) Purity 99%	5,039.0 µg/mL	+/- 29.5717 µg/mL +/- 304.0518 µg/mL +/- 304.7735 µg/mL	Gravimetric Unstressed Stressed	
2	Allyl chloride (3-chloropropene) CAS # 107-05-1 (Lot 191118KJ) Purity 99%	5,046.0 µg/mL	+/- 29.6128 µg/mL +/- 304.4742 µg/mL +/- 305.1969 µg/mL	Gravimetric Unstressed Stressed	
3	Bromochloromethane CAS # 74-97-5 (Lot 00008541) Purity 98%	5,040.1 µg/mL	+/- 29.5784 µg/mL +/- 304.1206 µg/mL +/- 304.8425 µg/mL	Gravimetric Unstressed Stressed	
4	Methylcyclohexane CAS # 108-87-2 (Lot SHBJ0457) Purity 99%	5,041.0 µg/mL	+/- 29.5834 µg/mL +/- 304.1725 µg/mL +/- 304.8945 µg/mL	Gravimetric Unstressed Stressed	
5	Pentachloroethane CAS # 76-01-7 (Lot 8866000) Purity 99%	5,035.0 µg/mL	+/- 29.5482 µg/mL +/- 303.8104 µg/mL +/- 304.5316 µg/mL	Gravimetric Unstressed Stressed	
6	1,2,3-Trimethylbenzene CAS # 526-73-8 (Lot 8766.05-14) Purity 99%	5,012.0 µg/mL	+/- 29.4132 µg/mL +/- 302.4226 µg/mL +/- 303.1405 µg/mL	Gravimetric Unstressed Stressed	
7	1,3-Diethylbenzene CAS # 141-93-5 (Lot BCBT8967) Purity 98%	5,041.1 µg/mL	+/- 29.5841 µg/mL +/- 304.1797 µg/mL +/- 304.9017 µg/mL	Gravimetric Unstressed Stressed	

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

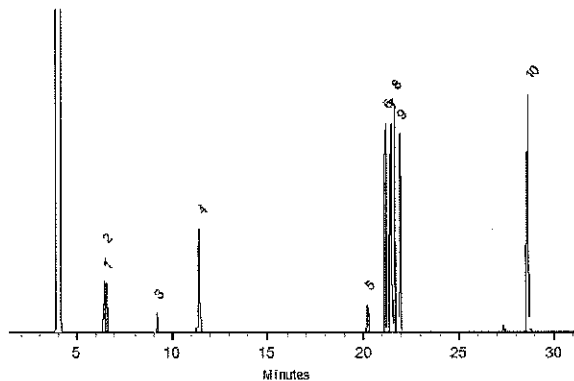
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

Inj. Temp:
200°C

Det. Temp:
250°C

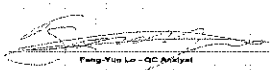
Det. Type:
FID



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


Tom Suckar - 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/ μ ECD, 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:

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

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
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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_V#6_00064



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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 CAS # 79-20-9 (Lot SHBK5436) Purity 99%	5,039.0 µg/mL	+/- 29.5717	µg/mL	Gravimetric	
			+/- 304.0518	µg/mL	Unstressed	
			+/- 304.7735	µg/mL	Stressed	
2	Allyl chloride (3-chloropropene) CAS # 107-05-1 (Lot 191118KJ) Purity 99%	5,046.0 µg/mL	+/- 29.6128	µg/mL	Gravimetric	
			+/- 304.4742	µg/mL	Unstressed	
			+/- 305.1969	µg/mL	Stressed	
3	Bromochloromethane CAS # 74-97-5 (Lot 00008541) Purity 98%	5,040.1 µg/mL	+/- 29.5784	µg/mL	Gravimetric	
			+/- 304.1206	µg/mL	Unstressed	
			+/- 304.8425	µg/mL	Stressed	
4	Methylcyclohexane CAS # 108-87-2 (Lot SHBJ0457) Purity 99%	5,041.0 µg/mL	+/- 29.5834	µg/mL	Gravimetric	
			+/- 304.1725	µg/mL	Unstressed	
			+/- 304.8945	µg/mL	Stressed	
5	Pentachloroethane CAS # 76-01-7 (Lot 8866000) Purity 99%	5,035.0 µg/mL	+/- 29.5482	µg/mL	Gravimetric	
			+/- 303.8104	µg/mL	Unstressed	
			+/- 304.5316	µg/mL	Stressed	
6	1,2,3-Trimethylbenzene CAS # 526-73-8 (Lot 8766.05-14) Purity 99%	5,012.0 µg/mL	+/- 29.4132	µg/mL	Gravimetric	
			+/- 302.4226	µg/mL	Unstressed	
			+/- 303.1405	µg/mL	Stressed	
7	1,3-Diethylbenzene CAS # 141-93-5 (Lot BCBT8967) Purity 98%	5,041.1 µg/mL	+/- 29.5841	µg/mL	Gravimetric	
			+/- 304.1797	µg/mL	Unstressed	
			+/- 304.9017	µg/mL	Stressed	

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

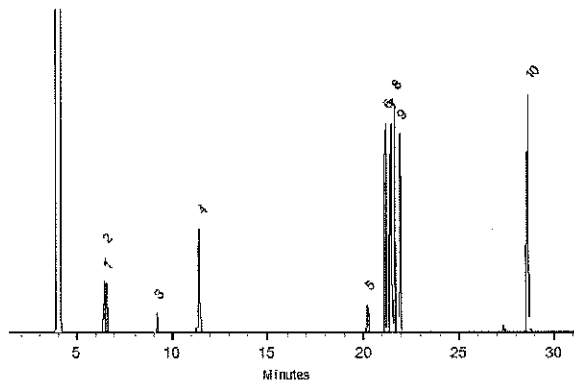
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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


Tom Suckar - 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/ μ ECD, 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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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_00067



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 558268 **Lot No.:** A0169789

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, 2022 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Methyl acetate	5,006.0 µg/mL	+/-	29.3780	µg/mL	Gravimetric
	CAS # 79-20-9 (Lot SHBK5436)		+/-	302.0606	µg/mL	Unstressed
	Purity 99%		+/-	302.7776	µg/mL	Stressed
2	Allyl chloride (3-chloropropene)	5,036.0 µg/mL	+/-	29.5541	µg/mL	Gravimetric
	CAS # 107-05-1 (Lot D0865-0528)		+/-	303.8708	µg/mL	Unstressed
	Purity 99%		+/-	304.5921	µg/mL	Stressed
3	Bromochloromethane	5,018.0 µg/mL	+/-	29.4484	µg/mL	Gravimetric
	CAS # 74-97-5 (Lot 00008541)		+/-	302.7846	µg/mL	Unstressed
	Purity 99%		+/-	303.5034	µg/mL	Stressed
4	Methylcyclohexane	5,022.0 µg/mL	+/-	29.4719	µg/mL	Gravimetric
	CAS # 108-87-2 (Lot SHBL0078)		+/-	303.0260	µg/mL	Unstressed
	Purity 99%		+/-	303.7453	µg/mL	Stressed
5	Pentachloroethane	5,012.0 µg/mL	+/-	29.4132	µg/mL	Gravimetric
	CAS # 76-01-7 (Lot 10518800)		+/-	302.4226	µg/mL	Unstressed
	Purity 99%		+/-	303.1405	µg/mL	Stressed
6	1,2,3-Trimethylbenzene	5,029.4 µg/mL	+/-	29.5151	µg/mL	Gravimetric
	CAS # 526-73-8 (Lot 8776.10-36)		+/-	303.4701	µg/mL	Unstressed
	Purity 98%		+/-	304.1905	µg/mL	Stressed
7	1,3-Diethylbenzene	5,001.9 µg/mL	+/-	29.3541	µg/mL	Gravimetric
	CAS # 141-93-5 (Lot BCBT8967)		+/-	301.8144	µg/mL	Unstressed
	Purity 98%		+/-	302.5308	µg/mL	Stressed

8	1,4-Diethylbenzene CAS # 105-05-5 Purity 98%	(Lot RLHJK)	5,003.9 µg/mL	+/- 29.3656 +/- 301.9326 +/- 302.6494	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	1,2-Diethylbenzene CAS # 135-01-3 Purity 99%	(Lot ECH2970181)	5,010.0 µg/mL	+/- 29.4015 +/- 302.3019 +/- 303.0195	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	2-Methylnaphthalene CAS # 91-57-6 Purity 99%	(Lot STBG8884)	5,042.0 µg/mL	+/- 29.5893 +/- 304.2328 +/- 304.9550	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)

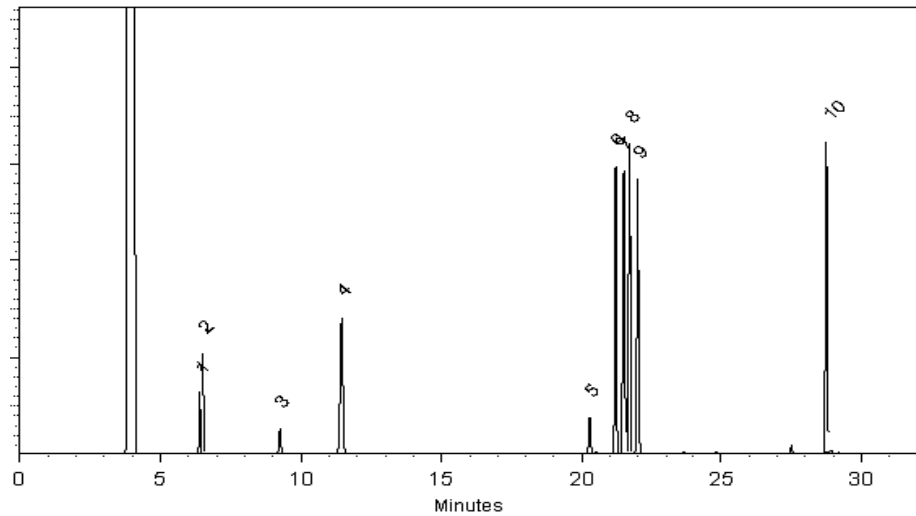
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



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

Sam Moodler
Sam Moodler - Operations Tech I

Date Mixed: 04-Mar-2021 Balance: B251644995

Alexis Shelow
Alexis Shelow - Operations Tech I

Date Passed: 08-Mar-2021

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

MSV_V_Gas_00176



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

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

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

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

CERTIFIED VALUES

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

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

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

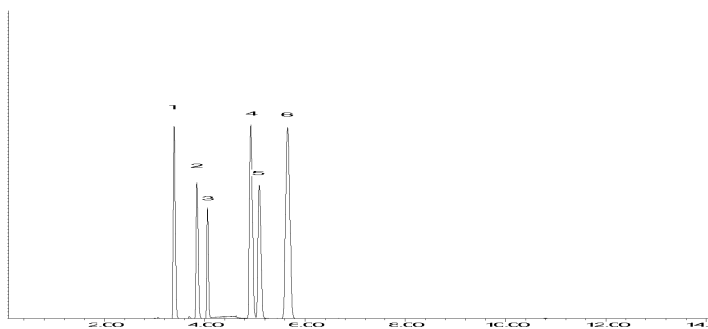
Carrier Gas:
helium-constant flow 2.0 mL/min.

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

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



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

Tom Suckar - Mix Technician

Date Mixed: 10-Apr-2020

Balance: B707717271

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 06-May-2020

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

MSV_V_Gas_00230



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

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

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

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

CERTIFIED VALUES

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

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

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

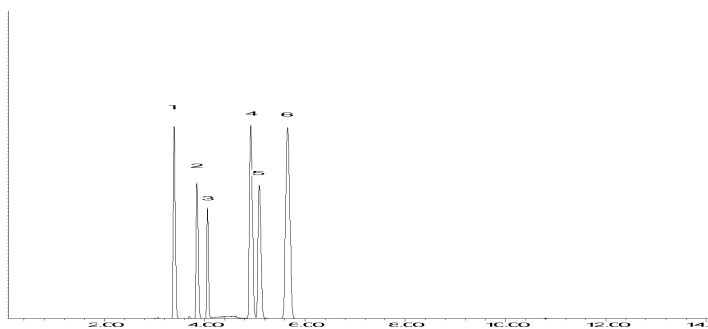
Carrier Gas:
helium-constant flow 2.0 mL/min.

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

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



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

Tom Suckar - Mix Technician

Date Mixed: 10-Apr-2020

Balance: B707717271

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 06-May-2020

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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_00241



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

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

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

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

CERTIFIED VALUES

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

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

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

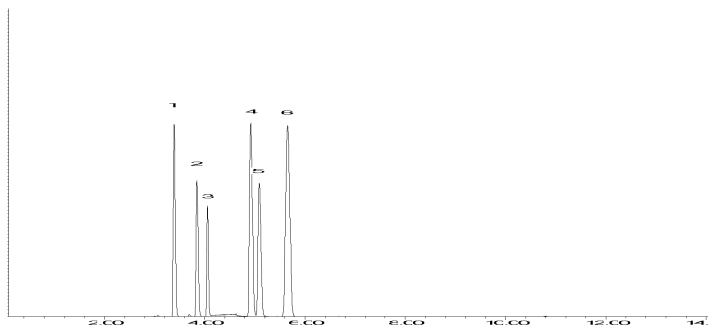
Carrier Gas:
helium-constant flow 2.0 mL/min.

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

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



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

Tom Suckar - Mix Technician

Date Mixed: 10-Apr-2020

Balance: B707717271

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 06-May-2020

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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_00245



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

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

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

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

CERTIFIED VALUES

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

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

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

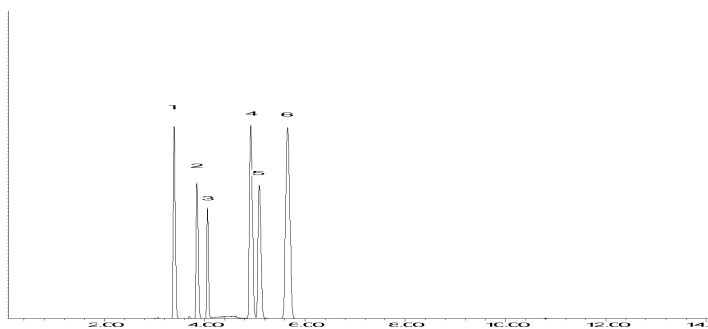
Carrier Gas:
helium-constant flow 2.0 mL/min.

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

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



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

Tom Suckar - Mix Technician

Date Mixed: 10-Apr-2020

Balance: B707717271

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 06-May-2020

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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.

Method 8260D Low Level

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

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-37501-1

SDG No.: _____

Matrix: Water Level: Low

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

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
HD-COD-SW-6-0/1-0	410-37501-1	99	102	100	93
HD-COD-SW-7-0/1-0	410-37501-2	99	101	101	93
HD-COD-SW-8-0/1-0	410-37501-3	98	102	101	93
HD-COD-SW-9-0/1-0	410-37501-4	99	104	100	94
HD-COD-SW-13-0/1-0	410-37501-5	98	104	101	94
HD-COD-SW-15-0/1-0	410-37501-6	99	104	100	94
HD-COD-SW-16-0/1-0	410-37501-7	103	99	93	89
HD-COD-SW-17-0/1-0	410-37501-8	103	96	93	88
HD-COD-SW-26-0/1-0	410-37501-9	103	96	92	88
HD-COD-SW-27-0/1-0	410-37501-10	103	98	93	89
HD-COD-SW-28-0/1-0	410-37501-11	103	99	93	89
HD-COD-SW-29-0/1-0	410-37501-12	103	97	93	89
HD-QC1-0/1-1	410-37501-13	102	97	93	89
HD-QC1-0/1-2	410-37501-14	103	97	92	88
	MB 410-120935/10	100	105	99	93
	MB 410-120958/7	102	100	93	89
	LCS 410-120935/4	98	104	100	96
	LCS 410-120958/4	101	97	93	90
	LCSD 410-120935/5	98	104	100	96
	LCSD 410-120958/5	100	97	93	90
HD-COD-SW-15-0/1-0 MS MS	410-37501-6 MS	98	102	100	97
HD-COD-SW-15-0/1-0 MSD MSD	410-37501-6 MSD	98	101	100	95

	<u>QC LIMITS</u>
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 III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-37501-1

SDG No.: _____

Matrix: Water Level: Low Lab File ID: IA30X03.D

Lab ID: LCS 410-120935/4 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	5.00	4.47	89	71-134	
1,1,1-Trichloroethane	5.00	4.55	91	78-126	
1,1,2,2-Tetrachloroethane	5.00	5.39	108	75-123	
1,1,2-Trichloroethane	5.00	5.11	102	80-120	
1,1-Dichloroethane	5.00	4.66	93	74-120	
1,1-Dichloroethene	5.00	4.69	94	80-131	
1,2-Dibromoethane (EDB)	5.00	5.07	101	80-120	
1,2-Dichloroethane	5.00	5.15	103	69-122	
1,2-Dichloropropane	5.00	4.89	98	80-120	
2-Butanone (MEK)	37.5	35.4	94	59-141	
2-Hexanone	25.0	23.1	92	52-140	
4-Methyl-2-pentanone (MIBK)	25.0	22.1	88	55-140	
Acetone	37.5	30.9	82	60-146	
Benzene	5.00	4.72	94	80-120	
Bromochloromethane	5.00	4.51	90	80-120	
Bromodichloromethane	5.00	4.74	95	73-124	
Bromoform	5.00	3.91	78	49-144	
Bromomethane	5.00	4.34	87	60-136	
Carbon disulfide	5.00	4.36	87	67-130	
Carbon tetrachloride	5.00	4.49	90	64-141	
Chlorobenzene	5.00	4.82	96	80-120	
Chloroethane	5.00	4.33	87	63-120	
Chloroform	5.00	4.80	96	80-120	
Chloromethane	5.00	4.67	93	56-124	
cis-1,2-Dichloroethene	5.00	4.64	93	80-122	
cis-1,3-Dichloropropene	5.00	4.55	91	67-121	
Dibromochloromethane	5.00	4.57	91	64-138	
Ethylbenzene	5.00	4.67	93	80-120	
Methyl tert-butyl ether	5.00	4.27	85	69-120	
Methylene Chloride	5.00	4.68	94	80-120	
Styrene	5.00	4.61	92	80-120	
Tetrachloroethene	5.00	4.66	93	80-120	
Toluene	5.00	4.65	93	80-120	
trans-1,2-Dichloroethene	5.00	4.50	90	80-122	
trans-1,3-Dichloropropene	5.00	4.86	97	61-129	
Trichloroethene	5.00	4.78	96	80-120	
Vinyl chloride	5.00	4.69	94	60-125	
Xylenes, Total	15.0	13.7	91	80-120	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-37501-1

SDG No.: _____

Matrix: Water Level: Low Lab File ID: GA30L01.D

Lab ID: LCS 410-120958/4 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	5.00	4.79	96	71-134	
1,1,1-Trichloroethane	5.00	4.59	92	78-126	
1,1,2,2-Tetrachloroethane	5.00	4.42	88	75-123	
1,1,2-Trichloroethane	5.00	4.82	96	80-120	
1,1-Dichloroethane	5.00	4.22	84	74-120	
1,1-Dichloroethene	5.00	4.74	95	80-131	
1,2-Dibromoethane (EDB)	5.00	4.60	92	80-120	
1,2-Dichloroethane	5.00	4.28	86	69-122	
1,2-Dichloropropane	5.00	4.37	87	80-120	
2-Butanone (MEK)	37.5	38.4	102	59-141	
2-Hexanone	25.0	25.6	102	52-140	
4-Methyl-2-pentanone (MIBK)	25.0	24.9	100	55-140	
Acetone	37.5	36.8	98	60-146	
Benzene	5.00	4.46	89	80-120	
Bromochloromethane	5.00	4.83	97	80-120	
Bromodichloromethane	5.00	4.54	91	73-124	
Bromoform	5.00	4.69	94	49-144	
Bromomethane	5.00	4.81	96	60-136	
Carbon disulfide	5.00	4.33	87	67-130	
Carbon tetrachloride	5.00	4.67	93	64-141	
Chlorobenzene	5.00	4.75	95	80-120	
Chloroethane	5.00	4.38	88	63-120	
Chloroform	5.00	4.60	92	80-120	
Chloromethane	5.00	4.28	86	56-124	
cis-1,2-Dichloroethene	5.00	4.71	94	80-122	
cis-1,3-Dichloropropene	5.00	4.04	81	67-121	
Dibromochloromethane	5.00	4.60	92	64-138	
Ethylbenzene	5.00	4.47	89	80-120	
Methyl tert-butyl ether	5.00	4.32	86	69-120	
Methylene Chloride	5.00	4.69	94	80-120	
Styrene	5.00	4.56	91	80-120	
Tetrachloroethene	5.00	4.91	98	80-120	
Toluene	5.00	4.44	89	80-120	
trans-1,2-Dichloroethene	5.00	4.62	92	80-122	
trans-1,3-Dichloropropene	5.00	4.03	81	61-129	
Trichloroethene	5.00	4.71	94	80-120	
Vinyl chloride	5.00	4.53	91	60-125	
Xylenes, Total	15.0	13.7	91	80-120	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-37501-1

SDG No.: _____

Matrix: Water Level: Low Lab File ID: IA30X04.D

Lab ID: LCSD 410-120935/5 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
1,1,1,2-Tetrachloroethane	5.00	4.50	90	1	30	71-134	
1,1,1-Trichloroethane	5.00	4.55	91	0	30	78-126	
1,1,2,2-Tetrachloroethane	5.00	5.35	107	1	30	75-123	
1,1,2-Trichloroethane	5.00	5.02	100	2	30	80-120	
1,1-Dichloroethane	5.00	4.75	95	2	30	74-120	
1,1-Dichloroethene	5.00	4.67	93	1	30	80-131	
1,2-Dibromoethane (EDB)	5.00	4.86	97	4	30	80-120	
1,2-Dichloroethane	5.00	5.05	101	2	30	69-122	
1,2-Dichloropropane	5.00	4.98	100	2	30	80-120	
2-Butanone (MEK)	37.5	34.7	92	2	30	59-141	
2-Hexanone	25.0	23.2	93	0	30	52-140	
4-Methyl-2-pentanone (MIBK)	25.0	22.0	88	1	30	55-140	
Acetone	37.5	31.8	85	3	30	60-146	
Benzene	5.00	4.75	95	1	30	80-120	
Bromochloromethane	5.00	4.54	91	1	30	80-120	
Bromodichloromethane	5.00	4.73	95	0	30	73-124	
Bromoform	5.00	3.91	78	0	30	49-144	
Bromomethane	5.00	4.20	84	3	30	60-136	
Carbon disulfide	5.00	4.39	88	1	30	67-130	
Carbon tetrachloride	5.00	4.50	90	0	30	64-141	
Chlorobenzene	5.00	4.81	96	0	30	80-120	
Chloroethane	5.00	4.40	88	2	30	63-120	
Chloroform	5.00	4.87	97	2	30	80-120	
Chloromethane	5.00	4.62	92	1	30	56-124	
cis-1,2-Dichloroethene	5.00	4.66	93	0	30	80-122	
cis-1,3-Dichloropropene	5.00	4.54	91	0	30	67-121	
Dibromochloromethane	5.00	4.52	90	1	30	64-138	
Ethylbenzene	5.00	4.70	94	1	30	80-120	
Methyl tert-butyl ether	5.00	4.45	89	4	30	69-120	
Methylene Chloride	5.00	4.73	95	1	30	80-120	
Styrene	5.00	4.62	92	0	30	80-120	
Tetrachloroethene	5.00	4.55	91	2	30	80-120	
Toluene	5.00	4.66	93	0	30	80-120	
trans-1,2-Dichloroethene	5.00	4.57	91	2	30	80-122	
trans-1,3-Dichloropropene	5.00	4.83	97	1	30	61-129	
Trichloroethene	5.00	4.74	95	1	30	80-120	
Vinyl chloride	5.00	4.77	95	2	30	60-125	
Xylenes, Total	15.0	13.8	92	1	30	80-120	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-37501-1

SDG No.: _____

Matrix: Water Level: Low Lab File ID: GA30L02.D

Lab ID: LCSD 410-120958/5 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
1,1,1,2-Tetrachloroethane	5.00	4.89	98	2	30	71-134	
1,1,1-Trichloroethane	5.00	4.64	93	1	30	78-126	
1,1,2,2-Tetrachloroethane	5.00	4.42	88	0	30	75-123	
1,1,2-Trichloroethane	5.00	4.81	96	0	30	80-120	
1,1-Dichloroethane	5.00	4.25	85	1	30	74-120	
1,1-Dichloroethene	5.00	4.81	96	1	30	80-131	
1,2-Dibromoethane (EDB)	5.00	4.67	93	1	30	80-120	
1,2-Dichloroethane	5.00	4.28	86	0	30	69-122	
1,2-Dichloropropane	5.00	4.34	87	1	30	80-120	
2-Butanone (MEK)	37.5	39.4	105	3	30	59-141	
2-Hexanone	25.0	26.5	106	3	30	52-140	
4-Methyl-2-pentanone (MIBK)	25.0	26.0	104	4	30	55-140	
Acetone	37.5	37.1	99	1	30	60-146	
Benzene	5.00	4.51	90	1	30	80-120	
Bromochloromethane	5.00	4.87	97	1	30	80-120	
Bromodichloromethane	5.00	4.59	92	1	30	73-124	
Bromoform	5.00	4.72	94	1	30	49-144	
Bromomethane	5.00	4.86	97	1	30	60-136	
Carbon disulfide	5.00	4.39	88	1	30	67-130	
Carbon tetrachloride	5.00	4.75	95	2	30	64-141	
Chlorobenzene	5.00	4.77	95	0	30	80-120	
Chloroethane	5.00	4.35	87	1	30	63-120	
Chloroform	5.00	4.68	94	2	30	80-120	
Chloromethane	5.00	4.33	87	1	30	56-124	
cis-1,2-Dichloroethene	5.00	4.77	95	1	30	80-122	
cis-1,3-Dichloropropene	5.00	4.06	81	0	30	67-121	
Dibromochloromethane	5.00	4.62	92	0	30	64-138	
Ethylbenzene	5.00	4.50	90	1	30	80-120	
Methyl tert-butyl ether	5.00	4.32	86	0	30	69-120	
Methylene Chloride	5.00	4.73	95	1	30	80-120	
Styrene	5.00	4.66	93	2	30	80-120	
Tetrachloroethene	5.00	5.02	100	2	30	80-120	
Toluene	5.00	4.52	90	2	30	80-120	
trans-1,2-Dichloroethene	5.00	4.66	93	1	30	80-122	
trans-1,3-Dichloropropene	5.00	4.07	81	1	30	61-129	
Trichloroethene	5.00	4.74	95	1	30	80-120	
Vinyl chloride	5.00	4.62	92	2	30	60-125	
Xylenes, Total	15.0	14.0	93	2	30	80-120	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins Lancaster Laboratories

Job No.: 410-37501-1

SDG No.: _____

Matrix: Water

Level: Low

Lab File ID: IA30X14.D

Lab ID: 410-37501-6 MS

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

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	5.00	ND	4.75	95	71-134	
1,1,1-Trichloroethane	5.00	0.12 J	5.21	102	78-126	
1,1,2,2-Tetrachloroethane	5.00	ND	5.50	110	75-123	
1,1,2-Trichloroethane	5.00	ND	5.38	108	80-120	
1,1-Dichloroethane	5.00	ND	5.15	103	74-120	
1,1-Dichloroethene	5.00	0.087 J	5.38	106	80-131	
1,2-Dibromoethane (EDB)	5.00	ND	5.10	102	80-120	
1,2-Dichloroethane	5.00	ND	5.31	106	69-122	
1,2-Dichloropropane	5.00	ND	5.33	106	80-120	
2-Butanone (MEK)	37.5	ND	36.2	96	59-141	
2-Hexanone	25.0	ND	23.9	95	52-140	
4-Methyl-2-pentanone (MIBK)	25.0	ND	22.8	91	55-140	
Acetone	37.5	ND	28.6	76	60-146	
Benzene	5.00	ND	5.11	102	80-120	
Bromochloromethane	5.00	ND	4.79	96	80-120	
Bromodichloromethane	5.00	ND	5.04	101	73-124	
Bromoform	5.00	ND	3.95	79	49-144	
Bromomethane	5.00	ND	4.68	93	60-136	
Carbon disulfide	5.00	ND	4.85	97	67-130	
Carbon tetrachloride	5.00	ND	5.20	104	64-141	
Chlorobenzene	5.00	ND	5.15	103	80-120	
Chloroethane	5.00	ND	4.90	98	63-120	
Chloroform	5.00	0.27 J	5.41	103	80-120	
Chloromethane	5.00	ND	5.15	103	80-120	
cis-1,2-Dichloroethene	5.00	0.69	5.62	99	80-122	
cis-1,3-Dichloropropene	5.00	ND	4.75	95	67-121	
Dibromochloromethane	5.00	ND	4.66	93	64-138	
Ethylbenzene	5.00	ND	5.11	102	80-120	
Methyl tert-butyl ether	5.00	ND	4.61	92	69-120	
Methylene Chloride	5.00	ND	4.97	99	80-120	
Styrene	5.00	ND	4.89	98	80-120	
Tetrachloroethene	5.00	2.4	7.48	101	80-120	
Toluene	5.00	ND	5.13	102	80-120	
trans-1,2-Dichloroethene	5.00	ND	5.03	100	80-122	
trans-1,3-Dichloropropene	5.00	ND	4.98	99	61-129	
Trichloroethene	5.00	0.86	6.07	104	80-120	
Vinyl chloride	5.00	ND	5.30	106	60-125	
Xylenes, Total	15.0	ND	14.9	99	80-120	

Column to be used to flag recovery and RPD values

FORM III 8260D

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins Lancaster Laboratories

Job No.: 410-37501-1

SDG No.: _____

Matrix: Water

Level: Low

Lab File ID: IA30X15.D

Lab ID: 410-37501-6 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	REC	
1,1,1,2-Tetrachloroethane	5.00	4.70	94	1	30	71-134	
1,1,1-Trichloroethane	5.00	5.20	101	0	30	78-126	
1,1,2,2-Tetrachloroethane	5.00	5.41	108	1	30	75-123	
1,1,2-Trichloroethane	5.00	5.18	103	4	30	80-120	
1,1-Dichloroethane	5.00	5.15	103	0	30	74-120	
1,1-Dichloroethene	5.00	5.37	106	0	30	80-131	
1,2-Dibromoethane (EDB)	5.00	5.09	102	0	30	80-120	
1,2-Dichloroethane	5.00	5.15	103	3	30	69-122	
1,2-Dichloropropane	5.00	5.23	105	2	30	80-120	
2-Butanone (MEK)	37.5	34.9	93	4	30	59-141	
2-Hexanone	25.0	23.3	93	2	30	52-140	
4-Methyl-2-pentanone (MIBK)	25.0	22.1	88	3	30	55-140	
Acetone	37.5	27.9	74	3	30	60-146	
Benzene	5.00	5.06	101	1	30	80-120	
Bromochloromethane	5.00	4.64	93	3	30	80-120	
Bromodichloromethane	5.00	5.01	100	0	30	73-124	
Bromoform	5.00	3.92	78	1	30	49-144	
Bromomethane	5.00	4.50	90	4	30	60-136	
Carbon disulfide	5.00	4.82	96	1	30	67-130	
Carbon tetrachloride	5.00	5.17	103	1	30	64-141	
Chlorobenzene	5.00	5.03	101	2	30	80-120	
Chloroethane	5.00	4.67	93	5	30	63-120	
Chloroform	5.00	5.44	103	1	30	80-120	
Chloromethane	5.00	4.82	96	7	30	80-120	
cis-1,2-Dichloroethene	5.00	5.68	100	1	30	80-122	
cis-1,3-Dichloropropene	5.00	4.79	96	1	30	67-121	
Dibromochloromethane	5.00	4.63	93	1	30	64-138	
Ethylbenzene	5.00	5.01	100	2	30	80-120	
Methyl tert-butyl ether	5.00	4.52	90	2	30	69-120	
Methylene Chloride	5.00	4.89	98	2	30	80-120	
Styrene	5.00	4.79	96	2	30	80-120	
Tetrachloroethene	5.00	7.44	100	1	30	80-120	
Toluene	5.00	5.01	100	2	30	80-120	
trans-1,2-Dichloroethene	5.00	5.07	101	1	30	80-122	
trans-1,3-Dichloropropene	5.00	5.04	101	1	30	61-129	
Trichloroethene	5.00	6.04	103	1	30	80-120	
Vinyl chloride	5.00	5.20	104	2	30	60-125	
Xylenes, Total	15.0	14.6	97	2	30	80-120	

Column to be used to flag recovery and RPD values

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-37501-1
 SDG No.: _____
 Lab File ID: GA30B01.D Lab Sample ID: MB 410-120958/7
 Matrix: Water Heated Purge: (Y/N) N
 Instrument ID: 16334 Date Analyzed: 04/30/2021 10:37
 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 410-120958/4	GA30L01.D	04/30/2021 09:29
	LCSD 410-120958/5	GA30L02.D	04/30/2021 09:51
HD-QC1-0/1-1	410-37501-13	GA30S05.D	04/30/2021 12:28
HD-QC1-0/1-2	410-37501-14	GA30S06.D	04/30/2021 12:50
HD-COD-SW-16-0/1-0	410-37501-7	GA30S07.D	04/30/2021 13:12
HD-COD-SW-17-0/1-0	410-37501-8	GA30S08.D	04/30/2021 13:34
HD-COD-SW-26-0/1-0	410-37501-9	GA30S09.D	04/30/2021 13:56
HD-COD-SW-27-0/1-0	410-37501-10	GA30S10.D	04/30/2021 14:18
HD-COD-SW-28-0/1-0	410-37501-11	GA30S11.D	04/30/2021 14:40
HD-COD-SW-29-0/1-0	410-37501-12	GA30S12.D	04/30/2021 15:02

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-37501-1
 SDG No.: _____
 Lab File ID: IA30X09.D Lab Sample ID: MB 410-120935/10
 Matrix: Water Heated Purge: (Y/N) N
 Instrument ID: 19930 Date Analyzed: 04/30/2021 12:43
 GC Column: R-624SilMS 30m ID: 0.25 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 410-120935/4	IA30X03.D	04/30/2021 10:36
	LCSD 410-120935/5	IA30X04.D	04/30/2021 10:57
HD-COD-SW-15-0/1-0	410-37501-6	IA30X13.D	04/30/2021 14:08
HD-COD-SW-15-0/1-0 MS MS	410-37501-6 MS	IA30X14.D	04/30/2021 14:29
HD-COD-SW-15-0/1-0 MSD MSD	410-37501-6 MSD	IA30X15.D	04/30/2021 14:51
HD-COD-SW-6-0/1-0	410-37501-1	IA30X20.D	04/30/2021 16:37
HD-COD-SW-7-0/1-0	410-37501-2	IA30X21.D	04/30/2021 16:59
HD-COD-SW-8-0/1-0	410-37501-3	IA30X22.D	04/30/2021 17:20
HD-COD-SW-9-0/1-0	410-37501-4	IA30X23.D	04/30/2021 17:41
HD-COD-SW-13-0/1-0	410-37501-5	IA30X24.D	04/30/2021 18:02

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

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-37501-1

SDG No.: _____

Lab File ID: GN30T01.D BFB Injection Date: 11/30/2020

Instrument ID: 16334 BFB Injection Time: 11:46

Analysis Batch No.: 70996

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	17.6
75	30.0 - 60.0 % of mass 95	46.9
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	0.2 (0.3) 1
174	Greater than 50% of mass 95	79.8
175	5.0 - 9.0 % of mass 174	6.0 (7.5) 1
176	95.0 - 101.0 % of mass 174	76.1 (95.4) 1
177	5.0 - 9.0 % of mass 176	5.2 (6.8) 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 410-70996/3	GN30I01.D	11/30/2020	12:50
	ICIS 410-70996/4	GN30I02.D	11/30/2020	13:12
	IC 410-70996/5	GN30I03.D	11/30/2020	13:34
	IC 410-70996/6	GN30I04.D	11/30/2020	13:56
	IC 410-70996/7	GN30I05.D	11/30/2020	14:19
	IC 410-70996/8	GN30I06.D	11/30/2020	14:41
	IC 410-70996/9	GN30I07.D	11/30/2020	15:03
	ICV 410-70996/10	GN30V01.D	11/30/2020	15:26

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

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-37501-1

SDG No.: _____

Lab File ID: GA30T01.D BFB Injection Date: 04/30/2021

Instrument ID: 16334 BFB Injection Time: 08:29

Analysis Batch No.: 120958

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	16.1
75	30.0 - 60.0 % of mass 95	46.1
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	6.5
173	Less than 2.0 % of mass 174	0.4 (0.5) 1
174	Greater than 50% of mass 95	95.3
175	5.0 - 9.0 % of mass 174	7.0 (7.4) 1
176	95.0 - 101.0 % of mass 174	93.5 (98.2) 1
177	5.0 - 9.0 % of mass 176	6.5 (6.9) 2

1-Value is % mass 174

2-Value is % mass 176

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 410-120958/3	GA30C01.D	04/30/2021	9:07
	LCS 410-120958/4	GA30L01.D	04/30/2021	9:29
	LCSD 410-120958/5	GA30L02.D	04/30/2021	9:51
	MB 410-120958/7	GA30B01.D	04/30/2021	10:37
HD-QC1-0/1-1	410-37501-13	GA30S05.D	04/30/2021	12:28
HD-QC1-0/1-2	410-37501-14	GA30S06.D	04/30/2021	12:50
HD-COD-SW-16-0/1-0	410-37501-7	GA30S07.D	04/30/2021	13:12
HD-COD-SW-17-0/1-0	410-37501-8	GA30S08.D	04/30/2021	13:34
HD-COD-SW-26-0/1-0	410-37501-9	GA30S09.D	04/30/2021	13:56
HD-COD-SW-27-0/1-0	410-37501-10	GA30S10.D	04/30/2021	14:18
HD-COD-SW-28-0/1-0	410-37501-11	GA30S11.D	04/30/2021	14:40
HD-COD-SW-29-0/1-0	410-37501-12	GA30S12.D	04/30/2021	15:02

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

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-37501-1

SDG No.: _____

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

Instrument ID: 19930 BFB Injection Time: 19:32

Analysis Batch No.: 107390

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	16.9
75	30.0 - 60.0 % of mass 95	45.9
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	6.6
173	Less than 2.0 % of mass 174	1.0 (1.2) 1
174	Greater than 50% of mass 95	84.4
175	5.0 - 9.0 % of mass 174	6.6 (7.8) 1
176	95.0 - 101.0 % of mass 174	80.7 (95.7) 1
177	5.0 - 9.0 % of mass 176	5.2 (6.5) 2

1-Value is % mass 174

2-Value is % mass 176

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

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

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

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-37501-1

SDG No.: _____

Lab File ID: IA30T02.D BFB Injection Date: 04/30/2021

Instrument ID: 19930 BFB Injection Time: 09:29

Analysis Batch No.: 120935

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	19.0
75	30.0 - 60.0 % of mass 95	48.5
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	6.4
173	Less than 2.0 % of mass 174	1.2 (1.4) 1
174	Greater than 50% of mass 95	82.5
175	5.0 - 9.0 % of mass 174	6.8 (8.2) 1
176	95.0 - 101.0 % of mass 174	78.5 (95.2) 1
177	5.0 - 9.0 % of mass 176	5.4 (6.9) 2

1-Value is % mass 174

2-Value is % mass 176

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 410-120935/3	IA30X02.D	04/30/2021	10:15
	LCS 410-120935/4	IA30X03.D	04/30/2021	10:36
	LCSD 410-120935/5	IA30X04.D	04/30/2021	10:57
	MB 410-120935/10	IA30X09.D	04/30/2021	12:43
HD-COD-SW-15-0/1-0	410-37501-6	IA30X13.D	04/30/2021	14:08
HD-COD-SW-15-0/1-0 MS MS	410-37501-6 MS	IA30X14.D	04/30/2021	14:29
HD-COD-SW-15-0/1-0 MSD MSD	410-37501-6 MSD	IA30X15.D	04/30/2021	14:51
HD-COD-SW-6-0/1-0	410-37501-1	IA30X20.D	04/30/2021	16:37
HD-COD-SW-7-0/1-0	410-37501-2	IA30X21.D	04/30/2021	16:59
HD-COD-SW-8-0/1-0	410-37501-3	IA30X22.D	04/30/2021	17:20
HD-COD-SW-9-0/1-0	410-37501-4	IA30X23.D	04/30/2021	17:41
HD-COD-SW-13-0/1-0	410-37501-5	IA30X24.D	04/30/2021	18:02

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

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-37501-1
 SDG No.: _____
 Sample No.: ICIS 410-70996/4 Date Analyzed: 11/30/2020 13:12
 Instrument ID: 16334 GC Column: R-624SilMS 30m ID: 0.25 (mm)
 Lab File ID (Standard): GN30I02.D Heated Purge: (Y/N) N
 Calibration ID: 16331

	TBAd10		FB		CBZd5		
	AREA #	RT #	AREA #	RT #	AREA #	RT #	
INITIAL CALIBRATION MID-POINT	186094	4.21	2246480	7.67	1636269	11.15	
UPPER LIMIT	372188	4.71	4492960	8.17	3272538	11.65	
LOWER LIMIT	93047	3.71	1123240	7.17	818135	10.65	
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 410-70996/10		179392	4.21	2211317	7.67	1601223	11.15
CCVIS 410-120958/3		164960	4.18	2485919	7.67	1877362	11.14

TBAd10 = t-Butyl alcohol-d10 (IS)

FB = Fluorobenzene (IS)

CBZd5 = Chlorobenzene-d5 (IS)

Area Limit = 50%-200% of internal standard area

RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

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

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-37501-1
 SDG No.: _____
 Sample No.: ICIS 410-70996/4 Date Analyzed: 11/30/2020 13:12
 Instrument ID: 16334 GC Column: R-624SilMS 30m ID: 0.25 (mm)
 Lab File ID (Standard): GN30I02.D Heated Purge: (Y/N) N
 Calibration ID: 16331

	DCBd4		#	RT #	#	RT #
	AREA #	RT #				
INITIAL CALIBRATION MID-POINT	888382	13.03				
UPPER LIMIT	1776764	13.53				
LOWER LIMIT	444191	12.53				
LAB SAMPLE ID	CLIENT SAMPLE ID					
ICV 410-70996/10		862512	13.03			
CCVIS 410-120958/3		1060100	13.02			

DCBd4 = 1,4-Dichlorobenzene-d4

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

Column used to flag values outside QC limits

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

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-37501-1
 SDG No.: _____
 Sample No.: CCVIS 410-120958/3 Date Analyzed: 04/30/2021 09:07
 Instrument ID: 16334 GC Column: R-624SilMS 30m ID: 0.25 (mm)
 Lab File ID (Standard): GA30C01.D Heated Purge: (Y/N) N
 Calibration ID: 16334

	TBAd10		FB		CBZd5		
	AREA #	RT #	AREA #	RT #	AREA #	RT #	
12/24 HOUR STD	164960	4.18	2485919	7.67	1877362	11.14	
UPPER LIMIT	329920	4.68	4971838	8.17	3754724	11.64	
LOWER LIMIT	82480	3.68	1242960	7.17	938681	10.64	
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 410-120958/4		177425	4.17	2513947	7.67	1900492	11.15
LCSD 410-120958/5		169201	4.18	2523268	7.67	1897759	11.14
MB 410-120958/7		188045	4.17	2461333	7.67	1844212	11.14
410-37501-13	HD-QC1-0/1-1	176022	4.17	2461087	7.67	1839914	11.14
410-37501-14	HD-QC1-0/1-2	174548	4.19	2424785	7.67	1846562	11.14
410-37501-7	HD-COD-SW-16-0/1-0	172406	4.17	2421138	7.67	1836860	11.14
410-37501-8	HD-COD-SW-17-0/1-0	168833	4.18	2423957	7.67	1819633	11.14
410-37501-9	HD-COD-SW-26-0/1-0	163268	4.18	2422752	7.67	1811721	11.15
410-37501-10	HD-COD-SW-27-0/1-0	149286	4.19	2406143	7.67	1806984	11.14
410-37501-11	HD-COD-SW-28-0/1-0	163949	4.18	2374667	7.67	1781676	11.14
410-37501-12	HD-COD-SW-29-0/1-0	148585	4.17	2392580	7.67	1796613	11.14

TBAd10 = t-Butyl alcohol-d10 (IS)
 FB = Fluorobenzene (IS)
 CBZd5 = Chlorobenzene-d5 (IS)

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

Column used to flag values outside QC limits

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

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-37501-1
 SDG No.: _____
 Sample No.: CCVIS 410-120958/3 Date Analyzed: 04/30/2021 09:07
 Instrument ID: 16334 GC Column: R-624SilMS 30m ID: 0.25 (mm)
 Lab File ID (Standard): GA30C01.D Heated Purge: (Y/N) N
 Calibration ID: 16334

		DCBd4					
		AREA #	RT #	#	RT #	#	RT #
12/24 HOUR STD		1060100	13.02				
UPPER LIMIT		2120200	13.52				
LOWER LIMIT		530050	12.52				
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 410-120958/4		1068976	13.02				
LCSD 410-120958/5		1069064	13.02				
MB 410-120958/7		1028422	13.02				
410-37501-13	HD-QC1-0/1-1	1032687	13.02				
410-37501-14	HD-QC1-0/1-2	1016080	13.02				
410-37501-7	HD-COD-SW-16-0/1-0	1013895	13.02				
410-37501-8	HD-COD-SW-17-0/1-0	1007473	13.02				
410-37501-9	HD-COD-SW-26-0/1-0	1008248	13.02				
410-37501-10	HD-COD-SW-27-0/1-0	998916	13.02				
410-37501-11	HD-COD-SW-28-0/1-0	990344	13.02				
410-37501-12	HD-COD-SW-29-0/1-0	999938	13.02				

DCBd4 = 1,4-Dichlorobenzene-d4

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

Column used to flag values outside QC limits

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

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-37501-1
 SDG No.: _____
 Sample No.: ICIS 410-107390/13 Date Analyzed: 03/25/2021 23:41
 Instrument ID: 19930 GC Column: R-624SilMS 30m ID: 0.25 (mm)
 Lab File ID (Standard): IM25I02.D Heated Purge: (Y/N) N
 Calibration ID: 22087

	TBAd10		FB		CBZd5		
	AREA #	RT #	AREA #	RT #	AREA #	RT #	
INITIAL CALIBRATION MID-POINT	155217	4.27	2148304	7.74	1638803	11.19	
UPPER LIMIT	310434	4.77	4296608	8.24	3277606	11.69	
LOWER LIMIT	77609	3.77	1074152	7.24	819402	10.69	
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 410-107390/19		167068	4.27	2148117	7.74	1633240	11.19
CCVIS 410-120935/3		147542	4.28	1752136	7.74	1347885	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
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-37501-1
 SDG No.: _____
 Sample No.: ICIS 410-107390/13 Date Analyzed: 03/25/2021 23:41
 Instrument ID: 19930 GC Column: R-624SilMS 30m ID: 0.25 (mm)
 Lab File ID (Standard): IM25I02.D Heated Purge: (Y/N) N
 Calibration ID: 22087

	DCBd4		#	RT #	#	RT #
	AREA #	RT #				
INITIAL CALIBRATION MID-POINT	899738	13.07				
UPPER LIMIT	1799476	13.57				
LOWER LIMIT	449869	12.57				
LAB SAMPLE ID	CLIENT SAMPLE ID					
ICV 410-107390/19		915488	13.07			
CCVIS 410-120935/3		702038	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
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-37501-1
 SDG No.: _____
 Sample No.: CCVIS 410-120935/3 Date Analyzed: 04/30/2021 10:15
 Instrument ID: 19930 GC Column: R-624SilMS 30m ID: 0.25 (mm)
 Lab File ID (Standard): IA30X02.D Heated Purge: (Y/N) N
 Calibration ID: 22087

	TBAd10		FB		CBZd5		
	AREA #	RT #	AREA #	RT #	AREA #	RT #	
12/24 HOUR STD	147542	4.28	1752136	7.74	1347885	11.19	
UPPER LIMIT	295084	4.78	3504272	8.24	2695770	11.69	
LOWER LIMIT	73771	3.78	876068	7.24	673943	10.69	
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 410-120935/4		173466	4.29	1851623	7.74	1411051	11.19
LCSD 410-120935/5		166494	4.27	1792887	7.74	1370503	11.19
MB 410-120935/10		165067	4.28	1740077	7.74	1335410	11.19
410-37501-6	HD-COD-SW-15-0/1-0	148013	4.26	1664511	7.74	1266656	11.19
410-37501-6 MS	HD-COD-SW-15-0/1-0 MS MS	155928	4.27	1702380	7.74	1291847	11.19
410-37501-6 MSD	HD-COD-SW-15-0/1-0 MSD MSD	161906	4.26	1738735	7.74	1340211	11.19
410-37501-1	HD-COD-SW-6-0/1-0	162766	4.27	1707174	7.74	1303365	11.19
410-37501-2	HD-COD-SW-7-0/1-0	153825	4.29	1662630	7.74	1273428	11.19
410-37501-3	HD-COD-SW-8-0/1-0	144685	4.28	1658037	7.74	1253956	11.19
410-37501-4	HD-COD-SW-9-0/1-0	150352	4.27	1652350	7.74	1264627	11.19
410-37501-5	HD-COD-SW-13-0/1-0	150312	4.28	1652701	7.74	1247453	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
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-37501-1
 SDG No.: _____
 Sample No.: CCVIS 410-120935/3 Date Analyzed: 04/30/2021 10:15
 Instrument ID: 19930 GC Column: R-624SilMS 30m ID: 0.25 (mm)
 Lab File ID (Standard): IA30X02.D Heated Purge: (Y/N) N
 Calibration ID: 22087

		DCBd4					
		AREA #	RT #	#	RT #	#	RT #
12/24 HOUR STD		702038	13.07				
UPPER LIMIT		1404076	13.57				
LOWER LIMIT		351019	12.57				
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 410-120935/4		719110	13.07				
LCSD 410-120935/5		704656	13.07				
MB 410-120935/10		675098	13.07				
410-37501-6	HD-COD-SW-15-0/1-0	627127	13.07				
410-37501-6 MS	HD-COD-SW-15-0/1-0 MS	676680	13.07				
410-37501-6 MSD	HD-COD-SW-15-0/1-0 MSD MSD	684398	13.07				
410-37501-1	HD-COD-SW-6-0/1-0	647992	13.07				
410-37501-2	HD-COD-SW-7-0/1-0	635610	13.07				
410-37501-3	HD-COD-SW-8-0/1-0	624305	13.07				
410-37501-4	HD-COD-SW-9-0/1-0	628930	13.07				
410-37501-5	HD-COD-SW-13-0/1-0	627710	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 I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-37501-1
 SDG No.: _____
 Client Sample ID: HD-COD-SW-6-0/1-0 Lab Sample ID: 410-37501-1
 Matrix: Water Lab File ID: IA30X20.D
 Analysis Method: 8260D Date Collected: 04/26/2021 11:00
 Sample wt/vol: 25 (mL) Date Analyzed: 04/30/2021 16:37
 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.: 120935 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	0.98	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	0.059	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 E Job No.: 410-37501-1
 SDG No.: _____
 Client Sample ID: HD-COD-SW-6-0/1-0 Lab Sample ID: 410-37501-1
 Matrix: Water Lab File ID: IA30X20.D
 Analysis Method: 8260D Date Collected: 04/26/2021 11:00
 Sample wt/vol: 25 (mL) Date Analyzed: 04/30/2021 16:37
 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.: 120935 Units: ug/L

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

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		80-120
460-00-4	4-Bromofluorobenzene (Surr)	93		80-120
1868-53-7	Dibromofluoromethane (Surr)	99		80-120
2037-26-5	Toluene-d8 (Surr)	100		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210430-28080.b\IA30X20.D
 Lims ID: 410-37501-A-1
 Client ID: HD-COD-SW-6-0/1-0
 Sample Type: Client
 Inject. Date: 30-Apr-2021 16:37:30 ALS Bottle#: 21 Worklist Smp#: 21
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0028080-021
 Operator ID: SRK36897 Instrument ID: 19930
 Method: \\chromfs\Lancaster\ChromData\19930\20210430-28080.b\8260 25ml HP31.m
 Limit Group: MSV - 8260C_D
 Last Update: 30-Apr-2021 17:42:44 Calib Date: 26-Mar-2021 01:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25107.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1630

First Level Reviewer: campbellme Date: 30-Apr-2021 17:42:16

Compound	Sig	RT (min.)	Exp RT (min.)	Diff RT (min.)	Q	Response	OnCol Amt ug/l	Flags
4 Chloromethane	50		2.178				ND	7
5 Vinyl chloride	62		2.288				ND	
7 Bromomethane	94		2.642				ND	
8 Chloroethane	64		2.745				ND	
14 1,1-Dichloroethene	96		3.611				ND	
15 Acetone	43	3.629	3.623	0.006	78	10348	0.9812	
19 Carbon disulfide	76	3.928	3.946	-0.018	63	6497	0.0495	M
23 Methylene Chloride	84		4.269				ND	
* 24 t-Butyl alcohol-d10 (IS)	65	4.269	4.275	-0.006	0	162766	50.0	
27 Methyl tert-butyl ether	73		4.678				ND	
28 trans-1,2-Dichloroethene	96		4.690				ND	
31 1,1-Dichloroethane	63		5.336				ND	
36 2-Butanone (MEK)	43		6.129				ND	7
37 cis-1,2-Dichloroethene	96	6.153	6.165	-0.012	78	3467	0.0594	
43 Chlorobromomethane	128		6.495				ND	
45 Chloroform	83		6.641				ND	
\$ 46 Dibromofluoromethane (Surr)	113	6.854	6.854	0.000	93	423105	9.86	
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	7.311	0.000	0	86025	10.2	
54 Benzene	78		7.342				ND	7
56 1,2-Dichloroethane	62		7.409				ND	
* 58 Fluorobenzene (IS)	96	7.738	7.738	0.000	98	1707174	10.0	
61 Trichloroethene	95	8.226	8.220	0.006	90	3031	0.0530	
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		9.598				ND	7
\$ 75 Toluene-d8 (Surr)	98	9.738	9.738	0.000	94	1708326	10.0	
76 Toluene	92	9.811	9.817	-0.006	97	6010	0.0428	
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	84	1700	0.0255	
83 2-Hexanone	43		10.482				ND	
85 Chlorodibromomethane	129		10.646				ND	
86 Ethylene Dibromide	107		10.762				ND	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.189	0.000	86	1303365	10.0	
90 Chlorobenzene	112		11.213				ND	
S 89 Xylenes, Total	106		11.245				ND	7
91 1,1,1,2-Tetrachloroethane	131		11.292				ND	
92 Ethylbenzene	91		11.298				ND	
93 m-Xylene & p-Xylene	106		11.414				ND	7
94 o-Xylene	106		11.743				ND	7
95 Styrene	104		11.756				ND	
96 Bromoform	173		11.914				ND	
\$ 100 4-Bromofluorobenzene (Surr)	95	12.188	12.182	0.006	92	602761	9.30	
101 1,1,2,2-Tetrachloroethane	83		12.280				ND	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	95	647992	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

Reagents:

MSV_31_826ISS_00004

Amount Added: 5.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19930\20210430-28080.b\IA30X20.D

Injection Date: 30-Apr-2021 16:37:30

Instrument ID: 19930

Operator ID: SRK36897

Lims ID: 410-37501-A-1

Lab Sample ID: 410-37501-1

Worklist Smp#: 21

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

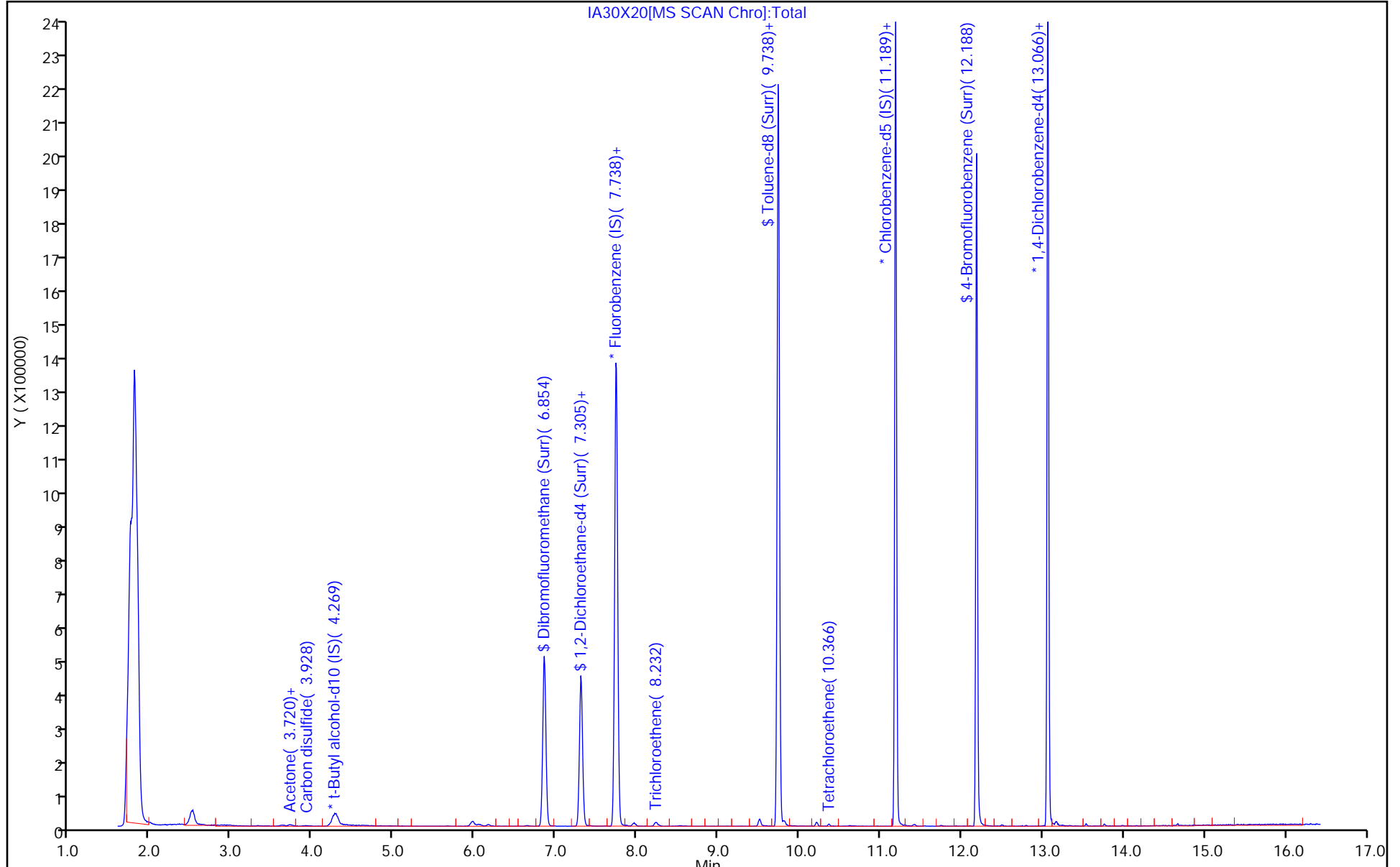
ALS Bottle#: 21

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\20210430-28080.b\A30X20.D
 Lims ID: 410-37501-A-1
 Client ID: HD-COD-SW-6-0/1-0
 Sample Type: Client
 Inject. Date: 30-Apr-2021 16:37:30 ALS Bottle#: 21 Worklist Smp#: 21
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0028080-021
 Operator ID: SRK36897 Instrument ID: 19930
 Method: \\chromfs\Lancaster\ChromData\19930\20210430-28080.b\8260 25ml HP31.m
 Limit Group: MSV - 8260C_D
 Last Update: 30-Apr-2021 17:42:44 Calib Date: 26-Mar-2021 01:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I07.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1630

First Level Reviewer: campbellme Date: 30-Apr-2021 17:42:16

Compound	Amount Added	Amount Recovered	% Rec.
\$ 46 Dibromofluoromethane (Surr)	10.0	9.86	98.57
\$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	10.2	102.39
\$ 75 Toluene-d8 (Surr)	10.0	10.0	100.15
\$ 100 4-Bromofluorobenzene (Surr)	10.0	9.30	93.01

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210430-28080.b\IA30X20.D

Injection Date: 30-Apr-2021 16:37:30

Instrument ID: 19930

Lims ID: 410-37501-A-1

Lab Sample ID: 410-37501-1

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

Operator ID: SRK36897

ALS Bottle#: 21

Worklist Smp#: 21

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

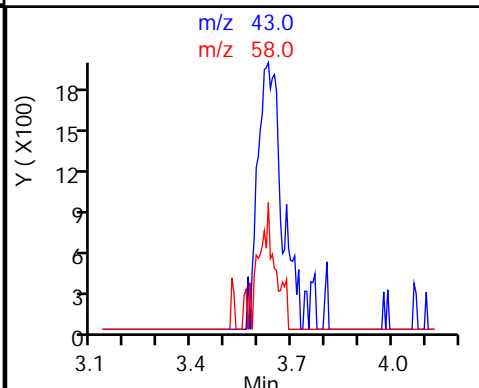
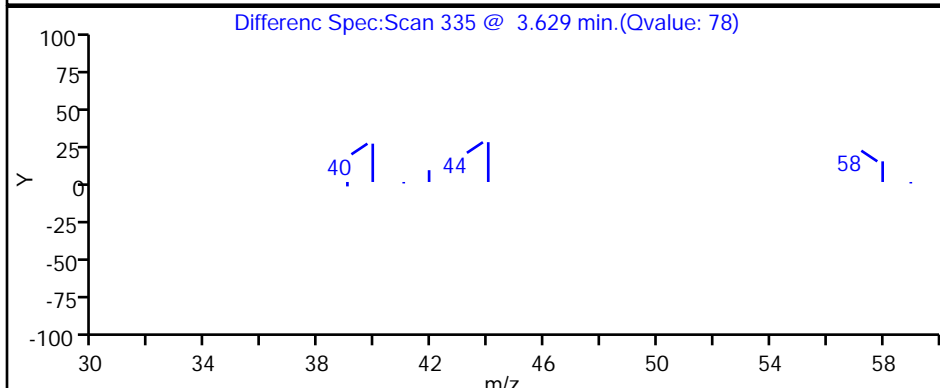
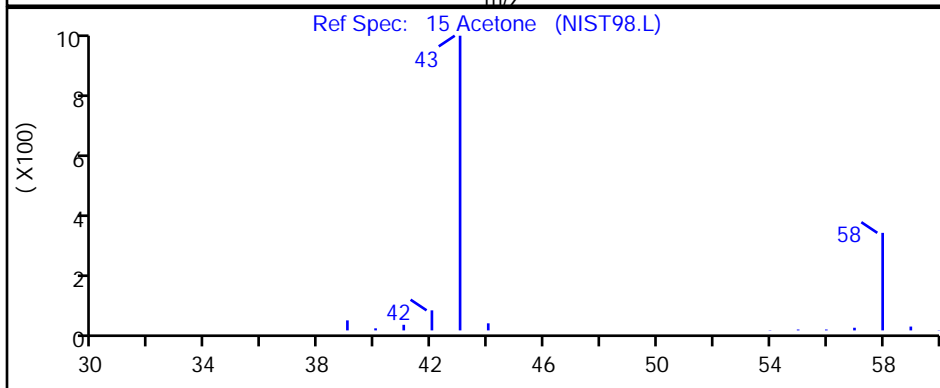
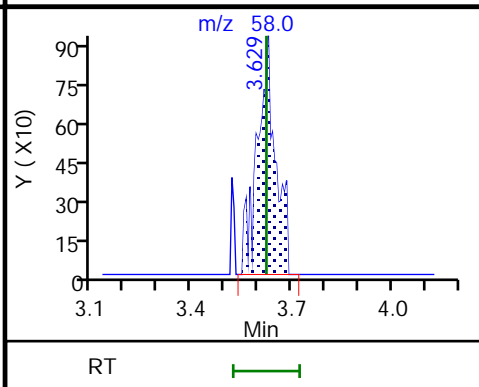
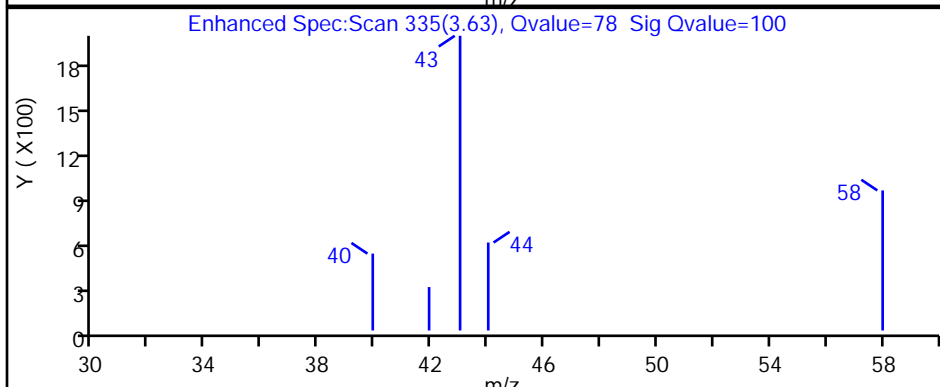
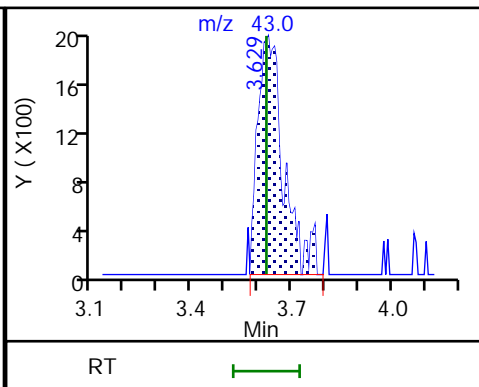
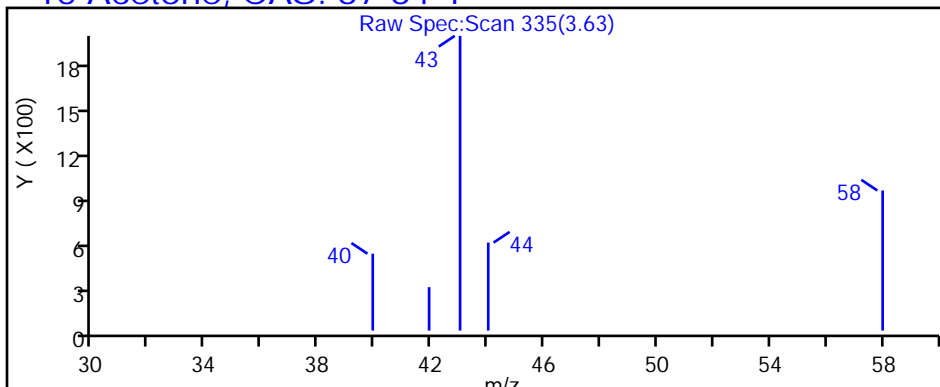
Method: 8260 25ml HP31

Limit Group: MSV - 8260C_D

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

MS Quad

15 Acetone, CAS: 67-64-1



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210430-28080.b\IA30X20.D

Injection Date: 30-Apr-2021 16:37:30

Instrument ID: 19930

Lims ID: 410-37501-A-1

Lab Sample ID: 410-37501-1

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

Operator ID: SRK36897

ALS Bottle#: 21

Worklist Smp#: 21

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

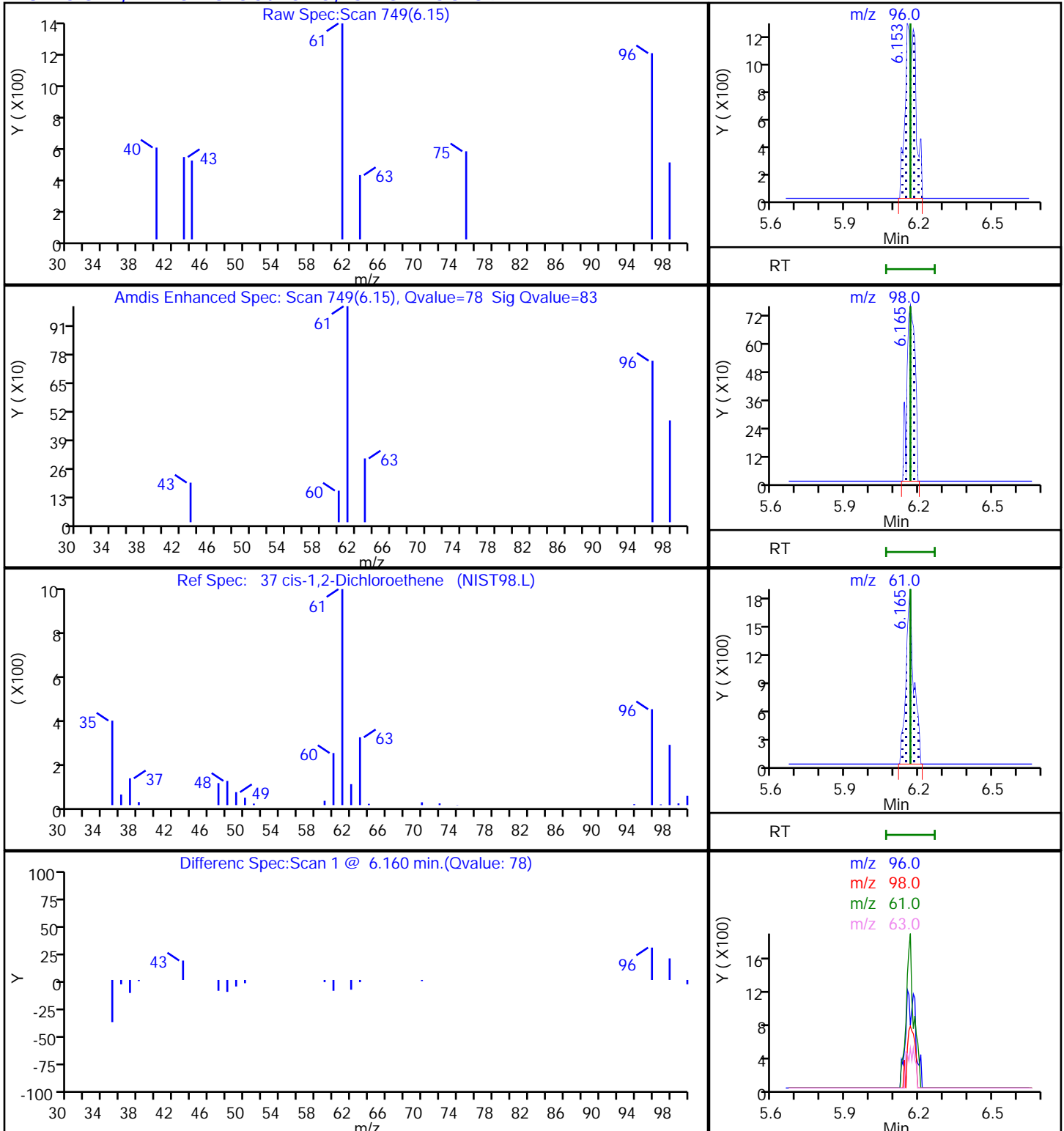
Method: 8260 25ml HP31

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) x 30m

MS Quad

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



Eurofins Lancaster Laboratories Env, LLC

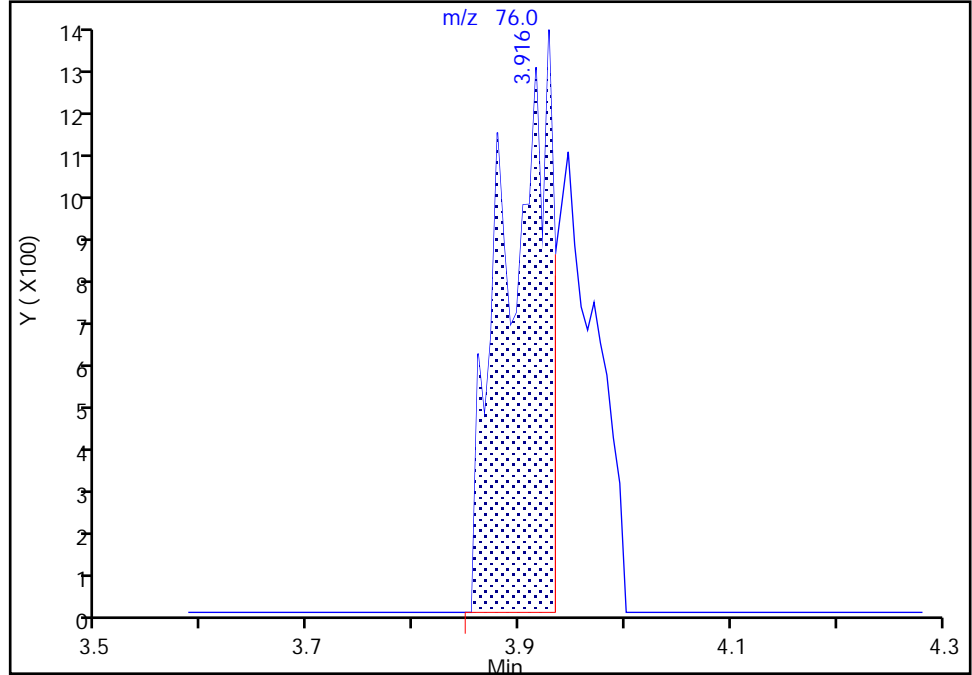
Data File:	\\chromfs\Lancaster\ChromData\19930\20210430-28080.b\IA30X20.D		
Injection Date:	30-Apr-2021 16:37:30	Instrument ID:	19930
Lims ID:	410-37501-A-1	Lab Sample ID:	410-37501-1
Client ID:	HD-COD-SW-6-0/1-0		
Operator ID:	SRK36897	ALS Bottle#:	21
Purge Vol:	25.000 mL	Dil. Factor:	1.0000
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D
Column:	Rxi-624Sil MS Capillary Column (0.25mm ID)	Detector:	MS Quad
		Worklist Smp#:	21

19 Carbon disulfide, CAS: 75-15-0

Signal: 1

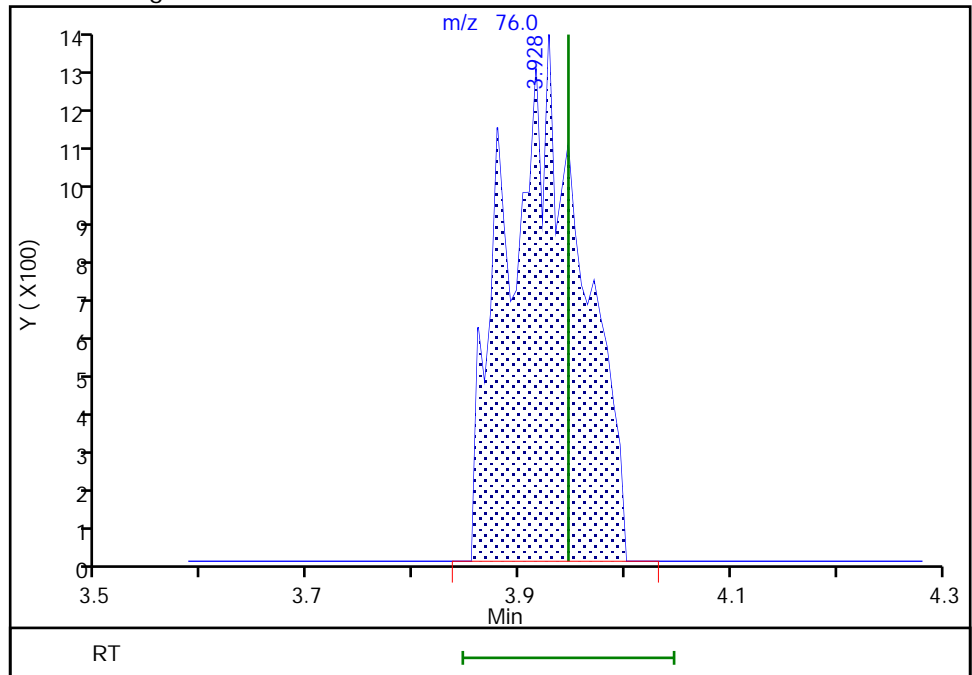
RT: 3.92
 Area: 4036
 Amount: 0.030749
 Amount Units: ug/l

Processing Integration Results



RT: 3.93
 Area: 6497
 Amount: 0.049499
 Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 30-Apr-2021 17:42:05
 Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-37501-1
 SDG No.: _____
 Client Sample ID: HD-COD-SW-7-0/1-0 Lab Sample ID: 410-37501-2
 Matrix: Water Lab File ID: IA30X21.D
 Analysis Method: 8260D Date Collected: 04/26/2021 11:40
 Sample wt/vol: 25 (mL) Date Analyzed: 04/30/2021 16:59
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: R-624SilMS 30m ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 120935 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.070
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.060
75-34-3	1,1-Dichloroethane	ND		0.50	0.070
75-35-4	1,1-Dichloroethene	ND		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.060
107-06-2	1,2-Dichloroethane	ND		0.50	0.050
78-87-5	1,2-Dichloropropane	ND		0.50	0.060
78-93-3	2-Butanone (MEK)	ND		5.0	0.60
591-78-6	2-Hexanone	ND		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70
67-64-1	Acetone	1.0	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	0.075	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	0.065	J	0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.050
124-48-1	Dibromochloromethane	ND		0.50	0.070
100-41-4	Ethylbenzene	ND		0.50	0.060
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.050
75-09-2	Methylene Chloride	ND		0.50	0.070
100-42-5	Styrene	ND		0.50	0.050
127-18-4	Tetrachloroethene	0.075	J	0.50	0.060
108-88-3	Toluene	ND		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	0.089	J	0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-37501-1
 SDG No.: _____
 Client Sample ID: HD-COD-SW-7-0/1-0 Lab Sample ID: 410-37501-2
 Matrix: Water Lab File ID: IA30X21.D
 Analysis Method: 8260D Date Collected: 04/26/2021 11:40
 Sample wt/vol: 25 (mL) Date Analyzed: 04/30/2021 16:59
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: R-624SilMS 30m ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 120935 Units: ug/L

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

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		80-120
460-00-4	4-Bromofluorobenzene (Surr)	93		80-120
1868-53-7	Dibromofluoromethane (Surr)	99		80-120
2037-26-5	Toluene-d8 (Surr)	101		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210430-28080.b\IA30X21.D
 Lims ID: 410-37501-A-2
 Client ID: HD-COD-SW-7-0/1-0
 Sample Type: Client
 Inject. Date: 30-Apr-2021 16:59:30 ALS Bottle#: 22 Worklist Smp#: 22
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0028080-022
 Operator ID: SRK36897 Instrument ID: 19930
 Method: \\chromfs\Lancaster\ChromData\19930\20210430-28080.b\8260 25ml HP31.m
 Limit Group: MSV - 8260C_D
 Last Update: 30-Apr-2021 17:42:44 Calib Date: 26-Mar-2021 01:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25107.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1630

First Level Reviewer: campbellme Date: 30-Apr-2021 17:42:44

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	87	2416	0.0383	
5 Vinyl chloride	62		2.288				ND	
7 Bromomethane	94		2.642				ND	
8 Chloroethane	64		2.745				ND	
14 1,1-Dichloroethene	96		3.611				ND	
15 Acetone	43	3.641	3.623	0.018	86	9969	1.00	
19 Carbon disulfide	76	3.958	3.946	0.012	61	9602	0.0751	M
23 Methylene Chloride	84		4.269				ND	
* 24 t-Butyl alcohol-d10 (IS)	65	4.288	4.275	0.013	0	153825	50.0	
27 Methyl tert-butyl ether	73		4.678				ND	
28 trans-1,2-Dichloroethene	96		4.690				ND	
31 1,1-Dichloroethane	63		5.336				ND	
36 2-Butanone (MEK)	43		6.129				ND	7
37 cis-1,2-Dichloroethene	96	6.165	6.165	0.000	80	3665	0.0645	
43 Chlorobromomethane	128		6.495				ND	
45 Chloroform	83	6.653	6.641	0.012	84	5315	0.0586	
\$ 46 Dibromofluoromethane (Surr)	113	6.854	6.854	0.000	93	413625	9.89	
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	7.311	0.000	0	82759	10.1	
54 Benzene	78		7.342				ND	7
56 1,2-Dichloroethane	62		7.409				ND	
* 58 Fluorobenzene (IS)	96	7.744	7.738	0.006	99	1662630	10.0	
61 Trichloroethene	95	8.226	8.220	0.006	96	4952	0.0889	
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		9.598				ND	7
\$ 75 Toluene-d8 (Surr)	98	9.744	9.738	0.006	94	1677748	10.1	
76 Toluene	92	9.817	9.817	0.000	96	7594	0.0554	
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	10.360	10.366	-0.006	87	4894	0.0750	
83 2-Hexanone	43		10.482				ND	
85 Chlorodibromomethane	129		10.646				ND	
86 Ethylene Dibromide	107		10.762				ND	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.189	0.000	86	1273428	10.0	
90 Chlorobenzene	112		11.213				ND	
S 89 Xylenes, Total	106		11.245				ND	7
91 1,1,1,2-Tetrachloroethane	131		11.292				ND	
92 Ethylbenzene	91		11.298				ND	7
93 m-Xylene & p-Xylene	106		11.414				ND	7
94 o-Xylene	106		11.743				ND	7
95 Styrene	104		11.756				ND	
96 Bromoform	173		11.914				ND	
\$ 100 4-Bromofluorobenzene (Surr)	95	12.188	12.182	0.006	92	591684	9.34	
101 1,1,2,2-Tetrachloroethane	83		12.280				ND	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	95	635610	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

Reagents:

MSV_31_826ISS_00004

Amount Added: 5.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19930\20210430-28080.b\IA30X21.D

Injection Date: 30-Apr-2021 16:59:30

Instrument ID: 19930

Operator ID: SRK36897

Lims ID: 410-37501-A-2

Lab Sample ID: 410-37501-2

Worklist Smp#: 22

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

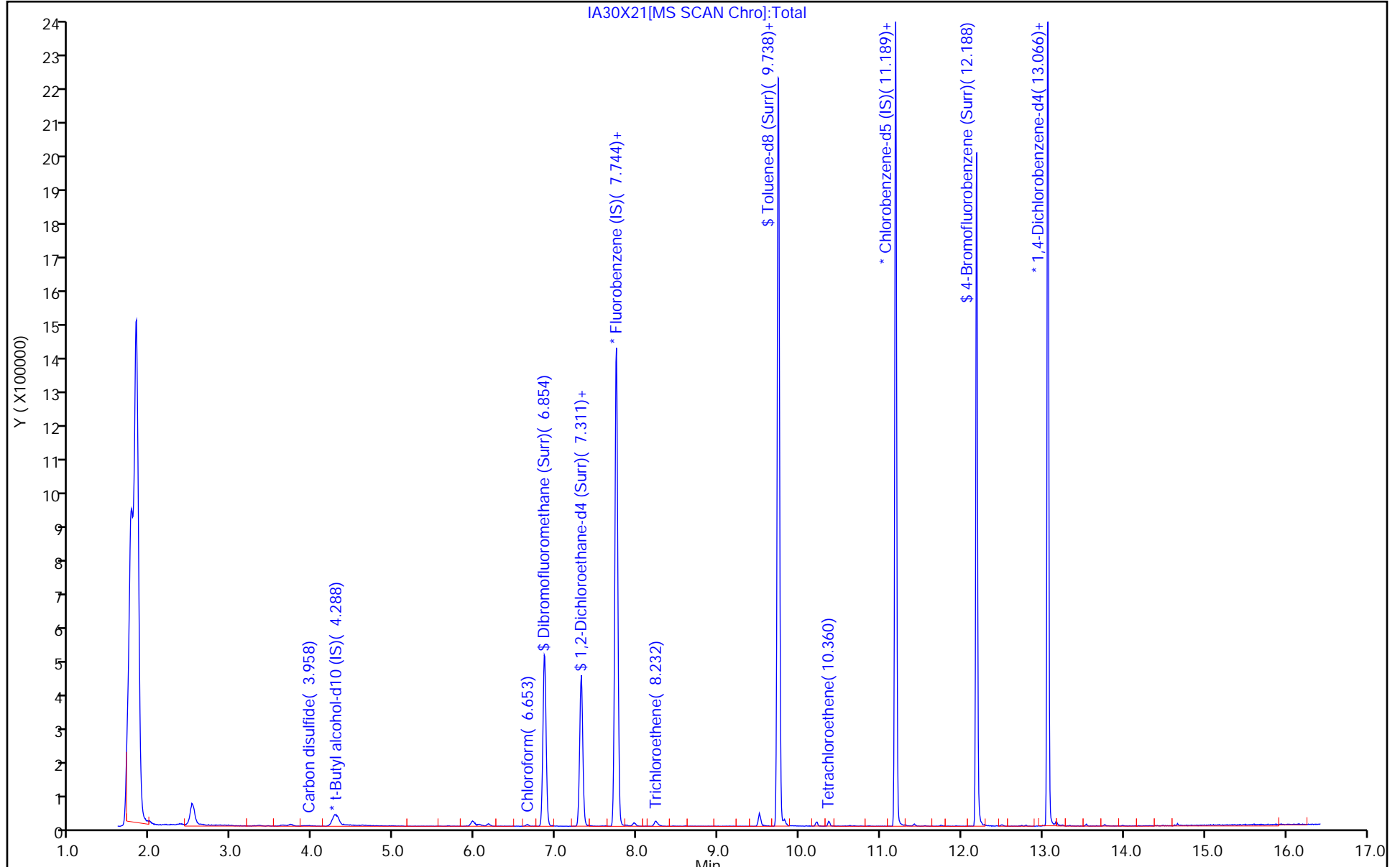
ALS Bottle#: 22

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\20210430-28080.b\A30X21.D
 Lims ID: 410-37501-A-2
 Client ID: HD-COD-SW-7-0/1-0
 Sample Type: Client
 Inject. Date: 30-Apr-2021 16:59:30 ALS Bottle#: 22 Worklist Smp#: 22
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0028080-022
 Operator ID: SRK36897 Instrument ID: 19930
 Method: \\chromfs\Lancaster\ChromData\19930\20210430-28080.b\8260 25ml HP31.m
 Limit Group: MSV - 8260C_D
 Last Update: 30-Apr-2021 17:42:44 Calib Date: 26-Mar-2021 01:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I07.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1630

First Level Reviewer: campbellme Date: 30-Apr-2021 17:42:44

Compound	Amount Added	Amount Recovered	% Rec.
\$ 46 Dibromofluoromethane (Surr)	10.0	9.89	98.94
\$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	10.1	101.14
\$ 75 Toluene-d8 (Surr)	10.0	10.1	100.67
\$ 100 4-Bromofluorobenzene (Surr)	10.0	9.34	93.45

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210430-28080.b\IA30X21.D

Injection Date: 30-Apr-2021 16:59:30

Instrument ID: 19930

Lims ID: 410-37501-A-2

Lab Sample ID: 410-37501-2

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

Operator ID: SRK36897

ALS Bottle#: 22

Worklist Smp#: 22

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

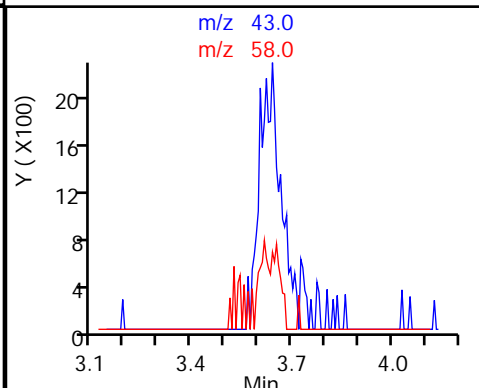
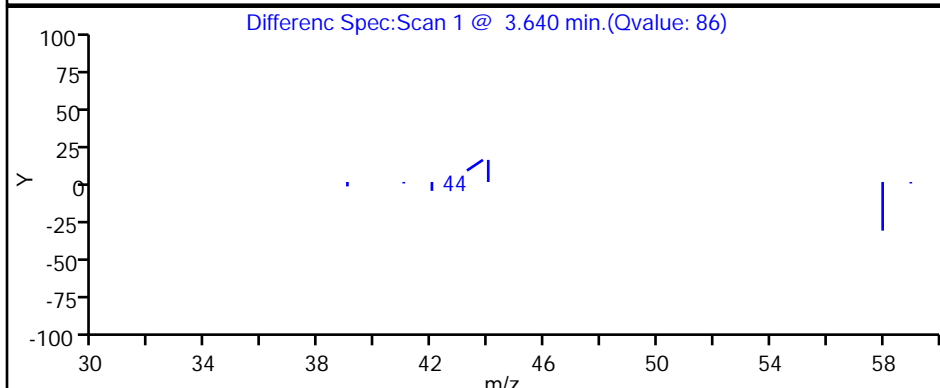
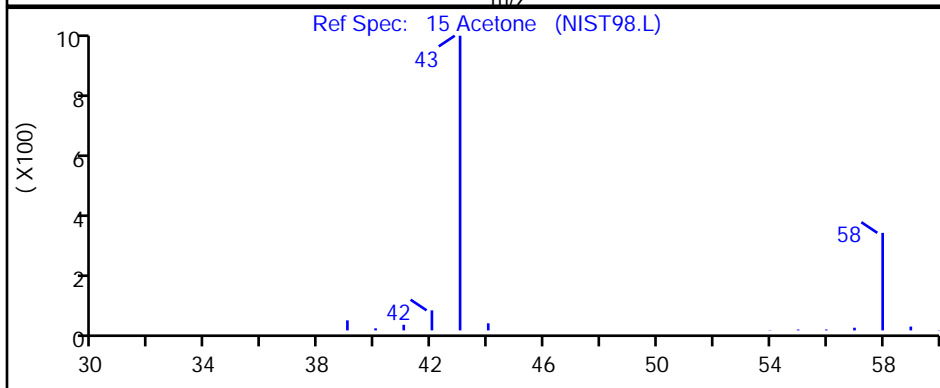
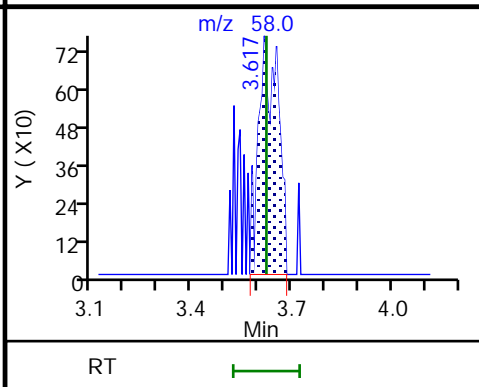
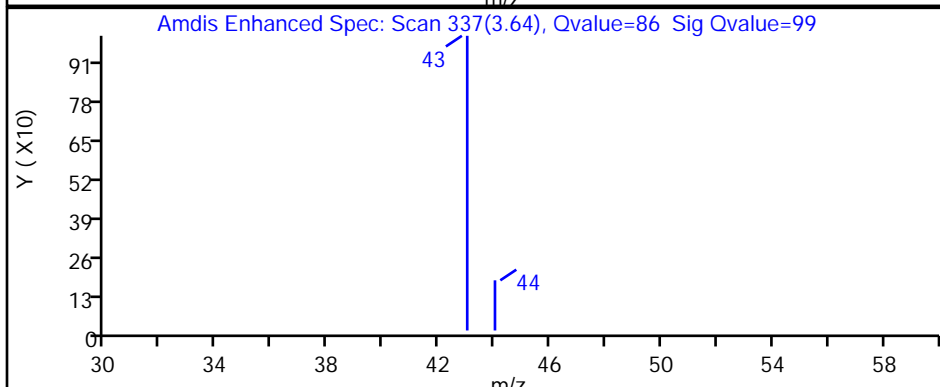
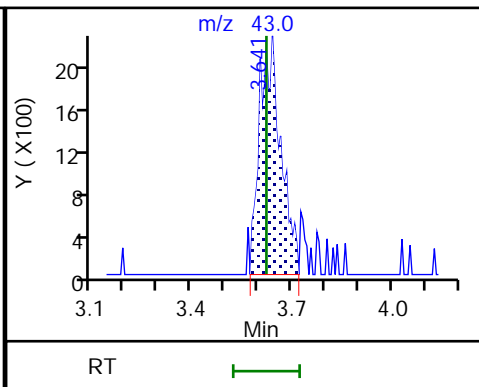
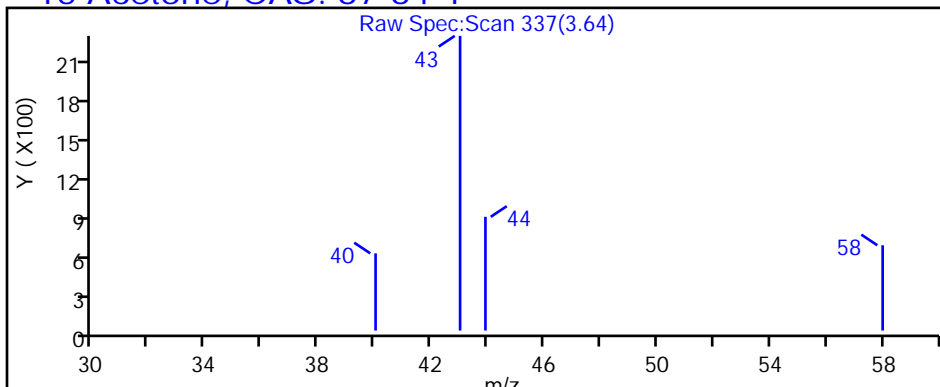
Method: 8260 25ml HP31

Limit Group: MSV - 8260C_D

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

MS Quad

15 Acetone, CAS: 67-64-1



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210430-28080.b\IA30X21.D

Injection Date: 30-Apr-2021 16:59:30

Instrument ID: 19930

Lims ID: 410-37501-A-2

Lab Sample ID: 410-37501-2

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

Operator ID: SRK36897

ALS Bottle#: 22

Worklist Smp#: 22

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

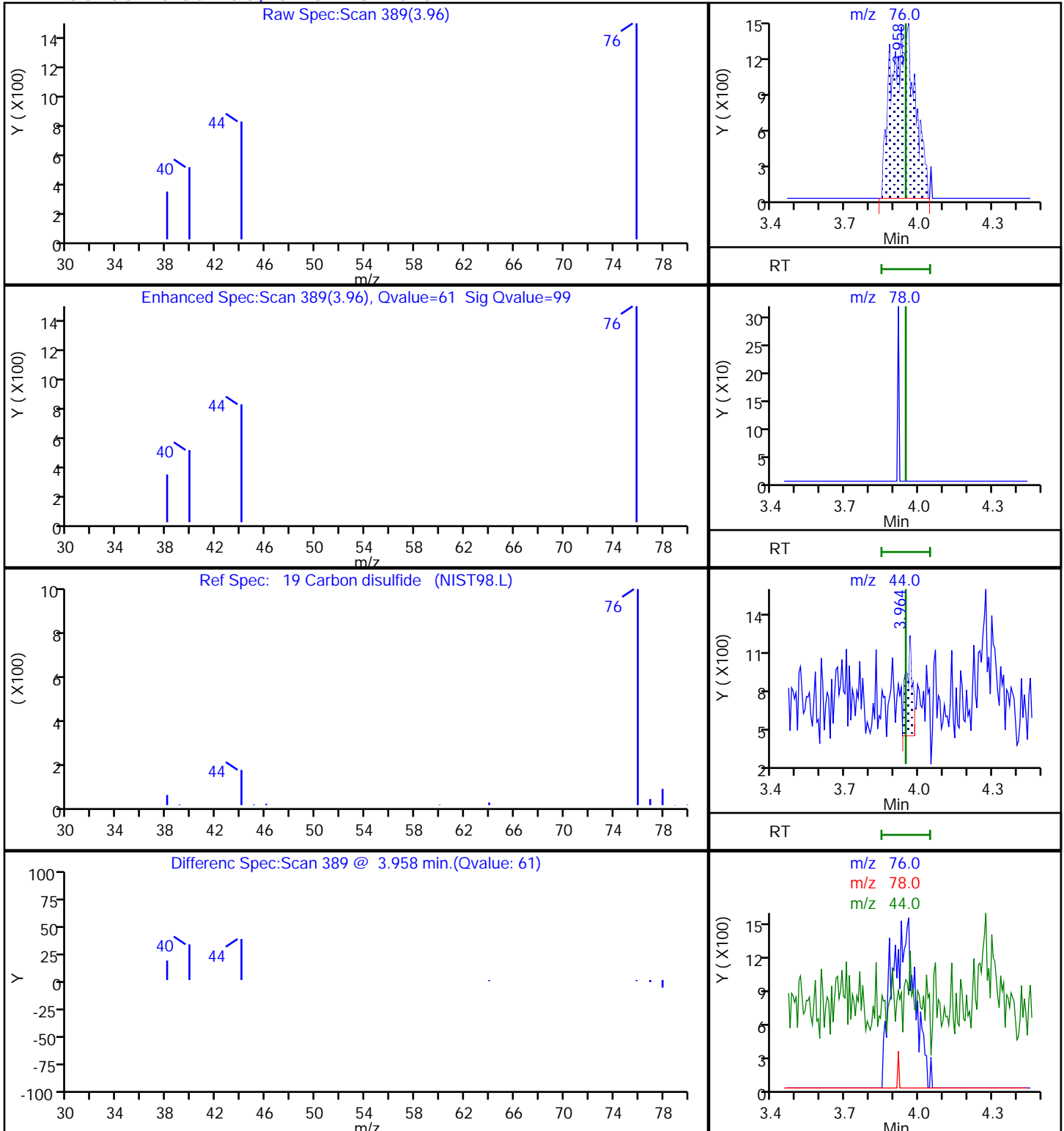
Method: 8260 25ml HP31

Limit Group: MSV - 8260C_D

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

MS Quad

19 Carbon disulfide, CAS: 75-15-0



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210430-28080.b\IA30X21.D

Injection Date: 30-Apr-2021 16:59:30

Instrument ID: 19930

Lims ID: 410-37501-A-2

Lab Sample ID: 410-37501-2

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

Operator ID: SRK36897

ALS Bottle#: 22

Worklist Smp#: 22

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

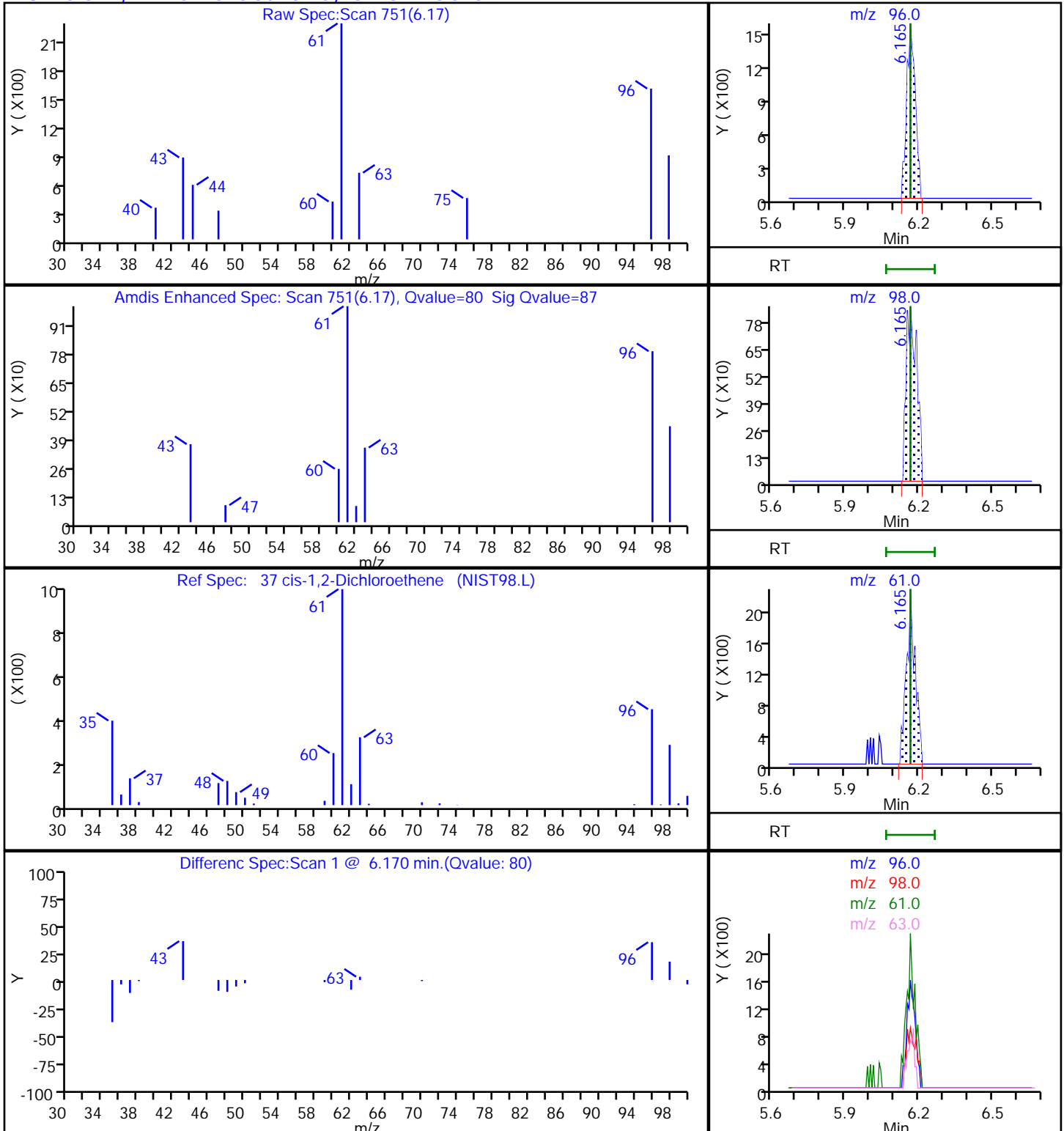
Method: 8260 25ml HP31

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) x 30m

MS Quad

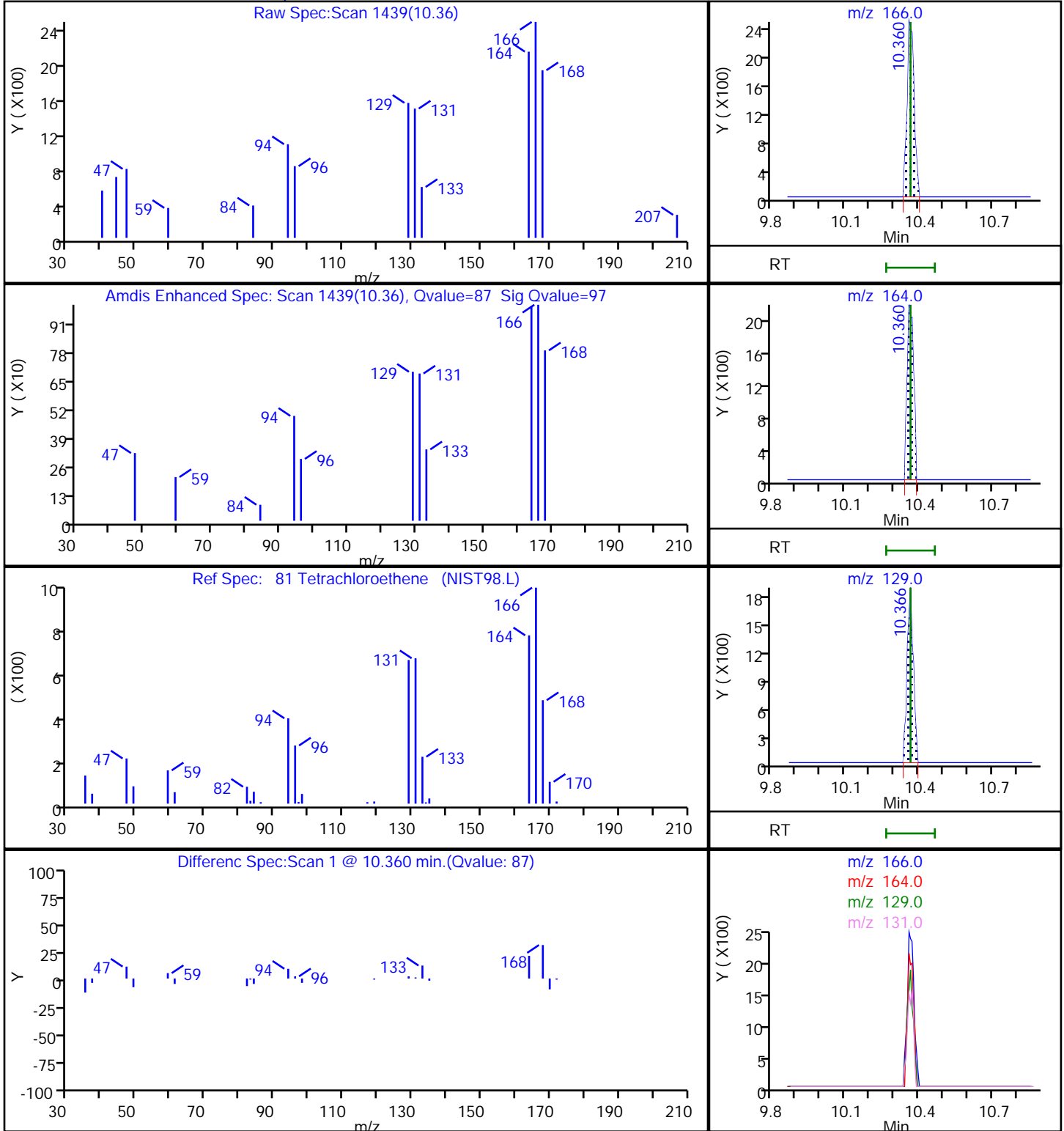
37 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210430-28080.b\IA30X21.D
Injection Date: 30-Apr-2021 16:59:30 Instrument ID: 19930
Lims ID: 410-37501-A-2 Lab Sample ID: 410-37501-2
Client ID: HD-COD-SW-7-0/1-0
Operator ID: SRK36897 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 ID) Detector: MS Quad

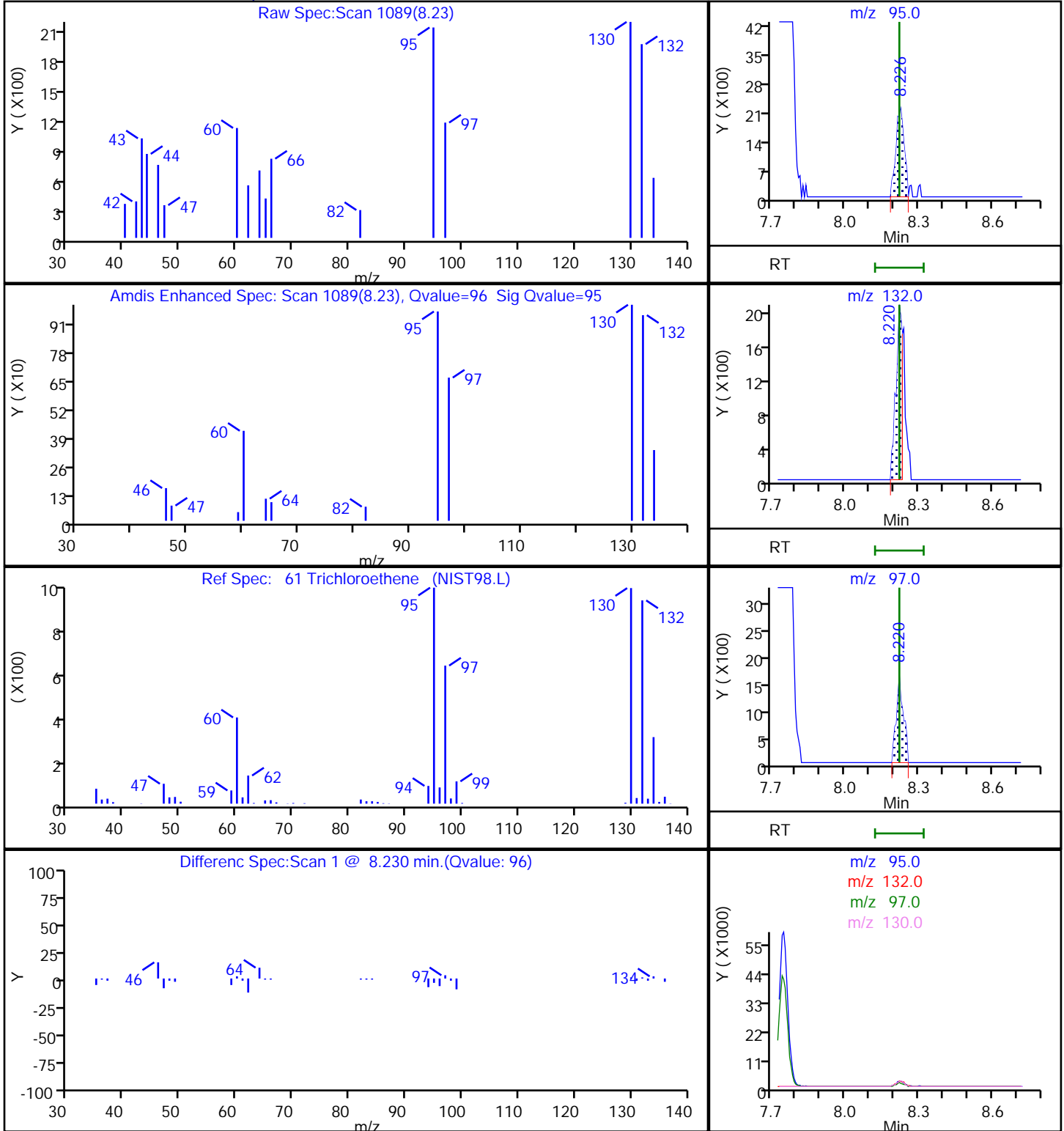
81 Tetrachloroethene, CAS: 127-18-4



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210430-28080.b\IA30X21.D
Injection Date: 30-Apr-2021 16:59:30 Instrument ID: 19930
Lims ID: 410-37501-A-2 Lab Sample ID: 410-37501-2
Client ID: HD-COD-SW-7-0/1-0
Operator ID: SRK36897 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 ID) MS Quad

61 Trichloroethene, CAS: 79-01-6



Eurofins Lancaster Laboratories Env, LLC

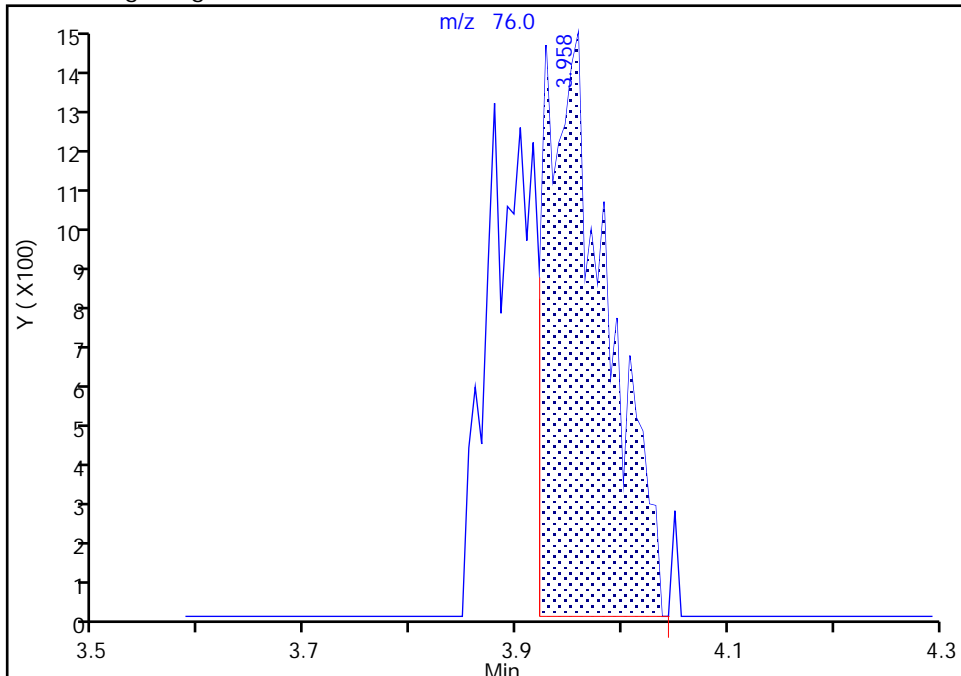
Data File: \\chromfs\Lancaster\ChromData\19930\20210430-28080.b\IA30X21.D
Injection Date: 30-Apr-2021 16:59:30 Instrument ID: 19930
Lims ID: 410-37501-A-2 Lab Sample ID: 410-37501-2
Client ID: HD-COD-SW-7-0/1-0
Operator ID: SRK36897 ALS Bottle#: 22 Worklist Smp#: 22
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

19 Carbon disulfide, CAS: 75-15-0

Signal: 1

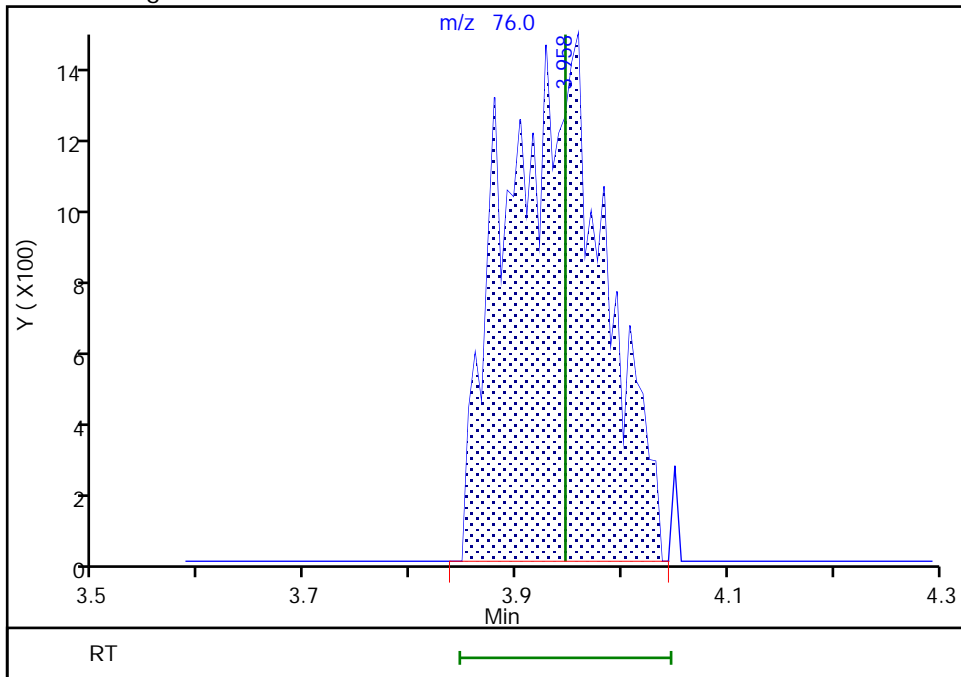
RT: 3.96
Area: 5980
Amount: 0.046781
Amount Units: ug/l

Processing Integration Results



RT: 3.96
Area: 9602
Amount: 0.075115
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 30-Apr-2021 17:42:27
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-37501-1
 SDG No.: _____
 Client Sample ID: HD-COD-SW-8-0/1-0 Lab Sample ID: 410-37501-3
 Matrix: Water Lab File ID: IA30X22.D
 Analysis Method: 8260D Date Collected: 04/26/2021 09:45
 Sample wt/vol: 25 (mL) Date Analyzed: 04/30/2021 17:20
 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.: 120935 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	0.95	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	0.069	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	0.075	J	0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-37501-1
 SDG No.: _____
 Client Sample ID: HD-COD-SW-8-0/1-0 Lab Sample ID: 410-37501-3
 Matrix: Water Lab File ID: IA30X22.D
 Analysis Method: 8260D Date Collected: 04/26/2021 09:45
 Sample wt/vol: 25 (mL) Date Analyzed: 04/30/2021 17:20
 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.: 120935 Units: ug/L

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

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		80-120
460-00-4	4-Bromofluorobenzene (Surr)	93		80-120
1868-53-7	Dibromofluoromethane (Surr)	98		80-120
2037-26-5	Toluene-d8 (Surr)	101		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210430-28080.b\IA30X22.D
 Lims ID: 410-37501-A-3
 Client ID: HD-COD-SW-8-0/1-0
 Sample Type: Client
 Inject. Date: 30-Apr-2021 17:20:30 ALS Bottle#: 23 Worklist Smp#: 23
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0028080-023
 Operator ID: SRK36897 Instrument ID: 19930
 Method: \\chromfs\Lancaster\ChromData\19930\20210430-28080.b\8260 25ml HP31.m
 Limit Group: MSV - 8260C_D
 Last Update: 30-Apr-2021 18:04:58 Calib Date: 26-Mar-2021 01:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25107.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1630

First Level Reviewer: campbellme Date: 30-Apr-2021 18:04:58

Compound	Sig	RT (min.)	Exp RT (min.)	Diff RT (min.)	Q	Response	OnCol Amt ug/l	Flags
4 Chloromethane	50	2.166	2.178	-0.012	91	2574	0.0409	
5 Vinyl chloride	62		2.288				ND	
7 Bromomethane	94		2.642				ND	
8 Chloroethane	64		2.745				ND	
14 1,1-Dichloroethene	96		3.611				ND	
15 Acetone	43	3.623	3.623	0.000	94	8894	0.9487	
19 Carbon disulfide	76	3.909	3.946	-0.037	53	6383	0.0501	M
23 Methylene Chloride	84		4.269				ND	
* 24 t-Butyl alcohol-d10 (IS)	65	4.281	4.275	0.006	0	144685	50.0	
27 Methyl tert-butyl ether	73		4.678				ND	
28 trans-1,2-Dichloroethene	96		4.690				ND	
31 1,1-Dichloroethane	63		5.336				ND	
36 2-Butanone (MEK)	43		6.129				ND	
37 cis-1,2-Dichloroethene	96	6.159	6.165	-0.006	80	3899	0.0688	
43 Chlorobromomethane	128		6.495				ND	
45 Chloroform	83	6.641	6.641	0.000	74	2788	0.0308	
\$ 46 Dibromofluoromethane (Surr)	113	6.854	6.854	0.000	93	408441	9.80	
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	7.311	0.000	0	82955	10.2	
54 Benzene	78		7.342				ND	7
56 1,2-Dichloroethane	62		7.409				ND	
* 58 Fluorobenzene (IS)	96	7.738	7.738	0.000	99	1658037	10.0	
61 Trichloroethene	95	8.226	8.220	0.006	88	4155	0.0748	
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		9.598				ND	7
\$ 75 Toluene-d8 (Surr)	98	9.738	9.738	0.000	94	1659442	10.1	
76 Toluene	92	9.823	9.817	0.006	65	5838	0.0432	
78 trans-1,3-Dichloropropene	75		10.067				ND	
80 1,1,2-Trichloroethane	97		10.274				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
81 Tetrachloroethene	166	10.359	10.366	-0.007	95	3375	0.0525	
83 2-Hexanone	43		10.482				ND	
85 Chlorodibromomethane	129		10.646				ND	
86 Ethylene Dibromide	107		10.762				ND	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.189	0.000	87	1253956	10.0	
90 Chlorobenzene	112		11.213				ND	
S 89 Xylenes, Total	106		11.245				ND	7
91 1,1,1,2-Tetrachloroethane	131		11.292				ND	
92 Ethylbenzene	91		11.298				ND	
93 m-Xylene & p-Xylene	106		11.414				ND	7
94 o-Xylene	106		11.743				ND	
95 Styrene	104		11.756				ND	
96 Bromoform	173		11.914				ND	
\$ 100 4-Bromofluorobenzene (Surr)	95	12.188	12.182	0.006	92	580887	9.32	
101 1,1,2,2-Tetrachloroethane	83		12.280				ND	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	95	624305	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

Reagents:

MSV_31_826ISS_00004

Amount Added: 5.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19930\20210430-28080.b\IA30X22.D

Injection Date: 30-Apr-2021 17:20:30

Instrument ID: 19930

Operator ID: SRK36897

Lims ID: 410-37501-A-3

Lab Sample ID: 410-37501-3

Worklist Smp#: 23

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

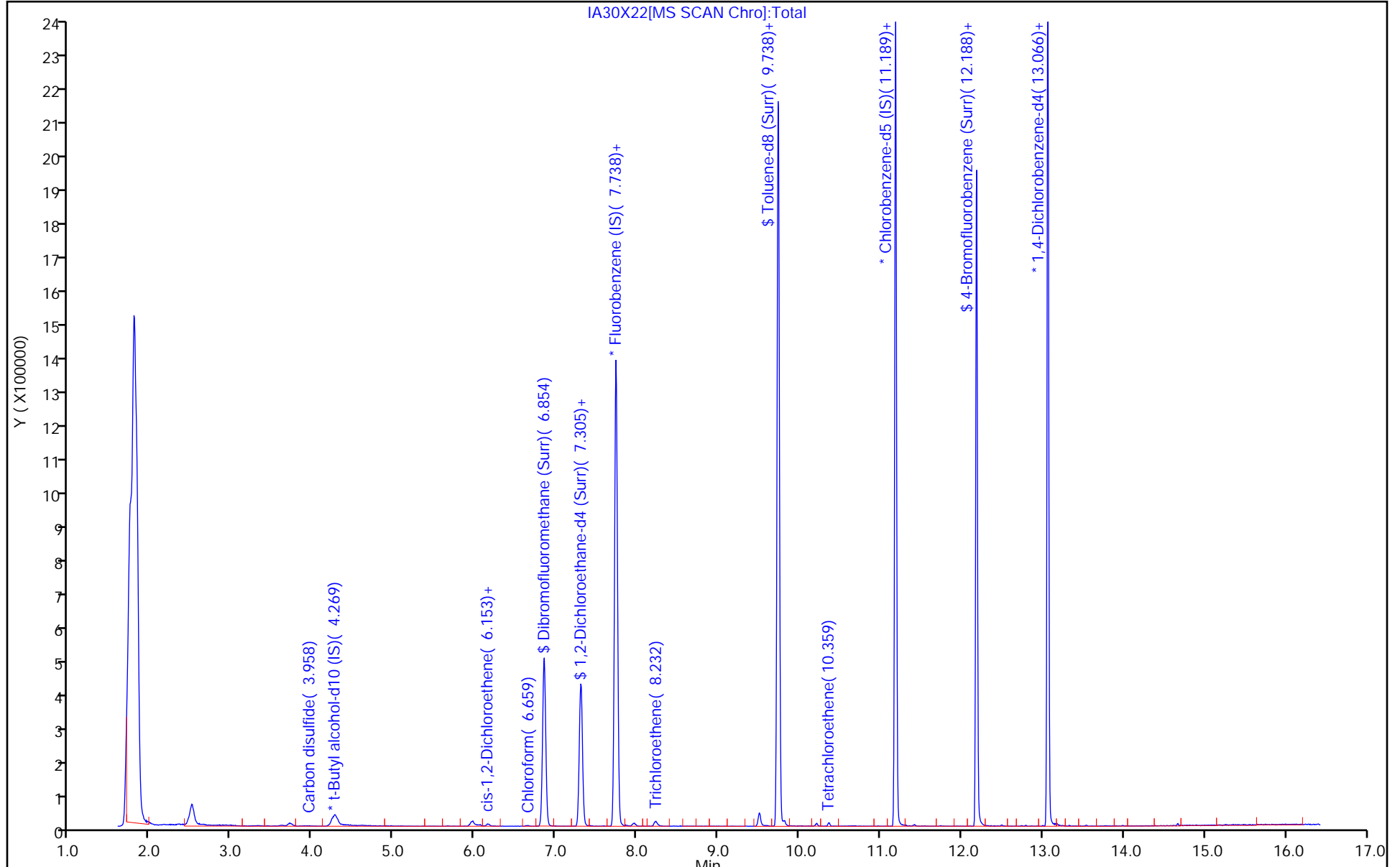
ALS Bottle#: 23

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\20210430-28080.b\A30X22.D
 Lims ID: 410-37501-A-3
 Client ID: HD-COD-SW-8-0/1-0
 Sample Type: Client
 Inject. Date: 30-Apr-2021 17:20:30 ALS Bottle#: 23 Worklist Smp#: 23
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0028080-023
 Operator ID: SRK36897 Instrument ID: 19930
 Method: \\chromfs\Lancaster\ChromData\19930\20210430-28080.b\8260 25ml HP31.m
 Limit Group: MSV - 8260C_D
 Last Update: 30-Apr-2021 18:04:58 Calib Date: 26-Mar-2021 01:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I07.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1630

First Level Reviewer: campbellme Date: 30-Apr-2021 18:04:58

Compound	Amount Added	Amount Recovered	% Rec.
\$ 46 Dibromofluoromethane (Surr)	10.0	9.80	97.97
\$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	10.2	101.66
\$ 75 Toluene-d8 (Surr)	10.0	10.1	101.12
\$ 100 4-Bromofluorobenzene (Surr)	10.0	9.32	93.17

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210430-28080.b\IA30X22.D

Injection Date: 30-Apr-2021 17:20:30

Instrument ID: 19930

Lims ID: 410-37501-A-3

Lab Sample ID: 410-37501-3

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

Operator ID: SRK36897

ALS Bottle#: 23

Worklist Smp#: 23

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

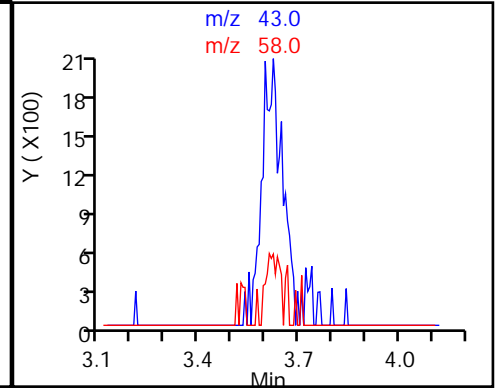
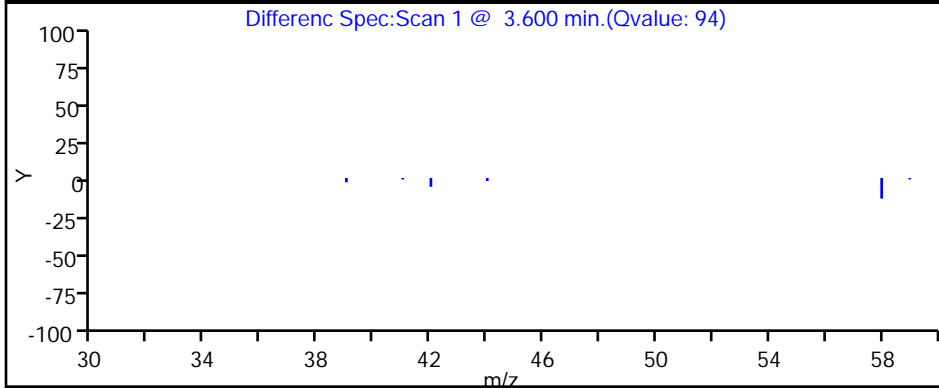
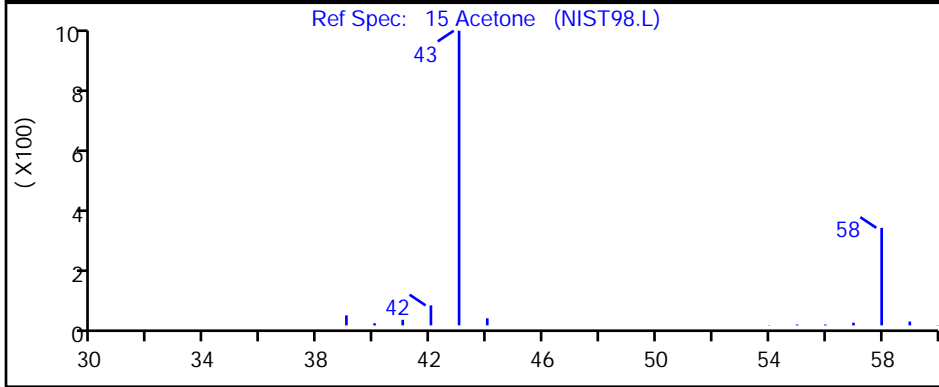
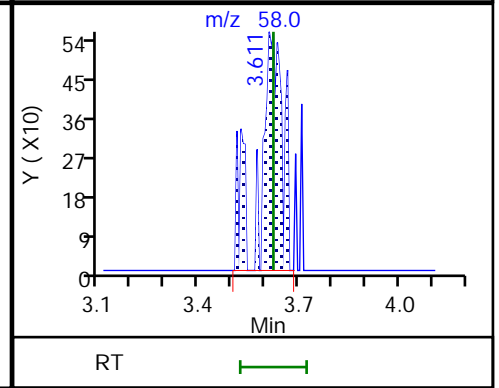
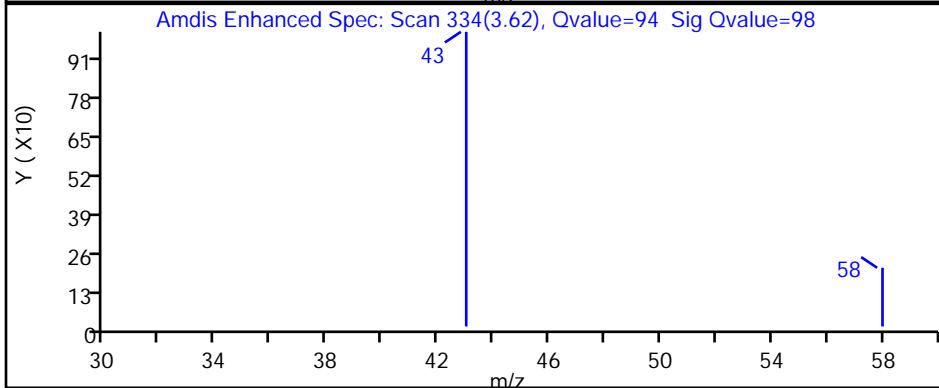
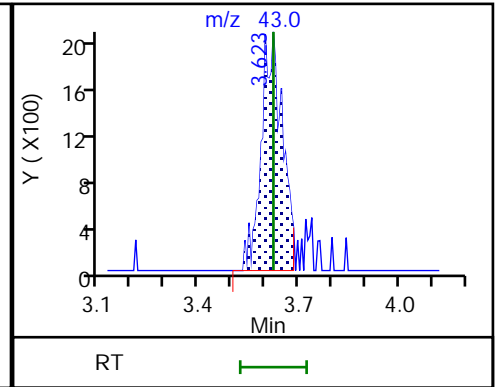
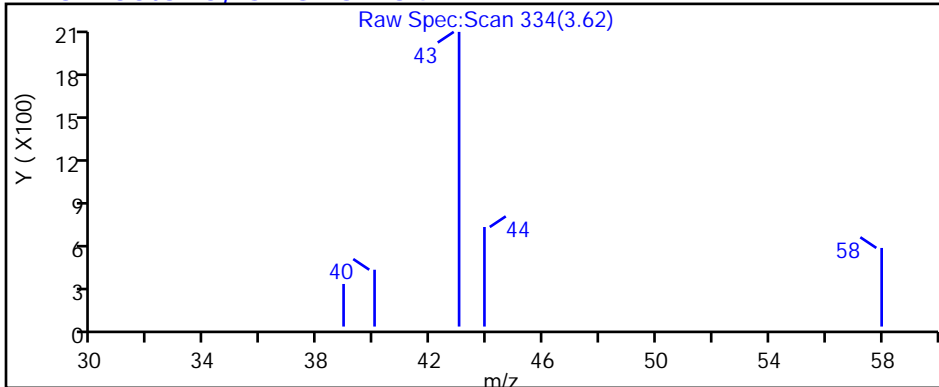
Method: 8260 25ml HP31

Limit Group: MSV - 8260C_D

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

MS Quad

15 Acetone, CAS: 67-64-1



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210430-28080.b\IA30X22.D

Injection Date: 30-Apr-2021 17:20:30

Instrument ID: 19930

Lims ID: 410-37501-A-3

Lab Sample ID: 410-37501-3

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

Operator ID: SRK36897

ALS Bottle#: 23

Worklist Smp#: 23

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

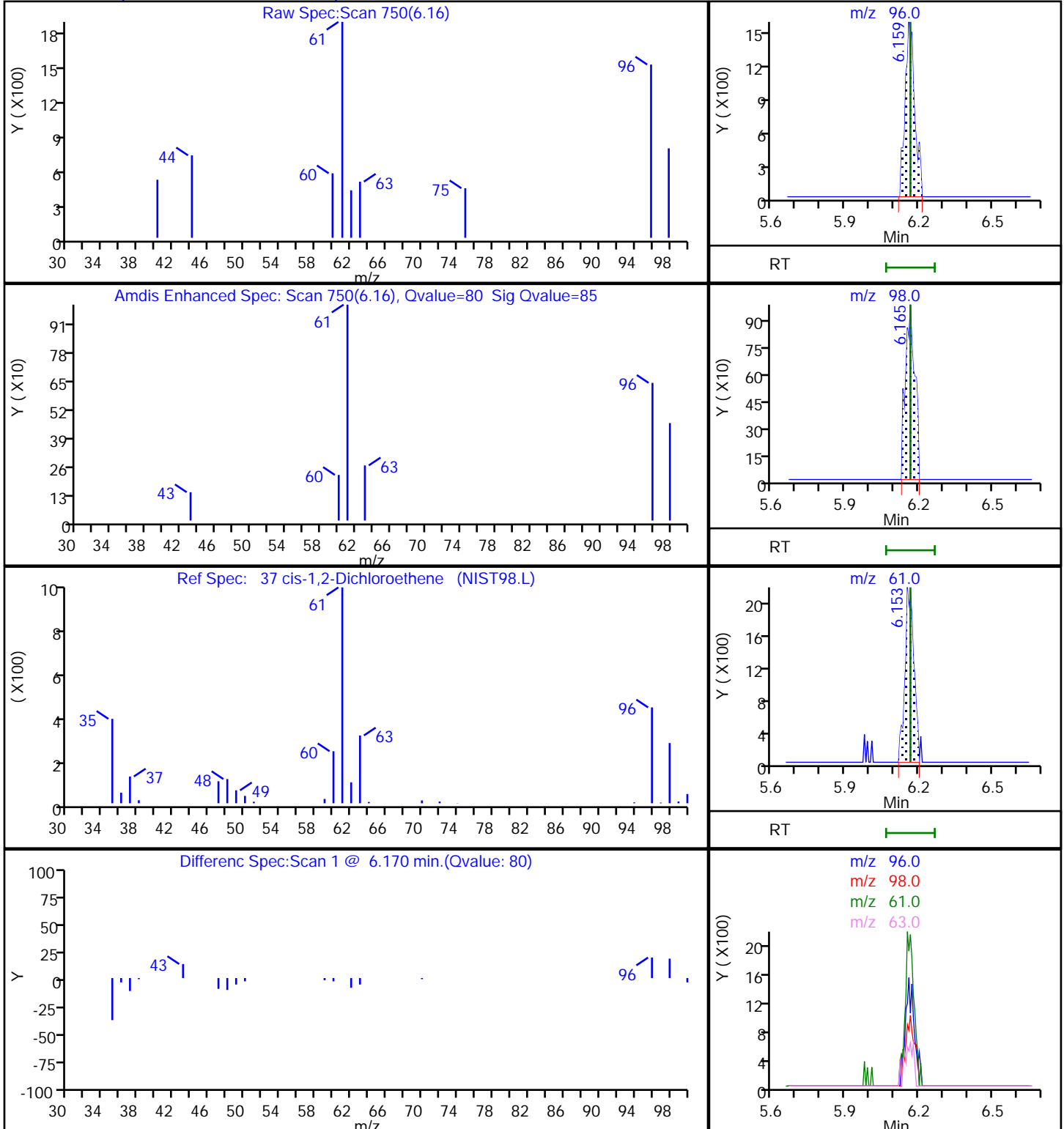
Method: 8260 25ml HP31

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) x 30m

MS Quad

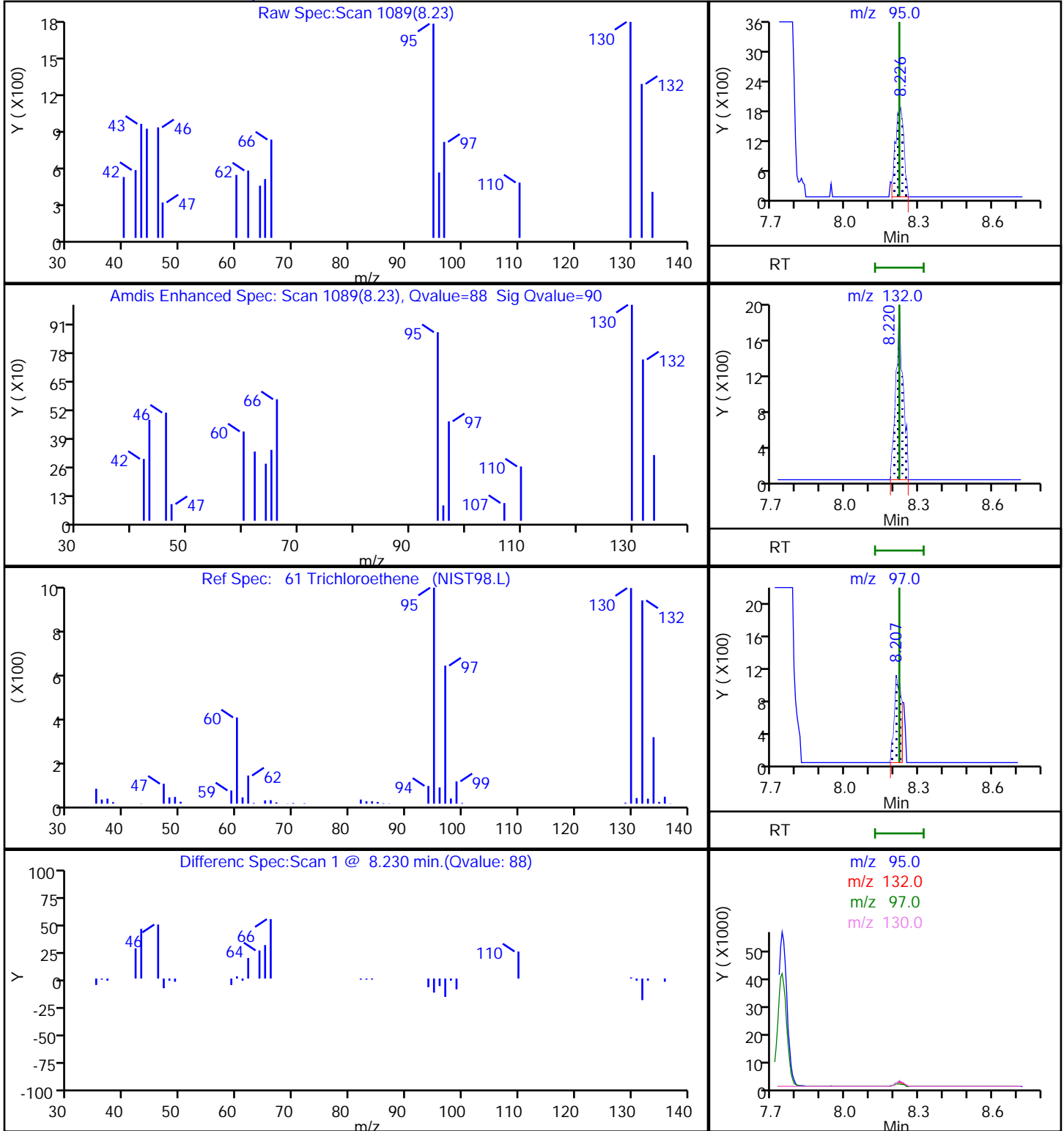
37 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210430-28080.b\IA30X22.D
Injection Date: 30-Apr-2021 17:20:30 Instrument ID: 19930
Lims ID: 410-37501-A-3 Lab Sample ID: 410-37501-3
Client ID: HD-COD-SW-8-0/1-0
Operator ID: SRK36897 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 ID) MS Quad

61 Trichloroethene, CAS: 79-01-6



Eurofins Lancaster Laboratories Env, LLC

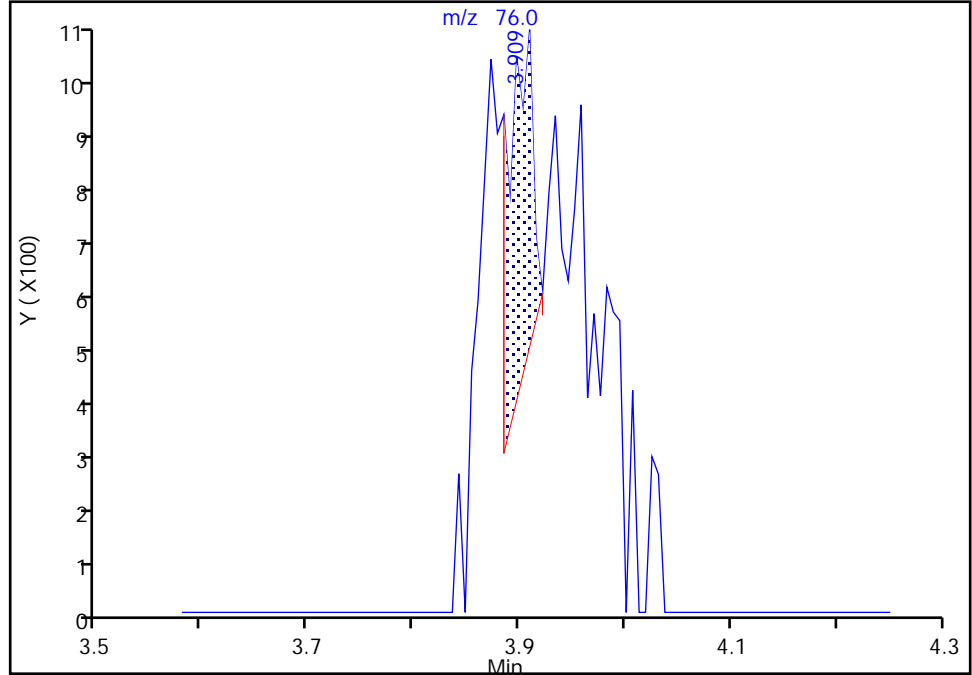
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Injection Date: 30-Apr-2021 17:20:30 Instrument ID: 19930
Lims ID: 410-37501-A-3 Lab Sample ID: 410-37501-3
Client ID: HD-COD-SW-8-0/1-0
Operator ID: SRK36897 ALS Bottle#: 23 Worklist Smp#: 23
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

19 Carbon disulfide, CAS: 75-15-0

Signal: 1

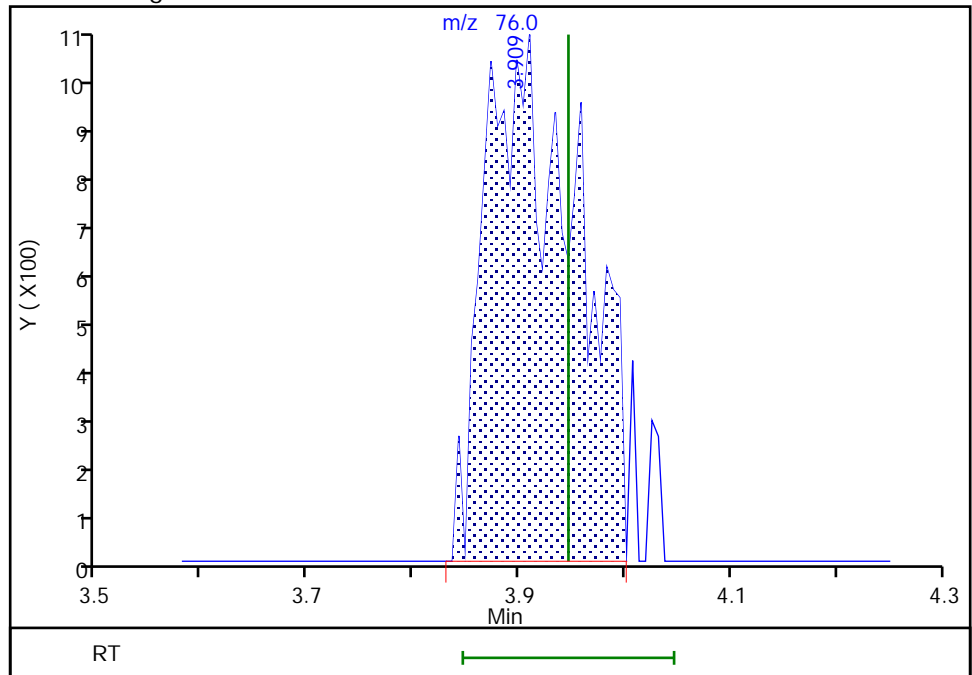
RT: 3.91
Area: 1045
Amount: 0.008198
Amount Units: ug/l

Processing Integration Results



RT: 3.91
Area: 6383
Amount: 0.050072
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 30-Apr-2021 18:04:45
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-37501-1
 SDG No.: _____
 Client Sample ID: HD-COD-SW-9-0/1-0 Lab Sample ID: 410-37501-4
 Matrix: Water Lab File ID: IA30X23.D
 Analysis Method: 8260D Date Collected: 04/26/2021 13:25
 Sample wt/vol: 25 (mL) Date Analyzed: 04/30/2021 17:41
 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.: 120935 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	ND		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	ND		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.050
124-48-1	Dibromochloromethane	ND		0.50	0.070
100-41-4	Ethylbenzene	ND		0.50	0.060
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.050
75-09-2	Methylene Chloride	ND		0.50	0.070
100-42-5	Styrene	ND		0.50	0.050
127-18-4	Tetrachloroethene	0.090	J	0.50	0.060
108-88-3	Toluene	0.088	J	0.50	0.070
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	0.063	J	0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-37501-1
 SDG No.: _____
 Client Sample ID: HD-COD-SW-9-0/1-0 Lab Sample ID: 410-37501-4
 Matrix: Water Lab File ID: IA30X23.D
 Analysis Method: 8260D Date Collected: 04/26/2021 13:25
 Sample wt/vol: 25 (mL) Date Analyzed: 04/30/2021 17:41
 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.: 120935 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
460-00-4	4-Bromofluorobenzene (Surr)	94		80-120
1868-53-7	Dibromofluoromethane (Surr)	99		80-120
2037-26-5	Toluene-d8 (Surr)	100		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210430-28080.b\IA30X23.D
 Lims ID: 410-37501-A-4
 Client ID: HD-COD-SW-9-0/1-0
 Sample Type: Client
 Inject. Date: 30-Apr-2021 17:41:30 ALS Bottle#: 24 Worklist Smp#: 24
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0028080-024
 Operator ID: SRK36897 Instrument ID: 19930
 Method: \\chromfs\Lancaster\ChromData\19930\20210430-28080.b\8260 25ml HP31.m
 Limit Group: MSV - 8260C_D
 Last Update: 30-Apr-2021 18:56:38 Calib Date: 26-Mar-2021 01:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25107.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1630

First Level Reviewer: campbellme Date: 30-Apr-2021 18:55:17

Compound	Sig	RT (min.)	Exp RT (min.)	Diff RT (min.)	Q	Response	OnCol Amt ug/l	Flags
4 Chloromethane	50	2.172	2.178	-0.006	85	3125	0.0498	
5 Vinyl chloride	62		2.288				ND	
7 Bromomethane	94		2.642				ND	
8 Chloroethane	64		2.745				ND	
14 1,1-Dichloroethene	96		3.611				ND	
15 Acetone	43	3.611	3.623	-0.012	98	26287	2.70	
19 Carbon disulfide	76	3.885	3.946	-0.061	51	4820	0.0379	M
23 Methylene Chloride	84		4.269				ND	
* 24 t-Butyl alcohol-d10 (IS)	65	4.269	4.275	-0.006	0	150352	50.0	
27 Methyl tert-butyl ether	73		4.678				ND	
28 trans-1,2-Dichloroethene	96		4.690				ND	
31 1,1-Dichloroethane	63		5.336				ND	
36 2-Butanone (MEK)	43		6.129				ND	7
37 cis-1,2-Dichloroethene	96	6.165	6.165	0.000	0	2513	0.0445	
43 Chlorobromomethane	128		6.495				ND	
45 Chloroform	83	6.635	6.641	-0.006	92	7966	0.0884	
\$ 46 Dibromofluoromethane (Surr)	113	6.854	6.854	0.000	93	412792	9.94	
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	7.311	-0.006	0	84196	10.4	
54 Benzene	78		7.342				ND	
56 1,2-Dichloroethane	62		7.409				ND	
* 58 Fluorobenzene (IS)	96	7.738	7.738	0.000	98	1652350	10.0	
61 Trichloroethene	95	8.220	8.220	0.000	88	3491	0.0631	
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		9.598				ND	7
\$ 75 Toluene-d8 (Surr)	98	9.738	9.738	0.000	94	1652353	9.98	
76 Toluene	92	9.811	9.817	-0.006	97	11956	0.0878	
78 trans-1,3-Dichloropropene	75		10.067				ND	
80 1,1,2-Trichloroethane	97		10.274				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
81 Tetrachloroethene	166	10.359	10.366	-0.007	95	5840	0.0901	
83 2-Hexanone	43		10.482				ND	
85 Chlorodibromomethane	129		10.646				ND	
86 Ethylene Dibromide	107		10.762				ND	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.189	0.000	86	1264627	10.0	
90 Chlorobenzene	112		11.213				ND	7
S 89 Xylenes, Total	106		11.245				ND	7
91 1,1,1,2-Tetrachloroethane	131		11.292				ND	
92 Ethylbenzene	91		11.298				ND	7
93 m-Xylene & p-Xylene	106	11.408	11.414	-0.006	99	4754	0.0455	
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	12.182	12.182	0.000	91	590023	9.38	
101 1,1,2,2-Tetrachloroethane	83		12.280				ND	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	95	628930	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

Reagents:

MSV_31_826ISS_00004

Amount Added: 5.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19930\20210430-28080.b\IA30X23.D

Injection Date: 30-Apr-2021 17:41:30

Instrument ID: 19930

Operator ID: SRK36897

Lims ID: 410-37501-A-4

Lab Sample ID: 410-37501-4

Worklist Smp#: 24

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

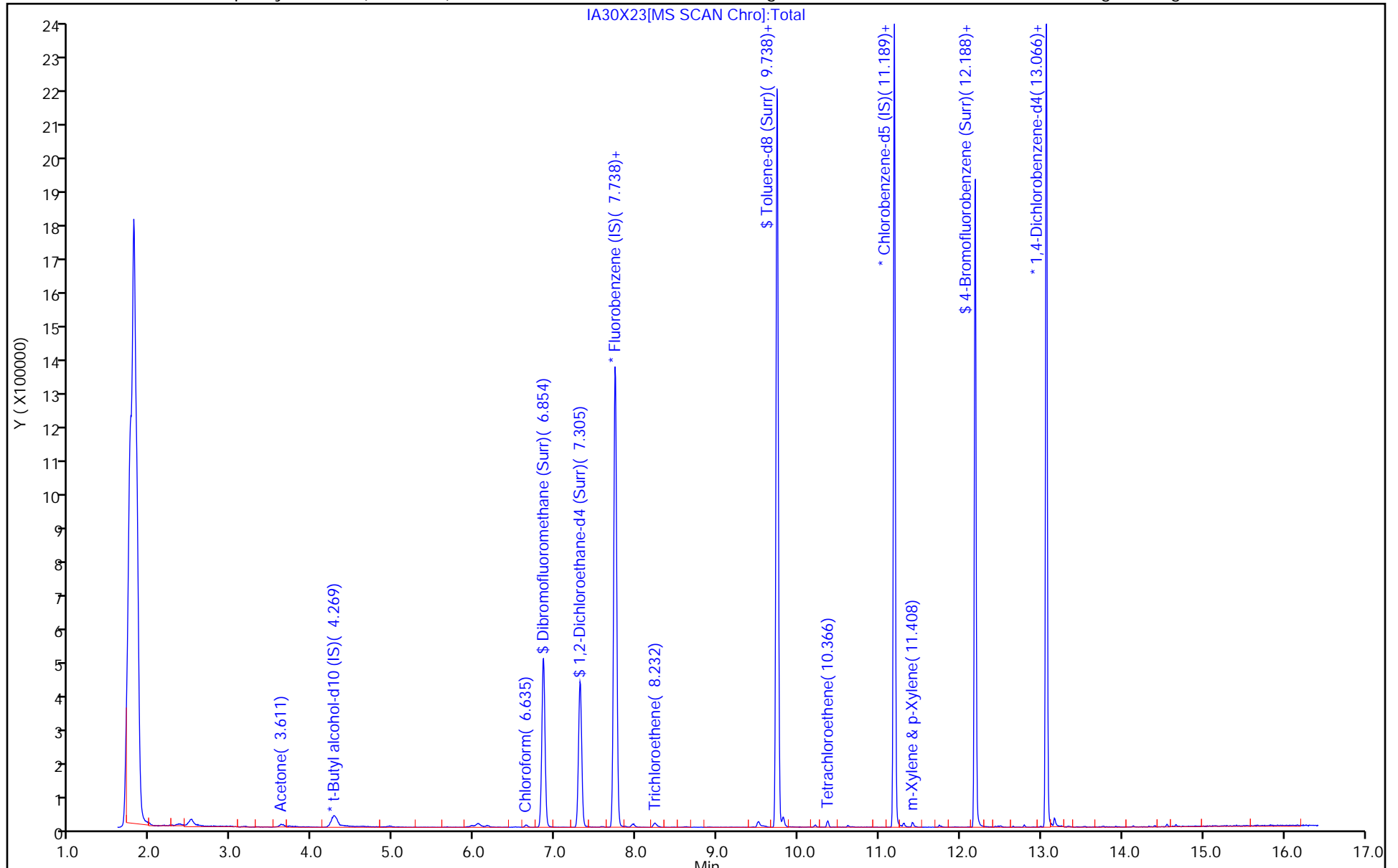
ALS Bottle#: 24

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\20210430-28080.b\IA30X23.D
 Lims ID: 410-37501-A-4
 Client ID: HD-COD-SW-9-0/1-0
 Sample Type: Client
 Inject. Date: 30-Apr-2021 17:41:30 ALS Bottle#: 24 Worklist Smp#: 24
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0028080-024
 Operator ID: SRK36897 Instrument ID: 19930
 Method: \\chromfs\Lancaster\ChromData\19930\20210430-28080.b\8260 25ml HP31.m
 Limit Group: MSV - 8260C_D
 Last Update: 30-Apr-2021 18:56:38 Calib Date: 26-Mar-2021 01:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I07.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1630

First Level Reviewer: campbellme Date: 30-Apr-2021 18:55:17

Compound	Amount Added	Amount Recovered	% Rec.
\$ 46 Dibromofluoromethane (Surr)	10.0	9.94	99.35
\$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	10.4	103.54
\$ 75 Toluene-d8 (Surr)	10.0	9.98	99.84
\$ 100 4-Bromofluorobenzene (Surr)	10.0	9.38	93.83

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210430-28080.b\IA30X23.D

Injection Date: 30-Apr-2021 17:41:30

Instrument ID: 19930

Lims ID: 410-37501-A-4

Lab Sample ID: 410-37501-4

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

Operator ID: SRK36897

ALS Bottle#: 24

Worklist Smp#: 24

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

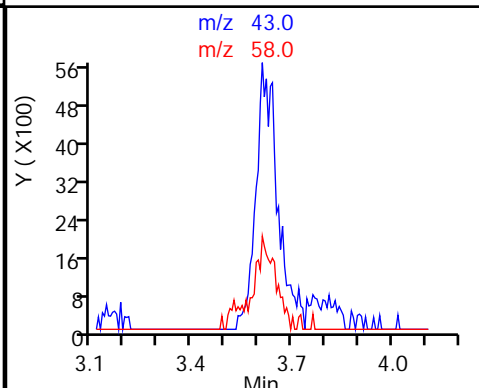
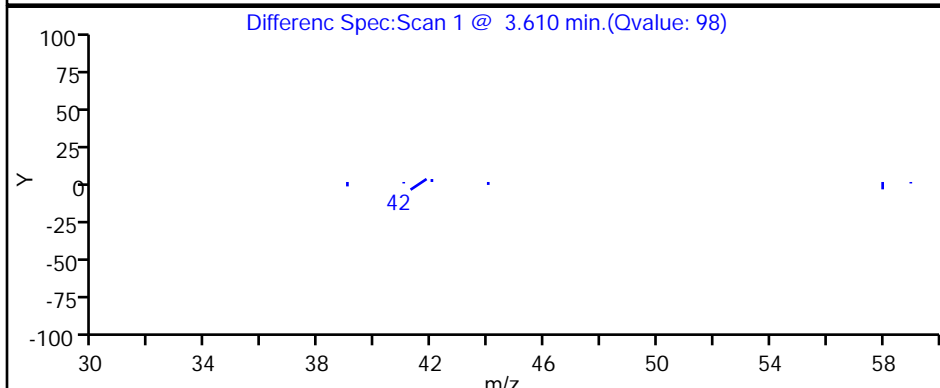
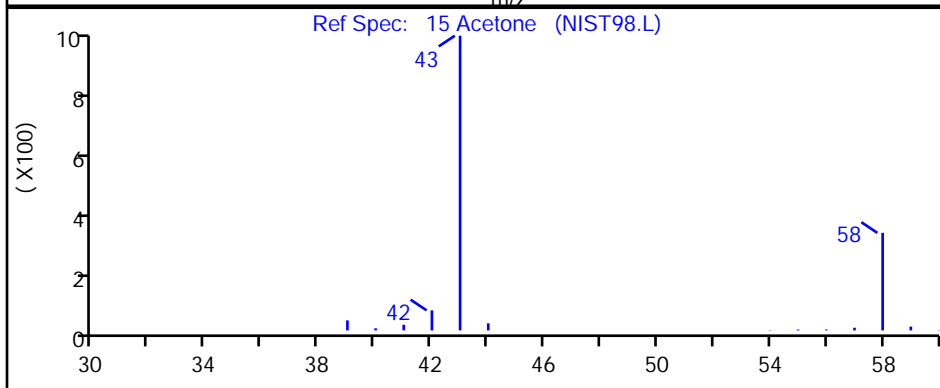
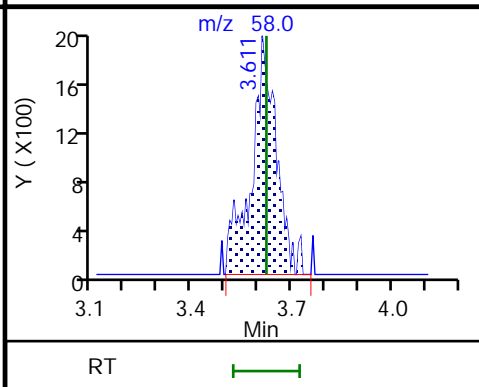
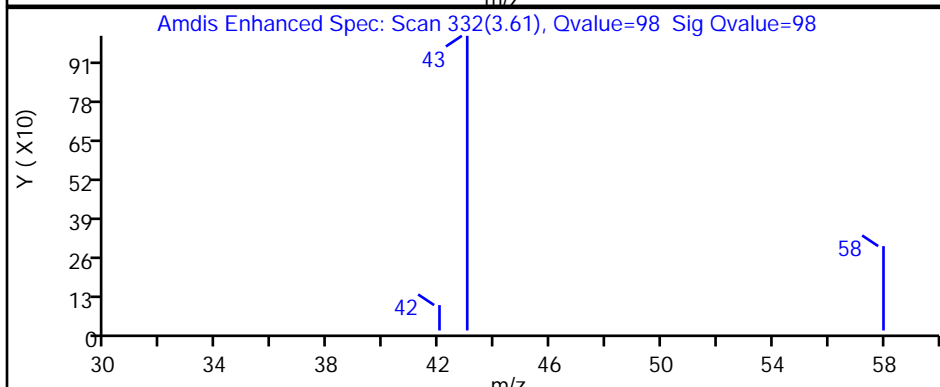
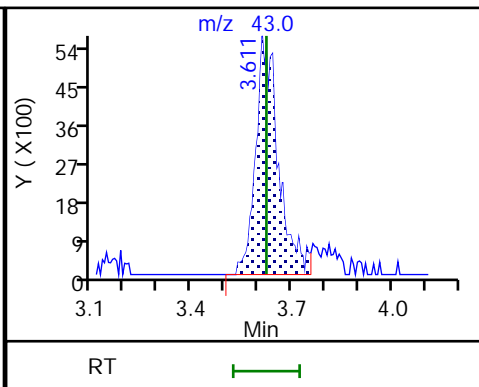
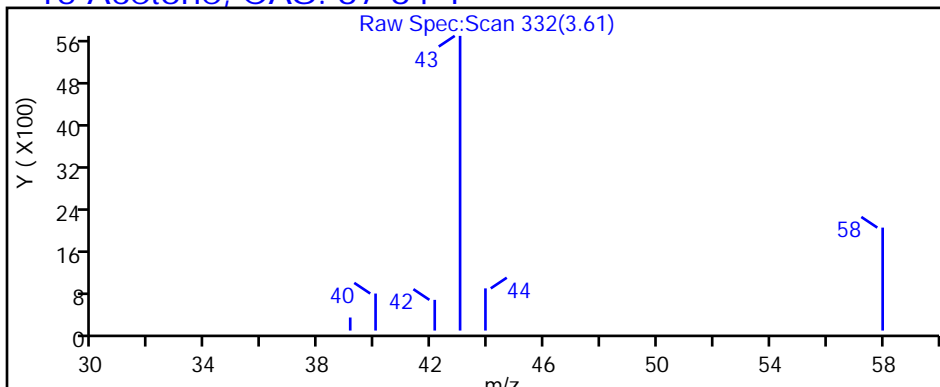
Method: 8260 25ml HP31

Limit Group: MSV - 8260C_D

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

MS Quad

15 Acetone, CAS: 67-64-1



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210430-28080.b\IA30X23.D

Injection Date: 30-Apr-2021 17:41:30

Instrument ID: 19930

Lims ID: 410-37501-A-4

Lab Sample ID: 410-37501-4

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

Operator ID: SRK36897

ALS Bottle#: 24

Worklist Smp#: 24

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

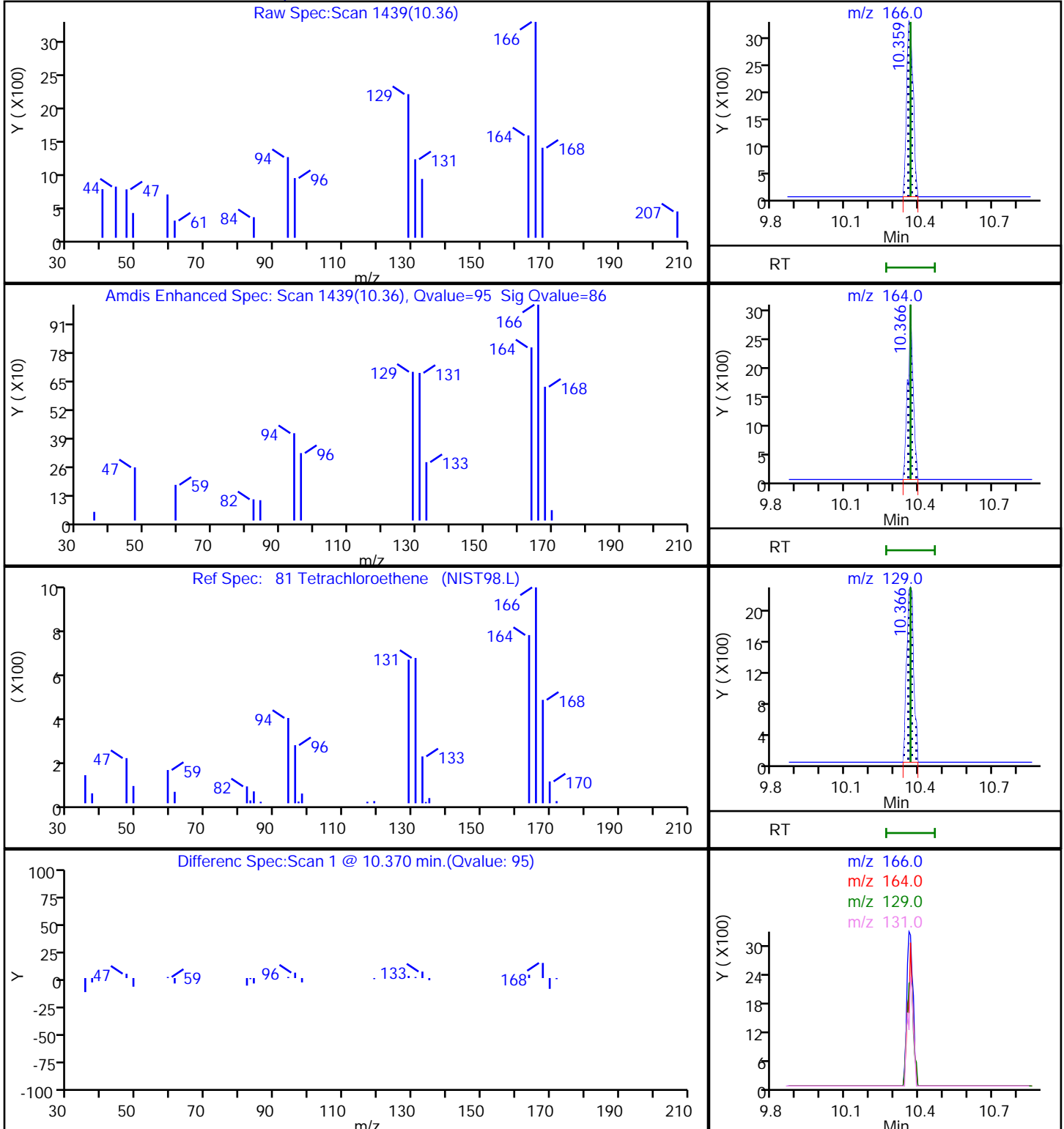
Method: 8260 25ml HP31

Limit Group: MSV - 8260C_D

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

MS Quad

81 Tetrachloroethene, CAS: 127-18-4



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210430-28080.b\IA30X23.D

Injection Date: 30-Apr-2021 17:41:30

Instrument ID: 19930

Lims ID: 410-37501-A-4

Lab Sample ID: 410-37501-4

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

Operator ID: SRK36897

ALS Bottle#: 24

Worklist Smp#: 24

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

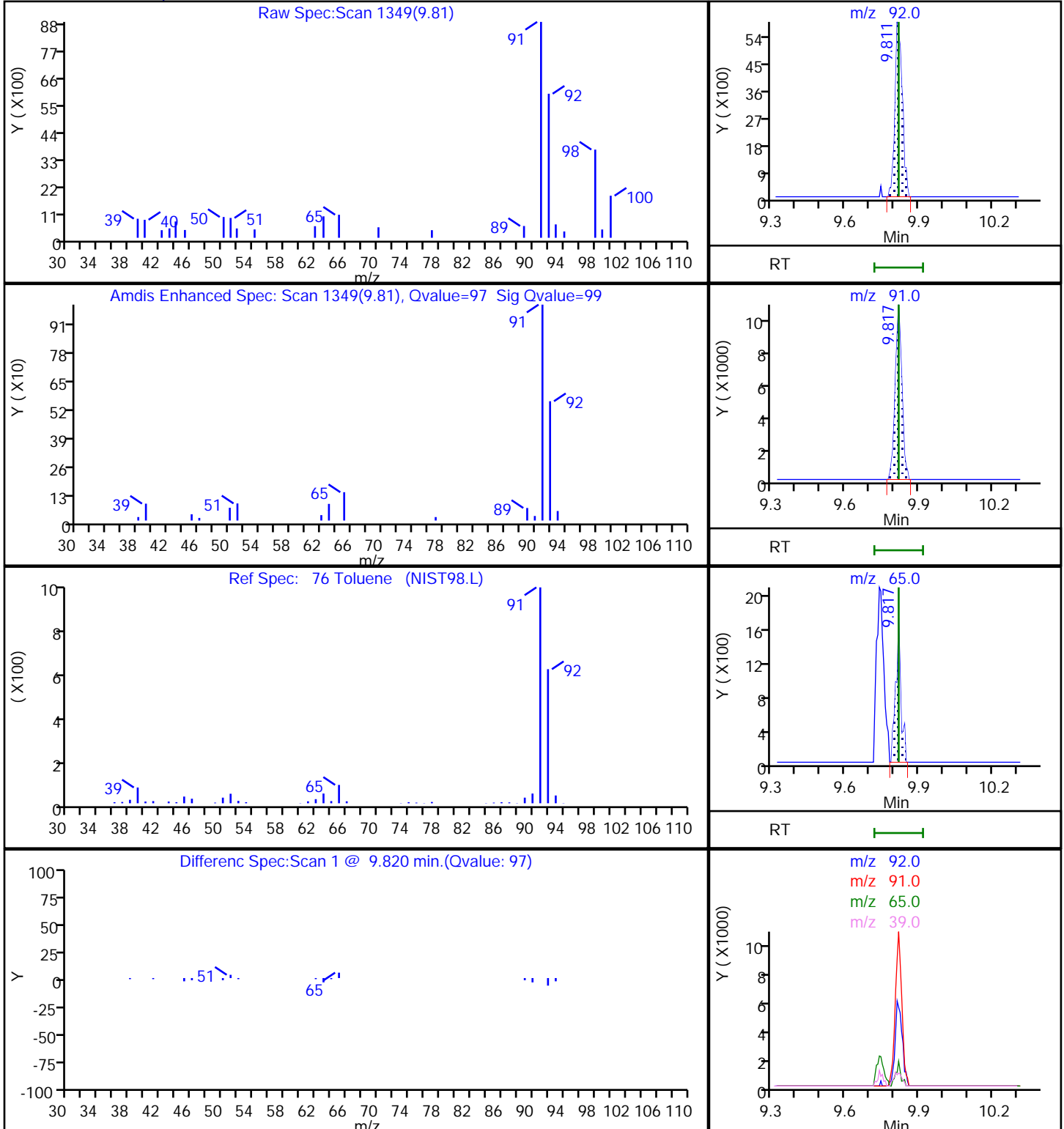
Method: 8260 25ml HP31

Limit Group: MSV - 8260C_D

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

MS Quad

76 Toluene, CAS: 108-88-3



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210430-28080.b\IA30X23.D

Injection Date: 30-Apr-2021 17:41:30

Instrument ID: 19930

Lims ID: 410-37501-A-4

Lab Sample ID: 410-37501-4

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

Operator ID: SRK36897

ALS Bottle#: 24

Worklist Smp#: 24

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

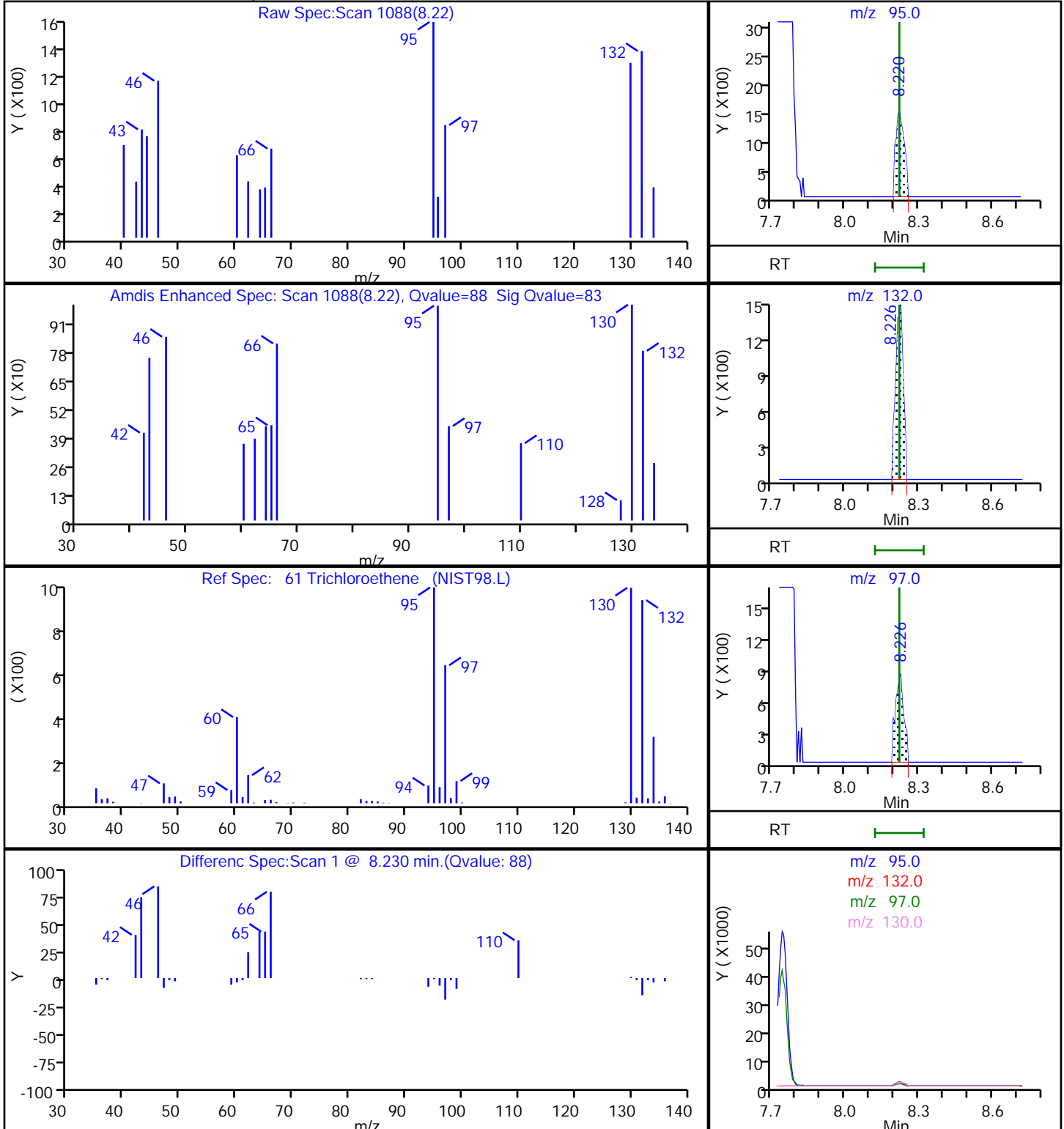
Method: 8260 25ml HP31

Limit Group: MSV - 8260C_D

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

MS Quad

61 Trichloroethene, CAS: 79-01-6



Eurofins Lancaster Laboratories Env, LLC

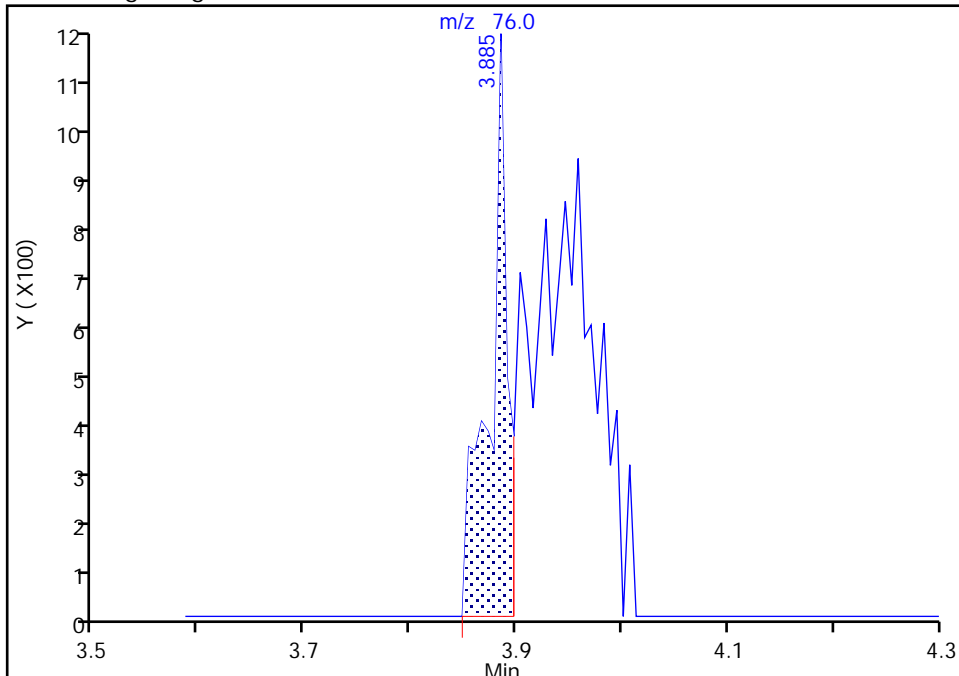
Data File: \\chromfs\Lancaster\ChromData\19930\20210430-28080.b\IA30X23.D
Injection Date: 30-Apr-2021 17:41:30 Instrument ID: 19930
Lims ID: 410-37501-A-4 Lab Sample ID: 410-37501-4
Client ID: HD-COD-SW-9-0/1-0
Operator ID: SRK36897 ALS Bottle#: 24 Worklist Smp#: 24
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

19 Carbon disulfide, CAS: 75-15-0

Signal: 1

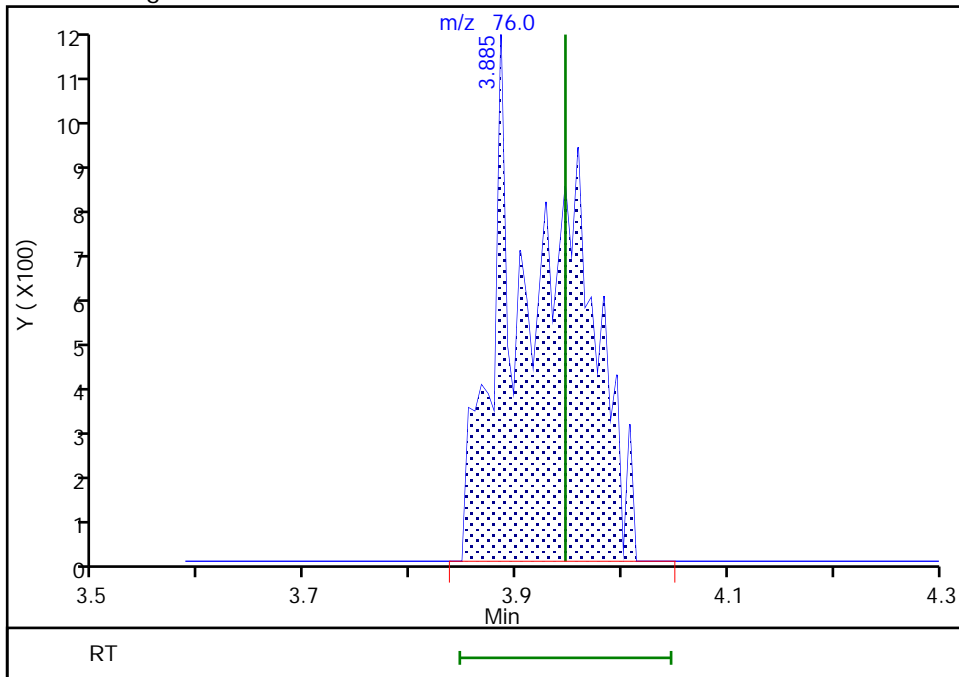
RT: 3.89
Area: 1333
Amount: 0.010493
Amount Units: ug/l

Processing Integration Results



RT: 3.89
Area: 4820
Amount: 0.037941
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 30-Apr-2021 18:55:06
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-37501-1
 SDG No.: _____
 Client Sample ID: HD-COD-SW-13-0/1-0 Lab Sample ID: 410-37501-5
 Matrix: Water Lab File ID: IA30X24.D
 Analysis Method: 8260D Date Collected: 04/26/2021 10:05
 Sample wt/vol: 25 (mL) Date Analyzed: 04/30/2021 18:02
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: R-624SilMS 30m ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 120935 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	0.97	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	0.075	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	0.071	J	0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-37501-1
 SDG No.: _____
 Client Sample ID: HD-COD-SW-13-0/1-0 Lab Sample ID: 410-37501-5
 Matrix: Water Lab File ID: IA30X24.D
 Analysis Method: 8260D Date Collected: 04/26/2021 10:05
 Sample wt/vol: 25 (mL) Date Analyzed: 04/30/2021 18:02
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: R-624SilMS 30m ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 120935 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
460-00-4	4-Bromofluorobenzene (Surr)	94		80-120
1868-53-7	Dibromofluoromethane (Surr)	98		80-120
2037-26-5	Toluene-d8 (Surr)	101		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210430-28080.b\IA30X24.D
 Lims ID: 410-37501-A-5
 Client ID: HD-COD-SW-13-0/1-0
 Sample Type: Client
 Inject. Date: 30-Apr-2021 18:02:30 ALS Bottle#: 25 Worklist Smp#: 25
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0028080-025
 Operator ID: SRK36897 Instrument ID: 19930
 Method: \\chromfs\Lancaster\ChromData\19930\20210430-28080.b\8260 25ml HP31.m
 Limit Group: MSV - 8260C_D
 Last Update: 30-Apr-2021 18:56:38 Calib Date: 26-Mar-2021 01:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25107.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1630

First Level Reviewer: campbellme Date: 30-Apr-2021 18:55:45

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
4 Chloromethane	50	2.160	2.178	-0.018	85	3046	0.0486	
5 Vinyl chloride	62		2.288				ND	
7 Bromomethane	94		2.642				ND	
8 Chloroethane	64		2.745				ND	
14 1,1-Dichloroethene	96		3.611				ND	
15 Acetone	43	3.629	3.623	0.006	67	9482	0.9736	
19 Carbon disulfide	76	3.879	3.946	-0.067	48	5937	0.0467	M
23 Methylene Chloride	84		4.269				ND	
* 24 t-Butyl alcohol-d10 (IS)	65	4.275	4.275	0.000	0	150312	50.0	
27 Methyl tert-butyl ether	73		4.678				ND	
28 trans-1,2-Dichloroethene	96		4.690				ND	
31 1,1-Dichloroethane	63		5.336				ND	
36 2-Butanone (MEK)	43		6.129				ND	7
37 cis-1,2-Dichloroethene	96	6.165	6.165	0.000	76	4261	0.0754	
43 Chlorobromomethane	128		6.495				ND	
45 Chloroform	83	6.641	6.641	0.000	67	2361	0.0262	a
\$ 46 Dibromofluoromethane (Surr)	113	6.854	6.854	0.000	94	409327	9.85	
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	7.311	-0.006	0	84355	10.4	
54 Benzene	78		7.342				ND	7
56 1,2-Dichloroethane	62		7.409				ND	
* 58 Fluorobenzene (IS)	96	7.738	7.738	0.000	99	1652701	10.0	
61 Trichloroethene	95	8.220	8.220	0.000	86	3918	0.0708	
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		9.598				ND	7
\$ 75 Toluene-d8 (Surr)	98	9.738	9.738	0.000	94	1646778	10.1	
76 Toluene	92	9.817	9.817	0.000	98	6739	0.0502	
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	10.360	10.366	-0.006	86	3598	0.0563	
83 2-Hexanone	43		10.482				ND	
85 Chlorodibromomethane	129		10.646				ND	
86 Ethylene Dibromide	107		10.762				ND	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.189	0.000	87	1247453	10.0	
90 Chlorobenzene	112		11.213				ND	
S 89 Xylenes, Total	106		11.245				ND	7
91 1,1,1,2-Tetrachloroethane	131		11.292				ND	
92 Ethylbenzene	91		11.298				ND	7
93 m-Xylene & p-Xylene	106		11.414				ND	7
94 o-Xylene	106		11.743				ND	
95 Styrene	104		11.756				ND	
96 Bromoform	173		11.914				ND	
\$ 100 4-Bromofluorobenzene (Surr)	95	12.188	12.182	0.006	91	583001	9.40	
101 1,1,2,2-Tetrachloroethane	83		12.280				ND	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	95	627710	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_00004

Amount Added: 5.00

Units: uL

Run Reagent

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210430-28080.b\IA30X24.D

Injection Date: 30-Apr-2021 18:02:30

Instrument ID: 19930

Operator ID: SRK36897

Lims ID: 410-37501-A-5

Lab Sample ID: 410-37501-5

Worklist Smp#: 25

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

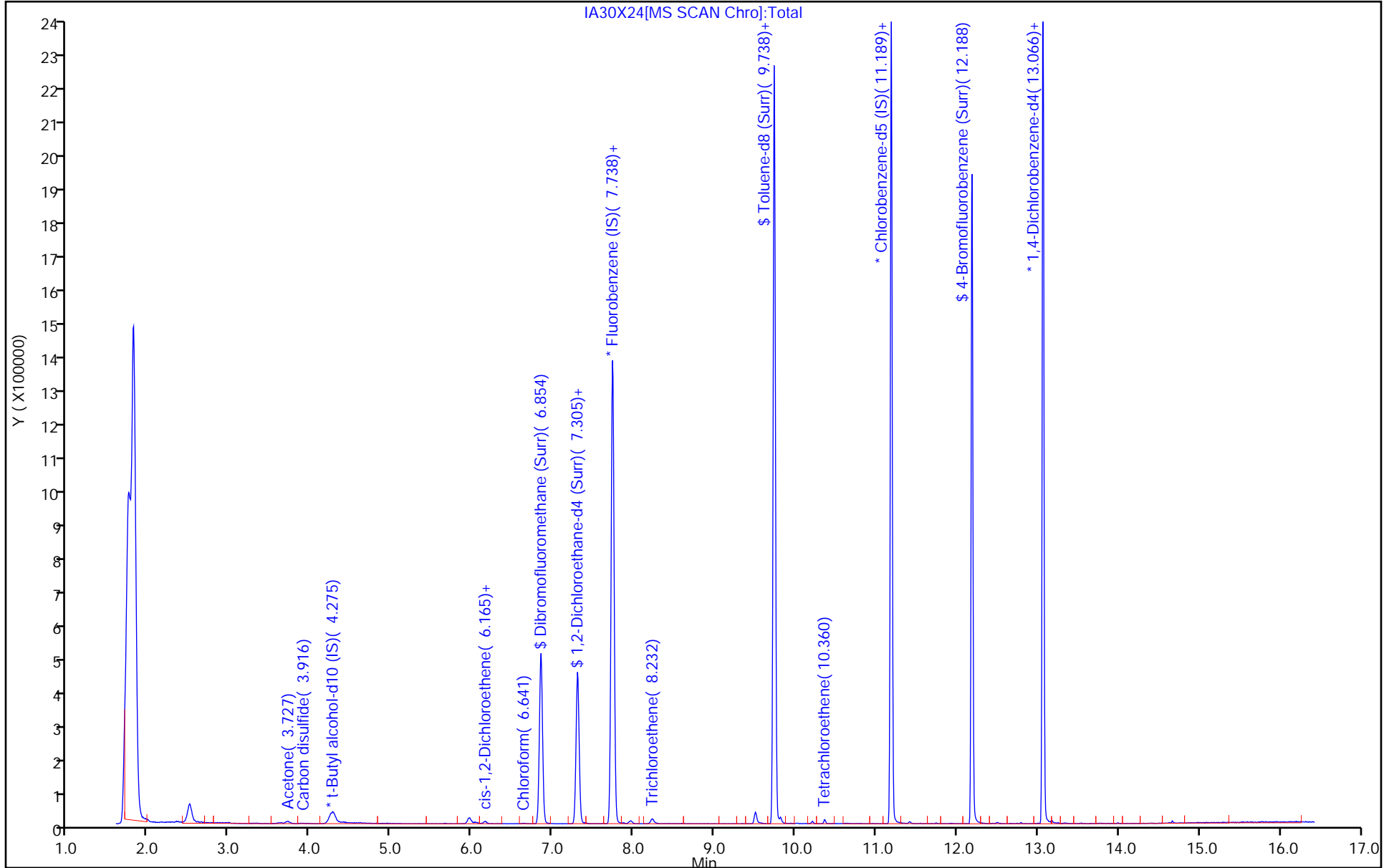
ALS Bottle#: 25

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\20210430-28080.b\A30X24.D
 Lims ID: 410-37501-A-5
 Client ID: HD-COD-SW-13-0/1-0
 Sample Type: Client
 Inject. Date: 30-Apr-2021 18:02:30 ALS Bottle#: 25 Worklist Smp#: 25
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0028080-025
 Operator ID: SRK36897 Instrument ID: 19930
 Method: \\chromfs\Lancaster\ChromData\19930\20210430-28080.b\8260 25ml HP31.m
 Limit Group: MSV - 8260C_D
 Last Update: 30-Apr-2021 18:56:38 Calib Date: 26-Mar-2021 01:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I07.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1630

First Level Reviewer: campbellme Date: 30-Apr-2021 18:55:45

Compound	Amount Added	Amount Recovered	% Rec.
\$ 46 Dibromofluoromethane (Surr)	10.0	9.85	98.50
\$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	10.4	103.71
\$ 75 Toluene-d8 (Surr)	10.0	10.1	100.87
\$ 100 4-Bromofluorobenzene (Surr)	10.0	9.40	93.99

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210430-28080.b\IA30X24.D

Injection Date: 30-Apr-2021 18:02:30

Instrument ID: 19930

Lims ID: 410-37501-A-5

Lab Sample ID: 410-37501-5

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

Operator ID: SRK36897

ALS Bottle#: 25

Worklist Smp#: 25

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

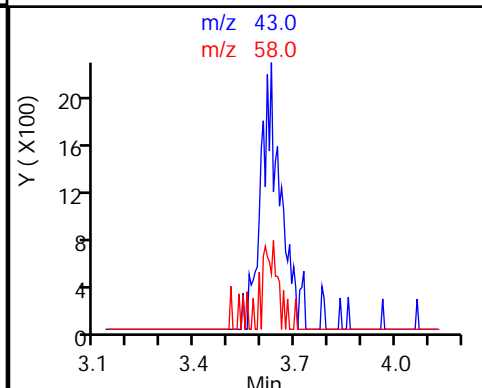
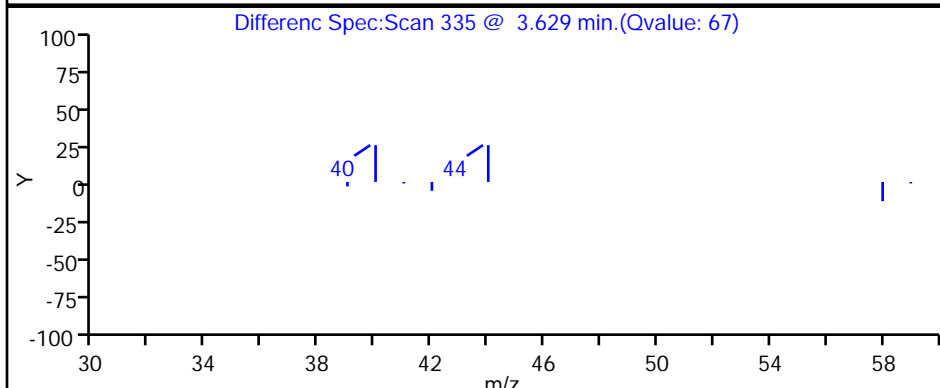
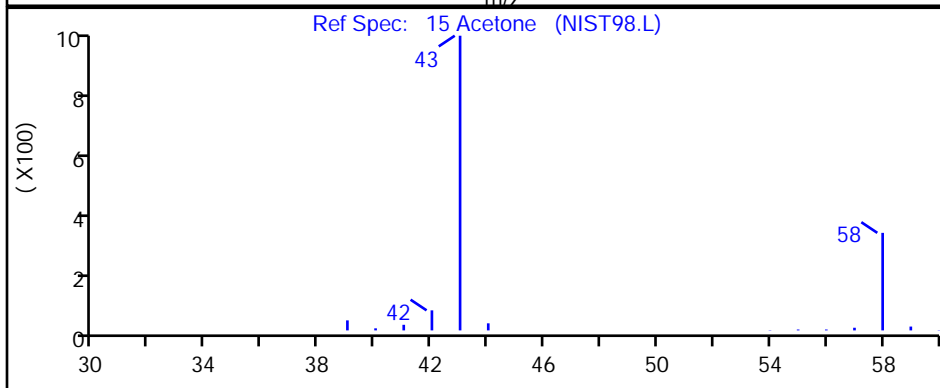
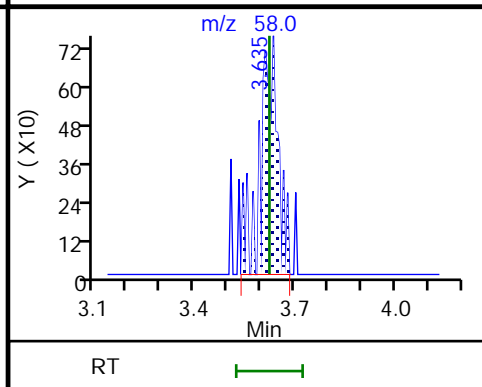
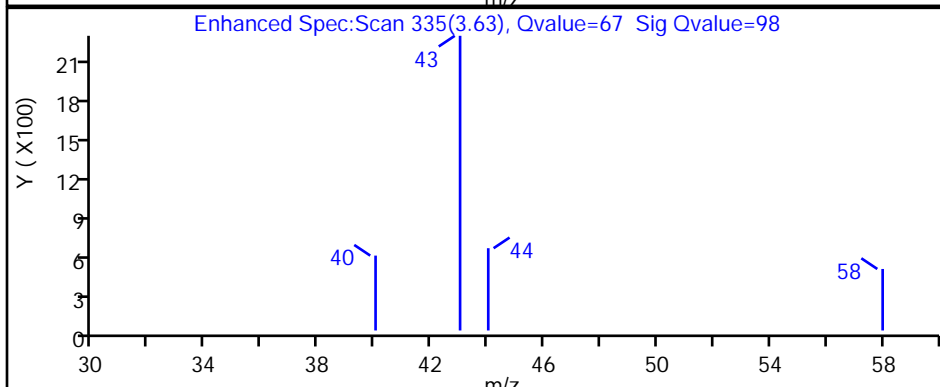
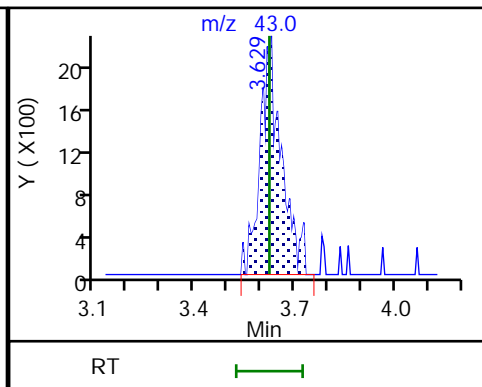
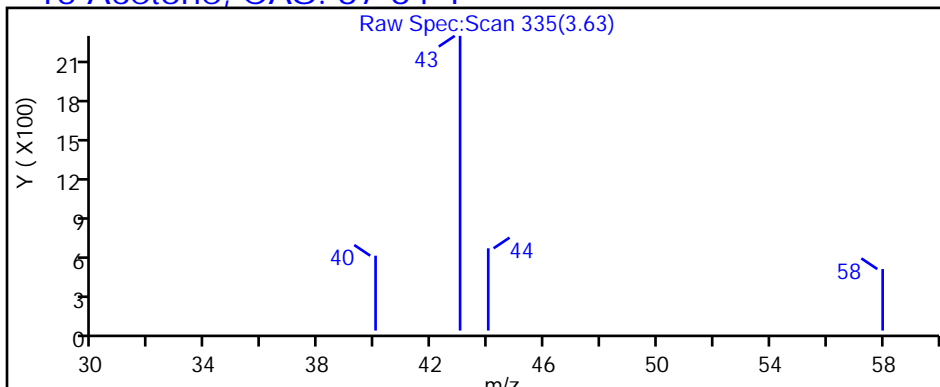
Method: 8260 25ml HP31

Limit Group: MSV - 8260C_D

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

MS Quad

15 Acetone, CAS: 67-64-1



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210430-28080.b\IA30X24.D

Injection Date: 30-Apr-2021 18:02:30

Instrument ID: 19930

Lims ID: 410-37501-A-5

Lab Sample ID: 410-37501-5

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

Operator ID: SRK36897

ALS Bottle#: 25

Worklist Smp#: 25

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

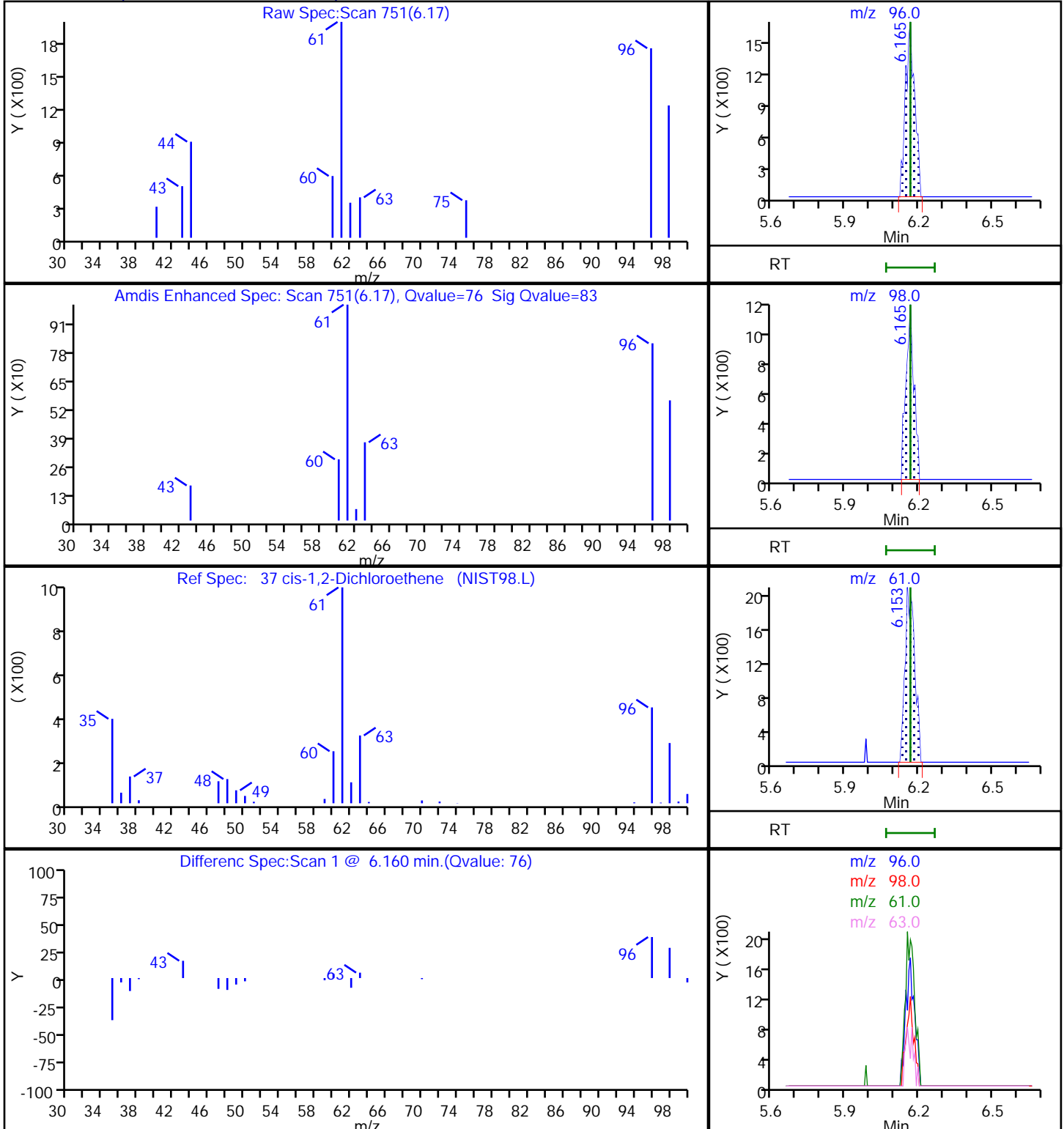
Method: 8260 25ml HP31

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) x 30m

MS Quad

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



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210430-28080.b\IA30X24.D

Injection Date: 30-Apr-2021 18:02:30

Instrument ID: 19930

Lims ID: 410-37501-A-5

Lab Sample ID: 410-37501-5

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

Operator ID: SRK36897

ALS Bottle#: 25

Worklist Smp#: 25

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

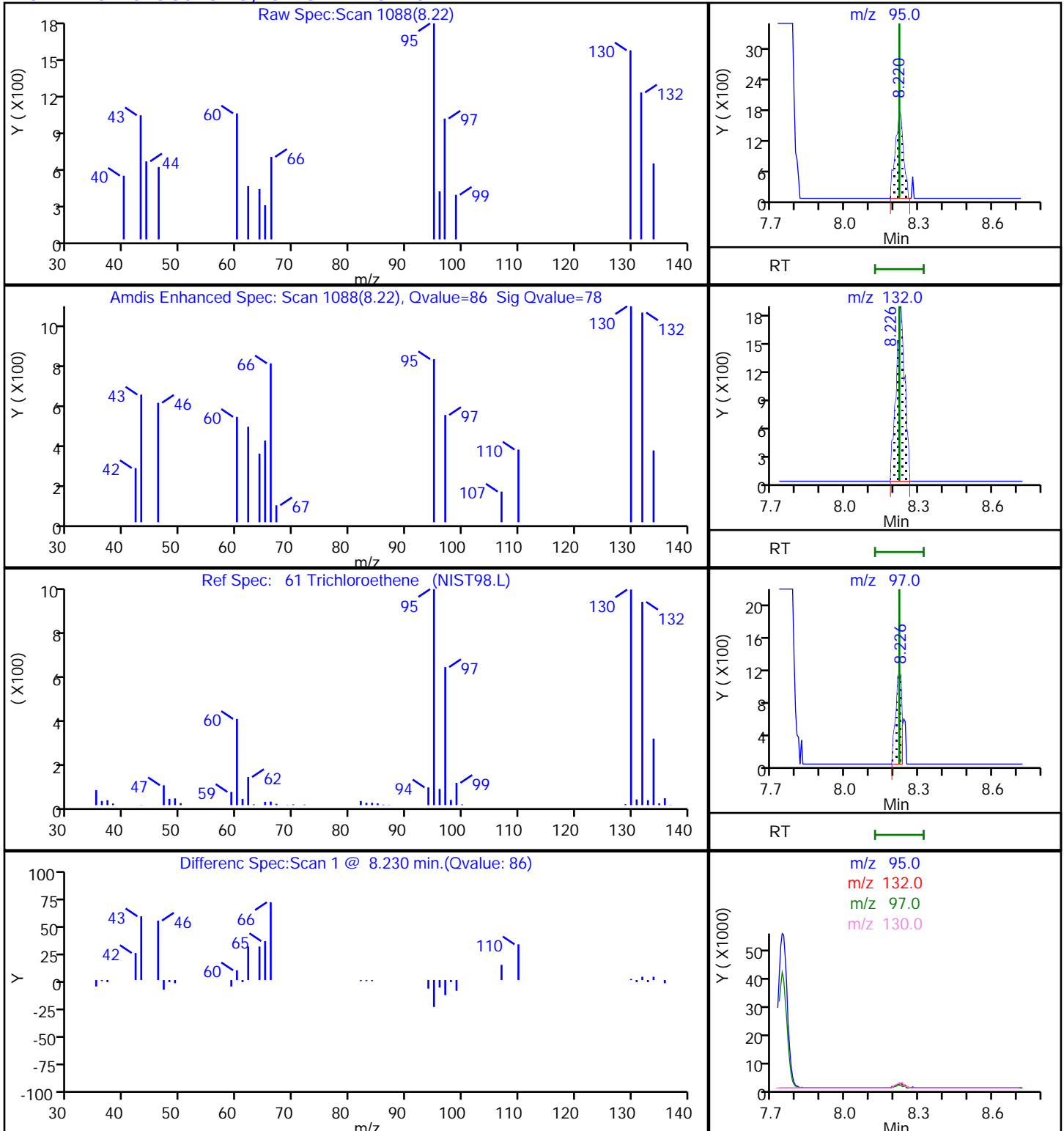
Method: 8260 25ml HP31

Limit Group: MSV - 8260C_D

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

MS Quad

61 Trichloroethene, CAS: 79-01-6



Eurofins Lancaster Laboratories Env, LLC

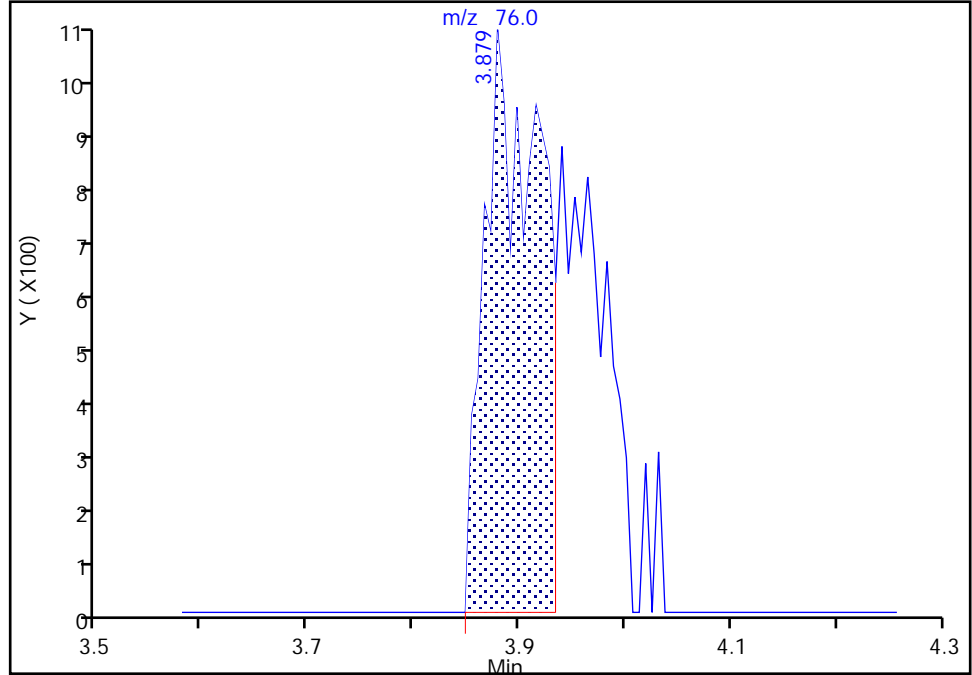
Data File: \\chromfs\Lancaster\ChromData\19930\20210430-28080.b\IA30X24.D
Injection Date: 30-Apr-2021 18:02:30 Instrument ID: 19930
Lims ID: 410-37501-A-5 Lab Sample ID: 410-37501-5
Client ID: HD-COD-SW-13-0/1-0
Operator ID: SRK36897 ALS Bottle#: 25 Worklist Smp#: 25
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

19 Carbon disulfide, CAS: 75-15-0

Signal: 1

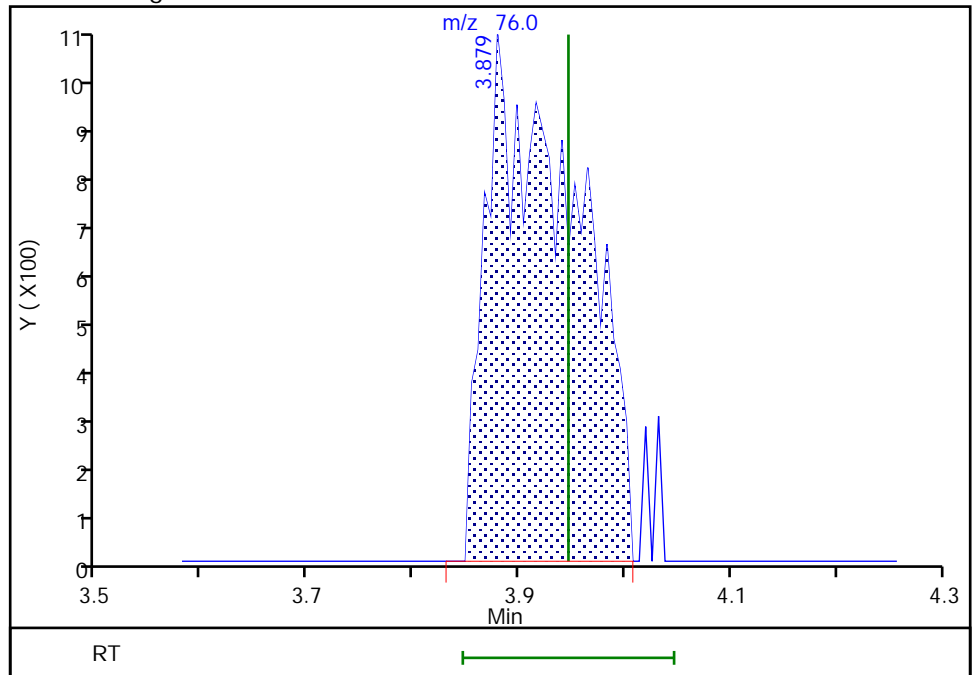
RT: 3.88
Area: 3651
Amount: 0.028733
Amount Units: ug/l

Processing Integration Results



RT: 3.88
Area: 5937
Amount: 0.046723
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 30-Apr-2021 18:55:28
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

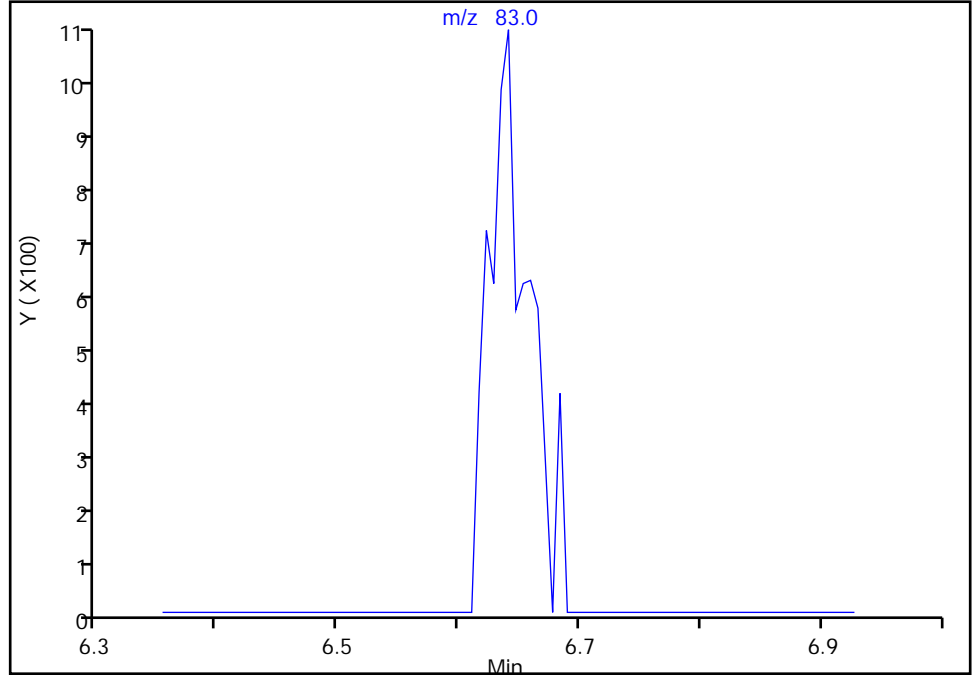
Data File: \\chromfs\Lancaster\ChromData\19930\20210430-28080.b\IA30X24.D
Injection Date: 30-Apr-2021 18:02:30 Instrument ID: 19930
Lims ID: 410-37501-A-5 Lab Sample ID: 410-37501-5
Client ID: HD-COD-SW-13-0/1-0
Operator ID: SRK36897 ALS Bottle#: 25 Worklist Smp#: 25
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

45 Chloroform, CAS: 67-66-3

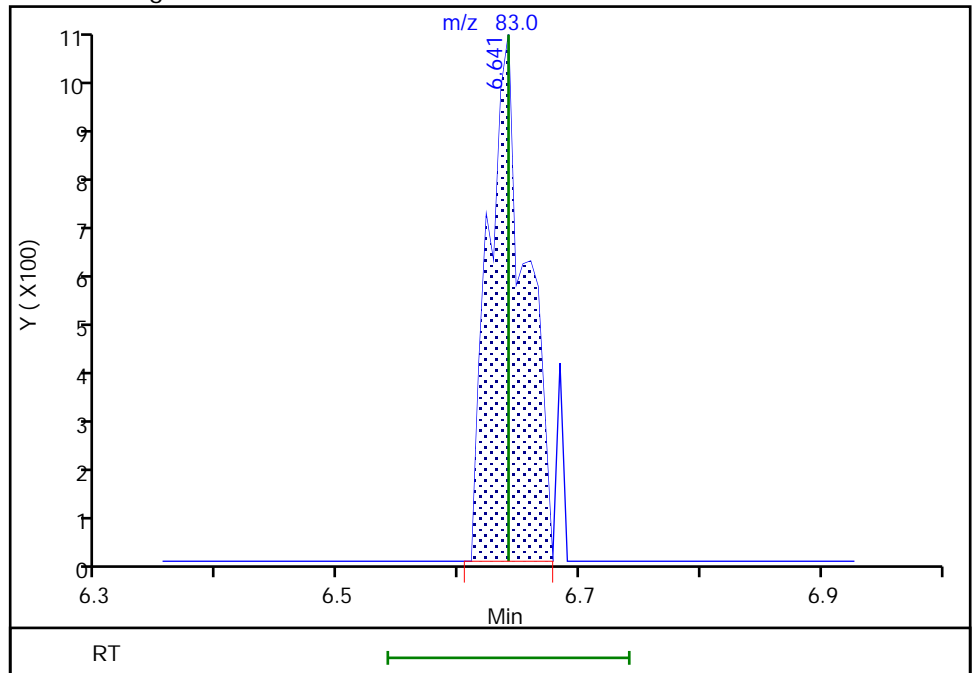
Signal: 1

Not Detected
Expected RT: 6.64

Processing Integration Results



Manual Integration Results



RT: 6.64
Area: 2361
Amount: 0.026209
Amount Units: ug/l

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-37501-1
 SDG No.: _____
 Client Sample ID: HD-COD-SW-15-0/1-0 Lab Sample ID: 410-37501-6
 Matrix: Water Lab File ID: IA30X13.D
 Analysis Method: 8260D Date Collected: 04/26/2021 12:05
 Sample wt/vol: 25 (mL) Date Analyzed: 04/30/2021 14:08
 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.: 120935 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	0.12	J	0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.070
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.060
75-34-3	1,1-Dichloroethane	ND		0.50	0.070
75-35-4	1,1-Dichloroethene	0.087	J	0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.060
107-06-2	1,2-Dichloroethane	ND		0.50	0.050
78-87-5	1,2-Dichloropropane	ND		0.50	0.060
78-93-3	2-Butanone (MEK)	ND		5.0	0.60
591-78-6	2-Hexanone	ND		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70
67-64-1	Acetone	ND		5.0	0.90
71-43-2	Benzene	ND		0.50	0.050
74-97-5	Bromochloromethane	ND		0.50	0.050
75-27-4	Bromodichloromethane	ND		0.50	0.050
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.070
75-15-0	Carbon disulfide	ND		1.0	0.060
56-23-5	Carbon tetrachloride	ND		0.50	0.070
108-90-7	Chlorobenzene	ND		0.50	0.060
75-00-3	Chloroethane	ND		0.50	0.070
67-66-3	Chloroform	0.27	J	0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	0.69		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.050
124-48-1	Dibromochloromethane	ND		0.50	0.070
100-41-4	Ethylbenzene	ND		0.50	0.060
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.050
75-09-2	Methylene Chloride	ND		0.50	0.070
100-42-5	Styrene	ND		0.50	0.050
127-18-4	Tetrachloroethene	2.4		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	0.86		0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-37501-1
 SDG No.: _____
 Client Sample ID: HD-COD-SW-15-0/1-0 Lab Sample ID: 410-37501-6
 Matrix: Water Lab File ID: IA30X13.D
 Analysis Method: 8260D Date Collected: 04/26/2021 12:05
 Sample wt/vol: 25 (mL) Date Analyzed: 04/30/2021 14:08
 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.: 120935 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
460-00-4	4-Bromofluorobenzene (Surr)	94		80-120
1868-53-7	Dibromofluoromethane (Surr)	99		80-120
2037-26-5	Toluene-d8 (Surr)	100		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210430-28080.b\IA30X13.D
 Lims ID: 410-37501-A-6
 Client ID: HD-COD-SW-15-0/1-0
 Sample Type: Client
 Inject. Date: 30-Apr-2021 14:08:30 ALS Bottle#: 14 Worklist Smp#: 14
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0028080-014
 Operator ID: SRK36897 Instrument ID: 19930
 Method: \\chromfs\Lancaster\ChromData\19930\20210430-28080.b\8260 25ml HP31.m
 Limit Group: MSV - 8260C_D
 Last Update: 30-Apr-2021 17:42:44 Calib Date: 26-Mar-2021 01:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25107.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1630

First Level Reviewer: campbellme Date: 30-Apr-2021 17:38:27

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85		1.971				ND	
2 Chlorodifluoromethane	51		1.989				ND	
3 Dimethyl ether	45		2.044				ND	
4 Chloromethane	50		2.178				ND	
5 Vinyl chloride	62		2.288				ND	
6 Butadiene	39		2.318				ND	7
7 Bromomethane	94		2.642				ND	
8 Chloroethane	64		2.745				ND	
9 Dichlorofluoromethane	67		2.983				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-trifluoroethane	67		3.391				ND	
13 Acrolein	56		3.446				ND	7
14 1,1-Dichloroethene	96	3.617	3.611	0.006	9	3782	0.0875	M
15 Acetone	43		3.623				ND	7
16 112TCTFE	101		3.648				ND	
17 Iodomethane	142		3.824				ND	
18 Ethyl bromide	108		3.830				ND	
19 Carbon disulfide	76		3.946				ND	7
20 Acetonitrile	41		3.995				ND	
21 Methyl acetate	43		4.044				ND	
22 3-Chloro-1-propene	41		4.074				ND	
23 Methylene Chloride	84		4.269				ND	
* 24 t-Butyl alcohol-d10 (IS)	65	4.263	4.275	-0.012	0	148013	50.0	M
25 2-Methyl-2-propanol	59	4.409	4.397	0.012	1	1906	0.5527	
26 Acrylonitrile	53		4.605				ND	
27 Methyl tert-butyl ether	73	4.653	4.678	-0.025	1	3760	0.0296	
28 trans-1,2-Dichloroethene	96		4.690				ND	
29 Hexane	57		5.105				ND	
30 Vinyl acetate	43		5.324				ND	
T 208 Vinyl acetate (TIC)	43		5.336				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
31 1,1-Dichloroethane	63	5.342	5.336	0.006	92	5297	0.0556	a
32 Isopropyl ether	45		5.397				ND	
33 2-Chloro-1,3-butadiene	53		5.446				ND	
34 Tert-butyl ethyl ether	59		5.928				ND	7
36 2-Butanone (MEK)	43		6.129				ND	7
S 35 1,2-Dichloroethene, Total	100				0		0.6869	
37 cis-1,2-Dichloroethene	96	6.159	6.165	-0.006	81	39075	0.6869	
38 2,2-Dichloropropane	77		6.184				ND	
39 Ethyl acetate	43		6.190				ND	U
40 Propionitrile	54		6.214				ND	
41 Methyl acrylate	55		6.245				ND	
42 Methacrylonitrile	67		6.434				ND	
43 Chlorobromomethane	128		6.495				ND	
44 Tetrahydrofuran	71		6.501				ND	
45 Chloroform	83	6.635	6.641	-0.006	94	24121	0.2659	
\$ 46 Dibromofluoromethane (Surr)	113	6.848	6.854	-0.006	93	413563	9.88	
47 1,1,1-Trichloroethane	97	6.872	6.872	0.000	35	9881	0.1197	
48 Cyclohexane	56		6.976				ND	
49 1-Chlorobutane	56		7.019				ND	
51 1,1-Dichloropropene	75		7.080				ND	
50 Carbon tetrachloride	117		7.086				ND	7
52 Isobutyl alcohol	41		7.226				ND	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.305	7.311	-0.006	0	85123	10.4	
54 Benzene	78		7.342				ND	
56 1,2-Dichloroethane	62		7.409				ND	
55 Isopropyl acetate	43		7.409				ND	
57 Tert-amyl methyl ether	73		7.531				ND	
* 58 Fluorobenzene (IS)	96	7.738	7.738	0.000	98	1664511	10.0	
59 n-Heptane	43		7.750				ND	
60 n-Butanol	56		8.092				ND	
61 Trichloroethene	95	8.214	8.220	-0.006	96	47779	0.8570	
62 Methylcyclohexane	83		8.531				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		8.708				ND	
68 Dichlorobromomethane	83		8.890				ND	
69 2-Nitropropane	41		9.159				ND	
70 Chloroacetonitrile	75		9.226				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		9.598				ND	
\$ 75 Toluene-d8 (Surr)	98	9.738	9.738	0.000	94	1655023	9.98	
76 Toluene	92	9.811	9.817	-0.006	44	3906	0.0286	
T 157 3-Chloro-1,2-propanediol TIC	44		10.000				ND	U
T 146 2,3-Dibromo-1-propanol TIC	57		10.000				ND	U
T 147 2-Bromoethanol TIC	45		10.000				ND	U
T 156 2,3-Dibromopropene TIC	119		10.000				ND	U
T 149 2-Chloroethanol TIC	44		10.000				ND	U
T 151 Chloroacetaldehyde TIC	50		10.000				ND	U

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
T 148 Monochloroacetic acid TIC	50		10.000				ND	
T 154 2-Bromo-3-chloropropene TIC	75		10.000				ND	U
T 153 Epichlorohydrin TIC	57		10.000				ND	
T 155 Ethylene oxide TIC	44		10.000				ND	
T 152 Vinyl bromide TIC	106		10.000				ND	U
T 150 Epibromohydrin TIC	57		10.000				ND	
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	10.366	0.000	98	157613	2.43	
82 1,3-Dichloropropane	76		10.433				ND	
83 2-Hexanone	43		10.482				ND	
84 n-Butyl acetate	43		10.603				ND	
85 Chlorodibromomethane	129		10.646				ND	
86 Ethylene Dibromide	107		10.762				ND	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.189	0.000	86	1266656	10.0	
88 1-Chlorohexane	91		11.195				ND	7
90 Chlorobenzene	112		11.213				ND	
S 89 Xylenes, Total	106		11.245				ND	7
91 1,1,1,2-Tetrachloroethane	131		11.292				ND	
92 Ethylbenzene	91		11.298				ND	7
93 m-Xylene & p-Xylene	106		11.414				ND	7
94 o-Xylene	106		11.743				ND	
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		12.115				ND	
\$ 100 4-Bromofluorobenzene (Surr)	95	12.188	12.182	0.006	91	590900	9.38	
101 1,1,2,2-Tetrachloroethane	83		12.280				ND	
102 Bromobenzene	156		12.304				ND	
103 trans-1,4-Dichloro-2-butene	53		12.310				ND	
104 1,2,3-Trichloropropane	110		12.329				ND	
105 N-Propylbenzene	91		12.371				ND	
106 2-Chlorotoluene	126		12.445				ND	
107 1,3,5-Trimethylbenzene	105		12.506				ND	7
108 4-Chlorotoluene	126		12.536				ND	
109 tert-Butylbenzene	134		12.743				ND	
110 Pentachloroethane	167		12.780				ND	
111 1,2,4-Trimethylbenzene	105		12.786				ND	7
112 sec-Butylbenzene	105		12.908				ND	
113 1,3-Dichlorobenzene	146		13.012				ND	7
114 4-Isopropyltoluene	119		13.018				ND	7
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	95	627127	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	
120 1,2-Dichlorobenzene	146		13.341				ND	
121 Hexachloroethane	117		13.542				ND	
122 1,2-Dibromo-3-Chloropropane	155		13.883				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
123 1,3,5-Trichlorobenzene	180		14.011				ND	
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	
135 p-Diethylbenzene	1		0.000				ND	
136 2-Chloro-1,1,1-Trifluoroethane	1		0.000				ND	
144 2-ethoxy-2-methyl butane	1		0.000				ND	
205 1,1-Dichloroacetone	1		0.000				ND	
139 1-Bromo-3-Chloropropane	1		0.000				ND	
143 n-Decane	57		0.000				ND	
204 Pentane	43		0.000				ND	
203 Propargyl alcohol TIC	1		0.000				ND	
202 1,3-Dichloro-2-propanol TIC	1		0.000				ND	
138 1,1-Dichloro-1-fluoroethane	1		0.000				ND	
137 2-Methylnaphthalene	142		0.000				ND	
131 tert-Butyl Formate	1		0.000				ND	
142 2-Bromo-1-chloropropane	1		0.000				ND	
206 Pentachloroethane TIC	1		0.000				ND	
130 Chlorotrifluoroethene	1		0.000				ND	
207 Acetonitrile TIC	1		0.000				ND	
129 Propene oxide	1		0.000				ND	
141 1-Chloropropane	1		0.000				ND	
134 Isopropyl alcohol	45		0.000				ND	
T 201 Isopropyl alcohol TIC	45	1.758	0.000	1.758	1	64867	0.3897	
133 t-Amyl alcohol	1		0.000				ND	
132 Methylal	1		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_00004

Amount Added: 5.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19930\20210430-28080.b\IA30X13.D

Injection Date: 30-Apr-2021 14:08:30

Instrument ID: 19930

Operator ID: SRK36897

Lims ID: 410-37501-A-6

Lab Sample ID: 410-37501-6

Worklist Smp#: 14

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

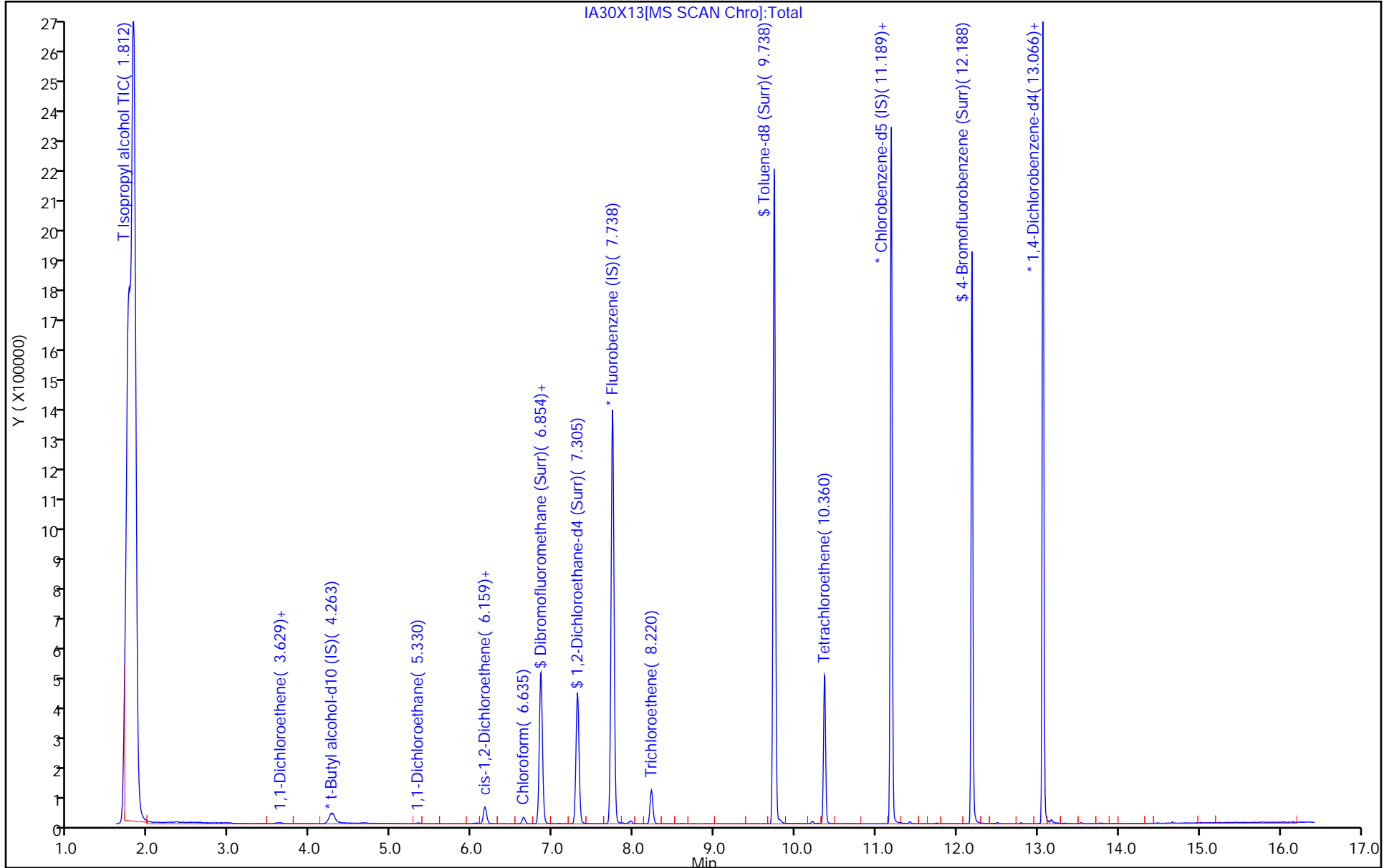
ALS Bottle#: 14

Method: 8260 25ml HP31

Limit Group: MSV - 8260C_D

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

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210430-28080.b\A30X13.D
 Lims ID: 410-37501-A-6
 Client ID: HD-COD-SW-15-0/1-0
 Sample Type: Client
 Inject. Date: 30-Apr-2021 14:08:30 ALS Bottle#: 14 Worklist Smp#: 14
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0028080-014
 Operator ID: SRK36897 Instrument ID: 19930
 Method: \\chromfs\Lancaster\ChromData\19930\20210430-28080.b\8260 25ml HP31.m
 Limit Group: MSV - 8260C_D
 Last Update: 30-Apr-2021 17:42:44 Calib Date: 26-Mar-2021 01:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I07.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1630

First Level Reviewer: campbellme Date: 30-Apr-2021 17:38:27

Compound	Amount Added	Amount Recovered	% Rec.
\$ 46 Dibromofluoromethane (Surr)	10.0	9.88	98.81
\$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	10.4	103.91
\$ 75 Toluene-d8 (Surr)	10.0	9.98	99.84
\$ 100 4-Bromofluorobenzene (Surr)	10.0	9.38	93.82

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210430-28080.b\IA30X13.D

Injection Date: 30-Apr-2021 14:08:30

Instrument ID: 19930

Lims ID: 410-37501-A-6

Lab Sample ID: 410-37501-6

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

Operator ID: SRK36897

ALS Bottle#: 14

Worklist Smp#: 14

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

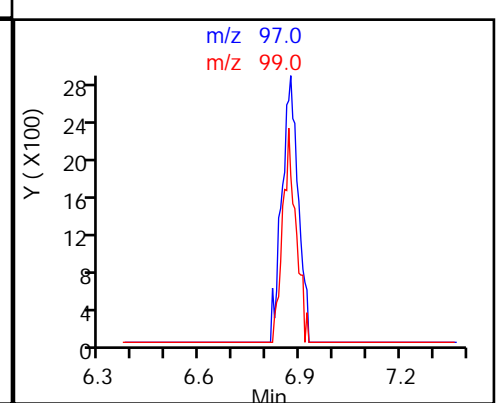
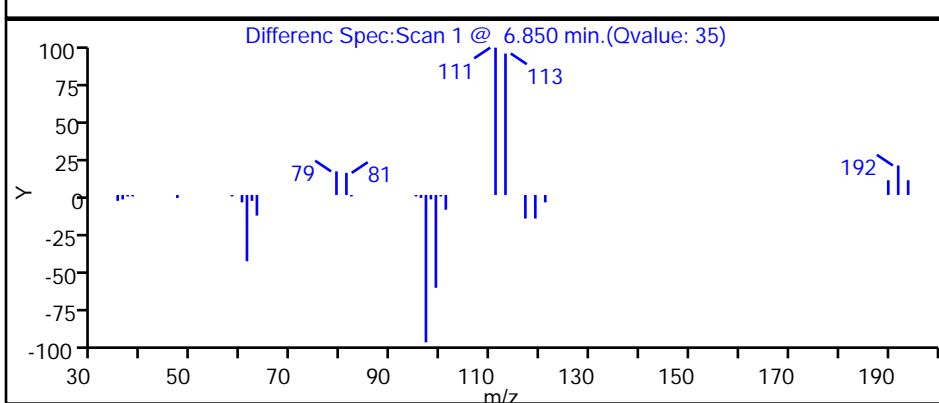
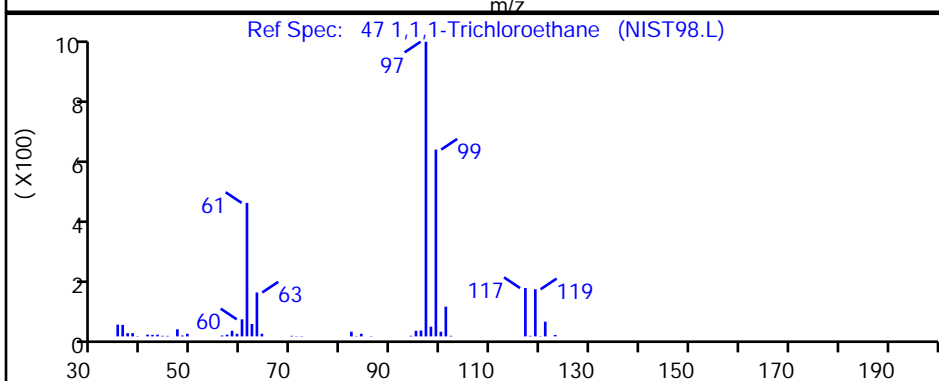
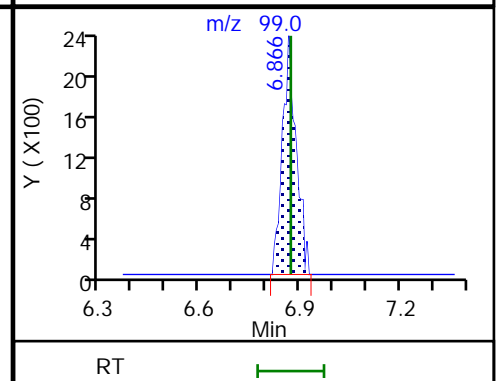
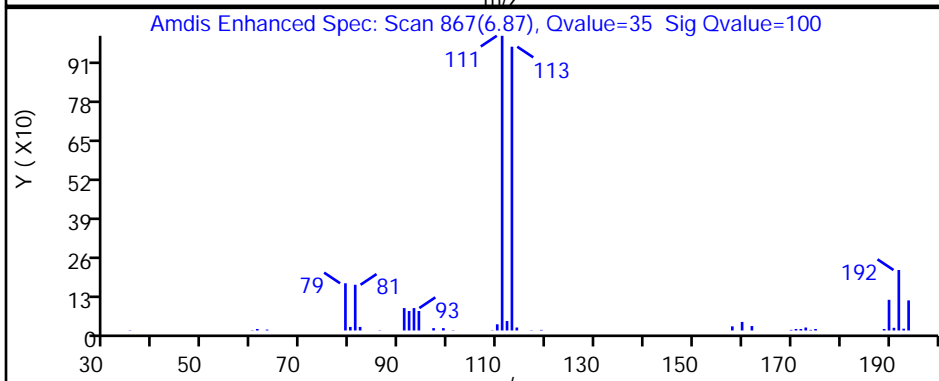
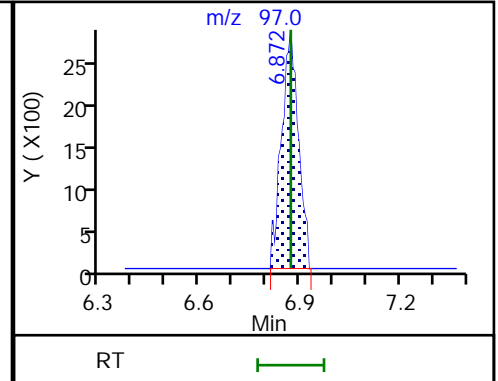
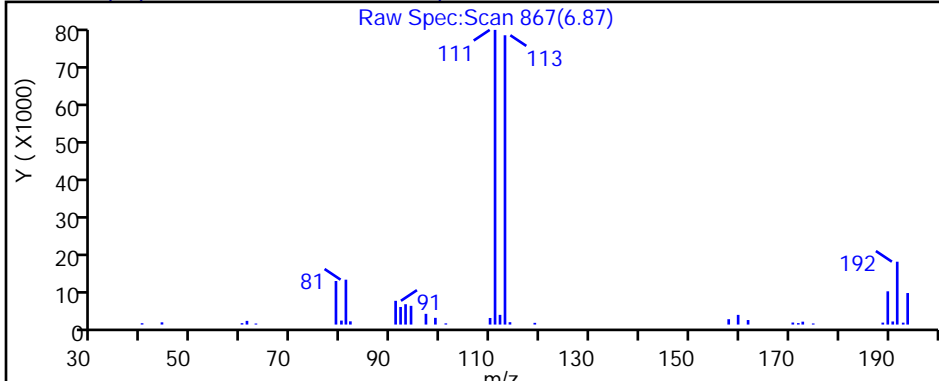
Method: 8260 25ml HP31

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) x 30m

MS Quad

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



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210430-28080.b\IA30X13.D

Injection Date: 30-Apr-2021 14:08:30

Instrument ID: 19930

Lims ID: 410-37501-A-6

Lab Sample ID: 410-37501-6

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

Operator ID: SRK36897

ALS Bottle#: 14

Worklist Smp#: 14

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

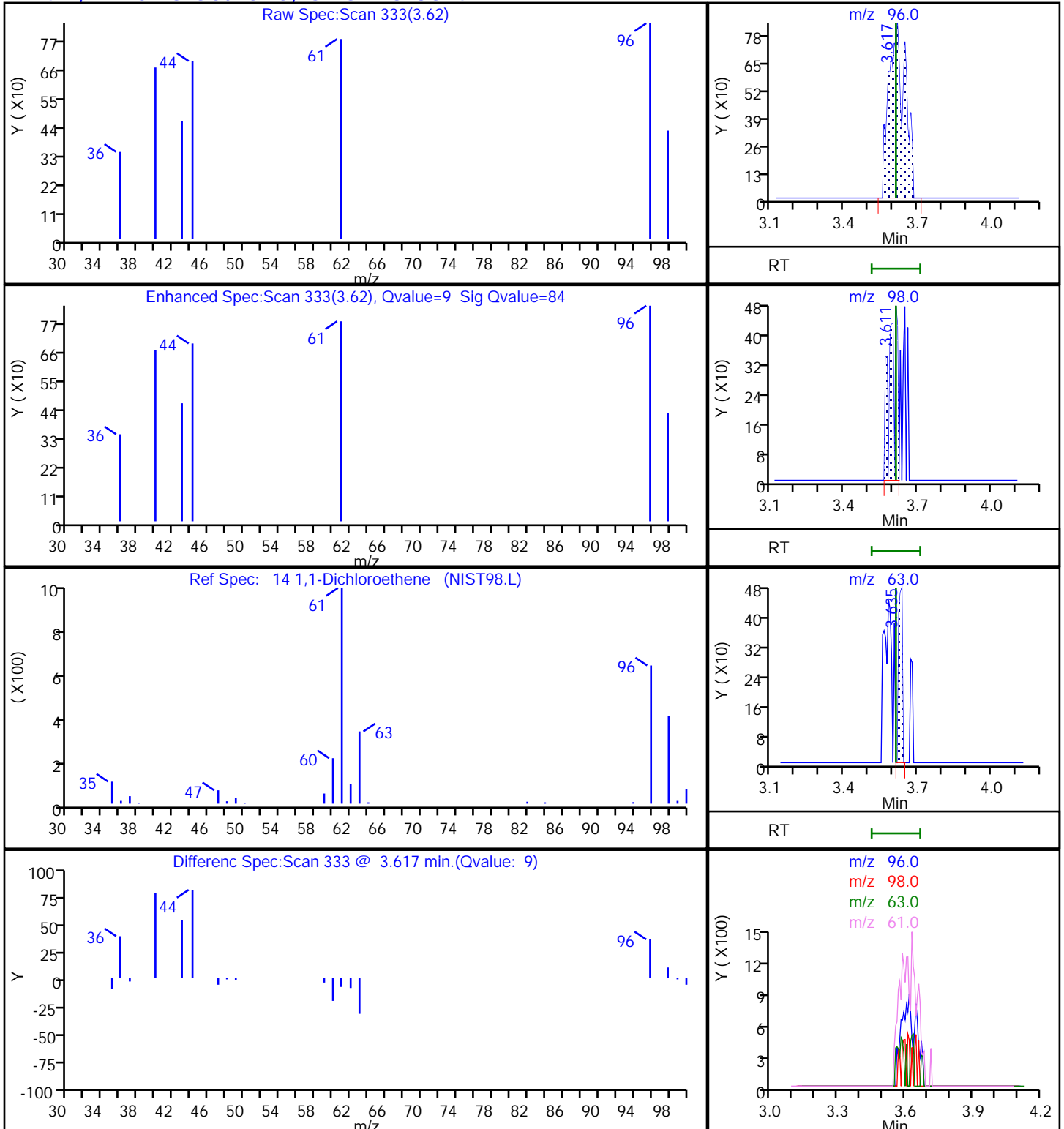
Method: 8260 25ml HP31

Limit Group: MSV - 8260C_D

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

MS Quad

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



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210430-28080.b\IA30X13.D

Injection Date: 30-Apr-2021 14:08:30

Instrument ID: 19930

Lims ID: 410-37501-A-6

Lab Sample ID: 410-37501-6

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

Operator ID: SRK36897

ALS Bottle#: 14

Worklist Smp#: 14

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

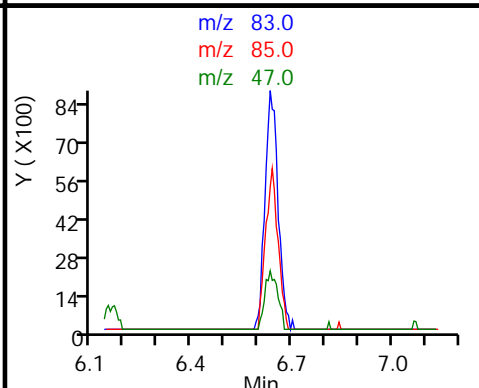
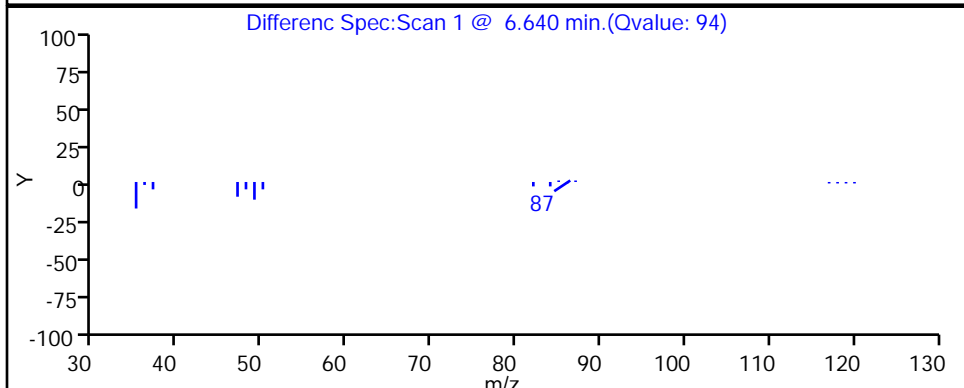
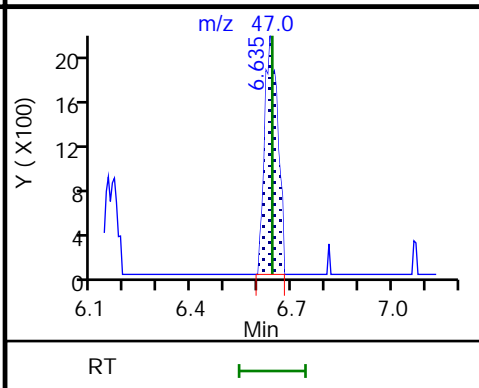
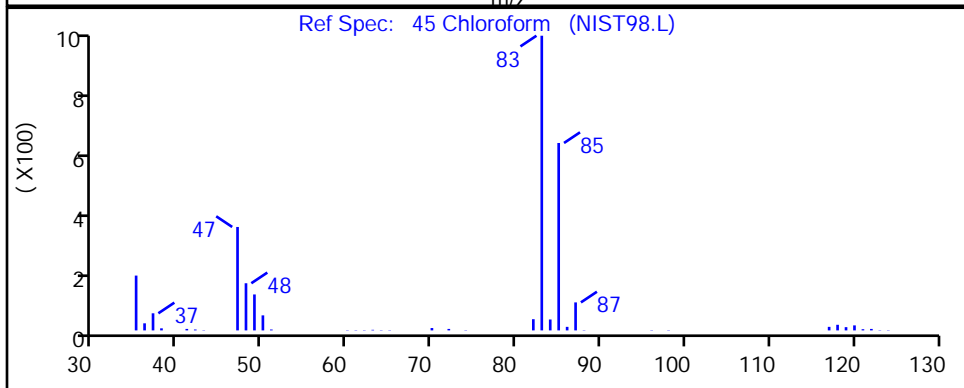
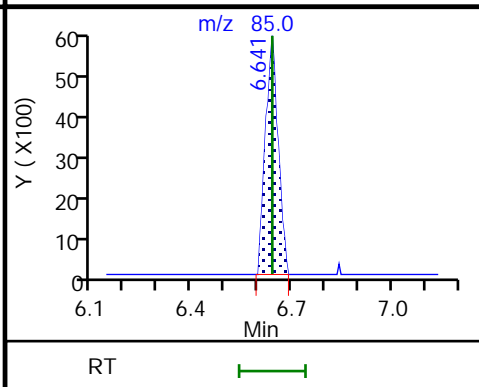
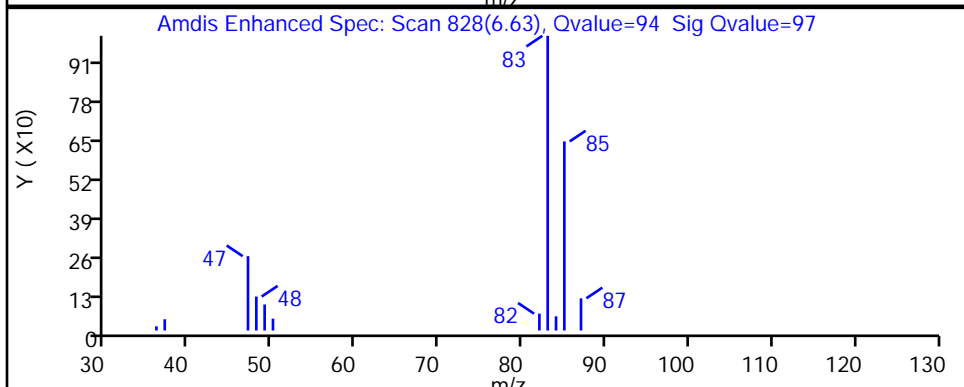
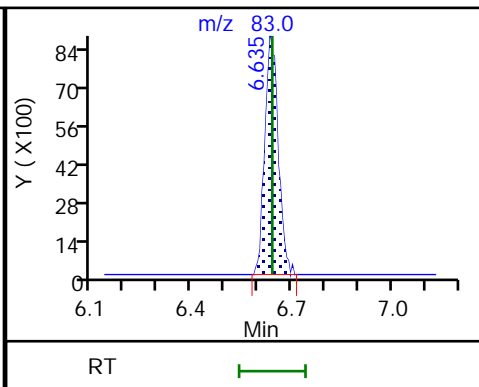
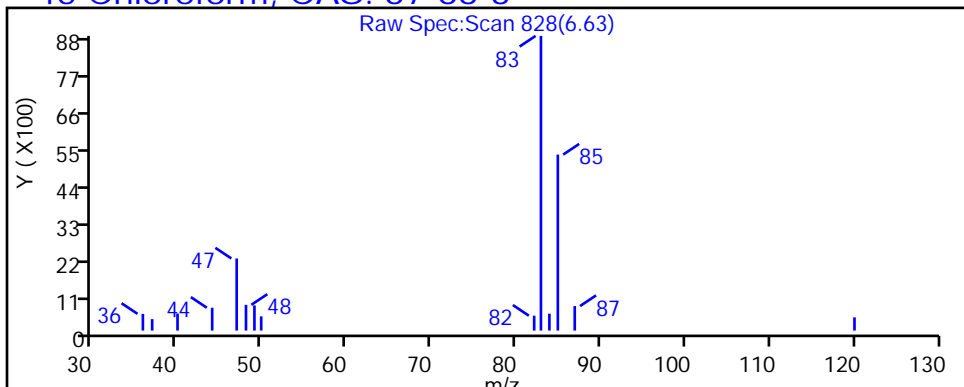
Method: 8260 25ml HP31

Limit Group: MSV - 8260C_D

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

MS Quad

45 Chloroform, CAS: 67-66-3



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210430-28080.b\IA30X13.D

Injection Date: 30-Apr-2021 14:08:30

Instrument ID: 19930

Lims ID: 410-37501-A-6

Lab Sample ID: 410-37501-6

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

Operator ID: SRK36897

ALS Bottle#: 14

Worklist Smp#: 14

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

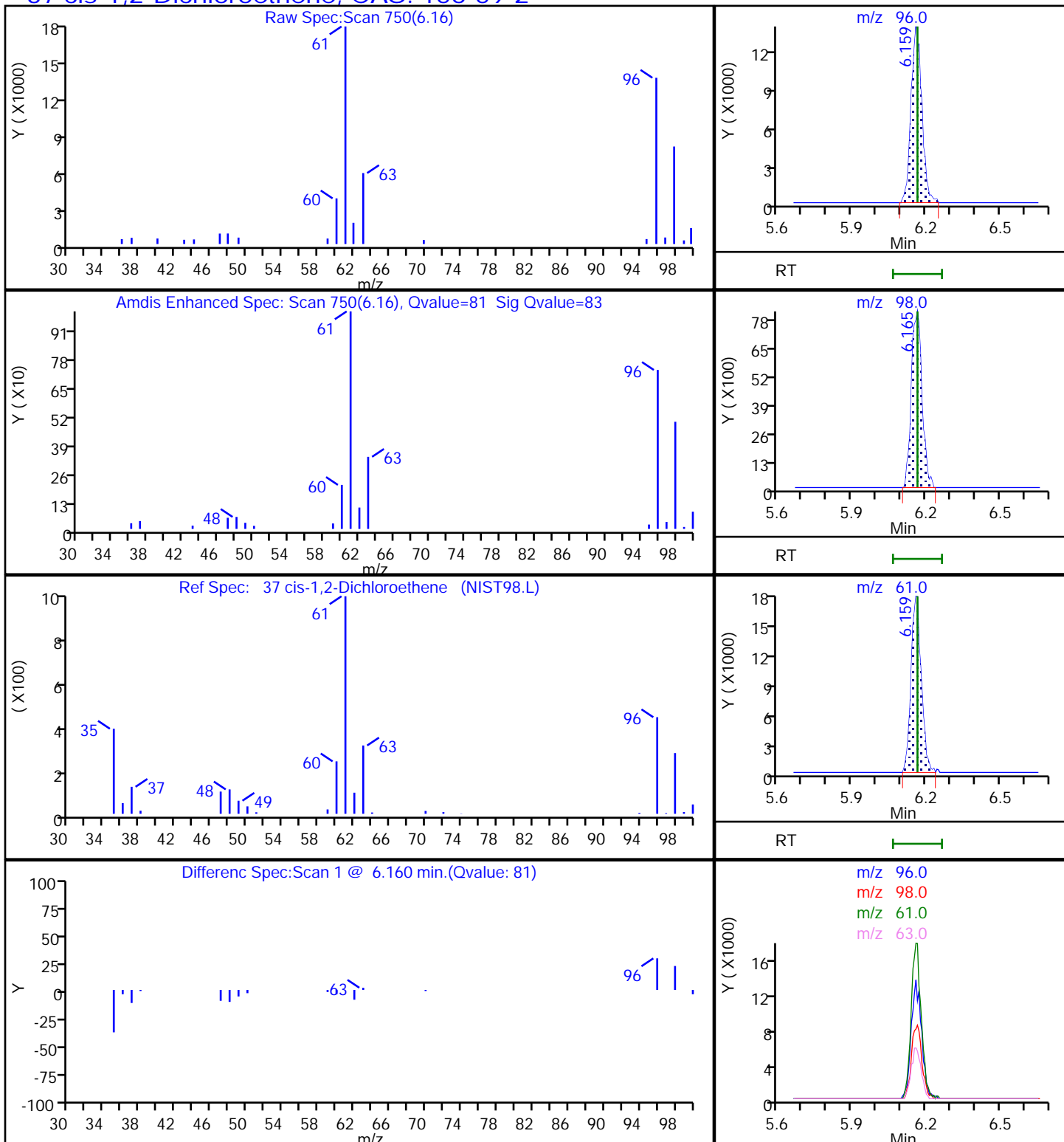
Method: 8260 25ml HP31

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) x 30m

MS Quad

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



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210430-28080.b\IA30X13.D

Injection Date: 30-Apr-2021 14:08:30

Instrument ID: 19930

Lims ID: 410-37501-A-6

Lab Sample ID: 410-37501-6

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

Operator ID: SRK36897

ALS Bottle#: 14

Worklist Smp#: 14

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

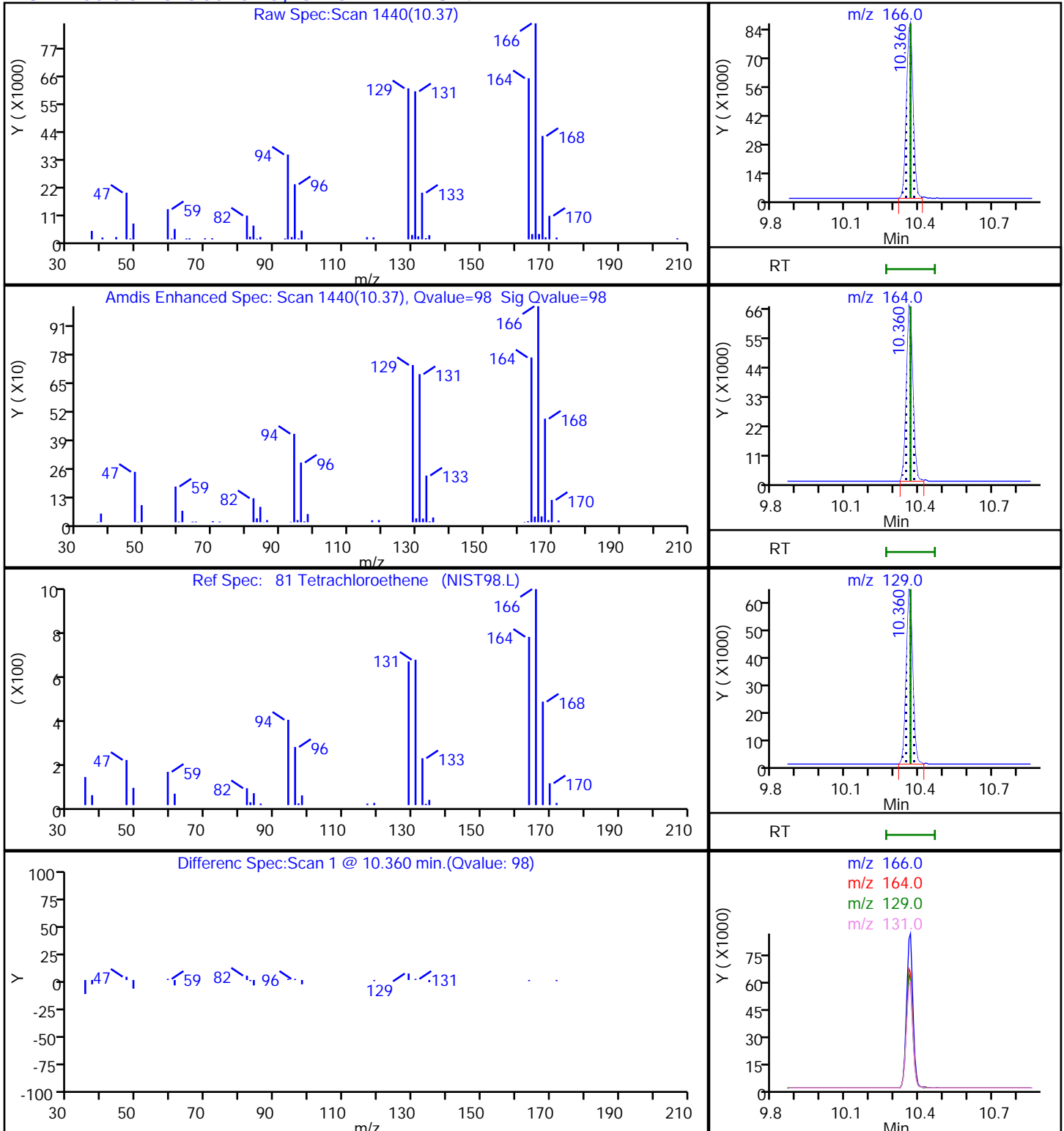
Method: 8260 25ml HP31

Limit Group: MSV - 8260C_D

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

MS Quad

81 Tetrachloroethene, CAS: 127-18-4



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210430-28080.b\IA30X13.D

Injection Date: 30-Apr-2021 14:08:30

Instrument ID: 19930

Lims ID: 410-37501-A-6

Lab Sample ID: 410-37501-6

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

Operator ID: SRK36897

ALS Bottle#: 14

Worklist Smp#: 14

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

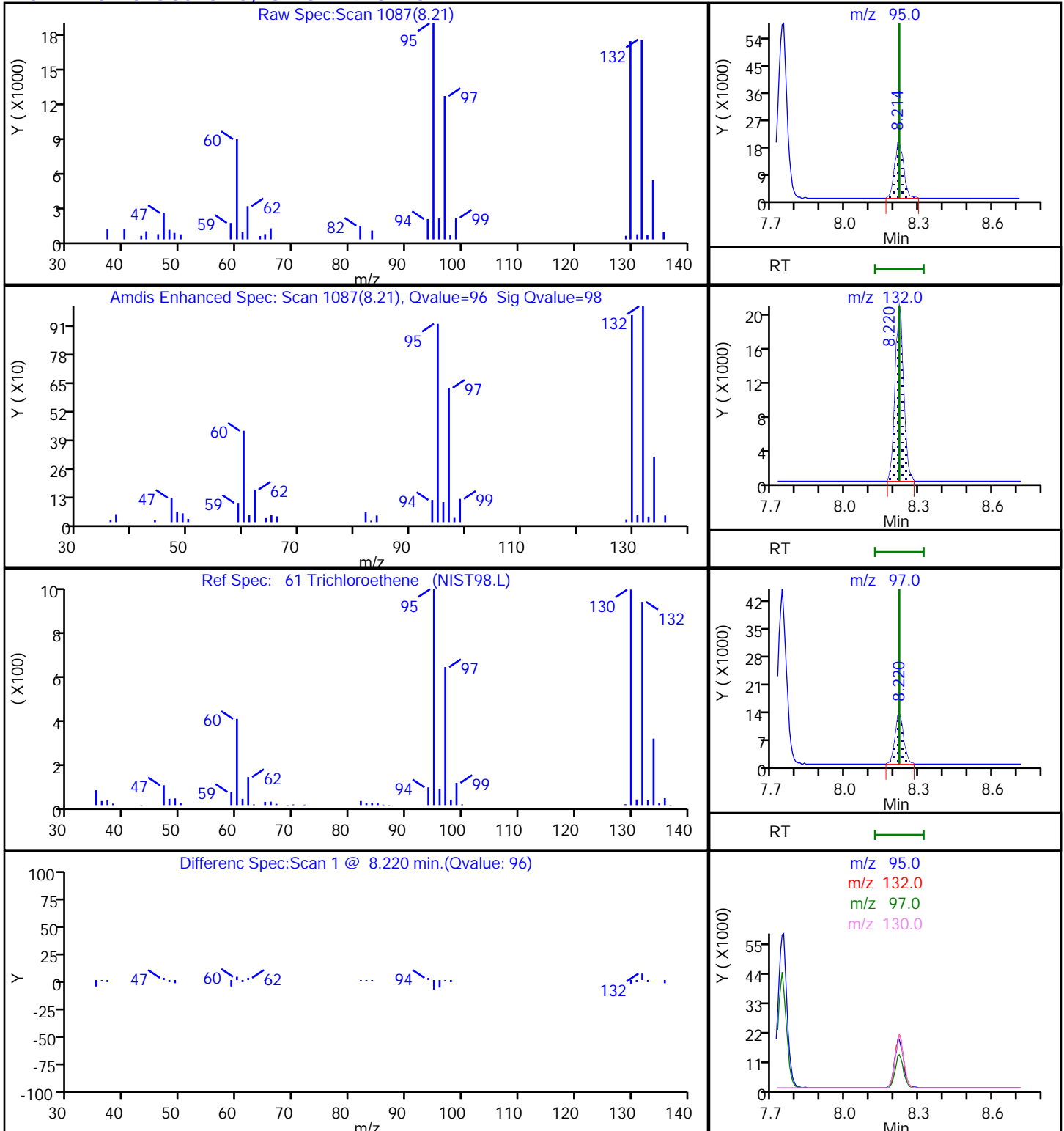
Method: 8260 25ml HP31

Limit Group: MSV - 8260C_D

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

MS Quad

61 Trichloroethene, CAS: 79-01-6



Eurofins Lancaster Laboratories Env, LLC

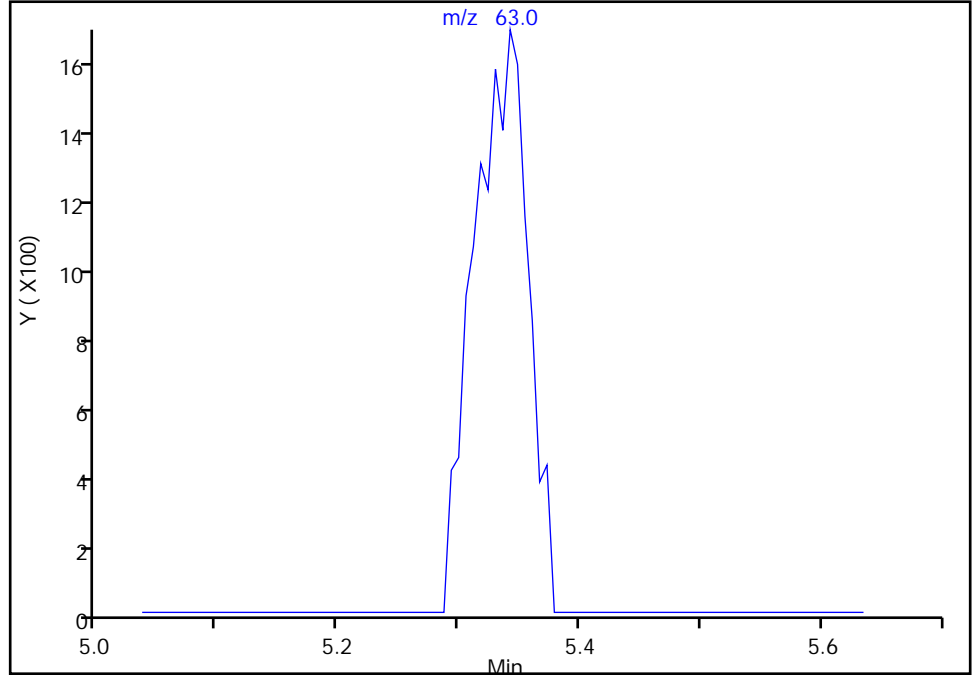
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Injection Date: 30-Apr-2021 14:08:30 Instrument ID: 19930
Lims ID: 410-37501-A-6 Lab Sample ID: 410-37501-6
Client ID: HD-COD-SW-15-0/1-0
Operator ID: SRK36897 ALS Bottle#: 14 Worklist Smp#: 14
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

31 1,1-Dichloroethane, CAS: 75-34-3

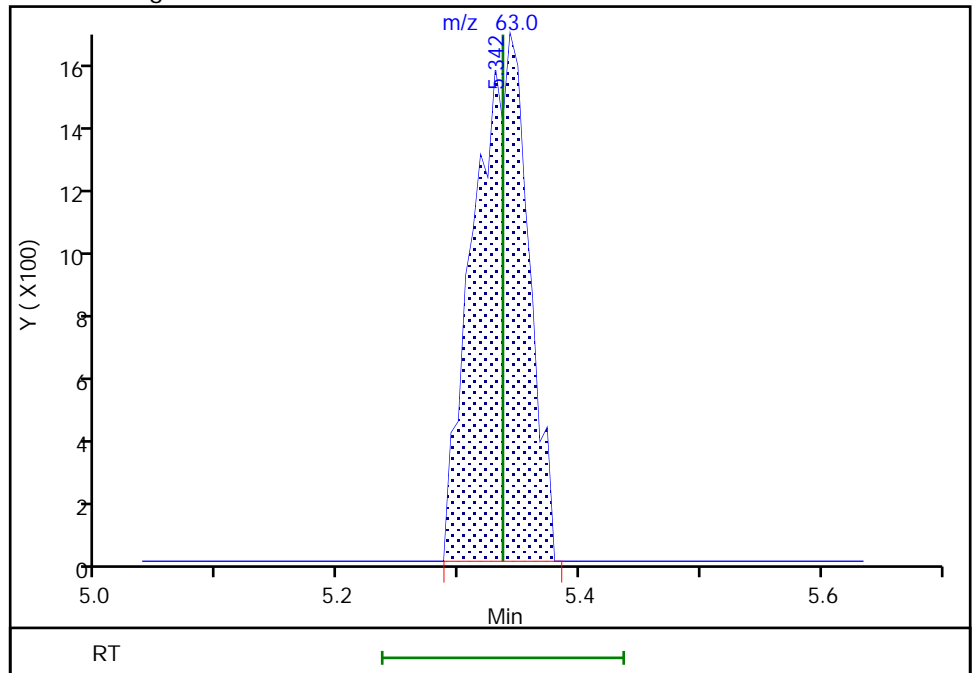
Signal: 1

Not Detected
Expected RT: 5.34

Processing Integration Results



Manual Integration Results



RT: 5.34
Area: 5297
Amount: 0.055608
Amount Units: ug/l

Eurofins Lancaster Laboratories Env, LLC

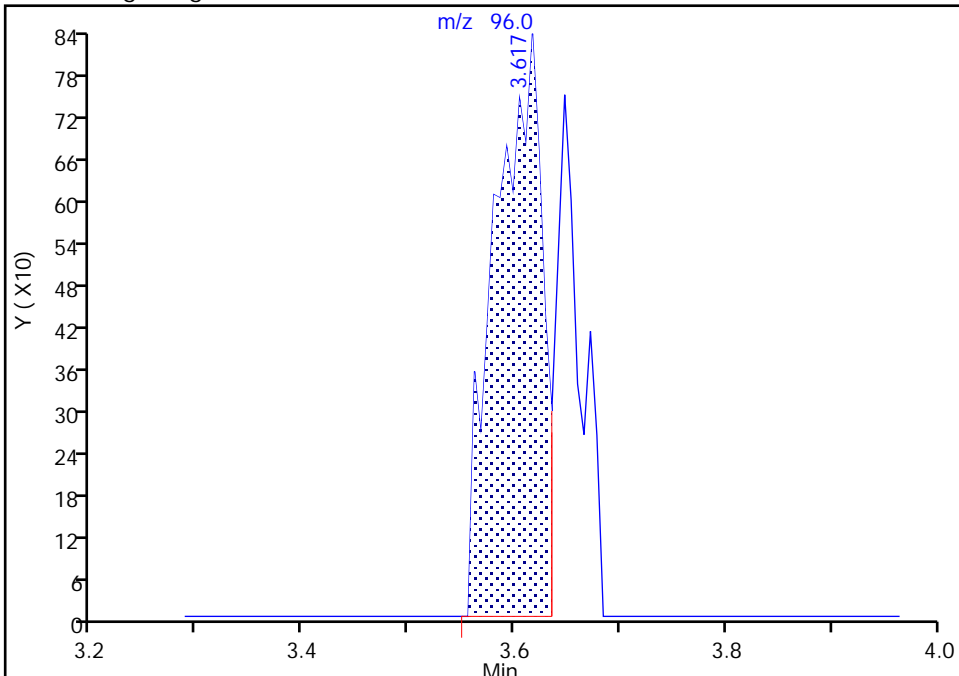
Data File: \\chromfs\Lancaster\ChromData\19930\20210430-28080.b\IA30X13.D
Injection Date: 30-Apr-2021 14:08:30 Instrument ID: 19930
Lims ID: 410-37501-A-6 Lab Sample ID: 410-37501-6
Client ID: HD-COD-SW-15-0/1-0
Operator ID: SRK36897 ALS Bottle#: 14 Worklist Smp#: 14
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

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

Signal: 1

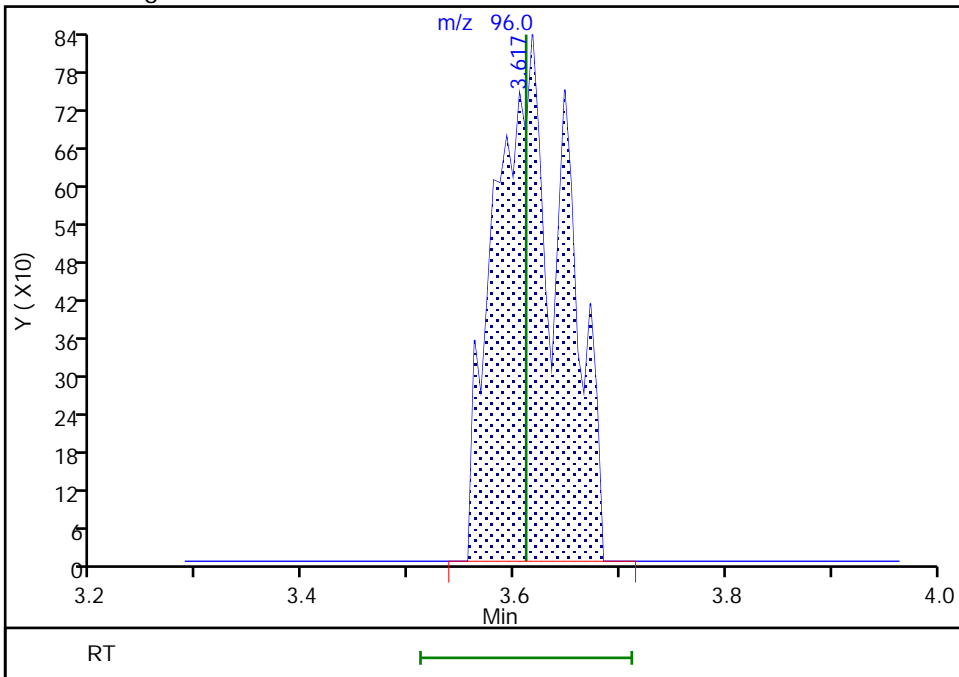
RT: 3.62
Area: 2633
Amount: 0.060886
Amount Units: ug/l

Processing Integration Results



RT: 3.62
Area: 3782
Amount: 0.087456
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 30-Apr-2021 17:37:30
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

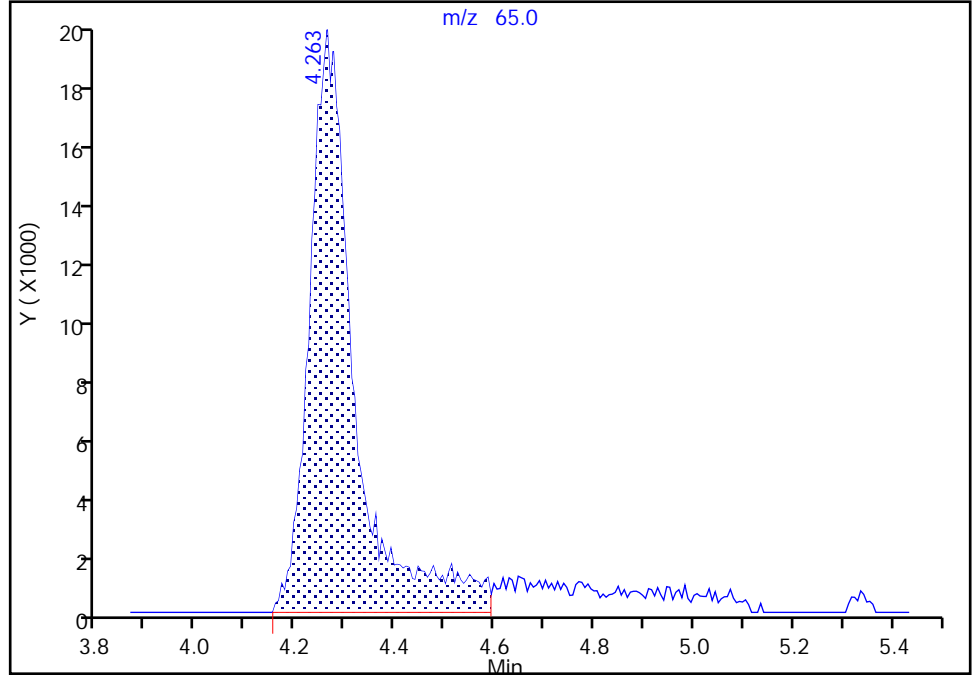
Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210430-28080.b\A30X13.D
Injection Date: 30-Apr-2021 14:08:30 Instrument ID: 19930
Lims ID: 410-37501-A-6 Lab Sample ID: 410-37501-6
Client ID: HD-COD-SW-15-0/1-0
Operator ID: SRK36897 ALS Bottle#: 14 Worklist Smp#: 14
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

* 24 t-Butyl alcohol-d10 (IS), CAS: 53001-22-2
Signal: 1

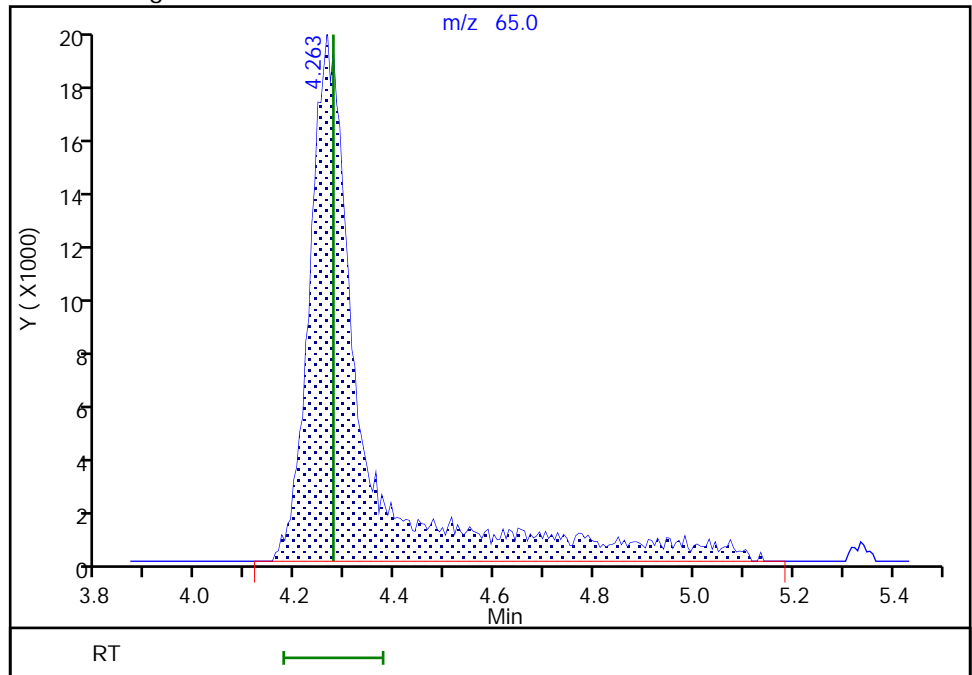
RT: 4.26
Area: 125174
Amount: 50.000000
Amount Units: ug/l

Processing Integration Results



RT: 4.26
Area: 148013
Amount: 50.000000
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 30-Apr-2021 17:37:40
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-37501-1
 SDG No.: _____
 Client Sample ID: HD-COD-SW-16-0/1-0 Lab Sample ID: 410-37501-7
 Matrix: Water Lab File ID: GA30S07.D
 Analysis Method: 8260D Date Collected: 04/26/2021 10:30
 Sample wt/vol: 25 (mL) Date Analyzed: 04/30/2021 13:12
 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.: 120958 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.070
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.060
75-34-3	1,1-Dichloroethane	ND		0.50	0.070
75-35-4	1,1-Dichloroethene	ND		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.060
107-06-2	1,2-Dichloroethane	ND		0.50	0.050
78-87-5	1,2-Dichloropropane	ND		0.50	0.060
78-93-3	2-Butanone (MEK)	ND		5.0	0.60
591-78-6	2-Hexanone	ND		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70
67-64-1	Acetone	1.8	J	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	0.076	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	0.065	J	0.50	0.060
108-88-3	Toluene	ND		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	0.081	J	0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-37501-1
 SDG No.: _____
 Client Sample ID: HD-COD-SW-16-0/1-0 Lab Sample ID: 410-37501-7
 Matrix: Water Lab File ID: GA30S07.D
 Analysis Method: 8260D Date Collected: 04/26/2021 10:30
 Sample wt/vol: 25 (mL) Date Analyzed: 04/30/2021 13:12
 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.: 120958 Units: ug/L

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

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		80-120
460-00-4	4-Bromofluorobenzene (Surr)	89		80-120
1868-53-7	Dibromofluoromethane (Surr)	103		80-120
2037-26-5	Toluene-d8 (Surr)	93		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\GA30S07.D
 Lims ID: 410-37501-A-7
 Client ID: HD-COD-SW-16-0/1-0
 Sample Type: Client
 Inject. Date: 30-Apr-2021 13:12:30 ALS Bottle#: 14 Worklist Smp#: 14
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0028091-014
 Operator ID: jml01693 Instrument ID: 16334
 Method: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\MSV_16334_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 30-Apr-2021 16:57:51 Calib Date: 30-Nov-2020 18:23:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1630

First Level Reviewer: campbellme Date: 30-Apr-2021 16:53:09

Compound	Sig	RT (min.)	Exp RT (min.)	Diff RT (min.)	Q	Response	OnCol Amt ug/l	Flags
5 Chloromethane	50	2.135	2.148	-0.013	7	3156	0.0372	
8 Vinyl chloride	62		2.263				ND	
9 Bromomethane	94		2.587				ND	
10 Chloroethane	64		2.666				ND	
19 1,1-Dichloroethene	96		3.513				ND	
21 Acetone	43	3.531	3.538	-0.007	97	15373	1.82	
25 Carbon disulfide	76	3.849	3.830	0.018	53	8201	0.0441	M
29 Methylene Chloride	84		4.166				ND	
* 30 t-Butyl alcohol-d10 (IS)	65	4.166	4.178	-0.012	0	172406	50.0	
33 Methyl tert-butyl ether	73		4.562				ND	
34 trans-1,2-Dichloroethene	96		4.568				ND	
37 1,1-Dichloroethane	63		5.239				ND	
41 2-Butanone (MEK)	43		6.049				ND	
42 cis-1,2-Dichloroethene	96	6.074	6.074	0.000	75	4949	0.0759	
49 Chlorobromomethane	128		6.403				ND	
51 Chloroform	83	6.555	6.561	-0.006	17	2627	0.0253	a
\$ 52 Dibromofluoromethane (Surr)	113	6.769	6.775	-0.006	94	601048	10.3	
53 1,1,1-Trichloroethane	97		6.787				ND	
56 Carbon tetrachloride	117		6.994				ND	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.226	7.232	-0.006	0	123091	9.87	
60 Benzene	78		7.263				ND	
61 1,2-Dichloroethane	62		7.330				ND	
* 64 Fluorobenzene (IS)	96	7.665	7.665	0.000	99	2421138	10.0	
68 Trichloroethene	95	8.134	8.140	-0.006	93	5114	0.0814	
70 1,2-Dichloropropane	63		8.476				ND	
76 Dichlorobromomethane	83		8.823				ND	
81 cis-1,3-Dichloropropene	75		9.378				ND	
82 4-Methyl-2-pentanone (MIBK)	43		9.555				ND	7
\$ 83 Toluene-d8 (Surr)	98	9.683	9.683	0.000	93	2272168	9.27	
84 Toluene	92	9.756	9.762	-0.006	99	7951	0.0499	
96 trans-1,3-Dichloropropene	75		10.018				ND	
99 1,1,2-Trichloroethane	97		10.225				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
100 Tetrachloroethene	166	10.305	10.311	-0.006	94	4466	0.0647	
102 2-Hexanone	43		10.445				ND	
104 Chlorodibromomethane	129		10.603				ND	
105 Ethylene Dibromide	107		10.707				ND	
* 106 Chlorobenzene-d5 (IS)	117	11.140	11.140	0.000	84	1836860	10.0	
108 Chlorobenzene	112		11.170				ND	
S 109 Xylenes, Total	106		11.245				ND	7
110 1,1,1,2-Tetrachloroethane	131		11.250				ND	
111 Ethylbenzene	91		11.256				ND	7
112 m-Xylene & p-Xylene	106		11.371				ND	7
113 o-Xylene	106		11.701				ND	7
114 Styrene	104		11.713				ND	
115 Bromoform	173		11.871				ND	
\$ 119 4-Bromofluorobenzene (Surr)	95	12.140	12.140	0.000	94	828953	8.86	
120 1,1,2,2-Tetrachloroethane	83		12.243				ND	
* 134 1,4-Dichlorobenzene-d4	152	13.017	13.017	0.000	94	1013895	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MSV_29_826ISS_00017

Amount Added: 1.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\GA30S07.D

Injection Date: 30-Apr-2021 13:12:30

Instrument ID: 16334

Operator ID: jml01693

Lims ID: 410-37501-A-7

Lab Sample ID: 410-37501-7

Worklist Smp#: 14

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

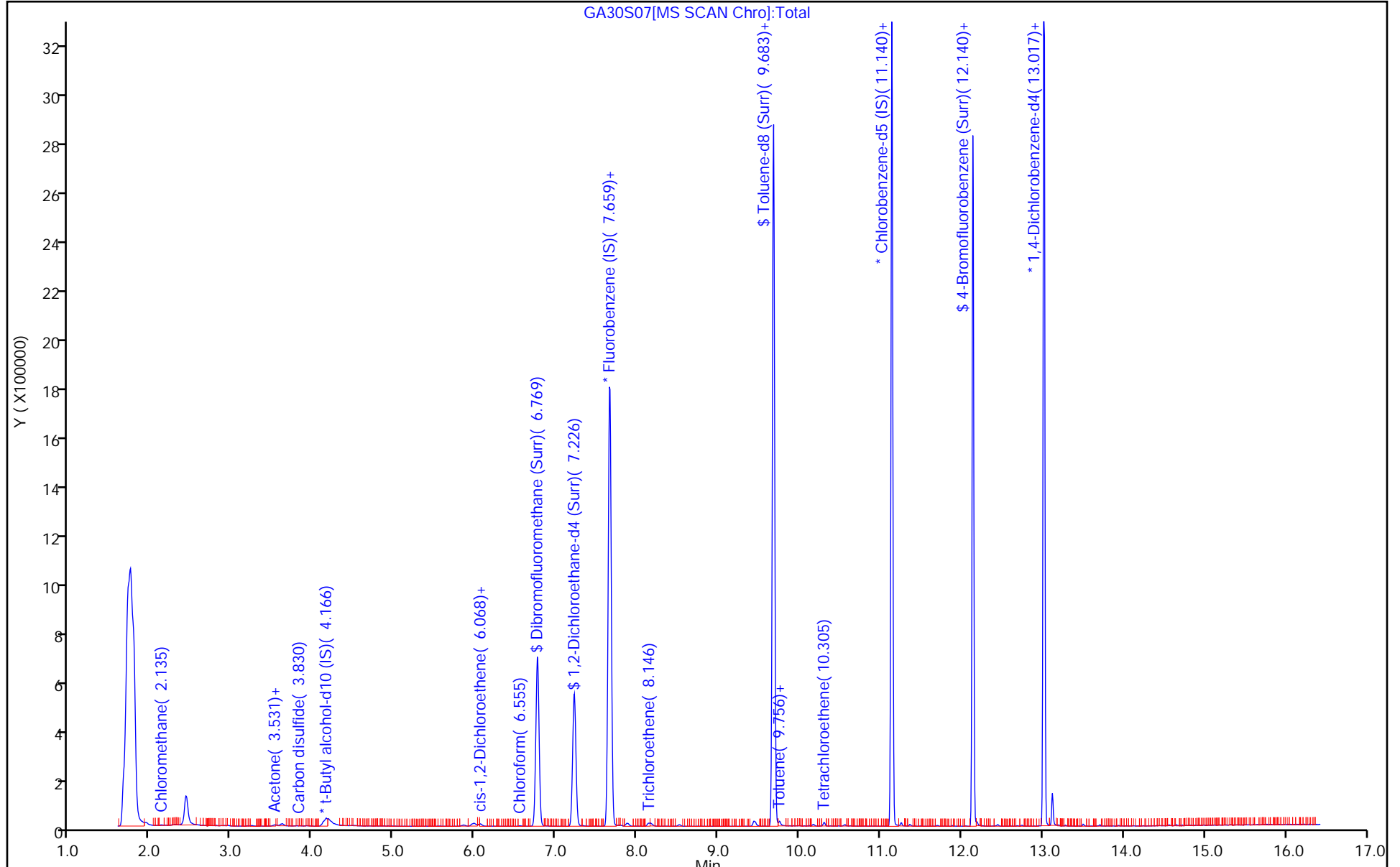
ALS Bottle#: 14

Method: MSV_16334_25mL

Limit Group: MSV - 8260C_D

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

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\GA30S07.D
 Lims ID: 410-37501-A-7
 Client ID: HD-COD-SW-16-0/1-0
 Sample Type: Client
 Inject. Date: 30-Apr-2021 13:12:30 ALS Bottle#: 14 Worklist Smp#: 14
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0028091-014
 Operator ID: jml01693 Instrument ID: 16334
 Method: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\MSV_16334_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 30-Apr-2021 16:57:51 Calib Date: 30-Nov-2020 18:23:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1630

First Level Reviewer: campbellme

Date: 30-Apr-2021 16:53:09

Compound	Amount Added	Amount Recovered	% Rec.
\$ 52 Dibromofluoromethane (Surr)	10.0	10.3	102.57
\$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	9.87	98.73
\$ 83 Toluene-d8 (Surr)	10.0	9.27	92.71
\$ 119 4-Bromofluorobenzene (Surr)	10.0	8.86	88.59

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\GA30S07.D

Injection Date: 30-Apr-2021 13:12:30

Instrument ID: 16334

Lims ID: 410-37501-A-7

Lab Sample ID: 410-37501-7

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

Operator ID: jml01693

ALS Bottle#: 14

Worklist Smp#: 14

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

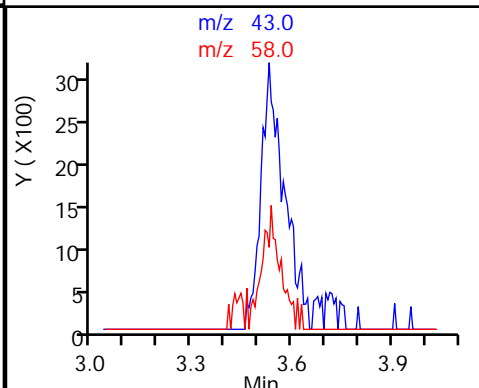
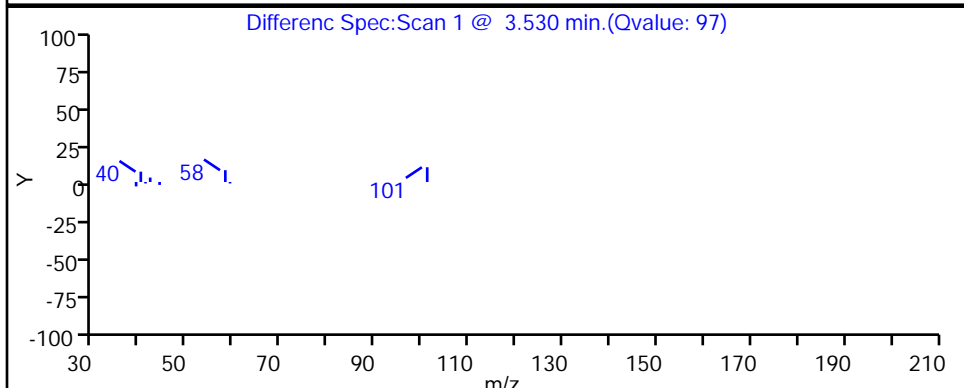
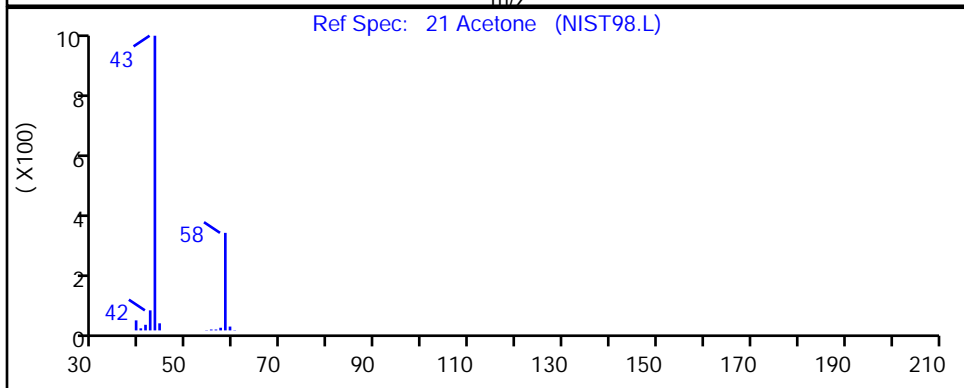
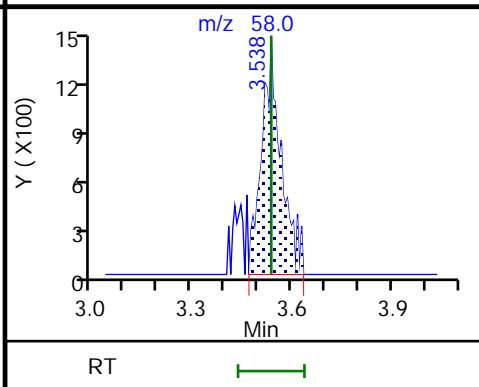
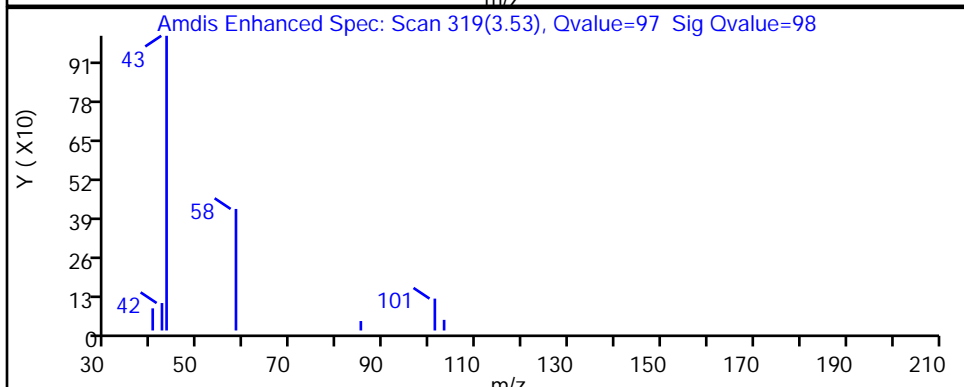
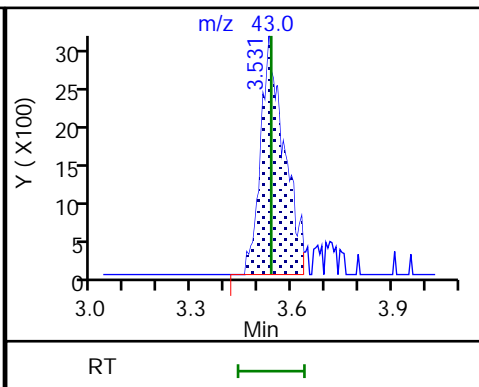
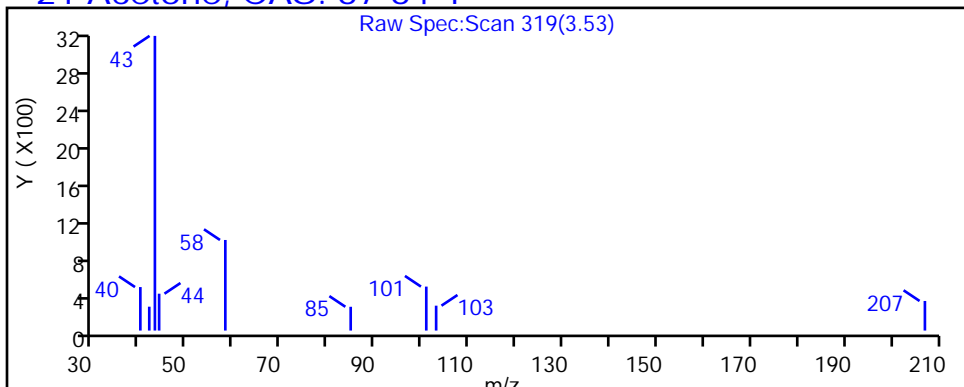
Method: MSV_16334_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

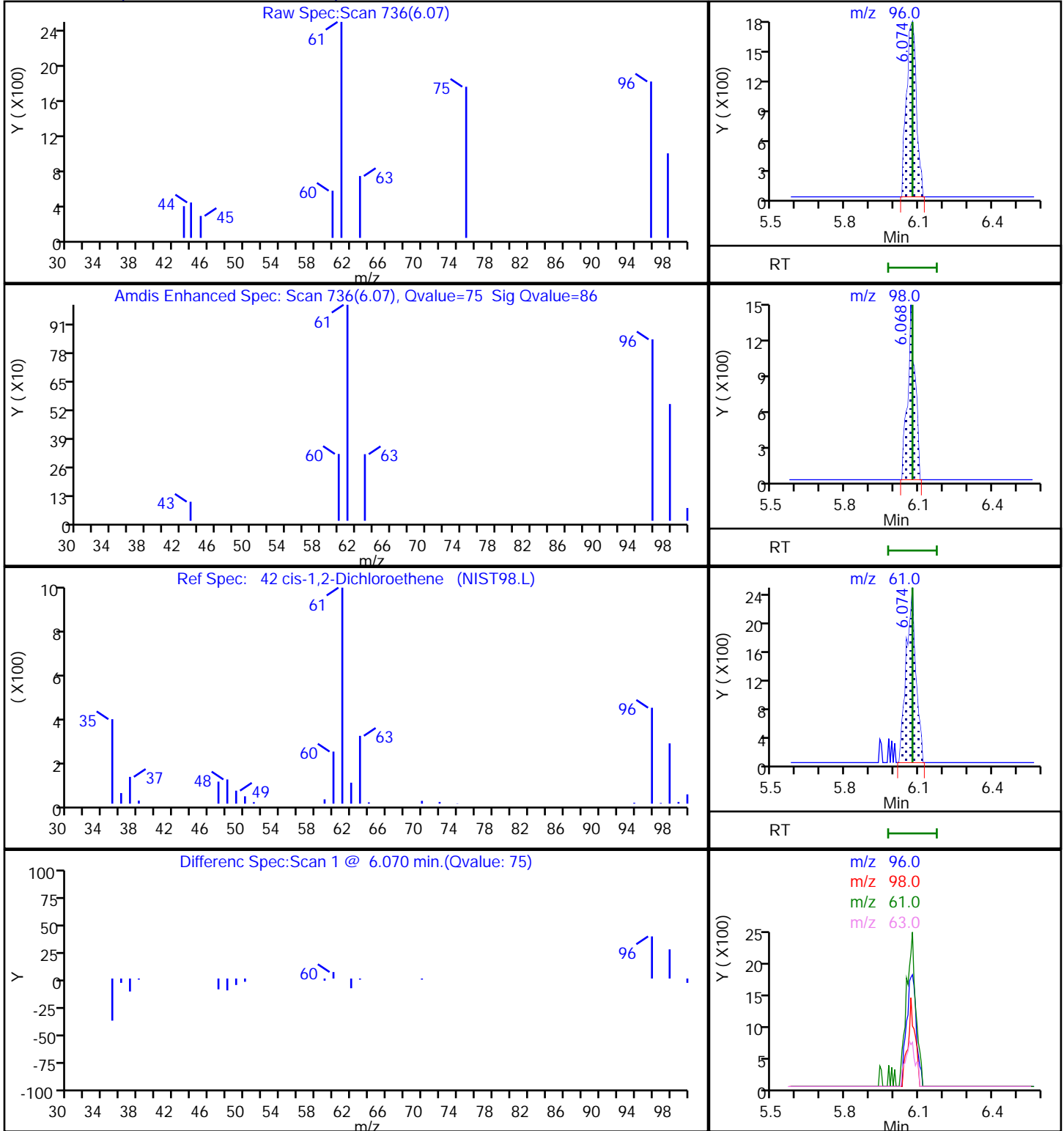
21 Acetone, CAS: 67-64-1



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\GA30S07.D
Injection Date: 30-Apr-2021 13:12:30 Instrument ID: 16334
Lims ID: 410-37501-A-7 Lab Sample ID: 410-37501-7
Client ID: HD-COD-SW-16-0/1-0
Operator ID: jml01693 ALS Bottle#: 14 Worklist Smp#: 14
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) MS Quad

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



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\GA30S07.D

Injection Date: 30-Apr-2021 13:12:30

Instrument ID: 16334

Lims ID: 410-37501-A-7

Lab Sample ID: 410-37501-7

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

Operator ID: jml01693

ALS Bottle#: 14

Worklist Smp#: 14

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

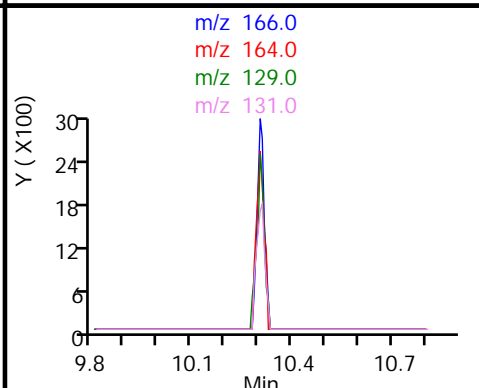
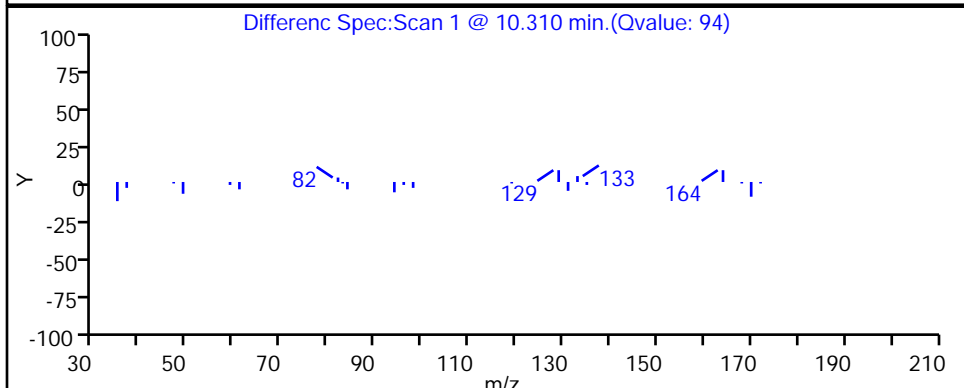
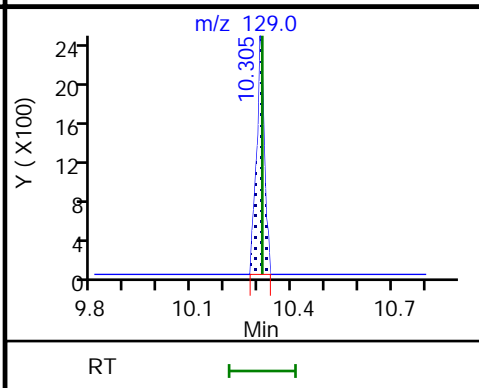
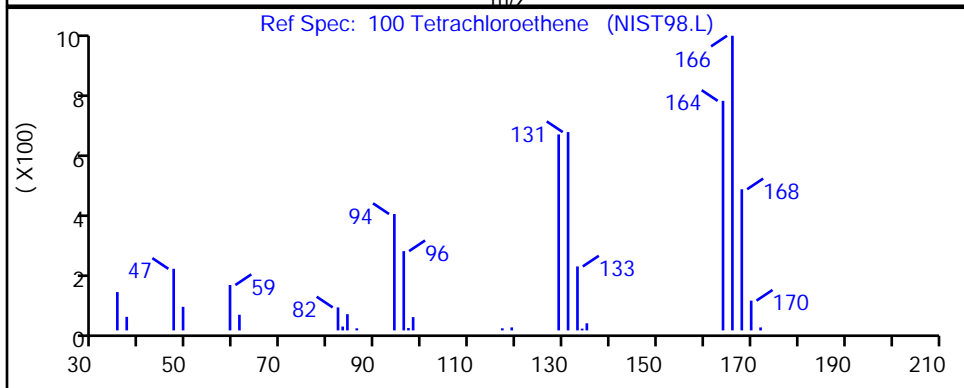
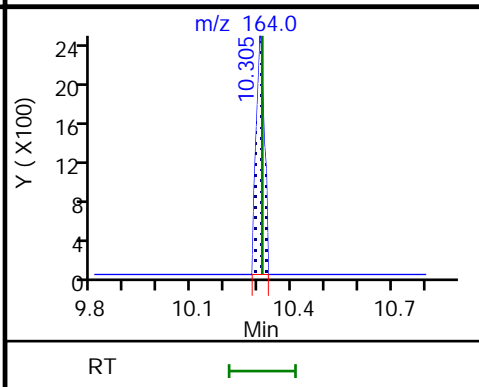
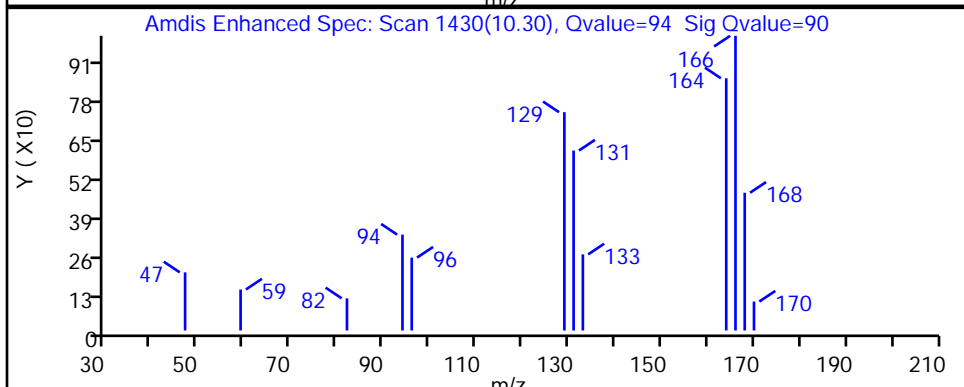
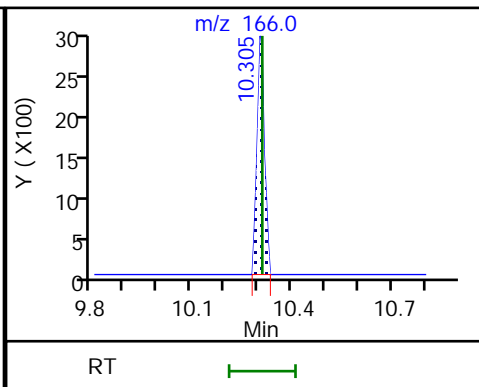
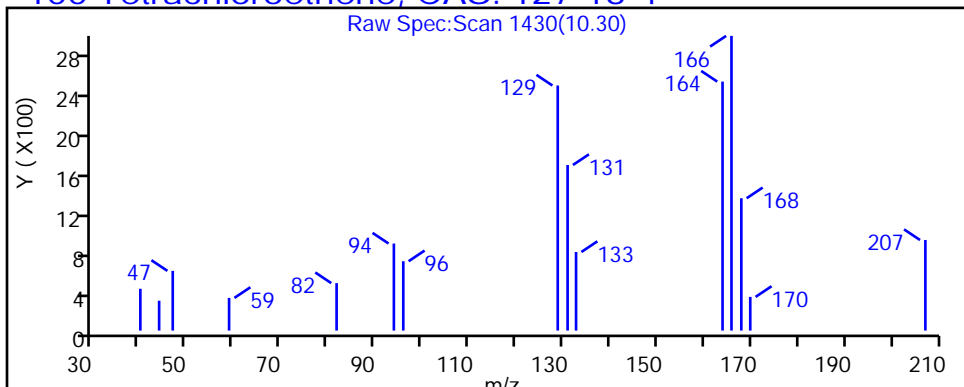
Method: MSV_16334_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

100 Tetrachloroethene, CAS: 127-18-4



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\GA30S07.D

Injection Date: 30-Apr-2021 13:12:30

Instrument ID: 16334

Lims ID: 410-37501-A-7

Lab Sample ID: 410-37501-7

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

Operator ID: jml01693

ALS Bottle#: 14

Worklist Smp#: 14

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

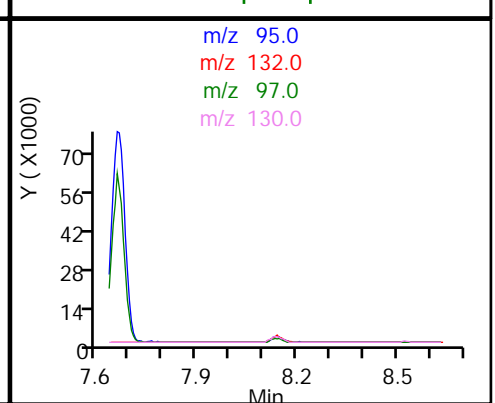
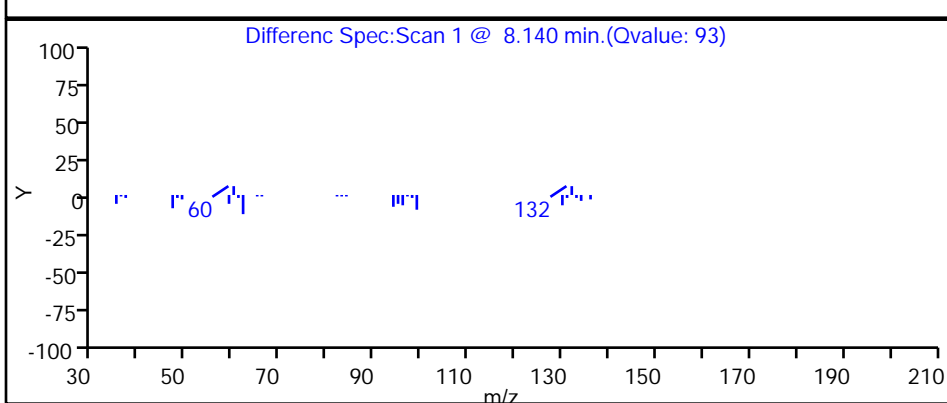
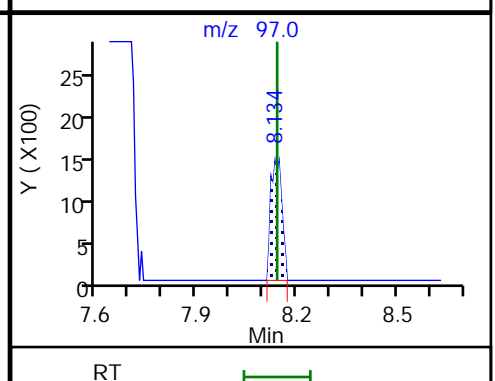
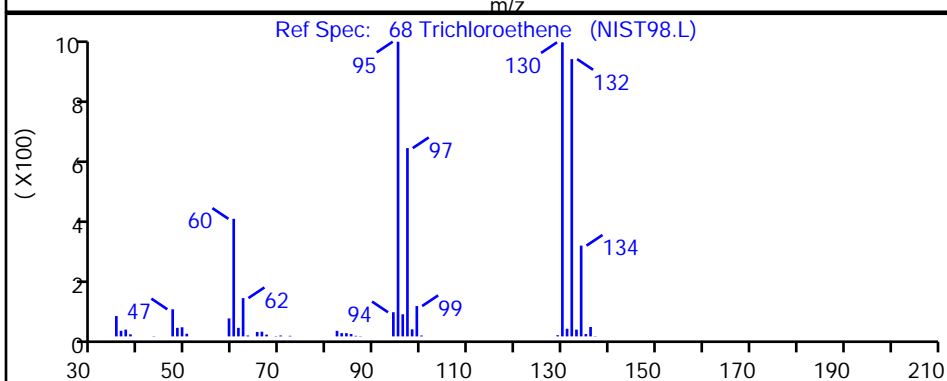
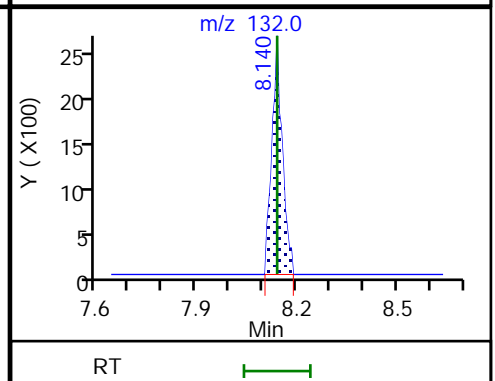
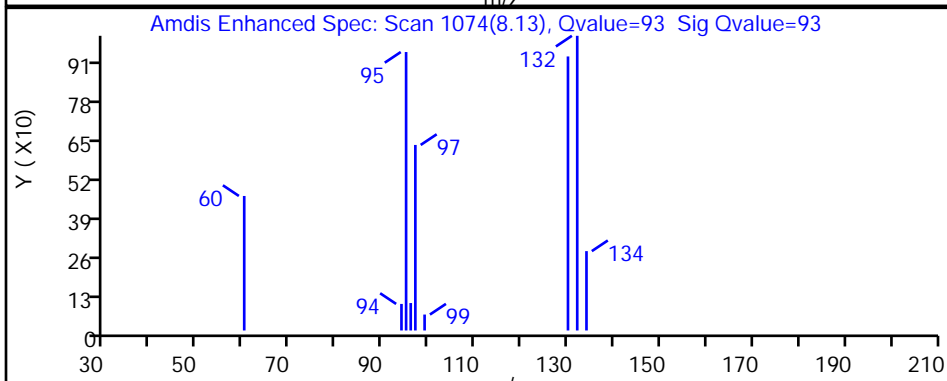
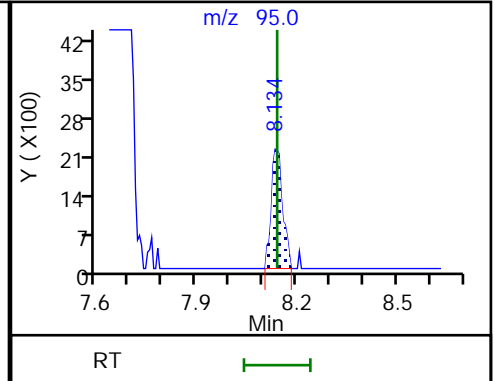
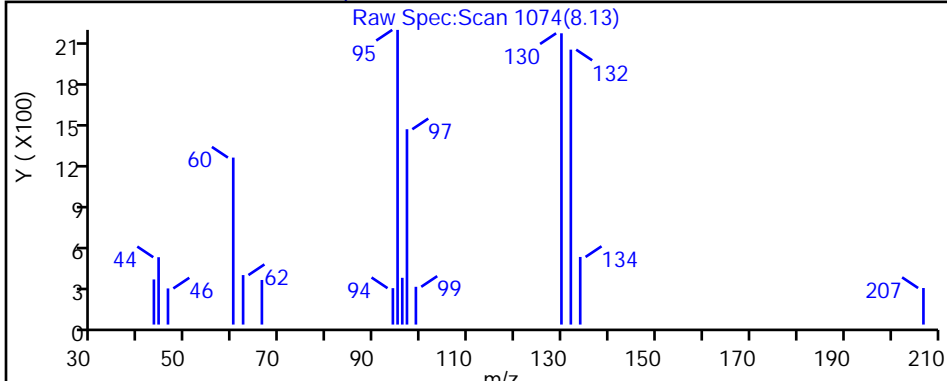
Method: MSV_16334_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

68 Trichloroethene, CAS: 79-01-6



Eurofins Lancaster Laboratories Env, LLC

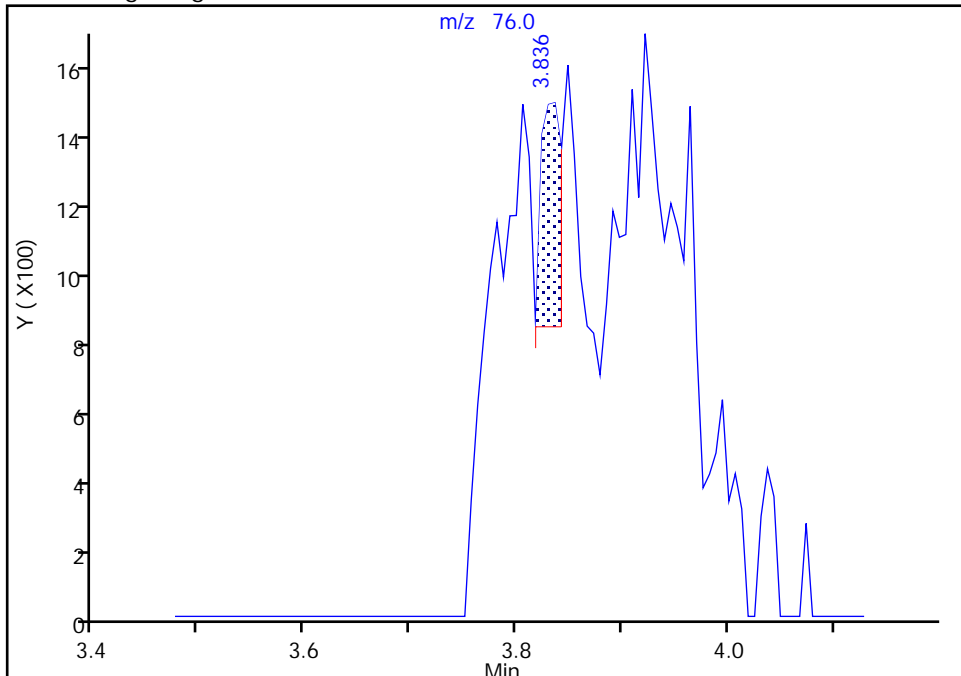
Data File: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\GA30S07.D
Injection Date: 30-Apr-2021 13:12:30 Instrument ID: 16334
Lims ID: 410-37501-A-7 Lab Sample ID: 410-37501-7
Client ID: HD-COD-SW-16-0/1-0
Operator ID: jml01693 ALS Bottle#: 14 Worklist Smp#: 14
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

25 Carbon disulfide, CAS: 75-15-0

Signal: 1

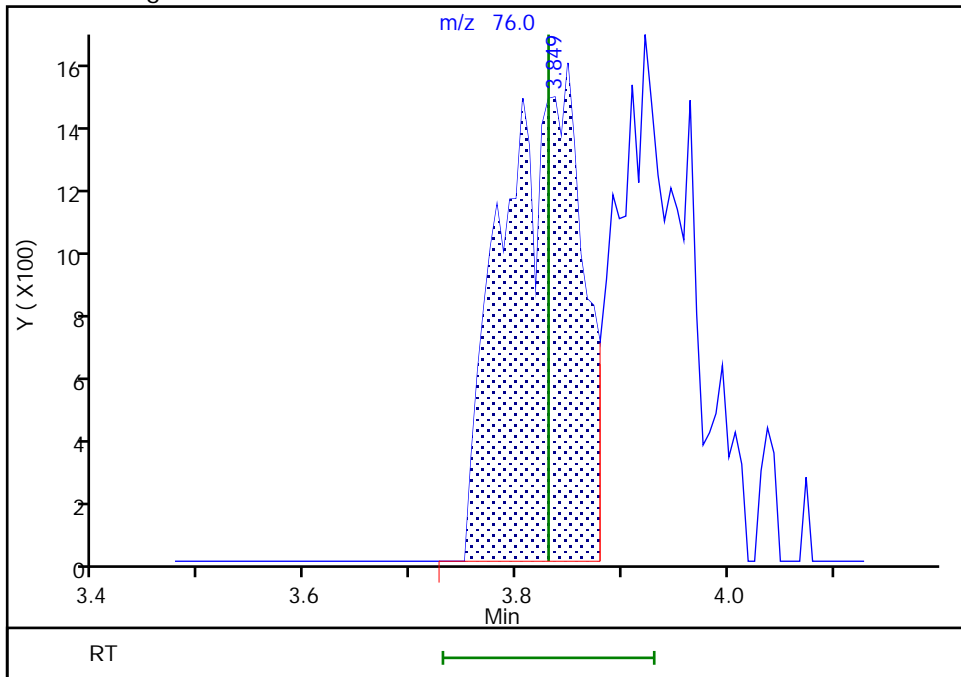
RT: 3.84
Area: 848
Amount: 0.004562
Amount Units: ug/l

Processing Integration Results



RT: 3.85
Area: 8201
Amount: 0.044115
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 30-Apr-2021 16:52:49
Audit Action: Split an Integrated Peak

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

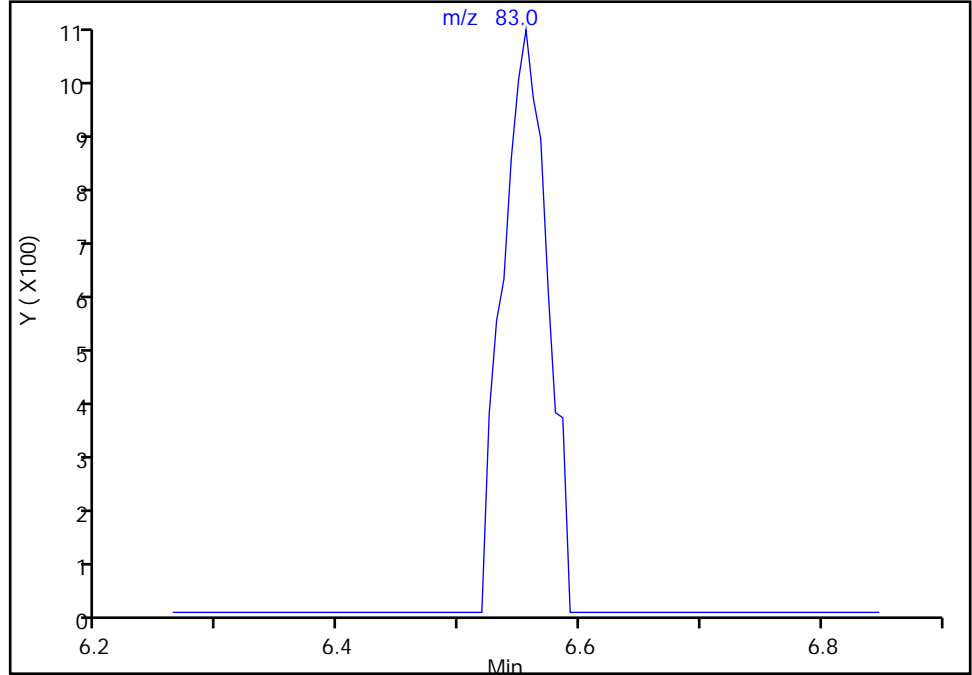
Data File: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\GA30S07.D
Injection Date: 30-Apr-2021 13:12:30 Instrument ID: 16334
Lims ID: 410-37501-A-7 Lab Sample ID: 410-37501-7
Client ID: HD-COD-SW-16-0/1-0
Operator ID: jml01693 ALS Bottle#: 14 Worklist Smp#: 14
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

51 Chloroform, CAS: 67-66-3

Signal: 1

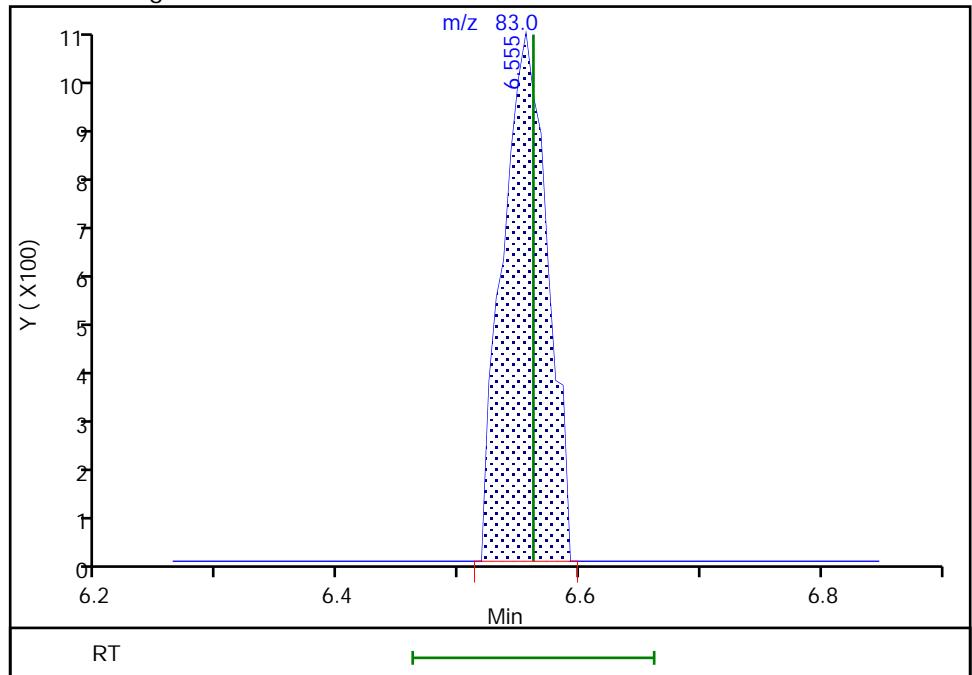
Not Detected
Expected RT: 6.56

Processing Integration Results



Manual Integration Results

RT: 6.56
Area: 2627
Amount: 0.025298
Amount Units: ug/l



Reviewer: campbellme, 30-Apr-2021 16:53:00
Audit Action: Assigned Compound ID

Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-37501-1
 SDG No.: _____
 Client Sample ID: HD-COD-SW-17-0/1-0 Lab Sample ID: 410-37501-8
 Matrix: Water Lab File ID: GA30S08.D
 Analysis Method: 8260D Date Collected: 04/26/2021 10:40
 Sample wt/vol: 25 (mL) Date Analyzed: 04/30/2021 13:34
 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.: 120958 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	0.071	J	0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.070
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.060
75-34-3	1,1-Dichloroethane	ND		0.50	0.070
75-35-4	1,1-Dichloroethene	0.063	J	0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.060
107-06-2	1,2-Dichloroethane	ND		0.50	0.050
78-87-5	1,2-Dichloropropane	ND		0.50	0.060
78-93-3	2-Butanone (MEK)	ND		5.0	0.60
591-78-6	2-Hexanone	ND		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70
67-64-1	Acetone	ND		5.0	0.90
71-43-2	Benzene	ND		0.50	0.050
74-97-5	Bromochloromethane	ND		0.50	0.050
75-27-4	Bromodichloromethane	ND		0.50	0.050
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.070
75-15-0	Carbon disulfide	ND		1.0	0.060
56-23-5	Carbon tetrachloride	ND		0.50	0.070
108-90-7	Chlorobenzene	ND		0.50	0.060
75-00-3	Chloroethane	ND		0.50	0.070
67-66-3	Chloroform	0.13	J	0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	0.80		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.050
124-48-1	Dibromochloromethane	ND		0.50	0.070
100-41-4	Ethylbenzene	ND		0.50	0.060
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.050
75-09-2	Methylene Chloride	ND		0.50	0.070
100-42-5	Styrene	ND		0.50	0.050
127-18-4	Tetrachloroethene	2.4		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	0.98		0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-37501-1
 SDG No.: _____
 Client Sample ID: HD-COD-SW-17-0/1-0 Lab Sample ID: 410-37501-8
 Matrix: Water Lab File ID: GA30S08.D
 Analysis Method: 8260D Date Collected: 04/26/2021 10:40
 Sample wt/vol: 25 (mL) Date Analyzed: 04/30/2021 13:34
 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.: 120958 Units: ug/L

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

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		80-120
460-00-4	4-Bromofluorobenzene (Surr)	88		80-120
1868-53-7	Dibromofluoromethane (Surr)	103		80-120
2037-26-5	Toluene-d8 (Surr)	93		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\GA30S08.D
 Lims ID: 410-37501-A-8
 Client ID: HD-COD-SW-17-0/1-0
 Sample Type: Client
 Inject. Date: 30-Apr-2021 13:34:30 ALS Bottle#: 15 Worklist Smp#: 15
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0028091-015
 Operator ID: jml01693 Instrument ID: 16334
 Method: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\MSV_16334_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 30-Apr-2021 16:57:51 Calib Date: 30-Nov-2020 18:23:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1630

First Level Reviewer: campbellme Date: 30-Apr-2021 16:53:52

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
5 Chloromethane	50		2.148				ND	
8 Vinyl chloride	62	2.270	2.263	0.007	92	3616	0.0498	
9 Bromomethane	94		2.587				ND	
10 Chloroethane	64		2.666				ND	
19 1,1-Dichloroethene	96	3.532	3.513	0.019	76	3173	0.0628	M
21 Acetone	43	3.556	3.538	0.018	86	6334	0.7646	
25 Carbon disulfide	76	3.788	3.830	-0.042	55	8666	0.0466	M
29 Methylene Chloride	84		4.166				ND	
* 30 t-Butyl alcohol-d10 (IS)	65	4.178	4.178	0.000	0	168833	50.0	
33 Methyl tert-butyl ether	73	4.580	4.562	0.018	1	2202	0.0137	7M
34 trans-1,2-Dichloroethene	96	4.574	4.568	0.006	5	1060	0.0182	Ma
37 1,1-Dichloroethane	63	5.245	5.239	0.006	0	5785	0.0536	M
41 2-Butanone (MEK)	43		6.049				ND	
42 cis-1,2-Dichloroethene	96	6.080	6.074	0.006	78	52169	0.7993	
49 Chlorobromomethane	128		6.403				ND	
51 Chloroform	83	6.568	6.561	0.007	92	13628	0.1311	
\$ 52 Dibromofluoromethane (Surr)	113	6.775	6.775	0.000	94	602554	10.3	
53 1,1,1-Trichloroethane	97	6.787	6.787	0.000	35	6321	0.0710	
56 Carbon tetrachloride	117		6.994				ND	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.226	7.232	-0.006	0	119549	9.58	
60 Benzene	78		7.263				ND	
61 1,2-Dichloroethane	62		7.330				ND	
* 64 Fluorobenzene (IS)	96	7.665	7.665	0.000	99	2423957	10.0	
68 Trichloroethene	95	8.140	8.140	0.000	96	61549	0.9783	
70 1,2-Dichloropropane	63		8.476				ND	
76 Dichlorobromomethane	83		8.823				ND	
81 cis-1,3-Dichloropropene	75		9.378				ND	
82 4-Methyl-2-pentanone (MIBK)	43		9.555				ND	
\$ 83 Toluene-d8 (Surr)	98	9.683	9.683	0.000	93	2252652	9.28	
84 Toluene	92	9.756	9.762	-0.006	96	4857	0.0308	
96 trans-1,3-Dichloropropene	75		10.018				ND	
99 1,1,2-Trichloroethane	97		10.225				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
100 Tetrachloroethene	166	10.311	10.311	0.000	98	162865	2.38	
102 2-Hexanone	43		10.445				ND	
104 Chlorodibromomethane	129		10.603				ND	
105 Ethylene Dibromide	107		10.707				ND	
* 106 Chlorobenzene-d5 (IS)	117	11.140	11.140	0.000	84	1819633	10.0	
108 Chlorobenzene	112		11.170				ND	
S 109 Xylenes, Total	106		11.245				ND	7
110 1,1,1,2-Tetrachloroethane	131		11.250				ND	
111 Ethylbenzene	91		11.256				ND	7
112 m-Xylene & p-Xylene	106		11.371				ND	7
113 o-Xylene	106		11.701				ND	
114 Styrene	104		11.713				ND	
115 Bromoform	173		11.871				ND	
\$ 119 4-Bromofluorobenzene (Surr)	95	12.140	12.140	0.000	94	817772	8.82	
120 1,1,2,2-Tetrachloroethane	83		12.243				ND	
* 134 1,4-Dichlorobenzene-d4	152	13.018	13.017	0.001	94	1007473	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MSV_29_826ISS_00017

Amount Added: 1.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\GA30S08.D

Injection Date: 30-Apr-2021 13:34:30

Instrument ID: 16334

Operator ID: jml01693

Lims ID: 410-37501-A-8

Lab Sample ID: 410-37501-8

Worklist Smp#: 15

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

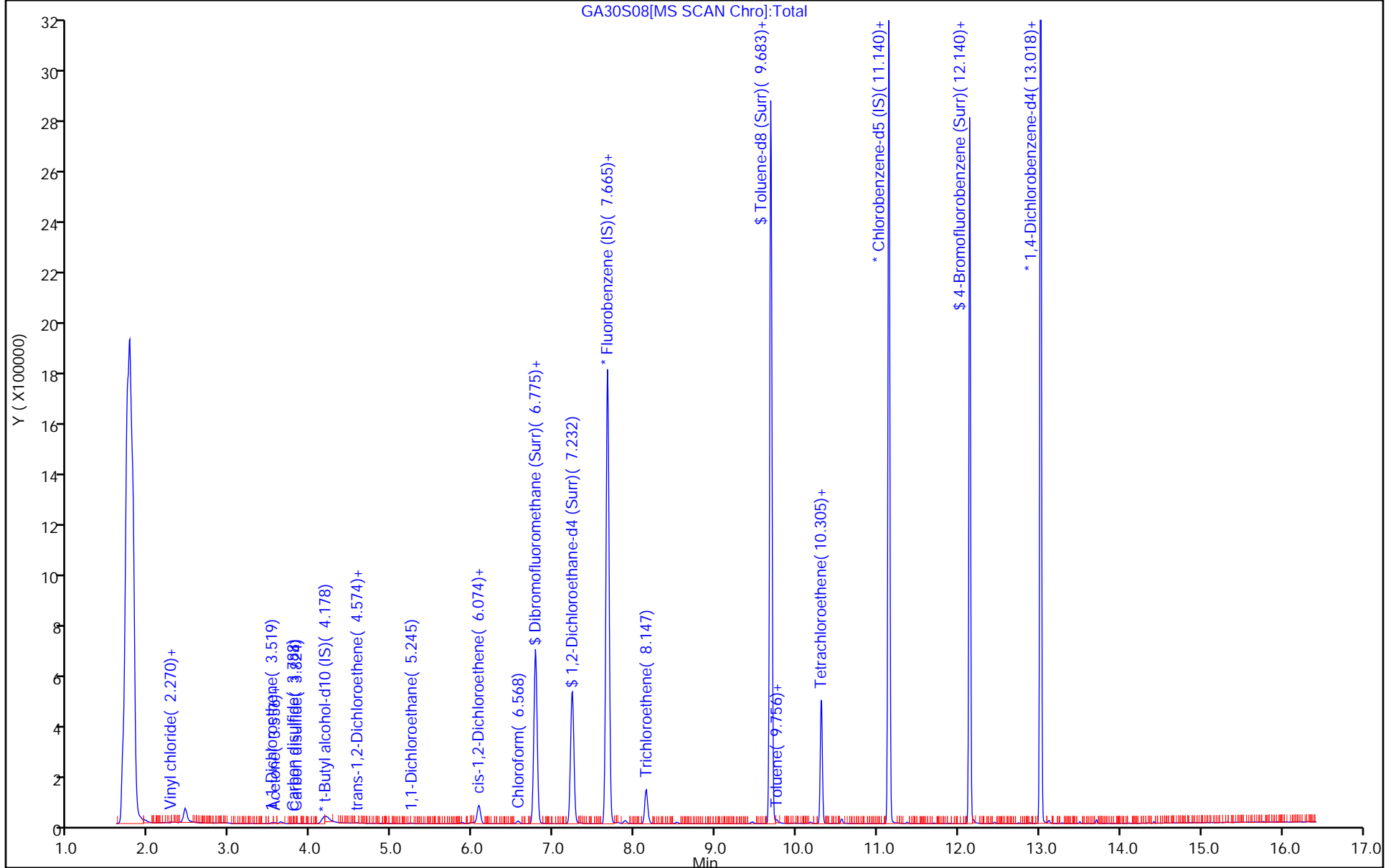
ALS Bottle#: 15

Method: MSV_16334_25mL

Limit Group: MSV - 8260C_D

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

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\GA30S08.D
 Lims ID: 410-37501-A-8
 Client ID: HD-COD-SW-17-0/1-0
 Sample Type: Client
 Inject. Date: 30-Apr-2021 13:34:30 ALS Bottle#: 15 Worklist Smp#: 15
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0028091-015
 Operator ID: jml01693 Instrument ID: 16334
 Method: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\MSV_16334_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 30-Apr-2021 16:57:51 Calib Date: 30-Nov-2020 18:23:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1630

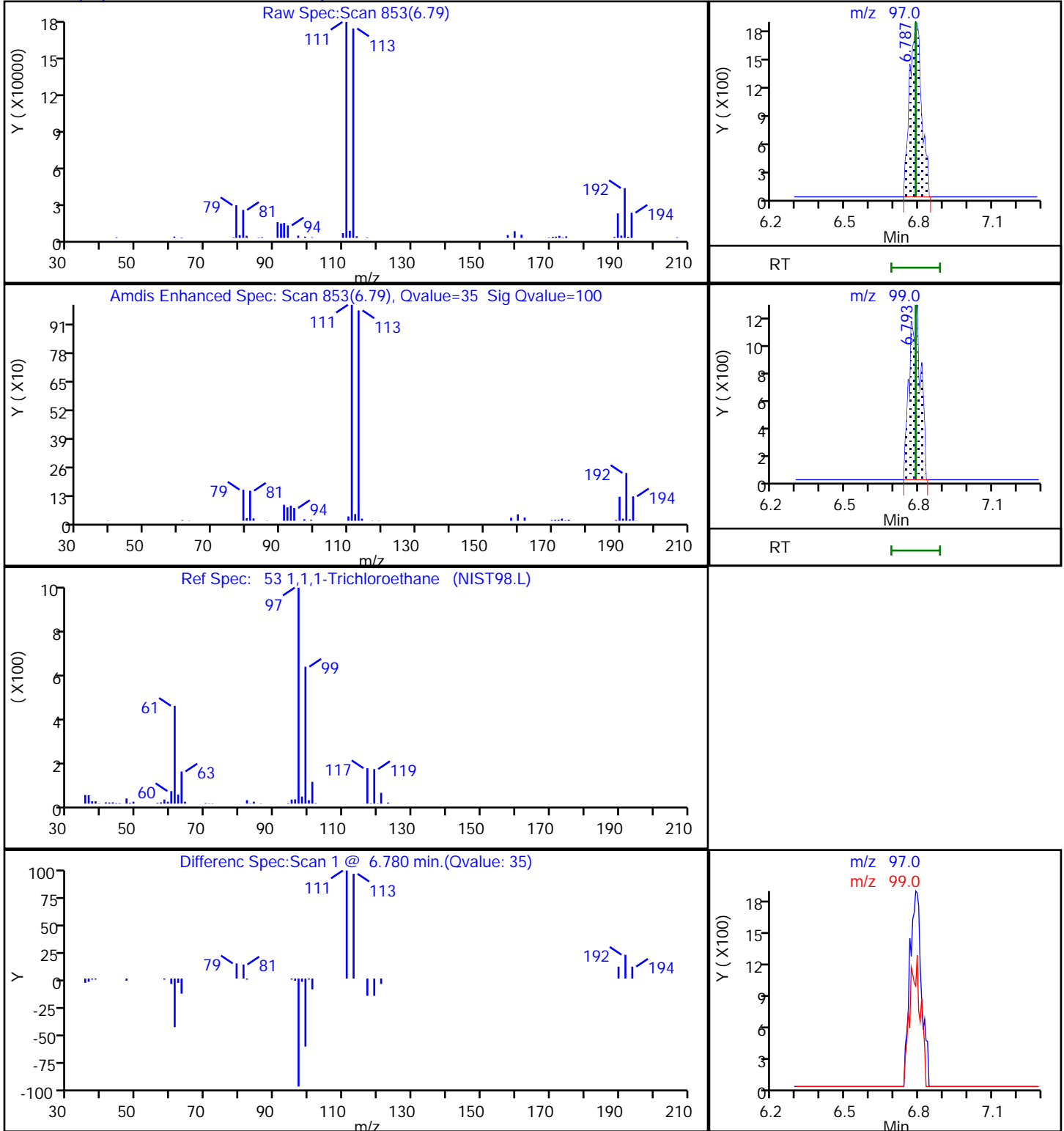
First Level Reviewer: campbellme Date: 30-Apr-2021 16:53:52

Compound	Amount Added	Amount Recovered	% Rec.
\$ 52 Dibromofluoromethane (Surr)	10.0	10.3	102.71
\$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	9.58	95.78
\$ 83 Toluene-d8 (Surr)	10.0	9.28	92.79
\$ 119 4-Bromofluorobenzene (Surr)	10.0	8.82	88.22

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\GA30S08.D
Injection Date: 30-Apr-2021 13:34:30 Instrument ID: 16334
Lims ID: 410-37501-A-8 Lab Sample ID: 410-37501-8
Client ID: HD-COD-SW-17-0/1-0
Operator ID: jml01693 ALS Bottle#: 15 Worklist Smp#: 15
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) MS Quad

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



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\GA30S08.D

Injection Date: 30-Apr-2021 13:34:30

Instrument ID: 16334

Lims ID: 410-37501-A-8

Lab Sample ID: 410-37501-8

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

Operator ID: jml01693

ALS Bottle#: 15

Worklist Smp#: 15

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

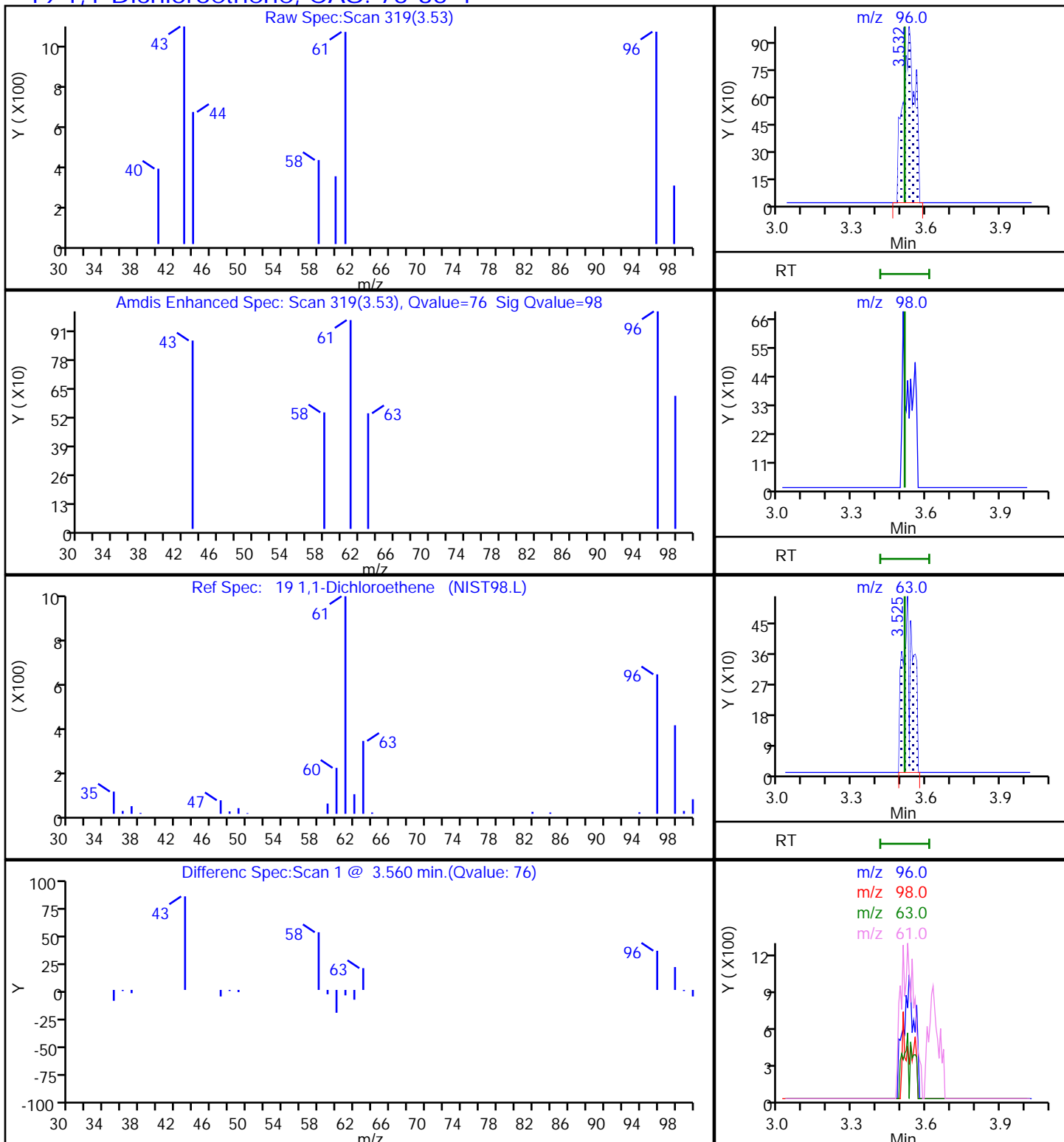
Method: MSV_16334_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

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



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\GA30S08.D

Injection Date: 30-Apr-2021 13:34:30

Instrument ID: 16334

Lims ID: 410-37501-A-8

Lab Sample ID: 410-37501-8

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

Operator ID: jml01693

ALS Bottle#: 15

Worklist Smp#: 15

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

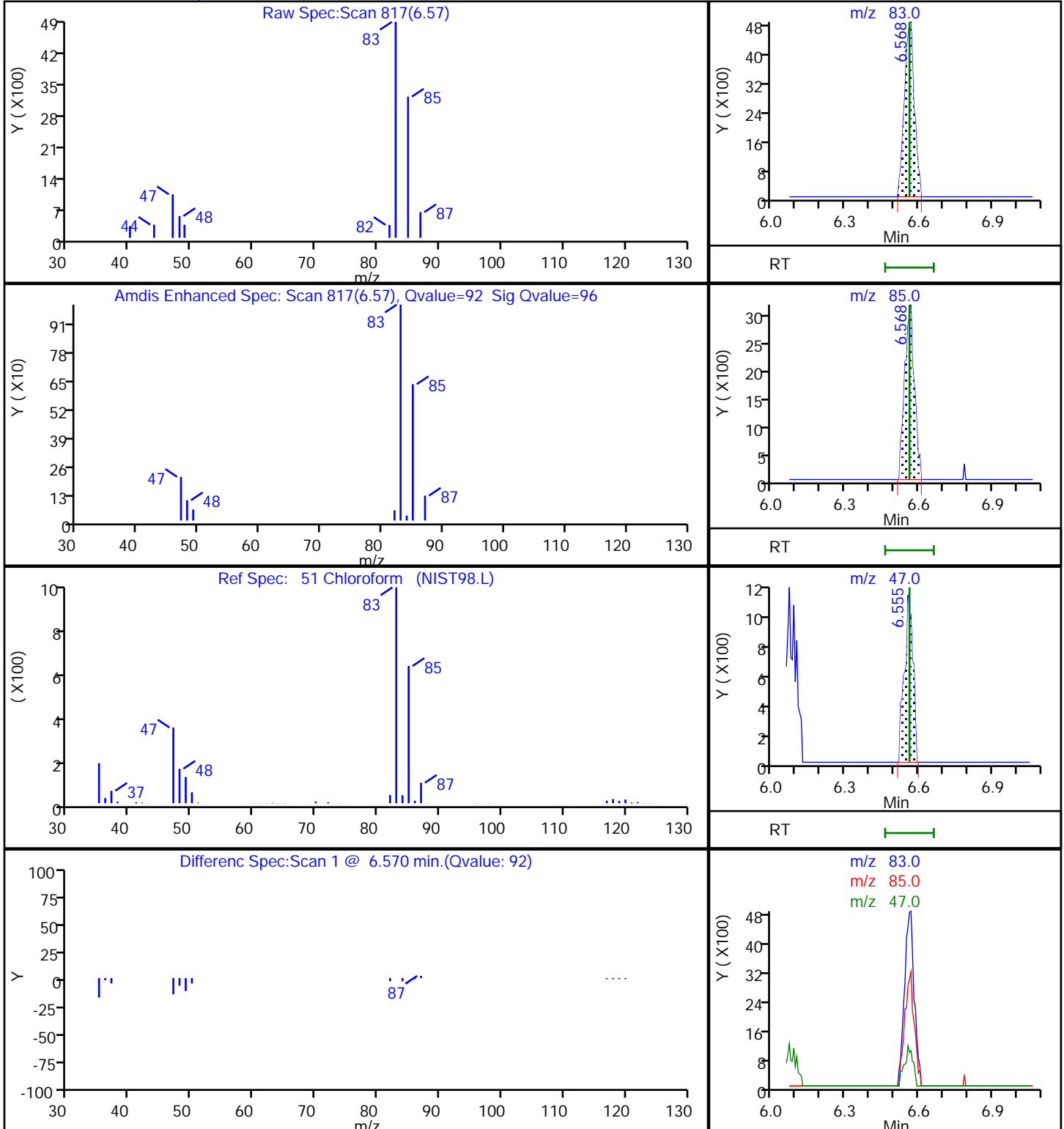
Method: MSV_16334_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) x 30m

MS Quad

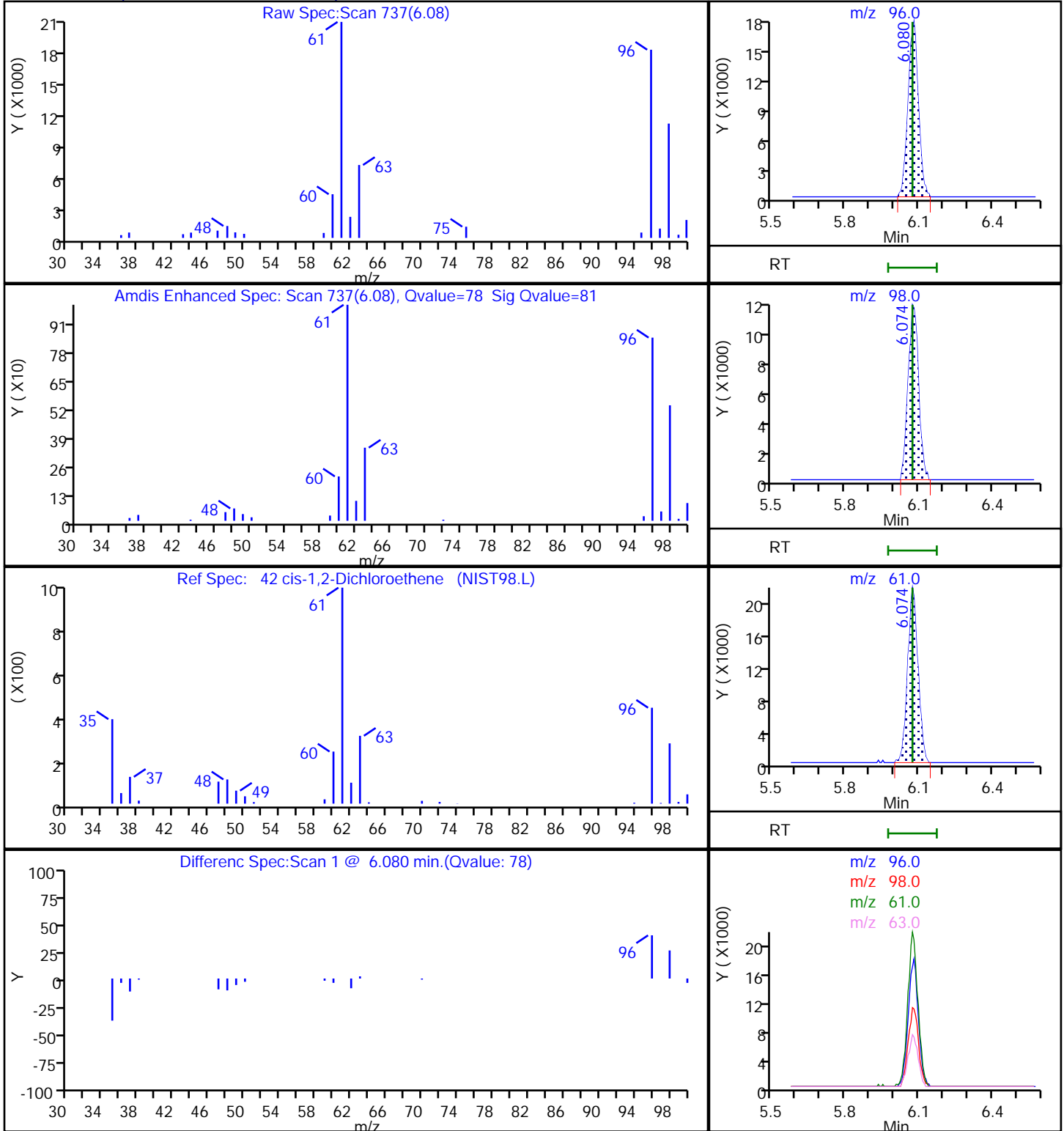
51 Chloroform, CAS: 67-66-3



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\GA30S08.D
Injection Date: 30-Apr-2021 13:34:30 Instrument ID: 16334
Lims ID: 410-37501-A-8 Lab Sample ID: 410-37501-8
Client ID: HD-COD-SW-17-0/1-0
Operator ID: jml01693 ALS Bottle#: 15 Worklist Smp#: 15
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

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



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\GA30S08.D

Injection Date: 30-Apr-2021 13:34:30

Instrument ID: 16334

Lims ID: 410-37501-A-8

Lab Sample ID: 410-37501-8

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

Operator ID: jml01693

ALS Bottle#: 15

Worklist Smp#: 15

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

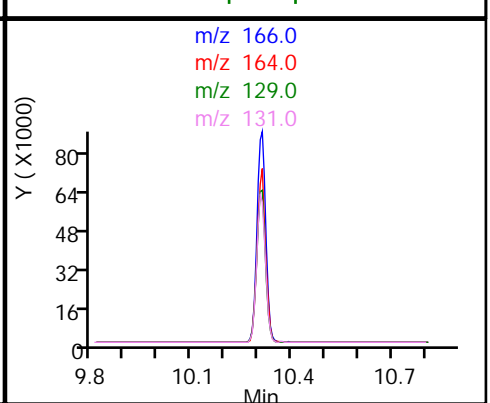
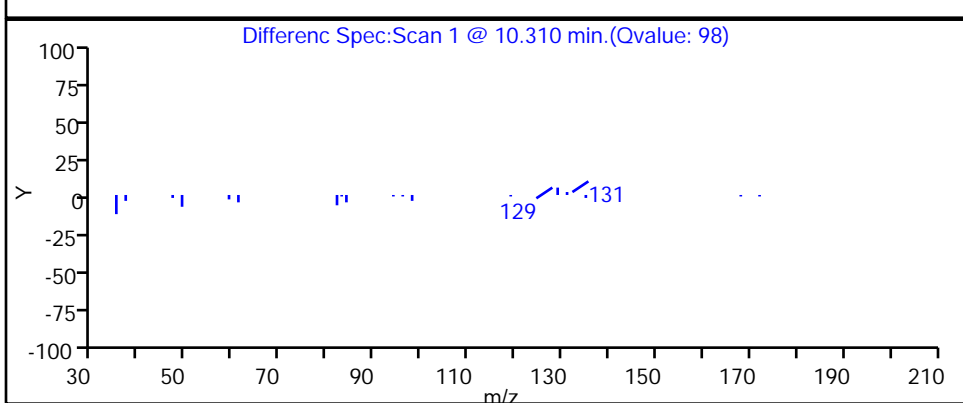
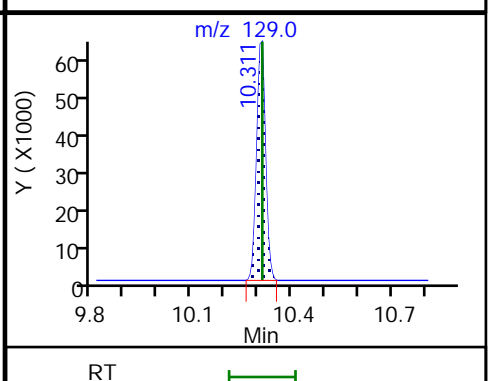
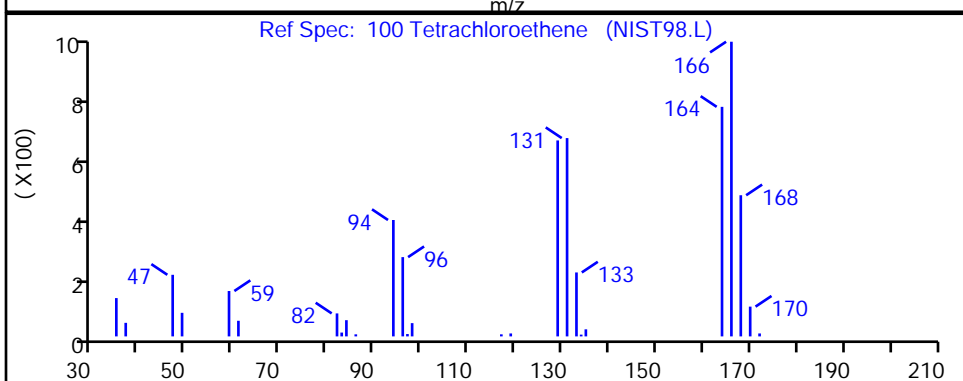
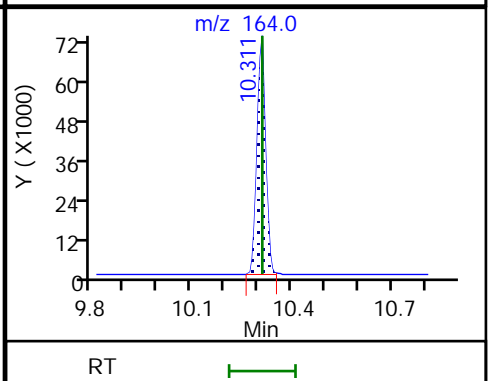
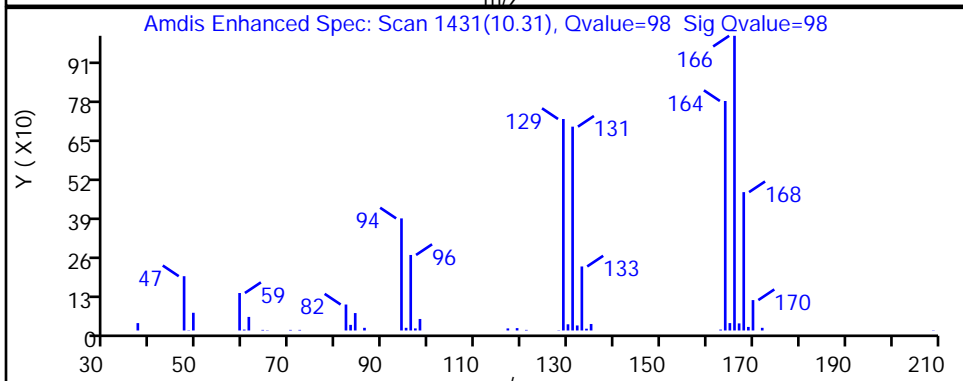
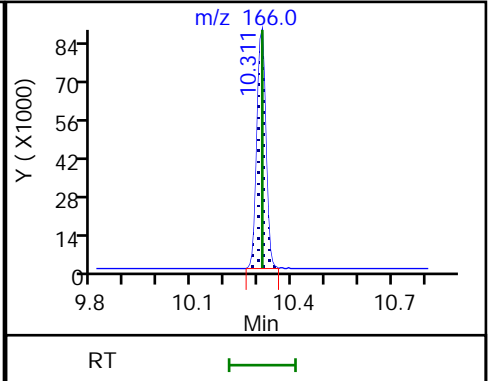
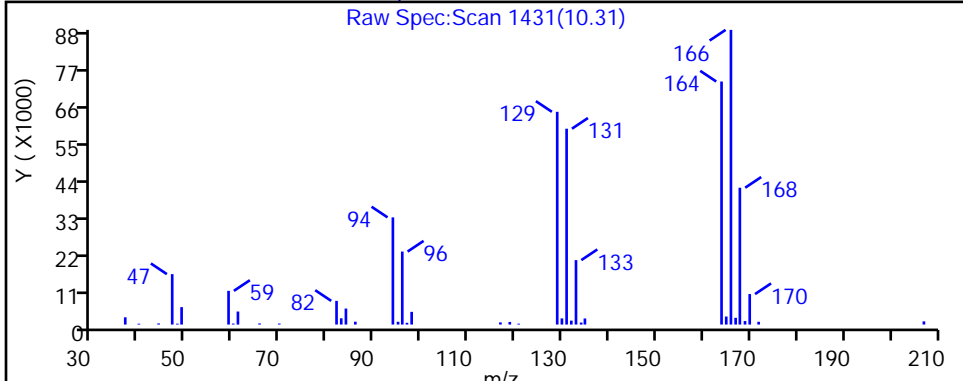
Method: MSV_16334_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

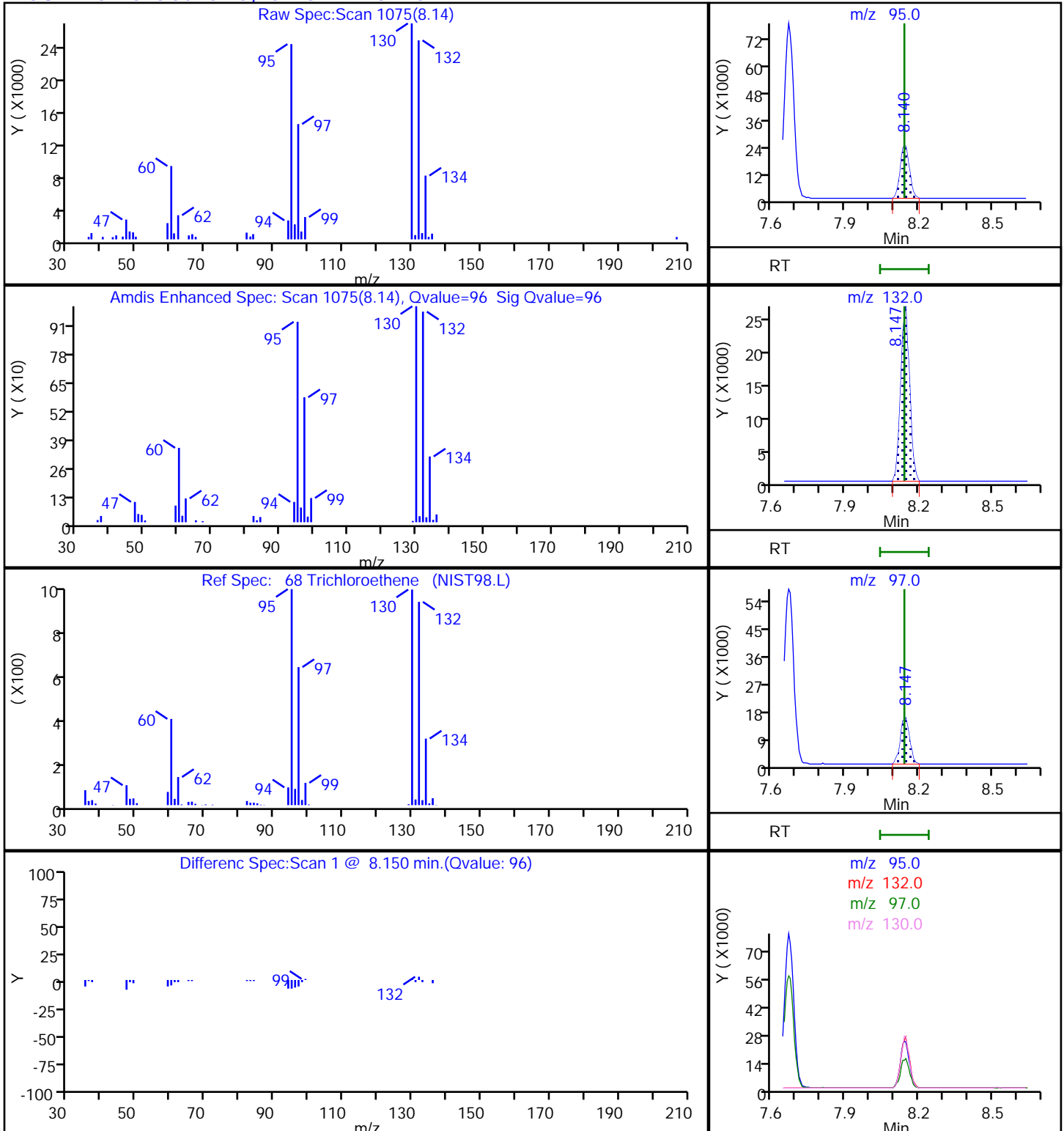
100 Tetrachloroethene, CAS: 127-18-4



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\GA30S08.D
Injection Date: 30-Apr-2021 13:34:30 Instrument ID: 16334
Lims ID: 410-37501-A-8 Lab Sample ID: 410-37501-8
Client ID: HD-COD-SW-17-0/1-0
Operator ID: jml01693 ALS Bottle#: 15 Worklist Smp#: 15
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm i.d.) MS Quad

68 Trichloroethene, CAS: 79-01-6



Eurofins Lancaster Laboratories Env, LLC

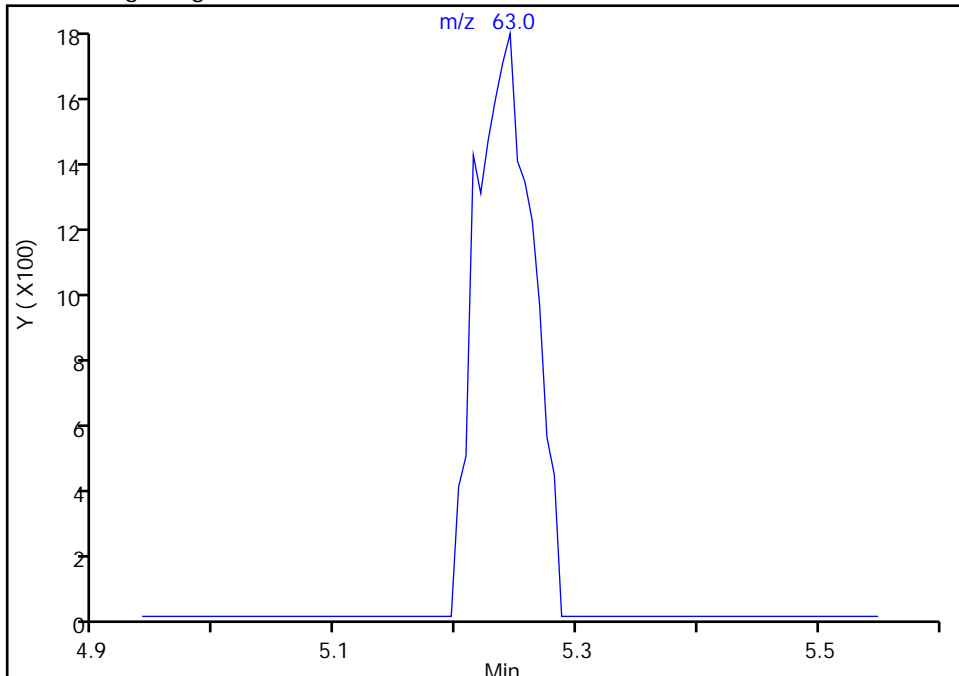
Data File:	\\chromfs\Lancaster\ChromData\16334\20210430-28091.b\GA30S08.D		
Injection Date:	30-Apr-2021 13:34:30	Instrument ID:	16334
Lims ID:	410-37501-A-8	Lab Sample ID:	410-37501-8
Client ID:	HD-COD-SW-17-0/1-0		
Operator ID:	jml01693	ALS Bottle#:	15
Purge Vol:	25.000 mL	Dil. Factor:	1.0000
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D
Column:	Rxi-624Sil MS Capillary Column (0.25mm ID)	Detector:	MS Quad
		Worklist Smp#:	15

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

Signal: 1

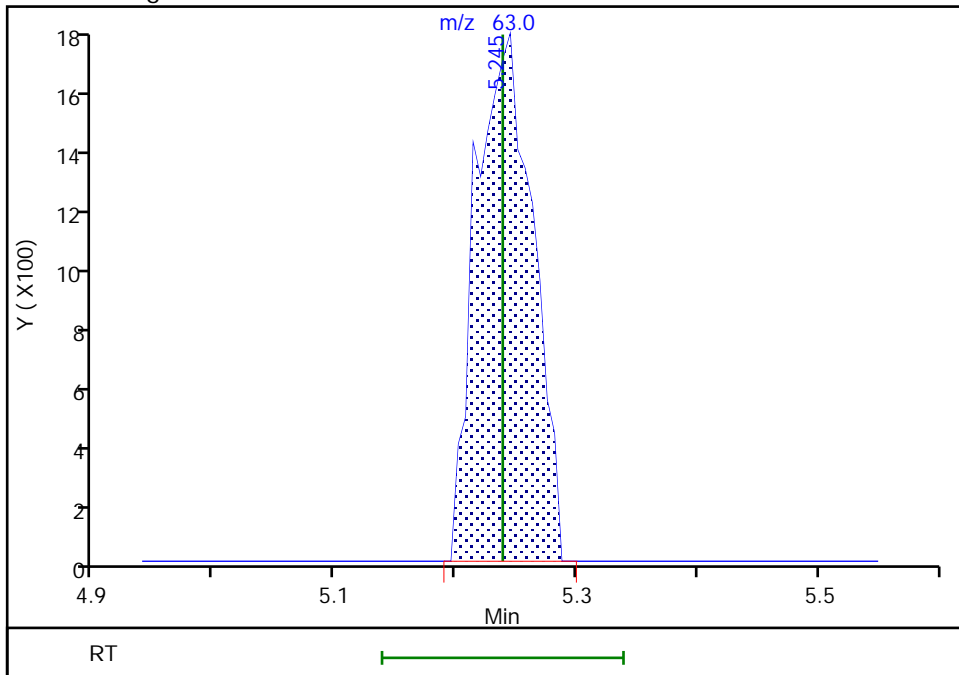
Not Detected
Expected RT: 5.24

Processing Integration Results



Manual Integration Results

RT: 5.24
 Area: 5785
 Amount: 0.053617
 Amount Units: ug/l



Reviewer: campbellme, 30-Apr-2021 16:53:38
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

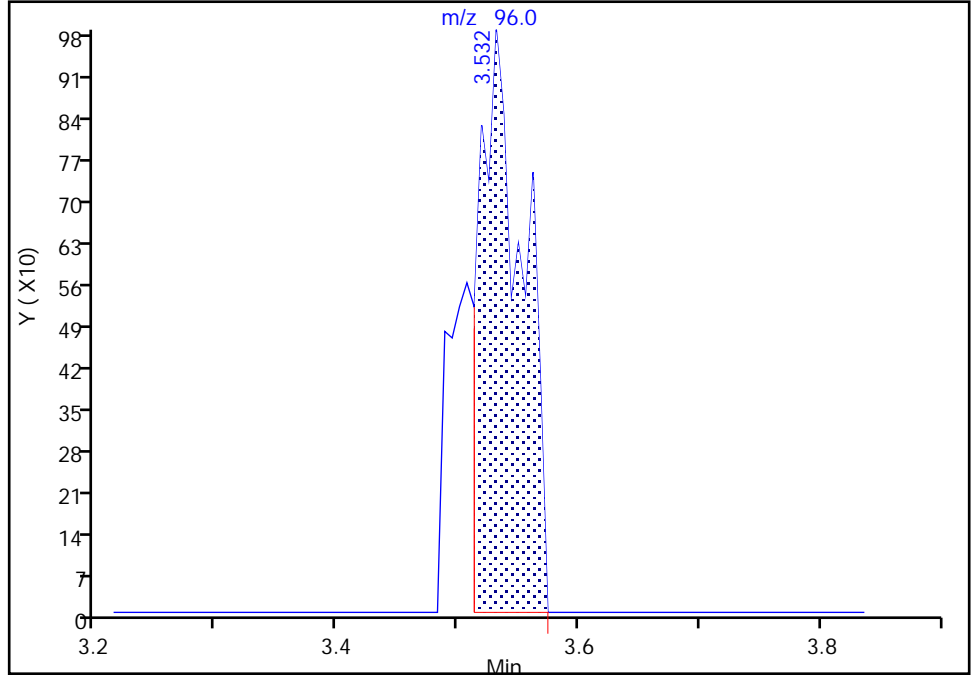
Data File: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\GA30S08.D
Injection Date: 30-Apr-2021 13:34:30 Instrument ID: 16334
Lims ID: 410-37501-A-8 Lab Sample ID: 410-37501-8
Client ID: HD-COD-SW-17-0/1-0
Operator ID: jml01693 ALS Bottle#: 15 Worklist Smp#: 15
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

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

Signal: 1

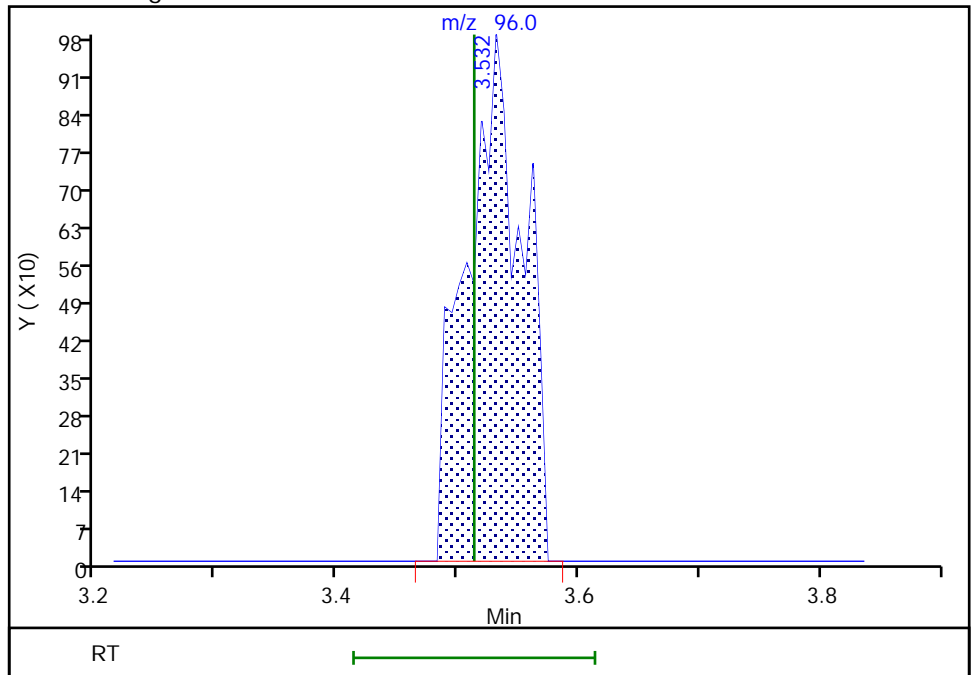
RT: 3.53
Area: 2439
Amount: 0.048305
Amount Units: ug/l

Processing Integration Results



RT: 3.53
Area: 3173
Amount: 0.062843
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 30-Apr-2021 16:53:21
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

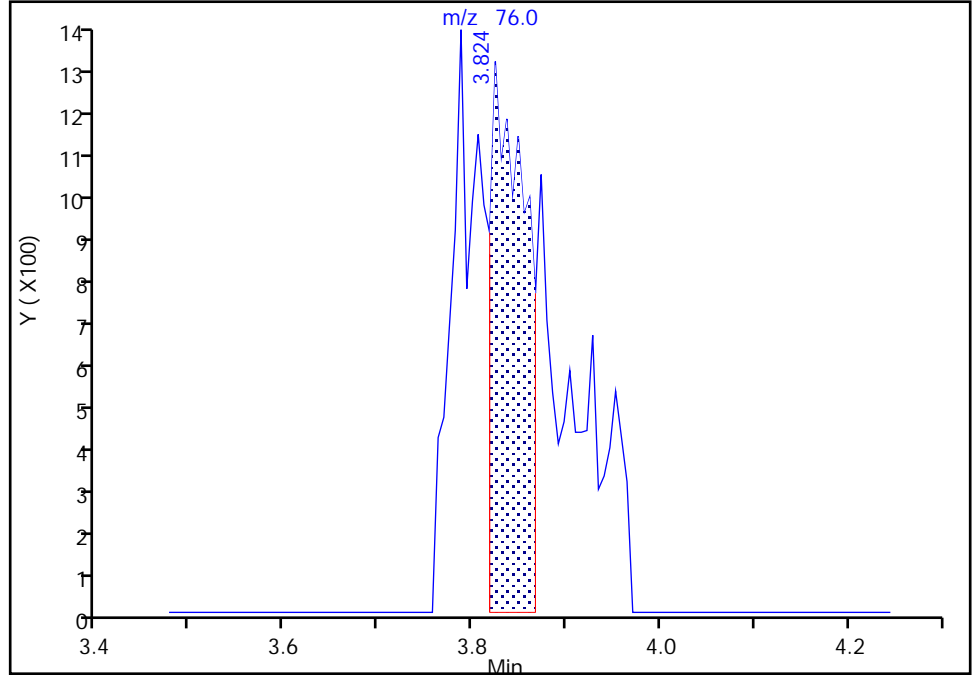
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Injection Date: 30-Apr-2021 13:34:30 Instrument ID: 16334
Lims ID: 410-37501-A-8 Lab Sample ID: 410-37501-8
Client ID: HD-COD-SW-17-0/1-0
Operator ID: jml01693 ALS Bottle#: 15 Worklist Smp#: 15
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

25 Carbon disulfide, CAS: 75-15-0

Signal: 1

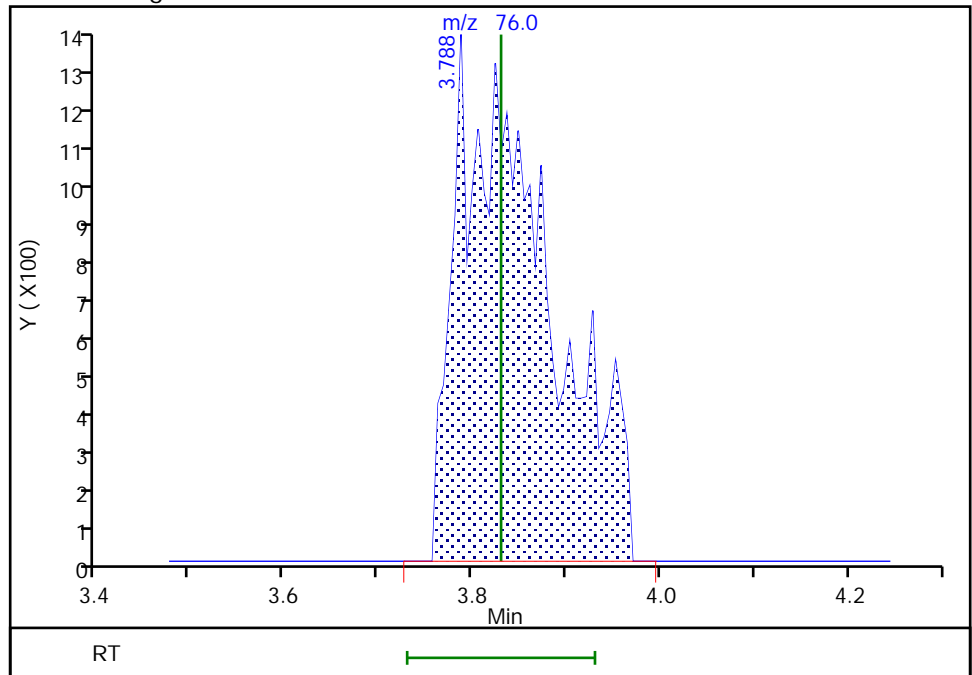
RT: 3.82
Area: 3224
Amount: 0.017322
Amount Units: ug/l

Processing Integration Results



RT: 3.79
Area: 8666
Amount: 0.046562
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 30-Apr-2021 16:53:25
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

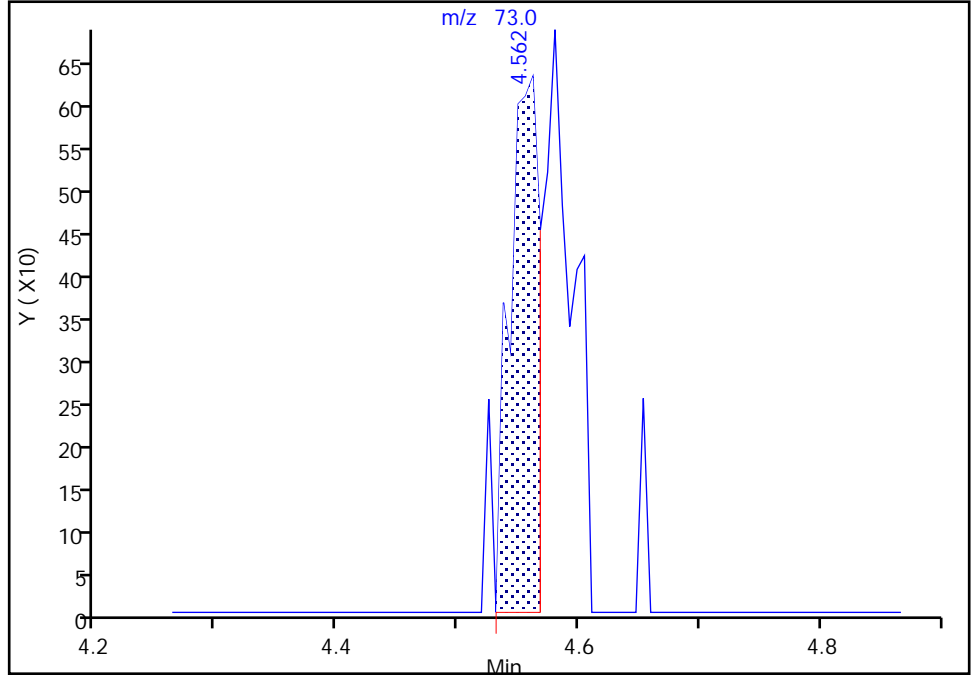
Data File: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\GA30S08.D
Injection Date: 30-Apr-2021 13:34:30 Instrument ID: 16334
Lims ID: 410-37501-A-8 Lab Sample ID: 410-37501-8
Client ID: HD-COD-SW-17-0/1-0
Operator ID: jml01693 ALS Bottle#: 15 Worklist Smp#: 15
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

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

Signal: 1

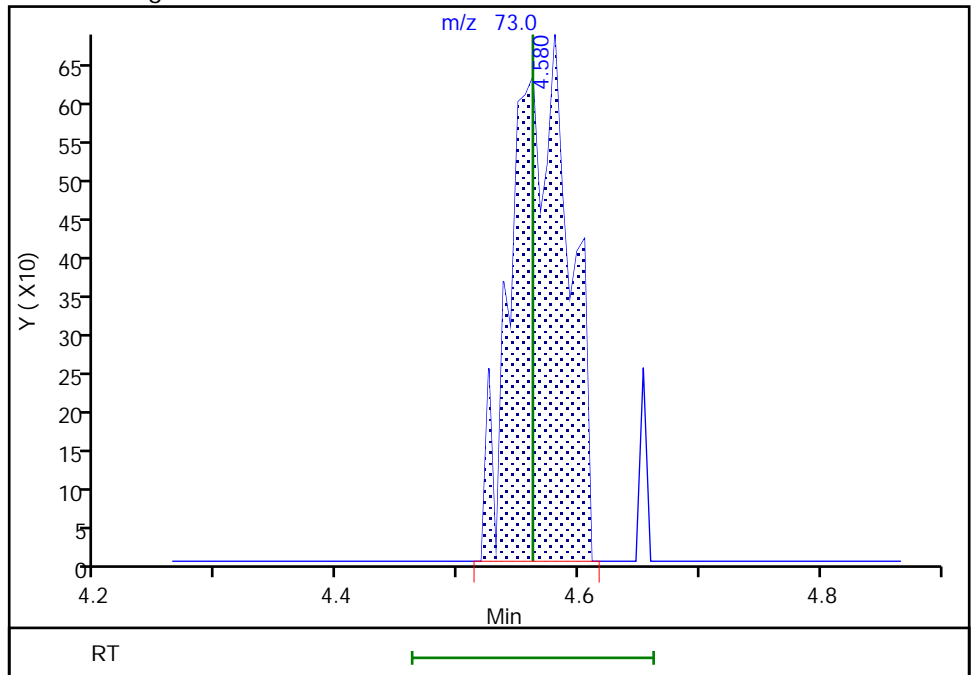
RT: 4.56
Area: 1075
Amount: 0.006699
Amount Units: ug/l

Processing Integration Results



RT: 4.58
Area: 2202
Amount: 0.013722
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 30-Apr-2021 16:53:30
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

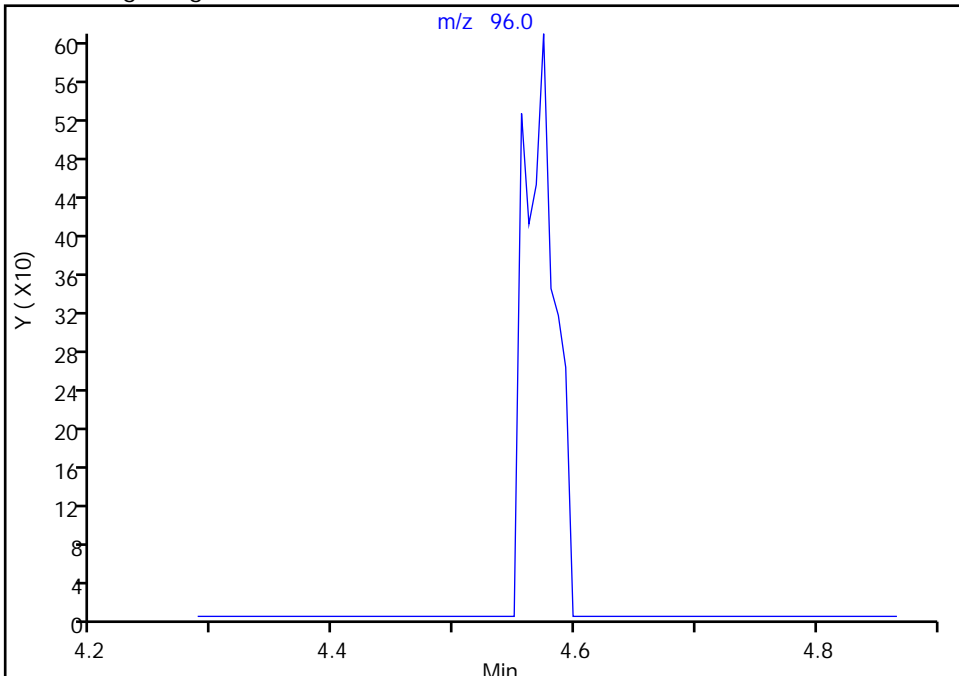
Data File: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\GA30S08.D
Injection Date: 30-Apr-2021 13:34:30 Instrument ID: 16334
Lims ID: 410-37501-A-8 Lab Sample ID: 410-37501-8
Client ID: HD-COD-SW-17-0/1-0
Operator ID: jml01693 ALS Bottle#: 15 Worklist Smp#: 15
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

34 trans-1,2-Dichloroethene, CAS: 156-60-5

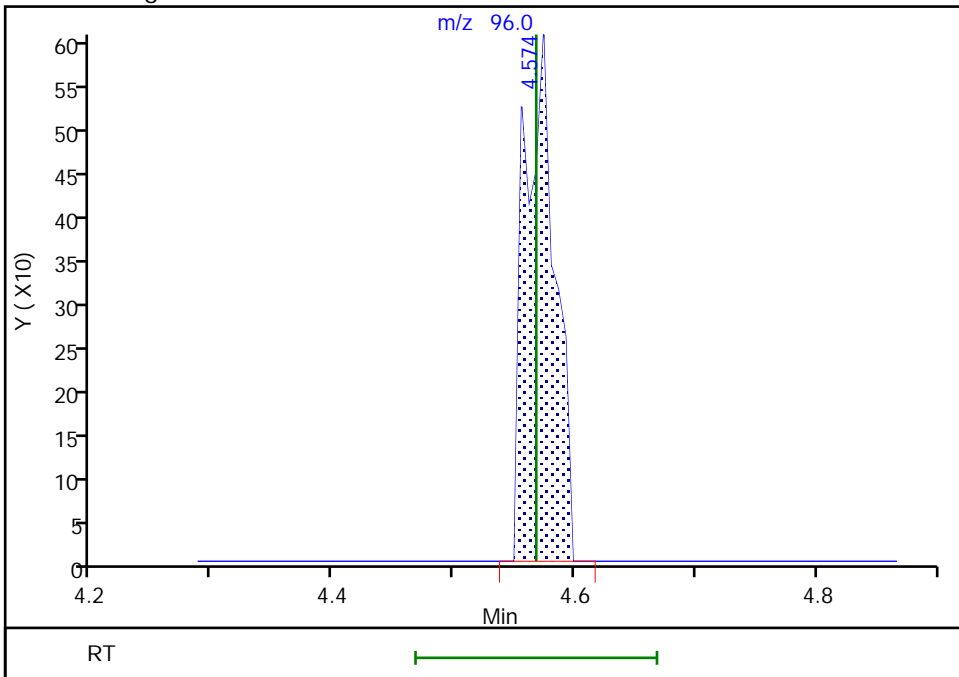
Signal: 1

Not Detected
Expected RT: 4.57

Processing Integration Results



Manual Integration Results



RT: 4.57
Area: 1060
Amount: 0.018234
Amount Units: ug/l

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-37501-1
 SDG No.: _____
 Client Sample ID: HD-COD-SW-26-0/1-0 Lab Sample ID: 410-37501-9
 Matrix: Water Lab File ID: GA30S09.D
 Analysis Method: 8260D Date Collected: 04/26/2021 11:20
 Sample wt/vol: 25 (mL) Date Analyzed: 04/30/2021 13:56
 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.: 120958 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.070
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.060
75-34-3	1,1-Dichloroethane	ND		0.50	0.070
75-35-4	1,1-Dichloroethene	0.19	J	0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.060
107-06-2	1,2-Dichloroethane	ND		0.50	0.050
78-87-5	1,2-Dichloropropane	ND		0.50	0.060
78-93-3	2-Butanone (MEK)	ND		5.0	0.60
591-78-6	2-Hexanone	ND		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70
67-64-1	Acetone	ND		5.0	0.90
71-43-2	Benzene	ND		0.50	0.050
74-97-5	Bromochloromethane	ND		0.50	0.050
75-27-4	Bromodichloromethane	ND		0.50	0.050
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.070
75-15-0	Carbon disulfide	ND		1.0	0.060
56-23-5	Carbon tetrachloride	ND		0.50	0.070
108-90-7	Chlorobenzene	ND		0.50	0.060
75-00-3	Chloroethane	ND		0.50	0.070
67-66-3	Chloroform	0.58		0.50	0.090
74-87-3	Chloromethane	ND		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	4.5		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	0.18	J	0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-37501-1
 SDG No.: _____
 Client Sample ID: HD-COD-SW-26-0/1-0 Lab Sample ID: 410-37501-9
 Matrix: Water Lab File ID: GA30S09.D
 Analysis Method: 8260D Date Collected: 04/26/2021 11:20
 Sample wt/vol: 25 (mL) Date Analyzed: 04/30/2021 13:56
 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.: 120958 Units: ug/L

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

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		80-120
460-00-4	4-Bromofluorobenzene (Surr)	88		80-120
1868-53-7	Dibromofluoromethane (Surr)	103		80-120
2037-26-5	Toluene-d8 (Surr)	92		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\GA30S09.D
 Lims ID: 410-37501-A-9
 Client ID: HD-COD-SW-26-0/1-0
 Sample Type: Client
 Inject. Date: 30-Apr-2021 13:56:30 ALS Bottle#: 16 Worklist Smp#: 16
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0028091-016
 Operator ID: jml01693 Instrument ID: 16334
 Method: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\MSV_16334_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 30-Apr-2021 16:57:51 Calib Date: 30-Nov-2020 18:23:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1630

First Level Reviewer: campbellme Date: 30-Apr-2021 16:54:24

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
5 Chloromethane	50		2.148				ND	
8 Vinyl chloride	62		2.263				ND	
9 Bromomethane	94		2.587				ND	
10 Chloroethane	64		2.666				ND	
19 1,1-Dichloroethene	96	3.525	3.513	0.012	97	9713	0.1925	
21 Acetone	43		3.538				ND	
25 Carbon disulfide	76		3.830				ND	
29 Methylene Chloride	84		4.166				ND	
* 30 t-Butyl alcohol-d10 (IS)	65	4.178	4.178	0.000	0	163268	50.0	
33 Methyl tert-butyl ether	73		4.562				ND	
34 trans-1,2-Dichloroethene	96		4.568				ND	
37 1,1-Dichloroethane	63		5.239				ND	
41 2-Butanone (MEK)	43		6.049				ND	
42 cis-1,2-Dichloroethene	96	6.074	6.074	0.000	76	4374	0.0670	
49 Chlorobromomethane	128		6.403				ND	
51 Chloroform	83	6.567	6.561	0.006	93	59843	0.5759	
\$ 52 Dibromofluoromethane (Surr)	113	6.775	6.775	0.000	94	606379	10.3	
53 1,1,1-Trichloroethane	97	6.781	6.787	-0.006	35	3332	0.0375	a
56 Carbon tetrachloride	117		6.994				ND	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.232	7.232	0.000	0	120149	9.63	
60 Benzene	78		7.263				ND	
61 1,2-Dichloroethane	62		7.330				ND	
* 64 Fluorobenzene (IS)	96	7.665	7.665	0.000	99	2422752	10.0	
68 Trichloroethene	95	8.146	8.140	0.006	97	11155	0.1774	
70 1,2-Dichloropropane	63		8.476				ND	
76 Dichlorobromomethane	83	8.823	8.823	0.000	1	1858	0.0243	7M
81 cis-1,3-Dichloropropene	75		9.378				ND	
82 4-Methyl-2-pentanone (MIBK)	43		9.555				ND	
\$ 83 Toluene-d8 (Surr)	98	9.683	9.683	0.000	93	2233717	9.24	
84 Toluene	92		9.762				ND	7
96 trans-1,3-Dichloropropene	75		10.018				ND	
99 1,1,2-Trichloroethane	97		10.225				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
100 Tetrachloroethene	166	10.311	10.311	0.000	98	309461	4.54	
102 2-Hexanone	43		10.445				ND	
104 Chlorodibromomethane	129		10.603				ND	
105 Ethylene Dibromide	107		10.707				ND	
* 106 Chlorobenzene-d5 (IS)	117	11.146	11.140	0.006	84	1811721	10.0	
108 Chlorobenzene	112		11.170				ND	
S 109 Xylenes, Total	106		11.245				ND	7
110 1,1,1,2-Tetrachloroethane	131		11.250				ND	
111 Ethylbenzene	91		11.256				ND	7
112 m-Xylene & p-Xylene	106		11.371				ND	7
113 o-Xylene	106		11.701				ND	7
114 Styrene	104		11.713				ND	
115 Bromoform	173		11.871				ND	
\$ 119 4-Bromofluorobenzene (Surr)	95	12.140	12.140	0.000	95	814637	8.83	
120 1,1,2,2-Tetrachloroethane	83		12.243				ND	
* 134 1,4-Dichlorobenzene-d4	152	13.017	13.017	0.000	94	1008248	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MSV_29_826ISS_00017

Amount Added: 1.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\GA30S09.D

Injection Date: 30-Apr-2021 13:56:30

Instrument ID: 16334

Operator ID: jml01693

Lims ID: 410-37501-A-9

Lab Sample ID: 410-37501-9

Worklist Smp#: 16

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

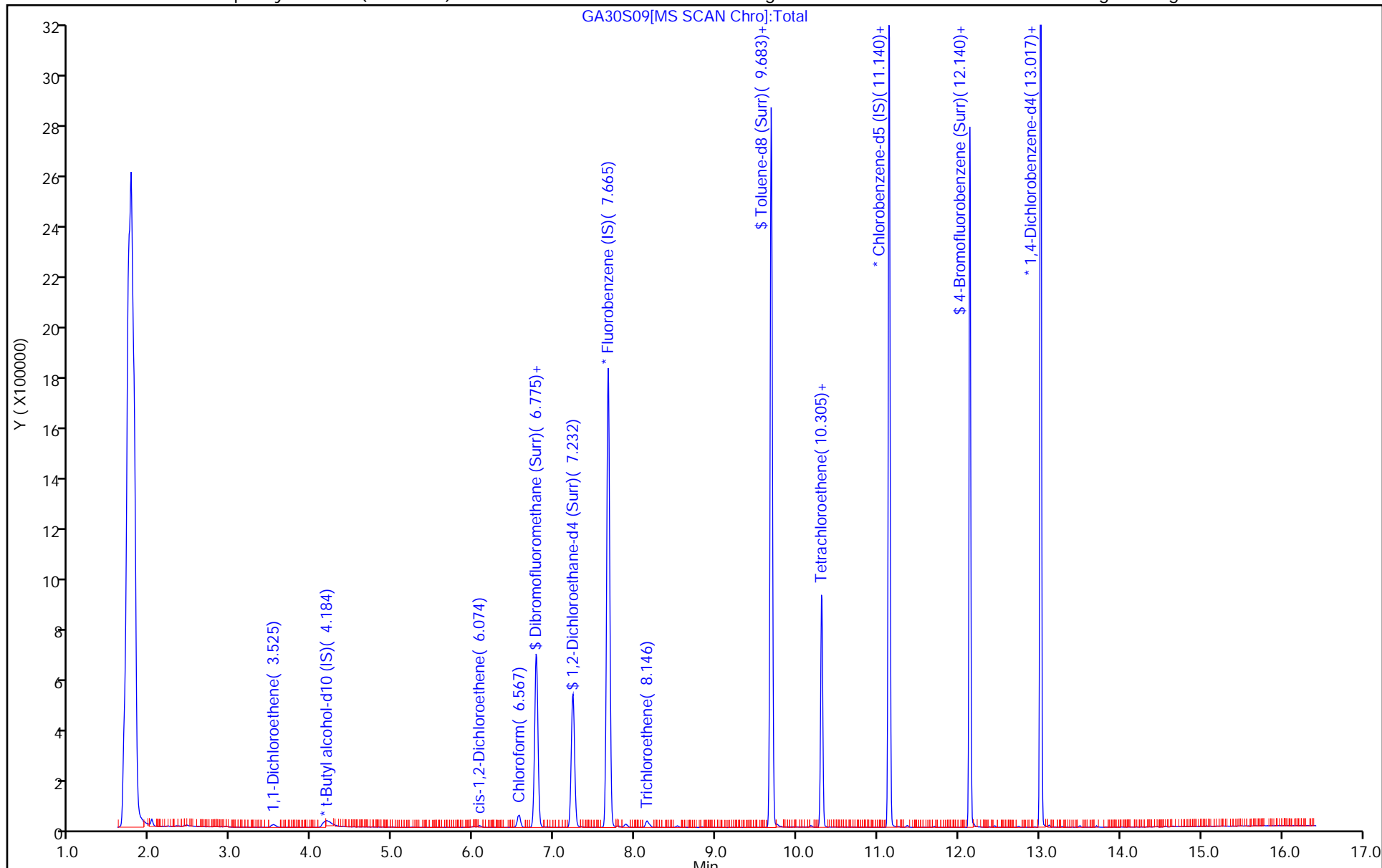
ALS Bottle#: 16

Method: MSV_16334_25mL

Limit Group: MSV - 8260C_D

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

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\GA30S09.D
 Lims ID: 410-37501-A-9
 Client ID: HD-COD-SW-26-0/1-0
 Sample Type: Client
 Inject. Date: 30-Apr-2021 13:56:30 ALS Bottle#: 16 Worklist Smp#: 16
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0028091-016
 Operator ID: jml01693 Instrument ID: 16334
 Method: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\MSV_16334_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 30-Apr-2021 16:57:51 Calib Date: 30-Nov-2020 18:23:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1630

First Level Reviewer: campbellme

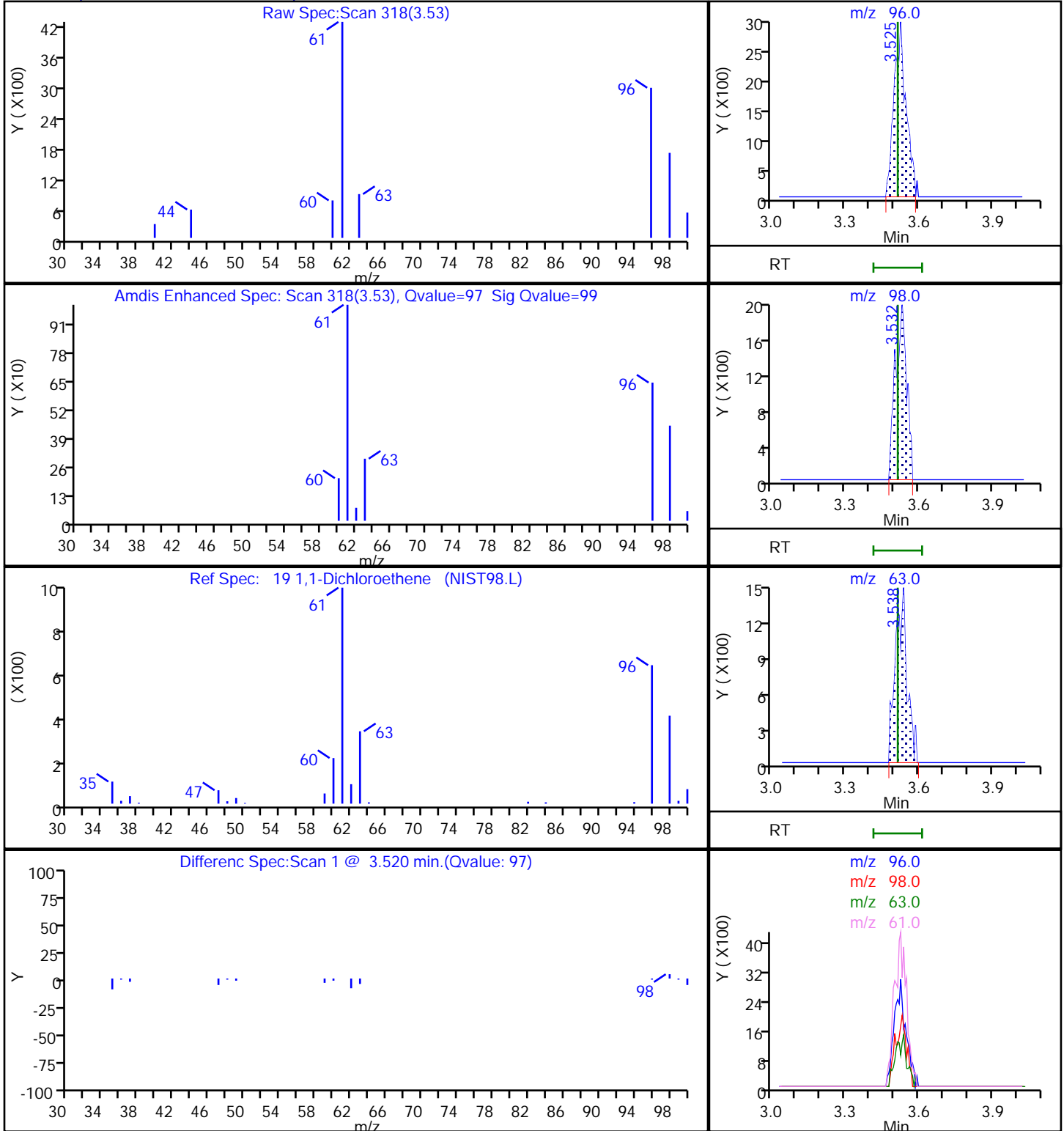
Date: 30-Apr-2021 16:54:24

Compound	Amount Added	Amount Recovered	% Rec.
\$ 52 Dibromofluoromethane (Surr)	10.0	10.3	103.41
\$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	9.63	96.30
\$ 83 Toluene-d8 (Surr)	10.0	9.24	92.41
\$ 119 4-Bromofluorobenzene (Surr)	10.0	8.83	88.27

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\GA30S09.D
Injection Date: 30-Apr-2021 13:56:30 Instrument ID: 16334
Lims ID: 410-37501-A-9 Lab Sample ID: 410-37501-9
Client ID: HD-COD-SW-26-0/1-0
Operator ID: jml01693 ALS Bottle#: 16 Worklist Smp#: 16
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) MS Quad

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



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\GA30S09.D

Injection Date: 30-Apr-2021 13:56:30

Instrument ID: 16334

Lims ID: 410-37501-A-9

Lab Sample ID: 410-37501-9

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

Operator ID: jml01693

ALS Bottle#: 16

Worklist Smp#: 16

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

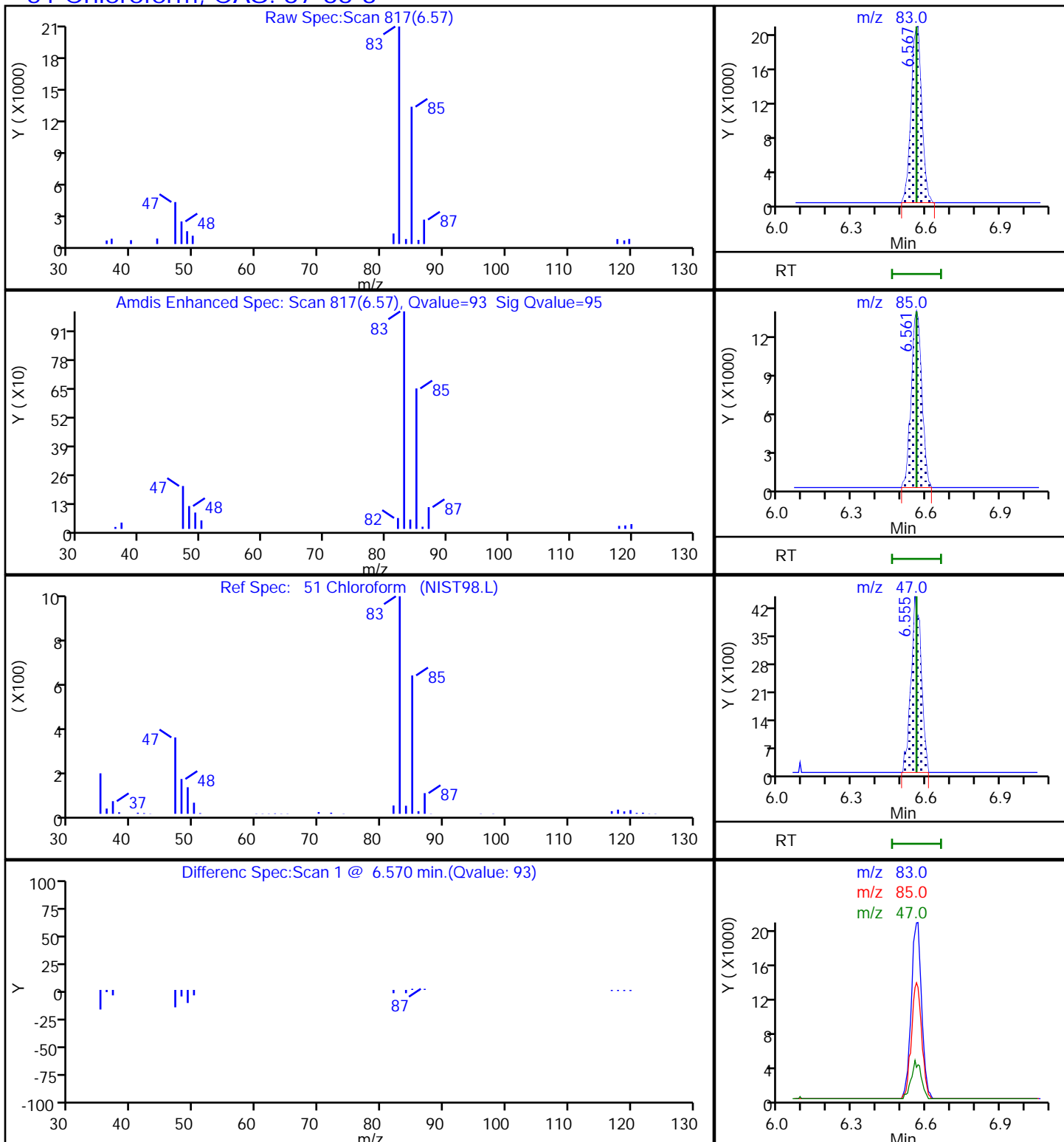
Method: MSV_16334_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) x 30m

MS Quad

51 Chloroform, CAS: 67-66-3



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\GA30S09.D

Injection Date: 30-Apr-2021 13:56:30

Instrument ID: 16334

Lims ID: 410-37501-A-9

Lab Sample ID: 410-37501-9

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

Operator ID: jml01693

ALS Bottle#: 16

Worklist Smp#: 16

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

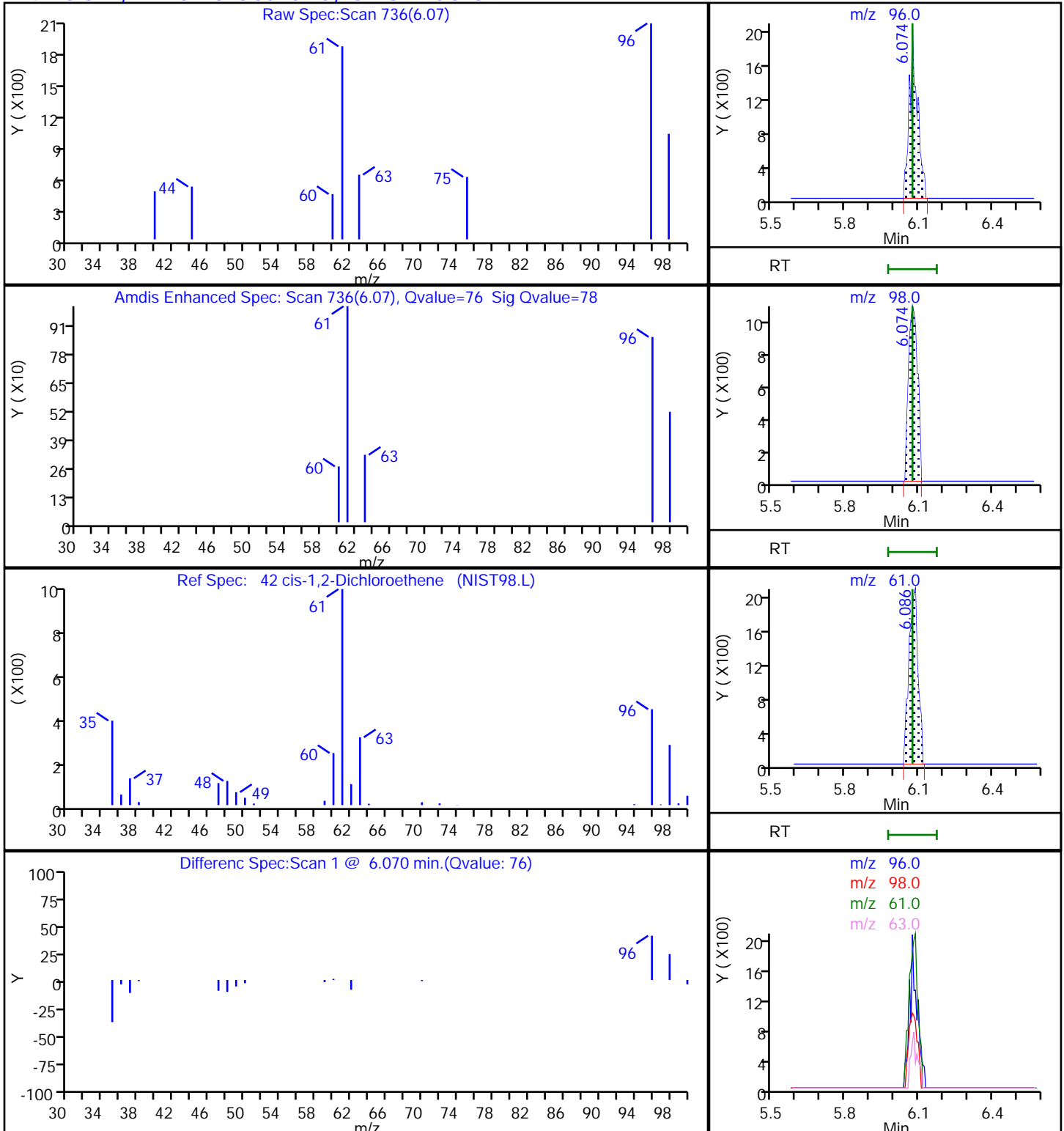
Method: MSV_16334_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) x 30m

MS Quad

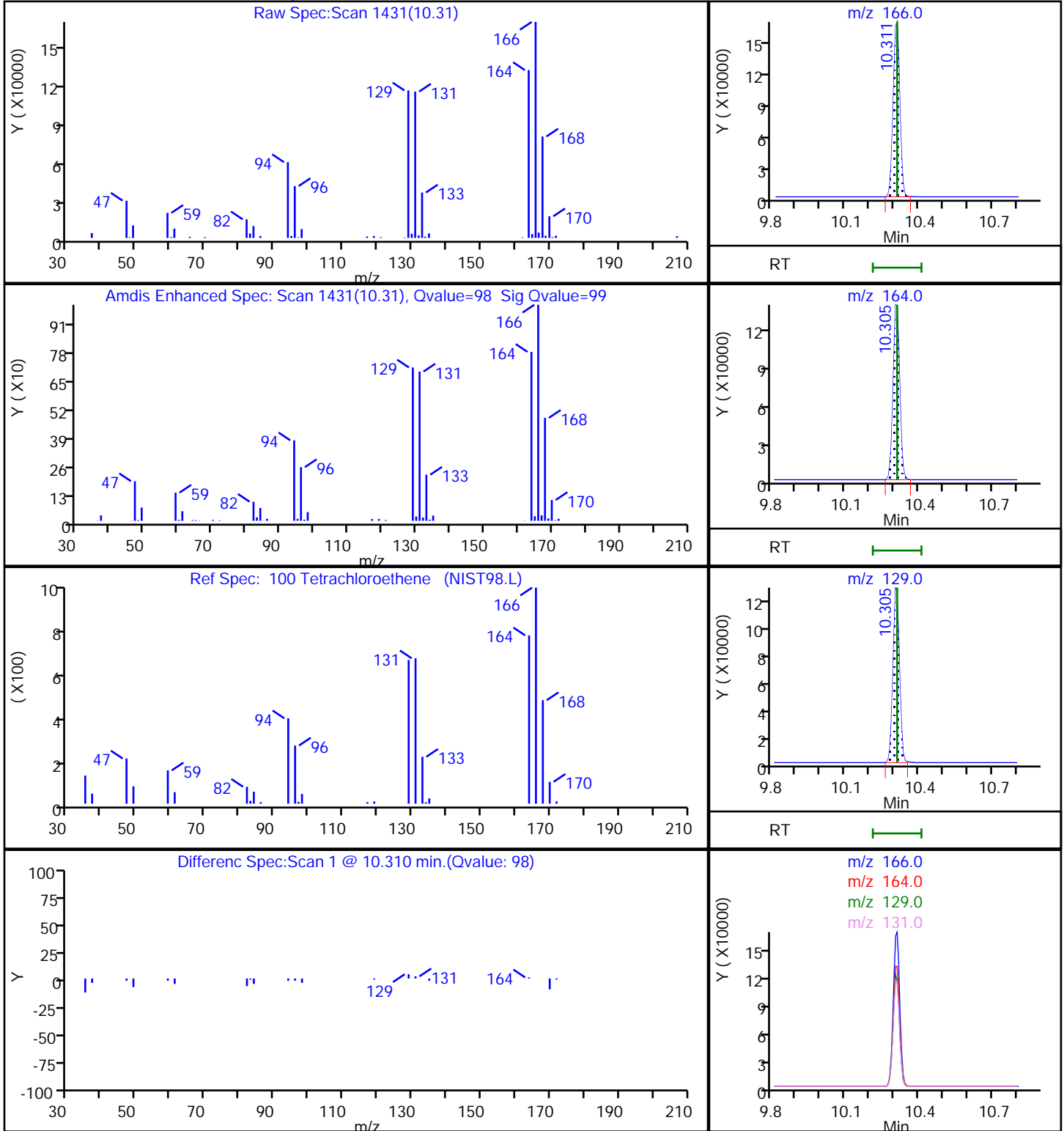
42 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\GA30S09.D
Injection Date: 30-Apr-2021 13:56:30 Instrument ID: 16334
Lims ID: 410-37501-A-9 Lab Sample ID: 410-37501-9
Client ID: HD-COD-SW-26-0/1-0
Operator ID: jml01693 ALS Bottle#: 16 Worklist Smp#: 16
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

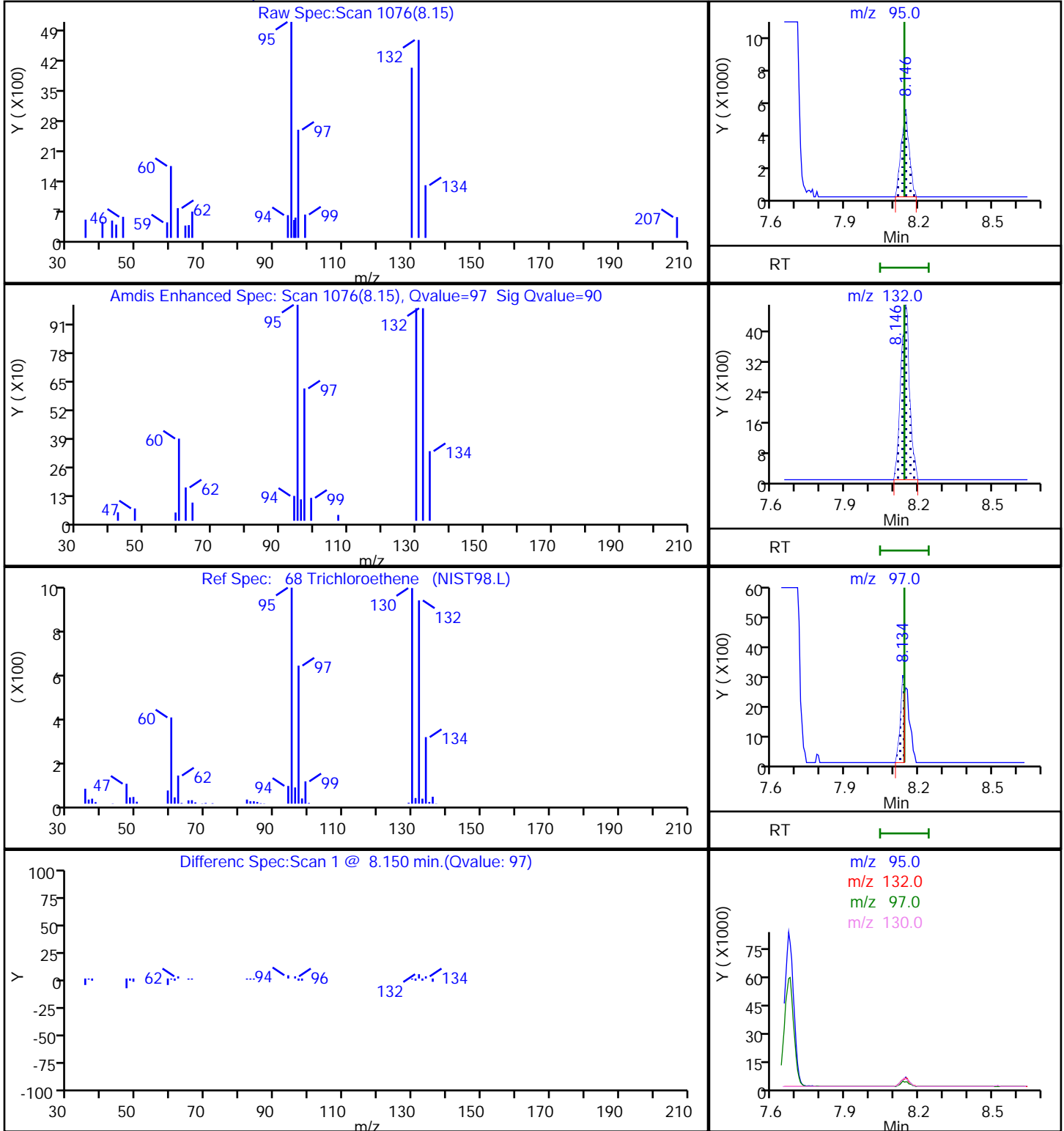
100 Tetrachloroethene, CAS: 127-18-4



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\GA30S09.D
Injection Date: 30-Apr-2021 13:56:30 Instrument ID: 16334
Lims ID: 410-37501-A-9 Lab Sample ID: 410-37501-9
Client ID: HD-COD-SW-26-0/1-0
Operator ID: jml01693 ALS Bottle#: 16 Worklist Smp#: 16
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) MS Quad

68 Trichloroethene, CAS: 79-01-6



Eurofins Lancaster Laboratories Env, LLC

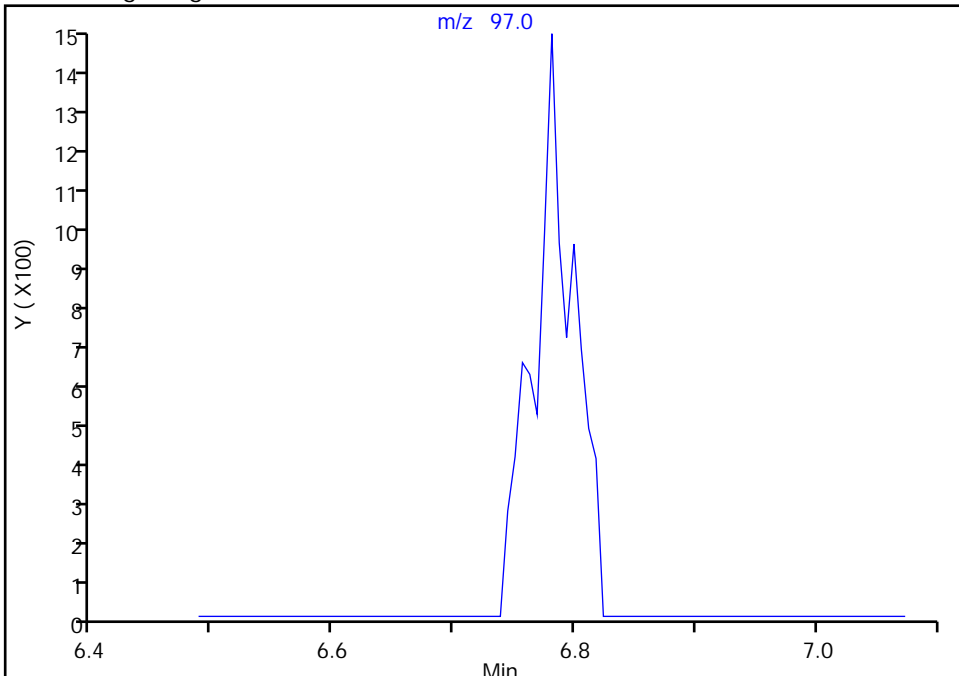
Data File: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\GA30S09.D
Injection Date: 30-Apr-2021 13:56:30 Instrument ID: 16334
Lims ID: 410-37501-A-9 Lab Sample ID: 410-37501-9
Client ID: HD-COD-SW-26-0/1-0
Operator ID: jml01693 ALS Bottle#: 16 Worklist Smp#: 16
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

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

Signal: 1

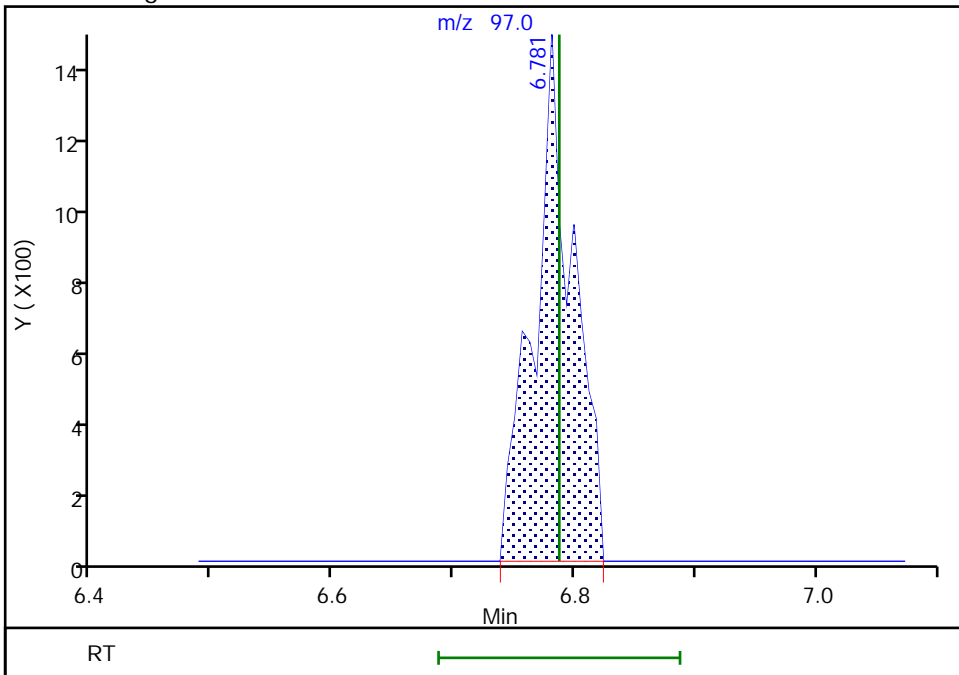
Not Detected
Expected RT: 6.79

Processing Integration Results



Manual Integration Results

RT: 6.78
Area: 3332
Amount: 0.037470
Amount Units: ug/l



Reviewer: campbellme, 30-Apr-2021 16:54:07
Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

Eurofins Lancaster Laboratories Env, LLC

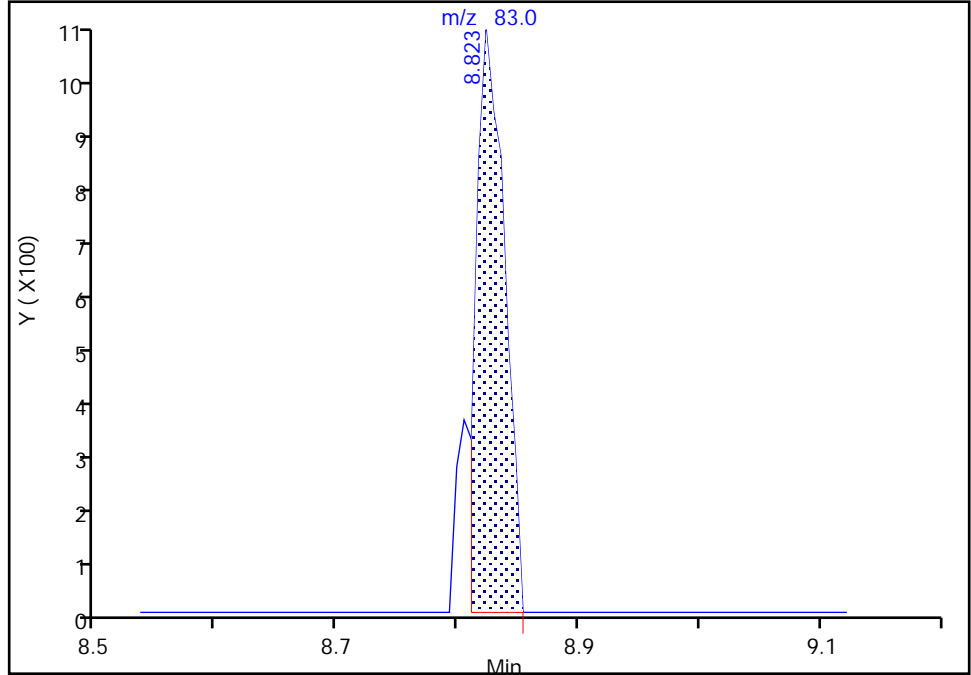
Data File: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\GA30S09.D
Injection Date: 30-Apr-2021 13:56:30 Instrument ID: 16334
Lims ID: 410-37501-A-9 Lab Sample ID: 410-37501-9
Client ID: HD-COD-SW-26-0/1-0
Operator ID: jml01693 ALS Bottle#: 16 Worklist Smp#: 16
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

76 Dichlorobromomethane, CAS: 75-27-4

Signal: 1

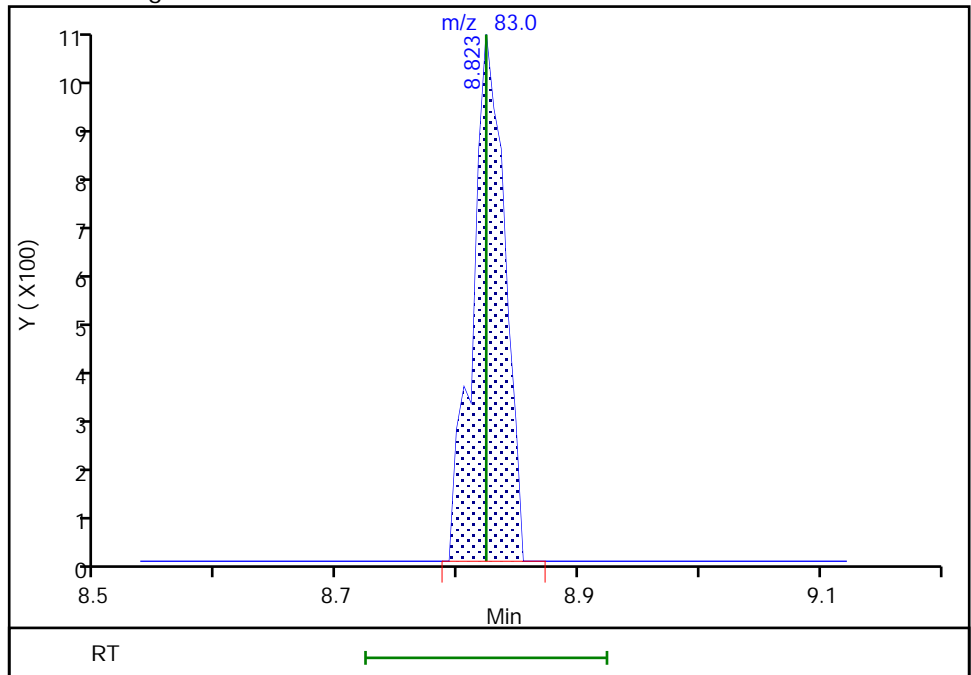
RT: 8.82
Area: 1644
Amount: 0.021519
Amount Units: ug/l

Processing Integration Results



RT: 8.82
Area: 1858
Amount: 0.024320
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 30-Apr-2021 16:54:16
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-37501-1
 SDG No.: _____
 Client Sample ID: HD-COD-SW-27-0/1-0 Lab Sample ID: 410-37501-10
 Matrix: Water Lab File ID: GA30S10.D
 Analysis Method: 8260D Date Collected: 04/26/2021 11:55
 Sample wt/vol: 25 (mL) Date Analyzed: 04/30/2021 14:18
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: R-624SilMS 30m ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 120958 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.070
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.060
75-34-3	1,1-Dichloroethane	ND		0.50	0.070
75-35-4	1,1-Dichloroethene	ND		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.060
107-06-2	1,2-Dichloroethane	ND		0.50	0.050
78-87-5	1,2-Dichloropropane	ND		0.50	0.060
78-93-3	2-Butanone (MEK)	ND		5.0	0.60
591-78-6	2-Hexanone	ND		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70
67-64-1	Acetone	1.5	J	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	0.073	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	0.066	J	0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.050
124-48-1	Dibromochloromethane	ND		0.50	0.070
100-41-4	Ethylbenzene	ND		0.50	0.060
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.050
75-09-2	Methylene Chloride	ND		0.50	0.070
100-42-5	Styrene	ND		0.50	0.050
127-18-4	Tetrachloroethene	0.064	J	0.50	0.060
108-88-3	Toluene	ND		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	0.072	J	0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-37501-1
 SDG No.: _____
 Client Sample ID: HD-COD-SW-27-0/1-0 Lab Sample ID: 410-37501-10
 Matrix: Water Lab File ID: GA30S10.D
 Analysis Method: 8260D Date Collected: 04/26/2021 11:55
 Sample wt/vol: 25 (mL) Date Analyzed: 04/30/2021 14:18
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: R-624SilMS 30m ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 120958 Units: ug/L

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

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	98		80-120
460-00-4	4-Bromofluorobenzene (Surr)	89		80-120
1868-53-7	Dibromofluoromethane (Surr)	103		80-120
2037-26-5	Toluene-d8 (Surr)	93		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\GA30S10.D
 Lims ID: 410-37501-A-10
 Client ID: HD-COD-SW-27-0/1-0
 Sample Type: Client
 Inject. Date: 30-Apr-2021 14:18:30 ALS Bottle#: 17 Worklist Smp#: 17
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0028091-017
 Operator ID: jml01693 Instrument ID: 16334
 Method: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\MSV_16334_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 30-Apr-2021 16:57:51 Calib Date: 30-Nov-2020 18:23:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1630

First Level Reviewer: campbellme

Date: 30-Apr-2021 16:54:58

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
5 Chloromethane	50		2.148				ND	
8 Vinyl chloride	62		2.263				ND	
9 Bromomethane	94		2.587				ND	
10 Chloroethane	64		2.666				ND	
19 1,1-Dichloroethene	96		3.513				ND	
21 Acetone	43	3.550	3.538	0.012	98	11245	1.54	
25 Carbon disulfide	76	3.824	3.830	-0.006	56	13554	0.0734	M
29 Methylene Chloride	84		4.166				ND	
* 30 t-Butyl alcohol-d10 (IS)	65	4.190	4.178	0.012	0	149286	50.0	
33 Methyl tert-butyl ether	73		4.562				ND	
34 trans-1,2-Dichloroethene	96		4.568				ND	
37 1,1-Dichloroethane	63		5.239				ND	
41 2-Butanone (MEK)	43		6.049				ND	
42 cis-1,2-Dichloroethene	96	6.086	6.074	0.012	76	4304	0.0664	a
49 Chlorobromomethane	128		6.403				ND	
51 Chloroform	83	6.555	6.561	-0.006	85	3954	0.0383	
\$ 52 Dibromofluoromethane (Surr)	113	6.775	6.775	0.000	94	601419	10.3	
53 1,1,1-Trichloroethane	97		6.787				ND	
56 Carbon tetrachloride	117		6.994				ND	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.232	7.232	0.000	0	121856	9.83	
60 Benzene	78		7.263				ND	7
61 1,2-Dichloroethane	62		7.330				ND	
* 64 Fluorobenzene (IS)	96	7.671	7.665	0.006	99	2406143	10.0	
68 Trichloroethene	95	8.140	8.140	0.000	81	4486	0.0718	
70 1,2-Dichloropropane	63		8.476				ND	
76 Dichlorobromomethane	83		8.823				ND	
81 cis-1,3-Dichloropropene	75		9.378				ND	
82 4-Methyl-2-pentanone (MIBK)	43		9.555				ND	7
\$ 83 Toluene-d8 (Surr)	98	9.683	9.683	0.000	93	2230037	9.25	
84 Toluene	92	9.762	9.762	0.000	99	9759	0.0623	
96 trans-1,3-Dichloropropene	75		10.018				ND	
99 1,1,2-Trichloroethane	97		10.225				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
100 Tetrachloroethene	166	10.305	10.311	-0.006	95	4320	0.0636	
102 2-Hexanone	43		10.445				ND	
104 Chlorodibromomethane	129		10.603				ND	
105 Ethylene Dibromide	107		10.707				ND	
* 106 Chlorobenzene-d5 (IS)	117	11.140	11.140	0.000	84	1806984	10.0	
108 Chlorobenzene	112		11.170				ND	
S 109 Xylenes, Total	106		11.245				ND	7
110 1,1,1,2-Tetrachloroethane	131		11.250				ND	
111 Ethylbenzene	91		11.256				ND	7
112 m-Xylene & p-Xylene	106	11.365	11.371	-0.006	95	4967	0.0426	
113 o-Xylene	106		11.701				ND	7
114 Styrene	104		11.713				ND	7
115 Bromoform	173		11.871				ND	
\$ 119 4-Bromofluorobenzene (Surr)	95	12.140	12.140	0.000	94	816068	8.87	
120 1,1,2,2-Tetrachloroethane	83		12.243				ND	
* 134 1,4-Dichlorobenzene-d4	152	13.018	13.017	0.001	94	998916	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MSV_29_826ISS_00017

Amount Added: 1.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\GA30S10.D

Injection Date: 30-Apr-2021 14:18:30

Instrument ID: 16334

Operator ID: jml01693

Lims ID: 410-37501-A-10

Lab Sample ID: 410-37501-10

Worklist Smp#: 17

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

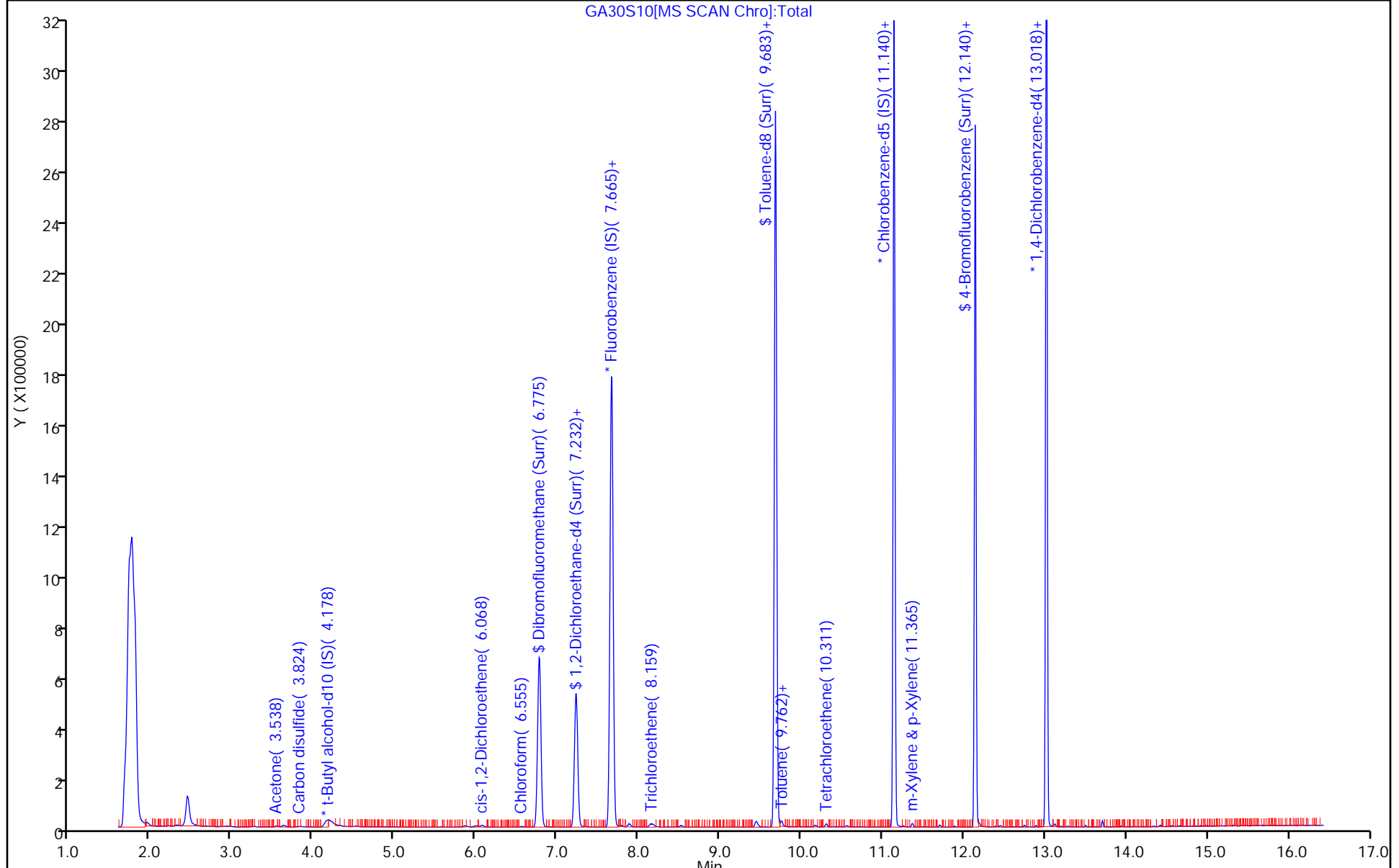
ALS Bottle#: 17

Method: MSV_16334_25mL

Limit Group: MSV - 8260C_D

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

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\GA30S10.D
 Lims ID: 410-37501-A-10
 Client ID: HD-COD-SW-27-0/1-0
 Sample Type: Client
 Inject. Date: 30-Apr-2021 14:18:30 ALS Bottle#: 17 Worklist Smp#: 17
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0028091-017
 Operator ID: jml01693 Instrument ID: 16334
 Method: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\MSV_16334_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 30-Apr-2021 16:57:51 Calib Date: 30-Nov-2020 18:23:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1630

First Level Reviewer: campbellme Date: 30-Apr-2021 16:54:58

Compound	Amount Added	Amount Recovered	% Rec.
\$ 52 Dibromofluoromethane (Surr)	10.0	10.3	103.28
\$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	9.83	98.35
\$ 83 Toluene-d8 (Surr)	10.0	9.25	92.50
\$ 119 4-Bromofluorobenzene (Surr)	10.0	8.87	88.66

Eurolins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\GA30S10.D

Injection Date: 30-Apr-2021 14:18:30

Instrument ID: 16334

Lims ID: 410-37501-A-10

Lab Sample ID: 410-37501-10

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

Operator ID: jml01693

ALS Bottle#: 17

Worklist Smp#: 17

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

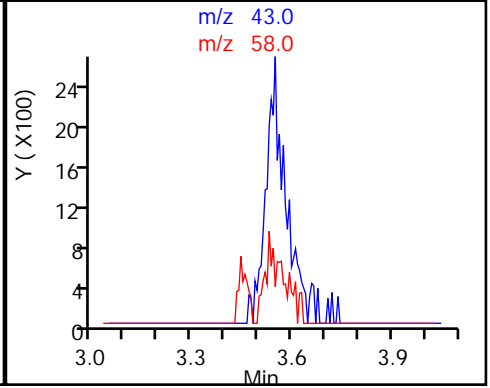
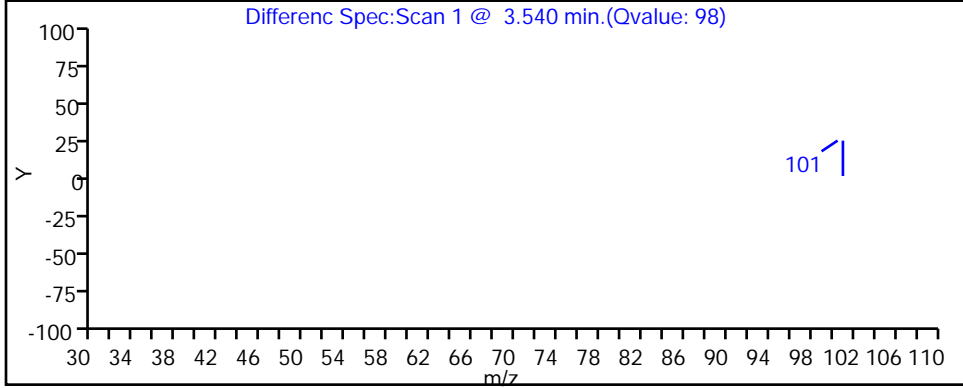
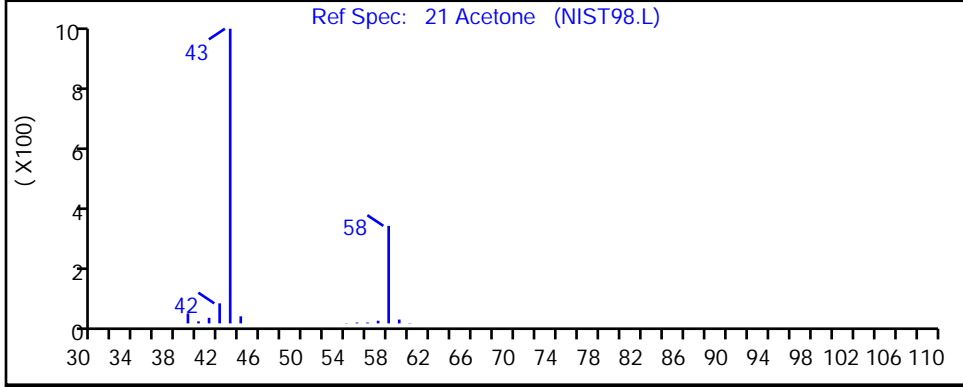
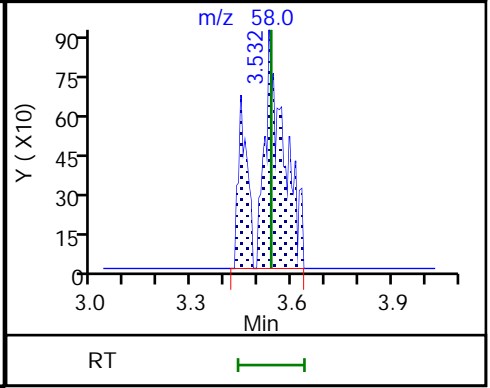
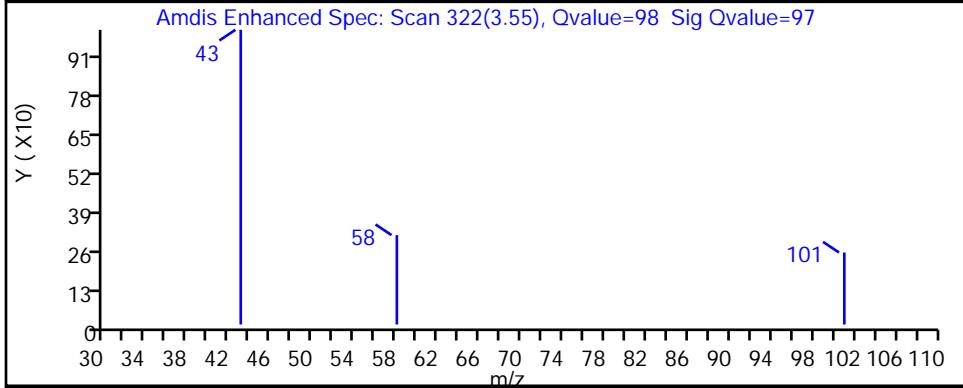
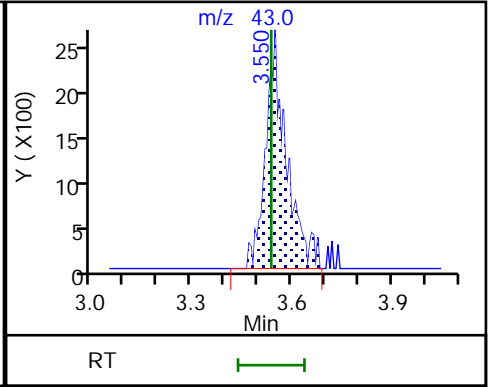
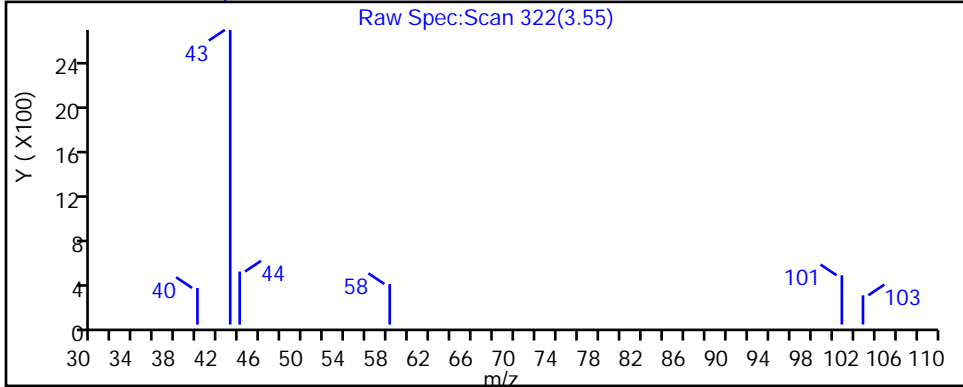
Method: MSV_16334_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

21 Acetone, CAS: 67-64-1



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\GA30S10.D

Injection Date: 30-Apr-2021 14:18:30

Instrument ID: 16334

Lims ID: 410-37501-A-10

Lab Sample ID: 410-37501-10

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

Operator ID: jml01693

ALS Bottle#: 17

Worklist Smp#: 17

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

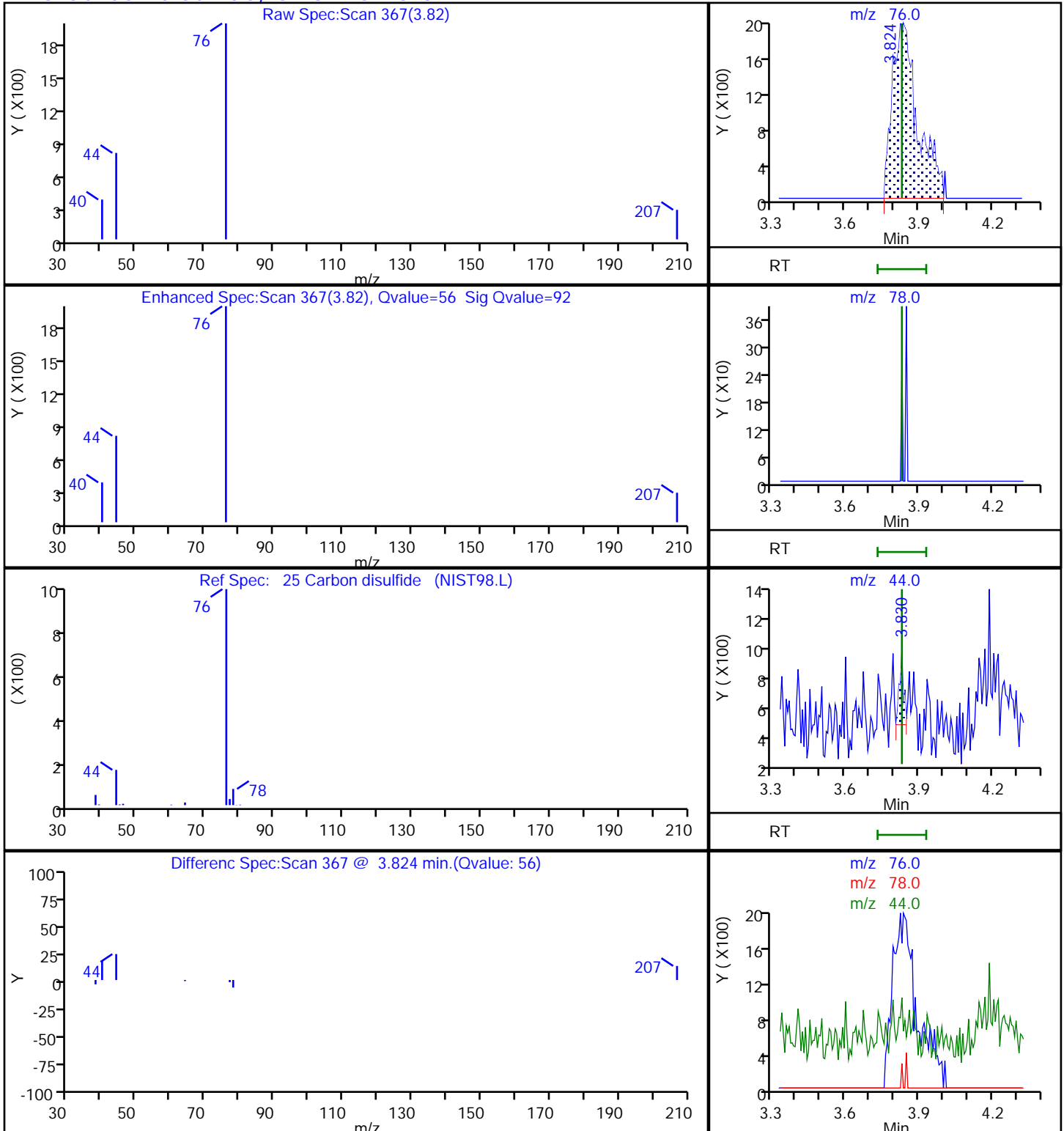
Method: MSV_16334_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

25 Carbon disulfide, CAS: 75-15-0



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\GA30S10.D

Injection Date: 30-Apr-2021 14:18:30

Instrument ID: 16334

Lims ID: 410-37501-A-10

Lab Sample ID: 410-37501-10

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

Operator ID: jml01693

ALS Bottle#: 17

Worklist Smp#: 17

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

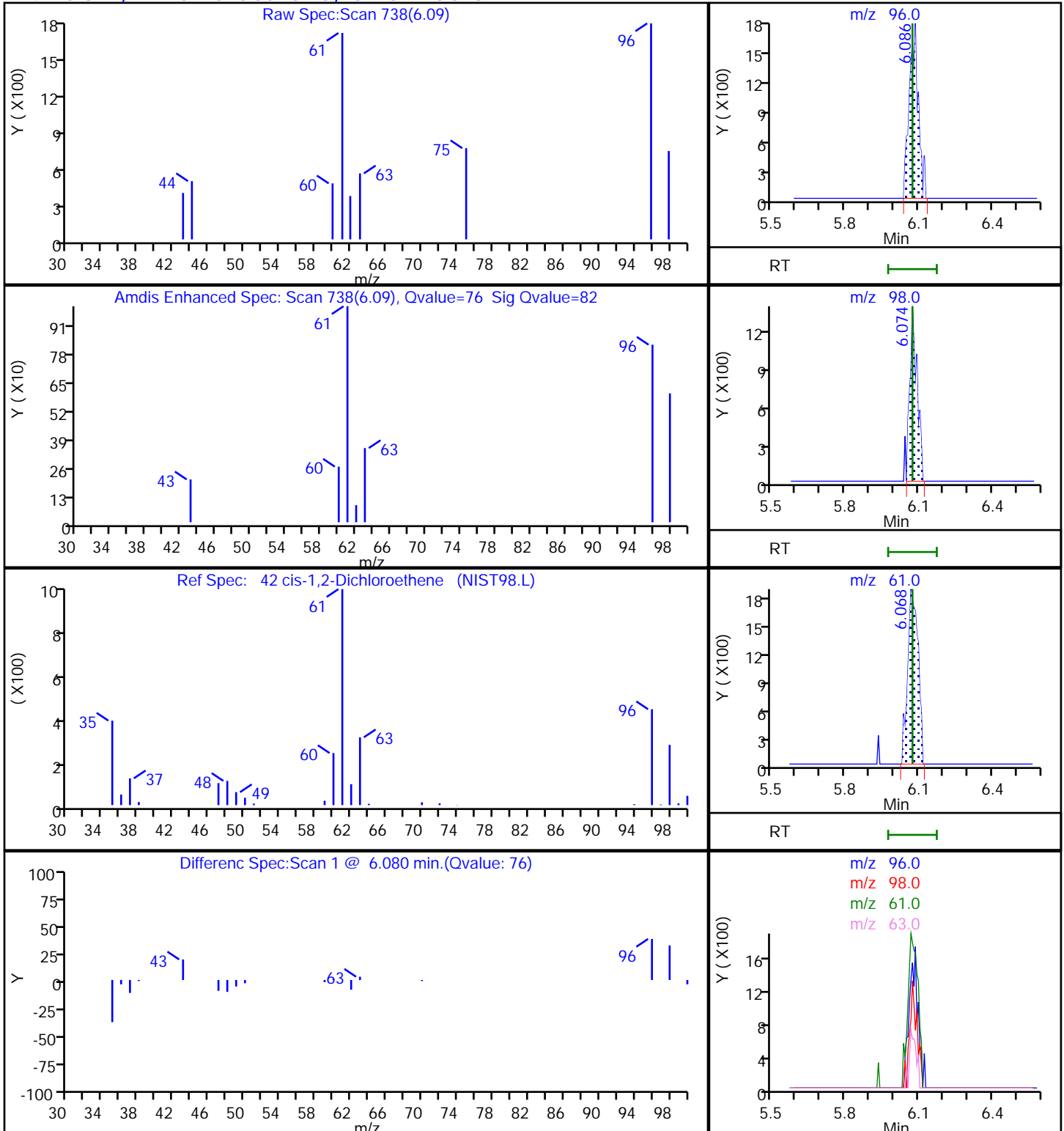
Method: MSV_16334_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

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



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\GA30S10.D

Injection Date: 30-Apr-2021 14:18:30

Instrument ID: 16334

Lims ID: 410-37501-A-10

Lab Sample ID: 410-37501-10

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

Operator ID: jml01693

ALS Bottle#: 17

Worklist Smp#: 17

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

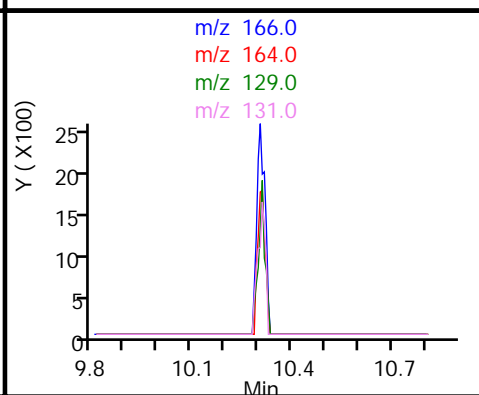
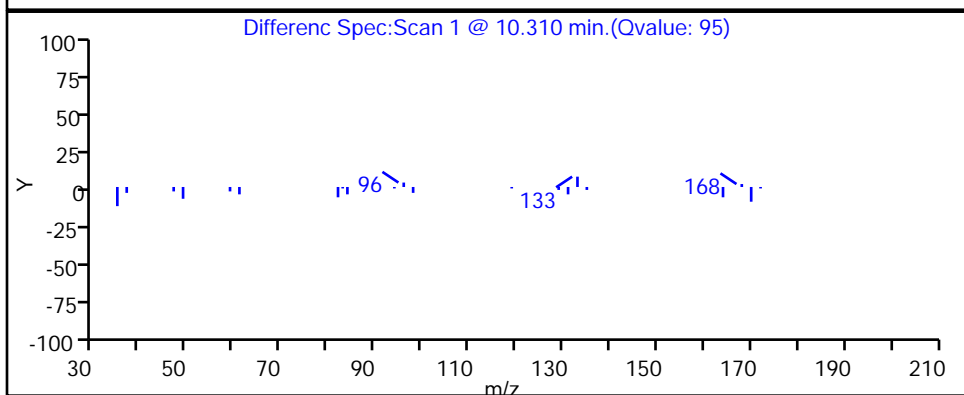
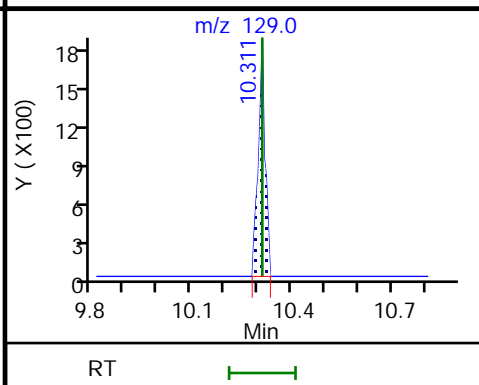
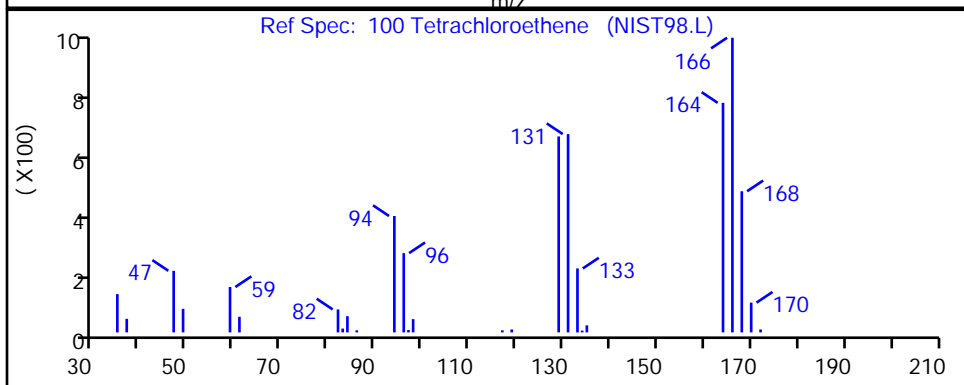
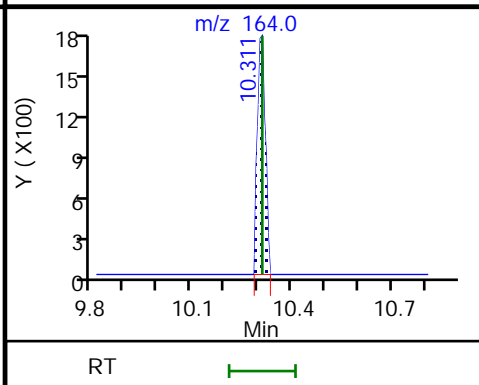
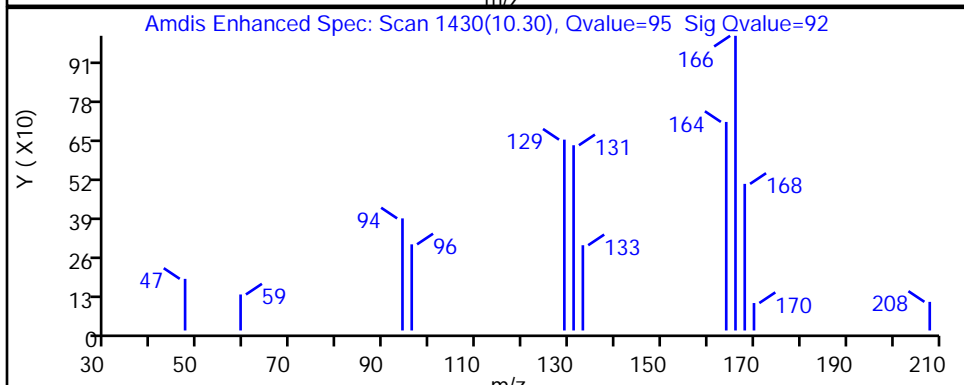
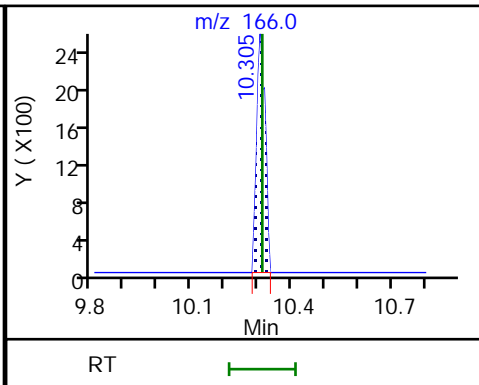
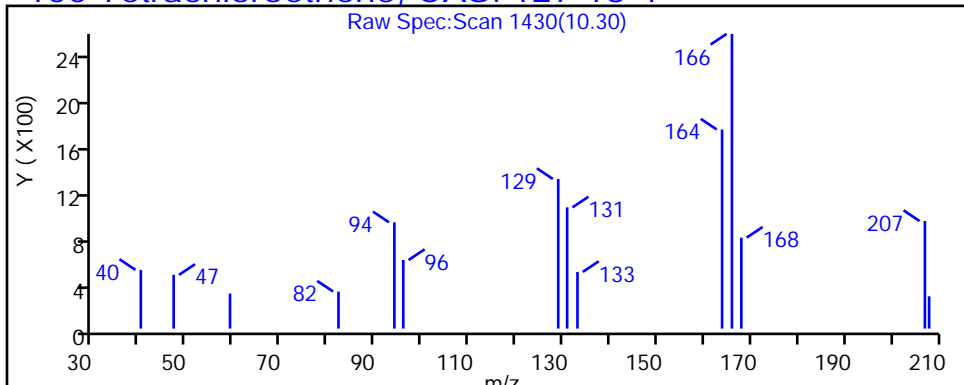
Method: MSV_16334_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

100 Tetrachloroethene, CAS: 127-18-4



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\GA30S10.D

Injection Date: 30-Apr-2021 14:18:30

Instrument ID: 16334

Lims ID: 410-37501-A-10

Lab Sample ID: 410-37501-10

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

Operator ID: jml01693

ALS Bottle#: 17

Worklist Smp#: 17

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

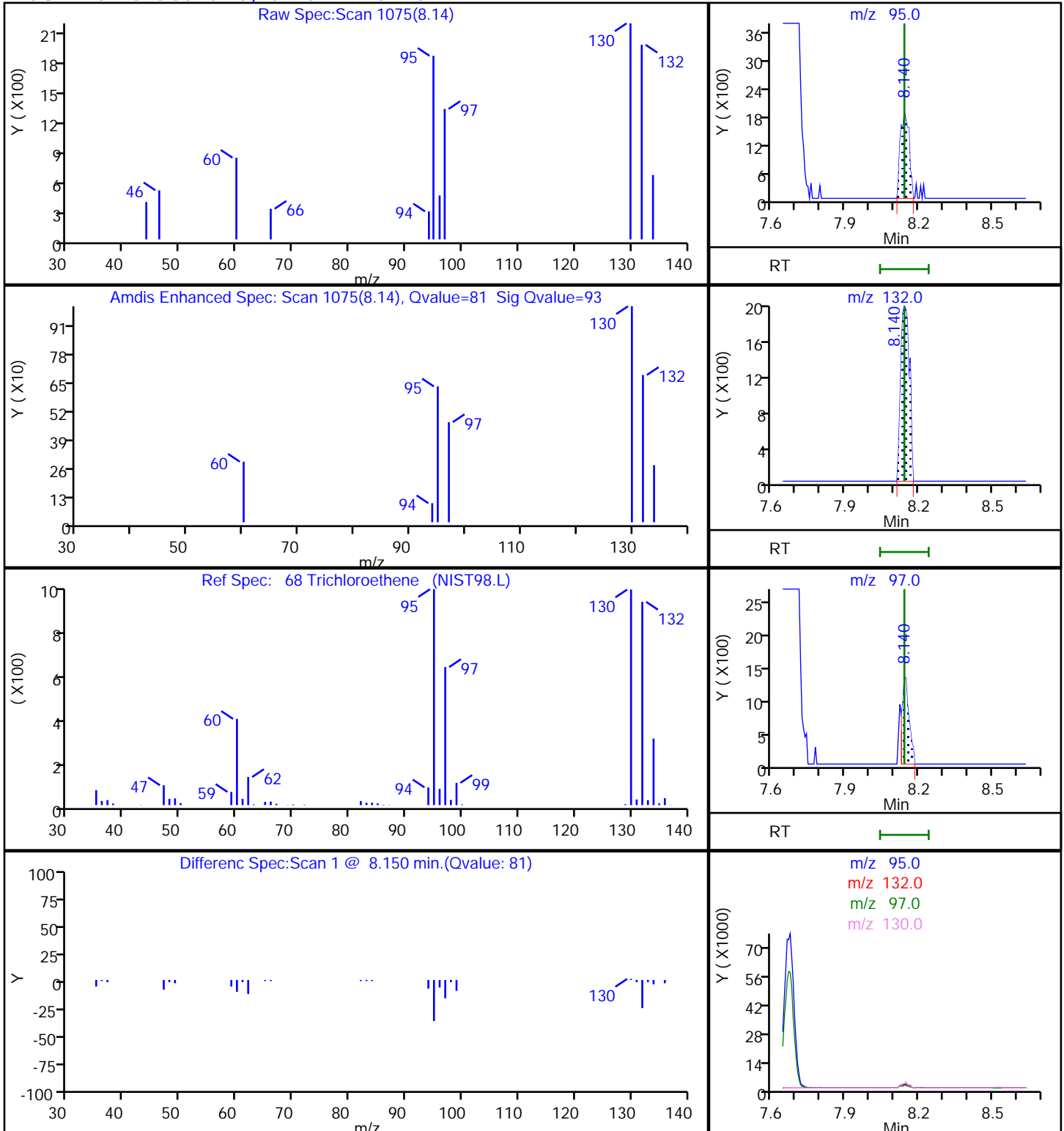
Method: MSV_16334_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

68 Trichloroethene, CAS: 79-01-6



Eurofins Lancaster Laboratories Env, LLC

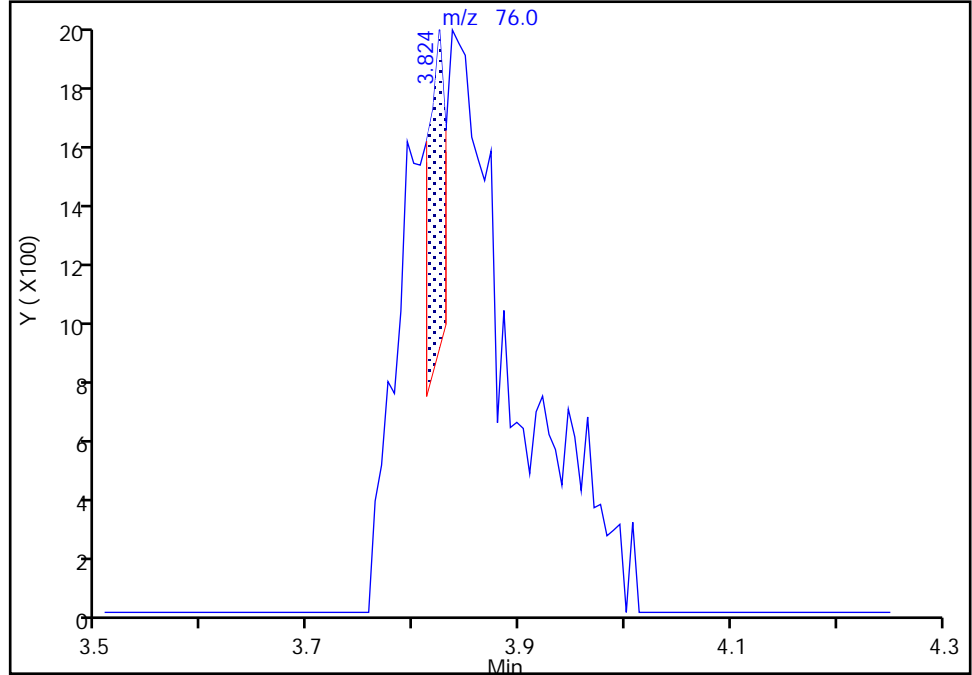
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Injection Date: 30-Apr-2021 14:18:30 Instrument ID: 16334
Lims ID: 410-37501-A-10 Lab Sample ID: 410-37501-10
Client ID: HD-COD-SW-27-0/1-0
Operator ID: jml01693 ALS Bottle#: 17 Worklist Smp#: 17
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

25 Carbon disulfide, CAS: 75-15-0

Signal: 1

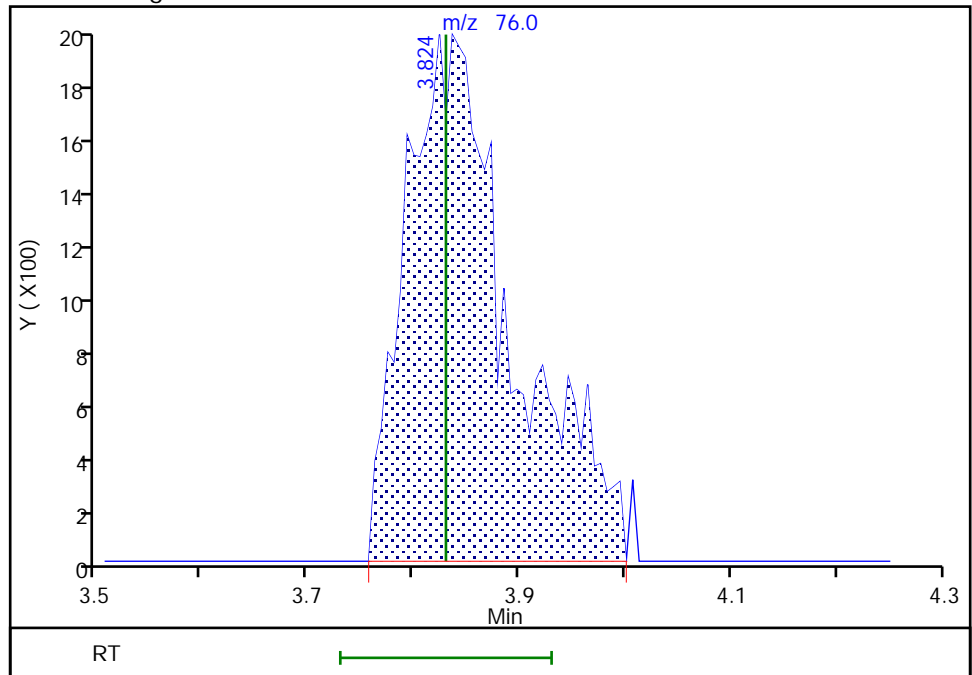
RT: 3.82
Area: 1252
Amount: 0.006777
Amount Units: ug/l

Processing Integration Results



RT: 3.82
Area: 13554
Amount: 0.073364
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 30-Apr-2021 16:54:37
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

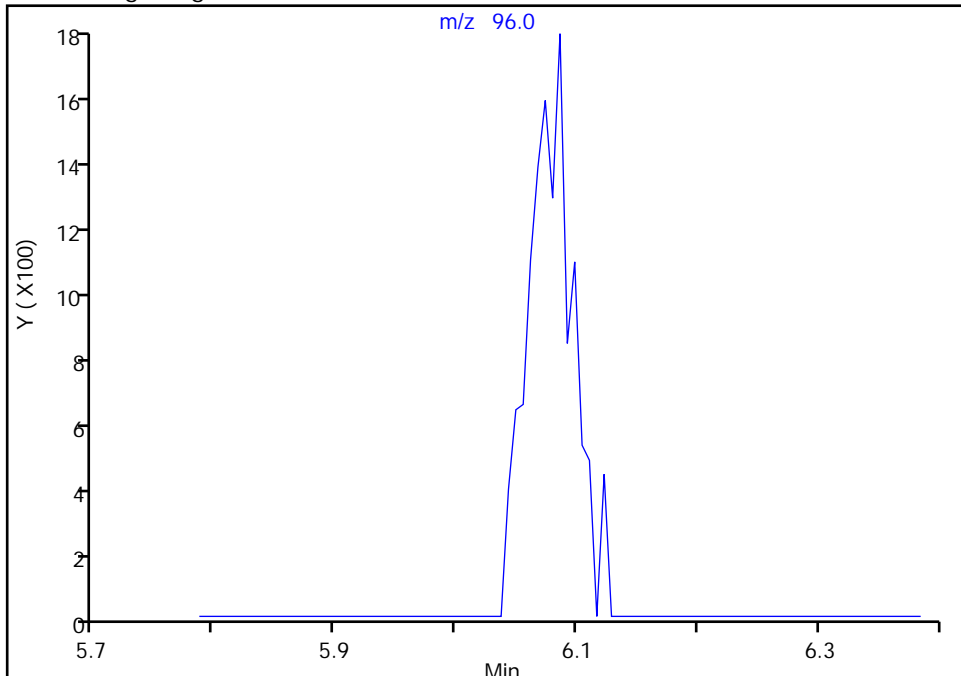
Data File: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\GA30S10.D
Injection Date: 30-Apr-2021 14:18:30 Instrument ID: 16334
Lims ID: 410-37501-A-10 Lab Sample ID: 410-37501-10
Client ID: HD-COD-SW-27-0/1-0
Operator ID: jml01693 ALS Bottle#: 17 Worklist Smp#: 17
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

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

Signal: 1

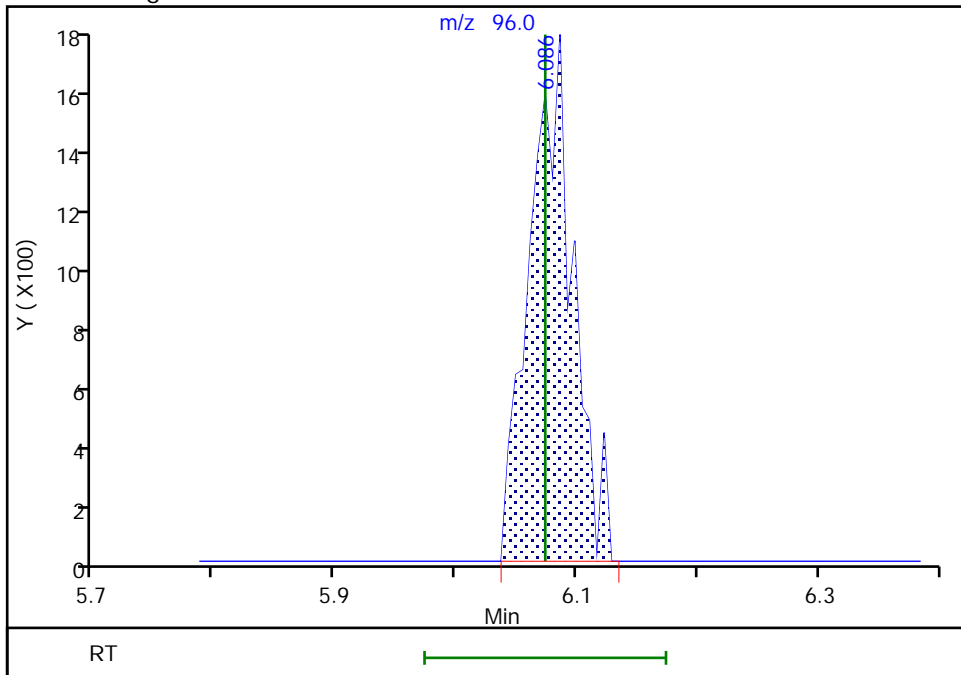
Not Detected
Expected RT: 6.07

Processing Integration Results



Manual Integration Results

RT: 6.09
Area: 4304
Amount: 0.066428
Amount Units: ug/l



Reviewer: campbellme, 30-Apr-2021 16:54:45
Audit Action: Assigned Compound ID

Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-37501-1
 SDG No.: _____
 Client Sample ID: HD-COD-SW-28-0/1-0 Lab Sample ID: 410-37501-11
 Matrix: Water Lab File ID: GA30S11.D
 Analysis Method: 8260D Date Collected: 04/26/2021 13:45
 Sample wt/vol: 25 (mL) Date Analyzed: 04/30/2021 14:40
 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.: 120958 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	ND		0.50	0.090
74-87-3	Chloromethane	0.070	J	0.50	0.060
156-59-2	cis-1,2-Dichloroethene	0.059	J	0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.050
124-48-1	Dibromochloromethane	ND		0.50	0.070
100-41-4	Ethylbenzene	ND		0.50	0.060
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.050
75-09-2	Methylene Chloride	ND		0.50	0.070
100-42-5	Styrene	ND		0.50	0.050
127-18-4	Tetrachloroethene	0.11	J	0.50	0.060
108-88-3	Toluene	0.089	J	0.50	0.070
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	0.070	J	0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-37501-1
 SDG No.: _____
 Client Sample ID: HD-COD-SW-28-0/1-0 Lab Sample ID: 410-37501-11
 Matrix: Water Lab File ID: GA30S11.D
 Analysis Method: 8260D Date Collected: 04/26/2021 13:45
 Sample wt/vol: 25 (mL) Date Analyzed: 04/30/2021 14:40
 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.: 120958 Units: ug/L

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

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		80-120
460-00-4	4-Bromofluorobenzene (Surr)	89		80-120
1868-53-7	Dibromofluoromethane (Surr)	103		80-120
2037-26-5	Toluene-d8 (Surr)	93		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\GA30S11.D
 Lims ID: 410-37501-A-11
 Client ID: HD-COD-SW-28-0/1-0
 Sample Type: Client
 Inject. Date: 30-Apr-2021 14:40:30 ALS Bottle#: 18 Worklist Smp#: 18
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0028091-018
 Operator ID: jml01693 Instrument ID: 16334
 Method: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\MSV_16334_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 30-Apr-2021 16:57:51 Calib Date: 30-Nov-2020 18:23:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1630

First Level Reviewer: campbellme Date: 30-Apr-2021 16:55:33

Compound	Sig	RT (min.)	Exp RT (min.)	Diff RT (min.)	Q	Response	OnCol Amt ug/l	Flags
5 Chloromethane	50	2.148	2.148	0.000	95	5870	0.0705	
8 Vinyl chloride	62		2.263				ND	
9 Bromomethane	94		2.587				ND	7
10 Chloroethane	64		2.666				ND	
19 1,1-Dichloroethene	96		3.513				ND	
21 Acetone	43	3.538	3.538	0.000	98	20830	2.59	
25 Carbon disulfide	76	3.794	3.830	-0.036	57	10024	0.0550	M
29 Methylene Chloride	84		4.166				ND	
* 30 t-Butyl alcohol-d10 (IS)	65	4.178	4.178	0.000	0	163949	50.0	
33 Methyl tert-butyl ether	73		4.562				ND	
34 trans-1,2-Dichloroethene	96		4.568				ND	
37 1,1-Dichloroethane	63		5.239				ND	
41 2-Butanone (MEK)	43		6.049				ND	
42 cis-1,2-Dichloroethene	96	6.080	6.074	0.006	78	3804	0.0595	
49 Chlorobromomethane	128		6.403				ND	
51 Chloroform	83	6.561	6.561	0.000	92	7395	0.0726	
\$ 52 Dibromofluoromethane (Surr)	113	6.775	6.775	0.000	94	592213	10.3	
53 1,1,1-Trichloroethane	97		6.787				ND	
56 Carbon tetrachloride	117		6.994				ND	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.232	7.232	0.000	0	120593	9.86	
60 Benzene	78	7.256	7.263	-0.007	44	3144	0.0130	7M
61 1,2-Dichloroethane	62		7.330				ND	
* 64 Fluorobenzene (IS)	96	7.665	7.665	0.000	99	2374667	10.0	
68 Trichloroethene	95	8.146	8.140	0.006	93	4319	0.0701	
70 1,2-Dichloropropane	63		8.476				ND	
76 Dichlorobromomethane	83		8.823				ND	7
81 cis-1,3-Dichloropropene	75		9.378				ND	
82 4-Methyl-2-pentanone (MIBK)	43		9.555				ND	7
\$ 83 Toluene-d8 (Surr)	98	9.683	9.683	0.000	93	2208080	9.29	
84 Toluene	92	9.756	9.762	-0.006	98	13744	0.0890	
96 trans-1,3-Dichloropropene	75		10.018				ND	
99 1,1,2-Trichloroethane	97		10.225				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
100 Tetrachloroethene	166	10.311	10.311	0.000	94	7300	0.1090	
102 2-Hexanone	43		10.445				ND	
104 Chlorodibromomethane	129		10.603				ND	
105 Ethylene Dibromide	107		10.707				ND	
* 106 Chlorobenzene-d5 (IS)	117	11.140	11.140	0.000	85	1781676	10.0	
108 Chlorobenzene	112		11.170				ND	
S 109 Xylenes, Total	106		11.245				ND	7
110 1,1,1,2-Tetrachloroethane	131		11.250				ND	
111 Ethylbenzene	91		11.256				ND	7
112 m-Xylene & p-Xylene	106	11.371	11.371	0.000	97	6182	0.0538	
113 o-Xylene	106		11.701				ND	7
114 Styrene	104		11.713				ND	7
115 Bromoform	173		11.871				ND	
\$ 119 4-Bromofluorobenzene (Surr)	95	12.140	12.140	0.000	94	809740	8.92	
120 1,1,2,2-Tetrachloroethane	83		12.243				ND	
* 134 1,4-Dichlorobenzene-d4	152	13.017	13.017	0.000	94	990344	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

Reagents:

MSV_29_826ISS_00017

Amount Added: 1.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\GA30S11.D

Injection Date: 30-Apr-2021 14:40:30

Instrument ID: 16334

Operator ID: jml01693

Lims ID: 410-37501-A-11

Lab Sample ID: 410-37501-11

Worklist Smp#: 18

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

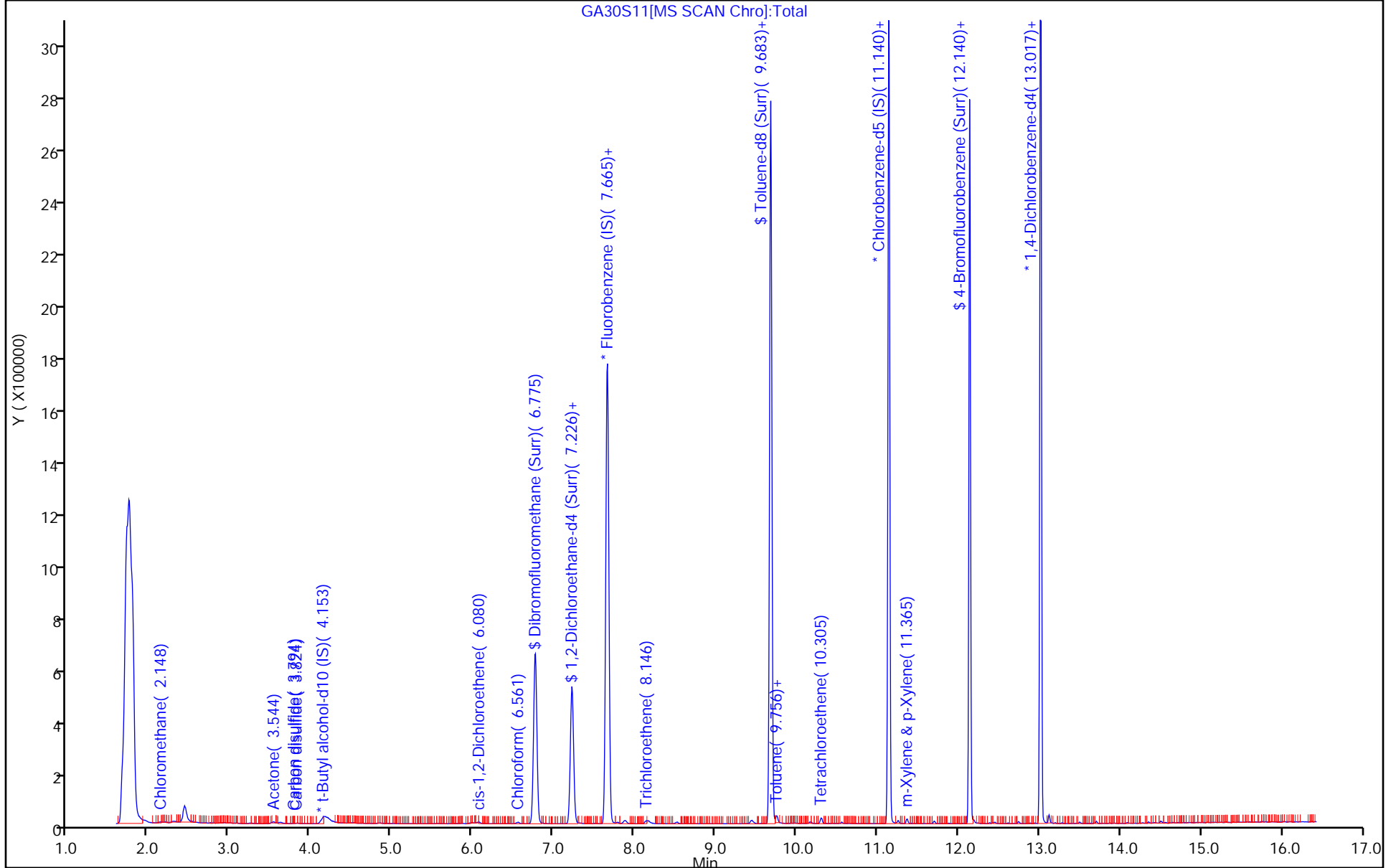
ALS Bottle#: 18

Method: MSV_16334_25mL

Limit Group: MSV - 8260C_D

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

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\GA30S11.D
 Lims ID: 410-37501-A-11
 Client ID: HD-COD-SW-28-0/1-0
 Sample Type: Client
 Inject. Date: 30-Apr-2021 14:40:30 ALS Bottle#: 18 Worklist Smp#: 18
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0028091-018
 Operator ID: jml01693 Instrument ID: 16334
 Method: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\MSV_16334_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 30-Apr-2021 16:57:51 Calib Date: 30-Nov-2020 18:23:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1630

First Level Reviewer: campbellme

Date: 30-Apr-2021 16:55:33

Compound	Amount Added	Amount Recovered	% Rec.
\$ 52 Dibromofluoromethane (Surr)	10.0	10.3	103.04
\$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	9.86	98.62
\$ 83 Toluene-d8 (Surr)	10.0	9.29	92.89
\$ 119 4-Bromofluorobenzene (Surr)	10.0	8.92	89.22

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\GA30S11.D

Injection Date: 30-Apr-2021 14:40:30

Instrument ID: 16334

Lims ID: 410-37501-A-11

Lab Sample ID: 410-37501-11

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

Operator ID: jml01693

ALS Bottle#: 18

Worklist Smp#: 18

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

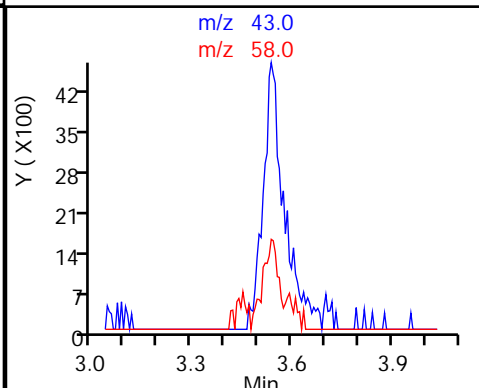
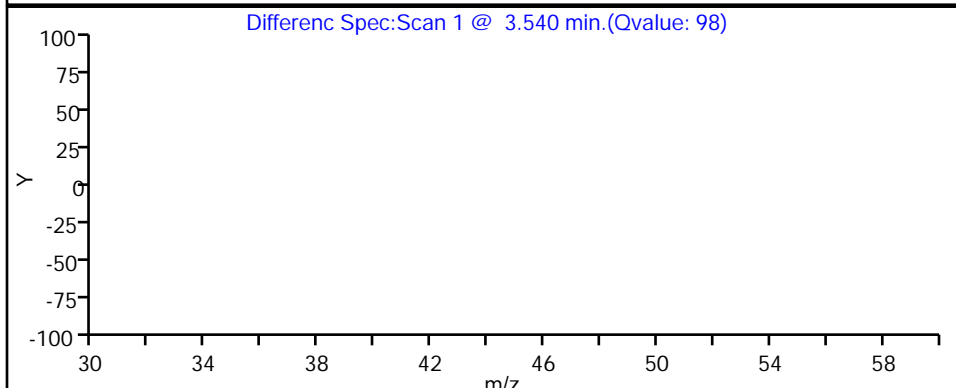
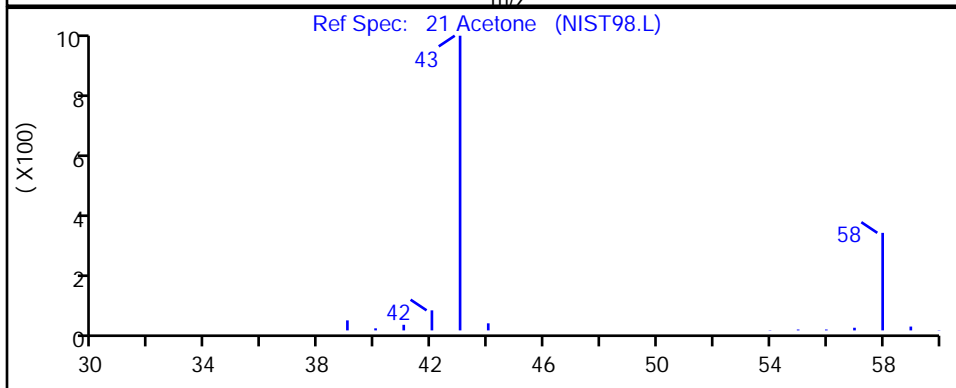
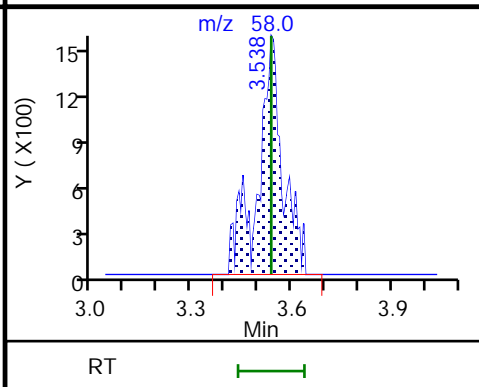
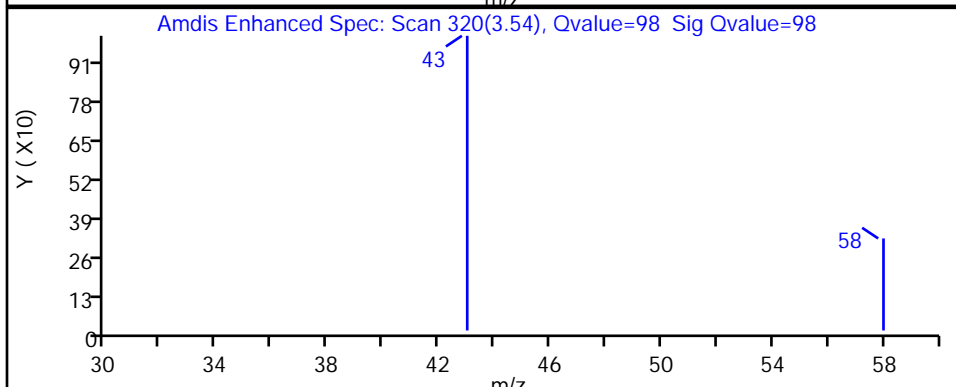
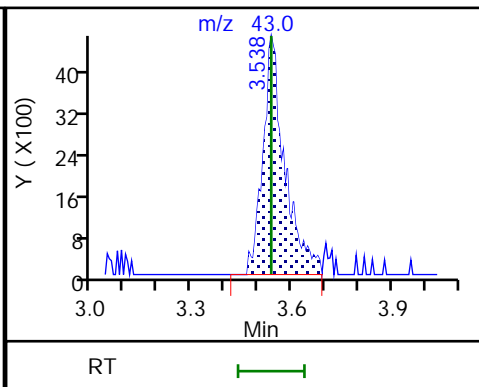
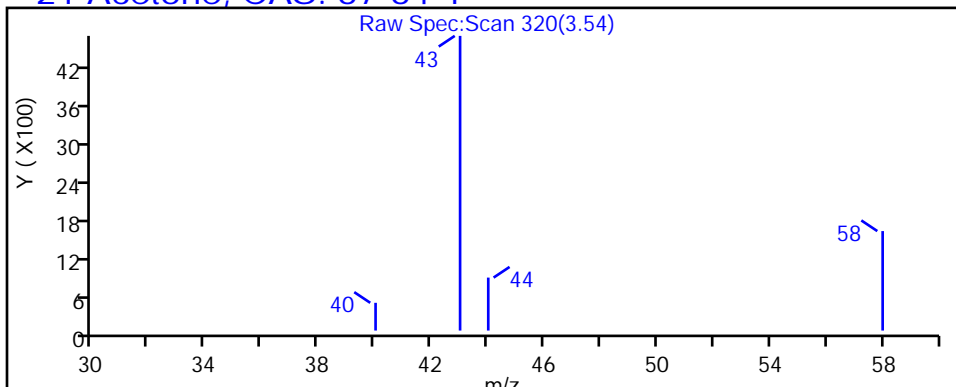
Method: MSV_16334_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

21 Acetone, CAS: 67-64-1



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\GA30S11.D

Injection Date: 30-Apr-2021 14:40:30

Instrument ID: 16334

Lims ID: 410-37501-A-11

Lab Sample ID: 410-37501-11

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

Operator ID: jml01693

ALS Bottle#: 18

Worklist Smp#: 18

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

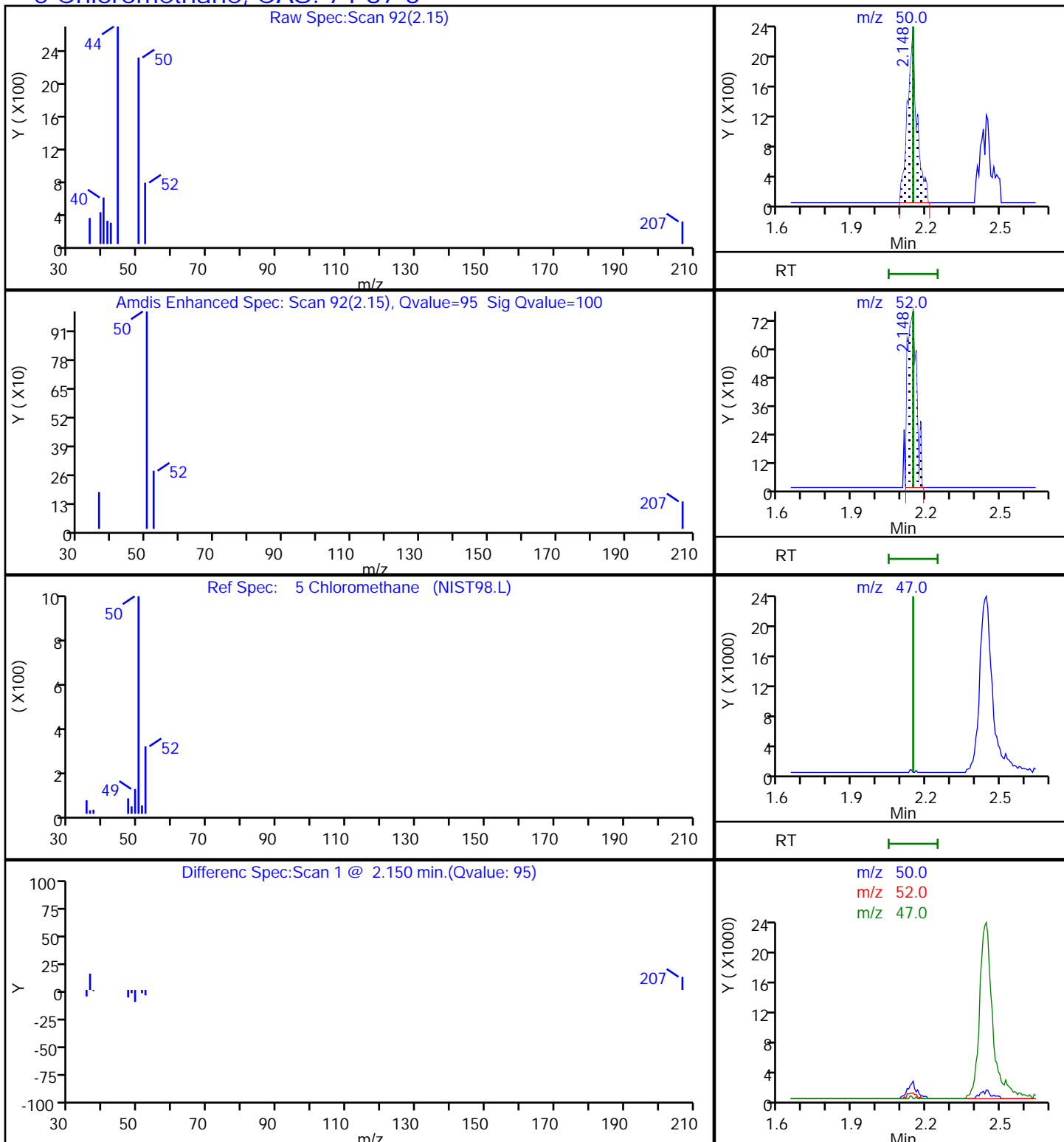
Method: MSV_16334_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) x 30m

MS Quad

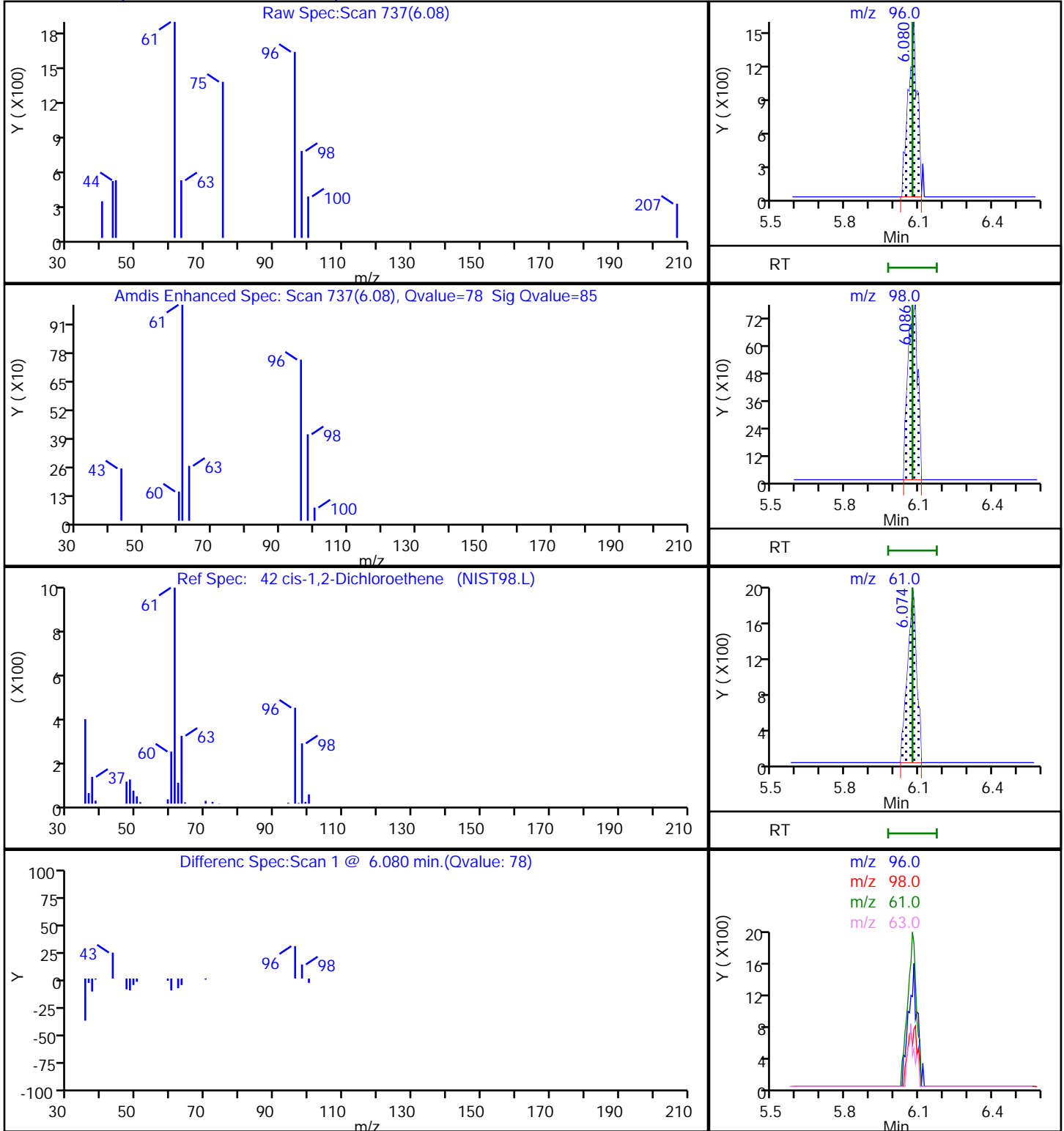
5 Chloromethane, CAS: 74-87-3



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\GA30S11.D
Injection Date: 30-Apr-2021 14:40:30 Instrument ID: 16334
Lims ID: 410-37501-A-11 Lab Sample ID: 410-37501-11
Client ID: HD-COD-SW-28-0/1-0
Operator ID: jml01693 ALS Bottle#: 18 Worklist Smp#: 18
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) MS Quad

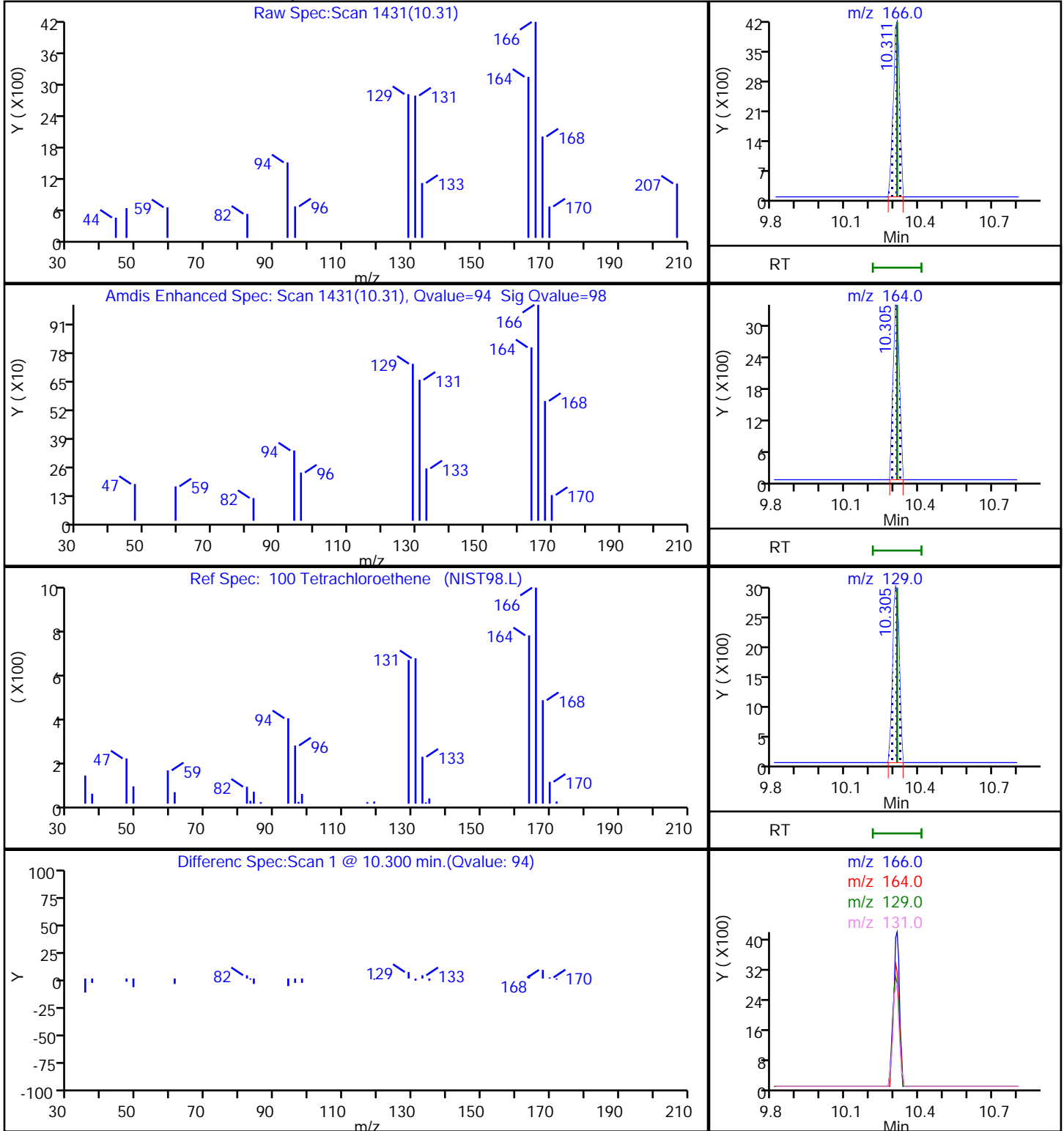
42 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins Lancaster Laboratories Env, LLC

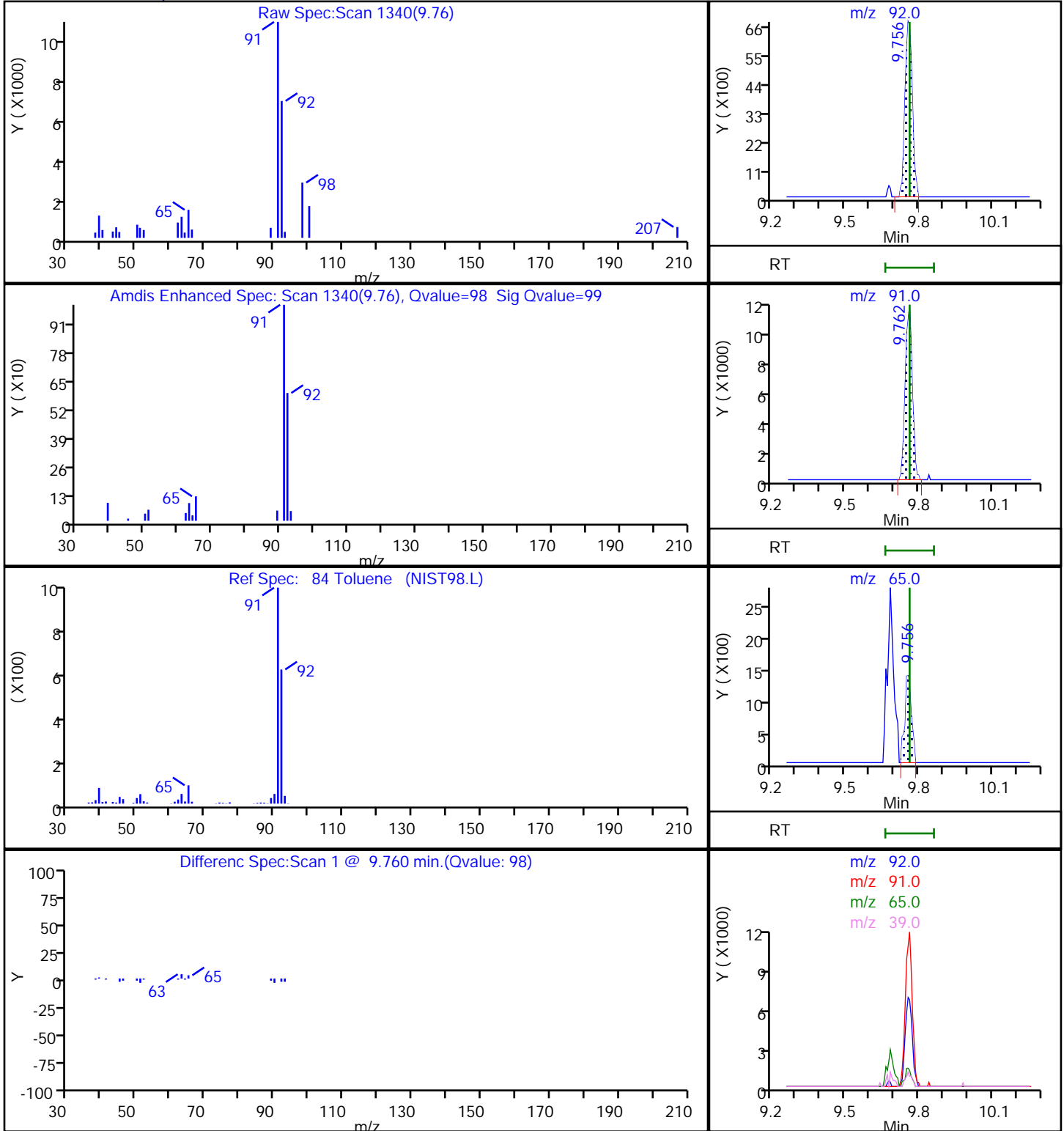
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Injection Date: 30-Apr-2021 14:40:30 Instrument ID: 16334
Lims ID: 410-37501-A-11 Lab Sample ID: 410-37501-11
Client ID: HD-COD-SW-28-0/1-0
Operator ID: jml01693 ALS Bottle#: 18 Worklist Smp#: 18
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

100 Tetrachloroethene, CAS: 127-18-4



Data File: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\GA30S11.D
Injection Date: 30-Apr-2021 14:40:30 Instrument ID: 16334
Lims ID: 410-37501-A-11 Lab Sample ID: 410-37501-11
Client ID: HD-COD-SW-28-0/1-0
Operator ID: jml01693 ALS Bottle#: 18 Worklist Smp#: 18
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm i.d.) MS Quad

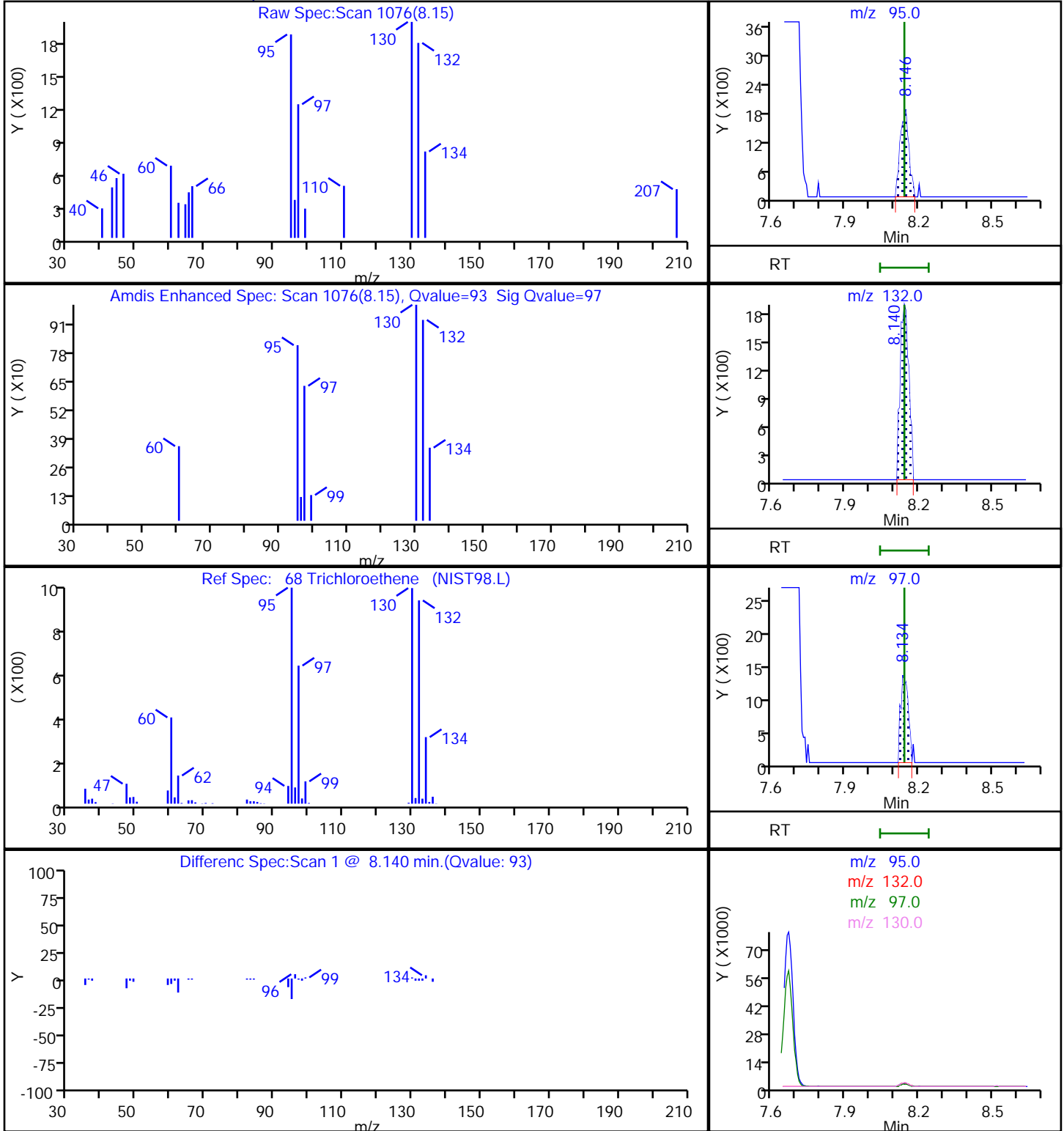
84 Toluene, CAS: 108-88-3



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\GA30S11.D
Injection Date: 30-Apr-2021 14:40:30 Instrument ID: 16334
Lims ID: 410-37501-A-11 Lab Sample ID: 410-37501-11
Client ID: HD-COD-SW-28-0/1-0
Operator ID: jml01693 ALS Bottle#: 18 Worklist Smp#: 18
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) MS Quad

68 Trichloroethene, CAS: 79-01-6



Eurofins Lancaster Laboratories Env, LLC

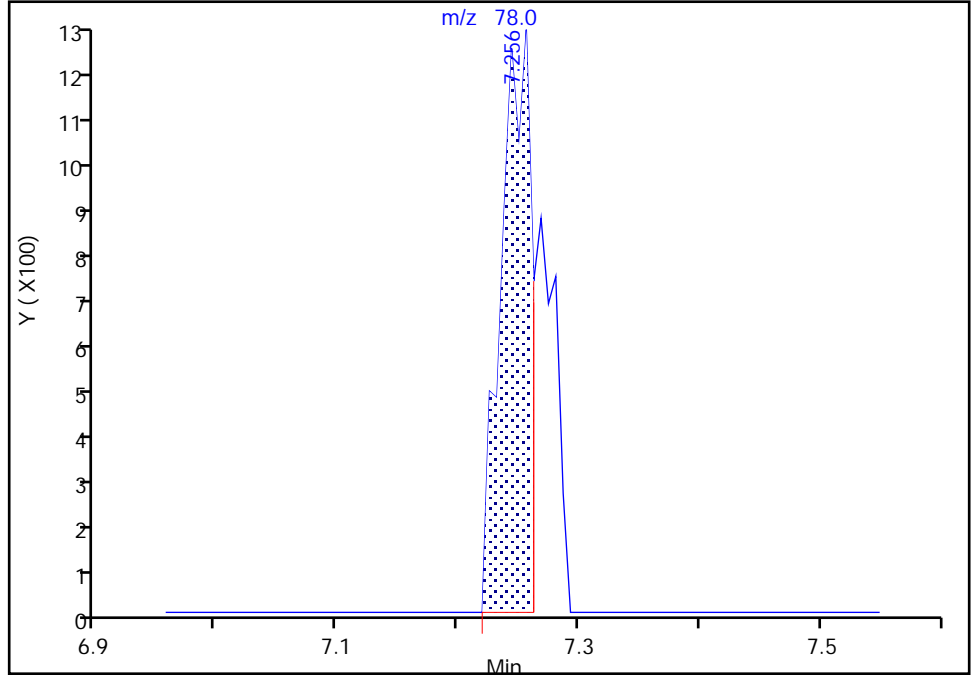
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Injection Date: 30-Apr-2021 14:40:30 Instrument ID: 16334
Lims ID: 410-37501-A-11 Lab Sample ID: 410-37501-11
Client ID: HD-COD-SW-28-0/1-0
Operator ID: jml01693 ALS Bottle#: 18 Worklist Smp#: 18
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

60 Benzene, CAS: 71-43-2

Signal: 1

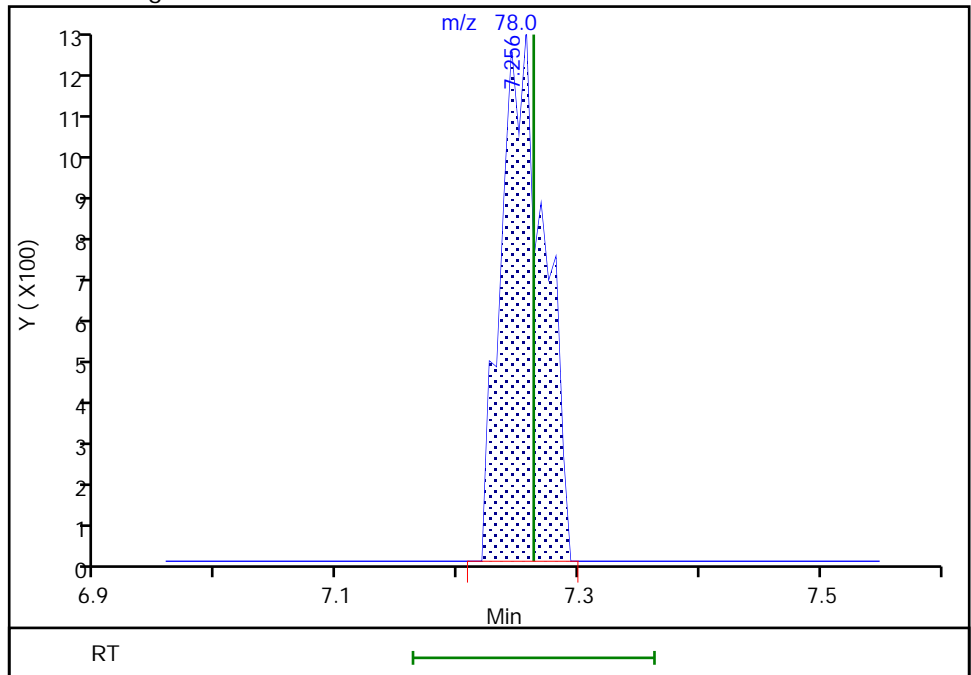
RT: 7.26
Area: 2220
Amount: 0.009197
Amount Units: ug/l

Processing Integration Results



RT: 7.26
Area: 3144
Amount: 0.013024
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 30-Apr-2021 16:55:23
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

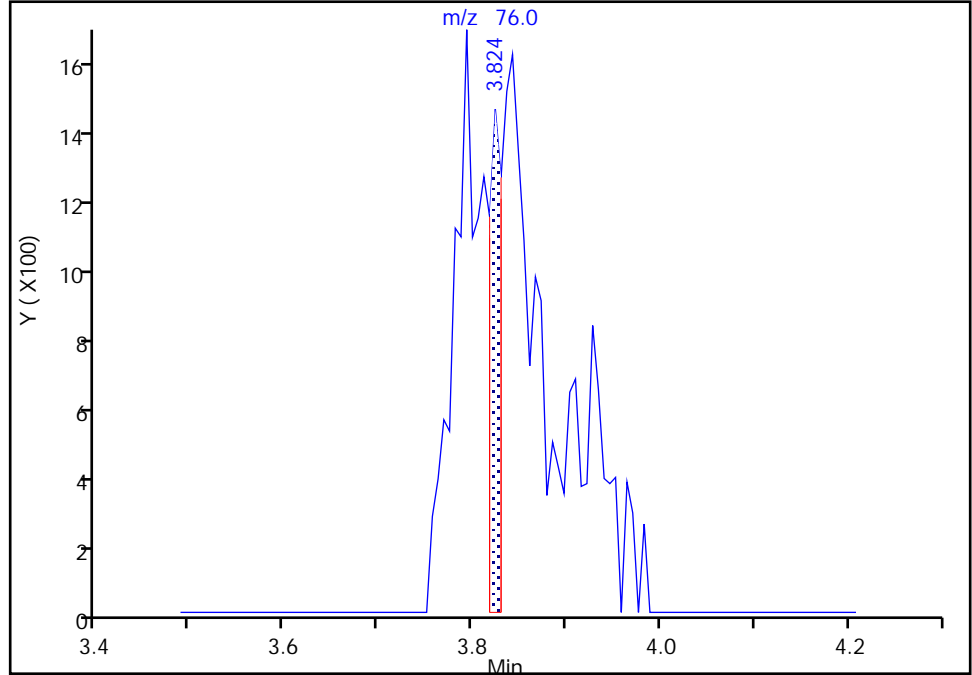
Data File: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\GA30S11.D
Injection Date: 30-Apr-2021 14:40:30 Instrument ID: 16334
Lims ID: 410-37501-A-11 Lab Sample ID: 410-37501-11
Client ID: HD-COD-SW-28-0/1-0
Operator ID: jml01693 ALS Bottle#: 18 Worklist Smp#: 18
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

25 Carbon disulfide, CAS: 75-15-0

Signal: 1

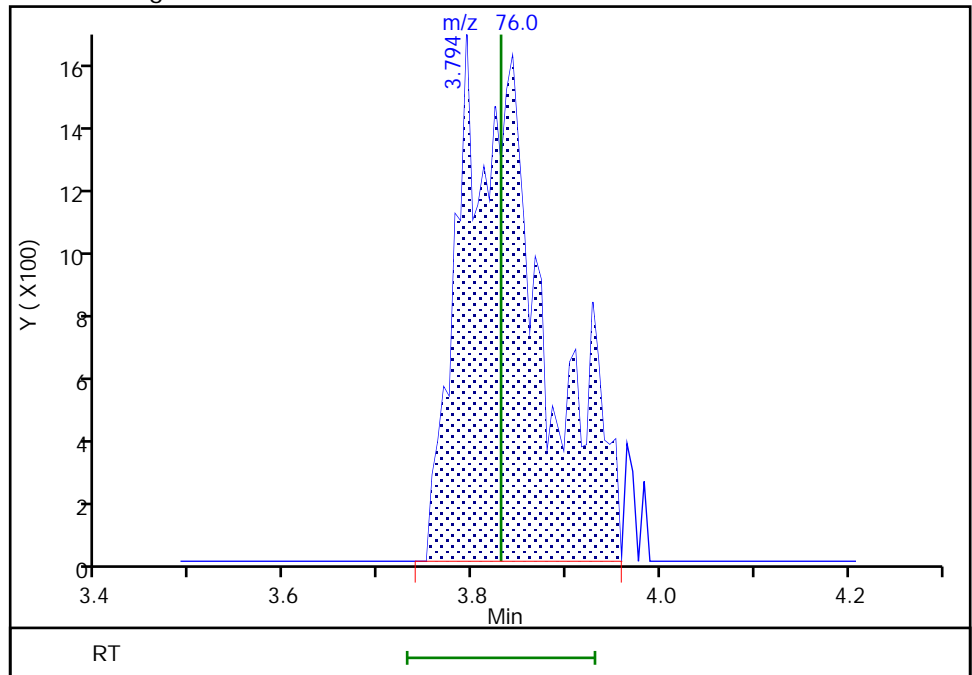
RT: 3.82
Area: 1414
Amount: 0.007755
Amount Units: ug/l

Processing Integration Results



RT: 3.79
Area: 10024
Amount: 0.054976
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 30-Apr-2021 16:55:10
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-37501-1
 SDG No.: _____
 Client Sample ID: HD-COD-SW-29-0/1-0 Lab Sample ID: 410-37501-12
 Matrix: Water Lab File ID: GA30S12.D
 Analysis Method: 8260D Date Collected: 04/26/2021 09:30
 Sample wt/vol: 25 (mL) Date Analyzed: 04/30/2021 15:02
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: R-624SilMS 30m ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 120958 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.070
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.060
75-34-3	1,1-Dichloroethane	ND		0.50	0.070
75-35-4	1,1-Dichloroethene	ND		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.060
107-06-2	1,2-Dichloroethane	ND		0.50	0.050
78-87-5	1,2-Dichloropropane	ND		0.50	0.060
78-93-3	2-Butanone (MEK)	ND		5.0	0.60
591-78-6	2-Hexanone	ND		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70
67-64-1	Acetone	1.9	J	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	0.076	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	0.075	J	0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-37501-1
 SDG No.: _____
 Client Sample ID: HD-COD-SW-29-0/1-0 Lab Sample ID: 410-37501-12
 Matrix: Water Lab File ID: GA30S12.D
 Analysis Method: 8260D Date Collected: 04/26/2021 09:30
 Sample wt/vol: 25 (mL) Date Analyzed: 04/30/2021 15:02
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: R-624SilMS 30m ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 120958 Units: ug/L

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

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		80-120
460-00-4	4-Bromofluorobenzene (Surr)	89		80-120
1868-53-7	Dibromofluoromethane (Surr)	103		80-120
2037-26-5	Toluene-d8 (Surr)	93		80-120

Eurofins Lancaster Laboratories Env, LLC
 Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\GA30S12.D
 Lims ID: 410-37501-A-12
 Client ID: HD-COD-SW-29-0/1-0
 Sample Type: Client
 Inject. Date: 30-Apr-2021 15:02:30 ALS Bottle#: 19 Worklist Smp#: 19
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0028091-019
 Operator ID: jml01693 Instrument ID: 16334
 Method: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\MSV_16334_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 30-Apr-2021 16:57:51 Calib Date: 30-Nov-2020 18:23:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1630

First Level Reviewer: campbellme Date: 30-Apr-2021 16:56:00

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
5 Chloromethane	50		2.148				ND	
8 Vinyl chloride	62		2.263				ND	
9 Bromomethane	94		2.587				ND	
10 Chloroethane	64		2.666				ND	
19 1,1-Dichloroethene	96		3.513				ND	
21 Acetone	43	3.544	3.538	0.006	72	13675	1.88	
25 Carbon disulfide	76	3.830	3.830	0.000	53	10093	0.0549	M
29 Methylene Chloride	84		4.166				ND	
* 30 t-Butyl alcohol-d10 (IS)	65	4.166	4.178	-0.012	0	148585	50.0	
33 Methyl tert-butyl ether	73		4.562				ND	
34 trans-1,2-Dichloroethene	96		4.568				ND	
37 1,1-Dichloroethane	63		5.239				ND	
41 2-Butanone (MEK)	43		6.049				ND	
42 cis-1,2-Dichloroethene	96	6.074	6.074	0.000	78	4891	0.0759	
49 Chlorobromomethane	128		6.403				ND	
51 Chloroform	83	6.561	6.561	0.000	84	2391	0.0233	a
\$ 52 Dibromofluoromethane (Surr)	113	6.775	6.775	0.000	94	595578	10.3	
53 1,1,1-Trichloroethane	97		6.787				ND	
56 Carbon tetrachloride	117		6.994				ND	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.232	7.232	0.000	0	120050	9.74	
60 Benzene	78		7.263				ND	
61 1,2-Dichloroethane	62		7.330				ND	
* 64 Fluorobenzene (IS)	96	7.665	7.665	0.000	99	2392580	10.0	
68 Trichloroethene	95	8.146	8.140	0.006	91	4648	0.0748	
70 1,2-Dichloropropane	63		8.476				ND	
76 Dichlorobromomethane	83		8.823				ND	
81 cis-1,3-Dichloropropene	75		9.378				ND	
82 4-Methyl-2-pentanone (MIBK)	43		9.555				ND	
\$ 83 Toluene-d8 (Surr)	98	9.683	9.683	0.000	93	2235811	9.33	
84 Toluene	92	9.762	9.762	0.000	99	7830	0.0503	
96 trans-1,3-Dichloropropene	75		10.018				ND	
99 1,1,2-Trichloroethane	97		10.225				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
100 Tetrachloroethene	166	10.311	10.311	0.000	90	3570	0.0528	
102 2-Hexanone	43		10.445				ND	7
104 Chlorodibromomethane	129		10.603				ND	
105 Ethylene Dibromide	107		10.707				ND	
* 106 Chlorobenzene-d5 (IS)	117	11.140	11.140	0.000	85	1796613	10.0	
108 Chlorobenzene	112		11.170				ND	
S 109 Xylenes, Total	106		11.245				ND	7
110 1,1,1,2-Tetrachloroethane	131		11.250				ND	
111 Ethylbenzene	91		11.256				ND	7
112 m-Xylene & p-Xylene	106		11.371				ND	7
113 o-Xylene	106		11.701				ND	
114 Styrene	104		11.713				ND	
115 Bromoform	173		11.871				ND	
\$ 119 4-Bromofluorobenzene (Surr)	95	12.140	12.140	0.000	94	810832	8.86	
120 1,1,2,2-Tetrachloroethane	83		12.243				ND	
* 134 1,4-Dichlorobenzene-d4	152	13.017	13.017	0.000	94	999938	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MSV_29_826ISS_00017

Amount Added: 1.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\GA30S12.D

Injection Date: 30-Apr-2021 15:02:30

Instrument ID: 16334

Operator ID: jml01693

Lims ID: 410-37501-A-12

Lab Sample ID: 410-37501-12

Worklist Smp#: 19

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

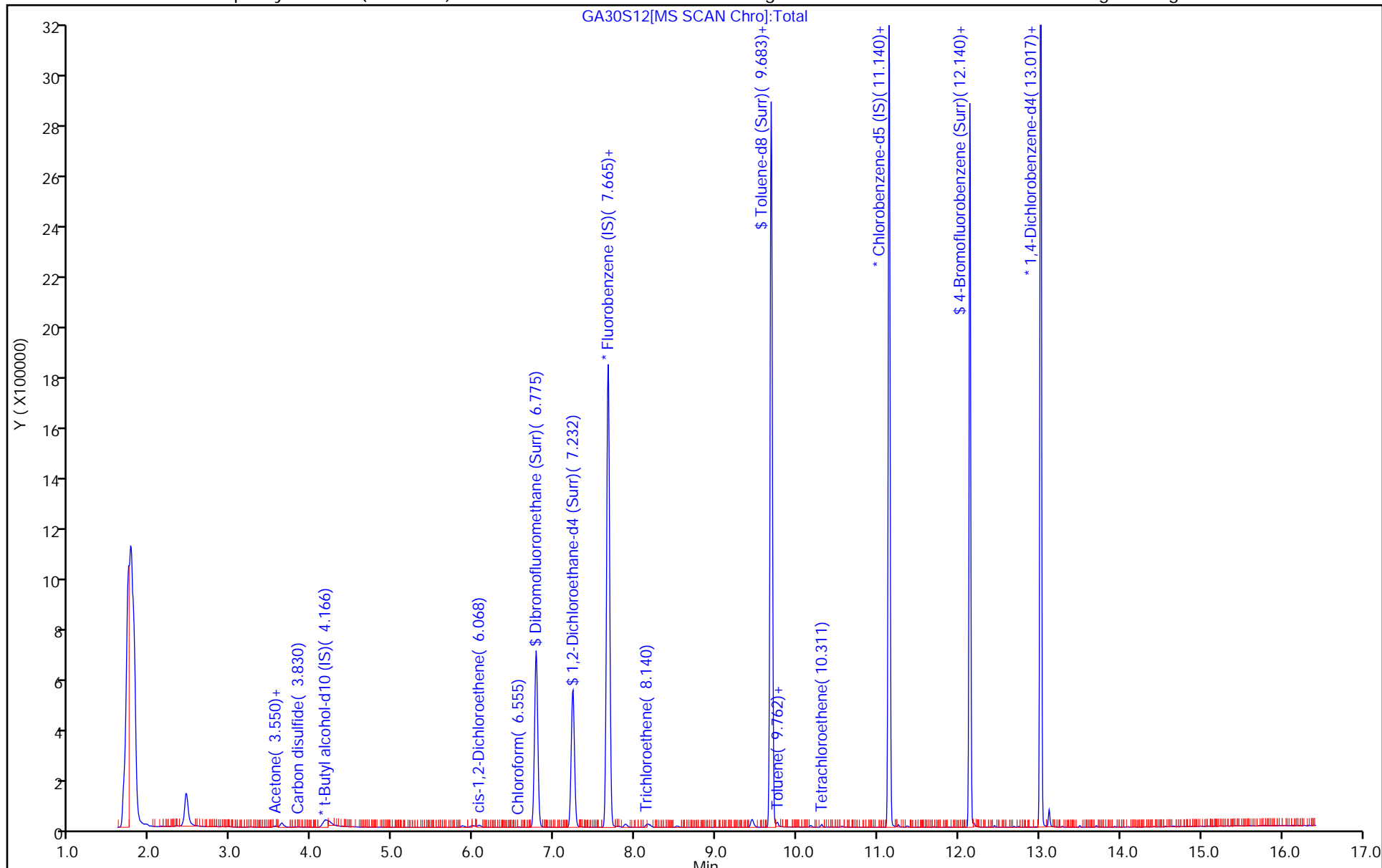
ALS Bottle#: 19

Method: MSV_16334_25mL

Limit Group: MSV - 8260C_D

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

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\GA30S12.D
 Lims ID: 410-37501-A-12
 Client ID: HD-COD-SW-29-0/1-0
 Sample Type: Client
 Inject. Date: 30-Apr-2021 15:02:30 ALS Bottle#: 19 Worklist Smp#: 19
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0028091-019
 Operator ID: jml01693 Instrument ID: 16334
 Method: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\MSV_16334_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 30-Apr-2021 16:57:51 Calib Date: 30-Nov-2020 18:23:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1630

First Level Reviewer: campbellme Date: 30-Apr-2021 16:56:00

Compound	Amount Added	Amount Recovered	% Rec.
\$ 52 Dibromofluoromethane (Surr)	10.0	10.3	102.85
\$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	9.74	97.44
\$ 83 Toluene-d8 (Surr)	10.0	9.33	93.28
\$ 119 4-Bromofluorobenzene (Surr)	10.0	8.86	88.60

Data File: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\GA30S12.D

Injection Date: 30-Apr-2021 15:02:30

Instrument ID: 16334

Lims ID: 410-37501-A-12

Lab Sample ID: 410-37501-12

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

Operator ID: jml01693

ALS Bottle#: 19

Worklist Smp#: 19

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

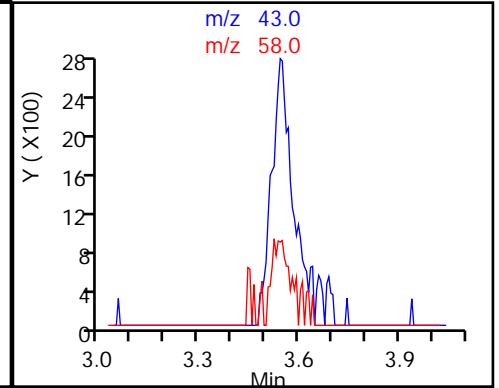
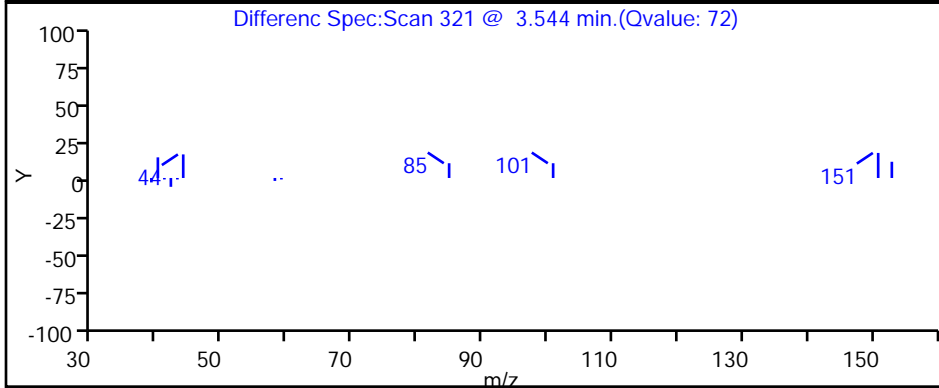
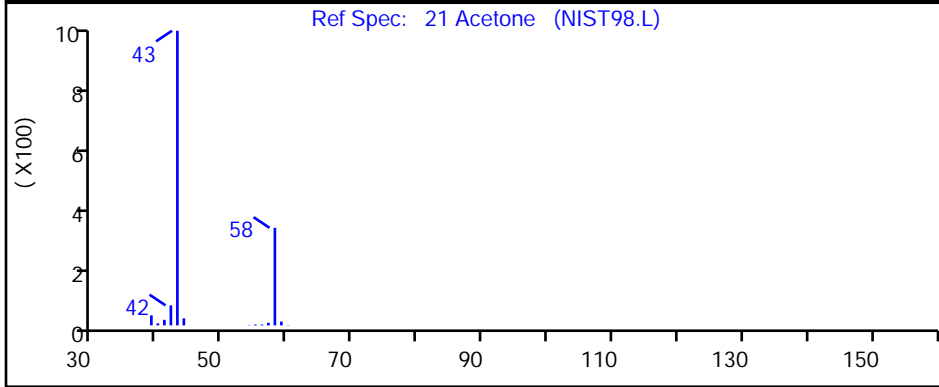
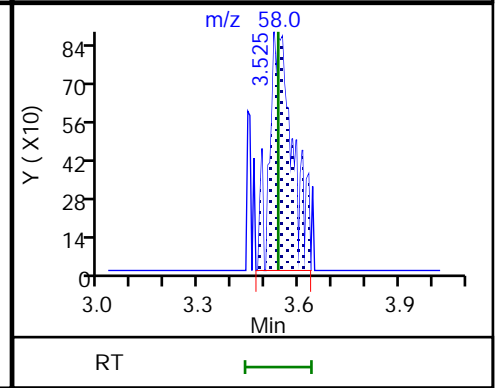
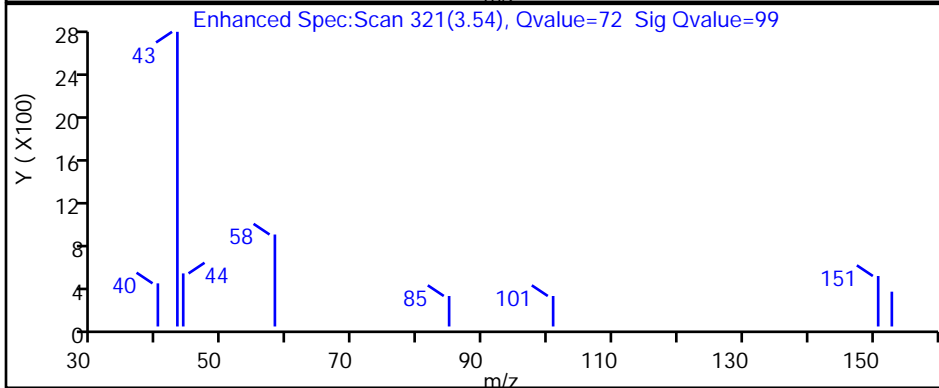
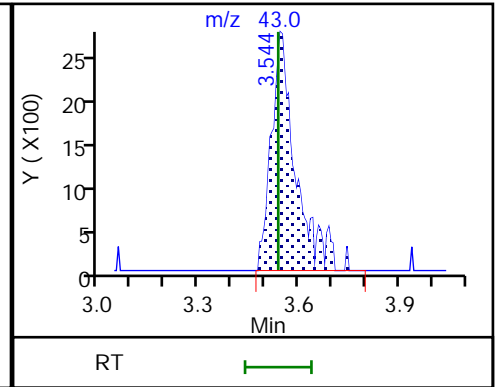
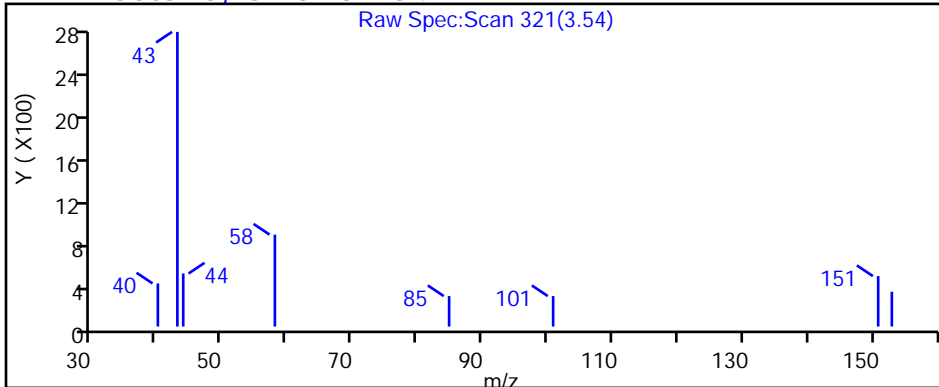
Method: MSV_16334_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

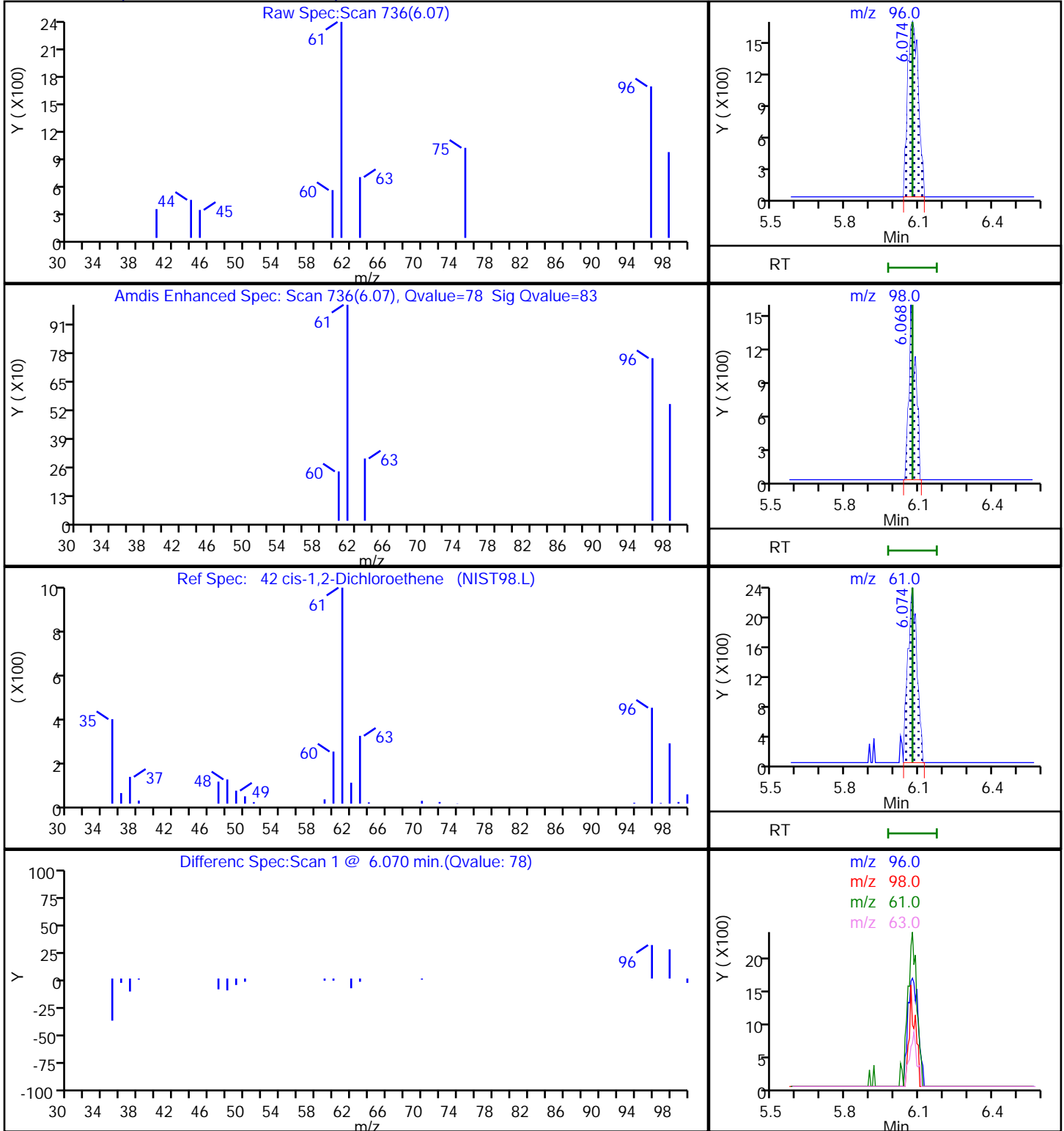
21 Acetone, CAS: 67-64-1



Eurofins Lancaster Laboratories Env, LLC

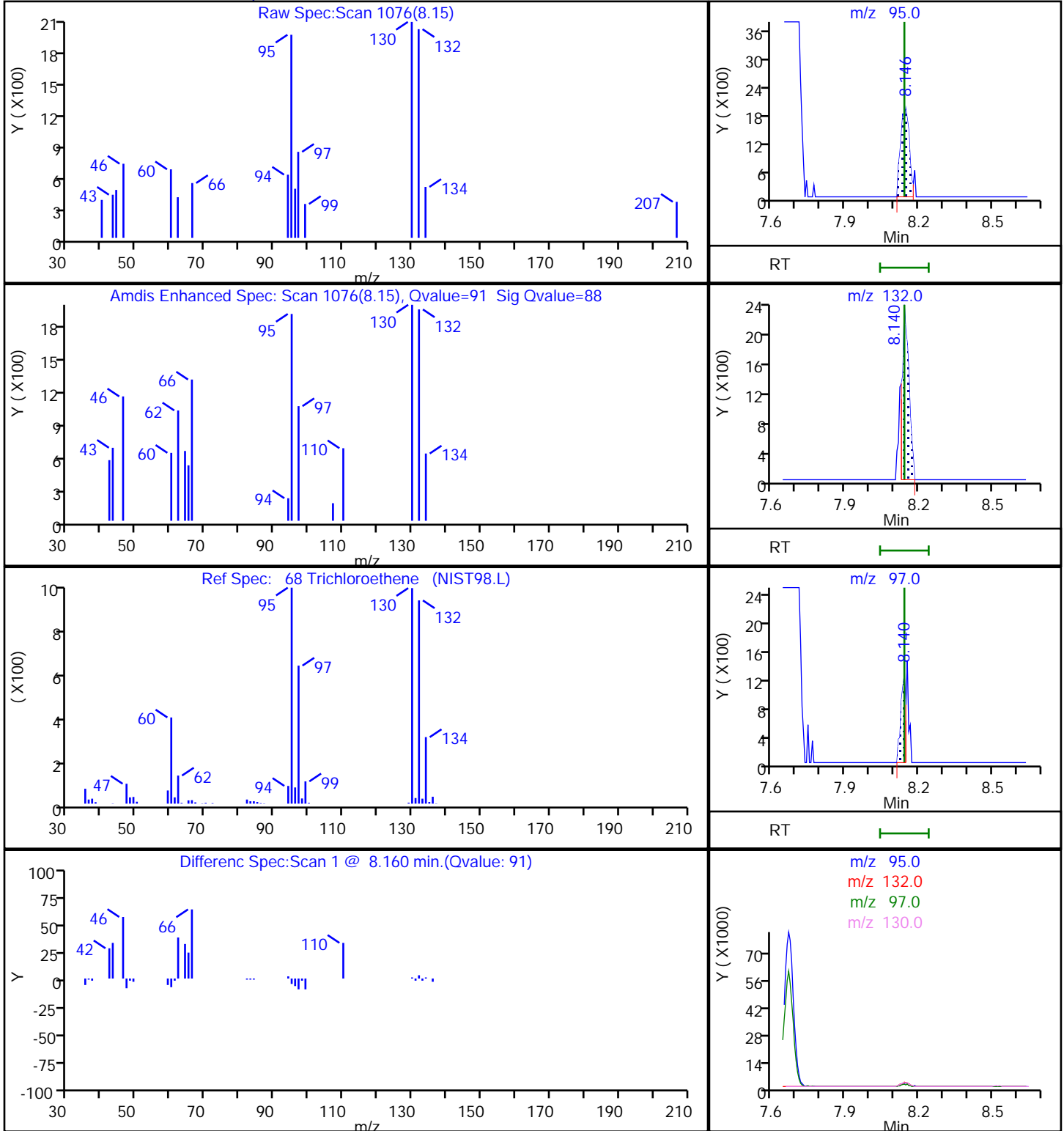
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Injection Date: 30-Apr-2021 15:02:30 Instrument ID: 16334
Lims ID: 410-37501-A-12 Lab Sample ID: 410-37501-12
Client ID: HD-COD-SW-29-0/1-0
Operator ID: jml01693 ALS Bottle#: 19 Worklist Smp#: 19
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) MS Quad

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



Data File: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\GA30S12.D
Injection Date: 30-Apr-2021 15:02:30 Instrument ID: 16334
Lims ID: 410-37501-A-12 Lab Sample ID: 410-37501-12
Client ID: HD-COD-SW-29-0/1-0
Operator ID: jml01693 ALS Bottle#: 19 Worklist Smp#: 19
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm i.d.) MS Quad

68 Trichloroethene, CAS: 79-01-6



Eurofins Lancaster Laboratories Env, LLC

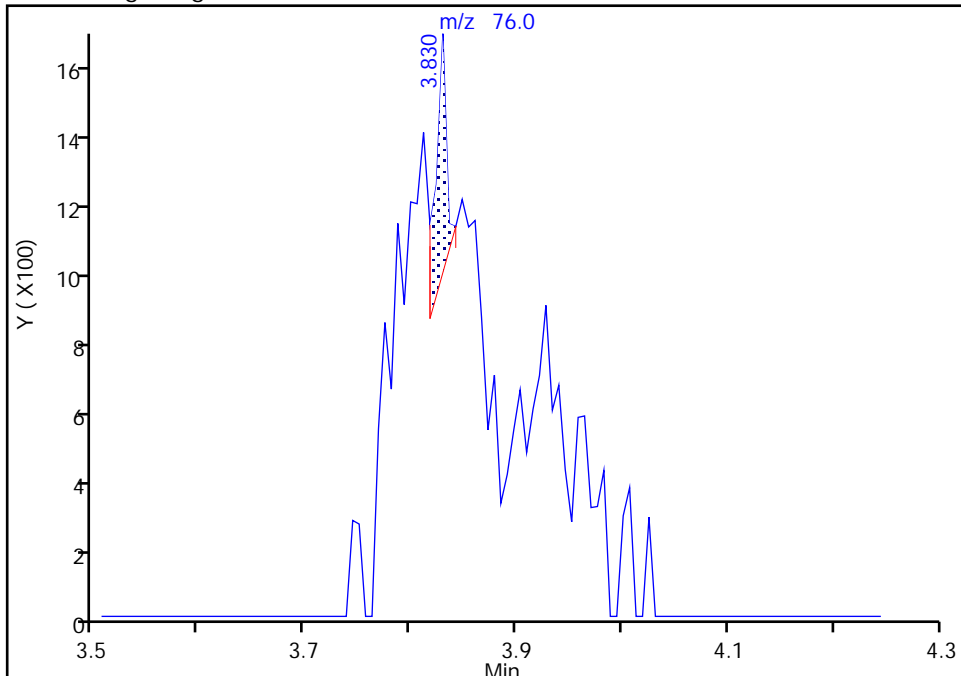
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Injection Date: 30-Apr-2021 15:02:30 Instrument ID: 16334
Lims ID: 410-37501-A-12 Lab Sample ID: 410-37501-12
Client ID: HD-COD-SW-29-0/1-0
Operator ID: jml01693 ALS Bottle#: 19 Worklist Smp#: 19
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

25 Carbon disulfide, CAS: 75-15-0

Signal: 1

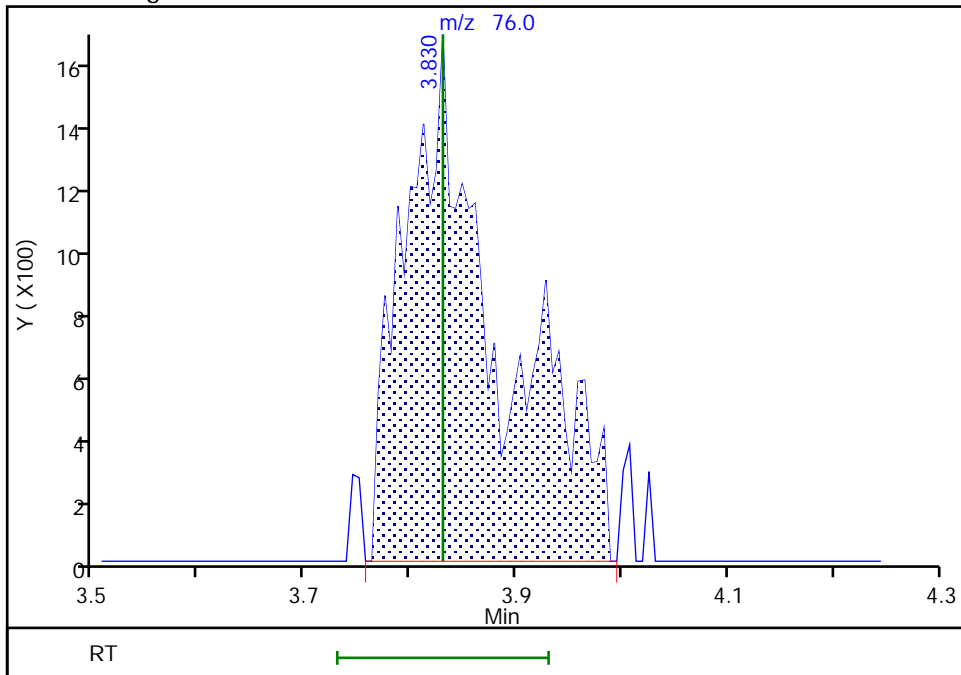
RT: 3.83
Area: 480
Amount: 0.002613
Amount Units: ug/l

Processing Integration Results



RT: 3.83
Area: 10093
Amount: 0.054940
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 30-Apr-2021 16:55:45
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

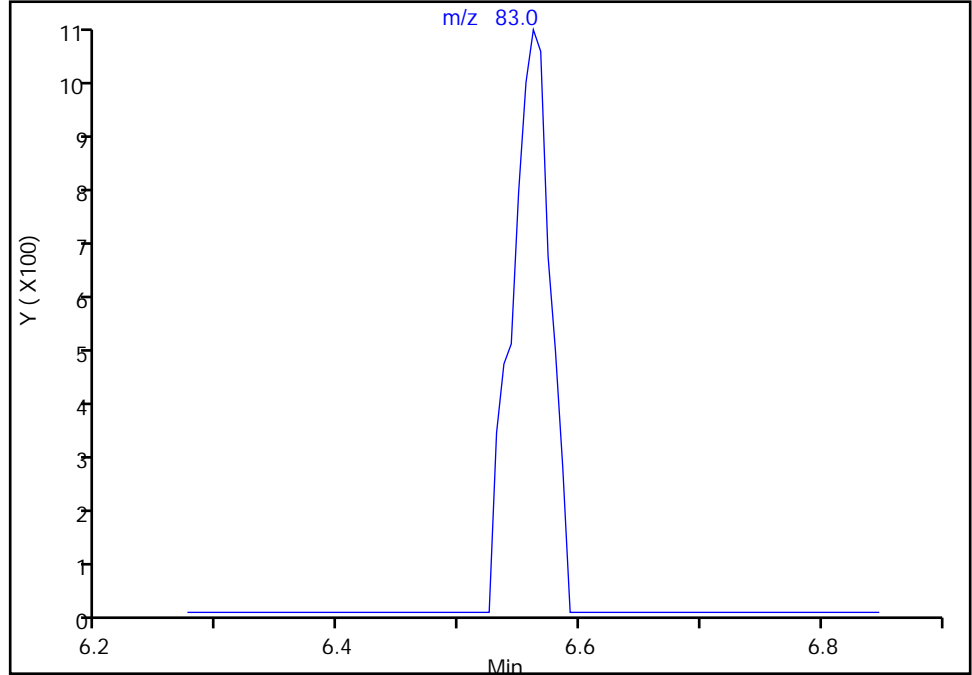
Data File: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\GA30S12.D
Injection Date: 30-Apr-2021 15:02:30 Instrument ID: 16334
Lims ID: 410-37501-A-12 Lab Sample ID: 410-37501-12
Client ID: HD-COD-SW-29-0/1-0
Operator ID: jml01693 ALS Bottle#: 19 Worklist Smp#: 19
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

51 Chloroform, CAS: 67-66-3

Signal: 1

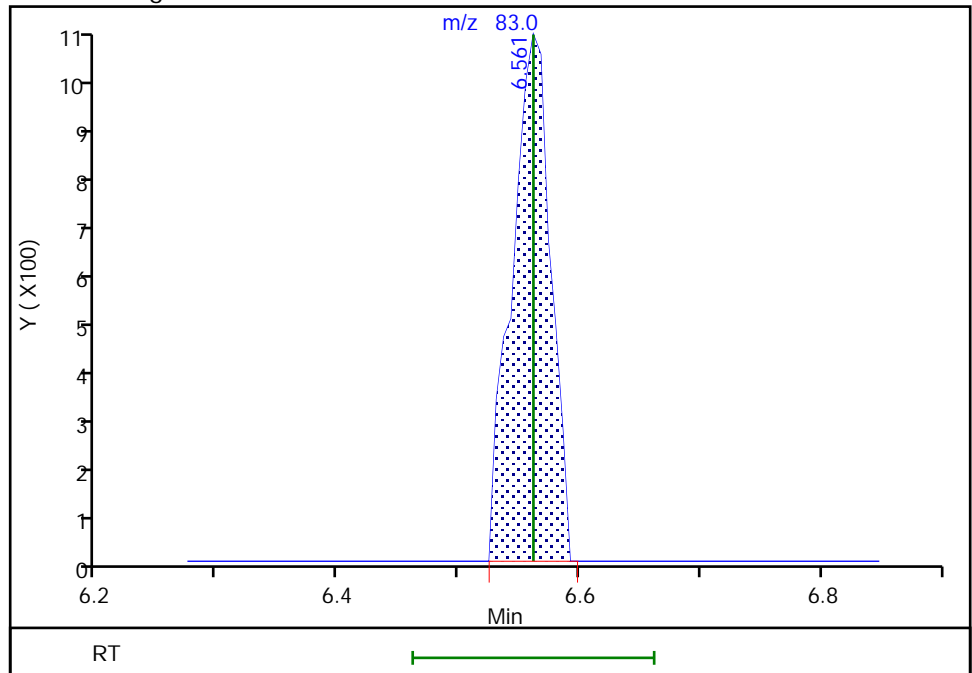
Not Detected
Expected RT: 6.56

Processing Integration Results



Manual Integration Results

RT: 6.56
Area: 2391
Amount: 0.023300
Amount Units: ug/l



Reviewer: campbellme, 30-Apr-2021 16:55:51
Audit Action: Assigned Compound ID

Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-37501-1
 SDG No.: _____
 Client Sample ID: HD-QC1-0/1-1 Lab Sample ID: 410-37501-13
 Matrix: Water Lab File ID: GA30S05.D
 Analysis Method: 8260D Date Collected: 04/26/2021 12:00
 Sample wt/vol: 25 (mL) Date Analyzed: 04/30/2021 12:28
 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.: 120958 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	0.068	J	0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.070
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.060
75-34-3	1,1-Dichloroethane	ND		0.50	0.070
75-35-4	1,1-Dichloroethene	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	0.12	J	0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	0.81		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.050
124-48-1	Dibromochloromethane	ND		0.50	0.070
100-41-4	Ethylbenzene	ND		0.50	0.060
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.050
75-09-2	Methylene Chloride	ND		0.50	0.070
100-42-5	Styrene	ND		0.50	0.050
127-18-4	Tetrachloroethene	2.4		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	0.97		0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-37501-1
 SDG No.: _____
 Client Sample ID: HD-QC1-0/1-1 Lab Sample ID: 410-37501-13
 Matrix: Water Lab File ID: GA30S05.D
 Analysis Method: 8260D Date Collected: 04/26/2021 12:00
 Sample wt/vol: 25 (mL) Date Analyzed: 04/30/2021 12:28
 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.: 120958 Units: ug/L

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

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		80-120
460-00-4	4-Bromofluorobenzene (Surr)	89		80-120
1868-53-7	Dibromofluoromethane (Surr)	102		80-120
2037-26-5	Toluene-d8 (Surr)	93		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\GA30S05.D
 Lims ID: 410-37501-A-13
 Client ID: HD-QC1-0/1-1
 Sample Type: Client
 Inject. Date: 30-Apr-2021 12:28:30 ALS Bottle#: 12 Worklist Smp#: 12
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0028091-012
 Operator ID: jml01693 Instrument ID: 16334
 Method: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\MSV_16334_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 30-Apr-2021 16:57:51 Calib Date: 30-Nov-2020 18:23:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1630

First Level Reviewer: campbellme Date: 30-Apr-2021 16:52:14

Compound	Sig	RT (min.)	Exp RT (min.)	Diff RT (min.)	Q	Response	OnCol Amt ug/l	Flags
5 Chloromethane	50		2.148				ND	
8 Vinyl chloride	62	2.264	2.263	0.001	94	4404	0.0597	
9 Bromomethane	94		2.587				ND	
10 Chloroethane	64		2.666				ND	
19 1,1-Dichloroethene	96	3.544	3.513	0.031	71	2599	0.0507	
21 Acetone	43	3.544	3.538	0.006	61	5816	0.6734	
25 Carbon disulfide	76	3.800	3.830	-0.030	58	6517	0.0345	M
29 Methylene Chloride	84		4.166				ND	
* 30 t-Butyl alcohol-d10 (IS)	65	4.172	4.178	-0.006	0	176022	50.0	
33 Methyl tert-butyl ether	73		4.562				ND	7
34 trans-1,2-Dichloroethene	96		4.568				ND	
37 1,1-Dichloroethane	63	5.245	5.239	0.006	85	5313	0.0485	a
41 2-Butanone (MEK)	43		6.049				ND	
42 cis-1,2-Dichloroethene	96	6.080	6.074	0.006	78	53943	0.8140	
49 Chlorobromomethane	128		6.403				ND	
51 Chloroform	83	6.555	6.561	-0.006	90	13034	0.1235	
\$ 52 Dibromofluoromethane (Surr)	113	6.775	6.775	0.000	94	606328	10.2	
53 1,1,1-Trichloroethane	97	6.799	6.787	0.012	35	6144	0.0680	a
56 Carbon tetrachloride	117		6.994				ND	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.226	7.232	-0.006	0	123420	9.74	
60 Benzene	78		7.263				ND	
61 1,2-Dichloroethane	62		7.330				ND	
* 64 Fluorobenzene (IS)	96	7.665	7.665	0.000	99	2461087	10.0	
68 Trichloroethene	95	8.140	8.140	0.000	97	62279	0.9749	
70 1,2-Dichloropropane	63		8.476				ND	
76 Dichlorobromomethane	83		8.823				ND	
81 cis-1,3-Dichloropropene	75		9.378				ND	
82 4-Methyl-2-pentanone (MIBK)	43		9.555				ND	7
\$ 83 Toluene-d8 (Surr)	98	9.683	9.683	0.000	93	2289476	9.33	
84 Toluene	92	9.756	9.762	-0.006	98	4994	0.0313	
96 trans-1,3-Dichloropropene	75		10.018				ND	
99 1,1,2-Trichloroethane	97		10.225				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
100 Tetrachloroethene	166	10.305	10.311	-0.006	97	167747	2.42	
102 2-Hexanone	43		10.445				ND	
104 Chlorodibromomethane	129		10.603				ND	
105 Ethylene Dibromide	107		10.707				ND	
* 106 Chlorobenzene-d5 (IS)	117	11.140	11.140	0.000	85	1839914	10.0	
108 Chlorobenzene	112		11.170				ND	
S 109 Xylenes, Total	106		11.245				ND	7
110 1,1,1,2-Tetrachloroethane	131		11.250				ND	
111 Ethylbenzene	91		11.256				ND	
112 m-Xylene & p-Xylene	106		11.371				ND	7
113 o-Xylene	106		11.701				ND	7
114 Styrene	104		11.713				ND	
115 Bromoform	173		11.871				ND	
\$ 119 4-Bromofluorobenzene (Surr)	95	12.140	12.140	0.000	94	831131	8.87	
120 1,1,2,2-Tetrachloroethane	83		12.243				ND	
* 134 1,4-Dichlorobenzene-d4	152	13.018	13.017	0.001	94	1032687	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MSV_29_826ISS_00017

Amount Added: 1.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\GA30S05.D

Injection Date: 30-Apr-2021 12:28:30

Instrument ID: 16334

Operator ID: jml01693

Lims ID: 410-37501-A-13

Lab Sample ID: 410-37501-13

Worklist Smp#: 12

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

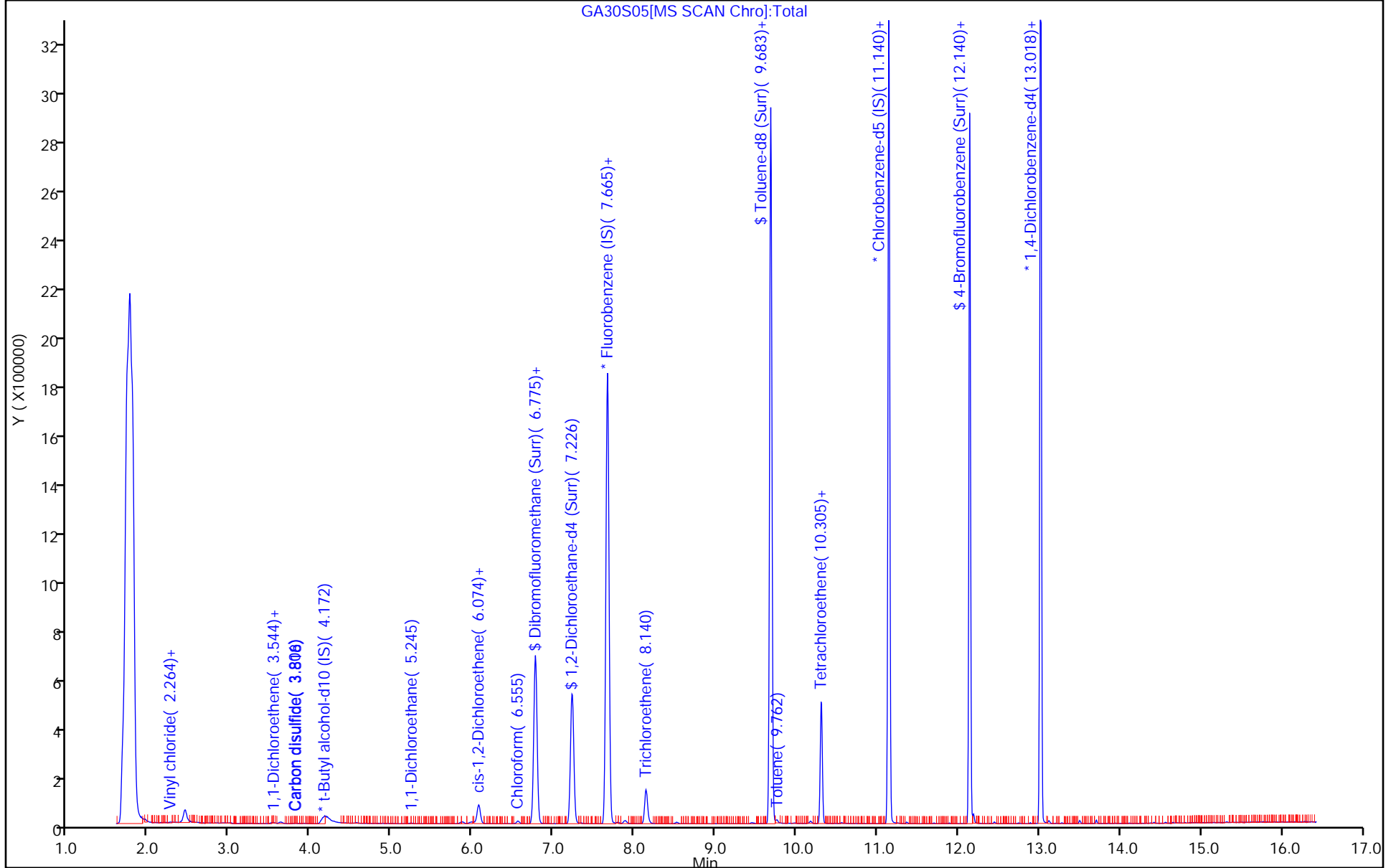
ALS Bottle#: 12

Method: MSV_16334_25mL

Limit Group: MSV - 8260C_D

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

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\GA30S05.D
 Lims ID: 410-37501-A-13
 Client ID: HD-QC1-0/1-1
 Sample Type: Client
 Inject. Date: 30-Apr-2021 12:28:30 ALS Bottle#: 12 Worklist Smp#: 12
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0028091-012
 Operator ID: jml01693 Instrument ID: 16334
 Method: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\MSV_16334_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 30-Apr-2021 16:57:51 Calib Date: 30-Nov-2020 18:23:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1630

First Level Reviewer: campbellme

Date: 30-Apr-2021 16:52:14

Compound	Amount Added	Amount Recovered	% Rec.
\$ 52 Dibromofluoromethane (Surr)	10.0	10.2	101.79
\$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	9.74	97.39
\$ 83 Toluene-d8 (Surr)	10.0	9.33	93.27
\$ 119 4-Bromofluorobenzene (Surr)	10.0	8.87	88.68

Data File: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\GA30S05.D

Injection Date: 30-Apr-2021 12:28:30

Instrument ID: 16334

Lims ID: 410-37501-A-13

Lab Sample ID: 410-37501-13

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

Operator ID: jml01693

ALS Bottle#: 12

Worklist Smp#: 12

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

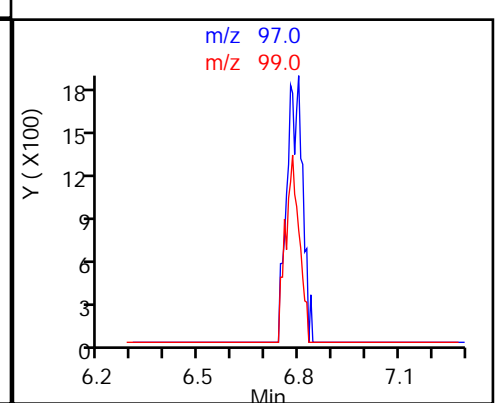
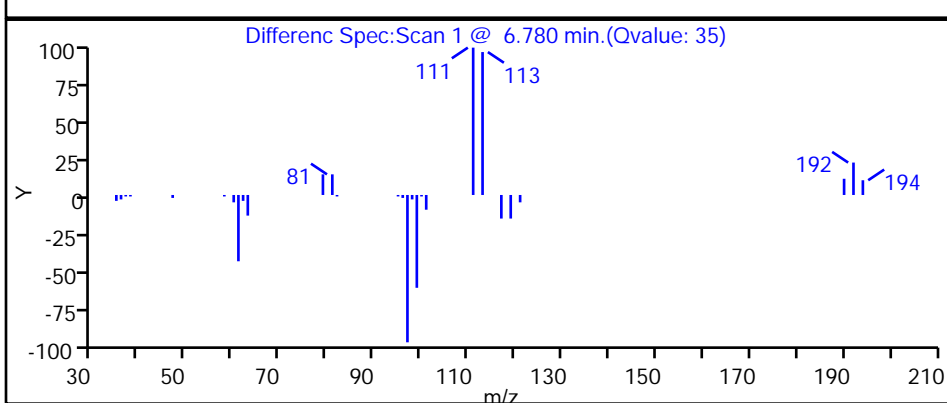
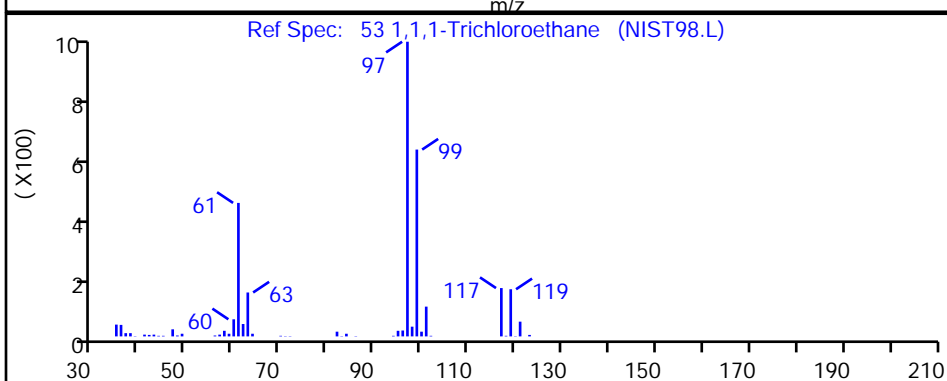
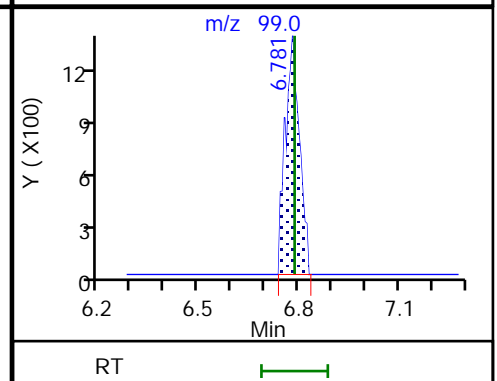
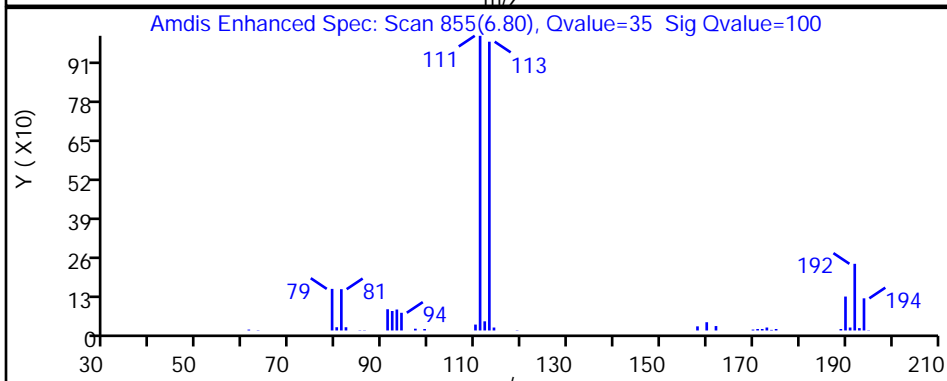
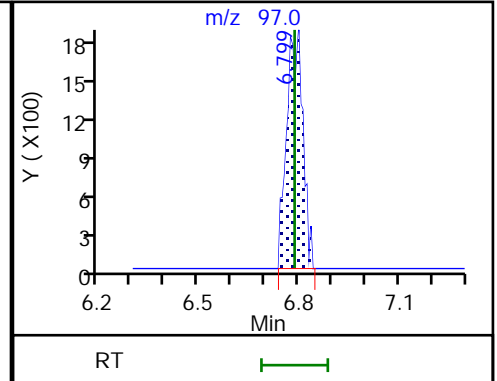
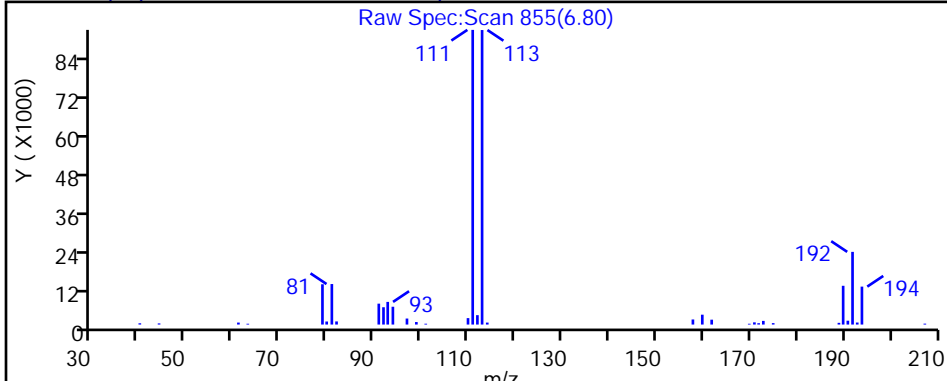
Method: MSV_16334_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

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



Data File: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\GA30S05.D

Injection Date: 30-Apr-2021 12:28:30

Instrument ID: 16334

Lims ID: 410-37501-A-13

Lab Sample ID: 410-37501-13

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

Operator ID: jml01693

ALS Bottle#: 12

Worklist Smp#: 12

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

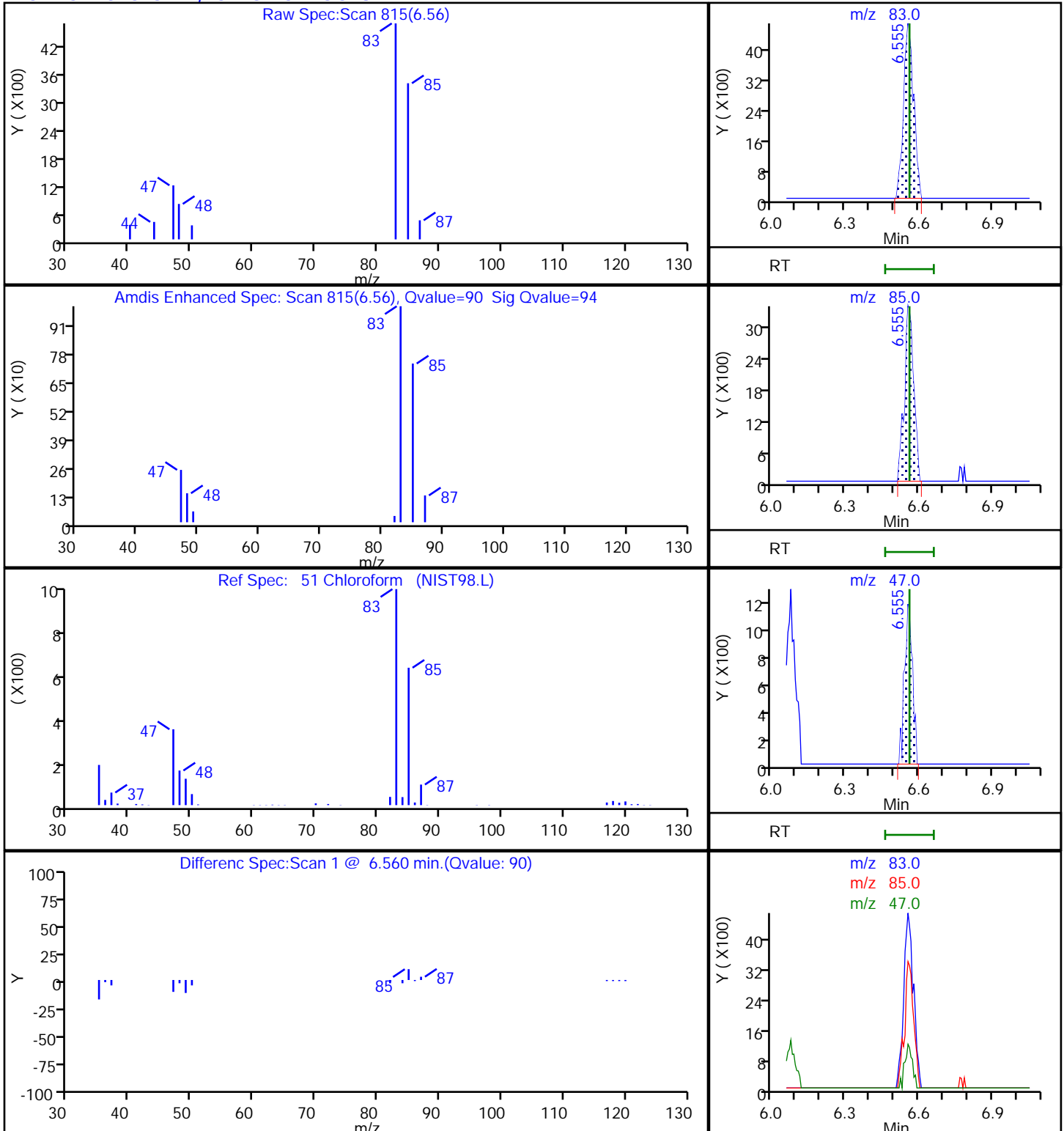
Method: MSV_16334_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) x 30m

MS Quad

51 Chloroform, CAS: 67-66-3



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\GA30S05.D

Injection Date: 30-Apr-2021 12:28:30

Instrument ID: 16334

Lims ID: 410-37501-A-13

Lab Sample ID: 410-37501-13

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

Operator ID: jml01693

ALS Bottle#: 12

Worklist Smp#: 12

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

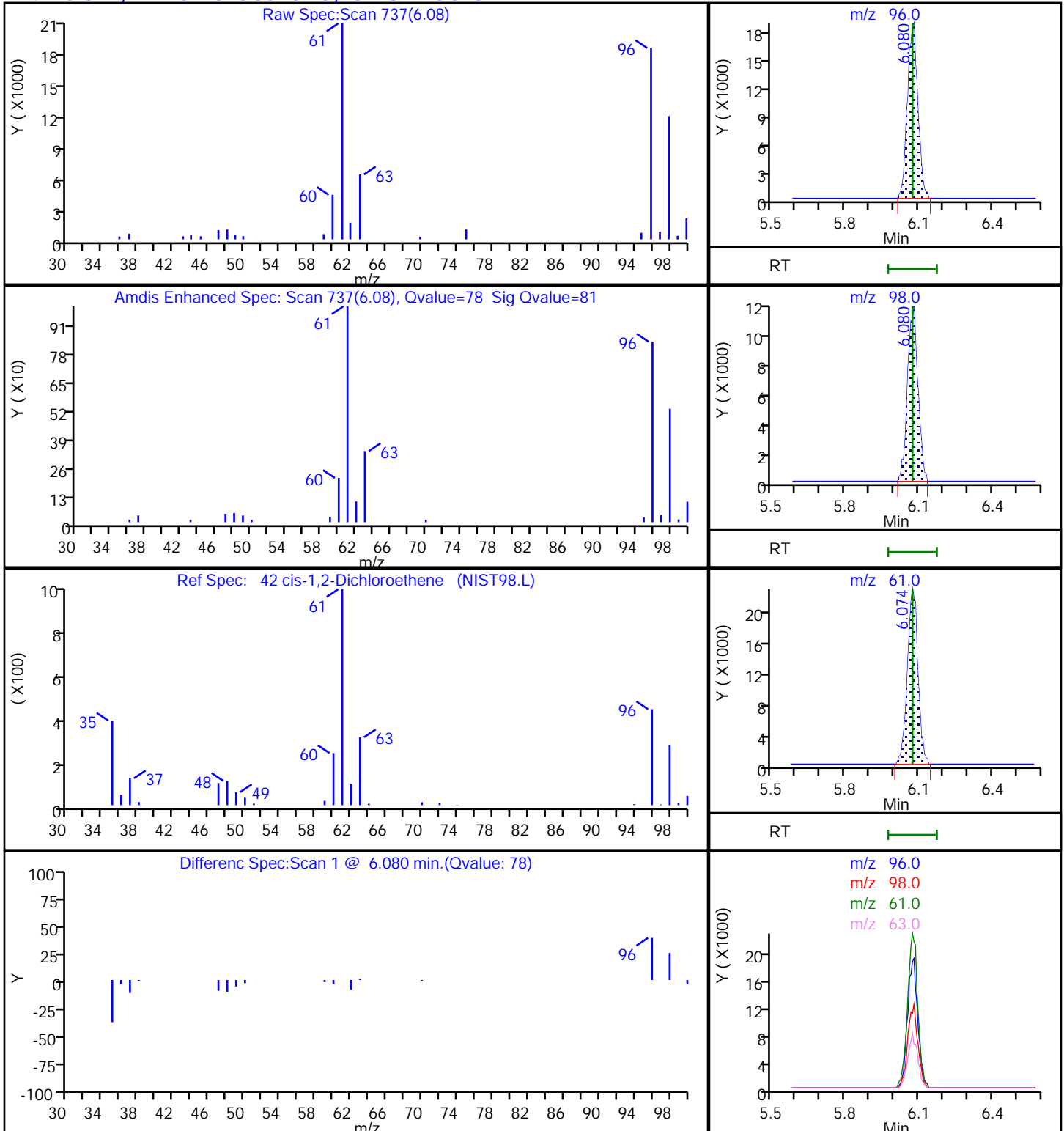
Method: MSV_16334_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) x 30m

MS Quad

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



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\GA30S05.D

Injection Date: 30-Apr-2021 12:28:30

Instrument ID: 16334

Lims ID: 410-37501-A-13

Lab Sample ID: 410-37501-13

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

Operator ID: jml01693

ALS Bottle#: 12

Worklist Smp#: 12

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

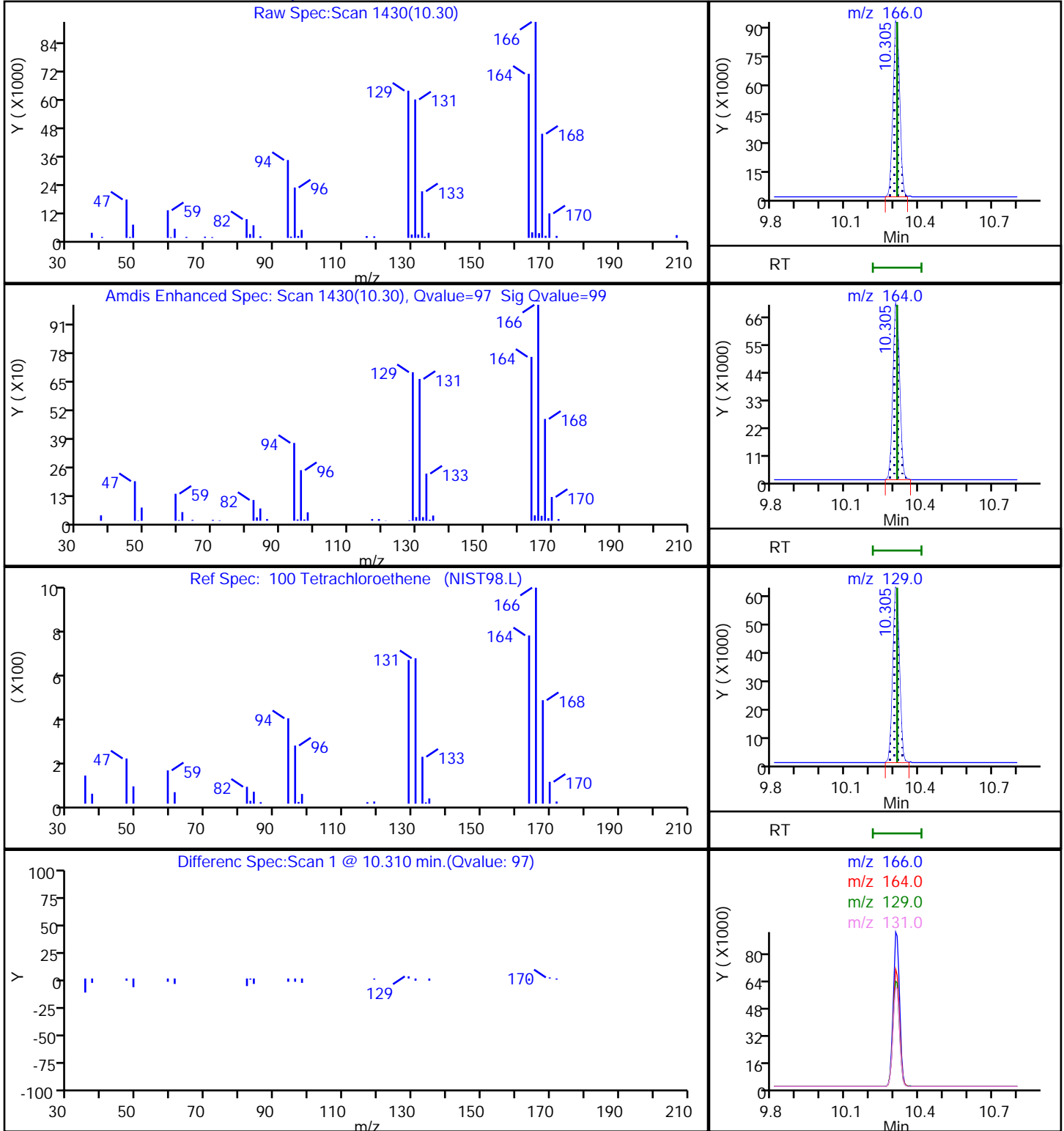
Method: MSV_16334_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

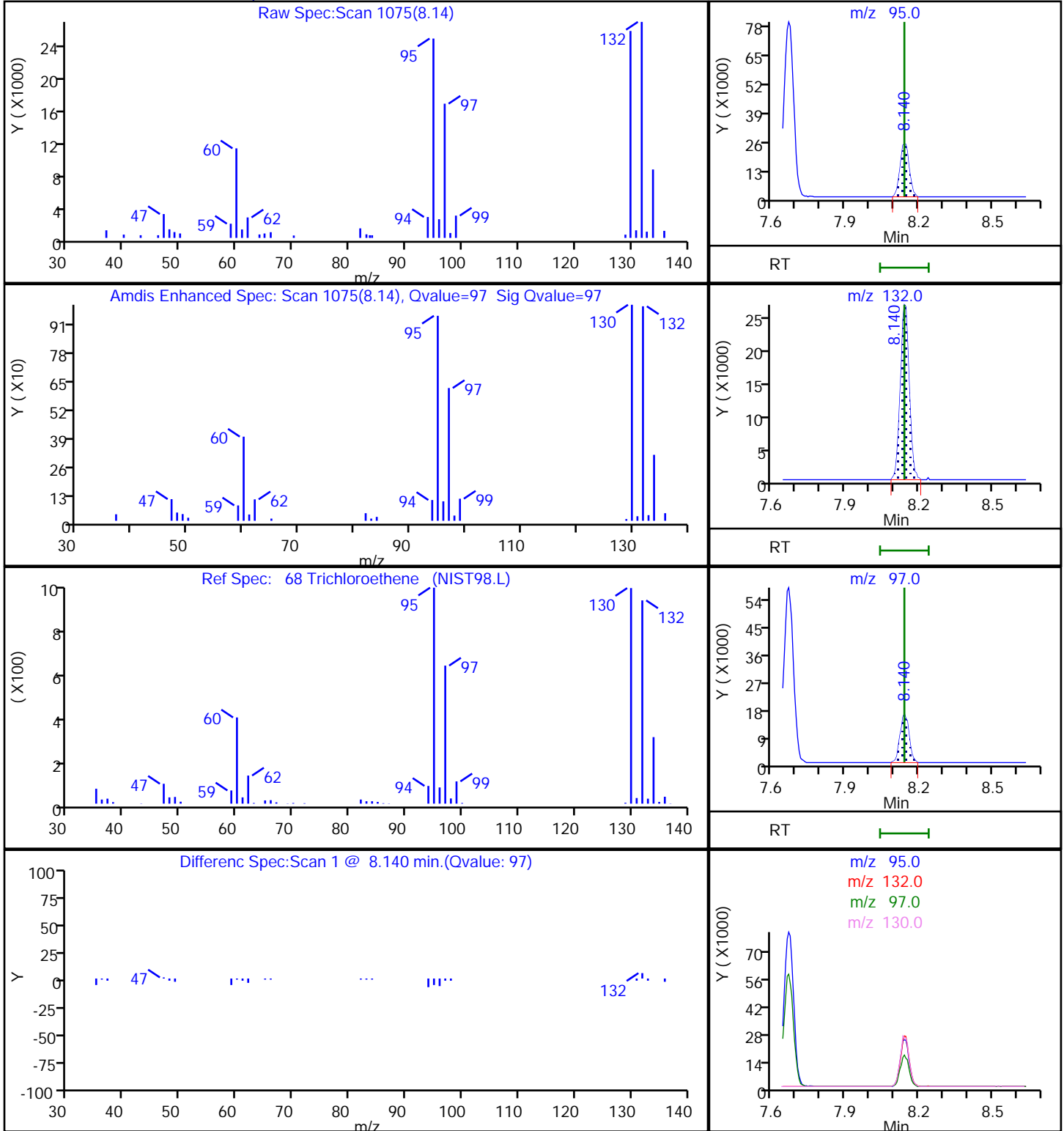
100 Tetrachloroethene, CAS: 127-18-4



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\GA30S05.D
Injection Date: 30-Apr-2021 12:28:30 Instrument ID: 16334
Lims ID: 410-37501-A-13 Lab Sample ID: 410-37501-13
Client ID: HD-QC1-0/1-1
Operator ID: jml01693 ALS Bottle#: 12 Worklist Smp#: 12
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) MS Quad

68 Trichloroethene, CAS: 79-01-6



Eurofins Lancaster Laboratories Env, LLC

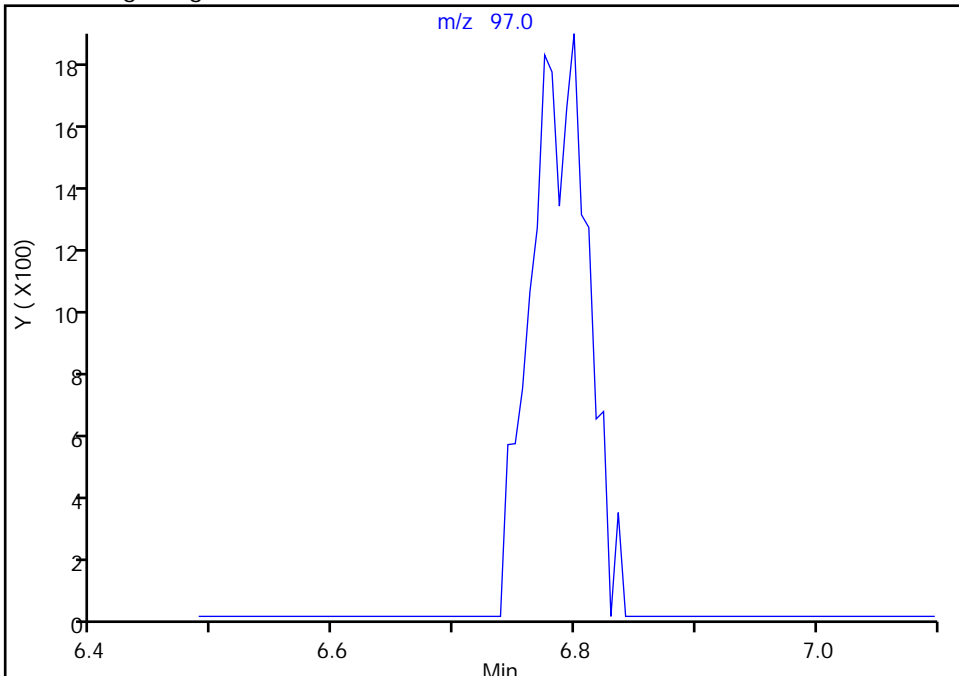
Data File: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\GA30S05.D
Injection Date: 30-Apr-2021 12:28:30 Instrument ID: 16334
Lims ID: 410-37501-A-13 Lab Sample ID: 410-37501-13
Client ID: HD-QC1-0/1-1
Operator ID: jml01693 ALS Bottle#: 12 Worklist Smp#: 12
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

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

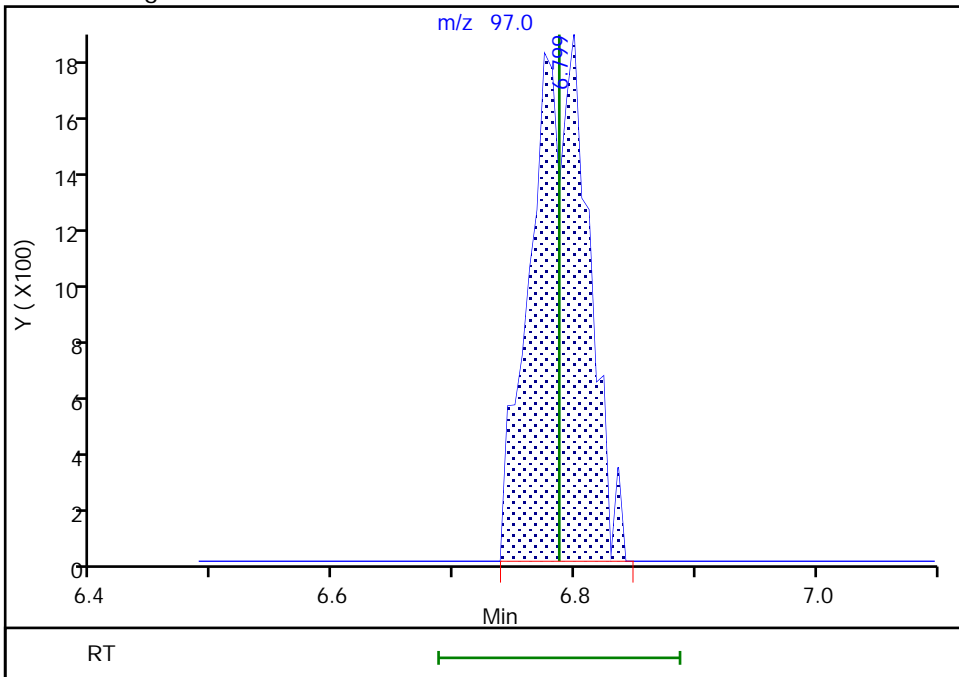
Signal: 1

Not Detected
Expected RT: 6.79

Processing Integration Results



Manual Integration Results



RT: 6.80
Area: 6144
Amount: 0.068015
Amount Units: ug/l

Eurofins Lancaster Laboratories Env, LLC

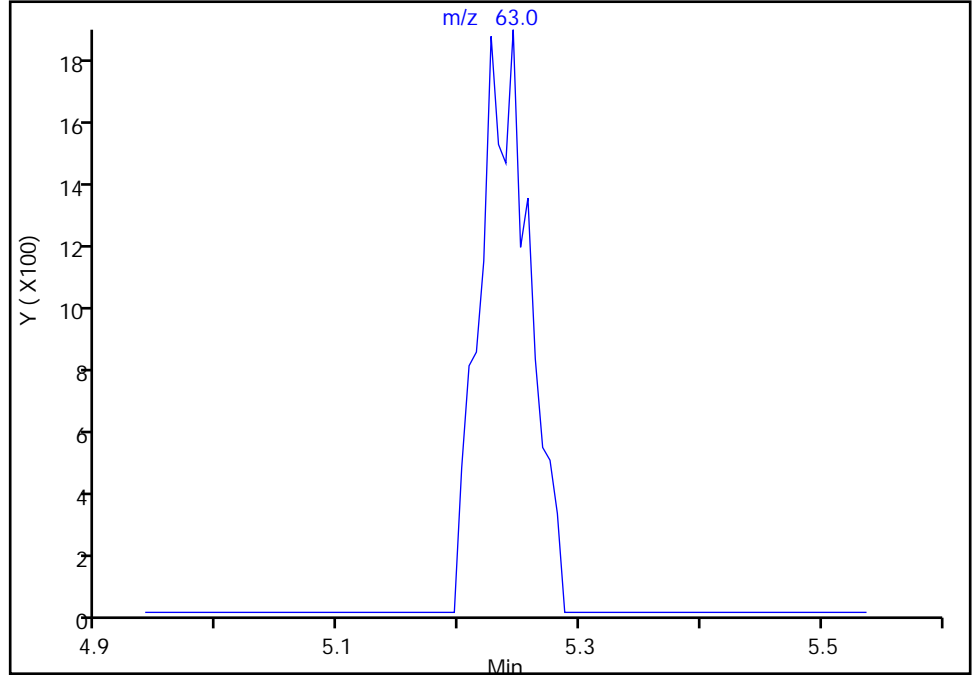
Data File: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\GA30S05.D
Injection Date: 30-Apr-2021 12:28:30 Instrument ID: 16334
Lims ID: 410-37501-A-13 Lab Sample ID: 410-37501-13
Client ID: HD-QC1-0/1-1
Operator ID: jml01693 ALS Bottle#: 12 Worklist Smp#: 12
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

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

Signal: 1

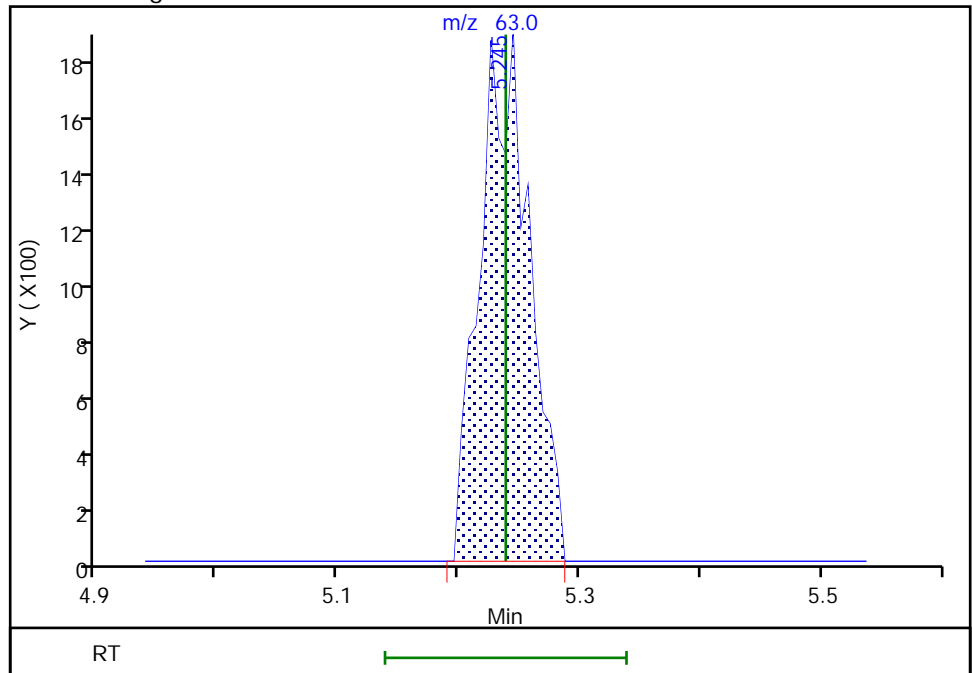
Not Detected
Expected RT: 5.24

Processing Integration Results



Manual Integration Results

RT: 5.24
Area: 5313
Amount: 0.048500
Amount Units: ug/l



Reviewer: campbellme, 30-Apr-2021 16:51:59
Audit Action: Assigned Compound ID

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

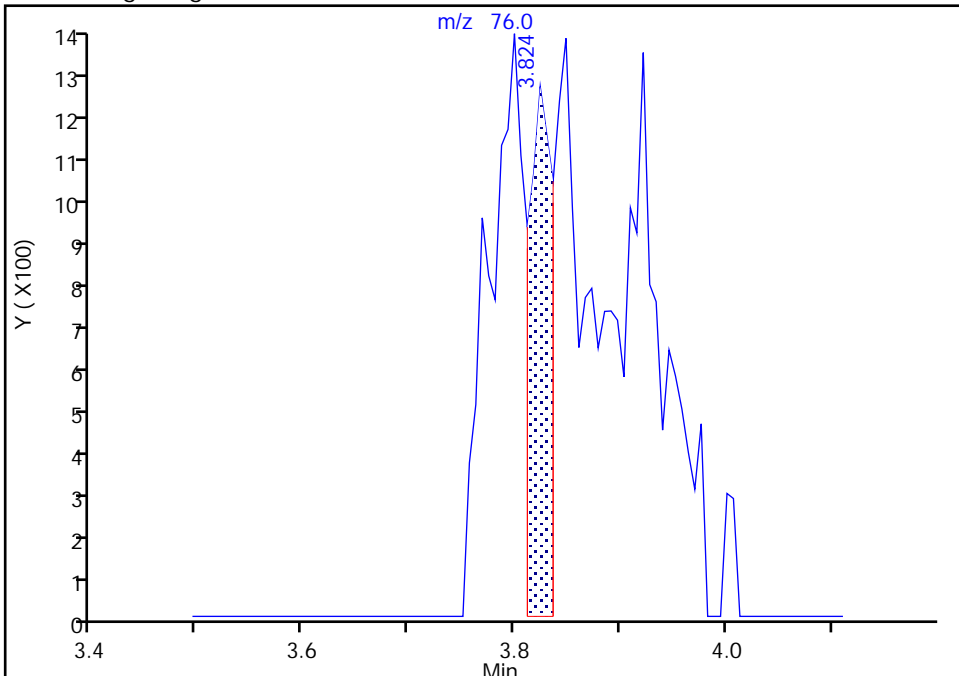
Data File: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\GA30S05.D
Injection Date: 30-Apr-2021 12:28:30 Instrument ID: 16334
Lims ID: 410-37501-A-13 Lab Sample ID: 410-37501-13
Client ID: HD-QC1-0/1-1
Operator ID: jml01693 ALS Bottle#: 12 Worklist Smp#: 12
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

25 Carbon disulfide, CAS: 75-15-0

Signal: 1

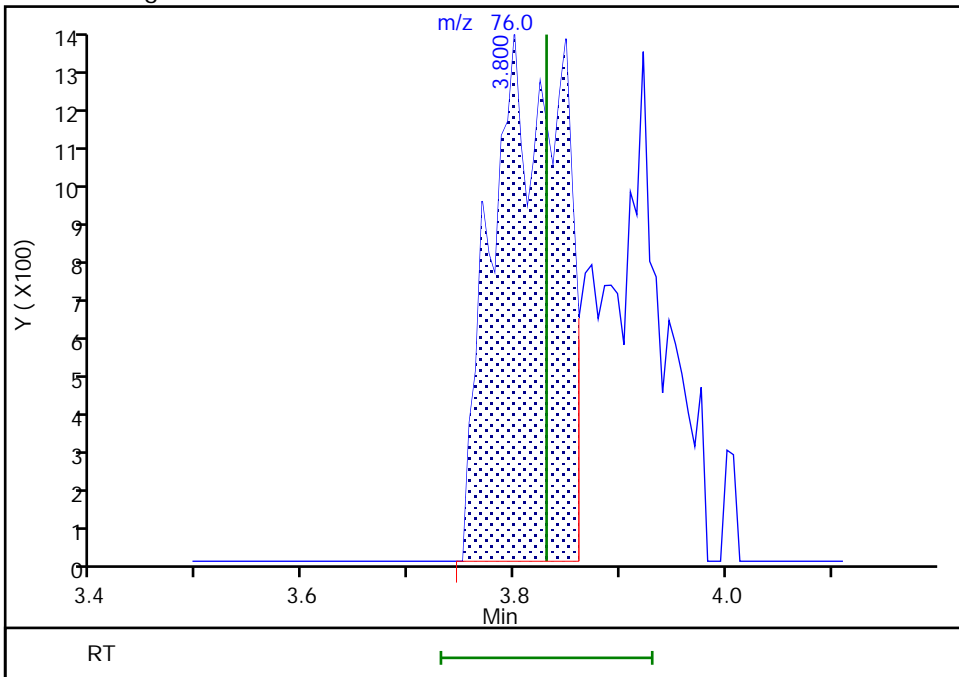
RT: 3.82
Area: 1988
Amount: 0.010520
Amount Units: ug/l

Processing Integration Results



RT: 3.80
Area: 6517
Amount: 0.034487
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 30-Apr-2021 16:51:51
Audit Action: Split an Integrated Peak

Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-37501-1
 SDG No.: _____
 Client Sample ID: HD-QC1-0/1-2 Lab Sample ID: 410-37501-14
 Matrix: Water Lab File ID: GA30S06.D
 Analysis Method: 8260D Date Collected: 04/26/2021 00:00
 Sample wt/vol: 25 (mL) Date Analyzed: 04/30/2021 12:50
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: R-624SilMS 30m ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 120958 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	5.0	0.90
71-43-2	Benzene	ND		0.50	0.050
74-97-5	Bromochloromethane	ND		0.50	0.050
75-27-4	Bromodichloromethane	ND		0.50	0.050
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.070
75-15-0	Carbon disulfide	ND		1.0	0.060
56-23-5	Carbon tetrachloride	ND		0.50	0.070
108-90-7	Chlorobenzene	ND		0.50	0.060
75-00-3	Chloroethane	ND		0.50	0.070
67-66-3	Chloroform	ND		0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	ND		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.050
124-48-1	Dibromochloromethane	ND		0.50	0.070
100-41-4	Ethylbenzene	ND		0.50	0.060
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.050
75-09-2	Methylene Chloride	ND		0.50	0.070
100-42-5	Styrene	ND		0.50	0.050
127-18-4	Tetrachloroethene	ND		0.50	0.060
108-88-3	Toluene	ND		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	ND		0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-37501-1
 SDG No.: _____
 Client Sample ID: HD-QC1-0/1-2 Lab Sample ID: 410-37501-14
 Matrix: Water Lab File ID: GA30S06.D
 Analysis Method: 8260D Date Collected: 04/26/2021 00:00
 Sample wt/vol: 25 (mL) Date Analyzed: 04/30/2021 12:50
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: R-624SilMS 30m ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 120958 Units: ug/L

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

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		80-120
460-00-4	4-Bromofluorobenzene (Surr)	88		80-120
1868-53-7	Dibromofluoromethane (Surr)	103		80-120
2037-26-5	Toluene-d8 (Surr)	92		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\GA30S06.D
 Lims ID: 410-37501-A-14
 Client ID: HD-QC1-0/1-2
 Sample Type: Client
 Inject. Date: 30-Apr-2021 12:50:30 ALS Bottle#: 13 Worklist Smp#: 13
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0028091-013
 Operator ID: jml01693 Instrument ID: 16334
 Method: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\MSV_16334_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 30-Apr-2021 16:57:51 Calib Date: 30-Nov-2020 18:23:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1630

First Level Reviewer: campbellme Date: 30-Apr-2021 16:52:32

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
5 Chloromethane	50		2.148				ND	
8 Vinyl chloride	62		2.263				ND	
9 Bromomethane	94		2.587				ND	
10 Chloroethane	64		2.666				ND	
19 1,1-Dichloroethene	96		3.513				ND	
21 Acetone	43	3.550	3.538	0.012	98	19586	2.29	
25 Carbon disulfide	76		3.830				ND	7
29 Methylene Chloride	84		4.166				ND	
* 30 t-Butyl alcohol-d10 (IS)	65	4.190	4.178	0.012	0	174548	50.0	
33 Methyl tert-butyl ether	73		4.562				ND	
34 trans-1,2-Dichloroethene	96		4.568				ND	
37 1,1-Dichloroethane	63		5.239				ND	
41 2-Butanone (MEK)	43		6.049				ND	
42 cis-1,2-Dichloroethene	96		6.074				ND	
49 Chlorobromomethane	128		6.403				ND	
51 Chloroform	83		6.561				ND	
\$ 52 Dibromofluoromethane (Surr)	113	6.775	6.775	0.000	94	605555	10.3	
53 1,1,1-Trichloroethane	97		6.787				ND	
56 Carbon tetrachloride	117		6.994				ND	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.226	7.232	-0.006	0	121655	9.74	
60 Benzene	78		7.263				ND	
61 1,2-Dichloroethane	62		7.330				ND	
* 64 Fluorobenzene (IS)	96	7.665	7.665	0.000	99	2424785	10.0	
68 Trichloroethene	95		8.140				ND	
70 1,2-Dichloropropane	63		8.476				ND	
76 Dichlorobromomethane	83		8.823				ND	
81 cis-1,3-Dichloropropene	75		9.378				ND	
82 4-Methyl-2-pentanone (MIBK)	43		9.555				ND	7
\$ 83 Toluene-d8 (Surr)	98	9.683	9.683	0.000	93	2263032	9.19	
84 Toluene	92		9.762				ND	7
96 trans-1,3-Dichloropropene	75		10.018				ND	
99 1,1,2-Trichloroethane	97		10.225				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
100 Tetrachloroethene	166		10.311				ND	
102 2-Hexanone	43		10.445				ND	
104 Chlorodibromomethane	129		10.603				ND	
105 Ethylene Dibromide	107		10.707				ND	
* 106 Chlorobenzene-d5 (IS)	117	11.140	11.140	0.000	84	1846562	10.0	
108 Chlorobenzene	112		11.170				ND	
S 109 Xylenes, Total	106		11.245				ND	7
110 1,1,1,2-Tetrachloroethane	131		11.250				ND	
111 Ethylbenzene	91		11.256				ND	
112 m-Xylene & p-Xylene	106		11.371				ND	
113 o-Xylene	106		11.701				ND	
114 Styrene	104		11.713				ND	
115 Bromoform	173		11.871				ND	
\$ 119 4-Bromofluorobenzene (Surr)	95	12.140	12.140	0.000	94	830998	8.83	
120 1,1,2,2-Tetrachloroethane	83		12.243				ND	
* 134 1,4-Dichlorobenzene-d4	152	13.017	13.017	0.000	94	1016080	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

MSV_29_826ISS_00017

Amount Added: 1.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\GA30S06.D

Injection Date: 30-Apr-2021 12:50:30

Instrument ID: 16334

Operator ID: jml01693

Lims ID: 410-37501-A-14

Lab Sample ID: 410-37501-14

Worklist Smp#: 13

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

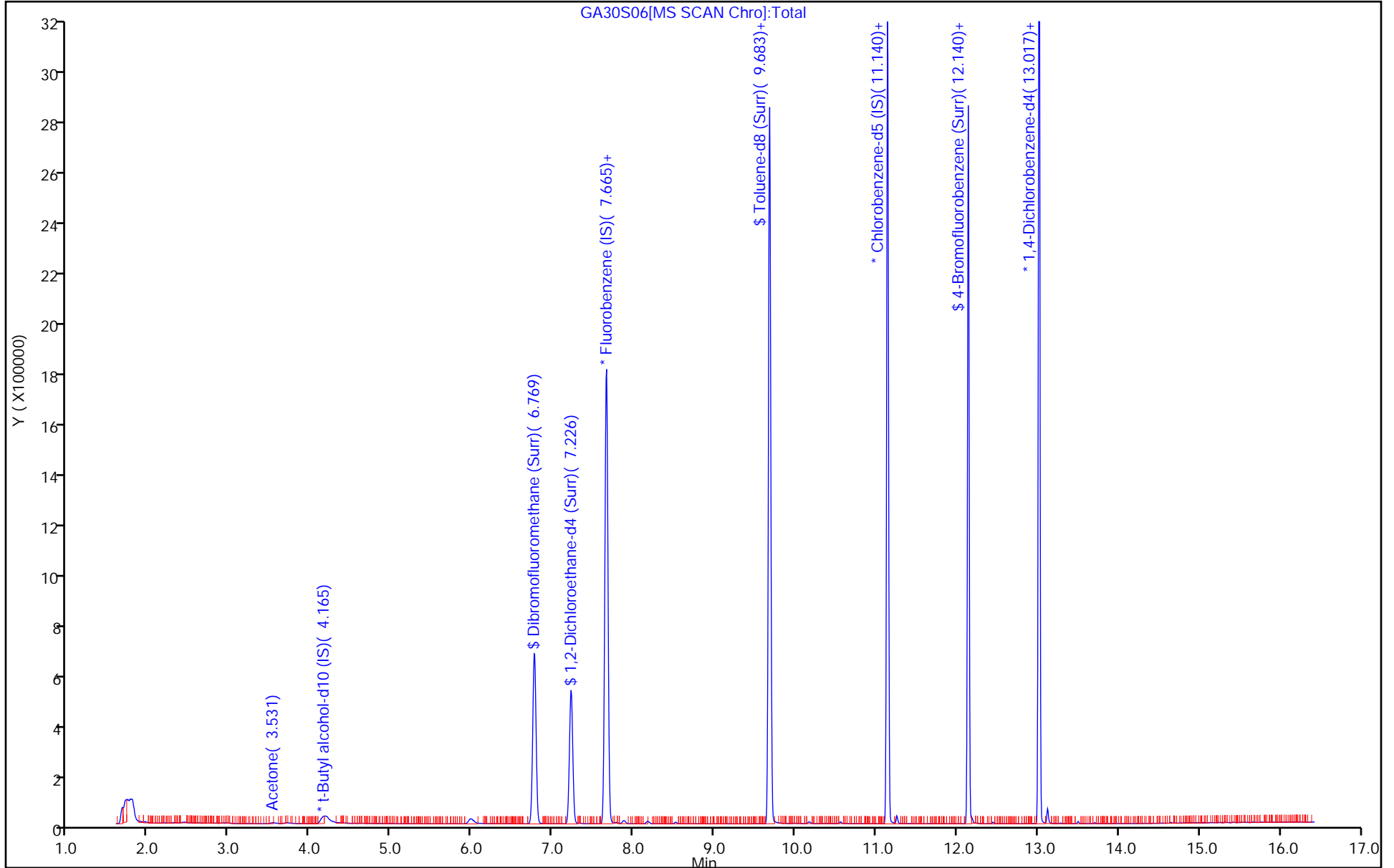
ALS Bottle#: 13

Method: MSV_16334_25mL

Limit Group: MSV - 8260C_D

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

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\GA30S06.D
 Lims ID: 410-37501-A-14
 Client ID: HD-QC1-0/1-2
 Sample Type: Client
 Inject. Date: 30-Apr-2021 12:50:30 ALS Bottle#: 13 Worklist Smp#: 13
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0028091-013
 Operator ID: jml01693 Instrument ID: 16334
 Method: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\MSV_16334_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 30-Apr-2021 16:57:51 Calib Date: 30-Nov-2020 18:23:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1630

First Level Reviewer: campbellme Date: 30-Apr-2021 16:52:32

Compound	Amount Added	Amount Recovered	% Rec.
\$ 52 Dibromofluoromethane (Surr)	10.0	10.3	103.19
\$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	9.74	97.43
\$ 83 Toluene-d8 (Surr)	10.0	9.19	91.86
\$ 119 4-Bromofluorobenzene (Surr)	10.0	8.83	88.34

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\GA30S06.D

Injection Date: 30-Apr-2021 12:50:30

Instrument ID: 16334

Lims ID: 410-37501-A-14

Lab Sample ID: 410-37501-14

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

Operator ID: jml01693

ALS Bottle#: 13

Worklist Smp#: 13

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

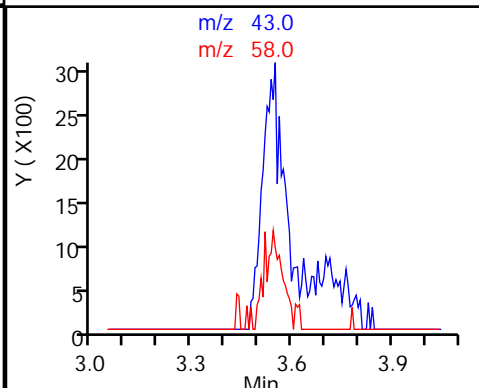
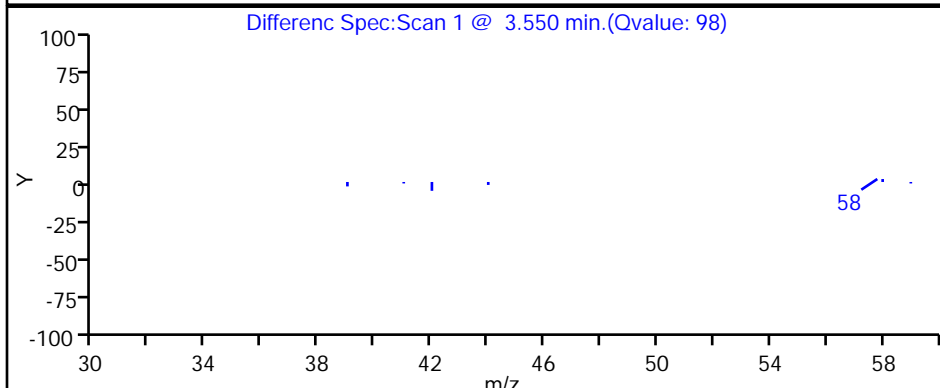
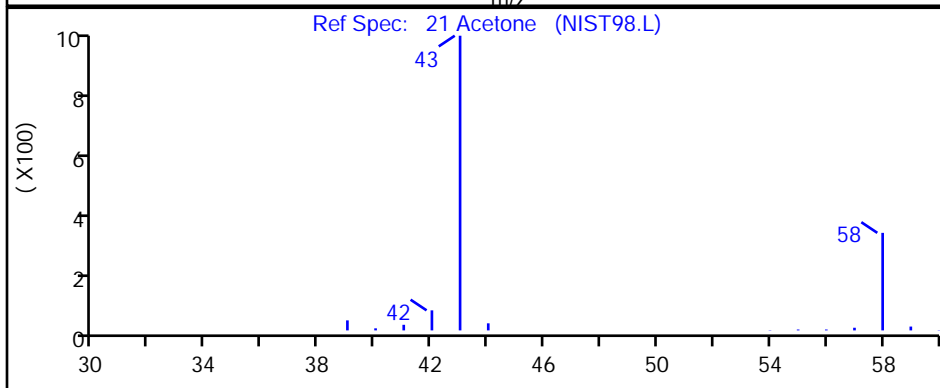
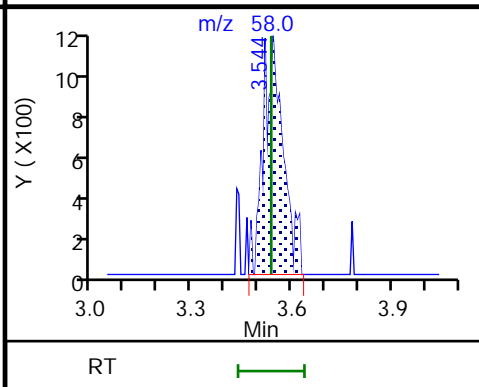
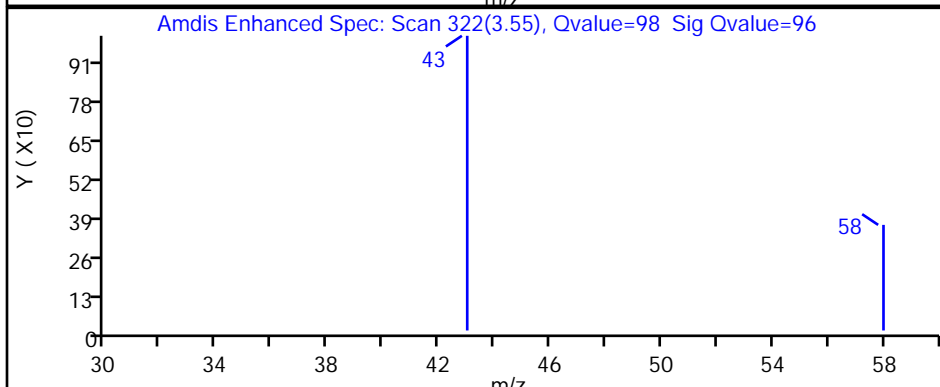
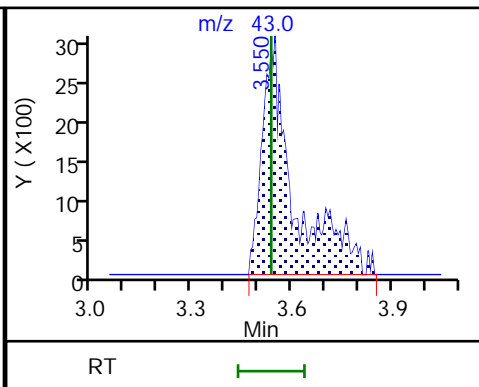
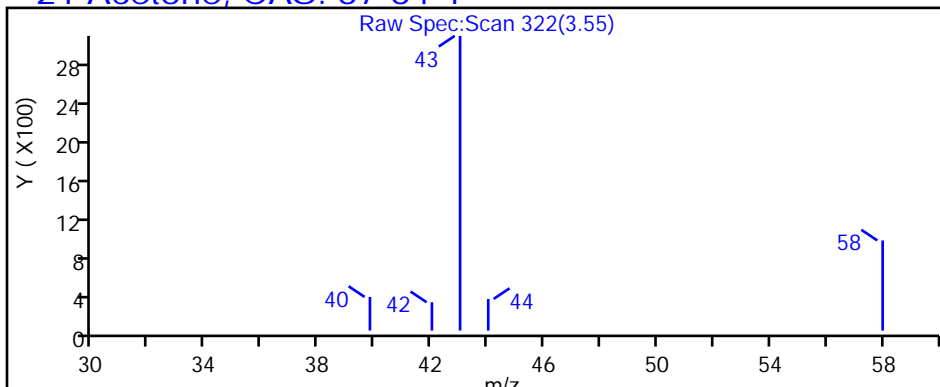
Method: MSV_16334_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

21 Acetone, CAS: 67-64-1



FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-37501-1 Analy Batch No.: 70996

SDG No.: _____

Instrument ID: 16334 GC Column: R-624SilMS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/30/2020 12:50 Calibration End Date: 11/30/2020 15:03 Calibration ID: 16331

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-70996/9	GN30I07.D
Level 2	IC 410-70996/8	GN30I06.D
Level 3	IC 410-70996/7	GN30I05.D
Level 4	IC 410-70996/6	GN30I04.D
Level 5	IC 410-70996/5	GN30I03.D
Level 6	ICIS 410-70996/4	GN30I02.D
Level 7	IC 410-70996/3	GN30I01.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7															
Dichlorodifluoromethane	0.2368 0.2560	0.2662 0.2659	0.2678	0.2708	0.2566	Ave	0.260 0			0.1000	4.5		20.0				
Chloromethane	0.3865 0.3323	0.3740 0.3289	0.3543	0.3488	0.3310	Ave	0.350 8			0.1000	6.4		20.0				
1,3-Butadiene	0.4818 0.3395	0.4668 0.3285	0.4287	0.3894	0.3604	Ave	0.399 3				15.3		20.0				
Vinyl chloride	0.3159 0.2911	0.3084 0.2925	0.2956	0.3035	0.2894	Ave	0.299 5			0.1000	3.3		20.0				
Bromomethane	0.2376 0.1945	0.2188 0.1939	0.2080	0.2091	0.1990	Ave	0.208 7			0.1000	7.5		20.0				
Chloroethane	0.2020 0.1743	0.1888 0.1718	0.1750	0.1835	0.1765	Ave	0.181 7			0.1000	5.9		20.0				
Dichlorofluoromethane	0.5017 0.3781	0.4250 0.3736	0.3878	0.4005	0.3845	Ave	0.407 3			0.1000	11.1		20.0				
Trichlorofluoromethane	0.3322 0.3378	0.3520 0.3476	0.3344	0.3624	0.3462	Ave	0.344 7			0.1000	3.1		20.0				
Ethyl ether	0.2029 0.1968	0.2094 0.1981	0.2105	0.2104	0.1960	Ave	0.203 5				3.3		20.0				
Freon 123a	0.3029 0.2615	0.2910 0.2660	0.2966	0.2824	0.2714	Ave	0.281 7				5.7		20.0				
Acrolein	1.9448 1.9018	1.8610 1.9961	1.8171	1.8798	1.8832	Ave	1.897 7				3.1		20.0				
1,1-Dichloroethene	0.2138 0.1990	0.2180 0.2009	0.2178	0.2053	0.2034	Ave	0.208 3			0.1000	3.9		20.0				
Freon 113	0.1453 0.2066	0.1948 0.2157	0.2243	0.2201	0.2189	Ave	0.203 7			0.1000	13.5		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.: 410-37501-1 Analy Batch No.: 70996

SDG No.: _____

Instrument ID: 16334 GC Column: R-624SilMS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/30/2020 12:50 Calibration End Date: 11/30/2020 15:03 Calibration ID: 16331

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R ² OR COD	#	MIN R ² OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7															
Acetone	3.1858 2.2113	2.5645 2.3024	2.4764	2.2168	2.2161	Ave		2.453 3		0.1000	14.3		20.0				
Methyl iodide	0.3770 0.3811	0.3974 0.3816	0.4099	0.3934	0.3832	Ave		0.389 1			3.0		20.0				
Carbon disulfide	0.7515 0.7551	0.7679 0.7566	0.8070	0.7768	0.7599	Ave		0.767 8		0.1000	2.5		20.0				
Methyl acetate	9.1363 6.5621	6.6209 7.7655	7.2886	7.4783	7.1352	Ave		7.426 7		0.1000	11.7		20.0				
Allyl chloride	0.4283 0.3873	0.4623 0.3893	0.4373	0.4145	0.3988	Ave		0.416 8			6.6		20.0				
Methylene Chloride	0.2382 0.2321	0.2393 0.2332	0.2491	0.2445	0.2344	Ave		0.238 7		0.1000	2.6		20.0				
t-Butyl alcohol	0.8497 0.8680	0.9516 0.8650	0.9723	0.8999	0.8866	Ave		0.899 0			5.1		20.0				
Acrylonitrile	2.9586 3.1288	3.2748 3.2919	3.2521	3.0729	3.2367	Ave		3.173 7			3.9		20.0				
Methyl tert-butyl ether	0.6635 0.6373	0.6694 0.6386	0.7123	0.6690	0.6442	Ave		0.662 0		0.1000	4.0		20.0				
trans-1,2-Dichloroethene	0.2376 0.2326	0.2463 0.2334	0.2519	0.2445	0.2326	Ave		0.239 8		0.1000	3.2		20.0				
n-Hexane	0.2867 0.3432	0.3264 0.3700	0.3750	0.3768	0.3699	Ave		0.349 7			9.6		20.0				
1,1-Dichloroethane	0.4270 0.4403	0.4431 0.4420	0.4771	0.4497	0.4365	Ave		0.445 1		0.2000	3.5		20.0				
di-Isopropyl ether	0.9062 0.8812	0.9128 0.8785	0.9662	0.9125	0.8808	Ave		0.905 5			3.4		20.0				
2-Chloro-1,3-butadiene	0.4041 0.3919	0.4061 0.3944	0.4315	0.4085	0.3968	Ave		0.404 8			3.3		20.0				
Ethyl t-butyl ether	0.8224 0.8052	0.8413 0.8030	0.8728	0.8231	0.8119	Ave		0.825 7			3.0		20.0				
2-Butanone (MEK)	4.6520 4.4491	4.5519 4.6499	4.6329	4.3702	4.5180	Ave		4.546 3		0.1000	2.4		20.0				
cis-1,2-Dichloroethene	0.2564 0.2641	0.2759 0.2643	0.2878	0.2732	0.2633	Ave		0.269 3		0.1000	3.9		20.0				
2,2-Dichloropropane	0.3736 0.3604	0.3790 0.3665	0.3915	0.3759	0.3663	Ave		0.373 3			2.7		20.0				

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-37501-1 Analy Batch No.: 70996

SDG No.: _____

Instrument ID: 16334 GC Column: R-624SilMS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/30/2020 12:50 Calibration End Date: 11/30/2020 15:03 Calibration ID: 16331

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R ² OR COD	#	MIN R ² OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7															
Propionitrile	1.0088 1.1203	1.1684 1.1561	1.2108	1.1154	1.1088	Ave		1.126 9			5.6		20.0				
Methacrylonitrile	4.4091 4.1503	3.9459 4.3367	4.1583	4.0671	4.1803	Ave		4.178 2			3.7		20.0				
Bromochloromethane	0.1217 0.1146	0.1254 0.1158	0.1267	0.1186	0.1174	Ave		0.120 0			3.9		20.0				
Tetrahydrofuran	1.2005 1.1636	1.1159 1.2081	1.2163	1.1464	1.1769	Ave		1.175 4			3.1		20.0				
Chloroform	0.4241 0.4162	0.4361 0.4174	0.4553	0.4333	0.4198	Ave		0.428 9		0.2000	3.2		20.0				
1,1,1-Trichloroethane	0.3679 0.3542	0.3769 0.3595	0.3870	0.3679	0.3559	Ave		0.367 0		0.1000	3.2		20.0				
Cyclohexane	0.3420 0.4161	0.4199 0.4367	0.4573	0.4449	0.4360	Ave		0.421 8		0.1000	9.0		20.0				
Carbon tetrachloride	0.3123 0.3112	0.3148 0.3194	0.3396	0.3190	0.3115	Ave		0.318 3		0.1000	3.1		20.0				
1,1-Dichloropropene	0.3441 0.3339	0.3429 0.3430	0.3610	0.3520	0.3373	Ave		0.344 9			2.6		20.0				
Isobutyl alcohol	0.0068 0.0052	0.0054 0.0052	0.0061	0.0055	0.0053	Ave		0.005 7			10.6		20.0				
Benzene	1.0017 0.9873	1.0172 0.9996	1.0905	1.0301	0.9893	Ave		1.016 5		0.5000	3.5		20.0				
1,2-Dichloroethane	0.3204 0.2618	0.2980 0.2685	0.2976	0.2780	0.2656	Ave		0.284 3		0.1000	7.6		20.0				
t-Amyl methyl ether	0.7252 0.7069	0.7307 0.7066	0.7818	0.7345	0.7088	Ave		0.727 8			3.6		20.0				
n-Heptane	0.3399 0.3914	0.3695 0.4239	0.4108	0.4097	0.4167	Ave		0.394 5			7.7		20.0				
n-Butanol	0.3526 0.3142	0.3215 0.3224	0.3129	0.3182	0.3198	Ave		0.323 1			4.2		20.0				
Trichloroethene	0.2659 0.2521	0.2619 0.2540	0.2695	0.2633	0.2503	Ave		0.259 6		0.2000	2.9		20.0				
Methylcyclohexane	0.3576 0.3955	0.4154 0.4155	0.4132	0.4131	0.4113	Ave		0.403 1		0.1000	5.3		20.0				
1,2-Dichloropropane	0.2764 0.2646	0.2751 0.2634	0.2909	0.2701	0.2629	Ave		0.271 9		0.1000	3.7		20.0				

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-37501-1

Analy Batch No.: 70996

SDG No.: _____

Instrument ID: 16334

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

Heated Purge: (Y/N) N

Calibration Start Date: 11/30/2020 12:50

Calibration End Date: 11/30/2020 15:03

Calibration ID: 16331

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7															
Methyl methacrylate	8.4555 8.4558	8.3239 8.9257	8.5022	8.3048	8.6057	Ave		8.510 5			2.5		20.0				
1,4-Dioxane	0.0338 0.0625	0.0557 0.0631	0.0575	0.0672	0.0625	Ave		0.057 5		0.0050	19.3		20.0				
Dibromomethane	0.1296 0.1226	0.1259 0.1239	0.1333	0.1251	0.1218	Ave		0.126 0			3.3		20.0				
Bromodichloromethane	0.3106 0.3144	0.3050 0.3189	0.3322	0.3171	0.3091	Ave		0.315 3		0.2000	2.8		20.0				
2-Nitropropane	2.4618 2.4156	2.2909 2.5645	2.4079	2.3139	2.4372	Ave		2.413 1			3.8		20.0				
cis-1,3-Dichloropropene	0.3958 0.4012	0.4084 0.4132	0.4313	0.4116	0.4036	Ave		0.409 3		0.2000	2.8		20.0				
4-Methyl-2-pentanone (MIBK)	11.696 11.678	11.385 11.961	11.883	11.358	11.750	Ave		11.67 3		0.1000	2.0		20.0				
Toluene	0.8735 0.8410	0.8787 0.8422	0.9144	0.8681	0.8484	Ave		0.866 6		0.4000	3.0		20.0				
trans-1,3-Dichloropropene	0.4485 0.4678	0.4666 0.4735	0.4784	0.4703	0.4700	Ave		0.467 9		0.1000	2.0		20.0				
Ethyl methacrylate	0.4267 0.4178	0.4069 0.4096	0.4408	0.4285	0.4128	Ave		0.420 4			2.9		20.0				
1,1,2-Trichloroethane	0.2513 0.2433	0.2624 0.2439	0.2703	0.2532	0.2453	Ave		0.252 8		0.1000	4.0		20.0				
Tetrachloroethene	0.3630 0.3679	0.3860 0.3728	0.3919	0.3792	0.3711	Ave		0.376 0		0.2000	2.7		20.0				
1,3-Dichloropropane	0.4642 0.4402	0.4635 0.4417	0.4827	0.4548	0.4449	Ave		0.456 0			3.4		20.0				
2-Hexanone	8.4134 8.4221	8.0551 8.7386	8.3204	8.2560	8.5645	Ave		8.395 7		0.1000	2.6		20.0				
Dibromochloromethane	0.2790 0.3043	0.2850 0.3109	0.3146	0.3034	0.3016	Ave		0.299 8			4.4		20.0				
1,2-Dibromoethane (EDB)	0.2472 0.2422	0.2457 0.2444	0.2626	0.2507	0.2443	Ave		0.248 2		0.1000	2.8		20.0				
1-Chlorohexane	0.5856 0.4836	0.5459 0.4876	0.5425	0.5056	0.4925	Ave		0.520 5			7.4		20.0				
Chlorobenzene	0.9694 0.9420	0.9847 0.9413	1.0084	0.9677	0.9436	Ave		0.965 3		0.5000	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.: 410-37501-1 Analy Batch No.: 70996

SDG No.: _____

Instrument ID: 16334 GC Column: R-624SilMS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/30/2020 12:50 Calibration End Date: 11/30/2020 15:03 Calibration ID: 16331

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R ² OR COD	#	MIN R ² OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7															
1,1,1,2-Tetrachloroethane	0.3288 0.3431	0.3338 0.3450	0.3600	0.3479	0.3423	Ave		0.343 0			2.9		20.0				
Ethylbenzene	1.7755 1.6522	1.7215 1.6522	1.8045	1.7106	1.6703	Ave		1.712 4		0.1000	3.5		20.0				
m&p-Xylene	0.6303 0.6325	0.6463 0.6343	0.6858	0.6521	0.6362	Ave		0.645 3		0.1000	3.0		20.0				
o-Xylene	0.6524 0.6249	0.6497 0.6301	0.6620	0.6342	0.6268	Ave		0.640 0		0.3000	2.3		20.0				
Styrene	1.0833 1.0667	1.0941 1.0702	1.1441	1.1059	1.0699	Ave		1.090 6		0.3000	2.5		20.0				
Bromoform	0.1479 0.1859	0.1627 0.1929	0.1753	0.1784	0.1822	Ave		0.175 0		0.1000	8.7		20.0				
Isopropylbenzene	1.6857 1.6374	1.6628 1.6363	1.7542	1.6896	1.6520	Ave		1.674 0		0.1000	2.5		20.0				
1,1,2,2-Tetrachloroethane	0.5902 0.6232	0.6428 0.6177	0.6602	0.6428	0.6232	Ave		0.628 6		0.3000	3.6		20.0				
Bromobenzene	0.7516 0.7370	0.7538 0.7418	0.8074	0.7608	0.7302	Ave		0.754 7			3.4		20.0				
trans-1,4-Dichloro-2-butene	3.1378 3.9168	3.2490 4.2032	3.4681	3.5618	3.8283	Ave		3.623 6			10.5		20.0				
1,2,3-Trichloropropane	0.1468 0.1564	0.1683 0.1540	0.1787	0.1639	0.1534	Ave		0.160 2			6.7		20.0				
N-Propylbenzene	3.8085 3.6437	3.8314 3.6182	3.9342	3.8079	3.6943	Ave		3.762 6			3.0		20.0				
2-Chlorotoluene	0.7437 0.7150	0.7306 0.7301	0.7906	0.7486	0.7213	Ave		0.740 0			3.4		20.0				
1,3,5-Trimethylbenzene	2.5579 2.6111	2.6772 2.6267	2.7986	2.6831	2.6274	Ave		2.654 6			2.9		20.0				
4-Chlorotoluene	0.7484 0.7495	0.8055 0.7555	0.8263	0.7661	0.7496	Ave		0.771 6			4.1		20.0				
tert-Butylbenzene	0.5660 0.5518	0.5860 0.5647	0.5833	0.5591	0.5570	Ave		0.566 8			2.3		20.0				
Pentachloroethane	0.4568 0.4818	0.4935 0.4984	0.5005	0.4929	0.4867	Ave		0.487 2			3.1		20.0				
1,2,4-Trimethylbenzene	2.7790 2.7142	2.7782 2.7275	2.9168	2.7763	2.7094	Ave		2.771 6			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.: 410-37501-1 Analy Batch No.: 70996

SDG No.: _____

Instrument ID: 16334 GC Column: R-624SilMS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/30/2020 12:50 Calibration End Date: 11/30/2020 15:03 Calibration ID: 16331

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R ² OR COD	#	MIN R ² OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7															
sec-Butylbenzene	3.4820 3.3763	3.4174 3.4112	3.6235	3.4743	3.3895	Ave		3.453 5			2.5		20.0				
1,3-Dichlorobenzene	1.5196 1.4752	1.5457 1.5040	1.5950	1.5325	1.4802	Ave		1.521 8		0.6000	2.7		20.0				
p-Isopropyltoluene	2.9520 2.9374	3.0087 2.9748	3.1925	2.9847	2.9468	Ave		2.999 5			3.0		20.0				
1,4-Dichlorobenzene	1.5720 1.4942	1.5904 1.5102	1.6124	1.5600	1.5127	Ave		1.550 3		0.5000	2.9		20.0				
1,2,3-Trimethylbenzene	1.3165 1.1680	1.2574 1.1806	1.2686	1.2341	1.1796	Ave		1.229 3			4.5		20.0				
Benzyl chloride	0.2641 0.2717	0.2595 0.2754	0.2913	0.2698	0.2713	Ave		0.271 9			3.7		20.0				
n-Butylbenzene	1.5804 1.5475	1.6196 1.5630	1.6848	1.5860	1.5416	Ave		1.589 0			3.1		20.0				
1,2-Dichlorobenzene	1.4023 1.3754	1.4491 1.3831	1.5174	1.4370	1.3753	Ave		1.419 9		0.4000	3.7		20.0				
1,2-Dibromo-3-Chloropropane	0.0866 0.0921	0.0907 0.0929	0.1005	0.0897	0.0887	Ave		0.091 6		0.0500	4.9		20.0				
1,3,5-Trichlorobenzene	1.3005 1.2452	1.3075 1.2589	1.3317	1.2404	1.2438	Ave		1.275 4			2.9		20.0				
1,2,4-Trichlorobenzene	1.1627 1.1438	1.2549 1.1466	1.2199	1.1628	1.1368	Ave		1.175 4		0.2000	3.8		20.0				
Hexachlorobutadiene	0.5964 0.5566	0.6122 0.5730	0.5894	0.5543	0.5576	Ave		0.577 1			3.9		20.0				
Naphthalene	2.1901 2.0588	2.1833 2.0314	2.2888	2.1532	2.0650	Ave		2.138 7			4.3		20.0				
1,2,3-Trichlorobenzene	1.0554 1.0003	1.1043 0.9938	1.0851	1.0287	0.9943	Ave		1.037 4			4.4		20.0				
Dibromofluoromethane (Surr)	0.2387 0.2412	0.2434 0.2414	0.2438	0.2429	0.2428	Ave		0.242 0			0.7		20.0				
1,2-Dichloroethane-d4 (Surr)	0.0510 0.0517	0.0510 0.0520	0.0519	0.0518	0.0511	Ave		0.051 5			0.9		20.0				
Toluene-d8 (Surr)	1.3449 1.3317	1.3345 1.3197	1.3349	1.3314	1.3421	Ave		1.334 2			0.6		20.0				
4-Bromofluorobenzene (Surr)	0.5151 0.5069	0.5107 0.5026	0.5115	0.5101	0.5089	Ave		0.509 4			0.8		20.0				

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-37501-1 Analy Batch No.: 70996

SDG No.: _____

Instrument ID: 16334 GC Column: R-624SilMS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/30/2020 12:50 Calibration End Date: 11/30/2020 15:03 Calibration ID: 16331

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-70996/9	GN30I07.D
Level 2	IC 410-70996/8	GN30I06.D
Level 3	IC 410-70996/7	GN30I05.D
Level 4	IC 410-70996/6	GN30I04.D
Level 5	IC 410-70996/5	GN30I03.D
Level 6	ICIS 410-70996/4	GN30I02.D
Level 7	IC 410-70996/3	GN30I01.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
			LVL 6	LVL 7				LVL 6	LVL 7			
Dichlorodifluoromethane	FB	Ave	10440 575013	29137 1495396	59213	119710	285502	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Chloromethane	FB	Ave	17041 746607	40943 1849975	78349	154159	368365	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,3-Butadiene	FB	Ave	21243 762788	51097 1847653	94809	172137	400995	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Vinyl chloride	FB	Ave	13930 653889	33758 1645533	65380	134133	322069	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Bromomethane	FB	Ave	10477 437020	23952 1090646	46006	92413	221448	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Chloroethane	FB	Ave	8907 391559	20672 966420	38699	81099	196409	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Dichlorofluoromethane	FB	Ave	22123 849408	46525 2101552	85751	177022	427842	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Trichlorofluoromethane	FB	Ave	14649 758912	38530 1955497	73951	160183	385200	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Ethyl ether	FB	Ave	8950 442210	22931 1114451	46571	93021	218165	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Freon 123a	FB	Ave	13355 587407	31854 1496120	65601	124813	302034	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Acrolein	TBAd 10	Ave	71856 3539158	182229 8876973	365629	734398	1726399	10.0 500	25.0 1250	50.0	100	250
1,1-Dichloroethene	FB	Ave	9428 447046	23861 1129827	48163	90732	226327	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Freon 113	FB	Ave	6407 464025	21323 1213458	49604	97294	243555	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.: 410-37501-1

Analy Batch No.: 70996

SDG No.:

Instrument ID: 16334

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

Heated Purge: (Y/N) N

Calibration Start Date: 11/30/2020 12:50

Calibration End Date: 11/30/2020 15:03

Calibration ID: 16331

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Acetone	TBAd 10	Ave	23541	50222	99654	173204	406309	2.00	5.00	10.0	20.0	50.0
			823027	2047683				100	250			
Methyl iodide	FB	Ave	16625	43500	90654	173875	426388	0.200	0.500	1.00	2.00	5.00
			856231	2146588				10.0	25.0			
Carbon disulfide	FB	Ave	33137	84062	178461	343343	845631	0.200	0.500	1.00	2.00	5.00
			1696280	4255752				10.0	25.0			
Methyl acetate	TBAd 10	Ave	6751	12966	29330	58429	130819	0.200	0.500	1.00	2.00	5.00
			244232	690648				10.0	25.0			
Allyl chloride	FB	Ave	18885	50604	96698	183197	443750	0.200	0.500	1.00	2.00	5.00
			870096	2189679				10.0	25.0			
Methylene Chloride	FB	Ave	10502	26198	55096	108056	260868	0.200	0.500	1.00	2.00	5.00
			521426	1311628				10.0	25.0			
t-Butyl alcohol	TBAd 10	Ave	12558	37272	78250	140629	325105	4.00	10.0	20.0	40.0	100
			646096	1538645				200	500			
Acrylonitrile	TBAd 10	Ave	10931	32066	65434	120047	296709	1.00	2.50	5.00	10.0	25.0
			582252	1463905				50.0	125			
Methyl tert-butyl ether	FB	Ave	29258	73272	157517	295684	716859	0.200	0.500	1.00	2.00	5.00
			1431718	3592103				10.0	25.0			
trans-1,2-Dichloroethene	FB	Ave	10478	26963	55706	108056	258856	0.200	0.500	1.00	2.00	5.00
			522420	1312619				10.0	25.0			
n-Hexane	FB	Ave	12643	35728	82931	166559	411619	0.200	0.500	1.00	2.00	5.00
			770889	2081061				10.0	25.0			
1,1-Dichloroethane	FB	Ave	18828	48509	105511	198755	485770	0.200	0.500	1.00	2.00	5.00
			989205	2486421				10.0	25.0			
di-Isopropyl ether	FB	Ave	39957	99922	213671	403335	980101	0.200	0.500	1.00	2.00	5.00
			1979657	4941744				10.0	25.0			
2-Chloro-1,3-butadiene	FB	Ave	17821	44458	95428	180575	441551	0.200	0.500	1.00	2.00	5.00
			880335	2218551				10.0	25.0			
Ethyl t-butyl ether	FB	Ave	36262	92089	193019	363795	903460	0.200	0.500	1.00	2.00	5.00
			1808949	4516790				10.0	25.0			
2-Butanone (MEK)	TBAd 10	Ave	34375	89142	186432	341451	828352	2.00	5.00	10.0	20.0	50.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-37501-1

Analy Batch No.: 70996

SDG No.:

Instrument ID: 16334

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

Heated Purge: (Y/N) N

Calibration Start Date: 11/30/2020 12:50

Calibration End Date: 11/30/2020 15:03

Calibration ID: 16331

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
			1655912	4135516				100	250			
cis-1,2-Dichloroethene	FB	Ave	11304 593244	30199 1486697	63650	120745	293028	0.200 10.0	0.500 25.0	1.00	2.00	5.00
2,2-Dichloropropane	FB	Ave	16476 809643	41487 2061512	86568	166142	407651	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Propionitrile	TBAd 10	Ave	14908 833953	45761 2056391	97449	174294	406595	4.00 200	10.0 500	20.0	40.0	100
Methacrylonitrile	TBAd 10	Ave	32580 1544674	77275 3857032	167335	317768	766425	2.00 100	5.00 250	10.0	20.0	50.0
Bromochloromethane	FB	Ave	5366 257416	13722 651451	28011	52433	130627	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Tetrahydrofuran	TBAd 10	Ave	8871 433079	21854 1074451	48944	89573	215770	2.00 100	5.00 250	10.0	20.0	50.0
Chloroform	FB	Ave	18700 935084	47732 2347914	100689	191526	467191	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,1,1-Trichloroethane	FB	Ave	16224 795686	41257 2022017	85584	162606	396057	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Cyclohexane	FB	Ave	15080 934696	45968 2456493	101123	196628	485144	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Carbon tetrachloride	FB	Ave	13772 699045	34456 1796395	75097	141008	346656	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,1-Dichloropropene	FB	Ave	15173 750119	37534 1929345	79831	155596	375317	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Isobutyl alcohol	FB	Ave	14998 587299	29644 1475056	67984	121267	292232	10.0 500	25.0 1250	50.0	100	250
Benzene	FB	Ave	44170 2218035	111347 5622443	241164	455295	1100869	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2-Dichloroethane	FB	Ave	14128 588167	32618 1510198	65819	122885	295549	0.200 10.0	0.500 25.0	1.00	2.00	5.00
t-Amyl methyl ether	FB	Ave	31976 1588018	79984 3974346	172887	324674	788786	0.200 10.0	0.500 25.0	1.00	2.00	5.00
n-Heptane	FB	Ave	14986 879279	40450 2384149	90836	181073	463712	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.: 410-37501-1

Analy Batch No.: 70996

SDG No.:

Instrument ID: 16334

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

Heated Purge: (Y/N) N

Calibration Start Date: 11/30/2020 12:50

Calibration End Date: 11/30/2020 15:03

Calibration ID: 16331

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
n-Butanol	TBAd 10	Ave	26057 1169293	62965 2867258	125899	248576	586370	20.0 1000	50.0 2500	100	200	500
Trichloroethene	FB	Ave	11723 566426	28664 1428934	59598	116383	278479	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Methylcyclohexane	FB	Ave	15769 888517	45474 2337109	91381	182602	457689	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2-Dichloropropane	FB	Ave	12189 594461	30117 1481659	64320	119367	292517	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Methyl methacrylate	TBAd 10	Ave	6248 314713	16301 793834	34214	64887	157779	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,4-Dioxane	TBAd 10	Ave	1248 116348	5456 280447	11572	26270	57308	10.0 500	25.0 1250	50.0	100	250
Dibromomethane	FB	Ave	5716 275323	13777 696745	29475	55304	135590	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Bromodichloromethane	FB	Ave	13698 706255	33392 1793553	73464	140150	343988	0.200 10.0	0.500 25.0	1.00	2.00	5.00
2-Nitropropane	TBAd 10	Ave	18191 899063	44863 2280829	96897	180791	446843	2.00 100	5.00 250	10.0	20.0	50.0
cis-1,3-Dichloropropene	FB	Ave	17452 901197	44710 2324073	95377	181945	449091	0.200 10.0	0.500 25.0	1.00	2.00	5.00
4-Methyl-2-pentanone (MIBK)	TBAd 10	Ave	86421 4346527	222955 10637772	478190	887415	2154238	2.00 100	5.00 250	10.0	20.0	50.0
Toluene	CBZd 5	Ave	27572 1376073	69853 3492002	146327	278591	683495	0.200 10.0	0.500 25.0	1.00	2.00	5.00
trans-1,3-Dichloropropene	CBZd 5	Ave	14156 765518	37093 1963134	76563	150936	378649	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Ethyl methacrylate	CBZd 5	Ave	13470 683673	32351 1698291	70532	137503	332561	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.: 410-37501-1

Analy Batch No.: 70996

SDG No.: _____

Instrument ID: 16334

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

Heated Purge: (Y/N) N

Calibration Start Date: 11/30/2020 12:50

Calibration End Date: 11/30/2020 15:03

Calibration ID: 16331

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
1,1,2-Trichloroethane	CBZd 5	Ave	7932	20860	43259	81260	197601	0.200	0.500	1.00	2.00	5.00
			398053	1011153				10.0	25.0			
Tetrachloroethene	CBZd 5	Ave	11458	30689	62720	121696	298979	0.200	0.500	1.00	2.00	5.00
			602059	1545623				10.0	25.0			
1,3-Dichloropropane	CBZd 5	Ave	14652	36850	77242	145956	358460	0.200	0.500	1.00	2.00	5.00
			720295	1831199				10.0	25.0			
2-Hexanone	TBAd 10	Ave	62169	157747	334821	645054	1570233	2.00	5.00	10.0	20.0	50.0
			3134600	7771959				100	250			
Dibromochloromethane	CBZd 5	Ave	8808	22656	50339	97381	243007	0.200	0.500	1.00	2.00	5.00
			497877	1288980				10.0	25.0			
1,2-Dibromoethane (EDB)	CBZd 5	Ave	7804	19536	42028	80460	196846	0.200	0.500	1.00	2.00	5.00
			396354	1013188				10.0	25.0			
1-Chlorohexane	CBZd 5	Ave	18485	43401	86809	162251	396805	0.200	0.500	1.00	2.00	5.00
			791218	2021466				10.0	25.0			
Chlorobenzene	CBZd 5	Ave	30598	78284	161371	310565	760248	0.200	0.500	1.00	2.00	5.00
			1541301	3902651				10.0	25.0			
1,1,1,2-Tetrachloroethane	CBZd 5	Ave	10378	26540	57609	111642	275804	0.200	0.500	1.00	2.00	5.00
			561469	1430192				10.0	25.0			
Ethylbenzene	CBZd 5	Ave	56042	136856	288772	548965	1345750	0.200	0.500	1.00	2.00	5.00
			2703437	6849934				10.0	25.0			
m&p-Xylene	CBZd 5	Ave	39788	102766	219481	418534	1025168	0.400	1.00	2.00	4.00	10.0
			2069783	5259805				20.0	50.0			
o-Xylene	CBZd 5	Ave	20593	51651	105945	203530	504969	0.200	0.500	1.00	2.00	5.00
			1022577	2612526				10.0	25.0			

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-37501-1

Analy Batch No.: 70996

SDG No.: _____

Instrument ID: 16334

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

Heated Purge: (Y/N) N

Calibration Start Date: 11/30/2020 12:50

Calibration End Date: 11/30/2020 15:03

Calibration ID: 16331

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Styrene	CBZd 5	Ave	34193	86978	183091	354894	861952	0.200	0.500	1.00	2.00	5.00
			1745400	4437047				10.0	25.0			
Bromoform	CBZd 5	Ave	4668	12931	28046	57245	146803	0.200	0.500	1.00	2.00	5.00
			304248	799958				10.0	25.0			
Isopropylbenzene	CBZd 5	Ave	53210	132190	280719	542248	1331001	0.200	0.500	1.00	2.00	5.00
			2679183	6784295				10.0	25.0			
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	10124	27699	56804	111748	273837	0.200	0.500	1.00	2.00	5.00
			553642	1384788				10.0	25.0			
Bromobenzene	DCBd 4	Ave	12894	32482	69470	132263	320859	0.200	0.500	1.00	2.00	5.00
			654760	1663078				10.0	25.0			
trans-1,4-Dichloro-2-butene	TBAd 10	Ave	23186	63627	139562	278293	701899	2.00	5.00	10.0	20.0	50.0
			1457770	3738276				100	250			
1,2,3-Trichloropropane	DCBd 4	Ave	2519	7254	15377	28491	67388	0.200	0.500	1.00	2.00	5.00
			138980	345318				10.0	25.0			
N-Propylbenzene	DCBd 4	Ave	65333	165110	338497	661944	1623321	0.200	0.500	1.00	2.00	5.00
			3236978	8111815				10.0	25.0			
2-Chlorotoluene	DCBd 4	Ave	12758	31485	68023	130139	316960	0.200	0.500	1.00	2.00	5.00
			635163	1636772				10.0	25.0			
1,3,5-Trimethylbenzene	DCBd 4	Ave	43880	115372	240788	466416	1154535	0.200	0.500	1.00	2.00	5.00
			2319655	5889002				10.0	25.0			
4-Chlorotoluene	DCBd 4	Ave	12838	34713	71097	133168	329404	0.200	0.500	1.00	2.00	5.00
			665842	1693778				10.0	25.0			
tert-Butylbenzene	DCBd 4	Ave	9709	25251	50184	97199	244744	0.200	0.500	1.00	2.00	5.00
			490248	1265966				10.0	25.0			

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-37501-1

Analy Batch No.: 70996

SDG No.: _____

Instrument ID: 16334

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

Heated Purge: (Y/N) N

Calibration Start Date: 11/30/2020 12:50

Calibration End Date: 11/30/2020 15:03

Calibration ID: 16331

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Pentachloroethane	DCBd 4	Ave	7836	21266	43066	85685	213871	0.200	0.500	1.00	2.00	5.00
			427979	1117481				10.0	25.0			
1,2,4-Trimethylbenzene	DCBd 4	Ave	47673	119721	250956	482620	1190575	0.200	0.500	1.00	2.00	5.00
			2411281	6115025				10.0	25.0			
sec-Butylbenzene	DCBd 4	Ave	59733	147266	311759	603955	1489422	0.200	0.500	1.00	2.00	5.00
			2999448	7647756				10.0	25.0			
1,3-Dichlorobenzene	DCBd 4	Ave	26068	66610	137230	266406	650429	0.200	0.500	1.00	2.00	5.00
			1310582	3371982				10.0	25.0			
p-Isopropyltoluene	DCBd 4	Ave	50640	129655	274677	518846	1294886	0.200	0.500	1.00	2.00	5.00
			2609529	6669275				10.0	25.0			
1,4-Dichlorobenzene	DCBd 4	Ave	26967	68535	138733	271182	664687	0.200	0.500	1.00	2.00	5.00
			1327411	3385890				10.0	25.0			
1,2,3-Trimethylbenzene	DCBd 4	Ave	22584	54187	109147	214525	518339	0.200	0.500	1.00	2.00	5.00
			1037654	2646951				10.0	25.0			
Benzyl chloride	DCBd 4	Ave	4530	11182	25065	46895	119235	0.200	0.500	1.00	2.00	5.00
			241370	617345				10.0	25.0			
n-Butylbenzene	DCBd 4	Ave	27112	69796	144959	275706	677396	0.200	0.500	1.00	2.00	5.00
			1374780	3504248				10.0	25.0			
1,2-Dichlorobenzene	DCBd 4	Ave	24056	62448	130553	249800	604314	0.200	0.500	1.00	2.00	5.00
			1221855	3100816				10.0	25.0			
1,2-Dibromo-3-Chloropropane	DCBd 4	Ave	1486	3908	8650	15596	38959	0.200	0.500	1.00	2.00	5.00
			81816	208192				10.0	25.0			
1,3,5-Trichlorobenzene	DCBd 4	Ave	22309	56346	114581	215623	546533	0.200	0.500	1.00	2.00	5.00
			1106187	2822323				10.0	25.0			

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-37501-1 Analy Batch No.: 70996

SDG No.: _____

Instrument ID: 16334 GC Column: R-624SilMS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/30/2020 12:50 Calibration End Date: 11/30/2020 15:03 Calibration ID: 16331

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
1,2,4-Trichlorobenzene	DCBd 4	Ave	19946	54078	104962	202142	499550	0.200	0.500	1.00	2.00	5.00
			1016153	2570710				10.0	25.0			
Hexachlorobutadiene	DCBd 4	Ave	10231	26381	50715	96356	245031	0.200	0.500	1.00	2.00	5.00
			494492	1284715				10.0	25.0			
Naphthalene	DCBd 4	Ave	37571	94086	196928	374308	907383	0.200	0.500	1.00	2.00	5.00
			1828996	4554237				10.0	25.0			
1,2,3-Trichlorobenzene	DCBd 4	Ave	18105	47589	93358	178820	436916	0.200	0.500	1.00	2.00	5.00
			888658	2227961				10.0	25.0			
Dibromofluoromethane (Surr)	FB	Ave	526196	532962	539150	536748	540338	10.0	10.0	10.0	10.0	10.0
			541882	543100				10.0	10.0			
1,2-Dichloroethane-d4 (Surr)	FB	Ave	112511	111685	114722	114415	113626	10.0	10.0	10.0	10.0	10.0
			116084	117092				10.0	10.0			
Toluene-d8 (Surr)	CBZd 5	Ave	2122568	2121912	2136211	2136446	2162628	10.0	10.0	10.0	10.0	10.0
			2179039	2188553				10.0	10.0			
4-Bromofluorobenzene (Surr)	CBZd 5	Ave	812877	812090	818561	818494	820021	10.0	10.0	10.0	10.0	10.0
			829357	833577				10.0	10.0			

Curve Type Legend

Ave = Average ISTD

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-37501-1 Analy Batch No.: 70996

SDG No.: _____

Instrument ID: 16334 GC Column: R-624SilMS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/30/2020 12:50 Calibration End Date: 11/30/2020 15:03 Calibration ID: 16331

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-70996/9	GN30I07.D
Level 2	IC 410-70996/8	GN30I06.D
Level 3	IC 410-70996/7	GN30I05.D
Level 4	IC 410-70996/6	GN30I04.D
Level 5	IC 410-70996/5	GN30I03.D
Level 6	ICIS 410-70996/4	GN30I02.D
Level 7	IC 410-70996/3	GN30I01.D

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
Dichlorodifluoromethane	-8.9 2.3	2.4	3.0	4.2	-1.3	-1.5	50 30	30	30	30	30	30
Chloromethane	10.2 -6.3	6.6	1.0	-0.6	-5.6	-5.3	50 30	30	30	30	30	30
1,3-Butadiene	20.6 -17.7	16.9	7.4	-2.5	-9.8	-15.0	50 30	30	30	30	30	30
Vinyl chloride	5.5 -2.3	3.0	-1.3	1.3	-3.4	-2.8	50 30	30	30	30	30	30
Bromomethane	13.8 -7.1	4.8	-0.3	0.2	-4.6	-6.8	50 30	30	30	30	30	30
Chloroethane	11.2 -5.4	3.9	-3.7	1.0	-2.9	-4.1	50 30	30	30	30	30	30
Dichlorofluoromethane	23.2 -8.3	4.3	-4.8	-1.7	-5.6	-7.2	50 30	30	30	30	30	30
Trichlorofluoromethane	-3.6 0.9	2.1	-3.0	5.1	0.4	-2.0	50 30	30	30	30	30	30
Ethyl ether	-0.3 -2.6	2.9	3.5	3.4	-3.7	-3.3	50 30	30	30	30	30	30
Freon 123a	7.5 -5.6	3.3	5.3	0.2	-3.6	-7.2	50 30	30	30	30	30	30
Acrolein	2.5 5.2	-1.9	-4.2	-0.9	-0.8	0.2	50 30	30	30	30	30	30
1,1-Dichloroethene	2.6 -3.6	4.6	4.6	-1.5	-2.4	-4.5	50 30	30	30	30	30	30
Freon 113	-28.7 5.9	-4.4	10.1	8.1	7.5	1.4	50 30	30	30	30	30	30
Acetone	29.9 -6.2	4.5	0.9	-9.6	-9.7	-9.9	50 30	30	30	30	30	30

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-37501-1

Analy Batch No.: 70996

SDG No.: _____

Instrument ID: 16334

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

Heated Purge: (Y/N) N

Calibration Start Date: 11/30/2020 12:50

Calibration End Date: 11/30/2020 15:03

Calibration ID: 16331

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
Methyl iodide	-3.1 -1.9	2.1	5.4	1.1	-1.5	-2.0	50 30	30	30	30	30	30
Carbon disulfide	-2.1 -1.5	0.0	5.1	1.2	-1.0	-1.7	50 30	30	30	30	30	30
Methyl acetate	23.0 4.6	-10.8	-1.9	0.7	-3.9	-11.6	50 30	30	30	30	30	30
Allyl chloride	2.8 -6.6	10.9	4.9	-0.6	-4.3	-7.1	50 30	30	30	30	30	30
Methylene Chloride	-0.2 -2.3	0.3	4.4	2.4	-1.8	-2.8	50 30	30	30	30	30	30
t-Butyl alcohol	-5.5 -3.8	5.9	8.1	0.1	-1.4	-3.5	50 30	30	30	30	30	30
Acrylonitrile	-6.8 3.7	3.2	2.5	-3.2	2.0	-1.4	50 30	30	30	30	30	30
Methyl tert-butyl ether	0.2 -3.5	1.1	7.6	1.0	-2.7	-3.7	50 30	30	30	30	30	30
trans-1,2-Dichloroethene	-0.9 -2.7	2.7	5.0	1.9	-3.0	-3.0	50 30	30	30	30	30	30
n-Hexane	-18.0 5.8	-6.7	7.2	7.8	5.8	-1.9	50 30	30	30	30	30	30
1,1-Dichloroethane	-4.1 -0.7	-0.4	7.2	1.0	-1.9	-1.1	50 30	30	30	30	30	30
di-Isopropyl ether	0.1 -3.0	0.8	6.7	0.8	-2.7	-2.7	50 30	30	30	30	30	30
2-Chloro-1,3-butadiene	-0.2 -2.6	0.3	6.6	0.9	-2.0	-3.2	50 30	30	30	30	30	30
Ethyl t-butyl ether	-0.4 -2.7	1.9	5.7	-0.3	-1.7	-2.5	50 30	30	30	30	30	30
2-Butanone (MEK)	2.3 2.3	0.1	1.9	-3.9	-0.6	-2.1	50 30	30	30	30	30	30
cis-1,2-Dichloroethene	-4.8 -1.8	2.5	6.9	1.4	-2.2	-1.9	50 30	30	30	30	30	30
2,2-Dichloropropane	0.1 -1.8	1.5	4.9	0.7	-1.9	-3.5	50 30	30	30	30	30	30
Propionitrile	-10.5 2.6	3.7	7.4	-1.0	-1.6	-0.6	50 30	30	30	30	30	30
Methacrylonitrile	5.5 3.8	-5.6	-0.5	-2.7	0.0	-0.7	50 30	30	30	30	30	30

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-37501-1

Analy Batch No.: 70996

SDG No.: _____

Instrument ID: 16334

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

Heated Purge: (Y/N) N

Calibration Start Date: 11/30/2020 12:50

Calibration End Date: 11/30/2020 15:03

Calibration ID: 16331

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
Bromochloromethane	1.4 -3.5	4.4	5.5	-1.2	-2.2	-4.5	50 30	30	30	30	30	30
Tetrahydrofuran	2.1 2.8	-5.1	3.5	-2.5	0.1	-1.0	50 30	30	30	30	30	30
Chloroform	-1.1 -2.7	1.7	6.2	1.0	-2.1	-2.9	50 30	30	30	30	30	30
1,1,1-Trichloroethane	0.2 -2.1	2.7	5.4	0.2	-3.0	-3.5	50 30	30	30	30	30	30
Cyclohexane	-18.9 3.5	-0.4	8.4	5.5	3.4	-1.4	50 30	30	30	30	30	30
Carbon tetrachloride	-1.9 0.3	-1.1	6.7	0.2	-2.1	-2.2	50 30	30	30	30	30	30
1,1-Dichloropropene	-0.2 -0.5	-0.6	4.7	2.1	-2.2	-3.2	50 30	30	30	30	30	30
Isobutyl alcohol	20.3 -7.2	-4.2	8.7	-3.0	-7.1	-7.5	50 30	30	30	30	30	30
Benzene	-1.5 -1.7	0.1	7.3	1.3	-2.7	-2.9	50 30	30	30	30	30	30
1,2-Dichloroethane	12.7 -5.6	4.8	4.7	-2.2	-6.6	-7.9	50 30	30	30	30	30	30
t-Amyl methyl ether	-0.4 -2.9	0.4	7.4	0.9	-2.6	-2.9	50 30	30	30	30	30	30
n-Heptane	-13.9 7.4	-6.3	4.1	3.8	5.6	-0.8	50 30	30	30	30	30	30
n-Butanol	9.1 -0.2	-0.5	-3.2	-1.5	-1.0	-2.8	50 30	30	30	30	30	30
Trichloroethene	2.4 -2.1	0.9	3.8	1.4	-3.6	-2.9	50 30	30	30	30	30	30
Methylcyclohexane	-11.3 3.1	3.1	2.5	2.5	2.0	-1.9	50 30	30	30	30	30	30
1,2-Dichloropropane	1.7 -3.1	1.2	7.0	-0.7	-3.3	-2.7	50 30	30	30	30	30	30
Methyl methacrylate	-0.6 4.9	-2.2	-0.1	-2.4	1.1	-0.6	50 30	30	30	30	30	30
1,4-Dioxane	-41.2 9.7	-3.1	0.1	17.0	8.8	8.8	50 30	30	30	30	30	30
Dibromomethane	2.9 -1.7	-0.1	5.8	-0.7	-3.3	-2.8	50 30	30	30	30	30	30

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-37501-1

Analy Batch No.: 70996

SDG No.: _____

Instrument ID: 16334

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

Heated Purge: (Y/N) N

Calibration Start Date: 11/30/2020 12:50

Calibration End Date: 11/30/2020 15:03

Calibration ID: 16331

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
Bromodichloromethane	-1.5 1.1	-3.3	5.3	0.6	-2.0	-0.3	50 30	30	30	30	30	30
2-Nitropropane	2.0 6.3	-5.1	-0.2	-4.1	1.0	0.1	50 30	30	30	30	30	30
cis-1,3-Dichloropropene	-3.3 0.9	-0.2	5.4	0.6	-1.4	-2.0	50 30	30	30	30	30	30
4-Methyl-2-pentanone (MIBK)	0.2 2.5	-2.5	1.8	-2.7	0.7	0.0	50 30	30	30	30	30	30
Toluene	0.8 -2.8	1.4	5.5	0.2	-2.1	-3.0	50 30	30	30	30	30	30
trans-1,3-Dichloropropene	-4.1 1.2	-0.3	2.3	0.5	0.4	0.0	50 30	30	30	30	30	30
Ethyl methacrylate	1.5 -2.6	-3.2	4.8	1.9	-1.8	-0.6	50 30	30	30	30	30	30
1,1,2-Trichloroethane	-0.6 -3.5	3.8	6.9	0.2	-3.0	-3.8	50 30	30	30	30	30	30
Tetrachloroethene	-3.5 -0.9	2.7	4.2	0.9	-1.3	-2.1	50 30	30	30	30	30	30
1,3-Dichloropropane	1.8 -3.1	1.7	5.9	-0.3	-2.4	-3.5	50 30	30	30	30	30	30
2-Hexanone	0.2 4.1	-4.1	-0.9	-1.7	2.0	0.3	50 30	30	30	30	30	30
Dibromochloromethane	-6.9 3.7	-5.0	4.9	1.2	0.6	1.5	50 30	30	30	30	30	30
1,2-Dibromoethane (EDB)	-0.4 -1.5	-1.0	5.8	1.0	-1.6	-2.4	50 30	30	30	30	30	30
1-Chlorohexane	12.5 -6.3	4.9	4.2	-2.9	-5.4	-7.1	50 30	30	30	30	30	30
Chlorobenzene	0.4 -2.5	2.0	4.5	0.3	-2.2	-2.4	50 30	30	30	30	30	30
1,1,1,2-Tetrachloroethane	-4.1 0.6	-2.7	5.0	1.4	-0.2	0.0	50 30	30	30	30	30	30
Ethylbenzene	3.7 -3.5	0.5	5.4	-0.1	-2.5	-3.5	50 30	30	30	30	30	30
m&p-Xylene	-2.3 -1.7	0.2	6.3	1.0	-1.4	-2.0	50 30	30	30	30	30	30
o-Xylene	1.9 -1.5	1.5	3.4	-0.9	-2.1	-2.4	50 30	30	30	30	30	30

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-37501-1

Analy Batch No.: 70996

SDG No.: _____

Instrument ID: 16334

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

Heated Purge: (Y/N) N

Calibration Start Date: 11/30/2020 12:50

Calibration End Date: 11/30/2020 15:03

Calibration ID: 16331

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
Styrene	-0.7 -1.9	0.3	4.9	1.4	-1.9	-2.2	50 30	30	30	30	30	30
Bromoform	-15.5 10.2	-7.1	0.1	1.9	4.1	6.2	50 30	30	30	30	30	30
Isopropylbenzene	0.7 -2.3	-0.7	4.8	0.9	-1.3	-2.2	50 30	30	30	30	30	30
1,1,2,2-Tetrachloroethane	-6.1 -1.7	2.3	5.0	2.3	-0.9	-0.9	50 30	30	30	30	30	30
Bromobenzene	-0.4 -1.7	-0.1	7.0	0.8	-3.2	-2.3	50 30	30	30	30	30	30
trans-1,4-Dichloro-2-butene	-13.4 16.0	-10.3	-4.3	-1.7	5.7	8.1	50 30	30	30	30	30	30
1,2,3-Trichloropropane	-8.4 -3.9	5.1	11.5	2.3	-4.3	-2.4	50 30	30	30	30	30	30
N-Propylbenzene	1.2 -3.8	1.8	4.6	1.2	-1.8	-3.2	50 30	30	30	30	30	30
2-Chlorotoluene	0.5 -1.3	-1.3	6.8	1.2	-2.5	-3.4	50 30	30	30	30	30	30
1,3,5-Trimethylbenzene	-3.6 -1.0	0.9	5.4	1.1	-1.0	-1.6	50 30	30	30	30	30	30
4-Chlorotoluene	-3.0 -2.1	4.4	7.1	-0.7	-2.8	-2.9	50 30	30	30	30	30	30
tert-Butylbenzene	-0.2 -0.4	3.4	2.9	-1.4	-1.7	-2.6	50 30	30	30	30	30	30
Pentachloroethane	-6.2 2.3	1.3	2.7	1.2	-0.1	-1.1	50 30	30	30	30	30	30
1,2,4-Trimethylbenzene	0.3 -1.6	0.2	5.2	0.2	-2.2	-2.1	50 30	30	30	30	30	30
sec-Butylbenzene	0.8 -1.2	-1.0	4.9	0.6	-1.9	-2.2	50 30	30	30	30	30	30
1,3-Dichlorobenzene	-0.1 -1.2	1.6	4.8	0.7	-2.7	-3.1	50 30	30	30	30	30	30
p-Isopropyltoluene	-1.6 -0.8	0.3	6.4	-0.5	-1.8	-2.1	50 30	30	30	30	30	30
1,4-Dichlorobenzene	1.4 -2.6	2.6	4.0	0.6	-2.4	-3.6	50 30	30	30	30	30	30
1,2,3-Trimethylbenzene	7.1 -4.0	2.3	3.2	0.4	-4.0	-5.0	50 30	30	30	30	30	30

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-37501-1 Analy Batch No.: 70996

SDG No.: _____

Instrument ID: 16334 GC Column: R-624SilMS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/30/2020 12:50 Calibration End Date: 11/30/2020 15:03 Calibration ID: 16331

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
Benzyl chloride	-2.9 1.3	-4.6	7.2	-0.8	-0.2	-0.1	50 30	30	30	30	30	30
n-Butylbenzene	-0.5 -1.6	1.9	6.0	-0.2	-3.0	-2.6	50 30	30	30	30	30	30
1,2-Dichlorobenzene	-1.2 -2.6	2.1	6.9	1.2	-3.1	-3.1	50 30	30	30	30	30	30
1,2-Dibromo-3-Chloropropane	-5.4 1.4	-1.0	9.8	-2.1	-3.2	0.5	50 30	30	30	30	30	30
1,3,5-Trichlorobenzene	2.0 -1.3	2.5	4.4	-2.7	-2.5	-2.4	50 30	30	30	30	30	30
1,2,4-Trichlorobenzene	-1.1 -2.4	6.8	3.8	-1.1	-3.3	-2.7	50 30	30	30	30	30	30
Hexachlorobutadiene	3.3 -0.7	6.1	2.1	-3.9	-3.4	-3.5	50 30	30	30	30	30	30
Naphthalene	2.4 -5.0	2.1	7.0	0.7	-3.4	-3.7	50 30	30	30	30	30	30
1,2,3-Trichlorobenzene	1.7 -4.2	6.5	4.6	-0.8	-4.2	-3.6	50 30	30	30	30	30	30
Dibromofluoromethane (Surr)	-1.4 -0.3	0.6	0.7	0.3	0.3	-0.3	50 30	30	30	30	30	30
1,2-Dichloroethane-d4 (Surr)	-0.9 1.1	-0.9	0.7	0.5	-0.9	0.3	50 30	30	30	30	30	30
Toluene-d8 (Surr)	0.8 -1.1	0.0	0.1	-0.2	0.6	-0.2	50 30	30	30	30	30	30
4-Bromofluorobenzene (Surr)	1.1 -1.3	0.3	0.4	0.1	-0.1	-0.5	50 30	30	30	30	30	30

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I01.D
 Lims ID: IC std7
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 30-Nov-2020 12:50:30 ALS Bottle#: 2 Worklist Smp#: 3
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0016641-003
 Misc. Info.: IC STD7
 Operator ID: DVV10203 Instrument ID: 16334
 Sublist: chrom-MSV_16334_25mL*sub4
 Method: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\MSV_16334_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 01-Dec-2020 18:56:56 Calib Date: 30-Nov-2020 18:23:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1610

First Level Reviewer: virayd

Date: 01-Dec-2020 11:39:16

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.940	1.953	-0.013	99	1495396	25.0	25.6	
5 Chloromethane	50	2.142	2.148	-0.006	99	1849975	25.0	23.4	
6 Butadiene	39	2.251	2.264	-0.013	96	1847653	25.0	20.6	
7 Vinyl chloride	62	2.257	2.270	-0.013	98	1645533	25.0	24.4	
9 Bromomethane	94	2.574	2.593	-0.019	91	1090646	25.0	23.2	
10 Chloroethane	64	2.654	2.666	-0.012	100	966420	25.0	23.6	
11 Dichlorofluoromethane	67	2.891	2.904	-0.013	97	2101552	25.0	22.9	
13 Trichlorofluoromethane	101	2.965	2.977	-0.012	97	1955497	25.0	25.2	
15 Ethyl ether	59	3.196	3.208	-0.012	94	1114451	25.0	24.3	
16 1,2-Dichloro-1,1,2-trifluoroethane	67	3.288	3.300	-0.012	93	1496120	25.0	23.6	
18 Acrolein	56	3.373	3.385	-0.012	99	8876973	1250.0	1314.9	
19 1,1-Dichloroethene	96	3.507	3.519	-0.012	97	1129827	25.0	24.1	
21 112TCTFE	101	3.544	3.556	-0.012	92	1213458	25.0	26.5	
20 Acetone	43	3.544	3.562	-0.018	100	2047683	250.0	234.6	
22 Iodomethane	142	3.696	3.714	-0.018	98	2146588	25.0	24.5	
23 Isopropyl alcohol	45	3.721	3.727	-0.007	48	773552	500.0	433.4	
24 Ethyl bromide	108	3.727	3.739	-0.012	98	986182	25.0	24.2	
25 Carbon disulfide	76	3.800	3.812	-0.012	99	4255752	25.0	24.6	
26 Methyl acetate	43	3.952	3.971	-0.018	98	690648	25.0	26.1	M
27 3-Chloro-1-propene	41	3.977	3.989	-0.012	93	2189679	25.0	23.3	
28 Methylene Chloride	84	4.166	4.178	-0.012	94	1311628	25.0	24.4	
* 29 t-Butyl alcohol-d10 (IS)	65	4.196	4.202	-0.006	0	177877	50.0	50.0	
30 2-Methyl-2-propanol	59	4.318	4.336	-0.018	100	1538645	500.0	481.1	
31 Acrylonitrile	53	4.513	4.525	-0.012	98	1463905	125.0	129.7	
32 Methyl tert-butyl ether	73	4.568	4.580	-0.012	96	3592103	25.0	24.1	
33 trans-1,2-Dichloroethene	96	4.568	4.586	-0.018	98	1312619	25.0	24.3	
34 Hexane	57	4.995	5.007	-0.012	94	2081061	25.0	26.4	
36 1,1-Dichloroethane	63	5.239	5.251	-0.013	96	2486421	25.0	24.8	
37 Isopropyl ether	45	5.299	5.306	-0.007	96	4941744	25.0	24.3	
38 2-Chloro-1,3-butadiene	53	5.348	5.360	-0.012	91	2218551	25.0	24.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
39 Tert-butyl ethyl ether	59	5.836	5.836	0.000	99	4516790	25.0	24.3	
40 2-Butanone (MEK)	43	6.043	6.049	-0.006	100	4135516	250.0	255.7	
41 cis-1,2-Dichloroethene	96	6.074	6.086	-0.012	83	1486697	25.0	24.5	
42 2,2-Dichloropropane	77	6.092	6.092	0.000	88	2061512	25.0	24.5	
44 Propionitrile	54	6.147	6.147	0.000	99	2056391	500.0	512.9	
S 49 1,2-Dichloroethene, Total	100				0			48.9	
46 Methacrylonitrile	67	6.360	6.360	0.000	94	3857032	250.0	259.5	
48 Chlorobromomethane	128	6.409	6.409	0.000	96	651451	25.0	24.1	
47 Tetrahydrofuran	71	6.415	6.409	0.006	93	1074451	250.0	257.0	
50 Chloroform	83	6.561	6.561	0.000	93	2347914	25.0	24.3	
\$ 52 Dibromofluoromethane (Surr)	113	6.775	6.781	-0.006	94	543100	10.0	9.97	
51 1,1,1-Trichloroethane	97	6.781	6.787	-0.006	98	2022017	25.0	24.5	
53 Cyclohexane	56	6.872	6.878	-0.006	92	2456493	25.0	25.9	
56 Carbon tetrachloride	117	6.988	7.000	-0.012	95	1796395	25.0	25.1	
55 1,1-Dichloropropene	75	6.994	7.000	-0.006	98	1929345	25.0	24.9	
57 Isobutyl alcohol	41	7.165	7.165	0.000	95	1475056	1250.0	1159.5	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.232	7.232	0.000	0	117092	10.0	10.1	
59 Benzene	78	7.263	7.263	-0.001	97	5622443	25.0	24.6	
60 1,2-Dichloroethane	62	7.330	7.336	-0.006	97	1510198	25.0	23.6	M
62 Tert-amyl methyl ether	73	7.451	7.458	-0.007	98	3974346	25.0	24.3	
* 63 Fluorobenzene (IS)	96	7.665	7.671	-0.006	98	2249974	10.0	10.0	
64 n-Heptane	43	7.671	7.677	-0.006	94	2384149	25.0	26.9	
65 n-Butanol	56	8.043	8.049	-0.006	89	2867258	2500.0	2494.7	
67 Trichloroethene	95	8.140	8.147	-0.007	99	1428934	25.0	24.5	
68 Methylcyclohexane	83	8.445	8.451	-0.006	94	2337109	25.0	25.8	
69 1,2-Dichloropropane	63	8.476	8.482	-0.006	86	1481659	25.0	24.2	
70 2-ethoxy-2-methyl butane	87	8.488	8.488	0.000	91	2213829	25.0	24.7	
72 1,4-Dioxane	88	8.567	8.567	0.000	33	280447	1250.0	1371.5	
71 Methyl methacrylate	69	8.567	8.567	0.000	92	793834	25.0	26.2	
73 Dibromomethane	93	8.585	8.585	0.000	96	696745	25.0	24.6	
75 Dichlorobromomethane	83	8.823	8.823	0.000	100	1793553	25.0	25.3	
76 2-Nitropropane	41	9.110	9.110	0.000	97	2280829	250.0	265.7	
79 1-Bromo-2-chloroethane	63	9.213	9.219	-0.006	98	1613118	25.0	24.6	
80 cis-1,3-Dichloropropene	75	9.378	9.378	0.000	95	2324073	25.0	25.2	
81 4-Methyl-2-pentanone (MIBK)	43	9.555	9.561	-0.006	97	10637772	250.0	256.2	
\$ 82 Toluene-d8 (Surr)	98	9.689	9.689	0.000	94	2188553	10.0	9.89	
83 Toluene	92	9.762	9.762	0.000	98	3492002	25.0	24.3	
84 trans-1,3-Dichloropropene	75	10.024	10.024	0.000	93	1963134	25.0	25.3	
S 87 1,3-Dichloropropene, Total	100				0			50.5	
85 Ethyl methacrylate	69	10.085	10.085	0.000	91	1698291	25.0	24.4	
86 1,1,2-Trichloroethane	97	10.225	10.231	-0.006	90	1011153	25.0	24.1	
88 Tetrachloroethene	166	10.311	10.311	0.000	98	1545623	25.0	24.8	
89 1,3-Dichloropropane	76	10.390	10.396	-0.006	92	1831199	25.0	24.2	
91 2-Hexanone	43	10.445	10.451	-0.006	98	7771959	250.0	260.2	
93 Chlorodibromomethane	129	10.603	10.603	0.000	90	1288980	25.0	25.9	
94 Ethylene Dibromide	107	10.713	10.713	0.000	99	1013188	25.0	24.6	
* 95 Chlorobenzene-d5 (IS)	117	11.146	11.146	0.000	86	1658425	10.0	10.0	
96 1-Chlorohexane	91	11.158	11.158	0.000	98	2021466	25.0	23.4	
97 Chlorobenzene	112	11.170	11.176	-0.006	95	3902651	25.0	24.4	
S 101 Xylenes, Total	106				0			73.8	
98 1,1,1,2-Tetrachloroethane	131	11.256	11.256	0.000	96	1430192	25.0	25.1	
99 Ethylbenzene	91	11.262	11.262	0.000	99	6849934	25.0	24.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
100 m-Xylene & p-Xylene	106	11.378	11.378	0.000	98	5259805	50.0	49.1	
102 o-Xylene	106	11.707	11.707	0.000	97	2612526	25.0	24.6	
103 Styrene	104	11.719	11.719	0.000	95	4437047	25.0	24.5	
104 Bromoform	173	11.877	11.877	0.000	97	799958	25.0	27.6	
105 Isopropylbenzene	105	12.005	12.006	-0.001	96	6784295	25.0	24.4	
\$ 108 4-Bromofluorobenzene (Surr)	95	12.146	12.152	-0.006	89	833577	10.0	9.87	
109 1,1,2,2-Tetrachloroethane	83	12.255	12.255	0.000	92	1384788	25.0	24.6	
110 Bromobenzene	156	12.268	12.268	0.000	95	1663078	25.0	24.6	
111 trans-1,4-Dichloro-2-butene	53	12.280	12.280	0.000	91	3738276	250.0	290.0	
112 1,2,3-Trichloropropane	110	12.298	12.304	-0.006	79	345318	25.0	24.0	
113 N-Propylbenzene	91	12.335	12.335	0.000	99	8111815	25.0	24.0	
114 2-Chlorotoluene	126	12.414	12.414	0.000	97	1636772	25.0	24.7	
115 1,3,5-Trimethylbenzene	105	12.469	12.469	0.000	94	5889002	25.0	24.7	
116 4-Chlorotoluene	126	12.505	12.505	0.000	97	1693778	25.0	24.5	
118 tert-Butylbenzene	134	12.713	12.713	0.000	93	1265966	25.0	24.9	
120 Pentachloroethane	167	12.743	12.743	0.000	95	1117481	25.0	25.6	
119 1,2,4-Trimethylbenzene	105	12.755	12.755	0.000	97	6115025	25.0	24.6	
121 sec-Butylbenzene	105	12.877	12.877	0.000	94	7647756	25.0	24.7	
122 1,3-Dichlorobenzene	146	12.975	12.975	0.000	98	3371982	25.0	24.7	
123 4-Isopropyltoluene	119	12.981	12.981	0.000	97	6669275	25.0	24.8	
* 124 1,4-Dichlorobenzene-d4	152	13.030	13.030	0.000	93	896780	10.0	10.0	
125 1,4-Dichlorobenzene	146	13.048	13.048	0.000	94	3385890	25.0	24.4	
126 1,2,3-Trimethylbenzene	120	13.060	13.060	0.000	99	2646951	25.0	24.0	
127 Benzyl chloride	126	13.127	13.127	0.000	99	617345	25.0	25.3	
129 p-Diethylbenzene	119	13.182	13.182	0.000	92	4022632	25.0	24.6	
130 n-Butylbenzene	92	13.274	13.274	0.000	98	3504248	25.0	24.6	
131 1,2-Dichlorobenzene	146	13.310	13.310	0.000	98	3100816	25.0	24.4	
134 1,2-Dibromo-3-Chloropropane	155	13.853	13.853	0.000	94	208192	25.0	25.3	
135 1,3,5-Trichlorobenzene	180	13.975	13.975	0.000	98	2822323	25.0	24.7	
136 1,2,4-Trichlorobenzene	180	14.395	14.395	0.000	94	2570710	25.0	24.4	
137 Hexachlorobutadiene	225	14.481	14.481	0.000	96	1284715	25.0	24.8	
138 Naphthalene	128	14.578	14.578	0.000	97	4554237	25.0	23.7	
139 1,2,3-Trichlorobenzene	180	14.718	14.718	0.000	96	2227961	25.0	23.9	
140 2-Methylnaphthalene	142	15.340	15.340	0.000	92	3104331	25.0	22.6	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MSV_RV1_826_00031

Amount Added: 25.00

Units: uL

MSV_RV4GAS826_00097

Amount Added: 25.00

Units: uL

MSV_RV4_826_00035

Amount Added: 25.00

Units: uL

MSV_29_826ISS_00013

Amount Added: 1.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I01.D

Injection Date: 30-Nov-2020 12:50:30

Instrument ID: 16334

Operator ID: DVV10203

Lims ID: IC std7

Worklist Smp#: 3

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

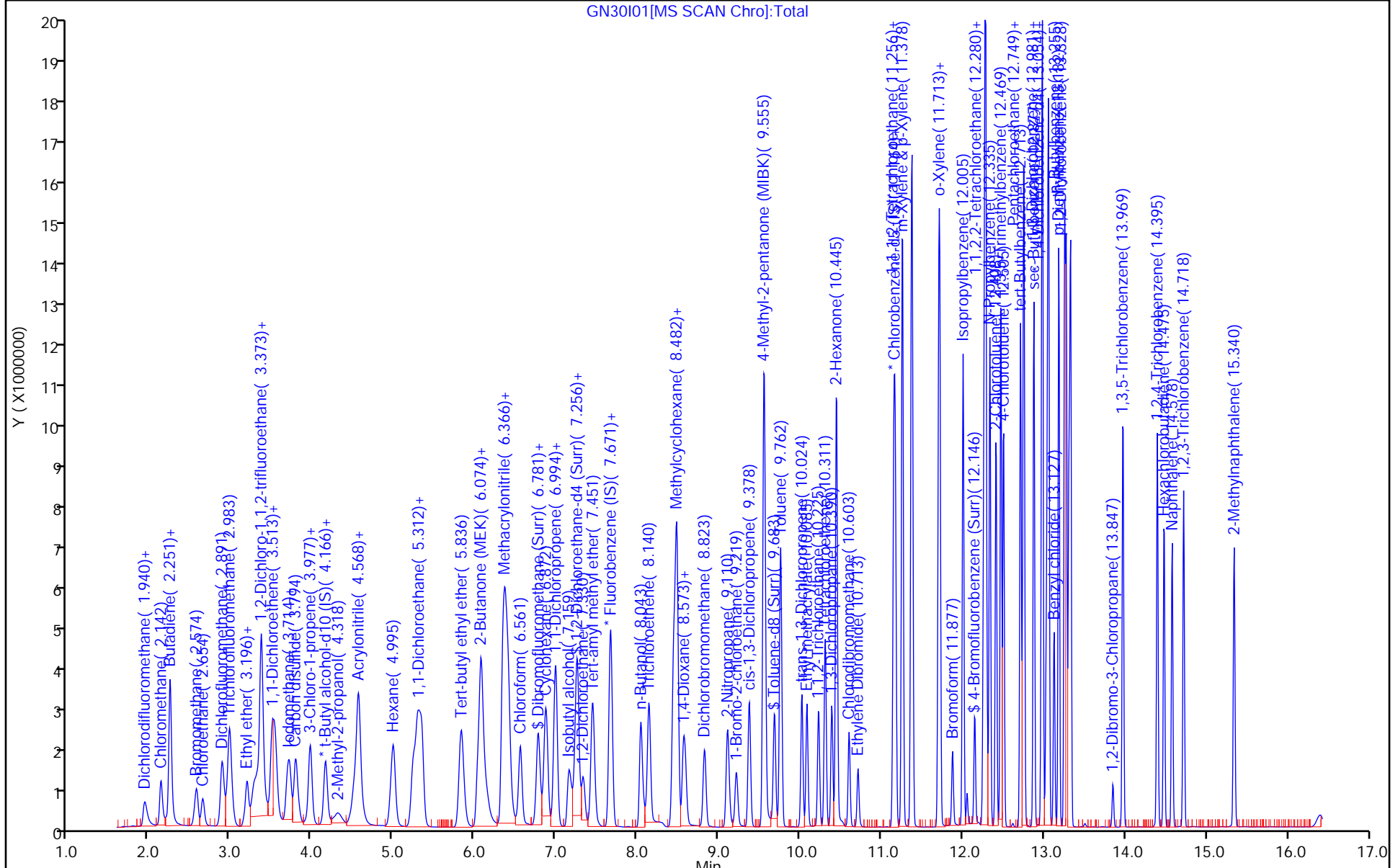
ALS Bottle#: 2

Method: MSV_16334_25mL

Limit Group: MSV - 8260C_D

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

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC

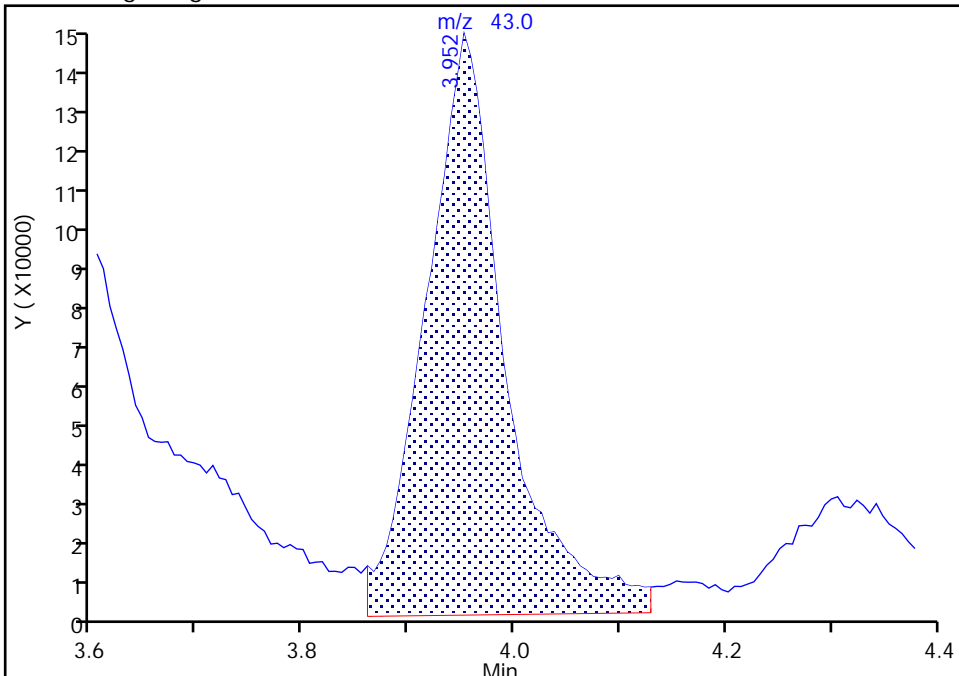
Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I01.D
Injection Date: 30-Nov-2020 12:50:30 Instrument ID: 16334
Lims ID: IC std7
Client ID:
Operator ID: DVV10203 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

26 Methyl acetate, CAS: 79-20-9

Signal: 1

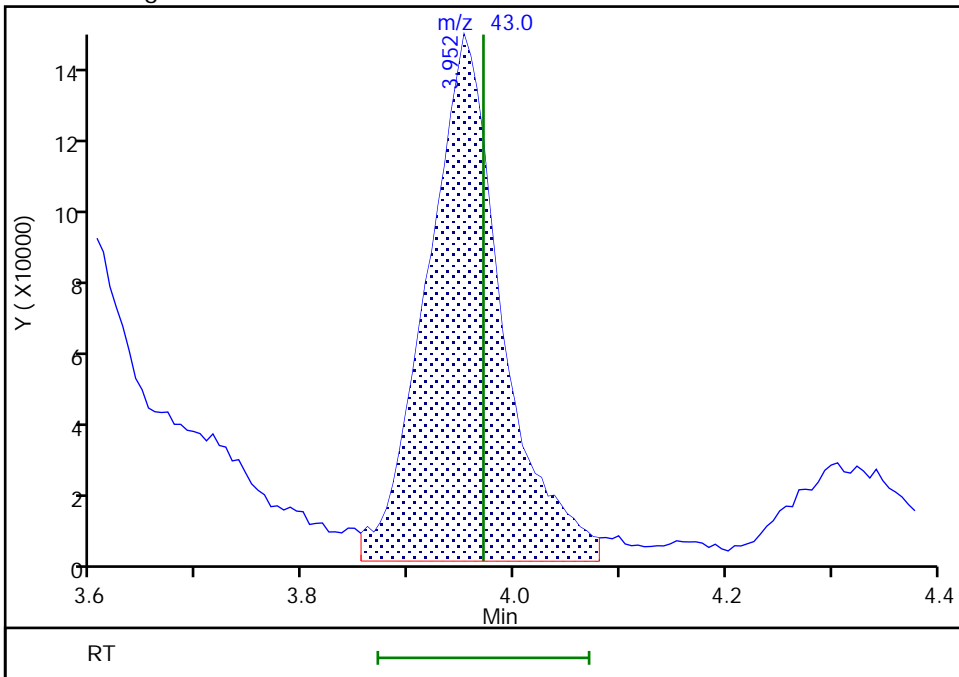
RT: 3.95
Area: 749074
Amount: 27.913187
Amount Units: ug/l

Processing Integration Results



RT: 3.95
Area: 690648
Amount: 26.140420
Amount Units: ug/l

Manual Integration Results



Reviewer: virayd, 01-Dec-2020 11:38:22
Audit Action: Manually Integrated

Audit Reason: Other

Eurofins Lancaster Laboratories Env, LLC

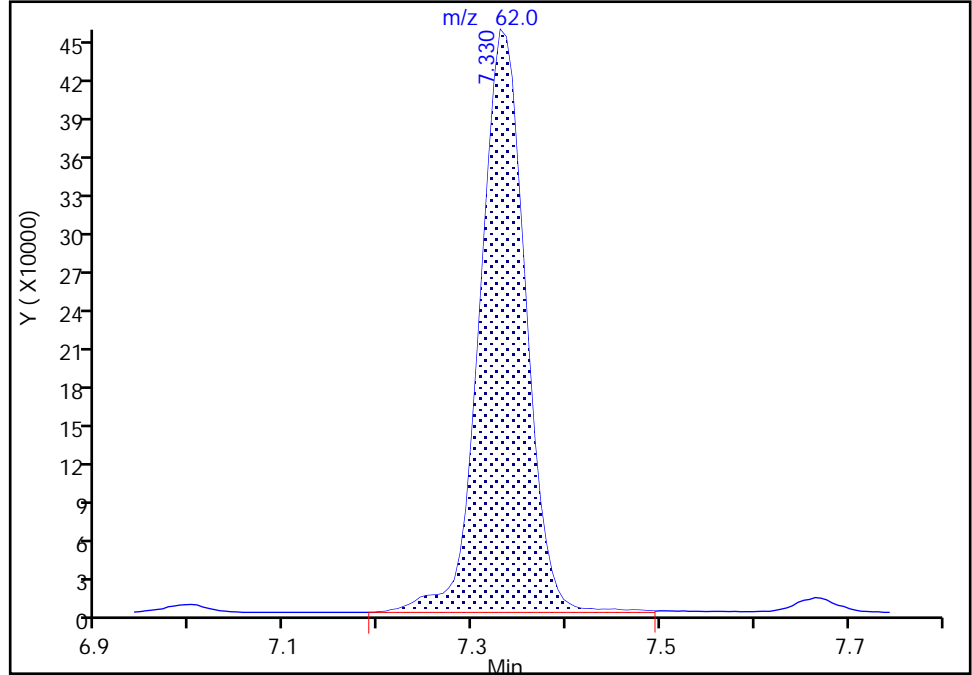
Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I01.D
Injection Date: 30-Nov-2020 12:50:30 Instrument ID: 16334
Lims ID: IC std7
Client ID:
Operator ID: DVV10203 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

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

Signal: 1

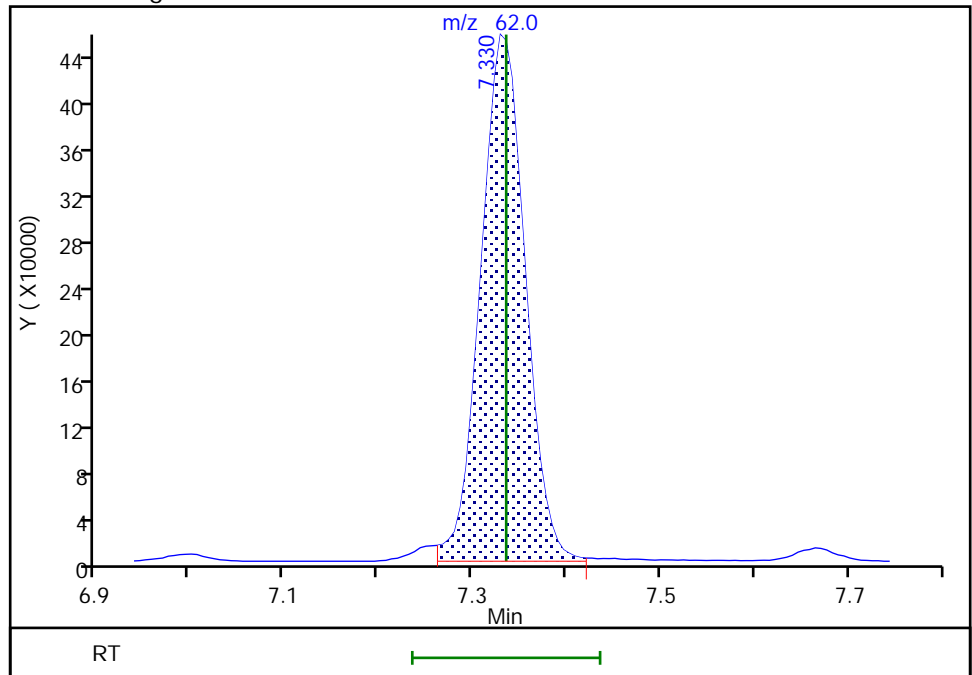
RT: 7.33
Area: 1541889
Amount: 23.957758
Amount Units: ug/l

Processing Integration Results



RT: 7.33
Area: 1510198
Amount: 23.611228
Amount Units: ug/l

Manual Integration Results



Reviewer: virayd, 01-Dec-2020 11:38:44
Audit Action: Manually Integrated

Audit Reason: Other

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I02.D
 Lims ID: ICIS std6
 Client ID:
 Sample Type: ICIS Calib Level: 6
 Inject. Date: 30-Nov-2020 13:12:30 ALS Bottle#: 3 Worklist Smp#: 4
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0016641-004
 Misc. Info.: ICIS STD6
 Operator ID: DVV10203 Instrument ID: 16334
 Sublist: chrom-MSV_16334_25mL*sub4
 Method: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\MSV_16334_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 01-Dec-2020 18:57:10 Calib Date: 30-Nov-2020 18:23:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1610

First Level Reviewer: virayd

Date: 01-Dec-2020 11:46:03

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.952	1.952	0.000	99	575013	10.0	9.85	
5 Chloromethane	50	2.148	2.148	0.000	99	746607	10.0	9.47	
6 Butadiene	39	2.257	2.257	0.000	95	762788	10.0	8.50	
7 Vinyl chloride	62	2.257	2.257	0.000	98	653889	10.0	9.72	
9 Bromomethane	94	2.580	2.580	0.000	90	437020	10.0	9.32	
10 Chloroethane	64	2.660	2.660	0.000	100	391559	10.0	9.59	
11 Dichlorofluoromethane	67	2.897	2.897	0.000	97	849408	10.0	9.28	
13 Trichlorofluoromethane	101	2.971	2.971	0.000	97	758912	10.0	9.80	
15 Ethyl ether	59	3.208	3.208	0.000	93	442210	10.0	9.67	
16 1,2-Dichloro-1,1,2-trifluoroethane	67	3.294	3.294	0.000	94	587407	10.0	9.28	
18 Acrolein	56	3.379	3.379	0.000	99	3539158	500.0	501.1	
19 1,1-Dichloroethene	96	3.513	3.513	0.000	97	447046	10.0	9.55	
21 112TCTFE	101	3.550	3.550	0.000	93	464025	10.0	10.1	
20 Acetone	43	3.550	3.550	0.000	100	823027	100.0	90.1	
22 Iodomethane	142	3.702	3.702	0.000	98	856231	10.0	9.80	
23 Isopropyl alcohol	45	3.727	3.727	0.000	47	310668	200.0	174.3	
24 Ethyl bromide	108	3.733	3.733	0.000	98	392528	10.0	9.63	
25 Carbon disulfide	76	3.806	3.806	0.000	99	1696280	10.0	9.83	
26 Methyl acetate	43	3.964	3.964	0.000	99	244232	10.0	8.84	
27 3-Chloro-1-propene	41	3.989	3.989	0.000	93	870096	10.0	9.29	
28 Methylene Chloride	84	4.172	4.172	0.000	94	521426	10.0	9.72	
* 29 t-Butyl alcohol-d10 (IS)	65	4.208	4.208	0.000	0	186094	50.0	50.0	
30 2-Methyl-2-propanol	59	4.318	4.318	0.000	100	646096	200.0	193.1	
31 Acrylonitrile	53	4.519	4.519	0.000	98	582252	50.0	49.3	
32 Methyl tert-butyl ether	73	4.574	4.574	0.000	96	1431718	10.0	9.63	
33 trans-1,2-Dichloroethene	96	4.580	4.580	0.000	97	522420	10.0	9.70	
34 Hexane	57	5.007	5.007	0.000	94	770889	10.0	9.81	
36 1,1-Dichloroethane	63	5.245	5.245	0.000	96	989205	10.0	9.89	
37 Isopropyl ether	45	5.299	5.299	0.000	96	1979657	10.0	9.73	
38 2-Chloro-1,3-butadiene	53	5.354	5.354	0.000	91	880335	10.0	9.68	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
39 Tert-butyl ethyl ether	59	5.836	5.836	0.000	99	1808949	10.0	9.75	
40 2-Butanone (MEK)	43	6.043	6.043	0.000	100	1655912	100.0	97.9	
41 cis-1,2-Dichloroethene	96	6.080	6.080	0.000	83	593244	10.0	9.81	
42 2,2-Dichloropropane	77	6.092	6.092	0.000	87	809643	10.0	9.65	
44 Propionitrile	54	6.147	6.147	0.000	99	833953	200.0	198.8	
46 Methacrylonitrile	67	6.354	6.354	0.000	94	1544674	100.0	99.3	
48 Chlorobromomethane	128	6.409	6.409	0.000	96	257416	10.0	9.55	
47 Tetrahydrofuran	71	6.421	6.421	0.000	82	433079	100.0	99.0	
50 Chloroform	83	6.561	6.561	0.000	93	935084	10.0	9.71	
\$ 52 Dibromofluoromethane (Surr)	113	6.781	6.781	0.000	94	541882	10.0	9.97	
51 1,1,1-Trichloroethane	97	6.787	6.787	0.000	98	795686	10.0	9.65	
53 Cyclohexane	56	6.878	6.878	0.000	92	934696	10.0	9.86	
56 Carbon tetrachloride	117	6.988	6.988	0.000	96	699045	10.0	9.78	
55 1,1-Dichloropropene	75	7.000	7.000	0.000	95	750119	10.0	9.68	
57 Isobutyl alcohol	41	7.159	7.159	0.000	95	587299	500.0	462.4	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.238	7.238	0.000	0	116084	10.0	10.0	
59 Benzene	78	7.262	7.262	0.000	98	2218035	10.0	9.71	
60 1,2-Dichloroethane	62	7.336	7.336	0.000	97	588167	10.0	9.21	
62 Tert-amyl methyl ether	73	7.451	7.451	0.000	98	1588018	10.0	9.71	
* 63 Fluorobenzene (IS)	96	7.671	7.671	0.000	98	2246480	10.0	10.0	
64 n-Heptane	43	7.677	7.677	0.000	93	879279	10.0	9.92	
65 n-Butanol	56	8.043	8.043	0.000	90	1169293	1000.0	972.4	
67 Trichloroethene	95	8.146	8.146	0.000	99	566426	10.0	9.71	
68 Methylcyclohexane	83	8.451	8.451	0.000	94	888517	10.0	9.81	
69 1,2-Dichloropropane	63	8.482	8.482	0.000	98	594461	10.0	9.73	
70 2-ethoxy-2-methyl butane	87	8.488	8.488	0.000	91	881887	10.0	9.87	
72 1,4-Dioxane	88	8.561	8.561	0.000	33	116348	500.0	543.9	M
71 Methyl methacrylate	69	8.567	8.567	0.000	92	314713	10.0	9.94	
73 Dibromomethane	93	8.591	8.591	0.000	96	275323	10.0	9.72	
75 Dichlorobromomethane	83	8.829	8.829	0.000	100	706255	10.0	9.97	
76 2-Nitropropane	41	9.110	9.110	0.000	98	899063	100.0	100.1	
79 1-Bromo-2-chloroethane	63	9.219	9.219	0.000	99	632658	10.0	9.66	
80 cis-1,3-Dichloropropene	75	9.378	9.378	0.000	95	901197	10.0	9.80	
81 4-Methyl-2-pentanone (MIBK)	43	9.561	9.561	0.000	97	4346527	100.0	100.0	
\$ 82 Toluene-d8 (Surr)	98	9.689	9.689	0.000	94	2179039	10.0	9.98	
83 Toluene	92	9.762	9.762	0.000	97	1376073	10.0	9.70	
84 trans-1,3-Dichloropropene	75	10.024	10.024	0.000	94	765518	10.0	10.0	
85 Ethyl methacrylate	69	10.085	10.085	0.000	91	683673	10.0	9.94	
86 1,1,2-Trichloroethane	97	10.231	10.231	0.000	90	398053	10.0	9.62	
88 Tetrachloroethene	166	10.311	10.311	0.000	98	602059	10.0	9.79	
89 1,3-Dichloropropane	76	10.390	10.390	0.000	92	720295	10.0	9.65	
91 2-Hexanone	43	10.451	10.451	0.000	98	3134600	100.0	100.3	
93 Chlorodibromomethane	129	10.603	10.603	0.000	90	497877	10.0	10.1	
94 Ethylene Dibromide	107	10.713	10.713	0.000	98	396354	10.0	9.76	
* 95 Chlorobenzene-d5 (IS)	117	11.146	11.146	0.000	87	1636269	10.0	10.0	
96 1-Chlorohexane	91	11.158	11.158	0.000	98	791218	10.0	9.29	
97 Chlorobenzene	112	11.176	11.176	0.000	94	1541301	10.0	9.76	
98 1,1,1,2-Tetrachloroethane	131	11.256	11.256	0.000	95	561469	10.0	10.0	
99 Ethylbenzene	91	11.262	11.262	0.000	99	2703437	10.0	9.65	
100 m-Xylene & p-Xylene	106	11.377	11.377	0.000	97	2069783	20.0	19.6	
102 o-Xylene	106	11.707	11.707	0.000	97	1022577	10.0	9.76	
103 Styrene	104	11.719	11.719	0.000	95	1745400	10.0	9.78	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
104 Bromoform	173	11.877	11.877	0.000	97	304248	10.0	10.6	
105 Isopropylbenzene	105	12.005	12.005	0.000	96	2679183	10.0	9.78	
\$ 108 4-Bromofluorobenzene (Surr)	95	12.146	12.146	0.000	89	829357	10.0	9.95	
109 1,1,2,2-Tetrachloroethane	83	12.255	12.255	0.000	92	553642	10.0	9.91	
110 Bromobenzene	156	12.268	12.268	0.000	95	654760	10.0	9.77	
111 trans-1,4-Dichloro-2-butene	53	12.280	12.280	0.000	92	1457770	100.0	108.1	
112 1,2,3-Trichloropropane	110	12.298	12.298	0.000	80	138980	10.0	9.76	
113 N-Propylbenzene	91	12.335	12.335	0.000	99	3236978	10.0	9.68	
114 2-Chlorotoluene	126	12.414	12.414	0.000	96	635163	10.0	9.66	
115 1,3,5-Trimethylbenzene	105	12.469	12.469	0.000	94	2319655	10.0	9.84	
116 4-Chlorotoluene	126	12.505	12.505	0.000	98	665842	10.0	9.71	
118 tert-Butylbenzene	134	12.713	12.713	0.000	93	490248	10.0	9.74	
120 Pentachloroethane	167	12.743	12.743	0.000	92	427979	10.0	9.89	
119 1,2,4-Trimethylbenzene	105	12.755	12.755	0.000	97	2411281	10.0	9.79	
121 sec-Butylbenzene	105	12.877	12.877	0.000	94	2999448	10.0	9.78	
122 1,3-Dichlorobenzene	146	12.975	12.975	0.000	98	1310582	10.0	9.69	
123 4-Isopropyltoluene	119	12.981	12.981	0.000	97	2609529	10.0	9.79	
* 124 1,4-Dichlorobenzene-d4	152	13.030	13.030	0.000	94	888382	10.0	10.0	
125 1,4-Dichlorobenzene	146	13.048	13.048	0.000	94	1327411	10.0	9.64	
126 1,2,3-Trimethylbenzene	120	13.060	13.060	0.000	98	1037654	10.0	9.50	
127 Benzyl chloride	126	13.127	13.127	0.000	99	241370	10.0	10.0	
129 p-Diethylbenzene	119	13.182	13.182	0.000	92	1562547	10.0	9.65	
130 n-Butylbenzene	92	13.273	13.273	0.000	98	1374780	10.0	9.74	
131 1,2-Dichlorobenzene	146	13.310	13.310	0.000	98	1221855	10.0	9.69	
134 1,2-Dibromo-3-Chloropropane	155	13.853	13.853	0.000	87	81816	10.0	10.1	
135 1,3,5-Trichlorobenzene	180	13.975	13.975	0.000	98	1106187	10.0	9.76	
136 1,2,4-Trichlorobenzene	180	14.395	14.395	0.000	94	1016153	10.0	9.73	
137 Hexachlorobutadiene	225	14.481	14.481	0.000	96	494492	10.0	9.65	
138 Naphthalene	128	14.578	14.578	0.000	97	1828996	10.0	9.63	
139 1,2,3-Trichlorobenzene	180	14.718	14.718	0.000	96	888658	10.0	9.64	
140 2-Methylnaphthalene	142	15.340	15.340	0.000	92	1290648	10.0	9.50	

QC Flag Legend

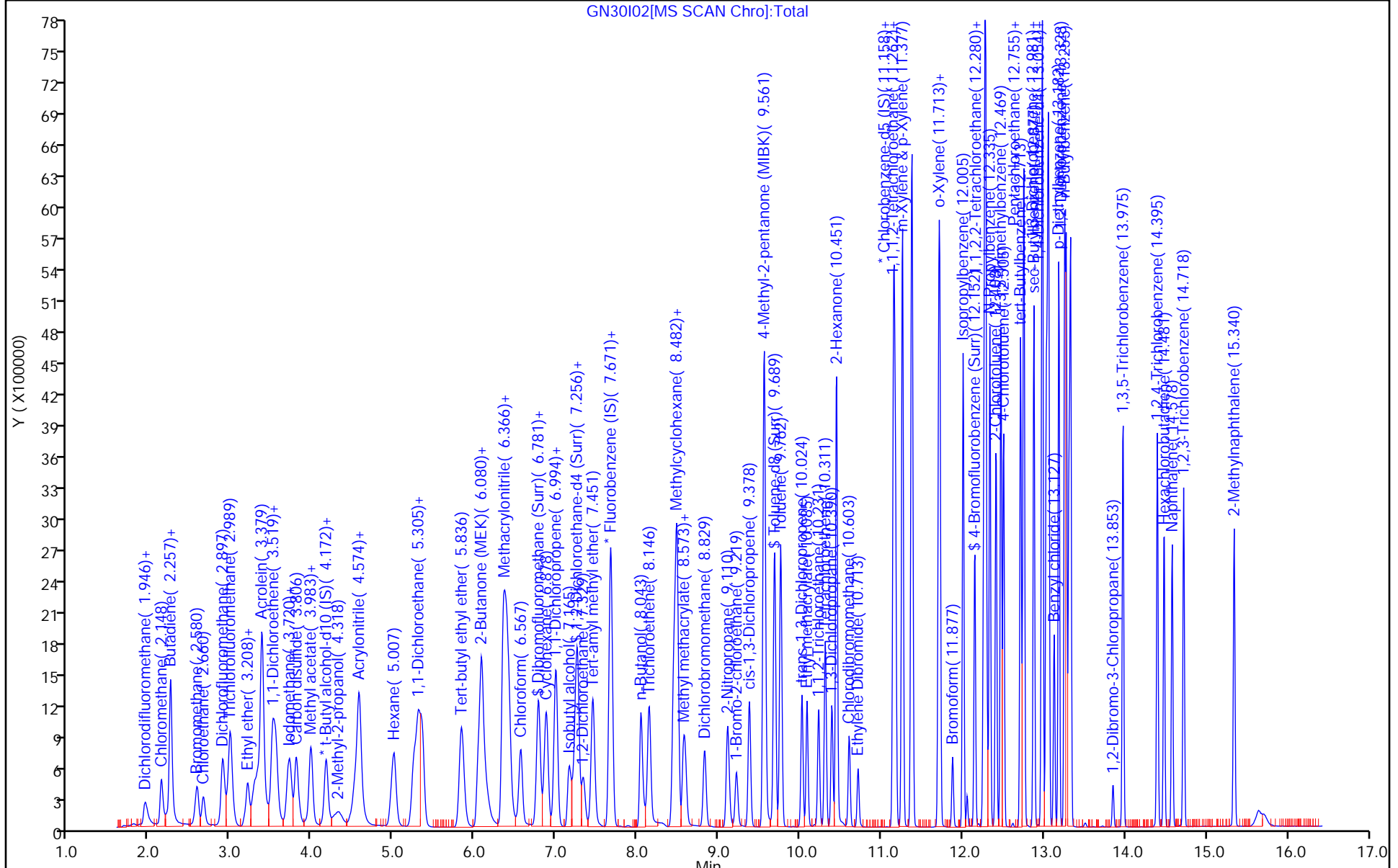
Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MSV_RV1_826_00031	Amount Added: 10.00	Units: uL	
MSV_RV4GAS826_00097	Amount Added: 10.00	Units: uL	
MSV_RV4_826_00035	Amount Added: 10.00	Units: uL	
MSV_29_826ISS_00013	Amount Added: 1.00	Units: uL	Run Reagent



Eurofins Lancaster Laboratories Env, LLC

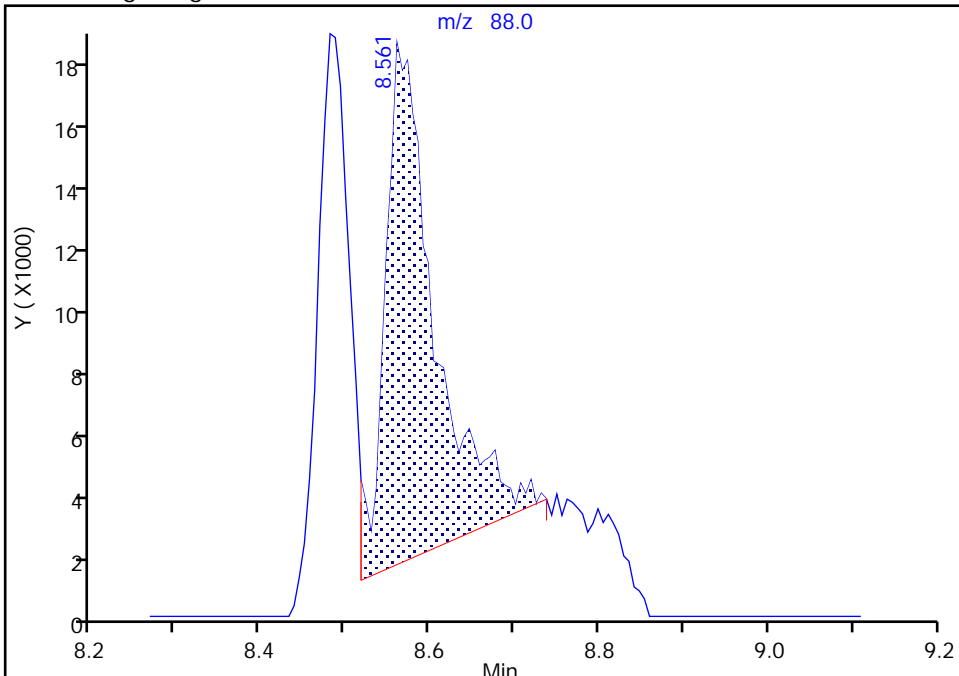
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Injection Date: 30-Nov-2020 13:12:30 Instrument ID: 16334
Lims ID: ICIS std6
Client ID:
Operator ID: DVV10203 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

72 1,4-Dioxane, CAS: 123-91-1

Signal: 1

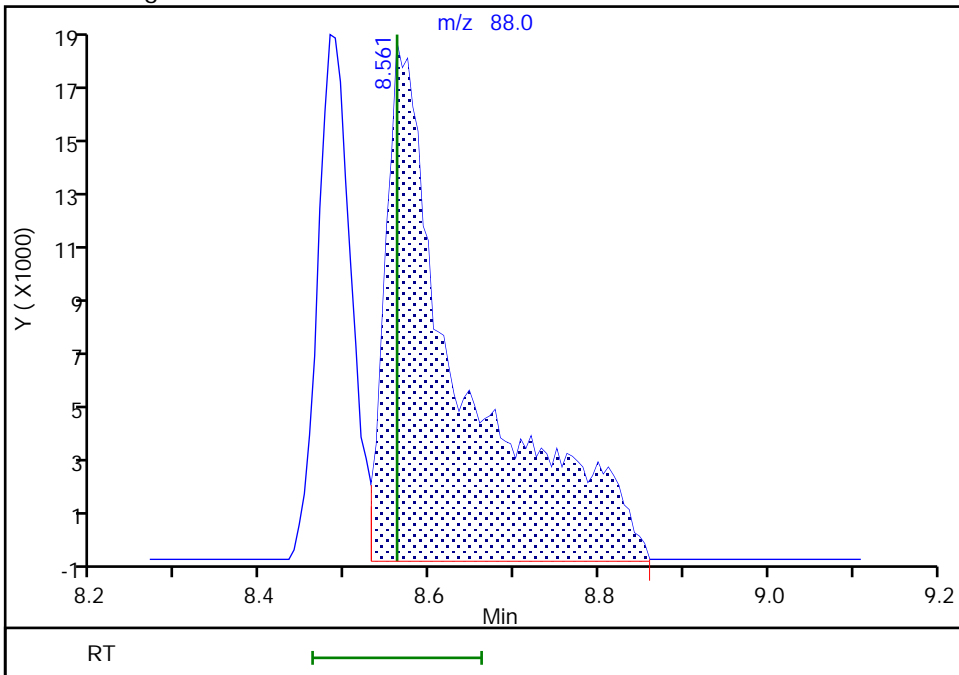
RT: 8.56
Area: 66720
Amount: 408.4380
Amount Units: ug/l

Processing Integration Results



RT: 8.56
Area: 116348
Amount: 543.8519
Amount Units: ug/l

Manual Integration Results



Reviewer: virayd, 01-Dec-2020 11:45:41
Audit Action: Manually Integrated

Audit Reason: Other

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I03.D
 Lims ID: IC std5
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 30-Nov-2020 13:34:30 ALS Bottle#: 4 Worklist Smp#: 5
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0016641-005
 Misc. Info.: IC STD5
 Operator ID: DVV10203 Instrument ID: 16334
 Sublist: chrom-MSV_16334_25mL*sub4
 Method: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\MSV_16334_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 01-Dec-2020 18:57:21 Calib Date: 30-Nov-2020 18:23:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1610

First Level Reviewer: virayd

Date: 01-Dec-2020 11:48:14

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.941	1.952	-0.011	99	285502	5.00	4.93	
5 Chloromethane	50	2.136	2.148	-0.012	99	368365	5.00	4.72	
6 Butadiene	39	2.245	2.257	-0.012	96	400995	5.00	4.51	
7 Vinyl chloride	62	2.251	2.257	-0.006	97	322069	5.00	4.83	
9 Bromomethane	94	2.575	2.580	-0.005	90	221448	5.00	4.77	
10 Chloroethane	64	2.654	2.660	-0.006	100	196409	5.00	4.86	
11 Dichlorofluoromethane	67	2.892	2.897	-0.005	97	427842	5.00	4.72	
13 Trichlorofluoromethane	101	2.965	2.971	-0.006	97	385200	5.00	5.02	
15 Ethyl ether	59	3.202	3.208	-0.006	95	218165	5.00	4.82	
16 1,2-Dichloro-1,1,2-trifluoroethane	67	3.294	3.294	0.000	94	302034	5.00	4.82	
18 Acrolein	56	3.373	3.379	-0.006	99	1726399	250.0	248.1	
19 1,1-Dichloroethene	96	3.507	3.513	-0.006	98	226327	5.00	4.88	
21 112TCTFE	101	3.544	3.550	-0.006	92	243555	5.00	5.37	
20 Acetone	43	3.544	3.550	-0.006	100	406309	50.0	45.2	
22 Iodomethane	142	3.696	3.702	-0.006	98	426388	5.00	4.92	
23 Isopropyl alcohol	45	3.715	3.727	-0.012	96	158997	100.0	90.1	
24 Ethyl bromide	108	3.727	3.733	-0.006	98	200380	5.00	4.96	
25 Carbon disulfide	76	3.794	3.806	-0.012	99	845631	5.00	4.95	
26 Methyl acetate	43	3.958	3.964	-0.006	98	130819	5.00	4.80	
27 3-Chloro-1-propene	41	3.977	3.989	-0.012	93	443750	5.00	4.78	
28 Methylene Chloride	84	4.166	4.172	-0.006	94	260868	5.00	4.91	
* 29 t-Butyl alcohol-d10 (IS)	65	4.178	4.208	-0.030	0	183343	50.0	50.0	
30 2-Methyl-2-propanol	59	4.306	4.318	-0.012	100	325105	100.0	98.6	M
31 Acrylonitrile	53	4.513	4.519	-0.006	98	296709	25.0	25.5	
32 Methyl tert-butyl ether	73	4.562	4.574	-0.012	95	716859	5.00	4.87	
33 trans-1,2-Dichloroethene	96	4.568	4.580	-0.012	97	258856	5.00	4.85	
34 Hexane	57	5.001	5.007	-0.006	94	411619	5.00	5.29	
36 1,1-Dichloroethane	63	5.239	5.245	-0.006	96	485770	5.00	4.90	
37 Isopropyl ether	45	5.294	5.299	-0.005	96	980101	5.00	4.86	
38 2-Chloro-1,3-butadiene	53	5.342	5.354	-0.012	91	441551	5.00	4.90	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
39 Tert-butyl ethyl ether	59	5.830	5.836	-0.006	99	903460	5.00	4.92	
40 2-Butanone (MEK)	43	6.037	6.043	-0.006	100	828352	50.0	49.7	
41 cis-1,2-Dichloroethene	96	6.080	6.080	0.000	83	293028	5.00	4.89	
42 2,2-Dichloropropane	77	6.086	6.092	-0.006	88	407651	5.00	4.91	
44 Propionitrile	54	6.147	6.147	0.000	99	406595	100.0	98.4	
S 49 1,2-Dichloroethene, Total	100				0			9.74	
46 Methacrylonitrile	67	6.348	6.354	-0.006	94	766425	50.0	50.0	
48 Chlorobromomethane	128	6.403	6.409	-0.006	69	130627	5.00	4.89	
47 Tetrahydrofuran	71	6.403	6.421	-0.018	82	215770	50.0	50.1	
50 Chloroform	83	6.556	6.561	-0.005	93	467191	5.00	4.89	
\$ 52 Dibromofluoromethane (Surr)	113	6.775	6.781	-0.006	94	540338	10.0	10.0	
51 1,1,1-Trichloroethane	97	6.781	6.787	-0.006	98	396057	5.00	4.85	
53 Cyclohexane	56	6.879	6.878	0.001	92	485144	5.00	5.17	
56 Carbon tetrachloride	117	6.988	6.988	0.000	97	346656	5.00	4.89	
55 1,1-Dichloropropene	75	6.994	7.000	-0.006	97	375317	5.00	4.89	
57 Isobutyl alcohol	41	7.153	7.159	-0.006	95	292232	250.0	232.2	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.226	7.238	-0.012	0	113626	10.0	9.91	
59 Benzene	78	7.263	7.262	0.001	97	1100869	5.00	4.87	
60 1,2-Dichloroethane	62	7.330	7.336	-0.006	97	295549	5.00	4.67	M
62 Tert-amyl methyl ether	73	7.446	7.451	-0.005	98	788786	5.00	4.87	
* 63 Fluorobenzene (IS)	96	7.665	7.671	-0.006	98	2225560	10.0	10.0	
64 n-Heptane	43	7.671	7.677	-0.006	94	463712	5.00	5.28	
65 n-Butanol	56	8.043	8.043	0.000	89	586370	500.0	495.0	
67 Trichloroethene	95	8.141	8.146	-0.005	99	278479	5.00	4.82	
68 Methylcyclohexane	83	8.445	8.451	-0.006	94	457689	5.00	5.10	
69 1,2-Dichloropropane	63	8.476	8.482	-0.006	97	292517	5.00	4.83	
70 2-ethoxy-2-methyl butane	87	8.482	8.488	-0.006	91	435122	5.00	4.92	
72 1,4-Dioxane	88	8.573	8.561	0.012	33	57308	250.0	271.9	M
71 Methyl methacrylate	69	8.567	8.567	0.000	92	157779	5.00	5.06	
73 Dibromomethane	93	8.586	8.591	-0.005	96	135590	5.00	4.83	
75 Dichlorobromomethane	83	8.823	8.829	-0.006	100	343988	5.00	4.90	
76 2-Nitropropane	41	9.110	9.110	0.000	97	446843	50.0	50.5	
79 1-Bromo-2-chloroethane	63	9.214	9.219	-0.005	98	323185	5.00	4.98	
80 cis-1,3-Dichloropropene	75	9.372	9.378	-0.006	95	449091	5.00	4.93	
81 4-Methyl-2-pentanone (MIBK)	43	9.555	9.561	-0.006	97	2154238	50.0	50.3	
\$ 82 Toluene-d8 (Surr)	98	9.683	9.689	-0.006	94	2162628	10.0	10.1	
83 Toluene	92	9.762	9.762	0.000	98	683495	5.00	4.89	
84 trans-1,3-Dichloropropene	75	10.024	10.024	0.000	94	378649	5.00	5.02	
S 87 1,3-Dichloropropene, Total	100				0			9.95	
85 Ethyl methacrylate	69	10.085	10.085	0.000	91	332561	5.00	4.91	
86 1,1,2-Trichloroethane	97	10.232	10.231	0.001	90	197601	5.00	4.85	
88 Tetrachloroethene	166	10.311	10.311	0.000	97	298979	5.00	4.93	
89 1,3-Dichloropropane	76	10.390	10.390	0.000	92	358460	5.00	4.88	
91 2-Hexanone	43	10.445	10.451	-0.006	98	1570233	50.0	51.0	
93 Chlorodibromomethane	129	10.603	10.603	0.000	91	243007	5.00	5.03	
94 Ethylene Dibromide	107	10.713	10.713	0.000	98	196846	5.00	4.92	
* 95 Chlorobenzene-d5 (IS)	117	11.146	11.146	0.000	86	1611346	10.0	10.0	
96 1-Chlorohexane	91	11.158	11.158	0.000	98	396805	5.00	4.73	
97 Chlorobenzene	112	11.170	11.176	-0.006	94	760248	5.00	4.89	
S 101 Xylenes, Total	106				0			14.8	
98 1,1,1,2-Tetrachloroethane	131	11.256	11.256	0.000	96	275804	5.00	4.99	
99 Ethylbenzene	91	11.262	11.262	0.000	99	1345750	5.00	4.88	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
100 m-Xylene & p-Xylene	106	11.372	11.377	-0.005	97	1025168	10.0	9.86	
102 o-Xylene	106	11.707	11.707	0.000	97	504969	5.00	4.90	
103 Styrene	104	11.719	11.719	0.000	94	861952	5.00	4.90	
104 Bromoform	173	11.878	11.877	0.001	97	146803	5.00	5.20	
105 Isopropylbenzene	105	12.006	12.005	0.001	96	1331001	5.00	4.93	
\$ 108 4-Bromofluorobenzene (Surr)	95	12.146	12.146	0.000	89	820021	10.0	10.0	
109 1,1,2,2-Tetrachloroethane	83	12.256	12.255	0.001	91	273837	5.00	4.96	
110 Bromobenzene	156	12.268	12.268	0.000	95	320859	5.00	4.84	
111 trans-1,4-Dichloro-2-butene	53	12.280	12.280	0.000	91	701899	50.0	52.8	
112 1,2,3-Trichloropropane	110	12.298	12.298	0.000	79	67388	5.00	4.79	
113 N-Propylbenzene	91	12.335	12.335	0.000	99	1623321	5.00	4.91	
114 2-Chlorotoluene	126	12.408	12.414	-0.006	96	316960	5.00	4.87	
115 1,3,5-Trimethylbenzene	105	12.469	12.469	0.000	94	1154535	5.00	4.95	
116 4-Chlorotoluene	126	12.506	12.505	0.001	98	329404	5.00	4.86	
118 tert-Butylbenzene	134	12.713	12.713	0.000	93	244744	5.00	4.91	
120 Pentachloroethane	167	12.743	12.743	0.000	90	213871	5.00	4.99	
119 1,2,4-Trimethylbenzene	105	12.756	12.755	0.001	97	1190575	5.00	4.89	
121 sec-Butylbenzene	105	12.877	12.877	0.000	94	1489422	5.00	4.91	
122 1,3-Dichlorobenzene	146	12.975	12.975	0.000	98	650429	5.00	4.86	
123 4-Isopropyltoluene	119	12.981	12.981	0.000	97	1294886	5.00	4.91	
* 124 1,4-Dichlorobenzene-d4	152	13.030	13.030	0.000	95	878834	10.0	10.0	
125 1,4-Dichlorobenzene	146	13.048	13.048	0.000	94	664687	5.00	4.88	
126 1,2,3-Trimethylbenzene	120	13.060	13.060	0.000	99	518339	5.00	4.80	
127 Benzyl chloride	126	13.127	13.127	0.000	98	119235	5.00	4.99	
129 p-Diethylbenzene	119	13.182	13.182	0.000	92	785877	5.00	4.91	
130 n-Butylbenzene	92	13.274	13.273	0.001	96	677396	5.00	4.85	
131 1,2-Dichlorobenzene	146	13.310	13.310	0.000	98	604314	5.00	4.84	
134 1,2-Dibromo-3-Chloropropane	155	13.853	13.853	0.000	85	38959	5.00	4.84	
135 1,3,5-Trichlorobenzene	180	13.975	13.975	0.000	98	546533	5.00	4.88	
136 1,2,4-Trichlorobenzene	180	14.395	14.395	0.000	94	499550	5.00	4.84	
137 Hexachlorobutadiene	225	14.481	14.481	0.000	97	245031	5.00	4.83	
138 Naphthalene	128	14.578	14.578	0.000	97	907383	5.00	4.83	
139 1,2,3-Trichlorobenzene	180	14.719	14.718	0.001	95	436916	5.00	4.79	
140 2-Methylnaphthalene	142	15.340	15.340	0.000	92	648031	5.00	4.82	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MSV_RV1_826_00031

Amount Added: 5.00

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MSV_RV4GAS826_00097

Amount Added: 5.00

Units: uL

MSV_RV4_826_00035

Amount Added: 5.00

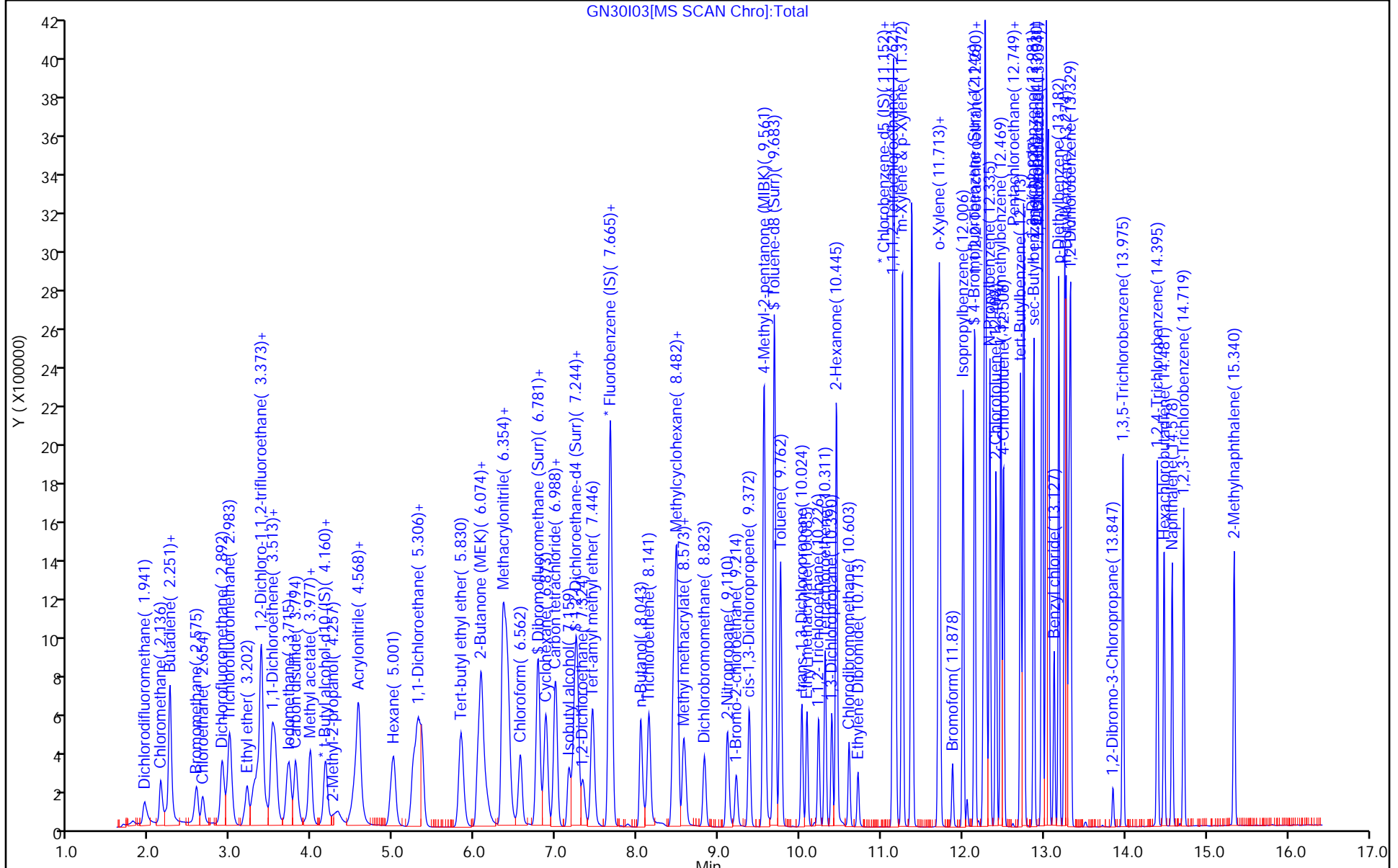
Units: uL

MSV_29_826ISS_00013

Amount Added: 1.00

Units: uL

Run Reagent



GN30I03[MS SCAN Chrom]:Total

Euofins Lancaster Laboratories Env, LLC

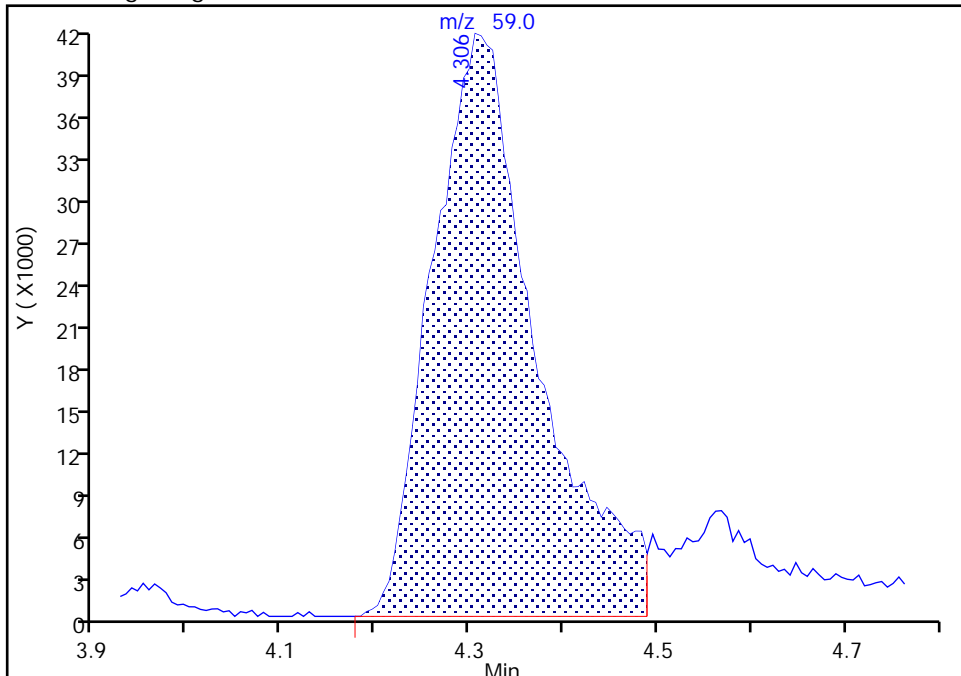
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Injection Date: 30-Nov-2020 13:34:30 Instrument ID: 16334
Lims ID: IC std5
Client ID:
Operator ID: DVV10203 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25 mm ID) Detector: MS Quad

30 2-Methyl-2-propanol, CAS: 75-65-0

Signal: 1

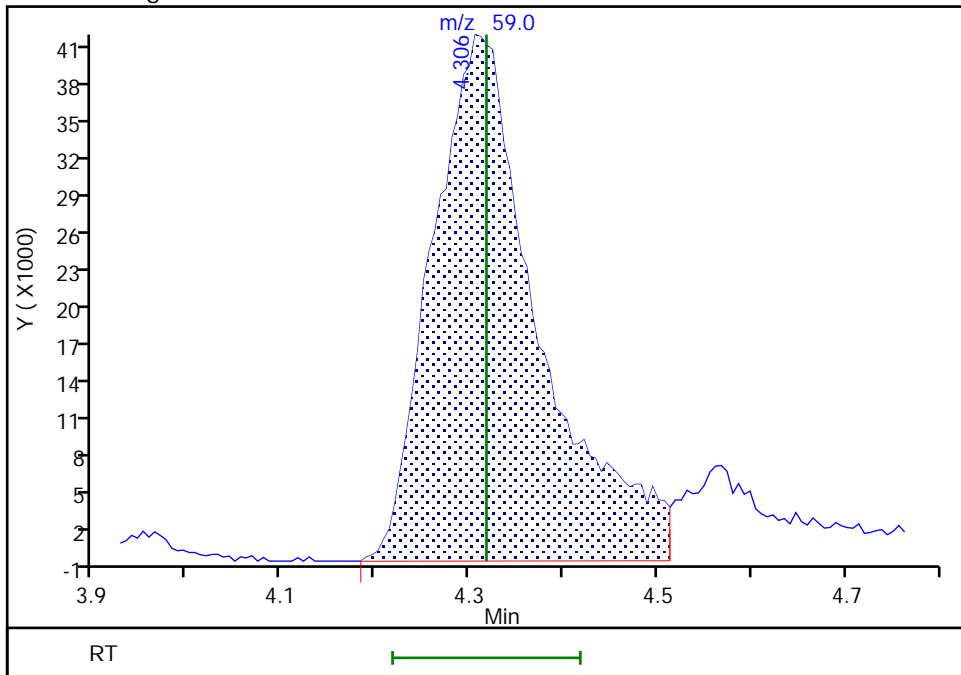
RT: 4.31
Area: 318169
Amount: 99.986734
Amount Units: ug/l

Processing Integration Results



RT: 4.31
Area: 325105
Amount: 98.618521
Amount Units: ug/l

Manual Integration Results



Reviewer: virayd, 01-Dec-2020 11:47:24
Audit Action: Manually Integrated

Audit Reason: Other

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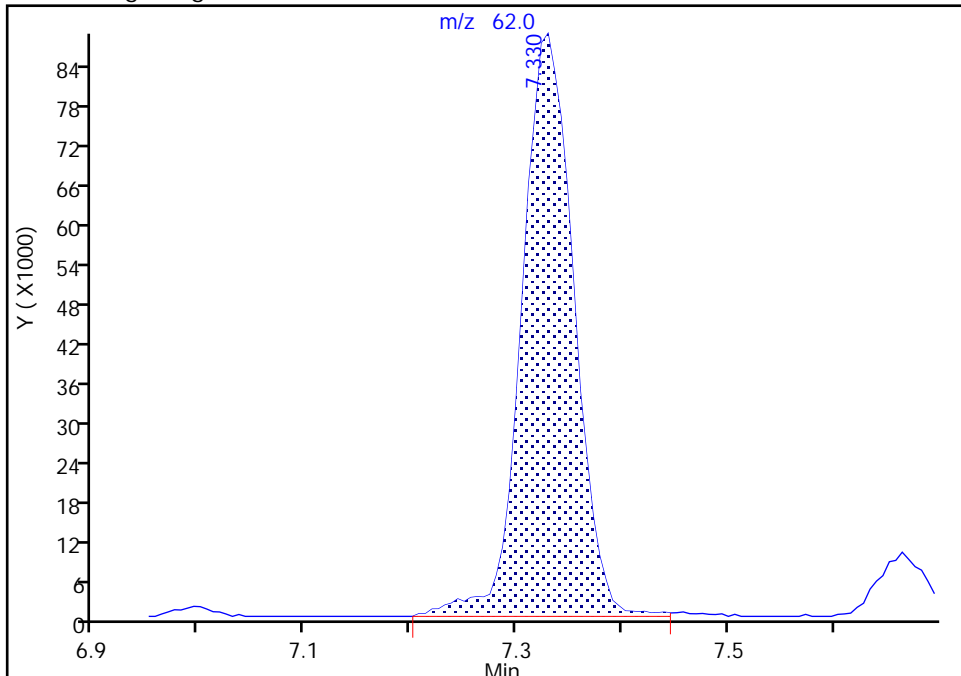
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Injection Date: 30-Nov-2020 13:34:30 Instrument ID: 16334
Lims ID: IC std5
Client ID:
Operator ID: DVV10203 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

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

Signal: 1

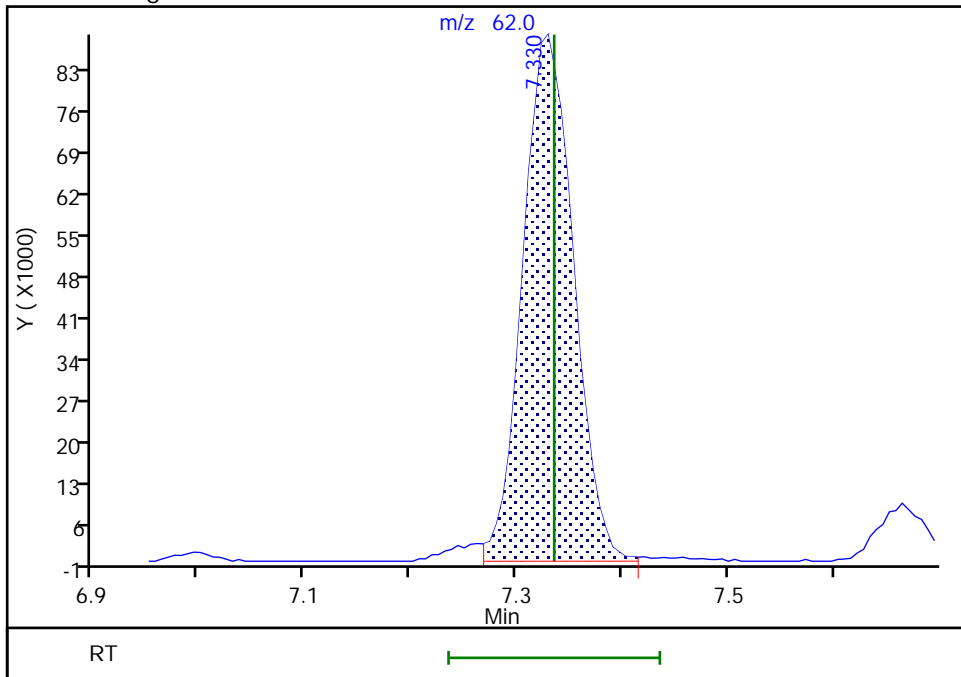
RT: 7.33
Area: 303046
Amount: 4.773793
Amount Units: ug/l

Processing Integration Results



RT: 7.33
Area: 295549
Amount: 4.671457
Amount Units: ug/l

Manual Integration Results



Reviewer: virayd, 01-Dec-2020 11:47:41
Audit Action: Manually Integrated

Audit Reason: Other

Eurofins Lancaster Laboratories Env, LLC

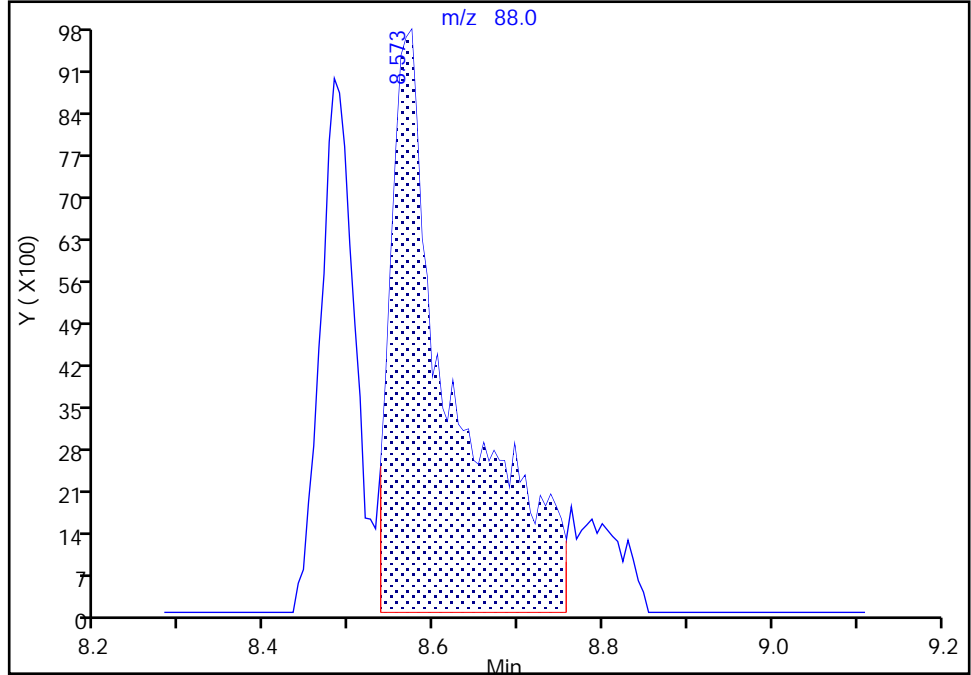
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Injection Date: 30-Nov-2020 13:34:30 Instrument ID: 16334
Lims ID: IC std5
Client ID:
Operator ID: DVV10203 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

72 1,4-Dioxane, CAS: 123-91-1

Signal: 1

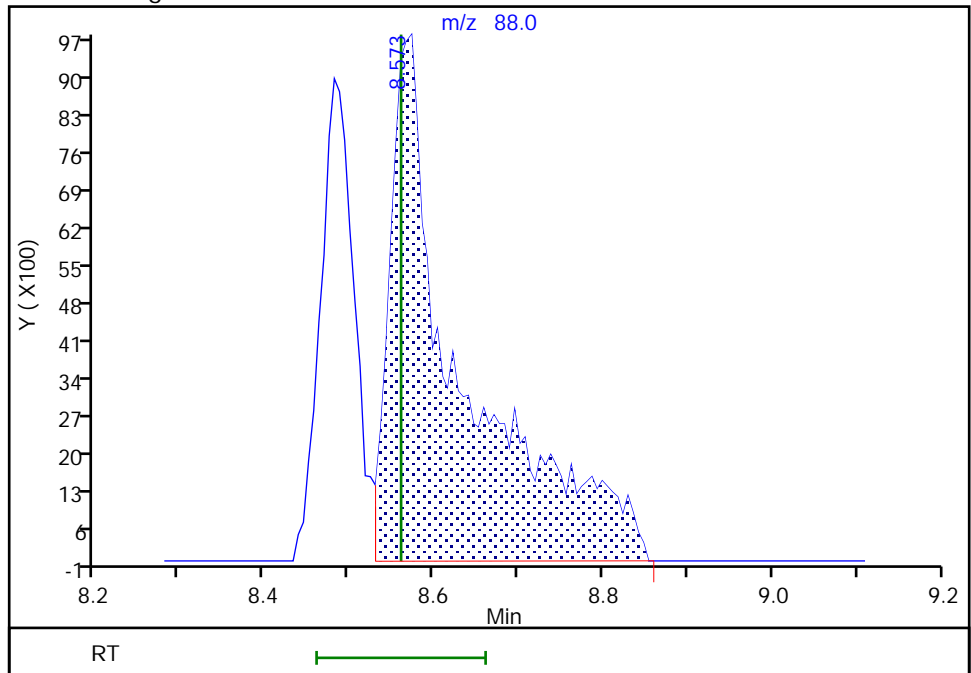
RT: 8.57
Area: 50236
Amount: 287.2121
Amount Units: ug/l

Processing Integration Results



RT: 8.57
Area: 57308
Amount: 271.8974
Amount Units: ug/l

Manual Integration Results



Reviewer: virayd, 01-Dec-2020 11:47:52
Audit Action: Manually Integrated

Audit Reason: Other

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I04.D
 Lims ID: IC std4
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 30-Nov-2020 13:56:30 ALS Bottle#: 5 Worklist Smp#: 6
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0016641-006
 Misc. Info.: IC STD4
 Operator ID: DVV10203 Instrument ID: 16334
 Sublist: chrom-MSV_16334_25mL*sub4
 Method: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\MSV_16334_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 01-Dec-2020 18:57:32 Calib Date: 30-Nov-2020 18:23:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1610

First Level Reviewer: virayd

Date: 01-Dec-2020 11:50:29

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.953	1.953	0.000	99	119710	2.00	2.08	
5 Chloromethane	50	2.148	2.148	0.000	99	154159	2.00	1.99	
6 Butadiene	39	2.264	2.264	0.000	95	172137	2.00	1.95	
7 Vinyl chloride	62	2.270	2.270	0.000	98	134133	2.00	2.03	
9 Bromomethane	94	2.593	2.593	0.000	90	92413	2.00	2.00	
10 Chloroethane	64	2.666	2.666	0.000	99	81099	2.00	2.02	
11 Dichlorofluoromethane	67	2.904	2.904	0.000	97	177022	2.00	1.97	
13 Trichlorofluoromethane	101	2.977	2.977	0.000	97	160183	2.00	2.10	
15 Ethyl ether	59	3.208	3.208	0.000	94	93021	2.00	2.07	
16 1,2-Dichloro-1,1,2-trifluoroethane	67	3.300	3.300	0.000	95	124813	2.00	2.00	
18 Acrolein	56	3.385	3.385	0.000	99	734398	100.0	99.1	
19 1,1-Dichloroethene	96	3.519	3.519	0.000	97	90732	2.00	1.97	
21 112TCTFE	101	3.556	3.556	0.000	92	97294	2.00	2.16	
20 Acetone	43	3.562	3.562	0.000	99	173204	20.0	18.1	
22 Iodomethane	142	3.714	3.714	0.000	98	173875	2.00	2.02	
23 Isopropyl alcohol	45	3.727	3.727	0.000	45	68119	40.0	38.9	
24 Ethyl bromide	108	3.739	3.739	0.000	98	81572	2.00	2.03	
25 Carbon disulfide	76	3.812	3.812	0.000	99	343343	2.00	2.02	
26 Methyl acetate	43	3.971	3.971	0.000	99	58429	2.00	2.01	M
27 3-Chloro-1-propene	41	3.989	3.989	0.000	93	183197	2.00	1.99	
28 Methylene Chloride	84	4.178	4.178	0.000	94	108056	2.00	2.05	
* 29 t-Butyl alcohol-d10 (IS)	65	4.214	4.214	0.000	0	195329	50.0	50.0	
30 2-Methyl-2-propanol	59	4.336	4.336	0.000	100	140629	40.0	40.0	M
31 Acrylonitrile	53	4.525	4.525	0.000	98	120047	10.0	9.68	
32 Methyl tert-butyl ether	73	4.580	4.580	0.000	96	295684	2.00	2.02	
33 trans-1,2-Dichloroethene	96	4.586	4.586	0.000	97	108056	2.00	2.04	
34 Hexane	57	5.007	5.007	0.000	94	166559	2.00	2.16	
36 1,1-Dichloroethane	63	5.251	5.251	0.000	96	198755	2.00	2.02	
37 Isopropyl ether	45	5.306	5.306	0.000	96	403335	2.00	2.02	
38 2-Chloro-1,3-butadiene	53	5.360	5.360	0.000	91	180575	2.00	2.02	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
39 Tert-butyl ethyl ether	59	5.836	5.836	0.000	98	363795	2.00	1.99	
40 2-Butanone (MEK)	43	6.049	6.049	0.000	100	341451	20.0	19.2	
41 cis-1,2-Dichloroethene	96	6.086	6.086	0.000	83	120745	2.00	2.03	
42 2,2-Dichloropropane	77	6.092	6.092	0.000	87	166142	2.00	2.01	
44 Propionitrile	54	6.147	6.147	0.000	99	174294	40.0	39.6	
S 49 1,2-Dichloroethene, Total	100				0			4.07	
46 Methacrylonitrile	67	6.360	6.360	0.000	94	317768	20.0	19.5	
48 Chlorobromomethane	128	6.409	6.409	0.000	68	52433	2.00	1.98	
47 Tetrahydrofuran	71	6.409	6.409	0.000	89	89573	20.0	19.5	
50 Chloroform	83	6.561	6.561	0.000	93	191526	2.00	2.02	
\$ 52 Dibromofluoromethane (Surr)	113	6.781	6.781	0.000	94	536748	10.0	10.0	
51 1,1,1-Trichloroethane	97	6.787	6.787	0.000	97	162606	2.00	2.00	
53 Cyclohexane	56	6.878	6.878	0.000	93	196628	2.00	2.11	
56 Carbon tetrachloride	117	7.000	7.000	0.000	86	141008	2.00	2.00	
55 1,1-Dichloropropene	75	7.000	7.000	0.000	95	155596	2.00	2.04	
57 Isobutyl alcohol	41	7.165	7.165	0.000	95	121267	100.0	97.0	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.232	7.232	0.000	0	114415	10.0	10.1	
59 Benzene	78	7.263	7.263	0.000	95	455295	2.00	2.03	
60 1,2-Dichloroethane	62	7.336	7.336	0.000	97	122885	2.00	1.96	
62 Tert-amyl methyl ether	73	7.458	7.458	0.000	98	324674	2.00	2.02	
* 63 Fluorobenzene (IS)	96	7.671	7.671	0.000	98	2210035	10.0	10.0	
64 n-Heptane	43	7.677	7.677	0.000	93	181073	2.00	2.08	
65 n-Butanol	56	8.049	8.049	0.000	90	248576	200.0	196.9	
67 Trichloroethene	95	8.147	8.147	0.000	99	116383	2.00	2.03	
68 Methylcyclohexane	83	8.451	8.451	0.000	93	182602	2.00	2.05	
69 1,2-Dichloropropane	63	8.482	8.482	0.000	94	119367	2.00	1.99	
70 2-ethoxy-2-methyl butane	87	8.488	8.488	0.000	89	176797	2.00	2.01	
72 1,4-Dioxane	88	8.567	8.567	0.000	33	26270	100.0	117.0	M
71 Methyl methacrylate	69	8.567	8.567	0.000	94	64887	2.00	1.95	
73 Dibromomethane	93	8.585	8.585	0.000	95	55304	2.00	1.99	
75 Dichlorobromomethane	83	8.823	8.823	0.000	100	140150	2.00	2.01	
76 2-Nitropropane	41	9.110	9.110	0.000	98	180791	20.0	19.2	
79 1-Bromo-2-chloroethane	63	9.219	9.219	0.000	99	130329	2.00	2.02	
80 cis-1,3-Dichloropropene	75	9.378	9.378	0.000	95	181945	2.00	2.01	
81 4-Methyl-2-pentanone (MIBK)	43	9.561	9.561	0.000	98	887415	20.0	19.5	
\$ 82 Toluene-d8 (Surr)	98	9.689	9.689	0.000	94	2136446	10.0	9.98	
83 Toluene	92	9.762	9.762	0.000	98	278591	2.00	2.00	
84 trans-1,3-Dichloropropene	75	10.024	10.024	0.000	94	150936	2.00	2.01	
S 87 1,3-Dichloropropene, Total	100				0			4.02	
85 Ethyl methacrylate	69	10.085	10.085	0.000	91	137503	2.00	2.04	
86 1,1,2-Trichloroethane	97	10.231	10.231	0.000	90	81260	2.00	2.00	
88 Tetrachloroethene	166	10.311	10.311	0.000	98	121696	2.00	2.02	
89 1,3-Dichloropropane	76	10.396	10.396	0.000	92	145956	2.00	1.99	
91 2-Hexanone	43	10.451	10.451	0.000	98	645054	20.0	19.7	
93 Chlorodibromomethane	129	10.603	10.603	0.000	90	97381	2.00	2.02	
94 Ethylene Dibromide	107	10.713	10.713	0.000	98	80460	2.00	2.02	
* 95 Chlorobenzene-d5 (IS)	117	11.146	11.146	0.000	87	1604620	10.0	10.0	
96 1-Chlorohexane	91	11.158	11.158	0.000	97	162251	2.00	1.94	
97 Chlorobenzene	112	11.176	11.176	0.000	95	310565	2.00	2.01	
S 101 Xylenes, Total	106				0			6.02	
98 1,1,1,2-Tetrachloroethane	131	11.256	11.256	0.000	95	111642	2.00	2.03	
99 Ethylbenzene	91	11.262	11.262	0.000	99	548965	2.00	2.00	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
100 m-Xylene & p-Xylene	106	11.378	11.378	0.000	97	418534	4.00	4.04	
102 o-Xylene	106	11.707	11.707	0.000	97	203530	2.00	1.98	
103 Styrene	104	11.719	11.719	0.000	95	354894	2.00	2.03	
104 Bromoform	173	11.877	11.877	0.000	97	57245	2.00	2.04	
105 Isopropylbenzene	105	12.006	12.006	0.000	96	542248	2.00	2.02	
\$ 108 4-Bromofluorobenzene (Surr)	95	12.152	12.152	0.000	90	818494	10.0	10.0	
109 1,1,2,2-Tetrachloroethane	83	12.255	12.255	0.000	92	111748	2.00	2.05	
110 Bromobenzene	156	12.268	12.268	0.000	96	132263	2.00	2.02	
111 trans-1,4-Dichloro-2-butene	53	12.280	12.280	0.000	92	278293	20.0	19.7	
112 1,2,3-Trichloropropane	110	12.304	12.304	0.000	83	28491	2.00	2.05	
113 N-Propylbenzene	91	12.335	12.335	0.000	99	661944	2.00	2.02	
114 2-Chlorotoluene	126	12.414	12.414	0.000	96	130139	2.00	2.02	
115 1,3,5-Trimethylbenzene	105	12.469	12.469	0.000	94	466416	2.00	2.02	
116 4-Chlorotoluene	126	12.505	12.505	0.000	98	133168	2.00	1.99	
118 tert-Butylbenzene	134	12.713	12.713	0.000	93	97199	2.00	1.97	
120 Pentachloroethane	167	12.743	12.743	0.000	92	85685	2.00	2.02	
119 1,2,4-Trimethylbenzene	105	12.755	12.755	0.000	97	482620	2.00	2.00	
121 sec-Butylbenzene	105	12.877	12.877	0.000	94	603955	2.00	2.01	
122 1,3-Dichlorobenzene	146	12.975	12.975	0.000	98	266406	2.00	2.01	
123 4-Isopropyltoluene	119	12.981	12.981	0.000	97	518846	2.00	1.99	
* 124 1,4-Dichlorobenzene-d4	152	13.030	13.030	0.000	96	869181	10.0	10.0	
125 1,4-Dichlorobenzene	146	13.048	13.048	0.000	96	271182	2.00	2.01	
126 1,2,3-Trimethylbenzene	120	13.060	13.060	0.000	99	214525	2.00	2.01	
127 Benzyl chloride	126	13.127	13.127	0.000	99	46895	2.00	1.98	
129 p-Diethylbenzene	119	13.182	13.182	0.000	92	319745	2.00	2.02	
130 n-Butylbenzene	92	13.274	13.274	0.000	97	275706	2.00	2.00	
131 1,2-Dichlorobenzene	146	13.310	13.310	0.000	98	249800	2.00	2.02	
134 1,2-Dibromo-3-Chloropropane	155	13.853	13.853	0.000	79	15596	2.00	1.96	
135 1,3,5-Trichlorobenzene	180	13.975	13.975	0.000	98	215623	2.00	1.95	
136 1,2,4-Trichlorobenzene	180	14.395	14.395	0.000	94	202142	2.00	1.98	
137 Hexachlorobutadiene	225	14.481	14.481	0.000	97	96356	2.00	1.92	
138 Naphthalene	128	14.578	14.578	0.000	97	374308	2.00	2.01	
139 1,2,3-Trichlorobenzene	180	14.718	14.718	0.000	95	178820	2.00	1.98	
140 2-Methylnaphthalene	142	15.340	15.340	0.000	92	267358	2.00	2.01	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MSV_RV1_826_00031

Amount Added: 2.00

Units: uL

MSV_RV4GAS826_00097

Amount Added: 2.00

Units: uL

MSV_RV4_826_00035

Amount Added: 2.00

Units: uL

MSV_29_826ISS_00013

Amount Added: 1.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I04.D

Injection Date: 30-Nov-2020 13:56:30

Instrument ID: 16334

Operator ID: DVV10203

Lims ID: IC std4

Worklist Smp#: 6

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

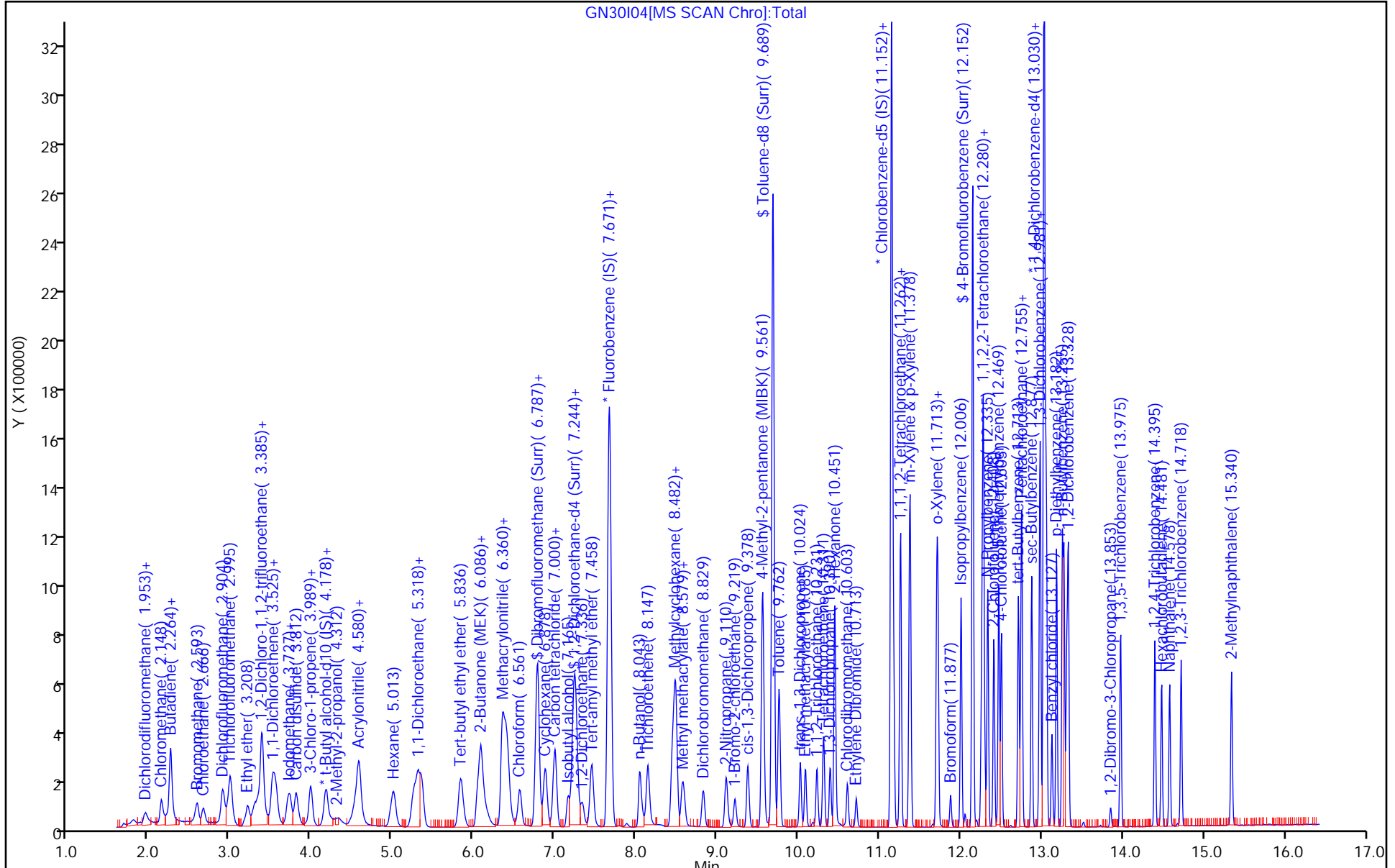
ALS Bottle#: 5

Method: MSV_16334_25mL

Limit Group: MSV - 8260C_D

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

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC

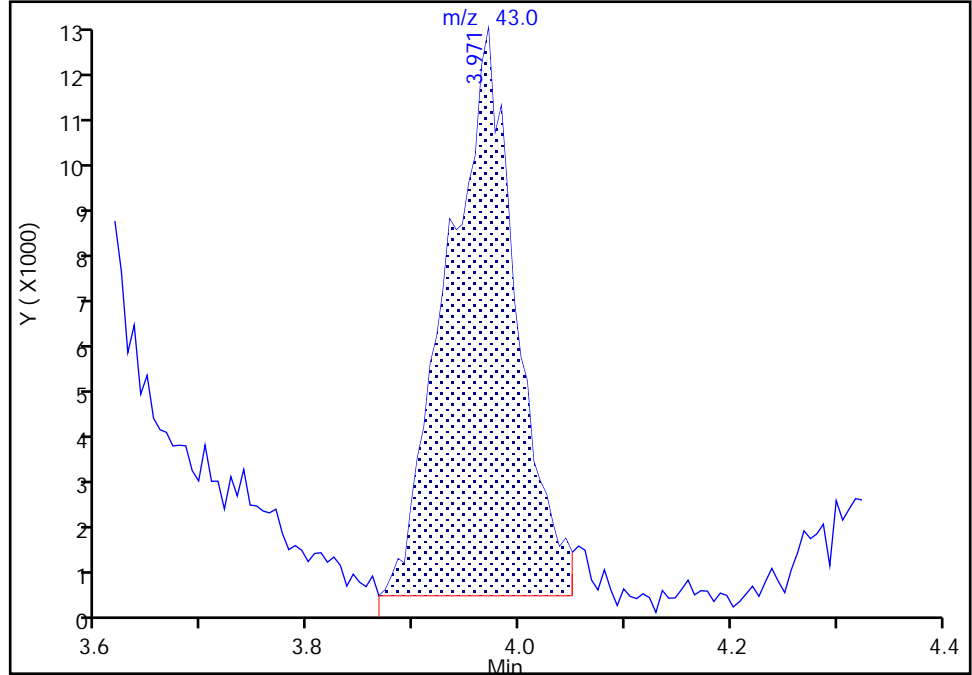
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Injection Date: 30-Nov-2020 13:56:30 Instrument ID: 16334
Lims ID: IC std4
Client ID:
Operator ID: DVV10203 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

26 Methyl acetate, CAS: 79-20-9

Signal: 1

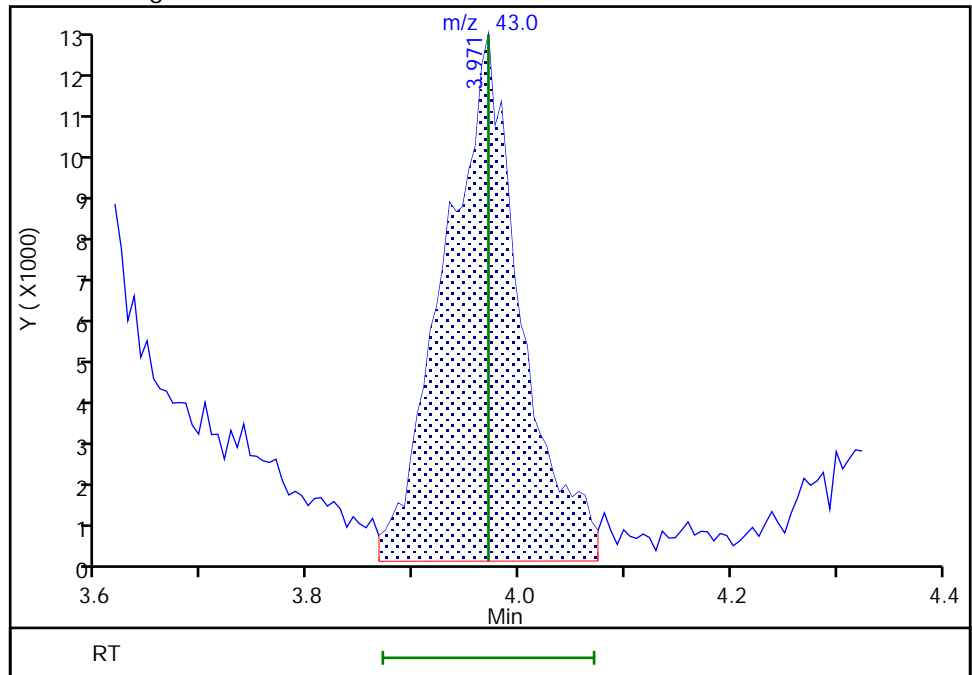
RT: 3.97
Area: 50433
Amount: 2.026094
Amount Units: ug/l

Processing Integration Results



RT: 3.97
Area: 58429
Amount: 2.013897
Amount Units: ug/l

Manual Integration Results



Reviewer: virayd, 01-Dec-2020 11:49:22
Audit Action: Manually Integrated

Audit Reason: Other

Eurofins Lancaster Laboratories Env, LLC

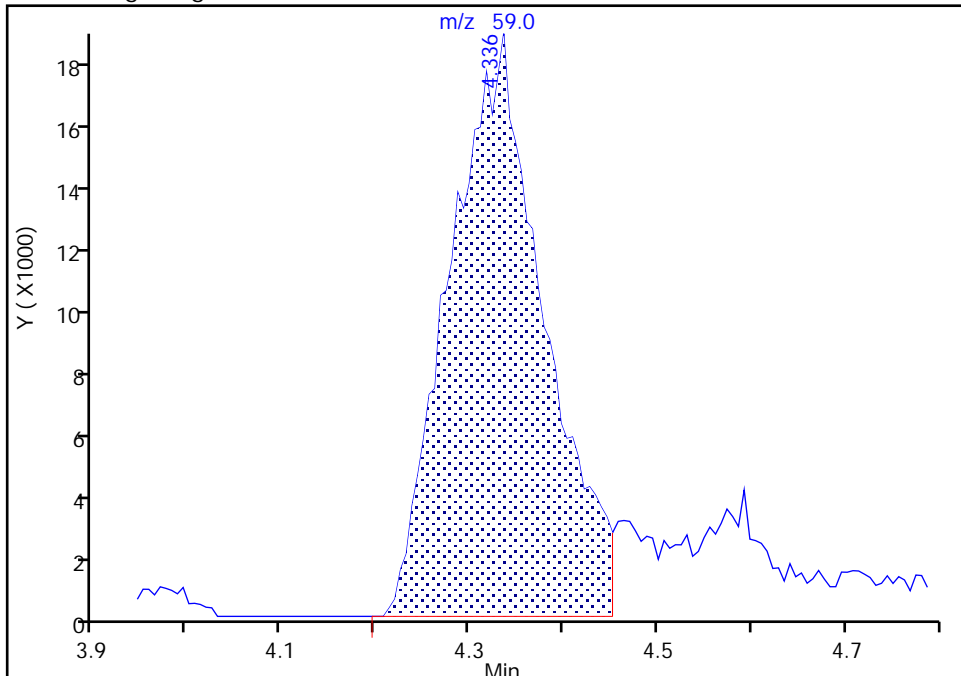
Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I04.D
Injection Date: 30-Nov-2020 13:56:30 Instrument ID: 16334
Lims ID: IC std4
Client ID:
Operator ID: DVV10203 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

30 2-Methyl-2-propanol, CAS: 75-65-0

Signal: 1

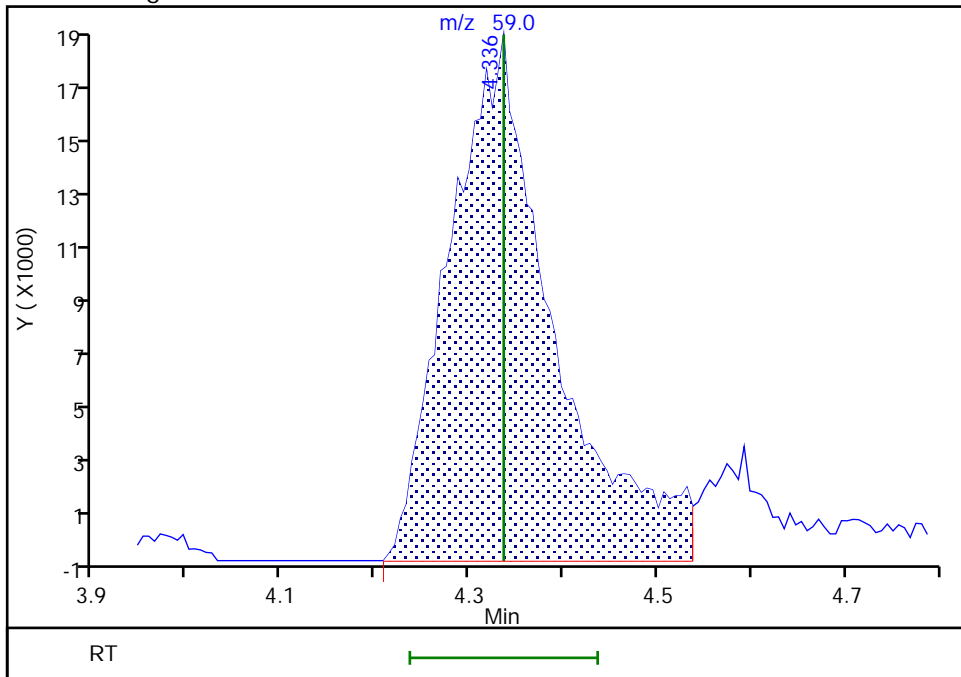
RT: 4.34
Area: 127704
Amount: 37.552288
Amount Units: ug/l

Processing Integration Results



RT: 4.34
Area: 140629
Amount: 40.041223
Amount Units: ug/l

Manual Integration Results



Reviewer: virayd, 01-Dec-2020 11:49:37
Audit Action: Manually Integrated

Audit Reason: Other

Euofins Lancaster Laboratories Env, LLC

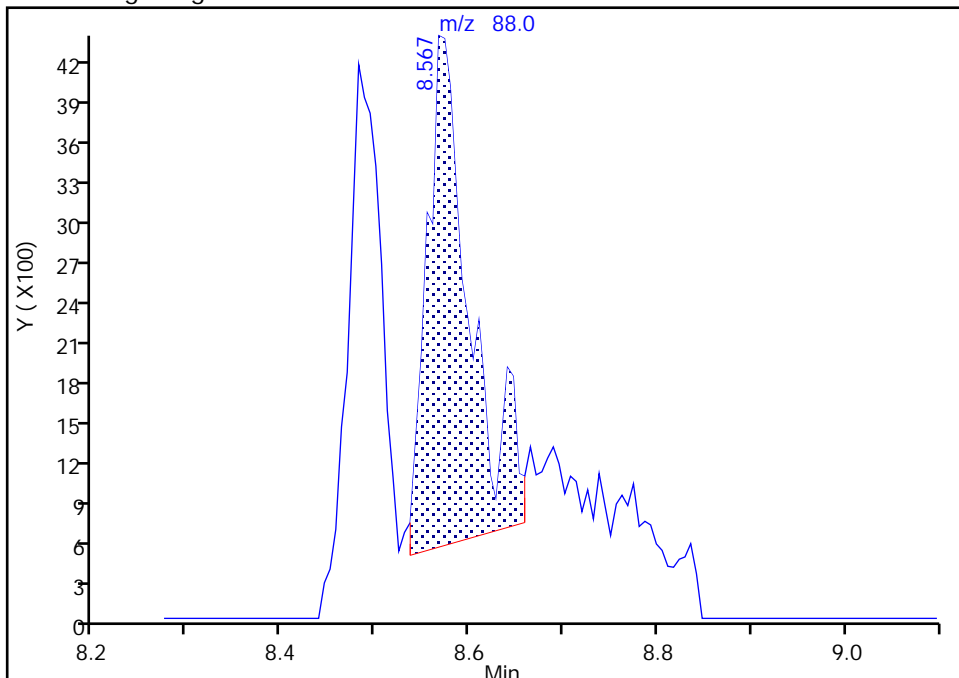
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Injection Date:	30-Nov-2020 13:56:30	Instrument ID:	16334
Lims ID:	IC std4		
Client ID:			
Operator ID:	DVV10203	ALS Bottle#:	5
Purge Vol:	25.000 mL	Dil. Factor:	1.0000
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D
Column:	Rxi-624Sil MS Capillary Column (0.25mm ID)	Detector:	MS Quad
		Worklist Smp#:	6

72 1,4-Dioxane, CAS: 123-91-1

Signal: 1

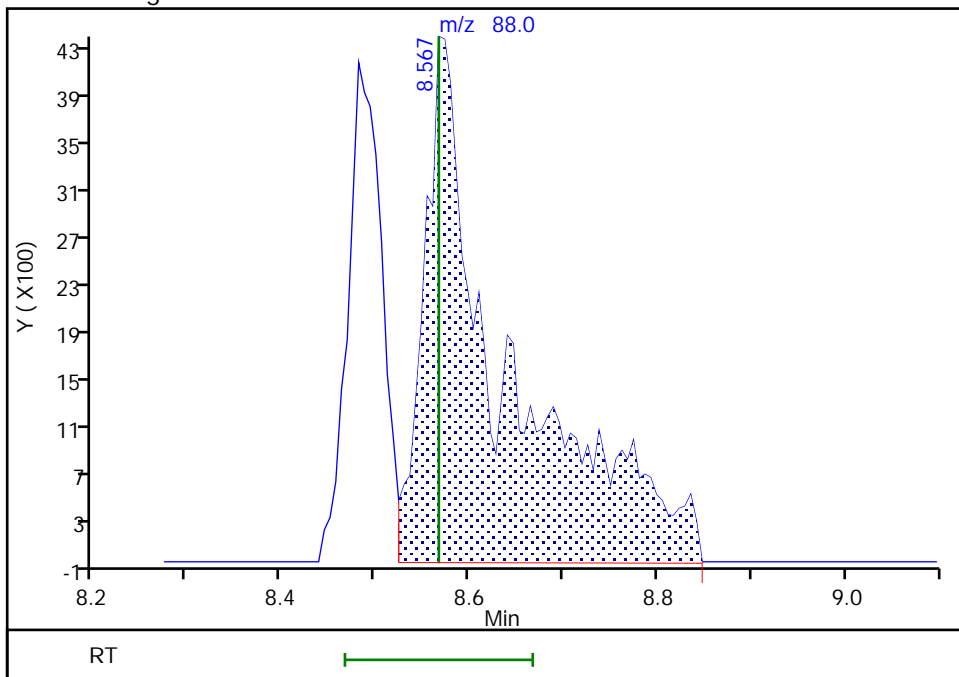
RT: 8.57
 Area: 12148
 Amount: 63.719188
 Amount Units: ug/l

Processing Integration Results



RT: 8.57
 Area: 26270
 Amount: 116.9896
 Amount Units: ug/l

Manual Integration Results



Reviewer: virayd, 01-Dec-2020 11:49:57
 Audit Action: Manually Integrated

Audit Reason: Other

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I05.D
 Lims ID: IC std3
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 30-Nov-2020 14:19:30 ALS Bottle#: 6 Worklist Smp#: 7
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0016641-007
 Misc. Info.: IC STD3
 Operator ID: DVV10203 Instrument ID: 16334
 Sublist: chrom-MSV_16334_25mL*sub4
 Method: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\MSV_16334_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 01-Dec-2020 18:57:44 Calib Date: 30-Nov-2020 18:23:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1610

First Level Reviewer: virayd

Date: 01-Dec-2020 11:52:37

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.953	1.953	0.000	98	59213	1.00	1.03	
5 Chloromethane	50	2.148	2.148	0.000	98	78349	1.00	1.01	
6 Butadiene	39	2.257	2.264	-0.007	96	94809	1.00	1.07	
7 Vinyl chloride	62	2.270	2.270	0.000	79	65380	1.00	0.9872	
9 Bromomethane	94	2.593	2.593	0.000	91	46006	1.00	1.00	
10 Chloroethane	64	2.672	2.666	0.006	99	38699	1.00	0.9631	
11 Dichlorofluoromethane	67	2.910	2.904	0.006	97	85751	1.00	0.9520	
13 Trichlorofluoromethane	101	2.977	2.977	0.000	95	73951	1.00	0.9702	
15 Ethyl ether	59	3.215	3.208	0.007	93	46571	1.00	1.04	
16 1,2-Dichloro-1,1,2-trifluoroethane	67	3.306	3.300	0.006	93	65601	1.00	1.05	
18 Acrolein	56	3.385	3.385	0.000	99	365629	50.0	47.9	
19 1,1-Dichloroethene	96	3.519	3.519	0.000	97	48163	1.00	1.05	
21 112TCTFE	101	3.550	3.556	-0.006	88	49604	1.00	1.10	
20 Acetone	43	3.562	3.562	0.000	99	99654	10.0	10.1	
22 Iodomethane	142	3.714	3.714	0.000	99	90654	1.00	1.05	
23 Isopropyl alcohol	45	3.727	3.727	0.000	34	39390	20.0	22.5	
24 Ethyl bromide	108	3.745	3.739	0.006	98	41519	1.00	1.03	
25 Carbon disulfide	76	3.812	3.812	0.000	99	178461	1.00	1.05	
26 Methyl acetate	43	3.971	3.971	0.001	96	29330	1.00	0.9814	M
27 3-Chloro-1-propene	41	3.989	3.989	0.000	93	96698	1.00	1.05	
28 Methylene Chloride	84	4.178	4.178	0.000	93	55096	1.00	1.04	
* 29 t-Butyl alcohol-d10 (IS)	65	4.202	4.214	-0.012	0	201206	50.0	50.0	
30 2-Methyl-2-propanol	59	4.312	4.336	-0.024	99	78250	20.0	21.6	
31 Acrylonitrile	53	4.531	4.525	0.006	97	65434	5.00	5.12	
32 Methyl tert-butyl ether	73	4.580	4.580	0.000	91	157517	1.00	1.08	
33 trans-1,2-Dichloroethene	96	4.580	4.586	-0.006	98	55706	1.00	1.05	
34 Hexane	57	5.007	5.007	0.000	95	82931	1.00	1.07	
36 1,1-Dichloroethane	63	5.245	5.251	-0.006	95	105511	1.00	1.07	
37 Isopropyl ether	45	5.300	5.306	-0.006	98	213671	1.00	1.07	
38 2-Chloro-1,3-butadiene	53	5.361	5.360	0.001	91	95428	1.00	1.07	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
39 Tert-butyl ethyl ether	59	5.836	5.836	0.000	99	193019	1.00	1.06	
40 2-Butanone (MEK)	43	6.043	6.049	-0.006	99	186432	10.0	10.2	
41 cis-1,2-Dichloroethene	96	6.086	6.086	0.000	83	63650	1.00	1.07	
42 2,2-Dichloropropane	77	6.098	6.092	0.006	86	86568	1.00	1.05	
44 Propionitrile	54	6.159	6.147	0.012	99	97449	20.0	21.5	
S 49 1,2-Dichloroethene, Total	100				0			2.12	
46 Methacrylonitrile	67	6.360	6.360	0.000	94	167335	10.0	9.95	
48 Chlorobromomethane	128	6.409	6.409	0.000	71	28011	1.00	1.06	
47 Tetrahydrofuran	71	6.415	6.409	0.006	80	48944	10.0	10.3	
50 Chloroform	83	6.568	6.561	0.007	94	100689	1.00	1.06	
\$ 52 Dibromofluoromethane (Surr)	113	6.781	6.781	0.000	94	539150	10.0	10.1	
51 1,1,1-Trichloroethane	97	6.793	6.787	0.006	98	85584	1.00	1.05	
53 Cyclohexane	56	6.879	6.878	0.000	92	101123	1.00	1.08	
56 Carbon tetrachloride	117	6.994	7.000	-0.006	87	75097	1.00	1.07	
55 1,1-Dichloropropene	75	7.000	7.000	0.000	95	79831	1.00	1.05	
57 Isobutyl alcohol	41	7.165	7.165	0.000	95	67984	50.0	54.4	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.238	7.232	0.006	0	114722	10.0	10.1	
59 Benzene	78	7.263	7.263	0.000	92	241164	1.00	1.07	
60 1,2-Dichloroethane	62	7.336	7.336	0.000	97	65819	1.00	1.05	
62 Tert-amyl methyl ether	73	7.452	7.458	-0.006	98	172887	1.00	1.07	
* 63 Fluorobenzene (IS)	96	7.671	7.671	0.000	99	2211412	10.0	10.0	
64 n-Heptane	43	7.677	7.677	0.000	72	90836	1.00	1.04	
65 n-Butanol	56	8.049	8.049	0.000	89	125899	100.0	96.8	M
67 Trichloroethene	95	8.147	8.147	0.000	98	59598	1.00	1.04	
68 Methylcyclohexane	83	8.451	8.451	0.000	92	91381	1.00	1.03	
69 1,2-Dichloropropane	63	8.482	8.482	0.000	93	64320	1.00	1.07	
70 2-ethoxy-2-methyl butane	87	8.494	8.488	0.006	92	93157	1.00	1.06	
72 1,4-Dioxane	88	8.573	8.567	0.006	35	11572	50.0	50.0	M
71 Methyl methacrylate	69	8.567	8.567	0.000	94	34214	1.00	1.00	
73 Dibromomethane	93	8.585	8.585	0.000	96	29475	1.00	1.06	
75 Dichlorobromomethane	83	8.823	8.823	0.000	99	73464	1.00	1.05	
76 2-Nitropropane	41	9.110	9.110	0.000	99	96897	10.0	9.98	
79 1-Bromo-2-chloroethane	63	9.220	9.219	0.001	98	67155	1.00	1.04	
80 cis-1,3-Dichloropropene	75	9.372	9.378	-0.006	95	95377	1.00	1.05	
81 4-Methyl-2-pentanone (MIBK)	43	9.561	9.561	0.000	97	478190	10.0	10.2	
\$ 82 Toluene-d8 (Surr)	98	9.689	9.689	0.000	94	2136211	10.0	10.0	
83 Toluene	92	9.762	9.762	0.000	98	146327	1.00	1.06	
84 trans-1,3-Dichloropropene	75	10.024	10.024	0.000	94	76563	1.00	1.02	
S 87 1,3-Dichloropropene, Total	100				0			2.08	
85 Ethyl methacrylate	69	10.091	10.085	0.006	91	70532	1.00	1.05	
86 1,1,2-Trichloroethane	97	10.232	10.231	0.001	90	43259	1.00	1.07	
88 Tetrachloroethene	166	10.311	10.311	0.000	98	62720	1.00	1.04	
89 1,3-Dichloropropane	76	10.390	10.396	-0.006	91	77242	1.00	1.06	
91 2-Hexanone	43	10.451	10.451	0.000	98	334821	10.0	9.91	
93 Chlorodibromomethane	129	10.603	10.603	0.000	90	50339	1.00	1.05	
94 Ethylene Dibromide	107	10.713	10.713	0.000	99	42028	1.00	1.06	
* 95 Chlorobenzene-d5 (IS)	117	11.146	11.146	0.000	86	1600264	10.0	10.0	
96 1-Chlorohexane	91	11.158	11.158	0.000	96	86809	1.00	1.04	
97 Chlorobenzene	112	11.176	11.176	0.000	94	161371	1.00	1.04	
S 101 Xylenes, Total	106				0			3.16	
98 1,1,1,2-Tetrachloroethane	131	11.256	11.256	0.000	95	57609	1.00	1.05	
99 Ethylbenzene	91	11.262	11.262	0.000	98	288772	1.00	1.05	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
100 m-Xylene & p-Xylene	106	11.378	11.378	0.000	97	219481	2.00	2.13	
102 o-Xylene	106	11.707	11.707	0.000	97	105945	1.00	1.03	
103 Styrene	104	11.719	11.719	0.000	95	183091	1.00	1.05	
104 Bromoform	173	11.878	11.877	0.001	96	28046	1.00	1.00	
105 Isopropylbenzene	105	12.006	12.006	0.000	96	280719	1.00	1.05	
\$ 108 4-Bromofluorobenzene (Surr)	95	12.152	12.152	0.000	90	818561	10.0	10.0	
109 1,1,2,2-Tetrachloroethane	83	12.256	12.255	0.001	92	56804	1.00	1.05	
110 Bromobenzene	156	12.268	12.268	0.000	96	69470	1.00	1.07	
111 trans-1,4-Dichloro-2-butene	53	12.280	12.280	0.000	92	139562	10.0	9.57	
112 1,2,3-Trichloropropane	110	12.298	12.304	-0.006	79	15377	1.00	1.12	
113 N-Propylbenzene	91	12.335	12.335	0.000	99	338497	1.00	1.05	
114 2-Chlorotoluene	126	12.408	12.414	-0.006	96	68023	1.00	1.07	
115 1,3,5-Trimethylbenzene	105	12.469	12.469	0.000	94	240788	1.00	1.05	
116 4-Chlorotoluene	126	12.505	12.505	0.000	97	71097	1.00	1.07	
118 tert-Butylbenzene	134	12.713	12.713	0.000	94	50184	1.00	1.03	
120 Pentachloroethane	167	12.743	12.743	0.000	90	43066	1.00	1.03	
119 1,2,4-Trimethylbenzene	105	12.755	12.755	0.000	97	250956	1.00	1.05	
121 sec-Butylbenzene	105	12.877	12.877	0.000	94	311759	1.00	1.05	
122 1,3-Dichlorobenzene	146	12.975	12.975	0.000	98	137230	1.00	1.05	
123 4-Isopropyltoluene	119	12.981	12.981	0.000	98	274677	1.00	1.06	
* 124 1,4-Dichlorobenzene-d4	152	13.030	13.030	0.000	95	860391	10.0	10.0	
125 1,4-Dichlorobenzene	146	13.048	13.048	0.000	94	138733	1.00	1.04	
126 1,2,3-Trimethylbenzene	120	13.060	13.060	0.000	99	109147	1.00	1.03	
127 Benzyl chloride	126	13.127	13.127	0.000	99	25065	1.00	1.07	
129 p-Diethylbenzene	119	13.182	13.182	0.000	93	165650	1.00	1.06	
130 n-Butylbenzene	92	13.274	13.274	0.000	98	144959	1.00	1.06	
131 1,2-Dichlorobenzene	146	13.310	13.310	0.000	98	130553	1.00	1.07	
134 1,2-Dibromo-3-Chloropropane	155	13.853	13.853	0.000	87	8650	1.00	1.10	
135 1,3,5-Trichlorobenzene	180	13.975	13.975	0.000	98	114581	1.00	1.04	
136 1,2,4-Trichlorobenzene	180	14.395	14.395	0.000	94	104962	1.00	1.04	
137 Hexachlorobutadiene	225	14.481	14.481	0.000	97	50715	1.00	1.02	
138 Naphthalene	128	14.578	14.578	0.000	97	196928	1.00	1.07	
139 1,2,3-Trichlorobenzene	180	14.718	14.718	0.000	95	93358	1.00	1.05	
140 2-Methylnaphthalene	142	15.340	15.340	0.000	92	137772	1.00	1.05	

QC Flag Legend

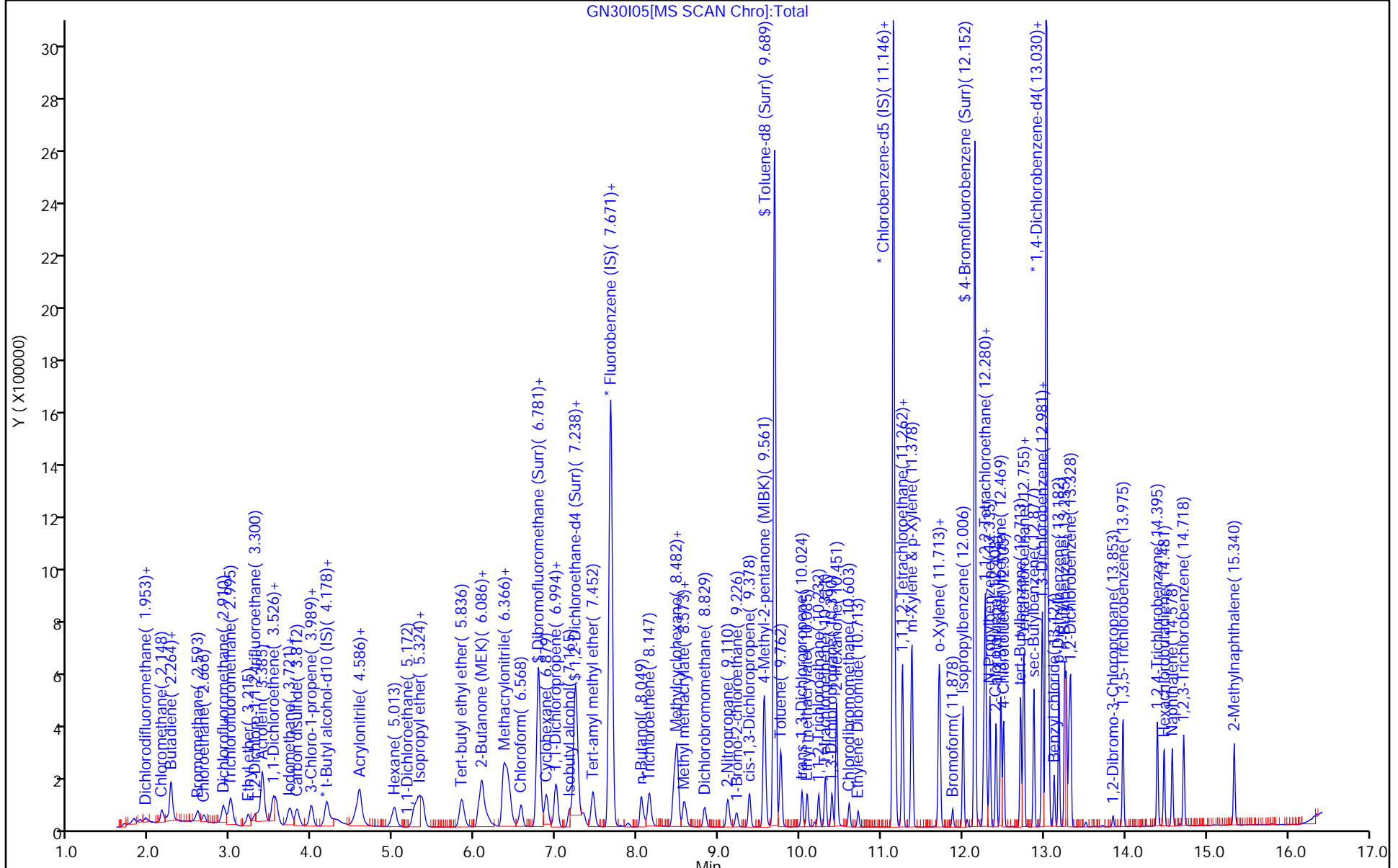
Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MSV_RV1_826_00031	Amount Added: 2.00	Units: uL	
MSV_RV4GAS826_00097	Amount Added: 2.00	Units: uL	
MSV_RV4_826_00035	Amount Added: 2.00	Units: uL	
MSV_29_826ISS_00013	Amount Added: 1.00	Units: uL	Run Reagent



Euofins Lancaster Laboratories Env, LLC

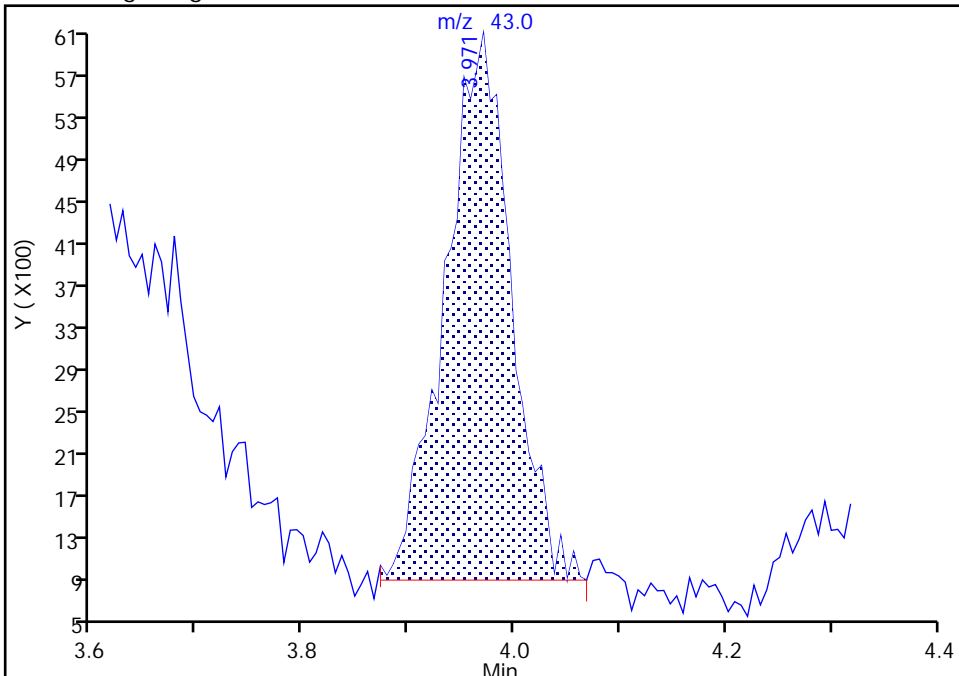
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Injection Date: 30-Nov-2020 14:19:30 Instrument ID: 16334
Lims ID: IC std3
Client ID:
Operator ID: DVV10203 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

26 Methyl acetate, CAS: 79-20-9

Signal: 1

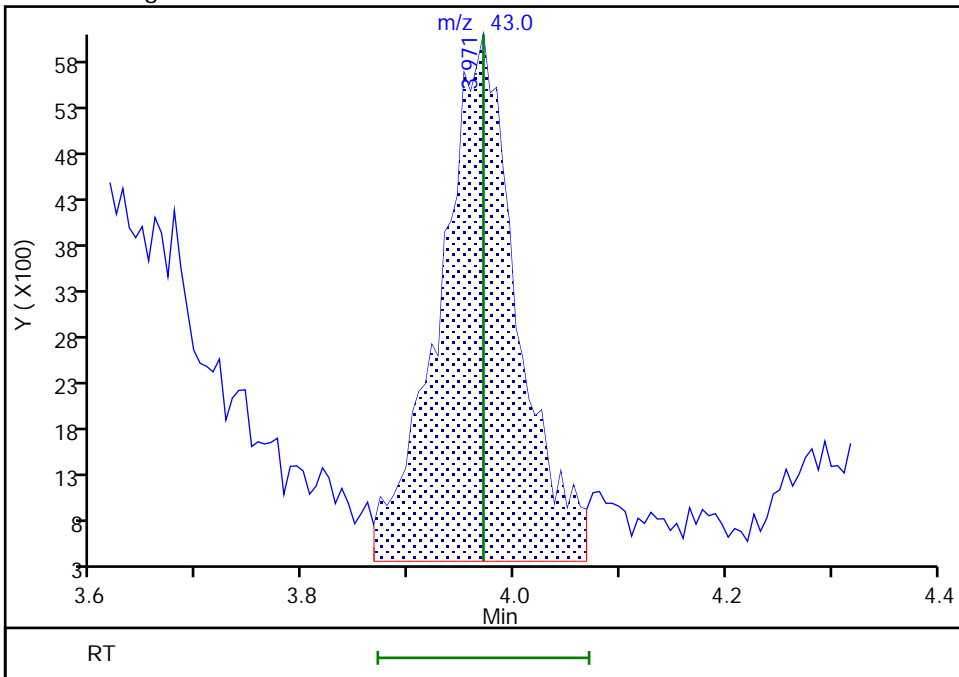
RT: 3.97
Area: 22428
Amount: 0.855084
Amount Units: ug/l

Processing Integration Results



RT: 3.97
Area: 29330
Amount: 0.981402
Amount Units: ug/l

Manual Integration Results



Reviewer: virayd, 01-Dec-2020 11:51:24
Audit Action: Manually Integrated

Audit Reason: Other

Eurofins Lancaster Laboratories Env, LLC

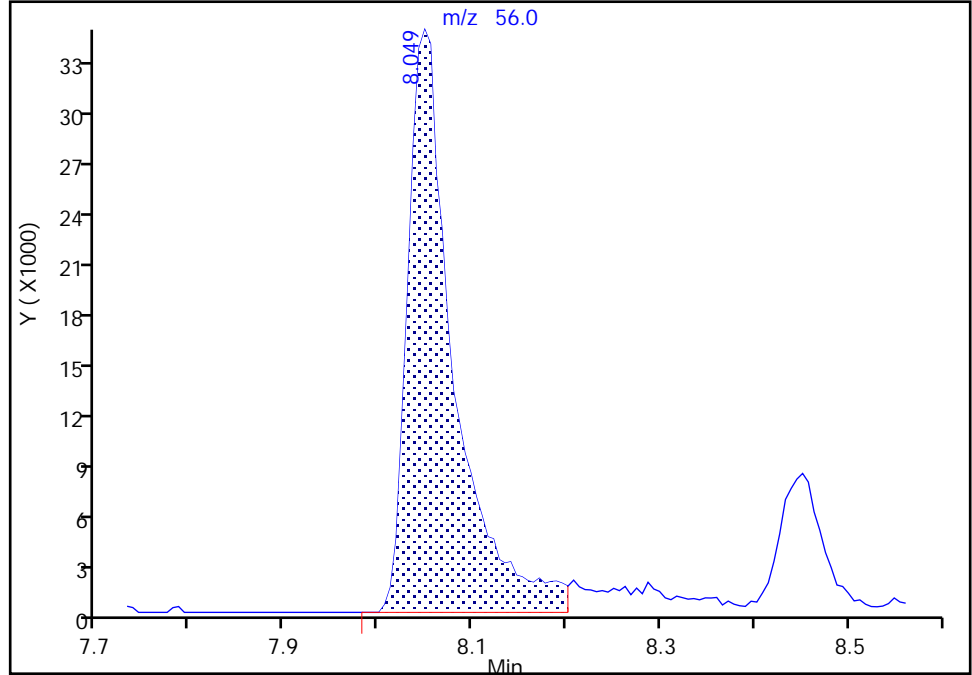
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Injection Date: 30-Nov-2020 14:19:30 Instrument ID: 16334
Lims ID: IC std3
Client ID:
Operator ID: DVV10203 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

65 n-Butanol, CAS: 71-36-3

Signal: 1

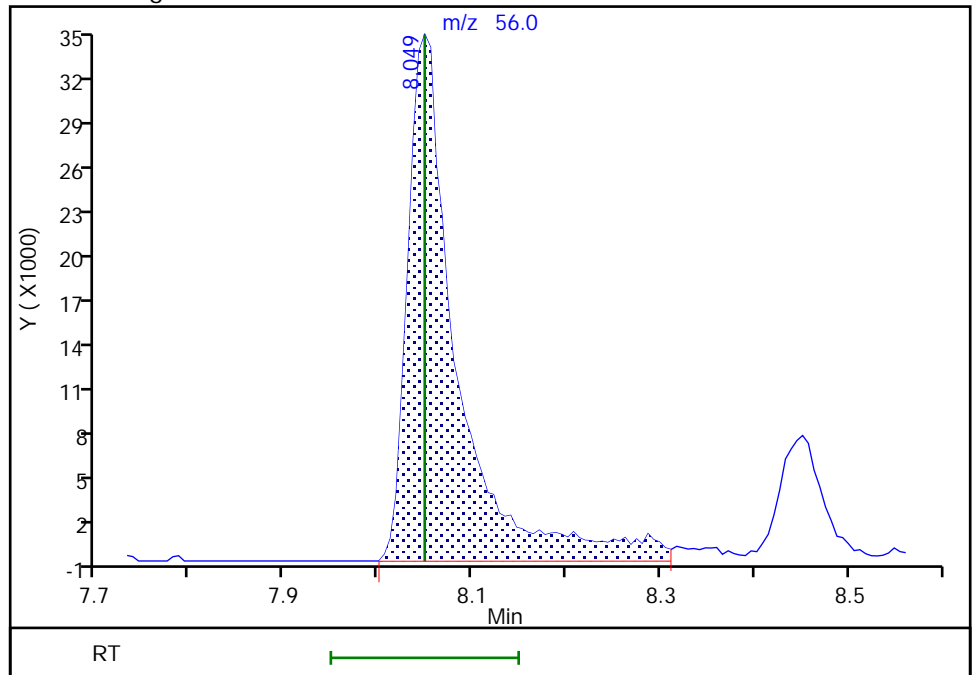
RT: 8.05
Area: 117068
Amount: 90.927496
Amount Units: ug/l

Processing Integration Results



RT: 8.05
Area: 125899
Amount: 96.837708
Amount Units: ug/l

Manual Integration Results



Reviewer: virayd, 01-Dec-2020 11:51:57
Audit Action: Manually Integrated

Audit Reason: Other

Euofins Lancaster Laboratories Env, LLC

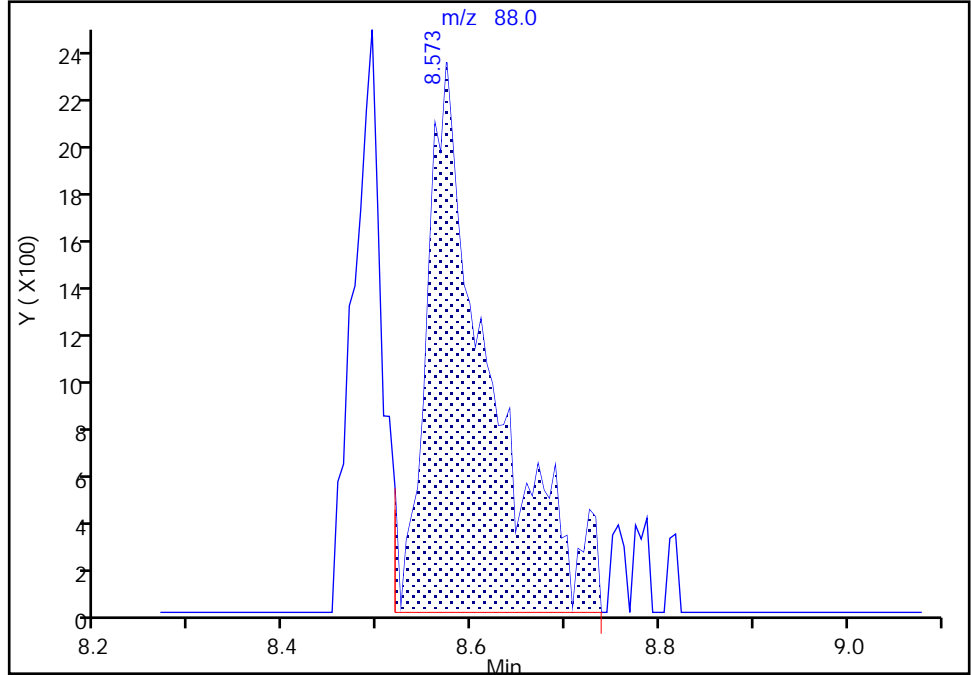
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Injection Date: 30-Nov-2020 14:19:30 Instrument ID: 16334
Lims ID: IC std3
Client ID:
Operator ID: DVV10203 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

72 1,4-Dioxane, CAS: 123-91-1

Signal: 1

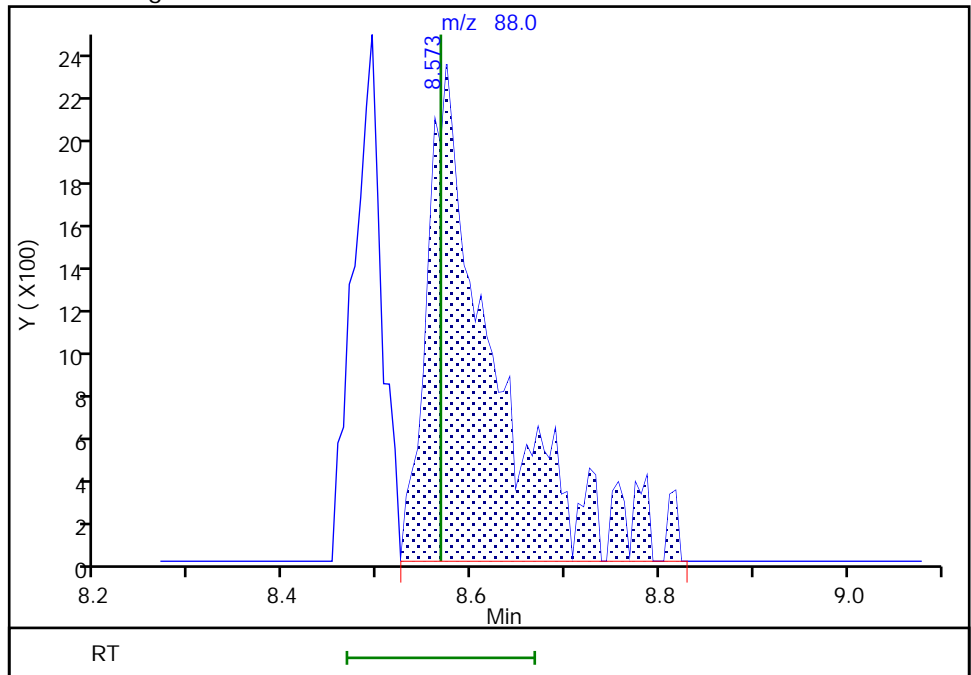
RT: 8.57
Area: 10783
Amount: 49.653151
Amount Units: ug/l

Processing Integration Results



RT: 8.57
Area: 11572
Amount: 50.028974
Amount Units: ug/l

Manual Integration Results



Reviewer: virayd, 01-Dec-2020 11:52:12
Audit Action: Manually Integrated

Audit Reason: Other

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I06.D
 Lims ID: IC std2
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 30-Nov-2020 14:41:30 ALS Bottle#: 7 Worklist Smp#: 8
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0016641-008
 Misc. Info.: IC STD2
 Operator ID: DVV10203 Instrument ID: 16334
 Sublist: chrom-MSV_16334_25mL*sub4
 Method: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\MSV_16334_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 01-Dec-2020 18:57:55 Calib Date: 30-Nov-2020 18:23:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1610

First Level Reviewer: virayd

Date: 01-Dec-2020 11:55:49

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.959	1.953	0.006	98	29137	0.5000	0.5119	M
5 Chloromethane	50	2.148	2.148	0.000	98	40943	0.5000	0.5331	
6 Butadiene	39	2.257	2.264	-0.007	94	51097	0.5000	0.5845	M
7 Vinyl chloride	62	2.257	2.270	-0.013	81	33758	0.5000	0.5149	
9 Bromomethane	94	2.593	2.593	0.000	88	23952	0.5000	0.5242	M
10 Chloroethane	64	2.654	2.666	-0.012	99	20672	0.5000	0.5197	
11 Dichlorofluoromethane	67	2.904	2.904	0.000	97	46525	0.5000	0.5217	M
13 Trichlorofluoromethane	101	2.977	2.977	0.000	97	38530	0.5000	0.5106	
15 Ethyl ether	59	3.208	3.208	0.000	95	22931	0.5001	0.5148	M
16 1,2-Dichloro-1,1,2-trifluoroethane	67	3.312	3.300	0.012	95	31854	0.5000	0.5165	
18 Acrolein	56	3.385	3.385	0.000	99	182229	25.0	24.5	
19 1,1-Dichloroethene	96	3.519	3.519	0.000	98	23861	0.5000	0.5232	
21 112TCTFE	101	3.556	3.556	0.000	93	21323	0.5000	0.4782	
20 Acetone	43	3.550	3.562	-0.012	99	50222	5.00	5.23	M
22 Iodomethane	142	3.708	3.714	-0.006	98	43500	0.5000	0.5107	Ma
23 Isopropyl alcohol	45	3.733	3.727	0.006	33	20534	10.0	11.8	M
24 Ethyl bromide	108	3.739	3.739	0.000	97	21157	0.5000	0.5326	
25 Carbon disulfide	76	3.806	3.812	-0.006	98	84062	0.5000	0.5001	
26 Methyl acetate	43	3.977	3.971	0.007	29	12966	0.5000	0.4458	
27 3-Chloro-1-propene	41	3.983	3.989	-0.006	92	50604	0.5000	0.5546	
28 Methylene Chloride	84	4.172	4.178	-0.006	93	26198	0.5000	0.5013	
* 29 t-Butyl alcohol-d10 (IS)	65	4.196	4.214	-0.018	0	195834	50.0	50.0	
30 2-Methyl-2-propanol	59	4.342	4.336	0.006	98	37272	10.0	10.6	M
31 Acrylonitrile	53	4.531	4.525	0.006	99	32066	2.50	2.58	
32 Methyl tert-butyl ether	73	4.574	4.580	-0.006	95	73272	0.5000	0.5055	
33 trans-1,2-Dichloroethene	96	4.574	4.586	-0.012	98	26963	0.5000	0.5135	
34 Hexane	57	5.001	5.007	-0.006	94	35728	0.5000	0.4667	
36 1,1-Dichloroethane	63	5.257	5.251	0.006	95	48509	0.5000	0.4978	
37 Isopropyl ether	45	5.300	5.306	-0.006	96	99922	0.5000	0.5041	
38 2-Chloro-1,3-butadiene	53	5.354	5.360	-0.006	91	44458	0.5000	0.5017	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
39 Tert-butyl ethyl ether	59	5.836	5.836	0.000	98	92089	0.5000	0.5095	
40 2-Butanone (MEK)	43	6.049	6.049	0.000	99	89142	5.00	5.01	
41 cis-1,2-Dichloroethene	96	6.092	6.086	0.006	83	30199	0.5000	0.5123	
42 2,2-Dichloropropane	77	6.098	6.092	0.006	64	41487	0.5000	0.5076	M
44 Propionitrile	54	6.147	6.147	0.000	98	45761	10.0	10.4	
S 49 1,2-Dichloroethene, Total	100				0			1.03	
46 Methacrylonitrile	67	6.360	6.360	0.000	93	77275	5.00	4.72	
48 Chlorobromomethane	128	6.409	6.409	0.000	74	13722	0.5000	0.5222	
47 Tetrahydrofuran	71	6.415	6.409	0.006	94	21854	5.00	4.75	
50 Chloroform	83	6.561	6.561	0.000	93	47732	0.5000	0.5083	
\$ 52 Dibromofluoromethane (Surr)	113	6.781	6.781	0.000	94	532962	10.0	10.1	
51 1,1,1-Trichloroethane	97	6.793	6.787	0.006	59	41257	0.5000	0.5134	
53 Cyclohexane	56	6.878	6.878	0.000	92	45968	0.5000	0.4978	
56 Carbon tetrachloride	117	6.988	7.000	-0.012	83	34456	0.5000	0.4945	M
55 1,1-Dichloropropene	75	7.006	7.000	0.006	95	37534	0.5000	0.4971	
57 Isobutyl alcohol	41	7.159	7.165	-0.006	93	29644	25.0	23.9	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.232	7.232	0.000	0	111685	10.0	9.91	
59 Benzene	78	7.263	7.263	0.000	93	111347	0.5000	0.5003	
60 1,2-Dichloroethane	62	7.330	7.336	-0.006	97	32618	0.5000	0.5241	
62 Tert-amyl methyl ether	73	7.452	7.458	-0.006	98	79984	0.5000	0.5020	
* 63 Fluorobenzene (IS)	96	7.671	7.671	0.000	98	2189287	10.0	10.0	
64 n-Heptane	43	7.677	7.677	0.000	37	40450	0.5000	0.4683	
65 n-Butanol	56	8.049	8.049	0.000	91	62965	50.0	49.8	
67 Trichloroethene	95	8.140	8.147	-0.007	97	28664	0.5000	0.5044	
68 Methylcyclohexane	83	8.445	8.451	-0.006	90	45474	0.5000	0.5153	
69 1,2-Dichloropropane	63	8.482	8.482	0.000	73	30117	0.5000	0.5059	
70 2-ethoxy-2-methyl butane	87	8.482	8.488	-0.006	89	42888	0.5000	0.4926	
72 1,4-Dioxane	88	8.567	8.567	0.000	37	5456	25.0	24.2	M
71 Methyl methacrylate	69	8.573	8.567	0.006	92	16301	0.5000	0.4890	
73 Dibromomethane	93	8.579	8.585	-0.006	68	13777	0.5000	0.4993	M
75 Dichlorobromomethane	83	8.829	8.823	0.006	98	33392	0.5000	0.4837	
76 2-Nitropropane	41	9.110	9.110	0.000	98	44863	5.00	4.75	
79 1-Bromo-2-chloroethane	63	9.219	9.219	0.000	98	32732	0.5000	0.5129	
80 cis-1,3-Dichloropropene	75	9.378	9.378	0.000	95	44710	0.5000	0.4990	
81 4-Methyl-2-pentanone (MIBK)	43	9.561	9.561	0.000	98	222955	5.00	4.88	
\$ 82 Toluene-d8 (Surr)	98	9.689	9.689	0.000	94	2121912	10.0	10.0	
83 Toluene	92	9.762	9.762	0.000	98	69853	0.5000	0.5070	
84 trans-1,3-Dichloropropene	75	10.018	10.024	-0.006	94	37093	0.5000	0.4986	
S 87 1,3-Dichloropropene, Total	100				0			1.00	
85 Ethyl methacrylate	69	10.085	10.085	0.000	91	32351	0.5000	0.4839	
86 1,1,2-Trichloroethane	97	10.231	10.231	0.000	89	20860	0.5000	0.5190	
88 Tetrachloroethene	166	10.311	10.311	0.000	98	30689	0.5000	0.5133	
89 1,3-Dichloropropane	76	10.390	10.396	-0.006	91	36850	0.5000	0.5083	
91 2-Hexanone	43	10.451	10.451	0.000	98	157747	5.00	4.80	
93 Chlorodibromomethane	129	10.603	10.603	0.000	91	22656	0.5000	0.4752	
94 Ethylene Dibromide	107	10.713	10.713	0.000	97	19536	0.5000	0.4951	
* 95 Chlorobenzene-d5 (IS)	117	11.146	11.146	0.000	87	1589997	10.0	10.0	
96 1-Chlorohexane	91	11.158	11.158	0.000	97	43401	0.5000	0.5245	
97 Chlorobenzene	112	11.176	11.176	0.000	95	78284	0.5000	0.5101	
S 101 Xylenes, Total	106				0			1.51	
98 1,1,1,2-Tetrachloroethane	131	11.256	11.256	0.000	96	26540	0.5000	0.4867	
99 Ethylbenzene	91	11.262	11.262	0.000	99	136856	0.5000	0.5026	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
100 m-Xylene & p-Xylene	106	11.378	11.378	0.000	97	102766	1.00	1.00	
102 o-Xylene	106	11.707	11.707	0.000	97	51651	0.5000	0.5076	
103 Styrene	104	11.719	11.719	0.000	95	86978	0.5000	0.5016	
104 Bromoform	173	11.877	11.877	0.000	96	12931	0.5000	0.4646	
105 Isopropylbenzene	105	12.006	12.006	0.000	96	132190	0.5000	0.4966	
\$ 108 4-Bromofluorobenzene (Surr)	95	12.146	12.152	-0.006	89	812090	10.0	10.0	
109 1,1,2,2-Tetrachloroethane	83	12.255	12.255	0.000	93	27699	0.5000	0.5113	
110 Bromobenzene	156	12.268	12.268	0.000	93	32482	0.5000	0.4994	
111 trans-1,4-Dichloro-2-butene	53	12.280	12.280	0.000	95	63627	5.00	4.48	
112 1,2,3-Trichloropropane	110	12.298	12.304	-0.006	75	7254	0.5000	0.5253	
113 N-Propylbenzene	91	12.335	12.335	0.000	99	165110	0.5000	0.5091	
114 2-Chlorotoluene	126	12.414	12.414	0.000	96	31485	0.5000	0.4937	
115 1,3,5-Trimethylbenzene	105	12.469	12.469	0.000	94	115372	0.5000	0.5043	
116 4-Chlorotoluene	126	12.505	12.505	0.000	97	34713	0.5000	0.5220	
118 tert-Butylbenzene	134	12.713	12.713	0.000	93	25251	0.5000	0.5169	
120 Pentachloroethane	167	12.743	12.743	0.000	88	21266	0.5000	0.5064	
119 1,2,4-Trimethylbenzene	105	12.755	12.755	0.000	97	119721	0.5000	0.5012	
121 sec-Butylbenzene	105	12.877	12.877	0.000	94	147266	0.5000	0.4948	
122 1,3-Dichlorobenzene	146	12.975	12.975	0.000	98	66610	0.5000	0.5079	
123 4-Isopropyltoluene	119	12.981	12.981	0.000	97	129655	0.5000	0.5015	
* 124 1,4-Dichlorobenzene-d4	152	13.030	13.030	0.000	96	861870	10.0	10.0	
125 1,4-Dichlorobenzene	146	13.048	13.048	0.000	95	68535	0.5000	0.5129	
126 1,2,3-Trimethylbenzene	120	13.060	13.060	0.000	98	54187	0.5000	0.5115	
127 Benzyl chloride	126	13.127	13.127	0.000	99	11182	0.5000	0.4772	
129 p-Diethylbenzene	119	13.182	13.182	0.000	91	79964	0.5000	0.5091	
130 n-Butylbenzene	92	13.274	13.274	0.000	97	69796	0.5000	0.5096	
131 1,2-Dichlorobenzene	146	13.310	13.310	0.000	98	62448	0.5000	0.5103	
134 1,2-Dibromo-3-Chloropropane	155	13.847	13.853	-0.006	85	3908	0.5000	0.4950	
135 1,3,5-Trichlorobenzene	180	13.975	13.975	0.000	97	56346	0.5000	0.5126	
136 1,2,4-Trichlorobenzene	180	14.395	14.395	0.000	93	54078	0.5000	0.5338	
137 Hexachlorobutadiene	225	14.481	14.481	0.000	97	26381	0.5000	0.5304	
138 Naphthalene	128	14.578	14.578	0.000	97	94086	0.5000	0.5104	
139 1,2,3-Trichlorobenzene	180	14.718	14.718	0.000	95	47589	0.5000	0.5323	
140 2-Methylnaphthalene	142	15.340	15.340	0.000	93	71187	0.5000	0.5401	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MSV_RV1_826_00031

Amount Added: 2.00

Units: uL

MSV_RV4GAS826_00097

Amount Added: 2.00

Units: uL

MSV_RV4_826_00035

Amount Added: 2.00

Units: uL

MSV_29_826ISS_00013

Amount Added: 1.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I06.D

Injection Date: 30-Nov-2020 14:41:30

Instrument ID: 16334

Operator ID: DVV10203

Lims ID: IC std2

Worklist Smp#: 8

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

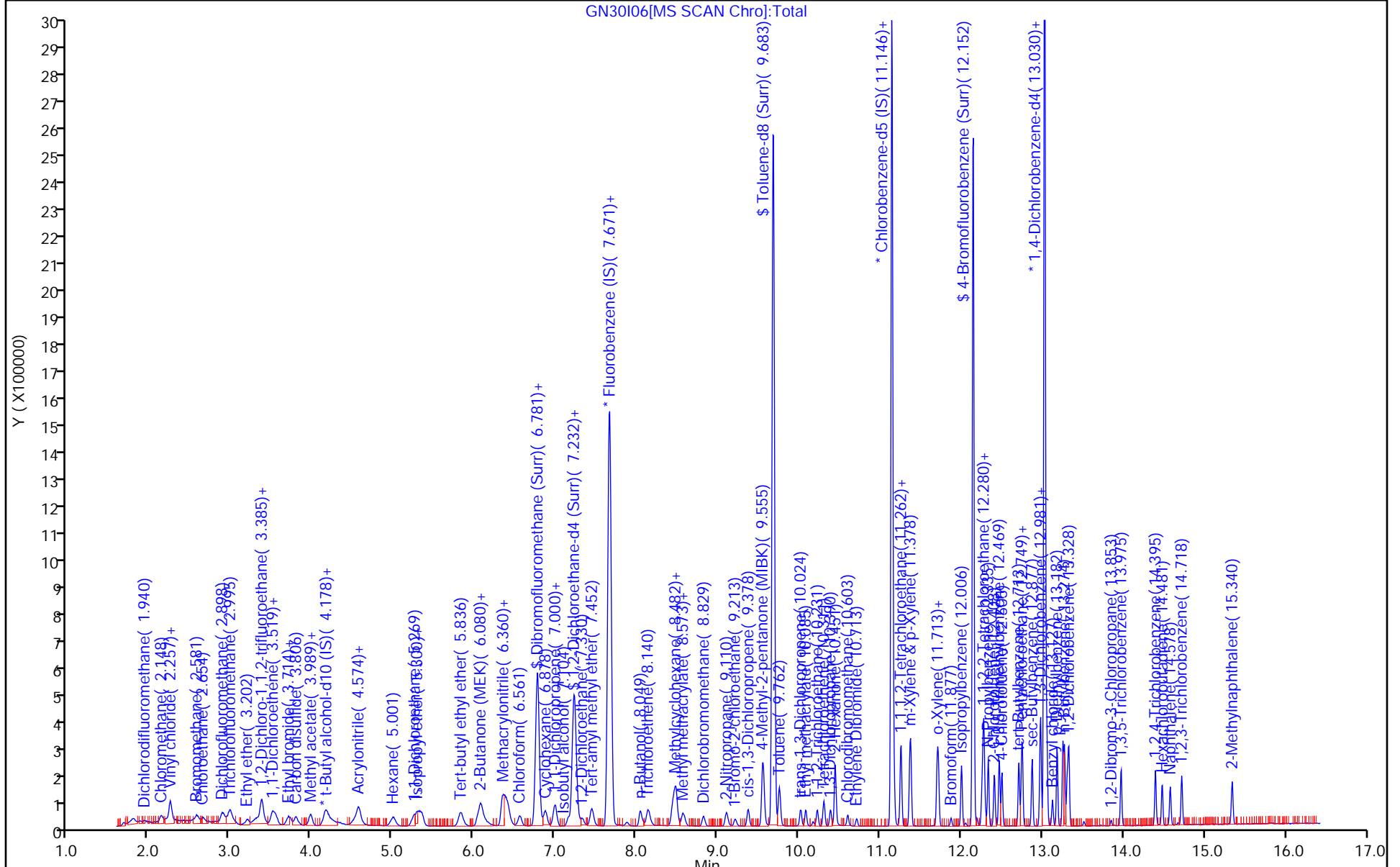
ALS Bottle#: 7

Method: MSV_16334_25mL

Limit Group: MSV - 8260C_D

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

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



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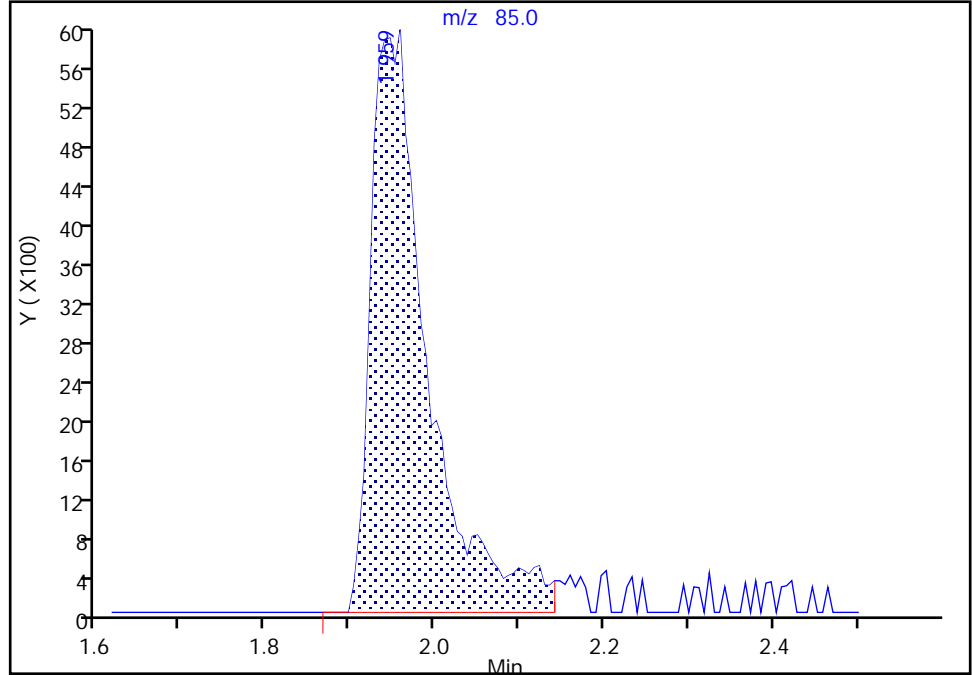
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Injection Date: 30-Nov-2020 14:41:30 Instrument ID: 16334
Lims ID: IC std2
Client ID:
Operator ID: DVV10203 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

1 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

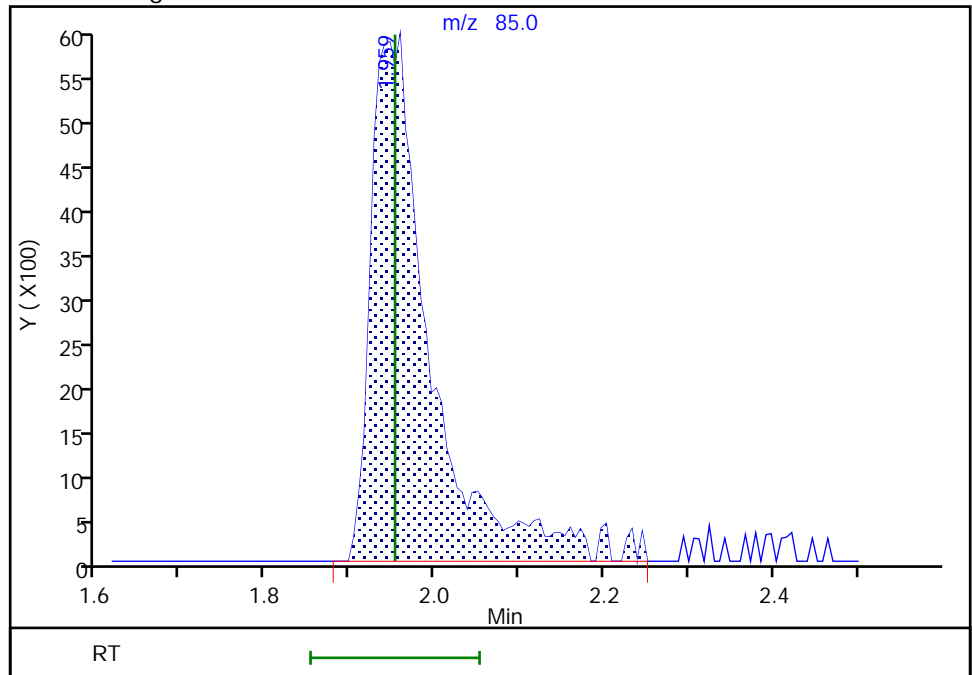
RT: 1.96
Area: 27810
Amount: 0.491868
Amount Units: ug/l

Processing Integration Results



RT: 1.96
Area: 29137
Amount: 0.511905
Amount Units: ug/l

Manual Integration Results



Reviewer: virayd, 01-Dec-2020 11:53:12
Audit Action: Manually Integrated

Audit Reason: Other

Eurofins Lancaster Laboratories Env, LLC

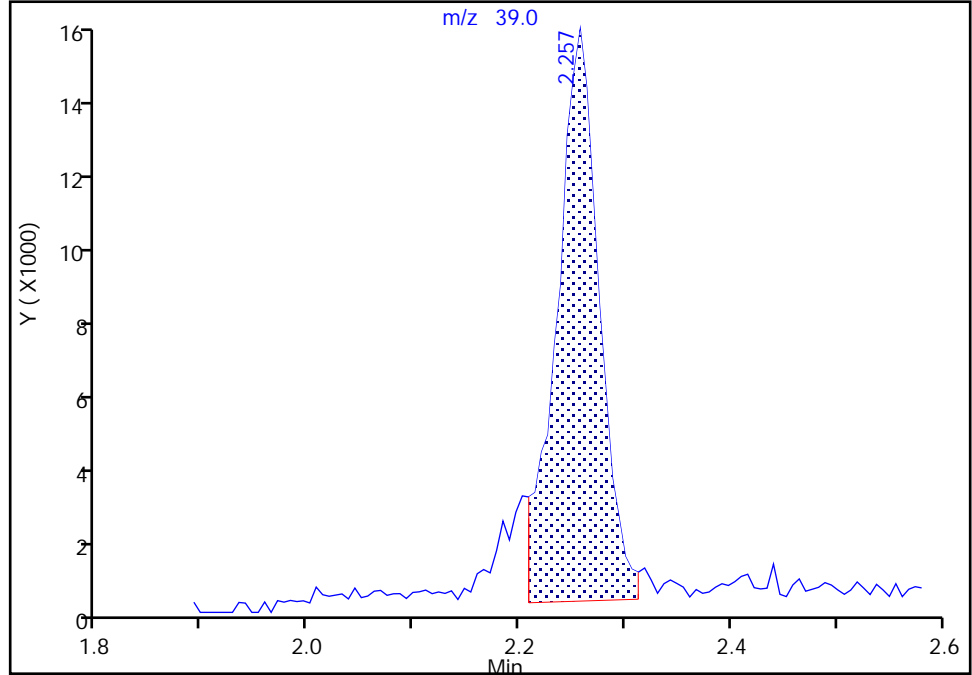
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Injection Date: 30-Nov-2020 14:41:30 Instrument ID: 16334
Lims ID: IC std2
Client ID:
Operator ID: DVV10203 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

6 Butadiene, CAS: 106-99-0

Signal: 1

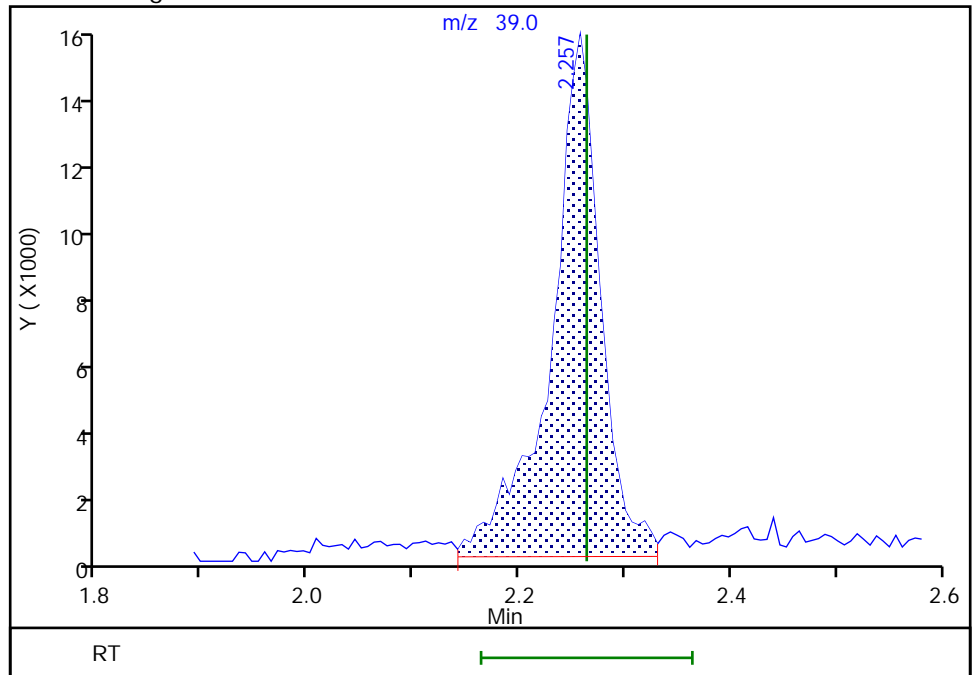
RT: 2.26
Area: 43591
Amount: 0.531353
Amount Units: ug/l

Processing Integration Results



RT: 2.26
Area: 51097
Amount: 0.584513
Amount Units: ug/l

Manual Integration Results



Reviewer: virayd, 01-Dec-2020 11:53:23
Audit Action: Manually Integrated

Audit Reason: Other

Eurofins Lancaster Laboratories Env, LLC

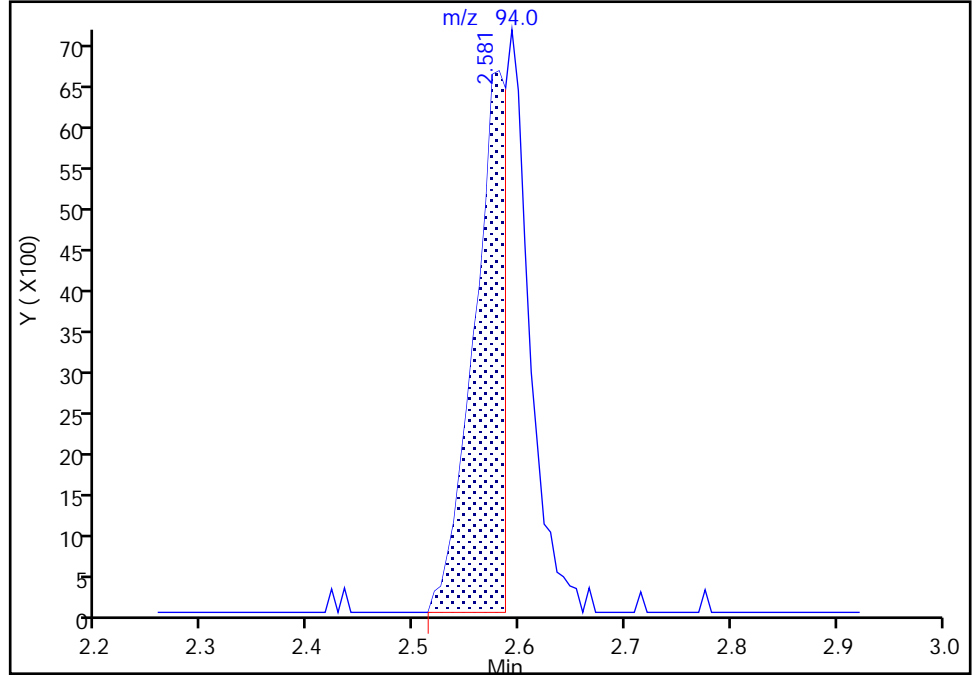
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Injection Date: 30-Nov-2020 14:41:30 Instrument ID: 16334
Lims ID: IC std2
Client ID:
Operator ID: DVV10203 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

9 Bromomethane, CAS: 74-83-9

Signal: 1

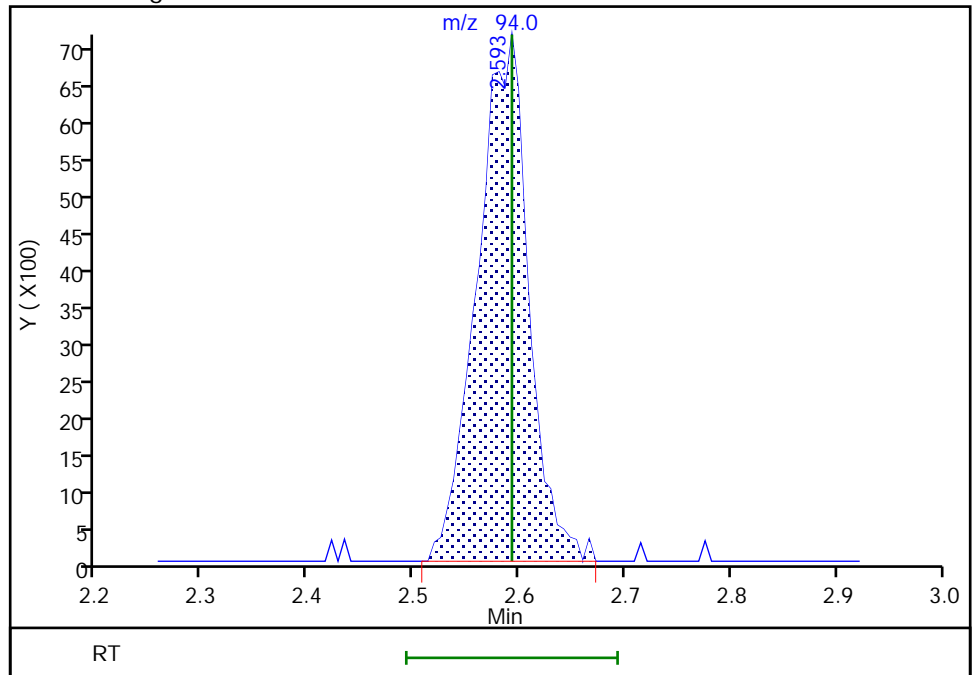
RT: 2.58
Area: 14139
Amount: 0.329668
Amount Units: ug/l

Processing Integration Results



RT: 2.59
Area: 23952
Amount: 0.524202
Amount Units: ug/l

Manual Integration Results



Reviewer: virayd, 01-Dec-2020 11:53:33
Audit Action: Manually Integrated

Audit Reason: Other

Eurofins Lancaster Laboratories Env, LLC

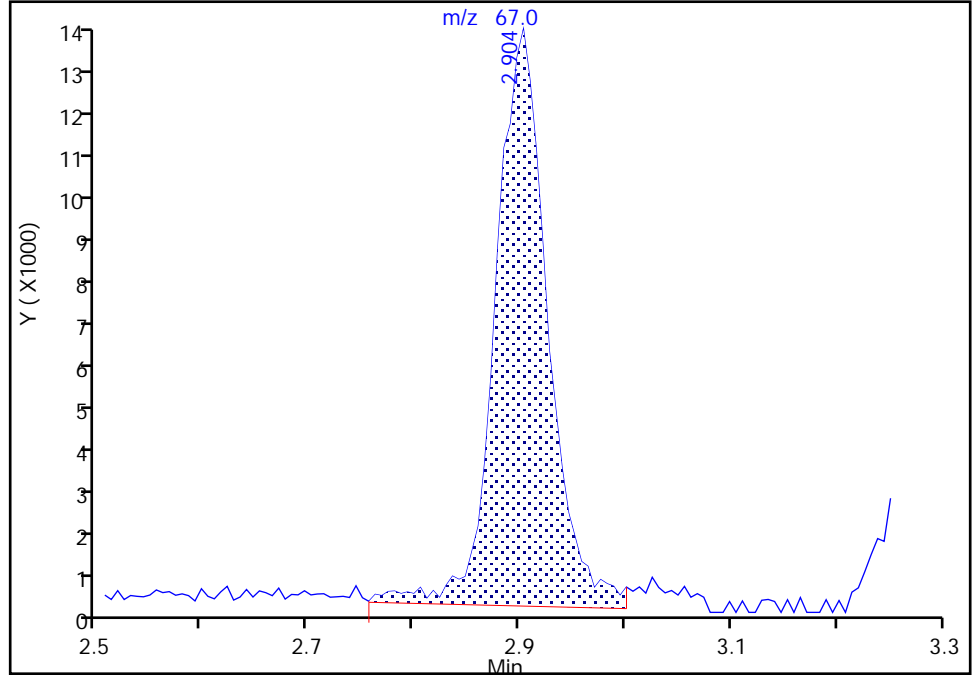
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Injection Date: 30-Nov-2020 14:41:30 Instrument ID: 16334
Lims ID: IC std2
Client ID:
Operator ID: DVV10203 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

11 Dichlorofluoromethane, CAS: 75-43-4

Signal: 1

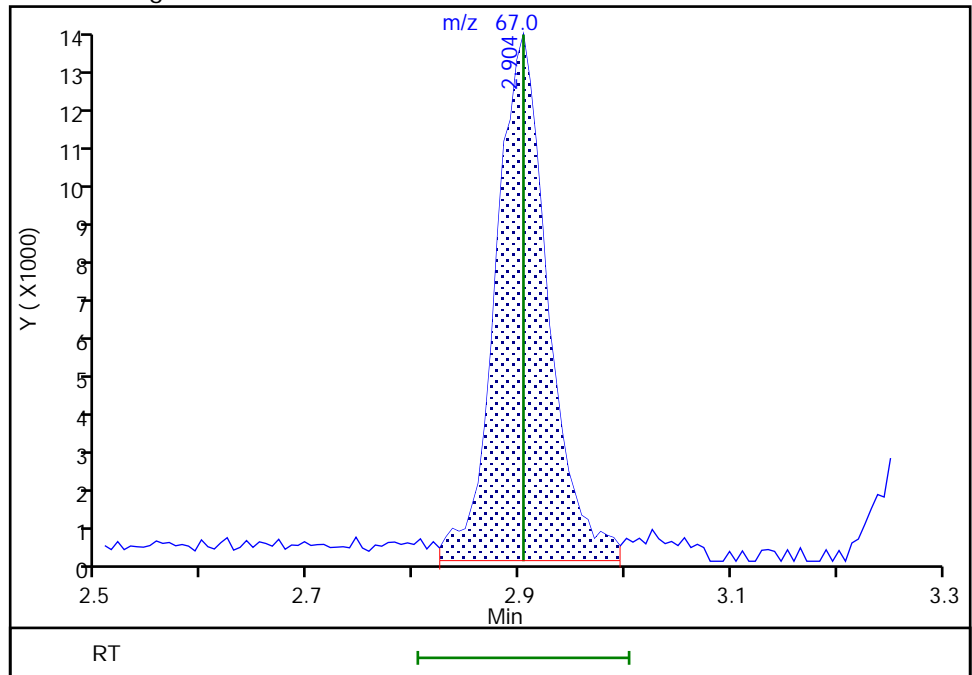
RT: 2.90
Area: 46241
Amount: 0.521398
Amount Units: ug/l

Processing Integration Results



RT: 2.90
Area: 46525
Amount: 0.521740
Amount Units: ug/l

Manual Integration Results



Reviewer: virayd, 01-Dec-2020 11:53:45
Audit Action: Manually Integrated

Audit Reason: Other

Eurofins Lancaster Laboratories Env, LLC

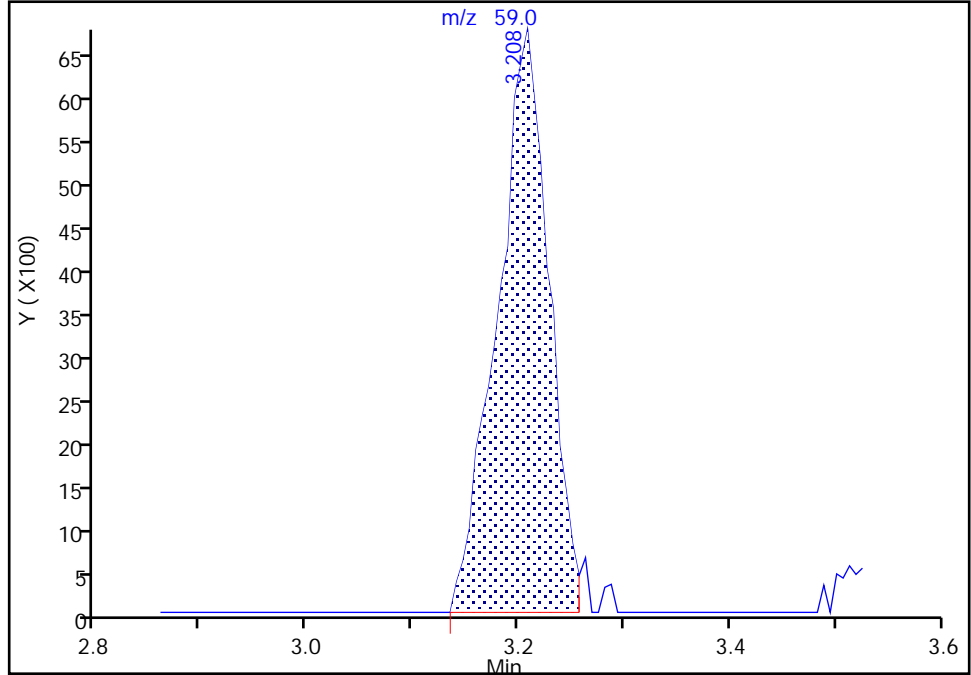
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Injection Date: 30-Nov-2020 14:41:30 Instrument ID: 16334
Lims ID: IC std2
Client ID:
Operator ID: DVV10203 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

15 Ethyl ether, CAS: 60-29-7

Signal: 1

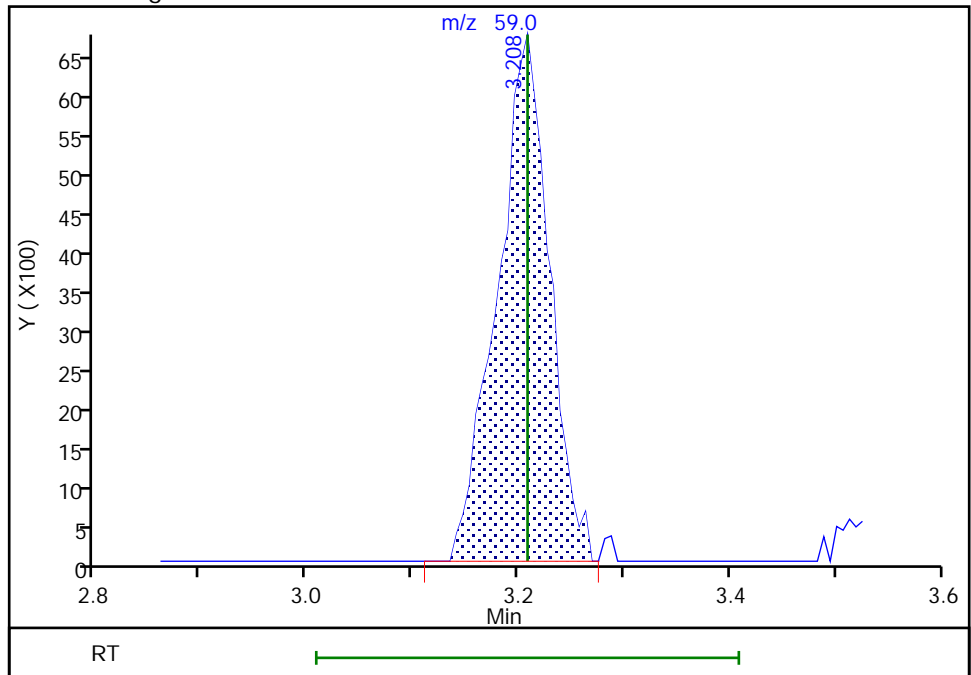
RT: 3.21
Area: 22702
Amount: 0.541226
Amount Units: ug/l

Processing Integration Results



RT: 3.21
Area: 22931
Amount: 0.514803
Amount Units: ug/l

Manual Integration Results



Reviewer: virayd, 01-Dec-2020 11:53:52
Audit Action: Manually Integrated

Audit Reason: Other

Eurofins Lancaster Laboratories Env, LLC

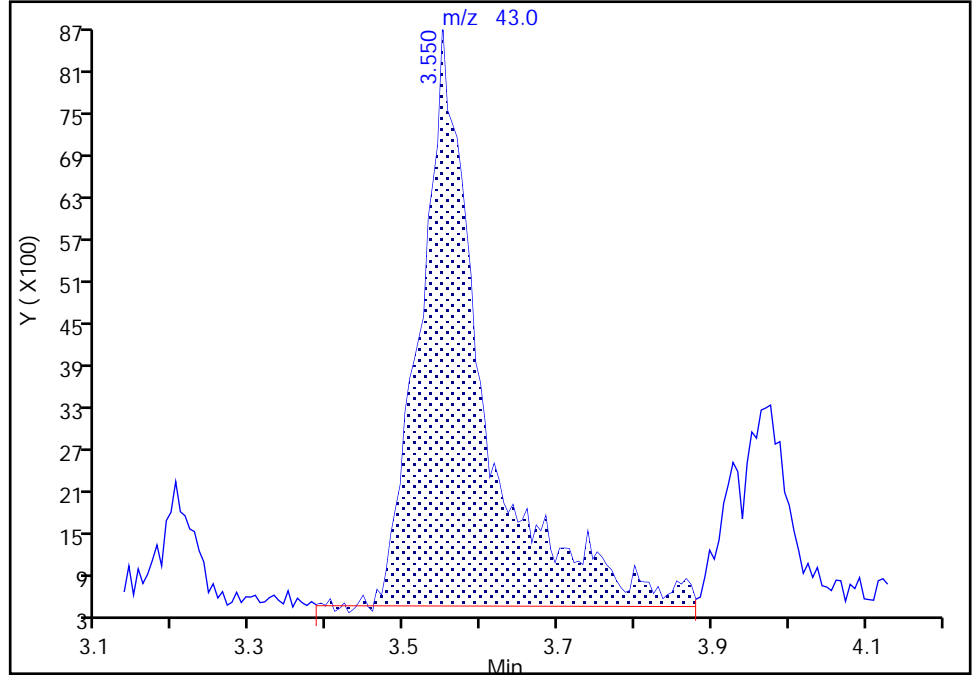
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Injection Date: 30-Nov-2020 14:41:30 Instrument ID: 16334
Lims ID: IC std2
Client ID:
Operator ID: DVV10203 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

20 Acetone, CAS: 67-64-1

Signal: 1

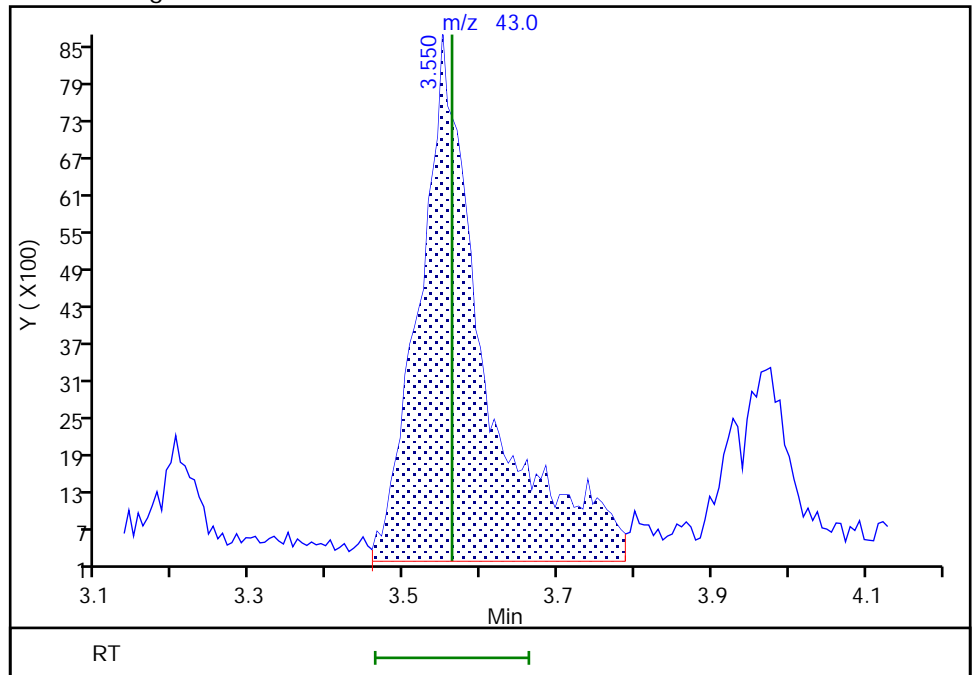
RT: 3.55
Area: 46876
Amount: 5.077360
Amount Units: ug/l

Processing Integration Results



RT: 3.55
Area: 50222
Amount: 5.226580
Amount Units: ug/l

Manual Integration Results



Reviewer: virayd, 01-Dec-2020 11:54:03
Audit Action: Manually Integrated

Audit Reason: Other

Eurofins Lancaster Laboratories Env, LLC

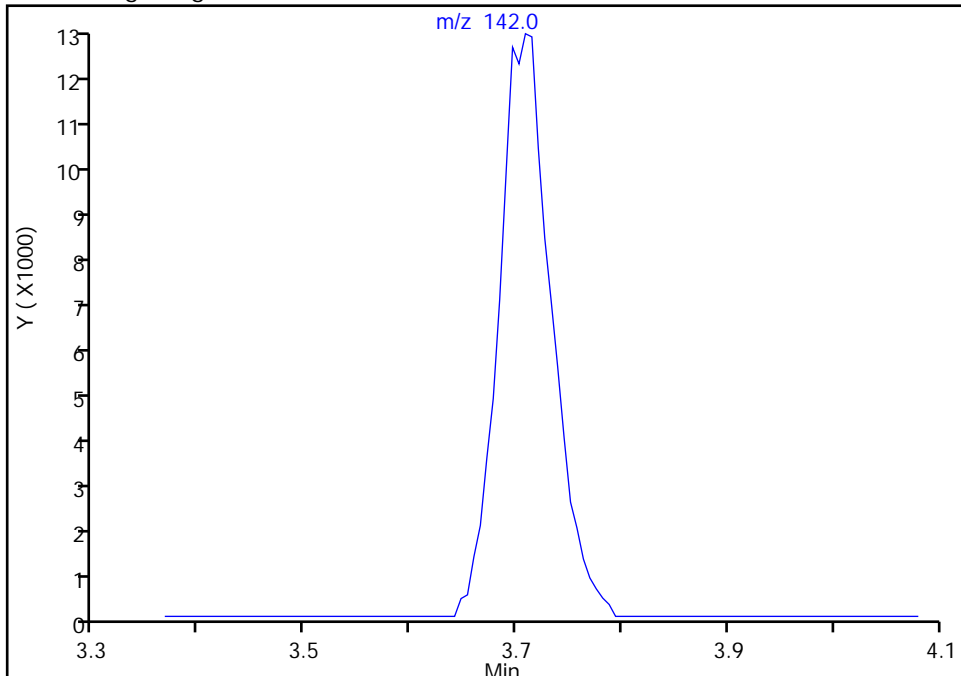
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Injection Date: 30-Nov-2020 14:41:30 Instrument ID: 16334
Lims ID: IC std2
Client ID:
Operator ID: DVV10203 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

22 Iodomethane, CAS: 74-88-4

Signal: 1

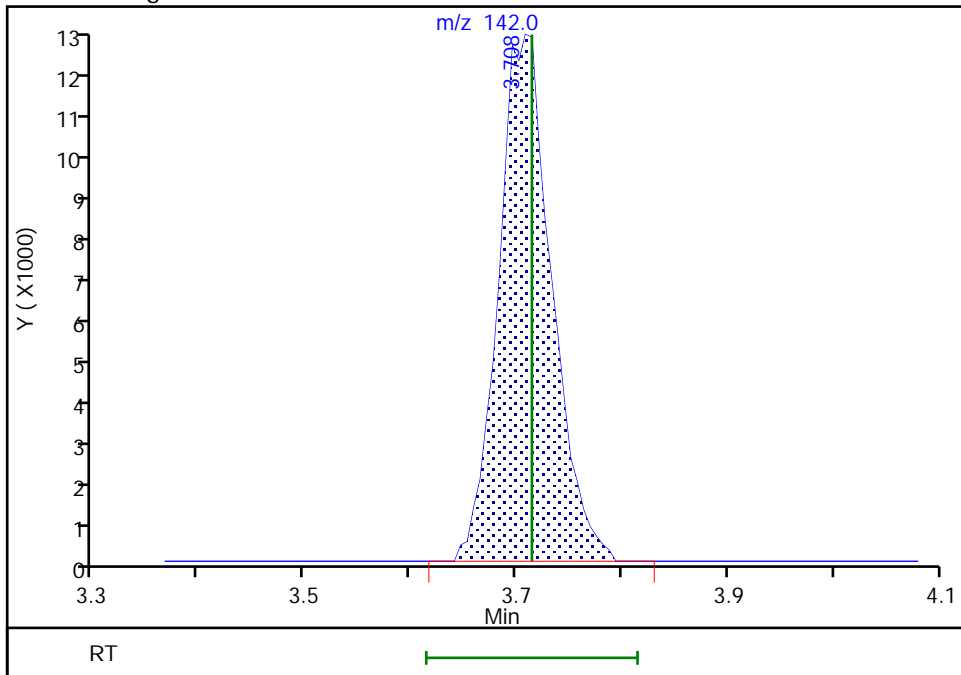
Not Detected
Expected RT: 3.71

Processing Integration Results



Manual Integration Results

RT: 3.71
Area: 43500
Amount: 0.510659
Amount Units: ug/l



Reviewer: virayd, 01-Dec-2020 11:54:17
Audit Action: Manually Integrated

Audit Reason: Other

Eurofins Lancaster Laboratories Env, LLC

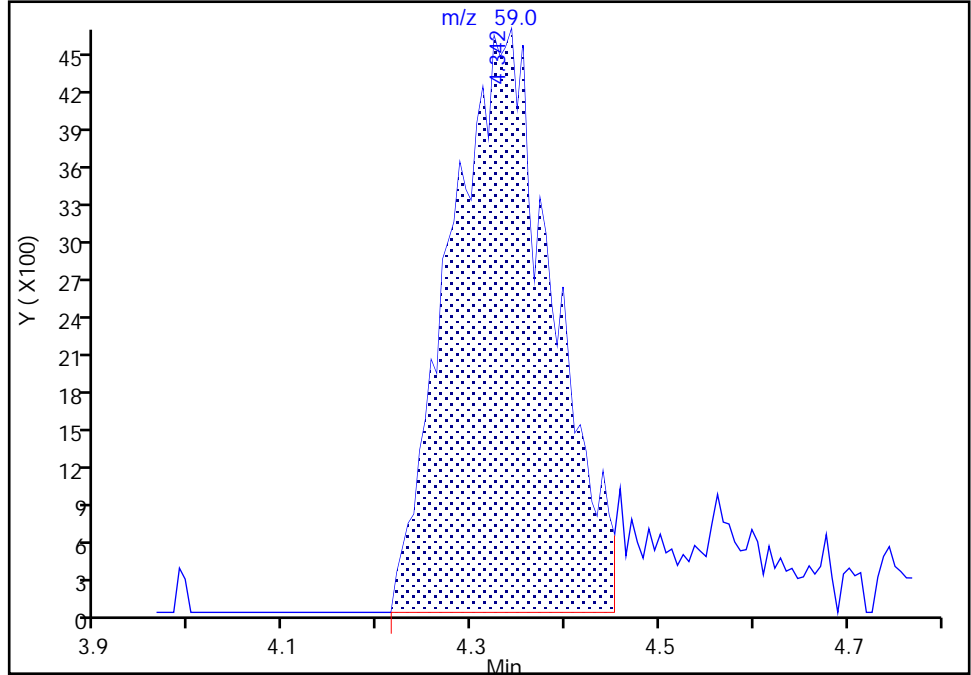
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Injection Date: 30-Nov-2020 14:41:30 Instrument ID: 16334
Lims ID: IC std2
Client ID:
Operator ID: DVV10203 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

30 2-Methyl-2-propanol, CAS: 75-65-0

Signal: 1

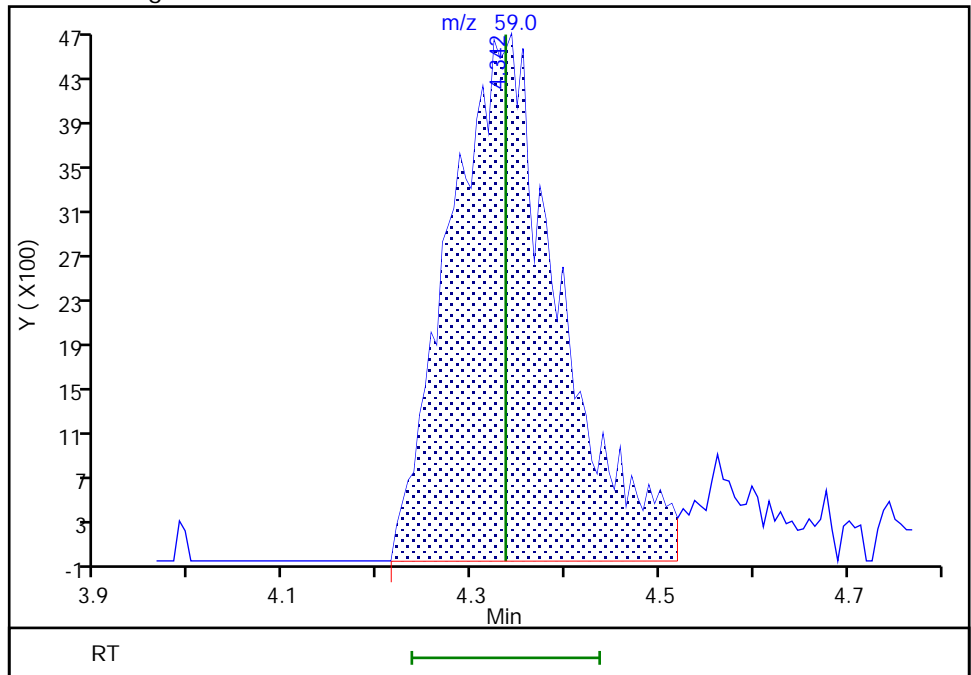
RT: 4.34
Area: 34943
Amount: 10.111494
Amount Units: ug/l

Processing Integration Results



RT: 4.34
Area: 37272
Amount: 10.585071
Amount Units: ug/l

Manual Integration Results



Reviewer: virayd, 01-Dec-2020 11:54:40
Audit Action: Manually Integrated

Audit Reason: Other

Eurofins Lancaster Laboratories Env, LLC

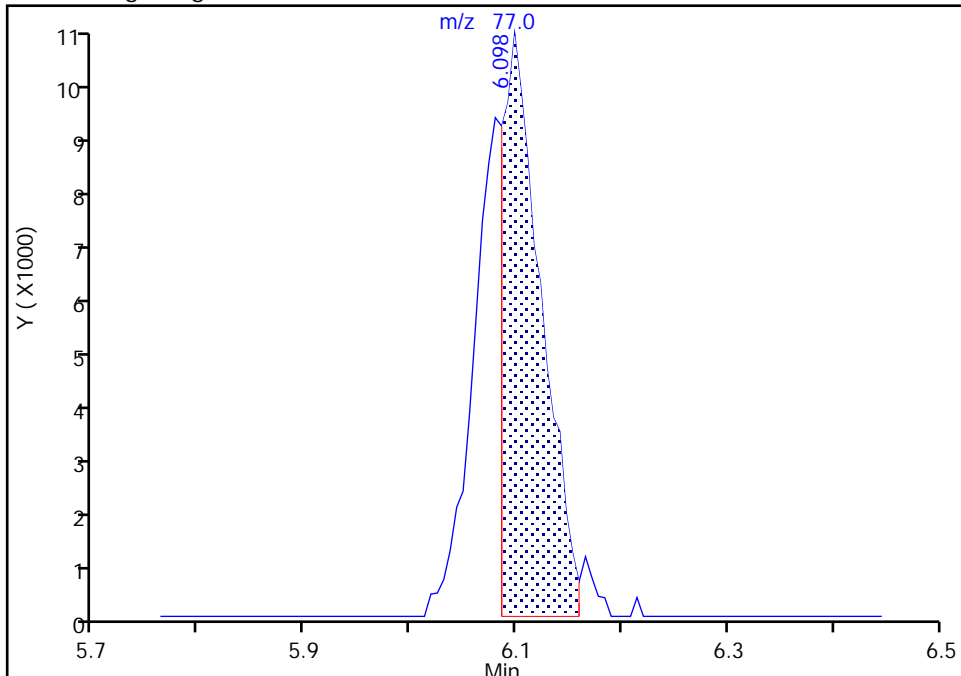
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Injection Date: 30-Nov-2020 14:41:30 Instrument ID: 16334
Lims ID: IC std2
Client ID:
Operator ID: DVV10203 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

42 2,2-Dichloropropane, CAS: 594-20-7

Signal: 1

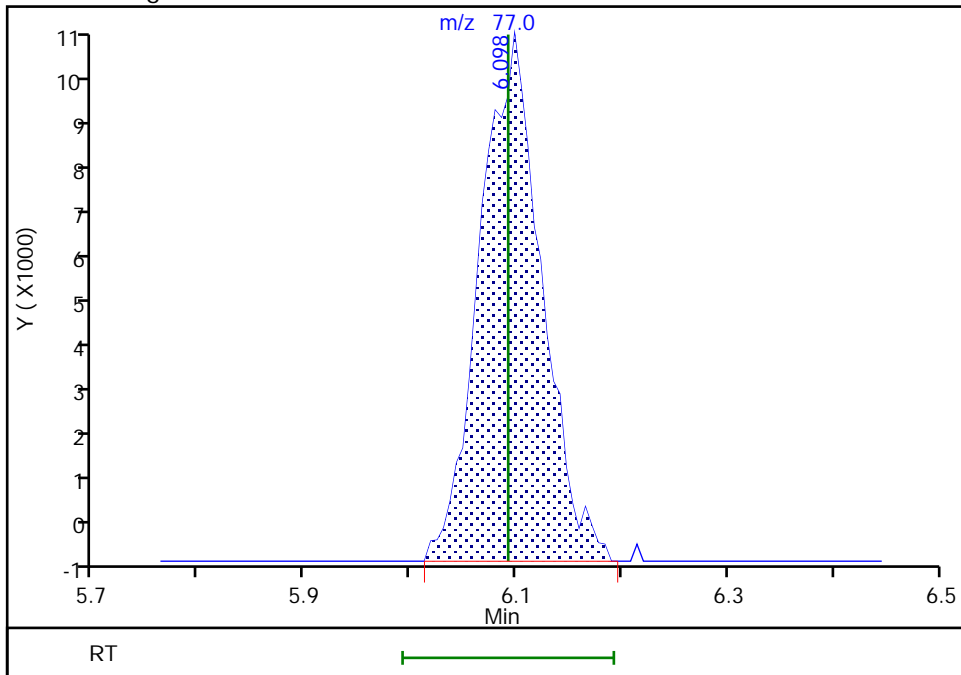
RT: 6.10
Area: 26319
Amount: 0.397289
Amount Units: ug/l

Processing Integration Results



RT: 6.10
Area: 41487
Amount: 0.507611
Amount Units: ug/l

Manual Integration Results



Reviewer: virayd, 01-Dec-2020 11:54:54
Audit Action: Manually Integrated

Audit Reason: Other

Euofins Lancaster Laboratories Env, LLC

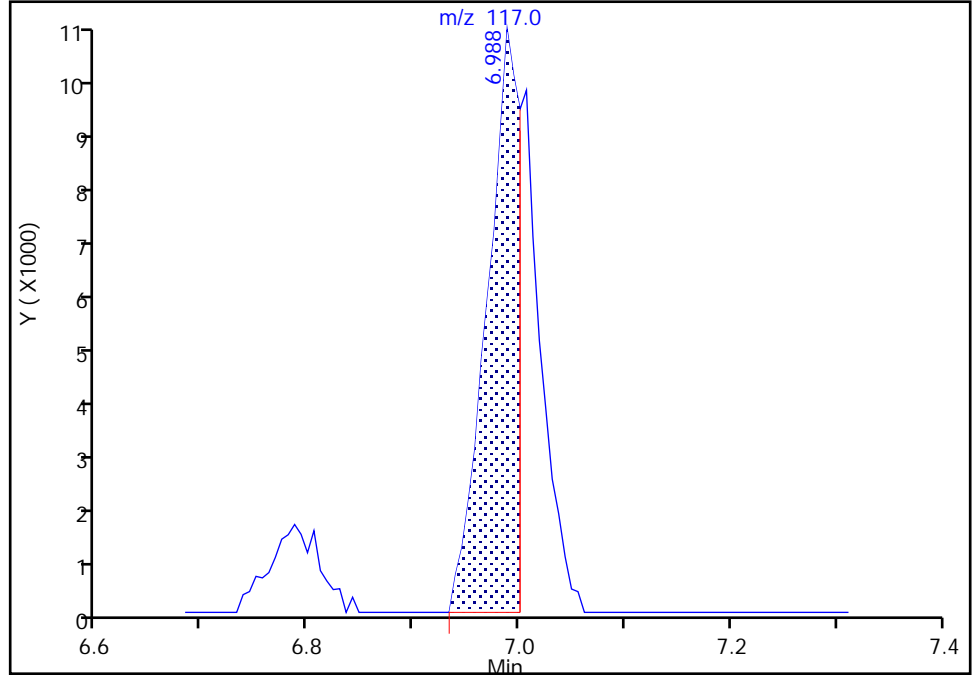
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Injection Date: 30-Nov-2020 14:41:30 Instrument ID: 16334
Lims ID: IC std2
Client ID:
Operator ID: DVV10203 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

56 Carbon tetrachloride, CAS: 56-23-5

Signal: 1

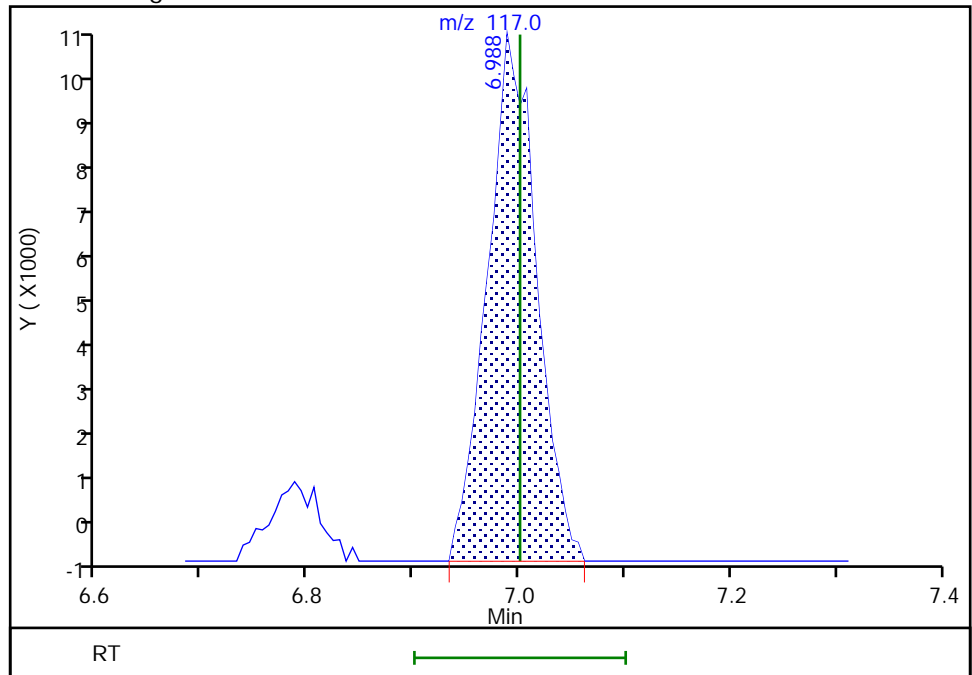
RT: 6.99
Area: 23019
Amount: 0.365200
Amount Units: ug/l

Processing Integration Results



RT: 6.99
Area: 34456
Amount: 0.494529
Amount Units: ug/l

Manual Integration Results



Reviewer: virayd, 01-Dec-2020 11:55:06
Audit Action: Manually Integrated

Audit Reason: Other

Euofins Lancaster Laboratories Env, LLC

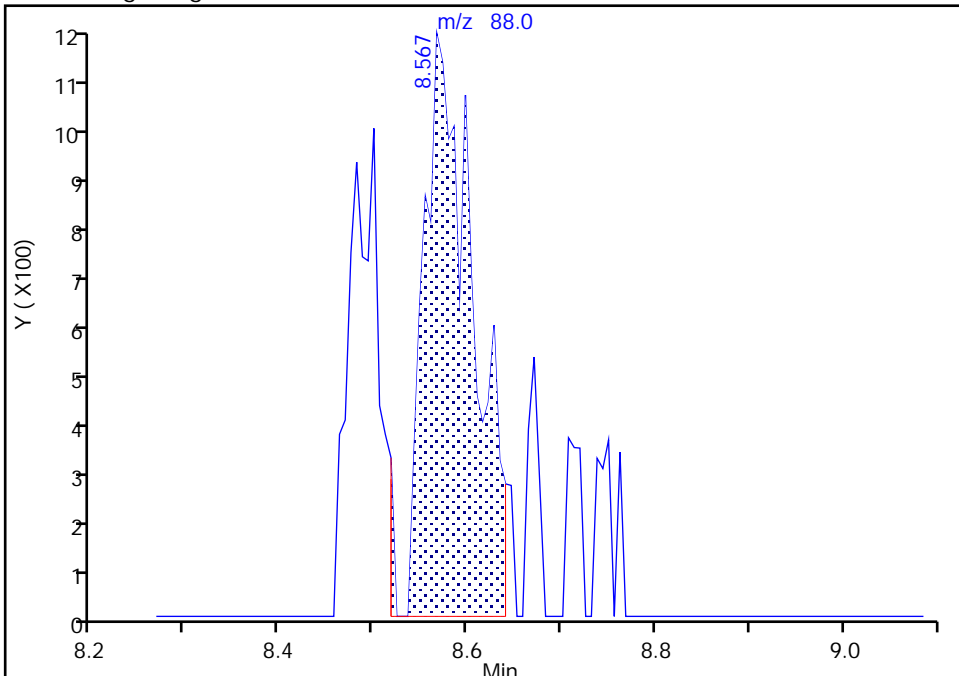
Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I06.D
Injection Date: 30-Nov-2020 14:41:30 Instrument ID: 16334
Lims ID: IC std2
Client ID:
Operator ID: DVV10203 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

72 1,4-Dioxane, CAS: 123-91-1

Signal: 1

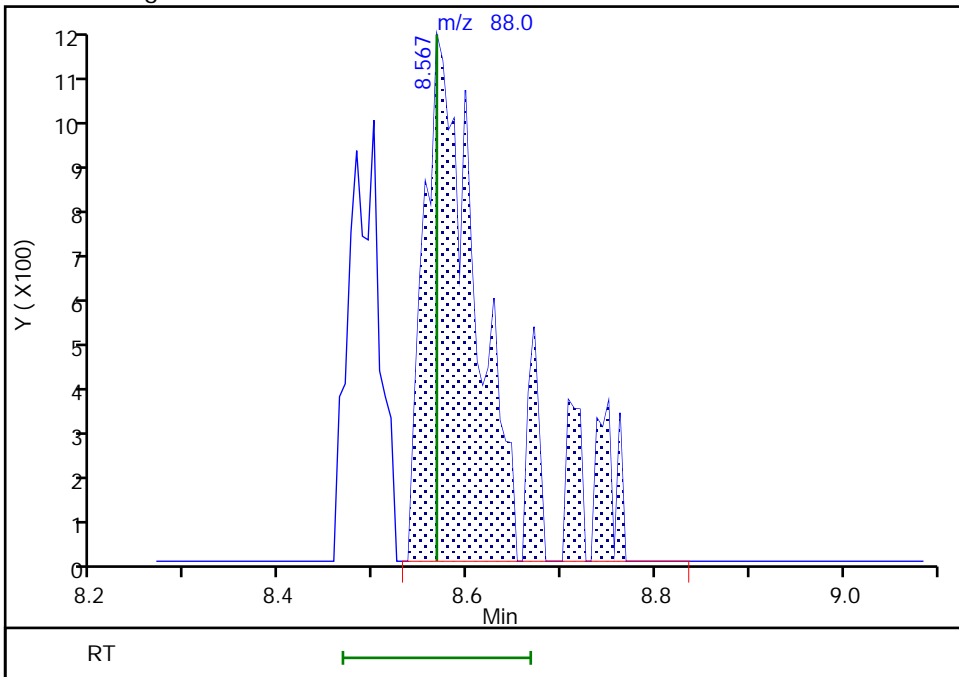
RT: 8.57
Area: 4232
Amount: 19.816218
Amount Units: ug/l

Processing Integration Results



RT: 8.57
Area: 5456
Amount: 24.234851
Amount Units: ug/l

Manual Integration Results



Reviewer: virayd, 01-Dec-2020 11:55:21
Audit Action: Manually Integrated

Audit Reason: Other

Eurofins Lancaster Laboratories Env, LLC

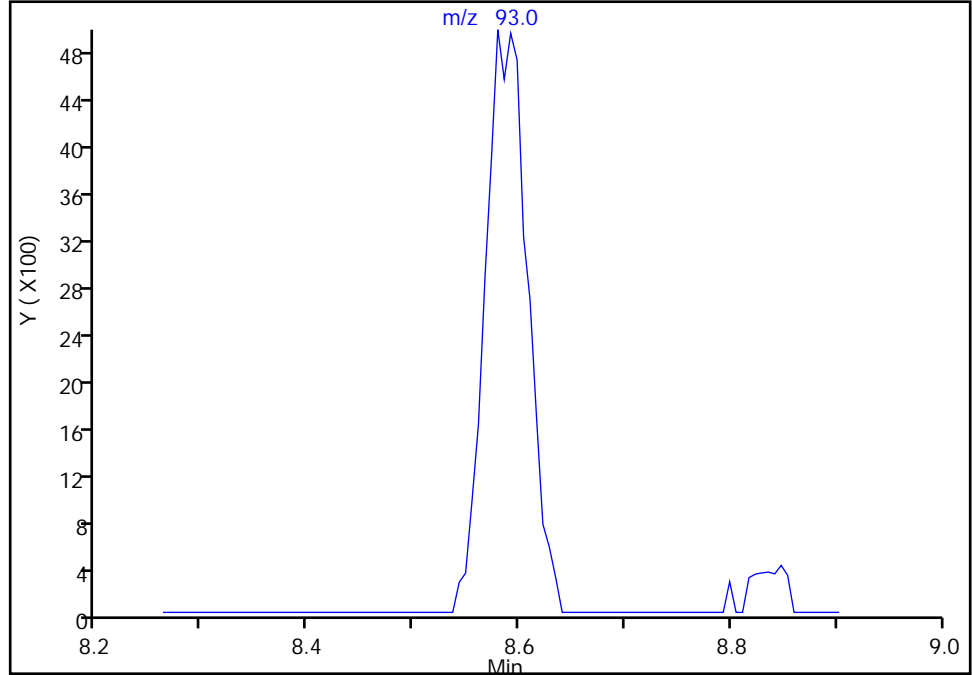
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Injection Date: 30-Nov-2020 14:41:30 Instrument ID: 16334
Lims ID: IC std2
Client ID:
Operator ID: DVV10203 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

73 Dibromomethane, CAS: 74-95-3

Signal: 1

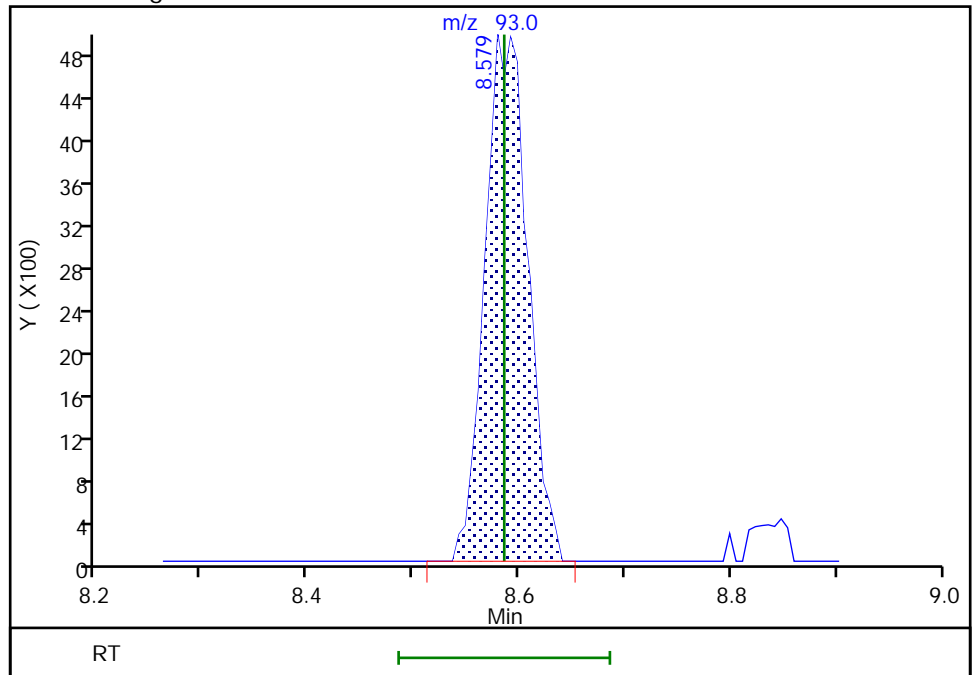
Not Detected
Expected RT: 8.59

Processing Integration Results



Manual Integration Results

RT: 8.58
Area: 13777
Amount: 0.499344
Amount Units: ug/l



Reviewer: virayd, 01-Dec-2020 11:55:26
Audit Action: Manually Integrated

Audit Reason: Other

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I07.D
 Lims ID: IC std1
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 30-Nov-2020 15:03:30 ALS Bottle#: 8 Worklist Smp#: 9
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0016641-009
 Misc. Info.: IC STD1
 Operator ID: DVV10203 Instrument ID: 16334
 Sublist: chrom-MSV_16334_25mL*sub4
 Method: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\MSV_16334_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 01-Dec-2020 18:58:07 Calib Date: 30-Nov-2020 18:23:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1610

First Level Reviewer: virayd

Date: 01-Dec-2020 12:00:14

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.940	1.953	-0.013	86	10440	0.2000	0.1821	
5 Chloromethane	50	2.129	2.148	-0.019	99	17041	0.2000	0.2203	
6 Butadiene	39	2.245	2.264	-0.019	93	21243	0.2000	0.2413	M
7 Vinyl chloride	62	2.251	2.270	-0.019	86	13930	0.2000	0.2110	M
9 Bromomethane	94	2.581	2.593	-0.012	89	10477	0.2000	0.2277	
10 Chloroethane	64	2.654	2.666	-0.012	97	8907	0.2000	0.2223	
11 Dichlorofluoromethane	67	2.898	2.904	-0.006	96	22123	0.2000	0.2464	M
13 Trichlorofluoromethane	101	2.959	2.977	-0.019	95	14649	0.2000	0.1928	M
15 Ethyl ether	59	3.202	3.208	-0.006	97	8950	0.2000	0.1995	M
16 1,2-Dichloro-1,1,2-trifluoroetha	67	3.294	3.300	-0.006	89	13355	0.2000	0.2150	
18 Acrolein	56	3.373	3.385	-0.012	99	71856	10.0	10.2	M
19 1,1-Dichloroethene	96	3.507	3.519	-0.012	96	9428	0.2000	0.2053	
21 112TCTFE	101	3.544	3.556	-0.012	79	6407	0.2000	0.1427	
20 Acetone	43	3.538	3.562	-0.024	98	23541	2.00	2.60	M
22 Iodomethane	142	3.696	3.714	-0.018	99	16625	0.2000	0.1938	
23 Isopropyl alcohol	45	3.721	3.727	-0.006	51	7582	4.00	4.34	
24 Ethyl bromide	108	3.721	3.739	-0.018	95	7681	0.2000	0.1920	
25 Carbon disulfide	76	3.800	3.812	-0.012	99	33137	0.2000	0.1957	
26 Methyl acetate	43	3.958	3.971	-0.012	21	6751	0.2000	0.2460	M
27 3-Chloro-1-propene	41	3.977	3.989	-0.012	92	18885	0.2000	0.2055	M
28 Methylene Chloride	84	4.159	4.178	-0.019	92	10502	0.2000	0.1996	M
* 29 t-Butyl alcohol-d10 (IS)	65	4.190	4.214	-0.024	0	184731	50.0	50.0	
30 2-Methyl-2-propanol	59	4.324	4.336	-0.012	57	12558	4.00	3.78	M
31 Acrylonitrile	53	4.507	4.525	-0.018	87	10931	1.00	0.9322	
32 Methyl tert-butyl ether	73	4.556	4.580	-0.024	88	29258	0.2000	0.2004	
33 trans-1,2-Dichloroethene	96	4.574	4.586	-0.012	97	10478	0.2000	0.1982	
34 Hexane	57	5.007	5.007	0.000	91	12643	0.2000	0.1640	
36 1,1-Dichloroethane	63	5.232	5.251	-0.019	95	18828	0.2000	0.1919	
37 Isopropyl ether	45	5.300	5.306	-0.006	95	39957	0.2000	0.2002	
38 2-Chloro-1,3-butadiene	53	5.342	5.360	-0.018	90	17821	0.2000	0.1997	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
39 Tert-butyl ethyl ether	59	5.824	5.836	-0.012	99	36262	0.2000	0.1992	
40 2-Butanone (MEK)	43	6.043	6.049	-0.006	100	34375	2.00	2.05	
41 cis-1,2-Dichloroethene	96	6.074	6.086	-0.012	85	11304	0.2000	0.1904	
42 2,2-Dichloropropane	77	6.080	6.092	-0.012	65	16476	0.2000	0.2002	M
44 Propionitrile	54	6.135	6.147	-0.012	97	14908	4.00	3.58	
S 49 1,2-Dichloroethene, Total	100				0			0.3886	
46 Methacrylonitrile	67	6.354	6.360	-0.006	94	32580	2.00	2.11	M
48 Chlorobromomethane	128	6.409	6.409	0.000	85	5366	0.2000	0.2028	
47 Tetrahydrofuran	71	6.415	6.409	0.006	82	8871	2.00	2.04	
50 Chloroform	83	6.555	6.561	-0.006	93	18700	0.2000	0.1978	
\$ 52 Dibromofluoromethane (Surr)	113	6.769	6.781	-0.012	94	526196	10.0	9.86	
51 1,1,1-Trichloroethane	97	6.793	6.787	0.006	12	16224	0.2000	0.2005	M
53 Cyclohexane	56	6.866	6.878	-0.012	92	15080	0.2000	0.1621	M
56 Carbon tetrachloride	117	6.994	7.000	-0.006	94	13772	0.2000	0.1963	M
55 1,1-Dichloropropene	75	7.000	7.000	0.000	90	15173	0.2000	0.1995	
57 Isobutyl alcohol	41	7.165	7.165	0.000	85	14998	10.0	12.0	M
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.220	7.232	-0.012	0	112511	10.0	9.91	
59 Benzene	78	7.250	7.263	-0.013	95	44170	0.2000	0.1971	
60 1,2-Dichloroethane	62	7.330	7.336	-0.006	95	14128	0.2000	0.2254	
62 Tert-amyl methyl ether	73	7.445	7.458	-0.013	98	31976	0.2000	0.1993	
* 63 Fluorobenzene (IS)	96	7.665	7.671	-0.006	98	2204755	10.0	10.0	
64 n-Heptane	43	7.671	7.677	-0.006	36	14986	0.2000	0.1723	
65 n-Butanol	56	8.049	8.049	0.000	89	26057	20.0	21.8	
67 Trichloroethene	95	8.140	8.147	-0.007	73	11723	0.2000	0.2048	M
68 Methylcyclohexane	83	8.451	8.451	0.000	92	15769	0.2000	0.1774	
69 1,2-Dichloropropane	63	8.482	8.482	0.000	89	12189	0.2000	0.2033	
70 2-ethoxy-2-methyl butane	87	8.488	8.488	0.000	91	17353	0.2000	0.1979	
72 1,4-Dioxane	88	8.567	8.567	0.000	36	1248	10.0	5.88	M
71 Methyl methacrylate	69	8.561	8.567	-0.006	94	6248	0.2000	0.1987	M
73 Dibromomethane	93	8.579	8.585	-0.006	97	5716	0.2000	0.2057	
75 Dichlorobromomethane	83	8.817	8.823	-0.006	98	13698	0.2000	0.1970	
76 2-Nitropropane	41	9.110	9.110	0.000	96	18191	2.00	2.04	
79 1-Bromo-2-chloroethane	63	9.213	9.219	-0.006	97	12526	0.2000	0.1949	
80 cis-1,3-Dichloropropene	75	9.372	9.378	-0.006	94	17452	0.2000	0.1934	
81 4-Methyl-2-pentanone (MIBK)	43	9.561	9.561	0.000	98	86421	2.00	2.00	
\$ 82 Toluene-d8 (Surr)	98	9.683	9.689	-0.006	94	2122568	10.0	10.1	
83 Toluene	92	9.762	9.762	0.000	97	27572	0.2000	0.2016	
84 trans-1,3-Dichloropropene	75	10.024	10.024	0.000	94	14156	0.2000	0.1917	
S 87 1,3-Dichloropropene, Total	100				0			0.3851	
85 Ethyl methacrylate	69	10.091	10.085	0.006	88	13470	0.2000	0.2030	
86 1,1,2-Trichloroethane	97	10.225	10.231	-0.006	87	7932	0.2000	0.1988	
88 Tetrachloroethene	166	10.311	10.311	0.000	95	11458	0.2000	0.1931	
89 1,3-Dichloropropane	76	10.396	10.396	0.000	91	14652	0.2000	0.2036	
91 2-Hexanone	43	10.445	10.451	-0.006	98	62169	2.00	2.00	
93 Chlorodibromomethane	129	10.603	10.603	0.000	89	8808	0.2000	0.1861	
94 Ethylene Dibromide	107	10.713	10.713	0.000	99	7804	0.2000	0.1992	
* 95 Chlorobenzene-d5 (IS)	117	11.146	11.146	0.000	87	1578236	10.0	10.0	
96 1-Chlorohexane	91	11.158	11.158	0.000	91	18485	0.2000	0.2250	
97 Chlorobenzene	112	11.176	11.176	0.000	96	30598	0.2000	0.2008	
S 101 Xylenes, Total	106				0			0.5945	
98 1,1,1,2-Tetrachloroethane	131	11.256	11.256	0.000	95	10378	0.2000	0.1917	
99 Ethylbenzene	91	11.262	11.262	0.000	99	56042	0.2000	0.2074	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
100 m-Xylene & p-Xylene	106	11.371	11.378	-0.007	96	39788	0.4000	0.3906	
102 o-Xylene	106	11.707	11.707	0.000	96	20593	0.2000	0.2039	
103 Styrene	104	11.719	11.719	0.000	95	34193	0.2000	0.1987	
104 Bromoform	173	11.877	11.877	0.000	94	4668	0.2000	0.1690	
105 Isopropylbenzene	105	12.006	12.006	0.000	96	53210	0.2000	0.2014	
\$ 108 4-Bromofluorobenzene (Surr)	95	12.146	12.152	-0.006	89	812877	10.0	10.1	
109 1,1,2,2-Tetrachloroethane	83	12.255	12.255	0.000	93	10124	0.2000	0.1878	
110 Bromobenzene	156	12.268	12.268	0.000	95	12894	0.2000	0.1992	
111 trans-1,4-Dichloro-2-butene	53	12.280	12.280	0.000	95	23186	2.00	1.73	
112 1,2,3-Trichloropropane	110	12.298	12.304	-0.006	78	2519	0.2000	0.1833	
113 N-Propylbenzene	91	12.335	12.335	0.000	98	65333	0.2000	0.2024	
114 2-Chlorotoluene	126	12.408	12.414	-0.006	96	12758	0.2000	0.2010	
115 1,3,5-Trimethylbenzene	105	12.469	12.469	0.000	93	43880	0.2000	0.1927	
116 4-Chlorotoluene	126	12.505	12.505	0.000	97	12838	0.2000	0.1940	
118 tert-Butylbenzene	134	12.713	12.713	0.000	94	9709	0.2000	0.1997	
120 Pentachloroethane	167	12.743	12.743	0.000	82	7836	0.2000	0.1875	
119 1,2,4-Trimethylbenzene	105	12.755	12.755	0.000	97	47673	0.2000	0.2005	
121 sec-Butylbenzene	105	12.877	12.877	0.000	94	59733	0.2000	0.2017	
122 1,3-Dichlorobenzene	146	12.975	12.975	0.000	98	26068	0.2000	0.1997	
123 4-Isopropyltoluene	119	12.981	12.981	0.000	97	50640	0.2000	0.1968	
* 124 1,4-Dichlorobenzene-d4	152	13.030	13.030	0.000	96	857732	10.0	10.0	
125 1,4-Dichlorobenzene	146	13.042	13.048	-0.006	93	26967	0.2000	0.2028	
126 1,2,3-Trimethylbenzene	120	13.060	13.060	0.000	97	22584	0.2000	0.2142	
127 Benzyl chloride	126	13.127	13.127	0.000	98	4530	0.2000	0.1943	
129 p-Diethylbenzene	119	13.182	13.182	0.000	91	30785	0.2000	0.1970	
130 n-Butylbenzene	92	13.274	13.274	0.000	97	27112	0.2000	0.1989	
131 1,2-Dichlorobenzene	146	13.310	13.310	0.000	97	24056	0.2000	0.1975	
134 1,2-Dibromo-3-Chloropropane	155	13.853	13.853	0.000	84	1486	0.2000	0.1891	
135 1,3,5-Trichlorobenzene	180	13.975	13.975	0.000	97	22309	0.2000	0.2039	
136 1,2,4-Trichlorobenzene	180	14.395	14.395	0.000	94	19946	0.2000	0.1978	
137 Hexachlorobutadiene	225	14.481	14.481	0.000	95	10231	0.2000	0.2067	
138 Naphthalene	128	14.578	14.578	0.000	97	37571	0.2000	0.2048	
139 1,2,3-Trichlorobenzene	180	14.718	14.718	0.000	96	18105	0.2000	0.2035	
140 2-Methylnaphthalene	142	15.340	15.340	0.000	91	27463	0.2000	0.2094	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MSV_RV1_826_00031

Amount Added: 2.00

Units: uL

MSV_RV4GAS826_00097

Amount Added: 2.00

Units: uL

MSV_RV4_826_00035

Amount Added: 2.00

Units: uL

MSV_29_826ISS_00013

Amount Added: 1.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I07.D

Injection Date: 30-Nov-2020 15:03:30

Instrument ID: 16334

Operator ID: DVV10203

Lims ID: IC std1

Worklist Smp#: 9

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

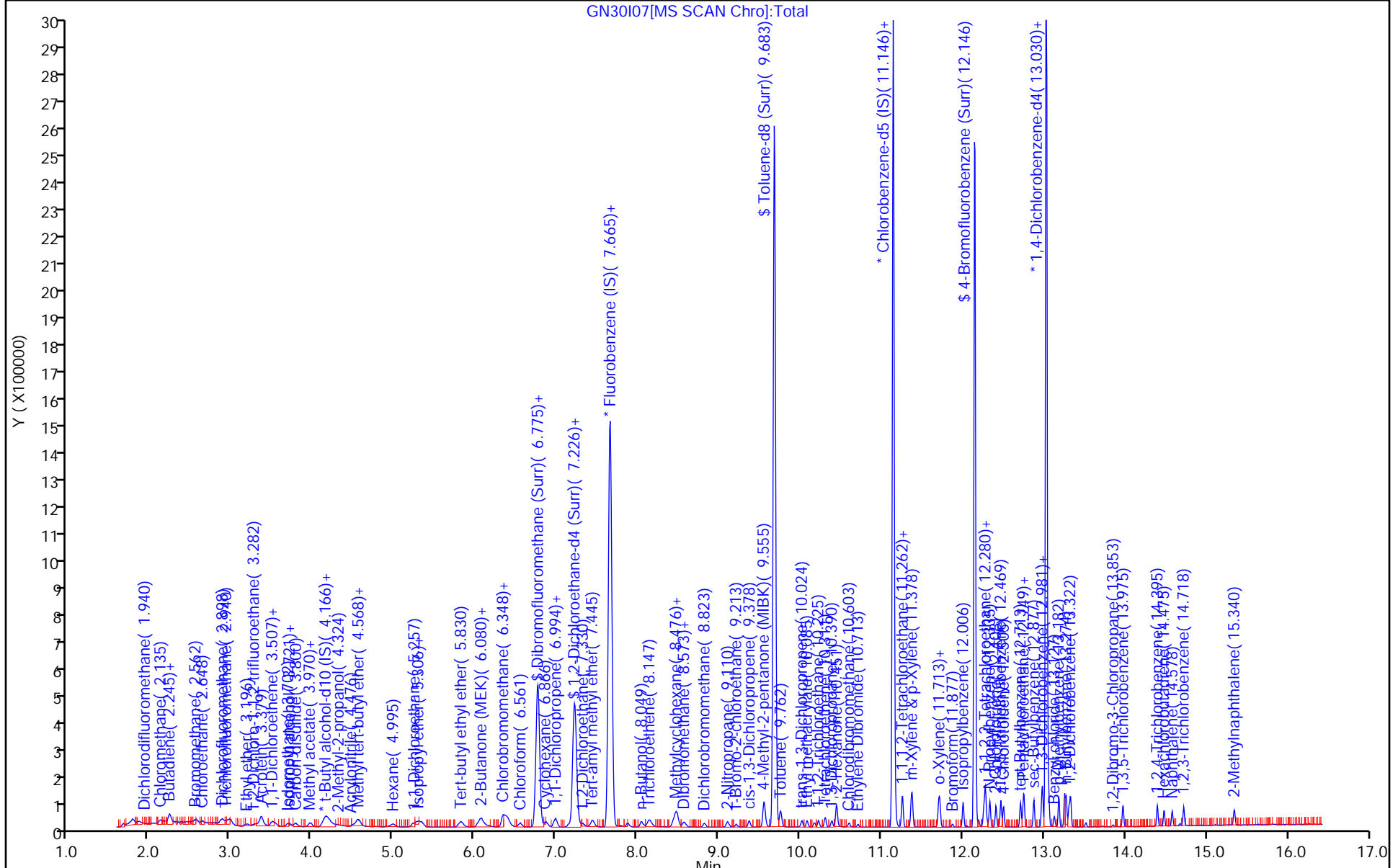
ALS Bottle#: 8

Method: MSV_16334_25mL

Limit Group: MSV - 8260C_D

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

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC

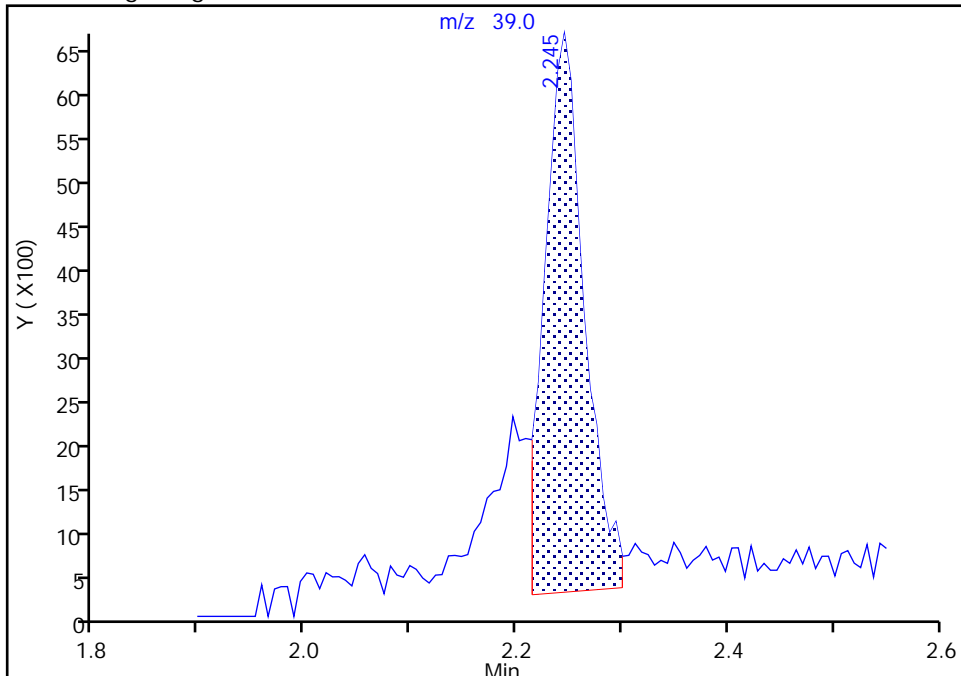
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Injection Date: 30-Nov-2020 15:03:30 Instrument ID: 16334
Lims ID: IC std1
Client ID:
Operator ID: DVV10203 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

6 Butadiene, CAS: 106-99-0

Signal: 1

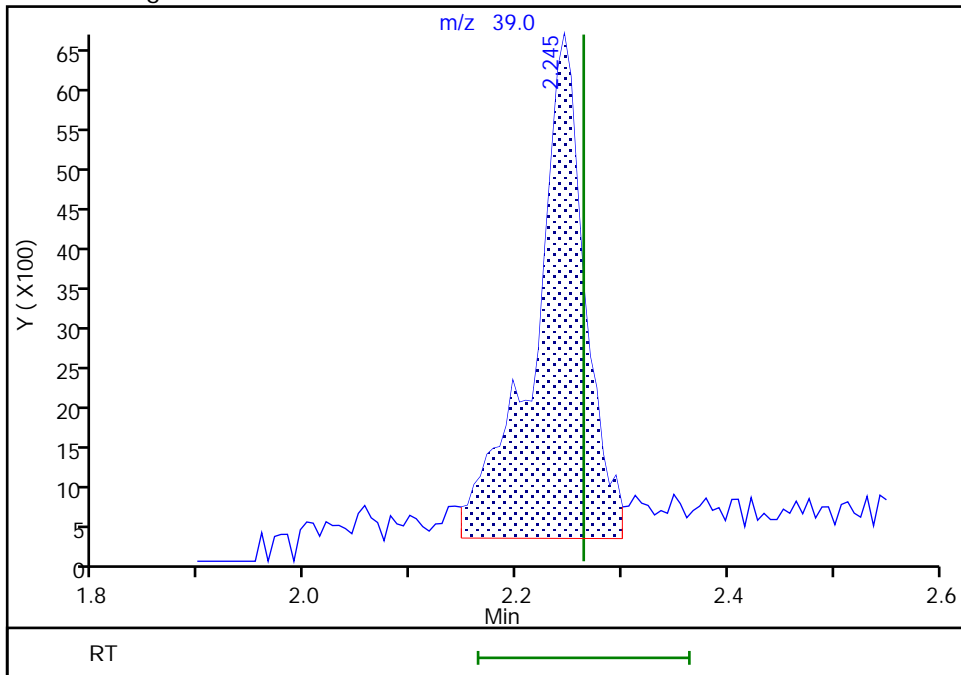
RT: 2.25
Area: 16681
Amount: 0.196763
Amount Units: ug/l

Processing Integration Results



RT: 2.25
Area: 21243
Amount: 0.241300
Amount Units: ug/l

Manual Integration Results



Reviewer: virayd, 01-Dec-2020 11:56:19
Audit Action: Manually Integrated

Audit Reason: Other

Eurofins Lancaster Laboratories Env, LLC

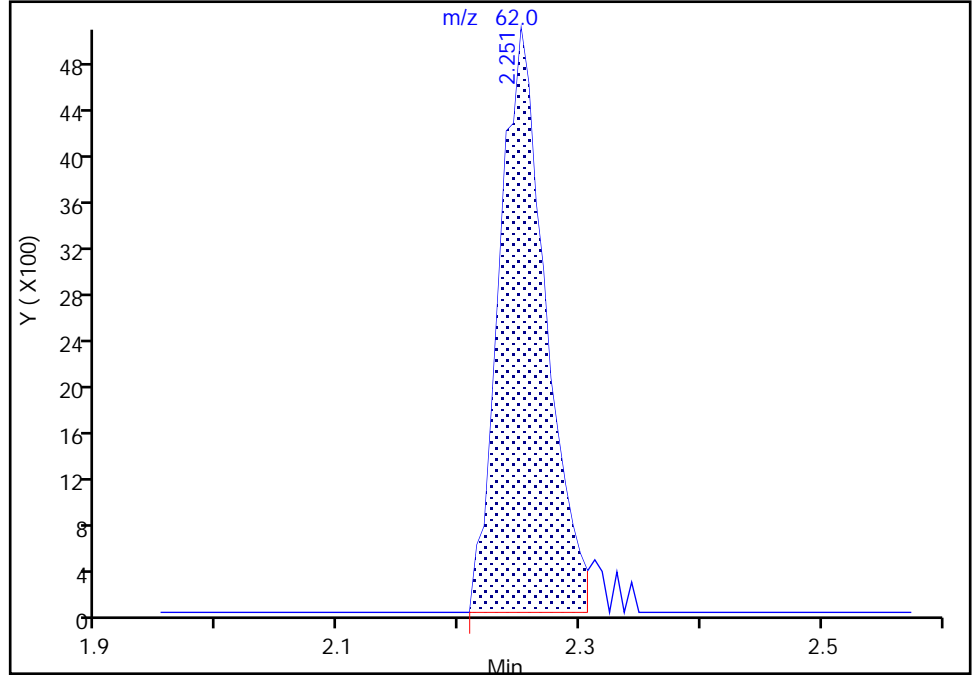
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Injection Date: 30-Nov-2020 15:03:30 Instrument ID: 16334
Lims ID: IC std1
Client ID:
Operator ID: DVV10203 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

7 Vinyl chloride, CAS: 75-01-4

Signal: 1

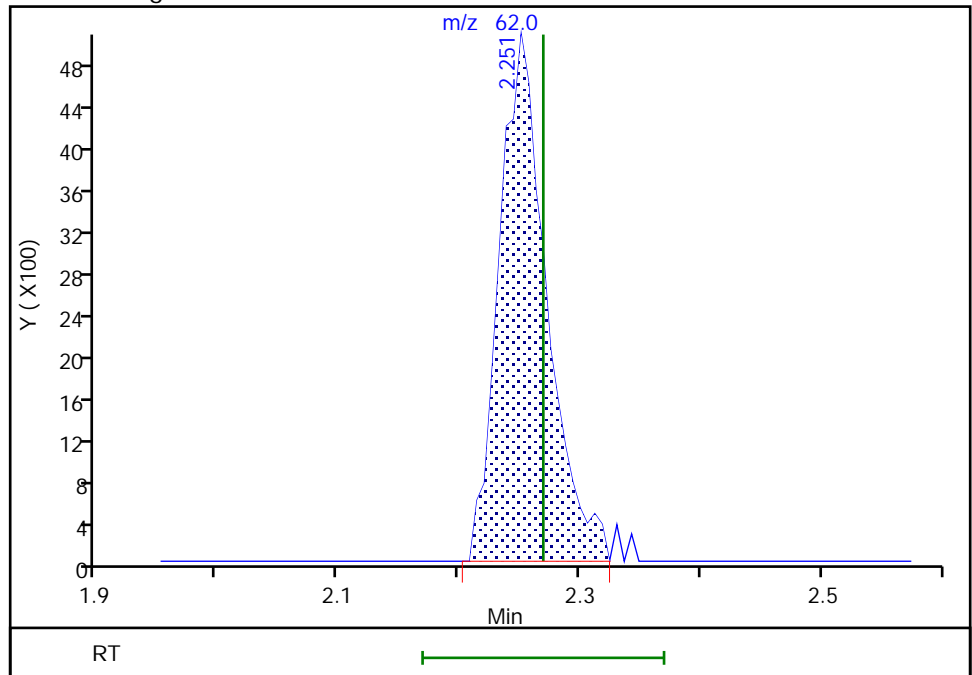
RT: 2.25
Area: 13633
Amount: 0.207129
Amount Units: ug/l

Processing Integration Results



RT: 2.25
Area: 13930
Amount: 0.210962
Amount Units: ug/l

Manual Integration Results



Reviewer: virayd, 01-Dec-2020 11:57:02
Audit Action: Manually Integrated

Audit Reason: Other

Eurofins Lancaster Laboratories Env, LLC

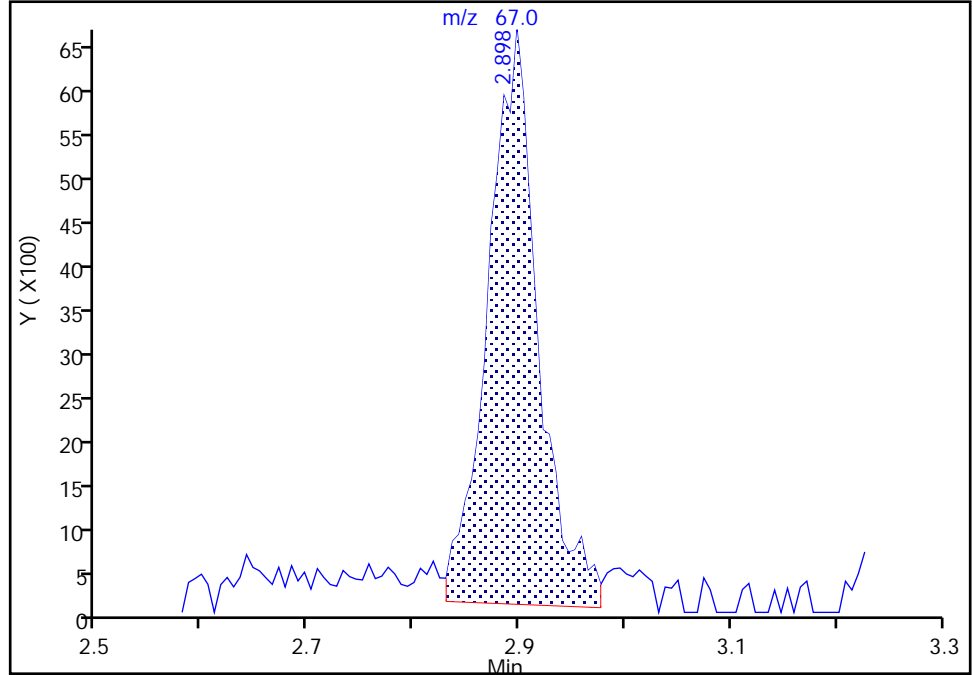
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Injection Date: 30-Nov-2020 15:03:30 Instrument ID: 16334
Lims ID: IC std1
Client ID:
Operator ID: DVV10203 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

11 Dichlorofluoromethane, CAS: 75-43-4

Signal: 1

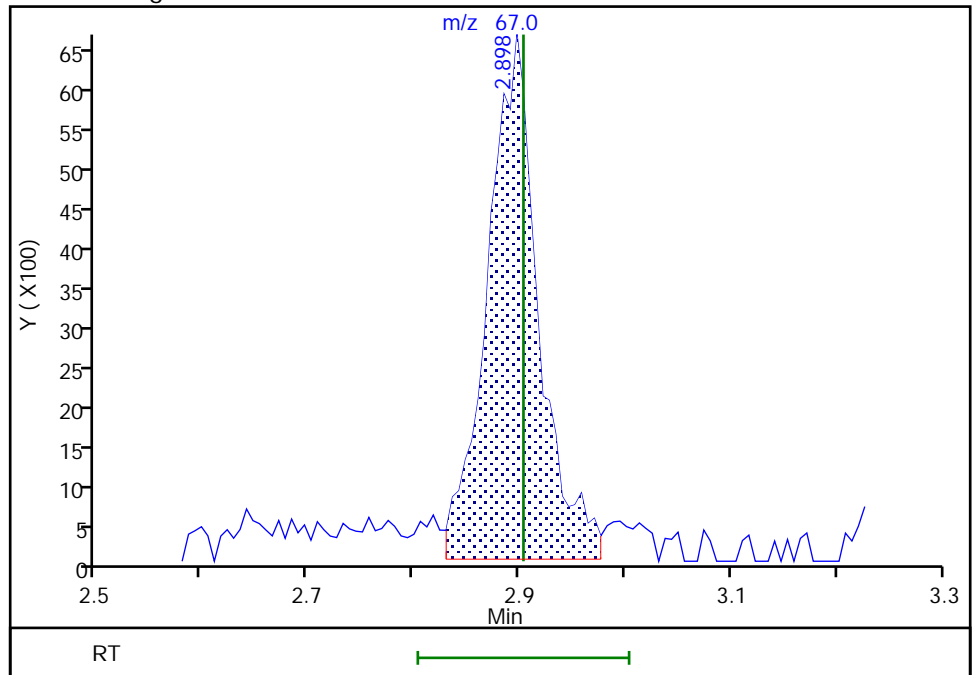
RT: 2.90
Area: 21552
Amount: 0.241088
Amount Units: ug/l

Processing Integration Results



RT: 2.90
Area: 22123
Amount: 0.246351
Amount Units: ug/l

Manual Integration Results



Reviewer: virayd, 01-Dec-2020 11:57:16
Audit Action: Manually Integrated

Audit Reason: Other

Eurofins Lancaster Laboratories Env, LLC

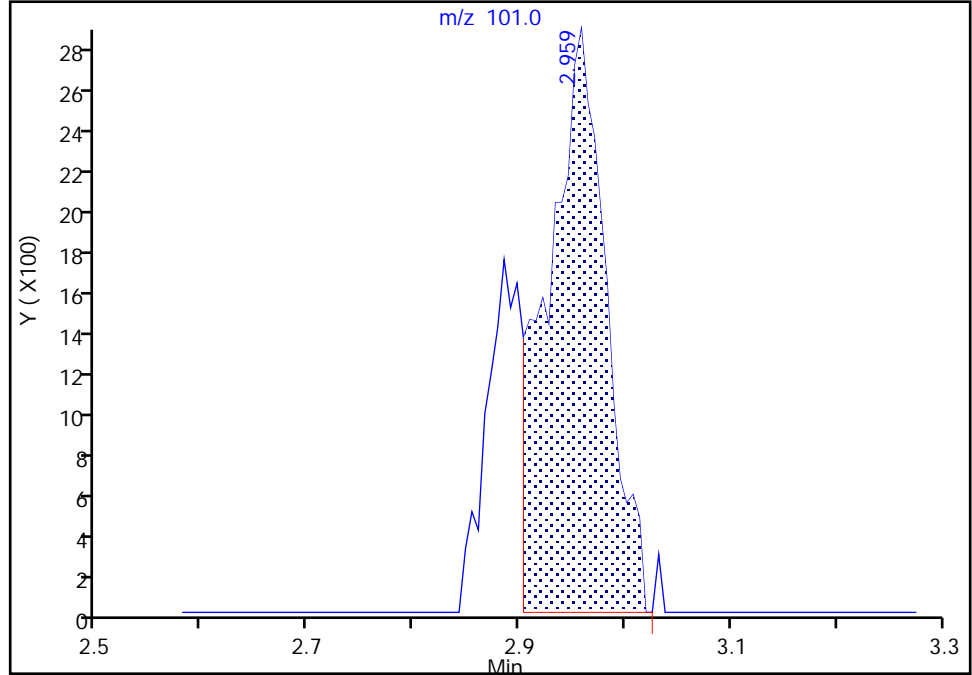
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Injection Date: 30-Nov-2020 15:03:30 Instrument ID: 16334
Lims ID: IC std1
Client ID:
Operator ID: DVV10203 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

13 Trichlorofluoromethane, CAS: 75-69-4

Signal: 1

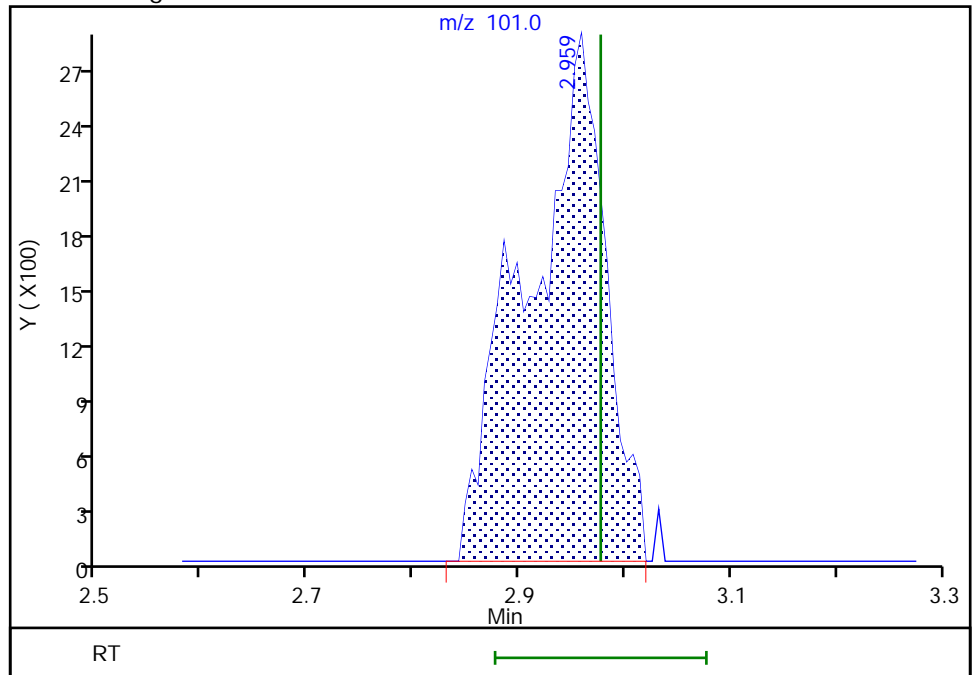
RT: 2.96
Area: 11144
Amount: 0.151648
Amount Units: ug/l

Processing Integration Results



RT: 2.96
Area: 14649
Amount: 0.192776
Amount Units: ug/l

Manual Integration Results



Reviewer: virayd, 01-Dec-2020 11:57:22
Audit Action: Manually Integrated

Audit Reason: Other

Eurofins Lancaster Laboratories Env, LLC

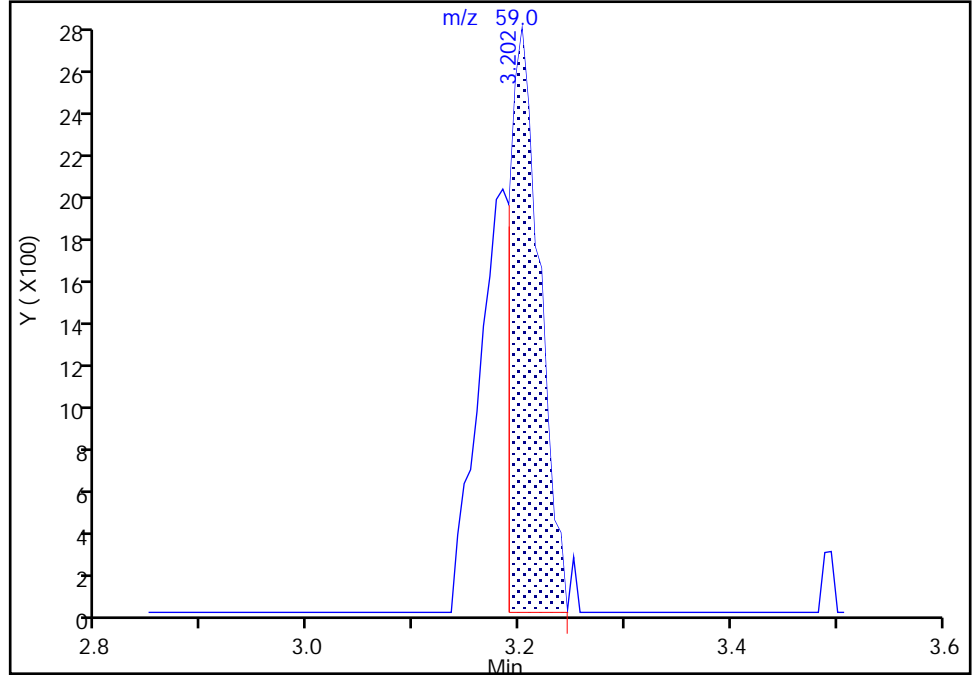
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Injection Date: 30-Nov-2020 15:03:30 Instrument ID: 16334
Lims ID: IC std1
Client ID:
Operator ID: DVV10203 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

15 Ethyl ether, CAS: 60-29-7

Signal: 1

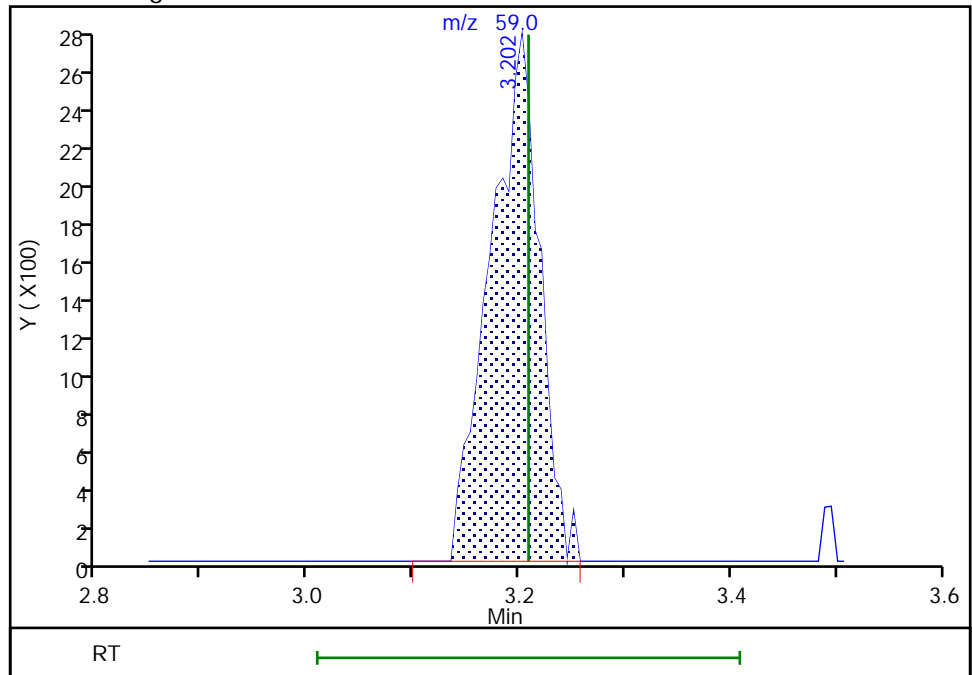
RT: 3.20
Area: 5379
Amount: 0.127140
Amount Units: ug/l

Processing Integration Results



RT: 3.20
Area: 8950
Amount: 0.199519
Amount Units: ug/l

Manual Integration Results



Reviewer: virayd, 01-Dec-2020 11:57:29
Audit Action: Manually Integrated

Audit Reason: Other

Eurofins Lancaster Laboratories Env, LLC

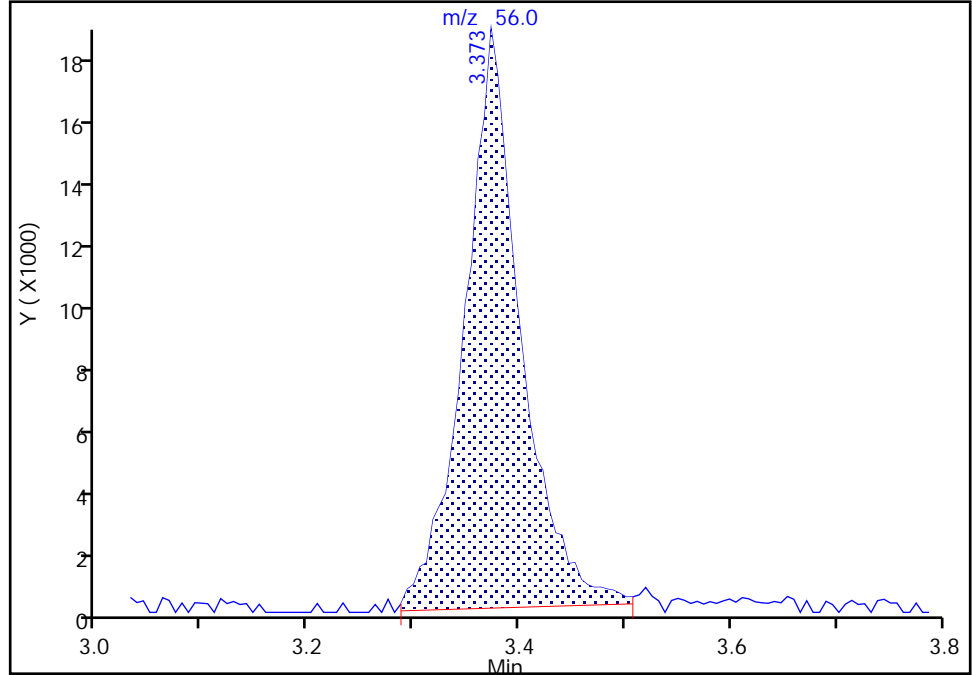
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Injection Date: 30-Nov-2020 15:03:30 Instrument ID: 16334
Lims ID: IC std1
Client ID:
Operator ID: DVV10203 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

18 Acrolein, CAS: 107-02-8

Signal: 1

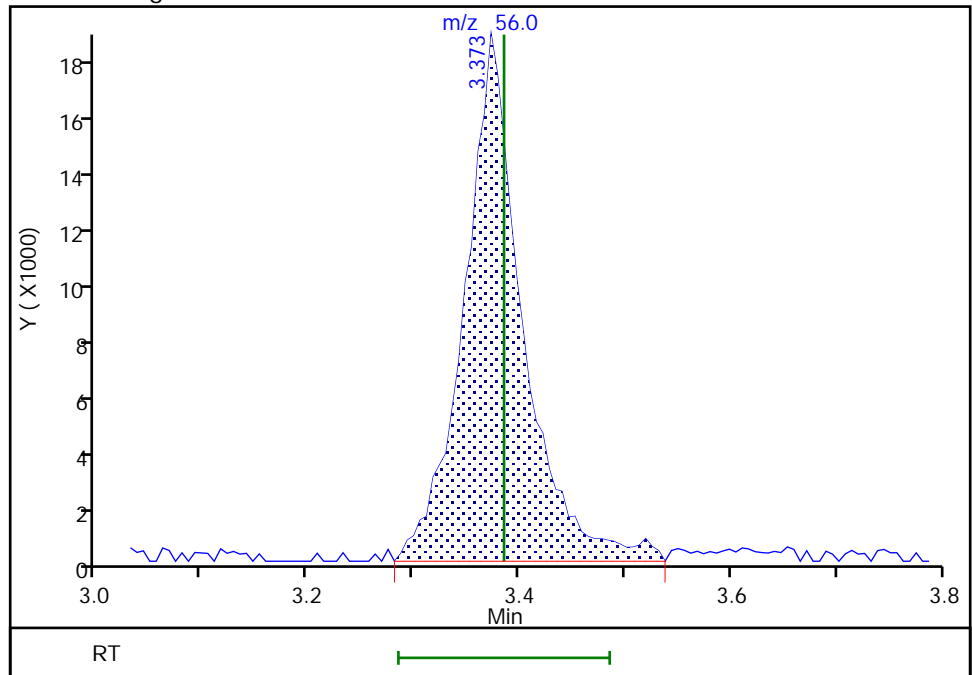
RT: 3.37
Area: 68852
Amount: 9.880650
Amount Units: ug/l

Processing Integration Results



RT: 3.37
Area: 71856
Amount: 10.248628
Amount Units: ug/l

Manual Integration Results



Reviewer: virayd, 01-Dec-2020 11:57:49
Audit Action: Manually Integrated

Audit Reason: Other

Eurofins Lancaster Laboratories Env, LLC

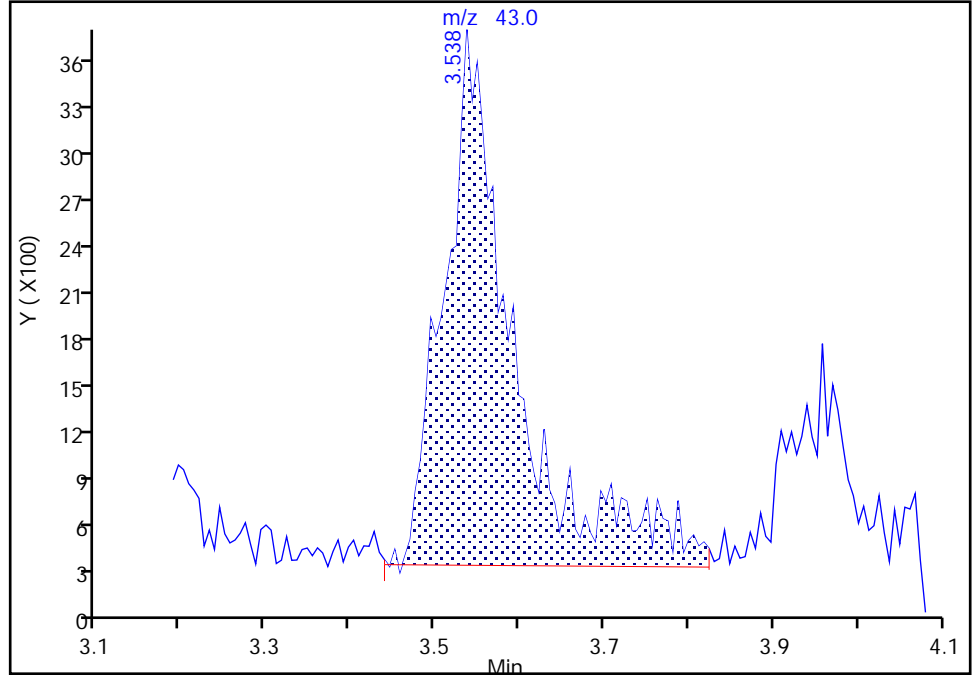
Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I07.D
Injection Date: 30-Nov-2020 15:03:30 Instrument ID: 16334
Lims ID: IC std1
Client ID:
Operator ID: DVV10203 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

20 Acetone, CAS: 67-64-1

Signal: 1

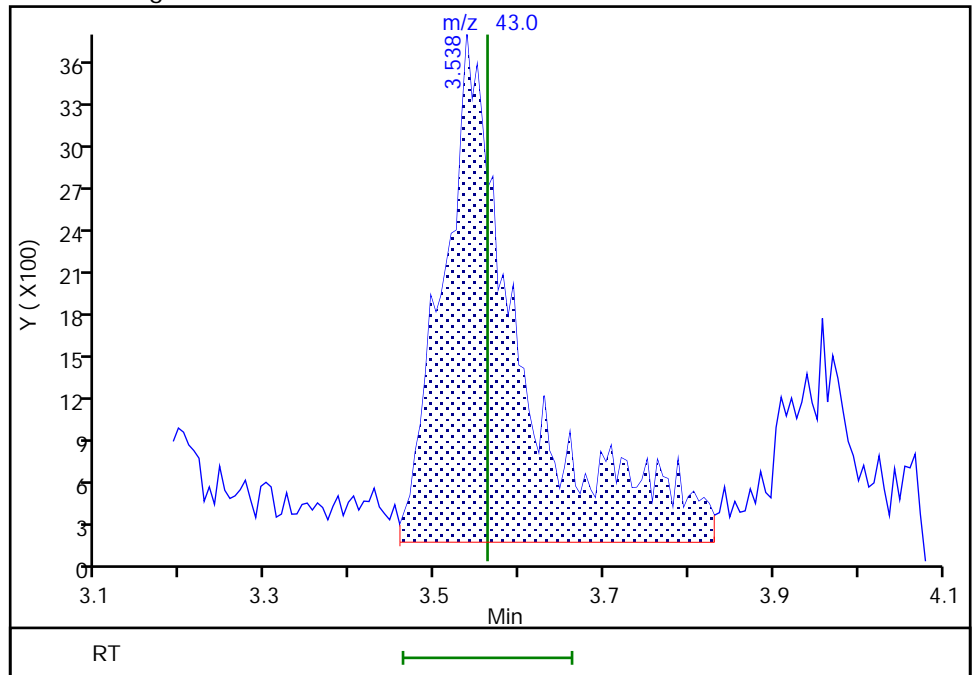
RT: 3.54
Area: 19830
Amount: 2.253640
Amount Units: ug/l

Processing Integration Results



RT: 3.54
Area: 23541
Amount: 2.597149
Amount Units: ug/l

Manual Integration Results



Reviewer: virayd, 01-Dec-2020 11:58:09
Audit Action: Manually Integrated

Audit Reason: Other

Eurofins Lancaster Laboratories Env, LLC

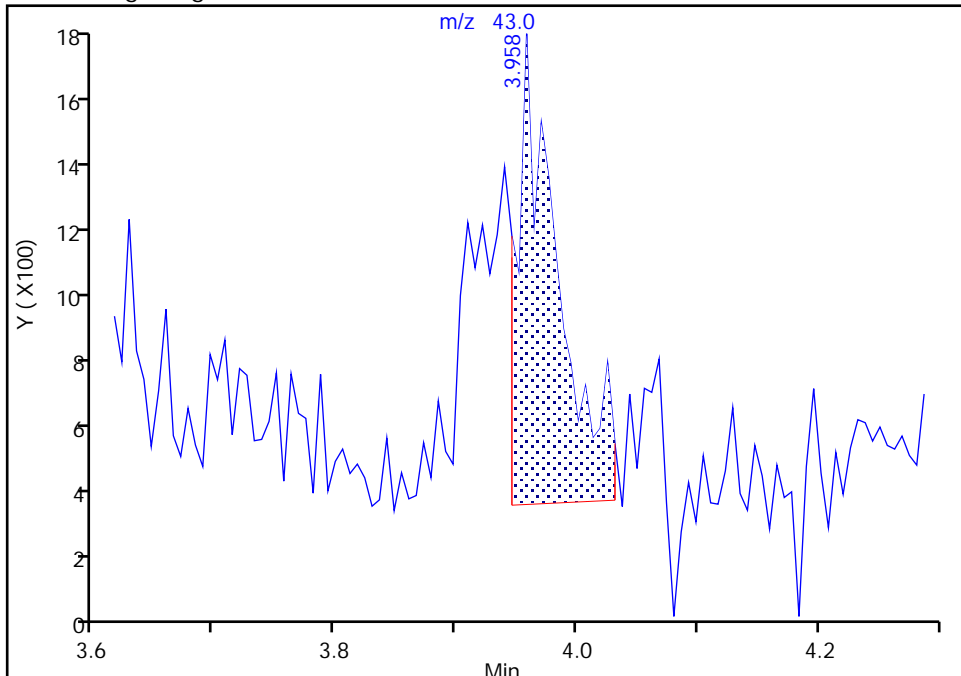
Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I07.D
Injection Date: 30-Nov-2020 15:03:30 Instrument ID: 16334
Lims ID: IC std1
Client ID:
Operator ID: DVV10203 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

26 Methyl acetate, CAS: 79-20-9

Signal: 1

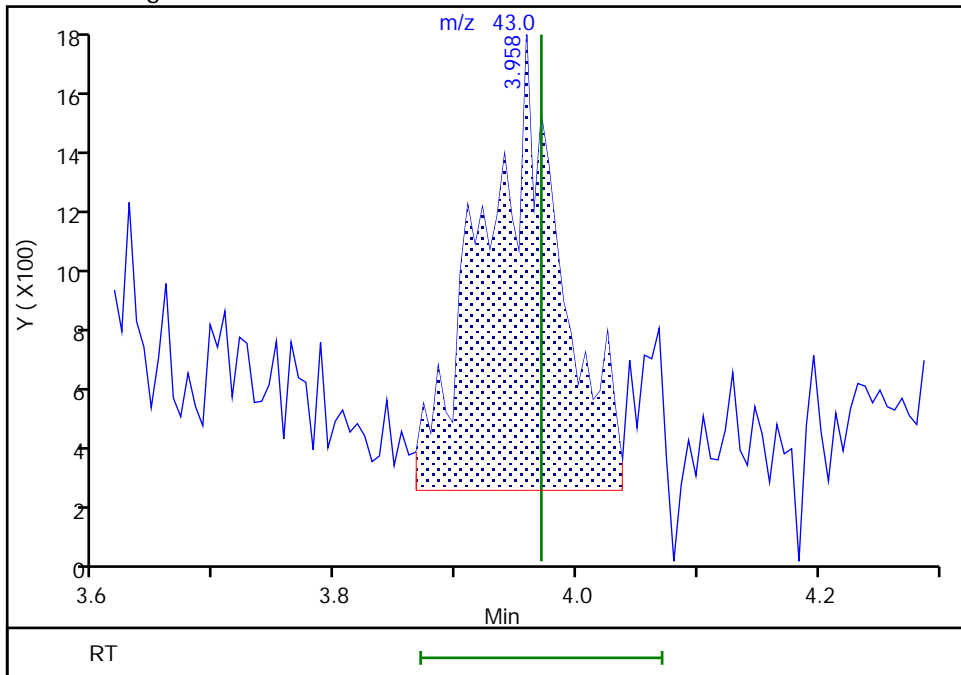
RT: 3.96
Area: 3318
Amount: 0.132791
Amount Units: ug/l

Processing Integration Results



RT: 3.96
Area: 6751
Amount: 0.246039
Amount Units: ug/l

Manual Integration Results



Reviewer: virayd, 01-Dec-2020 11:58:21
Audit Action: Manually Integrated

Audit Reason: Other

Eurofins Lancaster Laboratories Env, LLC

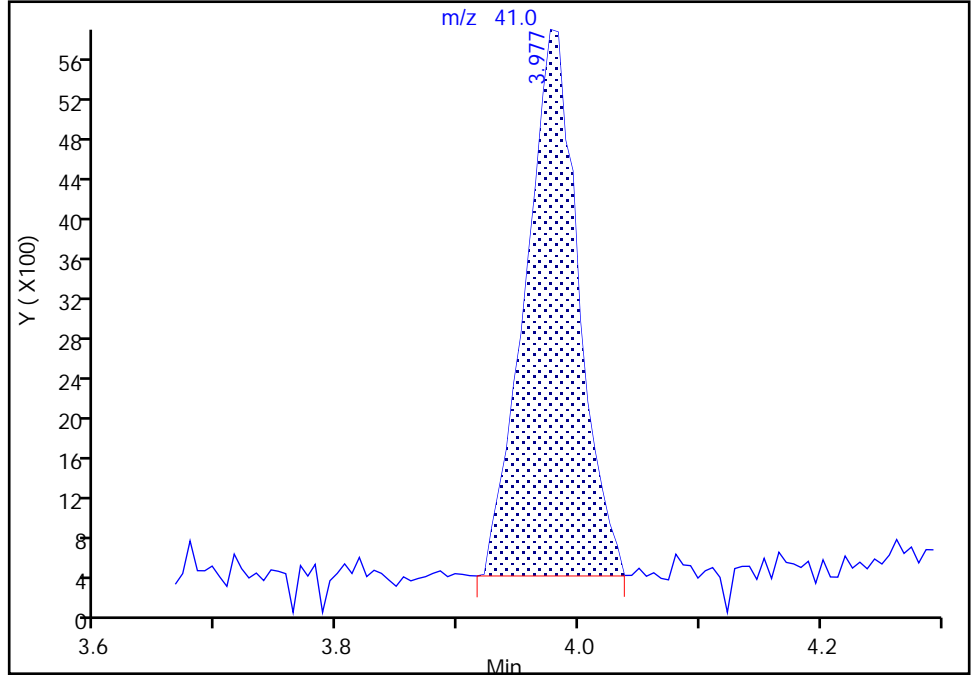
Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I07.D
Injection Date: 30-Nov-2020 15:03:30 Instrument ID: 16334
Lims ID: IC std1
Client ID:
Operator ID: DVV10203 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

27 3-Chloro-1-propene, CAS: 107-05-1

Signal: 1

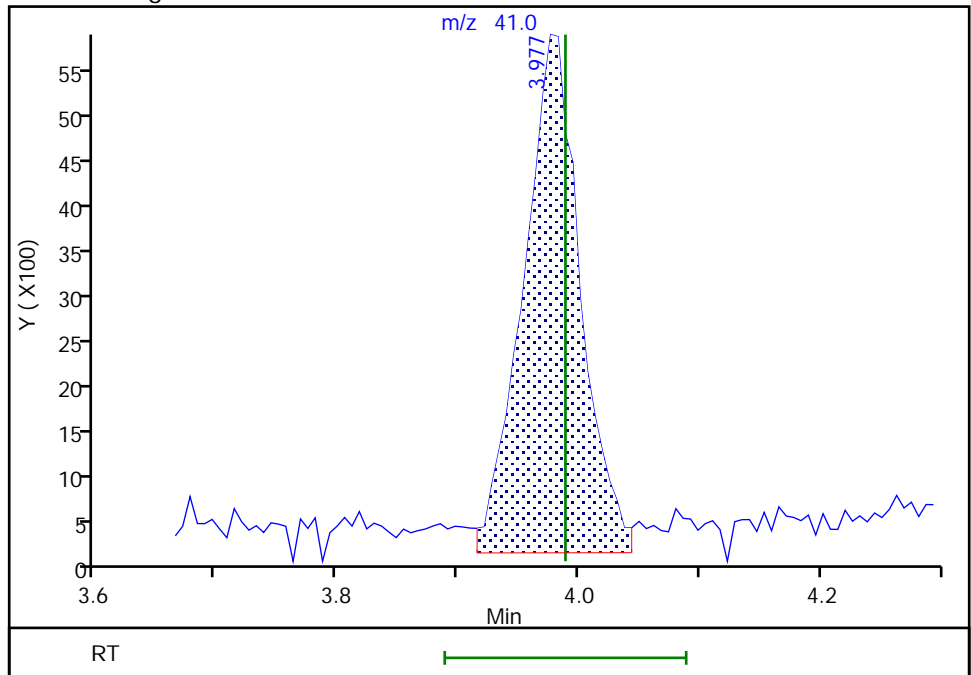
RT: 3.98
Area: 16697
Amount: 0.184837
Amount Units: ug/l

Processing Integration Results



RT: 3.98
Area: 18885
Amount: 0.205503
Amount Units: ug/l

Manual Integration Results



Reviewer: virayd, 01-Dec-2020 11:58:29
Audit Action: Manually Integrated

Audit Reason: Other

Eurofins Lancaster Laboratories Env, LLC

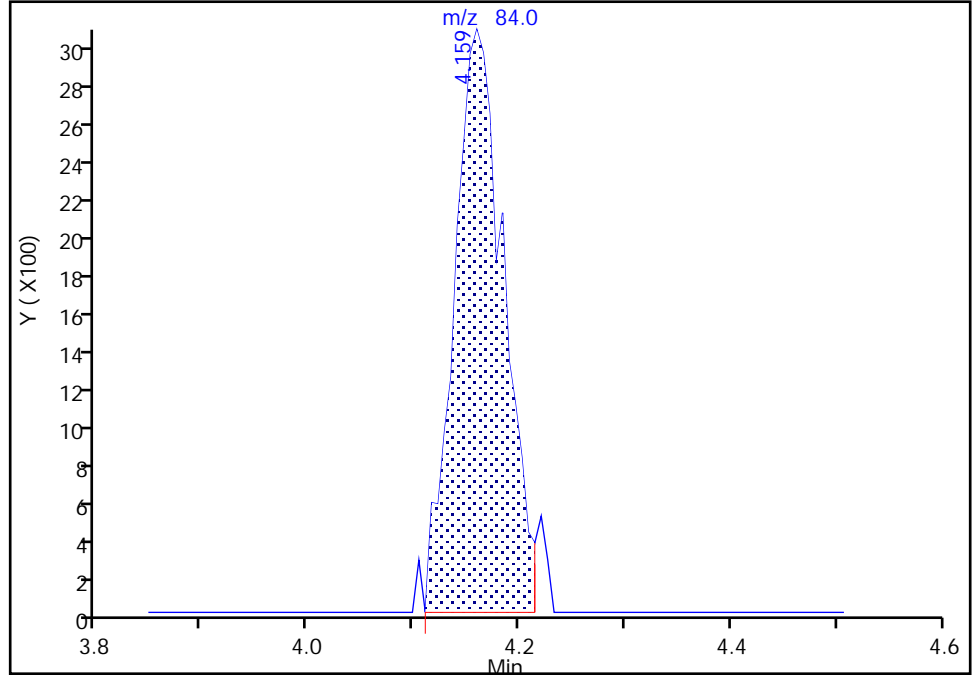
Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I07.D
Injection Date: 30-Nov-2020 15:03:30 Instrument ID: 16334
Lims ID: IC std1
Client ID:
Operator ID: DVV10203 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

28 Methylene Chloride, CAS: 75-09-2

Signal: 1

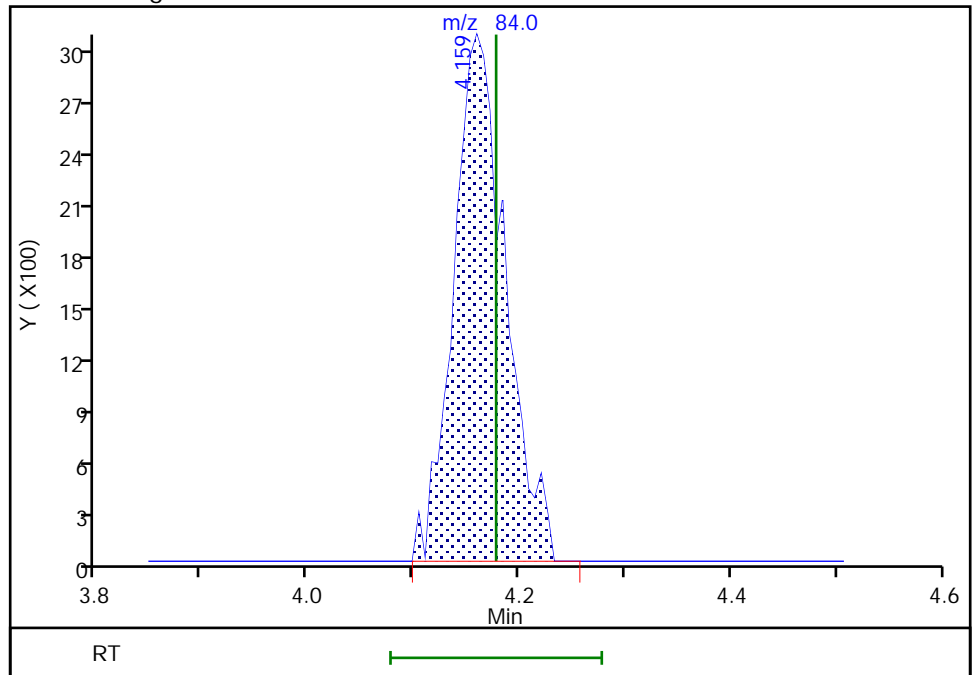
RT: 4.16
Area: 10112
Amount: 0.193174
Amount Units: ug/l

Processing Integration Results



RT: 4.16
Area: 10502
Amount: 0.199562
Amount Units: ug/l

Manual Integration Results



Reviewer: virayd, 01-Dec-2020 11:58:35
Audit Action: Manually Integrated

Audit Reason: Other

Eurofins Lancaster Laboratories Env, LLC

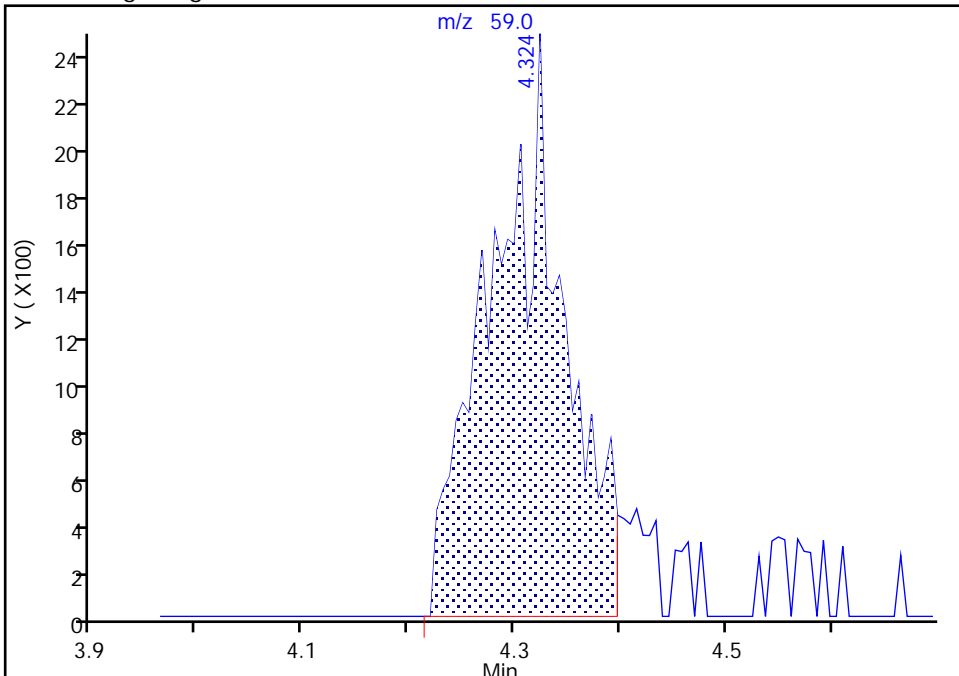
Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I07.D
Injection Date: 30-Nov-2020 15:03:30 Instrument ID: 16334
Lims ID: IC std1
Client ID:
Operator ID: DVV10203 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

30 2-Methyl-2-propanol, CAS: 75-65-0

Signal: 1

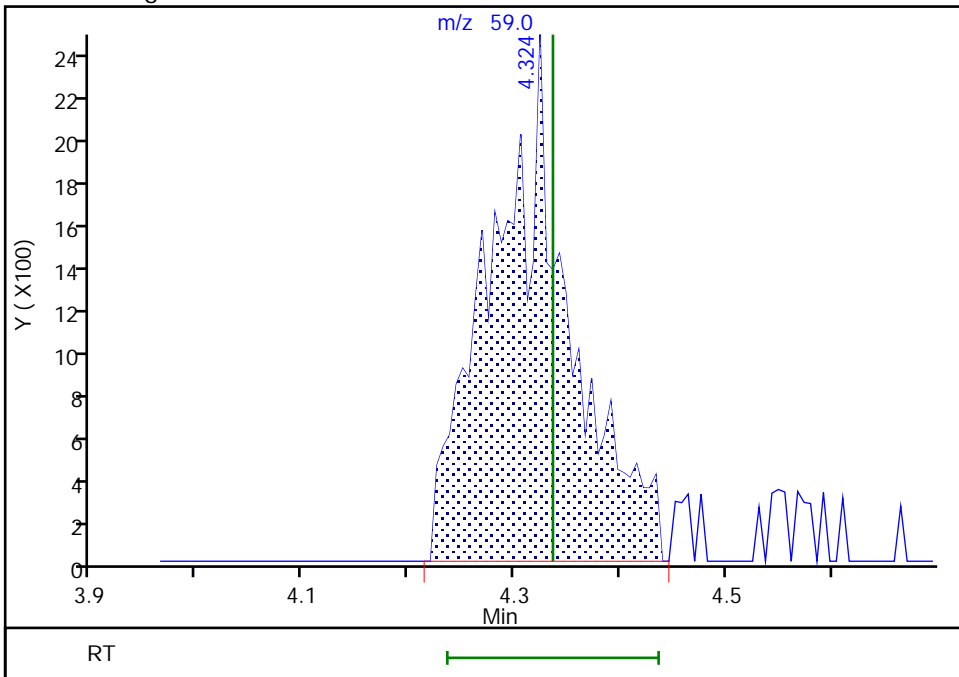
RT: 4.32
Area: 11709
Amount: 3.557640
Amount Units: ug/l

Processing Integration Results



RT: 4.32
Area: 12558
Amount: 3.780767
Amount Units: ug/l

Manual Integration Results



Reviewer: virayd, 01-Dec-2020 11:58:41
Audit Action: Manually Integrated

Audit Reason: Other

Eurofins Lancaster Laboratories Env, LLC

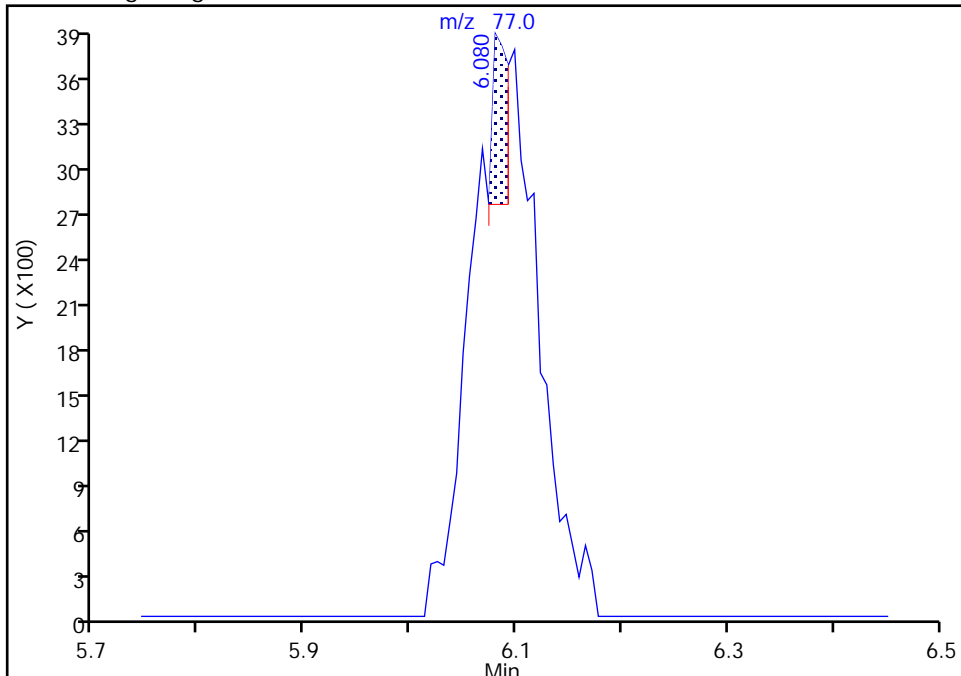
Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I07.D
Injection Date: 30-Nov-2020 15:03:30 Instrument ID: 16334
Lims ID: IC std1
Client ID:
Operator ID: DVV10203 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

42 2,2-Dichloropropane, CAS: 594-20-7

Signal: 1

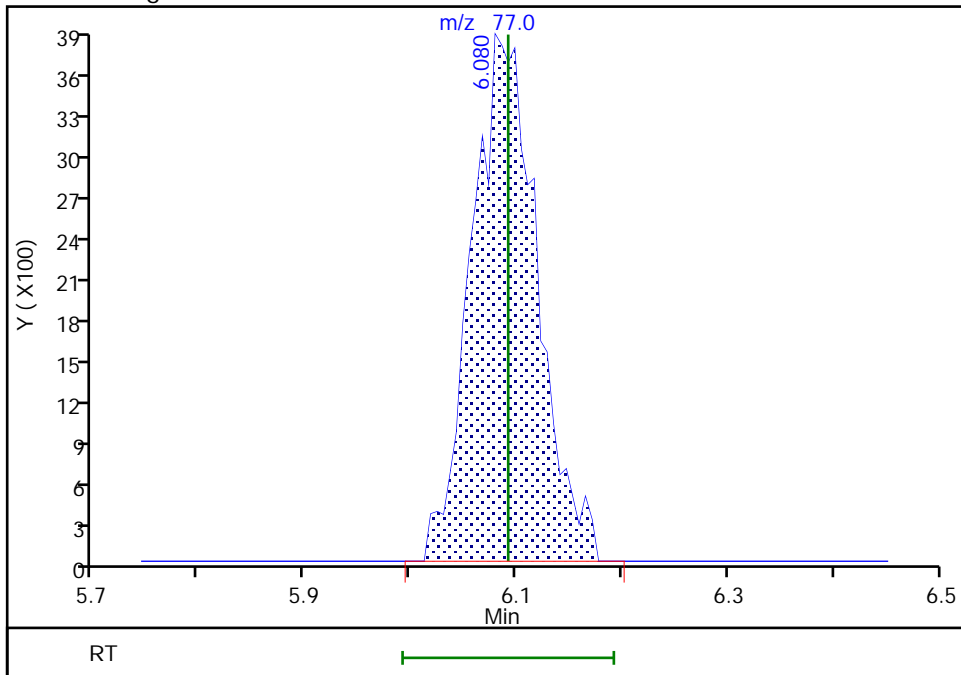
RT: 6.08
Area: 1118
Amount: 0.042823
Amount Units: ug/l

Processing Integration Results



RT: 6.08
Area: 16476
Amount: 0.200176
Amount Units: ug/l

Manual Integration Results



Reviewer: virayd, 01-Dec-2020 11:58:50
Audit Action: Manually Integrated

Audit Reason: Other

Eurofins Lancaster Laboratories Env, LLC

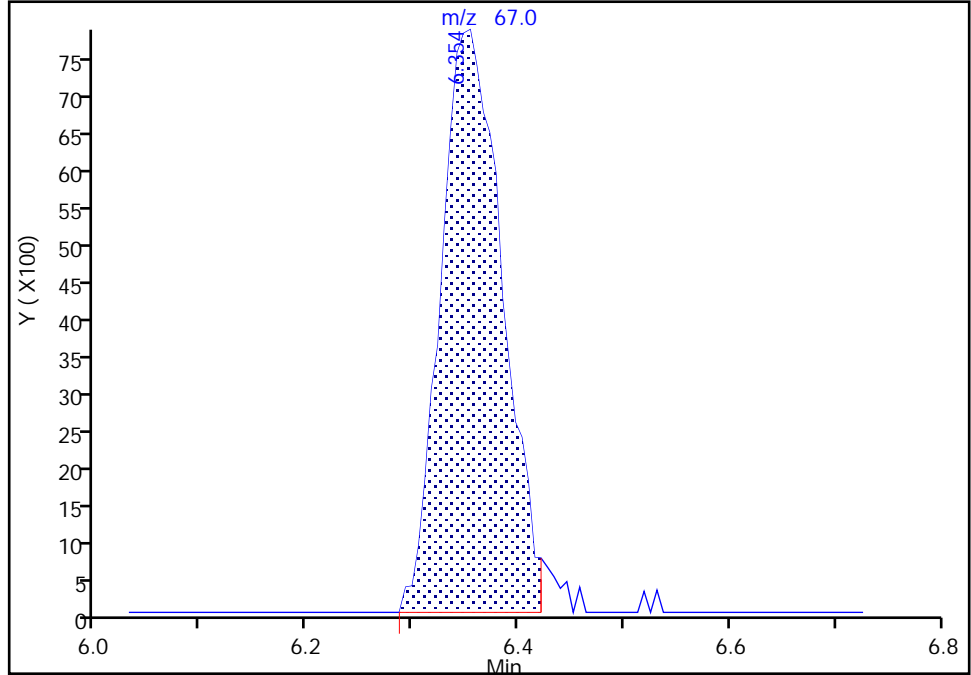
Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I07.D
Injection Date: 30-Nov-2020 15:03:30 Instrument ID: 16334
Lims ID: IC std1
Client ID:
Operator ID: DVV10203 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

46 Methacrylonitrile, CAS: 126-98-7

Signal: 1

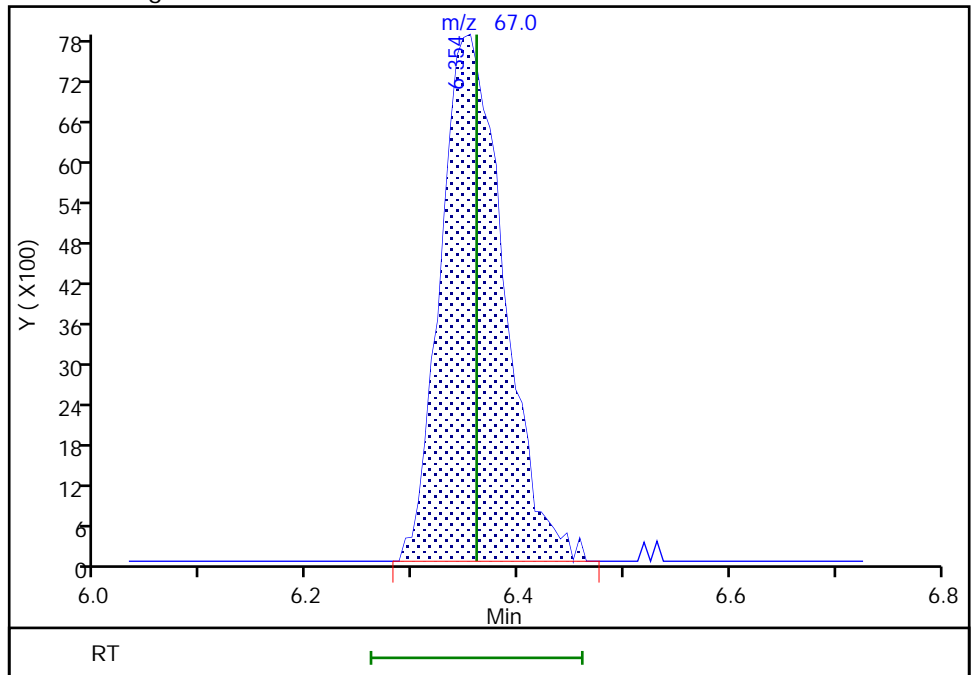
RT: 6.35
Area: 31788
Amount: 2.066779
Amount Units: ug/l

Processing Integration Results



RT: 6.35
Area: 32580
Amount: 2.110510
Amount Units: ug/l

Manual Integration Results



Reviewer: virayd, 01-Dec-2020 11:58:58
Audit Action: Manually Integrated

Audit Reason: Other

Eurofins Lancaster Laboratories Env, LLC

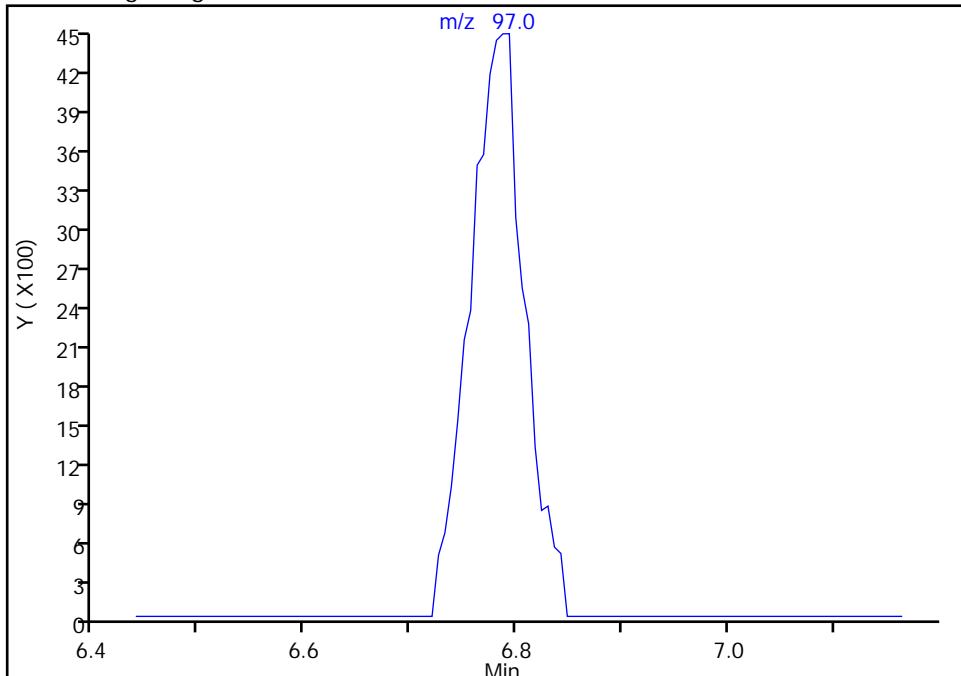
Data File:	\\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I07.D		
Injection Date:	30-Nov-2020 15:03:30	Instrument ID:	16334
Lims ID:	IC std1		
Client ID:			
Operator ID:	DVV10203	ALS Bottle#:	8
Purge Vol:	25.000 mL	Dil. Factor:	1.0000
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D
Column:	Rxi-624Sil MS Capillary Column (0.25mm ID)	Detector:	MS Quad
		Worklist Smp#:	9

51 1,1,1-Trichloroethane, CAS: 71-55-6

Signal: 1

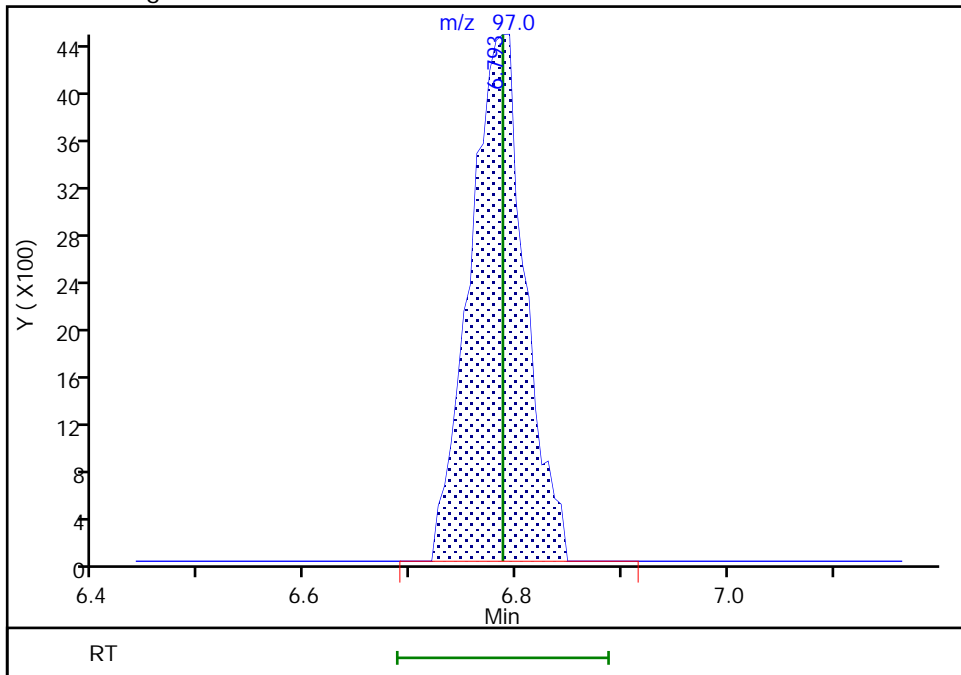
Not Detected
Expected RT: 6.79

Processing Integration Results



Manual Integration Results

RT: 6.79
 Area: 16224
 Amount: 0.200484
 Amount Units: ug/l



Reviewer: virayd, 01-Dec-2020 11:59:05
Audit Action: Manually Integrated

Audit Reason: Other

Eurofins Lancaster Laboratories Env, LLC

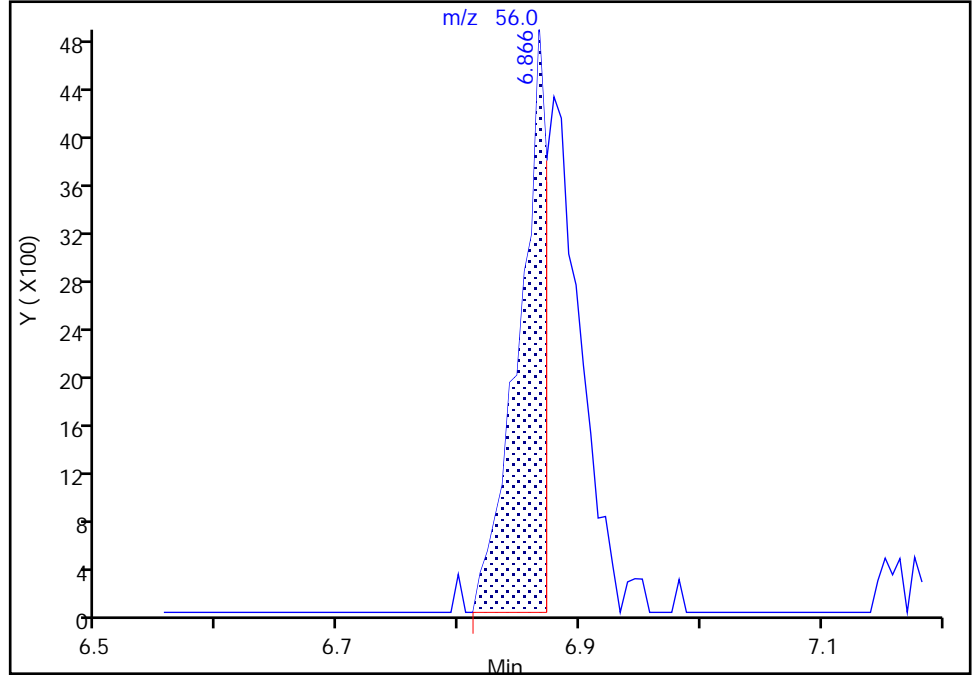
Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I07.D
Injection Date: 30-Nov-2020 15:03:30 Instrument ID: 16334
Lims ID: IC std1
Client ID:
Operator ID: DVV10203 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

53 Cyclohexane, CAS: 110-82-7

Signal: 1

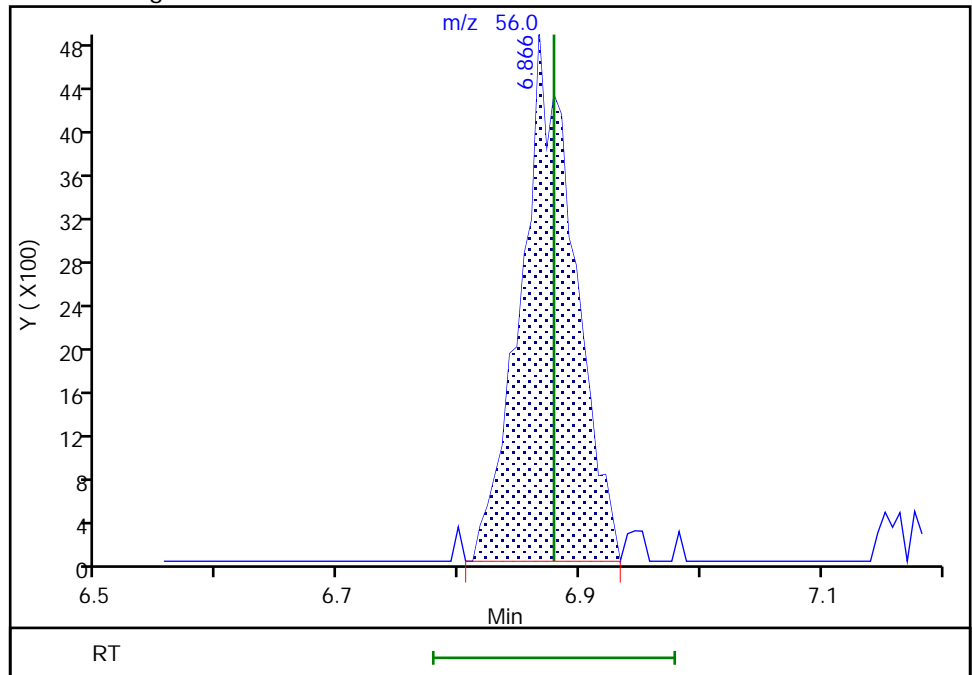
RT: 6.87
Area: 7828
Amount: 0.140707
Amount Units: ug/l

Processing Integration Results



RT: 6.87
Area: 15080
Amount: 0.162145
Amount Units: ug/l

Manual Integration Results



Reviewer: virayd, 01-Dec-2020 11:59:11
Audit Action: Manually Integrated

Audit Reason: Other

Eurofins Lancaster Laboratories Env, LLC

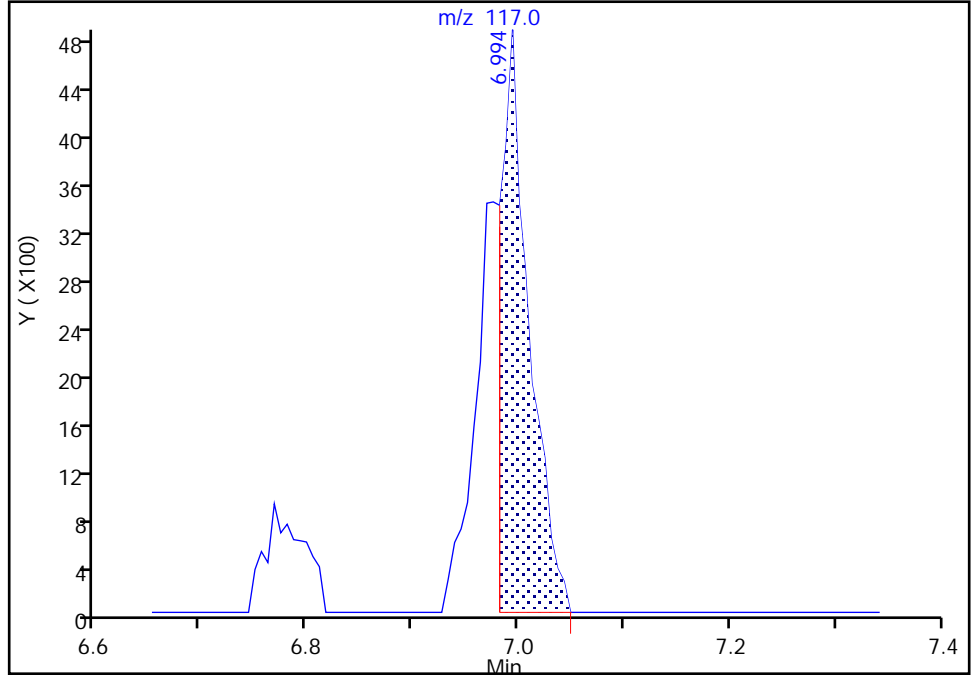
Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I07.D
Injection Date: 30-Nov-2020 15:03:30 Instrument ID: 16334
Lims ID: IC std1
Client ID:
Operator ID: DVV10203 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

56 Carbon tetrachloride, CAS: 56-23-5

Signal: 1

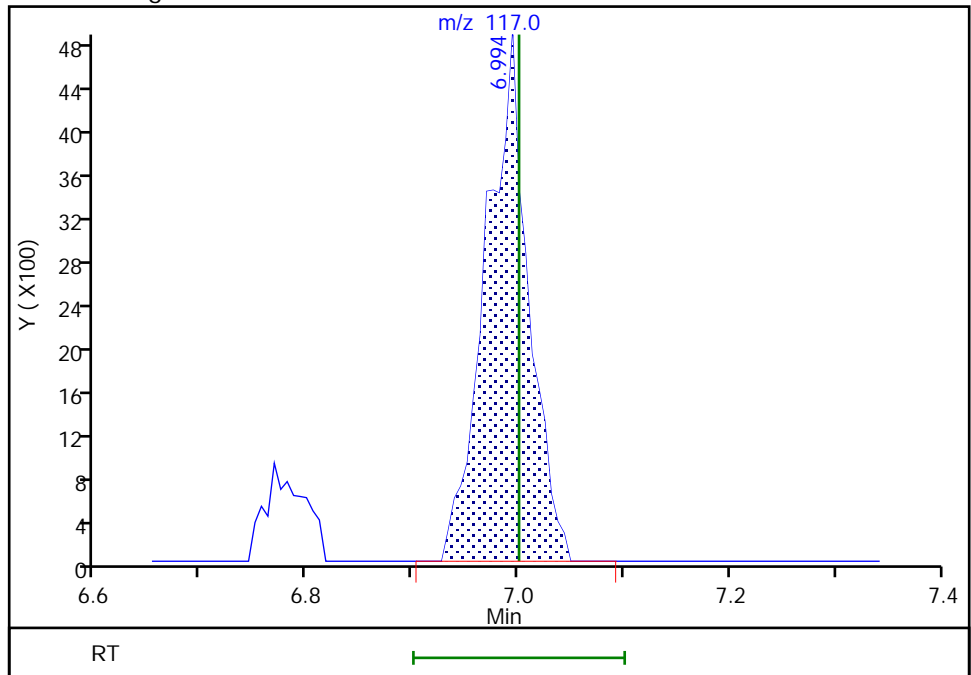
RT: 6.99
Area: 9013
Amount: 0.134991
Amount Units: ug/l

Processing Integration Results



RT: 6.99
Area: 13772
Amount: 0.196276
Amount Units: ug/l

Manual Integration Results



Reviewer: virayd, 01-Dec-2020 11:59:15
Audit Action: Manually Integrated

Audit Reason: Other

Eurofins Lancaster Laboratories Env, LLC

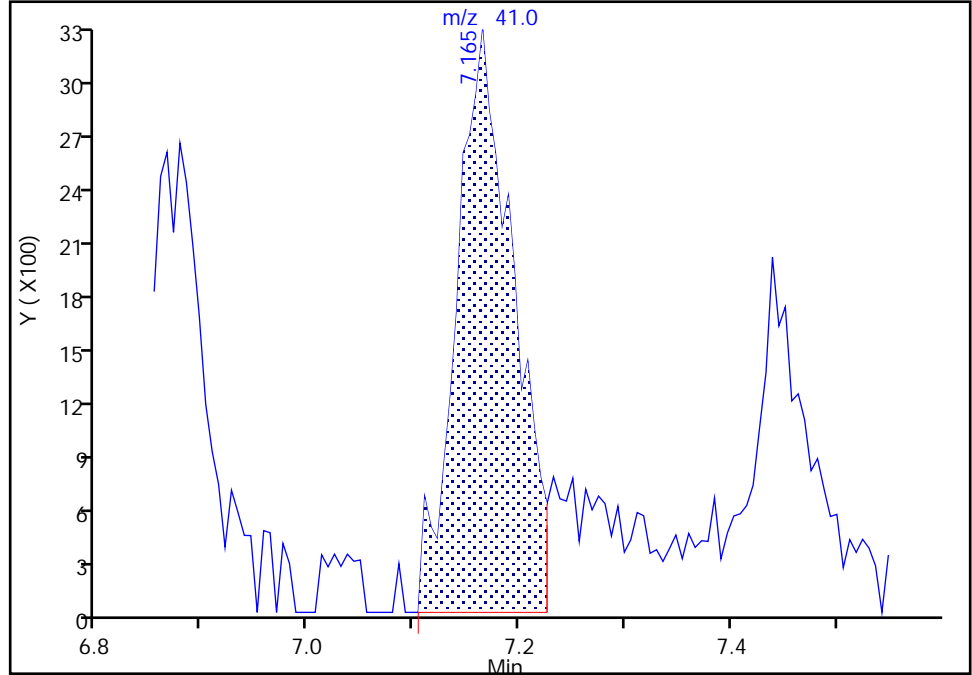
Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I07.D
Injection Date: 30-Nov-2020 15:03:30 Instrument ID: 16334
Lims ID: IC std1
Client ID:
Operator ID: DVV10203 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

57 Isobutyl alcohol, CAS: 78-83-1

Signal: 1

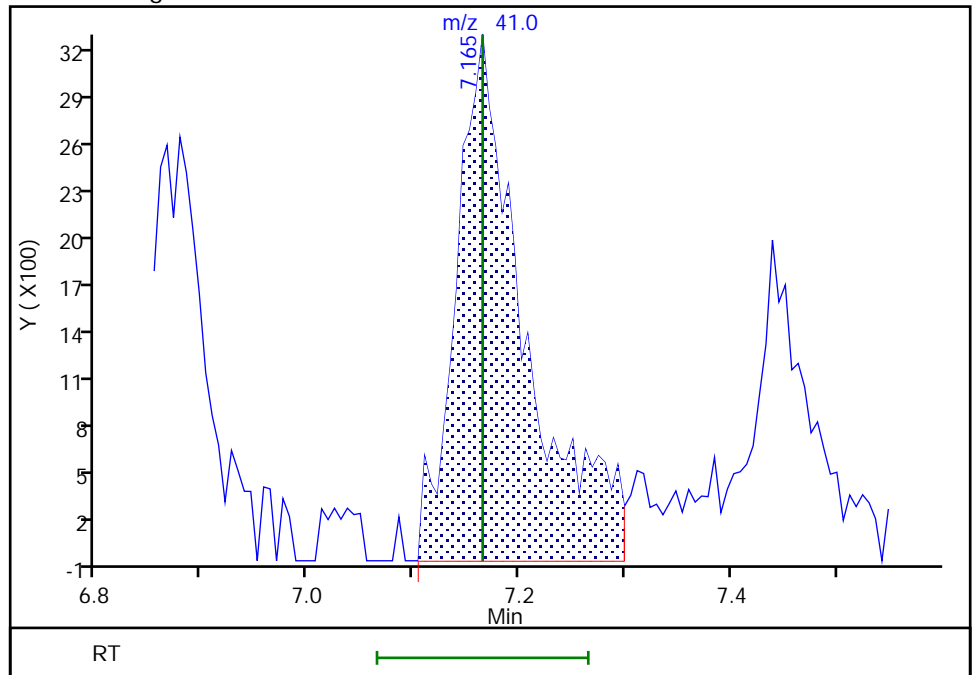
RT: 7.16
Area: 12358
Amount: 10.222385
Amount Units: ug/l

Processing Integration Results



RT: 7.16
Area: 14998
Amount: 12.030837
Amount Units: ug/l

Manual Integration Results



Reviewer: virayd, 01-Dec-2020 11:59:26
Audit Action: Manually Integrated

Audit Reason: Other

Eurofins Lancaster Laboratories Env, LLC

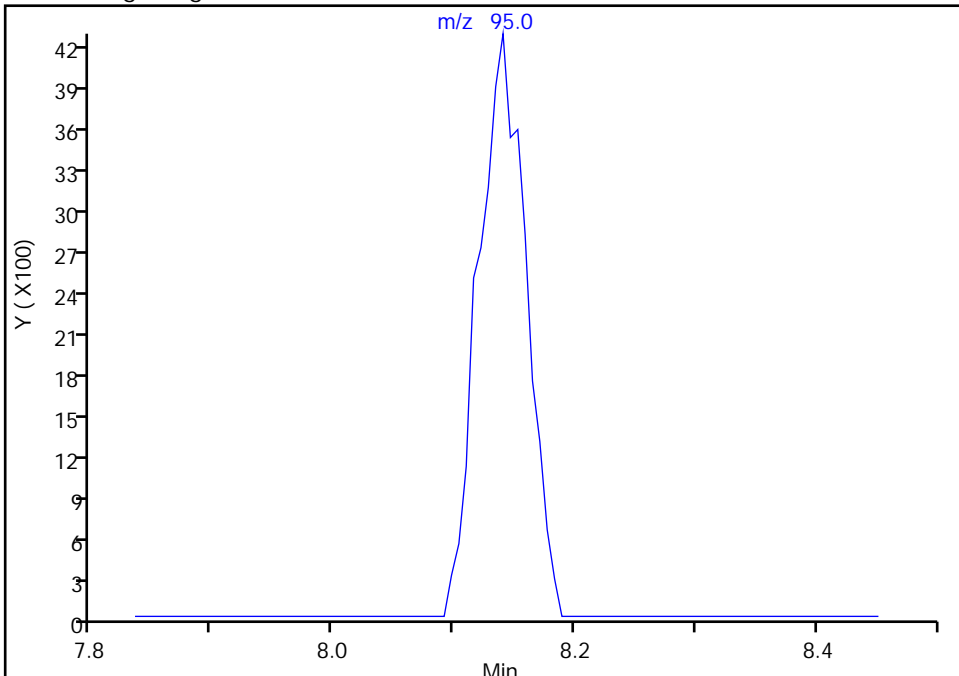
Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I07.D
Injection Date: 30-Nov-2020 15:03:30 Instrument ID: 16334
Lims ID: IC std1
Client ID:
Operator ID: DVV10203 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

67 Trichloroethene, CAS: 79-01-6

Signal: 1

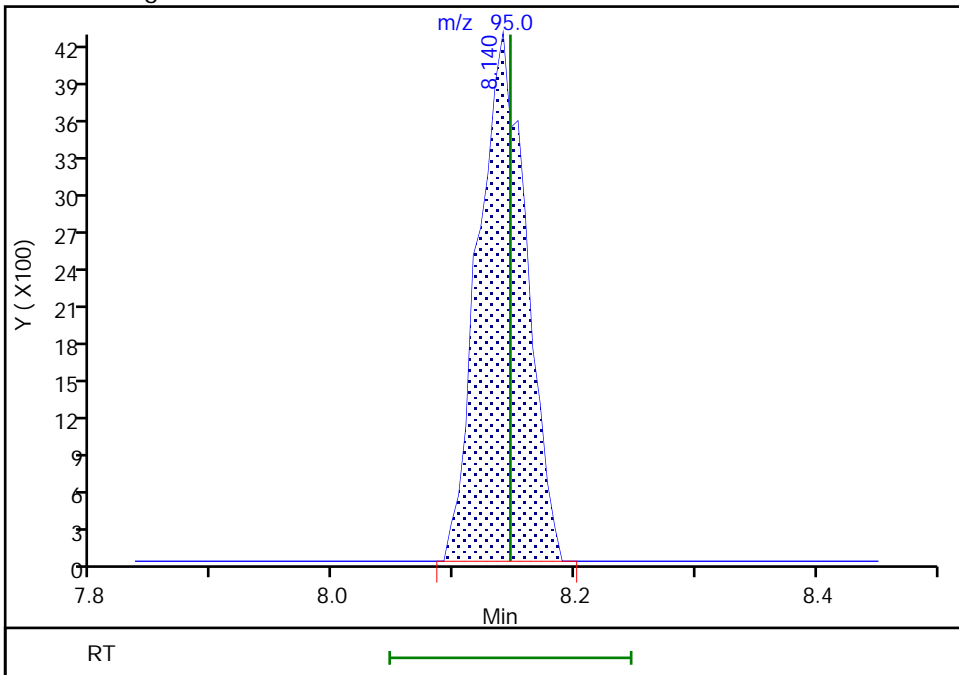
Not Detected
Expected RT: 8.15

Processing Integration Results



Manual Integration Results

RT: 8.14
Area: 11723
Amount: 0.204849
Amount Units: ug/l



Reviewer: virayd, 01-Dec-2020 11:59:36
Audit Action: Manually Integrated

Audit Reason: Other

Eurofins Lancaster Laboratories Env, LLC

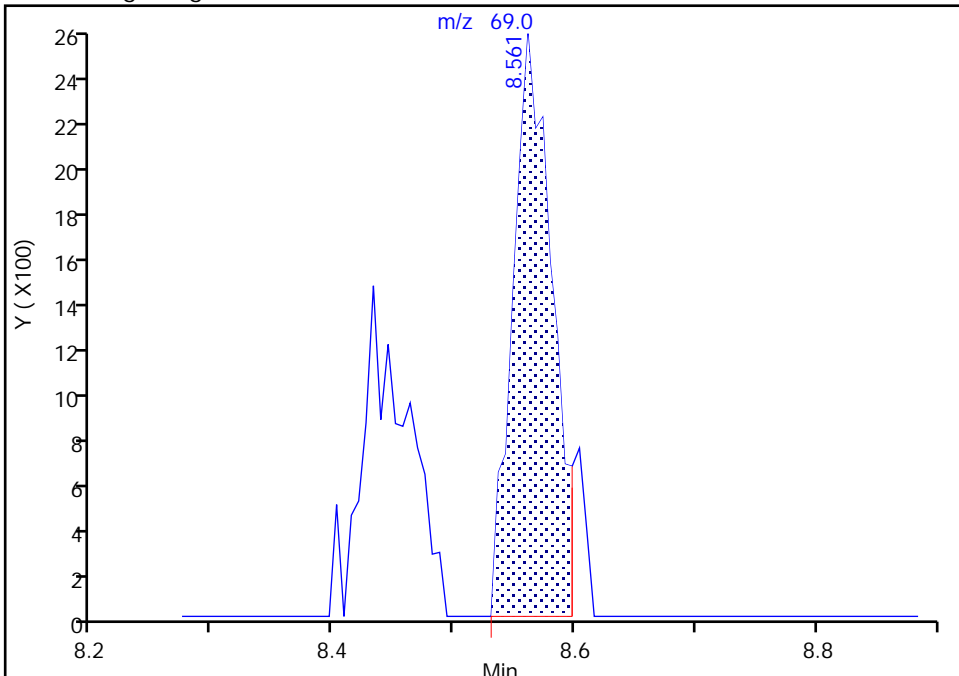
Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I07.D
Injection Date: 30-Nov-2020 15:03:30 Instrument ID: 16334
Lims ID: IC std1
Client ID:
Operator ID: DVV10203 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

71 Methyl methacrylate, CAS: 80-62-6

Signal: 1

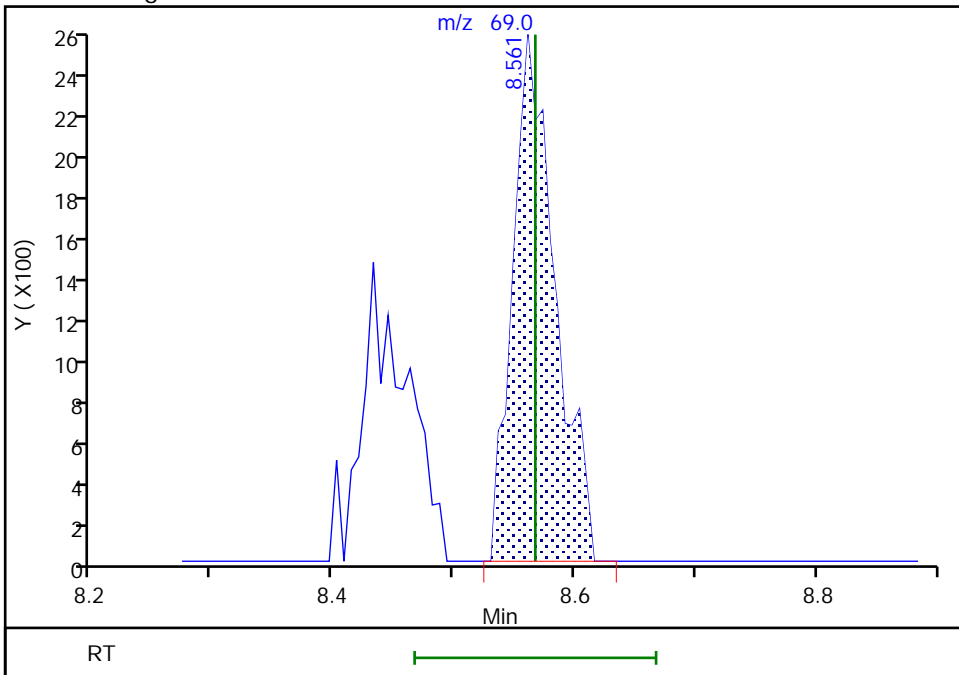
RT: 8.56
Area: 5837
Amount: 0.187386
Amount Units: ug/l

Processing Integration Results



RT: 8.56
Area: 6248
Amount: 0.198708
Amount Units: ug/l

Manual Integration Results



Reviewer: virayd, 01-Dec-2020 11:59:42
Audit Action: Manually Integrated

Audit Reason: Other

Eurofins Lancaster Laboratories Env, LLC

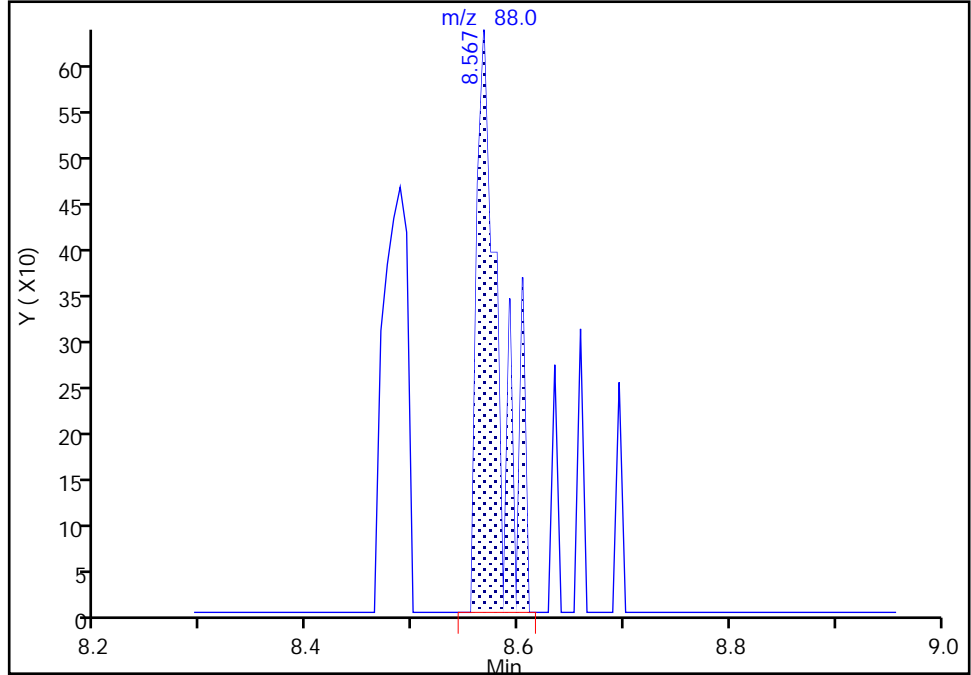
Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I07.D
Injection Date: 30-Nov-2020 15:03:30 Instrument ID: 16334
Lims ID: IC std1
Client ID:
Operator ID: DVV10203 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

72 1,4-Dioxane, CAS: 123-91-1

Signal: 1

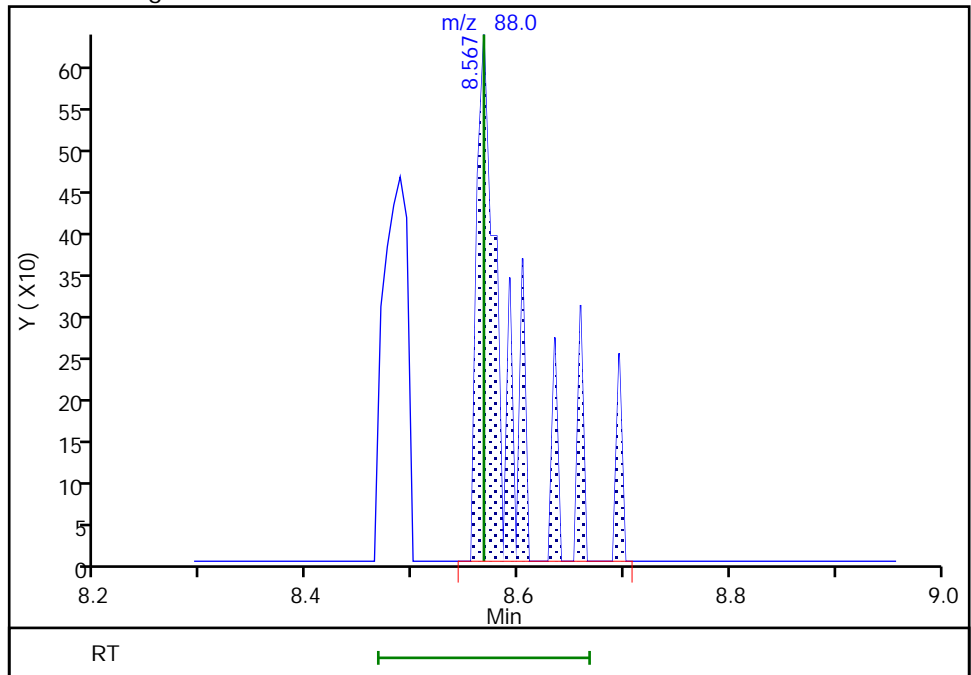
RT: 8.57
Area: 946
Amount: 4.546939
Amount Units: ug/l

Processing Integration Results



RT: 8.57
Area: 1248
Amount: 5.876637
Amount Units: ug/l

Manual Integration Results



Reviewer: virayd, 01-Dec-2020 11:59:46
Audit Action: Manually Integrated

Audit Reason: Other

Calibration

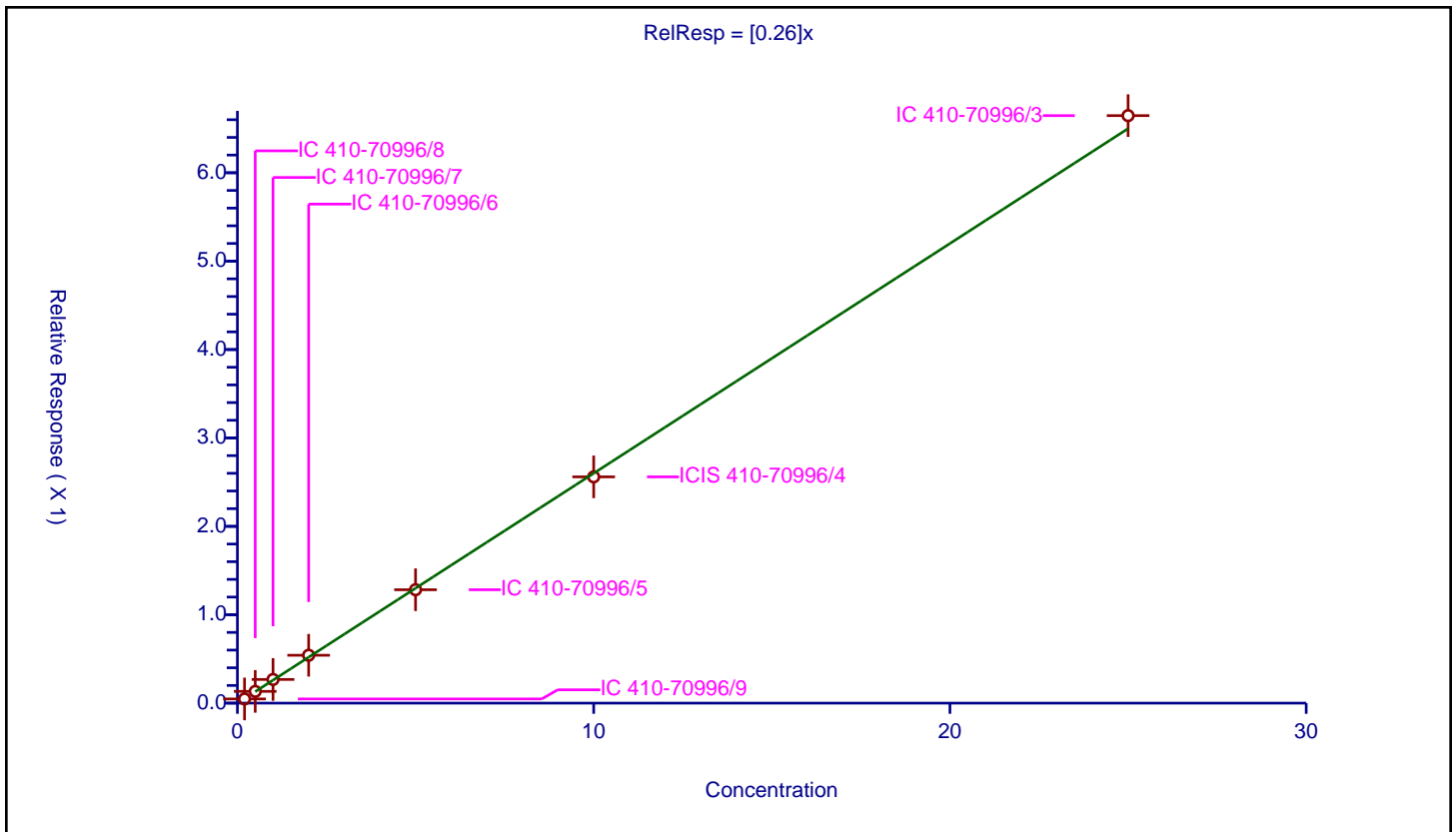
/ Dichlorodifluoromethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.26

Error Coefficients	
Standard Error:	667000
Relative Standard Error:	4.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-70996/9	0.2	0.047352	10.0	2204755.0	0.236761	Y
2	IC 410-70996/8	0.5	0.133089	10.0	2189287.0	0.266178	Y
3	IC 410-70996/7	1.0	0.267761	10.0	2211412.0	0.267761	Y
4	IC 410-70996/6	2.0	0.541666	10.0	2210035.0	0.270833	Y
5	IC 410-70996/5	5.0	1.282832	10.0	2225560.0	0.256566	Y
6	ICIS 410-70996/4	10.0	2.559618	10.0	2246480.0	0.255962	Y
7	IC 410-70996/3	25.0	6.646281	10.0	2249974.0	0.265851	Y



Calibration

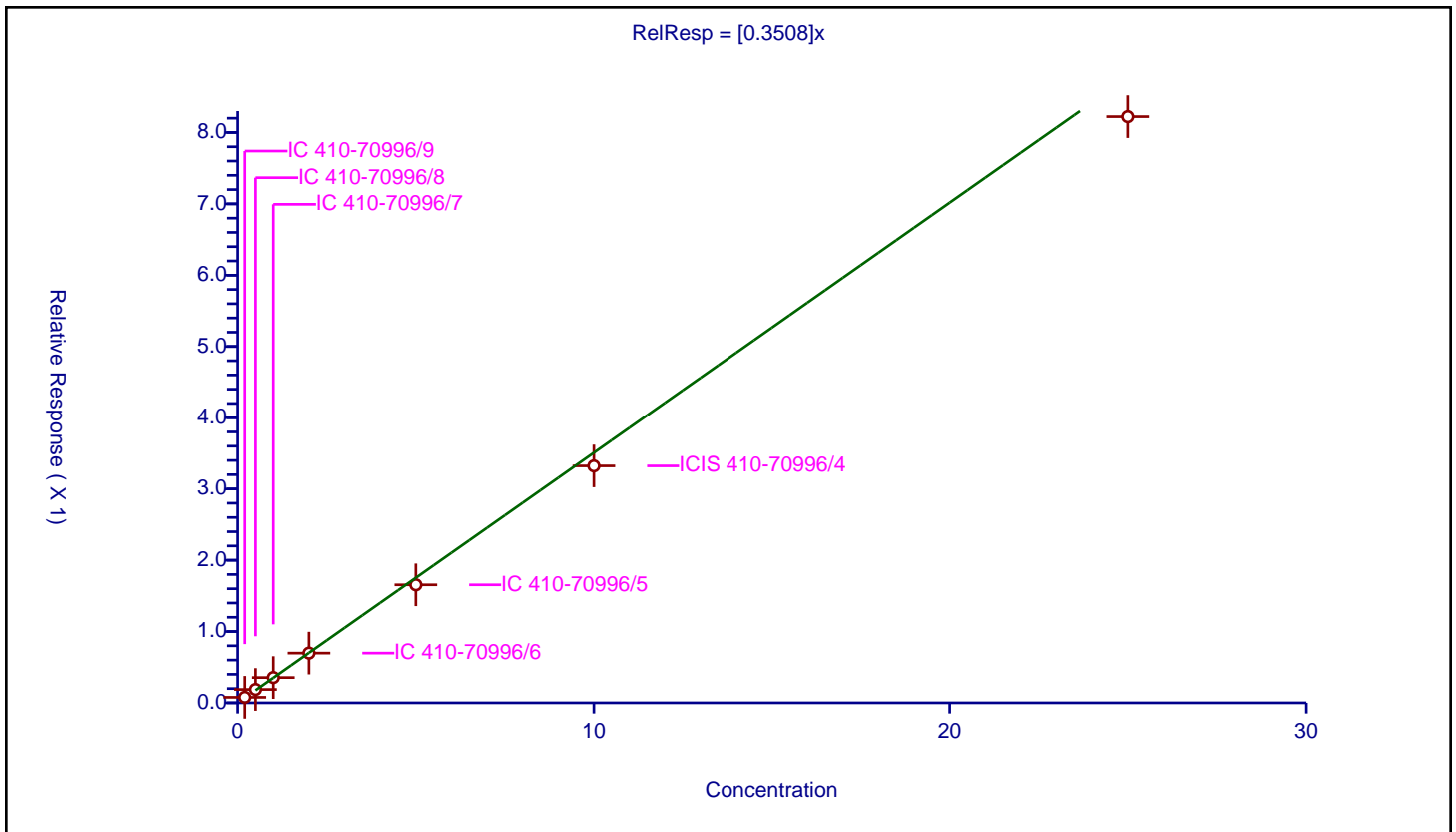
/ Chloromethane

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3508

Error Coefficients	
Standard Error:	831000
Relative Standard Error:	6.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-70996/9	0.2	0.077292	10.0	2204755.0	0.38646	Y
2	IC 410-70996/8	0.5	0.187015	10.0	2189287.0	0.37403	Y
3	IC 410-70996/7	1.0	0.354294	10.0	2211412.0	0.354294	Y
4	IC 410-70996/6	2.0	0.697541	10.0	2210035.0	0.34877	Y
5	IC 410-70996/5	5.0	1.655156	10.0	2225560.0	0.331031	Y
6	ICIS 410-70996/4	10.0	3.323453	10.0	2246480.0	0.332345	Y
7	IC 410-70996/3	25.0	8.222206	10.0	2249974.0	0.328888	Y



Calibration

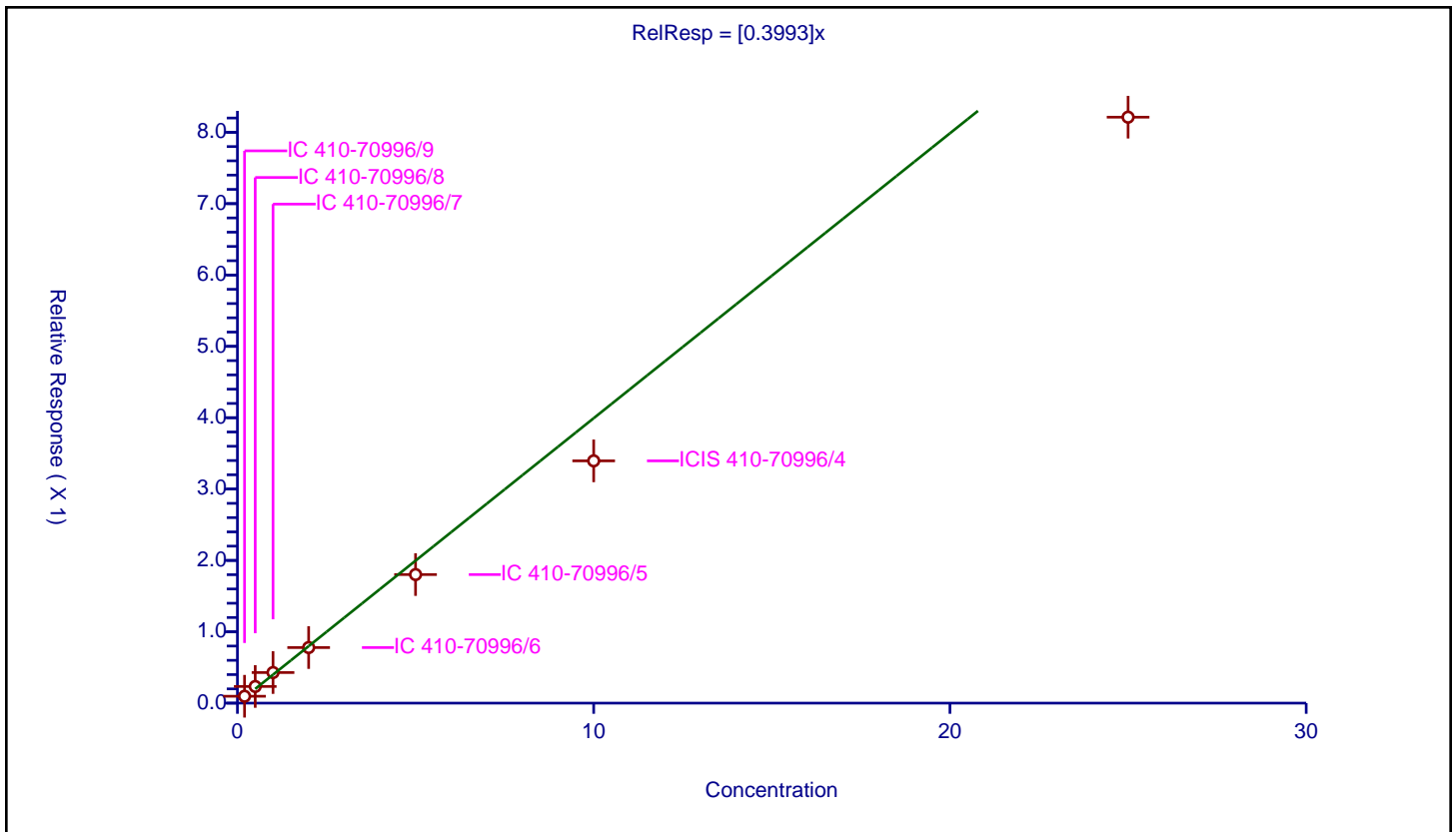
/ Butadiene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3993

Error Coefficients	
Standard Error:	836000
Relative Standard Error:	15.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.962

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-70996/9	0.2	0.096351	10.0	2204755.0	0.481754	Y
2	IC 410-70996/8	0.5	0.233396	10.0	2189287.0	0.466791	Y
3	IC 410-70996/7	1.0	0.428726	10.0	2211412.0	0.428726	Y
4	IC 410-70996/6	2.0	0.778888	10.0	2210035.0	0.389444	Y
5	IC 410-70996/5	5.0	1.801771	10.0	2225560.0	0.360354	Y
6	ICIS 410-70996/4	10.0	3.395481	10.0	2246480.0	0.339548	Y
7	IC 410-70996/3	25.0	8.211886	10.0	2249974.0	0.328475	Y



Calibration

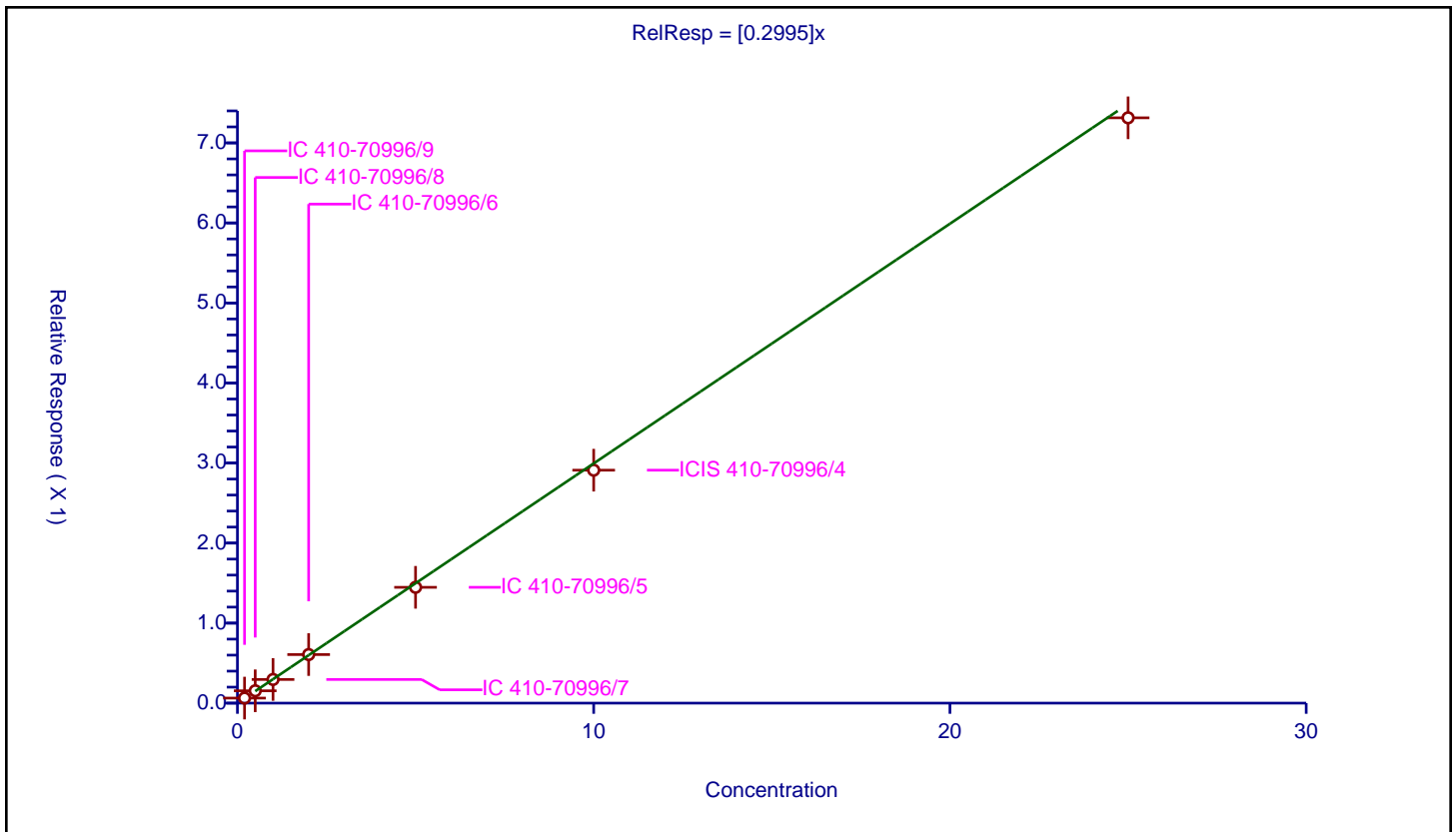
/ Vinyl chloride

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2995

Error Coefficients	
Standard Error:	737000
Relative Standard Error:	3.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-70996/9	0.2	0.063182	10.0	2204755.0	0.315908	Y
2	IC 410-70996/8	0.5	0.154196	10.0	2189287.0	0.308393	Y
3	IC 410-70996/7	1.0	0.295648	10.0	2211412.0	0.295648	Y
4	IC 410-70996/6	2.0	0.606927	10.0	2210035.0	0.303464	Y
5	IC 410-70996/5	5.0	1.447137	10.0	2225560.0	0.289427	Y
6	ICIS 410-70996/4	10.0	2.910727	10.0	2246480.0	0.291073	Y
7	IC 410-70996/3	25.0	7.313565	10.0	2249974.0	0.292543	Y



Calibration

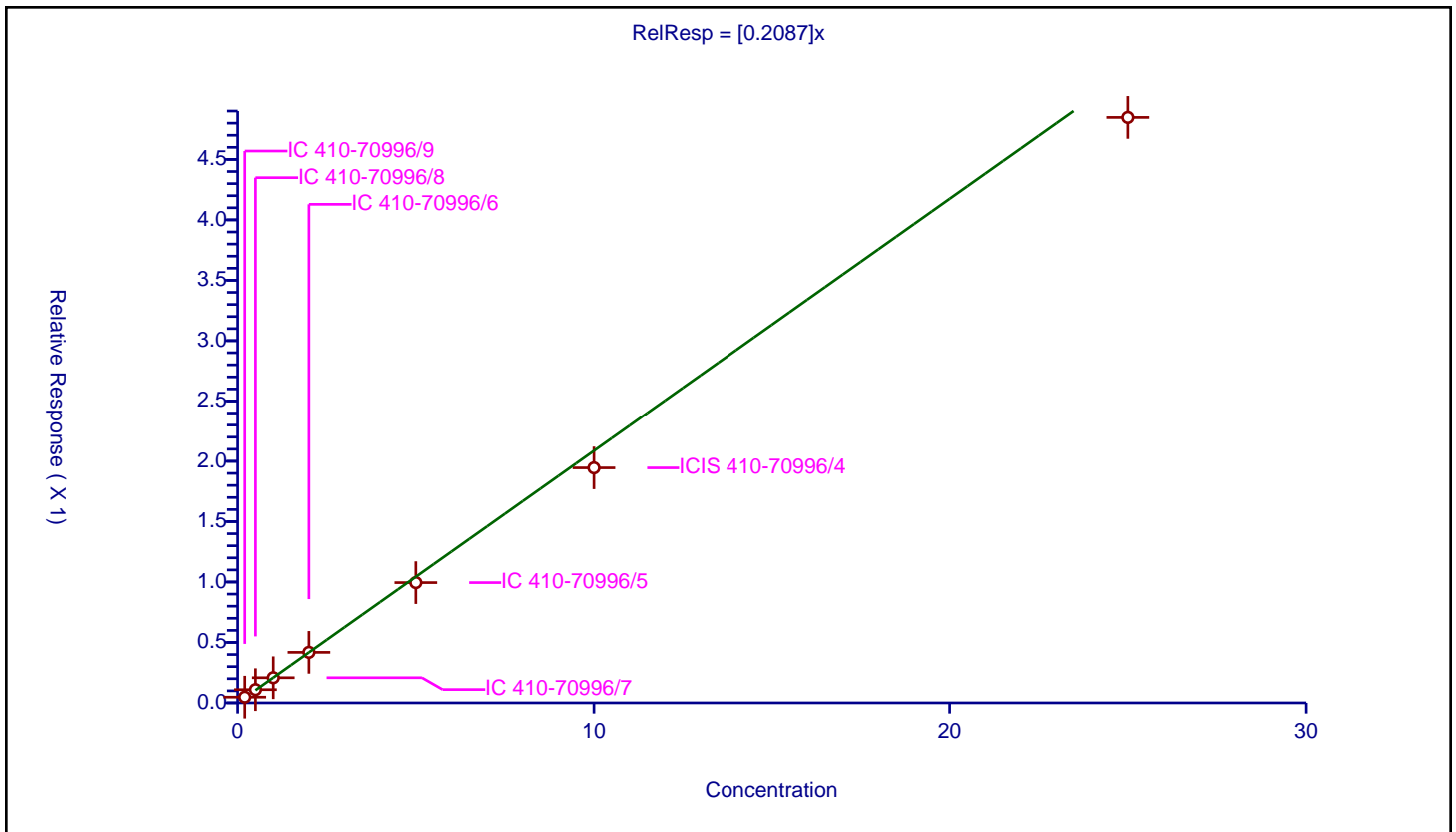
/ Bromomethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2087

Error Coefficients	
Standard Error:	490000
Relative Standard Error:	7.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-70996/9	0.2	0.04752	10.0	2204755.0	0.2376	Y
2	IC 410-70996/8	0.5	0.109405	10.0	2189287.0	0.218811	Y
3	IC 410-70996/7	1.0	0.208039	10.0	2211412.0	0.208039	Y
4	IC 410-70996/6	2.0	0.418152	10.0	2210035.0	0.209076	Y
5	IC 410-70996/5	5.0	0.995021	10.0	2225560.0	0.199004	Y
6	ICIS 410-70996/4	10.0	1.945355	10.0	2246480.0	0.194535	Y
7	IC 410-70996/3	25.0	4.847372	10.0	2249974.0	0.193895	Y



Calibration

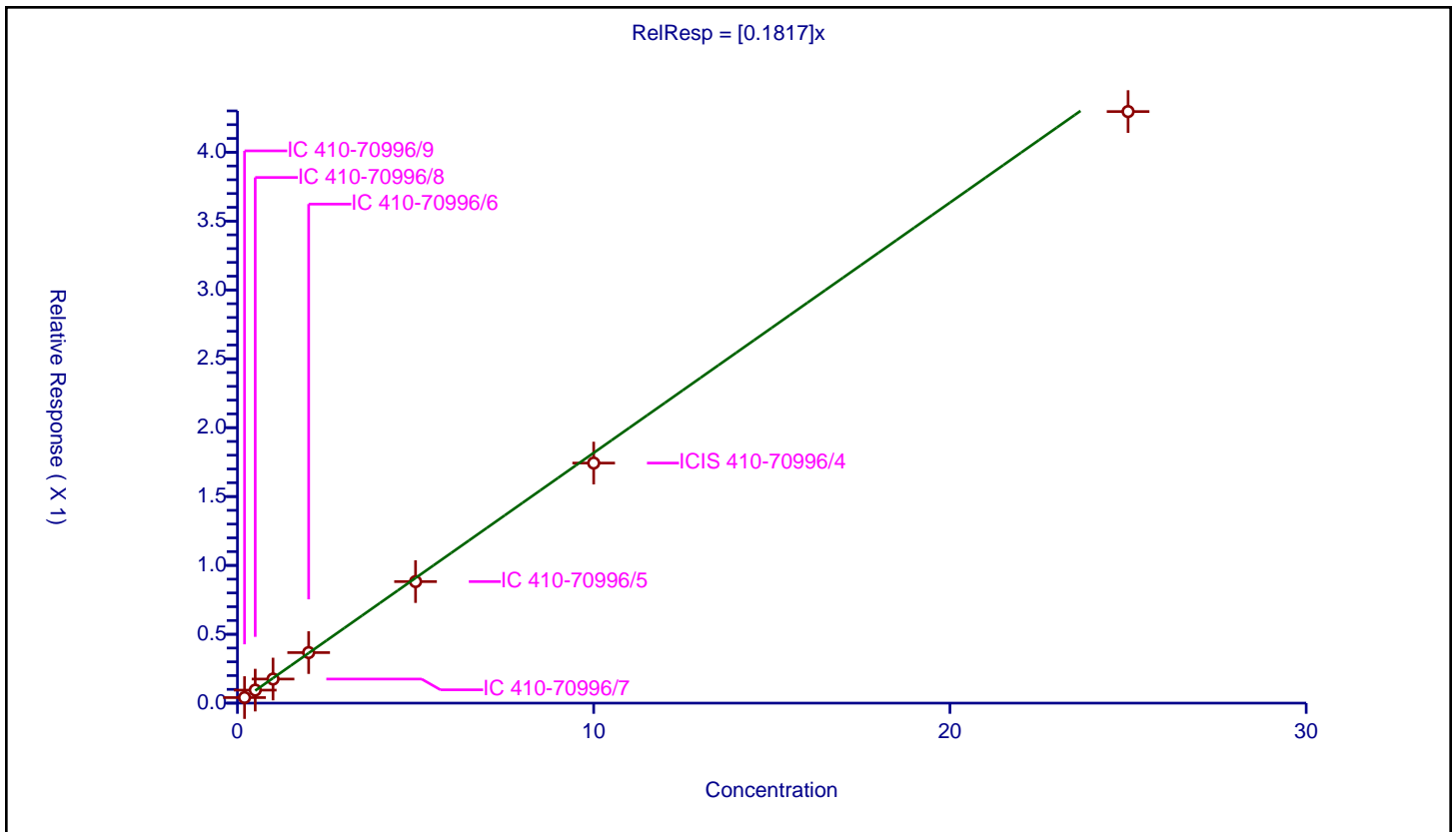
/ Chloroethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.1817

Error Coefficients	
Standard Error:	435000
Relative Standard Error:	5.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-70996/9	0.2	0.040399	10.0	2204755.0	0.201995	Y
2	IC 410-70996/8	0.5	0.094423	10.0	2189287.0	0.188847	Y
3	IC 410-70996/7	1.0	0.174997	10.0	2211412.0	0.174997	Y
4	IC 410-70996/6	2.0	0.366958	10.0	2210035.0	0.183479	Y
5	IC 410-70996/5	5.0	0.882515	10.0	2225560.0	0.176503	Y
6	ICIS 410-70996/4	10.0	1.742989	10.0	2246480.0	0.174299	Y
7	IC 410-70996/3	25.0	4.29525	10.0	2249974.0	0.17181	Y



Calibration

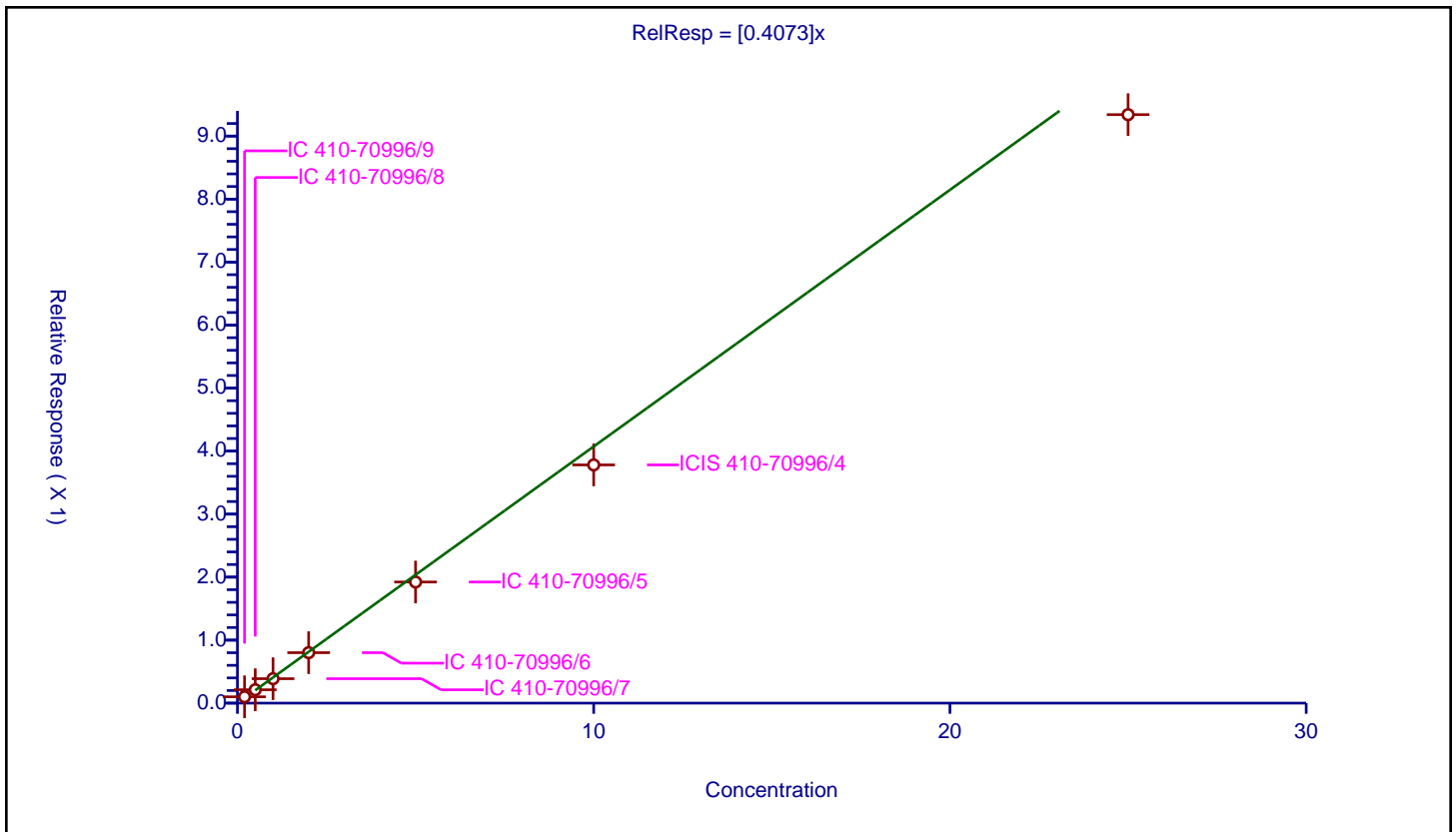
/ Dichlorofluoromethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4073

Error Coefficients	
Standard Error:	945000
Relative Standard Error:	11.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.981

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-70996/9	0.2	0.100342	10.0	2204755.0	0.501711	Y
2	IC 410-70996/8	0.5	0.212512	10.0	2189287.0	0.425024	Y
3	IC 410-70996/7	1.0	0.387766	10.0	2211412.0	0.387766	Y
4	IC 410-70996/6	2.0	0.800992	10.0	2210035.0	0.400496	Y
5	IC 410-70996/5	5.0	1.922402	10.0	2225560.0	0.38448	Y
6	ICIS 410-70996/4	10.0	3.781062	10.0	2246480.0	0.378106	Y
7	IC 410-70996/3	25.0	9.340339	10.0	2249974.0	0.373614	Y



Calibration

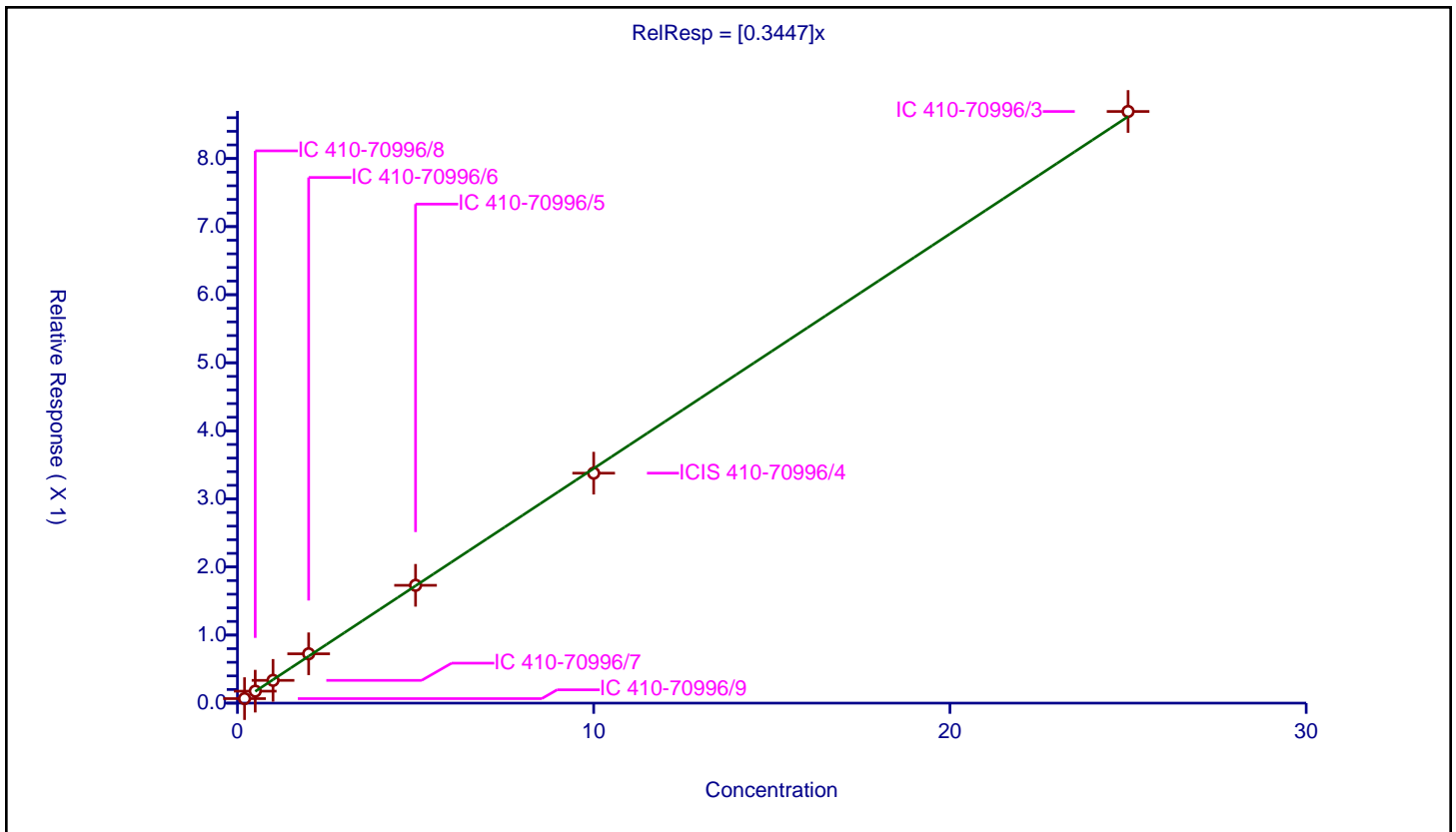
/ Trichlorofluoromethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3447

Error Coefficients	
Standard Error:	874000
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 410-70996/9	0.2	0.066443	10.0	2204755.0	0.332214	Y
2	IC 410-70996/8	0.5	0.175993	10.0	2189287.0	0.351987	Y
3	IC 410-70996/7	1.0	0.334406	10.0	2211412.0	0.334406	Y
4	IC 410-70996/6	2.0	0.724798	10.0	2210035.0	0.362399	Y
5	IC 410-70996/5	5.0	1.7308	10.0	2225560.0	0.34616	Y
6	ICIS 410-70996/4	10.0	3.378227	10.0	2246480.0	0.337823	Y
7	IC 410-70996/3	25.0	8.691198	10.0	2249974.0	0.347648	Y



Calibration

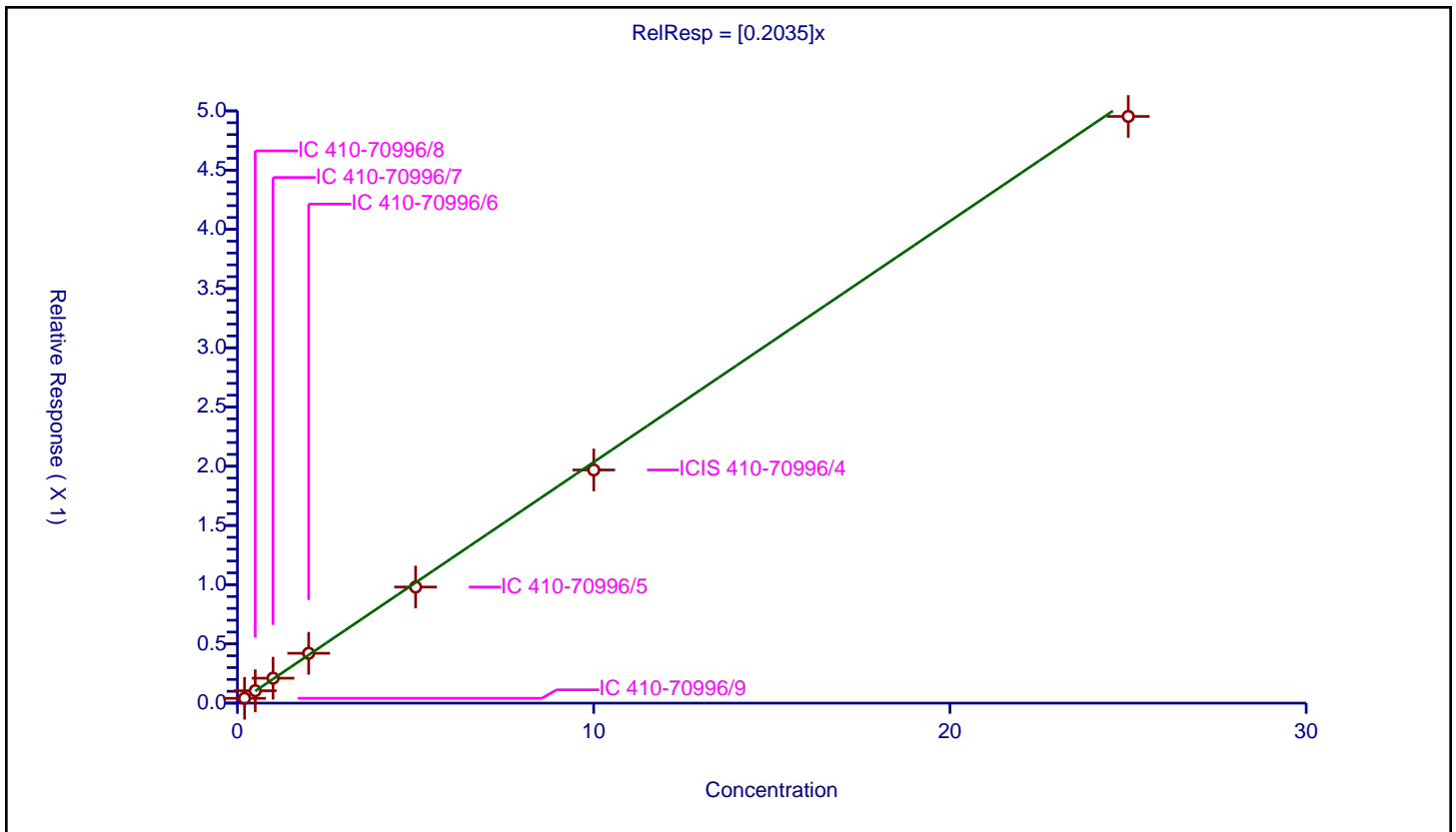
/ Ethyl ether

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2035

Error Coefficients	
Standard Error:	499000
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 410-70996/9	0.200043	0.040594	10.0	2204755.0	0.202927	Y
2	IC 410-70996/8	0.500108	0.104742	10.0	2189287.0	0.209439	Y
3	IC 410-70996/7	1.000215	0.210594	10.0	2211412.0	0.210549	Y
4	IC 410-70996/6	2.00043	0.420903	10.0	2210035.0	0.210406	Y
5	IC 410-70996/5	5.001075	0.98027	10.0	2225560.0	0.196012	Y
6	ICIS 410-70996/4	10.00215	1.968457	10.0	2246480.0	0.196803	Y
7	IC 410-70996/3	25.005375	4.953173	10.0	2249974.0	0.198084	Y



Calibration

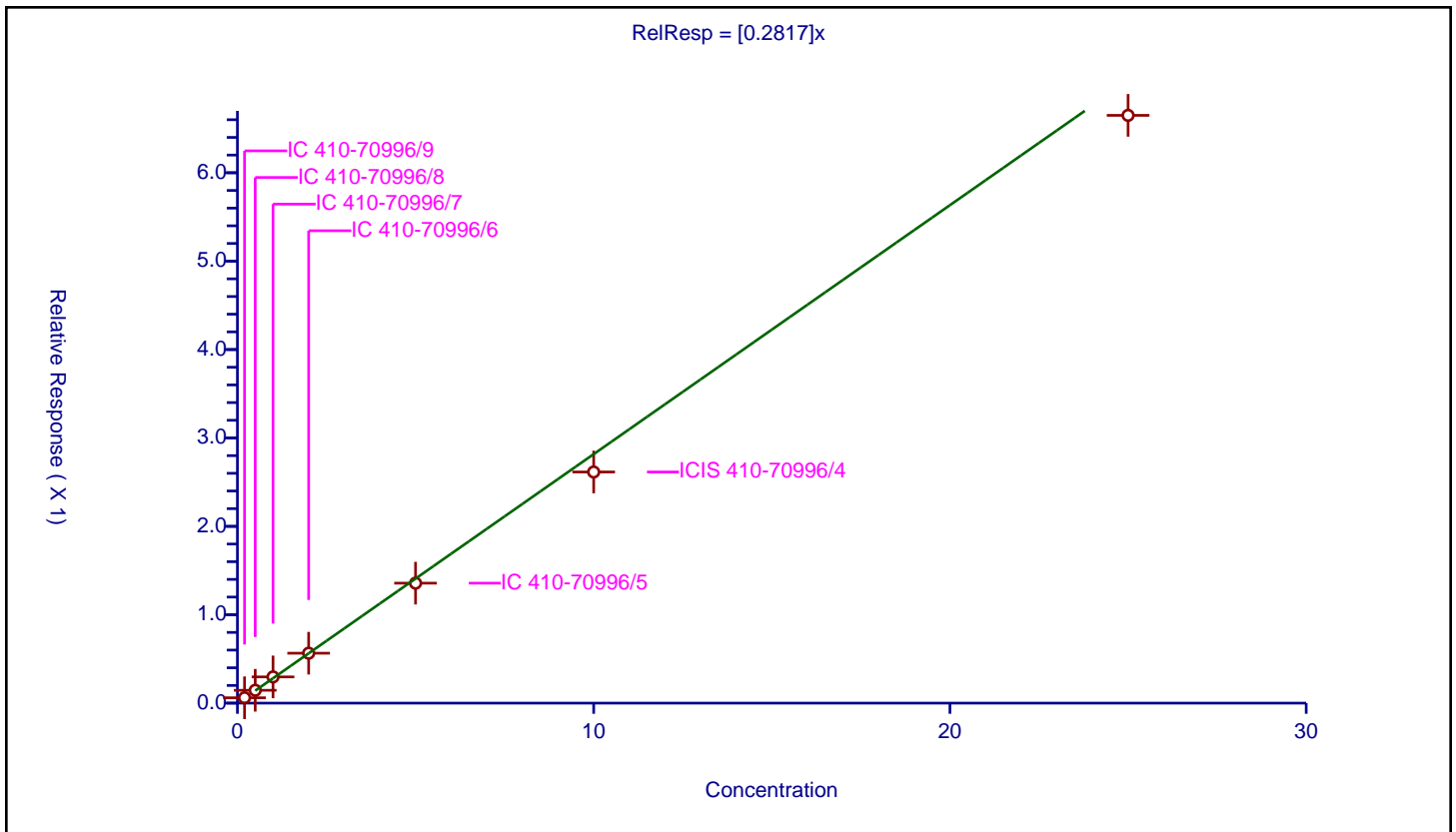
/ 1,2-Dichloro-1,1,2-trifluoroethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2817

Error Coefficients	
Standard Error:	670000
Relative Standard Error:	5.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-70996/9	0.2	0.060574	10.0	2204755.0	0.302868	Y
2	IC 410-70996/8	0.5	0.145499	10.0	2189287.0	0.290999	Y
3	IC 410-70996/7	1.0	0.296648	10.0	2211412.0	0.296648	Y
4	IC 410-70996/6	2.0	0.564756	10.0	2210035.0	0.282378	Y
5	IC 410-70996/5	5.0	1.357115	10.0	2225560.0	0.271423	Y
6	ICIS 410-70996/4	10.0	2.614788	10.0	2246480.0	0.261479	Y
7	IC 410-70996/3	25.0	6.649499	10.0	2249974.0	0.26598	Y



Calibration

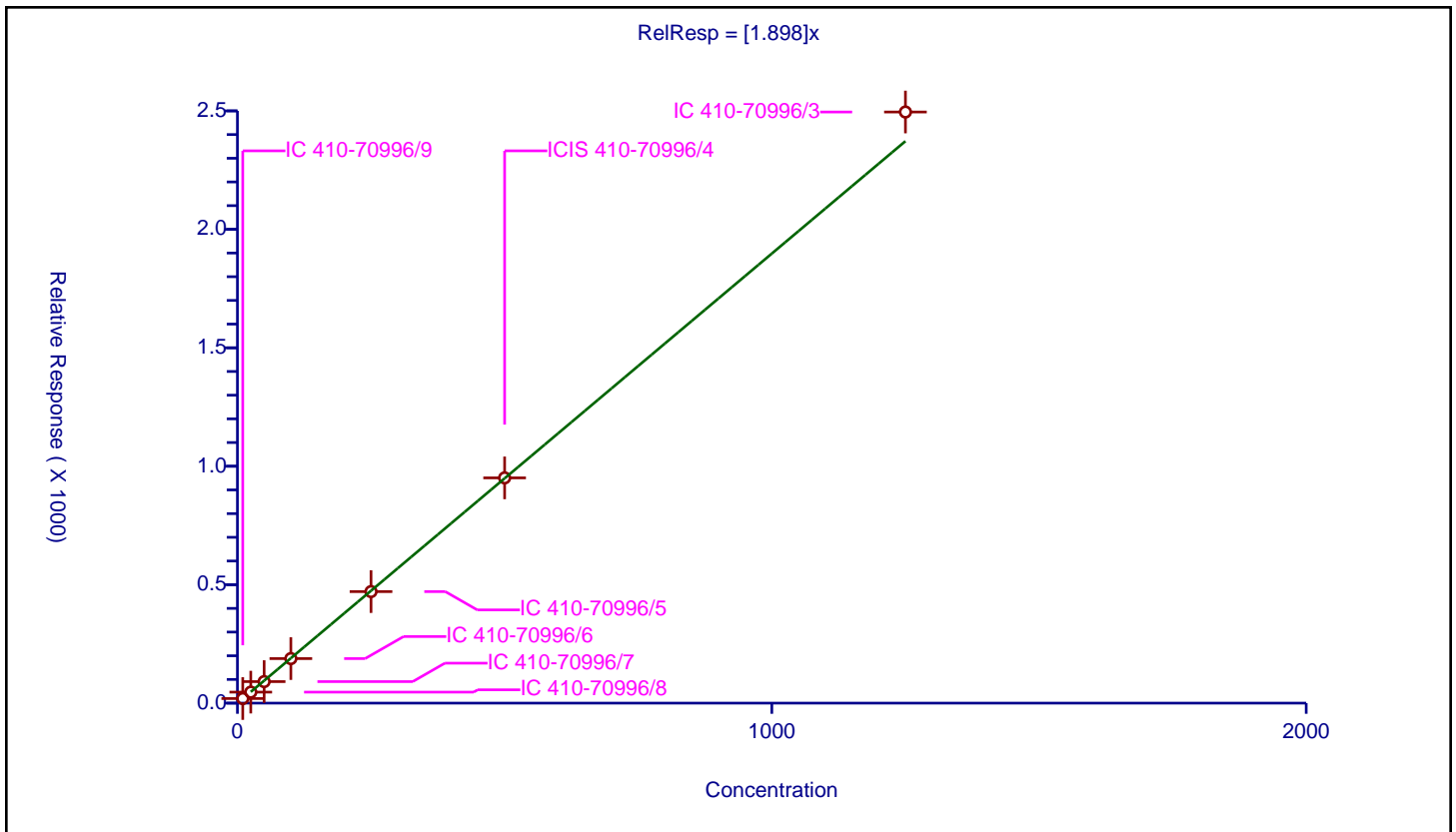
/ Acrolein

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.898

Error Coefficients	
Standard Error:	3980000
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 410-70996/9	10.000292	19.44882	50.0	184731.0	1.944825	Y
2	IC 410-70996/8	25.000729	46.526395	50.0	195834.0	1.861002	Y
3	IC 410-70996/7	50.001458	90.859368	50.0	201206.0	1.817134	Y
4	IC 410-70996/6	100.002917	187.990007	50.0	195329.0	1.879845	Y
5	IC 410-70996/5	250.007292	470.811266	50.0	183343.0	1.88319	Y
6	ICIS 410-70996/4	500.014585	950.905994	50.0	186094.0	1.901757	Y
7	IC 410-70996/3	1250.036462	2495.255991	50.0	177877.0	1.996147	Y



Calibration

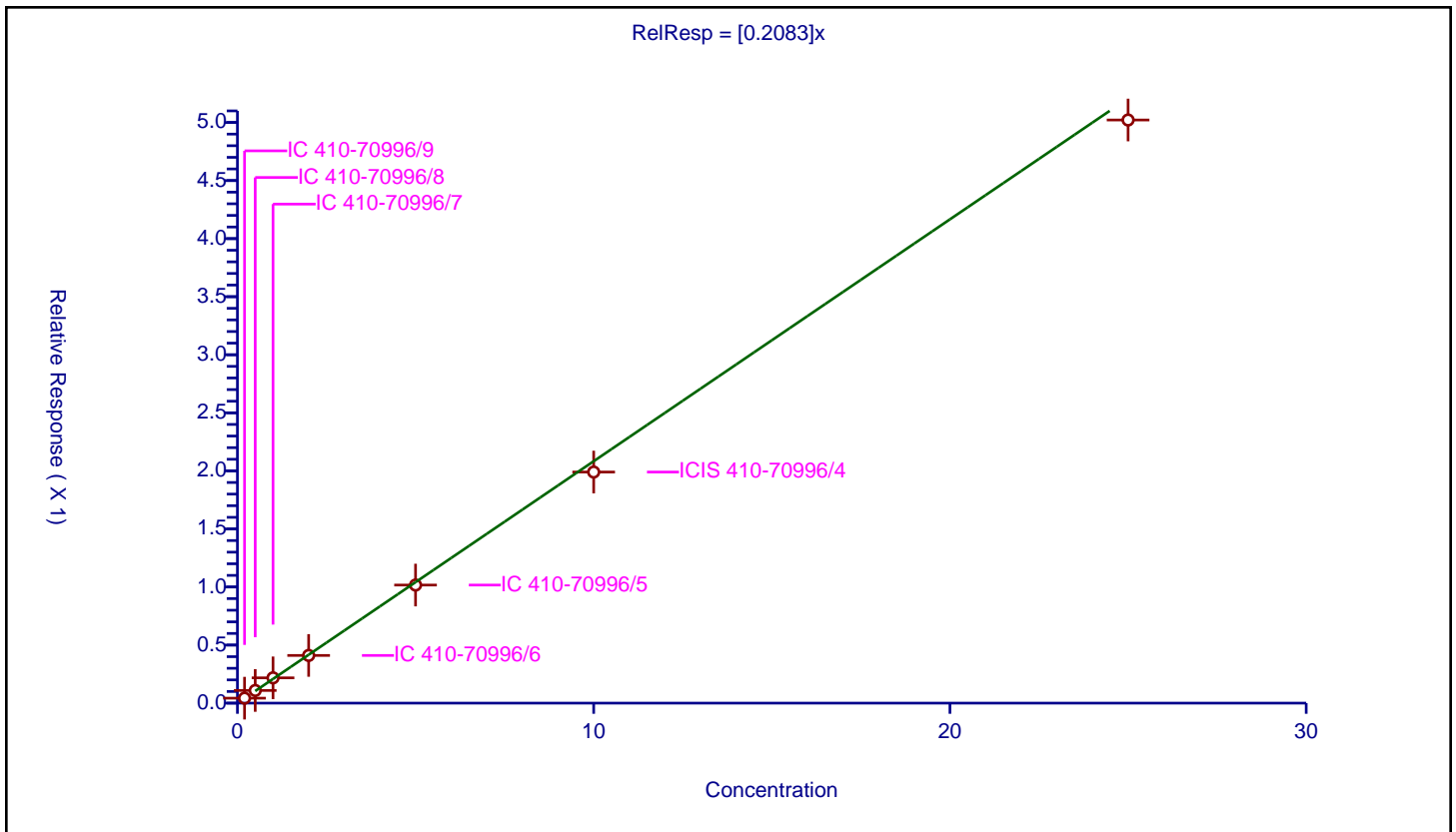
/ 1,1-Dichloroethene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2083

Error Coefficients	
Standard Error:	506000
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 410-70996/9	0.2	0.042762	10.0	2204755.0	0.213811	Y
2	IC 410-70996/8	0.5	0.10899	10.0	2189287.0	0.21798	Y
3	IC 410-70996/7	1.0	0.217793	10.0	2211412.0	0.217793	Y
4	IC 410-70996/6	2.0	0.410546	10.0	2210035.0	0.205273	Y
5	IC 410-70996/5	5.0	1.016944	10.0	2225560.0	0.203389	Y
6	ICIS 410-70996/4	10.0	1.989984	10.0	2246480.0	0.198998	Y
7	IC 410-70996/3	25.0	5.021511	10.0	2249974.0	0.20086	Y



Calibration

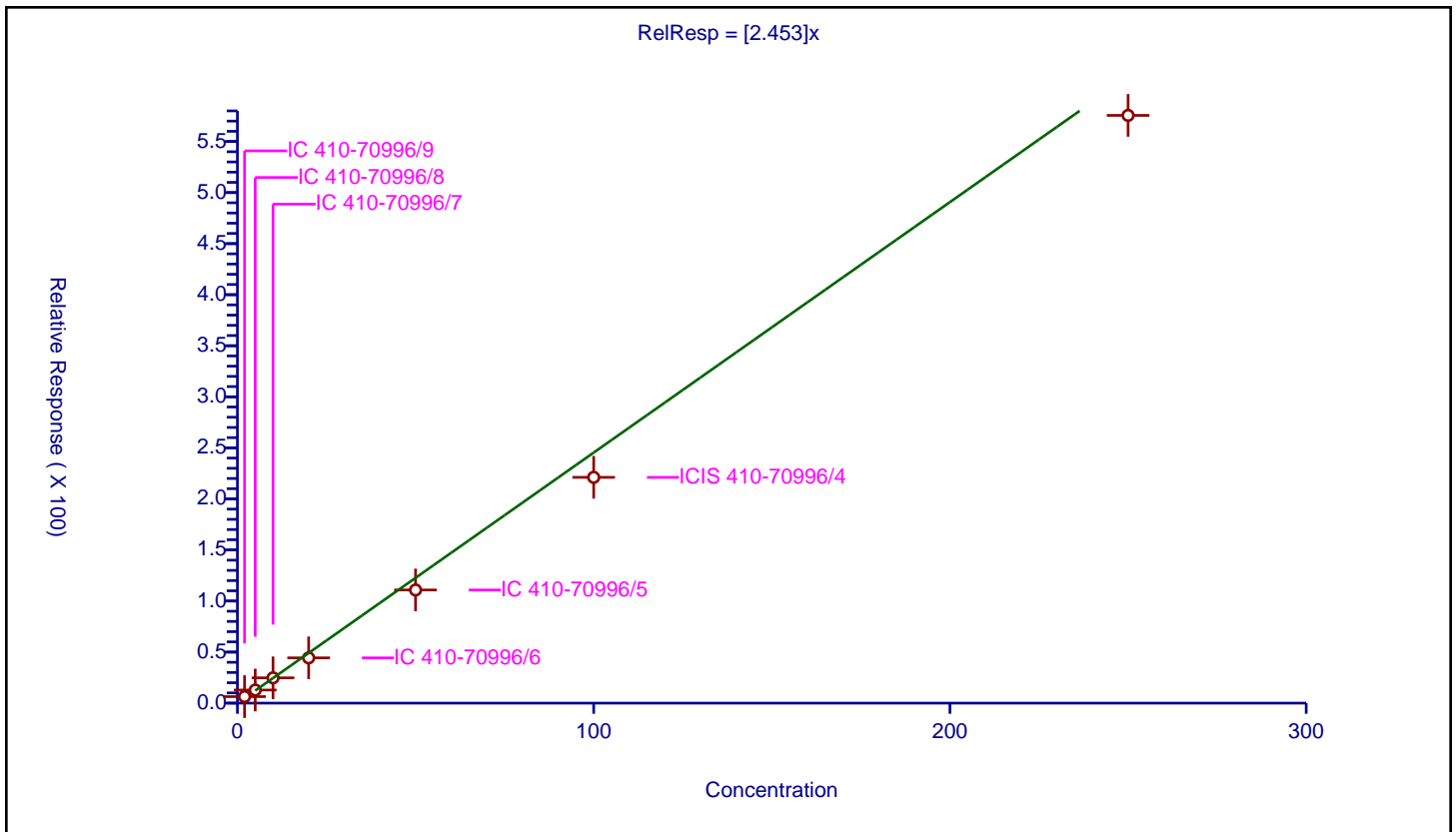
/ Acetone

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	2.453

Error Coefficients	
Standard Error:	920000
Relative Standard Error:	14.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.966

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-70996/9	2.0	6.371697	50.0	184731.0	3.185849	Y
2	IC 410-70996/8	5.0	12.822595	50.0	195834.0	2.564519	Y
3	IC 410-70996/7	10.0	24.764172	50.0	201206.0	2.476417	Y
4	IC 410-70996/6	20.0	44.336478	50.0	195329.0	2.216824	Y
5	IC 410-70996/5	50.0	110.805703	50.0	183343.0	2.216114	Y
6	ICIS 410-70996/4	100.0	221.132062	50.0	186094.0	2.211321	Y
7	IC 410-70996/3	250.0	575.589593	50.0	177877.0	2.302358	Y



Calibration

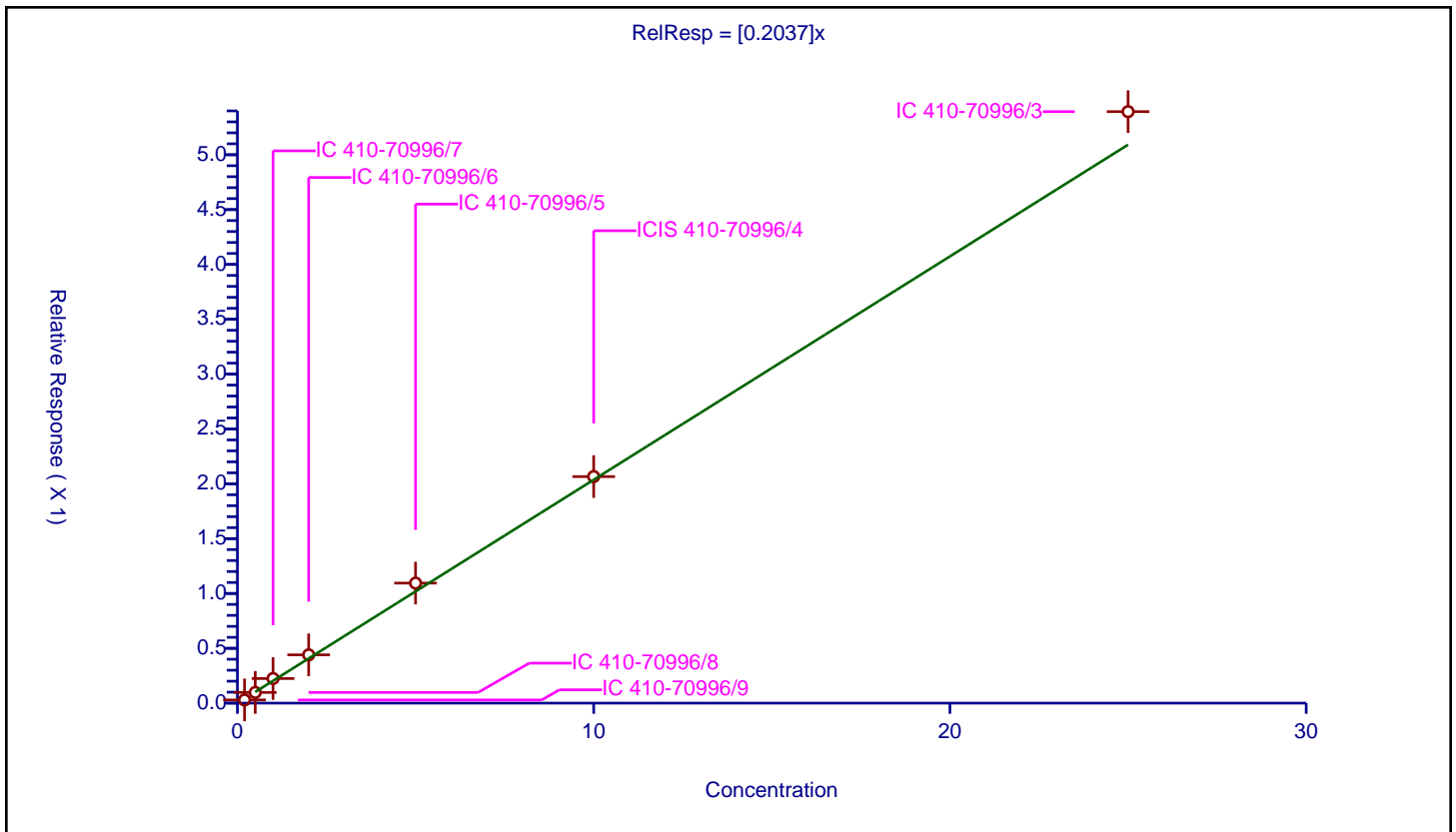
/ 1,1,2-Trichloro-1,2,2-trifluoroethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2037

Error Coefficients	
Standard Error:	542000
Relative Standard Error:	13.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.979

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-70996/9	0.2	0.02906	10.0	2204755.0	0.1453	Y
2	IC 410-70996/8	0.5	0.097397	10.0	2189287.0	0.194794	Y
3	IC 410-70996/7	1.0	0.224309	10.0	2211412.0	0.224309	Y
4	IC 410-70996/6	2.0	0.440237	10.0	2210035.0	0.220119	Y
5	IC 410-70996/5	5.0	1.094354	10.0	2225560.0	0.218871	Y
6	ICIS 410-70996/4	10.0	2.065565	10.0	2246480.0	0.206556	Y
7	IC 410-70996/3	25.0	5.393209	10.0	2249974.0	0.215728	Y



Calibration

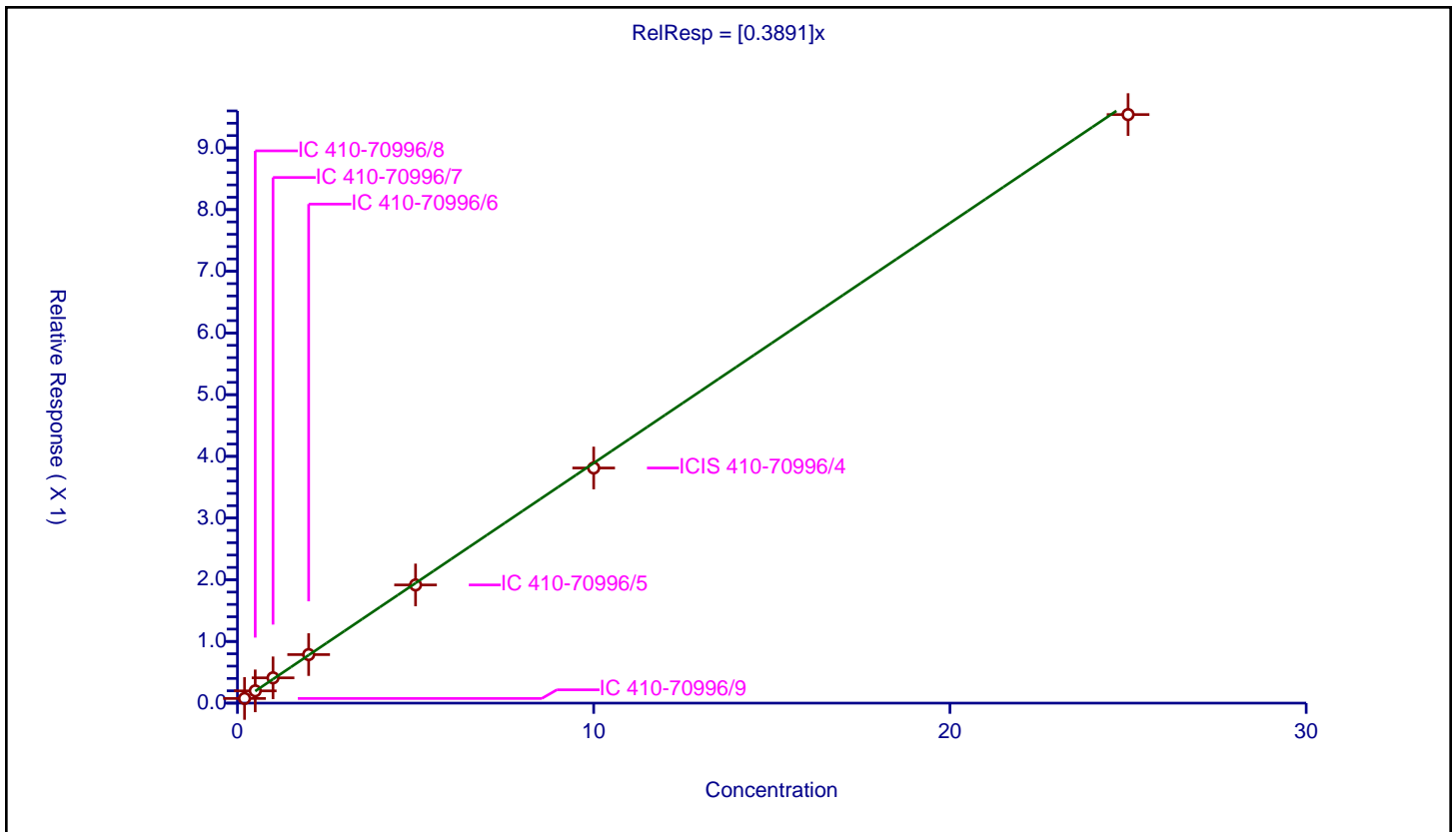
/ Iodomethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3891

Error Coefficients	
Standard Error:	963000
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 410-70996/9	0.2	0.075405	10.0	2204755.0	0.377026	Y
2	IC 410-70996/8	0.5	0.198695	10.0	2189287.0	0.39739	Y
3	IC 410-70996/7	1.0	0.409937	10.0	2211412.0	0.409937	Y
4	IC 410-70996/6	2.0	0.786752	10.0	2210035.0	0.393376	Y
5	IC 410-70996/5	5.0	1.915868	10.0	2225560.0	0.383174	Y
6	ICIS 410-70996/4	10.0	3.811434	10.0	2246480.0	0.381143	Y
7	IC 410-70996/3	25.0	9.540501	10.0	2249974.0	0.38162	Y



Calibration

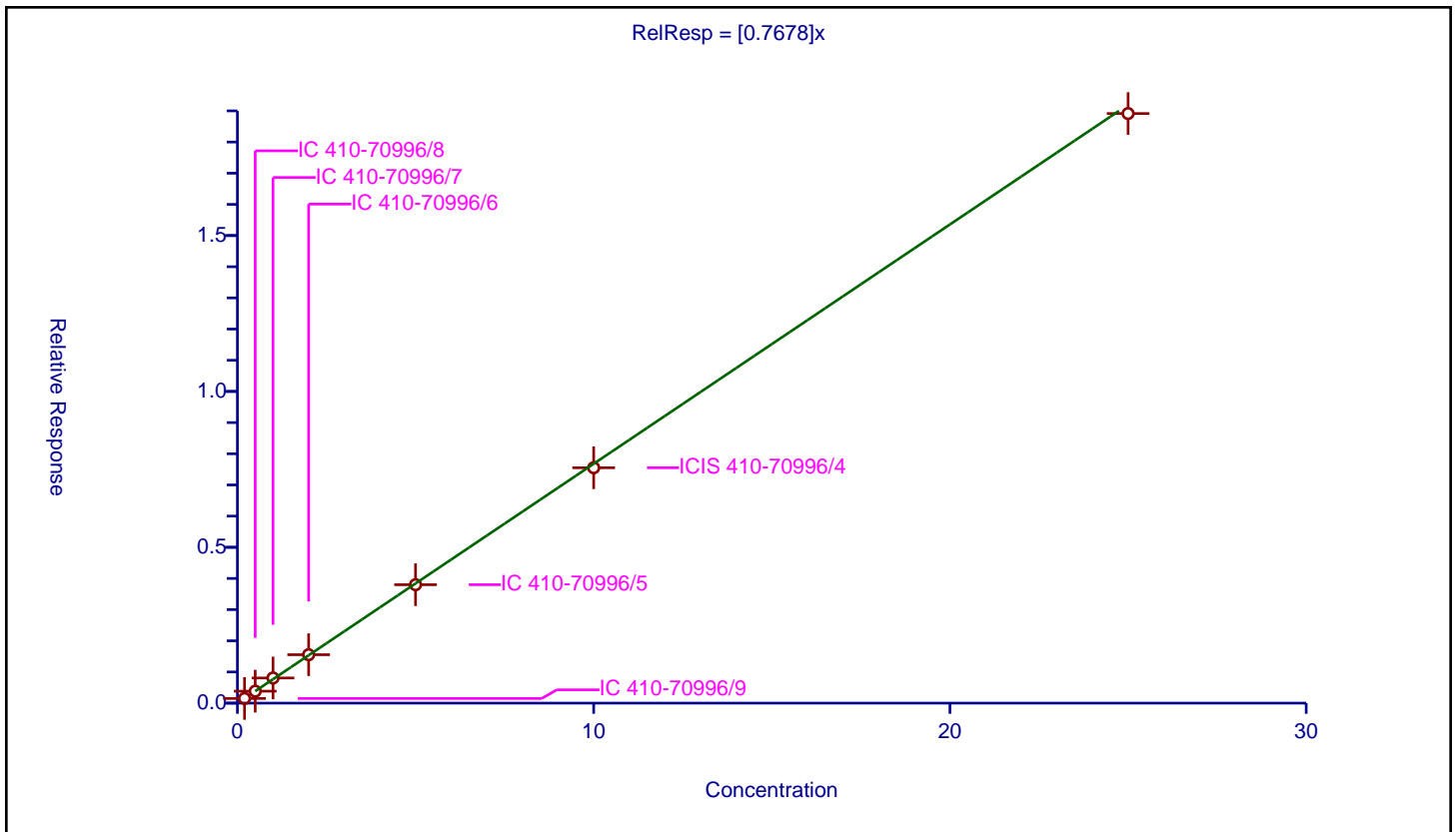
/ Carbon disulfide

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.7678

Error Coefficients	
Standard Error:	1910000
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 410-70996/9	0.2	0.150298	10.0	2204755.0	0.751489	Y
2	IC 410-70996/8	0.5	0.38397	10.0	2189287.0	0.76794	Y
3	IC 410-70996/7	1.0	0.807	10.0	2211412.0	0.807	Y
4	IC 410-70996/6	2.0	1.553564	10.0	2210035.0	0.776782	Y
5	IC 410-70996/5	5.0	3.799632	10.0	2225560.0	0.759926	Y
6	ICIS 410-70996/4	10.0	7.550835	10.0	2246480.0	0.755084	Y
7	IC 410-70996/3	25.0	18.914672	10.0	2249974.0	0.756587	Y



Calibration

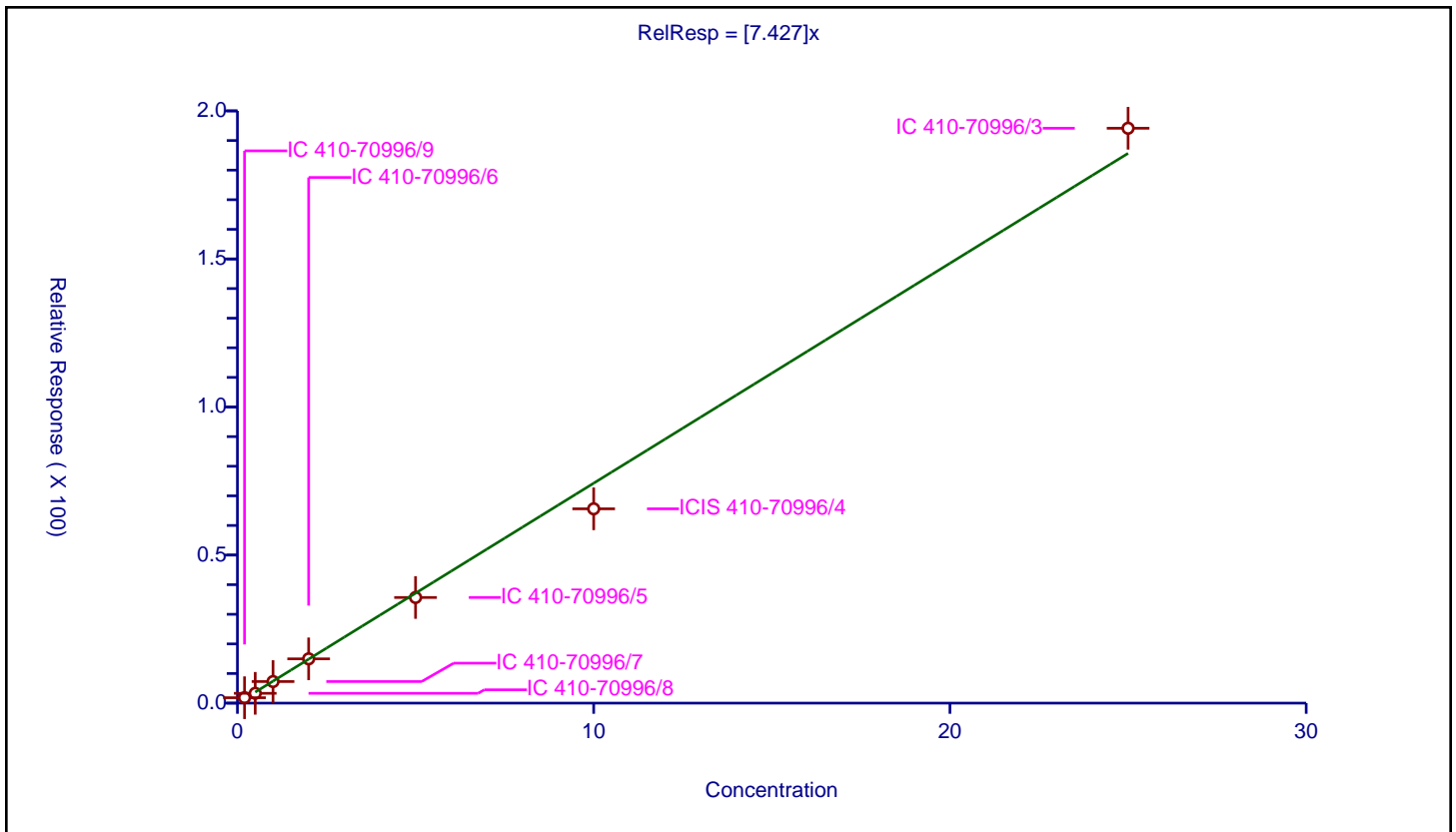
/ Methyl acetate

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	7.427

Error Coefficients	
Standard Error:	305000
Relative Standard Error:	11.7
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.979

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-70996/9	0.2	1.827252	50.0	184731.0	9.136258	Y
2	IC 410-70996/8	0.5	3.310457	50.0	195834.0	6.620914	Y
3	IC 410-70996/7	1.0	7.28855	50.0	201206.0	7.28855	Y
4	IC 410-70996/6	2.0	14.95656	50.0	195329.0	7.47828	Y
5	IC 410-70996/5	5.0	35.676028	50.0	183343.0	7.135206	Y
6	ICIS 410-70996/4	10.0	65.6206	50.0	186094.0	6.56206	Y
7	IC 410-70996/3	25.0	194.136398	50.0	177877.0	7.765456	Y



Calibration

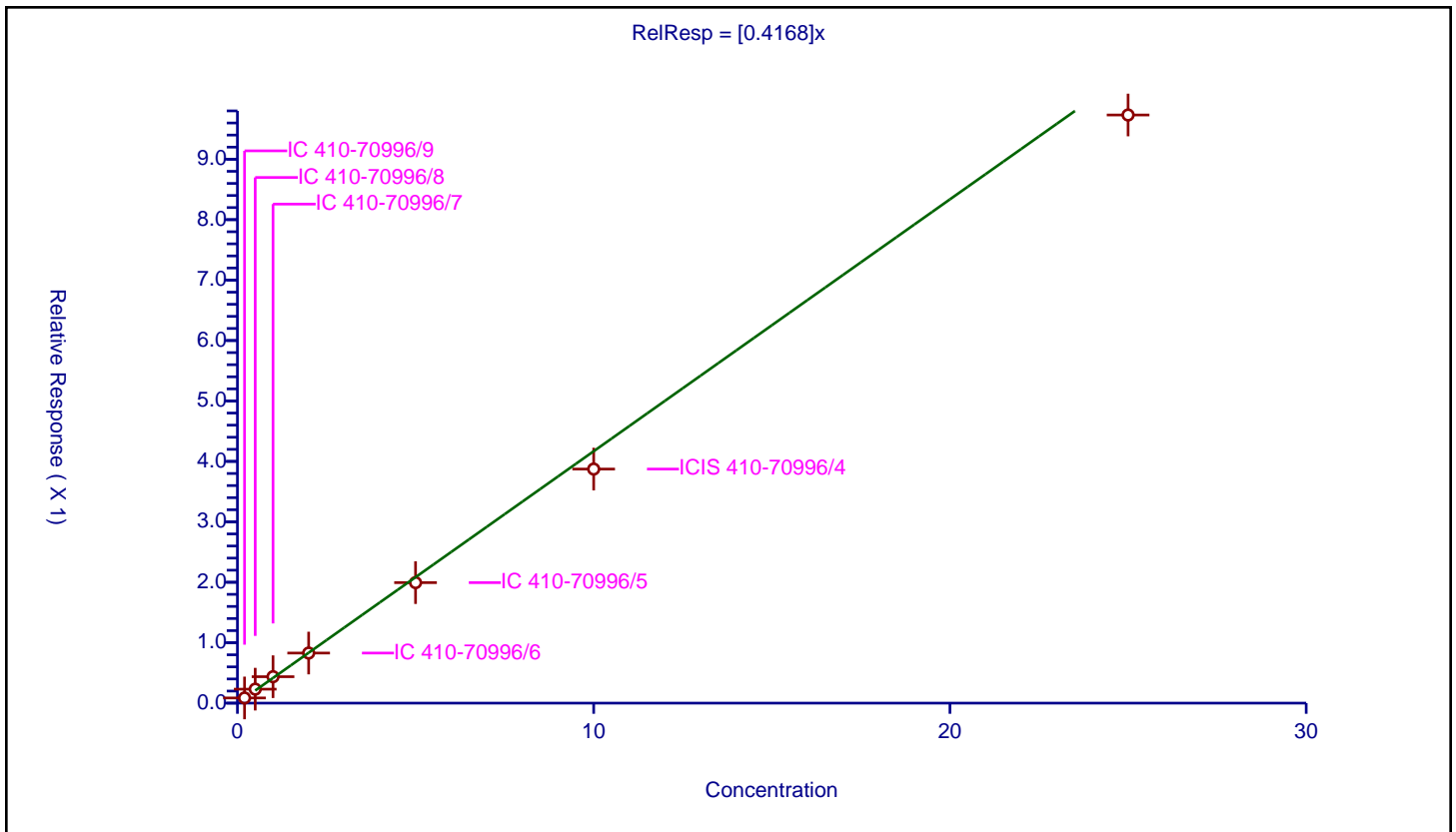
/ 3-Chloro-1-propene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4168

Error Coefficients	
Standard Error:	983000
Relative Standard Error:	6.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-70996/9	0.2	0.085656	10.0	2204755.0	0.428279	Y
2	IC 410-70996/8	0.5	0.231144	10.0	2189287.0	0.462287	Y
3	IC 410-70996/7	1.0	0.437268	10.0	2211412.0	0.437268	Y
4	IC 410-70996/6	2.0	0.828933	10.0	2210035.0	0.414466	Y
5	IC 410-70996/5	5.0	1.99388	10.0	2225560.0	0.398776	Y
6	ICIS 410-70996/4	10.0	3.873153	10.0	2246480.0	0.387315	Y
7	IC 410-70996/3	25.0	9.732019	10.0	2249974.0	0.389281	Y



Calibration

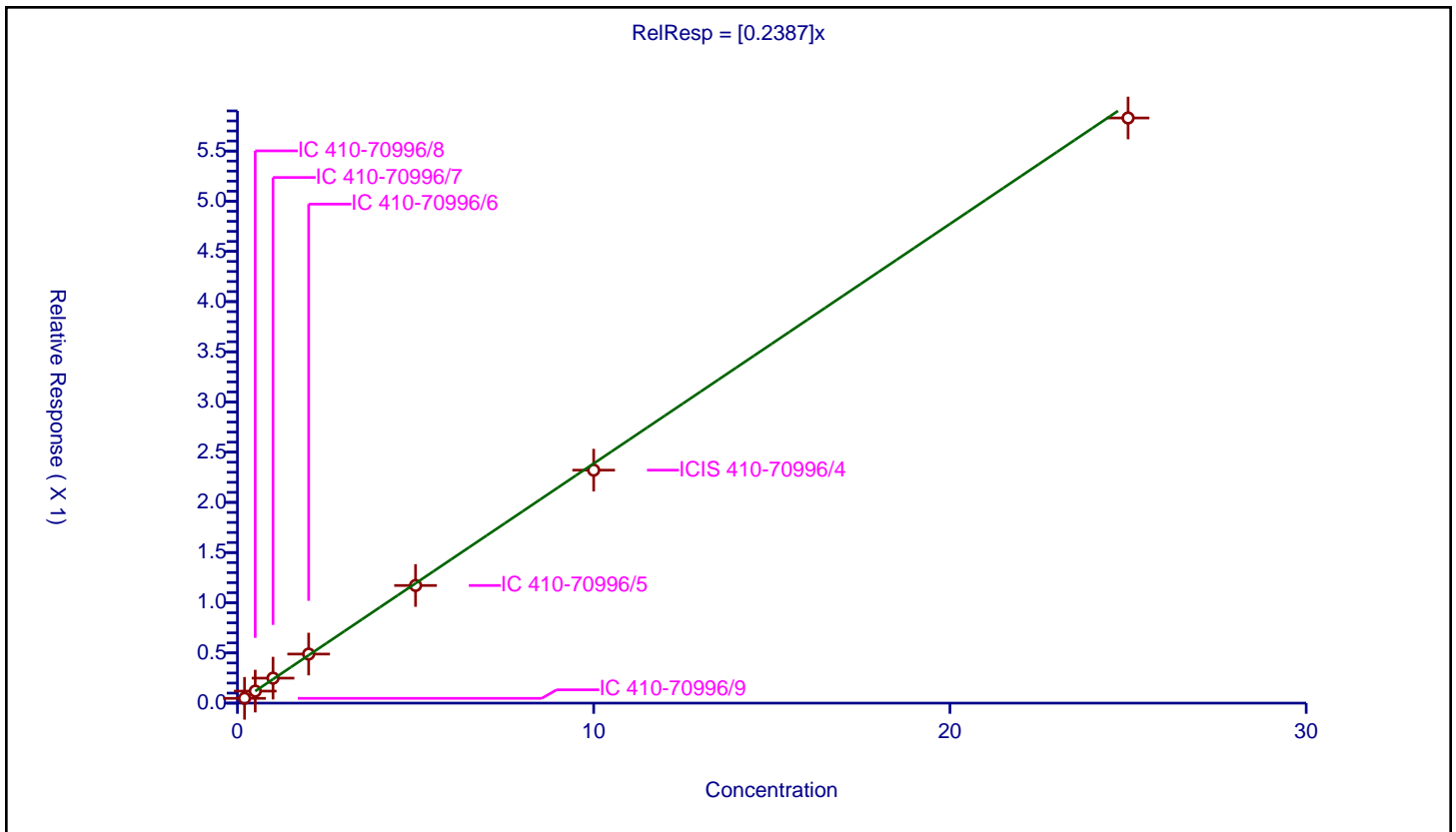
/ Methylene Chloride

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2387

Error Coefficients	
Standard Error:	588000
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 410-70996/9	0.2	0.047633	10.0	2204755.0	0.238167	Y
2	IC 410-70996/8	0.5	0.119665	10.0	2189287.0	0.239329	Y
3	IC 410-70996/7	1.0	0.249144	10.0	2211412.0	0.249144	Y
4	IC 410-70996/6	2.0	0.488933	10.0	2210035.0	0.244467	Y
5	IC 410-70996/5	5.0	1.172145	10.0	2225560.0	0.234429	Y
6	ICIS 410-70996/4	10.0	2.32108	10.0	2246480.0	0.232108	Y
7	IC 410-70996/3	25.0	5.829525	10.0	2249974.0	0.233181	Y



Calibration

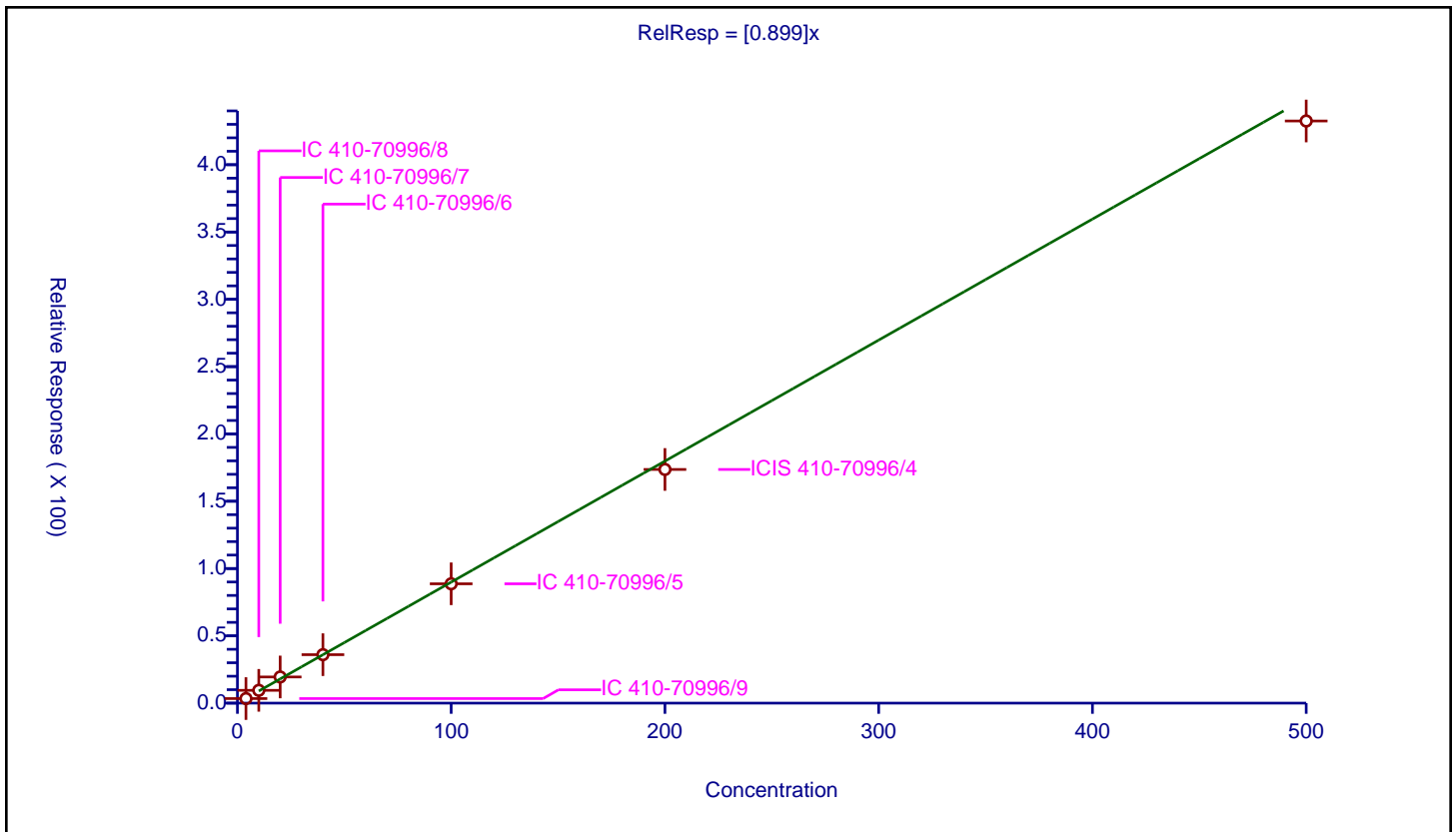
/ 2-Methyl-2-propanol

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.899

Error Coefficients	
Standard Error:	697000
Relative Standard Error:	5.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-70996/9	4.0	3.398996	50.0	184731.0	0.849749	Y
2	IC 410-70996/8	10.0	9.516223	50.0	195834.0	0.951622	Y
3	IC 410-70996/7	20.0	19.445245	50.0	201206.0	0.972262	Y
4	IC 410-70996/6	40.0	35.997983	50.0	195329.0	0.89995	Y
5	IC 410-70996/5	100.0	88.660325	50.0	183343.0	0.886603	Y
6	ICIS 410-70996/4	200.0	173.59399	50.0	186094.0	0.86797	Y
7	IC 410-70996/3	500.0	432.502516	50.0	177877.0	0.865005	Y



Calibration

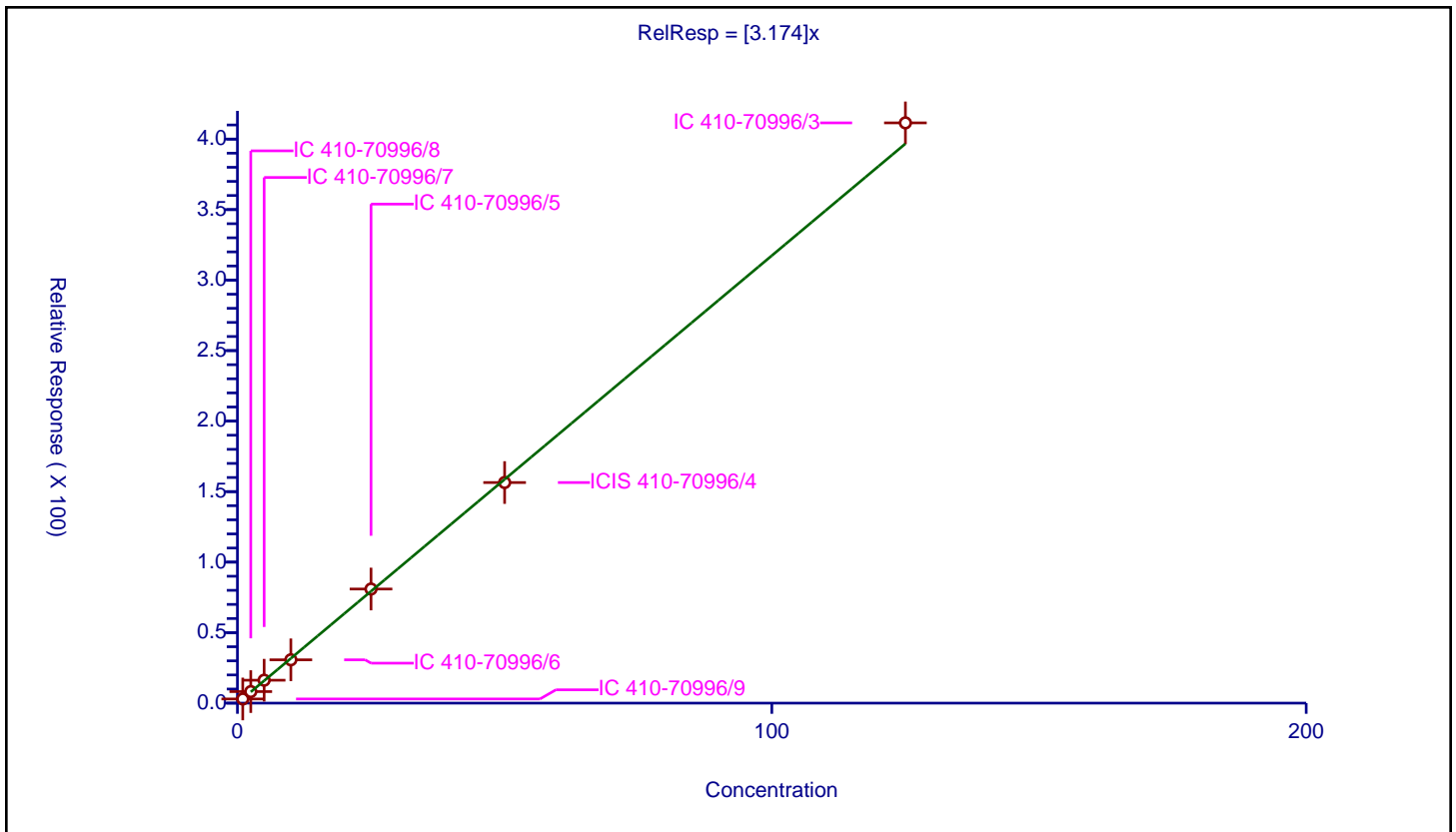
/ Acrylonitrile

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	3.174

Error Coefficients	
Standard Error:	657000
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 410-70996/9	1.0	2.958626	50.0	184731.0	2.958626	Y
2	IC 410-70996/8	2.5	8.187036	50.0	195834.0	3.274814	Y
3	IC 410-70996/7	5.0	16.260449	50.0	201206.0	3.25209	Y
4	IC 410-70996/6	10.0	30.729436	50.0	195329.0	3.072944	Y
5	IC 410-70996/5	25.0	80.91637	50.0	183343.0	3.236655	Y
6	ICIS 410-70996/4	50.0	156.440294	50.0	186094.0	3.128806	Y
7	IC 410-70996/3	125.0	411.493616	50.0	177877.0	3.291949	Y



Calibration

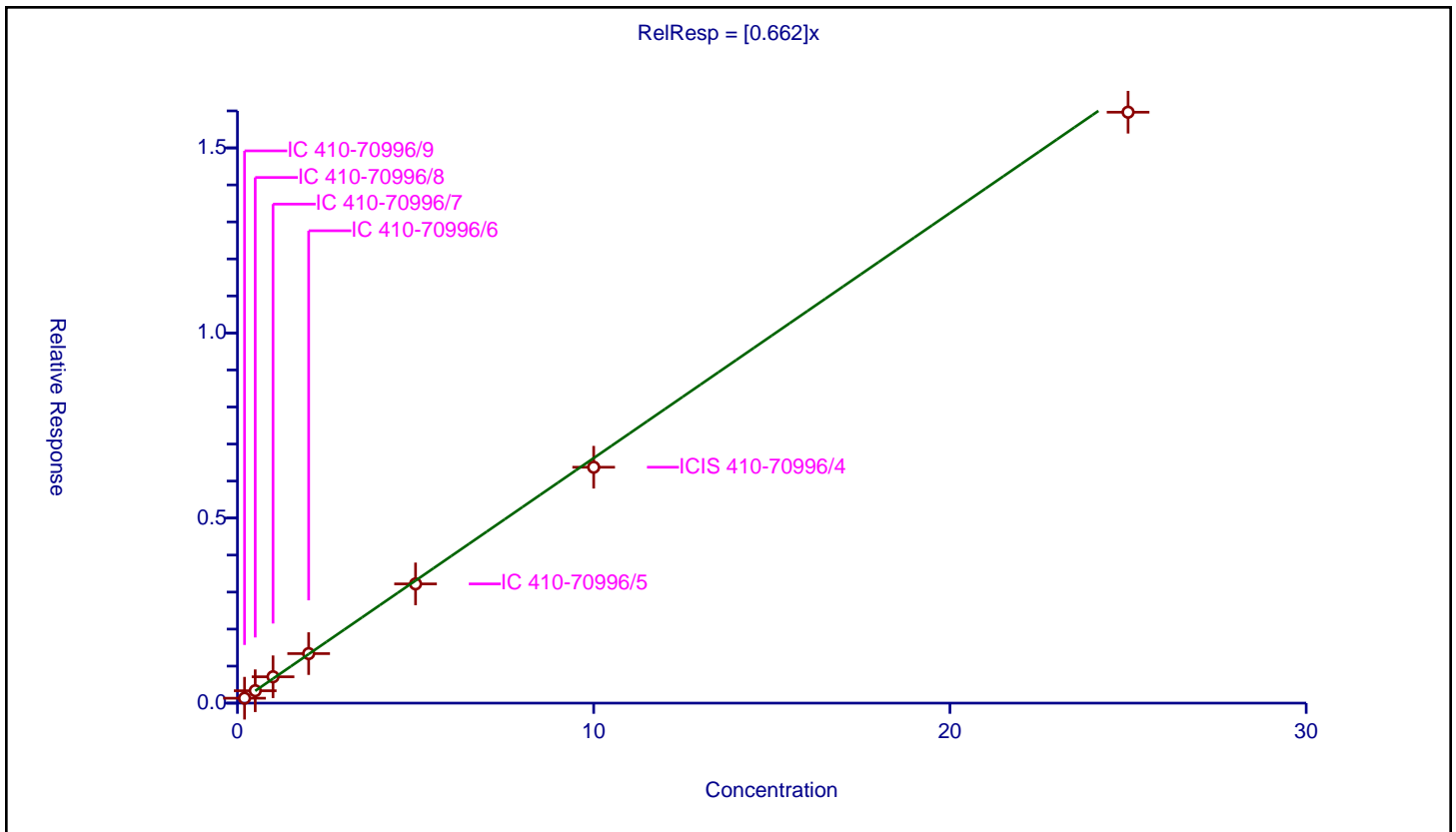
/ Methyl tert-butyl ether

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.662

Error Coefficients	
Standard Error:	1610000
Relative Standard Error:	4.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-70996/9	0.2	0.132704	10.0	2204755.0	0.66352	Y
2	IC 410-70996/8	0.5	0.334684	10.0	2189287.0	0.669369	Y
3	IC 410-70996/7	1.0	0.712292	10.0	2211412.0	0.712292	Y
4	IC 410-70996/6	2.0	1.337915	10.0	2210035.0	0.668958	Y
5	IC 410-70996/5	5.0	3.221028	10.0	2225560.0	0.644206	Y
6	ICIS 410-70996/4	10.0	6.373162	10.0	2246480.0	0.637316	Y
7	IC 410-70996/3	25.0	15.965087	10.0	2249974.0	0.638603	Y



Calibration

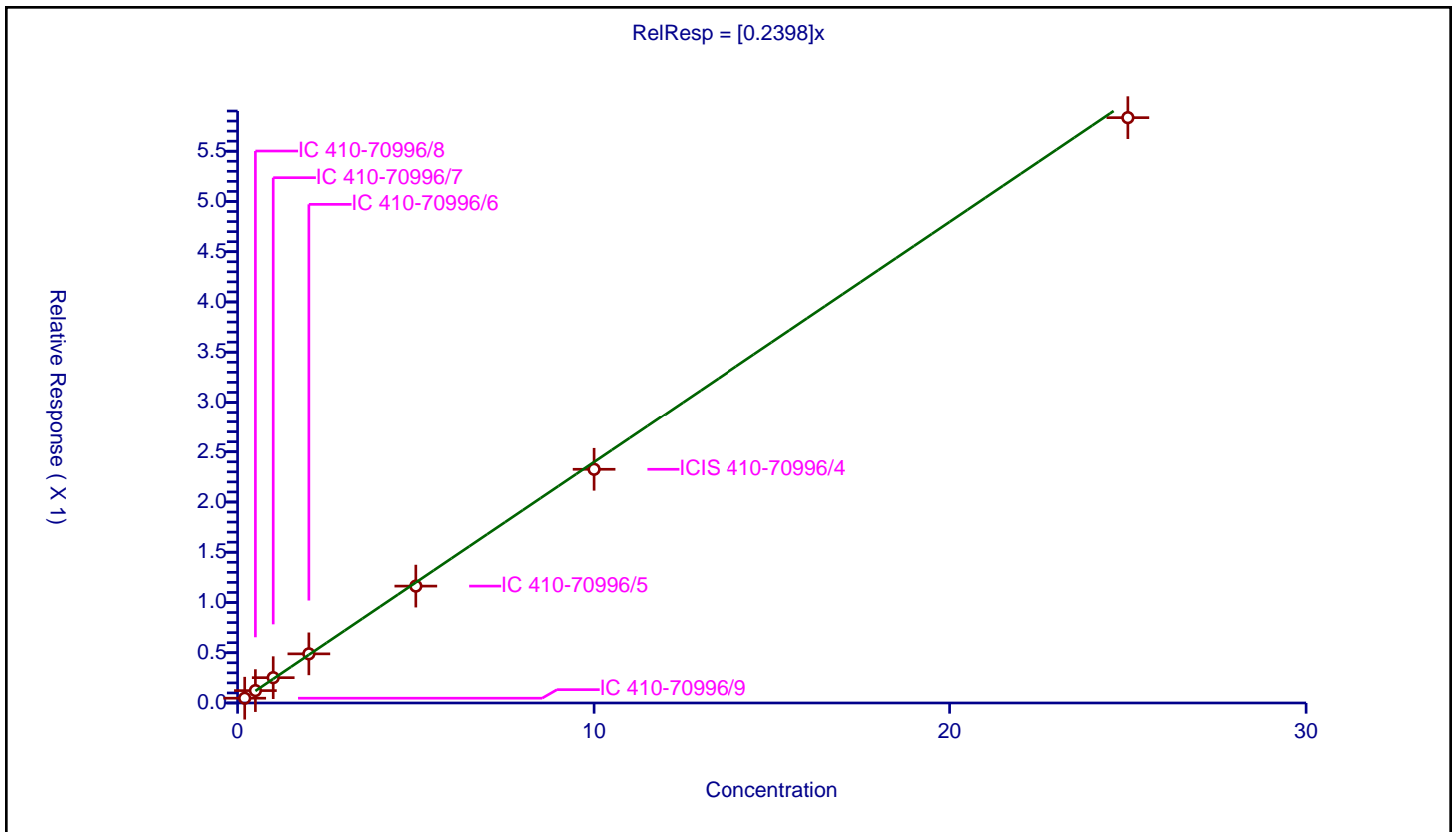
/ trans-1,2-Dichloroethene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2398

Error Coefficients	
Standard Error:	589000
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 410-70996/9	0.2	0.047525	10.0	2204755.0	0.237623	Y
2	IC 410-70996/8	0.5	0.123159	10.0	2189287.0	0.246318	Y
3	IC 410-70996/7	1.0	0.251902	10.0	2211412.0	0.251902	Y
4	IC 410-70996/6	2.0	0.488933	10.0	2210035.0	0.244467	Y
5	IC 410-70996/5	5.0	1.163105	10.0	2225560.0	0.232621	Y
6	ICIS 410-70996/4	10.0	2.325505	10.0	2246480.0	0.23255	Y
7	IC 410-70996/3	25.0	5.83393	10.0	2249974.0	0.233357	Y



Calibration

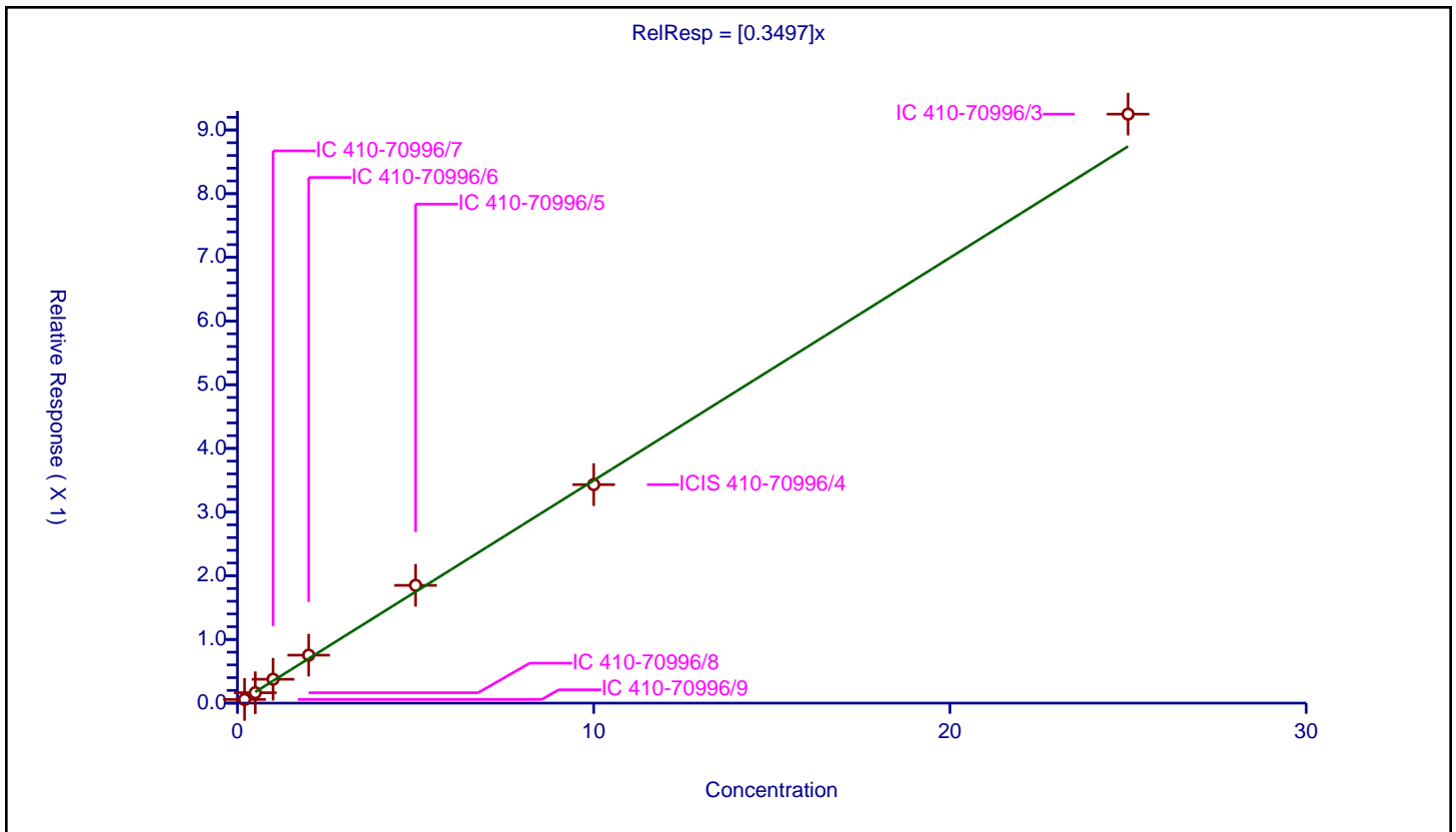
/ Hexane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3497

Error Coefficients	
Standard Error:	925000
Relative Standard Error:	9.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-70996/9	0.2	0.057344	10.0	2204755.0	0.286721	Y
2	IC 410-70996/8	0.5	0.163195	10.0	2189287.0	0.326389	Y
3	IC 410-70996/7	1.0	0.375014	10.0	2211412.0	0.375014	Y
4	IC 410-70996/6	2.0	0.753649	10.0	2210035.0	0.376824	Y
5	IC 410-70996/5	5.0	1.849508	10.0	2225560.0	0.369902	Y
6	ICIS 410-70996/4	10.0	3.431542	10.0	2246480.0	0.343154	Y
7	IC 410-70996/3	25.0	9.249267	10.0	2249974.0	0.369971	Y



Calibration

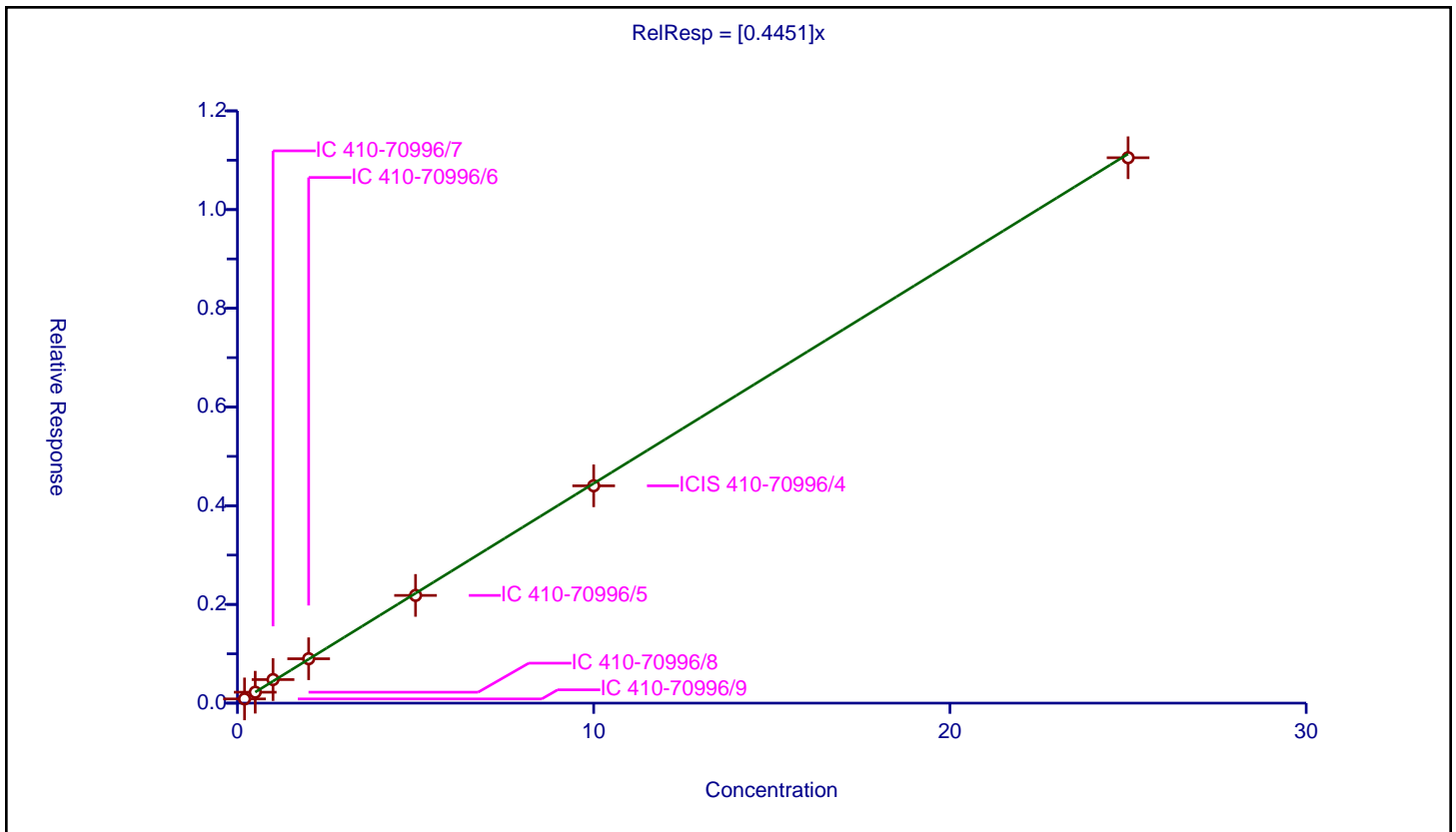
/ 1,1-Dichloroethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4451

Error Coefficients	
Standard Error:	1110000
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 410-70996/9	0.2	0.085397	10.0	2204755.0	0.426986	Y
2	IC 410-70996/8	0.5	0.221574	10.0	2189287.0	0.443149	Y
3	IC 410-70996/7	1.0	0.477121	10.0	2211412.0	0.477121	Y
4	IC 410-70996/6	2.0	0.89933	10.0	2210035.0	0.449665	Y
5	IC 410-70996/5	5.0	2.182687	10.0	2225560.0	0.436537	Y
6	ICIS 410-70996/4	10.0	4.403355	10.0	2246480.0	0.440336	Y
7	IC 410-70996/3	25.0	11.050888	10.0	2249974.0	0.442036	Y



Calibration

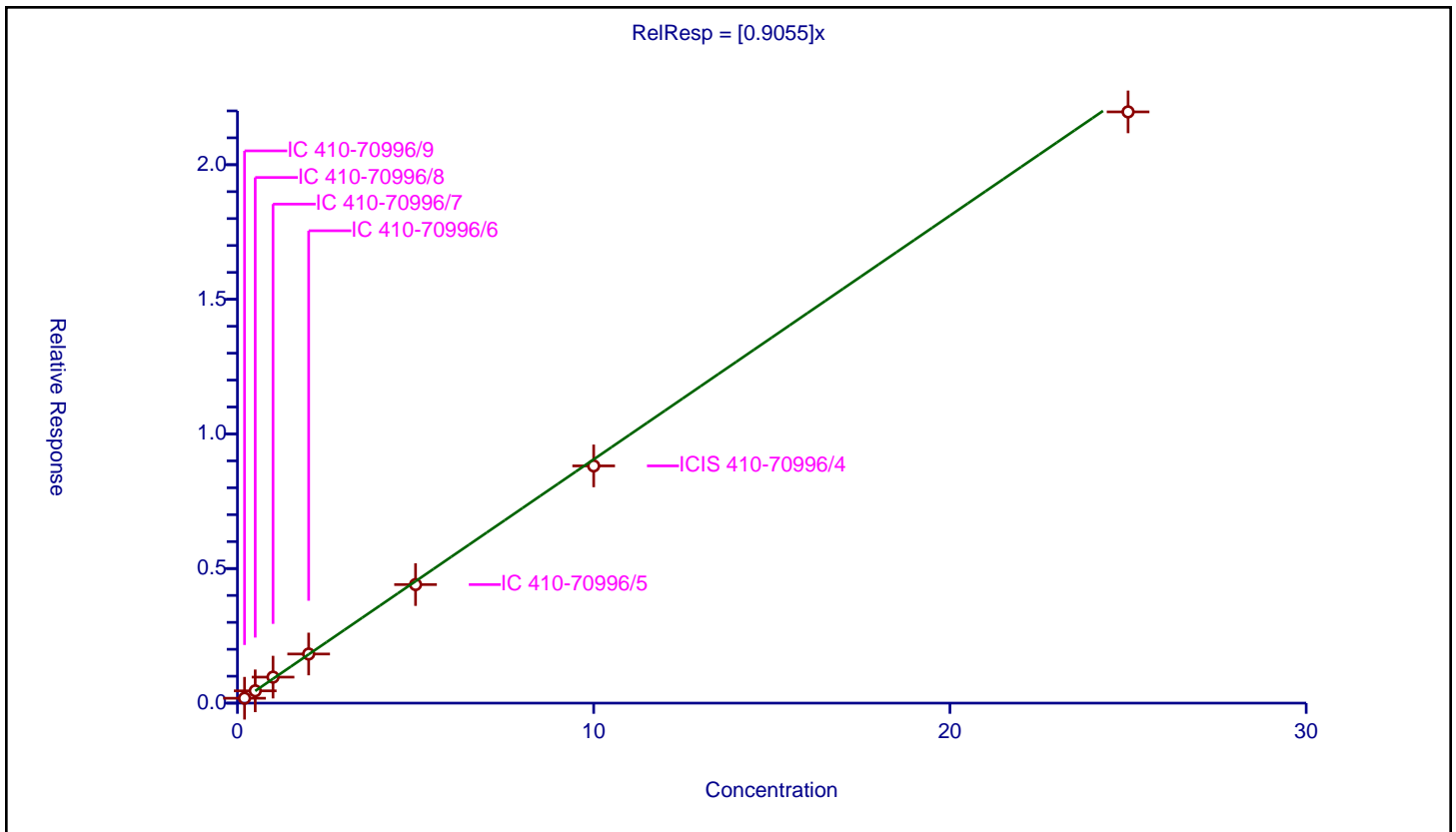
/ Isopropyl ether

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.9055

Error Coefficients	
Standard Error:	2220000
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 410-70996/9	0.2	0.181231	10.0	2204755.0	0.906155	Y
2	IC 410-70996/8	0.5	0.456413	10.0	2189287.0	0.912827	Y
3	IC 410-70996/7	1.0	0.96622	10.0	2211412.0	0.96622	Y
4	IC 410-70996/6	2.0	1.825016	10.0	2210035.0	0.912508	Y
5	IC 410-70996/5	5.0	4.40384	10.0	2225560.0	0.880768	Y
6	ICIS 410-70996/4	10.0	8.812262	10.0	2246480.0	0.881226	Y
7	IC 410-70996/3	25.0	21.96356	10.0	2249974.0	0.878542	Y



Calibration

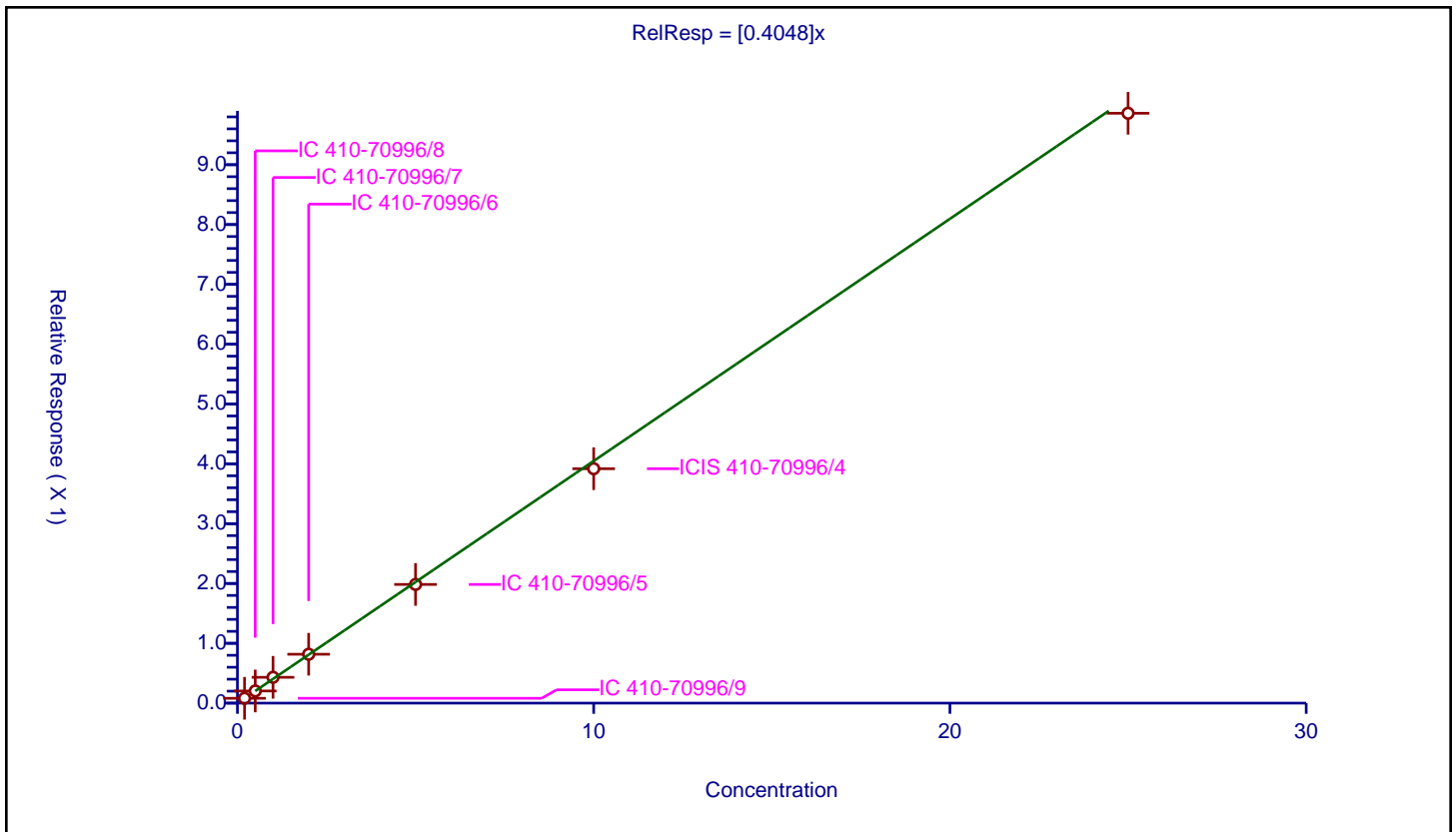
/ 2-Chloro-1,3-butadiene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4048

Error Coefficients	
Standard Error:	995000
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 410-70996/9	0.2	0.08083	10.0	2204755.0	0.404149	Y
2	IC 410-70996/8	0.5	0.203071	10.0	2189287.0	0.406141	Y
3	IC 410-70996/7	1.0	0.431525	10.0	2211412.0	0.431525	Y
4	IC 410-70996/6	2.0	0.817069	10.0	2210035.0	0.408534	Y
5	IC 410-70996/5	5.0	1.984	10.0	2225560.0	0.3968	Y
6	ICIS 410-70996/4	10.0	3.918731	10.0	2246480.0	0.391873	Y
7	IC 410-70996/3	25.0	9.860341	10.0	2249974.0	0.394414	Y



Calibration

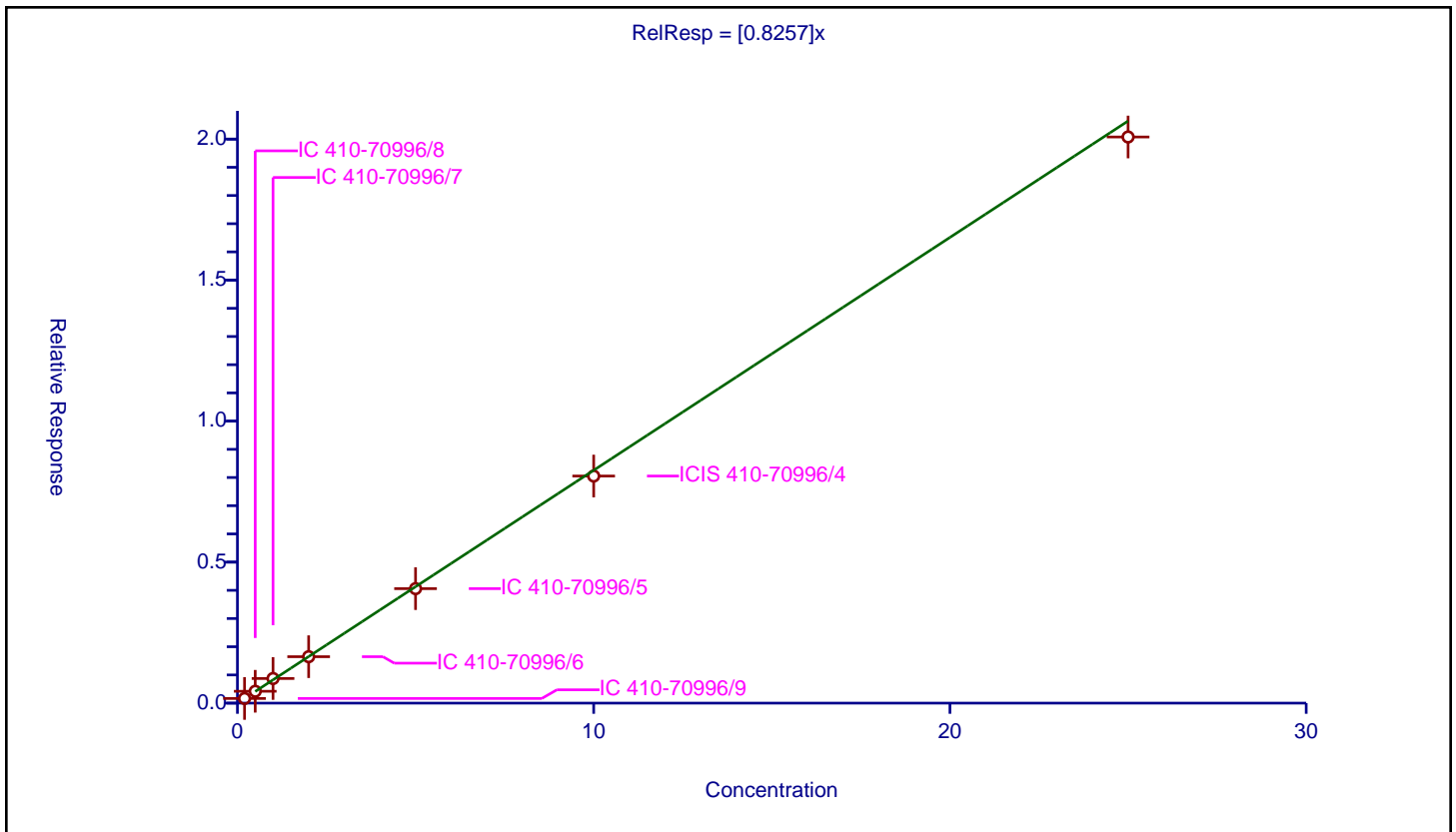
/ Tert-butyl ethyl ether

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.8257

Error Coefficients	
Standard Error:	2030000
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 410-70996/9	0.2	0.164472	10.0	2204755.0	0.822359	Y
2	IC 410-70996/8	0.5	0.420635	10.0	2189287.0	0.841269	Y
3	IC 410-70996/7	1.0	0.872831	10.0	2211412.0	0.872831	Y
4	IC 410-70996/6	2.0	1.646105	10.0	2210035.0	0.823053	Y
5	IC 410-70996/5	5.0	4.059473	10.0	2225560.0	0.811895	Y
6	ICIS 410-70996/4	10.0	8.052371	10.0	2246480.0	0.805237	Y
7	IC 410-70996/3	25.0	20.074854	10.0	2249974.0	0.802994	Y



Calibration

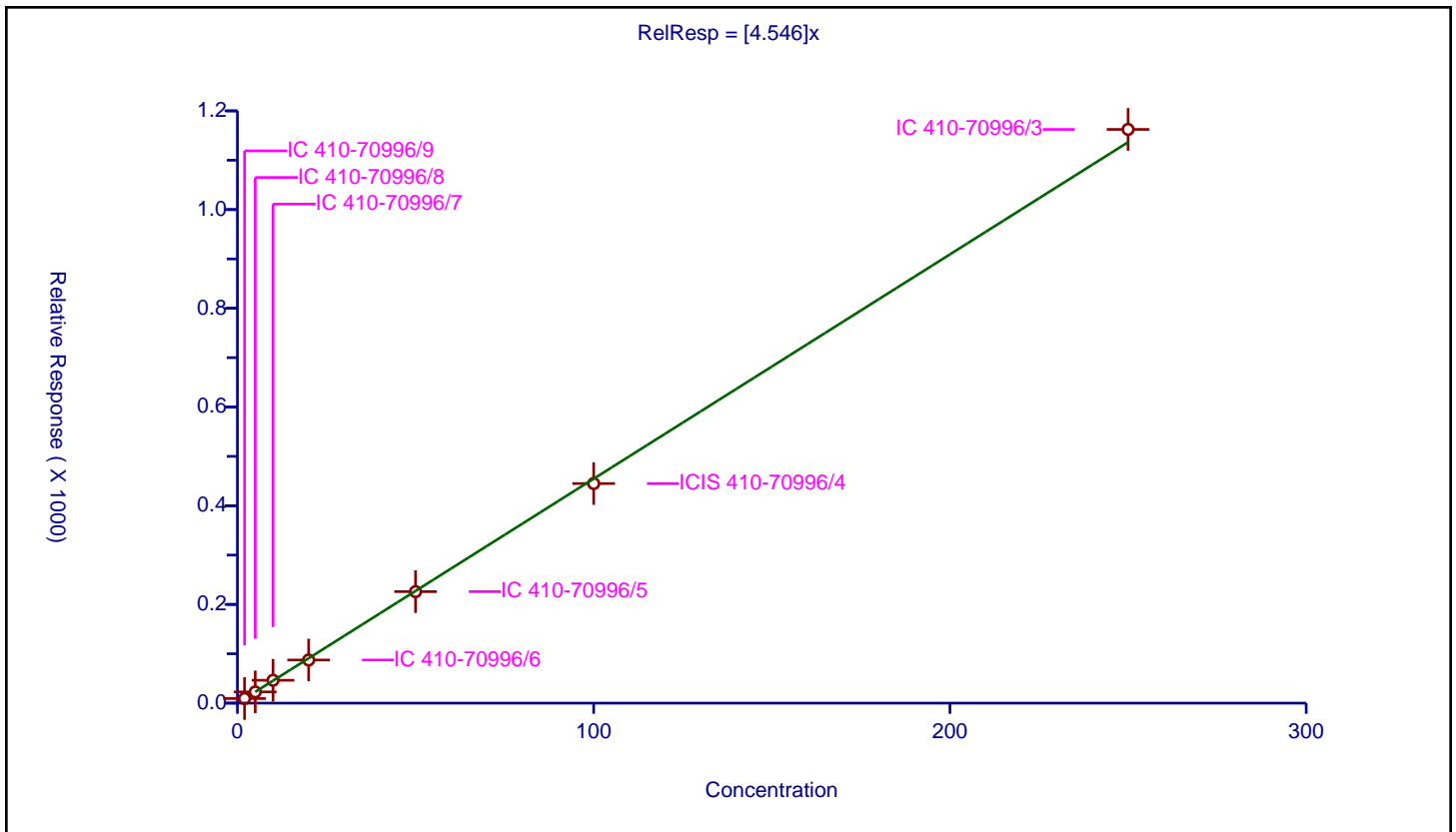
/ 2-Butanone (MEK)

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	4.546

Error Coefficients	
Standard Error:	1860000
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 410-70996/9	2.0	9.304069	50.0	184731.0	4.652035	Y
2	IC 410-70996/8	5.0	22.759582	50.0	195834.0	4.551916	Y
3	IC 410-70996/7	10.0	46.328638	50.0	201206.0	4.632864	Y
4	IC 410-70996/6	20.0	87.404072	50.0	195329.0	4.370204	Y
5	IC 410-70996/5	50.0	225.902271	50.0	183343.0	4.518045	Y
6	ICIS 410-70996/4	100.0	444.912786	50.0	186094.0	4.449128	Y
7	IC 410-70996/3	250.0	1162.465074	50.0	177877.0	4.64986	Y



Calibration

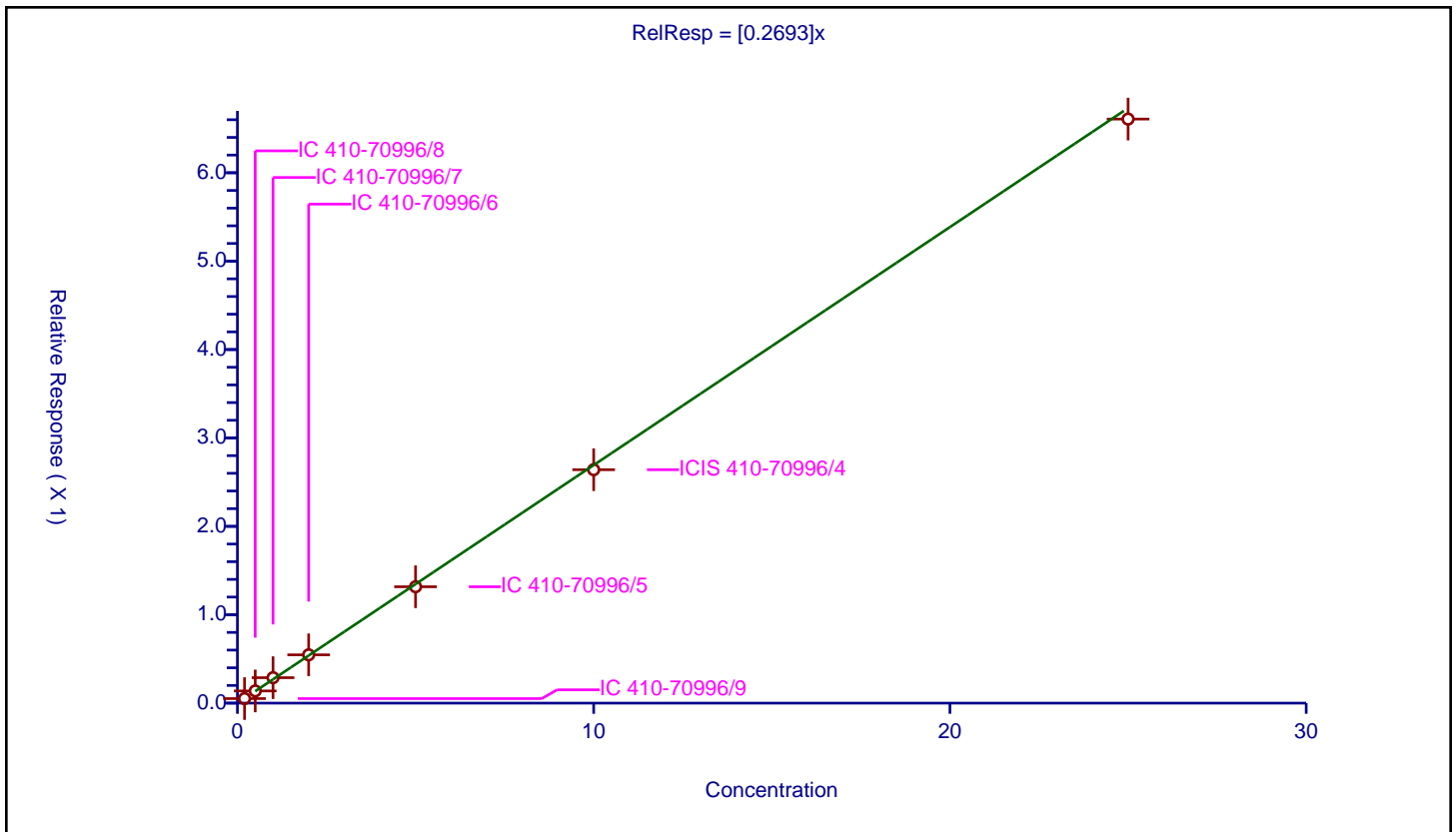
/ cis-1,2-Dichloroethene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2693

Error Coefficients	
Standard Error:	667000
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 410-70996/9	0.2	0.051271	10.0	2204755.0	0.256355	Y
2	IC 410-70996/8	0.5	0.13794	10.0	2189287.0	0.27588	Y
3	IC 410-70996/7	1.0	0.287825	10.0	2211412.0	0.287825	Y
4	IC 410-70996/6	2.0	0.546349	10.0	2210035.0	0.273174	Y
5	IC 410-70996/5	5.0	1.316648	10.0	2225560.0	0.26333	Y
6	ICIS 410-70996/4	10.0	2.640771	10.0	2246480.0	0.264077	Y
7	IC 410-70996/3	25.0	6.607619	10.0	2249974.0	0.264305	Y



Calibration

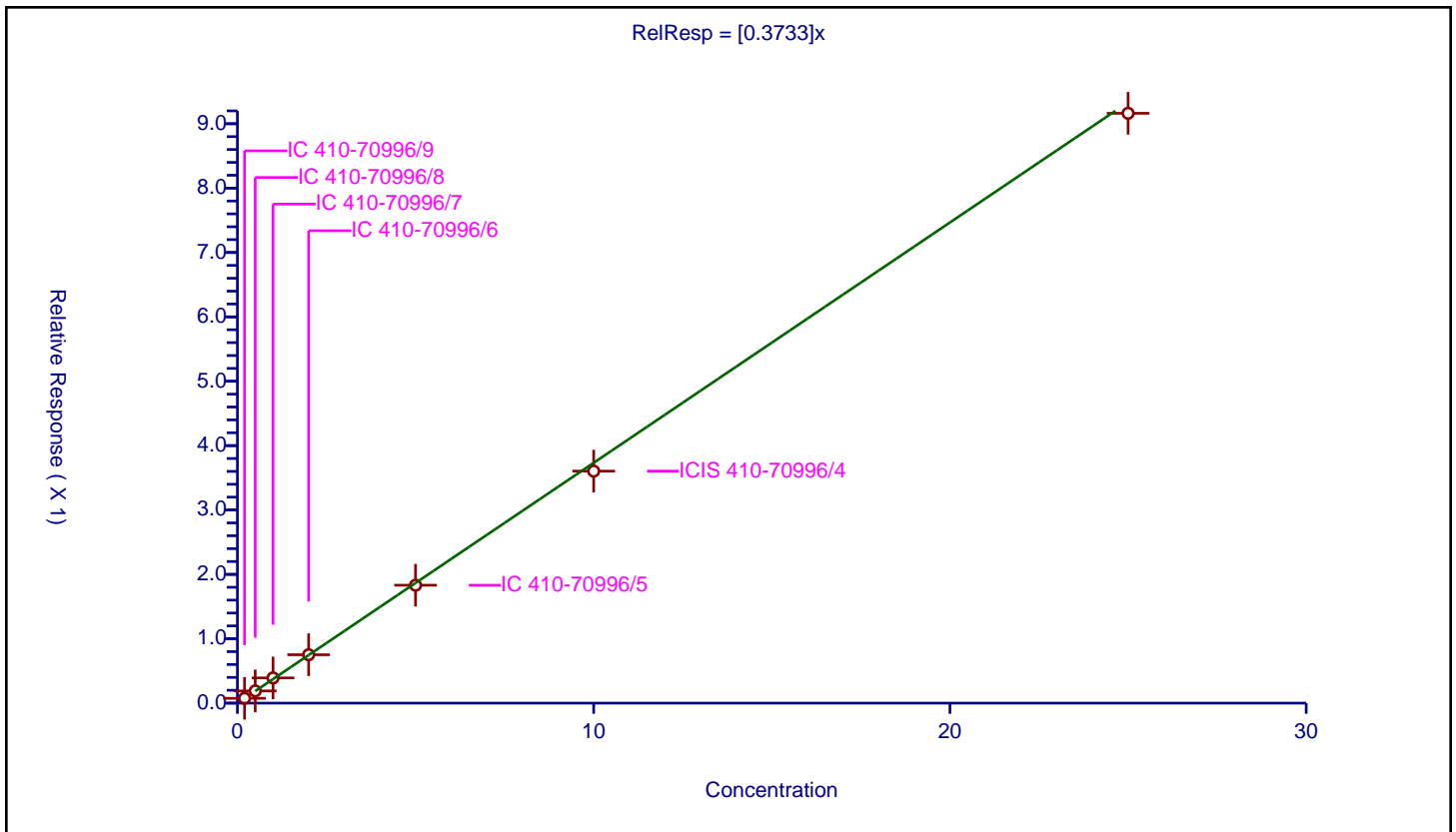
/ 2,2-Dichloropropane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3733

Error Coefficients	
Standard Error:	923000
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 410-70996/9	0.2	0.074729	10.0	2204755.0	0.373647	Y
2	IC 410-70996/8	0.5	0.1895	10.0	2189287.0	0.379	Y
3	IC 410-70996/7	1.0	0.39146	10.0	2211412.0	0.39146	Y
4	IC 410-70996/6	2.0	0.751762	10.0	2210035.0	0.375881	Y
5	IC 410-70996/5	5.0	1.831678	10.0	2225560.0	0.366336	Y
6	ICIS 410-70996/4	10.0	3.604052	10.0	2246480.0	0.360405	Y
7	IC 410-70996/3	25.0	9.162381	10.0	2249974.0	0.366495	Y



Calibration

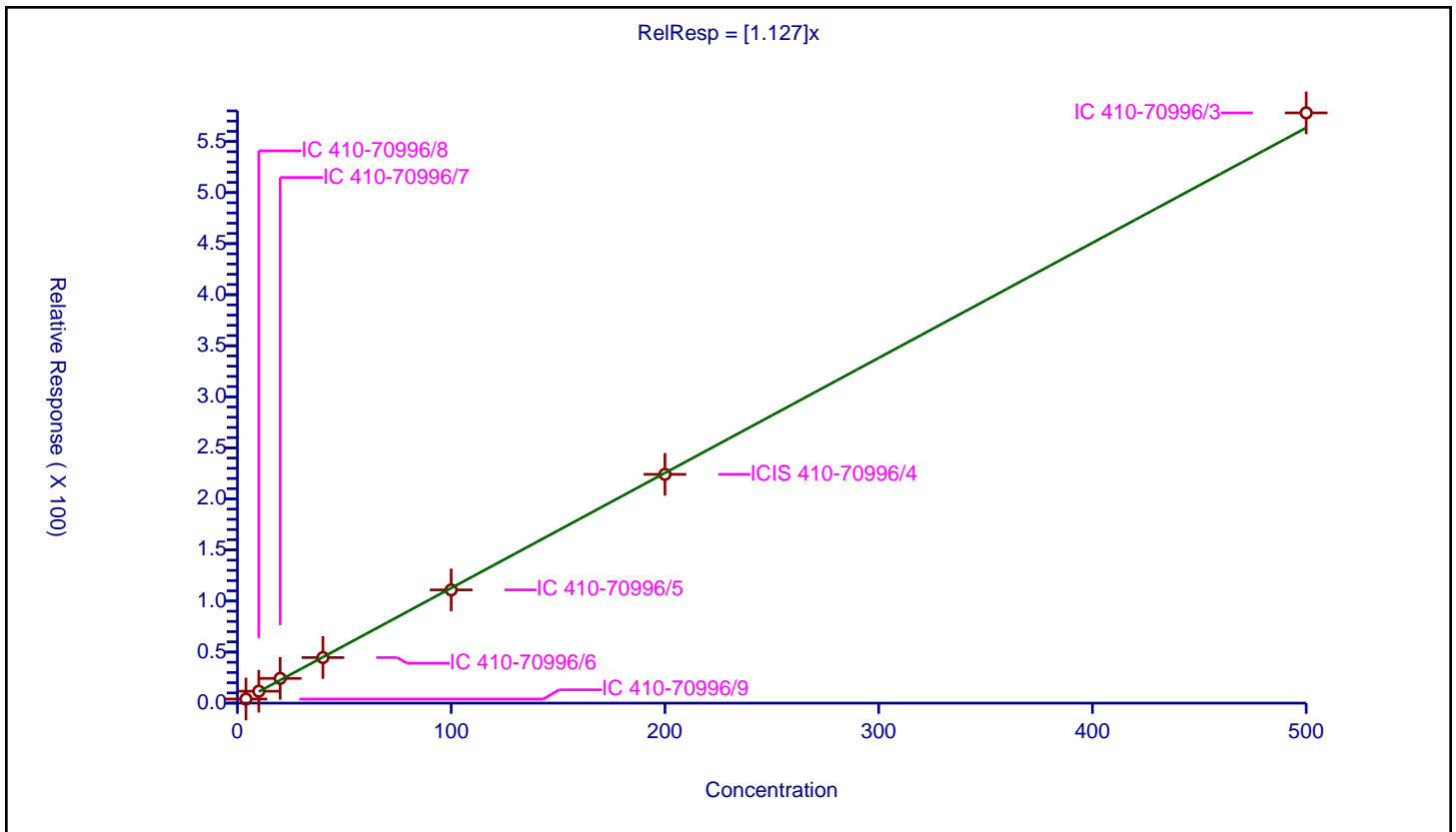
/ Propionitrile

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.127

Error Coefficients	
Standard Error:	925000
Relative Standard Error:	5.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-70996/9	4.0	4.035056	50.0	184731.0	1.008764	Y
2	IC 410-70996/8	10.0	11.68362	50.0	195834.0	1.168362	Y
3	IC 410-70996/7	20.0	24.216226	50.0	201206.0	1.210811	Y
4	IC 410-70996/6	40.0	44.615495	50.0	195329.0	1.115387	Y
5	IC 410-70996/5	100.0	110.883699	50.0	183343.0	1.108837	Y
6	ICIS 410-70996/4	200.0	224.067675	50.0	186094.0	1.120338	Y
7	IC 410-70996/3	500.0	578.037352	50.0	177877.0	1.156075	Y



Calibration

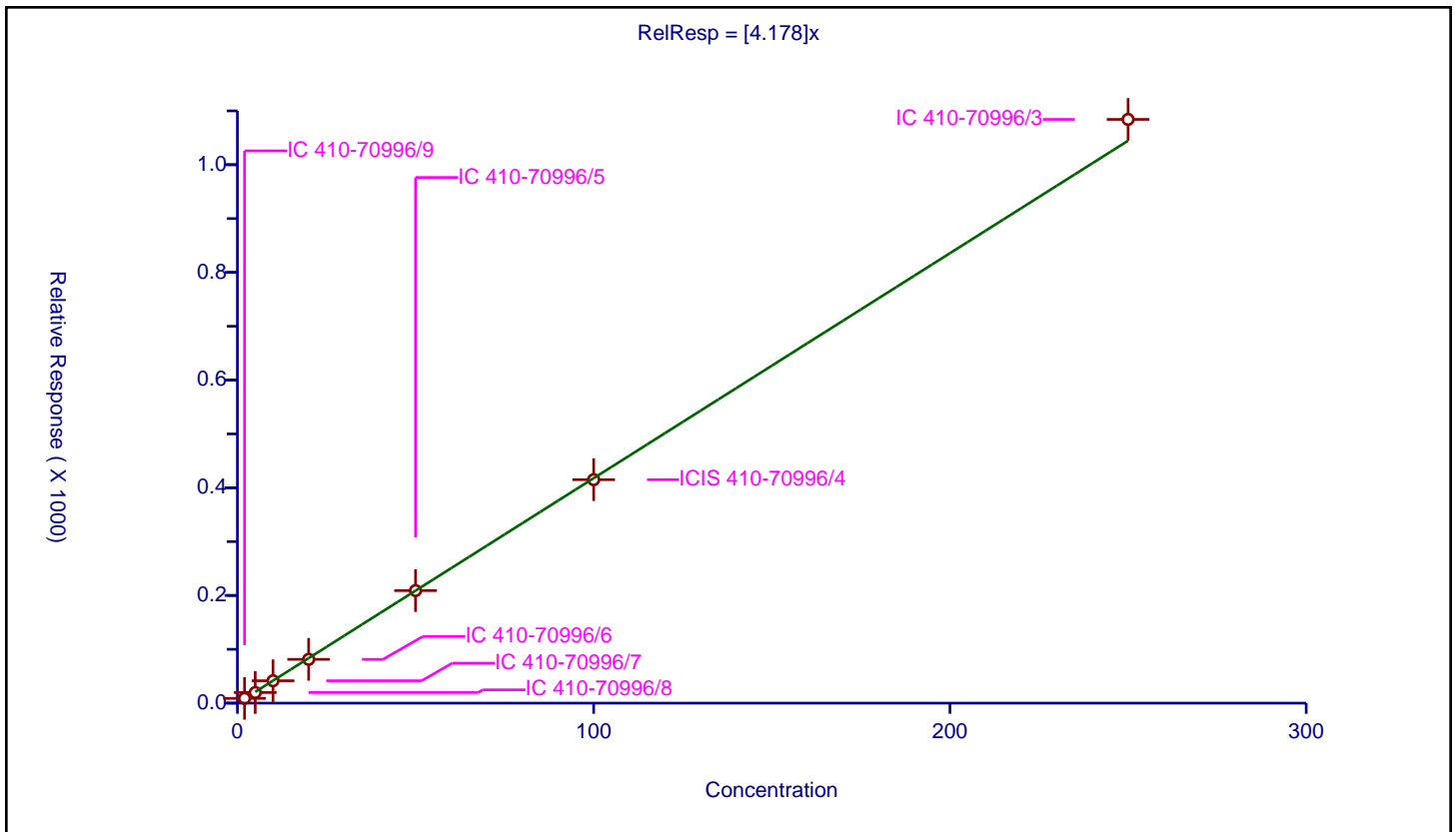
/ Methacrylonitrile

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	4.178

Error Coefficients	
Standard Error:	1730000
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 410-70996/9	2.0	8.818228	50.0	184731.0	4.409114	Y
2	IC 410-70996/8	5.0	19.72972	50.0	195834.0	3.945944	Y
3	IC 410-70996/7	10.0	41.583004	50.0	201206.0	4.1583	Y
4	IC 410-70996/6	20.0	81.341736	50.0	195329.0	4.067087	Y
5	IC 410-70996/5	50.0	209.013979	50.0	183343.0	4.18028	Y
6	ICIS 410-70996/4	100.0	415.025202	50.0	186094.0	4.150252	Y
7	IC 410-70996/3	250.0	1084.185139	50.0	177877.0	4.336741	Y



Calibration

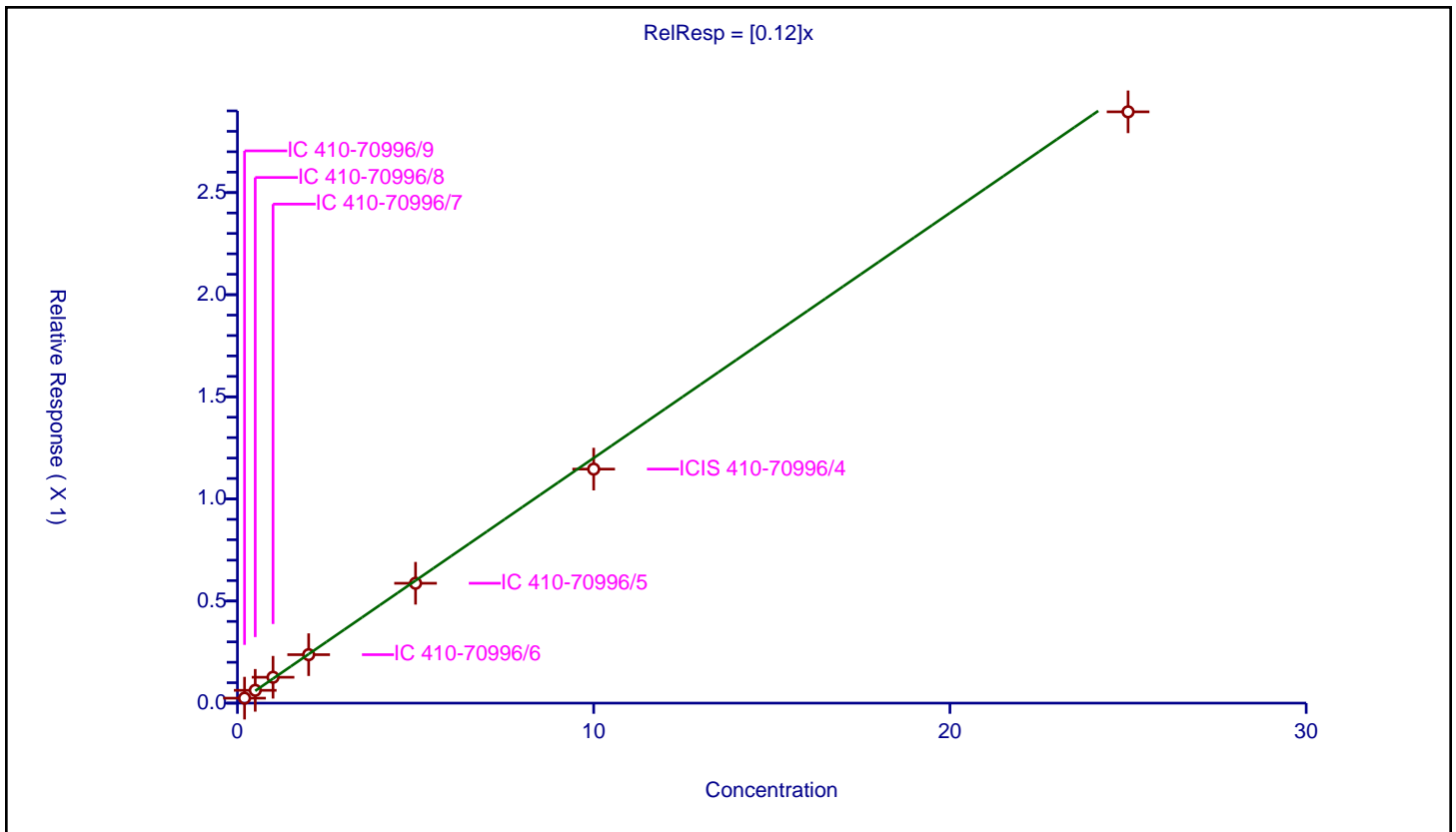
/ Chlorobromomethane

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.12

Error Coefficients	
Standard Error:	292000
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 410-70996/9	0.2	0.024338	10.0	2204755.0	0.121692	Y
2	IC 410-70996/8	0.5	0.062678	10.0	2189287.0	0.125356	Y
3	IC 410-70996/7	1.0	0.126666	10.0	2211412.0	0.126666	Y
4	IC 410-70996/6	2.0	0.23725	10.0	2210035.0	0.118625	Y
5	IC 410-70996/5	5.0	0.58694	10.0	2225560.0	0.117388	Y
6	ICIS 410-70996/4	10.0	1.145864	10.0	2246480.0	0.114586	Y
7	IC 410-70996/3	25.0	2.895371	10.0	2249974.0	0.115815	Y



Calibration

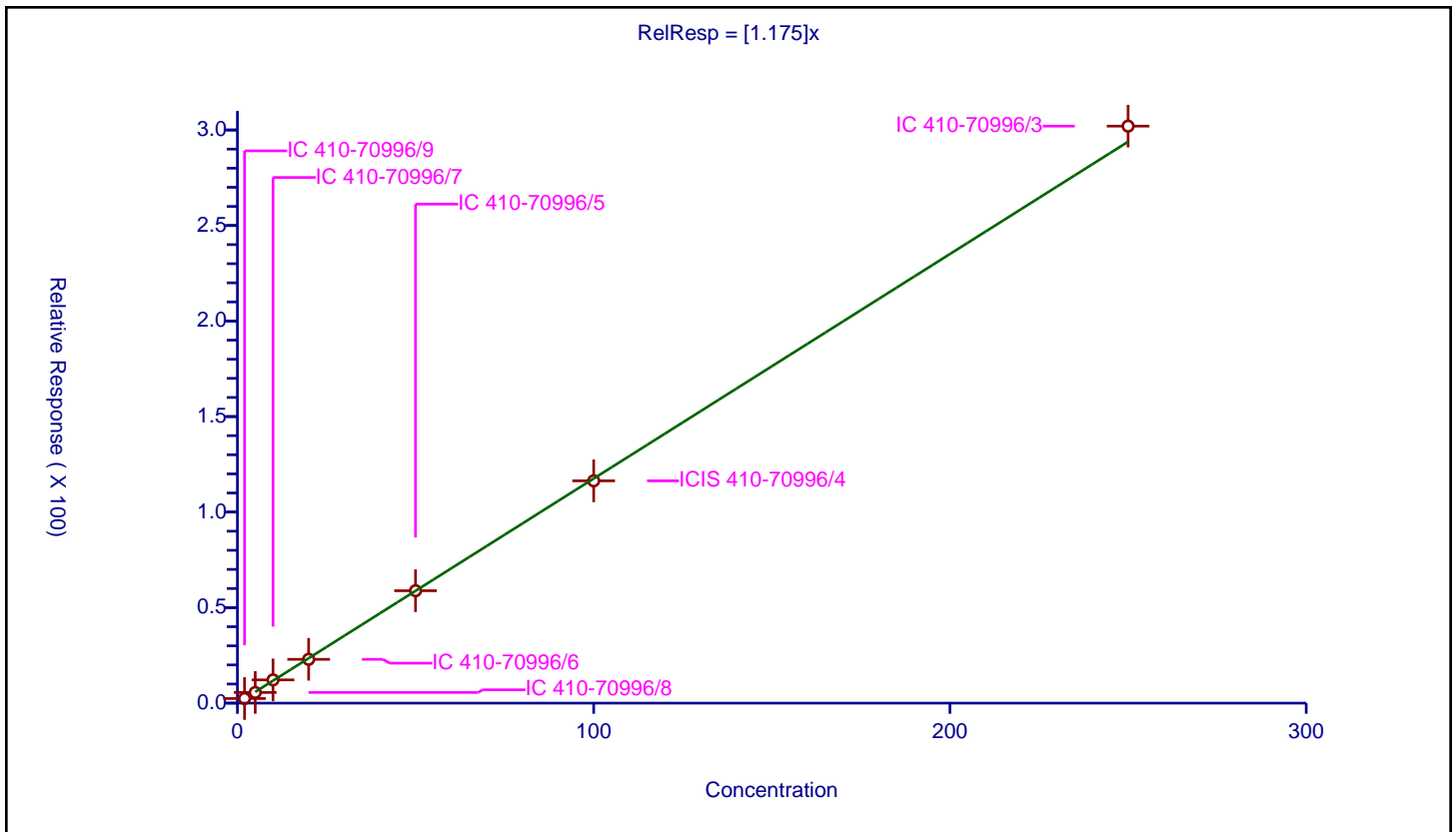
/ Tetrahydrofuran

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.175

Error Coefficients	
Standard Error:	483000
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 410-70996/9	2.0	2.401059	50.0	184731.0	1.200529	Y
2	IC 410-70996/8	5.0	5.579726	50.0	195834.0	1.115945	Y
3	IC 410-70996/7	10.0	12.162659	50.0	201206.0	1.216266	Y
4	IC 410-70996/6	20.0	22.928751	50.0	195329.0	1.146438	Y
5	IC 410-70996/5	50.0	58.843261	50.0	183343.0	1.176865	Y
6	ICIS 410-70996/4	100.0	116.36028	50.0	186094.0	1.163603	Y
7	IC 410-70996/3	250.0	302.020778	50.0	177877.0	1.208083	Y



Calibration

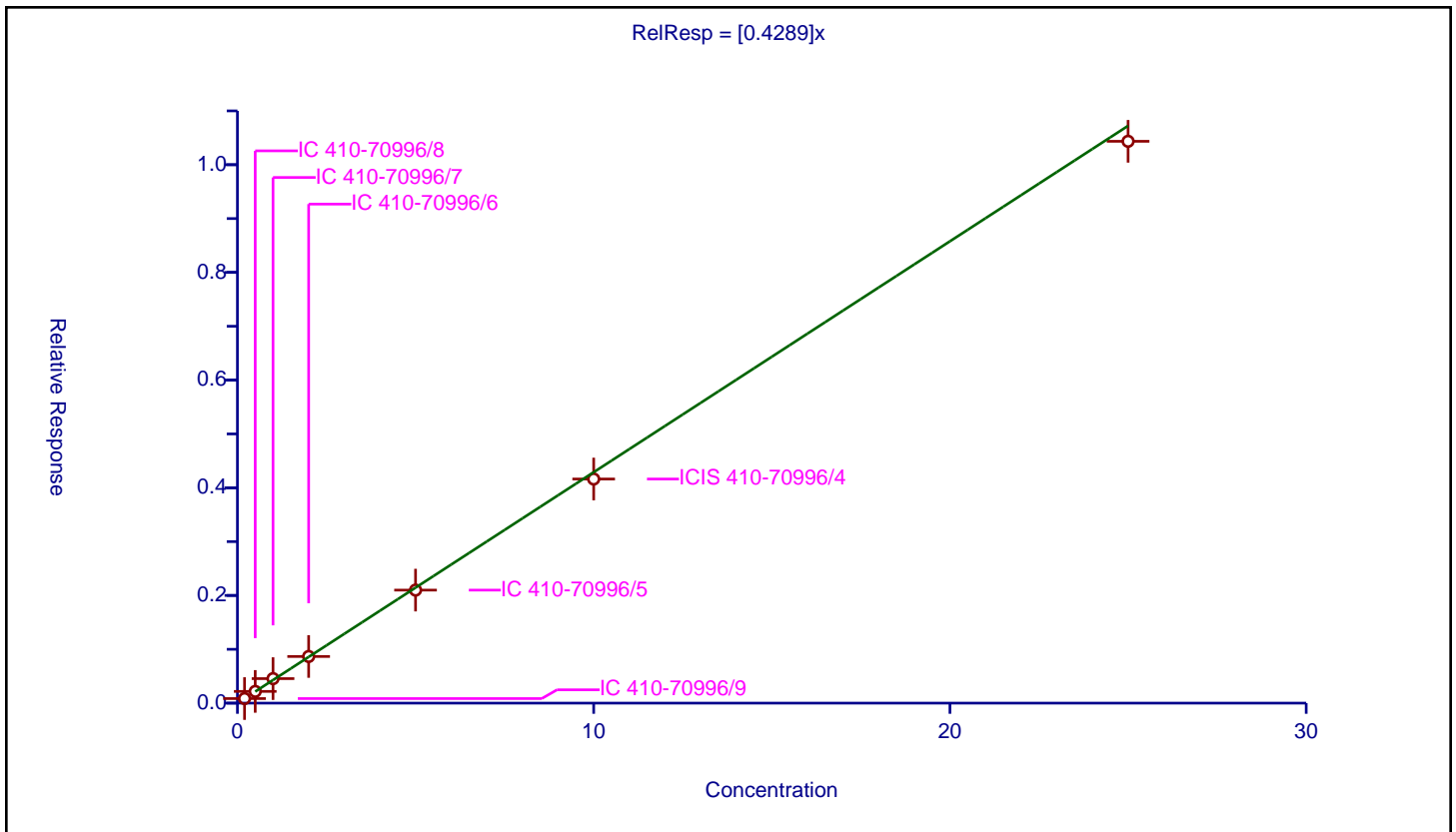
/ Chloroform

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4289

Error Coefficients	
Standard Error:	1050000
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 410-70996/9	0.2	0.084817	10.0	2204755.0	0.424083	Y
2	IC 410-70996/8	0.5	0.218025	10.0	2189287.0	0.436051	Y
3	IC 410-70996/7	1.0	0.455315	10.0	2211412.0	0.455315	Y
4	IC 410-70996/6	2.0	0.86662	10.0	2210035.0	0.43331	Y
5	IC 410-70996/5	5.0	2.099206	10.0	2225560.0	0.419841	Y
6	ICIS 410-70996/4	10.0	4.162441	10.0	2246480.0	0.416244	Y
7	IC 410-70996/3	25.0	10.435294	10.0	2249974.0	0.417412	Y



Calibration

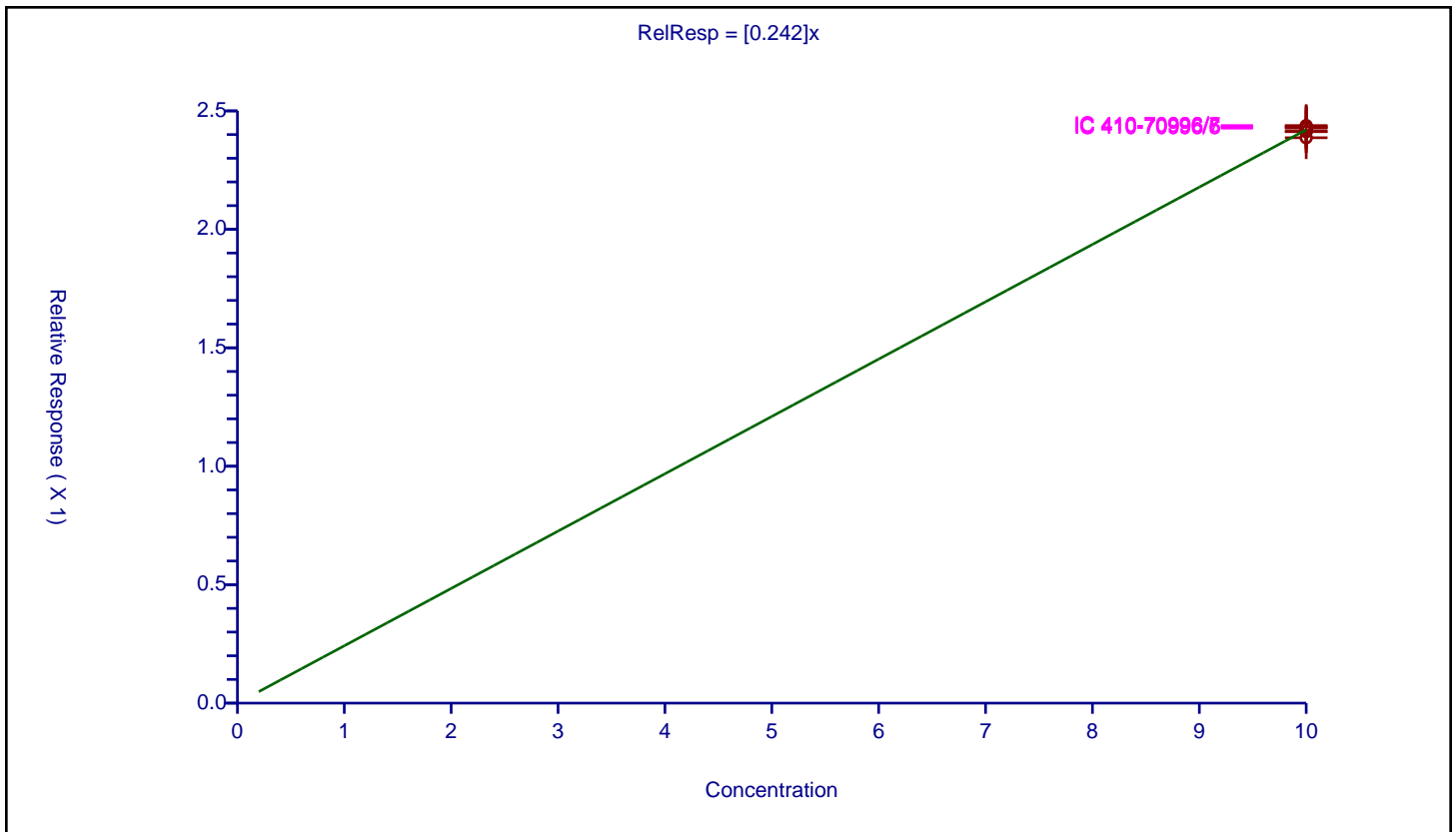
/ Dibromofluoromethane (Surr)

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.242

Error Coefficients	
Standard Error:	580000
Relative Standard Error:	0.7
Correlation Coefficient:	NA
Coefficient of Determination (Adjusted):	0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-70996/3	10.0	2.413806	10.0	2249974.0	0.241381	Y
2	ICIS 410-70996/4	10.0	2.412138	10.0	2246480.0	0.241214	Y
3	IC 410-70996/5	10.0	2.427874	10.0	2225560.0	0.242787	Y
4	IC 410-70996/6	10.0	2.428686	10.0	2210035.0	0.242869	Y
5	IC 410-70996/7	10.0	2.438035	10.0	2211412.0	0.243804	Y
6	IC 410-70996/8	10.0	2.434409	10.0	2189287.0	0.243441	Y
7	IC 410-70996/9	10.0	2.386642	10.0	2204755.0	0.238664	Y



Calibration

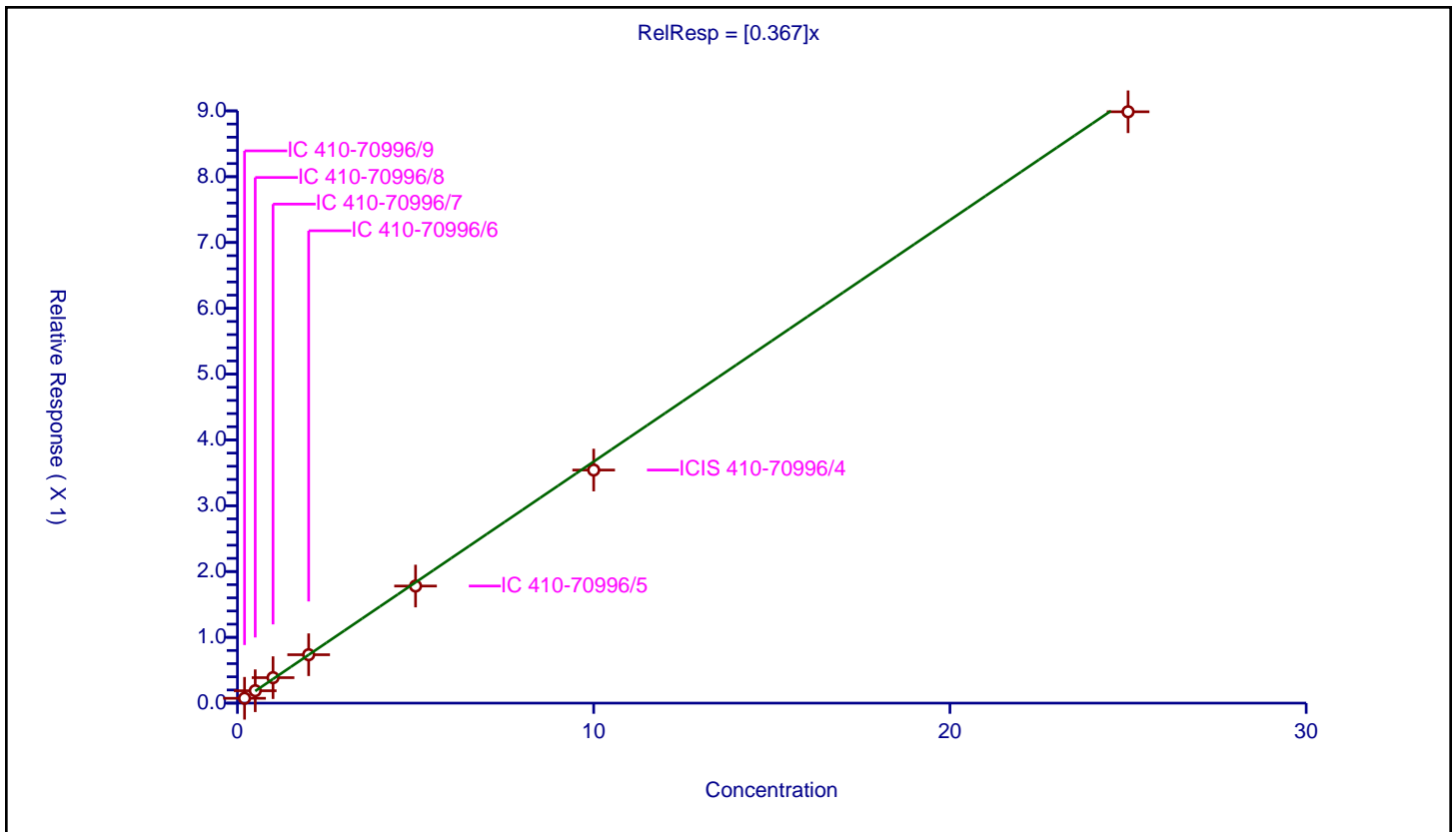
/ 1,1,1-Trichloroethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.367

Error Coefficients	
Standard Error:	905000
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 410-70996/9	0.2	0.073586	10.0	2204755.0	0.367932	Y
2	IC 410-70996/8	0.5	0.188449	10.0	2189287.0	0.376899	Y
3	IC 410-70996/7	1.0	0.387011	10.0	2211412.0	0.387011	Y
4	IC 410-70996/6	2.0	0.735762	10.0	2210035.0	0.367881	Y
5	IC 410-70996/5	5.0	1.779584	10.0	2225560.0	0.355917	Y
6	ICIS 410-70996/4	10.0	3.541923	10.0	2246480.0	0.354192	Y
7	IC 410-70996/3	25.0	8.986846	10.0	2249974.0	0.359474	Y



Calibration

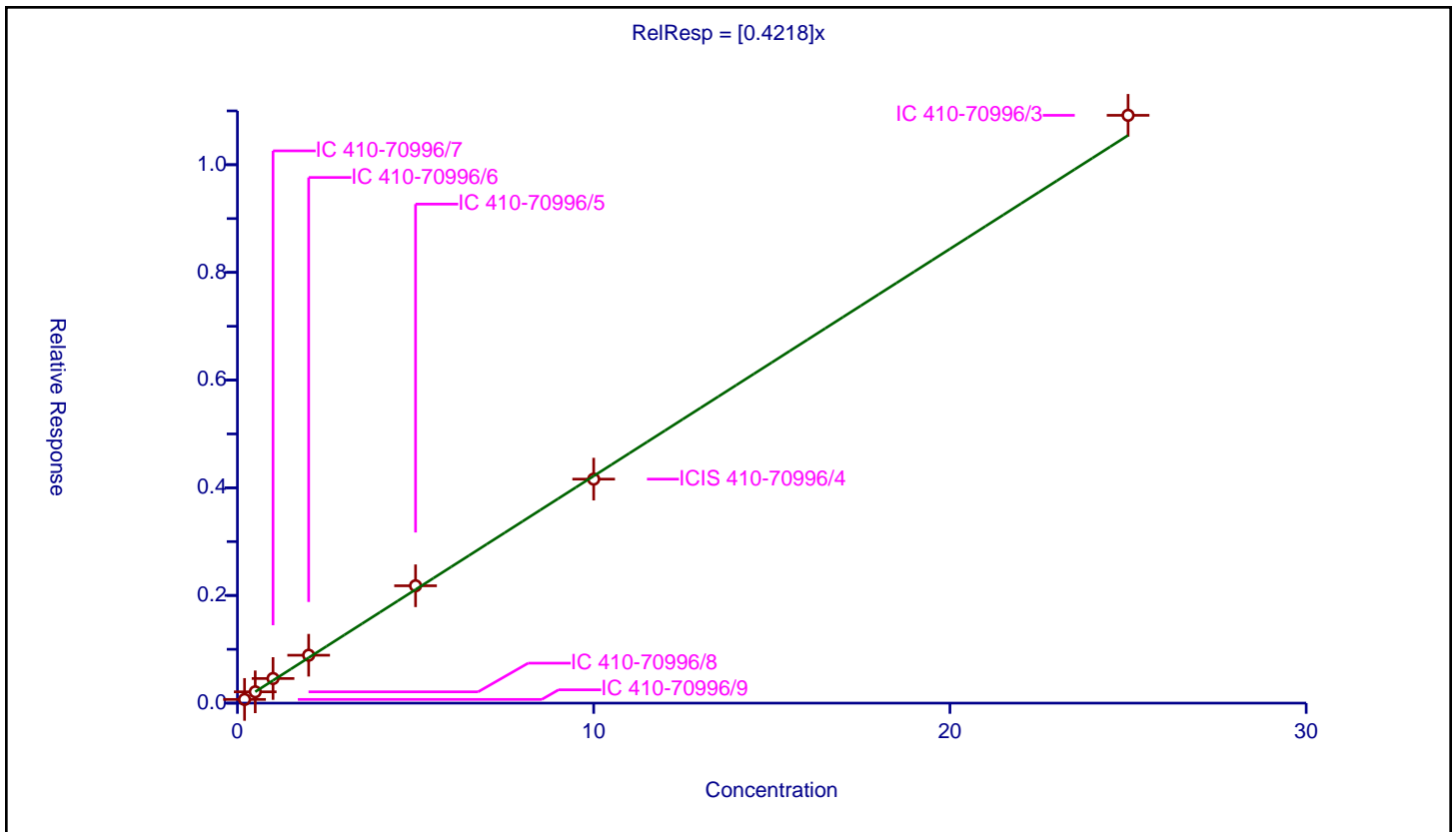
/ Cyclohexane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4218

Error Coefficients	
Standard Error:	1100000
Relative Standard Error:	9.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-70996/9	0.2	0.068398	10.0	2204755.0	0.341988	Y
2	IC 410-70996/8	0.5	0.209968	10.0	2189287.0	0.419936	Y
3	IC 410-70996/7	1.0	0.457278	10.0	2211412.0	0.457278	Y
4	IC 410-70996/6	2.0	0.889705	10.0	2210035.0	0.444853	Y
5	IC 410-70996/5	5.0	2.179874	10.0	2225560.0	0.435975	Y
6	ICIS 410-70996/4	10.0	4.160714	10.0	2246480.0	0.416071	Y
7	IC 410-70996/3	25.0	10.917873	10.0	2249974.0	0.436715	Y



Calibration

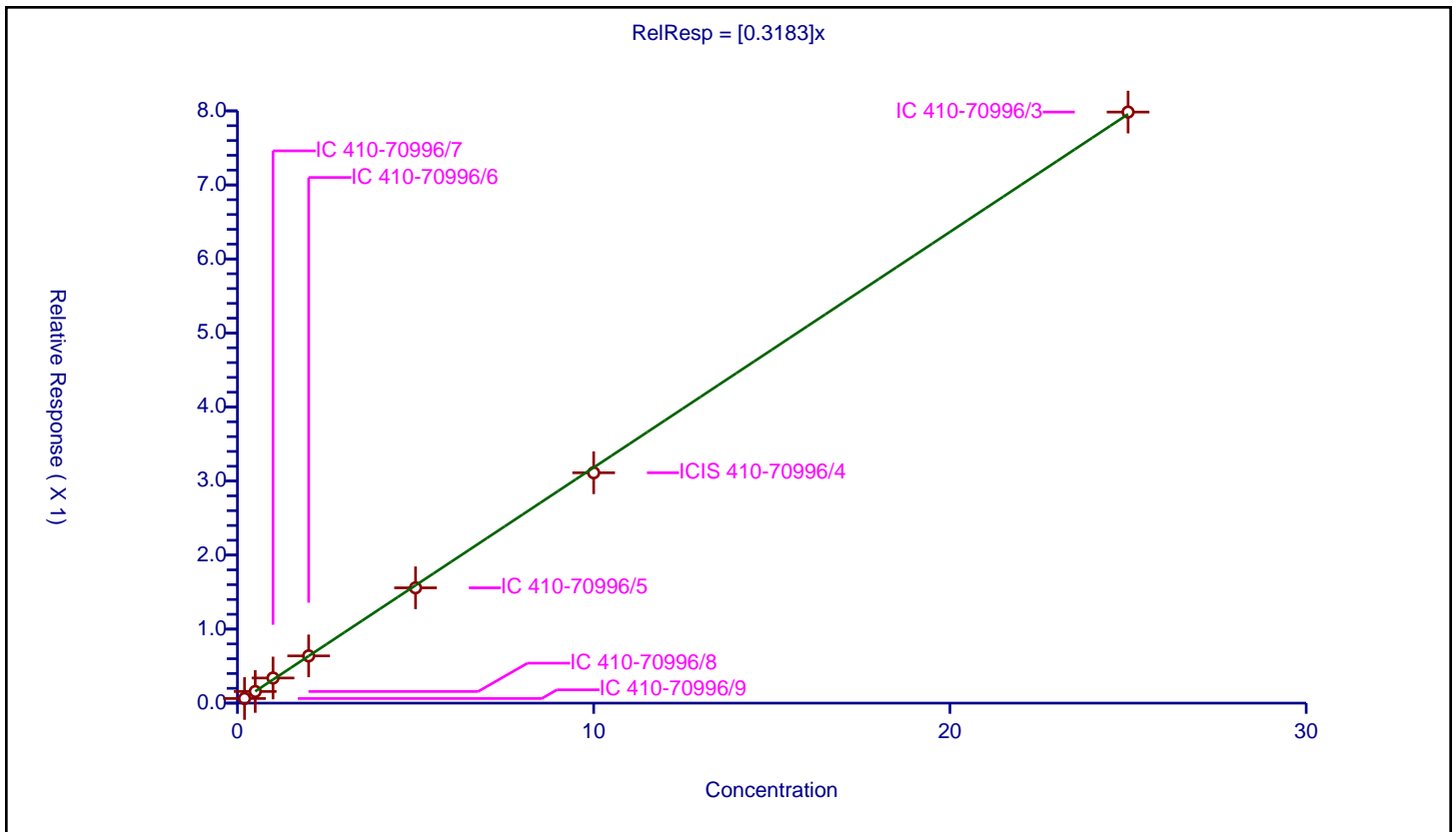
/ Carbon tetrachloride

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3183

Error Coefficients	
Standard Error:	802000
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 410-70996/9	0.2	0.062465	10.0	2204755.0	0.312325	Y
2	IC 410-70996/8	0.5	0.157385	10.0	2189287.0	0.314769	Y
3	IC 410-70996/7	1.0	0.339588	10.0	2211412.0	0.339588	Y
4	IC 410-70996/6	2.0	0.638035	10.0	2210035.0	0.319018	Y
5	IC 410-70996/5	5.0	1.557612	10.0	2225560.0	0.311522	Y
6	ICIS 410-70996/4	10.0	3.111735	10.0	2246480.0	0.311173	Y
7	IC 410-70996/3	25.0	7.98407	10.0	2249974.0	0.319363	Y



Calibration

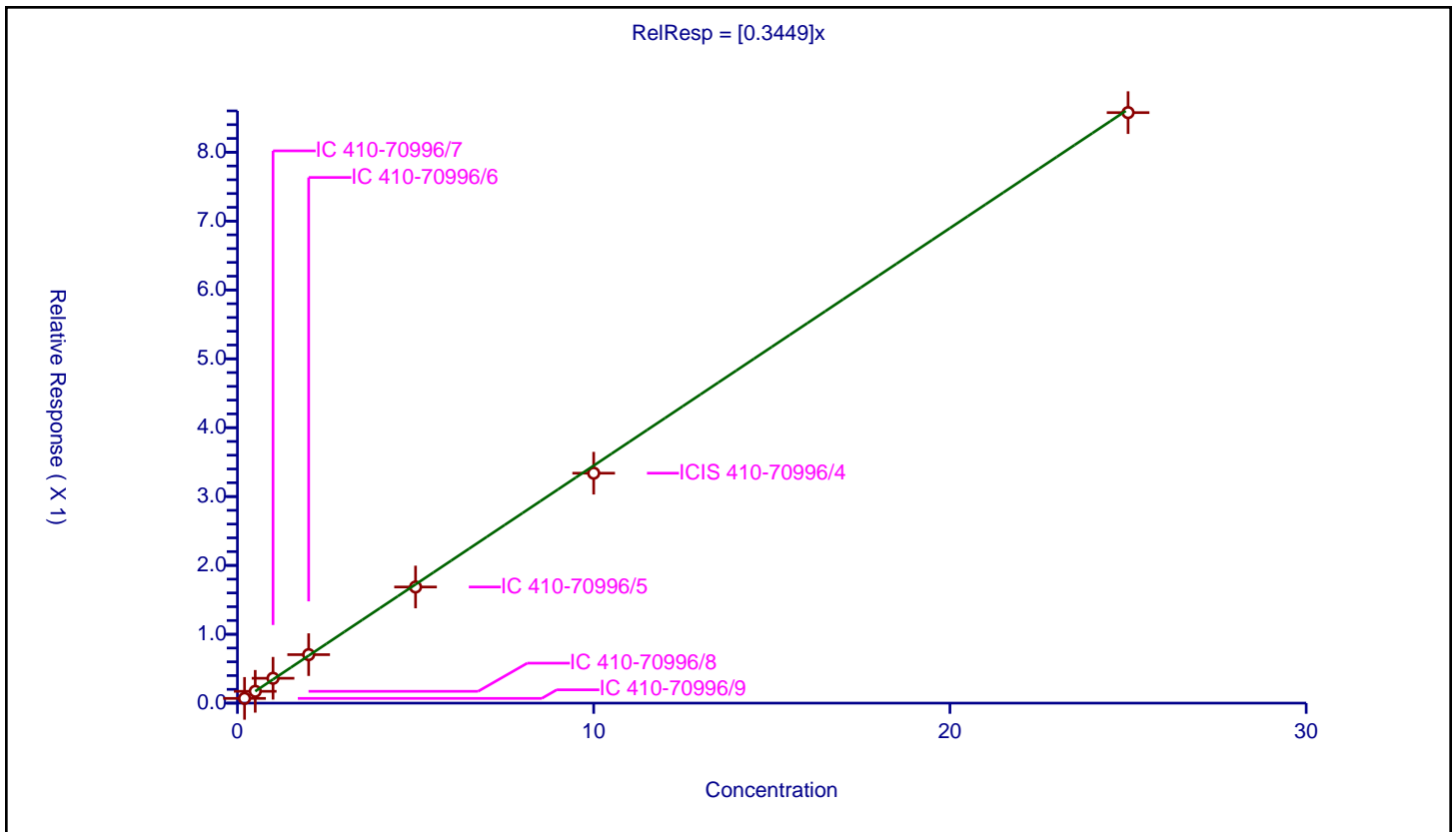
/ 1,1-Dichloropropene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3449

Error Coefficients	
Standard Error:	862000
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 410-70996/9	0.2	0.068819	10.0	2204755.0	0.344097	Y
2	IC 410-70996/8	0.5	0.171444	10.0	2189287.0	0.342888	Y
3	IC 410-70996/7	1.0	0.360996	10.0	2211412.0	0.360996	Y
4	IC 410-70996/6	2.0	0.704043	10.0	2210035.0	0.352022	Y
5	IC 410-70996/5	5.0	1.686394	10.0	2225560.0	0.337279	Y
6	ICIS 410-70996/4	10.0	3.339086	10.0	2246480.0	0.333909	Y
7	IC 410-70996/3	25.0	8.574966	10.0	2249974.0	0.342999	Y



Calibration

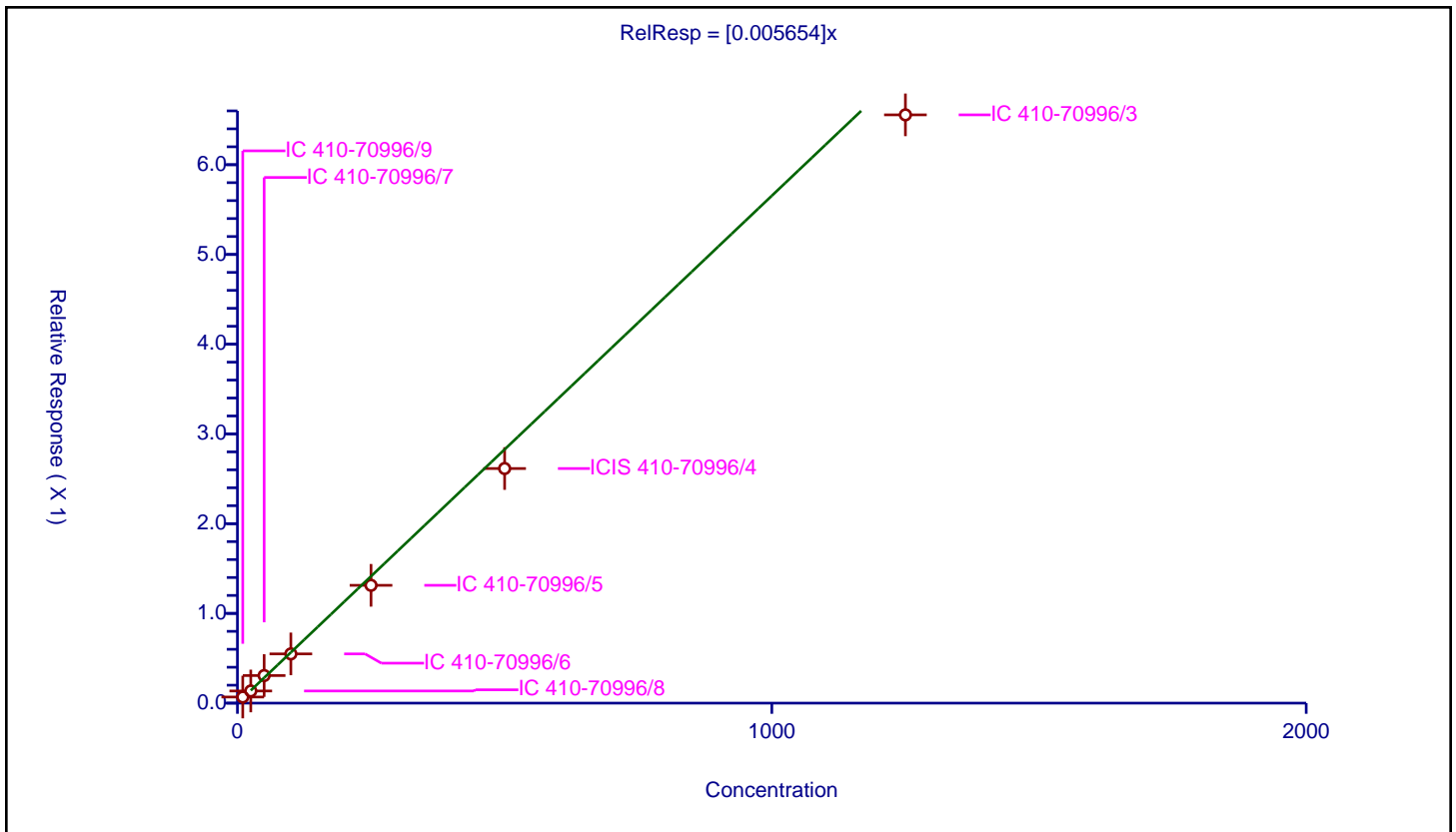
/ Isobutyl alcohol

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.005654

Error Coefficients	
Standard Error:	662000
Relative Standard Error:	10.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.983

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-70996/9	10.0	0.068026	10.0	2204755.0	0.006803	Y
2	IC 410-70996/8	25.0	0.135405	10.0	2189287.0	0.005416	Y
3	IC 410-70996/7	50.0	0.307423	10.0	2211412.0	0.006148	Y
4	IC 410-70996/6	100.0	0.548711	10.0	2210035.0	0.005487	Y
5	IC 410-70996/5	250.0	1.313072	10.0	2225560.0	0.005252	Y
6	ICIS 410-70996/4	500.0	2.614308	10.0	2246480.0	0.005229	Y
7	IC 410-70996/3	1250.0	6.55588	10.0	2249974.0	0.005245	Y



Calibration

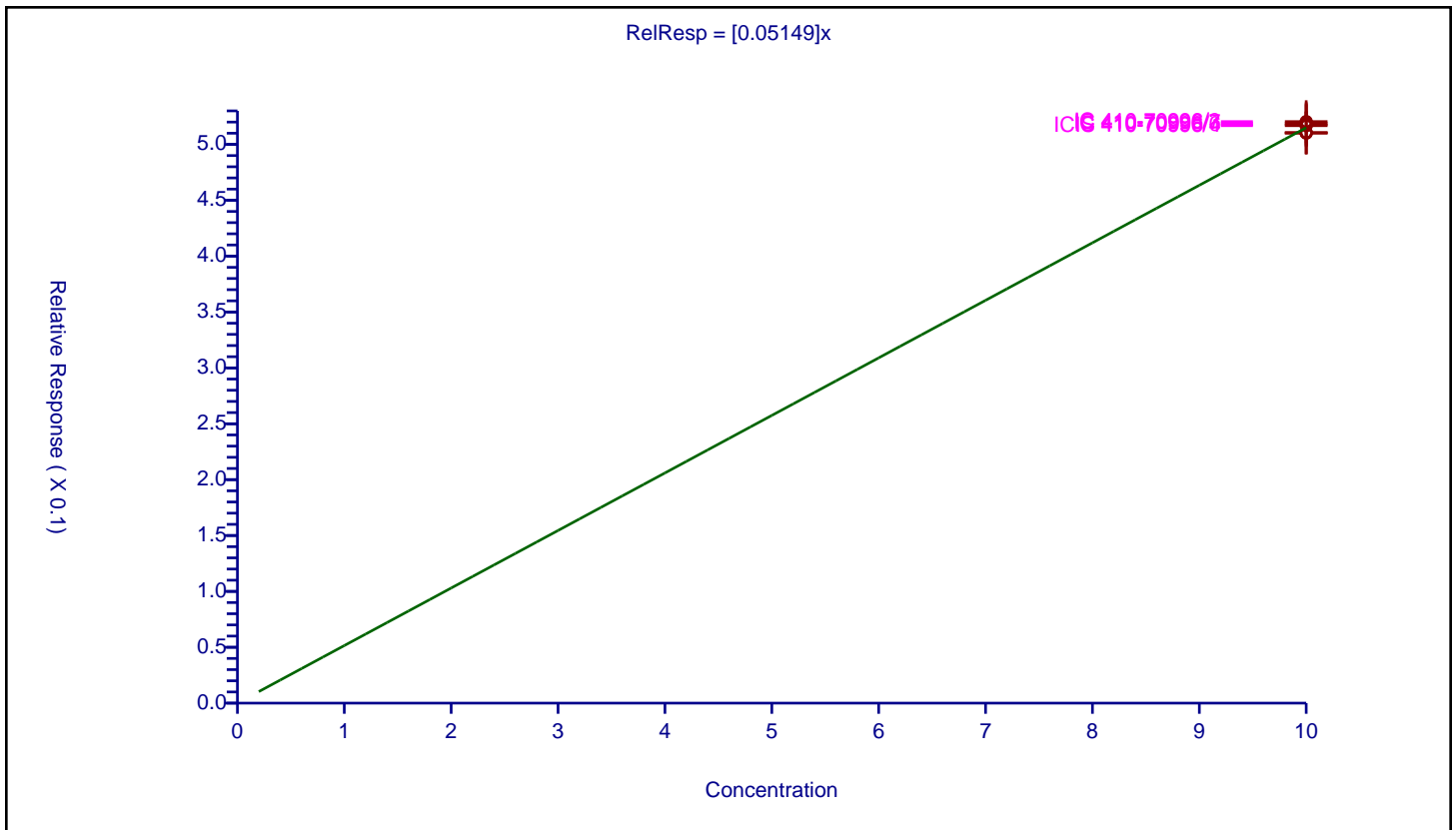
/ 1,2-Dichloroethane-d4 (Surr)

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.05149

Error Coefficients	
Standard Error:	123000
Relative Standard Error:	0.9
Correlation Coefficient:	NA
Coefficient of Determination (Adjusted):	0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-70996/3	10.0	0.520415	10.0	2249974.0	0.052041	Y
2	ICIS 410-70996/4	10.0	0.516737	10.0	2246480.0	0.051674	Y
3	IC 410-70996/5	10.0	0.51055	10.0	2225560.0	0.051055	Y
4	IC 410-70996/6	10.0	0.517707	10.0	2210035.0	0.051771	Y
5	IC 410-70996/7	10.0	0.518773	10.0	2211412.0	0.051877	Y
6	IC 410-70996/8	10.0	0.510143	10.0	2189287.0	0.051014	Y
7	IC 410-70996/9	10.0	0.510311	10.0	2204755.0	0.051031	Y



Calibration

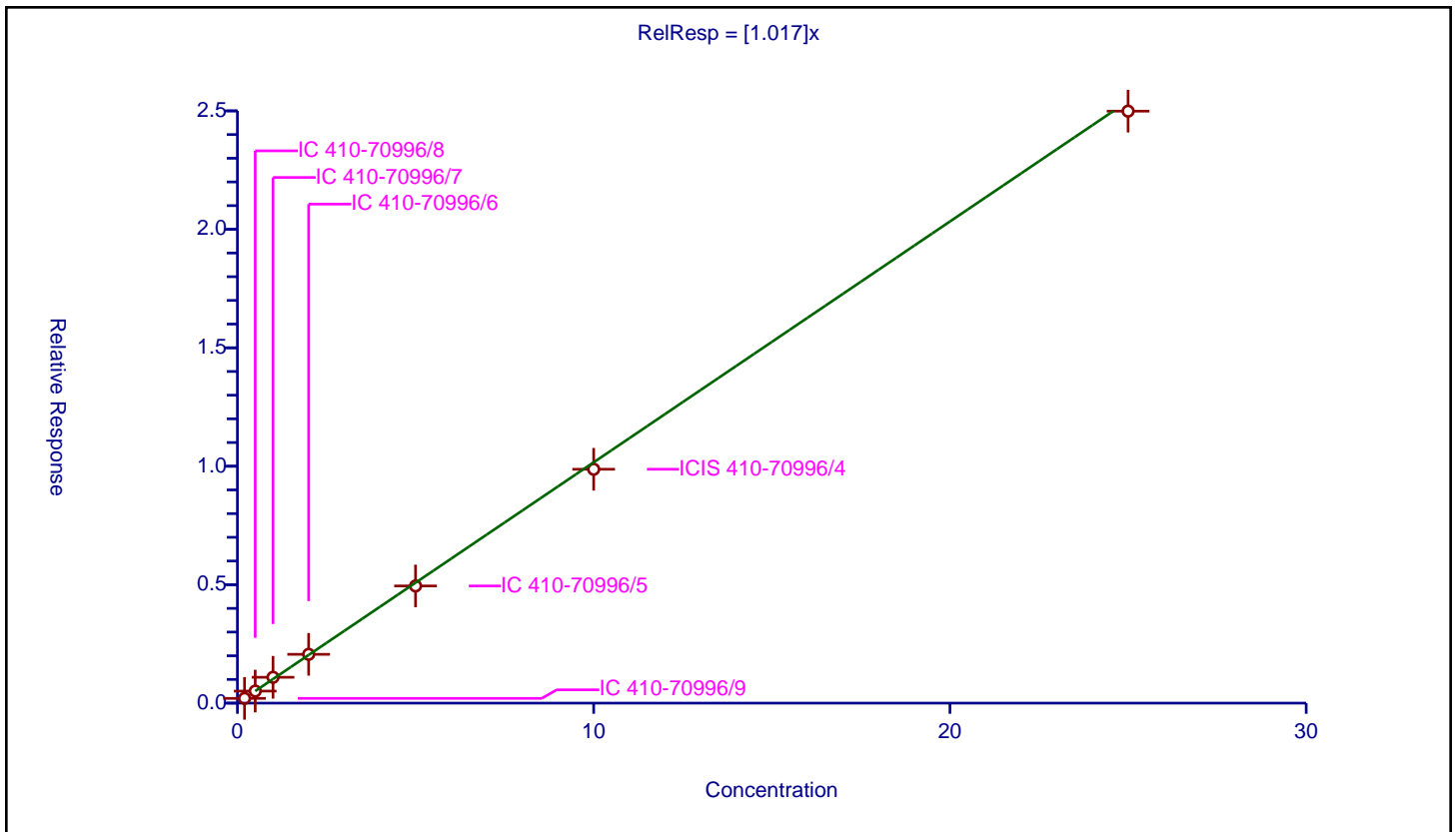
/ Benzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.017

Error Coefficients	
Standard Error:	2520000
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 410-70996/9	0.2	0.20034	10.0	2204755.0	1.001699	Y
2	IC 410-70996/8	0.5	0.508599	10.0	2189287.0	1.017199	Y
3	IC 410-70996/7	1.0	1.090543	10.0	2211412.0	1.090543	Y
4	IC 410-70996/6	2.0	2.060126	10.0	2210035.0	1.030063	Y
5	IC 410-70996/5	5.0	4.946481	10.0	2225560.0	0.989296	Y
6	ICIS 410-70996/4	10.0	9.87338	10.0	2246480.0	0.987338	Y
7	IC 410-70996/3	25.0	24.988924	10.0	2249974.0	0.999557	Y



Calibration

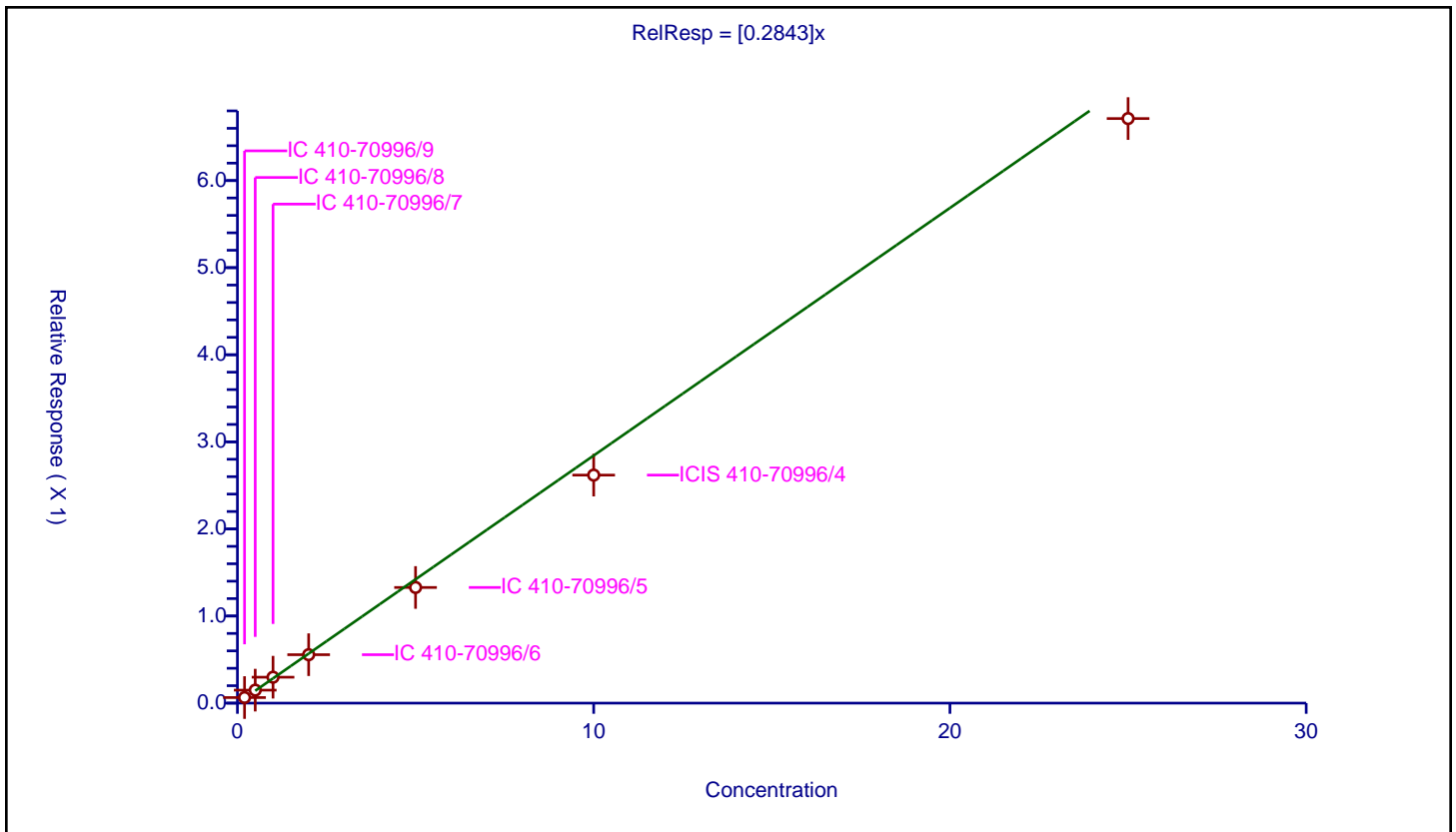
/ 1,2-Dichloroethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2843

Error Coefficients	
Standard Error:	675000
Relative Standard Error:	7.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-70996/9	0.2	0.06408	10.0	2204755.0	0.320398	Y
2	IC 410-70996/8	0.5	0.148989	10.0	2189287.0	0.297978	Y
3	IC 410-70996/7	1.0	0.297633	10.0	2211412.0	0.297633	Y
4	IC 410-70996/6	2.0	0.556032	10.0	2210035.0	0.278016	Y
5	IC 410-70996/5	5.0	1.327976	10.0	2225560.0	0.265595	Y
6	ICIS 410-70996/4	10.0	2.618172	10.0	2246480.0	0.261817	Y
7	IC 410-70996/3	25.0	6.712069	10.0	2249974.0	0.268483	Y



Calibration

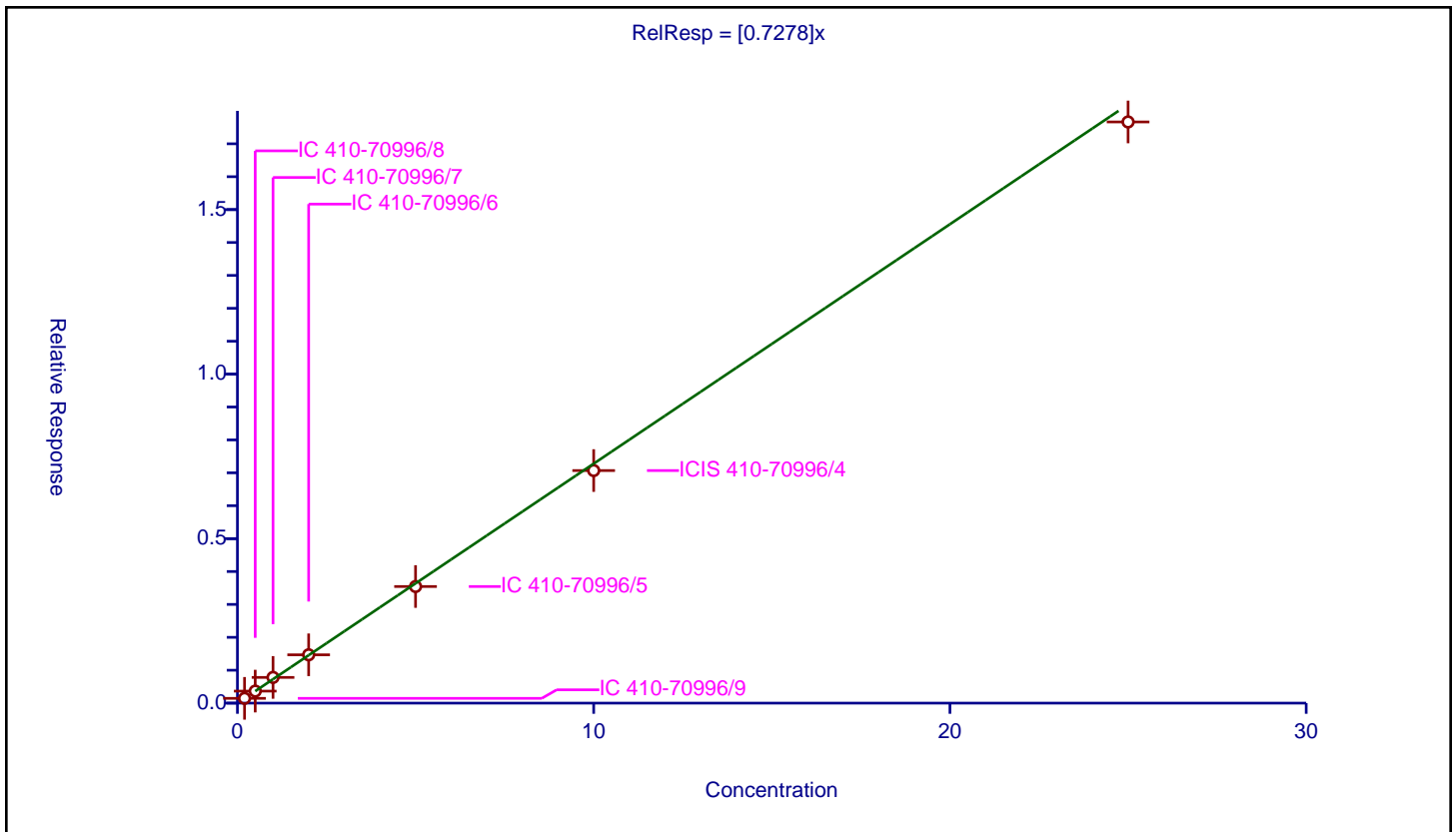
/ Tert-amyl methyl ether

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.7278

Error Coefficients	
Standard Error:	1780000
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 410-70996/9	0.2	0.145032	10.0	2204755.0	0.72516	Y
2	IC 410-70996/8	0.5	0.365343	10.0	2189287.0	0.730685	Y
3	IC 410-70996/7	1.0	0.781795	10.0	2211412.0	0.781795	Y
4	IC 410-70996/6	2.0	1.46909	10.0	2210035.0	0.734545	Y
5	IC 410-70996/5	5.0	3.544214	10.0	2225560.0	0.708843	Y
6	ICIS 410-70996/4	10.0	7.068917	10.0	2246480.0	0.706892	Y
7	IC 410-70996/3	25.0	17.663964	10.0	2249974.0	0.706559	Y



Calibration

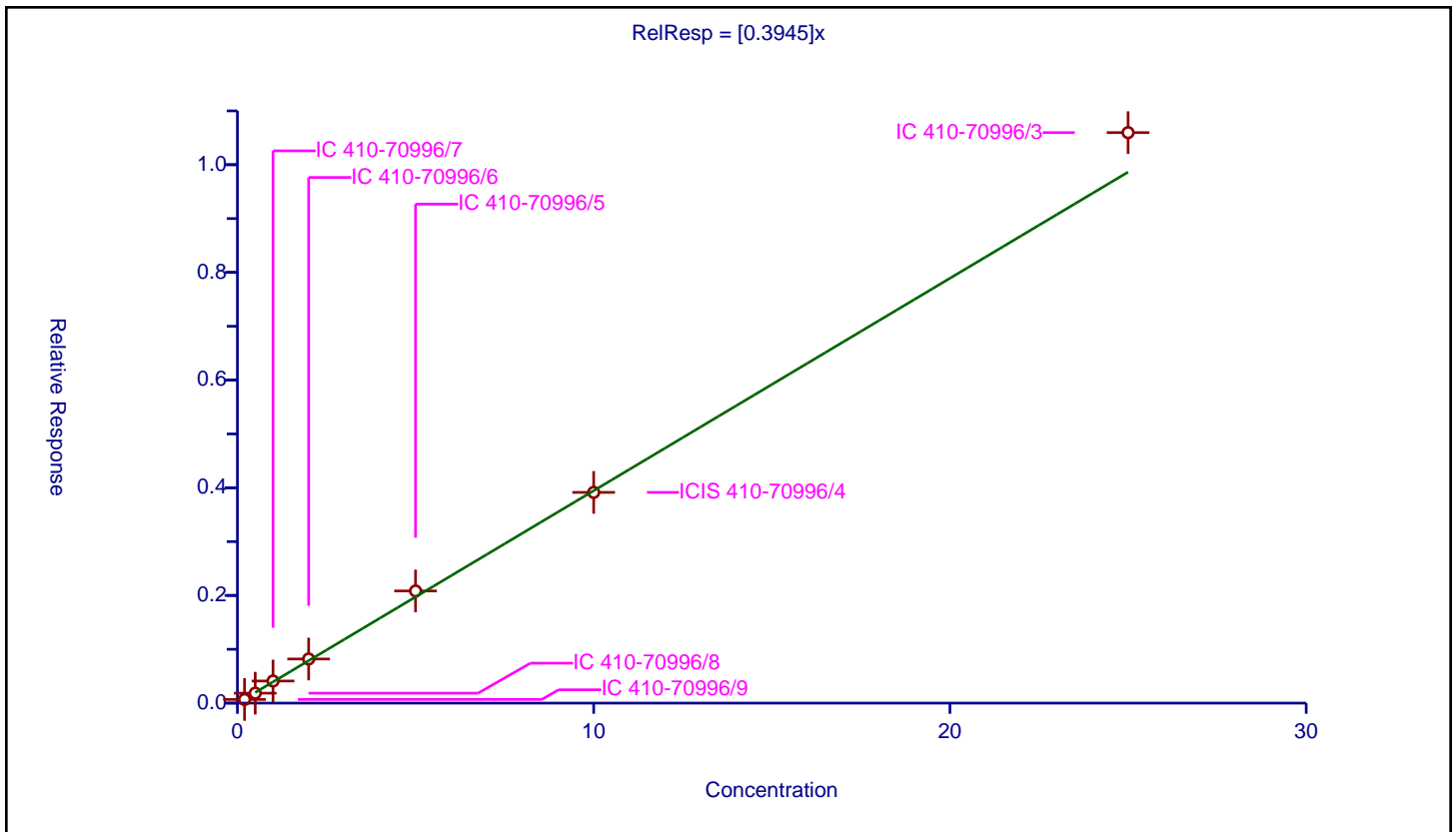
/ n-Heptane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3945

Error Coefficients	
Standard Error:	1060000
Relative Standard Error:	7.7
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-70996/9	0.2	0.067971	10.0	2204755.0	0.339856	Y
2	IC 410-70996/8	0.5	0.184763	10.0	2189287.0	0.369527	Y
3	IC 410-70996/7	1.0	0.41076	10.0	2211412.0	0.41076	Y
4	IC 410-70996/6	2.0	0.819322	10.0	2210035.0	0.409661	Y
5	IC 410-70996/5	5.0	2.083574	10.0	2225560.0	0.416715	Y
6	ICIS 410-70996/4	10.0	3.91403	10.0	2246480.0	0.391403	Y
7	IC 410-70996/3	25.0	10.59634	10.0	2249974.0	0.423854	Y



Calibration

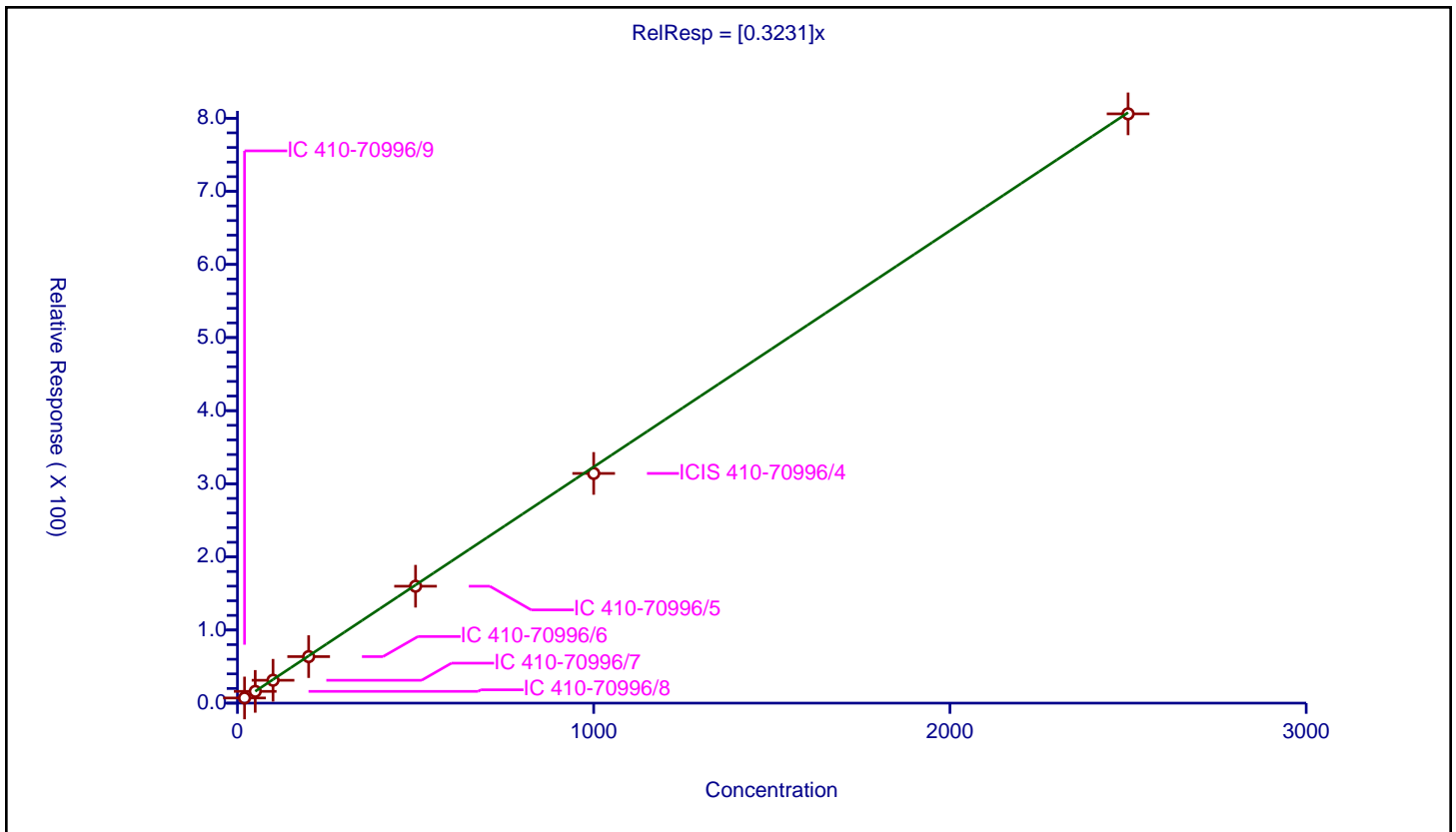
/ n-Butanol

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3231

Error Coefficients	
Standard Error:	1290000
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 410-70996/9	20.0	7.052687	50.0	184731.0	0.352634	Y
2	IC 410-70996/8	50.0	16.076115	50.0	195834.0	0.321522	Y
3	IC 410-70996/7	100.0	31.286095	50.0	201206.0	0.312861	Y
4	IC 410-70996/6	200.0	63.630081	50.0	195329.0	0.31815	Y
5	IC 410-70996/5	500.0	159.910659	50.0	183343.0	0.319821	Y
6	ICIS 410-70996/4	1000.0	314.167303	50.0	186094.0	0.314167	Y
7	IC 410-70996/3	2500.0	805.966482	50.0	177877.0	0.322387	Y



Calibration

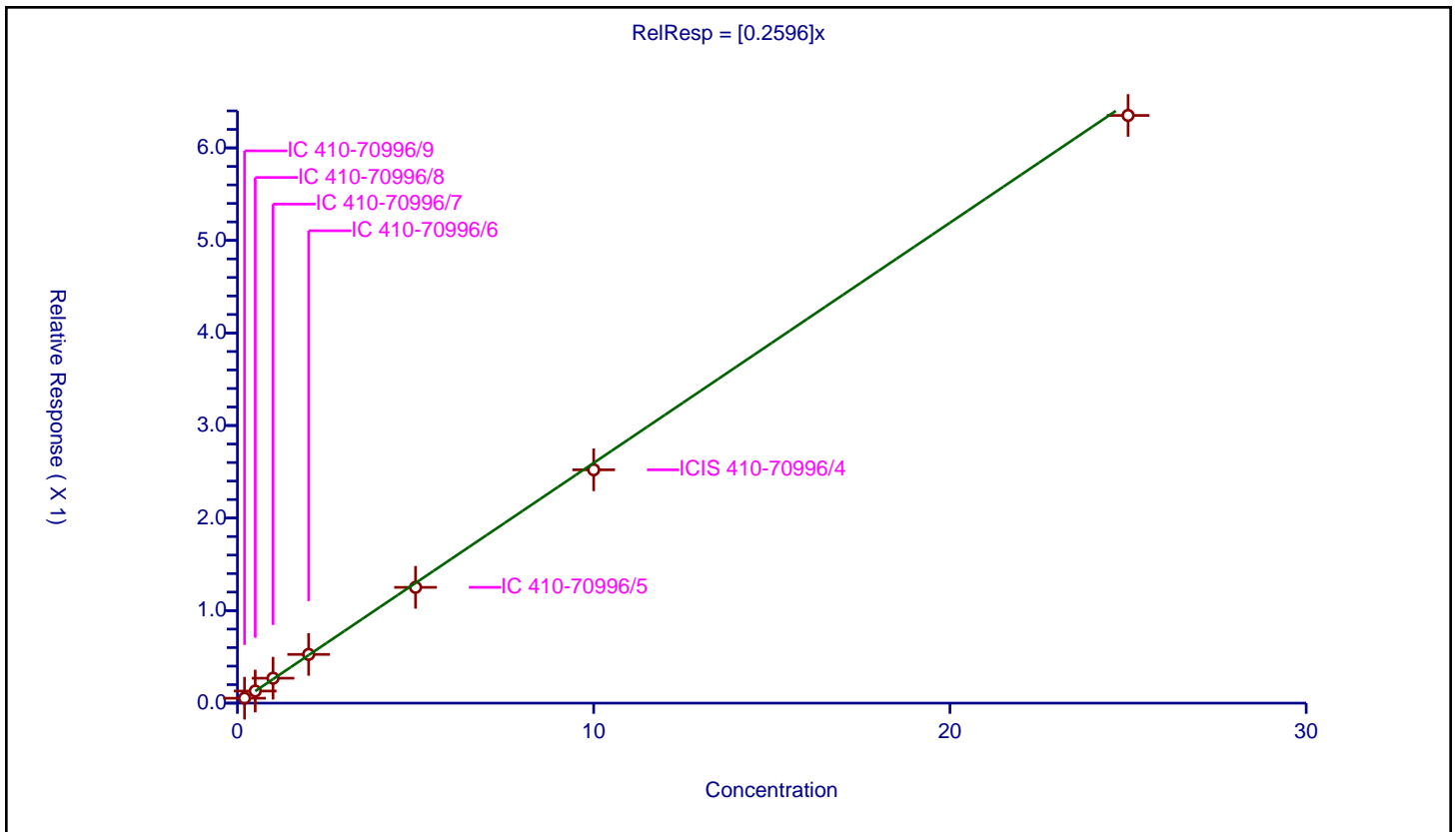
/ Trichloroethene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2596

Error Coefficients	
Standard Error:	640000
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 410-70996/9	0.2	0.053171	10.0	2204755.0	0.265857	Y
2	IC 410-70996/8	0.5	0.130928	10.0	2189287.0	0.261857	Y
3	IC 410-70996/7	1.0	0.269502	10.0	2211412.0	0.269502	Y
4	IC 410-70996/6	2.0	0.526612	10.0	2210035.0	0.263306	Y
5	IC 410-70996/5	5.0	1.251276	10.0	2225560.0	0.250255	Y
6	ICIS 410-70996/4	10.0	2.521393	10.0	2246480.0	0.252139	Y
7	IC 410-70996/3	25.0	6.350891	10.0	2249974.0	0.254036	Y



Calibration

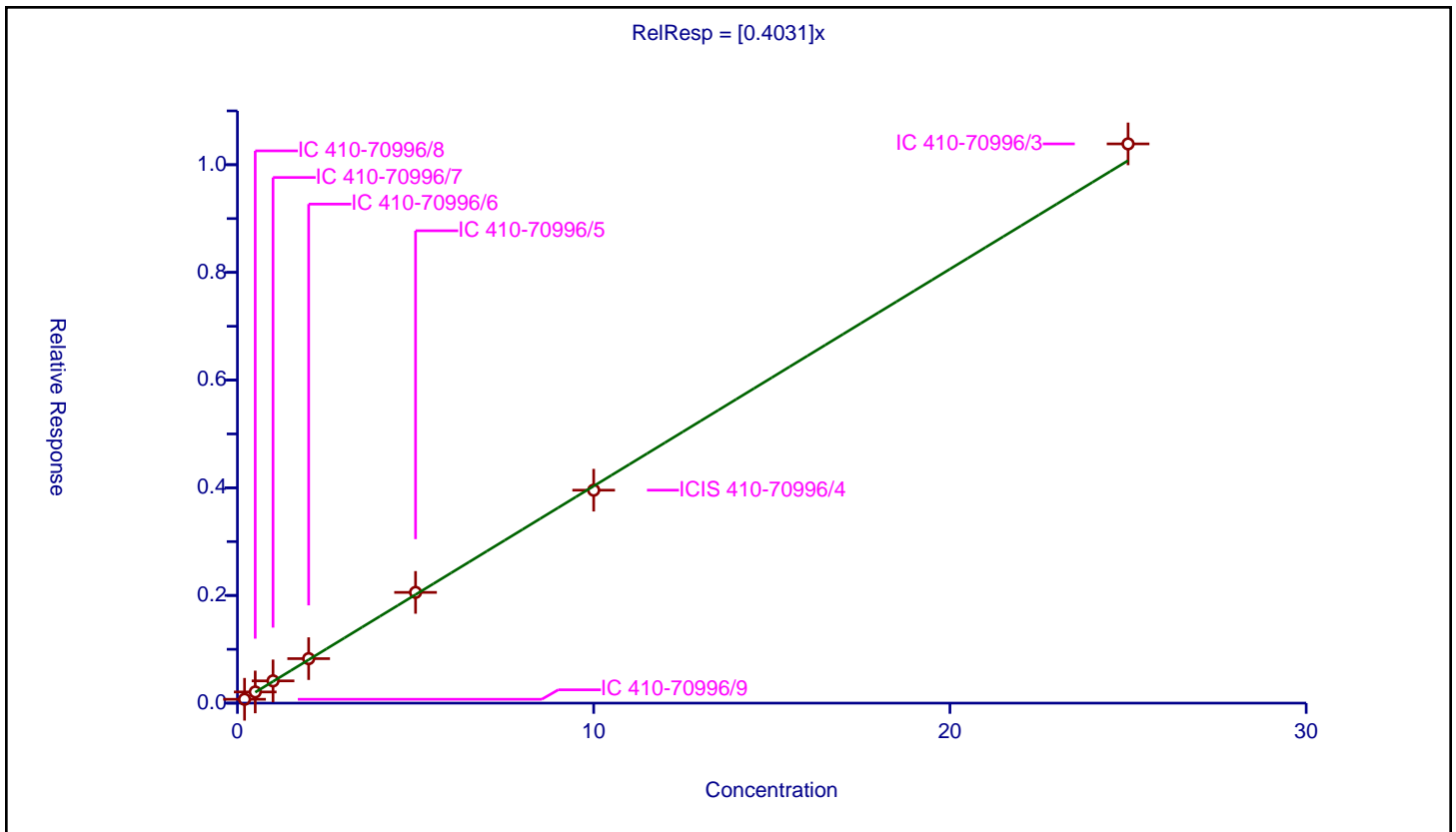
/ Methylcyclohexane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4031

Error Coefficients	
Standard Error:	1040000
Relative Standard Error:	5.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-70996/9	0.2	0.071523	10.0	2204755.0	0.357613	Y
2	IC 410-70996/8	0.5	0.207711	10.0	2189287.0	0.415423	Y
3	IC 410-70996/7	1.0	0.413225	10.0	2211412.0	0.413225	Y
4	IC 410-70996/6	2.0	0.82624	10.0	2210035.0	0.41312	Y
5	IC 410-70996/5	5.0	2.056512	10.0	2225560.0	0.411302	Y
6	ICIS 410-70996/4	10.0	3.955152	10.0	2246480.0	0.395515	Y
7	IC 410-70996/3	25.0	10.387271	10.0	2249974.0	0.415491	Y



Calibration

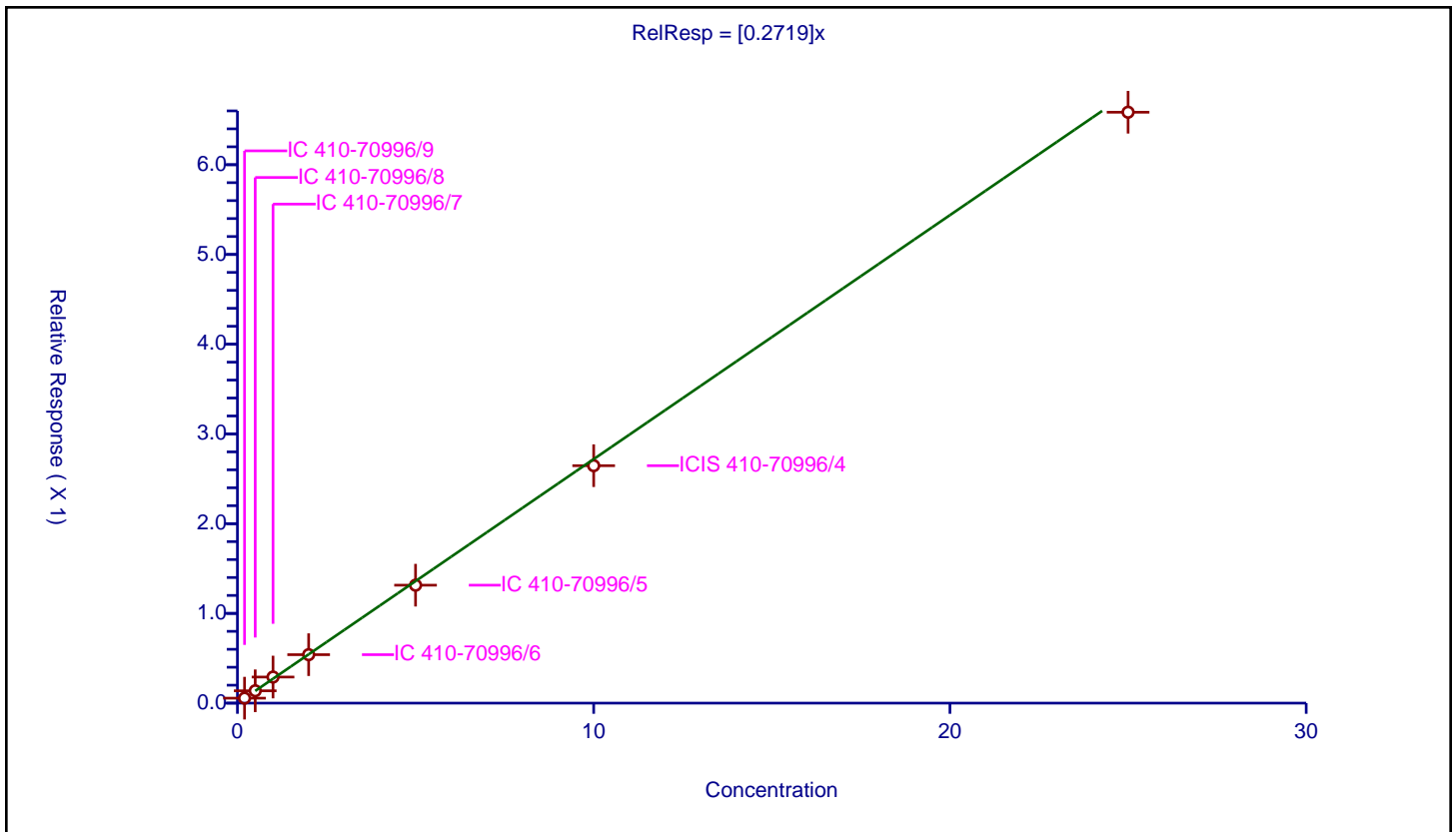
/ 1,2-Dichloropropane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2719

Error Coefficients	
Standard Error:	665000
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 410-70996/9	0.2	0.055285	10.0	2204755.0	0.276425	Y
2	IC 410-70996/8	0.5	0.137565	10.0	2189287.0	0.275131	Y
3	IC 410-70996/7	1.0	0.290855	10.0	2211412.0	0.290855	Y
4	IC 410-70996/6	2.0	0.540114	10.0	2210035.0	0.270057	Y
5	IC 410-70996/5	5.0	1.314352	10.0	2225560.0	0.26287	Y
6	ICIS 410-70996/4	10.0	2.646189	10.0	2246480.0	0.264619	Y
7	IC 410-70996/3	25.0	6.585227	10.0	2249974.0	0.263409	Y



Calibration

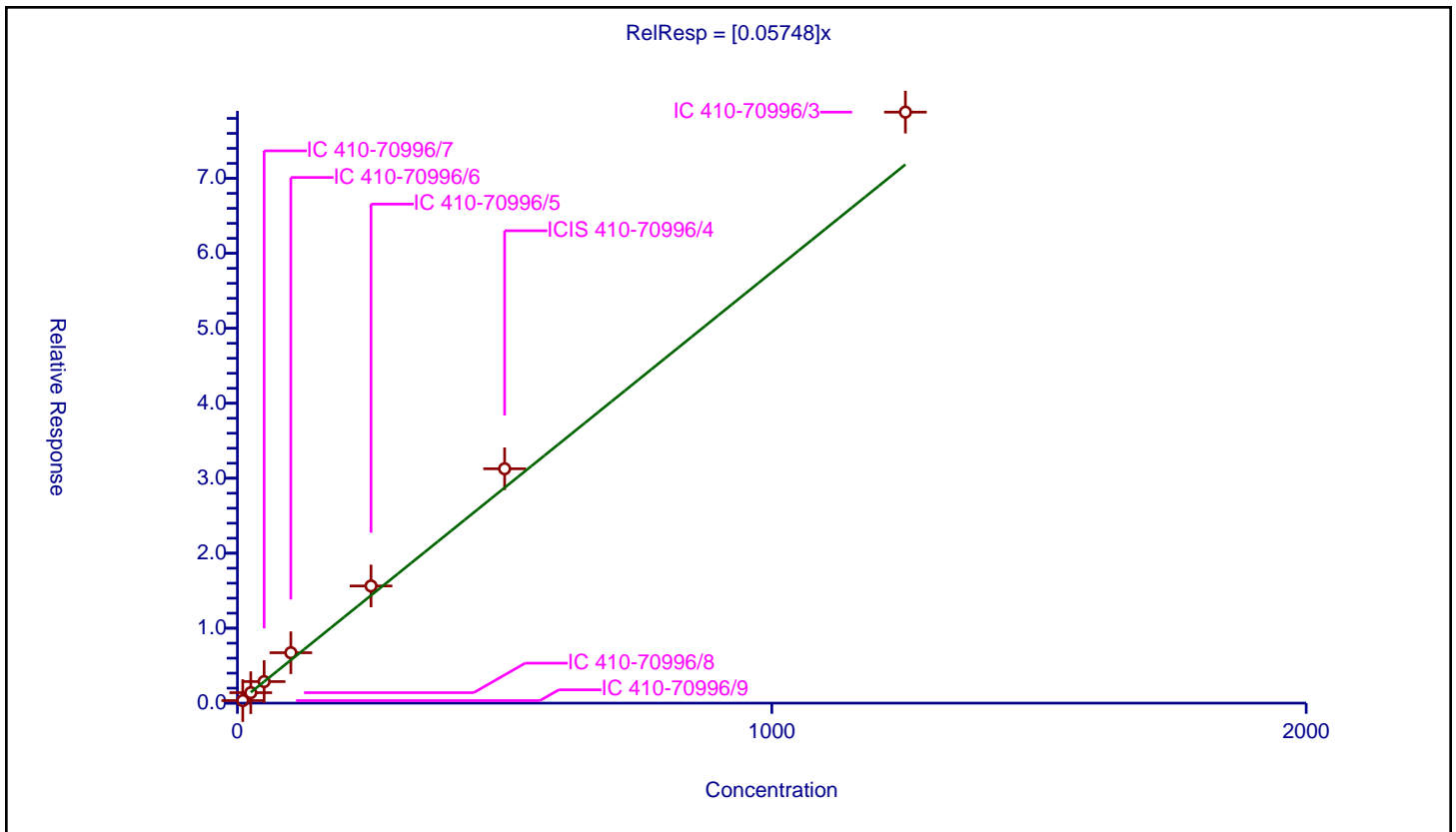
/ 1,4-Dioxane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.05748

Error Coefficients	
Standard Error:	127000
Relative Standard Error:	19.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.960

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-70996/9	10.0	0.337788	50.0	184731.0	0.033779	Y
2	IC 410-70996/8	25.0	1.393017	50.0	195834.0	0.055721	Y
3	IC 410-70996/7	50.0	2.87566	50.0	201206.0	0.057513	Y
4	IC 410-70996/6	100.0	6.724552	50.0	195329.0	0.067246	Y
5	IC 410-70996/5	250.0	15.62863	50.0	183343.0	0.062515	Y
6	ICIS 410-70996/4	500.0	31.260546	50.0	186094.0	0.062521	Y
7	IC 410-70996/3	1250.0	78.831721	50.0	177877.0	0.063065	Y



Calibration

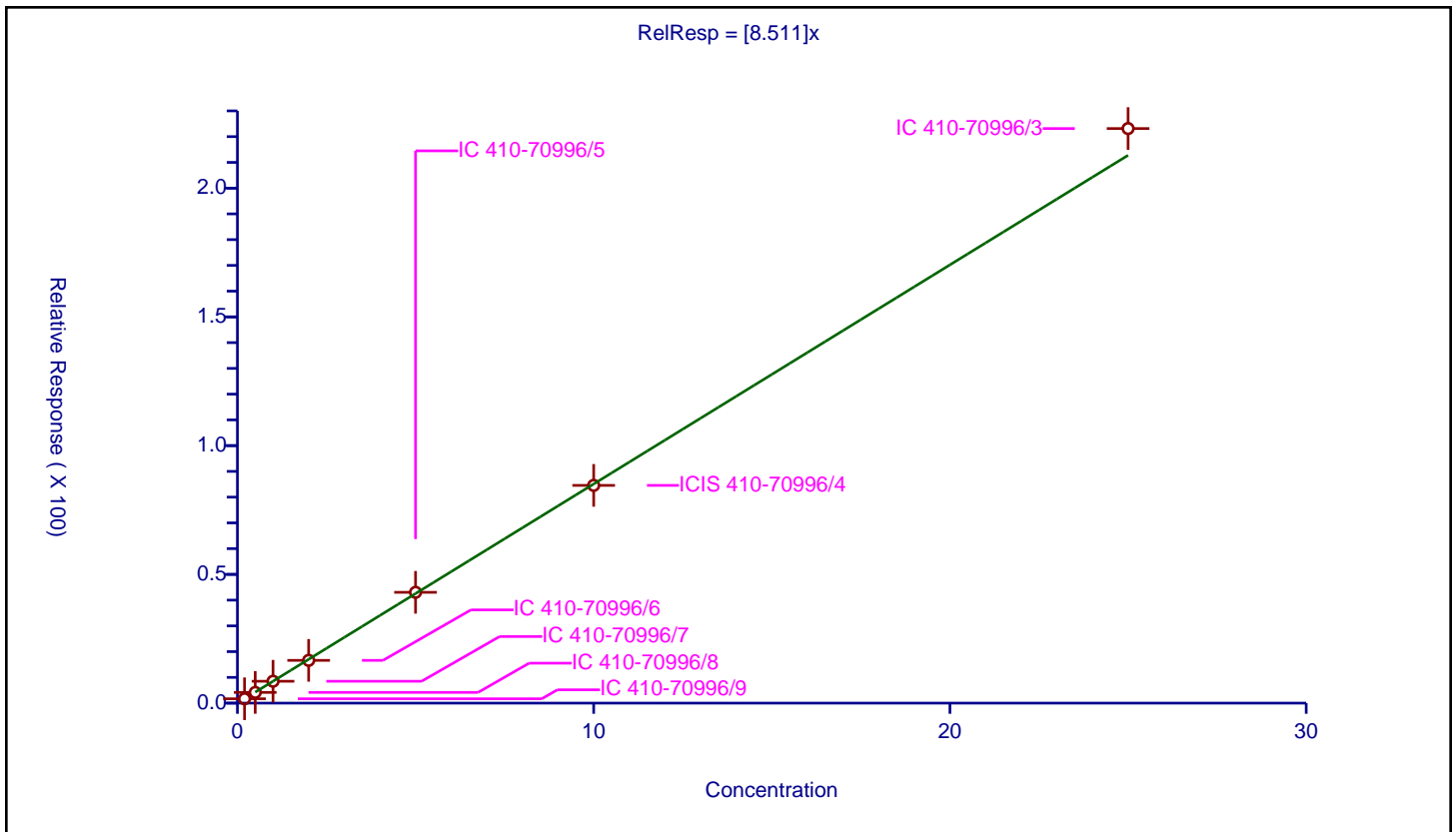
/ Methyl methacrylate

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	8.511

Error Coefficients	
Standard Error:	356000
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 410-70996/9	0.2	1.691108	50.0	184731.0	8.455538	Y
2	IC 410-70996/8	0.5	4.161943	50.0	195834.0	8.323887	Y
3	IC 410-70996/7	1.0	8.502232	50.0	201206.0	8.502232	Y
4	IC 410-70996/6	2.0	16.609669	50.0	195329.0	8.304834	Y
5	IC 410-70996/5	5.0	43.028368	50.0	183343.0	8.605674	Y
6	ICIS 410-70996/4	10.0	84.557535	50.0	186094.0	8.455754	Y
7	IC 410-70996/3	25.0	223.141272	50.0	177877.0	8.925651	Y



Calibration

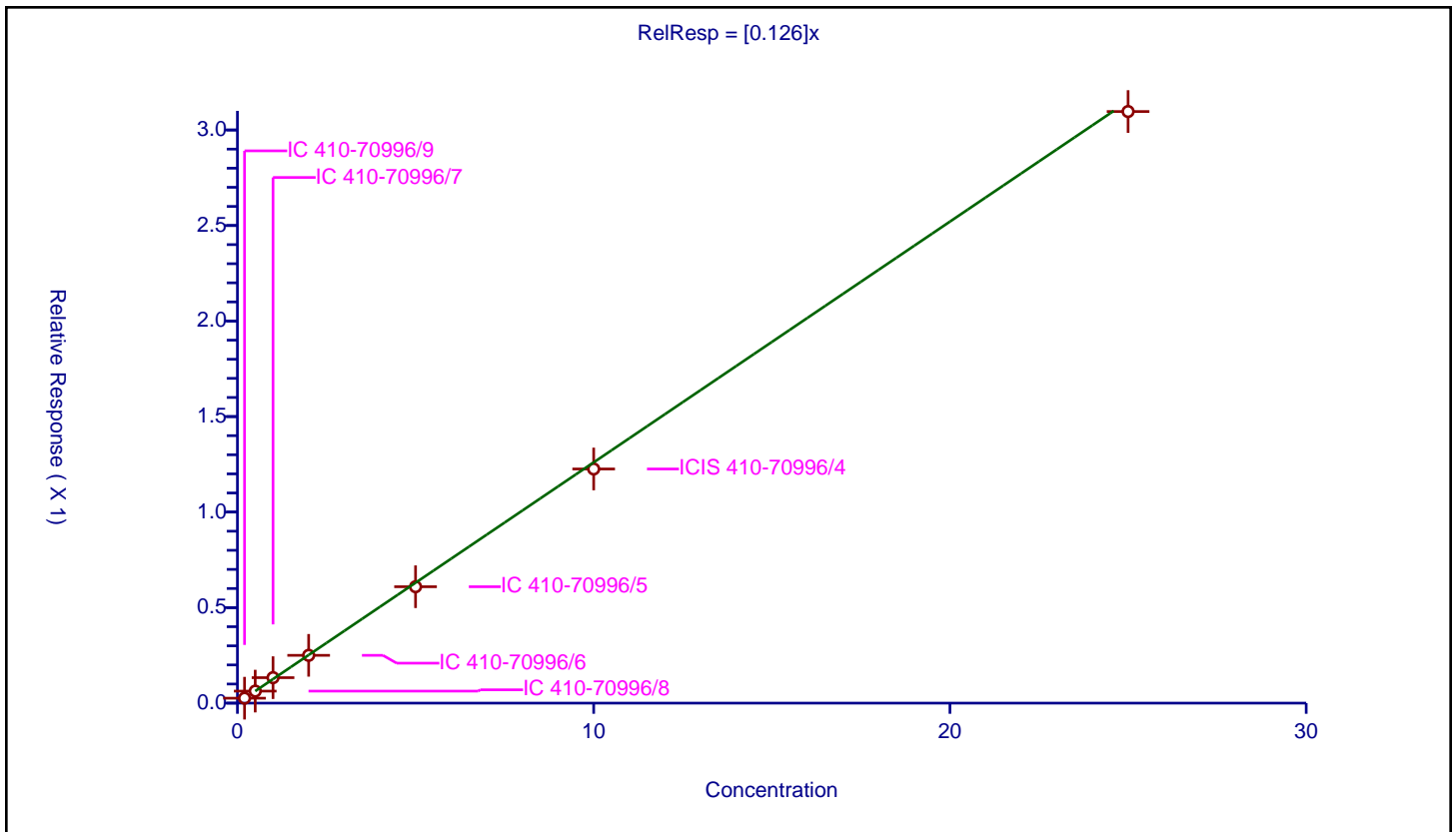
/ Dibromomethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.126

Error Coefficients	
Standard Error:	312000
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 410-70996/9	0.2	0.025926	10.0	2204755.0	0.129629	Y
2	IC 410-70996/8	0.5	0.062929	10.0	2189287.0	0.125858	Y
3	IC 410-70996/7	1.0	0.133286	10.0	2211412.0	0.133286	Y
4	IC 410-70996/6	2.0	0.25024	10.0	2210035.0	0.12512	Y
5	IC 410-70996/5	5.0	0.60924	10.0	2225560.0	0.121848	Y
6	ICIS 410-70996/4	10.0	1.225575	10.0	2246480.0	0.122558	Y
7	IC 410-70996/3	25.0	3.09668	10.0	2249974.0	0.123867	Y



Calibration

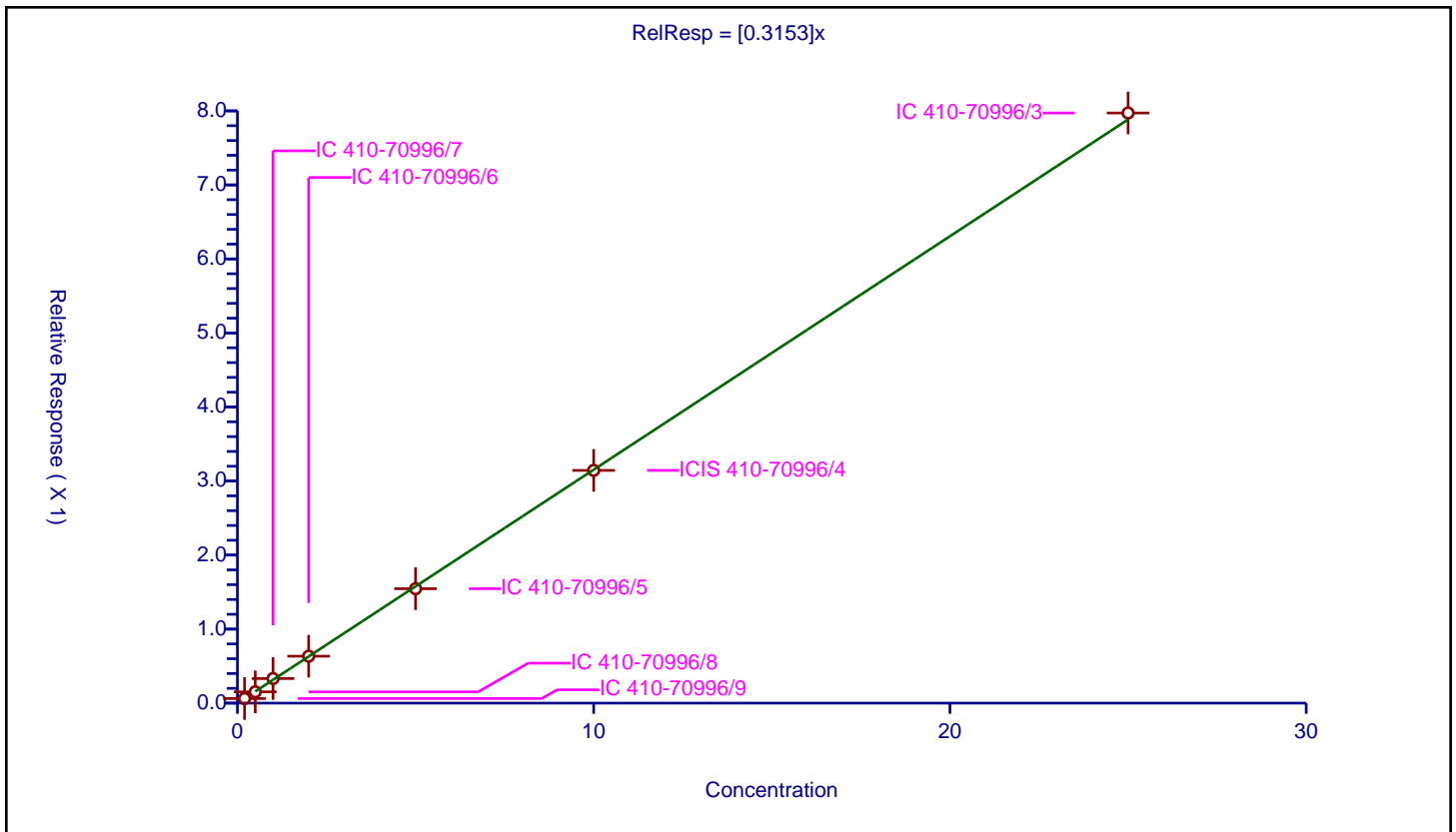
/ Dichlorobromomethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3153

Error Coefficients	
Standard Error:	802000
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 410-70996/9	0.2	0.062129	10.0	2204755.0	0.310647	Y
2	IC 410-70996/8	0.5	0.152525	10.0	2189287.0	0.305049	Y
3	IC 410-70996/7	1.0	0.332204	10.0	2211412.0	0.332204	Y
4	IC 410-70996/6	2.0	0.634153	10.0	2210035.0	0.317076	Y
5	IC 410-70996/5	5.0	1.545624	10.0	2225560.0	0.309125	Y
6	ICIS 410-70996/4	10.0	3.143829	10.0	2246480.0	0.314383	Y
7	IC 410-70996/3	25.0	7.971439	10.0	2249974.0	0.318858	Y



Calibration

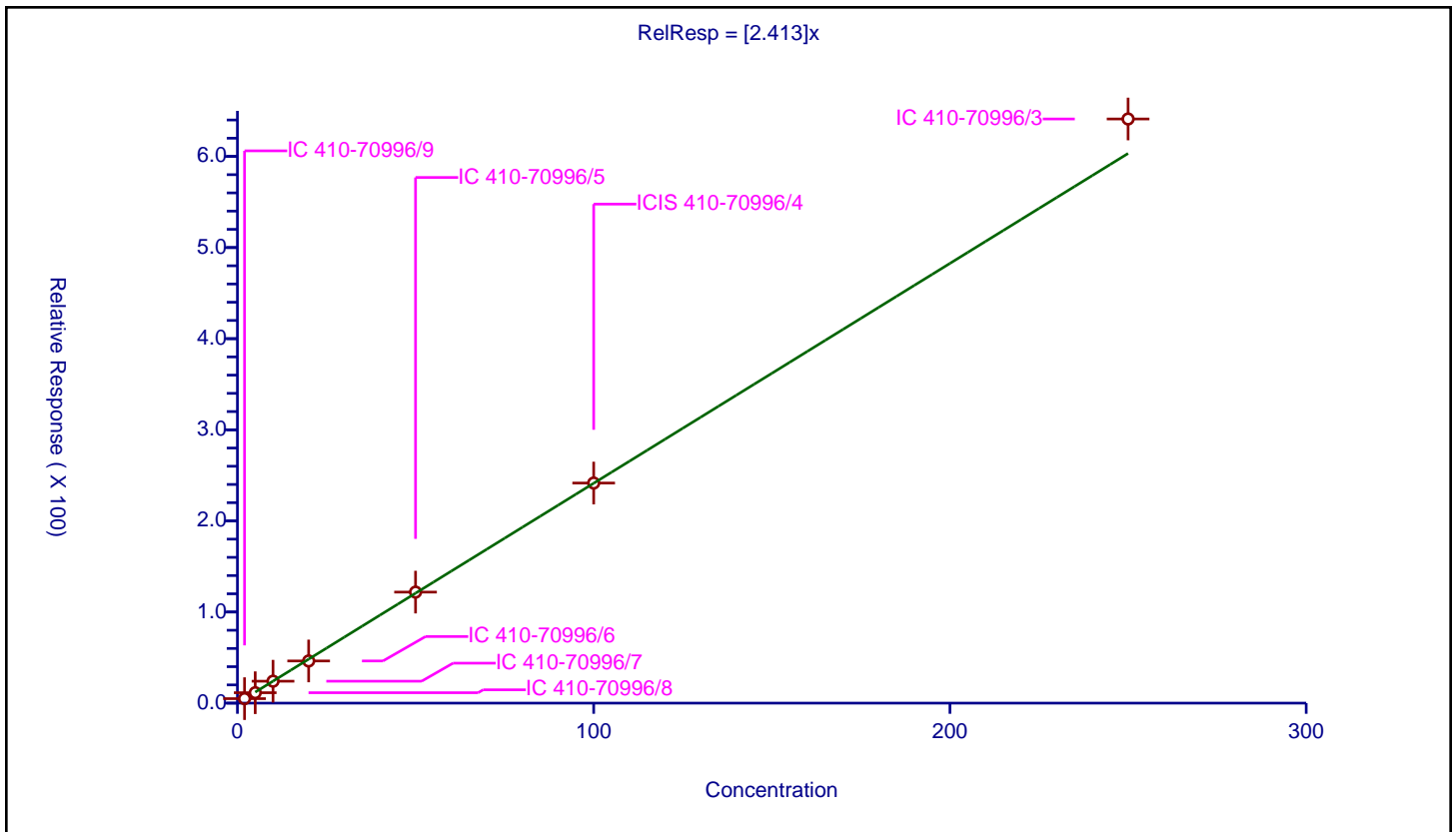
/ 2-Nitropropane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	2.413

Error Coefficients	
Standard Error:	1020000
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 410-70996/9	2.0	4.923646	50.0	184731.0	2.461823	Y
2	IC 410-70996/8	5.0	11.454344	50.0	195834.0	2.290869	Y
3	IC 410-70996/7	10.0	24.079053	50.0	201206.0	2.407905	Y
4	IC 410-70996/6	20.0	46.278586	50.0	195329.0	2.313929	Y
5	IC 410-70996/5	50.0	121.859847	50.0	183343.0	2.437197	Y
6	ICIS 410-70996/4	100.0	241.561523	50.0	186094.0	2.415615	Y
7	IC 410-70996/3	250.0	641.125328	50.0	177877.0	2.564501	Y



Calibration

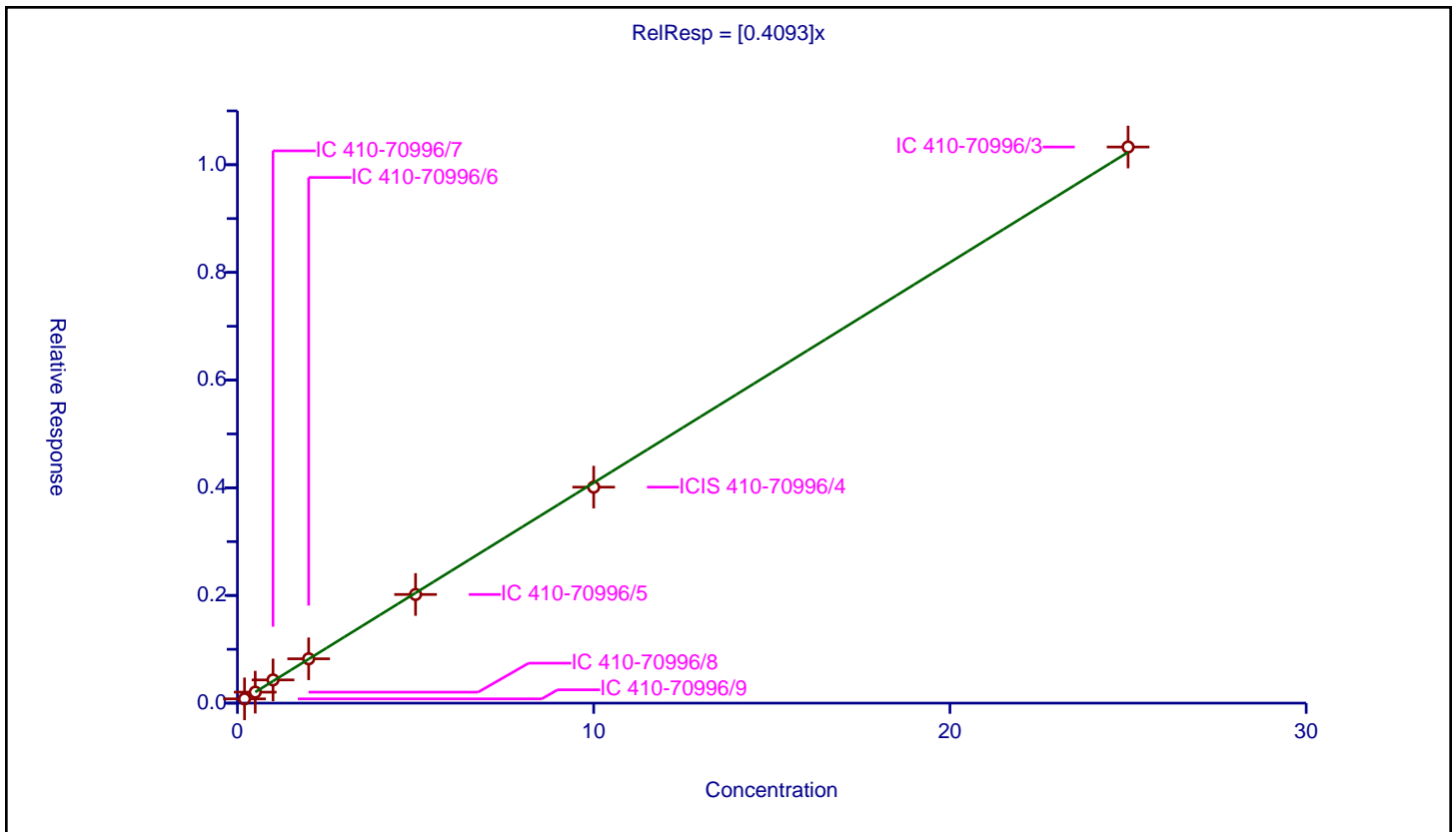
/ cis-1,3-Dichloropropene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4093

Error Coefficients	
Standard Error:	1040000
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 410-70996/9	0.2	0.079156	10.0	2204755.0	0.395781	Y
2	IC 410-70996/8	0.5	0.204222	10.0	2189287.0	0.408443	Y
3	IC 410-70996/7	1.0	0.431295	10.0	2211412.0	0.431295	Y
4	IC 410-70996/6	2.0	0.823268	10.0	2210035.0	0.411634	Y
5	IC 410-70996/5	5.0	2.017879	10.0	2225560.0	0.403576	Y
6	ICIS 410-70996/4	10.0	4.011596	10.0	2246480.0	0.401116	Y
7	IC 410-70996/3	25.0	10.329333	10.0	2249974.0	0.413173	Y



Calibration

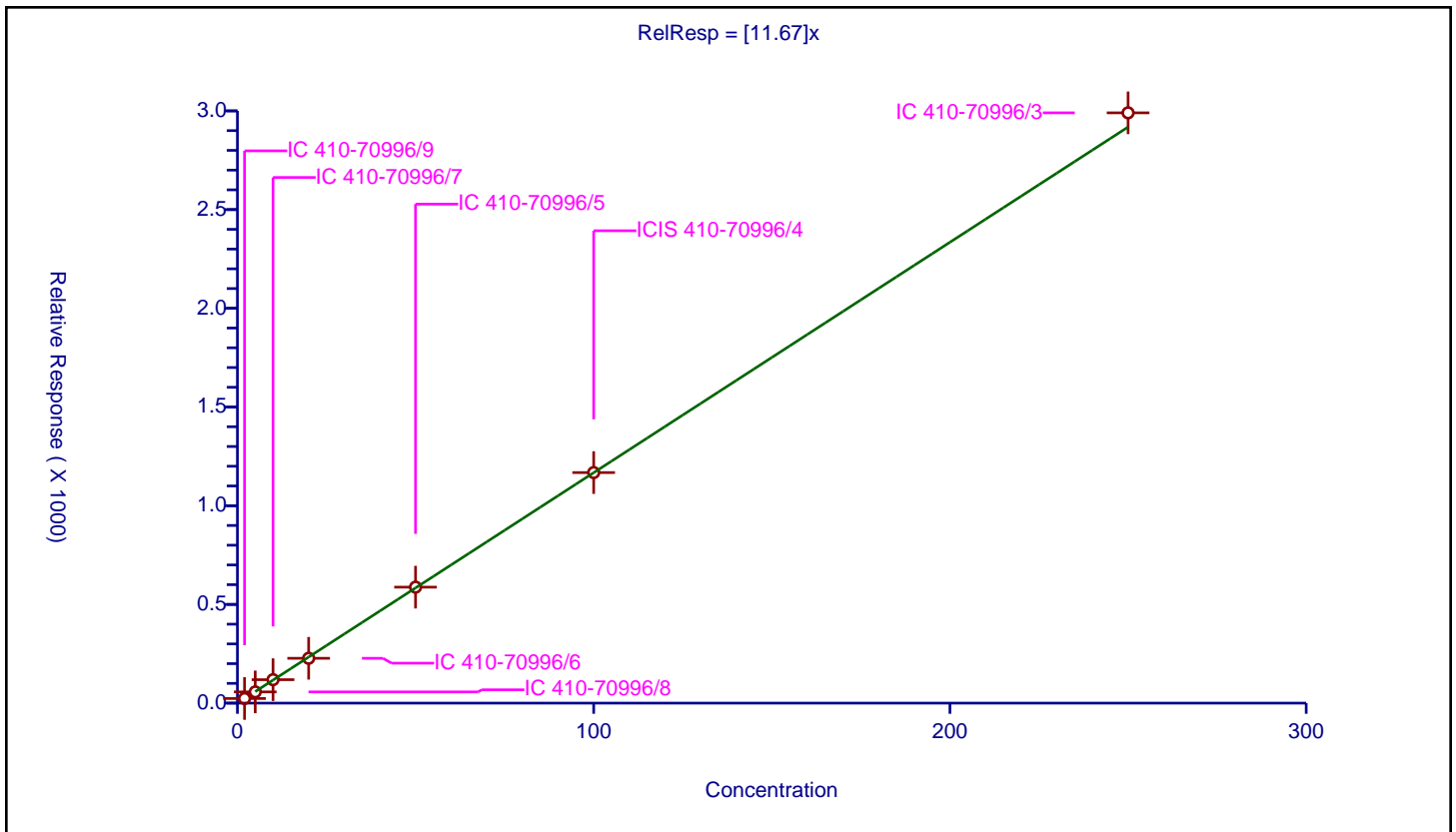
/ 4-Methyl-2-pentanone (MIBK)

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	11.67

Error Coefficients	
Standard Error:	4790000
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 410-70996/9	2.0	23.391039	50.0	184731.0	11.695519	Y
2	IC 410-70996/8	5.0	56.924487	50.0	195834.0	11.384897	Y
3	IC 410-70996/7	10.0	118.830949	50.0	201206.0	11.883095	Y
4	IC 410-70996/6	20.0	227.15905	50.0	195329.0	11.357952	Y
5	IC 410-70996/5	50.0	587.488478	50.0	183343.0	11.74977	Y
6	ICIS 410-70996/4	100.0	1167.831042	50.0	186094.0	11.67831	Y
7	IC 410-70996/3	250.0	2990.204467	50.0	177877.0	11.960818	Y



Calibration

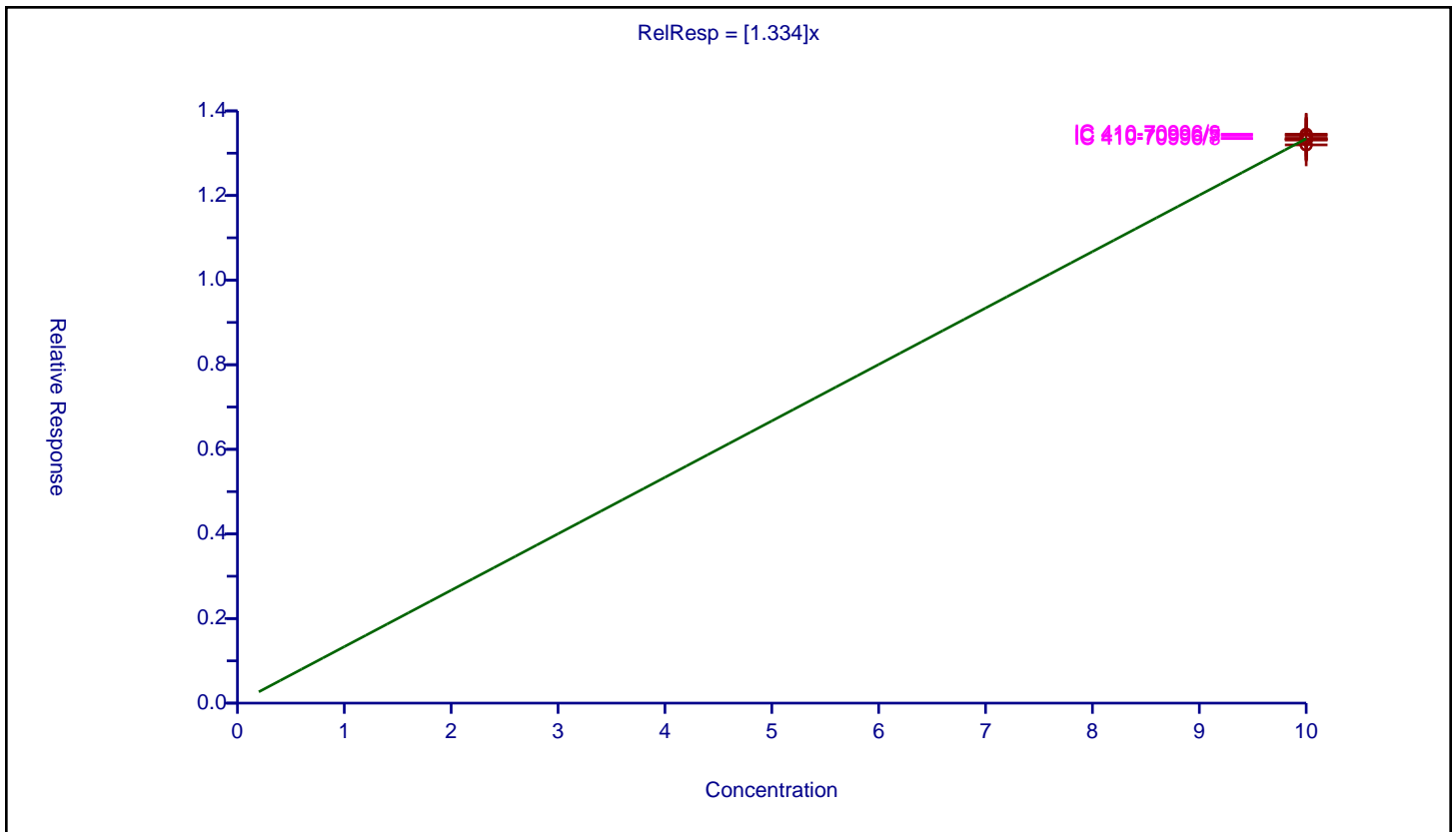
/ Toluene-d8 (Surr)

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.334

Error Coefficients	
Standard Error:	2320000
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 410-70996/3	10.0	13.196575	10.0	1658425.0	1.319658	Y
2	ICIS 410-70996/4	10.0	13.31712	10.0	1636269.0	1.331712	Y
3	IC 410-70996/5	10.0	13.421252	10.0	1611346.0	1.342125	Y
4	IC 410-70996/6	10.0	13.314342	10.0	1604620.0	1.331434	Y
5	IC 410-70996/7	10.0	13.349116	10.0	1600264.0	1.334912	Y
6	IC 410-70996/8	10.0	13.345384	10.0	1589997.0	1.334538	Y
7	IC 410-70996/9	10.0	13.44899	10.0	1578236.0	1.344899	Y



Calibration

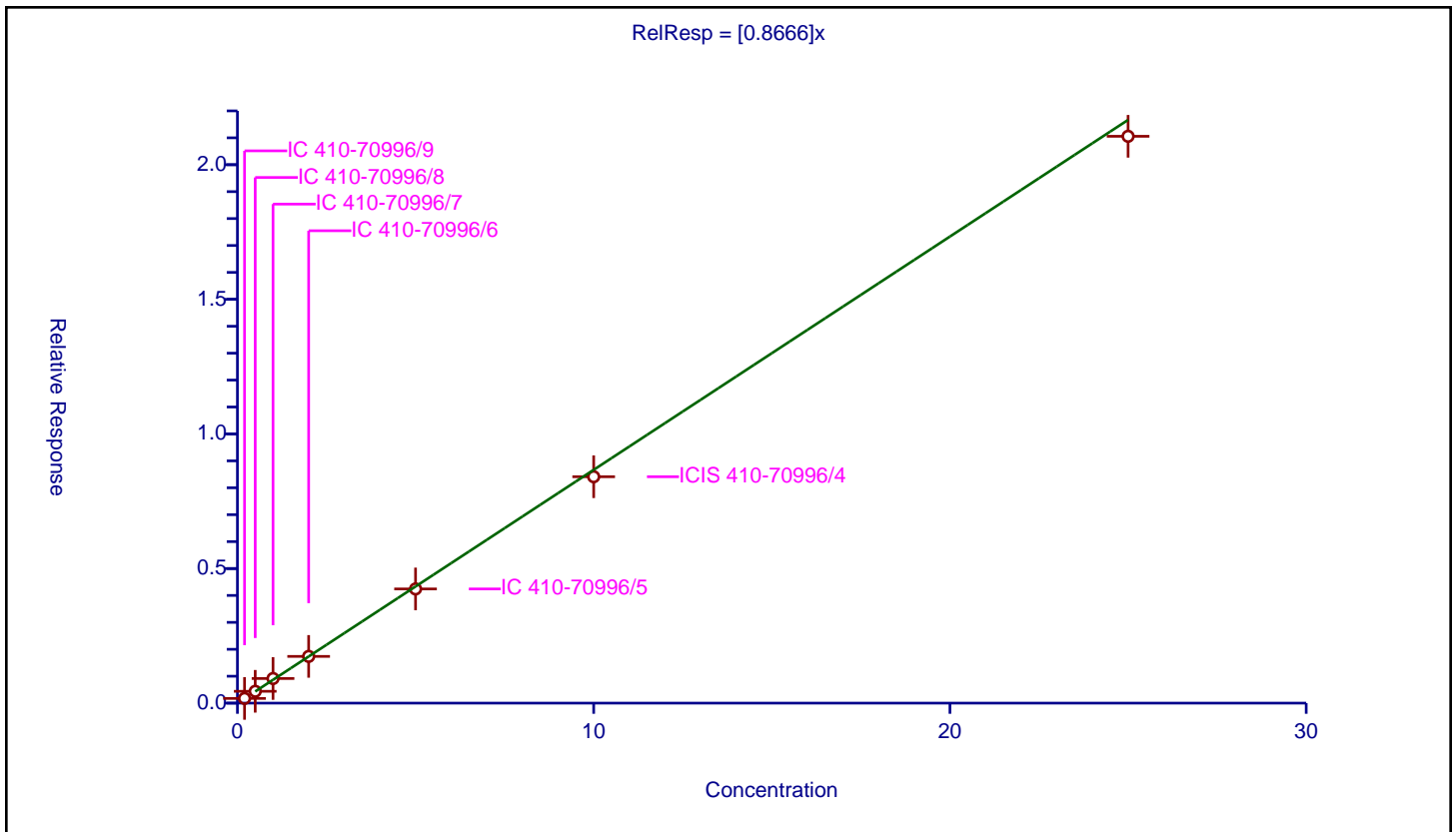
/ Toluene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.8666

Error Coefficients	
Standard Error:	1560000
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 410-70996/9	0.2	0.174701	10.0	1578236.0	0.873507	Y
2	IC 410-70996/8	0.5	0.439328	10.0	1589997.0	0.878656	Y
3	IC 410-70996/7	1.0	0.914393	10.0	1600264.0	0.914393	Y
4	IC 410-70996/6	2.0	1.736181	10.0	1604620.0	0.86809	Y
5	IC 410-70996/5	5.0	4.241764	10.0	1611346.0	0.848353	Y
6	ICIS 410-70996/4	10.0	8.409821	10.0	1636269.0	0.840982	Y
7	IC 410-70996/3	25.0	21.056135	10.0	1658425.0	0.842245	Y



Calibration

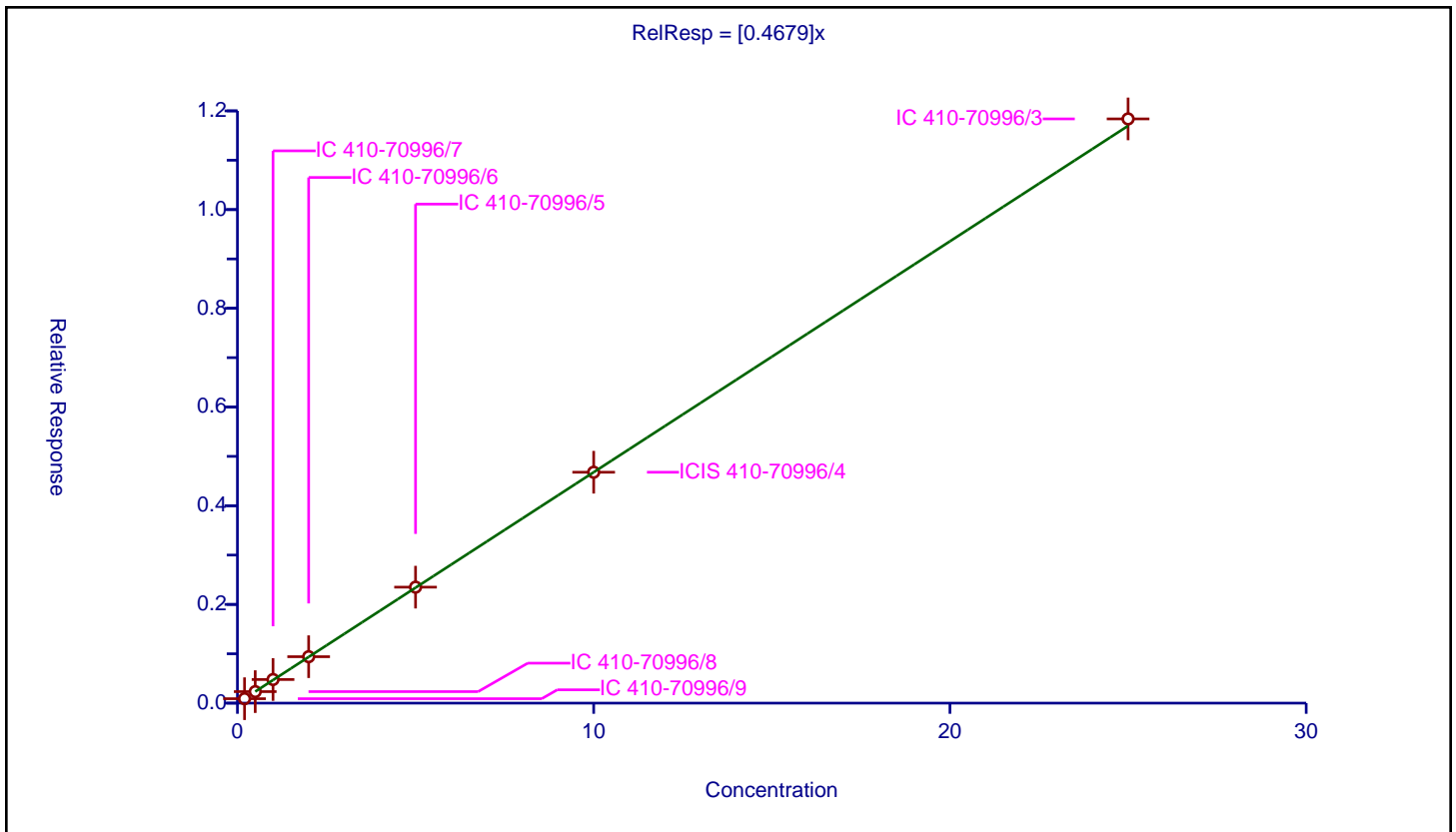
/ trans-1,3-Dichloropropene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4679

Error Coefficients	
Standard Error:	877000
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 410-70996/9	0.2	0.089695	10.0	1578236.0	0.448475	Y
2	IC 410-70996/8	0.5	0.23329	10.0	1589997.0	0.466579	Y
3	IC 410-70996/7	1.0	0.47844	10.0	1600264.0	0.47844	Y
4	IC 410-70996/6	2.0	0.940634	10.0	1604620.0	0.470317	Y
5	IC 410-70996/5	5.0	2.349893	10.0	1611346.0	0.469979	Y
6	ICIS 410-70996/4	10.0	4.678436	10.0	1636269.0	0.467844	Y
7	IC 410-70996/3	25.0	11.83734	10.0	1658425.0	0.473494	Y



Calibration

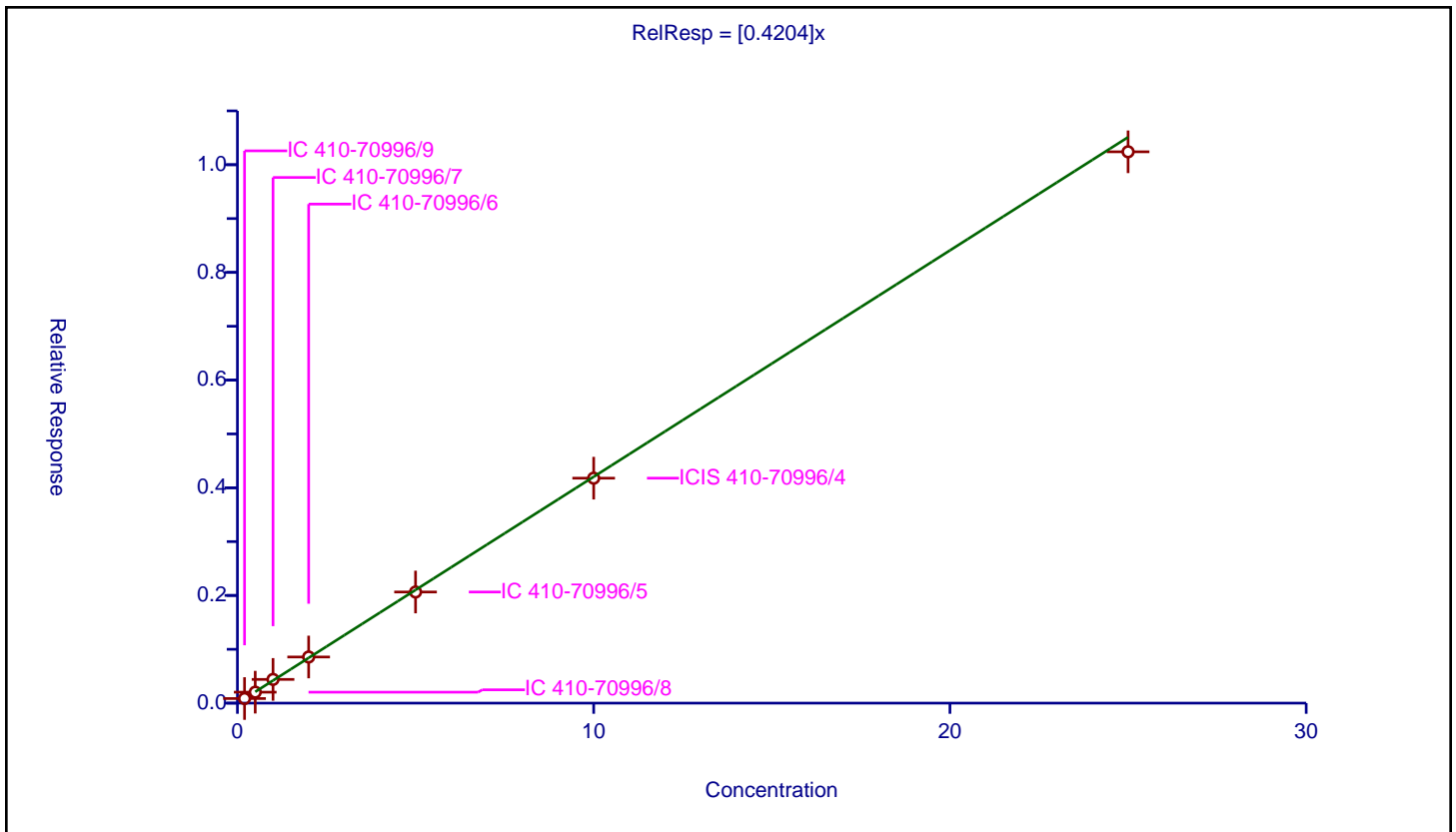
/ Ethyl methacrylate

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4204

Error Coefficients	
Standard Error:	762000
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 410-70996/9	0.2	0.085348	10.0	1578236.0	0.426742	Y
2	IC 410-70996/8	0.5	0.203466	10.0	1589997.0	0.406932	Y
3	IC 410-70996/7	1.0	0.440752	10.0	1600264.0	0.440752	Y
4	IC 410-70996/6	2.0	0.856919	10.0	1604620.0	0.42846	Y
5	IC 410-70996/5	5.0	2.063871	10.0	1611346.0	0.412774	Y
6	ICIS 410-70996/4	10.0	4.178243	10.0	1636269.0	0.417824	Y
7	IC 410-70996/3	25.0	10.240385	10.0	1658425.0	0.409615	Y



Calibration

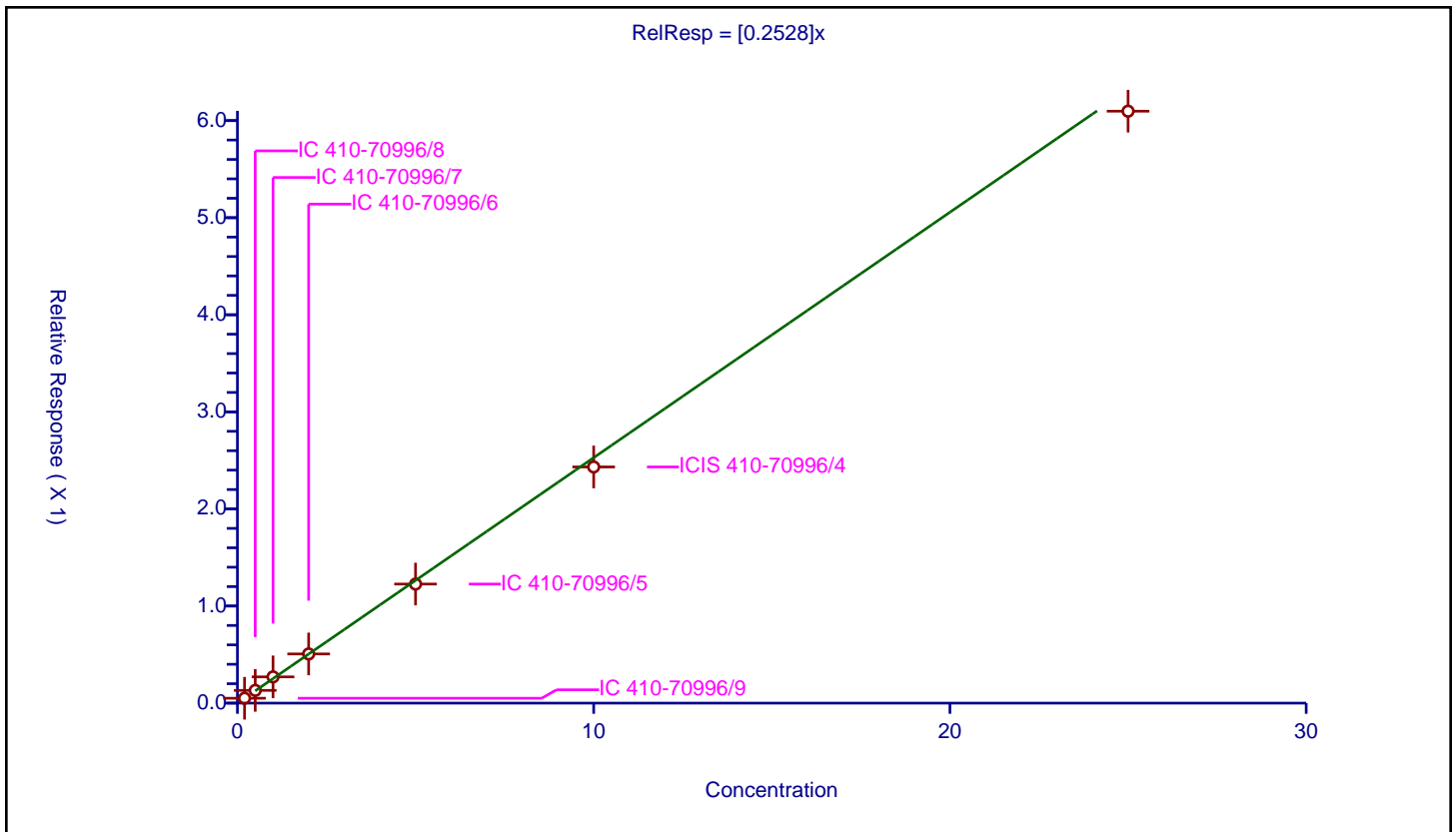
/ 1,1,2-Trichloroethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2528

Error Coefficients	
Standard Error:	453000
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 410-70996/9	0.2	0.050259	10.0	1578236.0	0.251293	Y
2	IC 410-70996/8	0.5	0.131195	10.0	1589997.0	0.26239	Y
3	IC 410-70996/7	1.0	0.270324	10.0	1600264.0	0.270324	Y
4	IC 410-70996/6	2.0	0.506413	10.0	1604620.0	0.253206	Y
5	IC 410-70996/5	5.0	1.22631	10.0	1611346.0	0.245262	Y
6	ICIS 410-70996/4	10.0	2.432687	10.0	1636269.0	0.243269	Y
7	IC 410-70996/3	25.0	6.097068	10.0	1658425.0	0.243883	Y



Calibration

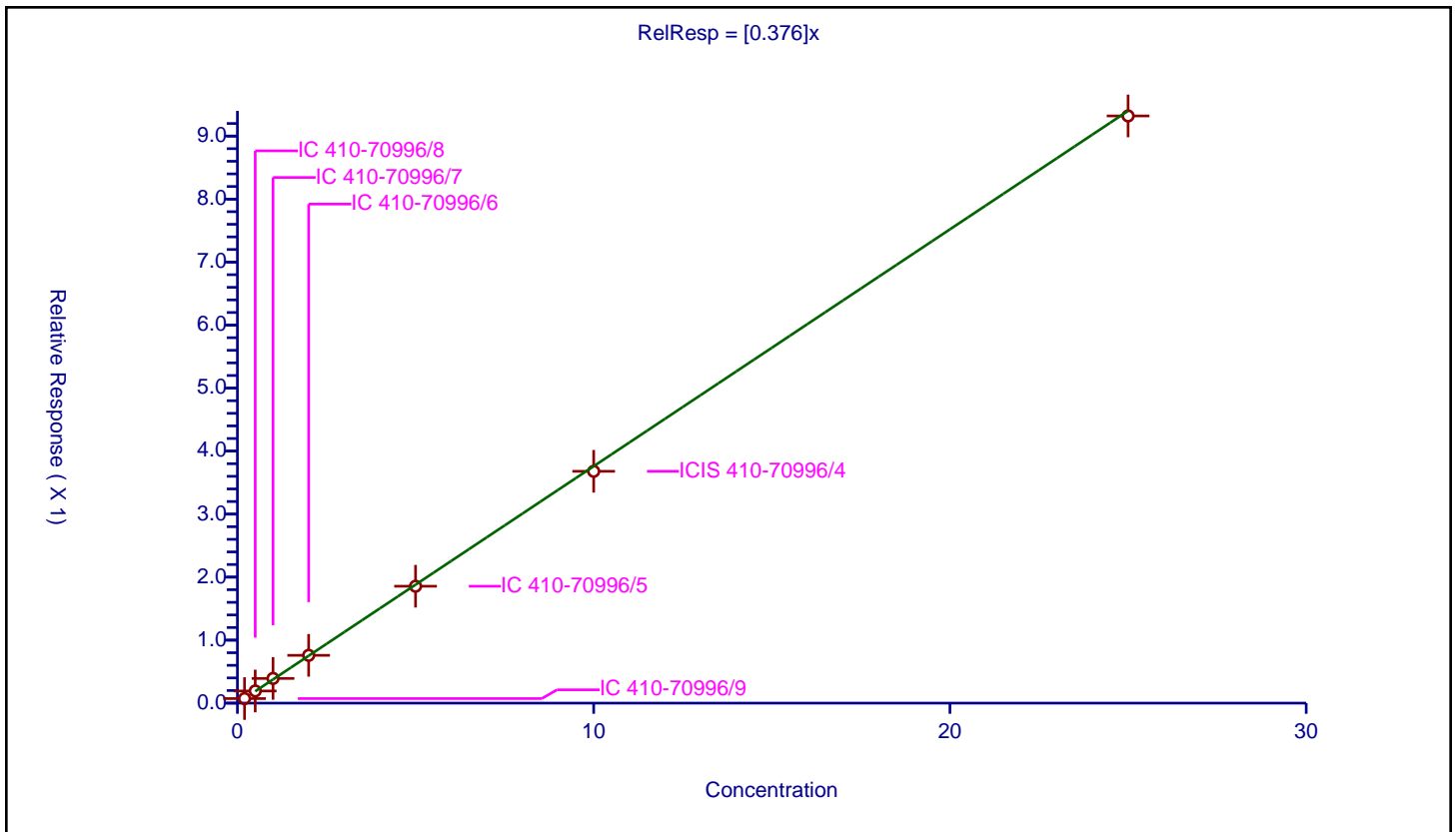
/ Tetrachloroethene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.376

Error Coefficients	
Standard Error:	690000
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 410-70996/9	0.2	0.0726	10.0	1578236.0	0.363	Y
2	IC 410-70996/8	0.5	0.193013	10.0	1589997.0	0.386026	Y
3	IC 410-70996/7	1.0	0.391935	10.0	1600264.0	0.391935	Y
4	IC 410-70996/6	2.0	0.75841	10.0	1604620.0	0.379205	Y
5	IC 410-70996/5	5.0	1.855461	10.0	1611346.0	0.371092	Y
6	ICIS 410-70996/4	10.0	3.679462	10.0	1636269.0	0.367946	Y
7	IC 410-70996/3	25.0	9.319825	10.0	1658425.0	0.372793	Y



Calibration

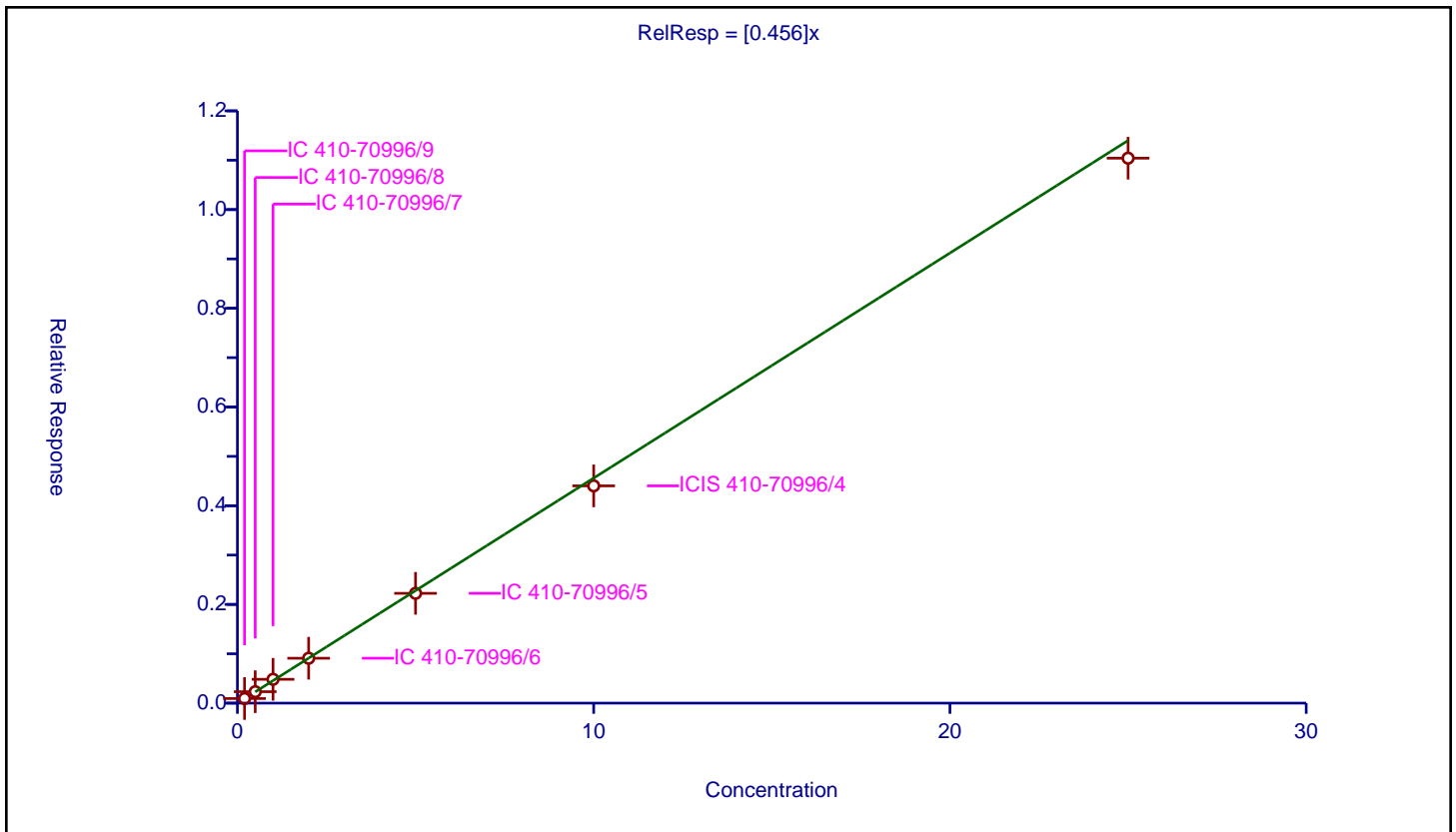
/ 1,3-Dichloropropane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.456

Error Coefficients	
Standard Error:	819000
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 410-70996/9	0.2	0.092838	10.0	1578236.0	0.464189	Y
2	IC 410-70996/8	0.5	0.231761	10.0	1589997.0	0.463523	Y
3	IC 410-70996/7	1.0	0.482683	10.0	1600264.0	0.482683	Y
4	IC 410-70996/6	2.0	0.909599	10.0	1604620.0	0.454799	Y
5	IC 410-70996/5	5.0	2.2246	10.0	1611346.0	0.44492	Y
6	ICIS 410-70996/4	10.0	4.402057	10.0	1636269.0	0.440206	Y
7	IC 410-70996/3	25.0	11.041796	10.0	1658425.0	0.441672	Y



Calibration

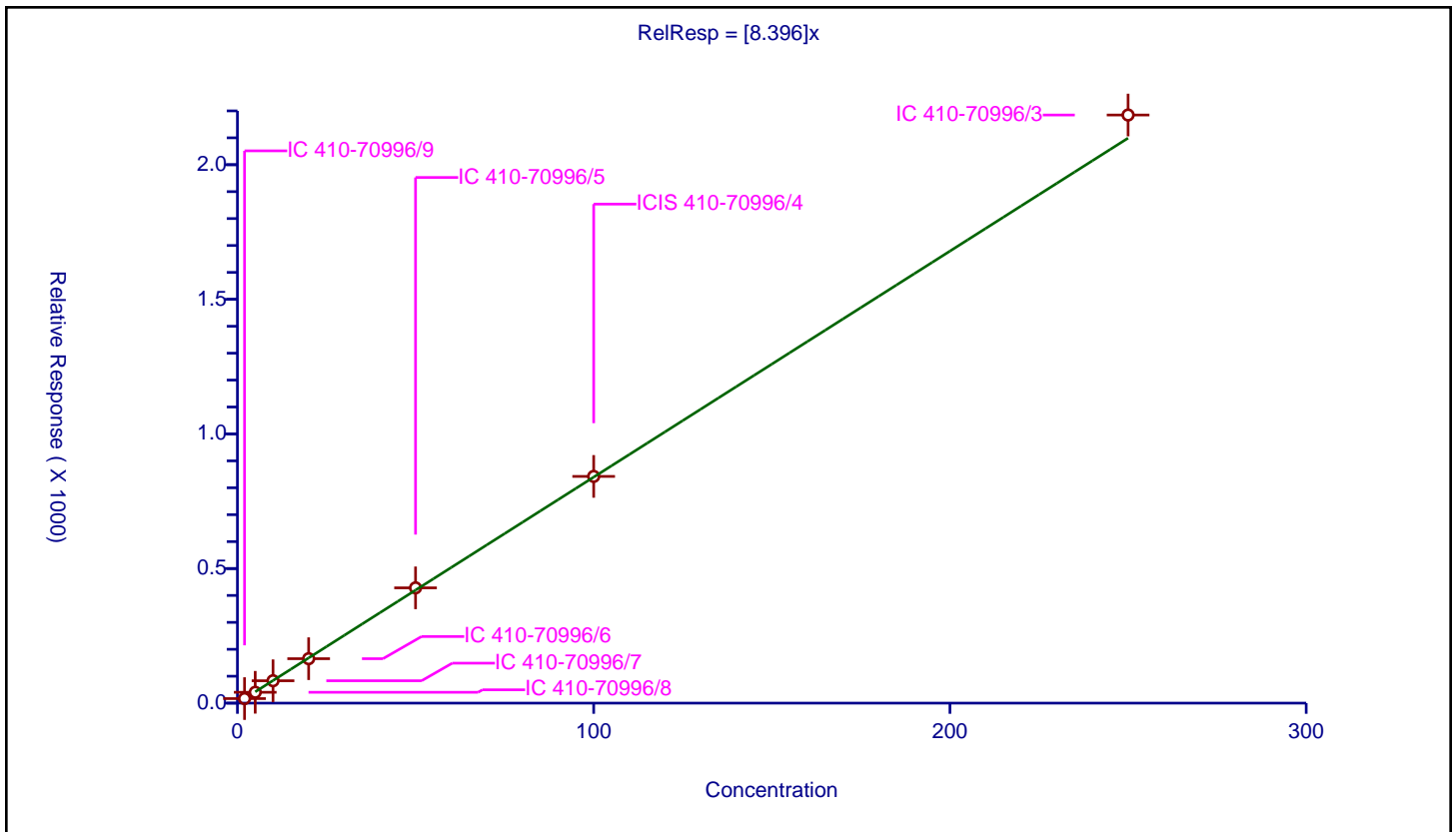
/ 2-Hexanone

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	8.396

Error Coefficients	
Standard Error:	3490000
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 410-70996/9	2.0	16.8269	50.0	184731.0	8.41345	Y
2	IC 410-70996/8	5.0	40.275693	50.0	195834.0	8.055139	Y
3	IC 410-70996/7	10.0	83.203533	50.0	201206.0	8.320353	Y
4	IC 410-70996/6	20.0	165.119875	50.0	195329.0	8.255994	Y
5	IC 410-70996/5	50.0	428.222785	50.0	183343.0	8.564456	Y
6	ICIS 410-70996/4	100.0	842.208776	50.0	186094.0	8.422088	Y
7	IC 410-70996/3	250.0	2184.644164	50.0	177877.0	8.738577	Y



Calibration

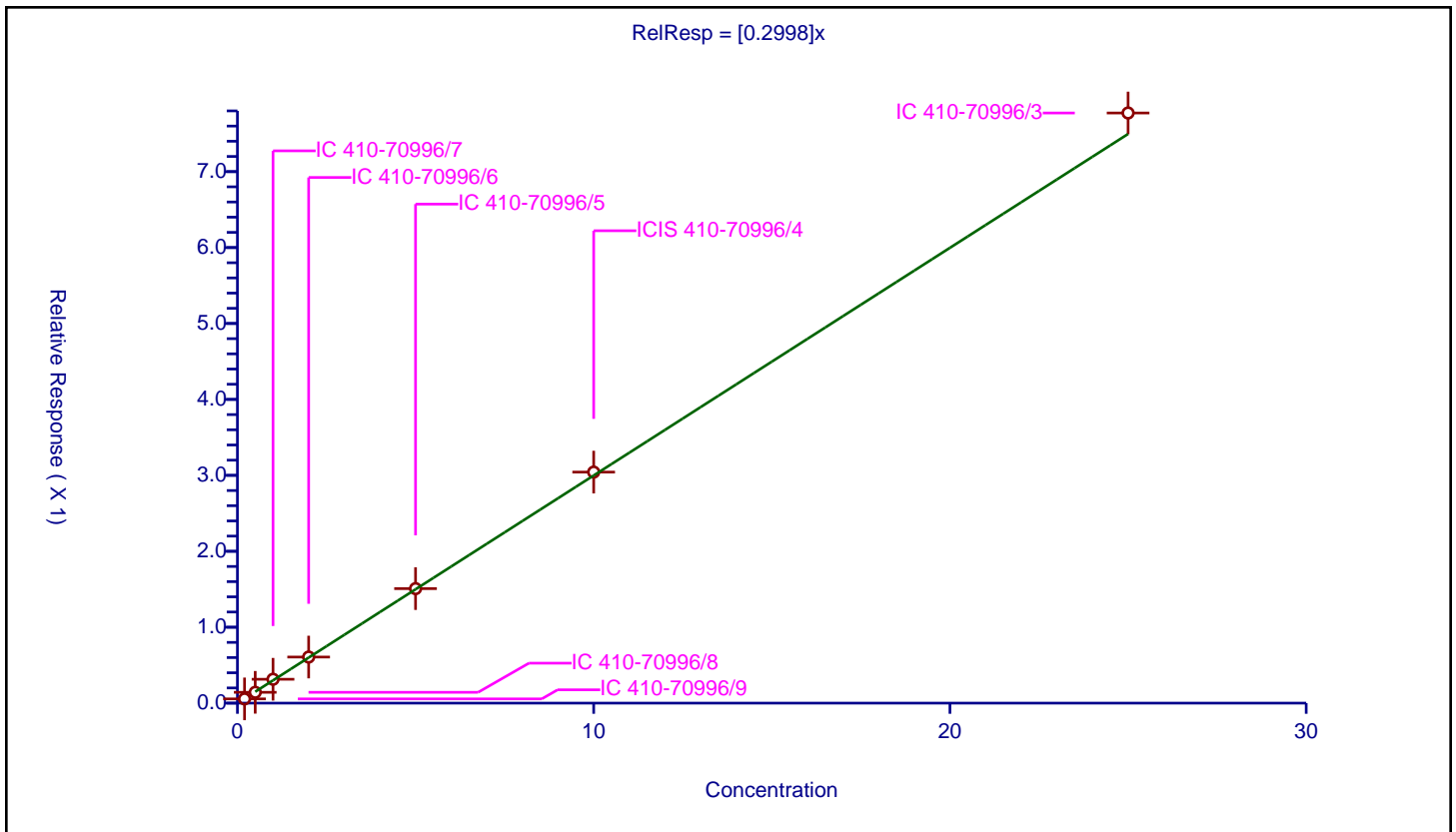
/ Chlorodibromomethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2998

Error Coefficients	
Standard Error:	575000
Relative Standard Error:	4.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-70996/9	0.2	0.055809	10.0	1578236.0	0.279046	Y
2	IC 410-70996/8	0.5	0.142491	10.0	1589997.0	0.284982	Y
3	IC 410-70996/7	1.0	0.314567	10.0	1600264.0	0.314567	Y
4	IC 410-70996/6	2.0	0.606879	10.0	1604620.0	0.303439	Y
5	IC 410-70996/5	5.0	1.508099	10.0	1611346.0	0.30162	Y
6	ICIS 410-70996/4	10.0	3.042758	10.0	1636269.0	0.304276	Y
7	IC 410-70996/3	25.0	7.772314	10.0	1658425.0	0.310893	Y



Calibration

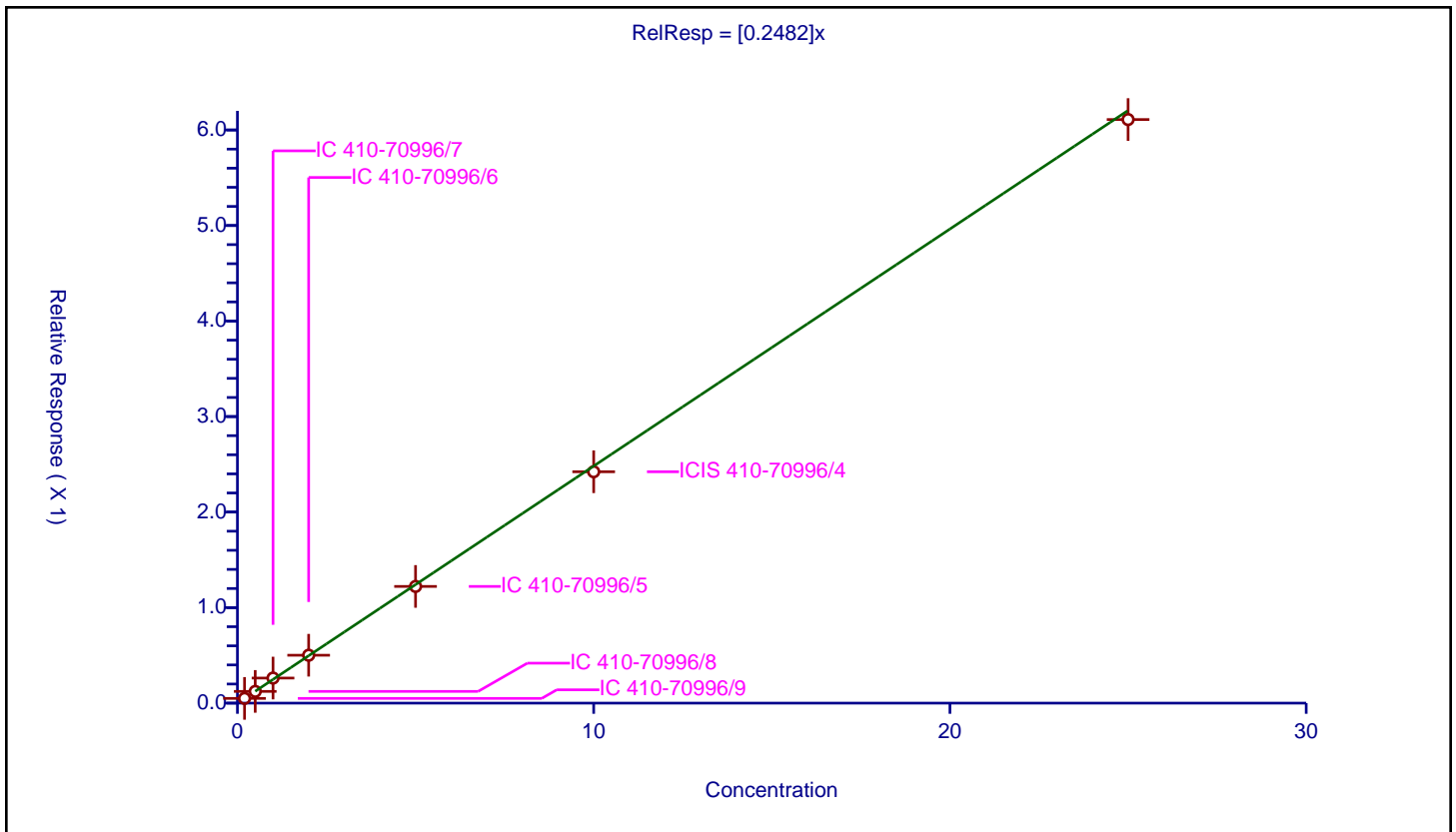
/ Ethylene Dibromide

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2482

Error Coefficients	
Standard Error:	453000
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 410-70996/9	0.2	0.049448	10.0	1578236.0	0.247238	Y
2	IC 410-70996/8	0.5	0.122868	10.0	1589997.0	0.245736	Y
3	IC 410-70996/7	1.0	0.262632	10.0	1600264.0	0.262632	Y
4	IC 410-70996/6	2.0	0.501427	10.0	1604620.0	0.250714	Y
5	IC 410-70996/5	5.0	1.221625	10.0	1611346.0	0.244325	Y
6	ICIS 410-70996/4	10.0	2.422303	10.0	1636269.0	0.24223	Y
7	IC 410-70996/3	25.0	6.109339	10.0	1658425.0	0.244374	Y



Calibration

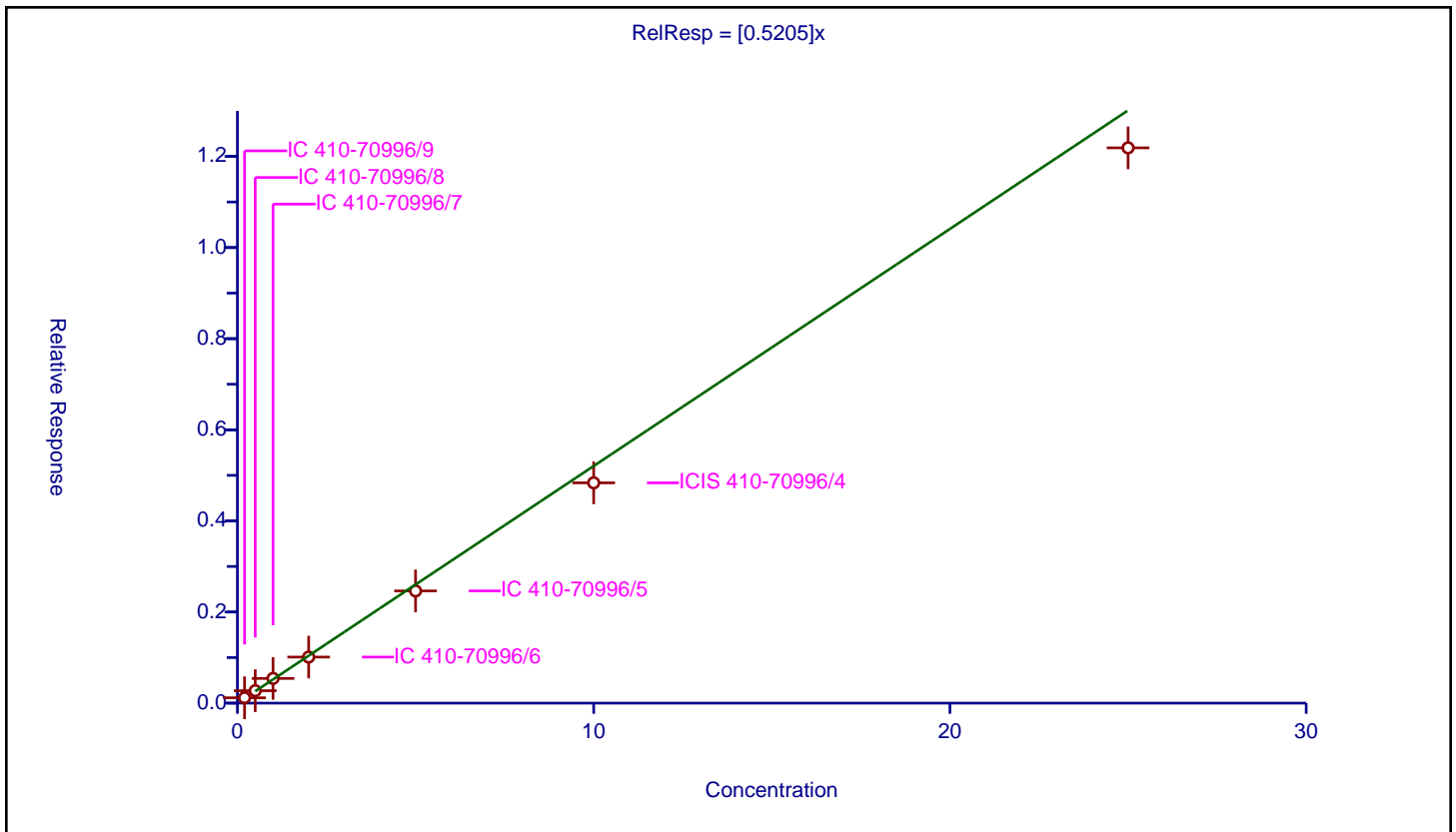
/ 1-Chlorohexane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.5205

Error Coefficients	
Standard Error:	904000
Relative Standard Error:	7.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-70996/9	0.2	0.117124	10.0	1578236.0	0.585622	Y
2	IC 410-70996/8	0.5	0.272963	10.0	1589997.0	0.545926	Y
3	IC 410-70996/7	1.0	0.542467	10.0	1600264.0	0.542467	Y
4	IC 410-70996/6	2.0	1.011149	10.0	1604620.0	0.505575	Y
5	IC 410-70996/5	5.0	2.462569	10.0	1611346.0	0.492514	Y
6	ICIS 410-70996/4	10.0	4.835501	10.0	1636269.0	0.48355	Y
7	IC 410-70996/3	25.0	12.189071	10.0	1658425.0	0.487563	Y



Calibration

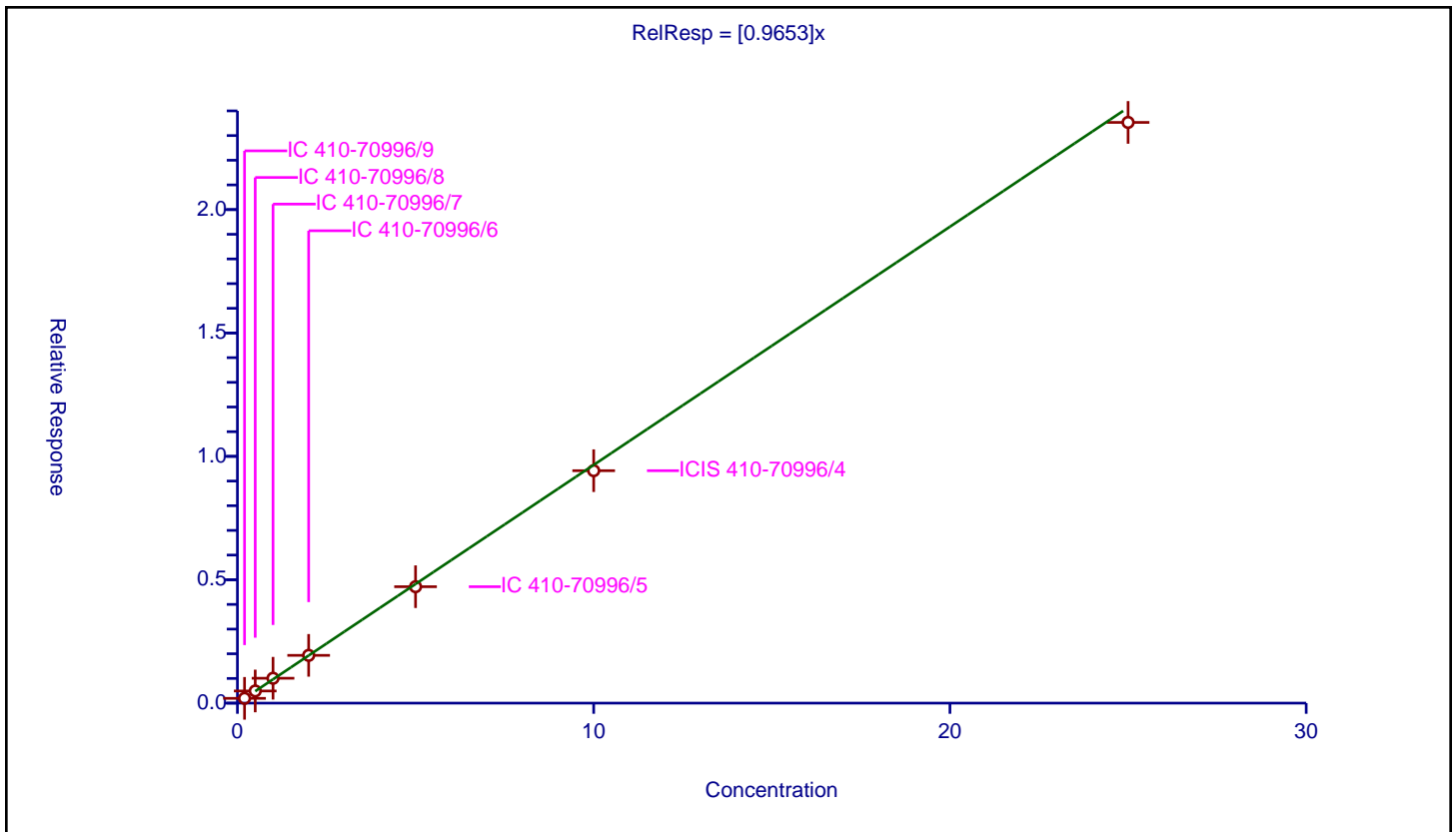
/ Chlorobenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.9653

Error Coefficients	
Standard Error:	1750000
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 410-70996/9	0.2	0.193875	10.0	1578236.0	0.969373	Y
2	IC 410-70996/8	0.5	0.492353	10.0	1589997.0	0.984706	Y
3	IC 410-70996/7	1.0	1.008402	10.0	1600264.0	1.008402	Y
4	IC 410-70996/6	2.0	1.935443	10.0	1604620.0	0.967721	Y
5	IC 410-70996/5	5.0	4.718093	10.0	1611346.0	0.943619	Y
6	ICIS 410-70996/4	10.0	9.419606	10.0	1636269.0	0.941961	Y
7	IC 410-70996/3	25.0	23.532273	10.0	1658425.0	0.941291	Y



Calibration

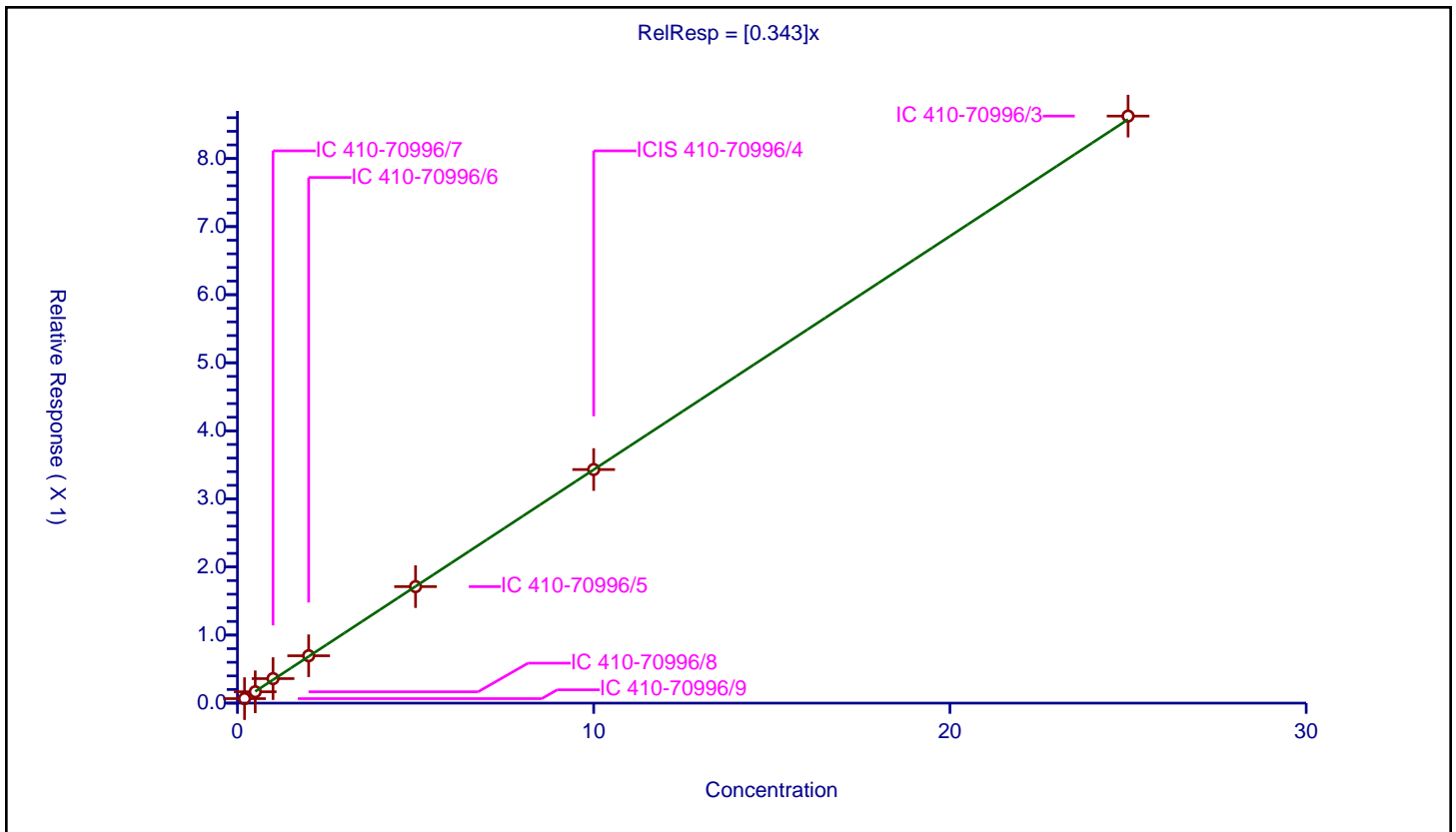
/ 1,1,1,2-Tetrachloroethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.343

Error Coefficients	
Standard Error:	639000
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 410-70996/9	0.2	0.065757	10.0	1578236.0	0.328785	Y
2	IC 410-70996/8	0.5	0.166919	10.0	1589997.0	0.333837	Y
3	IC 410-70996/7	1.0	0.359997	10.0	1600264.0	0.359997	Y
4	IC 410-70996/6	2.0	0.695754	10.0	1604620.0	0.347877	Y
5	IC 410-70996/5	5.0	1.711637	10.0	1611346.0	0.342327	Y
6	ICIS 410-70996/4	10.0	3.431398	10.0	1636269.0	0.34314	Y
7	IC 410-70996/3	25.0	8.623797	10.0	1658425.0	0.344952	Y



Calibration

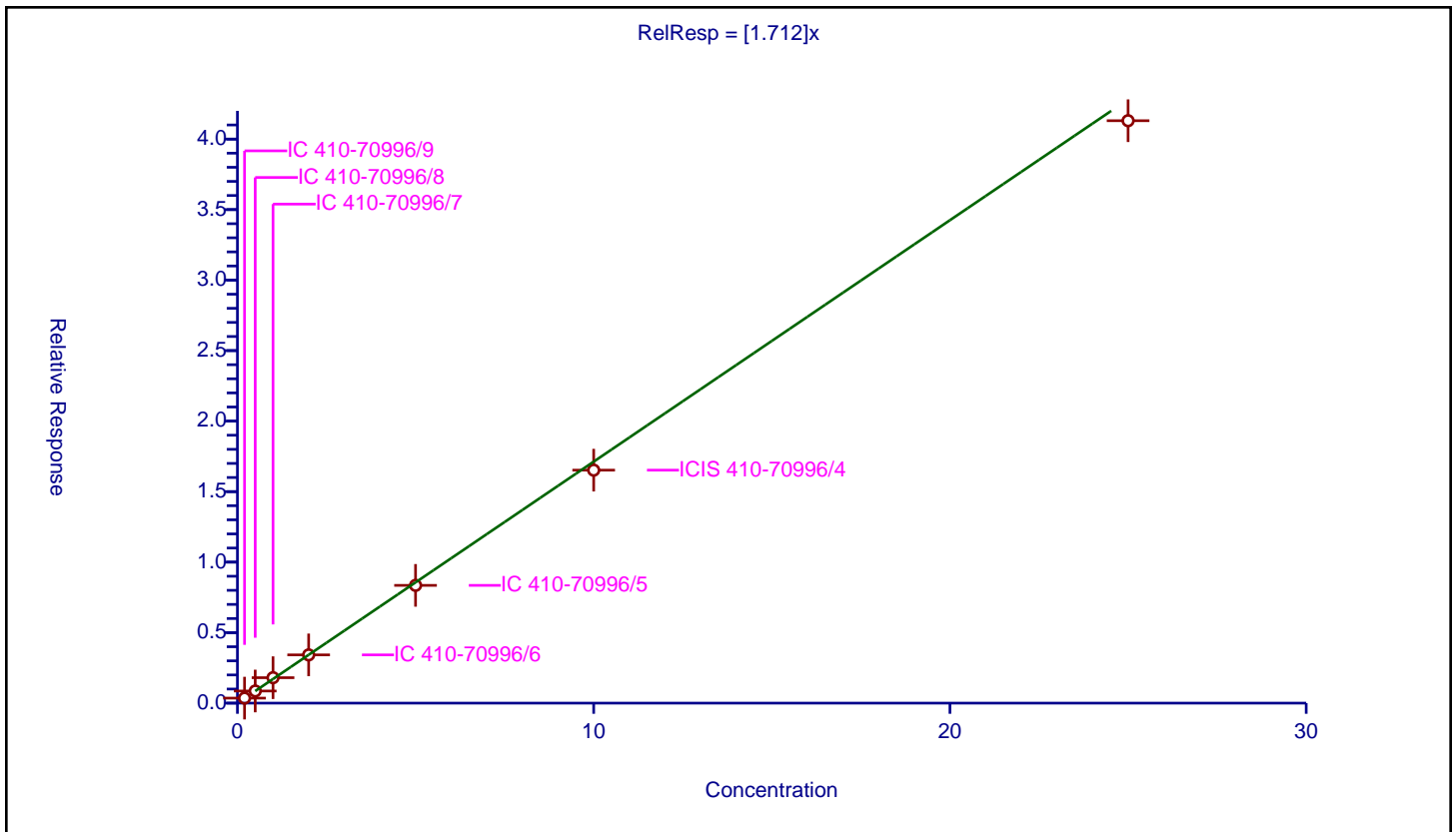
/ Ethylbenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.712

Error Coefficients	
Standard Error:	3070000
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 410-70996/9	0.2	0.355093	10.0	1578236.0	1.775463	Y
2	IC 410-70996/8	0.5	0.860731	10.0	1589997.0	1.721462	Y
3	IC 410-70996/7	1.0	1.804527	10.0	1600264.0	1.804527	Y
4	IC 410-70996/6	2.0	3.421153	10.0	1604620.0	1.710576	Y
5	IC 410-70996/5	5.0	8.351713	10.0	1611346.0	1.670343	Y
6	ICIS 410-70996/4	10.0	16.521959	10.0	1636269.0	1.652196	Y
7	IC 410-70996/3	25.0	41.303852	10.0	1658425.0	1.652154	Y



Calibration

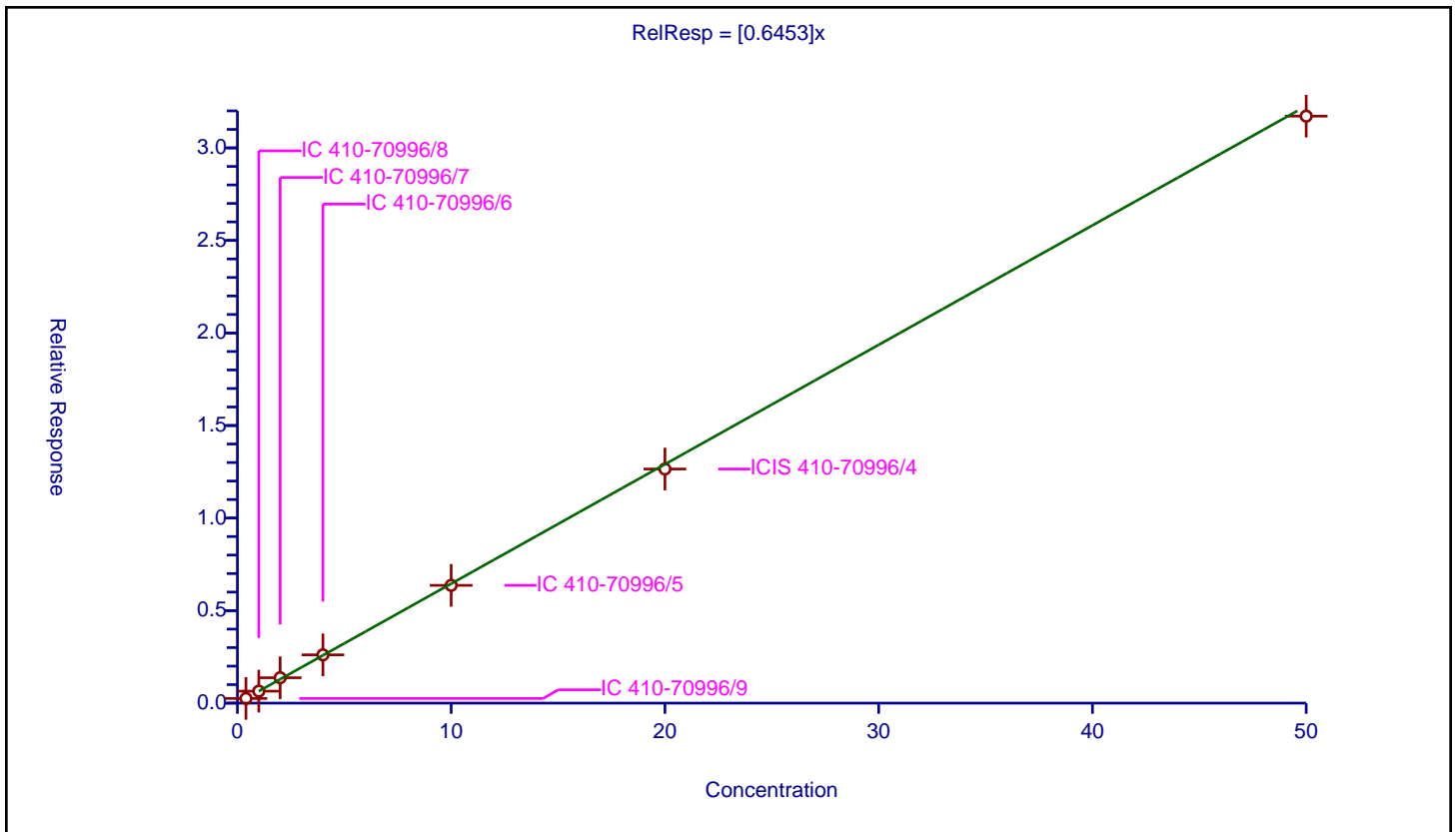
/ m-Xylene & p-Xylene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.6453

Error Coefficients	
Standard Error:	2350000
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 410-70996/9	0.4	0.252104	10.0	1578236.0	0.630261	Y
2	IC 410-70996/8	1.0	0.646328	10.0	1589997.0	0.646328	Y
3	IC 410-70996/7	2.0	1.37153	10.0	1600264.0	0.685765	Y
4	IC 410-70996/6	4.0	2.608306	10.0	1604620.0	0.652077	Y
5	IC 410-70996/5	10.0	6.362184	10.0	1611346.0	0.636218	Y
6	ICIS 410-70996/4	20.0	12.649405	10.0	1636269.0	0.63247	Y
7	IC 410-70996/3	50.0	31.715664	10.0	1658425.0	0.634313	Y



Calibration

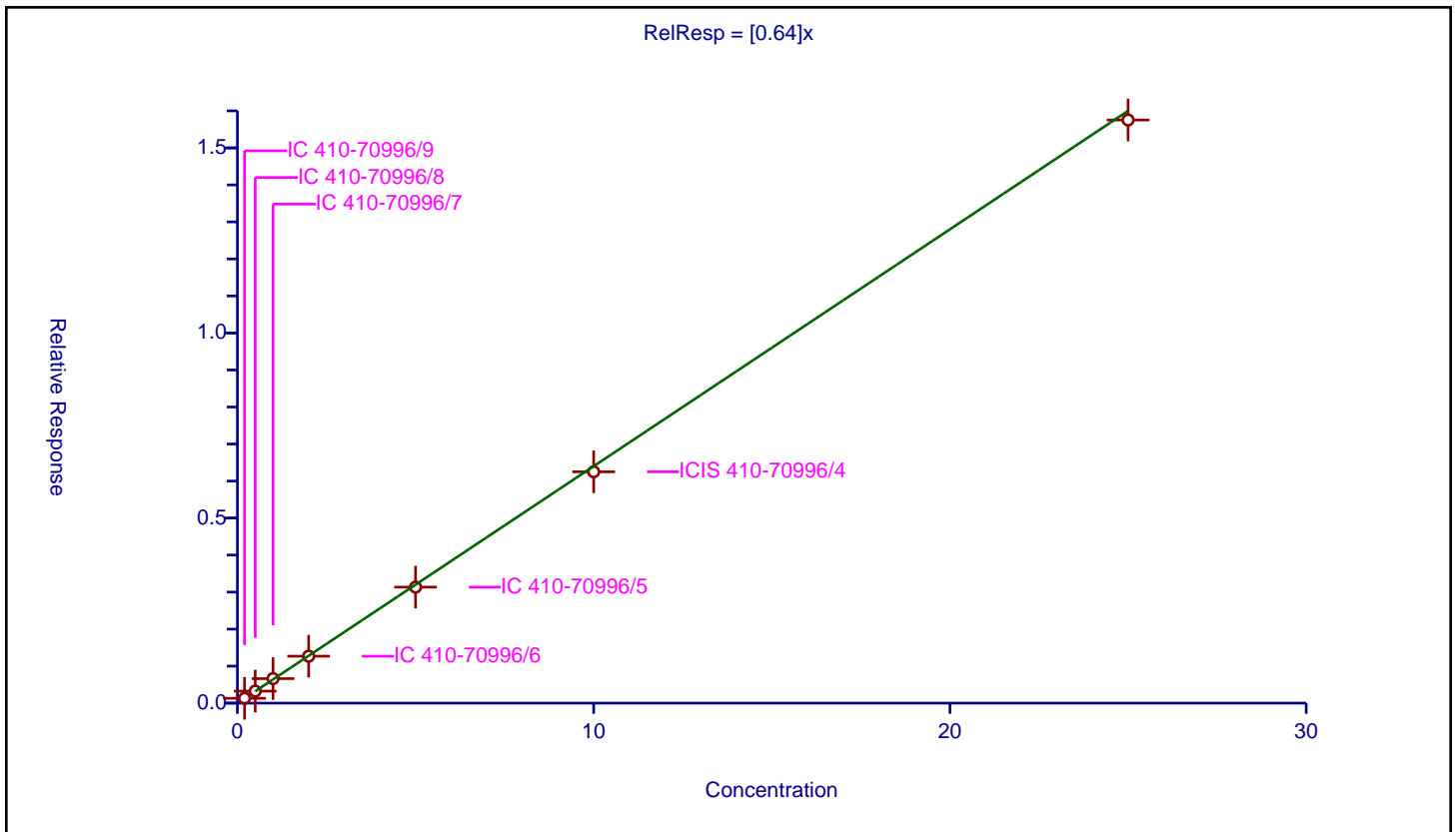
/ o-Xylene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.64

Error Coefficients	
Standard Error:	1170000
Relative Standard Error:	2.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-70996/9	0.2	0.130481	10.0	1578236.0	0.652406	Y
2	IC 410-70996/8	0.5	0.32485	10.0	1589997.0	0.649699	Y
3	IC 410-70996/7	1.0	0.662047	10.0	1600264.0	0.662047	Y
4	IC 410-70996/6	2.0	1.2684	10.0	1604620.0	0.6342	Y
5	IC 410-70996/5	5.0	3.133833	10.0	1611346.0	0.626767	Y
6	ICIS 410-70996/4	10.0	6.249443	10.0	1636269.0	0.624944	Y
7	IC 410-70996/3	25.0	15.753055	10.0	1658425.0	0.630122	Y



Calibration

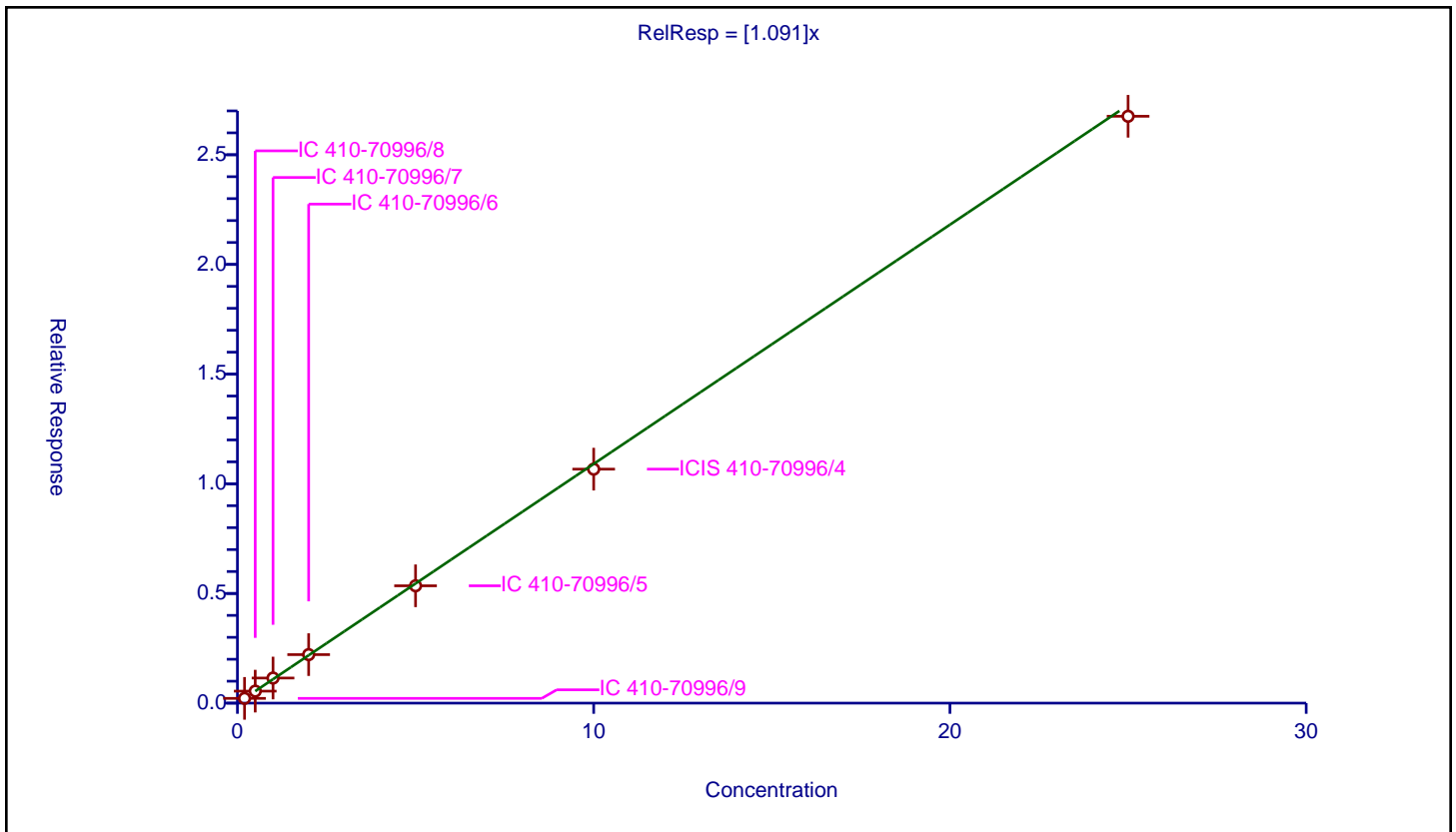
/ Styrene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.091

Error Coefficients	
Standard Error:	1990000
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 410-70996/9	0.2	0.216653	10.0	1578236.0	1.083266	Y
2	IC 410-70996/8	0.5	0.547032	10.0	1589997.0	1.094065	Y
3	IC 410-70996/7	1.0	1.14413	10.0	1600264.0	1.14413	Y
4	IC 410-70996/6	2.0	2.211701	10.0	1604620.0	1.105851	Y
5	IC 410-70996/5	5.0	5.349267	10.0	1611346.0	1.069853	Y
6	ICIS 410-70996/4	10.0	10.66695	10.0	1636269.0	1.066695	Y
7	IC 410-70996/3	25.0	26.754583	10.0	1658425.0	1.070183	Y



Calibration

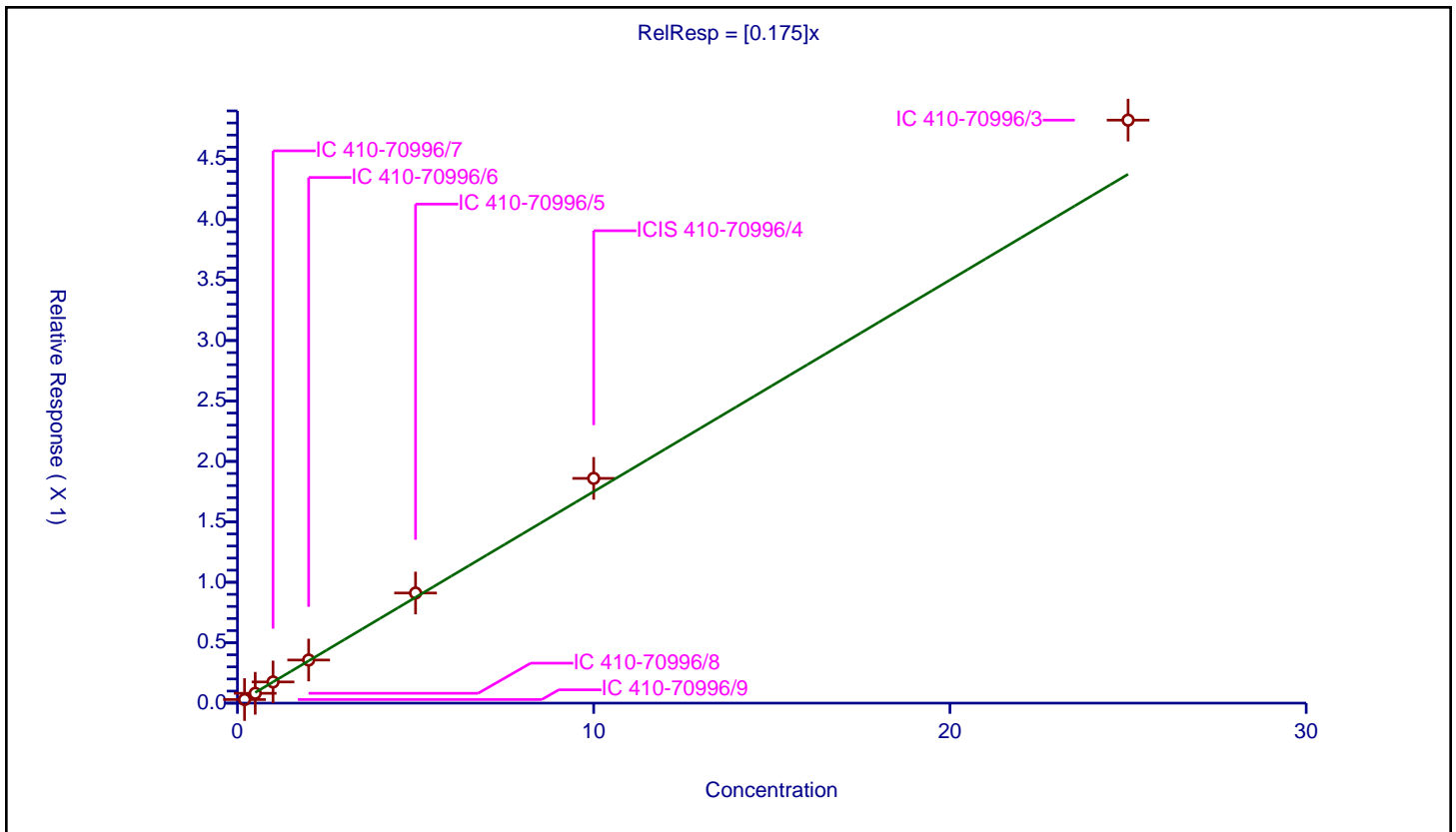
/ Bromoform

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.175

Error Coefficients	
Standard Error:	356000
Relative Standard Error:	8.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-70996/9	0.2	0.029577	10.0	1578236.0	0.147887	Y
2	IC 410-70996/8	0.5	0.081327	10.0	1589997.0	0.162654	Y
3	IC 410-70996/7	1.0	0.175259	10.0	1600264.0	0.175259	Y
4	IC 410-70996/6	2.0	0.356751	10.0	1604620.0	0.178376	Y
5	IC 410-70996/5	5.0	0.911058	10.0	1611346.0	0.182212	Y
6	ICIS 410-70996/4	10.0	1.859401	10.0	1636269.0	0.18594	Y
7	IC 410-70996/3	25.0	4.823601	10.0	1658425.0	0.192944	Y



Calibration

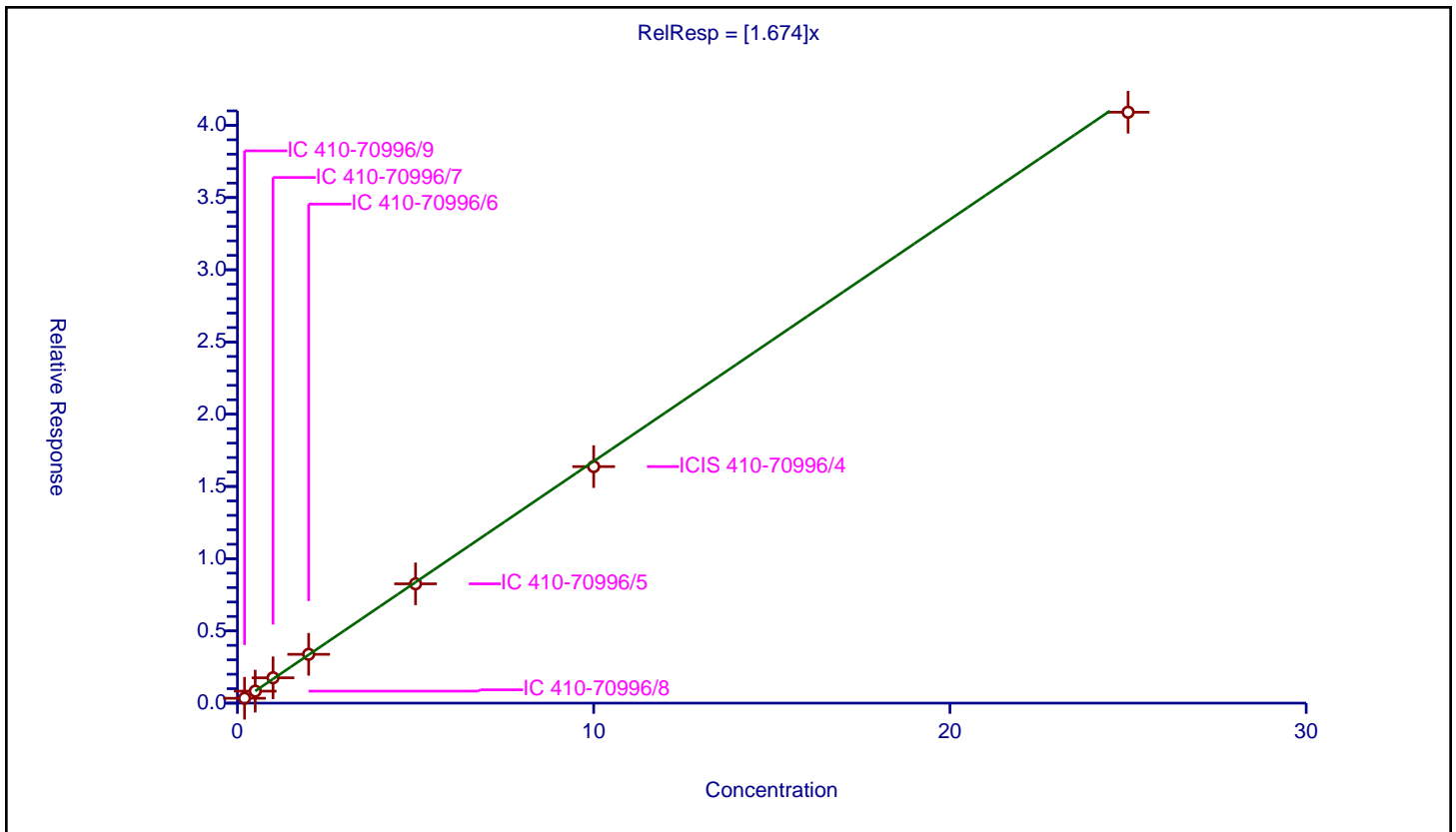
/ Isopropylbenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.674

Error Coefficients	
Standard Error:	3040000
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 410-70996/9	0.2	0.337149	10.0	1578236.0	1.685743	Y
2	IC 410-70996/8	0.5	0.831385	10.0	1589997.0	1.66277	Y
3	IC 410-70996/7	1.0	1.754204	10.0	1600264.0	1.754204	Y
4	IC 410-70996/6	2.0	3.379292	10.0	1604620.0	1.689646	Y
5	IC 410-70996/5	5.0	8.260181	10.0	1611346.0	1.652036	Y
6	ICIS 410-70996/4	10.0	16.373732	10.0	1636269.0	1.637373	Y
7	IC 410-70996/3	25.0	40.90806	10.0	1658425.0	1.636322	Y



Calibration

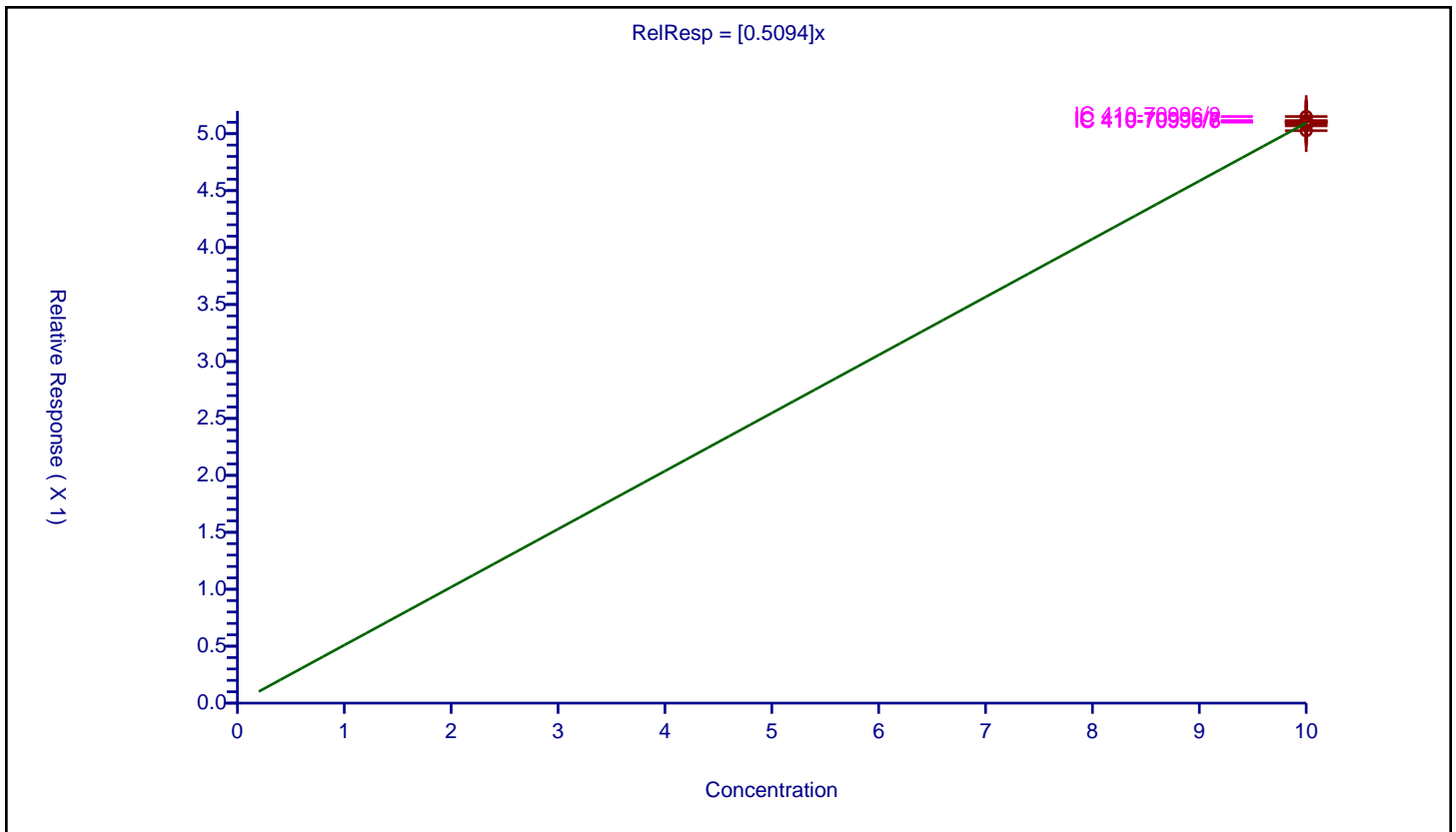
/ 4-Bromofluorobenzene (Surr)

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.5094

Error Coefficients	
Standard Error:	886000
Relative Standard Error:	0.8
Correlation Coefficient:	0
Coefficient of Determination (Adjusted):	0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-70996/3	10.0	5.026317	10.0	1658425.0	0.502632	Y
2	ICIS 410-70996/4	10.0	5.068586	10.0	1636269.0	0.506859	Y
3	IC 410-70996/5	10.0	5.089044	10.0	1611346.0	0.508904	Y
4	IC 410-70996/6	10.0	5.100859	10.0	1604620.0	0.510086	Y
5	IC 410-70996/7	10.0	5.115162	10.0	1600264.0	0.511516	Y
6	IC 410-70996/8	10.0	5.107494	10.0	1589997.0	0.510749	Y
7	IC 410-70996/9	10.0	5.150541	10.0	1578236.0	0.515054	Y



Calibration

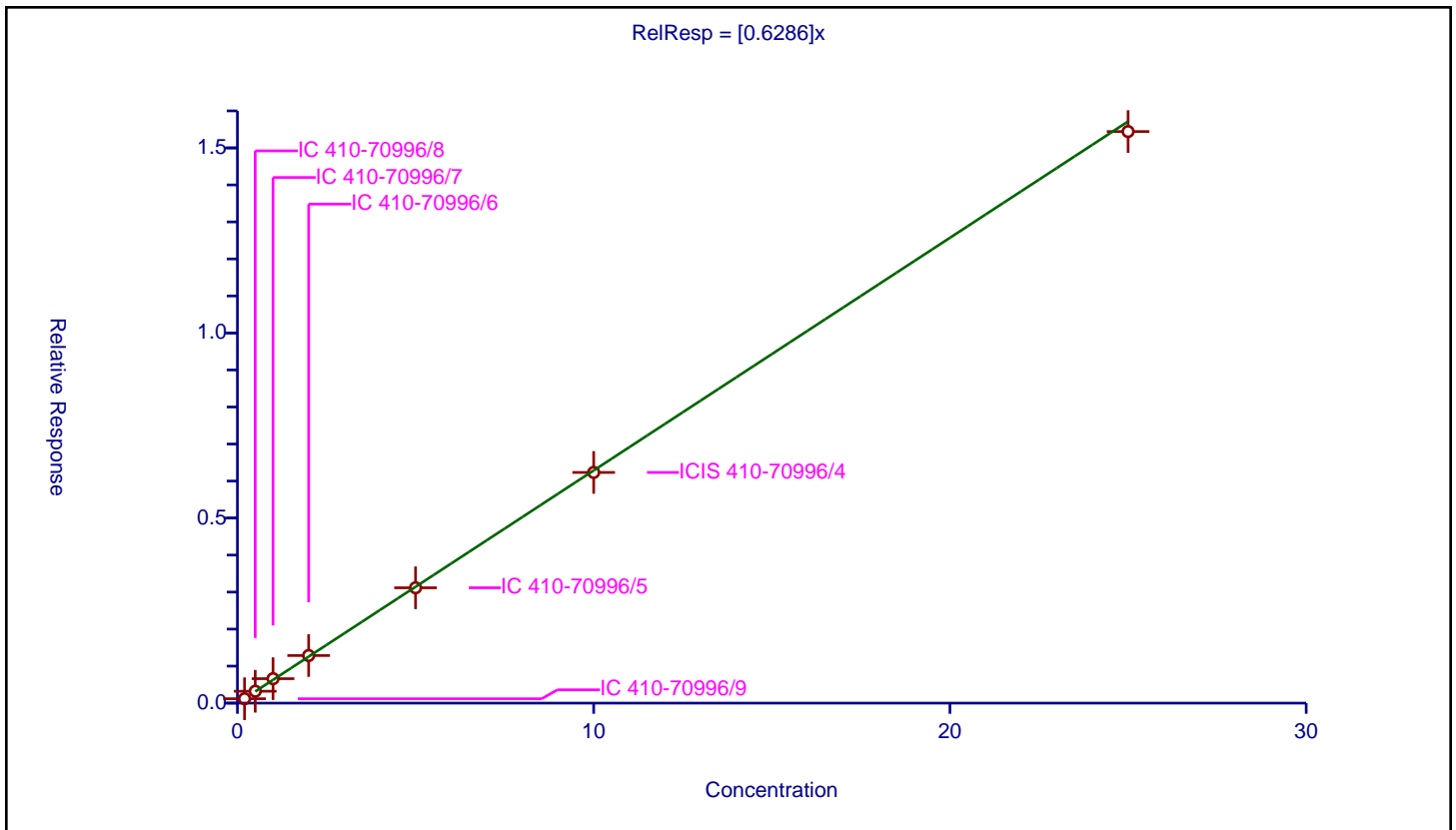
/ 1,1,2,2-Tetrachloroethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.6286

Error Coefficients	
Standard Error:	621000
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 410-70996/9	0.2	0.118032	10.0	857732.0	0.590161	Y
2	IC 410-70996/8	0.5	0.321383	10.0	861870.0	0.642765	Y
3	IC 410-70996/7	1.0	0.660211	10.0	860391.0	0.660211	Y
4	IC 410-70996/6	2.0	1.28567	10.0	869181.0	0.642835	Y
5	IC 410-70996/5	5.0	3.115913	10.0	878834.0	0.623183	Y
6	ICIS 410-70996/4	10.0	6.232026	10.0	888382.0	0.623203	Y
7	IC 410-70996/3	25.0	15.441781	10.0	896780.0	0.617671	Y



Calibration

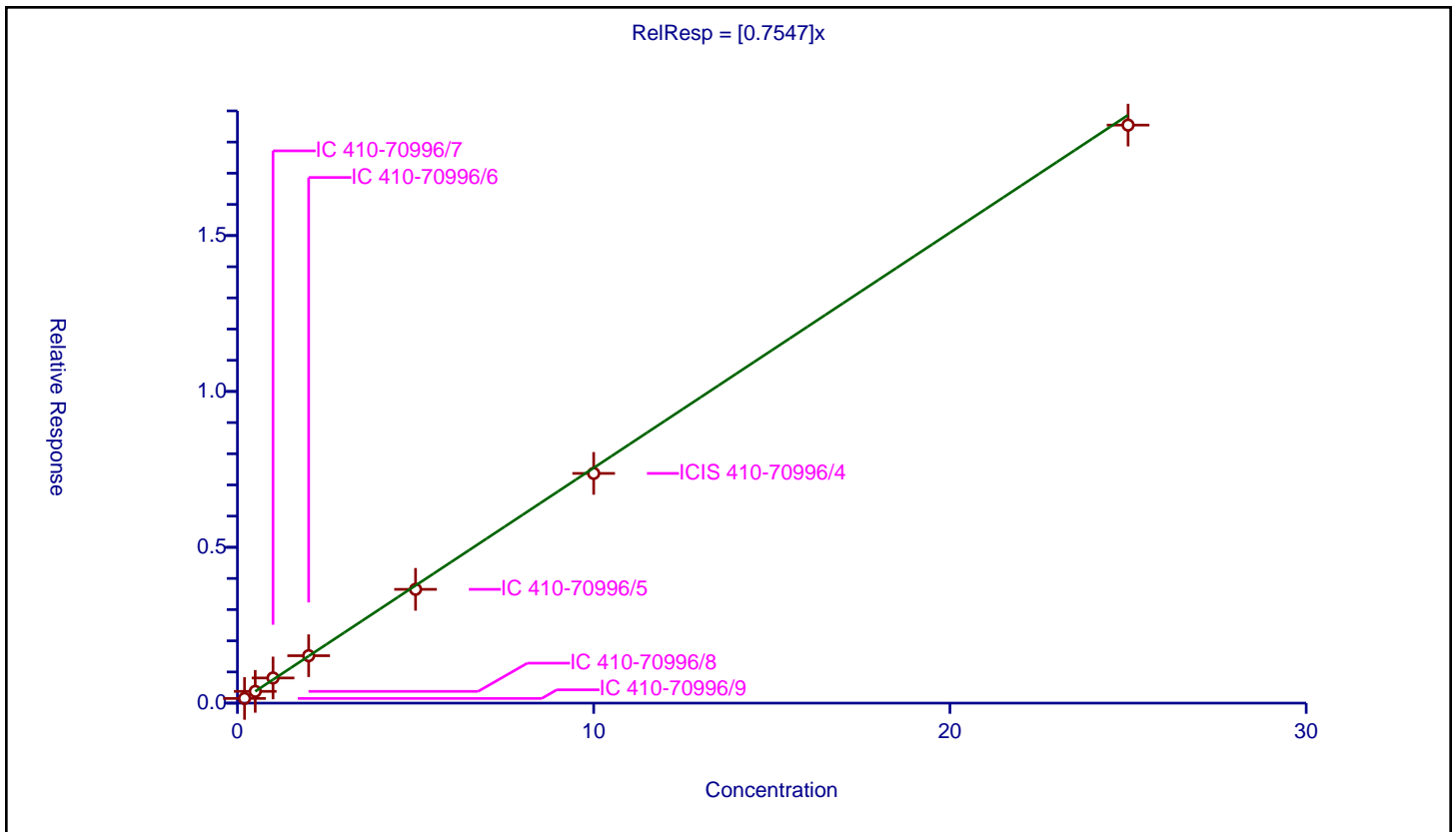
/ Bromobenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.7547

Error Coefficients	
Standard Error:	744000
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 410-70996/9	0.2	0.150327	10.0	857732.0	0.751633	Y
2	IC 410-70996/8	0.5	0.376878	10.0	861870.0	0.753756	Y
3	IC 410-70996/7	1.0	0.807424	10.0	860391.0	0.807424	Y
4	IC 410-70996/6	2.0	1.521697	10.0	869181.0	0.760848	Y
5	IC 410-70996/5	5.0	3.650963	10.0	878834.0	0.730193	Y
6	ICIS 410-70996/4	10.0	7.370253	10.0	888382.0	0.737025	Y
7	IC 410-70996/3	25.0	18.544994	10.0	896780.0	0.7418	Y



Calibration

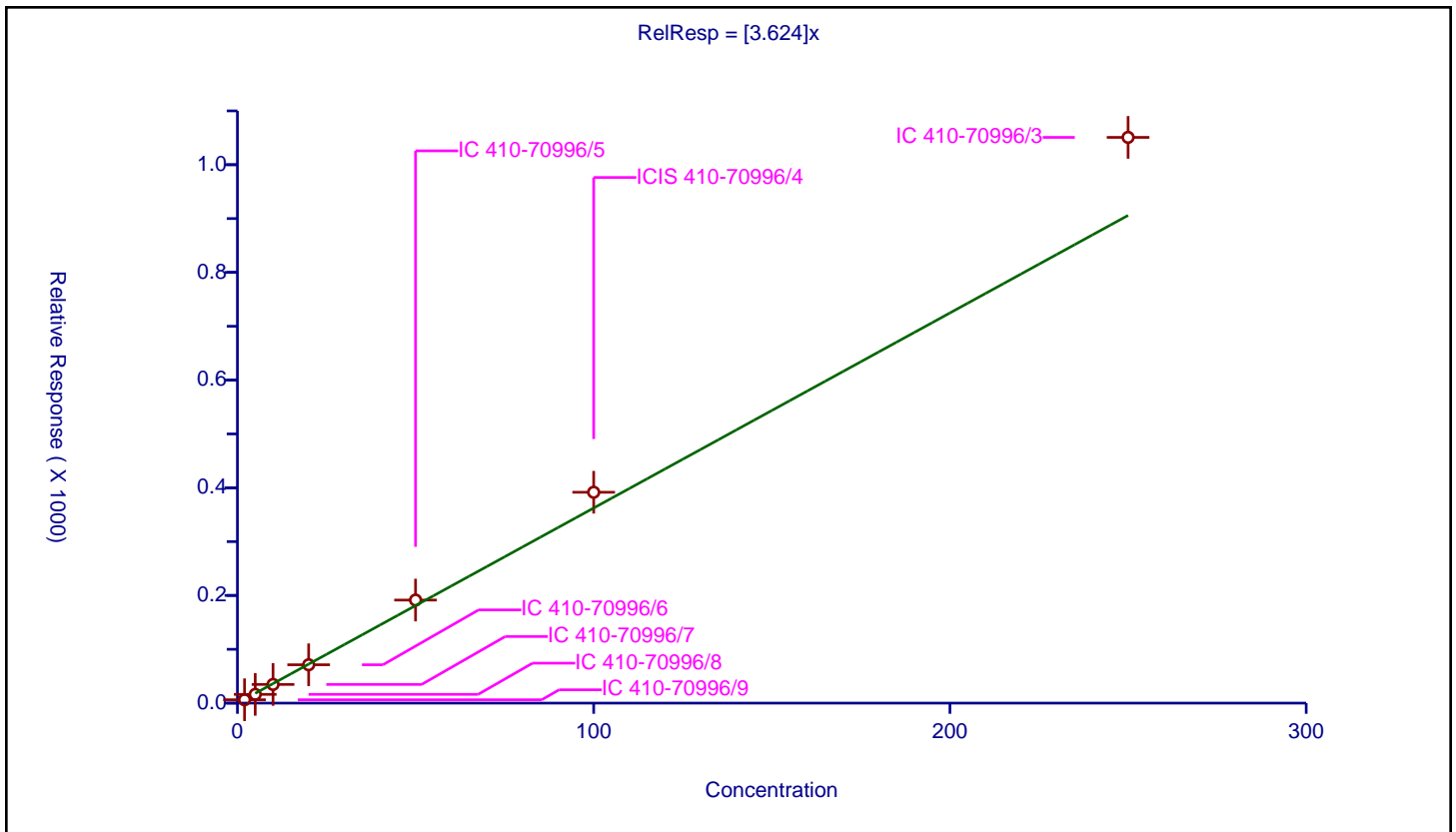
/ trans-1,4-Dichloro-2-butene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	3.624

Error Coefficients	
Standard Error:	1670000
Relative Standard Error:	10.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-70996/9	2.0	6.275612	50.0	184731.0	3.137806	Y
2	IC 410-70996/8	5.0	16.245136	50.0	195834.0	3.249027	Y
3	IC 410-70996/7	10.0	34.681371	50.0	201206.0	3.468137	Y
4	IC 410-70996/6	20.0	71.23699	50.0	195329.0	3.561849	Y
5	IC 410-70996/5	50.0	191.416907	50.0	183343.0	3.828338	Y
6	ICIS 410-70996/4	100.0	391.675712	50.0	186094.0	3.916757	Y
7	IC 410-70996/3	250.0	1050.803645	50.0	177877.0	4.203215	Y



Calibration

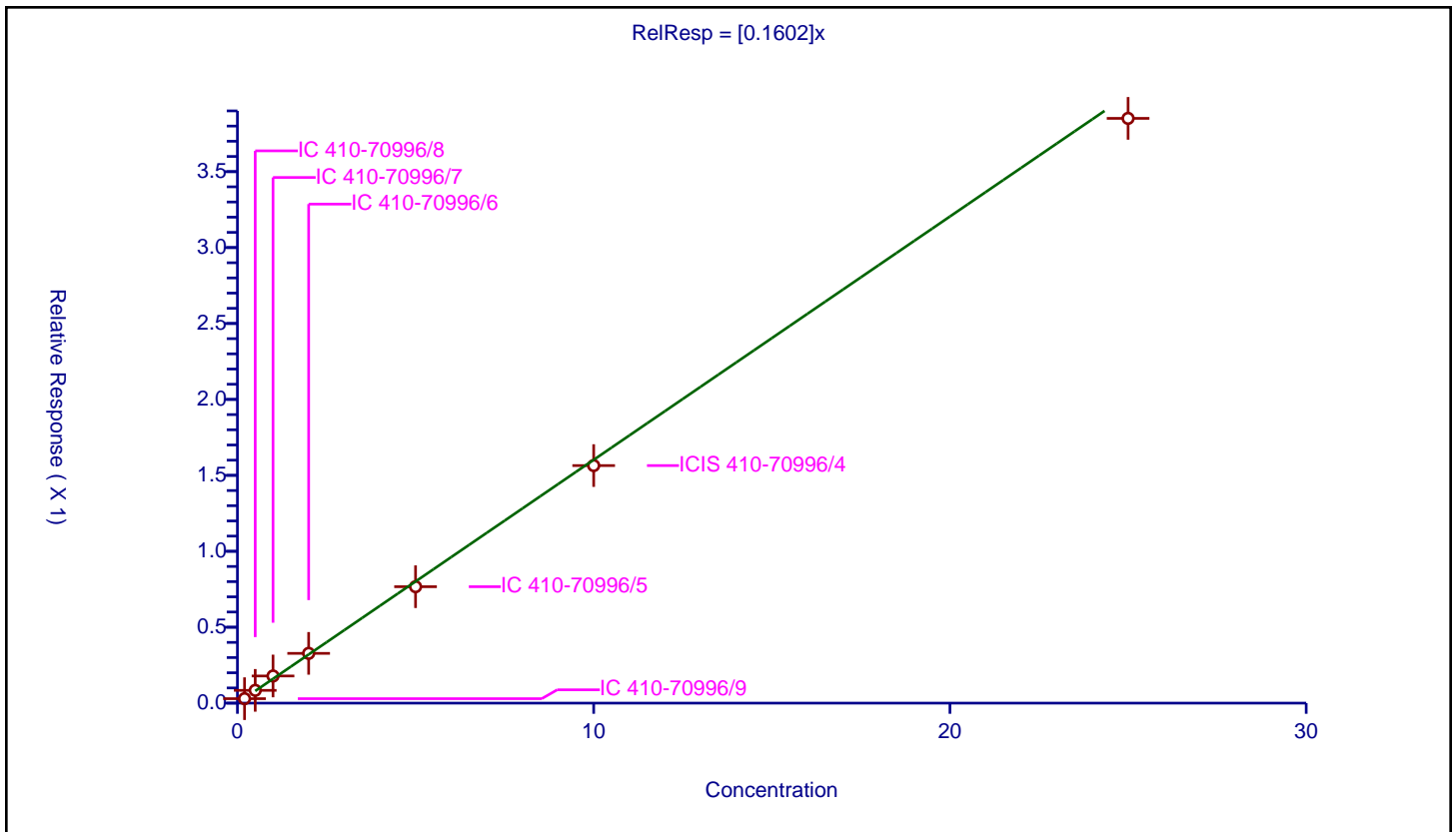
/ 1,2,3-Trichloropropane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.1602

Error Coefficients	
Standard Error:	155000
Relative Standard Error:	6.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-70996/9	0.2	0.029368	10.0	857732.0	0.146841	Y
2	IC 410-70996/8	0.5	0.084166	10.0	861870.0	0.168332	Y
3	IC 410-70996/7	1.0	0.178721	10.0	860391.0	0.178721	Y
4	IC 410-70996/6	2.0	0.327791	10.0	869181.0	0.163896	Y
5	IC 410-70996/5	5.0	0.766789	10.0	878834.0	0.153358	Y
6	ICIS 410-70996/4	10.0	1.564417	10.0	888382.0	0.156442	Y
7	IC 410-70996/3	25.0	3.850643	10.0	896780.0	0.154026	Y



Calibration

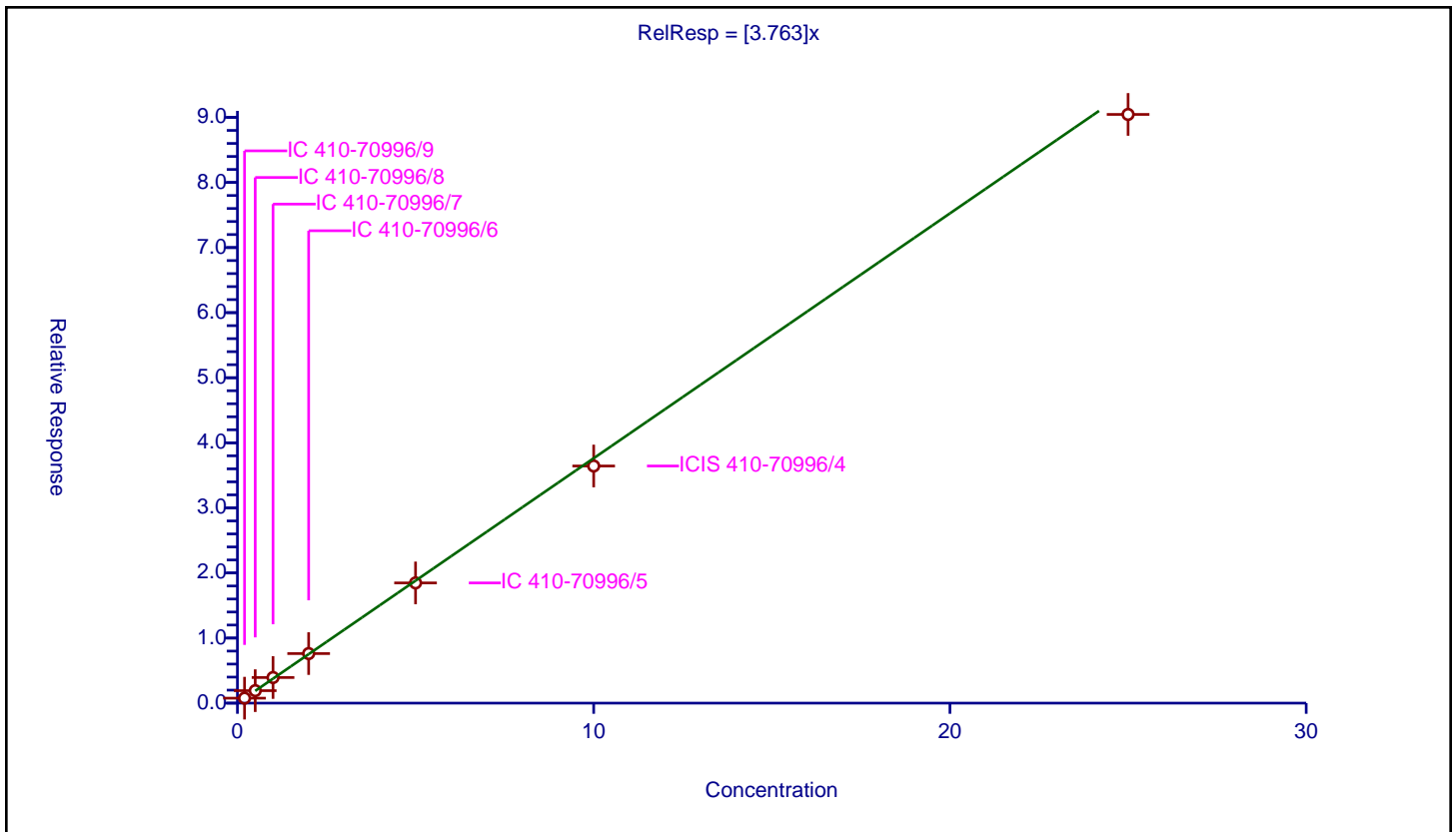
/ N-Propylbenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	3.763

Error Coefficients	
Standard Error:	3640000
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 410-70996/9	0.2	0.761695	10.0	857732.0	3.808474	Y
2	IC 410-70996/8	0.5	1.915718	10.0	861870.0	3.831436	Y
3	IC 410-70996/7	1.0	3.934223	10.0	860391.0	3.934223	Y
4	IC 410-70996/6	2.0	7.615721	10.0	869181.0	3.807861	Y
5	IC 410-70996/5	5.0	18.471304	10.0	878834.0	3.694261	Y
6	ICIS 410-70996/4	10.0	36.436781	10.0	888382.0	3.643678	Y
7	IC 410-70996/3	25.0	90.454905	10.0	896780.0	3.618196	Y



Calibration

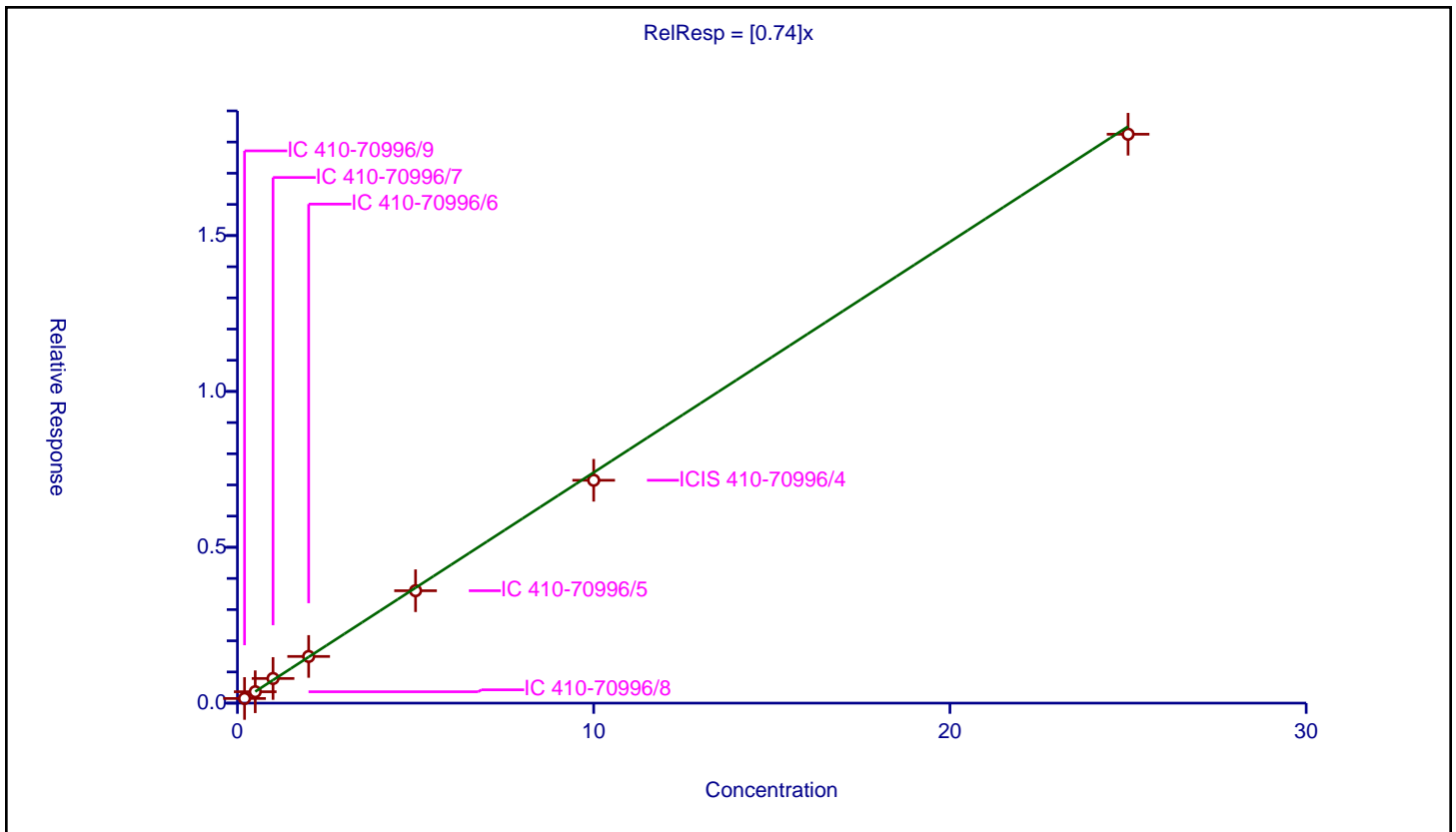
/ 2-Chlorotoluene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.74

Error Coefficients	
Standard Error:	731000
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 410-70996/9	0.2	0.148741	10.0	857732.0	0.743705	Y
2	IC 410-70996/8	0.5	0.36531	10.0	861870.0	0.730621	Y
3	IC 410-70996/7	1.0	0.790606	10.0	860391.0	0.790606	Y
4	IC 410-70996/6	2.0	1.49726	10.0	869181.0	0.74863	Y
5	IC 410-70996/5	5.0	3.606597	10.0	878834.0	0.721319	Y
6	ICIS 410-70996/4	10.0	7.149661	10.0	888382.0	0.714966	Y
7	IC 410-70996/3	25.0	18.251656	10.0	896780.0	0.730066	Y



Calibration

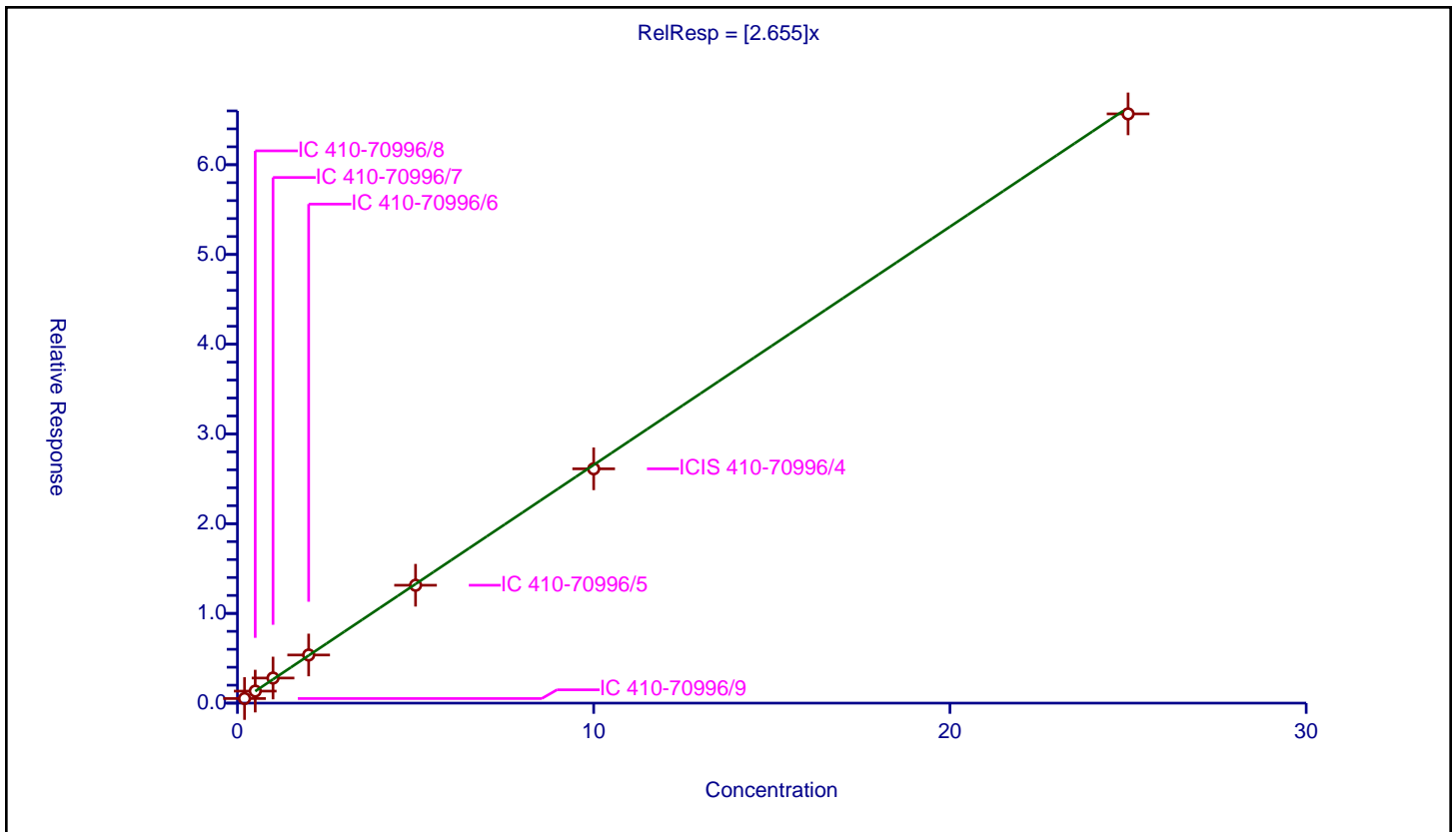
/ 1,3,5-Trimethylbenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	2.655

Error Coefficients	
Standard Error:	2640000
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 410-70996/9	0.2	0.511582	10.0	857732.0	2.557909	Y
2	IC 410-70996/8	0.5	1.338624	10.0	861870.0	2.677248	Y
3	IC 410-70996/7	1.0	2.798588	10.0	860391.0	2.798588	Y
4	IC 410-70996/6	2.0	5.366155	10.0	869181.0	2.683078	Y
5	IC 410-70996/5	5.0	13.137123	10.0	878834.0	2.627425	Y
6	ICIS 410-70996/4	10.0	26.111009	10.0	888382.0	2.611101	Y
7	IC 410-70996/3	25.0	65.668302	10.0	896780.0	2.626732	Y



Calibration

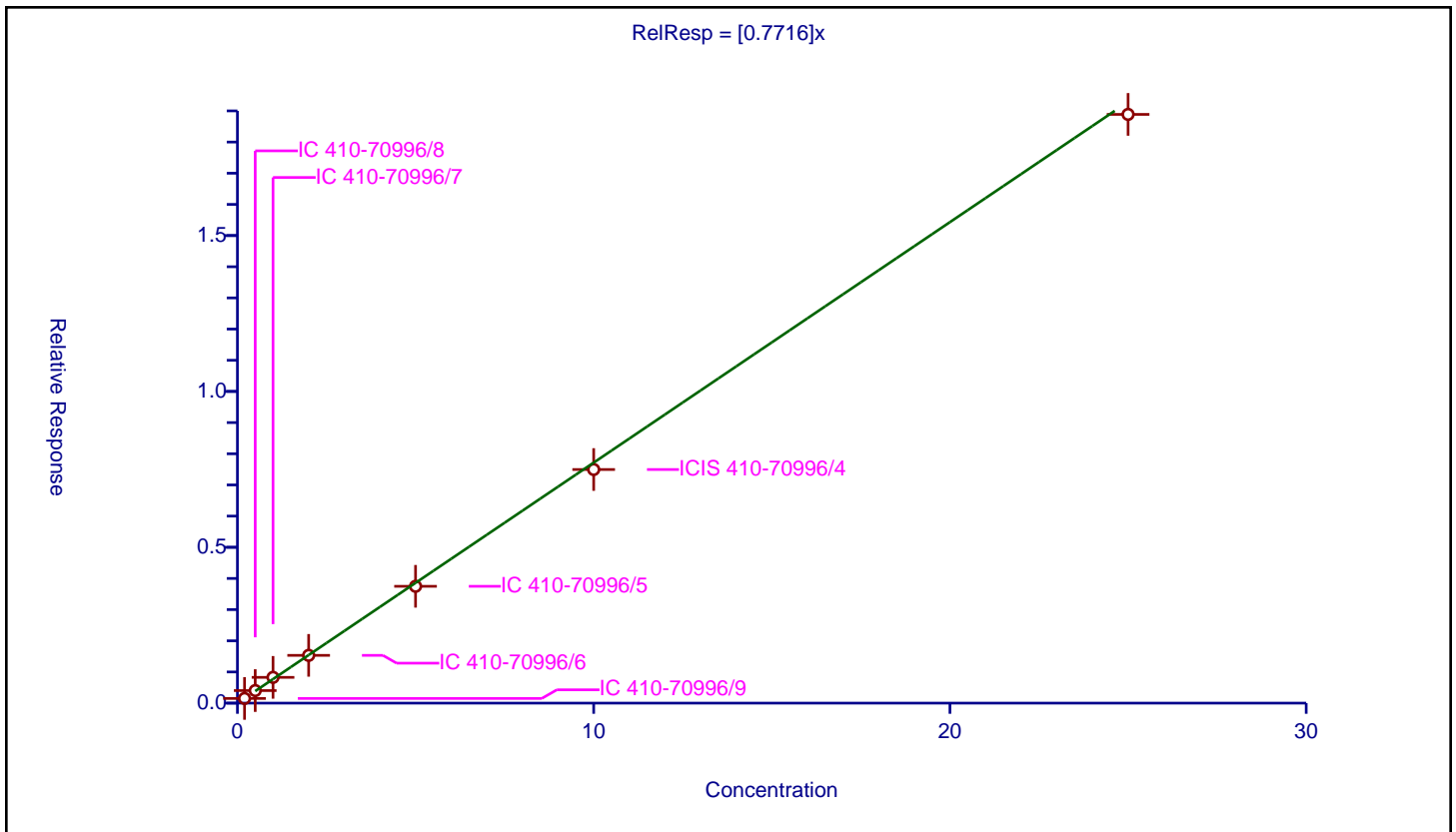
/ 4-Chlorotoluene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.7716

Error Coefficients	
Standard Error:	758000
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 410-70996/9	0.2	0.149674	10.0	857732.0	0.748369	Y
2	IC 410-70996/8	0.5	0.402764	10.0	861870.0	0.805528	Y
3	IC 410-70996/7	1.0	0.826334	10.0	860391.0	0.826334	Y
4	IC 410-70996/6	2.0	1.532109	10.0	869181.0	0.766054	Y
5	IC 410-70996/5	5.0	3.748194	10.0	878834.0	0.749639	Y
6	ICIS 410-70996/4	10.0	7.494997	10.0	888382.0	0.7495	Y
7	IC 410-70996/3	25.0	18.88733	10.0	896780.0	0.755493	Y



Calibration

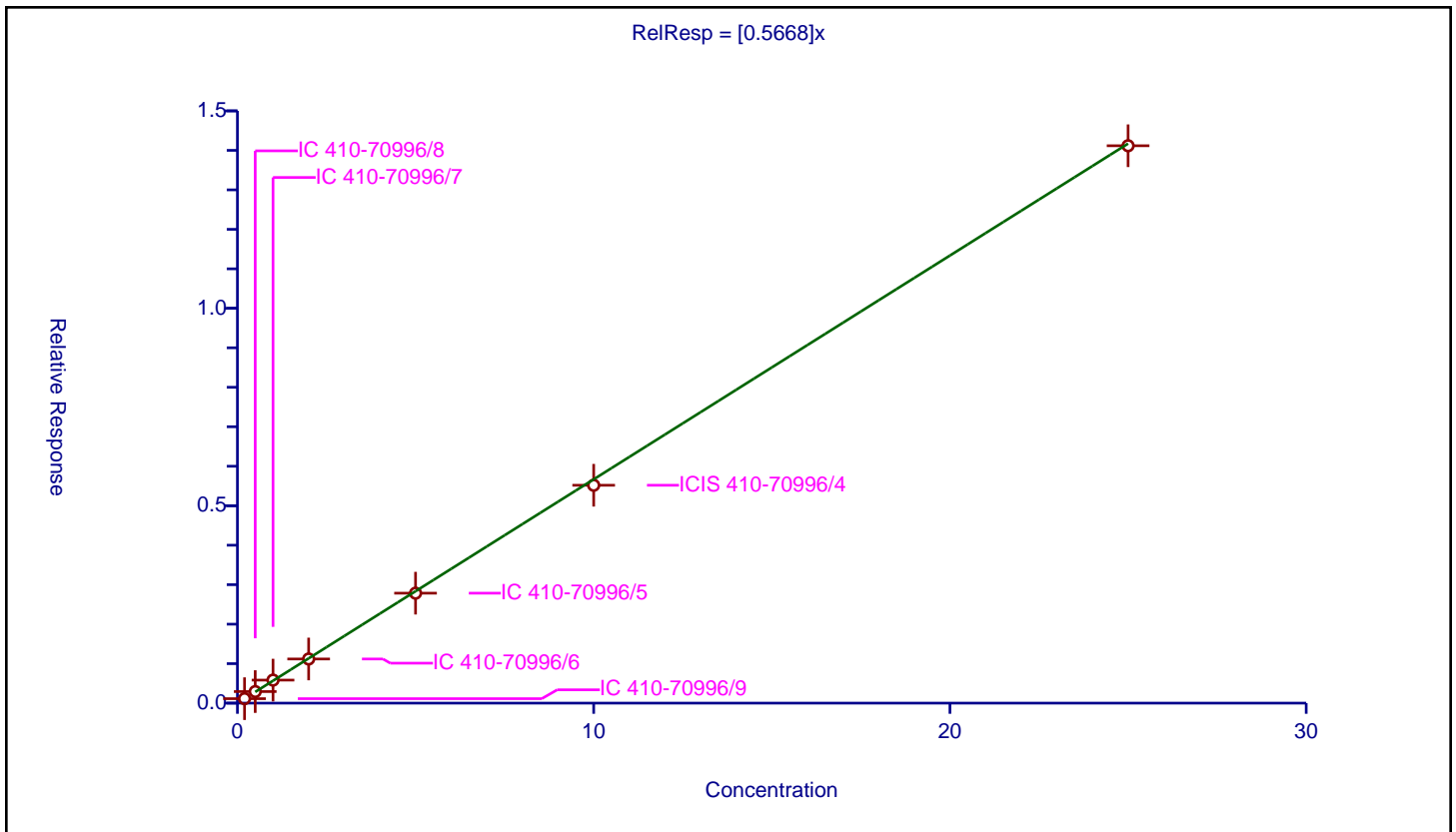
/ tert-Butylbenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.5668

Error Coefficients	
Standard Error:	565000
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 410-70996/9	0.2	0.113194	10.0	857732.0	0.565969	Y
2	IC 410-70996/8	0.5	0.292979	10.0	861870.0	0.585958	Y
3	IC 410-70996/7	1.0	0.58327	10.0	860391.0	0.58327	Y
4	IC 410-70996/6	2.0	1.118283	10.0	869181.0	0.559141	Y
5	IC 410-70996/5	5.0	2.784872	10.0	878834.0	0.556974	Y
6	ICIS 410-70996/4	10.0	5.518437	10.0	888382.0	0.551844	Y
7	IC 410-70996/3	25.0	14.116796	10.0	896780.0	0.564672	Y



Calibration

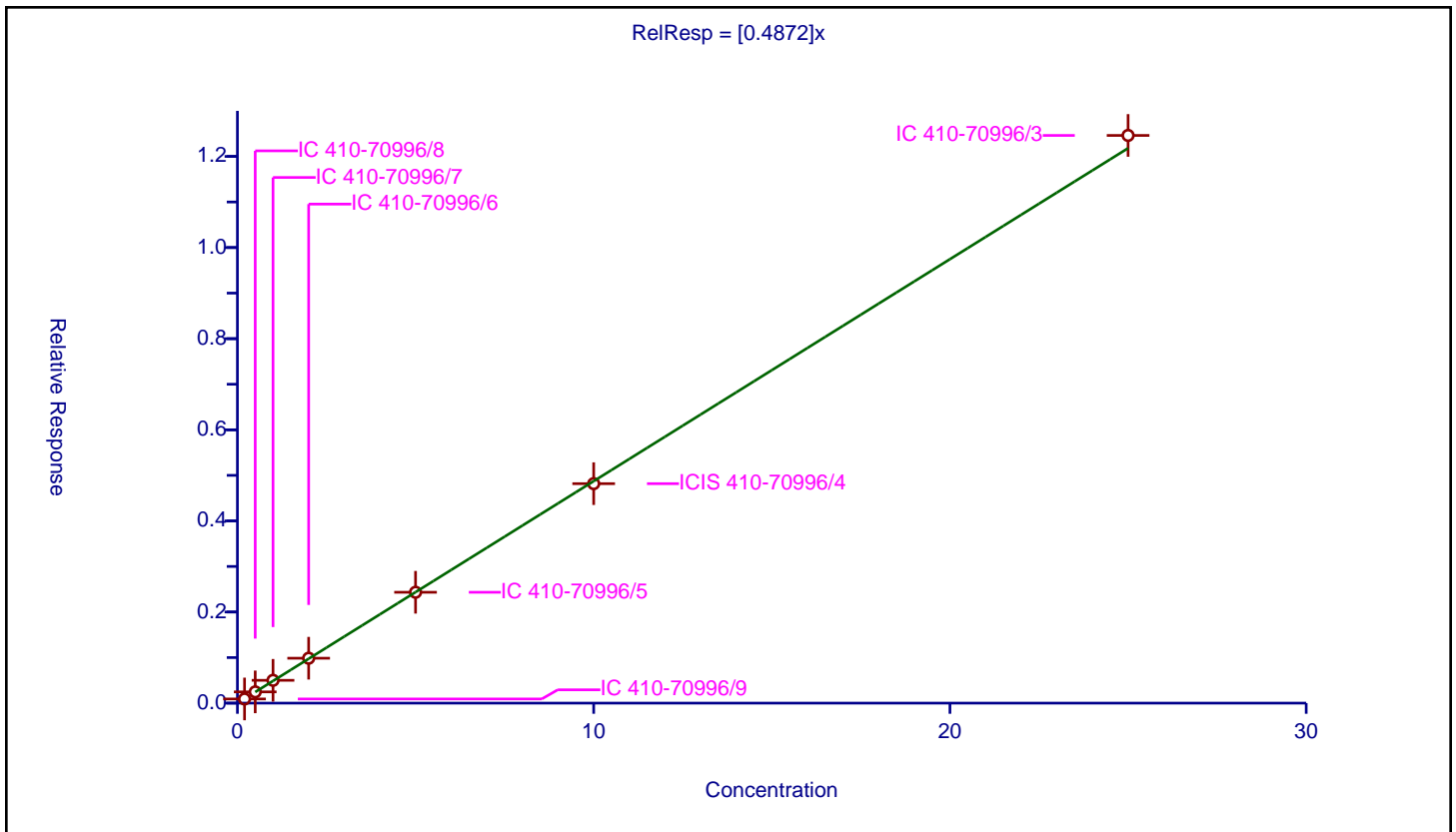
/ Pentachloroethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4872

Error Coefficients	
Standard Error:	498000
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 410-70996/9	0.2	0.091357	10.0	857732.0	0.456786	Y
2	IC 410-70996/8	0.5	0.246743	10.0	861870.0	0.493485	Y
3	IC 410-70996/7	1.0	0.50054	10.0	860391.0	0.50054	Y
4	IC 410-70996/6	2.0	0.985813	10.0	869181.0	0.492907	Y
5	IC 410-70996/5	5.0	2.433577	10.0	878834.0	0.486715	Y
6	ICIS 410-70996/4	10.0	4.817511	10.0	888382.0	0.481751	Y
7	IC 410-70996/3	25.0	12.461038	10.0	896780.0	0.498442	Y



Calibration

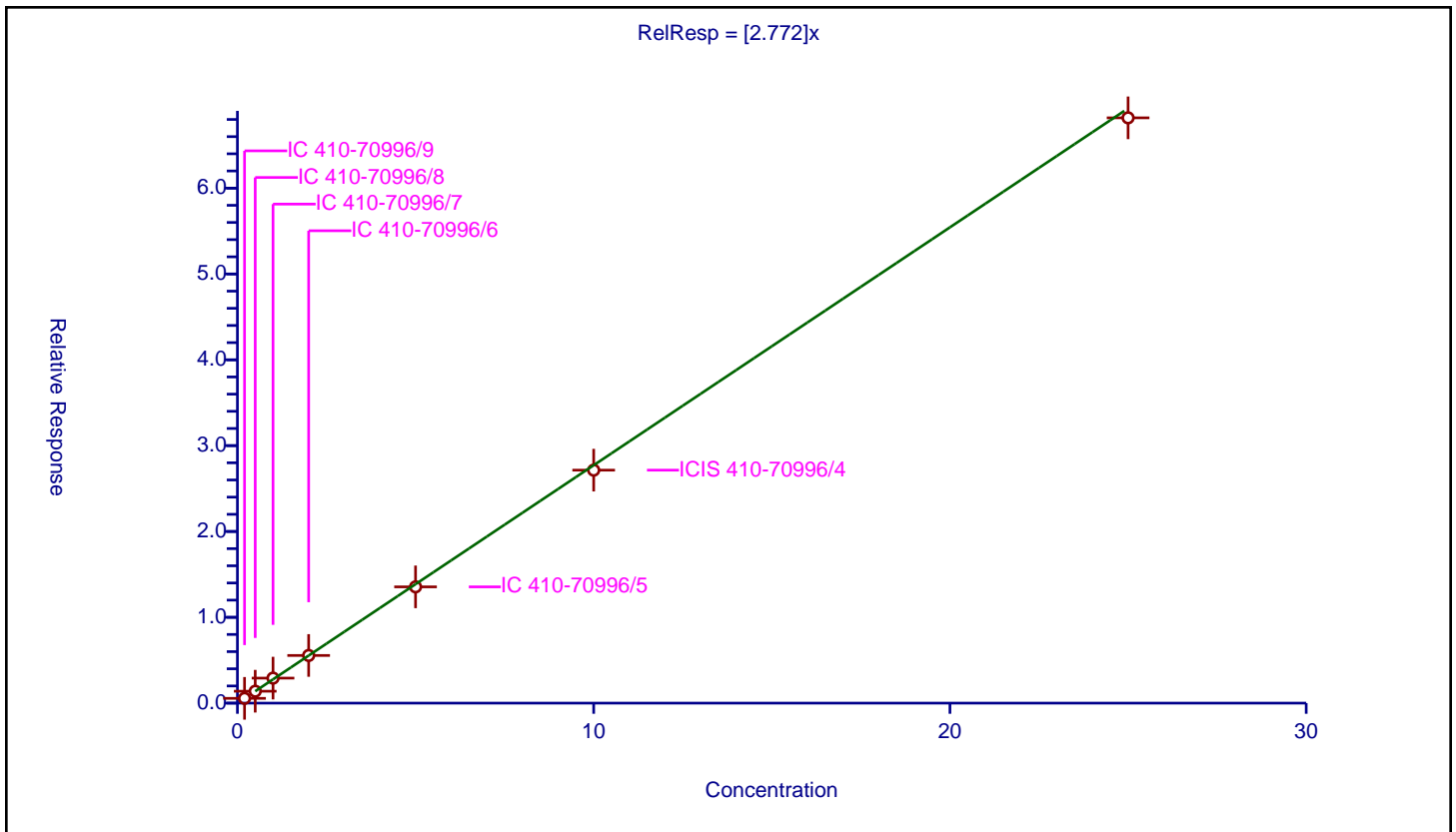
/ 1,2,4-Trimethylbenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	2.772

Error Coefficients	
Standard Error:	2740000
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 410-70996/9	0.2	0.555803	10.0	857732.0	2.779015	Y
2	IC 410-70996/8	0.5	1.389084	10.0	861870.0	2.778168	Y
3	IC 410-70996/7	1.0	2.916767	10.0	860391.0	2.916767	Y
4	IC 410-70996/6	2.0	5.552583	10.0	869181.0	2.776292	Y
5	IC 410-70996/5	5.0	13.547211	10.0	878834.0	2.709442	Y
6	ICIS 410-70996/4	10.0	27.142389	10.0	888382.0	2.714239	Y
7	IC 410-70996/3	25.0	68.188686	10.0	896780.0	2.727547	Y



Calibration

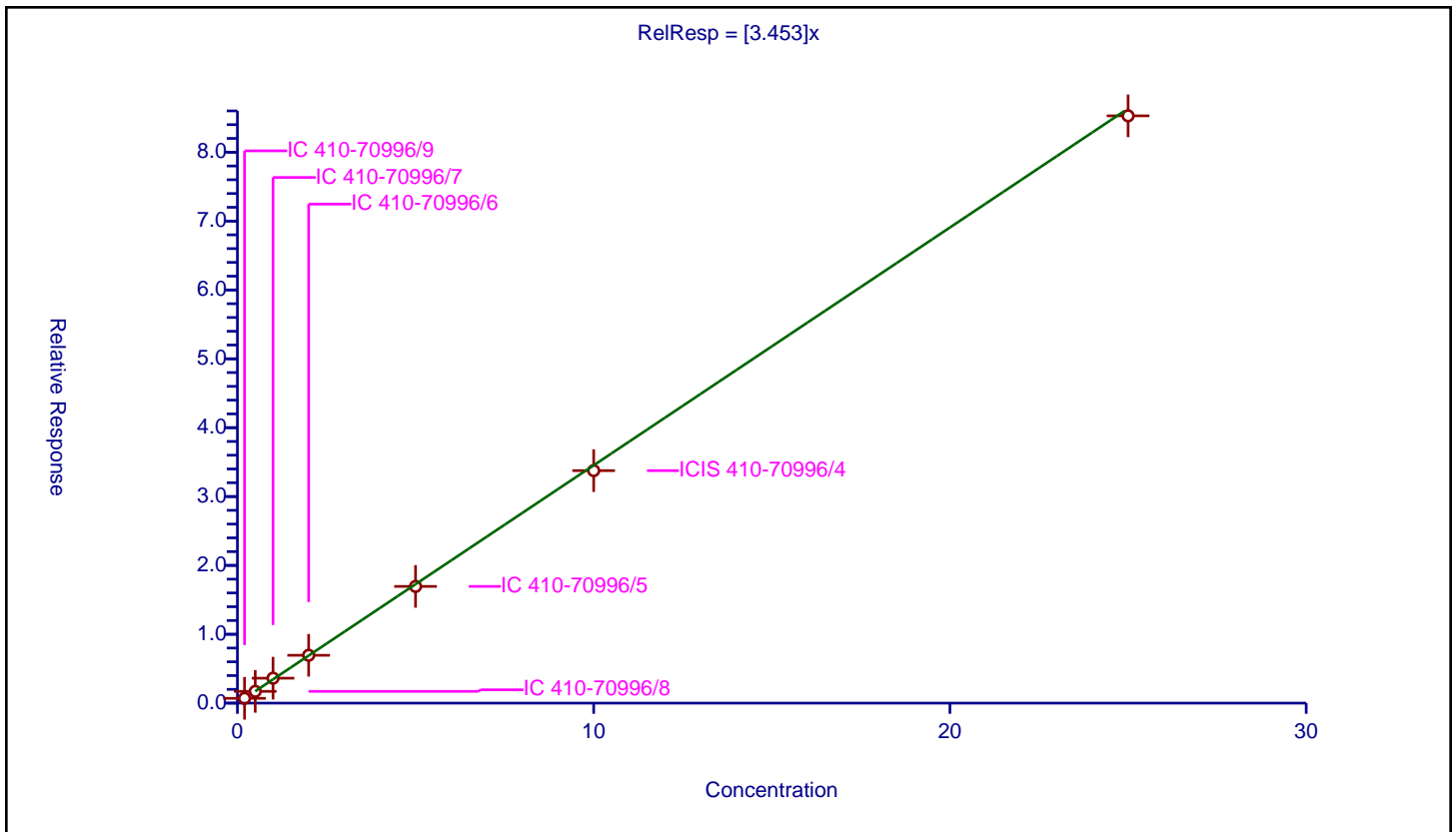
/ sec-Butylbenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	3.453

Error Coefficients	
Standard Error:	3420000
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 410-70996/9	0.2	0.696406	10.0	857732.0	3.482032	Y
2	IC 410-70996/8	0.5	1.70868	10.0	861870.0	3.41736	Y
3	IC 410-70996/7	1.0	3.623457	10.0	860391.0	3.623457	Y
4	IC 410-70996/6	2.0	6.948553	10.0	869181.0	3.474276	Y
5	IC 410-70996/5	5.0	16.947706	10.0	878834.0	3.389541	Y
6	ICIS 410-70996/4	10.0	33.763043	10.0	888382.0	3.376304	Y
7	IC 410-70996/3	25.0	85.28018	10.0	896780.0	3.411207	Y



Calibration

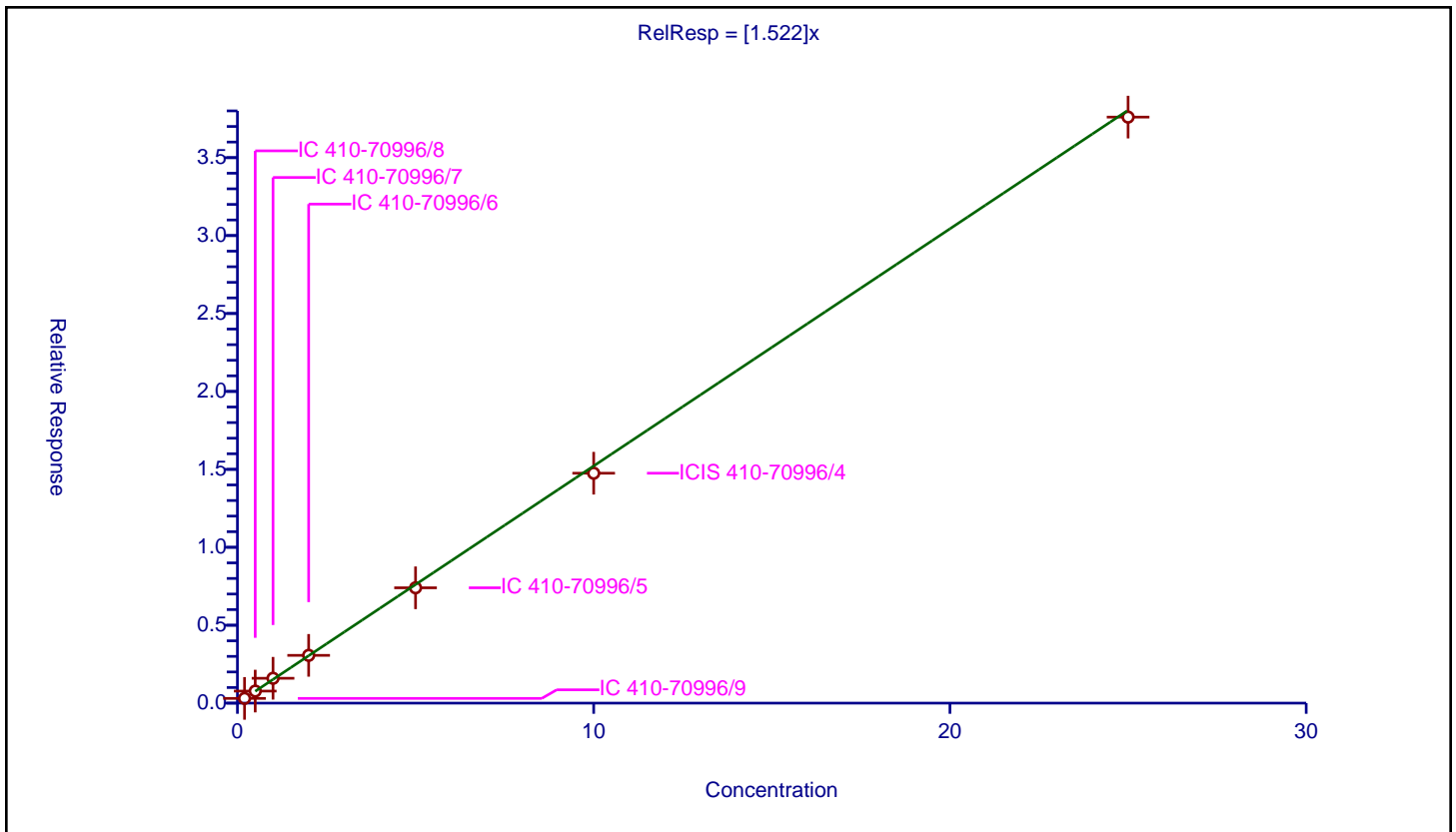
/ 1,3-Dichlorobenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.522

Error Coefficients	
Standard Error:	1510000
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 410-70996/9	0.2	0.303918	10.0	857732.0	1.519589	Y
2	IC 410-70996/8	0.5	0.772854	10.0	861870.0	1.545709	Y
3	IC 410-70996/7	1.0	1.594973	10.0	860391.0	1.594973	Y
4	IC 410-70996/6	2.0	3.065023	10.0	869181.0	1.532512	Y
5	IC 410-70996/5	5.0	7.401045	10.0	878834.0	1.480209	Y
6	ICIS 410-70996/4	10.0	14.75246	10.0	888382.0	1.475246	Y
7	IC 410-70996/3	25.0	37.600995	10.0	896780.0	1.50404	Y



Calibration

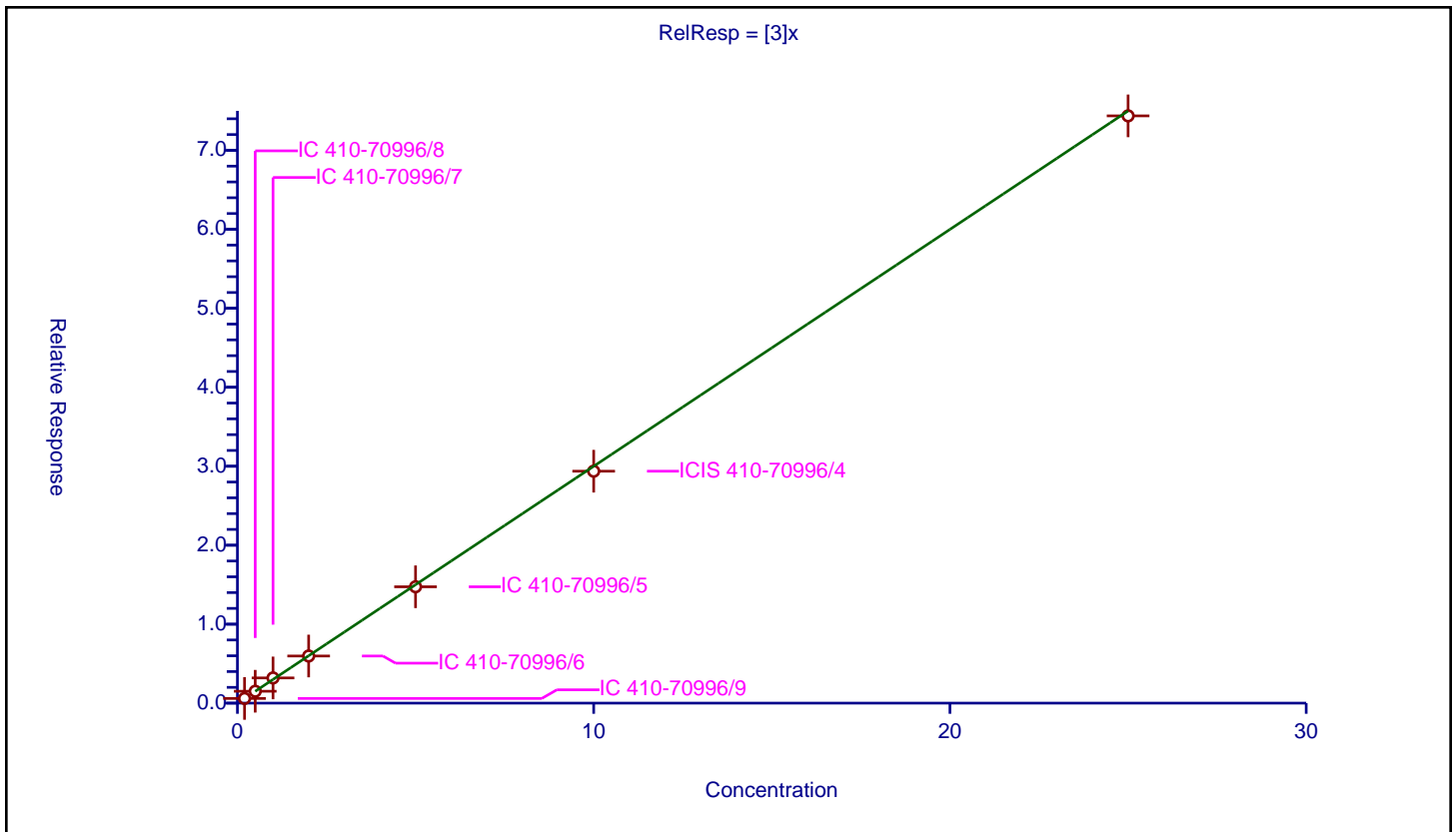
/ 4-Isopropyltoluene

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

Error Coefficients	
Standard Error:	2980000
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 410-70996/9	0.2	0.590394	10.0	857732.0	2.951971	Y
2	IC 410-70996/8	0.5	1.504345	10.0	861870.0	3.00869	Y
3	IC 410-70996/7	1.0	3.192467	10.0	860391.0	3.192467	Y
4	IC 410-70996/6	2.0	5.969367	10.0	869181.0	2.984683	Y
5	IC 410-70996/5	5.0	14.734136	10.0	878834.0	2.946827	Y
6	ICIS 410-70996/4	10.0	29.373952	10.0	888382.0	2.937395	Y
7	IC 410-70996/3	25.0	74.369132	10.0	896780.0	2.974765	Y



Calibration

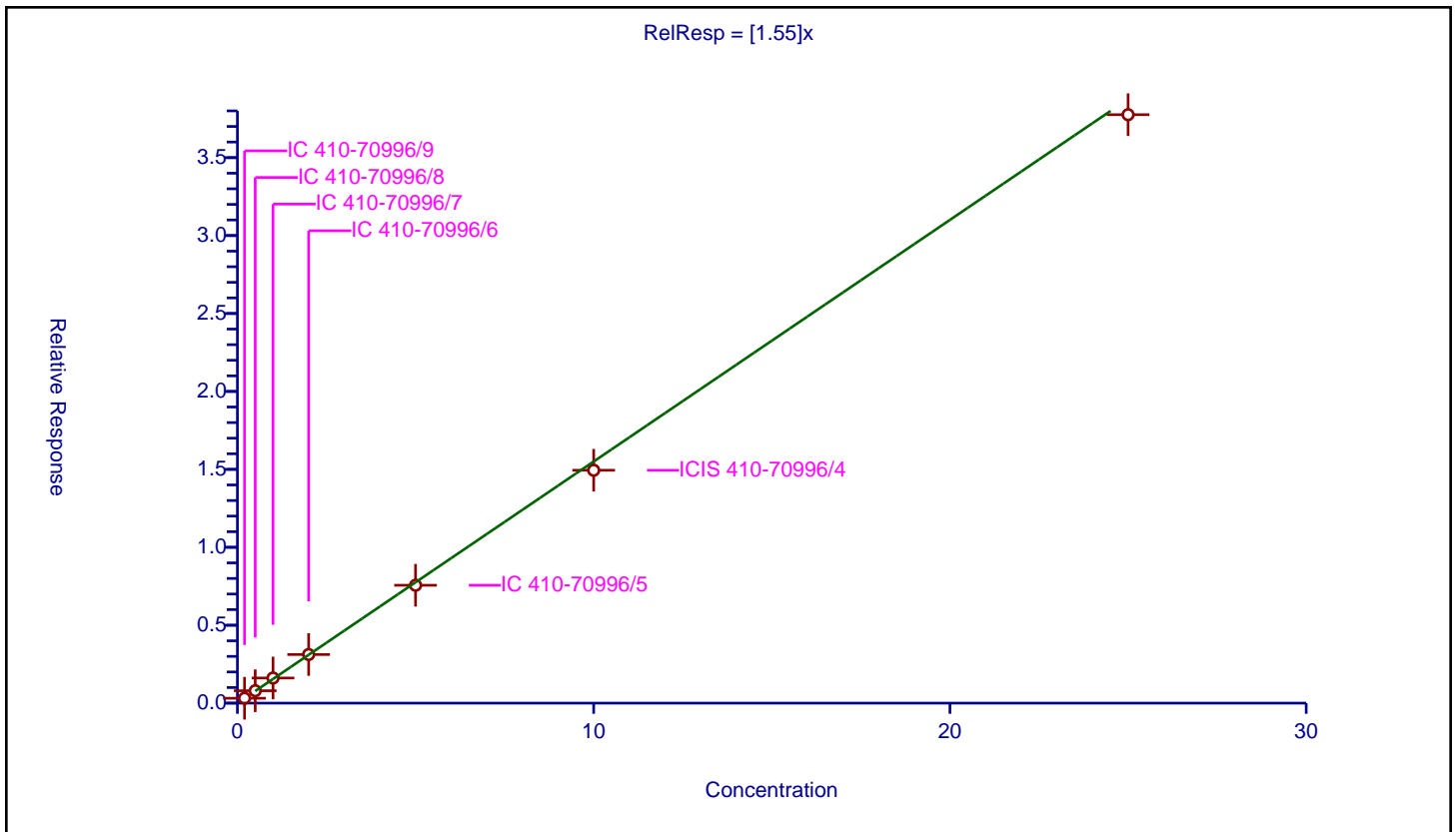
/ 1,4-Dichlorobenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.55

Error Coefficients	
Standard Error:	1510000
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 410-70996/9	0.2	0.314399	10.0	857732.0	1.571995	Y
2	IC 410-70996/8	0.5	0.79519	10.0	861870.0	1.590379	Y
3	IC 410-70996/7	1.0	1.612441	10.0	860391.0	1.612441	Y
4	IC 410-70996/6	2.0	3.119972	10.0	869181.0	1.559986	Y
5	IC 410-70996/5	5.0	7.563283	10.0	878834.0	1.512657	Y
6	ICIS 410-70996/4	10.0	14.941894	10.0	888382.0	1.494189	Y
7	IC 410-70996/3	25.0	37.756083	10.0	896780.0	1.510243	Y



Calibration

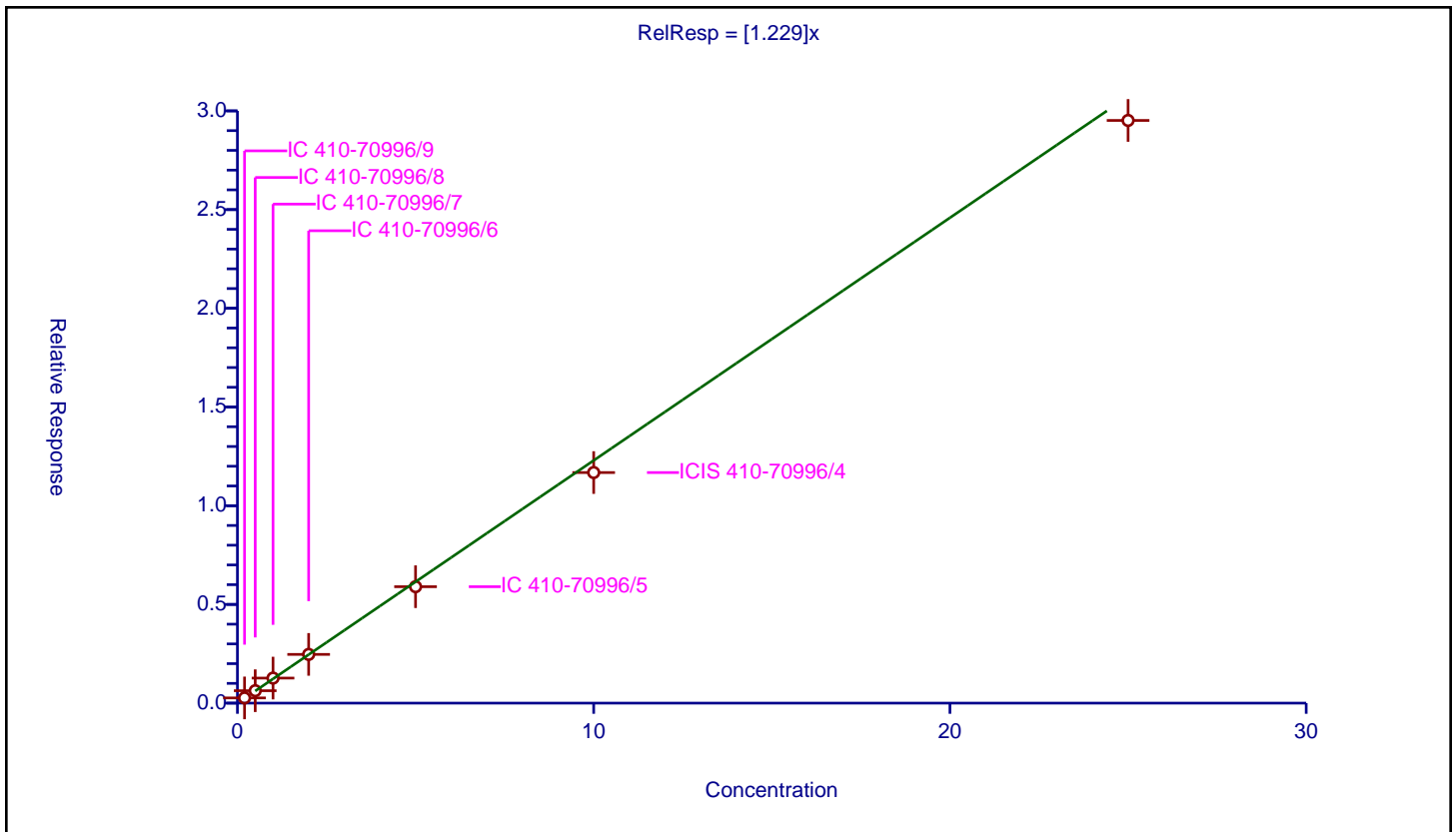
/ 1,2,3-Trimethylbenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.229

Error Coefficients	
Standard Error:	1180000
Relative Standard Error:	4.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-70996/9	0.2	0.263299	10.0	857732.0	1.316495	Y
2	IC 410-70996/8	0.5	0.628714	10.0	861870.0	1.257429	Y
3	IC 410-70996/7	1.0	1.268574	10.0	860391.0	1.268574	Y
4	IC 410-70996/6	2.0	2.468128	10.0	869181.0	1.234064	Y
5	IC 410-70996/5	5.0	5.898031	10.0	878834.0	1.179606	Y
6	ICIS 410-70996/4	10.0	11.680268	10.0	888382.0	1.168027	Y
7	IC 410-70996/3	25.0	29.516169	10.0	896780.0	1.180647	Y



Calibration

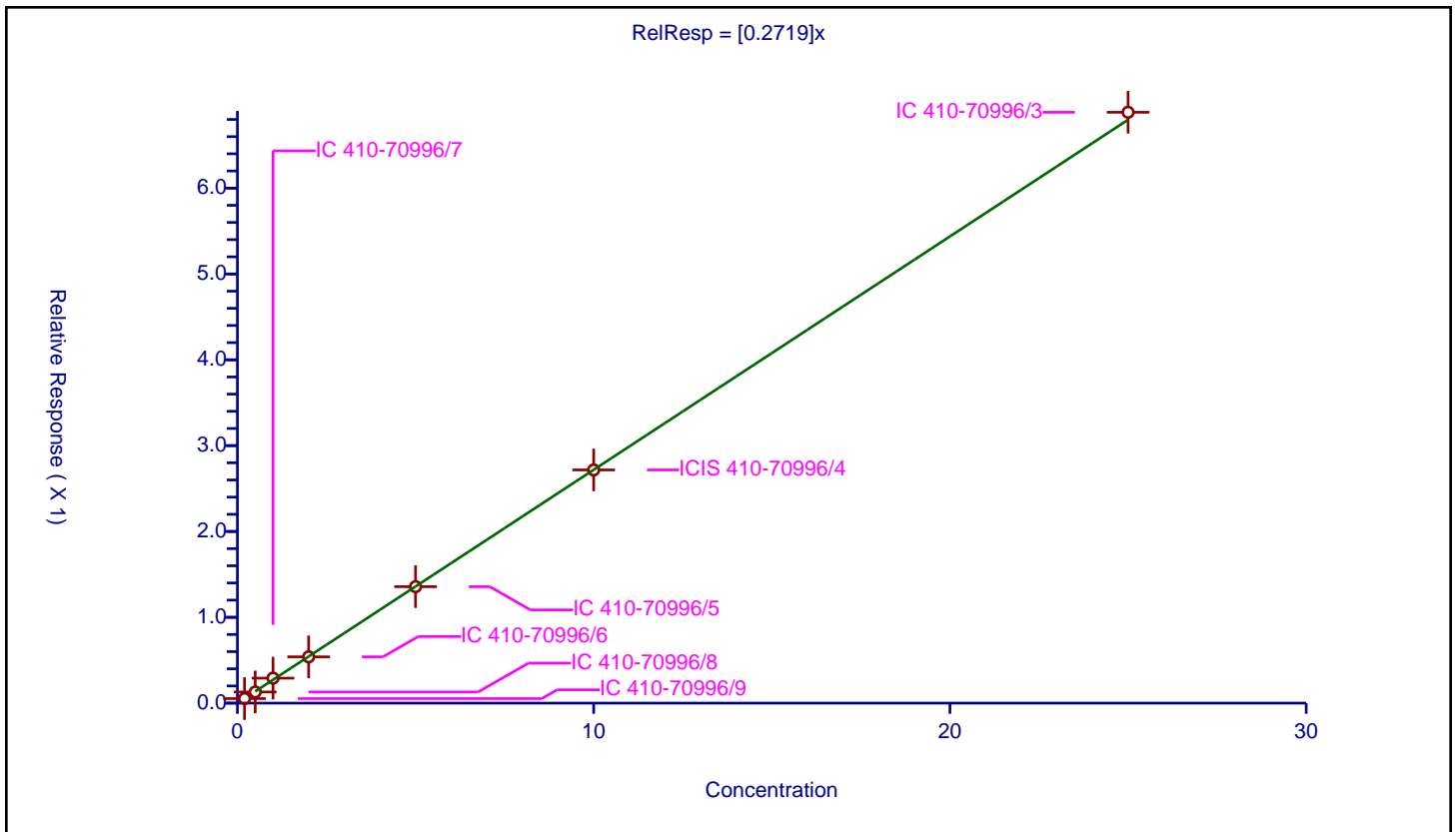
/ Benzyl chloride

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2719

Error Coefficients	
Standard Error:	276000
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 410-70996/9	0.2	0.052814	10.0	857732.0	0.264068	Y
2	IC 410-70996/8	0.5	0.129741	10.0	861870.0	0.259482	Y
3	IC 410-70996/7	1.0	0.291321	10.0	860391.0	0.291321	Y
4	IC 410-70996/6	2.0	0.539531	10.0	869181.0	0.269765	Y
5	IC 410-70996/5	5.0	1.356741	10.0	878834.0	0.271348	Y
6	ICIS 410-70996/4	10.0	2.716962	10.0	888382.0	0.271696	Y
7	IC 410-70996/3	25.0	6.884018	10.0	896780.0	0.275361	Y



Calibration

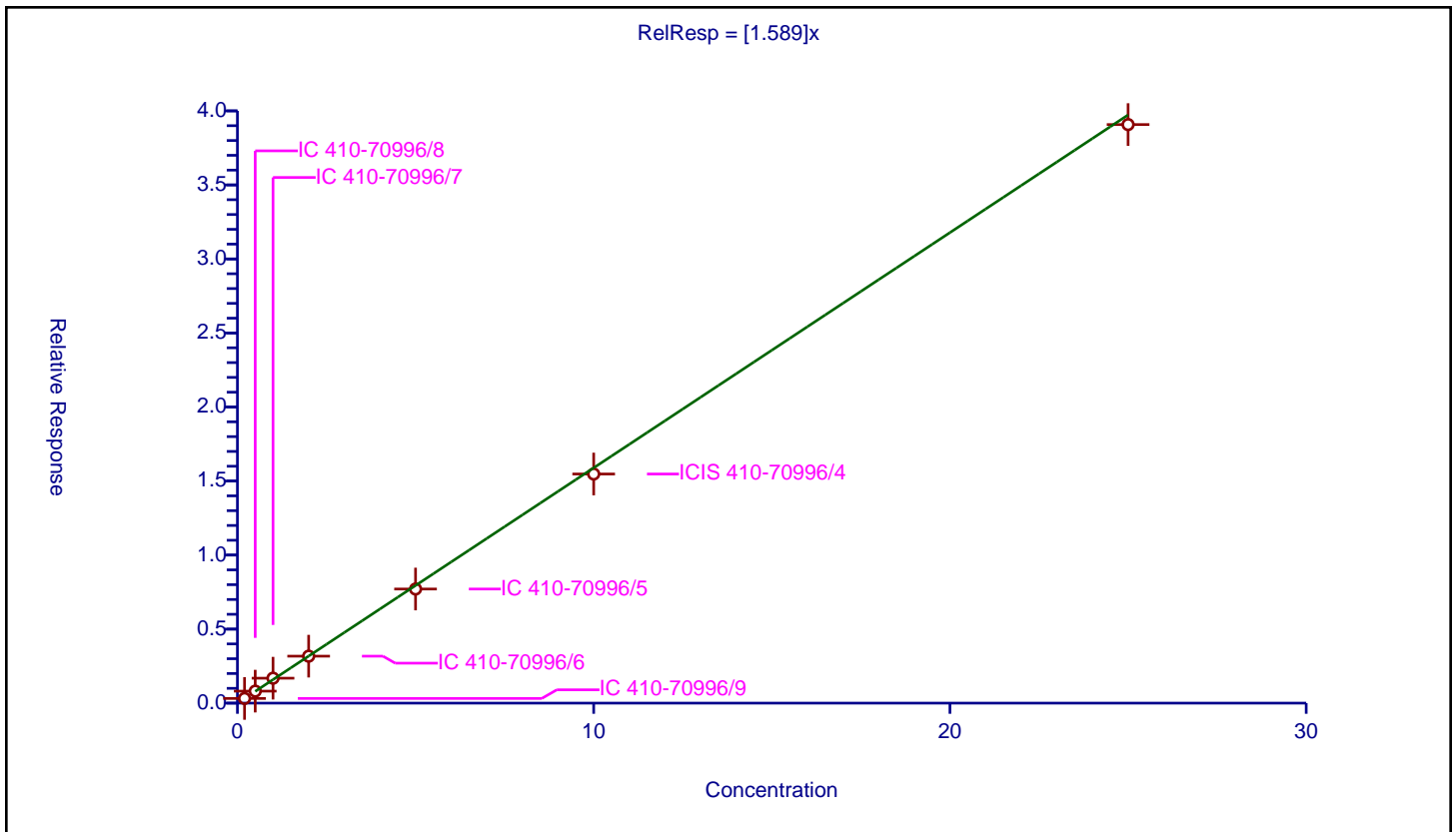
/ n-Butylbenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.589

Error Coefficients	
Standard Error:	1570000
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 410-70996/9	0.2	0.316089	10.0	857732.0	1.580447	Y
2	IC 410-70996/8	0.5	0.809821	10.0	861870.0	1.619641	Y
3	IC 410-70996/7	1.0	1.684804	10.0	860391.0	1.684804	Y
4	IC 410-70996/6	2.0	3.172021	10.0	869181.0	1.58601	Y
5	IC 410-70996/5	5.0	7.707895	10.0	878834.0	1.541579	Y
6	ICIS 410-70996/4	10.0	15.4751	10.0	888382.0	1.54751	Y
7	IC 410-70996/3	25.0	39.075894	10.0	896780.0	1.563036	Y



Calibration

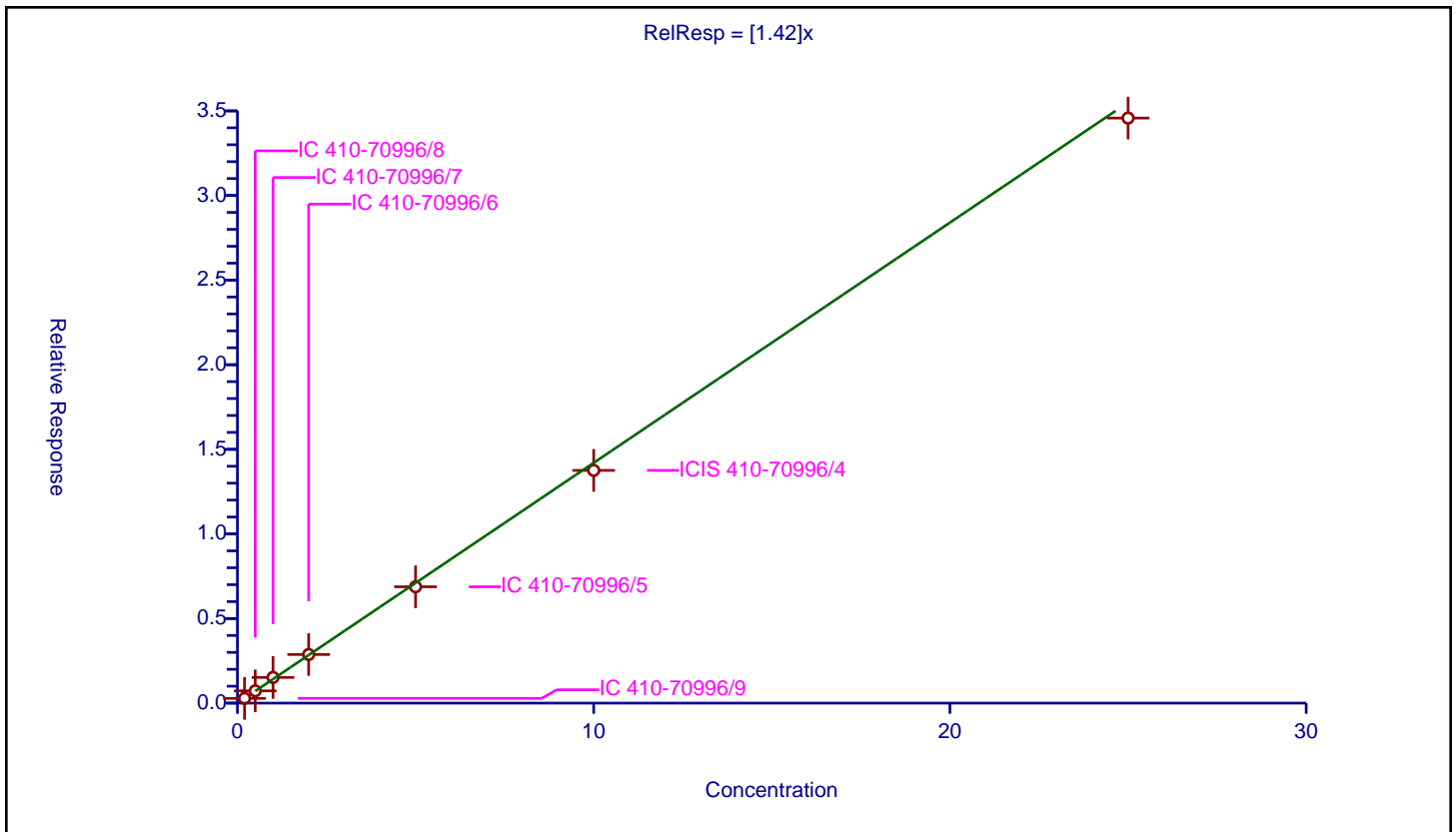
/ 1,2-Dichlorobenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.42

Error Coefficients	
Standard Error:	1390000
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 410-70996/9	0.2	0.280461	10.0	857732.0	1.402303	Y
2	IC 410-70996/8	0.5	0.724564	10.0	861870.0	1.449128	Y
3	IC 410-70996/7	1.0	1.517368	10.0	860391.0	1.517368	Y
4	IC 410-70996/6	2.0	2.87397	10.0	869181.0	1.436985	Y
5	IC 410-70996/5	5.0	6.876316	10.0	878834.0	1.375263	Y
6	ICIS 410-70996/4	10.0	13.753712	10.0	888382.0	1.375371	Y
7	IC 410-70996/3	25.0	34.577221	10.0	896780.0	1.383089	Y



Calibration

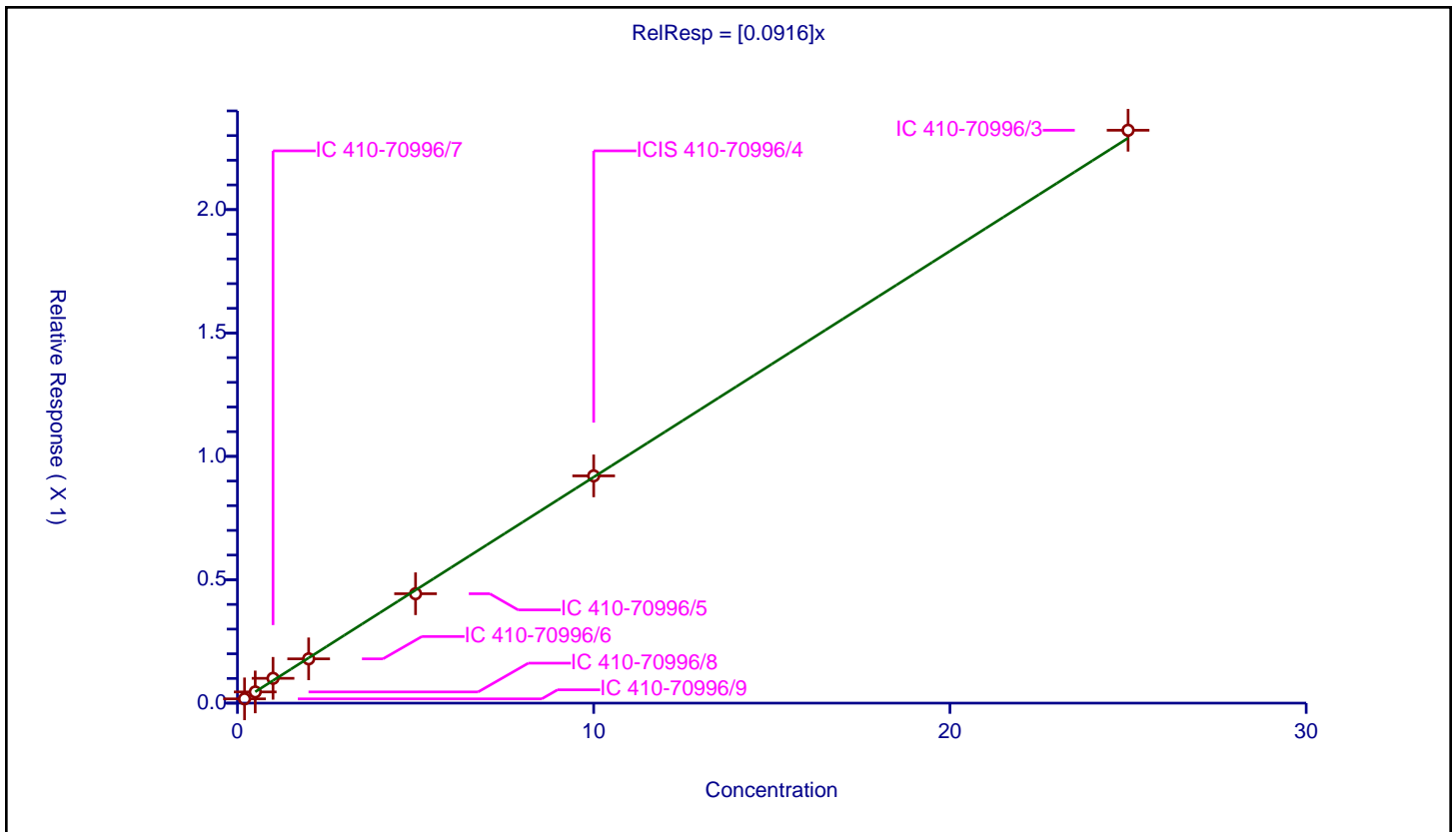
/ 1,2-Dibromo-3-Chloropropane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.0916

Error Coefficients	
Standard Error:	93000
Relative Standard Error:	4.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-70996/9	0.2	0.017325	10.0	857732.0	0.086624	Y
2	IC 410-70996/8	0.5	0.045343	10.0	861870.0	0.090687	Y
3	IC 410-70996/7	1.0	0.100536	10.0	860391.0	0.100536	Y
4	IC 410-70996/6	2.0	0.179433	10.0	869181.0	0.089717	Y
5	IC 410-70996/5	5.0	0.443303	10.0	878834.0	0.088661	Y
6	ICIS 410-70996/4	10.0	0.920955	10.0	888382.0	0.092096	Y
7	IC 410-70996/3	25.0	2.32155	10.0	896780.0	0.092862	Y



Calibration

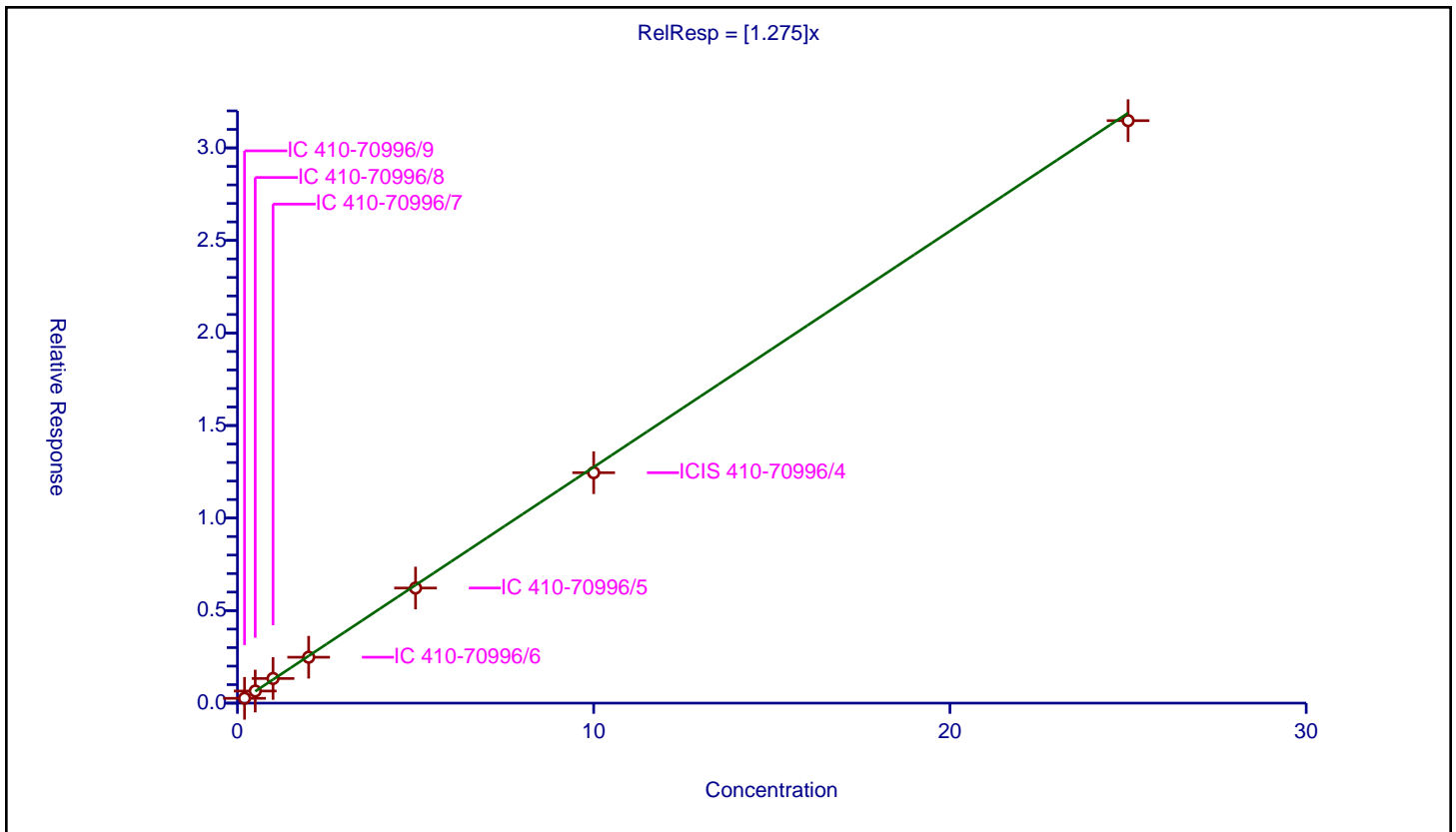
/ 1,3,5-Trichlorobenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.275

Error Coefficients	
Standard Error:	1260000
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 410-70996/9	0.2	0.260093	10.0	857732.0	1.300464	Y
2	IC 410-70996/8	0.5	0.653764	10.0	861870.0	1.307529	Y
3	IC 410-70996/7	1.0	1.331732	10.0	860391.0	1.331732	Y
4	IC 410-70996/6	2.0	2.480761	10.0	869181.0	1.24038	Y
5	IC 410-70996/5	5.0	6.218842	10.0	878834.0	1.243768	Y
6	ICIS 410-70996/4	10.0	12.451704	10.0	888382.0	1.24517	Y
7	IC 410-70996/3	25.0	31.471743	10.0	896780.0	1.25887	Y



Calibration

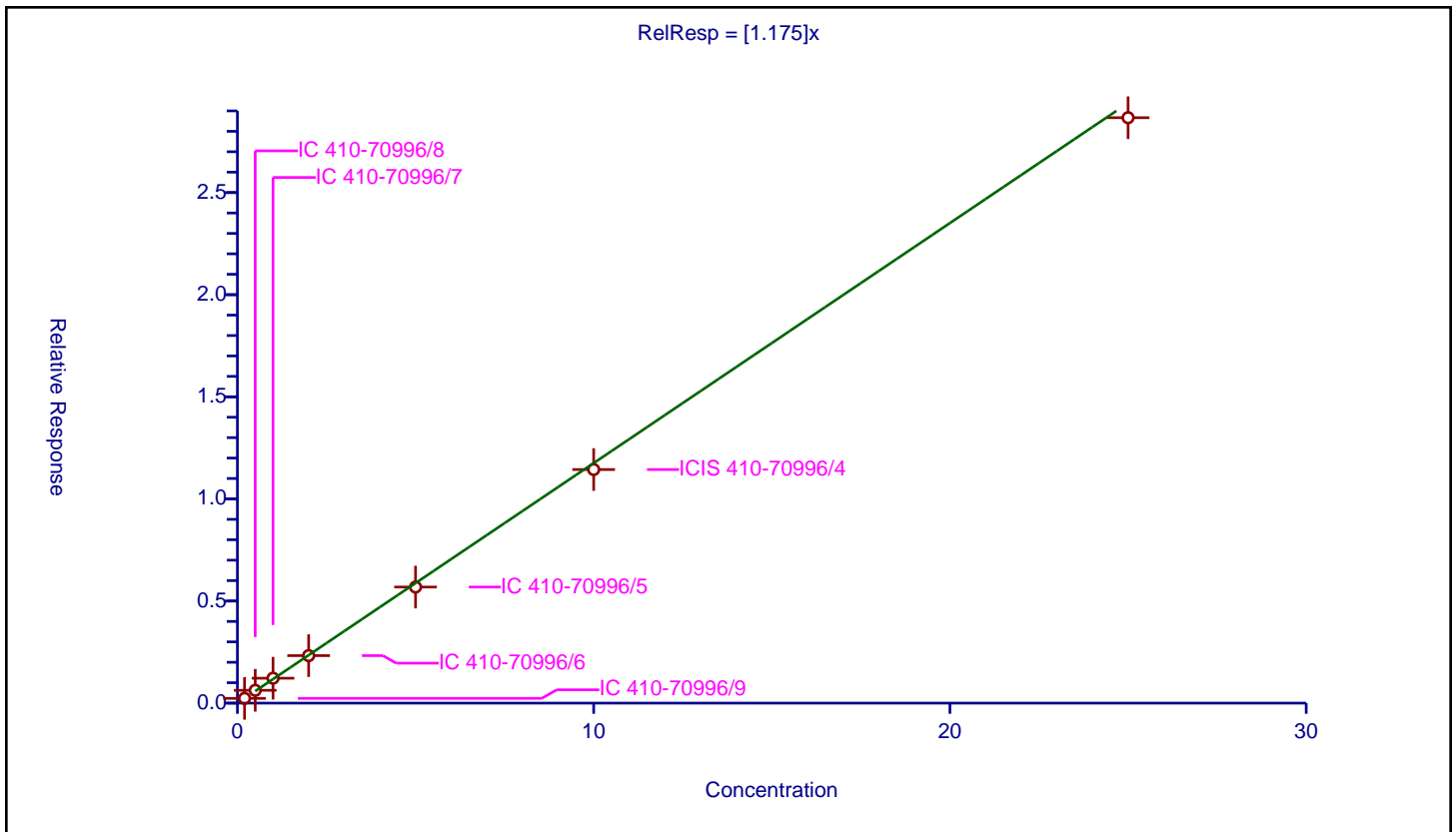
/ 1,2,4-Trichlorobenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.175

Error Coefficients	
Standard Error:	1150000
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 410-70996/9	0.2	0.232543	10.0	857732.0	1.162717	Y
2	IC 410-70996/8	0.5	0.62745	10.0	861870.0	1.254899	Y
3	IC 410-70996/7	1.0	1.219934	10.0	860391.0	1.219934	Y
4	IC 410-70996/6	2.0	2.325661	10.0	869181.0	1.16283	Y
5	IC 410-70996/5	5.0	5.684236	10.0	878834.0	1.136847	Y
6	ICIS 410-70996/4	10.0	11.438244	10.0	888382.0	1.143824	Y
7	IC 410-70996/3	25.0	28.666005	10.0	896780.0	1.14664	Y



Calibration

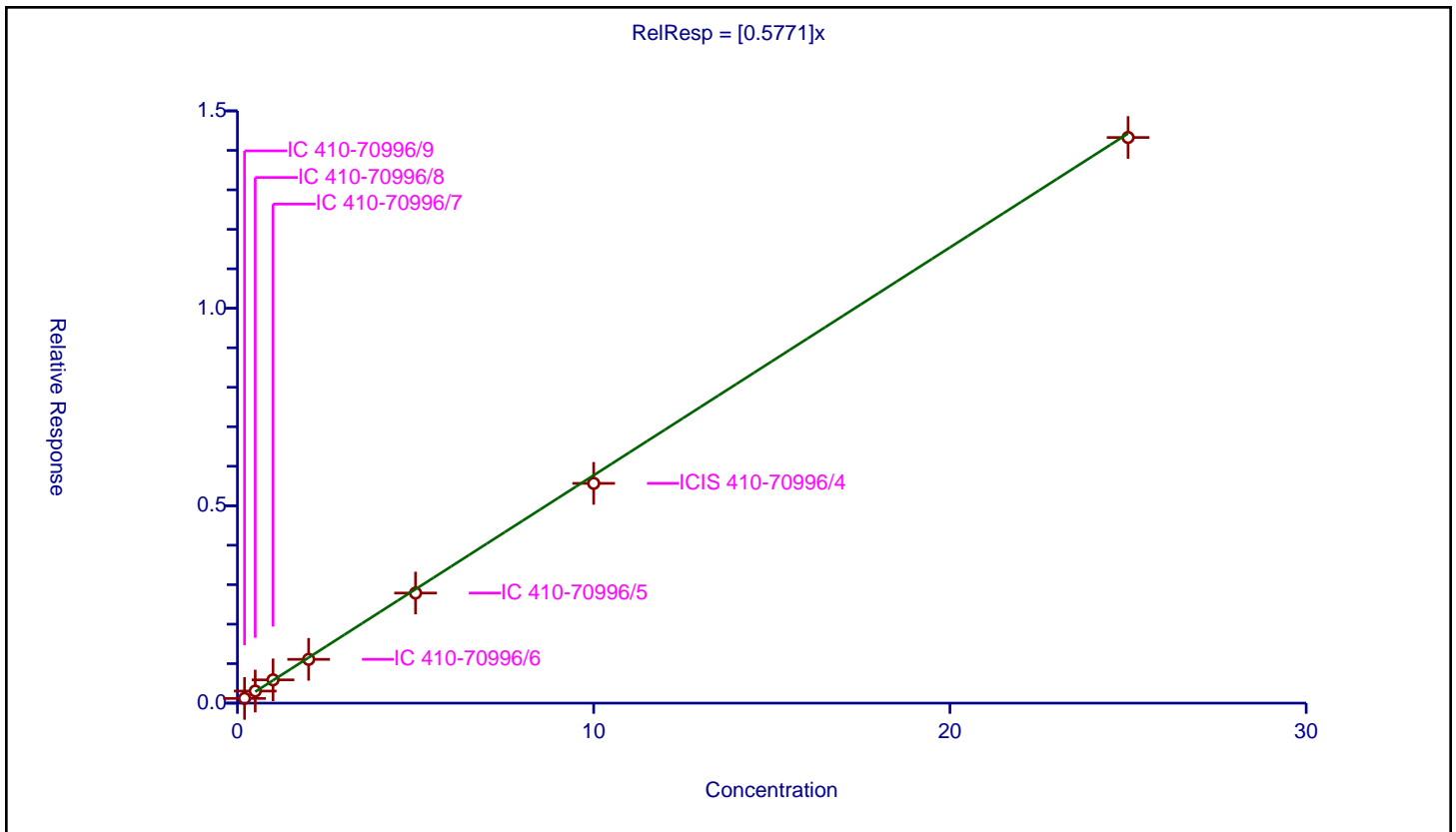
/ Hexachlorobutadiene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.5771

Error Coefficients	
Standard Error:	573000
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 410-70996/9	0.2	0.11928	10.0	857732.0	0.596398	Y
2	IC 410-70996/8	0.5	0.30609	10.0	861870.0	0.61218	Y
3	IC 410-70996/7	1.0	0.589441	10.0	860391.0	0.589441	Y
4	IC 410-70996/6	2.0	1.108584	10.0	869181.0	0.554292	Y
5	IC 410-70996/5	5.0	2.788137	10.0	878834.0	0.557627	Y
6	ICIS 410-70996/4	10.0	5.566209	10.0	888382.0	0.556621	Y
7	IC 410-70996/3	25.0	14.325866	10.0	896780.0	0.573035	Y



Calibration

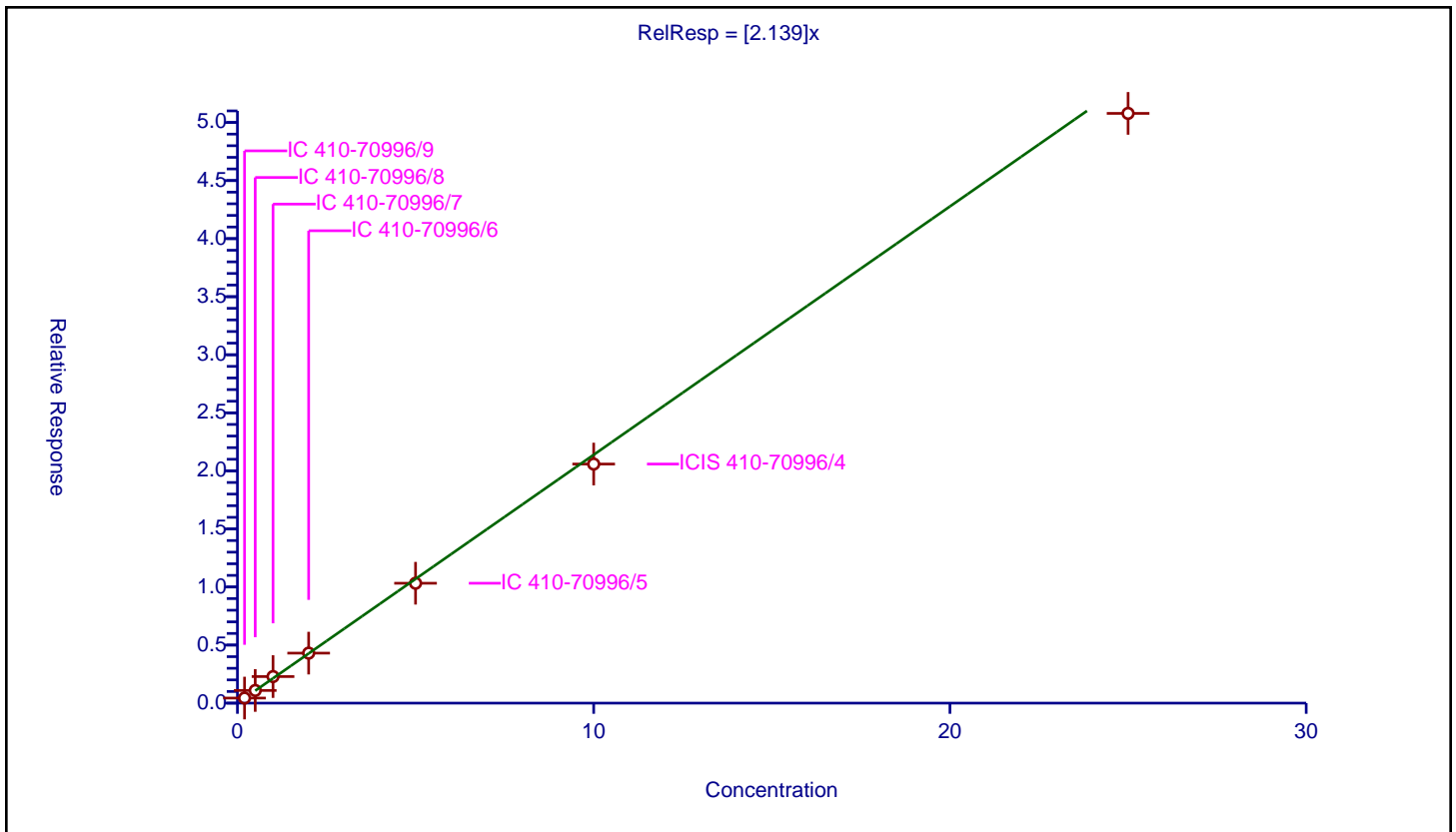
/ Naphthalene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	2.139

Error Coefficients	
Standard Error:	2050000
Relative Standard Error:	4.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-70996/9	0.2	0.438027	10.0	857732.0	2.190136	Y
2	IC 410-70996/8	0.5	1.09165	10.0	861870.0	2.183299	Y
3	IC 410-70996/7	1.0	2.28882	10.0	860391.0	2.28882	Y
4	IC 410-70996/6	2.0	4.306445	10.0	869181.0	2.153222	Y
5	IC 410-70996/5	5.0	10.324851	10.0	878834.0	2.06497	Y
6	ICIS 410-70996/4	10.0	20.587945	10.0	888382.0	2.058795	Y
7	IC 410-70996/3	25.0	50.784328	10.0	896780.0	2.031373	Y



Calibration

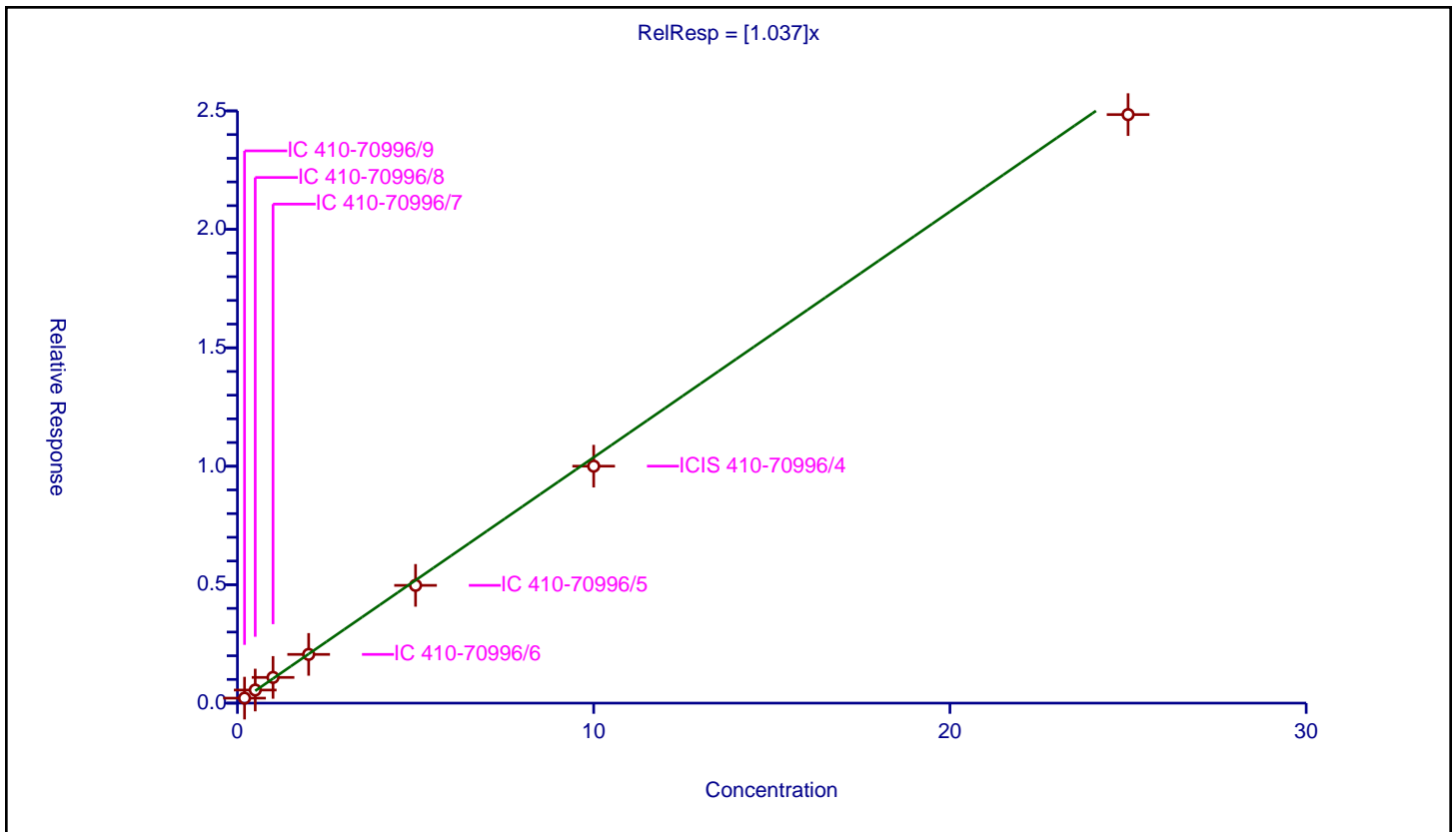
/ 1,2,3-Trichlorobenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.037

Error Coefficients	
Standard Error:	999000
Relative Standard Error:	4.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-70996/9	0.2	0.21108	10.0	857732.0	1.0554	Y
2	IC 410-70996/8	0.5	0.55216	10.0	861870.0	1.10432	Y
3	IC 410-70996/7	1.0	1.085065	10.0	860391.0	1.085065	Y
4	IC 410-70996/6	2.0	2.057339	10.0	869181.0	1.02867	Y
5	IC 410-70996/5	5.0	4.971542	10.0	878834.0	0.994308	Y
6	ICIS 410-70996/4	10.0	10.003107	10.0	888382.0	1.000311	Y
7	IC 410-70996/3	25.0	24.844009	10.0	896780.0	0.99376	Y



FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-37501-1 Analy Batch No.: 107390

SDG No.: _____

Instrument ID: 19930 GC Column: R-624SilMS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/25/2021 23:19 Calibration End Date: 03/26/2021 01:26 Calibration ID: 22087

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-107390/18	IM25I07.D
Level 2	IC 410-107390/17	IM25I06.D
Level 3	IC 410-107390/16	IM25I05.D
Level 4	IC 410-107390/15	IM25I04.D
Level 5	IC 410-107390/14	IM25I03.D
Level 6	ICIS 410-107390/13	IM25I02.D
Level 7	IC 410-107390/12	IM25I01.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7															
Dichlorodifluoromethane	0.3161 0.3188	0.3055 0.3089	0.3081	0.3049	0.3210	Ave	0.311 9			0.1000	2.1		20.0				
Chloromethane	0.4063 0.3755	0.3850 0.3678	0.3758	0.3637	0.3830	Ave	0.379 6			0.1000	3.7		20.0				
1,3-Butadiene	0.3406 0.3331	0.3391 0.3190	0.3426	0.3442	0.3340	Ave	0.336 1				2.6		20.0				
Vinyl chloride	0.3362 0.3481	0.3339 0.3453	0.3509	0.3361	0.3541	Ave	0.343 5			0.1000	2.3		20.0				
Bromomethane	0.2711 0.2451	0.2509 0.2357	0.2428	0.2462	0.2529	Ave	0.249 2			0.1000	4.5		20.0				
Chloroethane	0.2202 0.2143	0.2175 0.2087	0.2143	0.2094	0.2223	Ave	0.215 2			0.1000	2.4		20.0				
Dichlorofluoromethane	0.4038 0.3434	0.3703 0.3276	0.3415	0.3419	0.3411	Ave	0.352 8			0.1000	7.3		20.0				
Trichlorofluoromethane	0.4985 0.4873	0.4671 0.4646	0.4749	0.4838	0.5008	Ave	0.482 4			0.1000	3.0		20.0				
Ethyl ether	0.2354 0.2354	0.2269 0.2286	0.2271	0.2339	0.2430	Ave	0.232 9				2.5		20.0				
Freon 123a	0.3695 0.3627	0.3318 0.3462	0.3738	0.3787	0.3591	Ave	0.360 2				4.6		20.0				
Acrolein	2.3009 2.5895	2.2062 2.4442	2.5487	2.5120	2.6867	Ave	2.469 7				6.8		20.0				
1,1-Dichloroethene	0.2431 0.2654	0.2519 0.2531	0.2694	0.2750	0.2607	Ave	0.259 8			0.1000	4.3		20.0				
Acetone	3.9095 2.9943	3.3284 2.8785	3.2713	3.1341	3.1611	Ave	3.239 6			0.1000	10.3		20.0				

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-37501-1 Analy Batch No.: 107390

SDG No.: _____

Instrument ID: 19930 GC Column: R-624SilMS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/25/2021 23:19 Calibration End Date: 03/26/2021 01:26 Calibration ID: 22087

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R ² OR COD	#	MIN R ² OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7															
Freon 113	0.2697 0.3053	0.2530 0.2959	0.3065	0.3198	0.3008	Ave		0.293 0		0.1000	8.0		20.0				
Methyl iodide	0.4934 0.5205	0.5006 0.5043	0.5346	0.5334	0.5210	Ave		0.515 4			3.1		20.0				
Carbon disulfide	0.7655 0.7708	0.7577 0.7442	0.7866	0.7952	0.7621	Ave		0.768 8		0.1000	2.3		20.0				
Methyl acetate	13.830 10.474	10.262 9.8872	9.5262	9.5918	10.892	Ave		10.63 8		0.1000	14.0		20.0				
Allyl chloride	0.5864 0.5157	0.5430 0.4996	0.5188	0.5218	0.5313	Ave		0.531 0			5.2		20.0				
Methylene Chloride	0.2910 0.2890	0.2970 0.2781	0.2936	0.3011	0.2942	Ave		0.292 0		0.1000	2.5		20.0				
t-Butyl alcohol	1.1178 1.1919	1.1795 1.1223	1.1724	1.1769	1.1939	Ave		1.165 0			2.7		20.0				
Acrylonitrile	3.4598 4.2222	3.5884 4.0070	4.1514	4.0019	4.4115	Ave		3.977 5			8.6		20.0				
Methyl tert-butyl ether	0.7256 0.7653	0.7572 0.7342	0.7775	0.7971	0.7768	Ave		0.762 0		0.1000	3.3		20.0				
trans-1,2-Dichloroethene	0.3123 0.2906	0.2898 0.2832	0.2945	0.3060	0.2970	Ave		0.296 2		0.1000	3.4		20.0				
n-Hexane	0.4724 0.5031	0.4182 0.4850	0.5091	0.5063	0.4821	Ave		0.482 3			6.5		20.0				
1,1-Dichloroethane	0.5539 0.5801	0.5651 0.5547	0.5826	0.5894	0.5801	Ave		0.572 3		0.2000	2.5		20.0				
di-Isopropyl ether	1.0584 1.0627	1.0282 1.0334	1.0717	1.0911	1.0804	Ave		1.060 8			2.2		20.0				
2-Chloro-1,3-butadiene	0.4921 0.5124	0.4733 0.4949	0.5257	0.5230	0.5048	Ave		0.503 8			3.7		20.0				
Ethyl t-butyl ether	0.9546 0.9662	0.9458 0.9307	0.9816	0.9880	0.9858	Ave		0.964 7			2.3		20.0				
2-Butanone (MEK)	5.5213 5.9675	5.1246 5.6827	5.7749	5.6922	6.1459	Ave		5.701 3		0.1000	5.7		20.0				
cis-1,2-Dichloroethene	0.3323 0.3404	0.3432 0.3291	0.3441	0.3544	0.3485	Ave		0.341 7		0.1000	2.6		20.0				
2,2-Dichloropropane	0.4942 0.4990	0.4602 0.4837	0.5173	0.5172	0.4949	Ave		0.495 2			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.: 410-37501-1 Analy Batch No.: 107390

SDG No.: _____

Instrument ID: 19930 GC Column: R-624SilMS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/25/2021 23:19 Calibration End Date: 03/26/2021 01:26 Calibration ID: 22087

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R ² OR COD	#	MIN R ² OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7															
Propionitrile	1.2665 1.3900	1.2587 1.3669	1.3905	1.3624	1.4340	Ave		1.352 7			4.9		20.0				
Methacrylonitrile	4.7208 5.5487	4.5326 5.2460	5.3542	5.3742	5.7769	Ave		5.221 9			8.5		20.0				
Bromochloromethane	0.1590 0.1514	0.1535 0.1461	0.1483	0.1529	0.1567	Ave		0.152 6			2.9		20.0				
Tetrahydrofuran	1.4096 1.5546	1.3763 1.4694	1.5973	1.5120	1.6077	Ave		1.503 8			6.0		20.0				
Chloroform	0.5301 0.5438	0.5525 0.5267	0.5542	0.5591	0.5490	Ave		0.545 1		0.2000	2.3		20.0				
1,1,1-Trichloroethane	0.4884 0.5005	0.4869 0.4839	0.5071	0.5094	0.4945	Ave		0.495 8		0.1000	2.0		20.0				
Cyclohexane	0.5868 0.5873	0.5164 0.5741	0.6044	0.6010	0.5710	Ave		0.577 3		0.1000	5.1		20.0				
1,1-Dichloropropene	0.4195 0.4444	0.4211 0.4366	0.4472	0.4552	0.4454	Ave		0.438 5			3.1		20.0				
Carbon tetrachloride	0.4027 0.4482	0.4047 0.4420	0.4535	0.4509	0.4408	Ave		0.434 7		0.1000	5.0		20.0				
Isobutyl alcohol	0.5089 0.4163	0.3762 0.3899	0.4005	0.4257	0.4241	Ave		0.420 2			10.3		20.0				
Benzene	1.2714 1.2905	1.2746 1.2569	1.3107	1.3279	1.2900	Ave		1.288 9		0.5000	1.9		20.0				
1,2-Dichloroethane	0.3631 0.3372	0.3502 0.3311	0.3400	0.3507	0.3379	Ave		0.344 3		0.1000	3.2		20.0				
t-Amyl methyl ether	0.8236 0.8501	0.8191 0.8247	0.8500	0.8731	0.8695	Ave		0.844 3			2.6		20.0				
n-Heptane	0.5528 0.5562	0.5048 0.5427	0.5633	0.5640	0.5403	Ave		0.546 3			3.7		20.0				
n-Butanol	0.3470 0.3813	0.3295 0.3484	0.3787	0.3915	0.3782	Ave		0.364 9			6.3		20.0				
Trichloroethene	0.3393 0.3366	0.3270 0.3292	0.3326	0.3426	0.3371	Ave		0.334 9		0.2000	1.7		20.0				
Methylcyclohexane	0.5546 0.6108	0.5689 0.5961	0.5757	0.6109	0.6180	Ave		0.590 7		0.1000	4.1		20.0				
1,2-Dichloropropane	0.3325 0.3358	0.3270 0.3255	0.3340	0.3437	0.3373	Ave		0.333 7		0.1000	1.9		20.0				

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-37501-1 Analy Batch No.: 107390

SDG No.: _____

Instrument ID: 19930 GC Column: R-624SilMS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/25/2021 23:19 Calibration End Date: 03/26/2021 01:26 Calibration ID: 22087

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R ² OR COD	#	MIN R ² OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7															
Methyl methacrylate	9.3914 11.497	8.4810 10.809	10.202	10.848	11.206	Ave		10.34 8			10.4		20.0				
1,4-Dioxane	0.0486 0.0743	0.0709 0.0608	0.0727	0.0831	0.0780	Ave		0.069 8		0.0050	16.6		20.0				
Dibromomethane	0.1470 0.1505	0.1545 0.1473	0.1567	0.1516	0.1528	Ave		0.151 5			2.4		20.0				
Bromodichloromethane	0.3879 0.4059	0.3729 0.4014	0.4016	0.4031	0.3998	Ave		0.396 1		0.2000	3.0		20.0				
2-Nitropropane	2.9434 3.4735	2.8816 3.2975	3.2364	3.2552	3.5424	Ave		3.232 9			7.6		20.0				
cis-1,3-Dichloropropene	0.4681 0.5109	0.4688 0.5008	0.4988	0.5084	0.5121	Ave		0.495 4		0.2000	3.9		20.0				
4-Methyl-2-pentanone (MIBK)	13.137 15.663	12.919 14.602	14.962	15.019	16.176	Ave		14.64 0		0.1000	8.3		20.0				
Toluene	1.0817 1.0766	1.0626 1.0526	1.0848	1.1098	1.0718	Ave		1.077 1		0.4000	1.7		20.0				
trans-1,3-Dichloropropene	0.4890 0.5475	0.4989 0.5366	0.5114	0.5428	0.5490	Ave		0.525 0		0.1000	4.7		20.0				
Ethyl methacrylate	0.4294 0.4618	0.4285 0.4457	0.4378	0.4804	0.4729	Ave		0.450 9			4.7		20.0				
1,1,2-Trichloroethane	0.2899 0.2940	0.2781 0.2825	0.2965	0.3013	0.2930	Ave		0.290 8		0.1000	2.8		20.0				
Tetrachloroethene	0.4983 0.5290	0.4756 0.5125	0.5145	0.5318	0.5248	Ave		0.512 4		0.2000	3.9		20.0				
1,3-Dichloropropane	0.4851 0.5158	0.5034 0.5014	0.5260	0.5275	0.5290	Ave		0.512 6			3.2		20.0				
2-Hexanone	8.8540 11.161	8.9822 10.380	10.489	10.603	11.420	Ave		10.27 0		0.1000	9.7		20.0				
Dibromochloromethane	0.3323 0.3914	0.3522 0.3805	0.3705	0.3809	0.3896	Ave		0.371 1			5.8		20.0				
1,2-Dibromoethane (EDB)	0.2593 0.2917	0.2841 0.2808	0.2886	0.2925	0.2951	Ave		0.284 6		0.1000	4.3		20.0				
1-Chlorohexane	0.7174 0.6554	0.6316 0.6280	0.6707	0.6668	0.6379	Ave		0.658 3			4.7		20.0				
Chlorobenzene	1.1391 1.2048	1.1671 1.1680	1.2143	1.2336	1.2057	Ave		1.190 4		0.5000	2.8		20.0				

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-37501-1 Analy Batch No.: 107390

SDG No.: _____

Instrument ID: 19930 GC Column: R-624SilMS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/25/2021 23:19 Calibration End Date: 03/26/2021 01:26 Calibration ID: 22087

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R ² OR COD	#	MIN R ² OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7															
1,1,1,2-Tetrachloroethane	0.3971 0.4409	0.4237 0.4330	0.4295	0.4447	0.4474	Ave		0.430 9			4.0		20.0				
Ethylbenzene	2.0701 2.1207	2.0650 2.0513	2.1442	2.1705	2.1320	Ave		2.107 7		0.1000	2.2		20.0				
m&p-Xylene	0.7760 0.8410	0.8198 0.8130	0.8421	0.8526	0.8398	Ave		0.826 3		0.1000	3.2		20.0				
o-Xylene	0.7522 0.8256	0.7744 0.8061	0.8238	0.8447	0.8316	Ave		0.808 3		0.3000	4.1		20.0				
Styrene	1.2532 1.3471	1.2521 1.3131	1.3349	1.3807	1.3504	Ave		1.318 8		0.3000	3.7		20.0				
Bromoform	0.2144 0.2430	0.2171 0.2443	0.2359	0.2431	0.2440	Ave		0.234 5		0.1000	5.6		20.0				
Isopropylbenzene	2.0650 2.2008	2.0547 2.1087	2.2011	2.2323	2.2041	Ave		2.152 4		0.1000	3.4		20.0				
1,1,2,2-Tetrachloroethane	0.6159 0.6845	0.6176 0.6677	0.6668	0.6946	0.6961	Ave		0.663 3		0.3000	5.1		20.0				
Bromobenzene	0.8677 0.9401	0.8667 0.9194	0.9208	0.9533	0.9313	Ave		0.914 2			3.7		20.0				
trans-1,4-Dichloro-2-butene	4.6013 5.5395	4.1321 5.2884	5.0425	5.1470	5.6301	Ave		5.054 4			10.5		20.0				
1,2,3-Trichloropropane	0.1546 0.1818	0.1836 0.1755	0.1678	0.1873	0.1854	Ave		0.176 6			6.7		20.0				
N-Propylbenzene	4.1812 4.6368	4.3628 4.3963	4.5736	4.6711	4.5843	Ave		4.486 6			4.0		20.0				
2-Chlorotoluene	0.8811 0.9453	0.8469 0.9163	0.9198	0.9603	0.9229	Ave		0.913 2			4.2		20.0				
1,3,5-Trimethylbenzene	3.0298 3.3579	3.0467 3.2361	3.2498	3.3587	3.3219	Ave		3.228 7			4.3		20.0				
4-Chlorotoluene	0.9160 0.9594	0.8882 0.9340	0.9219	0.9611	0.9448	Ave		0.932 2			2.8		20.0				
tert-Butylbenzene	0.6831 0.7495	0.6727 0.7351	0.7153	0.7518	0.7343	Ave		0.720 3			4.4		20.0				
Pentachloroethane	0.5979 0.6222	0.5420 0.6185	0.5585	0.5945	0.6267	Ave		0.594 3			5.5		20.0				
1,2,4-Trimethylbenzene	3.1371 3.4147	3.1745 3.2817	3.3501	3.4169	3.4145	Ave		3.312 8			3.6		20.0				

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-37501-1 Analy Batch No.: 107390

SDG No.: _____

Instrument ID: 19930 GC Column: R-624SilMS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/25/2021 23:19 Calibration End Date: 03/26/2021 01:26 Calibration ID: 22087

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R ² OR COD	#	MIN R ² OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7															
sec-Butylbenzene	4.0814 4.3894	4.0243 4.1841	4.2744	4.3911	4.3461	Ave		4.241 5			3.5		20.0				
1,3-Dichlorobenzene	1.7705 1.8618	1.7247 1.8321	1.7792	1.8757	1.8591	Ave		1.814 7		0.6000	3.1		20.0				
p-Isopropyltoluene	3.3717 3.7614	3.3520 3.6084	3.6499	3.7725	3.7384	Ave		3.607 8			4.9		20.0				
1,4-Dichlorobenzene	1.7600 1.8579	1.7375 1.7965	1.8203	1.8637	1.8562	Ave		1.813 2		0.5000	2.8		20.0				
1,2,3-Trimethylbenzene	1.4753 1.4583	1.3759 1.4324	1.3862	1.4326	1.4743	Ave		1.433 6			2.8		20.0				
Benzyl chloride	0.2445 0.3178	0.2809 0.3217	0.2907	0.3136	0.3186	Ave		0.298 3			9.5		20.0				
n-Butylbenzene	1.6664 1.8364	1.6295 1.7805	1.7365	1.8186	1.8102	Ave		1.754 0			4.6		20.0				
1,2-Dichlorobenzene	1.5892 1.6835	1.6113 1.6329	1.6555	1.6951	1.6789	Ave		1.649 5		0.4000	2.4		20.0				
1,2-Dibromo-3-Chloropropane	0.0909 0.1092	0.1030 0.1094	0.0981	0.1049	0.1092	Ave		0.103 6		0.0500	6.7		20.0				
1,3,5-Trichlorobenzene	1.2121 1.3897	1.2360 1.3748	1.3102	1.3465	1.3686	Ave		1.319 7			5.3		20.0				
1,2,4-Trichlorobenzene	0.9848 1.1979	1.0053 1.1600	1.0712	1.1215	1.1664	Ave		1.101 0		0.2000	7.5		20.0				
Hexachlorobutadiene	0.5581 0.4808	0.4811 0.4846	0.4838	0.4774	0.4759	Ave		0.491 7			6.0		20.0				
Naphthalene	1.8385 2.2268	1.9493 2.0743	2.1034	2.1750	2.2187	Ave		2.083 7			6.9		20.0				
1,2,3-Trichlorobenzene	0.9224 1.0092	0.8998 0.9435	0.9372	1.0031	0.9952	Ave		0.958 6			4.5		20.0				
Dibromofluoromethane (Surr)	0.2515 0.2513	0.2495 0.2524	0.2534	0.2496	0.2524	Ave		0.251 4			0.6		20.0				
1,2-Dichloroethane-d4 (Surr)	0.0492 0.0486	0.0497 0.0489	0.0496	0.0495	0.0490	Ave		0.049 2			0.8		20.0				
Toluene-d8 (Surr)	1.3009 1.3085	1.3104 1.3080	1.3113	1.3044	1.3175	Ave		1.308 7			0.4		20.0				
4-Bromofluorobenzene (Surr)	0.4983 0.4959	0.5011 0.4959	0.4969	0.4949	0.4975	Ave		0.497 2			0.4		20.0				

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-37501-1 Analy Batch No.: 107390

SDG No.: _____

Instrument ID: 19930 GC Column: R-624SilMS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/25/2021 23:19 Calibration End Date: 03/26/2021 01:26 Calibration ID: 22087

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-107390/18	IM25I07.D
Level 2	IC 410-107390/17	IM25I06.D
Level 3	IC 410-107390/16	IM25I05.D
Level 4	IC 410-107390/15	IM25I04.D
Level 5	IC 410-107390/14	IM25I03.D
Level 6	ICIS 410-107390/13	IM25I02.D
Level 7	IC 410-107390/12	IM25I01.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
			LVL 6	LVL 7				LVL 6	LVL 7			
Dichlorodifluoromethane	FB	Ave	13752 684973	33158 1652773	66157	131503	342635	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Chloromethane	FB	Ave	17674 806634	41785 1968101	80672	156895	408845	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,3-Butadiene	FB	Ave	14817 715678	36799 1706528	73564	148459	356583	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Vinyl chloride	FB	Ave	14627 747762	36238 1847361	75331	144991	377973	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Bromomethane	FB	Ave	11794 526580	27227 1260967	52121	106174	269988	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Chloroethane	FB	Ave	9578 460355	23600 1116726	46009	90316	237311	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Dichlorofluoromethane	FB	Ave	17565 737652	40189 1753000	73317	147453	364119	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Trichlorofluoromethane	FB	Ave	21686 1046802	50696 2485598	101953	208668	534682	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Ethyl ether	FB	Ave	10243 505910	24629 1223300	48765	100901	259473	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Freon 123a	FB	Ave	16074 779116	36009 1852151	80249	163328	383382	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Acrolein	TBAd 10	Ave	80784 4019121	206147 9704706	420930	839518	2051424	10.00 500	25.0 1250	50.0	100.0	250
1,1-Dichloroethene	FB	Ave	10577 570227	27336 1354325	57828	118638	278264	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Acetone	TBAd 10	Ave	27454	62204	108062	209498	482763	2.00	5.00	10.0	20.0	50.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-37501-1 Analy Batch No.: 107390

SDG No.: _____

Instrument ID: 19930 GC Column: R-624SilMS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/25/2021 23:19 Calibration End Date: 03/26/2021 01:26 Calibration ID: 22087

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
			929522	2285940				100	250			
Freon 113	FB	Ave	11732 655797	27455 1583141	65806	137933	321103	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Methyl iodide	FB	Ave	21462 1118135	54329 2698334	114765	230064	556247	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Carbon disulfide	FB	Ave	33302 1655816	82229 3981511	168868	342979	813569	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Methyl acetate	TBAd 10	Ave	9712 325151	19178 785174	31468	64116	166334	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Allyl chloride	FB	Ave	25508 1107944	58935 2673144	111386	225080	567178	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Methylene Chloride	FB	Ave	12659 620780	32234 1487802	63035	129865	314102	0.200 10.0	0.500 25.0	1.00	2.00	5.00
t-Butyl alcohol	TBAd 10	Ave	15699 740004	44088 1782579	77456	157334	364657	4.00 200	10.0 500	20.0	40.0	100
Acrylonitrile	TBAd 10	Ave	12148 655363	33532 1591064	68567	133754	336861	1.00 50.0	2.50 125	5.00	10.0	25.0
Methyl tert-butyl ether	FB	Ave	31566 1644094	82175 3928149	166927	343815	829305	0.200 10.0	0.500 25.0	1.00	2.00	5.00
trans-1,2-Dichloroethene	FB	Ave	13585 624221	31450 1515454	63219	131976	317030	0.200 10.0	0.500 25.0	1.00	2.00	5.00
n-Hexane	FB	Ave	20550 1080750	45384 2594712	109292	218391	514678	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,1-Dichloroethane	FB	Ave	24094 1246284	61328 2967767	125080	254250	619308	0.200 10.0	0.500 25.0	1.00	2.00	5.00
di-Isopropyl ether	FB	Ave	46041 2282943	111585 5528886	230093	470623	1153419	0.200 10.0	0.500 25.0	1.00	2.00	5.00
2-Chloro-1,3-butadiene	FB	Ave	21409 1100812	51363 2647970	112863	225610	538900	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Ethyl t-butyl ether	FB	Ave	41529 2075655	102647 4979385	210732	426180	1052398	0.200 10.0	0.500 25.0	1.00	2.00	5.00
2-Butanone (MEK)	TBAd 10	Ave	38773	95774	190761	380491	938585	2.00	5.00	10.0	20.0	50.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-37501-1

Analy Batch No.: 107390

SDG No.:

Instrument ID: 19930

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

Heated Purge: (Y/N) N

Calibration Start Date: 03/25/2021 23:19

Calibration End Date: 03/26/2021 01:26

Calibration ID: 22087

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
			1852516	4512811				100	250			
cis-1,2-Dichloroethene	FB	Ave	14457 731328	37242 1761040	73881	152885	372066	0.200 10.0	0.500 25.0	1.00	2.00	5.00
2,2-Dichloropropane	FB	Ave	21501 1072043	49949 2587808	111065	223081	528380	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Propionitrile	TBAd 10	Ave	17788 862982	47048 2170928	91864	182137	438000	4.00 200	10.0 500	20.0	40.0	100
Methacrylonitrile	TBAd 10	Ave	33151 1722490	84710 4166040	176866	359237	882231	2.00 100	5.00 250	10.0	20.0	50.0
Bromochloromethane	FB	Ave	6918 325281	16661 781560	31843	65954	167243	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Tetrahydrofuran	TBAd 10	Ave	9899 482595	25722 1166871	52762	101067	245520	2.00 100	5.00 250	10.0	20.0	50.0
Chloroform	FB	Ave	23062 1168251	59962 2818067	118977	241166	586095	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,1,1-Trichloroethane	FB	Ave	21246 1075219	52840 2588835	108874	219727	527956	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Cyclohexane	FB	Ave	25529 1261698	56046 3071642	129757	259219	609600	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,1-Dichloropropene	FB	Ave	18248 954603	45700 2336173	96006	196323	475475	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Carbon tetrachloride	FB	Ave	17519 962938	43925 2364690	97370	194469	470581	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Isobutyl alcohol	TBAd 10	Ave	17870 646193	35158 1548095	66146	142284	323833	10.0 500	25.0 1250	50.0	100	250
Benzene	FB	Ave	55307 2772432	138329 6724662	281402	572779	1377133	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2-Dichloroethane	FB	Ave	15797 724346	38004 1771645	72998	151288	360703	0.200 10.0	0.500 25.0	1.00	2.00	5.00
t-Amyl methyl ether	FB	Ave	35829 1826371	88898 4412445	182481	376620	928259	0.200 10.0	0.500 25.0	1.00	2.00	5.00
n-Heptane	FB	Ave	24047	54789	120942	243269	576846	0.200	0.500	1.00	2.00	5.00

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-37501-1 Analy Batch No.: 107390

SDG No.: _____

Instrument ID: 19930 GC Column: R-624SilMS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/25/2021 23:19 Calibration End Date: 03/26/2021 01:26 Calibration ID: 22087

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
			1194850	2903414				10.0	25.0			
n-Butanol	TBAd 10	Ave	24365	61571	125106	261716	577630	20.0	50.0	100	200	500
			1183757	2766855				1000	2500			
Trichloroethene	FB	Ave	14760	35485	71417	147779	359914	0.200	0.500	1.00	2.00	5.00
			723166	1761390				10.0	25.0			
Methylcyclohexane	FB	Ave	24128	61740	123593	263506	659798	0.200	0.500	1.00	2.00	5.00
			1312238	3189381				10.0	25.0			
1,2-Dichloropropane	FB	Ave	14465	35486	71710	148250	360060	0.200	0.500	1.00	2.00	5.00
			721456	1741575				10.0	25.0			
Methyl methacrylate	TBAd 10	Ave	6595	15850	33700	72515	171139	0.200	0.500	1.00	2.00	5.00
			356900	858374				10.0	25.0			
1,4-Dioxane	TBAd 10	Ave	1706	6622	12008	27783	59547	10.0	25.0	50.0	100	250
			115387	241329				500	1250			
Dibromomethane	FB	Ave	6393	16764	33652	65371	163136	0.200	0.500	1.00	2.00	5.00
			323321	787975				10.0	25.0			
Bromodichloromethane	FB	Ave	16873	40469	86229	173868	426779	0.200	0.500	1.00	2.00	5.00
			872014	2147789				10.0	25.0			
2-Nitropropane	TBAd 10	Ave	20670	53853	106909	217593	540981	2.00	5.00	10.0	20.0	50.0
			1078290	2618662				100	250			
cis-1,3-Dichloropropene	FB	Ave	20362	50878	107084	219295	546745	0.200	0.500	1.00	2.00	5.00
			1097652	2679238				10.0	25.0			
4-Methyl-2-pentanone (MIBK)	TBAd 10	Ave	92250	241439	494241	1003927	2470307	2.00	5.00	10.0	20.0	50.0
			4862462	11596289				100	250			
Toluene	CBZd 5	Ave	35687	87241	176402	363726	869128	0.200	0.500	1.00	2.00	5.00
			1764372	4335726				10.0	25.0			
trans-1,3-Dichloropropene	CBZd 5	Ave	16134	40964	83157	177893	445142	0.200	0.500	1.00	2.00	5.00
			897325	2210346				10.0	25.0			
Ethyl methacrylate	CBZd 5	Ave	14167	35178	71189	157462	383451	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.: 410-37501-1 Analy Batch No.: 107390

SDG No.: _____

Instrument ID: 19930 GC Column: R-624SilMS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/25/2021 23:19 Calibration End Date: 03/26/2021 01:26 Calibration ID: 22087

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
			756835	1835713				10.0	25.0			
1,1,2-Trichloroethane	CBZd 5	Ave	9564	22834	48211	98763	237582	0.200	0.500	1.00	2.00	5.00
			481732	1163743				10.0	25.0			
Tetrachloroethene	CBZd 5	Ave	16441	39052	83669	174286	425512	0.200	0.500	1.00	2.00	5.00
			866923	2110806				10.0	25.0			
1,3-Dichloropropane	CBZd 5	Ave	16003	41331	85540	172879	428964	0.200	0.500	1.00	2.00	5.00
			845366	2065120				10.0	25.0			
2-Hexanone	TBAd 10	Ave	62176	167867	346497	708784	1744022	2.00	5.00	10.0	20.0	50.0
			3464716	8242882				100	250			
Dibromochloromethane	CBZd 5	Ave	10963	28920	60243	124832	315923	0.200	0.500	1.00	2.00	5.00
			641453	1567134				10.0	25.0			
1,2-Dibromoethane (EDB)	CBZd 5	Ave	8556	23323	46934	95855	239263	0.200	0.500	1.00	2.00	5.00
			478074	1156382				10.0	25.0			
1-Chlorohexane	CBZd 5	Ave	23669	51858	109064	218547	517255	0.200	0.500	1.00	2.00	5.00
			1074128	2586722				10.0	25.0			
Chlorobenzene	CBZd 5	Ave	37579	95826	197457	404331	977663	0.200	0.500	1.00	2.00	5.00
			1974363	4811071				10.0	25.0			
1,1,1,2-Tetrachloroethane	CBZd 5	Ave	13100	34792	69838	145750	362752	0.200	0.500	1.00	2.00	5.00
			722501	1783600				10.0	25.0			
Ethylbenzene	CBZd 5	Ave	68295	169543	348677	711404	1728838	0.200	0.500	1.00	2.00	5.00
			3475445	8449113				10.0	25.0			
m&p-Xylene	CBZd 5	Ave	51200	134614	273866	558858	1362023	0.400	1.00	2.00	4.00	10.0
			2756475	6697468				20.0	50.0			
o-Xylene	CBZd 5	Ave	24816	63580	133969	276854	674327	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.: 410-37501-1 Analy Batch No.: 107390

SDG No.: _____

Instrument ID: 19930 GC Column: R-624SilMS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/25/2021 23:19 Calibration End Date: 03/26/2021 01:26 Calibration ID: 22087

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)					
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	
			1353061	3320234					10.0	25.0			
Styrene	CBZd 5	Ave	41346	102806	217070	452528	1095031	0.200	0.500	1.00	2.00	5.00	
			2207662	5408522				10.0	25.0				
Bromoform	CBZd 5	Ave	7072	17826	38357	79664	197838	0.200	0.500	1.00	2.00	5.00	
			398150	1006142				10.0	25.0				
Isopropylbenzene	CBZd 5	Ave	68127	168700	357935	731637	1787241	0.200	0.500	1.00	2.00	5.00	
			3606643	8685502				10.0	25.0				
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	11364	28607	60797	126655	313169	0.200	0.500	1.00	2.00	5.00	
			615911	1521486				10.0	25.0				
Bromobenzene	DCBd 4	Ave	16009	40145	83959	173823	418974	0.200	0.500	1.00	2.00	5.00	
			845880	2095054				10.0	25.0				
trans-1,4-Dichloro-2-butene	TBAd 10	Ave	32312	77224	166570	344049	859813	2.00	5.00	10.0	20.0	50.0	
			1719659	4199708				100	250				
1,2,3-Trichloropropane	DCBd 4	Ave	2852	8504	15297	34148	83391	0.200	0.500	1.00	2.00	5.00	
			163606	399964				10.0	25.0				
N-Propylbenzene	DCBd 4	Ave	77146	202079	417034	851752	2062328	0.200	0.500	1.00	2.00	5.00	
			4171904	10018099				10.0	25.0				
2-Chlorotoluene	DCBd 4	Ave	16257	39228	83871	175115	415188	0.200	0.500	1.00	2.00	5.00	
			850537	2087968				10.0	25.0				
1,3,5-Trimethylbenzene	DCBd 4	Ave	55902	141120	296322	612448	1494397	0.200	0.500	1.00	2.00	5.00	
			3021269	7374201				10.0	25.0				
4-Chlorotoluene	DCBd 4	Ave	16900	41138	84059	175246	425054	0.200	0.500	1.00	2.00	5.00	
			863180	2128307				10.0	25.0				
tert-Butylbenzene	DCBd 4	Ave	12603	31160	65226	137088	330326	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.: 410-37501-1 Analy Batch No.: 107390

SDG No.: _____

Instrument ID: 19930 GC Column: R-624SilMS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/25/2021 23:19 Calibration End Date: 03/26/2021 01:26 Calibration ID: 22087

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
			674379	1675051				10.0	25.0			
Pentachloroethane	DCBd 4	Ave	11032	25106	50922	108399	281922	0.200	0.500	1.00	2.00	5.00
			559813	1409384				10.0	25.0			
1,2,4-Trimethylbenzene	DCBd 4	Ave	57882	147037	305474	623059	1536046	0.200	0.500	1.00	2.00	5.00
			3072367	7478056				10.0	25.0			
sec-Butylbenzene	DCBd 4	Ave	75304	186398	389750	800709	1955145	0.200	0.500	1.00	2.00	5.00
			3949288	9534392				10.0	25.0			
1,3-Dichlorobenzene	DCBd 4	Ave	32667	79884	162228	342026	836365	0.200	0.500	1.00	2.00	5.00
			1675156	4174846				10.0	25.0			
p-Isopropyltoluene	DCBd 4	Ave	62210	155261	332809	687905	1681791	0.200	0.500	1.00	2.00	5.00
			3384266	8222554				10.0	25.0			
1,4-Dichlorobenzene	DCBd 4	Ave	32474	80478	165981	339830	835031	0.200	0.500	1.00	2.00	5.00
			1671621	4093737				10.0	25.0			
1,2,3-Trimethylbenzene	DCBd 4	Ave	27220	63732	126397	261226	663242	0.200	0.500	1.00	2.00	5.00
			1312071	3263963				10.0	25.0			
Benzyl chloride	DCBd 4	Ave	4512	13013	26506	57189	143338	0.200	0.500	1.00	2.00	5.00
			285981	733152				10.0	25.0			
n-Butylbenzene	DCBd 4	Ave	30747	75474	158340	331614	814333	0.200	0.500	1.00	2.00	5.00
			1652234	4057315				10.0	25.0			
1,2-Dichlorobenzene	DCBd 4	Ave	29321	74631	150954	309104	755290	0.200	0.500	1.00	2.00	5.00
			1514665	3720898				10.0	25.0			
1,2-Dibromo-3-Chloropropane	DCBd 4	Ave	1678	4773	8946	19137	49133	0.200	0.500	1.00	2.00	5.00
			98219	249387				10.0	25.0			
1,3,5-Trichlorobenzene	DCBd 4	Ave	22364	57251	119469	245529	615668	0.200	0.500	1.00	2.00	5.00

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-37501-1 Analy Batch No.: 107390

SDG No.: _____

Instrument ID: 19930 GC Column: R-624SilMS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/25/2021 23:19 Calibration End Date: 03/26/2021 01:26 Calibration ID: 22087

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
			1250393	3132791				10.0	25.0			
1,2,4-Trichlorobenzene	DCBd 4	Ave	18170	46562	97675	204502	524702	0.200	0.500	1.00	2.00	5.00
			1077769	2643264				10.0	25.0			
Hexachlorobutadiene	DCBd 4	Ave	10298	22282	44110	87060	214097	0.200	0.500	1.00	2.00	5.00
			432628	1104366				10.0	25.0			
Naphthalene	DCBd 4	Ave	33921	90288	191794	396601	998124	0.200	0.500	1.00	2.00	5.00
			2003574	4726811				10.0	25.0			
1,2,3-Trichlorobenzene	DCBd 4	Ave	17019	41678	85459	182917	447706	0.200	0.500	1.00	2.00	5.00
			907974	2149955				10.0	25.0			
Dibromofluoromethane (Surr)	FB	Ave	547082	541504	544006	538391	538959	10.0	10.0	10.0	10.0	10.0
			539871	540126				10.0	10.0			
1,2-Dichloroethane-d4 (Surr)	FB	Ave	106960	107831	106557	106715	104722	10.0	10.0	10.0	10.0	10.0
			104409	104628				10.0	10.0			
Toluene-d8 (Surr)	CBZd 5	Ave	2145909	2151774	2132430	2137685	2136606	10.0	10.0	10.0	10.0	10.0
			2144368	2154955				10.0	10.0			
4-Bromofluorobenzene (Surr)	CBZd 5	Ave	822001	822933	807959	811047	806855	10.0	10.0	10.0	10.0	10.0
			812680	817055				10.0	10.0			

Curve Type Legend

Ave = Average ISTD

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-37501-1 Analy Batch No.: 107390

SDG No.: _____

Instrument ID: 19930 GC Column: R-624SilMS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/25/2021 23:19 Calibration End Date: 03/26/2021 01:26 Calibration ID: 22087

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-107390/18	IM25I07.D
Level 2	IC 410-107390/17	IM25I06.D
Level 3	IC 410-107390/16	IM25I05.D
Level 4	IC 410-107390/15	IM25I04.D
Level 5	IC 410-107390/14	IM25I03.D
Level 6	ICIS 410-107390/13	IM25I02.D
Level 7	IC 410-107390/12	IM25I01.D

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
Dichlorodifluoromethane	1.3 -1.0	-2.0	-1.2	-2.3	2.9	2.2	50 30	30	30	30	30	30
Chloromethane	7.0 -3.1	1.4	-1.0	-4.2	0.9	-1.1	50 30	30	30	30	30	30
1,3-Butadiene	1.3 -5.1	0.9	2.0	2.4	-0.6	-0.9	50 30	30	30	30	30	30
Vinyl chloride	-2.1 0.5	-2.8	2.1	-2.1	3.1	1.3	50 30	30	30	30	30	30
Bromomethane	8.8 -5.4	0.7	-2.6	-1.2	1.5	-1.7	50 30	30	30	30	30	30
Chloroethane	2.3 -3.0	1.0	-0.4	-2.7	3.3	-0.4	50 30	30	30	30	30	30
Dichlorofluoromethane	14.5 -7.1	5.0	-3.2	-3.1	-3.3	-2.7	50 30	30	30	30	30	30
Trichlorofluoromethane	3.3 -3.7	-3.2	-1.6	0.3	3.8	1.0	50 30	30	30	30	30	30
Ethyl ether	1.1 -1.8	-2.6	-2.5	0.4	4.3	1.1	50 30	30	30	30	30	30
Freon 123a	2.6 -3.9	-7.9	3.8	5.1	-0.3	0.7	50 30	30	30	30	30	30
Acrolein	-6.8 -1.0	-10.7	3.2	1.7	8.8	4.8	50 30	30	30	30	30	30
1,1-Dichloroethene	-6.4 -2.6	-3.1	3.7	5.9	0.3	2.2	50 30	30	30	30	30	30
Acetone	20.7 -11.1	2.7	1.0	-3.3	-2.4	-7.6	50 30	30	30	30	30	30
Freon 113	-8.0 1.0	-13.7	4.6	9.1	2.7	4.2	50 30	30	30	30	30	30

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-37501-1 Analy Batch No.: 107390

SDG No.: _____

Instrument ID: 19930 GC Column: R-624SilMS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/25/2021 23:19 Calibration End Date: 03/26/2021 01:26 Calibration ID: 22087

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
Methyl iodide	-4.3 -2.1	-2.9	3.7	3.5	1.1	1.0	50 30	30	30	30	30	30
Carbon disulfide	-0.4 -3.2	-1.5	2.3	3.4	-0.9	0.2	50 30	30	30	30	30	30
Methyl acetate	30.0 -7.1	-3.5	-10.4	-9.8	2.4	-1.5	50 30	30	30	30	30	30
Allyl chloride	10.4 -5.9	2.3	-2.3	-1.7	0.1	-2.9	50 30	30	30	30	30	30
Methylene Chloride	-0.3 -4.8	1.7	0.6	3.1	0.8	-1.0	50 30	30	30	30	30	30
t-Butyl alcohol	-4.0 -3.7	1.3	0.6	1.0	2.5	2.3	50 30	30	30	30	30	30
Acrylonitrile	-13.0 0.7	-9.8	4.4	0.6	10.9	6.2	50 30	30	30	30	30	30
Methyl tert-butyl ether	-4.8 -3.6	-0.6	2.0	4.6	2.0	0.4	50 30	30	30	30	30	30
trans-1,2-Dichloroethene	5.4 -4.4	-2.2	-0.6	3.3	0.3	-1.9	50 30	30	30	30	30	30
n-Hexane	-2.1 0.6	-13.3	5.5	5.0	0.0	4.3	50 30	30	30	30	30	30
1,1-Dichloroethane	-3.2 -3.1	-1.3	1.8	3.0	1.4	1.4	50 30	30	30	30	30	30
di-Isopropyl ether	-0.2 -2.6	-3.1	1.0	2.9	1.8	0.2	50 30	30	30	30	30	30
2-Chloro-1,3-butadiene	-2.3 -1.8	-6.1	4.4	3.8	0.2	1.7	50 30	30	30	30	30	30
Ethyl t-butyl ether	-1.0 -3.5	-2.0	1.8	2.4	2.2	0.2	50 30	30	30	30	30	30
2-Butanone (MEK)	-3.2 -0.3	-10.1	1.3	-0.2	7.8	4.7	50 30	30	30	30	30	30
cis-1,2-Dichloroethene	-2.8 -3.7	0.4	0.7	3.7	2.0	-0.4	50 30	30	30	30	30	30
2,2-Dichloropropane	-0.2 -2.3	-7.1	4.5	4.4	-0.1	0.8	50 30	30	30	30	30	30
Propionitrile	-6.4 1.0	-6.9	2.8	0.7	6.0	2.8	50 30	30	30	30	30	30
Methacrylonitrile	-9.6 0.5	-13.2	2.5	2.9	10.6	6.3	50 30	30	30	30	30	30

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-37501-1 Analy Batch No.: 107390

SDG No.: _____

Instrument ID: 19930 GC Column: R-624SilMS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/25/2021 23:19 Calibration End Date: 03/26/2021 01:26 Calibration ID: 22087

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
Bromochloromethane	4.2 -4.2	0.6	-2.8	0.2	2.7	-0.8	50 30	30	30	30	30	30
Tetrahydrofuran	-6.3 -2.3	-8.5	6.2	0.5	6.9	3.4	50 30	30	30	30	30	30
Chloroform	-2.7 -3.4	1.4	1.7	2.6	0.7	-0.2	50 30	30	30	30	30	30
1,1,1-Trichloroethane	-1.5 -2.4	-1.8	2.3	2.7	-0.3	0.9	50 30	30	30	30	30	30
Cyclohexane	1.7 -0.6	-10.5	4.7	4.1	-1.1	1.7	50 30	30	30	30	30	30
1,1-Dichloropropene	-4.3 -0.4	-4.0	2.0	3.8	1.6	1.3	50 30	30	30	30	30	30
Carbon tetrachloride	-7.4 1.7	-6.9	4.3	3.7	1.4	3.1	50 30	30	30	30	30	30
Isobutyl alcohol	21.1 -7.2	-10.5	-4.7	1.3	0.9	-0.9	50 30	30	30	30	30	30
Benzene	-1.4 -2.5	-1.1	1.7	3.0	0.1	0.1	50 30	30	30	30	30	30
1,2-Dichloroethane	5.5 -3.8	1.7	-1.3	1.9	-1.9	-2.1	50 30	30	30	30	30	30
t-Amyl methyl ether	-2.5 -2.3	-3.0	0.7	3.4	3.0	0.7	50 30	30	30	30	30	30
n-Heptane	1.2 -0.7	-7.6	3.1	3.2	-1.1	1.8	50 30	30	30	30	30	30
n-Butanol	-4.9 -4.5	-9.7	3.8	7.3	3.6	4.5	50 30	30	30	30	30	30
Trichloroethene	1.3 -1.7	-2.4	-0.7	2.3	0.7	0.5	50 30	30	30	30	30	30
Methylcyclohexane	-6.1 0.9	-3.7	-2.5	3.4	4.6	3.4	50 30	30	30	30	30	30
1,2-Dichloropropane	-0.4 -2.5	-2.0	0.1	3.0	1.1	0.6	50 30	30	30	30	30	30
Methyl methacrylate	-9.2 4.5	-18.0	-1.4	4.8	8.3	11.1	50 30	30	30	30	30	30
1,4-Dioxane	-30.4 -12.9	1.6	4.2	19.1	11.8	6.6	50 30	30	30	30	30	30
Dibromomethane	-3.0 -2.8	2.0	3.5	0.1	0.9	-0.6	50 30	30	30	30	30	30

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-37501-1

Analy Batch No.: 107390

SDG No.: _____

Instrument ID: 19930

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

Heated Purge: (Y/N) N

Calibration Start Date: 03/25/2021 23:19

Calibration End Date: 03/26/2021 01:26

Calibration ID: 22087

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
Bromodichloromethane	-2.1 1.4	-5.9	1.4	1.8	0.9	2.5	50 30	30	30	30	30	30
2-Nitropropane	-9.0 2.0	-10.9	0.1	0.7	9.6	7.4	50 30	30	30	30	30	30
cis-1,3-Dichloropropene	-5.5 1.1	-5.4	0.7	2.6	3.4	3.1	50 30	30	30	30	30	30
4-Methyl-2-pentanone (MIBK)	-10.3 -0.3	-11.8	2.2	2.6	10.5	7.0	50 30	30	30	30	30	30
Toluene	0.4 -2.3	-1.4	0.7	3.0	-0.5	0.0	50 30	30	30	30	30	30
trans-1,3-Dichloropropene	-6.9 2.2	-5.0	-2.6	3.4	4.6	4.3	50 30	30	30	30	30	30
Ethyl methacrylate	-4.8 -1.2	-5.0	-2.9	6.5	4.9	2.4	50 30	30	30	30	30	30
1,1,2-Trichloroethane	-0.3 -2.8	-4.4	2.0	3.6	0.8	1.1	50 30	30	30	30	30	30
Tetrachloroethene	-2.7 0.0	-7.2	0.4	3.8	2.4	3.2	50 30	30	30	30	30	30
1,3-Dichloropropane	-5.4 -2.2	-1.8	2.6	2.9	3.2	0.6	50 30	30	30	30	30	30
2-Hexanone	-13.8 1.1	-12.5	2.1	3.2	11.2	8.7	50 30	30	30	30	30	30
Dibromochloromethane	-10.4 2.5	-5.1	-0.2	2.6	5.0	5.5	50 30	30	30	30	30	30
1,2-Dibromoethane (EDB)	-8.9 -1.3	-0.2	1.4	2.8	3.7	2.5	50 30	30	30	30	30	30
1-Chlorohexane	9.0 -4.6	-4.1	1.9	1.3	-3.1	-0.4	50 30	30	30	30	30	30
Chlorobenzene	-4.3 -1.9	-2.0	2.0	3.6	1.3	1.2	50 30	30	30	30	30	30
1,1,1,2-Tetrachloroethane	-7.8 0.5	-1.7	-0.3	3.2	3.8	2.3	50 30	30	30	30	30	30
Ethylbenzene	-1.8 -2.7	-2.0	1.7	3.0	1.2	0.6	50 30	30	30	30	30	30
m&p-Xylene	-6.1 -1.6	-0.8	1.9	3.2	1.6	1.8	50 30	30	30	30	30	30
o-Xylene	-6.9 -0.3	-4.2	1.9	4.5	2.9	2.1	50 30	30	30	30	30	30

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-37501-1 Analy Batch No.: 107390

SDG No.: _____

Instrument ID: 19930 GC Column: R-624SilMS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/25/2021 23:19 Calibration End Date: 03/26/2021 01:26 Calibration ID: 22087

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
Styrene	-5.0 -0.4	-5.1	1.2	4.7	2.4	2.1	50 30	30	30	30	30	30
Bromoform	-8.6 4.2	-7.4	0.6	3.6	4.0	3.6	50 30	30	30	30	30	30
Isopropylbenzene	-4.1 -2.0	-4.5	2.3	3.7	2.4	2.2	50 30	30	30	30	30	30
1,1,2,2-Tetrachloroethane	-7.1 0.7	-6.9	0.5	4.7	4.9	3.2	50 30	30	30	30	30	30
Bromobenzene	-5.1 0.6	-5.2	0.7	4.3	1.9	2.8	50 30	30	30	30	30	30
trans-1,4-Dichloro-2-butene	-9.0 4.6	-18.2	-0.2	1.8	11.4	9.6	50 30	30	30	30	30	30
1,2,3-Trichloropropane	-12.5 -0.6	4.0	-5.0	6.1	5.0	3.0	50 30	30	30	30	30	30
N-Propylbenzene	-6.8 -2.0	-2.8	1.9	4.1	2.2	3.3	50 30	30	30	30	30	30
2-Chlorotoluene	-3.5 0.3	-7.3	0.7	5.2	1.1	3.5	50 30	30	30	30	30	30
1,3,5-Trimethylbenzene	-6.2 0.2	-5.6	0.7	4.0	2.9	4.0	50 30	30	30	30	30	30
4-Chlorotoluene	-1.7 0.2	-4.7	-1.1	3.1	1.4	2.9	50 30	30	30	30	30	30
tert-Butylbenzene	-5.2 2.1	-6.6	-0.7	4.4	1.9	4.1	50 30	30	30	30	30	30
Pentachloroethane	0.6 4.1	-8.8	-6.0	0.0	5.4	4.7	50 30	30	30	30	30	30
1,2,4-Trimethylbenzene	-5.3 -0.9	-4.2	1.1	3.1	3.1	3.1	50 30	30	30	30	30	30
sec-Butylbenzene	-3.8 -1.4	-5.1	0.8	3.5	2.5	3.5	50 30	30	30	30	30	30
1,3-Dichlorobenzene	-2.4 1.0	-5.0	-2.0	3.4	2.4	2.6	50 30	30	30	30	30	30
p-Isopropyltoluene	-6.5 0.0	-7.1	1.2	4.6	3.6	4.3	50 30	30	30	30	30	30
1,4-Dichlorobenzene	-2.9 -0.9	-4.2	0.4	2.8	2.4	2.5	50 30	30	30	30	30	30
1,2,3-Trimethylbenzene	2.9 -0.1	-4.0	-3.3	-0.1	2.8	1.7	50 30	30	30	30	30	30

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-37501-1 Analy Batch No.: 107390

SDG No.: _____

Instrument ID: 19930 GC Column: R-624SilMS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/25/2021 23:19 Calibration End Date: 03/26/2021 01:26 Calibration ID: 22087

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
Benzyl chloride	-18.0 7.9	-5.8	-2.5	5.1	6.8	6.6	50 30	30	30	30	30	30
n-Butylbenzene	-5.0 1.5	-7.1	-1.0	3.7	3.2	4.7	50 30	30	30	30	30	30
1,2-Dichlorobenzene	-3.7 -1.0	-2.3	0.4	2.8	1.8	2.1	50 30	30	30	30	30	30
1,2-Dibromo-3-Chloropropane	-12.2 5.7	-0.5	-5.3	1.3	5.5	5.4	50 30	30	30	30	30	30
1,3,5-Trichlorobenzene	-8.2 4.2	-6.3	-0.7	2.0	3.7	5.3	50 30	30	30	30	30	30
1,2,4-Trichlorobenzene	-10.6 5.4	-8.7	-2.7	1.9	5.9	8.8	50 30	30	30	30	30	30
Hexachlorobutadiene	13.5 -1.4	-2.2	-1.6	-2.9	-3.2	-2.2	50 30	30	30	30	30	30
Naphthalene	-11.8 -0.5	-6.5	0.9	4.4	6.5	6.9	50 30	30	30	30	30	30
1,2,3-Trichlorobenzene	-3.8 -1.6	-6.1	-2.2	4.6	3.8	5.3	50 30	30	30	30	30	30
Dibromofluoromethane (Surr)	0.0 0.4	-0.8	0.8	-0.7	0.4	-0.1	50 30	30	30	30	30	30
1,2-Dichloroethane-d4 (Surr)	-0.1 -0.7	0.9	0.8	0.5	-0.3	-1.2	50 30	30	30	30	30	30
Toluene-d8 (Surr)	-0.6 -0.1	0.1	0.2	-0.3	0.7	0.0	50 30	30	30	30	30	30
4-Bromofluorobenzene (Surr)	0.2 -0.3	0.8	-0.1	-0.5	0.1	-0.3	50 30	30	30	30	30	30

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25101.D
 Lims ID: IC std7
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 25-Mar-2021 23:19:30 ALS Bottle#: 11 Worklist Smp#: 12
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0025078-012
 Misc. Info.: IC STD7
 Operator ID: mec29284 Instrument ID: 19930
 Sublist: chrom-8260 25ml HP31*sub2

Method: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\8260 25ml HP31.m
 Limit Group: MSV - 8260C_D
 Last Update: 26-Mar-2021 17:09:26 Calib Date: 26-Mar-2021 01:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25107.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1605

First Level Reviewer: campbellme

Date: 26-Mar-2021 16:42:11

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.971	1.983	-0.012	99	1652773	25.0	24.8	
4 Chloromethane	50	2.172	2.178	-0.006	99	1968101	25.0	24.2	
6 Butadiene	39	2.282	2.294	-0.012	93	1706528	25.0	23.7	
5 Vinyl chloride	62	2.288	2.300	-0.012	98	1847361	25.0	25.1	
7 Bromomethane	94	2.611	2.629	-0.018	90	1260967	25.0	23.6	
8 Chloroethane	64	2.702	2.715	-0.012	100	1116726	25.0	24.2	
9 Dichlorofluoromethane	67	2.940	2.952	-0.012	97	1753000	25.0	23.2	
10 Trichlorofluoromethane	101	3.013	3.019	-0.006	98	2485598	25.0	24.1	
11 Ethyl ether	59	3.263	3.275	-0.012	92	1223300	25.0	24.5	
12 1,2-Dichloro-1,1,2-trifluoroethane	67	3.343	3.342	0.001	92	1852151	25.0	24.0	
13 Acrolein	56	3.434	3.446	-0.012	99	9704706	1249.9	1237.0	
14 1,1-Dichloroethene	96	3.574	3.586	-0.012	98	1354325	25.0	24.4	
15 Acetone	43	3.605	3.617	-0.012	99	2285940	250.0	222.1	
16 1,1,1-Trichloroethane	101	3.611	3.623	-0.012	91	1583141	25.0	25.2	
17 Iodomethane	142	3.775	3.787	-0.012	98	2698334	25.0	24.5	
18 Ethyl bromide	108	3.800	3.812	-0.012	98	1220358	25.0	24.3	
19 Carbon disulfide	76	3.879	3.897	-0.018	99	3981511	25.0	24.2	
21 Methyl acetate	43	4.031	4.050	-0.019	98	785174	25.0	23.2	
22 3-Chloro-1-propene	41	4.056	4.074	-0.018	92	2673144	25.0	23.5	
23 Methylene Chloride	84	4.245	4.257	-0.012	94	1487802	25.0	23.8	
* 24 t-Butyl alcohol-d10 (IS)	65	4.269	4.269	0.000	0	158827	50.0	50.0	
25 2-Methyl-2-propanol	59	4.397	4.391	0.006	99	1782579	500.0	481.7	
26 Acrylonitrile	53	4.586	4.604	-0.018	99	1591064	125.0	125.9	
27 Methyl tert-butyl ether	73	4.653	4.659	-0.006	96	3928149	25.0	24.1	
28 trans-1,2-Dichloroethene	96	4.672	4.684	-0.012	98	1515454	25.0	23.9	
29 Hexane	57	5.092	5.104	-0.012	94	2594712	25.0	25.1	
31 1,1-Dichloroethane	63	5.330	5.342	-0.012	96	2967767	25.0	24.2	
32 Isopropyl ether	45	5.385	5.397	-0.012	95	5528886	25.0	24.4	
33 2-Chloro-1,3-butadiene	53	5.440	5.446	-0.006	91	2647970	25.0	24.6	
34 Tert-butyl ethyl ether	59	5.921	5.927	-0.006	98	4979385	25.0	24.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 2-Butanone (MEK)	43	6.129	6.122	0.007	100	4512811	250.0	249.2	
S 35 1,2-Dichloroethene, Total	100				0			48.0	
37 cis-1,2-Dichloroethene	96	6.159	6.165	-0.006	82	1761040	25.0	24.1	
38 2,2-Dichloropropane	77	6.177	6.183	-0.006	89	2587808	25.0	24.4	
40 Propionitrile	54	6.214	6.214	0.000	99	2170928	500.0	505.2	
42 Methacrylonitrile	67	6.433	6.427	0.006	94	4166040	250.0	251.2	
43 Chlorobromomethane	128	6.488	6.488	0.000	94	781560	25.0	23.9	
44 Tetrahydrofuran	71	6.507	6.500	0.007	90	1166871	250.0	244.3	
45 Chloroform	83	6.641	6.647	-0.006	93	2818067	25.0	24.2	
\$ 46 Dibromofluoromethane (Surr)	113	6.854	6.860	-0.006	94	540126	10.0	10.0	
47 1,1,1-Trichloroethane	97	6.866	6.872	-0.006	99	2588835	25.0	24.4	
48 Cyclohexane	56	6.964	6.964	0.000	91	3071642	25.0	24.9	
51 1,1-Dichloropropene	75	7.080	7.080	0.000	95	2336173	25.0	24.9	
50 Carbon tetrachloride	117	7.080	7.086	-0.006	96	2364690	25.0	25.4	
52 Isobutyl alcohol	41	7.214	7.220	-0.006	96	1548095	1250.0	1159.7	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.311	7.305	0.006	0	104628	10.0	9.93	
54 Benzene	78	7.342	7.342	0.000	96	6724662	25.0	24.4	
56 1,2-Dichloroethane	62	7.409	7.415	-0.006	97	1771645	25.0	24.0	
57 Tert-amyl methyl ether	73	7.525	7.531	-0.006	98	4412445	25.0	24.4	
* 58 Fluorobenzene (IS)	96	7.738	7.738	0.000	99	2140113	10.0	10.0	
59 n-Heptane	43	7.750	7.756	-0.006	94	2903414	25.0	24.8	
60 n-Butanol	56	8.092	8.092	0.000	89	2766855	2500.0	2386.7	
61 Trichloroethene	95	8.220	8.220	0.000	98	1761390	25.0	24.6	
62 Methylcyclohexane	83	8.525	8.530	-0.005	94	3189381	25.0	25.2	
63 1,2-Dichloropropane	63	8.549	8.549	0.000	94	1741575	25.0	24.4	
64 Methyl methacrylate	69	8.628	8.628	0.000	92	858374	25.0	26.1	
65 1,4-Dioxane	88	8.634	8.634	0.000	33	241329	1250.0	1088.9	M
66 Dibromomethane	93	8.659	8.665	-0.006	94	787975	25.0	24.3	
68 Dichlorobromomethane	83	8.896	8.890	0.006	99	2147789	25.0	25.3	
69 2-Nitropropane	41	9.159	9.158	0.001	96	2618662	250.0	255.0	
72 1-Bromo-2-chloroethane	63	9.280	9.286	-0.006	98	1670744	25.0	25.1	
73 cis-1,3-Dichloropropene	75	9.433	9.433	0.000	96	2679238	25.0	25.3	
74 4-Methyl-2-pentanone (MIBK)	43	9.604	9.603	0.001	97	11596289	250.0	249.4	
\$ 75 Toluene-d8 (Surr)	98	9.744	9.744	0.000	93	2154955	10.0	10.0	
76 Toluene	92	9.817	9.817	0.000	98	4335726	25.0	24.4	
S 77 1,3-Dichloropropene, Total	100				0			50.8	
78 trans-1,3-Dichloropropene	75	10.067	10.073	-0.006	93	2210346	25.0	25.6	
79 Ethyl methacrylate	69	10.128	10.128	0.000	90	1835713	25.0	24.7	
80 1,1,2-Trichloroethane	97	10.274	10.274	0.000	90	1163743	25.0	24.3	
81 Tetrachloroethene	166	10.366	10.359	0.007	98	2110806	25.0	25.0	
82 1,3-Dichloropropane	76	10.433	10.439	-0.006	91	2065120	25.0	24.5	
83 2-Hexanone	43	10.481	10.481	0.000	98	8242882	250.0	252.7	
85 Chlorodibromomethane	129	10.652	10.652	0.000	90	1567134	25.0	25.6	
86 Ethylene Dibromide	107	10.762	10.762	0.000	99	1156382	25.0	24.7	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.189	0.000	86	1647559	10.0	10.0	
88 1-Chlorohexane	91	11.195	11.195	0.000	99	2586722	25.0	23.9	
90 Chlorobenzene	112	11.213	11.213	0.000	95	4811071	25.0	24.5	
S 89 Xylenes, Total	106				0			74.1	
92 Ethylbenzene	91	11.298	11.298	0.000	98	8449113	25.0	24.3	
91 1,1,1,2-Tetrachloroethane	131	11.298	11.298	0.000	97	1783600	25.0	25.1	
93 m-Xylene & p-Xylene	106	11.414	11.414	0.000	99	6697468	50.0	49.2	
94 o-Xylene	106	11.743	11.743	0.000	96	3320234	25.0	24.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
95 Styrene	104	11.756	11.755	0.001	94	5408522	25.0	24.9	
96 Bromoform	173	11.914	11.914	0.000	98	1006142	25.0	26.0	
97 Isopropylbenzene	105	12.042	12.042	0.000	96	8685502	25.0	24.5	
\$ 100 4-Bromofluorobenzene (Surr)	95	12.188	12.188	0.000	94	817055	10.0	9.97	
101 1,1,2,2-Tetrachloroethane	83	12.286	12.286	0.000	92	1521486	25.0	25.2	
102 Bromobenzene	156	12.304	12.304	0.000	96	2095054	25.0	25.1	
103 trans-1,4-Dichloro-2-butene	53	12.310	12.310	0.000	92	4199708	250.0	261.6	
104 1,2,3-Trichloropropane	110	12.329	12.328	0.001	81	399964	25.0	24.9	
105 N-Propylbenzene	91	12.371	12.371	0.000	98	10018099	25.0	24.5	
106 2-Chlorotoluene	126	12.451	12.444	0.007	97	2087968	25.0	25.1	
107 1,3,5-Trimethylbenzene	105	12.505	12.505	0.000	94	7374201	25.0	25.1	
108 4-Chlorotoluene	126	12.536	12.542	-0.006	97	2128307	25.0	25.0	
109 tert-Butylbenzene	134	12.749	12.743	0.006	93	1675051	25.0	25.5	
110 Pentachloroethane	167	12.780	12.780	0.000	93	1409384	25.0	26.0	
111 1,2,4-Trimethylbenzene	105	12.786	12.786	0.000	97	7478056	25.0	24.8	
112 sec-Butylbenzene	105	12.908	12.908	0.000	94	9534392	25.0	24.7	
113 1,3-Dichlorobenzene	146	13.011	13.011	0.000	98	4174846	25.0	25.2	
114 4-Isopropyltoluene	119	13.018	13.017	0.001	97	8222554	25.0	25.0	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	93	911496	10.0	10.0	
116 1,4-Dichlorobenzene	146	13.085	13.084	0.001	94	4093737	25.0	24.8	
117 1,2,3-Trimethylbenzene	120	13.091	13.091	0.000	98	3263963	25.0	25.0	
118 Benzyl chloride	126	13.158	13.158	0.000	98	733152	25.0	27.0	
119 n-Butylbenzene	92	13.310	13.310	0.000	97	4057315	25.0	25.4	
120 1,2-Dichlorobenzene	146	13.341	13.340	0.001	99	3720898	25.0	24.7	
122 1,2-Dibromo-3-Chloropropane	155	13.883	13.883	0.000	88	249387	25.0	26.4	
123 1,3,5-Trichlorobenzene	180	14.011	14.011	0.000	98	3132791	25.0	26.0	
124 1,2,4-Trichlorobenzene	180	14.432	14.432	0.000	94	2643264	25.0	26.3	
125 Hexachlorobutadiene	225	14.517	14.517	0.000	96	1104366	25.0	24.6	
126 Naphthalene	128	14.615	14.615	0.000	97	4726811	25.0	24.9	
127 1,2,3-Trichlorobenzene	180	14.755	14.755	0.000	96	2149955	25.0	24.6	
137 2-Methylnaphthalene	142		0.000				ND	ND	
135 p-Diethylbenzene	1		0.000				ND	ND	
144 2-ethoxy-2-methyl butane	1		0.000				ND	ND	
204 Pentane	43		0.000				ND	ND	
134 Isopropyl alcohol	45		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

MSV_RV1_826_00042	Amount Added: 25.00	Units: uL	
MSV_RV4_826_00048	Amount Added: 25.00	Units: uL	
MSV_RV4GAS826_00121	Amount Added: 25.00	Units: uL	
MSV_31_826ISS_00004	Amount Added: 5.00	Units: uL	Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25101.D

Injection Date: 25-Mar-2021 23:19:30

Instrument ID: 19930

Operator ID: mec29284

Lims ID: IC std7

Worklist Smp#: 12

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

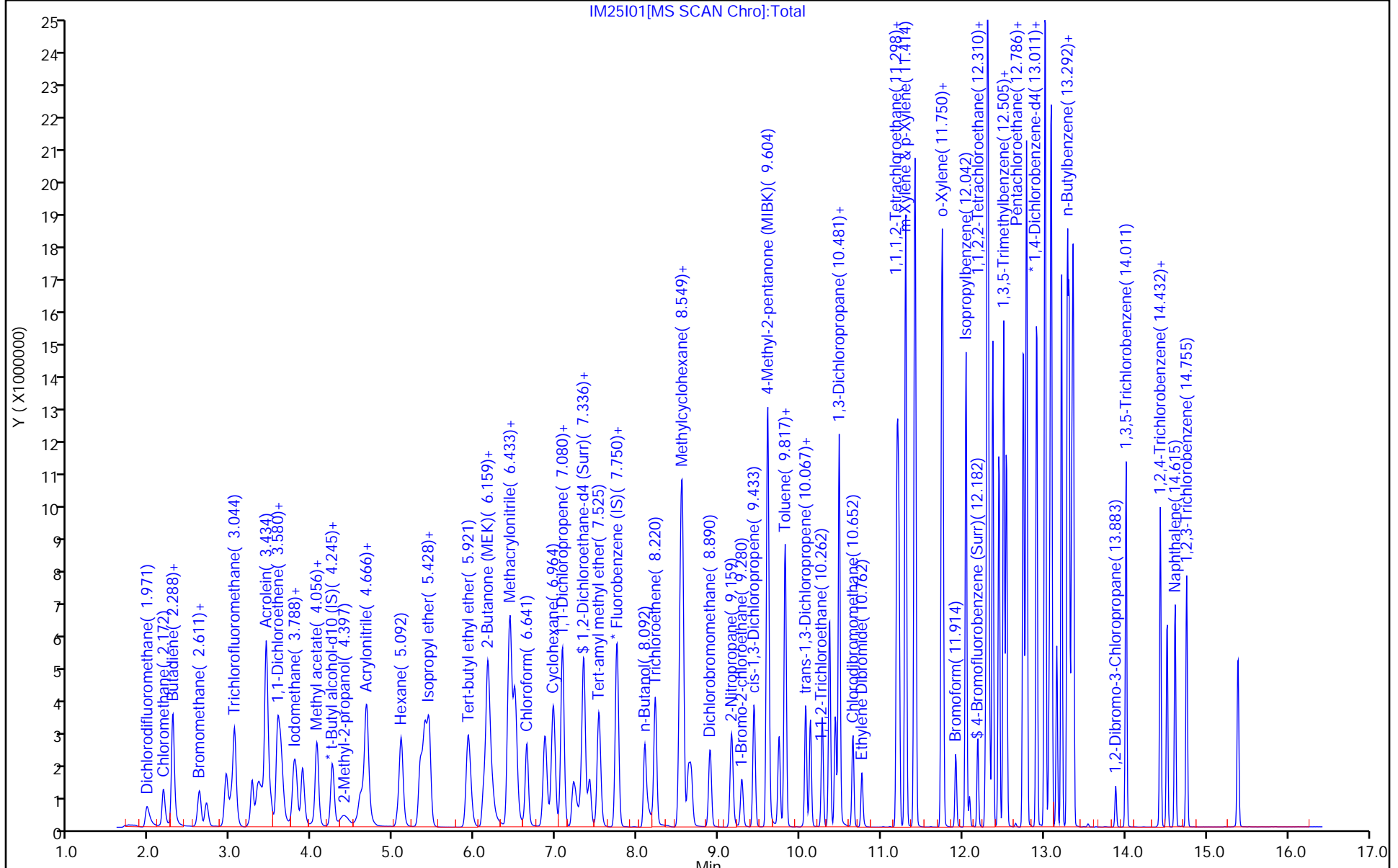
ALS Bottle#: 11

Method: 8260 25ml HP31

Limit Group: MSV - 8260C_D

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

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Euofins Lancaster Laboratories Env, LLC

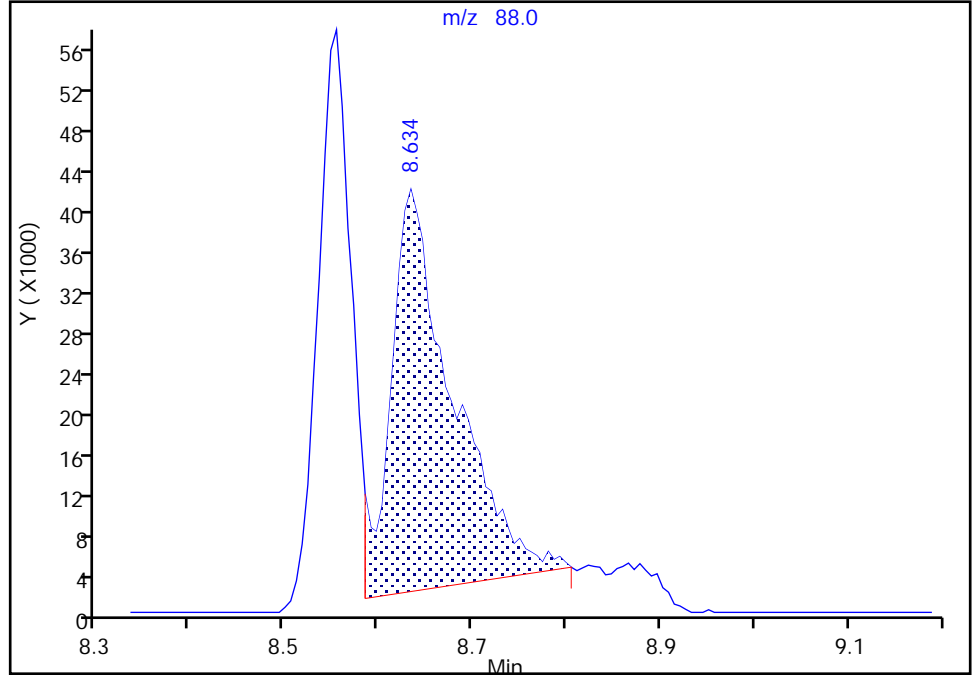
Data File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25101.D
Injection Date: 25-Mar-2021 23:19:30 Instrument ID: 19930
Lims ID: IC std7
Client ID:
Operator ID: mec29284 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

65 1,4-Dioxane, CAS: 123-91-1

Signal: 1

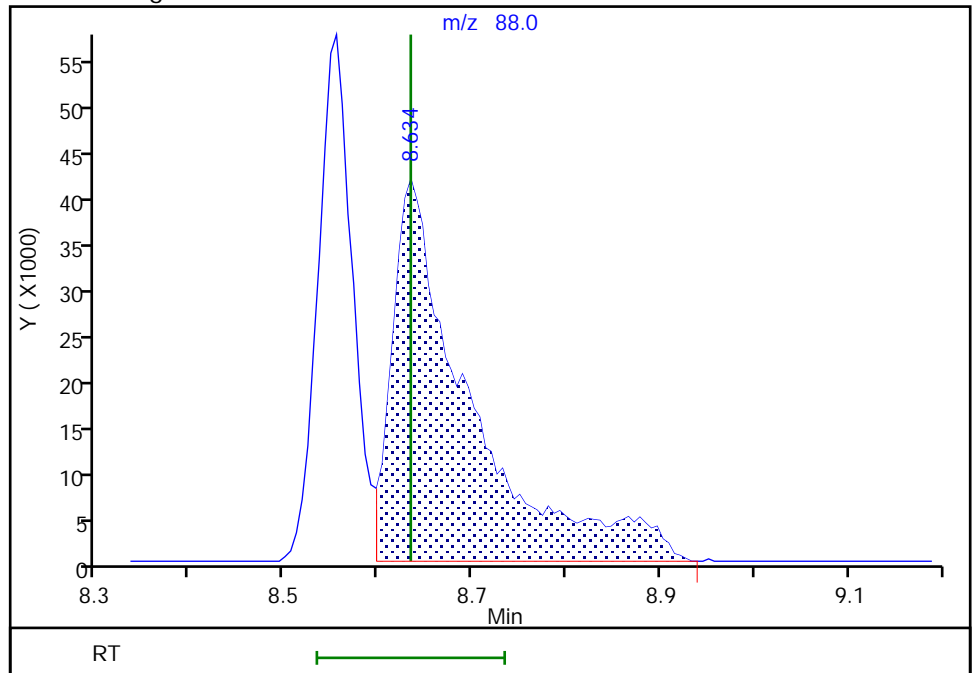
RT: 8.63
Area: 183223
Amount: 1179.6899
Amount Units: ug/l

Processing Integration Results



RT: 8.63
Area: 241329
Amount: 1088.9121
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 26-Mar-2021 16:41:41
Audit Action: Split an Integrated Peak

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25102.D
 Lims ID: ICIS - LG
 Client ID:
 Sample Type: ICIS Calib Level: 6
 Inject. Date: 25-Mar-2021 23:41:30 ALS Bottle#: 12 Worklist Smp#: 13
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0025078-013
 Misc. Info.: ICIS - LG
 Operator ID: mec29284 Instrument ID: 19930
 Sublist: chrom-8260 25ml HP31*sub2

Method: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\8260 25ml HP31.m
 Limit Group: MSV - 8260C_D
 Last Update: 26-Mar-2021 17:09:38 Calib Date: 26-Mar-2021 01:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25107.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1605

First Level Reviewer: campbellme

Date: 26-Mar-2021 16:43:47

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.971	1.971	0.000	99	684973	10.0	10.2	M
4 Chloromethane	50	2.172	2.172	0.000	99	806634	10.0	9.89	
6 Butadiene	39	2.288	2.288	0.000	94	715678	10.0	9.91	
5 Vinyl chloride	62	2.294	2.294	0.000	98	747762	10.0	10.1	
7 Bromomethane	94	2.617	2.617	0.000	89	526580	10.0	9.83	M
8 Chloroethane	64	2.702	2.702	0.000	100	460355	10.0	9.96	
9 Dichlorofluoromethane	67	2.940	2.940	0.000	97	737652	10.0	9.73	
10 Trichlorofluoromethane	101	3.013	3.013	0.000	97	1046802	10.0	10.1	
11 Ethyl ether	59	3.263	3.263	0.000	93	505910	10.0	10.1	
12 1,2-Dichloro-1,1,2-trifluoroethane	67	3.343	3.343	0.000	93	779116	10.0	10.1	
13 Acrolein	56	3.434	3.434	0.000	99	4019121	500.0	524.2	
14 1,1-Dichloroethene	96	3.574	3.574	0.000	98	570227	10.0	10.2	
15 Acetone	43	3.599	3.599	0.000	100	929522	100.0	92.4	
16 112TCTFE	101	3.611	3.611	0.000	91	655797	10.0	10.4	
17 Iodomethane	142	3.775	3.775	0.000	98	1118135	10.0	10.1	
18 Ethyl bromide	108	3.806	3.806	0.000	98	505630	10.0	10.0	
19 Carbon disulfide	76	3.879	3.879	0.000	99	1655816	10.0	10.0	
21 Methyl acetate	43	4.031	4.031	0.000	98	325151	10.0	9.85	
22 3-Chloro-1-propene	41	4.062	4.062	0.000	92	1107944	10.0	9.71	
23 Methylene Chloride	84	4.251	4.251	0.000	94	620780	10.0	9.90	
* 24 t-Butyl alcohol-d10 (IS)	65	4.269	4.269	0.000	0	155217	50.0	50.0	
25 2-Methyl-2-propanol	59	4.379	4.379	0.000	100	740004	200.0	204.6	
26 Acrylonitrile	53	4.592	4.592	0.000	98	655363	50.0	53.1	
27 Methyl tert-butyl ether	73	4.653	4.653	0.000	95	1644094	10.0	10.0	
28 trans-1,2-Dichloroethene	96	4.672	4.672	0.000	98	624221	10.0	9.81	
29 Hexane	57	5.098	5.098	0.000	94	1080750	10.0	10.4	
31 1,1-Dichloroethane	63	5.330	5.330	0.000	96	1246284	10.0	10.1	
32 Isopropyl ether	45	5.391	5.391	0.000	95	2282943	10.0	10.0	
33 2-Chloro-1,3-butadiene	53	5.440	5.440	0.000	91	1100812	10.0	10.2	
34 Tert-butyl ethyl ether	59	5.921	5.921	0.000	98	2075655	10.0	10.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 2-Butanone (MEK)	43	6.116	6.116	0.000	100	1852516	100.0	104.7	
37 cis-1,2-Dichloroethene	96	6.159	6.159	0.000	83	731328	10.0	9.96	
38 2,2-Dichloropropane	77	6.171	6.171	0.000	87	1072043	10.0	10.1	
40 Propionitrile	54	6.208	6.208	0.000	99	862982	200.0	205.5	
42 Methacrylonitrile	67	6.427	6.427	0.000	94	1722490	100.0	106.3	
43 Chlorobromomethane	128	6.488	6.488	0.000	96	325281	10.0	9.92	
44 Tetrahydrofuran	71	6.500	6.500	0.000	90	482595	100.0	103.4	
45 Chloroform	83	6.641	6.641	0.000	93	1168251	10.0	9.98	
\$ 46 Dibromofluoromethane (Surr)	113	6.854	6.854	0.000	94	539871	10.0	10.0	
47 1,1,1-Trichloroethane	97	6.866	6.866	0.000	99	1075219	10.0	10.1	
48 Cyclohexane	56	6.964	6.964	0.000	91	1261698	10.0	10.2	
51 1,1-Dichloropropene	75	7.080	7.080	0.000	95	954603	10.0	10.1	
50 Carbon tetrachloride	117	7.080	7.080	0.000	96	962938	10.0	10.3	
52 Isobutyl alcohol	41	7.214	7.214	0.000	96	646193	500.0	495.3	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.305	7.305	0.000	0	104409	10.0	9.88	
54 Benzene	78	7.342	7.342	0.000	97	2772432	10.0	10.0	
56 1,2-Dichloroethane	62	7.409	7.409	0.000	97	724346	10.0	9.79	
57 Tert-amyl methyl ether	73	7.525	7.525	0.000	98	1826371	10.0	10.1	
* 58 Fluorobenzene (IS)	96	7.738	7.738	0.000	98	2148304	10.0	10.0	
59 n-Heptane	43	7.750	7.750	0.000	94	1194850	10.0	10.2	
60 n-Butanol	56	8.092	8.092	0.000	89	1183757	1000.0	1044.9	
61 Trichloroethene	95	8.220	8.220	0.000	98	723166	10.0	10.1	
62 Methylcyclohexane	83	8.524	8.524	0.000	94	1312238	10.0	10.3	
63 1,2-Dichloropropane	63	8.549	8.549	0.000	83	721456	10.0	10.1	
64 Methyl methacrylate	69	8.628	8.628	0.000	92	356900	10.0	11.1	
65 1,4-Dioxane	88	8.634	8.634	0.000	68	115387	500.0	532.8	M
66 Dibromomethane	93	8.659	8.659	0.000	96	323321	10.0	9.94	
68 Dichlorobromomethane	83	8.890	8.890	0.000	99	872014	10.0	10.2	
69 2-Nitropropane	41	9.158	9.158	0.000	97	1078290	100.0	107.4	
72 1-Bromo-2-chloroethane	63	9.286	9.286	0.000	98	693715	10.0	10.4	
73 cis-1,3-Dichloropropene	75	9.433	9.433	0.000	96	1097652	10.0	10.3	
74 4-Methyl-2-pentanone (MIBK)	43	9.603	9.603	0.000	97	4862462	100.0	107.0	
\$ 75 Toluene-d8 (Surr)	98	9.738	9.738	0.000	94	2144368	10.0	10.0	
76 Toluene	92	9.817	9.817	0.000	98	1764372	10.0	10.0	
78 trans-1,3-Dichloropropene	75	10.067	10.067	0.000	93	897325	10.0	10.4	
79 Ethyl methacrylate	69	10.128	10.128	0.000	91	756835	10.0	10.2	
80 1,1,2-Trichloroethane	97	10.274	10.274	0.000	90	481732	10.0	10.1	
81 Tetrachloroethene	166	10.366	10.366	0.000	98	866923	10.0	10.3	
82 1,3-Dichloropropane	76	10.433	10.433	0.000	91	845366	10.0	10.1	
83 2-Hexanone	43	10.481	10.481	0.000	98	3464716	100.0	108.7	
85 Chlorodibromomethane	129	10.652	10.652	0.000	90	641453	10.0	10.5	
86 Ethylene Dibromide	107	10.762	10.762	0.000	98	478074	10.0	10.3	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.189	0.000	85	1638803	10.0	10.0	
88 1-Chlorohexane	91	11.195	11.195	0.000	98	1074128	10.0	9.96	
90 Chlorobenzene	112	11.213	11.213	0.000	95	1974363	10.0	10.1	
92 Ethylbenzene	91	11.298	11.298	0.000	98	3475445	10.0	10.1	
91 1,1,1,2-Tetrachloroethane	131	11.298	11.298	0.000	97	722501	10.0	10.2	
93 m-Xylene & p-Xylene	106	11.414	11.414	0.000	99	2756475	20.0	20.4	
94 o-Xylene	106	11.743	11.743	0.000	96	1353061	10.0	10.2	
95 Styrene	104	11.755	11.755	0.000	94	2207662	10.0	10.2	
96 Bromoform	173	11.914	11.914	0.000	98	398150	10.0	10.4	
97 Isopropylbenzene	105	12.042	12.042	0.000	96	3606643	10.0	10.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
\$ 100 4-Bromofluorobenzene (Surr)	95	12.188	12.188	0.000	94	812680	10.0	9.97	
101 1,1,2,2-Tetrachloroethane	83	12.286	12.286	0.000	92	615911	10.0	10.3	
102 Bromobenzene	156	12.304	12.304	0.000	93	845880	10.0	10.3	
103 trans-1,4-Dichloro-2-butene	53	12.310	12.310	0.000	92	1719659	100.0	109.6	
104 1,2,3-Trichloropropane	110	12.335	12.335	0.000	83	163606	10.0	10.3	
105 N-Propylbenzene	91	12.371	12.371	0.000	99	4171904	10.0	10.3	
106 2-Chlorotoluene	126	12.444	12.444	0.000	97	850537	10.0	10.4	
107 1,3,5-Trimethylbenzene	105	12.505	12.505	0.000	94	3021269	10.0	10.4	
108 4-Chlorotoluene	126	12.536	12.536	0.000	98	863180	10.0	10.3	
109 tert-Butylbenzene	134	12.749	12.749	0.000	93	674379	10.0	10.4	
110 Pentachloroethane	167	12.780	12.780	0.000	94	559813	10.0	10.5	
111 1,2,4-Trimethylbenzene	105	12.786	12.786	0.000	97	3072367	10.0	10.3	
112 sec-Butylbenzene	105	12.908	12.908	0.000	94	3949288	10.0	10.3	
113 1,3-Dichlorobenzene	146	13.011	13.011	0.000	98	1675156	10.0	10.3	
114 4-Isopropyltoluene	119	13.017	13.017	0.000	97	3384266	10.0	10.4	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	94	899738	10.0	10.0	
116 1,4-Dichlorobenzene	146	13.085	13.085	0.000	94	1671621	10.0	10.2	
117 1,2,3-Trimethylbenzene	120	13.091	13.091	0.000	99	1312071	10.0	10.2	
118 Benzyl chloride	126	13.158	13.158	0.000	98	285981	10.0	10.7	
119 n-Butylbenzene	92	13.310	13.310	0.000	97	1652234	10.0	10.5	
120 1,2-Dichlorobenzene	146	13.341	13.341	0.000	99	1514665	10.0	10.2	
122 1,2-Dibromo-3-Chloropropane	155	13.883	13.883	0.000	88	98219	10.0	10.5	
123 1,3,5-Trichlorobenzene	180	14.011	14.011	0.000	98	1250393	10.0	10.5	
124 1,2,4-Trichlorobenzene	180	14.432	14.432	0.000	94	1077769	10.0	10.9	
125 Hexachlorobutadiene	225	14.517	14.517	0.000	96	432628	10.0	9.78	
126 Naphthalene	128	14.615	14.615	0.000	97	2003574	10.0	10.7	
127 1,2,3-Trichlorobenzene	180	14.755	14.755	0.000	96	907974	10.0	10.5	
204 Pentane	43		0.000				ND	ND	
137 2-Methylnaphthalene	142		0.000				ND	ND	
135 p-Diethylbenzene	1		0.000				ND	ND	
144 2-ethoxy-2-methyl butane	1		0.000				ND	ND	
134 Isopropyl alcohol	45		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

MSV_RV1_826_00042

Amount Added: 10.00

Units: uL

MSV_RV4_826_00048

Amount Added: 10.00

Units: uL

MSV_RV4GAS826_00121

Amount Added: 10.00

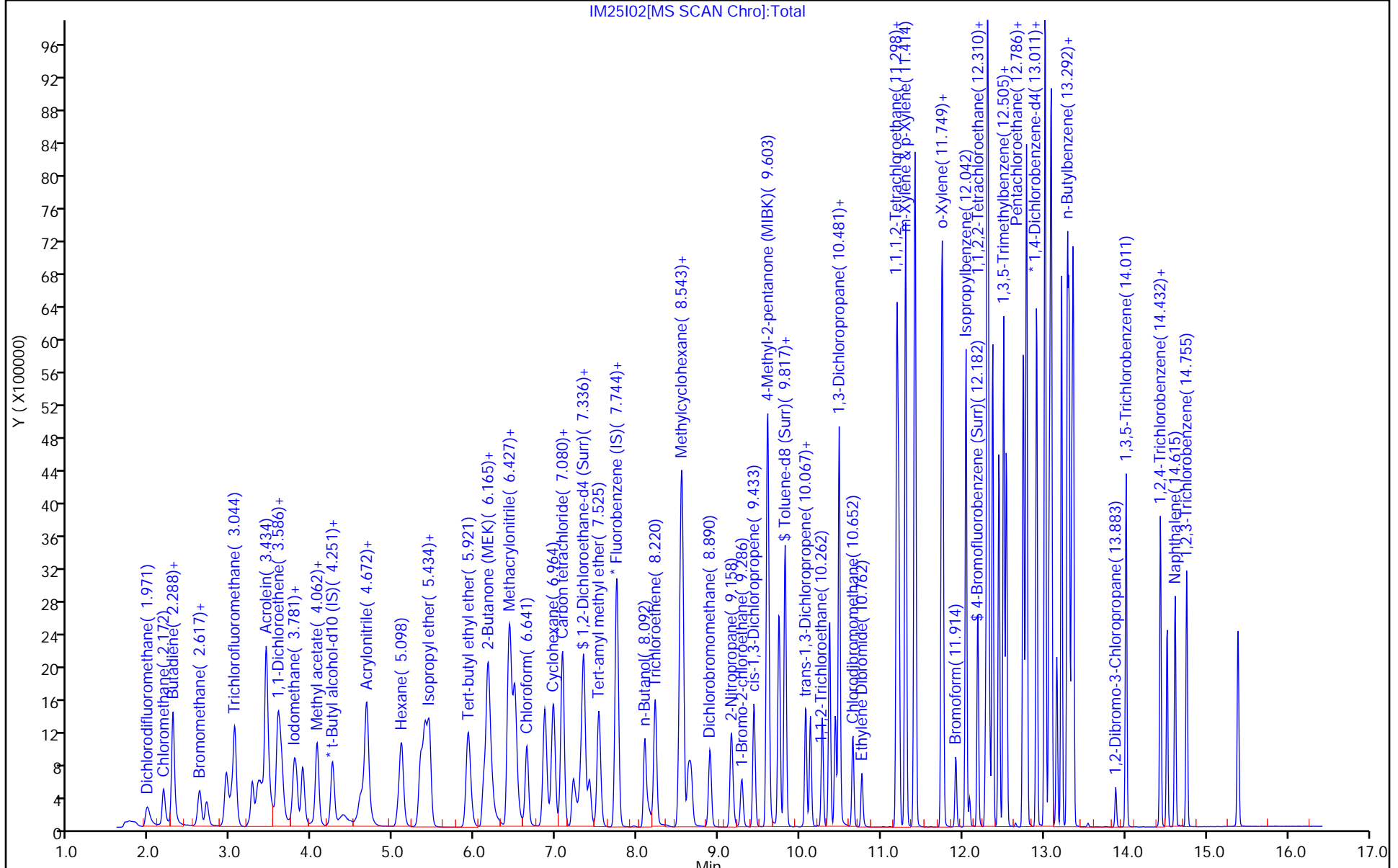
Units: uL

MSV_31_826ISS_00004

Amount Added: 5.00

Units: uL

Run Reagent



IM25102[MS SCAN Chrom]:Total

Eurofins Lancaster Laboratories Env, LLC

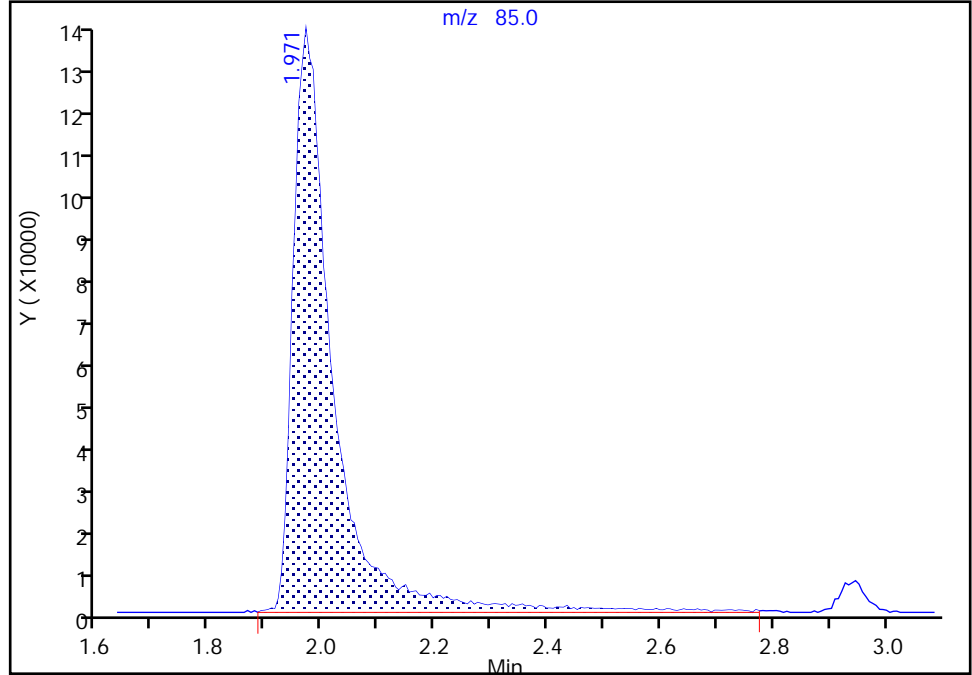
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Injection Date: 25-Mar-2021 23:41:30 Instrument ID: 19930
Lims ID: ICIS - LG
Client ID:
Operator ID: mec29284 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

1 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

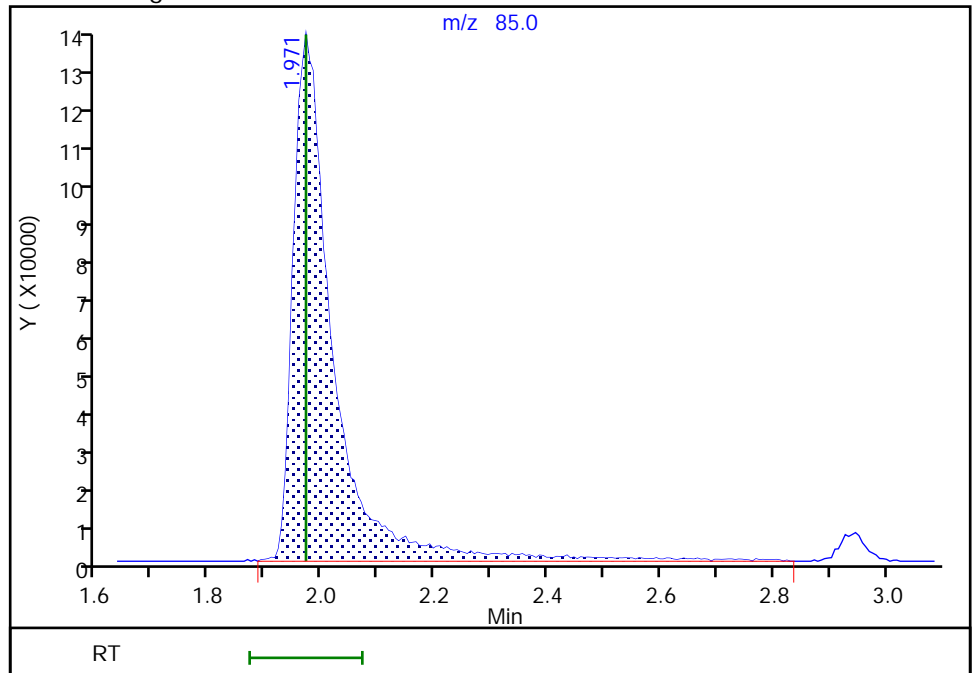
RT: 1.97
Area: 684017
Amount: 10.340664
Amount Units: ug/l

Processing Integration Results



RT: 1.97
Area: 684973
Amount: 10.222260
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 26-Mar-2021 16:42:45
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Euofins Lancaster Laboratories Env, LLC

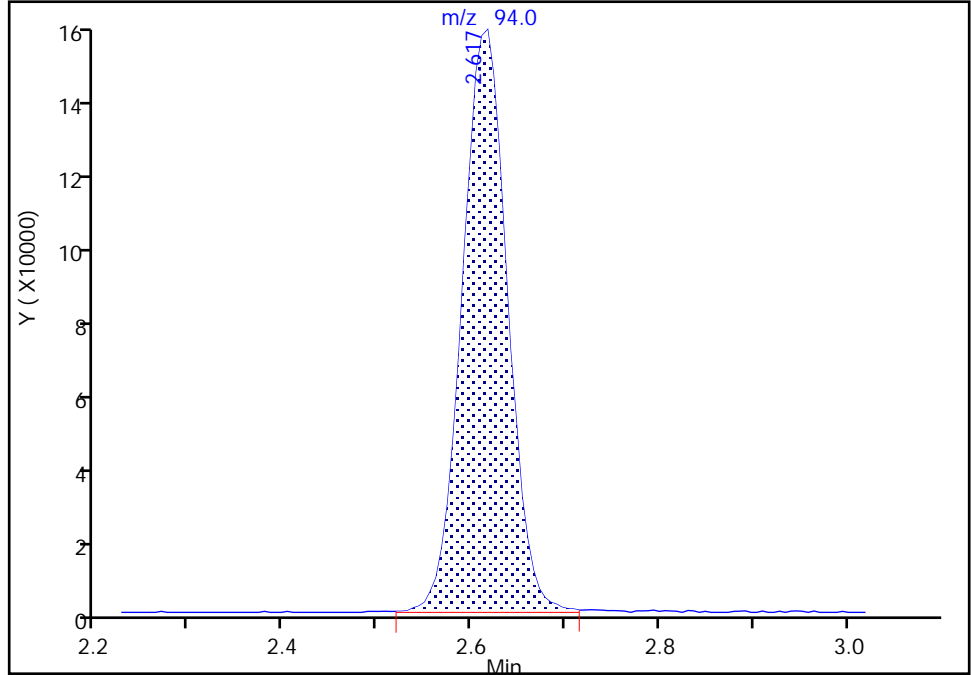
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Injection Date: 25-Mar-2021 23:41:30 Instrument ID: 19930
Lims ID: ICIS - LG
Client ID:
Operator ID: mec29284 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

7 Bromomethane, CAS: 74-83-9

Signal: 1

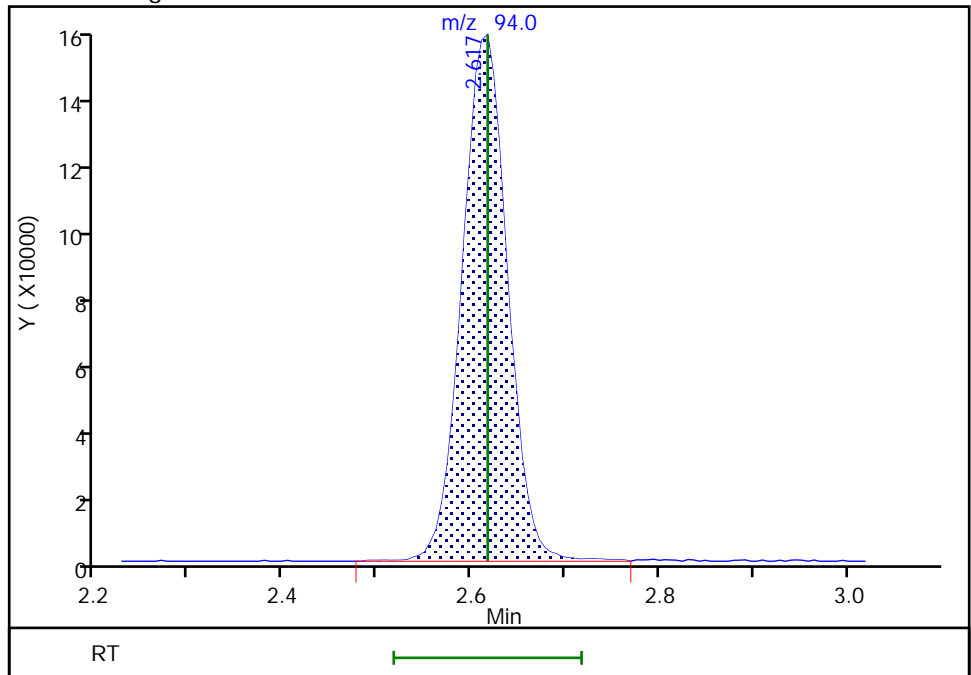
RT: 2.62
Area: 524521
Amount: 9.972578
Amount Units: ug/l

Processing Integration Results



RT: 2.62
Area: 526580
Amount: 9.834867
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 26-Mar-2021 16:42:55
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Euofins Lancaster Laboratories Env, LLC

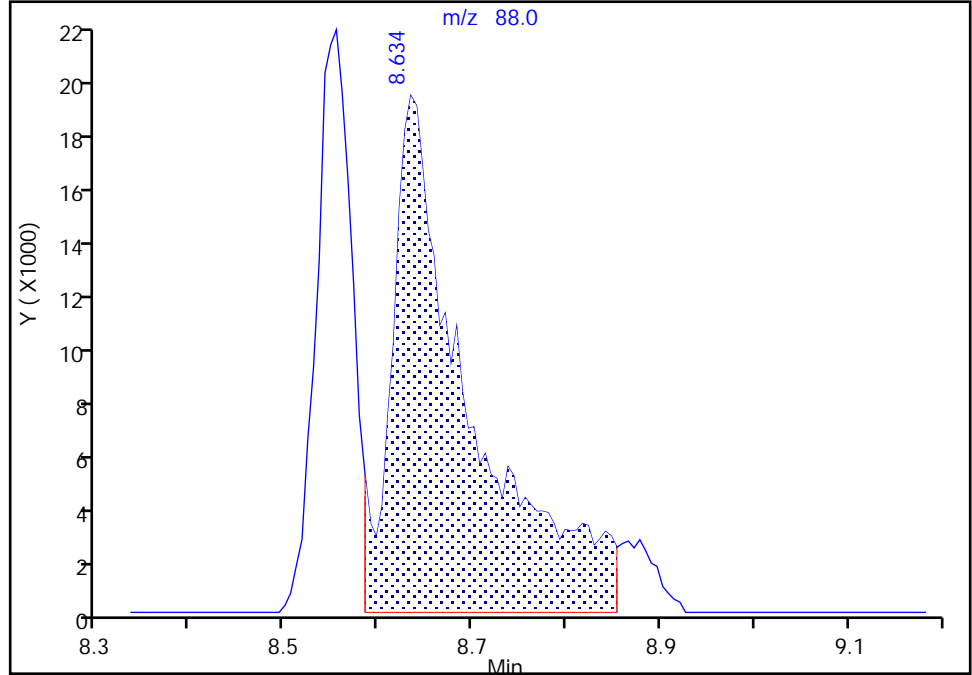
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Injection Date: 25-Mar-2021 23:41:30 Instrument ID: 19930
Lims ID: ICIS - LG
Client ID:
Operator ID: mec29284 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

65 1,4-Dioxane, CAS: 123-91-1

Signal: 1

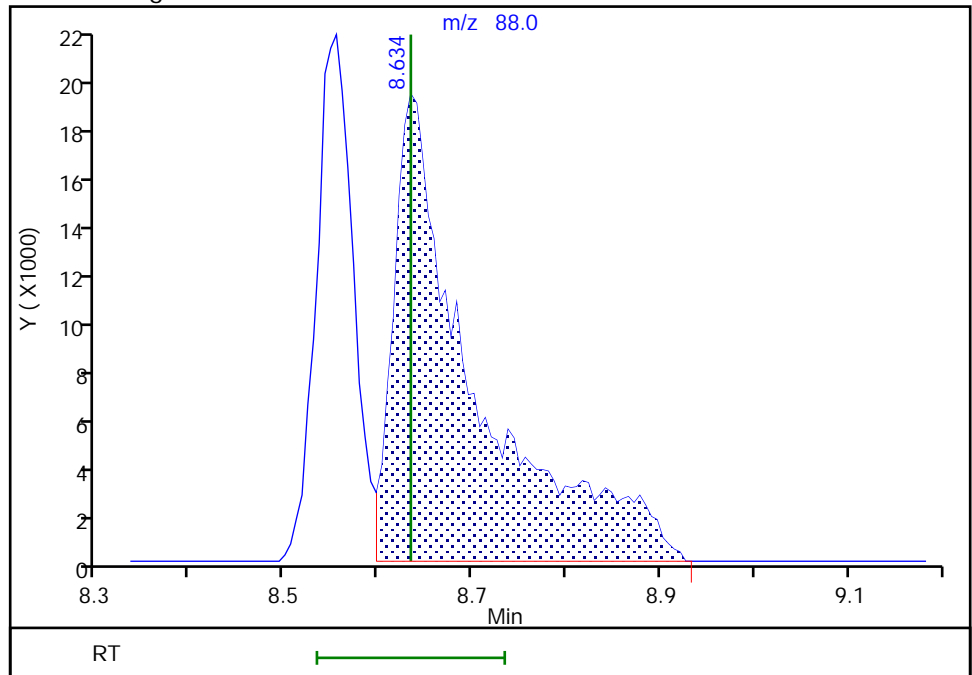
RT: 8.63
Area: 111627
Amount: 705.2763
Amount Units: ug/l

Processing Integration Results



RT: 8.63
Area: 115387
Amount: 532.7522
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 26-Mar-2021 16:43:31
Audit Action: Split an Integrated Peak

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25103.D
 Lims ID: IC std5
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 26-Mar-2021 00:02:30 ALS Bottle#: 13 Worklist Smp#: 14
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0025078-014
 Misc. Info.: IC STD5
 Operator ID: mec29284 Instrument ID: 19930
 Sublist: chrom-8260 25ml HP31*sub2

Method: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\8260 25ml HP31.m
 Limit Group: MSV - 8260C_D
 Last Update: 26-Mar-2021 17:09:50 Calib Date: 26-Mar-2021 01:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25107.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1605

First Level Reviewer: campbellme

Date: 26-Mar-2021 16:46:33

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.965	1.971	-0.006	99	342635	5.00	5.14	
4 Chloromethane	50	2.166	2.172	-0.006	99	408845	5.00	5.04	
6 Butadiene	39	2.282	2.288	-0.006	96	356583	5.00	4.97	
5 Vinyl chloride	62	2.288	2.294	-0.006	98	377973	5.00	5.15	
7 Bromomethane	94	2.617	2.617	0.000	90	269988	5.00	5.07	
8 Chloroethane	64	2.696	2.702	-0.006	100	237311	5.00	5.16	
9 Dichlorofluoromethane	67	2.940	2.940	0.000	96	364119	5.00	4.83	
10 Trichlorofluoromethane	101	3.007	3.013	-0.006	97	534682	5.00	5.19	
11 Ethyl ether	59	3.257	3.263	-0.006	93	259473	5.00	5.22	
12 1,2-Dichloro-1,1,2-trifluoroethane	67	3.343	3.343	0.001	92	383382	5.00	4.98	
13 Acrolein	56	3.434	3.434	0.000	99	2051424	250.0	271.9	
14 1,1-Dichloroethene	96	3.574	3.574	0.000	98	278264	5.00	5.02	
15 Acetone	43	3.605	3.599	0.006	100	482763	50.0	48.8	M
16 112TCTFE	101	3.611	3.611	0.000	92	321103	5.00	5.13	
17 Iodomethane	142	3.776	3.775	0.001	98	556247	5.00	5.05	
18 Ethyl bromide	108	3.800	3.806	-0.006	98	260354	5.00	5.19	
19 Carbon disulfide	76	3.879	3.879	0.000	99	813569	5.00	4.96	
21 Methyl acetate	43	4.038	4.031	0.007	99	166334	5.00	5.12	M
22 3-Chloro-1-propene	41	4.056	4.062	-0.006	92	567178	5.00	5.00	
23 Methylene Chloride	84	4.245	4.251	-0.006	94	314102	5.00	5.04	
* 24 t-Butyl alcohol-d10 (IS)	65	4.245	4.269	-0.024	0	152718	50.0	50.0	
25 2-Methyl-2-propanol	59	4.397	4.379	0.018	99	364657	100.0	102.5	
26 Acrylonitrile	53	4.592	4.592	0.000	99	336861	25.0	27.7	
27 Methyl tert-butyl ether	73	4.659	4.653	0.006	96	829305	5.00	5.10	
28 trans-1,2-Dichloroethene	96	4.672	4.672	0.000	98	317030	5.00	5.01	
29 Hexane	57	5.092	5.098	-0.006	94	514678	5.00	5.00	
31 1,1-Dichloroethane	63	5.330	5.330	0.000	96	619308	5.00	5.07	
32 Isopropyl ether	45	5.385	5.391	-0.006	95	1153419	5.00	5.09	
33 2-Chloro-1,3-butadiene	53	5.440	5.440	0.000	91	538900	5.00	5.01	
34 Tert-butyl ethyl ether	59	5.915	5.921	-0.006	98	1052398	5.00	5.11	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 2-Butanone (MEK)	43	6.117	6.116	0.001	100	938585	50.0	53.9	
S 35 1,2-Dichloroethene, Total	100				0			10.1	
37 cis-1,2-Dichloroethene	96	6.159	6.159	0.000	83	372066	5.00	5.10	
38 2,2-Dichloropropane	77	6.171	6.171	0.000	90	528380	5.00	5.00	
40 Propionitrile	54	6.208	6.208	0.000	99	438000	100.0	106.0	
42 Methacrylonitrile	67	6.427	6.427	0.000	93	882231	50.0	55.3	
43 Chlorobromomethane	128	6.488	6.488	0.000	96	167243	5.00	5.13	
44 Tetrahydrofuran	71	6.501	6.500	0.001	89	245520	50.0	53.5	
45 Chloroform	83	6.641	6.641	0.000	93	586095	5.00	5.04	
\$ 46 Dibromofluoromethane (Surr)	113	6.854	6.854	0.000	94	538959	10.0	10.0	
47 1,1,1-Trichloroethane	97	6.866	6.866	0.000	98	527956	5.00	4.99	
48 Cyclohexane	56	6.964	6.964	0.000	92	609600	5.00	4.95	
51 1,1-Dichloropropene	75	7.074	7.080	-0.006	95	475475	5.00	5.08	
50 Carbon tetrachloride	117	7.074	7.080	-0.006	86	470581	5.00	5.07	
52 Isobutyl alcohol	41	7.214	7.214	0.000	94	323833	250.0	252.3	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.305	7.305	0.000	0	104722	10.0	9.97	
54 Benzene	78	7.336	7.342	-0.006	97	1377133	5.00	5.00	
56 1,2-Dichloroethane	62	7.409	7.409	0.000	97	360703	5.00	4.91	
57 Tert-amyl methyl ether	73	7.525	7.525	0.000	98	928259	5.00	5.15	
* 58 Fluorobenzene (IS)	96	7.738	7.738	0.000	98	2135112	10.0	10.0	
59 n-Heptane	43	7.750	7.750	0.000	93	576846	5.00	4.95	
60 n-Butanol	56	8.092	8.092	0.000	89	577630	500.0	518.2	M
61 Trichloroethene	95	8.214	8.220	-0.006	97	359914	5.00	5.03	
62 Methylcyclohexane	83	8.525	8.524	0.001	94	659798	5.00	5.23	
63 1,2-Dichloropropane	63	8.549	8.549	0.000	88	360060	5.00	5.05	
64 Methyl methacrylate	69	8.628	8.628	0.000	91	171139	5.00	5.41	
65 1,4-Dioxane	88	8.640	8.634	0.006	34	59547	250.0	279.4	M
66 Dibromomethane	93	8.659	8.659	0.000	95	163136	5.00	5.04	
68 Dichlorobromomethane	83	8.890	8.890	0.000	99	426779	5.00	5.05	
69 2-Nitropropane	41	9.159	9.158	0.001	98	540981	50.0	54.8	
72 1-Bromo-2-chloroethane	63	9.281	9.286	-0.005	98	345481	5.00	5.21	
73 cis-1,3-Dichloropropene	75	9.433	9.433	0.000	96	546745	5.00	5.17	
74 4-Methyl-2-pentanone (MIBK)	43	9.598	9.603	-0.005	97	2470307	50.0	55.2	
\$ 75 Toluene-d8 (Surr)	98	9.738	9.738	0.000	93	2136606	10.0	10.1	
76 Toluene	92	9.817	9.817	0.000	98	869128	5.00	4.98	
S 77 1,3-Dichloropropene, Total	100				0			10.4	
78 trans-1,3-Dichloropropene	75	10.067	10.067	0.000	93	445142	5.00	5.23	
79 Ethyl methacrylate	69	10.128	10.128	0.000	90	383451	5.00	5.24	
80 1,1,2-Trichloroethane	97	10.274	10.274	0.000	90	237582	5.00	5.04	
81 Tetrachloroethene	166	10.366	10.366	0.000	98	425512	5.00	5.12	
82 1,3-Dichloropropane	76	10.433	10.433	0.000	91	428964	5.00	5.16	
83 2-Hexanone	43	10.482	10.481	0.001	98	1744022	50.0	55.6	
85 Chlorodibromomethane	129	10.652	10.652	0.000	90	315923	5.00	5.25	
86 Ethylene Dibromide	107	10.762	10.762	0.000	99	239263	5.00	5.18	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.189	0.000	86	1621764	10.0	10.0	
88 1-Chlorohexane	91	11.195	11.195	0.000	99	517255	5.00	4.85	
90 Chlorobenzene	112	11.213	11.213	0.000	96	977663	5.00	5.06	
S 89 Xylenes, Total	106				0			15.3	
92 Ethylbenzene	91	11.298	11.298	0.000	98	1728838	5.00	5.06	
91 1,1,1,2-Tetrachloroethane	131	11.298	11.298	0.000	97	362752	5.00	5.19	
93 m-Xylene & p-Xylene	106	11.414	11.414	0.000	99	1362023	10.0	10.2	
94 o-Xylene	106	11.743	11.743	0.000	96	674327	5.00	5.14	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
95 Styrene	104	11.756	11.755	0.001	95	1095031	5.00	5.12	
96 Bromoform	173	11.914	11.914	0.000	98	197838	5.00	5.20	
97 Isopropylbenzene	105	12.042	12.042	0.000	96	1787241	5.00	5.12	
\$ 100 4-Bromofluorobenzene (Surr)	95	12.182	12.188	-0.006	92	806855	10.0	10.0	
101 1,1,2,2-Tetrachloroethane	83	12.286	12.286	0.000	93	313169	5.00	5.25	
102 Bromobenzene	156	12.304	12.304	0.000	92	418974	5.00	5.09	
103 trans-1,4-Dichloro-2-butene	53	12.310	12.310	0.000	92	859813	50.0	55.7	
104 1,2,3-Trichloropropane	110	12.329	12.335	-0.006	80	83391	5.00	5.25	
105 N-Propylbenzene	91	12.371	12.371	0.000	99	2062328	5.00	5.11	
106 2-Chlorotoluene	126	12.445	12.444	0.001	97	415188	5.00	5.05	
107 1,3,5-Trimethylbenzene	105	12.506	12.505	0.001	94	1494397	5.00	5.14	
108 4-Chlorotoluene	126	12.536	12.536	0.000	98	425054	5.00	5.07	
109 tert-Butylbenzene	134	12.749	12.749	0.000	93	330326	5.00	5.10	
110 Pentachloroethane	167	12.780	12.780	0.000	94	281922	5.00	5.27	
111 1,2,4-Trimethylbenzene	105	12.786	12.786	0.000	97	1536046	5.00	5.15	
112 sec-Butylbenzene	105	12.908	12.908	0.000	94	1955145	5.00	5.12	
113 1,3-Dichlorobenzene	146	13.012	13.011	0.001	98	836365	5.00	5.12	
114 4-Isopropyltoluene	119	13.018	13.017	0.001	97	1681791	5.00	5.18	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	94	899730	10.0	10.0	
116 1,4-Dichlorobenzene	146	13.085	13.085	0.001	95	835031	5.00	5.12	
117 1,2,3-Trimethylbenzene	120	13.091	13.091	0.000	98	663242	5.00	5.14	
118 Benzyl chloride	126	13.158	13.158	0.000	98	143338	5.00	5.34	
119 n-Butylbenzene	92	13.310	13.310	0.000	97	814333	5.00	5.16	
120 1,2-Dichlorobenzene	146	13.341	13.341	0.000	99	755290	5.00	5.09	
122 1,2-Dibromo-3-Chloropropane	155	13.883	13.883	0.000	87	49133	5.00	5.27	
123 1,3,5-Trichlorobenzene	180	14.011	14.011	0.000	98	615668	5.00	5.19	
124 1,2,4-Trichlorobenzene	180	14.432	14.432	0.000	94	524702	5.00	5.30	
125 Hexachlorobutadiene	225	14.517	14.517	0.000	96	214097	5.00	4.84	
126 Naphthalene	128	14.615	14.615	0.000	97	998124	5.00	5.32	
127 1,2,3-Trichlorobenzene	180	14.755	14.755	0.000	96	447706	5.00	5.19	
204 Pentane	43		0.000				ND	ND	
137 2-Methylnaphthalene	142		0.000				ND	ND	
135 p-Diethylbenzene	1		0.000				ND	ND	
144 2-ethoxy-2-methyl butane	1		0.000				ND	ND	
134 Isopropyl alcohol	45		0.000				ND	ND	

QC Flag Legend

Processing Flags

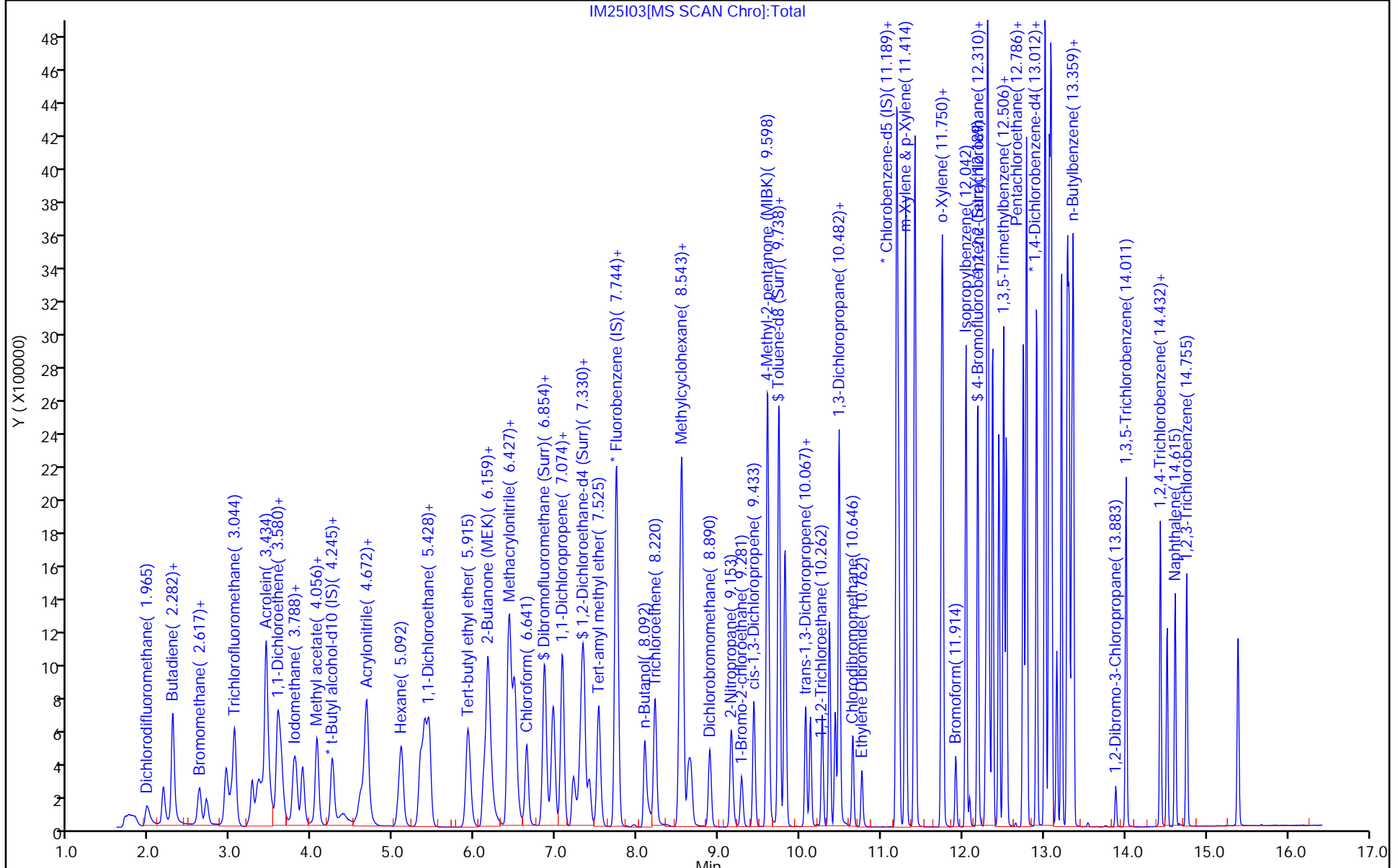
ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

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MSV_RV4_826_00048	Amount Added: 5.00	Units: uL	
MSV_RV4GAS826_00121	Amount Added: 5.00	Units: uL	
MSV_31_826ISS_00004	Amount Added: 5.00	Units: uL	Run Reagent



IM25103[MS SCAN Chrom]:Total

Eurofins Lancaster Laboratories Env, LLC

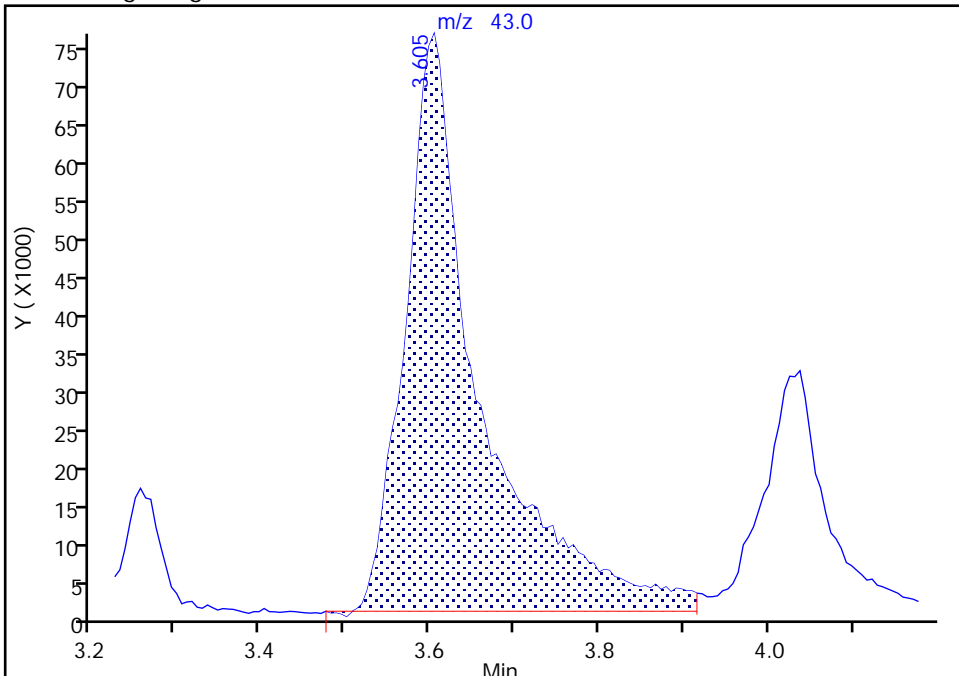
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Lims ID: IC std5
Client ID:
Operator ID: mec29284 ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

15 Acetone, CAS: 67-64-1

Signal: 1

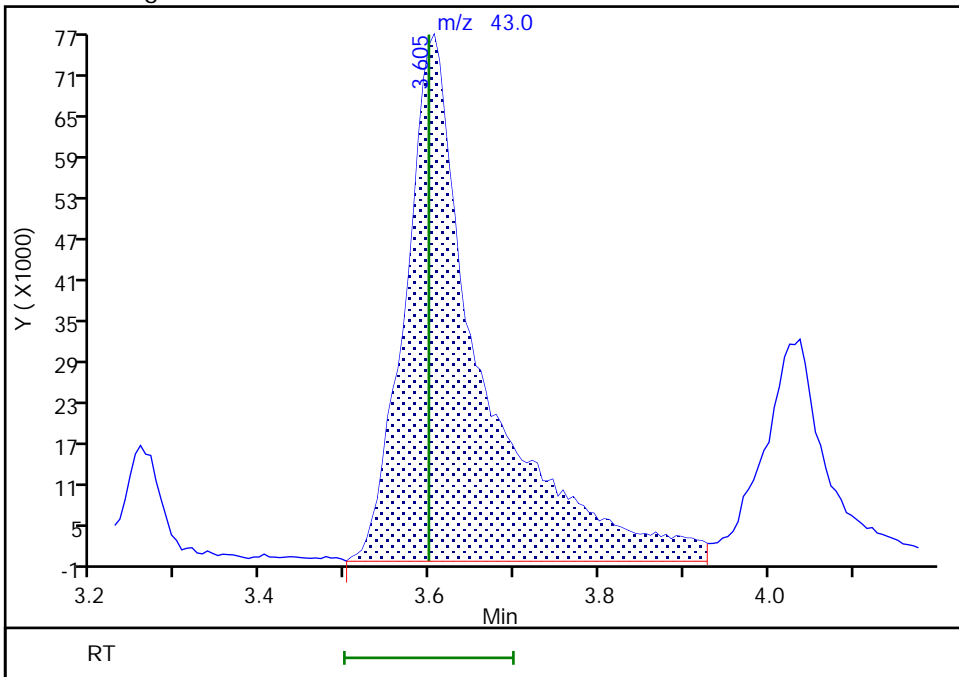
RT: 3.60
Area: 463346
Amount: 49.960262
Amount Units: ug/l

Processing Integration Results



RT: 3.60
Area: 482763
Amount: 48.788948
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 26-Mar-2021 16:44:48
Audit Action: Assigned New Baseline

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

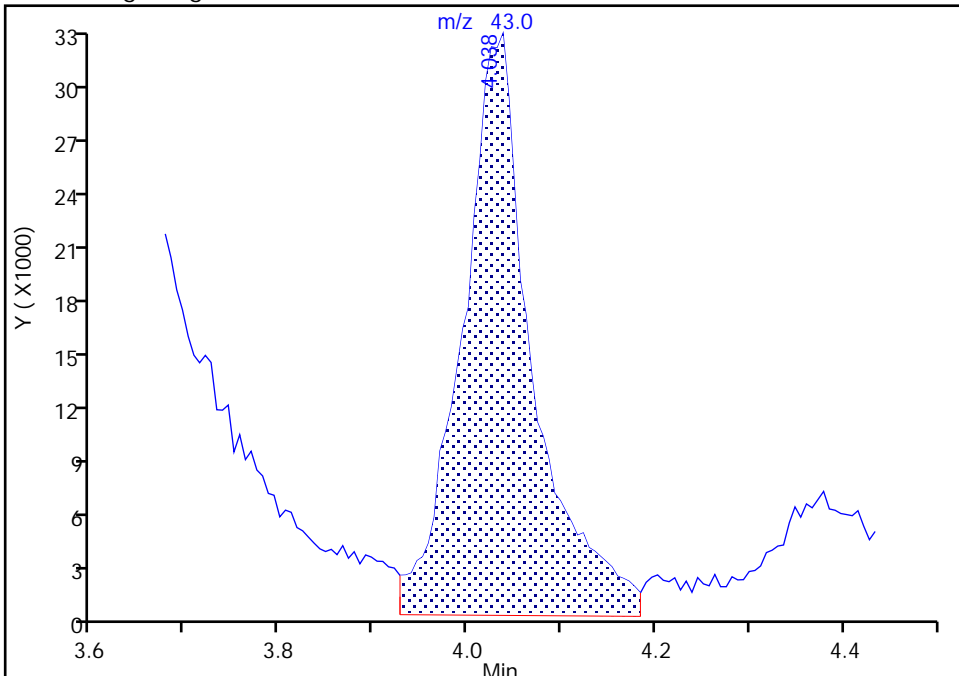
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Injection Date: 26-Mar-2021 00:02:30 Instrument ID: 19930
Lims ID: IC std5
Client ID:
Operator ID: mec29284 ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

21 Methyl acetate, CAS: 79-20-9

Signal: 1

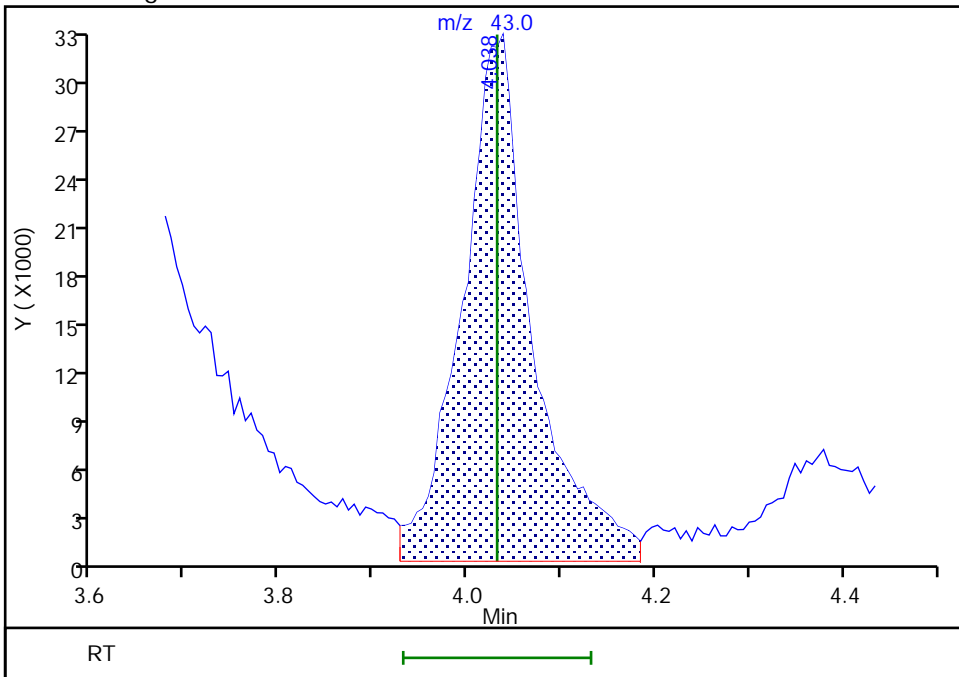
RT: 4.04
Area: 167058
Amount: 5.297672
Amount Units: ug/l

Processing Integration Results



RT: 4.04
Area: 166334
Amount: 5.119422
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 26-Mar-2021 16:45:12
Audit Action: Assigned New Baseline

Audit Reason: Baseline

Eurofins Lancaster Laboratories Env, LLC

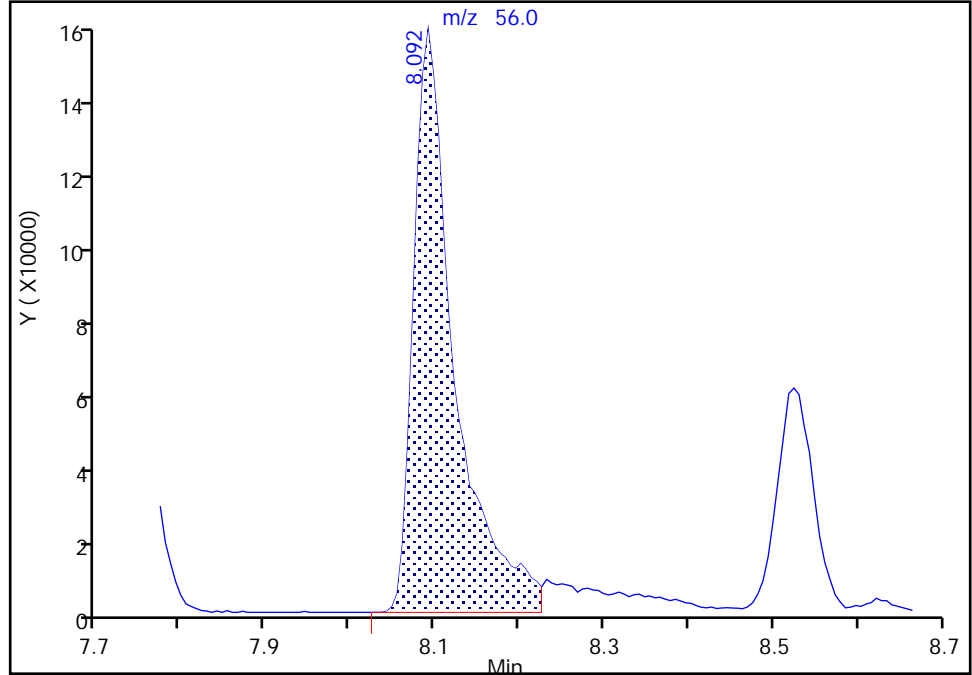
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Injection Date: 26-Mar-2021 00:02:30 Instrument ID: 19930
Lims ID: IC std5
Client ID:
Operator ID: mec29284 ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

60 n-Butanol, CAS: 71-36-3

Signal: 1

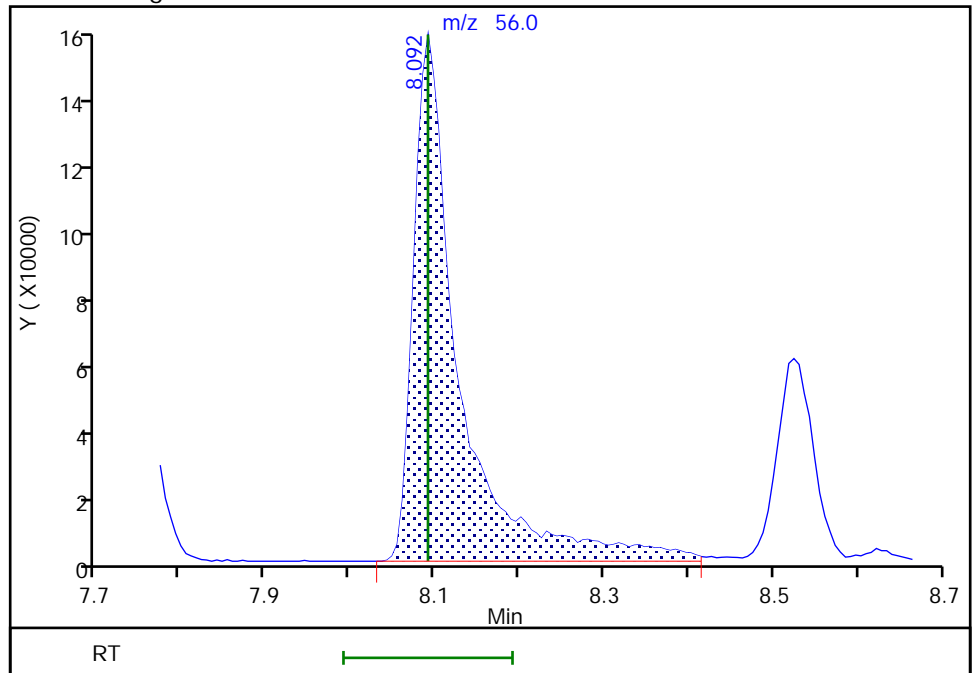
RT: 8.09
Area: 522500
Amount: 505.7200
Amount Units: ug/l

Processing Integration Results



RT: 8.09
Area: 577630
Amount: 518.2007
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 26-Mar-2021 16:45:43
Audit Action: Assigned New Baseline

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

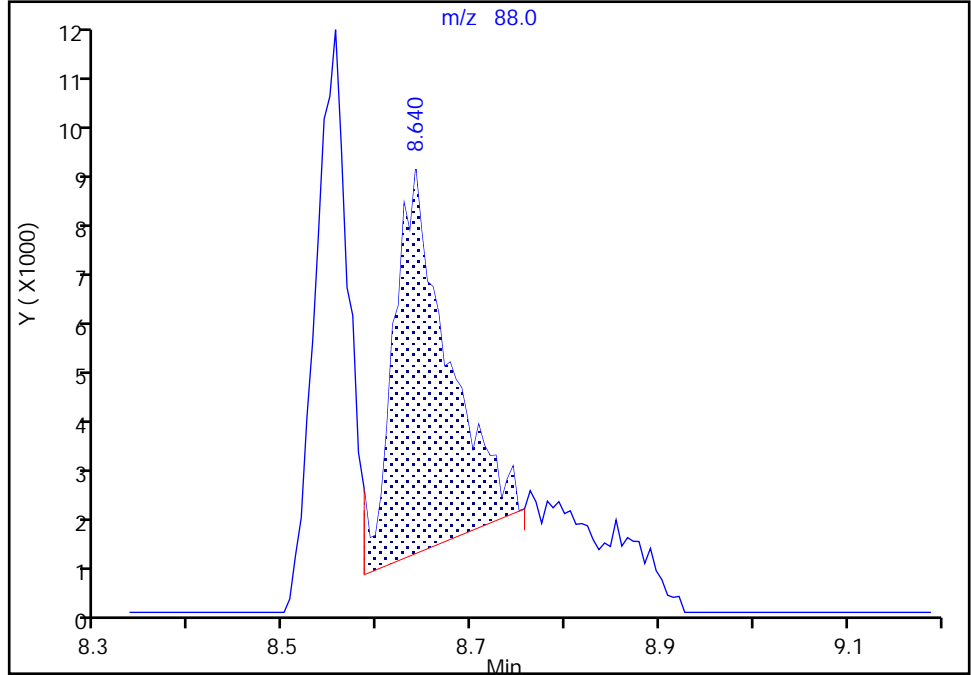
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Injection Date: 26-Mar-2021 00:02:30 Instrument ID: 19930
Lims ID: IC std5
Client ID:
Operator ID: mec29284 ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

65 1,4-Dioxane, CAS: 123-91-1

Signal: 1

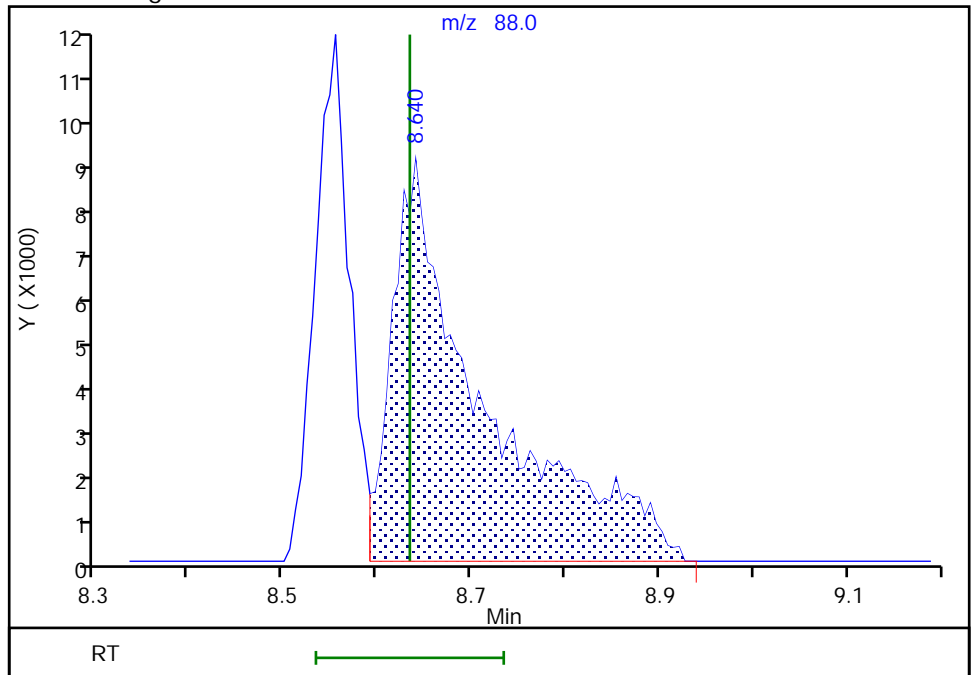
RT: 8.64
Area: 31067
Amount: 198.1530
Amount Units: ug/l

Processing Integration Results



RT: 8.64
Area: 59547
Amount: 279.4328
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 26-Mar-2021 16:46:14
Audit Action: Split an Integrated Peak

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25104.D
 Lims ID: IC std4
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 26-Mar-2021 00:23:30 ALS Bottle#: 14 Worklist Smp#: 15
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0025078-015
 Misc. Info.: IC STD4
 Operator ID: mec29284 Instrument ID: 19930
 Sublist: chrom-8260 25ml HP31*sub2
 Method: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\8260 25ml HP31.m
 Limit Group: MSV - 8260C_D
 Last Update: 26-Mar-2021 17:10:01 Calib Date: 26-Mar-2021 01:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25107.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1605

First Level Reviewer: campbellme

Date: 26-Mar-2021 16:49:04

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.983	1.983	0.000	99	131503	2.00	1.95	M
4 Chloromethane	50	2.178	2.178	0.000	99	156895	2.00	1.92	M
6 Butadiene	39	2.294	2.294	0.000	93	148459	2.00	2.05	
5 Vinyl chloride	62	2.300	2.300	0.000	77	144991	2.00	1.96	
7 Bromomethane	94	2.629	2.629	0.000	90	106174	2.00	1.98	
8 Chloroethane	64	2.715	2.715	0.000	100	90316	2.00	1.95	
9 Dichlorofluoromethane	67	2.952	2.952	0.000	97	147453	2.00	1.94	
10 Trichlorofluoromethane	101	3.019	3.019	0.000	97	208668	2.00	2.01	
11 Ethyl ether	59	3.275	3.275	0.000	92	100901	2.00	2.01	
12 1,2-Dichloro-1,1,2-trifluoroethane	67	3.342	3.342	0.000	92	163328	2.00	2.10	
13 Acrolein	56	3.446	3.446	0.000	100	839518	100.0	101.7	
14 1,1-Dichloroethene	96	3.586	3.586	0.000	98	118638	2.00	2.12	
15 Acetone	43	3.617	3.617	0.000	98	209498	20.0	19.3	
16 112TCTFE	101	3.623	3.623	0.000	90	137933	2.00	2.18	
17 Iodomethane	142	3.787	3.787	0.000	98	230064	2.00	2.07	
18 Ethyl bromide	108	3.812	3.812	0.000	97	103933	2.00	2.05	
19 Carbon disulfide	76	3.897	3.897	0.000	99	342979	2.00	2.07	
21 Methyl acetate	43	4.050	4.050	0.000	98	64116	2.00	1.80	M
22 3-Chloro-1-propene	41	4.074	4.074	0.000	93	225080	2.00	1.97	
23 Methylene Chloride	84	4.257	4.257	0.000	97	129865	2.00	2.06	
* 24 t-Butyl alcohol-d10 (IS)	65	4.263	4.263	0.000	0	167112	50.0	50.0	
25 2-Methyl-2-propanol	59	4.391	4.391	0.000	99	157334	40.0	40.4	
26 Acrylonitrile	53	4.604	4.604	0.000	99	133754	10.0	10.1	
27 Methyl tert-butyl ether	73	4.659	4.659	0.000	94	343815	2.00	2.09	
28 trans-1,2-Dichloroethene	96	4.684	4.684	0.000	97	131976	2.00	2.07	
29 Hexane	57	5.104	5.104	0.000	94	218391	2.00	2.10	
31 1,1-Dichloroethane	63	5.342	5.342	0.000	96	254250	2.00	2.06	
32 Isopropyl ether	45	5.397	5.397	0.000	95	470623	2.00	2.06	
33 2-Chloro-1,3-butadiene	53	5.446	5.446	0.000	91	225610	2.00	2.08	
34 Tert-butyl ethyl ether	59	5.927	5.927	0.000	99	426180	2.00	2.05	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 2-Butanone (MEK)	43	6.122	6.122	0.000	100	380491	20.0	20.0	
S 35 1,2-Dichloroethene, Total	100				0			4.14	
37 cis-1,2-Dichloroethene	96	6.165	6.165	0.000	82	152885	2.00	2.07	
38 2,2-Dichloropropane	77	6.183	6.183	0.000	89	223081	2.00	2.09	
40 Propionitrile	54	6.214	6.214	0.000	99	182137	40.0	40.3	
42 Methacrylonitrile	67	6.427	6.427	0.000	94	359237	20.0	20.6	
43 Chlorobromomethane	128	6.488	6.488	0.000	82	65954	2.00	2.00	a
44 Tetrahydrofuran	71	6.500	6.500	0.000	81	101067	20.0	20.1	
45 Chloroform	83	6.647	6.647	0.000	93	241166	2.00	2.05	
\$ 46 Dibromofluoromethane (Surr)	113	6.860	6.860	0.000	94	538391	10.0	9.93	
47 1,1,1-Trichloroethane	97	6.872	6.872	0.000	98	219727	2.00	2.05	
48 Cyclohexane	56	6.964	6.964	0.000	92	259219	2.00	2.08	
51 1,1-Dichloropropene	75	7.080	7.080	0.000	95	196323	2.00	2.08	
50 Carbon tetrachloride	117	7.086	7.086	0.000	88	194469	2.00	2.07	
52 Isobutyl alcohol	41	7.220	7.220	0.000	93	142284	100.0	101.3	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.305	7.305	0.000	0	106715	10.0	10.1	
54 Benzene	78	7.342	7.342	0.000	97	572779	2.00	2.06	
56 1,2-Dichloroethane	62	7.415	7.415	0.000	97	151288	2.00	2.04	
57 Tert-amyl methyl ether	73	7.531	7.531	0.000	98	376620	2.00	2.07	
* 58 Fluorobenzene (IS)	96	7.744	7.744	0.000	99	2156681	10.0	10.0	
59 n-Heptane	43	7.756	7.756	0.000	92	243269	2.00	2.06	
60 n-Butanol	56	8.092	8.092	0.000	88	261716	200.0	214.6	M
61 Trichloroethene	95	8.220	8.220	0.000	98	147779	2.00	2.05	
62 Methylcyclohexane	83	8.530	8.530	0.000	93	263506	2.00	2.07	
63 1,2-Dichloropropane	63	8.549	8.549	0.000	82	148250	2.00	2.06	
64 Methyl methacrylate	69	8.628	8.628	0.000	91	72515	2.00	2.10	
65 1,4-Dioxane	88	8.634	8.634	0.000	35	27783	100.0	119.1	M
66 Dibromomethane	93	8.665	8.665	0.000	94	65371	2.00	2.00	
68 Dichlorobromomethane	83	8.890	8.890	0.000	99	173868	2.00	2.04	
69 2-Nitropropane	41	9.158	9.158	0.000	96	217593	20.0	20.1	
72 1-Bromo-2-chloroethane	63	9.286	9.286	0.000	98	133773	2.00	2.00	
73 cis-1,3-Dichloropropene	75	9.433	9.433	0.000	95	219295	2.00	2.05	
74 4-Methyl-2-pentanone (MIBK)	43	9.603	9.603	0.000	97	1003927	20.0	20.5	
\$ 75 Toluene-d8 (Surr)	98	9.744	9.744	0.000	94	2137685	10.0	9.97	
76 Toluene	92	9.817	9.817	0.000	98	363726	2.00	2.06	
S 77 1,3-Dichloropropene, Total	100				0			4.12	
78 trans-1,3-Dichloropropene	75	10.073	10.073	0.000	94	177893	2.00	2.07	
79 Ethyl methacrylate	69	10.128	10.128	0.000	90	157462	2.00	2.13	
80 1,1,2-Trichloroethane	97	10.274	10.274	0.000	90	98763	2.00	2.07	
81 Tetrachloroethene	166	10.359	10.359	0.000	96	174286	2.00	2.08	
82 1,3-Dichloropropane	76	10.439	10.439	0.000	91	172879	2.00	2.06	
83 2-Hexanone	43	10.481	10.481	0.000	98	708784	20.0	20.6	
85 Chlorodibromomethane	129	10.652	10.652	0.000	90	124832	2.00	2.05	
86 Ethylene Dibromide	107	10.762	10.762	0.000	98	95855	2.00	2.06	
* 87 Chlorobenzene-d5 (IS)	117	11.188	11.188	0.000	86	1638769	10.0	10.0	
88 1-Chlorohexane	91	11.195	11.195	0.000	98	218547	2.00	2.03	
90 Chlorobenzene	112	11.213	11.213	0.000	95	404331	2.00	2.07	
S 89 Xylenes, Total	106				0			6.22	
92 Ethylbenzene	91	11.298	11.298	0.000	98	711404	2.00	2.06	
91 1,1,1,2-Tetrachloroethane	131	11.298	11.298	0.000	96	145750	2.00	2.06	
93 m-Xylene & p-Xylene	106	11.414	11.414	0.000	99	558858	4.00	4.13	
94 o-Xylene	106	11.743	11.743	0.000	96	276854	2.00	2.09	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
95 Styrene	104	11.755	11.755	0.000	95	452528	2.00	2.09	
96 Bromoform	173	11.914	11.914	0.000	97	79664	2.00	2.07	
97 Isopropylbenzene	105	12.042	12.042	0.000	96	731637	2.00	2.07	
\$ 100 4-Bromofluorobenzene (Surr)	95	12.188	12.188	0.000	93	811047	10.0	9.95	
101 1,1,2,2-Tetrachloroethane	83	12.286	12.286	0.000	93	126655	2.00	2.09	
102 Bromobenzene	156	12.304	12.304	0.000	93	173823	2.00	2.09	
103 trans-1,4-Dichloro-2-butene	53	12.310	12.310	0.000	93	344049	20.0	20.4	
104 1,2,3-Trichloropropane	110	12.328	12.328	0.000	80	34148	2.00	2.12	
105 N-Propylbenzene	91	12.371	12.371	0.000	99	851752	2.00	2.08	
106 2-Chlorotoluene	126	12.444	12.444	0.000	97	175115	2.00	2.10	
107 1,3,5-Trimethylbenzene	105	12.505	12.505	0.000	95	612448	2.00	2.08	
108 4-Chlorotoluene	126	12.542	12.542	0.000	97	175246	2.00	2.06	
109 tert-Butylbenzene	134	12.743	12.743	0.000	93	137088	2.00	2.09	
110 Pentachloroethane	167	12.780	12.780	0.000	91	108399	2.00	2.00	
111 1,2,4-Trimethylbenzene	105	12.786	12.786	0.000	97	623059	2.00	2.06	
112 sec-Butylbenzene	105	12.908	12.908	0.000	94	800709	2.00	2.07	
113 1,3-Dichlorobenzene	146	13.011	13.011	0.000	98	342026	2.00	2.07	
114 4-Isopropyltoluene	119	13.017	13.017	0.000	97	687905	2.00	2.09	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	95	911732	10.0	10.0	
116 1,4-Dichlorobenzene	146	13.084	13.084	0.000	96	339830	2.00	2.06	
117 1,2,3-Trimethylbenzene	120	13.091	13.091	0.000	97	261226	2.00	2.00	
118 Benzyl chloride	126	13.158	13.158	0.000	98	57189	2.00	2.10	
119 n-Butylbenzene	92	13.310	13.310	0.000	97	331614	2.00	2.07	
120 1,2-Dichlorobenzene	146	13.340	13.340	0.000	99	309104	2.00	2.06	
122 1,2-Dibromo-3-Chloropropane	155	13.883	13.883	0.000	87	19137	2.00	2.03	
123 1,3,5-Trichlorobenzene	180	14.011	14.011	0.000	98	245529	2.00	2.04	
124 1,2,4-Trichlorobenzene	180	14.432	14.432	0.000	94	204502	2.00	2.04	
125 Hexachlorobutadiene	225	14.517	14.517	0.000	97	87060	2.00	1.94	
126 Naphthalene	128	14.615	14.615	0.000	97	396601	2.00	2.09	
127 1,2,3-Trichlorobenzene	180	14.755	14.755	0.000	96	182917	2.00	2.09	
144 2-ethoxy-2-methyl butane	1		0.000				ND	ND	
204 Pentane	43		0.000				ND	ND	
137 2-Methylnaphthalene	142		0.000				ND	ND	
135 p-Diethylbenzene	1		0.000				ND	ND	
134 Isopropyl alcohol	45		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

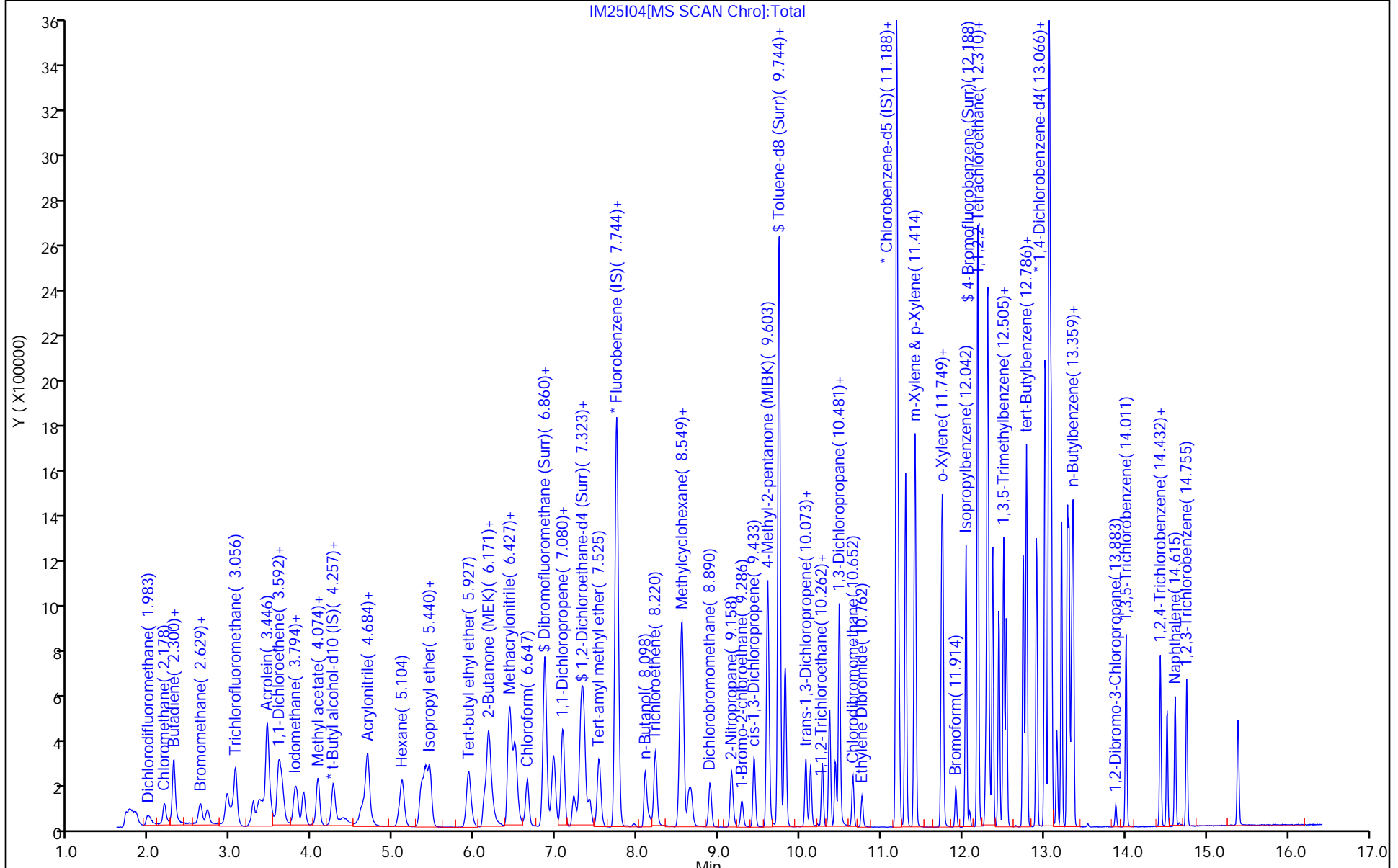
Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MSV_RV1_826_00042	Amount Added: 2.00	Units: uL	
MSV_RV4_826_00048	Amount Added: 2.00	Units: uL	
MSV_RV4GAS826_00121	Amount Added: 2.00	Units: uL	
MSV_31_826ISS_00004	Amount Added: 5.00	Units: uL	Run Reagent



Eurofins Lancaster Laboratories Env, LLC

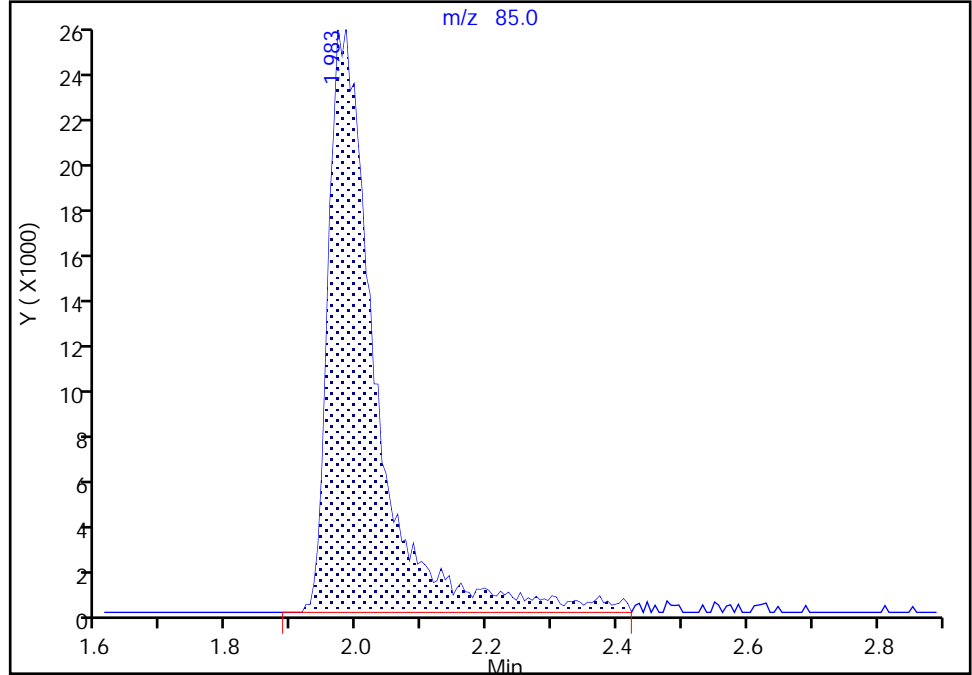
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Injection Date: 26-Mar-2021 00:23:30 Instrument ID: 19930
Lims ID: IC std4
Client ID:
Operator ID: mec29284 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

1 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

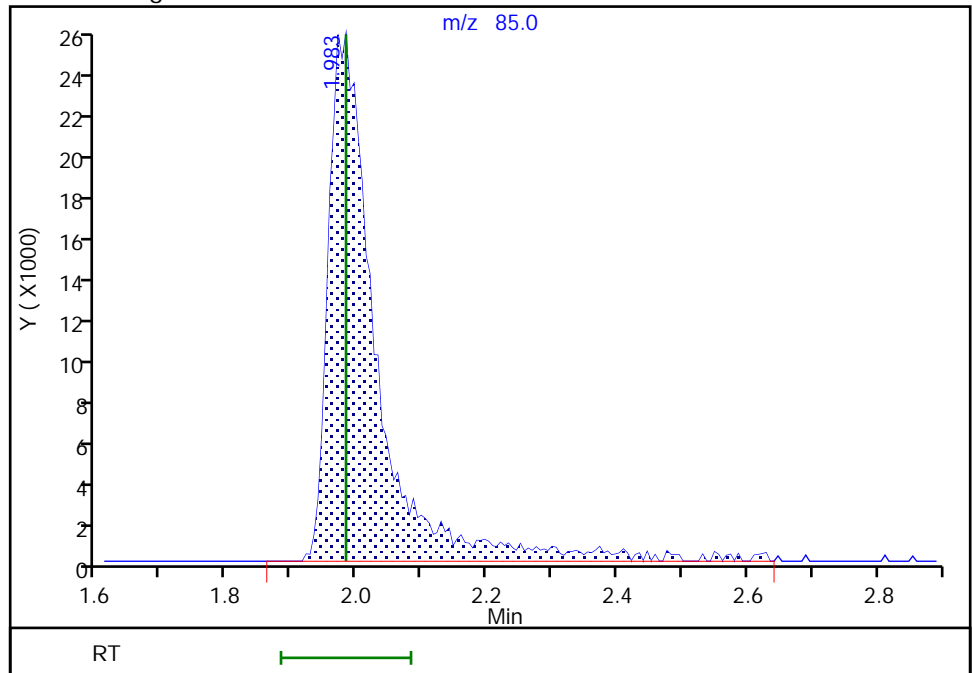
RT: 1.98
Area: 129177
Amount: 1.944853
Amount Units: ug/l

Processing Integration Results



RT: 1.98
Area: 131503
Amount: 1.954875
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 26-Mar-2021 16:46:58
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

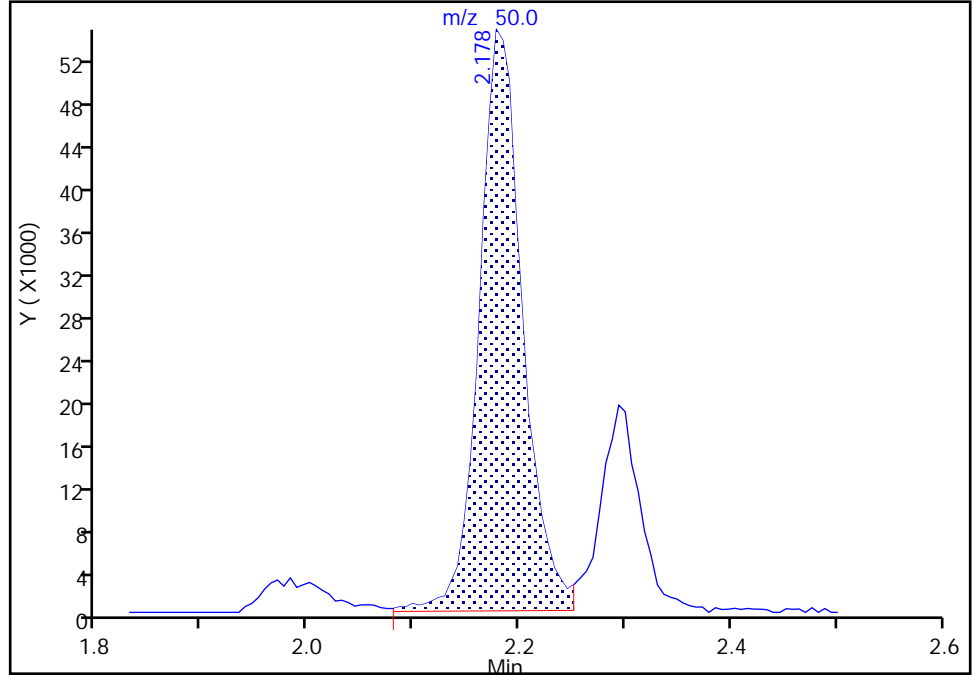
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Injection Date: 26-Mar-2021 00:23:30 Instrument ID: 19930
Lims ID: IC std4
Client ID:
Operator ID: mec29284 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

4 Chloromethane, CAS: 74-87-3

Signal: 1

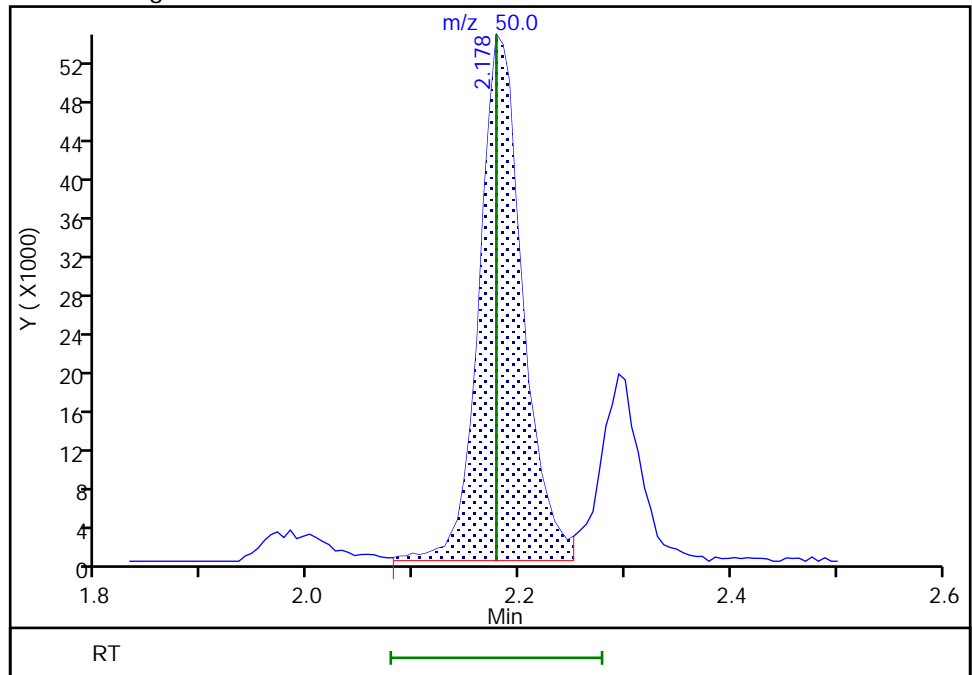
RT: 2.18
Area: 156168
Amount: 1.908858
Amount Units: ug/l

Processing Integration Results



RT: 2.18
Area: 156895
Amount: 1.916528
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 26-Mar-2021 16:47:11
Audit Action: Assigned New Baseline

Audit Reason: Baseline

Eurofins Lancaster Laboratories Env, LLC

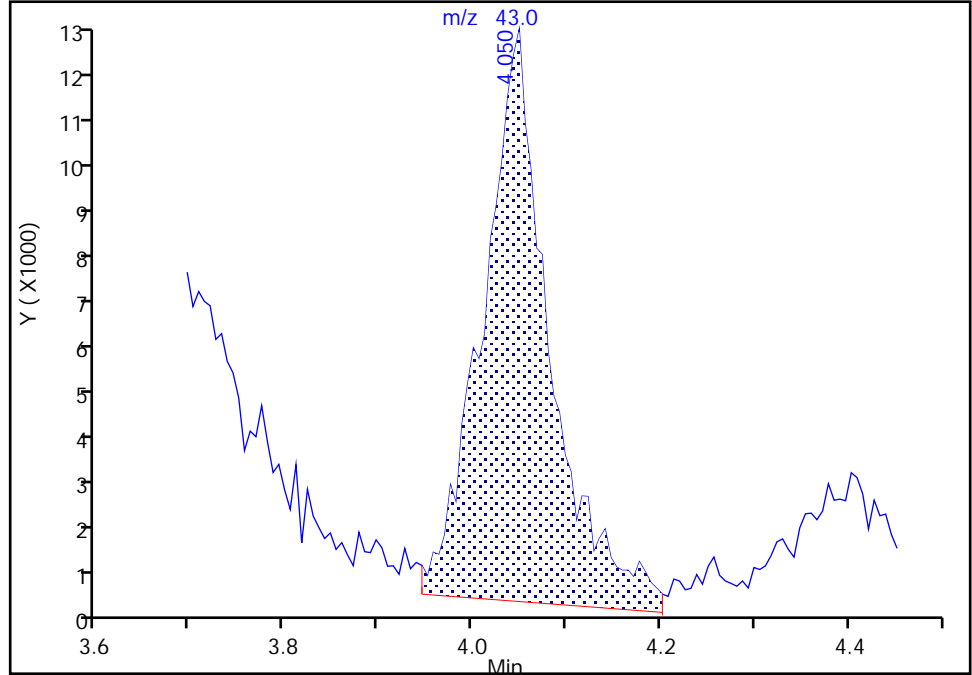
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Injection Date: 26-Mar-2021 00:23:30 Instrument ID: 19930
Lims ID: IC std4
Client ID:
Operator ID: mec29284 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

21 Methyl acetate, CAS: 79-20-9

Signal: 1

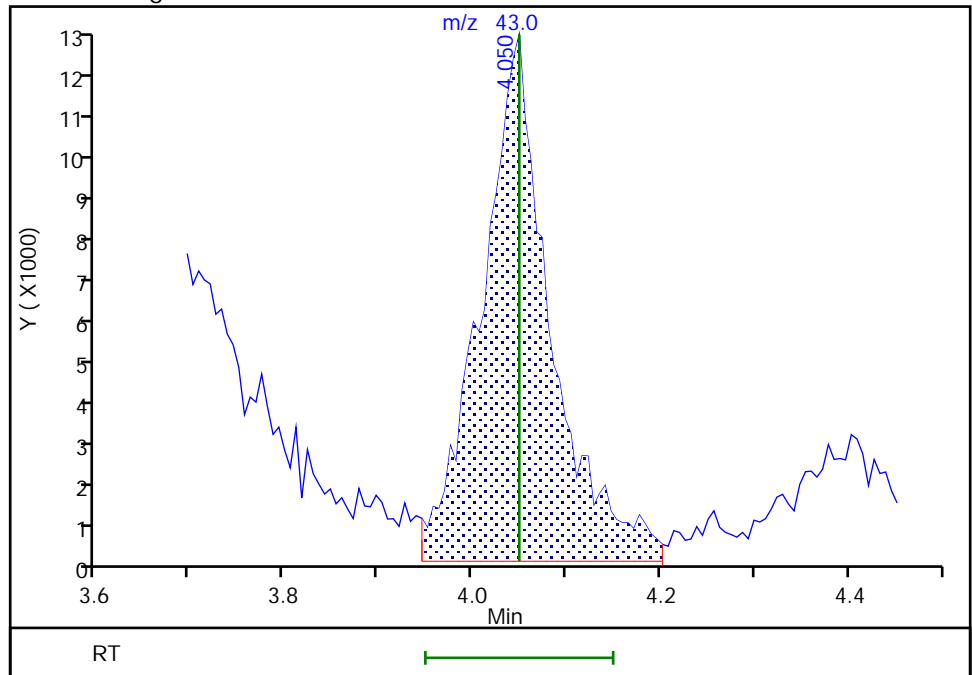
RT: 4.05
Area: 60861
Amount: 1.764918
Amount Units: ug/l

Processing Integration Results



RT: 4.05
Area: 64116
Amount: 1.803387
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 26-Mar-2021 16:47:41
Audit Action: Assigned New Baseline

Audit Reason: Baseline

Eurofins Lancaster Laboratories Env, LLC

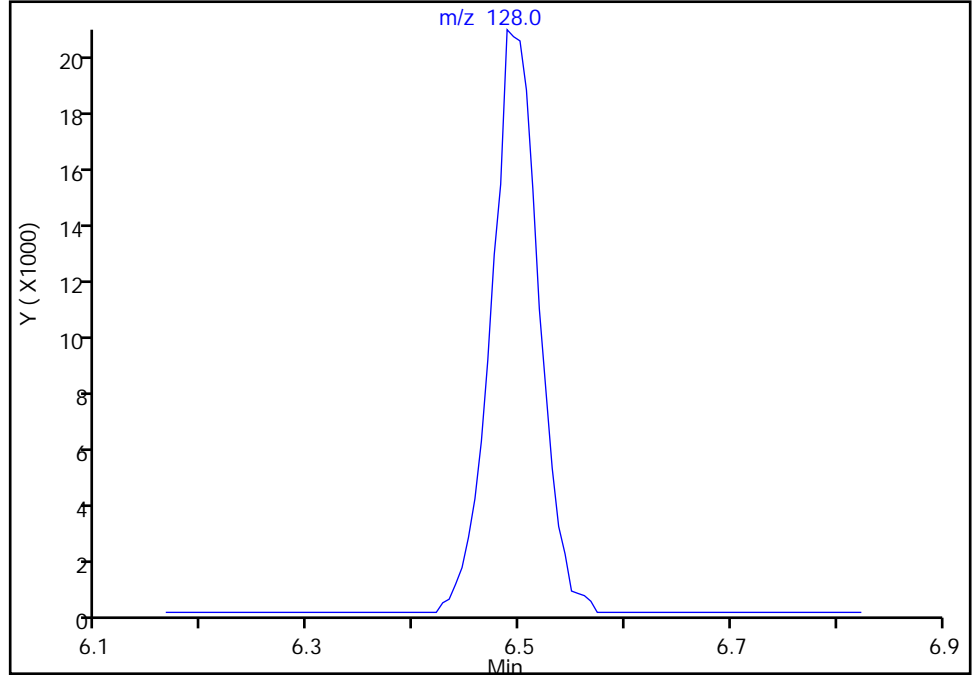
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Lims ID: IC std4
Client ID:
Operator ID: mec29284 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

43 Chlorobromomethane, CAS: 74-97-5

Signal: 1

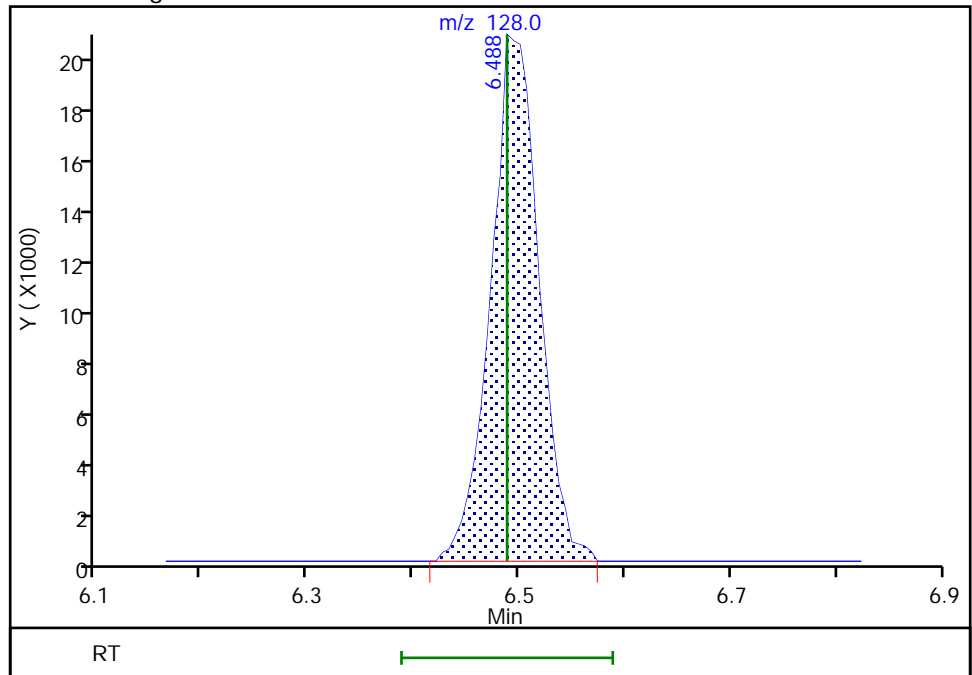
Not Detected
Expected RT: 6.49

Processing Integration Results



Manual Integration Results

RT: 6.49
Area: 65954
Amount: 2.004538
Amount Units: ug/l



Reviewer: campbellme, 26-Mar-2021 16:47:53
Audit Action: Assigned Compound ID

Audit Reason: Baseline

Eurofins Lancaster Laboratories Env, LLC

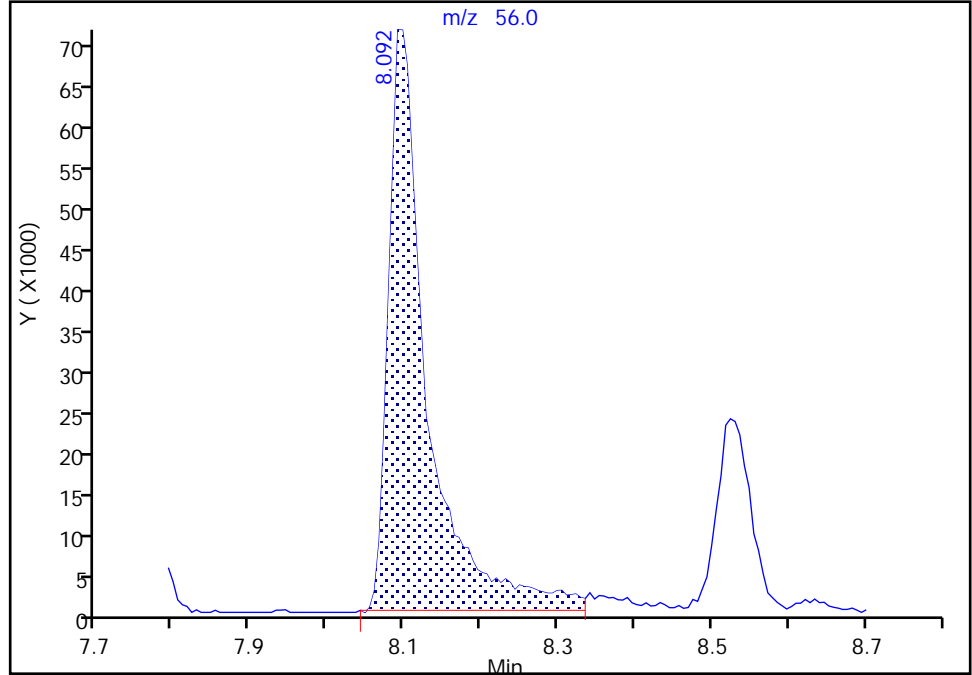
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Injection Date: 26-Mar-2021 00:23:30 Instrument ID: 19930
Lims ID: IC std4
Client ID:
Operator ID: mec29284 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

60 n-Butanol, CAS: 71-36-3

Signal: 1

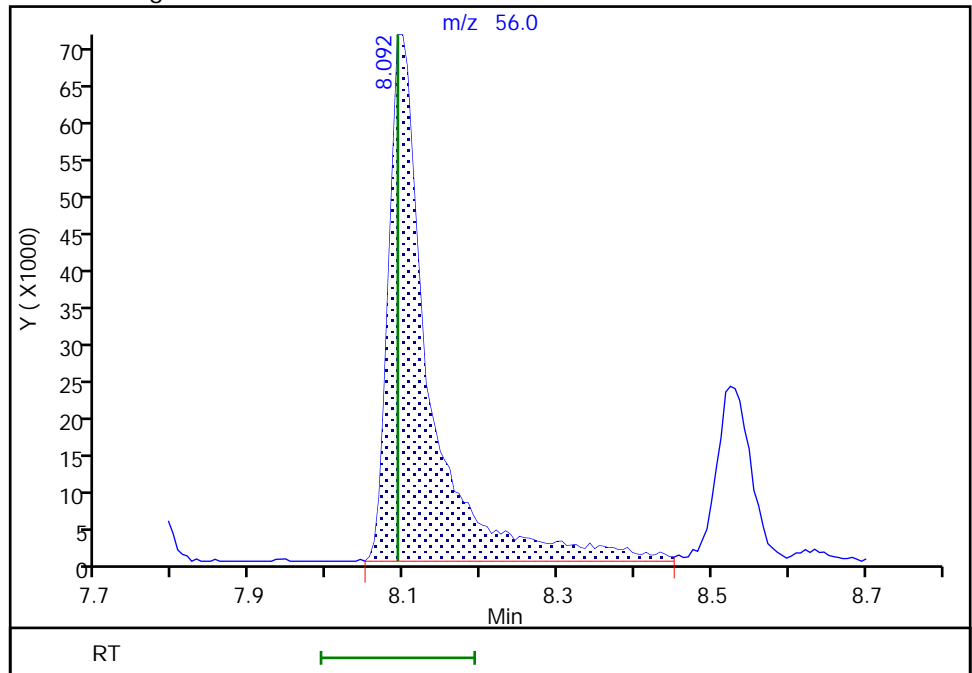
RT: 8.09
Area: 248125
Amount: 216.1752
Amount Units: ug/l

Processing Integration Results



RT: 8.09
Area: 261716
Amount: 214.5661
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 26-Mar-2021 16:48:30
Audit Action: Assigned New Baseline

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

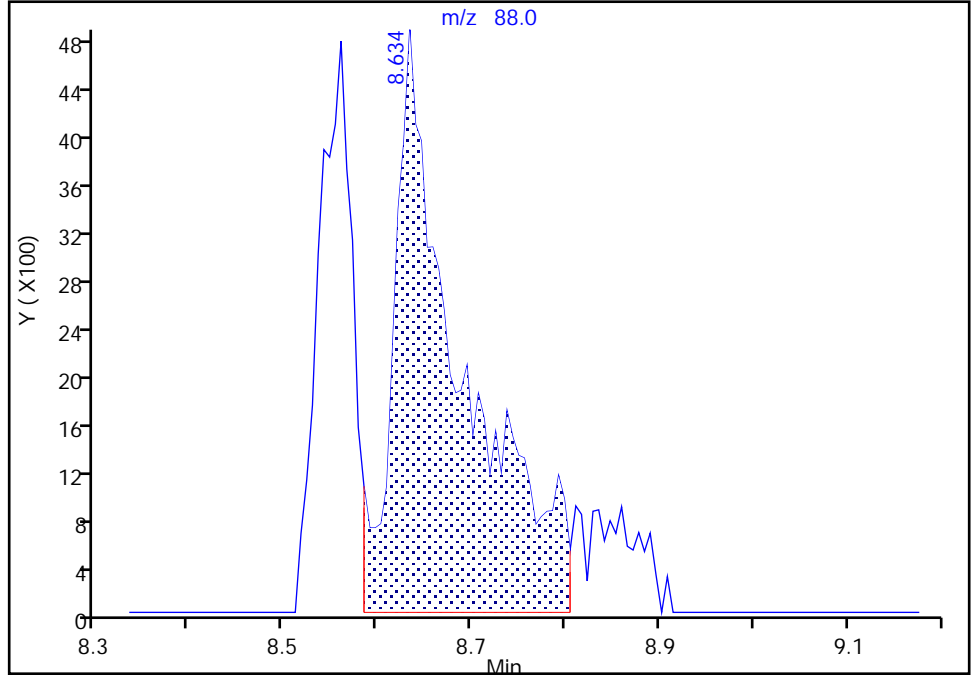
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Injection Date: 26-Mar-2021 00:23:30 Instrument ID: 19930
Lims ID: IC std4
Client ID:
Operator ID: mec29284 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

65 1,4-Dioxane, CAS: 123-91-1

Signal: 1

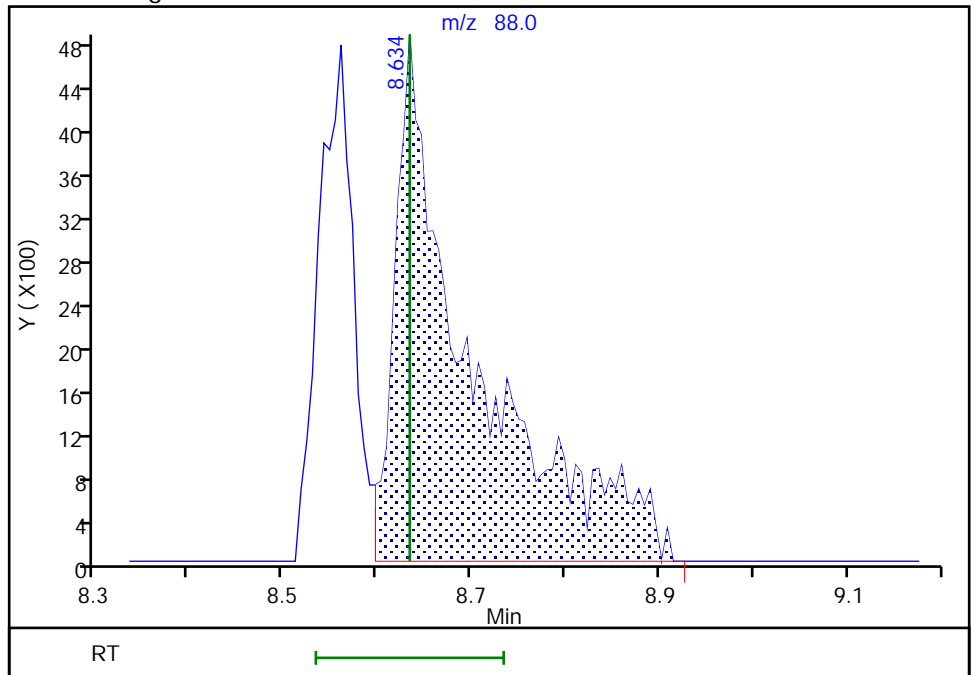
RT: 8.63
Area: 24710
Amount: 130.4865
Amount Units: ug/l

Processing Integration Results



RT: 8.63
Area: 27783
Amount: 119.1459
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 26-Mar-2021 16:48:47
Audit Action: Split an Integrated Peak

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25105.D
 Lims ID: IC std3
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 26-Mar-2021 00:44:30 ALS Bottle#: 15 Worklist Smp#: 16
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0025078-016
 Misc. Info.: IC STD3
 Operator ID: mec29284 Instrument ID: 19930
 Sublist: chrom-8260 25ml HP31*sub2
 Method: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\8260 25ml HP31.m
 Limit Group: MSV - 8260C_D
 Last Update: 26-Mar-2021 17:10:12 Calib Date: 26-Mar-2021 01:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25107.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1605

First Level Reviewer: campbellme

Date: 26-Mar-2021 16:51:12

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.965	1.983	-0.018	99	66157	1.00	0.9879	M
4 Chloromethane	50	2.178	2.178	0.000	99	80672	1.00	0.9899	
6 Butadiene	39	2.288	2.294	-0.006	91	73564	1.00	1.02	
5 Vinyl chloride	62	2.300	2.300	0.000	82	75331	1.00	1.02	
7 Bromomethane	94	2.617	2.629	-0.012	89	52121	1.00	0.9741	
8 Chloroethane	64	2.709	2.715	-0.005	99	46009	1.00	1.00	
9 Dichlorofluoromethane	67	2.940	2.952	-0.012	96	73317	1.00	0.9680	
10 Trichlorofluoromethane	101	3.020	3.019	0.001	95	101953	1.00	0.9844	
11 Ethyl ether	59	3.276	3.275	0.001	92	48765	1.00	0.9753	
12 1,2-Dichloro-1,1,2-trifluoroethane	67	3.349	3.342	0.007	94	80249	1.00	1.04	
13 Acrolein	56	3.440	3.446	-0.006	99	420930	50.0	51.6	
14 1,1-Dichloroethene	96	3.580	3.586	-0.006	97	57828	1.00	1.04	
15 Acetone	43	3.617	3.617	0.000	99	108062	10.0	10.1	
16 112TCTFE	101	3.623	3.623	0.000	92	65806	1.00	1.05	
17 Iodomethane	142	3.775	3.787	-0.012	98	114765	1.00	1.04	
18 Ethyl bromide	108	3.806	3.812	-0.006	96	49021	1.00	0.9716	
19 Carbon disulfide	76	3.885	3.897	-0.012	99	168868	1.00	1.02	
21 Methyl acetate	43	4.038	4.050	-0.012	20	31468	1.00	0.8955	M
22 3-Chloro-1-propene	41	4.062	4.074	-0.012	93	111386	1.00	0.9771	
23 Methylene Chloride	84	4.251	4.257	-0.006	95	63035	1.00	1.01	
* 24 t-Butyl alcohol-d10 (IS)	65	4.257	4.263	-0.006	0	165165	50.0	50.0	
25 2-Methyl-2-propanol	59	4.403	4.391	0.012	99	77456	20.0	20.1	
26 Acrylonitrile	53	4.605	4.604	0.001	99	68567	5.00	5.22	
27 Methyl tert-butyl ether	73	4.666	4.659	0.007	90	166927	1.00	1.02	
28 trans-1,2-Dichloroethene	96	4.678	4.684	-0.006	97	63219	1.00	0.99	
29 Hexane	57	5.098	5.104	-0.006	94	109292	1.00	1.06	
31 1,1-Dichloroethane	63	5.336	5.342	-0.006	96	125080	1.00	1.02	
32 Isopropyl ether	45	5.391	5.397	-0.006	95	230093	1.00	1.01	
33 2-Chloro-1,3-butadiene	53	5.446	5.446	0.000	91	112863	1.00	1.04	
34 Tert-butyl ethyl ether	59	5.921	5.927	-0.006	98	210732	1.00	1.02	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 2-Butanone (MEK)	43	6.123	6.122	0.001	100	190761	10.0	10.1	M
S 35 1,2-Dichloroethene, Total	100				0			2.00	
37 cis-1,2-Dichloroethene	96	6.165	6.165	0.000	83	73881	1.00	1.01	
38 2,2-Dichloropropane	77	6.171	6.183	-0.012	86	111065	1.00	1.04	
40 Propionitrile	54	6.220	6.214	0.006	99	91864	20.0	20.6	
42 Methacrylonitrile	67	6.434	6.427	0.007	93	176866	10.0	10.3	
43 Chlorobromomethane	128	6.488	6.488	0.000	78	31843	1.00	0.9722	
44 Tetrahydrofuran	71	6.507	6.500	0.007	83	52762	10.0	10.6	
45 Chloroform	83	6.641	6.647	-0.006	93	118977	1.00	1.02	
\$ 46 Dibromofluoromethane (Surr)	113	6.854	6.860	-0.006	94	544006	10.0	10.1	
47 1,1,1-Trichloroethane	97	6.872	6.872	0.000	45	108874	1.00	1.02	
48 Cyclohexane	56	6.970	6.964	0.006	92	129757	1.00	1.05	
51 1,1-Dichloropropene	75	7.080	7.080	0.000	94	96006	1.00	1.02	
50 Carbon tetrachloride	117	7.080	7.086	-0.006	89	97370	1.00	1.04	
52 Isobutyl alcohol	41	7.208	7.220	-0.012	94	66146	50.0	47.6	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.311	7.305	0.006	0	106557	10.0	10.1	
54 Benzene	78	7.336	7.342	-0.006	93	281402	1.00	1.02	
56 1,2-Dichloroethane	62	7.409	7.415	-0.006	98	72998	1.00	0.9875	
57 Tert-amyl methyl ether	73	7.525	7.531	-0.006	98	182481	1.00	1.01	
* 58 Fluorobenzene (IS)	96	7.738	7.744	-0.006	99	2146917	10.0	10.0	
59 n-Heptane	43	7.750	7.756	-0.006	82	120942	1.00	1.03	
60 n-Butanol	56	8.092	8.092	0.000	88	125106	100.0	103.8	M
61 Trichloroethene	95	8.220	8.220	0.000	97	71417	1.00	0.99	
62 Methylcyclohexane	83	8.531	8.530	0.001	93	123593	1.00	0.9745	
63 1,2-Dichloropropane	63	8.549	8.549	0.000	71	71710	1.00	1.00	
64 Methyl methacrylate	69	8.634	8.628	0.006	92	33700	1.00	0.9859	
65 1,4-Dioxane	88	8.646	8.634	0.012	35	12008	50.0	52.1	M
66 Dibromomethane	93	8.653	8.665	-0.012	96	33652	1.00	1.03	
68 Dichlorobromomethane	83	8.890	8.890	0.000	99	86229	1.00	1.01	
69 2-Nitropropane	41	9.159	9.158	0.001	98	106909	10.0	10.0	
72 1-Bromo-2-chloroethane	63	9.281	9.286	-0.005	98	64382	1.00	0.9649	
73 cis-1,3-Dichloropropene	75	9.433	9.433	0.000	95	107084	1.00	1.01	
74 4-Methyl-2-pentanone (MIBK)	43	9.604	9.603	0.001	97	494241	10.0	10.2	
\$ 75 Toluene-d8 (Surr)	98	9.744	9.744	0.000	93	2132430	10.0	10.0	
76 Toluene	92	9.817	9.817	0.000	98	176402	1.00	1.01	
S 77 1,3-Dichloropropene, Total	100				0			1.98	
78 trans-1,3-Dichloropropene	75	10.073	10.073	0.000	94	83157	1.00	0.9740	
79 Ethyl methacrylate	69	10.128	10.128	0.000	92	71189	1.00	0.9708	
80 1,1,2-Trichloroethane	97	10.274	10.274	0.000	92	48211	1.00	1.02	
81 Tetrachloroethene	166	10.366	10.359	0.007	98	83669	1.00	1.00	
82 1,3-Dichloropropane	76	10.439	10.439	0.000	91	85540	1.00	1.03	
83 2-Hexanone	43	10.482	10.481	0.001	98	346497	10.0	10.2	
85 Chlorodibromomethane	129	10.652	10.652	0.000	91	60243	1.00	1.00	
86 Ethylene Dibromide	107	10.762	10.762	0.000	100	46934	1.00	1.01	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.188	0.001	87	1626155	10.0	10.0	
88 1-Chlorohexane	91	11.195	11.195	0.000	98	109064	1.00	1.02	
90 Chlorobenzene	112	11.213	11.213	0.000	96	197457	1.00	1.02	
S 89 Xylenes, Total	106				0			3.06	
92 Ethylbenzene	91	11.298	11.298	0.000	98	348677	1.00	1.02	
91 1,1,1,2-Tetrachloroethane	131	11.292	11.298	-0.006	96	69838	1.00	1.00	
93 m-Xylene & p-Xylene	106	11.414	11.414	0.000	99	273866	2.00	2.04	
94 o-Xylene	106	11.743	11.743	0.000	96	133969	1.00	1.02	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
95 Styrene	104	11.762	11.755	0.007	95	217070	1.00	1.01	
96 Bromoform	173	11.914	11.914	0.000	97	38357	1.00	1.01	
97 Isopropylbenzene	105	12.042	12.042	0.000	96	357935	1.00	1.02	
\$ 100 4-Bromofluorobenzene (Surr)	95	12.188	12.188	0.000	94	807959	10.0	10.0	
101 1,1,2,2-Tetrachloroethane	83	12.286	12.286	0.000	93	60797	1.00	1.01	
102 Bromobenzene	156	12.304	12.304	0.000	93	83959	1.00	1.01	
103 trans-1,4-Dichloro-2-butene	53	12.310	12.310	0.000	92	166570	10.0	9.98	
104 1,2,3-Trichloropropane	110	12.335	12.328	0.007	83	15297	1.00	0.9502	
105 N-Propylbenzene	91	12.371	12.371	0.000	99	417034	1.00	1.02	
106 2-Chlorotoluene	126	12.445	12.444	0.001	97	83871	1.00	1.01	
107 1,3,5-Trimethylbenzene	105	12.505	12.505	0.000	95	296322	1.00	1.01	
108 4-Chlorotoluene	126	12.542	12.542	0.000	97	84059	1.00	0.9889	
109 tert-Butylbenzene	134	12.749	12.743	0.006	93	65226	1.00	0.99	
110 Pentachloroethane	167	12.780	12.780	0.000	90	50922	1.00	0.9397	
111 1,2,4-Trimethylbenzene	105	12.792	12.786	0.006	97	305474	1.00	1.01	
112 sec-Butylbenzene	105	12.908	12.908	0.000	94	389750	1.00	1.01	
113 1,3-Dichlorobenzene	146	13.011	13.011	0.000	98	162228	1.00	0.9804	
114 4-Isopropyltoluene	119	13.018	13.017	0.001	97	332809	1.00	1.01	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	94	911826	10.0	10.0	
116 1,4-Dichlorobenzene	146	13.085	13.084	0.001	95	165981	1.00	1.00	
117 1,2,3-Trimethylbenzene	120	13.091	13.091	0.000	97	126397	1.00	0.9670	
118 Benzyl chloride	126	13.164	13.158	0.006	98	26506	1.00	0.9745	
119 n-Butylbenzene	92	13.310	13.310	0.000	98	158340	1.00	0.99	
120 1,2-Dichlorobenzene	146	13.341	13.340	0.001	98	150954	1.00	1.00	
122 1,2-Dibromo-3-Chloropropane	155	13.883	13.883	0.000	86	8946	1.00	0.9474	
123 1,3,5-Trichlorobenzene	180	14.011	14.011	0.000	97	119469	1.00	0.99	
124 1,2,4-Trichlorobenzene	180	14.432	14.432	0.000	94	97675	1.00	0.9729	
125 Hexachlorobutadiene	225	14.517	14.517	0.000	97	44110	1.00	0.9839	
126 Naphthalene	128	14.615	14.615	0.000	97	191794	1.00	1.01	
127 1,2,3-Trichlorobenzene	180	14.755	14.755	0.000	96	85459	1.00	0.9777	
135 p-Diethylbenzene	1		0.000				ND	ND	
144 2-ethoxy-2-methyl butane	1		0.000				ND	ND	
204 Pentane	43		0.000				ND	ND	
137 2-Methylnaphthalene	142		0.000				ND	ND	
134 Isopropyl alcohol	45		0.000				ND	ND	

QC Flag Legend

Processing Flags

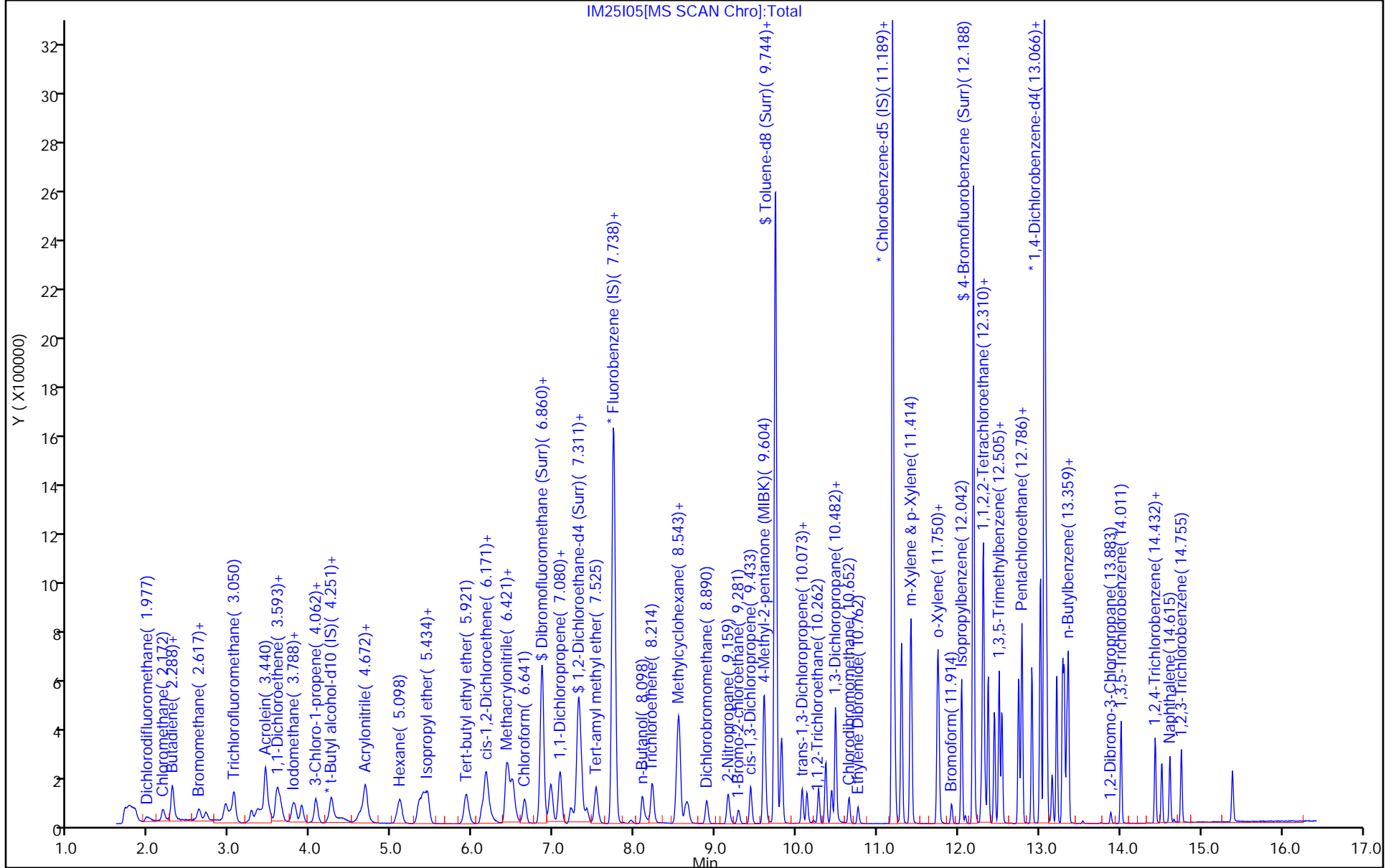
ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

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MSV_RV4_826_00048	Amount Added: 2.00	Units: uL	
MSV_RV4GAS826_00121	Amount Added: 2.00	Units: uL	
MSV_31_826ISS_00004	Amount Added: 5.00	Units: uL	Run Reagent



Eurofins Lancaster Laboratories Env, LLC

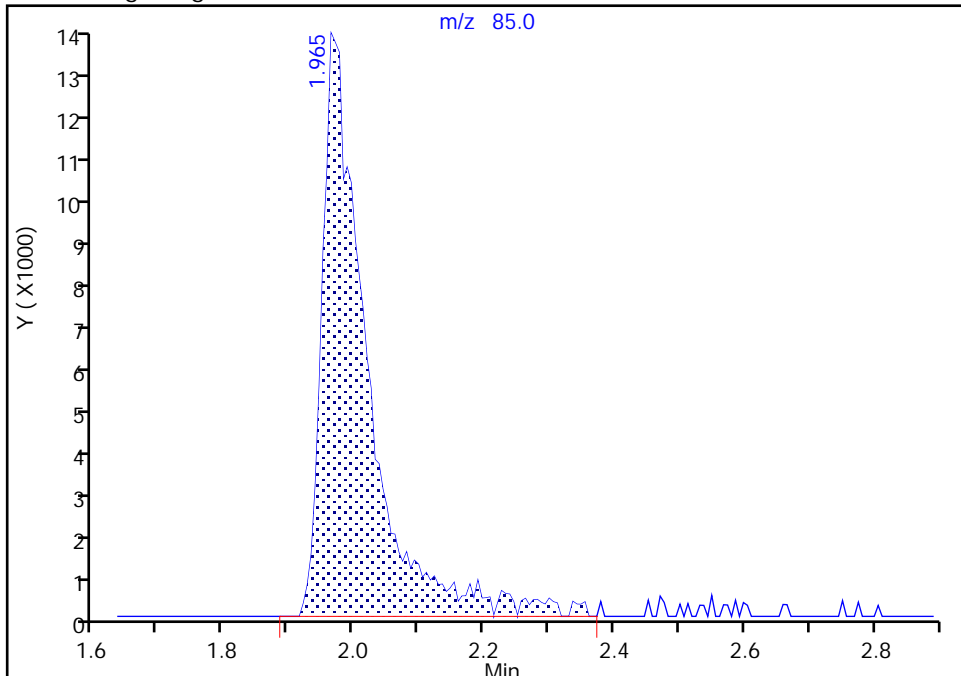
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Lims ID: IC std3
Client ID:
Operator ID: mec29284 ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

1 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

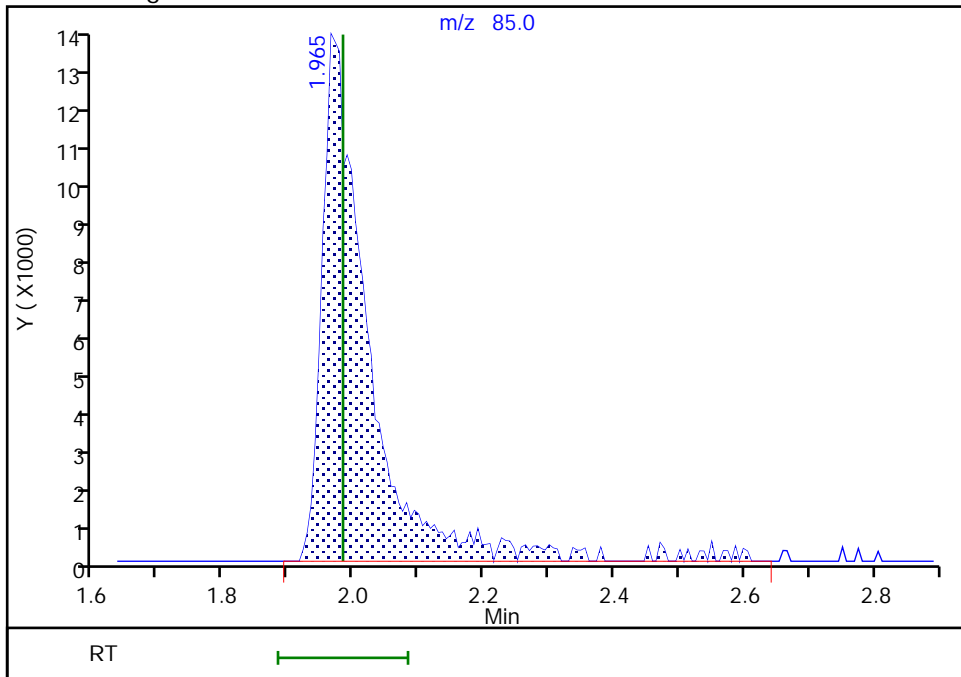
RT: 1.96
Area: 64500
Amount: 0.973077
Amount Units: ug/l

Processing Integration Results



RT: 1.96
Area: 66157
Amount: 0.987938
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 26-Mar-2021 16:49:30
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

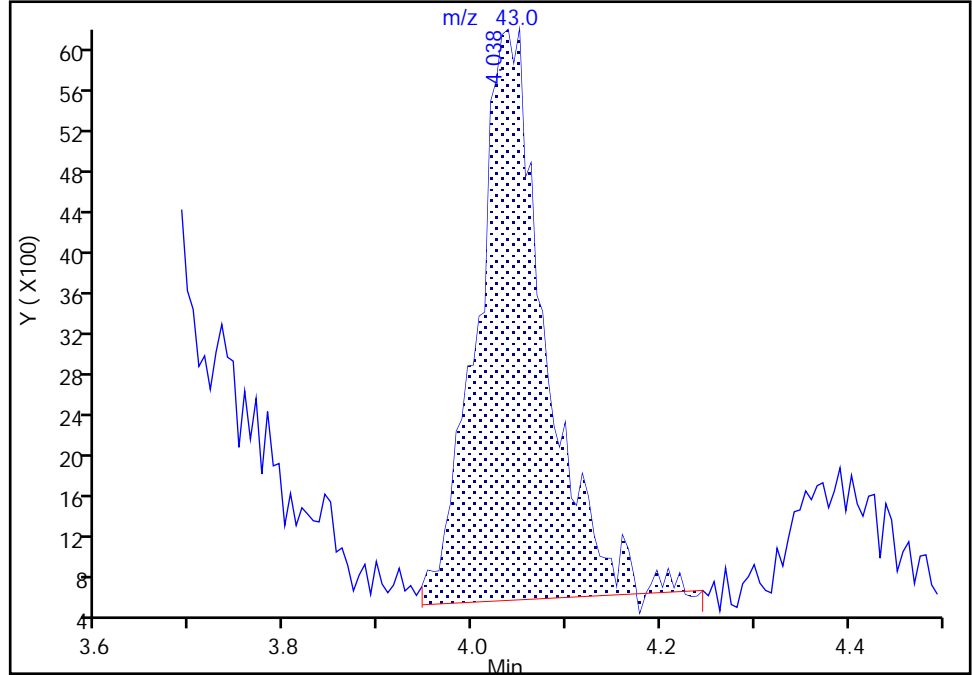
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Lims ID: IC std3
Client ID:
Operator ID: mec29284 ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

21 Methyl acetate, CAS: 79-20-9

Signal: 1

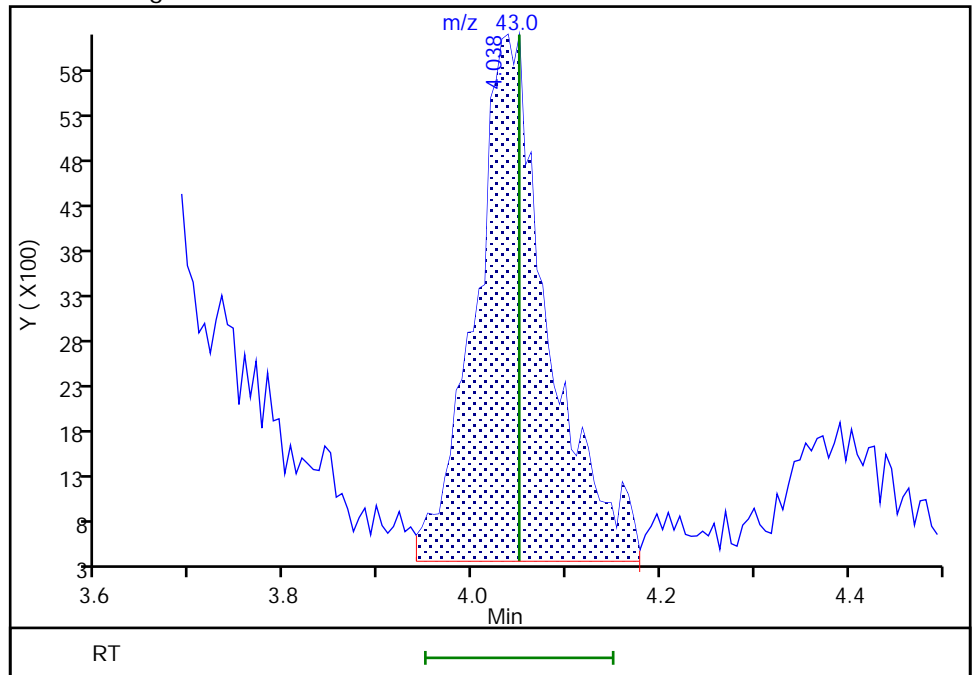
RT: 4.04
Area: 28091
Amount: 0.818698
Amount Units: ug/l

Processing Integration Results



RT: 4.04
Area: 31468
Amount: 0.895532
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 26-Mar-2021 16:49:58
Audit Action: Assigned New Baseline

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

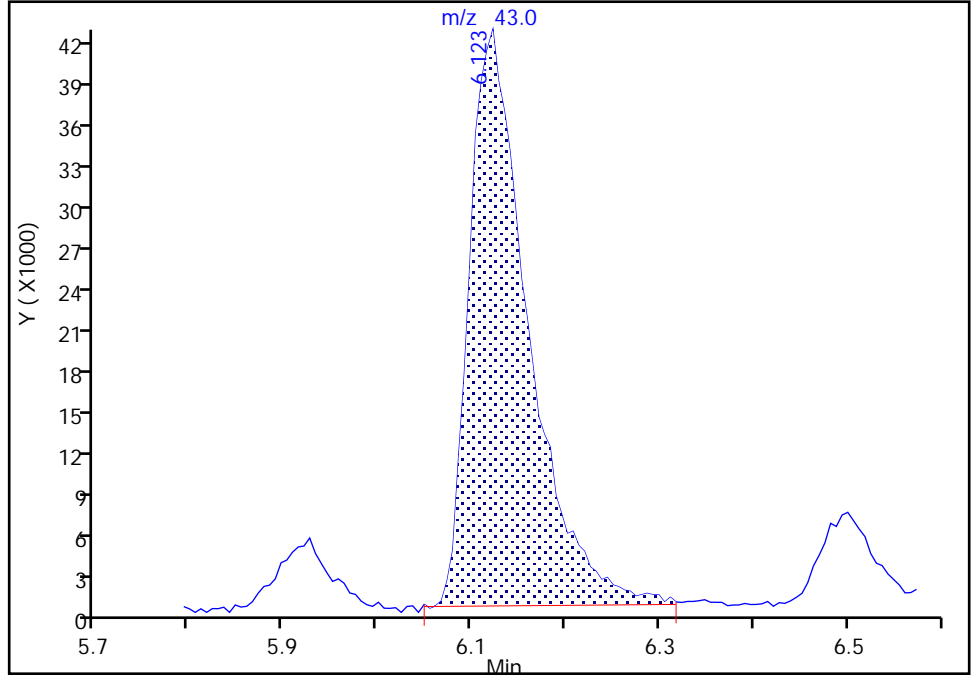
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Lims ID: IC std3
Client ID:
Operator ID: mec29284 ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

36 2-Butanone (MEK), CAS: 78-93-3

Signal: 1

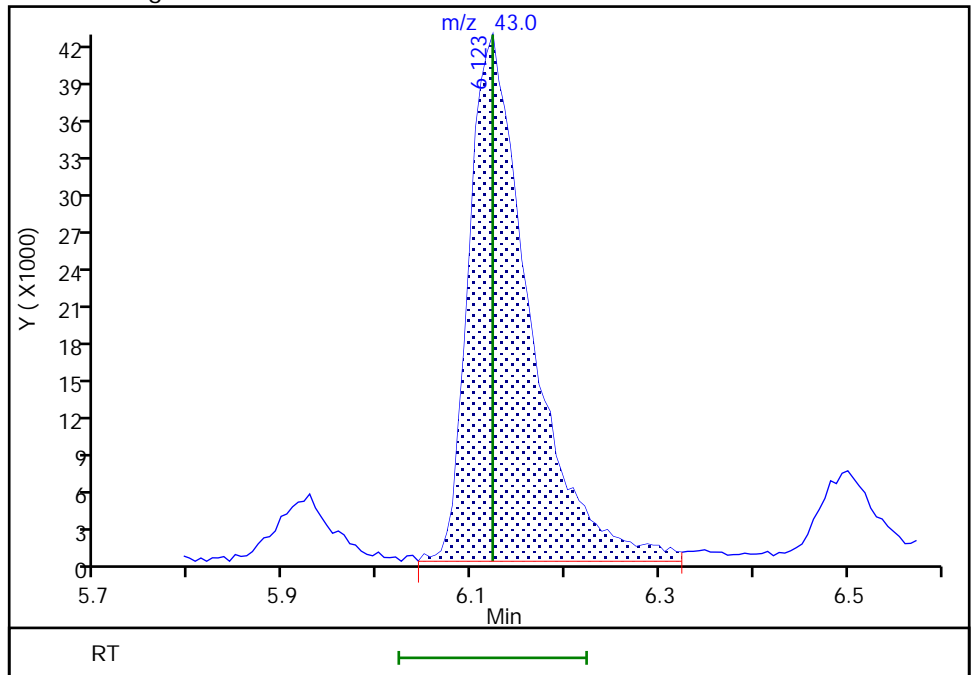
RT: 6.12
Area: 182296
Amount: 9.742120
Amount Units: ug/l

Processing Integration Results



RT: 6.12
Area: 190761
Amount: 10.129040
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 26-Mar-2021 16:50:22
Audit Action: Assigned New Baseline

Audit Reason: Incomplete Integration

Euofins Lancaster Laboratories Env, LLC

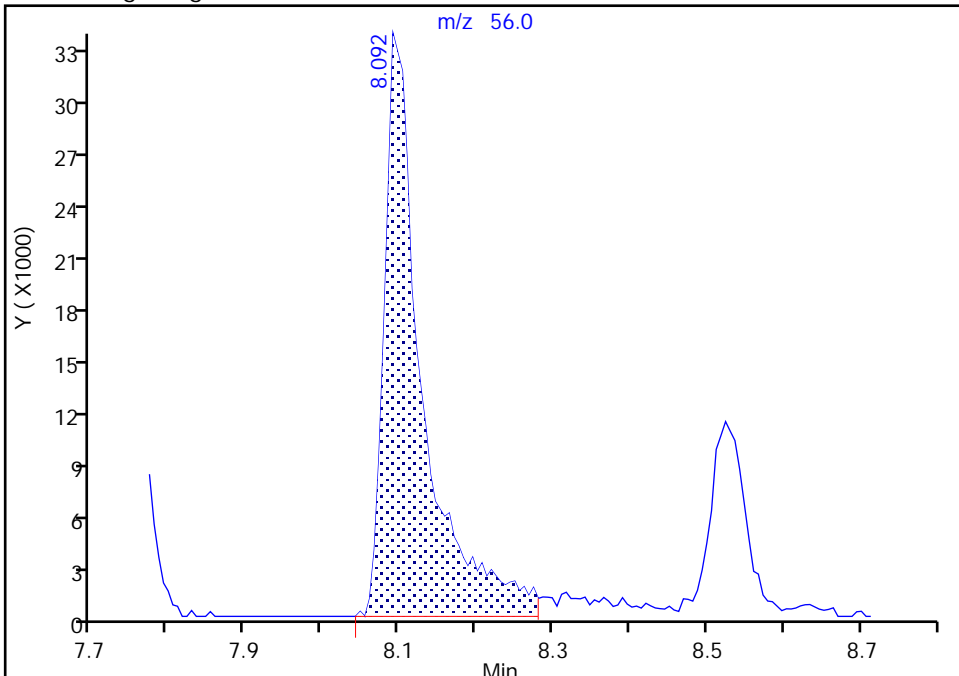
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Injection Date: 26-Mar-2021 00:44:30 Instrument ID: 19930
Lims ID: IC std3
Client ID:
Operator ID: mec29284 ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

60 n-Butanol, CAS: 71-36-3

Signal: 1

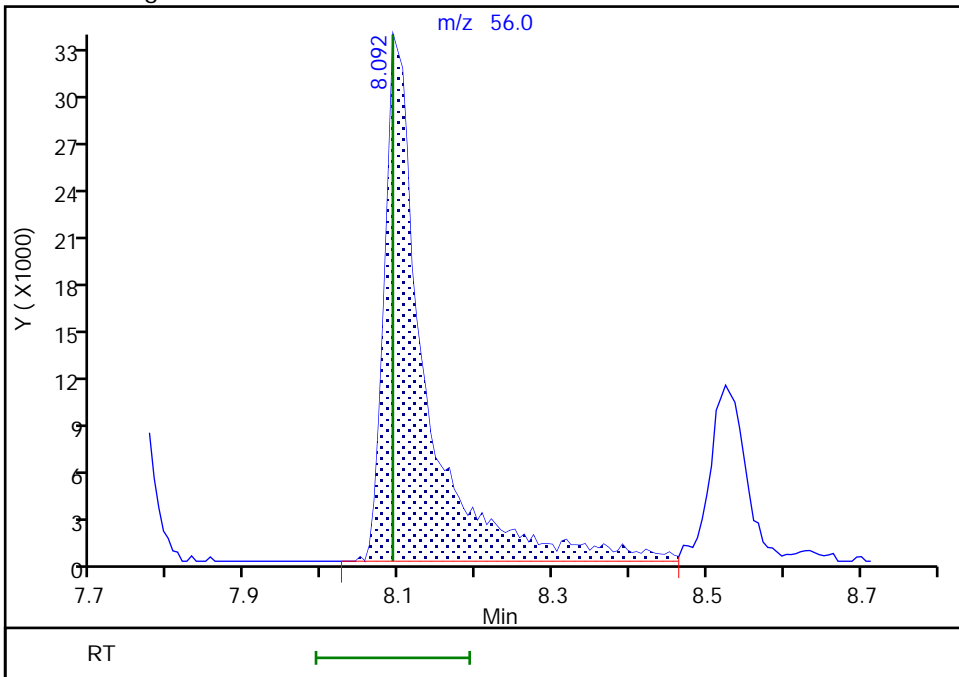
RT: 8.09
Area: 116465
Amount: 101.8035
Amount Units: ug/l

Processing Integration Results



RT: 8.09
Area: 125106
Amount: 103.7764
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 26-Mar-2021 16:50:44
Audit Action: Assigned New Baseline

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

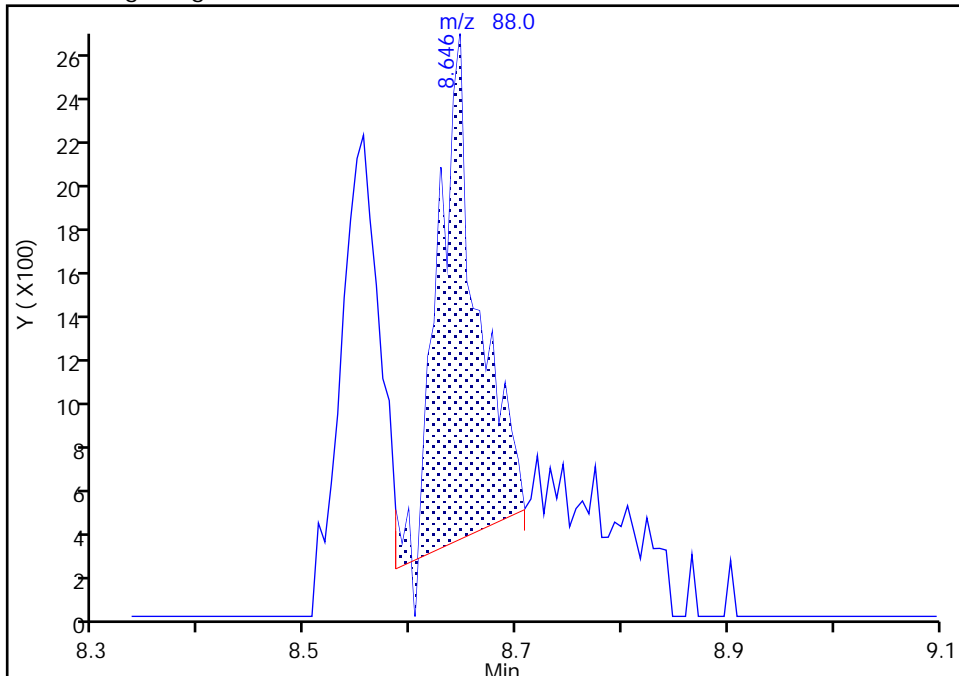
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Lims ID: IC std3
Client ID:
Operator ID: mec29284 ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

65 1,4-Dioxane, CAS: 123-91-1

Signal: 1

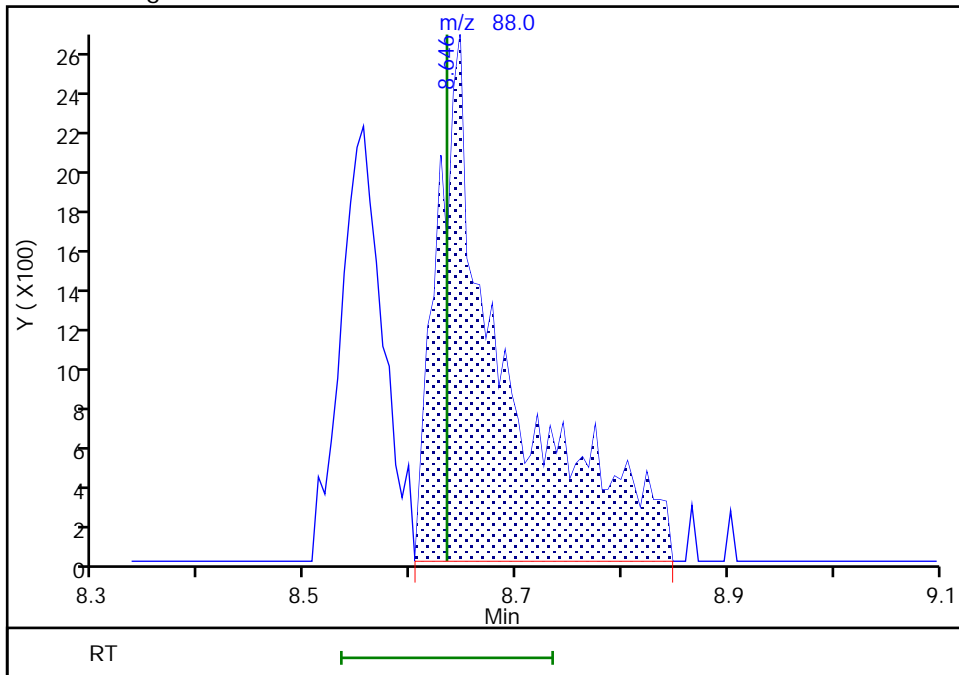
RT: 8.65
Area: 5993
Amount: 31.294917
Amount Units: ug/l

Processing Integration Results



RT: 8.65
Area: 12008
Amount: 52.102709
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 26-Mar-2021 16:50:55
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25106.D
 Lims ID: IC std2
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 26-Mar-2021 01:05:30 ALS Bottle#: 16 Worklist Smp#: 17
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0025078-017
 Misc. Info.: IC STD2
 Operator ID: mec29284 Instrument ID: 19930
 Sublist: chrom-8260 25ml HP31*sub2

Method: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\8260 25ml HP31.m
 Limit Group: MSV - 8260C_D
 Last Update: 26-Mar-2021 17:10:23 Calib Date: 26-Mar-2021 01:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25107.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1605

First Level Reviewer: campbellme

Date: 26-Mar-2021 16:53:52

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.965	1.983	-0.018	99	33158	0.5000	0.4898	M
4 Chloromethane	50	2.166	2.178	-0.012	99	41785	0.5000	0.5072	
6 Butadiene	39	2.288	2.294	-0.006	93	36799	0.5000	0.5044	M
5 Vinyl chloride	62	2.288	2.300	-0.012	89	36238	0.5000	0.4860	
7 Bromomethane	94	2.611	2.629	-0.018	90	27227	0.5000	0.5033	
8 Chloroethane	64	2.696	2.715	-0.018	99	23600	0.5000	0.5052	
9 Dichlorofluoromethane	67	2.940	2.952	-0.012	96	40189	0.5000	0.5248	
10 Trichlorofluoromethane	101	3.013	3.019	-0.006	94	50696	0.5000	0.4841	
11 Ethyl ether	59	3.263	3.275	-0.012	94	24629	0.5001	0.4872	
12 1,2-Dichloro-1,1,2-trifluoroetha	67	3.337	3.342	-0.005	93	36009	0.5000	0.4605	
13 Acrolein	56	3.434	3.446	-0.012	99	206147	25.0	22.3	
14 1,1-Dichloroethene	96	3.574	3.586	-0.012	98	27336	0.5000	0.4847	
15 Acetone	43	3.605	3.617	-0.012	94	62204	5.00	5.14	M
16 112TCTFE	101	3.599	3.623	-0.024	89	27455	0.5000	0.4317	
17 Iodomethane	142	3.776	3.787	-0.011	100	54329	0.5000	0.4857	
18 Ethyl bromide	108	3.812	3.812	0.000	98	25320	0.5002	0.4964	
19 Carbon disulfide	76	3.885	3.897	-0.012	99	82229	0.5000	0.4927	
21 Methyl acetate	43	4.044	4.050	-0.006	23	19178	0.5000	0.4823	M
22 3-Chloro-1-propene	41	4.068	4.074	-0.006	92	58935	0.5000	0.5114	
23 Methylene Chloride	84	4.245	4.257	-0.012	91	32234	0.5000	0.5086	
* 24 t-Butyl alcohol-d10 (IS)	65	4.275	4.263	0.012	0	186889	50.0	50.0	
25 2-Methyl-2-propanol	59	4.397	4.391	0.006	97	44088	10.0	10.1	
26 Acrylonitrile	53	4.617	4.604	0.013	99	33532	2.50	2.26	a
27 Methyl tert-butyl ether	73	4.647	4.659	-0.012	94	82175	0.5000	0.4969	
28 trans-1,2-Dichloroethene	96	4.672	4.684	-0.012	97	31450	0.5000	0.4892	M
29 Hexane	57	5.098	5.104	-0.006	95	45384	0.5000	0.4335	
31 1,1-Dichloroethane	63	5.330	5.342	-0.012	96	61328	0.5000	0.4937	
32 Isopropyl ether	45	5.385	5.397	-0.012	94	111585	0.5000	0.4846	
33 2-Chloro-1,3-butadiene	53	5.446	5.446	0.000	92	51363	0.5000	0.4697	
34 Tert-butyl ethyl ether	59	5.909	5.927	-0.018	98	102647	0.5000	0.4902	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 2-Butanone (MEK)	43	6.117	6.122	-0.005	100	95774	5.00	4.49	
S 35 1,2-Dichloroethene, Total	100				0			0.99	
37 cis-1,2-Dichloroethene	96	6.165	6.165	0.000	82	37242	0.5000	0.5021	
38 2,2-Dichloropropane	77	6.165	6.183	-0.018	66	49949	0.5000	0.4647	
40 Propionitrile	54	6.214	6.214	0.000	98	47048	10.0	9.31	
42 Methacrylonitrile	67	6.415	6.427	-0.012	93	84710	5.00	4.34	
43 Chlorobromomethane	128	6.482	6.488	-0.006	84	16661	0.5000	0.5031	
44 Tetrahydrofuran	71	6.501	6.500	0.001	81	25722	5.00	4.58	
45 Chloroform	83	6.641	6.647	-0.006	93	59962	0.5000	0.5068	
\$ 46 Dibromofluoromethane (Surr)	113	6.848	6.860	-0.012	94	541504	10.0	9.92	
47 1,1,1-Trichloroethane	97	6.860	6.872	-0.012	39	52840	0.5000	0.4910	
48 Cyclohexane	56	6.964	6.964	0.000	91	56046	0.5000	0.4473	Ma
51 1,1-Dichloropropene	75	7.074	7.080	-0.006	94	45700	0.5000	0.4802	
50 Carbon tetrachloride	117	7.080	7.086	-0.006	90	43925	0.5000	0.4655	
52 Isobutyl alcohol	41	7.208	7.220	-0.012	95	35158	25.0	22.4	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.299	7.305	-0.006	0	107831	10.0	10.1	
54 Benzene	78	7.342	7.342	0.000	94	138329	0.5000	0.4945	
56 1,2-Dichloroethane	62	7.409	7.415	-0.006	96	38004	0.5000	0.5085	
57 Tert-amyl methyl ether	73	7.525	7.531	-0.006	97	88898	0.5000	0.4851	
* 58 Fluorobenzene (IS)	96	7.738	7.744	-0.006	98	2170550	10.0	10.0	
59 n-Heptane	43	7.750	7.756	-0.006	61	54789	0.5000	0.4621	
60 n-Butanol	56	8.098	8.092	0.006	90	61571	50.0	45.1	M
61 Trichloroethene	95	8.220	8.220	0.000	98	35485	0.5000	0.4881	
62 Methylcyclohexane	83	8.525	8.530	-0.005	94	61740	0.5000	0.4815	
63 1,2-Dichloropropane	63	8.543	8.549	-0.006	85	35486	0.5000	0.4899	
64 Methyl methacrylate	69	8.628	8.628	0.000	93	15850	0.5000	0.4098	M
65 1,4-Dioxane	88	8.640	8.634	0.006	34	6622	25.0	25.4	M
66 Dibromomethane	93	8.659	8.665	-0.006	95	16764	0.5000	0.5099	
68 Dichlorobromomethane	83	8.890	8.890	0.000	97	40469	0.5000	0.4707	
69 2-Nitropropane	41	9.159	9.158	0.001	99	53853	5.00	4.46	
72 1-Bromo-2-chloroethane	63	9.287	9.286	0.001	98	32672	0.5000	0.4843	
73 cis-1,3-Dichloropropene	75	9.433	9.433	0.000	95	50878	0.5000	0.4731	
74 4-Methyl-2-pentanone (MIBK)	43	9.598	9.603	-0.005	97	241439	5.00	4.41	
\$ 75 Toluene-d8 (Surr)	98	9.738	9.744	-0.006	94	2151774	10.0	10.0	
76 Toluene	92	9.817	9.817	0.000	99	87241	0.5000	0.4932	
S 77 1,3-Dichloropropene, Total	100				0			0.9483	
78 trans-1,3-Dichloropropene	75	10.073	10.073	0.000	93	40964	0.5000	0.4751	
79 Ethyl methacrylate	69	10.128	10.128	0.000	92	35178	0.5000	0.4751	
80 1,1,2-Trichloroethane	97	10.274	10.274	0.000	91	22834	0.5000	0.4782	
81 Tetrachloroethene	166	10.366	10.359	0.007	96	39052	0.5000	0.4642	
82 1,3-Dichloropropane	76	10.433	10.439	-0.006	91	41331	0.5000	0.4910	
83 2-Hexanone	43	10.482	10.481	0.001	98	167867	5.00	4.37	
85 Chlorodibromomethane	129	10.646	10.652	-0.006	90	28920	0.5000	0.4746	
86 Ethylene Dibromide	107	10.762	10.762	0.000	96	23323	0.5000	0.4991	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.188	0.001	86	1642102	10.0	10.0	
88 1-Chlorohexane	91	11.195	11.195	0.000	93	51858	0.5000	0.4797	
90 Chlorobenzene	112	11.213	11.213	0.000	95	95826	0.5000	0.4902	
S 89 Xylenes, Total	106				0			1.47	
92 Ethylbenzene	91	11.298	11.298	0.000	98	169543	0.5000	0.4899	
91 1,1,1,2-Tetrachloroethane	131	11.292	11.298	-0.006	95	34792	0.5000	0.4917	
93 m-Xylene & p-Xylene	106	11.414	11.414	0.000	99	134614	1.00	0.99	
94 o-Xylene	106	11.743	11.743	0.000	97	63580	0.5000	0.4790	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
95 Styrene	104	11.762	11.755	0.007	96	102806	0.5000	0.4747	
96 Bromoform	173	11.920	11.914	0.006	95	17826	0.5000	0.4629	
97 Isopropylbenzene	105	12.042	12.042	0.000	95	168700	0.5000	0.4773	
\$ 100 4-Bromofluorobenzene (Surr)	95	12.182	12.188	-0.006	92	822933	10.0	10.1	
101 1,1,2,2-Tetrachloroethane	83	12.286	12.286	0.000	93	28607	0.5000	0.4655	
102 Bromobenzene	156	12.304	12.304	0.000	94	40145	0.5000	0.4740	
103 trans-1,4-Dichloro-2-butene	53	12.310	12.310	0.000	92	77224	5.00	4.09	
104 1,2,3-Trichloropropane	110	12.329	12.328	0.001	82	8504	0.5000	0.5199	
105 N-Propylbenzene	91	12.371	12.371	0.000	99	202079	0.5000	0.4862	
106 2-Chlorotoluene	126	12.451	12.444	0.007	97	39228	0.5000	0.4637	
107 1,3,5-Trimethylbenzene	105	12.506	12.505	0.001	94	141120	0.5000	0.4718	
108 4-Chlorotoluene	126	12.542	12.542	0.000	97	41138	0.5000	0.4764	
109 tert-Butylbenzene	134	12.743	12.743	0.000	94	31160	0.5000	0.4670	
110 Pentachloroethane	167	12.780	12.780	0.000	80	25106	0.5000	0.4560	
111 1,2,4-Trimethylbenzene	105	12.786	12.786	0.000	97	147037	0.5000	0.4791	
112 sec-Butylbenzene	105	12.908	12.908	0.000	94	186398	0.5000	0.4744	
113 1,3-Dichlorobenzene	146	13.012	13.011	0.001	98	79884	0.5000	0.4752	
114 4-Isopropyltoluene	119	13.018	13.017	0.001	97	155261	0.5000	0.4646	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	94	926371	10.0	10.0	
116 1,4-Dichlorobenzene	146	13.085	13.084	0.001	94	80478	0.5000	0.4791	
117 1,2,3-Trimethylbenzene	120	13.091	13.091	0.000	97	63732	0.5000	0.4799	
118 Benzyl chloride	126	13.164	13.158	0.006	98	13013	0.5000	0.4709	
119 n-Butylbenzene	92	13.310	13.310	0.000	98	75474	0.5000	0.4645	
120 1,2-Dichlorobenzene	146	13.341	13.340	0.001	98	74631	0.5000	0.4884	
122 1,2-Dibromo-3-Chloropropane	155	13.889	13.883	0.006	83	4773	0.5000	0.4976	
123 1,3,5-Trichlorobenzene	180	14.011	14.011	0.000	97	57251	0.5000	0.4683	
124 1,2,4-Trichlorobenzene	180	14.432	14.432	0.000	94	46562	0.5000	0.4565	
125 Hexachlorobutadiene	225	14.517	14.517	0.000	95	22282	0.5000	0.4892	
126 Naphthalene	128	14.615	14.615	0.000	97	90288	0.5000	0.4677	
127 1,2,3-Trichlorobenzene	180	14.755	14.755	0.000	95	41678	0.5000	0.4693	
137 2-Methylnaphthalene	142		0.000				ND	ND	
135 p-Diethylbenzene	1		0.000				ND	ND	
144 2-ethoxy-2-methyl butane	1		0.000				ND	ND	
204 Pentane	43		0.000				ND	ND	
134 Isopropyl alcohol	45		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

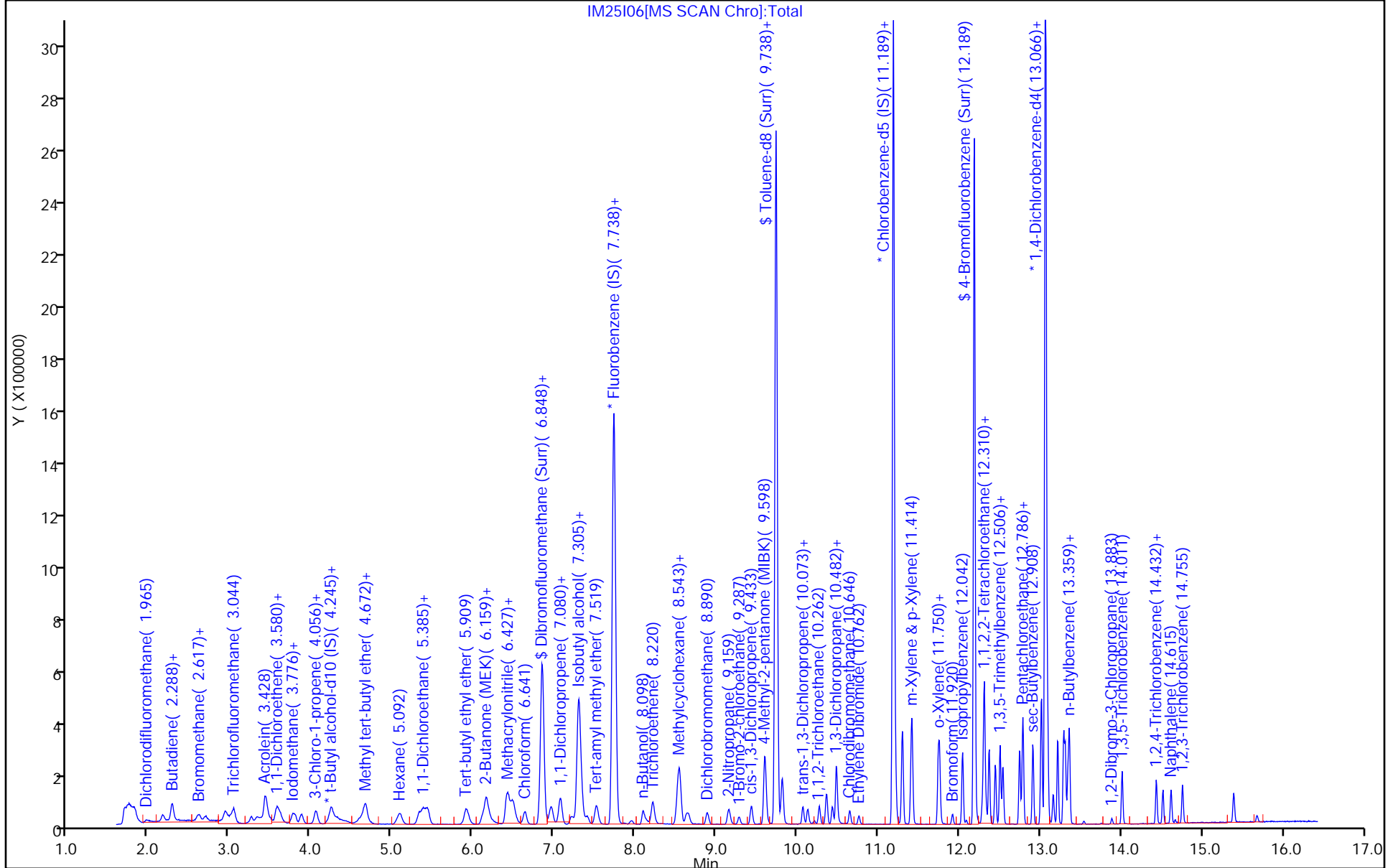
Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MSV_RV1_826_00042	Amount Added: 2.00	Units: uL	
MSV_RV4_826_00048	Amount Added: 2.00	Units: uL	
MSV_RV4GAS826_00121	Amount Added: 2.00	Units: uL	
MSV_31_826ISS_00004	Amount Added: 5.00	Units: uL	Run Reagent



Eurofins Lancaster Laboratories Env, LLC

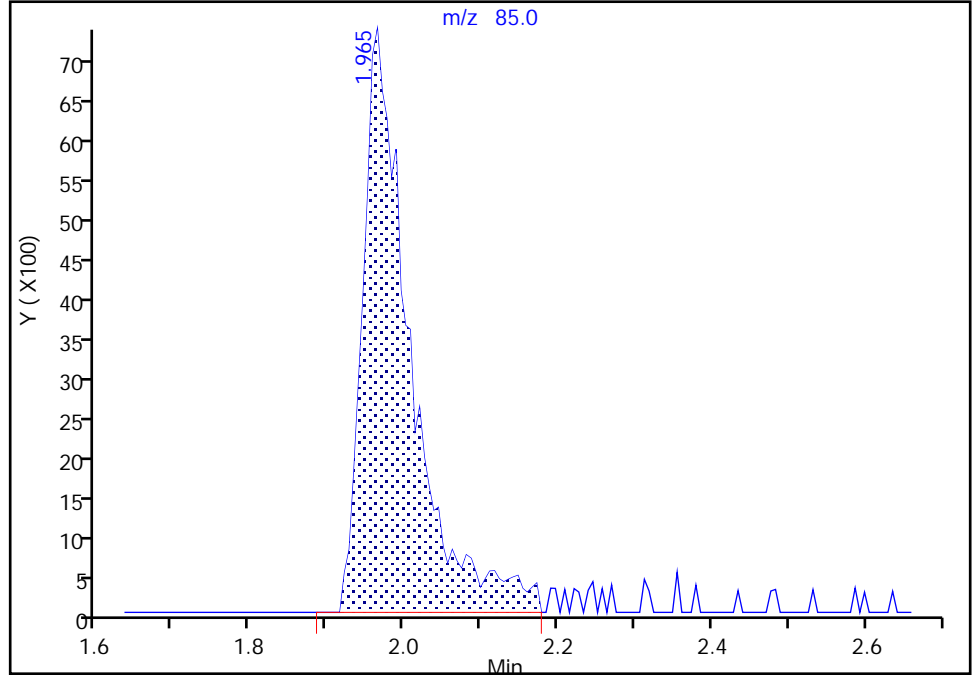
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Injection Date: 26-Mar-2021 01:05:30 Instrument ID: 19930
Lims ID: IC std2
Client ID:
Operator ID: mec29284 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

1 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

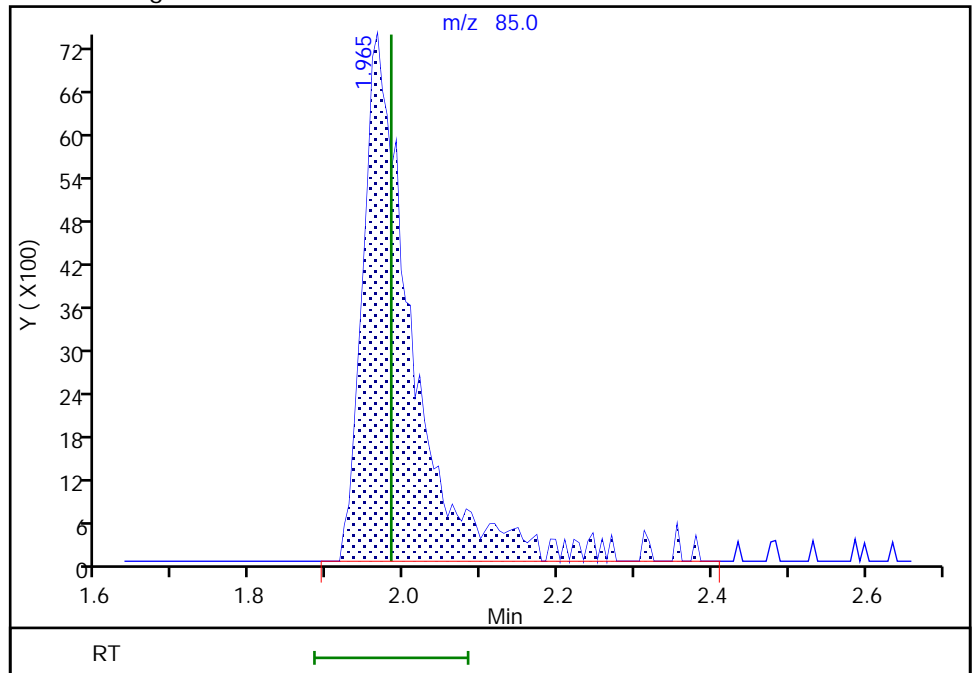
RT: 1.96
Area: 31589
Amount: 0.469700
Amount Units: ug/l

Processing Integration Results



RT: 1.96
Area: 33158
Amount: 0.489765
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 26-Mar-2021 16:51:38
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Euofins Lancaster Laboratories Env, LLC

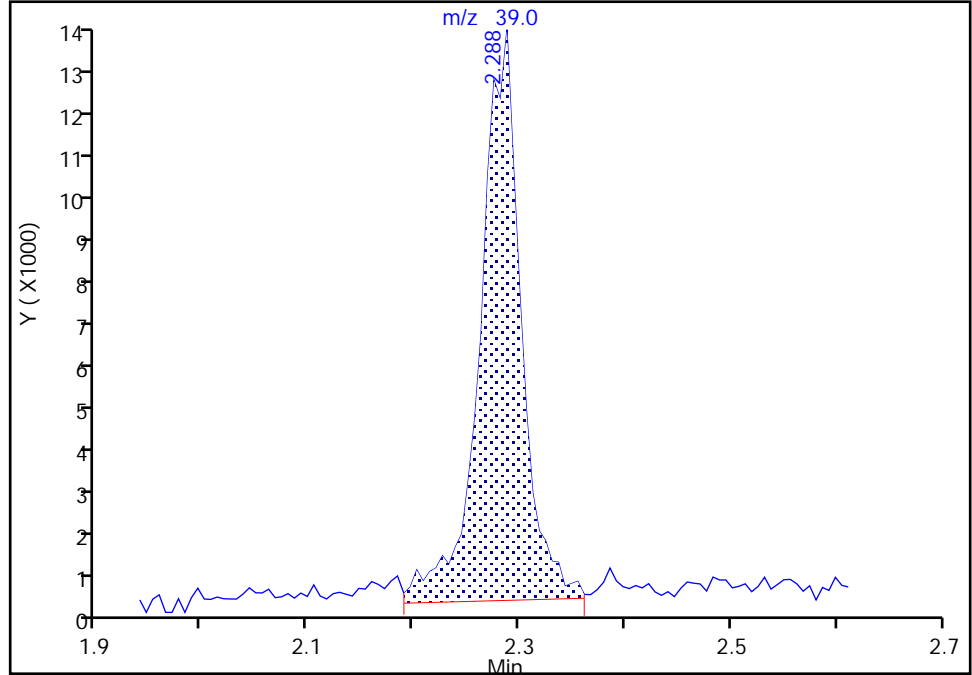
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Injection Date: 26-Mar-2021 01:05:30 Instrument ID: 19930
Lims ID: IC std2
Client ID:
Operator ID: mec29284 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

6 Butadiene, CAS: 106-99-0

Signal: 1

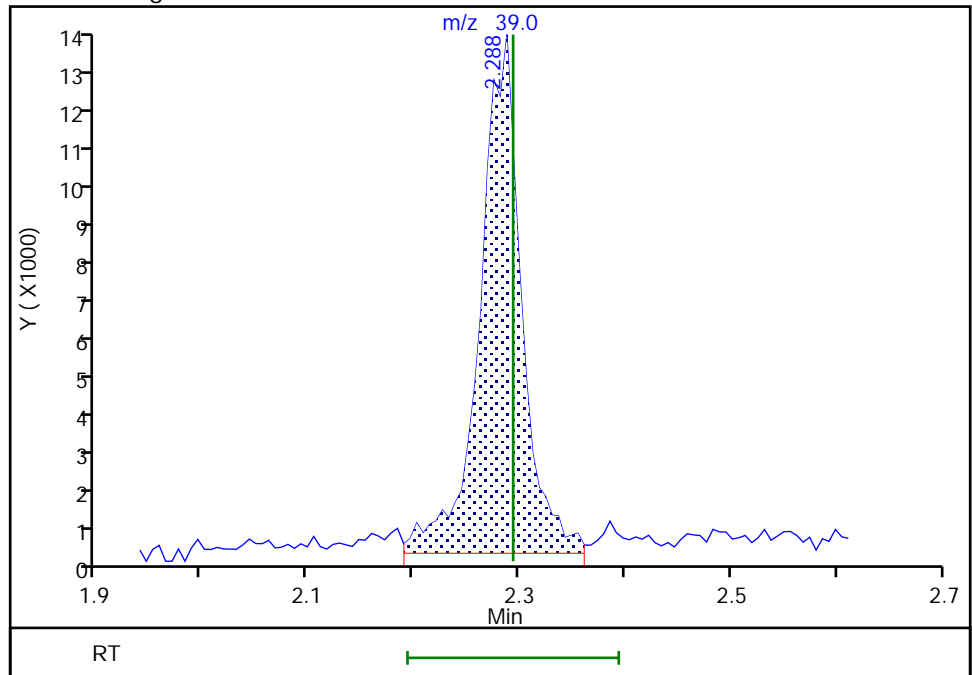
RT: 2.29
Area: 36109
Amount: 0.496325
Amount Units: ug/l

Processing Integration Results



RT: 2.29
Area: 36799
Amount: 0.504443
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 26-Mar-2021 16:51:48
Audit Action: Assigned New Baseline

Audit Reason: Incomplete Integration

Euofins Lancaster Laboratories Env, LLC

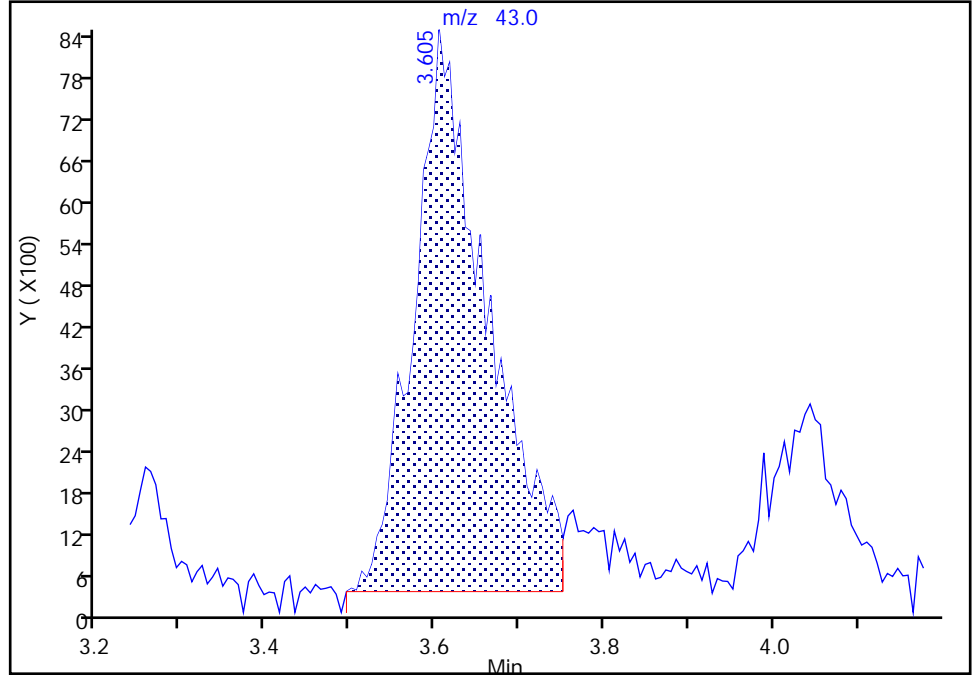
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Lims ID: IC std2
Client ID:
Operator ID: mec29284 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

15 Acetone, CAS: 67-64-1

Signal: 1

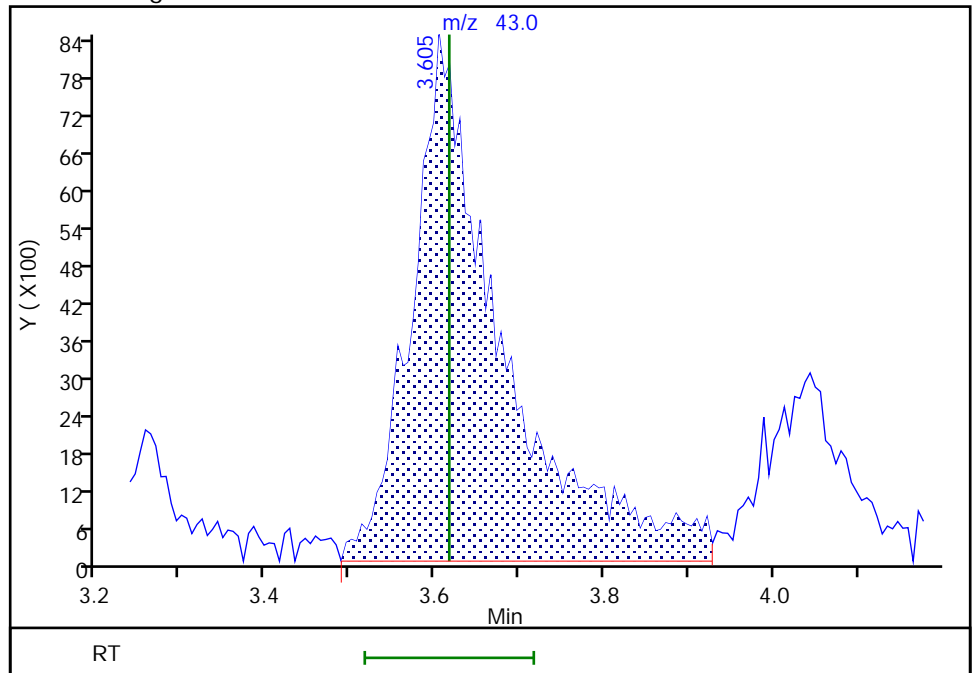
RT: 3.60
Area: 48744
Amount: 4.269301
Amount Units: ug/l

Processing Integration Results



RT: 3.60
Area: 62204
Amount: 5.137032
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 26-Mar-2021 16:52:10
Audit Action: Assigned New Baseline

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

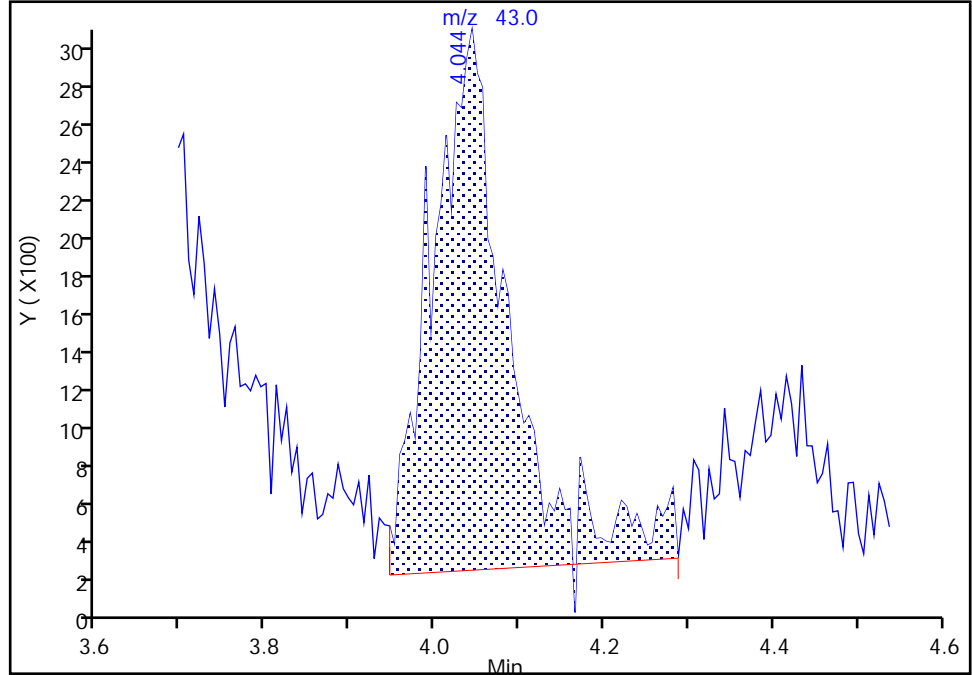
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Injection Date: 26-Mar-2021 01:05:30 Instrument ID: 19930
Lims ID: IC std2
Client ID:
Operator ID: mec29284 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

21 Methyl acetate, CAS: 79-20-9

Signal: 1

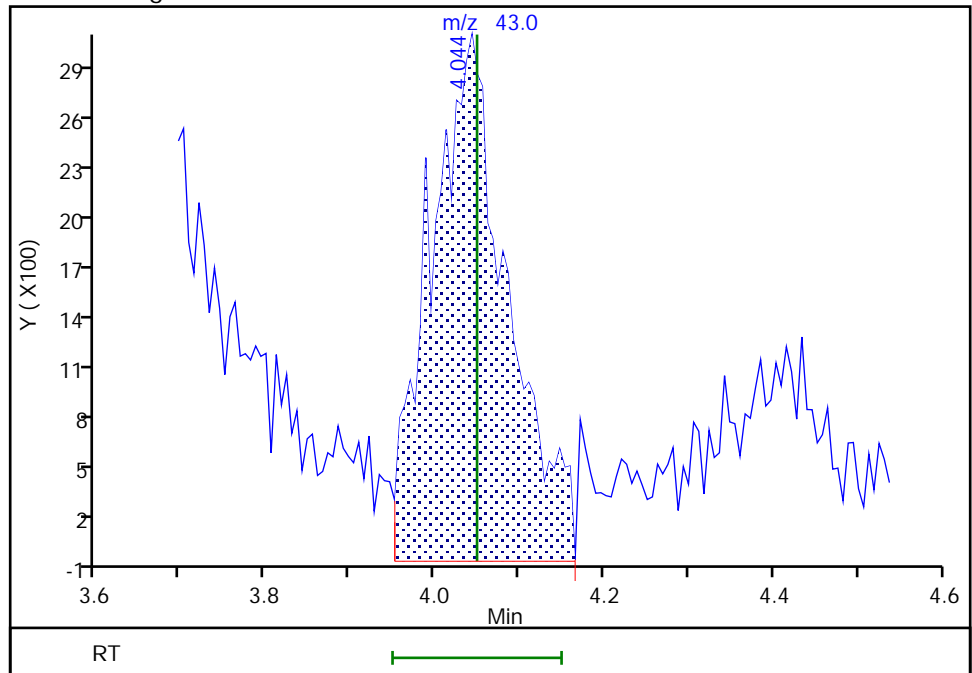
RT: 4.04
Area: 17813
Amount: 0.452443
Amount Units: ug/l

Processing Integration Results



RT: 4.04
Area: 19178
Amount: 0.482336
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 26-Mar-2021 16:52:27
Audit Action: Assigned New Baseline

Audit Reason: Incomplete Integration

Euofins Lancaster Laboratories Env, LLC

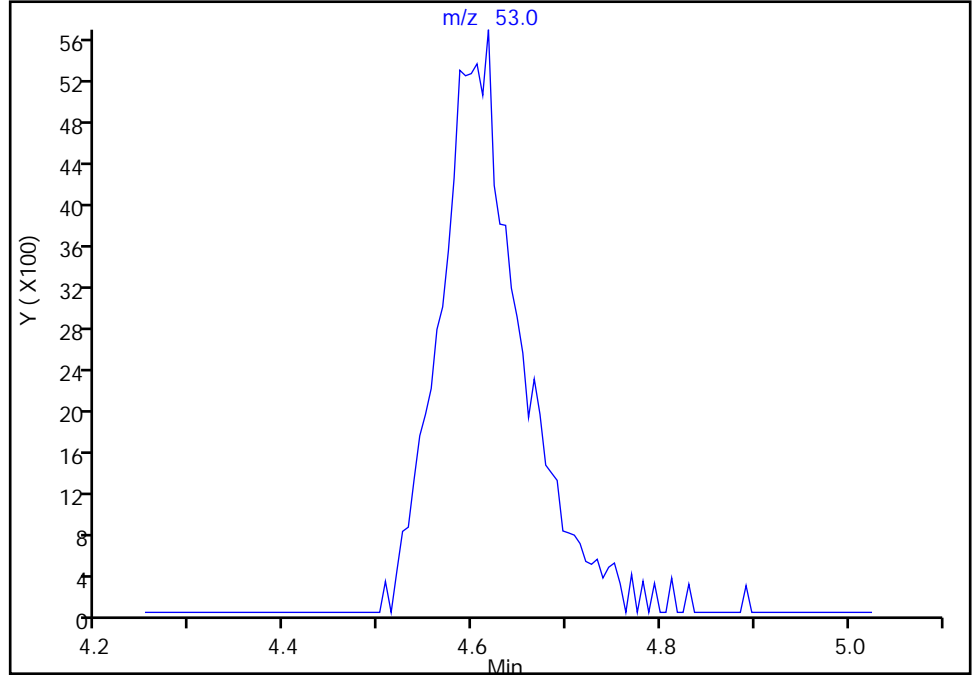
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Injection Date: 26-Mar-2021 01:05:30 Instrument ID: 19930
Lims ID: IC std2
Client ID:
Operator ID: mec29284 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

26 Acrylonitrile, CAS: 107-13-1

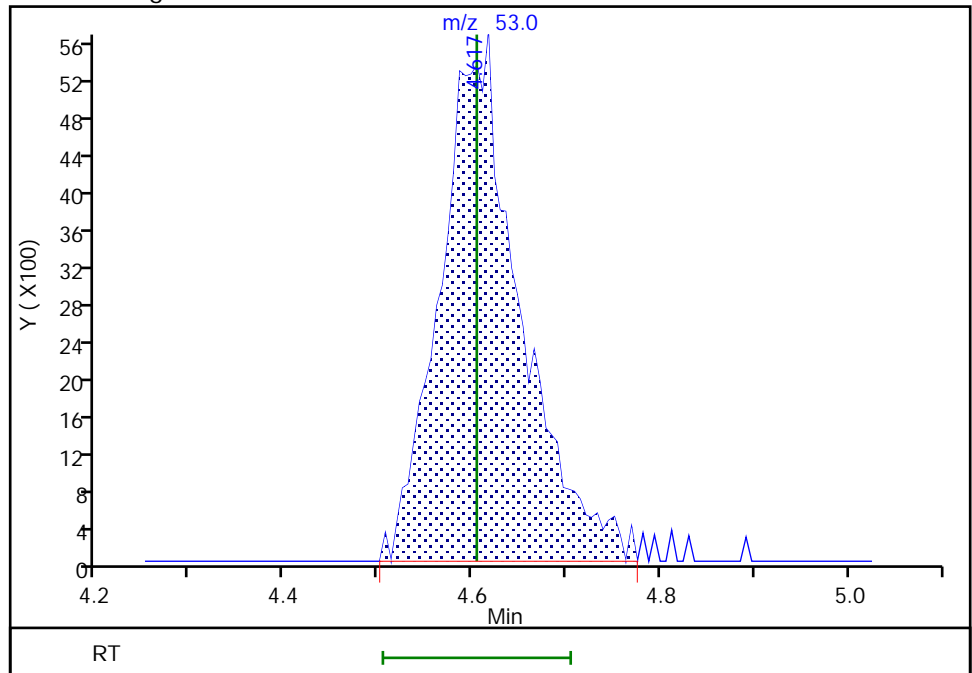
Signal: 1

Not Detected
Expected RT: 4.60

Processing Integration Results



Manual Integration Results



RT: 4.62
Area: 33532
Amount: 2.255471
Amount Units: ug/l

Euofins Lancaster Laboratories Env, LLC

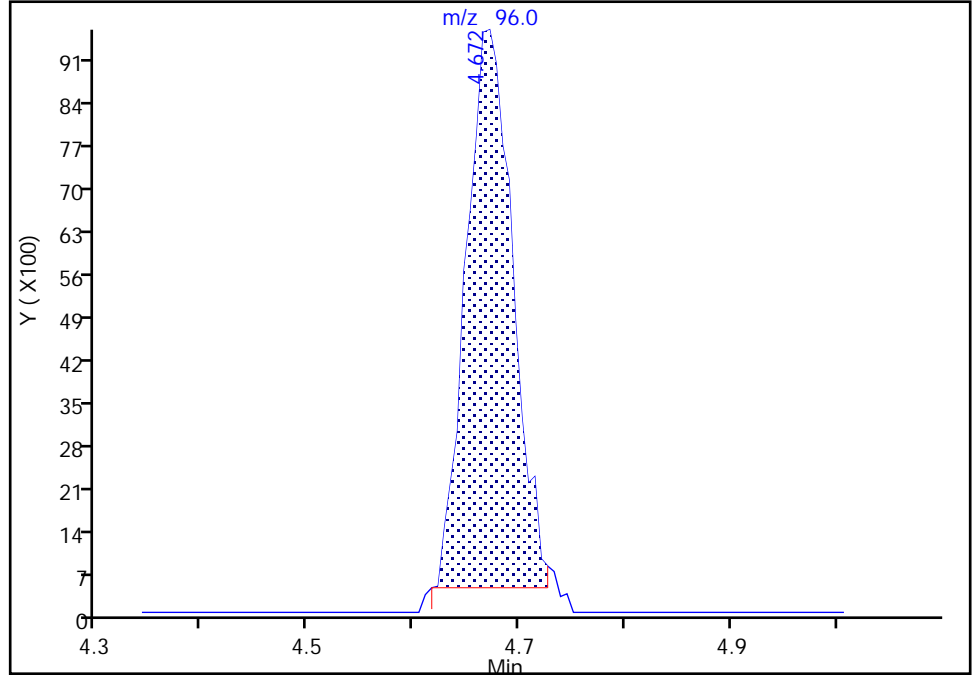
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Injection Date: 26-Mar-2021 01:05:30 Instrument ID: 19930
Lims ID: IC std2
Client ID:
Operator ID: mec29284 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

28 trans-1,2-Dichloroethene, CAS: 156-60-5

Signal: 1

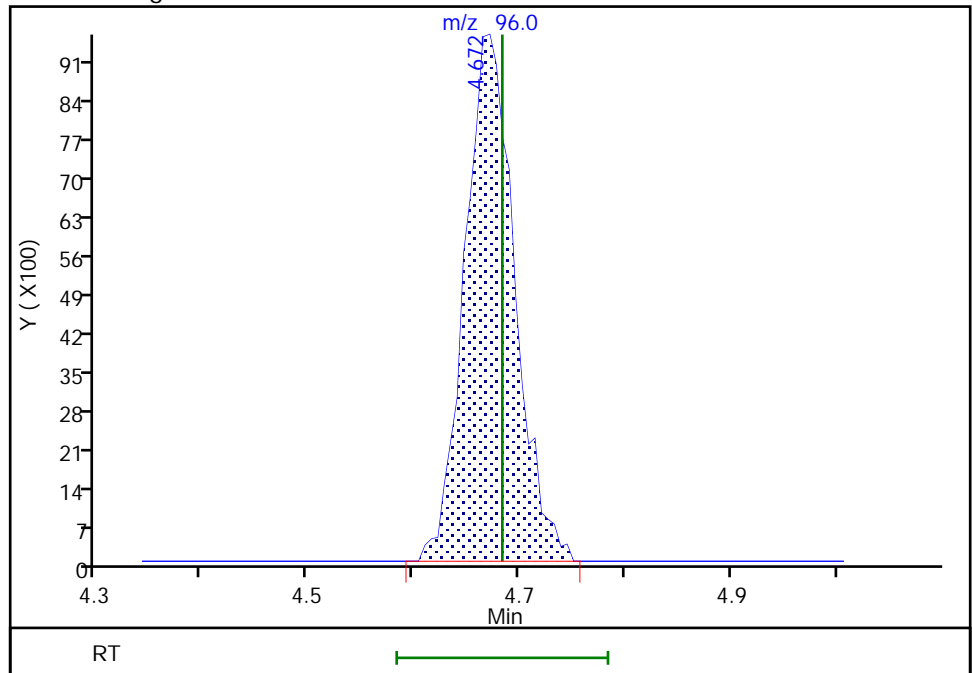
RT: 4.67
Area: 28076
Amount: 0.443370
Amount Units: ug/l

Processing Integration Results



RT: 4.67
Area: 31450
Amount: 0.489204
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 26-Mar-2021 16:52:45
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

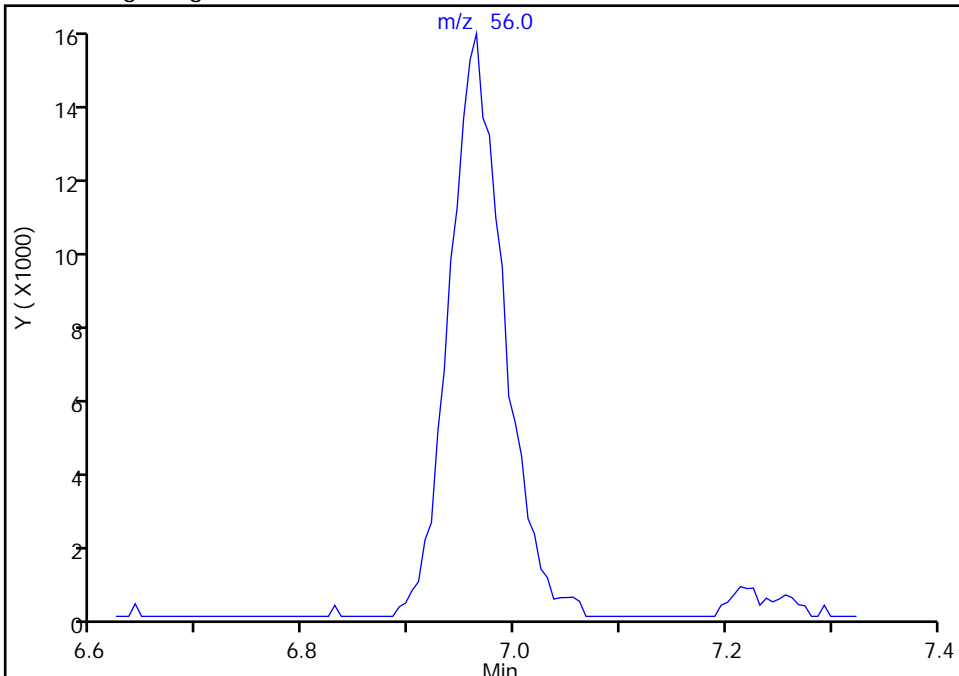
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Injection Date: 26-Mar-2021 01:05:30 Instrument ID: 19930
Lims ID: IC std2
Client ID:
Operator ID: mec29284 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

48 Cyclohexane, CAS: 110-82-7

Signal: 1

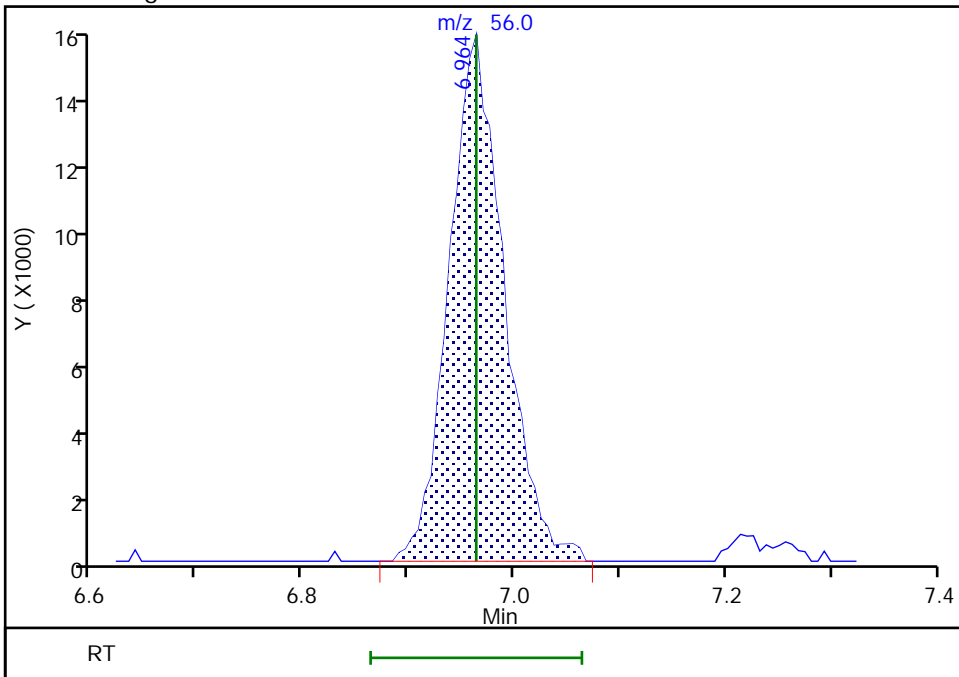
Not Detected
Expected RT: 6.96

Processing Integration Results



Manual Integration Results

RT: 6.96
Area: 56046
Amount: 0.447279
Amount Units: ug/l



Reviewer: campbellme, 26-Mar-2021 16:53:03
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

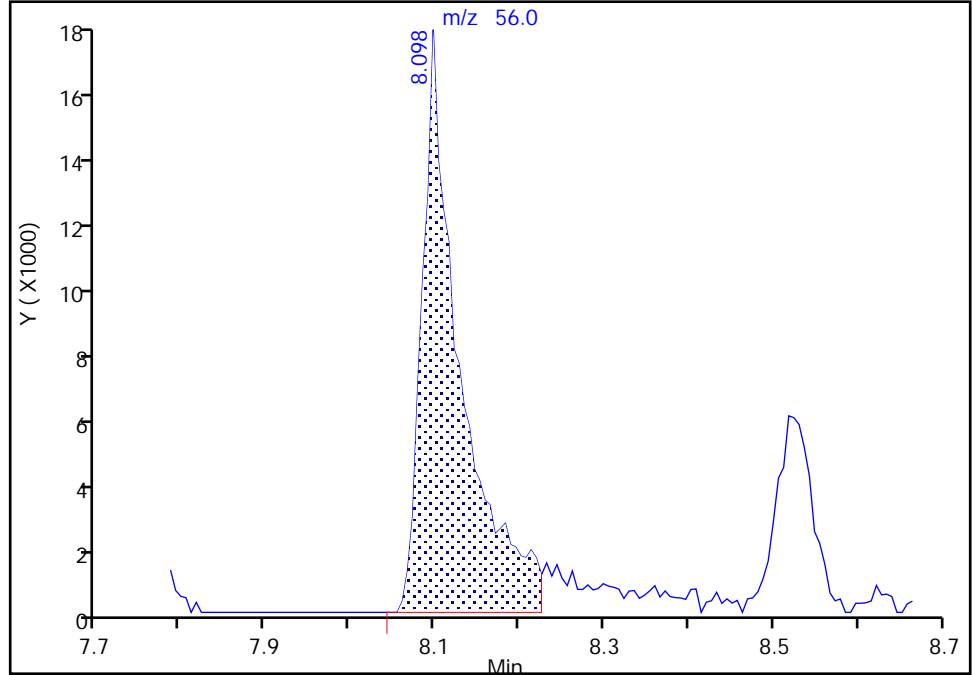
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Injection Date: 26-Mar-2021 01:05:30 Instrument ID: 19930
Lims ID: IC std2
Client ID:
Operator ID: mec29284 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

60 n-Butanol, CAS: 71-36-3

Signal: 1

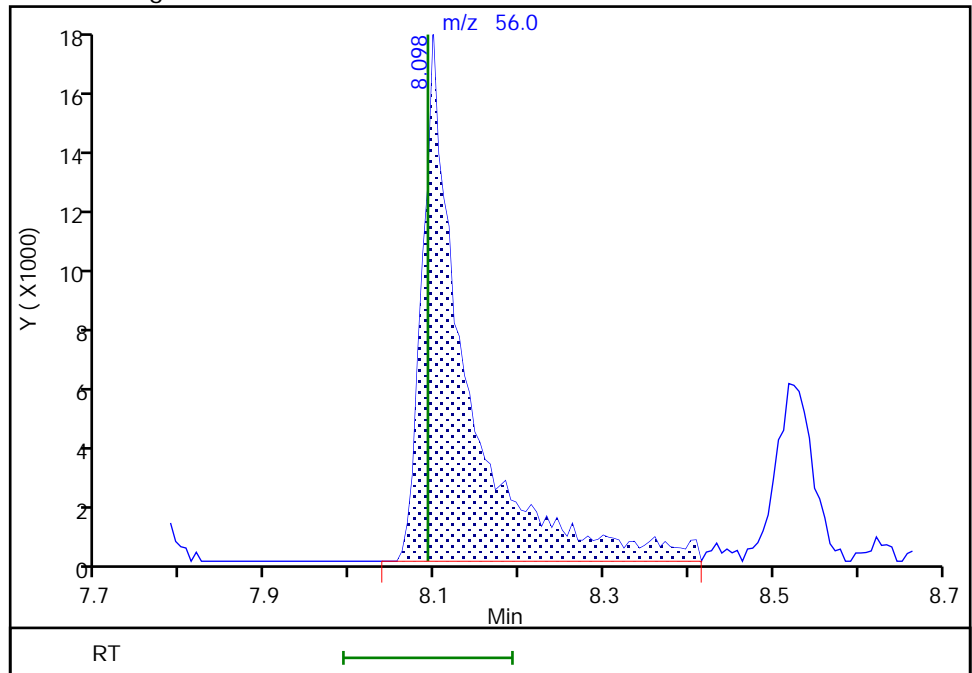
RT: 8.10
Area: 53650
Amount: 41.002478
Amount Units: ug/l

Processing Integration Results



RT: 8.10
Area: 61571
Amount: 45.136820
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 26-Mar-2021 16:53:17
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Euofins Lancaster Laboratories Env, LLC

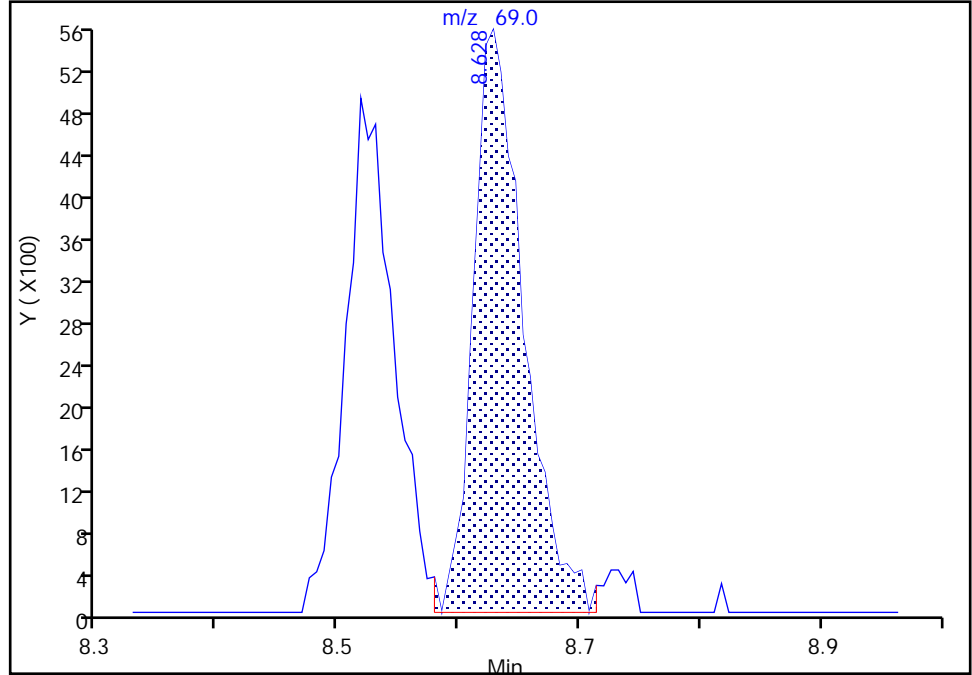
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Injection Date: 26-Mar-2021 01:05:30 Instrument ID: 19930
Lims ID: IC std2
Client ID:
Operator ID: mec29284 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

64 Methyl methacrylate, CAS: 80-62-6

Signal: 1

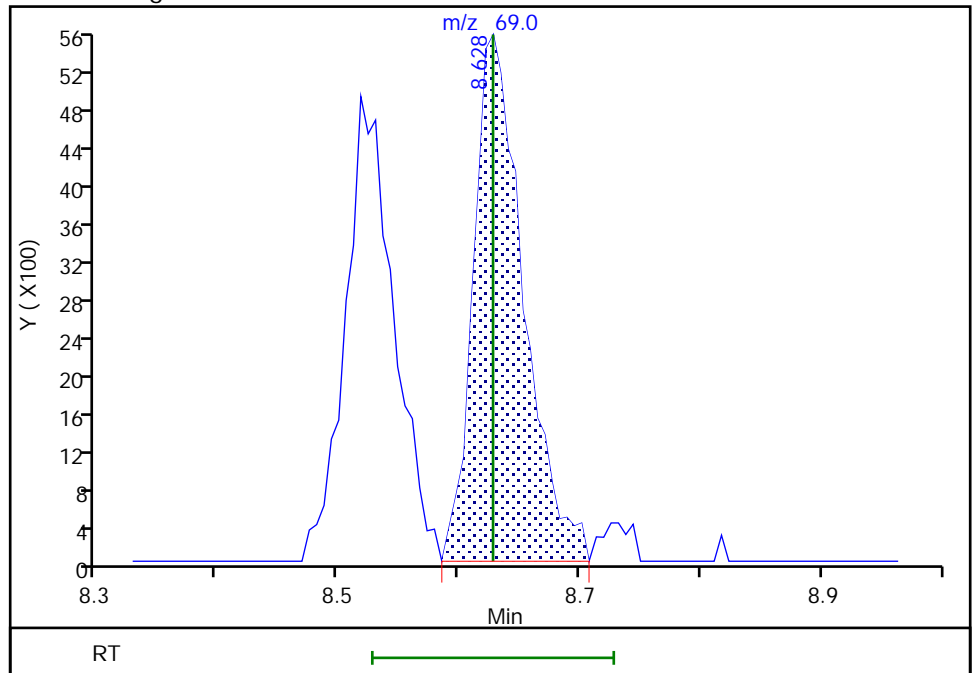
RT: 8.63
Area: 16067
Amount: 0.414742
Amount Units: ug/l

Processing Integration Results



RT: 8.63
Area: 15850
Amount: 0.409797
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 26-Mar-2021 16:53:27
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Euofins Lancaster Laboratories Env, LLC

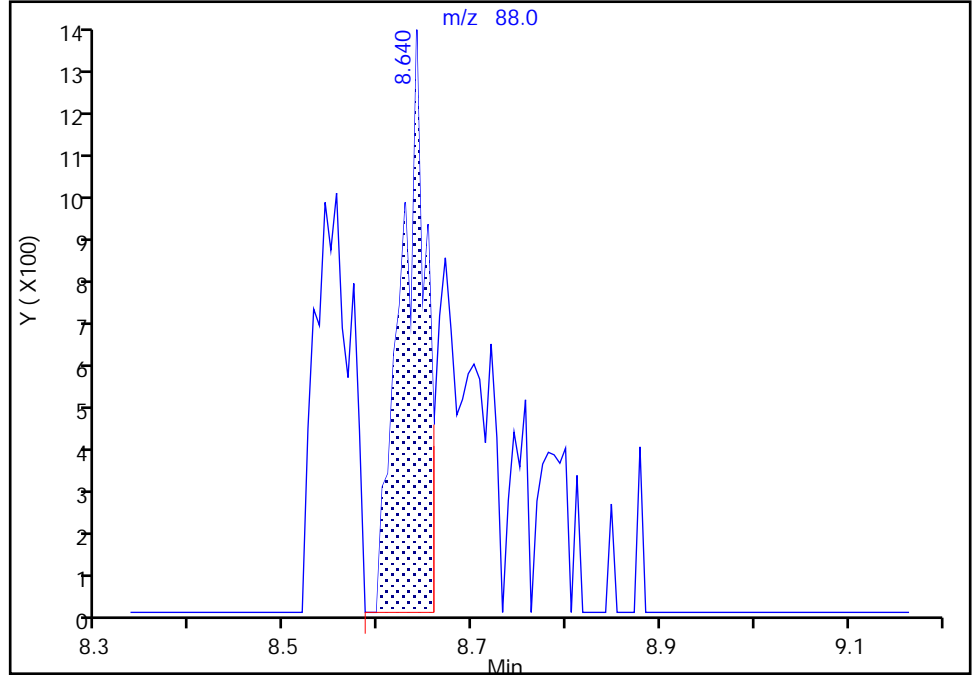
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Injection Date: 26-Mar-2021 01:05:30 Instrument ID: 19930
Lims ID: IC std2
Client ID:
Operator ID: mec29284 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

65 1,4-Dioxane, CAS: 123-91-1

Signal: 1

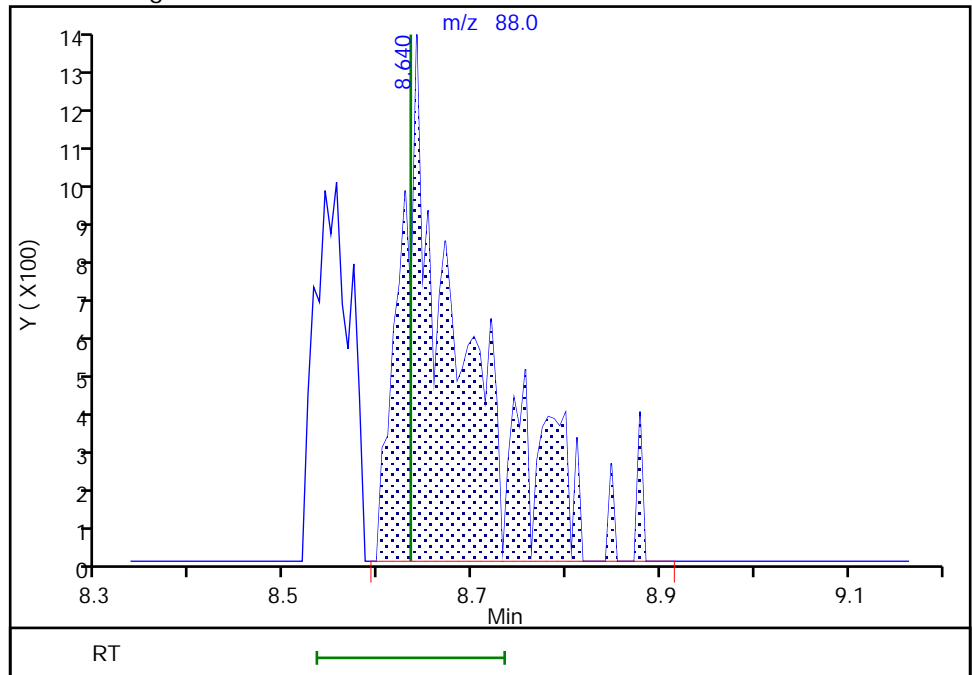
RT: 8.64
Area: 2591
Amount: 10.972546
Amount Units: ug/l

Processing Integration Results



RT: 8.64
Area: 6622
Amount: 25.392946
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 26-Mar-2021 16:53:33
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25107.D
 Lims ID: IC std1
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 26-Mar-2021 01:26:30 ALS Bottle#: 17 Worklist Smp#: 18
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0025078-018
 Misc. Info.: IC STD1
 Operator ID: mec29284 Instrument ID: 19930
 Sublist: chrom-8260 25ml HP31*sub2

Method: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\8260 25ml HP31.m
 Limit Group: MSV - 8260C_D
 Last Update: 26-Mar-2021 17:10:34 Calib Date: 26-Mar-2021 01:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25107.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1605

First Level Reviewer: campbellme

Date: 26-Mar-2021 17:01:50

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.977	1.983	-0.006	97	13752	0.2000	0.2027	
4 Chloromethane	50	2.184	2.178	0.006	98	17674	0.2000	0.2141	
6 Butadiene	39	2.288	2.294	-0.006	94	14817	0.2000	0.2027	
5 Vinyl chloride	62	2.294	2.300	-0.006	90	14627	0.2000	0.1958	
7 Bromomethane	94	2.623	2.629	-0.006	90	11794	0.2000	0.2176	M
8 Chloroethane	64	2.708	2.715	-0.006	94	9578	0.2000	0.2046	
9 Dichlorofluoromethane	67	2.946	2.952	-0.006	96	17565	0.2000	0.2289	
10 Trichlorofluoromethane	101	3.013	3.019	-0.006	91	21686	0.2000	0.2067	
11 Ethyl ether	59	3.269	3.275	-0.006	96	10243	0.2000	0.2022	
12 1,2-Dichloro-1,1,2-trifluoroethane	67	3.336	3.342	-0.006	84	16074	0.2000	0.2051	
13 Acrolein	56	3.452	3.446	0.006	98	80784	10.0	9.32	
14 1,1-Dichloroethene	96	3.586	3.586	0.000	97	10577	0.2000	0.1872	
15 Acetone	43	3.617	3.617	0.000	99	27454	2.00	2.41	M
16 112TCTFE	101	3.629	3.623	0.006	87	11732	0.2000	0.1841	
17 Iodomethane	142	3.794	3.787	0.007	99	21462	0.2000	0.1914	M
18 Ethyl bromide	108	3.812	3.812	0.000	90	10262	0.2001	0.2008	
19 Carbon disulfide	76	3.891	3.897	-0.006	98	33302	0.2000	0.1991	
21 Methyl acetate	43	4.062	4.050	0.012	25	9712	0.2000	0.2600	
22 3-Chloro-1-propene	41	4.074	4.074	0.000	93	25508	0.2000	0.2209	
23 Methylene Chloride	84	4.269	4.257	0.012	89	12659	0.2000	0.1993	
* 24 t-Butyl alcohol-d10 (IS)	65	4.263	4.263	0.000	0	175560	50.0	50.0	
25 2-Methyl-2-propanol	59	4.403	4.391	0.012	28	15699	4.00	3.84	M
26 Acrylonitrile	53	4.610	4.604	0.006	81	12148	1.00	0.8698	
27 Methyl tert-butyl ether	73	4.671	4.659	0.012	79	31566	0.2000	0.1905	
28 trans-1,2-Dichloroethene	96	4.678	4.684	-0.006	97	13585	0.2000	0.2109	
29 Hexane	57	5.110	5.104	0.006	94	20550	0.2000	0.1959	
31 1,1-Dichloroethane	63	5.336	5.342	-0.006	92	24094	0.2000	0.1936	
32 Isopropyl ether	45	5.391	5.397	-0.006	97	46041	0.2000	0.1995	
33 2-Chloro-1,3-butadiene	53	5.446	5.446	0.000	91	21409	0.2000	0.1954	
34 Tert-butyl ethyl ether	59	5.927	5.927	0.000	99	41529	0.2000	0.1979	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 2-Butanone (MEK)	43	6.122	6.122	0.000	97	38773	2.00	1.94	
S 35 1,2-Dichloroethene, Total	100				0			0.4054	
37 cis-1,2-Dichloroethene	96	6.171	6.165	0.006	82	14457	0.2000	0.1945	
38 2,2-Dichloropropane	77	6.183	6.183	0.000	66	21501	0.2000	0.1996	
40 Propionitrile	54	6.220	6.214	0.006	67	17788	4.00	3.75	
42 Methacrylonitrile	67	6.439	6.427	0.012	91	33151	2.00	1.81	
43 Chlorobromomethane	128	6.494	6.488	0.006	92	6918	0.2000	0.2085	
44 Tetrahydrofuran	71	6.500	6.500	0.000	80	9899	2.00	1.87	
45 Chloroform	83	6.647	6.647	0.000	93	23062	0.2000	0.1945	
\$ 46 Dibromofluoromethane (Surr)	113	6.854	6.860	-0.006	94	547082	10.0	10.0	
47 1,1,1-Trichloroethane	97	6.872	6.872	0.000	36	21246	0.2000	0.1970	
48 Cyclohexane	56	6.964	6.964	0.000	88	25529	0.2000	0.2033	M
51 1,1-Dichloropropene	75	7.086	7.080	0.006	93	18248	0.2000	0.1913	
50 Carbon tetrachloride	117	7.092	7.086	0.006	91	17519	0.2000	0.1853	
52 Isobutyl alcohol	41	7.226	7.220	0.006	94	17870	10.0	12.1	M
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.305	7.305	0.000	0	106960	10.0	10.0	
54 Benzene	78	7.342	7.342	0.000	92	55307	0.2000	0.1973	
56 1,2-Dichloroethane	62	7.409	7.415	-0.006	95	15797	0.2000	0.2109	
57 Tert-amyl methyl ether	73	7.531	7.531	0.000	98	35829	0.2000	0.1951	
* 58 Fluorobenzene (IS)	96	7.744	7.744	0.000	99	2175128	10.0	10.0	
59 n-Heptane	43	7.744	7.756	-0.012	60	24047	0.2000	0.2024	
60 n-Butanol	56	8.110	8.092	0.018	90	24365	20.0	19.0	M
61 Trichloroethene	95	8.220	8.220	0.000	97	14760	0.2000	0.2026	
62 Methylcyclohexane	83	8.530	8.530	0.000	93	24128	0.2000	0.1878	
63 1,2-Dichloropropane	63	8.549	8.549	0.000	70	14465	0.2000	0.1993	
64 Methyl methacrylate	69	8.640	8.628	0.012	90	6595	0.2000	0.1815	
65 1,4-Dioxane	88	8.628	8.634	-0.006	36	1706	10.0	6.96	M
66 Dibromomethane	93	8.658	8.665	-0.007	95	6393	0.2000	0.1940	
68 Dichlorobromomethane	83	8.890	8.890	0.000	96	16873	0.2000	0.1958	
69 2-Nitropropane	41	9.158	9.158	0.000	98	20670	2.00	1.82	
72 1-Bromo-2-chloroethane	63	9.286	9.286	0.000	96	13297	0.2000	0.1967	
73 cis-1,3-Dichloropropene	75	9.439	9.433	0.006	94	20362	0.2000	0.1890	
74 4-Methyl-2-pentanone (MIBK)	43	9.603	9.603	0.000	98	92250	2.00	1.79	
\$ 75 Toluene-d8 (Surr)	98	9.744	9.744	0.000	93	2145909	10.0	9.94	
76 Toluene	92	9.817	9.817	0.000	97	35687	0.2000	0.2008	
S 77 1,3-Dichloropropene, Total	100				0			0.3752	
78 trans-1,3-Dichloropropene	75	10.079	10.073	0.006	94	16134	0.2000	0.1863	
79 Ethyl methacrylate	69	10.134	10.128	0.006	89	14167	0.2000	0.1905	
80 1,1,2-Trichloroethane	97	10.280	10.274	0.006	90	9564	0.2000	0.1994	
81 Tetrachloroethene	166	10.365	10.359	0.006	96	16441	0.2000	0.1945	
82 1,3-Dichloropropane	76	10.439	10.439	0.000	88	16003	0.2000	0.1893	
83 2-Hexanone	43	10.487	10.481	0.006	98	62176	2.00	1.72	
85 Chlorodibromomethane	129	10.646	10.652	-0.006	90	10963	0.2000	0.1791	
86 Ethylene Dibromide	107	10.762	10.762	0.000	97	8556	0.2000	0.1823	
* 87 Chlorobenzene-d5 (IS)	117	11.188	11.188	0.000	86	1649576	10.0	10.0	
88 1-Chlorohexane	91	11.195	11.195	0.000	72	23669	0.2000	0.2180	
90 Chlorobenzene	112	11.213	11.213	0.000	96	37579	0.2000	0.1914	
S 89 Xylenes, Total	106				0			0.5617	
92 Ethylbenzene	91	11.304	11.298	0.006	99	68295	0.2000	0.1964	
91 1,1,1,2-Tetrachloroethane	131	11.298	11.298	0.000	92	13100	0.2000	0.1843	
93 m-Xylene & p-Xylene	106	11.420	11.414	0.006	99	51200	0.4000	0.3756	
94 o-Xylene	106	11.743	11.743	0.000	96	24816	0.2000	0.1861	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
95 Styrene	104	11.762	11.755	0.007	96	41346	0.2000	0.1901	
96 Bromoform	173	11.920	11.914	0.006	95	7072	0.2000	0.1828	
97 Isopropylbenzene	105	12.042	12.042	0.000	96	68127	0.2000	0.1919	
\$ 100 4-Bromofluorobenzene (Surr)	95	12.188	12.188	0.000	93	822001	10.0	10.0	
101 1,1,2,2-Tetrachloroethane	83	12.286	12.286	0.000	91	11364	0.2000	0.1857	a
102 Bromobenzene	156	12.304	12.304	0.000	91	16009	0.2000	0.1898	
103 trans-1,4-Dichloro-2-butene	53	12.310	12.310	0.000	94	32312	2.00	1.82	
104 1,2,3-Trichloropropane	110	12.335	12.328	0.007	74	2852	0.2000	0.1751	
105 N-Propylbenzene	91	12.371	12.371	0.000	99	77146	0.2000	0.1864	
106 2-Chlorotoluene	126	12.450	12.444	0.006	97	16257	0.2000	0.1930	
107 1,3,5-Trimethylbenzene	105	12.505	12.505	0.000	93	55902	0.2000	0.1877	
108 4-Chlorotoluene	126	12.542	12.542	0.000	96	16900	0.2000	0.1965	
109 tert-Butylbenzene	134	12.749	12.743	0.006	94	12603	0.2000	0.1897	
110 Pentachloroethane	167	12.780	12.780	0.000	78	11032	0.2000	0.2012	
111 1,2,4-Trimethylbenzene	105	12.792	12.786	0.006	97	57882	0.2000	0.1894	
112 sec-Butylbenzene	105	12.908	12.908	0.000	94	75304	0.2000	0.1924	
113 1,3-Dichlorobenzene	146	13.011	13.011	0.000	98	32667	0.2000	0.1951	
114 4-Isopropyltoluene	119	13.017	13.017	0.000	97	62210	0.2000	0.1869	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	94	922535	10.0	10.0	
116 1,4-Dichlorobenzene	146	13.084	13.084	0.000	94	32474	0.2000	0.1941	
117 1,2,3-Trimethylbenzene	120	13.091	13.091	0.000	96	27220	0.2000	0.2058	
118 Benzyl chloride	126	13.158	13.158	0.000	98	4512	0.2000	0.1640	
119 n-Butylbenzene	92	13.310	13.310	0.000	97	30747	0.2000	0.1900	
120 1,2-Dichlorobenzene	146	13.347	13.340	0.007	98	29321	0.2000	0.1927	
122 1,2-Dibromo-3-Chloropropane	155	13.883	13.883	0.000	90	1678	0.2000	0.1756	
123 1,3,5-Trichlorobenzene	180	14.011	14.011	0.000	96	22364	0.2000	0.1837	
124 1,2,4-Trichlorobenzene	180	14.438	14.432	0.006	95	18170	0.2000	0.1789	
125 Hexachlorobutadiene	225	14.517	14.517	0.000	96	10298	0.2000	0.2270	
126 Naphthalene	128	14.615	14.615	0.000	97	33921	0.2000	0.1765	
127 1,2,3-Trichlorobenzene	180	14.761	14.755	0.006	94	17019	0.2000	0.1924	
137 2-Methylnaphthalene	142		0.000				ND	ND	
135 p-Diethylbenzene	1		0.000				ND	ND	
144 2-ethoxy-2-methyl butane	1		0.000				ND	ND	
204 Pentane	43		0.000				ND	ND	
134 Isopropyl alcohol	45		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MSV_RV1_826_00042	Amount Added: 2.00	Units: uL	
MSV_RV4_826_00048	Amount Added: 2.00	Units: uL	
MSV_RV4GAS826_00121	Amount Added: 2.00	Units: uL	
MSV_31_826ISS_00004	Amount Added: 5.00	Units: uL	Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25107.D

Injection Date: 26-Mar-2021 01:26:30

Instrument ID: 19930

Operator ID: mec29284

Lims ID: IC std1

Worklist Smp#: 18

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

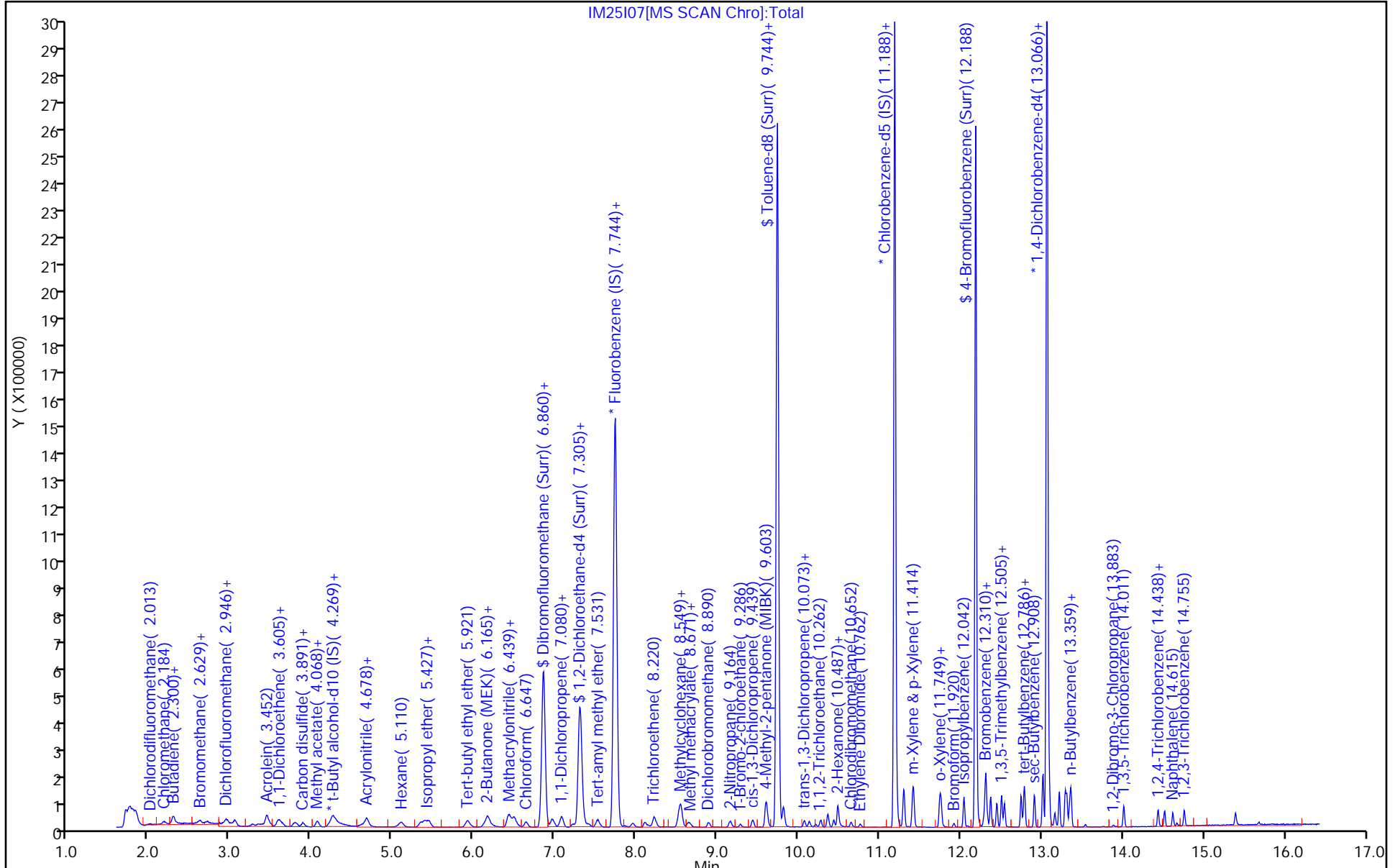
ALS Bottle#: 17

Method: 8260 25ml HP31

Limit Group: MSV - 8260C_D

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

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



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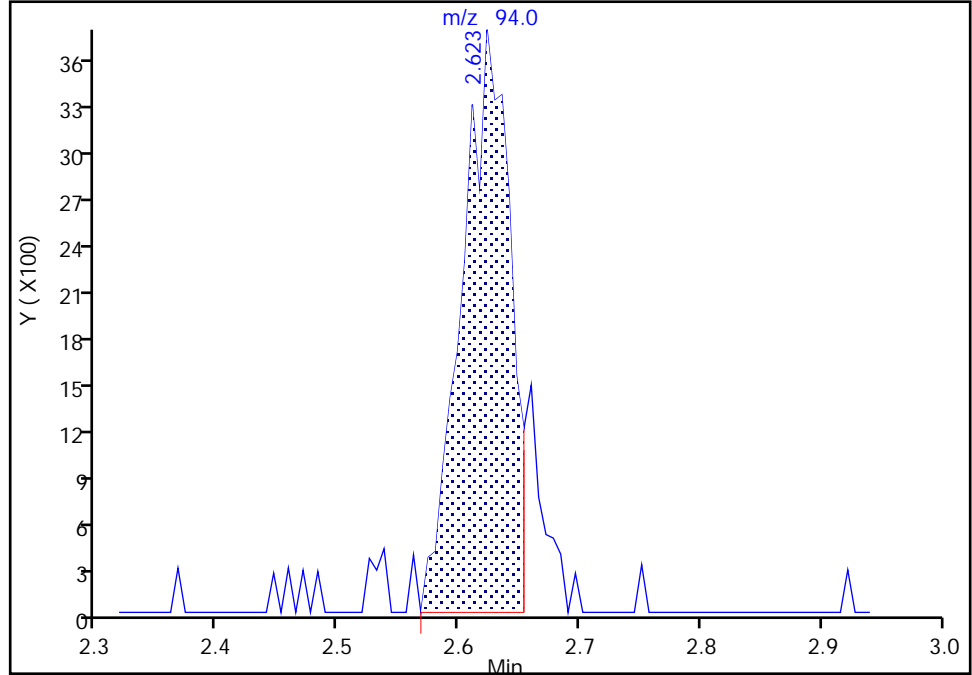
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Injection Date: 26-Mar-2021 01:26:30 Instrument ID: 19930
Lims ID: IC std1
Client ID:
Operator ID: mec29284 ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

7 Bromomethane, CAS: 74-83-9

Signal: 1

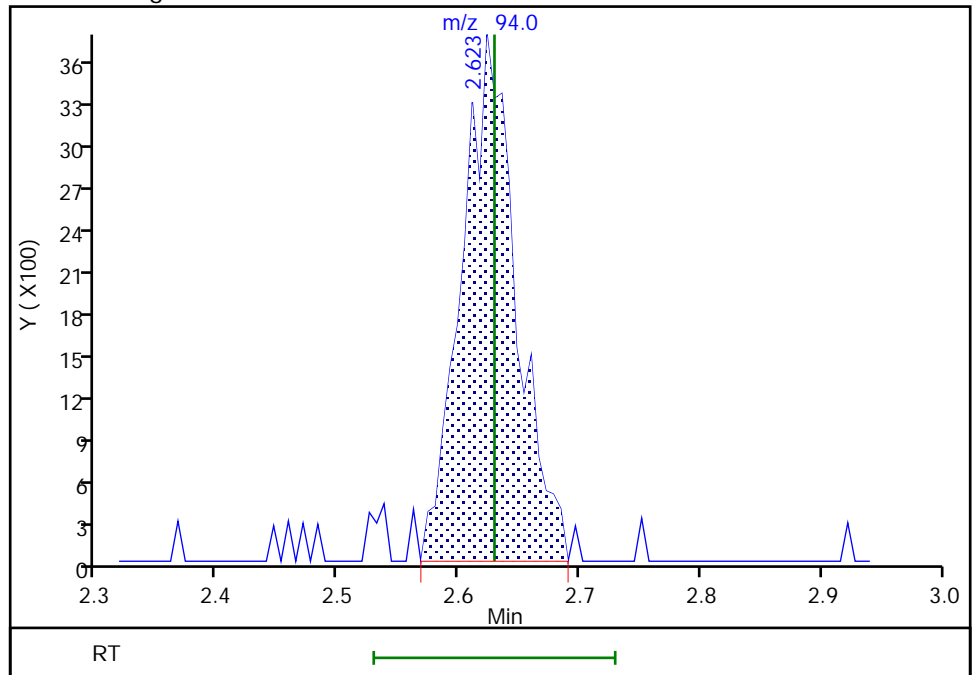
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Area: 10495
Amount: 0.196968
Amount Units: ug/l

Processing Integration Results



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Area: 11794
Amount: 0.217559
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 26-Mar-2021 16:54:29
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

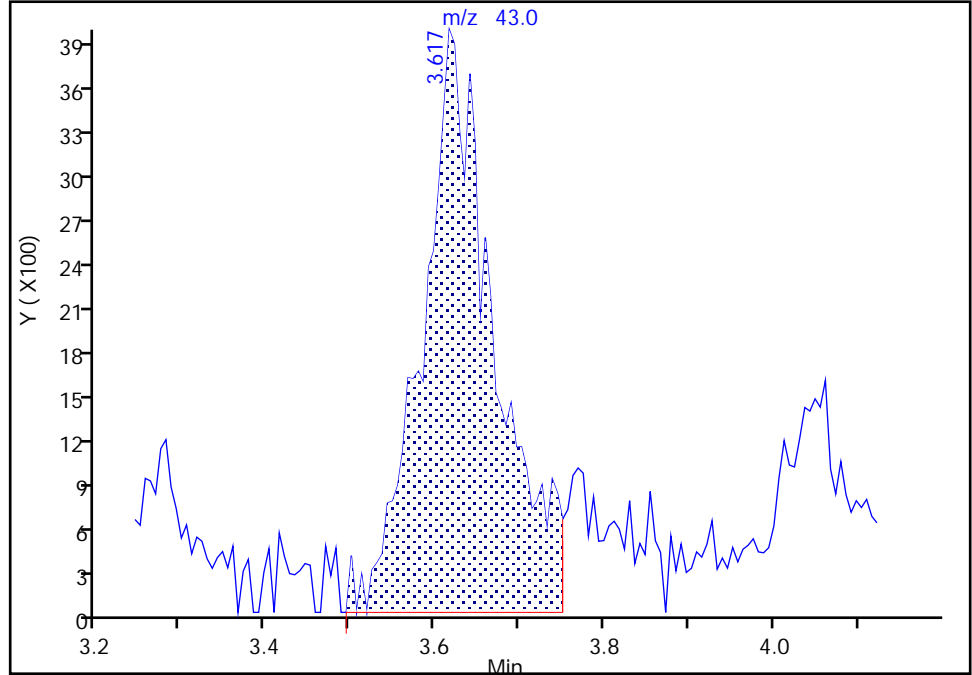
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Injection Date: 26-Mar-2021 01:26:30 Instrument ID: 19930
Lims ID: IC std1
Client ID:
Operator ID: mec29284 ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

15 Acetone, CAS: 67-64-1

Signal: 1

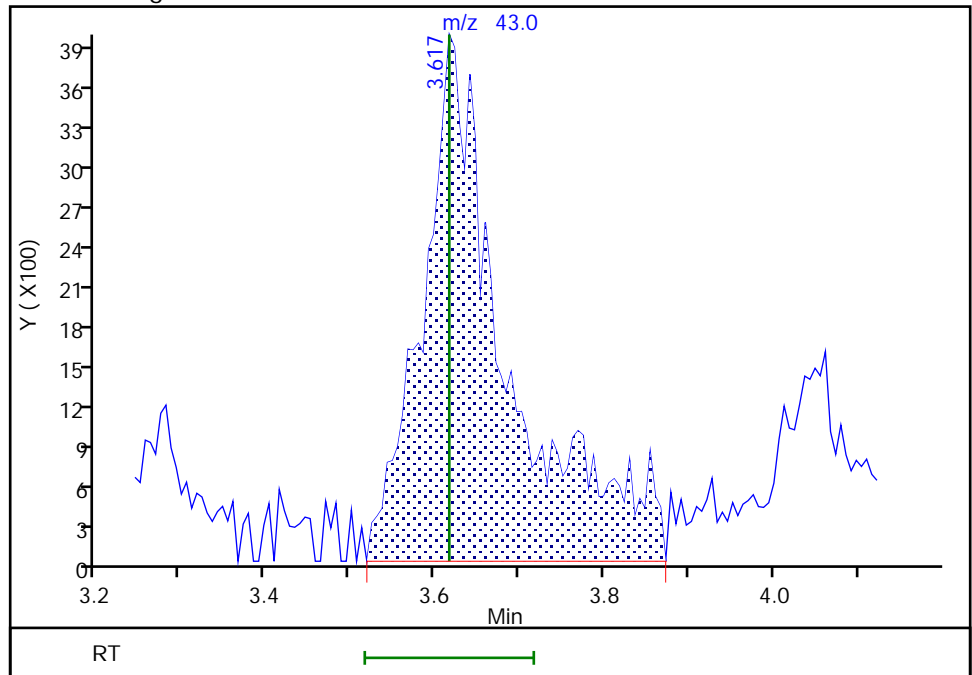
RT: 3.62
Area: 23416
Amount: 2.112122
Amount Units: ug/l

Processing Integration Results



RT: 3.62
Area: 27454
Amount: 2.413558
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 26-Mar-2021 16:54:44
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

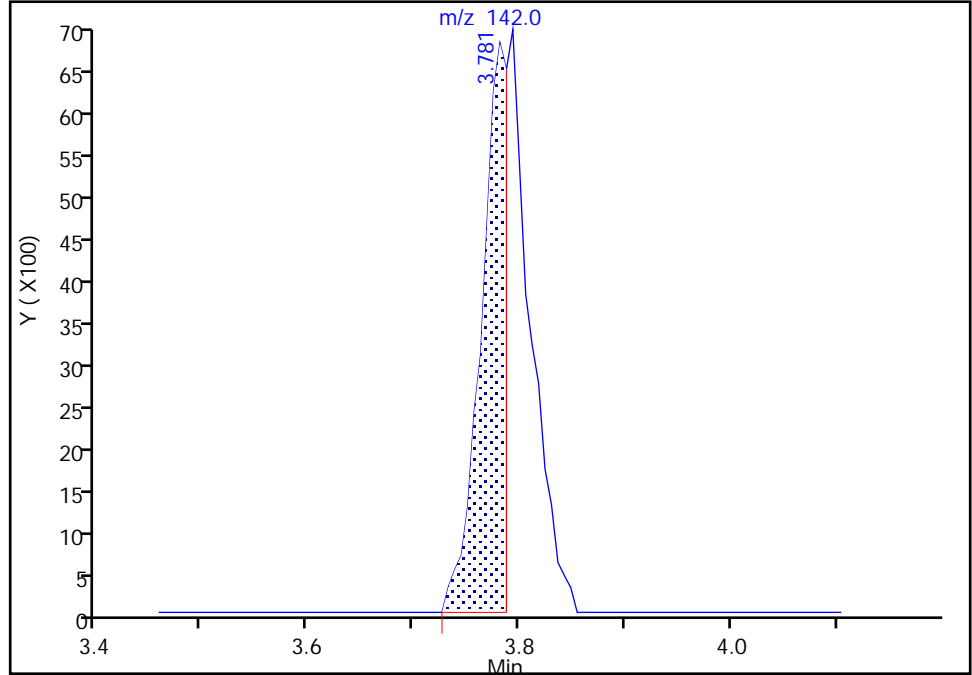
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Injection Date: 26-Mar-2021 01:26:30 Instrument ID: 19930
Lims ID: IC std1
Client ID:
Operator ID: mec29284 ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

17 Iodomethane, CAS: 74-88-4

Signal: 1

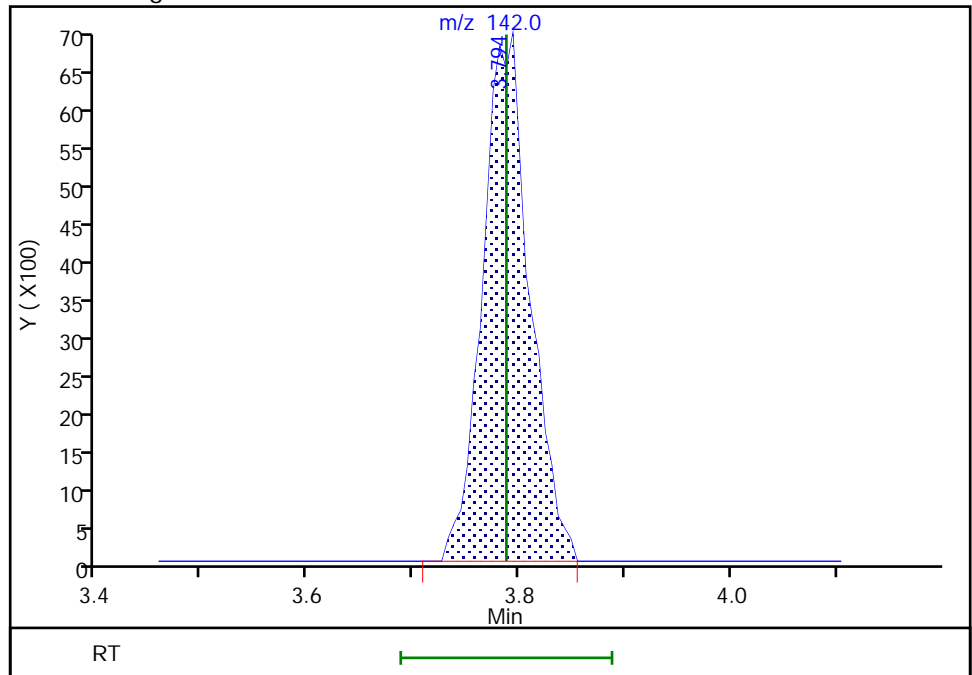
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Area: 11819
Amount: 0.112330
Amount Units: ug/l

Processing Integration Results



RT: 3.79
Area: 21462
Amount: 0.191447
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 26-Mar-2021 16:54:49
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

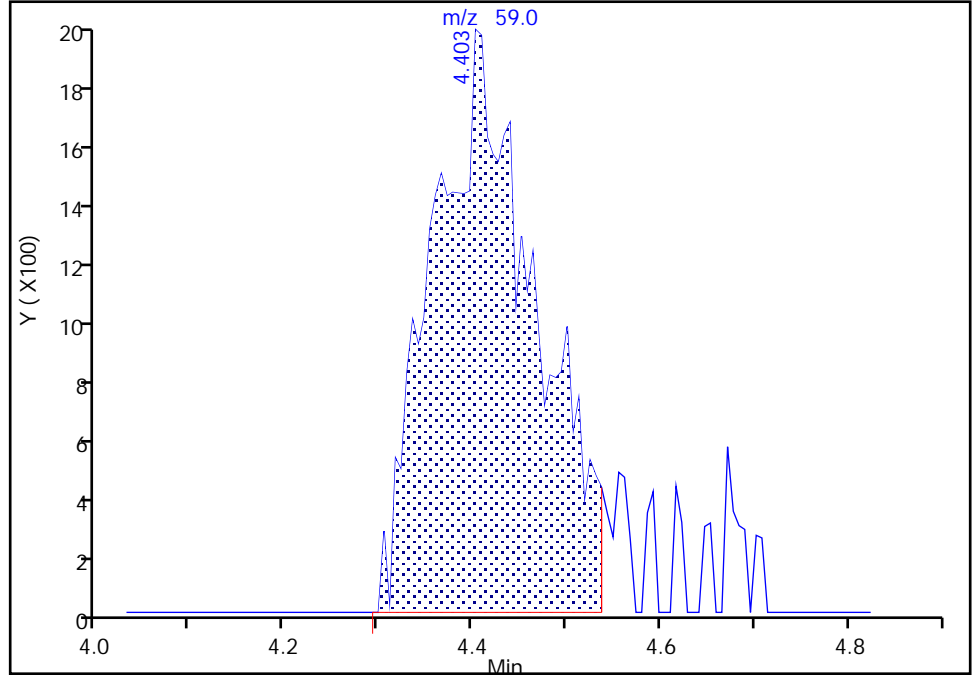
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Injection Date: 26-Mar-2021 01:26:30 Instrument ID: 19930
Lims ID: IC std1
Client ID:
Operator ID: mec29284 ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

25 2-Methyl-2-propanol, CAS: 75-65-0

Signal: 1

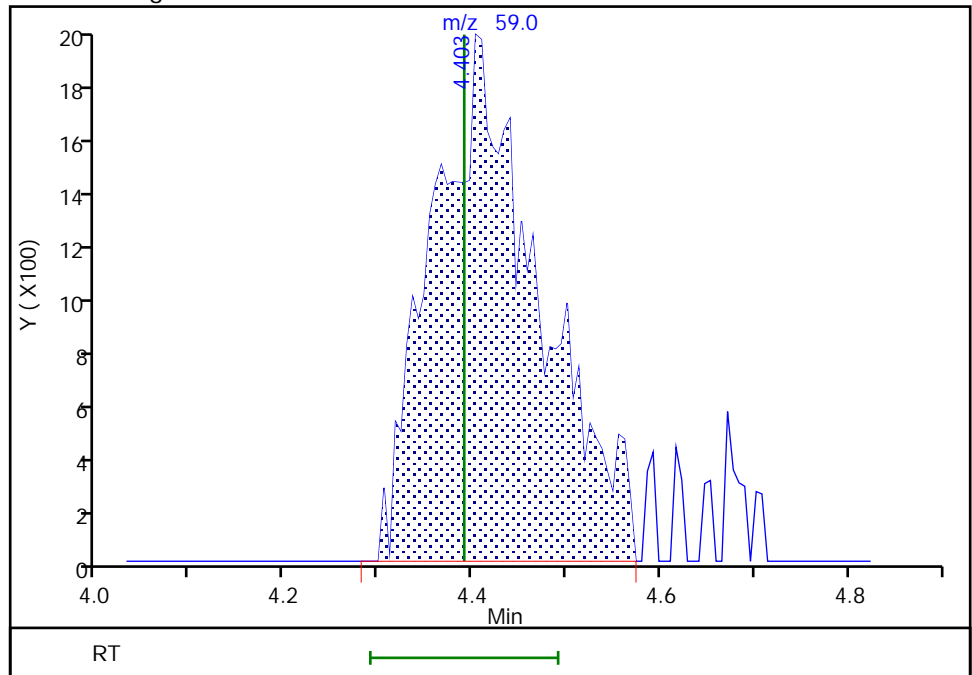
RT: 4.40
Area: 15048
Amount: 3.699898
Amount Units: ug/l

Processing Integration Results



RT: 4.40
Area: 15699
Amount: 3.838021
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 26-Mar-2021 16:55:00
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Euofins Lancaster Laboratories Env, LLC

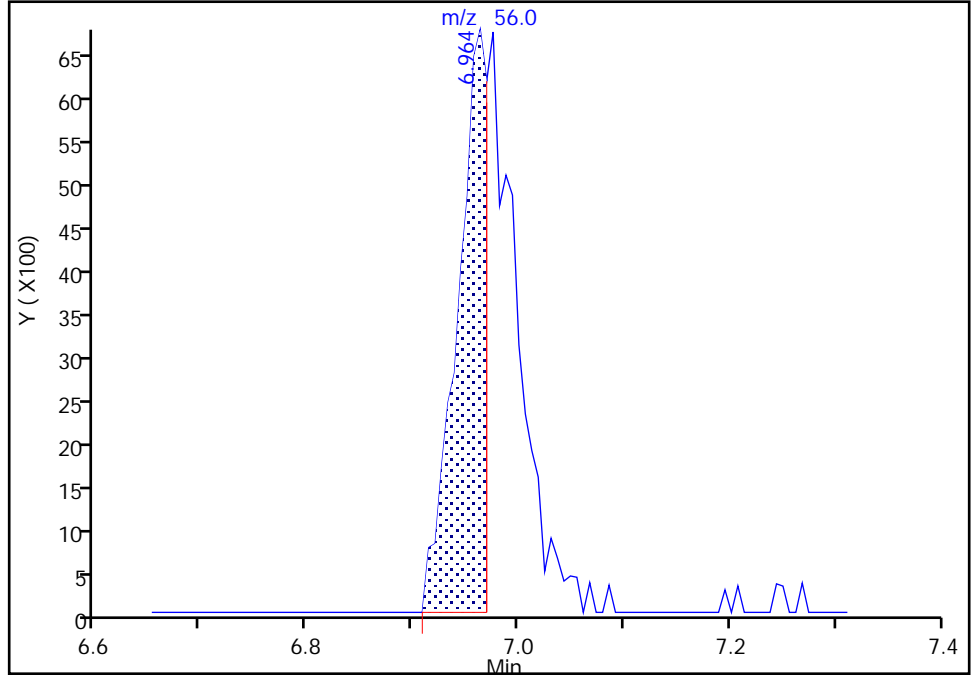
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Injection Date: 26-Mar-2021 01:26:30 Instrument ID: 19930
Lims ID: IC std1
Client ID:
Operator ID: mec29284 ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

48 Cyclohexane, CAS: 110-82-7

Signal: 1

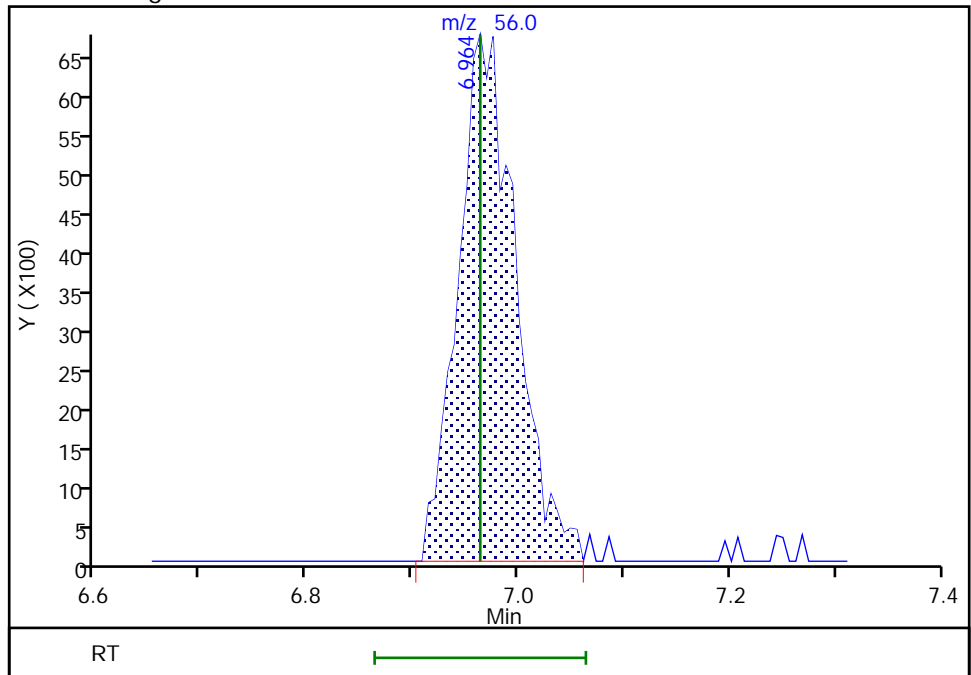
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Area: 13360
Amount: 0.114309
Amount Units: ug/l

Processing Integration Results



RT: 6.96
Area: 25529
Amount: 0.203307
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 26-Mar-2021 16:55:15
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

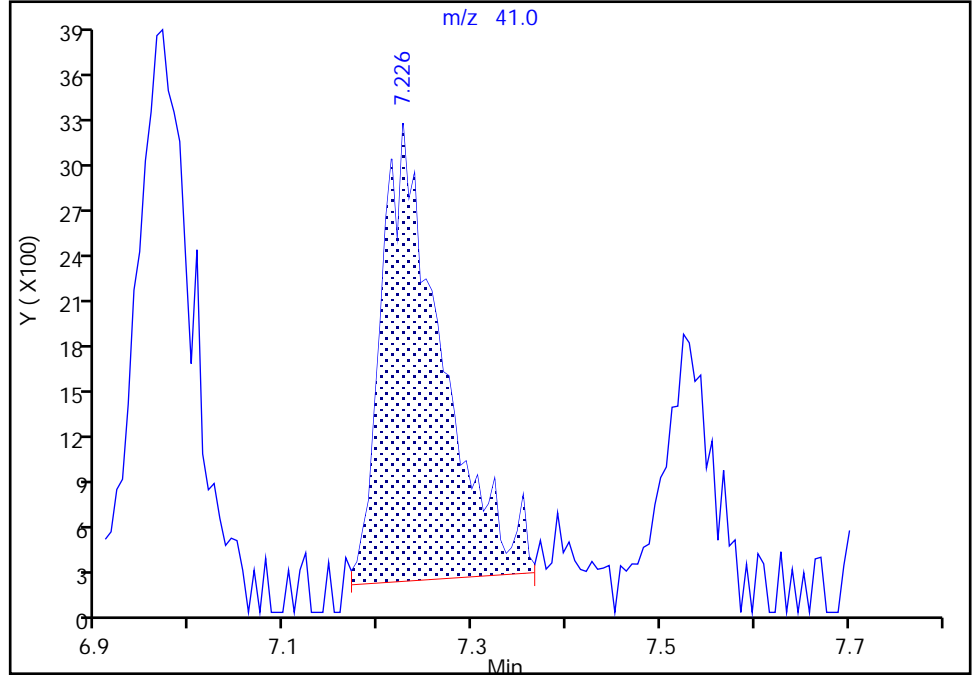
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Injection Date: 26-Mar-2021 01:26:30 Instrument ID: 19930
Lims ID: IC std1
Client ID:
Operator ID: mec29284 ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

52 Isobutyl alcohol, CAS: 78-83-1

Signal: 1

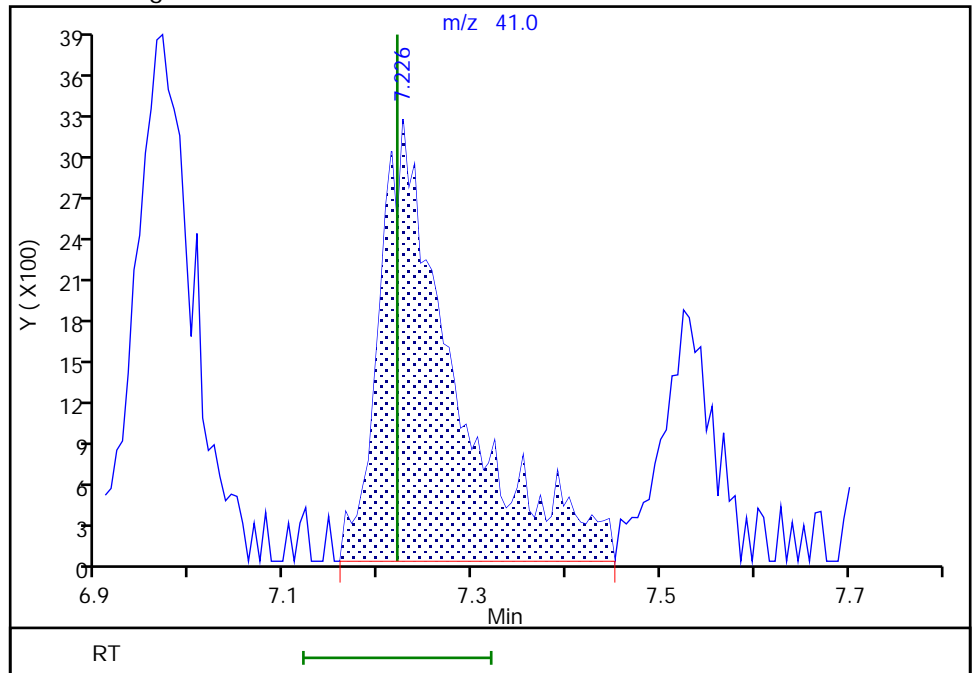
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Area: 13353
Amount: 9.463389
Amount Units: ug/l

Processing Integration Results



RT: 7.23
Area: 17870
Amount: 12.110777
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 26-Mar-2021 16:55:22
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Euofins Lancaster Laboratories Env, LLC

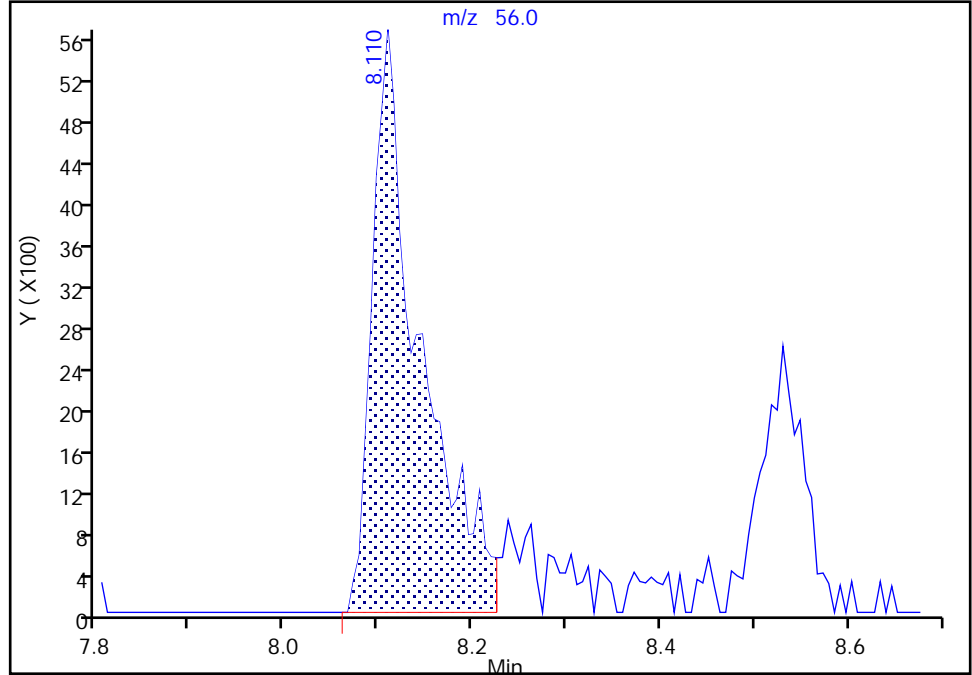
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Injection Date: 26-Mar-2021 01:26:30 Instrument ID: 19930
Lims ID: IC std1
Client ID:
Operator ID: mec29284 ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

60 n-Butanol, CAS: 71-36-3

Signal: 1

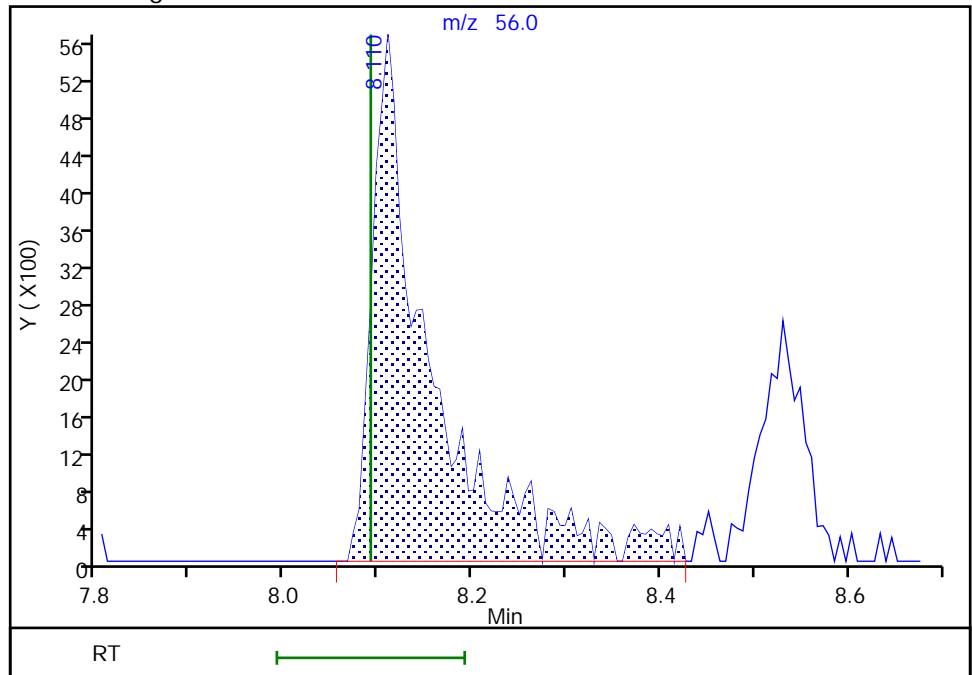
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Amount: 16.014078
Amount Units: ug/l

Processing Integration Results



RT: 8.11
Area: 24365
Amount: 19.014256
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 26-Mar-2021 16:55:33
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

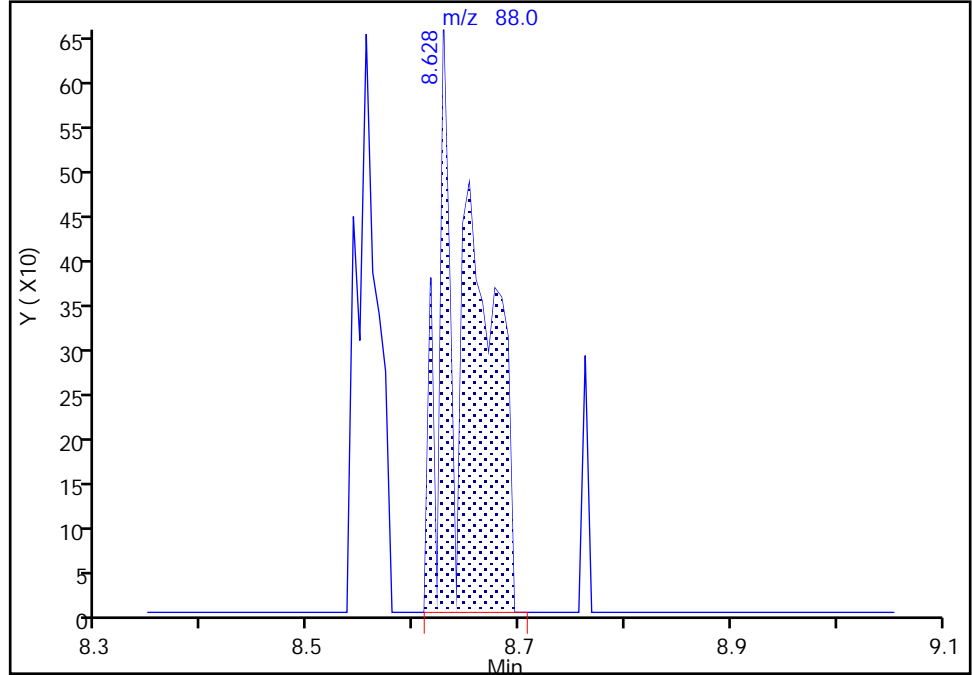
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Injection Date: 26-Mar-2021 01:26:30 Instrument ID: 19930
Lims ID: IC std1
Client ID:
Operator ID: mec29284 ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

65 1,4-Dioxane, CAS: 123-91-1

Signal: 1

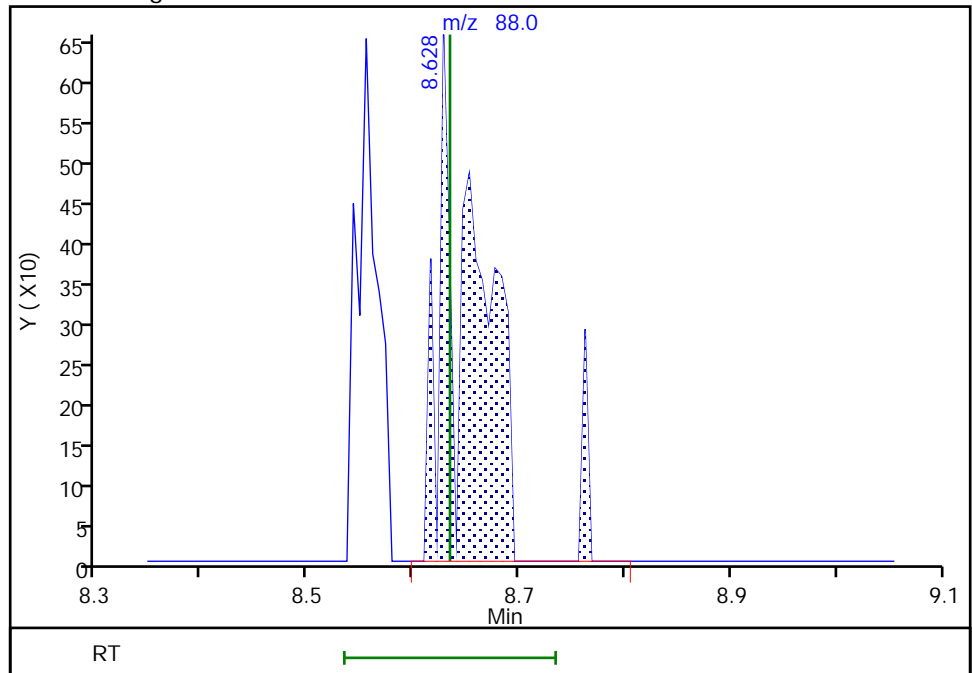
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Area: 1600
Amount: 6.571961
Amount Units: ug/l

Processing Integration Results



RT: 8.63
Area: 1706
Amount: 6.964038
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 26-Mar-2021 16:55:41
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

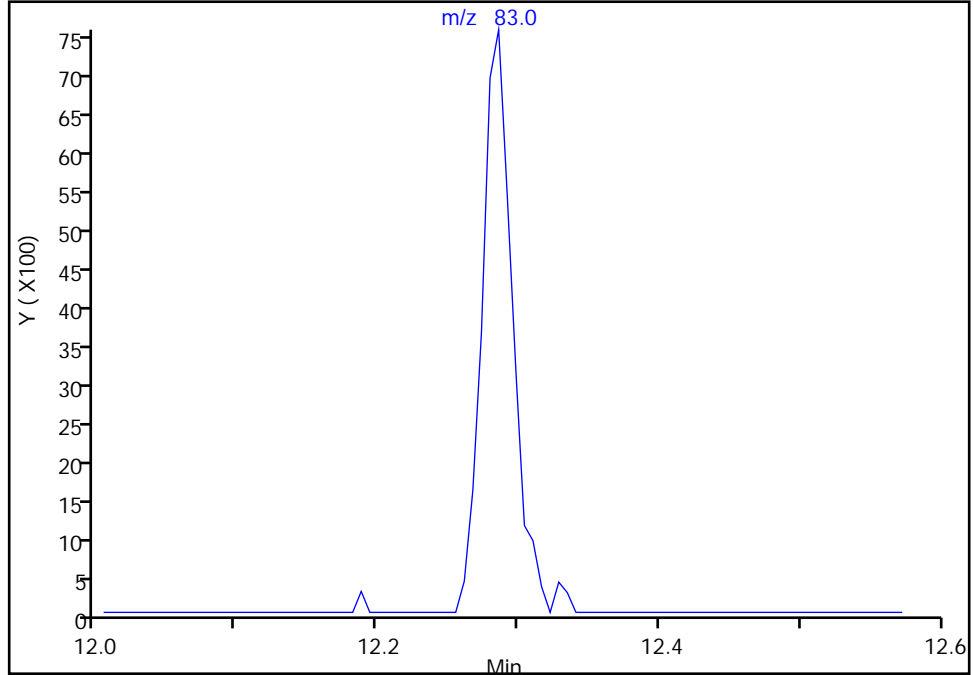
Data File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\1M25107.D
Injection Date: 26-Mar-2021 01:26:30 Instrument ID: 19930
Lims ID: IC std1
Client ID:
Operator ID: mec29284 ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

101 1,1,2,2-Tetrachloroethane, CAS: 79-34-5

Signal: 1

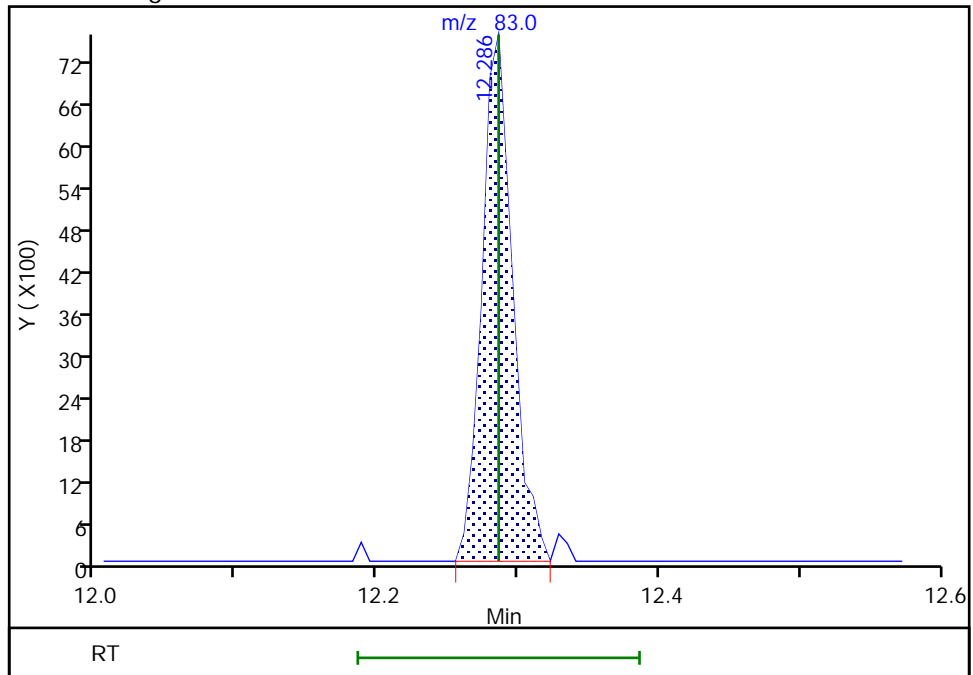
Not Detected
Expected RT: 12.29

Processing Integration Results



Manual Integration Results

RT: 12.29
Area: 11364
Amount: 0.185706
Amount Units: ug/l



Calibration

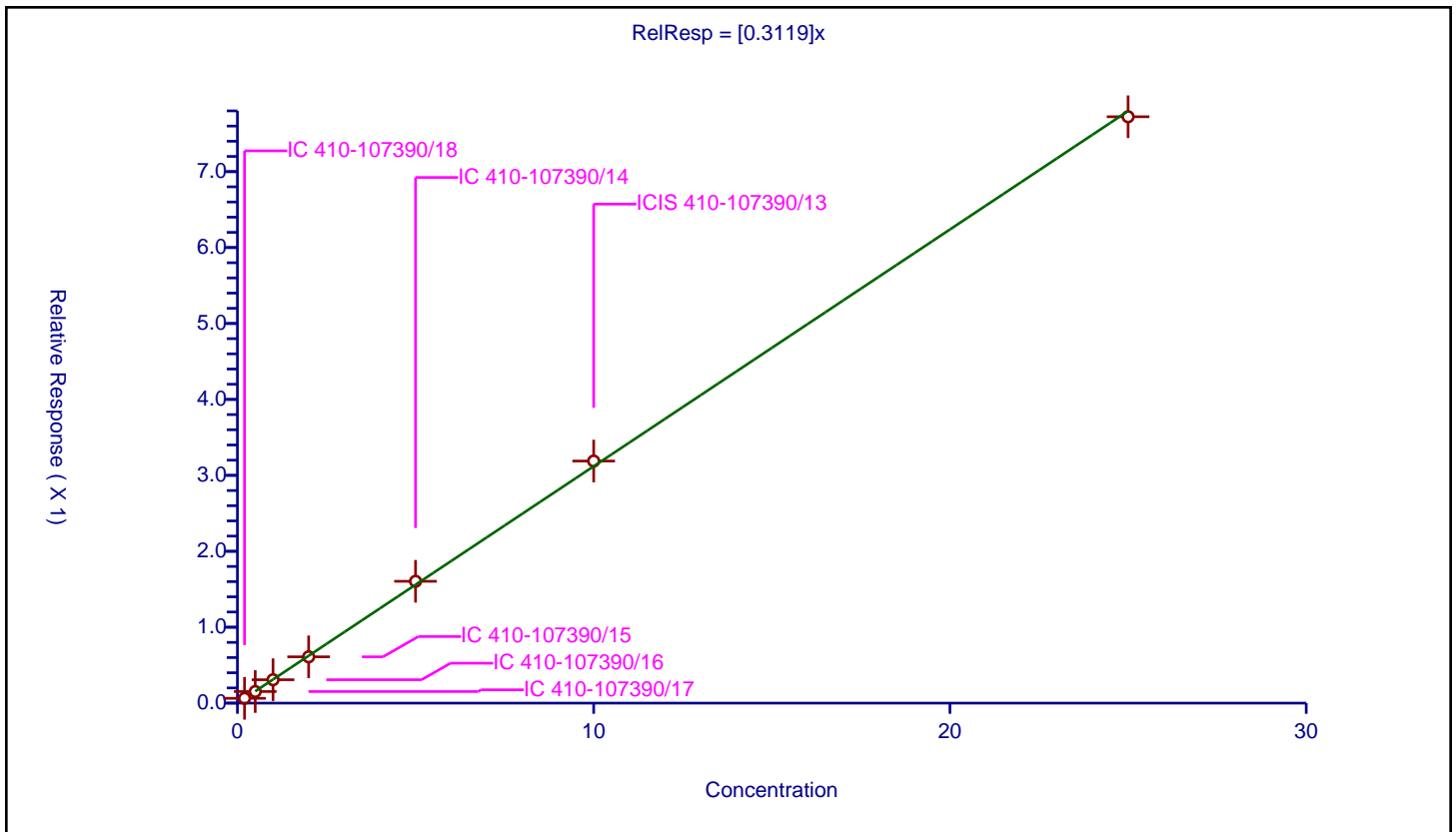
/ Dichlorodifluoromethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3119

Error Coefficients	
Standard Error:	746000
Relative Standard Error:	2.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.063224	10.0	2175128.0	0.316119	Y
2	IC 410-107390/17	0.5	0.152763	10.0	2170550.0	0.305526	Y
3	IC 410-107390/16	1.0	0.308149	10.0	2146917.0	0.308149	Y
4	IC 410-107390/15	2.0	0.609747	10.0	2156681.0	0.304874	Y
5	IC 410-107390/14	5.0	1.604764	10.0	2135112.0	0.320953	Y
6	ICIS 410-107390/13	10.0	3.188436	10.0	2148304.0	0.318844	Y
7	IC 410-107390/12	25.0	7.722831	10.0	2140113.0	0.308913	Y



Calibration

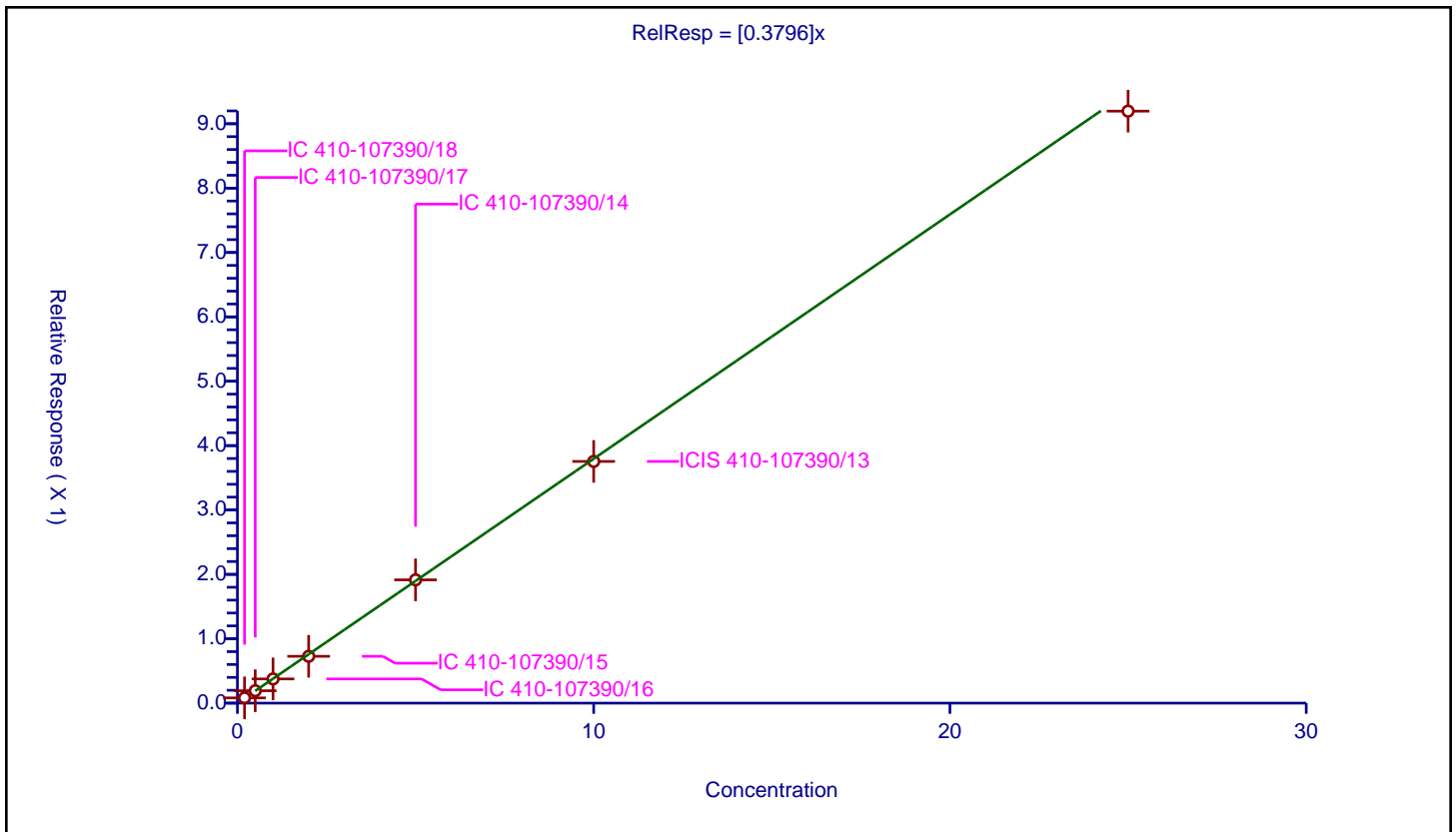
/ Chloromethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3796

Error Coefficients	
Standard Error:	887000
Relative Standard Error:	3.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.081255	10.0	2175128.0	0.406275	Y
2	IC 410-107390/17	0.5	0.192509	10.0	2170550.0	0.385018	Y
3	IC 410-107390/16	1.0	0.375757	10.0	2146917.0	0.375757	Y
4	IC 410-107390/15	2.0	0.727484	10.0	2156681.0	0.363742	Y
5	IC 410-107390/14	5.0	1.914864	10.0	2135112.0	0.382973	Y
6	ICIS 410-107390/13	10.0	3.754748	10.0	2148304.0	0.375475	Y
7	IC 410-107390/12	25.0	9.196248	10.0	2140113.0	0.36785	Y



Calibration

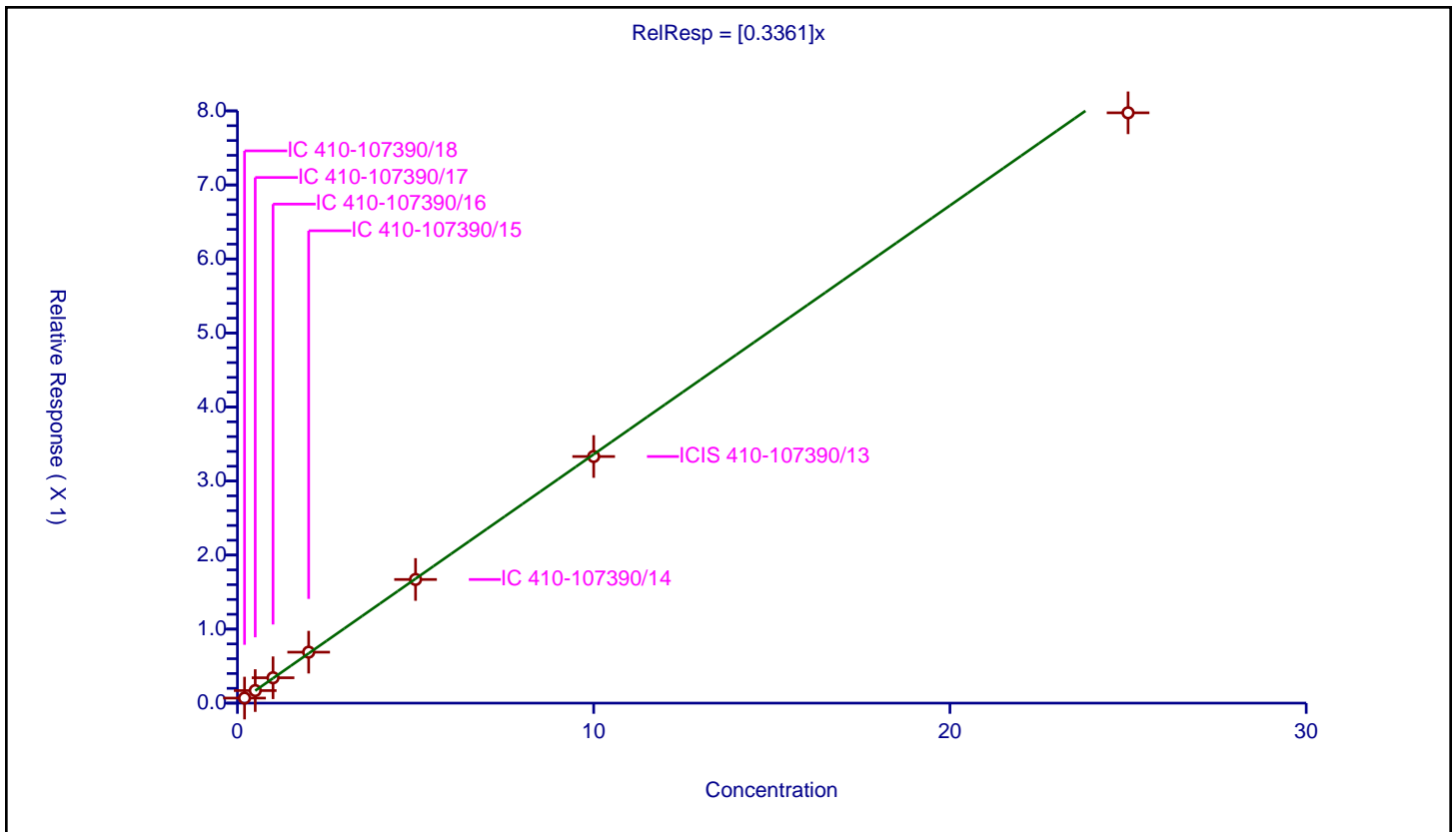
/ Butadiene

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3361

Error Coefficients	
Standard Error:	773000
Relative Standard Error:	2.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.06812	10.0	2175128.0	0.340601	Y
2	IC 410-107390/17	0.5	0.169538	10.0	2170550.0	0.339075	Y
3	IC 410-107390/16	1.0	0.342649	10.0	2146917.0	0.342649	Y
4	IC 410-107390/15	2.0	0.688368	10.0	2156681.0	0.344184	Y
5	IC 410-107390/14	5.0	1.67009	10.0	2135112.0	0.334018	Y
6	ICIS 410-107390/13	10.0	3.331363	10.0	2148304.0	0.333136	Y
7	IC 410-107390/12	25.0	7.974009	10.0	2140113.0	0.31896	Y



Calibration

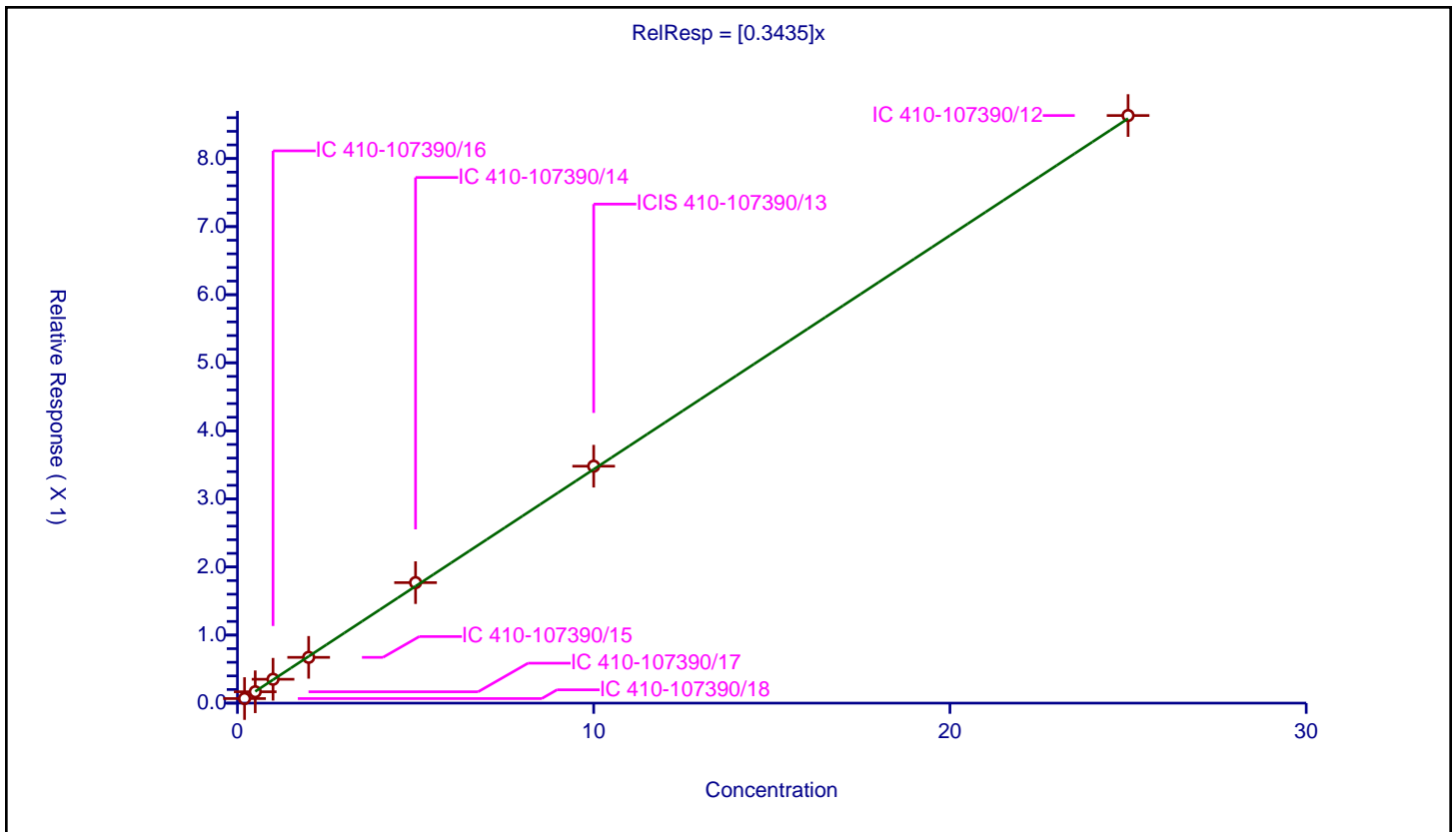
/ Vinyl chloride

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3435

Error Coefficients	
Standard Error:	831000
Relative Standard Error:	2.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.067247	10.0	2175128.0	0.336233	Y
2	IC 410-107390/17	0.5	0.166953	10.0	2170550.0	0.333906	Y
3	IC 410-107390/16	1.0	0.35088	10.0	2146917.0	0.35088	Y
4	IC 410-107390/15	2.0	0.672288	10.0	2156681.0	0.336144	Y
5	IC 410-107390/14	5.0	1.770272	10.0	2135112.0	0.354054	Y
6	ICIS 410-107390/13	10.0	3.480709	10.0	2148304.0	0.348071	Y
7	IC 410-107390/12	25.0	8.632072	10.0	2140113.0	0.345283	Y



Calibration

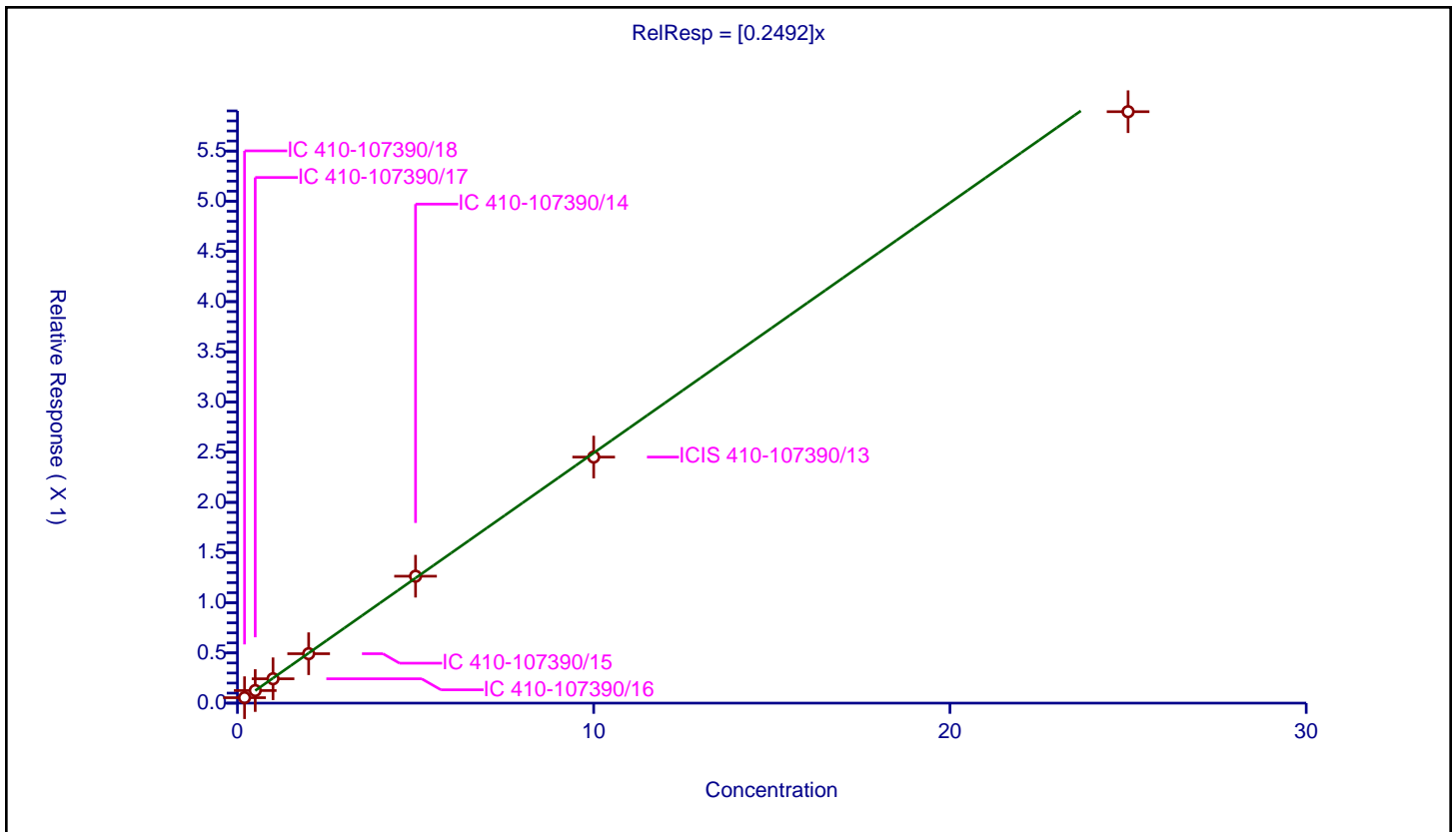
/ Bromomethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2492

Error Coefficients	
Standard Error:	571000
Relative Standard Error:	4.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.054222	10.0	2175128.0	0.27111	Y
2	IC 410-107390/17	0.5	0.125438	10.0	2170550.0	0.250877	Y
3	IC 410-107390/16	1.0	0.242771	10.0	2146917.0	0.242771	Y
4	IC 410-107390/15	2.0	0.492303	10.0	2156681.0	0.246151	Y
5	IC 410-107390/14	5.0	1.264514	10.0	2135112.0	0.252903	Y
6	ICIS 410-107390/13	10.0	2.451143	10.0	2148304.0	0.245114	Y
7	IC 410-107390/12	25.0	5.892058	10.0	2140113.0	0.235682	Y



Calibration

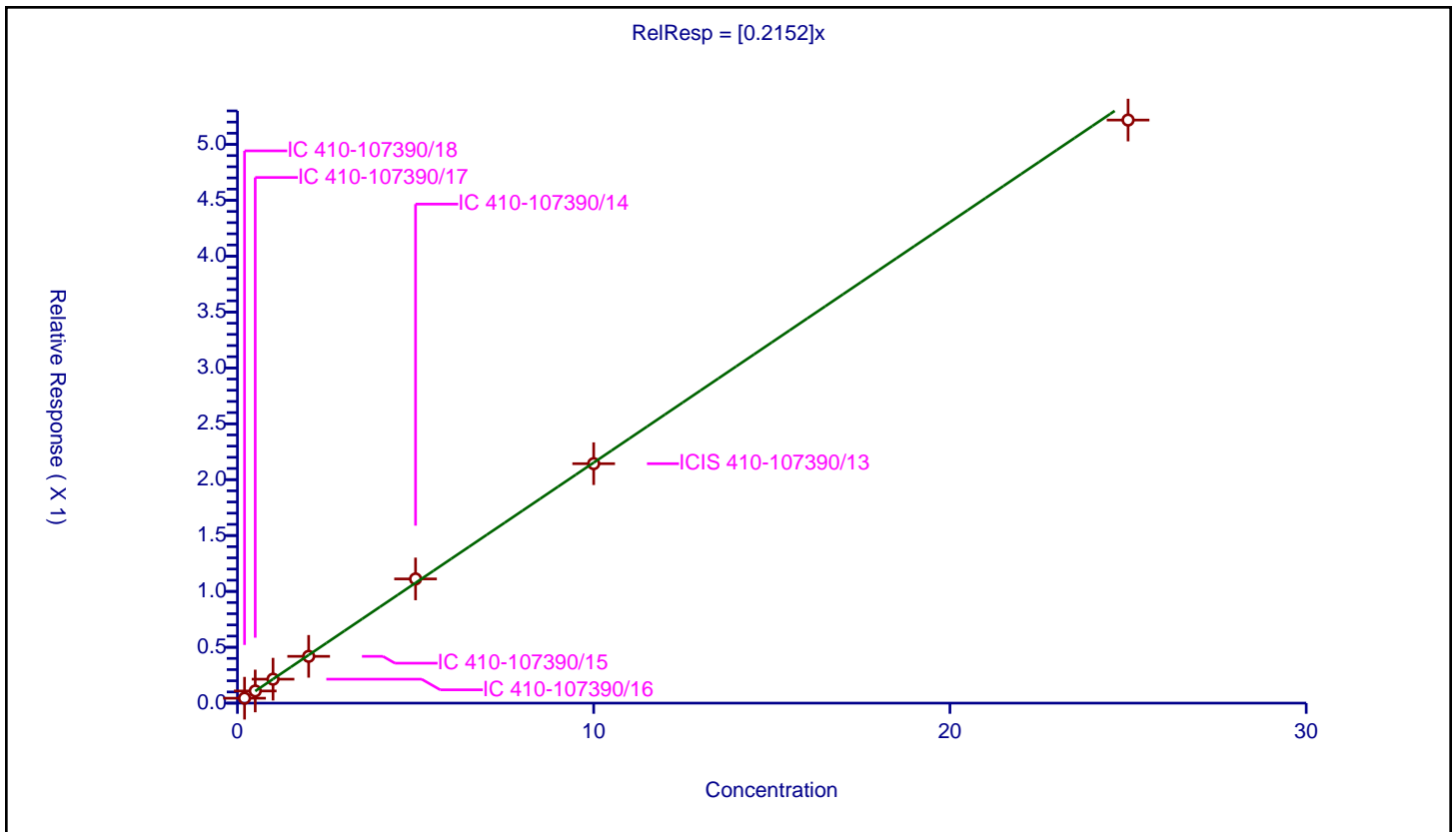
/ Chloroethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2152

Error Coefficients	
Standard Error:	504000
Relative Standard Error:	2.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.044034	10.0	2175128.0	0.220171	Y
2	IC 410-107390/17	0.5	0.108728	10.0	2170550.0	0.217456	Y
3	IC 410-107390/16	1.0	0.214303	10.0	2146917.0	0.214303	Y
4	IC 410-107390/15	2.0	0.418773	10.0	2156681.0	0.209387	Y
5	IC 410-107390/14	5.0	1.111469	10.0	2135112.0	0.222294	Y
6	ICIS 410-107390/13	10.0	2.142876	10.0	2148304.0	0.214288	Y
7	IC 410-107390/12	25.0	5.21807	10.0	2140113.0	0.208723	Y



Calibration

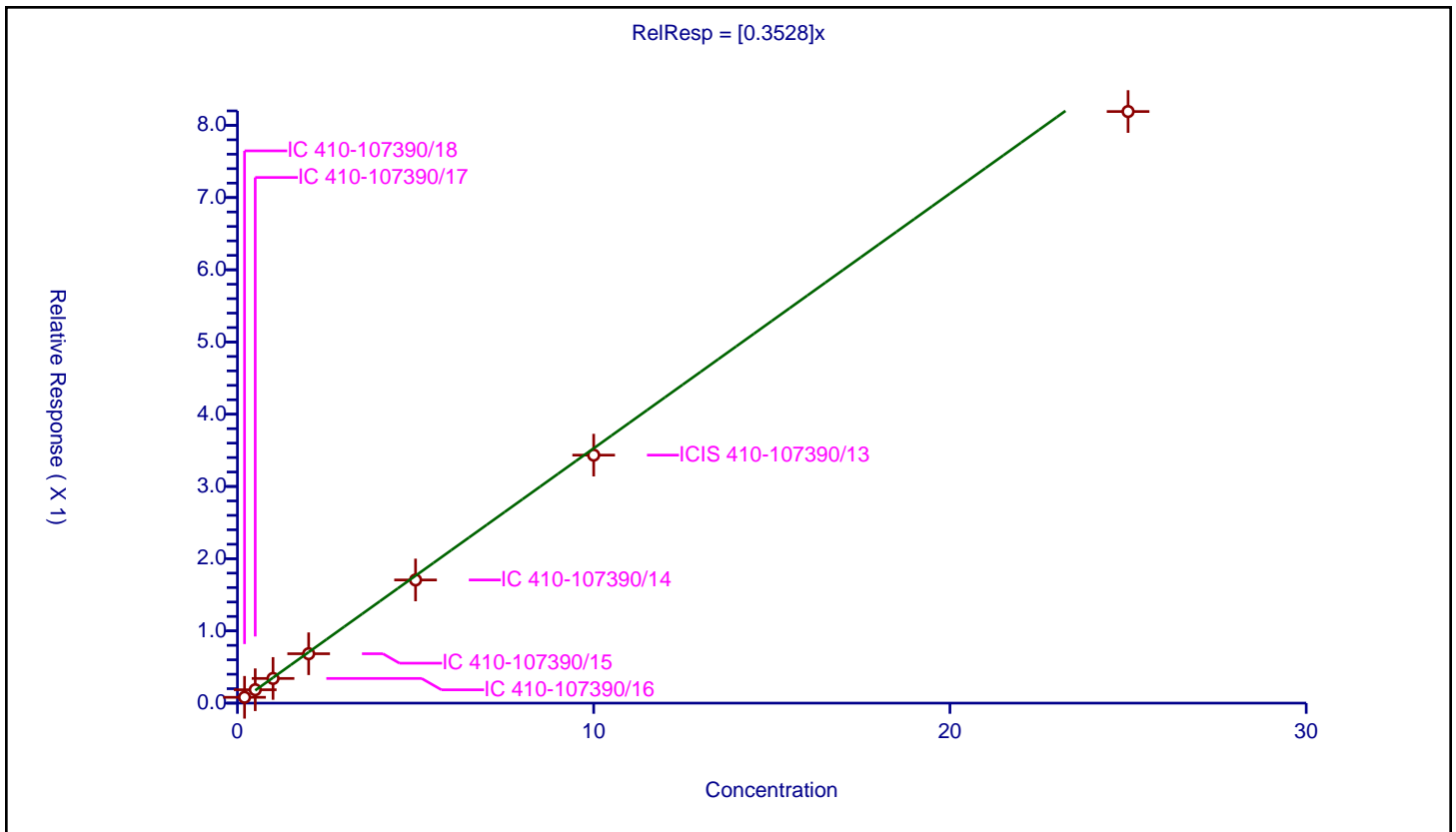
/ Dichlorofluoromethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3528

Error Coefficients	
Standard Error:	794000
Relative Standard Error:	7.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.080754	10.0	2175128.0	0.403769	Y
2	IC 410-107390/17	0.5	0.185156	10.0	2170550.0	0.370312	Y
3	IC 410-107390/16	1.0	0.341499	10.0	2146917.0	0.341499	Y
4	IC 410-107390/15	2.0	0.683703	10.0	2156681.0	0.341852	Y
5	IC 410-107390/14	5.0	1.705386	10.0	2135112.0	0.341077	Y
6	ICIS 410-107390/13	10.0	3.433648	10.0	2148304.0	0.343365	Y
7	IC 410-107390/12	25.0	8.191156	10.0	2140113.0	0.327646	Y



Calibration

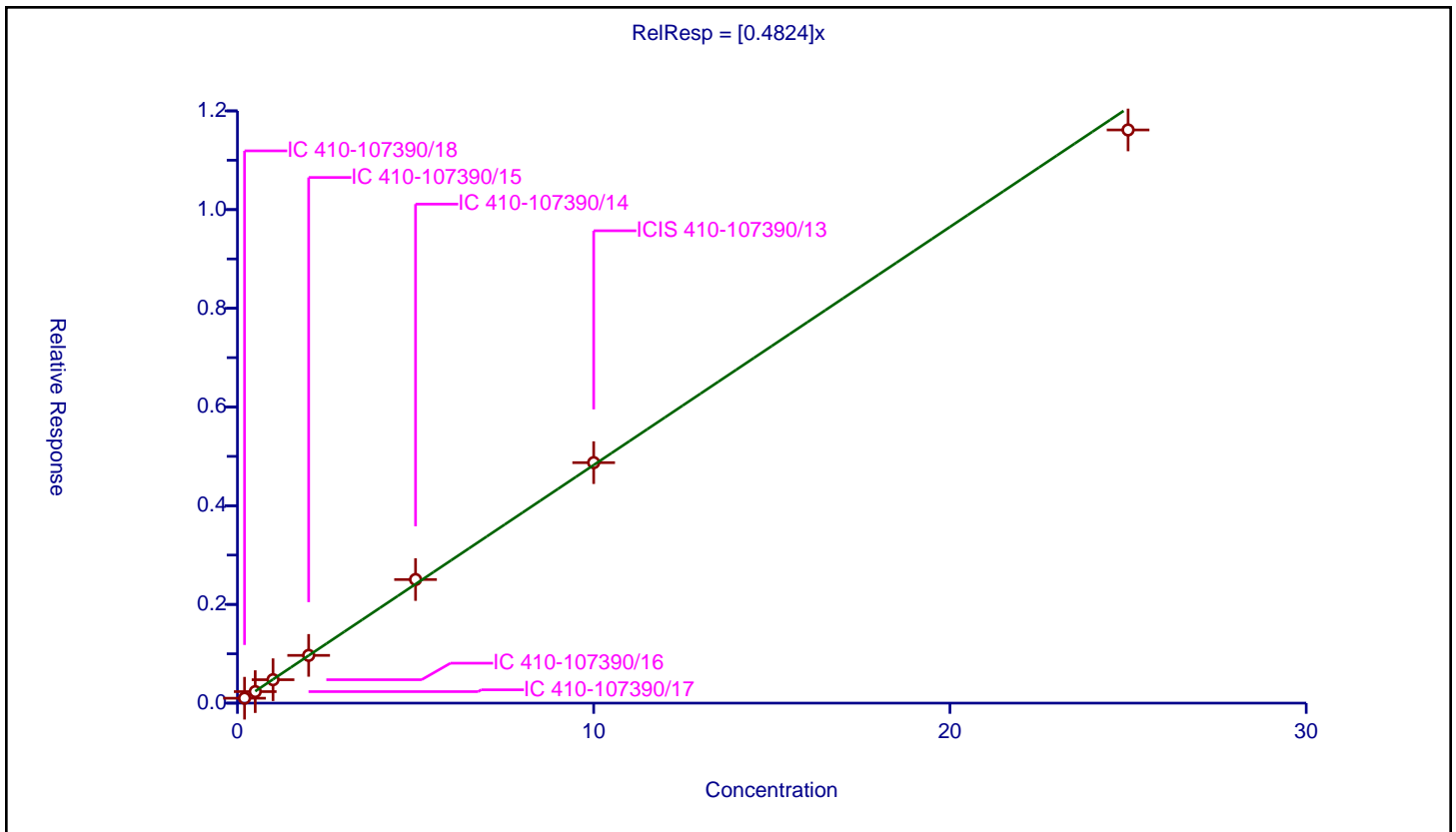
/ Trichlorofluoromethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4824

Error Coefficients	
Standard Error:	1130000
Relative Standard Error:	3.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.0997	10.0	2175128.0	0.498499	Y
2	IC 410-107390/17	0.5	0.233563	10.0	2170550.0	0.467126	Y
3	IC 410-107390/16	1.0	0.474881	10.0	2146917.0	0.474881	Y
4	IC 410-107390/15	2.0	0.967542	10.0	2156681.0	0.483771	Y
5	IC 410-107390/14	5.0	2.504234	10.0	2135112.0	0.500847	Y
6	ICIS 410-107390/13	10.0	4.87269	10.0	2148304.0	0.487269	Y
7	IC 410-107390/12	25.0	11.614331	10.0	2140113.0	0.464573	Y



Calibration

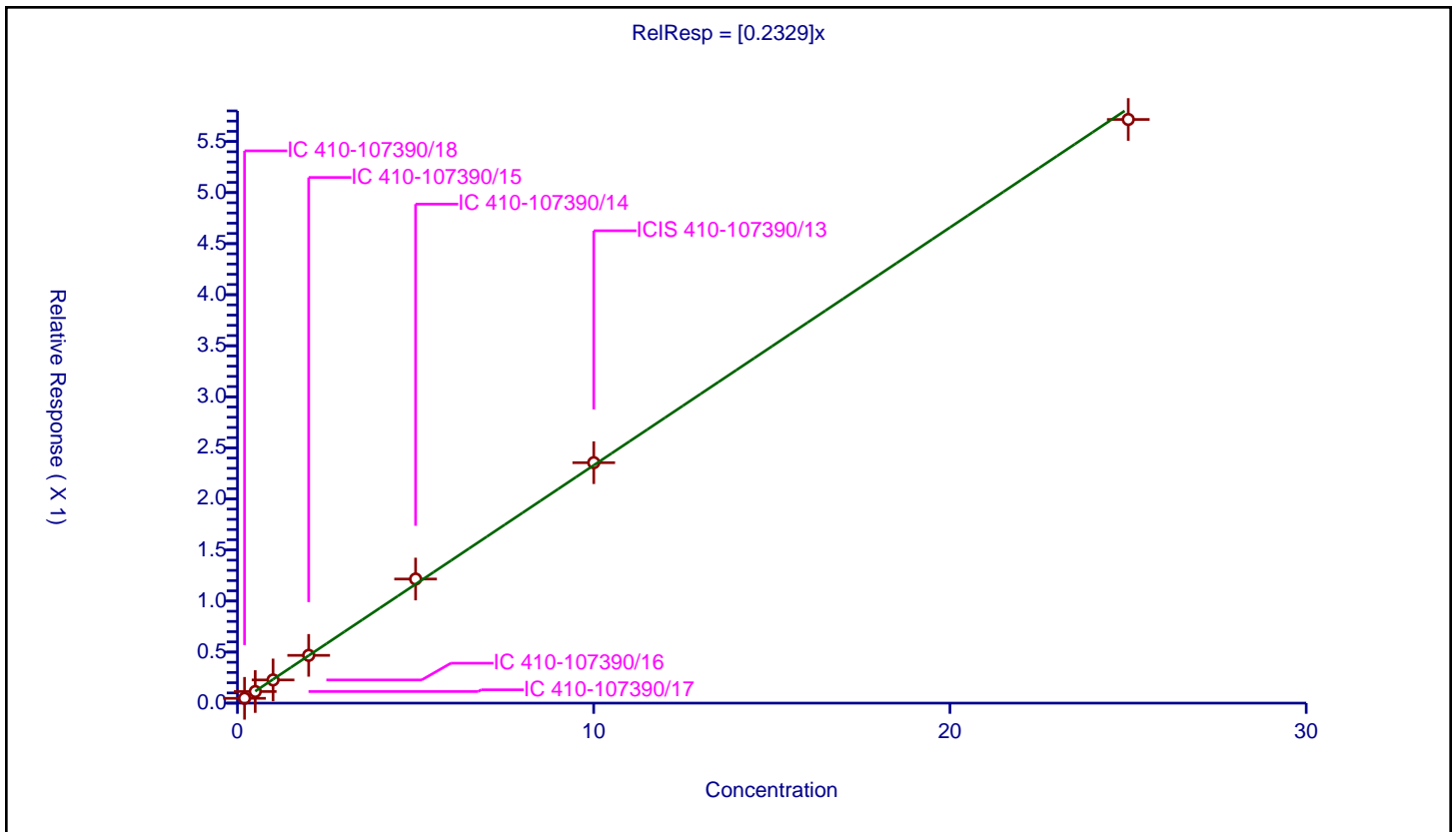
/ Ethyl ether

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2329

Error Coefficients	
Standard Error:	553000
Relative Standard Error:	2.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.200043	0.047091	10.0	2175128.0	0.235407	Y
2	IC 410-107390/17	0.500108	0.113469	10.0	2170550.0	0.226889	Y
3	IC 410-107390/16	1.000215	0.22714	10.0	2146917.0	0.227091	Y
4	IC 410-107390/15	2.00043	0.467853	10.0	2156681.0	0.233876	Y
5	IC 410-107390/14	5.001075	1.215266	10.0	2135112.0	0.243001	Y
6	ICIS 410-107390/13	10.00215	2.354927	10.0	2148304.0	0.235442	Y
7	IC 410-107390/12	25.005375	5.716053	10.0	2140113.0	0.228593	Y



Calibration

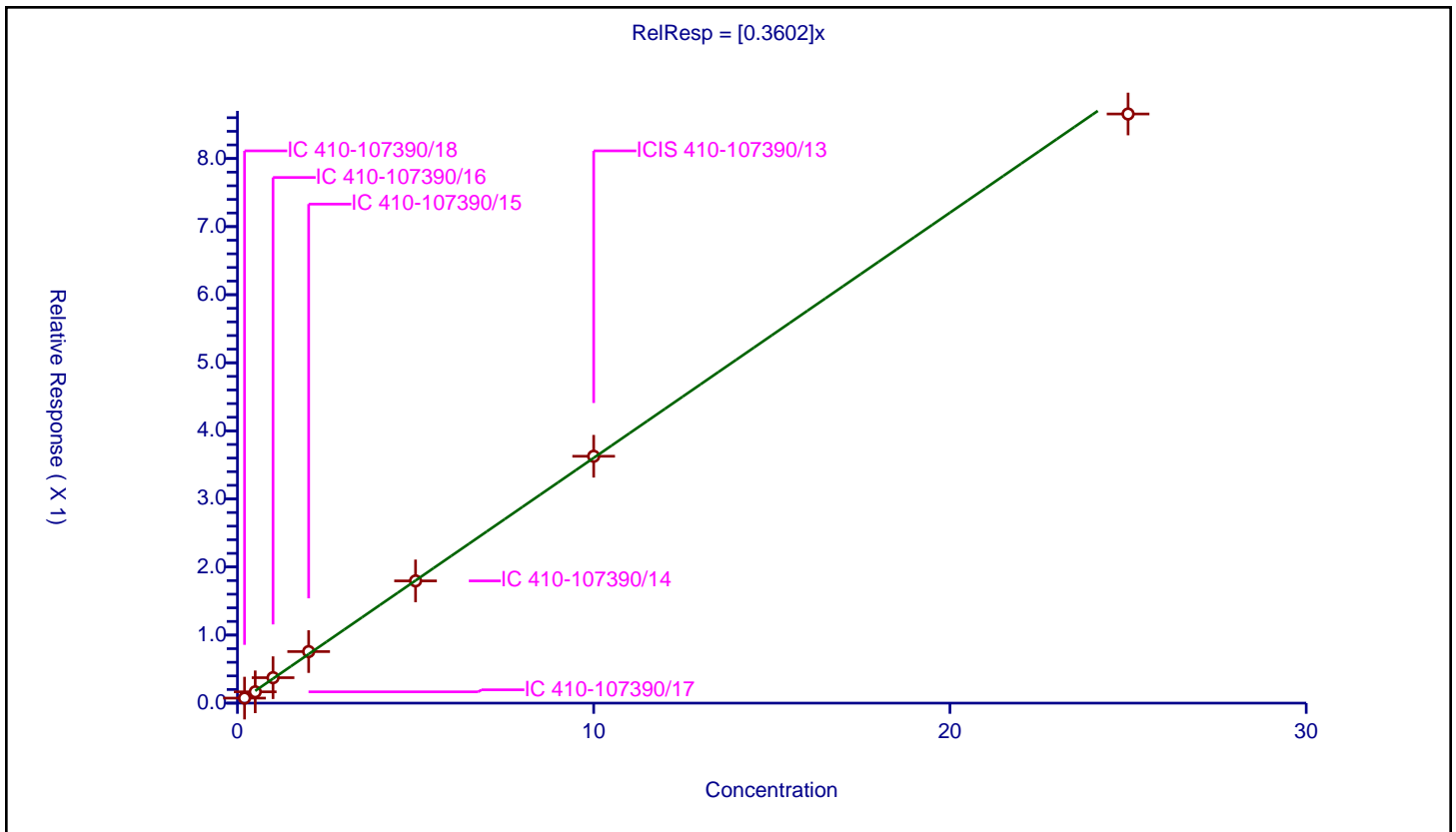
/ 1,2-Dichloro-1,1,2-trifluoroethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3602

Error Coefficients	
Standard Error:	839000
Relative Standard Error:	4.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.073899	10.0	2175128.0	0.369495	Y
2	IC 410-107390/17	0.5	0.165898	10.0	2170550.0	0.331796	Y
3	IC 410-107390/16	1.0	0.373787	10.0	2146917.0	0.373787	Y
4	IC 410-107390/15	2.0	0.757312	10.0	2156681.0	0.378656	Y
5	IC 410-107390/14	5.0	1.795606	10.0	2135112.0	0.359121	Y
6	ICIS 410-107390/13	10.0	3.626656	10.0	2148304.0	0.362666	Y
7	IC 410-107390/12	25.0	8.654454	10.0	2140113.0	0.346178	Y



Calibration

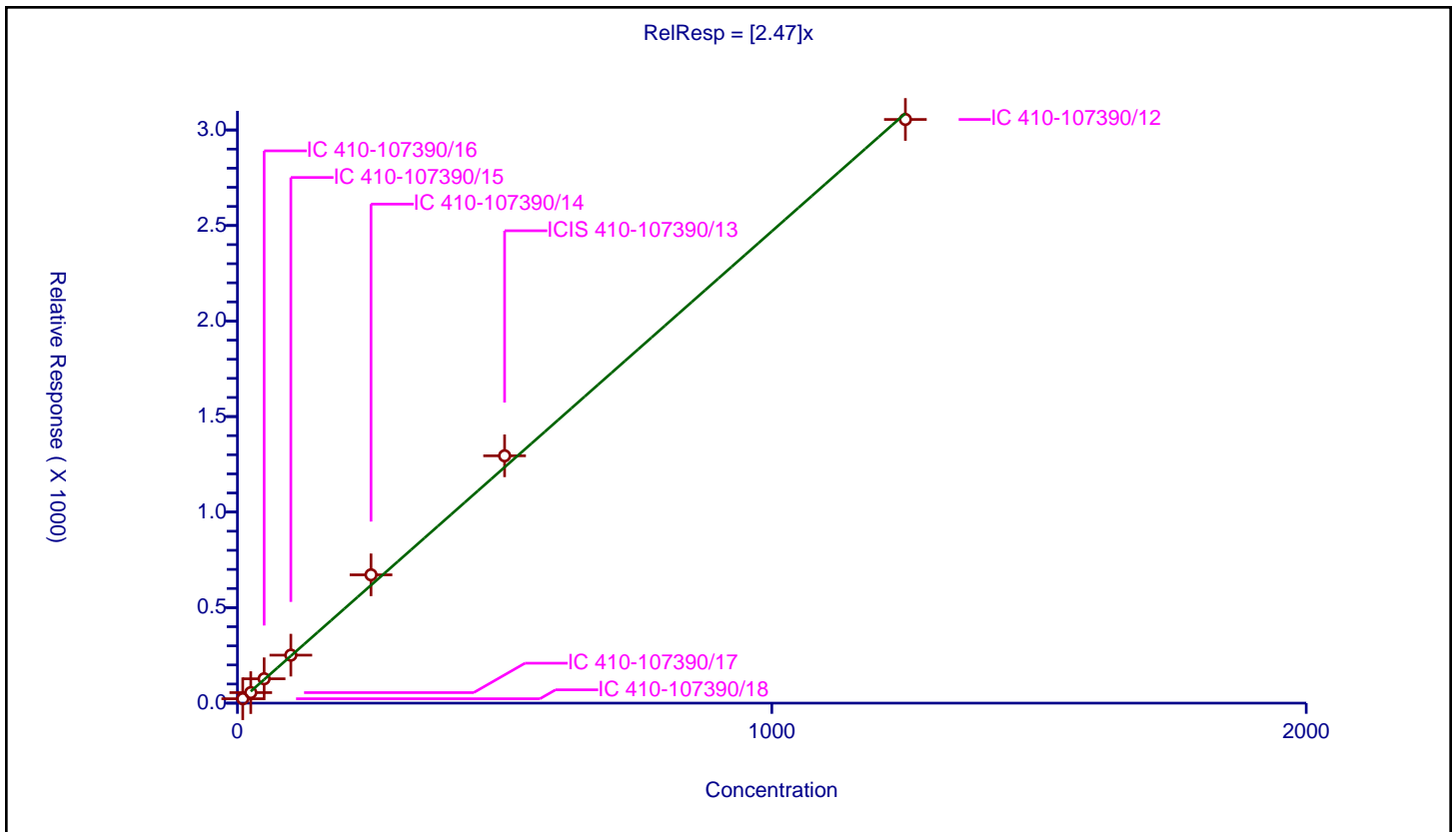
/ Acrolein

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	2.47

Error Coefficients	
Standard Error:	4390000
Relative Standard Error:	6.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	9.999544	23.007519	50.0	175560.0	2.300857	Y
2	IC 410-107390/17	24.998861	55.152256	50.0	186889.0	2.206191	Y
3	IC 410-107390/16	49.997722	127.427118	50.0	165165.0	2.548658	Y
4	IC 410-107390/15	99.995444	251.184236	50.0	167112.0	2.511957	Y
5	IC 410-107390/14	249.988611	671.637921	50.0	152718.0	2.686674	Y
6	ICIS 410-107390/13	499.977222	1294.678096	50.0	155217.0	2.589474	Y
7	IC 410-107390/12	1249.943055	3055.118462	50.0	158827.0	2.444206	Y



Calibration

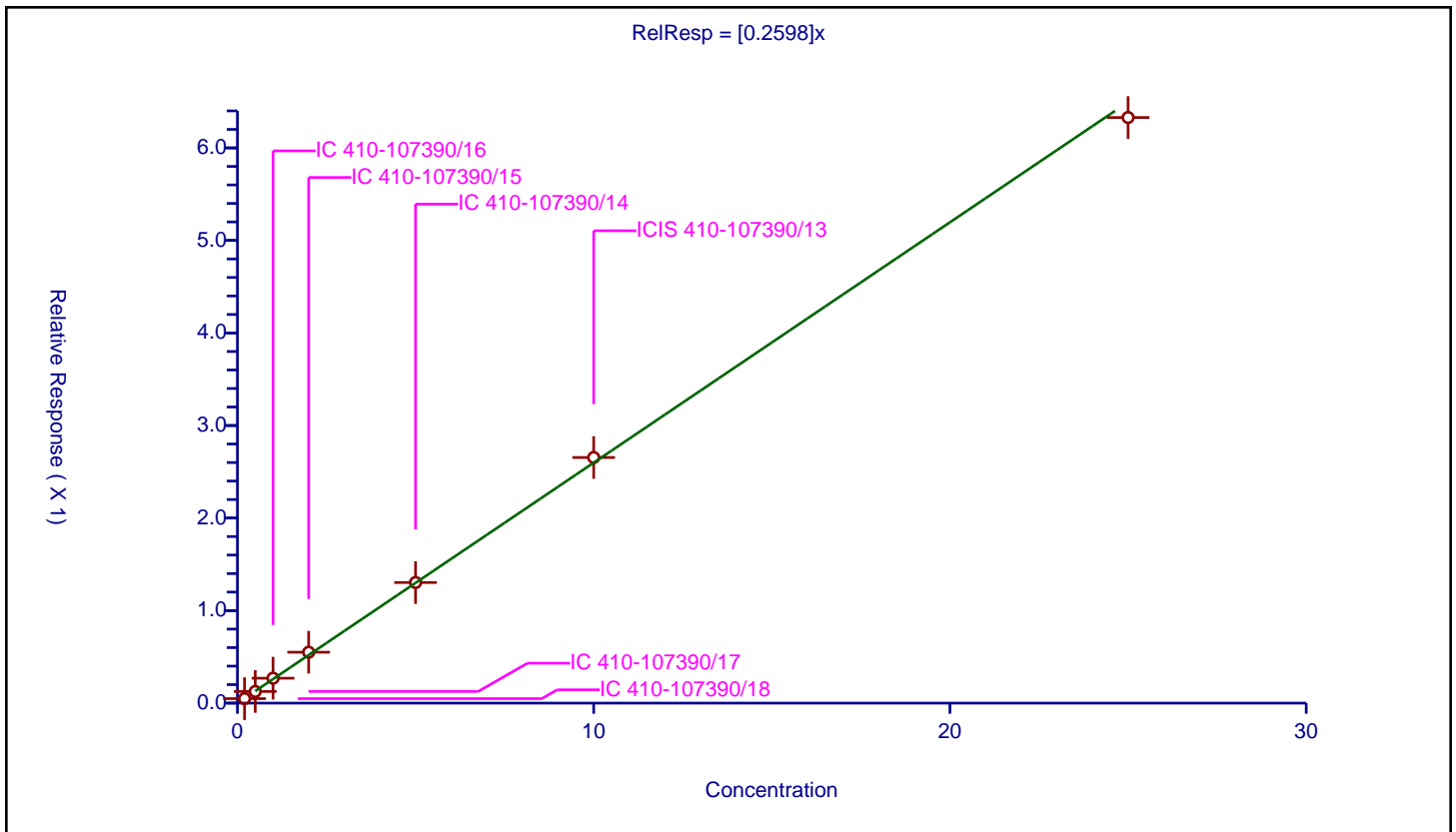
/ 1,1-Dichloroethene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2598

Error Coefficients	
Standard Error:	613000
Relative Standard Error:	4.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.048627	10.0	2175128.0	0.243135	Y
2	IC 410-107390/17	0.5	0.12594	10.0	2170550.0	0.251881	Y
3	IC 410-107390/16	1.0	0.269354	10.0	2146917.0	0.269354	Y
4	IC 410-107390/15	2.0	0.550095	10.0	2156681.0	0.275048	Y
5	IC 410-107390/14	5.0	1.303276	10.0	2135112.0	0.260655	Y
6	ICIS 410-107390/13	10.0	2.654312	10.0	2148304.0	0.265431	Y
7	IC 410-107390/12	25.0	6.328287	10.0	2140113.0	0.253131	Y



Calibration

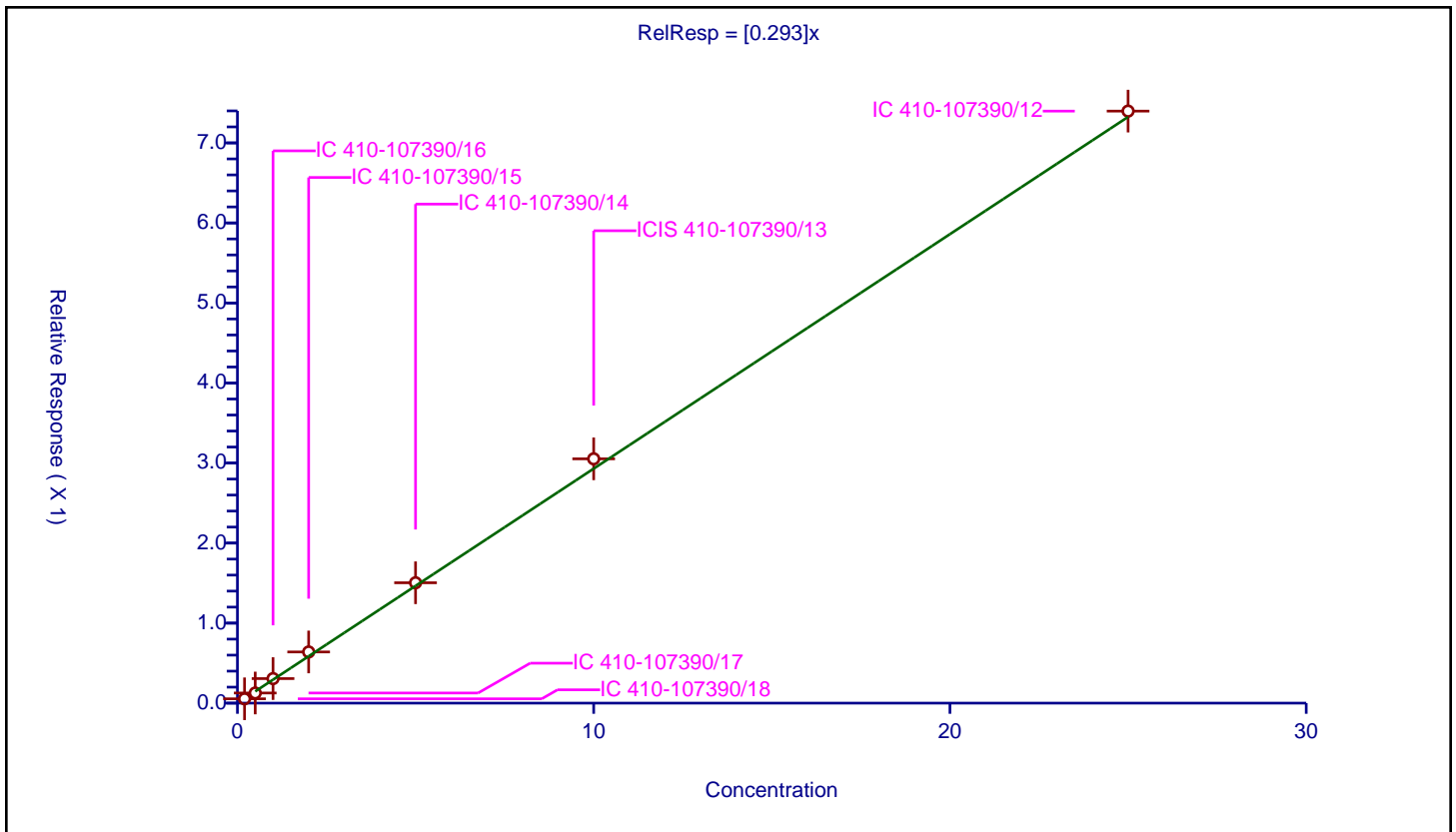
/ 1,1,2-Trichloro-1,2,2-trifluoroethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.293

Error Coefficients	
Standard Error:	715000
Relative Standard Error:	8.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.053937	10.0	2175128.0	0.269685	Y
2	IC 410-107390/17	0.5	0.126489	10.0	2170550.0	0.252977	Y
3	IC 410-107390/16	1.0	0.306514	10.0	2146917.0	0.306514	Y
4	IC 410-107390/15	2.0	0.639561	10.0	2156681.0	0.319781	Y
5	IC 410-107390/14	5.0	1.503916	10.0	2135112.0	0.300783	Y
6	ICIS 410-107390/13	10.0	3.052627	10.0	2148304.0	0.305263	Y
7	IC 410-107390/12	25.0	7.397465	10.0	2140113.0	0.295899	Y



Calibration

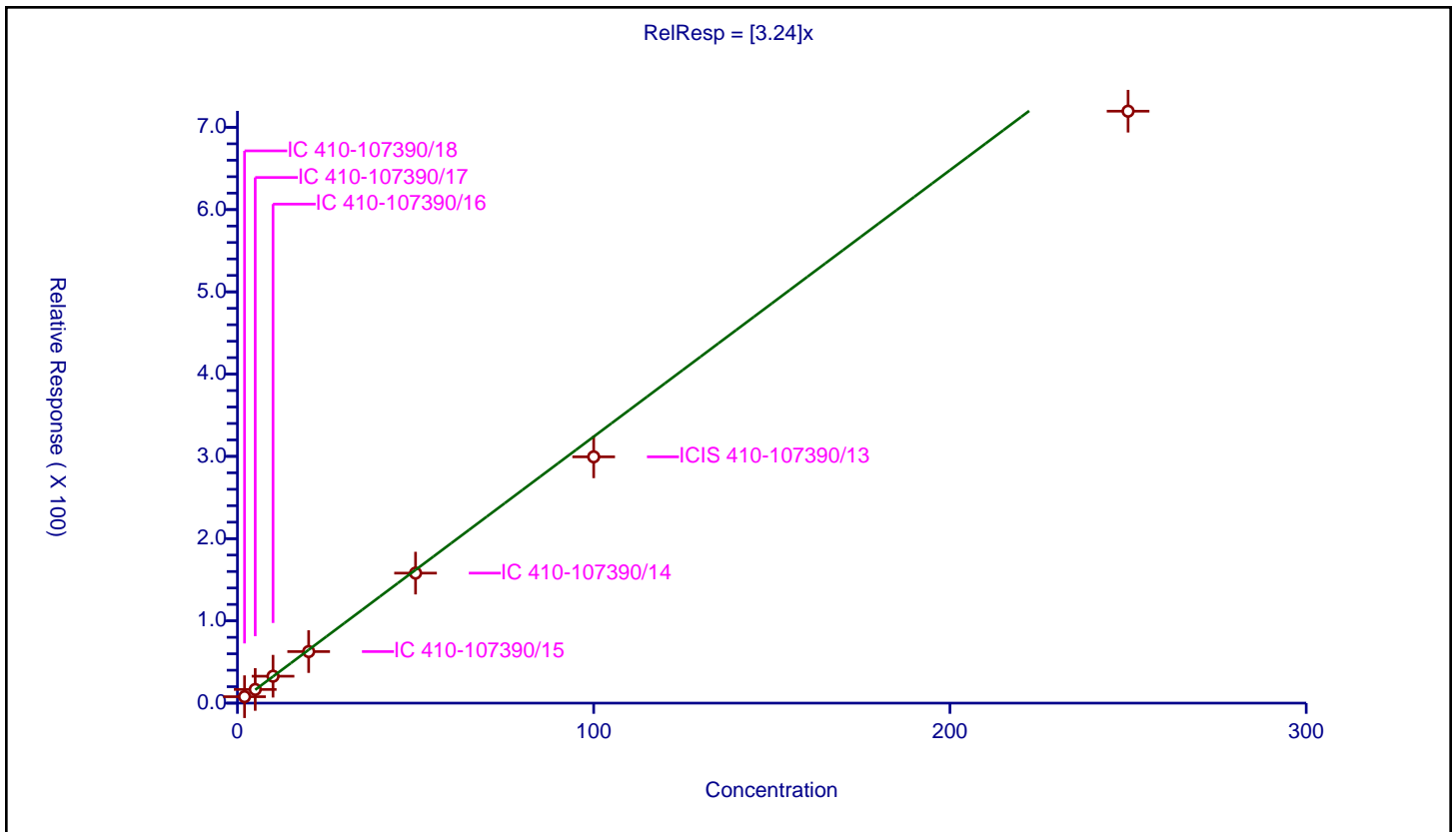
/ Acetone

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	3.24

Error Coefficients	
Standard Error:	1030000
Relative Standard Error:	10.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.983

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	2.0	7.818979	50.0	175560.0	3.90949	Y
2	IC 410-107390/17	5.0	16.641964	50.0	186889.0	3.328393	Y
3	IC 410-107390/16	10.0	32.713347	50.0	165165.0	3.271335	Y
4	IC 410-107390/15	20.0	62.681914	50.0	167112.0	3.134096	Y
5	IC 410-107390/14	50.0	158.057007	50.0	152718.0	3.16114	Y
6	ICIS 410-107390/13	100.0	299.426609	50.0	155217.0	2.994266	Y
7	IC 410-107390/12	250.0	719.632052	50.0	158827.0	2.878528	Y



Calibration

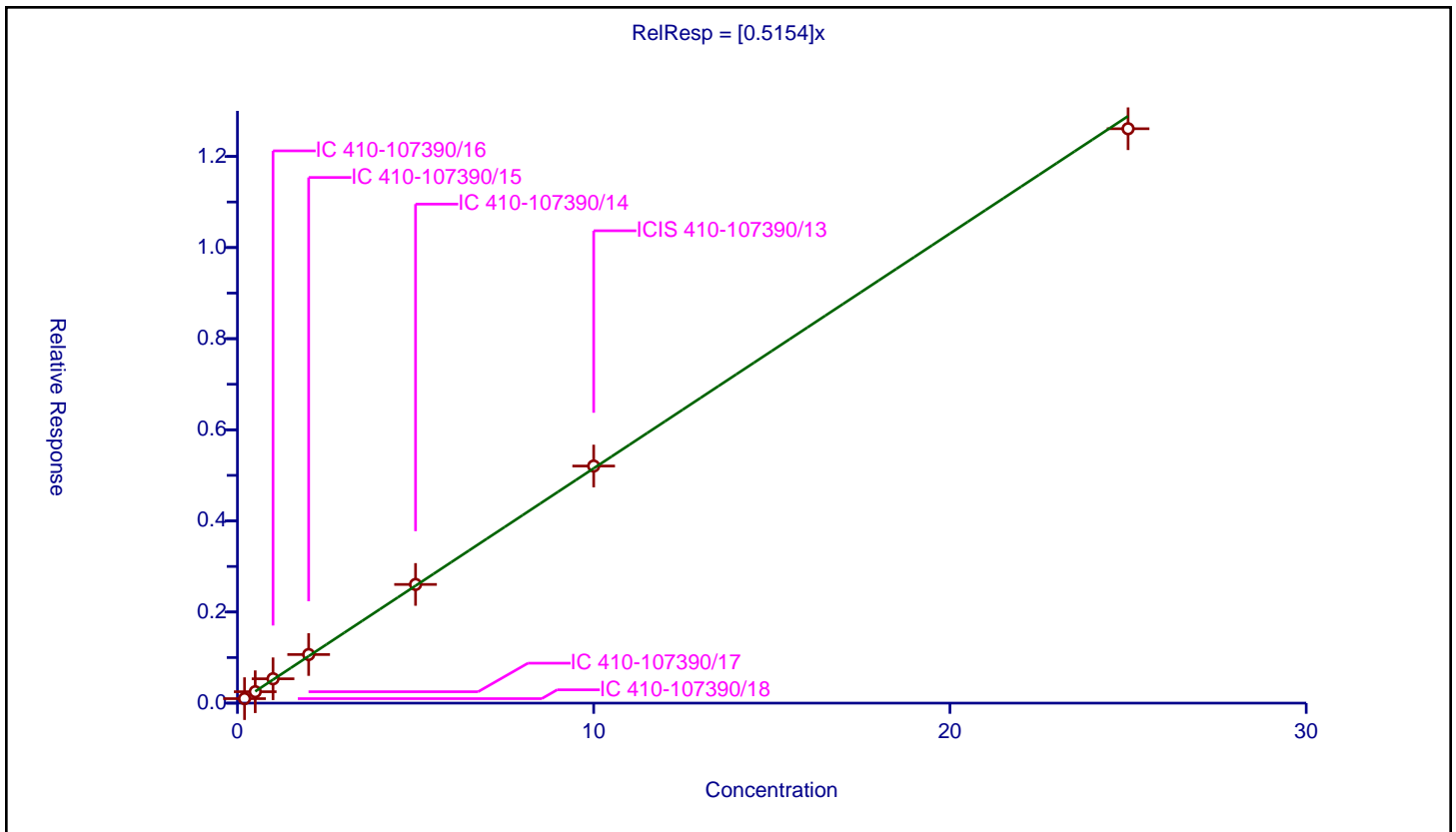
/ Iodomethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.5154

Error Coefficients	
Standard Error:	1220000
Relative Standard Error:	3.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.09867	10.0	2175128.0	0.49335	Y
2	IC 410-107390/17	0.5	0.250301	10.0	2170550.0	0.500601	Y
3	IC 410-107390/16	1.0	0.534557	10.0	2146917.0	0.534557	Y
4	IC 410-107390/15	2.0	1.06675	10.0	2156681.0	0.533375	Y
5	IC 410-107390/14	5.0	2.605236	10.0	2135112.0	0.521047	Y
6	ICIS 410-107390/13	10.0	5.204734	10.0	2148304.0	0.520473	Y
7	IC 410-107390/12	25.0	12.608372	10.0	2140113.0	0.504335	Y



Calibration

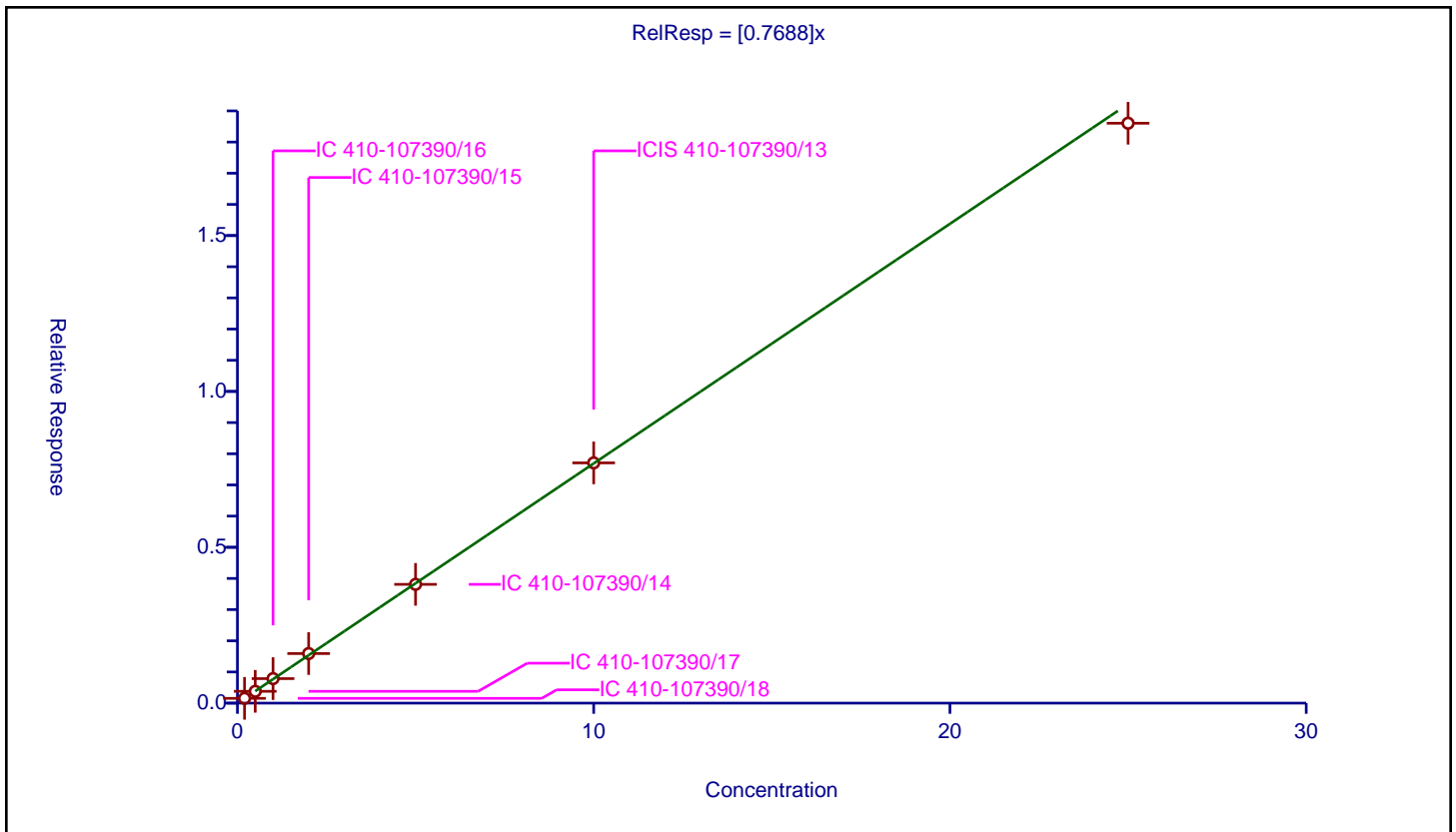
/ Carbon disulfide

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.7688

Error Coefficients	
Standard Error:	1800000
Relative Standard Error:	2.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.153104	10.0	2175128.0	0.765518	Y
2	IC 410-107390/17	0.5	0.378839	10.0	2170550.0	0.757679	Y
3	IC 410-107390/16	1.0	0.78656	10.0	2146917.0	0.78656	Y
4	IC 410-107390/15	2.0	1.590309	10.0	2156681.0	0.795155	Y
5	IC 410-107390/14	5.0	3.810428	10.0	2135112.0	0.762086	Y
6	ICIS 410-107390/13	10.0	7.70755	10.0	2148304.0	0.770755	Y
7	IC 410-107390/12	25.0	18.604209	10.0	2140113.0	0.744168	Y



Calibration

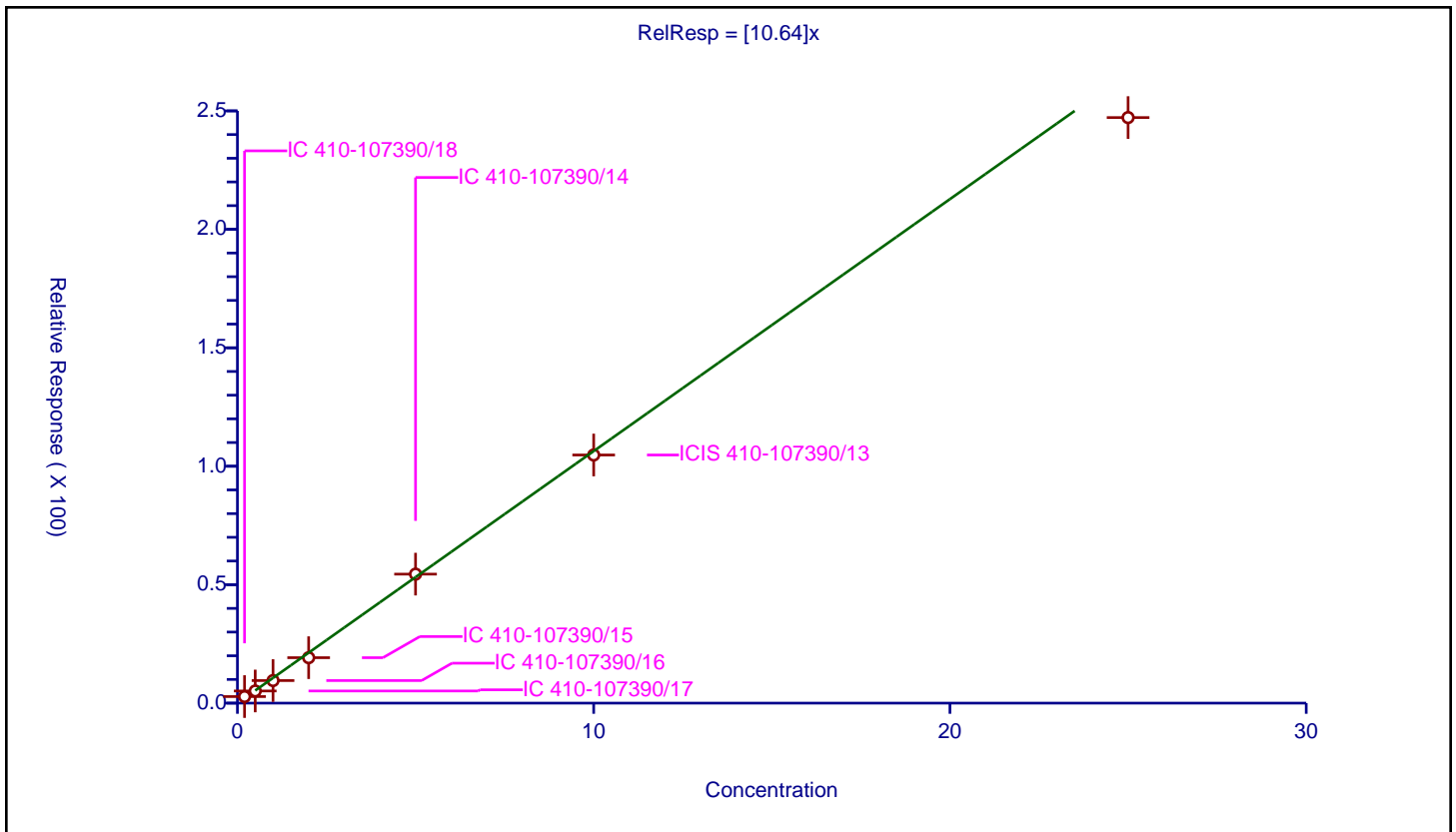
/ Methyl acetate

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	10.64

Error Coefficients	
Standard Error:	355000
Relative Standard Error:	14.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.969

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	2.766006	50.0	175560.0	13.83003	Y
2	IC 410-107390/17	0.5	5.130853	50.0	186889.0	10.261706	Y
3	IC 410-107390/16	1.0	9.526231	50.0	165165.0	9.526231	Y
4	IC 410-107390/15	2.0	19.183542	50.0	167112.0	9.591771	Y
5	IC 410-107390/14	5.0	54.45789	50.0	152718.0	10.891578	Y
6	ICIS 410-107390/13	10.0	104.740782	50.0	155217.0	10.474078	Y
7	IC 410-107390/12	25.0	247.179006	50.0	158827.0	9.88716	Y



Calibration

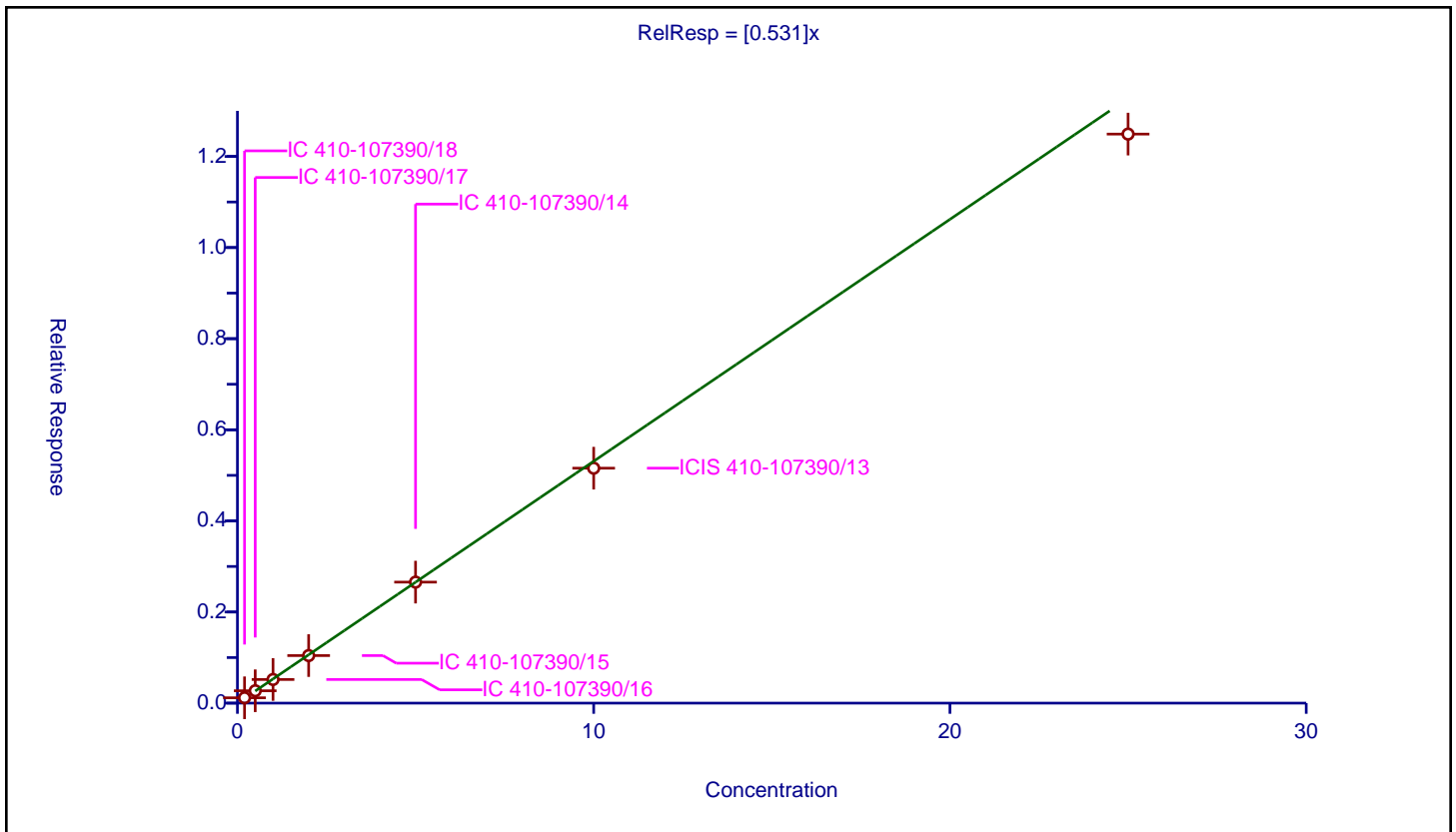
/ 3-Chloro-1-propene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.531

Error Coefficients	
Standard Error:	1210000
Relative Standard Error:	5.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.117271	10.0	2175128.0	0.586356	Y
2	IC 410-107390/17	0.5	0.271521	10.0	2170550.0	0.543042	Y
3	IC 410-107390/16	1.0	0.518818	10.0	2146917.0	0.518818	Y
4	IC 410-107390/15	2.0	1.043641	10.0	2156681.0	0.52182	Y
5	IC 410-107390/14	5.0	2.656432	10.0	2135112.0	0.531286	Y
6	ICIS 410-107390/13	10.0	5.157296	10.0	2148304.0	0.51573	Y
7	IC 410-107390/12	25.0	12.490668	10.0	2140113.0	0.499627	Y



Calibration

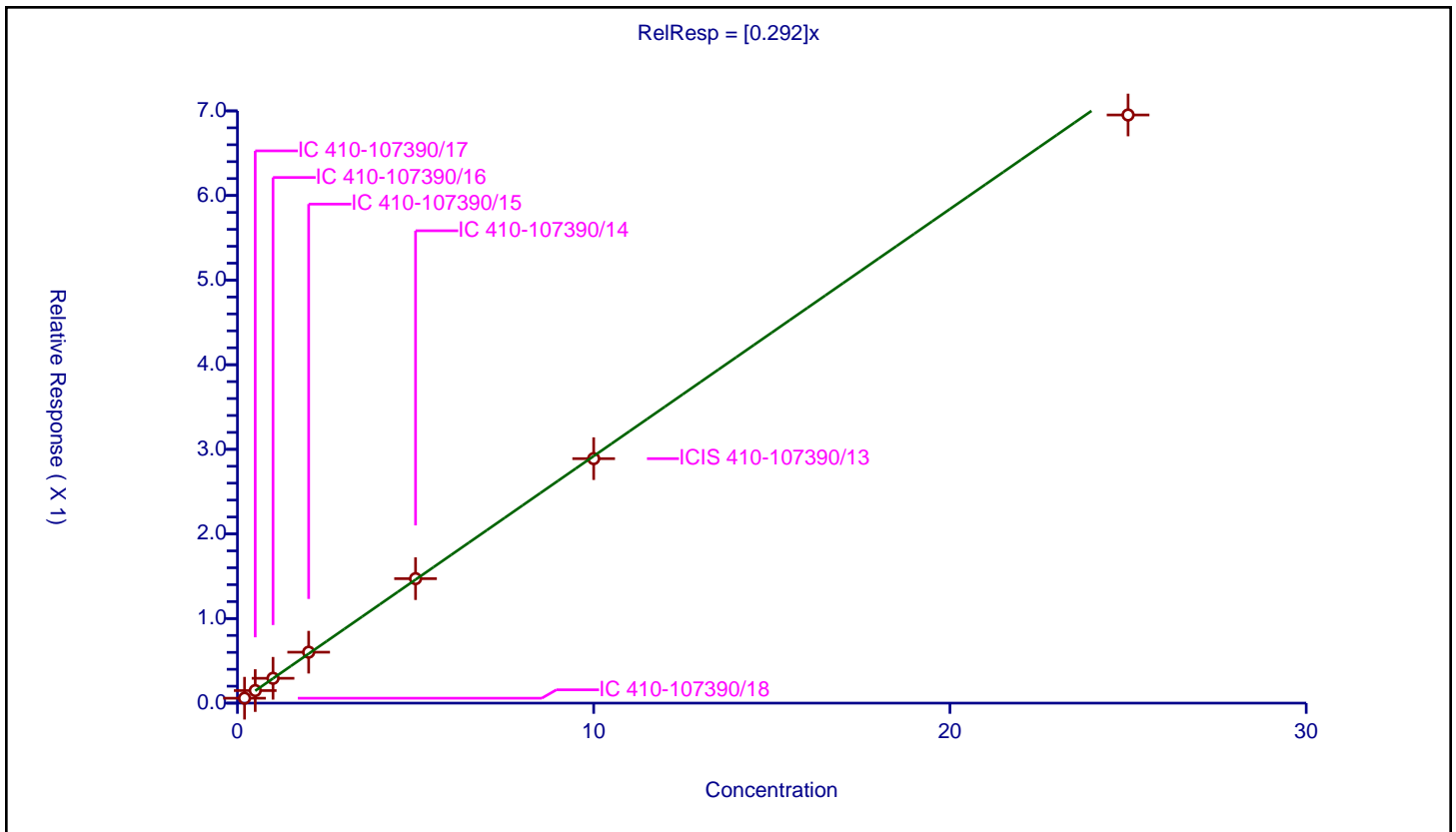
/ Methylene Chloride

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.292

Error Coefficients	
Standard Error:	673000
Relative Standard Error:	2.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.058199	10.0	2175128.0	0.290994	Y
2	IC 410-107390/17	0.5	0.148506	10.0	2170550.0	0.297012	Y
3	IC 410-107390/16	1.0	0.293607	10.0	2146917.0	0.293607	Y
4	IC 410-107390/15	2.0	0.602152	10.0	2156681.0	0.301076	Y
5	IC 410-107390/14	5.0	1.471127	10.0	2135112.0	0.294225	Y
6	ICIS 410-107390/13	10.0	2.889628	10.0	2148304.0	0.288963	Y
7	IC 410-107390/12	25.0	6.951979	10.0	2140113.0	0.278079	Y



Calibration

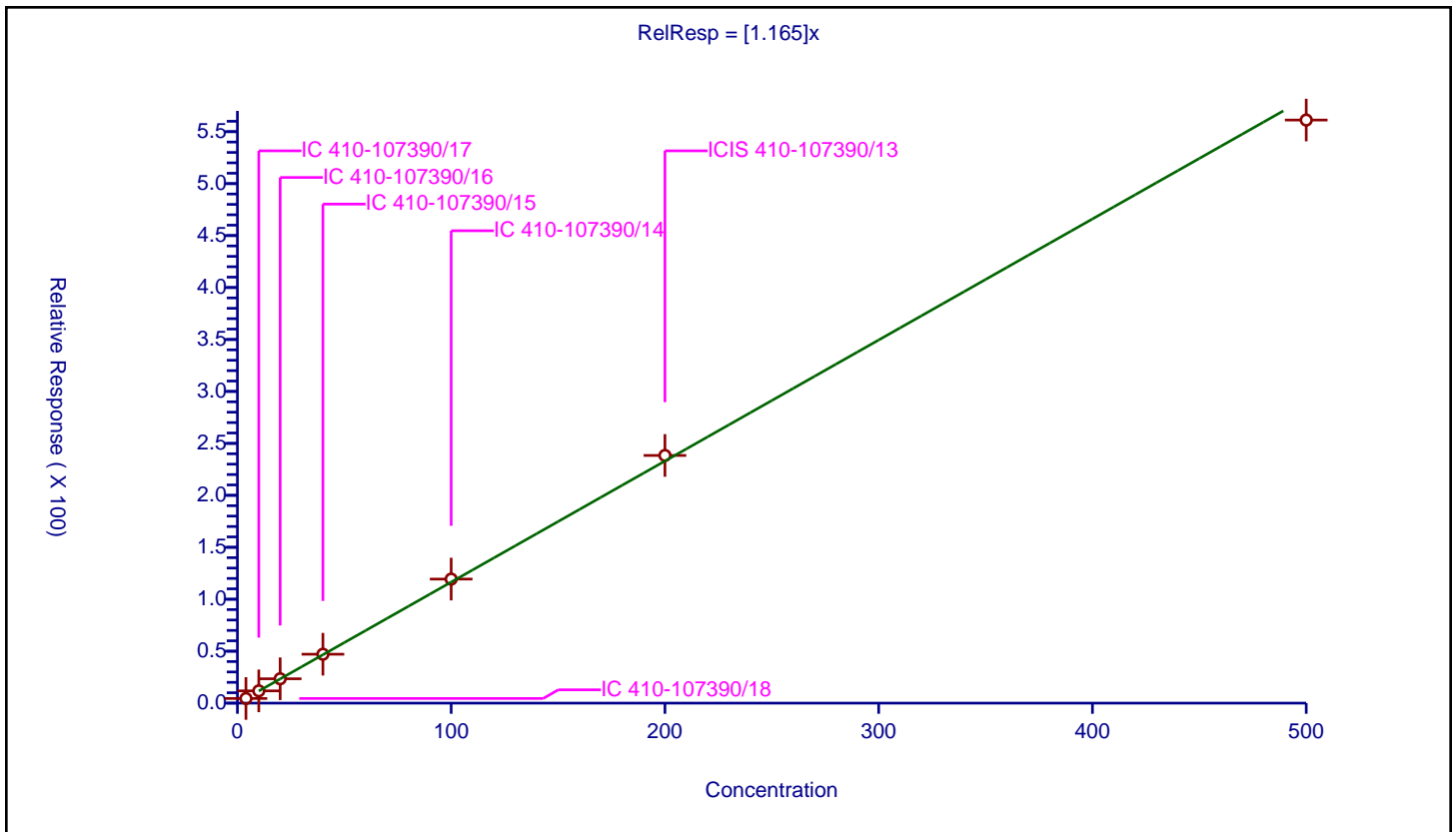
/ 2-Methyl-2-propanol

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.165

Error Coefficients	
Standard Error:	805000
Relative Standard Error:	2.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	4.0	4.471121	50.0	175560.0	1.11778	Y
2	IC 410-107390/17	10.0	11.795237	50.0	186889.0	1.179524	Y
3	IC 410-107390/16	20.0	23.448067	50.0	165165.0	1.172403	Y
4	IC 410-107390/15	40.0	47.074417	50.0	167112.0	1.17686	Y
5	IC 410-107390/14	100.0	119.389005	50.0	152718.0	1.19389	Y
6	ICIS 410-107390/13	200.0	238.37724	50.0	155217.0	1.191886	Y
7	IC 410-107390/12	500.0	561.170015	50.0	158827.0	1.12234	Y



Calibration

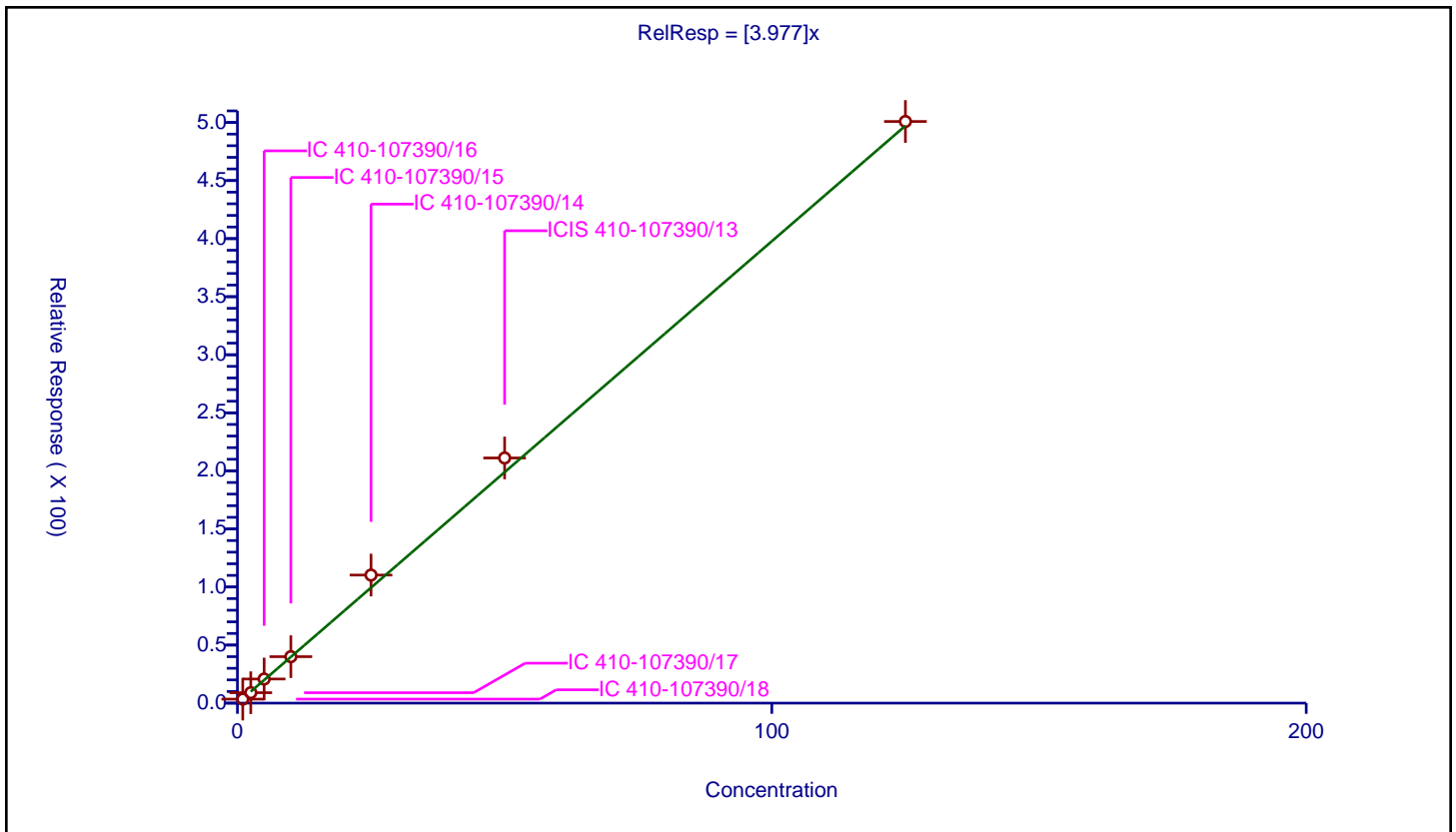
/ Acrylonitrile

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	3.977

Error Coefficients	
Standard Error:	718000
Relative Standard Error:	8.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	1.0	3.459786	50.0	175560.0	3.459786	Y
2	IC 410-107390/17	2.5	8.9711	50.0	186889.0	3.58844	Y
3	IC 410-107390/16	5.0	20.757122	50.0	165165.0	4.151424	Y
4	IC 410-107390/15	10.0	40.019269	50.0	167112.0	4.001927	Y
5	IC 410-107390/14	25.0	110.288571	50.0	152718.0	4.411543	Y
6	ICIS 410-107390/13	50.0	211.111863	50.0	155217.0	4.222237	Y
7	IC 410-107390/12	125.0	500.879573	50.0	158827.0	4.007037	Y



Calibration

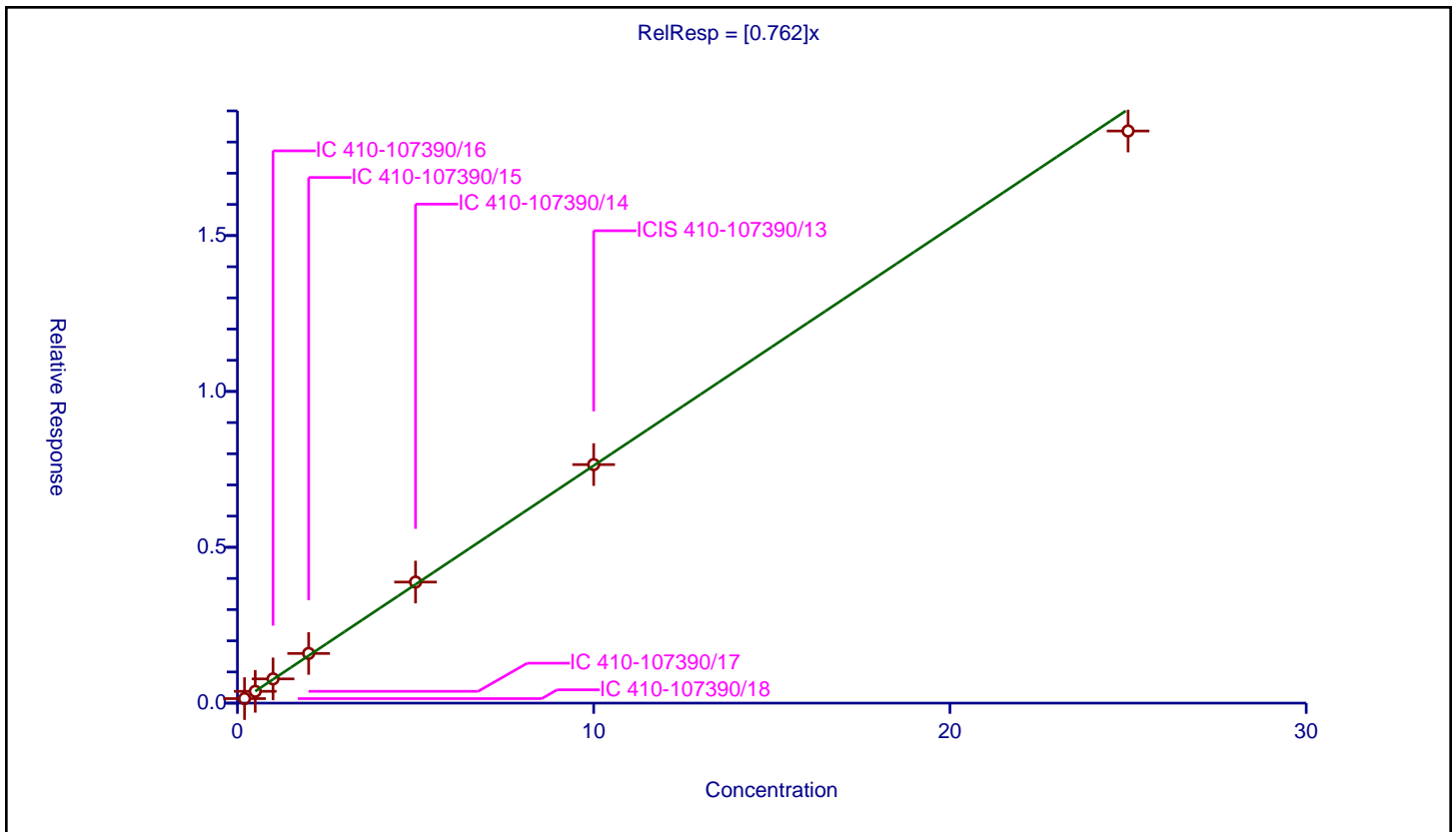
/ Methyl tert-butyl ether

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.762

Error Coefficients	
Standard Error:	1780000
Relative Standard Error:	3.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.145122	10.0	2175128.0	0.725612	Y
2	IC 410-107390/17	0.5	0.378591	10.0	2170550.0	0.757181	Y
3	IC 410-107390/16	1.0	0.77752	10.0	2146917.0	0.77752	Y
4	IC 410-107390/15	2.0	1.594186	10.0	2156681.0	0.797093	Y
5	IC 410-107390/14	5.0	3.884129	10.0	2135112.0	0.776826	Y
6	ICIS 410-107390/13	10.0	7.652986	10.0	2148304.0	0.765299	Y
7	IC 410-107390/12	25.0	18.354867	10.0	2140113.0	0.734195	Y



Calibration

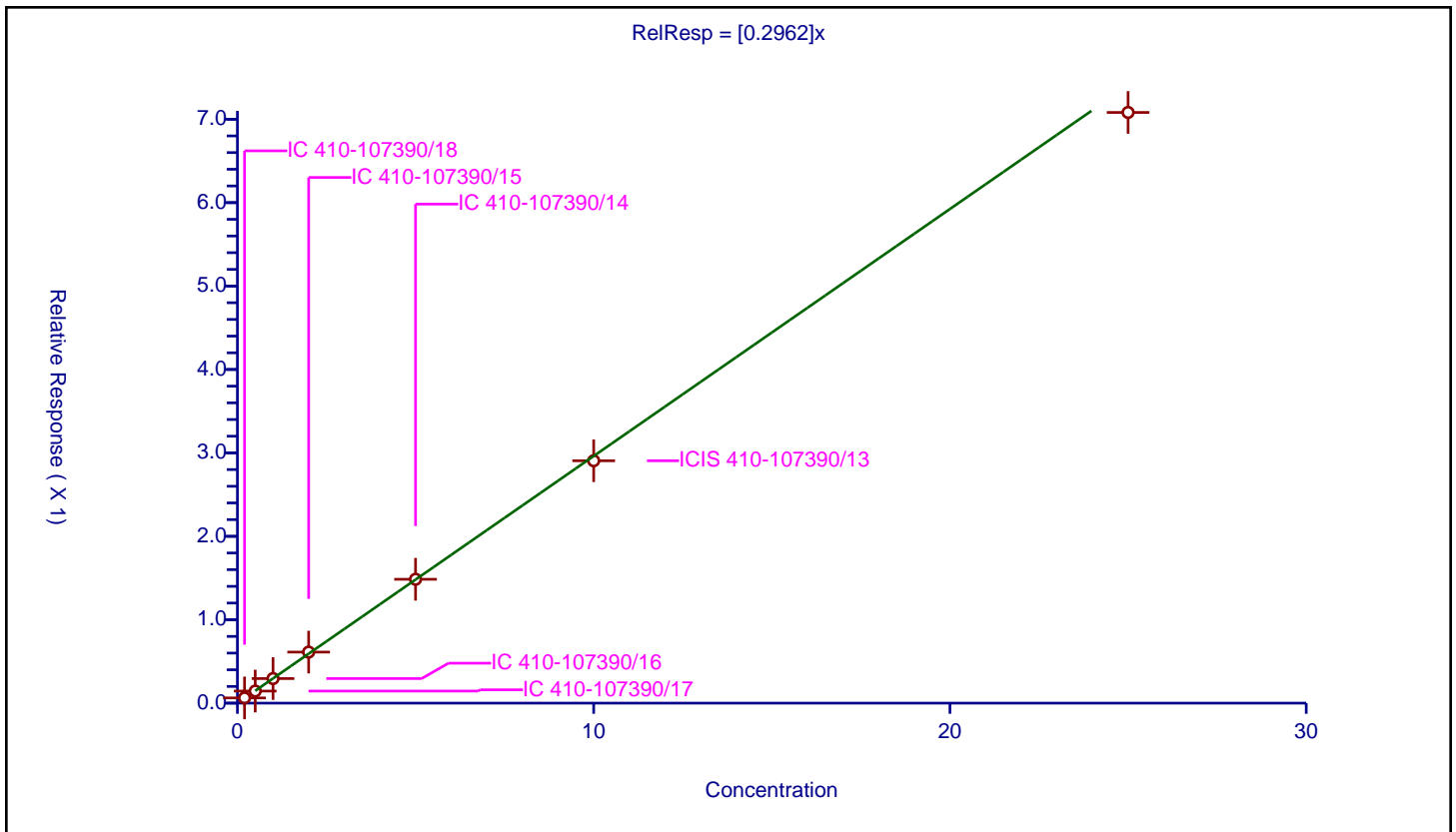
/ trans-1,2-Dichloroethene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2962

Error Coefficients	
Standard Error:	684000
Relative Standard Error:	3.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.062456	10.0	2175128.0	0.31228	Y
2	IC 410-107390/17	0.5	0.144894	10.0	2170550.0	0.289788	Y
3	IC 410-107390/16	1.0	0.294464	10.0	2146917.0	0.294464	Y
4	IC 410-107390/15	2.0	0.61194	10.0	2156681.0	0.30597	Y
5	IC 410-107390/14	5.0	1.48484	10.0	2135112.0	0.296968	Y
6	ICIS 410-107390/13	10.0	2.905646	10.0	2148304.0	0.290565	Y
7	IC 410-107390/12	25.0	7.081187	10.0	2140113.0	0.283247	Y



Calibration

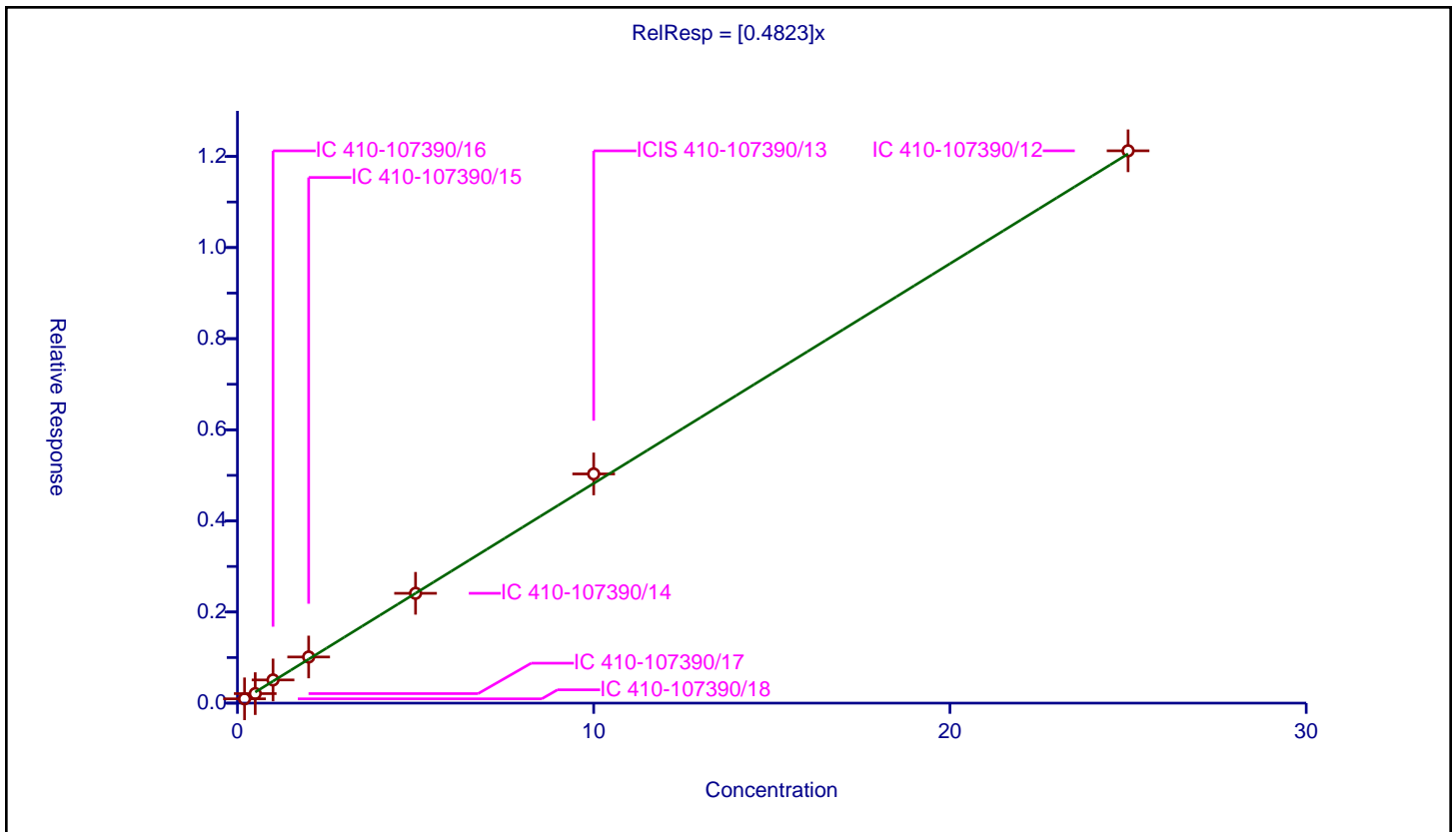
/ Hexane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4823

Error Coefficients	
Standard Error:	1170000
Relative Standard Error:	6.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.094477	10.0	2175128.0	0.472386	Y
2	IC 410-107390/17	0.5	0.20909	10.0	2170550.0	0.41818	Y
3	IC 410-107390/16	1.0	0.509065	10.0	2146917.0	0.509065	Y
4	IC 410-107390/15	2.0	1.012625	10.0	2156681.0	0.506313	Y
5	IC 410-107390/14	5.0	2.410543	10.0	2135112.0	0.482109	Y
6	ICIS 410-107390/13	10.0	5.030713	10.0	2148304.0	0.503071	Y
7	IC 410-107390/12	25.0	12.124182	10.0	2140113.0	0.484967	Y



Calibration

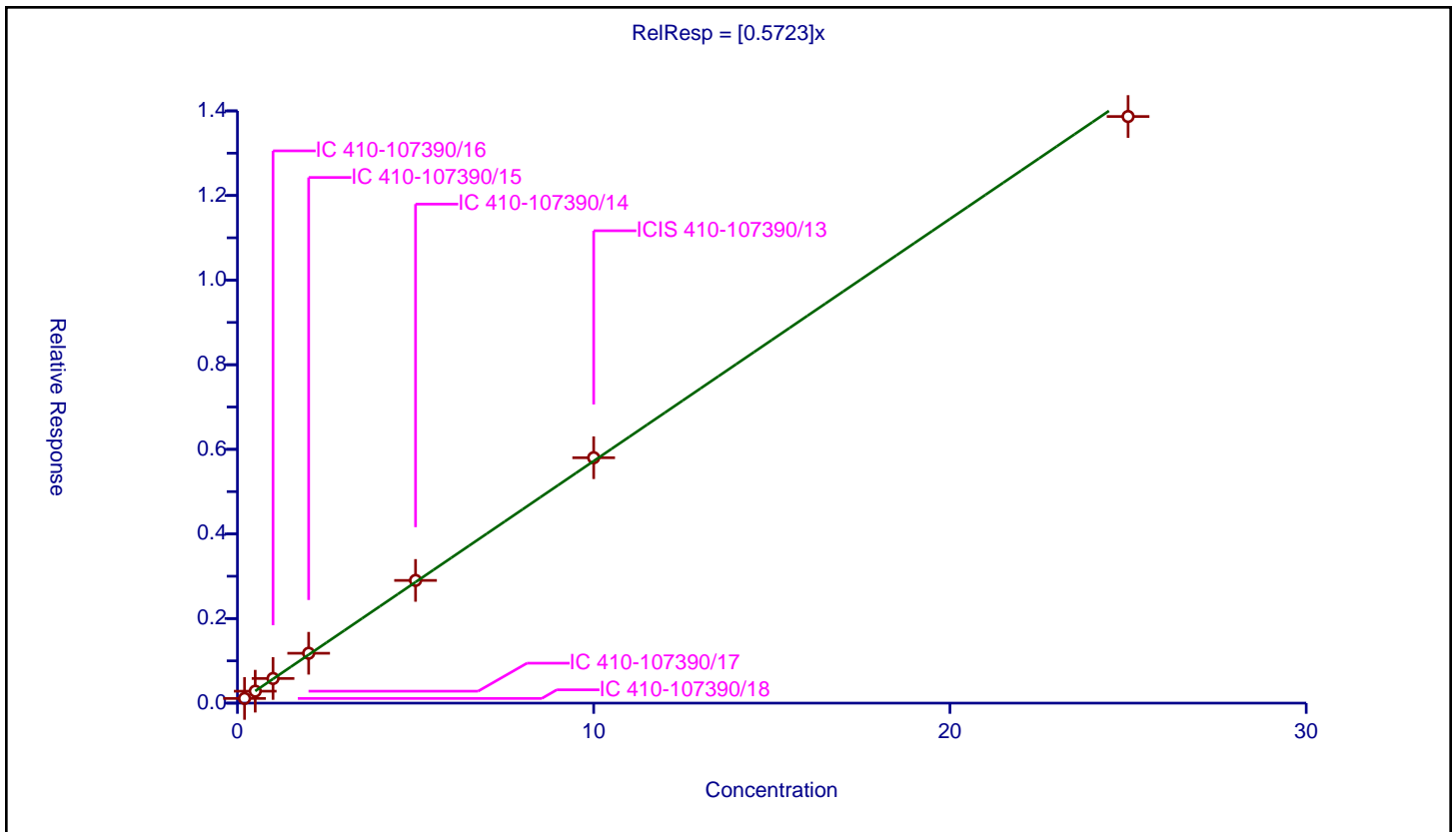
/ 1,1-Dichloroethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.5723

Error Coefficients	
Standard Error:	1340000
Relative Standard Error:	2.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.11077	10.0	2175128.0	0.553852	Y
2	IC 410-107390/17	0.5	0.282546	10.0	2170550.0	0.565092	Y
3	IC 410-107390/16	1.0	0.582603	10.0	2146917.0	0.582603	Y
4	IC 410-107390/15	2.0	1.178895	10.0	2156681.0	0.589447	Y
5	IC 410-107390/14	5.0	2.900588	10.0	2135112.0	0.580118	Y
6	ICIS 410-107390/13	10.0	5.801246	10.0	2148304.0	0.580125	Y
7	IC 410-107390/12	25.0	13.867338	10.0	2140113.0	0.554694	Y



Calibration

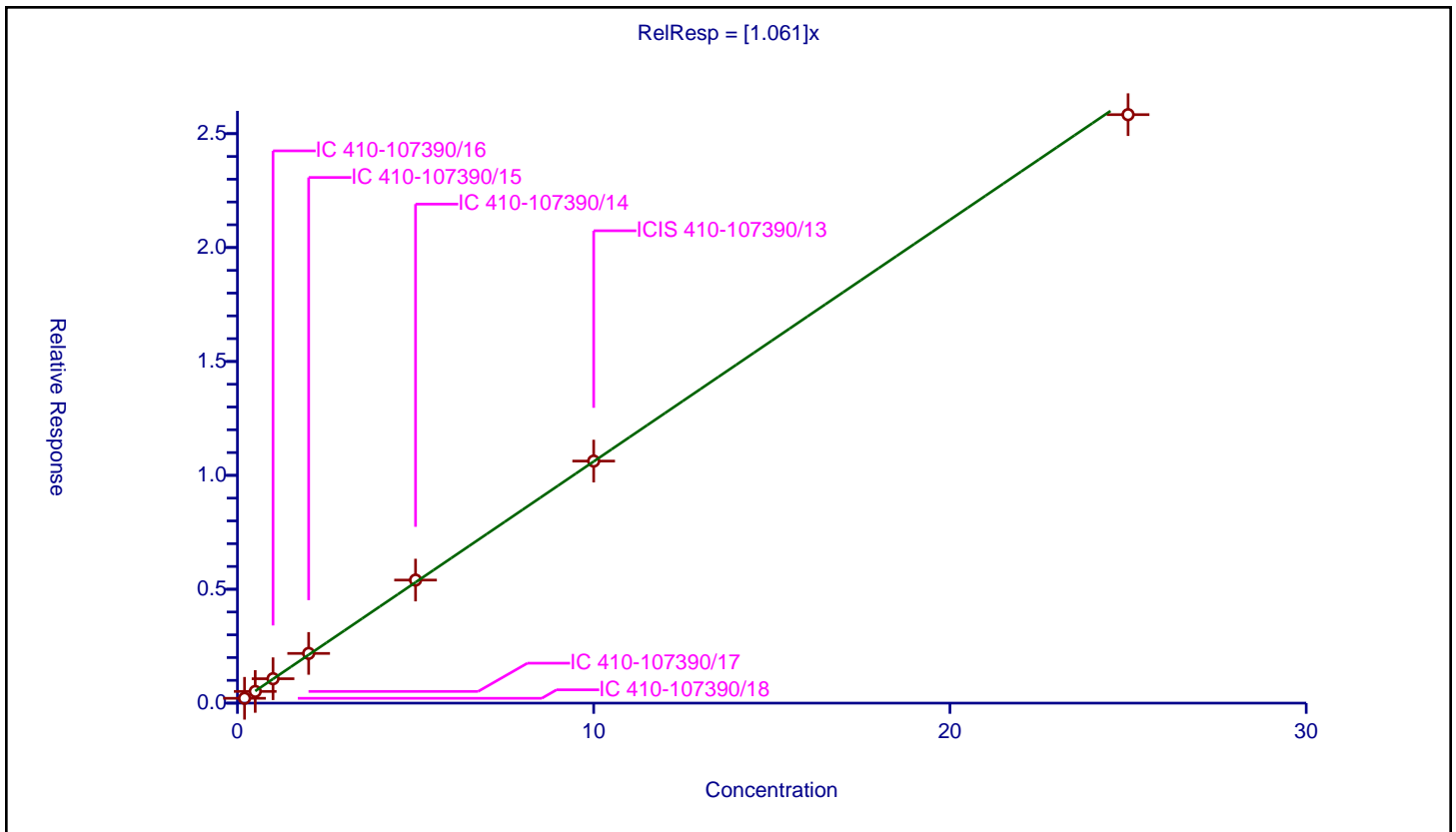
/ Isopropyl ether

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.061

Error Coefficients	
Standard Error:	2500000
Relative Standard Error:	2.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.21167	10.0	2175128.0	1.058352	Y
2	IC 410-107390/17	0.5	0.514086	10.0	2170550.0	1.028173	Y
3	IC 410-107390/16	1.0	1.071737	10.0	2146917.0	1.071737	Y
4	IC 410-107390/15	2.0	2.182163	10.0	2156681.0	1.091082	Y
5	IC 410-107390/14	5.0	5.402148	10.0	2135112.0	1.08043	Y
6	ICIS 410-107390/13	10.0	10.626722	10.0	2148304.0	1.062672	Y
7	IC 410-107390/12	25.0	25.834552	10.0	2140113.0	1.033382	Y



Calibration

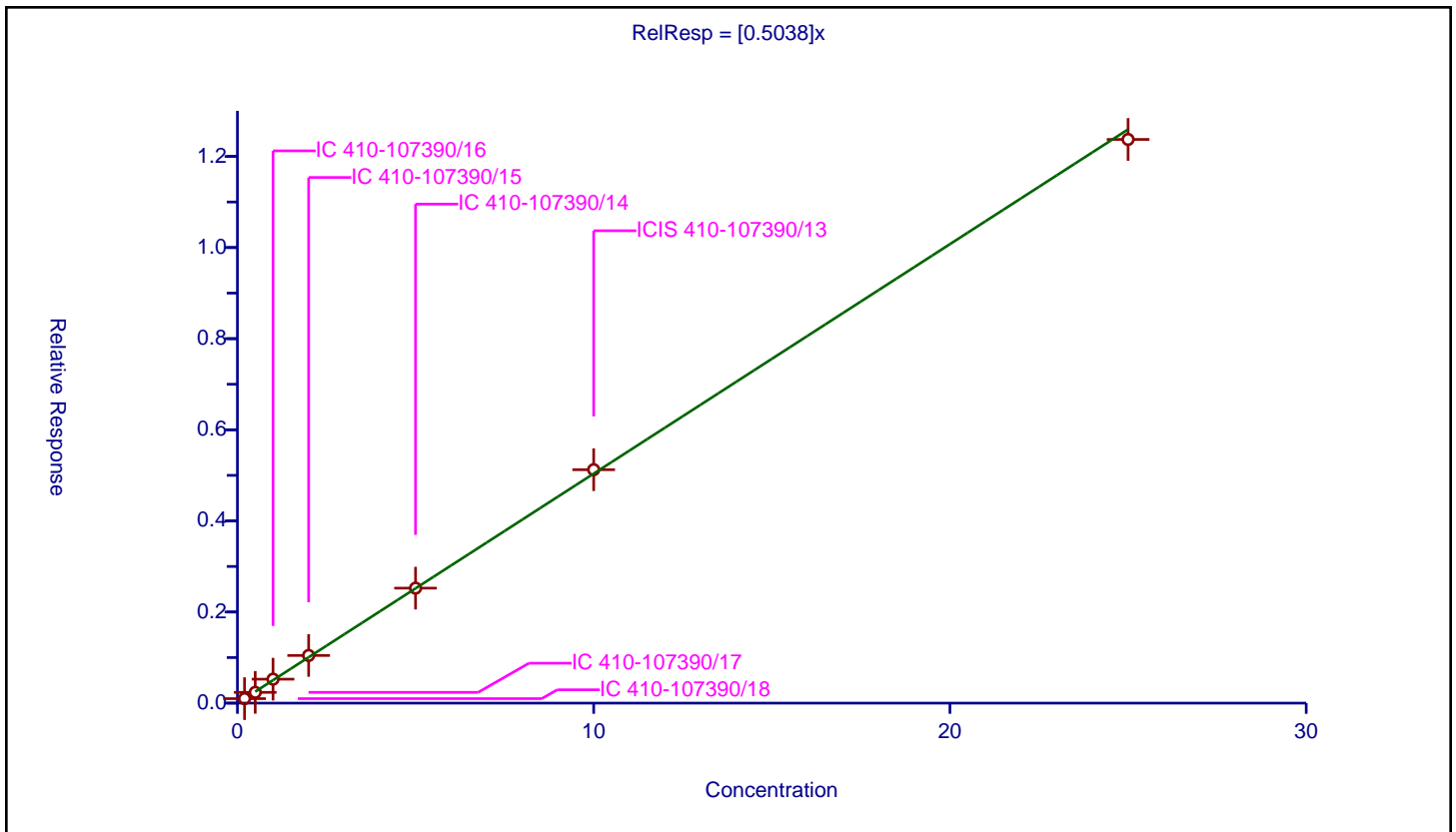
/ 2-Chloro-1,3-butadiene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.5038

Error Coefficients	
Standard Error:	1200000
Relative Standard Error:	3.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.098426	10.0	2175128.0	0.492132	Y
2	IC 410-107390/17	0.5	0.236636	10.0	2170550.0	0.473272	Y
3	IC 410-107390/16	1.0	0.525698	10.0	2146917.0	0.525698	Y
4	IC 410-107390/15	2.0	1.046098	10.0	2156681.0	0.523049	Y
5	IC 410-107390/14	5.0	2.523989	10.0	2135112.0	0.504798	Y
6	ICIS 410-107390/13	10.0	5.124098	10.0	2148304.0	0.51241	Y
7	IC 410-107390/12	25.0	12.373038	10.0	2140113.0	0.494922	Y



Calibration

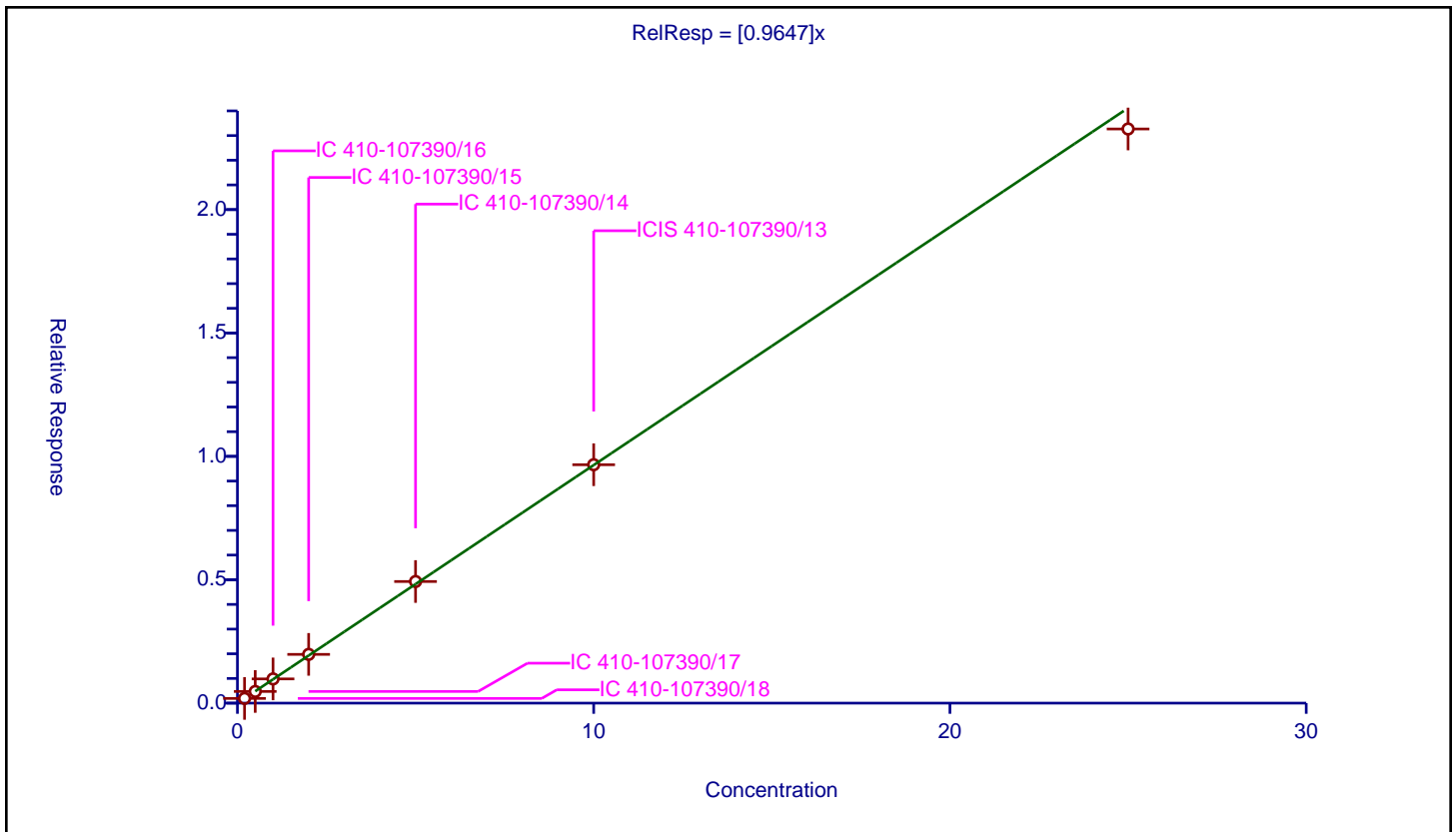
/ Tert-butyl ethyl ether

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.9647

Error Coefficients	
Standard Error:	2250000
Relative Standard Error:	2.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.190927	10.0	2175128.0	0.954633	Y
2	IC 410-107390/17	0.5	0.472908	10.0	2170550.0	0.945816	Y
3	IC 410-107390/16	1.0	0.981556	10.0	2146917.0	0.981556	Y
4	IC 410-107390/15	2.0	1.976092	10.0	2156681.0	0.988046	Y
5	IC 410-107390/14	5.0	4.929006	10.0	2135112.0	0.985801	Y
6	ICIS 410-107390/13	10.0	9.661831	10.0	2148304.0	0.966183	Y
7	IC 410-107390/12	25.0	23.266926	10.0	2140113.0	0.930677	Y



Calibration

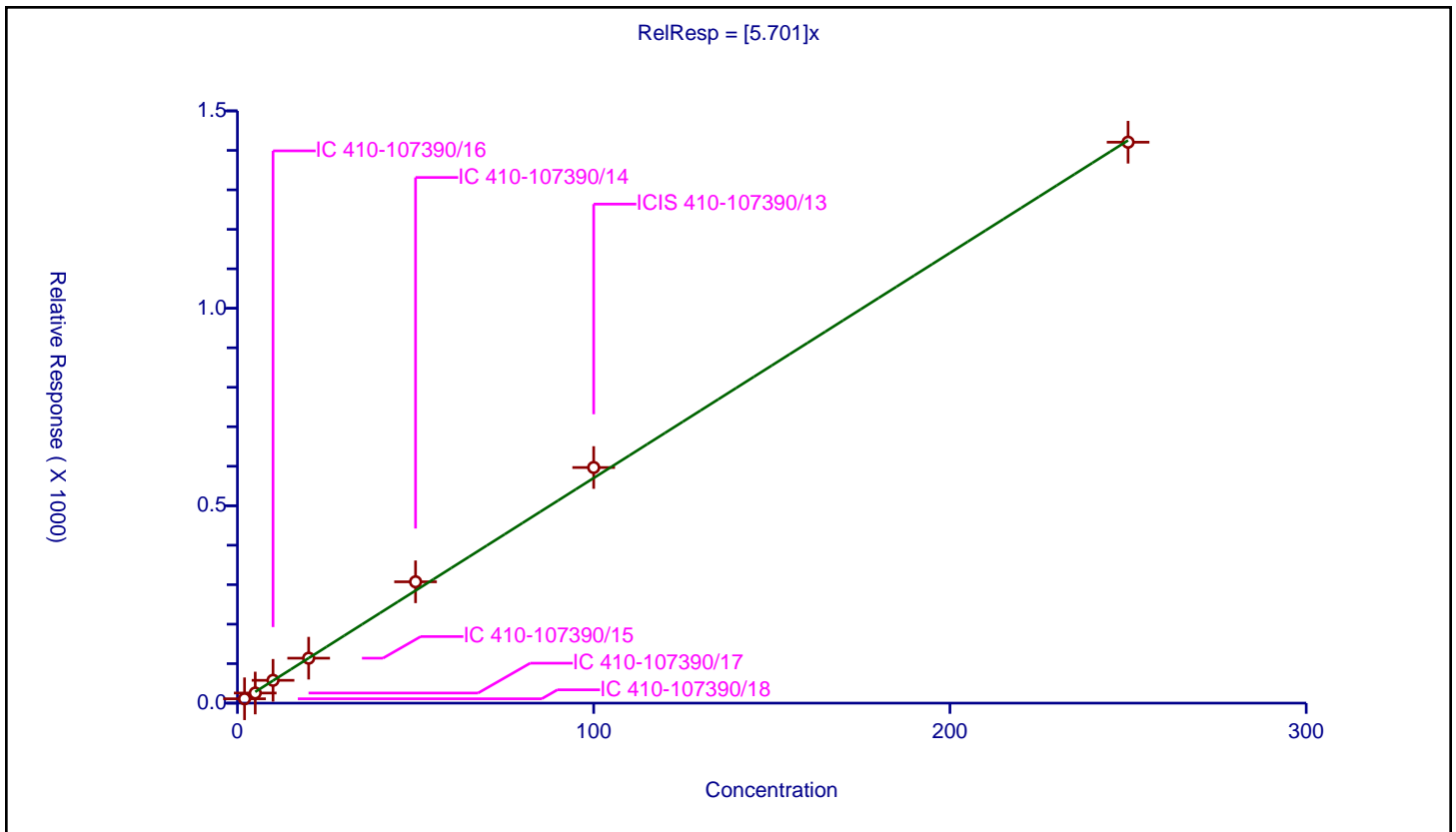
/ 2-Butanone (MEK)

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	5.701

Error Coefficients	
Standard Error:	2040000
Relative Standard Error:	5.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	2.0	11.042663	50.0	175560.0	5.521332	Y
2	IC 410-107390/17	5.0	25.623231	50.0	186889.0	5.124646	Y
3	IC 410-107390/16	10.0	57.748615	50.0	165165.0	5.774862	Y
4	IC 410-107390/15	20.0	113.843111	50.0	167112.0	5.692156	Y
5	IC 410-107390/14	50.0	307.293508	50.0	152718.0	6.14587	Y
6	ICIS 410-107390/13	100.0	596.750356	50.0	155217.0	5.967504	Y
7	IC 410-107390/12	250.0	1420.668715	50.0	158827.0	5.682675	Y



Calibration

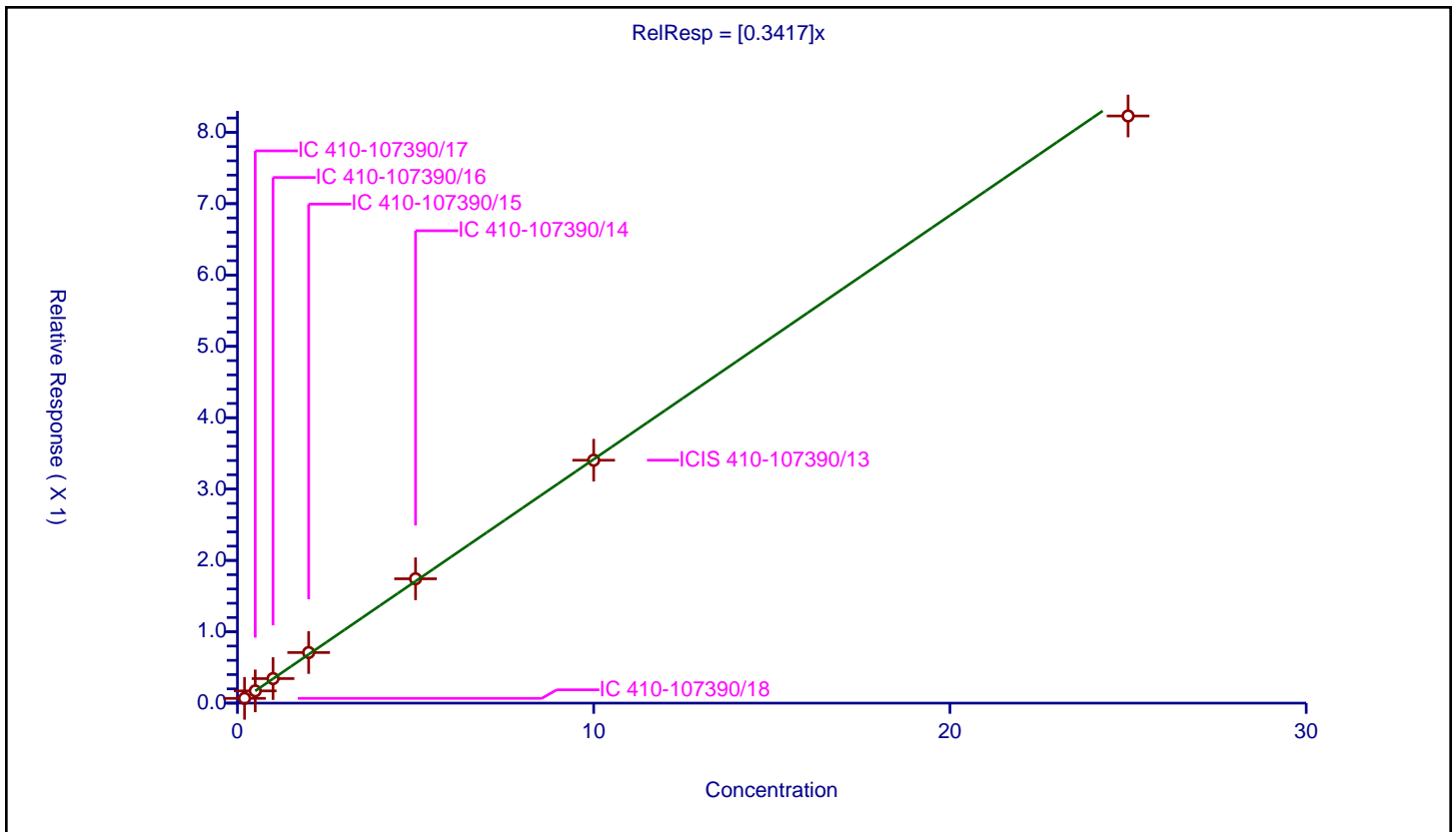
/ cis-1,2-Dichloroethene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3417

Error Coefficients	
Standard Error:	796000
Relative Standard Error:	2.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.066465	10.0	2175128.0	0.332325	Y
2	IC 410-107390/17	0.5	0.171579	10.0	2170550.0	0.343157	Y
3	IC 410-107390/16	1.0	0.344126	10.0	2146917.0	0.344126	Y
4	IC 410-107390/15	2.0	0.70889	10.0	2156681.0	0.354445	Y
5	IC 410-107390/14	5.0	1.742606	10.0	2135112.0	0.348521	Y
6	ICIS 410-107390/13	10.0	3.404211	10.0	2148304.0	0.340421	Y
7	IC 410-107390/12	25.0	8.228724	10.0	2140113.0	0.329149	Y



Calibration

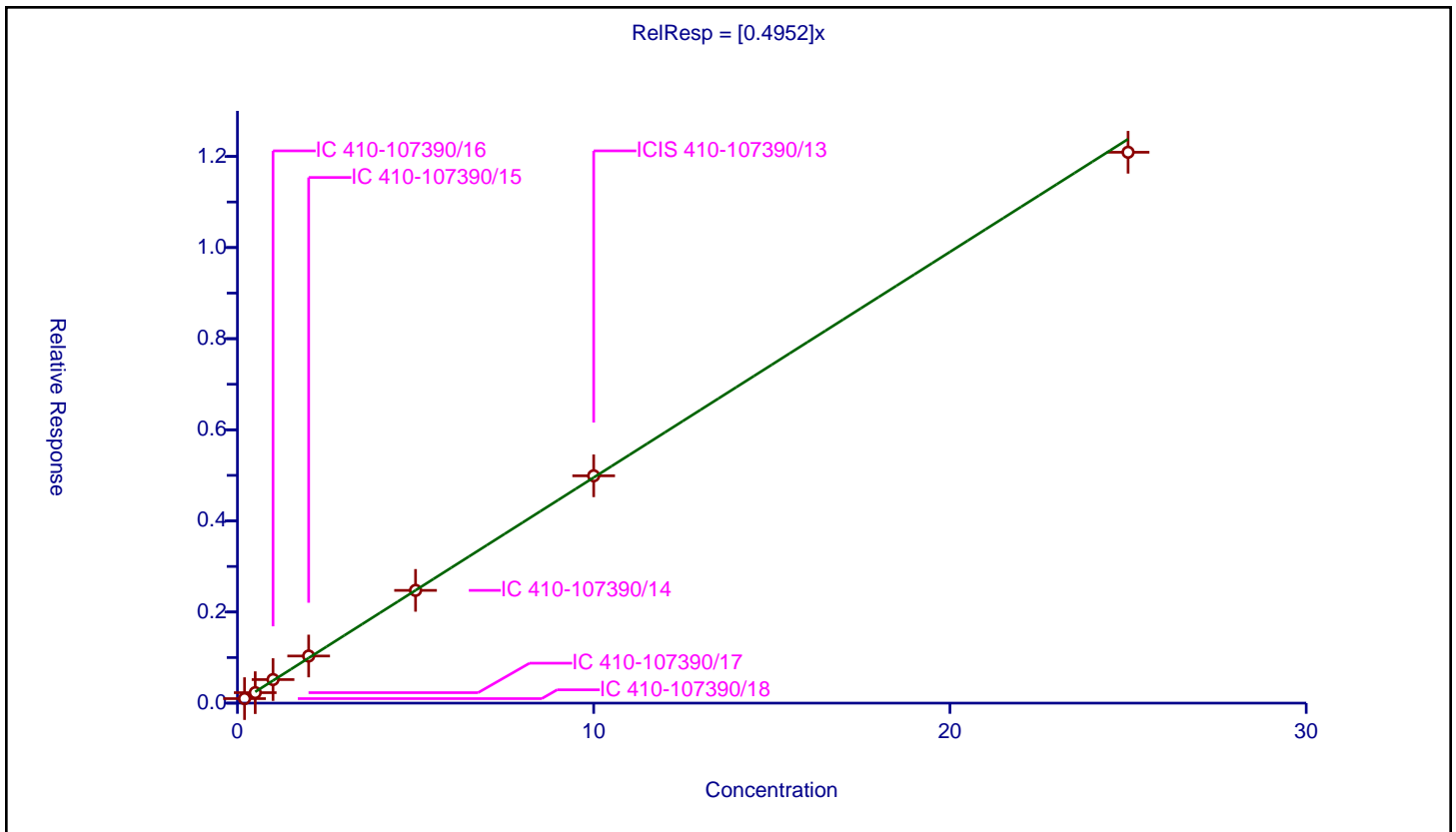
/ 2,2-Dichloropropane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4952

Error Coefficients	
Standard Error:	1170000
Relative Standard Error:	4.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.098849	10.0	2175128.0	0.494247	Y
2	IC 410-107390/17	0.5	0.230121	10.0	2170550.0	0.460243	Y
3	IC 410-107390/16	1.0	0.517323	10.0	2146917.0	0.517323	Y
4	IC 410-107390/15	2.0	1.034372	10.0	2156681.0	0.517186	Y
5	IC 410-107390/14	5.0	2.474718	10.0	2135112.0	0.494944	Y
6	ICIS 410-107390/13	10.0	4.990183	10.0	2148304.0	0.499018	Y
7	IC 410-107390/12	25.0	12.091922	10.0	2140113.0	0.483677	Y



Calibration

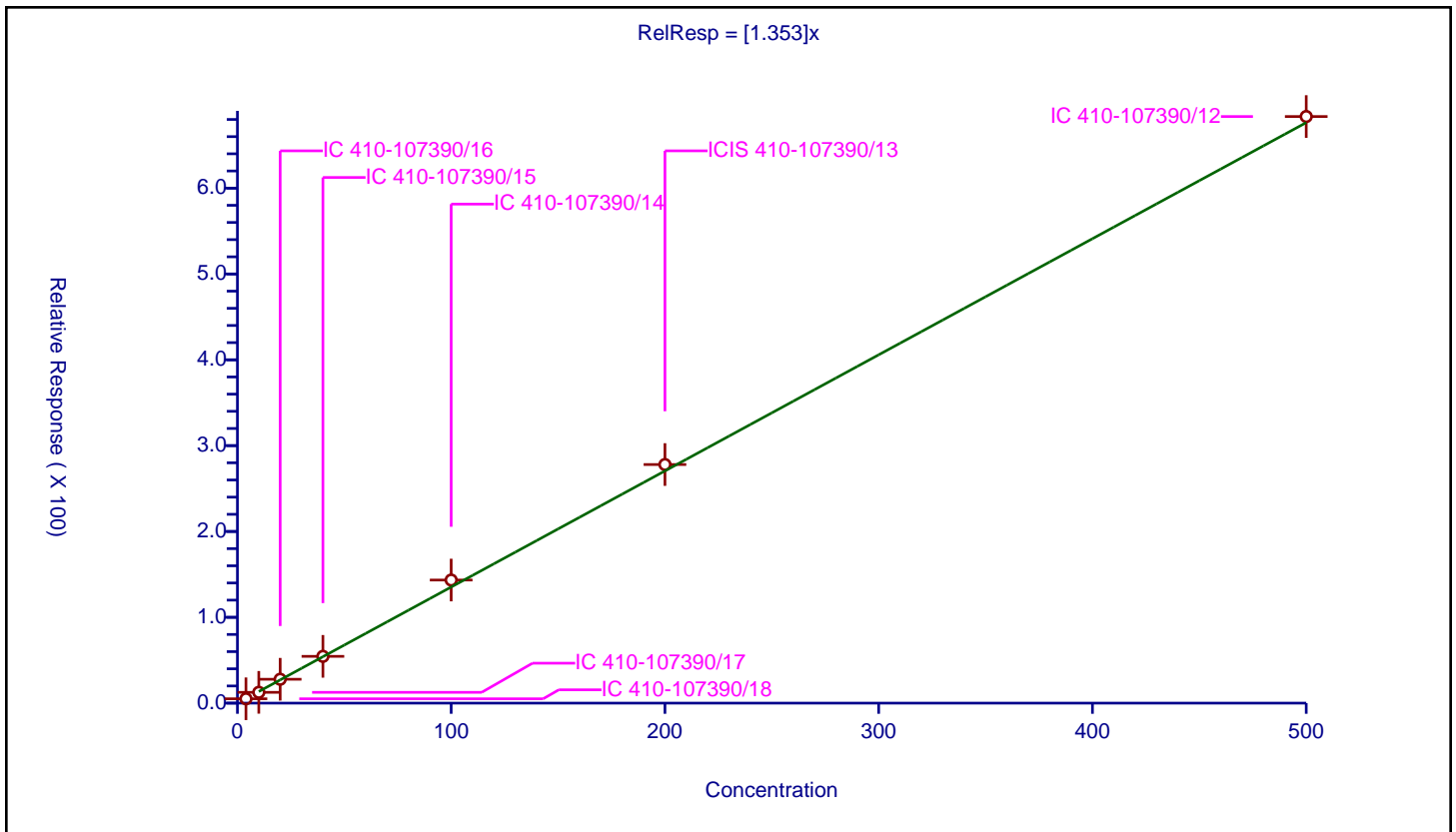
/ Propionitrile

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.353

Error Coefficients	
Standard Error:	974000
Relative Standard Error:	4.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	4.0	5.066074	50.0	175560.0	1.266519	Y
2	IC 410-107390/17	10.0	12.587151	50.0	186889.0	1.258715	Y
3	IC 410-107390/16	20.0	27.809766	50.0	165165.0	1.390488	Y
4	IC 410-107390/15	40.0	54.495488	50.0	167112.0	1.362387	Y
5	IC 410-107390/14	100.0	143.401564	50.0	152718.0	1.434016	Y
6	ICIS 410-107390/13	200.0	277.992101	50.0	155217.0	1.389961	Y
7	IC 410-107390/12	500.0	683.425362	50.0	158827.0	1.366851	Y



Calibration

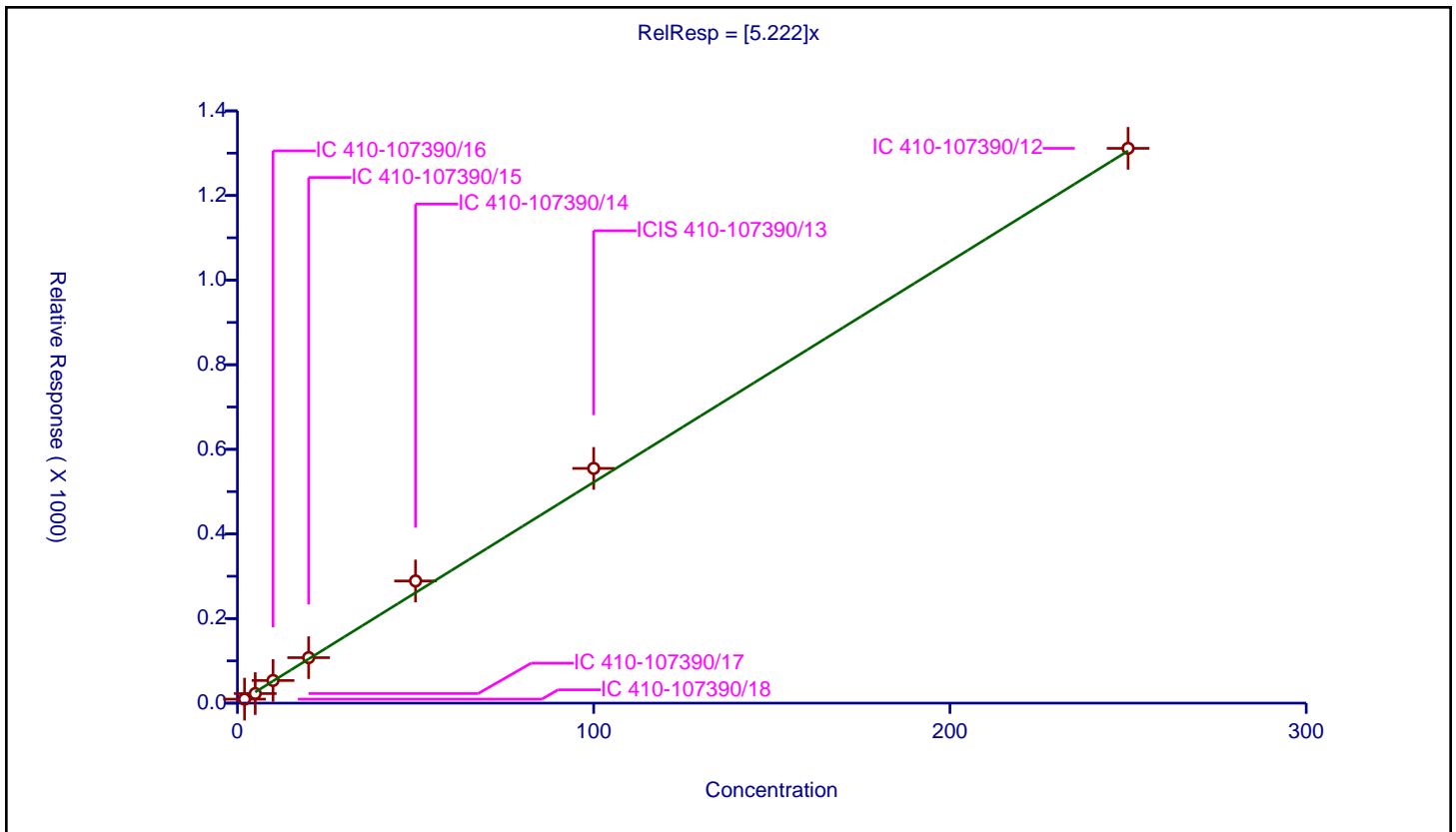
/ Methacrylonitrile

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	5.222

Error Coefficients	
Standard Error:	1880000
Relative Standard Error:	8.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	2.0	9.441501	50.0	175560.0	4.720751	Y
2	IC 410-107390/17	5.0	22.663185	50.0	186889.0	4.532637	Y
3	IC 410-107390/16	10.0	53.542215	50.0	165165.0	5.354222	Y
4	IC 410-107390/15	20.0	107.483903	50.0	167112.0	5.374195	Y
5	IC 410-107390/14	50.0	288.843162	50.0	152718.0	5.776863	Y
6	ICIS 410-107390/13	100.0	554.865124	50.0	155217.0	5.548651	Y
7	IC 410-107390/12	250.0	1311.502452	50.0	158827.0	5.24601	Y



Calibration

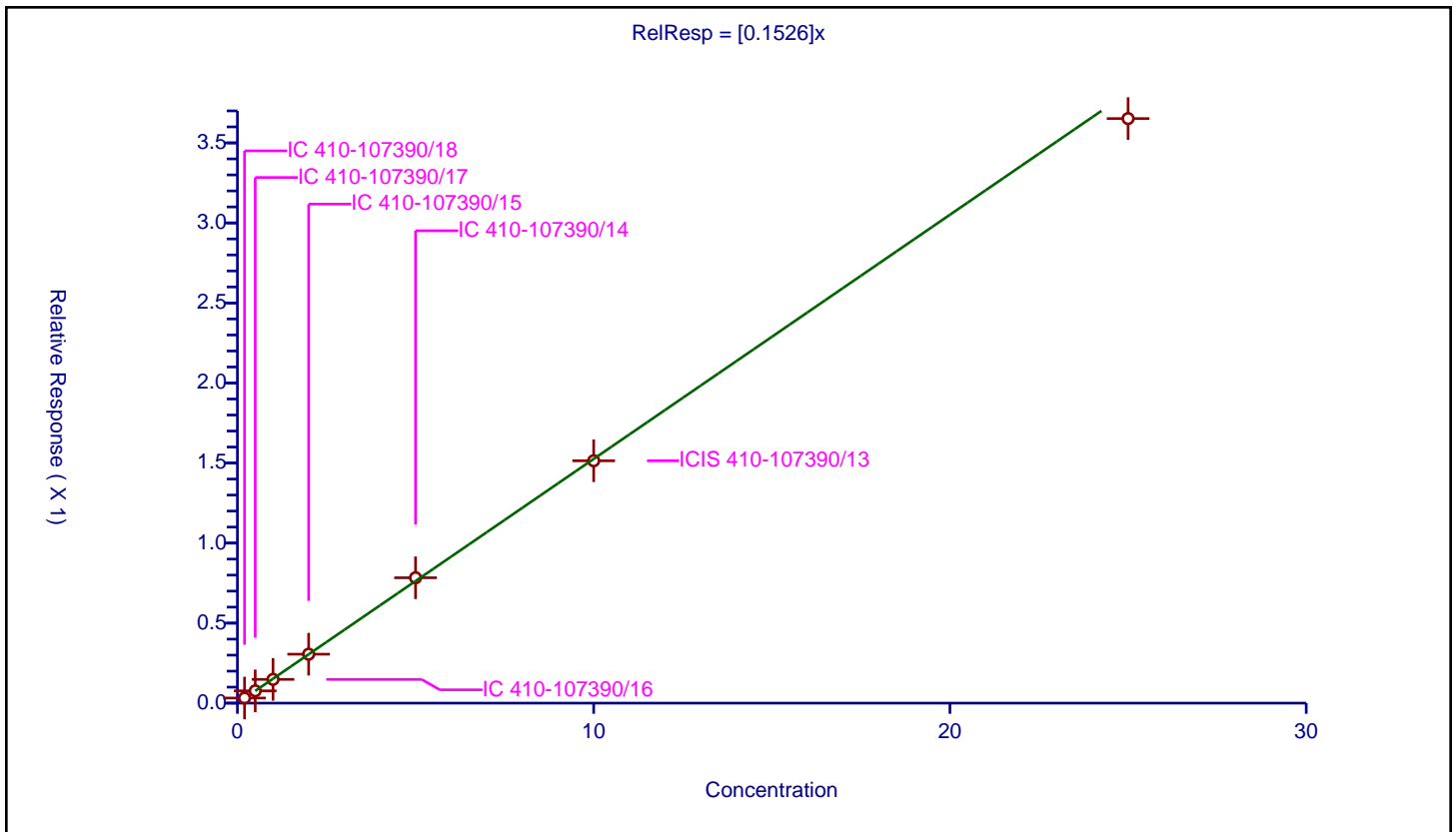
/ Chlorobromomethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.1526

Error Coefficients	
Standard Error:	354000
Relative Standard Error:	2.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.031805	10.0	2175128.0	0.159025	Y
2	IC 410-107390/17	0.5	0.076759	10.0	2170550.0	0.153519	Y
3	IC 410-107390/16	1.0	0.14832	10.0	2146917.0	0.14832	Y
4	IC 410-107390/15	2.0	0.305812	10.0	2156681.0	0.152906	Y
5	IC 410-107390/14	5.0	0.783298	10.0	2135112.0	0.15666	Y
6	ICIS 410-107390/13	10.0	1.514129	10.0	2148304.0	0.151413	Y
7	IC 410-107390/12	25.0	3.651957	10.0	2140113.0	0.146078	Y



Calibration

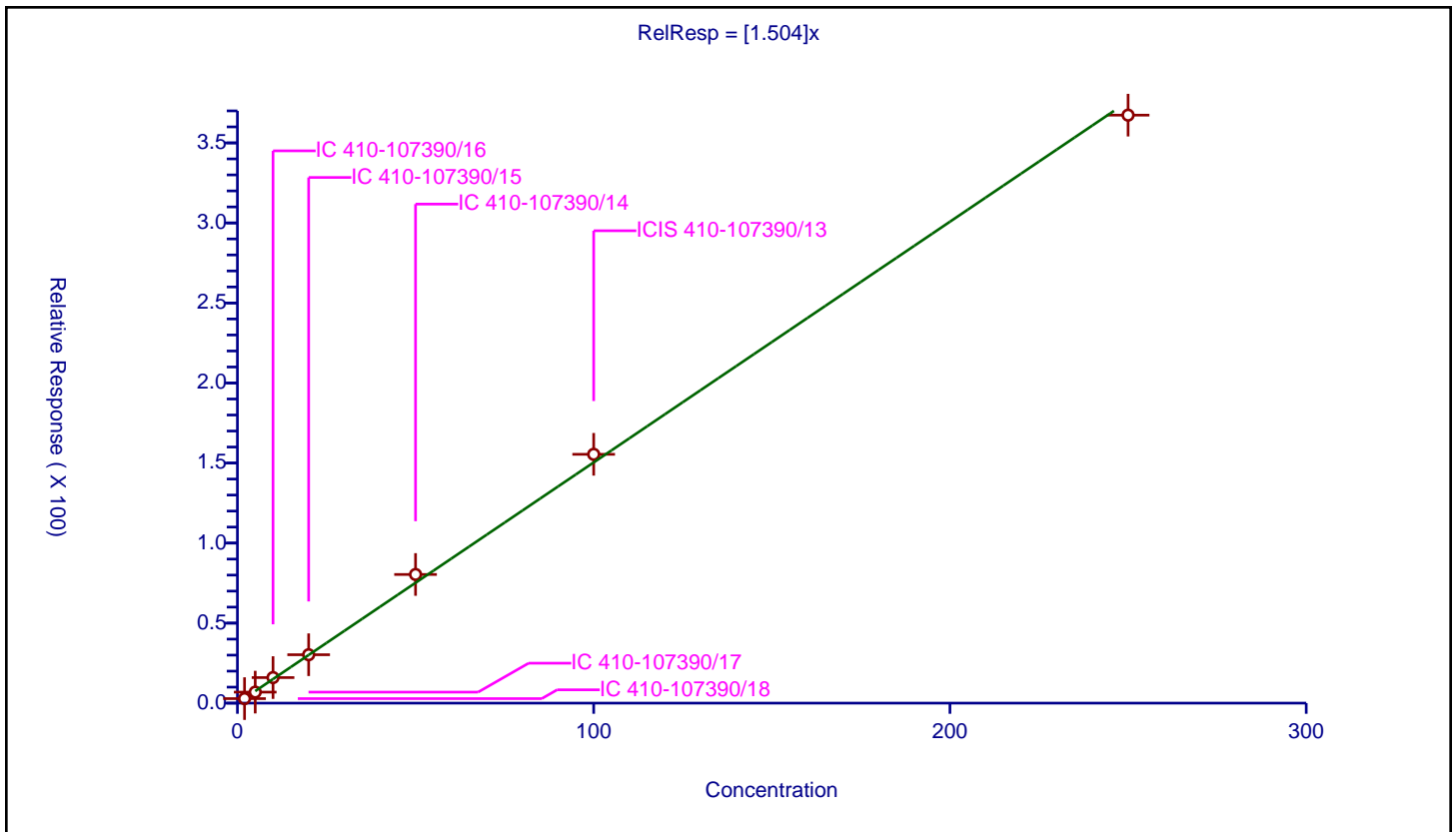
/ Tetrahydrofuran

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.504

Error Coefficients	
Standard Error:	527000
Relative Standard Error:	6.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	2.0	2.819264	50.0	175560.0	1.409632	Y
2	IC 410-107390/17	5.0	6.881625	50.0	186889.0	1.376325	Y
3	IC 410-107390/16	10.0	15.972512	50.0	165165.0	1.597251	Y
4	IC 410-107390/15	20.0	30.239301	50.0	167112.0	1.511965	Y
5	IC 410-107390/14	50.0	80.383452	50.0	152718.0	1.607669	Y
6	ICIS 410-107390/13	100.0	155.458165	50.0	155217.0	1.554582	Y
7	IC 410-107390/12	250.0	367.340251	50.0	158827.0	1.469361	Y



Calibration

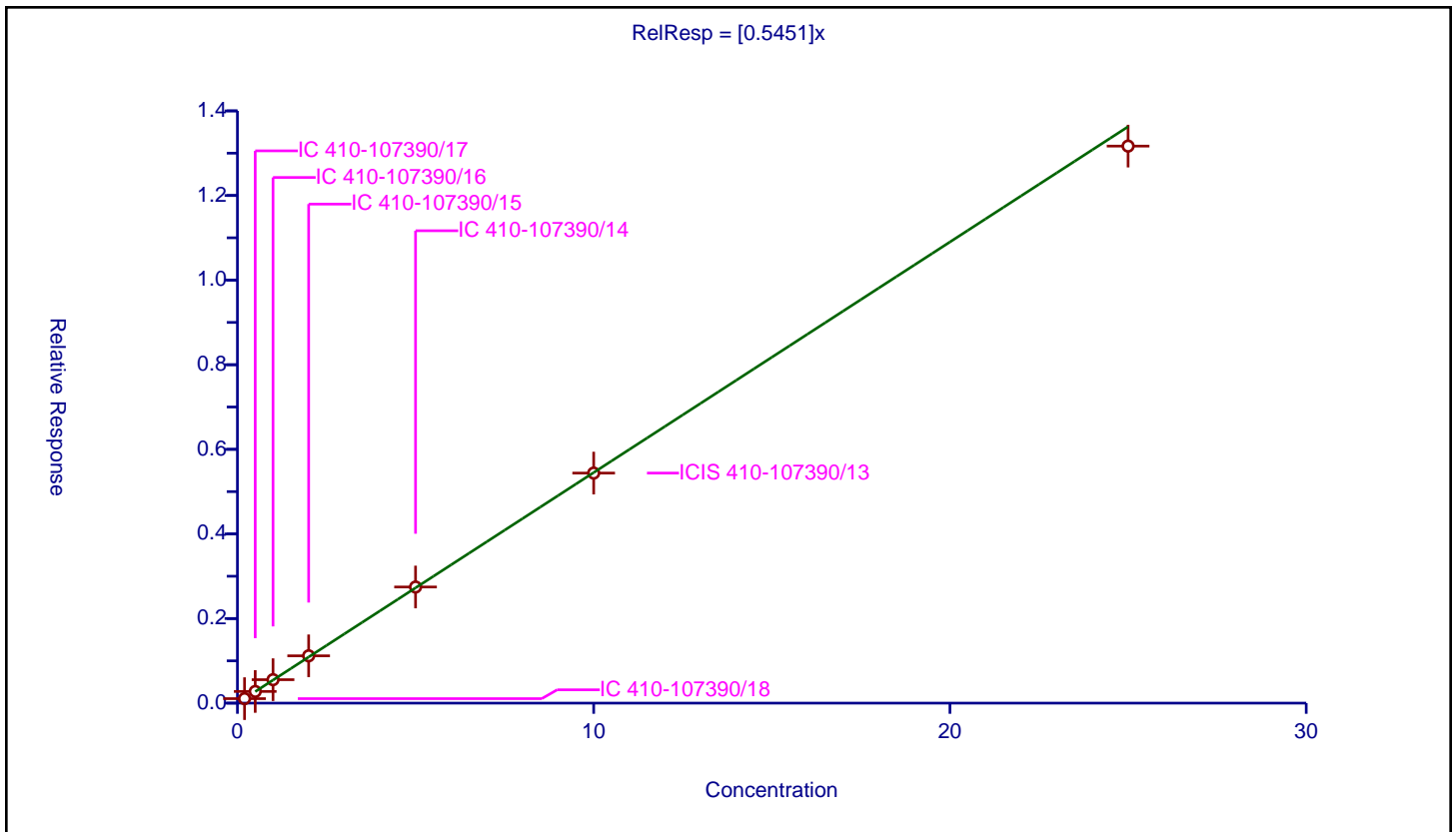
/ Chloroform

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.5451

Error Coefficients	
Standard Error:	1270000
Relative Standard Error:	2.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.106026	10.0	2175128.0	0.53013	Y
2	IC 410-107390/17	0.5	0.276253	10.0	2170550.0	0.552505	Y
3	IC 410-107390/16	1.0	0.554176	10.0	2146917.0	0.554176	Y
4	IC 410-107390/15	2.0	1.118227	10.0	2156681.0	0.559114	Y
5	IC 410-107390/14	5.0	2.745032	10.0	2135112.0	0.549006	Y
6	ICIS 410-107390/13	10.0	5.438015	10.0	2148304.0	0.543802	Y
7	IC 410-107390/12	25.0	13.167842	10.0	2140113.0	0.526714	Y



Calibration

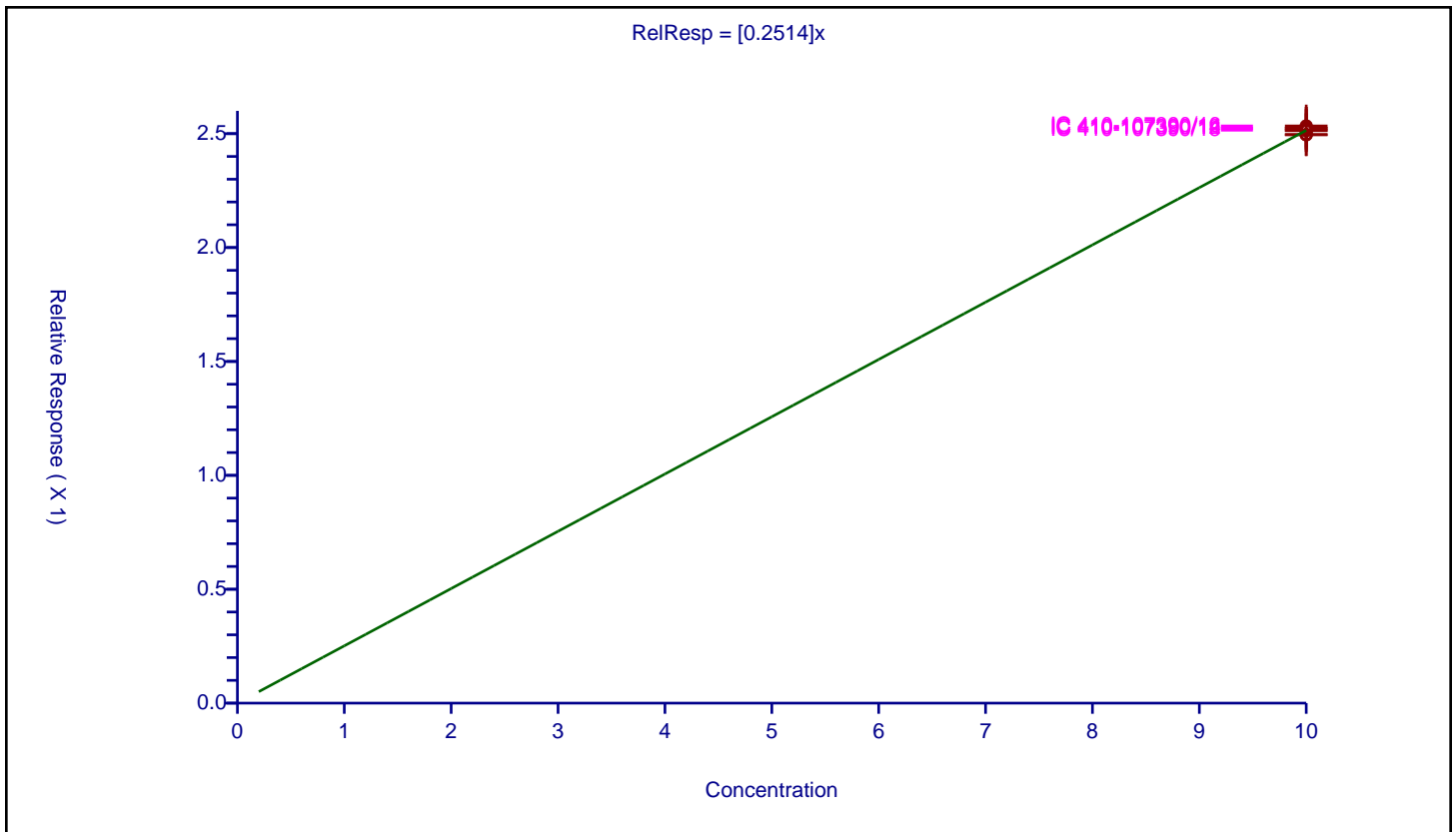
/ Dibromofluoromethane (Surr)

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2514

Error Coefficients	
Standard Error:	585000
Relative Standard Error:	0.6
Correlation Coefficient:	NA
Coefficient of Determination (Adjusted):	0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/12	10.0	2.52382	10.0	2140113.0	0.252382	Y
2	ICIS 410-107390/13	10.0	2.51301	10.0	2148304.0	0.251301	Y
3	IC 410-107390/14	10.0	2.524266	10.0	2135112.0	0.252427	Y
4	IC 410-107390/15	10.0	2.496387	10.0	2156681.0	0.249639	Y
5	IC 410-107390/16	10.0	2.533894	10.0	2146917.0	0.253389	Y
6	IC 410-107390/17	10.0	2.494778	10.0	2170550.0	0.249478	Y
7	IC 410-107390/18	10.0	2.515172	10.0	2175128.0	0.251517	Y



Calibration

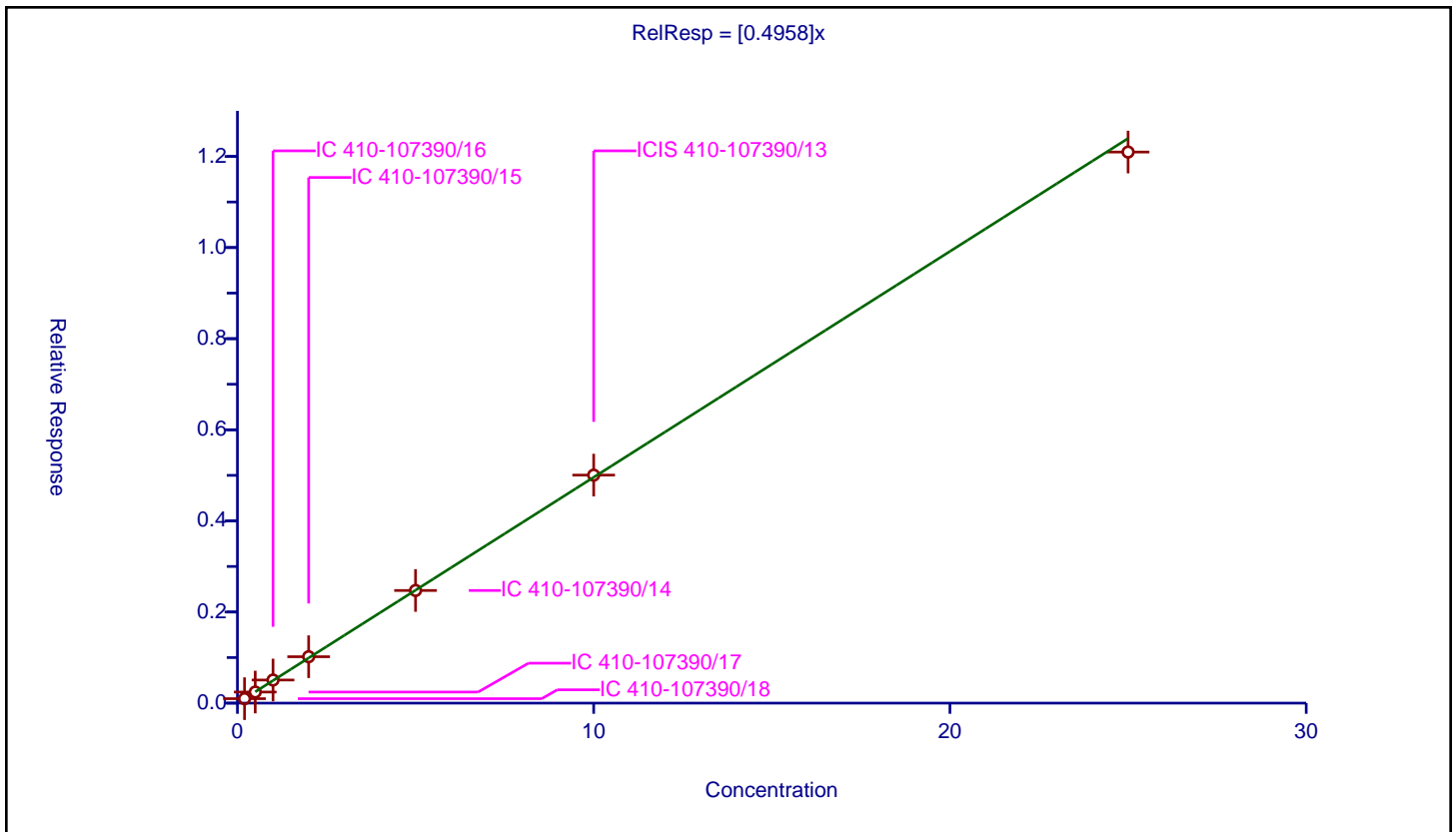
/ 1,1,1-Trichloroethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4958

Error Coefficients	
Standard Error:	1170000
Relative Standard Error:	2.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.097677	10.0	2175128.0	0.488385	Y
2	IC 410-107390/17	0.5	0.243441	10.0	2170550.0	0.486881	Y
3	IC 410-107390/16	1.0	0.507118	10.0	2146917.0	0.507118	Y
4	IC 410-107390/15	2.0	1.01882	10.0	2156681.0	0.50941	Y
5	IC 410-107390/14	5.0	2.472732	10.0	2135112.0	0.494546	Y
6	ICIS 410-107390/13	10.0	5.004967	10.0	2148304.0	0.500497	Y
7	IC 410-107390/12	25.0	12.096721	10.0	2140113.0	0.483869	Y



Calibration

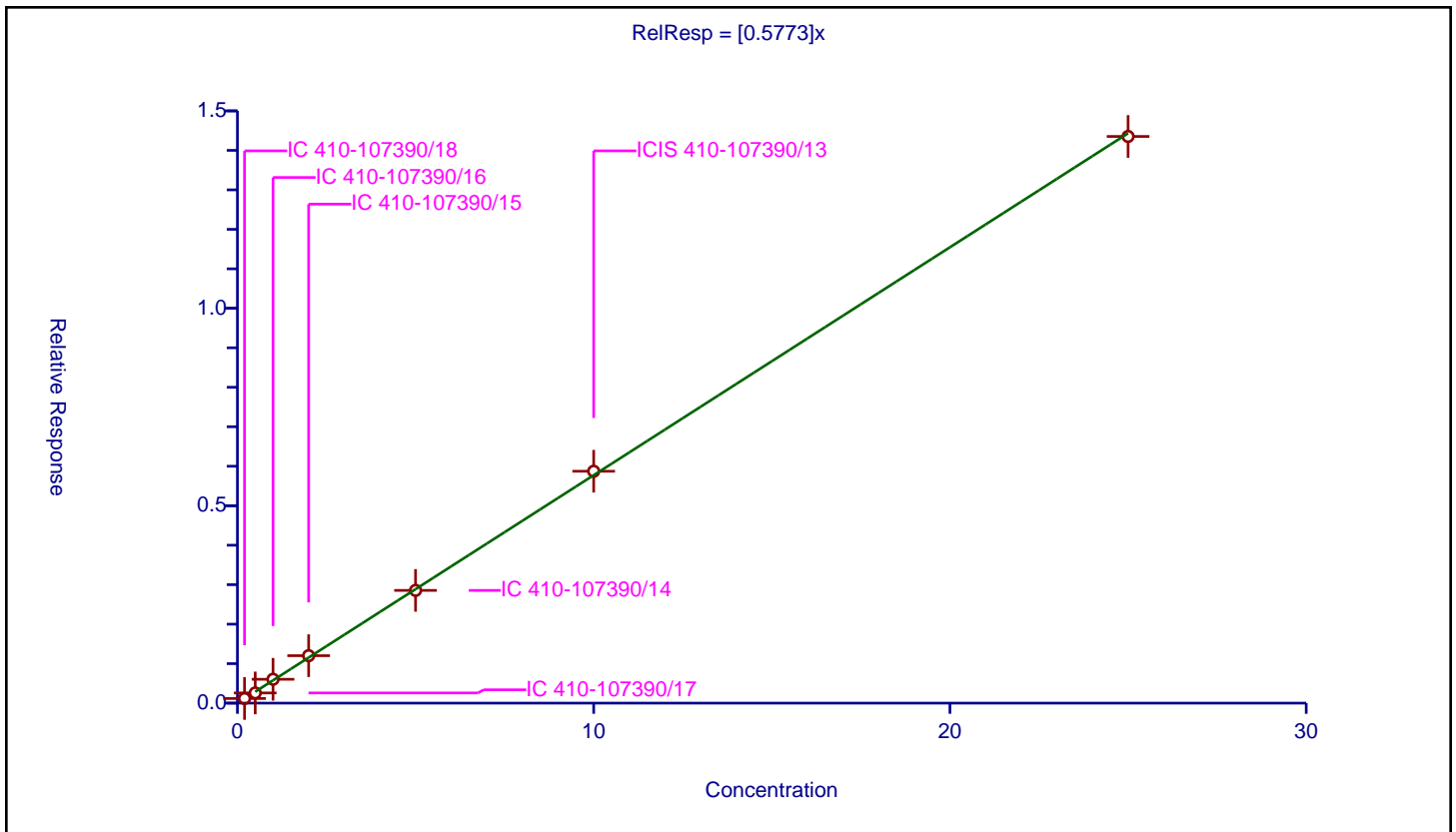
/ Cyclohexane

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.5773

Error Coefficients	
Standard Error:	1380000
Relative Standard Error:	5.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.117368	10.0	2175128.0	0.586839	Y
2	IC 410-107390/17	0.5	0.258211	10.0	2170550.0	0.516422	Y
3	IC 410-107390/16	1.0	0.604388	10.0	2146917.0	0.604388	Y
4	IC 410-107390/15	2.0	1.201935	10.0	2156681.0	0.600967	Y
5	IC 410-107390/14	5.0	2.85512	10.0	2135112.0	0.571024	Y
6	ICIS 410-107390/13	10.0	5.872996	10.0	2148304.0	0.5873	Y
7	IC 410-107390/12	25.0	14.352709	10.0	2140113.0	0.574108	Y



Calibration

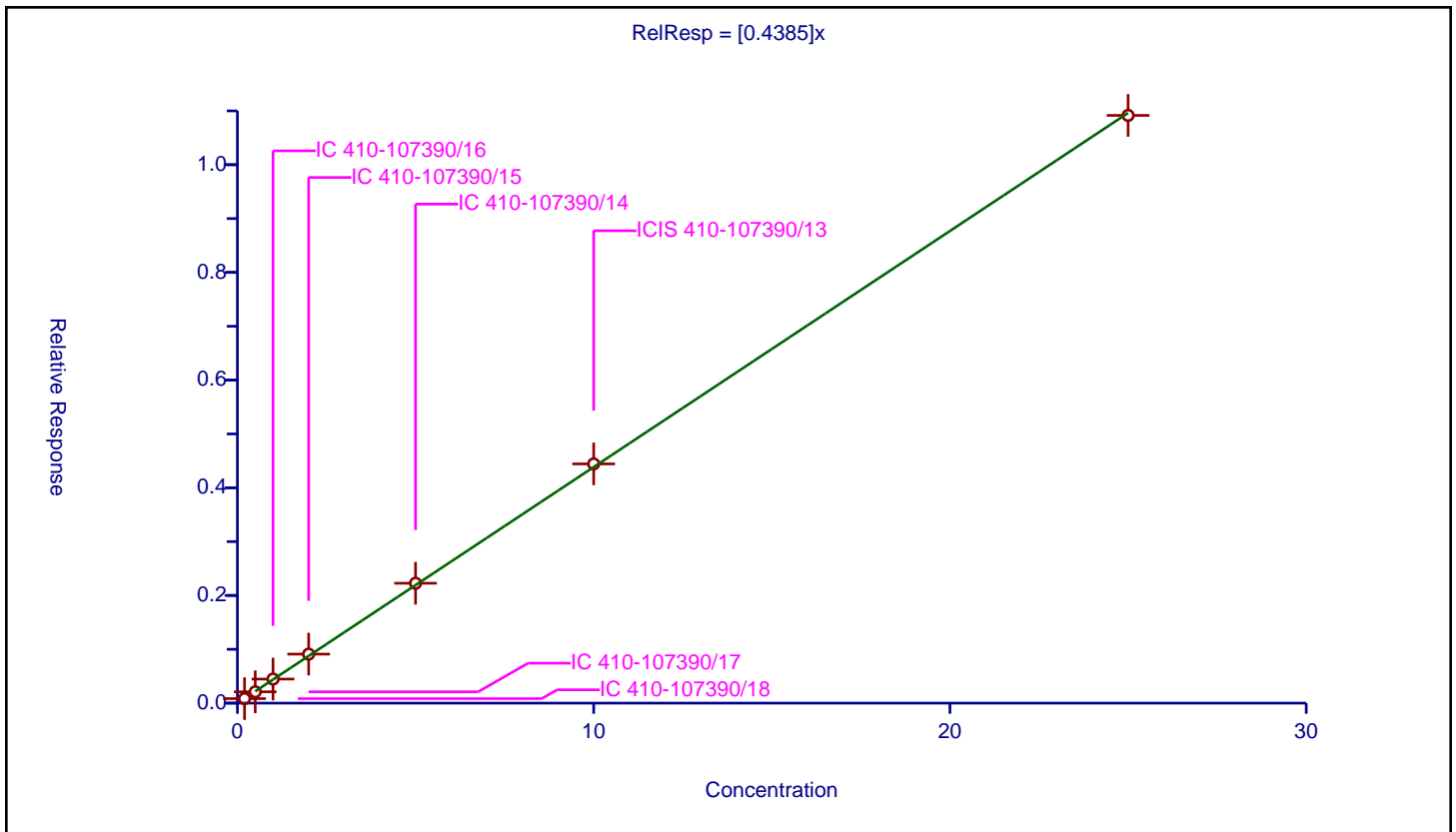
/ 1,1-Dichloropropene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4385

Error Coefficients	
Standard Error:	1050000
Relative Standard Error:	3.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.083894	10.0	2175128.0	0.41947	Y
2	IC 410-107390/17	0.5	0.210546	10.0	2170550.0	0.421091	Y
3	IC 410-107390/16	1.0	0.447181	10.0	2146917.0	0.447181	Y
4	IC 410-107390/15	2.0	0.910302	10.0	2156681.0	0.455151	Y
5	IC 410-107390/14	5.0	2.226932	10.0	2135112.0	0.445386	Y
6	ICIS 410-107390/13	10.0	4.443519	10.0	2148304.0	0.444352	Y
7	IC 410-107390/12	25.0	10.91612	10.0	2140113.0	0.436645	Y



Calibration

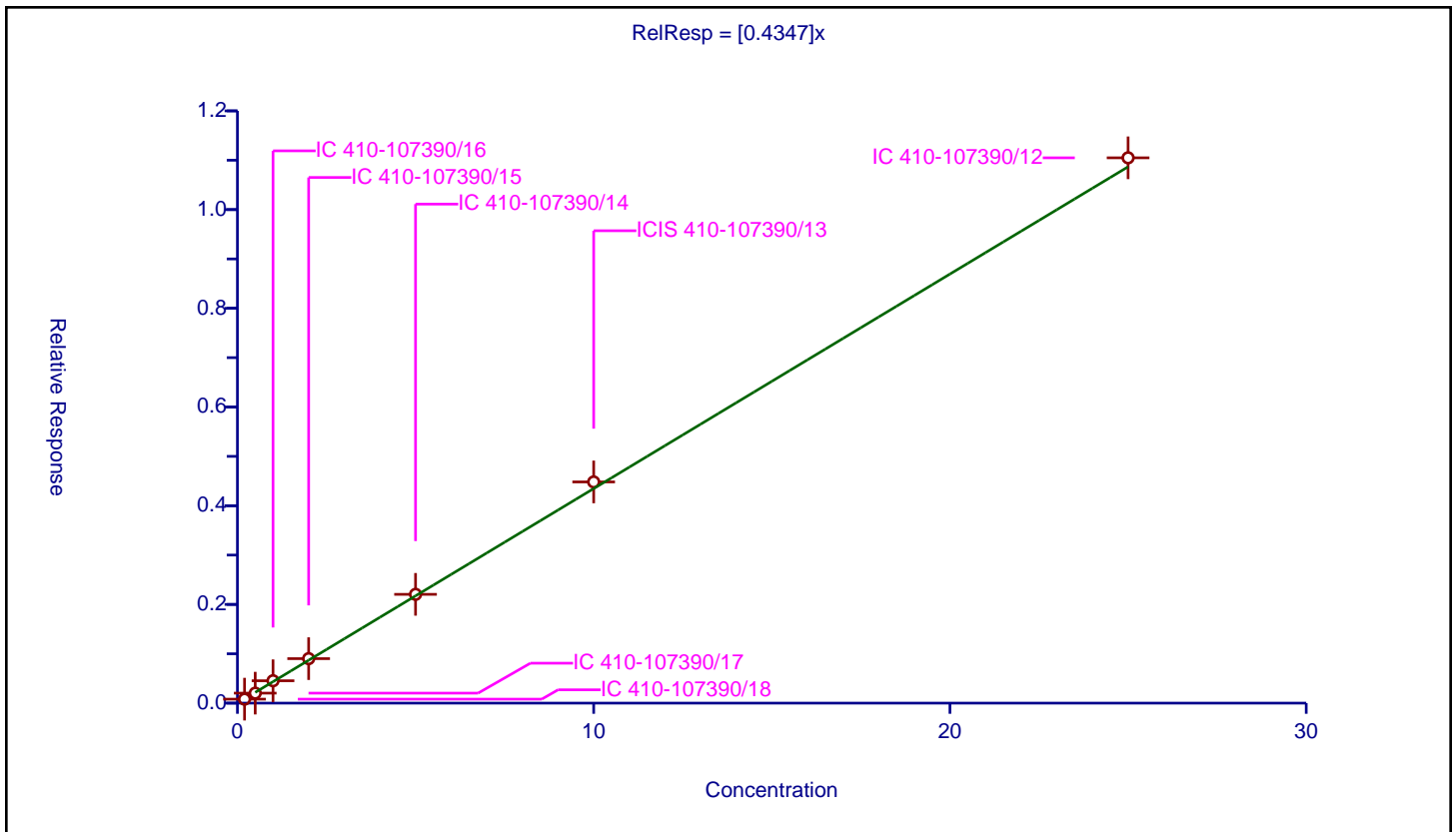
/ Carbon tetrachloride

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4347

Error Coefficients	
Standard Error:	1060000
Relative Standard Error:	5.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.080542	10.0	2175128.0	0.402712	Y
2	IC 410-107390/17	0.5	0.202368	10.0	2170550.0	0.404736	Y
3	IC 410-107390/16	1.0	0.453534	10.0	2146917.0	0.453534	Y
4	IC 410-107390/15	2.0	0.901705	10.0	2156681.0	0.450852	Y
5	IC 410-107390/14	5.0	2.204011	10.0	2135112.0	0.440802	Y
6	ICIS 410-107390/13	10.0	4.482317	10.0	2148304.0	0.448232	Y
7	IC 410-107390/12	25.0	11.04937	10.0	2140113.0	0.441975	Y



Calibration

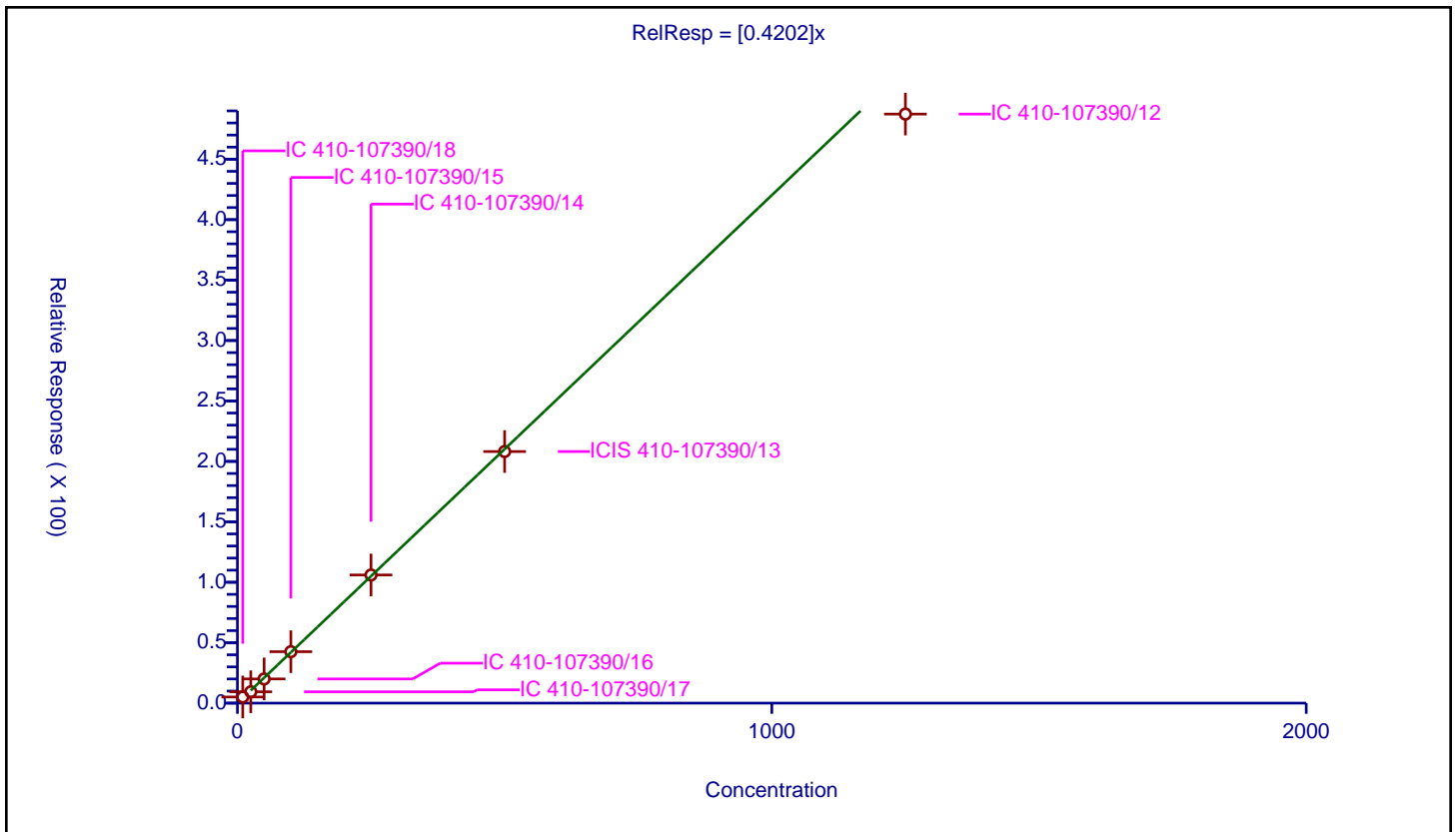
/ Isobutyl alcohol

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4202

Error Coefficients	
Standard Error:	700000
Relative Standard Error:	10.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.984

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	10.0	5.089428	50.0	175560.0	0.508943	Y
2	IC 410-107390/17	25.0	9.406118	50.0	186889.0	0.376245	Y
3	IC 410-107390/16	50.0	20.024218	50.0	165165.0	0.400484	Y
4	IC 410-107390/15	100.0	42.571449	50.0	167112.0	0.425714	Y
5	IC 410-107390/14	250.0	106.023193	50.0	152718.0	0.424093	Y
6	ICIS 410-107390/13	500.0	208.157934	50.0	155217.0	0.416316	Y
7	IC 410-107390/12	1250.0	487.352591	50.0	158827.0	0.389882	Y



Calibration

/ 1,2-Dichloroethane-d4 (Surr)

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

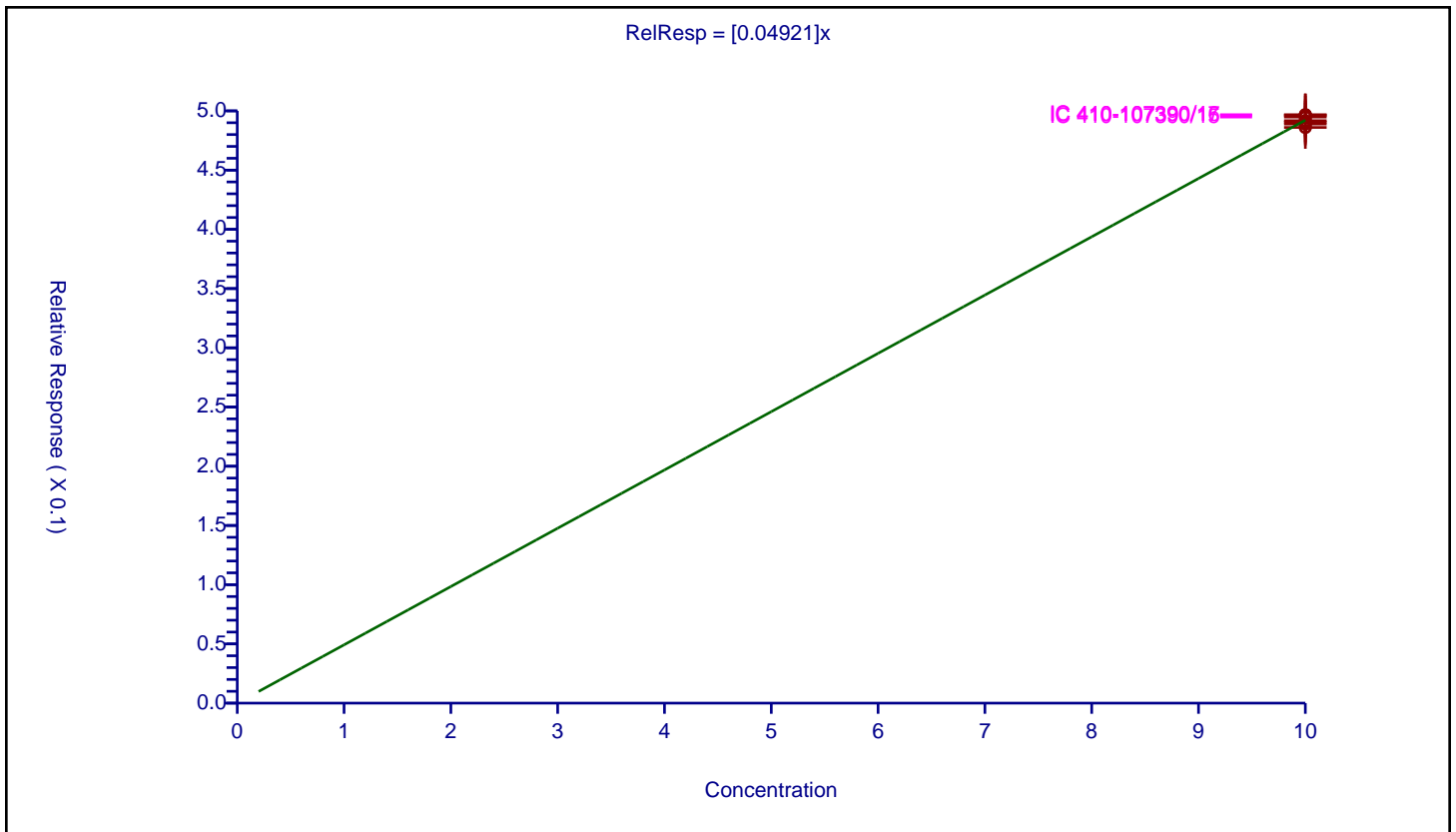
Curve Coefficients

Intercept: 0
 Slope: 0.04921

Error Coefficients

Standard Error: 114000
 Relative Standard Error: 0.8
 Correlation Coefficient: 0.00000000000000000000
 Coefficient of Determination (Adjusted): 0.0000000000000000444

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/12	10.0	0.48889	10.0	2140113.0	0.048889	Y
2	ICIS 410-107390/13	10.0	0.486007	10.0	2148304.0	0.048601	Y
3	IC 410-107390/14	10.0	0.490475	10.0	2135112.0	0.049048	Y
4	IC 410-107390/15	10.0	0.494811	10.0	2156681.0	0.049481	Y
5	IC 410-107390/16	10.0	0.496326	10.0	2146917.0	0.049633	Y
6	IC 410-107390/17	10.0	0.496791	10.0	2170550.0	0.049679	Y
7	IC 410-107390/18	10.0	0.491741	10.0	2175128.0	0.049174	Y



Calibration

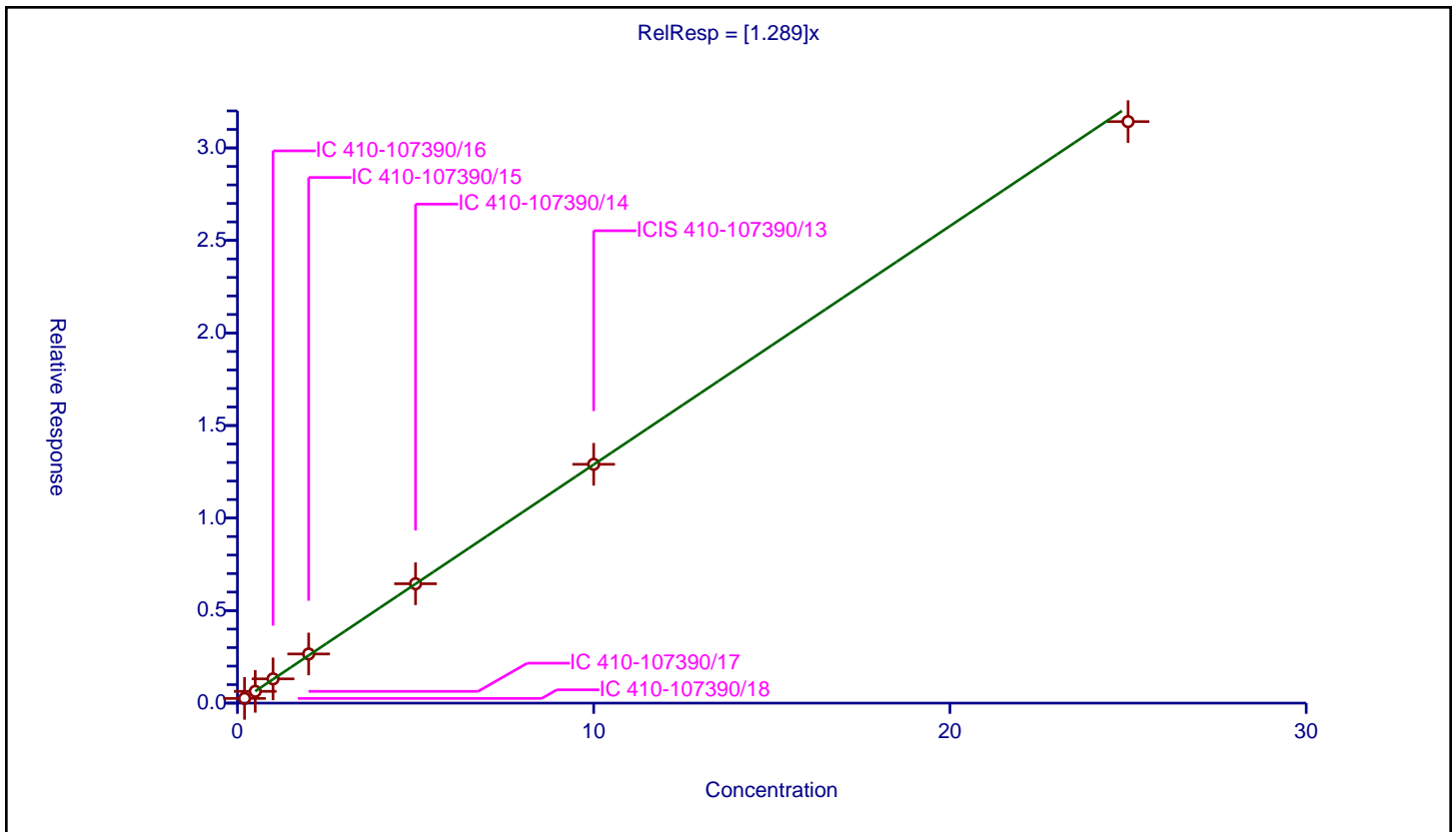
/ Benzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.289

Error Coefficients	
Standard Error:	3030000
Relative Standard Error:	1.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.25427	10.0	2175128.0	1.27135	Y
2	IC 410-107390/17	0.5	0.637299	10.0	2170550.0	1.274599	Y
3	IC 410-107390/16	1.0	1.310726	10.0	2146917.0	1.310726	Y
4	IC 410-107390/15	2.0	2.655836	10.0	2156681.0	1.327918	Y
5	IC 410-107390/14	5.0	6.449933	10.0	2135112.0	1.289987	Y
6	ICIS 410-107390/13	10.0	12.905213	10.0	2148304.0	1.290521	Y
7	IC 410-107390/12	25.0	31.421995	10.0	2140113.0	1.25688	Y



Calibration

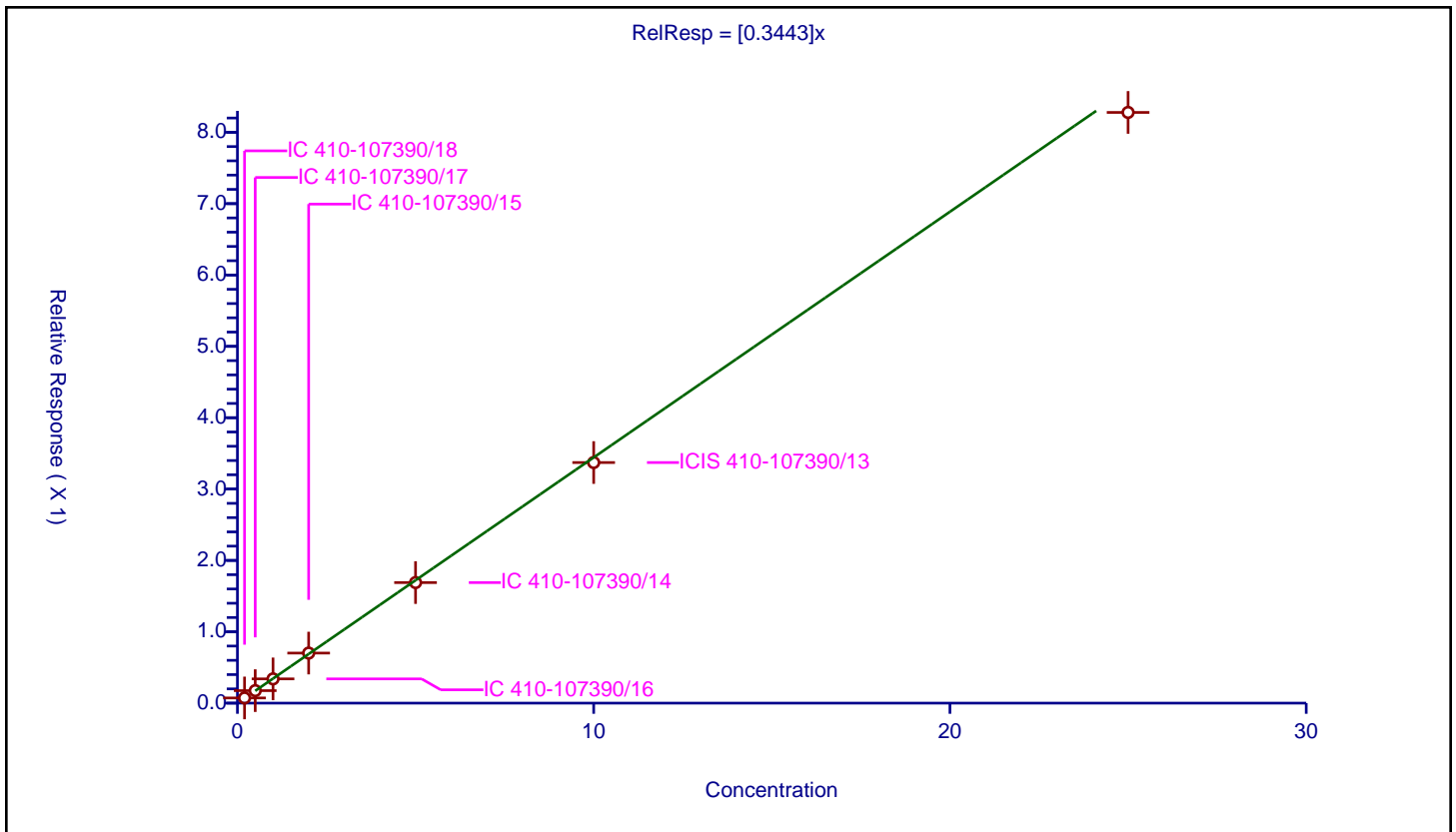
/ 1,2-Dichloroethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3443

Error Coefficients	
Standard Error:	798000
Relative Standard Error:	3.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.072626	10.0	2175128.0	0.363128	Y
2	IC 410-107390/17	0.5	0.175089	10.0	2170550.0	0.350179	Y
3	IC 410-107390/16	1.0	0.340013	10.0	2146917.0	0.340013	Y
4	IC 410-107390/15	2.0	0.701485	10.0	2156681.0	0.350743	Y
5	IC 410-107390/14	5.0	1.689387	10.0	2135112.0	0.337877	Y
6	ICIS 410-107390/13	10.0	3.371711	10.0	2148304.0	0.337171	Y
7	IC 410-107390/12	25.0	8.278278	10.0	2140113.0	0.331131	Y



Calibration

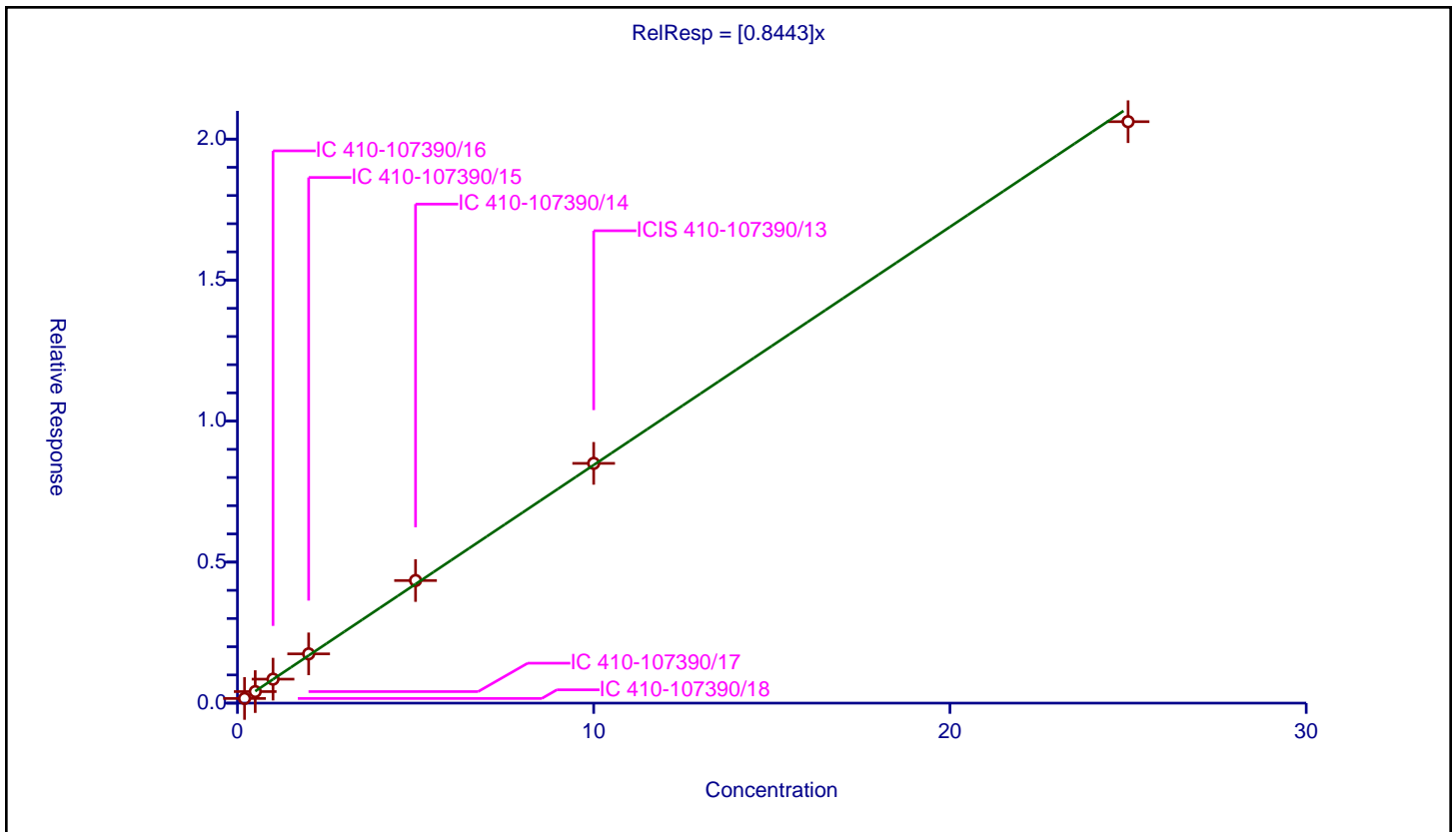
/ Tert-amyl methyl ether

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.8443

Error Coefficients	
Standard Error:	1990000
Relative Standard Error:	2.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.164721	10.0	2175128.0	0.823607	Y
2	IC 410-107390/17	0.5	0.409564	10.0	2170550.0	0.819129	Y
3	IC 410-107390/16	1.0	0.849968	10.0	2146917.0	0.849968	Y
4	IC 410-107390/15	2.0	1.746294	10.0	2156681.0	0.873147	Y
5	IC 410-107390/14	5.0	4.347589	10.0	2135112.0	0.869518	Y
6	ICIS 410-107390/13	10.0	8.501455	10.0	2148304.0	0.850146	Y
7	IC 410-107390/12	25.0	20.617813	10.0	2140113.0	0.824713	Y



Calibration

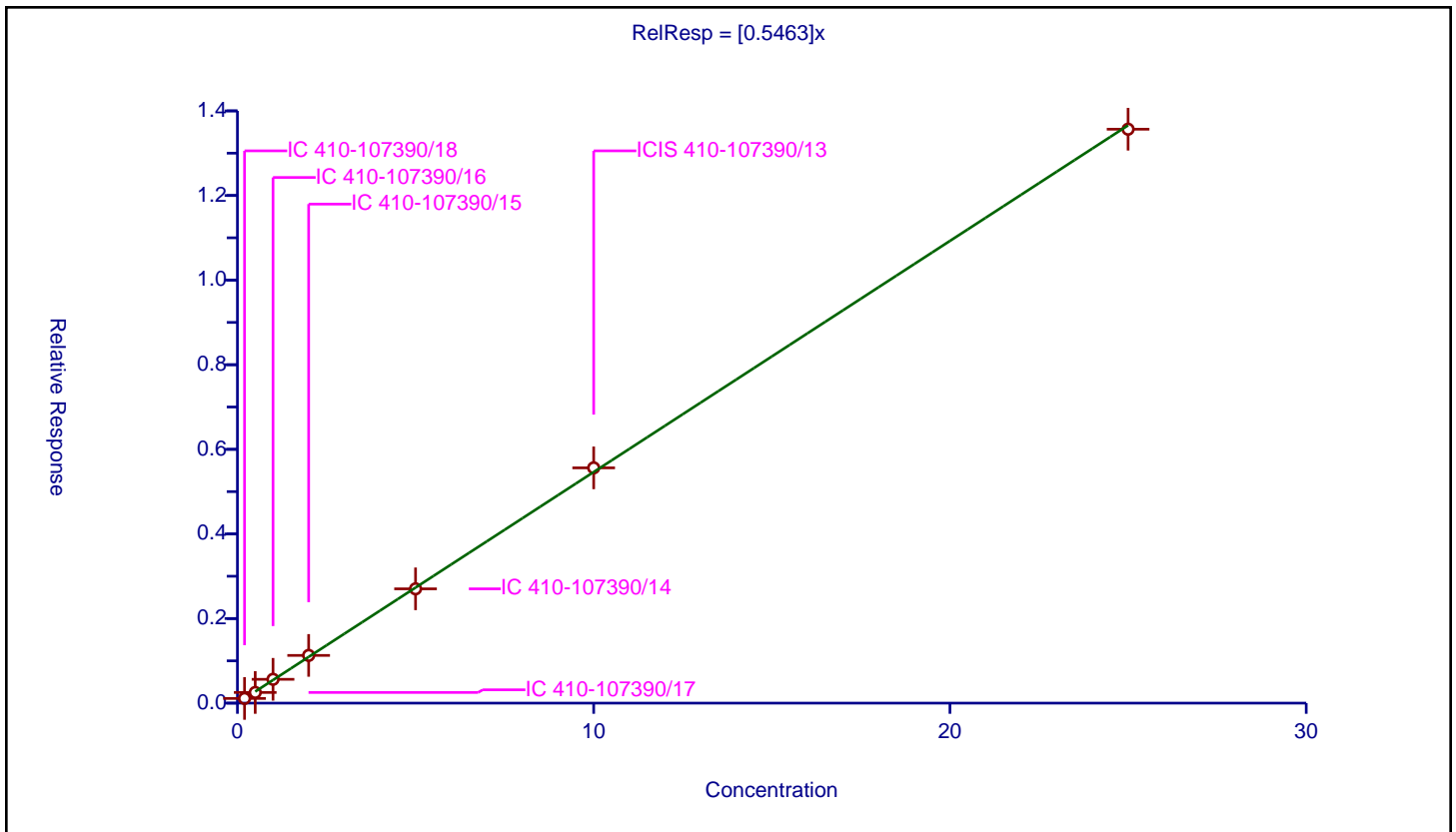
/ n-Heptane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.5463

Error Coefficients	
Standard Error:	1310000
Relative Standard Error:	3.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.110554	10.0	2175128.0	0.552772	Y
2	IC 410-107390/17	0.5	0.25242	10.0	2170550.0	0.50484	Y
3	IC 410-107390/16	1.0	0.563329	10.0	2146917.0	0.563329	Y
4	IC 410-107390/15	2.0	1.127979	10.0	2156681.0	0.563989	Y
5	IC 410-107390/14	5.0	2.701713	10.0	2135112.0	0.540343	Y
6	ICIS 410-107390/13	10.0	5.561829	10.0	2148304.0	0.556183	Y
7	IC 410-107390/12	25.0	13.566639	10.0	2140113.0	0.542666	Y



Calibration

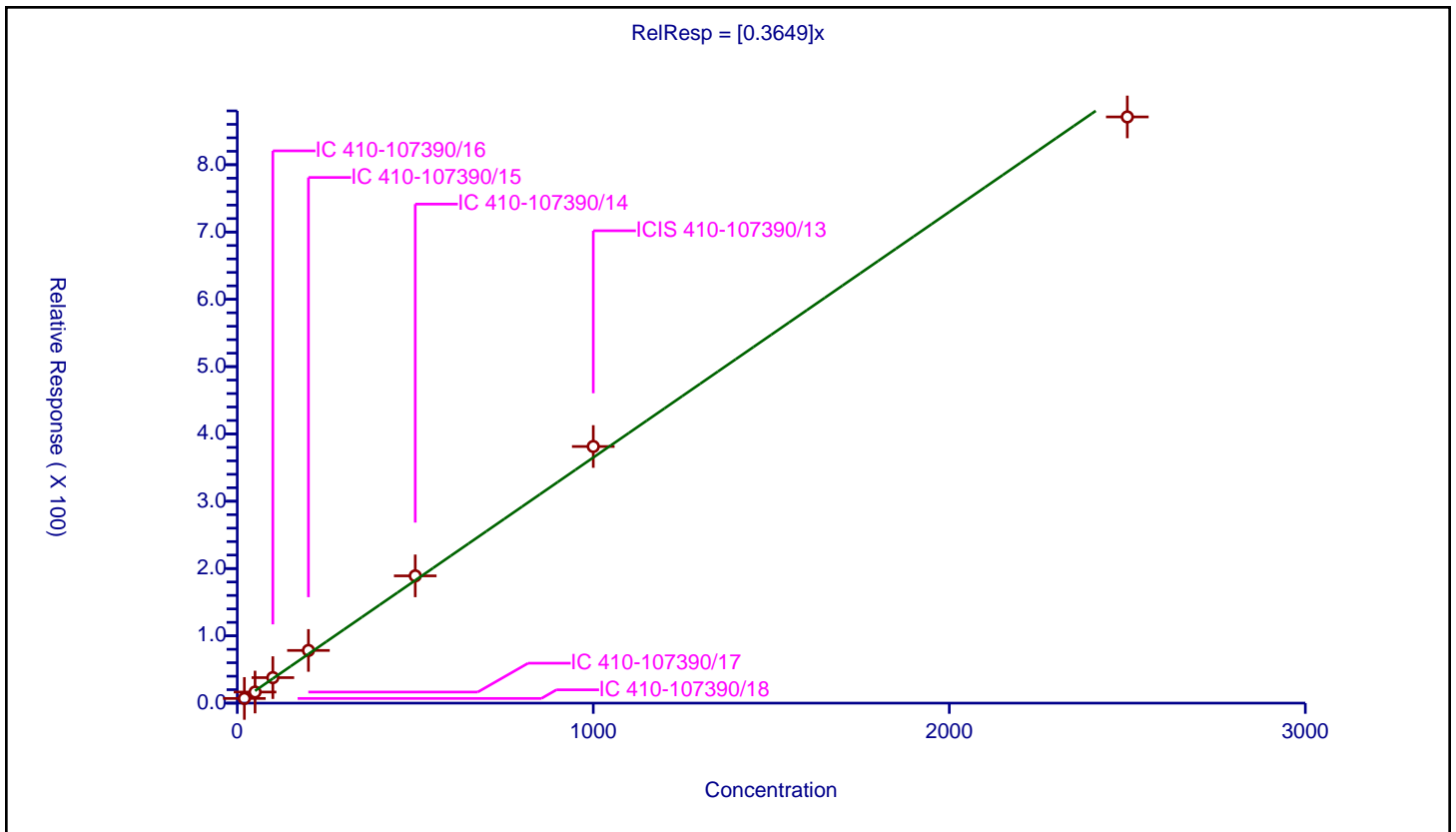
/ n-Butanol

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3649

Error Coefficients	
Standard Error:	1260000
Relative Standard Error:	6.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	20.0	6.939223	50.0	175560.0	0.346961	Y
2	IC 410-107390/17	50.0	16.472612	50.0	186889.0	0.329452	Y
3	IC 410-107390/16	100.0	37.873036	50.0	165165.0	0.37873	Y
4	IC 410-107390/15	200.0	78.305568	50.0	167112.0	0.391528	Y
5	IC 410-107390/14	500.0	189.116542	50.0	152718.0	0.378233	Y
6	ICIS 410-107390/13	1000.0	381.323244	50.0	155217.0	0.381323	Y
7	IC 410-107390/12	2500.0	871.027911	50.0	158827.0	0.348411	Y



Calibration

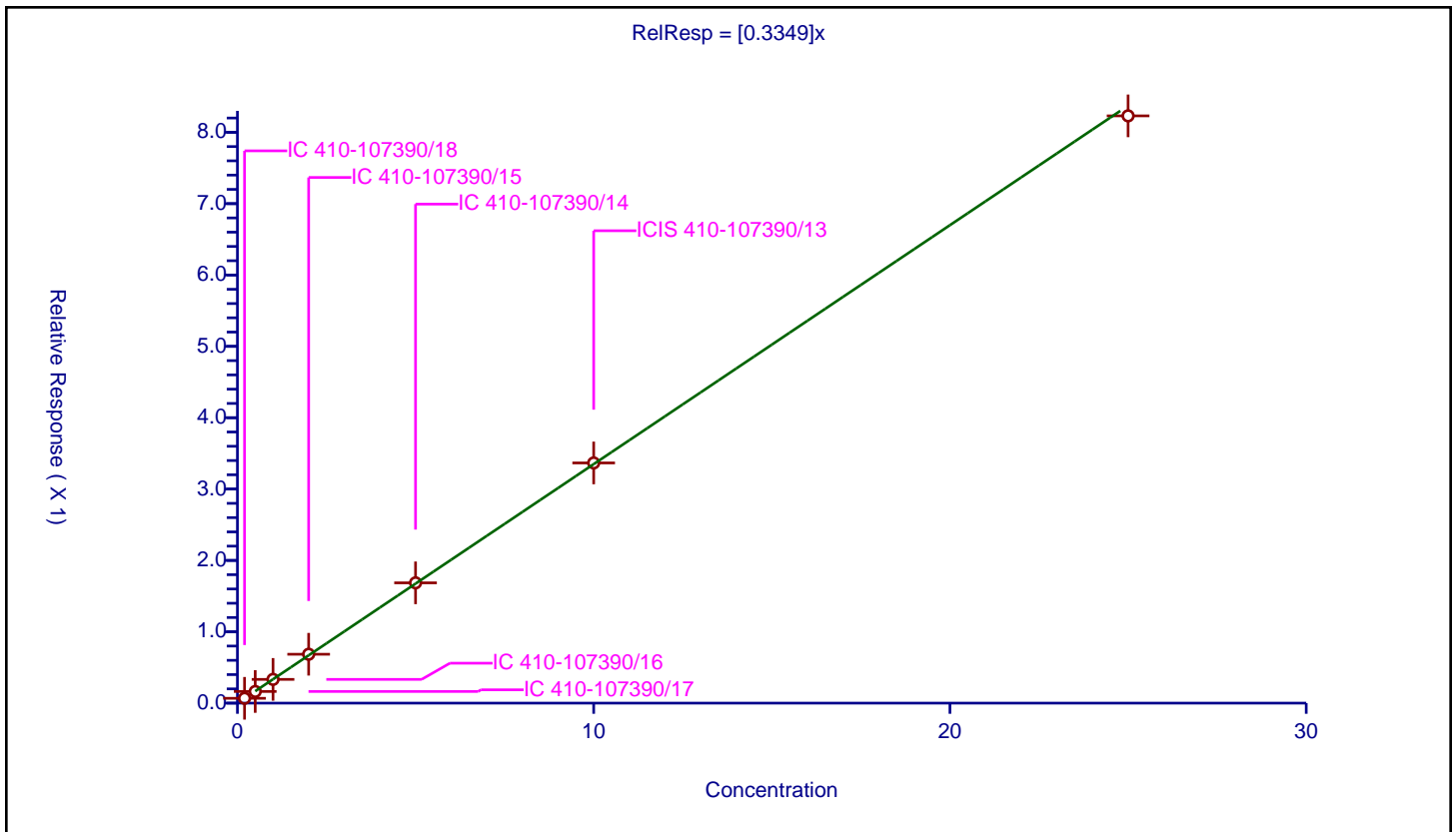
/ Trichloroethene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3349

Error Coefficients	
Standard Error:	794000
Relative Standard Error:	1.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.067858	10.0	2175128.0	0.33929	Y
2	IC 410-107390/17	0.5	0.163484	10.0	2170550.0	0.326968	Y
3	IC 410-107390/16	1.0	0.332649	10.0	2146917.0	0.332649	Y
4	IC 410-107390/15	2.0	0.685215	10.0	2156681.0	0.342607	Y
5	IC 410-107390/14	5.0	1.685691	10.0	2135112.0	0.337138	Y
6	ICIS 410-107390/13	10.0	3.366218	10.0	2148304.0	0.336622	Y
7	IC 410-107390/12	25.0	8.23036	10.0	2140113.0	0.329214	Y



Calibration

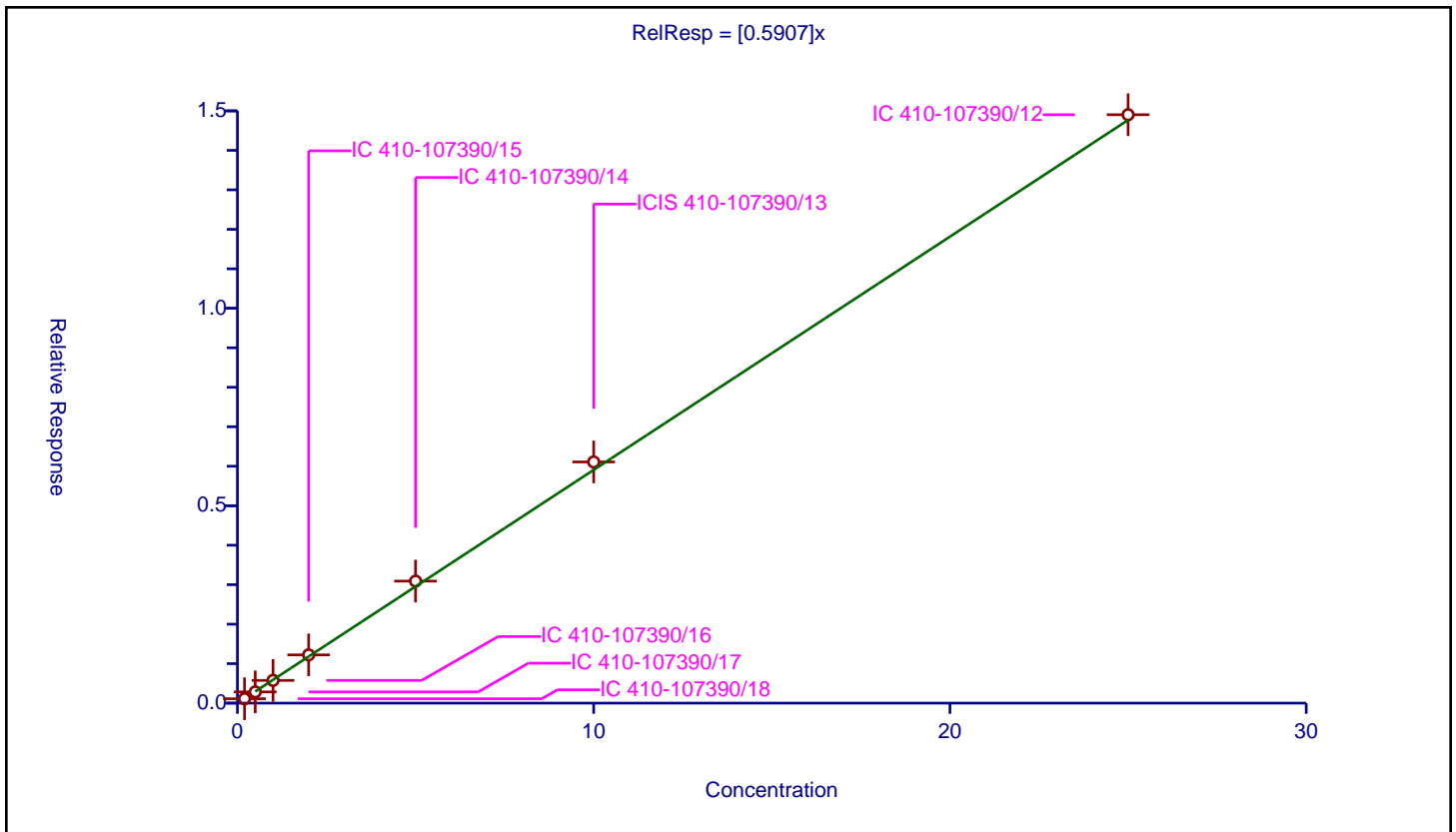
/ Methylcyclohexane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.5907

Error Coefficients	
Standard Error:	1440000
Relative Standard Error:	4.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.110927	10.0	2175128.0	0.554634	Y
2	IC 410-107390/17	0.5	0.284444	10.0	2170550.0	0.568888	Y
3	IC 410-107390/16	1.0	0.575677	10.0	2146917.0	0.575677	Y
4	IC 410-107390/15	2.0	1.221813	10.0	2156681.0	0.610906	Y
5	IC 410-107390/14	5.0	3.090227	10.0	2135112.0	0.618045	Y
6	ICIS 410-107390/13	10.0	6.108251	10.0	2148304.0	0.610825	Y
7	IC 410-107390/12	25.0	14.902863	10.0	2140113.0	0.596115	Y



Calibration

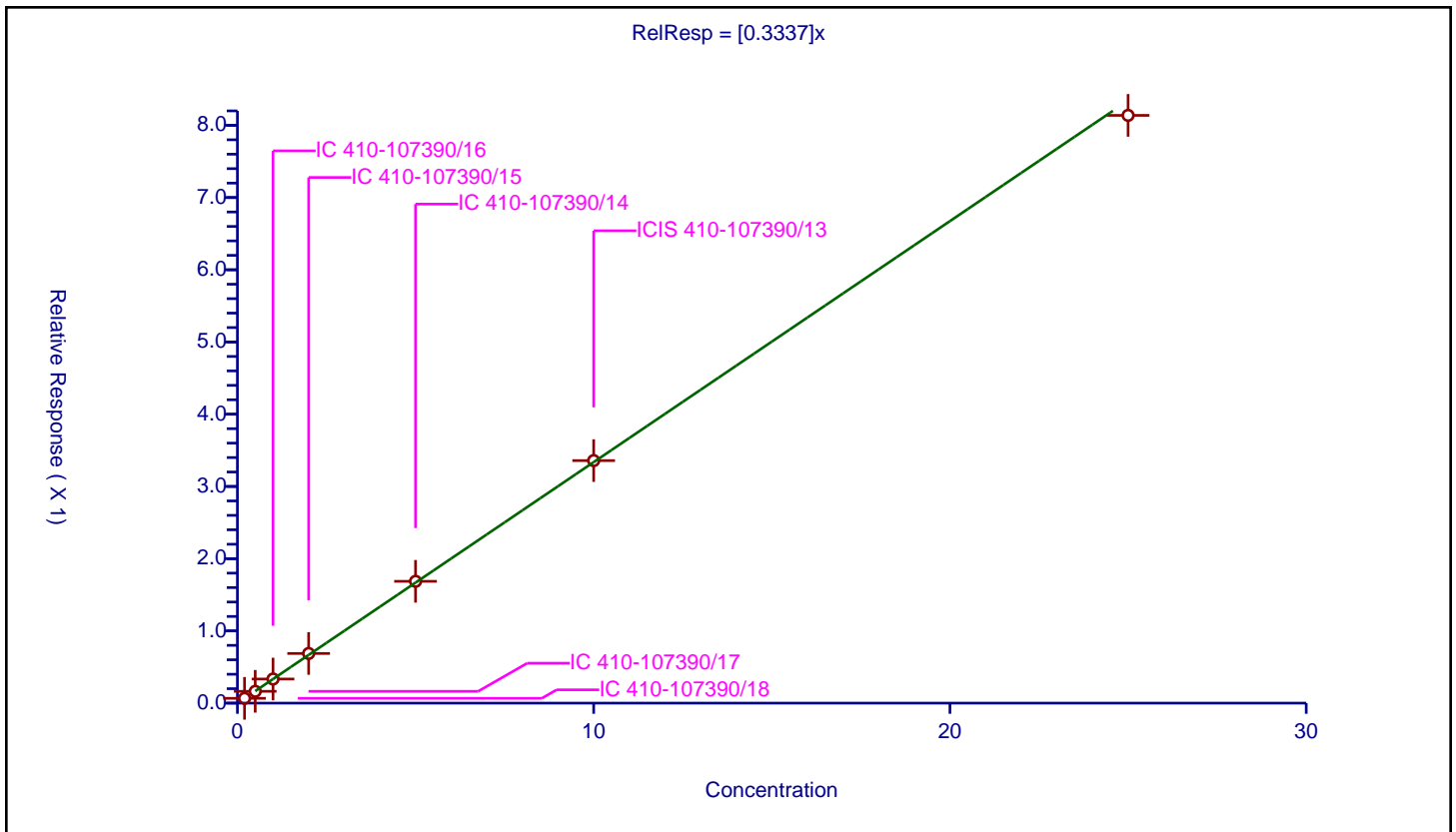
/ 1,2-Dichloropropane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3337

Error Coefficients	
Standard Error:	787000
Relative Standard Error:	1.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.066502	10.0	2175128.0	0.332509	Y
2	IC 410-107390/17	0.5	0.163489	10.0	2170550.0	0.326977	Y
3	IC 410-107390/16	1.0	0.334014	10.0	2146917.0	0.334014	Y
4	IC 410-107390/15	2.0	0.687399	10.0	2156681.0	0.343699	Y
5	IC 410-107390/14	5.0	1.686375	10.0	2135112.0	0.337275	Y
6	ICIS 410-107390/13	10.0	3.358258	10.0	2148304.0	0.335826	Y
7	IC 410-107390/12	25.0	8.137771	10.0	2140113.0	0.325511	Y



Calibration

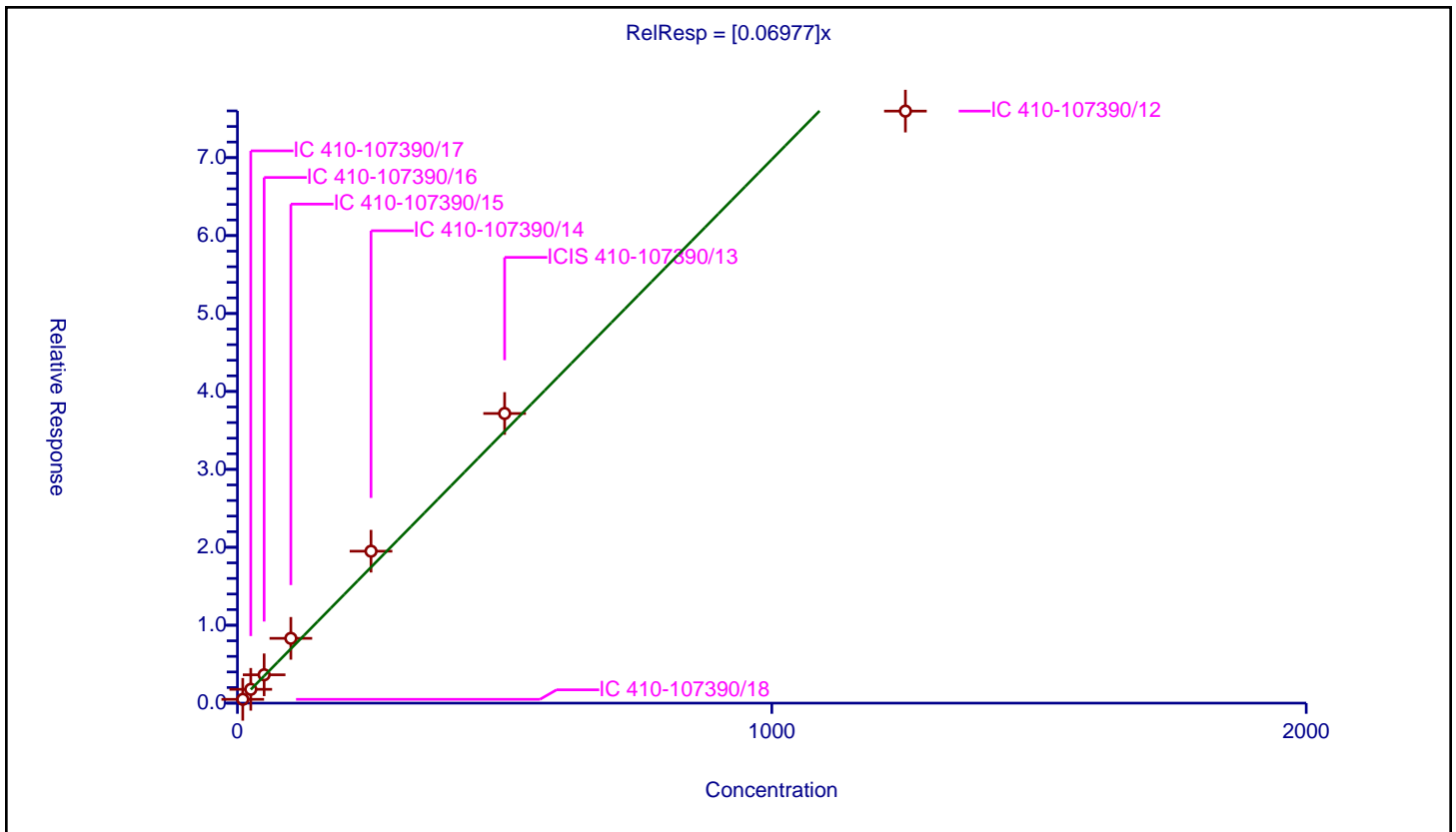
/ 1,4-Dioxane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.06977

Error Coefficients	
Standard Error:	113000
Relative Standard Error:	16.6
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.969

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	10.0	0.485874	50.0	175560.0	0.048587	Y
2	IC 410-107390/17	25.0	1.77164	50.0	186889.0	0.070866	Y
3	IC 410-107390/16	50.0	3.635153	50.0	165165.0	0.072703	Y
4	IC 410-107390/15	100.0	8.312688	50.0	167112.0	0.083127	Y
5	IC 410-107390/14	250.0	19.495737	50.0	152718.0	0.077983	Y
6	ICIS 410-107390/13	500.0	37.169575	50.0	155217.0	0.074339	Y
7	IC 410-107390/12	1250.0	75.972284	50.0	158827.0	0.060778	Y



Calibration

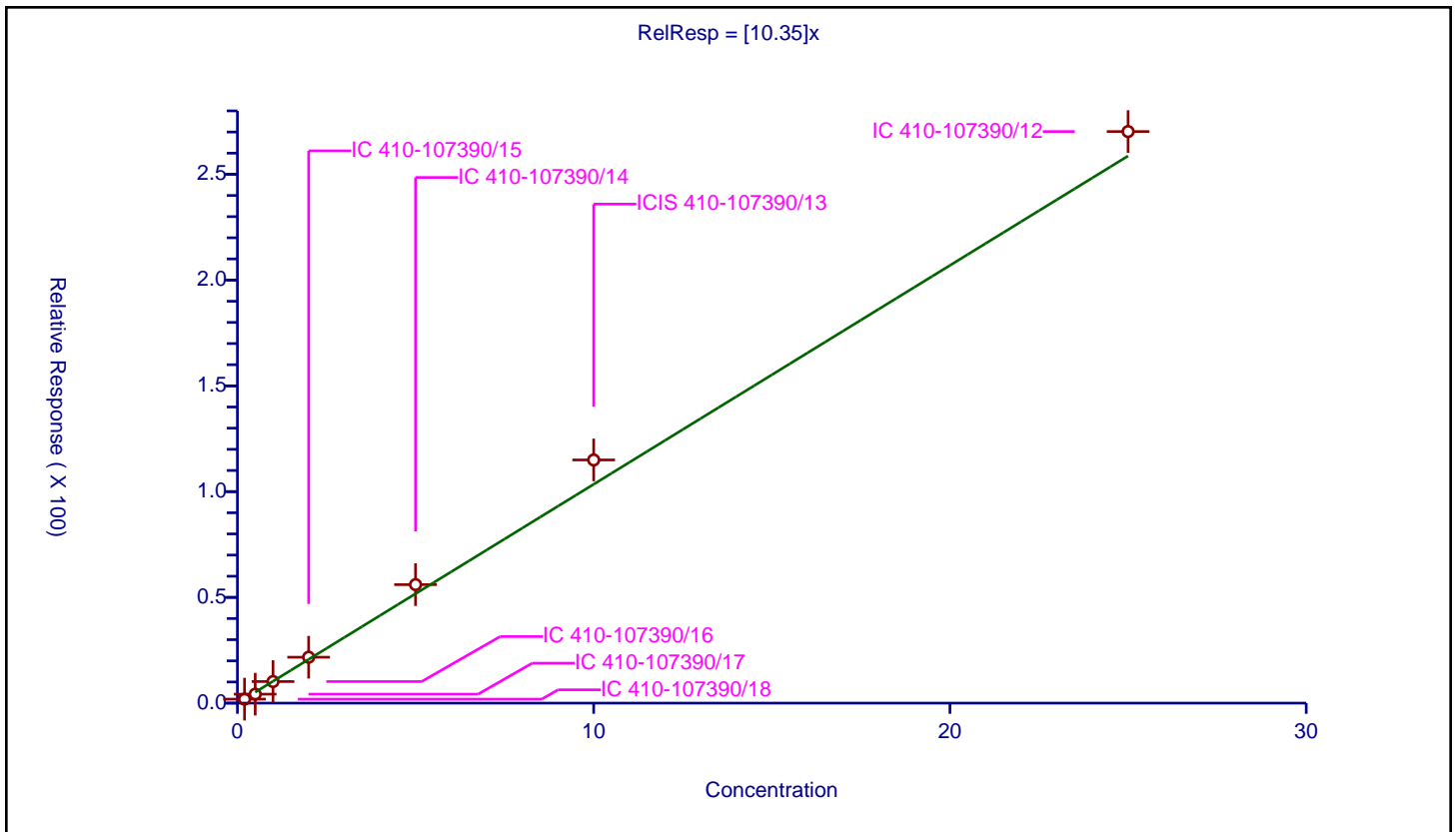
/ Methyl methacrylate

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	10.35

Error Coefficients	
Standard Error:	387000
Relative Standard Error:	10.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	1.878275	50.0	175560.0	9.391376	Y
2	IC 410-107390/17	0.5	4.240485	50.0	186889.0	8.48097	Y
3	IC 410-107390/16	1.0	10.201919	50.0	165165.0	10.201919	Y
4	IC 410-107390/15	2.0	21.696527	50.0	167112.0	10.848263	Y
5	IC 410-107390/14	5.0	56.031051	50.0	152718.0	11.20621	Y
6	ICIS 410-107390/13	10.0	114.968077	50.0	155217.0	11.496808	Y
7	IC 410-107390/12	25.0	270.222947	50.0	158827.0	10.808918	Y



Calibration

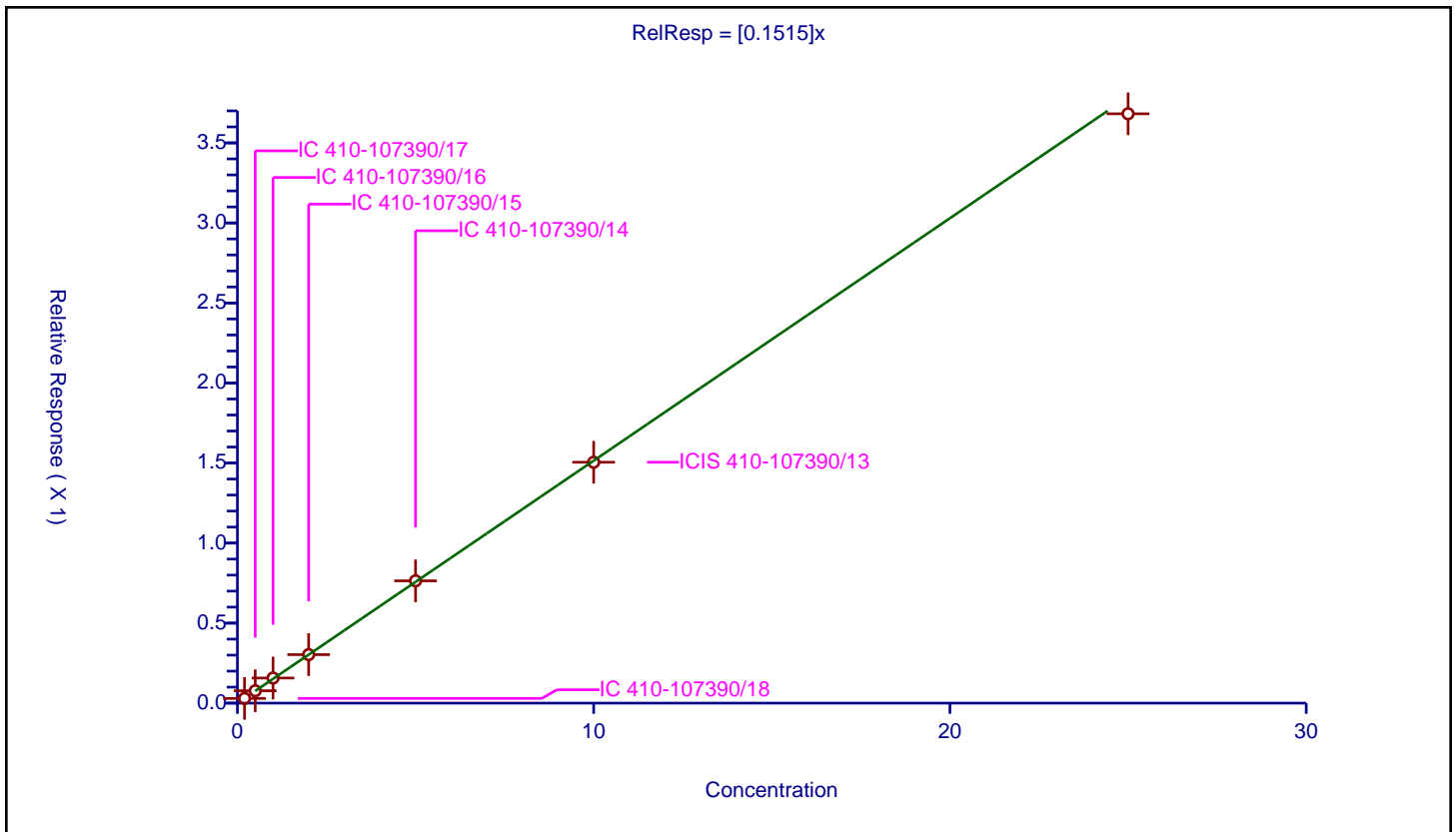
/ Dibromomethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.1515

Error Coefficients	
Standard Error:	355000
Relative Standard Error:	2.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.029391	10.0	2175128.0	0.146957	Y
2	IC 410-107390/17	0.5	0.077234	10.0	2170550.0	0.154468	Y
3	IC 410-107390/16	1.0	0.156746	10.0	2146917.0	0.156746	Y
4	IC 410-107390/15	2.0	0.303109	10.0	2156681.0	0.151555	Y
5	IC 410-107390/14	5.0	0.764063	10.0	2135112.0	0.152813	Y
6	ICIS 410-107390/13	10.0	1.505006	10.0	2148304.0	0.150501	Y
7	IC 410-107390/12	25.0	3.681932	10.0	2140113.0	0.147277	Y



Calibration

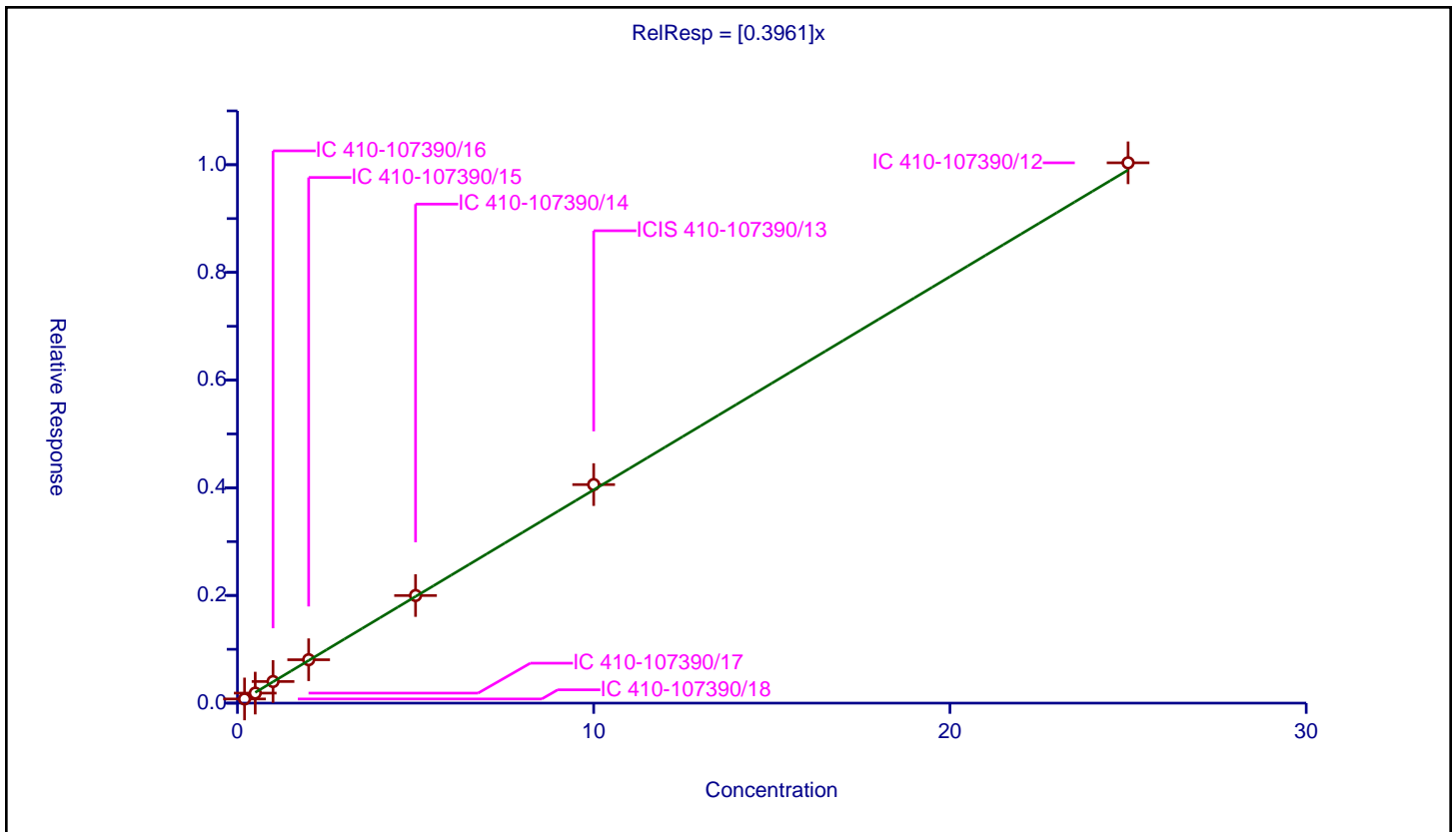
/ Dichlorobromomethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3961

Error Coefficients	
Standard Error:	966000
Relative Standard Error:	3.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.077572	10.0	2175128.0	0.387862	Y
2	IC 410-107390/17	0.5	0.186446	10.0	2170550.0	0.372892	Y
3	IC 410-107390/16	1.0	0.401641	10.0	2146917.0	0.401641	Y
4	IC 410-107390/15	2.0	0.806183	10.0	2156681.0	0.403092	Y
5	IC 410-107390/14	5.0	1.99886	10.0	2135112.0	0.399772	Y
6	ICIS 410-107390/13	10.0	4.059081	10.0	2148304.0	0.405908	Y
7	IC 410-107390/12	25.0	10.035867	10.0	2140113.0	0.401435	Y



Calibration

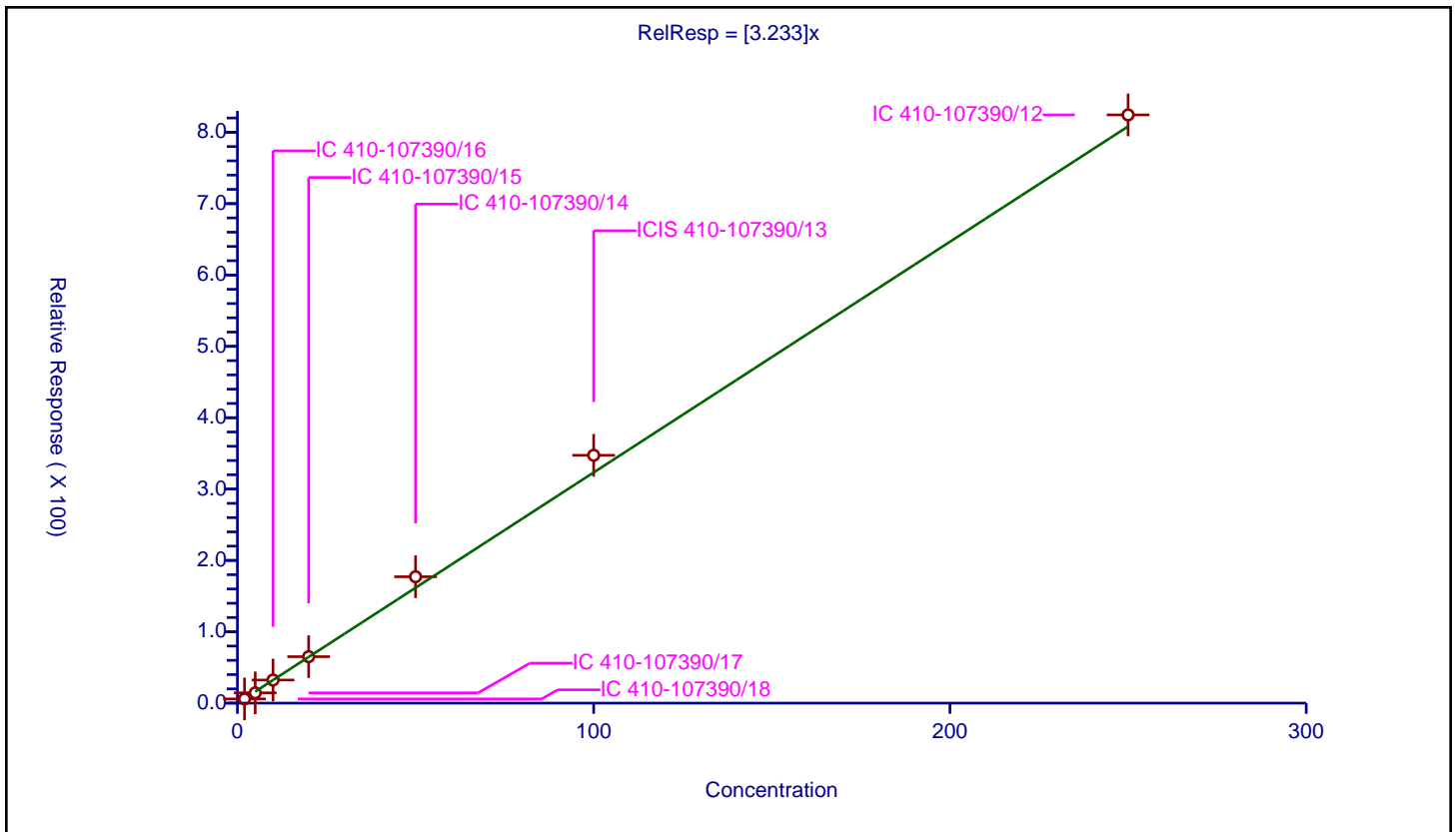
/ 2-Nitropropane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	3.233

Error Coefficients	
Standard Error:	1180000
Relative Standard Error:	7.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	2.0	5.886876	50.0	175560.0	2.943438	Y
2	IC 410-107390/17	5.0	14.40775	50.0	186889.0	2.88155	Y
3	IC 410-107390/16	10.0	32.364302	50.0	165165.0	3.23643	Y
4	IC 410-107390/15	20.0	65.103942	50.0	167112.0	3.255197	Y
5	IC 410-107390/14	50.0	177.117629	50.0	152718.0	3.542353	Y
6	ICIS 410-107390/13	100.0	347.349195	50.0	155217.0	3.473492	Y
7	IC 410-107390/12	250.0	824.375578	50.0	158827.0	3.297502	Y



Calibration

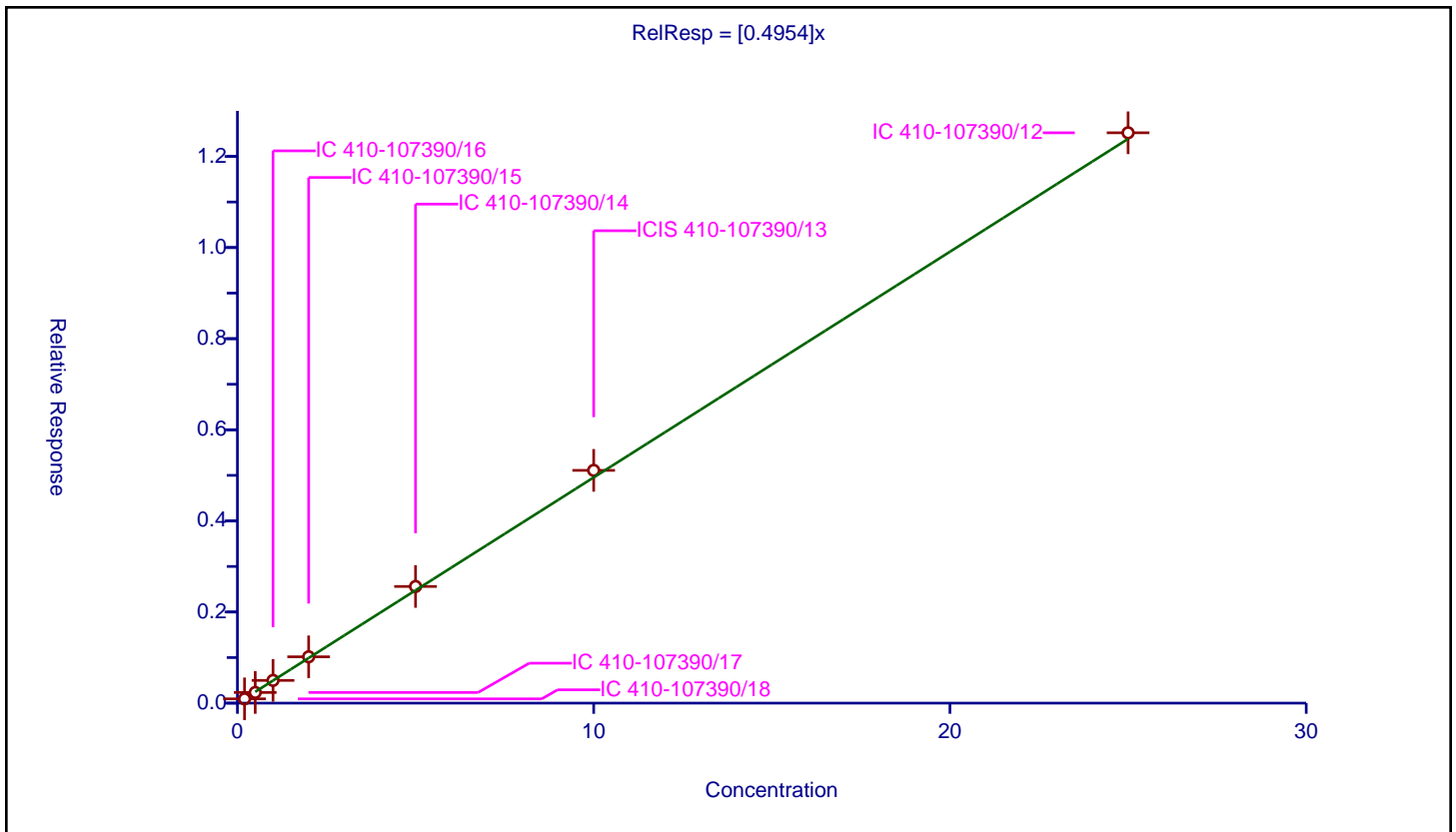
/ cis-1,3-Dichloropropene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4954

Error Coefficients	
Standard Error:	1210000
Relative Standard Error:	3.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.093613	10.0	2175128.0	0.468064	Y
2	IC 410-107390/17	0.5	0.234401	10.0	2170550.0	0.468803	Y
3	IC 410-107390/16	1.0	0.49878	10.0	2146917.0	0.49878	Y
4	IC 410-107390/15	2.0	1.016817	10.0	2156681.0	0.508409	Y
5	IC 410-107390/14	5.0	2.560732	10.0	2135112.0	0.512146	Y
6	ICIS 410-107390/13	10.0	5.109389	10.0	2148304.0	0.510939	Y
7	IC 410-107390/12	25.0	12.519143	10.0	2140113.0	0.500766	Y



Calibration

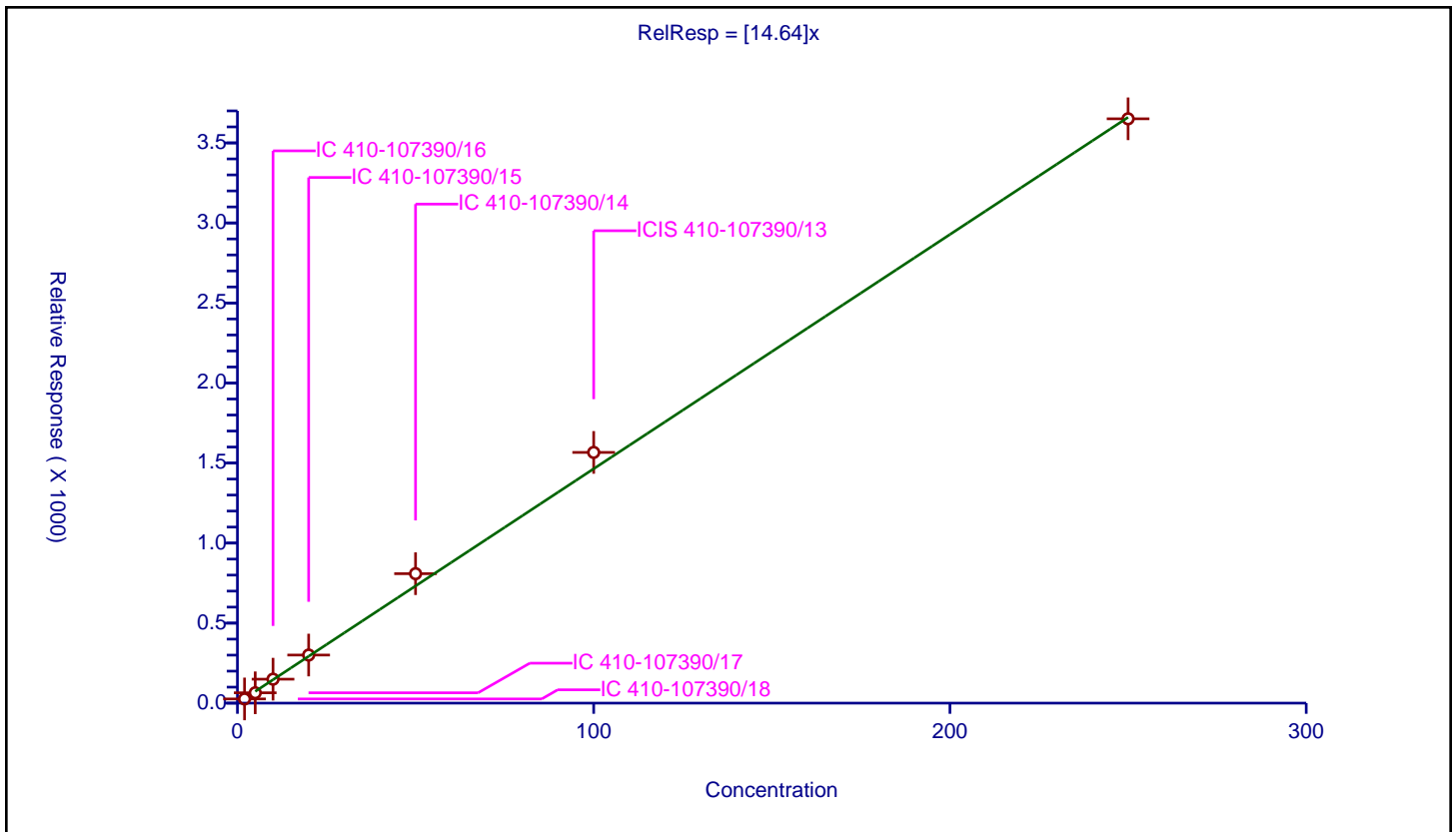
/ 4-Methyl-2-pentanone (MIBK)

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	14.64

Error Coefficients	
Standard Error:	5250000
Relative Standard Error:	8.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	2.0	26.273069	50.0	175560.0	13.136535	Y
2	IC 410-107390/17	5.0	64.594224	50.0	186889.0	12.918845	Y
3	IC 410-107390/16	10.0	149.62038	50.0	165165.0	14.962038	Y
4	IC 410-107390/15	20.0	300.375497	50.0	167112.0	15.018775	Y
5	IC 410-107390/14	50.0	808.780563	50.0	152718.0	16.175611	Y
6	ICIS 410-107390/13	100.0	1566.343248	50.0	155217.0	15.663432	Y
7	IC 410-107390/12	250.0	3650.603802	50.0	158827.0	14.602415	Y



Calibration

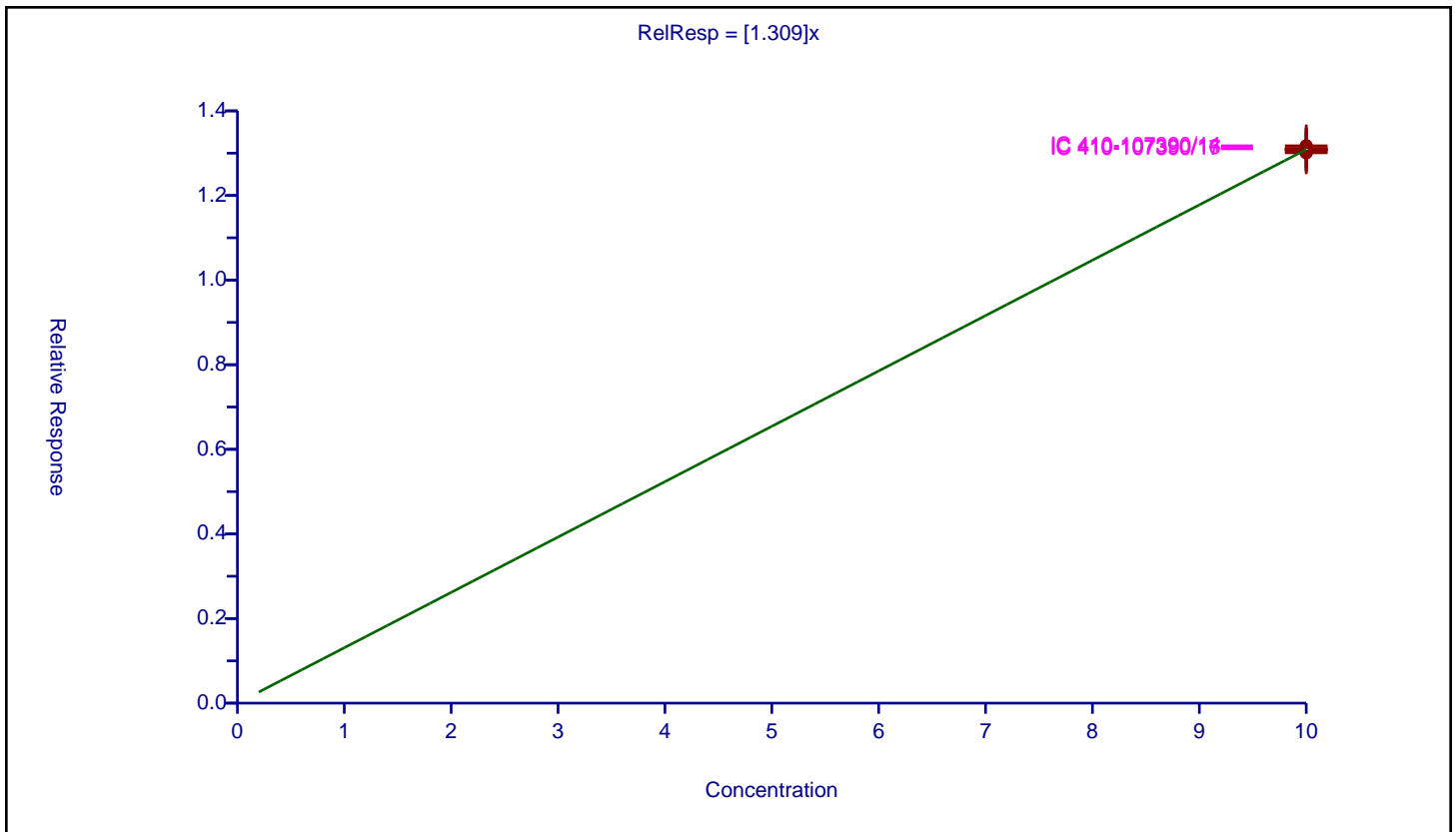
/ Toluene-d8 (Surr)

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.309

Error Coefficients	
Standard Error:	2320000
Relative Standard Error:	0.4
Correlation Coefficient:	0.00000000000000000000
Coefficient of Determination (Adjusted):	0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/14	10.0	13.17458	10.0	1621764.0	1.317458	Y
2	IC 410-107390/12	10.0	13.079683	10.0	1647559.0	1.307968	Y
3	ICIS 410-107390/13	10.0	13.084965	10.0	1638803.0	1.308497	Y
4	IC 410-107390/15	10.0	13.044456	10.0	1638769.0	1.304446	Y
5	IC 410-107390/16	10.0	13.113326	10.0	1626155.0	1.311333	Y
6	IC 410-107390/17	10.0	13.103778	10.0	1642102.0	1.310378	Y
7	IC 410-107390/18	10.0	13.008852	10.0	1649576.0	1.300885	Y



Calibration

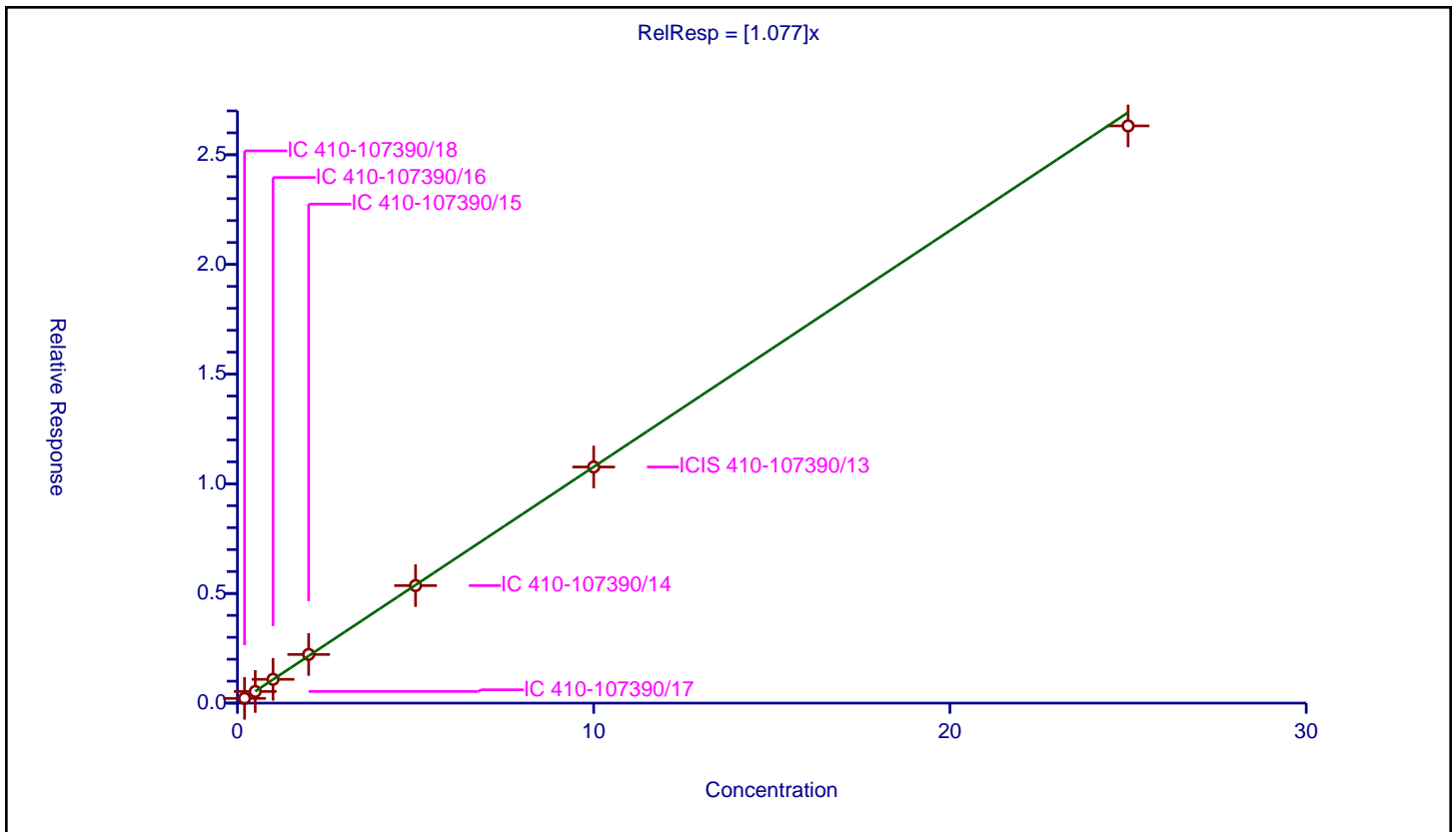
/ Toluene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.077

Error Coefficients	
Standard Error:	1950000
Relative Standard Error:	1.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.21634	10.0	1649576.0	1.081702	Y
2	IC 410-107390/17	0.5	0.531276	10.0	1642102.0	1.062553	Y
3	IC 410-107390/16	1.0	1.08478	10.0	1626155.0	1.08478	Y
4	IC 410-107390/15	2.0	2.219507	10.0	1638769.0	1.109754	Y
5	IC 410-107390/14	5.0	5.359152	10.0	1621764.0	1.07183	Y
6	ICIS 410-107390/13	10.0	10.766224	10.0	1638803.0	1.076622	Y
7	IC 410-107390/12	25.0	26.316059	10.0	1647559.0	1.052642	Y



Calibration

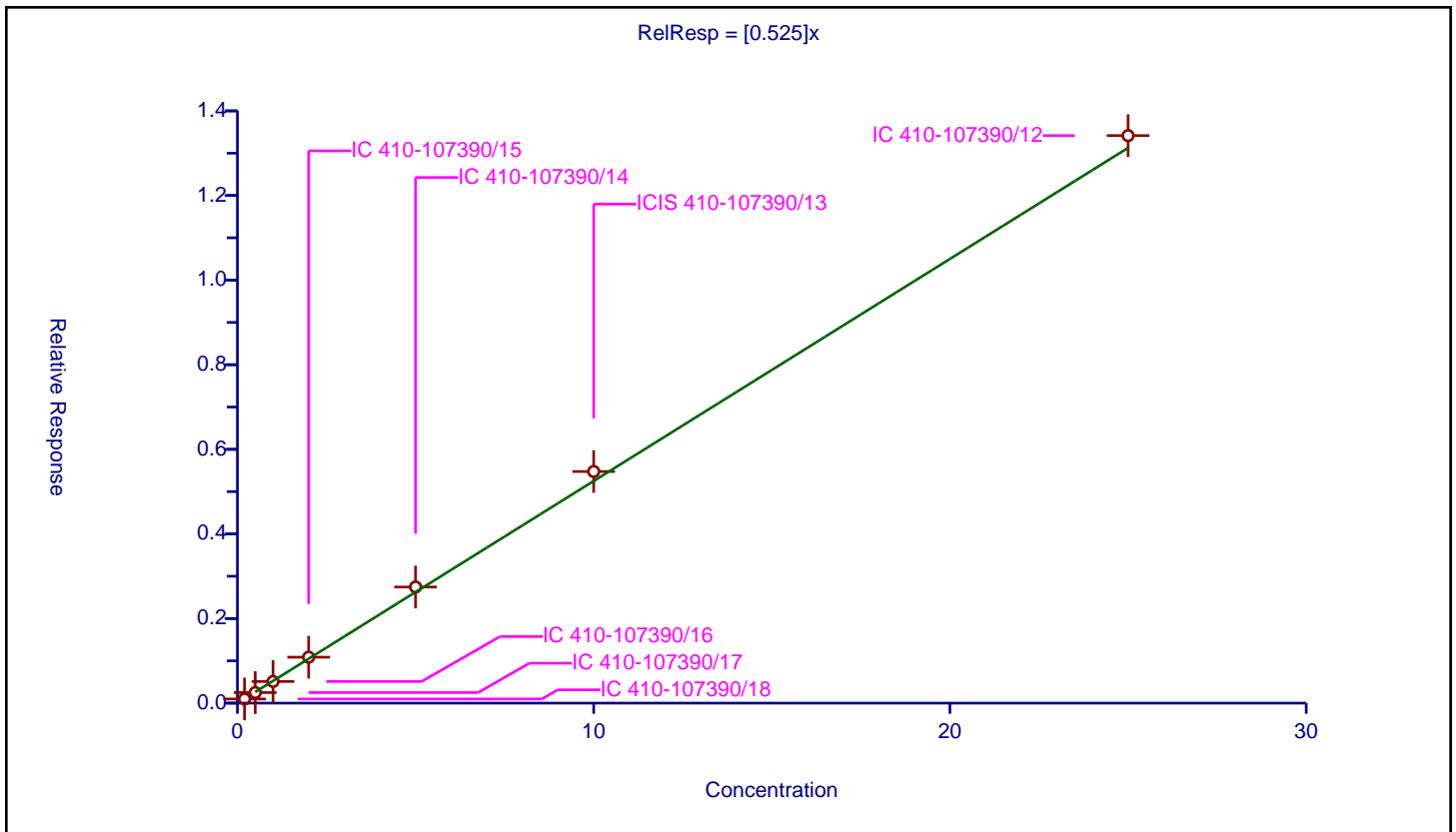
/ trans-1,3-Dichloropropene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.525

Error Coefficients	
Standard Error:	994000
Relative Standard Error:	4.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.097807	10.0	1649576.0	0.489035	Y
2	IC 410-107390/17	0.5	0.249461	10.0	1642102.0	0.498922	Y
3	IC 410-107390/16	1.0	0.511372	10.0	1626155.0	0.511372	Y
4	IC 410-107390/15	2.0	1.085528	10.0	1638769.0	0.542764	Y
5	IC 410-107390/14	5.0	2.744801	10.0	1621764.0	0.54896	Y
6	ICIS 410-107390/13	10.0	5.47549	10.0	1638803.0	0.547549	Y
7	IC 410-107390/12	25.0	13.415884	10.0	1647559.0	0.536635	Y



Calibration

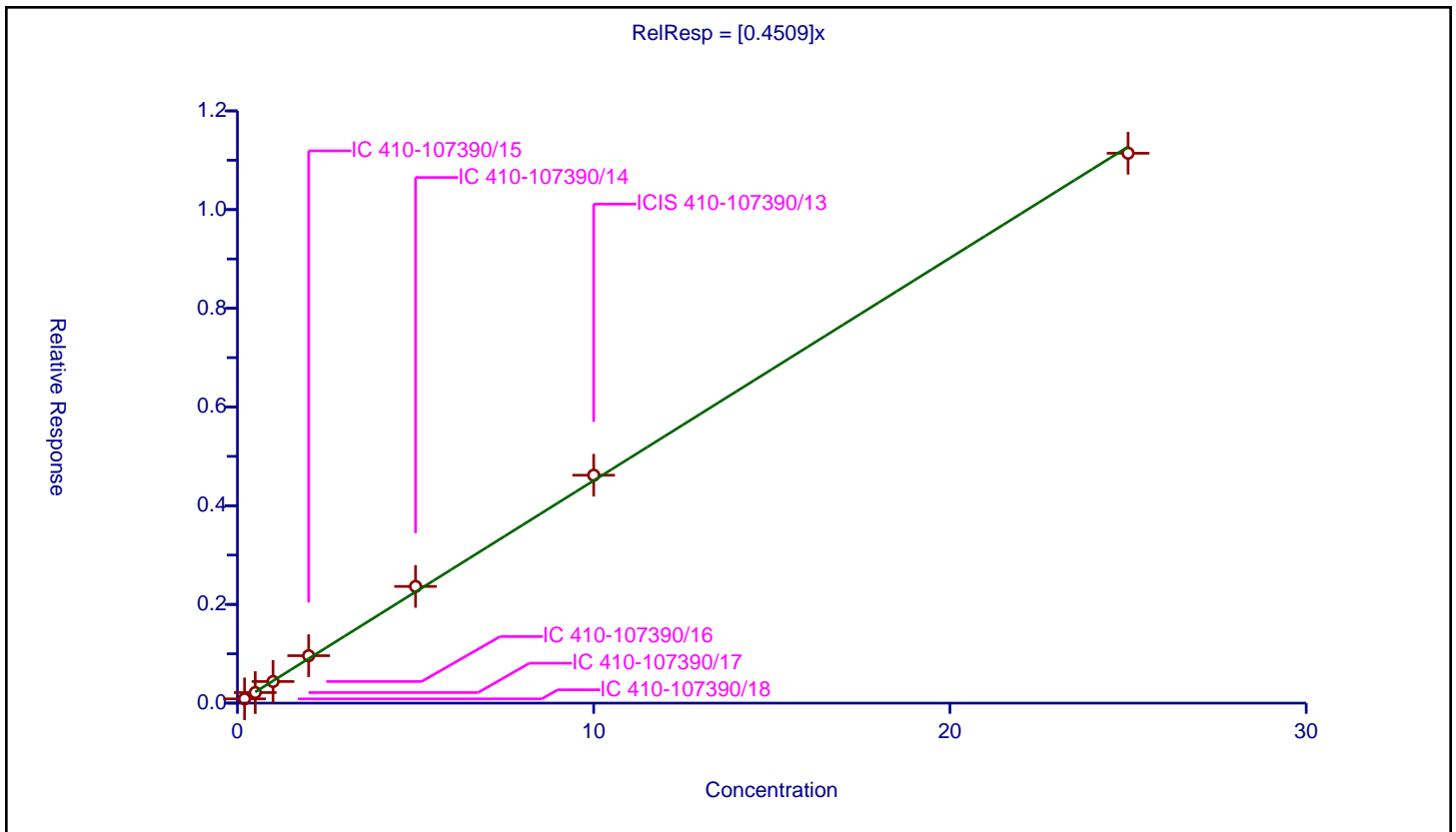
/ Ethyl methacrylate

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4509

Error Coefficients	
Standard Error:	829000
Relative Standard Error:	4.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.085883	10.0	1649576.0	0.429413	Y
2	IC 410-107390/17	0.5	0.214225	10.0	1642102.0	0.428451	Y
3	IC 410-107390/16	1.0	0.437775	10.0	1626155.0	0.437775	Y
4	IC 410-107390/15	2.0	0.960855	10.0	1638769.0	0.480428	Y
5	IC 410-107390/14	5.0	2.364407	10.0	1621764.0	0.472881	Y
6	ICIS 410-107390/13	10.0	4.618218	10.0	1638803.0	0.461822	Y
7	IC 410-107390/12	25.0	11.142017	10.0	1647559.0	0.445681	Y



Calibration

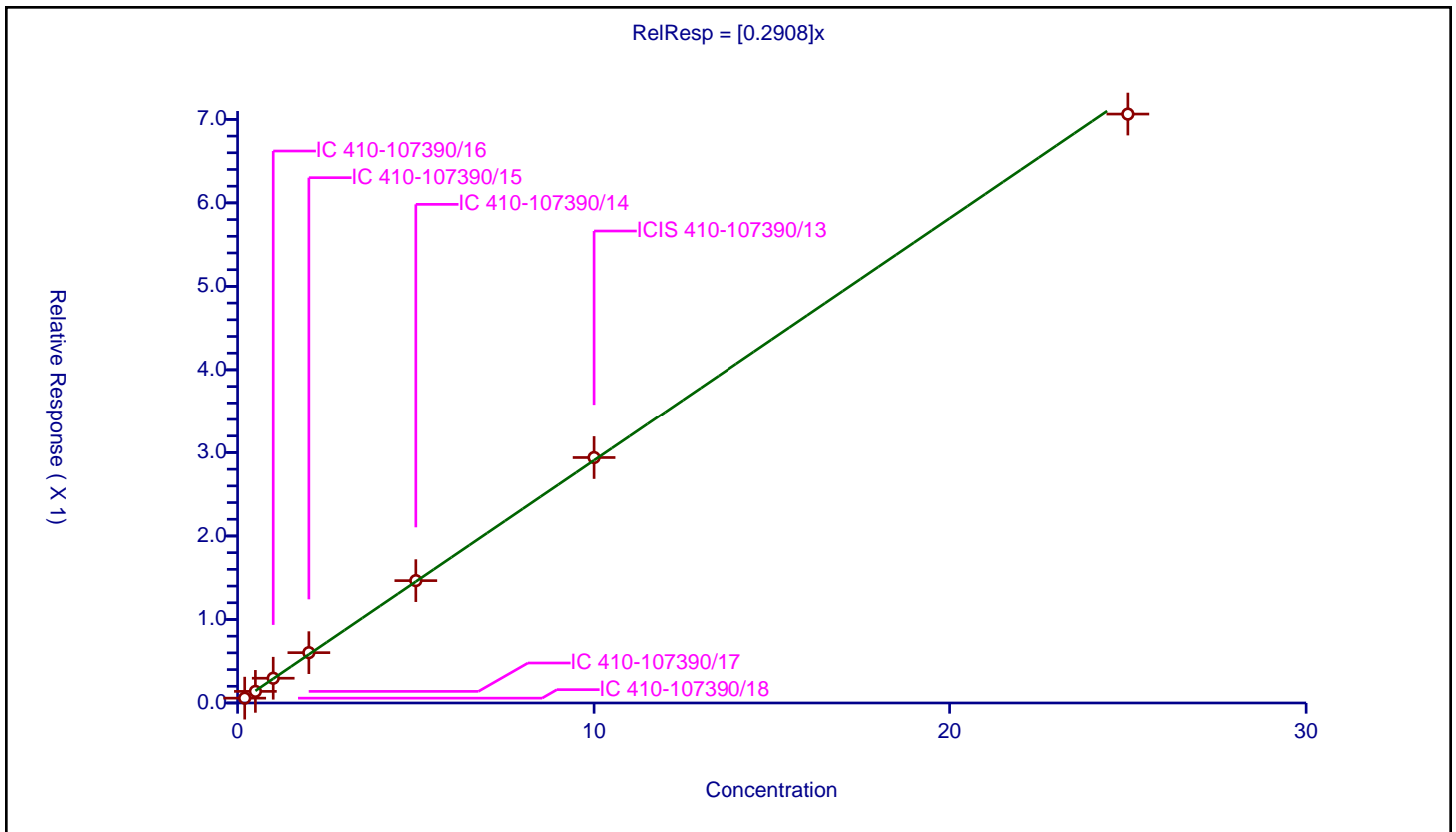
/ 1,1,2-Trichloroethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2908

Error Coefficients	
Standard Error:	525000
Relative Standard Error:	2.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.057979	10.0	1649576.0	0.289893	Y
2	IC 410-107390/17	0.5	0.139053	10.0	1642102.0	0.278107	Y
3	IC 410-107390/16	1.0	0.296472	10.0	1626155.0	0.296472	Y
4	IC 410-107390/15	2.0	0.602666	10.0	1638769.0	0.301333	Y
5	IC 410-107390/14	5.0	1.46496	10.0	1621764.0	0.292992	Y
6	ICIS 410-107390/13	10.0	2.939536	10.0	1638803.0	0.293954	Y
7	IC 410-107390/12	25.0	7.063437	10.0	1647559.0	0.282537	Y



Calibration

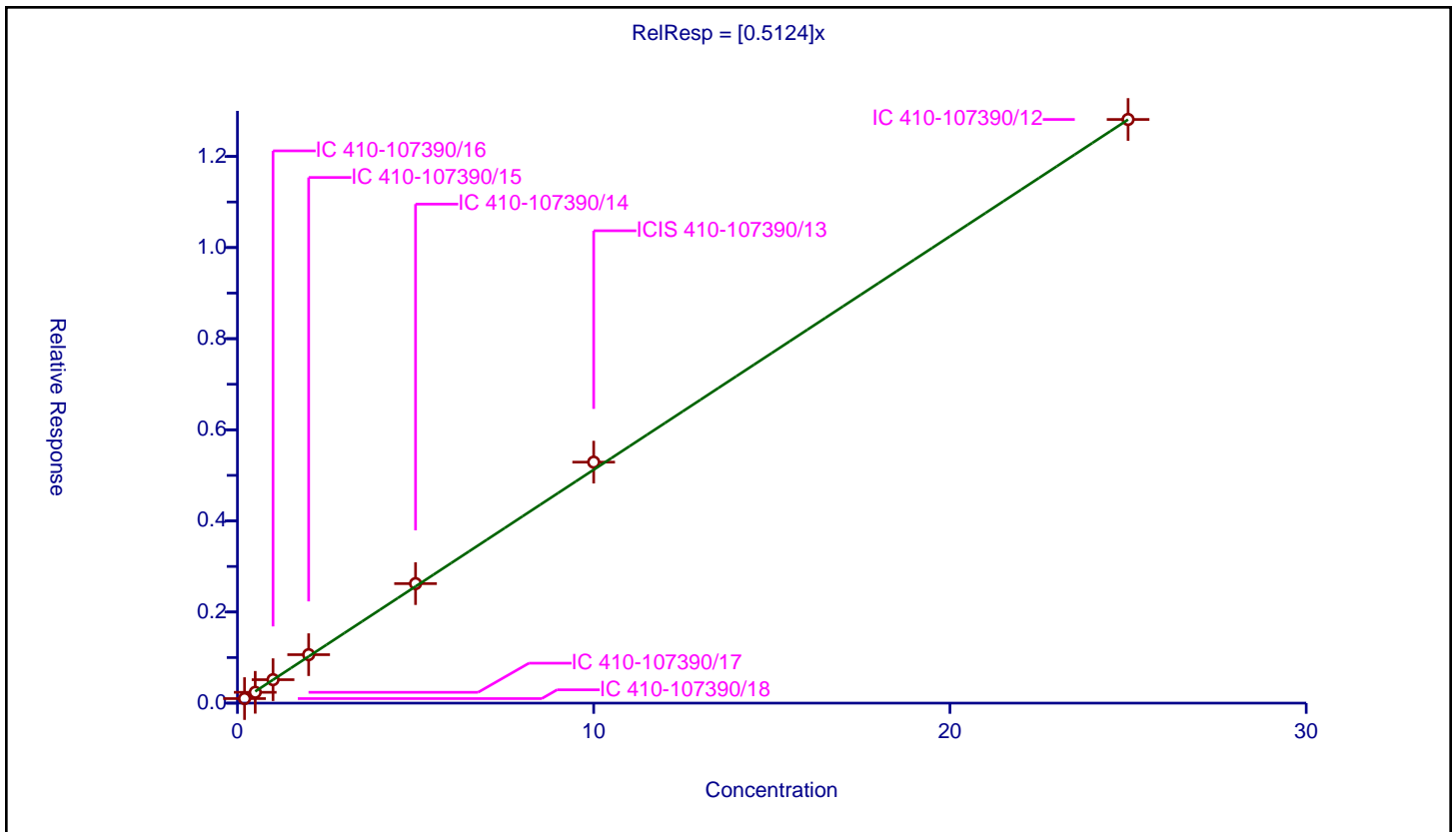
/ Tetrachloroethene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.5124

Error Coefficients	
Standard Error:	951000
Relative Standard Error:	3.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.099668	10.0	1649576.0	0.49834	Y
2	IC 410-107390/17	0.5	0.237817	10.0	1642102.0	0.475634	Y
3	IC 410-107390/16	1.0	0.51452	10.0	1626155.0	0.51452	Y
4	IC 410-107390/15	2.0	1.063518	10.0	1638769.0	0.531759	Y
5	IC 410-107390/14	5.0	2.62376	10.0	1621764.0	0.524752	Y
6	ICIS 410-107390/13	10.0	5.289977	10.0	1638803.0	0.528998	Y
7	IC 410-107390/12	25.0	12.811717	10.0	1647559.0	0.512469	Y



Calibration

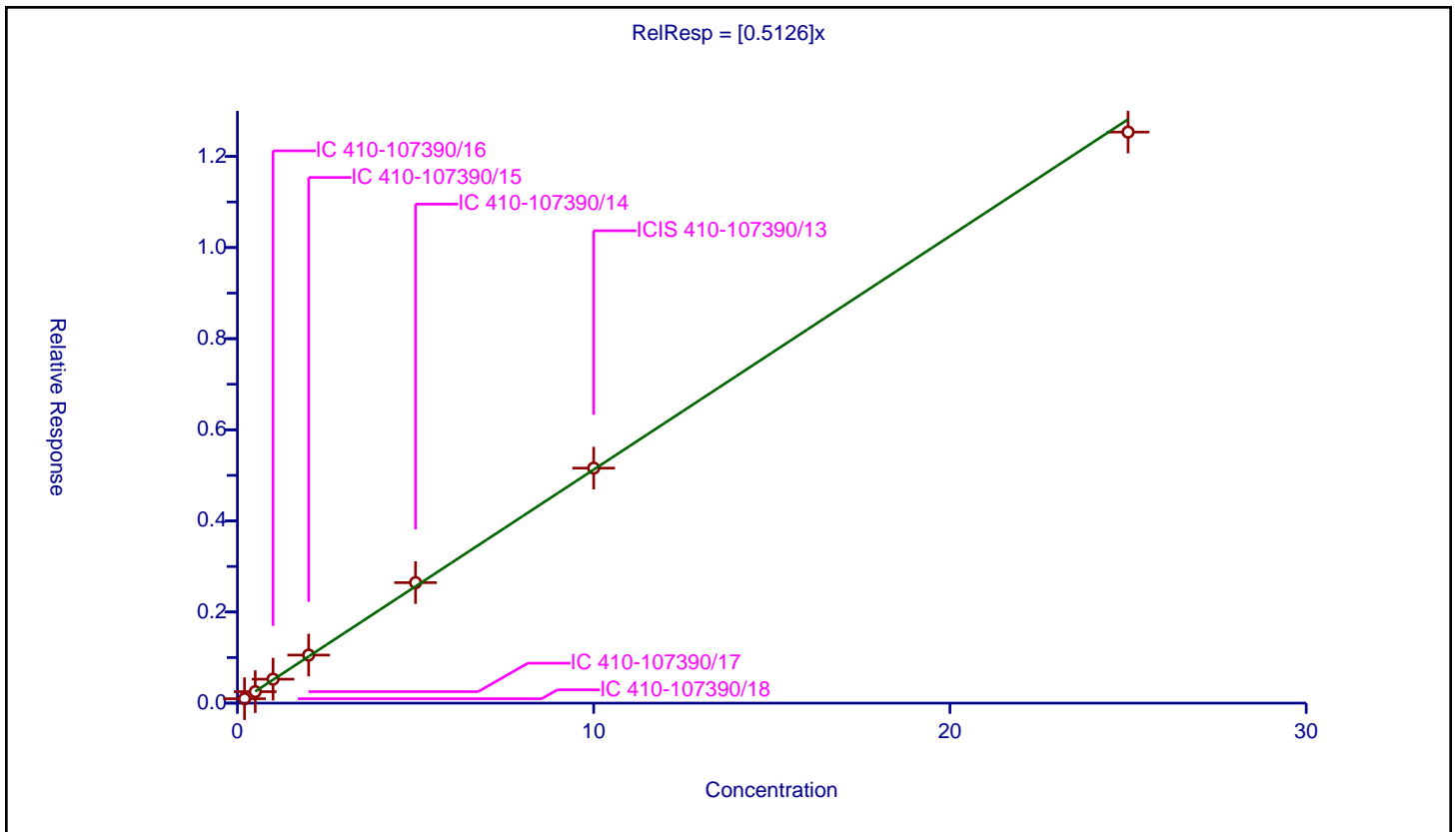
/ 1,3-Dichloropropane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.5126

Error Coefficients	
Standard Error:	931000
Relative Standard Error:	3.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.097013	10.0	1649576.0	0.485064	Y
2	IC 410-107390/17	0.5	0.251696	10.0	1642102.0	0.503391	Y
3	IC 410-107390/16	1.0	0.526026	10.0	1626155.0	0.526026	Y
4	IC 410-107390/15	2.0	1.054932	10.0	1638769.0	0.527466	Y
5	IC 410-107390/14	5.0	2.645046	10.0	1621764.0	0.529009	Y
6	ICIS 410-107390/13	10.0	5.158436	10.0	1638803.0	0.515844	Y
7	IC 410-107390/12	25.0	12.534422	10.0	1647559.0	0.501377	Y



Calibration

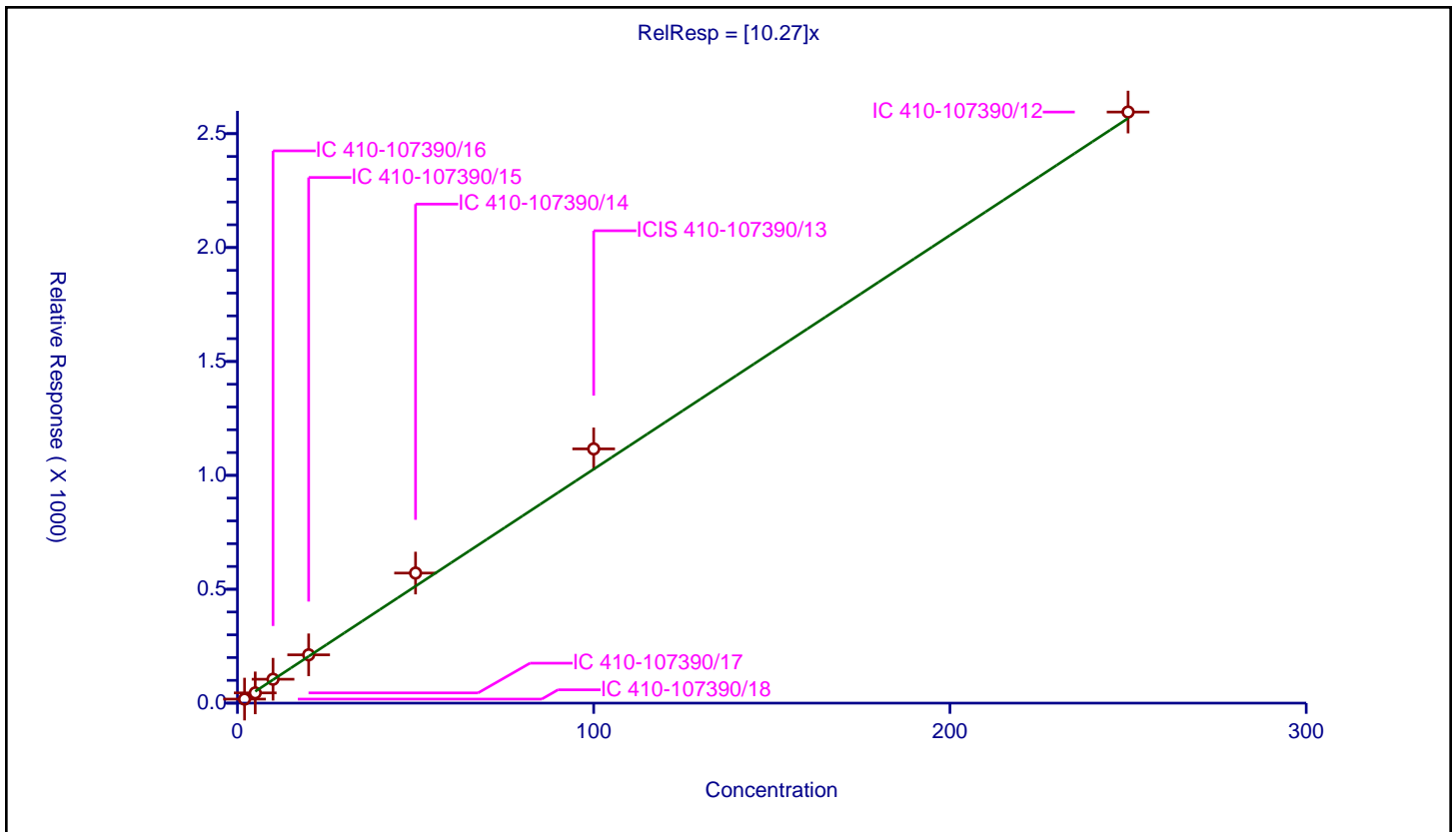
/ 2-Hexanone

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	10.27

Error Coefficients	
Standard Error:	3730000
Relative Standard Error:	9.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	2.0	17.707906	50.0	175560.0	8.853953	Y
2	IC 410-107390/17	5.0	44.910883	50.0	186889.0	8.982177	Y
3	IC 410-107390/16	10.0	104.894197	50.0	165165.0	10.48942	Y
4	IC 410-107390/15	20.0	212.068553	50.0	167112.0	10.603428	Y
5	IC 410-107390/14	50.0	570.994251	50.0	152718.0	11.419885	Y
6	ICIS 410-107390/13	100.0	1116.0878	50.0	155217.0	11.160878	Y
7	IC 410-107390/12	250.0	2594.924666	50.0	158827.0	10.379699	Y



Calibration

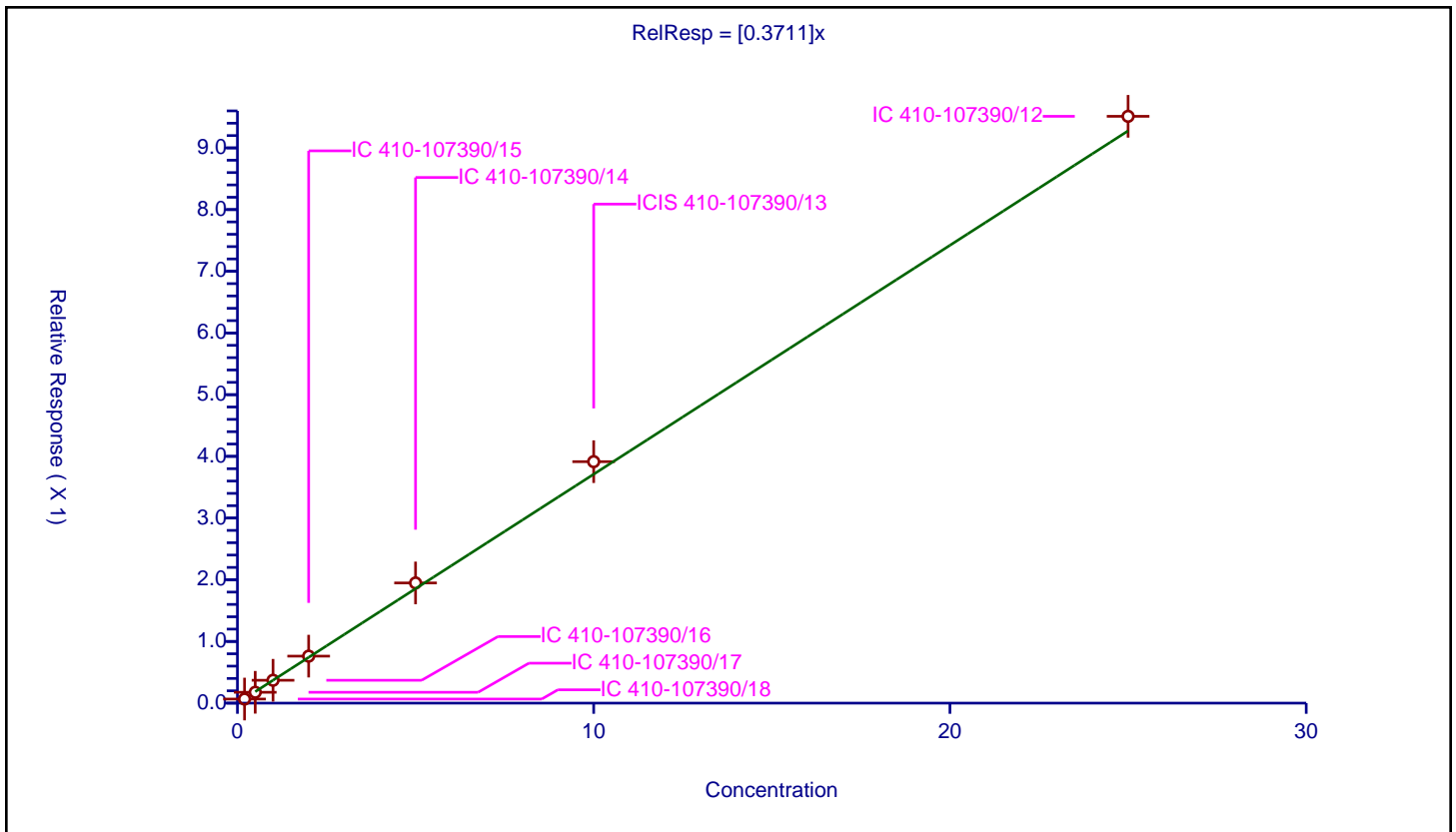
/ Chlorodibromomethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3711

Error Coefficients	
Standard Error:	706000
Relative Standard Error:	5.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.06646	10.0	1649576.0	0.332298	Y
2	IC 410-107390/17	0.5	0.176116	10.0	1642102.0	0.352231	Y
3	IC 410-107390/16	1.0	0.370463	10.0	1626155.0	0.370463	Y
4	IC 410-107390/15	2.0	0.761743	10.0	1638769.0	0.380871	Y
5	IC 410-107390/14	5.0	1.948021	10.0	1621764.0	0.389604	Y
6	ICIS 410-107390/13	10.0	3.914156	10.0	1638803.0	0.391416	Y
7	IC 410-107390/12	25.0	9.511854	10.0	1647559.0	0.380474	Y



Calibration

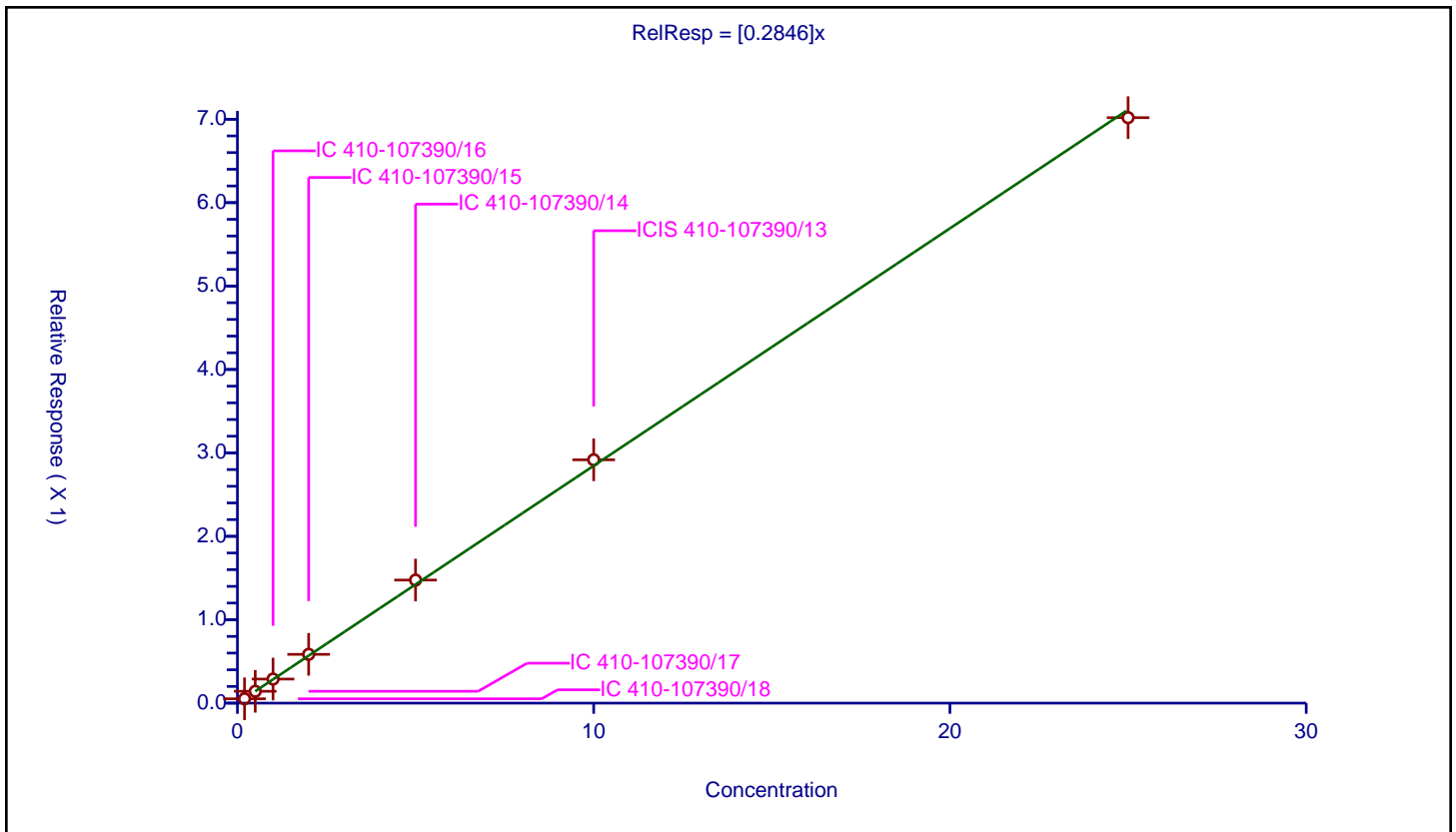
/ Ethylene Dibromide

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2846

Error Coefficients	
Standard Error:	522000
Relative Standard Error:	4.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.051868	10.0	1649576.0	0.259339	Y
2	IC 410-107390/17	0.5	0.142031	10.0	1642102.0	0.284063	Y
3	IC 410-107390/16	1.0	0.288619	10.0	1626155.0	0.288619	Y
4	IC 410-107390/15	2.0	0.584921	10.0	1638769.0	0.29246	Y
5	IC 410-107390/14	5.0	1.475326	10.0	1621764.0	0.295065	Y
6	ICIS 410-107390/13	10.0	2.917215	10.0	1638803.0	0.291721	Y
7	IC 410-107390/12	25.0	7.018759	10.0	1647559.0	0.28075	Y



Calibration

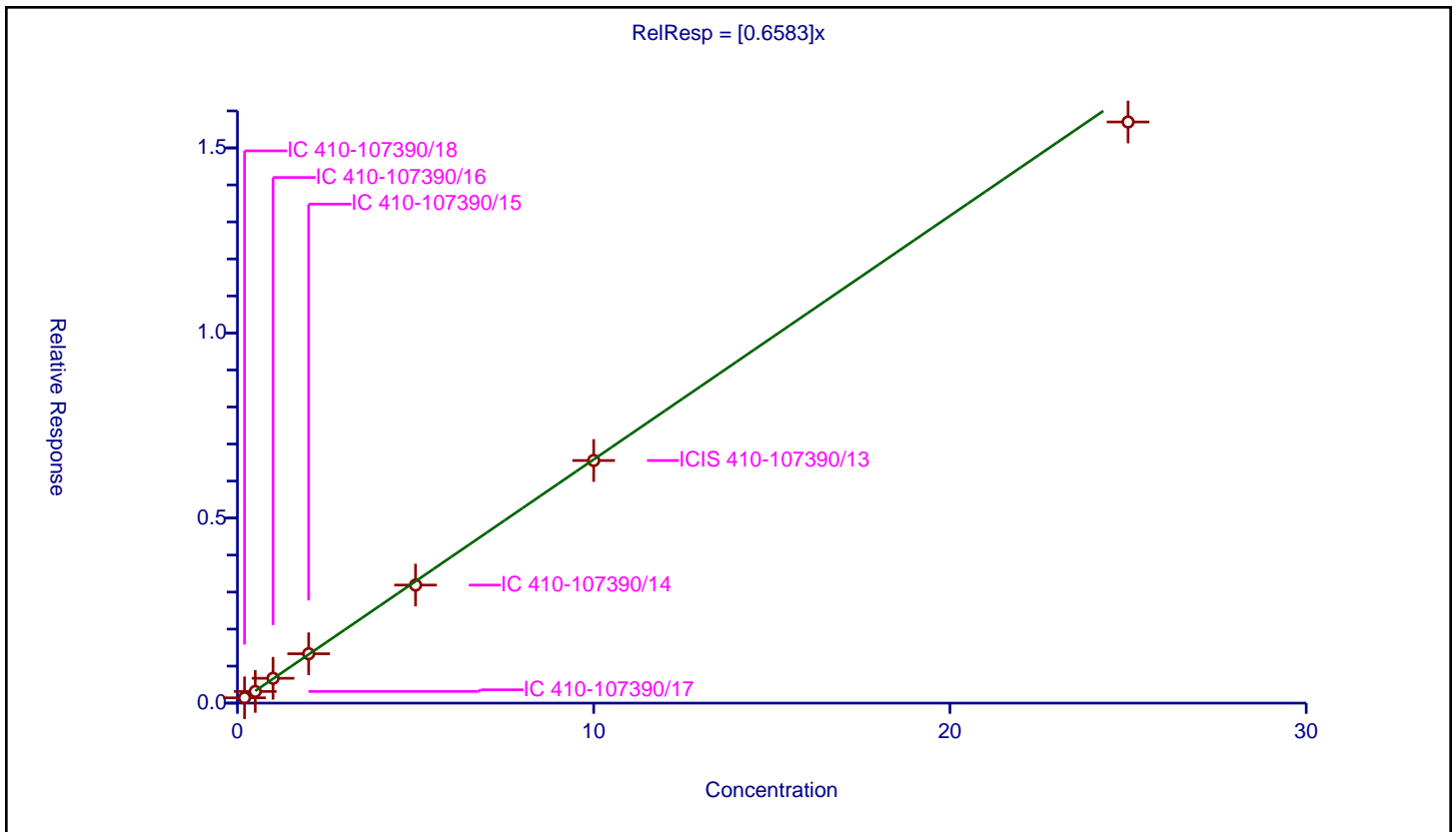
/ 1-Chlorohexane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.6583

Error Coefficients	
Standard Error:	1170000
Relative Standard Error:	4.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.143485	10.0	1649576.0	0.717427	Y
2	IC 410-107390/17	0.5	0.315803	10.0	1642102.0	0.631605	Y
3	IC 410-107390/16	1.0	0.670686	10.0	1626155.0	0.670686	Y
4	IC 410-107390/15	2.0	1.333605	10.0	1638769.0	0.666802	Y
5	IC 410-107390/14	5.0	3.189459	10.0	1621764.0	0.637892	Y
6	ICIS 410-107390/13	10.0	6.554345	10.0	1638803.0	0.655434	Y
7	IC 410-107390/12	25.0	15.70033	10.0	1647559.0	0.628013	Y



Calibration

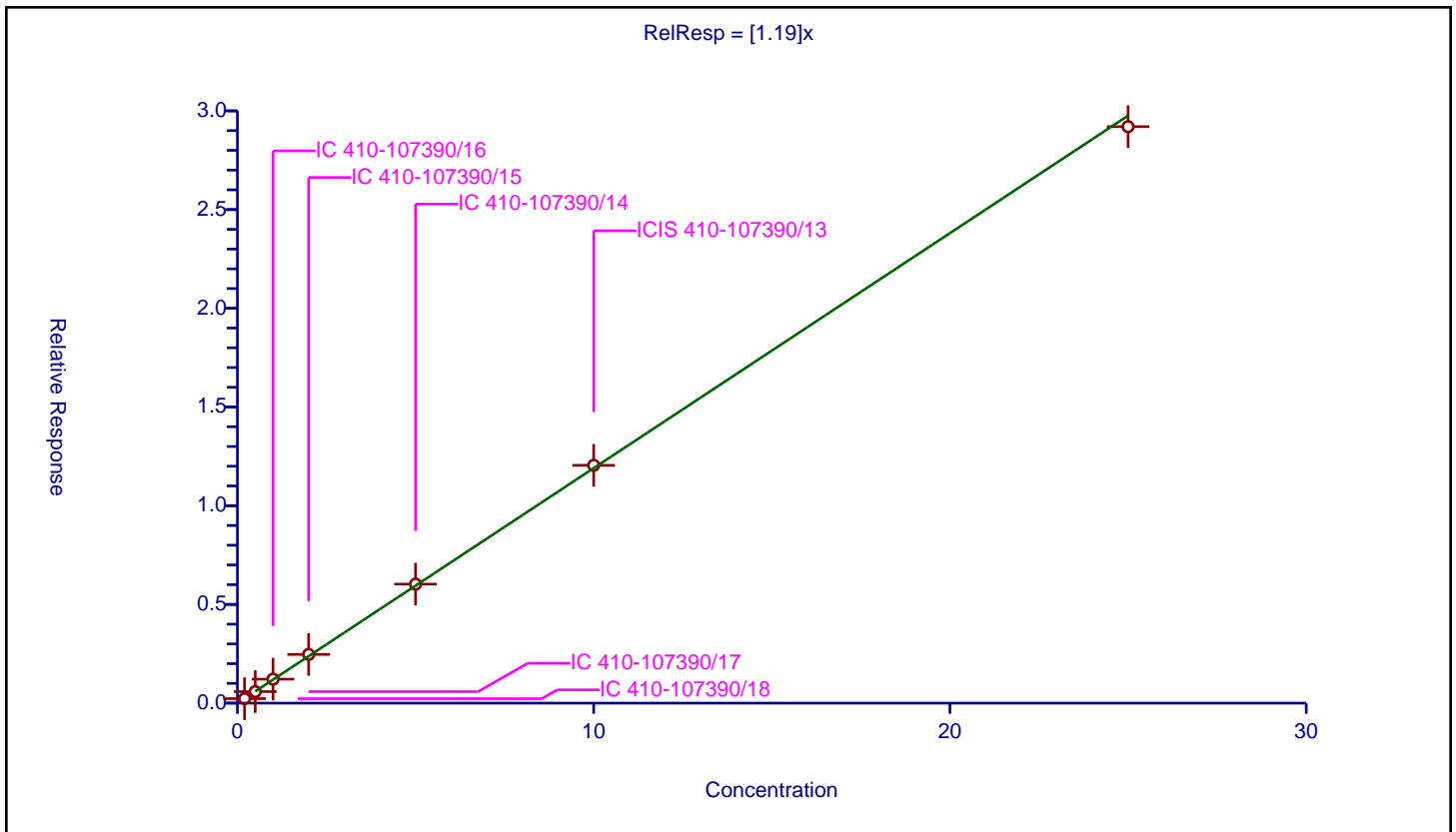
/ Chlorobenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.19

Error Coefficients	
Standard Error:	2170000
Relative Standard Error:	2.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.22781	10.0	1649576.0	1.13905	Y
2	IC 410-107390/17	0.5	0.583557	10.0	1642102.0	1.167114	Y
3	IC 410-107390/16	1.0	1.214257	10.0	1626155.0	1.214257	Y
4	IC 410-107390/15	2.0	2.467285	10.0	1638769.0	1.233642	Y
5	IC 410-107390/14	5.0	6.028393	10.0	1621764.0	1.205679	Y
6	ICIS 410-107390/13	10.0	12.047592	10.0	1638803.0	1.204759	Y
7	IC 410-107390/12	25.0	29.201206	10.0	1647559.0	1.168048	Y



Calibration

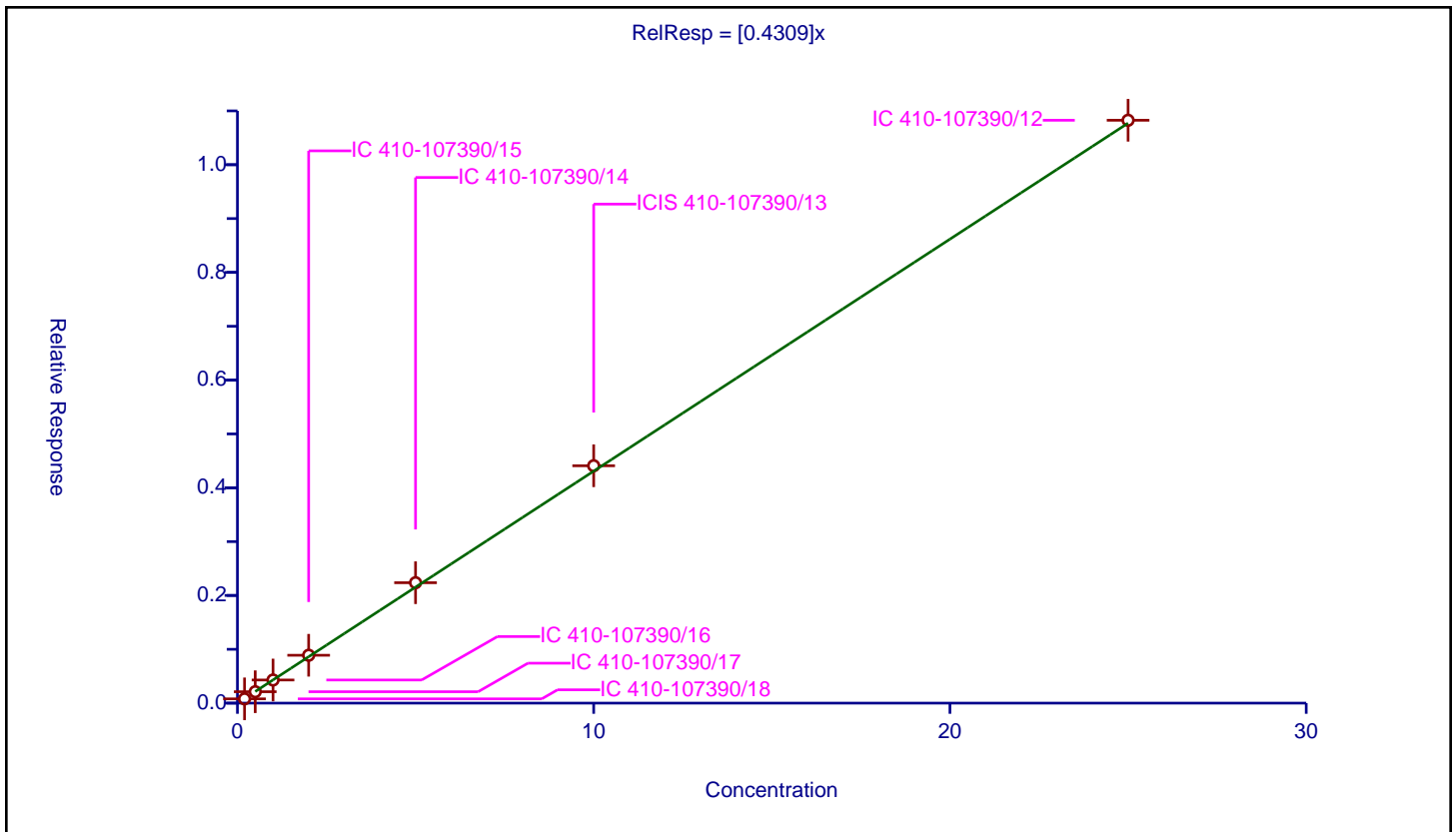
/ 1,1,1,2-Tetrachloroethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4309

Error Coefficients	
Standard Error:	802000
Relative Standard Error:	4.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.079414	10.0	1649576.0	0.397072	Y
2	IC 410-107390/17	0.5	0.211875	10.0	1642102.0	0.42375	Y
3	IC 410-107390/16	1.0	0.429467	10.0	1626155.0	0.429467	Y
4	IC 410-107390/15	2.0	0.889387	10.0	1638769.0	0.444694	Y
5	IC 410-107390/14	5.0	2.236774	10.0	1621764.0	0.447355	Y
6	ICIS 410-107390/13	10.0	4.408712	10.0	1638803.0	0.440871	Y
7	IC 410-107390/12	25.0	10.825712	10.0	1647559.0	0.433028	Y



Calibration

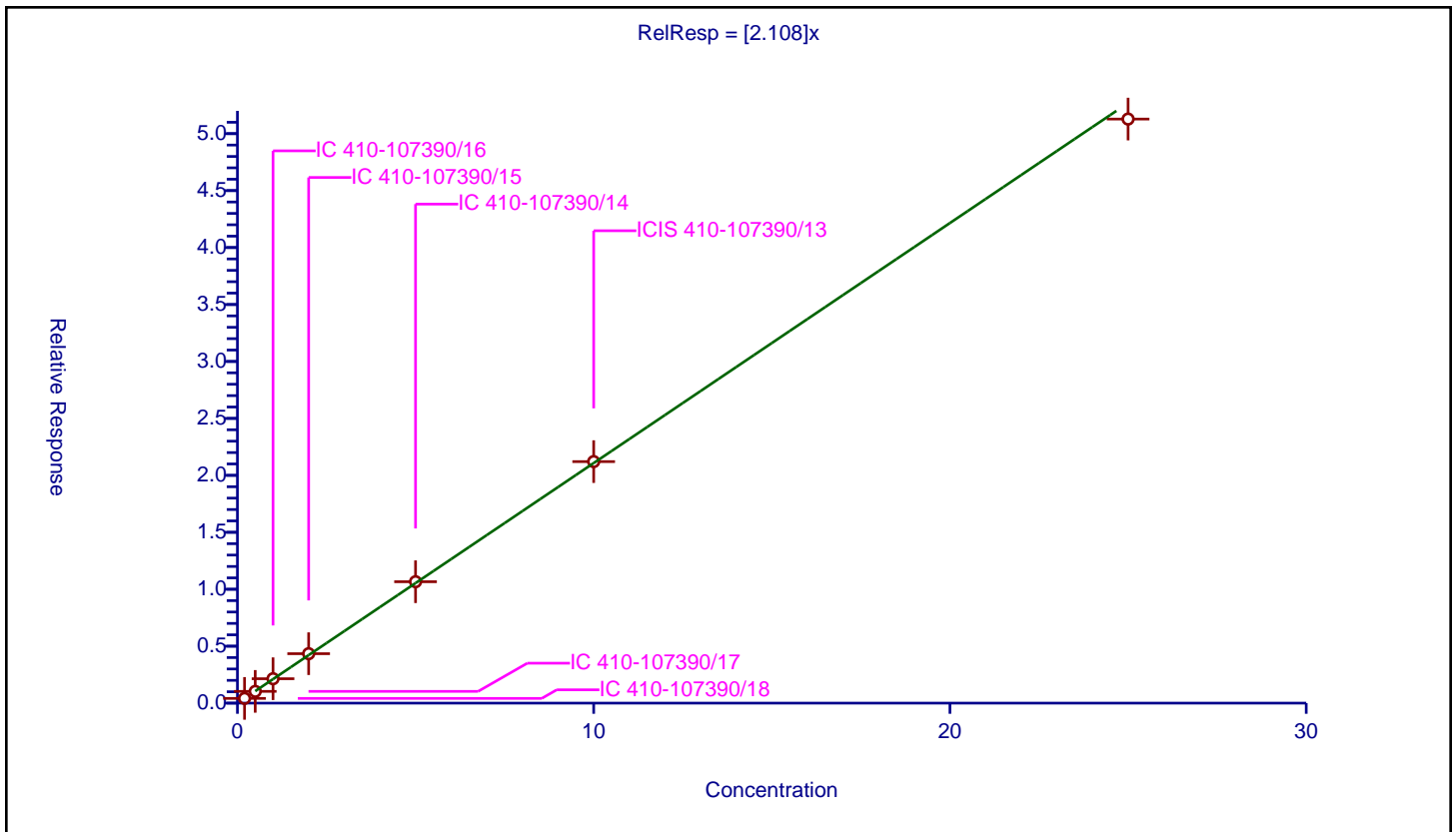
/ Ethylbenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	2.108

Error Coefficients	
Standard Error:	3810000
Relative Standard Error:	2.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.414015	10.0	1649576.0	2.070077	Y
2	IC 410-107390/17	0.5	1.032475	10.0	1642102.0	2.064951	Y
3	IC 410-107390/16	1.0	2.144181	10.0	1626155.0	2.144181	Y
4	IC 410-107390/15	2.0	4.341088	10.0	1638769.0	2.170544	Y
5	IC 410-107390/14	5.0	10.660232	10.0	1621764.0	2.132046	Y
6	ICIS 410-107390/13	10.0	21.207216	10.0	1638803.0	2.120722	Y
7	IC 410-107390/12	25.0	51.282613	10.0	1647559.0	2.051305	Y



Calibration

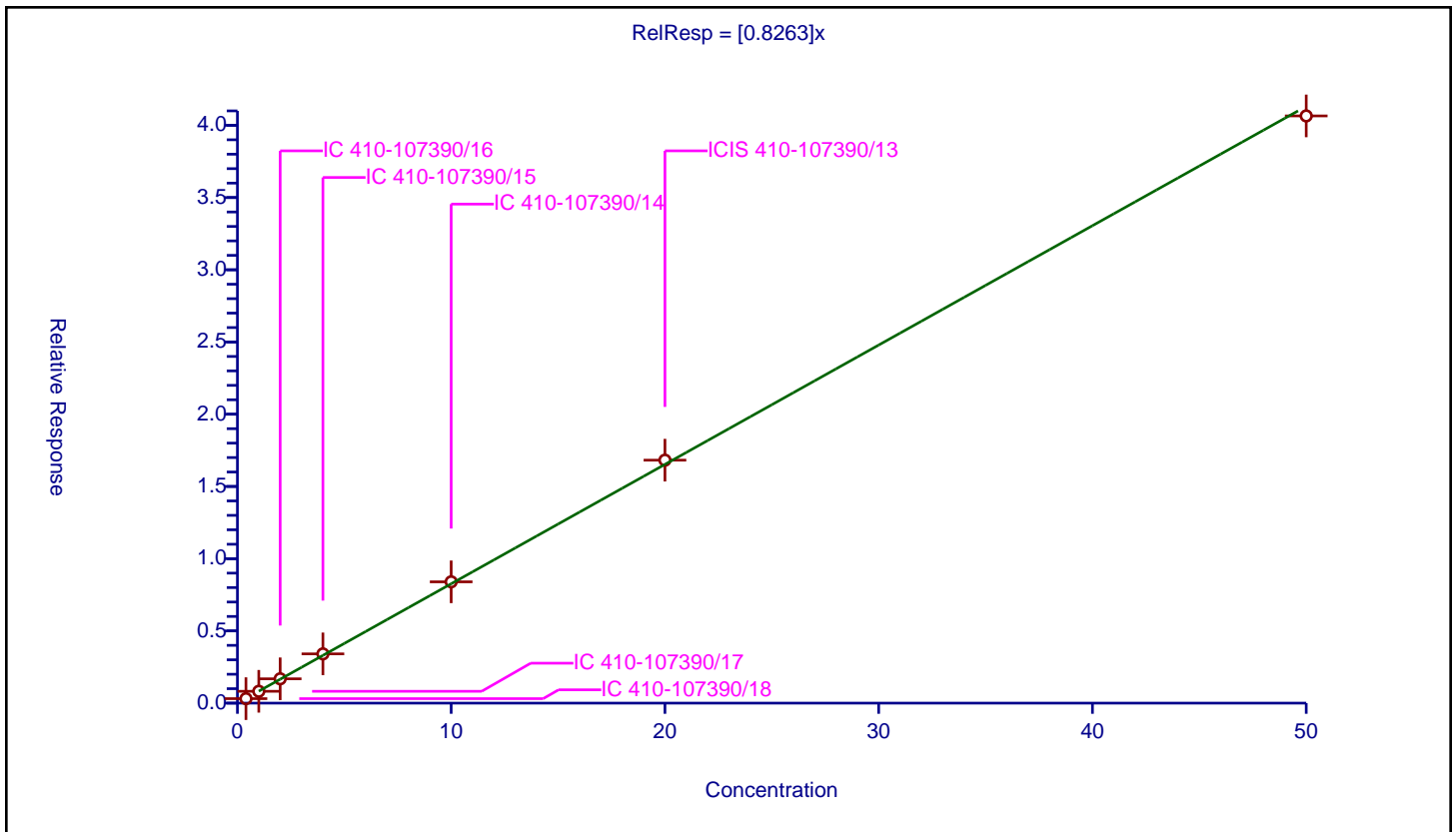
/ m-Xylene & p-Xylene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.8263

Error Coefficients	
Standard Error:	3020000
Relative Standard Error:	3.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.4	0.310383	10.0	1649576.0	0.775957	Y
2	IC 410-107390/17	1.0	0.819766	10.0	1642102.0	0.819766	Y
3	IC 410-107390/16	2.0	1.684132	10.0	1626155.0	0.842066	Y
4	IC 410-107390/15	4.0	3.41023	10.0	1638769.0	0.852558	Y
5	IC 410-107390/14	10.0	8.398404	10.0	1621764.0	0.83984	Y
6	ICIS 410-107390/13	20.0	16.820051	10.0	1638803.0	0.841003	Y
7	IC 410-107390/12	50.0	40.650854	10.0	1647559.0	0.813017	Y



Calibration

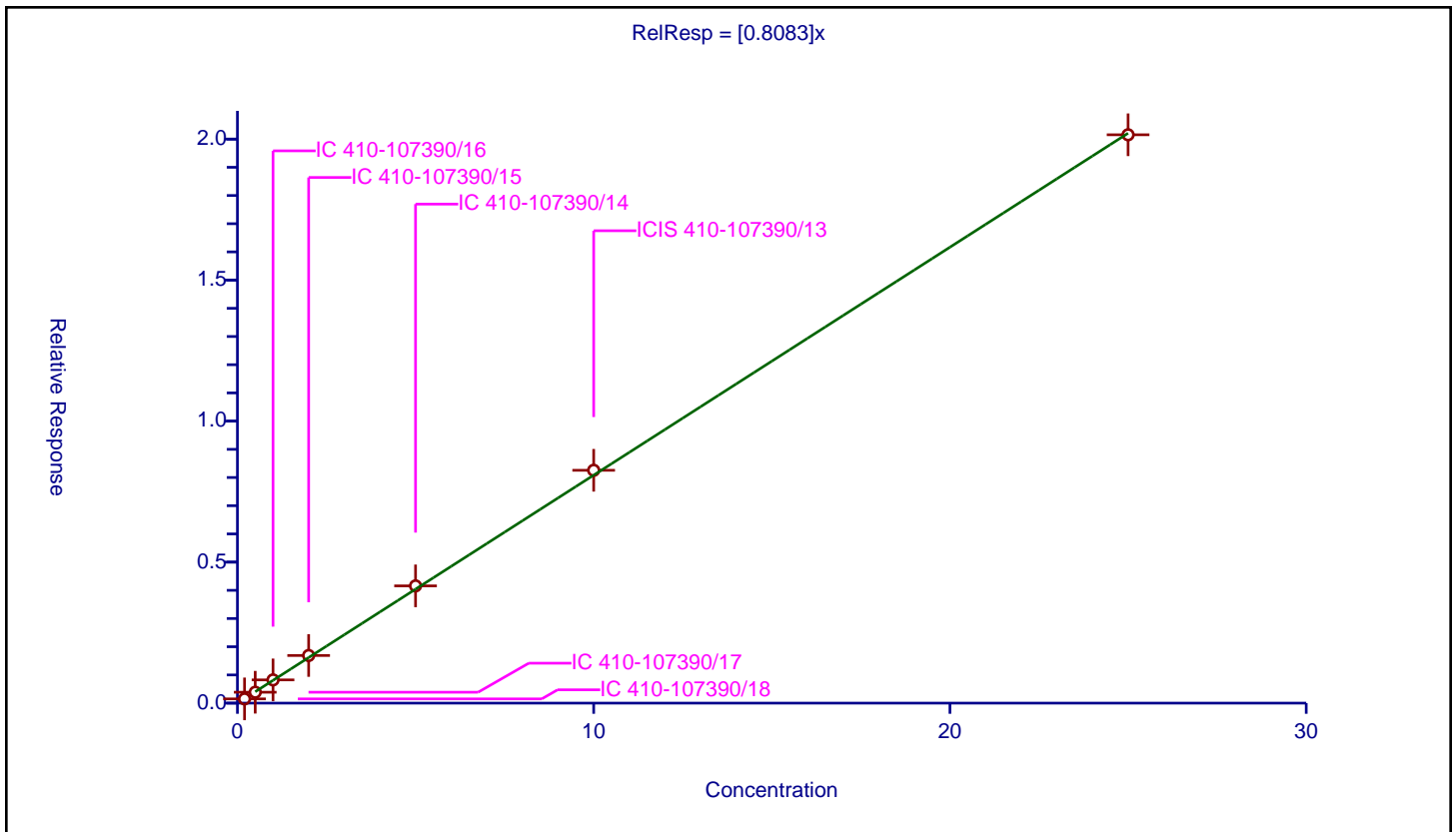
/ o-Xylene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.8083

Error Coefficients	
Standard Error:	1490000
Relative Standard Error:	4.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.150439	10.0	1649576.0	0.752193	Y
2	IC 410-107390/17	0.5	0.387187	10.0	1642102.0	0.774373	Y
3	IC 410-107390/16	1.0	0.823839	10.0	1626155.0	0.823839	Y
4	IC 410-107390/15	2.0	1.689402	10.0	1638769.0	0.844701	Y
5	IC 410-107390/14	5.0	4.157985	10.0	1621764.0	0.831597	Y
6	ICIS 410-107390/13	10.0	8.256398	10.0	1638803.0	0.82564	Y
7	IC 410-107390/12	25.0	20.152444	10.0	1647559.0	0.806098	Y



Calibration

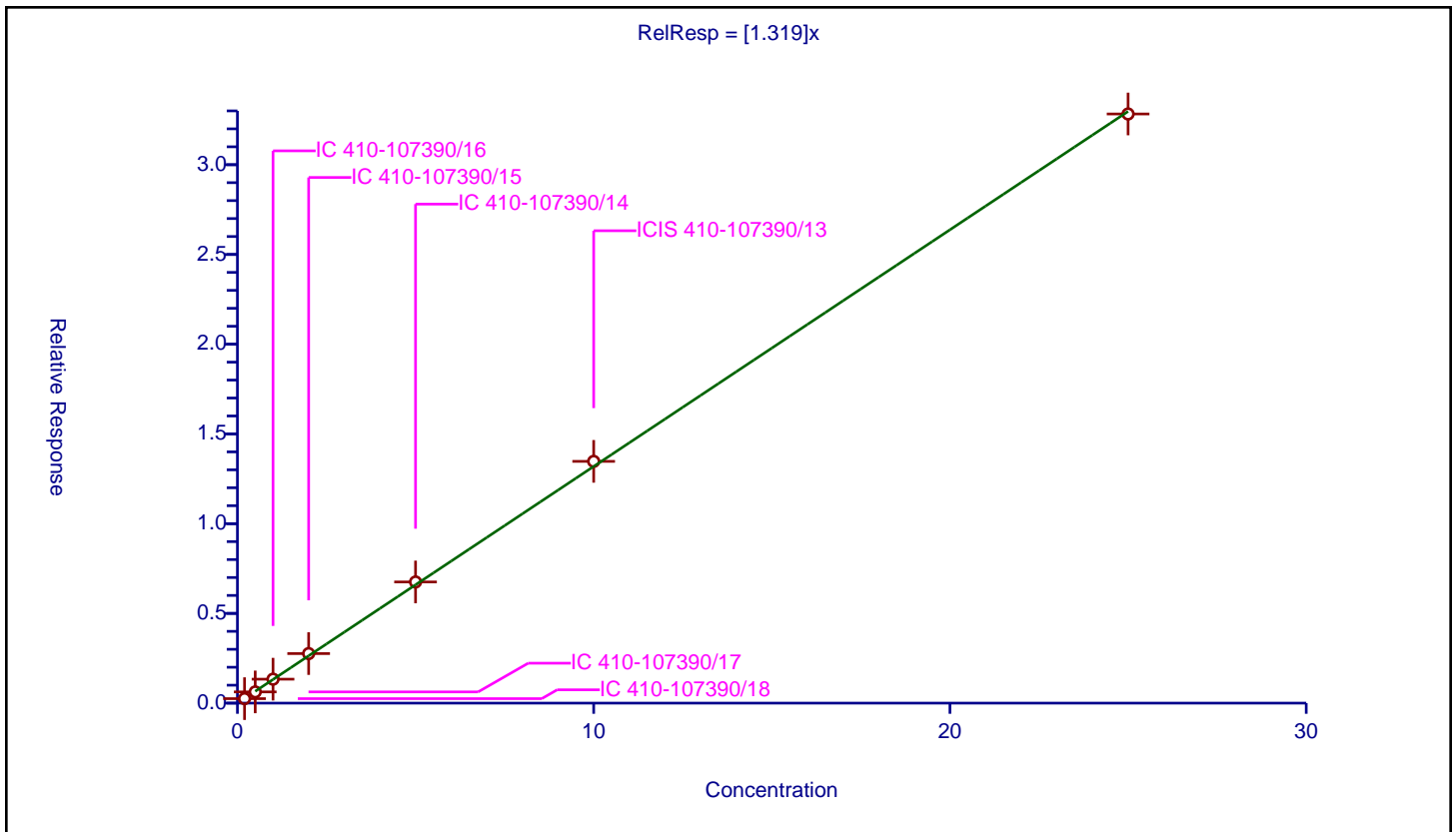
/ Styrene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.319

Error Coefficients	
Standard Error:	2440000
Relative Standard Error:	3.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.250646	10.0	1649576.0	1.253231	Y
2	IC 410-107390/17	0.5	0.626063	10.0	1642102.0	1.252127	Y
3	IC 410-107390/16	1.0	1.334867	10.0	1626155.0	1.334867	Y
4	IC 410-107390/15	2.0	2.76139	10.0	1638769.0	1.380695	Y
5	IC 410-107390/14	5.0	6.752098	10.0	1621764.0	1.35042	Y
6	ICIS 410-107390/13	10.0	13.471186	10.0	1638803.0	1.347119	Y
7	IC 410-107390/12	25.0	32.827486	10.0	1647559.0	1.313099	Y



Calibration

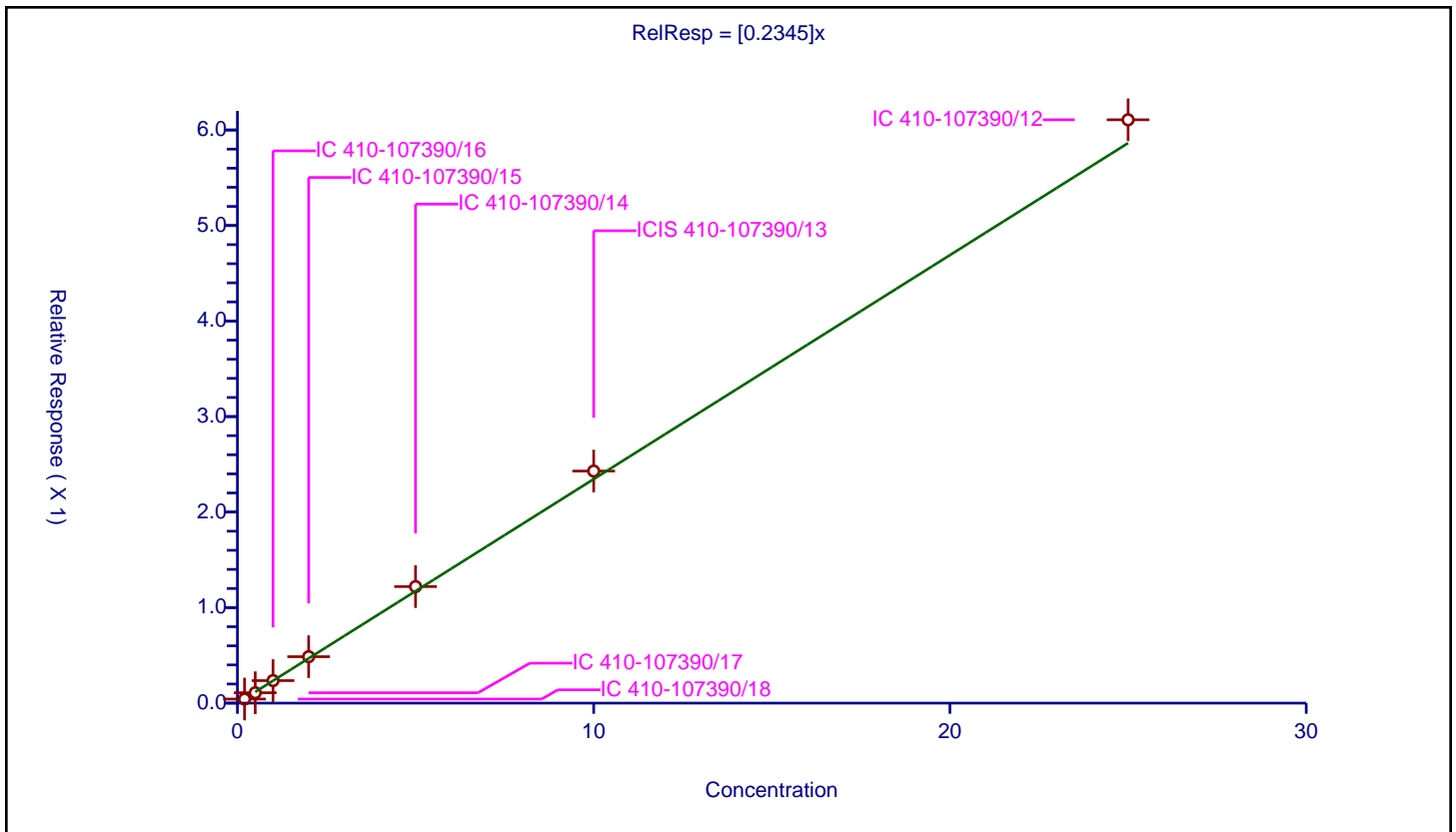
/ Bromoform

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2345

Error Coefficients	
Standard Error:	451000
Relative Standard Error:	5.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.042872	10.0	1649576.0	0.214358	Y
2	IC 410-107390/17	0.5	0.108556	10.0	1642102.0	0.217112	Y
3	IC 410-107390/16	1.0	0.235875	10.0	1626155.0	0.235875	Y
4	IC 410-107390/15	2.0	0.486121	10.0	1638769.0	0.24306	Y
5	IC 410-107390/14	5.0	1.219894	10.0	1621764.0	0.243979	Y
6	ICIS 410-107390/13	10.0	2.429517	10.0	1638803.0	0.242952	Y
7	IC 410-107390/12	25.0	6.106865	10.0	1647559.0	0.244275	Y



Calibration

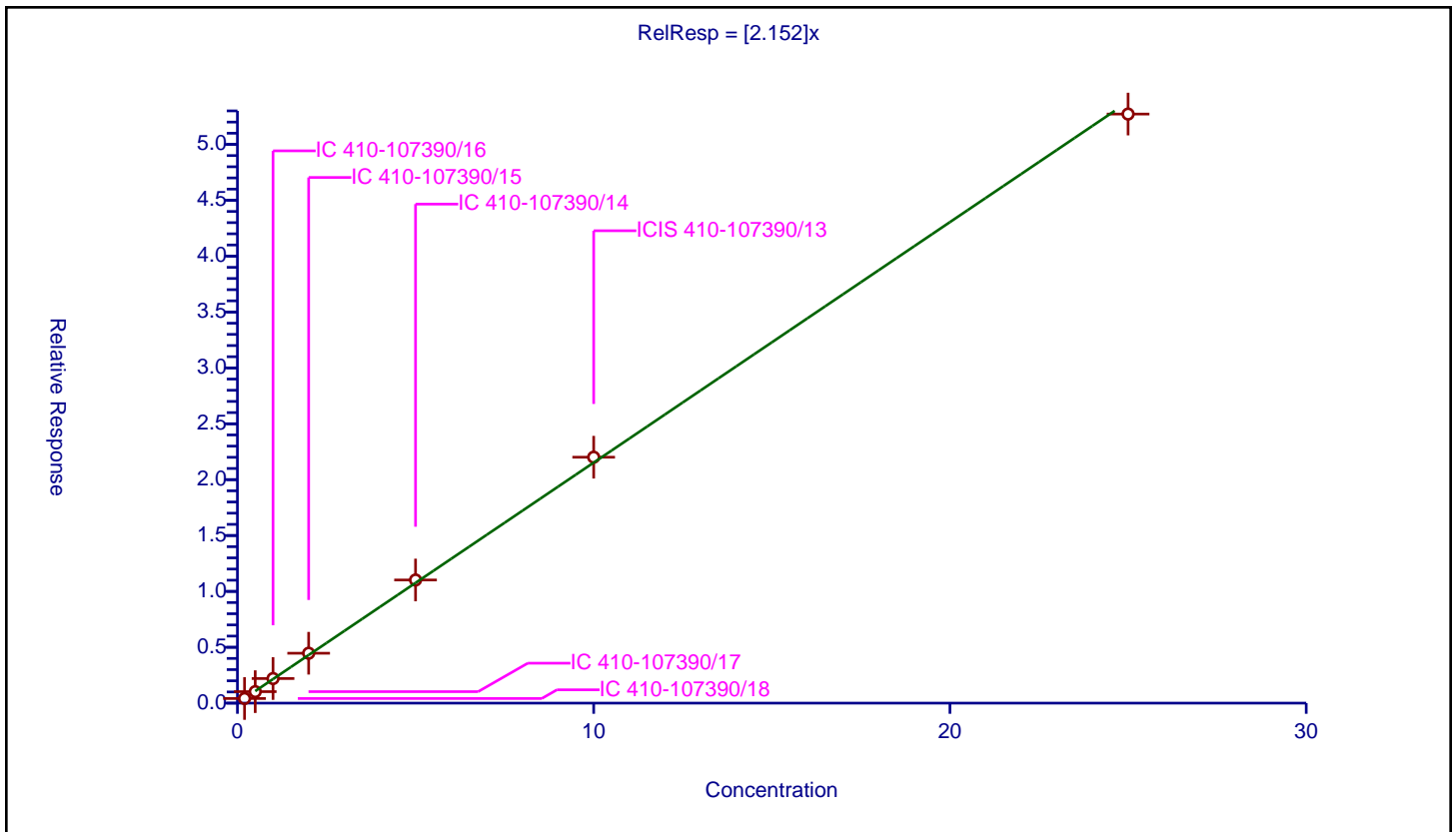
/ Isopropylbenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	2.152

Error Coefficients	
Standard Error:	3920000
Relative Standard Error:	3.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.412997	10.0	1649576.0	2.064985	Y
2	IC 410-107390/17	0.5	1.027342	10.0	1642102.0	2.054684	Y
3	IC 410-107390/16	1.0	2.201112	10.0	1626155.0	2.201112	Y
4	IC 410-107390/15	2.0	4.464552	10.0	1638769.0	2.232276	Y
5	IC 410-107390/14	5.0	11.020352	10.0	1621764.0	2.20407	Y
6	ICIS 410-107390/13	10.0	22.007789	10.0	1638803.0	2.200779	Y
7	IC 410-107390/12	25.0	52.717396	10.0	1647559.0	2.108696	Y



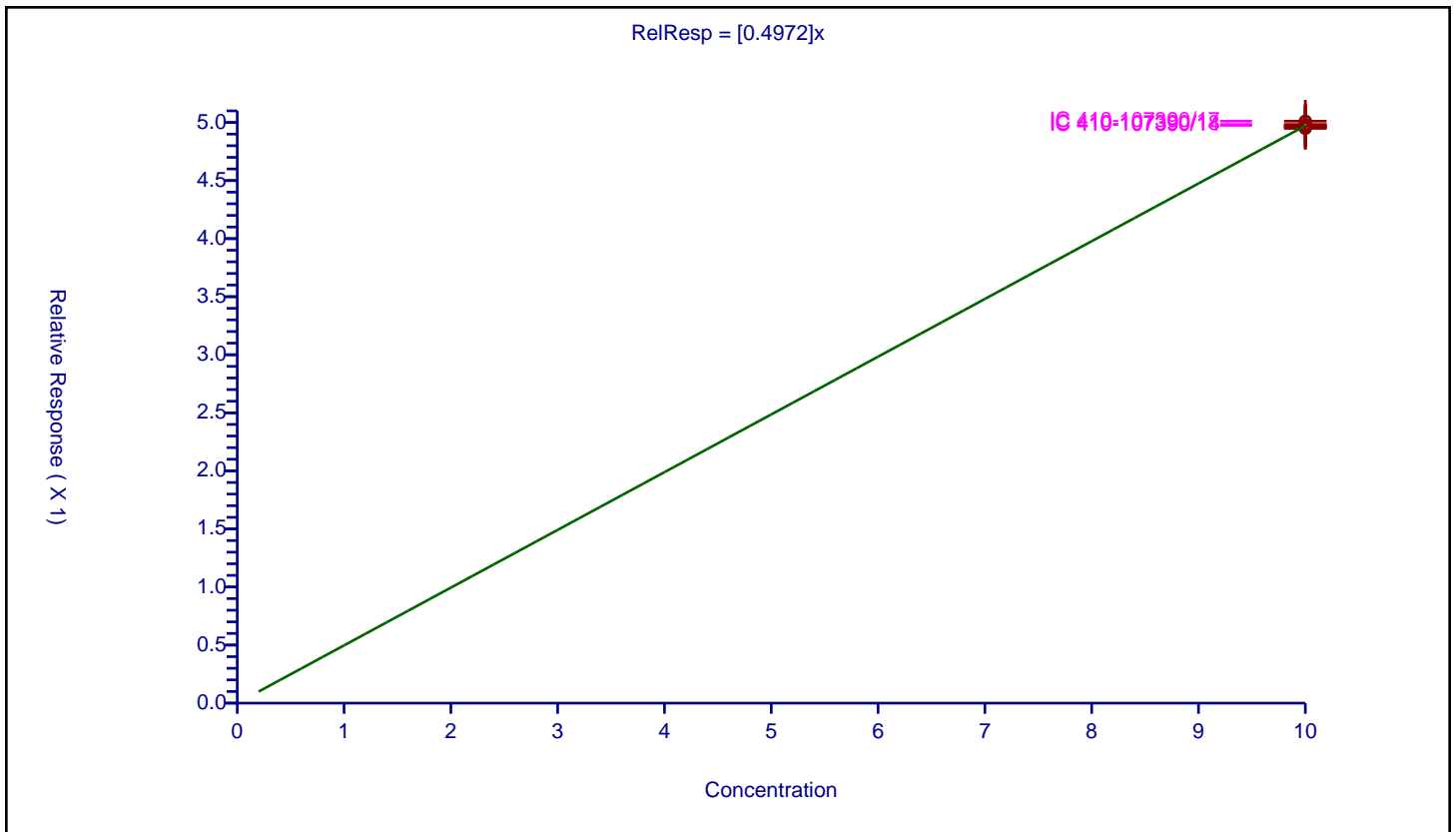
Calibration

/ 4-Bromofluorobenzene (Surr)

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4972
Error Coefficients	
Standard Error:	880000
Relative Standard Error:	0.4
Correlation Coefficient:	0.00000000000000000000
Coefficient of Determination (Adjusted):	0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/15	10.0	4.949123	10.0	1638769.0	0.494912	Y
2	IC 410-107390/14	10.0	4.975169	10.0	1621764.0	0.497517	Y
3	IC 410-107390/12	10.0	4.959185	10.0	1647559.0	0.495919	Y
4	ICIS 410-107390/13	10.0	4.958985	10.0	1638803.0	0.495899	Y
5	IC 410-107390/16	10.0	4.968524	10.0	1626155.0	0.496852	Y
6	IC 410-107390/17	10.0	5.011461	10.0	1642102.0	0.501146	Y
7	IC 410-107390/18	10.0	4.983105	10.0	1649576.0	0.49831	Y



Calibration

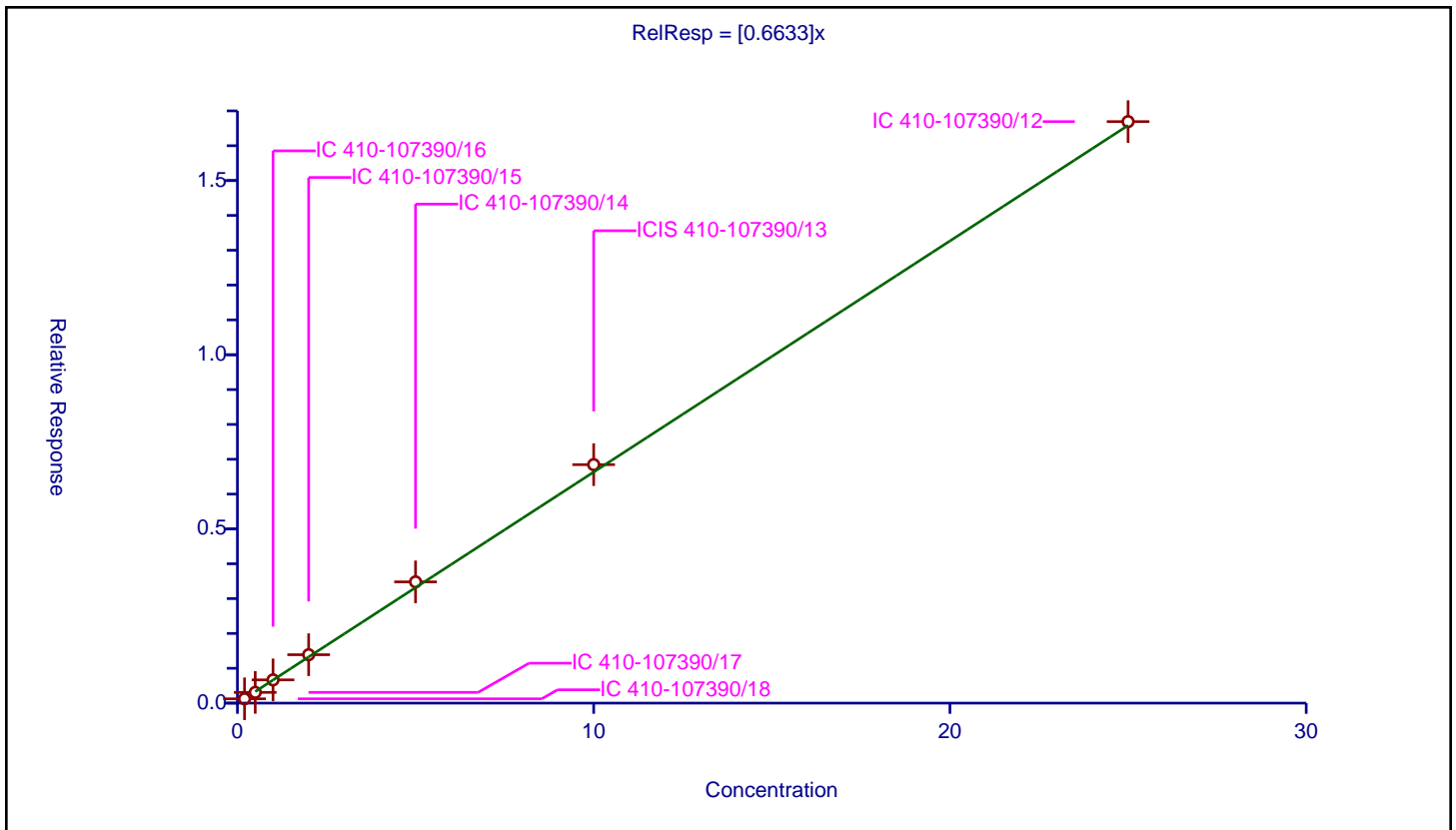
/ 1,1,2,2-Tetrachloroethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.6633

Error Coefficients	
Standard Error:	685000
Relative Standard Error:	5.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.123182	10.0	922535.0	0.615912	Y
2	IC 410-107390/17	0.5	0.308807	10.0	926371.0	0.617614	Y
3	IC 410-107390/16	1.0	0.666761	10.0	911826.0	0.666761	Y
4	IC 410-107390/15	2.0	1.389169	10.0	911732.0	0.694585	Y
5	IC 410-107390/14	5.0	3.4807	10.0	899730.0	0.69614	Y
6	ICIS 410-107390/13	10.0	6.845448	10.0	899738.0	0.684545	Y
7	IC 410-107390/12	25.0	16.692185	10.0	911496.0	0.667687	Y



Calibration

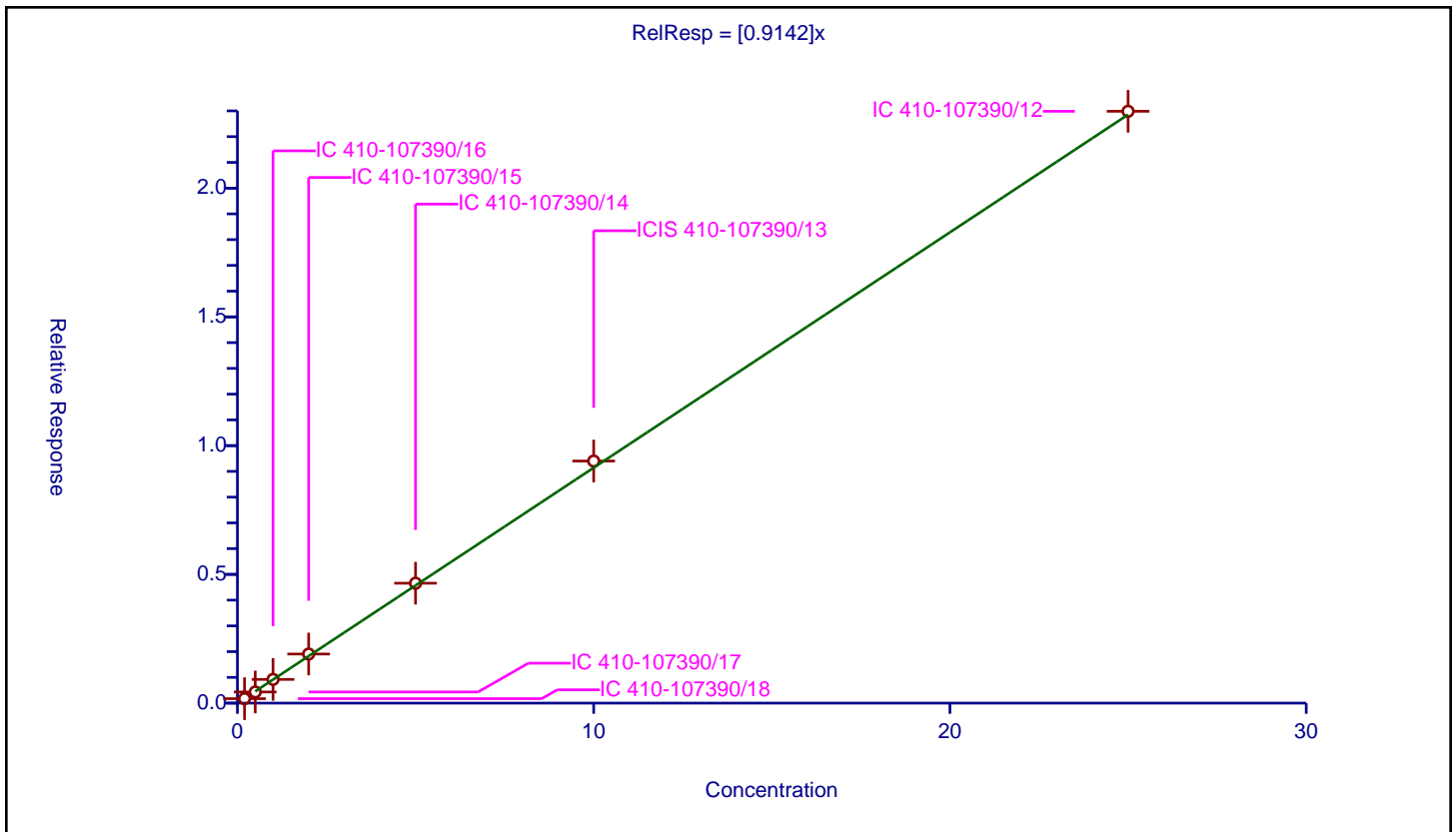
/ Bromobenzene

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.9142

Error Coefficients	
Standard Error:	942000
Relative Standard Error:	3.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.173533	10.0	922535.0	0.867664	Y
2	IC 410-107390/17	0.5	0.433358	10.0	926371.0	0.866715	Y
3	IC 410-107390/16	1.0	0.920779	10.0	911826.0	0.920779	Y
4	IC 410-107390/15	2.0	1.906514	10.0	911732.0	0.953257	Y
5	IC 410-107390/14	5.0	4.656664	10.0	899730.0	0.931333	Y
6	ICIS 410-107390/13	10.0	9.401404	10.0	899738.0	0.94014	Y
7	IC 410-107390/12	25.0	22.984785	10.0	911496.0	0.919391	Y



Calibration

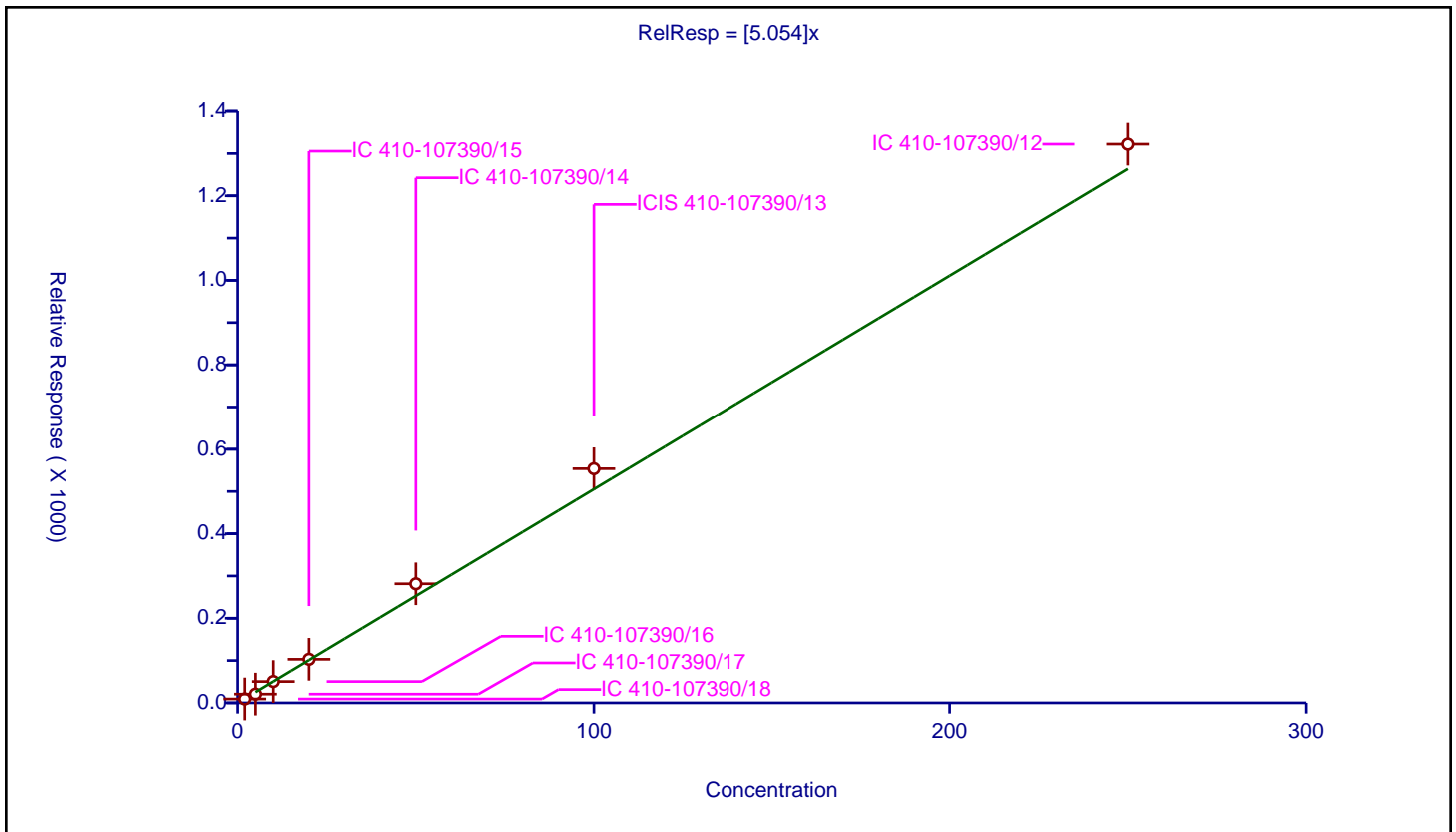
/ trans-1,4-Dichloro-2-butene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	5.054

Error Coefficients	
Standard Error:	1890000
Relative Standard Error:	10.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	2.0	9.202552	50.0	175560.0	4.601276	Y
2	IC 410-107390/17	5.0	20.660392	50.0	186889.0	4.132078	Y
3	IC 410-107390/16	10.0	50.425332	50.0	165165.0	5.042533	Y
4	IC 410-107390/15	20.0	102.939645	50.0	167112.0	5.146982	Y
5	IC 410-107390/14	50.0	281.50349	50.0	152718.0	5.63007	Y
6	ICIS 410-107390/13	100.0	553.953175	50.0	155217.0	5.539532	Y
7	IC 410-107390/12	250.0	1322.101406	50.0	158827.0	5.288406	Y



Calibration

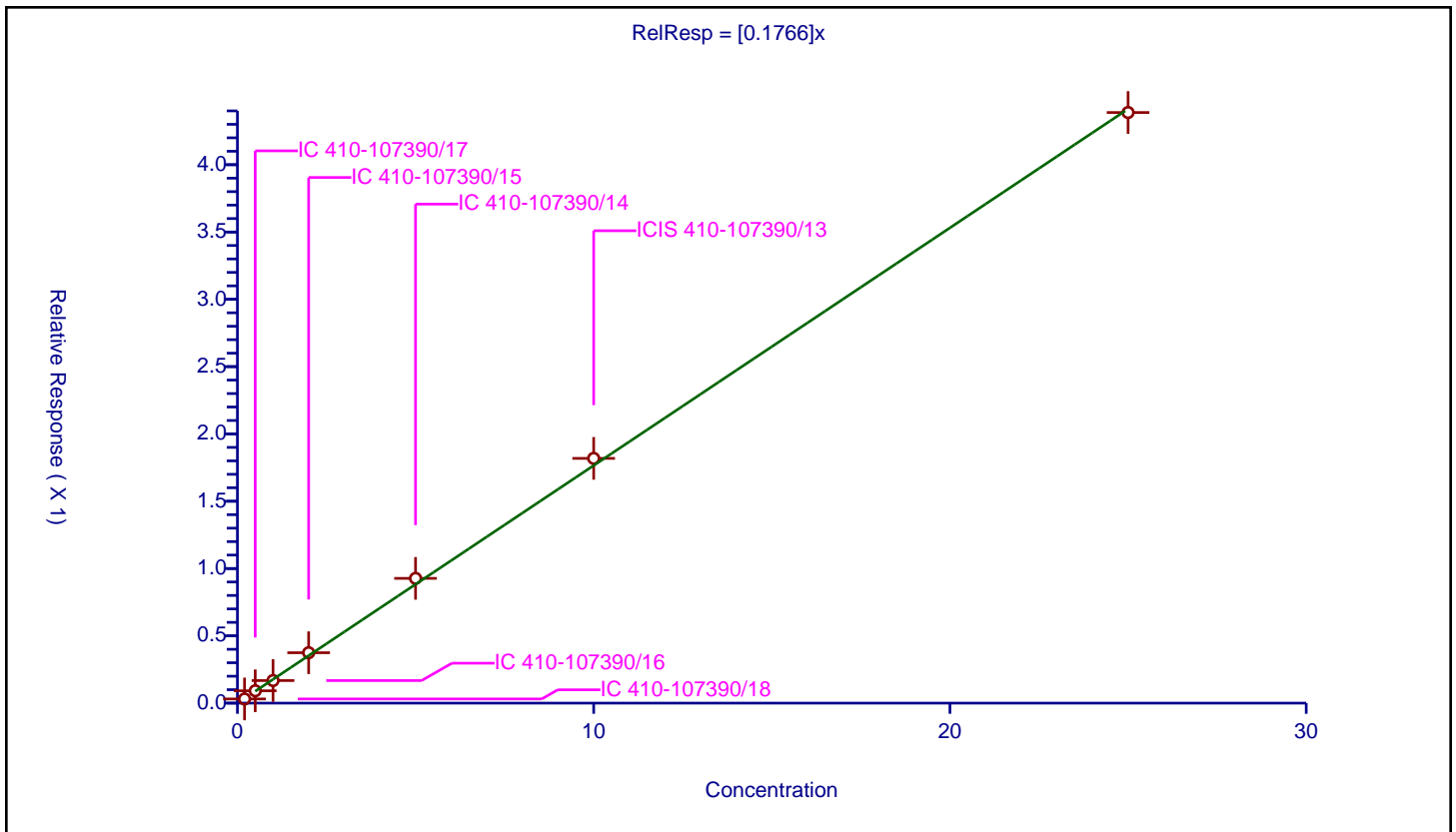
/ 1,2,3-Trichloropropane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.1766

Error Coefficients	
Standard Error:	180000
Relative Standard Error:	6.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.030915	10.0	922535.0	0.154574	Y
2	IC 410-107390/17	0.5	0.091799	10.0	926371.0	0.183598	Y
3	IC 410-107390/16	1.0	0.167762	10.0	911826.0	0.167762	Y
4	IC 410-107390/15	2.0	0.37454	10.0	911732.0	0.18727	Y
5	IC 410-107390/14	5.0	0.926845	10.0	899730.0	0.185369	Y
6	ICIS 410-107390/13	10.0	1.818374	10.0	899738.0	0.181837	Y
7	IC 410-107390/12	25.0	4.387995	10.0	911496.0	0.17552	Y



Calibration

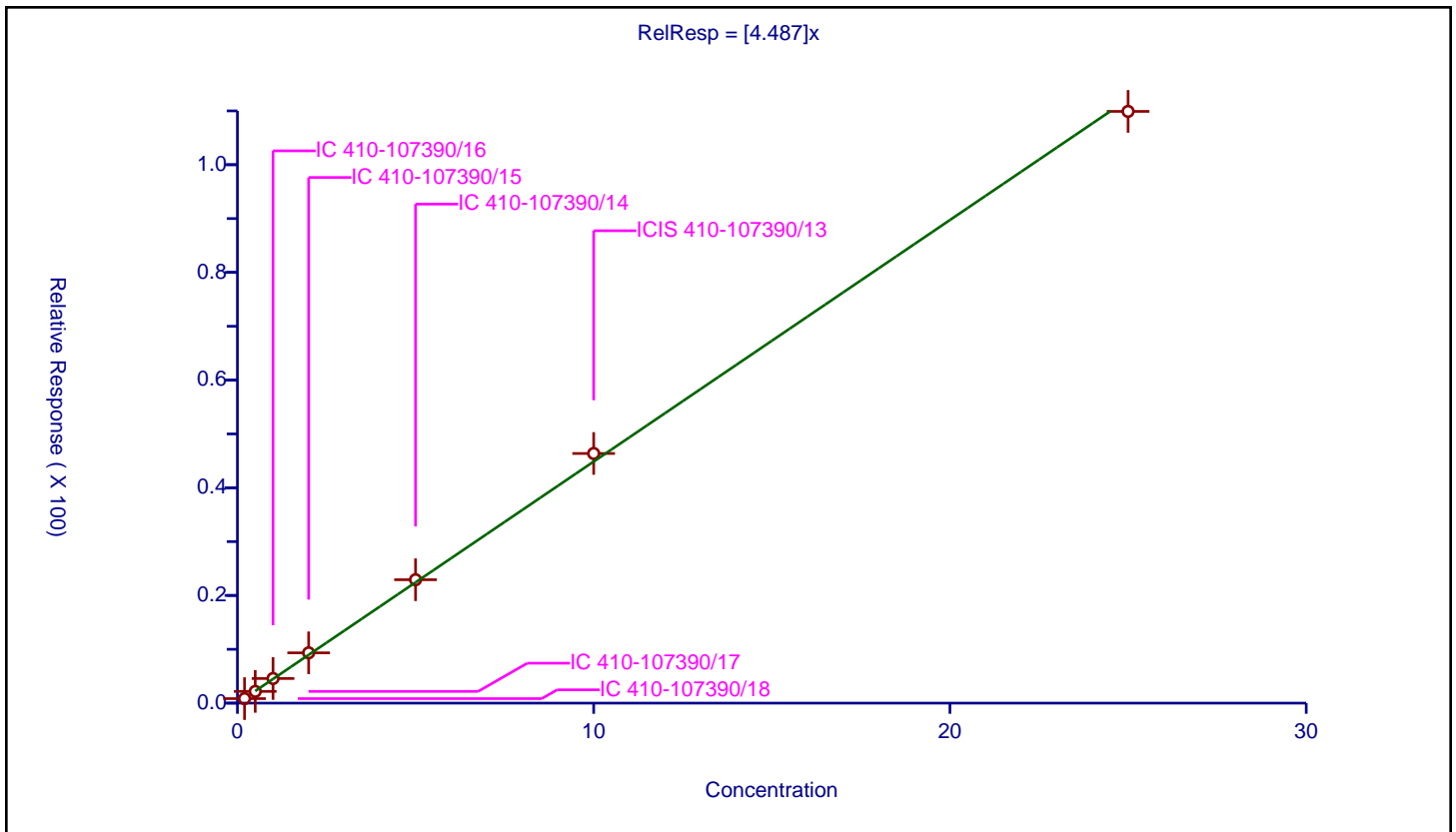
/ N-Propylbenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	4.487

Error Coefficients	
Standard Error:	4530000
Relative Standard Error:	4.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.836239	10.0	922535.0	4.181196	Y
2	IC 410-107390/17	0.5	2.181405	10.0	926371.0	4.362809	Y
3	IC 410-107390/16	1.0	4.573614	10.0	911826.0	4.573614	Y
4	IC 410-107390/15	2.0	9.342131	10.0	911732.0	4.671066	Y
5	IC 410-107390/14	5.0	22.921632	10.0	899730.0	4.584326	Y
6	ICIS 410-107390/13	10.0	46.367987	10.0	899738.0	4.636799	Y
7	IC 410-107390/12	25.0	109.908316	10.0	911496.0	4.396333	Y



Calibration

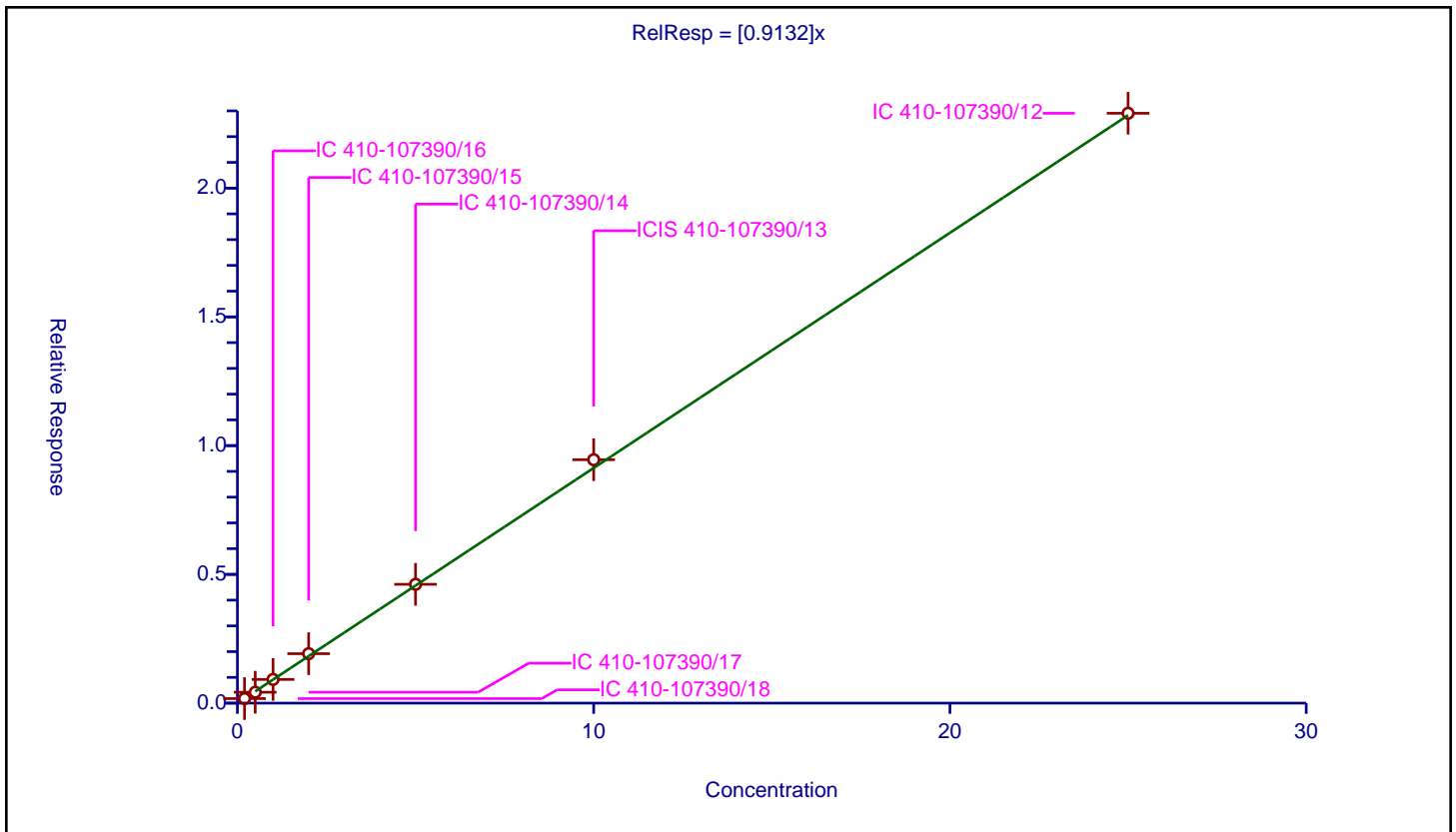
/ 2-Chlorotoluene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.9132

Error Coefficients	
Standard Error:	939000
Relative Standard Error:	4.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.176221	10.0	922535.0	0.881105	Y
2	IC 410-107390/17	0.5	0.423459	10.0	926371.0	0.846918	Y
3	IC 410-107390/16	1.0	0.919814	10.0	911826.0	0.919814	Y
4	IC 410-107390/15	2.0	1.920685	10.0	911732.0	0.960343	Y
5	IC 410-107390/14	5.0	4.614584	10.0	899730.0	0.922917	Y
6	ICIS 410-107390/13	10.0	9.453163	10.0	899738.0	0.945316	Y
7	IC 410-107390/12	25.0	22.907045	10.0	911496.0	0.916282	Y



Calibration

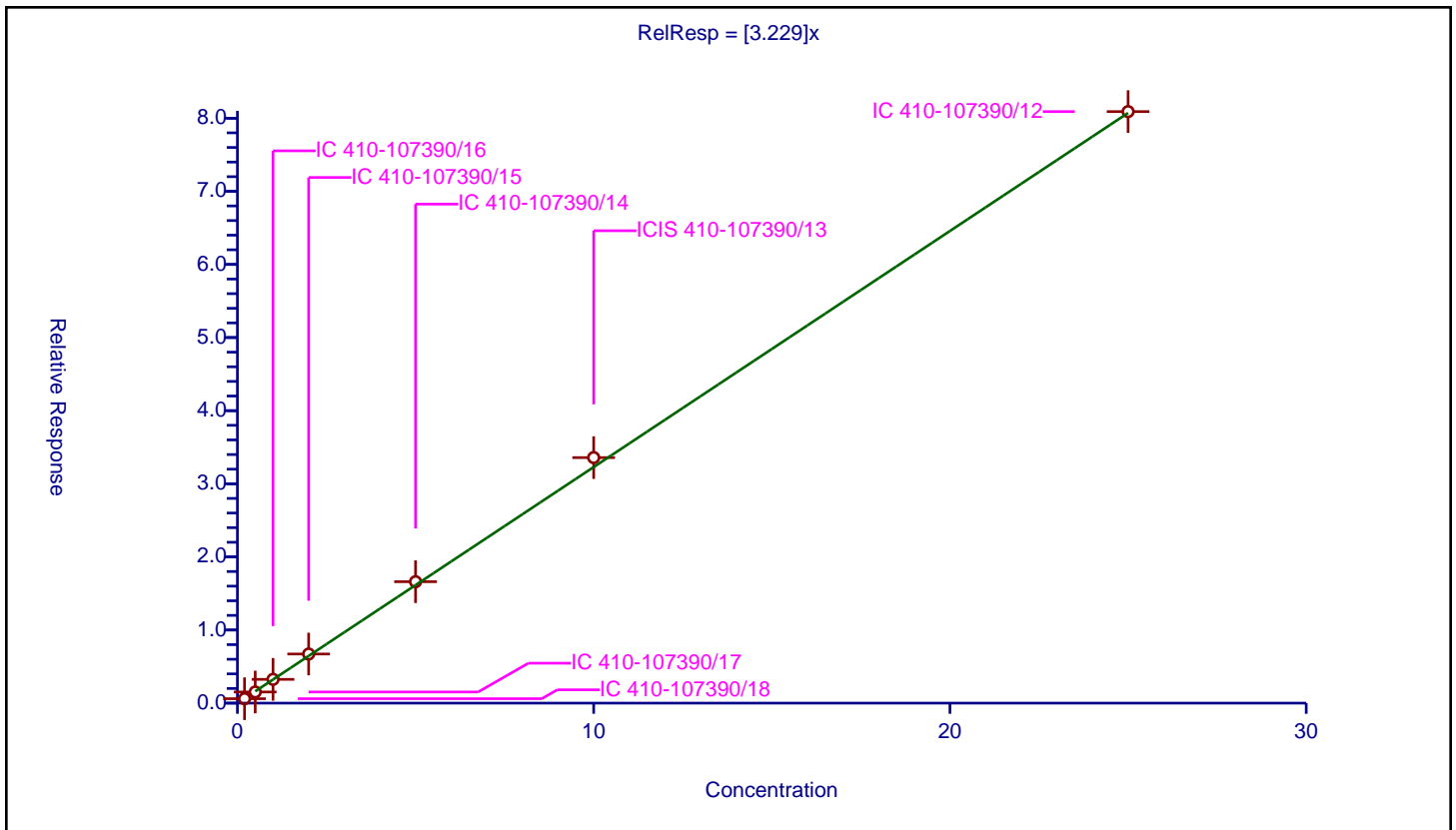
/ 1,3,5-Trimethylbenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	3.229

Error Coefficients	
Standard Error:	3320000
Relative Standard Error:	4.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.605961	10.0	922535.0	3.029804	Y
2	IC 410-107390/17	0.5	1.523364	10.0	926371.0	3.046727	Y
3	IC 410-107390/16	1.0	3.249765	10.0	911826.0	3.249765	Y
4	IC 410-107390/15	2.0	6.717413	10.0	911732.0	3.358706	Y
5	IC 410-107390/14	5.0	16.609394	10.0	899730.0	3.321879	Y
6	ICIS 410-107390/13	10.0	33.579431	10.0	899738.0	3.357943	Y
7	IC 410-107390/12	25.0	80.902176	10.0	911496.0	3.236087	Y



Calibration

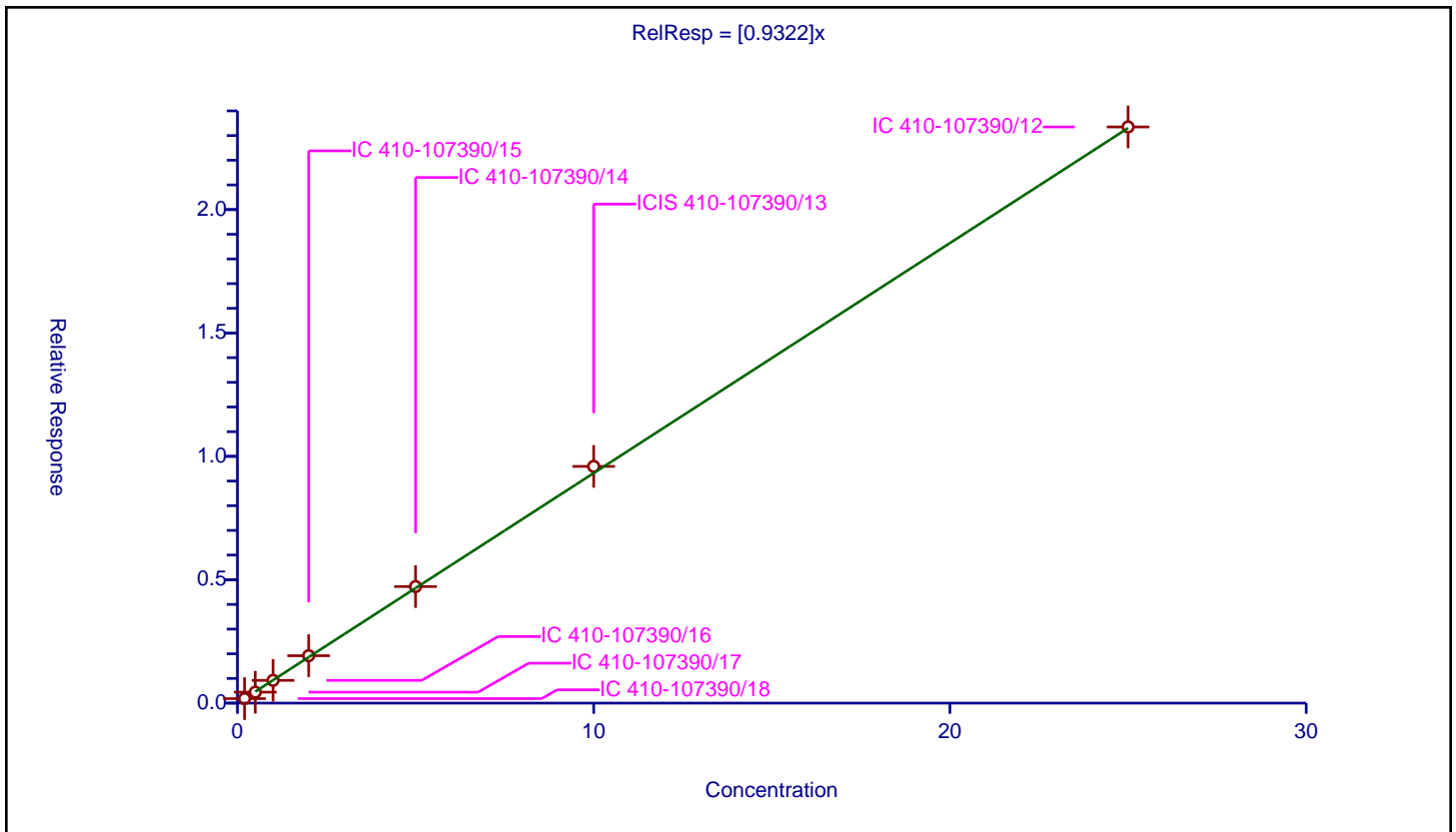
/ 4-Chlorotoluene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.9322

Error Coefficients	
Standard Error:	957000
Relative Standard Error:	2.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.183191	10.0	922535.0	0.915954	Y
2	IC 410-107390/17	0.5	0.444077	10.0	926371.0	0.888154	Y
3	IC 410-107390/16	1.0	0.921875	10.0	911826.0	0.921875	Y
4	IC 410-107390/15	2.0	1.922122	10.0	911732.0	0.961061	Y
5	IC 410-107390/14	5.0	4.724239	10.0	899730.0	0.944848	Y
6	ICIS 410-107390/13	10.0	9.593682	10.0	899738.0	0.959368	Y
7	IC 410-107390/12	25.0	23.349603	10.0	911496.0	0.933984	Y



Calibration

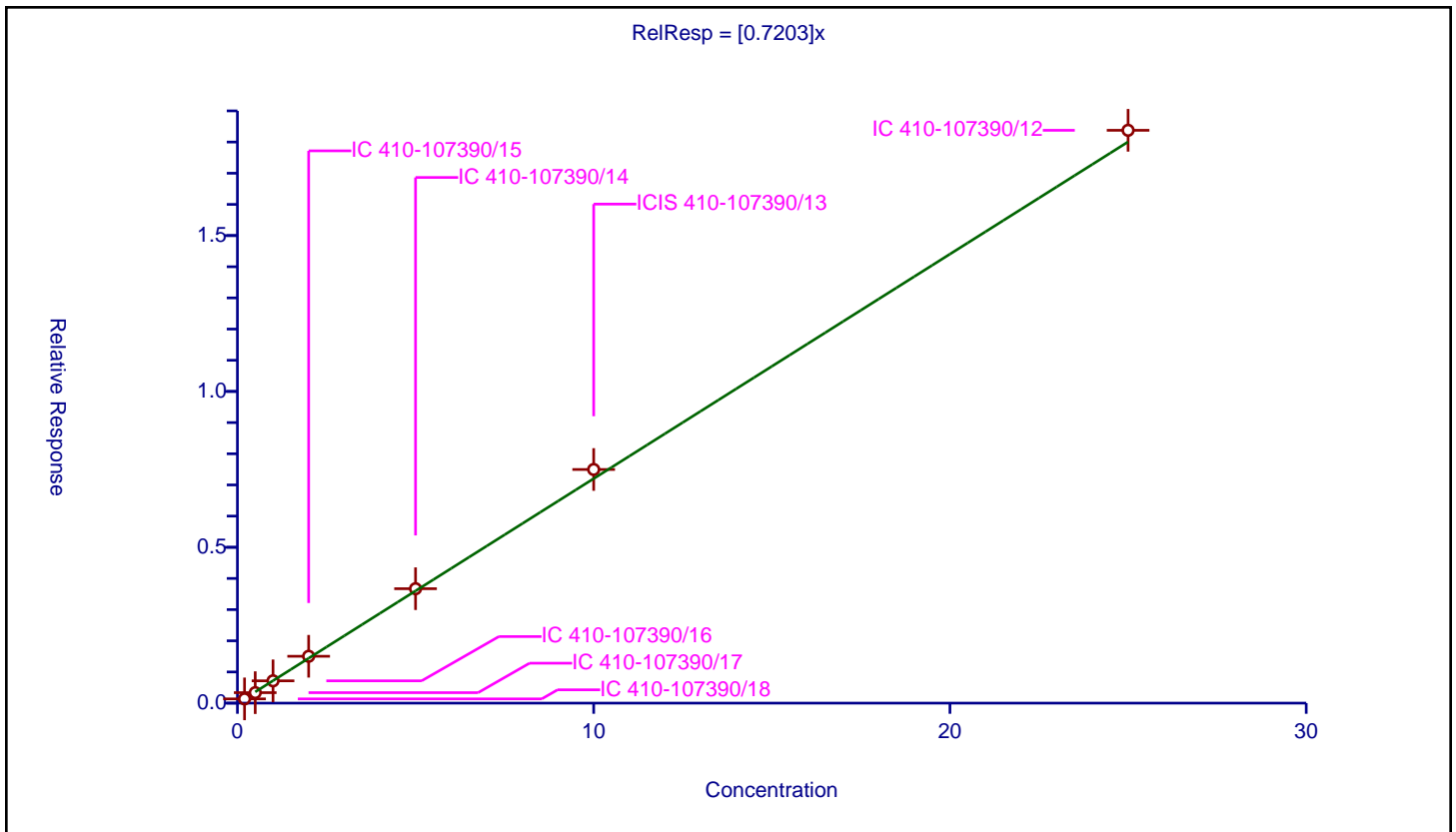
/ tert-Butylbenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.7203

Error Coefficients	
Standard Error:	752000
Relative Standard Error:	4.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.136613	10.0	922535.0	0.683064	Y
2	IC 410-107390/17	0.5	0.336366	10.0	926371.0	0.672733	Y
3	IC 410-107390/16	1.0	0.715334	10.0	911826.0	0.715334	Y
4	IC 410-107390/15	2.0	1.5036	10.0	911732.0	0.7518	Y
5	IC 410-107390/14	5.0	3.67139	10.0	899730.0	0.734278	Y
6	ICIS 410-107390/13	10.0	7.495282	10.0	899738.0	0.749528	Y
7	IC 410-107390/12	25.0	18.376943	10.0	911496.0	0.735078	Y



Calibration

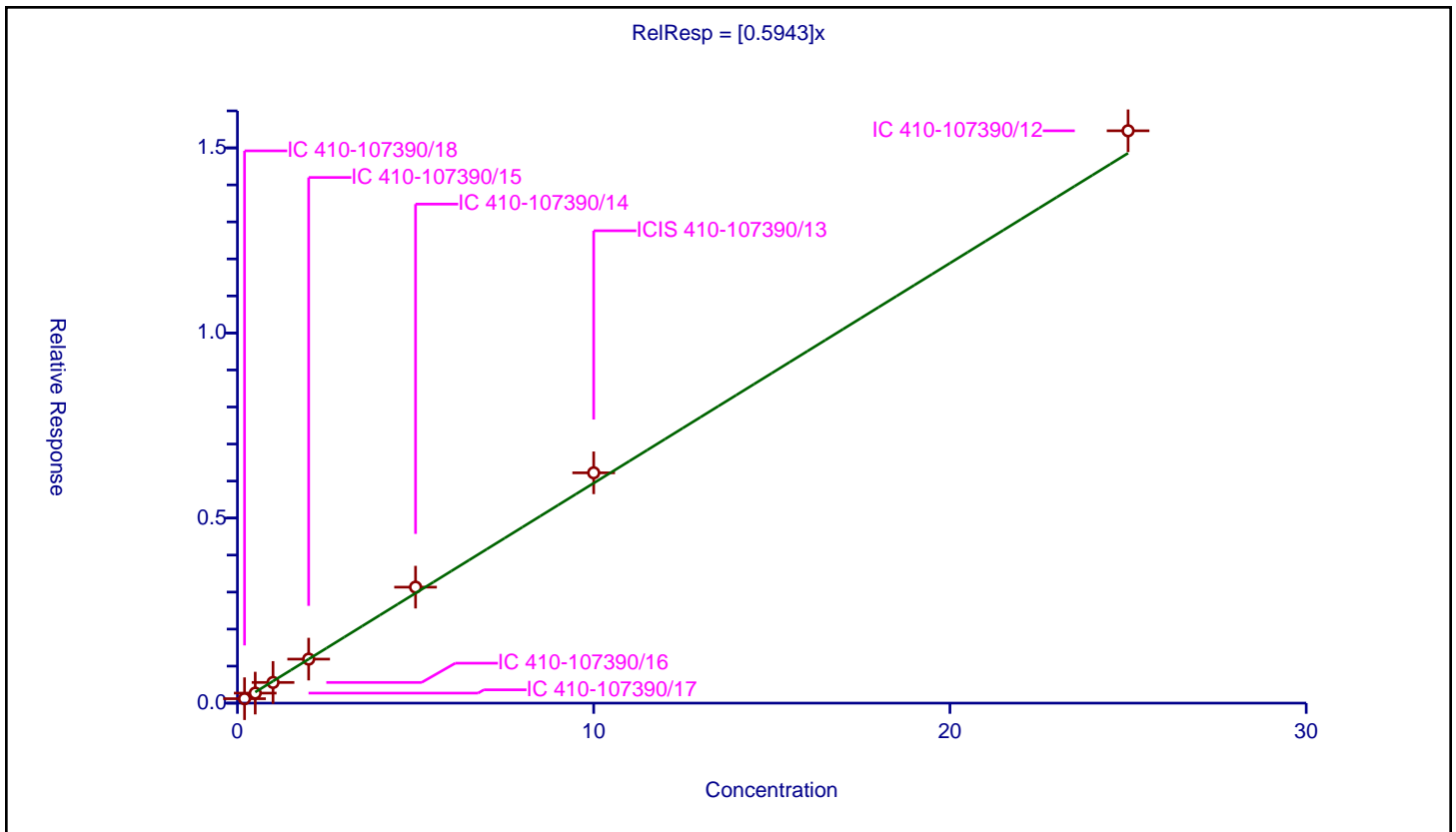
/ Pentachloroethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.5943

Error Coefficients	
Standard Error:	632000
Relative Standard Error:	5.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.119584	10.0	922535.0	0.597918	Y
2	IC 410-107390/17	0.5	0.271015	10.0	926371.0	0.542029	Y
3	IC 410-107390/16	1.0	0.558462	10.0	911826.0	0.558462	Y
4	IC 410-107390/15	2.0	1.188935	10.0	911732.0	0.594467	Y
5	IC 410-107390/14	5.0	3.133407	10.0	899730.0	0.626681	Y
6	ICIS 410-107390/13	10.0	6.221956	10.0	899738.0	0.622196	Y
7	IC 410-107390/12	25.0	15.462317	10.0	911496.0	0.618493	Y



Calibration

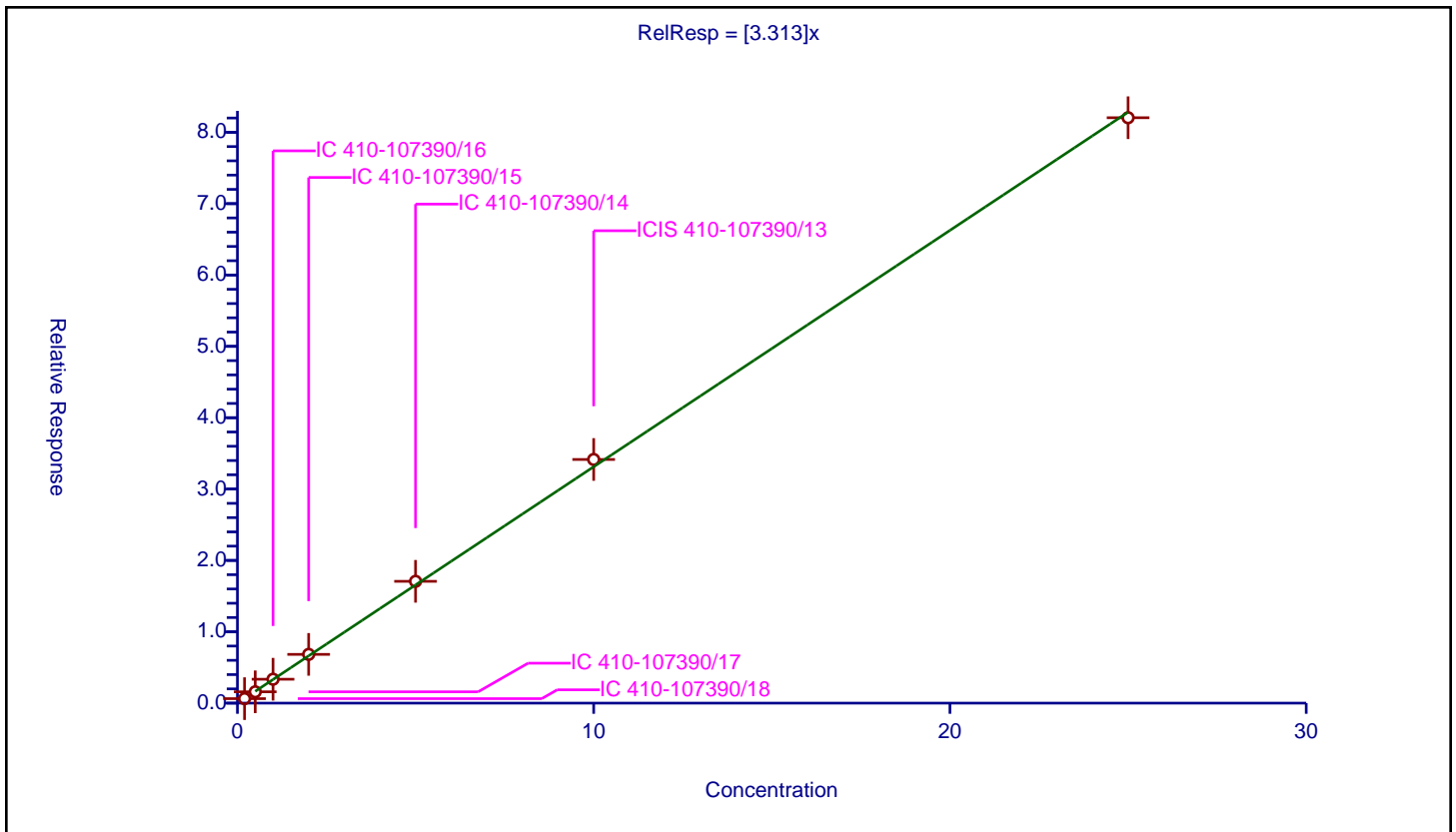
/ 1,2,4-Trimethylbenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	3.313

Error Coefficients	
Standard Error:	3370000
Relative Standard Error:	3.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.627423	10.0	922535.0	3.137117	Y
2	IC 410-107390/17	0.5	1.587237	10.0	926371.0	3.174473	Y
3	IC 410-107390/16	1.0	3.350135	10.0	911826.0	3.350135	Y
4	IC 410-107390/15	2.0	6.833795	10.0	911732.0	3.416898	Y
5	IC 410-107390/14	5.0	17.072299	10.0	899730.0	3.41446	Y
6	ICIS 410-107390/13	10.0	34.147352	10.0	899738.0	3.414735	Y
7	IC 410-107390/12	25.0	82.041567	10.0	911496.0	3.281663	Y



Calibration

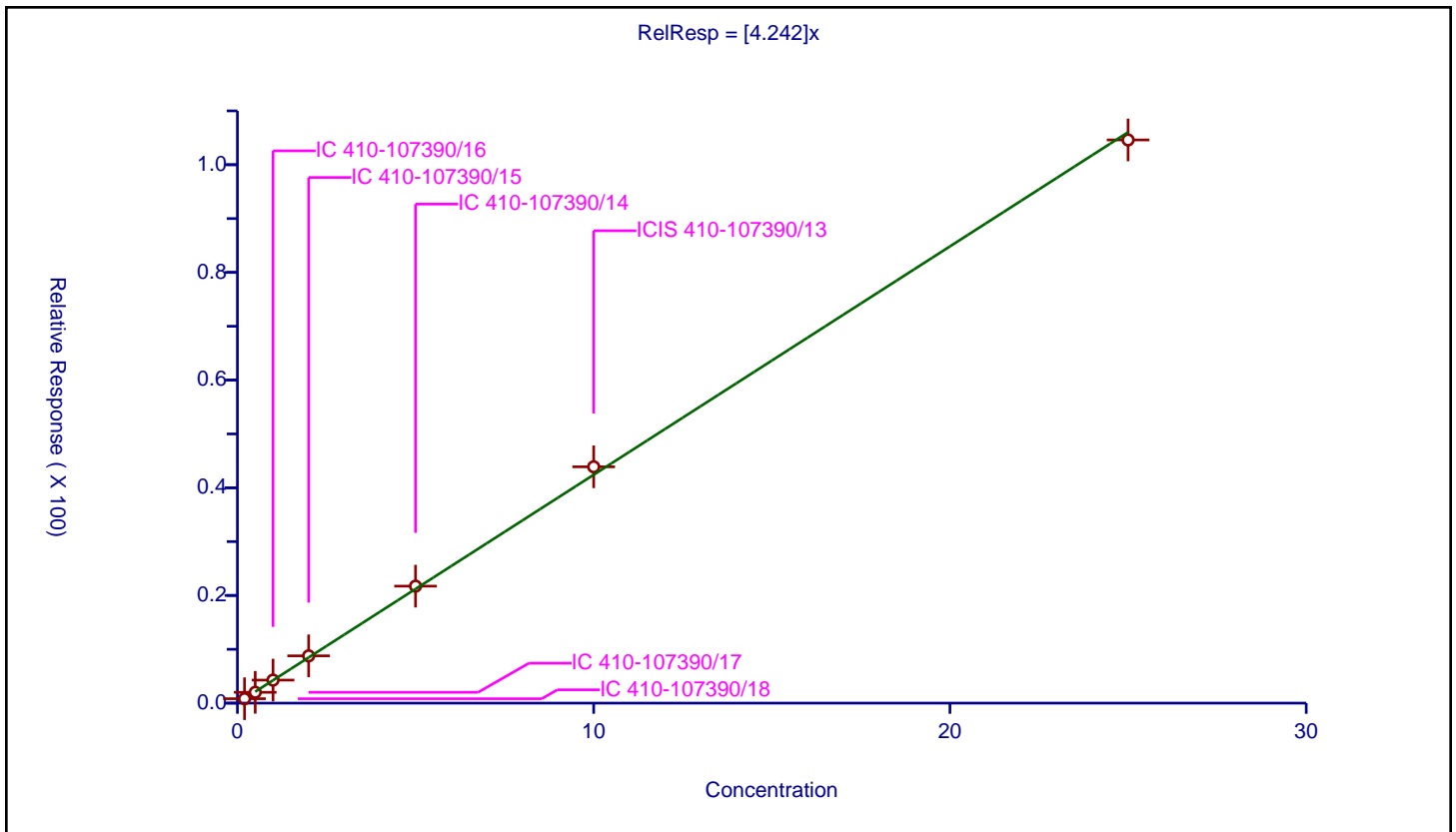
/ sec-Butylbenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	4.242

Error Coefficients	
Standard Error:	4300000
Relative Standard Error:	3.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.816273	10.0	922535.0	4.081363	Y
2	IC 410-107390/17	0.5	2.012131	10.0	926371.0	4.024262	Y
3	IC 410-107390/16	1.0	4.27439	10.0	911826.0	4.27439	Y
4	IC 410-107390/15	2.0	8.782285	10.0	911732.0	4.391142	Y
5	IC 410-107390/14	5.0	21.730352	10.0	899730.0	4.34607	Y
6	ICIS 410-107390/13	10.0	43.893756	10.0	899738.0	4.389376	Y
7	IC 410-107390/12	25.0	104.601578	10.0	911496.0	4.184063	Y



Calibration

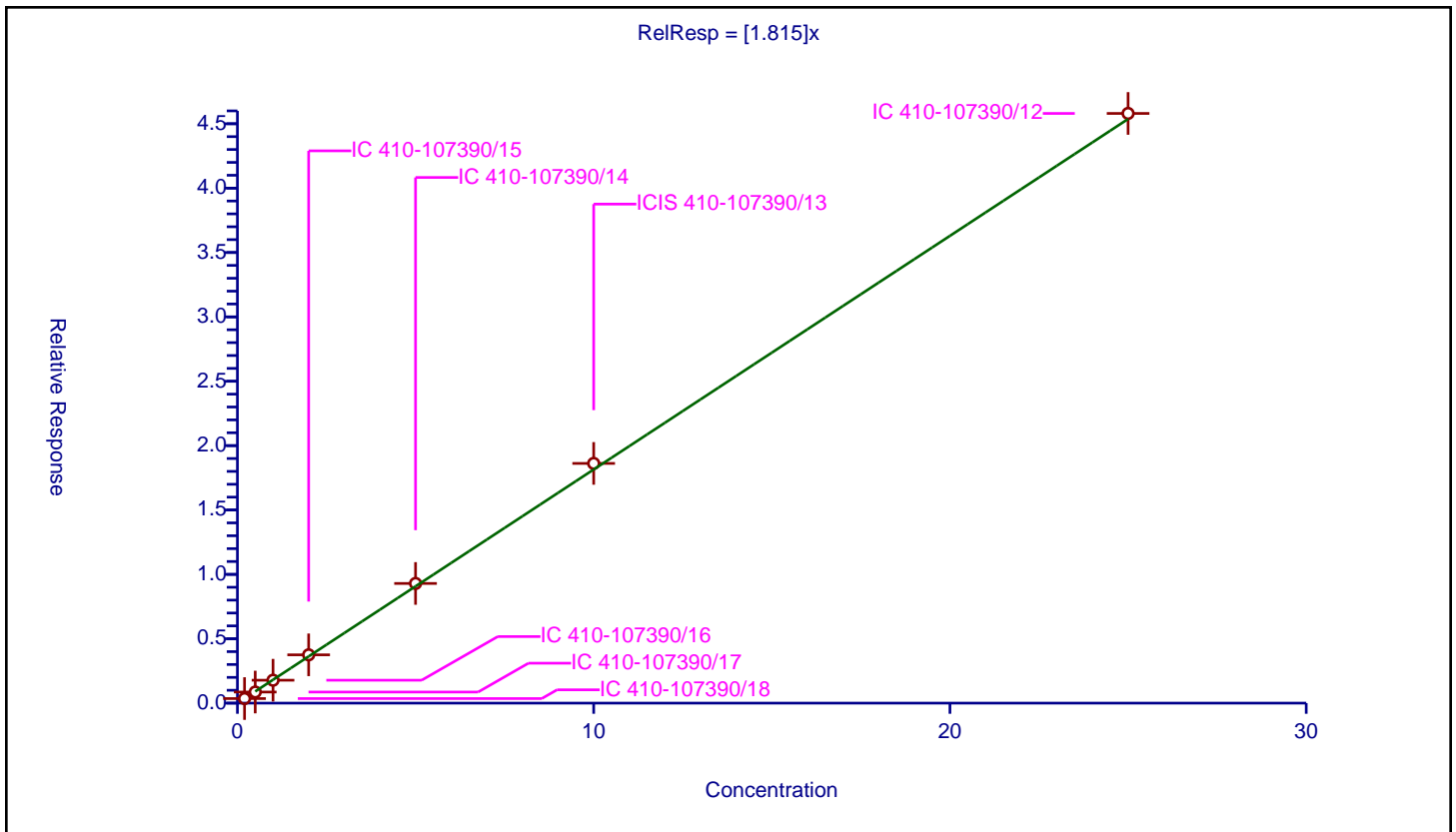
/ 1,3-Dichlorobenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.815

Error Coefficients	
Standard Error:	1870000
Relative Standard Error:	3.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.3541	10.0	922535.0	1.770502	Y
2	IC 410-107390/17	0.5	0.862333	10.0	926371.0	1.724665	Y
3	IC 410-107390/16	1.0	1.779155	10.0	911826.0	1.779155	Y
4	IC 410-107390/15	2.0	3.751387	10.0	911732.0	1.875694	Y
5	IC 410-107390/14	5.0	9.295733	10.0	899730.0	1.859147	Y
6	ICIS 410-107390/13	10.0	18.618264	10.0	899738.0	1.861826	Y
7	IC 410-107390/12	25.0	45.802132	10.0	911496.0	1.832085	Y



Calibration

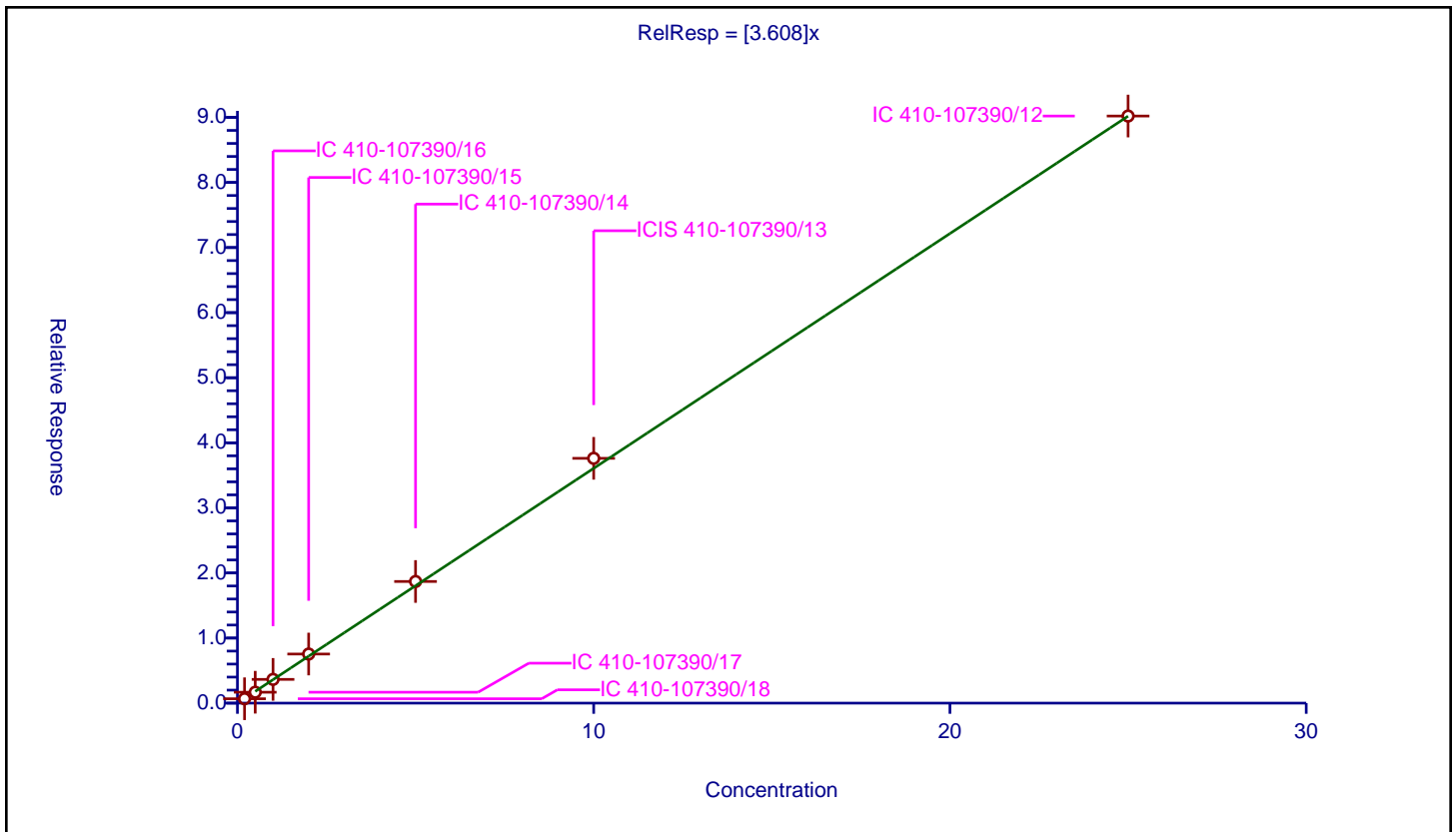
/ 4-Isopropyltoluene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	3.608

Error Coefficients	
Standard Error:	3710000
Relative Standard Error:	4.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.674338	10.0	922535.0	3.371688	Y
2	IC 410-107390/17	0.5	1.676013	10.0	926371.0	3.352026	Y
3	IC 410-107390/16	1.0	3.649918	10.0	911826.0	3.649918	Y
4	IC 410-107390/15	2.0	7.545035	10.0	911732.0	3.772518	Y
5	IC 410-107390/14	5.0	18.692174	10.0	899730.0	3.738435	Y
6	ICIS 410-107390/13	10.0	37.613905	10.0	899738.0	3.761391	Y
7	IC 410-107390/12	25.0	90.209436	10.0	911496.0	3.608377	Y



Calibration

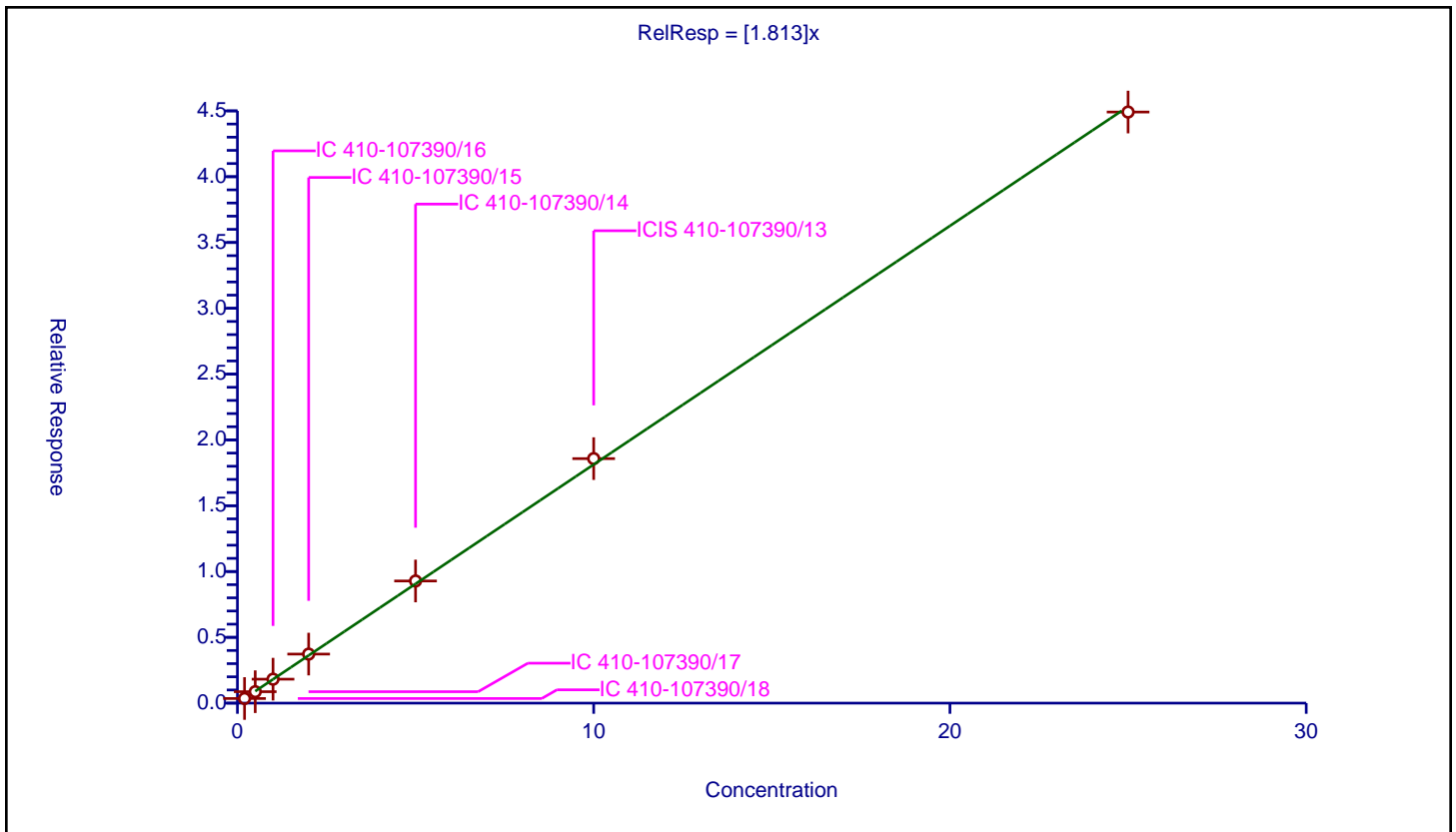
/ 1,4-Dichlorobenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.813

Error Coefficients	
Standard Error:	1840000
Relative Standard Error:	2.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.352008	10.0	922535.0	1.760042	Y
2	IC 410-107390/17	0.5	0.868745	10.0	926371.0	1.73749	Y
3	IC 410-107390/16	1.0	1.820314	10.0	911826.0	1.820314	Y
4	IC 410-107390/15	2.0	3.727301	10.0	911732.0	1.863651	Y
5	IC 410-107390/14	5.0	9.280906	10.0	899730.0	1.856181	Y
6	ICIS 410-107390/13	10.0	18.578975	10.0	899738.0	1.857898	Y
7	IC 410-107390/12	25.0	44.912287	10.0	911496.0	1.796491	Y



Calibration

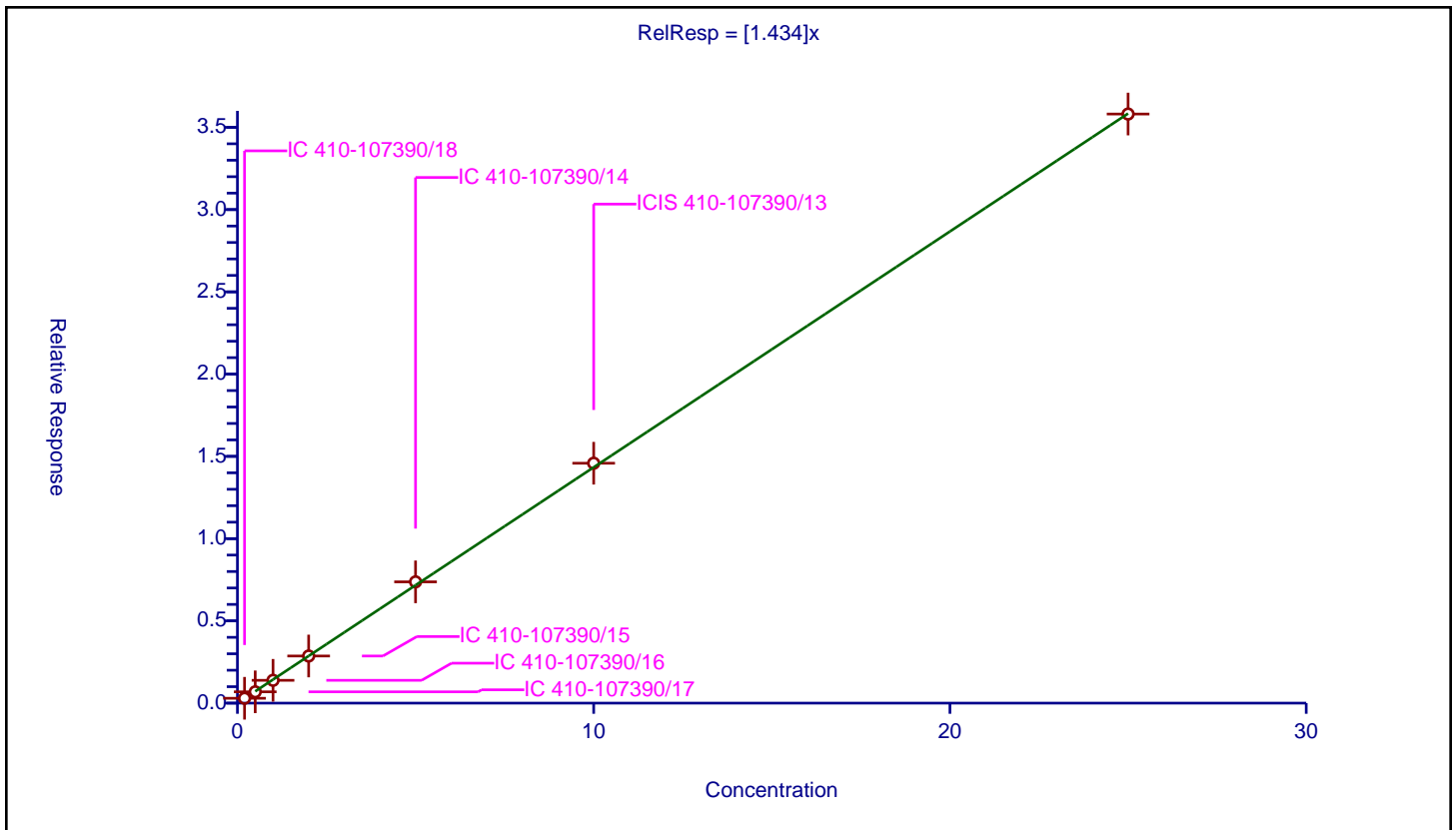
/ 1,2,3-Trimethylbenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.434

Error Coefficients	
Standard Error:	1470000
Relative Standard Error:	2.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.295057	10.0	922535.0	1.475283	Y
2	IC 410-107390/17	0.5	0.687975	10.0	926371.0	1.37595	Y
3	IC 410-107390/16	1.0	1.386196	10.0	911826.0	1.386196	Y
4	IC 410-107390/15	2.0	2.865162	10.0	911732.0	1.432581	Y
5	IC 410-107390/14	5.0	7.371567	10.0	899730.0	1.474313	Y
6	ICIS 410-107390/13	10.0	14.582812	10.0	899738.0	1.458281	Y
7	IC 410-107390/12	25.0	35.808857	10.0	911496.0	1.432354	Y



Calibration

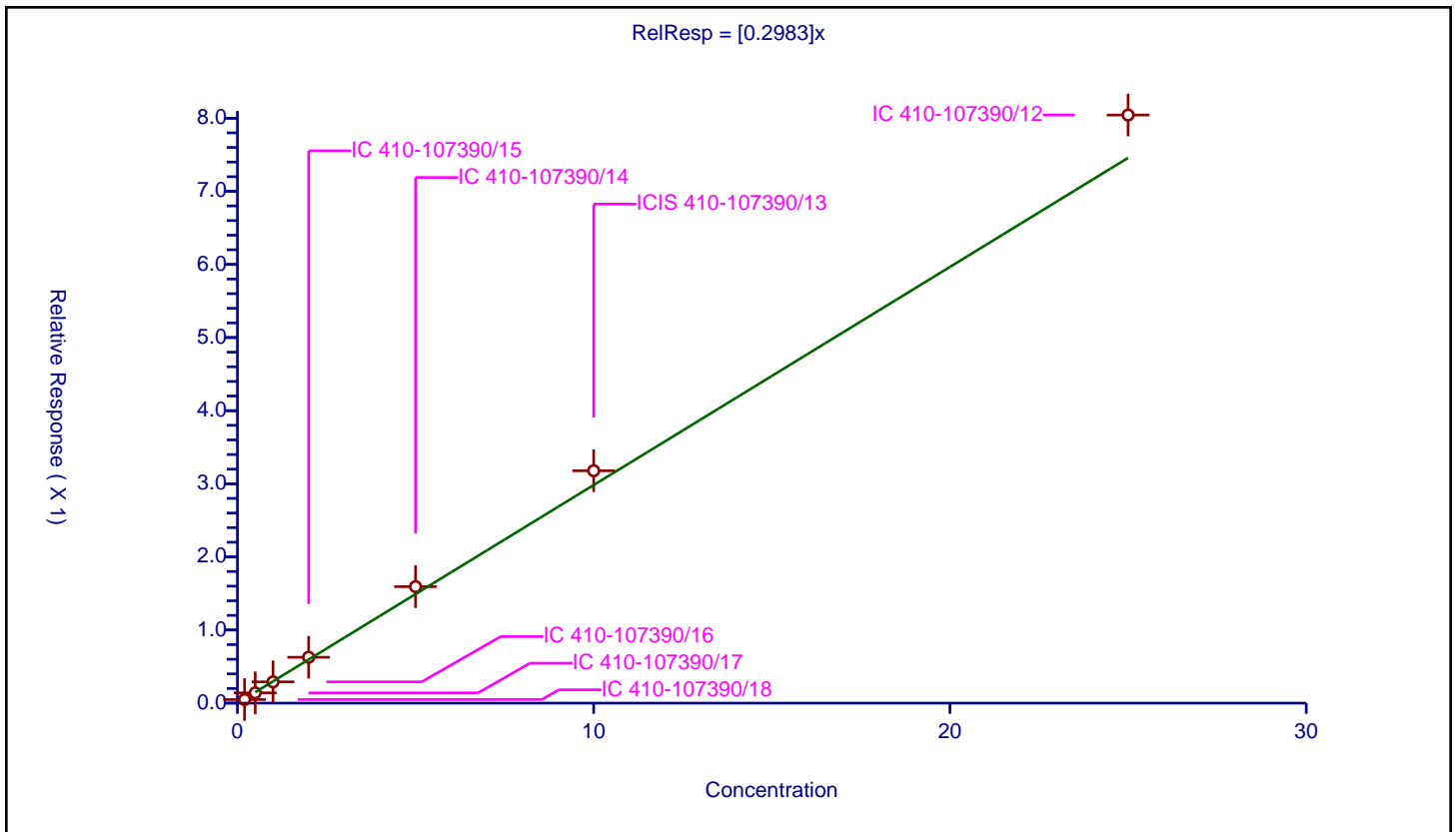
/ Benzyl chloride

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2983

Error Coefficients	
Standard Error:	328000
Relative Standard Error:	9.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.048909	10.0	922535.0	0.244544	Y
2	IC 410-107390/17	0.5	0.140473	10.0	926371.0	0.280946	Y
3	IC 410-107390/16	1.0	0.290691	10.0	911826.0	0.290691	Y
4	IC 410-107390/15	2.0	0.627257	10.0	911732.0	0.313628	Y
5	IC 410-107390/14	5.0	1.593122	10.0	899730.0	0.318624	Y
6	ICIS 410-107390/13	10.0	3.178492	10.0	899738.0	0.317849	Y
7	IC 410-107390/12	25.0	8.043392	10.0	911496.0	0.321736	Y



Calibration

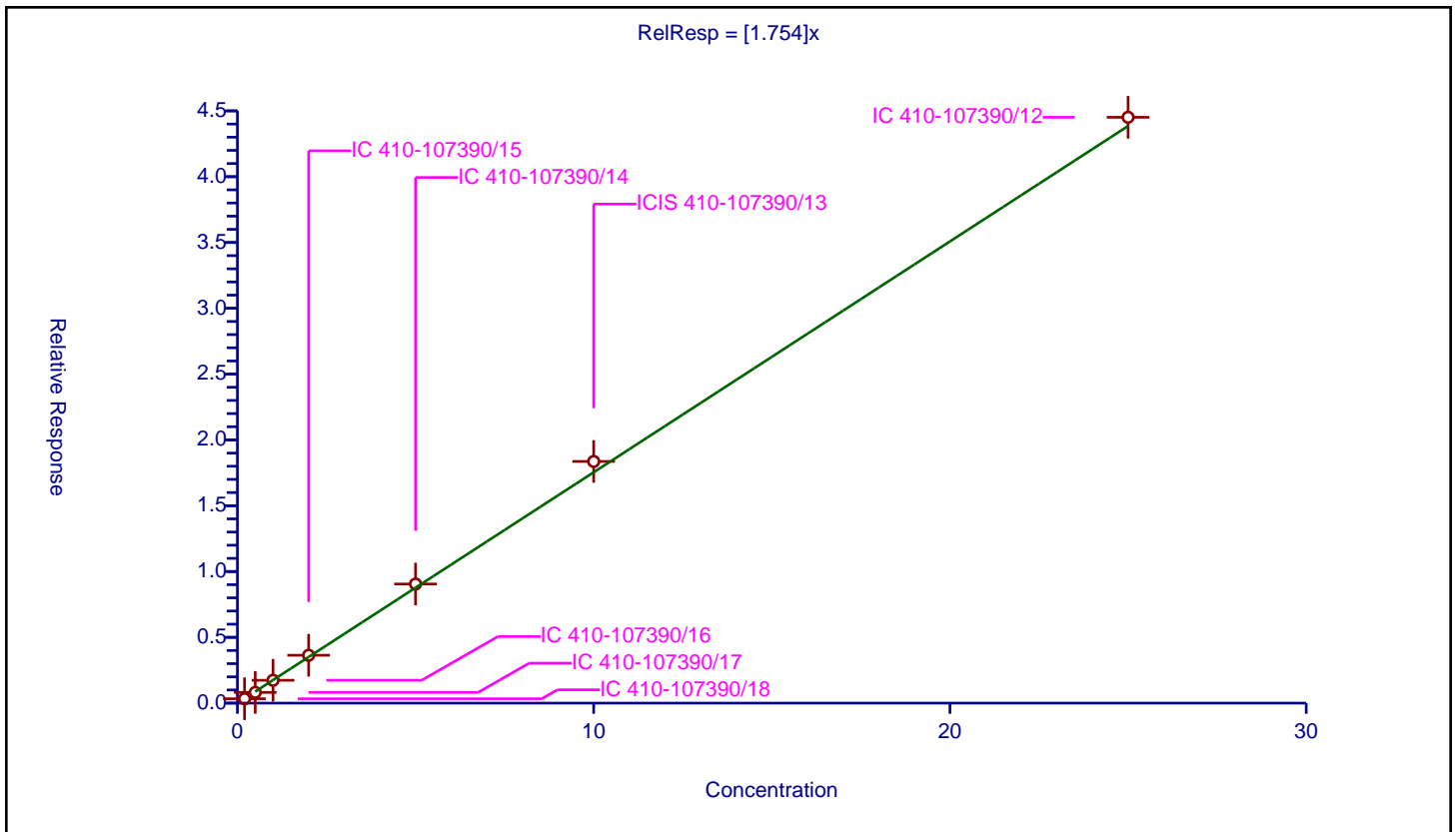
/ n-Butylbenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.754

Error Coefficients	
Standard Error:	1830000
Relative Standard Error:	4.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.333288	10.0	922535.0	1.666441	Y
2	IC 410-107390/17	0.5	0.814728	10.0	926371.0	1.629455	Y
3	IC 410-107390/16	1.0	1.736516	10.0	911826.0	1.736516	Y
4	IC 410-107390/15	2.0	3.637187	10.0	911732.0	1.818594	Y
5	IC 410-107390/14	5.0	9.05086	10.0	899730.0	1.810172	Y
6	ICIS 410-107390/13	10.0	18.363501	10.0	899738.0	1.83635	Y
7	IC 410-107390/12	25.0	44.512702	10.0	911496.0	1.780508	Y



Calibration

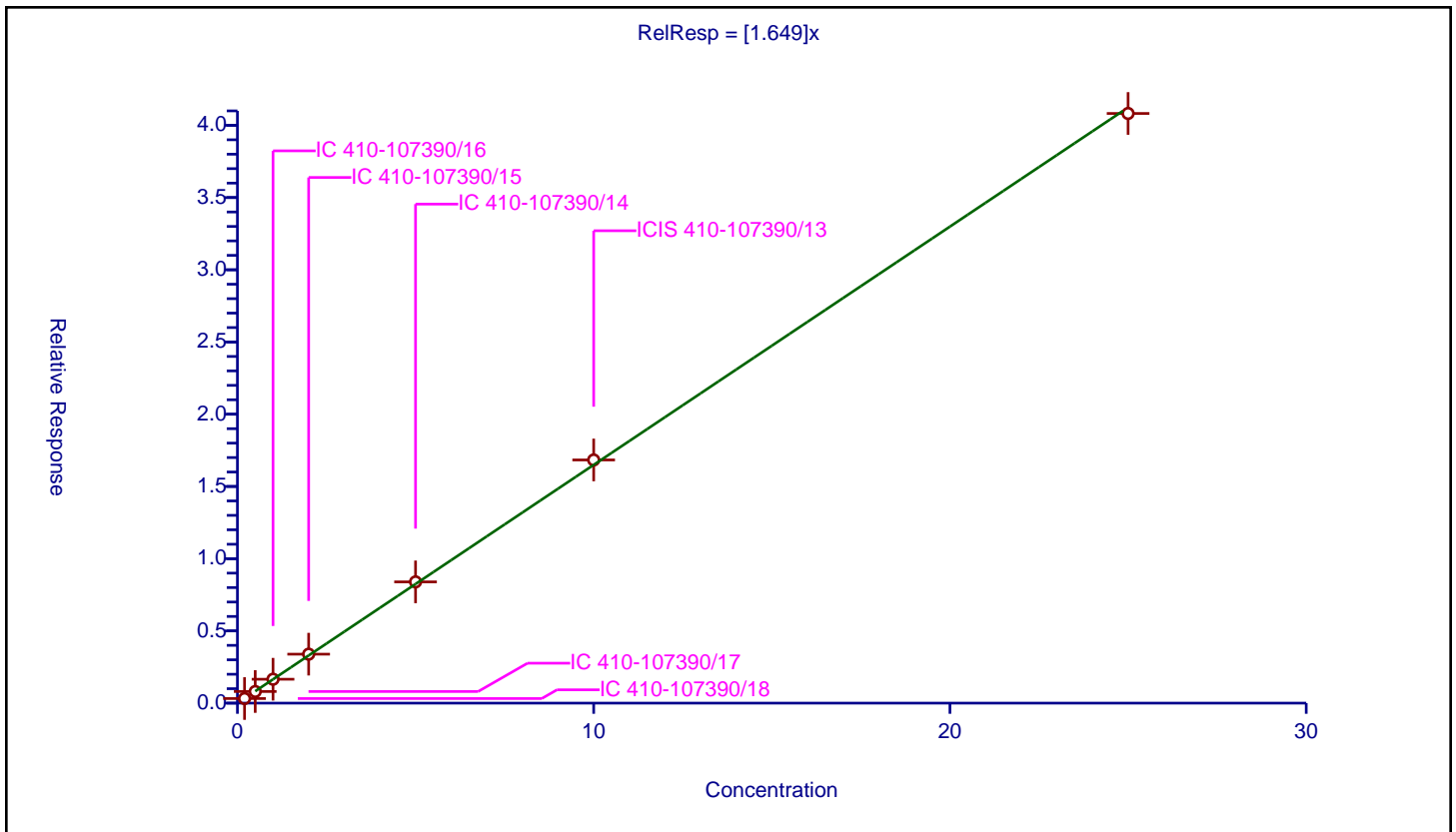
/ 1,2-Dichlorobenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.649

Error Coefficients	
Standard Error:	1680000
Relative Standard Error:	2.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.317831	10.0	922535.0	1.589154	Y
2	IC 410-107390/17	0.5	0.805628	10.0	926371.0	1.611255	Y
3	IC 410-107390/16	1.0	1.655513	10.0	911826.0	1.655513	Y
4	IC 410-107390/15	2.0	3.390295	10.0	911732.0	1.695147	Y
5	IC 410-107390/14	5.0	8.394629	10.0	899730.0	1.678926	Y
6	ICIS 410-107390/13	10.0	16.834512	10.0	899738.0	1.683451	Y
7	IC 410-107390/12	25.0	40.82188	10.0	911496.0	1.632875	Y



Calibration

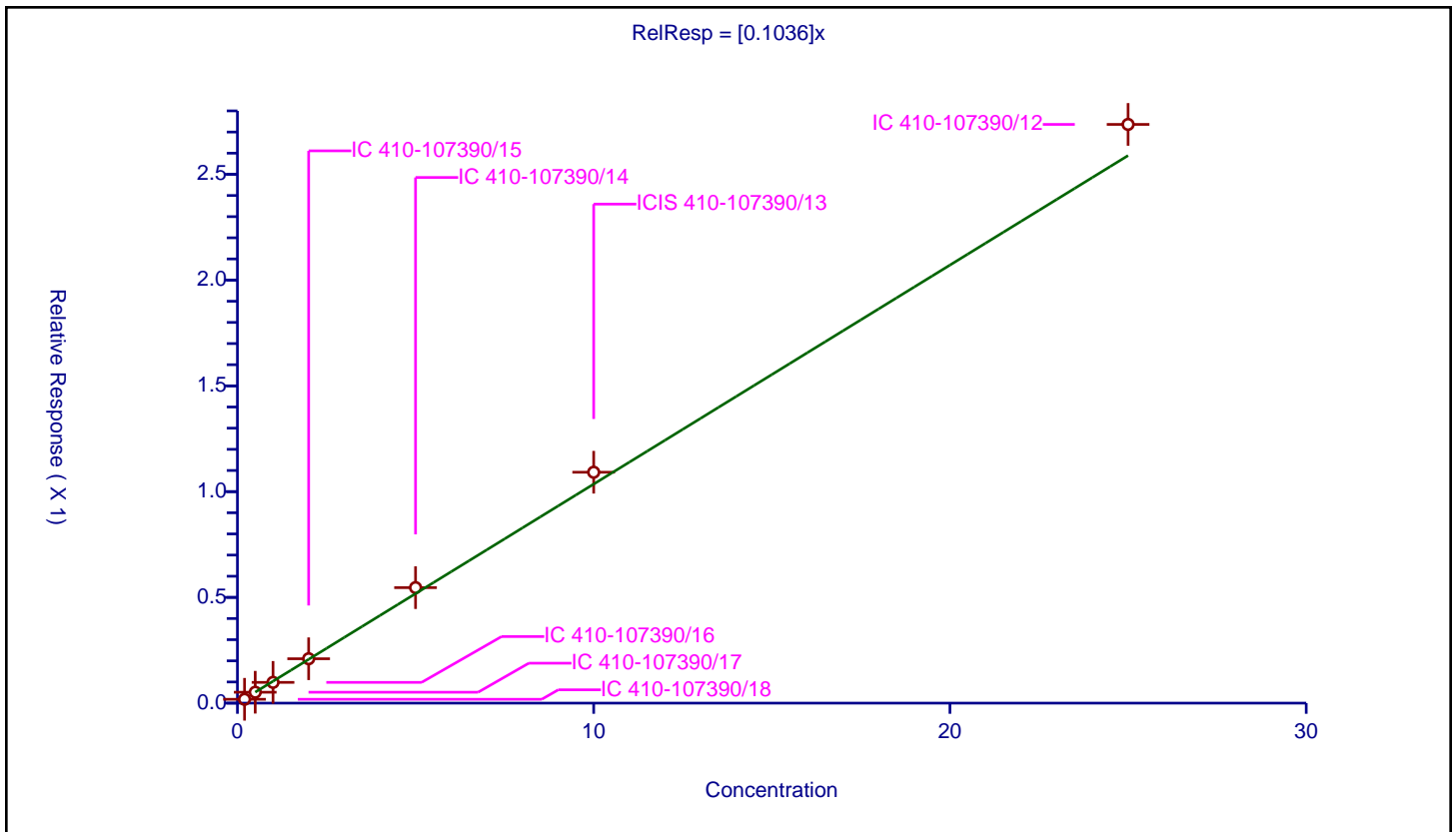
/ 1,2-Dibromo-3-Chloropropane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.1036

Error Coefficients	
Standard Error:	112000
Relative Standard Error:	6.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.018189	10.0	922535.0	0.090945	Y
2	IC 410-107390/17	0.5	0.051524	10.0	926371.0	0.103047	Y
3	IC 410-107390/16	1.0	0.098111	10.0	911826.0	0.098111	Y
4	IC 410-107390/15	2.0	0.209897	10.0	911732.0	0.104949	Y
5	IC 410-107390/14	5.0	0.546086	10.0	899730.0	0.109217	Y
6	ICIS 410-107390/13	10.0	1.09164	10.0	899738.0	0.109164	Y
7	IC 410-107390/12	25.0	2.736019	10.0	911496.0	0.109441	Y



Calibration

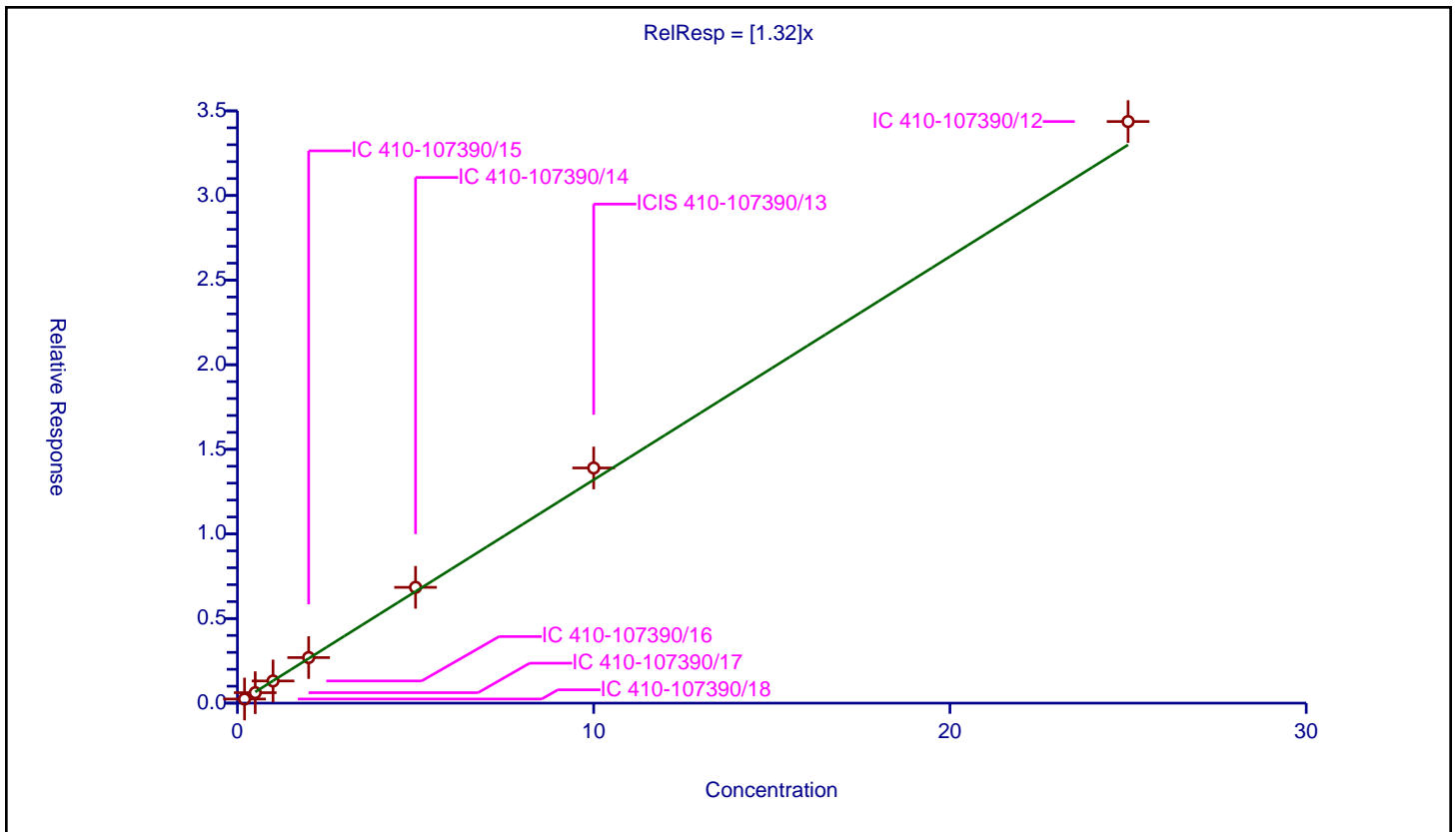
/ 1,3,5-Trichlorobenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.32

Error Coefficients	
Standard Error:	1400000
Relative Standard Error:	5.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.242419	10.0	922535.0	1.212095	Y
2	IC 410-107390/17	0.5	0.618014	10.0	926371.0	1.236027	Y
3	IC 410-107390/16	1.0	1.310217	10.0	911826.0	1.310217	Y
4	IC 410-107390/15	2.0	2.692995	10.0	911732.0	1.346498	Y
5	IC 410-107390/14	5.0	6.842808	10.0	899730.0	1.368562	Y
6	ICIS 410-107390/13	10.0	13.897301	10.0	899738.0	1.38973	Y
7	IC 410-107390/12	25.0	34.369772	10.0	911496.0	1.374791	Y



Calibration

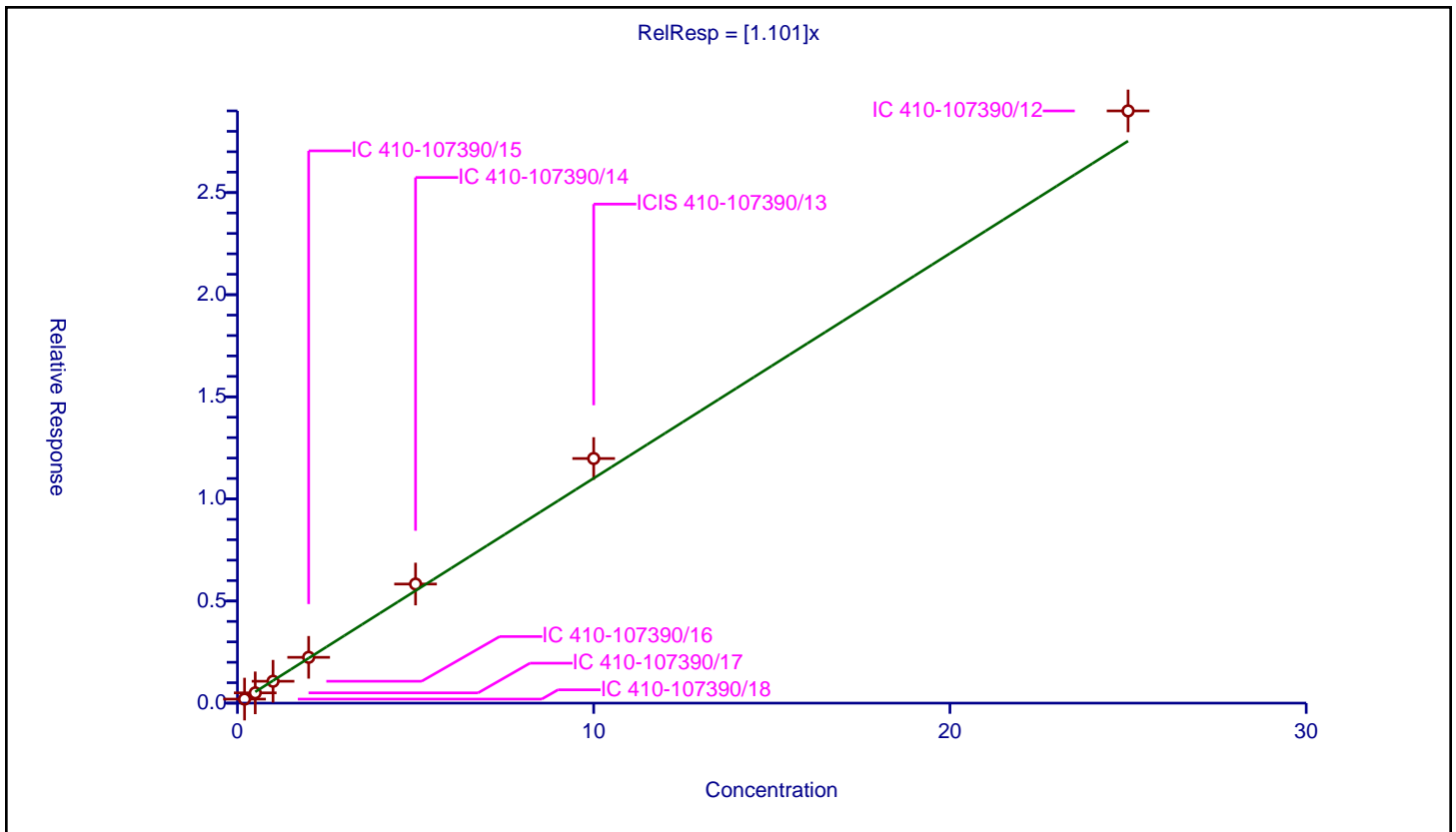
/ 1,2,4-Trichlorobenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.101

Error Coefficients	
Standard Error:	1190000
Relative Standard Error:	7.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.196957	10.0	922535.0	0.984786	Y
2	IC 410-107390/17	0.5	0.502628	10.0	926371.0	1.005256	Y
3	IC 410-107390/16	1.0	1.071202	10.0	911826.0	1.071202	Y
4	IC 410-107390/15	2.0	2.243006	10.0	911732.0	1.121503	Y
5	IC 410-107390/14	5.0	5.831772	10.0	899730.0	1.166354	Y
6	ICIS 410-107390/13	10.0	11.978698	10.0	899738.0	1.19787	Y
7	IC 410-107390/12	25.0	28.999184	10.0	911496.0	1.159967	Y



Calibration

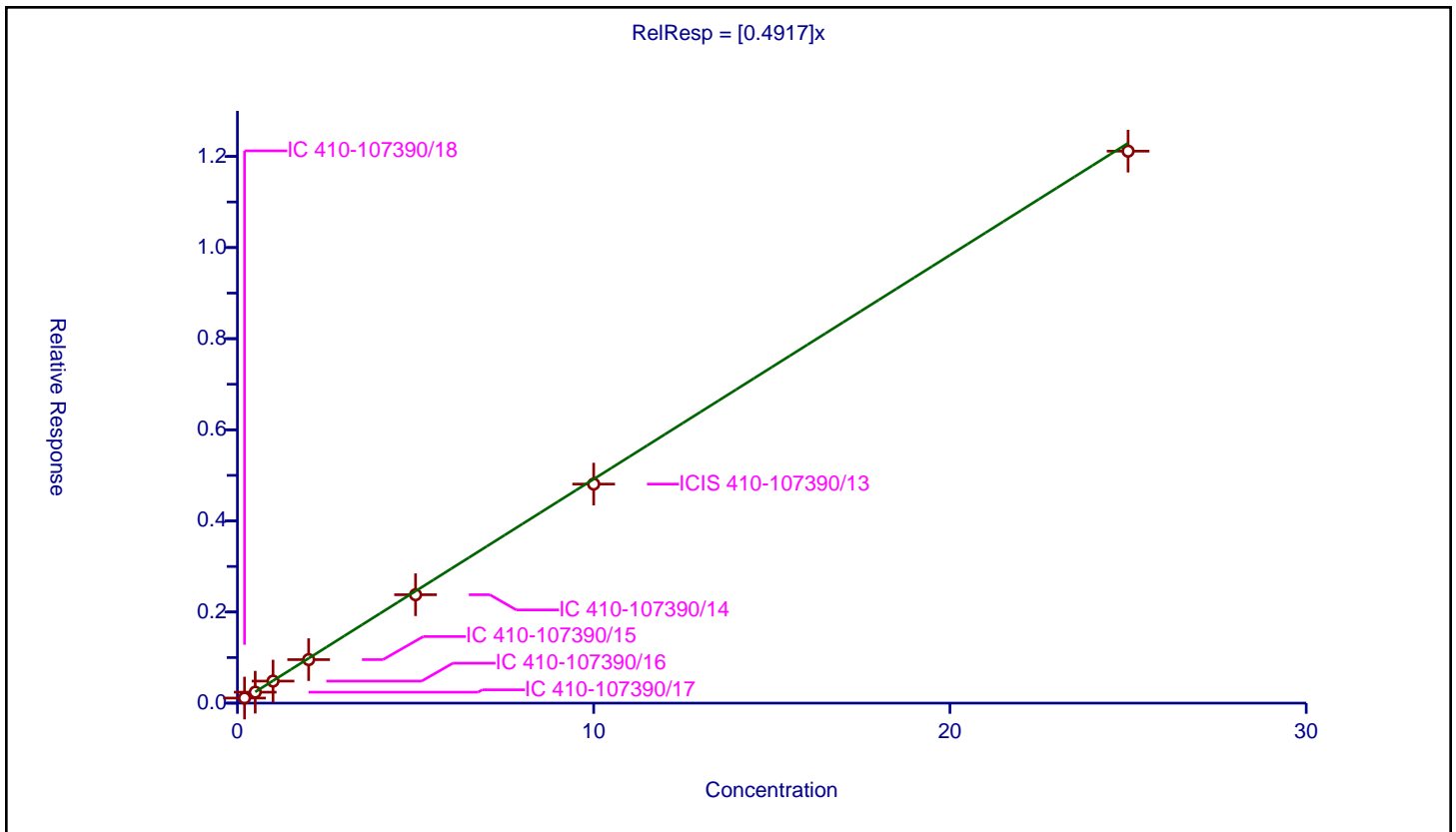
/ Hexachlorobutadiene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4917

Error Coefficients	
Standard Error:	494000
Relative Standard Error:	6.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.111627	10.0	922535.0	0.558136	Y
2	IC 410-107390/17	0.5	0.24053	10.0	926371.0	0.48106	Y
3	IC 410-107390/16	1.0	0.483755	10.0	911826.0	0.483755	Y
4	IC 410-107390/15	2.0	0.954886	10.0	911732.0	0.477443	Y
5	IC 410-107390/14	5.0	2.379569	10.0	899730.0	0.475914	Y
6	ICIS 410-107390/13	10.0	4.808378	10.0	899738.0	0.480838	Y
7	IC 410-107390/12	25.0	12.115972	10.0	911496.0	0.484639	Y



Calibration

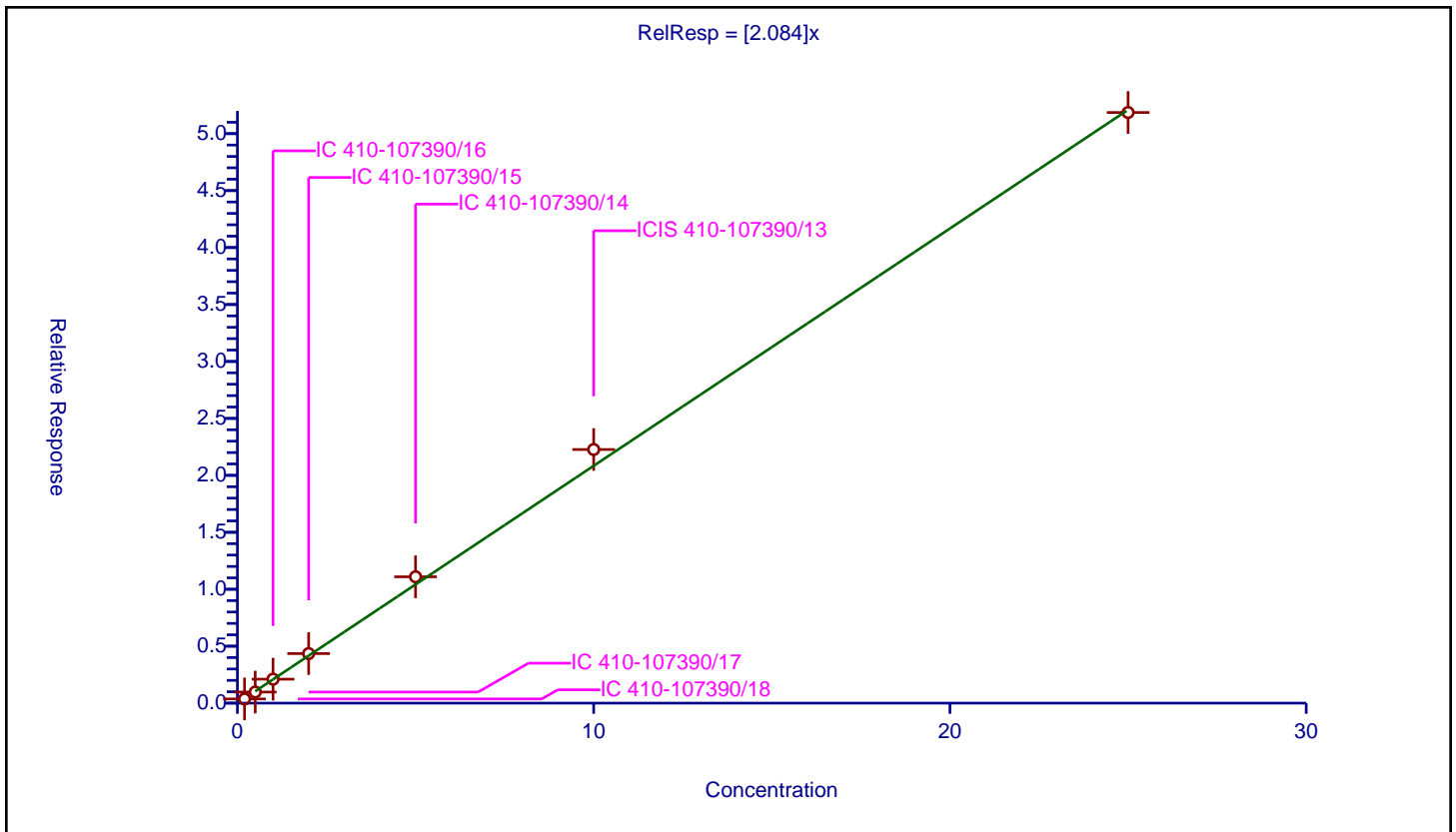
/ Naphthalene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	2.084

Error Coefficients	
Standard Error:	2140000
Relative Standard Error:	6.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.367693	10.0	922535.0	1.838467	Y
2	IC 410-107390/17	0.5	0.974642	10.0	926371.0	1.949284	Y
3	IC 410-107390/16	1.0	2.103406	10.0	911826.0	2.103406	Y
4	IC 410-107390/15	2.0	4.349973	10.0	911732.0	2.174987	Y
5	IC 410-107390/14	5.0	11.093595	10.0	899730.0	2.218719	Y
6	ICIS 410-107390/13	10.0	22.268416	10.0	899738.0	2.226842	Y
7	IC 410-107390/12	25.0	51.857726	10.0	911496.0	2.074309	Y



Calibration

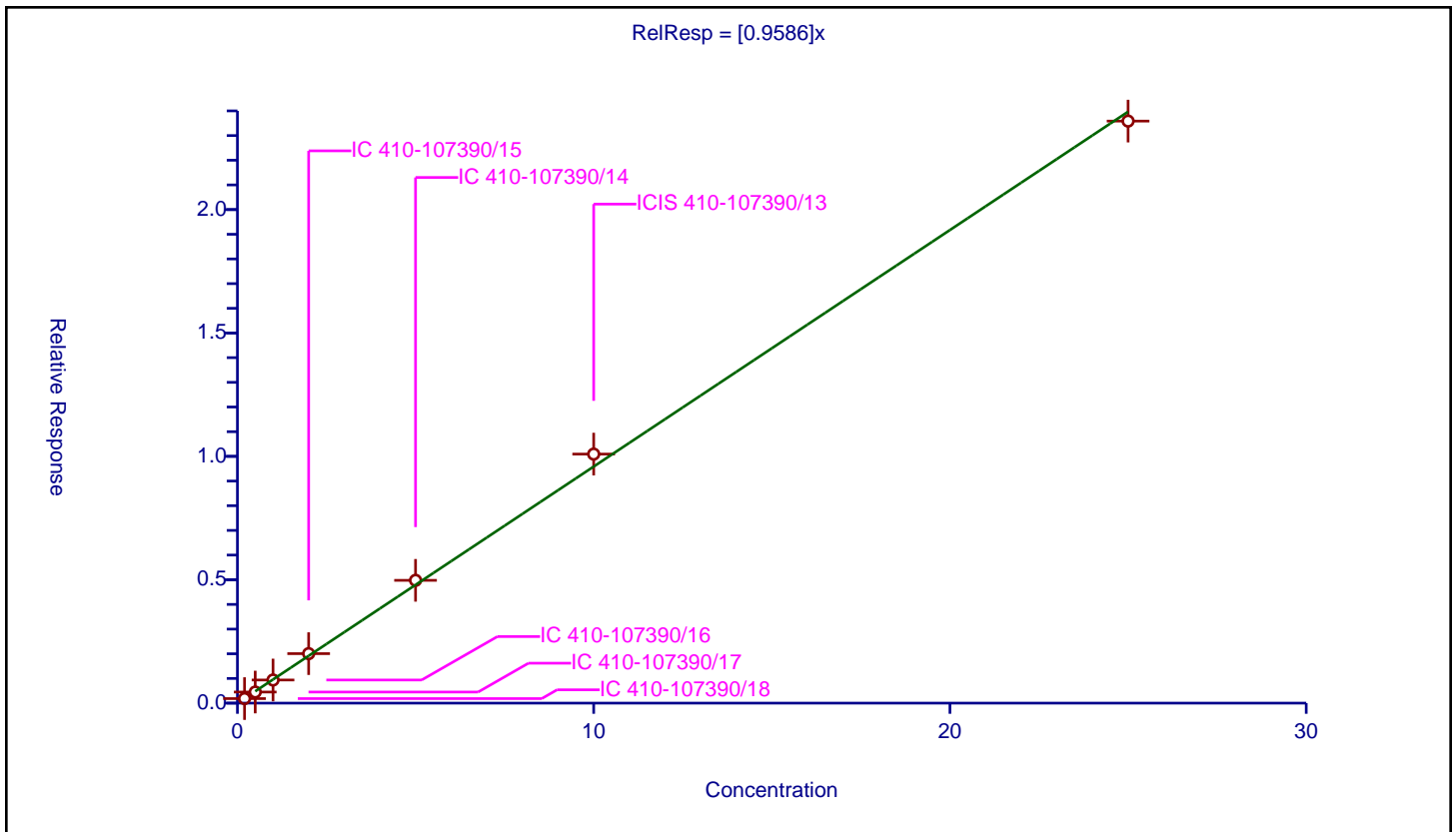
/ 1,2,3-Trichlorobenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.9586

Error Coefficients	
Standard Error:	974000
Relative Standard Error:	4.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.184481	10.0	922535.0	0.922404	Y
2	IC 410-107390/17	0.5	0.449906	10.0	926371.0	0.899812	Y
3	IC 410-107390/16	1.0	0.937229	10.0	911826.0	0.937229	Y
4	IC 410-107390/15	2.0	2.006258	10.0	911732.0	1.003129	Y
5	IC 410-107390/14	5.0	4.976004	10.0	899730.0	0.995201	Y
6	ICIS 410-107390/13	10.0	10.091538	10.0	899738.0	1.009154	Y
7	IC 410-107390/12	25.0	23.587103	10.0	911496.0	0.943484	Y



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-37501-1

SDG No.: _____

Lab Sample ID: ICV 410-70996/10 Calibration Date: 11/30/2020 15:26

Instrument ID: 16334 Calib Start Date: 11/30/2020 12:50

GC Column: R-624SilMS 30m ID: 0.25 (mm) Calib End Date: 11/30/2020 15:03

Lab File ID: GN30V01.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	0.2600	0.2416	0.1000	4.65	5.00	-7.1	30.0
Chloromethane	Ave	0.3508	0.3213	0.1000	4.58	5.00	-8.4	30.0
1,3-Butadiene	Ave	0.3993	0.3126		3.91	5.00	-21.7	30.0
Vinyl chloride	Ave	0.2995	0.2990	0.1000	4.99	5.00	-0.2	30.0
Bromomethane	Ave	0.2087	0.1997	0.1000	4.79	5.00	-4.3	30.0
Chloroethane	Ave	0.1817	0.1723	0.1000	4.74	5.00	-5.2	30.0
Dichlorofluoromethane	Ave	0.4073	0.3764		4.62	5.00	-7.6	30.0
Trichlorofluoromethane	Ave	0.3447	0.3362	0.1000	4.88	5.00	-2.5	30.0
Ethyl ether	Ave	0.2035	0.2224		5.47	5.00	9.3	30.0
Freon 123a	Ave	0.2817	0.2596		4.61	5.00	-7.8	30.0
Acrolein	Ave	1.898	1.828		36.1	37.5	-3.7	30.0
1,1-Dichloroethene	Ave	0.2083	0.1948	0.1000	4.68	5.00	-6.5	30.0
Freon 113	Ave	0.2037	0.1872	0.1000	4.60	5.00	-8.1	30.0
Acetone	Ave	2.453	2.210	0.1000	33.8	37.5	-9.9	30.0
Methyl iodide	Ave	0.3891	0.3490		4.48	5.00	-10.3	30.0
Ethyl bromide	Ave	0.1814	0.1740		4.80	5.01	-4.1	30.0
Carbon disulfide	Ave	0.7678	0.7064	0.1000	4.60	5.00	-8.0	30.0
Methyl acetate	Ave	7.427	6.901	0.1000	4.65	5.00	-7.1	30.0
Allyl chloride	Ave	0.4168	0.3882		4.66	5.00	-6.9	30.0
Methylene Chloride	Ave	0.2387	0.2297	0.1000	4.81	5.00	-3.8	30.0
t-Butyl alcohol	Ave	0.8990	0.8686		48.3	50.0	-3.4	30.0
Acrylonitrile	Ave	3.174	3.312		26.1	25.0	4.4	30.0
Methyl tert-butyl ether	Ave	0.6620	0.5965	0.1000	4.51	5.00	-9.9	30.0
trans-1,2-Dichloroethene	Ave	0.2398	0.2273	0.1000	4.74	5.00	-5.2	30.0
n-Hexane	Ave	0.3497	0.3110		4.45	5.00	-11.1	30.0
1,1-Dichloroethane	Ave	0.4451	0.4261	0.2000	4.79	5.00	-4.3	30.0
di-Isopropyl ether	Ave	0.9055	0.8389		4.63	5.00	-7.3	30.0
2-Chloro-1,3-butadiene	Ave	0.4048	0.3703		4.57	5.00	-8.5	30.0
Ethyl t-butyl ether	Ave	0.8257	0.7643		4.63	5.00	-7.4	30.0
2-Butanone (MEK)	Ave	4.546	4.606	0.1000	38.0	37.5	1.3	30.0
cis-1,2-Dichloroethene	Ave	0.2693	0.2694	0.1000	5.00	5.00	0.0	30.0
2,2-Dichloropropane	Ave	0.3733	0.3517		4.71	5.00	-5.8	30.0
Propionitrile	Ave	1.127	1.044		34.7	37.5	-7.4	30.0
Methacrylonitrile	Ave	4.178	4.142		37.2	37.5	-0.9	30.0
Bromochloromethane	Ave	0.1200	0.1113		4.64	5.00	-7.3	30.0
Tetrahydrofuran	Ave	1.175	1.236		26.3	25.0	5.2	30.0
Chloroform	Ave	0.4289	0.4042	0.2000	4.71	5.00	-5.8	30.0
1,1,1-Trichloroethane	Ave	0.3670	0.3406	0.1000	4.64	5.00	-7.2	30.0
Cyclohexane	Ave	0.4218	0.3924	0.1000	4.65	5.00	-7.0	30.0
Carbon tetrachloride	Ave	0.3183	0.2983	0.1000	4.69	5.00	-6.3	30.0
1,1-Dichloropropene	Ave	0.3449	0.3203		4.64	5.00	-7.1	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-37501-1

SDG No.: _____

Lab Sample ID: ICV 410-70996/10 Calibration Date: 11/30/2020 15:26

Instrument ID: 16334 Calib Start Date: 11/30/2020 12:50

GC Column: R-624SilMS 30m ID: 0.25 (mm) Calib End Date: 11/30/2020 15:03

Lab File ID: GN30V01.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	0.0057	0.0050		111	125	-11.4	30.0
Benzene	Ave	1.017	0.9504	0.5000	4.67	5.00	-6.5	30.0
1,2-Dichloroethane	Ave	0.2843	0.2627	0.1000	4.62	5.00	-7.6	30.0
t-Amyl methyl ether	Ave	0.7278	0.6845		4.70	5.00	-5.9	30.0
n-Heptane	Ave	0.3945	0.3606		4.57	5.00	-8.6	30.0
n-Butanol	Ave	0.3231	0.2927		226	250	-9.4	30.0
Trichloroethene	Ave	0.2596	0.2419	0.2000	4.66	5.00	-6.8	30.0
Methylcyclohexane	Ave	0.4031	0.3800	0.1000	4.71	5.00	-5.7	30.0
1,2-Dichloropropane	Ave	0.2719	0.2560	0.1000	4.71	5.00	-5.8	30.0
1,4-Dioxane	Ave	0.0575	0.0668	0.0050	145	125	16.3	30.0
Methyl methacrylate	Ave	8.511	8.550		5.02	5.00	0.5	30.0
Dibromomethane	Ave	0.1260	0.1182		4.69	5.00	-6.2	30.0
Bromodichloromethane	Ave	0.3153	0.3029	0.2000	4.80	5.00	-3.9	30.0
2-Nitropropane	Ave	2.413	2.399		4.97	5.00	-0.6	30.0
1-Bromo-2-chloroethane	Ave	0.2915	0.2778		4.77	5.00	-4.7	30.0
cis-1,3-Dichloropropene	Ave	0.4093	0.3852	0.2000	4.71	5.00	-5.9	30.0
4-Methyl-2-pentanone (MIBK)	Ave	11.67	11.75	0.1000	25.2	25.0	0.7	30.0
Toluene	Ave	0.8666	0.7991	0.4000	4.61	5.00	-7.8	30.0
trans-1,3-Dichloropropene	Ave	0.4679	0.4437	0.1000	4.74	5.00	-5.2	30.0
Ethyl methacrylate	Ave	0.4204	0.3987		4.74	5.00	-5.2	30.0
1,1,2-Trichloroethane	Ave	0.2528	0.2457	0.1000	4.86	5.00	-2.8	30.0
Tetrachloroethene	Ave	0.3760	0.3549	0.2000	4.72	5.00	-5.6	30.0
1,3-Dichloropropane	Ave	0.4560	0.4249		4.66	5.00	-6.8	30.0
2-Hexanone	Ave	8.396	8.581	0.1000	25.6	25.0	2.2	30.0
Dibromochloromethane	Ave	0.2998	0.2903		4.84	5.00	-3.2	30.0
1,2-Dibromoethane (EDB)	Ave	0.2482	0.2342	0.1000	4.72	5.00	-5.6	30.0
1-Chlorohexane	Ave	0.5205	0.4525		4.35	5.00	-13.1	30.0
Chlorobenzene	Ave	0.9653	0.9074	0.5000	4.70	5.00	-6.0	30.0
1,1,1,2-Tetrachloroethane	Ave	0.3430	0.3270		4.77	5.00	-4.7	30.0
Ethylbenzene	Ave	1.712	1.599	0.1000	4.67	5.00	-6.6	30.0
m&p-Xylene	Ave	0.6453	0.6073	0.1000	9.41	10.0	-5.9	30.0
o-Xylene	Ave	0.6400	0.6049	0.3000	4.73	5.00	-5.5	30.0
Styrene	Ave	1.091	1.027	0.3000	4.71	5.00	-5.8	30.0
Bromoform	Ave	0.1750	0.1659	0.1000	4.74	5.00	-5.2	30.0
Isopropylbenzene	Ave	1.674	1.575	0.1000	4.70	5.00	-5.9	30.0
1,1,2,2-Tetrachloroethane	Ave	0.6286	0.5991	0.3000	4.77	5.00	-4.7	30.0
Bromobenzene	Ave	0.7547	0.7134		4.73	5.00	-5.5	30.0
trans-1,4-Dichloro-2-butene	Ave	3.624	3.634		25.1	25.0	0.3	30.0
1,2,3-Trichloropropane	Ave	0.1602	0.1550		4.84	5.00	-3.3	30.0
N-Propylbenzene	Ave	3.763	3.595		4.78	5.00	-4.5	30.0
2-Chlorotoluene	Ave	0.7400	0.7011		4.74	5.00	-5.2	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-37501-1
 SDG No.: _____
 Lab Sample ID: ICV 410-70996/10 Calibration Date: 11/30/2020 15:26
 Instrument ID: 16334 Calib Start Date: 11/30/2020 12:50
 GC Column: R-624SilMS 30m ID: 0.25 (mm) Calib End Date: 11/30/2020 15:03
 Lab File ID: GN30V01.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,3,5-Trimethylbenzene	Ave	2.655	2.531		4.77	5.00	-4.6	30.0
4-Chlorotoluene	Ave	0.7716	0.7340		4.76	5.00	-4.9	30.0
tert-Butylbenzene	Ave	0.5668	0.5305		4.68	5.00	-6.4	30.0
Pentachloroethane	Ave	0.4872	0.4720		4.84	5.00	-3.1	30.0
1,2,4-Trimethylbenzene	Ave	2.772	2.598		4.69	5.00	-6.3	30.0
sec-Butylbenzene	Ave	3.453	3.272		4.74	5.00	-5.2	30.0
1,3-Dichlorobenzene	Ave	1.522	1.436	0.6000	4.72	5.00	-5.7	30.0
p-Isopropyltoluene	Ave	3.000	2.846		4.74	5.00	-5.1	30.0
1,4-Dichlorobenzene	Ave	1.550	1.456	0.5000	4.70	5.00	-6.1	30.0
1,2,3-Trimethylbenzene	Ave	1.229	1.217		4.95	5.00	-1.0	30.0
Benzyl chloride	Ave	0.2719	0.2597		4.78	5.00	-4.5	30.0
n-Butylbenzene	Ave	1.589	1.470		4.63	5.00	-7.5	30.0
1,2-Dichlorobenzene	Ave	1.420	1.344	0.4000	4.73	5.00	-5.3	30.0
1,2-Dibromo-3-Chloropropane	Ave	0.0916	0.0871	0.0500	4.75	5.00	-4.9	30.0
1,3,5-Trichlorobenzene	Ave	1.275	1.183		4.64	5.00	-7.2	30.0
1,2,4-Trichlorobenzene	Ave	1.175	1.105	0.2000	4.70	5.00	-6.0	30.0
Hexachlorobutadiene	Ave	0.5771	0.5485		4.75	5.00	-5.0	30.0
Naphthalene	Ave	2.139	1.949		4.56	5.00	-8.9	30.0
1,2,3-Trichlorobenzene	Ave	1.037	0.9616		4.63	5.00	-7.3	30.0
Dibromofluoromethane (Surr)	Ave	0.2420	0.2421		10.0	10.0	0.0	30.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.0515	0.0508		9.86	10.0	-1.4	30.0
Toluene-d8 (Surr)	Ave	1.334	1.336		10.0	10.0	0.2	30.0
4-Bromofluorobenzene (Surr)	Ave	0.5094	0.5081		9.97	10.0	-0.3	30.0

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30V01.D
 Lims ID: ICV
 Client ID:
 Sample Type: ICV
 Inject. Date: 30-Nov-2020 15:26:30 ALS Bottle#: 9 Worklist Smp#: 10
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0016641-010
 Misc. Info.: ICV
 Operator ID: DVV10203 Instrument ID: 16334
 Sublist:
 Method: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\MSV_16334_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 01-Dec-2020 19:03:51 Calib Date: 30-Nov-2020 18:23:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1610

First Level Reviewer: virayd

Date: 01-Dec-2020 12:04:00

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.953	1.953	0.000	99	267093	5.00	4.65	
5 Chloromethane	50	2.148	2.148	0.000	99	355206	5.00	4.58	
6 Butadiene	39	2.264	2.264	0.000	93	345587	5.00	3.91	
7 Vinyl chloride	62	2.264	2.270	-0.006	97	330590	5.00	4.99	
9 Bromomethane	94	2.593	2.593	0.000	90	220846	5.00	4.79	
10 Chloroethane	64	2.666	2.666	0.000	100	190525	5.00	4.74	
11 Dichlorofluoromethane	67	2.904	2.904	0.000	97	416165	5.00	4.62	
13 Trichlorofluoromethane	101	2.971	2.977	-0.006	98	371721	5.00	4.88	
15 Ethyl ether	59	3.208	3.208	0.000	95	245940	5.00	5.47	
16 1,2-Dichloro-1,1,2-trifluoroethane	67	3.300	3.300	0.000	93	287040	5.00	4.61	
18 Acrolein	56	3.385	3.385	0.000	99	245936	37.5	36.1	
19 1,1-Dichloroethene	96	3.519	3.519	0.000	98	215348	5.00	4.68	
21 112TCTFE	101	3.550	3.556	-0.006	92	207005	5.00	4.60	
20 Acetone	43	3.556	3.562	-0.006	99	297377	37.5	33.8	
22 Iodomethane	142	3.708	3.714	-0.006	98	385894	5.00	4.48	
23 Isopropyl alcohol	45	3.733	3.727	0.006	35	60908	37.5	34.7	
24 Ethyl bromide	108	3.739	3.739	0.000	98	192753	5.01	4.80	
25 Carbon disulfide	76	3.812	3.812	0.000	99	781041	5.00	4.60	
26 Methyl acetate	43	3.964	3.971	-0.006	99	123806	5.00	4.65	
27 3-Chloro-1-propene	41	3.989	3.989	0.000	92	429201	5.00	4.66	
28 Methylene Chloride	84	4.178	4.178	0.000	95	254001	5.00	4.81	
* 29 t-Butyl alcohol-d10 (IS)	65	4.208	4.202	0.006	0	179392	50.0	50.0	
30 2-Methyl-2-propanol	59	4.324	4.336	-0.012	99	155815	50.0	48.3	
31 Acrylonitrile	53	4.519	4.525	-0.006	99	297117	25.0	26.1	
32 Methyl tert-butyl ether	73	4.580	4.580	0.000	96	659564	5.00	4.51	
33 trans-1,2-Dichloroethene	96	4.580	4.586	-0.006	98	251292	5.00	4.74	
34 Hexane	57	5.007	5.007	0.000	94	343809	5.00	4.45	
36 1,1-Dichloroethane	63	5.251	5.251	0.000	96	471094	5.00	4.79	
37 Isopropyl ether	45	5.306	5.306	0.000	96	927579	5.00	4.63	
38 2-Chloro-1,3-butadiene	53	5.360	5.360	0.000	91	409377	5.00	4.57	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
39 Tert-butyl ethyl ether	59	5.836	5.836	0.000	99	845008	5.00	4.63	
40 2-Butanone (MEK)	43	6.043	6.049	-0.006	100	619774	37.5	38.0	
41 cis-1,2-Dichloroethene	96	6.086	6.086	0.000	83	297814	5.00	5.00	
42 2,2-Dichloropropane	77	6.092	6.092	0.000	86	388867	5.00	4.71	
44 Propionitrile	54	6.153	6.147	0.006	98	140400	37.5	34.7	
46 Methacrylonitrile	67	6.360	6.360	0.000	94	557295	37.5	37.2	
48 Chlorobromomethane	128	6.409	6.409	0.000	95	123040	5.00	4.64	
47 Tetrahydrofuran	71	6.421	6.409	0.012	78	110891	25.0	26.3	
50 Chloroform	83	6.561	6.561	0.000	93	446942	5.00	4.71	
\$ 52 Dibromofluoromethane (Surr)	113	6.781	6.781	0.000	94	535394	10.0	10.0	
51 1,1,1-Trichloroethane	97	6.787	6.787	0.000	98	376570	5.00	4.64	
53 Cyclohexane	56	6.878	6.878	0.000	92	433837	5.00	4.65	
56 Carbon tetrachloride	117	6.994	7.000	-0.006	94	329779	5.00	4.69	
55 1,1-Dichloropropene	75	7.000	7.000	0.000	96	354186	5.00	4.64	
57 Isobutyl alcohol	41	7.165	7.165	0.000	94	138400	125.0	110.7	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.232	7.232	0.000	0	112249	10.0	9.86	
59 Benzene	78	7.263	7.263	0.000	97	1050827	5.00	4.67	
60 1,2-Dichloroethane	62	7.336	7.336	0.000	97	290495	5.00	4.62	M
62 Tert-amyl methyl ether	73	7.452	7.458	-0.006	98	756827	5.00	4.70	
* 63 Fluorobenzene (IS)	96	7.671	7.671	0.000	98	2211317	10.0	10.0	
64 n-Heptane	43	7.677	7.677	0.000	94	398665	5.00	4.57	
65 n-Butanol	56	8.049	8.049	0.000	90	262496	250.0	226.5	
67 Trichloroethene	95	8.147	8.147	0.000	99	267510	5.00	4.66	
68 Methylcyclohexane	83	8.451	8.451	0.000	95	420203	5.00	4.71	
69 1,2-Dichloropropane	63	8.482	8.482	0.000	85	283073	5.00	4.71	
70 2-ethoxy-2-methyl butane	87	8.488	8.488	0.000	91	420551	5.00	4.78	
72 1,4-Dioxane	88	8.567	8.567	0.000	30	29971	125.0	145.3	M
71 Methyl methacrylate	69	8.567	8.567	0.000	93	153384	5.00	5.02	
73 Dibromomethane	93	8.592	8.585	0.007	96	130736	5.00	4.69	
75 Dichlorobromomethane	83	8.823	8.823	0.000	100	334899	5.00	4.80	
76 2-Nitropropane	41	9.110	9.110	0.000	98	43035	5.00	4.97	
78 2-Chloroethyl vinyl ether	63		9.195				ND	ND	
79 1-Bromo-2-chloroethane	63	9.219	9.219	0.000	98	307205	5.00	4.77	
80 cis-1,3-Dichloropropene	75	9.378	9.378	0.000	95	425919	5.00	4.71	
81 4-Methyl-2-pentanone (MIBK)	43	9.561	9.561	0.000	98	1053892	25.0	25.2	
\$ 82 Toluene-d8 (Surr)	98	9.689	9.689	0.000	94	2139566	10.0	10.0	
83 Toluene	92	9.762	9.762	0.000	99	639770	5.00	4.61	
84 trans-1,3-Dichloropropene	75	10.024	10.024	0.000	94	355211	5.00	4.74	
85 Ethyl methacrylate	69	10.085	10.085	0.000	91	319181	5.00	4.74	
86 1,1,2-Trichloroethane	97	10.231	10.231	0.000	91	196724	5.00	4.86	
88 Tetrachloroethene	166	10.311	10.311	0.000	97	284108	5.00	4.72	
89 1,3-Dichloropropane	76	10.390	10.396	-0.006	92	340186	5.00	4.66	
91 2-Hexanone	43	10.451	10.451	0.000	98	769685	25.0	25.6	
93 Chlorodibromomethane	129	10.603	10.603	0.000	90	232451	5.00	4.84	
94 Ethylene Dibromide	107	10.713	10.713	0.000	98	187535	5.00	4.72	
* 95 Chlorobenzene-d5 (IS)	117	11.146	11.146	0.000	86	1601223	10.0	10.0	
96 1-Chlorohexane	91	11.158	11.158	0.000	97	362277	5.00	4.35	
97 Chlorobenzene	112	11.176	11.176	0.000	94	726467	5.00	4.70	
98 1,1,1,2-Tetrachloroethane	131	11.256	11.256	0.000	96	261798	5.00	4.77	
99 Ethylbenzene	91	11.262	11.262	0.000	99	1279967	5.00	4.67	
100 m-Xylene & p-Xylene	106	11.378	11.378	0.000	97	972480	10.0	9.41	
102 o-Xylene	106	11.707	11.707	0.000	97	484319	5.00	4.73	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
103 Styrene	104	11.719	11.719	0.000	94	822532	5.00	4.71	
104 Bromoform	173	11.878	11.877	0.001	97	132838	5.00	4.74	
105 Isopropylbenzene	105	12.006	12.006	0.000	96	1261145	5.00	4.70	
\$ 108 4-Bromofluorobenzene (Surr)	95	12.152	12.152	0.000	91	813558	10.0	9.97	
109 1,1,2,2-Tetrachloroethane	83	12.255	12.255	0.000	93	258348	5.00	4.77	
110 Bromobenzene	156	12.268	12.268	0.000	96	307662	5.00	4.73	
111 trans-1,4-Dichloro-2-butene	53	12.280	12.280	0.000	93	325926	25.0	25.1	
112 1,2,3-Trichloropropane	110	12.298	12.304	-0.006	82	66839	5.00	4.84	
113 N-Propylbenzene	91	12.335	12.335	0.000	99	1550266	5.00	4.78	
114 2-Chlorotoluene	126	12.414	12.414	0.000	96	302371	5.00	4.74	
115 1,3,5-Trimethylbenzene	105	12.469	12.469	0.000	94	1091590	5.00	4.77	
116 4-Chlorotoluene	126	12.505	12.505	0.000	98	316533	5.00	4.76	
118 tert-Butylbenzene	134	12.713	12.713	0.000	94	228776	5.00	4.68	
120 Pentachloroethane	167	12.743	12.743	0.000	91	203574	5.00	4.84	
119 1,2,4-Trimethylbenzene	105	12.755	12.755	0.000	97	1120562	5.00	4.69	
121 sec-Butylbenzene	105	12.877	12.877	0.000	94	1411165	5.00	4.74	
122 1,3-Dichlorobenzene	146	12.975	12.975	0.000	98	619173	5.00	4.72	
123 4-Isopropyltoluene	119	12.981	12.981	0.000	97	1227233	5.00	4.74	
* 124 1,4-Dichlorobenzene-d4	152	13.030	13.030	0.000	95	862512	10.0	10.0	
125 1,4-Dichlorobenzene	146	13.048	13.048	0.000	94	628073	5.00	4.70	
126 1,2,3-Trimethylbenzene	120	13.060	13.060	0.000	99	524945	5.00	4.95	
127 Benzyl chloride	126	13.127	13.127	0.000	99	111979	5.00	4.78	
129 p-Diethylbenzene	119	13.182	13.182	0.000	92	749547	5.00	4.77	
130 n-Butylbenzene	92	13.274	13.274	0.000	98	633928	5.00	4.63	
131 1,2-Dichlorobenzene	146	13.310	13.310	0.000	99	579605	5.00	4.73	
134 1,2-Dibromo-3-Chloropropane	155	13.853	13.853	0.000	85	37558	5.00	4.75	
135 1,3,5-Trichlorobenzene	180	13.975	13.975	0.000	98	510248	5.00	4.64	
136 1,2,4-Trichlorobenzene	180	14.395	14.395	0.000	94	476558	5.00	4.70	
137 Hexachlorobutadiene	225	14.481	14.481	0.000	96	236549	5.00	4.75	
138 Naphthalene	128	14.578	14.578	0.000	97	840564	5.00	4.56	
139 1,2,3-Trichlorobenzene	180	14.718	14.718	0.000	95	414693	5.00	4.63	
140 2-Methylnaphthalene	142	15.340	15.340	0.000	93	560337	5.00	4.25	

QC Flag Legend

Processing Flags

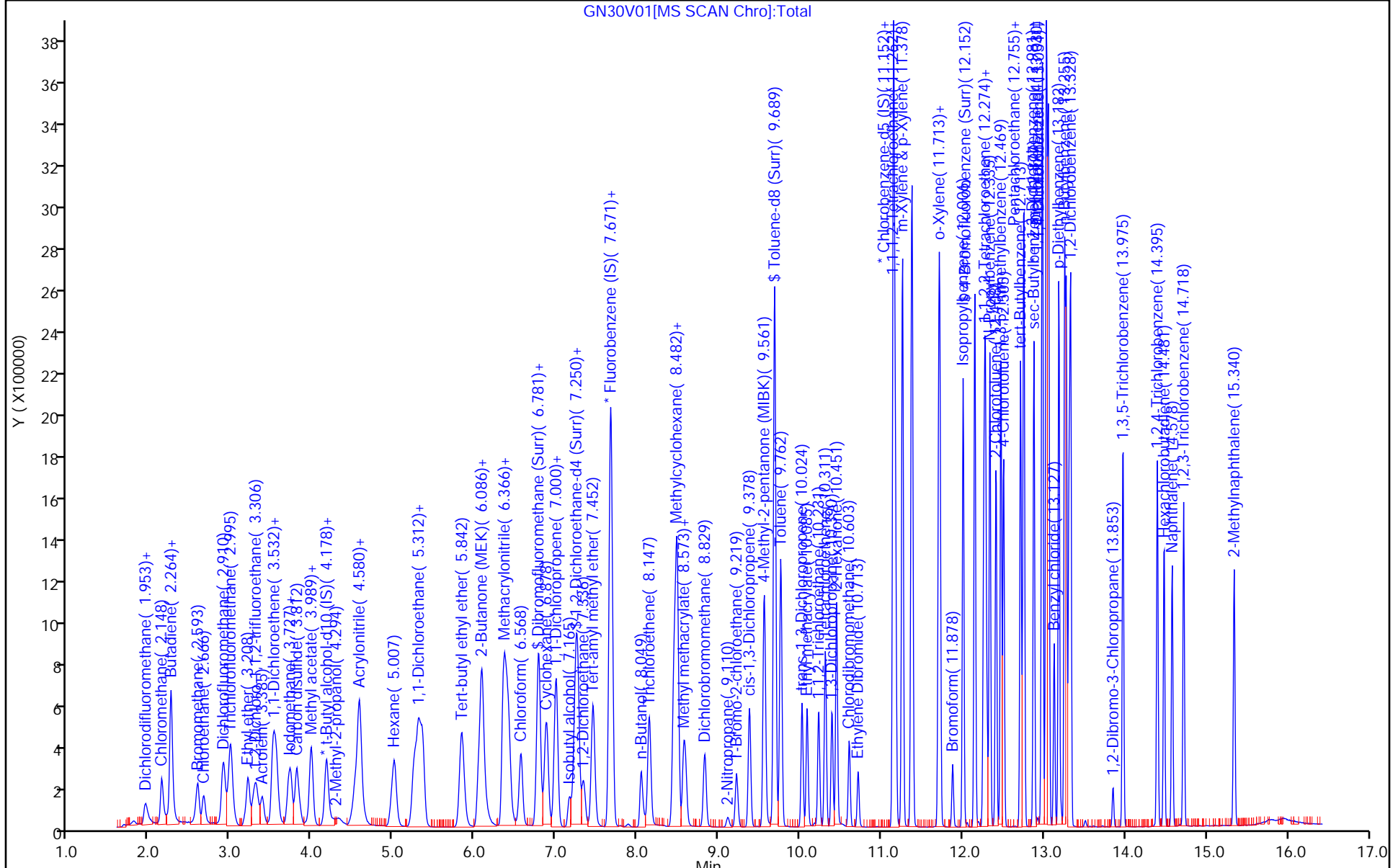
ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

MSV_Q_QARC_00056	Amount Added: 12.50	Units: uL	
MSV_Q_QVOA6_00054	Amount Added: 12.50	Units: uL	
MSV_Q_QVOA1_00057	Amount Added: 12.50	Units: uL	
MSV_Q_EE_00003	Amount Added: 12.50	Units: uL	
MSV_Q_ETBR_00005	Amount Added: 12.50	Units: uL	
MSV_QGAS_826_00093	Amount Added: 12.50	Units: uL	
MSV_29_826ISS_00013	Amount Added: 1.00	Units: uL	Run Reagent



Eurofins Lancaster Laboratories Env, LLC

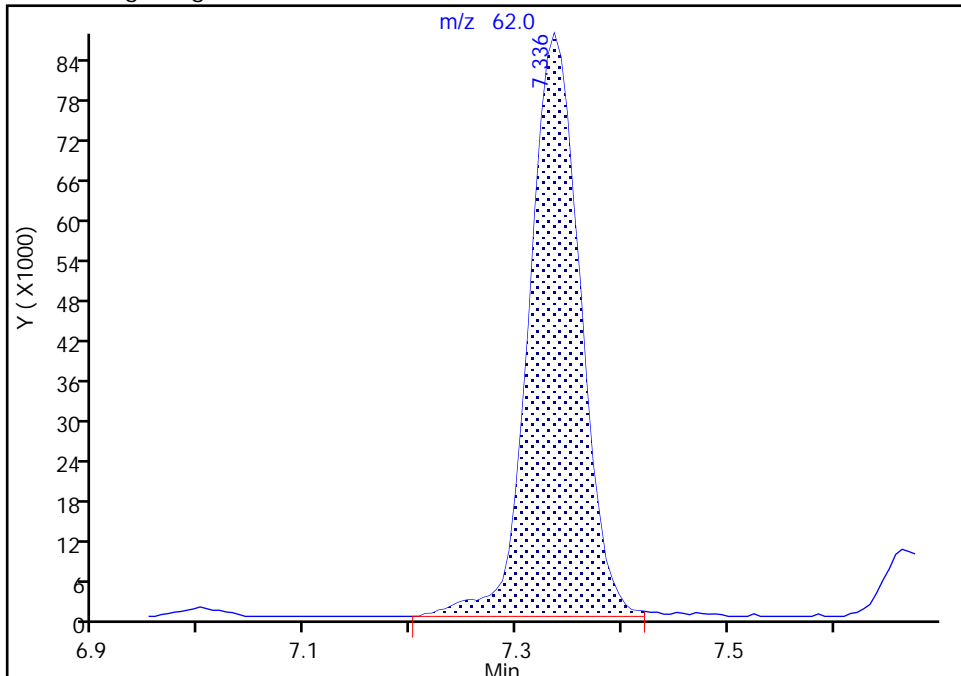
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Injection Date: 30-Nov-2020 15:26:30 Instrument ID: 16334
Lims ID: ICV
Client ID:
Operator ID: DVV10203 ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

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

Signal: 1

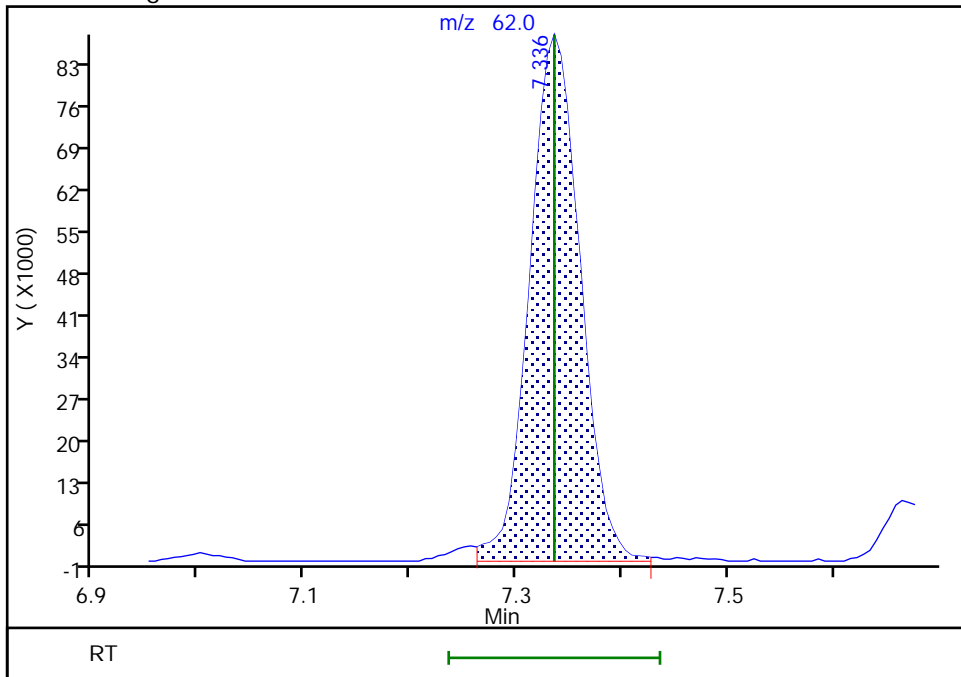
RT: 7.34
Area: 294206
Amount: 4.680182
Amount Units: ug/l

Processing Integration Results



RT: 7.34
Area: 290495
Amount: 4.621148
Amount Units: ug/l

Manual Integration Results



Reviewer: virayd, 01-Dec-2020 12:02:36
Audit Action: Manually Integrated

Audit Reason: Other

Euofins Lancaster Laboratories Env, LLC

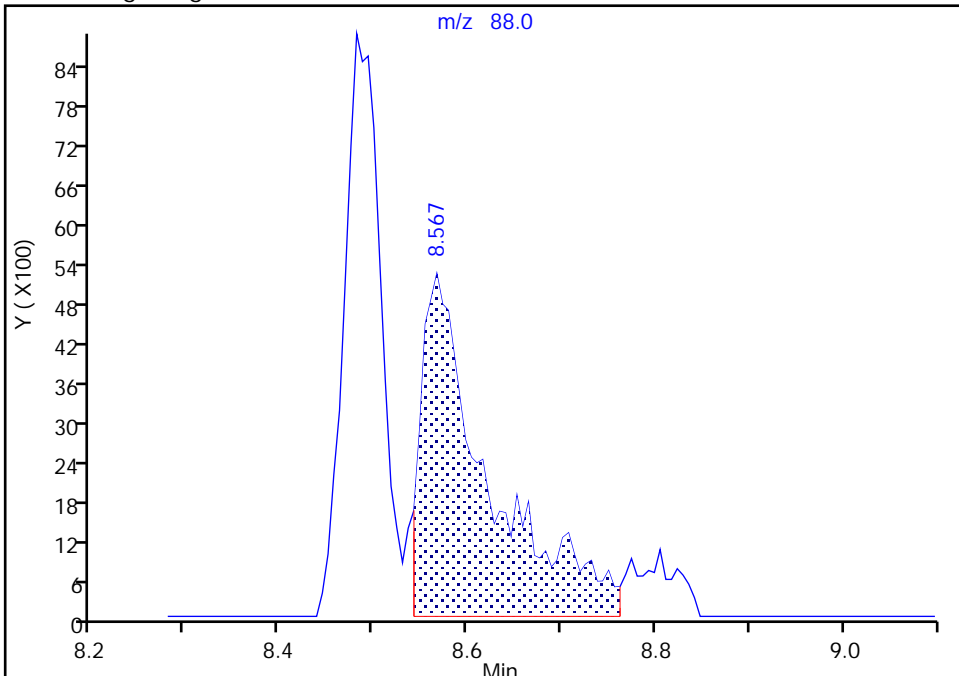
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Injection Date: 30-Nov-2020 15:26:30 Instrument ID: 16334
Lims ID: ICV
Client ID:
Operator ID: DVV10203 ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

72 1,4-Dioxane, CAS: 123-91-1

Signal: 1

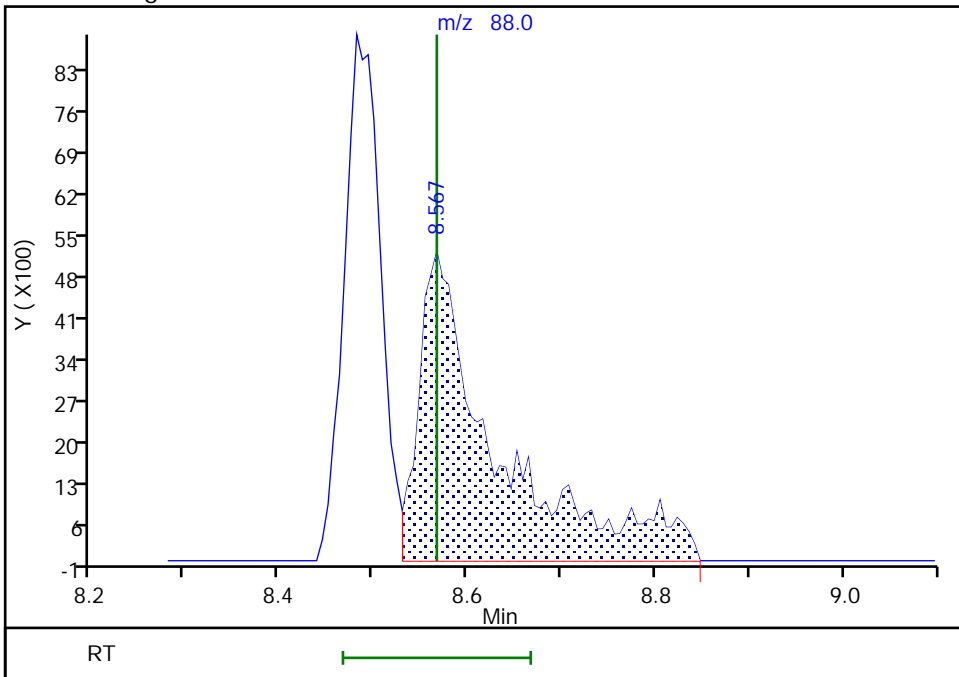
RT: 8.57
Area: 25930
Amount: 125.7342
Amount Units: ug/l

Processing Integration Results



RT: 8.57
Area: 29971
Amount: 145.3290
Amount Units: ug/l

Manual Integration Results



Reviewer: virayd, 01-Dec-2020 12:02:49
Audit Action: Manually Integrated

Audit Reason: Other

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-37501-1

SDG No.: _____

Lab Sample ID: CCVIS 410-120958/3 Calibration Date: 04/30/2021 09:07

Instrument ID: 16334 Calib Start Date: 11/30/2020 12:50

GC Column: R-624SilMS 30m ID: 0.25 (mm) Calib End Date: 11/30/2020 15:03

Lab File ID: GA30C01.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	0.2600	0.2320	0.1000	8.93	10.0	-10.7	20.0
Chloromethane	Ave	0.3508	0.3099	0.1000	8.83	10.0	-11.7	20.0
1,3-Butadiene	Ave	0.3993	0.5991		15.0	10.0	50.0*	20.0
Vinyl chloride	Ave	0.2995	0.2640	0.1000	8.81	10.0	-11.9	20.0
Bromomethane	Ave	0.2087	0.1974	0.1000	9.46	10.0	-5.4	20.0
Chloroethane	Ave	0.1817	0.1614	0.1000	8.88	10.0	-11.2	20.0
Dichlorofluoromethane	Ave	0.4073	0.3242		7.96	10.0	-20.4*	20.0
Trichlorofluoromethane	Ave	0.3447	0.3807	0.1000	11.0	10.0	10.5	20.0
Ethyl ether	Ave	0.2035	0.1766		8.68	10.0	-13.2	20.0
Freon 123a	Ave	0.2817	0.2483		8.82	10.0	-11.8	20.0
Acrolein	Ave	1.898	2.045		539	500	7.8	20.0
1,1-Dichloroethene	Ave	0.2083	0.1933	0.1000	9.28	10.0	-7.2	20.0
Acetone	Ave	2.453	2.538	0.1000	103	100	3.5	20.0
Freon 113	Ave	0.2037	0.2133	0.1000	10.5	10.0	4.7	20.0
Methyl iodide	Ave	0.3891	0.3928		10.1	10.0	0.9	20.0
Ethyl bromide	Ave	0.1814	0.1756		9.68	10.0	-3.2	20.0
Carbon disulfide	Ave	0.7678	0.6531	0.1000	8.51	10.0	-14.9	20.0
Methyl acetate	Ave	7.427	6.833	0.1000	9.20	10.0	-8.0	20.0
Allyl chloride	Ave	0.4168	0.2908		6.98	10.0	-30.2*	20.0
Methylene Chloride	Ave	0.2387	0.2206	0.1000	9.24	10.0	-7.6	20.0
t-Butyl alcohol	Ave	0.8990	0.9270		206	200	3.1	20.0
Acrylonitrile	Ave	3.174	3.591		56.6	50.0	13.1	20.0
Methyl tert-butyl ether	Ave	0.6620	0.5691	0.1000	8.60	10.0	-14.0	20.0
trans-1,2-Dichloroethene	Ave	0.2398	0.2231	0.1000	9.30	10.0	-7.0	20.0
n-Hexane	Ave	0.3497	0.3199		9.15	10.0	-8.5	20.0
1,1-Dichloroethane	Ave	0.4451	0.3831	0.2000	8.61	10.0	-13.9	20.0
di-Isopropyl ether	Ave	0.9055	0.7096		7.84	10.0	-21.6*	20.0
2-Chloro-1,3-butadiene	Ave	0.4048	0.3277		8.10	10.0	-19.0	20.0
Ethyl t-butyl ether	Ave	0.8257	0.6641		8.04	10.0	-19.6	20.0
2-Butanone (MEK)	Ave	4.546	4.800	0.1000	106	100	5.6	20.0
cis-1,2-Dichloroethene	Ave	0.2693	0.2551	0.1000	9.47	10.0	-5.3	20.0
2,2-Dichloropropane	Ave	0.3733	0.3212		8.60	10.0	-14.0	20.0
Propionitrile	Ave	1.127	1.245		221	200	10.5	20.0
Methacrylonitrile	Ave	4.178	4.941		118	100	18.3	20.0
Bromochloromethane	Ave	0.1200	0.1162		9.68	10.0	-3.2	20.0
Tetrahydrofuran	Ave	1.175	1.414		120	100	20.3*	20.0
Chloroform	Ave	0.4289	0.4040	0.2000	9.42	10.0	-5.8	20.0
1,1,1-Trichloroethane	Ave	0.3670	0.3453	0.1000	9.41	10.0	-5.9	20.0
Cyclohexane	Ave	0.4218	0.3830	0.1000	9.08	10.0	-9.2	20.0
1,1-Dichloropropene	Ave	0.3449	0.3118		9.04	10.0	-9.6	20.0
Carbon tetrachloride	Ave	0.3183	0.3070	0.1000	9.65	10.0	-3.5	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-37501-1

SDG No.: _____

Lab Sample ID: CCVIS 410-120958/3 Calibration Date: 04/30/2021 09:07

Instrument ID: 16334 Calib Start Date: 11/30/2020 12:50

GC Column: R-624SilMS 30m ID: 0.25 (mm) Calib End Date: 11/30/2020 15:03

Lab File ID: GA30C01.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	0.0057	0.0041		363	500	-27.3*	20.0
Benzene	Ave	1.017	0.9279	0.5000	9.13	10.0	-8.7	20.0
1,2-Dichloroethane	Ave	0.2843	0.2433	0.1000	8.56	10.0	-14.4	20.0
t-Amyl methyl ether	Ave	0.7278	0.6187		8.50	10.0	-15.0	20.0
n-Heptane	Ave	0.3945	0.3334		8.45	10.0	-15.5	20.0
n-Butanol	Ave	0.3231	0.3224		998	1000	-0.2	20.0
Trichloroethene	Ave	0.2596	0.2499	0.2000	9.63	10.0	-3.7	20.0
Methylcyclohexane	Ave	0.4031	0.4051	0.1000	10.0	10.0	0.5	20.0
1,2-Dichloropropane	Ave	0.2719	0.2378	0.1000	8.75	10.0	-12.5	20.0
1,4-Dioxane	Ave	0.0575	0.0518	0.0050	451	500	-9.9	20.0
Methyl methacrylate	Ave	8.511	9.586		11.3	10.0	12.6	20.0
Dibromomethane	Ave	0.1260	0.1225		9.72	10.0	-2.8	20.0
Bromodichloromethane	Ave	0.3153	0.2951	0.2000	9.36	10.0	-6.4	20.0
2-Nitropropane	Ave	2.413	2.478		103	100	2.7	20.0
1-Bromo-2-chloroethane	Ave	0.2915	0.2501		8.58	10.0	-14.2	20.0
cis-1,3-Dichloropropene	Ave	0.4093	0.3503	0.2000	8.56	10.0	-14.4	20.0
4-Methyl-2-pentanone (MIBK)	Ave	11.67	12.15	0.1000	104	100	4.1	20.0
Toluene	Ave	0.8666	0.8008	0.4000	9.24	10.0	-7.6	20.0
trans-1,3-Dichloropropene	Ave	0.4679	0.3856	0.1000	8.24	10.0	-17.6	20.0
Ethyl methacrylate	Ave	0.4204	0.3585		8.53	10.0	-14.7	20.0
1,1,2-Trichloroethane	Ave	0.2528	0.2419	0.1000	9.57	10.0	-4.3	20.0
Tetrachloroethene	Ave	0.3760	0.3829	0.2000	10.2	10.0	1.8	20.0
1,3-Dichloropropane	Ave	0.4560	0.4070		8.93	10.0	-10.7	20.0
2-Hexanone	Ave	8.396	8.827	0.1000	105	100	5.1	20.0
Dibromochloromethane	Ave	0.2998	0.2859		9.54	10.0	-4.6	20.0
1,2-Dibromoethane (EDB)	Ave	0.2482	0.2391	0.1000	9.63	10.0	-3.7	20.0
1-Chlorohexane	Ave	0.5205	0.4590		8.82	10.0	-11.8	20.0
Chlorobenzene	Ave	0.9653	0.9304	0.5000	9.64	10.0	-3.6	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3430	0.3396		9.90	10.0	-1.0	20.0
Ethylbenzene	Ave	1.712	1.565	0.1000	9.14	10.0	-8.6	20.0
m&p-Xylene	Ave	0.6453	0.6180	0.1000	19.2	20.0	-4.2	20.0
o-Xylene	Ave	0.6400	0.6090	0.3000	9.52	10.0	-4.8	20.0
Styrene	Ave	1.091	1.037	0.3000	9.51	10.0	-4.9	20.0
Bromoform	Ave	0.1750	0.1735	0.1000	9.91	10.0	-0.9	20.0
Isopropylbenzene	Ave	1.674	1.563	0.1000	9.34	10.0	-6.6	20.0
1,1,2,2-Tetrachloroethane	Ave	0.6286	0.5437	0.3000	8.65	10.0	-13.5	20.0
Bromobenzene	Ave	0.7547	0.7398		9.80	10.0	-2.0	20.0
trans-1,4-Dichloro-2-butene	Ave	3.624	2.341		64.6	100	-35.4*	20.0
1,2,3-Trichloropropane	Ave	0.1602	0.1508		9.41	10.0	-5.9	20.0
N-Propylbenzene	Ave	3.763	3.321		8.83	10.0	-11.7	20.0
2-Chlorotoluene	Ave	0.7400	0.7004		9.47	10.0	-5.3	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-37501-1
 SDG No.: _____
 Lab Sample ID: CCVIS 410-120958/3 Calibration Date: 04/30/2021 09:07
 Instrument ID: 16334 Calib Start Date: 11/30/2020 12:50
 GC Column: R-624SilMS 30m ID: 0.25 (mm) Calib End Date: 11/30/2020 15:03
 Lab File ID: GA30C01.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,3,5-Trimethylbenzene	Ave	2.655	2.399		9.04	10.0	-9.6	20.0
4-Chlorotoluene	Ave	0.7716	0.7363		9.54	10.0	-4.6	20.0
tert-Butylbenzene	Ave	0.5668	0.5560		9.81	10.0	-1.9	20.0
Pentachloroethane	Ave	0.4872	0.4500		9.24	10.0	-7.6	20.0
1,2,4-Trimethylbenzene	Ave	2.772	2.502		9.03	10.0	-9.7	20.0
sec-Butylbenzene	Ave	3.453	3.145		9.11	10.0	-8.9	20.0
1,3-Dichlorobenzene	Ave	1.522	1.470	0.6000	9.66	10.0	-3.4	20.0
p-Isopropyltoluene	Ave	3.000	2.744		9.15	10.0	-8.5	20.0
1,4-Dichlorobenzene	Ave	1.550	1.467	0.5000	9.46	10.0	-5.4	20.0
1,2,3-Trimethylbenzene	Ave	1.229	1.130		9.19	10.0	-8.1	20.0
Benzyl chloride	Ave	0.2719	0.2481		9.13	10.0	-8.7	20.0
n-Butylbenzene	Ave	1.589	1.418		8.93	10.0	-10.7	20.0
1,2-Dichlorobenzene	Ave	1.420	1.368	0.4000	9.64	10.0	-3.6	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.0916	0.0898	0.0500	9.81	10.0	-1.9	20.0
1,3,5-Trichlorobenzene	Ave	1.275	1.258		9.87	10.0	-1.3	20.0
1,2,4-Trichlorobenzene	Ave	1.175	1.144	0.2000	9.73	10.0	-2.7	20.0
Hexachlorobutadiene	Ave	0.5771	0.5676		9.84	10.0	-1.6	20.0
Naphthalene	Ave	2.139	1.971		9.22	10.0	-7.8	20.0
1,2,3-Trichlorobenzene	Ave	1.037	1.025		9.88	10.0	-1.2	20.0
Dibromofluoromethane (Surr)	Ave	0.2420	0.2455		10.1	10.0	1.4	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.0515	0.0503		9.76	10.0	-2.4	20.0
Toluene-d8 (Surr)	Ave	1.334	1.243		9.32	10.0	-6.8	20.0
4-Bromofluorobenzene (Surr)	Ave	0.5094	0.4562		8.96	10.0	-10.4	20.0

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\GA30C01.D
 Lims ID: CCVIS VSTD010
 Client ID:
 Sample Type: CCVIS
 Inject. Date: 30-Apr-2021 09:07:30 ALS Bottle#: 3 Worklist Smp#: 3
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0028091-003
 Misc. Info.: CCVIS VSTD010
 Operator ID: jml01693 Instrument ID: 16334
 Sublist: chrom-MSV_16334_25mL*sub4
 Method: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\MSV_16334_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 30-Apr-2021 10:05:58 Calib Date: 30-Nov-2020 18:23:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1624

First Level Reviewer: longj

Date: 30-Apr-2021 10:05:58

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.953	1.953	0.000	99	576835	10.0	8.93	
5 Chloromethane	50	2.148	2.148	0.000	98	770301	10.0	8.83	
7 Butadiene	39	2.257	2.257	0.000	91	1489338	10.0	15.0	
8 Vinyl chloride	62	2.263	2.263	0.000	98	656192	10.0	8.81	
9 Bromomethane	94	2.587	2.587	0.000	91	490639	10.0	9.46	
10 Chloroethane	64	2.666	2.666	0.000	100	401156	10.0	8.88	
12 Dichlorofluoromethane	67	2.910	2.910	0.000	97	805909	10.0	7.96	
13 Trichlorofluoromethane	101	2.971	2.971	0.000	98	946476	10.0	11.0	
15 Ethyl ether	59	3.196	3.196	0.000	92	438927	10.0	8.68	
17 1,2-Dichloro-1,1,2-trifluoroetha	67	3.300	3.300	0.000	94	617277	10.0	8.82	
18 Acrolein	56	3.373	3.373	0.000	100	3374350	500.0	539.0	
19 1,1-Dichloroethene	96	3.513	3.513	0.000	97	480469	10.0	9.28	
21 Acetone	43	3.538	3.538	0.000	100	837384	100.0	103.5	
20 112TCTFE	101	3.550	3.550	0.000	90	530266	10.0	10.5	
22 Isopropyl alcohol	45	3.708	3.708	0.000	38	286242	200.0	145.2	
23 Iodomethane	142	3.708	3.708	0.000	98	976387	10.0	10.1	
24 Ethyl bromide	108	3.727	3.727	0.000	98	436789	10.0	9.68	
25 Carbon disulfide	76	3.830	3.830	0.000	99	1623457	10.0	8.51	
27 Methyl acetate	43	3.952	3.952	0.000	97	225428	10.0	9.20	
28 3-Chloro-1-propene	41	3.977	3.977	0.000	93	723014	10.0	6.98	
29 Methylene Chloride	84	4.166	4.166	0.000	90	548326	10.0	9.24	
* 30 t-Butyl alcohol-d10 (IS)	65	4.178	4.178	0.000	0	164960	50.0	50.0	
31 2-Methyl-2-propanol	59	4.300	4.300	0.000	100	611664	200.0	206.2	
32 Acrylonitrile	53	4.507	4.507	0.000	98	592310	50.0	56.6	
33 Methyl tert-butyl ether	73	4.562	4.562	0.000	89	1414854	10.0	8.60	
34 trans-1,2-Dichloroethene	96	4.568	4.568	0.000	99	554688	10.0	9.30	
35 Hexane	57	4.995	4.995	0.000	91	795212	10.0	9.15	
37 1,1-Dichloroethane	63	5.239	5.239	0.000	96	952280	10.0	8.61	
38 Isopropyl ether	45	5.293	5.293	0.000	94	1763980	10.0	7.84	
39 2-Chloro-1,3-butadiene	53	5.348	5.348	0.000	90	814656	10.0	8.10	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
40 Tert-butyl ethyl ether	59	5.830	5.830	0.000	98	1650944	10.0	8.04	
41 2-Butanone (MEK)	43	6.049	6.049	0.000	99	1583509	100.0	105.6	
42 cis-1,2-Dichloroethene	96	6.074	6.074	0.000	80	634050	10.0	9.47	
43 2,2-Dichloropropane	77	6.092	6.092	0.000	86	798554	10.0	8.60	
45 Propionitrile	54	6.141	6.141	0.000	99	821584	200.0	221.0	
48 Methacrylonitrile	67	6.354	6.354	0.000	91	1630170	100.0	118.3	
49 Chlorobromomethane	128	6.403	6.403	0.000	92	288920	10.0	9.68	
50 Tetrahydrofuran	71	6.415	6.415	0.000	87	466511	100.0	120.3	
51 Chloroform	83	6.561	6.561	0.000	93	1004365	10.0	9.42	
\$ 52 Dibromofluoromethane (Surr)	113	6.775	6.775	0.000	94	610333	10.0	10.1	
53 1,1,1-Trichloroethane	97	6.787	6.787	0.000	98	858324	10.0	9.41	
54 Cyclohexane	56	6.878	6.878	0.000	90	952045	10.0	9.08	
56 Carbon tetrachloride	117	6.994	6.994	0.000	97	763284	10.0	9.65	
57 1,1-Dichloropropene	75	6.994	6.994	0.000	97	775124	10.0	9.04	
58 Isobutyl alcohol	41	7.165	7.165	0.000	94	510752	500.0	363.4	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.232	7.232	0.000	0	124918	10.0	9.76	
60 Benzene	78	7.263	7.263	0.000	96	2306613	10.0	9.13	
61 1,2-Dichloroethane	62	7.330	7.330	0.000	97	604809	10.0	8.56	
63 Tert-amyl methyl ether	73	7.452	7.452	0.000	99	1537990	10.0	8.50	
* 64 Fluorobenzene (IS)	96	7.665	7.665	0.000	99	2485919	10.0	10.0	
65 n-Heptane	43	7.677	7.677	0.000	91	828765	10.0	8.45	
67 n-Butanol	56	8.043	8.043	0.000	88	1063594	1000.0	997.8	
68 Trichloroethene	95	8.140	8.140	0.000	97	621154	10.0	9.63	
69 Methylcyclohexane	83	8.451	8.451	0.000	91	1006951	10.0	10.0	
70 1,2-Dichloropropane	63	8.476	8.476	0.000	97	591265	10.0	8.75	
71 2-ethoxy-2-methyl butane	87	8.488	8.488	0.000	95	879913	10.0	8.90	
72 Methyl methacrylate	69	8.567	8.567	0.000	91	316275	10.0	11.3	
73 1,4-Dioxane	88	8.567	8.567	0.000	35	85461	500.0	450.7	
74 Dibromomethane	93	8.585	8.585	0.000	94	304516	10.0	9.72	
76 Dichlorobromomethane	83	8.823	8.823	0.000	99	733606	10.0	9.36	
77 2-Nitropropane	41	9.110	9.110	0.000	98	817592	100.0	102.7	
80 1-Bromo-2-chloroethane	63	9.213	9.213	0.000	98	621733	10.0	8.58	
81 cis-1,3-Dichloropropene	75	9.378	9.378	0.000	97	870858	10.0	8.56	
82 4-Methyl-2-pentanone (MIBK)	43	9.555	9.555	0.000	96	4008718	100.0	104.1	
\$ 83 Toluene-d8 (Surr)	98	9.683	9.683	0.000	93	2333770	10.0	9.32	
84 Toluene	92	9.762	9.762	0.000	98	1503407	10.0	9.24	
96 trans-1,3-Dichloropropene	75	10.018	10.018	0.000	91	723979	10.0	8.24	
98 Ethyl methacrylate	69	10.085	10.085	0.000	89	673010	10.0	8.53	
99 1,1,2-Trichloroethane	97	10.225	10.225	0.000	89	454109	10.0	9.57	
100 Tetrachloroethene	166	10.311	10.311	0.000	98	718762	10.0	10.2	
101 1,3-Dichloropropane	76	10.390	10.390	0.000	88	764122	10.0	8.93	
102 2-Hexanone	43	10.445	10.445	0.000	96	2912213	100.0	105.1	
104 Chlorodibromomethane	129	10.603	10.603	0.000	90	536830	10.0	9.54	
105 Ethylene Dibromide	107	10.707	10.707	0.000	98	448858	10.0	9.63	
* 106 Chlorobenzene-d5 (IS)	117	11.140	11.140	0.000	85	1877362	10.0	10.0	
107 1-Chlorohexane	91	11.152	11.152	0.000	96	861629	10.0	8.82	
108 Chlorobenzene	112	11.170	11.170	0.000	96	1746775	10.0	9.64	
110 1,1,1,2-Tetrachloroethane	131	11.250	11.250	0.000	96	637472	10.0	9.90	
111 Ethylbenzene	91	11.256	11.256	0.000	98	2938996	10.0	9.14	
112 m-Xylene & p-Xylene	106	11.371	11.371	0.000	97	2320481	20.0	19.2	
113 o-Xylene	106	11.701	11.701	0.000	96	1143351	10.0	9.52	
114 Styrene	104	11.713	11.713	0.000	95	1946620	10.0	9.51	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
115 Bromoform	173	11.871	11.871	0.000	98	325708	10.0	9.91	
116 Isopropylbenzene	105	11.999	11.999	0.000	95	2934092	10.0	9.34	
\$ 119 4-Bromofluorobenzene (Surr)	95	12.140	12.140	0.000	94	856456	10.0	8.96	
120 1,1,2,2-Tetrachloroethane	83	12.243	12.243	0.000	93	576413	10.0	8.65	
121 Bromobenzene	156	12.255	12.255	0.000	97	784299	10.0	9.80	
122 trans-1,4-Dichloro-2-butene	53	12.268	12.268	0.000	93	772180	100.0	64.6	
123 1,2,3-Trichloropropane	110	12.292	12.292	0.000	83	159829	10.0	9.41	
124 N-Propylbenzene	91	12.329	12.329	0.000	99	3520509	10.0	8.83	
125 2-Chlorotoluene	126	12.402	12.402	0.000	97	742499	10.0	9.47	
126 1,3,5-Trimethylbenzene	105	12.463	12.463	0.000	94	2543146	10.0	9.04	
127 4-Chlorotoluene	126	12.493	12.493	0.000	97	780542	10.0	9.54	
128 tert-Butylbenzene	134	12.700	12.700	0.000	93	589453	10.0	9.81	
129 Pentachloroethane	167	12.737	12.737	0.000	93	477034	10.0	9.24	
130 1,2,4-Trimethylbenzene	105	12.743	12.743	0.000	97	2652275	10.0	9.03	
131 sec-Butylbenzene	105	12.865	12.865	0.000	94	3334054	10.0	9.11	
132 1,3-Dichlorobenzene	146	12.963	12.963	0.000	99	1558170	10.0	9.66	
133 4-Isopropyltoluene	119	12.969	12.969	0.000	97	2908530	10.0	9.15	
* 134 1,4-Dichlorobenzene-d4	152	13.017	13.017	0.000	93	1060100	10.0	10.0	
135 1,4-Dichlorobenzene	146	13.036	13.036	0.000	95	1554950	10.0	9.46	
136 1,2,3-Trimethylbenzene	120	13.048	13.048	0.000	98	1197723	10.0	9.19	
137 Benzyl chloride	126	13.115	13.115	0.000	98	263047	10.0	9.13	
138 p-Diethylbenzene	119	13.170	13.170	0.000	92	1734149	10.0	8.98	
139 n-Butylbenzene	92	13.261	13.261	0.000	97	1503581	10.0	8.93	
140 1,2-Dichlorobenzene	146	13.298	13.298	0.000	99	1450688	10.0	9.64	
142 1,2-Dibromo-3-Chloropropane	155	13.834	13.834	0.000	89	95232	10.0	9.81	
143 1,3,5-Trichlorobenzene	180	13.956	13.956	0.000	98	1334127	10.0	9.87	
144 1,2,4-Trichlorobenzene	180	14.377	14.377	0.000	94	1212604	10.0	9.73	
145 Hexachlorobutadiene	225	14.456	14.456	0.000	96	601750	10.0	9.84	
146 Naphthalene	128	14.560	14.560	0.000	97	2089796	10.0	9.22	
147 1,2,3-Trichlorobenzene	180	14.700	14.700	0.000	96	1086804	10.0	9.88	
148 2-Methylnaphthalene	142	15.316	15.316	0.000	92	1343060	10.0	8.28	
160 Pentane	43		0.000				ND	ND	

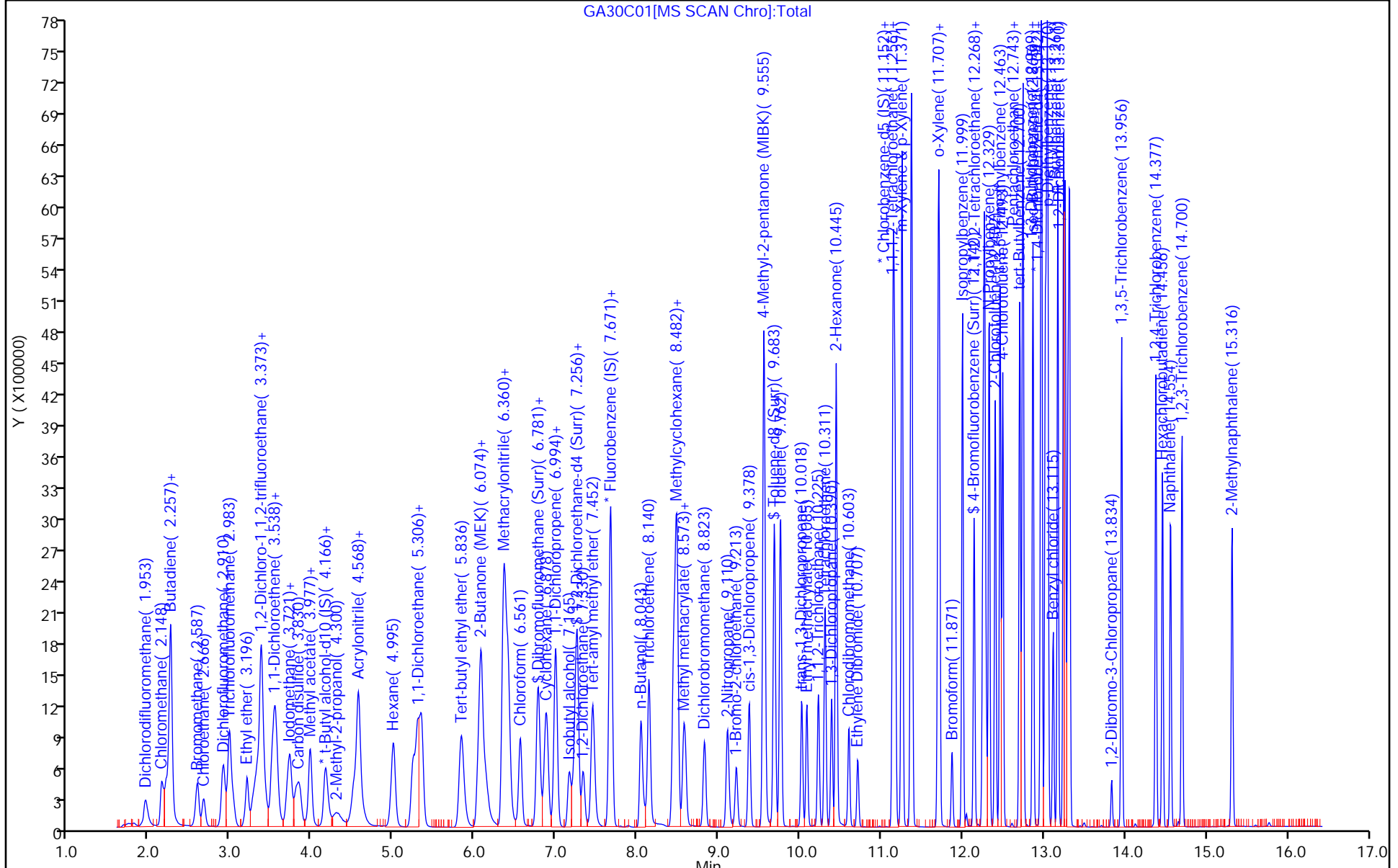
QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

MSV_RV4GAS826_00127	Amount Added: 20.00	Units: uL	
MSV_RV4_826_00050	Amount Added: 20.00	Units: uL	
MSV_RV1_826_00045	Amount Added: 20.00	Units: uL	
MSV_29_826ISS_00017	Amount Added: 1.00	Units: uL	Run Reagent



GA30C01[MS SCAN Chrom]:Total

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-37501-1

SDG No.: _____

Lab Sample ID: ICV 410-107390/19 Calibration Date: 03/26/2021 01:47

Instrument ID: 19930 Calib Start Date: 03/25/2021 23:19

GC Column: R-624SilMS 30m ID: 0.25 (mm) Calib End Date: 03/26/2021 01:26

Lab File ID: IM25V01.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3119	0.3943	0.1000	6.32	5.00	26.4	30.0
Chloromethane	Ave	0.3796	0.4323	0.1000	5.69	5.00	13.9	30.0
1,3-Butadiene	Ave	0.3361	0.3206		4.77	5.00	-4.6	30.0
Vinyl chloride	Ave	0.3435	0.4080	0.1000	5.94	5.00	18.8	30.0
Bromomethane	Ave	0.2492	0.2736	0.1000	5.49	5.00	9.8	30.0
Chloroethane	Ave	0.2152	0.2298	0.1000	5.34	5.00	6.8	30.0
Dichlorofluoromethane	Ave	0.3528	0.3369		4.78	5.00	-4.5	30.0
Trichlorofluoromethane	Ave	0.4824	0.4993	0.1000	5.17	5.00	3.5	30.0
Ethyl ether	Ave	0.2329	0.2580		5.54	5.00	10.8	30.0
Freon 123a	Ave	0.3602	0.3582		4.97	5.00	-0.6	30.0
Acrolein	Ave	2.470	2.236		34.0	37.5	-9.4	30.0
1,1-Dichloroethene	Ave	0.2598	0.2724	0.1000	5.24	5.00	4.8	30.0
Acetone	Ave	3.240	2.791	0.1000	32.3	37.5	-13.9	30.0
Freon 113	Ave	0.2930	0.2732	0.1000	4.66	5.00	-6.8	30.0
Methyl iodide	Ave	0.5154	0.4945		4.80	5.00	-4.1	30.0
Ethyl bromide	Ave	0.2350	0.2298		4.92	5.03	-2.2	30.0
Carbon disulfide	Ave	0.7688	0.7441	0.1000	4.84	5.00	-3.2	30.0
Methyl acetate	Ave	10.64	8.893	0.1000	4.18	5.00	-16.4	30.0
Allyl chloride	Ave	0.5310	0.5182		4.88	5.00	-2.4	30.0
Methylene Chloride	Ave	0.2920	0.2942	0.1000	5.04	5.00	0.8	30.0
t-Butyl alcohol	Ave	1.165	1.132		48.6	50.0	-2.8	30.0
Acrylonitrile	Ave	3.977	4.032		25.3	25.0	1.4	30.0
Methyl tert-butyl ether	Ave	0.7620	0.7264	0.1000	4.77	5.00	-4.7	30.0
trans-1,2-Dichloroethene	Ave	0.2962	0.2926	0.1000	4.94	5.00	-1.2	30.0
n-Hexane	Ave	0.4823	0.4539		4.71	5.00	-5.9	30.0
1,1-Dichloroethane	Ave	0.5723	0.5600	0.2000	4.89	5.00	-2.1	30.0
di-Isopropyl ether	Ave	1.061	1.023		4.82	5.00	-3.5	30.0
2-Chloro-1,3-butadiene	Ave	0.5038	0.4932		4.90	5.00	-2.1	30.0
Ethyl t-butyl ether	Ave	0.9647	0.9333		4.84	5.00	-3.3	30.0
2-Butanone (MEK)	Ave	5.701	5.519	0.1000	36.3	37.5	-3.2	30.0
cis-1,2-Dichloroethene	Ave	0.3417	0.3365	0.1000	4.92	5.00	-1.5	30.0
2,2-Dichloropropane	Ave	0.4952	0.4844		4.89	5.00	-2.2	30.0
Propionitrile	Ave	1.353	1.293		35.9	37.5	-4.4	30.0
Methacrylonitrile	Ave	5.222	5.175		37.2	37.5	-0.9	30.0
Bromochloromethane	Ave	0.1526	0.1423		4.66	5.00	-6.8	30.0
Tetrahydrofuran	Ave	1.504	1.498		24.9	25.0	-0.4	30.0
Chloroform	Ave	0.5451	0.5416	0.2000	4.97	5.00	-0.6	30.0
1,1,1-Trichloroethane	Ave	0.4958	0.4915	0.1000	4.96	5.00	-0.9	30.0
Cyclohexane	Ave	0.5773	0.5497	0.1000	4.76	5.00	-4.8	30.0
1,1-Dichloropropene	Ave	0.4385	0.4241		4.84	5.00	-3.3	30.0
Carbon tetrachloride	Ave	0.4347	0.4353	0.1000	5.01	5.00	0.1	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-37501-1
 SDG No.: _____
 Lab Sample ID: ICV 410-107390/19 Calibration Date: 03/26/2021 01:47
 Instrument ID: 19930 Calib Start Date: 03/25/2021 23:19
 GC Column: R-624SilMS 30m ID: 0.25 (mm) Calib End Date: 03/26/2021 01:26
 Lab File ID: IM25V01.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Isobutyl alcohol	Ave	0.4202	0.3905		116	125	-7.1	30.0
Benzene	Ave	1.289	1.252	0.5000	4.86	5.00	-2.9	30.0
1,2-Dichloroethane	Ave	0.3443	0.3292	0.1000	4.78	5.00	-4.4	30.0
t-Amyl methyl ether	Ave	0.8443	0.8294		4.91	5.00	-1.8	30.0
n-Heptane	Ave	0.5463	0.5016		4.59	5.00	-8.2	30.0
n-Butanol	Ave	0.3649	0.3287		225	250	-9.9	30.0
Trichloroethene	Ave	0.3349	0.3309	0.2000	4.94	5.00	-1.2	30.0
Methylcyclohexane	Ave	0.5907	0.5718	0.1000	4.84	5.00	-3.2	30.0
1,2-Dichloropropane	Ave	0.3337	0.3278	0.1000	4.91	5.00	-1.8	30.0
Methyl methacrylate	Ave	10.35	10.45		5.05	5.00	0.9	30.0
1,4-Dioxane	Ave	0.0698	0.0638	0.0050	114	125	-8.6	30.0
Dibromomethane	Ave	0.1515	0.1494		4.93	5.00	-1.4	30.0
Bromodichloromethane	Ave	0.3961	0.3915	0.2000	4.94	5.00	-1.2	30.0
2-Nitropropane	Ave	3.233	3.131		4.84	5.00	-3.2	30.0
1-Bromo-2-chloroethane	Ave	0.3108	0.3190		5.13	5.00	2.6	30.0
cis-1,3-Dichloropropene	Ave	0.4954	0.4885	0.2000	4.93	5.00	-1.4	30.0
4-Methyl-2-pentanone (MIBK)	Ave	14.64	14.35	0.1000	24.5	25.0	-2.0	30.0
Toluene	Ave	1.077	1.042	0.4000	4.84	5.00	-3.2	30.0
trans-1,3-Dichloropropene	Ave	0.5250	0.5465	0.1000	5.20	5.00	4.1	30.0
Ethyl methacrylate	Ave	0.4509	0.4443		4.93	5.00	-1.5	30.0
1,1,2-Trichloroethane	Ave	0.2908	0.2898	0.1000	4.98	5.00	-0.3	30.0
Tetrachloroethene	Ave	0.5124	0.5141	0.2000	5.02	5.00	0.3	30.0
1,3-Dichloropropane	Ave	0.5126	0.5027		4.90	5.00	-1.9	30.0
2-Hexanone	Ave	10.27	10.37	0.1000	25.2	25.0	0.9	30.0
Dibromochloromethane	Ave	0.3711	0.3742		5.04	5.00	0.9	30.0
1,2-Dibromoethane (EDB)	Ave	0.2846	0.2792	0.1000	4.90	5.00	-1.9	30.0
1-Chlorohexane	Ave	0.6583	0.6051		4.60	5.00	-8.1	30.0
Chlorobenzene	Ave	1.190	1.182	0.5000	4.97	5.00	-0.7	30.0
1,1,1,2-Tetrachloroethane	Ave	0.4309	0.4369		5.07	5.00	1.4	30.0
Ethylbenzene	Ave	2.108	2.078	0.1000	4.93	5.00	-1.4	30.0
m&p-Xylene	Ave	0.8263	0.8140	0.1000	9.85	10.0	-1.5	30.0
o-Xylene	Ave	0.8083	0.8016	0.3000	4.96	5.00	-0.8	30.0
Styrene	Ave	1.319	1.313	0.3000	4.98	5.00	-0.4	30.0
Bromoform	Ave	0.2345	0.2315	0.1000	4.94	5.00	-1.3	30.0
Isopropylbenzene	Ave	2.152	2.083	0.1000	4.84	5.00	-3.2	30.0
1,1,2,2-Tetrachloroethane	Ave	0.6633	0.6668	0.3000	5.03	5.00	0.5	30.0
Bromobenzene	Ave	0.9142	0.8942		4.89	5.00	-2.2	30.0
trans-1,4-Dichloro-2-butene	Ave	5.054	4.908		24.3	25.0	-2.9	30.0
1,2,3-Trichloropropane	Ave	0.1766	0.1759		4.98	5.00	-0.4	30.0
N-Propylbenzene	Ave	4.487	4.432		4.94	5.00	-1.2	30.0
2-Chlorotoluene	Ave	0.9132	0.8941		4.90	5.00	-2.1	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-37501-1
 SDG No.: _____
 Lab Sample ID: ICV 410-107390/19 Calibration Date: 03/26/2021 01:47
 Instrument ID: 19930 Calib Start Date: 03/25/2021 23:19
 GC Column: R-624SilMS 30m ID: 0.25 (mm) Calib End Date: 03/26/2021 01:26
 Lab File ID: IM25V01.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,3,5-Trimethylbenzene	Ave	3.229	3.167		4.90	5.00	-1.9	30.0
4-Chlorotoluene	Ave	0.9322	0.9107		4.88	5.00	-2.3	30.0
tert-Butylbenzene	Ave	0.7203	0.6989		4.85	5.00	-3.0	30.0
Pentachloroethane	Ave	0.5943	0.5805		4.88	5.00	-2.3	30.0
1,2,4-Trimethylbenzene	Ave	3.313	3.196		4.82	5.00	-3.5	30.0
sec-Butylbenzene	Ave	4.242	4.074		4.80	5.00	-4.0	30.0
1,3-Dichlorobenzene	Ave	1.815	1.752	0.6000	4.83	5.00	-3.5	30.0
p-Isopropyltoluene	Ave	3.608	3.569		4.95	5.00	-1.1	30.0
1,4-Dichlorobenzene	Ave	1.813	1.775	0.5000	4.89	5.00	-2.1	30.0
1,2,3-Trimethylbenzene	Ave	1.434	1.463		5.10	5.00	2.0	30.0
Benzyl chloride	Ave	0.2983	0.2936		4.92	5.00	-1.6	30.0
n-Butylbenzene	Ave	1.754	1.672		4.77	5.00	-4.7	30.0
1,2-Dichlorobenzene	Ave	1.649	1.597	0.4000	4.84	5.00	-3.2	30.0
1,2-Dibromo-3-Chloropropane	Ave	0.1036	0.1013	0.0500	4.89	5.00	-2.2	30.0
1,3,5-Trichlorobenzene	Ave	1.320	1.273		4.82	5.00	-3.5	30.0
1,2,4-Trichlorobenzene	Ave	1.101	1.067	0.2000	4.85	5.00	-3.1	30.0
Hexachlorobutadiene	Ave	0.4917	0.4411		4.49	5.00	-10.3	30.0
Naphthalene	Ave	2.084	2.011		4.83	5.00	-3.5	30.0
1,2,3-Trichlorobenzene	Ave	0.9586	0.9033		4.71	5.00	-5.8	30.0
Dibromofluoromethane (Surr)	Ave	0.2514	0.2512		9.99	10.0	-0.0	30.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.0492	0.0489		9.93	10.0	-0.7	30.0
Toluene-d8 (Surr)	Ave	1.309	1.304		9.96	10.0	-0.4	30.0
4-Bromofluorobenzene (Surr)	Ave	0.4972	0.4908		9.87	10.0	-1.3	30.0

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25V01.D
 Lims ID: ICV LG
 Client ID:
 Sample Type: ICV
 Inject. Date: 26-Mar-2021 01:47:30 ALS Bottle#: 18 Worklist Smp#: 19
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0025078-019
 Misc. Info.: ICV LG
 Operator ID: mec29284 Instrument ID: 19930
 Sublist:

Method: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\8260 25ml HP31.m
 Limit Group: MSV - 8260C_D
 Last Update: 26-Mar-2021 17:13:18 Calib Date: 26-Mar-2021 01:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I07.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1605

First Level Reviewer: campbellme Date: 26-Mar-2021 17:08:41

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.971	1.983	-0.012	99	423532	5.00	6.32	M
4 Chloromethane	50	2.172	2.178	-0.006	99	464335	5.00	5.69	
6 Butadiene	39	2.288	2.294	-0.006	94	344361	5.00	4.77	
5 Vinyl chloride	62	2.294	2.300	-0.006	98	438207	5.00	5.94	
7 Bromomethane	94	2.617	2.629	-0.012	90	293814	5.00	5.49	
8 Chloroethane	64	2.702	2.715	-0.012	100	246861	5.00	5.34	
9 Dichlorofluoromethane	67	2.940	2.952	-0.012	97	361892	5.00	4.78	
10 Trichlorofluoromethane	101	3.007	3.019	-0.012	98	536277	5.00	5.17	
11 Ethyl ether	59	3.263	3.275	-0.012	93	277107	5.00	5.54	
12 1,2-Dichloro-1,1,2-trifluoroethane	67	3.336	3.342	-0.006	93	384751	5.00	4.97	
13 Acrolein	56	3.434	3.446	-0.012	100	280242	37.5	34.0	
14 1,1-Dichloroethene	96	3.580	3.586	-0.006	97	292553	5.00	5.24	
15 Acetone	43	3.611	3.617	-0.006	97	349673	37.5	32.3	
16 112TCTFE	101	3.617	3.623	-0.006	91	293423	5.00	4.66	
17 Iodomethane	142	3.775	3.787	-0.012	98	531105	5.00	4.80	
18 Ethyl bromide	108	3.806	3.812	-0.006	98	248516	5.03	4.92	
19 Carbon disulfide	76	3.885	3.897	-0.012	99	799246	5.00	4.84	
21 Methyl acetate	43	4.037	4.050	-0.013	99	148573	5.00	4.18	
22 3-Chloro-1-propene	41	4.062	4.074	-0.012	92	556616	5.00	4.88	
23 Methylene Chloride	84	4.251	4.257	-0.006	95	316004	5.00	5.04	
* 24 t-Butyl alcohol-d10 (IS)	65	4.269	4.263	0.006	0	167068	50.0	50.0	
25 2-Methyl-2-propanol	59	4.397	4.391	0.006	100	189101	50.0	48.6	
26 Acrylonitrile	53	4.598	4.604	-0.006	98	336823	25.0	25.3	
27 Methyl tert-butyl ether	73	4.659	4.659	0.000	96	780174	5.00	4.77	
28 trans-1,2-Dichloroethene	96	4.678	4.684	-0.006	99	314297	5.00	4.94	
29 Hexane	57	5.098	5.104	-0.006	94	487520	5.00	4.71	
31 1,1-Dichloroethane	63	5.336	5.342	-0.006	96	601511	5.00	4.89	
32 Isopropyl ether	45	5.385	5.397	-0.012	95	1099063	5.00	4.82	
33 2-Chloro-1,3-butadiene	53	5.440	5.446	-0.006	91	529760	5.00	4.90	
34 Tert-butyl ethyl ether	59	5.921	5.927	-0.006	98	1002398	5.00	4.84	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 2-Butanone (MEK)	43	6.122	6.122	0.000	100	691497	37.5	36.3	
37 cis-1,2-Dichloroethene	96	6.159	6.165	-0.006	83	361454	5.00	4.92	
38 2,2-Dichloropropane	77	6.171	6.183	-0.012	91	520302	5.00	4.89	
40 Propionitrile	54	6.220	6.214	0.006	99	162051	37.5	35.9	
42 Methacrylonitrile	67	6.427	6.427	0.000	93	648416	37.5	37.2	
43 Chlorobromomethane	128	6.494	6.488	0.006	96	152785	5.00	4.66	
44 Tetrahydrofuran	71	6.507	6.500	0.006	84	125131	25.0	24.9	
45 Chloroform	83	6.641	6.647	-0.006	94	581752	5.00	4.97	
\$ 46 Dibromofluoromethane (Surr)	113	6.854	6.860	-0.006	94	539679	10.0	10.0	
47 1,1,1-Trichloroethane	97	6.866	6.872	-0.006	98	527895	5.00	4.96	
48 Cyclohexane	56	6.964	6.964	0.000	91	590388	5.00	4.76	
51 1,1-Dichloropropene	75	7.080	7.080	0.000	94	455464	5.00	4.84	
50 Carbon tetrachloride	117	7.080	7.086	-0.006	89	467571	5.00	5.01	
52 Isobutyl alcohol	41	7.220	7.220	0.000	96	163096	125.0	116.2	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.305	7.305	0.000	0	104964	10.0	9.93	
54 Benzene	78	7.342	7.342	0.000	97	1344285	5.00	4.86	
56 1,2-Dichloroethane	62	7.415	7.415	0.000	97	353599	5.00	4.78	
57 Tert-amyl methyl ether	73	7.525	7.531	-0.006	98	890864	5.00	4.91	
* 58 Fluorobenzene (IS)	96	7.738	7.744	-0.006	99	2148117	10.0	10.0	
59 n-Heptane	43	7.750	7.756	-0.006	94	538781	5.00	4.59	
60 n-Butanol	56	8.092	8.092	0.000	90	274539	250.0	225.1	
61 Trichloroethene	95	8.220	8.220	0.000	98	355440	5.00	4.94	
62 Methylcyclohexane	83	8.531	8.530	0.000	93	614188	5.00	4.84	
63 1,2-Dichloropropane	63	8.549	8.549	0.000	81	352097	5.00	4.91	
64 Methyl methacrylate	69	8.628	8.628	0.000	93	174514	5.00	5.05	
65 1,4-Dioxane	88	8.640	8.634	0.006	31	26646	125.0	114.3	M
66 Dibromomethane	93	8.659	8.665	-0.006	95	160492	5.00	4.93	
68 Dichlorobromomethane	83	8.890	8.890	0.000	99	420517	5.00	4.94	
69 2-Nitropropane	41	9.158	9.158	0.000	98	52307	5.00	4.84	
71 2-Chloroethyl vinyl ether	63		9.250				ND	ND	
72 1-Bromo-2-chloroethane	63	9.286	9.286	0.000	99	342576	5.00	5.13	
73 cis-1,3-Dichloropropene	75	9.433	9.433	0.000	95	524701	5.00	4.93	
74 4-Methyl-2-pentanone (MIBK)	43	9.603	9.603	0.000	97	1198420	25.0	24.5	
\$ 75 Toluene-d8 (Surr)	98	9.744	9.744	0.000	93	2129593	10.0	9.96	
76 Toluene	92	9.817	9.817	0.000	98	851233	5.00	4.84	
78 trans-1,3-Dichloropropene	75	10.073	10.073	0.000	93	446306	5.00	5.20	
79 Ethyl methacrylate	69	10.128	10.128	0.000	90	362799	5.00	4.93	
80 1,1,2-Trichloroethane	97	10.274	10.274	0.000	90	236692	5.00	4.98	
81 Tetrachloroethene	166	10.366	10.359	0.007	98	419857	5.00	5.02	
82 1,3-Dichloropropane	76	10.439	10.439	0.000	90	410508	5.00	4.90	
83 2-Hexanone	43	10.481	10.481	0.000	99	865959	25.0	25.2	
85 Chlorodibromomethane	129	10.646	10.652	-0.006	89	305615	5.00	5.04	
86 Ethylene Dibromide	107	10.762	10.762	0.000	99	227960	5.00	4.90	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.188	0.001	86	1633240	10.0	10.0	
88 1-Chlorohexane	91	11.195	11.195	0.000	99	494145	5.00	4.60	
90 Chlorobenzene	112	11.213	11.213	0.000	95	965440	5.00	4.97	
92 Ethylbenzene	91	11.298	11.298	0.000	98	1697112	5.00	4.93	
91 1,1,1,2-Tetrachloroethane	131	11.298	11.298	0.000	96	356814	5.00	5.07	
93 m-Xylene & p-Xylene	106	11.414	11.414	0.000	99	1329524	10.0	9.85	
94 o-Xylene	106	11.743	11.743	0.000	96	654573	5.00	4.96	
95 Styrene	104	11.755	11.755	0.000	94	1072288	5.00	4.98	
96 Bromoform	173	11.920	11.914	0.006	98	189038	5.00	4.94	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
97 Isopropylbenzene	105	12.042	12.042	0.000	95	1700728	5.00	4.84	
\$ 100 4-Bromofluorobenzene (Surr)	95	12.188	12.188	0.000	93	801581	10.0	9.87	
101 1,1,2,2-Tetrachloroethane	83	12.286	12.286	0.000	93	305208	5.00	5.03	
102 Bromobenzene	156	12.304	12.304	0.000	96	409303	5.00	4.89	
103 trans-1,4-Dichloro-2-butene	53	12.310	12.310	0.000	91	409945	25.0	24.3	
104 1,2,3-Trichloropropane	110	12.329	12.328	0.001	82	80511	5.00	4.98	
105 N-Propylbenzene	91	12.371	12.371	0.000	99	2028673	5.00	4.94	
106 2-Chlorotoluene	126	12.444	12.444	0.000	97	409266	5.00	4.90	
107 1,3,5-Trimethylbenzene	105	12.505	12.505	0.000	94	1449613	5.00	4.90	
108 4-Chlorotoluene	126	12.536	12.542	-0.006	98	416873	5.00	4.88	
109 tert-Butylbenzene	134	12.749	12.743	0.006	93	319903	5.00	4.85	
110 Pentachloroethane	167	12.780	12.780	0.000	94	265732	5.00	4.88	
111 1,2,4-Trimethylbenzene	105	12.786	12.786	0.000	97	1462735	5.00	4.82	
112 sec-Butylbenzene	105	12.908	12.908	0.000	94	1864821	5.00	4.80	
113 1,3-Dichlorobenzene	146	13.011	13.011	0.000	98	801839	5.00	4.83	
114 4-Isopropyltoluene	119	13.017	13.017	0.000	97	1633806	5.00	4.95	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	94	915488	10.0	10.0	
116 1,4-Dichlorobenzene	146	13.084	13.084	0.000	95	812417	5.00	4.89	
117 1,2,3-Trimethylbenzene	120	13.091	13.091	0.000	98	669611	5.00	5.10	
118 Benzyl chloride	126	13.158	13.158	0.000	99	134378	5.00	4.92	
119 n-Butylbenzene	92	13.310	13.310	0.000	98	765270	5.00	4.77	
120 1,2-Dichlorobenzene	146	13.341	13.340	0.001	99	730895	5.00	4.84	
122 1,2-Dibromo-3-Chloropropane	155	13.883	13.883	0.000	86	46369	5.00	4.89	
123 1,3,5-Trichlorobenzene	180	14.011	14.011	0.000	97	582795	5.00	4.82	
124 1,2,4-Trichlorobenzene	180	14.432	14.432	0.000	94	488509	5.00	4.85	
125 Hexachlorobutadiene	225	14.517	14.517	0.000	96	201913	5.00	4.49	
126 Naphthalene	128	14.615	14.615	0.000	97	920478	5.00	4.83	
127 1,2,3-Trichlorobenzene	180	14.755	14.755	0.000	96	413484	5.00	4.71	
204 Pentane	43		0.000				ND	ND	
137 2-Methylnaphthalene	142		0.000				ND	ND	
135 p-Diethylbenzene	1		0.000				ND	ND	
144 2-ethoxy-2-methyl butane	1		0.000				ND	ND	
134 Isopropyl alcohol	45		0.000				ND	ND	

QC Flag Legend

Processing Flags

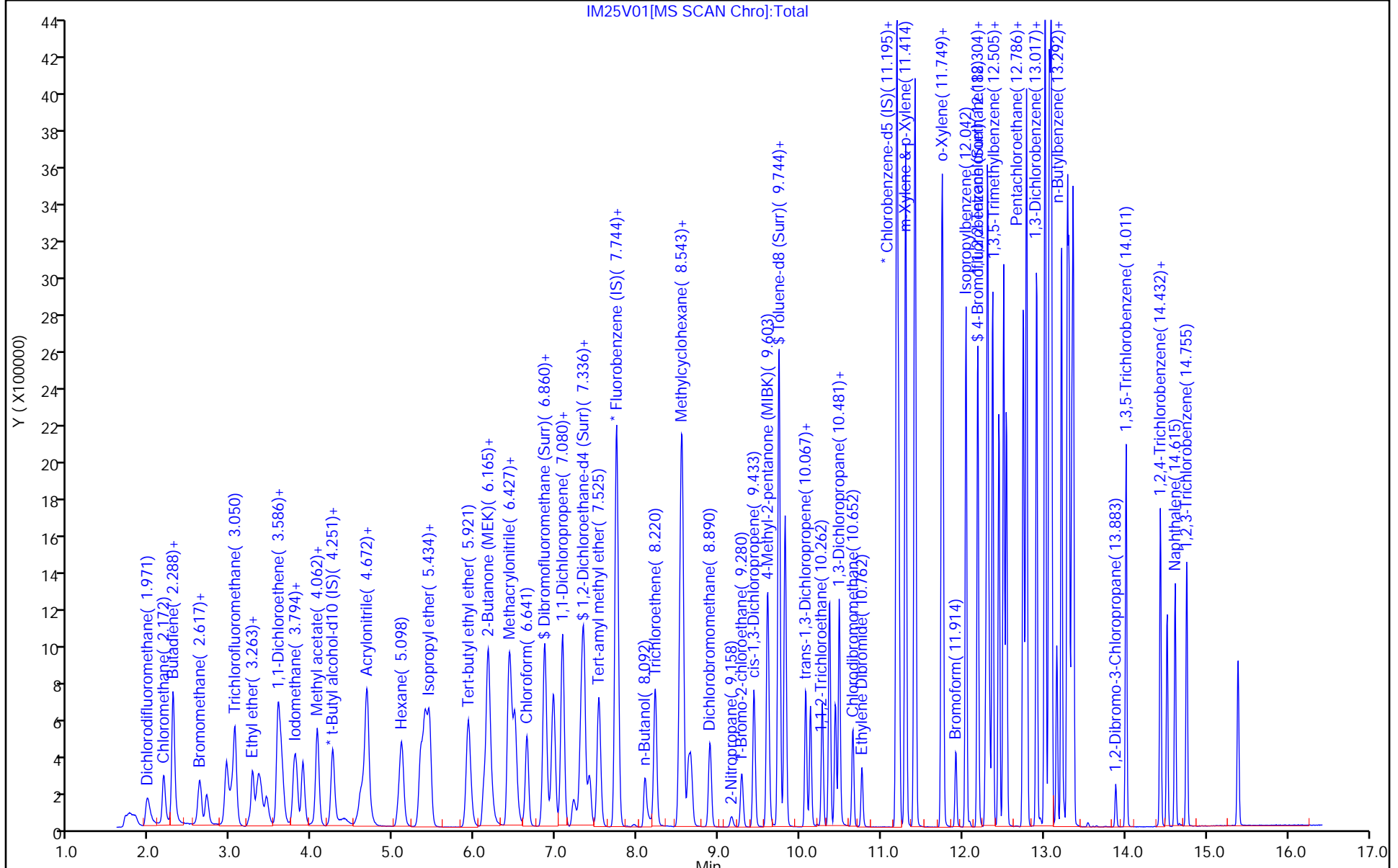
ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

MSV_Q_EE_00003	Amount Added: 12.50	Units: uL	
MSV_Q_QVOA1_00073	Amount Added: 12.50	Units: uL	
MSV_Q_QARC_00073	Amount Added: 12.50	Units: uL	
MSV_Q_QVOA6_00071	Amount Added: 12.50	Units: uL	
MSV_QGAS_826_00118	Amount Added: 12.50	Units: uL	
MSV_Q_ETBR_00006	Amount Added: 12.50	Units: uL	
MSV_31_826ISS_00004	Amount Added: 5.00	Units: uL	Run Reagent



Eurofins Lancaster Laboratories Env, LLC

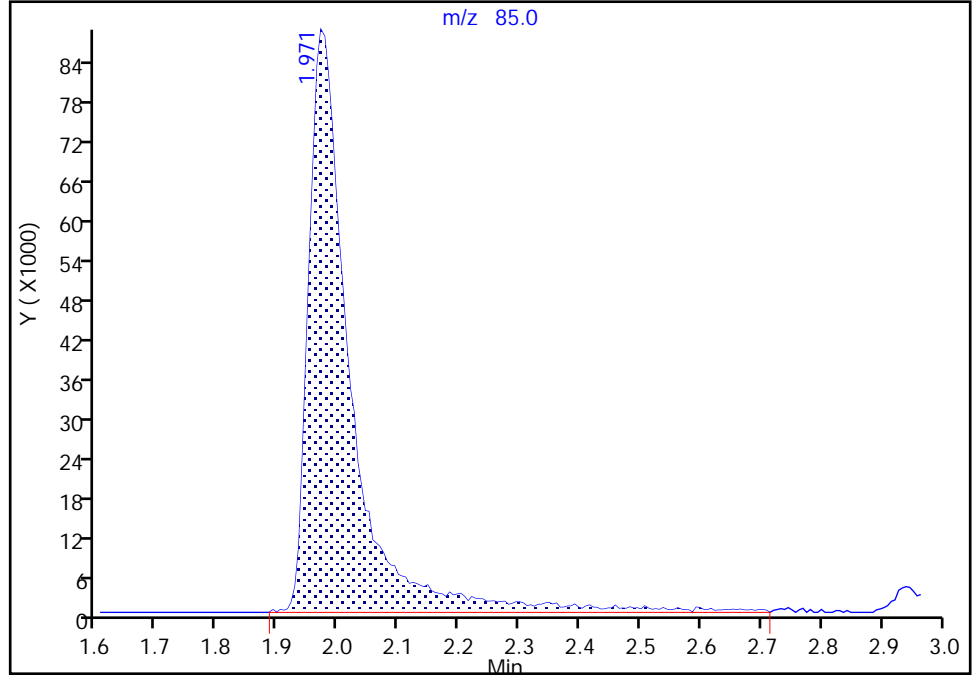
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Injection Date: 26-Mar-2021 01:47:30 Instrument ID: 19930
Lims ID: ICV LG
Client ID:
Operator ID: mec29284 ALS Bottle#: 18 Worklist Smp#: 19
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

1 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

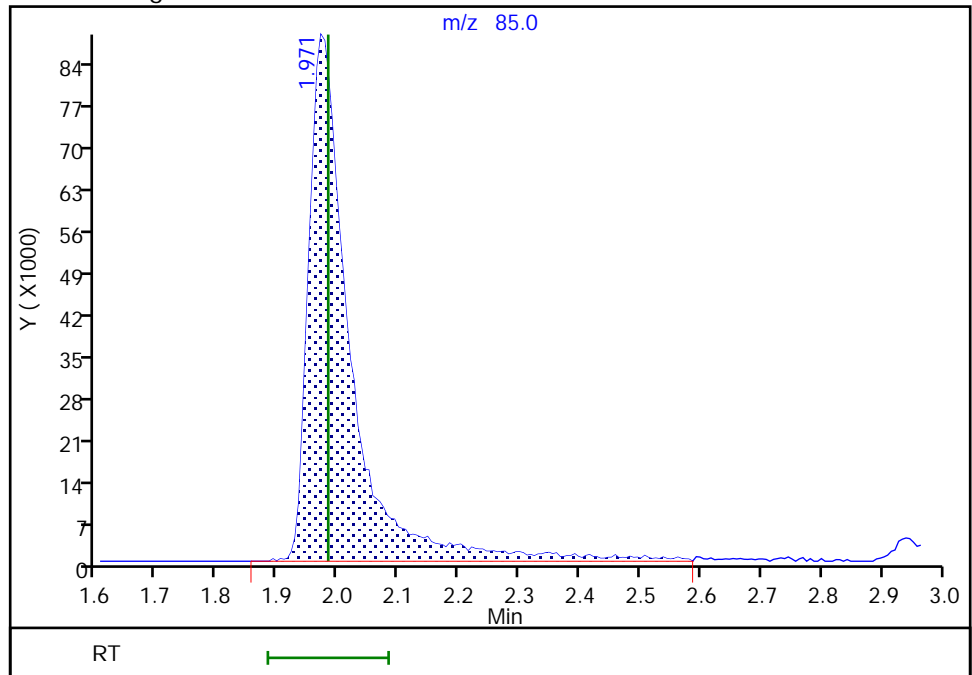
RT: 1.97
Area: 426483
Amount: 6.365214
Amount Units: ug/l

Processing Integration Results



RT: 1.97
Area: 423532
Amount: 6.321170
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 26-Mar-2021 17:07:43
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Euofins Lancaster Laboratories Env, LLC

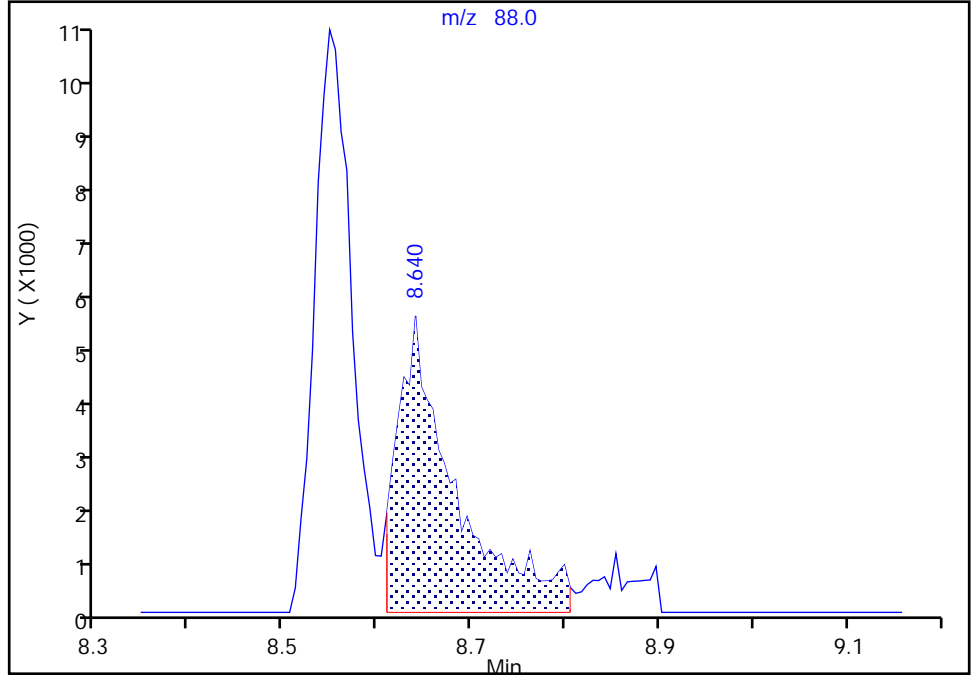
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Injection Date: 26-Mar-2021 01:47:30 Instrument ID: 19930
Lims ID: ICV LG
Client ID:
Operator ID: mec29284 ALS Bottle#: 18 Worklist Smp#: 19
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

65 1,4-Dioxane, CAS: 123-91-1

Signal: 1

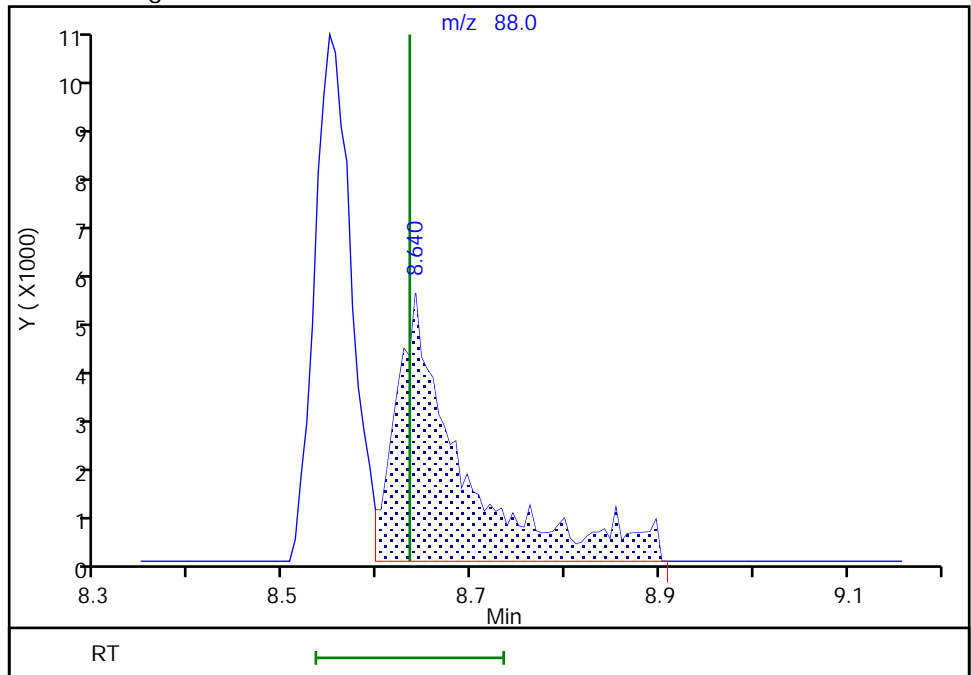
RT: 8.64
Area: 22758
Amount: 97.622173
Amount Units: ug/l

Processing Integration Results



RT: 8.64
Area: 26646
Amount: 114.3000
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 26-Mar-2021 17:03:30
Audit Action: Split an Integrated Peak

Audit Reason: Incomplete Integration

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-37501-1

SDG No.: _____

Lab Sample ID: CCVIS 410-120935/3 Calibration Date: 04/30/2021 10:15

Instrument ID: 19930 Calib Start Date: 03/25/2021 23:19

GC Column: R-624SilMS 30m ID: 0.25 (mm) Calib End Date: 03/26/2021 01:26

Lab File ID: IA30X02.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3119	0.2515	0.1000	8.06	10.0	-19.4	20.0
Chloromethane	Ave	0.3796	0.3257	0.1000	8.58	10.0	-14.2	20.0
Vinyl chloride	Ave	0.3435	0.2873	0.1000	8.36	10.0	-16.4	20.0
1,3-Butadiene	Ave	0.3361	0.7354		21.9	10.0	118.8*	20.0
Bromomethane	Ave	0.2492	0.2043	0.1000	8.20	10.0	-18.0	20.0
Chloroethane	Ave	0.2152	0.1833	0.1000	8.52	10.0	-14.8	20.0
Dichlorofluoromethane	Ave	0.3528	0.3749		10.6	10.0	6.3	20.0
Trichlorofluoromethane	Ave	0.4824	0.4036	0.1000	8.37	10.0	-16.3	20.0
Ethyl ether	Ave	0.2329	0.2302		9.88	10.0	-1.2	20.0
Freon 123a	Ave	0.3602	0.3340		9.27	10.0	-7.3	20.0
Acrolein	Ave	2.470	1.964		398	500	-20.5*	20.0
1,1-Dichloroethene	Ave	0.2598	0.2273	0.1000	8.75	10.0	-12.5	20.0
Acetone	Ave	3.240	2.622	0.1000	80.9	100	-19.1	20.0
Freon 113	Ave	0.2930	0.2408	0.1000	8.22	10.0	-17.8	20.0
Methyl iodide	Ave	0.5154	0.4421		8.58	10.0	-14.2	20.0
Ethyl bromide	Ave	0.2350	0.2019		8.59	10.0	-14.1	20.0
Carbon disulfide	Ave	0.7688	0.6224	0.1000	8.09	10.0	-19.1	20.0
Methyl acetate	Ave	10.64	9.895	0.1000	9.30	10.0	-7.0	20.0
Allyl chloride	Ave	0.5310	0.4371		8.23	10.0	-17.7	20.0
Methylene Chloride	Ave	0.2920	0.2589	0.1000	8.87	10.0	-11.3	20.0
t-Butyl alcohol	Ave	1.165	1.094		188	200	-6.1	20.0
Acrylonitrile	Ave	3.977	3.792		47.7	50.0	-4.7	20.0
Methyl tert-butyl ether	Ave	0.7620	0.6513	0.1000	8.55	10.0	-14.5	20.0
trans-1,2-Dichloroethene	Ave	0.2962	0.2661	0.1000	8.98	10.0	-10.2	20.0
n-Hexane	Ave	0.4823	0.4541		9.42	10.0	-5.8	20.0
1,1-Dichloroethane	Ave	0.5723	0.5456	0.2000	9.53	10.0	-4.7	20.0
di-Isopropyl ether	Ave	1.061	0.9805		9.24	10.0	-7.6	20.0
2-Chloro-1,3-butadiene	Ave	0.5038	0.4763		9.45	10.0	-5.5	20.0
Ethyl t-butyl ether	Ave	0.9647	0.8193		8.49	10.0	-15.1	20.0
2-Butanone (MEK)	Ave	5.701	5.815	0.1000	102	100	2.0	20.0
cis-1,2-Dichloroethene	Ave	0.3417	0.3184	0.1000	9.32	10.0	-6.8	20.0
2,2-Dichloropropane	Ave	0.4952	0.4249		8.58	10.0	-14.2	20.0
Propionitrile	Ave	1.353	1.433		212	200	5.9	20.0
Methacrylonitrile	Ave	5.222	5.104		97.7	100	-2.3	20.0
Bromochloromethane	Ave	0.1526	0.1331		8.73	10.0	-12.7	20.0
Tetrahydrofuran	Ave	1.504	1.445		96.1	100	-3.9	20.0
Chloroform	Ave	0.5451	0.5228	0.2000	9.59	10.0	-4.1	20.0
1,1,1-Trichloroethane	Ave	0.4958	0.4462	0.1000	9.00	10.0	-10.0	20.0
Cyclohexane	Ave	0.5773	0.5135	0.1000	8.89	10.0	-11.1	20.0
1,1-Dichloropropene	Ave	0.4385	0.4213		9.61	10.0	-3.9	20.0
Carbon tetrachloride	Ave	0.4347	0.3996	0.1000	9.19	10.0	-8.1	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-37501-1
 SDG No.: _____
 Lab Sample ID: CCVIS 410-120935/3 Calibration Date: 04/30/2021 10:15
 Instrument ID: 19930 Calib Start Date: 03/25/2021 23:19
 GC Column: R-624SilMS 30m ID: 0.25 (mm) Calib End Date: 03/26/2021 01:26
 Lab File ID: IA30X02.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Isobutyl alcohol	Ave	0.4202	0.4343		517	500	3.4	20.0
Benzene	Ave	1.289	1.218	0.5000	9.45	10.0	-5.5	20.0
1,2-Dichloroethane	Ave	0.3443	0.3418	0.1000	9.93	10.0	-0.7	20.0
t-Amyl methyl ether	Ave	0.8443	0.7498		8.88	10.0	-11.2	20.0
n-Heptane	Ave	0.5463	0.5103		9.34	10.0	-6.6	20.0
n-Butanol	Ave	0.3649	0.3833		1050	1000	5.0	20.0
Trichloroethene	Ave	0.3349	0.3169	0.2000	9.46	10.0	-5.4	20.0
Methylcyclohexane	Ave	0.5907	0.4626	0.1000	7.83	10.0	-21.7*	20.0
1,2-Dichloropropane	Ave	0.3337	0.3345	0.1000	10.0	10.0	0.2	20.0
Methyl methacrylate	Ave	10.35	10.09		9.75	10.0	-2.5	20.0
1,4-Dioxane	Ave	0.0698	0.0782	0.0050	561	500	12.1	20.0
Dibromomethane	Ave	0.1515	0.1541		10.2	10.0	1.7	20.0
Bromodichloromethane	Ave	0.3961	0.3820	0.2000	9.64	10.0	-3.6	20.0
2-Nitropropane	Ave	3.233	3.205		99.1	100	-0.9	20.0
1-Bromo-2-chloroethane	Ave	0.3108	0.3380		10.9	10.0	8.8	20.0
cis-1,3-Dichloropropene	Ave	0.4954	0.4715	0.2000	9.52	10.0	-4.8	20.0
4-Methyl-2-pentanone (MIBK)	Ave	14.64	14.29	0.1000	97.6	100	-2.4	20.0
Toluene	Ave	1.077	1.022	0.4000	9.48	10.0	-5.2	20.0
trans-1,3-Dichloropropene	Ave	0.5250	0.5126	0.1000	9.76	10.0	-2.4	20.0
Ethyl methacrylate	Ave	0.4509	0.4703		10.4	10.0	4.3	20.0
1,1,2-Trichloroethane	Ave	0.2908	0.2955	0.1000	10.2	10.0	1.6	20.0
Tetrachloroethene	Ave	0.5124	0.4662	0.2000	9.10	10.0	-9.0	20.0
1,3-Dichloropropane	Ave	0.5126	0.5341		10.4	10.0	4.2	20.0
2-Hexanone	Ave	10.27	10.49	0.1000	102	100	2.1	20.0
Dibromochloromethane	Ave	0.3711	0.3465		9.34	10.0	-6.6	20.0
1,2-Dibromoethane (EDB)	Ave	0.2846	0.2914	0.1000	10.2	10.0	2.4	20.0
1-Chlorohexane	Ave	0.6583	0.6082		9.24	10.0	-7.6	20.0
Chlorobenzene	Ave	1.190	1.146	0.5000	9.63	10.0	-3.7	20.0
1,1,1,2-Tetrachloroethane	Ave	0.4309	0.3955		9.18	10.0	-8.2	20.0
Ethylbenzene	Ave	2.108	2.000	0.1000	9.49	10.0	-5.1	20.0
m&p-Xylene	Ave	0.8263	0.7812	0.1000	18.9	20.0	-5.5	20.0
o-Xylene	Ave	0.8083	0.7419	0.3000	9.18	10.0	-8.2	20.0
Styrene	Ave	1.319	1.248	0.3000	9.46	10.0	-5.4	20.0
Bromoform	Ave	0.2345	0.1968	0.1000	8.39	10.0	-16.1	20.0
Isopropylbenzene	Ave	2.152	1.950	0.1000	9.06	10.0	-9.4	20.0
1,1,2,2-Tetrachloroethane	Ave	0.6633	0.6998	0.3000	10.6	10.0	5.5	20.0
Bromobenzene	Ave	0.9142	0.9122		9.98	10.0	-0.2	20.0
trans-1,4-Dichloro-2-butene	Ave	5.054	2.150		42.5	100	-57.5*	20.0
1,2,3-Trichloropropane	Ave	0.1766	0.1978		11.2	10.0	12.0	20.0
N-Propylbenzene	Ave	4.487	4.465		9.95	10.0	-0.5	20.0
2-Chlorotoluene	Ave	0.9132	0.8913		9.76	10.0	-2.4	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-37501-1
 SDG No.: _____
 Lab Sample ID: CCVIS 410-120935/3 Calibration Date: 04/30/2021 10:15
 Instrument ID: 19930 Calib Start Date: 03/25/2021 23:19
 GC Column: R-624SilMS 30m ID: 0.25 (mm) Calib End Date: 03/26/2021 01:26
 Lab File ID: IA30X02.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,3,5-Trimethylbenzene	Ave	3.229	3.042		9.42	10.0	-5.8	20.0
4-Chlorotoluene	Ave	0.9322	0.9318		10.0	10.0	-0.0	20.0
tert-Butylbenzene	Ave	0.7203	0.6817		9.47	10.0	-5.3	20.0
Pentachloroethane	Ave	0.5943	0.5463		9.19	10.0	-8.1	20.0
1,2,4-Trimethylbenzene	Ave	3.313	3.131		9.45	10.0	-5.5	20.0
sec-Butylbenzene	Ave	4.242	4.022		9.48	10.0	-5.2	20.0
1,3-Dichlorobenzene	Ave	1.815	1.727	0.6000	9.52	10.0	-4.8	20.0
p-Isopropyltoluene	Ave	3.608	3.385		9.38	10.0	-6.2	20.0
1,4-Dichlorobenzene	Ave	1.813	1.740	0.5000	9.60	10.0	-4.0	20.0
1,2,3-Trimethylbenzene	Ave	1.434	1.320		9.21	10.0	-7.9	20.0
Benzyl chloride	Ave	0.2983	0.2787		9.34	10.0	-6.6	20.0
n-Butylbenzene	Ave	1.754	1.663		9.48	10.0	-5.2	20.0
1,2-Dichlorobenzene	Ave	1.649	1.561	0.4000	9.46	10.0	-5.4	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.1036	0.0997	0.0500	9.63	10.0	-3.7	20.0
1,3,5-Trichlorobenzene	Ave	1.320	1.208		9.15	10.0	-8.5	20.0
1,2,4-Trichlorobenzene	Ave	1.101	1.041	0.2000	9.46	10.0	-5.4	20.0
Hexachlorobutadiene	Ave	0.4917	0.4188		8.52	10.0	-14.8	20.0
Naphthalene	Ave	2.084	2.033		9.76	10.0	-2.4	20.0
1,2,3-Trichlorobenzene	Ave	0.9586	0.8905		9.29	10.0	-7.1	20.0
Dibromofluoromethane (Surr)	Ave	0.2514	0.2480		9.86	10.0	-1.4	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.0492	0.0500		10.2	10.0	1.6	20.0
Toluene-d8 (Surr)	Ave	1.309	1.299		9.92	10.0	-0.8	20.0
4-Bromofluorobenzene (Surr)	Ave	0.4972	0.4816		9.69	10.0	-3.1	20.0

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210430-28080.b\A30X02.D
 Lims ID: CCVIS VSTD010
 Client ID:
 Sample Type: CCVIS
 Inject. Date: 30-Apr-2021 10:15:30 ALS Bottle#: 2 Worklist Smp#: 3
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0028080-003
 Misc. Info.: CCVIS VSTD010
 Operator ID: SRK36897 Instrument ID: 19930
 Sublist: chrom-8260 25ml HP31*sub2
 Method: \\chromfs\Lancaster\ChromData\19930\20210430-28080.b\8260 25ml HP31.m
 Limit Group: MSV - 8260C_D
 Last Update: 30-Apr-2021 13:12:07 Calib Date: 26-Mar-2021 01:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25107.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1683

First Level Reviewer: knouses

Date: 30-Apr-2021 11:41:59

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	440700	10.0	8.06	
4 Chloromethane	50	2.178	2.178	0.000	99	570746	10.0	8.58	
5 Vinyl chloride	62	2.288	2.288	0.000	98	503371	10.0	8.36	
6 Butadiene	39	2.318	2.318	0.000	95	1288557	10.0	21.9	
7 Bromomethane	94	2.642	2.642	0.000	92	357972	10.0	8.20	
8 Chloroethane	64	2.745	2.745	0.000	99	321119	10.0	8.52	
9 Dichlorofluoromethane	67	2.983	2.983	0.000	97	656939	10.0	10.6	
10 Trichlorofluoromethane	101	3.032	3.032	0.000	98	707171	10.0	8.37	
11 Ethyl ether	59	3.276	3.276	0.000	94	403333	10.0	9.88	
12 1,2-Dichloro-1,1,2-trifluoroethane	67	3.391	3.391	0.000	94	585300	10.0	9.27	
13 Acrolein	56	3.446	3.446	0.000	99	2898293	500.0	397.7	
14 1,1-Dichloroethene	96	3.611	3.611	0.000	96	398210	10.0	8.75	
15 Acetone	43	3.623	3.623	0.000	99	773839	100.0	80.9	
16 112TCTFE	101	3.648	3.648	0.000	93	421883	10.0	8.22	
17 Iodomethane	142	3.824	3.824	0.000	99	774553	10.0	8.58	M
18 Ethyl bromide	108	3.830	3.830	0.000	98	353896	10.0	8.59	
19 Carbon disulfide	76	3.946	3.946	0.000	99	1090453	10.0	8.09	
21 Methyl acetate	43	4.044	4.044	0.000	98	291996	10.0	9.30	M
22 3-Chloro-1-propene	41	4.074	4.074	0.000	90	765845	10.0	8.23	
23 Methylene Chloride	84	4.269	4.269	0.000	96	453602	10.0	8.87	
* 24 t-Butyl alcohol-d10 (IS)	65	4.275	4.275	0.000	0	147542	50.0	50.0	
25 2-Methyl-2-propanol	59	4.397	4.397	0.000	99	645446	200.0	187.8	
26 Acrylonitrile	53	4.605	4.605	0.000	98	559499	50.0	47.7	
27 Methyl tert-butyl ether	73	4.678	4.678	0.000	97	1141195	10.0	8.55	
28 trans-1,2-Dichloroethene	96	4.690	4.690	0.000	97	466193	10.0	8.98	
29 Hexane	57	5.105	5.105	0.000	95	795720	10.0	9.42	
31 1,1-Dichloroethane	63	5.336	5.336	0.000	96	955994	10.0	9.53	
32 Isopropyl ether	45	5.397	5.397	0.000	95	1717971	10.0	9.24	
33 2-Chloro-1,3-butadiene	53	5.446	5.446	0.000	92	834475	10.0	9.45	
34 Tert-butyl ethyl ether	59	5.928	5.928	0.000	98	1435538	10.0	8.49	

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	6.129	0.000	100	1715816	100.0	102.0	
37 cis-1,2-Dichloroethene	96	6.165	6.165	0.000	83	557963	10.0	9.32	
38 2,2-Dichloropropane	77	6.184	6.184	0.000	87	744516	10.0	8.58	
40 Propionitrile	54	6.214	6.214	0.000	99	845743	200.0	211.9	
42 Methacrylonitrile	67	6.434	6.434	0.000	94	1505984	100.0	97.7	
43 Chlorobromomethane	128	6.495	6.495	0.000	68	233228	10.0	8.73	
44 Tetrahydrofuran	71	6.501	6.501	0.000	93	426383	100.0	96.1	
45 Chloroform	83	6.641	6.641	0.000	94	916046	10.0	9.59	
\$ 46 Dibromofluoromethane (Surr)	113	6.854	6.854	0.000	93	434500	10.0	9.86	
47 1,1,1-Trichloroethane	97	6.872	6.872	0.000	99	781802	10.0	9.00	
48 Cyclohexane	56	6.976	6.976	0.000	93	899649	10.0	8.89	
51 1,1-Dichloropropene	75	7.080	7.080	0.000	95	738133	10.0	9.61	
50 Carbon tetrachloride	117	7.086	7.086	0.000	95	700153	10.0	9.19	
52 Isobutyl alcohol	41	7.226	7.226	0.000	94	640820	500.0	516.8	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.311	7.311	0.000	0	87631	10.0	10.2	
54 Benzene	78	7.342	7.342	0.000	97	2134373	10.0	9.45	
56 1,2-Dichloroethane	62	7.409	7.409	0.000	97	598859	10.0	9.93	
57 Tert-amyl methyl ether	73	7.531	7.531	0.000	98	1313758	10.0	8.88	
* 58 Fluorobenzene (IS)	96	7.738	7.738	0.000	99	1752136	10.0	10.0	
59 n-Heptane	43	7.750	7.750	0.000	94	894159	10.0	9.34	
60 n-Butanol	56	8.092	8.092	0.000	90	1131122	1000.0	1050.3	
61 Trichloroethene	95	8.220	8.220	0.000	98	555210	10.0	9.46	
62 Methylcyclohexane	83	8.531	8.531	0.000	93	810486	10.0	7.83	
63 1,2-Dichloropropane	63	8.549	8.549	0.000	86	586112	10.0	10.0	
64 Methyl methacrylate	69	8.628	8.628	0.000	92	297851	10.0	9.75	
65 1,4-Dioxane	88	8.634	8.634	0.000	43	115441	500.0	560.7	M
66 Dibromomethane	93	8.659	8.659	0.000	97	269969	10.0	10.2	
68 Dichlorobromomethane	83	8.890	8.890	0.000	99	669359	10.0	9.64	
69 2-Nitropropane	41	9.159	9.159	0.000	97	945786	100.0	99.1	
72 1-Bromo-2-chloroethane	63	9.287	9.287	0.000	99	592288	10.0	10.9	
73 cis-1,3-Dichloropropene	75	9.433	9.433	0.000	95	826187	10.0	9.52	
74 4-Methyl-2-pentanone (MIBK)	43	9.598	9.598	0.000	98	4217345	100.0	97.6	
\$ 75 Toluene-d8 (Surr)	98	9.738	9.738	0.000	94	1750345	10.0	9.92	
76 Toluene	92	9.817	9.817	0.000	98	1376883	10.0	9.48	
78 trans-1,3-Dichloropropene	75	10.067	10.067	0.000	94	690971	10.0	9.76	
79 Ethyl methacrylate	69	10.128	10.128	0.000	90	633970	10.0	10.4	
80 1,1,2-Trichloroethane	97	10.274	10.274	0.000	91	398278	10.0	10.2	
81 Tetrachloroethene	166	10.366	10.366	0.000	98	628357	10.0	9.10	
82 1,3-Dichloropropane	76	10.433	10.433	0.000	93	719909	10.0	10.4	
83 2-Hexanone	43	10.482	10.482	0.000	99	3094621	100.0	102.1	
85 Chlorodibromomethane	129	10.646	10.646	0.000	90	467051	10.0	9.34	
86 Ethylene Dibromide	107	10.762	10.762	0.000	98	392739	10.0	10.2	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.189	0.000	86	1347885	10.0	10.0	
88 1-Chlorohexane	91	11.195	11.195	0.000	99	819836	10.0	9.24	
90 Chlorobenzene	112	11.213	11.213	0.000	94	1544356	10.0	9.63	
91 1,1,1,2-Tetrachloroethane	131	11.292	11.292	0.000	95	533097	10.0	9.18	
92 Ethylbenzene	91	11.298	11.298	0.000	98	2696252	10.0	9.49	
93 m-Xylene & p-Xylene	106	11.414	11.414	0.000	99	2105867	20.0	18.9	
94 o-Xylene	106	11.743	11.743	0.000	97	1000013	10.0	9.18	
95 Styrene	104	11.756	11.756	0.000	95	1681507	10.0	9.46	
96 Bromoform	173	11.914	11.914	0.000	97	265283	10.0	8.39	
97 Isopropylbenzene	105	12.042	12.042	0.000	96	2628577	10.0	9.06	

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	12.182	12.182	0.000	91	649167	10.0	9.69	
101 1,1,2,2-Tetrachloroethane	83	12.280	12.280	0.000	94	491307	10.0	10.6	
102 Bromobenzene	156	12.304	12.304	0.000	97	640376	10.0	9.98	
103 trans-1,4-Dichloro-2-butene	53	12.310	12.310	0.000	91	634523	100.0	42.5	
104 1,2,3-Trichloropropane	110	12.329	12.329	0.000	83	138858	10.0	11.2	
105 N-Propylbenzene	91	12.371	12.371	0.000	99	3134685	10.0	9.95	
106 2-Chlorotoluene	126	12.445	12.445	0.000	96	625706	10.0	9.76	
107 1,3,5-Trimethylbenzene	105	12.506	12.506	0.000	94	2135480	10.0	9.42	
108 4-Chlorotoluene	126	12.536	12.536	0.000	98	654153	10.0	10.0	
109 tert-Butylbenzene	134	12.743	12.743	0.000	94	478612	10.0	9.47	
110 Pentachloroethane	167	12.780	12.780	0.000	93	383550	10.0	9.19	
111 1,2,4-Trimethylbenzene	105	12.786	12.786	0.000	97	2197921	10.0	9.45	
112 sec-Butylbenzene	105	12.908	12.908	0.000	94	2823274	10.0	9.48	
113 1,3-Dichlorobenzene	146	13.012	13.012	0.000	98	1212753	10.0	9.52	
114 4-Isopropyltoluene	119	13.018	13.018	0.000	97	2376317	10.0	9.38	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	94	702038	10.0	10.0	
116 1,4-Dichlorobenzene	146	13.085	13.085	0.000	94	1221663	10.0	9.60	
117 1,2,3-Trimethylbenzene	120	13.091	13.091	0.000	98	926565	10.0	9.21	
118 Benzyl chloride	126	13.158	13.158	0.000	99	195672	10.0	9.34	
119 n-Butylbenzene	92	13.310	13.310	0.000	97	1167269	10.0	9.48	
120 1,2-Dichlorobenzene	146	13.341	13.341	0.000	98	1095532	10.0	9.46	
122 1,2-Dibromo-3-Chloropropane	155	13.883	13.883	0.000	86	69991	10.0	9.63	
123 1,3,5-Trichlorobenzene	180	14.011	14.011	0.000	98	847822	10.0	9.15	
124 1,2,4-Trichlorobenzene	180	14.432	14.432	0.000	94	731167	10.0	9.46	
125 Hexachlorobutadiene	225	14.517	14.517	0.000	97	294008	10.0	8.52	
126 Naphthalene	128	14.615	14.615	0.000	97	1427131	10.0	9.76	
127 1,2,3-Trichlorobenzene	180	14.755	14.755	0.000	96	625148	10.0	9.29	
135 p-Diethylbenzene	1		0.000				ND	ND	
144 2-ethoxy-2-methyl butane	1		0.000				ND	ND	
204 Pentane	43		0.000				ND	ND	
137 2-Methylnaphthalene	142		0.000				ND	ND	
134 Isopropyl alcohol	45		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

MSV_RV4_826_00050

Amount Added: 10.00

Units: uL

MSV_RV1_826_00045

Amount Added: 10.00

Units: uL

MSV_RV4GAS826_00128

Amount Added: 10.00

Units: uL

MSV_31_826ISS_00004

Amount Added: 5.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19930\20210430-28080.b\IA30X02.D

Injection Date: 30-Apr-2021 10:15:30

Instrument ID: 19930

Operator ID: SRK36897

Lims ID: CCVIS VSTD010

Worklist Smp#: 3

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

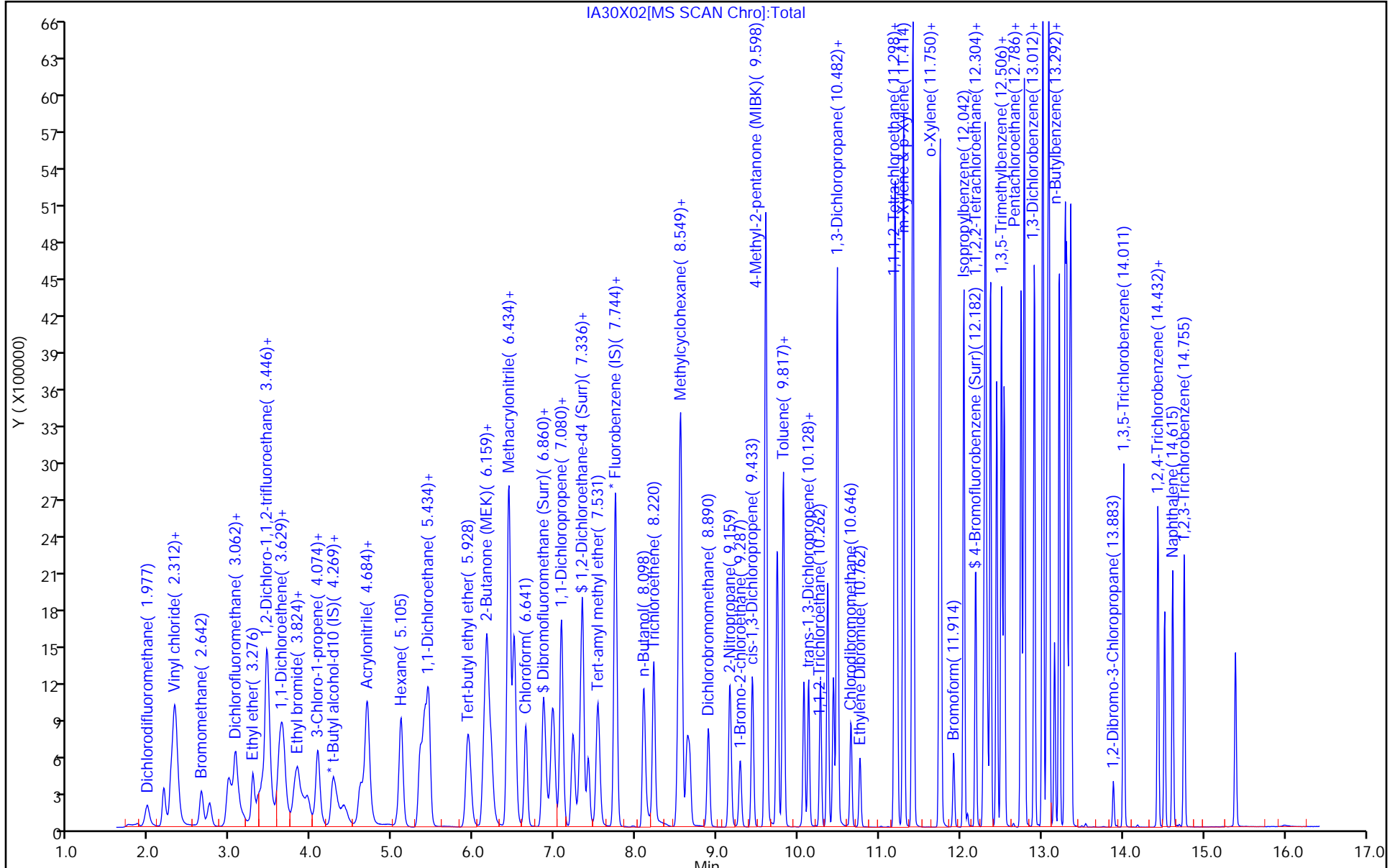
ALS Bottle#: 2

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



Euofins Lancaster Laboratories Env, LLC

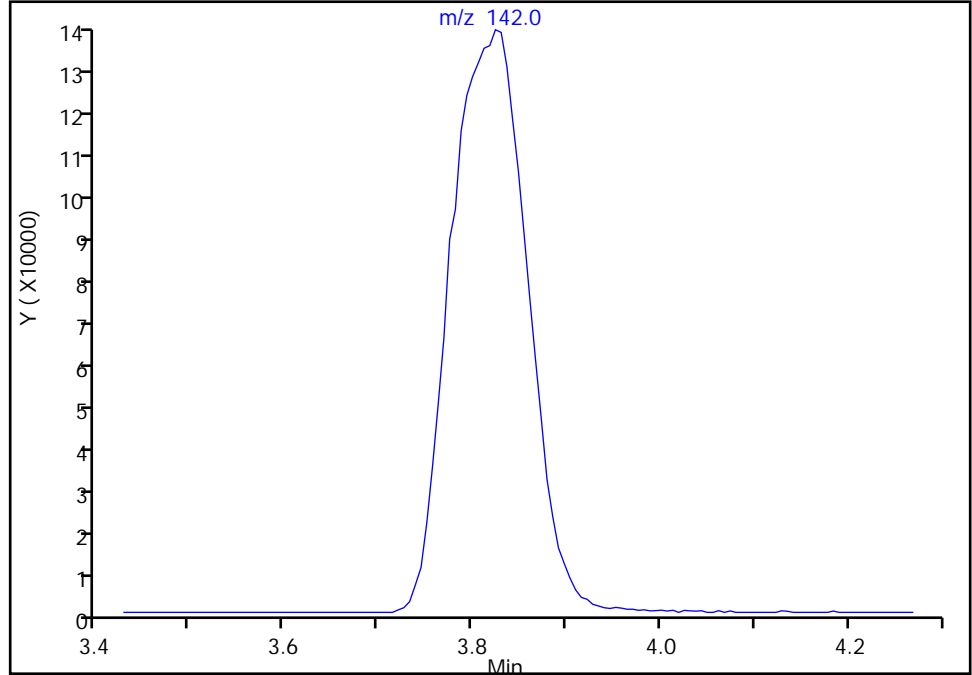
Data File: \\chromfs\Lancaster\ChromData\19930\20210430-28080.b\IA30X02.D
Injection Date: 30-Apr-2021 10:15:30 Instrument ID: 19930
Lims ID: CCVIS VSTD010
Client ID:
Operator ID: SRK36897 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

17 Iodomethane, CAS: 74-88-4

Signal: 1

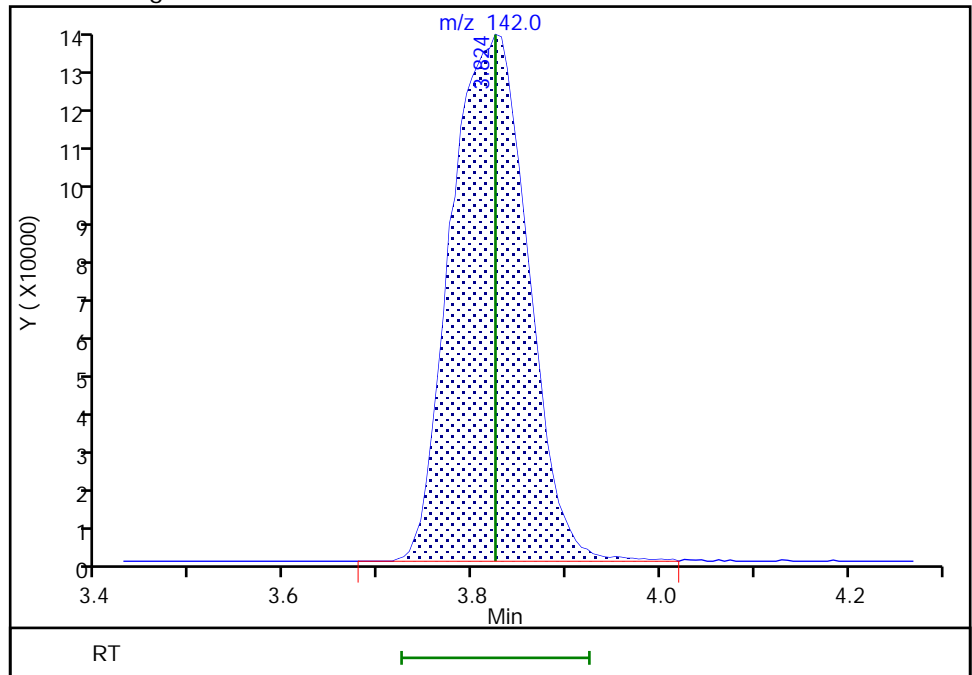
Not Detected
Expected RT: 3.82

Processing Integration Results



Manual Integration Results

RT: 3.82
Area: 774553
Amount: 8.577214
Amount Units: ug/l



Reviewer: knouses, 30-Apr-2021 10:47:51
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

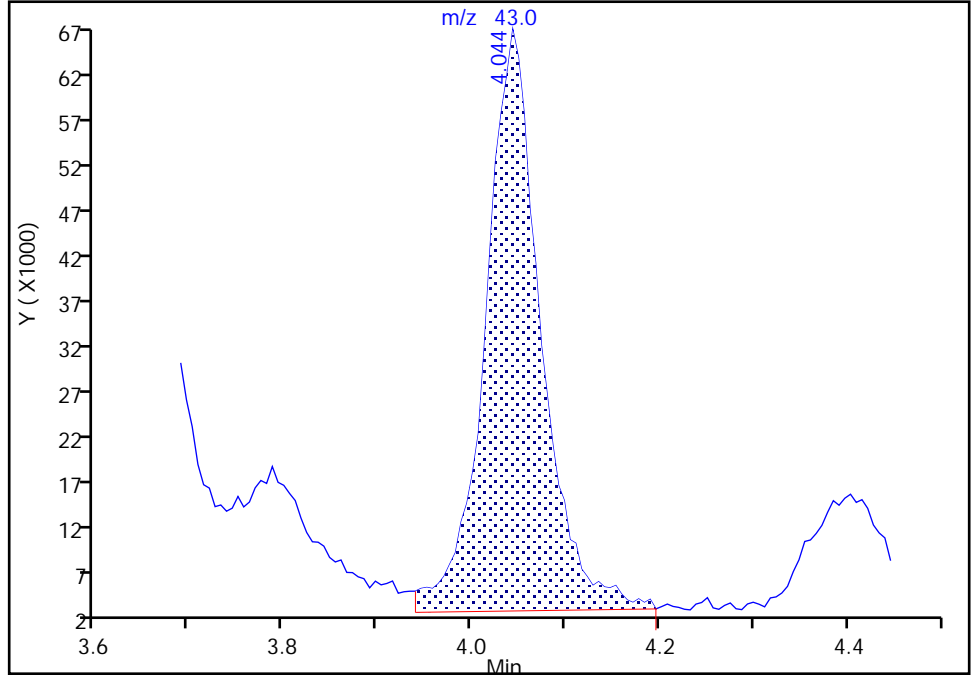
Data File: \\chromfs\Lancaster\ChromData\19930\20210430-28080.b\IA30X02.D
Injection Date: 30-Apr-2021 10:15:30 Instrument ID: 19930
Lims ID: CCVIS VSTD010
Client ID:
Operator ID: SRK36897 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

21 Methyl acetate, CAS: 79-20-9

Signal: 1

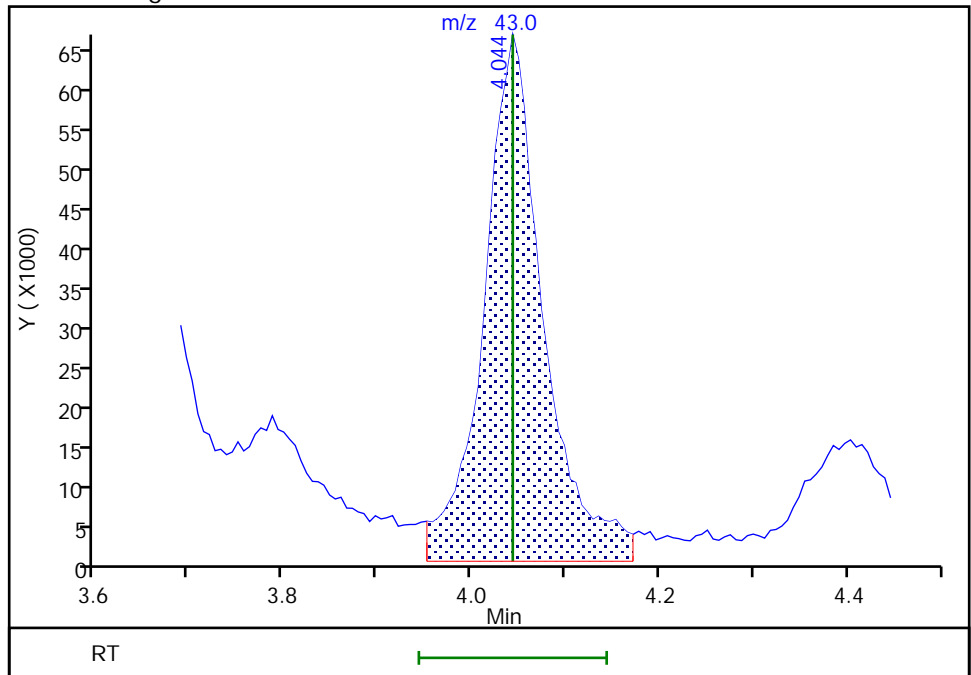
RT: 4.04
Area: 261394
Amount: 8.327412
Amount Units: ug/l

Processing Integration Results



RT: 4.04
Area: 291996
Amount: 9.302322
Amount Units: ug/l

Manual Integration Results



Reviewer: knouses, 30-Apr-2021 10:48:18
Audit Action: Manually Integrated

Audit Reason: Baseline

Euofins Lancaster Laboratories Env, LLC

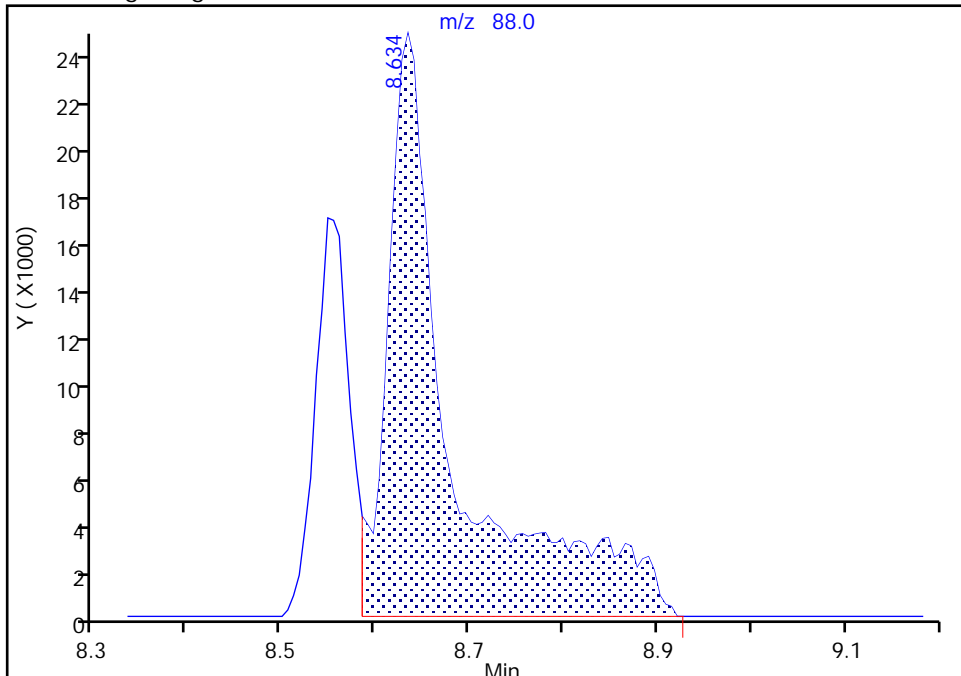
Data File:	\\chromfs\Lancaster\ChromData\19930\20210430-28080.b\IA30X02.D		
Injection Date:	30-Apr-2021 10:15:30	Instrument ID:	19930
Lims ID:	CCVIS VSTD010		
Client ID:			
Operator ID:	SRK36897	ALS Bottle#:	2
Purge Vol:	25.000 mL	Dil. Factor:	1.0000
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D
Column:	Rxi-624Sil MS Capillary Column (0.25mm ID)	Detector:	MS Quad
		Worklist Smp#:	3

65 1,4-Dioxane, CAS: 123-91-1

Signal: 1

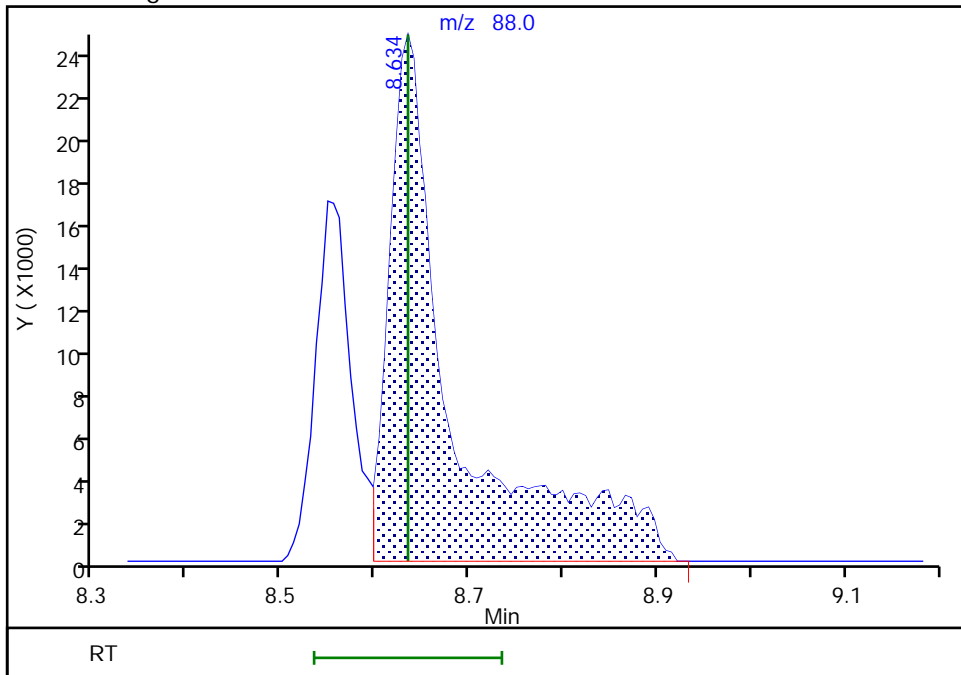
RT: 8.63
 Area: 118361
 Amount: 574.9110
 Amount Units: ug/l

Processing Integration Results



RT: 8.63
 Area: 115441
 Amount: 560.7278
 Amount Units: ug/l

Manual Integration Results



Reviewer: knouses, 30-Apr-2021 10:48:53
Audit Action: Split an Integrated Peak

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC
 Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30T01.D
 Lims ID: bfb
 Client ID:
 Sample Type: BFB
 Inject. Date: 30-Nov-2020 11:46:30 ALS Bottle#: 1 Worklist Smp#: 1
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 410-0016641-001
 Misc. Info.: BFB
 Operator ID: DVV10203 Instrument ID: 16334
 Method: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\MSV_16334_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 01-Dec-2020 19:03:51 Calib Date: 30-Nov-2020 18:23:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1610

First Level Reviewer: virayd Date: 30-Nov-2020 12:10:04

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
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\$ 165 BFB	95	5.188	5.188	0.000	87	489350	NR	NR	
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QC Flag Legend

Processing Flags

NR - Missing Quant Standard

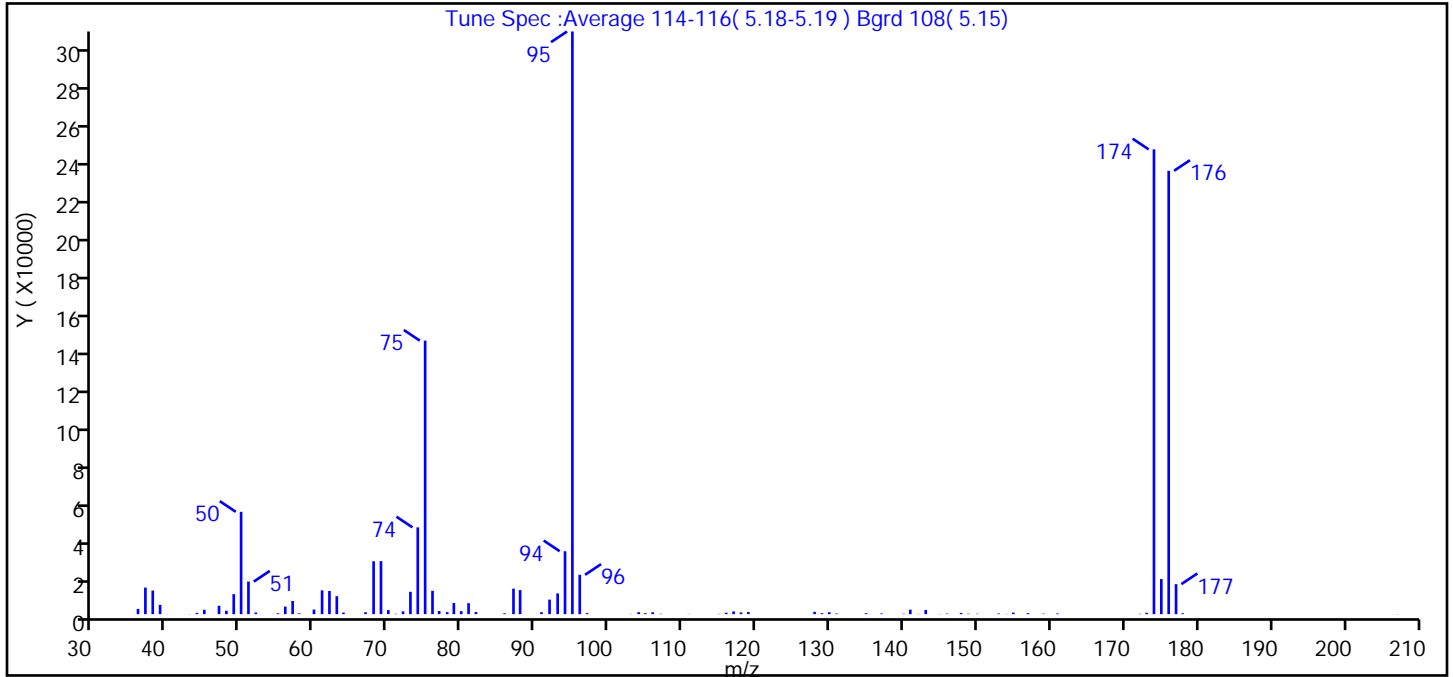
Reagents:

MSV_V_BFB_00003 Amount Added: 1.00 Units: uL

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30T01.D
 Injection Date: 30-Nov-2020 11:46:30 Instrument ID: 16334
 Lims ID: bfb
 Client ID:
 Operator ID: DVV10203 ALS Bottle#: 1 Worklist Smp#: 1
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
 Tune Method: BFB Method 8260

\$ 165 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	17.6
75	30 to 60% of m/z 95	46.9
96	5 to 9% of m/z 95	6.8
173	Less than 2% of m/z 174	0.2 (0.3)
174	50 to 120% of m/z 95	79.8
175	5 to 9% of m/z 174	6.0 (7.5)
176	Greater than 95% but less than 101% of m/z 174	76.1 (95.4)
177	5 to 9% of m/z 176	5.2 (6.8)

Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30T01.D\MSV_16334_25mL.rsl\spectra.d
Injection Date: 30-Nov-2020 11:46:30
Spectrum: Tune Spec :Average 114-116(5.18-5.19) Bgrd 108(5.15)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 90

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2772	67.00	1018	95.00	309376	143.00	2233
37.00	14113	68.00	28088	96.00	20888	145.00	88
38.00	12552	69.00	28160	97.00	561	146.00	300
39.00	4939	70.00	2151	103.00	123	148.00	674
40.00	58	71.00	201	104.00	1021	149.00	233
43.00	79	72.00	1472	105.00	508	150.00	205
44.00	676	73.00	11870	106.00	1010	151.00	14
45.00	2334	74.00	46080	107.00	199	153.00	361
47.00	4434	75.00	145216	111.00	97	154.00	104
48.00	1797	76.00	12401	115.00	150	155.00	827
49.00	10611	77.00	1661	116.00	743	157.00	548
50.00	54328	78.00	1061	117.00	1439	159.00	244
51.00	17288	79.00	5926	118.00	918	161.00	384
52.00	859	80.00	1585	119.00	1116	172.00	191
55.00	472	81.00	5817	128.00	1210	173.00	717
56.00	4009	82.00	1125	129.00	530	174.00	246784
57.00	6977	86.00	445	130.00	998	175.00	18624
58.00	399	87.00	13538	131.00	327	176.00	235392
60.00	2452	88.00	12773	135.00	505	177.00	15946
61.00	12629	91.00	1031	137.00	380	178.00	459
62.00	12288	92.00	7724	140.00	215	207.00	85
63.00	9532	93.00	11009	141.00	2365		
64.00	829	94.00	33408	142.00	111		

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30T01.D

Injection Date: 30-Nov-2020 11:46:30

Instrument ID: 16334

Operator ID: DVV10203

Lims ID: bfb

Worklist Smp#: 1

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

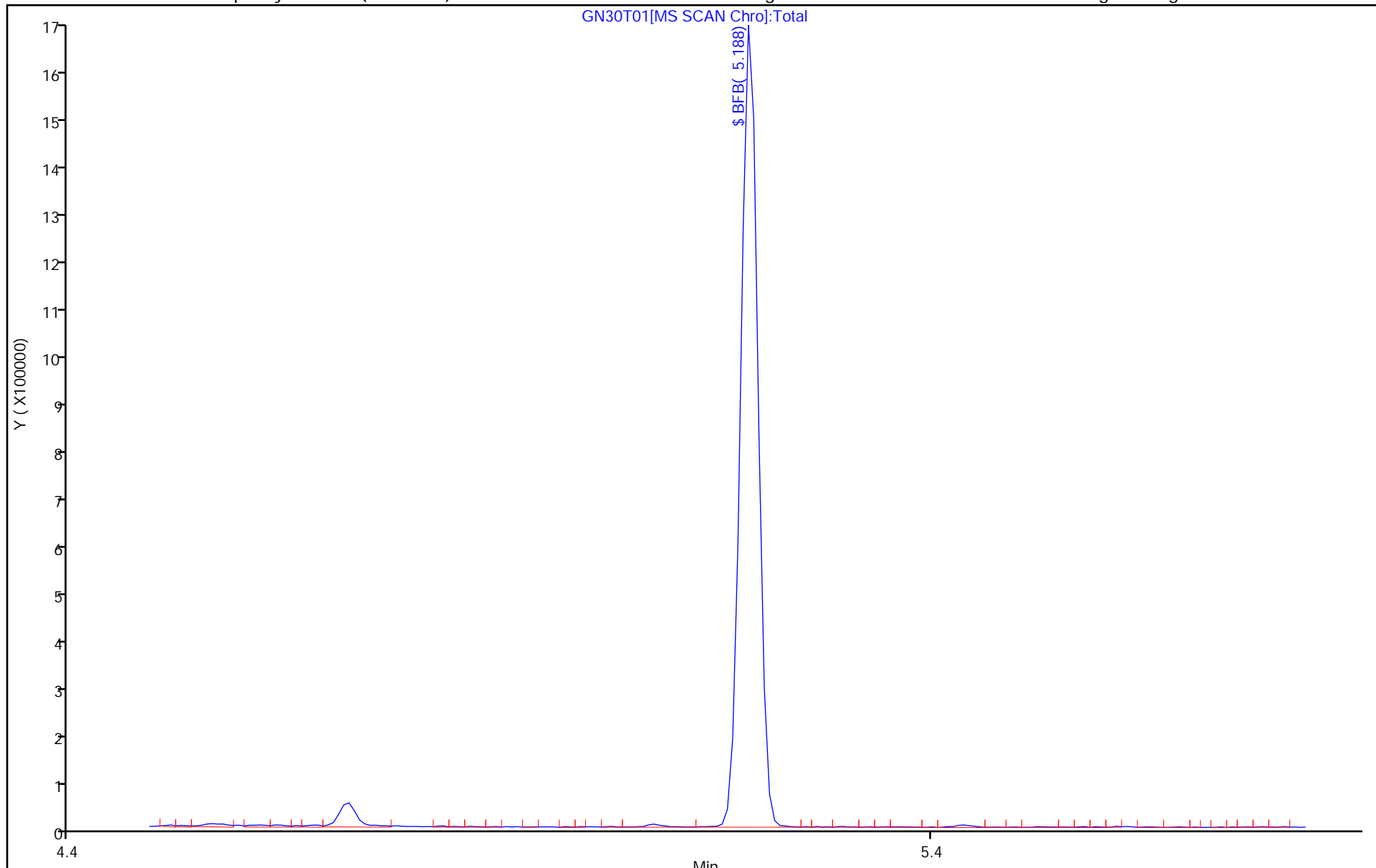
ALS Bottle#: 1

Method: MSV_16334_25mL

Limit Group: MSV - 8260C_D

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

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\GA30T01.D
 Lims ID: BFB
 Client ID:
 Sample Type: BFB
 Inject. Date: 30-Apr-2021 08:29:30 ALS Bottle#: 1 Worklist Smp#: 1
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 410-0028091-001
 Misc. Info.: BFB
 Operator ID: jml01693 Instrument ID: 16334
 Method: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\MSV_16334_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 30-Apr-2021 09:42:11 Calib Date: 30-Nov-2020 18:23:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1624

First Level Reviewer: longj Date: 30-Apr-2021 09:42:11

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
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\$ 163 BFB	95	5.182	5.182	0.000	95	558010	NR	NR	
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QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

MSV_V_BFB_00005

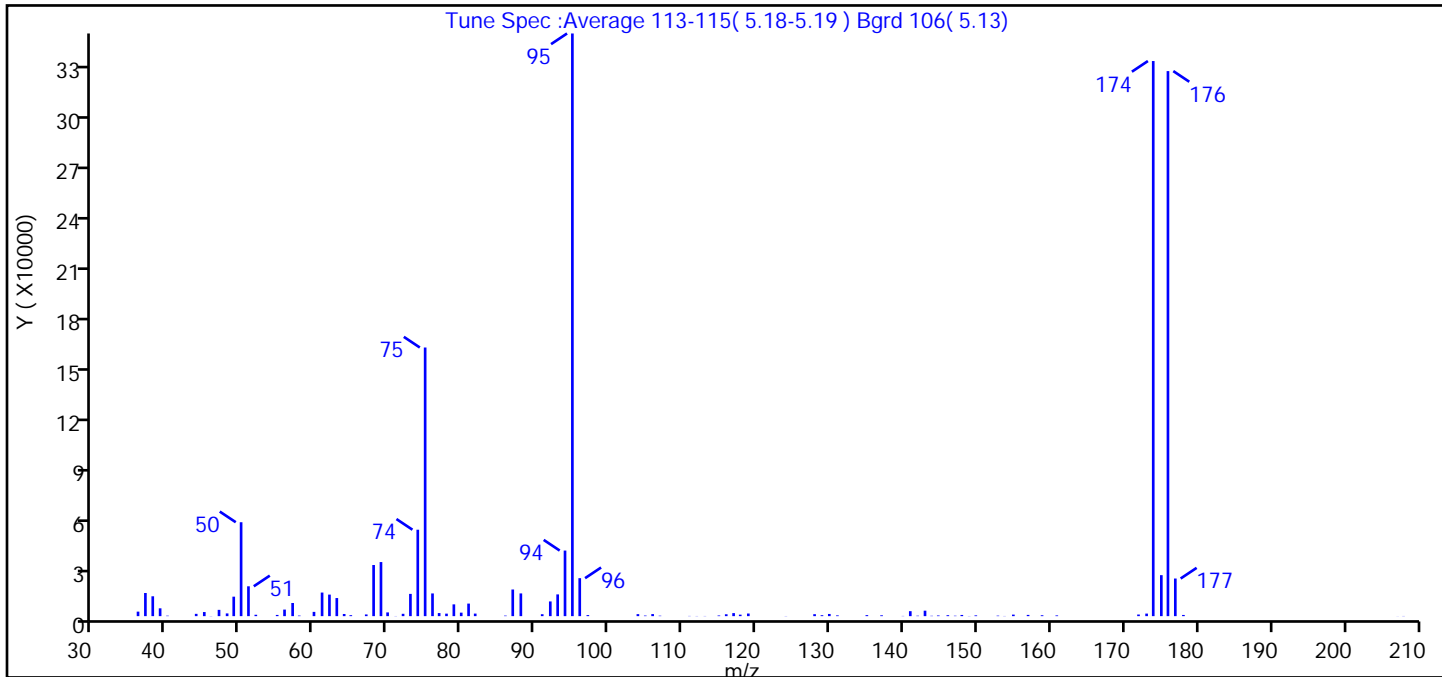
Amount Added: 1.00

Units: uL

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\GA30T01.D
 Injection Date: 30-Apr-2021 08:29:30 Instrument ID: 16334
 Lims ID: BFB
 Client ID:
 Operator ID: jml01693 ALS Bottle#: 1 Worklist Smp#: 1
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
 Tune Method: BFB Method 8260

\$ 163 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	16.1
75	30 to 60% of m/z 95	46.1
96	5 to 9% of m/z 95	6.5
173	Less than 2% of m/z 174	0.4 (0.5)
174	50 to 120% of m/z 95	95.3
175	5 to 9% of m/z 174	7.0 (7.4)
176	Greater than 95% but less than 101% of m/z 174	93.5 (98.2)
177	5 to 9% of m/z 176	6.5 (6.9)

Data File: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\GA30T01.D\MSV_16334_25mL.rsl\spectra.d
Injection Date: 30-Apr-2021 08:29:30
Spectrum: Tune Spec :Average 113-115(5.18-5.19) Bgrd 106(5.13)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 95

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2670	67.00	1010	96.00	22480	143.00	3234
37.00	13702	68.00	30272	97.00	620	144.00	202
38.00	11757	69.00	32016	104.00	1191	145.00	394
39.00	4634	70.00	2212	105.00	342	146.00	555
40.00	269	71.00	90	106.00	1225	147.00	244
44.00	1362	72.00	1387	107.00	253	148.00	705
45.00	2424	73.00	13175	111.00	129	149.00	91
46.00	84	74.00	51168	112.00	95	150.00	455
47.00	3723	75.00	159040	113.00	100	153.00	296
48.00	1611	76.00	13444	115.00	395	154.00	102
49.00	11530	77.00	1822	116.00	1115	155.00	908
50.00	55600	78.00	1485	117.00	1796	157.00	735
51.00	17672	79.00	6977	118.00	886	159.00	525
52.00	822	80.00	2069	119.00	1554	161.00	436
55.00	720	81.00	7435	124.00	89	172.00	963
56.00	3885	82.00	1511	128.00	1159	173.00	1514
57.00	7784	86.00	314	129.00	550	174.00	328640
58.00	327	87.00	15774	130.00	1293	175.00	24264
60.00	2523	88.00	13454	131.00	453	176.00	322688
61.00	13965	91.00	1142	135.00	599	177.00	22272
62.00	12752	92.00	8706	137.00	495	178.00	708
63.00	10715	93.00	12873	140.00	123	207.00	44
64.00	1275	94.00	38824	141.00	2942	208.00	100
65.00	565	95.00	344960	142.00	260		

Report Date: 30-Apr-2021 09:42:12

Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\GA30T01.D

Injection Date: 30-Apr-2021 08:29:30

Instrument ID: 16334

Operator ID: jml01693

Lims ID: BFB

Worklist Smp#: 1

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

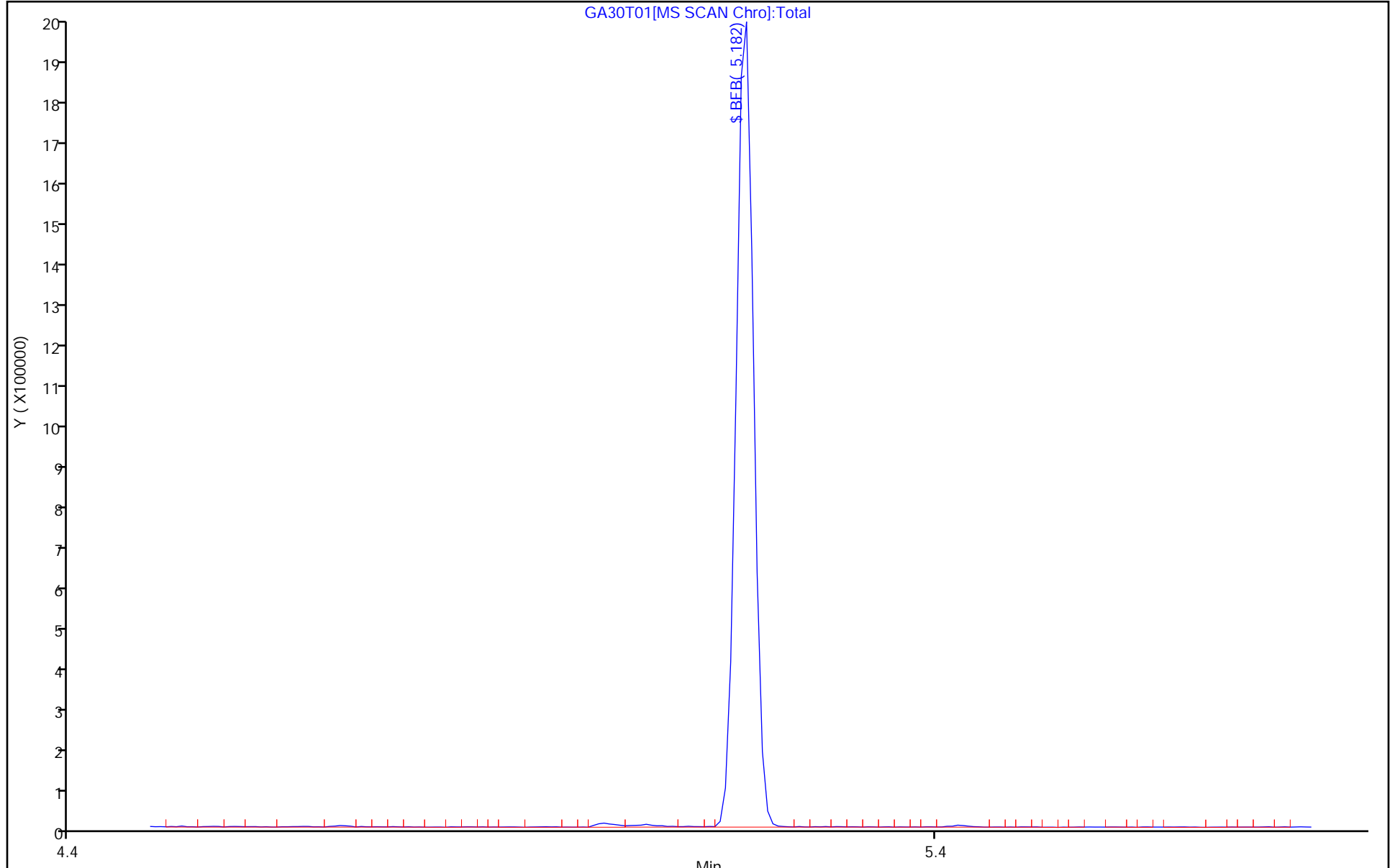
ALS Bottle#: 1

Method: MSV_16334_25mL

Limit Group: MSV - 8260C_D

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

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC
 Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25T01.D
 Lims ID: bfb
 Client ID:
 Sample Type: BFB
 Inject. Date: 25-Mar-2021 19:32:30 ALS Bottle#: 1 Worklist Smp#: 1
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info:
 Misc. Info.: BFB
 Operator ID: mec29284 Instrument ID: 19930
 Method: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\8260 25ml HP31.m
 Limit Group: MSV - 8260C_D
 Last Update: 26-Mar-2021 17:13:18 Calib Date: 26-Mar-2021 01:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I07.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1605

First Level Reviewer: campbellme Date: 25-Mar-2021 19:45:59

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
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\$ 145 BFB	95	5.190	5.190	0.000	0	267167	NR	NR	
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QC Flag Legend

Processing Flags

NR - Missing Quant Standard

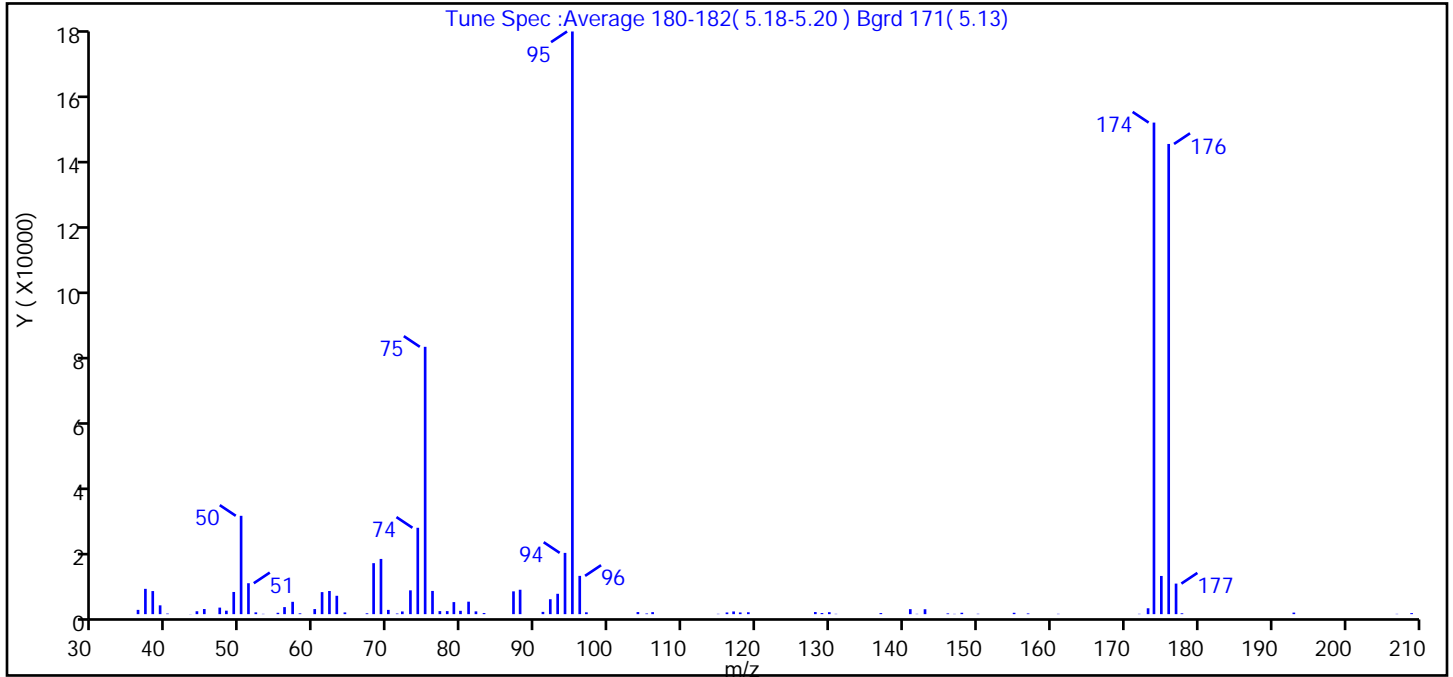
Reagents:

MSV_V_BFB_00004 Amount Added: 1.00 Units: uL

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25T01.D
 Injection Date: 25-Mar-2021 19:32:30 Instrument ID: 19930
 Lims ID: bfb
 Client ID:
 Operator ID: mec29284 ALS Bottle#: 1 Worklist Smp#: 1
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
 Tune Method: BFB Method 8260

\$ 145 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	16.9
75	30 to 60% of m/z 95	45.9
96	5 to 9% of m/z 95	6.6
173	Less than 2% of m/z 174	1.0 (1.2)
174	50 to 120% of m/z 95	84.4
175	5 to 9% of m/z 174	6.6 (7.8)
176	Greater than 95% but less than 101% of m/z 174	80.7 (95.7)
177	5 to 9% of m/z 176	5.2 (6.5)

Data File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25T01.D\8260 25ml HP31.rsl\spectra.d
Injection Date: 25-Mar-2021 19:32:30
Spectrum: Tune Spec :Average 180-182(5.18-5.20) Bgrd 171(5.13)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 83

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1306	62.00	7076	88.00	7457	141.00	1523
37.00	7732	63.00	5608	91.00	695	142.00	94
38.00	7053	64.00	527	92.00	4556	143.00	1498
39.00	2690	67.00	257	93.00	6221	146.00	233
40.00	172	68.00	15578	94.00	18720	147.00	87
43.00	42	69.00	16872	95.00	178048	148.00	424
44.00	887	70.00	1301	96.00	11695	150.00	113
45.00	1562	71.00	189	97.00	559	155.00	417
47.00	1997	72.00	819	104.00	638	157.00	222
48.00	1059	73.00	7274	105.00	199	161.00	99
49.00	6773	74.00	26392	106.00	613	172.00	98
50.00	30048	75.00	81688	115.00	98	173.00	1797
51.00	9447	76.00	7090	116.00	515	174.00	150208
52.00	540	77.00	931	117.00	820	175.00	11669
53.00	90	78.00	927	118.00	519	176.00	143680
55.00	413	79.00	3681	119.00	578	177.00	9336
56.00	2150	80.00	1018	128.00	641	178.00	259
57.00	3766	81.00	3810	129.00	341	193.00	471
58.00	246	82.00	848	130.00	599	207.00	87
60.00	1551	83.00	338	131.00	94	209.00	313
61.00	6734	87.00	6966	137.00	330		

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25T01.D

Injection Date: 25-Mar-2021 19:32:30

Instrument ID: 19930

Operator ID: mec29284

Lims ID: bfb

Worklist Smp#: 1

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

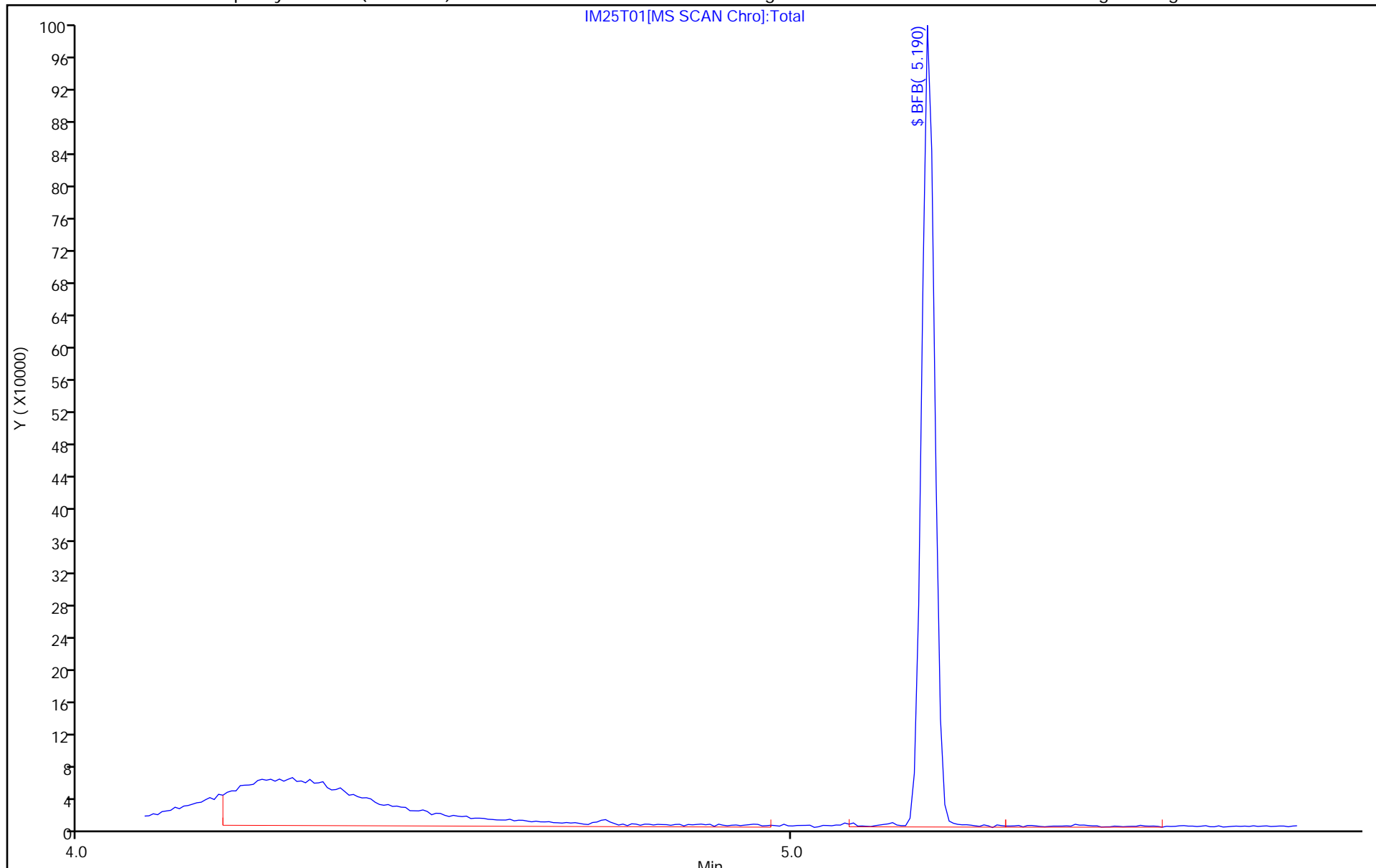
ALS Bottle#: 1

Method: 8260 25ml HP31

Limit Group: MSV - 8260C_D

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

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC
 Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210430-28080.b\A30T02.D
 Lims ID: BFB
 Client ID:
 Sample Type: BFB
 Inject. Date: 30-Apr-2021 09:29:30 ALS Bottle#: 1 Worklist Smp#: 1
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 410-0028080-001
 Misc. Info.: BFB
 Operator ID: SRK36897 Instrument ID: 19930
 Method: \\chromfs\Lancaster\ChromData\19930\20210430-28080.b\8260 25ml HP31.m
 Limit Group: MSV - 8260C_D
 Last Update: 30-Apr-2021 13:13:06 Calib Date: 26-Mar-2021 01:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I07.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1683

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
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\$ 145 BFB	95	5.190	5.190	0.000	0	153041	NR	NR	
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QC Flag Legend

Processing Flags

NR - Missing Quant Standard

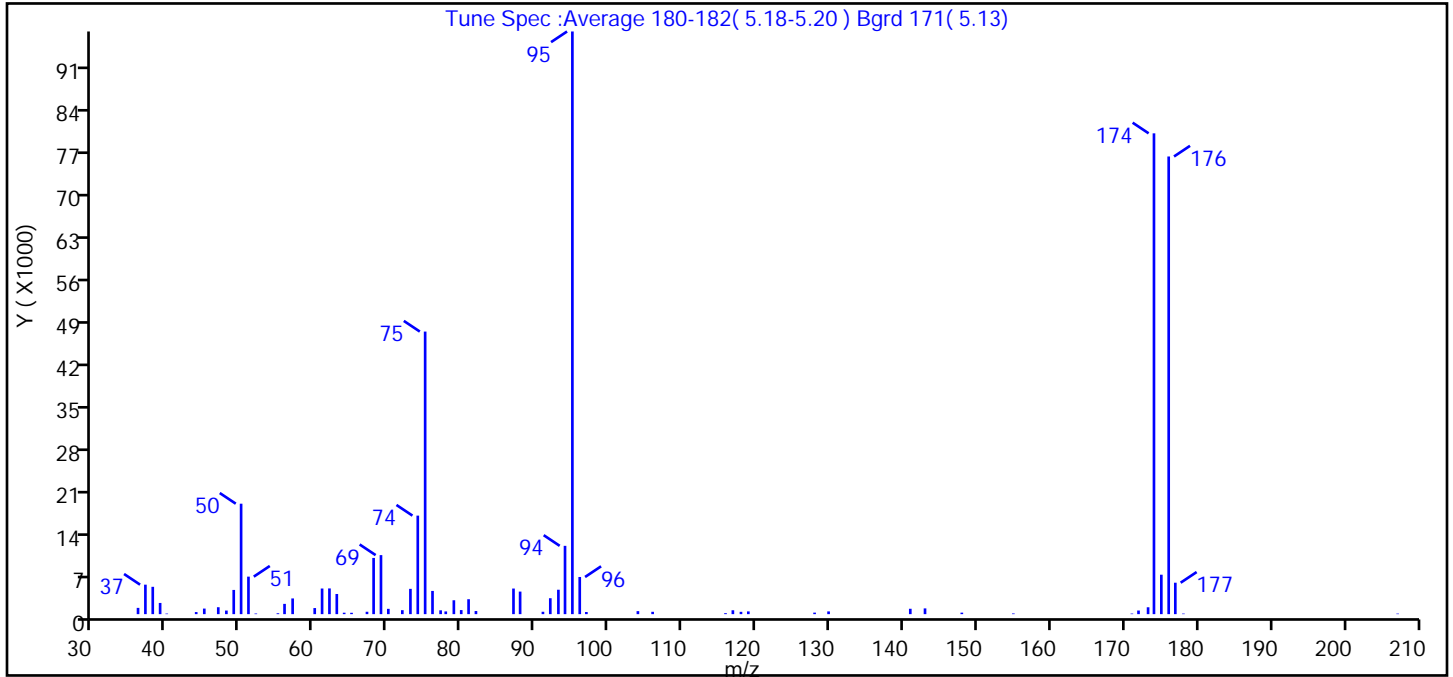
Reagents:

MSV_V_BFB_00005 Amount Added: 1.00 Units: uL

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210430-28080.b\IA30T02.D
 Injection Date: 30-Apr-2021 09:29:30 Instrument ID: 19930
 Lims ID: BFB
 Client ID:
 Operator ID: SRK36897 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	19.0
75	30 to 60% of m/z 95	48.5
96	5 to 9% of m/z 95	6.4
173	Less than 2% of m/z 174	1.2 (1.4)
174	50 to 120% of m/z 95	82.5
175	5 to 9% of m/z 174	6.8 (8.2)
176	Greater than 95% but less than 101% of m/z 174	78.5 (95.2)
177	5 to 9% of m/z 176	5.4 (6.9)

Data File: \\chromfs\Lancaster\ChromData\19930\20210430-28080.b\IA30T02.D\8260 25ml HP31.rsl\spectra.d
Injection Date: 30-Apr-2021 09:29:30
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: 67

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1033	61.00	4225	80.00	670	119.00	451
37.00	4860	62.00	4239	81.00	2461	128.00	251
38.00	4505	63.00	3323	82.00	513	130.00	451
39.00	1846	64.00	237	87.00	4220	141.00	886
40.00	91	65.00	225	88.00	3718	143.00	947
44.00	344	67.00	394	91.00	393	148.00	248
45.00	918	68.00	9266	92.00	2625	155.00	113
47.00	1140	69.00	9731	93.00	4025	171.00	96
48.00	590	70.00	875	94.00	11260	172.00	595
49.00	3992	72.00	655	95.00	96056	173.00	1133
50.00	18208	73.00	4169	96.00	6126	174.00	79264
51.00	6183	74.00	16242	97.00	352	175.00	6501
52.00	104	75.00	46584	104.00	496	176.00	75448
55.00	146	76.00	3825	106.00	387	177.00	5182
56.00	1693	77.00	632	116.00	161	178.00	93
57.00	2590	78.00	448	117.00	641	207.00	89
60.00	1003	79.00	2289	118.00	383		

Report Date: 30-Apr-2021 13:13:07

Chrom Revision: 2.3 08-Apr-2021 17:17:48

Euofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210430-28080.b\IA30T02.D

Injection Date: 30-Apr-2021 09:29:30

Instrument ID: 19930

Operator ID: SRK36897

Lims ID: BFB

Worklist Smp#: 1

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

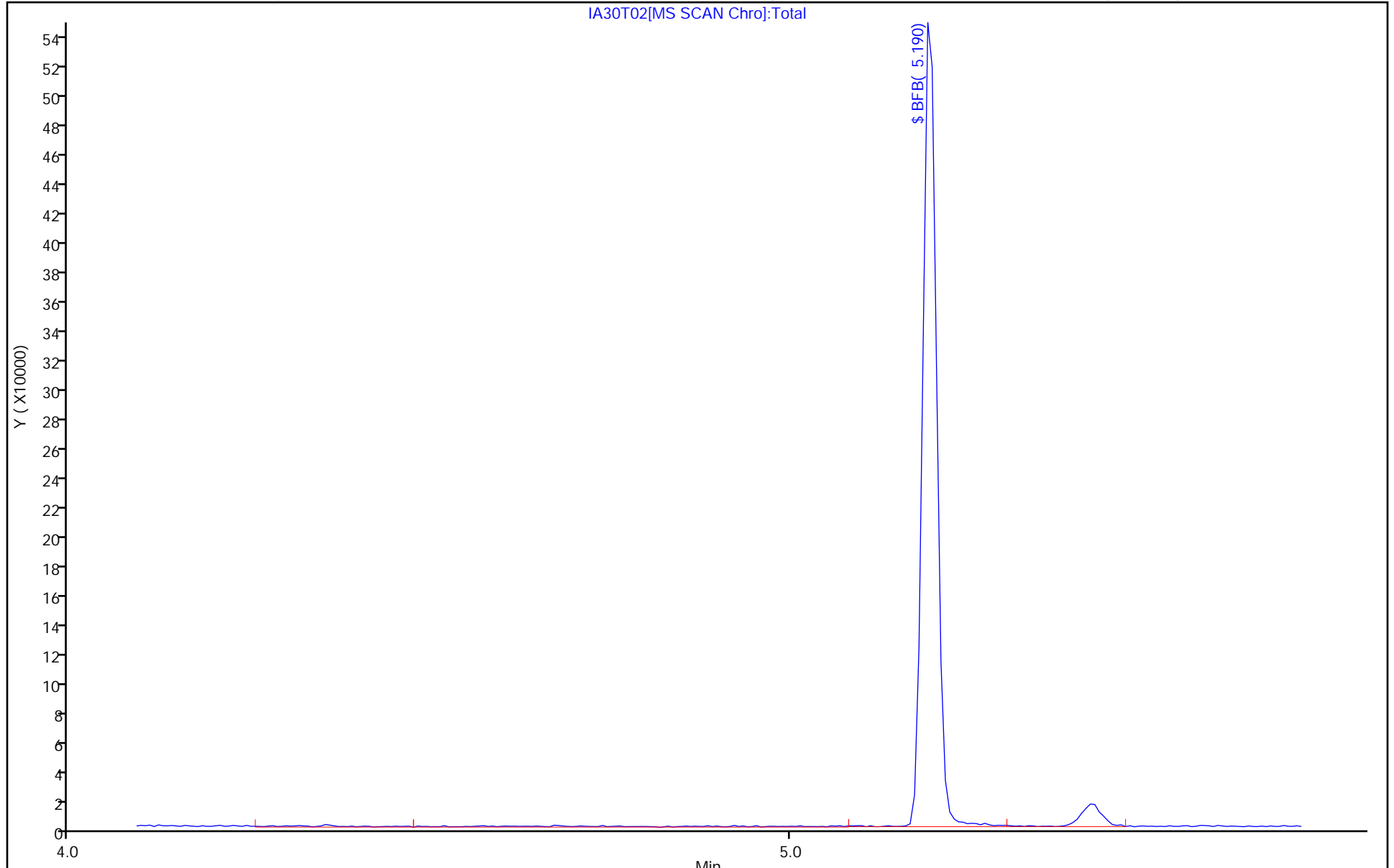
ALS Bottle#: 1

Method: 8260 25ml HP31

Limit Group: MSV - 8260C_D

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

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-37501-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 410-120935/10
 Matrix: Water Lab File ID: IA30X09.D
 Analysis Method: 8260D Date Collected: _____
 Sample wt/vol: 25 (mL) Date Analyzed: 04/30/2021 12:43
 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.: 120935 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.070
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.060
75-34-3	1,1-Dichloroethane	ND		0.50	0.070
75-35-4	1,1-Dichloroethene	ND		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.060
107-06-2	1,2-Dichloroethane	ND		0.50	0.050
78-87-5	1,2-Dichloropropane	ND		0.50	0.060
78-93-3	2-Butanone (MEK)	ND		5.0	0.60
591-78-6	2-Hexanone	ND		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70
67-64-1	Acetone	ND		5.0	0.90
71-43-2	Benzene	ND		0.50	0.050
74-97-5	Bromochloromethane	ND		0.50	0.050
75-27-4	Bromodichloromethane	ND		0.50	0.050
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.070
75-15-0	Carbon disulfide	ND		1.0	0.060
56-23-5	Carbon tetrachloride	ND		0.50	0.070
108-90-7	Chlorobenzene	ND		0.50	0.060
75-00-3	Chloroethane	ND		0.50	0.070
67-66-3	Chloroform	ND		0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	ND		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.050
124-48-1	Dibromochloromethane	ND		0.50	0.070
100-41-4	Ethylbenzene	ND		0.50	0.060
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.050
75-09-2	Methylene Chloride	ND		0.50	0.070
100-42-5	Styrene	ND		0.50	0.050
127-18-4	Tetrachloroethene	ND		0.50	0.060
108-88-3	Toluene	ND		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	ND		0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-37501-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 410-120935/10
 Matrix: Water Lab File ID: IA30X09.D
 Analysis Method: 8260D Date Collected: _____
 Sample wt/vol: 25 (mL) Date Analyzed: 04/30/2021 12:43
 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.: 120935 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
460-00-4	4-Bromofluorobenzene (Surr)	93		80-120
1868-53-7	Dibromofluoromethane (Surr)	100		80-120
2037-26-5	Toluene-d8 (Surr)	99		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210430-28080.b\IA30X09.D
 Lims ID: MB
 Client ID:
 Sample Type: MB
 Inject. Date: 30-Apr-2021 12:43:30 ALS Bottle#: 10 Worklist Smp#: 10
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0028080-010
 Misc. Info.: MB
 Operator ID: SRK36897 Instrument ID: 19930
 Method: \\chromfs\Lancaster\ChromData\19930\20210430-28080.b\8260 25ml HP31.m
 Limit Group: MSV - 8260C_D
 Last Update: 30-Apr-2021 13:12:43 Calib Date: 26-Mar-2021 01:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25107.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1683

First Level Reviewer: knouses Date: 30-Apr-2021 13:11:44

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		1.989					ND	
3 Dimethyl ether	45		2.044					ND	
4 Chloromethane	50		2.178					ND	
5 Vinyl chloride	62		2.288					ND	
6 Butadiene	39		2.318					ND	7
7 Bromomethane	94		2.642					ND	
8 Chloroethane	64		2.745					ND	
9 Dichlorofluoromethane	67		2.983					ND	
10 Trichlorofluoromethane	101		3.032					ND	
11 Ethyl ether	59		3.276					ND	
12 1,2-Dichloro-1,1,2-trifluoroetha	67		3.391					ND	
13 Acrolein	56	3.464	3.446	0.018	1	1730		0.2122	7M
14 1,1-Dichloroethene	96		3.611					ND	
15 Acetone	43		3.623					ND	7
16 112TCTFE	101		3.648					ND	
17 Iodomethane	142		3.824					ND	
18 Ethyl bromide	108		3.830					ND	
19 Carbon disulfide	76		3.946					ND	7
20 Acetonitrile	41		3.995					ND	
21 Methyl acetate	43		4.044					ND	
22 3-Chloro-1-propene	41		4.074					ND	
23 Methylene Chloride	84		4.269					ND	
* 24 t-Butyl alcohol-d10 (IS)	65	4.281	4.275	0.006	0	165067	50.0	50.0	
25 2-Methyl-2-propanol	59		4.397					ND	
26 Acrylonitrile	53		4.605					ND	
27 Methyl tert-butyl ether	73		4.678					ND	
28 trans-1,2-Dichloroethene	96		4.690					ND	
29 Hexane	57		5.105					ND	
30 Vinyl acetate	43		5.324					ND	
31 1,1-Dichloroethane	63		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		5.397					ND	
33 2-Chloro-1,3-butadiene	53		5.446					ND	
34 Tert-butyl ethyl ether	59		5.928					ND	
36 2-Butanone (MEK)	43		6.129					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		6.184					ND	
39 Ethyl acetate	43		6.190					ND	
40 Propionitrile	54		6.214					ND	
41 Methyl acrylate	55		6.245					ND	
42 Methacrylonitrile	67		6.434					ND	
43 Chlorobromomethane	128		6.495					ND	
44 Tetrahydrofuran	71		6.501					ND	
45 Chloroform	83		6.641					ND	
\$ 46 Dibromofluoromethane (Surr)	113	6.860	6.854	0.006	93	436476	10.0	9.98	
47 1,1,1-Trichloroethane	97		6.872					ND	
48 Cyclohexane	56		6.976					ND	
49 1-Chlorobutane	56		7.019					ND	
51 1,1-Dichloropropene	75		7.080					ND	
50 Carbon tetrachloride	117		7.086					ND	
52 Isobutyl alcohol	41		7.226					ND	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.311	7.311	0.000	0	89751	10.0	10.5	
54 Benzene	78		7.342					ND	
56 1,2-Dichloroethane	62		7.409					ND	
55 Isopropyl acetate	43		7.409					ND	
57 Tert-amyl methyl ether	73		7.531					ND	
* 58 Fluorobenzene (IS)	96	7.744	7.738	0.006	98	1740077	10.0	10.0	
59 n-Heptane	43		7.750					ND	7
60 n-Butanol	56		8.092					ND	
61 Trichloroethene	95		8.220					ND	
62 Methylcyclohexane	83		8.531					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		8.708					ND	
68 Dichlorobromomethane	83		8.890					ND	
69 2-Nitropropane	41		9.159					ND	
70 Chloroacetonitrile	75		9.226					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		9.598					ND	
\$ 75 Toluene-d8 (Surr)	98	9.744	9.738	0.006	94	1734177	10.0	9.92	
76 Toluene	92		9.817					ND	
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		10.433					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		10.603					ND	
85 Chlorodibromomethane	129		10.646					ND	
86 Ethylene Dibromide	107		10.762					ND	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.189	-0.001	86	1335410	10.0	10.0	
88 1-Chlorohexane	91		11.195					ND	7
90 Chlorobenzene	112		11.213					ND	
S 89 Xylenes, Total	106		11.245					ND	7
91 1,1,1,2-Tetrachloroethane	131		11.292					ND	
92 Ethylbenzene	91		11.298					ND	
93 m-Xylene & p-Xylene	106		11.414					ND	
94 o-Xylene	106		11.743					ND	
95 Styrene	104		11.756					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		12.115					ND	
\$ 100 4-Bromofluorobenzene (Surr)	95	12.188	12.182	0.006	91	618960	10.0	9.32	
101 1,1,2,2-Tetrachloroethane	83		12.280					ND	
102 Bromobenzene	156		12.304					ND	
103 trans-1,4-Dichloro-2-butene	53		12.310					ND	
104 1,2,3-Trichloropropane	110		12.329					ND	
105 N-Propylbenzene	91		12.371					ND	
106 2-Chlorotoluene	126		12.445					ND	
107 1,3,5-Trimethylbenzene	105		12.506					ND	
108 4-Chlorotoluene	126		12.536					ND	
109 tert-Butylbenzene	134		12.743					ND	
110 Pentachloroethane	167		12.780					ND	
111 1,2,4-Trimethylbenzene	105		12.786					ND	
112 sec-Butylbenzene	105		12.908					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	95	675098	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	
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	
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	
203 Propargyl alcohol TIC	1		0.000					ND	
202 1,3-Dichloro-2-propanol TIC	1		0.000					ND	
138 1,1-Dichloro-1-fluoroethane	1		0.000					ND	
137 2-Methylnaphthalene	142		0.000					ND	
135 p-Diethylbenzene	1		0.000					ND	
136 2-Chloro-1,1,1-Trifluoroethane	1		0.000					ND	
144 2-ethoxy-2-methyl butane	1		0.000					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
205 1,1-Dichloroacetone	1		0.000					ND	
139 1-Bromo-3-Chloropropane	1		0.000					ND	
143 n-Decane	57		0.000					ND	
204 Pentane	43		0.000					ND	
207 Acetonitrile TIC	1		0.000					ND	
129 Propene oxide	1		0.000					ND	
141 1-Chloropropane	1		0.000					ND	
134 Isopropyl alcohol	45		0.000					ND	
133 t-Amyl alcohol	1		0.000					ND	
132 Methylal	1		0.000					ND	
131 tert-Butyl Formate	1		0.000					ND	
142 2-Bromo-1-chloropropane	1		0.000					ND	
206 Pentachloroethane TIC	1		0.000					ND	
130 Chlorotrifluoroethene	1		0.000					ND	
140 Ethanol	45		3.288					ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

Reagents:

MSV_31_826ISS_00004

Amount Added: 5.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19930\20210430-28080.b\IA30X09.D

Injection Date: 30-Apr-2021 12:43:30

Instrument ID: 19930

Operator ID: SRK36897

Lims ID: MB

Worklist Smp#: 10

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

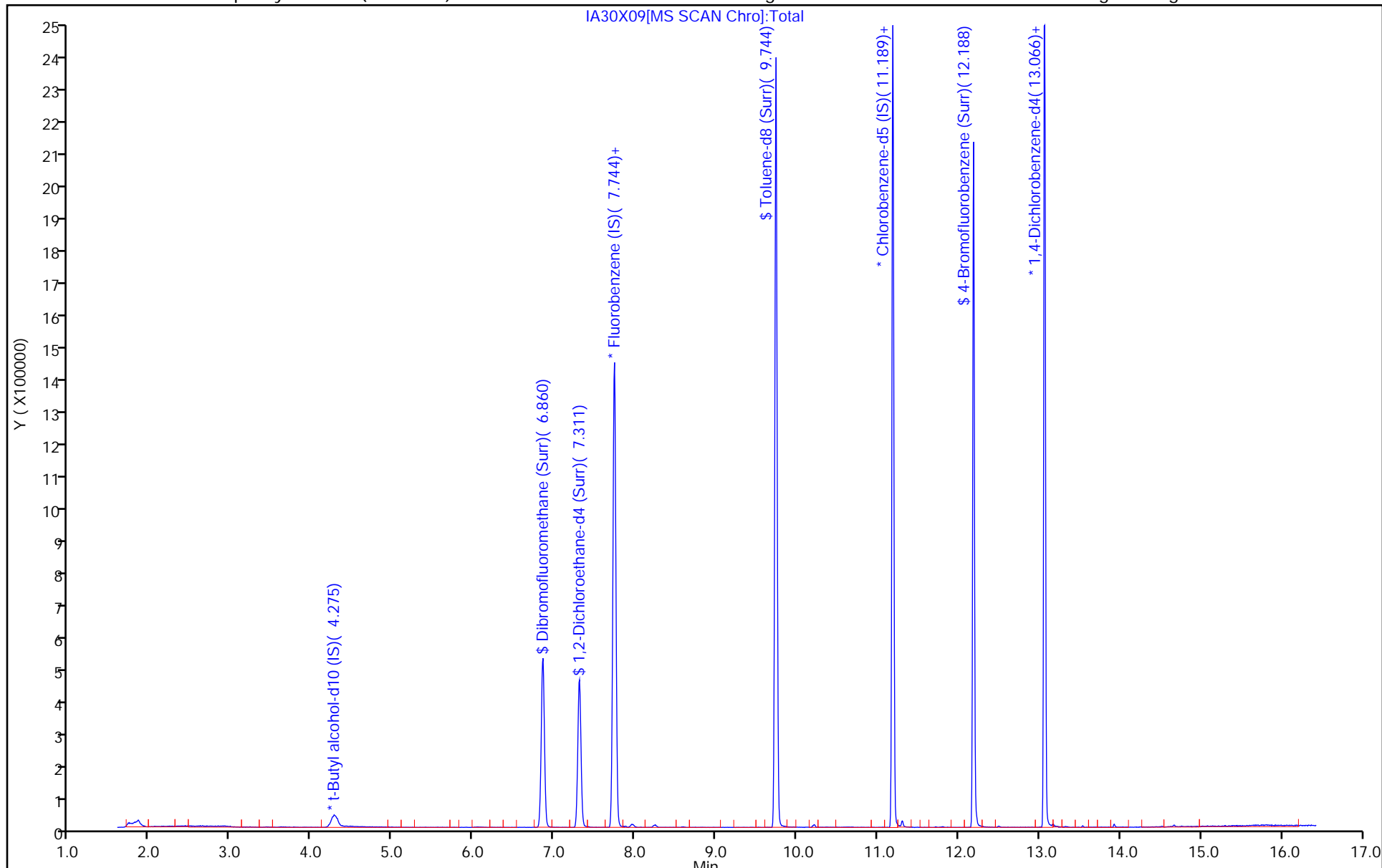
ALS Bottle#: 10

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\20210430-28080.b\A30X09.D
 Lims ID: MB
 Client ID:
 Sample Type: MB
 Inject. Date: 30-Apr-2021 12:43:30 ALS Bottle#: 10 Worklist Smp#: 10
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0028080-010
 Misc. Info.: MB
 Operator ID: SRK36897 Instrument ID: 19930
 Method: \\chromfs\Lancaster\ChromData\19930\20210430-28080.b\8260 25ml HP31.m
 Limit Group: MSV - 8260C_D
 Last Update: 30-Apr-2021 13:12:43 Calib Date: 26-Mar-2021 01:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I07.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1683

First Level Reviewer: knouses Date: 30-Apr-2021 13:11:44

Compound	Amount Added	Amount Recovered	% Rec.
\$ 46 Dibromofluoromethane (Surr)	10.0	9.98	99.76
\$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	10.5	104.80
\$ 75 Toluene-d8 (Surr)	10.0	9.92	99.23
\$ 100 4-Bromofluorobenzene (Surr)	10.0	9.32	93.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-37501-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 410-120958/7
 Matrix: Water Lab File ID: GA30B01.D
 Analysis Method: 8260D Date Collected: _____
 Sample wt/vol: 25 (mL) Date Analyzed: 04/30/2021 10:37
 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.: 120958 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.070
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.060
75-34-3	1,1-Dichloroethane	ND		0.50	0.070
75-35-4	1,1-Dichloroethene	ND		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.060
107-06-2	1,2-Dichloroethane	ND		0.50	0.050
78-87-5	1,2-Dichloropropane	ND		0.50	0.060
78-93-3	2-Butanone (MEK)	ND		5.0	0.60
591-78-6	2-Hexanone	ND		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70
67-64-1	Acetone	ND		5.0	0.90
71-43-2	Benzene	ND		0.50	0.050
74-97-5	Bromochloromethane	ND		0.50	0.050
75-27-4	Bromodichloromethane	ND		0.50	0.050
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.070
75-15-0	Carbon disulfide	ND		1.0	0.060
56-23-5	Carbon tetrachloride	ND		0.50	0.070
108-90-7	Chlorobenzene	ND		0.50	0.060
75-00-3	Chloroethane	ND		0.50	0.070
67-66-3	Chloroform	ND		0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	ND		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.050
124-48-1	Dibromochloromethane	ND		0.50	0.070
100-41-4	Ethylbenzene	ND		0.50	0.060
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.050
75-09-2	Methylene Chloride	ND		0.50	0.070
100-42-5	Styrene	ND		0.50	0.050
127-18-4	Tetrachloroethene	ND		0.50	0.060
108-88-3	Toluene	ND		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	ND		0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-37501-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 410-120958/7
 Matrix: Water Lab File ID: GA30B01.D
 Analysis Method: 8260D Date Collected: _____
 Sample wt/vol: 25 (mL) Date Analyzed: 04/30/2021 10:37
 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.: 120958 Units: ug/L

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

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		80-120
460-00-4	4-Bromofluorobenzene (Surr)	89		80-120
1868-53-7	Dibromofluoromethane (Surr)	102		80-120
2037-26-5	Toluene-d8 (Surr)	93		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\GA30B01.D
 Lims ID: MB
 Client ID:
 Sample Type: MB
 Inject. Date: 30-Apr-2021 10:37:30 ALS Bottle#: 7 Worklist Smp#: 7
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0028091-007
 Misc. Info.: MB
 Operator ID: jml01693 Instrument ID: 16334
 Method: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\MSV_16334_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 30-Apr-2021 11:15:15 Calib Date: 30-Nov-2020 18:23:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1624

First Level Reviewer: longj Date: 30-Apr-2021 11:15:15

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116		1.885					ND	
2 Dichlorodifluoromethane	85		1.953					ND	
3 Chlorodifluoromethane	51		1.959					ND	
4 Dimethyl ether	45		2.032					ND	
5 Chloromethane	50		2.148					ND	
6 2-Chloro-1,1,1-Trifluoroethane	118		2.233					ND	
7 Butadiene	39		2.257					ND	7
8 Vinyl chloride	62		2.263					ND	
9 Bromomethane	94		2.587					ND	
10 Chloroethane	64		2.666					ND	
12 Dichlorofluoromethane	67		2.910					ND	
13 Trichlorofluoromethane	101		2.971					ND	
14 Ethanol	45		3.111					ND	
15 Ethyl ether	59		3.196					ND	
17 1,2-Dichloro-1,1,2-trifluoroethane	67		3.300					ND	
18 Acrolein	56		3.373					ND	7
19 1,1-Dichloroethene	96		3.513					ND	
21 Acetone	43		3.538					ND	
20 112TCTFE	101		3.550					ND	
22 Isopropyl alcohol	45		3.708					ND	
23 Iodomethane	142		3.708					ND	
24 Ethyl bromide	108		3.727					ND	
25 Carbon disulfide	76		3.830					ND	7
26 Acetonitrile	41		3.940					ND	
27 Methyl acetate	43		3.952					ND	
28 3-Chloro-1-propene	41		3.977					ND	
29 Methylene Chloride	84		4.166					ND	
* 30 t-Butyl alcohol-d10 (IS)	65	4.172	4.178	-0.006	0	188045	50.0	50.0	
31 2-Methyl-2-propanol	59		4.300					ND	
32 Acrylonitrile	53		4.507					ND	
33 Methyl tert-butyl ether	73		4.562					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 trans-1,2-Dichloroethene	96		4.568					ND	
35 Hexane	57		4.995					ND	
36 Vinyl acetate	43		5.233					ND	
37 1,1-Dichloroethane	63		5.239					ND	
38 Isopropyl ether	45		5.293					ND	
39 2-Chloro-1,3-butadiene	53		5.348					ND	
40 Tert-butyl ethyl ether	59		5.830					ND	
41 2-Butanone (MEK)	43		6.049					ND	
42 cis-1,2-Dichloroethene	96		6.074					ND	
43 2,2-Dichloropropane	77		6.092					ND	
44 Ethyl acetate	43		6.104					ND	
45 Propionitrile	54		6.141					ND	
S 46 1,2-Dichloroethene, Total	100		6.155					ND	7
47 Methyl acrylate	55		6.171					ND	
48 Methacrylonitrile	67		6.354					ND	
49 Chlorobromomethane	128		6.403					ND	
50 Tetrahydrofuran	71		6.415					ND	
51 Chloroform	83		6.561					ND	
\$ 52 Dibromofluoromethane (Surr)	113	6.769	6.775	-0.006	94	604736	10.0	10.2	
53 1,1,1-Trichloroethane	97		6.787					ND	
54 Cyclohexane	56		6.878					ND	
55 1-Chlorobutane	56		6.940					ND	
56 Carbon tetrachloride	117		6.994					ND	
57 1,1-Dichloropropene	75		6.994					ND	
58 Isobutyl alcohol	41		7.165					ND	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.226	7.232	-0.006	0	126765	10.0	10.0	
60 Benzene	78		7.263					ND	
61 1,2-Dichloroethane	62		7.330					ND	
62 Isopropyl acetate	43		7.348					ND	
63 Tert-amyl methyl ether	73		7.452					ND	
* 64 Fluorobenzene (IS)	96	7.665	7.665	0.000	99	2461333	10.0	10.0	
65 n-Heptane	43		7.677					ND	
66 t-Amyl alcohol	73		7.842					ND	
67 n-Butanol	56		8.043					ND	
68 Trichloroethene	95		8.140					ND	
69 Methylcyclohexane	83		8.451					ND	
70 1,2-Dichloropropane	63		8.476					ND	
71 2-ethoxy-2-methyl butane	87		8.488					ND	
72 Methyl methacrylate	69		8.567					ND	
73 1,4-Dioxane	88		8.567					ND	
74 Dibromomethane	93		8.585					ND	
75 n-Propyl acetate	61		8.646					ND	
76 Dichlorobromomethane	83		8.823					ND	
77 2-Nitropropane	41		9.110					ND	
78 Chloroacetonitrile	75		9.189					ND	
79 2-Chloroethyl vinyl ether	63		9.195					ND	
80 1-Bromo-2-chloroethane	63		9.213					ND	
81 cis-1,3-Dichloropropene	75		9.378					ND	
82 4-Methyl-2-pentanone (MIBK)	43		9.555					ND	
\$ 83 Toluene-d8 (Surr)	98	9.683	9.683	0.000	93	2287125	10.0	9.30	
84 Toluene	92		9.762					ND	
96 trans-1,3-Dichloropropene	75		10.018					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
S 97 1,3-Dichloropropene, Total	100		10.060					ND	7
98 Ethyl methacrylate	69		10.085					ND	
99 1,1,2-Trichloroethane	97		10.225					ND	
100 Tetrachloroethene	166		10.311					ND	
101 1,3-Dichloropropane	76		10.390					ND	
102 2-Hexanone	43		10.445					ND	
103 n-Butyl acetate	43		10.567					ND	
104 Chlorodibromomethane	129		10.603					ND	
105 Ethylene Dibromide	107		10.707					ND	
* 106 Chlorobenzene-d5 (IS)	117	11.140	11.140	0.000	84	1844212	10.0	10.0	
107 1-Chlorohexane	91		11.152					ND	7
108 Chlorobenzene	112		11.170					ND	
S 109 Xylenes, Total	106		11.245					ND	7
110 1,1,1,2-Tetrachloroethane	131		11.250					ND	
111 Ethylbenzene	91		11.256					ND	
112 m-Xylene & p-Xylene	106		11.371					ND	
113 o-Xylene	106		11.701					ND	
114 Styrene	104		11.713					ND	
115 Bromoform	173		11.871					ND	
116 Isopropylbenzene	105		11.999					ND	
117 cis-1,4-Dichloro-2-butene	88		12.054					ND	U
118 Cyclohexanone	55		12.085					ND	U
\$ 119 4-Bromofluorobenzene (Surr)	95	12.140	12.140	0.000	94	836982	10.0	8.91	
120 1,1,2,2-Tetrachloroethane	83		12.243					ND	
121 Bromobenzene	156		12.255					ND	
122 trans-1,4-Dichloro-2-butene	53		12.268					ND	
123 1,2,3-Trichloropropane	110		12.292					ND	
124 N-Propylbenzene	91		12.329					ND	
125 2-Chlorotoluene	126		12.402					ND	
126 1,3,5-Trimethylbenzene	105		12.463					ND	
127 4-Chlorotoluene	126		12.493					ND	
128 tert-Butylbenzene	134		12.700					ND	
129 Pentachloroethane	167		12.737					ND	
130 1,2,4-Trimethylbenzene	105		12.743					ND	
131 sec-Butylbenzene	105		12.865					ND	
132 1,3-Dichlorobenzene	146		12.963					ND	7
133 4-Isopropyltoluene	119		12.969					ND	
* 134 1,4-Dichlorobenzene-d4	152	13.017	13.017	0.000	94	1028422	10.0	10.0	
135 1,4-Dichlorobenzene	146		13.036					ND	7
136 1,2,3-Trimethylbenzene	120		13.048					ND	7
137 Benzyl chloride	126		13.115					ND	
138 p-Diethylbenzene	119		13.170					ND	
139 n-Butylbenzene	92		13.261					ND	
140 1,2-Dichlorobenzene	146		13.298					ND	
141 Hexachloroethane	201		13.505					ND	
142 1,2-Dibromo-3-Chloropropane	155		13.834					ND	
143 1,3,5-Trichlorobenzene	180		13.956					ND	7
144 1,2,4-Trichlorobenzene	180		14.377					ND	7
145 Hexachlorobutadiene	225		14.456					ND	
146 Naphthalene	128		14.560					ND	7
147 1,2,3-Trichlorobenzene	180		14.700					ND	7
148 2-Methylnaphthalene	142	15.316	15.316	0.000	94	4813		0.0306	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
149 1,1-Dichloro-1-fluoroethane	1		0.000					ND	
150 2-Bromo-1-chloropropane	1		0.000					ND	
151 1-Chloropropane	1		0.000					ND	
152 1-Bromo-3-Chloropropane	1		0.000					ND	
153 Propene oxide	1		0.000					ND	
154 n-Decane	57		0.000					ND	
155 Methylal	1		0.000					ND	
156 Dodecane	57		0.000					ND	
157 tert-Butyl Formate	1		0.000					ND	
158 1,3-Dichloro-2-propanol TIC	1		0.000					ND	
159 Propargyl alcohol TIC	1		0.000					ND	
160 Pentane	43		0.000					ND	
161 1,1-Dichloroacetone	1		0.000					ND	
162 Pentachloroethane TIC	1		0.000					ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

MSV_29_826ISS_00017

Amount Added: 1.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\GA30B01.D

Injection Date: 30-Apr-2021 10:37:30

Instrument ID: 16334

Operator ID: jml01693

Lims ID: MB

Worklist Smp#: 7

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

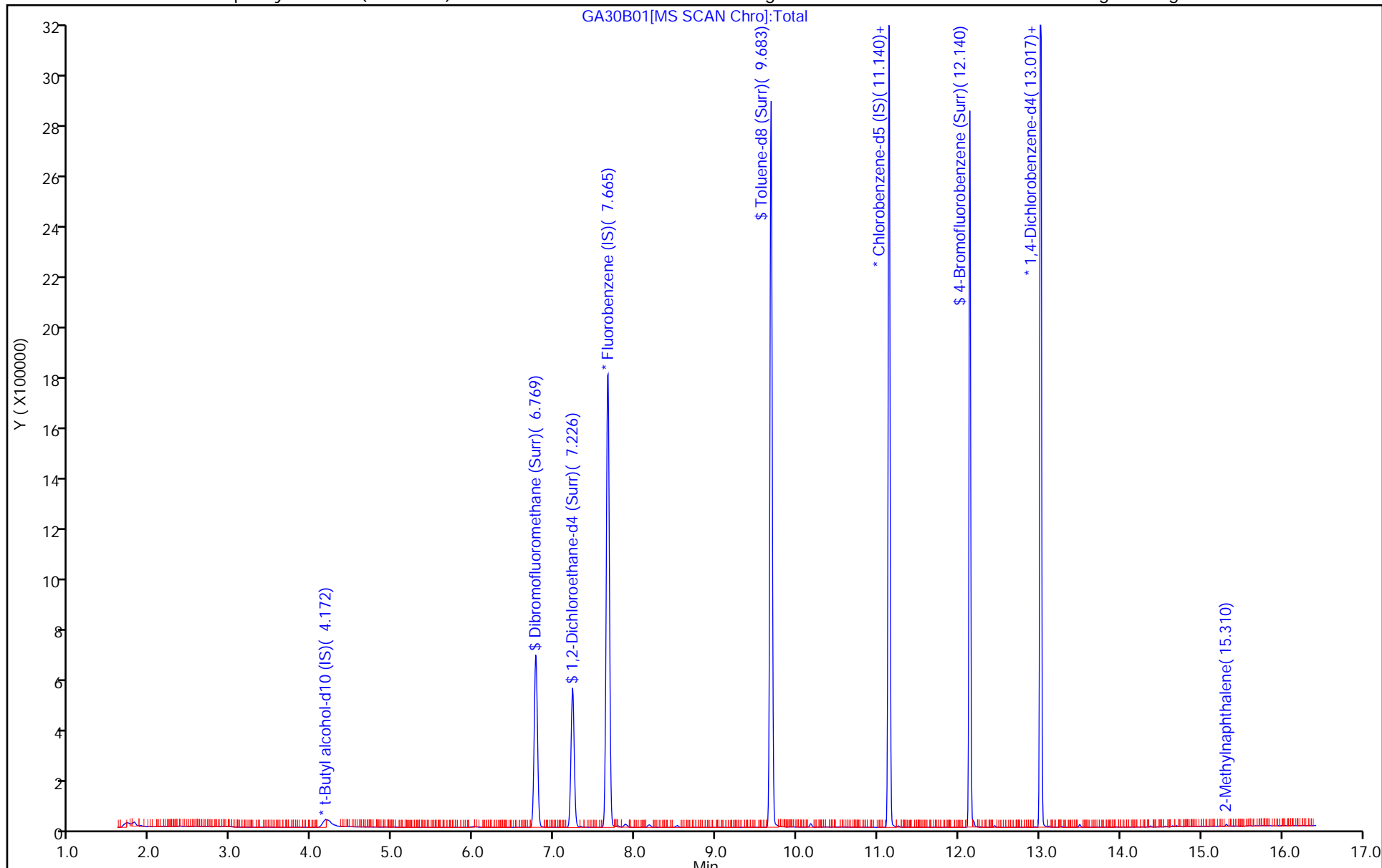
ALS Bottle#: 7

Method: MSV_16334_25mL

Limit Group: MSV - 8260C_D

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

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\GA30B01.D
 Lims ID: MB
 Client ID:
 Sample Type: MB
 Inject. Date: 30-Apr-2021 10:37:30 ALS Bottle#: 7 Worklist Smp#: 7
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0028091-007
 Misc. Info.: MB
 Operator ID: jml01693 Instrument ID: 16334
 Method: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\MSV_16334_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 30-Apr-2021 11:15:15 Calib Date: 30-Nov-2020 18:23:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1624

First Level Reviewer: longj Date: 30-Apr-2021 11:15:15

Compound	Amount Added	Amount Recovered	% Rec.
\$ 52 Dibromofluoromethane (Surr)	10.0	10.2	101.52
\$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	10.0	100.02
\$ 83 Toluene-d8 (Surr)	10.0	9.30	92.95
\$ 119 4-Bromofluorobenzene (Surr)	10.0	8.91	89.09

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-37501-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 410-120935/4
 Matrix: Water Lab File ID: IA30X03.D
 Analysis Method: 8260D Date Collected: _____
 Sample wt/vol: 25 (mL) Date Analyzed: 04/30/2021 10:36
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: R-624SilMS 30m ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 120935 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	4.47		0.50	0.070
71-55-6	1,1,1-Trichloroethane	4.55		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	5.39		0.50	0.070
79-00-5	1,1,2-Trichloroethane	5.11		0.50	0.060
75-34-3	1,1-Dichloroethane	4.66		0.50	0.070
75-35-4	1,1-Dichloroethene	4.69		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	5.07		0.50	0.060
107-06-2	1,2-Dichloroethane	5.15		0.50	0.050
78-87-5	1,2-Dichloropropane	4.89		0.50	0.060
78-93-3	2-Butanone (MEK)	35.4		5.0	0.60
591-78-6	2-Hexanone	23.1		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	22.1		5.0	0.70
67-64-1	Acetone	30.9		5.0	0.90
71-43-2	Benzene	4.72		0.50	0.050
74-97-5	Bromochloromethane	4.51		0.50	0.050
75-27-4	Bromodichloromethane	4.74		0.50	0.050
75-25-2	Bromoform	3.91		1.0	0.30
74-83-9	Bromomethane	4.34		0.50	0.070
75-15-0	Carbon disulfide	4.36		1.0	0.060
56-23-5	Carbon tetrachloride	4.49		0.50	0.070
108-90-7	Chlorobenzene	4.82		0.50	0.060
75-00-3	Chloroethane	4.33		0.50	0.070
67-66-3	Chloroform	4.80		0.50	0.090
74-87-3	Chloromethane	4.67		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	4.64		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	4.55		0.50	0.050
124-48-1	Dibromochloromethane	4.57		0.50	0.070
100-41-4	Ethylbenzene	4.67		0.50	0.060
1634-04-4	Methyl tert-butyl ether	4.27		0.50	0.050
75-09-2	Methylene Chloride	4.68		0.50	0.070
100-42-5	Styrene	4.61		0.50	0.050
127-18-4	Tetrachloroethene	4.66		0.50	0.060
108-88-3	Toluene	4.65		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	4.50		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	4.86		0.50	0.060
79-01-6	Trichloroethene	4.78		0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-37501-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 410-120935/4
 Matrix: Water Lab File ID: IA30X03.D
 Analysis Method: 8260D Date Collected: _____
 Sample wt/vol: 25 (mL) Date Analyzed: 04/30/2021 10:36
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: R-624SilMS 30m ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 120935 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-01-4	Vinyl chloride	4.69		0.50	0.10
1330-20-7	Xylenes, Total	13.7		1.0	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		80-120
460-00-4	4-Bromofluorobenzene (Surr)	96		80-120
1868-53-7	Dibromofluoromethane (Surr)	98		80-120
2037-26-5	Toluene-d8 (Surr)	100		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210430-28080.b\IA30X03.D
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 30-Apr-2021 10:36:30 ALS Bottle#: 3 Worklist Smp#: 4
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0028080-004
 Misc. Info.: LCS
 Operator ID: SRK36897 Instrument ID: 19930
 Method: \\chromfs\Lancaster\ChromData\19930\20210430-28080.b\8260 25ml HP31.m
 Limit Group: MSV - 8260C_D
 Last Update: 30-Apr-2021 13:12:07 Calib Date: 26-Mar-2021 01:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25107.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1683

First Level Reviewer: knouses

Date: 30-Apr-2021 11:45:44

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	282895	5.00	4.90	
4 Chloromethane	50	2.172	2.178	-0.006	99	328455	5.00	4.67	M
5 Vinyl chloride	62	2.282	2.288	-0.006	98	298002	5.00	4.69	
6 Butadiene	39	2.318	2.318	0.000	95	475927	5.00	7.65	
7 Bromomethane	94	2.642	2.642	0.000	91	200449	5.00	4.34	M
8 Chloroethane	64	2.733	2.745	-0.012	99	172470	5.00	4.33	
9 Dichlorofluoromethane	67	2.977	2.983	-0.006	97	344292	5.00	5.27	
10 Trichlorofluoromethane	101	3.019	3.032	-0.013	98	417649	5.00	4.68	
11 Ethyl ether	59	3.269	3.276	-0.007	93	206865	5.02	4.80	
12 1,2-Dichloro-1,1,2-trifluoroethane	67	3.379	3.391	-0.012	94	316553	5.00	4.75	M
13 Acrolein	56	3.452	3.446	0.006	98	203199	37.5	23.7	
14 1,1-Dichloroethene	96	3.611	3.611	0.000	96	225637	5.00	4.69	
15 Acetone	43	3.617	3.623	-0.006	99	346953	37.5	30.9	
16 112TCTFE	101	3.641	3.648	-0.007	93	229554	5.00	4.23	
17 Iodomethane	142	3.824	3.824	0.000	99	428452	5.00	4.49	M
18 Ethyl bromide	108	3.818	3.830	-0.012	98	189039	5.03	4.34	M
19 Carbon disulfide	76	3.940	3.946	-0.006	100	620576	5.00	4.36	
21 Methyl acetate	43	4.038	4.044	-0.006	99	155682	5.00	4.22	M
22 3-Chloro-1-propene	41	4.074	4.074	0.000	90	417129	5.00	4.24	
23 Methylene Chloride	84	4.269	4.269	0.000	95	252893	5.00	4.68	
* 24 t-Butyl alcohol-d10 (IS)	65	4.288	4.275	0.013	0	173466	50.0	50.0	
25 2-Methyl-2-propanol	59	4.397	4.397	0.000	99	171882	50.0	42.5	
26 Acrylonitrile	53	4.592	4.605	-0.013	100	298685	25.0	21.6	
27 Methyl tert-butyl ether	73	4.678	4.678	0.000	96	602029	5.00	4.27	
28 trans-1,2-Dichloroethene	96	4.684	4.690	-0.006	97	246751	5.00	4.50	
29 Hexane	57	5.104	5.105	-0.001	95	440526	5.00	4.93	
31 1,1-Dichloroethane	63	5.336	5.336	0.000	96	493938	5.00	4.66	
32 Isopropyl ether	45	5.391	5.397	-0.006	95	913347	5.00	4.65	
33 2-Chloro-1,3-butadiene	53	5.440	5.446	-0.006	92	451489	5.00	4.84	
34 Tert-butyl ethyl ether	59	5.921	5.928	-0.007	98	782713	5.00	4.38	
36 2-Butanone (MEK)	43	6.129	6.129	0.000	100	699516	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	6.165	6.165	0.000	83	293799	5.00	4.64	
38 2,2-Dichloropropane	77	6.184	6.184	0.000	87	383047	5.00	4.18	
40 Propionitrile	54	6.220	6.214	0.006	99	169086	37.5	36.0	
42 Methacrylonitrile	67	6.433	6.434	-0.001	94	595966	37.5	32.9	
43 Chlorobromomethane	128	6.494	6.495	0.000	96	127346	5.00	4.51	
44 Tetrahydrofuran	71	6.507	6.501	0.006	91	116145	25.0	22.3	
45 Chloroform	83	6.641	6.641	0.000	94	484261	5.00	4.80	
\$ 46 Dibromofluoromethane (Surr)	113	6.854	6.854	0.000	93	457082	10.0	9.82	
47 1,1,1-Trichloroethane	97	6.866	6.872	-0.006	99	417352	5.00	4.55	
48 Cyclohexane	56	6.970	6.976	-0.006	92	480710	5.00	4.50	
51 1,1-Dichloropropene	75	7.080	7.080	0.000	95	376155	5.00	4.63	
50 Carbon tetrachloride	117	7.086	7.086	0.000	94	361175	5.00	4.49	
52 Isobutyl alcohol	41	7.226	7.226	0.000	94	175588	125.0	120.4	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.305	7.311	-0.006	0	95220	10.0	10.4	
54 Benzene	78	7.336	7.342	-0.006	98	1125573	5.00	4.72	
56 1,2-Dichloroethane	62	7.409	7.409	0.000	97	328297	5.00	5.15	
57 Tert-amyl methyl ether	73	7.525	7.531	-0.006	98	692105	5.00	4.43	
* 58 Fluorobenzene (IS)	96	7.738	7.738	0.000	98	1851623	10.0	10.0	
59 n-Heptane	43	7.750	7.750	0.000	96	474268	5.00	4.69	
60 n-Butanol	56	8.098	8.092	0.006	91	272450	250.0	215.2	
61 Trichloroethene	95	8.214	8.220	-0.006	98	296686	5.00	4.78	
62 Methylcyclohexane	83	8.531	8.531	0.000	93	478996	5.00	4.38	
63 1,2-Dichloropropane	63	8.549	8.549	0.000	86	301932	5.00	4.89	
64 Methyl methacrylate	69	8.628	8.628	0.000	93	154839	5.00	4.31	
65 1,4-Dioxane	88	8.634	8.634	0.000	34	34913	125.0	144.2	M
66 Dibromomethane	93	8.659	8.659	0.000	96	141543	5.00	5.05	
68 Dichlorobromomethane	83	8.890	8.890	0.000	99	347621	5.00	4.74	
69 2-Nitropropane	41	9.152	9.159	-0.007	98	46036	5.00	4.10	
71 2-Chloroethyl vinyl ether	63		9.250				ND	ND	
72 1-Bromo-2-chloroethane	63	9.280	9.287	-0.007	99	317559	5.00	5.52	
73 cis-1,3-Dichloropropene	75	9.433	9.433	0.000	95	417755	5.00	4.55	
74 4-Methyl-2-pentanone (MIBK)	43	9.597	9.598	-0.001	98	1123655	25.0	22.1	
\$ 75 Toluene-d8 (Surr)	98	9.738	9.738	0.000	94	1849451	10.0	10.0	
76 Toluene	92	9.817	9.817	0.000	98	706627	5.00	4.65	
78 trans-1,3-Dichloropropene	75	10.067	10.067	0.000	94	359783	5.00	4.86	
79 Ethyl methacrylate	69	10.128	10.128	0.000	90	323078	5.00	5.08	
80 1,1,2-Trichloroethane	97	10.274	10.274	0.000	91	209823	5.00	5.11	
81 Tetrachloroethene	166	10.366	10.366	0.000	98	336546	5.00	4.66	
82 1,3-Dichloropropane	76	10.433	10.433	0.000	92	371489	5.00	5.14	
83 2-Hexanone	43	10.481	10.482	-0.001	99	822954	25.0	23.1	
85 Chlorodibromomethane	129	10.652	10.646	0.006	90	239094	5.00	4.57	
86 Ethylene Dibromide	107	10.762	10.762	0.000	97	203697	5.00	5.07	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.189	0.000	87	1411051	10.0	10.0	
88 1-Chlorohexane	91	11.195	11.195	0.000	98	402885	5.00	4.34	
90 Chlorobenzene	112	11.213	11.213	0.000	94	808827	5.00	4.82	
91 1,1,1,2-Tetrachloroethane	131	11.292	11.292	0.000	95	271571	5.00	4.47	
92 Ethylbenzene	91	11.298	11.298	0.000	98	1388849	5.00	4.67	
93 m-Xylene & p-Xylene	106	11.414	11.414	0.000	99	1071951	10.0	9.19	
94 o-Xylene	106	11.743	11.743	0.000	97	512662	5.00	4.49	
95 Styrene	104	11.756	11.756	0.000	95	857824	5.00	4.61	
96 Bromoform	173	11.914	11.914	0.000	97	129400	5.00	3.91	
97 Isopropylbenzene	105	12.042	12.042	0.000	96	1312742	5.00	4.32	

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	12.182	12.182	0.000	91	671030	10.0	9.56	
101 1,1,2,2-Tetrachloroethane	83	12.286	12.280	0.006	94	257016	5.00	5.39	
102 Bromobenzene	156	12.304	12.304	0.000	96	326657	5.00	4.97	
103 trans-1,4-Dichloro-2-butene	53	12.310	12.310	0.000	86	141002	25.0	8.04	
104 1,2,3-Trichloropropane	110	12.329	12.329	0.000	84	68639	5.00	5.41	
105 N-Propylbenzene	91	12.371	12.371	0.000	99	1603486	5.00	4.97	
106 2-Chlorotoluene	126	12.444	12.445	-0.001	97	320966	5.00	4.89	
107 1,3,5-Trimethylbenzene	105	12.505	12.506	-0.001	94	1084971	5.00	4.67	
108 4-Chlorotoluene	126	12.536	12.536	0.000	98	327595	5.00	4.89	
109 tert-Butylbenzene	134	12.749	12.743	0.006	94	239625	5.00	4.63	
110 Pentachloroethane	167	12.780	12.780	0.000	93	196147	5.00	4.59	
111 1,2,4-Trimethylbenzene	105	12.786	12.786	0.000	97	1103254	5.00	4.63	
112 sec-Butylbenzene	105	12.908	12.908	0.000	94	1426787	5.00	4.68	
113 1,3-Dichlorobenzene	146	13.011	13.012	-0.001	98	606209	5.00	4.65	
114 4-Isopropyltoluene	119	13.018	13.018	0.000	97	1204246	5.00	4.64	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	95	719110	10.0	10.0	
116 1,4-Dichlorobenzene	146	13.085	13.085	0.000	95	624559	5.00	4.79	
117 1,2,3-Trimethylbenzene	120	13.091	13.091	0.000	99	491256	5.00	4.77	
118 Benzyl chloride	126	13.158	13.158	0.000	99	93750	5.00	4.37	
119 n-Butylbenzene	92	13.310	13.310	0.000	98	581170	5.00	4.61	
120 1,2-Dichlorobenzene	146	13.341	13.341	0.000	98	554082	5.00	4.67	
122 1,2-Dibromo-3-Chloropropane	155	13.883	13.883	0.000	85	34744	5.00	4.67	
123 1,3,5-Trichlorobenzene	180	14.011	14.011	0.000	97	419028	5.00	4.42	
124 1,2,4-Trichlorobenzene	180	14.432	14.432	0.000	94	371791	5.00	4.70	
125 Hexachlorobutadiene	225	14.517	14.517	0.000	96	152414	5.00	4.31	
126 Naphthalene	128	14.615	14.615	0.000	97	738983	5.00	4.93	
127 1,2,3-Trichlorobenzene	180	14.755	14.755	0.000	95	327313	5.00	4.75	
137 2-Methylnaphthalene	142		0.000				ND	ND	
135 p-Diethylbenzene	1		0.000				ND	ND	
144 2-ethoxy-2-methyl butane	1		0.000				ND	ND	
204 Pentane	43		0.000				ND	ND	
134 Isopropyl alcohol	45		0.000				ND	ND	

QC Flag Legend

Processing Flags

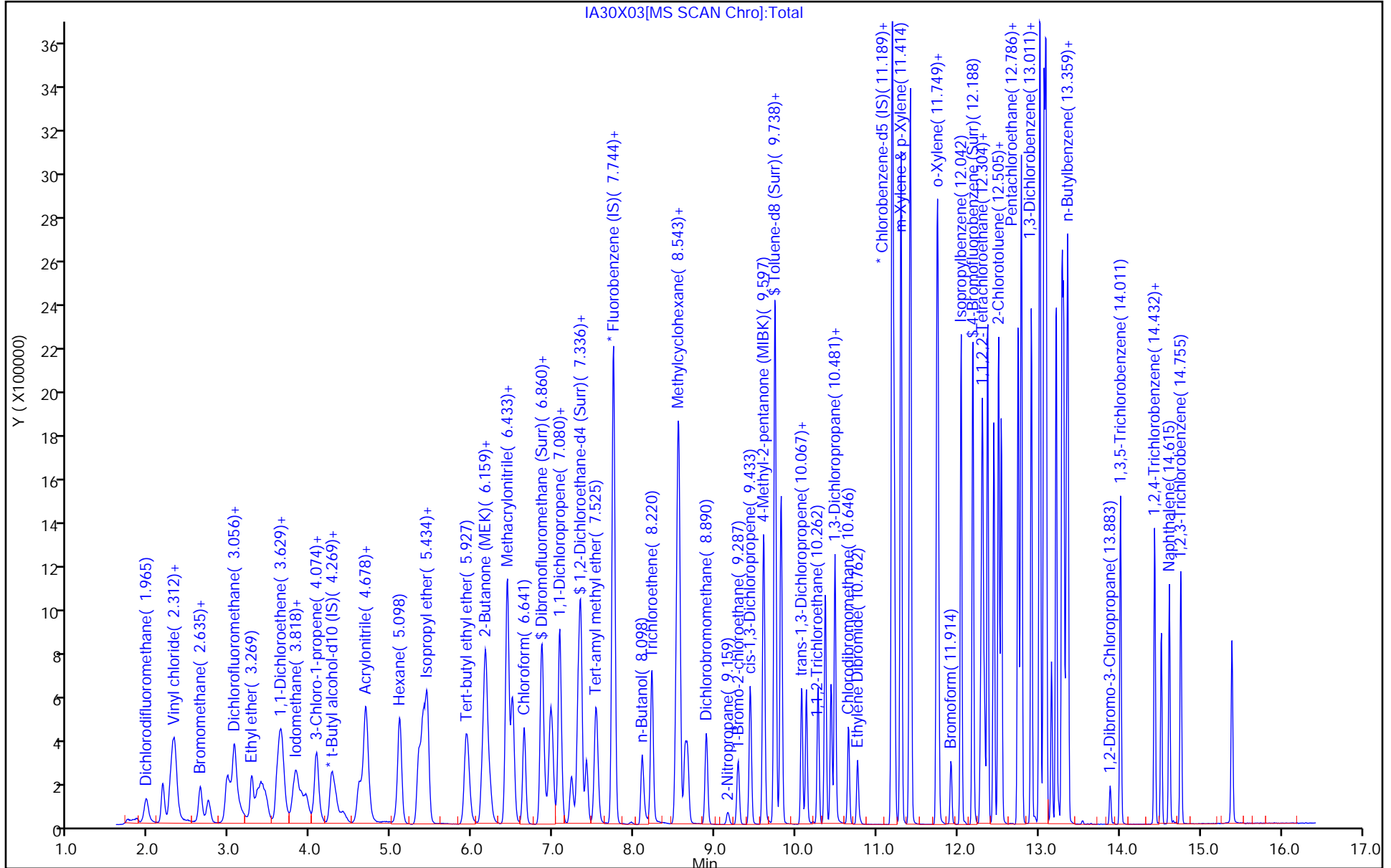
ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

MSV_Q_QVOA1_00080	Amount Added: 25.00	Units: uL	
MSV_Q_QVOA6_00076	Amount Added: 25.00	Units: uL	
MSV_Q_ETBR_00006	Amount Added: 25.00	Units: uL	
MSV_Q_QARC_00079	Amount Added: 25.00	Units: uL	
MSV_Q_EE_00004	Amount Added: 25.00	Units: uL	
MSV_QGAS_826_00125	Amount Added: 25.00	Units: uL	
MSV_31_826ISS_00004	Amount Added: 5.00	Units: uL	Run Reagent



Eurofins Lancaster Laboratories Env, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210430-28080.b\A30X03.D
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 30-Apr-2021 10:36:30 ALS Bottle#: 3 Worklist Smp#: 4
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0028080-004
 Misc. Info.: LCS
 Operator ID: SRK36897 Instrument ID: 19930
 Method: \\chromfs\Lancaster\ChromData\19930\20210430-28080.b\8260 25ml HP31.m
 Limit Group: MSV - 8260C_D
 Last Update: 30-Apr-2021 13:12:07 Calib Date: 26-Mar-2021 01:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I07.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1683

First Level Reviewer: knouses

Date: 30-Apr-2021 11:45:44

Compound	Amount Added	Amount Recovered	% Rec.
\$ 46 Dibromofluoromethane (Surr)	10.0	9.82	98.17
\$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	10.4	104.49
\$ 75 Toluene-d8 (Surr)	10.0	10.0	100.15
\$ 100 4-Bromofluorobenzene (Surr)	10.0	9.56	95.64

Euofins Lancaster Laboratories Env, LLC

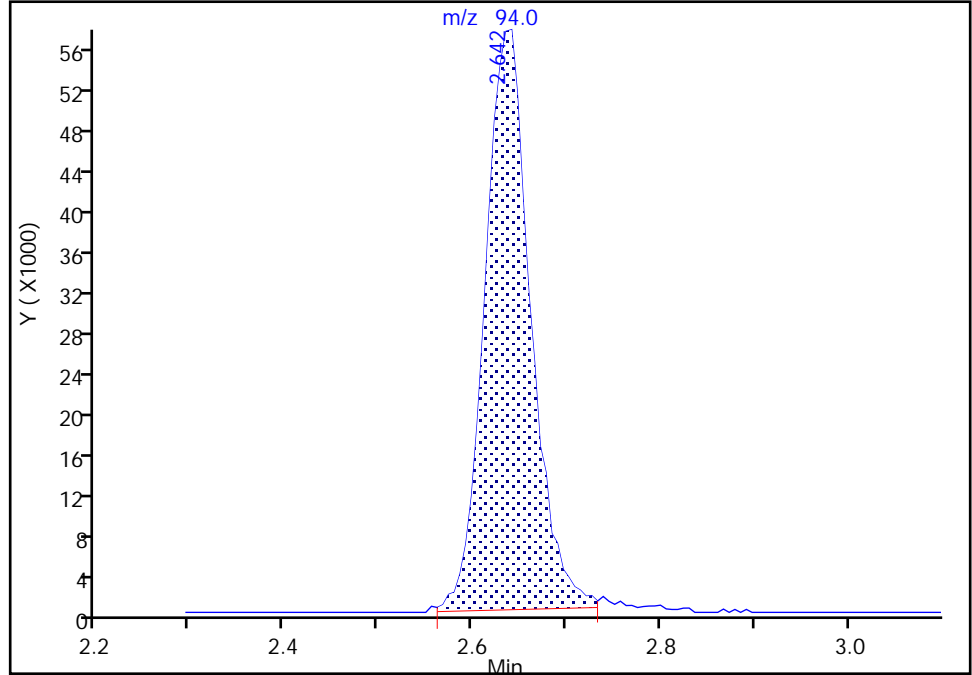
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Injection Date: 30-Apr-2021 10:36:30 Instrument ID: 19930
Lims ID: LCS
Client ID:
Operator ID: SRK36897 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

7 Bromomethane, CAS: 74-83-9

Signal: 1

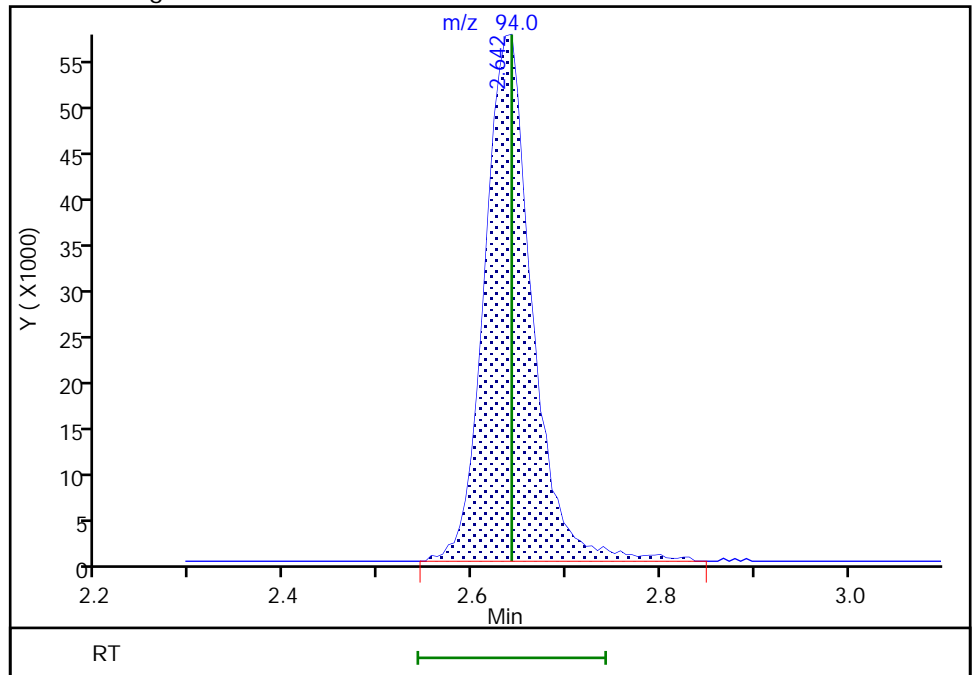
RT: 2.64
Area: 193409
Amount: 4.191061
Amount Units: ug/l

Processing Integration Results



RT: 2.64
Area: 200449
Amount: 4.343614
Amount Units: ug/l

Manual Integration Results



Reviewer: knouses, 30-Apr-2021 11:43:49
Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins Lancaster Laboratories Env, LLC

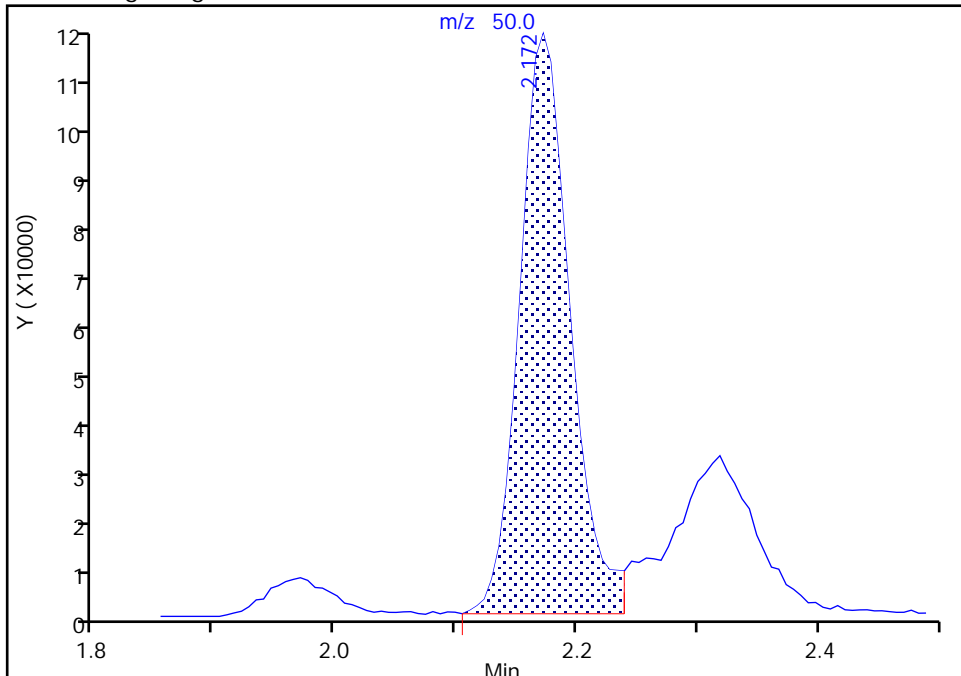
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Injection Date: 30-Apr-2021 10:36:30 Instrument ID: 19930
Lims ID: LCS
Client ID:
Operator ID: SRK36897 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

4 Chloromethane, CAS: 74-87-3

Signal: 1

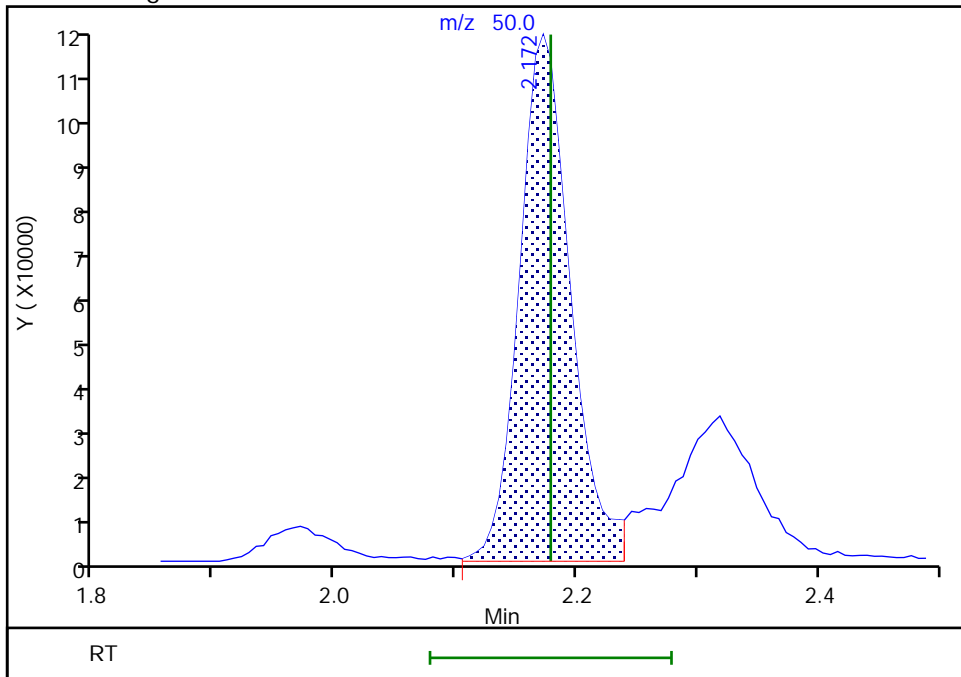
RT: 2.17
Area: 324249
Amount: 4.613366
Amount Units: ug/l

Processing Integration Results



RT: 2.17
Area: 328455
Amount: 4.673209
Amount Units: ug/l

Manual Integration Results



Reviewer: knouses, 30-Apr-2021 11:43:33
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-37501-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 410-120958/4
 Matrix: Water Lab File ID: GA30L01.D
 Analysis Method: 8260D Date Collected: _____
 Sample wt/vol: 25 (mL) Date Analyzed: 04/30/2021 09:29
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: R-624SilMS 30m ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 120958 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	4.79		0.50	0.070
71-55-6	1,1,1-Trichloroethane	4.59		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	4.42		0.50	0.070
79-00-5	1,1,2-Trichloroethane	4.82		0.50	0.060
75-34-3	1,1-Dichloroethane	4.22		0.50	0.070
75-35-4	1,1-Dichloroethene	4.74		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	4.60		0.50	0.060
107-06-2	1,2-Dichloroethane	4.28		0.50	0.050
78-87-5	1,2-Dichloropropane	4.37		0.50	0.060
78-93-3	2-Butanone (MEK)	38.4		5.0	0.60
591-78-6	2-Hexanone	25.6		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	24.9		5.0	0.70
67-64-1	Acetone	36.8		5.0	0.90
71-43-2	Benzene	4.46		0.50	0.050
74-97-5	Bromochloromethane	4.83		0.50	0.050
75-27-4	Bromodichloromethane	4.54		0.50	0.050
75-25-2	Bromoform	4.69		1.0	0.30
74-83-9	Bromomethane	4.81		0.50	0.070
75-15-0	Carbon disulfide	4.33		1.0	0.060
56-23-5	Carbon tetrachloride	4.67		0.50	0.070
108-90-7	Chlorobenzene	4.75		0.50	0.060
75-00-3	Chloroethane	4.38		0.50	0.070
67-66-3	Chloroform	4.60		0.50	0.090
74-87-3	Chloromethane	4.28		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	4.71		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	4.04		0.50	0.050
124-48-1	Dibromochloromethane	4.60		0.50	0.070
100-41-4	Ethylbenzene	4.47		0.50	0.060
1634-04-4	Methyl tert-butyl ether	4.32		0.50	0.050
75-09-2	Methylene Chloride	4.69		0.50	0.070
100-42-5	Styrene	4.56		0.50	0.050
127-18-4	Tetrachloroethene	4.91		0.50	0.060
108-88-3	Toluene	4.44		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	4.62		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	4.03		0.50	0.060
79-01-6	Trichloroethene	4.71		0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-37501-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 410-120958/4
 Matrix: Water Lab File ID: GA30L01.D
 Analysis Method: 8260D Date Collected: _____
 Sample wt/vol: 25 (mL) Date Analyzed: 04/30/2021 09:29
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: R-624SilMS 30m ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 120958 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-01-4	Vinyl chloride	4.53		0.50	0.10
1330-20-7	Xylenes, Total	13.7		1.0	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		80-120
460-00-4	4-Bromofluorobenzene (Surr)	90		80-120
1868-53-7	Dibromofluoromethane (Surr)	101		80-120
2037-26-5	Toluene-d8 (Surr)	93		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\GA30L01.D
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 30-Apr-2021 09:29:30 ALS Bottle#: 4 Worklist Smp#: 4
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0028091-004
 Misc. Info.: LCS
 Operator ID: jml01693 Instrument ID: 16334
 Method: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\MSV_16334_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 30-Apr-2021 10:15:06 Calib Date: 30-Nov-2020 18:23:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1624

First Level Reviewer: longj

Date: 30-Apr-2021 10:15:06

Compound	Sig	RT (min.)	Exp RT (min.)	Diff RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.947	1.953	-0.007	99	287384	5.00	4.40	
5 Chloromethane	50	2.142	2.148	-0.006	99	377484	5.00	4.28	
7 Butadiene	39	2.257	2.257	0.000	91	514964	5.00	5.13	
8 Vinyl chloride	62	2.257	2.263	-0.006	98	340950	5.00	4.53	
9 Bromomethane	94	2.587	2.587	0.000	90	252268	5.00	4.81	
10 Chloroethane	64	2.666	2.666	0.000	100	200010	5.00	4.38	
12 Dichlorofluoromethane	67	2.904	2.910	-0.006	97	395821	5.00	3.87	
13 Trichlorofluoromethane	101	2.965	2.971	-0.006	98	439159	5.00	5.07	
15 Ethyl ether	59	3.196	3.196	0.000	91	215771	5.02	4.22	
17 1,2-Dichloro-1,1,2-trifluoroethane	67	3.306	3.300	0.006	94	313208	5.00	4.42	
18 Acrolein	56	3.373	3.373	0.000	100	239400	37.5	35.6	
19 1,1-Dichloroethene	96	3.519	3.513	0.006	97	248431	5.00	4.74	
21 Acetone	43	3.538	3.538	0.000	99	320381	37.5	36.8	
20 112TCTFE	101	3.556	3.550	0.006	92	266894	5.00	5.21	
22 Isopropyl alcohol	45	3.714	3.708	0.006	30	51303	37.5	25.7	
23 Iodomethane	142	3.708	3.708	0.000	98	499105	5.00	5.10	
24 Ethyl bromide	108	3.727	3.727	0.000	98	211003	5.03	4.63	
25 Carbon disulfide	76	3.830	3.830	0.000	99	835649	5.00	4.33	
27 Methyl acetate	43	3.952	3.952	0.000	97	113919	5.00	4.32	
28 3-Chloro-1-propene	41	3.971	3.977	-0.007	93	370820	5.00	3.54	
29 Methylene Chloride	84	4.159	4.166	-0.007	90	281398	5.00	4.69	
* 30 t-Butyl alcohol-d10 (IS)	65	4.172	4.178	-0.006	0	177425	50.0	50.0	
31 2-Methyl-2-propanol	59	4.294	4.300	-0.006	99	145203	50.0	45.5	
32 Acrylonitrile	53	4.507	4.507	0.000	99	314019	25.0	27.9	
33 Methyl tert-butyl ether	73	4.568	4.562	0.006	90	719426	5.00	4.32	
34 trans-1,2-Dichloroethene	96	4.562	4.568	-0.006	99	278678	5.00	4.62	
35 Hexane	57	4.995	4.995	0.000	91	389170	5.00	4.43	
37 1,1-Dichloroethane	63	5.232	5.239	-0.007	96	472222	5.00	4.22	
38 Isopropyl ether	45	5.293	5.293	0.000	94	899658	5.00	3.95	
39 2-Chloro-1,3-butadiene	53	5.342	5.348	-0.006	90	409546	5.00	4.02	
40 Tert-butyl ethyl ether	59	5.830	5.830	0.000	98	859873	5.00	4.14	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
41 2-Butanone (MEK)	43	6.049	6.049	0.000	99	619213	37.5	38.4	
42 cis-1,2-Dichloroethene	96	6.074	6.074	0.000	80	318996	5.00	4.71	
43 2,2-Dichloropropane	77	6.086	6.092	-0.006	85	393084	5.00	4.19	
45 Propionitrile	54	6.147	6.141	0.006	98	161133	37.5	40.3	
48 Methacrylonitrile	67	6.354	6.354	0.000	91	621042	37.5	41.9	
49 Chlorobromomethane	128	6.403	6.403	0.000	94	145694	5.00	4.83	
50 Tetrahydrofuran	71	6.409	6.415	-0.006	85	122412	25.0	29.3	
51 Chloroform	83	6.555	6.561	-0.006	93	495792	5.00	4.60	
\$ 52 Dibromofluoromethane (Surr)	113	6.775	6.775	0.000	94	615581	10.0	10.1	
53 1,1,1-Trichloroethane	97	6.781	6.787	-0.006	97	423570	5.00	4.59	
54 Cyclohexane	56	6.878	6.878	0.000	89	457042	5.00	4.31	
56 Carbon tetrachloride	117	6.988	6.994	-0.006	95	373265	5.00	4.67	
57 1,1-Dichloropropene	75	6.994	6.994	0.000	98	373708	5.00	4.31	
58 Isobutyl alcohol	41	7.165	7.165	0.000	94	128494	125.0	90.4	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.226	7.232	-0.006	0	125030	10.0	9.66	
60 Benzene	78	7.256	7.263	-0.007	96	1139847	5.00	4.46	
61 1,2-Dichloroethane	62	7.336	7.330	0.006	97	305936	5.00	4.28	
63 Tert-amyl methyl ether	73	7.445	7.452	-0.007	99	783883	5.00	4.28	
* 64 Fluorobenzene (IS)	96	7.665	7.665	0.000	99	2513947	10.0	10.0	
65 n-Heptane	43	7.671	7.677	-0.006	91	408916	5.00	4.12	
67 n-Butanol	56	8.043	8.043	0.000	89	279734	250.0	244.0	
68 Trichloroethene	95	8.140	8.140	0.000	96	307091	5.00	4.71	
69 Methylcyclohexane	83	8.445	8.451	-0.006	89	487730	5.00	4.81	
70 1,2-Dichloropropane	63	8.476	8.476	0.000	95	299033	5.00	4.37	
71 2-ethoxy-2-methyl butane	87	8.482	8.488	-0.006	94	445489	5.00	4.46	
72 Methyl methacrylate	69	8.561	8.567	-0.006	91	157646	5.00	5.22	
73 1,4-Dioxane	88	8.567	8.567	0.000	31	33594	125.0	164.7	M
74 Dibromomethane	93	8.585	8.585	0.000	93	154169	5.00	4.87	
76 Dichlorobromomethane	83	8.823	8.823	0.000	100	359597	5.00	4.54	
77 2-Nitropropane	41	9.110	9.110	0.000	99	39141	5.00	4.57	
79 2-Chloroethyl vinyl ether	63		9.195				ND	ND	
80 1-Bromo-2-chloroethane	63	9.213	9.213	0.000	98	322074	5.00	4.40	
81 cis-1,3-Dichloropropene	75	9.372	9.378	-0.006	97	416035	5.00	4.04	
82 4-Methyl-2-pentanone (MIBK)	43	9.555	9.555	0.000	96	1032658	25.0	24.9	
\$ 83 Toluene-d8 (Surr)	98	9.683	9.683	0.000	93	2365701	10.0	9.33	
84 Toluene	92	9.756	9.762	-0.006	98	731146	5.00	4.44	
96 trans-1,3-Dichloropropene	75	10.018	10.018	0.000	91	358521	5.00	4.03	
98 Ethyl methacrylate	69	10.085	10.085	0.000	88	337274	5.00	4.22	
99 1,1,2-Trichloroethane	97	10.225	10.225	0.000	90	231549	5.00	4.82	
100 Tetrachloroethene	166	10.305	10.311	-0.006	98	350523	5.00	4.91	
101 1,3-Dichloropropane	76	10.390	10.390	0.000	89	385668	5.00	4.45	
102 2-Hexanone	43	10.445	10.445	0.000	97	762732	25.0	25.6	
104 Chlorodibromomethane	129	10.597	10.603	-0.006	90	261879	5.00	4.60	
105 Ethylene Dibromide	107	10.707	10.707	0.000	99	217022	5.00	4.60	
* 106 Chlorobenzene-d5 (IS)	117	11.146	11.140	0.006	84	1900492	10.0	10.0	
107 1-Chlorohexane	91	11.152	11.152	0.000	97	402721	5.00	4.07	
108 Chlorobenzene	112	11.170	11.170	0.000	96	871621	5.00	4.75	
110 1,1,1,2-Tetrachloroethane	131	11.250	11.250	0.000	95	311989	5.00	4.79	
111 Ethylbenzene	91	11.256	11.256	0.000	98	1455687	5.00	4.47	
112 m-Xylene & p-Xylene	106	11.372	11.371	0.001	97	1118568	10.0	9.12	
113 o-Xylene	106	11.701	11.701	0.000	96	554479	5.00	4.56	
114 Styrene	104	11.713	11.713	0.000	94	946126	5.00	4.56	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
115 Bromoform	173	11.871	11.871	0.000	98	155887	5.00	4.69	
116 Isopropylbenzene	105	11.999	11.999	0.000	95	1395182	5.00	4.39	
\$ 119 4-Bromofluorobenzene (Surr)	95	12.140	12.140	0.000	94	874522	10.0	9.03	
120 1,1,2,2-Tetrachloroethane	83	12.243	12.243	0.000	94	296943	5.00	4.42	
121 Bromobenzene	156	12.255	12.255	0.000	91	390783	5.00	4.84	
122 trans-1,4-Dichloro-2-butene	53	12.268	12.268	0.000	90	162804	25.0	12.7	
123 1,2,3-Trichloropropane	110	12.292	12.292	0.000	83	79075	5.00	4.62	
124 N-Propylbenzene	91	12.329	12.329	0.000	99	1734079	5.00	4.31	
125 2-Chlorotoluene	126	12.402	12.402	0.000	97	374546	5.00	4.73	
126 1,3,5-Trimethylbenzene	105	12.463	12.463	0.000	94	1225214	5.00	4.32	
127 4-Chlorotoluene	126	12.493	12.493	0.000	97	383939	5.00	4.66	
128 tert-Butylbenzene	134	12.701	12.700	0.000	92	270825	5.00	4.47	
129 Pentachloroethane	167	12.737	12.737	0.000	92	233073	5.00	4.47	
130 1,2,4-Trimethylbenzene	105	12.743	12.743	0.000	97	1281023	5.00	4.32	
131 sec-Butylbenzene	105	12.865	12.865	0.000	94	1610458	5.00	4.36	
132 1,3-Dichlorobenzene	146	12.963	12.963	0.000	99	769508	5.00	4.73	
133 4-Isopropyltoluene	119	12.969	12.969	0.000	97	1426056	5.00	4.45	
* 134 1,4-Dichlorobenzene-d4	152	13.018	13.017	0.001	96	1068976	10.0	10.0	
135 1,4-Dichlorobenzene	146	13.036	13.036	0.000	95	789437	5.00	4.76	
136 1,2,3-Trimethylbenzene	120	13.048	13.048	0.000	98	613519	5.00	4.67	
137 Benzyl chloride	126	13.115	13.115	0.000	98	129804	5.00	4.47	
138 p-Diethylbenzene	119	13.170	13.170	0.000	92	855802	5.00	4.39	
139 n-Butylbenzene	92	13.261	13.261	0.000	97	736575	5.00	4.34	
140 1,2-Dichlorobenzene	146	13.298	13.298	0.000	99	729266	5.00	4.80	
142 1,2-Dibromo-3-Chloropropane	155	13.834	13.834	0.000	90	45856	5.00	4.68	
143 1,3,5-Trichlorobenzene	180	13.956	13.956	0.000	98	669126	5.00	4.91	
144 1,2,4-Trichlorobenzene	180	14.377	14.377	0.000	93	615638	5.00	4.90	
145 Hexachlorobutadiene	225	14.462	14.456	0.006	96	310402	5.00	5.03	
146 Naphthalene	128	14.560	14.560	0.000	97	1065246	5.00	4.66	
147 1,2,3-Trichlorobenzene	180	14.700	14.700	0.000	95	566829	5.00	5.11	
148 2-Methylnaphthalene	142	15.316	15.316	0.000	92	685643	5.00	4.19	
160 Pentane	43		0.000				ND	ND	

QC Flag Legend

Processing Flags

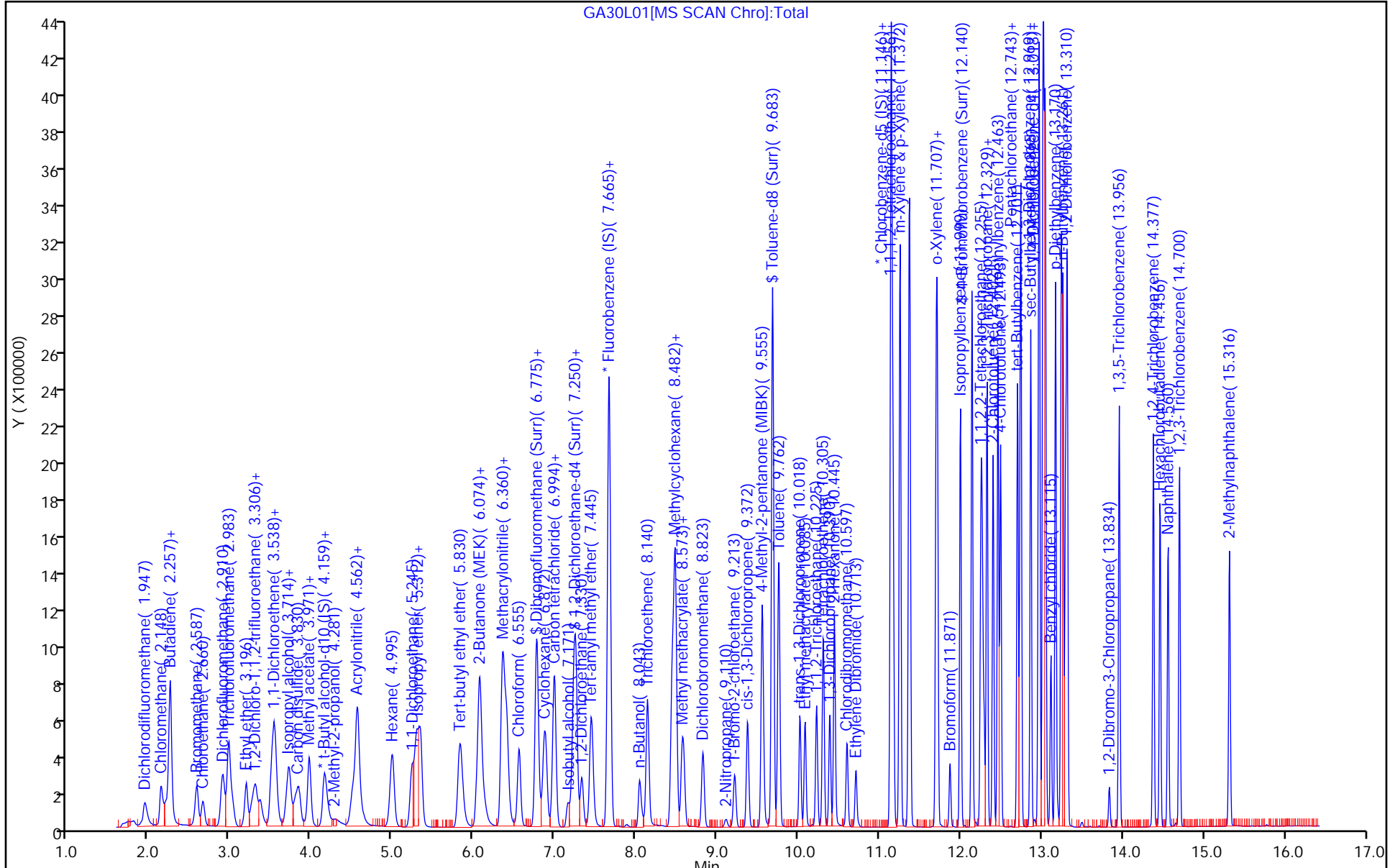
ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

MSV_Q_QVOA1_00080	Amount Added: 25.00	Units: uL	
MSV_Q_QARC_00079	Amount Added: 25.00	Units: uL	
MSV_Q_ETBR_00006	Amount Added: 25.00	Units: uL	
MSV_Q_QVOA6_00076	Amount Added: 25.00	Units: uL	
MSV_Q_EE_00004	Amount Added: 25.00	Units: uL	
MSV_QGAS_826_00124	Amount Added: 25.00	Units: uL	
MSV_29_826ISS_00017	Amount Added: 1.00	Units: uL	Run Reagent



Eurofins Lancaster Laboratories Env, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\GA30L01.D
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 30-Apr-2021 09:29:30 ALS Bottle#: 4 Worklist Smp#: 4
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0028091-004
 Misc. Info.: LCS
 Operator ID: jml01693 Instrument ID: 16334
 Method: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\MSV_16334_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 30-Apr-2021 10:15:06 Calib Date: 30-Nov-2020 18:23:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1624

First Level Reviewer: longj Date: 30-Apr-2021 10:15:06

Compound	Amount Added	Amount Recovered	% Rec.
\$ 52 Dibromofluoromethane (Surr)	10.0	10.1	101.17
\$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	9.66	96.58
\$ 83 Toluene-d8 (Surr)	10.0	9.33	93.30
\$ 119 4-Bromofluorobenzene (Surr)	10.0	9.03	90.33

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-37501-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCSD 410-120935/5
 Matrix: Water Lab File ID: IA30X04.D
 Analysis Method: 8260D Date Collected: _____
 Sample wt/vol: 25 (mL) Date Analyzed: 04/30/2021 10:57
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: R-624SilMS 30m ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 120935 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	4.50		0.50	0.070
71-55-6	1,1,1-Trichloroethane	4.55		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	5.35		0.50	0.070
79-00-5	1,1,2-Trichloroethane	5.02		0.50	0.060
75-34-3	1,1-Dichloroethane	4.75		0.50	0.070
75-35-4	1,1-Dichloroethene	4.67		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	4.86		0.50	0.060
107-06-2	1,2-Dichloroethane	5.05		0.50	0.050
78-87-5	1,2-Dichloropropane	4.98		0.50	0.060
78-93-3	2-Butanone (MEK)	34.7		5.0	0.60
591-78-6	2-Hexanone	23.2		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	22.0		5.0	0.70
67-64-1	Acetone	31.8		5.0	0.90
71-43-2	Benzene	4.75		0.50	0.050
74-97-5	Bromochloromethane	4.54		0.50	0.050
75-27-4	Bromodichloromethane	4.73		0.50	0.050
75-25-2	Bromoform	3.91		1.0	0.30
74-83-9	Bromomethane	4.20		0.50	0.070
75-15-0	Carbon disulfide	4.39		1.0	0.060
56-23-5	Carbon tetrachloride	4.50		0.50	0.070
108-90-7	Chlorobenzene	4.81		0.50	0.060
75-00-3	Chloroethane	4.40		0.50	0.070
67-66-3	Chloroform	4.87		0.50	0.090
74-87-3	Chloromethane	4.62		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	4.66		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	4.54		0.50	0.050
124-48-1	Dibromochloromethane	4.52		0.50	0.070
100-41-4	Ethylbenzene	4.70		0.50	0.060
1634-04-4	Methyl tert-butyl ether	4.45		0.50	0.050
75-09-2	Methylene Chloride	4.73		0.50	0.070
100-42-5	Styrene	4.62		0.50	0.050
127-18-4	Tetrachloroethene	4.55		0.50	0.060
108-88-3	Toluene	4.66		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	4.57		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	4.83		0.50	0.060
79-01-6	Trichloroethene	4.74		0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-37501-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCSD 410-120935/5
 Matrix: Water Lab File ID: IA30X04.D
 Analysis Method: 8260D Date Collected: _____
 Sample wt/vol: 25 (mL) Date Analyzed: 04/30/2021 10:57
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: R-624SilMS 30m ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 120935 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-01-4	Vinyl chloride	4.77		0.50	0.10
1330-20-7	Xylenes, Total	13.8		1.0	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		80-120
460-00-4	4-Bromofluorobenzene (Surr)	96		80-120
1868-53-7	Dibromofluoromethane (Surr)	98		80-120
2037-26-5	Toluene-d8 (Surr)	100		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210430-28080.b\IA30X04.D
 Lims ID: LCSD
 Client ID:
 Sample Type: LCSD
 Inject. Date: 30-Apr-2021 10:57:30 ALS Bottle#: 5 Worklist Smp#: 5
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0028080-005
 Misc. Info.: LCSD
 Operator ID: SRK36897 Instrument ID: 19930
 Method: \\chromfs\Lancaster\ChromData\19930\20210430-28080.b\8260 25ml HP31.m
 Limit Group: MSV - 8260C_D
 Last Update: 30-Apr-2021 13:12:07 Calib Date: 26-Mar-2021 01:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25107.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1683

First Level Reviewer: knouses

Date: 30-Apr-2021 11:48:08

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	267118	5.00	4.78	
4 Chloromethane	50	2.178	2.178	0.000	99	314295	5.00	4.62	
5 Vinyl chloride	62	2.288	2.288	0.000	98	293690	5.00	4.77	
6 Butadiene	39	2.324	2.318	0.006	96	456839	5.00	7.58	
7 Bromomethane	94	2.641	2.642	-0.001	92	187885	5.00	4.20	
8 Chloroethane	64	2.745	2.745	0.000	100	169715	5.00	4.40	
9 Dichlorofluoromethane	67	2.977	2.983	-0.006	98	341334	5.00	5.40	
10 Trichlorofluoromethane	101	3.032	3.032	0.000	97	386396	5.00	4.47	
11 Ethyl ether	59	3.275	3.276	-0.001	94	200546	5.02	4.80	
12 1,2-Dichloro-1,1,2-trifluoroethane	67	3.397	3.391	0.006	94	309798	5.00	4.80	
13 Acrolein	56	3.446	3.446	0.000	99	210592	37.5	25.6	
14 1,1-Dichloroethene	96	3.605	3.611	-0.006	95	217315	5.00	4.67	
15 Acetone	43	3.623	3.623	0.000	99	343511	37.5	31.8	
16 112TCTFE	101	3.653	3.648	0.005	93	229339	5.00	4.37	
17 Iodomethane	142	3.818	3.824	-0.006	99	419238	5.00	4.54	M
18 Ethyl bromide	108	3.824	3.830	-0.006	98	185570	5.03	4.40	M
19 Carbon disulfide	76	3.940	3.946	-0.006	99	604835	5.00	4.39	
21 Methyl acetate	43	4.050	4.044	0.006	98	141781	5.00	4.00	M
22 3-Chloro-1-propene	41	4.080	4.074	0.006	90	408770	5.00	4.29	
23 Methylene Chloride	84	4.275	4.269	0.006	94	247664	5.00	4.73	
* 24 t-Butyl alcohol-d10 (IS)	65	4.269	4.275	-0.006	0	166494	50.0	50.0	
25 2-Methyl-2-propanol	59	4.403	4.397	0.006	100	181571	50.0	46.8	
26 Acrylonitrile	53	4.604	4.605	-0.001	98	297645	25.0	22.5	
27 Methyl tert-butyl ether	73	4.678	4.678	0.000	91	607549	5.00	4.45	
28 trans-1,2-Dichloroethene	96	4.690	4.690	0.000	97	242883	5.00	4.57	
29 Hexane	57	5.110	5.105	0.005	95	419912	5.00	4.86	
31 1,1-Dichloroethane	63	5.336	5.336	0.000	96	487361	5.00	4.75	
32 Isopropyl ether	45	5.397	5.397	0.000	95	906443	5.00	4.77	
33 2-Chloro-1,3-butadiene	53	5.446	5.446	0.000	92	437193	5.00	4.84	
34 Tert-butyl ethyl ether	59	5.927	5.928	-0.001	98	786887	5.00	4.55	
36 2-Butanone (MEK)	43	6.135	6.129	0.006	100	657860	37.5	34.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
37 cis-1,2-Dichloroethene	96	6.165	6.165	0.000	81	285444	5.00	4.66	
38 2,2-Dichloropropane	77	6.183	6.184	-0.001	89	372378	5.00	4.19	
40 Propionitrile	54	6.220	6.214	0.006	98	171455	37.5	38.1	
42 Methacrylonitrile	67	6.433	6.434	-0.001	94	569979	37.5	32.8	
43 Chlorobromomethane	128	6.494	6.495	0.000	94	124276	5.00	4.54	
44 Tetrahydrofuran	71	6.507	6.501	0.006	93	110843	25.0	22.1	
45 Chloroform	83	6.641	6.641	0.000	94	476206	5.00	4.87	
\$ 46 Dibromofluoromethane (Surr)	113	6.854	6.854	0.000	93	442701	10.0	9.82	
47 1,1,1-Trichloroethane	97	6.872	6.872	0.000	99	404762	5.00	4.55	
48 Cyclohexane	56	6.976	6.976	0.000	92	463774	5.00	4.48	
51 1,1-Dichloropropene	75	7.080	7.080	0.000	95	372628	5.00	4.74	
50 Carbon tetrachloride	117	7.086	7.086	0.000	95	350623	5.00	4.50	
52 Isobutyl alcohol	41	7.226	7.226	0.000	95	174680	125.0	124.8	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.311	7.311	0.000	0	91536	10.0	10.4	
54 Benzene	78	7.342	7.342	0.000	97	1096637	5.00	4.75	
56 1,2-Dichloroethane	62	7.409	7.409	0.000	97	311604	5.00	5.05	
57 Tert-amyl methyl ether	73	7.531	7.531	0.000	98	676550	5.00	4.47	
* 58 Fluorobenzene (IS)	96	7.744	7.738	0.006	98	1792887	10.0	10.0	
59 n-Heptane	43	7.756	7.750	0.006	95	458515	5.00	4.68	
60 n-Butanol	56	8.104	8.092	0.012	92	287747	250.0	236.8	
61 Trichloroethene	95	8.220	8.220	0.000	98	284827	5.00	4.74	
62 Methylcyclohexane	83	8.531	8.531	0.000	93	463524	5.00	4.38	
63 1,2-Dichloropropane	63	8.549	8.549	0.000	94	297720	5.00	4.98	
64 Methyl methacrylate	69	8.628	8.628	0.000	91	149098	5.00	4.33	
65 1,4-Dioxane	88	8.634	8.634	0.000	36	34294	125.0	147.6	M
66 Dibromomethane	93	8.659	8.659	0.000	96	139091	5.00	5.12	
68 Dichlorobromomethane	83	8.896	8.890	0.006	99	335608	5.00	4.73	
69 2-Nitropropane	41	9.158	9.159	-0.001	98	45086	5.00	4.19	
71 2-Chloroethyl vinyl ether	63		9.250				ND	ND	
72 1-Bromo-2-chloroethane	63	9.287	9.287	-0.001	99	300592	5.00	5.39	
73 cis-1,3-Dichloropropene	75	9.439	9.433	0.006	95	403062	5.00	4.54	
74 4-Methyl-2-pentanone (MIBK)	43	9.604	9.598	0.006	98	1072709	25.0	22.0	
\$ 75 Toluene-d8 (Surr)	98	9.744	9.738	0.006	94	1785739	10.0	9.96	
76 Toluene	92	9.817	9.817	0.000	97	688453	5.00	4.66	
78 trans-1,3-Dichloropropene	75	10.073	10.067	0.006	94	347278	5.00	4.83	
79 Ethyl methacrylate	69	10.128	10.128	0.000	90	303956	5.00	4.92	
80 1,1,2-Trichloroethane	97	10.274	10.274	0.000	92	200096	5.00	5.02	
81 Tetrachloroethene	166	10.366	10.366	0.000	98	319259	5.00	4.55	
82 1,3-Dichloropropane	76	10.433	10.433	0.000	93	352770	5.00	5.02	
83 2-Hexanone	43	10.481	10.482	-0.001	99	792468	25.0	23.2	
85 Chlorodibromomethane	129	10.652	10.646	0.006	90	229629	5.00	4.52	
86 Ethylene Dibromide	107	10.762	10.762	0.000	99	189484	5.00	4.86	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.189	0.000	86	1370503	10.0	10.0	
88 1-Chlorohexane	91	11.195	11.195	0.000	98	398031	5.00	4.41	
90 Chlorobenzene	112	11.213	11.213	0.000	94	784335	5.00	4.81	
91 1,1,1,2-Tetrachloroethane	131	11.298	11.292	0.006	96	265628	5.00	4.50	
92 Ethylbenzene	91	11.298	11.298	0.000	99	1356333	5.00	4.70	
93 m-Xylene & p-Xylene	106	11.414	11.414	0.000	99	1046948	10.0	9.24	
94 o-Xylene	106	11.743	11.743	0.000	97	500317	5.00	4.52	
95 Styrene	104	11.756	11.756	0.000	95	835156	5.00	4.62	
96 Bromoform	173	11.914	11.914	0.000	97	125713	5.00	3.91	
97 Isopropylbenzene	105	12.042	12.042	0.000	96	1278078	5.00	4.33	

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	12.182	12.182	0.000	91	653829	10.0	9.59	
101 1,1,2,2-Tetrachloroethane	83	12.286	12.280	0.006	94	249991	5.00	5.35	
102 Bromobenzene	156	12.304	12.304	0.000	96	319960	5.00	4.97	
103 trans-1,4-Dichloro-2-butene	53	12.310	12.310	0.000	84	139367	25.0	8.28	
104 1,2,3-Trichloropropane	110	12.329	12.329	0.000	84	65465	5.00	5.26	
105 N-Propylbenzene	91	12.371	12.371	0.000	99	1566912	5.00	4.96	
106 2-Chlorotoluene	126	12.444	12.445	-0.001	96	315256	5.00	4.90	
107 1,3,5-Trimethylbenzene	105	12.505	12.506	-0.001	94	1071799	5.00	4.71	
108 4-Chlorotoluene	126	12.542	12.536	0.006	97	320587	5.00	4.88	
109 tert-Butylbenzene	134	12.749	12.743	0.006	94	243571	5.00	4.80	
110 Pentachloroethane	167	12.780	12.780	0.000	91	187564	5.00	4.48	
111 1,2,4-Trimethylbenzene	105	12.786	12.786	0.000	97	1075031	5.00	4.61	
112 sec-Butylbenzene	105	12.908	12.908	0.000	94	1403896	5.00	4.70	
113 1,3-Dichlorobenzene	146	13.011	13.012	-0.001	98	600270	5.00	4.69	
114 4-Isopropyltoluene	119	13.017	13.018	-0.001	97	1197549	5.00	4.71	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	95	704656	10.0	10.0	
116 1,4-Dichlorobenzene	146	13.085	13.085	0.000	95	608216	5.00	4.76	
117 1,2,3-Trimethylbenzene	120	13.091	13.091	0.000	99	476764	5.00	4.72	
118 Benzyl chloride	126	13.158	13.158	0.000	99	91378	5.00	4.35	
119 n-Butylbenzene	92	13.310	13.310	0.000	97	577867	5.00	4.68	
120 1,2-Dichlorobenzene	146	13.341	13.341	0.000	98	542648	5.00	4.67	
122 1,2-Dibromo-3-Chloropropane	155	13.883	13.883	0.000	84	32851	5.00	4.50	
123 1,3,5-Trichlorobenzene	180	14.011	14.011	0.000	98	413043	5.00	4.44	
124 1,2,4-Trichlorobenzene	180	14.432	14.432	0.000	94	358829	5.00	4.63	
125 Hexachlorobutadiene	225	14.517	14.517	0.000	97	145268	5.00	4.19	
126 Naphthalene	128	14.615	14.615	0.000	97	692387	5.00	4.72	
127 1,2,3-Trichlorobenzene	180	14.755	14.755	0.000	94	311719	5.00	4.61	
137 2-Methylnaphthalene	142		0.000				ND	ND	
135 p-Diethylbenzene	1		0.000				ND	ND	
144 2-ethoxy-2-methyl butane	1		0.000				ND	ND	
204 Pentane	43		0.000				ND	ND	
134 Isopropyl alcohol	45		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

MSV_Q_QVOA1_00080	Amount Added: 25.00	Units: uL	
MSV_Q_QVOA6_00076	Amount Added: 25.00	Units: uL	
MSV_Q_ETBR_00006	Amount Added: 25.00	Units: uL	
MSV_Q_QARC_00079	Amount Added: 25.00	Units: uL	
MSV_Q_EE_00004	Amount Added: 25.00	Units: uL	
MSV_QGAS_826_00125	Amount Added: 25.00	Units: uL	
MSV_31_826ISS_00004	Amount Added: 5.00	Units: uL	Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19930\20210430-28080.b\IA30X04.D

Injection Date: 30-Apr-2021 10:57:30

Instrument ID: 19930

Operator ID: SRK36897

Lims ID: LCSD

Worklist Smp#: 5

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

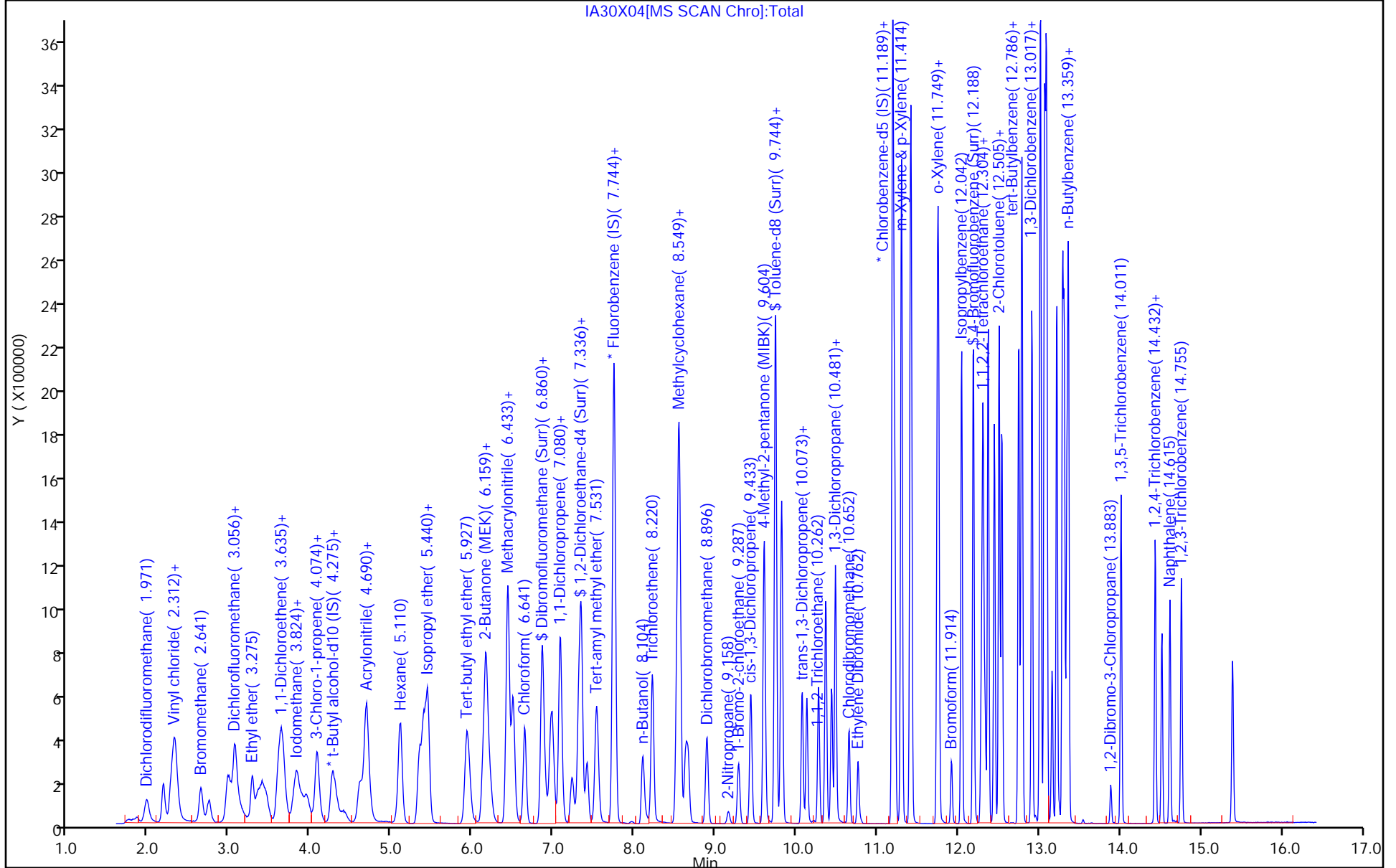
ALS Bottle#: 5

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\20210430-28080.b\A30X04.D
 Lims ID: LCSD
 Client ID:
 Sample Type: LCSD
 Inject. Date: 30-Apr-2021 10:57:30 ALS Bottle#: 5 Worklist Smp#: 5
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0028080-005
 Misc. Info.: LCSD
 Operator ID: SRK36897 Instrument ID: 19930
 Method: \\chromfs\Lancaster\ChromData\19930\20210430-28080.b\8260 25ml HP31.m
 Limit Group: MSV - 8260C_D
 Last Update: 30-Apr-2021 13:12:07 Calib Date: 26-Mar-2021 01:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I07.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1683

First Level Reviewer: knouses Date: 30-Apr-2021 11:48:08

Compound	Amount Added	Amount Recovered	% Rec.
\$ 46 Dibromofluoromethane (Surr)	10.0	9.82	98.20
\$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	10.4	103.74
\$ 75 Toluene-d8 (Surr)	10.0	9.96	99.56
\$ 100 4-Bromofluorobenzene (Surr)	10.0	9.59	95.95

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-37501-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCSD 410-120958/5
 Matrix: Water Lab File ID: GA30L02.D
 Analysis Method: 8260D Date Collected: _____
 Sample wt/vol: 25 (mL) Date Analyzed: 04/30/2021 09:51
 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.: 120958 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	4.64		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	4.42		0.50	0.070
79-00-5	1,1,2-Trichloroethane	4.81		0.50	0.060
75-34-3	1,1-Dichloroethane	4.25		0.50	0.070
75-35-4	1,1-Dichloroethene	4.81		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	4.67		0.50	0.060
107-06-2	1,2-Dichloroethane	4.28		0.50	0.050
78-87-5	1,2-Dichloropropane	4.34		0.50	0.060
78-93-3	2-Butanone (MEK)	39.4		5.0	0.60
591-78-6	2-Hexanone	26.5		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	26.0		5.0	0.70
67-64-1	Acetone	37.1		5.0	0.90
71-43-2	Benzene	4.51		0.50	0.050
74-97-5	Bromochloromethane	4.87		0.50	0.050
75-27-4	Bromodichloromethane	4.59		0.50	0.050
75-25-2	Bromoform	4.72		1.0	0.30
74-83-9	Bromomethane	4.86		0.50	0.070
75-15-0	Carbon disulfide	4.39		1.0	0.060
56-23-5	Carbon tetrachloride	4.75		0.50	0.070
108-90-7	Chlorobenzene	4.77		0.50	0.060
75-00-3	Chloroethane	4.35		0.50	0.070
67-66-3	Chloroform	4.68		0.50	0.090
74-87-3	Chloromethane	4.33		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	4.77		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	4.06		0.50	0.050
124-48-1	Dibromochloromethane	4.62		0.50	0.070
100-41-4	Ethylbenzene	4.50		0.50	0.060
1634-04-4	Methyl tert-butyl ether	4.32		0.50	0.050
75-09-2	Methylene Chloride	4.73		0.50	0.070
100-42-5	Styrene	4.66		0.50	0.050
127-18-4	Tetrachloroethene	5.02		0.50	0.060
108-88-3	Toluene	4.52		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	4.66		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	4.07		0.50	0.060
79-01-6	Trichloroethene	4.74		0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-37501-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCSD 410-120958/5
 Matrix: Water Lab File ID: GA30L02.D
 Analysis Method: 8260D Date Collected: _____
 Sample wt/vol: 25 (mL) Date Analyzed: 04/30/2021 09:51
 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.: 120958 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-01-4	Vinyl chloride	4.62		0.50	0.10
1330-20-7	Xylenes, Total	14.0		1.0	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		80-120
460-00-4	4-Bromofluorobenzene (Surr)	90		80-120
1868-53-7	Dibromofluoromethane (Surr)	100		80-120
2037-26-5	Toluene-d8 (Surr)	93		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\GA30L02.D
 Lims ID: LCSD
 Client ID:
 Sample Type: LCSD
 Inject. Date: 30-Apr-2021 09:51:30 ALS Bottle#: 5 Worklist Smp#: 5
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0028091-005
 Misc. Info.: LCSD
 Operator ID: jml01693 Instrument ID: 16334
 Method: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\MSV_16334_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 30-Apr-2021 10:17:24 Calib Date: 30-Nov-2020 18:23:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1624

First Level Reviewer: longj

Date: 30-Apr-2021 10:17:24

Compound	Sig	RT (min.)	Exp RT (min.)	Diff RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.946	1.953	-0.007	99	283795	5.00	4.33	
5 Chloromethane	50	2.148	2.148	0.000	99	383729	5.00	4.33	
7 Butadiene	39	2.257	2.257	0.000	90	521749	5.00	5.18	
8 Vinyl chloride	62	2.263	2.263	0.000	97	348953	5.00	4.62	
9 Bromomethane	94	2.593	2.587	0.006	90	256030	5.00	4.86	
10 Chloroethane	64	2.666	2.666	0.000	100	199660	5.00	4.35	
12 Dichlorofluoromethane	67	2.910	2.910	0.000	97	401543	5.00	3.91	
13 Trichlorofluoromethane	101	2.971	2.971	0.000	98	456820	5.00	5.25	
15 Ethyl ether	59	3.196	3.196	0.000	91	221519	5.02	4.31	
17 1,2-Dichloro-1,1,2-trifluoroethane	67	3.306	3.300	0.006	90	318304	5.00	4.48	
18 Acrolein	56	3.379	3.373	0.006	99	244098	37.5	38.0	
19 1,1-Dichloroethene	96	3.519	3.513	0.006	98	252684	5.00	4.81	
21 Acetone	43	3.544	3.538	0.006	100	307713	37.5	37.1	
20 112TCTFE	101	3.556	3.550	0.006	91	274444	5.00	5.34	
22 Isopropyl alcohol	45	3.702	3.708	-0.006	29	46838	37.5	23.4	
23 Iodomethane	142	3.720	3.708	0.012	98	503964	5.00	5.13	
24 Ethyl bromide	108	3.727	3.727	0.000	97	215128	5.03	4.70	
25 Carbon disulfide	76	3.842	3.830	0.012	99	851064	5.00	4.39	
27 Methyl acetate	43	3.952	3.952	0.000	98	116861	5.00	4.65	
28 3-Chloro-1-propene	41	3.977	3.977	0.000	93	366325	5.00	3.48	
29 Methylene Chloride	84	4.166	4.166	0.000	90	284965	5.00	4.73	
* 30 t-Butyl alcohol-d10 (IS)	65	4.184	4.178	0.006	0	169201	50.0	50.0	
31 2-Methyl-2-propanol	59	4.318	4.300	0.018	99	153328	50.0	50.4	
32 Acrylonitrile	53	4.507	4.507	0.000	99	305562	25.0	28.5	
33 Methyl tert-butyl ether	73	4.568	4.562	0.006	91	722080	5.00	4.32	
34 trans-1,2-Dichloroethene	96	4.574	4.568	0.006	99	282073	5.00	4.66	
35 Hexane	57	4.995	4.995	0.000	92	393620	5.00	4.46	
37 1,1-Dichloroethane	63	5.238	5.239	-0.001	96	477385	5.00	4.25	
38 Isopropyl ether	45	5.299	5.293	0.006	94	911857	5.00	3.99	
39 2-Chloro-1,3-butadiene	53	5.348	5.348	0.000	90	420245	5.00	4.11	
40 Tert-butyl ethyl ether	59	5.830	5.830	0.000	98	857814	5.00	4.12	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
41 2-Butanone (MEK)	43	6.049	6.049	0.000	100	606018	37.5	39.4	
42 cis-1,2-Dichloroethene	96	6.074	6.074	0.000	81	323812	5.00	4.77	
43 2,2-Dichloropropane	77	6.092	6.092	0.000	86	399127	5.00	4.24	
45 Propionitrile	54	6.147	6.141	0.006	98	157404	37.5	41.3	
48 Methacrylonitrile	67	6.360	6.354	0.006	90	612450	37.5	43.3	
49 Chlorobromomethane	128	6.409	6.403	0.006	94	147378	5.00	4.87	
50 Tetrahydrofuran	71	6.415	6.415	0.000	77	117724	25.0	29.6	
51 Chloroform	83	6.561	6.561	0.000	93	506827	5.00	4.68	
\$ 52 Dibromofluoromethane (Surr)	113	6.775	6.775	0.000	94	609610	10.0	9.98	
53 1,1,1-Trichloroethane	97	6.781	6.787	-0.006	97	430078	5.00	4.64	
54 Cyclohexane	56	6.885	6.878	0.006	89	467194	5.00	4.39	
56 Carbon tetrachloride	117	6.988	6.994	-0.006	94	381299	5.00	4.75	
57 1,1-Dichloropropene	75	6.994	6.994	0.000	98	381387	5.00	4.38	
58 Isobutyl alcohol	41	7.165	7.165	0.000	92	123892	125.0	86.8	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.226	7.232	-0.006	0	125699	10.0	9.67	
60 Benzene	78	7.256	7.263	-0.007	96	1157604	5.00	4.51	
61 1,2-Dichloroethane	62	7.336	7.330	0.006	97	307148	5.00	4.28	
63 Tert-amyl methyl ether	73	7.451	7.452	-0.001	99	780737	5.00	4.25	
* 64 Fluorobenzene (IS)	96	7.665	7.665	0.000	99	2523268	10.0	10.0	
65 n-Heptane	43	7.677	7.677	0.000	90	409869	5.00	4.12	
67 n-Butanol	56	8.043	8.043	0.000	88	270849	250.0	247.7	
68 Trichloroethene	95	8.146	8.140	0.006	96	310122	5.00	4.74	
69 Methylcyclohexane	83	8.445	8.451	-0.006	90	497332	5.00	4.89	
70 1,2-Dichloropropane	63	8.476	8.476	0.000	97	297957	5.00	4.34	
71 2-ethoxy-2-methyl butane	87	8.488	8.488	0.000	95	453678	5.00	4.52	
72 Methyl methacrylate	69	8.567	8.567	0.000	91	157647	5.00	5.47	
73 1,4-Dioxane	88	8.567	8.567	0.000	31	32955	125.0	169.4	M
74 Dibromomethane	93	8.591	8.585	0.006	94	153275	5.00	4.82	
76 Dichlorobromomethane	83	8.823	8.823	0.000	99	365237	5.00	4.59	
77 2-Nitropropane	41	9.110	9.110	0.000	99	37978	5.00	4.65	
79 2-Chloroethyl vinyl ether	63		9.195				ND	ND	
80 1-Bromo-2-chloroethane	63	9.213	9.213	0.000	98	322591	5.00	4.39	
81 cis-1,3-Dichloropropene	75	9.378	9.378	0.000	97	419300	5.00	4.06	
82 4-Methyl-2-pentanone (MIBK)	43	9.555	9.555	0.000	96	1025632	25.0	26.0	
\$ 83 Toluene-d8 (Surr)	98	9.683	9.683	0.000	93	2357789	10.0	9.31	
84 Toluene	92	9.762	9.762	0.000	99	743132	5.00	4.52	
96 trans-1,3-Dichloropropene	75	10.018	10.018	0.000	92	361312	5.00	4.07	
98 Ethyl methacrylate	69	10.085	10.085	0.000	88	331701	5.00	4.16	
99 1,1,2-Trichloroethane	97	10.225	10.225	0.000	89	230688	5.00	4.81	
100 Tetrachloroethene	166	10.311	10.311	0.000	97	358023	5.00	5.02	
101 1,3-Dichloropropane	76	10.390	10.390	0.000	89	383371	5.00	4.43	
102 2-Hexanone	43	10.445	10.445	0.000	96	752195	25.0	26.5	
104 Chlorodibromomethane	129	10.603	10.603	0.000	90	262620	5.00	4.62	
105 Ethylene Dibromide	107	10.707	10.707	0.000	98	219731	5.00	4.67	
* 106 Chlorobenzene-d5 (IS)	117	11.140	11.140	0.000	84	1897759	10.0	10.0	
107 1-Chlorohexane	91	11.152	11.152	0.000	96	416361	5.00	4.22	
108 Chlorobenzene	112	11.170	11.170	0.000	96	873441	5.00	4.77	
110 1,1,1,2-Tetrachloroethane	131	11.250	11.250	0.000	97	318073	5.00	4.89	
111 Ethylbenzene	91	11.256	11.256	0.000	98	1463816	5.00	4.50	
112 m-Xylene & p-Xylene	106	11.371	11.371	0.000	97	1141742	10.0	9.32	
113 o-Xylene	106	11.701	11.701	0.000	96	568655	5.00	4.68	
114 Styrene	104	11.713	11.713	0.000	95	964656	5.00	4.66	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
115 Bromoform	173	11.871	11.871	0.000	98	156631	5.00	4.72	
116 Isopropylbenzene	105	11.999	11.999	0.000	95	1422292	5.00	4.48	
\$ 119 4-Bromofluorobenzene (Surr)	95	12.140	12.140	0.000	94	867537	10.0	8.97	
120 1,1,2,2-Tetrachloroethane	83	12.243	12.243	0.000	94	296963	5.00	4.42	
121 Bromobenzene	156	12.255	12.255	0.000	91	395238	5.00	4.90	
122 trans-1,4-Dichloro-2-butene	53	12.274	12.268	0.006	86	159606	25.0	13.0	
123 1,2,3-Trichloropropane	110	12.292	12.292	0.000	83	80211	5.00	4.68	
124 N-Propylbenzene	91	12.322	12.329	-0.007	99	1765248	5.00	4.39	
125 2-Chlorotoluene	126	12.402	12.402	0.000	97	372342	5.00	4.71	
126 1,3,5-Trimethylbenzene	105	12.463	12.463	0.000	94	1242721	5.00	4.38	
127 4-Chlorotoluene	126	12.493	12.493	0.000	97	393797	5.00	4.77	
128 tert-Butylbenzene	134	12.700	12.700	0.000	93	287731	5.00	4.75	
129 Pentachloroethane	167	12.737	12.737	0.000	91	237051	5.00	4.55	
130 1,2,4-Trimethylbenzene	105	12.743	12.743	0.000	97	1301092	5.00	4.39	
131 sec-Butylbenzene	105	12.865	12.865	0.000	94	1636323	5.00	4.43	
132 1,3-Dichlorobenzene	146	12.963	12.963	0.000	98	772531	5.00	4.75	
133 4-Isopropyltoluene	119	12.975	12.969	0.006	97	1460413	5.00	4.55	
* 134 1,4-Dichlorobenzene-d4	152	13.017	13.017	0.000	94	1069064	10.0	10.0	
135 1,4-Dichlorobenzene	146	13.036	13.036	0.000	95	793709	5.00	4.79	
136 1,2,3-Trimethylbenzene	120	13.048	13.048	0.000	98	621236	5.00	4.73	
137 Benzyl chloride	126	13.115	13.115	0.000	98	130626	5.00	4.49	
138 p-Diethylbenzene	119	13.170	13.170	0.000	91	867897	5.00	4.45	
139 n-Butylbenzene	92	13.261	13.261	0.000	97	745217	5.00	4.39	
140 1,2-Dichlorobenzene	146	13.298	13.298	0.000	99	737475	5.00	4.86	
142 1,2-Dibromo-3-Chloropropane	155	13.834	13.834	0.000	90	45835	5.00	4.68	
143 1,3,5-Trichlorobenzene	180	13.956	13.956	0.000	98	678864	5.00	4.98	
144 1,2,4-Trichlorobenzene	180	14.377	14.377	0.000	94	620879	5.00	4.94	
145 Hexachlorobutadiene	225	14.456	14.456	0.000	96	313591	5.00	5.08	
146 Naphthalene	128	14.560	14.560	0.000	97	1047638	5.00	4.58	
147 1,2,3-Trichlorobenzene	180	14.700	14.700	0.000	95	562484	5.00	5.07	
148 2-Methylnaphthalene	142	15.316	15.316	0.000	92	673630	5.00	4.12	
160 Pentane	43		0.000				ND	ND	

QC Flag Legend

Processing Flags

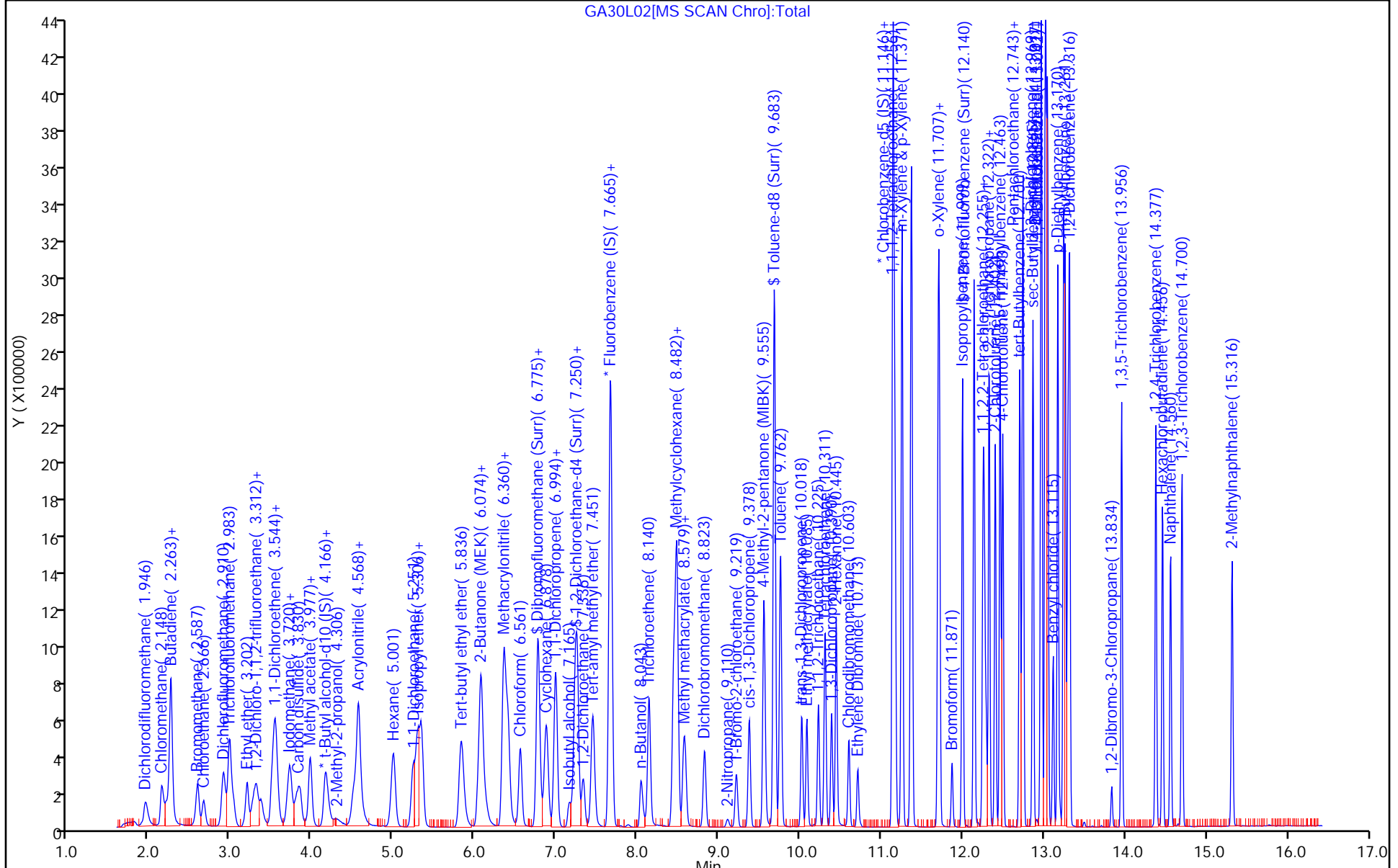
ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

MSV_Q_QVOA1_00080	Amount Added: 12.50	Units: uL	
MSV_Q_QARC_00079	Amount Added: 12.50	Units: uL	
MSV_Q_QVOA6_00076	Amount Added: 12.50	Units: uL	
MSV_Q_EE_00004	Amount Added: 12.50	Units: uL	
MSV_Q_ETBR_00006	Amount Added: 12.50	Units: uL	
MSV_QGAS_826_00124	Amount Added: 12.50	Units: uL	
MSV_29_826ISS_00017	Amount Added: 1.00	Units: uL	Run Reagent



Eurofins Lancaster Laboratories Env, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\GA30L02.D
 Lims ID: LCSD
 Client ID:
 Sample Type: LCSD
 Inject. Date: 30-Apr-2021 09:51:30 ALS Bottle#: 5 Worklist Smp#: 5
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0028091-005
 Misc. Info.: LCSD
 Operator ID: jml01693 Instrument ID: 16334
 Method: \\chromfs\Lancaster\ChromData\16334\20210430-28091.b\MSV_16334_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 30-Apr-2021 10:17:24 Calib Date: 30-Nov-2020 18:23:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1624

First Level Reviewer: longj Date: 30-Apr-2021 10:17:24

Compound	Amount Added	Amount Recovered	% Rec.
\$ 52 Dibromofluoromethane (Surr)	10.0	9.98	99.82
\$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	9.67	96.74
\$ 83 Toluene-d8 (Surr)	10.0	9.31	93.12
\$ 119 4-Bromofluorobenzene (Surr)	10.0	8.97	89.74

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-37501-1
 SDG No.: _____
 Client Sample ID: HD-COD-SW-15-0/1-0 MS MS Lab Sample ID: 410-37501-6 MS
 Matrix: Water Lab File ID: IA30X14.D
 Analysis Method: 8260D Date Collected: 04/26/2021 12:05
 Sample wt/vol: 25 (mL) Date Analyzed: 04/30/2021 14:29
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: R-624SilMS 30m ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 120935 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	4.75		0.50	0.070
71-55-6	1,1,1-Trichloroethane	5.21		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	5.50		0.50	0.070
79-00-5	1,1,2-Trichloroethane	5.38		0.50	0.060
75-34-3	1,1-Dichloroethane	5.15		0.50	0.070
75-35-4	1,1-Dichloroethene	5.38		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	5.10		0.50	0.060
107-06-2	1,2-Dichloroethane	5.31		0.50	0.050
78-87-5	1,2-Dichloropropane	5.33		0.50	0.060
78-93-3	2-Butanone (MEK)	36.2		5.0	0.60
591-78-6	2-Hexanone	23.9		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	22.8		5.0	0.70
67-64-1	Acetone	28.6		5.0	0.90
71-43-2	Benzene	5.11		0.50	0.050
74-97-5	Bromochloromethane	4.79		0.50	0.050
75-27-4	Bromodichloromethane	5.04		0.50	0.050
75-25-2	Bromoform	3.95		1.0	0.30
74-83-9	Bromomethane	4.68		0.50	0.070
75-15-0	Carbon disulfide	4.85		1.0	0.060
56-23-5	Carbon tetrachloride	5.20		0.50	0.070
108-90-7	Chlorobenzene	5.15		0.50	0.060
75-00-3	Chloroethane	4.90		0.50	0.070
67-66-3	Chloroform	5.41		0.50	0.090
74-87-3	Chloromethane	5.15		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	5.62		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	4.75		0.50	0.050
124-48-1	Dibromochloromethane	4.66		0.50	0.070
100-41-4	Ethylbenzene	5.11		0.50	0.060
1634-04-4	Methyl tert-butyl ether	4.61		0.50	0.050
75-09-2	Methylene Chloride	4.97		0.50	0.070
100-42-5	Styrene	4.89		0.50	0.050
127-18-4	Tetrachloroethene	7.48		0.50	0.060
108-88-3	Toluene	5.13		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	5.03		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	4.98		0.50	0.060
79-01-6	Trichloroethene	6.07		0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-37501-1
 SDG No.: _____
 Client Sample ID: HD-COD-SW-15-0/1-0 MS MS Lab Sample ID: 410-37501-6 MS
 Matrix: Water Lab File ID: IA30X14.D
 Analysis Method: 8260D Date Collected: 04/26/2021 12:05
 Sample wt/vol: 25 (mL) Date Analyzed: 04/30/2021 14:29
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: R-624SilMS 30m ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 120935 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-01-4	Vinyl chloride	5.30		0.50	0.10
1330-20-7	Xylenes, Total	14.9		1.0	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		80-120
460-00-4	4-Bromofluorobenzene (Surr)	97		80-120
1868-53-7	Dibromofluoromethane (Surr)	98		80-120
2037-26-5	Toluene-d8 (Surr)	100		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210430-28080.b\IA30X14.D
 Lims ID: 410-37501-A-6 MS
 Client ID: HD-COD-SW-15-0/1-0 MS
 Sample Type: MS
 Inject. Date: 30-Apr-2021 14:29:30 ALS Bottle#: 15 Worklist Smp#: 15
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0028080-015
 Operator ID: SRK36897 Instrument ID: 19930
 Method: \\chromfs\Lancaster\ChromData\19930\20210430-28080.b\8260 25ml HP31.m
 Limit Group: MSV - 8260C_D
 Last Update: 30-Apr-2021 17:42:44 Calib Date: 26-Mar-2021 01:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25107.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1630

First Level Reviewer: campbellme

Date: 30-Apr-2021 17:39:32

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	282691	5.00	5.32	
4 Chloromethane	50	2.178	2.178	0.000	99	332959	5.00	5.15	
5 Vinyl chloride	62	2.288	2.288	0.000	98	310187	5.00	5.30	
6 Butadiene	39	2.325	2.318	0.007	96	485096	5.00	8.48	
7 Bromomethane	94	2.642	2.642	0.000	91	198382	5.00	4.68	
8 Chloroethane	64	2.751	2.745	0.006	99	179499	5.00	4.90	
9 Dichlorofluoromethane	67	2.983	2.983	0.000	97	363920	5.00	6.06	
10 Trichlorofluoromethane	101	3.038	3.032	0.006	97	440838	5.00	5.37	
11 Ethyl ether	59	3.276	3.276	0.000	93	205070	5.03	5.17	
12 1,2-Dichloro-1,1,2-trifluoroethane	67	3.398	3.391	0.007	96	339058	5.00	5.53	
13 Acrolein	56	3.465	3.446	0.019	98	182117	37.5	23.6	
14 1,1-Dichloroethene	96	3.617	3.611	0.006	96	238104	5.00	5.38	
15 Acetone	43	3.623	3.623	0.000	100	289166	37.5	28.6	
16 112TCTFE	101	3.647	3.648	-0.001	94	254975	5.00	5.11	
17 Iodomethane	142	3.806	3.824	-0.018	100	422257	5.00	4.81	M
18 Ethyl bromide	108	3.830	3.830	0.000	98	191649	5.04	4.79	M
19 Carbon disulfide	76	3.946	3.946	0.000	100	634697	5.00	4.85	
21 Methyl acetate	43	4.044	4.044	0.000	98	128752	5.00	3.88	
22 3-Chloro-1-propene	41	4.080	4.074	0.006	90	416204	5.00	4.60	
23 Methylene Chloride	84	4.281	4.269	0.012	98	247170	5.00	4.97	
* 24 t-Butyl alcohol-d10 (IS)	65	4.269	4.275	-0.006	0	155928	50.0	50.0	
25 2-Methyl-2-propanol	59	4.397	4.397	0.000	99	149855	50.0	41.2	
26 Acrylonitrile	53	4.605	4.605	0.000	99	275436	25.0	22.2	
27 Methyl tert-butyl ether	73	4.684	4.678	0.006	89	598046	5.00	4.61	
28 trans-1,2-Dichloroethene	96	4.690	4.690	0.000	98	253553	5.00	5.03	
29 Hexane	57	5.111	5.105	0.006	95	469275	5.00	5.72	
31 1,1-Dichloroethane	63	5.342	5.336	0.006	96	501664	5.00	5.15	
32 Isopropyl ether	45	5.403	5.397	0.006	95	898331	5.00	4.97	
33 2-Chloro-1,3-butadiene	53	5.446	5.446	0.000	93	466646	5.00	5.44	
34 Tert-butyl ethyl ether	59	5.934	5.928	0.006	98	766994	5.00	4.67	
36 2-Butanone (MEK)	43	6.135	6.129	0.006	99	642967	37.5	36.2	
37 cis-1,2-Dichloroethene	96	6.165	6.165	0.000	83	326950	5.00	5.62	

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	6.184	6.184	0.000	89	396126	5.00	4.70	
40 Propionitrile	54	6.226	6.214	0.012	99	156726	37.5	37.2	
42 Methacrylonitrile	67	6.434	6.434	0.000	94	554233	37.5	34.0	
43 Chlorobromomethane	128	6.494	6.495	0.000	93	124453	5.00	4.79	
44 Tetrahydrofuran	71	6.507	6.501	0.006	93	106210	25.0	22.6	
45 Chloroform	83	6.647	6.641	0.006	94	501540	5.00	5.41	
\$ 46 Dibromofluoromethane (Surr)	113	6.854	6.854	0.000	93	418067	10.0	9.77	
47 1,1,1-Trichloroethane	97	6.872	6.872	0.000	99	439847	5.00	5.21	
48 Cyclohexane	56	6.976	6.976	0.000	93	514433	5.00	5.23	
51 1,1-Dichloropropene	75	7.080	7.080	0.000	95	398768	5.00	5.34	
50 Carbon tetrachloride	117	7.080	7.086	-0.006	70	384559	5.00	5.20	
52 Isobutyl alcohol	41	7.226	7.226	0.000	94	144308	125.1	110.1	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.311	7.311	0.000	0	85530	10.0	10.2	
54 Benzene	78	7.342	7.342	0.000	97	1122028	5.00	5.11	
56 1,2-Dichloroethane	62	7.415	7.409	0.006	97	311064	5.00	5.31	
57 Tert-amyl methyl ether	73	7.531	7.531	0.000	98	656544	5.00	4.57	
* 58 Fluorobenzene (IS)	96	7.744	7.738	0.006	99	1702380	10.0	10.0	
59 n-Heptane	43	7.756	7.750	0.006	95	508861	5.00	5.47	
60 n-Butanol	56	8.104	8.092	0.012	91	237421	250.2	208.6	
61 Trichloroethene	95	8.220	8.220	0.000	98	346347	5.00	6.07	
62 Methylcyclohexane	83	8.531	8.531	0.000	93	515074	5.00	5.12	
63 1,2-Dichloropropane	63	8.549	8.549	0.000	94	302552	5.00	5.33	
64 Methyl methacrylate	69	8.628	8.628	0.000	92	144732	5.00	4.49	
65 1,4-Dioxane	88	8.646	8.634	0.012	35	31487	125.1	144.7	M
66 Dibromomethane	93	8.665	8.659	0.006	97	133340	5.00	5.17	
68 Dichlorobromomethane	83	8.896	8.890	0.006	99	339586	5.00	5.04	
69 2-Nitropropane	41	9.152	9.159	-0.007	98	43657	5.00	4.33	
71 2-Chloroethyl vinyl ether	63		9.250				ND	ND	
72 1-Bromo-2-chloroethane	63	9.287	9.287	0.000	99	305421	5.00	5.77	
73 cis-1,3-Dichloropropene	75	9.433	9.433	0.000	95	400965	5.00	4.75	
74 4-Methyl-2-pentanone (MIBK)	43	9.604	9.598	0.006	98	1038787	25.0	22.8	
\$ 75 Toluene-d8 (Surr)	98	9.744	9.738	0.006	94	1696198	10.0	10.0	
76 Toluene	92	9.817	9.817	0.000	98	713595	5.00	5.13	
78 trans-1,3-Dichloropropene	75	10.073	10.067	0.006	95	337737	5.00	4.98	
79 Ethyl methacrylate	69	10.128	10.128	0.000	91	300711	5.00	5.16	
80 1,1,2-Trichloroethane	97	10.274	10.274	0.000	91	202223	5.00	5.38	
81 Tetrachloroethene	166	10.366	10.366	0.000	97	494808	5.00	7.48	
82 1,3-Dichloropropane	76	10.433	10.433	0.000	92	352524	5.00	5.32	
83 2-Hexanone	43	10.482	10.482	0.000	99	764612	25.0	23.9	
85 Chlorodibromomethane	129	10.652	10.646	0.006	91	223400	5.00	4.66	
86 Ethylene Dibromide	107	10.762	10.762	0.000	99	187414	5.00	5.10	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.189	0.000	87	1291847	10.0	10.0	
88 1-Chlorohexane	91	11.195	11.195	0.000	98	423194	5.00	4.98	
90 Chlorobenzene	112	11.213	11.213	0.000	95	792162	5.00	5.15	
91 1,1,1,2-Tetrachloroethane	131	11.292	11.292	0.000	95	264598	5.00	4.75	
92 Ethylbenzene	91	11.298	11.298	0.000	99	1392419	5.00	5.11	
93 m-Xylene & p-Xylene	106	11.414	11.414	0.000	99	1071672	10.0	10.0	
94 o-Xylene	106	11.743	11.743	0.000	97	506776	5.00	4.85	
95 Styrene	104	11.756	11.756	0.000	95	832833	5.00	4.89	
96 Bromoform	173	11.914	11.914	0.000	96	119804	5.00	3.95	
97 Isopropylbenzene	105	12.042	12.042	0.000	96	1317357	5.00	4.74	
\$ 100 4-Bromofluorobenzene (Surr)	95	12.182	12.182	0.000	91	619915	10.0	9.65	

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	12.280	12.280	0.000	95	246690	5.00	5.50	
102 Bromobenzene	156	12.304	12.304	0.000	96	319689	5.00	5.17	
103 trans-1,4-Dichloro-2-butene	53	12.310	12.310	0.000	88	135777	25.0	8.61	
104 1,2,3-Trichloropropane	110	12.329	12.329	0.000	85	65357	5.00	5.47	
105 N-Propylbenzene	91	12.371	12.371	0.000	99	1625532	5.00	5.35	
106 2-Chlorotoluene	126	12.445	12.445	0.000	96	313512	5.00	5.07	
107 1,3,5-Trimethylbenzene	105	12.505	12.506	-0.001	94	1085031	5.00	4.97	
108 4-Chlorotoluene	126	12.536	12.536	0.000	98	330534	5.00	5.24	
109 tert-Butylbenzene	134	12.743	12.743	0.000	94	243951	5.00	5.01	
110 Pentachloroethane	167	12.780	12.780	0.000	90	192933	5.00	4.80	
111 1,2,4-Trimethylbenzene	105	12.786	12.786	0.000	97	1102682	5.00	4.92	
112 sec-Butylbenzene	105	12.908	12.908	0.000	95	1458600	5.00	5.08	
113 1,3-Dichlorobenzene	146	13.011	13.012	-0.001	98	604782	5.00	4.92	
114 4-Isopropyltoluene	119	13.018	13.018	0.000	97	1231936	5.00	5.05	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	97	676680	10.0	10.0	
116 1,4-Dichlorobenzene	146	13.085	13.085	0.000	94	611234	5.00	4.98	
117 1,2,3-Trimethylbenzene	120	13.091	13.091	0.000	99	490234	5.00	5.05	
118 Benzyl chloride	126	13.158	13.158	0.000	99	92783	5.00	4.60	
119 n-Butylbenzene	92	13.310	13.310	0.000	98	591135	5.00	4.98	
120 1,2-Dichlorobenzene	146	13.341	13.341	0.000	98	547154	5.00	4.90	
122 1,2-Dibromo-3-Chloropropane	155	13.883	13.883	0.000	85	31414	5.00	4.48	
123 1,3,5-Trichlorobenzene	180	14.011	14.011	0.000	97	408810	5.00	4.58	
124 1,2,4-Trichlorobenzene	180	14.432	14.432	0.000	94	339057	5.00	4.55	
125 Hexachlorobutadiene	225	14.517	14.517	0.000	96	152327	5.00	4.58	
126 Naphthalene	128	14.615	14.615	0.000	97	656004	5.00	4.65	
127 1,2,3-Trichlorobenzene	180	14.755	14.755	0.000	95	295212	5.00	4.55	
135 p-Diethylbenzene	1		0.000				ND	ND	
144 2-ethoxy-2-methyl butane	1		0.000				ND	ND	
204 Pentane	43		0.000				ND	ND	
137 2-Methylnaphthalene	142		0.000				ND	ND	
134 Isopropyl alcohol	45		0.000				ND	ND	

QC Flag Legend

Processing Flags

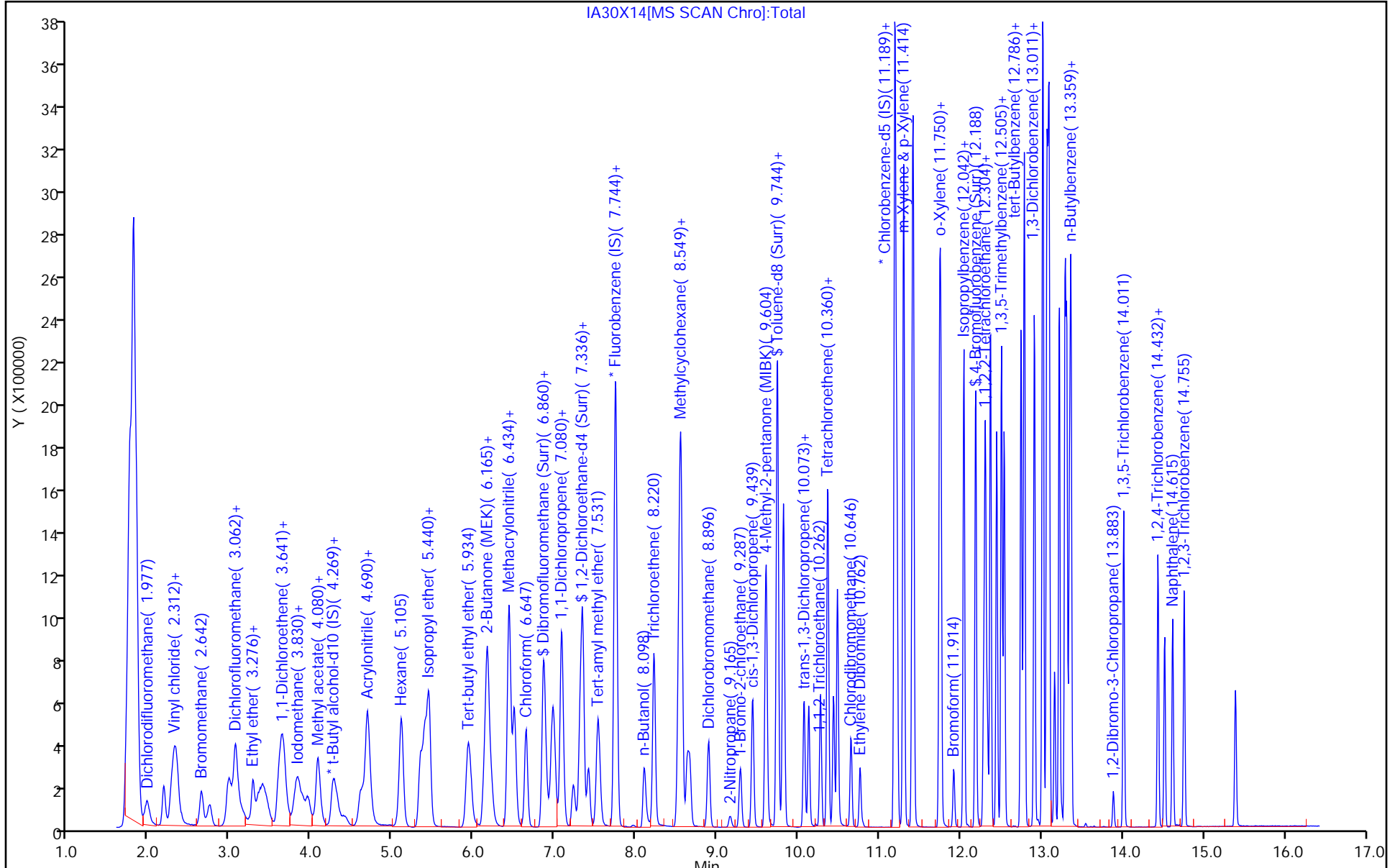
ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

MSV_Q_QVOA1_00080	Amount Added: 5.38	Units: uL	
MSV_Q_QVOA6_00076	Amount Added: 5.38	Units: uL	
MSV_Q_ETBR_00006	Amount Added: 5.38	Units: uL	
MSV_Q_QARC_00079	Amount Added: 5.38	Units: uL	
MSV_Q_EE_00004	Amount Added: 5.38	Units: uL	
MSV_QGAS_826_00125	Amount Added: 5.38	Units: uL	
MSV_31_826ISS_00004	Amount Added: 5.00	Units: uL	Run Reagent



Eurofins Lancaster Laboratories Env, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210430-28080.b\A30X14.D
 Lims ID: 410-37501-A-6 MS
 Client ID: HD-COD-SW-15-0/1-0 MS
 Sample Type: MS
 Inject. Date: 30-Apr-2021 14:29:30 ALS Bottle#: 15 Worklist Smp#: 15
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0028080-015
 Operator ID: SRK36897 Instrument ID: 19930
 Method: \\chromfs\Lancaster\ChromData\19930\20210430-28080.b\8260 25ml HP31.m
 Limit Group: MSV - 8260C_D
 Last Update: 30-Apr-2021 17:42:44 Calib Date: 26-Mar-2021 01:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I07.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1630

First Level Reviewer: campbellme

Date: 30-Apr-2021 17:39:32

Compound	Amount Added	Amount Recovered	% Rec.
\$ 46 Dibromofluoromethane (Surr)	10.0	9.77	97.67
\$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	10.2	102.09
\$ 75 Toluene-d8 (Surr)	10.0	10.0	100.33
\$ 100 4-Bromofluorobenzene (Surr)	10.0	9.65	96.51

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210430-28080.b\IA30X15.D
 Lims ID: 410-37501-A-6 MSD
 Client ID: HD-COD-SW-15-0/1-0 MSD
 Sample Type: MSD
 Inject. Date: 30-Apr-2021 14:51:30 ALS Bottle#: 16 Worklist Smp#: 16
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0028080-016
 Operator ID: SRK36897 Instrument ID: 19930
 Method: \\chromfs\Lancaster\ChromData\19930\20210430-28080.b\8260 25ml HP31.m
 Limit Group: MSV - 8260C_D
 Last Update: 30-Apr-2021 17:42:44 Calib Date: 26-Mar-2021 01:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25107.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1630

First Level Reviewer: campbellme

Date: 30-Apr-2021 17:40:28

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.959	1.971	-0.012	99	281182	5.00	5.18	
4 Chloromethane	50	2.160	2.178	-0.018	99	318435	5.00	4.82	
5 Vinyl chloride	62	2.270	2.288	-0.018	98	310365	5.00	5.20	
6 Butadiene	39	2.306	2.318	-0.012	96	486619	5.00	8.33	
7 Bromomethane	94	2.623	2.642	-0.019	92	195058	5.00	4.50	
8 Chloroethane	64	2.727	2.745	-0.018	99	174706	5.00	4.67	
9 Dichlorofluoromethane	67	2.959	2.983	-0.024	97	348939	5.00	5.69	
10 Trichlorofluoromethane	101	3.007	3.032	-0.025	97	417742	5.00	4.98	
11 Ethyl ether	59	3.263	3.276	-0.013	94	199443	5.03	4.93	
12 1,2-Dichloro-1,1,2-trifluoroethane	67	3.379	3.391	-0.012	93	336361	5.00	5.37	
13 Acrolein	56	3.446	3.446	0.000	97	175692	37.5	22.0	
14 1,1-Dichloroethene	96	3.593	3.611	-0.018	96	242560	5.00	5.37	
15 Acetone	43	3.611	3.623	-0.012	99	292442	37.5	27.9	
16 112TCTFE	101	3.641	3.648	-0.007	86	259412	5.00	5.09	
17 Iodomethane	142	3.800	3.824	-0.024	99	423149	5.00	4.72	M
18 Ethyl bromide	108	3.818	3.830	-0.012	99	189017	5.04	4.63	
19 Carbon disulfide	76	3.940	3.946	-0.006	100	643973	5.00	4.82	
21 Methyl acetate	43	4.038	4.044	-0.006	99	138600	5.00	4.02	
22 3-Chloro-1-propene	41	4.062	4.074	-0.012	90	420876	5.00	4.56	
23 Methylene Chloride	84	4.257	4.269	-0.012	95	248145	5.00	4.89	
* 24 t-Butyl alcohol-d10 (IS)	65	4.257	4.275	-0.018	0	161906	50.0	50.0	
25 2-Methyl-2-propanol	59	4.391	4.397	-0.006	99	159650	50.0	42.3	
26 Acrylonitrile	53	4.592	4.605	-0.013	100	276199	25.0	21.4	
27 Methyl tert-butyl ether	73	4.672	4.678	-0.006	96	598617	5.00	4.52	
28 trans-1,2-Dichloroethene	96	4.678	4.690	-0.012	97	261114	5.00	5.07	
29 Hexane	57	5.092	5.105	-0.013	95	472461	5.00	5.63	
31 1,1-Dichloroethane	63	5.330	5.336	-0.006	96	512148	5.00	5.15	
32 Isopropyl ether	45	5.385	5.397	-0.012	96	907734	5.00	4.92	
33 2-Chloro-1,3-butadiene	53	5.440	5.446	-0.006	92	473338	5.00	5.40	
34 Tert-butyl ethyl ether	59	5.921	5.928	-0.007	98	773775	5.00	4.61	
36 2-Butanone (MEK)	43	6.129	6.129	0.000	100	644137	37.5	34.9	
37 cis-1,2-Dichloroethene	96	6.159	6.165	-0.006	83	337605	5.00	5.68	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
38 2,2-Dichloropropane	77	6.177	6.184	-0.007	87	402629	5.00	4.68	
40 Propionitrile	54	6.214	6.214	0.000	98	150659	37.5	34.4	
42 Methacrylonitrile	67	6.427	6.434	-0.007	94	560094	37.5	33.1	
43 Chlorobromomethane	128	6.488	6.495	-0.006	94	123013	5.00	4.64	
44 Tetrahydrofuran	71	6.495	6.501	-0.007	93	105778	25.0	21.7	
45 Chloroform	83	6.635	6.641	-0.006	94	515273	5.00	5.44	
\$ 46 Dibromofluoromethane (Surr)	113	6.848	6.854	-0.006	93	430496	10.0	9.85	
47 1,1,1-Trichloroethane	97	6.866	6.872	-0.006	99	447867	5.00	5.20	
48 Cyclohexane	56	6.964	6.976	-0.012	93	519491	5.00	5.18	
51 1,1-Dichloropropene	75	7.074	7.080	-0.006	95	402253	5.00	5.28	
50 Carbon tetrachloride	117	7.080	7.086	-0.006	95	390449	5.00	5.17	
52 Isobutyl alcohol	41	7.220	7.226	-0.006	94	161516	125.1	118.7	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.305	7.311	-0.006	0	86523	10.0	10.1	
54 Benzene	78	7.336	7.342	-0.006	98	1133242	5.00	5.06	
56 1,2-Dichloroethane	62	7.409	7.409	0.000	97	308538	5.00	5.15	
57 Tert-amyl methyl ether	73	7.525	7.531	-0.006	98	676011	5.00	4.60	
* 58 Fluorobenzene (IS)	96	7.738	7.738	0.000	99	1738735	10.0	10.0	
59 n-Heptane	43	7.750	7.750	0.000	94	515252	5.00	5.42	
60 n-Butanol	56	8.098	8.092	0.006	92	244644	250.2	207.0	
61 Trichloroethene	95	8.214	8.220	-0.006	98	351508	5.00	6.04	
62 Methylcyclohexane	83	8.525	8.531	-0.006	93	516083	5.00	5.02	
63 1,2-Dichloropropane	63	8.549	8.549	0.000	93	303682	5.00	5.23	
64 Methyl methacrylate	69	8.628	8.628	0.000	93	147286	5.00	4.40	
65 1,4-Dioxane	88	8.634	8.634	0.000	34	32681	125.1	144.7	M
66 Dibromomethane	93	8.659	8.659	0.000	96	135681	5.00	5.15	
68 Dichlorobromomethane	83	8.890	8.890	0.000	99	345363	5.00	5.01	
69 2-Nitropropane	41	9.153	9.159	-0.006	99	42515	5.00	4.06	
71 2-Chloroethyl vinyl ether	63		9.250				ND	ND	
72 1-Bromo-2-chloroethane	63	9.287	9.287	0.000	98	302536	5.00	5.60	
73 cis-1,3-Dichloropropene	75	9.433	9.433	0.000	94	412832	5.00	4.79	
74 4-Methyl-2-pentanone (MIBK)	43	9.598	9.598	0.000	98	1048556	25.0	22.1	
\$ 75 Toluene-d8 (Surr)	98	9.738	9.738	0.000	94	1746953	10.0	9.96	
76 Toluene	92	9.817	9.817	0.000	98	722668	5.00	5.01	
78 trans-1,3-Dichloropropene	75	10.067	10.067	0.000	94	354525	5.00	5.04	
79 Ethyl methacrylate	69	10.128	10.128	0.000	91	300774	5.00	4.98	
80 1,1,2-Trichloroethane	97	10.274	10.274	0.000	91	201813	5.00	5.18	
81 Tetrachloroethene	166	10.360	10.366	-0.006	98	510536	5.00	7.44	
82 1,3-Dichloropropane	76	10.433	10.433	0.000	92	359292	5.00	5.23	
83 2-Hexanone	43	10.482	10.482	0.000	99	774327	25.0	23.3	
85 Chlorodibromomethane	129	10.646	10.646	0.000	90	230482	5.00	4.63	
86 Ethylene Dibromide	107	10.762	10.762	0.000	99	193956	5.00	5.09	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.189	0.000	86	1340211	10.0	10.0	
88 1-Chlorohexane	91	11.195	11.195	0.000	97	430579	5.00	4.88	
90 Chlorobenzene	112	11.213	11.213	0.000	94	802888	5.00	5.03	
91 1,1,1,2-Tetrachloroethane	131	11.292	11.292	0.000	94	271575	5.00	4.70	
92 Ethylbenzene	91	11.298	11.298	0.000	99	1415508	5.00	5.01	
93 m-Xylene & p-Xylene	106	11.414	11.414	0.000	99	1093289	10.0	9.87	
94 o-Xylene	106	11.743	11.743	0.000	97	510577	5.00	4.71	
95 Styrene	104	11.756	11.756	0.000	95	845807	5.00	4.79	
96 Bromoform	173	11.914	11.914	0.000	97	123083	5.00	3.92	
97 Isopropylbenzene	105	12.042	12.042	0.000	96	1341016	5.00	4.65	
\$ 100 4-Bromofluorobenzene (Surr)	95	12.182	12.182	0.000	91	631486	10.0	9.48	

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	12.280	12.280	0.000	94	245826	5.00	5.41	
102 Bromobenzene	156	12.304	12.304	0.000	96	324458	5.00	5.19	
103 trans-1,4-Dichloro-2-butene	53	12.310	12.310	0.000	84	139609	25.0	8.53	
104 1,2,3-Trichloropropane	110	12.329	12.329	0.000	84	65755	5.00	5.44	
105 N-Propylbenzene	91	12.371	12.371	0.000	99	1662635	5.00	5.41	
106 2-Chlorotoluene	126	12.445	12.445	0.000	97	326699	5.00	5.23	
107 1,3,5-Trimethylbenzene	105	12.506	12.506	0.000	94	1100231	5.00	4.98	
108 4-Chlorotoluene	126	12.536	12.536	0.000	98	333312	5.00	5.22	
109 tert-Butylbenzene	134	12.743	12.743	0.000	94	242179	5.00	4.91	
110 Pentachloroethane	167	12.780	12.780	0.000	92	190831	5.00	4.69	
111 1,2,4-Trimethylbenzene	105	12.786	12.786	0.000	97	1112859	5.00	4.91	
112 sec-Butylbenzene	105	12.908	12.908	0.000	94	1466521	5.00	5.05	
113 1,3-Dichlorobenzene	146	13.012	13.012	0.000	98	610713	5.00	4.92	
114 4-Isopropyltoluene	119	13.018	13.018	0.000	97	1253108	5.00	5.08	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	94	684398	10.0	10.0	
116 1,4-Dichlorobenzene	146	13.085	13.085	0.000	95	619534	5.00	4.99	
117 1,2,3-Trimethylbenzene	120	13.091	13.091	0.000	99	488064	5.00	4.97	
118 Benzyl chloride	126	13.158	13.158	0.000	99	91716	5.00	4.49	
119 n-Butylbenzene	92	13.310	13.310	0.000	98	604295	5.00	5.03	
120 1,2-Dichlorobenzene	146	13.341	13.341	0.000	98	547922	5.00	4.85	
122 1,2-Dibromo-3-Chloropropane	155	13.883	13.883	0.000	84	31721	5.00	4.48	
123 1,3,5-Trichlorobenzene	180	14.011	14.011	0.000	98	418204	5.00	4.63	
124 1,2,4-Trichlorobenzene	180	14.432	14.432	0.000	94	353244	5.00	4.69	
125 Hexachlorobutadiene	225	14.517	14.517	0.000	98	150159	5.00	4.46	
126 Naphthalene	128	14.615	14.615	0.000	97	689345	5.00	4.83	
127 1,2,3-Trichlorobenzene	180	14.755	14.755	0.000	95	316087	5.00	4.82	
135 p-Diethylbenzene	1		0.000				ND	ND	
144 2-ethoxy-2-methyl butane	1		0.000				ND	ND	
204 Pentane	43		0.000				ND	ND	
137 2-Methylnaphthalene	142		0.000				ND	ND	
134 Isopropyl alcohol	45		0.000				ND	ND	

QC Flag Legend

Processing Flags

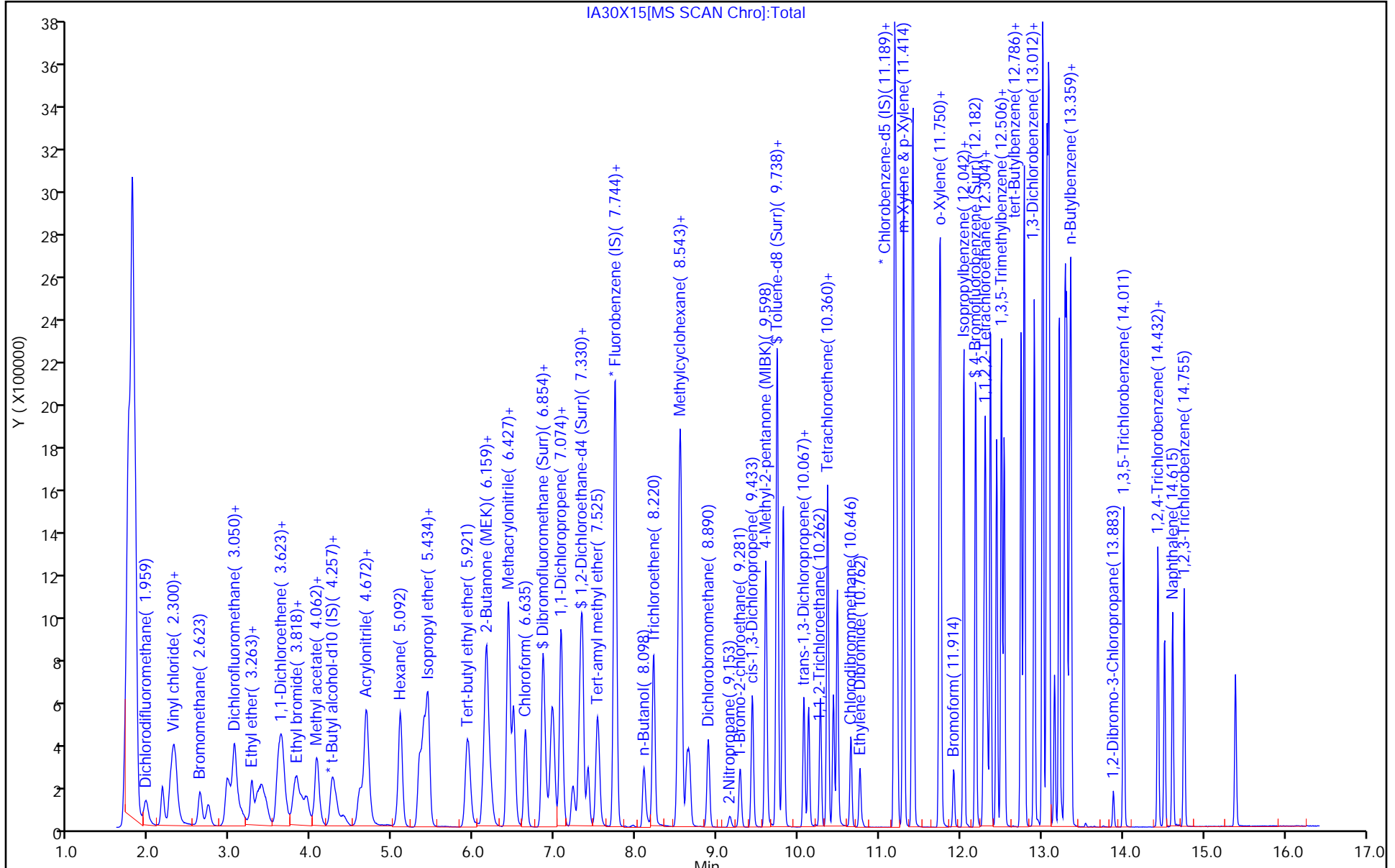
ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

MSV_Q_QVOA1_00080	Amount Added: 5.38	Units: uL	
MSV_Q_QVOA6_00076	Amount Added: 5.38	Units: uL	
MSV_Q_ETBR_00006	Amount Added: 5.38	Units: uL	
MSV_Q_QARC_00079	Amount Added: 5.38	Units: uL	
MSV_Q_EE_00004	Amount Added: 5.38	Units: uL	
MSV_QGAS_826_00125	Amount Added: 5.38	Units: uL	
MSV_31_826ISS_00004	Amount Added: 5.00	Units: uL	Run Reagent



Eurofins Lancaster Laboratories Env, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210430-28080.b\A30X15.D
 Lims ID: 410-37501-A-6 MSD
 Client ID: HD-COD-SW-15-0/1-0 MSD
 Sample Type: MSD
 Inject. Date: 30-Apr-2021 14:51:30 ALS Bottle#: 16 Worklist Smp#: 16
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0028080-016
 Operator ID: SRK36897 Instrument ID: 19930
 Method: \\chromfs\Lancaster\ChromData\19930\20210430-28080.b\8260 25ml HP31.m
 Limit Group: MSV - 8260C_D
 Last Update: 30-Apr-2021 17:42:44 Calib Date: 26-Mar-2021 01:26:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I07.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1630

First Level Reviewer: campbellme

Date: 30-Apr-2021 17:40:28

Compound	Amount Added	Amount Recovered	% Rec.
\$ 46 Dibromofluoromethane (Surr)	10.0	9.85	98.47
\$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	10.1	101.11
\$ 75 Toluene-d8 (Surr)	10.0	9.96	99.60
\$ 100 4-Bromofluorobenzene (Surr)	10.0	9.48	94.76

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-37501-1

SDG No.: _____

Instrument ID: 16334 Start Date: 11/30/2020 11:46Analysis Batch Number: 70996 End Date: 11/30/2020 18:45

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 410-70996/1		11/30/2020 11:46	1	GN30T01.D	R-624SilMS 30m 0.25 (mm)
IC 410-70996/3		11/30/2020 12:50	1	GN30I01.D	R-624SilMS 30m 0.25 (mm)
ICIS 410-70996/4		11/30/2020 13:12	1	GN30I02.D	R-624SilMS 30m 0.25 (mm)
IC 410-70996/5		11/30/2020 13:34	1	GN30I03.D	R-624SilMS 30m 0.25 (mm)
IC 410-70996/6		11/30/2020 13:56	1	GN30I04.D	R-624SilMS 30m 0.25 (mm)
IC 410-70996/7		11/30/2020 14:19	1	GN30I05.D	R-624SilMS 30m 0.25 (mm)
IC 410-70996/8		11/30/2020 14:41	1	GN30I06.D	R-624SilMS 30m 0.25 (mm)
IC 410-70996/9		11/30/2020 15:03	1	GN30I07.D	R-624SilMS 30m 0.25 (mm)
ICV 410-70996/10		11/30/2020 15:26	1	GN30V01.D	R-624SilMS 30m 0.25 (mm)
IC 410-70996/12		11/30/2020 16:10	1		R-624SilMS 30m 0.25 (mm)
IC 410-70996/13		11/30/2020 16:32	1		R-624SilMS 30m 0.25 (mm)
IC 410-70996/14		11/30/2020 16:54	1		R-624SilMS 30m 0.25 (mm)
IC 410-70996/15		11/30/2020 17:16	1		R-624SilMS 30m 0.25 (mm)
IC 410-70996/16		11/30/2020 17:39	1		R-624SilMS 30m 0.25 (mm)
IC 410-70996/17		11/30/2020 18:01	1		R-624SilMS 30m 0.25 (mm)
IC 410-70996/18		11/30/2020 18:23	1		R-624SilMS 30m 0.25 (mm)
ICV 410-70996/19		11/30/2020 18:45	1		R-624SilMS 30m 0.25 (mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-37501-1

SDG No.: _____

Instrument ID: 19930Start Date: 03/25/2021 19:32Analysis Batch Number: 107390End Date: 03/26/2021 01:47

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 410-107390/1		03/25/2021 19:32	1	IM25T01.D	R-624SilMS 30m 0.25 (mm)
IC 410-107390/3		03/25/2021 20:09	1		R-624SilMS 30m 0.25 (mm)
IC 410-107390/4		03/25/2021 20:30	1		R-624SilMS 30m 0.25 (mm)
IC 410-107390/5		03/25/2021 20:51	1		R-624SilMS 30m 0.25 (mm)
IC 410-107390/6		03/25/2021 21:12	1		R-624SilMS 30m 0.25 (mm)
IC 410-107390/7		03/25/2021 21:33	1		R-624SilMS 30m 0.25 (mm)
IC 410-107390/8		03/25/2021 21:55	1		R-624SilMS 30m 0.25 (mm)
IC 410-107390/9		03/25/2021 22:16	1		R-624SilMS 30m 0.25 (mm)
ICV 410-107390/10		03/25/2021 22:37	1		R-624SilMS 30m 0.25 (mm)
IC 410-107390/12		03/25/2021 23:19	1	IM25I01.D	R-624SilMS 30m 0.25 (mm)
ICIS 410-107390/13		03/25/2021 23:41	1	IM25I02.D	R-624SilMS 30m 0.25 (mm)
IC 410-107390/14		03/26/2021 00:02	1	IM25I03.D	R-624SilMS 30m 0.25 (mm)
IC 410-107390/15		03/26/2021 00:23	1	IM25I04.D	R-624SilMS 30m 0.25 (mm)
IC 410-107390/16		03/26/2021 00:44	1	IM25I05.D	R-624SilMS 30m 0.25 (mm)
IC 410-107390/17		03/26/2021 01:05	1	IM25I06.D	R-624SilMS 30m 0.25 (mm)
IC 410-107390/18		03/26/2021 01:26	1	IM25I07.D	R-624SilMS 30m 0.25 (mm)
ICV 410-107390/19		03/26/2021 01:47	1	IM25V01.D	R-624SilMS 30m 0.25 (mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-37501-1

SDG No.: _____

Instrument ID: 19930Start Date: 04/30/2021 09:29Analysis Batch Number: 120935End Date: 04/30/2021 20:33

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 410-120935/1		04/30/2021 09:29	1	IA30T02.D	R-624SilMS 30m 0.25 (mm)
CCVIS 410-120935/3		04/30/2021 10:15	1	IA30X02.D	R-624SilMS 30m 0.25 (mm)
LCS 410-120935/4		04/30/2021 10:36	1	IA30X03.D	R-624SilMS 30m 0.25 (mm)
LCSD 410-120935/5		04/30/2021 10:57	1	IA30X04.D	R-624SilMS 30m 0.25 (mm)
CCV 410-120935/6		04/30/2021 11:18	1		R-624SilMS 30m 0.25 (mm)
ZZZZZ		04/30/2021 11:39	1		R-624SilMS 30m 0.25 (mm)
ZZZZZ		04/30/2021 12:01	1		R-624SilMS 30m 0.25 (mm)
ZZZZZ		04/30/2021 12:22	1		R-624SilMS 30m 0.25 (mm)
MB 410-120935/10		04/30/2021 12:43	1	IA30X09.D	R-624SilMS 30m 0.25 (mm)
ZZZZZ		04/30/2021 13:05	1		R-624SilMS 30m 0.25 (mm)
ZZZZZ		04/30/2021 13:26	1		R-624SilMS 30m 0.25 (mm)
ZZZZZ		04/30/2021 13:47	1		R-624SilMS 30m 0.25 (mm)
410-37501-6	HD-COD-SW-15-0/1-0	04/30/2021 14:08	1	IA30X13.D	R-624SilMS 30m 0.25 (mm)
410-37501-6 MS	HD-COD-SW-15-0/1-0 MS MS	04/30/2021 14:29	1	IA30X14.D	R-624SilMS 30m 0.25 (mm)
410-37501-6 MSD	HD-COD-SW-15-0/1-0 MSD MSD	04/30/2021 14:51	1	IA30X15.D	R-624SilMS 30m 0.25 (mm)
ZZZZZ		04/30/2021 15:33	1		R-624SilMS 30m 0.25 (mm)
ZZZZZ		04/30/2021 15:54	1		R-624SilMS 30m 0.25 (mm)
ZZZZZ		04/30/2021 16:16	1		R-624SilMS 30m 0.25 (mm)
410-37501-1	HD-COD-SW-6-0/1-0	04/30/2021 16:37	1	IA30X20.D	R-624SilMS 30m 0.25 (mm)
410-37501-2	HD-COD-SW-7-0/1-0	04/30/2021 16:59	1	IA30X21.D	R-624SilMS 30m 0.25 (mm)
410-37501-3	HD-COD-SW-8-0/1-0	04/30/2021 17:20	1	IA30X22.D	R-624SilMS 30m 0.25 (mm)
410-37501-4	HD-COD-SW-9-0/1-0	04/30/2021 17:41	1	IA30X23.D	R-624SilMS 30m 0.25 (mm)
410-37501-5	HD-COD-SW-13-0/1-0	04/30/2021 18:02	1	IA30X24.D	R-624SilMS 30m 0.25 (mm)
ZZZZZ		04/30/2021 18:24	1		R-624SilMS 30m 0.25 (mm)
ZZZZZ		04/30/2021 18:45	10		R-624SilMS 30m 0.25 (mm)
ZZZZZ		04/30/2021 19:06	10		R-624SilMS 30m 0.25 (mm)
ZZZZZ		04/30/2021 19:50	100		R-624SilMS 30m 0.25 (mm)
ZZZZZ		04/30/2021 20:11	1000		R-624SilMS 30m 0.25 (mm)
ZZZZZ		04/30/2021 20:33	10		R-624SilMS 30m 0.25 (mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-37501-1

SDG No.: _____

Instrument ID: 16334 Start Date: 04/30/2021 08:29

Analysis Batch Number: 120958 End Date: 04/30/2021 18:21

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 410-120958/1		04/30/2021 08:29	1	GA30T01.D	R-624silMS 30m 0.25 (mm)
CCVIS 410-120958/3		04/30/2021 09:07	1	GA30C01.D	R-624silMS 30m 0.25 (mm)
LCS 410-120958/4		04/30/2021 09:29	1	GA30L01.D	R-624silMS 30m 0.25 (mm)
LCSD 410-120958/5		04/30/2021 09:51	1	GA30L02.D	R-624silMS 30m 0.25 (mm)
ZZZZZ		04/30/2021 10:13	1		R-624silMS 30m 0.25 (mm)
MB 410-120958/7		04/30/2021 10:37	1	GA30B01.D	R-624silMS 30m 0.25 (mm)
ZZZZZ		04/30/2021 10:59	1		R-624silMS 30m 0.25 (mm)
ZZZZZ		04/30/2021 11:21	1		R-624silMS 30m 0.25 (mm)
ZZZZZ		04/30/2021 11:43	1		R-624silMS 30m 0.25 (mm)
ZZZZZ		04/30/2021 12:06	1		R-624silMS 30m 0.25 (mm)
410-37501-13	HD-QC1-0/1-1	04/30/2021 12:28	1	GA30S05.D	R-624silMS 30m 0.25 (mm)
410-37501-14	HD-QC1-0/1-2	04/30/2021 12:50	1	GA30S06.D	R-624silMS 30m 0.25 (mm)
410-37501-7	HD-COD-SW-16-0/1-0	04/30/2021 13:12	1	GA30S07.D	R-624silMS 30m 0.25 (mm)
410-37501-8	HD-COD-SW-17-0/1-0	04/30/2021 13:34	1	GA30S08.D	R-624silMS 30m 0.25 (mm)
410-37501-9	HD-COD-SW-26-0/1-0	04/30/2021 13:56	1	GA30S09.D	R-624silMS 30m 0.25 (mm)
410-37501-10	HD-COD-SW-27-0/1-0	04/30/2021 14:18	1	GA30S10.D	R-624silMS 30m 0.25 (mm)
410-37501-11	HD-COD-SW-28-0/1-0	04/30/2021 14:40	1	GA30S11.D	R-624silMS 30m 0.25 (mm)
410-37501-12	HD-COD-SW-29-0/1-0	04/30/2021 15:02	1	GA30S12.D	R-624silMS 30m 0.25 (mm)
ZZZZZ		04/30/2021 15:24	1		R-624silMS 30m 0.25 (mm)
ZZZZZ		04/30/2021 15:46	1		R-624silMS 30m 0.25 (mm)
ZZZZZ		04/30/2021 16:08	1		R-624silMS 30m 0.25 (mm)
ZZZZZ		04/30/2021 16:31	1		R-624silMS 30m 0.25 (mm)
ZZZZZ		04/30/2021 16:53	1		R-624silMS 30m 0.25 (mm)
ZZZZZ		04/30/2021 17:15	1		R-624silMS 30m 0.25 (mm)
ZZZZZ		04/30/2021 17:37	1		R-624silMS 30m 0.25 (mm)
ZZZZZ		04/30/2021 17:59	1		R-624silMS 30m 0.25 (mm)
ZZZZZ		04/30/2021 18:21	1		R-624silMS 30m 0.25 (mm)

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-37501-1

SDG No.: _____

Batch Number: 70996 Batch Start Date: 11/30/20 11:46 Batch Analyst: Viray, Don V

Batch Method: 8260D Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MSV_29 826ISS 00013	MSV_Q_EE 00003	MSV_Q_ETBR 00005	MSV_Q_QARC 00056
BFB 410-70996/1		8260D		1 uL	1 uL				
IC 410-70996/3		8260D		25 mL	25 mL	1 uL			
ICIS 410-70996/4		8260D		25 mL	25 mL	1 uL			
IC 410-70996/5		8260D		25 mL	25 mL	1 uL			
IC 410-70996/6		8260D		25 mL	25 mL	1 uL			
IC 410-70996/7		8260D		25 mL	25 mL	1 uL			
IC 410-70996/8		8260D		25 mL	25 mL	1 uL			
IC 410-70996/9		8260D		25 mL	25 mL	1 uL			
ICV 410-70996/10		8260D		25 mL	25 mL	1 uL	12.5 uL	12.5 uL	12.5 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_Q_QVOA1 00057	MSV_Q_QVOA6 00054	MSV_QGAS 826 00093	MSV_RV1 826 00031	MSV_RV4 826 00035	MSV_RV4GAS826 00097
BFB 410-70996/1		8260D							
IC 410-70996/3		8260D					25 uL	25 uL	25 uL
ICIS 410-70996/4		8260D					10 uL	10 uL	10 uL
IC 410-70996/5		8260D					5 uL	5 uL	5 uL
IC 410-70996/6		8260D					2 uL	2 uL	2 uL
IC 410-70996/7		8260D					2 uL	2 uL	2 uL
IC 410-70996/8		8260D					2 uL	2 uL	2 uL
IC 410-70996/9		8260D					2 uL	2 uL	2 uL
ICV 410-70996/10		8260D		12.5 uL	12.5 uL	12.5 uL			

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_V_BFB 00003					
BFB 410-70996/1		8260D		1 uL					
IC 410-70996/3		8260D							
ICIS 410-70996/4		8260D							
IC 410-70996/5		8260D							
IC 410-70996/6		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 Laboratorie Job No.: 410-37501-1

SDG No.: _____

Batch Number: 70996 Batch Start Date: 11/30/20 11:46 Batch Analyst: Viray, Don V

Batch Method: 8260D Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_V_BFB 00003					
IC 410-70996/7		8260D							
IC 410-70996/8		8260D							
IC 410-70996/9		8260D							
ICV 410-70996/10		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 Laboratorie Job No.: 410-37501-1

SDG No.: _____

Batch Number: 107390 Batch Start Date: 03/25/21 19:32 Batch Analyst: Campbell, Miranda E

Batch Method: 8260D Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Lot#Vial	MSV_31_826ISS 00004	MSV_Q_EE 00003	MSV_Q_ETBR 00006
BFB 410-107390/1		8260D		1 uL	1 uL				
IC 410-107390/12		8260D		25 mL	25 mL	0126201F	5 uL		
ICIS 410-107390/13		8260D		25 mL	25 mL	0126201F	5 uL		
IC 410-107390/14		8260D		25 mL	25 mL	0126201F	5 uL		
IC 410-107390/15		8260D		25 mL	25 mL	0126201F	5 uL		
IC 410-107390/16		8260D		25 mL	25 mL	0126201F	5 uL		
IC 410-107390/17		8260D		25 mL	25 mL	0126201F	5 uL		
IC 410-107390/18		8260D		25 mL	25 mL	0126201F	5 uL		
ICV 410-107390/19		8260D		25 mL	25 mL	0126201F	5 uL	12.5 uL	12.5 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_Q_QARC 00073	MSV_Q_QVOA1 00073	MSV_Q_QVOA6 00071	MSV_QGAS 826 00118	MSV_RV1 826 00042	MSV_RV4 826 00048
BFB 410-107390/1		8260D							
IC 410-107390/12		8260D						25 uL	25 uL
ICIS 410-107390/13		8260D						10 uL	10 uL
IC 410-107390/14		8260D						5 uL	5 uL
IC 410-107390/15		8260D						2 uL	2 uL
IC 410-107390/16		8260D						2 uL	2 uL
IC 410-107390/17		8260D						2 uL	2 uL
IC 410-107390/18		8260D						2 uL	2 uL
ICV 410-107390/19		8260D		12.5 uL	12.5 uL	12.5 uL	12.5 uL		

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-37501-1

SDG No.: _____

Batch Number: 107390 Batch Start Date: 03/25/21 19:32 Batch Analyst: Campbell, Miranda E

Batch Method: 8260D Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_RV4GAS826 00121	MSV_V_BFB 00004				
BFB 410-107390/1		8260D			1 uL				
IC 410-107390/12		8260D		25 uL					
ICIS 410-107390/13		8260D		10 uL					
IC 410-107390/14		8260D		5 uL					
IC 410-107390/15		8260D		2 uL					
IC 410-107390/16		8260D		2 uL					
IC 410-107390/17		8260D		2 uL					
IC 410-107390/18		8260D		2 uL					
ICV 410-107390/19		8260D							

Batch Notes	

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-37501-1

SDG No.: _____

Batch Number: 120935 Batch Start Date: 04/30/21 09:29 Batch Analyst: Campbell, Miranda E

Batch Method: 8260D Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	ResidualChloChe ck	Headspace	Lot#Vial
BFB 410-120935/1		8260D		1 uL	1 uL				
CCVIS 410-120935/3		8260D		25 mL	25 mL				0126201F
LCS 410-120935/4		8260D		25 mL	25 mL				0126201F
LCS 410-120935/5		8260D		25 mL	25 mL				0126201F
MB 410-120935/10		8260D		25 mL	25 mL				0126201F
410-37501-A-6	HD-COD-SW-15-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-37501-A-6	HD-COD-SW-15-0/1-0 MS	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-37501-A-6	HD-COD-SW-15-0/1-0 MSD	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-37501-A-1	HD-COD-SW-6-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-37501-A-2	HD-COD-SW-7-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-37501-A-3	HD-COD-SW-8-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-37501-A-4	HD-COD-SW-9-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-37501-A-5	HD-COD-SW-13-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_31_826ISS 00004	MSV_Q_EE 00004	MSV_Q_ETBR 00006	MSV_Q_QARC 00079	MSV_Q_QVOA1 00080	MSV_Q_QVOA6 00076
BFB 410-120935/1		8260D							
CCVIS 410-120935/3		8260D		5 uL					
LCS 410-120935/4		8260D		5 uL	25 uL	25 uL	25 uL	25 uL	25 uL
LCS 410-120935/5		8260D		5 uL	25 uL	25 uL	25 uL	25 uL	25 uL
MB 410-120935/10		8260D		5 uL					
410-37501-A-6	HD-COD-SW-15-0/1-0	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 Laboratorie Job No.: 410-37501-1

SDG No.: _____

Batch Number: 120935 Batch Start Date: 04/30/21 09:29 Batch Analyst: Campbell, Miranda E

Batch Method: 8260D Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_31_826ISS 00004	MSV_Q_EE 00004	MSV_Q_ETBR 00006	MSV_Q_QARC 00079	MSV_Q_QVOA1 00080	MSV_Q_QVOA6 00076
410-37501-A-6 MS	HD-COD-SW-15-0/1 -0 MS	8260D	T	5 uL	5.38 uL	5.38 uL	5.38 uL	5.38 uL	5.38 uL
410-37501-A-6 MSD	HD-COD-SW-15-0/1 -0 MSD	8260D	T	5 uL	5.38 uL	5.38 uL	5.38 uL	5.38 uL	5.38 uL
410-37501-A-1	HD-COD-SW-6-0/1- 0	8260D	T	5 uL					
410-37501-A-2	HD-COD-SW-7-0/1- 0	8260D	T	5 uL					
410-37501-A-3	HD-COD-SW-8-0/1- 0	8260D	T	5 uL					
410-37501-A-4	HD-COD-SW-9-0/1- 0	8260D	T	5 uL					
410-37501-A-5	HD-COD-SW-13-0/1 -0	8260D	T	5 uL					

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_QGAS_826 00125	MSV_RV1_826 00045	MSV_RV4_826 00050	MSV_RV4GAS826 00128	MSV_V_BFB 00005	
BFB 410-120935/1		8260D						1 uL	
CCVIS 410-120935/3		8260D			10 uL	10 uL	10 uL		
LCS 410-120935/4		8260D		25 uL					
LCS 410-120935/5		8260D		25 uL					
MB 410-120935/10		8260D							
410-37501-A-6	HD-COD-SW-15-0/1 -0	8260D	T						
410-37501-A-6 MS	HD-COD-SW-15-0/1 -0 MS	8260D	T	5.38 uL					
410-37501-A-6 MSD	HD-COD-SW-15-0/1 -0 MSD	8260D	T	5.38 uL					
410-37501-A-1	HD-COD-SW-6-0/1- 0	8260D	T						
410-37501-A-2	HD-COD-SW-7-0/1- 0	8260D	T						
410-37501-A-3	HD-COD-SW-8-0/1- 0	8260D	T						
410-37501-A-4	HD-COD-SW-9-0/1- 0	8260D	T						

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-37501-1

SDG No.: _____

Batch Number: 120935 Batch Start Date: 04/30/21 09:29 Batch Analyst: Campbell, Miranda E

Batch Method: 8260D Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_QGAS_826 00125	MSV_RV1_826 00045	MSV_RV4_826 00050	MSV_RV4GAS826 00128	MSV_V_BFB 00005	
410-37501-A-5	HD-COD-SW-13-0/1 -0	8260D	T						

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-37501-1

SDG No.: _____

Batch Number: 120958 Batch Start Date: 04/30/21 08:29 Batch Analyst: Campbell, Miranda E

Batch Method: 8260D Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	ResidualChloChe ck	Headspace	Lot#Vial
BFB 410-120958/1		8260D		1 uL	1 uL				
CCVIS 410-120958/3		8260D		25 mL	25 mL				0126201F
LCS 410-120958/4		8260D		25 mL	25 mL				0126201F
LCS 410-120958/5		8260D		25 mL	25 mL				0126201F
MB 410-120958/7		8260D		25 mL	25 mL				0126201F
410-37501-A-13	HD-QC1-0/1-1	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-37501-A-14	HD-QC1-0/1-2	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-37501-A-7	HD-COD-SW-16-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-37501-A-8	HD-COD-SW-17-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-37501-A-9	HD-COD-SW-26-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-37501-A-10	HD-COD-SW-27-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-37501-A-11	HD-COD-SW-28-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-37501-A-12	HD-COD-SW-29-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_29_826ISS 00017	MSV_Q_EE 00004	MSV_Q_ETBR 00006	MSV_Q_QARC 00079	MSV_Q_QVOA1 00080	MSV_Q_QVOA6 00076
BFB 410-120958/1		8260D							
CCVIS 410-120958/3		8260D		1 uL					
LCS 410-120958/4		8260D		1 uL	25 uL	25 uL	25 uL	25 uL	25 uL
LCS 410-120958/5		8260D		1 uL	12.5 uL	12.5 uL	12.5 uL	12.5 uL	12.5 uL
MB 410-120958/7		8260D		1 uL					
410-37501-A-13	HD-QC1-0/1-1	8260D	T	1 uL					
410-37501-A-14	HD-QC1-0/1-2	8260D	T	1 uL					
410-37501-A-7	HD-COD-SW-16-0/1-0	8260D	T	1 uL					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-37501-1

SDG No.: _____

Batch Number: 120958 Batch Start Date: 04/30/21 08:29 Batch Analyst: Campbell, Miranda E

Batch Method: 8260D Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_29_826ISS 00017	MSV_Q_EE 00004	MSV_Q_ETBR 00006	MSV_Q_QARC 00079	MSV_Q_QVOA1 00080	MSV_Q_QVOA6 00076
410-37501-A-8	HD-COD-SW-17-0/1 -0	8260D	T	1 uL					
410-37501-A-9	HD-COD-SW-26-0/1 -0	8260D	T	1 uL					
410-37501-A-10	HD-COD-SW-27-0/1 -0	8260D	T	1 uL					
410-37501-A-11	HD-COD-SW-28-0/1 -0	8260D	T	1 uL					
410-37501-A-12	HD-COD-SW-29-0/1 -0	8260D	T	1 uL					

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_QGAS_826 00124	MSV_RV1_826 00045	MSV_RV4_826 00050	MSV_RV4GAS826 00127	MSV_V_BFB 00005	
BFB 410-120958/1		8260D						1 uL	
CCVIS 410-120958/3		8260D			20 uL	20 uL	20 uL		
LCS 410-120958/4		8260D		25 uL					
LCSD 410-120958/5		8260D		12.5 uL					
MB 410-120958/7		8260D							
410-37501-A-13	HD-QC1-0/1-1	8260D	T						
410-37501-A-14	HD-QC1-0/1-2	8260D	T						
410-37501-A-7	HD-COD-SW-16-0/1 -0	8260D	T						
410-37501-A-8	HD-COD-SW-17-0/1 -0	8260D	T						
410-37501-A-9	HD-COD-SW-26-0/1 -0	8260D	T						
410-37501-A-10	HD-COD-SW-27-0/1 -0	8260D	T						
410-37501-A-11	HD-COD-SW-28-0/1 -0	8260D	T						
410-37501-A-12	HD-COD-SW-29-0/1 -0	8260D	T						

Batch Notes	

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-37501-1

SDG No.: _____

Batch Number: 120958 Batch Start Date: 04/30/21 08:29 Batch Analyst: Campbell, Miranda E

Batch Method: 8260D Batch End Date: _____

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Shipping and Receiving Documents

Environmental Analysis Request/Chain of Custody

page 2 of 2



Lancaster Laboratories
Environmental

Acct. # _____ Group # _____ Sample # _____

Client: Groundwater Sciences Corporation				Matrix			Analyses Requested						For Lab Use Only			
Project Name/#: YNOP Monthly Surface Water		Site ID #: YNOP, York PA		<input type="checkbox"/> Tissue	<input type="checkbox"/> Ground	<input checked="" type="checkbox"/> Surface	Preservation Codes						SF #: _____			
Project Manager: Chris O'Neil		P.O. #: 10012.42		<input type="checkbox"/> Potable	<input type="checkbox"/> NPDES	<input type="checkbox"/> Trip Blank	H						SCR #: _____			
Sampler: Casey Littlefield / Erin Peeling		PWSID #: N/A		<input type="checkbox"/> Water			Aqueous VOCs via 8260D (low level - 25 ml purge)						Preservation Codes H = HCl T = Thiosulfate N = HNO ₃ B = NaOH S = H ₂ SO ₄ P = H ₃ PO ₄ O = Other			
Phone #: (717) 901-8176 / (717) 756-1246		Quote #: _____		<input type="checkbox"/> Sediment												
State where samples were collected: York, PA				For Compliance: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>										Remarks		
Collection																
Sample Identification		Date	Time	Grab	Composite	Soil	Water	Other	Total # of Containers							
HD-COD-SW-26-0/1-0		4/26/21	1120	X			X		3	X						
HD-COD-SW-27-0/1-0			1155	X			X		3	X						
HD-COD-SW-28-0/1-0			1345	X			X		3	X						
HD-COD-SW-29-0/1-0			0930	X			X		3	X						
HD-QC1-0/1-1			1200	X			X		3	X						
HD-QC1-0/1-2			—	X				X	2	X						
Turnaround Time Requested (TAT) (please check): Standard <input checked="" type="checkbox"/> Rush <input type="checkbox"/>				Relinquished by: <i>[Signature]</i>		Date	Time	Received by: <i>[Signature]</i>		Date	Time					
(Rush TAT is subject to laboratory approval and surcharges.)						4/27/21	0746			04/27/21	0746					
Date results are needed:				Relinquished by: <i>[Signature]</i>		Date	Time	Received by: <i>[Signature]</i>		Date	Time					
Rush results requested by (please check): E-Mail <input type="checkbox"/> Phone <input type="checkbox"/>						04/27/21	1128			4/27/21	1128					
E-mail Address:				Relinquished by: <i>[Signature]</i>		Date	Time	Received by:		Date	Time					
Phone:						4/27/21	1635									
Data Package Options (please check if required)				Relinquished by:		Date	Time	Received by:		Date	Time					
Type I (Validation/non-CLP)	<input type="checkbox"/>	MA MCP	<input type="checkbox"/>													
Type III (Reduced non-CLP)	<input type="checkbox"/>	CT RCP	<input type="checkbox"/>													
Type VI (Raw Data Only)	<input type="checkbox"/>	TX TRRP-13	<input type="checkbox"/>													
NJ DKQP	<input type="checkbox"/>	NYSDEC Category	<input type="checkbox"/> A or <input type="checkbox"/> B													
EDD Required? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>				Relinquished by Commercial Carrier:								Temperature upon receipt <u>0.6</u> °C				
If yes, format: CLP Like Deliverables, Project Specific Analyte List				UPS _____ FedEx _____ Other _____												

Login Sample Receipt Checklist

Client: Groundwater Sciences Corporation

Job Number: 410-37501-1

Login Number: 37501

List Source: Eurofins Lancaster Laboratories Env

List Number: 1

Creator: Jeremiah, Cory T

Question	Answer	Comment
Radioactivity wasn't checked or is \leq 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 ($\leq 6^{\circ}\text{C}$, not frozen).	True	
Cooler Temperature is recorded.	True	
WV: Container Temperature is acceptable ($\leq 6^{\circ}\text{C}$, 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	