

ANALYTICAL REPORT

Job Number: 410-24913-1

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.
Marrison C Williams
Project Manager
1/7/2021 2:21 PM

Marrison C Williams, Project Manager
2425 New Holland Pike, Lancaster, PA, 17601
(717)556-7246
Marrison.Williams@eurofinset.com
01/07/2021

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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: 410-24913-1

Qualifiers

GC/MS VOA

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
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
410-24913-1

Receipt

The samples were received on 12/23/2020 1:45 PM; the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 0.7°C

GC/MS VOA

Method 8260D_LL: The continuing calibration verification (CCV) associated with batch 410-81468 recovered outside acceptance criteria, low biased, for Acetone. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Non-detections are reported. Any detection is considered estimated.

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

Detection Summary

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

Job ID: 410-24913-1

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

Lab Sample ID: 410-24913-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	1.8	J ^c	5.0	0.90	ug/L	1		8260D	Total/NA

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

Lab Sample ID: 410-24913-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	2.3	J ^c	5.0	0.90	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.063	J	0.50	0.050	ug/L	1		8260D	Total/NA
Tetrachloroethene	0.074	J	0.50	0.060	ug/L	1		8260D	Total/NA

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

Lab Sample ID: 410-24913-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	1.6	J ^c	5.0	0.90	ug/L	1		8260D	Total/NA

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

Lab Sample ID: 410-24913-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	2.8	J ^c	5.0	0.90	ug/L	1		8260D	Total/NA
Tetrachloroethene	0.11	J	0.50	0.060	ug/L	1		8260D	Total/NA
Toluene	0.079	J	0.50	0.070	ug/L	1		8260D	Total/NA

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

Lab Sample ID: 410-24913-5

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
cis-1,2-Dichloroethene	0.078	J	0.50	0.050	ug/L	1		8260D	Total/NA
Trichloroethene	0.069	J	0.50	0.060	ug/L	1		8260D	Total/NA

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

Lab Sample ID: 410-24913-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.15	J	0.50	0.060	ug/L	1		8260D	Total/NA
1,1-Dichloroethene	0.10	J	0.50	0.060	ug/L	1		8260D	Total/NA
Chloroform	0.24	J	0.50	0.090	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.84		0.50	0.050	ug/L	1		8260D	Total/NA
Tetrachloroethene	2.8		0.50	0.060	ug/L	1		8260D	Total/NA
Trichloroethene	0.97		0.50	0.060	ug/L	1		8260D	Total/NA

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

Lab Sample ID: 410-24913-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	1.1	J	5.0	0.90	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.068	J	0.50	0.050	ug/L	1		8260D	Total/NA

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

Lab Sample ID: 410-24913-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.080	J	0.50	0.060	ug/L	1		8260D	Total/NA
Chloroform	0.16	J	0.50	0.090	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.65		0.50	0.050	ug/L	1		8260D	Total/NA
Tetrachloroethene	2.3		0.50	0.060	ug/L	1		8260D	Total/NA
Trichloroethene	0.86		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: 410-24913-1

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

Lab Sample ID: 410-24913-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	2.1	J	5.0	0.90	ug/L	1		8260D	Total/NA
Chloroform	0.18	J	0.50	0.090	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.060	J	0.50	0.050	ug/L	1		8260D	Total/NA
Tetrachloroethene	0.72		0.50	0.060	ug/L	1		8260D	Total/NA

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

Lab Sample ID: 410-24913-10

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	0.062	J	0.50	0.050	ug/L	1		8260D	Total/NA
Tetrachloroethene	0.068	J	0.50	0.060	ug/L	1		8260D	Total/NA

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

Lab Sample ID: 410-24913-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	2.2	J	5.0	0.90	ug/L	1		8260D	Total/NA
Chloroform	0.090	J	0.50	0.090	ug/L	1		8260D	Total/NA
Tetrachloroethene	0.14	J	0.50	0.060	ug/L	1		8260D	Total/NA
Toluene	0.072	J	0.50	0.070	ug/L	1		8260D	Total/NA

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

Lab Sample ID: 410-24913-12

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
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: 410-24913-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.076	J	0.50	0.060	ug/L	1		8260D	Total/NA
Chloroform	0.15	J	0.50	0.090	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.55		0.50	0.050	ug/L	1		8260D	Total/NA
Tetrachloroethene	1.9		0.50	0.060	ug/L	1		8260D	Total/NA
Trichloroethene	0.78		0.50	0.060	ug/L	1		8260D	Total/NA

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

Lab Sample ID: 410-24913-14

No Detections.

Client Sample Results

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

Job ID: 410-24913-1

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

Lab Sample ID: 410-24913-1

Date Collected: 12/23/20 10:45

Matrix: Water

Date Received: 12/23/20 13:45

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			01/01/21 02:18	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			01/01/21 02:18	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			01/01/21 02:18	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			01/01/21 02:18	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			01/01/21 02:18	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			01/01/21 02:18	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			01/01/21 02:18	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			01/01/21 02:18	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			01/01/21 02:18	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			01/01/21 02:18	1
2-Hexanone	ND		5.0	0.60	ug/L			01/01/21 02:18	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			01/01/21 02:18	1
Acetone	1.8	J ^c	5.0	0.90	ug/L			01/01/21 02:18	1
Benzene	ND		0.50	0.050	ug/L			01/01/21 02:18	1
Bromochloromethane	ND		0.50	0.050	ug/L			01/01/21 02:18	1
Bromodichloromethane	ND		0.50	0.050	ug/L			01/01/21 02:18	1
Bromoform	ND		1.0	0.30	ug/L			01/01/21 02:18	1
Bromomethane	ND		0.50	0.070	ug/L			01/01/21 02:18	1
Carbon disulfide	ND		1.0	0.060	ug/L			01/01/21 02:18	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			01/01/21 02:18	1
Chlorobenzene	ND		0.50	0.060	ug/L			01/01/21 02:18	1
Chloroethane	ND		0.50	0.070	ug/L			01/01/21 02:18	1
Chloroform	ND		0.50	0.090	ug/L			01/01/21 02:18	1
Chloromethane	ND		0.50	0.060	ug/L			01/01/21 02:18	1
cis-1,2-Dichloroethene	ND		0.50	0.050	ug/L			01/01/21 02:18	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			01/01/21 02:18	1
Dibromochloromethane	ND		0.50	0.070	ug/L			01/01/21 02:18	1
Ethylbenzene	ND		0.50	0.060	ug/L			01/01/21 02:18	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			01/01/21 02:18	1
Methylene Chloride	ND		0.50	0.070	ug/L			01/01/21 02:18	1
Styrene	ND		0.50	0.050	ug/L			01/01/21 02:18	1
Tetrachloroethene	ND		0.50	0.060	ug/L			01/01/21 02:18	1
Toluene	ND		0.50	0.070	ug/L			01/01/21 02:18	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			01/01/21 02:18	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			01/01/21 02:18	1
Trichloroethene	ND		0.50	0.060	ug/L			01/01/21 02:18	1
Vinyl chloride	ND		0.50	0.10	ug/L			01/01/21 02:18	1
Xylenes, Total	ND		1.0	0.15	ug/L			01/01/21 02:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		80 - 120		01/01/21 02:18	1
4-Bromofluorobenzene (Surr)	98		80 - 120		01/01/21 02:18	1
Dibromofluoromethane (Surr)	98		80 - 120		01/01/21 02:18	1
Toluene-d8 (Surr)	101		80 - 120		01/01/21 02:18	1

Client Sample Results

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

Job ID: 410-24913-1

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

Lab Sample ID: 410-24913-2

Date Collected: 12/23/20 11:25

Matrix: Water

Date Received: 12/23/20 13:45

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			01/01/21 02:40	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			01/01/21 02:40	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			01/01/21 02:40	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			01/01/21 02:40	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			01/01/21 02:40	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			01/01/21 02:40	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			01/01/21 02:40	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			01/01/21 02:40	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			01/01/21 02:40	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			01/01/21 02:40	1
2-Hexanone	ND		5.0	0.60	ug/L			01/01/21 02:40	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			01/01/21 02:40	1
Acetone	2.3	J ^c	5.0	0.90	ug/L			01/01/21 02:40	1
Benzene	ND		0.50	0.050	ug/L			01/01/21 02:40	1
Bromochloromethane	ND		0.50	0.050	ug/L			01/01/21 02:40	1
Bromodichloromethane	ND		0.50	0.050	ug/L			01/01/21 02:40	1
Bromoform	ND		1.0	0.30	ug/L			01/01/21 02:40	1
Bromomethane	ND		0.50	0.070	ug/L			01/01/21 02:40	1
Carbon disulfide	ND		1.0	0.060	ug/L			01/01/21 02:40	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			01/01/21 02:40	1
Chlorobenzene	ND		0.50	0.060	ug/L			01/01/21 02:40	1
Chloroethane	ND		0.50	0.070	ug/L			01/01/21 02:40	1
Chloroform	ND		0.50	0.090	ug/L			01/01/21 02:40	1
Chloromethane	ND		0.50	0.060	ug/L			01/01/21 02:40	1
cis-1,2-Dichloroethene	0.063	J	0.50	0.050	ug/L			01/01/21 02:40	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			01/01/21 02:40	1
Dibromochloromethane	ND		0.50	0.070	ug/L			01/01/21 02:40	1
Ethylbenzene	ND		0.50	0.060	ug/L			01/01/21 02:40	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			01/01/21 02:40	1
Methylene Chloride	ND		0.50	0.070	ug/L			01/01/21 02:40	1
Styrene	ND		0.50	0.050	ug/L			01/01/21 02:40	1
Tetrachloroethene	0.074	J	0.50	0.060	ug/L			01/01/21 02:40	1
Toluene	ND		0.50	0.070	ug/L			01/01/21 02:40	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			01/01/21 02:40	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			01/01/21 02:40	1
Trichloroethene	ND		0.50	0.060	ug/L			01/01/21 02:40	1
Vinyl chloride	ND		0.50	0.10	ug/L			01/01/21 02:40	1
Xylenes, Total	ND		1.0	0.15	ug/L			01/01/21 02:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		80 - 120		01/01/21 02:40	1
4-Bromofluorobenzene (Surr)	98		80 - 120		01/01/21 02:40	1
Dibromofluoromethane (Surr)	98		80 - 120		01/01/21 02:40	1
Toluene-d8 (Surr)	101		80 - 120		01/01/21 02:40	1

Client Sample Results

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

Job ID: 410-24913-1

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

Lab Sample ID: 410-24913-3

Date Collected: 12/23/20 09:35

Matrix: Water

Date Received: 12/23/20 13:45

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			01/01/21 03:03	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			01/01/21 03:03	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			01/01/21 03:03	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			01/01/21 03:03	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			01/01/21 03:03	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			01/01/21 03:03	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			01/01/21 03:03	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			01/01/21 03:03	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			01/01/21 03:03	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			01/01/21 03:03	1
2-Hexanone	ND		5.0	0.60	ug/L			01/01/21 03:03	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			01/01/21 03:03	1
Acetone	1.6	J ^c	5.0	0.90	ug/L			01/01/21 03:03	1
Benzene	ND		0.50	0.050	ug/L			01/01/21 03:03	1
Bromochloromethane	ND		0.50	0.050	ug/L			01/01/21 03:03	1
Bromodichloromethane	ND		0.50	0.050	ug/L			01/01/21 03:03	1
Bromoform	ND		1.0	0.30	ug/L			01/01/21 03:03	1
Bromomethane	ND		0.50	0.070	ug/L			01/01/21 03:03	1
Carbon disulfide	ND		1.0	0.060	ug/L			01/01/21 03:03	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			01/01/21 03:03	1
Chlorobenzene	ND		0.50	0.060	ug/L			01/01/21 03:03	1
Chloroethane	ND		0.50	0.070	ug/L			01/01/21 03:03	1
Chloroform	ND		0.50	0.090	ug/L			01/01/21 03:03	1
Chloromethane	ND		0.50	0.060	ug/L			01/01/21 03:03	1
cis-1,2-Dichloroethene	ND		0.50	0.050	ug/L			01/01/21 03:03	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			01/01/21 03:03	1
Dibromochloromethane	ND		0.50	0.070	ug/L			01/01/21 03:03	1
Ethylbenzene	ND		0.50	0.060	ug/L			01/01/21 03:03	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			01/01/21 03:03	1
Methylene Chloride	ND		0.50	0.070	ug/L			01/01/21 03:03	1
Styrene	ND		0.50	0.050	ug/L			01/01/21 03:03	1
Tetrachloroethene	ND		0.50	0.060	ug/L			01/01/21 03:03	1
Toluene	ND		0.50	0.070	ug/L			01/01/21 03:03	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			01/01/21 03:03	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			01/01/21 03:03	1
Trichloroethene	ND		0.50	0.060	ug/L			01/01/21 03:03	1
Vinyl chloride	ND		0.50	0.10	ug/L			01/01/21 03:03	1
Xylenes, Total	ND		1.0	0.15	ug/L			01/01/21 03:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		80 - 120		01/01/21 03:03	1
4-Bromofluorobenzene (Surr)	98		80 - 120		01/01/21 03:03	1
Dibromofluoromethane (Surr)	98		80 - 120		01/01/21 03:03	1
Toluene-d8 (Surr)	101		80 - 120		01/01/21 03:03	1

Client Sample Results

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

Job ID: 410-24913-1

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

Lab Sample ID: 410-24913-4

Date Collected: 12/23/20 12:15

Matrix: Water

Date Received: 12/23/20 13:45

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			01/01/21 03:24	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			01/01/21 03:24	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			01/01/21 03:24	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			01/01/21 03:24	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			01/01/21 03:24	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			01/01/21 03:24	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			01/01/21 03:24	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			01/01/21 03:24	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			01/01/21 03:24	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			01/01/21 03:24	1
2-Hexanone	ND		5.0	0.60	ug/L			01/01/21 03:24	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			01/01/21 03:24	1
Acetone	2.8	J ^c	5.0	0.90	ug/L			01/01/21 03:24	1
Benzene	ND		0.50	0.050	ug/L			01/01/21 03:24	1
Bromochloromethane	ND		0.50	0.050	ug/L			01/01/21 03:24	1
Bromodichloromethane	ND		0.50	0.050	ug/L			01/01/21 03:24	1
Bromoform	ND		1.0	0.30	ug/L			01/01/21 03:24	1
Bromomethane	ND		0.50	0.070	ug/L			01/01/21 03:24	1
Carbon disulfide	ND		1.0	0.060	ug/L			01/01/21 03:24	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			01/01/21 03:24	1
Chlorobenzene	ND		0.50	0.060	ug/L			01/01/21 03:24	1
Chloroethane	ND		0.50	0.070	ug/L			01/01/21 03:24	1
Chloroform	ND		0.50	0.090	ug/L			01/01/21 03:24	1
Chloromethane	ND		0.50	0.060	ug/L			01/01/21 03:24	1
cis-1,2-Dichloroethene	ND		0.50	0.050	ug/L			01/01/21 03:24	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			01/01/21 03:24	1
Dibromochloromethane	ND		0.50	0.070	ug/L			01/01/21 03:24	1
Ethylbenzene	ND		0.50	0.060	ug/L			01/01/21 03:24	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			01/01/21 03:24	1
Methylene Chloride	ND		0.50	0.070	ug/L			01/01/21 03:24	1
Styrene	ND		0.50	0.050	ug/L			01/01/21 03:24	1
Tetrachloroethene	0.11	J	0.50	0.060	ug/L			01/01/21 03:24	1
Toluene	0.079	J	0.50	0.070	ug/L			01/01/21 03:24	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			01/01/21 03:24	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			01/01/21 03:24	1
Trichloroethene	ND		0.50	0.060	ug/L			01/01/21 03:24	1
Vinyl chloride	ND		0.50	0.10	ug/L			01/01/21 03:24	1
Xylenes, Total	ND		1.0	0.15	ug/L			01/01/21 03:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		80 - 120		01/01/21 03:24	1
4-Bromofluorobenzene (Surr)	98		80 - 120		01/01/21 03:24	1
Dibromofluoromethane (Surr)	99		80 - 120		01/01/21 03:24	1
Toluene-d8 (Surr)	101		80 - 120		01/01/21 03:24	1

Client Sample Results

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

Job ID: 410-24913-1

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

Lab Sample ID: 410-24913-5

Date Collected: 12/23/20 09:55

Matrix: Water

Date Received: 12/23/20 13:45

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			01/05/21 13:17	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			01/05/21 13:17	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			01/05/21 13:17	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			01/05/21 13:17	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			01/05/21 13:17	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			01/05/21 13:17	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			01/05/21 13:17	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			01/05/21 13:17	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			01/05/21 13:17	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			01/05/21 13:17	1
2-Hexanone	ND		5.0	0.60	ug/L			01/05/21 13:17	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			01/05/21 13:17	1
Acetone	1.5	J	5.0	0.90	ug/L			01/05/21 13:17	1
Benzene	ND		0.50	0.050	ug/L			01/05/21 13:17	1
Bromochloromethane	ND		0.50	0.050	ug/L			01/05/21 13:17	1
Bromodichloromethane	ND		0.50	0.050	ug/L			01/05/21 13:17	1
Bromoform	ND		1.0	0.30	ug/L			01/05/21 13:17	1
Bromomethane	ND		0.50	0.070	ug/L			01/05/21 13:17	1
Carbon disulfide	ND		1.0	0.060	ug/L			01/05/21 13:17	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			01/05/21 13:17	1
Chlorobenzene	ND		0.50	0.060	ug/L			01/05/21 13:17	1
Chloroethane	ND		0.50	0.070	ug/L			01/05/21 13:17	1
Chloroform	ND		0.50	0.090	ug/L			01/05/21 13:17	1
Chloromethane	ND		0.50	0.060	ug/L			01/05/21 13:17	1
cis-1,2-Dichloroethene	0.078	J	0.50	0.050	ug/L			01/05/21 13:17	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			01/05/21 13:17	1
Dibromochloromethane	ND		0.50	0.070	ug/L			01/05/21 13:17	1
Ethylbenzene	ND		0.50	0.060	ug/L			01/05/21 13:17	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			01/05/21 13:17	1
Methylene Chloride	ND		0.50	0.070	ug/L			01/05/21 13:17	1
Styrene	ND		0.50	0.050	ug/L			01/05/21 13:17	1
Tetrachloroethene	ND		0.50	0.060	ug/L			01/05/21 13:17	1
Toluene	ND		0.50	0.070	ug/L			01/05/21 13:17	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			01/05/21 13:17	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			01/05/21 13:17	1
Trichloroethene	0.069	J	0.50	0.060	ug/L			01/05/21 13:17	1
Vinyl chloride	ND		0.50	0.10	ug/L			01/05/21 13:17	1
Xylenes, Total	ND		1.0	0.15	ug/L			01/05/21 13:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		80 - 120		01/05/21 13:17	1
4-Bromofluorobenzene (Surr)	98		80 - 120		01/05/21 13:17	1
Dibromofluoromethane (Surr)	103		80 - 120		01/05/21 13:17	1
Toluene-d8 (Surr)	99		80 - 120		01/05/21 13:17	1

Client Sample Results

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

Job ID: 410-24913-1

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

Lab Sample ID: 410-24913-6

Date Collected: 12/23/20 11:45

Matrix: Water

Date Received: 12/23/20 13:45

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			01/05/21 00:42	1
1,1,1-Trichloroethane	0.15	J	0.50	0.060	ug/L			01/05/21 00:42	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			01/05/21 00:42	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			01/05/21 00:42	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			01/05/21 00:42	1
1,1-Dichloroethene	0.10	J	0.50	0.060	ug/L			01/05/21 00:42	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			01/05/21 00:42	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			01/05/21 00:42	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			01/05/21 00:42	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			01/05/21 00:42	1
2-Hexanone	ND		5.0	0.60	ug/L			01/05/21 00:42	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			01/05/21 00:42	1
Acetone	ND		5.0	0.90	ug/L			01/05/21 00:42	1
Benzene	ND		0.50	0.050	ug/L			01/05/21 00:42	1
Bromochloromethane	ND		0.50	0.050	ug/L			01/05/21 00:42	1
Bromodichloromethane	ND		0.50	0.050	ug/L			01/05/21 00:42	1
Bromoform	ND		1.0	0.30	ug/L			01/05/21 00:42	1
Bromomethane	ND		0.50	0.070	ug/L			01/05/21 00:42	1
Carbon disulfide	ND		1.0	0.060	ug/L			01/05/21 00:42	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			01/05/21 00:42	1
Chlorobenzene	ND		0.50	0.060	ug/L			01/05/21 00:42	1
Chloroethane	ND		0.50	0.070	ug/L			01/05/21 00:42	1
Chloroform	0.24	J	0.50	0.090	ug/L			01/05/21 00:42	1
Chloromethane	ND		0.50	0.060	ug/L			01/05/21 00:42	1
cis-1,2-Dichloroethene	0.84		0.50	0.050	ug/L			01/05/21 00:42	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			01/05/21 00:42	1
Dibromochloromethane	ND		0.50	0.070	ug/L			01/05/21 00:42	1
Ethylbenzene	ND		0.50	0.060	ug/L			01/05/21 00:42	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			01/05/21 00:42	1
Methylene Chloride	ND		0.50	0.070	ug/L			01/05/21 00:42	1
Styrene	ND		0.50	0.050	ug/L			01/05/21 00:42	1
Tetrachloroethene	2.8		0.50	0.060	ug/L			01/05/21 00:42	1
Toluene	ND		0.50	0.070	ug/L			01/05/21 00:42	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			01/05/21 00:42	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			01/05/21 00:42	1
Trichloroethene	0.97		0.50	0.060	ug/L			01/05/21 00:42	1
Vinyl chloride	ND		0.50	0.10	ug/L			01/05/21 00:42	1
Xylenes, Total	ND		1.0	0.15	ug/L			01/05/21 00:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		80 - 120		01/05/21 00:42	1
4-Bromofluorobenzene (Surr)	96		80 - 120		01/05/21 00:42	1
Dibromofluoromethane (Surr)	99		80 - 120		01/05/21 00:42	1
Toluene-d8 (Surr)	98		80 - 120		01/05/21 00:42	1

Client Sample Results

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

Job ID: 410-24913-1

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

Lab Sample ID: 410-24913-7

Date Collected: 12/23/20 10:10

Matrix: Water

Date Received: 12/23/20 13:45

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			01/05/21 03:37	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			01/05/21 03:37	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			01/05/21 03:37	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			01/05/21 03:37	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			01/05/21 03:37	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			01/05/21 03:37	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			01/05/21 03:37	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			01/05/21 03:37	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			01/05/21 03:37	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			01/05/21 03:37	1
2-Hexanone	ND		5.0	0.60	ug/L			01/05/21 03:37	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			01/05/21 03:37	1
Acetone	1.1	J	5.0	0.90	ug/L			01/05/21 03:37	1
Benzene	ND		0.50	0.050	ug/L			01/05/21 03:37	1
Bromochloromethane	ND		0.50	0.050	ug/L			01/05/21 03:37	1
Bromodichloromethane	ND		0.50	0.050	ug/L			01/05/21 03:37	1
Bromoform	ND		1.0	0.30	ug/L			01/05/21 03:37	1
Bromomethane	ND		0.50	0.070	ug/L			01/05/21 03:37	1
Carbon disulfide	ND		1.0	0.060	ug/L			01/05/21 03:37	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			01/05/21 03:37	1
Chlorobenzene	ND		0.50	0.060	ug/L			01/05/21 03:37	1
Chloroethane	ND		0.50	0.070	ug/L			01/05/21 03:37	1
Chloroform	ND		0.50	0.090	ug/L			01/05/21 03:37	1
Chloromethane	ND		0.50	0.060	ug/L			01/05/21 03:37	1
cis-1,2-Dichloroethene	0.068	J	0.50	0.050	ug/L			01/05/21 03:37	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			01/05/21 03:37	1
Dibromochloromethane	ND		0.50	0.070	ug/L			01/05/21 03:37	1
Ethylbenzene	ND		0.50	0.060	ug/L			01/05/21 03:37	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			01/05/21 03:37	1
Methylene Chloride	ND		0.50	0.070	ug/L			01/05/21 03:37	1
Styrene	ND		0.50	0.050	ug/L			01/05/21 03:37	1
Tetrachloroethene	ND		0.50	0.060	ug/L			01/05/21 03:37	1
Toluene	ND		0.50	0.070	ug/L			01/05/21 03:37	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			01/05/21 03:37	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			01/05/21 03:37	1
Trichloroethene	ND		0.50	0.060	ug/L			01/05/21 03:37	1
Vinyl chloride	ND		0.50	0.10	ug/L			01/05/21 03:37	1
Xylenes, Total	ND		1.0	0.15	ug/L			01/05/21 03:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		80 - 120		01/05/21 03:37	1
4-Bromofluorobenzene (Surr)	96		80 - 120		01/05/21 03:37	1
Dibromofluoromethane (Surr)	99		80 - 120		01/05/21 03:37	1
Toluene-d8 (Surr)	98		80 - 120		01/05/21 03:37	1

Client Sample Results

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

Job ID: 410-24913-1

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

Lab Sample ID: 410-24913-8

Date Collected: 12/23/20 10:25

Matrix: Water

Date Received: 12/23/20 13:45

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			01/05/21 03:59	1
1,1,1-Trichloroethane	0.080	J	0.50	0.060	ug/L			01/05/21 03:59	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			01/05/21 03:59	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			01/05/21 03:59	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			01/05/21 03:59	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			01/05/21 03:59	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			01/05/21 03:59	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			01/05/21 03:59	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			01/05/21 03:59	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			01/05/21 03:59	1
2-Hexanone	ND		5.0	0.60	ug/L			01/05/21 03:59	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			01/05/21 03:59	1
Acetone	ND		5.0	0.90	ug/L			01/05/21 03:59	1
Benzene	ND		0.50	0.050	ug/L			01/05/21 03:59	1
Bromochloromethane	ND		0.50	0.050	ug/L			01/05/21 03:59	1
Bromodichloromethane	ND		0.50	0.050	ug/L			01/05/21 03:59	1
Bromoform	ND		1.0	0.30	ug/L			01/05/21 03:59	1
Bromomethane	ND		0.50	0.070	ug/L			01/05/21 03:59	1
Carbon disulfide	ND		1.0	0.060	ug/L			01/05/21 03:59	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			01/05/21 03:59	1
Chlorobenzene	ND		0.50	0.060	ug/L			01/05/21 03:59	1
Chloroethane	ND		0.50	0.070	ug/L			01/05/21 03:59	1
Chloroform	0.16	J	0.50	0.090	ug/L			01/05/21 03:59	1
Chloromethane	ND		0.50	0.060	ug/L			01/05/21 03:59	1
cis-1,2-Dichloroethene	0.65		0.50	0.050	ug/L			01/05/21 03:59	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			01/05/21 03:59	1
Dibromochloromethane	ND		0.50	0.070	ug/L			01/05/21 03:59	1
Ethylbenzene	ND		0.50	0.060	ug/L			01/05/21 03:59	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			01/05/21 03:59	1
Methylene Chloride	ND		0.50	0.070	ug/L			01/05/21 03:59	1
Styrene	ND		0.50	0.050	ug/L			01/05/21 03:59	1
Tetrachloroethene	2.3		0.50	0.060	ug/L			01/05/21 03:59	1
Toluene	ND		0.50	0.070	ug/L			01/05/21 03:59	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			01/05/21 03:59	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			01/05/21 03:59	1
Trichloroethene	0.86		0.50	0.060	ug/L			01/05/21 03:59	1
Vinyl chloride	ND		0.50	0.10	ug/L			01/05/21 03:59	1
Xylenes, Total	ND		1.0	0.15	ug/L			01/05/21 03:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		80 - 120		01/05/21 03:59	1
4-Bromofluorobenzene (Surr)	95		80 - 120		01/05/21 03:59	1
Dibromofluoromethane (Surr)	98		80 - 120		01/05/21 03:59	1
Toluene-d8 (Surr)	99		80 - 120		01/05/21 03:59	1

Client Sample Results

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

Job ID: 410-24913-1

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

Lab Sample ID: 410-24913-9

Date Collected: 12/23/20 11:05

Matrix: Water

Date Received: 12/23/20 13:45

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			01/05/21 04:21	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			01/05/21 04:21	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			01/05/21 04:21	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			01/05/21 04:21	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			01/05/21 04:21	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			01/05/21 04:21	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			01/05/21 04:21	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			01/05/21 04:21	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			01/05/21 04:21	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			01/05/21 04:21	1
2-Hexanone	ND		5.0	0.60	ug/L			01/05/21 04:21	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			01/05/21 04:21	1
Acetone	2.1	J	5.0	0.90	ug/L			01/05/21 04:21	1
Benzene	ND		0.50	0.050	ug/L			01/05/21 04:21	1
Bromochloromethane	ND		0.50	0.050	ug/L			01/05/21 04:21	1
Bromodichloromethane	ND		0.50	0.050	ug/L			01/05/21 04:21	1
Bromoform	ND		1.0	0.30	ug/L			01/05/21 04:21	1
Bromomethane	ND		0.50	0.070	ug/L			01/05/21 04:21	1
Carbon disulfide	ND		1.0	0.060	ug/L			01/05/21 04:21	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			01/05/21 04:21	1
Chlorobenzene	ND		0.50	0.060	ug/L			01/05/21 04:21	1
Chloroethane	ND		0.50	0.070	ug/L			01/05/21 04:21	1
Chloroform	0.18	J	0.50	0.090	ug/L			01/05/21 04:21	1
Chloromethane	ND		0.50	0.060	ug/L			01/05/21 04:21	1
cis-1,2-Dichloroethene	0.060	J	0.50	0.050	ug/L			01/05/21 04:21	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			01/05/21 04:21	1
Dibromochloromethane	ND		0.50	0.070	ug/L			01/05/21 04:21	1
Ethylbenzene	ND		0.50	0.060	ug/L			01/05/21 04:21	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			01/05/21 04:21	1
Methylene Chloride	ND		0.50	0.070	ug/L			01/05/21 04:21	1
Styrene	ND		0.50	0.050	ug/L			01/05/21 04:21	1
Tetrachloroethene	0.72		0.50	0.060	ug/L			01/05/21 04:21	1
Toluene	ND		0.50	0.070	ug/L			01/05/21 04:21	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			01/05/21 04:21	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			01/05/21 04:21	1
Trichloroethene	ND		0.50	0.060	ug/L			01/05/21 04:21	1
Vinyl chloride	ND		0.50	0.10	ug/L			01/05/21 04:21	1
Xylenes, Total	ND		1.0	0.15	ug/L			01/05/21 04:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		80 - 120		01/05/21 04:21	1
4-Bromofluorobenzene (Surr)	95		80 - 120		01/05/21 04:21	1
Dibromofluoromethane (Surr)	99		80 - 120		01/05/21 04:21	1
Toluene-d8 (Surr)	99		80 - 120		01/05/21 04:21	1

Client Sample Results

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

Job ID: 410-24913-1

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

Lab Sample ID: 410-24913-10

Date Collected: 12/23/20 11:35

Matrix: Water

Date Received: 12/23/20 13:45

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			01/05/21 04:43	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			01/05/21 04:43	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			01/05/21 04:43	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			01/05/21 04:43	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			01/05/21 04:43	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			01/05/21 04:43	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			01/05/21 04:43	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			01/05/21 04:43	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			01/05/21 04:43	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			01/05/21 04:43	1
2-Hexanone	ND		5.0	0.60	ug/L			01/05/21 04:43	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			01/05/21 04:43	1
Acetone	1.9	J	5.0	0.90	ug/L			01/05/21 04:43	1
Benzene	ND		0.50	0.050	ug/L			01/05/21 04:43	1
Bromochloromethane	ND		0.50	0.050	ug/L			01/05/21 04:43	1
Bromodichloromethane	ND		0.50	0.050	ug/L			01/05/21 04:43	1
Bromoform	ND		1.0	0.30	ug/L			01/05/21 04:43	1
Bromomethane	ND		0.50	0.070	ug/L			01/05/21 04:43	1
Carbon disulfide	ND		1.0	0.060	ug/L			01/05/21 04:43	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			01/05/21 04:43	1
Chlorobenzene	ND		0.50	0.060	ug/L			01/05/21 04:43	1
Chloroethane	ND		0.50	0.070	ug/L			01/05/21 04:43	1
Chloroform	ND		0.50	0.090	ug/L			01/05/21 04:43	1
Chloromethane	ND		0.50	0.060	ug/L			01/05/21 04:43	1
cis-1,2-Dichloroethene	0.062	J	0.50	0.050	ug/L			01/05/21 04:43	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			01/05/21 04:43	1
Dibromochloromethane	ND		0.50	0.070	ug/L			01/05/21 04:43	1
Ethylbenzene	ND		0.50	0.060	ug/L			01/05/21 04:43	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			01/05/21 04:43	1
Methylene Chloride	ND		0.50	0.070	ug/L			01/05/21 04:43	1
Styrene	ND		0.50	0.050	ug/L			01/05/21 04:43	1
Tetrachloroethene	0.068	J	0.50	0.060	ug/L			01/05/21 04:43	1
Toluene	ND		0.50	0.070	ug/L			01/05/21 04:43	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			01/05/21 04:43	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			01/05/21 04:43	1
Trichloroethene	ND		0.50	0.060	ug/L			01/05/21 04:43	1
Vinyl chloride	ND		0.50	0.10	ug/L			01/05/21 04:43	1
Xylenes, Total	ND		1.0	0.15	ug/L			01/05/21 04:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		80 - 120		01/05/21 04:43	1
4-Bromofluorobenzene (Surr)	95		80 - 120		01/05/21 04:43	1
Dibromofluoromethane (Surr)	98		80 - 120		01/05/21 04:43	1
Toluene-d8 (Surr)	98		80 - 120		01/05/21 04:43	1

Client Sample Results

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

Job ID: 410-24913-1

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

Lab Sample ID: 410-24913-11

Date Collected: 12/23/20 12:25

Matrix: Water

Date Received: 12/23/20 13:45

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			01/05/21 05:05	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			01/05/21 05:05	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			01/05/21 05:05	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			01/05/21 05:05	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			01/05/21 05:05	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			01/05/21 05:05	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			01/05/21 05:05	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			01/05/21 05:05	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			01/05/21 05:05	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			01/05/21 05:05	1
2-Hexanone	ND		5.0	0.60	ug/L			01/05/21 05:05	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			01/05/21 05:05	1
Acetone	2.2	J	5.0	0.90	ug/L			01/05/21 05:05	1
Benzene	ND		0.50	0.050	ug/L			01/05/21 05:05	1
Bromochloromethane	ND		0.50	0.050	ug/L			01/05/21 05:05	1
Bromodichloromethane	ND		0.50	0.050	ug/L			01/05/21 05:05	1
Bromoform	ND		1.0	0.30	ug/L			01/05/21 05:05	1
Bromomethane	ND		0.50	0.070	ug/L			01/05/21 05:05	1
Carbon disulfide	ND		1.0	0.060	ug/L			01/05/21 05:05	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			01/05/21 05:05	1
Chlorobenzene	ND		0.50	0.060	ug/L			01/05/21 05:05	1
Chloroethane	ND		0.50	0.070	ug/L			01/05/21 05:05	1
Chloroform	0.090	J	0.50	0.090	ug/L			01/05/21 05:05	1
Chloromethane	ND		0.50	0.060	ug/L			01/05/21 05:05	1
cis-1,2-Dichloroethene	ND		0.50	0.050	ug/L			01/05/21 05:05	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			01/05/21 05:05	1
Dibromochloromethane	ND		0.50	0.070	ug/L			01/05/21 05:05	1
Ethylbenzene	ND		0.50	0.060	ug/L			01/05/21 05:05	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			01/05/21 05:05	1
Methylene Chloride	ND		0.50	0.070	ug/L			01/05/21 05:05	1
Styrene	ND		0.50	0.050	ug/L			01/05/21 05:05	1
Tetrachloroethene	0.14	J	0.50	0.060	ug/L			01/05/21 05:05	1
Toluene	0.072	J	0.50	0.070	ug/L			01/05/21 05:05	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			01/05/21 05:05	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			01/05/21 05:05	1
Trichloroethene	ND		0.50	0.060	ug/L			01/05/21 05:05	1
Vinyl chloride	ND		0.50	0.10	ug/L			01/05/21 05:05	1
Xylenes, Total	ND		1.0	0.15	ug/L			01/05/21 05:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		80 - 120		01/05/21 05:05	1
4-Bromofluorobenzene (Surr)	95		80 - 120		01/05/21 05:05	1
Dibromofluoromethane (Surr)	99		80 - 120		01/05/21 05:05	1
Toluene-d8 (Surr)	99		80 - 120		01/05/21 05:05	1

Client Sample Results

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

Job ID: 410-24913-1

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

Lab Sample ID: 410-24913-12

Date Collected: 12/23/20 09:25

Matrix: Water

Date Received: 12/23/20 13:45

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			01/05/21 05:27	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			01/05/21 05:27	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			01/05/21 05:27	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			01/05/21 05:27	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			01/05/21 05:27	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			01/05/21 05:27	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			01/05/21 05:27	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			01/05/21 05:27	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			01/05/21 05:27	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			01/05/21 05:27	1
2-Hexanone	ND		5.0	0.60	ug/L			01/05/21 05:27	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			01/05/21 05:27	1
Acetone	1.8	J	5.0	0.90	ug/L			01/05/21 05:27	1
Benzene	ND		0.50	0.050	ug/L			01/05/21 05:27	1
Bromochloromethane	ND		0.50	0.050	ug/L			01/05/21 05:27	1
Bromodichloromethane	ND		0.50	0.050	ug/L			01/05/21 05:27	1
Bromoform	ND		1.0	0.30	ug/L			01/05/21 05:27	1
Bromomethane	ND		0.50	0.070	ug/L			01/05/21 05:27	1
Carbon disulfide	ND		1.0	0.060	ug/L			01/05/21 05:27	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			01/05/21 05:27	1
Chlorobenzene	ND		0.50	0.060	ug/L			01/05/21 05:27	1
Chloroethane	ND		0.50	0.070	ug/L			01/05/21 05:27	1
Chloroform	ND		0.50	0.090	ug/L			01/05/21 05:27	1
Chloromethane	ND		0.50	0.060	ug/L			01/05/21 05:27	1
cis-1,2-Dichloroethene	0.076	J	0.50	0.050	ug/L			01/05/21 05:27	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			01/05/21 05:27	1
Dibromochloromethane	ND		0.50	0.070	ug/L			01/05/21 05:27	1
Ethylbenzene	ND		0.50	0.060	ug/L			01/05/21 05:27	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			01/05/21 05:27	1
Methylene Chloride	ND		0.50	0.070	ug/L			01/05/21 05:27	1
Styrene	ND		0.50	0.050	ug/L			01/05/21 05:27	1
Tetrachloroethene	ND		0.50	0.060	ug/L			01/05/21 05:27	1
Toluene	ND		0.50	0.070	ug/L			01/05/21 05:27	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			01/05/21 05:27	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			01/05/21 05:27	1
Trichloroethene	0.075	J	0.50	0.060	ug/L			01/05/21 05:27	1
Vinyl chloride	ND		0.50	0.10	ug/L			01/05/21 05:27	1
Xylenes, Total	ND		1.0	0.15	ug/L			01/05/21 05:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		80 - 120		01/05/21 05:27	1
4-Bromofluorobenzene (Surr)	95		80 - 120		01/05/21 05:27	1
Dibromofluoromethane (Surr)	98		80 - 120		01/05/21 05:27	1
Toluene-d8 (Surr)	99		80 - 120		01/05/21 05:27	1

Client Sample Results

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

Job ID: 410-24913-1

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

Lab Sample ID: 410-24913-13

Date Collected: 12/23/20 12:00

Matrix: Water

Date Received: 12/23/20 13:45

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			01/05/21 11:28	1
1,1,1-Trichloroethane	0.076	J	0.50	0.060	ug/L			01/05/21 11:28	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			01/05/21 11:28	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			01/05/21 11:28	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			01/05/21 11:28	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			01/05/21 11:28	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			01/05/21 11:28	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			01/05/21 11:28	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			01/05/21 11:28	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			01/05/21 11:28	1
2-Hexanone	ND		5.0	0.60	ug/L			01/05/21 11:28	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			01/05/21 11:28	1
Acetone	ND		5.0	0.90	ug/L			01/05/21 11:28	1
Benzene	ND		0.50	0.050	ug/L			01/05/21 11:28	1
Bromochloromethane	ND		0.50	0.050	ug/L			01/05/21 11:28	1
Bromodichloromethane	ND		0.50	0.050	ug/L			01/05/21 11:28	1
Bromoform	ND		1.0	0.30	ug/L			01/05/21 11:28	1
Bromomethane	ND		0.50	0.070	ug/L			01/05/21 11:28	1
Carbon disulfide	ND		1.0	0.060	ug/L			01/05/21 11:28	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			01/05/21 11:28	1
Chlorobenzene	ND		0.50	0.060	ug/L			01/05/21 11:28	1
Chloroethane	ND		0.50	0.070	ug/L			01/05/21 11:28	1
Chloroform	0.15	J	0.50	0.090	ug/L			01/05/21 11:28	1
Chloromethane	ND		0.50	0.060	ug/L			01/05/21 11:28	1
cis-1,2-Dichloroethene	0.55		0.50	0.050	ug/L			01/05/21 11:28	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			01/05/21 11:28	1
Dibromochloromethane	ND		0.50	0.070	ug/L			01/05/21 11:28	1
Ethylbenzene	ND		0.50	0.060	ug/L			01/05/21 11:28	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			01/05/21 11:28	1
Methylene Chloride	ND		0.50	0.070	ug/L			01/05/21 11:28	1
Styrene	ND		0.50	0.050	ug/L			01/05/21 11:28	1
Tetrachloroethene	1.9		0.50	0.060	ug/L			01/05/21 11:28	1
Toluene	ND		0.50	0.070	ug/L			01/05/21 11:28	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			01/05/21 11:28	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			01/05/21 11:28	1
Trichloroethene	0.78		0.50	0.060	ug/L			01/05/21 11:28	1
Vinyl chloride	ND		0.50	0.10	ug/L			01/05/21 11:28	1
Xylenes, Total	ND		1.0	0.15	ug/L			01/05/21 11:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	117		80 - 120		01/05/21 11:28	1
4-Bromofluorobenzene (Surr)	99		80 - 120		01/05/21 11:28	1
Dibromofluoromethane (Surr)	105		80 - 120		01/05/21 11:28	1
Toluene-d8 (Surr)	97		80 - 120		01/05/21 11:28	1

Client Sample Results

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

Job ID: 410-24913-1

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

Lab Sample ID: 410-24913-14

Date Collected: 12/23/20 00:00

Matrix: Water

Date Received: 12/23/20 13:45

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			01/05/21 11:50	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			01/05/21 11:50	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			01/05/21 11:50	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			01/05/21 11:50	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			01/05/21 11:50	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			01/05/21 11:50	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			01/05/21 11:50	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			01/05/21 11:50	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			01/05/21 11:50	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			01/05/21 11:50	1
2-Hexanone	ND		5.0	0.60	ug/L			01/05/21 11:50	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			01/05/21 11:50	1
Acetone	ND		5.0	0.90	ug/L			01/05/21 11:50	1
Benzene	ND		0.50	0.050	ug/L			01/05/21 11:50	1
Bromochloromethane	ND		0.50	0.050	ug/L			01/05/21 11:50	1
Bromodichloromethane	ND		0.50	0.050	ug/L			01/05/21 11:50	1
Bromoform	ND		1.0	0.30	ug/L			01/05/21 11:50	1
Bromomethane	ND		0.50	0.070	ug/L			01/05/21 11:50	1
Carbon disulfide	ND		1.0	0.060	ug/L			01/05/21 11:50	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			01/05/21 11:50	1
Chlorobenzene	ND		0.50	0.060	ug/L			01/05/21 11:50	1
Chloroethane	ND		0.50	0.070	ug/L			01/05/21 11:50	1
Chloroform	ND		0.50	0.090	ug/L			01/05/21 11:50	1
Chloromethane	ND		0.50	0.060	ug/L			01/05/21 11:50	1
cis-1,2-Dichloroethene	ND		0.50	0.050	ug/L			01/05/21 11:50	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			01/05/21 11:50	1
Dibromochloromethane	ND		0.50	0.070	ug/L			01/05/21 11:50	1
Ethylbenzene	ND		0.50	0.060	ug/L			01/05/21 11:50	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			01/05/21 11:50	1
Methylene Chloride	ND		0.50	0.070	ug/L			01/05/21 11:50	1
Styrene	ND		0.50	0.050	ug/L			01/05/21 11:50	1
Tetrachloroethene	ND		0.50	0.060	ug/L			01/05/21 11:50	1
Toluene	ND		0.50	0.070	ug/L			01/05/21 11:50	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			01/05/21 11:50	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			01/05/21 11:50	1
Trichloroethene	ND		0.50	0.060	ug/L			01/05/21 11:50	1
Vinyl chloride	ND		0.50	0.10	ug/L			01/05/21 11:50	1
Xylenes, Total	ND		1.0	0.15	ug/L			01/05/21 11:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	110		80 - 120		01/05/21 11:50	1
4-Bromofluorobenzene (Surr)	97		80 - 120		01/05/21 11:50	1
Dibromofluoromethane (Surr)	105		80 - 120		01/05/21 11:50	1
Toluene-d8 (Surr)	97		80 - 120		01/05/21 11:50	1

Default Detection Limits

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

Job ID: 410-24913-1

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: 410-24913-1

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)
410-24913-1	HD-COD-SW-6-0/1-0	99	98	98	101
410-24913-2	HD-COD-SW-7-0/1-0	99	98	98	101
410-24913-3	HD-COD-SW-8-0/1-0	97	98	98	101
410-24913-4	HD-COD-SW-9-0/1-0	99	98	99	101
410-24913-5	HD-COD-SW-13-0/1-0	104	98	103	99
410-24913-6	HD-COD-SW-15-0/1-0	99	96	99	98
410-24913-6 MS	HD-COD-SW-15-0/1-0	99	95	98	99
410-24913-6 MSD	HD-COD-SW-15-0/1-0	99	95	98	99
410-24913-7	HD-COD-SW-16-0/1-0	96	96	99	98
410-24913-8	HD-COD-SW-17-0/1-0	99	95	98	99
410-24913-9	HD-COD-SW-26-0/1-0	99	95	99	99
410-24913-10	HD-COD-SW-27-0/1-0	95	95	98	98
410-24913-11	HD-COD-SW-28-0/1-0	97	95	99	99
410-24913-12	HD-COD-SW-29-0/1-0	98	95	98	99
410-24913-13	HD-QC1-0/1-1	117	99	105	97
410-24913-14	HD-QC1-0/1-2	110	97	105	97
LCS 410-81468/6	Lab Control Sample	97	99	99	101
LCS 410-81892/5	Lab Control Sample	96	95	98	98
LCS 410-82059/4	Lab Control Sample	101	102	101	101
LCSD 410-81892/6	Lab Control Sample Dup	97	94	99	97
LCSD 410-82059/5	Lab Control Sample Dup	99	100	100	100
MB 410-81468/9	Method Blank	95	98	97	100
MB 410-81892/10	Method Blank	98	96	97	99
MB 410-82059/7	Method Blank	98	97	101	100

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: 410-24913-1

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

Lab Sample ID: MB 410-81468/9
 Matrix: Water
 Analysis Batch: 81468

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			12/31/20 18:59	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			12/31/20 18:59	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			12/31/20 18:59	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			12/31/20 18:59	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			12/31/20 18:59	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			12/31/20 18:59	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			12/31/20 18:59	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			12/31/20 18:59	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			12/31/20 18:59	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			12/31/20 18:59	1
2-Hexanone	ND		5.0	0.60	ug/L			12/31/20 18:59	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			12/31/20 18:59	1
Acetone	ND		5.0	0.90	ug/L			12/31/20 18:59	1
Benzene	ND		0.50	0.050	ug/L			12/31/20 18:59	1
Bromochloromethane	ND		0.50	0.050	ug/L			12/31/20 18:59	1
Bromodichloromethane	ND		0.50	0.050	ug/L			12/31/20 18:59	1
Bromoform	ND		1.0	0.30	ug/L			12/31/20 18:59	1
Bromomethane	ND		0.50	0.070	ug/L			12/31/20 18:59	1
Carbon disulfide	ND		1.0	0.060	ug/L			12/31/20 18:59	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			12/31/20 18:59	1
Chlorobenzene	ND		0.50	0.060	ug/L			12/31/20 18:59	1
Chloroethane	ND		0.50	0.070	ug/L			12/31/20 18:59	1
Chloroform	ND		0.50	0.090	ug/L			12/31/20 18:59	1
Chloromethane	ND		0.50	0.060	ug/L			12/31/20 18:59	1
cis-1,2-Dichloroethene	ND		0.50	0.050	ug/L			12/31/20 18:59	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			12/31/20 18:59	1
Dibromochloromethane	ND		0.50	0.070	ug/L			12/31/20 18:59	1
Ethylbenzene	ND		0.50	0.060	ug/L			12/31/20 18:59	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			12/31/20 18:59	1
Methylene Chloride	ND		0.50	0.070	ug/L			12/31/20 18:59	1
Styrene	ND		0.50	0.050	ug/L			12/31/20 18:59	1
Tetrachloroethene	ND		0.50	0.060	ug/L			12/31/20 18:59	1
Toluene	ND		0.50	0.070	ug/L			12/31/20 18:59	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			12/31/20 18:59	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			12/31/20 18:59	1
Trichloroethene	ND		0.50	0.060	ug/L			12/31/20 18:59	1
Vinyl chloride	ND		0.50	0.10	ug/L			12/31/20 18:59	1
Xylenes, Total	ND		1.0	0.15	ug/L			12/31/20 18:59	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	95		80 - 120		12/31/20 18:59	1
4-Bromofluorobenzene (Surr)	98		80 - 120		12/31/20 18:59	1
Dibromofluoromethane (Surr)	97		80 - 120		12/31/20 18:59	1
Toluene-d8 (Surr)	100		80 - 120		12/31/20 18:59	1

QC Sample Results

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

Job ID: 410-24913-1

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

Lab Sample ID: LCS 410-81468/6
Matrix: Water
Analysis Batch: 81468

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

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.
	Added	Result	Qualifier				
1,1,1,2-Tetrachloroethane	5.00	4.73		ug/L		95	71 - 134
1,1,1-Trichloroethane	5.00	4.50		ug/L		90	78 - 126
1,1,2,2-Tetrachloroethane	5.00	4.60		ug/L		92	75 - 123
1,1,2-Trichloroethane	5.00	4.79		ug/L		96	80 - 120
1,1-Dichloroethane	5.00	4.61		ug/L		92	74 - 120
1,1-Dichloroethene	5.00	4.59		ug/L		92	80 - 131
1,2-Dibromoethane (EDB)	5.00	4.62		ug/L		92	80 - 120
1,2-Dichloroethane	5.00	4.36		ug/L		87	69 - 122
1,2-Dichloropropane	5.00	4.59		ug/L		92	80 - 120
2-Butanone (MEK)	37.5	35.1		ug/L		94	59 - 141
2-Hexanone	25.0	25.7		ug/L		103	52 - 140
4-Methyl-2-pentanone (MIBK)	25.0	24.2		ug/L		97	55 - 140
Acetone	37.5	29.7		ug/L		79	60 - 146
Benzene	5.00	4.53		ug/L		91	80 - 120
Bromochloromethane	5.00	4.47		ug/L		89	80 - 120
Bromodichloromethane	5.00	4.59		ug/L		92	73 - 124
Bromoform	5.00	4.79		ug/L		96	49 - 144
Bromomethane	5.00	4.39		ug/L		88	60 - 136
Carbon disulfide	5.00	4.35		ug/L		87	67 - 130
Carbon tetrachloride	5.00	4.55		ug/L		91	64 - 141
Chlorobenzene	5.00	4.70		ug/L		94	80 - 120
Chloroethane	5.00	4.14		ug/L		83	63 - 120
Chloroform	5.00	4.52		ug/L		90	80 - 120
Chloromethane	5.00	4.21		ug/L		84	56 - 124
cis-1,2-Dichloroethene	5.00	4.79		ug/L		96	80 - 122
cis-1,3-Dichloropropene	5.00	4.47		ug/L		89	67 - 121
Dibromochloromethane	5.00	4.78		ug/L		96	64 - 138
Ethylbenzene	5.00	4.57		ug/L		91	80 - 120
Methyl tert-butyl ether	5.00	4.29		ug/L		86	69 - 120
Methylene Chloride	5.00	4.64		ug/L		93	80 - 120
Styrene	5.00	4.70		ug/L		94	80 - 120
Tetrachloroethene	5.00	4.79		ug/L		96	80 - 120
Toluene	5.00	4.59		ug/L		92	80 - 120
trans-1,2-Dichloroethene	5.00	4.45		ug/L		89	80 - 122
trans-1,3-Dichloropropene	5.00	4.48		ug/L		90	61 - 129
Trichloroethene	5.00	4.60		ug/L		92	80 - 120
Vinyl chloride	5.00	4.60		ug/L		92	60 - 125
Xylenes, Total	15.0	14.2		ug/L		94	80 - 120

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	97		80 - 120
4-Bromofluorobenzene (Surr)	99		80 - 120
Dibromofluoromethane (Surr)	99		80 - 120
Toluene-d8 (Surr)	101		80 - 120

QC Sample Results

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

Job ID: 410-24913-1

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

Lab Sample ID: MB 410-81892/10
 Matrix: Water
 Analysis Batch: 81892

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			01/04/21 21:29	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			01/04/21 21:29	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			01/04/21 21:29	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			01/04/21 21:29	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			01/04/21 21:29	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			01/04/21 21:29	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			01/04/21 21:29	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			01/04/21 21:29	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			01/04/21 21:29	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			01/04/21 21:29	1
2-Hexanone	ND		5.0	0.60	ug/L			01/04/21 21:29	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			01/04/21 21:29	1
Acetone	ND		5.0	0.90	ug/L			01/04/21 21:29	1
Benzene	ND		0.50	0.050	ug/L			01/04/21 21:29	1
Bromochloromethane	ND		0.50	0.050	ug/L			01/04/21 21:29	1
Bromodichloromethane	ND		0.50	0.050	ug/L			01/04/21 21:29	1
Bromoform	ND		1.0	0.30	ug/L			01/04/21 21:29	1
Bromomethane	ND		0.50	0.070	ug/L			01/04/21 21:29	1
Carbon disulfide	ND		1.0	0.060	ug/L			01/04/21 21:29	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			01/04/21 21:29	1
Chlorobenzene	ND		0.50	0.060	ug/L			01/04/21 21:29	1
Chloroethane	ND		0.50	0.070	ug/L			01/04/21 21:29	1
Chloroform	ND		0.50	0.090	ug/L			01/04/21 21:29	1
Chloromethane	ND		0.50	0.060	ug/L			01/04/21 21:29	1
cis-1,2-Dichloroethene	ND		0.50	0.050	ug/L			01/04/21 21:29	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			01/04/21 21:29	1
Dibromochloromethane	ND		0.50	0.070	ug/L			01/04/21 21:29	1
Ethylbenzene	ND		0.50	0.060	ug/L			01/04/21 21:29	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			01/04/21 21:29	1
Methylene Chloride	ND		0.50	0.070	ug/L			01/04/21 21:29	1
Styrene	ND		0.50	0.050	ug/L			01/04/21 21:29	1
Tetrachloroethene	ND		0.50	0.060	ug/L			01/04/21 21:29	1
Toluene	ND		0.50	0.070	ug/L			01/04/21 21:29	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			01/04/21 21:29	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			01/04/21 21:29	1
Trichloroethene	ND		0.50	0.060	ug/L			01/04/21 21:29	1
Vinyl chloride	ND		0.50	0.10	ug/L			01/04/21 21:29	1
Xylenes, Total	ND		1.0	0.15	ug/L			01/04/21 21:29	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	98		80 - 120		01/04/21 21:29	1
4-Bromofluorobenzene (Surr)	96		80 - 120		01/04/21 21:29	1
Dibromofluoromethane (Surr)	97		80 - 120		01/04/21 21:29	1
Toluene-d8 (Surr)	99		80 - 120		01/04/21 21:29	1

QC Sample Results

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

Job ID: 410-24913-1

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

Lab Sample ID: LCS 410-81892/5
Matrix: Water
Analysis Batch: 81892

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

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.
	Added	Result	Qualifier				
1,1,1,2-Tetrachloroethane	5.00	4.63		ug/L		93	71 - 134
1,1,1-Trichloroethane	5.00	4.38		ug/L		88	78 - 126
1,1,2,2-Tetrachloroethane	5.00	4.35		ug/L		87	75 - 123
1,1,2-Trichloroethane	5.00	4.68		ug/L		94	80 - 120
1,1-Dichloroethane	5.00	4.37		ug/L		87	74 - 120
1,1-Dichloroethene	5.00	4.61		ug/L		92	80 - 131
1,2-Dibromoethane (EDB)	5.00	4.61		ug/L		92	80 - 120
1,2-Dichloroethane	5.00	4.21		ug/L		84	69 - 122
1,2-Dichloropropane	5.00	4.44		ug/L		89	80 - 120
2-Butanone (MEK)	37.5	37.7		ug/L		101	59 - 141
2-Hexanone	25.0	26.5		ug/L		106	52 - 140
4-Methyl-2-pentanone (MIBK)	25.0	25.8		ug/L		103	55 - 140
Acetone	37.5	31.5		ug/L		84	60 - 146
Benzene	5.00	4.49		ug/L		90	80 - 120
Bromochloromethane	5.00	4.56		ug/L		91	80 - 120
Bromodichloromethane	5.00	4.58		ug/L		92	73 - 124
Bromoform	5.00	5.07		ug/L		101	49 - 144
Bromomethane	5.00	4.43		ug/L		89	60 - 136
Carbon disulfide	5.00	4.38		ug/L		88	67 - 130
Carbon tetrachloride	5.00	4.50		ug/L		90	64 - 141
Chlorobenzene	5.00	4.71		ug/L		94	80 - 120
Chloroethane	5.00	4.09		ug/L		82	63 - 120
Chloroform	5.00	4.49		ug/L		90	80 - 120
Chloromethane	5.00	3.81		ug/L		76	56 - 124
cis-1,2-Dichloroethene	5.00	4.82		ug/L		96	80 - 122
cis-1,3-Dichloropropene	5.00	4.41		ug/L		88	67 - 121
Dibromochloromethane	5.00	4.82		ug/L		96	64 - 138
Ethylbenzene	5.00	4.45		ug/L		89	80 - 120
Methyl tert-butyl ether	5.00	4.18		ug/L		84	69 - 120
Methylene Chloride	5.00	4.60		ug/L		92	80 - 120
Styrene	5.00	4.55		ug/L		91	80 - 120
Tetrachloroethene	5.00	4.84		ug/L		97	80 - 120
Toluene	5.00	4.51		ug/L		90	80 - 120
trans-1,2-Dichloroethene	5.00	4.54		ug/L		91	80 - 122
trans-1,3-Dichloropropene	5.00	4.33		ug/L		87	61 - 129
Trichloroethene	5.00	4.56		ug/L		91	80 - 120
Vinyl chloride	5.00	4.28		ug/L		86	60 - 125
Xylenes, Total	15.0	13.9		ug/L		92	80 - 120

Surrogate	LCS		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	96		80 - 120
4-Bromofluorobenzene (Surr)	95		80 - 120
Dibromofluoromethane (Surr)	98		80 - 120
Toluene-d8 (Surr)	98		80 - 120

QC Sample Results

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

Job ID: 410-24913-1

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

Lab Sample ID: LCSD 410-81892/6
 Matrix: Water
 Analysis Batch: 81892

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

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	%Rec.	RPD	RPD
	Added	Result	Qualifier				Limits		
1,1,1,2-Tetrachloroethane	5.00	4.64		ug/L		93	71 - 134	0	30
1,1,1-Trichloroethane	5.00	4.38		ug/L		88	78 - 126	0	30
1,1,2,2-Tetrachloroethane	5.00	4.39		ug/L		88	75 - 123	1	30
1,1,2-Trichloroethane	5.00	4.77		ug/L		95	80 - 120	2	30
1,1-Dichloroethane	5.00	4.30		ug/L		86	74 - 120	2	30
1,1-Dichloroethene	5.00	4.55		ug/L		91	80 - 131	1	30
1,2-Dibromoethane (EDB)	5.00	4.55		ug/L		91	80 - 120	1	30
1,2-Dichloroethane	5.00	4.23		ug/L		85	69 - 122	0	30
1,2-Dichloropropane	5.00	4.48		ug/L		90	80 - 120	1	30
2-Butanone (MEK)	37.5	39.1		ug/L		104	59 - 141	4	30
2-Hexanone	25.0	27.5		ug/L		110	52 - 140	4	30
4-Methyl-2-pentanone (MIBK)	25.0	26.5		ug/L		106	55 - 140	3	30
Acetone	37.5	31.7		ug/L		85	60 - 146	1	30
Benzene	5.00	4.51		ug/L		90	80 - 120	0	30
Bromochloromethane	5.00	4.58		ug/L		92	80 - 120	0	30
Bromodichloromethane	5.00	4.55		ug/L		91	73 - 124	1	30
Bromoform	5.00	4.83		ug/L		97	49 - 144	5	30
Bromomethane	5.00	4.42		ug/L		88	60 - 136	0	30
Carbon disulfide	5.00	4.38		ug/L		88	67 - 130	0	30
Carbon tetrachloride	5.00	4.50		ug/L		90	64 - 141	0	30
Chlorobenzene	5.00	4.64		ug/L		93	80 - 120	2	30
Chloroethane	5.00	4.06		ug/L		81	63 - 120	1	30
Chloroform	5.00	4.51		ug/L		90	80 - 120	0	30
Chloromethane	5.00	3.99		ug/L		80	56 - 124	5	30
cis-1,2-Dichloroethene	5.00	4.91		ug/L		98	80 - 122	2	30
cis-1,3-Dichloropropene	5.00	4.34		ug/L		87	67 - 121	1	30
Dibromochloromethane	5.00	4.81		ug/L		96	64 - 138	0	30
Ethylbenzene	5.00	4.42		ug/L		88	80 - 120	1	30
Methyl tert-butyl ether	5.00	4.24		ug/L		85	69 - 120	1	30
Methylene Chloride	5.00	4.59		ug/L		92	80 - 120	0	30
Styrene	5.00	4.55		ug/L		91	80 - 120	0	30
Tetrachloroethene	5.00	4.78		ug/L		96	80 - 120	1	30
Toluene	5.00	4.50		ug/L		90	80 - 120	0	30
trans-1,2-Dichloroethene	5.00	4.59		ug/L		92	80 - 122	1	30
trans-1,3-Dichloropropene	5.00	4.23		ug/L		85	61 - 129	2	30
Trichloroethene	5.00	4.60		ug/L		92	80 - 120	1	30
Vinyl chloride	5.00	4.25		ug/L		85	60 - 125	1	30
Xylenes, Total	15.0	13.8		ug/L		92	80 - 120	1	30

Surrogate	LCSD	LCSD	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	97		80 - 120
4-Bromofluorobenzene (Surr)	94		80 - 120
Dibromofluoromethane (Surr)	99		80 - 120
Toluene-d8 (Surr)	97		80 - 120

QC Sample Results

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

Job ID: 410-24913-1

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

Lab Sample ID: 410-24913-6 MS

Matrix: Water

Analysis Batch: 81892

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

Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec.	%Rec.
	Result	Qualifier	Added	Result	Qualifier			Limits	
1,1,1,2-Tetrachloroethane	ND		5.00	4.94		ug/L		99	71 - 134
1,1,1-Trichloroethane	0.15	J	5.00	5.00		ug/L		97	78 - 126
1,1,2,2-Tetrachloroethane	ND		5.00	4.54		ug/L		91	75 - 123
1,1,2-Trichloroethane	ND		5.00	4.88		ug/L		98	80 - 120
1,1-Dichloroethane	ND		5.00	4.80		ug/L		96	74 - 120
1,1-Dichloroethene	0.10	J	5.00	5.35		ug/L		105	80 - 131
1,2-Dibromoethane (EDB)	ND		5.00	4.73		ug/L		95	80 - 120
1,2-Dichloroethane	ND		5.00	4.27		ug/L		85	69 - 122
1,2-Dichloropropane	ND		5.00	4.74		ug/L		95	80 - 120
2-Butanone (MEK)	ND		37.5	38.5		ug/L		103	59 - 141
2-Hexanone	ND		25.0	27.1		ug/L		108	52 - 140
4-Methyl-2-pentanone (MIBK)	ND		25.0	26.0		ug/L		104	55 - 140
Acetone	ND		37.5	32.6		ug/L		87	60 - 146
Benzene	ND		5.00	4.86		ug/L		97	80 - 120
Bromochloromethane	ND		5.00	4.65		ug/L		93	80 - 120
Bromodichloromethane	ND		5.00	4.71		ug/L		94	73 - 124
Bromoform	ND		5.00	4.96		ug/L		99	49 - 144
Bromomethane	ND		5.00	4.85		ug/L		97	60 - 136
Carbon disulfide	ND		5.00	4.97		ug/L		99	67 - 130
Carbon tetrachloride	ND		5.00	5.15		ug/L		103	64 - 141
Chlorobenzene	ND		5.00	5.03		ug/L		100	80 - 120
Chloroethane	ND		5.00	4.54		ug/L		91	63 - 120
Chloroform	0.24	J	5.00	5.07		ug/L		97	80 - 120
Chloromethane	ND		5.00	4.31		ug/L		86	80 - 120
cis-1,2-Dichloroethene	0.84		5.00	6.08		ug/L		105	80 - 122
cis-1,3-Dichloropropene	ND		5.00	4.58		ug/L		91	67 - 121
Dibromochloromethane	ND		5.00	4.94		ug/L		99	64 - 138
Ethylbenzene	ND		5.00	4.91		ug/L		98	80 - 120
Methyl tert-butyl ether	ND		5.00	4.31		ug/L		86	69 - 120
Methylene Chloride	ND		5.00	4.94		ug/L		99	80 - 120
Styrene	ND		5.00	4.90		ug/L		98	80 - 120
Tetrachloroethene	2.8		5.00	8.25		ug/L		110	80 - 120
Toluene	ND		5.00	4.85		ug/L		97	80 - 120
trans-1,2-Dichloroethene	ND		5.00	5.04		ug/L		101	80 - 122
trans-1,3-Dichloropropene	ND		5.00	4.41		ug/L		88	61 - 129
Trichloroethene	0.97		5.00	5.97		ug/L		100	80 - 120
Vinyl chloride	ND		5.00	4.95		ug/L		99	60 - 125
Xylenes, Total	ND		15.0	15.2		ug/L		101	80 - 120

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

QC Sample Results

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

Job ID: 410-24913-1

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

Lab Sample ID: 410-24913-6 MSD

Matrix: Water

Analysis Batch: 81892

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

Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier				Limits		Limit
1,1,1,2-Tetrachloroethane	ND		5.00	4.92		ug/L		98	71 - 134	0	30
1,1,1-Trichloroethane	0.15	J	5.00	5.03		ug/L		98	78 - 126	1	30
1,1,2,2-Tetrachloroethane	ND		5.00	4.50		ug/L		90	75 - 123	1	30
1,1,2-Trichloroethane	ND		5.00	4.97		ug/L		99	80 - 120	2	30
1,1-Dichloroethane	ND		5.00	4.86		ug/L		97	74 - 120	1	30
1,1-Dichloroethene	0.10	J	5.00	5.33		ug/L		104	80 - 131	0	30
1,2-Dibromoethane (EDB)	ND		5.00	4.77		ug/L		95	80 - 120	1	30
1,2-Dichloroethane	ND		5.00	4.34		ug/L		87	69 - 122	2	30
1,2-Dichloropropane	ND		5.00	4.67		ug/L		93	80 - 120	1	30
2-Butanone (MEK)	ND		37.5	37.8		ug/L		101	59 - 141	2	30
2-Hexanone	ND		25.0	27.1		ug/L		108	52 - 140	0	30
4-Methyl-2-pentanone (MIBK)	ND		25.0	26.9		ug/L		108	55 - 140	3	30
Acetone	ND		37.5	31.0		ug/L		83	60 - 146	5	30
Benzene	ND		5.00	4.90		ug/L		98	80 - 120	1	30
Bromochloromethane	ND		5.00	4.72		ug/L		94	80 - 120	1	30
Bromodichloromethane	ND		5.00	4.74		ug/L		95	73 - 124	1	30
Bromoform	ND		5.00	4.81		ug/L		96	49 - 144	3	30
Bromomethane	ND		5.00	4.71		ug/L		94	60 - 136	3	30
Carbon disulfide	ND		5.00	4.93		ug/L		99	67 - 130	1	30
Carbon tetrachloride	ND		5.00	5.13		ug/L		102	64 - 141	0	30
Chlorobenzene	ND		5.00	5.04		ug/L		101	80 - 120	0	30
Chloroethane	ND		5.00	4.42		ug/L		88	63 - 120	3	30
Chloroform	0.24	J	5.00	5.01		ug/L		95	80 - 120	1	30
Chloromethane	ND		5.00	4.29		ug/L		86	80 - 120	1	30
cis-1,2-Dichloroethene	0.84		5.00	6.05		ug/L		104	80 - 122	0	30
cis-1,3-Dichloropropene	ND		5.00	4.54		ug/L		91	67 - 121	1	30
Dibromochloromethane	ND		5.00	4.91		ug/L		98	64 - 138	1	30
Ethylbenzene	ND		5.00	4.87		ug/L		97	80 - 120	1	30
Methyl tert-butyl ether	ND		5.00	4.34		ug/L		87	69 - 120	1	30
Methylene Chloride	ND		5.00	4.93		ug/L		99	80 - 120	0	30
Styrene	ND		5.00	4.89		ug/L		98	80 - 120	0	30
Tetrachloroethene	2.8		5.00	8.10		ug/L		107	80 - 120	2	30
Toluene	ND		5.00	4.93		ug/L		99	80 - 120	2	30
trans-1,2-Dichloroethene	ND		5.00	5.10		ug/L		102	80 - 122	1	30
trans-1,3-Dichloropropene	ND		5.00	4.34		ug/L		87	61 - 129	2	30
Trichloroethene	0.97		5.00	5.99		ug/L		100	80 - 120	0	30
Vinyl chloride	ND		5.00	4.67		ug/L		93	60 - 125	6	30
Xylenes, Total	ND		15.0	15.2		ug/L		101	80 - 120	0	30

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

QC Sample Results

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

Job ID: 410-24913-1

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

Lab Sample ID: MB 410-82059/7
 Matrix: Water
 Analysis Batch: 82059

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			01/05/21 11:06	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			01/05/21 11:06	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			01/05/21 11:06	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			01/05/21 11:06	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			01/05/21 11:06	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			01/05/21 11:06	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			01/05/21 11:06	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			01/05/21 11:06	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			01/05/21 11:06	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			01/05/21 11:06	1
2-Hexanone	ND		5.0	0.60	ug/L			01/05/21 11:06	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			01/05/21 11:06	1
Acetone	ND		5.0	0.90	ug/L			01/05/21 11:06	1
Benzene	ND		0.50	0.050	ug/L			01/05/21 11:06	1
Bromochloromethane	ND		0.50	0.050	ug/L			01/05/21 11:06	1
Bromodichloromethane	ND		0.50	0.050	ug/L			01/05/21 11:06	1
Bromoform	ND		1.0	0.30	ug/L			01/05/21 11:06	1
Bromomethane	ND		0.50	0.070	ug/L			01/05/21 11:06	1
Carbon disulfide	ND		1.0	0.060	ug/L			01/05/21 11:06	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			01/05/21 11:06	1
Chlorobenzene	ND		0.50	0.060	ug/L			01/05/21 11:06	1
Chloroethane	ND		0.50	0.070	ug/L			01/05/21 11:06	1
Chloroform	ND		0.50	0.090	ug/L			01/05/21 11:06	1
Chloromethane	ND		0.50	0.060	ug/L			01/05/21 11:06	1
cis-1,2-Dichloroethene	ND		0.50	0.050	ug/L			01/05/21 11:06	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			01/05/21 11:06	1
Dibromochloromethane	ND		0.50	0.070	ug/L			01/05/21 11:06	1
Ethylbenzene	ND		0.50	0.060	ug/L			01/05/21 11:06	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			01/05/21 11:06	1
Methylene Chloride	ND		0.50	0.070	ug/L			01/05/21 11:06	1
Styrene	ND		0.50	0.050	ug/L			01/05/21 11:06	1
Tetrachloroethene	ND		0.50	0.060	ug/L			01/05/21 11:06	1
Toluene	ND		0.50	0.070	ug/L			01/05/21 11:06	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			01/05/21 11:06	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			01/05/21 11:06	1
Trichloroethene	ND		0.50	0.060	ug/L			01/05/21 11:06	1
Vinyl chloride	ND		0.50	0.10	ug/L			01/05/21 11:06	1
Xylenes, Total	ND		1.0	0.15	ug/L			01/05/21 11:06	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	98		80 - 120		01/05/21 11:06	1
4-Bromofluorobenzene (Surr)	97		80 - 120		01/05/21 11:06	1
Dibromofluoromethane (Surr)	101		80 - 120		01/05/21 11:06	1
Toluene-d8 (Surr)	100		80 - 120		01/05/21 11:06	1

QC Sample Results

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

Job ID: 410-24913-1

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

Lab Sample ID: LCS 410-82059/4
Matrix: Water
Analysis Batch: 82059

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

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.
	Added	Result	Qualifier				
1,1,1,2-Tetrachloroethane	5.00	5.03		ug/L		101	71 - 134
1,1,1-Trichloroethane	5.00	5.08		ug/L		102	78 - 126
1,1,2,2-Tetrachloroethane	5.00	5.13		ug/L		103	75 - 123
1,1,2-Trichloroethane	5.00	5.28		ug/L		106	80 - 120
1,1-Dichloroethane	5.00	5.14		ug/L		103	74 - 120
1,1-Dichloroethene	5.00	5.08		ug/L		102	80 - 131
1,2-Dibromoethane (EDB)	5.00	5.31		ug/L		106	80 - 120
1,2-Dichloroethane	5.00	4.94		ug/L		99	69 - 122
1,2-Dichloropropane	5.00	5.27		ug/L		105	80 - 120
2-Butanone (MEK)	37.5	38.2		ug/L		102	59 - 141
2-Hexanone	25.0	25.5		ug/L		102	52 - 140
4-Methyl-2-pentanone (MIBK)	25.0	24.7		ug/L		99	55 - 140
Acetone	37.5	37.1		ug/L		99	60 - 146
Benzene	5.00	5.00		ug/L		100	80 - 120
Bromochloromethane	5.00	4.97		ug/L		99	80 - 120
Bromodichloromethane	5.00	5.20		ug/L		104	73 - 124
Bromoform	5.00	5.21		ug/L		104	49 - 144
Bromomethane	5.00	4.85		ug/L		97	60 - 136
Carbon disulfide	5.00	5.78		ug/L		116	67 - 130
Carbon tetrachloride	5.00	5.28		ug/L		106	64 - 141
Chlorobenzene	5.00	5.11		ug/L		102	80 - 120
Chloroethane	5.00	4.70		ug/L		94	63 - 120
Chloroform	5.00	5.19		ug/L		104	80 - 120
Chloromethane	5.00	4.62		ug/L		92	56 - 124
cis-1,2-Dichloroethene	5.00	5.37		ug/L		107	80 - 122
cis-1,3-Dichloropropene	5.00	5.29		ug/L		106	67 - 121
Dibromochloromethane	5.00	5.41		ug/L		108	64 - 138
Ethylbenzene	5.00	5.19		ug/L		104	80 - 120
Methyl tert-butyl ether	5.00	5.55		ug/L		111	69 - 120
Methylene Chloride	5.00	4.82		ug/L		96	80 - 120
Styrene	5.00	5.34		ug/L		107	80 - 120
Tetrachloroethene	5.00	5.11		ug/L		102	80 - 120
Toluene	5.00	5.02		ug/L		100	80 - 120
trans-1,2-Dichloroethene	5.00	5.08		ug/L		102	80 - 122
trans-1,3-Dichloropropene	5.00	5.19		ug/L		104	61 - 129
Trichloroethene	5.00	5.04		ug/L		101	80 - 120
Vinyl chloride	5.00	4.92		ug/L		98	60 - 125
Xylenes, Total	15.0	15.8		ug/L		105	80 - 120

Surrogate	LCS		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	101		80 - 120
4-Bromofluorobenzene (Surr)	102		80 - 120
Dibromofluoromethane (Surr)	101		80 - 120
Toluene-d8 (Surr)	101		80 - 120

QC Sample Results

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

Job ID: 410-24913-1

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

Lab Sample ID: LCSD 410-82059/5

Matrix: Water

Analysis Batch: 82059

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	%Rec.	RPD	RPD
	Added	Result	Qualifier				Limits		
1,1,1,2-Tetrachloroethane	5.00	4.96		ug/L		99	71 - 134	1	30
1,1,1-Trichloroethane	5.00	5.01		ug/L		100	78 - 126	1	30
1,1,2,2-Tetrachloroethane	5.00	5.02		ug/L		100	75 - 123	2	30
1,1,2-Trichloroethane	5.00	5.08		ug/L		102	80 - 120	4	30
1,1-Dichloroethane	5.00	5.15		ug/L		103	74 - 120	0	30
1,1-Dichloroethene	5.00	4.97		ug/L		99	80 - 131	2	30
1,2-Dibromoethane (EDB)	5.00	5.05		ug/L		101	80 - 120	5	30
1,2-Dichloroethane	5.00	4.96		ug/L		99	69 - 122	0	30
1,2-Dichloropropane	5.00	5.02		ug/L		100	80 - 120	5	30
2-Butanone (MEK)	37.5	38.5		ug/L		103	59 - 141	1	30
2-Hexanone	25.0	26.1		ug/L		104	52 - 140	2	30
4-Methyl-2-pentanone (MIBK)	25.0	25.2		ug/L		101	55 - 140	2	30
Acetone	37.5	37.2		ug/L		99	60 - 146	0	30
Benzene	5.00	4.93		ug/L		99	80 - 120	1	30
Bromochloromethane	5.00	4.90		ug/L		98	80 - 120	1	30
Bromodichloromethane	5.00	5.09		ug/L		102	73 - 124	2	30
Bromoform	5.00	5.06		ug/L		101	49 - 144	3	30
Bromomethane	5.00	4.75		ug/L		95	60 - 136	2	30
Carbon disulfide	5.00	5.62		ug/L		112	67 - 130	3	30
Carbon tetrachloride	5.00	5.15		ug/L		103	64 - 141	3	30
Chlorobenzene	5.00	5.05		ug/L		101	80 - 120	1	30
Chloroethane	5.00	4.69		ug/L		94	63 - 120	0	30
Chloroform	5.00	5.08		ug/L		102	80 - 120	2	30
Chloromethane	5.00	4.59		ug/L		92	56 - 124	1	30
cis-1,2-Dichloroethene	5.00	5.34		ug/L		107	80 - 122	1	30
cis-1,3-Dichloropropene	5.00	5.07		ug/L		101	67 - 121	4	30
Dibromochloromethane	5.00	5.31		ug/L		106	64 - 138	2	30
Ethylbenzene	5.00	5.10		ug/L		102	80 - 120	2	30
Methyl tert-butyl ether	5.00	5.44		ug/L		109	69 - 120	2	30
Methylene Chloride	5.00	4.72		ug/L		94	80 - 120	2	30
Styrene	5.00	5.27		ug/L		105	80 - 120	1	30
Tetrachloroethene	5.00	5.04		ug/L		101	80 - 120	1	30
Toluene	5.00	4.94		ug/L		99	80 - 120	2	30
trans-1,2-Dichloroethene	5.00	5.07		ug/L		101	80 - 122	0	30
trans-1,3-Dichloropropene	5.00	5.07		ug/L		101	61 - 129	2	30
Trichloroethene	5.00	4.98		ug/L		100	80 - 120	1	30
Vinyl chloride	5.00	4.82		ug/L		96	60 - 125	2	30
Xylenes, Total	15.0	15.6		ug/L		104	80 - 120	2	30

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

QC Association Summary

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

Job ID: 410-24913-1

GC/MS VOA

Analysis Batch: 81468

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-24913-1	HD-COD-SW-6-0/1-0	Total/NA	Water	8260D	
410-24913-2	HD-COD-SW-7-0/1-0	Total/NA	Water	8260D	
410-24913-3	HD-COD-SW-8-0/1-0	Total/NA	Water	8260D	
410-24913-4	HD-COD-SW-9-0/1-0	Total/NA	Water	8260D	
MB 410-81468/9	Method Blank	Total/NA	Water	8260D	
LCS 410-81468/6	Lab Control Sample	Total/NA	Water	8260D	

Analysis Batch: 81892

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-24913-6	HD-COD-SW-15-0/1-0	Total/NA	Water	8260D	
410-24913-7	HD-COD-SW-16-0/1-0	Total/NA	Water	8260D	
410-24913-8	HD-COD-SW-17-0/1-0	Total/NA	Water	8260D	
410-24913-9	HD-COD-SW-26-0/1-0	Total/NA	Water	8260D	
410-24913-10	HD-COD-SW-27-0/1-0	Total/NA	Water	8260D	
410-24913-11	HD-COD-SW-28-0/1-0	Total/NA	Water	8260D	
410-24913-12	HD-COD-SW-29-0/1-0	Total/NA	Water	8260D	
MB 410-81892/10	Method Blank	Total/NA	Water	8260D	
LCS 410-81892/5	Lab Control Sample	Total/NA	Water	8260D	
LCSD 410-81892/6	Lab Control Sample Dup	Total/NA	Water	8260D	
410-24913-6 MS	HD-COD-SW-15-0/1-0	Total/NA	Water	8260D	
410-24913-6 MSD	HD-COD-SW-15-0/1-0	Total/NA	Water	8260D	

Analysis Batch: 82059

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-24913-5	HD-COD-SW-13-0/1-0	Total/NA	Water	8260D	
410-24913-13	HD-QC1-0/1-1	Total/NA	Water	8260D	
410-24913-14	HD-QC1-0/1-2	Total/NA	Water	8260D	
MB 410-82059/7	Method Blank	Total/NA	Water	8260D	
LCS 410-82059/4	Lab Control Sample	Total/NA	Water	8260D	
LCSD 410-82059/5	Lab Control Sample Dup	Total/NA	Water	8260D	

Lab Chronicle

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

Job ID: 410-24913-1

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

Lab Sample ID: 410-24913-1

Date Collected: 12/23/20 10:45

Matrix: Water

Date Received: 12/23/20 13:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	81468	01/01/21 02:18	K4WN	ELLE

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

Lab Sample ID: 410-24913-2

Date Collected: 12/23/20 11:25

Matrix: Water

Date Received: 12/23/20 13:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	81468	01/01/21 02:40	K4WN	ELLE

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

Lab Sample ID: 410-24913-3

Date Collected: 12/23/20 09:35

Matrix: Water

Date Received: 12/23/20 13:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	81468	01/01/21 03:03	K4WN	ELLE

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

Lab Sample ID: 410-24913-4

Date Collected: 12/23/20 12:15

Matrix: Water

Date Received: 12/23/20 13:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	81468	01/01/21 03:24	K4WN	ELLE

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

Lab Sample ID: 410-24913-5

Date Collected: 12/23/20 09:55

Matrix: Water

Date Received: 12/23/20 13:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	82059	01/05/21 13:17	R64Z	ELLE

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

Lab Sample ID: 410-24913-6

Date Collected: 12/23/20 11:45

Matrix: Water

Date Received: 12/23/20 13:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	81892	01/05/21 00:42	R64Z	ELLE

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

Lab Sample ID: 410-24913-7

Date Collected: 12/23/20 10:10

Matrix: Water

Date Received: 12/23/20 13:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	81892	01/05/21 03:37	R64Z	ELLE

Lab Chronicle

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

Job ID: 410-24913-1

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

Lab Sample ID: 410-24913-8

Date Collected: 12/23/20 10:25

Matrix: Water

Date Received: 12/23/20 13:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	81892	01/05/21 03:59	R64Z	ELLE

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

Lab Sample ID: 410-24913-9

Date Collected: 12/23/20 11:05

Matrix: Water

Date Received: 12/23/20 13:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	81892	01/05/21 04:21	R64Z	ELLE

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

Lab Sample ID: 410-24913-10

Date Collected: 12/23/20 11:35

Matrix: Water

Date Received: 12/23/20 13:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	81892	01/05/21 04:43	R64Z	ELLE

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

Lab Sample ID: 410-24913-11

Date Collected: 12/23/20 12:25

Matrix: Water

Date Received: 12/23/20 13:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	81892	01/05/21 05:05	R64Z	ELLE

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

Lab Sample ID: 410-24913-12

Date Collected: 12/23/20 09:25

Matrix: Water

Date Received: 12/23/20 13:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	81892	01/05/21 05:27	R64Z	ELLE

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

Lab Sample ID: 410-24913-13

Date Collected: 12/23/20 12:00

Matrix: Water

Date Received: 12/23/20 13:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	82059	01/05/21 11:28	R64Z	ELLE

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

Lab Sample ID: 410-24913-14

Date Collected: 12/23/20 00:00

Matrix: Water

Date Received: 12/23/20 13:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	82059	01/05/21 11:50	R64Z	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: 410-24913-1

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: 410-24913-1

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: 410-24913-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
410-24913-1	HD-COD-SW-6-0/1-0	Water	12/23/20 10:45	12/23/20 13:45	
410-24913-2	HD-COD-SW-7-0/1-0	Water	12/23/20 11:25	12/23/20 13:45	
410-24913-3	HD-COD-SW-8-0/1-0	Water	12/23/20 09:35	12/23/20 13:45	
410-24913-4	HD-COD-SW-9-0/1-0	Water	12/23/20 12:15	12/23/20 13:45	
410-24913-5	HD-COD-SW-13-0/1-0	Water	12/23/20 09:55	12/23/20 13:45	
410-24913-6	HD-COD-SW-15-0/1-0	Water	12/23/20 11:45	12/23/20 13:45	
410-24913-7	HD-COD-SW-16-0/1-0	Water	12/23/20 10:10	12/23/20 13:45	
410-24913-8	HD-COD-SW-17-0/1-0	Water	12/23/20 10:25	12/23/20 13:45	
410-24913-9	HD-COD-SW-26-0/1-0	Water	12/23/20 11:05	12/23/20 13:45	
410-24913-10	HD-COD-SW-27-0/1-0	Water	12/23/20 11:35	12/23/20 13:45	
410-24913-11	HD-COD-SW-28-0/1-0	Water	12/23/20 12:25	12/23/20 13:45	
410-24913-12	HD-COD-SW-29-0/1-0	Water	12/23/20 09:25	12/23/20 13:45	
410-24913-13	HD-QC1-0/1-1	Water	12/23/20 12:00	12/23/20 13:45	
410-24913-14	HD-QC1-0/1-2	Water	12/23/20 00:00	12/23/20 13:45	

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-24913-1

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 30m 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 30m 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 30m 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 30m 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 Laboratorie Job No.: 410-24913-1

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 30m 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 30m 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 Laboratorie Job No.: 410-24913-1

SDG No.: _____

Instrument ID: 16334 Analysis Batch Number: 70996

Lab 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 30m 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 30m 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 Laboratorie Job No.: 410-24913-1

SDG No.: _____

Instrument ID: 16334 Analysis Batch Number: 81468Lab Sample ID: CCVIS 410-81468/4 Client Sample ID: _____Date Analyzed: 12/31/20 17:09 Lab File ID: GD31C32.D GC Column: R-624SilMS 30m ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Trichlorofluoromethane	2.96	Incomplete Integration	campbellme	12/31/20 17:34
t-Butyl alcohol	4.31	Incomplete Integration	campbellme	12/31/20 17:34
1,4-Dioxane	8.57	Incomplete Integration	campbellme	12/31/20 17:34

Lab Sample ID: 410-24913-1 Client Sample ID: HD-COD-SW-6-0/1-0Date Analyzed: 01/01/21 02:18 Lab File ID: GD31S20.D GC Column: R-624SilMS 30m ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon disulfide	3.80	Incomplete Integration	campbellme	01/04/21 19:40
Methylene Chloride	4.15	Incomplete Integration	campbellme	01/04/21 19:40
Chloroform	6.56	Incomplete Integration	campbellme	01/04/21 19:40

Lab Sample ID: 410-24913-2 Client Sample ID: HD-COD-SW-7-0/1-0Date Analyzed: 01/01/21 02:40 Lab File ID: GD31S21.D GC Column: R-624SilMS 30m ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methylene Chloride	4.15	Incomplete Integration	campbellme	01/04/21 19:40
cis-1,2-Dichloroethene	6.07	Incomplete Integration	campbellme	01/04/21 19:40
Benzene	7.26	Incomplete Integration	campbellme	01/04/21 19:41
Bromodichloromethane	8.82	Incomplete Integration	campbellme	01/04/21 19:41

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-24913-1

SDG No.: _____

Instrument ID: 16334 Analysis Batch Number: 81468Lab Sample ID: 410-24913-3 Client Sample ID: HD-COD-SW-8-0/1-0Date Analyzed: 01/01/21 03:03 Lab File ID: GD31S22.D GC Column: R-624SilMS 30m ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon disulfide	3.79	Incomplete Integration	campbellme	01/04/21 19:41
Chloroform	6.57	Incomplete Integration	campbellme	01/04/21 19:41
Benzene	7.27	Incomplete Integration	campbellme	01/04/21 19:41
Tetrachloroethene	10.31	Incomplete Integration	campbellme	01/04/21 19:42

Lab Sample ID: 410-24913-4 Client Sample ID: HD-COD-SW-9-0/1-0Date Analyzed: 01/01/21 03:24 Lab File ID: GD31S23.D GC Column: R-624SilMS 30m ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon disulfide	3.79	Incomplete Integration	campbellme	01/04/21 19:42
Benzene	7.26	Incomplete Integration	campbellme	01/04/21 19:42
Trichloroethene	8.14	Incomplete Integration	campbellme	01/04/21 19:42
m-Xylene & p-Xylene	11.38	Incomplete Integration	campbellme	01/04/21 19:42

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-24913-1

SDG No.: _____

Instrument ID: 16334 Analysis Batch Number: 81892Lab Sample ID: CCVIS 410-81892/3 Client Sample ID: _____Date Analyzed: 01/04/21 18:55 Lab File ID: GJ04C31.D GC Column: R-624SilMS 30m ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Trichlorofluoromethane	2.97	Incomplete Integration	campbellme	01/04/21 19:22
Methyl acetate	3.96	Incomplete Integration	campbellme	01/04/21 19:22
t-Butyl alcohol	4.32	Incomplete Integration	campbellme	01/04/21 19:23
1,4-Dioxane	8.57	Incomplete Integration	campbellme	01/04/21 19:23

Lab Sample ID: 410-24913-6 MS Client Sample ID: HD-COD-SW-15-0/1-0 MSDate Analyzed: 01/05/21 01:04 Lab File ID: GJ04S09.D GC Column: R-624SilMS 30m ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloromethane	2.14	Other	howej	01/05/21 08:57

Lab Sample ID: 410-24913-10 Client Sample ID: HD-COD-SW-27-0/1-0Date Analyzed: 01/05/21 04:43 Lab File ID: GJ04S19.D GC Column: R-624SilMS 30m ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon disulfide	3.81	Other	howej	01/05/21 09:24

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-24913-1

SDG No.: _____

Instrument ID: 19094 Analysis Batch Number: 81781Lab Sample ID: IC 410-81781/12 Client Sample ID: _____Date Analyzed: 01/04/21 16:29 Lab File ID: Hj04I11.D GC Column: R-624SilMS 30m ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dichloroethane	7.62	Other	howej	01/05/21 06:26
1,4-Dioxane	8.85	Other	howej	01/05/21 06:26

Lab Sample ID: ICIS 410-81781/13 Client Sample ID: _____Date Analyzed: 01/04/21 16:51 Lab File ID: Hj04I12.D GC Column: R-624SilMS 30m ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	2.08	Other	howej	01/05/21 06:05
Chloromethane	2.28	Other	howej	01/05/21 06:05
Vinyl chloride	2.40	Other	howej	01/05/21 06:05
1,3-Butadiene	2.41	Other	howej	01/05/21 06:05
Methyl acetate	4.23	Other	howej	01/05/21 06:06
1,2-Dichloroethane	7.62	Other	howej	01/05/21 06:06

Lab Sample ID: IC 410-81781/14 Client Sample ID: _____Date Analyzed: 01/04/21 17:12 Lab File ID: Hj04I13.D GC Column: R-624SilMS 30m ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,3-Butadiene	2.40	Other	howej	01/05/21 06:27
t-Butyl alcohol-d10 (IS)	4.44	Other	howej	01/05/21 06:31
1,2-Dichloroethane	7.61	Other	howej	01/05/21 06:28
1,4-Dioxane	8.85	Other	howej	01/05/21 06:28

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-24913-1

SDG No.: _____

Instrument ID: 19094 Analysis Batch Number: 81781Lab Sample ID: IC 410-81781/16 Client Sample ID: _____Date Analyzed: 01/04/21 17:56 Lab File ID: Hj04I15.D GC Column: R-624SilMS 30m ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
t-Butyl alcohol-d10 (IS)	4.46	Other	howej	01/05/21 06:32
1,4-Dioxane	8.86	Other	howej	01/05/21 06:33

Lab Sample ID: IC 410-81781/18 Client Sample ID: _____Date Analyzed: 01/04/21 18:39 Lab File ID: Hj04I17.D GC Column: R-624SilMS 30m ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon disulfide	4.06	Other	howej	01/05/21 06:37
Methyl methacrylate	8.84	Other	howej	01/05/21 06:37

Lab Sample ID: ICV 410-81781/19 Client Sample ID: _____Date Analyzed: 01/04/21 19:01 Lab File ID: Hj04V11.D GC Column: R-624SilMS 30m ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,3-Butadiene	2.40	Other	howej	01/05/21 07:28
1,2-Dichloroethane	7.61	Other	howej	01/05/21 07:28

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-24913-1

SDG No.: _____

Instrument ID: 19094 Analysis Batch Number: 82059Lab Sample ID: LCS 410-82059/4 Client Sample ID: _____Date Analyzed: 01/05/21 10:01 Lab File ID: HJ05L01.D GC Column: R-624SilMS 30m ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dichloroethane	7.61	Other	howej	01/05/21 10:30

Lab Sample ID: 410-24913-14 Client Sample ID: HD-QC1-0/1-2Date Analyzed: 01/05/21 11:50 Lab File ID: HJ05S02.D GC Column: R-624SilMS 30m ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetone		Invalid Compound ID	howej	01/05/21 12:41

Lab Sample ID: 410-24913-5 Client Sample ID: HD-COD-SW-13-0/1-0Date Analyzed: 01/05/21 13:17 Lab File ID: HJ05S06.D GC Column: R-624SilMS 30m ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dichloroethane		Invalid Compound ID	spositok	01/06/21 09:44
Carbon disulfide		Invalid Compound ID	spositok	01/06/21 09:43
Chloroform		Invalid Compound ID	spositok	01/06/21 09:43
Chloromethane		Invalid Compound ID	spositok	01/06/21 09:43

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-24913-1

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
					MSV_Cus826_IS_00151	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_00014	05/31/21	12/16/20	Methanol, Lot DZ644	10 mL	MSV_Cus826_IS_00163	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_00163	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_00014	05/31/21	12/16/20	Methanol, Lot DZ644	10 mL	MSV_8260_SS_00267	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_00267	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_30_826ISS_00006	05/31/21	11/30/20	Methanol, Lot DZ644	50 mL	MSV_8260_SS_00252	1 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							4-Bromofluorobenzene (Surr)	50 ug/mL
							Dibromofluoromethane (Surr)	50 ug/mL
					MSV_Cus826_IS_00156	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_00252	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_00156	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.: 410-24913-1

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_QVOA1_00057	12/30/20	11/30/20	Methanol, Lot DZ644	25 mL	MSV_Q#1B_00071	1 mL	1,1,1,2-Tetrachloroethane	40 mg/L	
							1,1,1-Trichloroethane	40 mg/L	
							1,1,2,2-Tetrachloroethane	40 mg/L	
							1,1,2-Trichloroethane	40 mg/L	
							1,1-Dichloroethane	40 mg/L	
							1,1-Dichloroethene	40 mg/L	
							1,2-Dibromoethane (EDB)	40 mg/L	
							1,2-Dichloroethane	40 mg/L	
							1,2-Dichloropropane	40 mg/L	
							Benzene	40 mg/L	
							Bromodichloromethane	40 mg/L	
							Bromoform	40 mg/L	
							Carbon tetrachloride	40 mg/L	
							Chlorobenzene	40 mg/L	
							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.: 410-24913-1

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_00061	01/27/21	12/28/20	Methanol, Lot DZ644	25 mL	MSV_Q#1B_00075	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_00067	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.: 410-24913-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Acetone	300 mg/L
					MSV_Q#4C_00073	1 mL	Carbon disulfide	40 mg/L
							Methyl tert-butyl ether	40 mg/L
.MSV_Q#1B_00075	04/30/22		Restek, Lot A0148625		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	1000 ug/mL
							1,1,1-Trichloroethane	1000 ug/mL
							1,1,2,2-Tetrachloroethane	1000 ug/mL
							1,1,2-Trichloroethane	1000 ug/mL
							1,1-Dichloroethane	1000 ug/mL
							1,1-Dichloroethene	1000 ug/mL
							1,2-Dibromoethane (EDB)	1000 ug/mL
							1,2-Dichloroethane	1000 ug/mL
							1,2-Dichloropropane	1000 ug/mL
							Benzene	1000 ug/mL
							Bromodichloromethane	1000 ug/mL
							Bromoform	1000 ug/mL
							Carbon tetrachloride	1000 ug/mL
							Chlorobenzene	1000 ug/mL
							Chloroform	1000 ug/mL
							cis-1,2-Dichloroethene	1000 ug/mL
							cis-1,3-Dichloropropene	1000 ug/mL
							Dibromochloromethane	1000 ug/mL
							Ethylbenzene	1000 ug/mL
							Methylene Chloride	1000 ug/mL
							Styrene	1000 ug/mL
							Tetrachloroethene	1000 ug/mL
							Toluene	1000 ug/mL
							trans-1,2-Dichloroethene	1000 ug/mL
							trans-1,3-Dichloropropene	1000 ug/mL
							Trichloroethene	1000 ug/mL
.MSV_Q#3B_00067	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_00073	03/31/21		Restek, Lot A0158704		(Purchased Reagent)		Carbon disulfide	1000 ug/mL
							Methyl tert-butyl ether	1000 ug/mL
MSV_Q_QVOA1_00062	02/03/21	01/04/21	Methanol, Lot DZ644	25 mL	MSV_Q#1B_00077	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.: 410-24913-1

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_00069	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_00074	1 mL	Carbon disulfide	40 mg/L
							Methyl tert-butyl ether	40 mg/L
.MSV_Q#1B_00077	04/30/22		Restek, Lot A0148625			(Purchased Reagent)	1,1,1,2-Tetrachloroethane	1000 ug/mL
							1,1,1-Trichloroethane	1000 ug/mL
							1,1,2,2-Tetrachloroethane	1000 ug/mL
							1,1,2-Trichloroethane	1000 ug/mL
							1,1-Dichloroethane	1000 ug/mL
							1,1-Dichloroethene	1000 ug/mL
							1,2-Dibromoethane (EDB)	1000 ug/mL
							1,2-Dichloroethane	1000 ug/mL
							1,2-Dichloropropane	1000 ug/mL
							Benzene	1000 ug/mL
							Bromodichloromethane	1000 ug/mL
							Bromoform	1000 ug/mL
							Carbon tetrachloride	1000 ug/mL
							Chlorobenzene	1000 ug/mL
							Chloroform	1000 ug/mL
							cis-1,2-Dichloroethene	1000 ug/mL
							cis-1,3-Dichloropropene	1000 ug/mL
							Dibromochloromethane	1000 ug/mL
							Ethylbenzene	1000 ug/mL
							Methylene Chloride	1000 ug/mL
							Styrene	1000 ug/mL
							Tetrachloroethene	1000 ug/mL
							Toluene	1000 ug/mL
							trans-1,2-Dichloroethene	1000 ug/mL
							trans-1,3-Dichloropropene	1000 ug/mL
							Trichloroethene	1000 ug/mL
.MSV_Q#3B_00069	09/30/21		Restek, Lot A0158722			(Purchased Reagent)	2-Butanone (MEK)	7500 ug/mL
							2-Hexanone	5000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-24913-1

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_00074	03/31/21		Restek, Lot A0158704			(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_00059	01/29/21	12/30/20	Methanol, Lot DZ644	25 mL	MSV_QCS#6Std_00072	1 mL	Bromochloromethane	40 ug/mL
.MSV_QCS#6Std_00072	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_00100	01/04/21	12/28/20	Methanol, Lot DZ644	1 mL	MSV_502QGas_00129	20 uL	Bromomethane	40 ug/mL
							Chloroethane	40 ug/mL
							Chloromethane	40 ug/mL
							Vinyl chloride	40 ug/mL
.MSV_502QGas_00129	01/04/21		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_00101	01/11/21	01/04/21	Methanol, Lot DZ644	1 mL	MSV_502QGas_00132	20 uL	Bromomethane	40 ug/mL
							Chloroethane	40 ug/mL
							Chloromethane	40 ug/mL
							Vinyl chloride	40 ug/mL
.MSV_502QGas_00132	01/11/21		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
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-24913-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2-Dichloroethane	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
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-24913-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration			
					Reagent ID	Volume Added					
					MSV_V#4C_00107	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			
					MSV_V_VOA3_00057	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			
					Acrolein	2500.07 ug/mL					
					.MSV_V#1B_00127	12/30/20	Restek, Lot A0158586	(Purchased Reagent)		1,1,1-Trichloroethane	5000 ug/mL
								1,1,2,2-Tetrachloroethane	5000 ug/mL		
1,1,2-Trichloroethane	5000 ug/mL										
1,1-Dichloroethane	5000 ug/mL										
1,1-Dichloroethene	5000 ug/mL										
1,1-Dichloropropene	5000 ug/mL										
1,2,3-Trichlorobenzene	5000 ug/mL										
1,2,3-Trichloropropane	5000 ug/mL										
1,2,4-Trichlorobenzene	5000 ug/mL										
1,2,4-Trimethylbenzene	5000 ug/mL										
1,2-Dibromo-3-Chloropropane	5000 ug/mL										
1,2-Dibromoethane (EDB)	5000 ug/mL										
1,2-Dichlorobenzene	5000 ug/mL										
1,2-Dichloroethane	5000 ug/mL										

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-24913-1

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
							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_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#4C_00107	12/30/20		Restek, Lot A0158660			(Purchased Reagent)	1,1,2-Trichloro-1,2,2-trifluoroethane	5000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-24913-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_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	5 mL	MSV_V#3B_00070	1 mL	2-Butanone (MEK)	5000 ug/mL
							2-Hexanone	5000 ug/mL
							2-Nitropropane	5000 ug/mL
							4-Methyl-2-pentanone (MIBK)	5000 ug/mL
							Acetone	5000 ug/mL
							Acrylonitrile	2500 ug/mL
							Tetrahydrofuran	5000 ug/mL
					MSV_VACR 00013	1 mL	Acrolein	25000.7 ug/mL
..MSV_V#3B_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
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-24913-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
MSV_RV1_826_00033	01/20/21	12/21/20	Methanol, Lot DZ644	1 mL	MSV_V#1B_00133	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_00113						10 uL	Carbon disulfide	50 ug/mL
							Methyl tert-butyl ether	50 ug/mL
MSV_V_VOA3_00060						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_00133	01/20/21		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
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-24913-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							cis-1,3-Dichloropropene	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_00113	01/20/21		Restek, Lot A0158660			(Purchased Reagent)	Carbon disulfide	5000 ug/mL
							Methyl tert-butyl ether	5000 ug/mL
.MSV_V_VOA3_00060	01/20/21	12/21/20	Methanol, Lot DZ644	5 mL	MSV_V#3B_00073	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_00073	01/20/21		Restek, Lot A0158677			(Purchased Reagent)	2-Butanone (MEK)	25000 ug/mL
							2-Hexanone	25000 ug/mL
							4-Methyl-2-pentanone (MIBK)	25000 ug/mL
							Acetone	25000 ug/mL
MSV_RV1_826_00034	02/03/21	01/04/21	Methanol, Lot DZ644	1 mL	MSV_V#1B_00136	10 uL	1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dibromoethane (EDB)	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3,5-Trichlorobenzene	50 ug/mL
							1,3,5-Trimethylbenzene	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							1-Chlorohexane	50 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							4-Isopropyltoluene	50 ug/mL
							Benzene	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-24913-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Bromobenzene	50 ug/mL
							Bromodichloromethane	50 ug/mL
							Bromoform	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Dibromochloromethane	50 ug/mL
							Dibromomethane	50 ug/mL
							Ethylbenzene	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	100 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							N-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							Trichloroethene	50 ug/mL
					MSV_V#2B_00177	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_00116	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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-24913-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methyl tert-butyl ether	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_00065	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_00062	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	2500.09 ug/mL
.MSV_V#1B_00136	02/03/21		Restek, Lot A0158586		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	5000 ug/mL
							1,1,1-Trichloroethane	5000 ug/mL
							1,1,2,2-Tetrachloroethane	5000 ug/mL
							1,1,2-Trichloroethane	5000 ug/mL
							1,1-Dichloroethane	5000 ug/mL
							1,1-Dichloroethene	5000 ug/mL
							1,1-Dichloropropene	5000 ug/mL
							1,2,3-Trichlorobenzene	5000 ug/mL
							1,2,3-Trichloropropane	5000 ug/mL
							1,2,4-Trichlorobenzene	5000 ug/mL
							1,2,4-Trimethylbenzene	5000 ug/mL
							1,2-Dibromo-3-Chloropropane	5000 ug/mL
							1,2-Dibromoethane (EDB)	5000 ug/mL
							1,2-Dichlorobenzene	5000 ug/mL
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-24913-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00177	02/03/21		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#4C_00116	02/03/21		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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-24913-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Tert-amyl methyl ether	5000 ug/mL
							Tert-butyl ethyl ether	5000 ug/mL
.MSV_V_VOA2_00065	02/03/21	01/04/21	Methanol, Lot DZ644	5 mL	MSV_V#2B_00178	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_00178	02/03/21		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_00062	02/03/21	01/04/21	Methanol, Lot DZ644	5 mL	MSV_V#3B_00075	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_00014	1 mL	Acrolein	25000.9 ug/mL
..MSV_V#3B_00075	02/03/21		Restek, Lot A0158677		(Purchased Reagent)		2-Butanone (MEK)	25000 ug/mL
							2-Hexanone	25000 ug/mL
							2-Nitropropane	25000 ug/mL
							4-Methyl-2-pentanone (MIBK)	25000 ug/mL
							Acetone	25000 ug/mL
							Acrylonitrile	12500 ug/mL
							Tetrahydrofuran	25000 ug/mL
..MSV_VACR_00014	02/13/21	12/15/20	Methanol, Lot DZ644	10 mL	MSV_VACR_STK_00016	9.207 mL	Acrolein	125005 ug/mL
...MSV_VACR_STK_00016	02/13/21	12/15/20	Methanol, Lot DZ644	10 mL	MSV_ACROLEIN_00009	1.449 g	Acrolein	135771 ug/mL
...MSV_ACROLEIN_00009	09/30/21		Chem Service, Lot 10804400		(Purchased Reagent)		Acrolein	0.937 g/g
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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-24913-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							Methyl acetate	5000 ug/mL
							Methylcyclohexane	5000 ug/mL
							Pentachloroethane	5000 ug/mL
MSV_RV4_826_00038	01/29/21	12/31/20	Methanol, Lot DZ644	1 mL	MSV_V_VOA6_00068	50 uL	Bromochloromethane	50 ug/mL
.MSV_V_VOA6_00068	01/29/21	12/30/20	Methanol, Lot DZ644	5 mL	MSV_V#6_00052	1 mL	Bromochloromethane	1000 ug/mL
..MSV_V#6_00052	01/29/21		Restek, Lot A0158625		(Purchased Reagent)		Bromochloromethane	5000 ug/mL
MSV_RV4_826_00039	01/29/21	01/04/21	Methanol, Lot DZ644	1 mL	MSV_V_EE_00004	50 uL	Ethyl ether	50.0108 ug/mL
					MSV_V_VOA6_00068	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_00068	01/29/21	12/30/20	Methanol, Lot DZ644	5 mL	MSV_V#6_00052	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_00052	01/29/21		Restek, Lot A0158625		(Purchased Reagent)		1,2,3-Trimethylbenzene	5000 ug/mL
							3-Chloro-1-propene	5000 ug/mL
							Bromochloromethane	5000 ug/mL
							Methyl acetate	5000 ug/mL
							Methylcyclohexane	5000 ug/mL
							Pentachloroethane	5000 ug/mL
MSV_RV4GAS826_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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-24913-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Vinyl chloride	2000 ug/mL
MSV_RV4GAS826_00104	01/04/21	12/28/20	Methanol, Lot DZ644	1 mL	MSV_V_Gas_00187	25 uL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.MSV_V_Gas_00187	01/04/21		Restek, Lot A0159812			(Purchased Reagent)	Bromomethane	2000 ug/mL
							Chloroethane	2000 ug/mL
							Chloromethane	2000 ug/mL
							Vinyl chloride	2000 ug/mL
MSV_RV4GAS826_00105	01/11/21	01/04/21	Methanol, Lot DZ644	1 mL	MSV_DCFM_00055	25 uL	Dichlorofluoromethane	50 ug/mL
					MSV_V_Gas_00193	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_00055	01/19/21		AccuStandard, Lot 220101035			(Purchased Reagent)	Dichlorofluoromethane	2000 ug/mL
.MSV_V_Gas_00193	01/11/21		Restek, Lot A0159812			(Purchased Reagent)	Bromomethane	2000 ug/mL
							Chloroethane	2000 ug/mL
							Chloromethane	2000 ug/mL
							Dichlorodifluoromethane	2000 ug/mL
							Trichlorofluoromethane	2000 ug/mL
							Vinyl chloride	2000 ug/mL
MSV_V_BFB_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	0.117 mL	BFB	50.0245 ug/mL
.MSV_VBFB_STK_00004	01/22/21	07/22/20	Methanol, Lot DX212	10 mL	MSV_4BFB_NEAT_00002	1.0689 g	BFB	106890 ug/mL
..MSV_4BFB_NEAT_00002	01/31/21		Chem Service, Lot 8601300			(Purchased Reagent)	BFB	1 g/g

Reagent

MSV_4BFB_NEAT_00002

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

CERTIFICATE OF ANALYSIS

4-Bromofluorobenzene

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

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

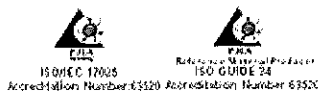
Chem Service, Inc. guarantees the purity to be +/- 0.5% deviation prior to the expiration date shown on the label and exclusive of any customer contamination.

Certified By:

Mary Beth O'Donnell

Mary Beth O'Donnell
CSM/TC

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



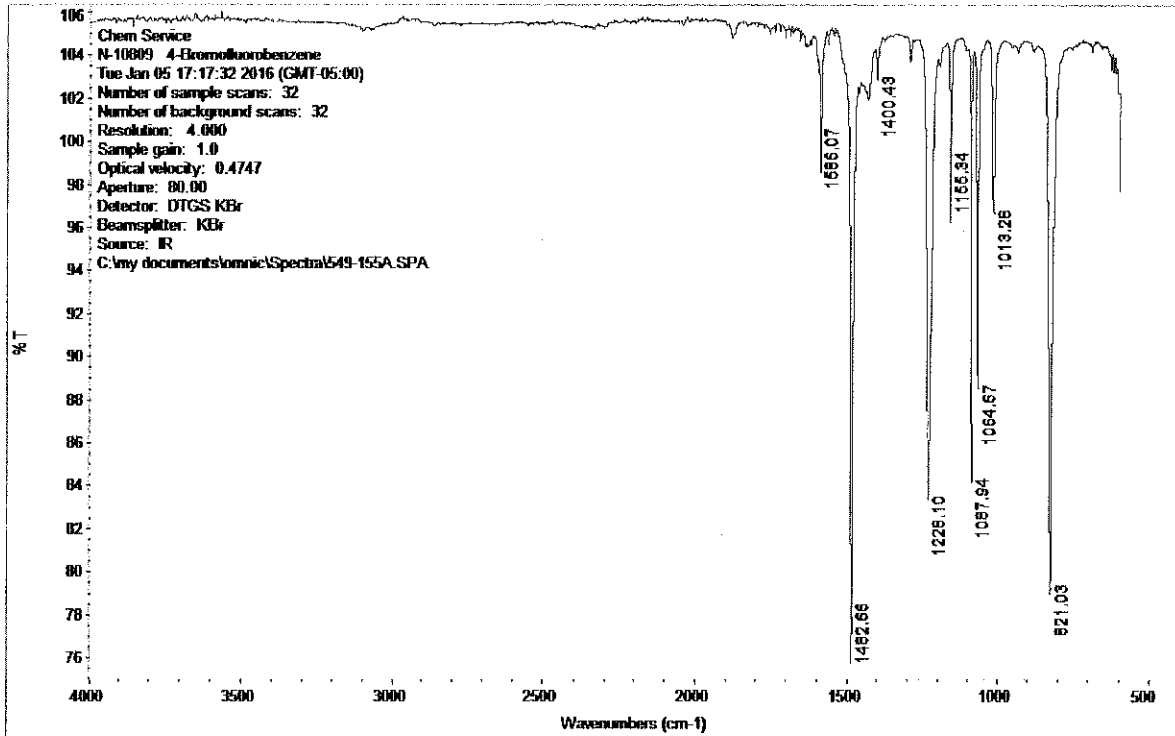
COA Form
Revision 3 (3/2015)

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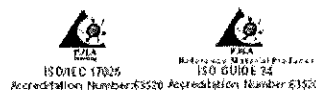
CERTIFICATE OF ANALYSIS

Analysis Method: 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





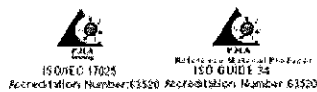
660 Tower Lane • P.O. Box 599 • West Chester, PA 19381-0599
1-800-452-9994 • 1-610-692-3026 • Fax 1-610-692-8729
info@chemservice.com • www.chemservice.com

CERTIFICATE OF ANALYSIS

Analysis Method:

Catalog Number:	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

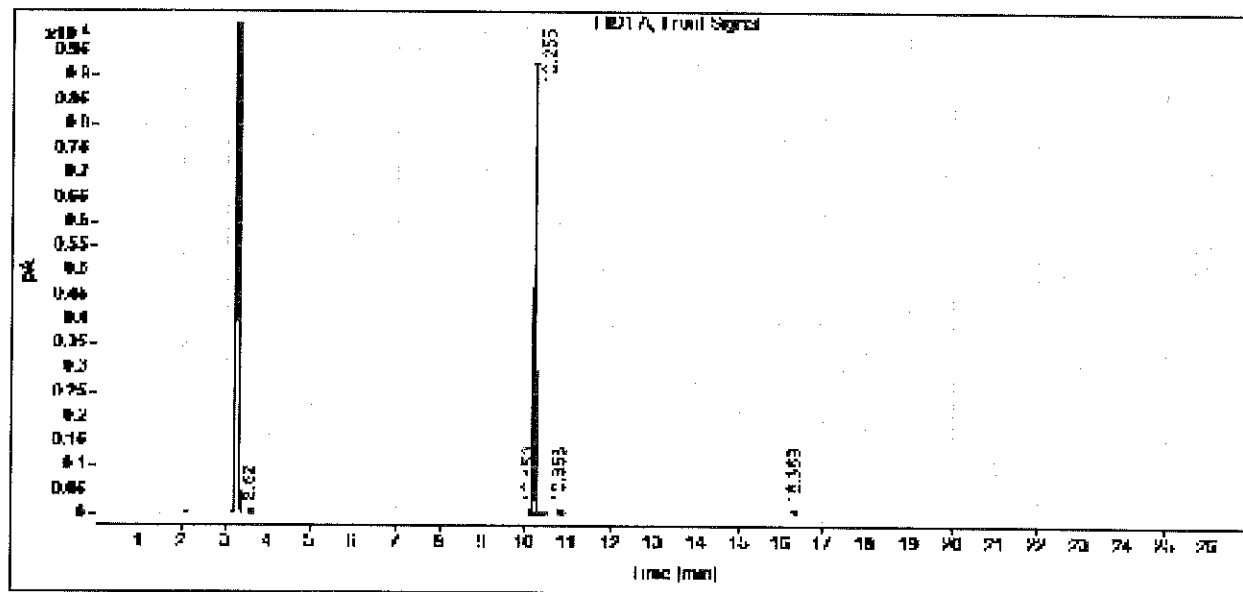


660 Tower Lane • P.O. Box 599 • West Chester, PA 19381-0599
 1-800-452-9994 • 1-610-692-3026 • Fax 1-610-692-8729
info@chemservice.com • www.chemservice.com

CERTIFICATE OF ANALYSIS

Gas Chromatography / Flame Ionization Detector (GC/FID)

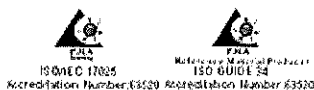
Data file: C:\CHEM32\1\DATA\1215\SIG1007347.D
 Sample name: N-10809/CH2CL2
 Instrument: GC 1
 Injection date: 1/5/2016 4:20:37 PM
 Acq. method: MIX1.M
 Column name: DB-824 (30m x 0.53mm x 3.0um)
 Sample type: Sample
 Location: Vial 6
 Injection volume: 1.0uL



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	0.4889	0.0028
10.255	VB S	0.0437	26687.8328	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			26748.5988		

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



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)

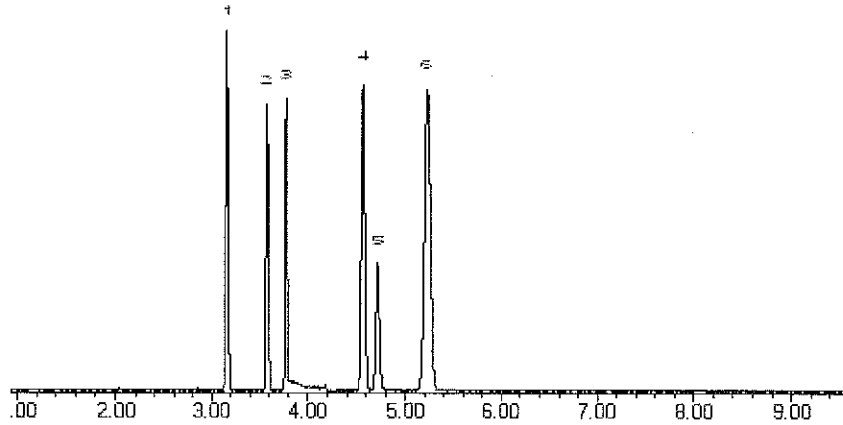
Carrier Gas:
helium-constant flow 2.0 mL/min.

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

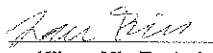
Inj. Temp:
200°C

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_00129



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)

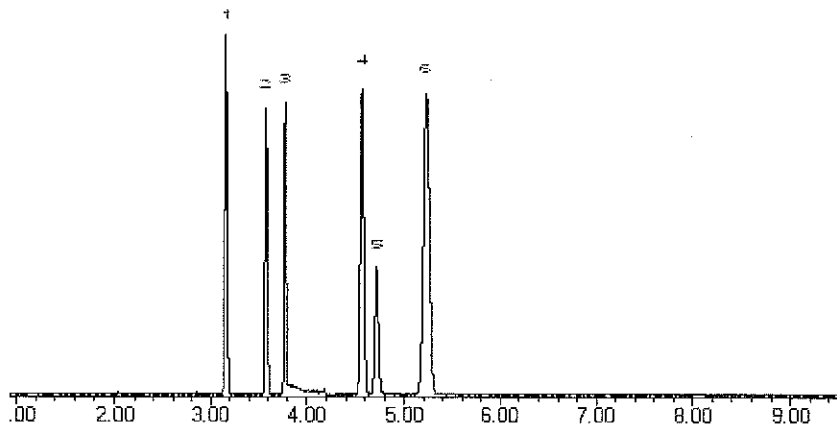
Carrier Gas:
helium-constant flow 2.0 mL/min.

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_502QGas_00132



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)

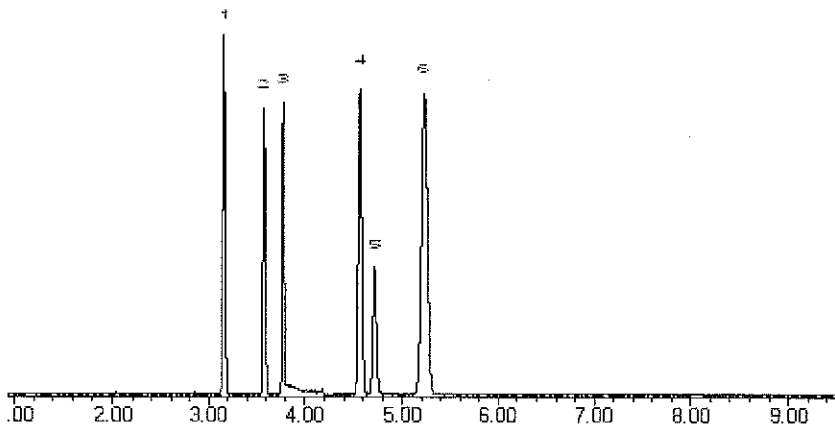
Carrier Gas:
helium-constant flow 2.0 mL/min.

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_8260_SS_00252



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:

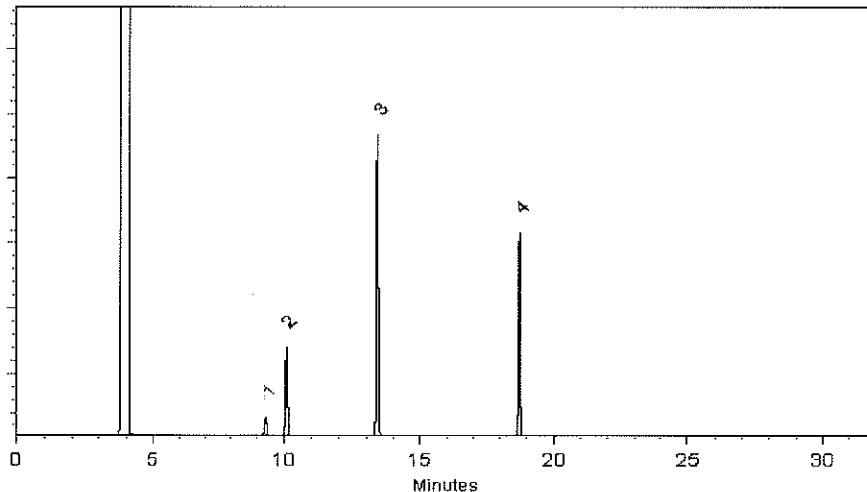
200°C

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_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:

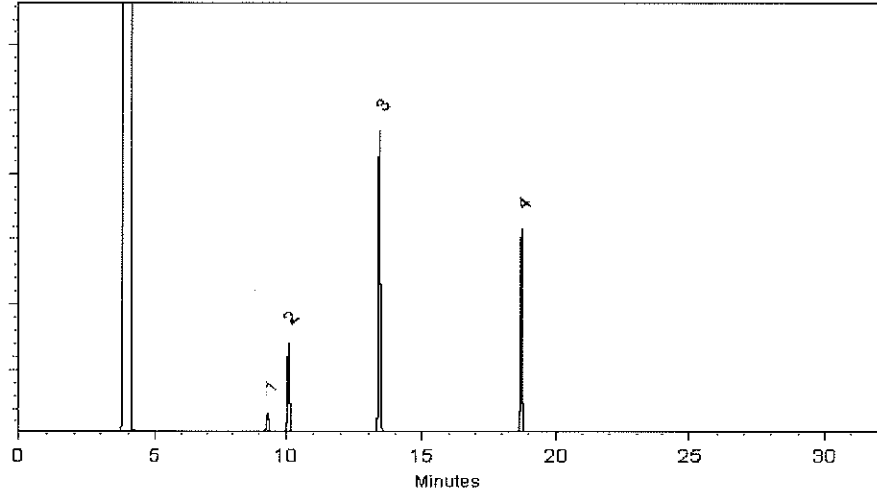
200°C

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

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- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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

Handling Notes:

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

MSV_8260_SS_00267



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:

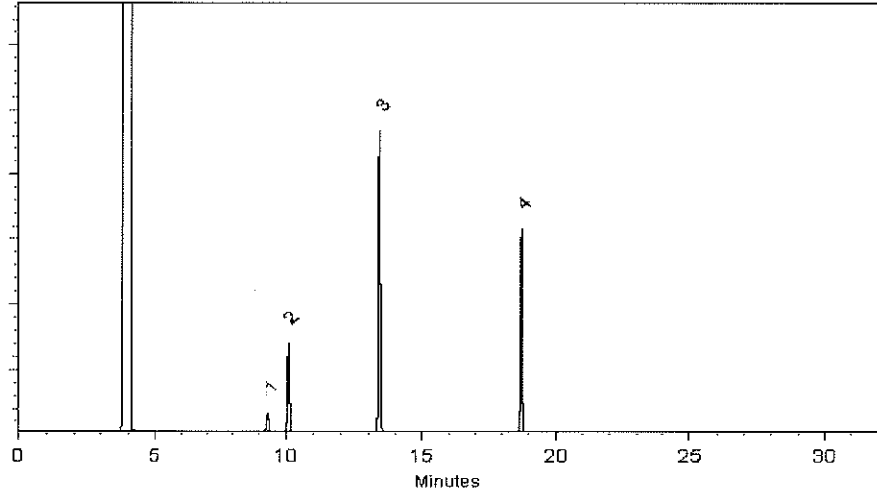
200°C

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.

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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



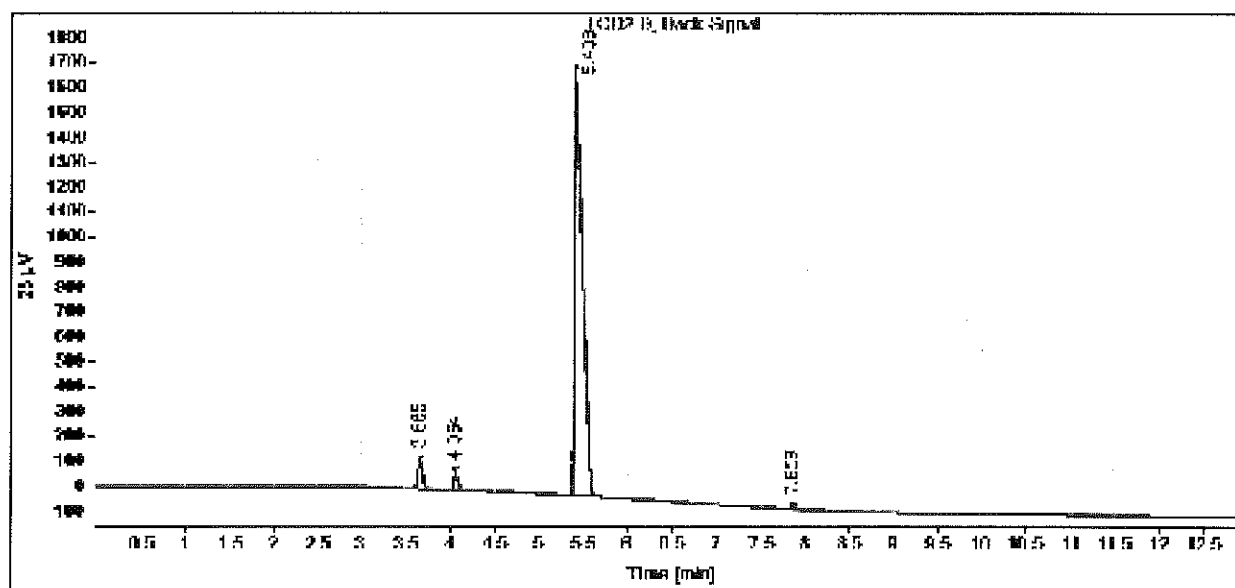
COA Form
Revision 3 (3/2015)

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
7.859	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_ACROLEIN_00009

CERTIFICATE OF ANALYSIS

Acrolein

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

<u>Analytical Test</u>	<u>Value</u>
% PURITY (GC/TCD)	93.7

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

Certified By:

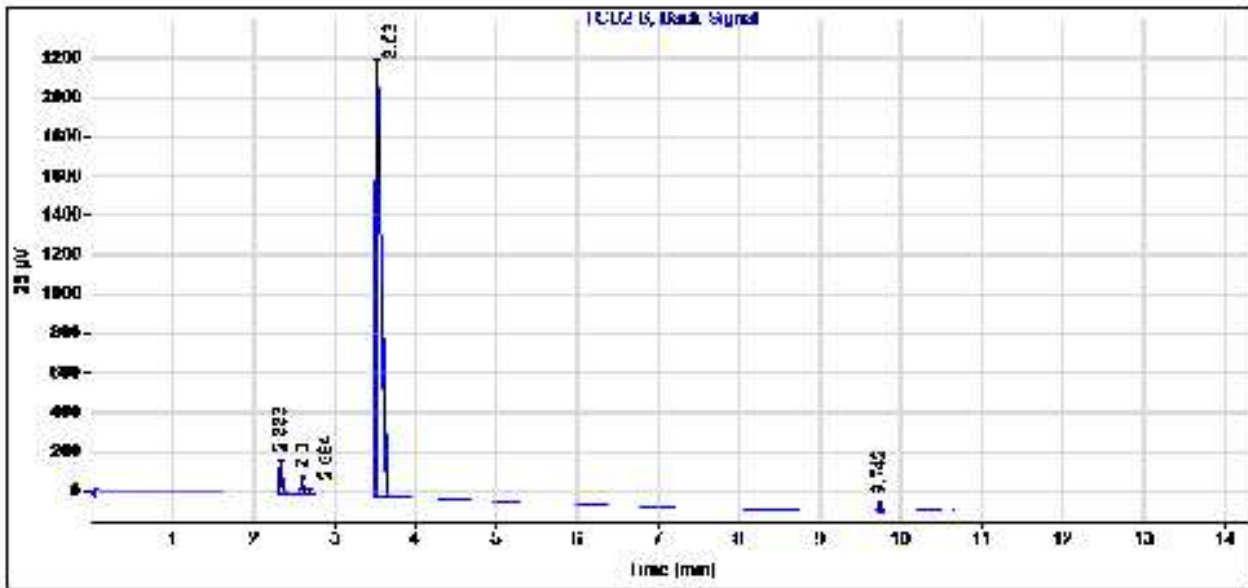
Mary Beth O'Donnell

Mary Beth O'Donnell
CSM/TC

CERTIFICATE OF ANALYSIS

Gas Chromatography / Flame Ionization Detector (GC/FID)

Data file: C:\CHEM32\1\DATA\2020 DATA\0920\SIG2022755.D
 Sample name: Acrolein
 Instrument: GC 1
 Injection date: 9/30/2020 9:08:04 AM
 Acq. method: GASBOMB_TCD.M
 Column name: DB-624 (30m x 0.53mm x 3.0um)
 Sample type: Blank
 Location:
 Injection volume: 1.0uL



Signal: TCD2 B, Back Signal

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

Reagent

MSV_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	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)

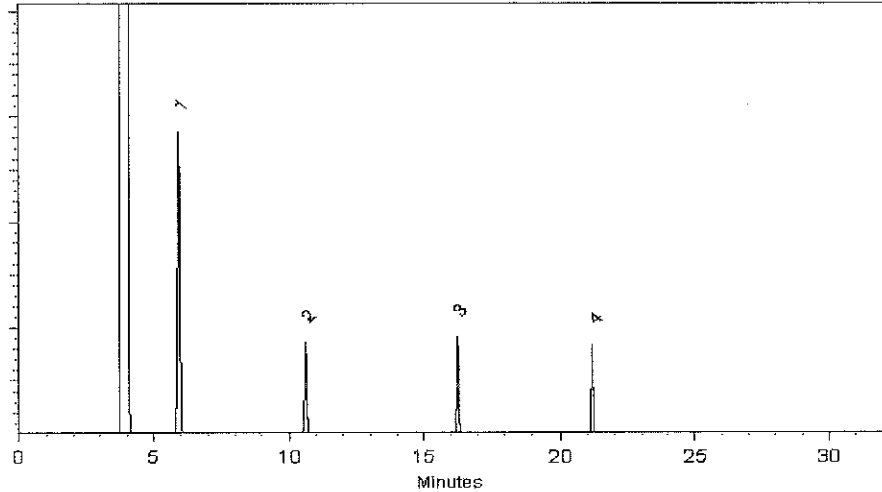
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

Inj. Temp:
200°C

Det. Temp:
250°C

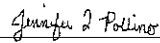
Det. Type:
FID



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.
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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.

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25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
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Handling Notes:

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

Reagent

MSV_Cus826_IS_00156



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)

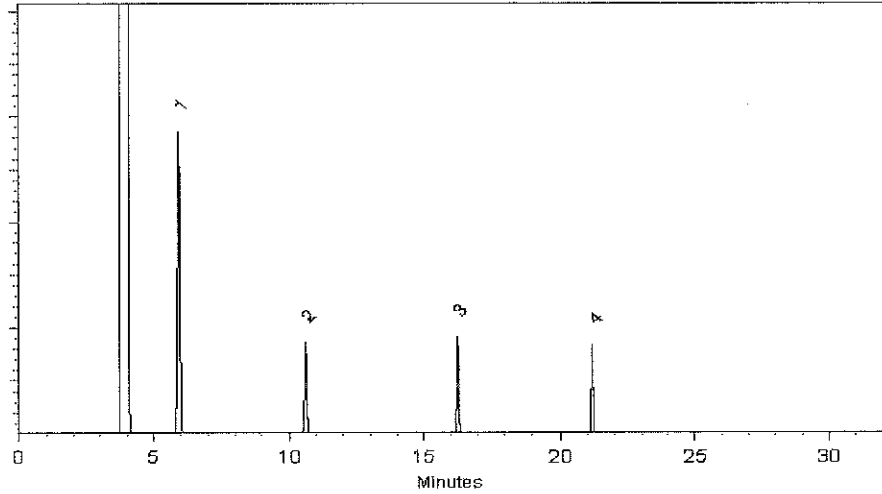
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

Inj. Temp:
200°C

Det. Temp:
250°C

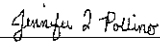
Det. Type:
FID



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
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_00163



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)

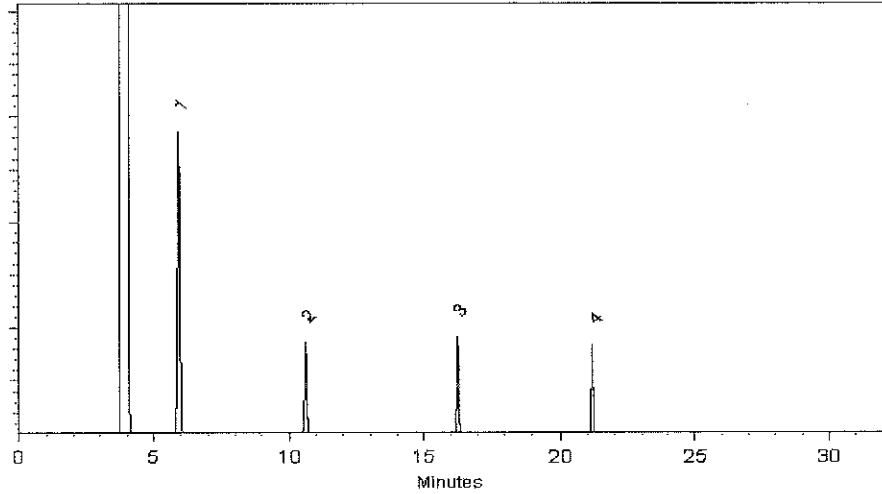
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

Inj. Temp:
200°C

Det. Temp:
250°C

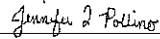
Det. Type:
FID



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.

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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)



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 $\pm 2.4\%$. 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:

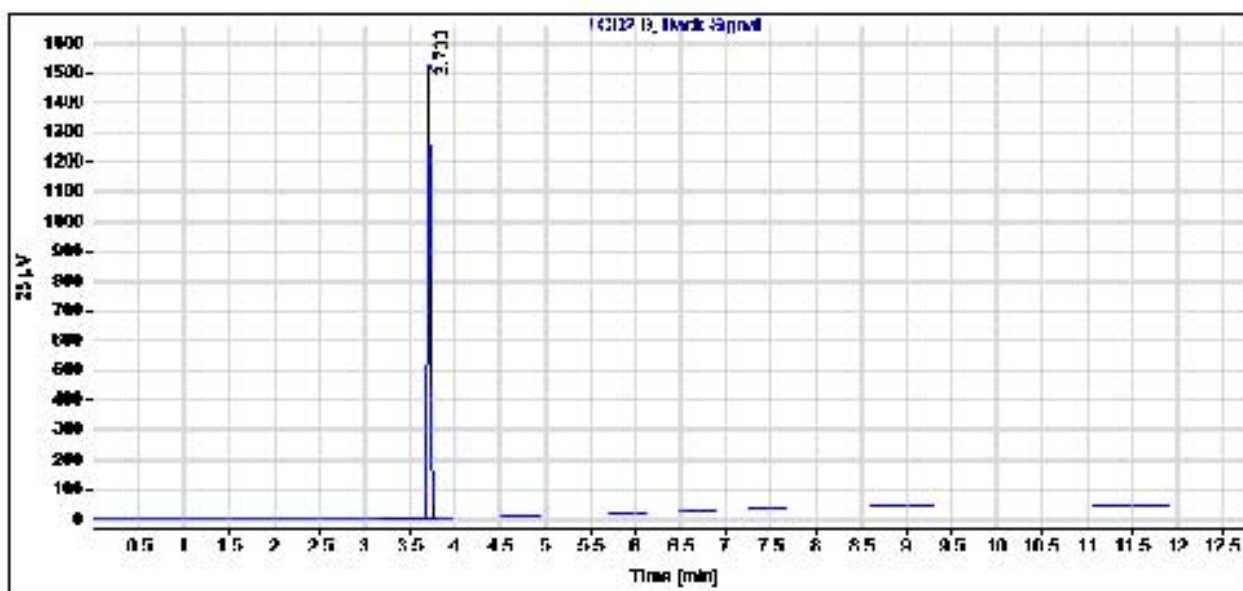
Mary Beth O'Donnell

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

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

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

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

40	2-Chlorotoluene 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)

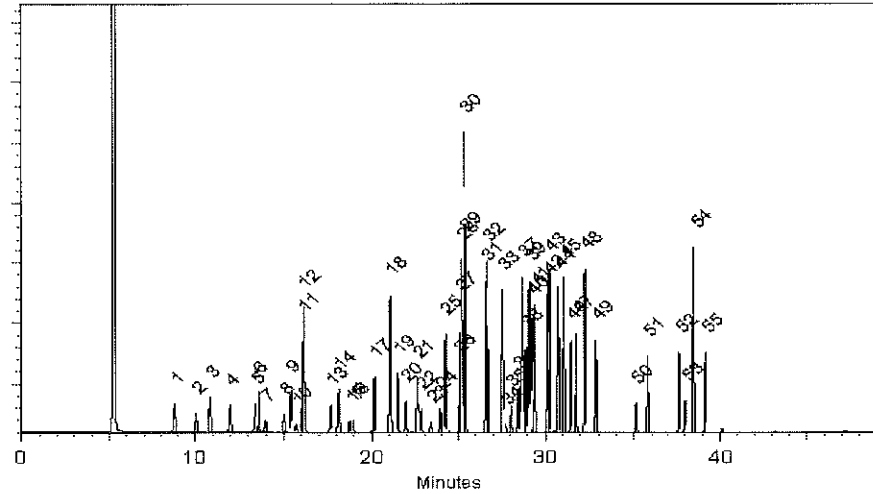
Carrier Gas:
hydrogen-constant pressure 8.0 psi.

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 Mage

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_00075



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. Rows 1-7 list various compounds like 1,1-Dichloroethene, Methylene chloride, trans-1,2-Dichloroethene, cis-1,2-Dichloroethene, and Chloroform.

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

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

40	2-Chlorotoluene 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)

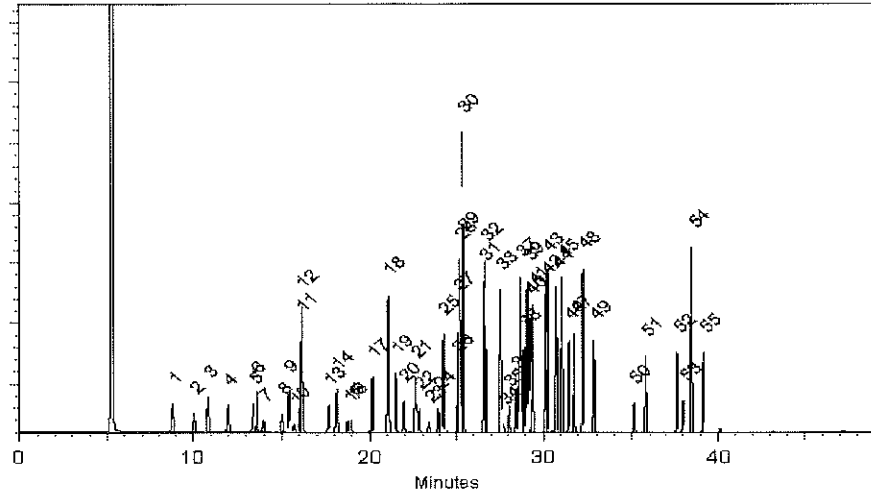
Carrier Gas:
hydrogen-constant pressure 8.0 psi.

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 Mage

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_00077



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, CAS #, Purity, Grav. Conc. (weight/volume), Expanded Uncertainty (95% C.L.; K=2), and measurement units. Contains 7 rows of data for various chemical standards.

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

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

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

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

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

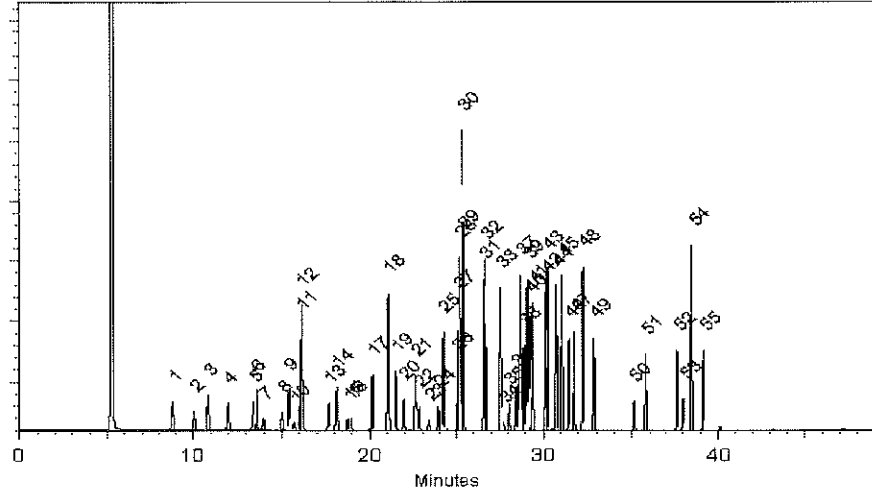
Carrier Gas:
hydrogen-constant pressure 8.0 psi.

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

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



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

Michael Mage

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#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 (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)

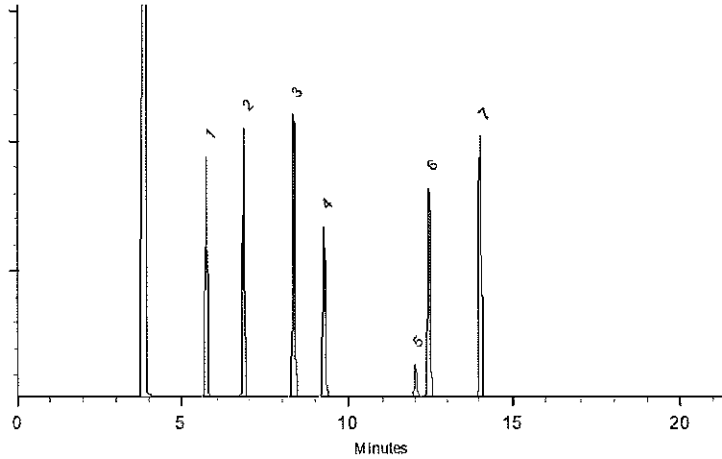
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

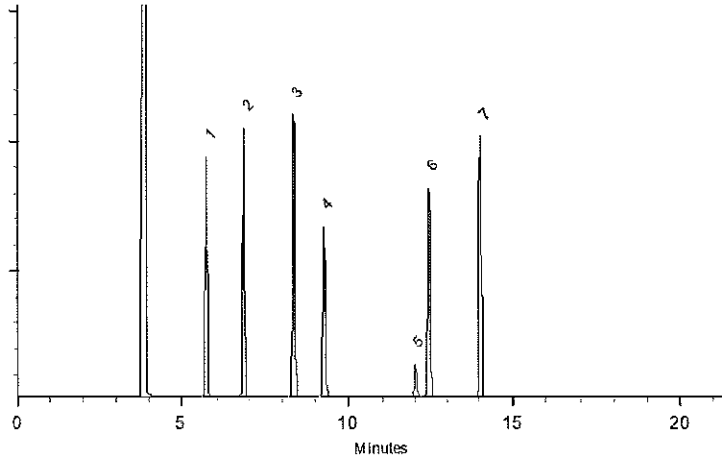
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.

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.

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

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.
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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_Q#3B_00069



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:

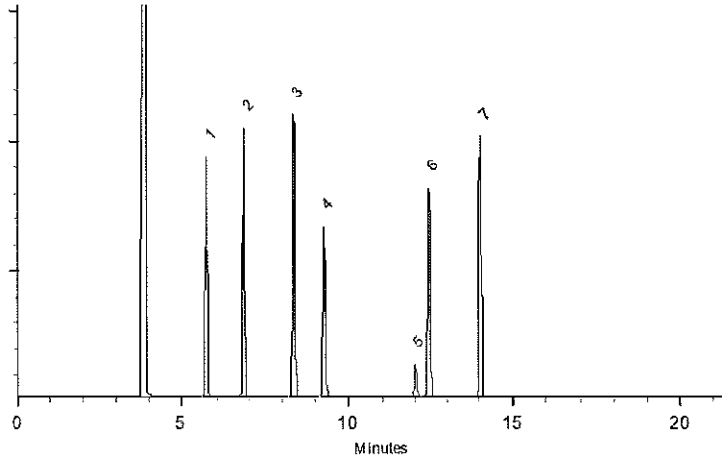
200°C

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:

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

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Label Conditions	Standard Conditions	Non-Standard Conditions
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0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

MSV_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)

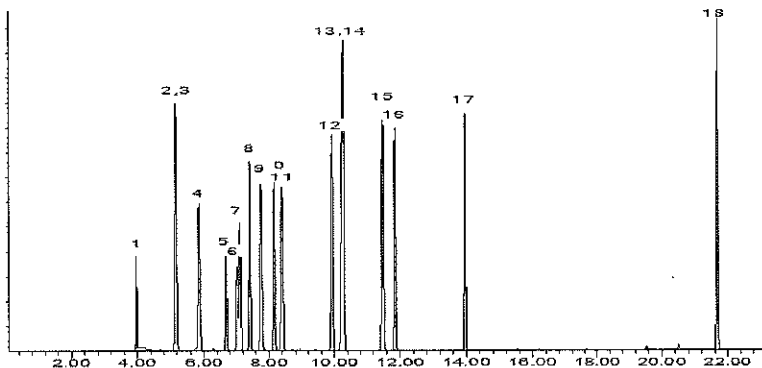
Carrier Gas:
helium-constant pressure 30 psi

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

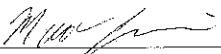
Inj. Temp:
200°C

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.

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_00073



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)

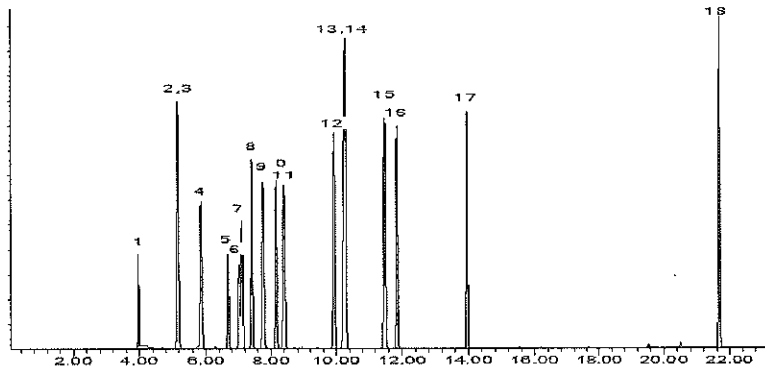
Carrier Gas:
helium-constant pressure 30 psi

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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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_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. : 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
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	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)

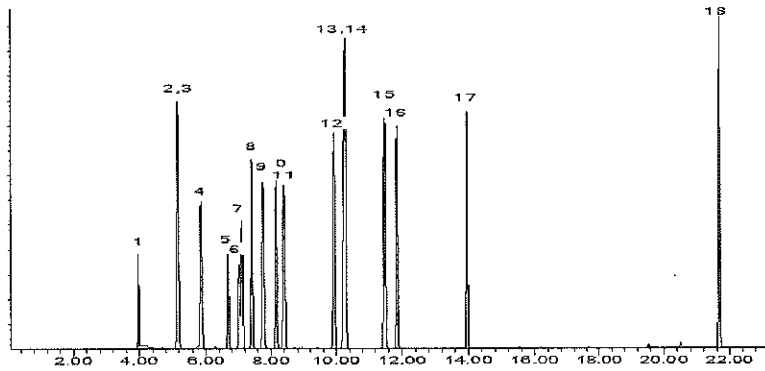
Carrier Gas:
helium-constant pressure 30 psi

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%.

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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
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_00072



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)

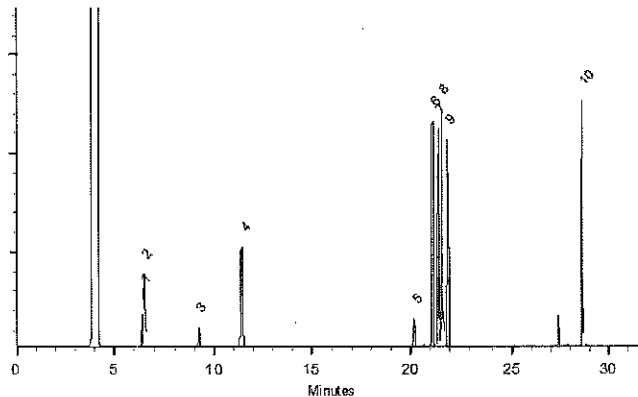
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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_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)

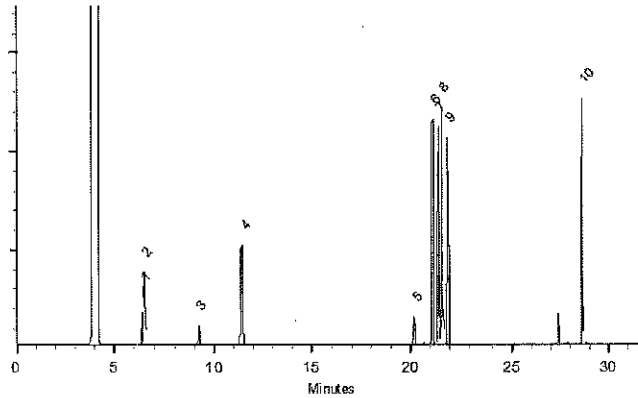
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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_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	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 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)

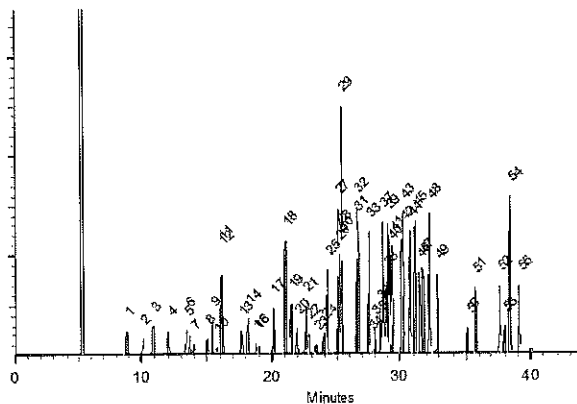
Carrier Gas:
hydrogen-constant pressure 8.0 psi.

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_00133



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	(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)

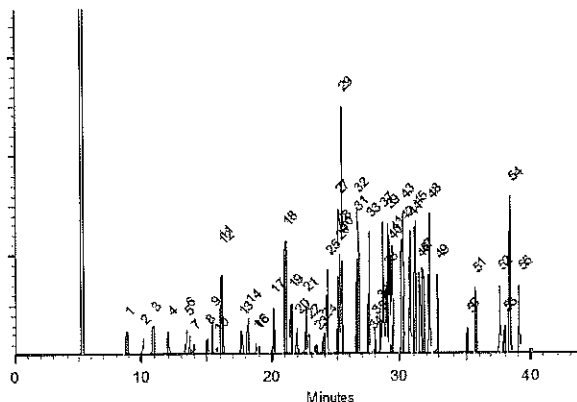
Carrier Gas:
hydrogen-constant pressure 8.0 psi.

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/ 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_00136



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	+/- 281.2901 µg/mL	+/- 287.8577 µg/mL	Gravimetric Unstressed Stressed
2	Methylene chloride (dichloromethane) CAS # 75-09-2 (Lot SHBL3107) Purity 99%	5,004.6 µg/mL	+/- 31.9213 µg/mL	+/- 280.9112 µg/mL	+/- 287.4700 µg/mL	Gravimetric Unstressed Stressed
3	trans-1,2-Dichloroethene CAS # 156-60-5 (Lot MKBH9850V) Purity 99%	5,017.5 µg/mL	+/- 32.0035 µg/mL	+/- 281.6339 µg/mL	+/- 288.2096 µg/mL	Gravimetric Unstressed Stressed
4	1,1-Dichloroethane CAS # 75-34-3 (Lot 580900) Purity 99%	5,020.4 µg/mL	+/- 32.0218 µg/mL	+/- 281.7953 µg/mL	+/- 288.3747 µg/mL	Gravimetric Unstressed Stressed
5	2,2-Dichloropropane CAS # 594-20-7 (Lot BCBT5124) Purity 99%	5,050.0 µg/mL	+/- 32.0202 µg/mL	+/- 283.4366 µg/mL	+/- 290.0553 µg/mL	Gravimetric Unstressed Stressed
6	cis-1,2-Dichloroethene CAS # 156-59-2 (Lot MKBX5945V) Purity 99%	5,046.5 µg/mL	+/- 31.9980 µg/mL	+/- 283.2401 µg/mL	+/- 289.8543 µg/mL	Gravimetric Unstressed Stressed
7	chloroform CAS # 67-66-3 (Lot SHBJ9076) Purity 99%	5,034.3 µg/mL	+/- 32.1103 µg/mL	+/- 282.5741 µg/mL	+/- 289.1717 µg/mL	Gravimetric Unstressed Stressed

8	1,1,1-trichloroethane 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)

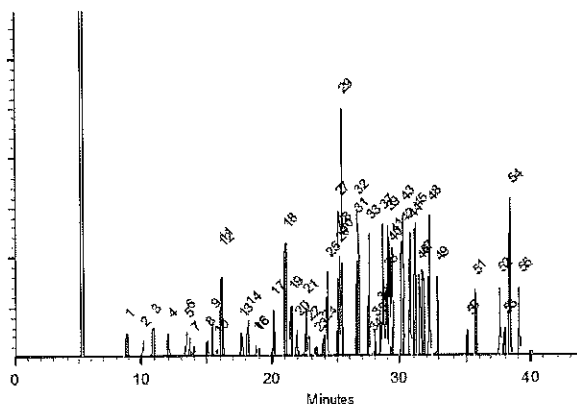
Carrier Gas:
hydrogen-constant pressure 8.0 psi.

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#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)

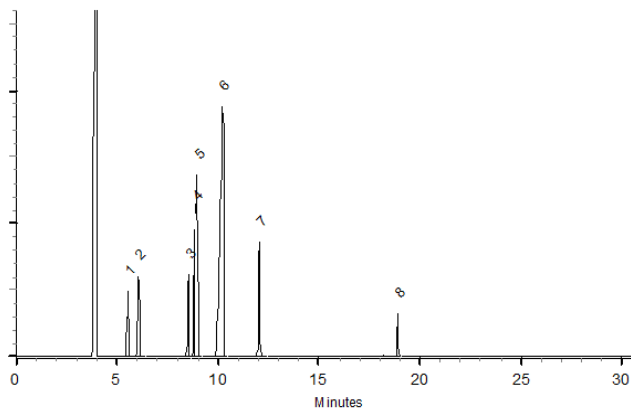
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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/ 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_00177



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)

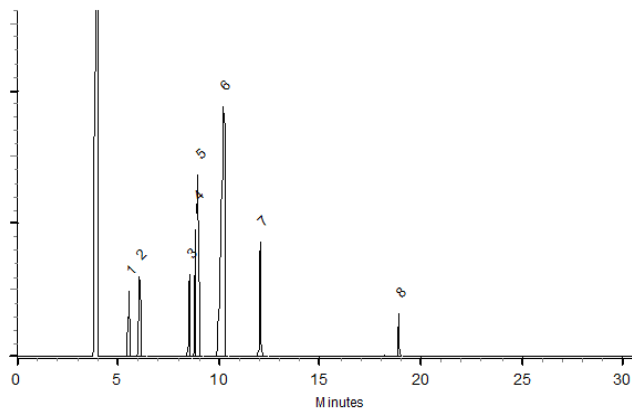
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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 - QC Analyst

Date Passed: 10-Apr-2020

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

General Reference Material Notes

Expiration Notes:

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

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/ 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_00178



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)

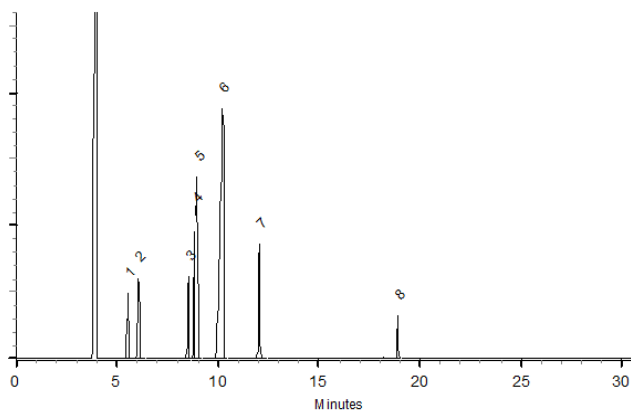
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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 - QC Analyst

Date Passed: 10-Apr-2020

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

General Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

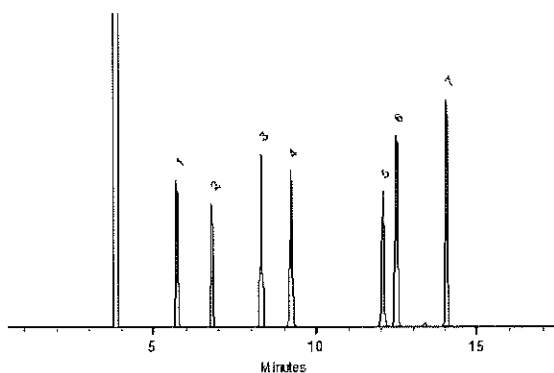
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

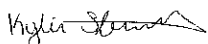
Inj. Temp:
200°C

Det. Temp:
250°C

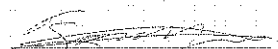
Det. Type:
FID



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_00073



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 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)

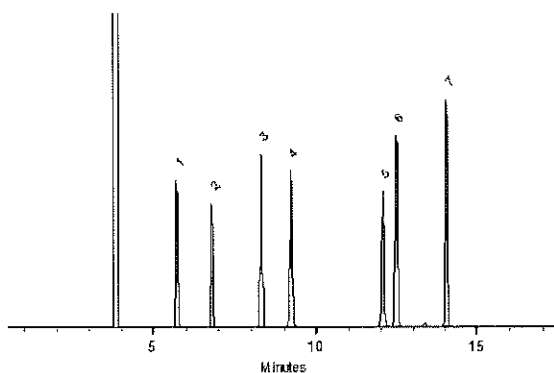
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

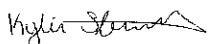
Inj. Temp:
200°C

Det. Temp:
250°C

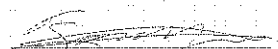
Det. Type:
FID



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_00075



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 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)

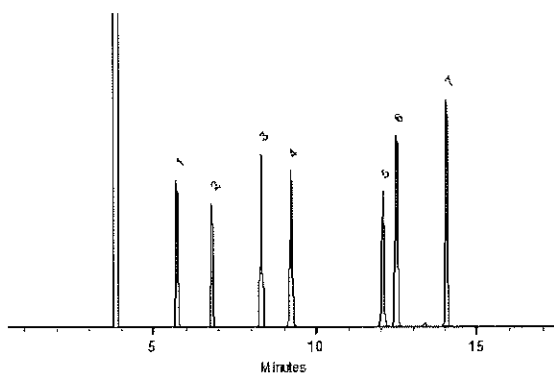
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

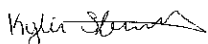
Inj. Temp:
200°C

Det. Temp:
250°C

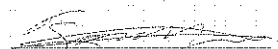
Det. Type:
FID



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#4C_00107



CERTIFIED REFERENCE MATERIAL

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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. : 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)

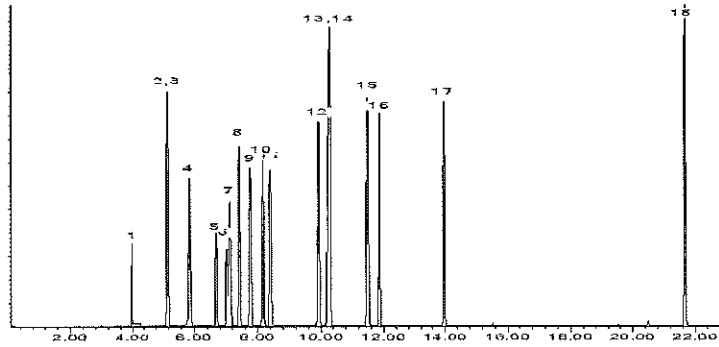
Carrier Gas:
helium-constant pressure 30 psi

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

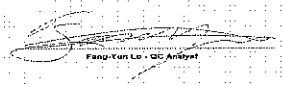


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Tom Suckal - Mix Technician

Date Mixed: 10-Mar-2020

Balance: B707717271



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_00113



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
 Bellefonte, PA 16823-8812
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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. : 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)

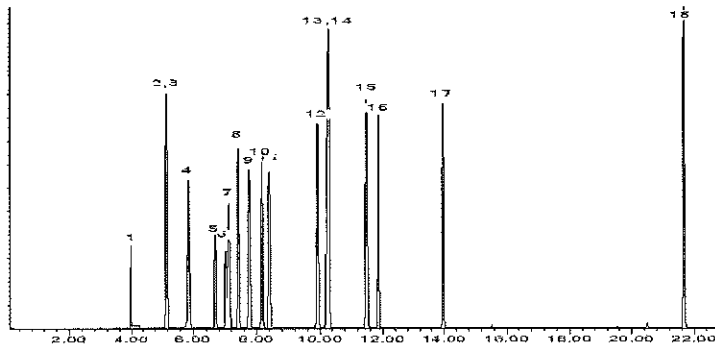
Carrier Gas:
helium-constant pressure 30 psi

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_00116



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)

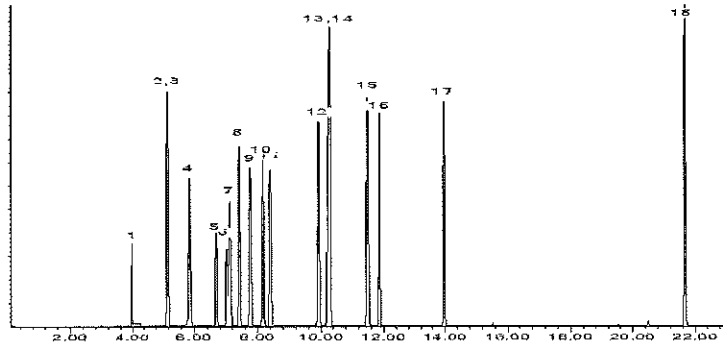
Carrier Gas:
helium-constant pressure 30 psi

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

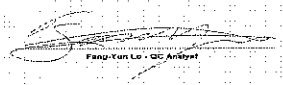


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Tom Suckar - Mix Technician

Date Mixed: 10-Mar-2020

Balance: B707717271



Date Passed: 25-Mar-2020

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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#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)

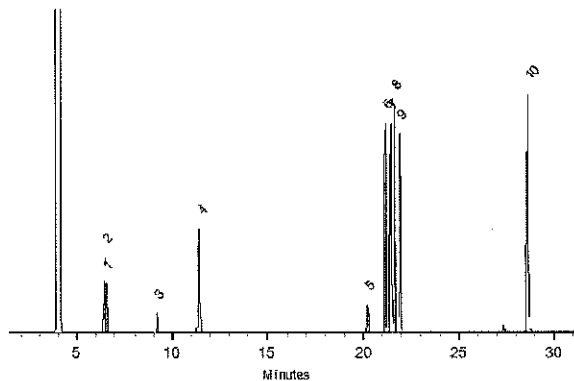
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

Inj. Temp:
200°C

Det. Temp:
250°C

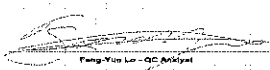
Det. Type:
FID



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
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_00052



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)

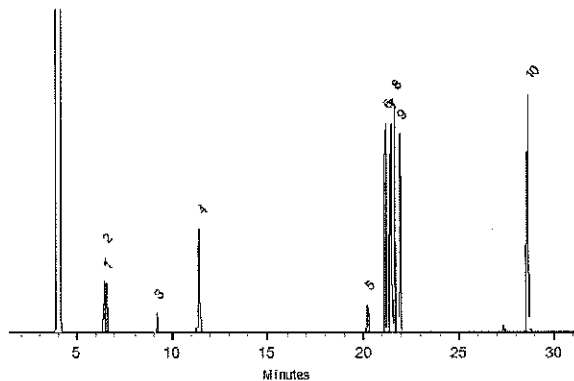
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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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- 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_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)

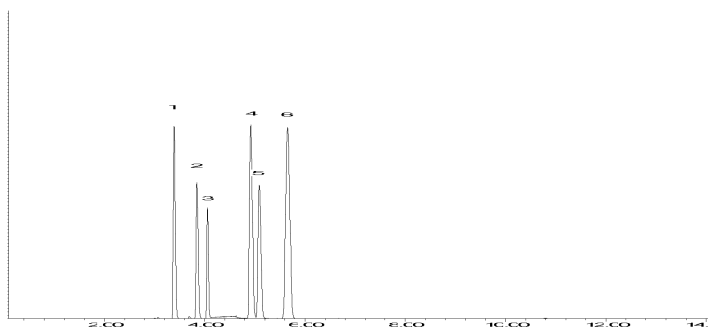
Carrier Gas:
helium-constant flow 2.0 mL/min.

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.
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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_Gas_00187



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)

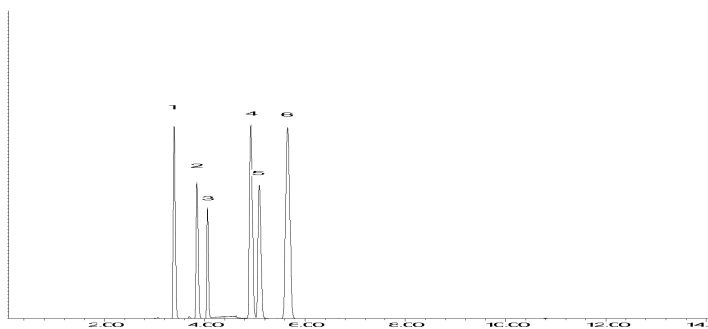
Carrier Gas:
helium-constant flow 2.0 mL/min.

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:

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- 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.

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Manufacturing Notes:

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- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

MSV_V_Gas_00193



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
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	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
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	CAS # 75-69-4 (Lot 25931)		+/-	113.2622	µg/mL	Unstressed
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Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
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Rtx-502.2 (cat.#10916)

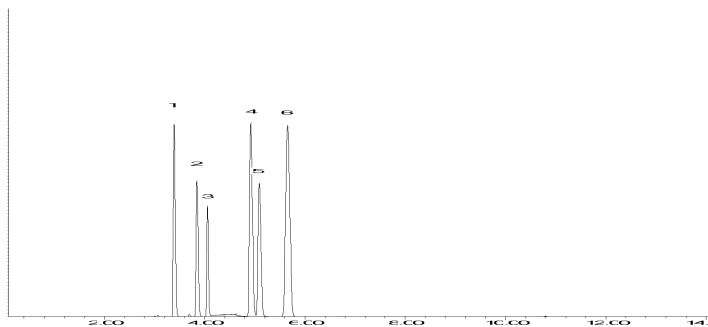
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helium-constant flow 2.0 mL/min.

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

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



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Tom Suckar - Mix Technician

Date Mixed: 10-Apr-2020

Balance: B707717271

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 06-May-2020

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

General Certified Reference Material Notes

Expiration Notes:

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

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Method 8260D Low Level

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

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins Lancaster Laboratories En Job No.: 410-24913-1

SDG No.: _____

Matrix: Water Level: Low

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

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
HD-COD-SW-6-0/1-0	410-24913-1	98	99	101	98
HD-COD-SW-7-0/1-0	410-24913-2	98	99	101	98
HD-COD-SW-8-0/1-0	410-24913-3	98	97	101	98
HD-COD-SW-9-0/1-0	410-24913-4	99	99	101	98
HD-COD-SW-13-0/1-0	410-24913-5	103	104	99	98
HD-COD-SW-15-0/1-0	410-24913-6	99	99	98	96
HD-COD-SW-16-0/1-0	410-24913-7	99	96	98	96
HD-COD-SW-17-0/1-0	410-24913-8	98	99	99	95
HD-COD-SW-26-0/1-0	410-24913-9	99	99	99	95
HD-COD-SW-27-0/1-0	410-24913-10	98	95	98	95
HD-COD-SW-28-0/1-0	410-24913-11	99	97	99	95
HD-COD-SW-29-0/1-0	410-24913-12	98	98	99	95
HD-QC1-0/1-1	410-24913-13	105	117	97	99
HD-QC1-0/1-2	410-24913-14	105	110	97	97
	MB 410-81468/9	97	95	100	98
	MB 410-81892/10	97	98	99	96
	MB 410-82059/7	101	98	100	97
	LCS 410-81468/6	99	97	101	99
	LCS 410-81892/5	98	96	98	95
	LCS 410-82059/4	101	101	101	102
	LCSD 410-81892/6	99	97	97	94
	LCSD 410-82059/5	100	99	100	100
HD-COD-SW-15-0/1-0 MS	410-24913-6 MS	98	99	99	95
HD-COD-SW-15-0/1-0 MSD	410-24913-6 MSD	98	99	99	95

QC LIMITS

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

Column to be used to flag recovery values

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Lancaster Laboratories En Job No.: 410-24913-1

SDG No.: _____

Matrix: Water Level: Low Lab File ID: GD31L31.D

Lab ID: LCS 410-81468/6 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	5.00	4.73	95	71-134	
1,1,1-Trichloroethane	5.00	4.50	90	78-126	
1,1,2,2-Tetrachloroethane	5.00	4.60	92	75-123	
1,1,2-Trichloroethane	5.00	4.79	96	80-120	
1,1-Dichloroethane	5.00	4.61	92	74-120	
1,1-Dichloroethene	5.00	4.59	92	80-131	
1,2-Dibromoethane (EDB)	5.00	4.62	92	80-120	
1,2-Dichloroethane	5.00	4.36	87	69-122	
1,2-Dichloropropane	5.00	4.59	92	80-120	
2-Butanone (MEK)	37.5	35.1	94	59-141	
2-Hexanone	25.0	25.7	103	52-140	
4-Methyl-2-pentanone (MIBK)	25.0	24.2	97	55-140	
Acetone	37.5	29.7	79	60-146	
Benzene	5.00	4.53	91	80-120	
Bromochloromethane	5.00	4.47	89	80-120	
Bromodichloromethane	5.00	4.59	92	73-124	
Bromoform	5.00	4.79	96	49-144	
Bromomethane	5.00	4.39	88	60-136	
Carbon disulfide	5.00	4.35	87	67-130	
Carbon tetrachloride	5.00	4.55	91	64-141	
Chlorobenzene	5.00	4.70	94	80-120	
Chloroethane	5.00	4.14	83	63-120	
Chloroform	5.00	4.52	90	80-120	
Chloromethane	5.00	4.21	84	56-124	
cis-1,2-Dichloroethene	5.00	4.79	96	80-122	
cis-1,3-Dichloropropene	5.00	4.47	89	67-121	
Dibromochloromethane	5.00	4.78	96	64-138	
Ethylbenzene	5.00	4.57	91	80-120	
Methyl tert-butyl ether	5.00	4.29	86	69-120	
Methylene Chloride	5.00	4.64	93	80-120	
Styrene	5.00	4.70	94	80-120	
Tetrachloroethene	5.00	4.79	96	80-120	
Toluene	5.00	4.59	92	80-120	
trans-1,2-Dichloroethene	5.00	4.45	89	80-122	
trans-1,3-Dichloropropene	5.00	4.48	90	61-129	
Trichloroethene	5.00	4.60	92	80-120	
Vinyl chloride	5.00	4.60	92	60-125	
Xylenes, Total	15.0	14.2	94	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 En Job No.: 410-24913-1

SDG No.: _____

Matrix: Water Level: Low Lab File ID: GJ04L31.D

Lab ID: LCS 410-81892/5 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	5.00	4.63	93	71-134	
1,1,1-Trichloroethane	5.00	4.38	88	78-126	
1,1,2,2-Tetrachloroethane	5.00	4.35	87	75-123	
1,1,2-Trichloroethane	5.00	4.68	94	80-120	
1,1-Dichloroethane	5.00	4.37	87	74-120	
1,1-Dichloroethene	5.00	4.61	92	80-131	
1,2-Dibromoethane (EDB)	5.00	4.61	92	80-120	
1,2-Dichloroethane	5.00	4.21	84	69-122	
1,2-Dichloropropane	5.00	4.44	89	80-120	
2-Butanone (MEK)	37.5	37.7	101	59-141	
2-Hexanone	25.0	26.5	106	52-140	
4-Methyl-2-pentanone (MIBK)	25.0	25.8	103	55-140	
Acetone	37.5	31.5	84	60-146	
Benzene	5.00	4.49	90	80-120	
Bromochloromethane	5.00	4.56	91	80-120	
Bromodichloromethane	5.00	4.58	92	73-124	
Bromoform	5.00	5.07	101	49-144	
Bromomethane	5.00	4.43	89	60-136	
Carbon disulfide	5.00	4.38	88	67-130	
Carbon tetrachloride	5.00	4.50	90	64-141	
Chlorobenzene	5.00	4.71	94	80-120	
Chloroethane	5.00	4.09	82	63-120	
Chloroform	5.00	4.49	90	80-120	
Chloromethane	5.00	3.81	76	56-124	
cis-1,2-Dichloroethene	5.00	4.82	96	80-122	
cis-1,3-Dichloropropene	5.00	4.41	88	67-121	
Dibromochloromethane	5.00	4.82	96	64-138	
Ethylbenzene	5.00	4.45	89	80-120	
Methyl tert-butyl ether	5.00	4.18	84	69-120	
Methylene Chloride	5.00	4.60	92	80-120	
Styrene	5.00	4.55	91	80-120	
Tetrachloroethene	5.00	4.84	97	80-120	
Toluene	5.00	4.51	90	80-120	
trans-1,2-Dichloroethene	5.00	4.54	91	80-122	
trans-1,3-Dichloropropene	5.00	4.33	87	61-129	
Trichloroethene	5.00	4.56	91	80-120	
Vinyl chloride	5.00	4.28	86	60-125	
Xylenes, Total	15.0	13.9	92	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 En Job No.: 410-24913-1

SDG No.: _____

Matrix: Water Level: Low Lab File ID: HJ05L01.D

Lab ID: LCS 410-82059/4 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	5.00	5.03	101	71-134	
1,1,1-Trichloroethane	5.00	5.08	102	78-126	
1,1,2,2-Tetrachloroethane	5.00	5.13	103	75-123	
1,1,2-Trichloroethane	5.00	5.28	106	80-120	
1,1-Dichloroethane	5.00	5.14	103	74-120	
1,1-Dichloroethene	5.00	5.08	102	80-131	
1,2-Dibromoethane (EDB)	5.00	5.31	106	80-120	
1,2-Dichloroethane	5.00	4.94	99	69-122	
1,2-Dichloropropane	5.00	5.27	105	80-120	
2-Butanone (MEK)	37.5	38.2	102	59-141	
2-Hexanone	25.0	25.5	102	52-140	
4-Methyl-2-pentanone (MIBK)	25.0	24.7	99	55-140	
Acetone	37.5	37.1	99	60-146	
Benzene	5.00	5.00	100	80-120	
Bromochloromethane	5.00	4.97	99	80-120	
Bromodichloromethane	5.00	5.20	104	73-124	
Bromoform	5.00	5.21	104	49-144	
Bromomethane	5.00	4.85	97	60-136	
Carbon disulfide	5.00	5.78	116	67-130	
Carbon tetrachloride	5.00	5.28	106	64-141	
Chlorobenzene	5.00	5.11	102	80-120	
Chloroethane	5.00	4.70	94	63-120	
Chloroform	5.00	5.19	104	80-120	
Chloromethane	5.00	4.62	92	56-124	
cis-1,2-Dichloroethene	5.00	5.37	107	80-122	
cis-1,3-Dichloropropene	5.00	5.29	106	67-121	
Dibromochloromethane	5.00	5.41	108	64-138	
Ethylbenzene	5.00	5.19	104	80-120	
Methyl tert-butyl ether	5.00	5.55	111	69-120	
Methylene Chloride	5.00	4.82	96	80-120	
Styrene	5.00	5.34	107	80-120	
Tetrachloroethene	5.00	5.11	102	80-120	
Toluene	5.00	5.02	100	80-120	
trans-1,2-Dichloroethene	5.00	5.08	102	80-122	
trans-1,3-Dichloropropene	5.00	5.19	104	61-129	
Trichloroethene	5.00	5.04	101	80-120	
Vinyl chloride	5.00	4.92	98	60-125	
Xylenes, Total	15.0	15.8	105	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 En Job No.: 410-24913-1

SDG No.: _____

Matrix: Water Level: Low Lab File ID: GJ04L32.D

Lab ID: LCSD 410-81892/6 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	4.64	93	0	30	71-134	
1,1,1-Trichloroethane	5.00	4.38	88	0	30	78-126	
1,1,2,2-Tetrachloroethane	5.00	4.39	88	1	30	75-123	
1,1,2-Trichloroethane	5.00	4.77	95	2	30	80-120	
1,1-Dichloroethane	5.00	4.30	86	2	30	74-120	
1,1-Dichloroethene	5.00	4.55	91	1	30	80-131	
1,2-Dibromoethane (EDB)	5.00	4.55	91	1	30	80-120	
1,2-Dichloroethane	5.00	4.23	85	0	30	69-122	
1,2-Dichloropropane	5.00	4.48	90	1	30	80-120	
2-Butanone (MEK)	37.5	39.1	104	4	30	59-141	
2-Hexanone	25.0	27.5	110	4	30	52-140	
4-Methyl-2-pentanone (MIBK)	25.0	26.5	106	3	30	55-140	
Acetone	37.5	31.7	85	1	30	60-146	
Benzene	5.00	4.51	90	0	30	80-120	
Bromochloromethane	5.00	4.58	92	0	30	80-120	
Bromodichloromethane	5.00	4.55	91	1	30	73-124	
Bromoform	5.00	4.83	97	5	30	49-144	
Bromomethane	5.00	4.42	88	0	30	60-136	
Carbon disulfide	5.00	4.38	88	0	30	67-130	
Carbon tetrachloride	5.00	4.50	90	0	30	64-141	
Chlorobenzene	5.00	4.64	93	2	30	80-120	
Chloroethane	5.00	4.06	81	1	30	63-120	
Chloroform	5.00	4.51	90	0	30	80-120	
Chloromethane	5.00	3.99	80	5	30	56-124	
cis-1,2-Dichloroethene	5.00	4.91	98	2	30	80-122	
cis-1,3-Dichloropropene	5.00	4.34	87	1	30	67-121	
Dibromochloromethane	5.00	4.81	96	0	30	64-138	
Ethylbenzene	5.00	4.42	88	1	30	80-120	
Methyl tert-butyl ether	5.00	4.24	85	1	30	69-120	
Methylene Chloride	5.00	4.59	92	0	30	80-120	
Styrene	5.00	4.55	91	0	30	80-120	
Tetrachloroethene	5.00	4.78	96	1	30	80-120	
Toluene	5.00	4.50	90	0	30	80-120	
trans-1,2-Dichloroethene	5.00	4.59	92	1	30	80-122	
trans-1,3-Dichloropropene	5.00	4.23	85	2	30	61-129	
Trichloroethene	5.00	4.60	92	1	30	80-120	
Vinyl chloride	5.00	4.25	85	1	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 En Job No.: 410-24913-1

SDG No.: _____

Matrix: Water Level: Low Lab File ID: HJ05L02.D

Lab ID: LCSD 410-82059/5 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	4.96	99	1	30	71-134	
1,1,1-Trichloroethane	5.00	5.01	100	1	30	78-126	
1,1,2,2-Tetrachloroethane	5.00	5.02	100	2	30	75-123	
1,1,2-Trichloroethane	5.00	5.08	102	4	30	80-120	
1,1-Dichloroethane	5.00	5.15	103	0	30	74-120	
1,1-Dichloroethene	5.00	4.97	99	2	30	80-131	
1,2-Dibromoethane (EDB)	5.00	5.05	101	5	30	80-120	
1,2-Dichloroethane	5.00	4.96	99	0	30	69-122	
1,2-Dichloropropane	5.00	5.02	100	5	30	80-120	
2-Butanone (MEK)	37.5	38.5	103	1	30	59-141	
2-Hexanone	25.0	26.1	104	2	30	52-140	
4-Methyl-2-pentanone (MIBK)	25.0	25.2	101	2	30	55-140	
Acetone	37.5	37.2	99	0	30	60-146	
Benzene	5.00	4.93	99	1	30	80-120	
Bromochloromethane	5.00	4.90	98	1	30	80-120	
Bromodichloromethane	5.00	5.09	102	2	30	73-124	
Bromoform	5.00	5.06	101	3	30	49-144	
Bromomethane	5.00	4.75	95	2	30	60-136	
Carbon disulfide	5.00	5.62	112	3	30	67-130	
Carbon tetrachloride	5.00	5.15	103	3	30	64-141	
Chlorobenzene	5.00	5.05	101	1	30	80-120	
Chloroethane	5.00	4.69	94	0	30	63-120	
Chloroform	5.00	5.08	102	2	30	80-120	
Chloromethane	5.00	4.59	92	1	30	56-124	
cis-1,2-Dichloroethene	5.00	5.34	107	1	30	80-122	
cis-1,3-Dichloropropene	5.00	5.07	101	4	30	67-121	
Dibromochloromethane	5.00	5.31	106	2	30	64-138	
Ethylbenzene	5.00	5.10	102	2	30	80-120	
Methyl tert-butyl ether	5.00	5.44	109	2	30	69-120	
Methylene Chloride	5.00	4.72	94	2	30	80-120	
Styrene	5.00	5.27	105	1	30	80-120	
Tetrachloroethene	5.00	5.04	101	1	30	80-120	
Toluene	5.00	4.94	99	2	30	80-120	
trans-1,2-Dichloroethene	5.00	5.07	101	0	30	80-122	
trans-1,3-Dichloropropene	5.00	5.07	101	2	30	61-129	
Trichloroethene	5.00	4.98	100	1	30	80-120	
Vinyl chloride	5.00	4.82	96	2	30	60-125	
Xylenes, Total	15.0	15.6	104	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 En Job No.: 410-24913-1

SDG No.: _____

Matrix: Water Level: Low Lab File ID: GJ04S09.D

Lab ID: 410-24913-6 MS Client ID: HD-COD-SW-15-0/1-0 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	5.00	ND	4.94	99	71-134	
1,1,1-Trichloroethane	5.00	0.15 J	5.00	97	78-126	
1,1,2,2-Tetrachloroethane	5.00	ND	4.54	91	75-123	
1,1,2-Trichloroethane	5.00	ND	4.88	98	80-120	
1,1-Dichloroethane	5.00	ND	4.80	96	74-120	
1,1-Dichloroethene	5.00	0.10 J	5.35	105	80-131	
1,2-Dibromoethane (EDB)	5.00	ND	4.73	95	80-120	
1,2-Dichloroethane	5.00	ND	4.27	85	69-122	
1,2-Dichloropropane	5.00	ND	4.74	95	80-120	
2-Butanone (MEK)	37.5	ND	38.5	103	59-141	
2-Hexanone	25.0	ND	27.1	108	52-140	
4-Methyl-2-pentanone (MIBK)	25.0	ND	26.0	104	55-140	
Acetone	37.5	ND	32.6	87	60-146	
Benzene	5.00	ND	4.86	97	80-120	
Bromochloromethane	5.00	ND	4.65	93	80-120	
Bromodichloromethane	5.00	ND	4.71	94	73-124	
Bromoform	5.00	ND	4.96	99	49-144	
Bromomethane	5.00	ND	4.85	97	60-136	
Carbon disulfide	5.00	ND	4.97	99	67-130	
Carbon tetrachloride	5.00	ND	5.15	103	64-141	
Chlorobenzene	5.00	ND	5.03	100	80-120	
Chloroethane	5.00	ND	4.54	91	63-120	
Chloroform	5.00	0.24 J	5.07	97	80-120	
Chloromethane	5.00	ND	4.31	86	80-120	
cis-1,2-Dichloroethene	5.00	0.84	6.08	105	80-122	
cis-1,3-Dichloropropene	5.00	ND	4.58	91	67-121	
Dibromochloromethane	5.00	ND	4.94	99	64-138	
Ethylbenzene	5.00	ND	4.91	98	80-120	
Methyl tert-butyl ether	5.00	ND	4.31	86	69-120	
Methylene Chloride	5.00	ND	4.94	99	80-120	
Styrene	5.00	ND	4.90	98	80-120	
Tetrachloroethene	5.00	2.8	8.25	110	80-120	
Toluene	5.00	ND	4.85	97	80-120	
trans-1,2-Dichloroethene	5.00	ND	5.04	101	80-122	
trans-1,3-Dichloropropene	5.00	ND	4.41	88	61-129	
Trichloroethene	5.00	0.97	5.97	100	80-120	
Vinyl chloride	5.00	ND	4.95	99	60-125	
Xylenes, Total	15.0	ND	15.2	101	80-120	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins Lancaster Laboratories En Job No.: 410-24913-1

SDG No.: _____

Matrix: Water Level: Low Lab File ID: GJ04S10.D

Lab ID: 410-24913-6 MSD Client ID: HD-COD-SW-15-0/1-0 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
1,1,1,2-Tetrachloroethane	5.00	4.92	98	0	30	71-134	
1,1,1-Trichloroethane	5.00	5.03	98	1	30	78-126	
1,1,2,2-Tetrachloroethane	5.00	4.50	90	1	30	75-123	
1,1,2-Trichloroethane	5.00	4.97	99	2	30	80-120	
1,1-Dichloroethane	5.00	4.86	97	1	30	74-120	
1,1-Dichloroethene	5.00	5.33	104	0	30	80-131	
1,2-Dibromoethane (EDB)	5.00	4.77	95	1	30	80-120	
1,2-Dichloroethane	5.00	4.34	87	2	30	69-122	
1,2-Dichloropropane	5.00	4.67	93	1	30	80-120	
2-Butanone (MEK)	37.5	37.8	101	2	30	59-141	
2-Hexanone	25.0	27.1	108	0	30	52-140	
4-Methyl-2-pentanone (MIBK)	25.0	26.9	108	3	30	55-140	
Acetone	37.5	31.0	83	5	30	60-146	
Benzene	5.00	4.90	98	1	30	80-120	
Bromochloromethane	5.00	4.72	94	1	30	80-120	
Bromodichloromethane	5.00	4.74	95	1	30	73-124	
Bromoform	5.00	4.81	96	3	30	49-144	
Bromomethane	5.00	4.71	94	3	30	60-136	
Carbon disulfide	5.00	4.93	99	1	30	67-130	
Carbon tetrachloride	5.00	5.13	102	0	30	64-141	
Chlorobenzene	5.00	5.04	101	0	30	80-120	
Chloroethane	5.00	4.42	88	3	30	63-120	
Chloroform	5.00	5.01	95	1	30	80-120	
Chloromethane	5.00	4.29	86	1	30	80-120	
cis-1,2-Dichloroethene	5.00	6.05	104	0	30	80-122	
cis-1,3-Dichloropropene	5.00	4.54	91	1	30	67-121	
Dibromochloromethane	5.00	4.91	98	1	30	64-138	
Ethylbenzene	5.00	4.87	97	1	30	80-120	
Methyl tert-butyl ether	5.00	4.34	87	1	30	69-120	
Methylene Chloride	5.00	4.93	99	0	30	80-120	
Styrene	5.00	4.89	98	0	30	80-120	
Tetrachloroethene	5.00	8.10	107	2	30	80-120	
Toluene	5.00	4.93	99	2	30	80-120	
trans-1,2-Dichloroethene	5.00	5.10	102	1	30	80-122	
trans-1,3-Dichloropropene	5.00	4.34	87	2	30	61-129	
Trichloroethene	5.00	5.99	100	0	30	80-120	
Vinyl chloride	5.00	4.67	93	6	30	60-125	
Xylenes, Total	15.0	15.2	101	0	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 En Job No.: 410-24913-1
 SDG No.: _____
 Lab File ID: GD31B31.D Lab Sample ID: MB 410-81468/9
 Matrix: Water Heated Purge: (Y/N) N
 Instrument ID: 16334 Date Analyzed: 12/31/2020 18:59
 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 410-81468/6	GD31L31.D	12/31/2020 17:52
HD-COD-SW-6-0/1-0	410-24913-1	GD31S20.D	01/01/2021 02:18
HD-COD-SW-7-0/1-0	410-24913-2	GD31S21.D	01/01/2021 02:40
HD-COD-SW-8-0/1-0	410-24913-3	GD31S22.D	01/01/2021 03:03
HD-COD-SW-9-0/1-0	410-24913-4	GD31S23.D	01/01/2021 03:24

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins Lancaster Laboratories En Job No.: 410-24913-1
 SDG No.: _____
 Lab File ID: GJ04B31.D Lab Sample ID: MB 410-81892/10
 Matrix: Water Heated Purge: (Y/N) N
 Instrument ID: 16334 Date Analyzed: 01/04/2021 21:29
 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 410-81892/5	GJ04L31.D	01/04/2021 19:39
	LCSD 410-81892/6	GJ04L32.D	01/04/2021 20:01
HD-COD-SW-15-0/1-0	410-24913-6	GJ04S08.D	01/05/2021 00:42
HD-COD-SW-15-0/1-0 MS	410-24913-6 MS	GJ04S09.D	01/05/2021 01:04
HD-COD-SW-15-0/1-0 MSD	410-24913-6 MSD	GJ04S10.D	01/05/2021 01:26
HD-COD-SW-16-0/1-0	410-24913-7	GJ04S16.D	01/05/2021 03:37
HD-COD-SW-17-0/1-0	410-24913-8	GJ04S17.D	01/05/2021 03:59
HD-COD-SW-26-0/1-0	410-24913-9	GJ04S18.D	01/05/2021 04:21
HD-COD-SW-27-0/1-0	410-24913-10	GJ04S19.D	01/05/2021 04:43
HD-COD-SW-28-0/1-0	410-24913-11	GJ04S20.D	01/05/2021 05:05
HD-COD-SW-29-0/1-0	410-24913-12	GJ04S21.D	01/05/2021 05:27

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins Lancaster Laboratories En Job No.: 410-24913-1
 SDG No.: _____
 Lab File ID: HJ05B01.D Lab Sample ID: MB 410-82059/7
 Matrix: Water Heated Purge: (Y/N) N
 Instrument ID: 19094 Date Analyzed: 01/05/2021 11:06
 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 410-82059/4	HJ05L01.D	01/05/2021 10:01
	LCSD 410-82059/5	HJ05L02.D	01/05/2021 10:23
HD-QC1-0/1-1	410-24913-13	HJ05S01.D	01/05/2021 11:28
HD-QC1-0/1-2	410-24913-14	HJ05S02.D	01/05/2021 11:50
HD-COD-SW-13-0/1-0	410-24913-5	HJ05S06.D	01/05/2021 13:17

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

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-24913-1
 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 Env Job No.: 410-24913-1

SDG No.: _____

Lab File ID: GD31T31.D BFB Injection Date: 12/31/2020

Instrument ID: 16334 BFB Injection Time: 16:11

Analysis Batch No.: 81468

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	17.7	
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	6.5	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	Greater than 50% of mass 95	85.1	
175	5.0 - 9.0 % of mass 174	6.5	(7.6) 1
176	95.0 - 101.0 % of mass 174	81.8	(96.1) 1
177	5.0 - 9.0 % of mass 176	5.5	(6.7) 2

1-Value is % mass 174

2-Value is % mass 176

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 410-81468/4	GD31C32.D	12/31/2020	17:09
	LCS 410-81468/6	GD31L31.D	12/31/2020	17:52
	MB 410-81468/9	GD31B31.D	12/31/2020	18:59
HD-COD-SW-6-0/1-0	410-24913-1	GD31S20.D	01/01/2021	2:18
HD-COD-SW-7-0/1-0	410-24913-2	GD31S21.D	01/01/2021	2:40
HD-COD-SW-8-0/1-0	410-24913-3	GD31S22.D	01/01/2021	3:03
HD-COD-SW-9-0/1-0	410-24913-4	GD31S23.D	01/01/2021	3:24

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

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-24913-1

SDG No.: _____

Lab File ID: GJ04T31.D BFB Injection Date: 01/04/2021

Instrument ID: 16334 BFB Injection Time: 18:20

Analysis Batch No.: 81892

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	15.8	
75	30.0 - 60.0 % of mass 95	45.4	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.6	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	Greater than 50% of mass 95	88.7	
175	5.0 - 9.0 % of mass 174	6.7	(7.6) 1
176	95.0 - 101.0 % of mass 174	87.0	(98.0) 1
177	5.0 - 9.0 % of mass 176	5.8	(6.7) 2

1-Value is % mass 174

2-Value is % mass 176

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 410-81892/3	GJ04C31.D	01/04/2021	18:55
	LCS 410-81892/5	GJ04L31.D	01/04/2021	19:39
	LCSD 410-81892/6	GJ04L32.D	01/04/2021	20:01
	MB 410-81892/10	GJ04B31.D	01/04/2021	21:29
HD-COD-SW-15-0/1-0	410-24913-6	GJ04S08.D	01/05/2021	0:42
HD-COD-SW-15-0/1-0 MS	410-24913-6 MS	GJ04S09.D	01/05/2021	1:04
HD-COD-SW-15-0/1-0 MSD	410-24913-6 MSD	GJ04S10.D	01/05/2021	1:26
HD-COD-SW-16-0/1-0	410-24913-7	GJ04S16.D	01/05/2021	3:37
HD-COD-SW-17-0/1-0	410-24913-8	GJ04S17.D	01/05/2021	3:59
HD-COD-SW-26-0/1-0	410-24913-9	GJ04S18.D	01/05/2021	4:21
HD-COD-SW-27-0/1-0	410-24913-10	GJ04S19.D	01/05/2021	4:43
HD-COD-SW-28-0/1-0	410-24913-11	GJ04S20.D	01/05/2021	5:05
HD-COD-SW-29-0/1-0	410-24913-12	GJ04S21.D	01/05/2021	5:27

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

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-24913-1

SDG No.: _____

Lab File ID: Hj04T02.D BFB Injection Date: 01/04/2021

Instrument ID: 19094 BFB Injection Time: 12:39

Analysis Batch No.: 81781

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	18.0	
75	30.0 - 60.0 % of mass 95	48.8	
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	1.0	(1.3) 1
174	Greater than 50% of mass 95	79.3	
175	5.0 - 9.0 % of mass 174	6.0	(7.6) 1
176	95.0 - 101.0 % of mass 174	78.0	(98.4) 1
177	5.0 - 9.0 % of mass 176	5.1	(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 410-81781/12	Hj04I11.D	01/04/2021	16:29
	ICIS 410-81781/13	Hj04I12.D	01/04/2021	16:51
	IC 410-81781/14	Hj04I13.D	01/04/2021	17:12
	IC 410-81781/15	Hj04I14.D	01/04/2021	17:34
	IC 410-81781/16	Hj04I15.D	01/04/2021	17:56
	IC 410-81781/17	Hj04I16.D	01/04/2021	18:17
	IC 410-81781/18	Hj04I17.D	01/04/2021	18:39
	ICV 410-81781/19	Hj04V11.D	01/04/2021	19:01

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

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-24913-1

SDG No.: _____

Lab File ID: Hj05T02.D BFB Injection Date: 01/05/2021

Instrument ID: 19094 BFB Injection Time: 09:04

Analysis Batch No.: 82059

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	19.9	
75	30.0 - 60.0 % of mass 95	50.0	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.8	
173	Less than 2.0 % of mass 174	0.8	(1.0) 1
174	Greater than 50% of mass 95	78.1	
175	5.0 - 9.0 % of mass 174	5.8	(7.4) 1
176	95.0 - 101.0 % of mass 174	75.4	(96.5) 1
177	5.0 - 9.0 % of mass 176	5.1	(6.7) 2

1-Value is % mass 174

2-Value is % mass 176

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 410-82059/3	HJ05C01.D	01/05/2021	9:40
	LCS 410-82059/4	HJ05L01.D	01/05/2021	10:01
	LCSD 410-82059/5	HJ05L02.D	01/05/2021	10:23
	MB 410-82059/7	HJ05B01.D	01/05/2021	11:06
HD-QC1-0/1-1	410-24913-13	HJ05S01.D	01/05/2021	11:28
HD-QC1-0/1-2	410-24913-14	HJ05S02.D	01/05/2021	11:50
HD-COD-SW-13-0/1-0	410-24913-5	HJ05S06.D	01/05/2021	13:17

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

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-24913-1
 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 410-81468/4	157993	4.18	1904585	7.67	1388757	11.15
CCVIS 410-81892/3	150910	4.19	2124391	7.67	1597660	11.15

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 Env Job No.: 410-24913-1
 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 410-81468/4		752875	13.02			
CCVIS 410-81892/3		886059	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 Env Job No.: 410-24913-1
 SDG No.: _____
 Sample No.: CCVIS 410-81468/4 Date Analyzed: 12/31/2020 17:09
 Instrument ID: 16334 GC Column: R-624SilMS 30m ID: 0.25(mm)
 Lab File ID (Standard): GD31C32.D Heated Purge: (Y/N) N
 Calibration ID: 16334

	TBAd10		FB		CBZd5			
	AREA #	RT #	AREA #	RT #	AREA #	RT #		
12/24 HOUR STD	157993	4.18	1904585	7.67	1388757	11.15		
UPPER LIMIT	315986	4.68	3809170	8.17	2777514	11.65		
LOWER LIMIT	78997	3.68	952293	7.17	694379	10.65		
LAB SAMPLE ID	CLIENT SAMPLE ID							
LCS 410-81468/6			150892	4.19	1882752	7.68	1365485	11.15
MB 410-81468/9			148461	4.19	1854329	7.67	1348051	11.15
410-24913-1	HD-COD-SW-6-0/1-0		132576	4.18	1794402	7.67	1291534	11.15
410-24913-2	HD-COD-SW-7-0/1-0		128445	4.19	1806368	7.67	1304819	11.15
410-24913-3	HD-COD-SW-8-0/1-0		120564	4.18	1788342	7.67	1292342	11.15
410-24913-4	HD-COD-SW-9-0/1-0		123513	4.18	1779865	7.67	1290392	11.15

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 Env Job No.: 410-24913-1
 SDG No.: _____
 Sample No.: CCVIS 410-81468/4 Date Analyzed: 12/31/2020 17:09
 Instrument ID: 16334 GC Column: R-624SilMS 30m ID: 0.25 (mm)
 Lab File ID (Standard): GD31C32.D Heated Purge: (Y/N) N
 Calibration ID: 16334

	DCBd4		#	RT #	#	RT #
	AREA #	RT #				
12/24 HOUR STD	752875	13.02				
UPPER LIMIT	1505750	13.52				
LOWER LIMIT	376438	12.52				
LAB SAMPLE ID	CLIENT SAMPLE ID					
LCS 410-81468/6		745344	13.02			
MB 410-81468/9		730578	13.02			
410-24913-1	HD-COD-SW-6-0/1-0	699149	13.02			
410-24913-2	HD-COD-SW-7-0/1-0	704205	13.02			
410-24913-3	HD-COD-SW-8-0/1-0	704003	13.02			
410-24913-4	HD-COD-SW-9-0/1-0	698991	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 Env Job No.: 410-24913-1
 SDG No.: _____
 Sample No.: CCVIS 410-81892/3 Date Analyzed: 01/04/2021 18:55
 Instrument ID: 16334 GC Column: R-624SilMS 30m ID: 0.25 (mm)
 Lab File ID (Standard): GJ04C31.D Heated Purge: (Y/N) N
 Calibration ID: 16331

	TBAd10		FB		CBZd5		
	AREA #	RT #	AREA #	RT #	AREA #	RT #	
12/24 HOUR STD	150910	4.19	2124391	7.67	1597660	11.15	
UPPER LIMIT	301820	4.69	4248782	8.17	3195320	11.65	
LOWER LIMIT	75455	3.69	1062196	7.17	798830	10.65	
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 410-81892/5		143565	4.18	2109496	7.67	1562063	11.15
LCSD 410-81892/6		136819	4.20	2097085	7.67	1568799	11.15
MB 410-81892/10		145623	4.18	2100142	7.67	1541085	11.15
410-24913-6	HD-COD-SW-15-0/1-0	142547	4.18	2072545	7.67	1534471	11.15
410-24913-6 MS	HD-COD-SW-15-0/1-0 MS	138925	4.18	2077996	7.67	1529454	11.15
410-24913-6 MSD	HD-COD-SW-15-0/1-0 MSD	136888	4.20	2070536	7.67	1524700	11.15
410-24913-7	HD-COD-SW-16-0/1-0	161492	4.17	2090850	7.67	1540712	11.15
410-24913-8	HD-COD-SW-17-0/1-0	164017	4.18	2076087	7.67	1526614	11.15
410-24913-9	HD-COD-SW-26-0/1-0	142434	4.18	2075301	7.67	1527085	11.15
410-24913-10	HD-COD-SW-27-0/1-0	135014	4.18	2070564	7.67	1531922	11.15
410-24913-11	HD-COD-SW-28-0/1-0	144201	4.18	2085302	7.67	1533129	11.15
410-24913-12	HD-COD-SW-29-0/1-0	137998	4.18	2079066	7.67	1531417	11.15

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 Env Job No.: 410-24913-1
 SDG No.: _____
 Sample No.: CCVIS 410-81892/3 Date Analyzed: 01/04/2021 18:55
 Instrument ID: 16334 GC Column: R-624SilMS 30m ID: 0.25 (mm)
 Lab File ID (Standard): GJ04C31.D Heated Purge: (Y/N) N
 Calibration ID: 16331

		DCBd4					
		AREA #	RT #	#	RT #	#	RT #
12/24 HOUR STD		886059	13.02				
UPPER LIMIT		1772118	13.52				
LOWER LIMIT		443030	12.52				
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 410-81892/5		860664	13.02				
LCSD 410-81892/6		852907	13.02				
MB 410-81892/10		856967	13.02				
410-24913-6	HD-COD-SW-15-0/1-0	853672	13.02				
410-24913-6 MS	HD-COD-SW-15-0/1-0 MS	837538	13.02				
410-24913-6 MSD	HD-COD-SW-15-0/1-0 MSD	840481	13.02				
410-24913-7	HD-COD-SW-16-0/1-0	852071	13.02				
410-24913-8	HD-COD-SW-17-0/1-0	850165	13.02				
410-24913-9	HD-COD-SW-26-0/1-0	846068	13.02				
410-24913-10	HD-COD-SW-27-0/1-0	834501	13.02				
410-24913-11	HD-COD-SW-28-0/1-0	845108	13.02				
410-24913-12	HD-COD-SW-29-0/1-0	840391	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 Env Job No.: 410-24913-1
 SDG No.: _____
 Sample No.: ICIS 410-81781/13 Date Analyzed: 01/04/2021 16:51
 Instrument ID: 19094 GC Column: R-624SilMS 30m ID: 0.25(mm)
 Lab File ID (Standard): Hj04I12.D Heated Purge: (Y/N) N
 Calibration ID: 18295

	TBAd10		FB		CBZd5	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT	97347	4.46	1641765	7.95	1162561	11.37
UPPER LIMIT	194694	4.96	3283530	8.45	2325122	11.87
LOWER LIMIT	48674	3.96	820883	7.45	581281	10.87
LAB SAMPLE ID	CLIENT SAMPLE ID					
ICV 410-81781/19	97955	4.45	1732208	7.94	1228925	11.37
CCVIS 410-82059/3	105284	4.46	1434869	7.95	1051723	11.37

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 Env Job No.: 410-24913-1
 SDG No.: _____
 Sample No.: ICIS 410-81781/13 Date Analyzed: 01/04/2021 16:51
 Instrument ID: 19094 GC Column: R-624SilMS 30m ID: 0.25 (mm)
 Lab File ID (Standard): Hj04I12.D Heated Purge: (Y/N) N
 Calibration ID: 18295

	DCBd4		#	RT #	#	RT #
	AREA #	RT #				
INITIAL CALIBRATION MID-POINT	601504	13.24				
UPPER LIMIT	1203008	13.74				
LOWER LIMIT	300752	12.74				
LAB SAMPLE ID	CLIENT SAMPLE ID					
ICV 410-81781/19		629636	13.24			
CCVIS 410-82059/3		542574	13.24			

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 Env Job No.: 410-24913-1
 SDG No.: _____
 Sample No.: CCVIS 410-82059/3 Date Analyzed: 01/05/2021 09:40
 Instrument ID: 19094 GC Column: R-624SilMS 30m ID: 0.25(mm)
 Lab File ID (Standard): HJ05C01.D Heated Purge: (Y/N) N
 Calibration ID: 18295

	TBAd10		FB		CBZd5		
	AREA #	RT #	AREA #	RT #	AREA #	RT #	
12/24 HOUR STD	105284	4.46	1434869	7.95	1051723	11.37	
UPPER LIMIT	210568	4.96	2869738	8.45	2103446	11.87	
LOWER LIMIT	52642	3.96	717435	7.45	525862	10.87	
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 410-82059/4	104329	4.45	1567525	7.94	1110051	11.37	
LCSD 410-82059/5	102348	4.46	1644297	7.95	1160243	11.37	
MB 410-82059/7	97942	4.46	1731796	7.95	1232345	11.37	
410-24913-13	HD-QC1-0/1-1	127887	4.46	1361033	7.95	981362	11.37
410-24913-14	HD-QC1-0/1-2	116119	4.45	1397279	7.94	1015202	11.37
410-24913-5	HD-COD-SW-13-0/1-0	95248	4.46	1604072	7.94	1147596	11.37

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 Env Job No.: 410-24913-1
 SDG No.: _____
 Sample No.: CCVIS 410-82059/3 Date Analyzed: 01/05/2021 09:40
 Instrument ID: 19094 GC Column: R-624SilMS 30m ID: 0.25 (mm)
 Lab File ID (Standard): HJ05C01.D Heated Purge: (Y/N) N
 Calibration ID: 18295

	DCBd4		#	RT #	#	RT #
	AREA #	RT #				
12/24 HOUR STD	542574	13.24				
UPPER LIMIT	1085148	13.74				
LOWER LIMIT	271287	12.74				
LAB SAMPLE ID	CLIENT SAMPLE ID					
LCS 410-82059/4		579051	13.24			
LCSD 410-82059/5		598371	13.24			
MB 410-82059/7		629324	13.24			
410-24913-13	HD-QC1-0/1-1	510970	13.24			
410-24913-14	HD-QC1-0/1-2	515605	13.24			
410-24913-5	HD-COD-SW-13-0/1-0	580346	13.24			

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 Env Job No.: 410-24913-1
 SDG No.: _____
 Client Sample ID: HD-COD-SW-6-0/1-0 Lab Sample ID: 410-24913-1
 Matrix: Water Lab File ID: GD31S20.D
 Analysis Method: 8260D Date Collected: 12/23/2020 10:45
 Sample wt/vol: 25 (mL) Date Analyzed: 01/01/2021 02:18
 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.: 81468 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.070
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.060
75-34-3	1,1-Dichloroethane	ND		0.50	0.070
75-35-4	1,1-Dichloroethene	ND		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.060
107-06-2	1,2-Dichloroethane	ND		0.50	0.050
78-87-5	1,2-Dichloropropane	ND		0.50	0.060
78-93-3	2-Butanone (MEK)	ND		5.0	0.60
591-78-6	2-Hexanone	ND		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70
67-64-1	Acetone	1.8	J ^c	5.0	0.90
71-43-2	Benzene	ND		0.50	0.050
74-97-5	Bromochloromethane	ND		0.50	0.050
75-27-4	Bromodichloromethane	ND		0.50	0.050
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.070
75-15-0	Carbon disulfide	ND		1.0	0.060
56-23-5	Carbon tetrachloride	ND		0.50	0.070
108-90-7	Chlorobenzene	ND		0.50	0.060
75-00-3	Chloroethane	ND		0.50	0.070
67-66-3	Chloroform	ND		0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	ND		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.050
124-48-1	Dibromochloromethane	ND		0.50	0.070
100-41-4	Ethylbenzene	ND		0.50	0.060
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.050
75-09-2	Methylene Chloride	ND		0.50	0.070
100-42-5	Styrene	ND		0.50	0.050
127-18-4	Tetrachloroethene	ND		0.50	0.060
108-88-3	Toluene	ND		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	ND		0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-24913-1
 SDG No.: _____
 Client Sample ID: HD-COD-SW-6-0/1-0 Lab Sample ID: 410-24913-1
 Matrix: Water Lab File ID: GD31S20.D
 Analysis Method: 8260D Date Collected: 12/23/2020 10:45
 Sample wt/vol: 25 (mL) Date Analyzed: 01/01/2021 02:18
 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.: 81468 Units: ug/L

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

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

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20201231-19071.b\GD31S20.D
 Lims ID: 410-24913-A-1
 Client ID: HD-COD-SW-6-0/1-0
 Sample Type: Client
 Inject. Date: 01-Jan-2021 02:18:30 ALS Bottle#: 28 Worklist Smp#: 28
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0019071-028
 Misc. Info.: 410-24913-A-1
 Operator ID: MEC29284 Instrument ID: 16334
 Method: \\chromfs\Lancaster\ChromData\16334\20201231-19071.b\MSV_16334_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 04-Jan-2021 19:42:56 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: CTX1624

First Level Reviewer: campbellme

Date: 04-Jan-2021 19:40:37

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
5 Chloromethane	50		2.142				ND	
8 Vinyl chloride	62		2.257				ND	
9 Bromomethane	94		2.593				ND	
10 Chloroethane	64		2.666				ND	
19 1,1-Dichloroethene	96		3.513				ND	
21 Acetone	43	3.556	3.550	0.006	97	11386	1.75	
25 Carbon disulfide	76	3.800	3.800	0.000	53	3625	0.0263	7M
29 Methylene Chloride	84	4.153	4.172	-0.019	1	1038	0.0242	7M
* 30 t-Butyl alcohol-d10 (IS)	65	4.178	4.202	-0.024	0	132576	50.0	
33 Methyl tert-butyl ether	73		4.568				ND	
34 trans-1,2-Dichloroethene	96		4.574				ND	
37 1,1-Dichloroethane	63		5.245				ND	
41 2-Butanone (MEK)	43		6.043				ND	
42 cis-1,2-Dichloroethene	96	6.092	6.086	0.006	75	2191	0.0453	
49 Chlorobromomethane	128		6.415				ND	
51 Chloroform	83	6.561	6.567	-0.006	0	2994	0.0389	a
\$ 52 Dibromofluoromethane (Surr)	113	6.781	6.781	0.000	94	426827	9.83	
53 1,1,1-Trichloroethane	97		6.787				ND	
56 Carbon tetrachloride	117		7.000				ND	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.238	7.238	0.000	0	91357	9.89	
60 Benzene	78		7.269				ND	7
61 1,2-Dichloroethane	62		7.342				ND	
* 64 Fluorobenzene (IS)	96	7.671	7.671	0.000	98	1794402	10.0	
68 Trichloroethene	95		8.153				ND	
70 1,2-Dichloropropane	63		8.488				ND	
76 Dichlorobromomethane	83		8.835				ND	
81 cis-1,3-Dichloropropene	75		9.384				ND	
82 4-Methyl-2-pentanone (MIBK)	43		9.561				ND	7
\$ 83 Toluene-d8 (Surr)	98	9.689	9.689	0.000	94	1740442	10.1	
84 Toluene	92	9.768	9.768	0.000	91	6050	0.0541	
96 trans-1,3-Dichloropropene	75		10.030				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
99 1,1,2-Trichloroethane	97		10.231				ND	
100 Tetrachloroethene	166	10.323	10.317	0.006	77	1779	0.0366	
102 2-Hexanone	43		10.451				ND	
104 Chlorodibromomethane	129		10.609				ND	
105 Ethylene Dibromide	107		10.719				ND	
* 106 Chlorobenzene-d5 (IS)	117	11.152	11.152	0.000	87	1291534	10.0	
108 Chlorobenzene	112		11.176				ND	
S 109 Xylenes, Total	106		11.245				ND	7
110 1,1,1,2-Tetrachloroethane	131		11.262				ND	
111 Ethylbenzene	91		11.262				ND	7
112 m-Xylene & p-Xylene	106	11.371	11.378	-0.007	93	3400	0.0408	
113 o-Xylene	106		11.707				ND	7
114 Styrene	104		11.719				ND	7
115 Bromoform	173		11.877				ND	
\$ 119 4-Bromofluorobenzene (Surr)	95	12.146	12.146	0.000	90	642087	9.76	
120 1,1,2,2-Tetrachloroethane	83		12.255				ND	
* 134 1,4-Dichlorobenzene-d4	152	13.024	13.024	0.000	96	699149	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_00014

Amount Added: 1.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\16334\20201231-19071.b\GD31S20.D

Injection Date: 01-Jan-2021 02:18:30

Instrument ID: 16334

Operator ID: MEC29284

Lims ID: 410-24913-A-1

Lab Sample ID: 410-24913-1

Worklist Smp#: 28

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

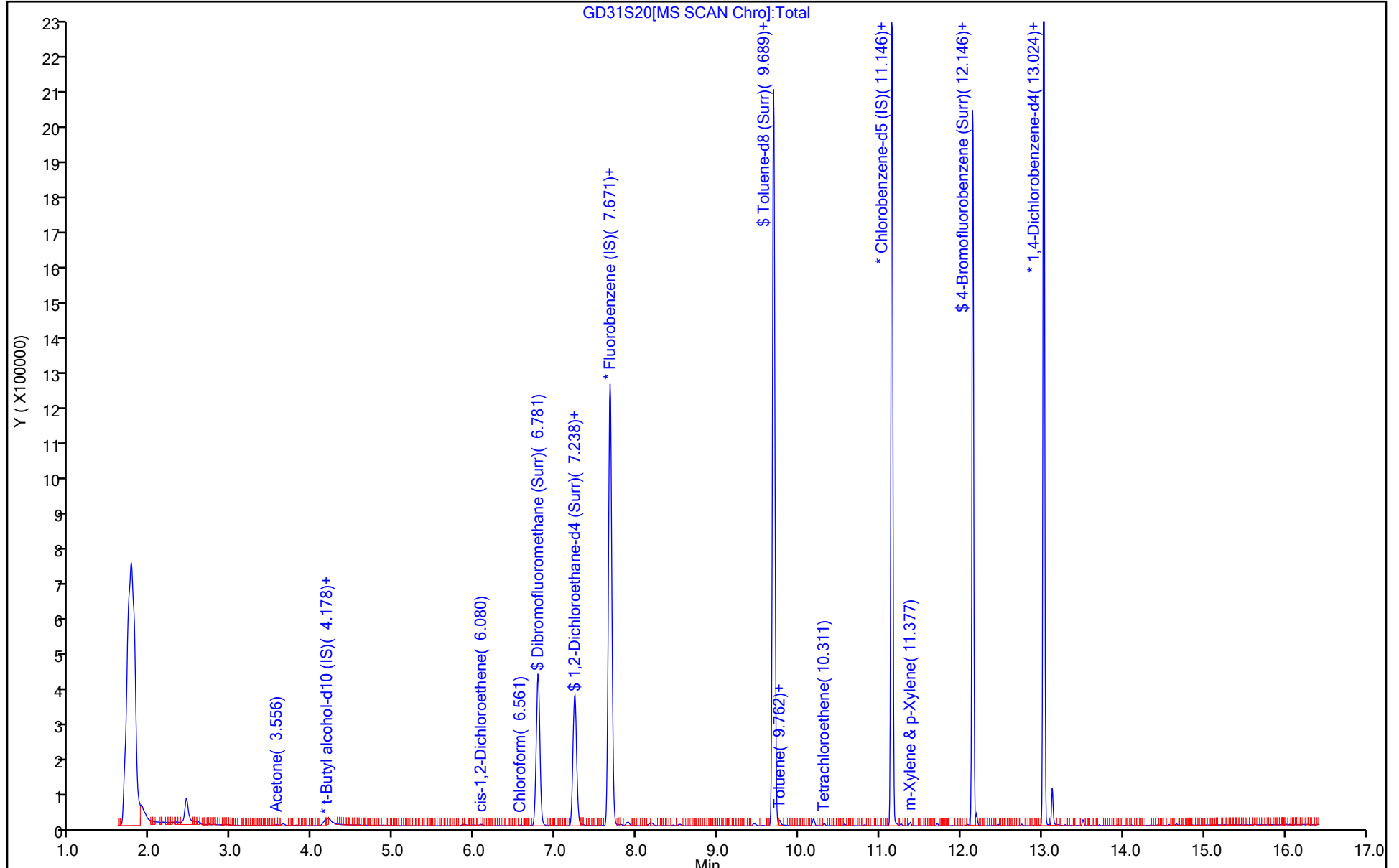
ALS Bottle#: 28

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\20201231-19071.b\GD31S20.D
 Lims ID: 410-24913-A-1
 Client ID: HD-COD-SW-6-0/1-0
 Sample Type: Client
 Inject. Date: 01-Jan-2021 02:18:30 ALS Bottle#: 28 Worklist Smp#: 28
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0019071-028
 Misc. Info.: 410-24913-A-1
 Operator ID: MEC29284 Instrument ID: 16334
 Method: \\chromfs\Lancaster\ChromData\16334\20201231-19071.b\MSV_16334_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 04-Jan-2021 19:42:56 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: CTX1624

First Level Reviewer: campbellme

Date: 04-Jan-2021 19:40:37

Compound	Amount Added	Amount Recovered	% Rec.
\$ 52 Dibromofluoromethane (Surr)	10.0	9.83	98.28
\$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	9.89	98.87
\$ 83 Toluene-d8 (Surr)	10.0	10.1	101.00
\$ 119 4-Bromofluorobenzene (Surr)	10.0	9.76	97.60

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20201231-19071.b\GD31S20.D

Injection Date: 01-Jan-2021 02:18:30

Instrument ID: 16334

Lims ID: 410-24913-A-1

Lab Sample ID: 410-24913-1

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

Operator ID: MEC29284

ALS Bottle#: 28

Worklist Smp#: 28

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

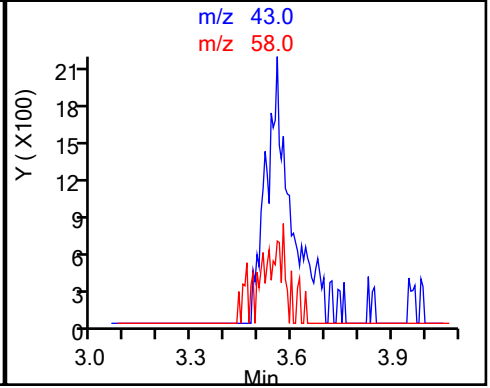
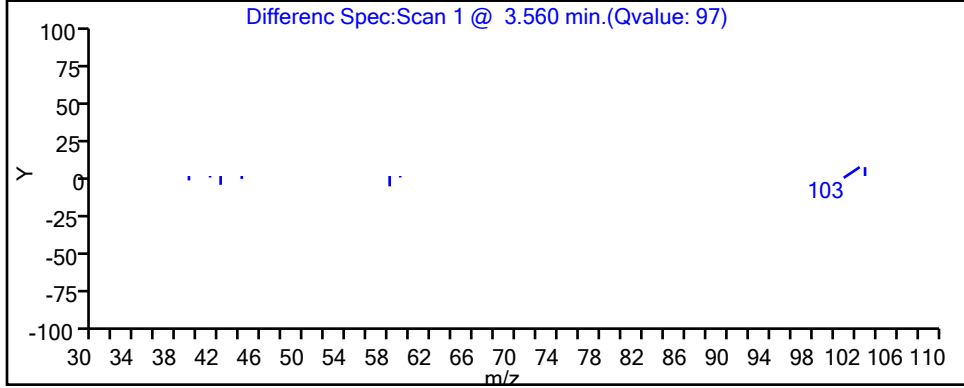
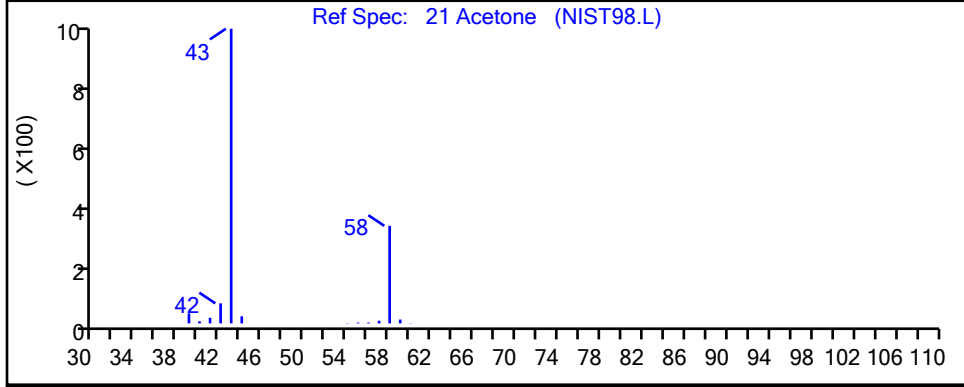
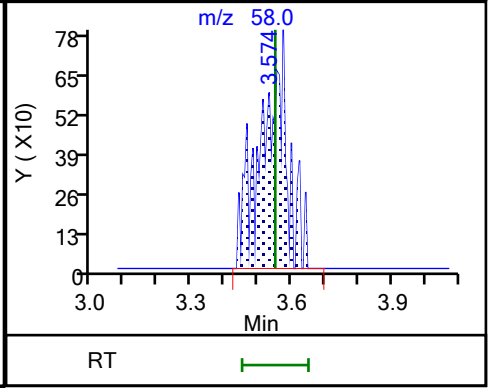
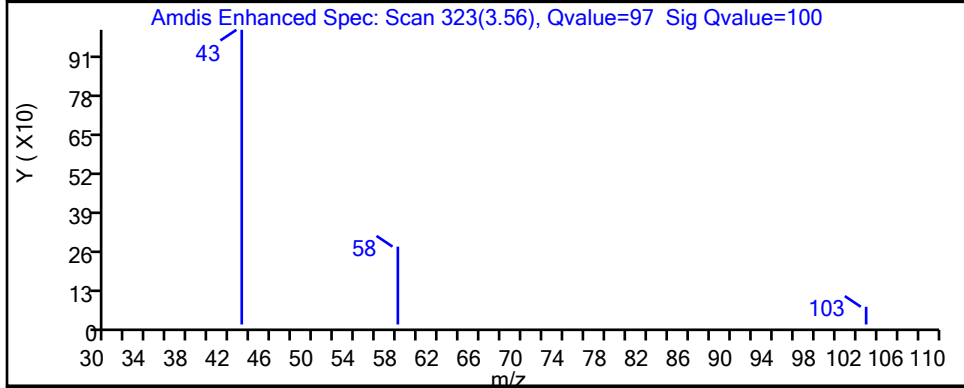
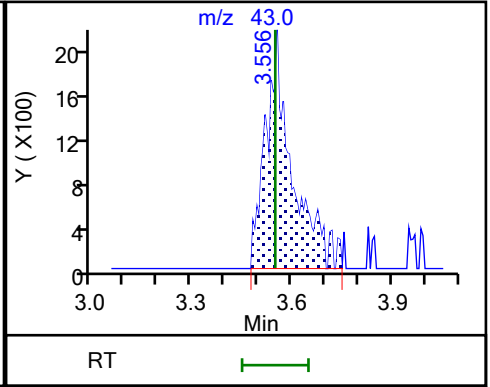
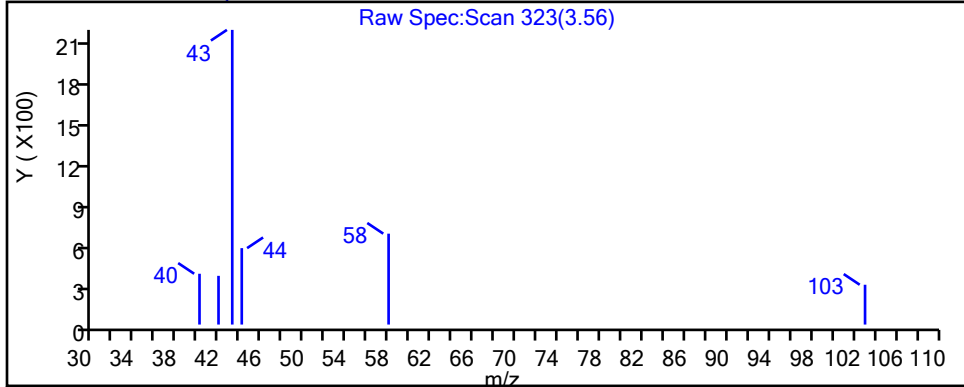
Method: MSV_16334_25mL

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

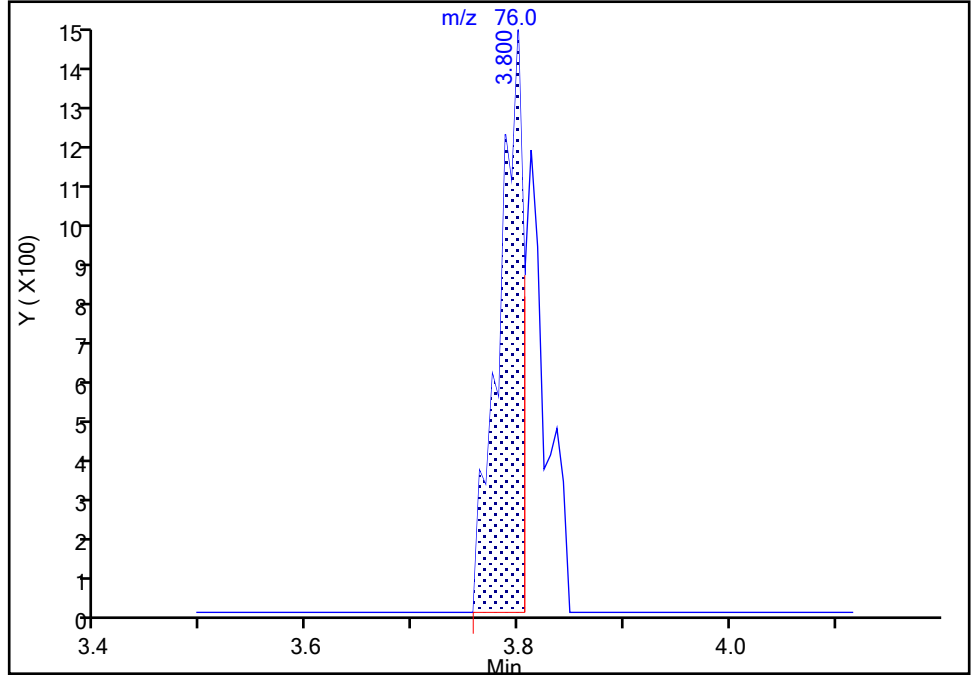
Data File: \\chromfs\Lancaster\ChromData\16334\20201231-19071.b\GD31S20.D
Injection Date: 01-Jan-2021 02:18:30 Instrument ID: 16334
Lims ID: 410-24913-A-1 Lab Sample ID: 410-24913-1
Client ID: HD-COD-SW-6-0/1-0
Operator ID: MEC29284 ALS Bottle#: 28 Worklist Smp#: 28
Purge Vol: 25.000 mL Dil. Factor: 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

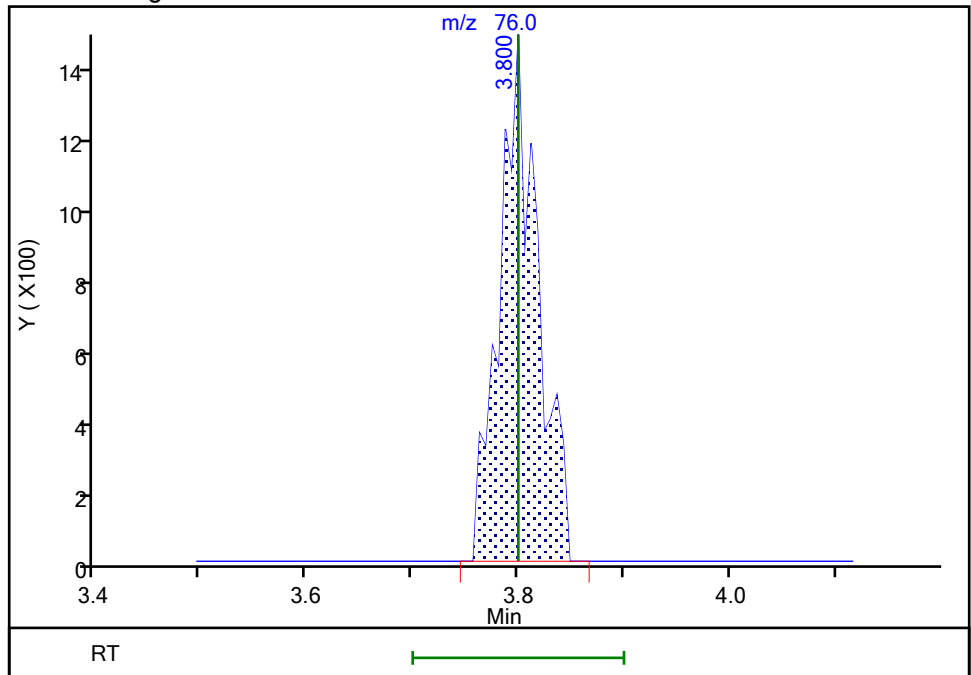
RT: 3.80
Area: 2312
Amount: 0.016780
Amount Units: ug/l

Processing Integration Results



RT: 3.80
Area: 3625
Amount: 0.026310
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 04-Jan-2021 19:40:15
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

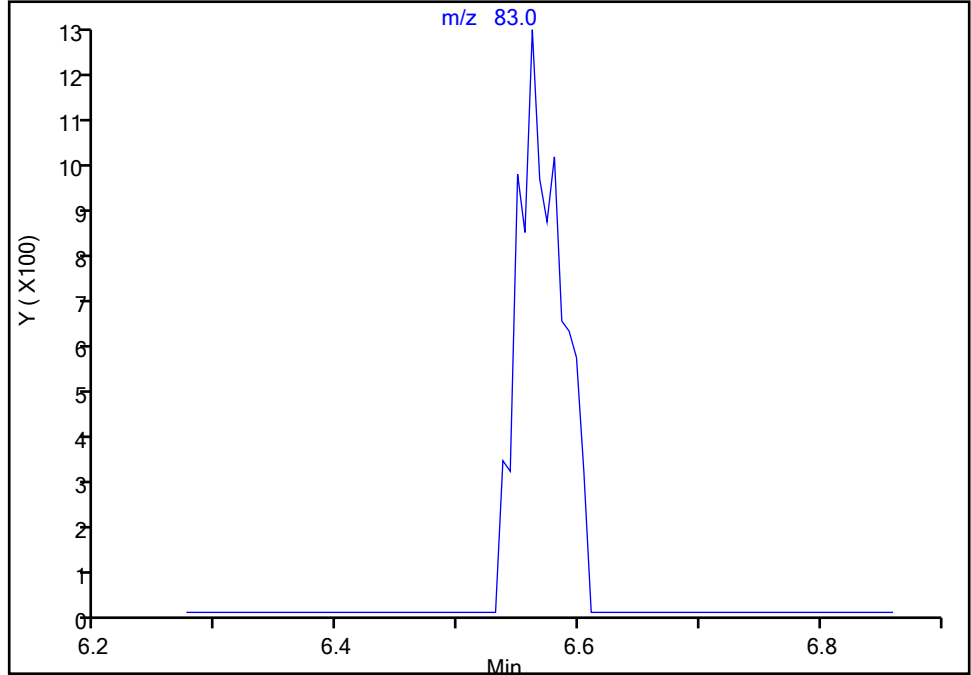
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Injection Date: 01-Jan-2021 02:18:30 Instrument ID: 16334
Lims ID: 410-24913-A-1 Lab Sample ID: 410-24913-1
Client ID: HD-COD-SW-6-0/1-0
Operator ID: MEC29284 ALS Bottle#: 28 Worklist Smp#: 28
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL 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

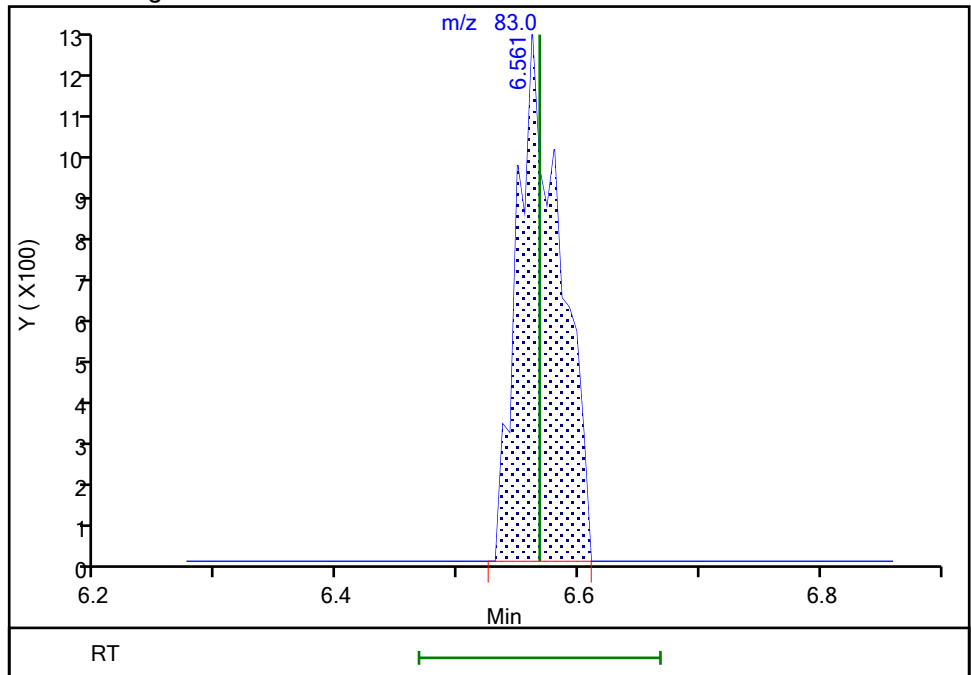
Not Detected
Expected RT: 6.57

Processing Integration Results



Manual Integration Results

RT: 6.56
Area: 2994
Amount: 0.038903
Amount Units: ug/l



Reviewer: campbellme, 04-Jan-2021 19:40:24
Audit Action: Assigned Compound ID

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

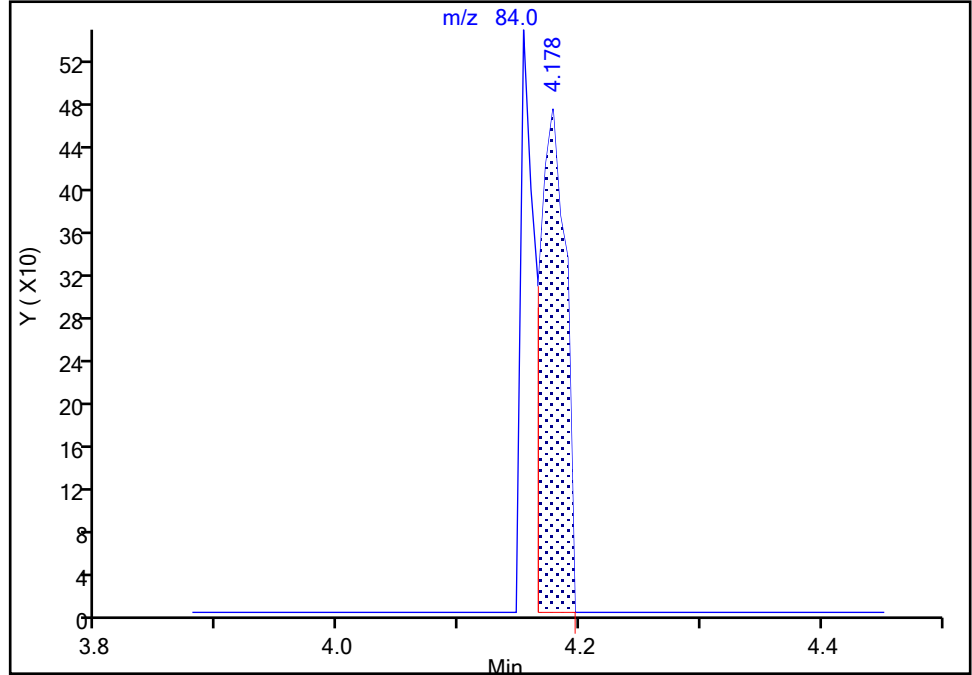
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Injection Date: 01-Jan-2021 02:18:30 Instrument ID: 16334
Lims ID: 410-24913-A-1 Lab Sample ID: 410-24913-1
Client ID: HD-COD-SW-6-0/1-0
Operator ID: MEC29284 ALS Bottle#: 28 Worklist Smp#: 28
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

29 Methylene Chloride, CAS: 75-09-2

Signal: 1

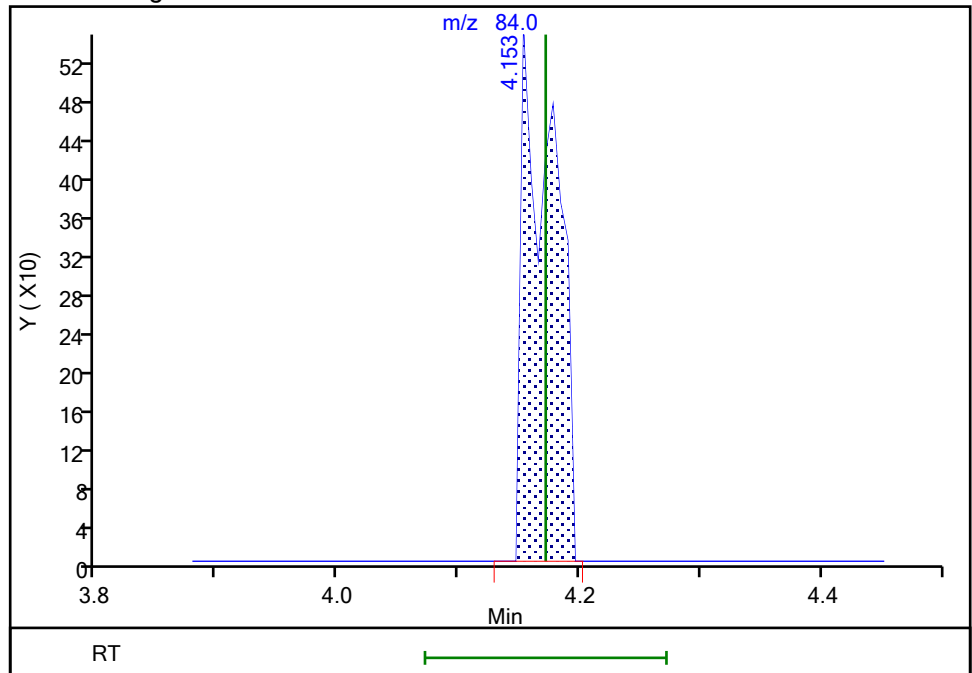
RT: 4.18
Area: 694
Amount: 0.016203
Amount Units: ug/l

Processing Integration Results



RT: 4.15
Area: 1038
Amount: 0.024235
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 04-Jan-2021 19:40:18
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-24913-1
 SDG No.: _____
 Client Sample ID: HD-COD-SW-7-0/1-0 Lab Sample ID: 410-24913-2
 Matrix: Water Lab File ID: GD31S21.D
 Analysis Method: 8260D Date Collected: 12/23/2020 11:25
 Sample wt/vol: 25 (mL) Date Analyzed: 01/01/2021 02:40
 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.: 81468 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.070
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.060
75-34-3	1,1-Dichloroethane	ND		0.50	0.070
75-35-4	1,1-Dichloroethene	ND		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.060
107-06-2	1,2-Dichloroethane	ND		0.50	0.050
78-87-5	1,2-Dichloropropane	ND		0.50	0.060
78-93-3	2-Butanone (MEK)	ND		5.0	0.60
591-78-6	2-Hexanone	ND		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70
67-64-1	Acetone	2.3	J ^c	5.0	0.90
71-43-2	Benzene	ND		0.50	0.050
74-97-5	Bromochloromethane	ND		0.50	0.050
75-27-4	Bromodichloromethane	ND		0.50	0.050
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.070
75-15-0	Carbon disulfide	ND		1.0	0.060
56-23-5	Carbon tetrachloride	ND		0.50	0.070
108-90-7	Chlorobenzene	ND		0.50	0.060
75-00-3	Chloroethane	ND		0.50	0.070
67-66-3	Chloroform	ND		0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	0.063	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	0.074	J	0.50	0.060
108-88-3	Toluene	ND		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	ND		0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-24913-1
 SDG No.: _____
 Client Sample ID: HD-COD-SW-7-0/1-0 Lab Sample ID: 410-24913-2
 Matrix: Water Lab File ID: GD31S21.D
 Analysis Method: 8260D Date Collected: 12/23/2020 11:25
 Sample wt/vol: 25 (mL) Date Analyzed: 01/01/2021 02:40
 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.: 81468 Units: ug/L

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

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

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20201231-19071.b\GD31S21.D
 Lims ID: 410-24913-A-2
 Client ID: HD-COD-SW-7-0/1-0
 Sample Type: Client
 Inject. Date: 01-Jan-2021 02:40:30 ALS Bottle#: 29 Worklist Smp#: 29
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0019071-029
 Misc. Info.: 410-24913-A-2
 Operator ID: MEC29284 Instrument ID: 16334
 Method: \\chromfs\Lancaster\ChromData\16334\20201231-19071.b\MSV_16334_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 04-Jan-2021 19:42:56 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: CTX1624

First Level Reviewer: campbellme

Date: 04-Jan-2021 19:41:26

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
5 Chloromethane	50	2.135	2.142	-0.007	1	3155	0.0498	
8 Vinyl chloride	62		2.257				ND	
9 Bromomethane	94		2.593				ND	
10 Chloroethane	64		2.666				ND	
19 1,1-Dichloroethene	96		3.513				ND	
21 Acetone	43	3.550	3.550	0.000	96	14731	2.34	
25 Carbon disulfide	76	3.800	3.800	0.000	94	6182	0.0446	
29 Methylene Chloride	84	4.153	4.172	-0.019	34	1835	0.0426	Ma
* 30 t-Butyl alcohol-d10 (IS)	65	4.190	4.202	-0.012	0	128445	50.0	
33 Methyl tert-butyl ether	73		4.568				ND	
34 trans-1,2-Dichloroethene	96		4.574				ND	
37 1,1-Dichloroethane	63		5.245				ND	
41 2-Butanone (MEK)	43		6.043				ND	
42 cis-1,2-Dichloroethene	96	6.068	6.086	-0.018	77	3058	0.0629	a
49 Chlorobromomethane	128		6.415				ND	
51 Chloroform	83	6.567	6.567	0.000	89	4788	0.0618	
\$ 52 Dibromofluoromethane (Surr)	113	6.781	6.781	0.000	94	428242	9.80	
53 1,1,1-Trichloroethane	97		6.787				ND	
56 Carbon tetrachloride	117		7.000				ND	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.232	7.238	-0.006	0	91728	9.86	
60 Benzene	78	7.262	7.269	-0.007	41	3752	0.0204	7M
61 1,2-Dichloroethane	62		7.342				ND	
* 64 Fluorobenzene (IS)	96	7.671	7.671	0.000	98	1806368	10.0	
68 Trichloroethene	95		8.153				ND	
70 1,2-Dichloropropane	63		8.488				ND	
76 Dichlorobromomethane	83	8.823	8.835	-0.012	1	699	0.0123	7M
81 cis-1,3-Dichloropropene	75		9.384				ND	
82 4-Methyl-2-pentanone (MIBK)	43		9.561				ND	7
\$ 83 Toluene-d8 (Surr)	98	9.689	9.689	0.000	94	1750932	10.1	
84 Toluene	92	9.768	9.768	0.000	99	4007	0.0354	
96 trans-1,3-Dichloropropene	75		10.030				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
99 1,1,2-Trichloroethane	97		10.231				ND	
100 Tetrachloroethene	166	10.317	10.317	0.000	93	3628	0.0739	
102 2-Hexanone	43		10.451				ND	
104 Chlorodibromomethane	129		10.609				ND	
105 Ethylene Dibromide	107		10.719				ND	
* 106 Chlorobenzene-d5 (IS)	117	11.152	11.152	0.000	87	1304819	10.0	
108 Chlorobenzene	112		11.176				ND	
S 109 Xylenes, Total	106		11.245				ND	7
110 1,1,1,2-Tetrachloroethane	131		11.262				ND	
111 Ethylbenzene	91		11.262				ND	7
112 m-Xylene & p-Xylene	106		11.378				ND	7
113 o-Xylene	106		11.707				ND	7
114 Styrene	104		11.719				ND	
115 Bromoform	173		11.877				ND	
\$ 119 4-Bromofluorobenzene (Surr)	95	12.146	12.146	0.000	90	654515	9.85	
120 1,1,2,2-Tetrachloroethane	83		12.255				ND	
* 134 1,4-Dichlorobenzene-d4	152	13.024	13.024	0.000	96	704205	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_00014

Amount Added: 1.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\16334\20201231-19071.b\GD31S21.D

Injection Date: 01-Jan-2021 02:40:30

Instrument ID: 16334

Operator ID: MEC29284

Lims ID: 410-24913-A-2

Lab Sample ID: 410-24913-2

Worklist Smp#: 29

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

ALS Bottle#: 29

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\20201231-19071.b\GD31S21.D
 Lims ID: 410-24913-A-2
 Client ID: HD-COD-SW-7-0/1-0
 Sample Type: Client
 Inject. Date: 01-Jan-2021 02:40:30 ALS Bottle#: 29 Worklist Smp#: 29
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0019071-029
 Misc. Info.: 410-24913-A-2
 Operator ID: MEC29284 Instrument ID: 16334
 Method: \\chromfs\Lancaster\ChromData\16334\20201231-19071.b\MSV_16334_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 04-Jan-2021 19:42:56 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: CTX1624

First Level Reviewer: campbellme

Date: 04-Jan-2021 19:41:26

Compound	Amount Added	Amount Recovered	% Rec.
\$ 52 Dibromofluoromethane (Surr)	10.0	9.80	97.96
\$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	9.86	98.61
\$ 83 Toluene-d8 (Surr)	10.0	10.1	100.58
\$ 119 4-Bromofluorobenzene (Surr)	10.0	9.85	98.47

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20201231-19071.b\GD31S21.D

Injection Date: 01-Jan-2021 02:40:30

Instrument ID: 16334

Lims ID: 410-24913-A-2

Lab Sample ID: 410-24913-2

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

Operator ID: MEC29284

ALS Bottle#: 29

Worklist Smp#: 29

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

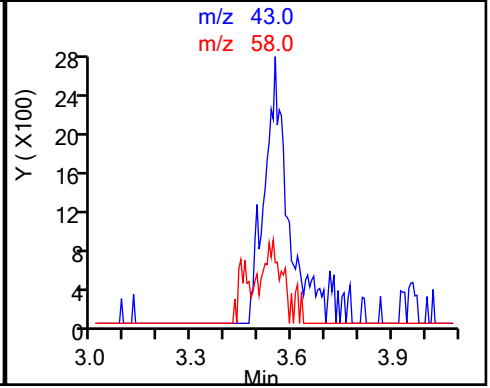
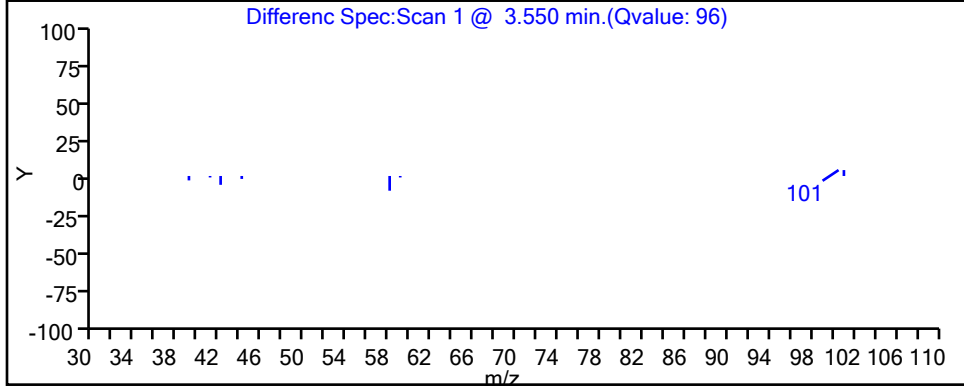
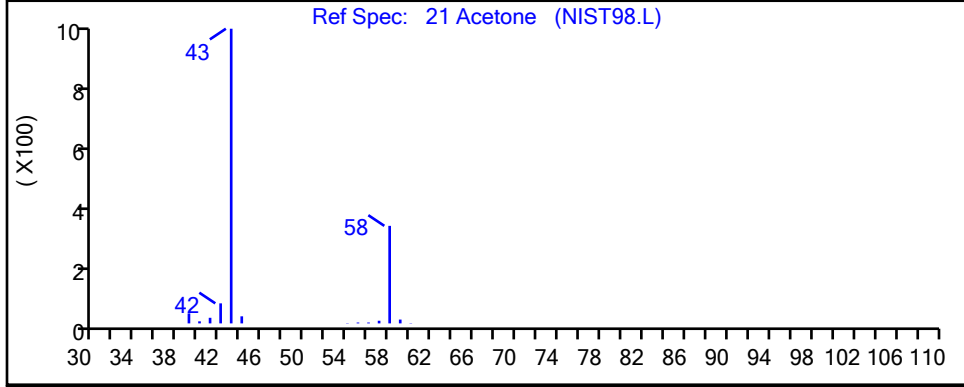
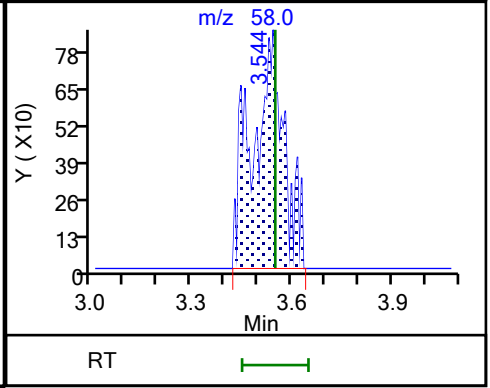
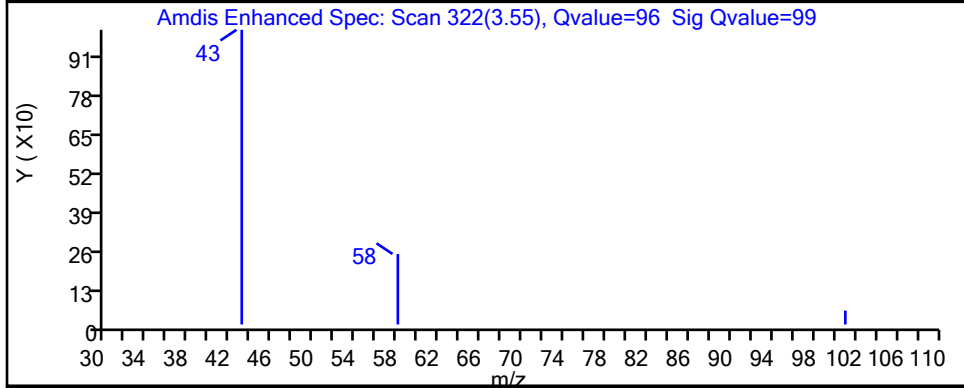
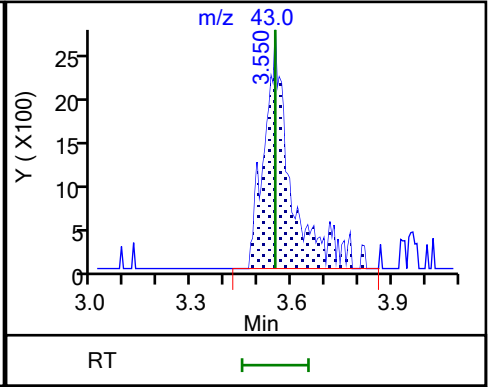
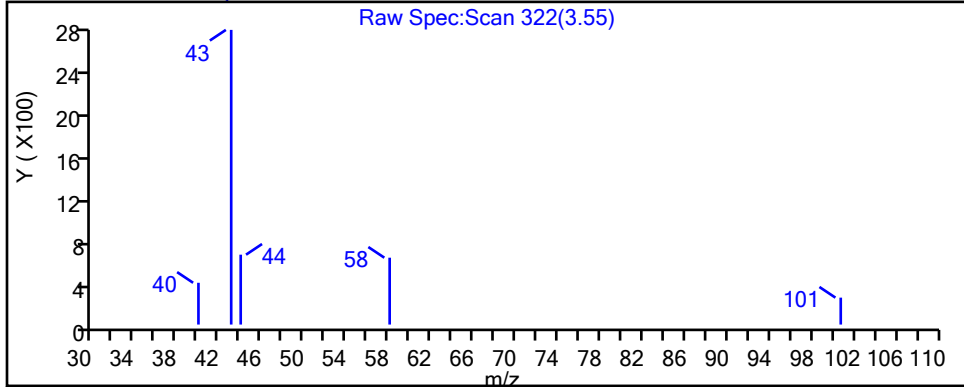
Method: MSV_16334_25mL

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\20201231-19071.b\GD31S21.D

Injection Date: 01-Jan-2021 02:40:30

Instrument ID: 16334

Lims ID: 410-24913-A-2

Lab Sample ID: 410-24913-2

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

Operator ID: MEC29284

ALS Bottle#: 29

Worklist Smp#: 29

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

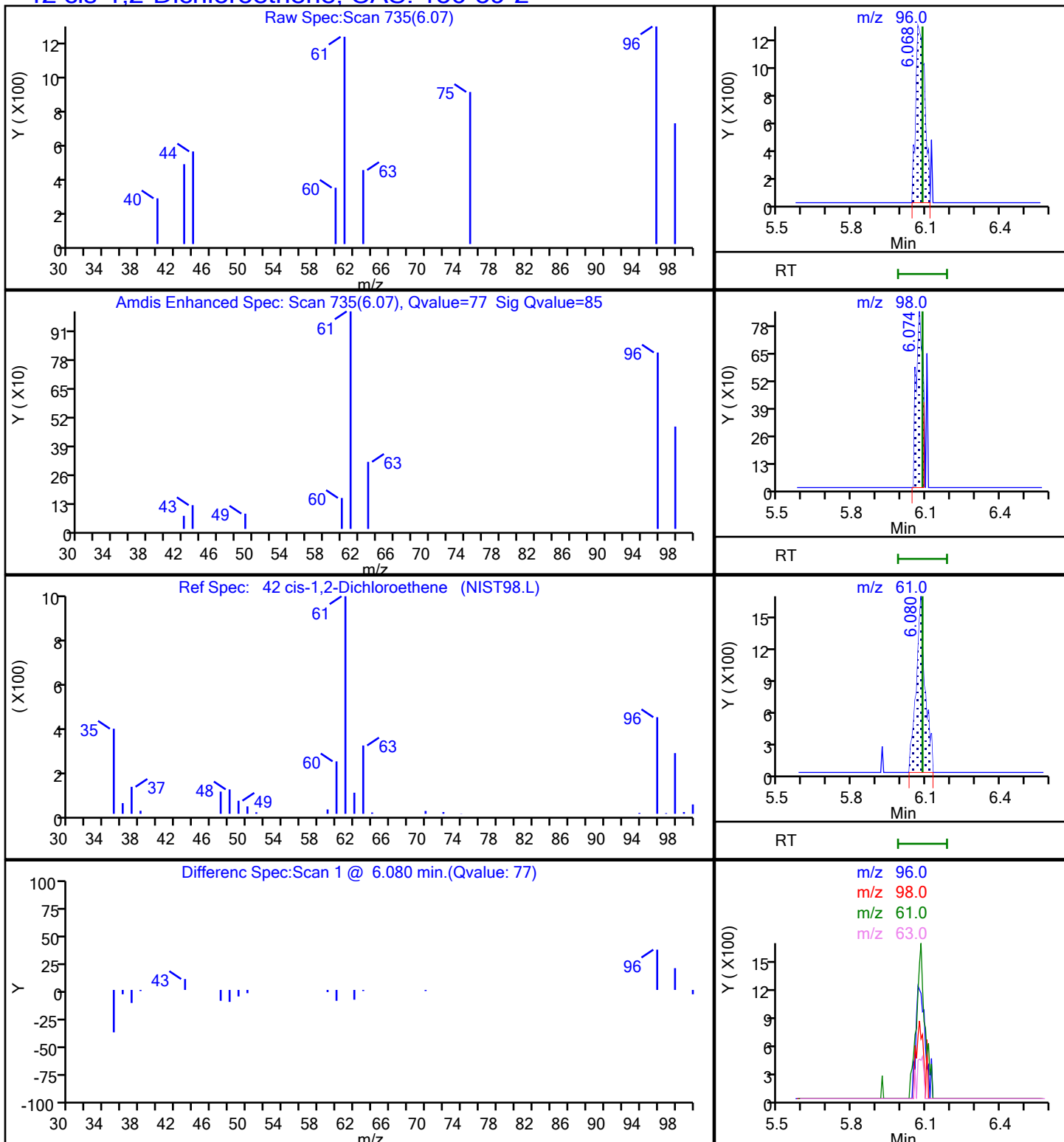
Method: MSV_16334_25mL

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\20201231-19071.b\GD31S21.D

Injection Date: 01-Jan-2021 02:40:30

Instrument ID: 16334

Lims ID: 410-24913-A-2

Lab Sample ID: 410-24913-2

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

Operator ID: MEC29284

ALS Bottle#: 29

Worklist Smp#: 29

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

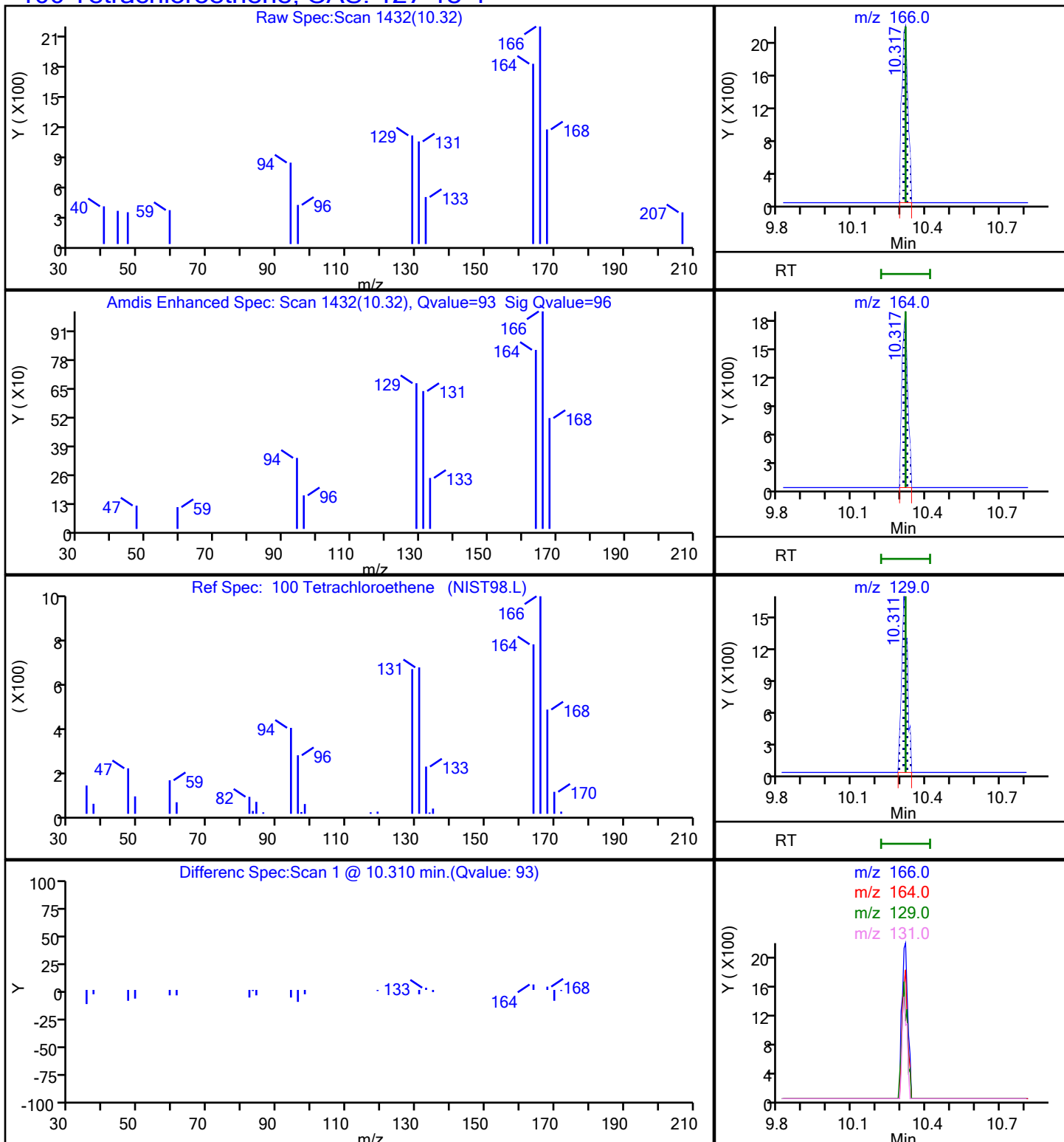
Method: MSV_16334_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) x 30m

MS Quad

100 Tetrachloroethene, CAS: 127-18-4



Eurofins Lancaster Laboratories Env, LLC

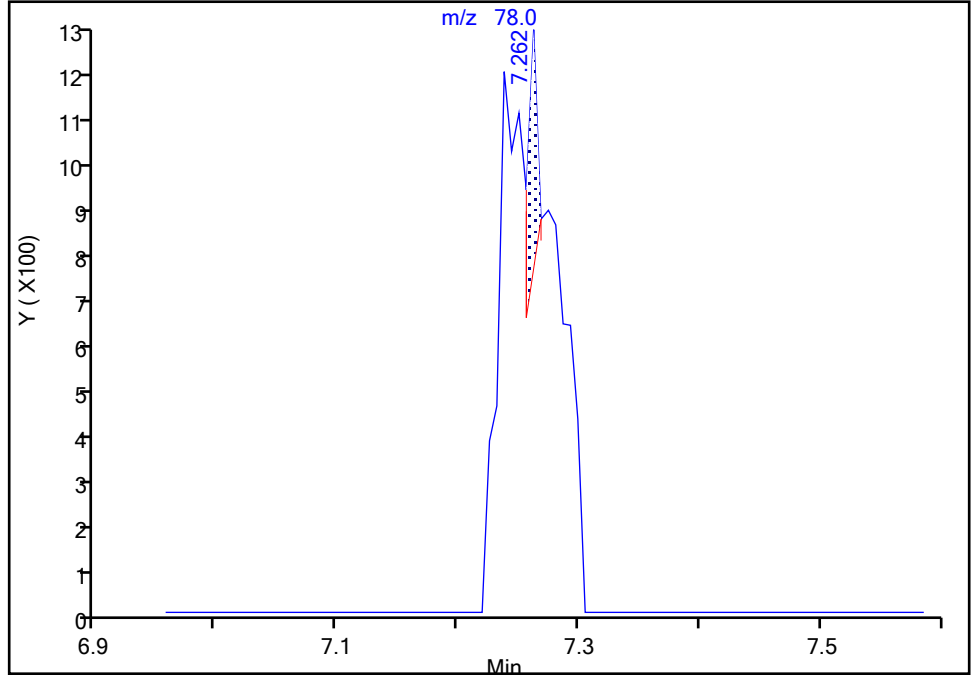
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Injection Date: 01-Jan-2021 02:40:30 Instrument ID: 16334
Lims ID: 410-24913-A-2 Lab Sample ID: 410-24913-2
Client ID: HD-COD-SW-7-0/1-0
Operator ID: MEC29284 ALS Bottle#: 29 Worklist Smp#: 29
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL 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

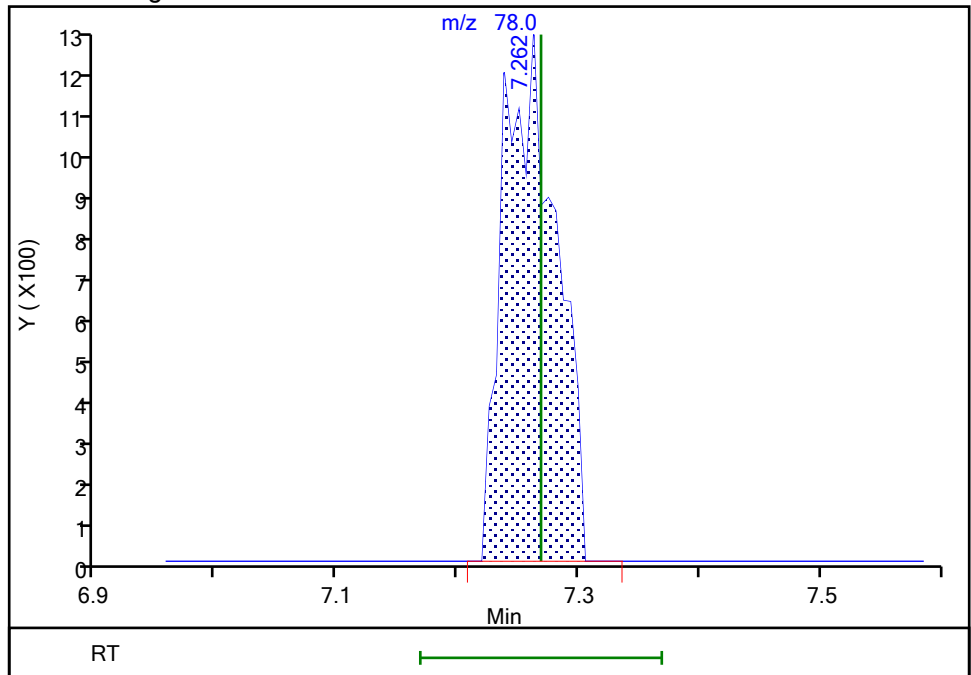
RT: 7.26
Area: 284
Amount: 0.001547
Amount Units: ug/l

Processing Integration Results



RT: 7.26
Area: 3752
Amount: 0.020433
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 04-Jan-2021 19:41:04
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

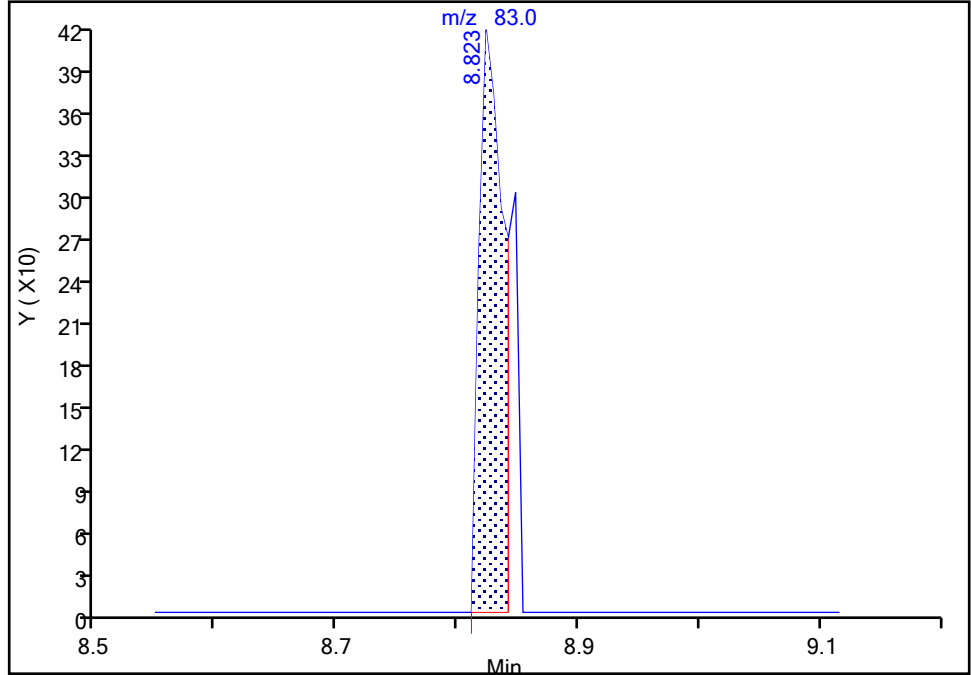
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Injection Date: 01-Jan-2021 02:40:30 Instrument ID: 16334
Lims ID: 410-24913-A-2 Lab Sample ID: 410-24913-2
Client ID: HD-COD-SW-7-0/1-0
Operator ID: MEC29284 ALS Bottle#: 29 Worklist Smp#: 29
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL 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

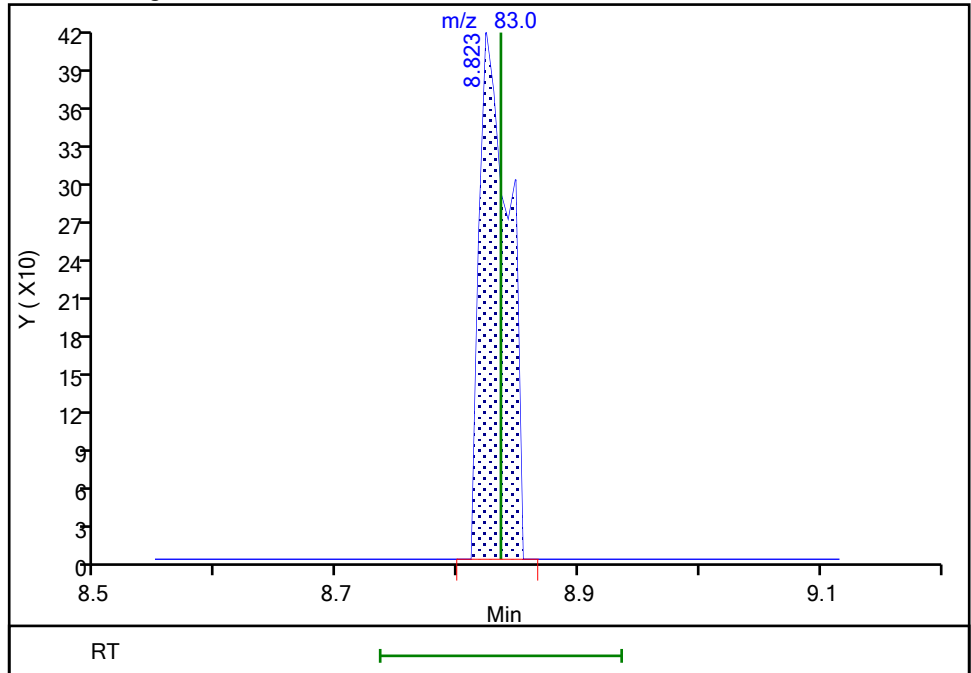
RT: 8.82
Area: 589
Amount: 0.010340
Amount Units: ug/l

Processing Integration Results



RT: 8.82
Area: 699
Amount: 0.012272
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 04-Jan-2021 19:41:11
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

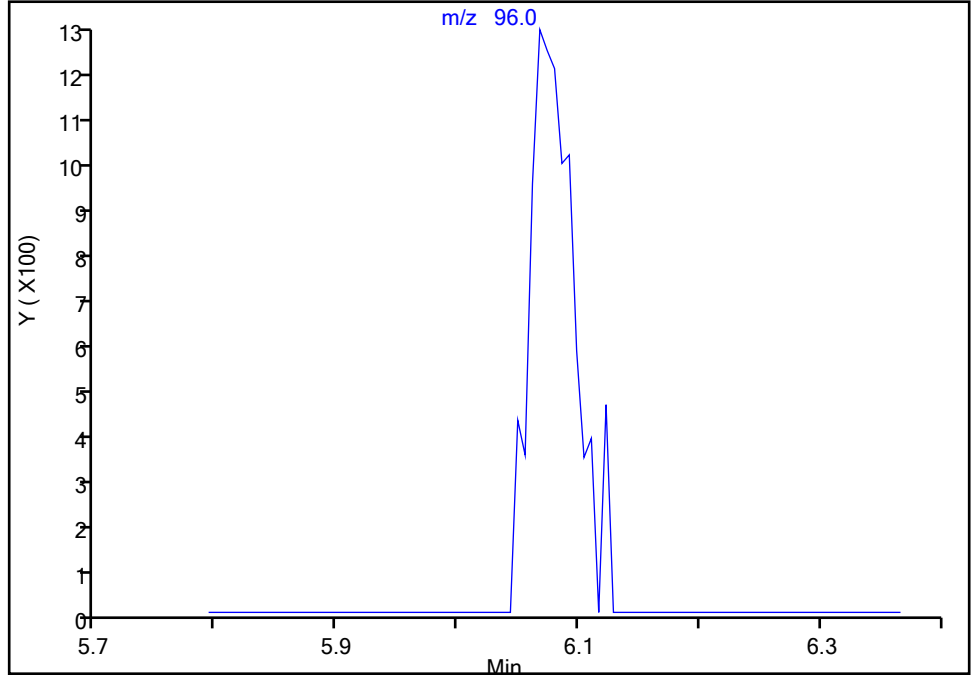
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Injection Date: 01-Jan-2021 02:40:30 Instrument ID: 16334
Lims ID: 410-24913-A-2 Lab Sample ID: 410-24913-2
Client ID: HD-COD-SW-7-0/1-0
Operator ID: MEC29284 ALS Bottle#: 29 Worklist Smp#: 29
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL 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

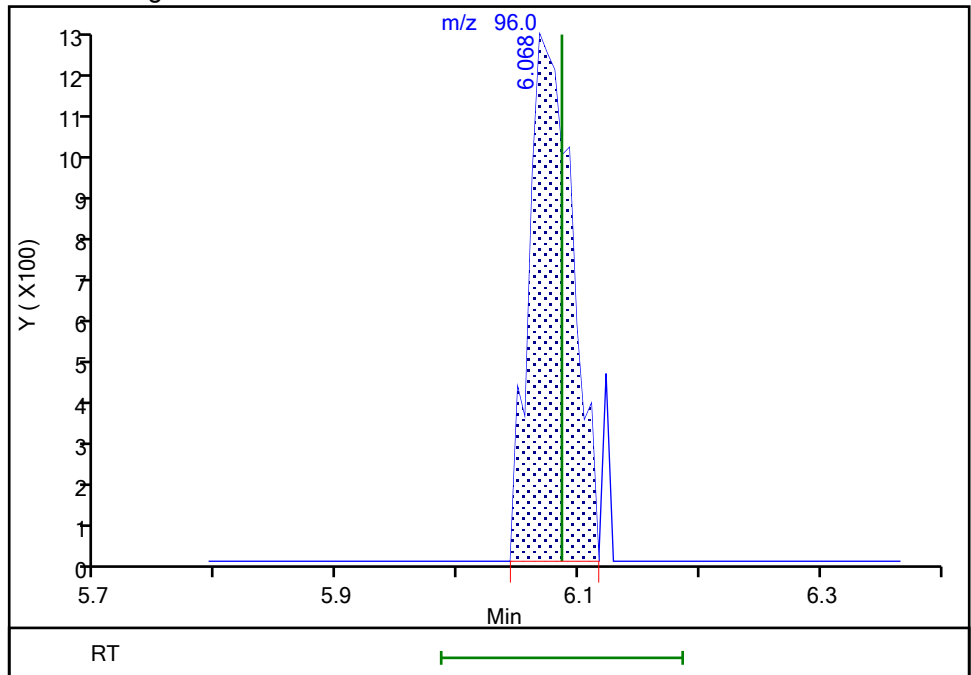
Not Detected
Expected RT: 6.09

Processing Integration Results



RT: 6.07
Area: 3058
Amount: 0.062868
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 04-Jan-2021 19:40:58
Audit Action: Assigned Compound ID

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

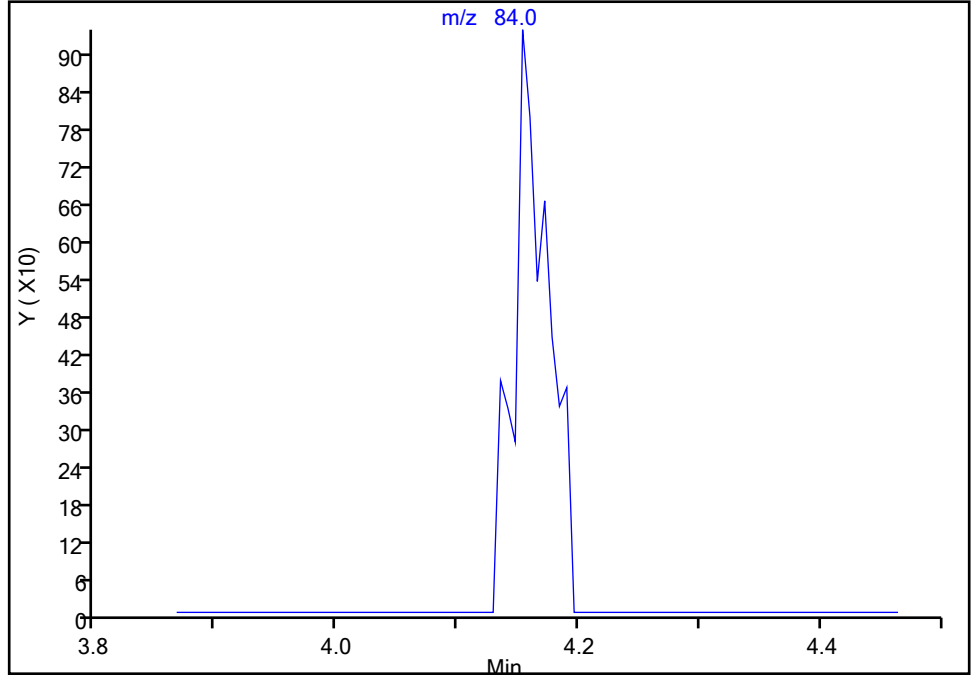
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Injection Date: 01-Jan-2021 02:40:30 Instrument ID: 16334
Lims ID: 410-24913-A-2 Lab Sample ID: 410-24913-2
Client ID: HD-COD-SW-7-0/1-0
Operator ID: MEC29284 ALS Bottle#: 29 Worklist Smp#: 29
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

29 Methylene Chloride, CAS: 75-09-2

Signal: 1

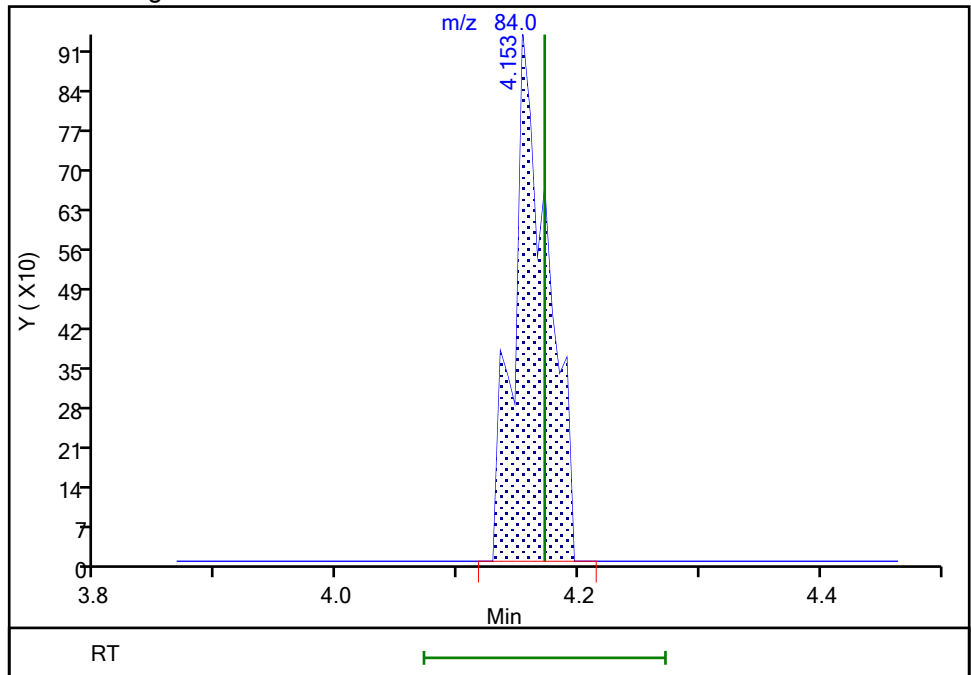
Not Detected
Expected RT: 4.17

Processing Integration Results



Manual Integration Results

RT: 4.15
Area: 1835
Amount: 0.042560
Amount Units: ug/l



Reviewer: campbellme, 04-Jan-2021 19:40:52
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-24913-1
 SDG No.: _____
 Client Sample ID: HD-COD-SW-8-0/1-0 Lab Sample ID: 410-24913-3
 Matrix: Water Lab File ID: GD31S22.D
 Analysis Method: 8260D Date Collected: 12/23/2020 09:35
 Sample wt/vol: 25 (mL) Date Analyzed: 01/01/2021 03:03
 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.: 81468 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.070
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.060
75-34-3	1,1-Dichloroethane	ND		0.50	0.070
75-35-4	1,1-Dichloroethene	ND		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.060
107-06-2	1,2-Dichloroethane	ND		0.50	0.050
78-87-5	1,2-Dichloropropane	ND		0.50	0.060
78-93-3	2-Butanone (MEK)	ND		5.0	0.60
591-78-6	2-Hexanone	ND		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70
67-64-1	Acetone	1.6	J ^c	5.0	0.90
71-43-2	Benzene	ND		0.50	0.050
74-97-5	Bromochloromethane	ND		0.50	0.050
75-27-4	Bromodichloromethane	ND		0.50	0.050
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.070
75-15-0	Carbon disulfide	ND		1.0	0.060
56-23-5	Carbon tetrachloride	ND		0.50	0.070
108-90-7	Chlorobenzene	ND		0.50	0.060
75-00-3	Chloroethane	ND		0.50	0.070
67-66-3	Chloroform	ND		0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	ND		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.050
124-48-1	Dibromochloromethane	ND		0.50	0.070
100-41-4	Ethylbenzene	ND		0.50	0.060
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.050
75-09-2	Methylene Chloride	ND		0.50	0.070
100-42-5	Styrene	ND		0.50	0.050
127-18-4	Tetrachloroethene	ND		0.50	0.060
108-88-3	Toluene	ND		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	ND		0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-24913-1
 SDG No.: _____
 Client Sample ID: HD-COD-SW-8-0/1-0 Lab Sample ID: 410-24913-3
 Matrix: Water Lab File ID: GD31S22.D
 Analysis Method: 8260D Date Collected: 12/23/2020 09:35
 Sample wt/vol: 25 (mL) Date Analyzed: 01/01/2021 03:03
 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.: 81468 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)	98		80-120
1868-53-7	Dibromofluoromethane (Surr)	98		80-120
2037-26-5	Toluene-d8 (Surr)	101		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20201231-19071.b\GD31S22.D
 Lims ID: 410-24913-A-3
 Client ID: HD-COD-SW-8-0/1-0
 Sample Type: Client
 Inject. Date: 01-Jan-2021 03:03:30 ALS Bottle#: 30 Worklist Smp#: 30
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0019071-030
 Misc. Info.: 410-24913-A-3
 Operator ID: MEC29284 Instrument ID: 16334
 Method: \\chromfs\Lancaster\ChromData\16334\20201231-19071.b\MSV_16334_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 04-Jan-2021 19:42:56 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: CTX1624

First Level Reviewer: campbellme Date: 04-Jan-2021 19:42:07

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
5 Chloromethane	50	2.135	2.142	-0.007	1	3492	0.0557	
8 Vinyl chloride	62		2.257				ND	
9 Bromomethane	94		2.593				ND	
10 Chloroethane	64		2.666				ND	
19 1,1-Dichloroethene	96		3.513				ND	
21 Acetone	43	3.550	3.550	0.000	70	9617	1.63	
25 Carbon disulfide	76	3.788	3.800	-0.012	58	4880	0.0355	M
29 Methylene Chloride	84		4.172				ND	7
* 30 t-Butyl alcohol-d10 (IS)	65	4.184	4.202	-0.018	0	120564	50.0	
33 Methyl tert-butyl ether	73		4.568				ND	
34 trans-1,2-Dichloroethene	96		4.574				ND	
37 1,1-Dichloroethane	63		5.245				ND	
41 2-Butanone (MEK)	43		6.043				ND	
42 cis-1,2-Dichloroethene	96		6.086				ND	
49 Chlorobromomethane	128		6.415				ND	
51 Chloroform	83	6.567	6.567	0.000	1	2062	0.0269	a
\$ 52 Dibromofluoromethane (Surr)	113	6.781	6.781	0.000	93	424372	9.80	
53 1,1,1-Trichloroethane	97		6.787				ND	
56 Carbon tetrachloride	117		7.000				ND	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.232	7.238	-0.006	0	89160	9.68	
60 Benzene	78	7.269	7.269	0.000	40	3625	0.0199	7M
61 1,2-Dichloroethane	62		7.342				ND	
* 64 Fluorobenzene (IS)	96	7.671	7.671	0.000	99	1788342	10.0	
68 Trichloroethene	95		8.153				ND	
70 1,2-Dichloropropane	63		8.488				ND	
76 Dichlorobromomethane	83		8.835				ND	
81 cis-1,3-Dichloropropene	75		9.384				ND	
82 4-Methyl-2-pentanone (MIBK)	43		9.561				ND	7
\$ 83 Toluene-d8 (Surr)	98	9.689	9.689	0.000	94	1742467	10.1	
84 Toluene	92	9.774	9.768	0.006	97	4858	0.0434	
96 trans-1,3-Dichloropropene	75		10.030				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
99 1,1,2-Trichloroethane	97		10.231				ND	
100 Tetrachloroethene	166	10.311	10.317	-0.006	85	2001	0.0412	M
102 2-Hexanone	43		10.451				ND	
104 Chlorodibromomethane	129		10.609				ND	
105 Ethylene Dibromide	107		10.719				ND	
* 106 Chlorobenzene-d5 (IS)	117	11.152	11.152	0.000	87	1292342	10.0	
108 Chlorobenzene	112		11.176				ND	
S 109 Xylenes, Total	106		11.245				ND	7
110 1,1,1,2-Tetrachloroethane	131		11.262				ND	
111 Ethylbenzene	91		11.262				ND	7
112 m-Xylene & p-Xylene	106		11.378				ND	7
113 o-Xylene	106		11.707				ND	7
114 Styrene	104		11.719				ND	
115 Bromoform	173		11.877				ND	
\$ 119 4-Bromofluorobenzene (Surr)	95	12.146	12.146	0.000	90	642320	9.76	
120 1,1,2,2-Tetrachloroethane	83		12.255				ND	
* 134 1,4-Dichlorobenzene-d4	152	13.024	13.024	0.000	96	704003	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_00014

Amount Added: 1.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\16334\20201231-19071.b\GD31S22.D

Injection Date: 01-Jan-2021 03:03:30

Instrument ID: 16334

Operator ID: MEC29284

Lims ID: 410-24913-A-3

Lab Sample ID: 410-24913-3

Worklist Smp#: 30

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

ALS Bottle#: 30

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\20201231-19071.b\GD31S22.D
 Lims ID: 410-24913-A-3
 Client ID: HD-COD-SW-8-0/1-0
 Sample Type: Client
 Inject. Date: 01-Jan-2021 03:03:30 ALS Bottle#: 30 Worklist Smp#: 30
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0019071-030
 Misc. Info.: 410-24913-A-3
 Operator ID: MEC29284 Instrument ID: 16334
 Method: \\chromfs\Lancaster\ChromData\16334\20201231-19071.b\MSV_16334_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 04-Jan-2021 19:42:56 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: CTX1624

First Level Reviewer: campbellme Date: 04-Jan-2021 19:42:07

Compound	Amount Added	Amount Recovered	% Rec.
\$ 52 Dibromofluoromethane (Surr)	10.0	9.80	98.05
\$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	9.68	96.82
\$ 83 Toluene-d8 (Surr)	10.0	10.1	101.06
\$ 119 4-Bromofluorobenzene (Surr)	10.0	9.76	97.57

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20201231-19071.b\GD31S22.D

Injection Date: 01-Jan-2021 03:03:30

Instrument ID: 16334

Lims ID: 410-24913-A-3

Lab Sample ID: 410-24913-3

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

Operator ID: MEC29284

ALS Bottle#: 30

Worklist Smp#: 30

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

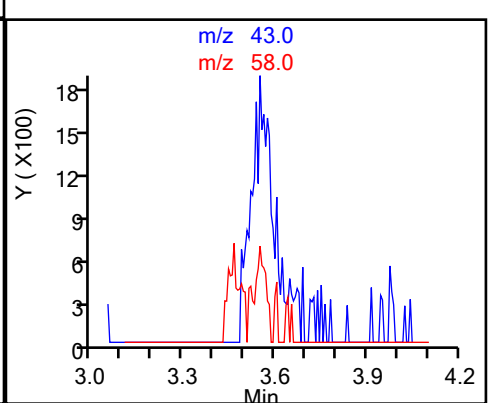
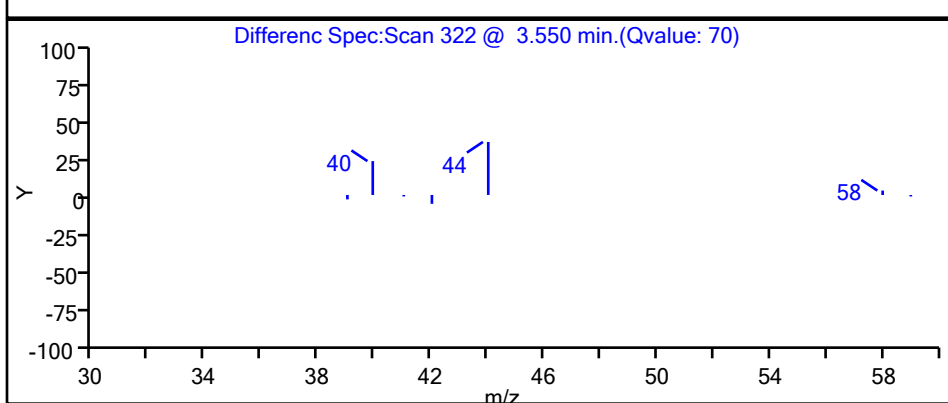
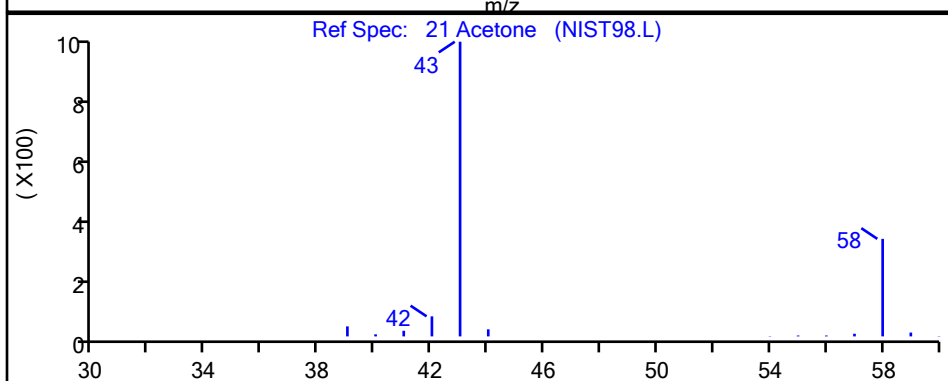
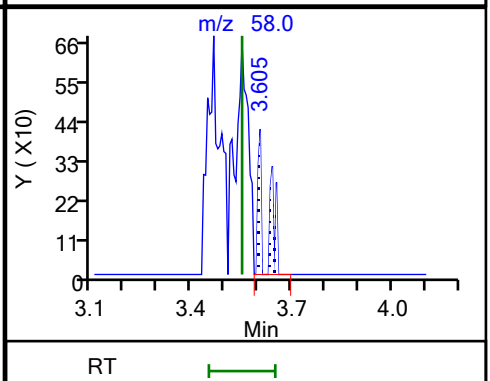
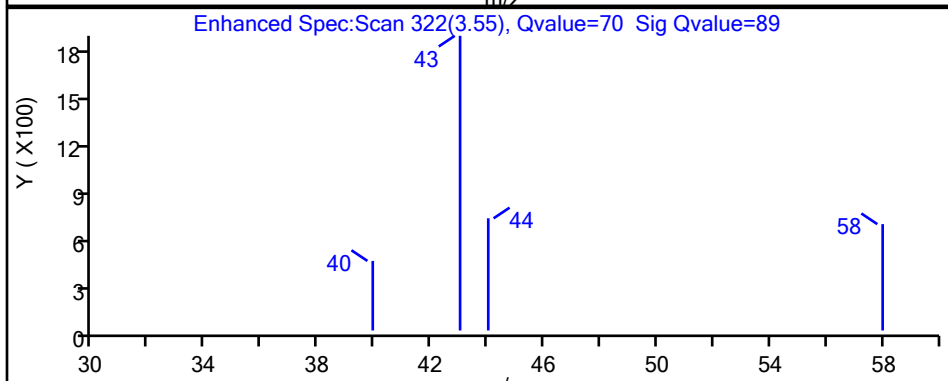
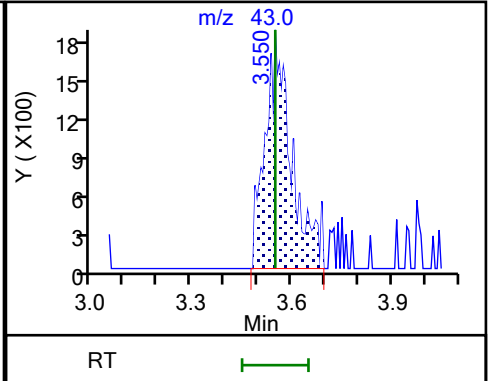
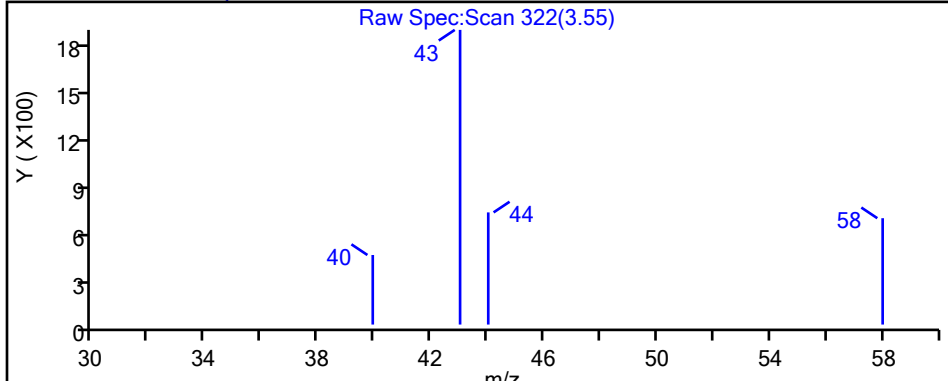
Method: MSV_16334_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) x 30m

MS Quad

21 Acetone, CAS: 67-64-1



Eurofins Lancaster Laboratories Env, LLC

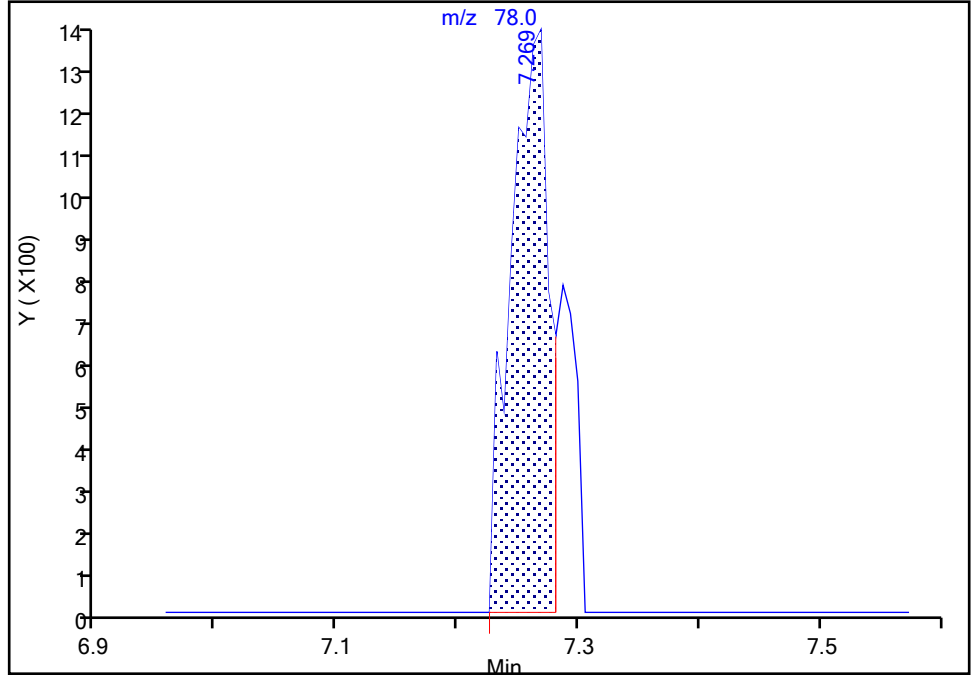
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Injection Date: 01-Jan-2021 03:03:30 Instrument ID: 16334
Lims ID: 410-24913-A-3 Lab Sample ID: 410-24913-3
Client ID: HD-COD-SW-8-0/1-0
Operator ID: MEC29284 ALS Bottle#: 30 Worklist Smp#: 30
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL 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

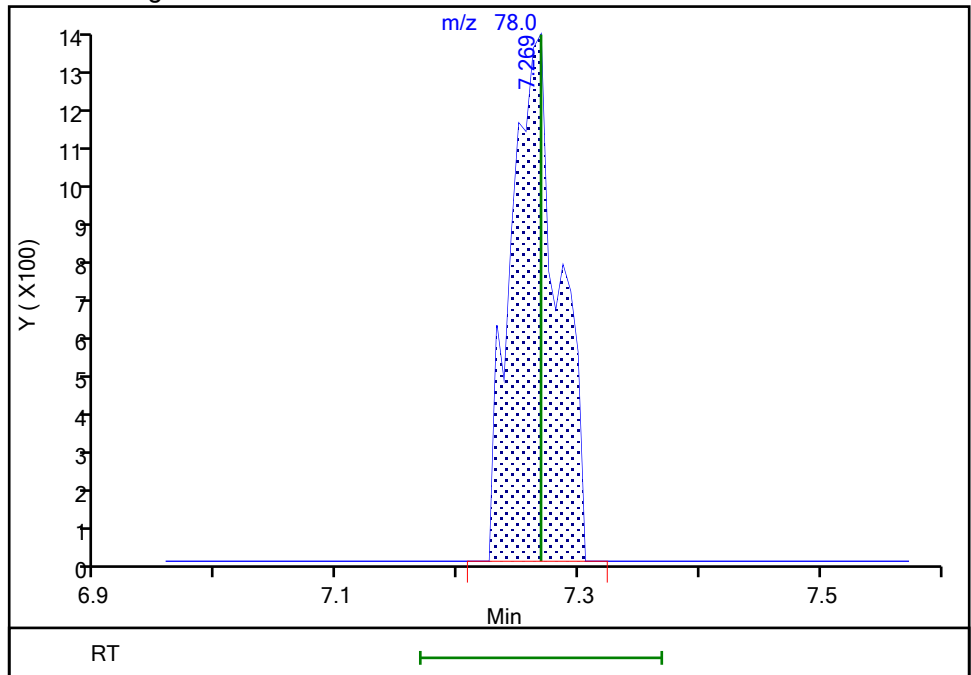
RT: 7.27
Area: 2915
Amount: 0.016035
Amount Units: ug/l

Processing Integration Results



RT: 7.27
Area: 3625
Amount: 0.019941
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 04-Jan-2021 19:41:54
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

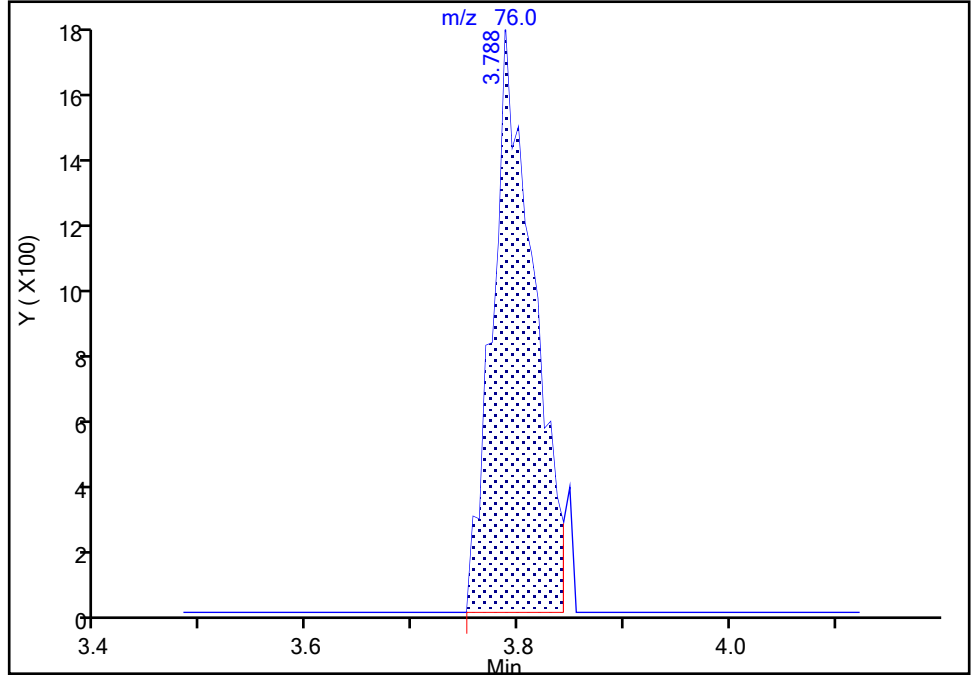
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Injection Date: 01-Jan-2021 03:03:30 Instrument ID: 16334
Lims ID: 410-24913-A-3 Lab Sample ID: 410-24913-3
Client ID: HD-COD-SW-8-0/1-0
Operator ID: MEC29284 ALS Bottle#: 30 Worklist Smp#: 30
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL 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

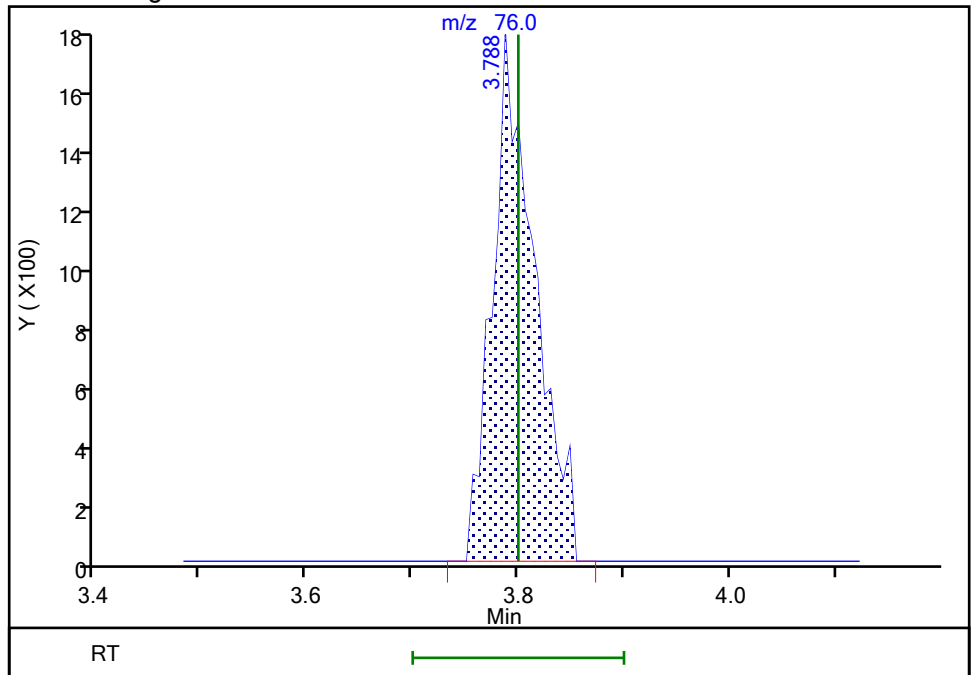
RT: 3.79
Area: 4741
Amount: 0.034527
Amount Units: ug/l

Processing Integration Results



RT: 3.79
Area: 4880
Amount: 0.035539
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 04-Jan-2021 19:41:40
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

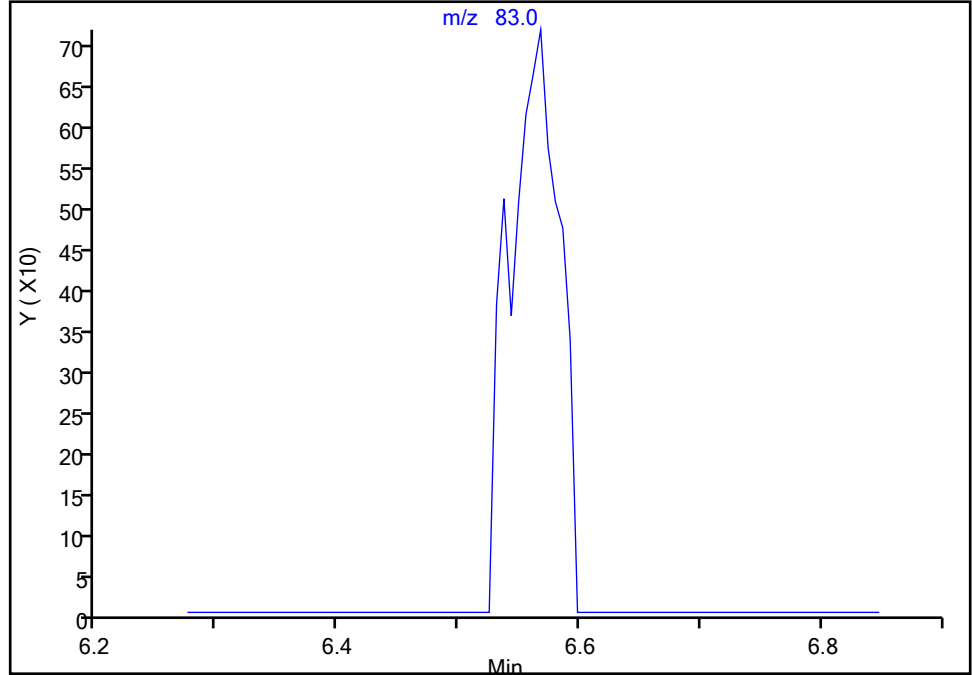
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Injection Date: 01-Jan-2021 03:03:30 Instrument ID: 16334
Lims ID: 410-24913-A-3 Lab Sample ID: 410-24913-3
Client ID: HD-COD-SW-8-0/1-0
Operator ID: MEC29284 ALS Bottle#: 30 Worklist Smp#: 30
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

51 Chloroform, CAS: 67-66-3

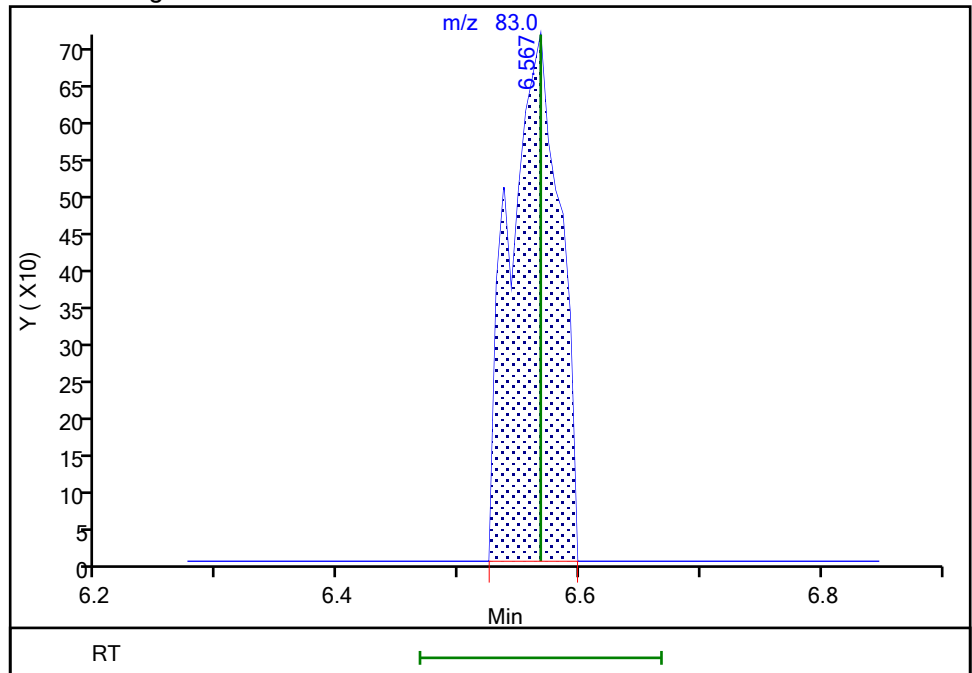
Signal: 1

Not Detected
Expected RT: 6.57

Processing Integration Results



Manual Integration Results



RT: 6.57
Area: 2062
Amount: 0.026884
Amount Units: ug/l

Reviewer: campbellme, 04-Jan-2021 19:41:46
Audit Action: Assigned Compound ID

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

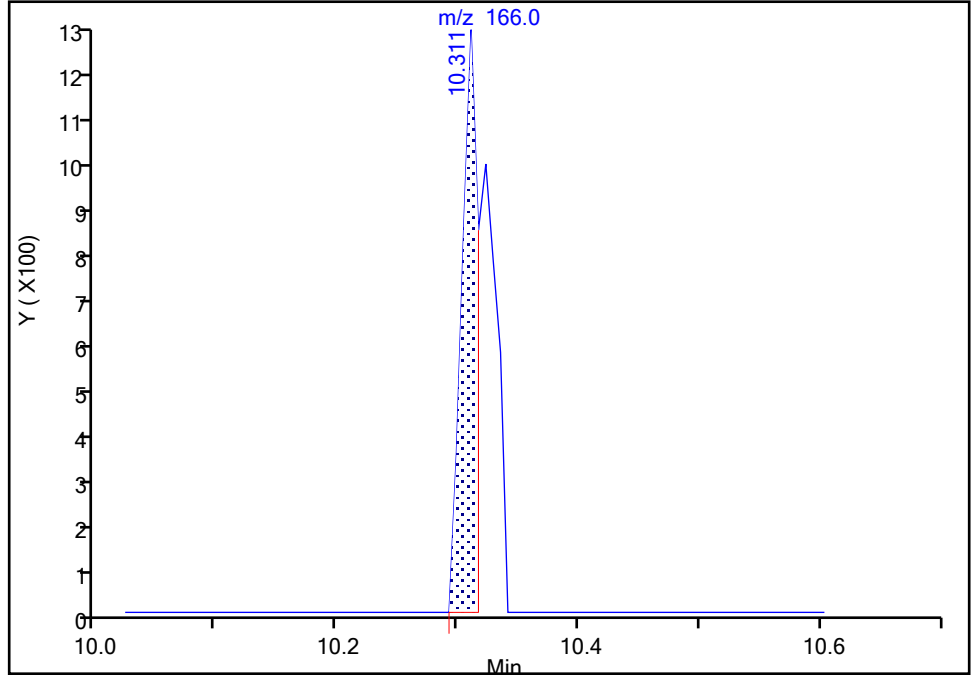
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Injection Date: 01-Jan-2021 03:03:30 Instrument ID: 16334
Lims ID: 410-24913-A-3 Lab Sample ID: 410-24913-3
Client ID: HD-COD-SW-8-0/1-0
Operator ID: MEC29284 ALS Bottle#: 30 Worklist Smp#: 30
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

100 Tetrachloroethene, CAS: 127-18-4

Signal: 1

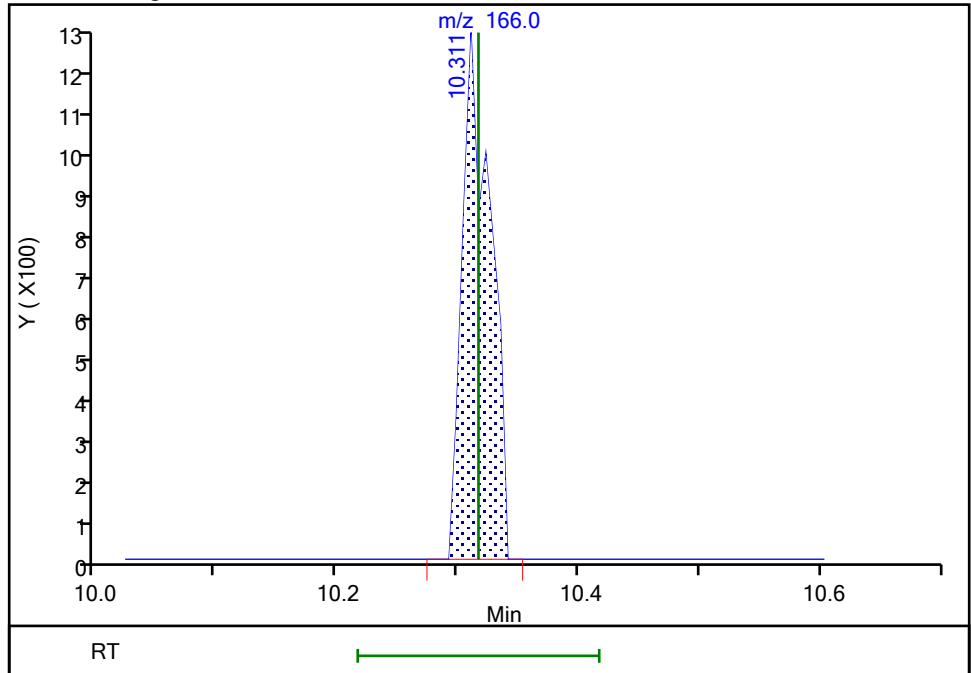
RT: 10.31
Area: 1175
Amount: 0.024181
Amount Units: ug/l

Processing Integration Results



RT: 10.31
Area: 2001
Amount: 0.041180
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 04-Jan-2021 19:42:01
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-24913-1
 SDG No.: _____
 Client Sample ID: HD-COD-SW-9-0/1-0 Lab Sample ID: 410-24913-4
 Matrix: Water Lab File ID: GD31S23.D
 Analysis Method: 8260D Date Collected: 12/23/2020 12:15
 Sample wt/vol: 25 (mL) Date Analyzed: 01/01/2021 03:24
 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.: 81468 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.070
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.060
75-34-3	1,1-Dichloroethane	ND		0.50	0.070
75-35-4	1,1-Dichloroethene	ND		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.060
107-06-2	1,2-Dichloroethane	ND		0.50	0.050
78-87-5	1,2-Dichloropropane	ND		0.50	0.060
78-93-3	2-Butanone (MEK)	ND		5.0	0.60
591-78-6	2-Hexanone	ND		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70
67-64-1	Acetone	2.8	J ^c	5.0	0.90
71-43-2	Benzene	ND		0.50	0.050
74-97-5	Bromochloromethane	ND		0.50	0.050
75-27-4	Bromodichloromethane	ND		0.50	0.050
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.070
75-15-0	Carbon disulfide	ND		1.0	0.060
56-23-5	Carbon tetrachloride	ND		0.50	0.070
108-90-7	Chlorobenzene	ND		0.50	0.060
75-00-3	Chloroethane	ND		0.50	0.070
67-66-3	Chloroform	ND		0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	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	0.11	J	0.50	0.060
108-88-3	Toluene	0.079	J	0.50	0.070
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	ND		0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-24913-1
 SDG No.: _____
 Client Sample ID: HD-COD-SW-9-0/1-0 Lab Sample ID: 410-24913-4
 Matrix: Water Lab File ID: GD31S23.D
 Analysis Method: 8260D Date Collected: 12/23/2020 12:15
 Sample wt/vol: 25 (mL) Date Analyzed: 01/01/2021 03:24
 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.: 81468 Units: ug/L

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

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		80-120
460-00-4	4-Bromofluorobenzene (Surr)	98		80-120
1868-53-7	Dibromofluoromethane (Surr)	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\16334\20201231-19071.b\GD31S23.D
 Lims ID: 410-24913-A-4
 Client ID: HD-COD-SW-9-0/1-0
 Sample Type: Client
 Inject. Date: 01-Jan-2021 03:24:30 ALS Bottle#: 31 Worklist Smp#: 31
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0019071-031
 Misc. Info.: 410-24913-A-4
 Operator ID: MEC29284 Instrument ID: 16334
 Method: \\chromfs\Lancaster\ChromData\16334\20201231-19071.b\MSV_16334_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 04-Jan-2021 19:42:56 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: CTX1624

First Level Reviewer: campbellme

Date: 04-Jan-2021 19:42:56

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
5 Chloromethane	50	2.129	2.142	-0.013	1	2443	0.0391	
8 Vinyl chloride	62		2.257				ND	
9 Bromomethane	94		2.593				ND	
10 Chloroethane	64		2.666				ND	
19 1,1-Dichloroethene	96		3.513				ND	
21 Acetone	43	3.544	3.550	-0.006	70	16884	2.79	
25 Carbon disulfide	76	3.794	3.800	-0.006	97	8002	0.0586	M
29 Methylene Chloride	84		4.172				ND	
* 30 t-Butyl alcohol-d10 (IS)	65	4.178	4.202	-0.024	0	123513	50.0	
33 Methyl tert-butyl ether	73		4.568				ND	
34 trans-1,2-Dichloroethene	96		4.574				ND	
37 1,1-Dichloroethane	63		5.245				ND	
41 2-Butanone (MEK)	43		6.043				ND	
42 cis-1,2-Dichloroethene	96	6.080	6.086	-0.006	77	2321	0.0484	
49 Chlorobromomethane	128		6.415				ND	
51 Chloroform	83	6.562	6.567	-0.005	90	6161	0.0807	
\$ 52 Dibromofluoromethane (Surr)	113	6.775	6.781	-0.006	94	424943	9.86	
53 1,1,1-Trichloroethane	97		6.787				ND	
56 Carbon tetrachloride	117		7.000				ND	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.226	7.238	-0.012	0	91128	9.94	
60 Benzene	78	7.263	7.269	-0.006	42	3049	0.0169	7M
61 1,2-Dichloroethane	62		7.342				ND	
* 64 Fluorobenzene (IS)	96	7.665	7.671	-0.006	99	1779865	10.0	
68 Trichloroethene	95	8.140	8.153	-0.013	69	2724	0.0590	M
70 1,2-Dichloropropane	63		8.488				ND	
76 Dichlorobromomethane	83		8.835				ND	7
81 cis-1,3-Dichloropropene	75		9.384				ND	
82 4-Methyl-2-pentanone (MIBK)	43		9.561				ND	7
\$ 83 Toluene-d8 (Surr)	98	9.689	9.689	0.000	94	1746389	10.1	
84 Toluene	92	9.762	9.768	-0.006	98	8780	0.0785	
96 trans-1,3-Dichloropropene	75		10.030				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
99 1,1,2-Trichloroethane	97		10.231				ND	
100 Tetrachloroethene	166	10.311	10.317	-0.006	94	5111	0.1053	
102 2-Hexanone	43		10.451				ND	
104 Chlorodibromomethane	129		10.609				ND	
105 Ethylene Dibromide	107		10.719				ND	
* 106 Chlorobenzene-d5 (IS)	117	11.146	11.152	-0.006	87	1290392	10.0	
108 Chlorobenzene	112		11.176				ND	
S 109 Xylenes, Total	106		11.245				ND	7
110 1,1,1,2-Tetrachloroethane	131		11.262				ND	
111 Ethylbenzene	91		11.262				ND	7
112 m-Xylene & p-Xylene	106	11.384	11.378	0.006	94	3668	0.0440	M
113 o-Xylene	106		11.707				ND	7
114 Styrene	104		11.719				ND	
115 Bromoform	173		11.877				ND	
\$ 119 4-Bromofluorobenzene (Surr)	95	12.146	12.146	0.000	90	647208	9.85	
120 1,1,2,2-Tetrachloroethane	83		12.255				ND	
* 134 1,4-Dichlorobenzene-d4	152	13.024	13.024	0.000	96	698991	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

Reagents:

MSV_29_826ISS_00014

Amount Added: 1.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\16334\20201231-19071.b\GD31S23.D

Injection Date: 01-Jan-2021 03:24:30

Instrument ID: 16334

Operator ID: MEC29284

Lims ID: 410-24913-A-4

Lab Sample ID: 410-24913-4

Worklist Smp#: 31

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

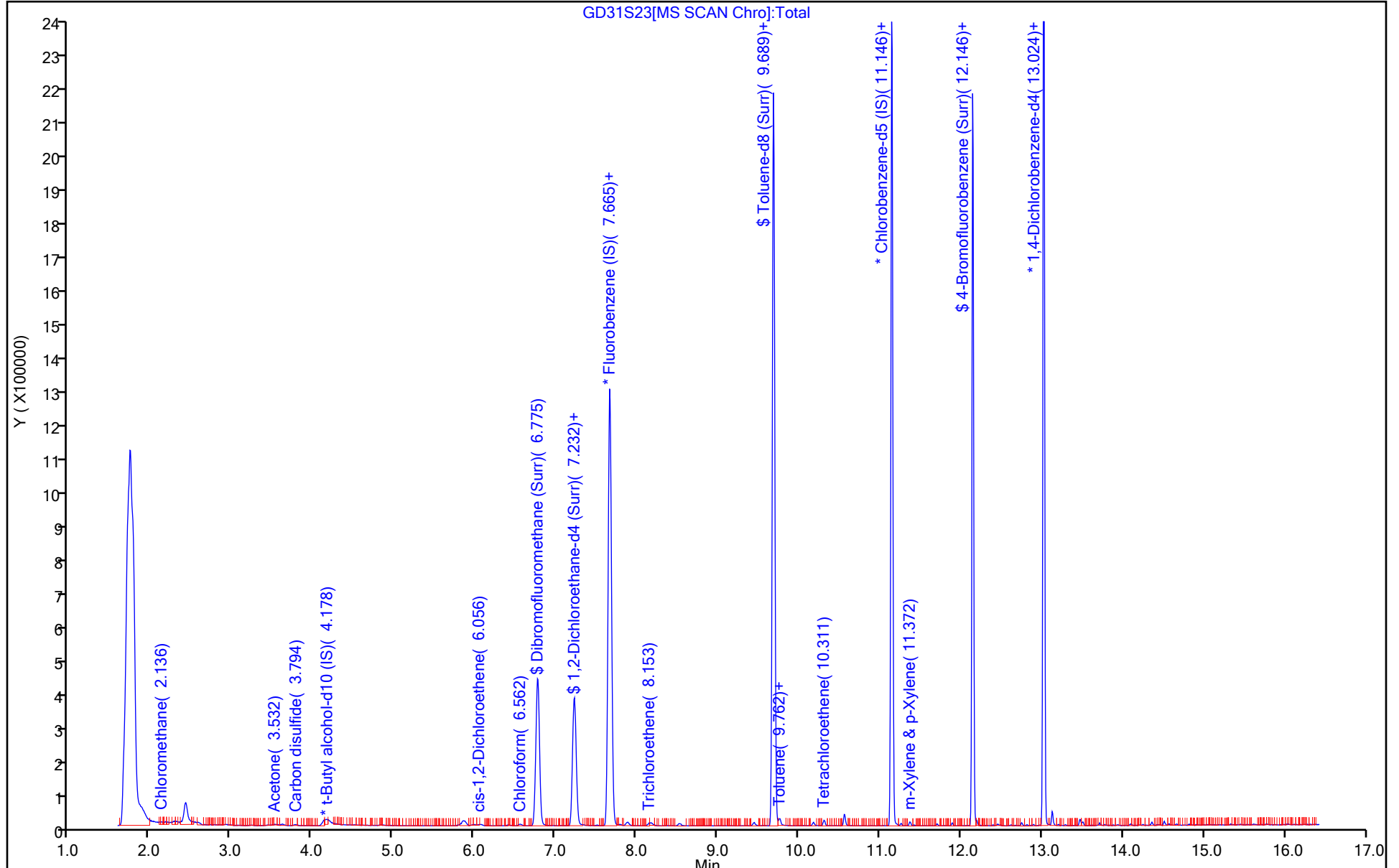
ALS Bottle#: 31

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\20201231-19071.b\GD31S23.D
 Lims ID: 410-24913-A-4
 Client ID: HD-COD-SW-9-0/1-0
 Sample Type: Client
 Inject. Date: 01-Jan-2021 03:24:30 ALS Bottle#: 31 Worklist Smp#: 31
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0019071-031
 Misc. Info.: 410-24913-A-4
 Operator ID: MEC29284 Instrument ID: 16334
 Method: \\chromfs\Lancaster\ChromData\16334\20201231-19071.b\MSV_16334_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 04-Jan-2021 19:42:56 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: CTX1624

First Level Reviewer: campbellme

Date: 04-Jan-2021 19:42:56

Compound	Amount Added	Amount Recovered	% Rec.
\$ 52 Dibromofluoromethane (Surr)	10.0	9.86	98.65
\$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	9.94	99.43
\$ 83 Toluene-d8 (Surr)	10.0	10.1	101.44
\$ 119 4-Bromofluorobenzene (Surr)	10.0	9.85	98.46

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20201231-19071.b\GD31S23.D

Injection Date: 01-Jan-2021 03:24:30

Instrument ID: 16334

Lims ID: 410-24913-A-4

Lab Sample ID: 410-24913-4

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

Operator ID: MEC29284

ALS Bottle#: 31

Worklist Smp#: 31

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

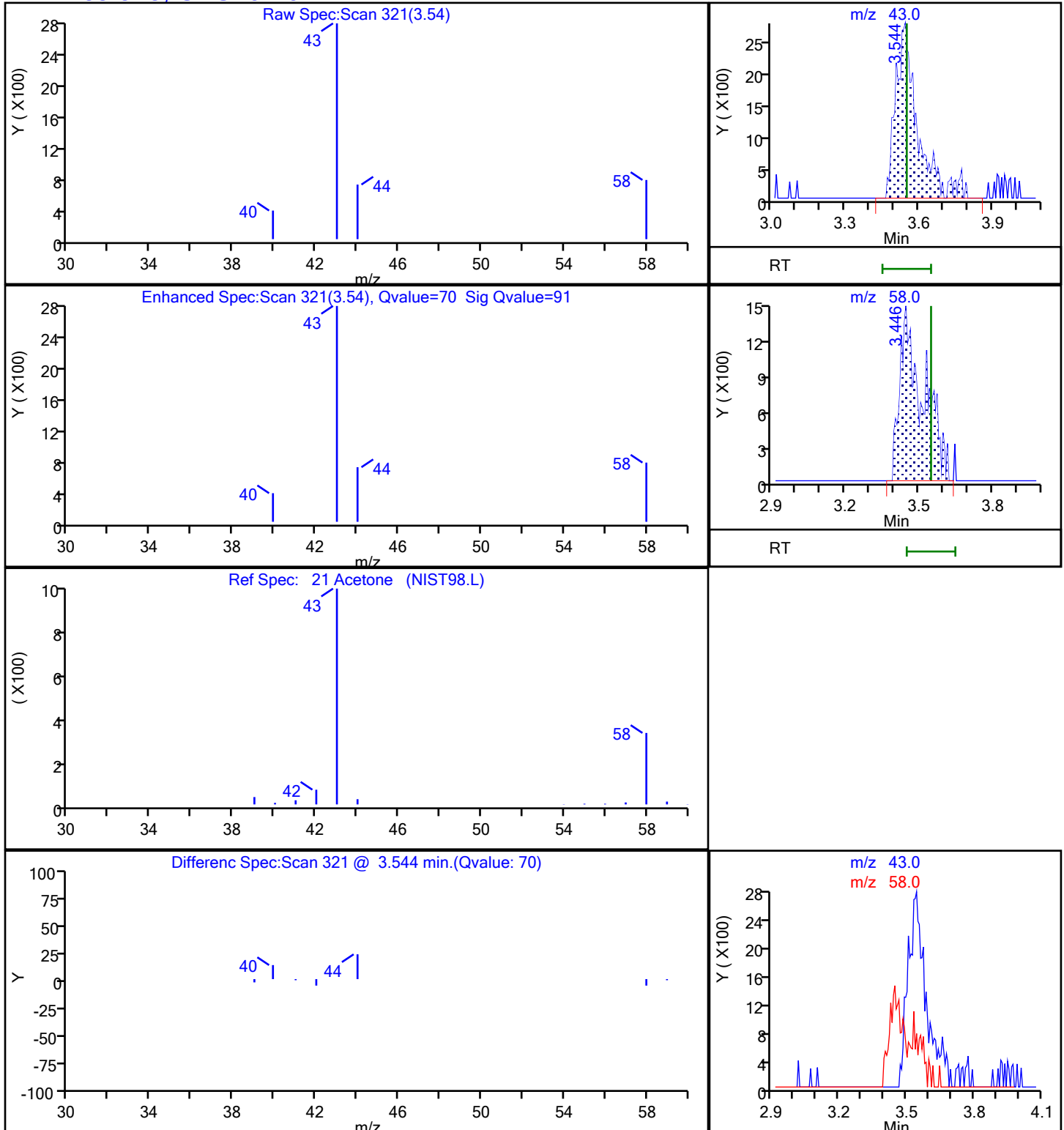
Method: MSV_16334_25mL

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\20201231-19071.b\GD31S23.D

Injection Date: 01-Jan-2021 03:24:30

Instrument ID: 16334

Lims ID: 410-24913-A-4

Lab Sample ID: 410-24913-4

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

Operator ID: MEC29284

ALS Bottle#: 31

Worklist Smp#: 31

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

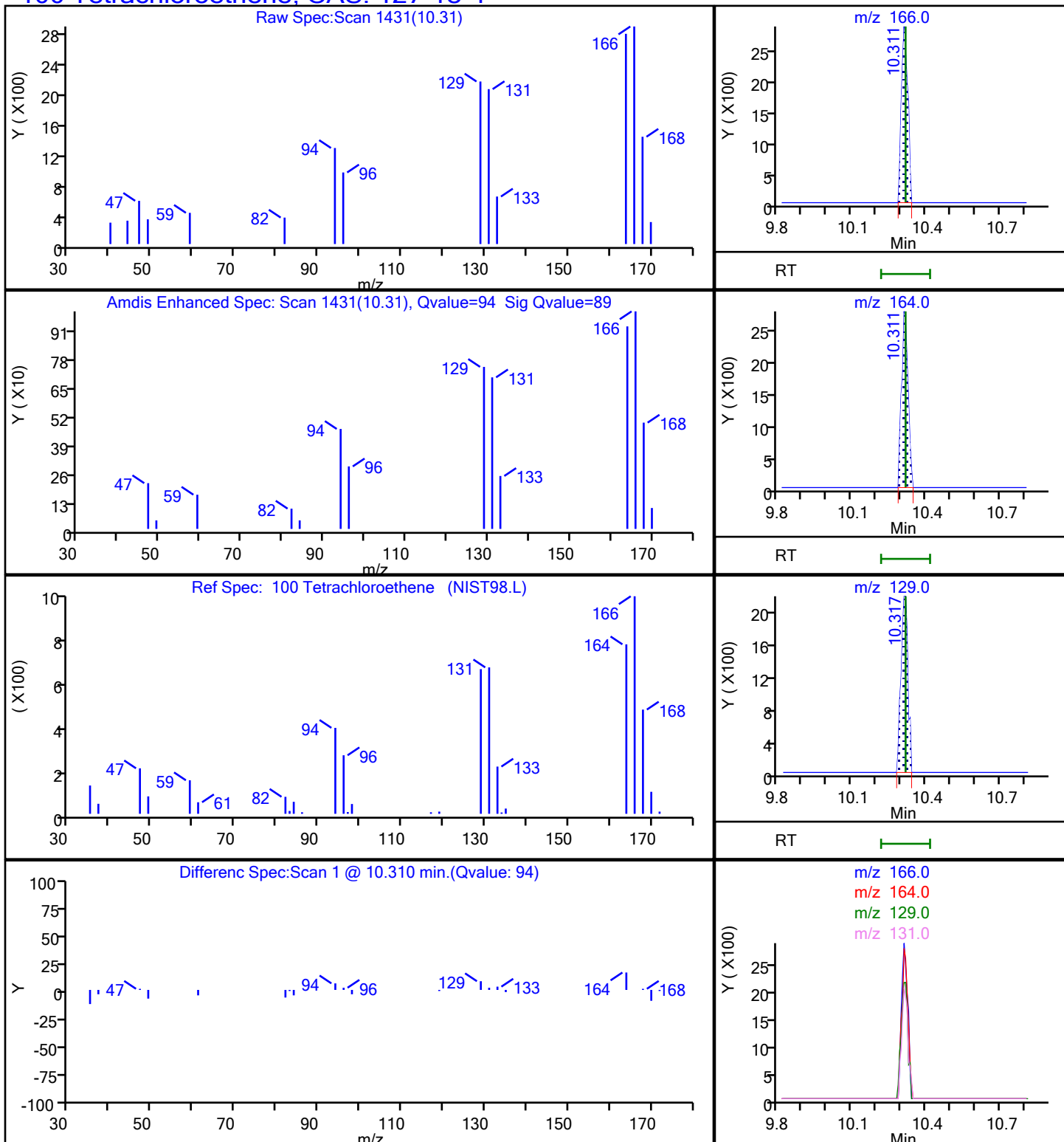
Method: MSV_16334_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) x 30m

MS Quad

100 Tetrachloroethene, CAS: 127-18-4



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20201231-19071.b\GD31S23.D

Injection Date: 01-Jan-2021 03:24:30

Instrument ID: 16334

Lims ID: 410-24913-A-4

Lab Sample ID: 410-24913-4

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

Operator ID: MEC29284

ALS Bottle#: 31

Worklist Smp#: 31

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

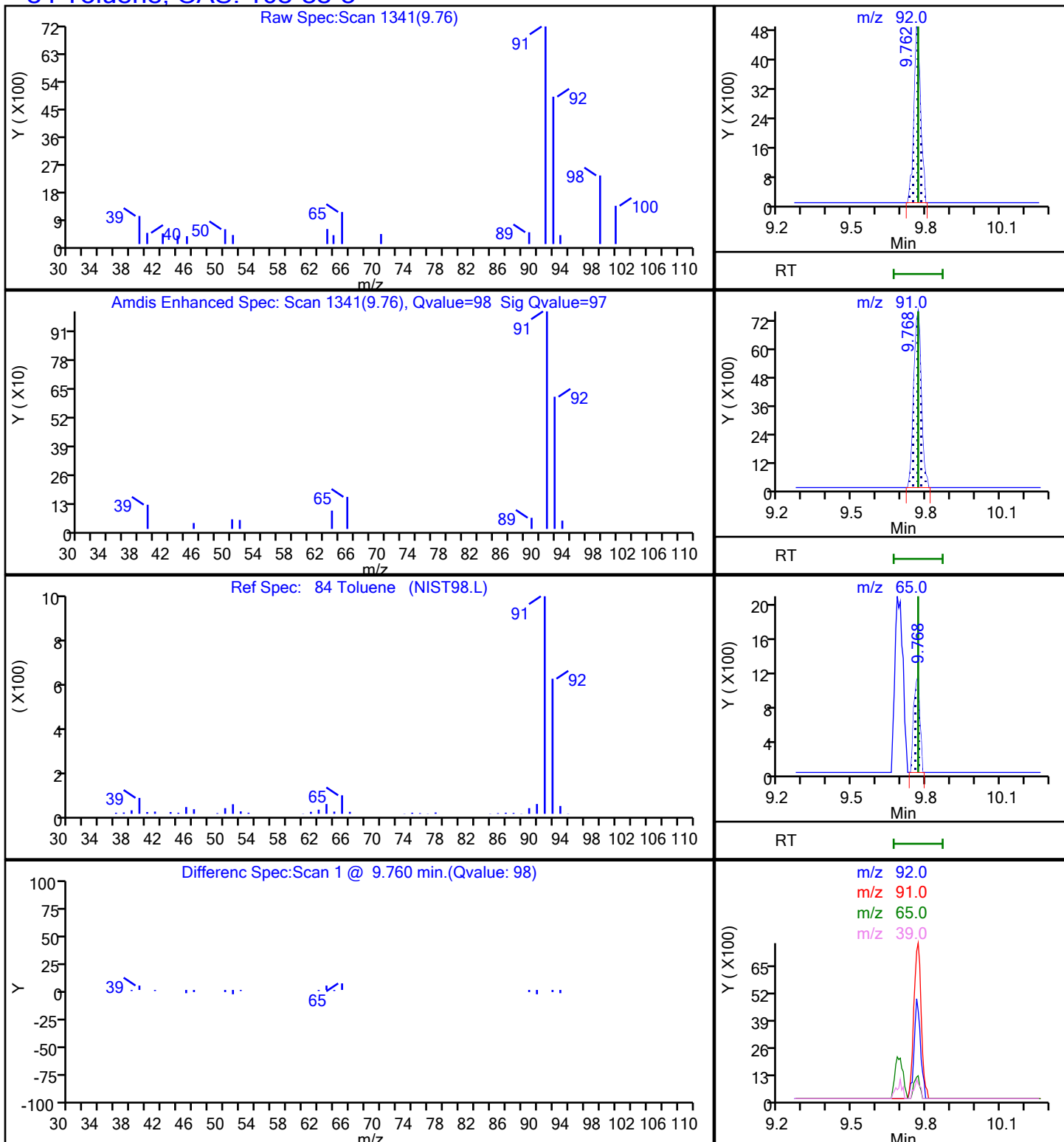
Method: MSV_16334_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

84 Toluene, CAS: 108-88-3



Eurofins Lancaster Laboratories Env, LLC

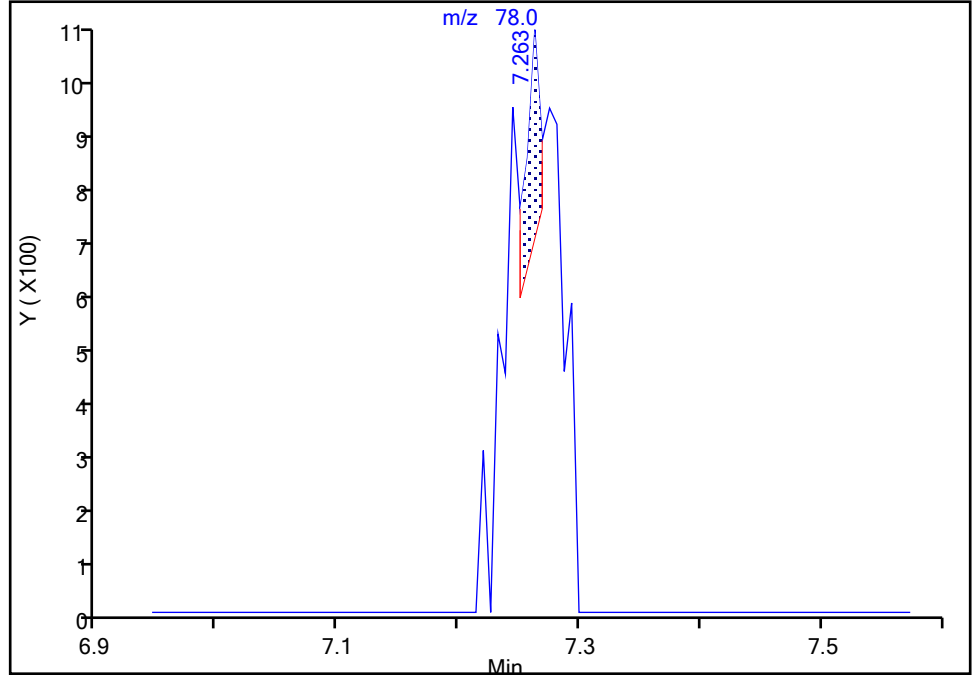
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Injection Date: 01-Jan-2021 03:24:30 Instrument ID: 16334
Lims ID: 410-24913-A-4 Lab Sample ID: 410-24913-4
Client ID: HD-COD-SW-9-0/1-0
Operator ID: MEC29284 ALS Bottle#: 31 Worklist Smp#: 31
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL 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

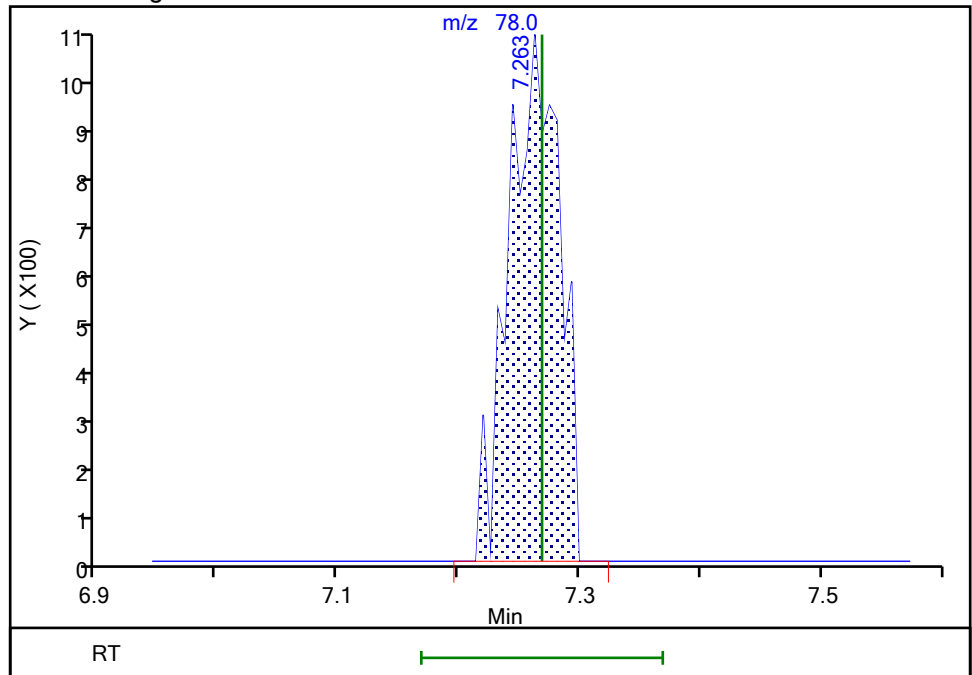
RT: 7.26
Area: 313
Amount: 0.001730
Amount Units: ug/l

Processing Integration Results



RT: 7.26
Area: 3049
Amount: 0.016852
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 04-Jan-2021 19:42:30
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

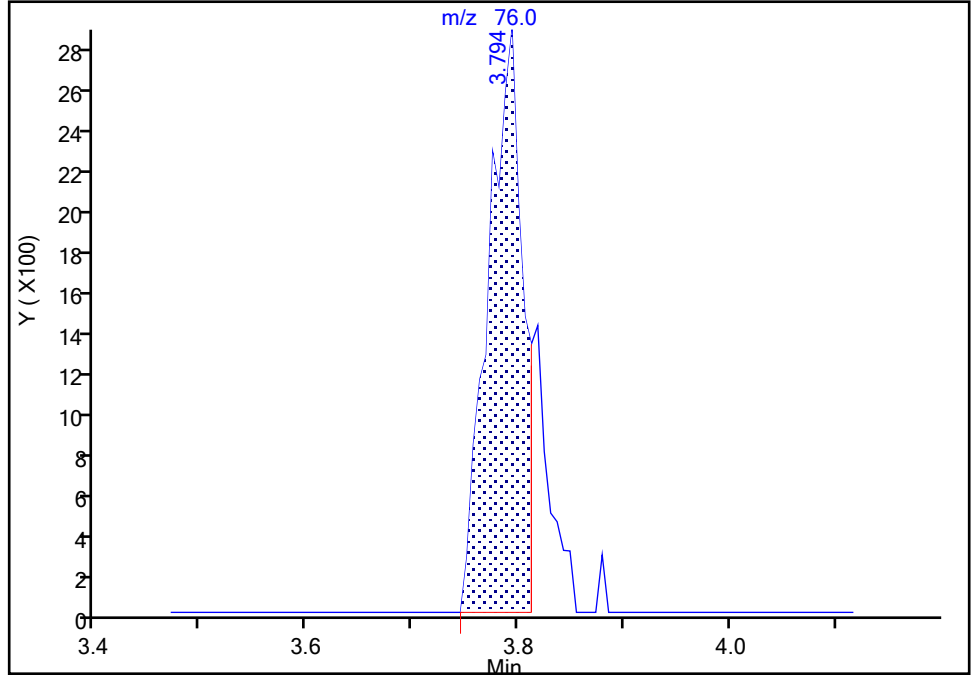
Data File: \\chromfs\Lancaster\ChromData\16334\20201231-19071.b\GD31S23.D
Injection Date: 01-Jan-2021 03:24:30 Instrument ID: 16334
Lims ID: 410-24913-A-4 Lab Sample ID: 410-24913-4
Client ID: HD-COD-SW-9-0/1-0
Operator ID: MEC29284 ALS Bottle#: 31 Worklist Smp#: 31
Purge Vol: 25.000 mL Dil. Factor: 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

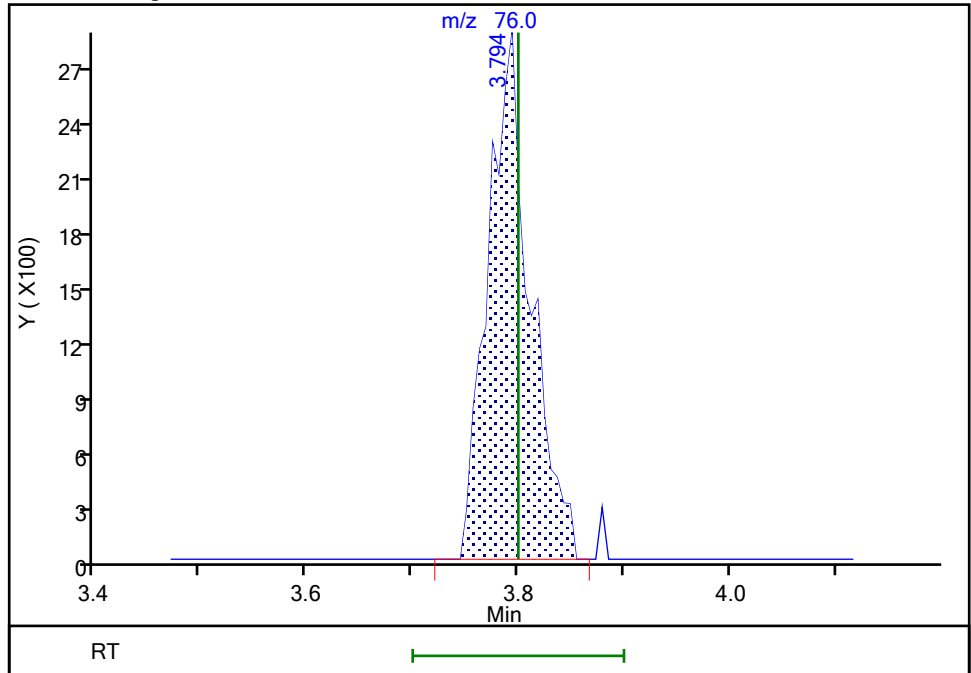
RT: 3.79
Area: 6627
Amount: 0.048491
Amount Units: ug/l

Processing Integration Results



RT: 3.79
Area: 8002
Amount: 0.058553
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 04-Jan-2021 19:42:19
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

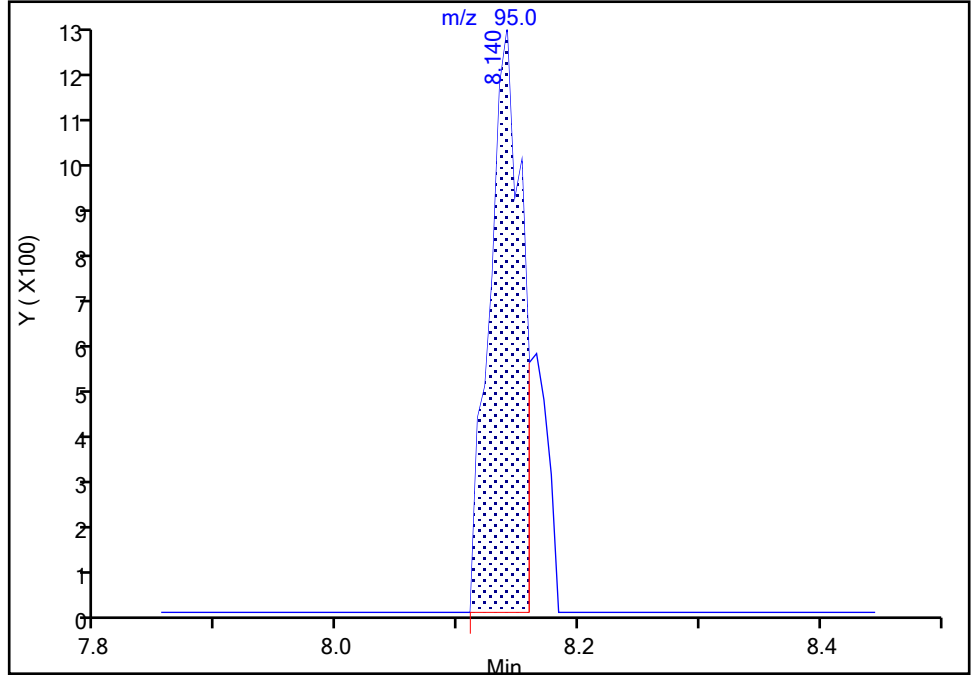
Data File: \\chromfs\Lancaster\ChromData\16334\20201231-19071.b\GD31S23.D
Injection Date: 01-Jan-2021 03:24:30 Instrument ID: 16334
Lims ID: 410-24913-A-4 Lab Sample ID: 410-24913-4
Client ID: HD-COD-SW-9-0/1-0
Operator ID: MEC29284 ALS Bottle#: 31 Worklist Smp#: 31
Purge Vol: 25.000 mL Dil. Factor: 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

Signal: 1

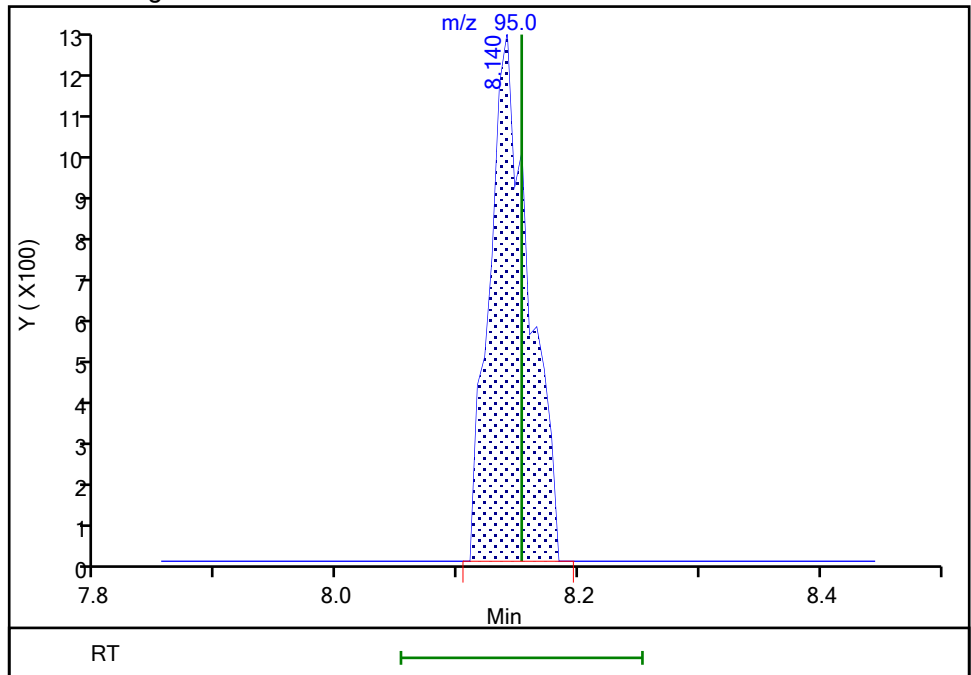
RT: 8.14
Area: 2261
Amount: 0.048940
Amount Units: ug/l

Processing Integration Results



RT: 8.14
Area: 2724
Amount: 0.058962
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 04-Jan-2021 19:42:37
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration
Page 347 of 966

Eurofins Lancaster Laboratories Env, LLC

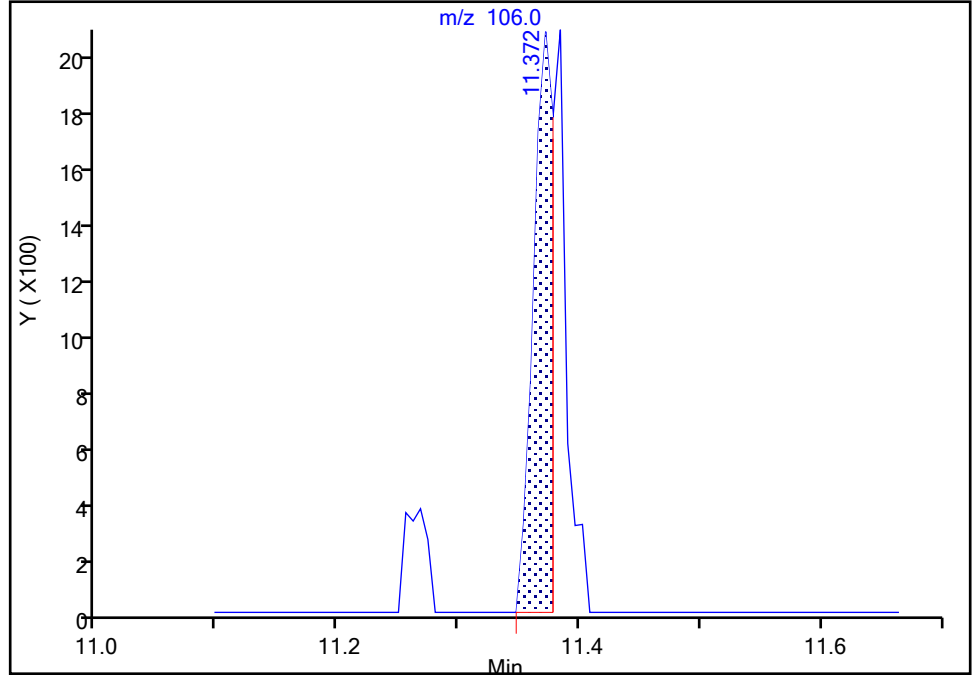
Data File: \\chromfs\Lancaster\ChromData\16334\20201231-19071.b\GD31S23.D
Injection Date: 01-Jan-2021 03:24:30 Instrument ID: 16334
Lims ID: 410-24913-A-4 Lab Sample ID: 410-24913-4
Client ID: HD-COD-SW-9-0/1-0
Operator ID: MEC29284 ALS Bottle#: 31 Worklist Smp#: 31
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

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

Signal: 1

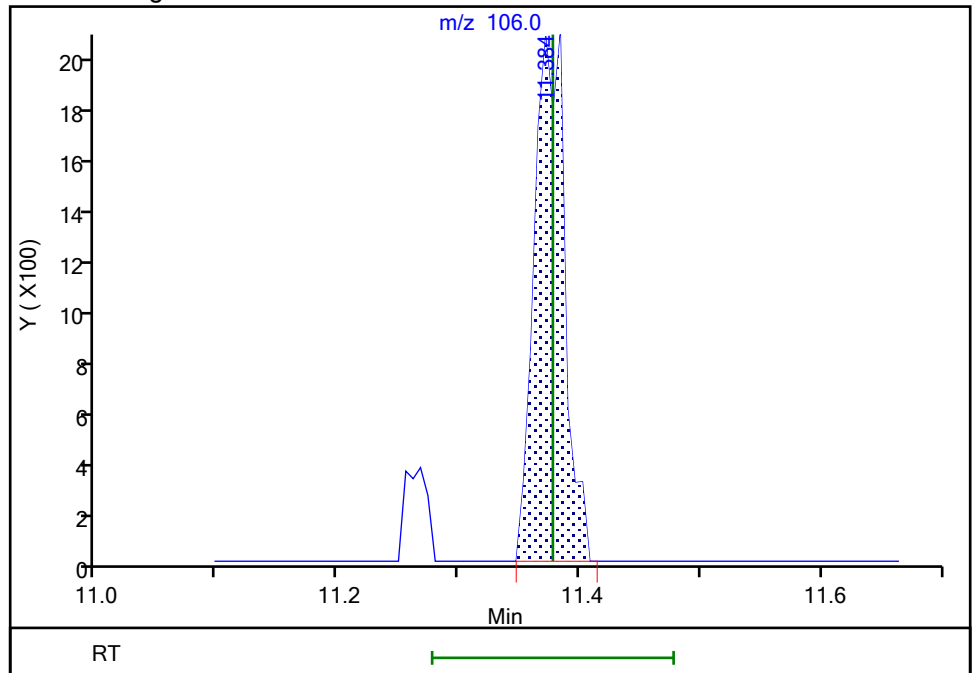
RT: 11.37
Area: 2459
Amount: 0.029529
Amount Units: ug/l

Processing Integration Results



RT: 11.38
Area: 3668
Amount: 0.044047
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 04-Jan-2021 19:42:48
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-24913-1
 SDG No.: _____
 Client Sample ID: HD-COD-SW-13-0/1-0 Lab Sample ID: 410-24913-5
 Matrix: Water Lab File ID: HJ05S06.D
 Analysis Method: 8260D Date Collected: 12/23/2020 09:55
 Sample wt/vol: 25 (mL) Date Analyzed: 01/05/2021 13:17
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: R-624SilMS 30m ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 82059 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	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	0.078	J	0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.050
124-48-1	Dibromochloromethane	ND		0.50	0.070
100-41-4	Ethylbenzene	ND		0.50	0.060
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.050
75-09-2	Methylene Chloride	ND		0.50	0.070
100-42-5	Styrene	ND		0.50	0.050
127-18-4	Tetrachloroethene	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	0.069	J	0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-24913-1
 SDG No.: _____
 Client Sample ID: HD-COD-SW-13-0/1-0 Lab Sample ID: 410-24913-5
 Matrix: Water Lab File ID: HJ05S06.D
 Analysis Method: 8260D Date Collected: 12/23/2020 09:55
 Sample wt/vol: 25 (mL) Date Analyzed: 01/05/2021 13:17
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: R-624SilMS 30m ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 82059 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)	98		80-120
1868-53-7	Dibromofluoromethane (Surr)	103		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\19094\20210105-19216.b\HJ05S06.D
 Lims ID: 410-24913-A-5
 Client ID: HD-COD-SW-13-0/1-0
 Sample Type: Client
 Inject. Date: 05-Jan-2021 13:17:30 ALS Bottle#: 12 Worklist Smp#: 13
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0019216-013
 Operator ID: jkh09052 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20210105-19216.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 06-Jan-2021 09:45:05 Calib Date: 04-Jan-2021 18:39:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20210104-19149.b\Hj04I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1619

First Level Reviewer: spositok

Date: 06-Jan-2021 09:44:19

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
6 Chloromethane	50		2.282				ND	U
7 Vinyl chloride	62		2.410				ND	
9 Bromomethane	94		2.745				ND	
10 Chloroethane	64		2.843				ND	
18 1,1-Dichloroethene	96		3.751				ND	
19 Acetone	43	3.788	3.782	0.006	68	8934	1.48	
24 Carbon disulfide	76		4.074				ND	U
29 Methylene Chloride	84		4.452				ND	7
* 28 t-Butyl alcohol-d10 (IS)	65	4.458	4.458	0.000	0	95248	50.0	
32 Methyl tert-butyl ether	73		4.867				ND	
33 trans-1,2-Dichloroethene	96		4.885				ND	
35 1,1-Dichloroethane	63		5.537				ND	
41 2-Butanone (MEK)	43		6.312				ND	7
42 cis-1,2-Dichloroethene	96	6.348	6.360	-0.012	80	3851	0.0780	
48 Chlorobromomethane	128		6.696				ND	
50 Chloroform	83		6.842				ND	U
\$ 51 Dibromofluoromethane (Surr)	113	7.049	7.061	-0.012	93	403936	10.3	
52 1,1,1-Trichloroethane	97		7.074				ND	
56 Carbon tetrachloride	117		7.287				ND	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.500	7.512	-0.012	0	82925	10.4	
59 Benzene	78		7.543				ND	7
60 1,2-Dichloroethane	62		7.616				ND	U
* 65 Fluorobenzene (IS)	96	7.939	7.945	-0.006	98	1604072	10.0	
67 Trichloroethene	95	8.415	8.427	-0.012	91	3319	0.0689	
70 1,2-Dichloropropane	63		8.762				ND	
75 Dichlorobromomethane	83		9.104				ND	
80 cis-1,3-Dichloropropene	75		9.628				ND	
81 4-Methyl-2-pentanone (MIBK)	43		9.793				ND	7
\$ 82 Toluene-d8 (Surr)	98	9.927	9.933	-0.006	94	1561004	9.93	
83 Toluene	92	10.006	10.006	0.000	96	6057	0.0515	
85 trans-1,3-Dichloropropene	75		10.256				ND	
87 1,1,2-Trichloroethane	97		10.457				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
88 Tetrachloroethene	166	10.548	10.548	0.000	91	2528	0.0504	
91 2-Hexanone	43		10.658				ND	
93 Chlorodibromomethane	129		10.829				ND	
94 Ethylene Dibromide	107		10.945				ND	
S 95 Xylenes, Total	106		11.245				ND	7
* 97 Chlorobenzene-d5 (IS)	117	11.365	11.365	0.000	87	1147596	10.0	
98 Chlorobenzene	112		11.396				ND	
100 Ethylbenzene	91		11.475				ND	7
99 1,1,1,2-Tetrachloroethane	131		11.475				ND	
101 m-Xylene & p-Xylene	106		11.591				ND	7
102 o-Xylene	106		11.920				ND	7
103 Styrene	104		11.932				ND	7
104 Bromoform	173		12.097				ND	
\$ 108 4-Bromofluorobenzene (Surr)	95	12.359	12.359	0.000	90	549089	9.75	
109 1,1,2,2-Tetrachloroethane	83		12.457				ND	
* 124 1,4-Dichlorobenzene-d4	152	13.237	13.237	0.000	96	580346	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

MSV_30_826ISS_00006

Amount Added: 5.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19094\20210105-19216.b\HJ05S06.D

Injection Date: 05-Jan-2021 13:17:30

Instrument ID: 19094

Operator ID: jkh09052

Lims ID: 410-24913-A-5

Lab Sample ID: 410-24913-5

Worklist Smp#: 13

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

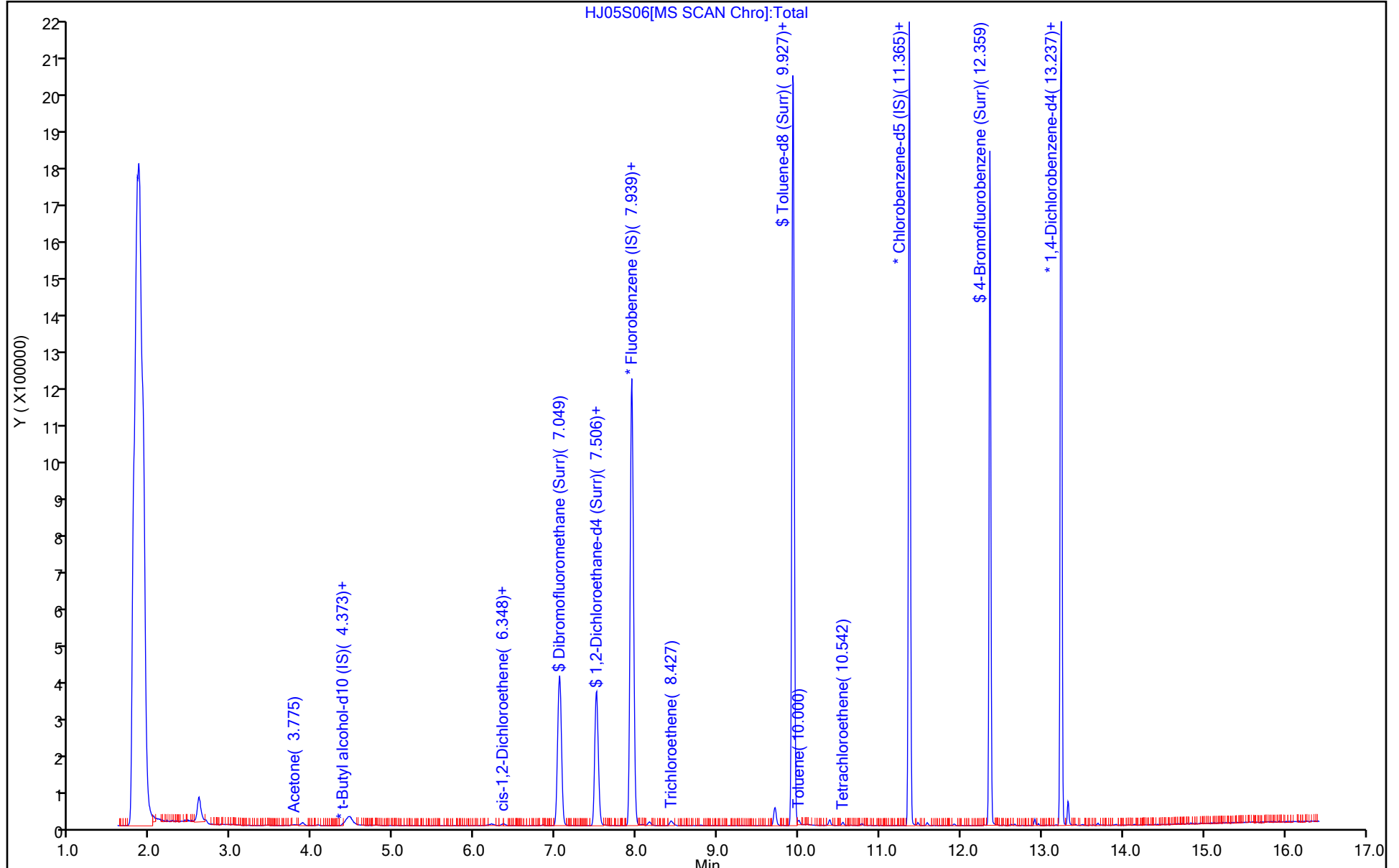
ALS Bottle#: 12

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20210105-19216.b\HJ05S06.D
 Lims ID: 410-24913-A-5
 Client ID: HD-COD-SW-13-0/1-0
 Sample Type: Client
 Inject. Date: 05-Jan-2021 13:17:30 ALS Bottle#: 12 Worklist Smp#: 13
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0019216-013
 Operator ID: jkh09052 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20210105-19216.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 06-Jan-2021 09:45:05 Calib Date: 04-Jan-2021 18:39:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20210104-19149.b\Hj04I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1619

First Level Reviewer: spositok

Date: 06-Jan-2021 09:44:19

Compound	Amount Added	Amount Recovered	% Rec.
\$ 51 Dibromofluoromethane (Surr)	10.0	10.3	103.05
\$ 58 1,2-Dichloroethane-d4 (Surr)	10.0	10.4	103.57
\$ 82 Toluene-d8 (Surr)	10.0	9.93	99.30
\$ 108 4-Bromofluorobenzene (Surr)	10.0	9.75	97.54

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20210105-19216.b\HJ05S06.D

Injection Date: 05-Jan-2021 13:17:30

Instrument ID: 19094

Lims ID: 410-24913-A-5

Lab Sample ID: 410-24913-5

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

Operator ID: jkh09052

ALS Bottle#: 12

Worklist Smp#: 13

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

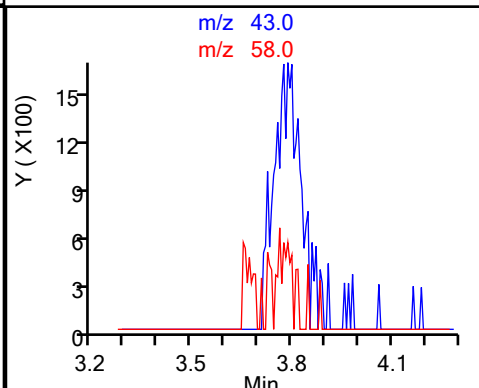
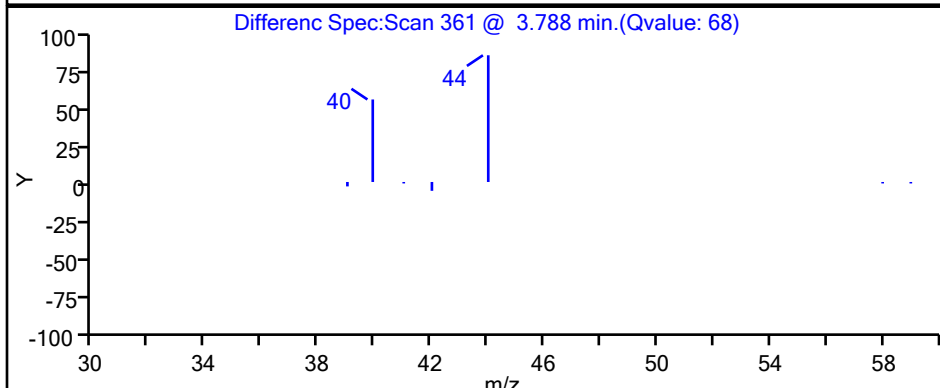
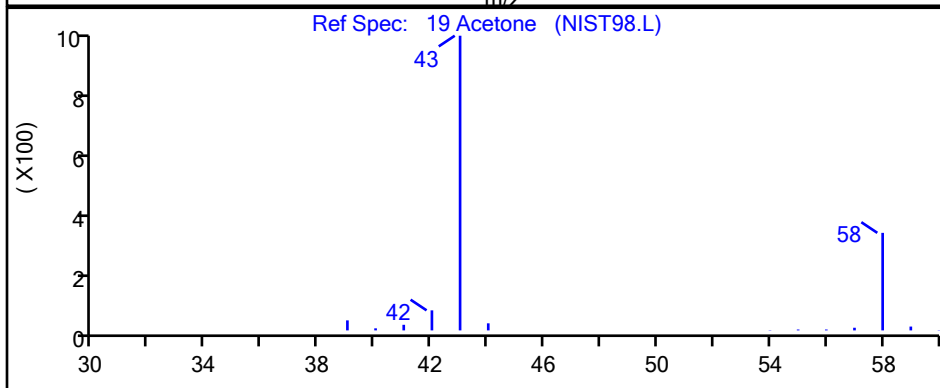
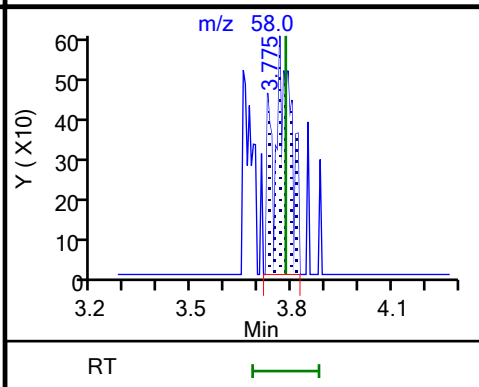
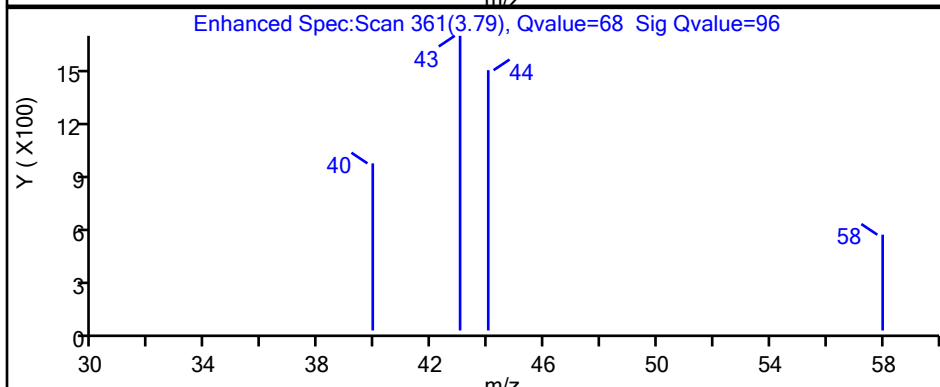
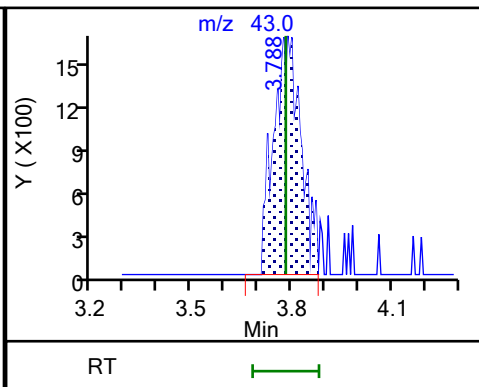
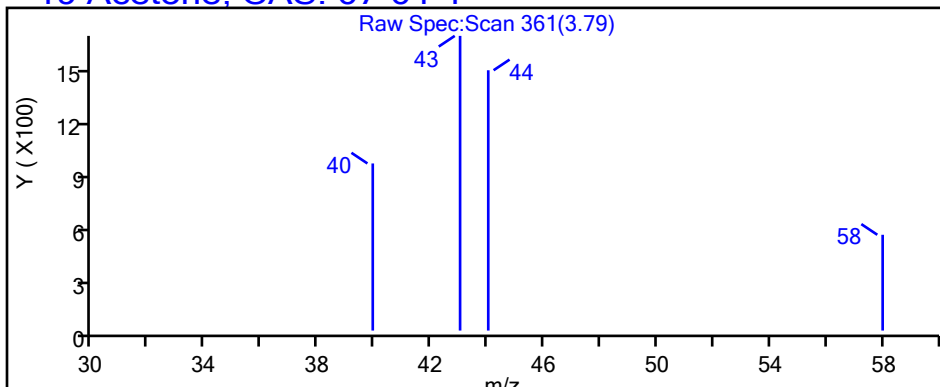
Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) x 30m

MS Quad

19 Acetone, CAS: 67-64-1



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20210105-19216.b\HJ05S06.D

Injection Date: 05-Jan-2021 13:17:30

Instrument ID: 19094

Lims ID: 410-24913-A-5

Lab Sample ID: 410-24913-5

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

Operator ID: jkh09052

ALS Bottle#: 12

Worklist Smp#: 13

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

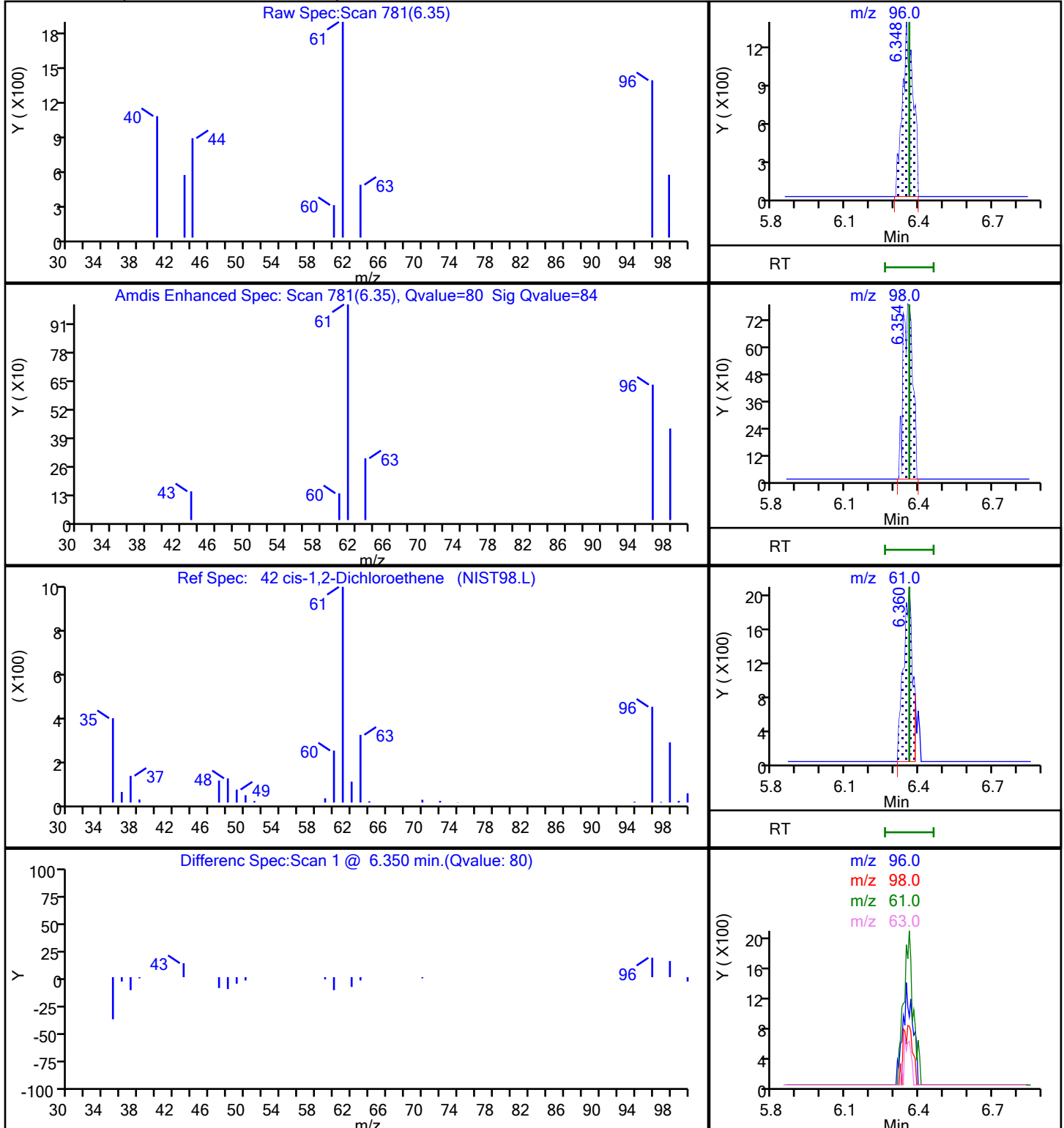
Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

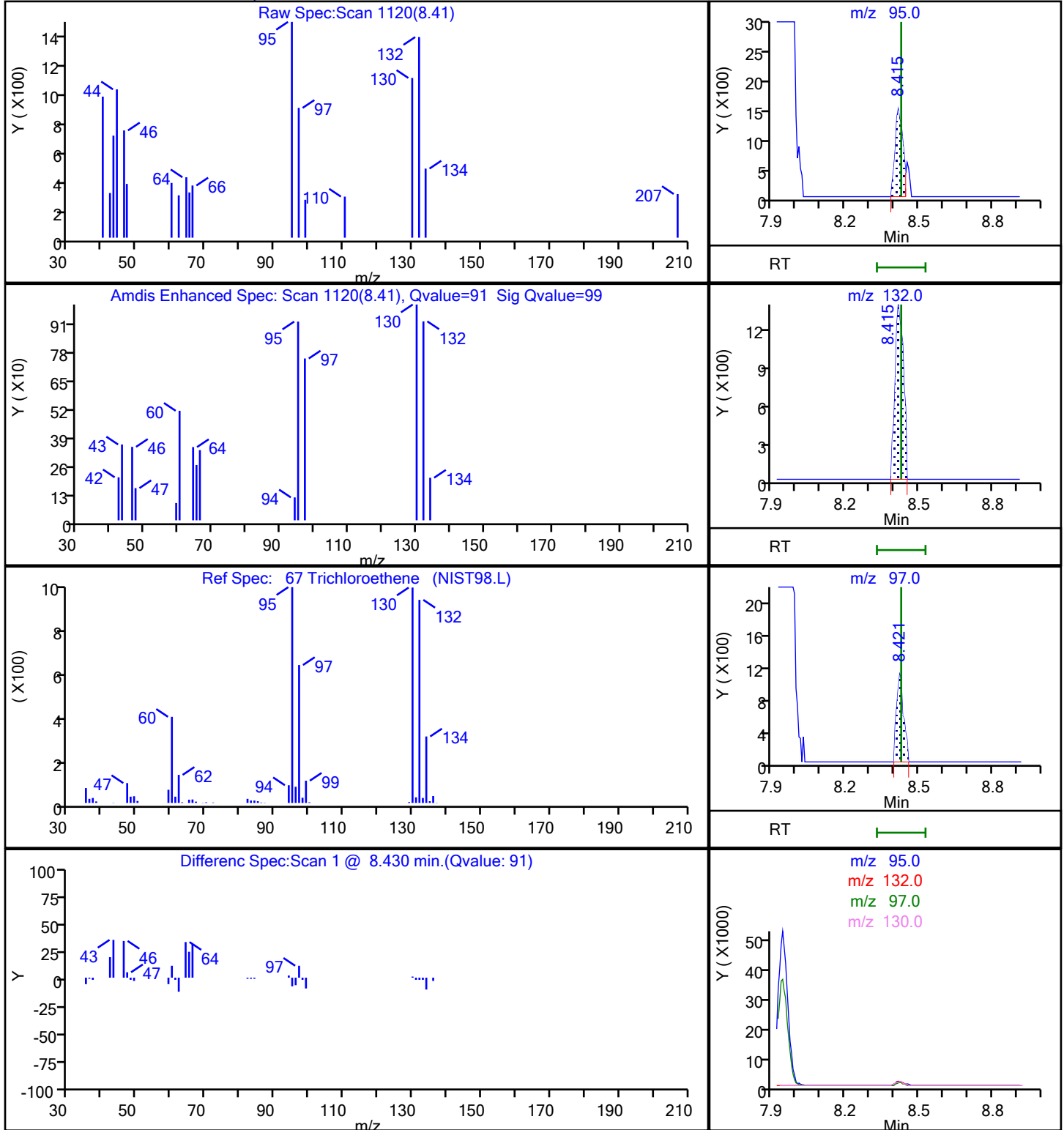
42 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20210105-19216.b\HJ05S06.D
Injection Date: 05-Jan-2021 13:17:30 Instrument ID: 19094
Lims ID: 410-24913-A-5 Lab Sample ID: 410-24913-5
Client ID: HD-COD-SW-13-0/1-0
Operator ID: jkh09052 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm i.d.) MS Quad

67 Trichloroethene, CAS: 79-01-6

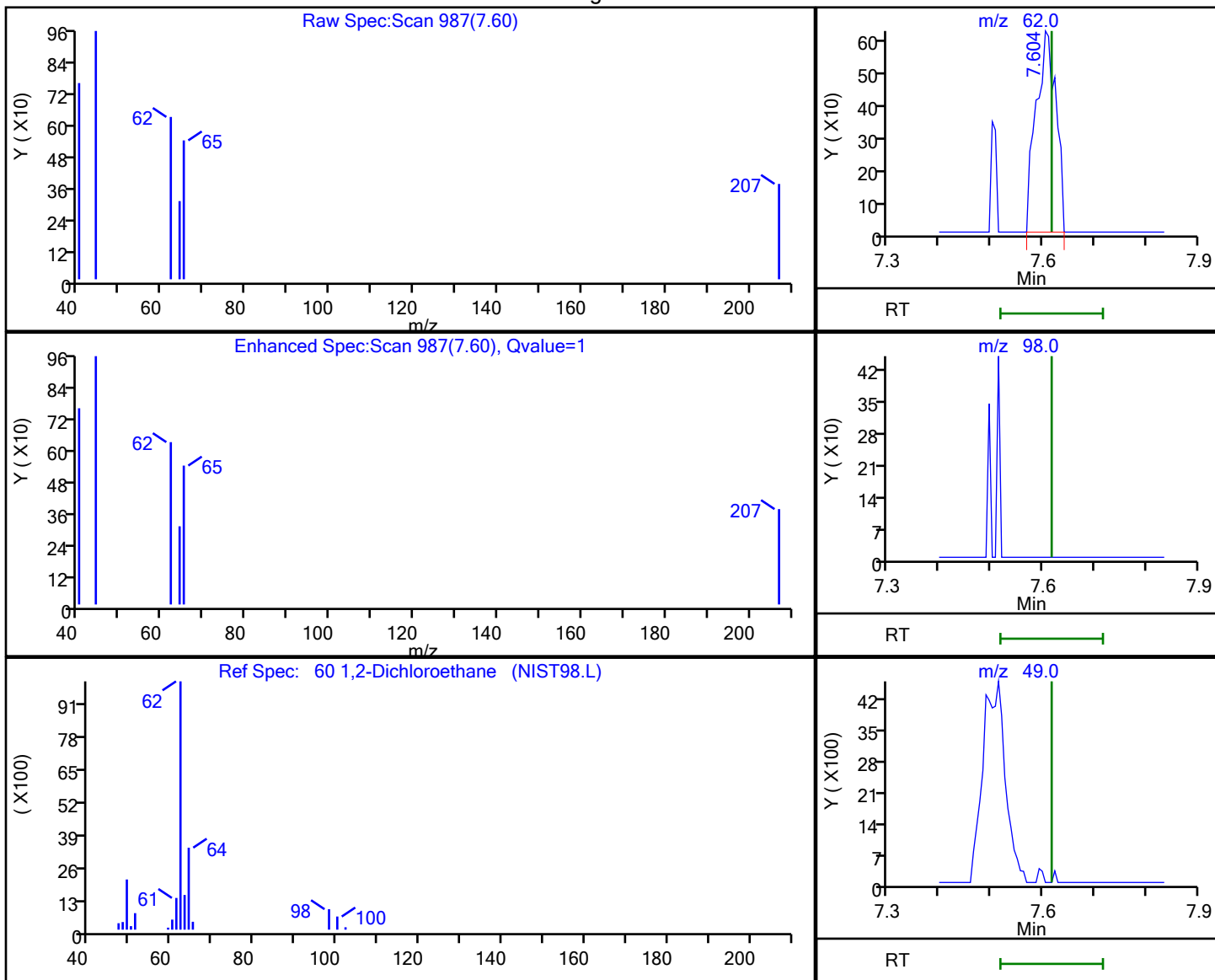


Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20210105-19216.b\HJ05S06.D
Injection Date: 05-Jan-2021 13:17:30 Instrument ID: 19094
Lims ID: 410-24913-A-5 Lab Sample ID: 410-24913-5
Client ID: HD-COD-SW-13-0/1-0
Operator ID: jkh09052 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

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

Processing Results



RT	Mass	Response	Amount
7.60	62.00	1673	0.032386
7.62	98.00	0	
7.62	49.00	0	

Reviewer: spositok, 06-Jan-2021 09:44:03

Audit Action: Marked Compound Undetected

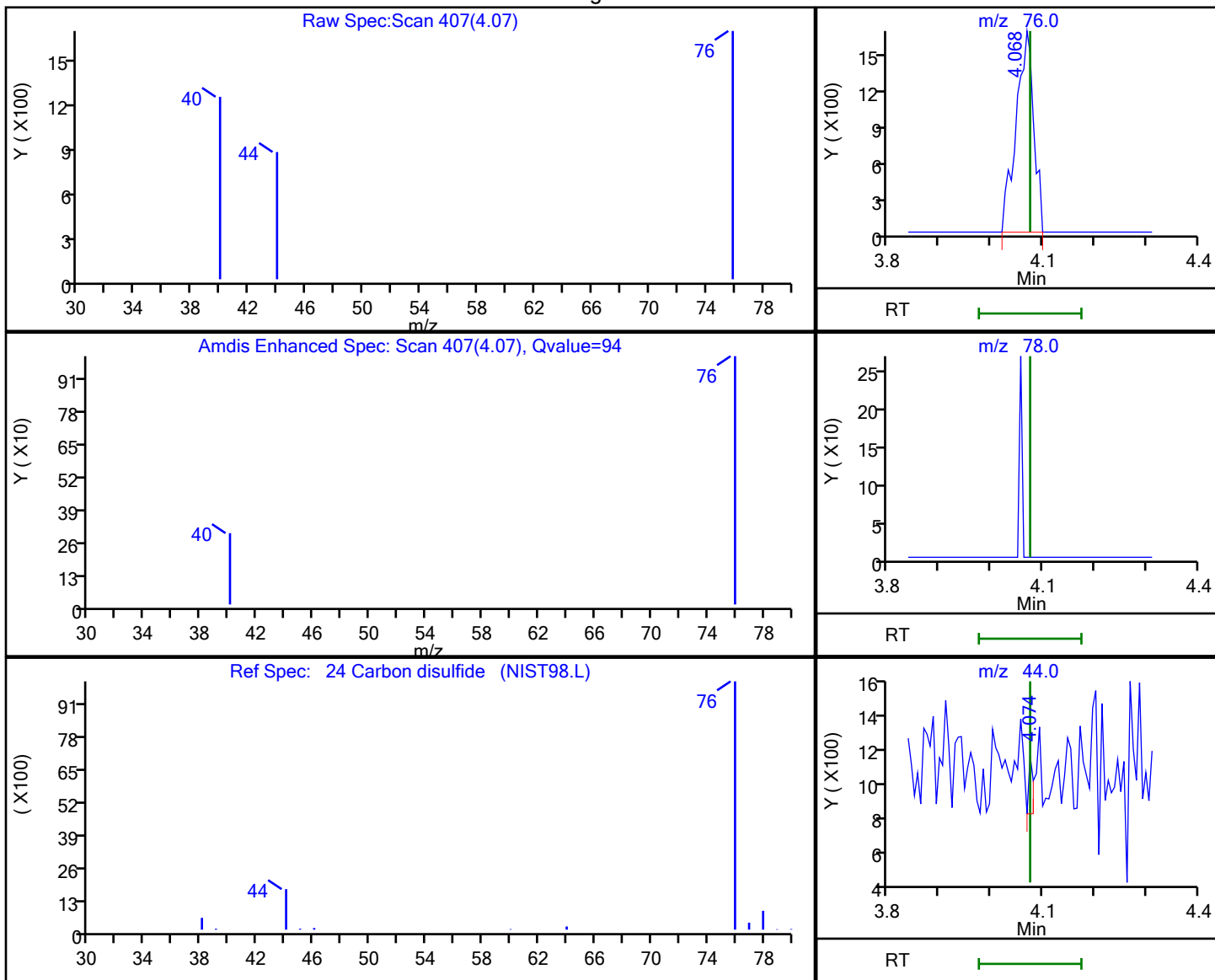
Audit Reason: Invalid Compound ID

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20210105-19216.b\HJ05S06.D
Injection Date: 05-Jan-2021 13:17:30 Instrument ID: 19094
Lims ID: 410-24913-A-5 Lab Sample ID: 410-24913-5
Client ID: HD-COD-SW-13-0/1-0
Operator ID: jkh09052 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

24 Carbon disulfide, CAS: 75-15-0

Processing Results



RT	Mass	Response	Amount
4.07	76.00	3862	0.032805
4.07	78.00	0	
4.07	44.00	183	

Reviewer: spositok, 06-Jan-2021 09:43:50

Audit Action: Marked Compound Undetected

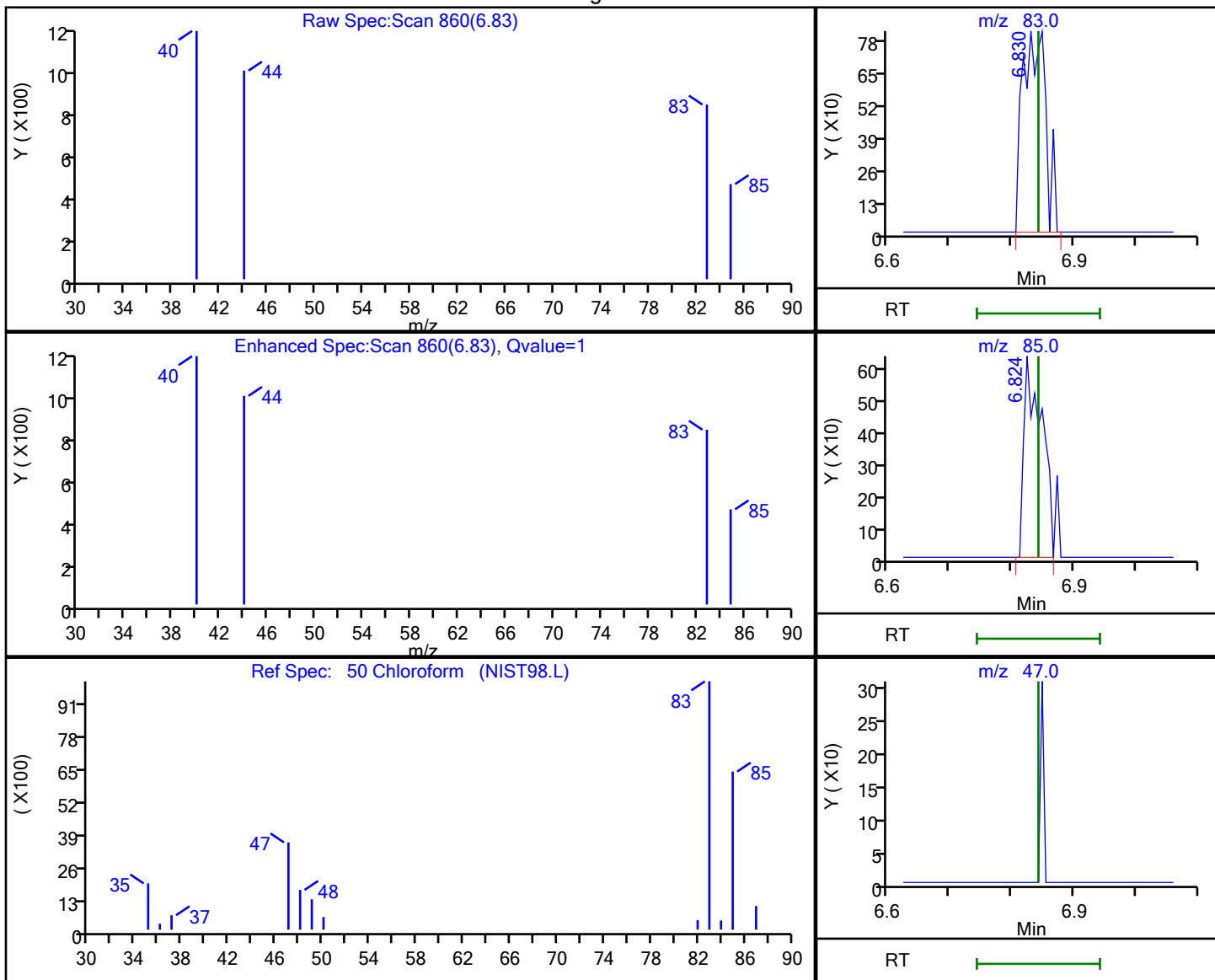
Audit Reason: Invalid Compound ID

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20210105-19216.b\HJ05S06.D
 Injection Date: 05-Jan-2021 13:17:30 Instrument ID: 19094
 Lims ID: 410-24913-A-5 Lab Sample ID: 410-24913-5
 Client ID: HD-COD-SW-13-0/1-0
 Operator ID: jkh09052 ALS Bottle#: 12 Worklist Smp#: 13
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
 Column: Rxi-624Sil MS Capillary Column (0.25mm i.d.) Detector: MS Quad

50 Chloroform, CAS: 67-66-3

Processing Results



RT	Mass	Response	Amount
6.83	83.00	2130	0.026212
6.82	85.00	1285	
6.84	47.00	0	

Reviewer: spositok, 06-Jan-2021 09:43:59

Audit Action: Marked Compound Undetected

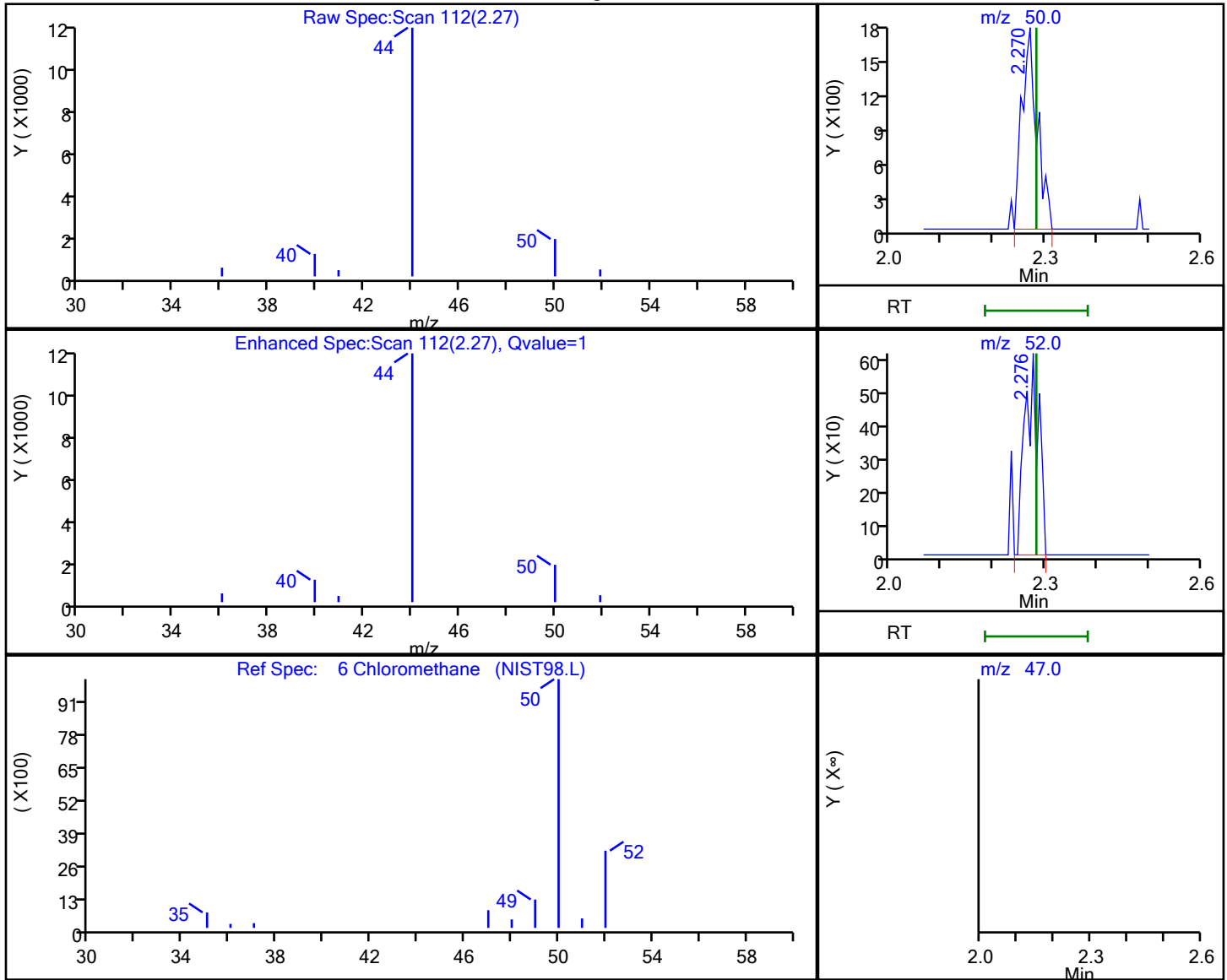
Audit Reason: Invalid Compound ID

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20210105-19216.b\HJ05S06.D
 Injection Date: 05-Jan-2021 13:17:30 Instrument ID: 19094
 Lims ID: 410-24913-A-5 Lab Sample ID: 410-24913-5
 Client ID: HD-COD-SW-13-0/1-0
 Operator ID: jkh09052 ALS Bottle#: 12 Worklist Smp#: 13
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
 Column: Rxi-624Sil MS Capillary Column (0.25mm i.d.) Detector: MS Quad

6 Chloromethane, CAS: 74-87-3

Processing Results



RT	Mass	Response	Amount
2.27	50.00	3671	0.051534
2.28	52.00	1135	
2.28	47.00	0	

Reviewer: spositok, 06-Jan-2021 09:43:44

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-24913-1
 SDG No.: _____
 Client Sample ID: HD-COD-SW-15-0/1-0 Lab Sample ID: 410-24913-6
 Matrix: Water Lab File ID: GJ04S08.D
 Analysis Method: 8260D Date Collected: 12/23/2020 11:45
 Sample wt/vol: 25 (mL) Date Analyzed: 01/05/2021 00:42
 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.: 81892 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	0.15	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	0.10	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	0.24	J	0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	0.84		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	2.8		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 Env Job No.: 410-24913-1
 SDG No.: _____
 Client Sample ID: HD-COD-SW-15-0/1-0 Lab Sample ID: 410-24913-6
 Matrix: Water Lab File ID: GJ04S08.D
 Analysis Method: 8260D Date Collected: 12/23/2020 11:45
 Sample wt/vol: 25 (mL) Date Analyzed: 01/05/2021 00:42
 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.: 81892 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)	96		80-120
1868-53-7	Dibromofluoromethane (Surr)	99		80-120
2037-26-5	Toluene-d8 (Surr)	98		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20210104-19179.b\GJ04S08.D
 Lims ID: 410-24913-A-6
 Client ID: HD-COD-SW-15-0/1-0
 Sample Type: Client
 Inject. Date: 05-Jan-2021 00:42:30 ALS Bottle#: 17 Worklist Smp#: 18
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0019179-018
 Misc. Info.: 410-24913-A-6
 Operator ID: MEC29284 Instrument ID: 16334
 Method: \\chromfs\Lancaster\ChromData\16334\20210104-19179.b\MSV_16334_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 05-Jan-2021 09:14:42 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: CTX1665

First Level Reviewer: howej

Date: 05-Jan-2021 08:57:29

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116		1.885				ND	
2 Dichlorodifluoromethane	85		1.946				ND	
3 Chlorodifluoromethane	51		1.959				ND	7
4 Dimethyl ether	45		2.032				ND	7
5 Chloromethane	50		2.141				ND	
6 2-Chloro-1,1,1-Trifluoroethane	118		2.233				ND	
8 Vinyl chloride	62		2.257				ND	
7 Butadiene	39		2.257				ND	7
9 Bromomethane	94		2.587				ND	
10 Chloroethane	64		2.666				ND	
T 11 Vinyl bromide TIC	106		2.830				ND	
12 Dichlorofluoromethane	67		2.904				ND	7
13 Trichlorofluoromethane	101		2.971				ND	
14 Ethanol	45		3.111				ND	
15 Ethyl ether	59		3.202				ND	
T 16 Ethanol TIC	45		3.215				ND	7
17 1,2-Dichloro-1,1,2-trifluoroethane	67		3.294				ND	
18 Acrolein	56		3.379				ND	
19 1,1-Dichloroethene	96	3.495	3.507	-0.012	94	4332	0.1003	
20 112TCTFE	101		3.550				ND	
21 Acetone	43		3.550				ND	7
23 Iodomethane	142		3.702				ND	
22 Isopropyl alcohol	45		3.714				ND	
24 Ethyl bromide	108		3.733				ND	
25 Carbon disulfide	76		3.800				ND	
26 Acetonitrile	41		3.940				ND	
27 Methyl acetate	43		3.958				ND	
28 3-Chloro-1-propene	41		3.983				ND	
29 Methylene Chloride	84		4.172				ND	
* 30 t-Butyl alcohol-d10 (IS)	65	4.184	4.190	-0.006	0	142547	50.0	
31 2-Methyl-2-propanol	59		4.318				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
32 Acrylonitrile	53		4.513				ND	
33 Methyl tert-butyl ether	73	4.562	4.568	-0.006	22	5645	0.0411	
34 trans-1,2-Dichloroethene	96		4.574				ND	
35 Hexane	57		5.001				ND	
36 Vinyl acetate	43		5.233				ND	
37 1,1-Dichloroethane	63		5.245				ND	
38 Isopropyl ether	45		5.305				ND	
39 2-Chloro-1,3-butadiene	53		5.354				ND	
40 Tert-butyl ethyl ether	59		5.836				ND	7
41 2-Butanone (MEK)	43		6.043				ND	
42 cis-1,2-Dichloroethene	96	6.074	6.080	-0.006	78	46907	0.8405	
43 2,2-Dichloropropane	77		6.098				ND	
44 Ethyl acetate	43		6.104				ND	
45 Propionitrile	54		6.141				ND	
S 46 1,2-Dichloroethene, Total	100				0		0.8405	
47 Methyl acrylate	55		6.171				ND	
48 Methacrylonitrile	67		6.360				ND	
49 Chlorobromomethane	128		6.409				ND	
50 Tetrahydrofuran	71		6.415				ND	
51 Chloroform	83	6.568	6.567	0.001	92	21488	0.2417	
\$ 52 Dibromofluoromethane (Surr)	113	6.775	6.787	-0.012	94	497380	9.92	
53 1,1,1-Trichloroethane	97	6.781	6.787	-0.006	63	11539	0.1517	
54 Cyclohexane	56		6.878				ND	
55 1-Chlorobutane	56		6.940				ND	
56 Carbon tetrachloride	117		6.994				ND	7
57 1,1-Dichloropropene	75		7.000				ND	
58 Isobutyl alcohol	41		7.159				ND	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.232	7.238	-0.006	0	106102	9.94	
60 Benzene	78		7.262				ND	
61 1,2-Dichloroethane	62		7.336				ND	
62 Isopropyl acetate	43		7.348				ND	
63 Tert-amyl methyl ether	73		7.458				ND	
* 64 Fluorobenzene (IS)	96	7.665	7.671	-0.006	99	2072545	10.0	
65 n-Heptane	43		7.677				ND	
66 t-Amyl alcohol	73		7.842				ND	
67 n-Butanol	56		8.049				ND	
68 Trichloroethene	95	8.147	8.146	0.000	98	52377	0.9736	
69 Methylcyclohexane	83		8.451				ND	
70 1,2-Dichloropropane	63		8.488				ND	
71 2-ethoxy-2-methyl butane	87		8.494				ND	
73 1,4-Dioxane	88		8.573				ND	
72 Methyl methacrylate	69		8.573				ND	
74 Dibromomethane	93		8.591				ND	
75 n-Propyl acetate	61		8.646				ND	
76 Dichlorobromomethane	83		8.835				ND	
77 2-Nitropropane	41		9.116				ND	
78 Chloroacetonitrile	75		9.189				ND	
79 2-Chloroethyl vinyl ether	63	9.219	9.195	0.024	1	739	0.0270	
80 1-Bromo-2-chloroethane	63		9.219				ND	7
81 cis-1,3-Dichloropropene	75		9.378				ND	
82 4-Methyl-2-pentanone (MIBK)	43		9.561				ND	
\$ 83 Toluene-d8 (Surr)	98	9.689	9.689	0.000	93	2010294	9.82	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
84 Toluene	92		9.768				ND	7
T 85 Monochloroacetic acid TIC	50		10.000				ND	U
T 86 2-Chloroethanol TIC	44		10.000				ND	U
T 87 Epibromohydrin TIC	57		10.000				ND	U
T 88 Chloroacetaldehyde TIC	50		10.000				ND	U
T 89 2,3-Dibromo-1-propanol TIC	57		10.000				ND	U
T 90 Ethylene oxide TIC	44		10.000				ND	U
T 91 3-Chloro-1,2-propanediol TIC	44		10.000				ND	U
T 92 2-Bromo-3-chloropropene TIC	75		10.000				ND	U
T 93 Epichlorohydrin TIC	57		10.000				ND	U
T 94 2,3-Dibromopropene TIC	119		10.000				ND	U
T 95 2-Bromoethanol TIC	45		10.000				ND	U
96 trans-1,3-Dichloropropene	75		10.030				ND	
S 97 1,3-Dichloropropene, Total	100		10.060				ND	7
98 Ethyl methacrylate	69		10.091				ND	
99 1,1,2-Trichloroethane	97		10.231				ND	
100 Tetrachloroethene	166	10.311	10.317	-0.006	97	159411	2.76	
101 1,3-Dichloropropane	76		10.396				ND	
102 2-Hexanone	43		10.451				ND	
103 n-Butyl acetate	43		10.567				ND	
104 Chlorodibromomethane	129		10.609				ND	
105 Ethylene Dibromide	107		10.719				ND	
* 106 Chlorobenzene-d5 (IS)	117	11.146	11.152	-0.006	85	1534471	10.0	
107 1-Chlorohexane	91		11.158				ND	7
108 Chlorobenzene	112		11.176				ND	
S 109 Xylenes, Total	106		11.245				ND	7
110 1,1,1,2-Tetrachloroethane	131		11.256				ND	
111 Ethylbenzene	91		11.262				ND	7
112 m-Xylene & p-Xylene	106		11.377				ND	7
113 o-Xylene	106		11.707				ND	
114 Styrene	104		11.719				ND	
115 Bromoform	173		11.877				ND	
116 Isopropylbenzene	105		12.005				ND	
117 cis-1,4-Dichloro-2-butene	88		12.054				ND	U
118 Cyclohexanone	55		12.085				ND	7
\$ 119 4-Bromofluorobenzene (Surr)	95	12.146	12.146	0.000	92	748278	9.57	
120 1,1,2,2-Tetrachloroethane	83		12.249				ND	
121 Bromobenzene	156		12.261				ND	
122 trans-1,4-Dichloro-2-butene	53		12.280				ND	
123 1,2,3-Trichloropropane	110		12.298				ND	
124 N-Propylbenzene	91		12.335				ND	
125 2-Chlorotoluene	126		12.408				ND	
126 1,3,5-Trimethylbenzene	105		12.469				ND	
127 4-Chlorotoluene	126		12.499				ND	
128 tert-Butylbenzene	134		12.706				ND	
129 Pentachloroethane	167		12.743				ND	
130 1,2,4-Trimethylbenzene	105		12.749				ND	7
131 sec-Butylbenzene	105		12.871				ND	
132 1,3-Dichlorobenzene	146		12.969				ND	7
133 4-Isopropyltoluene	119		12.981				ND	
* 134 1,4-Dichlorobenzene-d4	152	13.024	13.024	0.000	94	853672	10.0	
135 1,4-Dichlorobenzene	146		13.042				ND	7

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
136 1,2,3-Trimethylbenzene	120		13.054				ND	7
137 Benzyl chloride	126		13.121				ND	
138 p-Diethylbenzene	119		13.176				ND	
139 n-Butylbenzene	92		13.267				ND	
140 1,2-Dichlorobenzene	146		13.304				ND	
141 Hexachloroethane	201		13.505				ND	
142 1,2-Dibromo-3-Chloropropane	155		13.840				ND	
143 1,3,5-Trichlorobenzene	180		13.962				ND	
144 1,2,4-Trichlorobenzene	180		14.383				ND	
145 Hexachlorobutadiene	225		14.468				ND	
146 Naphthalene	128		14.566				ND	7
147 1,2,3-Trichlorobenzene	180		14.706				ND	
148 2-Methylnaphthalene	142		15.322				ND	
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_00014

Amount Added: 1.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\16334\20210104-19179.b\GJ04S08.D

Injection Date: 05-Jan-2021 00:42:30

Instrument ID: 16334

Operator ID: MEC29284

Lims ID: 410-24913-A-6

Lab Sample ID: 410-24913-6

Worklist Smp#: 18

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

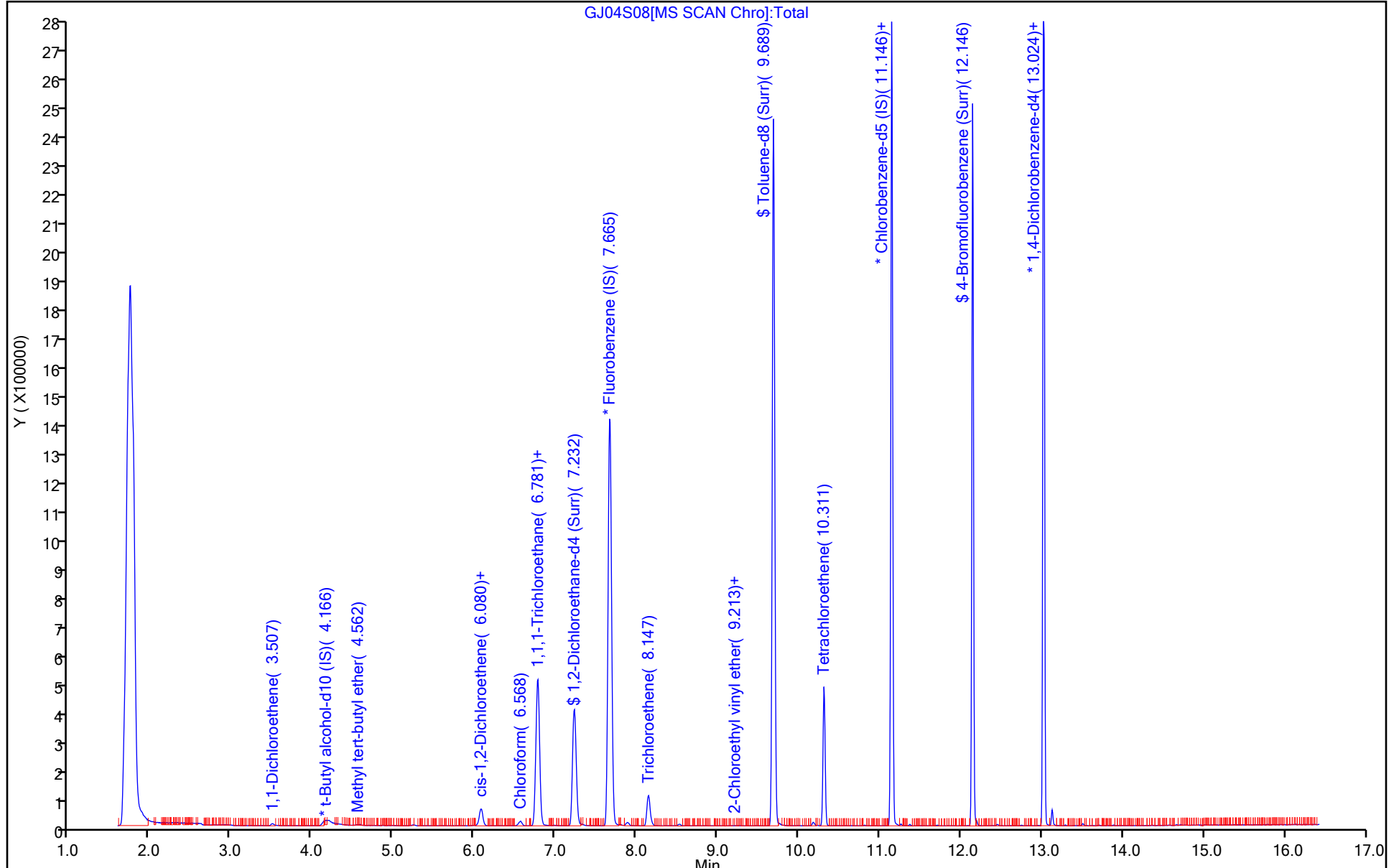
ALS Bottle#: 17

Method: MSV_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\20210104-19179.b\GJ04S08.D
 Lims ID: 410-24913-A-6
 Client ID: HD-COD-SW-15-0/1-0
 Sample Type: Client
 Inject. Date: 05-Jan-2021 00:42:30 ALS Bottle#: 17 Worklist Smp#: 18
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0019179-018
 Misc. Info.: 410-24913-A-6
 Operator ID: MEC29284 Instrument ID: 16334
 Method: \\chromfs\Lancaster\ChromData\16334\20210104-19179.b\MSV_16334_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 05-Jan-2021 09:14:42 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: CTX1665

First Level Reviewer: howej

Date: 05-Jan-2021 08:57:29

Compound	Amount Added	Amount Recovered	% Rec.
\$ 52 Dibromofluoromethane (Surr)	10.0	9.92	99.16
\$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	9.94	99.42
\$ 83 Toluene-d8 (Surr)	10.0	9.82	98.19
\$ 119 4-Bromofluorobenzene (Surr)	10.0	9.57	95.73

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20210104-19179.b\GJ04S08.D

Injection Date: 05-Jan-2021 00:42:30

Instrument ID: 16334

Lims ID: 410-24913-A-6

Lab Sample ID: 410-24913-6

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

Operator ID: MEC29284

ALS Bottle#: 17

Worklist Smp#: 18

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

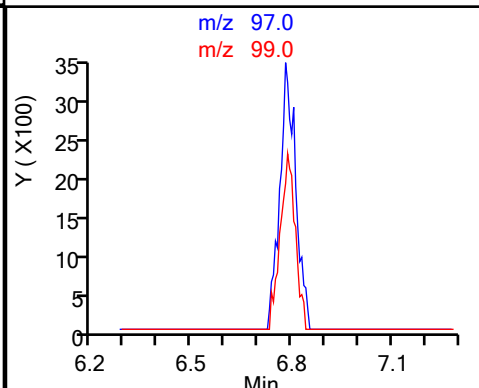
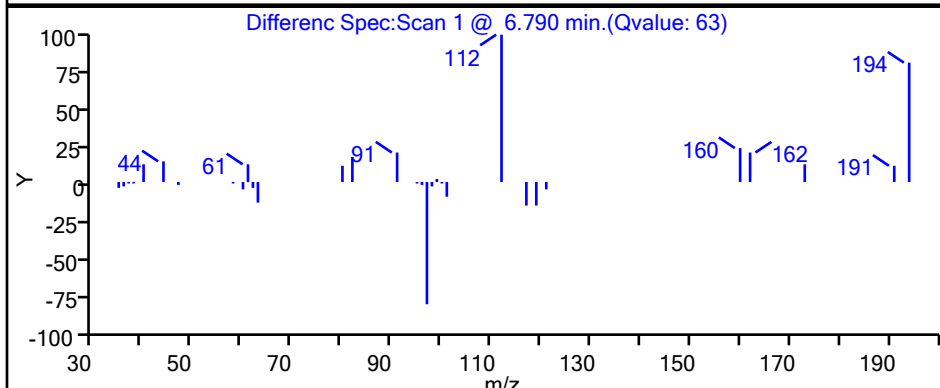
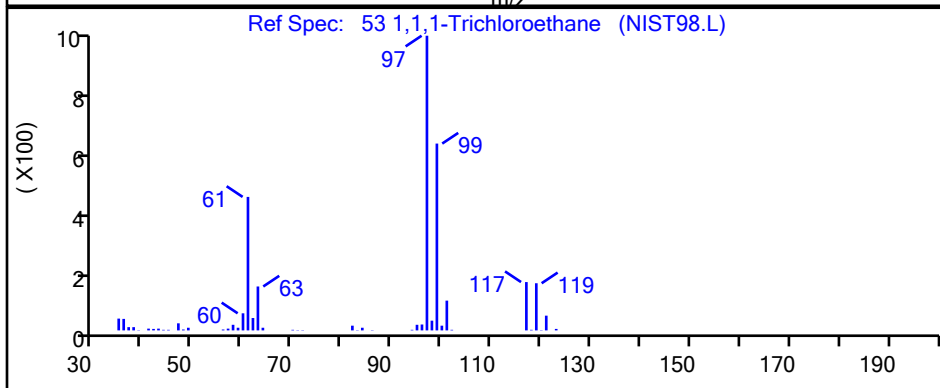
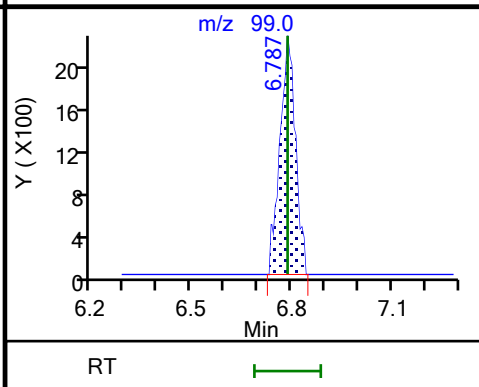
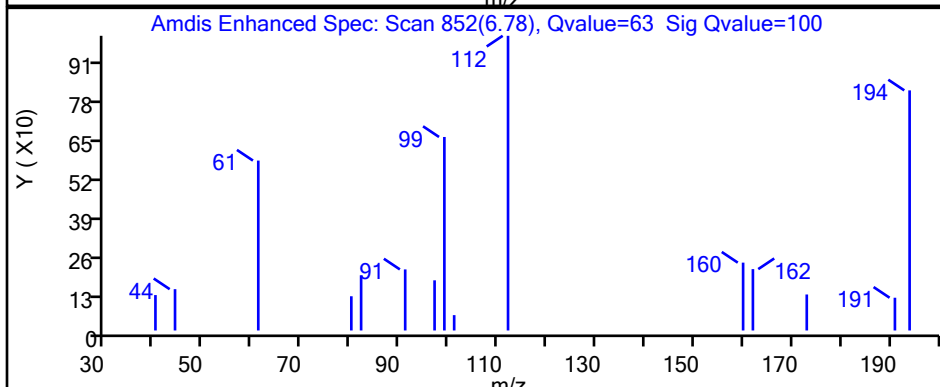
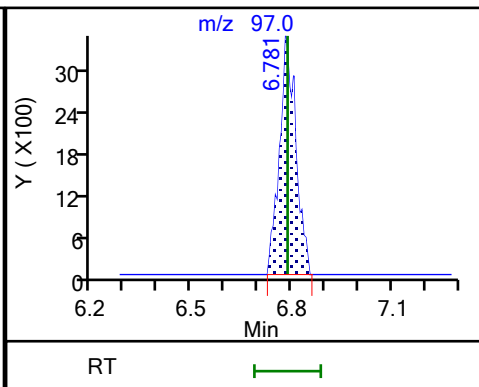
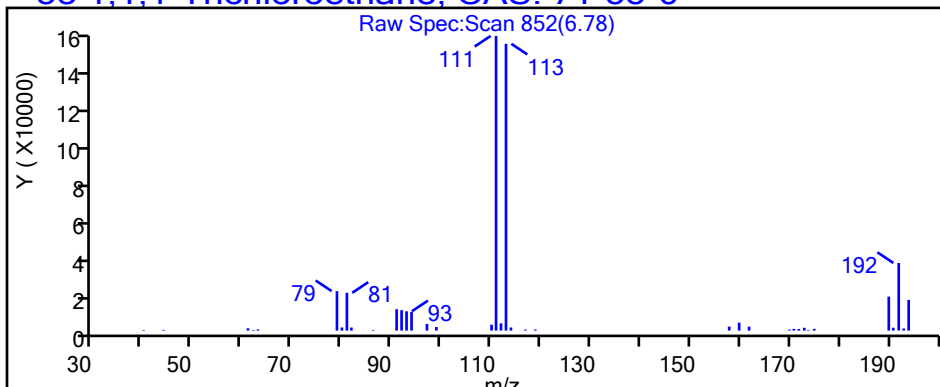
Method: MSV_16334_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

53 1,1,1-Trichloroethane, CAS: 71-55-6



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20210104-19179.b\GJ04S08.D

Injection Date: 05-Jan-2021 00:42:30

Instrument ID: 16334

Lims ID: 410-24913-A-6

Lab Sample ID: 410-24913-6

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

Operator ID: MEC29284

ALS Bottle#: 17

Worklist Smp#: 18

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

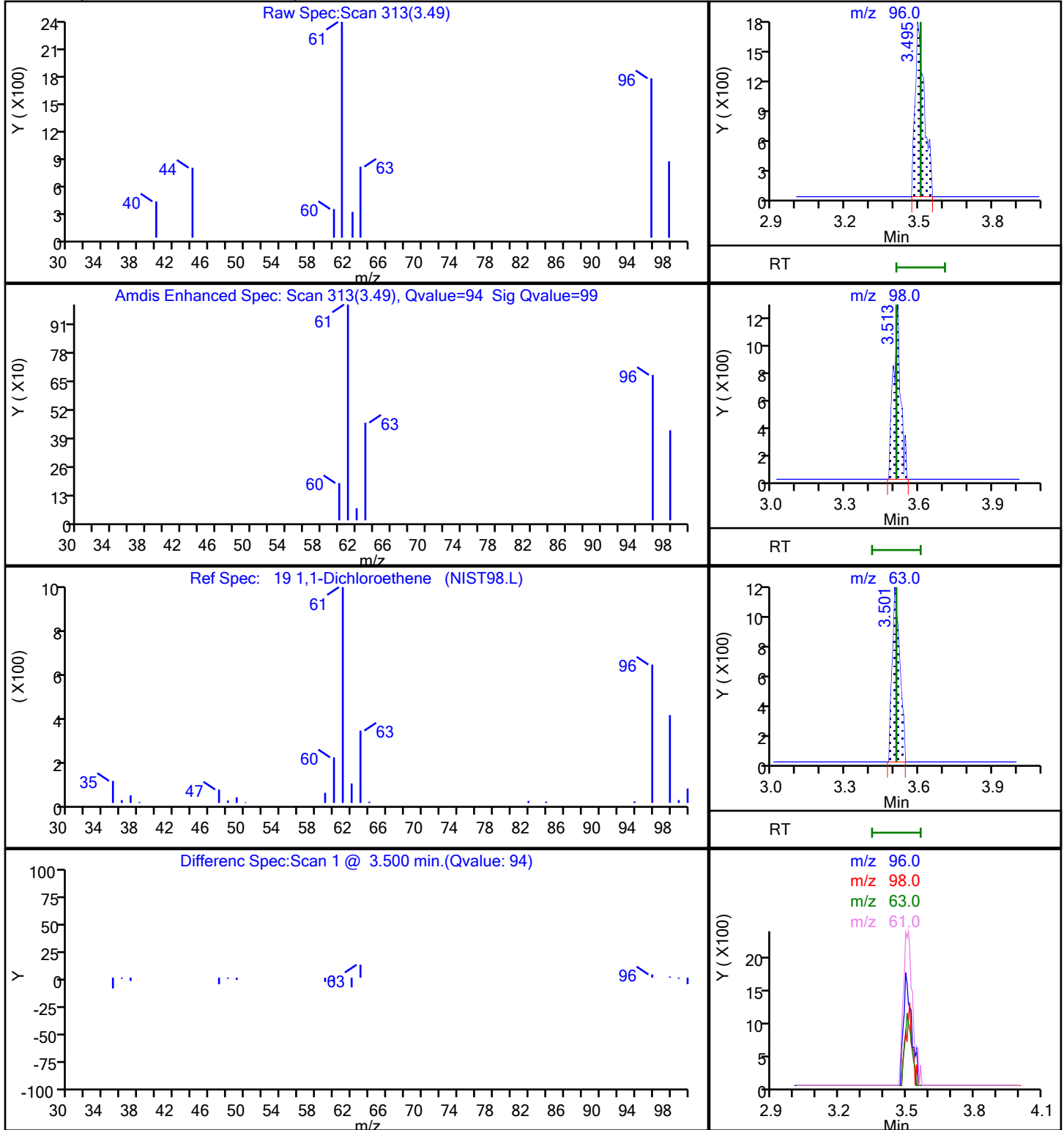
Method: MSV_16334_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) x 30m

MS Quad

19 1,1-Dichloroethene, CAS: 75-35-4



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20210104-19179.b\GJ04S08.D

Injection Date: 05-Jan-2021 00:42:30

Instrument ID: 16334

Lims ID: 410-24913-A-6

Lab Sample ID: 410-24913-6

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

Operator ID: MEC29284

ALS Bottle#: 17

Worklist Smp#: 18

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

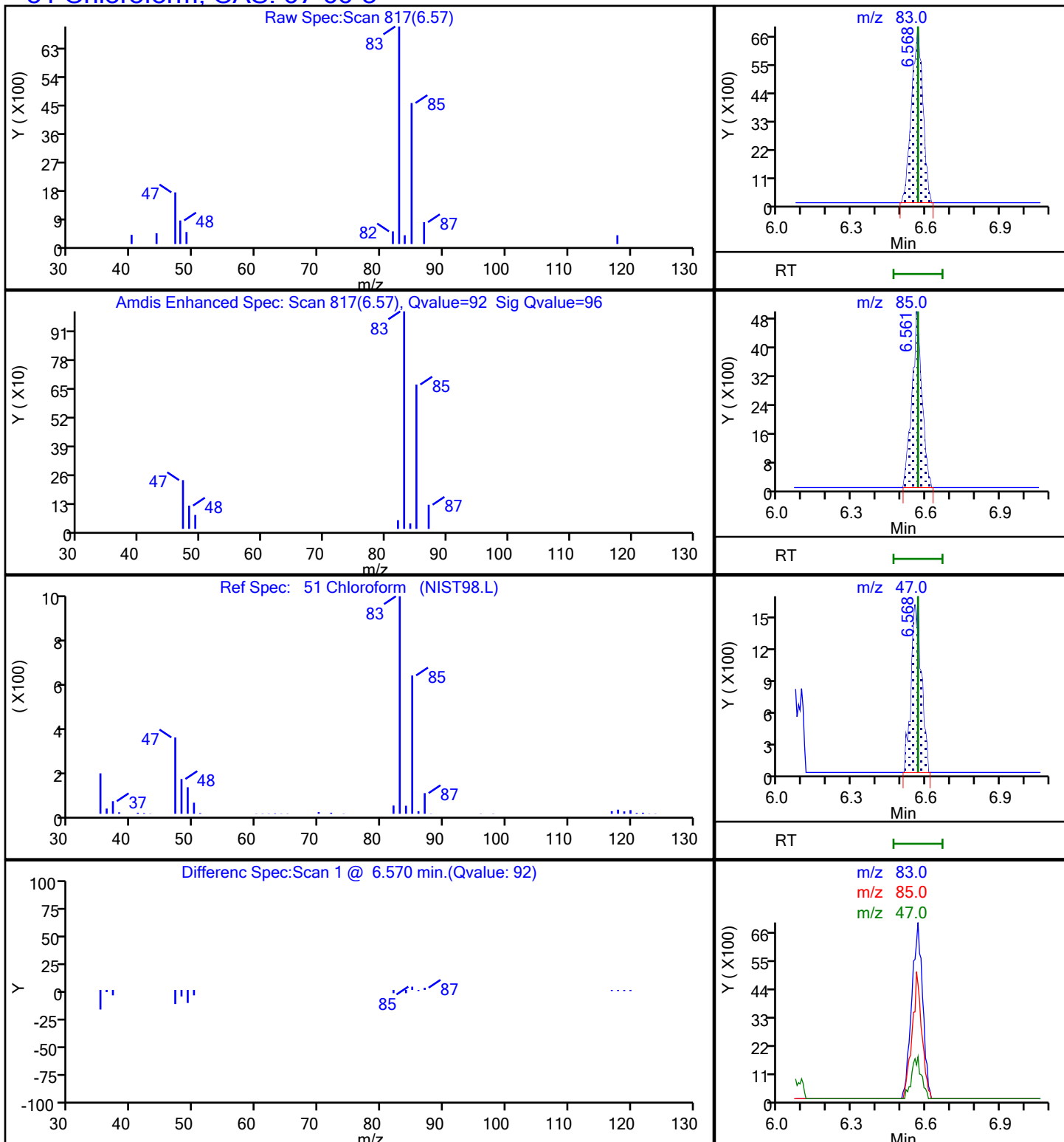
Method: MSV_16334_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) x 30m

MS Quad

51 Chloroform, CAS: 67-66-3



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20210104-19179.b\GJ04S08.D

Injection Date: 05-Jan-2021 00:42:30

Instrument ID: 16334

Lims ID: 410-24913-A-6

Lab Sample ID: 410-24913-6

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

Operator ID: MEC29284

ALS Bottle#: 17

Worklist Smp#: 18

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

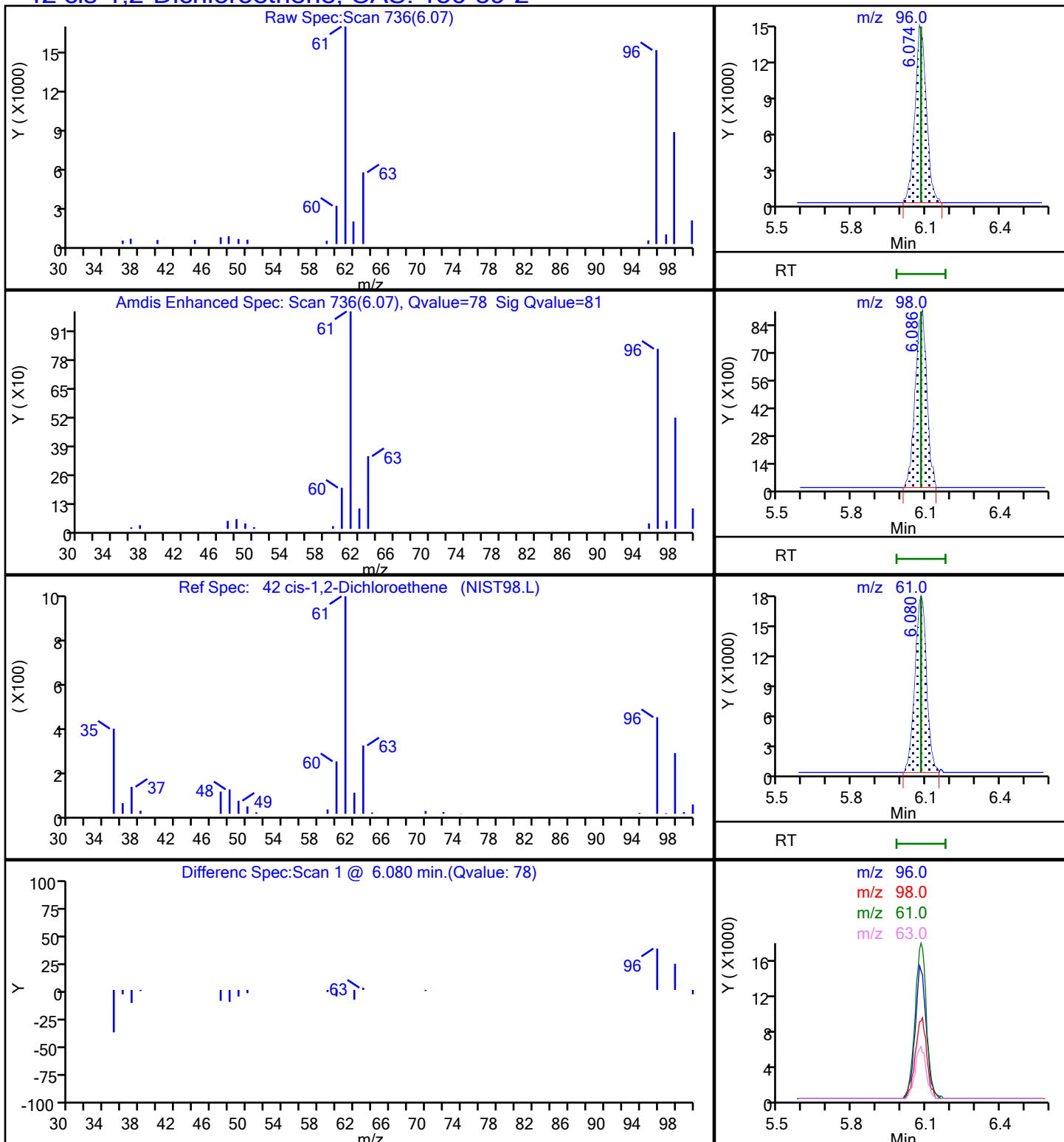
Method: MSV_16334_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

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



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20210104-19179.b\GJ04S08.D

Injection Date: 05-Jan-2021 00:42:30

Instrument ID: 16334

Lims ID: 410-24913-A-6

Lab Sample ID: 410-24913-6

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

Operator ID: MEC29284

ALS Bottle#: 17

Worklist Smp#: 18

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

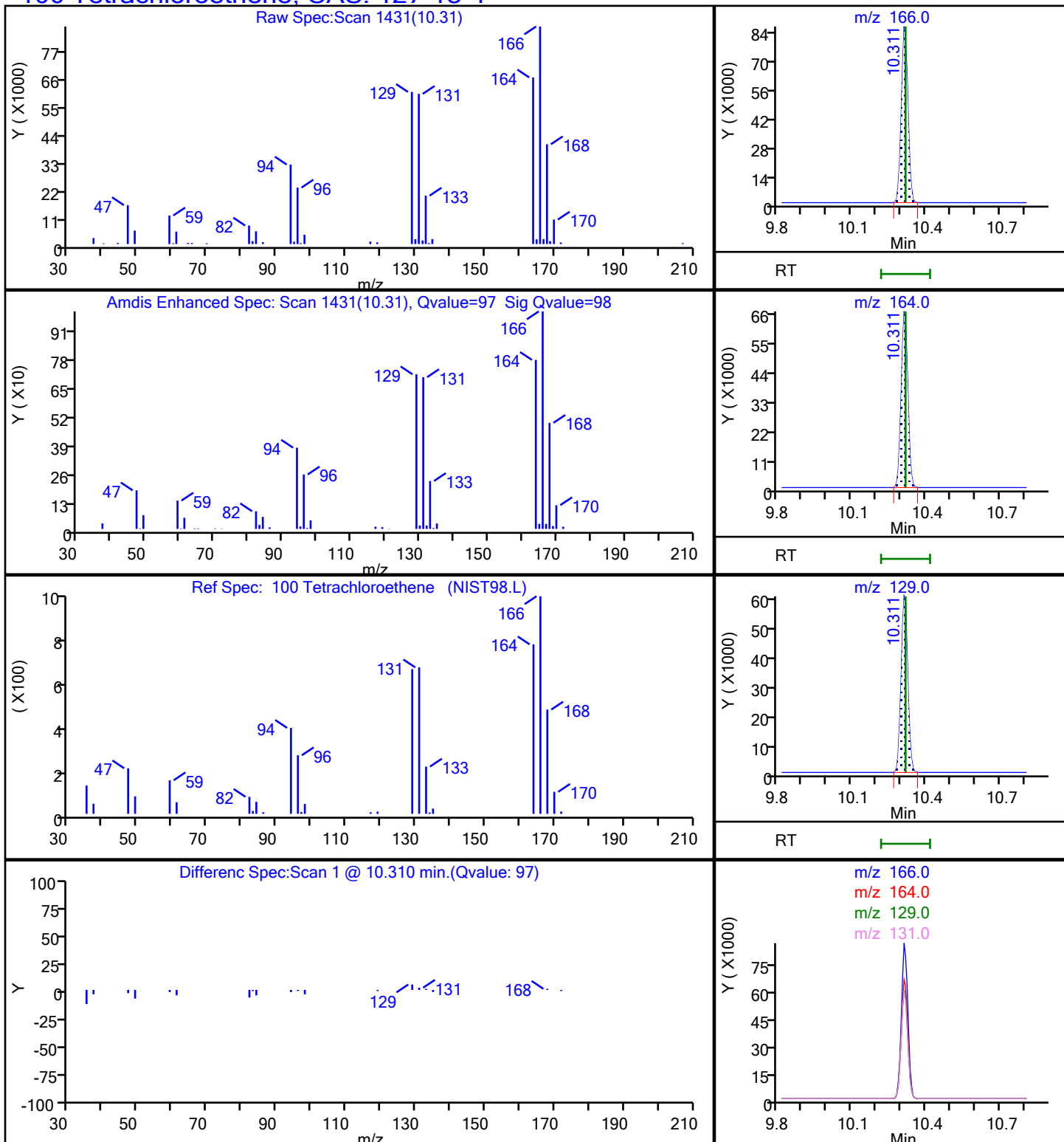
Method: MSV_16334_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

100 Tetrachloroethene, CAS: 127-18-4



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20210104-19179.b\GJ04S08.D

Injection Date: 05-Jan-2021 00:42:30

Instrument ID: 16334

Lims ID: 410-24913-A-6

Lab Sample ID: 410-24913-6

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

Operator ID: MEC29284

ALS Bottle#: 17

Worklist Smp#: 18

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

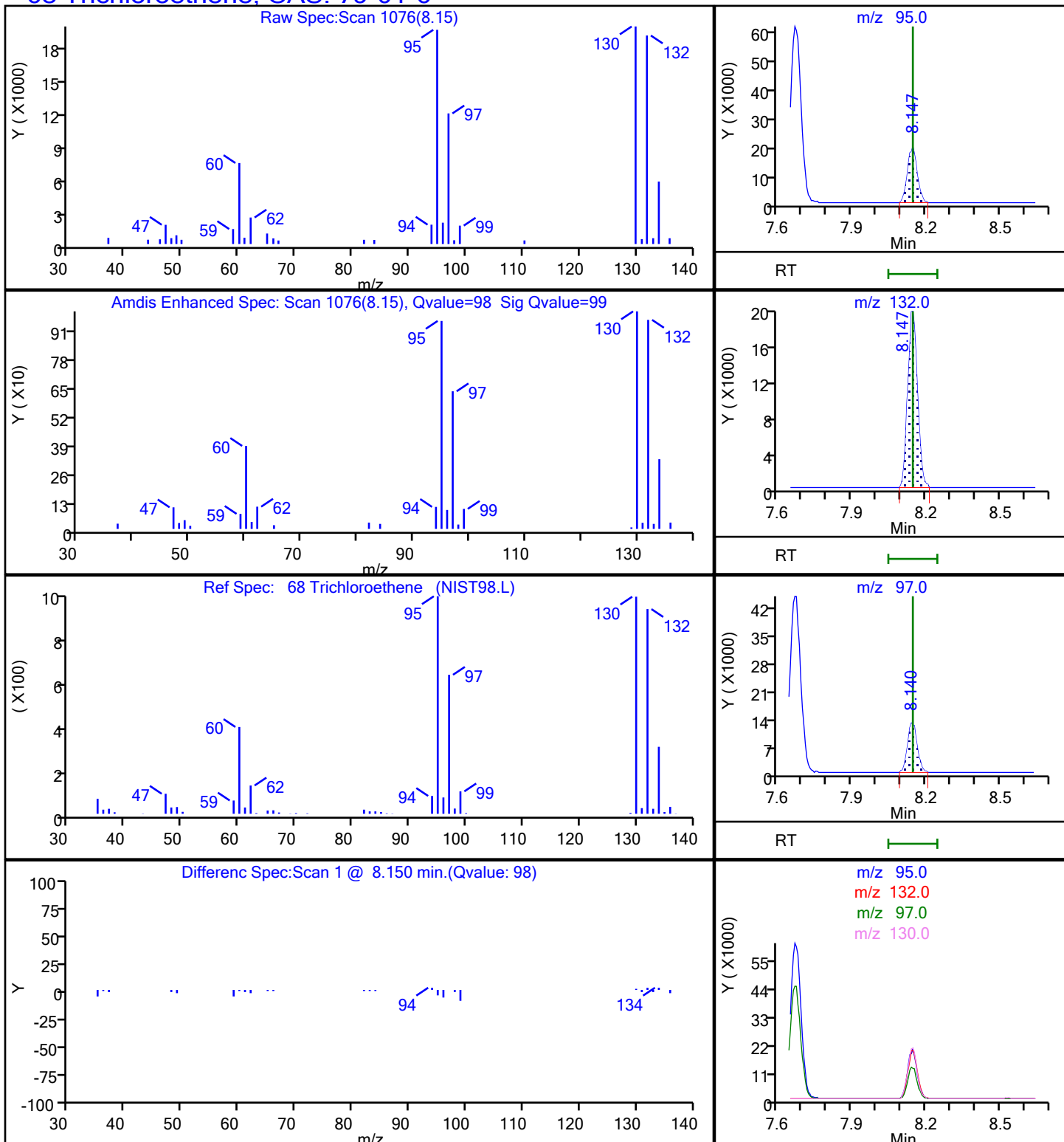
Method: MSV_16334_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

68 Trichloroethene, CAS: 79-01-6



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-24913-1
 SDG No.: _____
 Client Sample ID: HD-COD-SW-16-0/1-0 Lab Sample ID: 410-24913-7
 Matrix: Water Lab File ID: GJ04S16.D
 Analysis Method: 8260D Date Collected: 12/23/2020 10:10
 Sample wt/vol: 25 (mL) Date Analyzed: 01/05/2021 03:37
 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.: 81892 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	1.1	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	0.068	J	0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.050
124-48-1	Dibromochloromethane	ND		0.50	0.070
100-41-4	Ethylbenzene	ND		0.50	0.060
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.050
75-09-2	Methylene Chloride	ND		0.50	0.070
100-42-5	Styrene	ND		0.50	0.050
127-18-4	Tetrachloroethene	ND		0.50	0.060
108-88-3	Toluene	ND		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	ND		0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-24913-1
 SDG No.: _____
 Client Sample ID: HD-COD-SW-16-0/1-0 Lab Sample ID: 410-24913-7
 Matrix: Water Lab File ID: GJ04S16.D
 Analysis Method: 8260D Date Collected: 12/23/2020 10:10
 Sample wt/vol: 25 (mL) Date Analyzed: 01/05/2021 03:37
 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.: 81892 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)	96		80-120
1868-53-7	Dibromofluoromethane (Surr)	99		80-120
2037-26-5	Toluene-d8 (Surr)	98		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20210104-19179.b\GJ04S16.D
 Lims ID: 410-24913-A-7
 Client ID: HD-COD-SW-16-0/1-0
 Sample Type: Client
 Inject. Date: 05-Jan-2021 03:37:30 ALS Bottle#: 25 Worklist Smp#: 26
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0019179-026
 Misc. Info.: 410-24913-A-7
 Operator ID: MEC29284 Instrument ID: 16334
 Method: \\chromfs\Lancaster\ChromData\16334\20210104-19179.b\MSV_16334_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 05-Jan-2021 09:24:47 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: CTX1665

First Level Reviewer: howej

Date: 05-Jan-2021 09:22:31

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
5 Chloromethane	50		2.141				ND	
8 Vinyl chloride	62		2.257				ND	
9 Bromomethane	94		2.587				ND	
10 Chloroethane	64		2.666				ND	
19 1,1-Dichloroethene	96		3.507				ND	
21 Acetone	43	3.544	3.550	-0.006	69	8950	1.13	
25 Carbon disulfide	76		3.800				ND	7
29 Methylene Chloride	84		4.172				ND	
* 30 t-Butyl alcohol-d10 (IS)	65	4.172	4.190	-0.018	0	161492	50.0	
33 Methyl tert-butyl ether	73		4.568				ND	
34 trans-1,2-Dichloroethene	96		4.574				ND	
37 1,1-Dichloroethane	63		5.245				ND	
41 2-Butanone (MEK)	43		6.043				ND	
42 cis-1,2-Dichloroethene	96	6.080	6.080	0.000	73	3839	0.0682	
49 Chlorobromomethane	128		6.409				ND	
51 Chloroform	83		6.567				ND	
\$ 52 Dibromofluoromethane (Surr)	113	6.781	6.787	-0.006	94	501518	9.91	
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	7.238	-0.006	0	103856	9.65	
60 Benzene	78		7.262				ND	7
61 1,2-Dichloroethane	62		7.336				ND	
* 64 Fluorobenzene (IS)	96	7.665	7.671	-0.006	99	2090850	10.0	
68 Trichloroethene	95		8.146				ND	
70 1,2-Dichloropropane	63		8.488				ND	
76 Dichlorobromomethane	83		8.835				ND	
81 cis-1,3-Dichloropropene	75		9.378				ND	
82 4-Methyl-2-pentanone (MIBK)	43		9.561				ND	7
\$ 83 Toluene-d8 (Surr)	98	9.689	9.689	0.000	93	2023466	9.84	
84 Toluene	92	9.768	9.768	0.000	95	5567	0.0417	
96 trans-1,3-Dichloropropene	75		10.030				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
99 1,1,2-Trichloroethane	97		10.231				ND	
100 Tetrachloroethene	166	10.305	10.317	-0.012	93	2877	0.0497	
102 2-Hexanone	43		10.451				ND	
104 Chlorodibromomethane	129		10.609				ND	
105 Ethylene Dibromide	107		10.719				ND	
* 106 Chlorobenzene-d5 (IS)	117	11.146	11.152	-0.006	85	1540712	10.0	
108 Chlorobenzene	112		11.176				ND	
S 109 Xylenes, Total	106		11.245				ND	7
110 1,1,1,2-Tetrachloroethane	131		11.256				ND	
111 Ethylbenzene	91		11.262				ND	7
112 m-Xylene & p-Xylene	106		11.377				ND	7
113 o-Xylene	106		11.707				ND	7
114 Styrene	104		11.719				ND	7
115 Bromoform	173		11.877				ND	
\$ 119 4-Bromofluorobenzene (Surr)	95	12.146	12.146	0.000	92	755860	9.63	
120 1,1,2,2-Tetrachloroethane	83		12.249				ND	
* 134 1,4-Dichlorobenzene-d4	152	13.024	13.024	0.000	94	852071	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

MSV_29_826ISS_00014

Amount Added: 1.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\16334\20210104-19179.b\GJ04S16.D

Injection Date: 05-Jan-2021 03:37:30

Instrument ID: 16334

Operator ID: MEC29284

Lims ID: 410-24913-A-7

Lab Sample ID: 410-24913-7

Worklist Smp#: 26

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

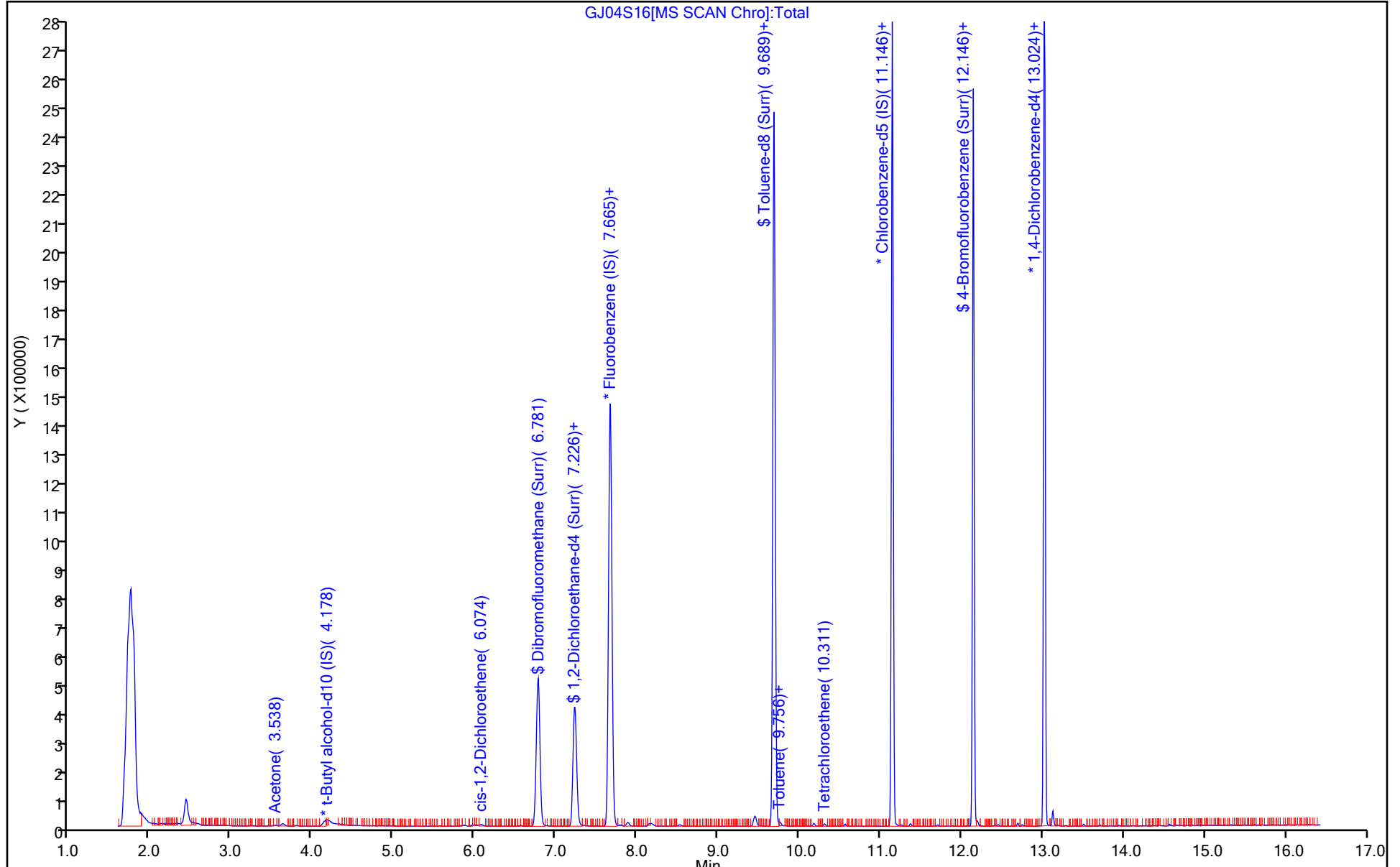
ALS Bottle#: 25

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\20210104-19179.b\GJ04S16.D
 Lims ID: 410-24913-A-7
 Client ID: HD-COD-SW-16-0/1-0
 Sample Type: Client
 Inject. Date: 05-Jan-2021 03:37:30 ALS Bottle#: 25 Worklist Smp#: 26
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0019179-026
 Misc. Info.: 410-24913-A-7
 Operator ID: MEC29284 Instrument ID: 16334
 Method: \\chromfs\Lancaster\ChromData\16334\20210104-19179.b\MSV_16334_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 05-Jan-2021 09:24:47 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: CTX1665

First Level Reviewer: howej

Date: 05-Jan-2021 09:22:31

Compound	Amount Added	Amount Recovered	% Rec.
\$ 52 Dibromofluoromethane (Surr)	10.0	9.91	99.11
\$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	9.65	96.46
\$ 83 Toluene-d8 (Surr)	10.0	9.84	98.44
\$ 119 4-Bromofluorobenzene (Surr)	10.0	9.63	96.31

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20210104-19179.b\GJ04S16.D

Injection Date: 05-Jan-2021 03:37:30

Instrument ID: 16334

Lims ID: 410-24913-A-7

Lab Sample ID: 410-24913-7

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

Operator ID: MEC29284

ALS Bottle#: 25

Worklist Smp#: 26

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

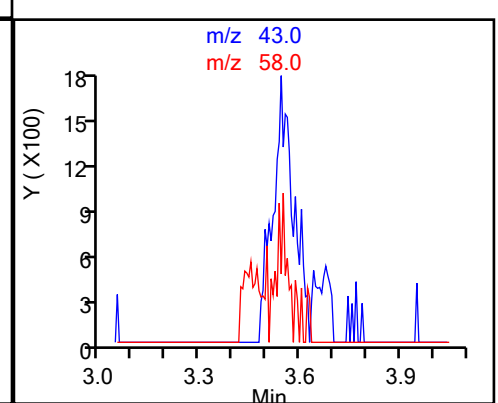
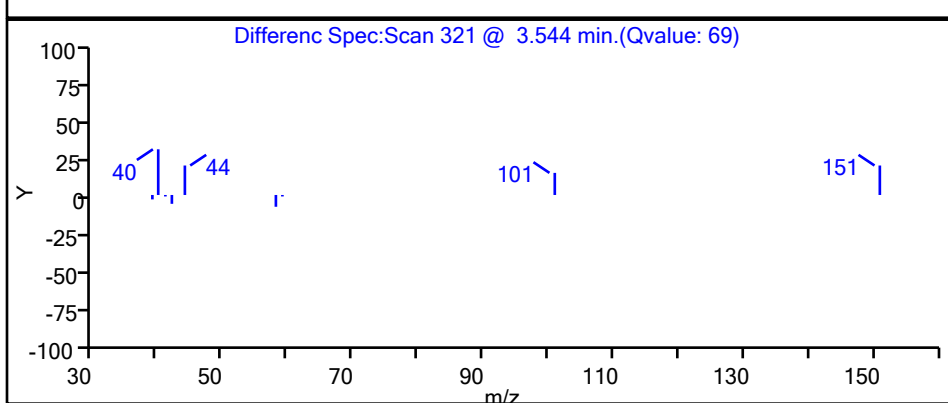
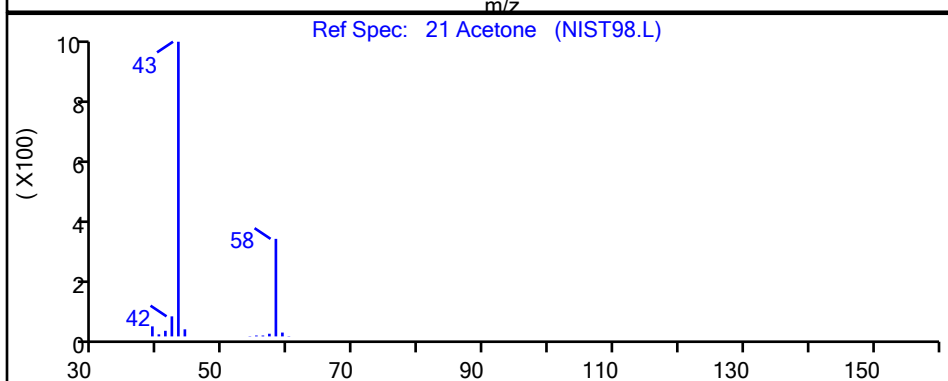
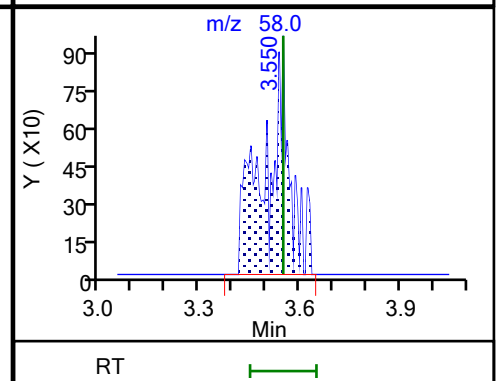
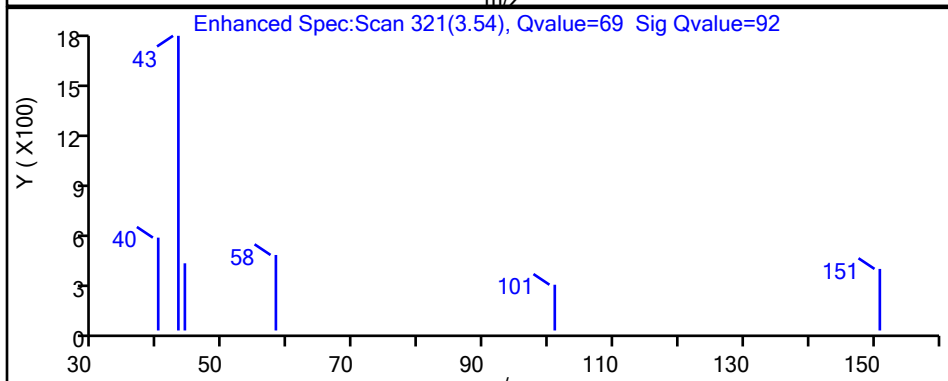
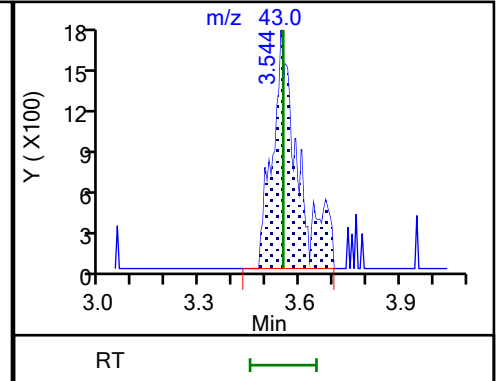
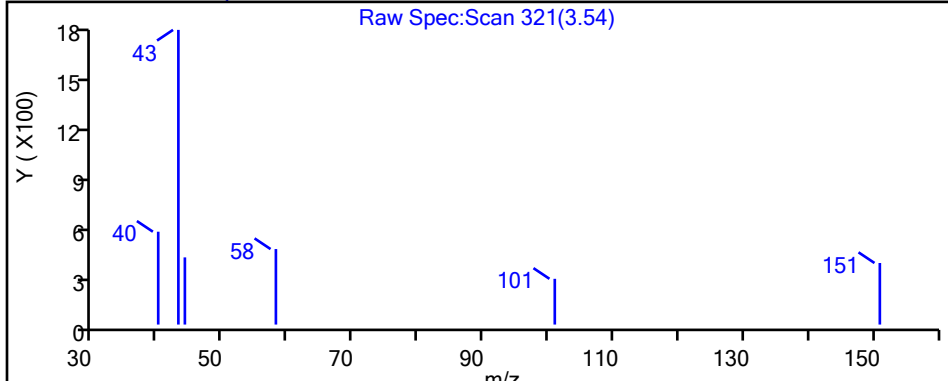
Method: MSV_16334_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) x 30m

MS Quad

21 Acetone, CAS: 67-64-1



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20210104-19179.b\GJ04S16.D

Injection Date: 05-Jan-2021 03:37:30

Instrument ID: 16334

Lims ID: 410-24913-A-7

Lab Sample ID: 410-24913-7

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

Operator ID: MEC29284

ALS Bottle#: 25

Worklist Smp#: 26

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

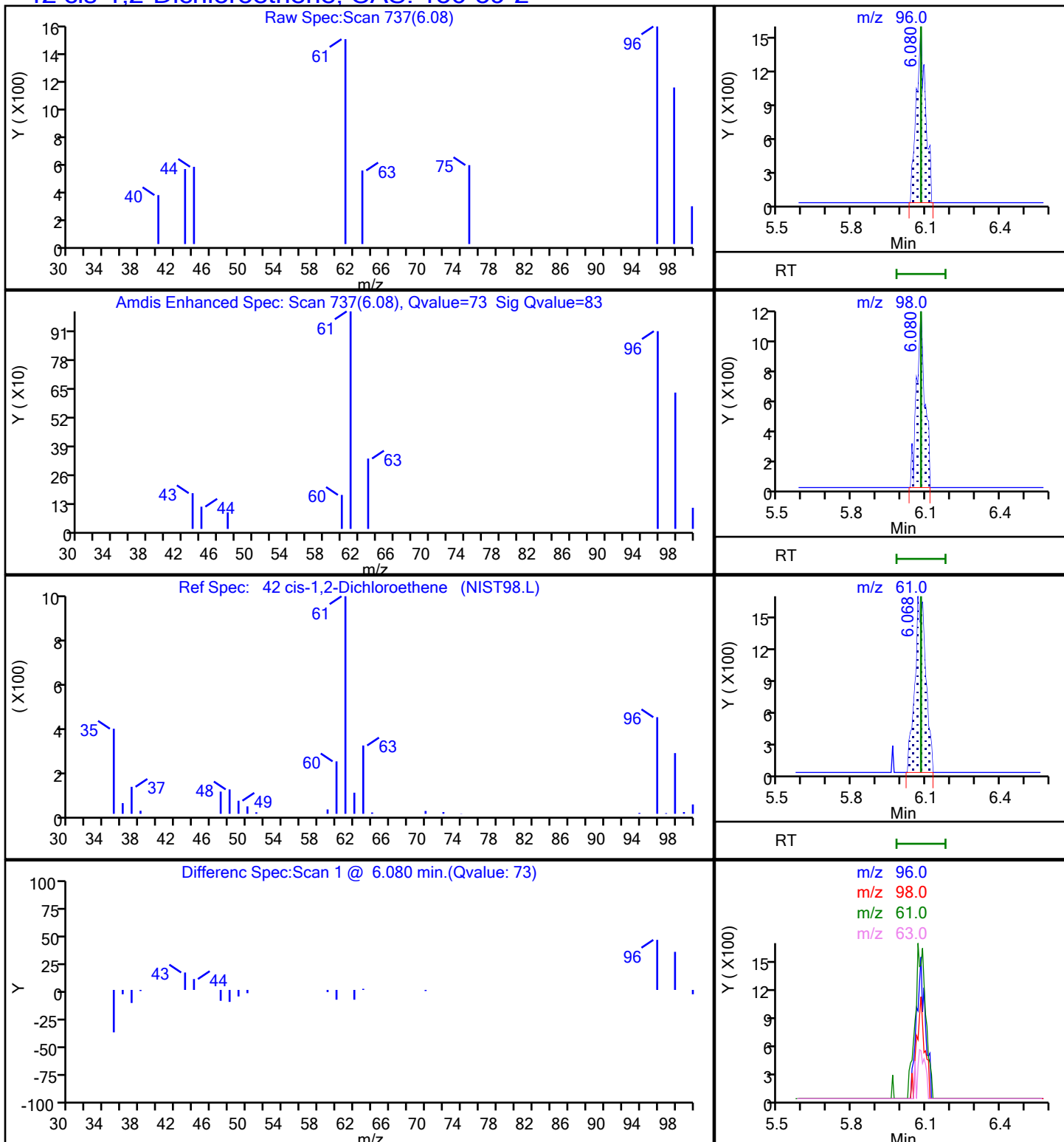
Method: MSV_16334_25mL

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



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-24913-1
 SDG No.: _____
 Client Sample ID: HD-COD-SW-17-0/1-0 Lab Sample ID: 410-24913-8
 Matrix: Water Lab File ID: GJ04S17.D
 Analysis Method: 8260D Date Collected: 12/23/2020 10:25
 Sample wt/vol: 25 (mL) Date Analyzed: 01/05/2021 03:59
 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.: 81892 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	0.080	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	0.16	J	0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	0.65		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	2.3		0.50	0.060
108-88-3	Toluene	ND		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	0.86		0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-24913-1
 SDG No.: _____
 Client Sample ID: HD-COD-SW-17-0/1-0 Lab Sample ID: 410-24913-8
 Matrix: Water Lab File ID: GJ04S17.D
 Analysis Method: 8260D Date Collected: 12/23/2020 10:25
 Sample wt/vol: 25 (mL) Date Analyzed: 01/05/2021 03:59
 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.: 81892 Units: ug/L

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

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		80-120
460-00-4	4-Bromofluorobenzene (Surr)	95		80-120
1868-53-7	Dibromofluoromethane (Surr)	98		80-120
2037-26-5	Toluene-d8 (Surr)	99		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20210104-19179.b\GJ04S17.D
 Lims ID: 410-24913-A-8
 Client ID: HD-COD-SW-17-0/1-0
 Sample Type: Client
 Inject. Date: 05-Jan-2021 03:59:30 ALS Bottle#: 26 Worklist Smp#: 27
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0019179-027
 Misc. Info.: 410-24913-A-8
 Operator ID: MEC29284 Instrument ID: 16334
 Method: \\chromfs\Lancaster\ChromData\16334\20210104-19179.b\MSV_16334_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 05-Jan-2021 09:24:47 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: CTX1665

First Level Reviewer: howej

Date: 05-Jan-2021 09:22:49

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
5 Chloromethane	50		2.141				ND	
8 Vinyl chloride	62		2.257				ND	
9 Bromomethane	94		2.587				ND	
10 Chloroethane	64		2.666				ND	
19 1,1-Dichloroethene	96	3.507	3.507	0.000	91	2278	0.0527	
21 Acetone	43	3.556	3.550	0.006	64	4006	0.4978	
25 Carbon disulfide	76		3.800				ND	7
29 Methylene Chloride	84		4.172				ND	
* 30 t-Butyl alcohol-d10 (IS)	65	4.178	4.190	-0.012	0	164017	50.0	
33 Methyl tert-butyl ether	73	4.580	4.568	0.012	1	3468	0.0252	
34 trans-1,2-Dichloroethene	96		4.574				ND	
37 1,1-Dichloroethane	63		5.245				ND	
41 2-Butanone (MEK)	43		6.043				ND	
42 cis-1,2-Dichloroethene	96	6.080	6.080	0.000	79	36506	0.6530	
49 Chlorobromomethane	128		6.409				ND	
51 Chloroform	83	6.568	6.567	0.001	91	14033	0.1576	
\$ 52 Dibromofluoromethane (Surr)	113	6.781	6.787	-0.006	94	494897	9.85	
53 1,1,1-Trichloroethane	97	6.799	6.787	0.012	35	6098	0.0800	
56 Carbon tetrachloride	117		6.994				ND	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.232	7.238	-0.006	0	105427	9.86	
60 Benzene	78		7.262				ND	
61 1,2-Dichloroethane	62		7.336				ND	
* 64 Fluorobenzene (IS)	96	7.671	7.671	0.000	99	2076087	10.0	
68 Trichloroethene	95	8.141	8.146	-0.005	97	46427	0.8615	
70 1,2-Dichloropropane	63		8.488				ND	
76 Dichlorobromomethane	83		8.835				ND	
81 cis-1,3-Dichloropropene	75		9.378				ND	
82 4-Methyl-2-pentanone (MIBK)	43		9.561				ND	
\$ 83 Toluene-d8 (Surr)	98	9.689	9.689	0.000	93	2006379	9.85	
84 Toluene	92	9.768	9.768	0.000	97	3421	0.0259	
96 trans-1,3-Dichloropropene	75		10.030				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
99 1,1,2-Trichloroethane	97		10.231				ND	
100 Tetrachloroethene	166	10.311	10.317	-0.006	97	130609	2.28	
102 2-Hexanone	43		10.451				ND	
104 Chlorodibromomethane	129		10.609				ND	
105 Ethylene Dibromide	107		10.719				ND	
* 106 Chlorobenzene-d5 (IS)	117	11.146	11.152	-0.006	85	1526614	10.0	
108 Chlorobenzene	112		11.176				ND	
S 109 Xylenes, Total	106		11.245				ND	7
110 1,1,1,2-Tetrachloroethane	131		11.256				ND	
111 Ethylbenzene	91		11.262				ND	7
112 m-Xylene & p-Xylene	106		11.377				ND	7
113 o-Xylene	106		11.707				ND	
114 Styrene	104		11.719				ND	
115 Bromoform	173		11.877				ND	
\$ 119 4-Bromofluorobenzene (Surr)	95	12.146	12.146	0.000	92	738747	9.50	
120 1,1,2,2-Tetrachloroethane	83		12.249				ND	
* 134 1,4-Dichlorobenzene-d4	152	13.024	13.024	0.000	94	850165	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

MSV_29_826ISS_00014

Amount Added: 1.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\16334\20210104-19179.b\GJ04S17.D

Injection Date: 05-Jan-2021 03:59:30

Instrument ID: 16334

Operator ID: MEC29284

Lims ID: 410-24913-A-8

Lab Sample ID: 410-24913-8

Worklist Smp#: 27

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

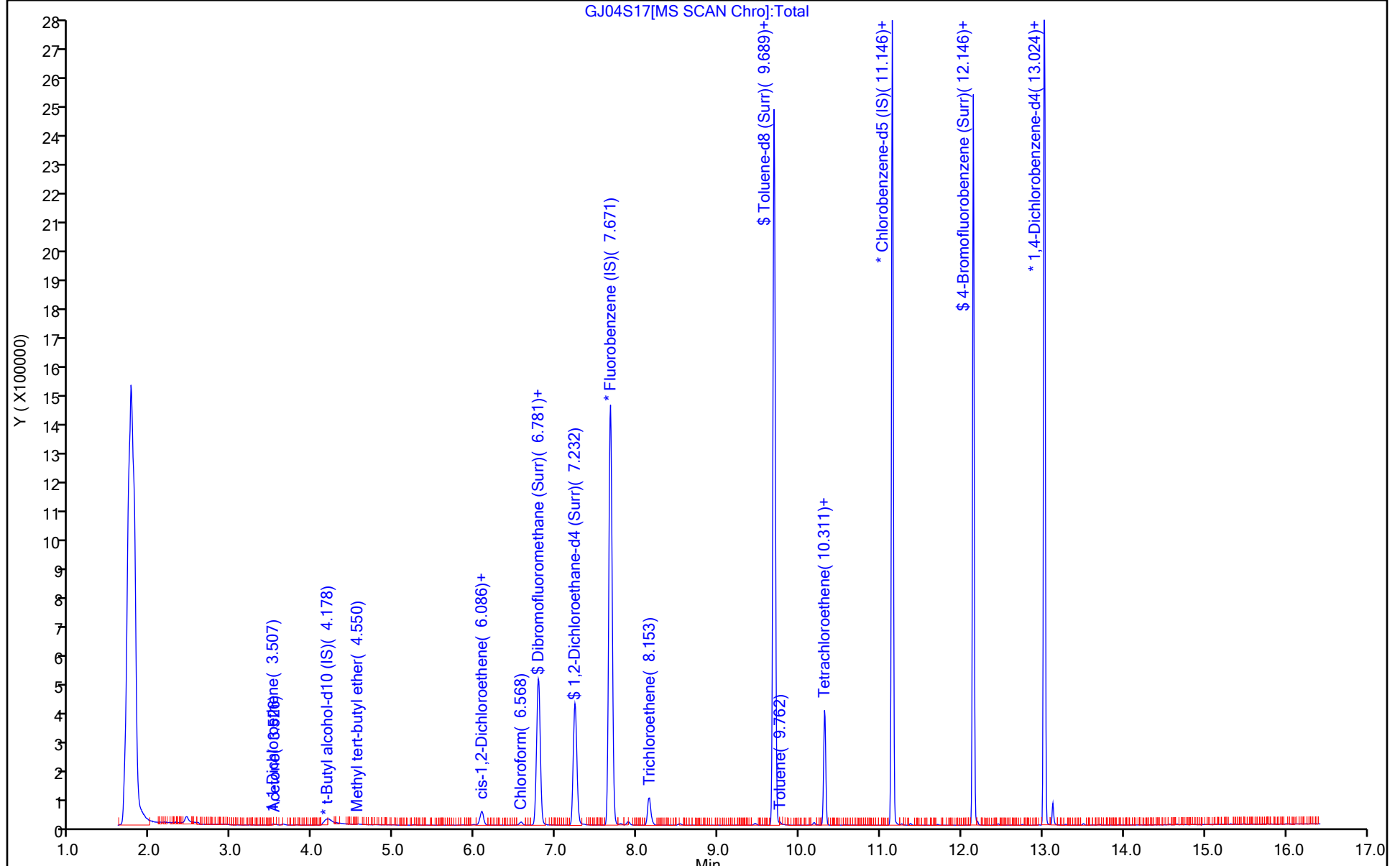
ALS Bottle#: 26

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\20210104-19179.b\GJ04S17.D
 Lims ID: 410-24913-A-8
 Client ID: HD-COD-SW-17-0/1-0
 Sample Type: Client
 Inject. Date: 05-Jan-2021 03:59:30 ALS Bottle#: 26 Worklist Smp#: 27
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0019179-027
 Misc. Info.: 410-24913-A-8
 Operator ID: MEC29284 Instrument ID: 16334
 Method: \\chromfs\Lancaster\ChromData\16334\20210104-19179.b\MSV_16334_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 05-Jan-2021 09:24:47 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: CTX1665

First Level Reviewer: howej

Date: 05-Jan-2021 09:22:49

Compound	Amount Added	Amount Recovered	% Rec.
\$ 52 Dibromofluoromethane (Surr)	10.0	9.85	98.49
\$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	9.86	98.62
\$ 83 Toluene-d8 (Surr)	10.0	9.85	98.51
\$ 119 4-Bromofluorobenzene (Surr)	10.0	9.50	95.00

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20210104-19179.b\GJ04S17.D

Injection Date: 05-Jan-2021 03:59:30

Instrument ID: 16334

Lims ID: 410-24913-A-8

Lab Sample ID: 410-24913-8

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

Operator ID: MEC29284

ALS Bottle#: 26

Worklist Smp#: 27

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

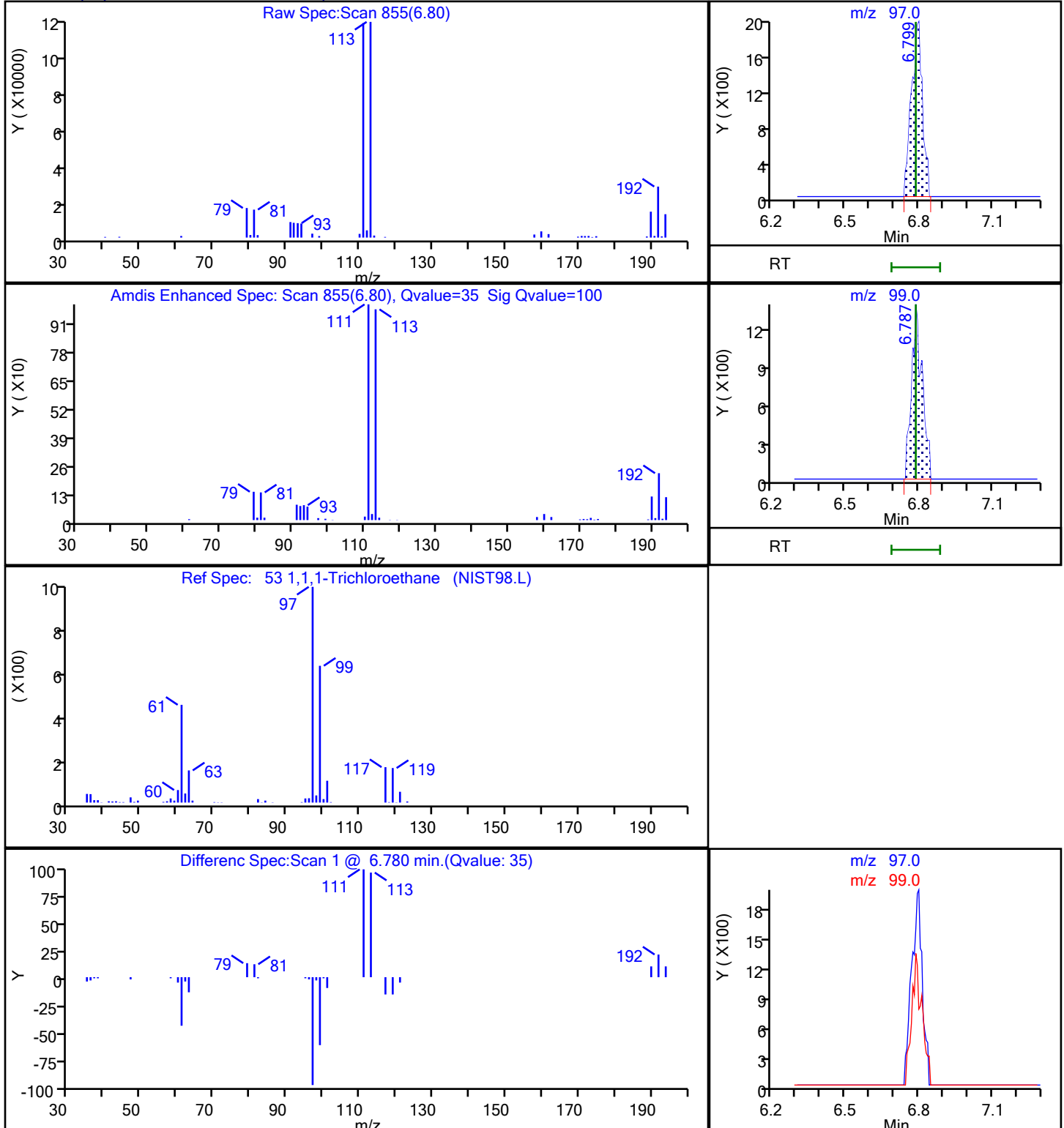
Method: MSV_16334_25mL

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\20210104-19179.b\GJ04S17.D

Injection Date: 05-Jan-2021 03:59:30

Instrument ID: 16334

Lims ID: 410-24913-A-8

Lab Sample ID: 410-24913-8

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

Operator ID: MEC29284

ALS Bottle#: 26

Worklist Smp#: 27

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

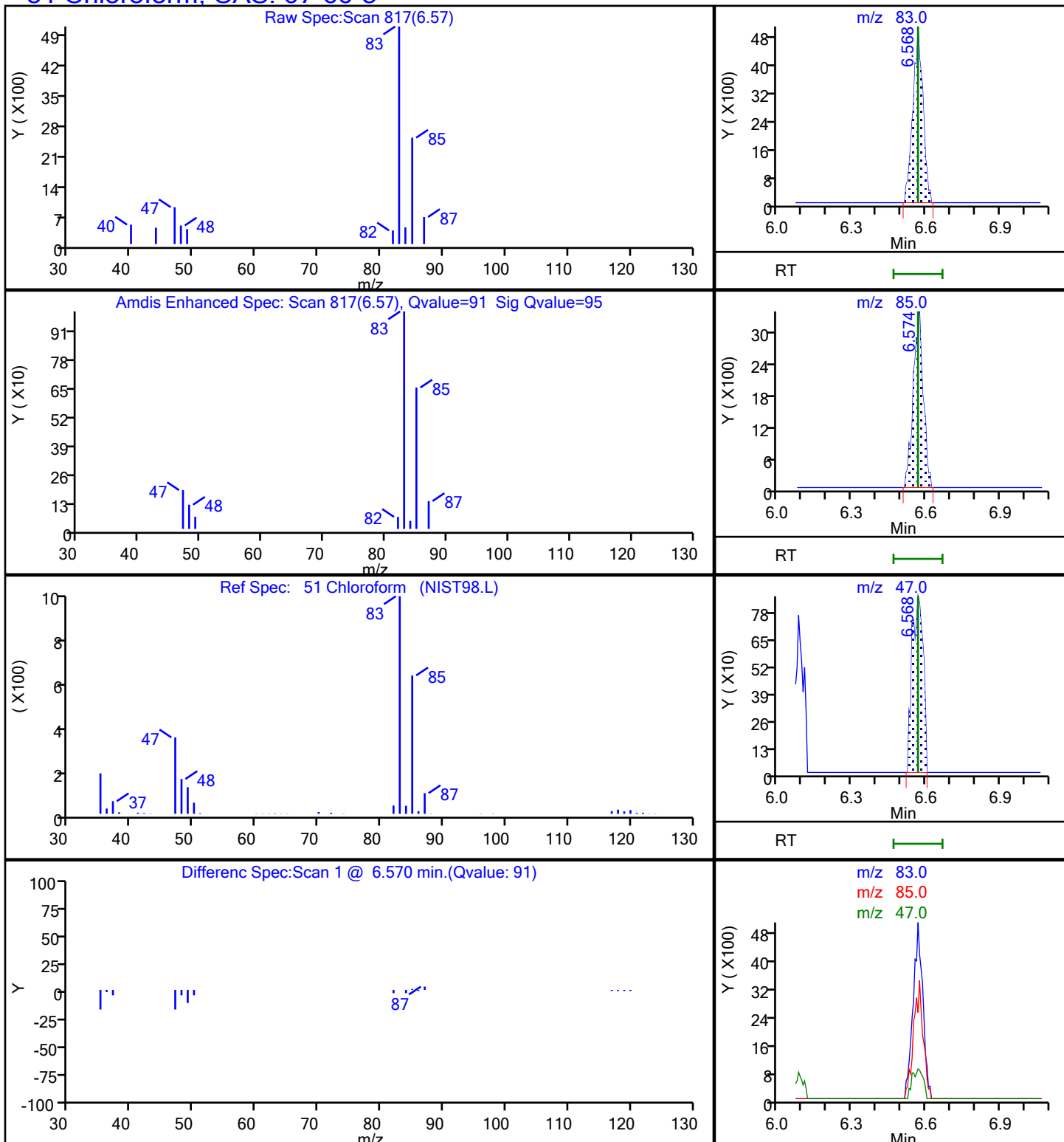
Method: MSV_16334_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

51 Chloroform, CAS: 67-66-3



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20210104-19179.b\GJ04S17.D

Injection Date: 05-Jan-2021 03:59:30

Instrument ID: 16334

Lims ID: 410-24913-A-8

Lab Sample ID: 410-24913-8

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

Operator ID: MEC29284

ALS Bottle#: 26

Worklist Smp#: 27

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

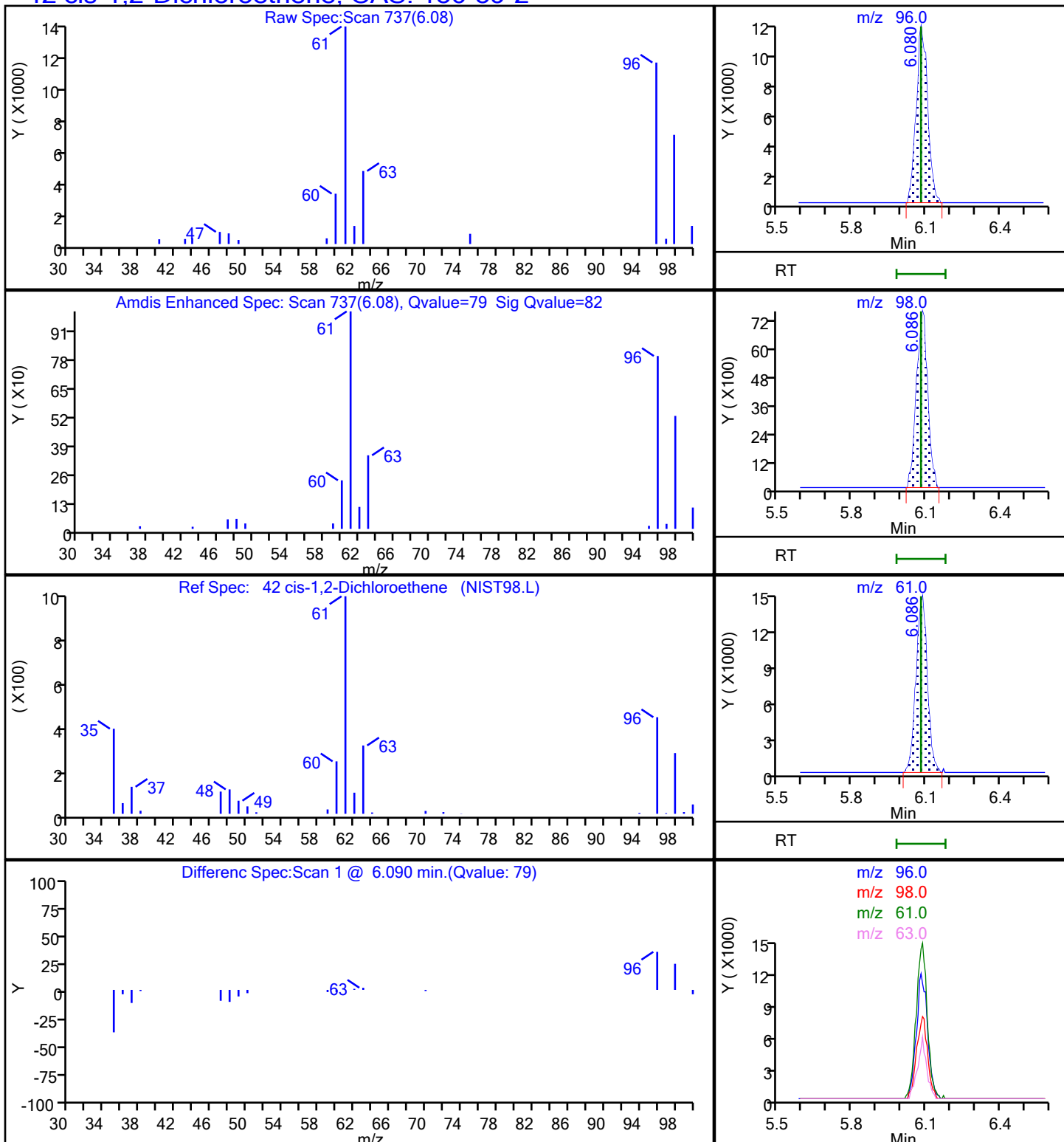
Method: MSV_16334_25mL

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\20210104-19179.b\GJ04S17.D

Injection Date: 05-Jan-2021 03:59:30

Instrument ID: 16334

Lims ID: 410-24913-A-8

Lab Sample ID: 410-24913-8

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

Operator ID: MEC29284

ALS Bottle#: 26

Worklist Smp#: 27

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

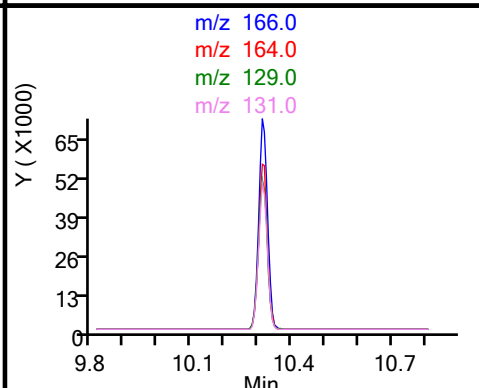
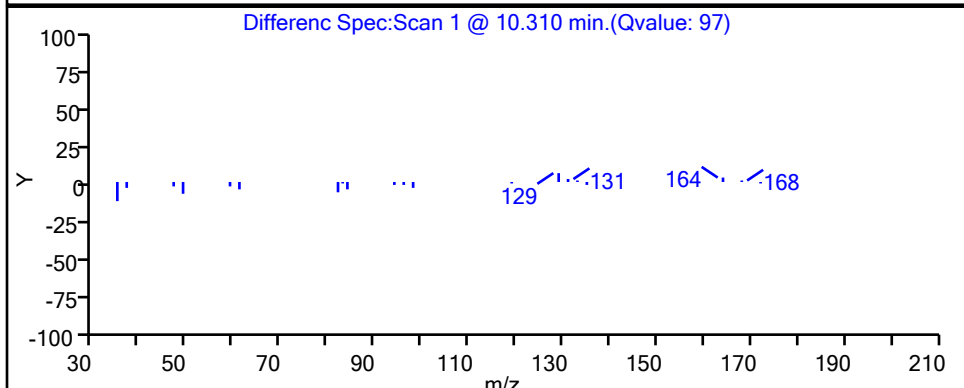
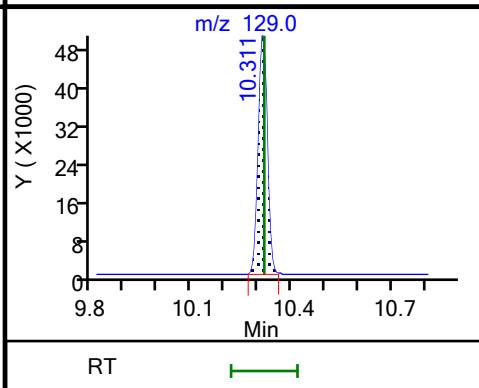
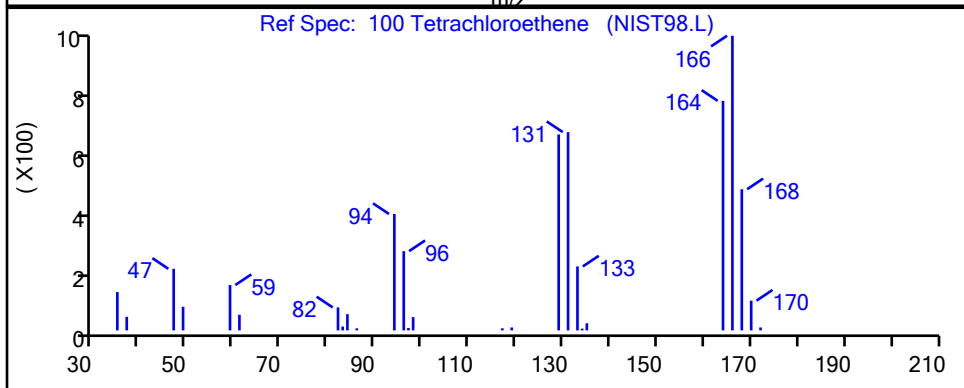
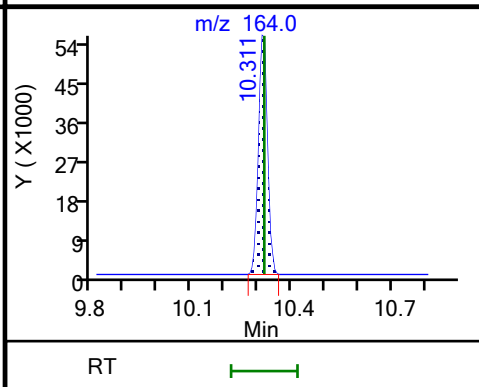
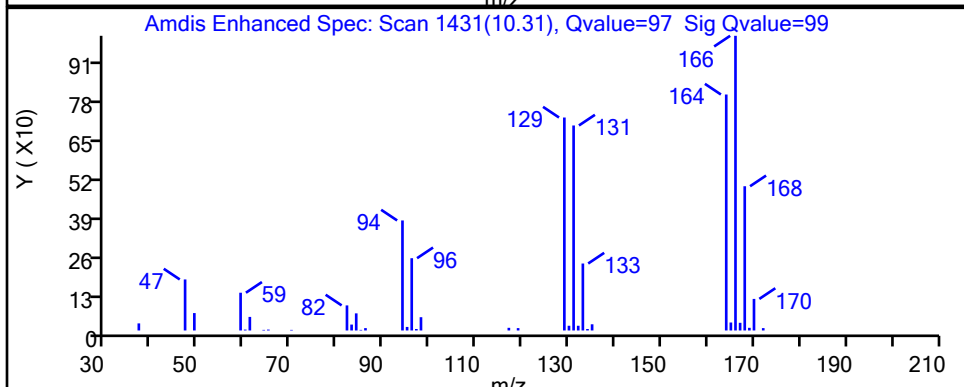
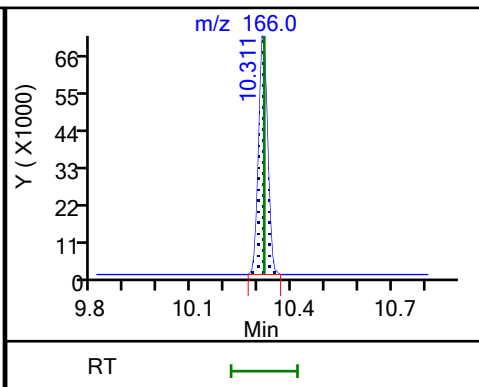
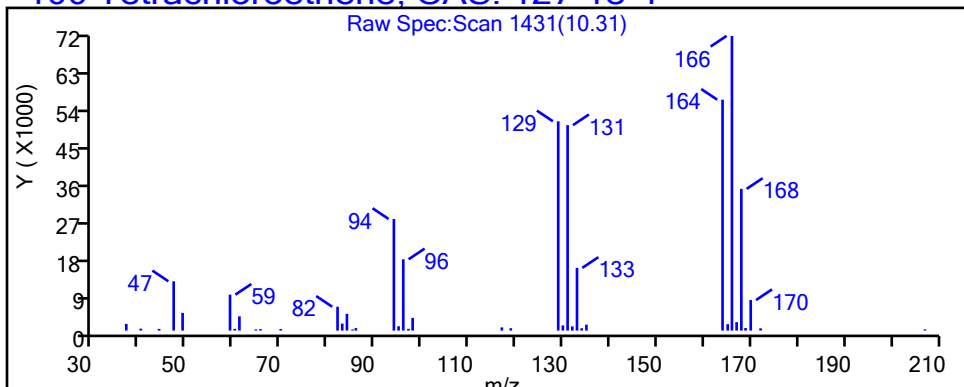
Method: MSV_16334_25mL

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\20210104-19179.b\GJ04S17.D

Injection Date: 05-Jan-2021 03:59:30

Instrument ID: 16334

Lims ID: 410-24913-A-8

Lab Sample ID: 410-24913-8

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

Operator ID: MEC29284

ALS Bottle#: 26

Worklist Smp#: 27

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

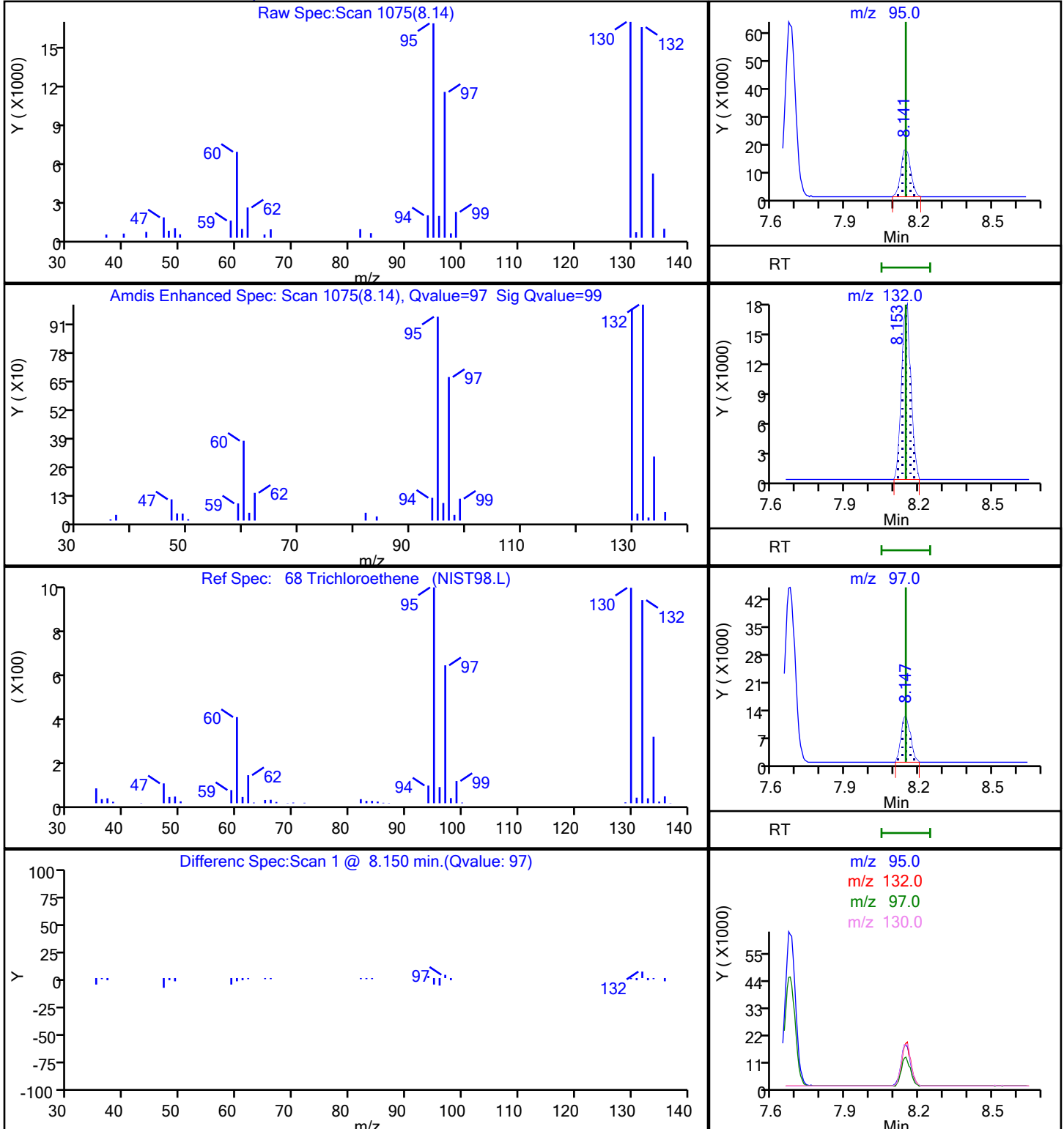
Method: MSV_16334_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) x 30m

MS Quad

68 Trichloroethene, CAS: 79-01-6



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-24913-1
 SDG No.: _____
 Client Sample ID: HD-COD-SW-26-0/1-0 Lab Sample ID: 410-24913-9
 Matrix: Water Lab File ID: GJ04S18.D
 Analysis Method: 8260D Date Collected: 12/23/2020 11:05
 Sample wt/vol: 25 (mL) Date Analyzed: 01/05/2021 04:21
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: R-624SilMS 30m ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 81892 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	2.1	J	5.0	0.90
71-43-2	Benzene	ND		0.50	0.050
74-97-5	Bromochloromethane	ND		0.50	0.050
75-27-4	Bromodichloromethane	ND		0.50	0.050
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.070
75-15-0	Carbon disulfide	ND		1.0	0.060
56-23-5	Carbon tetrachloride	ND		0.50	0.070
108-90-7	Chlorobenzene	ND		0.50	0.060
75-00-3	Chloroethane	ND		0.50	0.070
67-66-3	Chloroform	0.18	J	0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	0.060	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	0.72		0.50	0.060
108-88-3	Toluene	ND		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	ND		0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-24913-1
 SDG No.: _____
 Client Sample ID: HD-COD-SW-26-0/1-0 Lab Sample ID: 410-24913-9
 Matrix: Water Lab File ID: GJ04S18.D
 Analysis Method: 8260D Date Collected: 12/23/2020 11:05
 Sample wt/vol: 25 (mL) Date Analyzed: 01/05/2021 04:21
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: R-624SilMS 30m ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 81892 Units: ug/L

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

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		80-120
460-00-4	4-Bromofluorobenzene (Surr)	95		80-120
1868-53-7	Dibromofluoromethane (Surr)	99		80-120
2037-26-5	Toluene-d8 (Surr)	99		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20210104-19179.b\GJ04S18.D
 Lims ID: 410-24913-A-9
 Client ID: HD-COD-SW-26-0/1-0
 Sample Type: Client
 Inject. Date: 05-Jan-2021 04:21:30 ALS Bottle#: 27 Worklist Smp#: 28
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0019179-028
 Misc. Info.: 410-24913-A-9
 Operator ID: MEC29284 Instrument ID: 16334
 Method: \\chromfs\Lancaster\ChromData\16334\20210104-19179.b\MSV_16334_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 05-Jan-2021 09:24:47 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: CTX1665

First Level Reviewer: howej

Date: 05-Jan-2021 09:24:23

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
5 Chloromethane	50	2.141	2.141	0.000	94	2943	0.0404	
8 Vinyl chloride	62		2.257				ND	
9 Bromomethane	94		2.587				ND	
10 Chloroethane	64		2.666				ND	
19 1,1-Dichloroethene	96		3.507				ND	7
21 Acetone	43	3.538	3.550	-0.012	67	14515	2.08	
25 Carbon disulfide	76		3.800				ND	7
29 Methylene Chloride	84		4.172				ND	7
* 30 t-Butyl alcohol-d10 (IS)	65	4.184	4.190	-0.006	0	142434	50.0	
33 Methyl tert-butyl ether	73		4.568				ND	
34 trans-1,2-Dichloroethene	96		4.574				ND	
37 1,1-Dichloroethane	63		5.245				ND	
41 2-Butanone (MEK)	43		6.043				ND	
42 cis-1,2-Dichloroethene	96	6.080	6.080	0.000	74	3373	0.0604	
49 Chlorobromomethane	128		6.409				ND	
51 Chloroform	83	6.567	6.567	0.000	91	15911	0.1788	
\$ 52 Dibromofluoromethane (Surr)	113	6.781	6.787	-0.006	94	495685	9.87	
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	7.238	-0.006	0	105458	9.87	
60 Benzene	78		7.262				ND	7
61 1,2-Dichloroethane	62		7.336				ND	
* 64 Fluorobenzene (IS)	96	7.671	7.671	0.000	99	2075301	10.0	
68 Trichloroethene	95		8.146				ND	
70 1,2-Dichloropropane	63		8.488				ND	
76 Dichlorobromomethane	83		8.835				ND	7
81 cis-1,3-Dichloropropene	75		9.378				ND	
82 4-Methyl-2-pentanone (MIBK)	43		9.561				ND	7
\$ 83 Toluene-d8 (Surr)	98	9.689	9.689	0.000	93	2014262	9.89	
84 Toluene	92	9.762	9.768	-0.006	95	4302	0.0325	
96 trans-1,3-Dichloropropene	75		10.030				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
99 1,1,2-Trichloroethane	97		10.231				ND	
100 Tetrachloroethene	166	10.311	10.317	-0.006	98	41212	0.7177	
102 2-Hexanone	43		10.451				ND	
104 Chlorodibromomethane	129		10.609				ND	
105 Ethylene Dibromide	107		10.719				ND	
* 106 Chlorobenzene-d5 (IS)	117	11.146	11.152	-0.006	85	1527085	10.0	
108 Chlorobenzene	112		11.176				ND	
S 109 Xylenes, Total	106		11.245				ND	7
110 1,1,1,2-Tetrachloroethane	131		11.256				ND	
111 Ethylbenzene	91		11.262				ND	7
112 m-Xylene & p-Xylene	106		11.377				ND	7
113 o-Xylene	106		11.707				ND	7
114 Styrene	104		11.719				ND	7
115 Bromoform	173		11.877				ND	
\$ 119 4-Bromofluorobenzene (Surr)	95	12.146	12.146	0.000	92	737894	9.49	
120 1,1,2,2-Tetrachloroethane	83		12.249				ND	
* 134 1,4-Dichlorobenzene-d4	152	13.024	13.024	0.000	95	846068	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

MSV_29_826ISS_00014

Amount Added: 1.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\16334\20210104-19179.b\GJ04S18.D

Injection Date: 05-Jan-2021 04:21:30

Instrument ID: 16334

Operator ID: MEC29284

Lims ID: 410-24913-A-9

Lab Sample ID: 410-24913-9

Worklist Smp#: 28

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

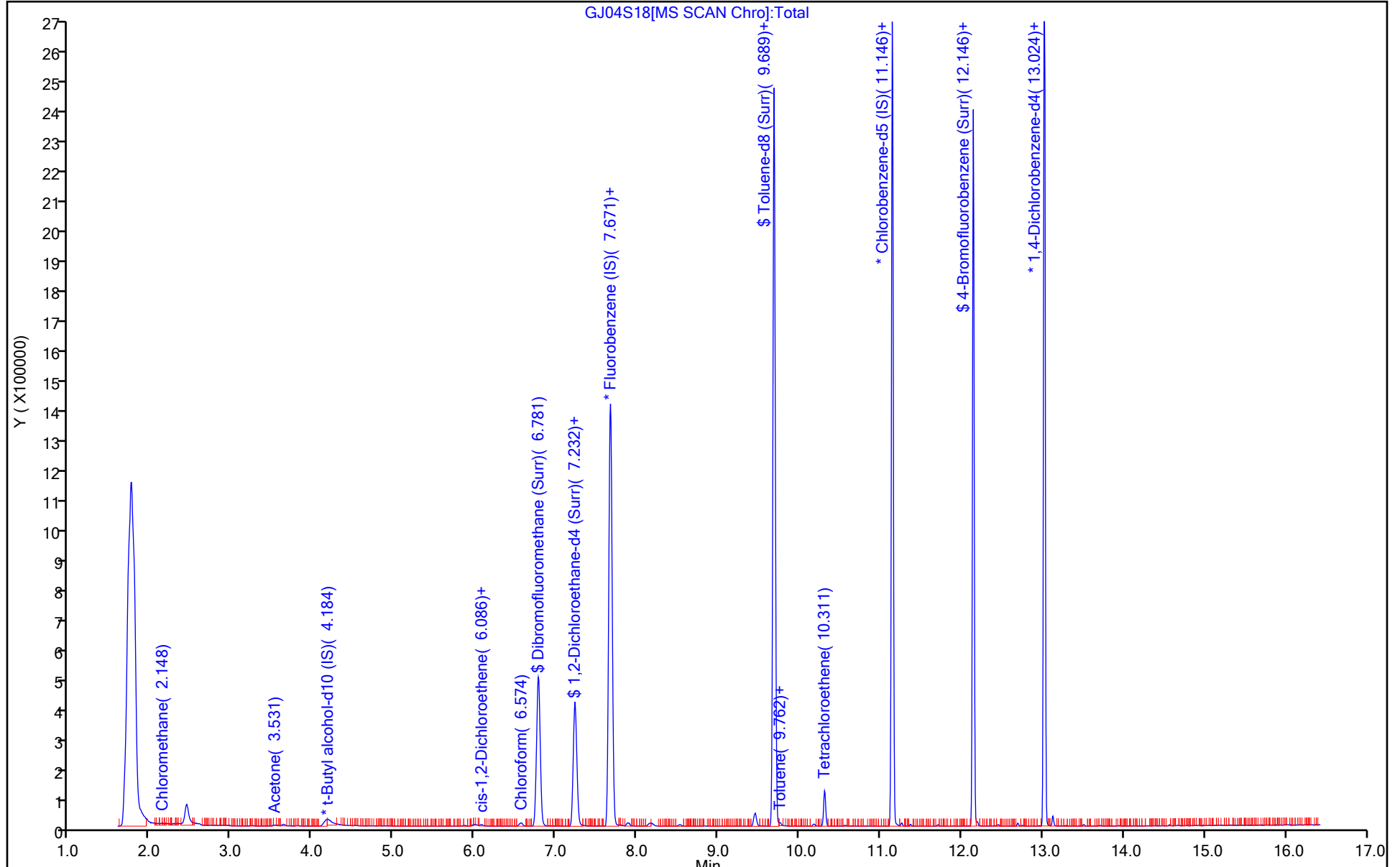
ALS Bottle#: 27

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\20210104-19179.b\GJ04S18.D
 Lims ID: 410-24913-A-9
 Client ID: HD-COD-SW-26-0/1-0
 Sample Type: Client
 Inject. Date: 05-Jan-2021 04:21:30 ALS Bottle#: 27 Worklist Smp#: 28
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0019179-028
 Misc. Info.: 410-24913-A-9
 Operator ID: MEC29284 Instrument ID: 16334
 Method: \\chromfs\Lancaster\ChromData\16334\20210104-19179.b\MSV_16334_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 05-Jan-2021 09:24:47 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: CTX1665

First Level Reviewer: howej Date: 05-Jan-2021 09:24:23

Compound	Amount Added	Amount Recovered	% Rec.
\$ 52 Dibromofluoromethane (Surr)	10.0	9.87	98.69
\$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	9.87	98.68
\$ 83 Toluene-d8 (Surr)	10.0	9.89	98.86
\$ 119 4-Bromofluorobenzene (Surr)	10.0	9.49	94.86

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20210104-19179.b\GJ04S18.D

Injection Date: 05-Jan-2021 04:21:30

Instrument ID: 16334

Lims ID: 410-24913-A-9

Lab Sample ID: 410-24913-9

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

Operator ID: MEC29284

ALS Bottle#: 27

Worklist Smp#: 28

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

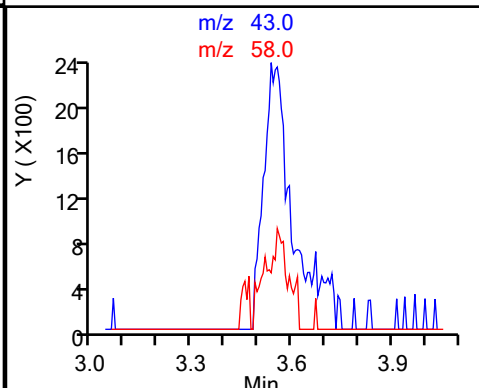
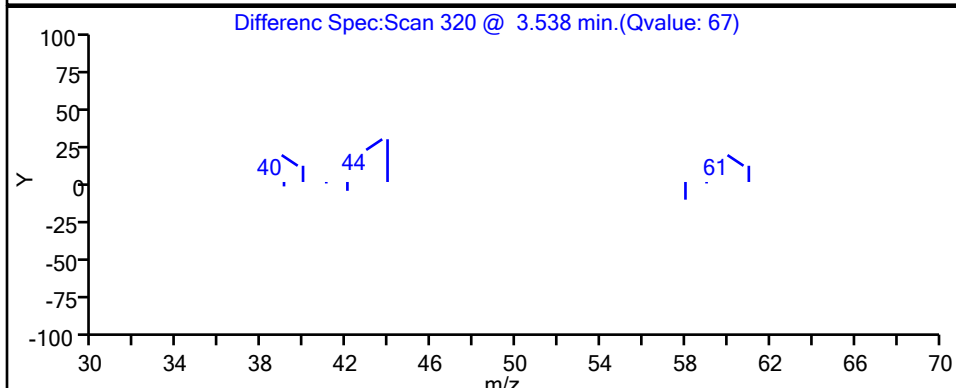
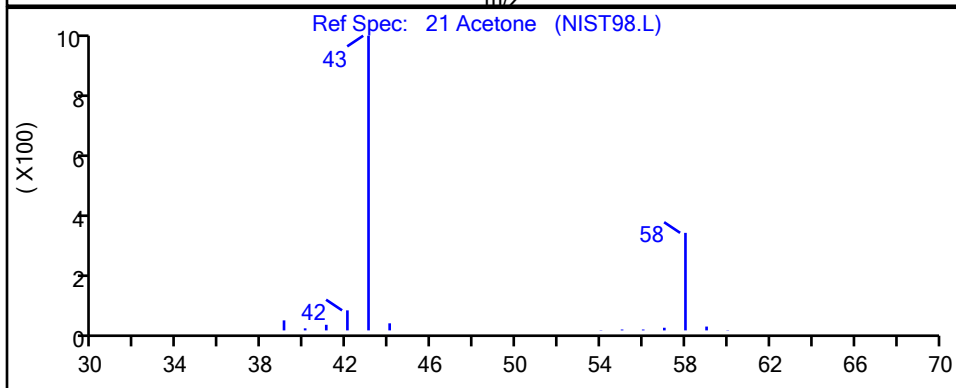
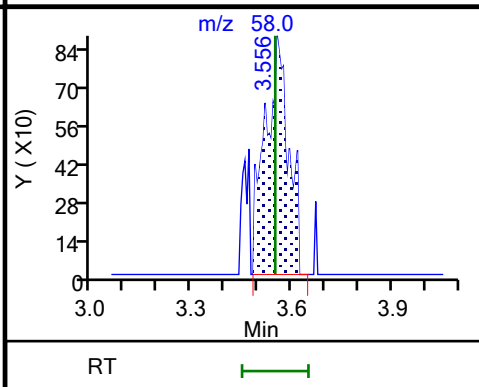
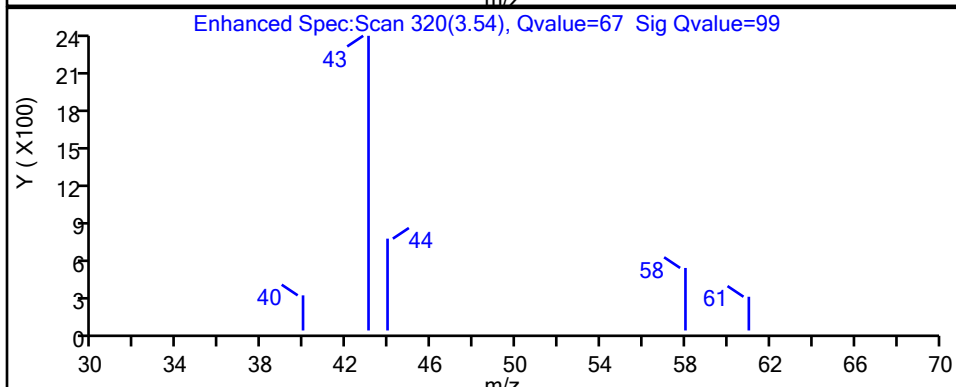
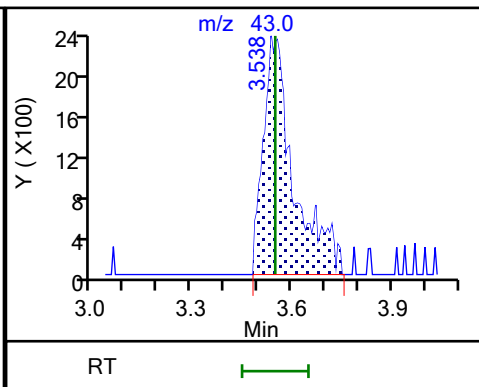
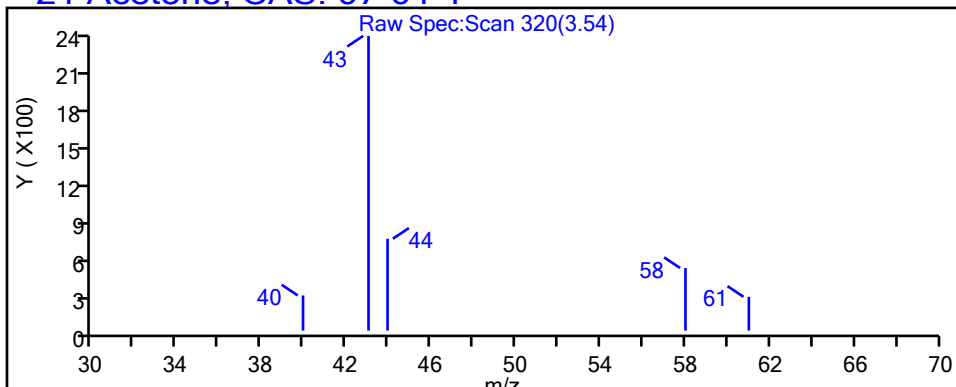
Method: MSV_16334_25mL

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\20210104-19179.b\GJ04S18.D

Injection Date: 05-Jan-2021 04:21:30

Instrument ID: 16334

Lims ID: 410-24913-A-9

Lab Sample ID: 410-24913-9

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

Operator ID: MEC29284

ALS Bottle#: 27

Worklist Smp#: 28

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

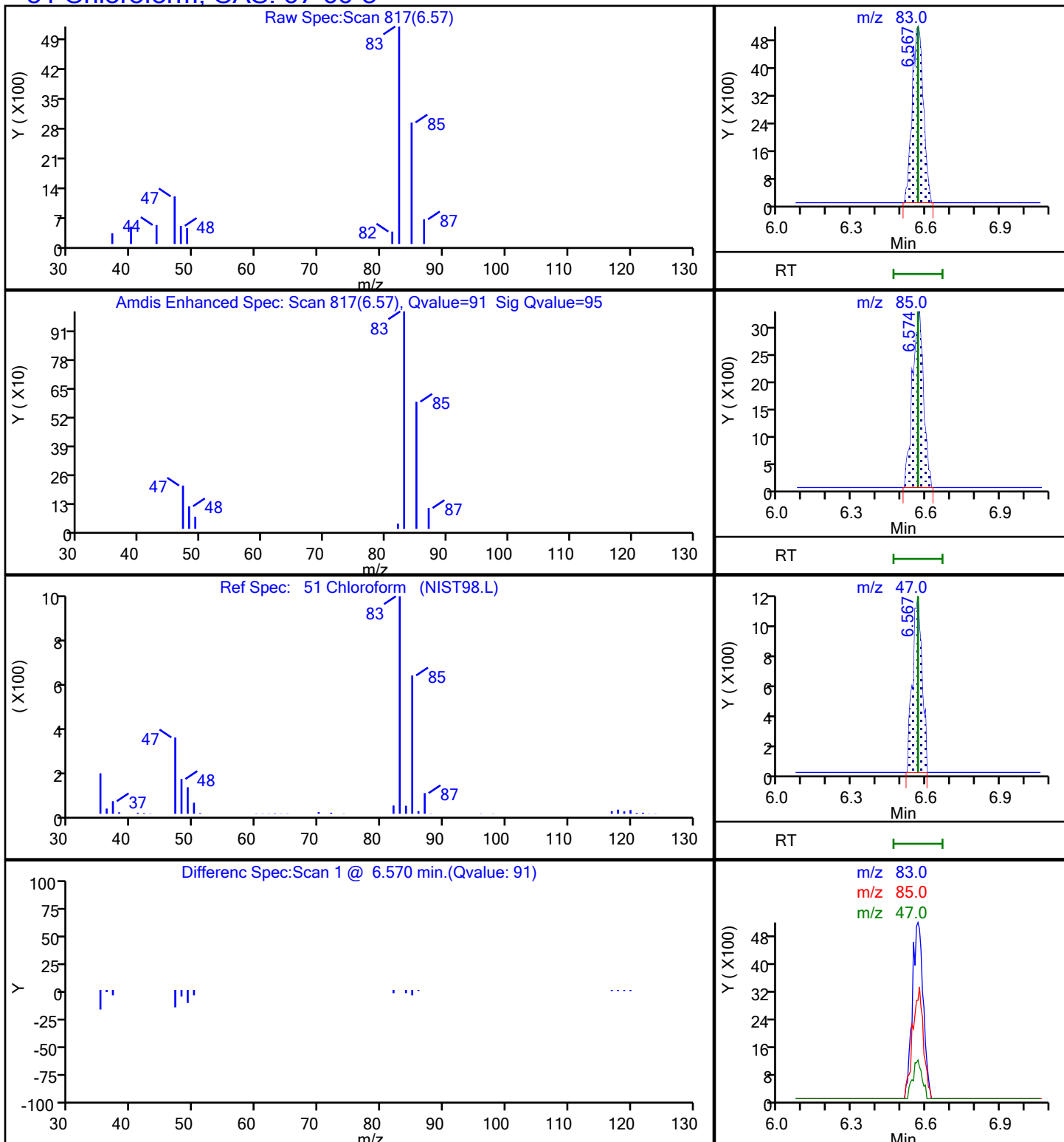
Method: MSV_16334_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

51 Chloroform, CAS: 67-66-3



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20210104-19179.b\GJ04S18.D

Injection Date: 05-Jan-2021 04:21:30

Instrument ID: 16334

Lims ID: 410-24913-A-9

Lab Sample ID: 410-24913-9

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

Operator ID: MEC29284

ALS Bottle#: 27

Worklist Smp#: 28

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

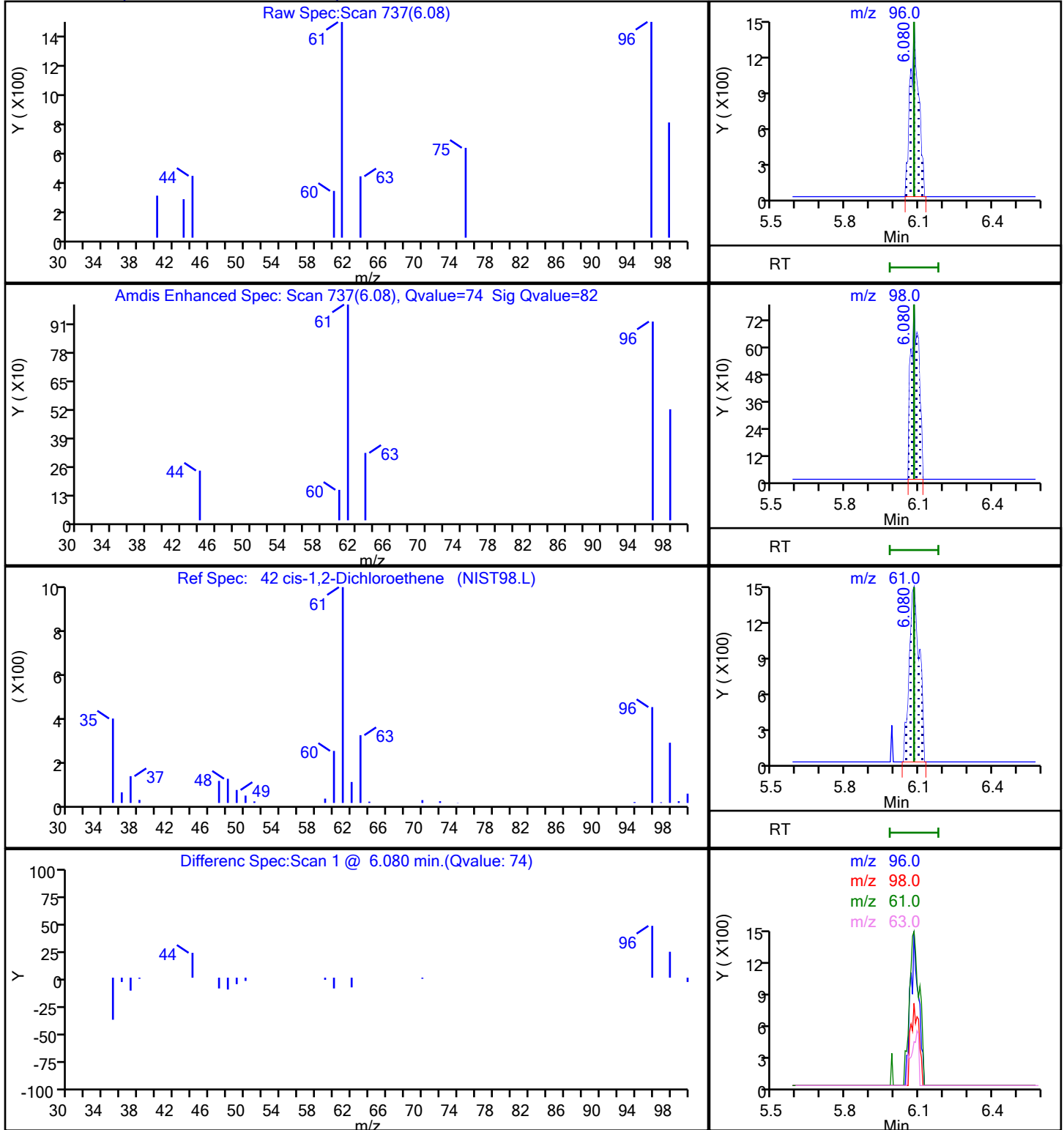
Method: MSV_16334_25mL

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\20210104-19179.b\GJ04S18.D

Injection Date: 05-Jan-2021 04:21:30

Instrument ID: 16334

Lims ID: 410-24913-A-9

Lab Sample ID: 410-24913-9

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

Operator ID: MEC29284

ALS Bottle#: 27

Worklist Smp#: 28

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

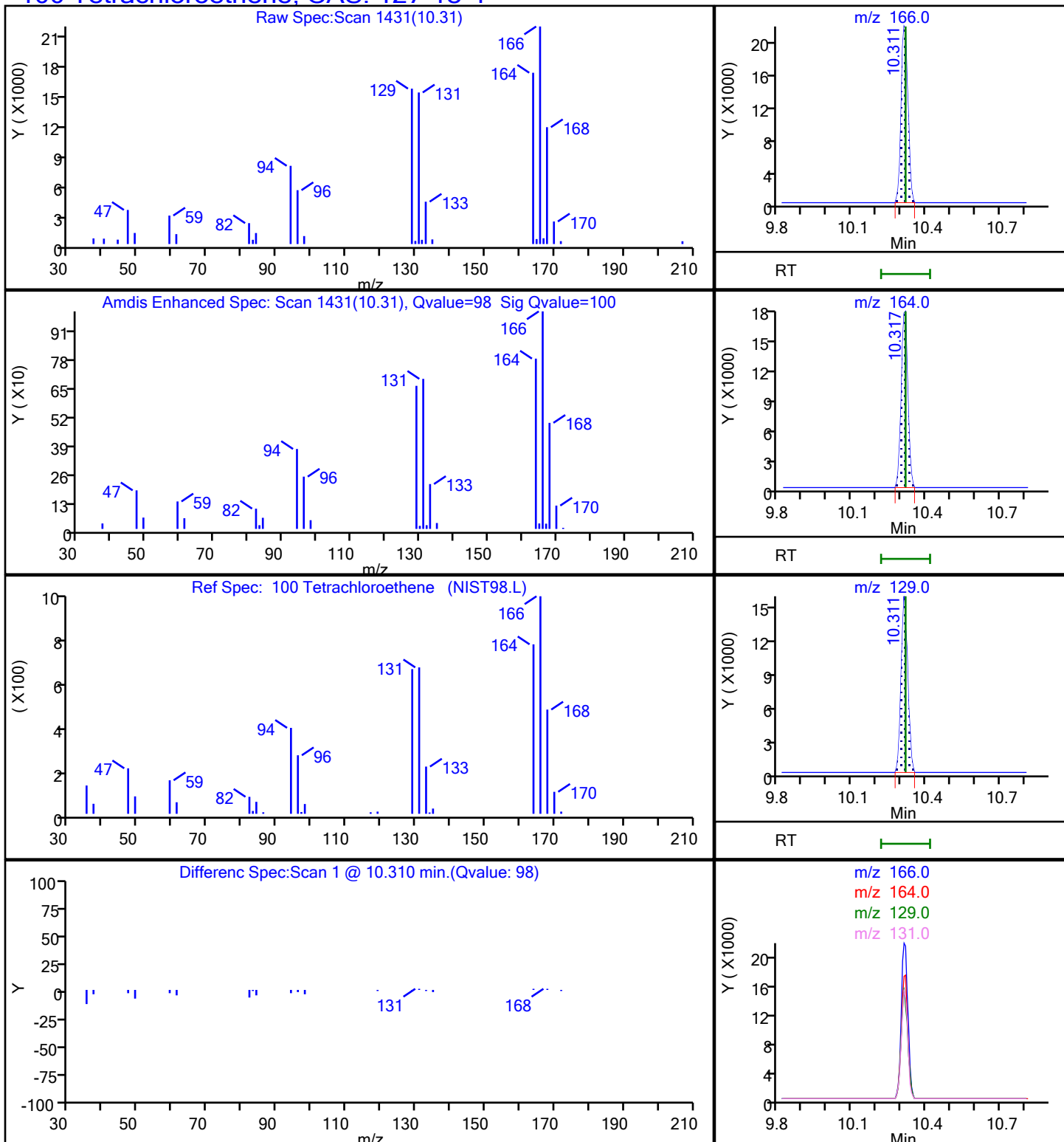
Method: MSV_16334_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

100 Tetrachloroethene, CAS: 127-18-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-24913-1
 SDG No.: _____
 Client Sample ID: HD-COD-SW-27-0/1-0 Lab Sample ID: 410-24913-10
 Matrix: Water Lab File ID: GJ04S19.D
 Analysis Method: 8260D Date Collected: 12/23/2020 11:35
 Sample wt/vol: 25 (mL) Date Analyzed: 01/05/2021 04:43
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: R-624SilMS 30m ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 81892 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	0.062	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	0.068	J	0.50	0.060
108-88-3	Toluene	ND		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	ND		0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-24913-1
 SDG No.: _____
 Client Sample ID: HD-COD-SW-27-0/1-0 Lab Sample ID: 410-24913-10
 Matrix: Water Lab File ID: GJ04S19.D
 Analysis Method: 8260D Date Collected: 12/23/2020 11:35
 Sample wt/vol: 25 (mL) Date Analyzed: 01/05/2021 04:43
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: R-624SilMS 30m ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 81892 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)	95		80-120
460-00-4	4-Bromofluorobenzene (Surr)	95		80-120
1868-53-7	Dibromofluoromethane (Surr)	98		80-120
2037-26-5	Toluene-d8 (Surr)	98		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20210104-19179.b\GJ04S19.D
 Lims ID: 410-24913-A-10
 Client ID: HD-COD-SW-27-0/1-0
 Sample Type: Client
 Inject. Date: 05-Jan-2021 04:43:30 ALS Bottle#: 28 Worklist Smp#: 29
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0019179-029
 Misc. Info.: 410-24913-A-10
 Operator ID: MEC29284 Instrument ID: 16334
 Method: \\chromfs\Lancaster\ChromData\16334\20210104-19179.b\MSV_16334_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 05-Jan-2021 09:24:47 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: CTX1665

First Level Reviewer: howej

Date: 05-Jan-2021 09:24:47

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
5 Chloromethane	50	2.142	2.141	0.001	1	2816	0.0388	
8 Vinyl chloride	62		2.257				ND	
9 Bromomethane	94		2.587				ND	
10 Chloroethane	64		2.666				ND	
19 1,1-Dichloroethene	96		3.507				ND	
21 Acetone	43	3.550	3.550	0.000	97	12786	1.93	
25 Carbon disulfide	76	3.806	3.800	0.006	99	7960	0.0501	M
29 Methylene Chloride	84		4.172				ND	
* 30 t-Butyl alcohol-d10 (IS)	65	4.178	4.190	-0.012	0	135014	50.0	
33 Methyl tert-butyl ether	73		4.568				ND	
34 trans-1,2-Dichloroethene	96		4.574				ND	
37 1,1-Dichloroethane	63		5.245				ND	
41 2-Butanone (MEK)	43		6.043				ND	
42 cis-1,2-Dichloroethene	96	6.080	6.080	0.000	77	3453	0.0619	
49 Chlorobromomethane	128		6.409				ND	
51 Chloroform	83	6.568	6.567	0.001	83	3765	0.0424	
\$ 52 Dibromofluoromethane (Surr)	113	6.781	6.787	-0.006	94	489686	9.77	
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	7.238	-0.006	0	101603	9.53	
60 Benzene	78		7.262				ND	7
61 1,2-Dichloroethane	62		7.336				ND	
* 64 Fluorobenzene (IS)	96	7.671	7.671	0.000	99	2070564	10.0	
68 Trichloroethene	95		8.146				ND	
70 1,2-Dichloropropane	63		8.488				ND	
76 Dichlorobromomethane	83		8.835				ND	
81 cis-1,3-Dichloropropene	75		9.378				ND	
82 4-Methyl-2-pentanone (MIBK)	43		9.561				ND	7
\$ 83 Toluene-d8 (Surr)	98	9.689	9.689	0.000	93	2009479	9.83	
84 Toluene	92	9.768	9.768	0.000	98	4715	0.0355	
96 trans-1,3-Dichloropropene	75		10.030				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
99 1,1,2-Trichloroethane	97		10.231				ND	
100 Tetrachloroethene	166	10.317	10.317	0.000	95	3892	0.0676	
102 2-Hexanone	43		10.451				ND	
104 Chlorodibromomethane	129		10.609				ND	
105 Ethylene Dibromide	107		10.719				ND	
* 106 Chlorobenzene-d5 (IS)	117	11.146	11.152	-0.006	85	1531922	10.0	
108 Chlorobenzene	112		11.176				ND	
S 109 Xylenes, Total	106		11.245				ND	7
110 1,1,1,2-Tetrachloroethane	131		11.256				ND	
111 Ethylbenzene	91		11.262				ND	7
112 m-Xylene & p-Xylene	106		11.377				ND	7
113 o-Xylene	106		11.707				ND	7
114 Styrene	104		11.719				ND	7
115 Bromoform	173		11.877				ND	
\$ 119 4-Bromofluorobenzene (Surr)	95	12.146	12.146	0.000	92	737650	9.45	
120 1,1,2,2-Tetrachloroethane	83		12.249				ND	
* 134 1,4-Dichlorobenzene-d4	152	13.024	13.024	0.000	94	834501	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

Reagents:

MSV_29_826ISS_00014

Amount Added: 1.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\16334\20210104-19179.b\GJ04S19.D

Injection Date: 05-Jan-2021 04:43:30

Instrument ID: 16334

Operator ID: MEC29284

Lims ID: 410-24913-A-10

Lab Sample ID: 410-24913-10

Worklist Smp#: 29

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

ALS Bottle#: 28

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\20210104-19179.b\GJ04S19.D
 Lims ID: 410-24913-A-10
 Client ID: HD-COD-SW-27-0/1-0
 Sample Type: Client
 Inject. Date: 05-Jan-2021 04:43:30 ALS Bottle#: 28 Worklist Smp#: 29
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0019179-029
 Misc. Info.: 410-24913-A-10
 Operator ID: MEC29284 Instrument ID: 16334
 Method: \\chromfs\Lancaster\ChromData\16334\20210104-19179.b\MSV_16334_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 05-Jan-2021 09:24:47 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: CTX1665

First Level Reviewer: howej

Date: 05-Jan-2021 09:24:47

Compound	Amount Added	Amount Recovered	% Rec.
\$ 52 Dibromofluoromethane (Surr)	10.0	9.77	97.72
\$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	9.53	95.29
\$ 83 Toluene-d8 (Surr)	10.0	9.83	98.32
\$ 119 4-Bromofluorobenzene (Surr)	10.0	9.45	94.53

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20210104-19179.b\GJ04S19.D

Injection Date: 05-Jan-2021 04:43:30

Instrument ID: 16334

Lims ID: 410-24913-A-10

Lab Sample ID: 410-24913-10

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

Operator ID: MEC29284

ALS Bottle#: 28

Worklist Smp#: 29

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

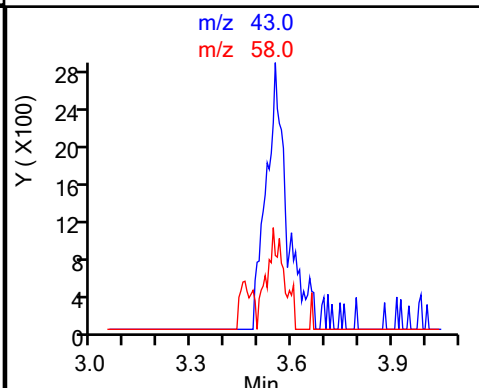
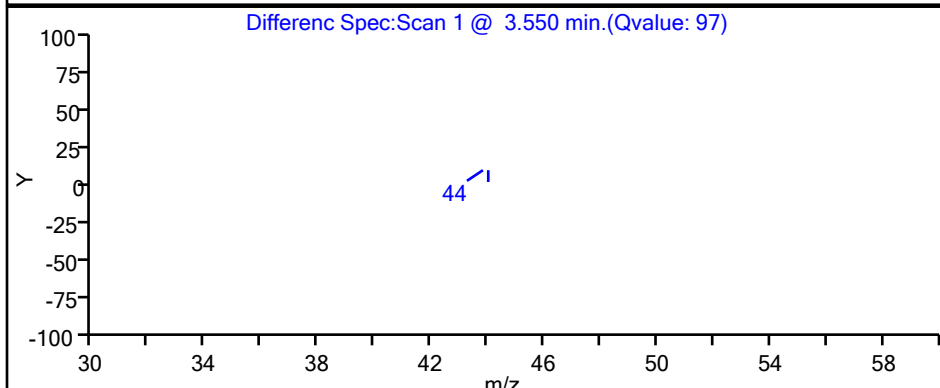
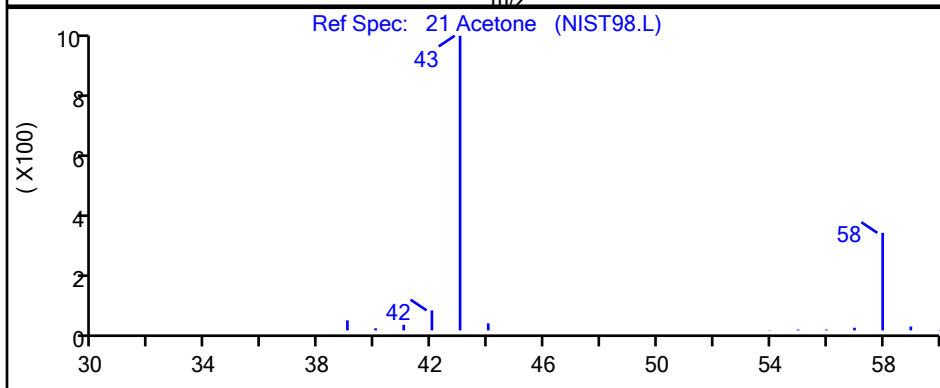
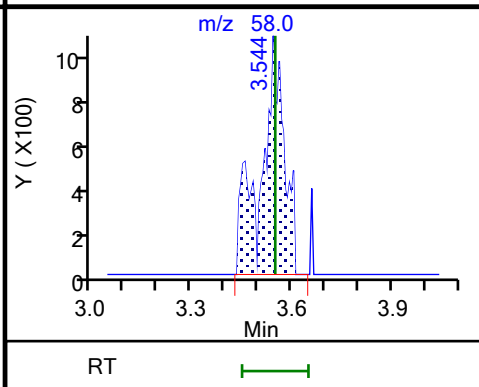
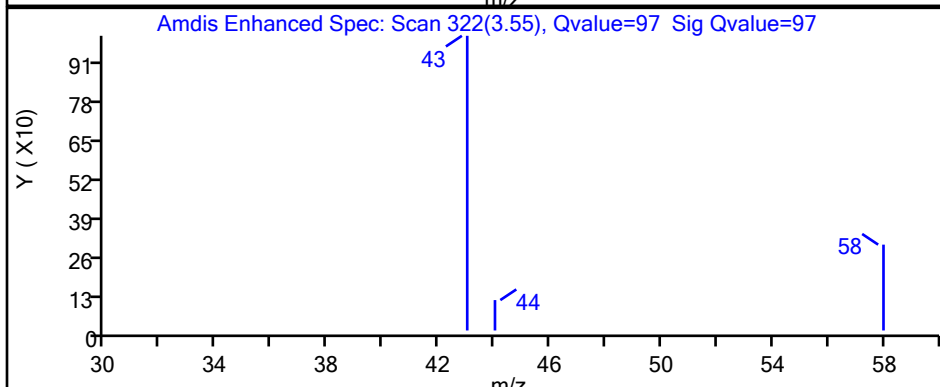
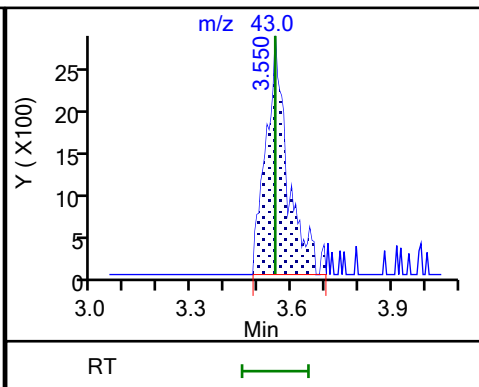
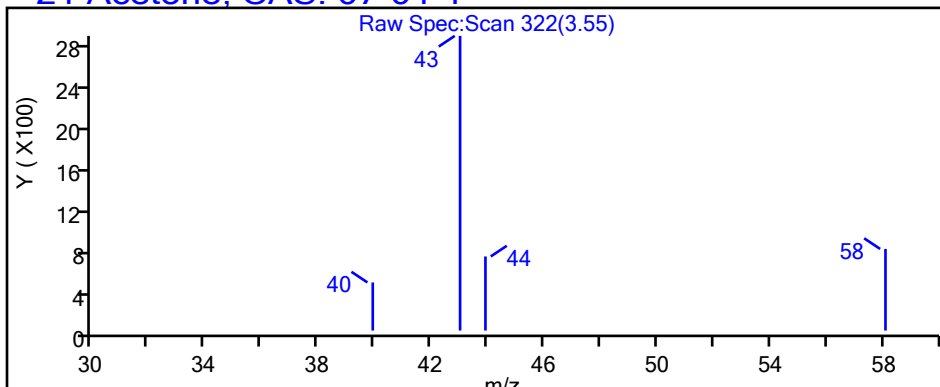
Method: MSV_16334_25mL

Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25mm ID) x 30m

MS Quad

21 Acetone, CAS: 67-64-1



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20210104-19179.b\GJ04S19.D

Injection Date: 05-Jan-2021 04:43:30

Instrument ID: 16334

Lims ID: 410-24913-A-10

Lab Sample ID: 410-24913-10

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

Operator ID: MEC29284

ALS Bottle#: 28

Worklist Smp#: 29

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

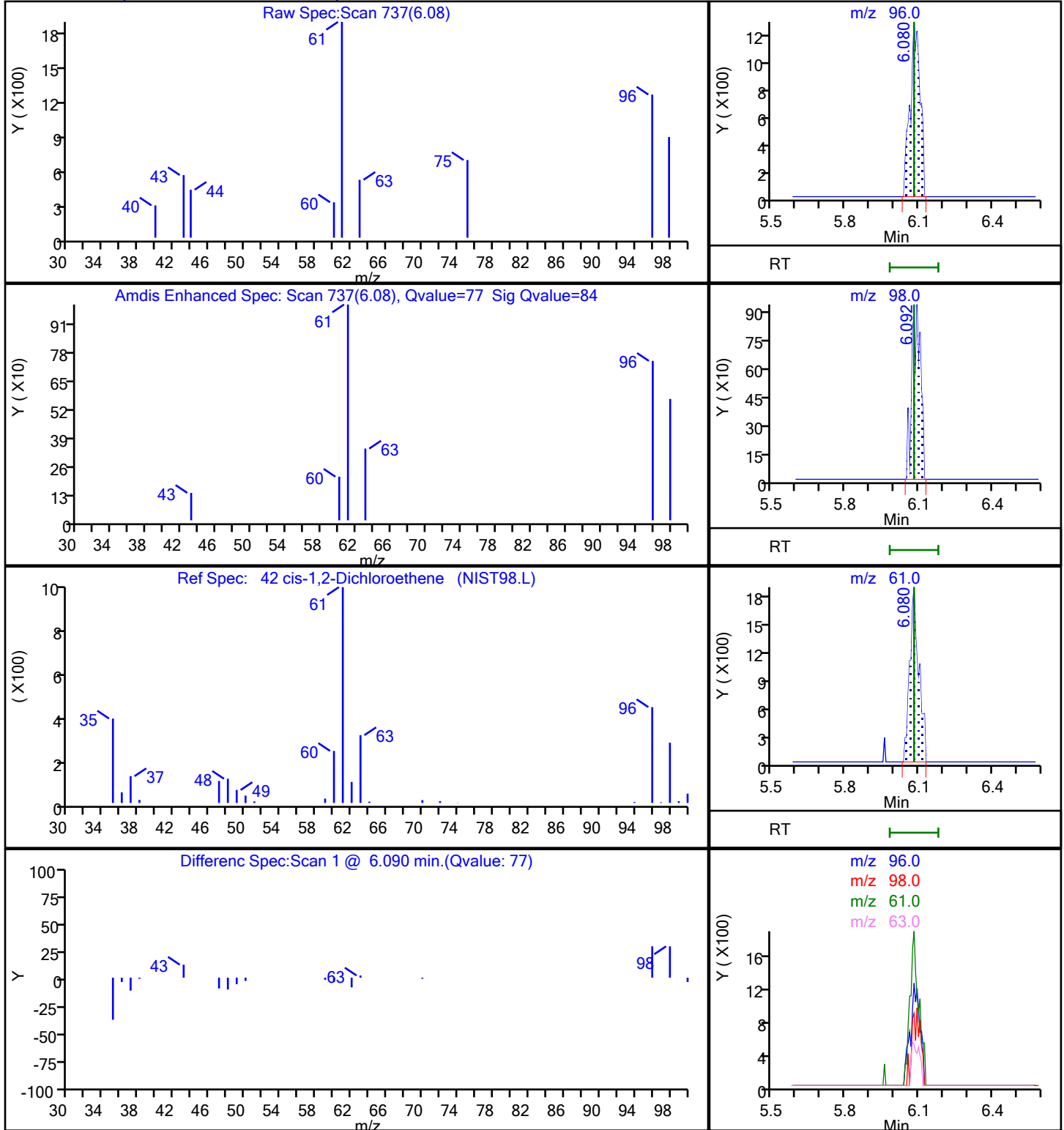
Method: MSV_16334_25mL

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\20210104-19179.b\GJ04S19.D

Injection Date: 05-Jan-2021 04:43:30

Instrument ID: 16334

Lims ID: 410-24913-A-10

Lab Sample ID: 410-24913-10

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

Operator ID: MEC29284

ALS Bottle#: 28

Worklist Smp#: 29

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

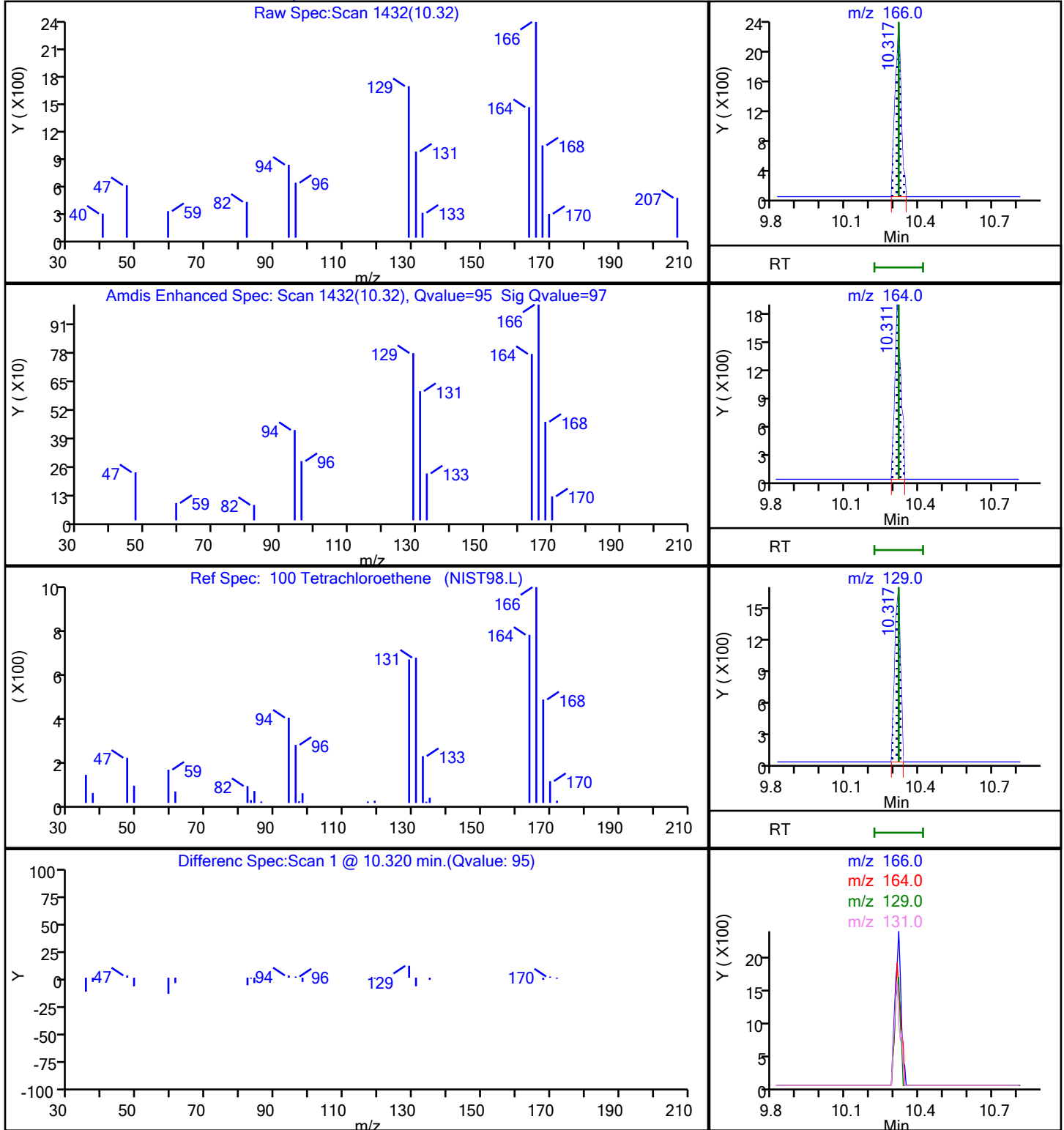
Method: MSV_16334_25mL

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

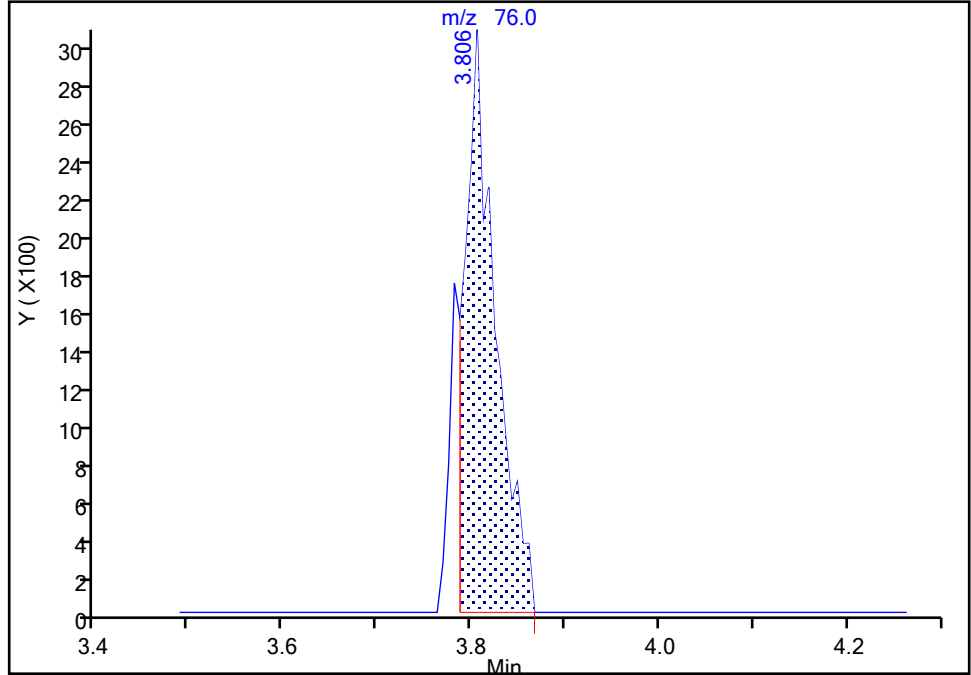
Data File: \\chromfs\Lancaster\ChromData\16334\20210104-19179.b\GJ04S19.D
Injection Date: 05-Jan-2021 04:43:30 Instrument ID: 16334
Lims ID: 410-24913-A-10 Lab Sample ID: 410-24913-10
Client ID: HD-COD-SW-27-0/1-0
Operator ID: MEC29284 ALS Bottle#: 28 Worklist Smp#: 29
Purge Vol: 25.000 mL Dil. Factor: 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

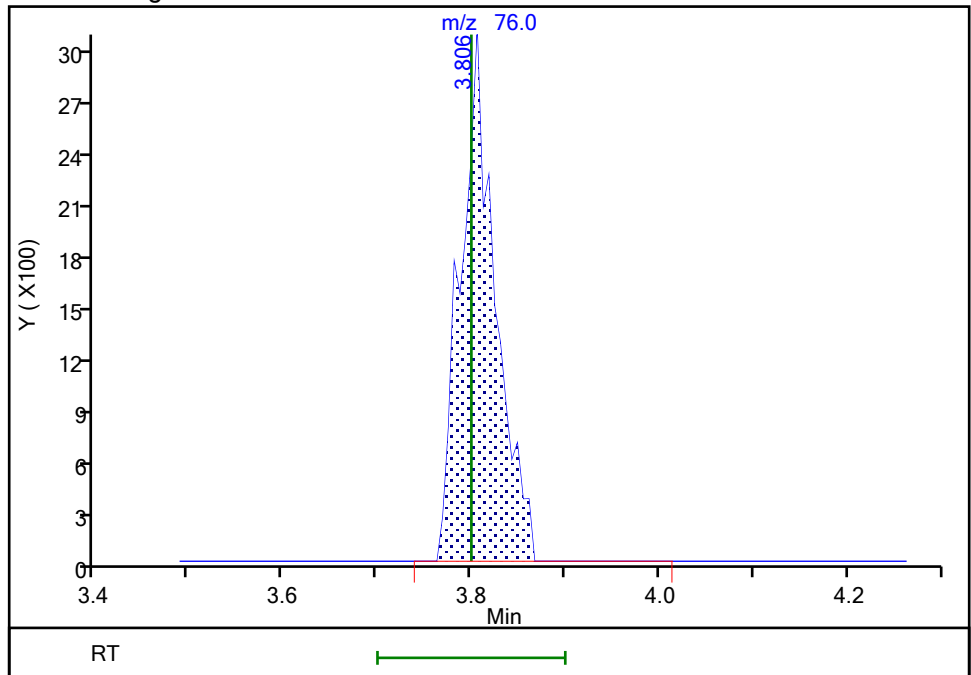
RT: 3.81
Area: 6936
Amount: 0.043627
Amount Units: ug/l

Processing Integration Results



RT: 3.81
Area: 7960
Amount: 0.050068
Amount Units: ug/l

Manual Integration Results



Reviewer: howej, 05-Jan-2021 09:24:34
Audit Action: Manually Integrated

Audit Reason: Other

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-24913-1
 SDG No.: _____
 Client Sample ID: HD-COD-SW-28-0/1-0 Lab Sample ID: 410-24913-11
 Matrix: Water Lab File ID: GJ04S20.D
 Analysis Method: 8260D Date Collected: 12/23/2020 12:25
 Sample wt/vol: 25 (mL) Date Analyzed: 01/05/2021 05:05
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: R-624SilMS 30m ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 81892 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.070
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.060
75-34-3	1,1-Dichloroethane	ND		0.50	0.070
75-35-4	1,1-Dichloroethene	ND		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.060
107-06-2	1,2-Dichloroethane	ND		0.50	0.050
78-87-5	1,2-Dichloropropane	ND		0.50	0.060
78-93-3	2-Butanone (MEK)	ND		5.0	0.60
591-78-6	2-Hexanone	ND		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70
67-64-1	Acetone	2.2	J	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	0.090	J	0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	ND		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.050
124-48-1	Dibromochloromethane	ND		0.50	0.070
100-41-4	Ethylbenzene	ND		0.50	0.060
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.050
75-09-2	Methylene Chloride	ND		0.50	0.070
100-42-5	Styrene	ND		0.50	0.050
127-18-4	Tetrachloroethene	0.14	J	0.50	0.060
108-88-3	Toluene	0.072	J	0.50	0.070
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	ND		0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-24913-1
 SDG No.: _____
 Client Sample ID: HD-COD-SW-28-0/1-0 Lab Sample ID: 410-24913-11
 Matrix: Water Lab File ID: GJ04S20.D
 Analysis Method: 8260D Date Collected: 12/23/2020 12:25
 Sample wt/vol: 25 (mL) Date Analyzed: 01/05/2021 05:05
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: R-624SilMS 30m ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 81892 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)	95		80-120
1868-53-7	Dibromofluoromethane (Surr)	99		80-120
2037-26-5	Toluene-d8 (Surr)	99		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20210104-19179.b\GJ04S20.D
 Lims ID: 410-24913-A-11
 Client ID: HD-COD-SW-28-0/1-0
 Sample Type: Client
 Inject. Date: 05-Jan-2021 05:05:30 ALS Bottle#: 29 Worklist Smp#: 30
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0019179-030
 Misc. Info.: 410-24913-A-11
 Operator ID: MEC29284 Instrument ID: 16334
 Method: \\chromfs\Lancaster\ChromData\16334\20210104-19179.b\MSV_16334_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 05-Jan-2021 09:24:47 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: CTX1665

First Level Reviewer: howej

Date: 05-Jan-2021 09:25:04

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
5 Chloromethane	50		2.141				ND	
8 Vinyl chloride	62		2.257				ND	
9 Bromomethane	94		2.587				ND	
10 Chloroethane	64		2.666				ND	
19 1,1-Dichloroethene	96		3.507				ND	
21 Acetone	43	3.544	3.550	-0.006	95	15683	2.22	
25 Carbon disulfide	76		3.800				ND	7
29 Methylene Chloride	84	4.178	4.172	0.006	37	2640	0.0530	
* 30 t-Butyl alcohol-d10 (IS)	65	4.178	4.190	-0.012	0	144201	50.0	
33 Methyl tert-butyl ether	73		4.568				ND	
34 trans-1,2-Dichloroethene	96		4.574				ND	
37 1,1-Dichloroethane	63		5.245				ND	
41 2-Butanone (MEK)	43		6.043				ND	
42 cis-1,2-Dichloroethene	96		6.080				ND	
49 Chlorobromomethane	128		6.409				ND	
51 Chloroform	83	6.568	6.567	0.001	90	8068	0.0902	
\$ 52 Dibromofluoromethane (Surr)	113	6.781	6.787	-0.006	94	497492	9.86	
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	7.238	-0.006	0	103992	9.68	
60 Benzene	78		7.262				ND	7
61 1,2-Dichloroethane	62		7.336				ND	
* 64 Fluorobenzene (IS)	96	7.665	7.671	-0.006	99	2085302	10.0	
68 Trichloroethene	95		8.146				ND	
70 1,2-Dichloropropane	63		8.488				ND	
76 Dichlorobromomethane	83		8.835				ND	7
81 cis-1,3-Dichloropropene	75		9.378				ND	
82 4-Methyl-2-pentanone (MIBK)	43		9.561				ND	7
\$ 83 Toluene-d8 (Surr)	98	9.689	9.689	0.000	93	2015812	9.85	
84 Toluene	92	9.768	9.768	0.000	98	9597	0.0722	
96 trans-1,3-Dichloropropene	75		10.030				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
99 1,1,2-Trichloroethane	97		10.231				ND	
100 Tetrachloroethene	166	10.311	10.317	-0.006	96	8327	0.1445	
102 2-Hexanone	43		10.451				ND	
104 Chlorodibromomethane	129		10.609				ND	
105 Ethylene Dibromide	107		10.719				ND	
* 106 Chlorobenzene-d5 (IS)	117	11.146	11.152	-0.006	85	1533129	10.0	
108 Chlorobenzene	112		11.176				ND	
S 109 Xylenes, Total	106		11.245				ND	7
110 1,1,1,2-Tetrachloroethane	131		11.256				ND	
111 Ethylbenzene	91		11.262				ND	7
112 m-Xylene & p-Xylene	106	11.371	11.377	-0.006	96	5042	0.0510	
113 o-Xylene	106		11.707				ND	7
114 Styrene	104		11.719				ND	
115 Bromoform	173		11.877				ND	
\$ 119 4-Bromofluorobenzene (Surr)	95	12.146	12.146	0.000	92	741963	9.50	
120 1,1,2,2-Tetrachloroethane	83		12.249				ND	
* 134 1,4-Dichlorobenzene-d4	152	13.024	13.024	0.000	94	845108	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

MSV_29_826ISS_00014

Amount Added: 1.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\16334\20210104-19179.b\GJ04S20.D

Injection Date: 05-Jan-2021 05:05:30

Instrument ID: 16334

Operator ID: MEC29284

Lims ID: 410-24913-A-11

Lab Sample ID: 410-24913-11

Worklist Smp#: 30

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

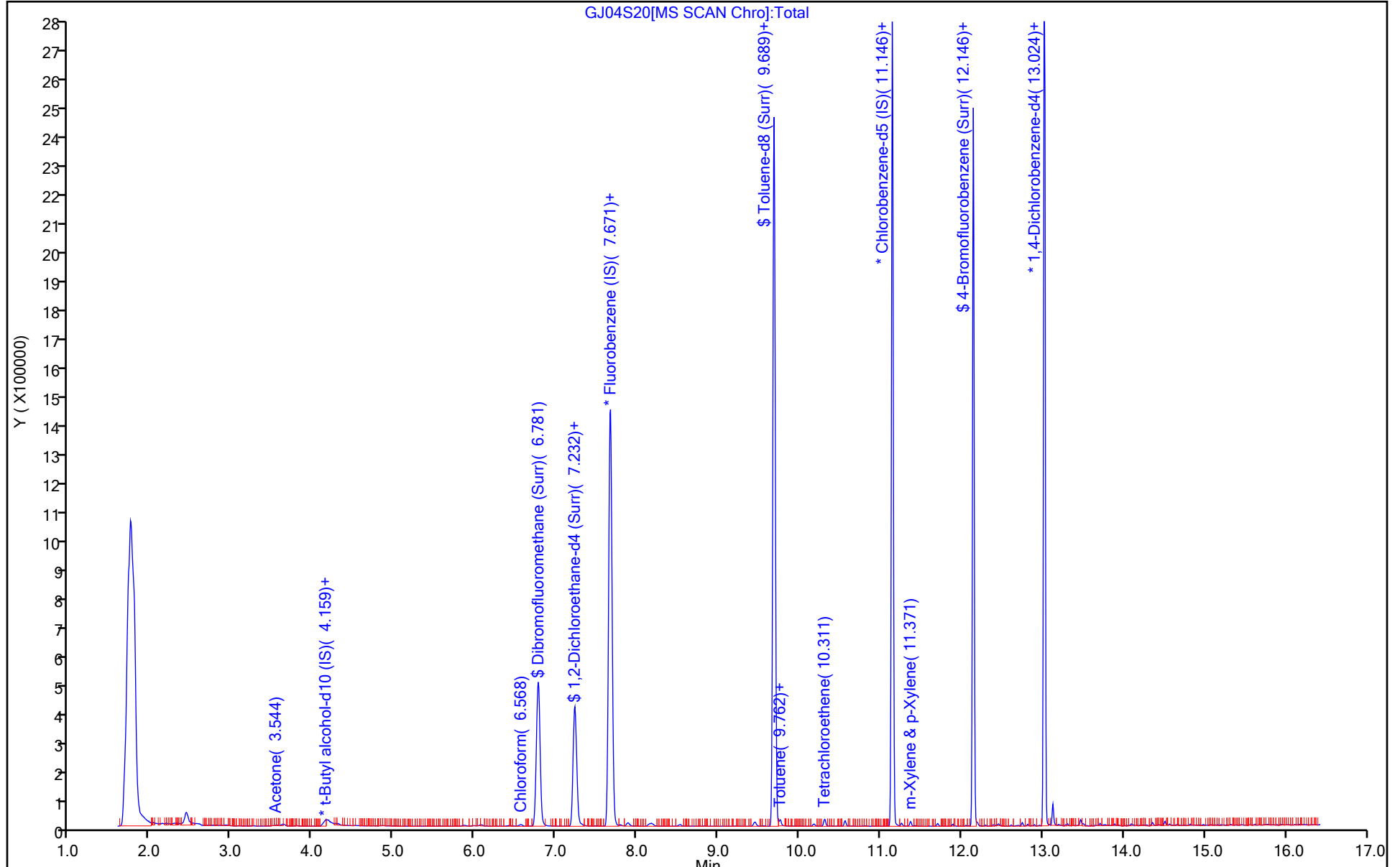
ALS Bottle#: 29

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\20210104-19179.b\GJ04S20.D
 Lims ID: 410-24913-A-11
 Client ID: HD-COD-SW-28-0/1-0
 Sample Type: Client
 Inject. Date: 05-Jan-2021 05:05:30 ALS Bottle#: 29 Worklist Smp#: 30
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0019179-030
 Misc. Info.: 410-24913-A-11
 Operator ID: MEC29284 Instrument ID: 16334
 Method: \\chromfs\Lancaster\ChromData\16334\20210104-19179.b\MSV_16334_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 05-Jan-2021 09:24:47 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: CTX1665

First Level Reviewer: howej

Date: 05-Jan-2021 09:25:04

Compound	Amount Added	Amount Recovered	% Rec.
\$ 52 Dibromofluoromethane (Surr)	10.0	9.86	98.57
\$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	9.68	96.84
\$ 83 Toluene-d8 (Surr)	10.0	9.85	98.55
\$ 119 4-Bromofluorobenzene (Surr)	10.0	9.50	95.00

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20210104-19179.b\GJ04S20.D

Injection Date: 05-Jan-2021 05:05:30

Instrument ID: 16334

Lims ID: 410-24913-A-11

Lab Sample ID: 410-24913-11

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

Operator ID: MEC29284

ALS Bottle#: 29

Worklist Smp#: 30

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

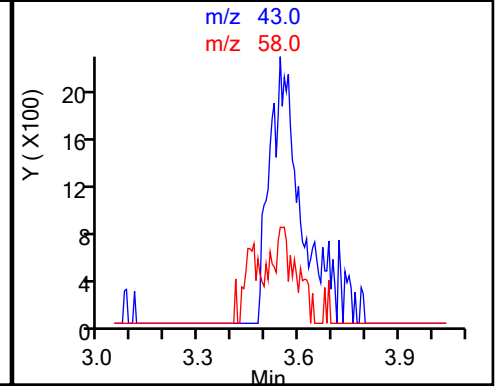
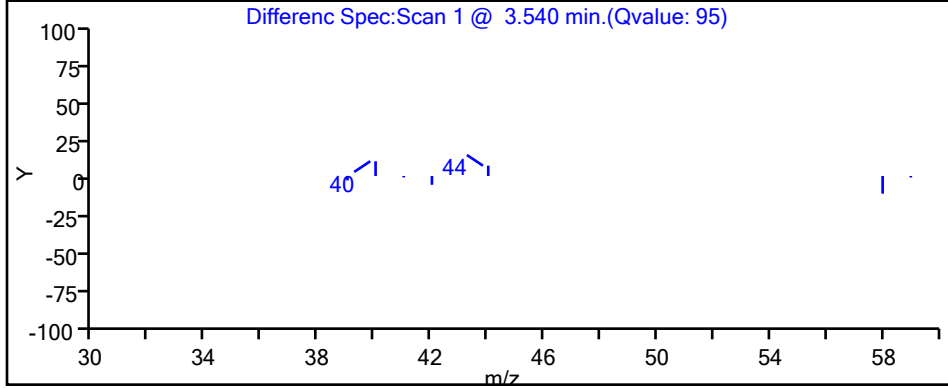
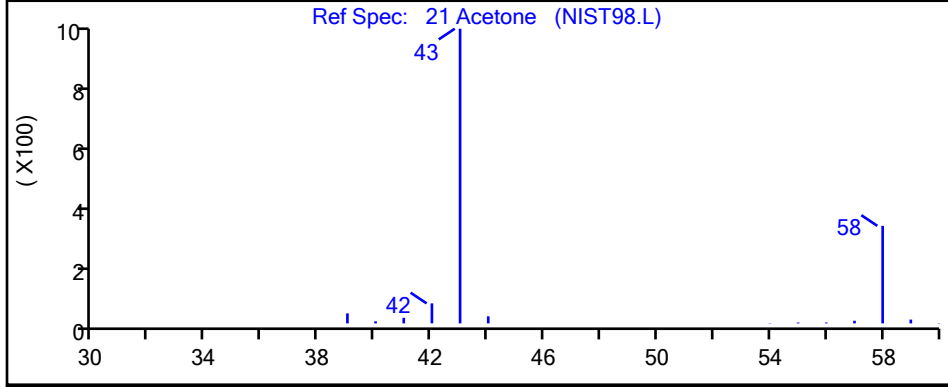
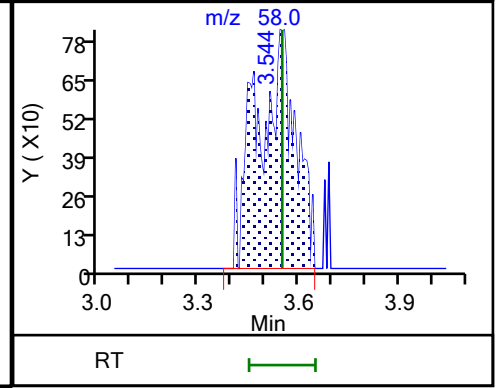
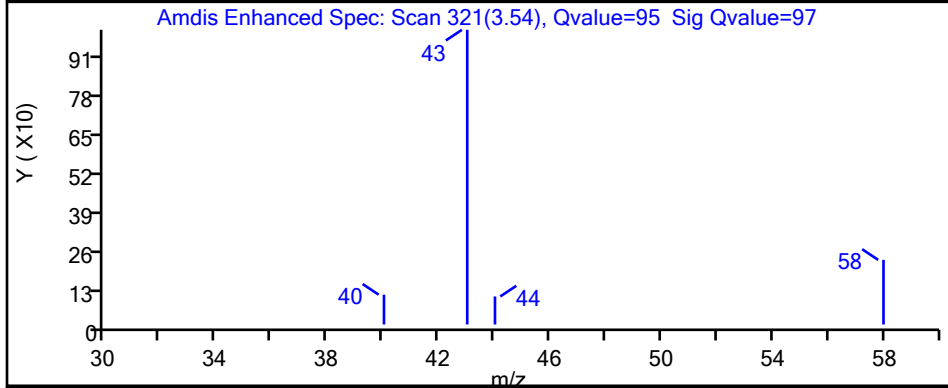
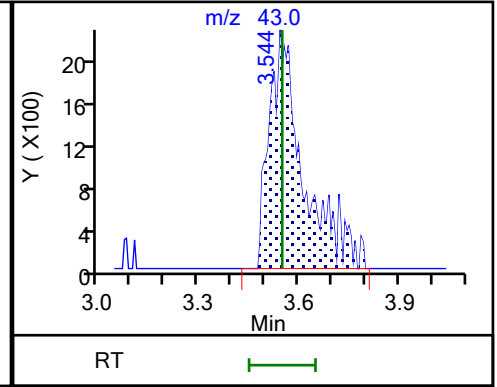
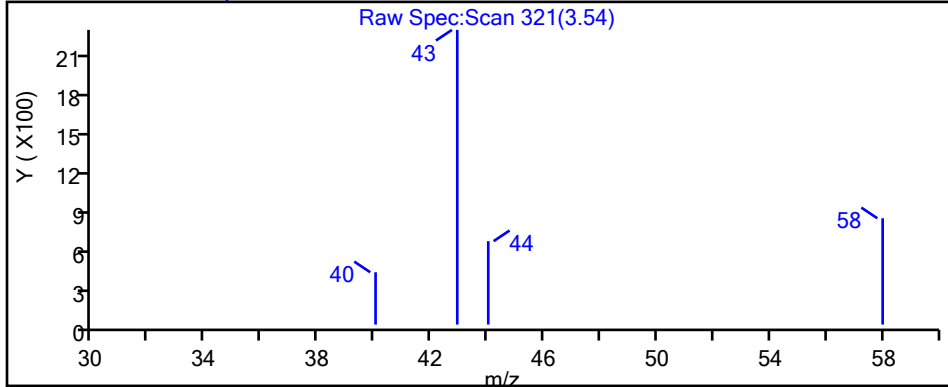
Method: MSV_16334_25mL

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\20210104-19179.b\GJ04S20.D

Injection Date: 05-Jan-2021 05:05:30

Instrument ID: 16334

Lims ID: 410-24913-A-11

Lab Sample ID: 410-24913-11

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

Operator ID: MEC29284

ALS Bottle#: 29

Worklist Smp#: 30

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

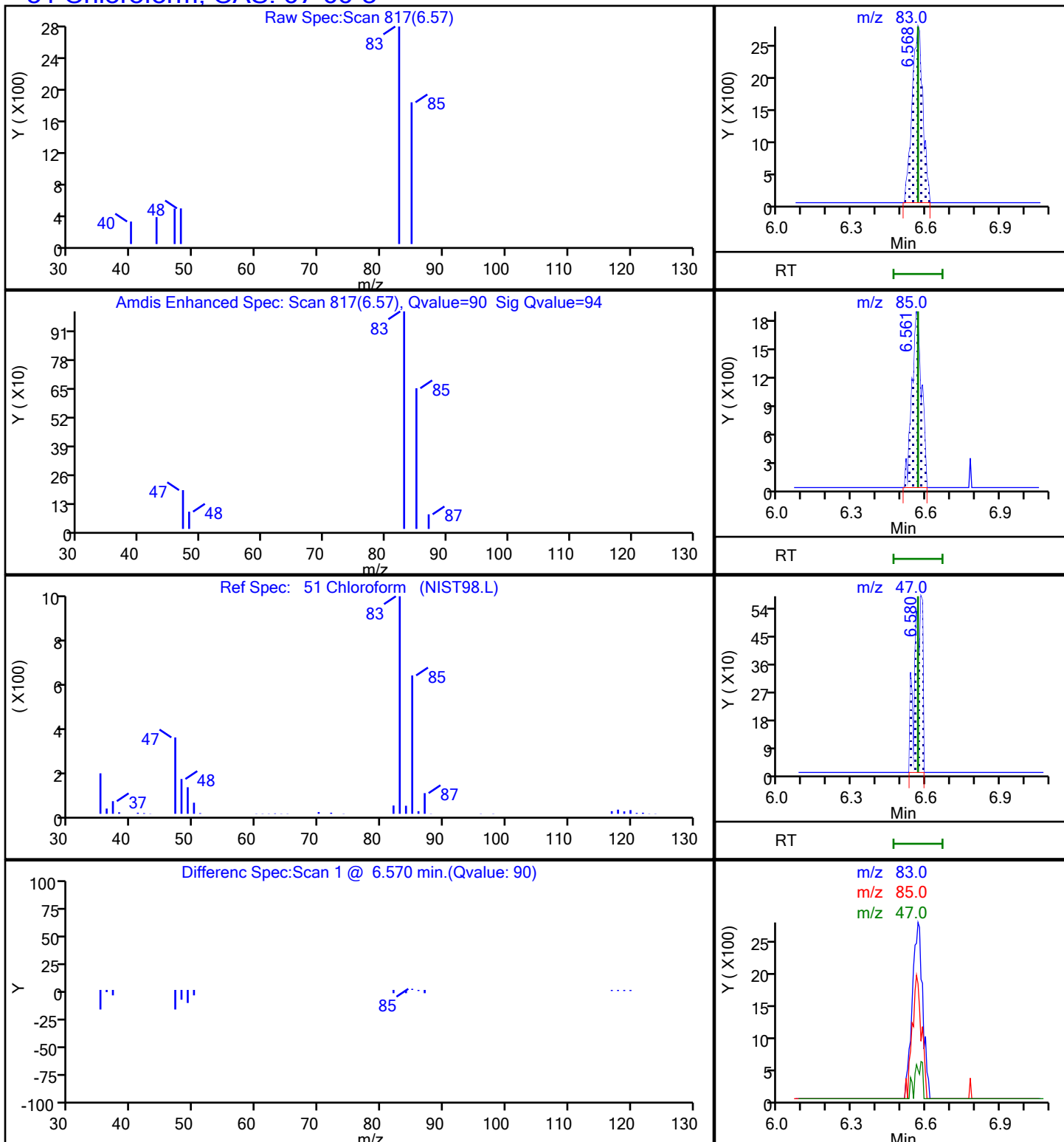
Method: MSV_16334_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

51 Chloroform, CAS: 67-66-3



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20210104-19179.b\GJ04S20.D

Injection Date: 05-Jan-2021 05:05:30

Instrument ID: 16334

Lims ID: 410-24913-A-11

Lab Sample ID: 410-24913-11

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

Operator ID: MEC29284

ALS Bottle#: 29

Worklist Smp#: 30

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

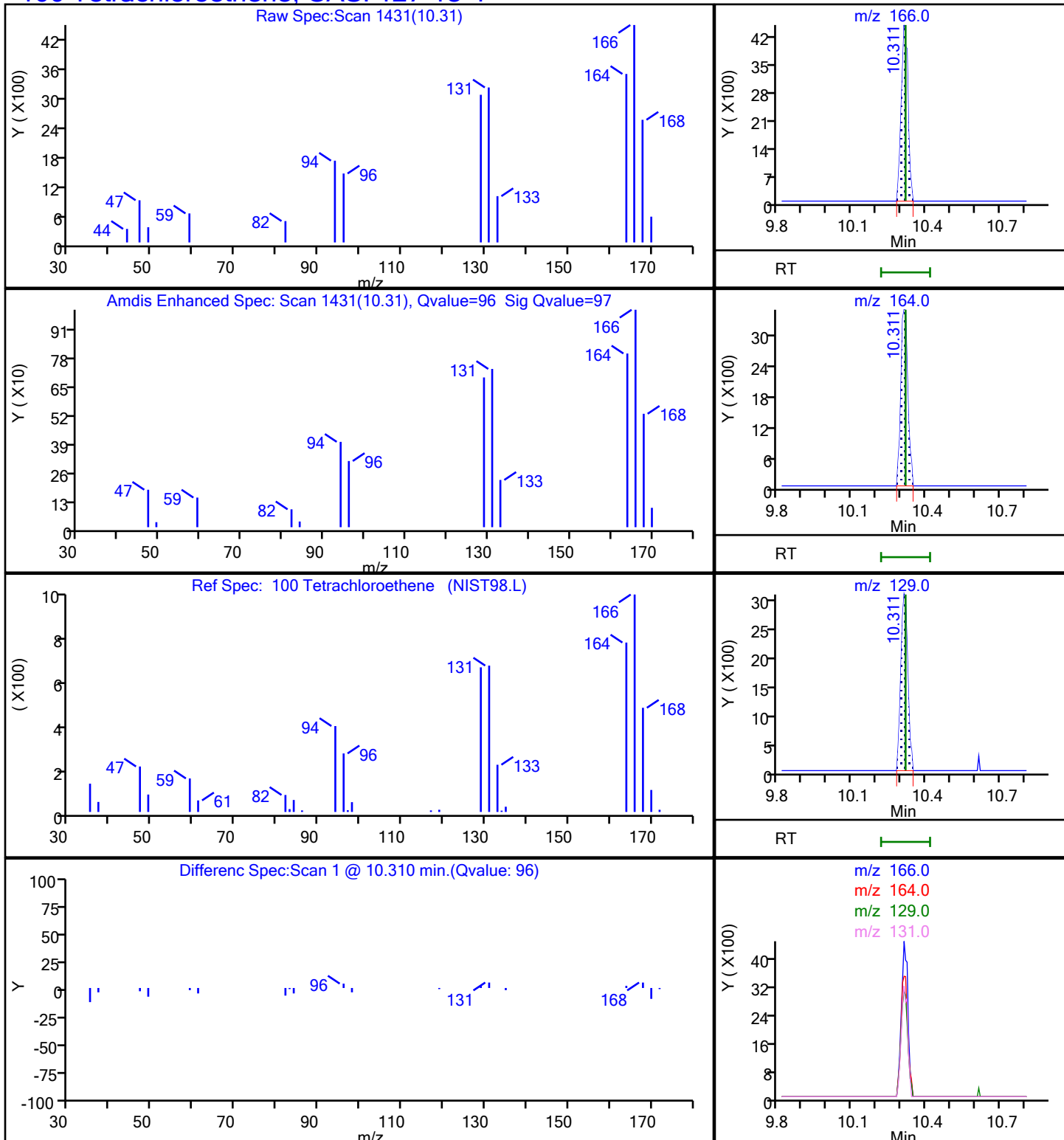
Method: MSV_16334_25mL

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\20210104-19179.b\GJ04S20.D

Injection Date: 05-Jan-2021 05:05:30

Instrument ID: 16334

Lims ID: 410-24913-A-11

Lab Sample ID: 410-24913-11

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

Operator ID: MEC29284

ALS Bottle#: 29

Worklist Smp#: 30

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

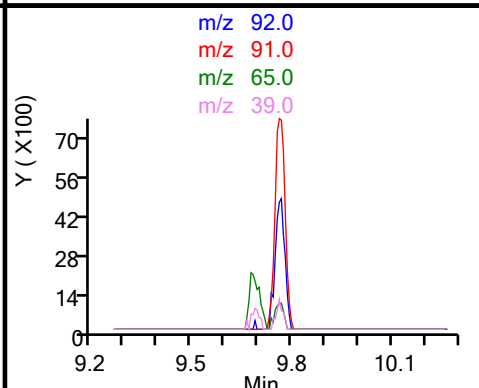
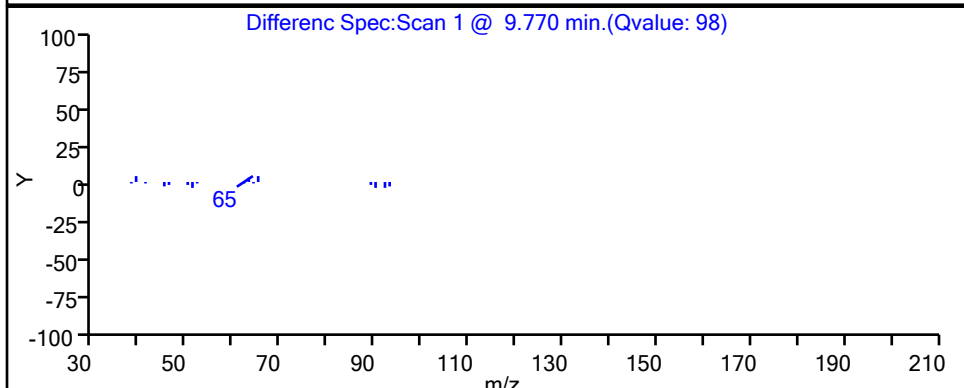
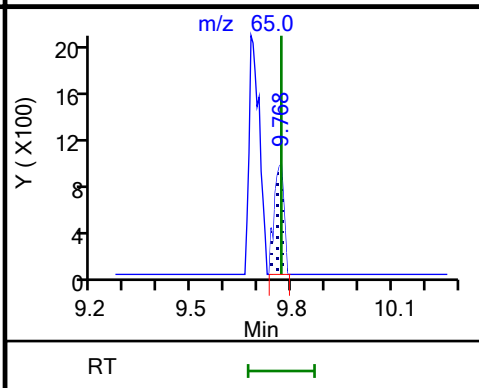
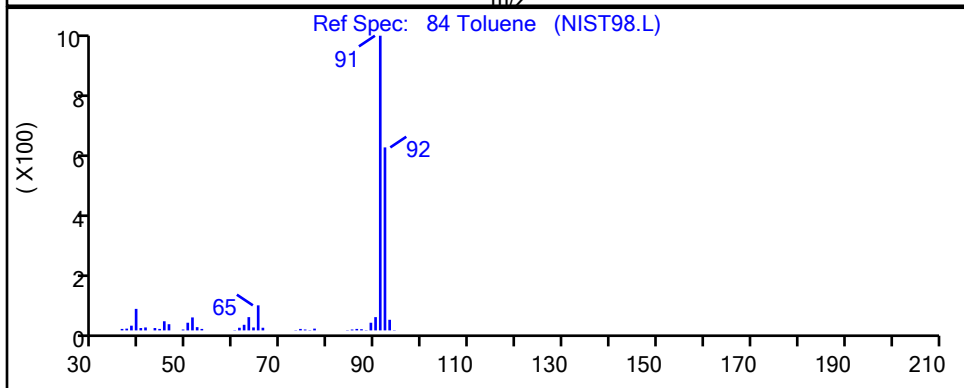
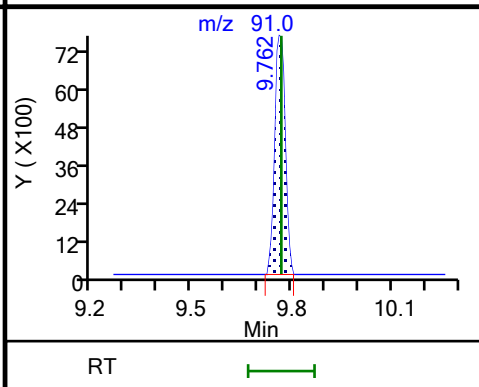
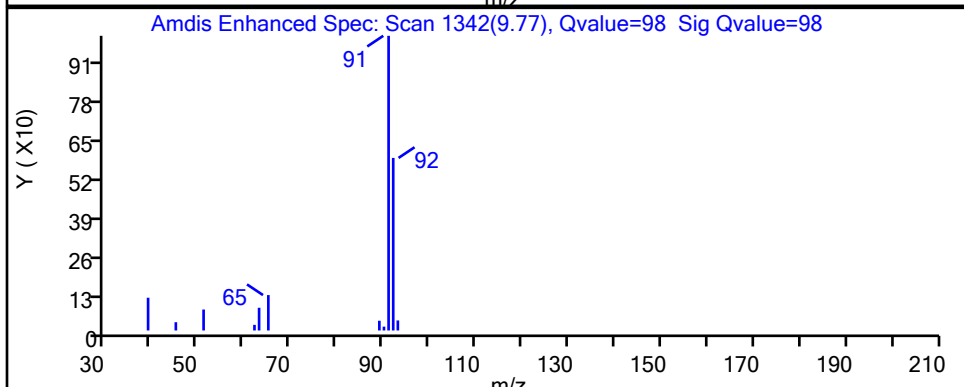
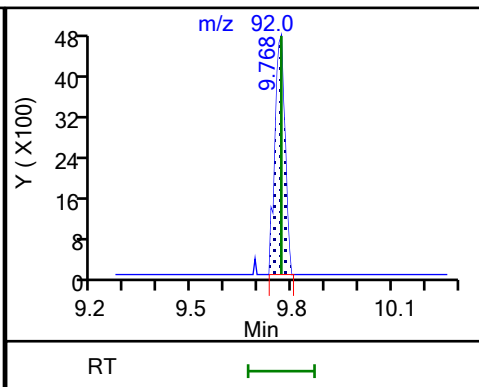
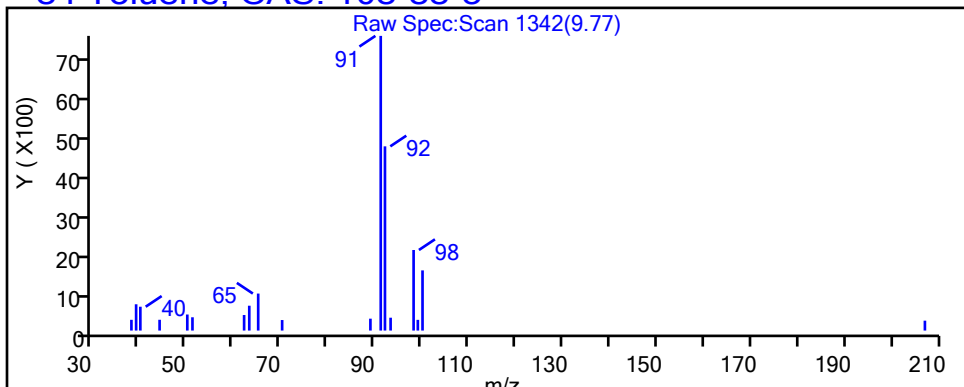
Method: MSV_16334_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

84 Toluene, CAS: 108-88-3



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-24913-1
 SDG No.: _____
 Client Sample ID: HD-COD-SW-29-0/1-0 Lab Sample ID: 410-24913-12
 Matrix: Water Lab File ID: GJ04S21.D
 Analysis Method: 8260D Date Collected: 12/23/2020 09:25
 Sample wt/vol: 25 (mL) Date Analyzed: 01/05/2021 05:27
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: R-624SilMS 30m ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 81892 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	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 Env Job No.: 410-24913-1
 SDG No.: _____
 Client Sample ID: HD-COD-SW-29-0/1-0 Lab Sample ID: 410-24913-12
 Matrix: Water Lab File ID: GJ04S21.D
 Analysis Method: 8260D Date Collected: 12/23/2020 09:25
 Sample wt/vol: 25 (mL) Date Analyzed: 01/05/2021 05:27
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: R-624SilMS 30m ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 81892 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)	95		80-120
1868-53-7	Dibromofluoromethane (Surr)	98		80-120
2037-26-5	Toluene-d8 (Surr)	99		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20210104-19179.b\GJ04S21.D
 Lims ID: 410-24913-A-12
 Client ID: HD-COD-SW-29-0/1-0
 Sample Type: Client
 Inject. Date: 05-Jan-2021 05:27:30 ALS Bottle#: 30 Worklist Smp#: 31
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0019179-031
 Misc. Info.: 410-24913-A-12
 Operator ID: MEC29284 Instrument ID: 16334
 Method: \\chromfs\Lancaster\ChromData\16334\20210104-19179.b\MSV_16334_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 05-Jan-2021 09:24:47 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: CTX1665

First Level Reviewer: howej

Date: 05-Jan-2021 09:25:27

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
5 Chloromethane	50	2.148	2.141	0.007	1	3428	0.0470	
8 Vinyl chloride	62		2.257				ND	
9 Bromomethane	94		2.587				ND	
10 Chloroethane	64		2.666				ND	
19 1,1-Dichloroethene	96		3.507				ND	
21 Acetone	43	3.550	3.550	0.000	67	12043	1.78	
25 Carbon disulfide	76		3.800				ND	7
29 Methylene Chloride	84		4.172				ND	7
* 30 t-Butyl alcohol-d10 (IS)	65	4.178	4.190	-0.012	0	137998	50.0	
33 Methyl tert-butyl ether	73		4.568				ND	
34 trans-1,2-Dichloroethene	96		4.574				ND	
37 1,1-Dichloroethane	63		5.245				ND	
41 2-Butanone (MEK)	43		6.043				ND	
42 cis-1,2-Dichloroethene	96	6.086	6.080	0.006	77	4229	0.0755	
49 Chlorobromomethane	128		6.409				ND	
51 Chloroform	83		6.567				ND	
\$ 52 Dibromofluoromethane (Surr)	113	6.781	6.787	-0.006	94	494381	9.83	
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	7.238	-0.006	0	105361	9.84	
60 Benzene	78		7.262				ND	
61 1,2-Dichloroethane	62		7.336				ND	
* 64 Fluorobenzene (IS)	96	7.671	7.671	0.000	99	2079066	10.0	
68 Trichloroethene	95	8.140	8.146	-0.006	32	4032	0.0747	
70 1,2-Dichloropropane	63		8.488				ND	
76 Dichlorobromomethane	83		8.835				ND	
81 cis-1,3-Dichloropropene	75		9.378				ND	
82 4-Methyl-2-pentanone (MIBK)	43		9.561				ND	7
\$ 83 Toluene-d8 (Surr)	98	9.689	9.689	0.000	93	2019500	9.88	
84 Toluene	92	9.768	9.768	0.000	99	5590	0.0421	
96 trans-1,3-Dichloropropene	75		10.030				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
99 1,1,2-Trichloroethane	97		10.231				ND	
100 Tetrachloroethene	166	10.305	10.317	-0.012	89	2748	0.0477	
102 2-Hexanone	43		10.451				ND	
104 Chlorodibromomethane	129		10.609				ND	
105 Ethylene Dibromide	107		10.719				ND	
* 106 Chlorobenzene-d5 (IS)	117	11.146	11.152	-0.006	85	1531417	10.0	
108 Chlorobenzene	112		11.176				ND	
S 109 Xylenes, Total	106		11.245				ND	7
110 1,1,1,2-Tetrachloroethane	131		11.256				ND	
111 Ethylbenzene	91		11.262				ND	7
112 m-Xylene & p-Xylene	106		11.377				ND	7
113 o-Xylene	106		11.707				ND	7
114 Styrene	104		11.719				ND	7
115 Bromoform	173		11.877				ND	
\$ 119 4-Bromofluorobenzene (Surr)	95	12.146	12.146	0.000	92	742073	9.51	
120 1,1,2,2-Tetrachloroethane	83		12.249				ND	
* 134 1,4-Dichlorobenzene-d4	152	13.024	13.024	0.000	95	840391	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

MSV_29_826ISS_00014

Amount Added: 1.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\16334\20210104-19179.b\GJ04S21.D

Injection Date: 05-Jan-2021 05:27:30

Instrument ID: 16334

Operator ID: MEC29284

Lims ID: 410-24913-A-12

Lab Sample ID: 410-24913-12

Worklist Smp#: 31

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

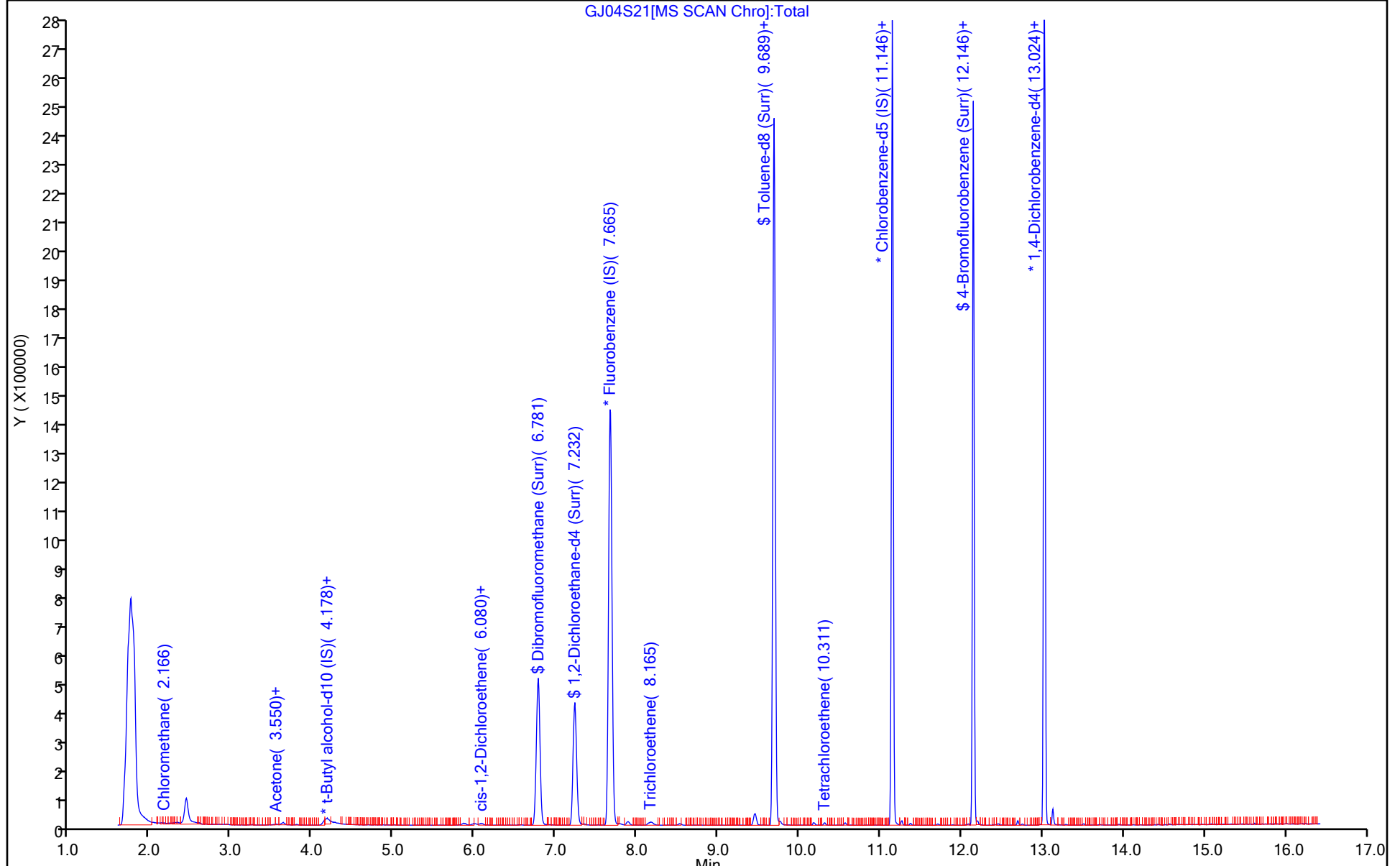
ALS Bottle#: 30

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\20210104-19179.b\GJ04S21.D
 Lims ID: 410-24913-A-12
 Client ID: HD-COD-SW-29-0/1-0
 Sample Type: Client
 Inject. Date: 05-Jan-2021 05:27:30 ALS Bottle#: 30 Worklist Smp#: 31
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0019179-031
 Misc. Info.: 410-24913-A-12
 Operator ID: MEC29284 Instrument ID: 16334
 Method: \\chromfs\Lancaster\ChromData\16334\20210104-19179.b\MSV_16334_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 05-Jan-2021 09:24:47 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: CTX1665

First Level Reviewer: howej

Date: 05-Jan-2021 09:25:27

Compound	Amount Added	Amount Recovered	% Rec.
\$ 52 Dibromofluoromethane (Surr)	10.0	9.83	98.25
\$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	9.84	98.41
\$ 83 Toluene-d8 (Surr)	10.0	9.88	98.84
\$ 119 4-Bromofluorobenzene (Surr)	10.0	9.51	95.12

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20210104-19179.b\GJ04S21.D

Injection Date: 05-Jan-2021 05:27:30

Instrument ID: 16334

Lims ID: 410-24913-A-12

Lab Sample ID: 410-24913-12

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

Operator ID: MEC29284

ALS Bottle#: 30

Worklist Smp#: 31

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

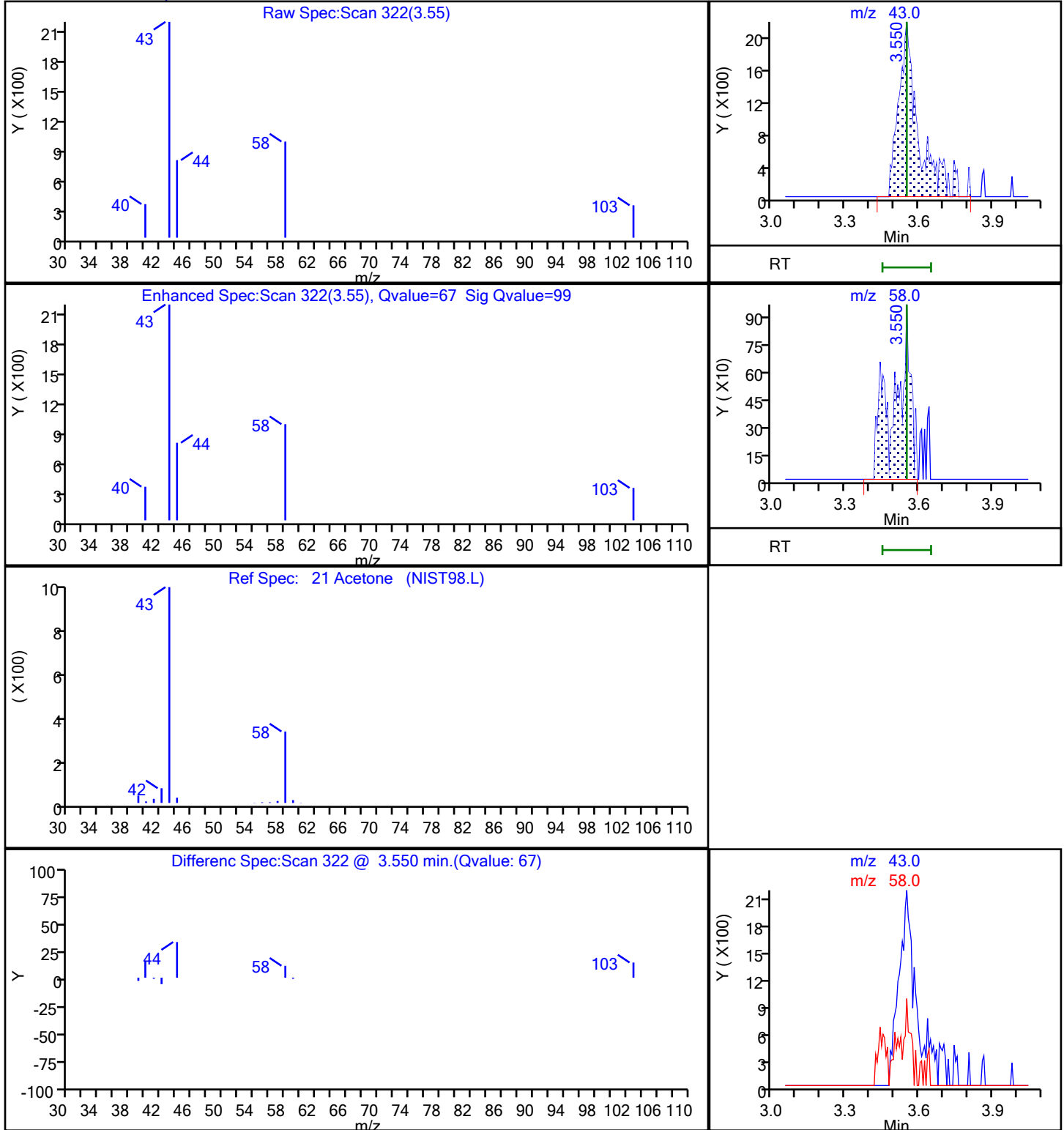
Method: MSV_16334_25mL

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\20210104-19179.b\GJ04S21.D

Injection Date: 05-Jan-2021 05:27:30

Instrument ID: 16334

Lims ID: 410-24913-A-12

Lab Sample ID: 410-24913-12

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

Operator ID: MEC29284

ALS Bottle#: 30

Worklist Smp#: 31

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

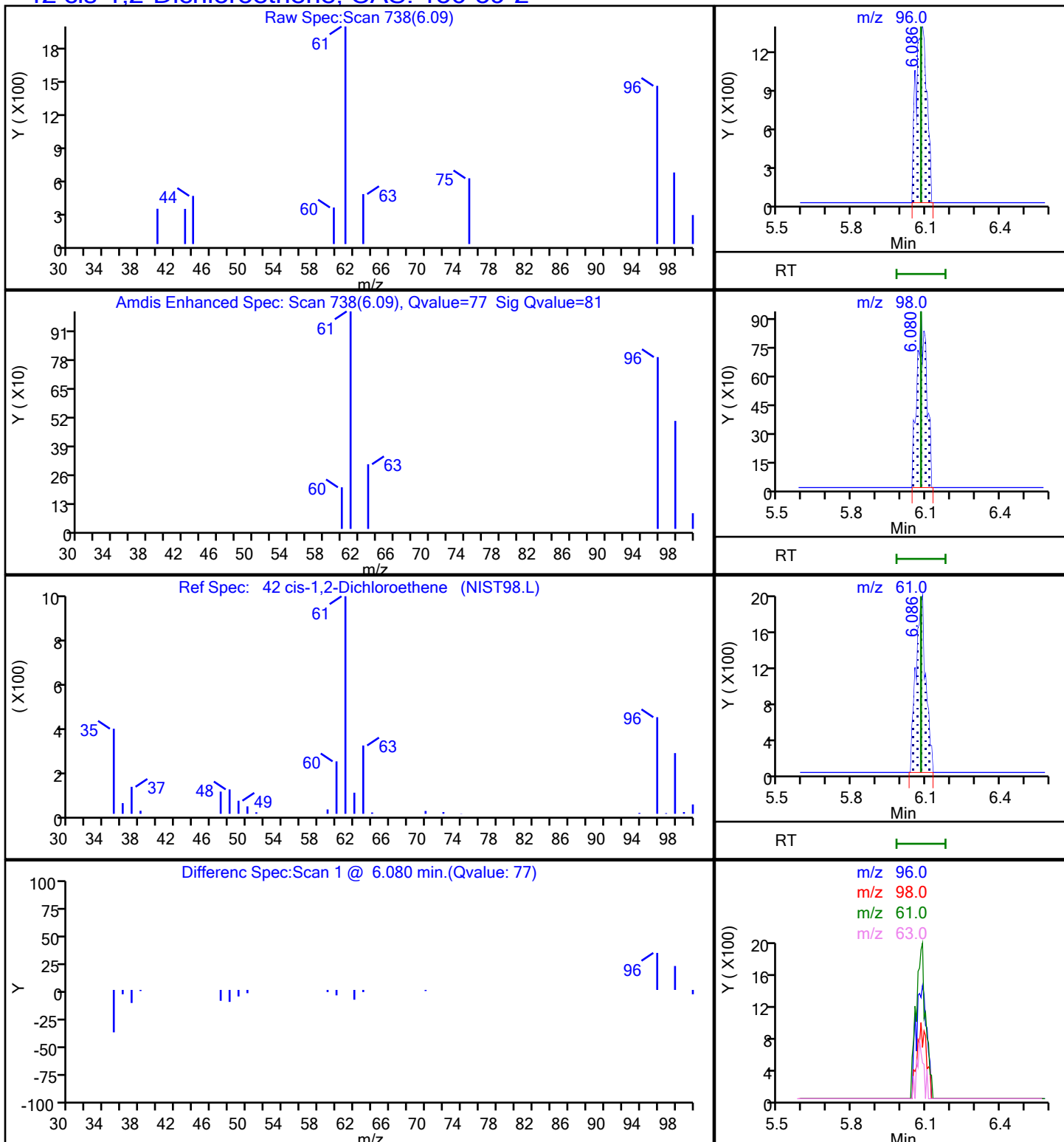
Method: MSV_16334_25mL

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\20210104-19179.b\GJ04S21.D

Injection Date: 05-Jan-2021 05:27:30

Instrument ID: 16334

Lims ID: 410-24913-A-12

Lab Sample ID: 410-24913-12

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

Operator ID: MEC29284

ALS Bottle#: 30

Worklist Smp#: 31

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

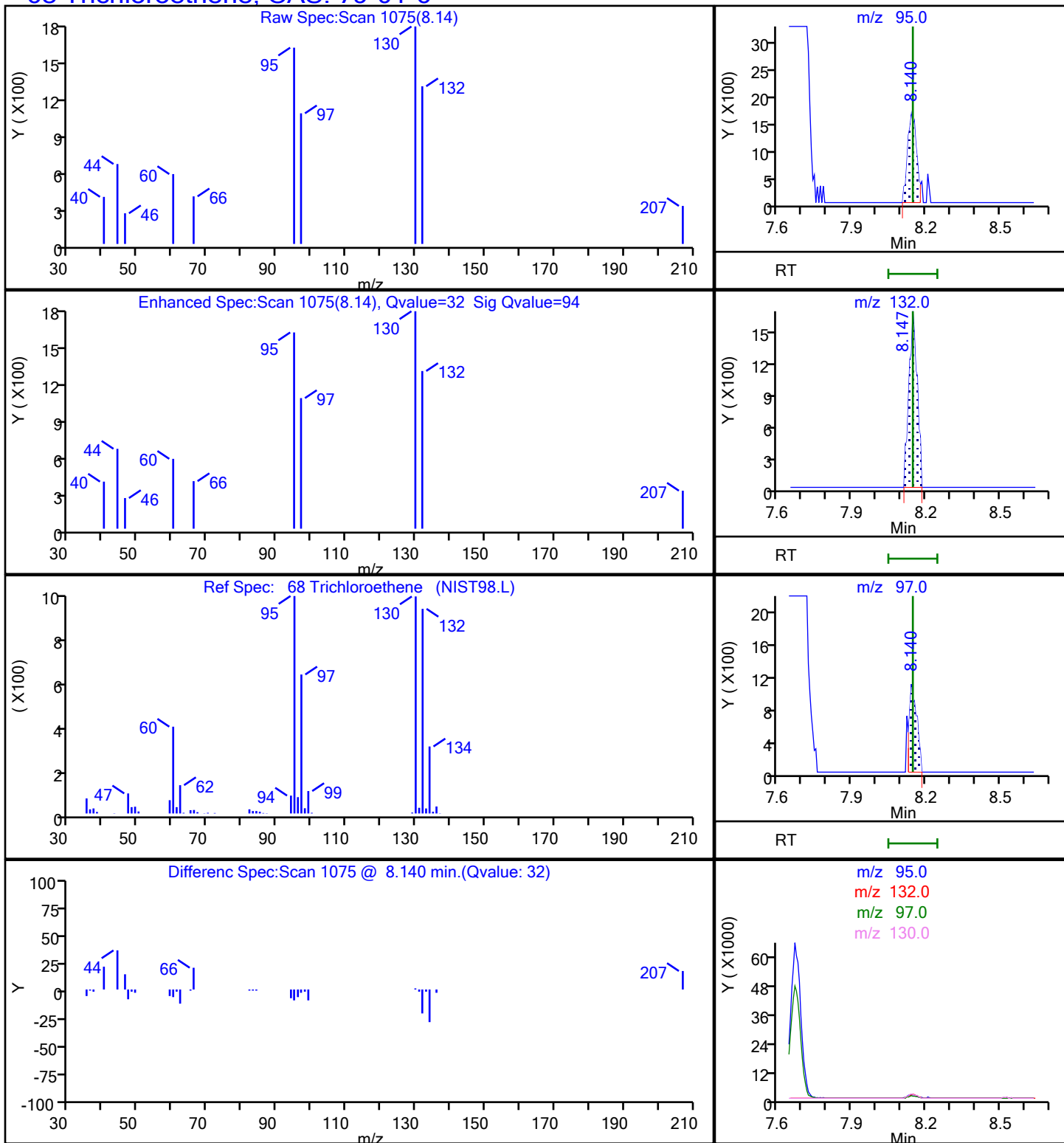
Method: MSV_16334_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

68 Trichloroethene, CAS: 79-01-6



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-24913-1
 SDG No.: _____
 Client Sample ID: HD-QC1-0/1-1 Lab Sample ID: 410-24913-13
 Matrix: Water Lab File ID: HJ05S01.D
 Analysis Method: 8260D Date Collected: 12/23/2020 12:00
 Sample wt/vol: 25 (mL) Date Analyzed: 01/05/2021 11:28
 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.: 82059 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	0.076	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	0.15	J	0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	0.55		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.050
124-48-1	Dibromochloromethane	ND		0.50	0.070
100-41-4	Ethylbenzene	ND		0.50	0.060
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.050
75-09-2	Methylene Chloride	ND		0.50	0.070
100-42-5	Styrene	ND		0.50	0.050
127-18-4	Tetrachloroethene	1.9		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	0.78		0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-24913-1
 SDG No.: _____
 Client Sample ID: HD-QC1-0/1-1 Lab Sample ID: 410-24913-13
 Matrix: Water Lab File ID: HJ05S01.D
 Analysis Method: 8260D Date Collected: 12/23/2020 12:00
 Sample wt/vol: 25 (mL) Date Analyzed: 01/05/2021 11:28
 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.: 82059 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)	117		80-120
460-00-4	4-Bromofluorobenzene (Surr)	99		80-120
1868-53-7	Dibromofluoromethane (Surr)	105		80-120
2037-26-5	Toluene-d8 (Surr)	97		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20210105-19216.b\HJ05S01.D
 Lims ID: 410-24913-A-13
 Client ID: HD-QC1-0/1-1
 Sample Type: Client
 Inject. Date: 05-Jan-2021 11:28:30 ALS Bottle#: 7 Worklist Smp#: 8
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0019216-008
 Operator ID: jkh09052 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20210105-19216.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 05-Jan-2021 12:41:44 Calib Date: 04-Jan-2021 18:39:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20210104-19149.b\Hj04I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1665

First Level Reviewer: howej

Date: 05-Jan-2021 12:41:20

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
6 Chloromethane	50		2.282				ND	7
7 Vinyl chloride	62		2.410				ND	
9 Bromomethane	94		2.745				ND	
10 Chloroethane	64		2.843				ND	
18 1,1-Dichloroethene	96	3.751	3.751	0.000	12	1268	0.0382	
19 Acetone	43	3.800	3.782	0.018	13	4252	0.5233	
24 Carbon disulfide	76		4.074				ND	7
29 Methylene Chloride	84		4.452				ND	
* 28 t-Butyl alcohol-d10 (IS)	65	4.464	4.458	0.006	0	127887	50.0	
32 Methyl tert-butyl ether	73	4.861	4.867	-0.007	1	1910	0.0256	
33 trans-1,2-Dichloroethene	96		4.885				ND	
35 1,1-Dichloroethane	63		5.537				ND	7
41 2-Butanone (MEK)	43		6.312				ND	
42 cis-1,2-Dichloroethene	96	6.354	6.360	-0.006	81	23074	0.5509	
48 Chlorobromomethane	128		6.696				ND	
50 Chloroform	83	6.842	6.842	0.000	92	10338	0.1499	
\$ 51 Dibromofluoromethane (Surr)	113	7.055	7.061	-0.006	93	348924	10.5	
52 1,1,1-Trichloroethane	97	7.073	7.074	-0.001	42	4429	0.0759	
56 Carbon tetrachloride	117		7.287				ND	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.506	7.512	-0.006	0	79534	11.7	
59 Benzene	78		7.543				ND	7
60 1,2-Dichloroethane	62	7.616	7.616	0.000	1	1484	0.0339	
* 65 Fluorobenzene (IS)	96	7.945	7.945	0.000	98	1361033	10.0	
67 Trichloroethene	95	8.421	8.427	-0.006	98	32027	0.7833	
70 1,2-Dichloropropane	63		8.762				ND	
75 Dichlorobromomethane	83		9.104				ND	
80 cis-1,3-Dichloropropene	75		9.628				ND	
81 4-Methyl-2-pentanone (MIBK)	43		9.793				ND	7
\$ 82 Toluene-d8 (Surr)	98	9.933	9.933	0.000	94	1309465	9.74	
83 Toluene	92		10.006				ND	7
85 trans-1,3-Dichloropropene	75		10.256				ND	
87 1,1,2-Trichloroethane	97		10.457				ND	7

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
88 Tetrachloroethene	166	10.542	10.548	-0.006	94	81329	1.89	
91 2-Hexanone	43		10.658				ND	
93 Chlorodibromomethane	129		10.829				ND	
94 Ethylene Dibromide	107		10.945				ND	
S 95 Xylenes, Total	106		11.245				ND	7
* 97 Chlorobenzene-d5 (IS)	117	11.365	11.365	0.000	87	981362	10.0	
98 Chlorobenzene	112		11.396				ND	7
100 Ethylbenzene	91		11.475				ND	7
99 1,1,1,2-Tetrachloroethane	131		11.475				ND	
101 m-Xylene & p-Xylene	106		11.591				ND	7
102 o-Xylene	106		11.920				ND	
103 Styrene	104		11.932				ND	
104 Bromoform	173		12.097				ND	
\$ 108 4-Bromofluorobenzene (Surr)	95	12.359	12.359	0.000	87	474349	9.85	
109 1,1,2,2-Tetrachloroethane	83		12.457				ND	
* 124 1,4-Dichlorobenzene-d4	152	13.237	13.237	0.000	96	510970	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

MSV_30_826ISS_00006

Amount Added: 5.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19094\20210105-19216.b\HJ05S01.D

Injection Date: 05-Jan-2021 11:28:30

Instrument ID: 19094

Operator ID: jkh09052

Lims ID: 410-24913-A-13

Lab Sample ID: 410-24913-13

Worklist Smp#: 8

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

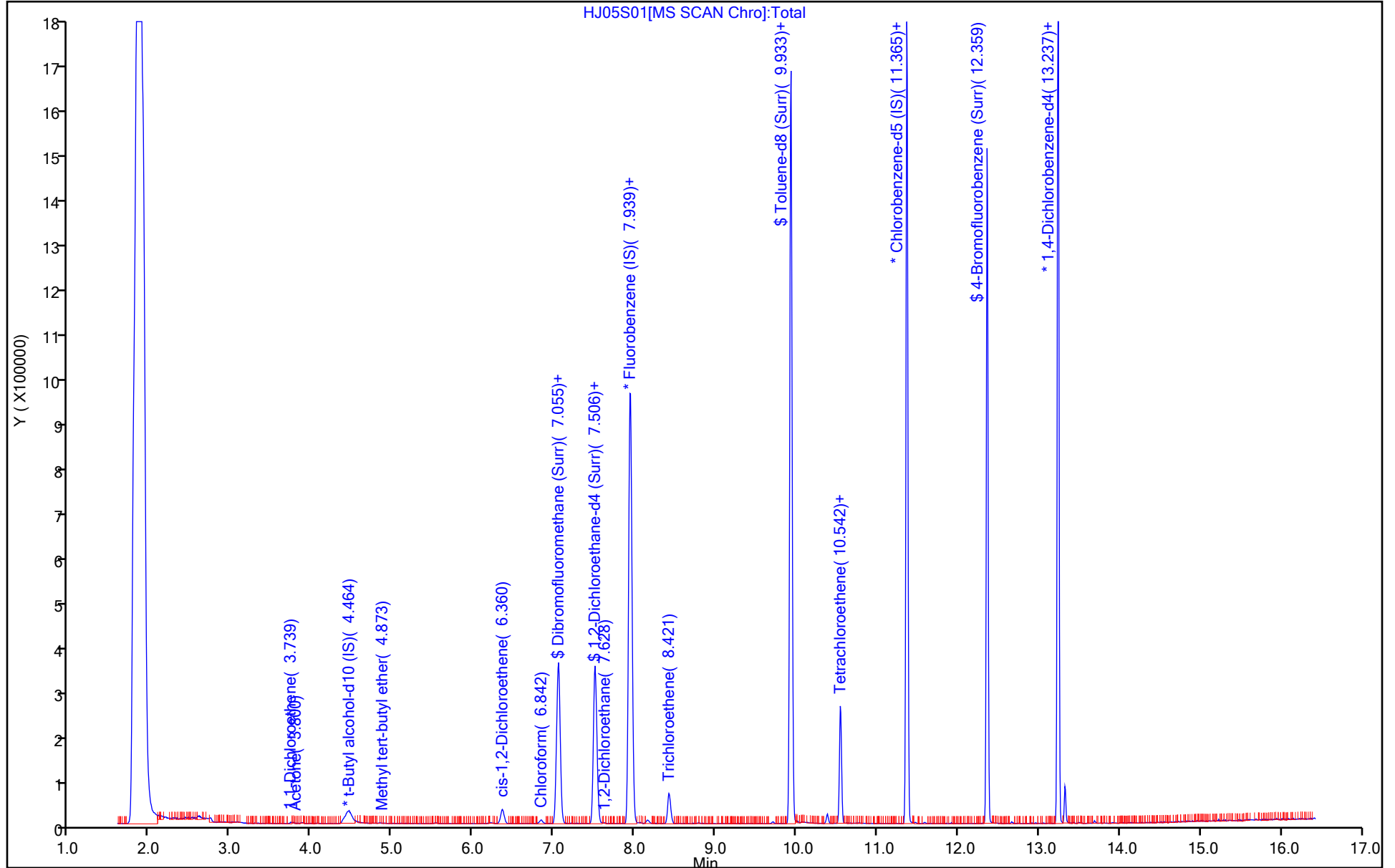
ALS Bottle#: 7

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20210105-19216.b\HJ05S01.D
 Lims ID: 410-24913-A-13
 Client ID: HD-QC1-0/1-1
 Sample Type: Client
 Inject. Date: 05-Jan-2021 11:28:30 ALS Bottle#: 7 Worklist Smp#: 8
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0019216-008
 Operator ID: jkh09052 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20210105-19216.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 05-Jan-2021 12:41:44 Calib Date: 04-Jan-2021 18:39:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20210104-19149.b\Hj04I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1665

First Level Reviewer: howej

Date: 05-Jan-2021 12:41:20

Compound	Amount Added	Amount Recovered	% Rec.
\$ 51 Dibromofluoromethane (Surr)	10.0	10.5	104.91
\$ 58 1,2-Dichloroethane-d4 (Surr)	10.0	11.7	117.07
\$ 82 Toluene-d8 (Surr)	10.0	9.74	97.41
\$ 108 4-Bromofluorobenzene (Surr)	10.0	9.85	98.53

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20210105-19216.b\HJ05S01.D

Injection Date: 05-Jan-2021 11:28:30

Instrument ID: 19094

Lims ID: 410-24913-A-13

Lab Sample ID: 410-24913-13

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

Operator ID: jkh09052

ALS Bottle#: 7

Worklist Smp#: 8

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

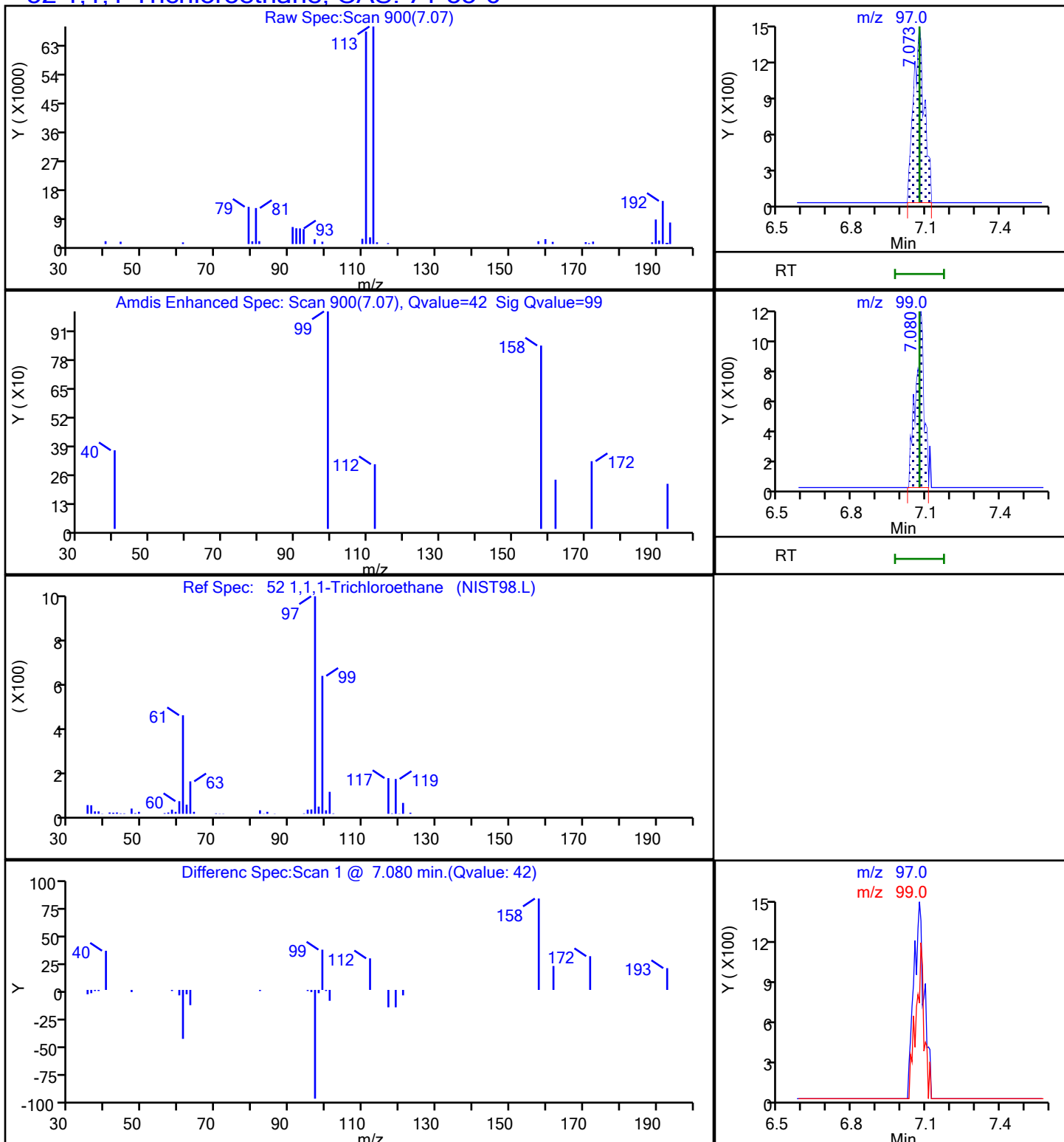
Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

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



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20210105-19216.b\HJ05S01.D

Injection Date: 05-Jan-2021 11:28:30

Instrument ID: 19094

Lims ID: 410-24913-A-13

Lab Sample ID: 410-24913-13

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

Operator ID: jkh09052

ALS Bottle#: 7

Worklist Smp#: 8

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

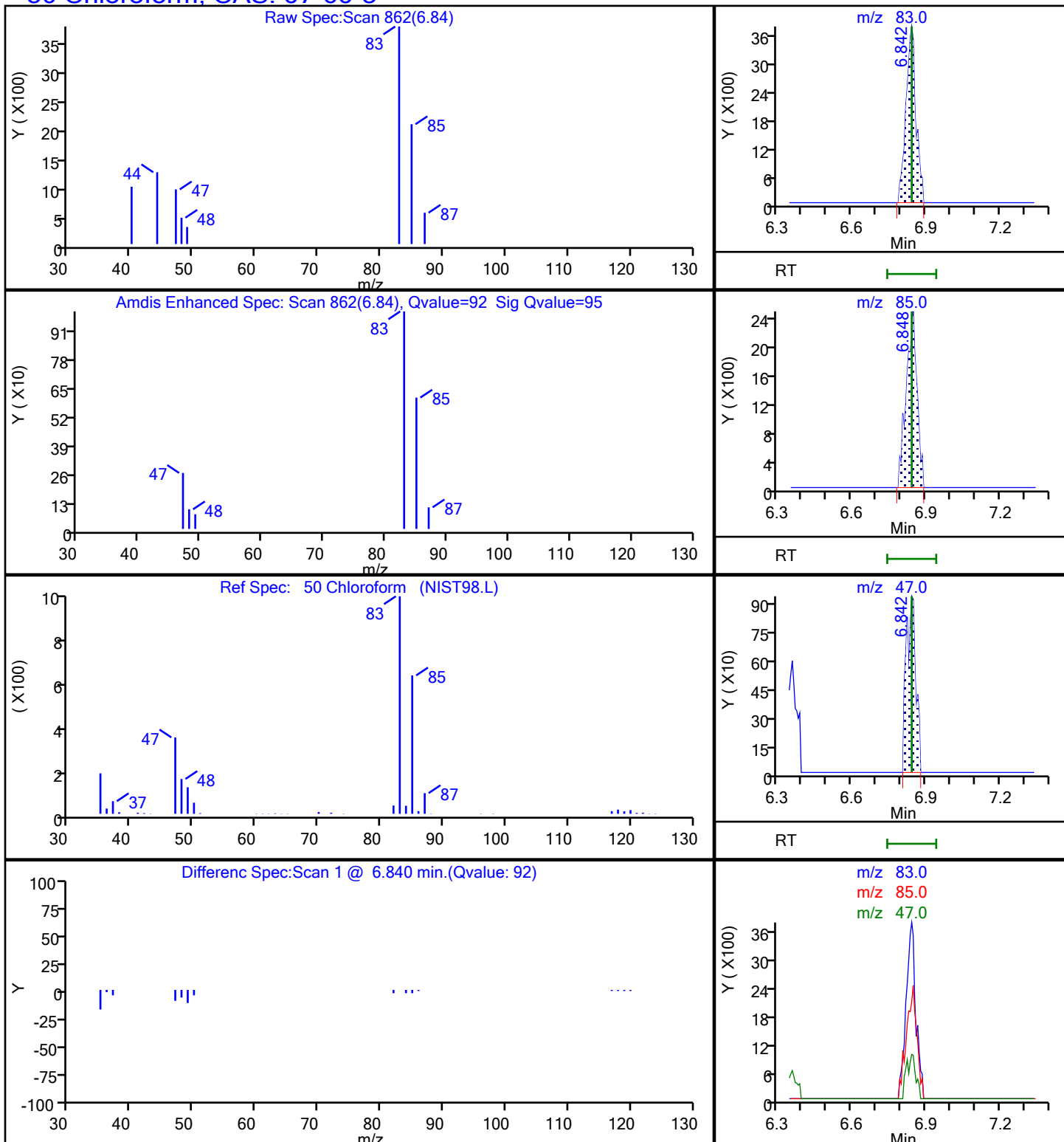
Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

50 Chloroform, CAS: 67-66-3



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20210105-19216.b\HJ05S01.D

Injection Date: 05-Jan-2021 11:28:30

Instrument ID: 19094

Lims ID: 410-24913-A-13

Lab Sample ID: 410-24913-13

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

Operator ID: jkh09052

ALS Bottle#: 7

Worklist Smp#: 8

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

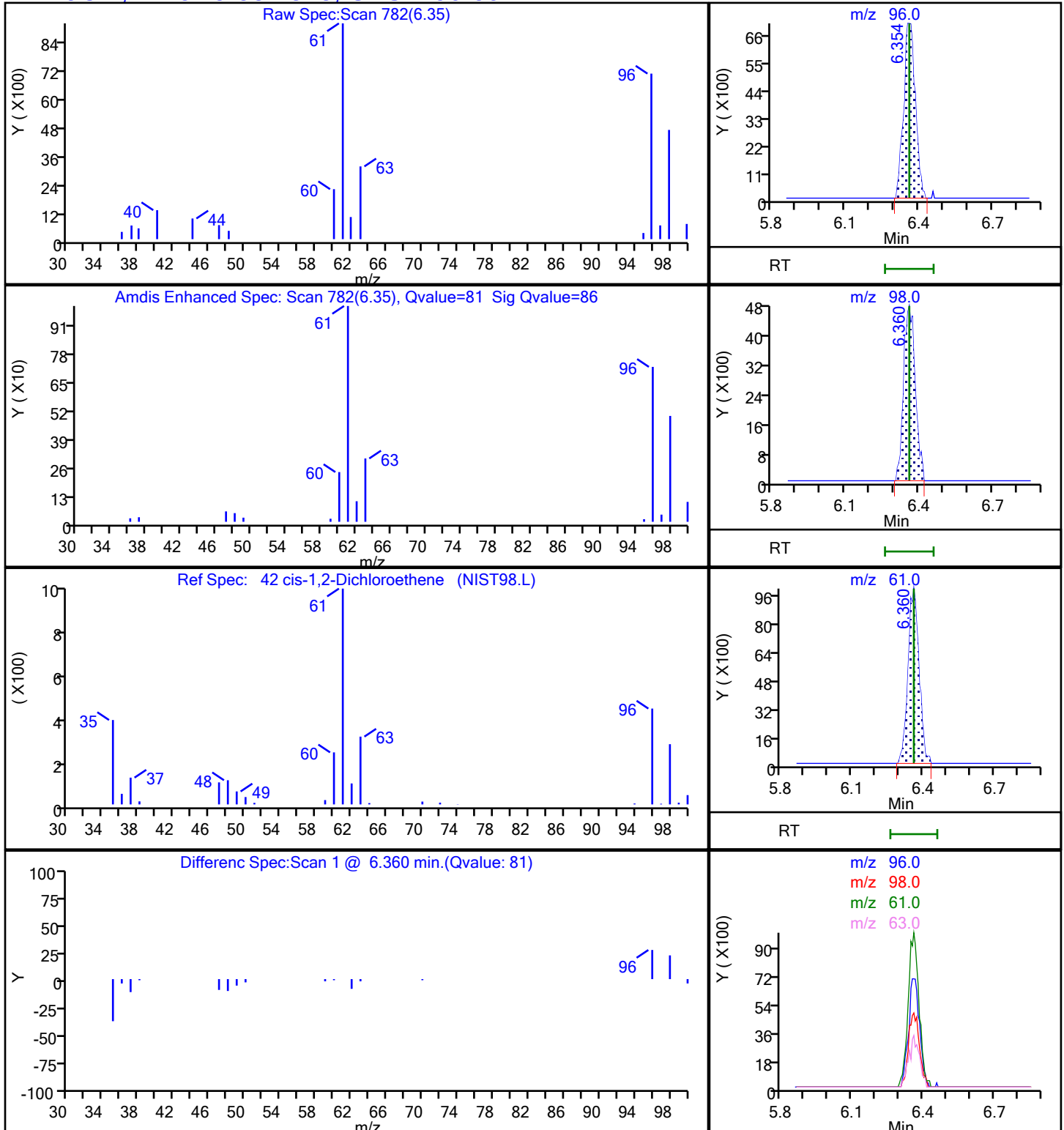
Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

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



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20210105-19216.b\HJ05S01.D

Injection Date: 05-Jan-2021 11:28:30

Instrument ID: 19094

Lims ID: 410-24913-A-13

Lab Sample ID: 410-24913-13

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

Operator ID: jkh09052

ALS Bottle#: 7

Worklist Smp#: 8

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

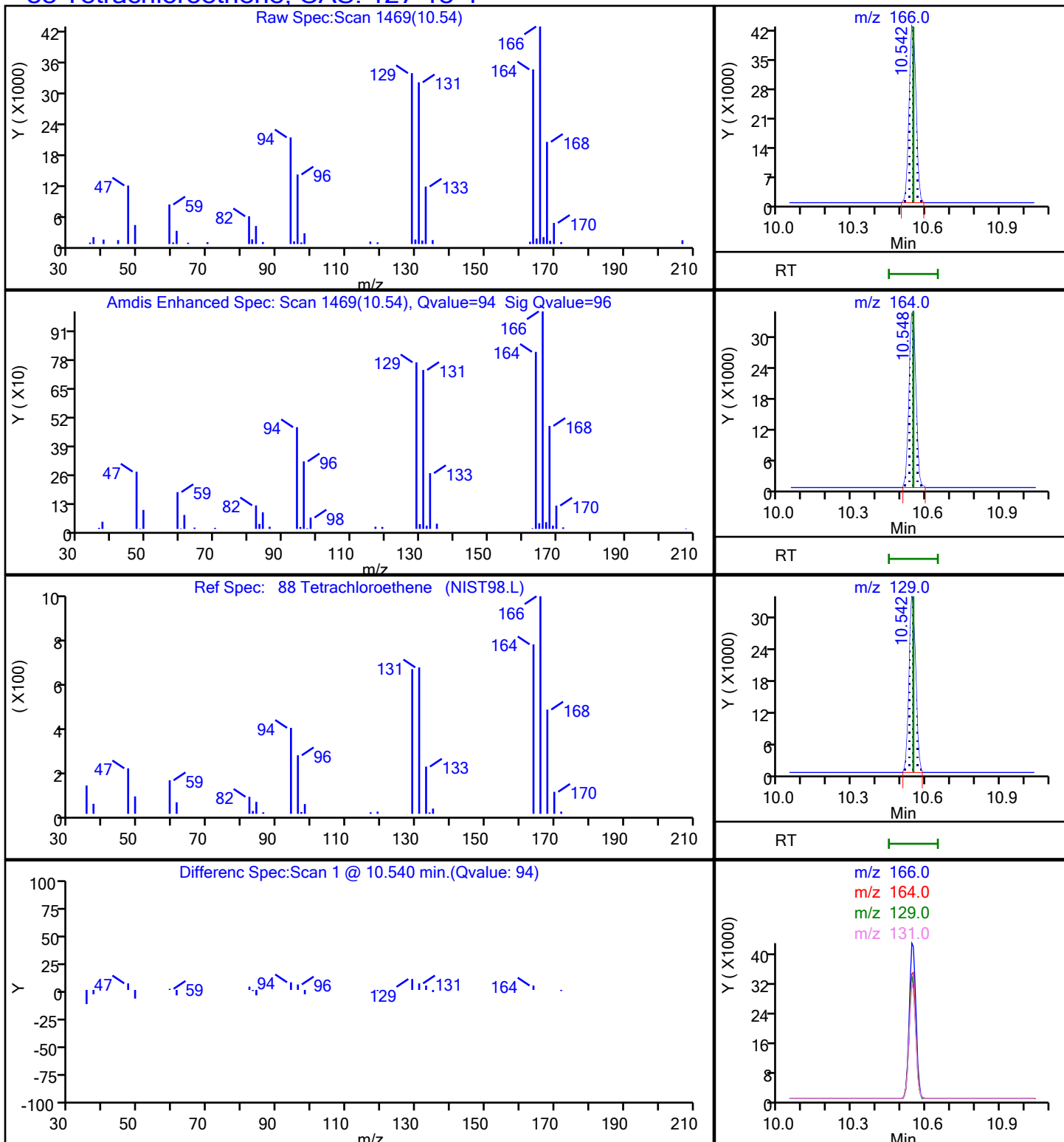
Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

88 Tetrachloroethene, CAS: 127-18-4



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20210105-19216.b\HJ05S01.D

Injection Date: 05-Jan-2021 11:28:30

Instrument ID: 19094

Lims ID: 410-24913-A-13

Lab Sample ID: 410-24913-13

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

Operator ID: jkh09052

ALS Bottle#: 7

Worklist Smp#: 8

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

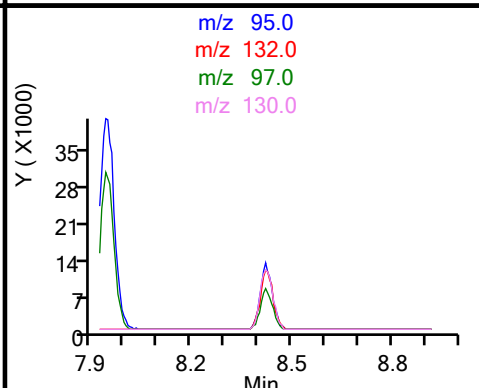
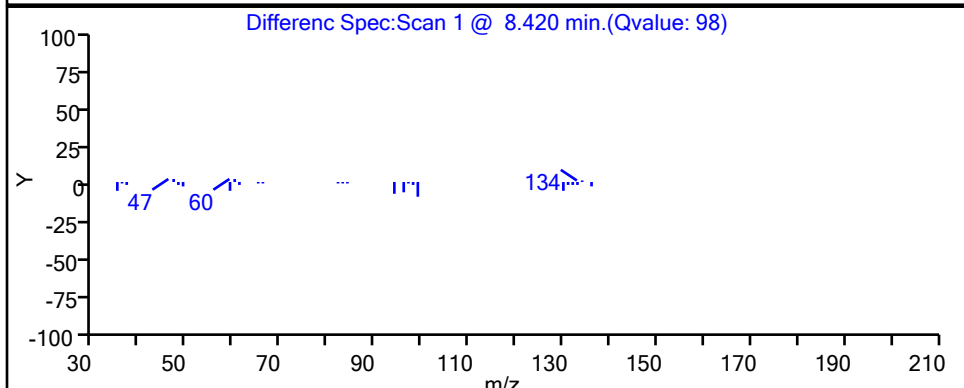
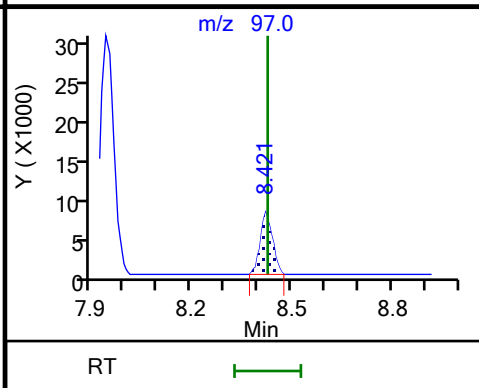
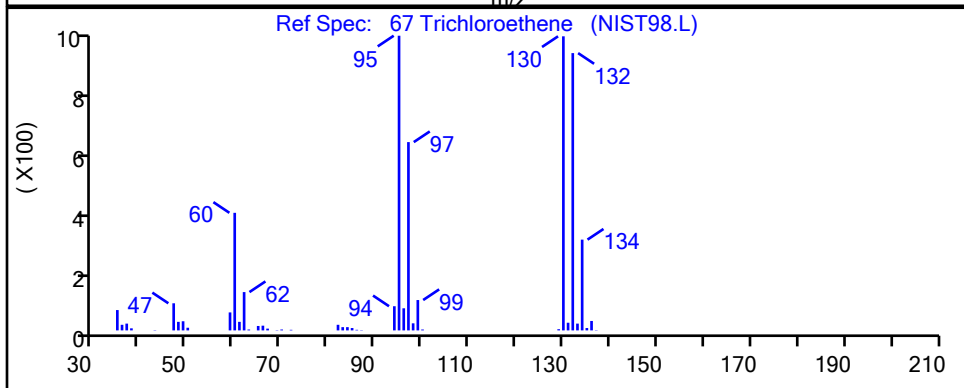
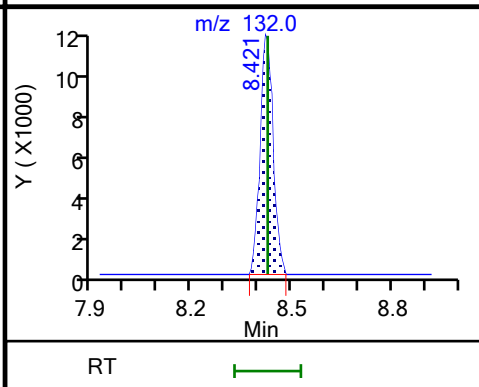
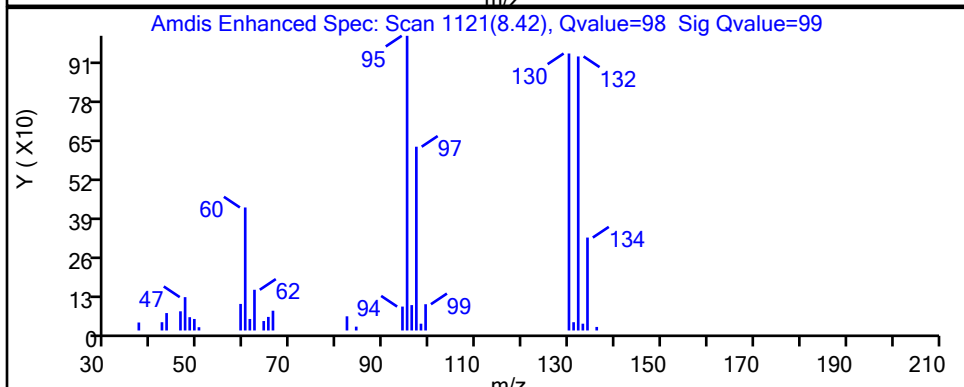
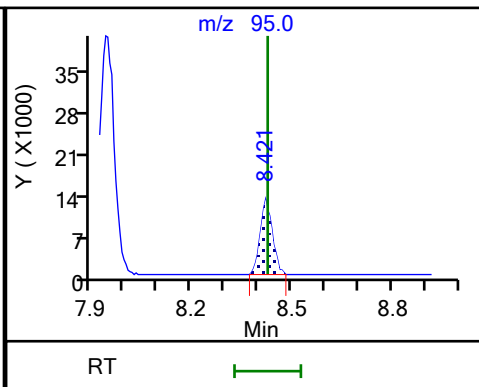
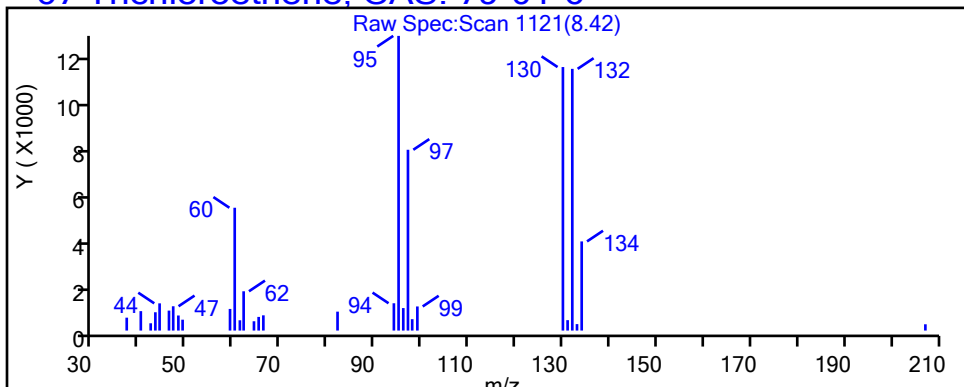
Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

67 Trichloroethene, CAS: 79-01-6



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-24913-1
 SDG No.: _____
 Client Sample ID: HD-QC1-0/1-2 Lab Sample ID: 410-24913-14
 Matrix: Water Lab File ID: HJ05S02.D
 Analysis Method: 8260D Date Collected: 12/23/2020 00:00
 Sample wt/vol: 25 (mL) Date Analyzed: 01/05/2021 11:50
 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.: 82059 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.070
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.060
75-34-3	1,1-Dichloroethane	ND		0.50	0.070
75-35-4	1,1-Dichloroethene	ND		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.060
107-06-2	1,2-Dichloroethane	ND		0.50	0.050
78-87-5	1,2-Dichloropropane	ND		0.50	0.060
78-93-3	2-Butanone (MEK)	ND		5.0	0.60
591-78-6	2-Hexanone	ND		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70
67-64-1	Acetone	ND		5.0	0.90
71-43-2	Benzene	ND		0.50	0.050
74-97-5	Bromochloromethane	ND		0.50	0.050
75-27-4	Bromodichloromethane	ND		0.50	0.050
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.070
75-15-0	Carbon disulfide	ND		1.0	0.060
56-23-5	Carbon tetrachloride	ND		0.50	0.070
108-90-7	Chlorobenzene	ND		0.50	0.060
75-00-3	Chloroethane	ND		0.50	0.070
67-66-3	Chloroform	ND		0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	ND		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.050
124-48-1	Dibromochloromethane	ND		0.50	0.070
100-41-4	Ethylbenzene	ND		0.50	0.060
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.050
75-09-2	Methylene Chloride	ND		0.50	0.070
100-42-5	Styrene	ND		0.50	0.050
127-18-4	Tetrachloroethene	ND		0.50	0.060
108-88-3	Toluene	ND		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	ND		0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-24913-1
 SDG No.: _____
 Client Sample ID: HD-QC1-0/1-2 Lab Sample ID: 410-24913-14
 Matrix: Water Lab File ID: HJ05S02.D
 Analysis Method: 8260D Date Collected: 12/23/2020 00:00
 Sample wt/vol: 25 (mL) Date Analyzed: 01/05/2021 11:50
 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.: 82059 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)	110		80-120
460-00-4	4-Bromofluorobenzene (Surr)	97		80-120
1868-53-7	Dibromofluoromethane (Surr)	105		80-120
2037-26-5	Toluene-d8 (Surr)	97		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20210105-19216.b\HJ05S02.D
 Lims ID: 410-24913-A-14
 Client ID: HD-QC1-0/1-2
 Sample Type: Client
 Inject. Date: 05-Jan-2021 11:50:30 ALS Bottle#: 8 Worklist Smp#: 9
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0019216-009
 Operator ID: jkh09052 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20210105-19216.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 05-Jan-2021 12:41:44 Calib Date: 04-Jan-2021 18:39:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20210104-19149.b\Hj04I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1665

First Level Reviewer: howej

Date: 05-Jan-2021 12:41:44

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
6 Chloromethane	50		2.282				ND	
7 Vinyl chloride	62		2.410				ND	
9 Bromomethane	94		2.745				ND	
10 Chloroethane	64		2.843				ND	
18 1,1-Dichloroethene	96		3.751				ND	
19 Acetone	43		3.782				ND	U
24 Carbon disulfide	76		4.074				ND	7
29 Methylene Chloride	84	4.446	4.452	-0.006	35	1759	0.0428	
* 28 t-Butyl alcohol-d10 (IS)	65	4.452	4.458	-0.006	0	116119	50.0	
32 Methyl tert-butyl ether	73		4.867				ND	
33 trans-1,2-Dichloroethene	96		4.885				ND	
35 1,1-Dichloroethane	63		5.537				ND	
41 2-Butanone (MEK)	43		6.312				ND	
42 cis-1,2-Dichloroethene	96		6.360				ND	
48 Chlorobromomethane	128		6.696				ND	
50 Chloroform	83		6.842				ND	
\$ 51 Dibromofluoromethane (Surr)	113	7.049	7.061	-0.012	93	357630	10.5	
52 1,1,1-Trichloroethane	97		7.074				ND	
56 Carbon tetrachloride	117		7.287				ND	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.506	7.512	-0.006	0	76446	11.0	
59 Benzene	78		7.543				ND	
60 1,2-Dichloroethane	62	7.610	7.616	-0.006	1	1529	0.0340	
* 65 Fluorobenzene (IS)	96	7.939	7.945	-0.006	99	1397279	10.0	
67 Trichloroethene	95		8.427				ND	
70 1,2-Dichloropropane	63		8.762				ND	
75 Dichlorobromomethane	83		9.104				ND	
80 cis-1,3-Dichloropropene	75		9.628				ND	
81 4-Methyl-2-pentanone (MIBK)	43		9.793				ND	
\$ 82 Toluene-d8 (Surr)	98	9.933	9.933	0.000	94	1350355	9.71	
83 Toluene	92		10.006				ND	7
85 trans-1,3-Dichloropropene	75		10.256				ND	
87 1,1,2-Trichloroethane	97		10.457				ND	7

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
88 Tetrachloroethene	166		10.548				ND	
91 2-Hexanone	43		10.658				ND	
93 Chlorodibromomethane	129		10.829				ND	
94 Ethylene Dibromide	107		10.945				ND	
S 95 Xylenes, Total	106		11.245				ND	7
* 97 Chlorobenzene-d5 (IS)	117	11.365	11.365	0.000	87	1015202	10.0	
98 Chlorobenzene	112		11.396				ND	
100 Ethylbenzene	91		11.475				ND	7
99 1,1,1,2-Tetrachloroethane	131		11.475				ND	
101 m-Xylene & p-Xylene	106		11.591				ND	
102 o-Xylene	106		11.920				ND	
103 Styrene	104		11.932				ND	7
104 Bromoform	173		12.097				ND	
\$ 108 4-Bromofluorobenzene (Surr)	95	12.359	12.359	0.000	87	484494	9.73	
109 1,1,2,2-Tetrachloroethane	83		12.457				ND	
* 124 1,4-Dichlorobenzene-d4	152	13.237	13.237	0.000	96	515605	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

MSV_30_826ISS_00006

Amount Added: 5.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19094\20210105-19216.b\HJ05S02.D

Injection Date: 05-Jan-2021 11:50:30

Instrument ID: 19094

Operator ID: jkh09052

Lims ID: 410-24913-A-14

Lab Sample ID: 410-24913-14

Worklist Smp#: 9

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

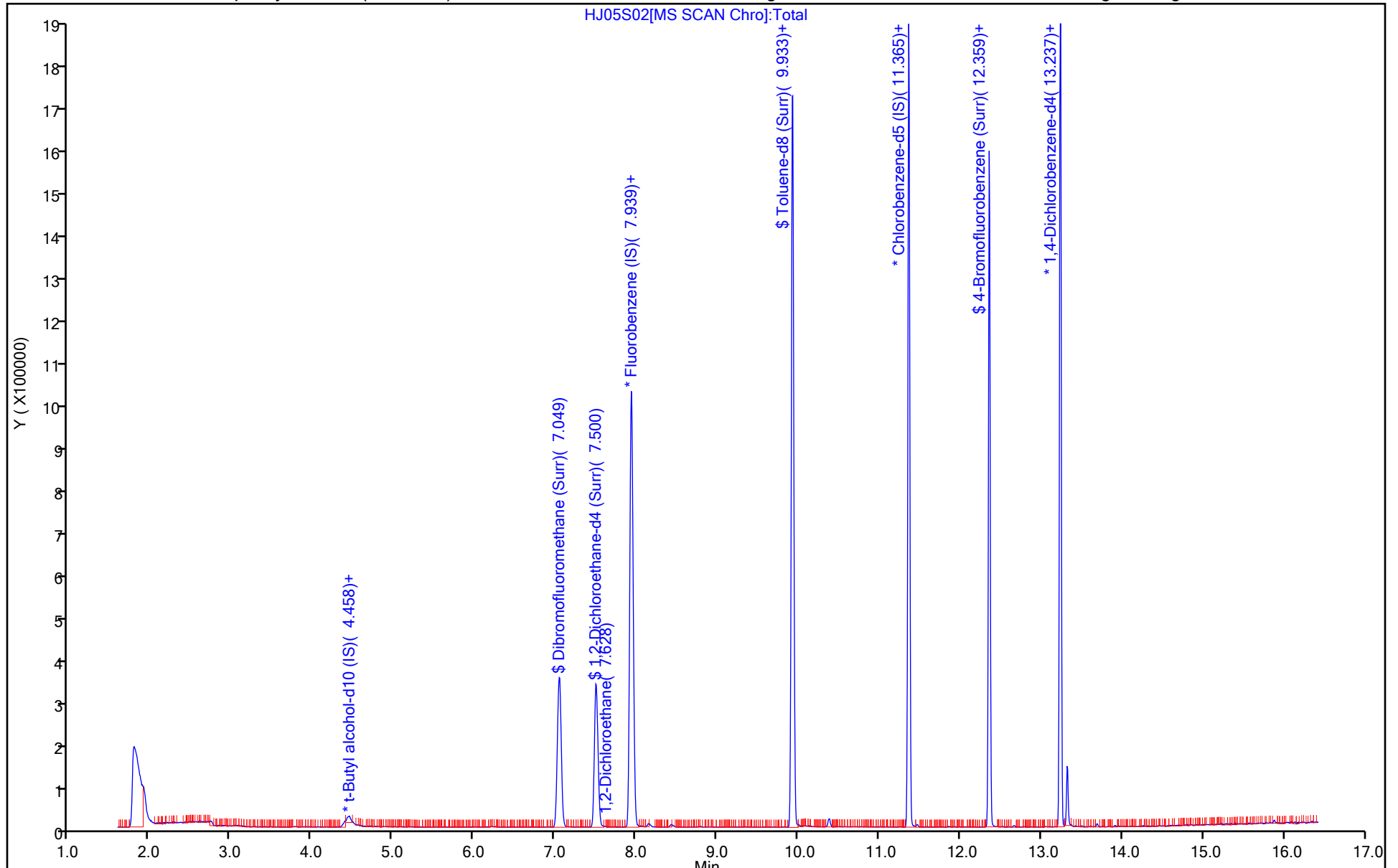
ALS Bottle#: 8

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20210105-19216.b\HJ05S02.D
 Lims ID: 410-24913-A-14
 Client ID: HD-QC1-0/1-2
 Sample Type: Client
 Inject. Date: 05-Jan-2021 11:50:30 ALS Bottle#: 8 Worklist Smp#: 9
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0019216-009
 Operator ID: jkh09052 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20210105-19216.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 05-Jan-2021 12:41:44 Calib Date: 04-Jan-2021 18:39:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20210104-19149.b\Hj04I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1665

First Level Reviewer: howej

Date: 05-Jan-2021 12:41:44

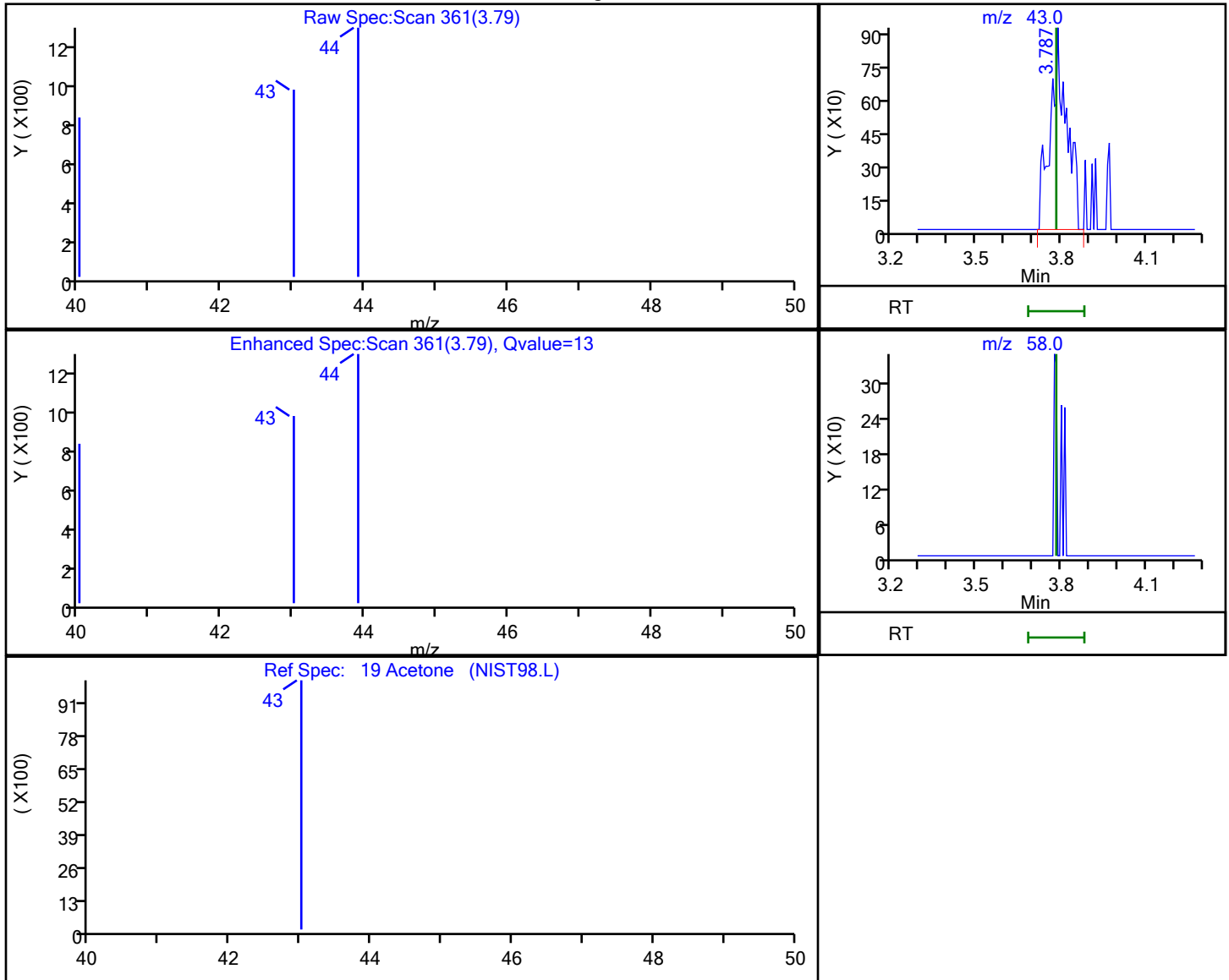
Compound	Amount Added	Amount Recovered	% Rec.
\$ 51 Dibromofluoromethane (Surr)	10.0	10.5	104.74
\$ 58 1,2-Dichloroethane-d4 (Surr)	10.0	11.0	109.61
\$ 82 Toluene-d8 (Surr)	10.0	9.71	97.11
\$ 108 4-Bromofluorobenzene (Surr)	10.0	9.73	97.29

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20210105-19216.b\HJ05S02.D
 Injection Date: 05-Jan-2021 11:50:30 Instrument ID: 19094
 Lims ID: 410-24913-A-14 Lab Sample ID: 410-24913-14
 Client ID: HD-QC1-0/1-2
 Operator ID: jkh09052 ALS Bottle#: 8 Worklist Smp#: 9
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
 Column: Rxi-624Sil MS Capillary Column (0.25mm i.d.) Detector: MS Quad

19 Acetone, CAS: 67-64-1

Processing Results



RT	Mass	Response	Amount
3.79	43.00	3728	0.505341
3.78	58.00	0	

Reviewer: howej, 05-Jan-2021 12:41:31

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-24913-1 Analy Batch No.: 70996

SDG No.: _____

Instrument ID: 16334 GC Column: R-624SilMS 3 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	0.2600			0.1000	4.5		20.0				
Chloromethane	0.3865 0.3323	0.3740 0.3289	0.3543	0.3488	0.3310	Ave	0.3508			0.1000	6.4		20.0				
1,3-Butadiene	0.4818 0.3395	0.4668 0.3285	0.4287	0.3894	0.3604	Ave	0.3993				15.3		20.0				
Vinyl chloride	0.3159 0.2911	0.3084 0.2925	0.2956	0.3035	0.2894	Ave	0.2995			0.1000	3.3		20.0				
Bromomethane	0.2376 0.1945	0.2188 0.1939	0.2080	0.2091	0.1990	Ave	0.2087			0.1000	7.5		20.0				
Chloroethane	0.2020 0.1743	0.1888 0.1718	0.1750	0.1835	0.1765	Ave	0.1817			0.1000	5.9		20.0				
Dichlorofluoromethane	0.5017 0.3781	0.4250 0.3736	0.3878	0.4005	0.3845	Ave	0.4073			0.1000	11.1		20.0				
Trichlorofluoromethane	0.3322 0.3378	0.3520 0.3476	0.3344	0.3624	0.3462	Ave	0.3447			0.1000	3.1		20.0				
Ethyl ether	0.2029 0.1968	0.2094 0.1981	0.2105	0.2104	0.1960	Ave	0.2035				3.3		20.0				
Freon 123a	0.3029 0.2615	0.2910 0.2660	0.2966	0.2824	0.2714	Ave	0.2817				5.7		20.0				
Acrolein	1.9448 1.9018	1.8610 1.9961	1.8171	1.8798	1.8832	Ave	1.8977				3.1		20.0				
1,1-Dichloroethene	0.2138 0.1990	0.2180 0.2009	0.2178	0.2053	0.2034	Ave	0.2083			0.1000	3.9		20.0				
Freon 113	0.1453 0.2066	0.1948 0.2157	0.2243	0.2201	0.2189	Ave	0.2037			0.1000	13.5		20.0				
Acetone	3.1858 2.2113	2.5645 2.3024	2.4764	2.2168	2.2161	Ave	2.4533			0.1000	14.3		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.: 410-24913-1 Analy Batch No.: 70996

SDG No.: _____

Instrument ID: 16334 GC Column: R-624SilMS 3 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 iodide	0.3770 0.3811	0.3974 0.3816	0.4099	0.3934	0.3832	Ave		0.3891			3.0		20.0				
Carbon disulfide	0.7515 0.7551	0.7679 0.7566	0.8070	0.7768	0.7599	Ave		0.7678		0.1000	2.5		20.0				
Methyl acetate	9.1363 6.5621	6.6209 7.7655	7.2886	7.4783	7.1352	Ave		7.4267		0.1000	11.7		20.0				
Allyl chloride	0.4283 0.3873	0.4623 0.3893	0.4373	0.4145	0.3988	Ave		0.4168			6.6		20.0				
Methylene Chloride	0.2382 0.2321	0.2393 0.2332	0.2491	0.2445	0.2344	Ave		0.2387		0.1000	2.6		20.0				
t-Butyl alcohol	0.8497 0.8680	0.9516 0.8650	0.9723	0.8999	0.8866	Ave		0.8990			5.1		20.0				
Acrylonitrile	2.9586 3.1288	3.2748 3.2919	3.2521	3.0729	3.2367	Ave		3.1737			3.9		20.0				
Methyl tert-butyl ether	0.6635 0.6373	0.6694 0.6386	0.7123	0.6690	0.6442	Ave		0.6620		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		0.2398		0.1000	3.2		20.0				
n-Hexane	0.2867 0.3432	0.3264 0.3700	0.3750	0.3768	0.3699	Ave		0.3497			9.6		20.0				
1,1-Dichloroethane	0.4270 0.4403	0.4431 0.4420	0.4771	0.4497	0.4365	Ave		0.4451		0.2000	3.5		20.0				
di-Isopropyl ether	0.9062 0.8812	0.9128 0.8785	0.9662	0.9125	0.8808	Ave		0.9055			3.4		20.0				
2-Chloro-1,3-butadiene	0.4041 0.3919	0.4061 0.3944	0.4315	0.4085	0.3968	Ave		0.4048			3.3		20.0				
Ethyl t-butyl ether	0.8224 0.8052	0.8413 0.8030	0.8728	0.8231	0.8119	Ave		0.8257			3.0		20.0				
2-Butanone (MEK)	4.6520 4.4491	4.5519 4.6499	4.6329	4.3702	4.5180	Ave		4.5463		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		0.2693		0.1000	3.9		20.0				
2,2-Dichloropropane	0.3736 0.3604	0.3790 0.3665	0.3915	0.3759	0.3663	Ave		0.3733			2.7		20.0				
Propionitrile	1.0088 1.1203	1.1684 1.1561	1.2108	1.1154	1.1088	Ave		1.1269			5.6		20.0				
Methacrylonitrile	4.4091 4.1503	3.9459 4.3367	4.1583	4.0671	4.1803	Ave		4.1782			3.7		20.0				
Bromochloromethane	0.1217 0.1146	0.1254 0.1158	0.1267	0.1186	0.1174	Ave		0.1200			3.9		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.: 410-24913-1 Analy Batch No.: 70996

SDG No.: _____

Instrument ID: 16334 GC Column: R-624SilMS 3 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															
Tetrahydrofuran	1.2005 1.1636	1.1159 1.2081	1.2163	1.1464	1.1769	Ave		1.1754			3.1		20.0				
Chloroform	0.4241 0.4162	0.4361 0.4174	0.4553	0.4333	0.4198	Ave		0.4289		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		0.3670		0.1000	3.2		20.0				
Cyclohexane	0.3420 0.4161	0.4199 0.4367	0.4573	0.4449	0.4360	Ave		0.4218		0.1000	9.0		20.0				
Carbon tetrachloride	0.3123 0.3112	0.3148 0.3194	0.3396	0.3190	0.3115	Ave		0.3183		0.1000	3.1		20.0				
1,1-Dichloropropene	0.3441 0.3339	0.3429 0.3430	0.3610	0.3520	0.3373	Ave		0.3449			2.6		20.0				
Isobutyl alcohol	0.0068 0.0052	0.0054 0.0052	0.0061	0.0055	0.0053	Ave		0.0057			10.6		20.0				
Benzene	1.0017 0.9873	1.0172 0.9996	1.0905	1.0301	0.9893	Ave		1.0165		0.5000	3.5		20.0				
1,2-Dichloroethane	0.3204 0.2618	0.2980 0.2685	0.2976	0.2780	0.2656	Ave		0.2843		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		0.7278			3.6		20.0				
n-Heptane	0.3399 0.3914	0.3695 0.4239	0.4108	0.4097	0.4167	Ave		0.3945			7.7		20.0				
n-Butanol	0.3526 0.3142	0.3215 0.3224	0.3129	0.3182	0.3198	Ave		0.3231			4.2		20.0				
Trichloroethene	0.2659 0.2521	0.2619 0.2540	0.2695	0.2633	0.2503	Ave		0.2596		0.2000	2.9		20.0				
Methylcyclohexane	0.3576 0.3955	0.4154 0.4155	0.4132	0.4131	0.4113	Ave		0.4031		0.1000	5.3		20.0				
1,2-Dichloropropane	0.2764 0.2646	0.2751 0.2634	0.2909	0.2701	0.2629	Ave		0.2719		0.1000	3.7		20.0				
Methyl methacrylate	8.4555 8.4558	8.3239 8.9257	8.5022	8.3048	8.6057	Ave		8.5105			2.5		20.0				
1,4-Dioxane	0.0338 0.0625	0.0557 0.0631	0.0575	0.0672	0.0625	Ave		0.0575		0.0050	19.3		20.0				
Dibromomethane	0.1296 0.1226	0.1259 0.1239	0.1333	0.1251	0.1218	Ave		0.1260			3.3		20.0				
Bromodichloromethane	0.3106 0.3144	0.3050 0.3189	0.3322	0.3171	0.3091	Ave		0.3153		0.2000	2.8		20.0				
2-Nitropropane	2.4618 2.4156	2.2909 2.5645	2.4079	2.3139	2.4372	Ave		2.4131			3.8		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.: 410-24913-1 Analy Batch No.: 70996

SDG No.: _____

Instrument ID: 16334 GC Column: R-624SilMS 3 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															
cis-1,3-Dichloropropene	0.3958 0.4012	0.4084 0.4132	0.4313	0.4116	0.4036	Ave		0.4093			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		11.673			0.1000	2.0	20.0				
Toluene	0.8735 0.8410	0.8787 0.8422	0.9144	0.8681	0.8484	Ave		0.8666			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		0.4679			0.1000	2.0	20.0				
Ethyl methacrylate	0.4267 0.4178	0.4069 0.4096	0.4408	0.4285	0.4128	Ave		0.4204				2.9	20.0				
1,1,2-Trichloroethane	0.2513 0.2433	0.2624 0.2439	0.2703	0.2532	0.2453	Ave		0.2528			0.1000	4.0	20.0				
Tetrachloroethene	0.3630 0.3679	0.3860 0.3728	0.3919	0.3792	0.3711	Ave		0.3760			0.2000	2.7	20.0				
1,3-Dichloropropane	0.4642 0.4402	0.4635 0.4417	0.4827	0.4548	0.4449	Ave		0.4560				3.4	20.0				
2-Hexanone	8.4134 8.4221	8.0551 8.7386	8.3204	8.2560	8.5645	Ave		8.3957			0.1000	2.6	20.0				
Dibromochloromethane	0.2790 0.3043	0.2850 0.3109	0.3146	0.3034	0.3016	Ave		0.2998				4.4	20.0				
1,2-Dibromoethane (EDB)	0.2472 0.2422	0.2457 0.2444	0.2626	0.2507	0.2443	Ave		0.2482			0.1000	2.8	20.0				
1-Chlorohexane	0.5856 0.4836	0.5459 0.4876	0.5425	0.5056	0.4925	Ave		0.5205				7.4	20.0				
Chlorobenzene	0.9694 0.9420	0.9847 0.9413	1.0084	0.9677	0.9436	Ave		0.9653			0.5000	2.6	20.0				
1,1,1,2-Tetrachloroethane	0.3288 0.3431	0.3338 0.3450	0.3600	0.3479	0.3423	Ave		0.3430				2.9	20.0				
Ethylbenzene	1.7755 1.6522	1.7215 1.6522	1.8045	1.7106	1.6703	Ave		1.7124			0.1000	3.5	20.0				
m&p-Xylene	0.6303 0.6325	0.6463 0.6343	0.6858	0.6521	0.6362	Ave		0.6453			0.1000	3.0	20.0				
o-Xylene	0.6524 0.6249	0.6497 0.6301	0.6620	0.6342	0.6268	Ave		0.6400			0.3000	2.3	20.0				
Styrene	1.0833 1.0667	1.0941 1.0702	1.1441	1.1059	1.0699	Ave		1.0906			0.3000	2.5	20.0				
Bromoform	0.1479 0.1859	0.1627 0.1929	0.1753	0.1784	0.1822	Ave		0.1750			0.1000	8.7	20.0				
Isopropylbenzene	1.6857 1.6374	1.6628 1.6363	1.7542	1.6896	1.6520	Ave		1.6740			0.1000	2.5	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.: 410-24913-1 Analy Batch No.: 70996

SDG No.: _____

Instrument ID: 16334 GC Column: R-624SilMS 3 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															
1,1,2,2-Tetrachloroethane	0.5902 0.6232	0.6428 0.6177	0.6602	0.6428	0.6232	Ave		0.6286		0.3000	3.6		20.0				
Bromobenzene	0.7516 0.7370	0.7538 0.7418	0.8074	0.7608	0.7302	Ave		0.7547			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		3.6236			10.5		20.0				
1,2,3-Trichloropropane	0.1468 0.1564	0.1683 0.1540	0.1787	0.1639	0.1534	Ave		0.1602			6.7		20.0				
N-Propylbenzene	3.8085 3.6437	3.8314 3.6182	3.9342	3.8079	3.6943	Ave		3.7626			3.0		20.0				
2-Chlorotoluene	0.7437 0.7150	0.7306 0.7301	0.7906	0.7486	0.7213	Ave		0.7400			3.4		20.0				
1,3,5-Trimethylbenzene	2.5579 2.6111	2.6772 2.6267	2.7986	2.6831	2.6274	Ave		2.6546			2.9		20.0				
4-Chlorotoluene	0.7484 0.7495	0.8055 0.7555	0.8263	0.7661	0.7496	Ave		0.7716			4.1		20.0				
tert-Butylbenzene	0.5660 0.5518	0.5860 0.5647	0.5833	0.5591	0.5570	Ave		0.5668			2.3		20.0				
Pentachloroethane	0.4568 0.4818	0.4935 0.4984	0.5005	0.4929	0.4867	Ave		0.4872			3.1		20.0				
1,2,4-Trimethylbenzene	2.7790 2.7142	2.7782 2.7275	2.9168	2.7763	2.7094	Ave		2.7716			2.6		20.0				
sec-Butylbenzene	3.4820 3.3763	3.4174 3.4112	3.6235	3.4743	3.3895	Ave		3.4535			2.5		20.0				
1,3-Dichlorobenzene	1.5196 1.4752	1.5457 1.5040	1.5950	1.5325	1.4802	Ave		1.5218		0.6000	2.7		20.0				
p-Isopropyltoluene	2.9520 2.9374	3.0087 2.9748	3.1925	2.9847	2.9468	Ave		2.9995			3.0		20.0				
1,4-Dichlorobenzene	1.5720 1.4942	1.5904 1.5102	1.6124	1.5600	1.5127	Ave		1.5503		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		1.2293			4.5		20.0				
Benzyl chloride	0.2641 0.2717	0.2595 0.2754	0.2913	0.2698	0.2713	Ave		0.2719			3.7		20.0				
n-Butylbenzene	1.5804 1.5475	1.6196 1.5630	1.6848	1.5860	1.5416	Ave		1.5890			3.1		20.0				
1,2-Dichlorobenzene	1.4023 1.3754	1.4491 1.3831	1.5174	1.4370	1.3753	Ave		1.4199		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		0.0916		0.0500	4.9		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.: 410-24913-1 Analy Batch No.: 70996

SDG No.: _____

Instrument ID: 16334 GC Column: R-624SilMS 3 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															
1,3,5-Trichlorobenzene	1.3005 1.2452	1.3075 1.2589	1.3317	1.2404	1.2438	Ave		1.2754			2.9		20.0				
1,2,4-Trichlorobenzene	1.1627 1.1438	1.2549 1.1466	1.2199	1.1628	1.1368	Ave		1.1754		0.2000	3.8		20.0				
Hexachlorobutadiene	0.5964 0.5566	0.6122 0.5730	0.5894	0.5543	0.5576	Ave		0.5771			3.9		20.0				
Naphthalene	2.1901 2.0588	2.1833 2.0314	2.2888	2.1532	2.0650	Ave		2.1387			4.3		20.0				
1,2,3-Trichlorobenzene	1.0554 1.0003	1.1043 0.9938	1.0851	1.0287	0.9943	Ave		1.0374			4.4		20.0				
Dibromofluoromethane (Surr)	0.2387 0.2412	0.2434 0.2414	0.2438	0.2429	0.2428	Ave		0.2420			0.7		20.0				
1,2-Dichloroethane-d4 (Surr)	0.0510 0.0517	0.0510 0.0520	0.0519	0.0518	0.0511	Ave		0.0515			0.9		20.0				
Toluene-d8 (Surr)	1.3449 1.3317	1.3345 1.3197	1.3349	1.3314	1.3421	Ave		1.3342			0.6		20.0				
4-Bromofluorobenzene (Surr)	0.5151 0.5069	0.5107 0.5026	0.5115	0.5101	0.5089	Ave		0.5094			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.: 410-24913-1 Analy Batch No.: 70996

SDG No.: _____

Instrument ID: 16334 GC Column: R-624SilMS 3 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	TBAd10	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
Acetone	TBAd10	Ave	23541 823027	50222 2047683	99654	173204	406309	2.00 100	5.00 250	10.0	20.0	50.0
Methyl iodide	FB	Ave	16625	43500	90654	173875	426388	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.: 410-24913-1 Analy Batch No.: 70996

SDG No.: _____

Instrument ID: 16334 GC Column: R-624SilMS 3 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
			856231	2146588				10.0	25.0			
Carbon disulfide	FB	Ave	33137 1696280	84062 4255752	178461	343343	845631	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Methyl acetate	TBAd1 0	Ave	6751 244232	12966 690648	29330	58429	130819	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Allyl chloride	FB	Ave	18885 870096	50604 2189679	96698	183197	443750	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Methylene Chloride	FB	Ave	10502 521426	26198 1311628	55096	108056	260868	0.200 10.0	0.500 25.0	1.00	2.00	5.00
t-Butyl alcohol	TBAd1 0	Ave	12558 646096	37272 1538645	78250	140629	325105	4.00 200	10.0 500	20.0	40.0	100
Acrylonitrile	TBAd1 0	Ave	10931 582252	32066 1463905	65434	120047	296709	1.00 50.0	2.50 125	5.00	10.0	25.0
Methyl tert-butyl ether	FB	Ave	29258 1431718	73272 3592103	157517	295684	716859	0.200 10.0	0.500 25.0	1.00	2.00	5.00
trans-1,2-Dichloroethene	FB	Ave	10478 522420	26963 1312619	55706	108056	258856	0.200 10.0	0.500 25.0	1.00	2.00	5.00
n-Hexane	FB	Ave	12643 770889	35728 2081061	82931	166559	411619	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,1-Dichloroethane	FB	Ave	18828 989205	48509 2486421	105511	198755	485770	0.200 10.0	0.500 25.0	1.00	2.00	5.00
di-Isopropyl ether	FB	Ave	39957 1979657	99922 4941744	213671	403335	980101	0.200 10.0	0.500 25.0	1.00	2.00	5.00
2-Chloro-1,3-butadiene	FB	Ave	17821 880335	44458 2218551	95428	180575	441551	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Ethyl t-butyl ether	FB	Ave	36262 1808949	92089 4516790	193019	363795	903460	0.200 10.0	0.500 25.0	1.00	2.00	5.00
2-Butanone (MEK)	TBAd1 0	Ave	34375 1655912	89142 4135516	186432	341451	828352	2.00 100	5.00 250	10.0	20.0	50.0
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	TBAd1 0	Ave	14908 833953	45761 2056391	97449	174294	406595	4.00 200	10.0 500	20.0	40.0	100
Methacrylonitrile	TBAd1 0	Ave	32580	77275	167335	317768	766425	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.: 410-24913-1 Analy Batch No.: 70996

SDG No.: _____

Instrument ID: 16334 GC Column: R-624SilMS 3 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
			1544674	3857032				100	250			
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	TBAd1 0	Ave	8871	21854	48944	89573	215770	2.00	5.00	10.0	20.0	50.0
Chloroform	FB	Ave	433079 18700 935084	1074451 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
n-Butanol	TBAd1 0	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	TBAd1 0	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	TBAd1 0	Ave	1248 116348	5456 280447	11572	26270	57308	10.0 500	25.0 1250	50.0	100	250
Dibromomethane	FB	Ave	5716	13777	29475	55304	135590	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.: 410-24913-1 Analy Batch No.: 70996

SDG No.: _____

Instrument ID: 16334 GC Column: R-624SilMS 3 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
			275323	696745				10.0	25.0			
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	TBAd1 0	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)	TBAd1 0	Ave	86421 4346527	222955 10637772	478190	887415	2154238	2.00 100	5.00 250	10.0	20.0	50.0
Toluene	CBZd5	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	CBZd5	Ave	14156 765518	37093 1963134	76563	150936	378649	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Ethyl methacrylate	CBZd5	Ave	13470 683673	32351 1698291	70532	137503	332561	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,1,2-Trichloroethane	CBZd5	Ave	7932 398053	20860 1011153	43259	81260	197601	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Tetrachloroethene	CBZd5	Ave	11458 602059	30689 1545623	62720	121696	298979	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,3-Dichloropropane	CBZd5	Ave	14652 720295	36850 1831199	77242	145956	358460	0.200 10.0	0.500 25.0	1.00	2.00	5.00
2-Hexanone	TBAd1 0	Ave	62169 3134600	157747 7771959	334821	645054	1570233	2.00 100	5.00 250	10.0	20.0	50.0
Dibromochloromethane	CBZd5	Ave	8808 497877	22656 1288980	50339	97381	243007	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2-Dibromoethane (EDB)	CBZd5	Ave	7804 396354	19536 1013188	42028	80460	196846	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1-Chlorohexane	CBZd5	Ave	18485 791218	43401 2021466	86809	162251	396805	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Chlorobenzene	CBZd5	Ave	30598 1541301	78284 3902651	161371	310565	760248	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,1,1,2-Tetrachloroethane	CBZd5	Ave	10378 561469	26540 1430192	57609	111642	275804	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Ethylbenzene	CBZd5	Ave	56042 2703437	136856 6849934	288772	548965	1345750	0.200 10.0	0.500 25.0	1.00	2.00	5.00
m&p-Xylene	CBZd5	Ave	39788 2069783	102766 5259805	219481	418534	1025168	0.400 20.0	1.00 50.0	2.00	4.00	10.0
o-Xylene	CBZd5	Ave	20593 1022577	51651 2612526	105945	203530	504969	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.: 410-24913-1 Analy Batch No.: 70996

SDG No.: _____

Instrument ID: 16334 GC Column: R-624SilMS 3 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	CBZd5	Ave	34193 1745400	86978 4437047	183091	354894	861952	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Bromoform	CBZd5	Ave	4668 304248	12931 799958	28046	57245	146803	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Isopropylbenzene	CBZd5	Ave	53210 2679183	132190 6784295	280719	542248	1331001	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,1,2,2-Tetrachloroethane	DCBd4	Ave	10124 553642	27699 1384788	56804	111748	273837	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Bromobenzene	DCBd4	Ave	12894 654760	32482 1663078	69470	132263	320859	0.200 10.0	0.500 25.0	1.00	2.00	5.00
trans-1,4-Dichloro-2-butene	TBAd1 0	Ave	23186 1457770	63627 3738276	139562	278293	701899	2.00 100	5.00 250	10.0	20.0	50.0
1,2,3-Trichloropropane	DCBd4	Ave	2519 138980	7254 345318	15377	28491	67388	0.200 10.0	0.500 25.0	1.00	2.00	5.00
N-Propylbenzene	DCBd4	Ave	65333 3236978	165110 8111815	338497	661944	1623321	0.200 10.0	0.500 25.0	1.00	2.00	5.00
2-Chlorotoluene	DCBd4	Ave	12758 635163	31485 1636772	68023	130139	316960	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,3,5-Trimethylbenzene	DCBd4	Ave	43880 2319655	115372 5889002	240788	466416	1154535	0.200 10.0	0.500 25.0	1.00	2.00	5.00
4-Chlorotoluene	DCBd4	Ave	12838 665842	34713 1693778	71097	133168	329404	0.200 10.0	0.500 25.0	1.00	2.00	5.00
tert-Butylbenzene	DCBd4	Ave	9709 490248	25251 1265966	50184	97199	244744	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Pentachloroethane	DCBd4	Ave	7836 427979	21266 1117481	43066	85685	213871	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2,4-Trimethylbenzene	DCBd4	Ave	47673 2411281	119721 6115025	250956	482620	1190575	0.200 10.0	0.500 25.0	1.00	2.00	5.00
sec-Butylbenzene	DCBd4	Ave	59733 2999448	147266 7647756	311759	603955	1489422	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,3-Dichlorobenzene	DCBd4	Ave	26068 1310582	66610 3371982	137230	266406	650429	0.200 10.0	0.500 25.0	1.00	2.00	5.00
p-Isopropyltoluene	DCBd4	Ave	50640 2609529	129655 6669275	274677	518846	1294886	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,4-Dichlorobenzene	DCBd4	Ave	26967 1327411	68535 3385890	138733	271182	664687	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2,3-Trimethylbenzene	DCBd4	Ave	22584 1037654	54187 2646951	109147	214525	518339	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Benzyl chloride	DCBd4	Ave	4530 241370	11182 617345	25065	46895	119235	0.200 10.0	0.500 25.0	1.00	2.00	5.00
n-Butylbenzene	DCBd4	Ave	27112	69796	144959	275706	677396	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.: 410-24913-1 Analy Batch No.: 70996

SDG No.: _____

Instrument ID: 16334 GC Column: R-624SilMS 3 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 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				
			1374780	3504248					10.0	25.0			
1,2-Dichlorobenzene	DCBd4	Ave	24056 1221855	62448 3100816	130553	249800	604314	0.200 10.0	0.500 25.0	1.00	2.00	5.00	
1,2-Dibromo-3-Chloropropane	DCBd4	Ave	1486 81816	3908 208192	8650	15596	38959	0.200 10.0	0.500 25.0	1.00	2.00	5.00	
1,3,5-Trichlorobenzene	DCBd4	Ave	22309 1106187	56346 2822323	114581	215623	546533	0.200 10.0	0.500 25.0	1.00	2.00	5.00	
1,2,4-Trichlorobenzene	DCBd4	Ave	19946 1016153	54078 2570710	104962	202142	499550	0.200 10.0	0.500 25.0	1.00	2.00	5.00	
Hexachlorobutadiene	DCBd4	Ave	10231 494492	26381 1284715	50715	96356	245031	0.200 10.0	0.500 25.0	1.00	2.00	5.00	
Naphthalene	DCBd4	Ave	37571 1828996	94086 4554237	196928	374308	907383	0.200 10.0	0.500 25.0	1.00	2.00	5.00	
1,2,3-Trichlorobenzene	DCBd4	Ave	18105 888658	47589 2227961	93358	178820	436916	0.200 10.0	0.500 25.0	1.00	2.00	5.00	
Dibromofluoromethane (Surr)	FB	Ave	526196 541882	532962 543100	539150	536748	540338	10.0 10.0	10.0 10.0	10.0	10.0	10.0	
1,2-Dichloroethane-d4 (Surr)	FB	Ave	112511 116084	111685 117092	114722	114415	113626	10.0 10.0	10.0 10.0	10.0	10.0	10.0	
Toluene-d8 (Surr)	CBZd5	Ave	2122568 2179039	2121912 2188553	2136211	2136446	2162628	10.0 10.0	10.0 10.0	10.0	10.0	10.0	
4-Bromofluorobenzene (Surr)	CBZd5	Ave	812877 829357	812090 833577	818561	818494	820021	10.0 10.0	10.0 10.0	10.0	10.0	10.0	

Curve Type Legend:

Ave = Average ISTD

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\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

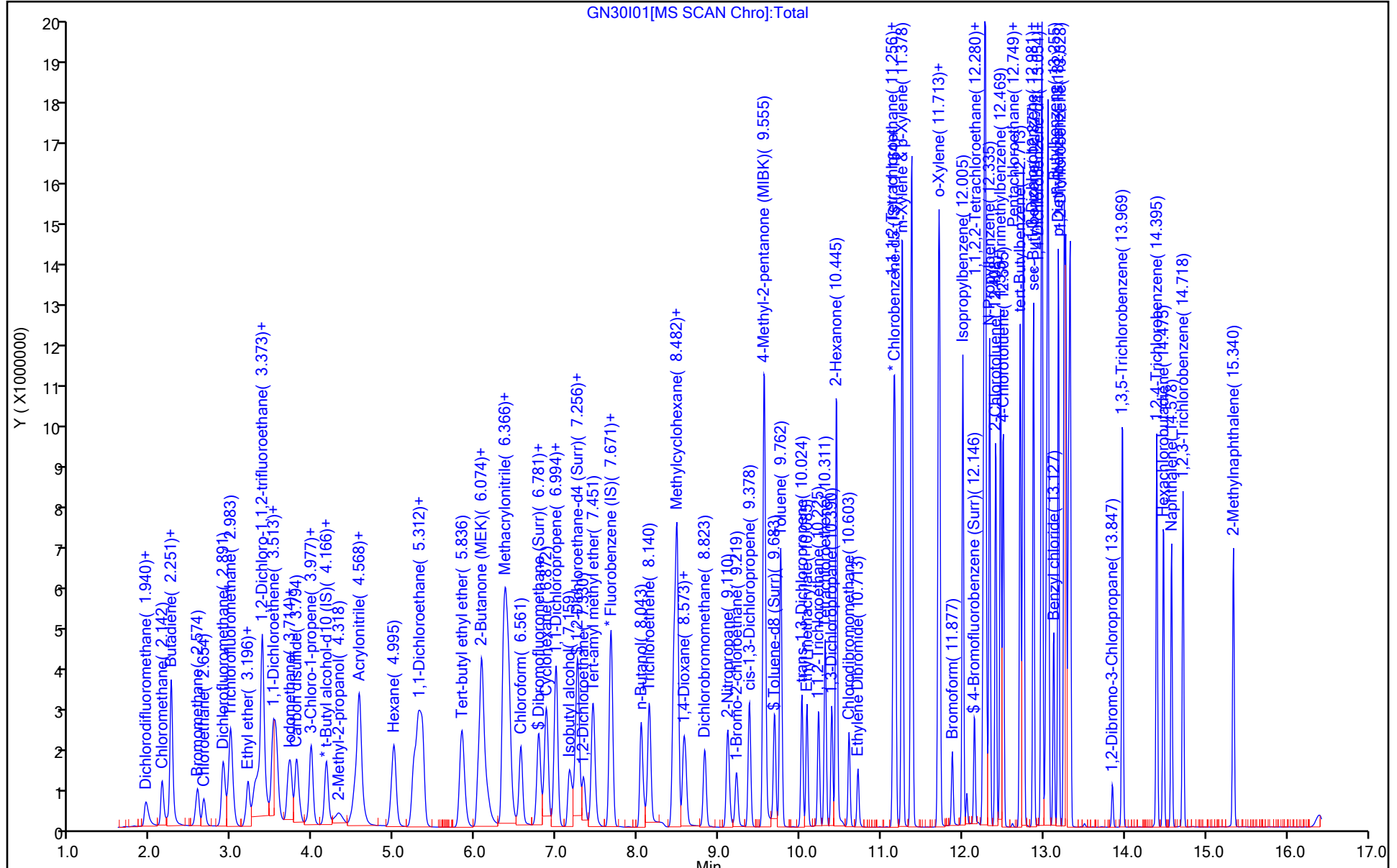
ALS Bottle#: 2

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

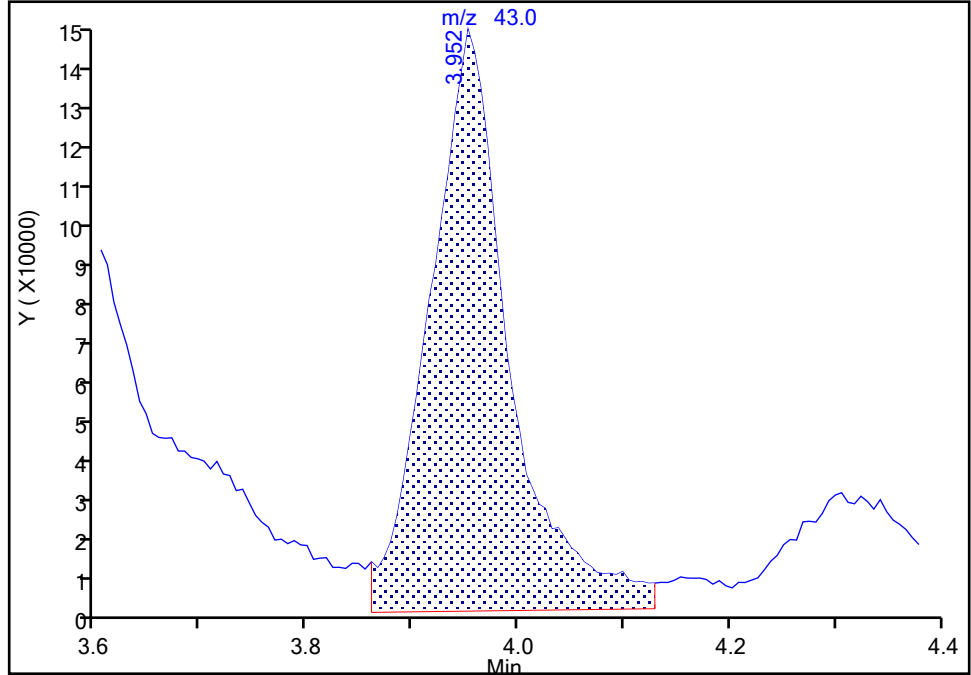
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Injection Date: 30-Nov-2020 12:50:30 Instrument ID: 16334
Lims ID: IC std7
Client ID:
Operator ID: DVV10203 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

26 Methyl acetate, CAS: 79-20-9

Signal: 1

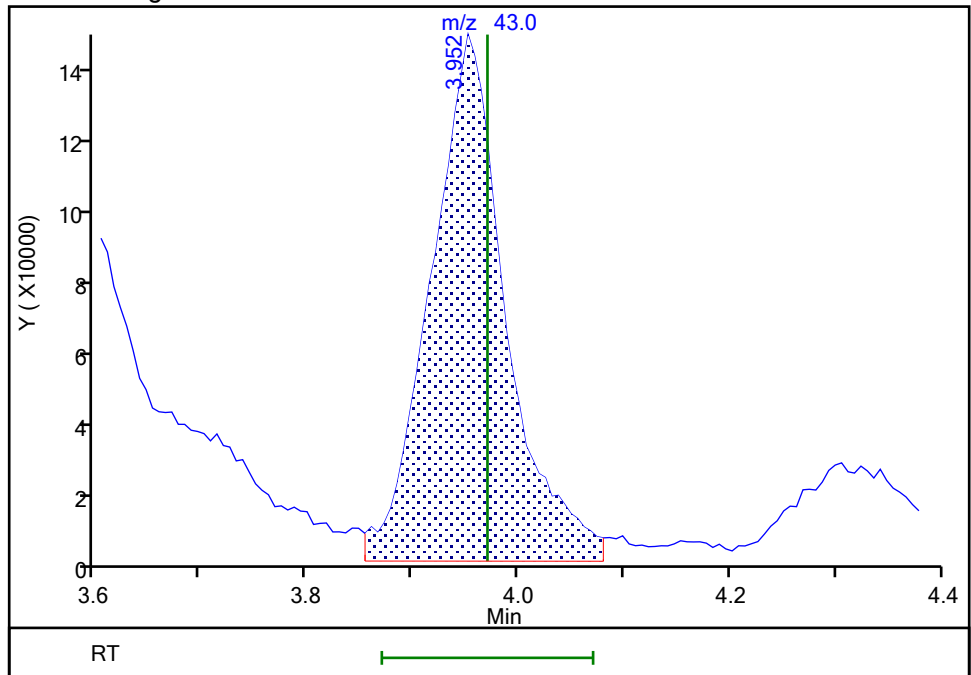
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Area: 749074
Amount: 27.913187
Amount Units: ug/l

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

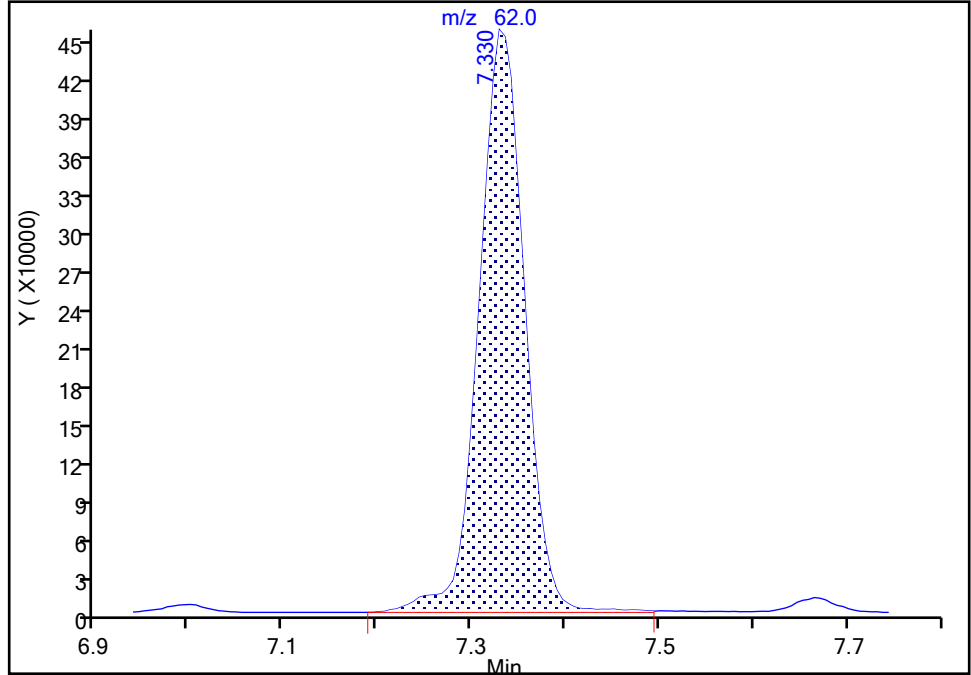
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Injection Date: 30-Nov-2020 12:50:30 Instrument ID: 16334
Lims ID: IC std7
Client ID:
Operator ID: DVV10203 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

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

Signal: 1

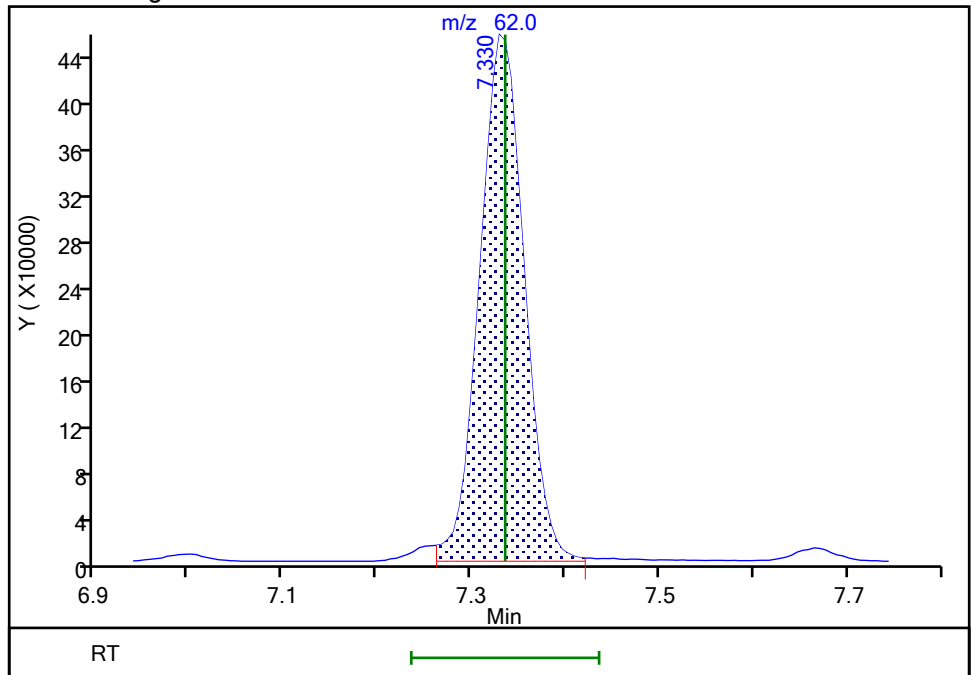
RT: 7.33
Area: 1541889
Amount: 23.957758
Amount Units: ug/l

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

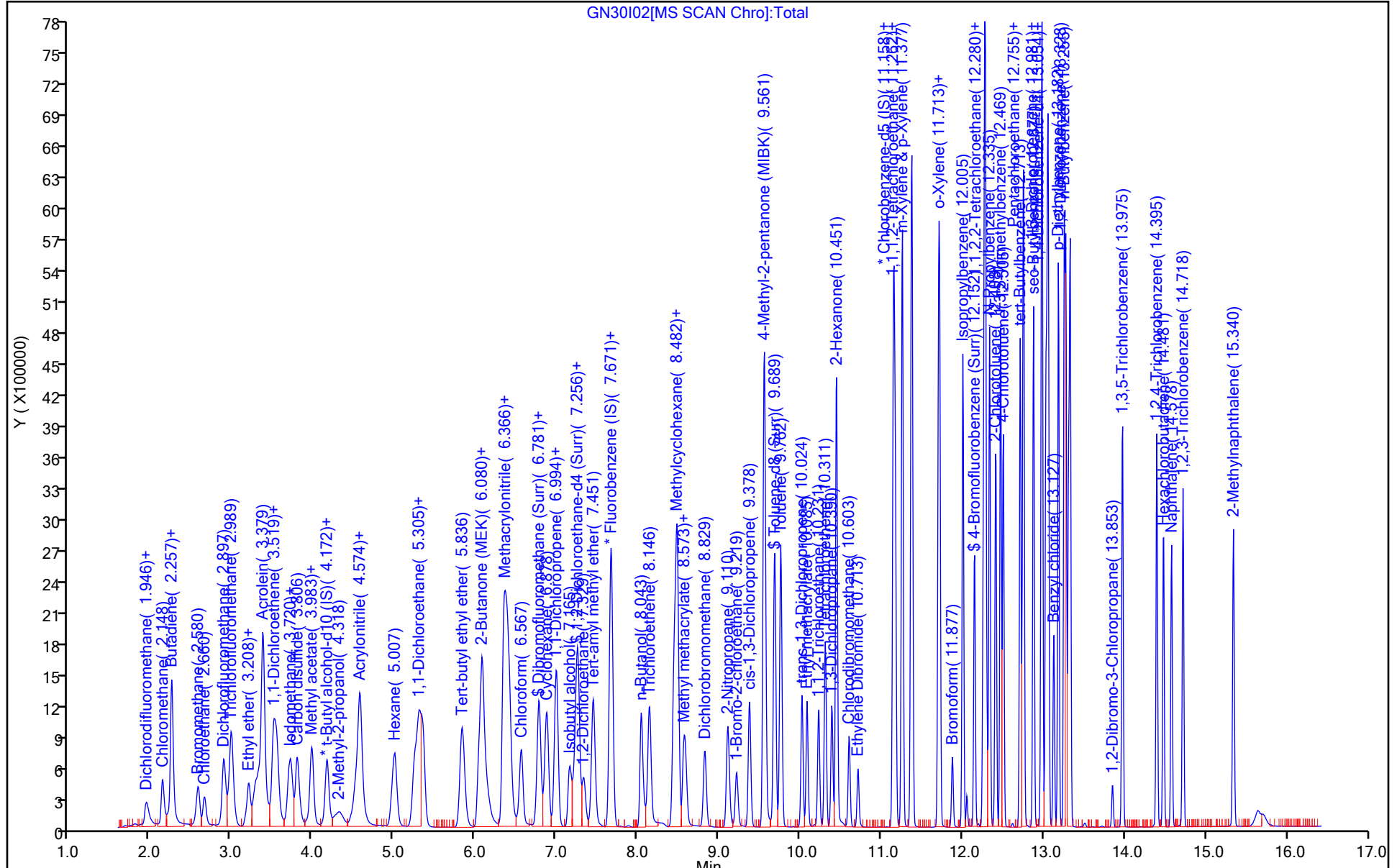
Processing Flags

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

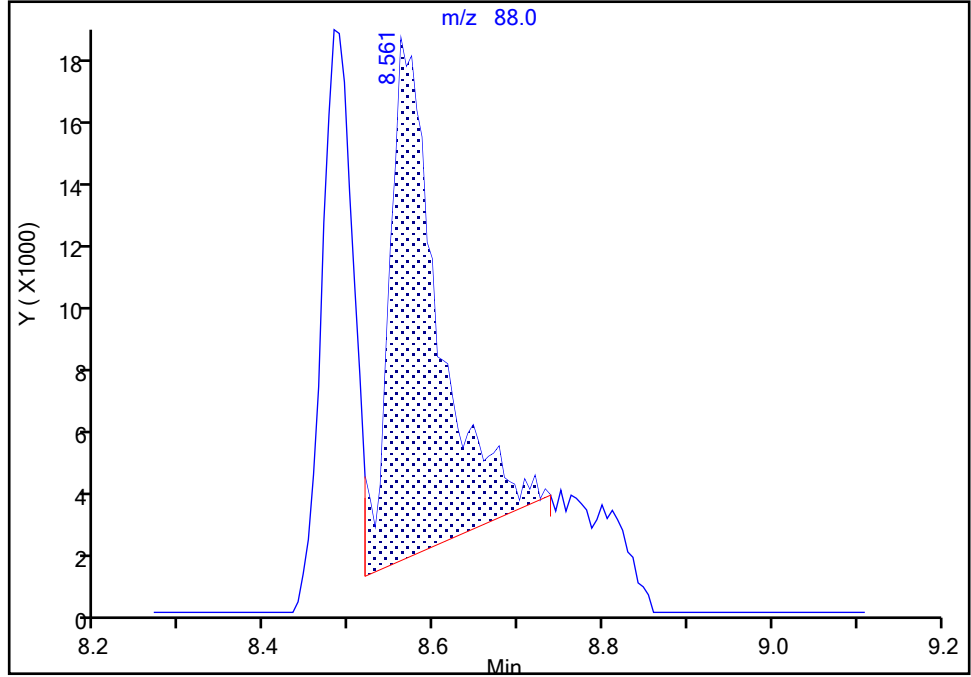
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Injection Date: 30-Nov-2020 13:12:30 Instrument ID: 16334
Lims ID: ICIS std6
Client ID:
Operator ID: DVV10203 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

72 1,4-Dioxane, CAS: 123-91-1

Signal: 1

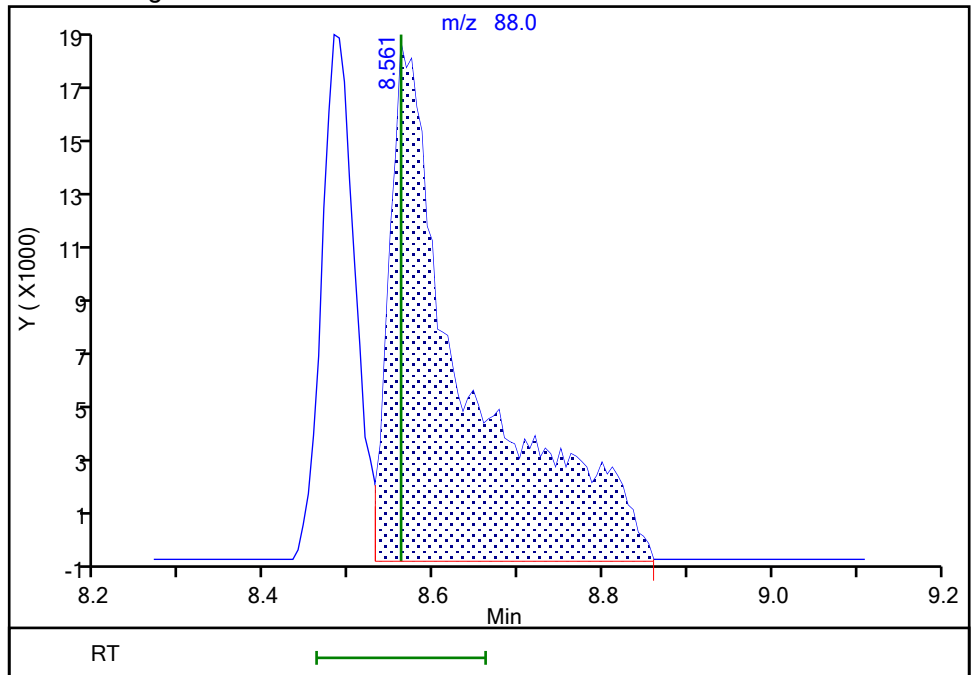
RT: 8.56
Area: 66720
Amount: 408.4380
Amount Units: ug/l

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
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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

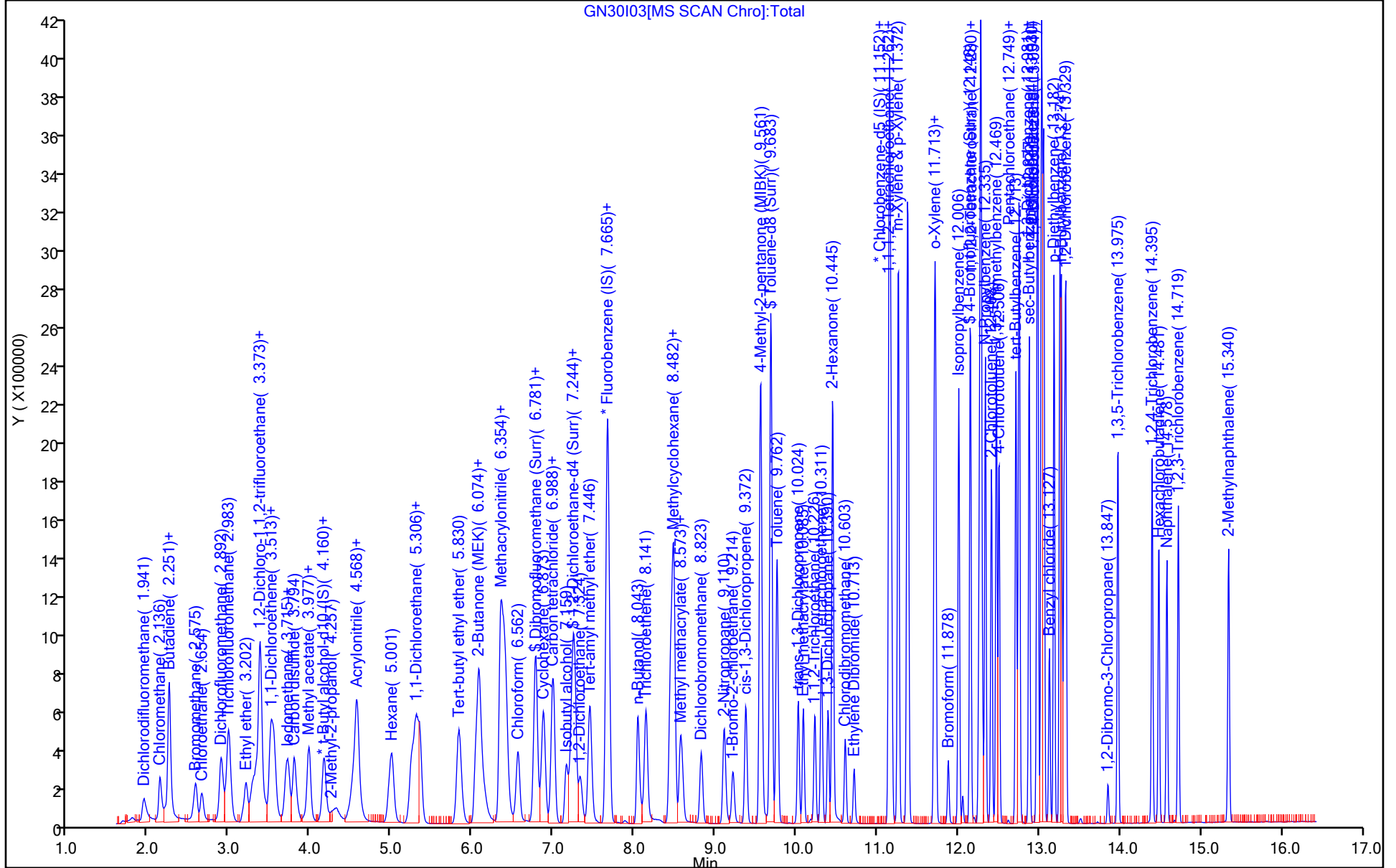
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MSV_29_826ISS_00013

Amount Added: 1.00

Units: uL

Run Reagent



GN30I03[MS SCAN Chrom]:Total

Eurofins Lancaster Laboratories Env, LLC

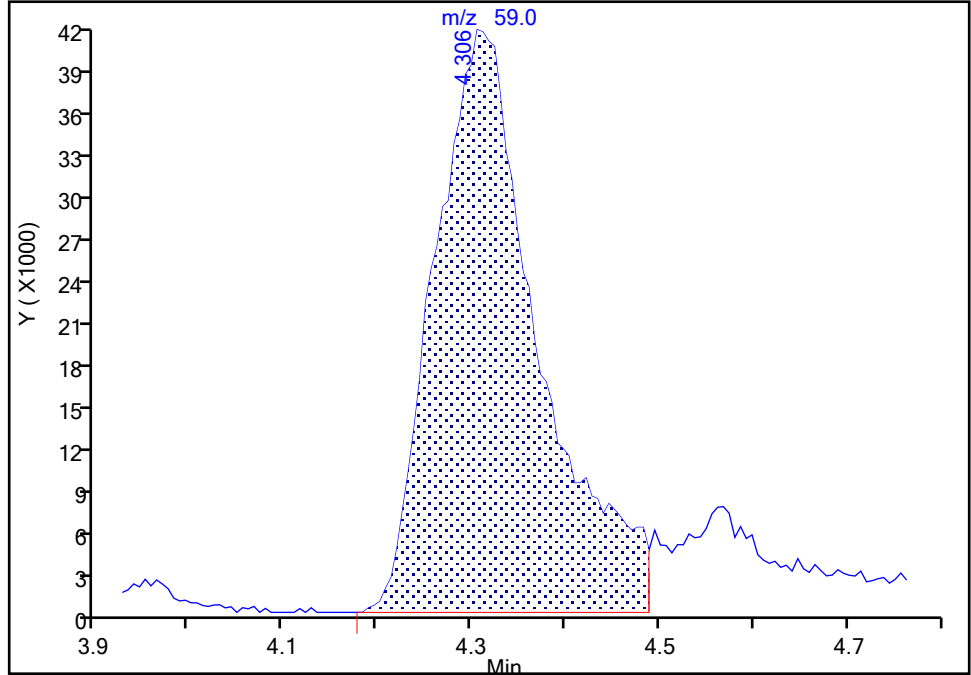
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Injection Date: 30-Nov-2020 13:34:30 Instrument ID: 16334
Lims ID: IC std5
Client ID:
Operator ID: DVV10203 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

30 2-Methyl-2-propanol, CAS: 75-65-0

Signal: 1

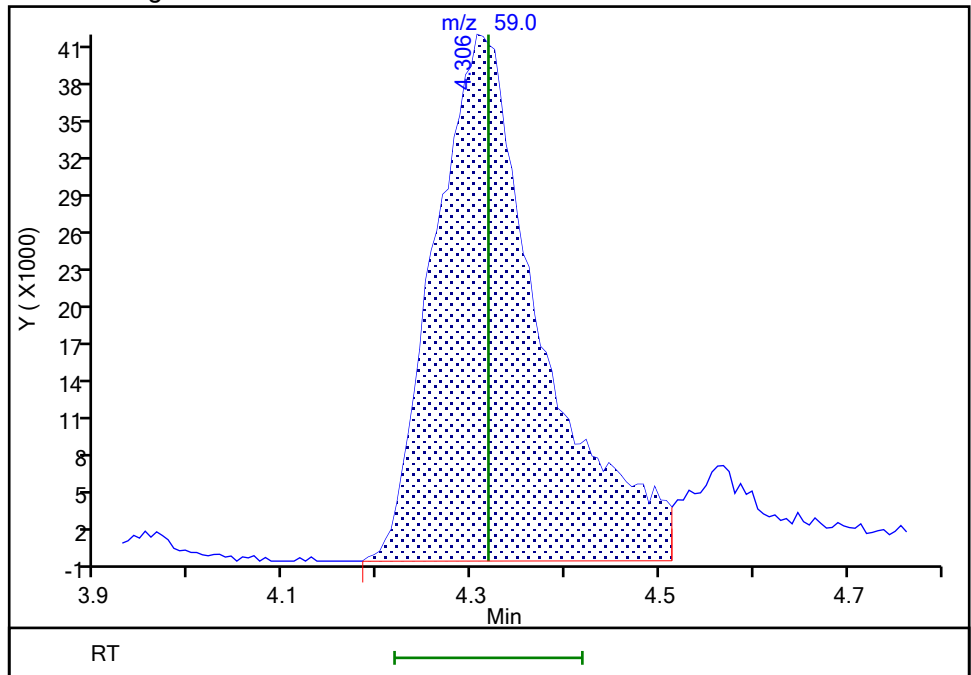
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Area: 318169
Amount: 99.986734
Amount Units: ug/l

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

Eurofins Lancaster Laboratories Env, LLC

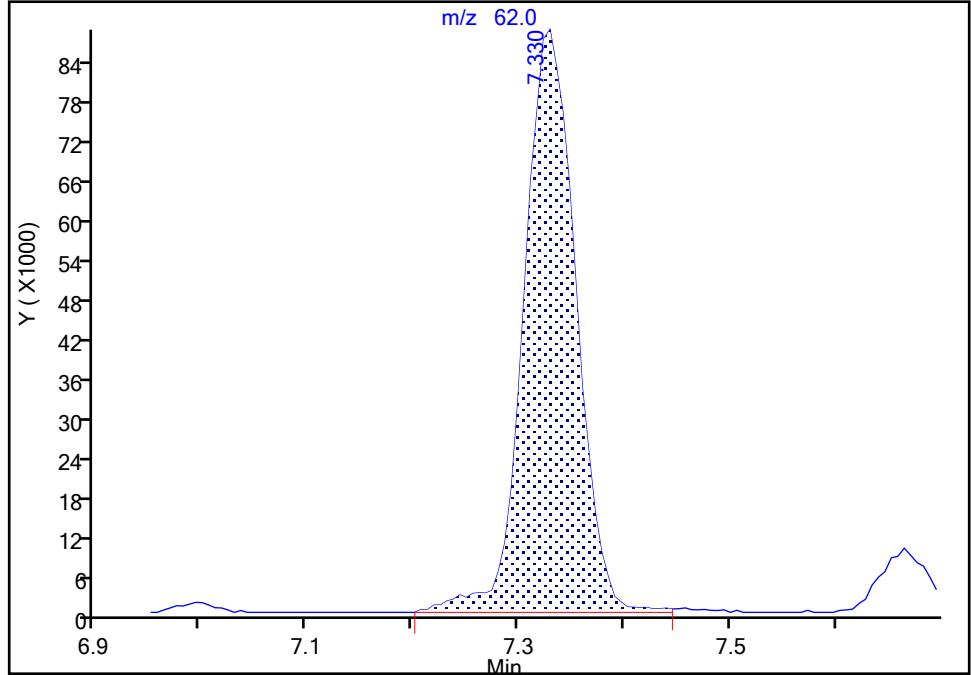
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Lims ID: IC std5
Client ID:
Operator ID: DVV10203 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

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

Signal: 1

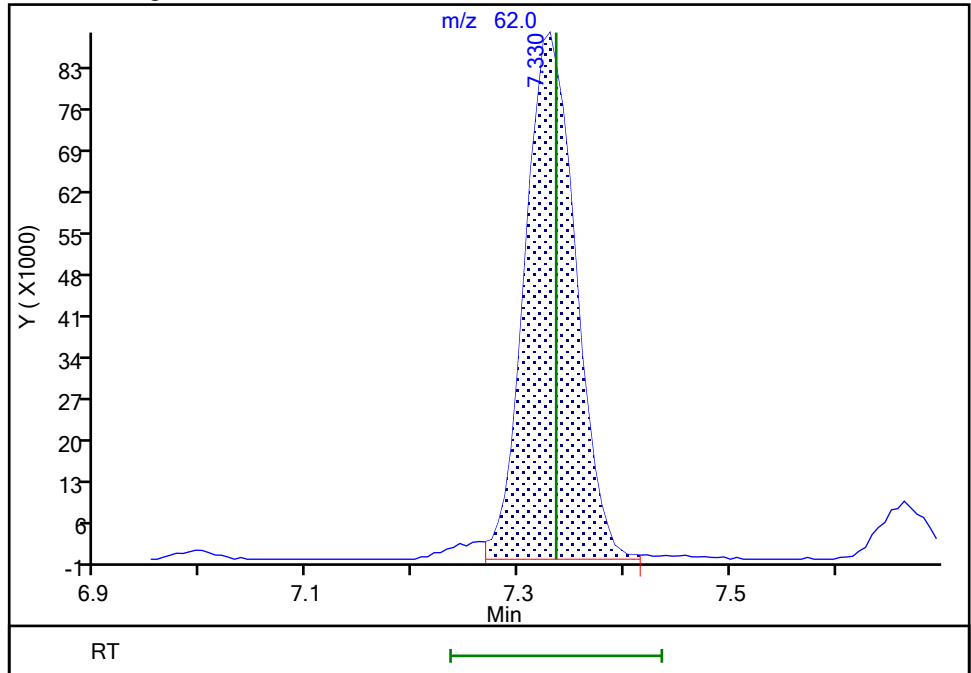
RT: 7.33
Area: 303046
Amount: 4.773793
Amount Units: ug/l

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

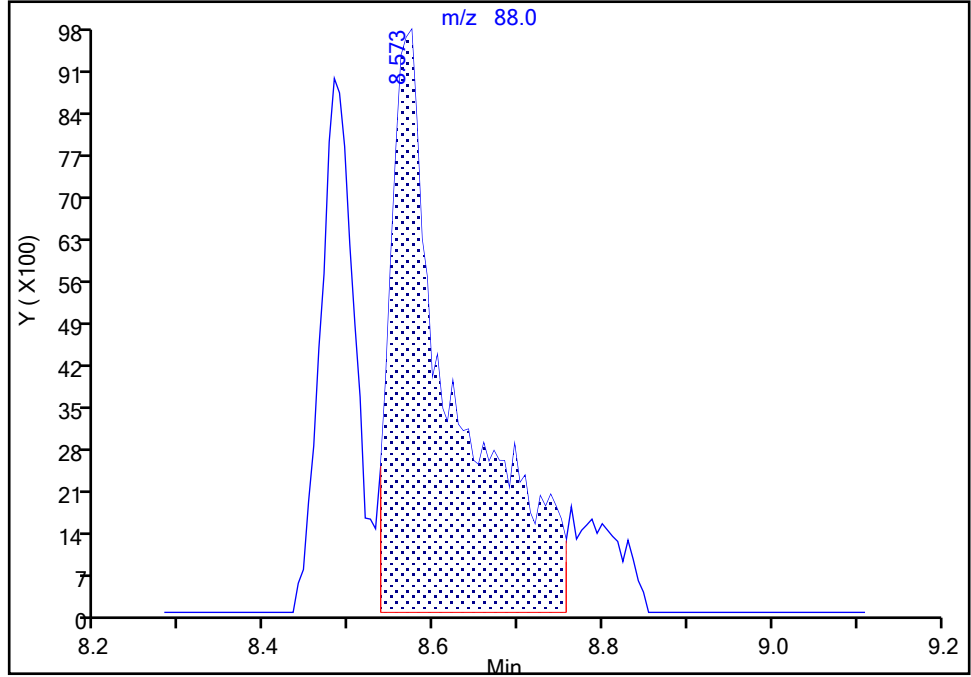
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Injection Date: 30-Nov-2020 13:34:30 Instrument ID: 16334
Lims ID: IC std5
Client ID:
Operator ID: DVV10203 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

72 1,4-Dioxane, CAS: 123-91-1

Signal: 1

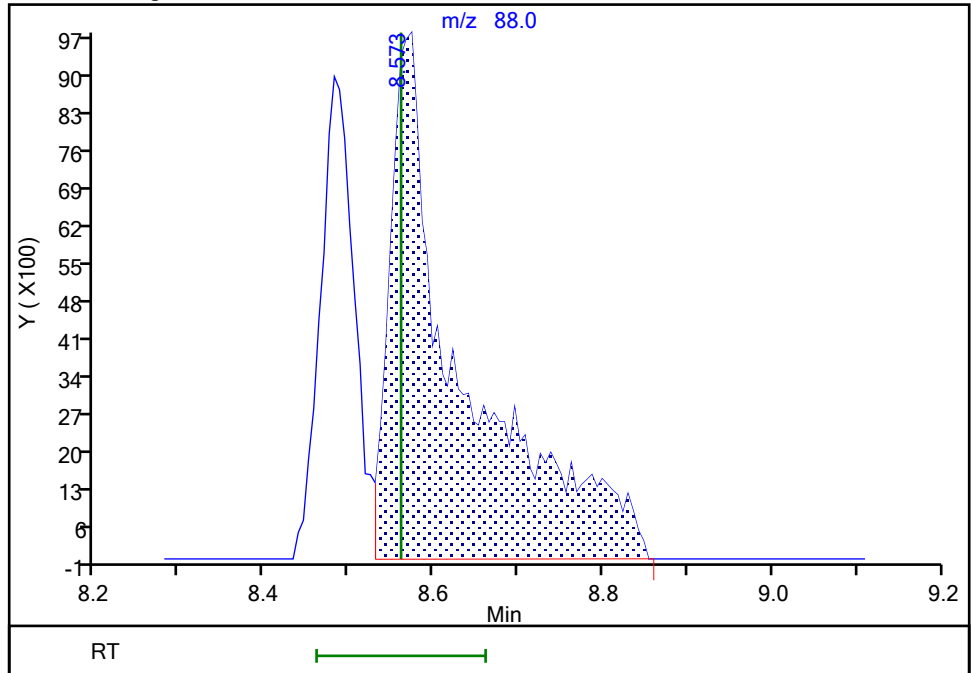
RT: 8.57
Area: 50236
Amount: 287.2121
Amount Units: ug/l

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
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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

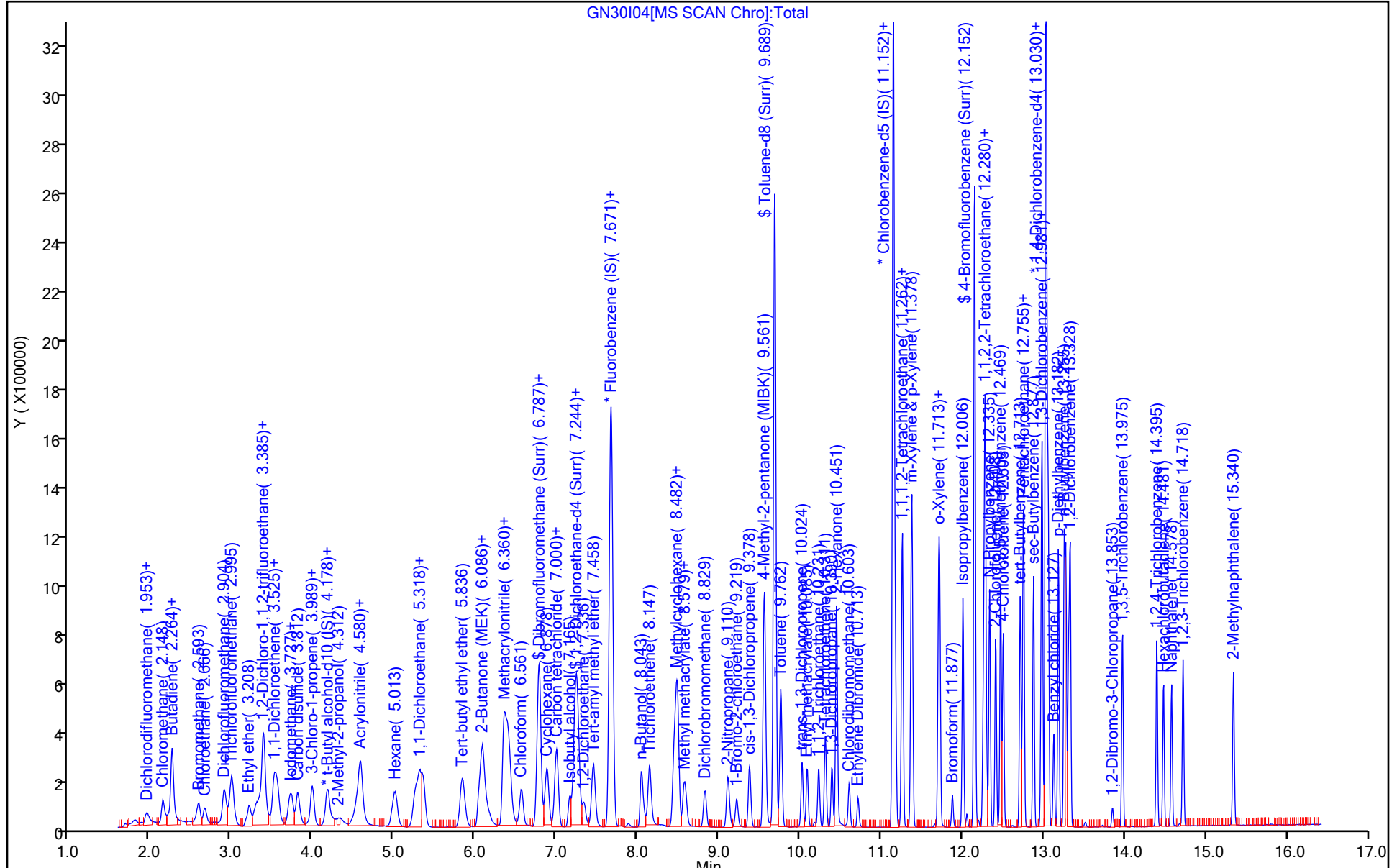
ALS Bottle#: 5

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

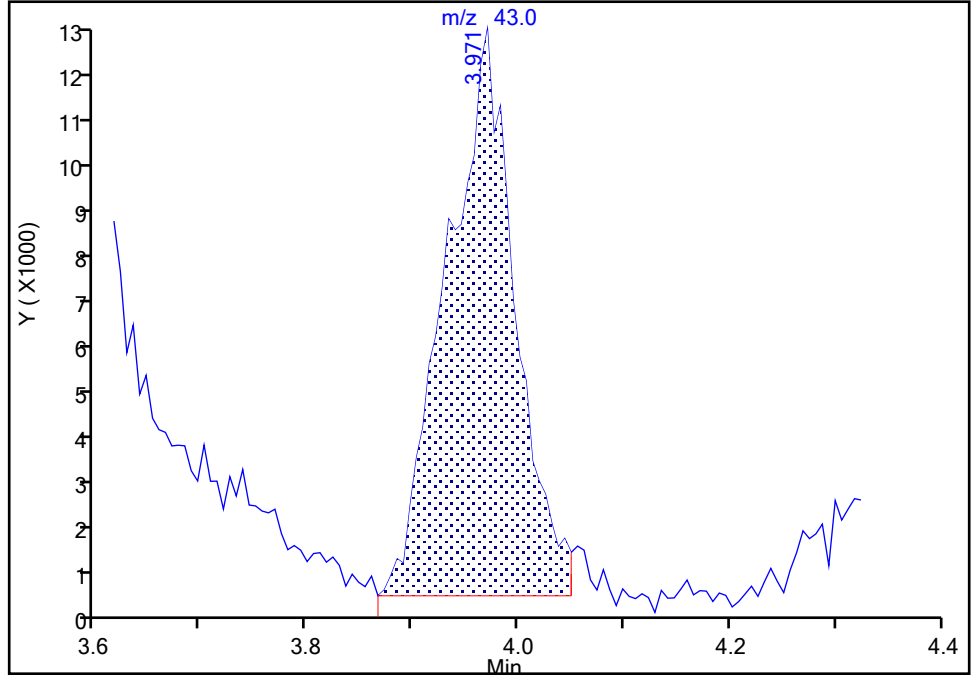
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Injection Date: 30-Nov-2020 13:56:30 Instrument ID: 16334
Lims ID: IC std4
Client ID:
Operator ID: DVV10203 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

26 Methyl acetate, CAS: 79-20-9

Signal: 1

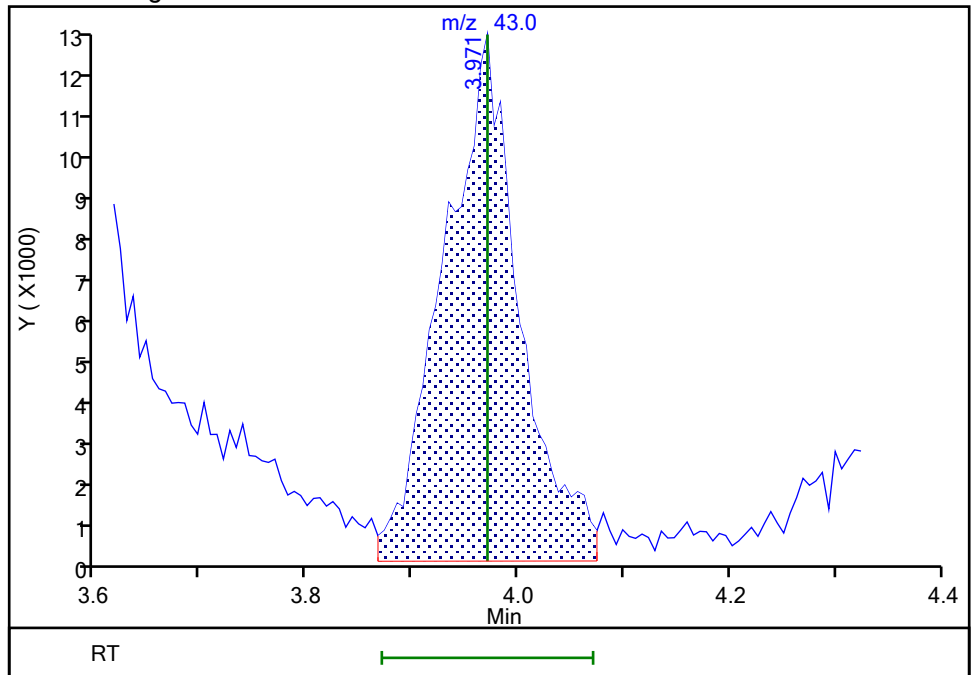
RT: 3.97
Area: 50433
Amount: 2.026094
Amount Units: ug/l

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

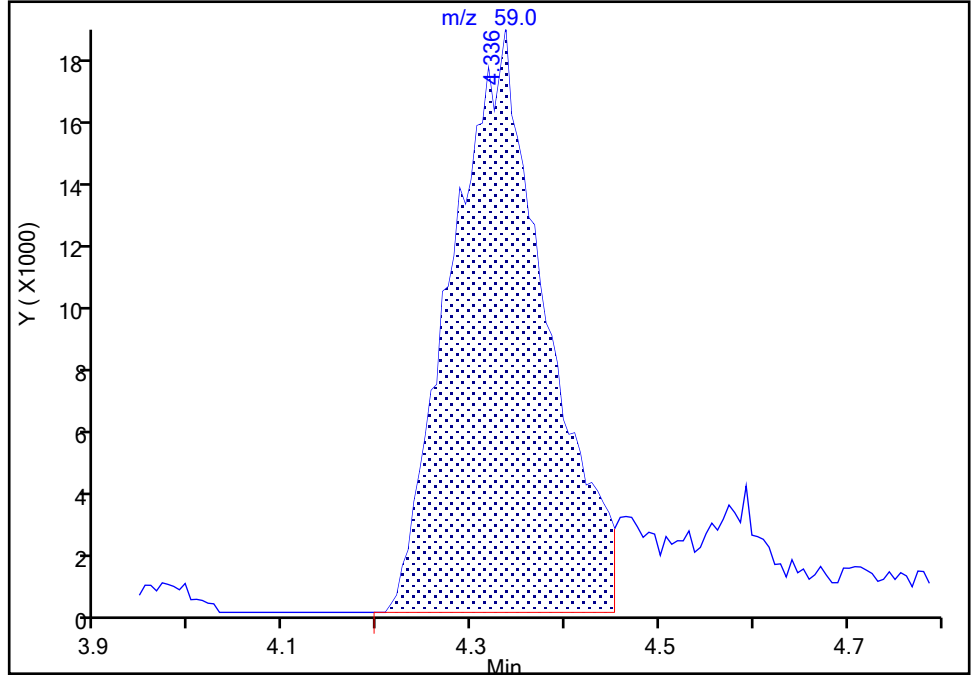
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Injection Date: 30-Nov-2020 13:56:30 Instrument ID: 16334
Lims ID: IC std4
Client ID:
Operator ID: DVV10203 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

30 2-Methyl-2-propanol, CAS: 75-65-0

Signal: 1

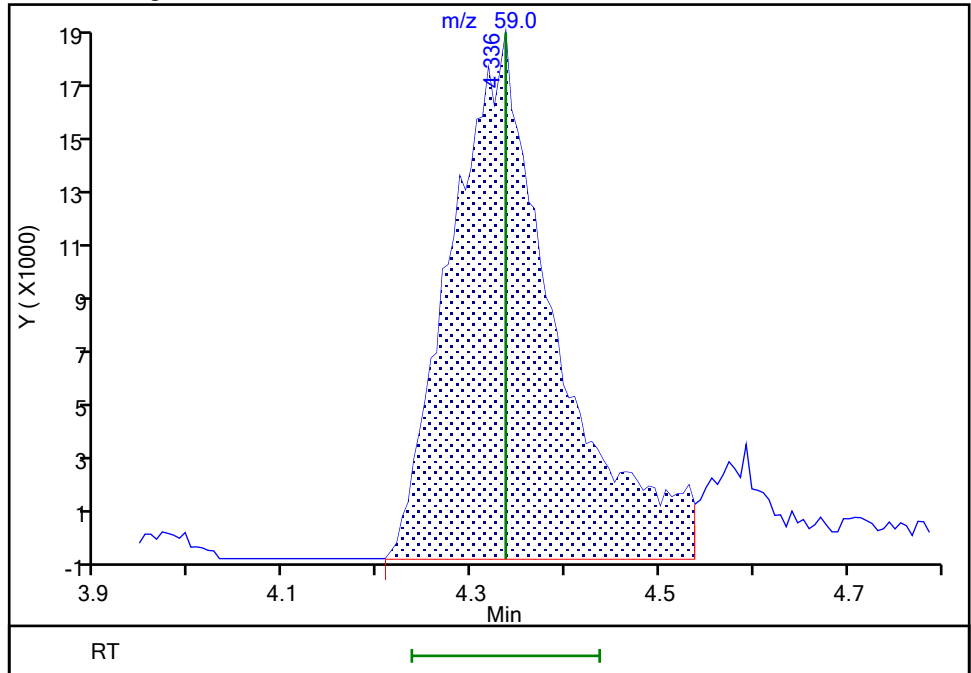
RT: 4.34
Area: 127704
Amount: 37.552288
Amount Units: ug/l

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

Eurofins Lancaster Laboratories Env, LLC

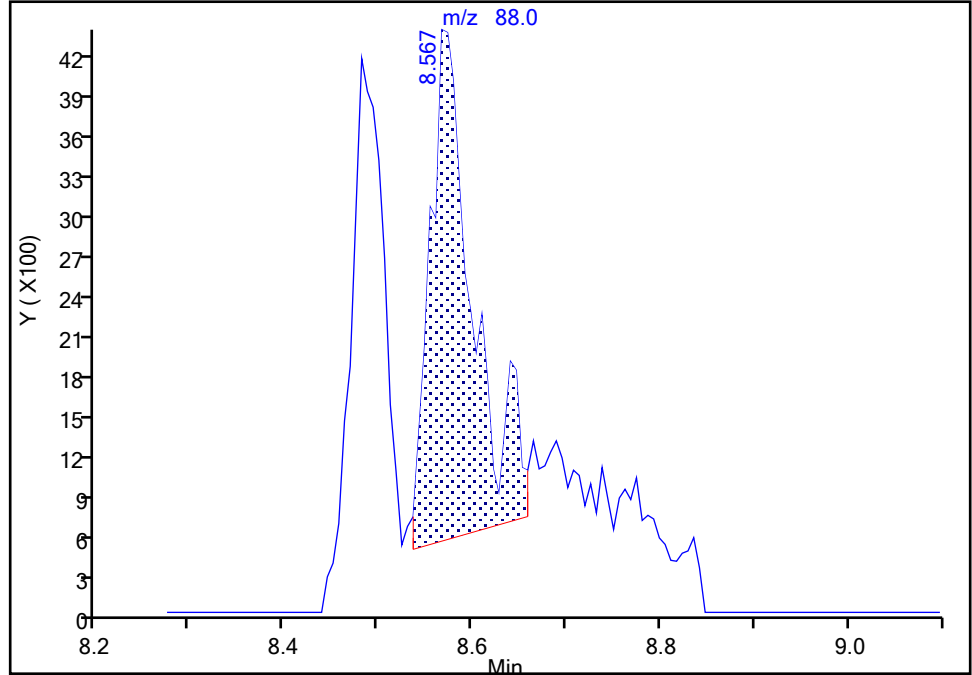
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Injection Date: 30-Nov-2020 13:56:30 Instrument ID: 16334
Lims ID: IC std4
Client ID:
Operator ID: DVV10203 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

72 1,4-Dioxane, CAS: 123-91-1

Signal: 1

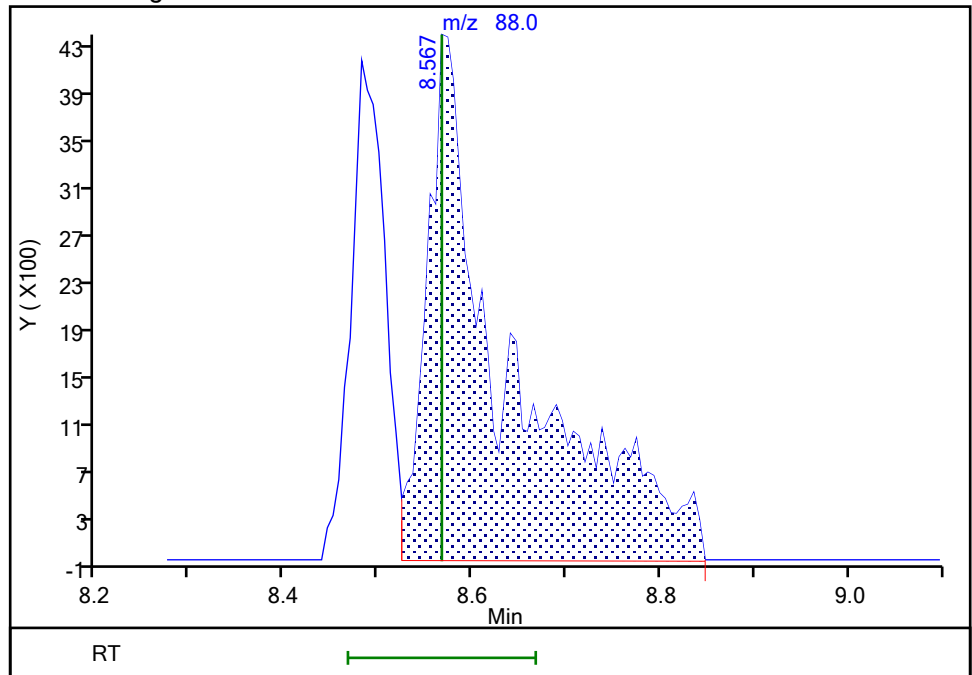
RT: 8.57
Area: 12148
Amount: 63.719188
Amount Units: ug/l

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-trifluoroetha	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

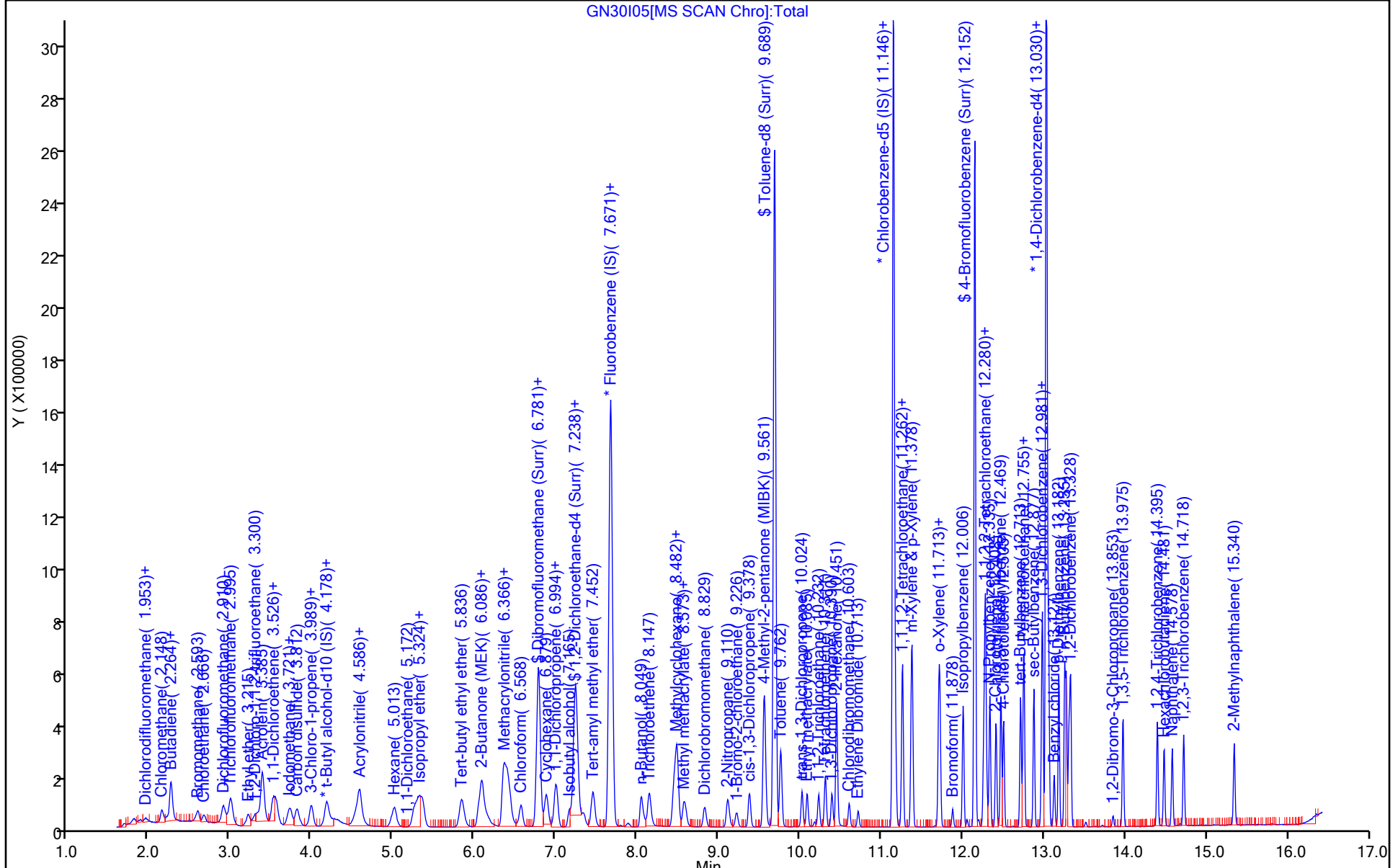
Units: uL

MSV_29_826ISS_00013

Amount Added: 1.00

Units: uL

Run Reagent



Eurofins Lancaster Laboratories Env, LLC

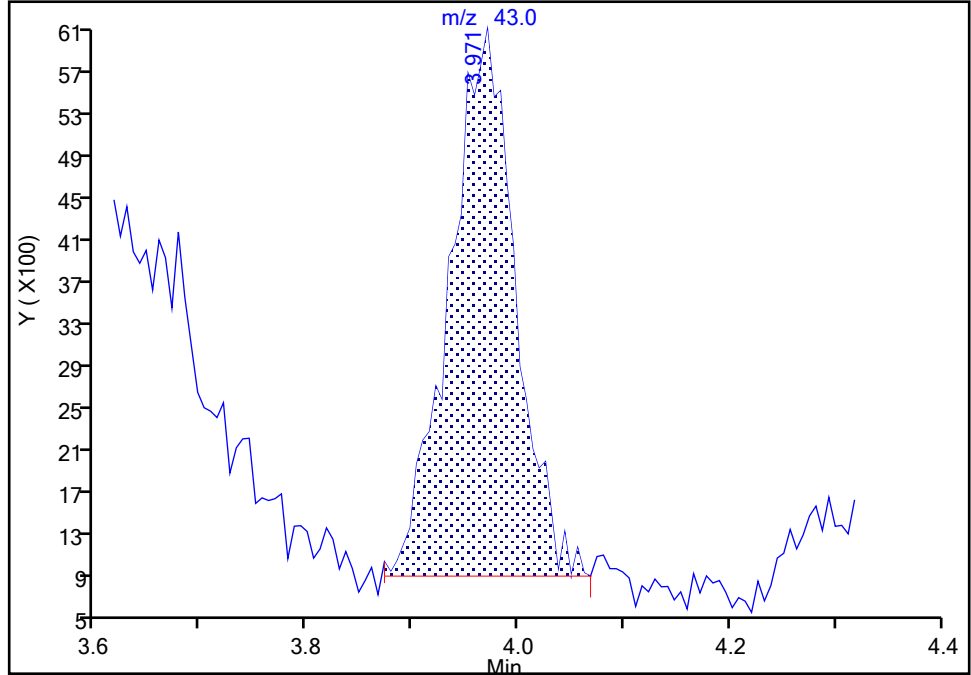
Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I05.D
Injection Date: 30-Nov-2020 14:19:30 Instrument ID: 16334
Lims ID: IC std3
Client ID:
Operator ID: DVV10203 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

26 Methyl acetate, CAS: 79-20-9

Signal: 1

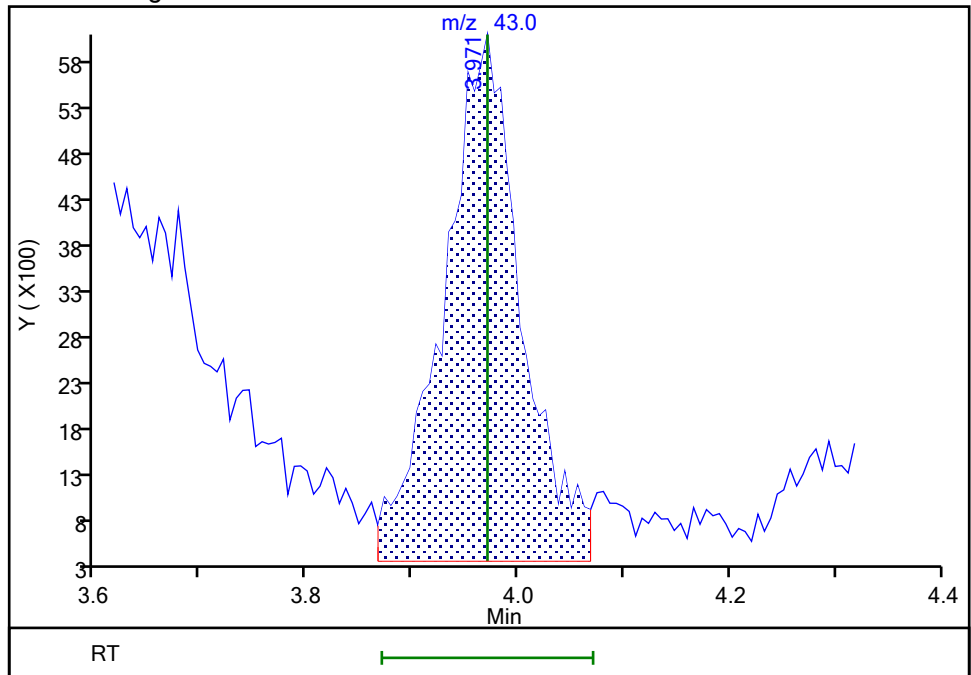
RT: 3.97
Area: 22428
Amount: 0.855084
Amount Units: ug/l

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

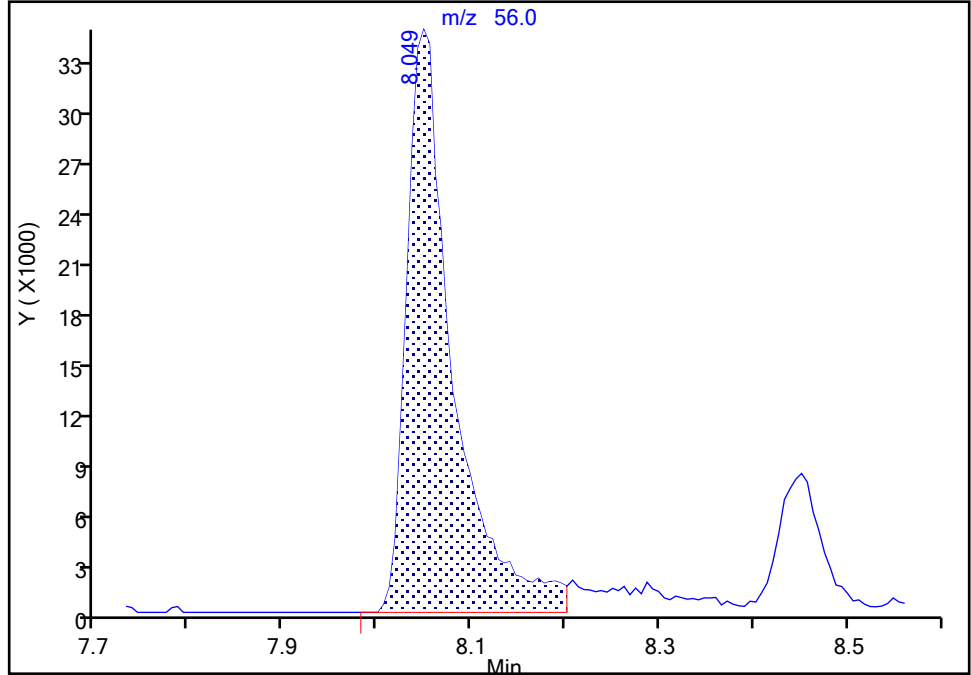
Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I05.D
Injection Date: 30-Nov-2020 14:19:30 Instrument ID: 16334
Lims ID: IC std3
Client ID:
Operator ID: DVV10203 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

65 n-Butanol, CAS: 71-36-3

Signal: 1

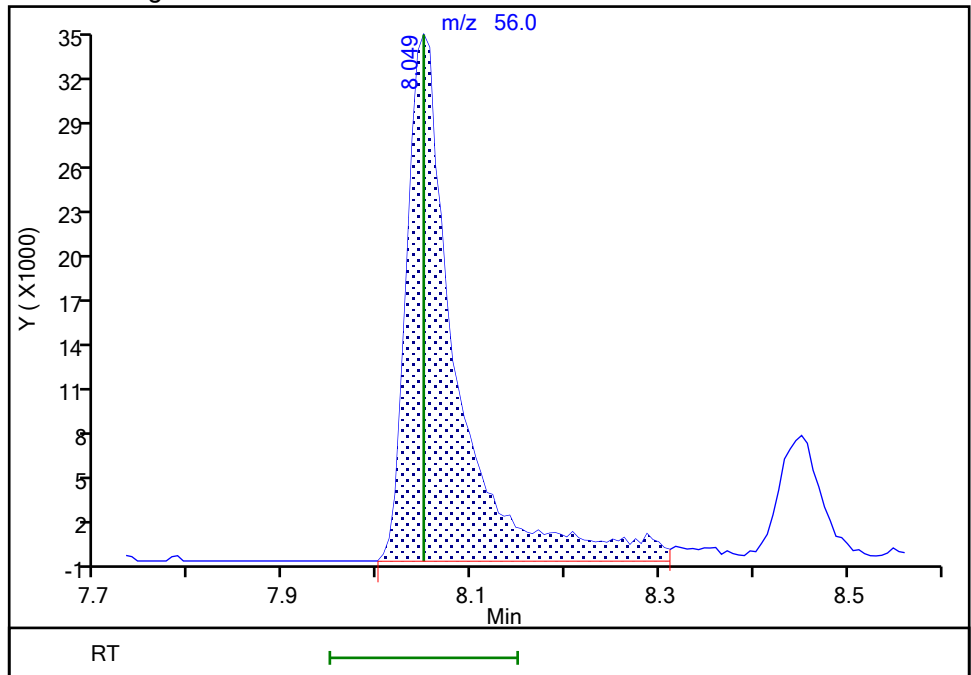
RT: 8.05
Area: 117068
Amount: 90.927496
Amount Units: ug/l

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

Eurofins Lancaster Laboratories Env, LLC

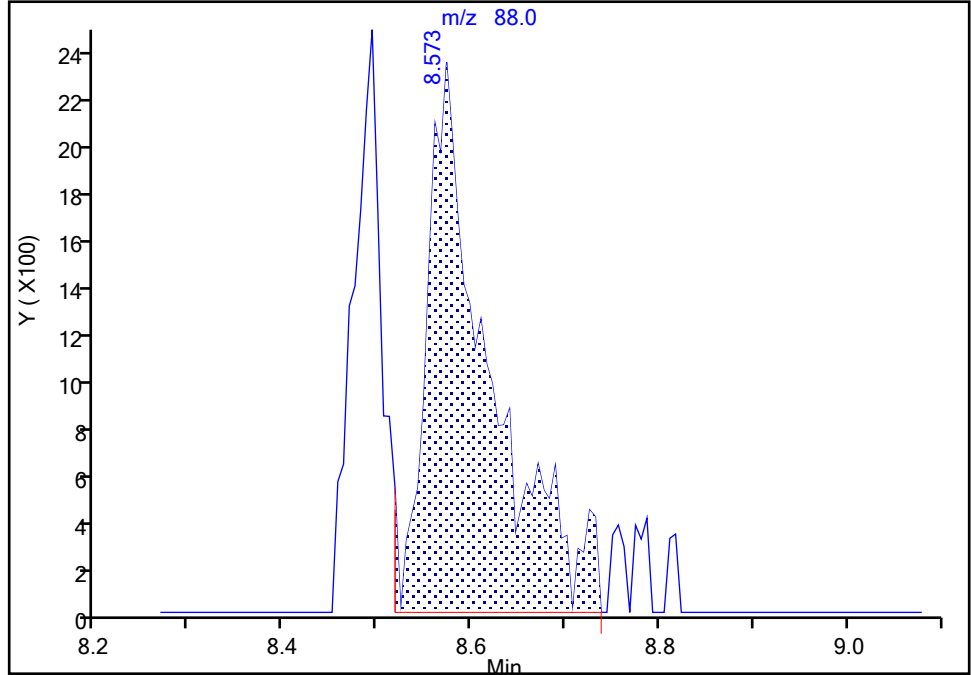
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 Injection Date: 30-Nov-2020 14:19:30 Instrument ID: 16334
 Lims ID: IC std3
 Client ID:
 Operator ID: DVV10203 ALS Bottle#: 6 Worklist Smp#: 7
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
 Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

72 1,4-Dioxane, CAS: 123-91-1

Signal: 1

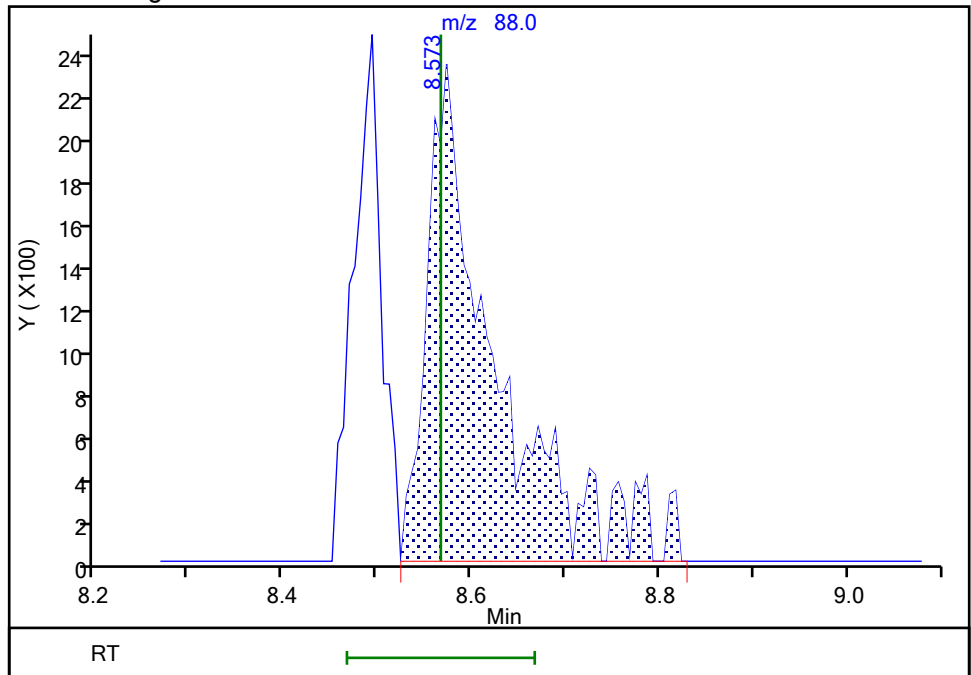
RT: 8.57
 Area: 10783
 Amount: 49.653151
 Amount Units: ug/l

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

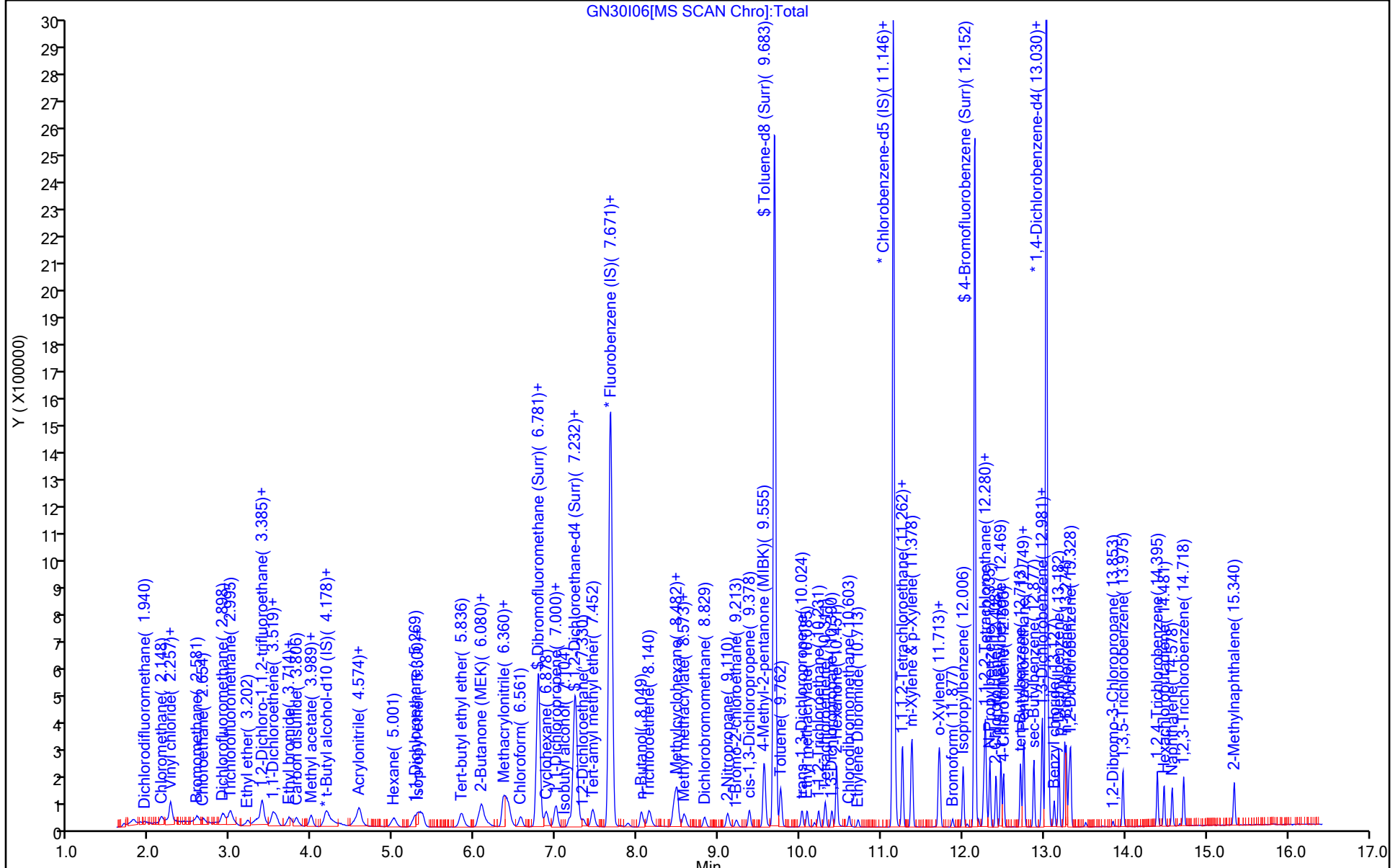
Units: uL

MSV_29_826ISS_00013

Amount Added: 1.00

Units: uL

Run Reagent



GN30I06[MS SCAN Chrom]:Total

Eurofins Lancaster Laboratories Env, LLC

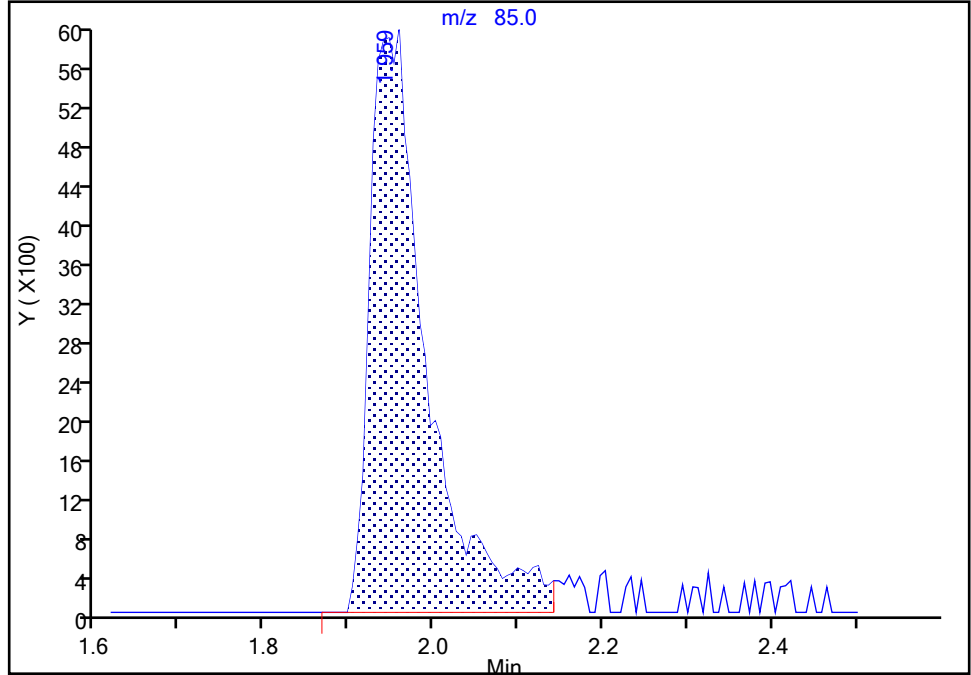
Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I06.D
Injection Date: 30-Nov-2020 14:41:30 Instrument ID: 16334
Lims ID: IC std2
Client ID:
Operator ID: DVV10203 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

1 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

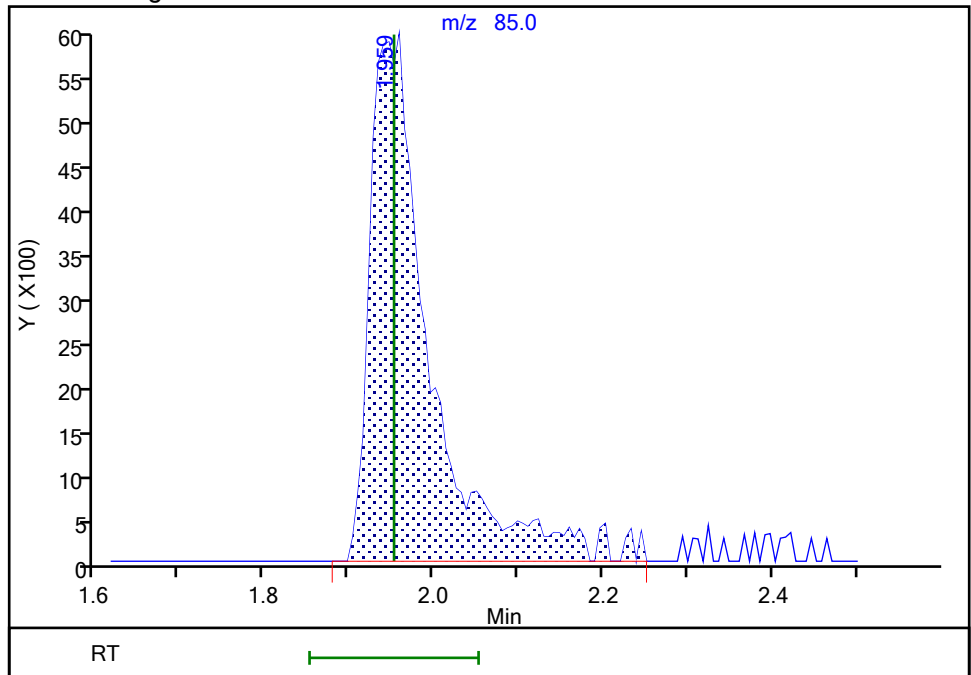
RT: 1.96
Area: 27810
Amount: 0.491868
Amount Units: ug/l

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

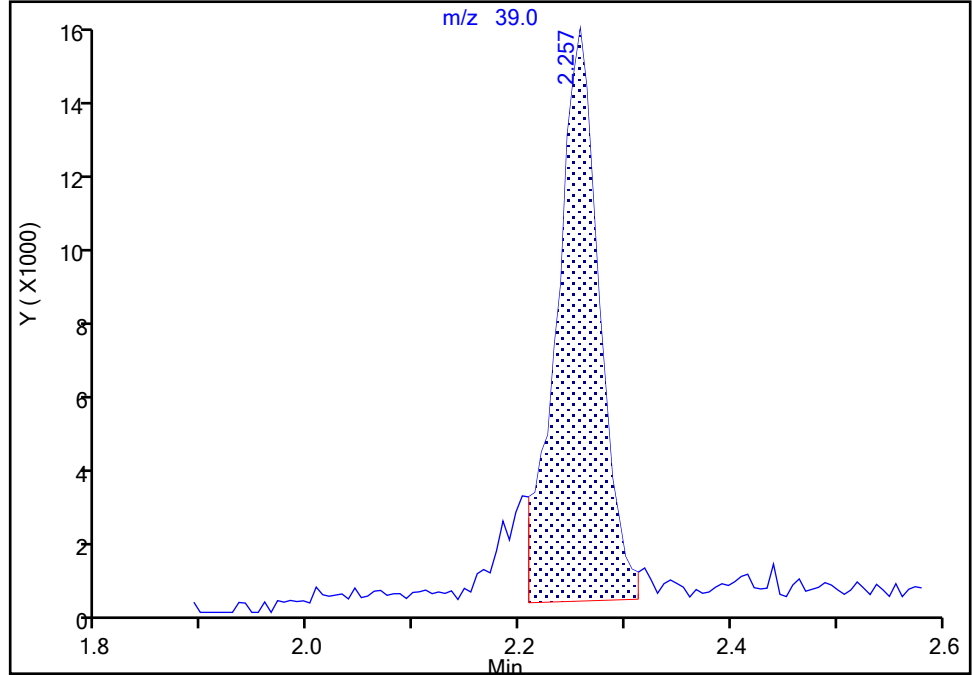
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Injection Date: 30-Nov-2020 14:41:30 Instrument ID: 16334
Lims ID: IC std2
Client ID:
Operator ID: DVV10203 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

6 Butadiene, CAS: 106-99-0

Signal: 1

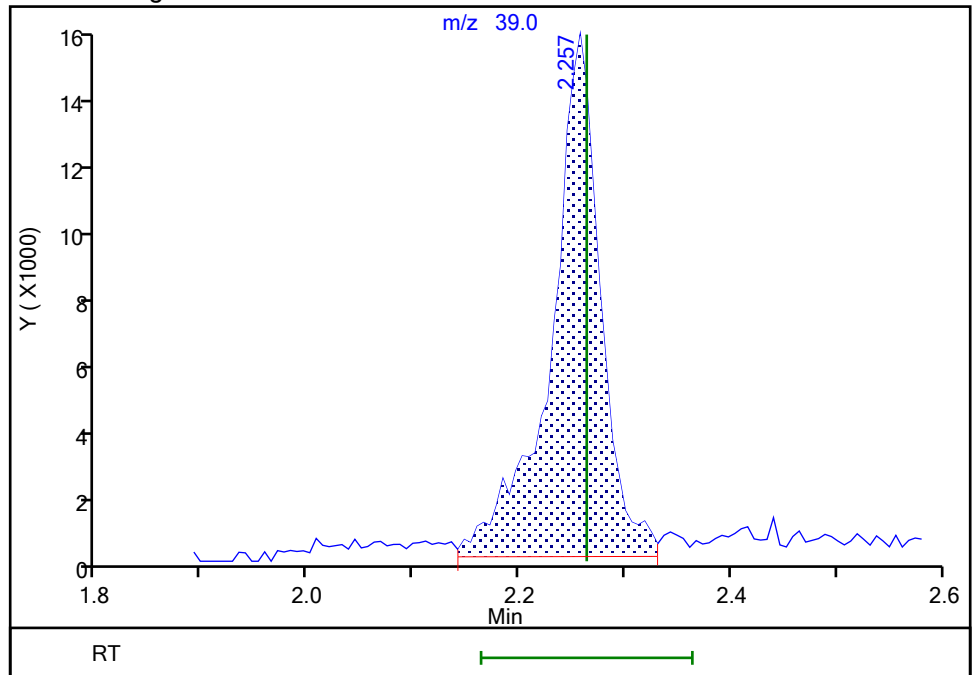
RT: 2.26
Area: 43591
Amount: 0.531353
Amount Units: ug/l

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

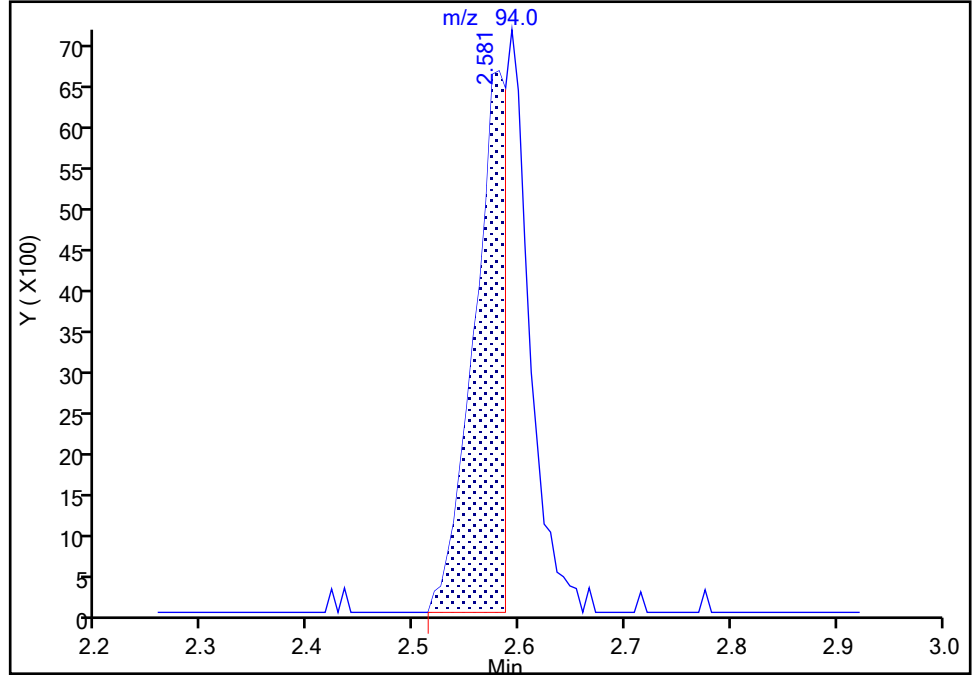
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Injection Date: 30-Nov-2020 14:41:30 Instrument ID: 16334
Lims ID: IC std2
Client ID:
Operator ID: DVV10203 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

9 Bromomethane, CAS: 74-83-9

Signal: 1

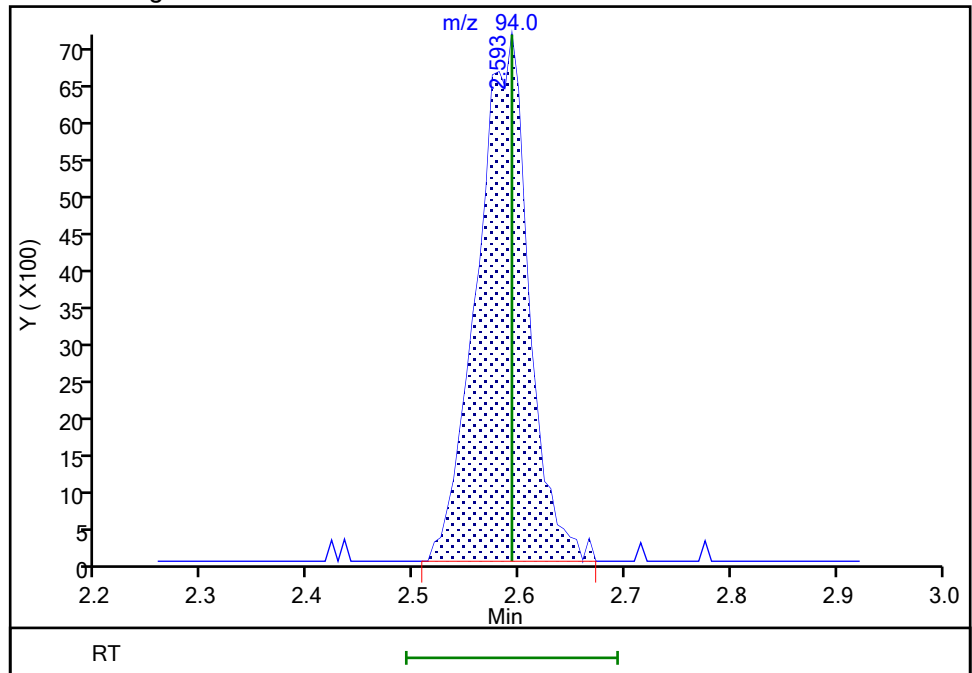
RT: 2.58
Area: 14139
Amount: 0.329668
Amount Units: ug/l

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

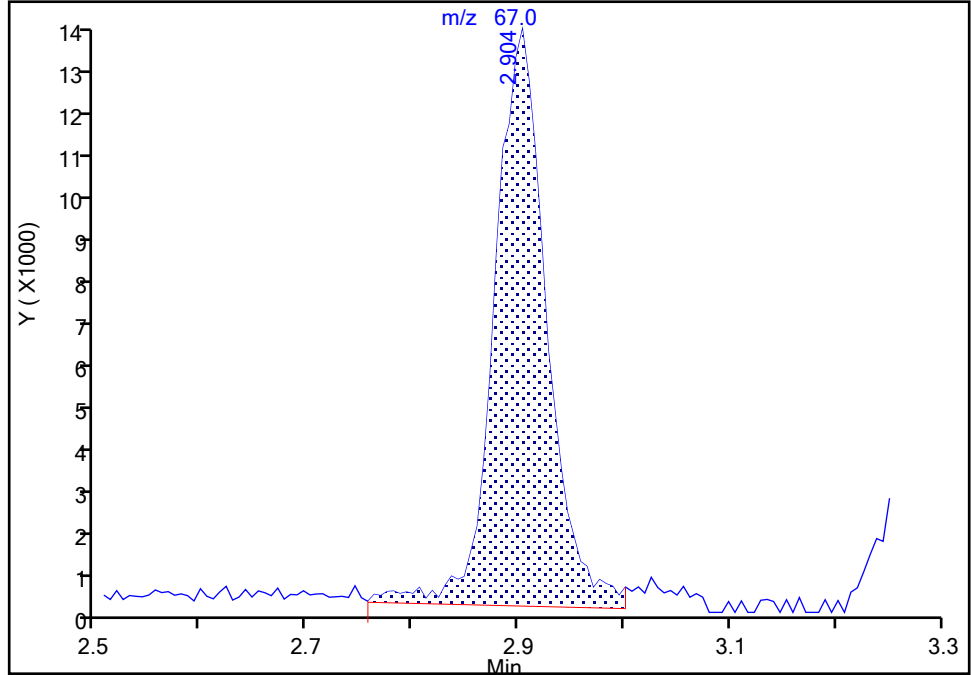
Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I06.D
Injection Date: 30-Nov-2020 14:41:30 Instrument ID: 16334
Lims ID: IC std2
Client ID:
Operator ID: DVV10203 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

11 Dichlorofluoromethane, CAS: 75-43-4

Signal: 1

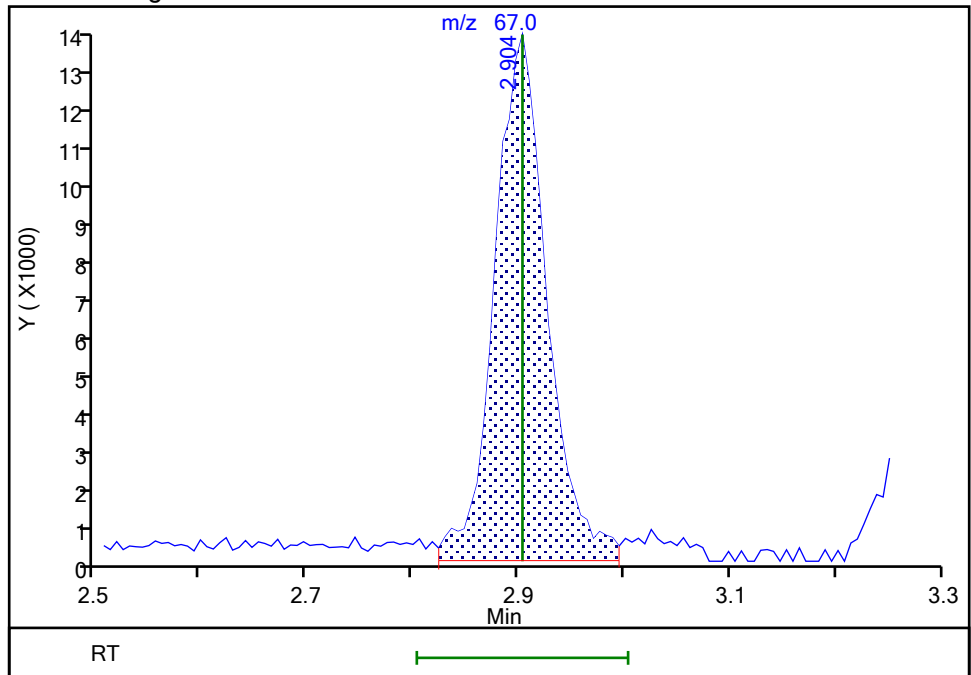
RT: 2.90
Area: 46241
Amount: 0.521398
Amount Units: ug/l

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

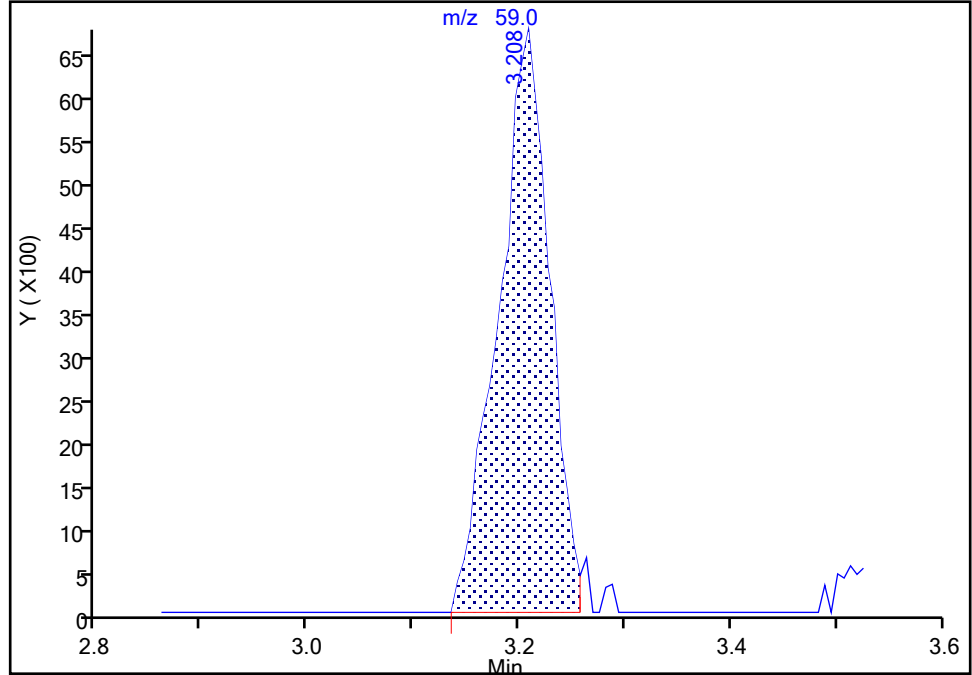
Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I06.D
Injection Date: 30-Nov-2020 14:41:30 Instrument ID: 16334
Lims ID: IC std2
Client ID:
Operator ID: DVV10203 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

15 Ethyl ether, CAS: 60-29-7

Signal: 1

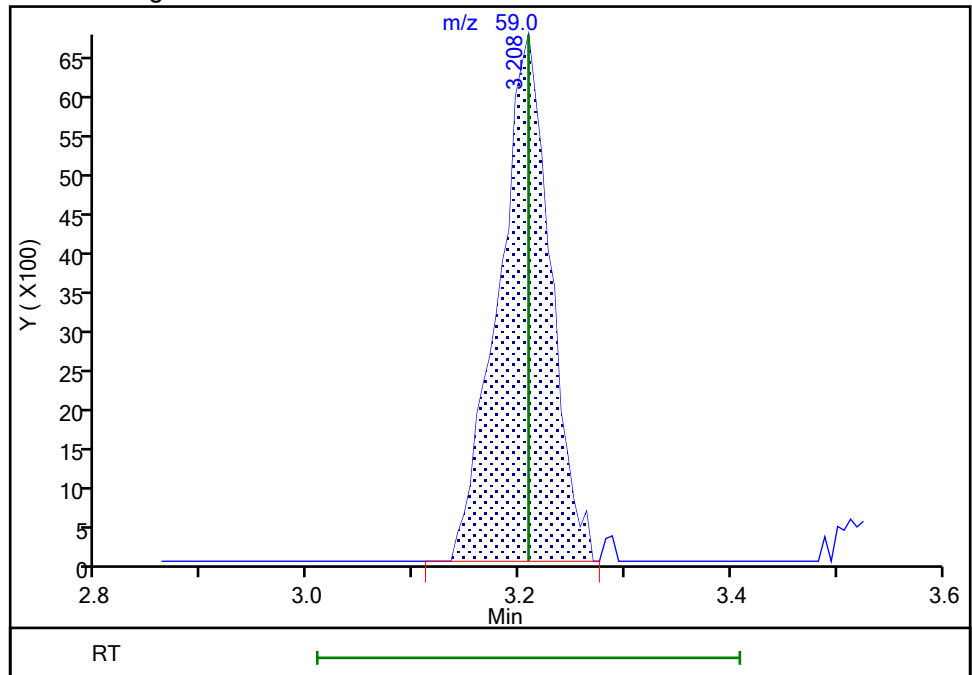
RT: 3.21
Area: 22702
Amount: 0.541226
Amount Units: ug/l

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

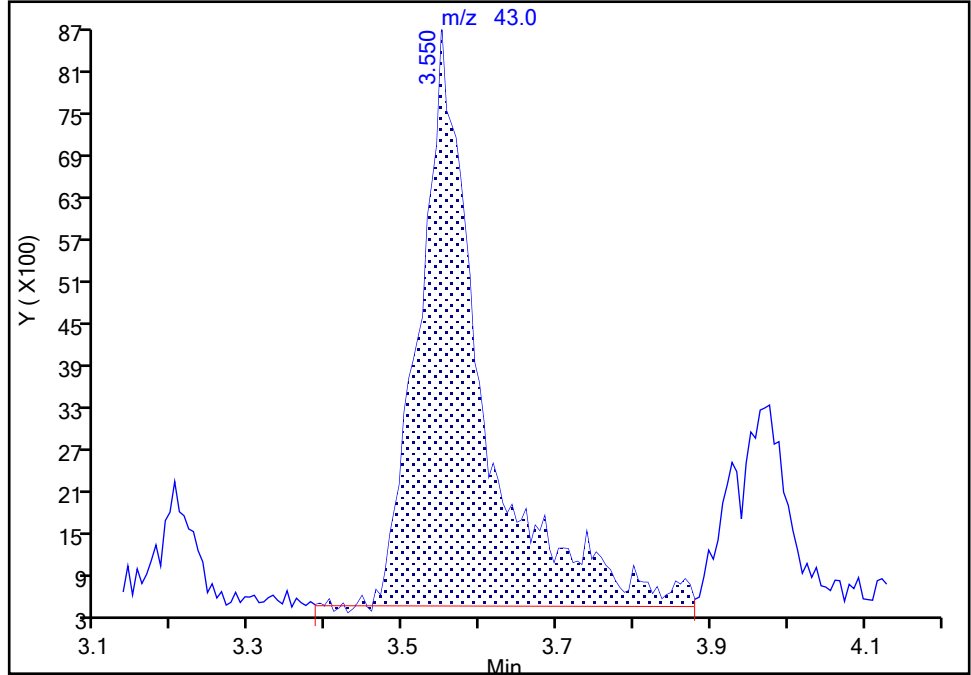
Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I06.D
 Injection Date: 30-Nov-2020 14:41:30 Instrument ID: 16334
 Lims ID: IC std2
 Client ID:
 Operator ID: DVV10203 ALS Bottle#: 7 Worklist Smp#: 8
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
 Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

20 Acetone, CAS: 67-64-1

Signal: 1

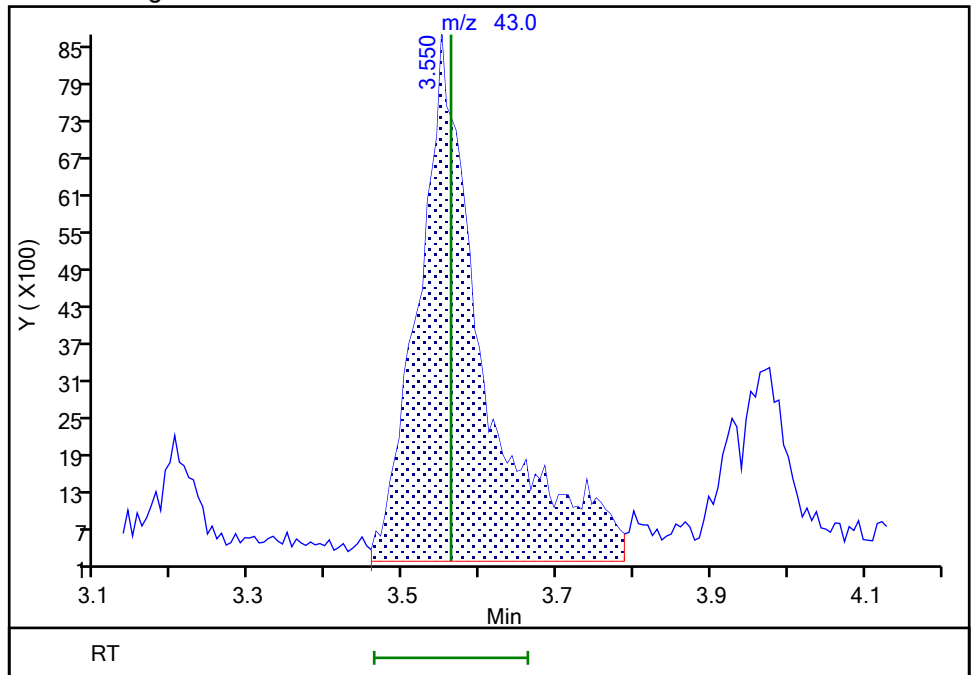
RT: 3.55
 Area: 46876
 Amount: 5.077360
 Amount Units: ug/l

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

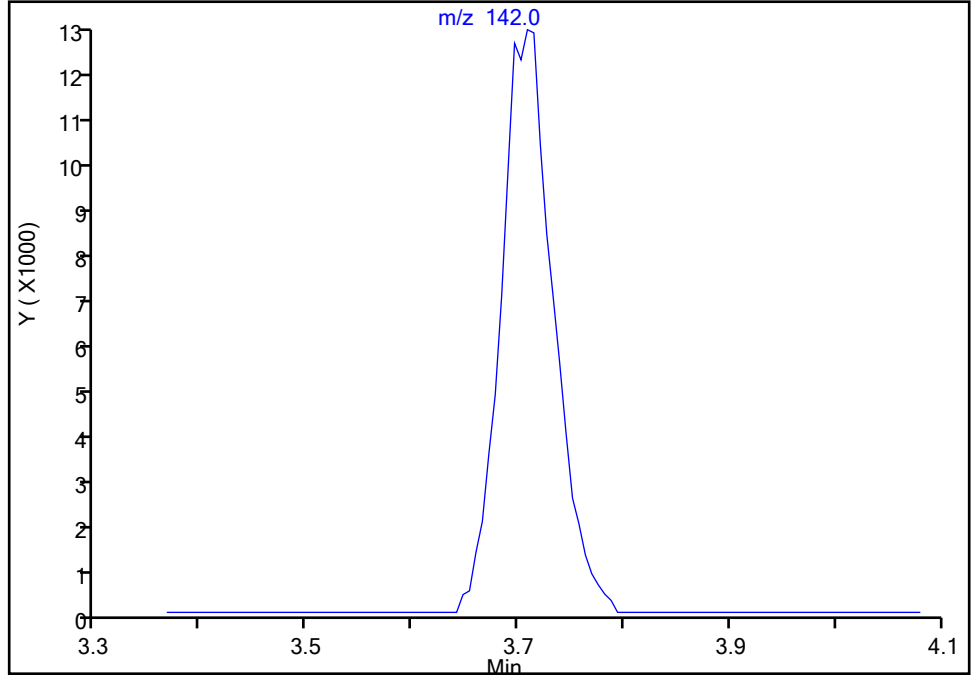
Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I06.D
Injection Date: 30-Nov-2020 14:41:30 Instrument ID: 16334
Lims ID: IC std2
Client ID:
Operator ID: DVV10203 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

22 Iodomethane, CAS: 74-88-4

Signal: 1

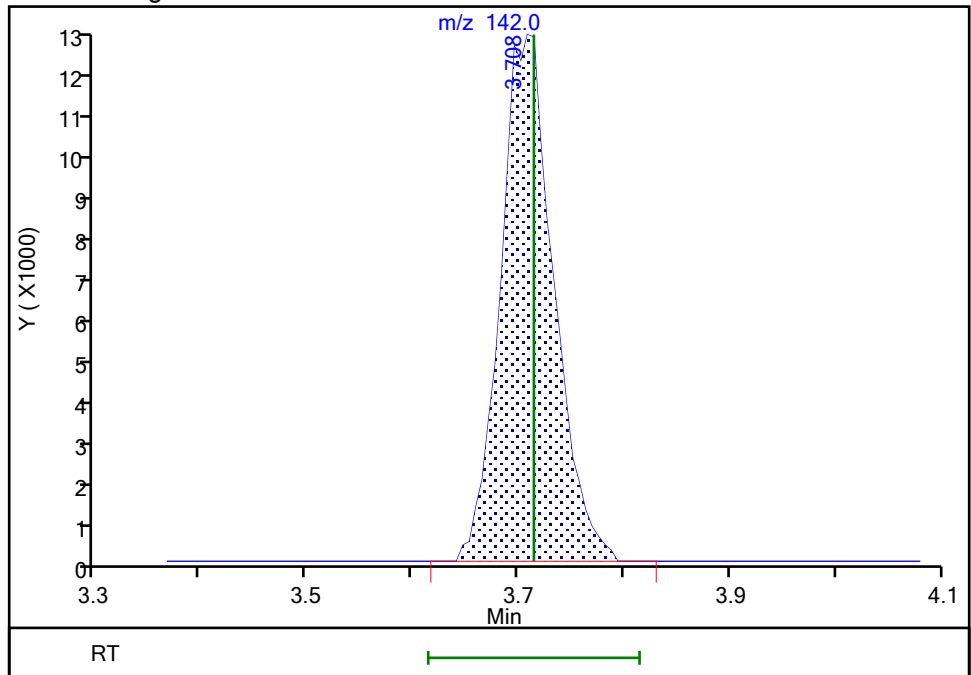
Not Detected
Expected RT: 3.71

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

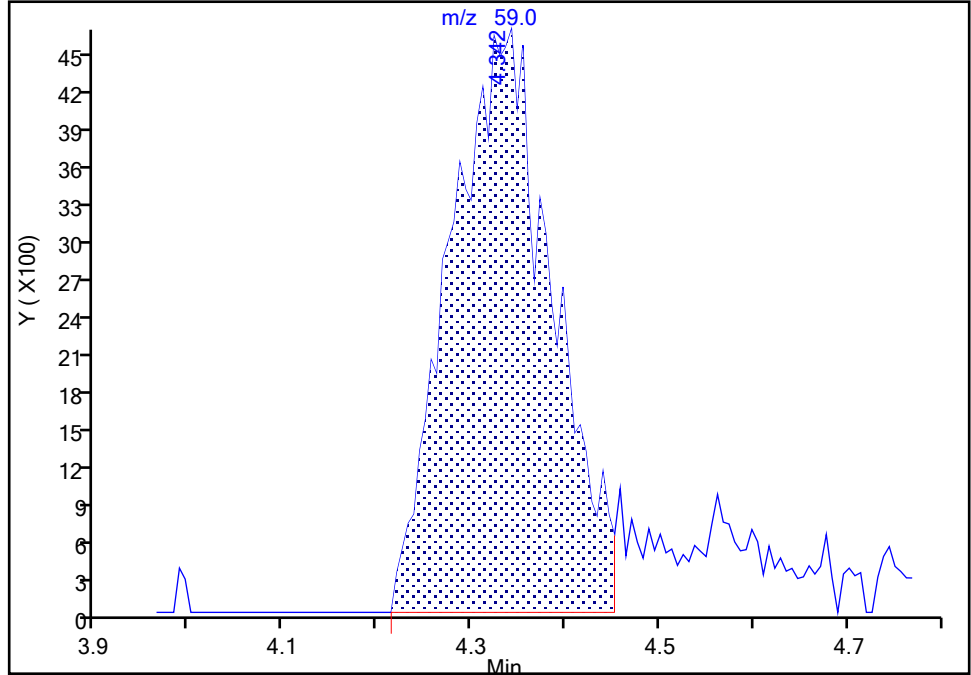
Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I06.D
Injection Date: 30-Nov-2020 14:41:30 Instrument ID: 16334
Lims ID: IC std2
Client ID:
Operator ID: DVV10203 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

30 2-Methyl-2-propanol, CAS: 75-65-0

Signal: 1

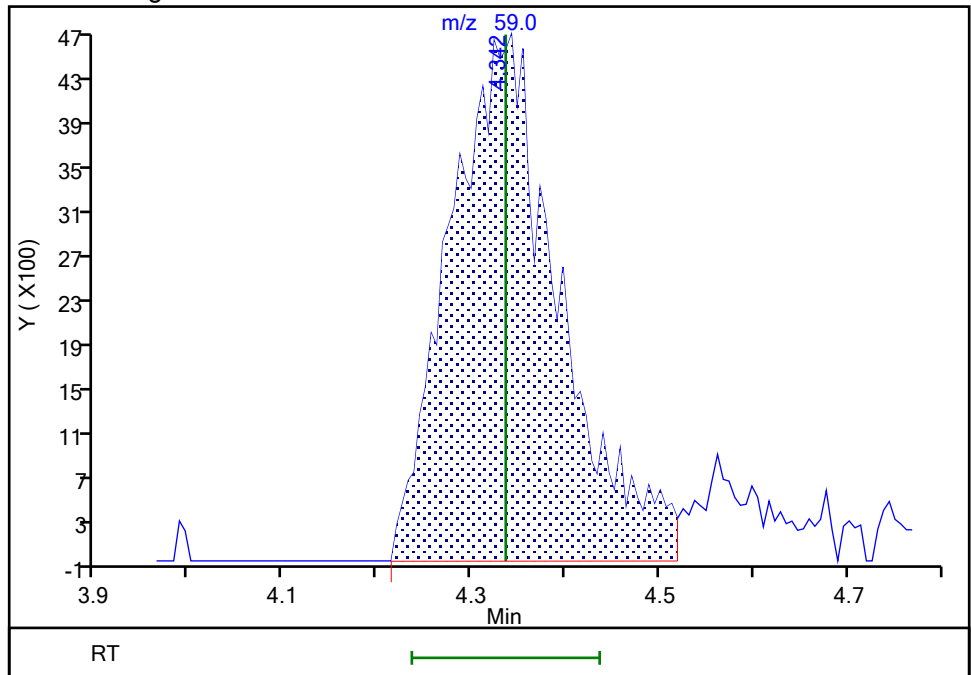
RT: 4.34
Area: 34943
Amount: 10.111494
Amount Units: ug/l

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

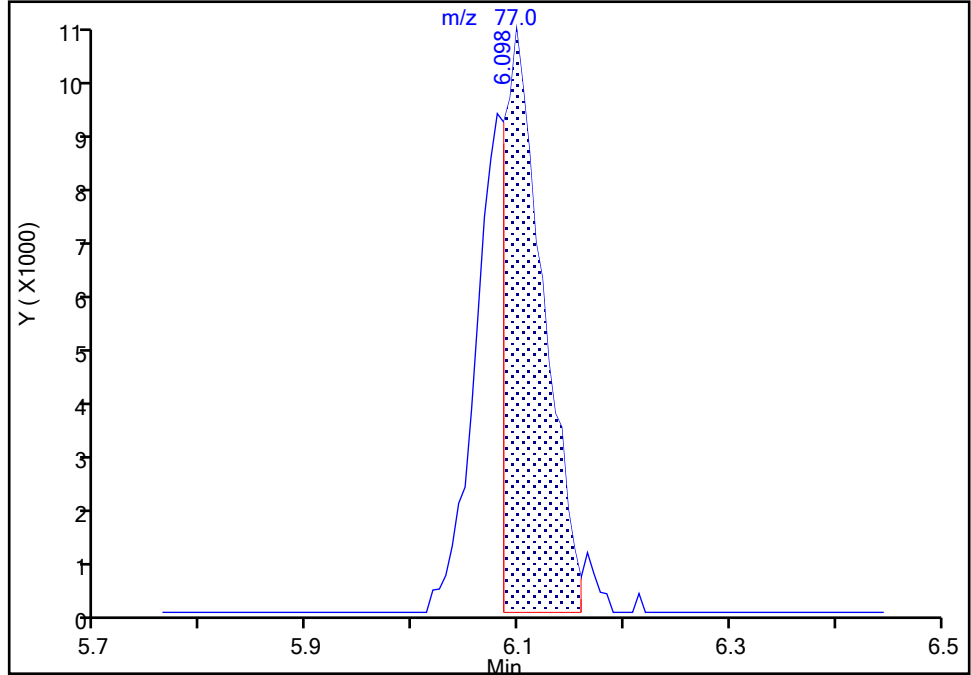
Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I06.D
Injection Date: 30-Nov-2020 14:41:30 Instrument ID: 16334
Lims ID: IC std2
Client ID:
Operator ID: DVV10203 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

42 2,2-Dichloropropane, CAS: 594-20-7

Signal: 1

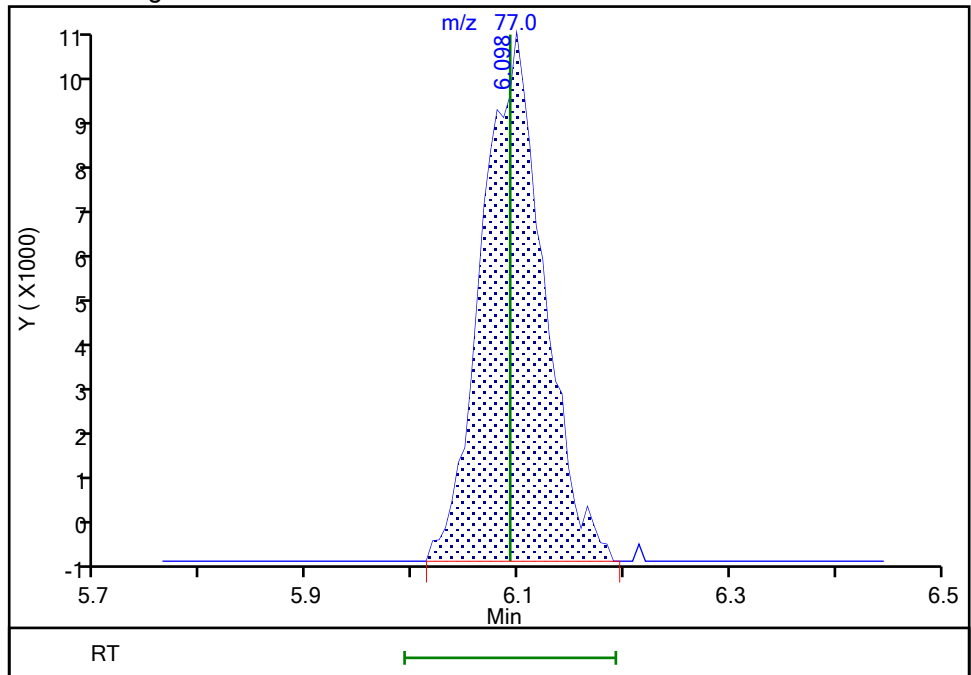
RT: 6.10
Area: 26319
Amount: 0.397289
Amount Units: ug/l

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

Eurofins Lancaster Laboratories Env, LLC

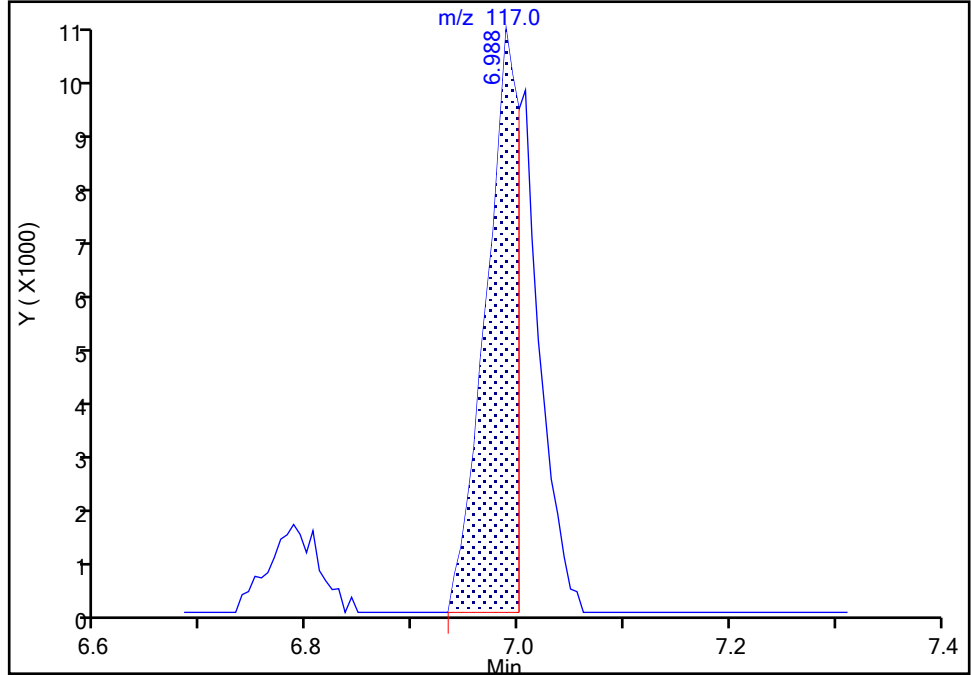
Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I06.D
Injection Date: 30-Nov-2020 14:41:30 Instrument ID: 16334
Lims ID: IC std2
Client ID:
Operator ID: DVV10203 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

56 Carbon tetrachloride, CAS: 56-23-5

Signal: 1

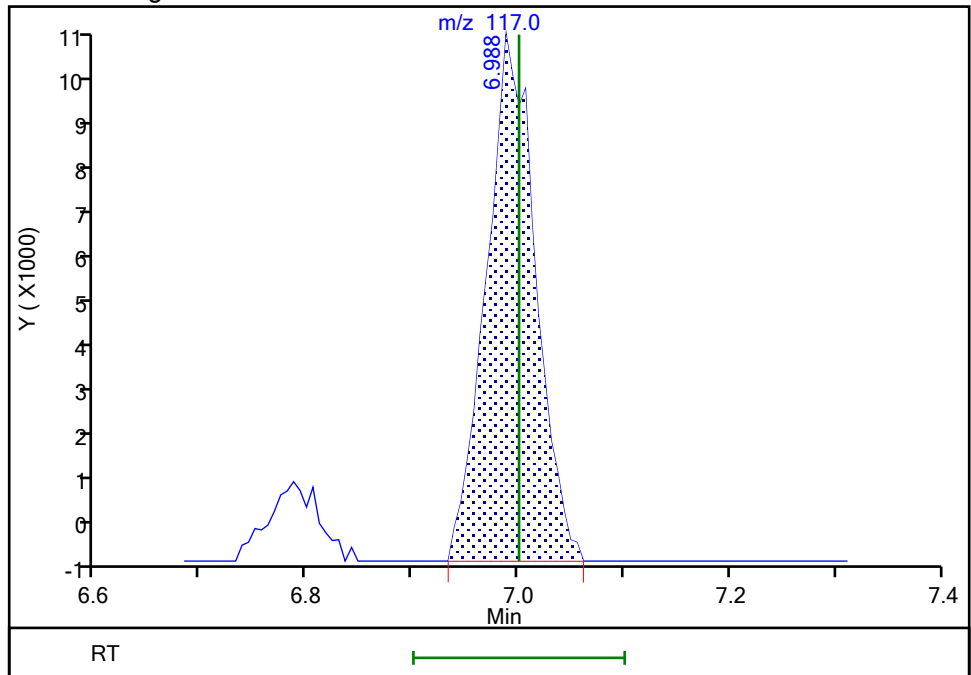
RT: 6.99
Area: 23019
Amount: 0.365200
Amount Units: ug/l

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

Eurofins Lancaster Laboratories Env, LLC

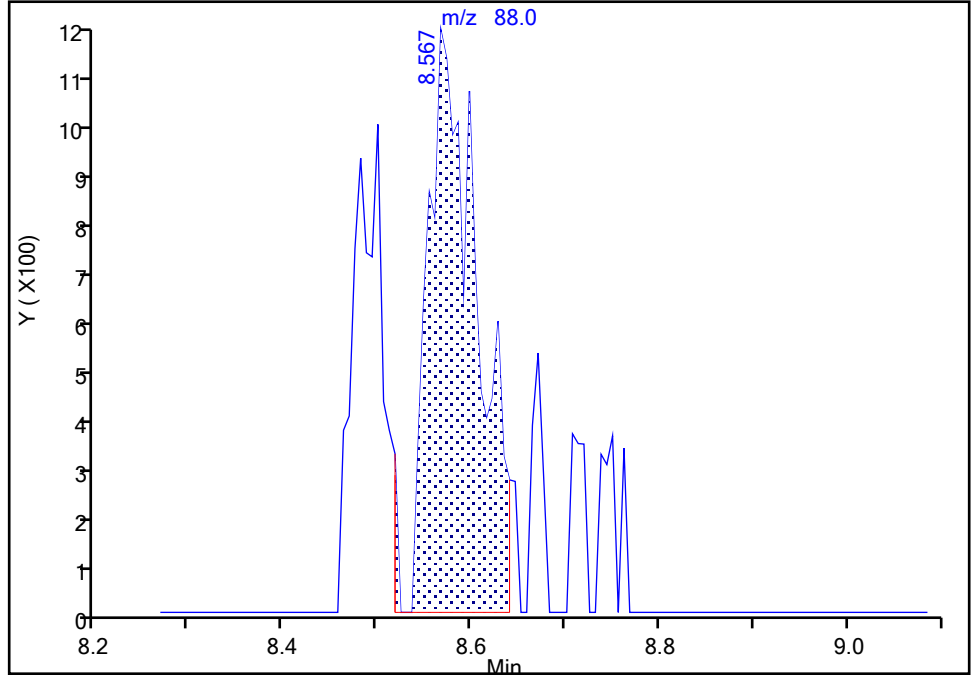
Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I06.D
Injection Date: 30-Nov-2020 14:41:30 Instrument ID: 16334
Lims ID: IC std2
Client ID:
Operator ID: DVV10203 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

72 1,4-Dioxane, CAS: 123-91-1

Signal: 1

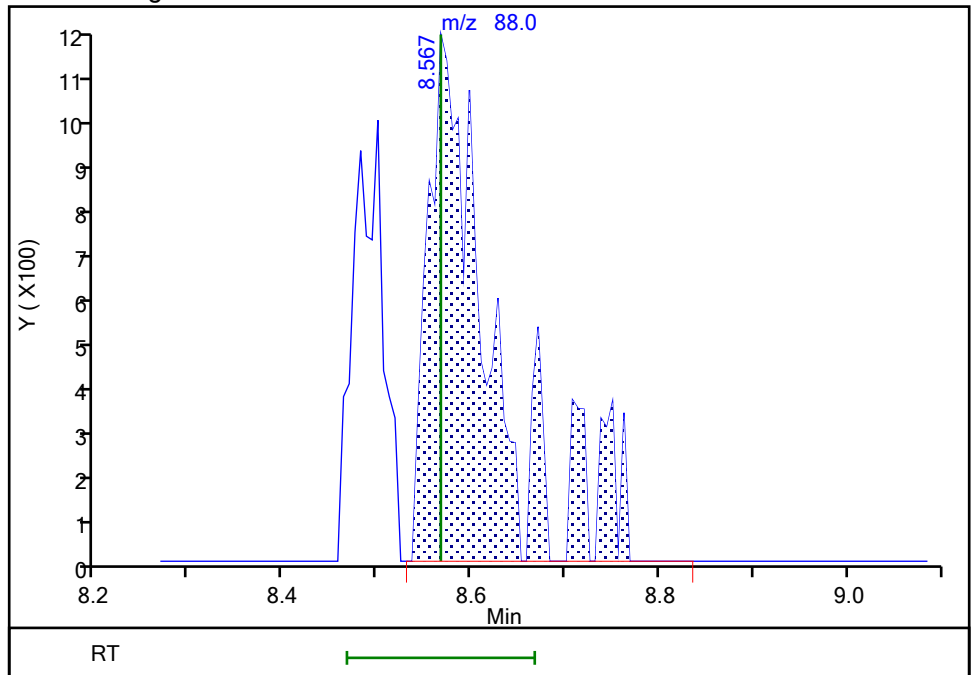
RT: 8.57
Area: 4232
Amount: 19.816218
Amount Units: ug/l

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

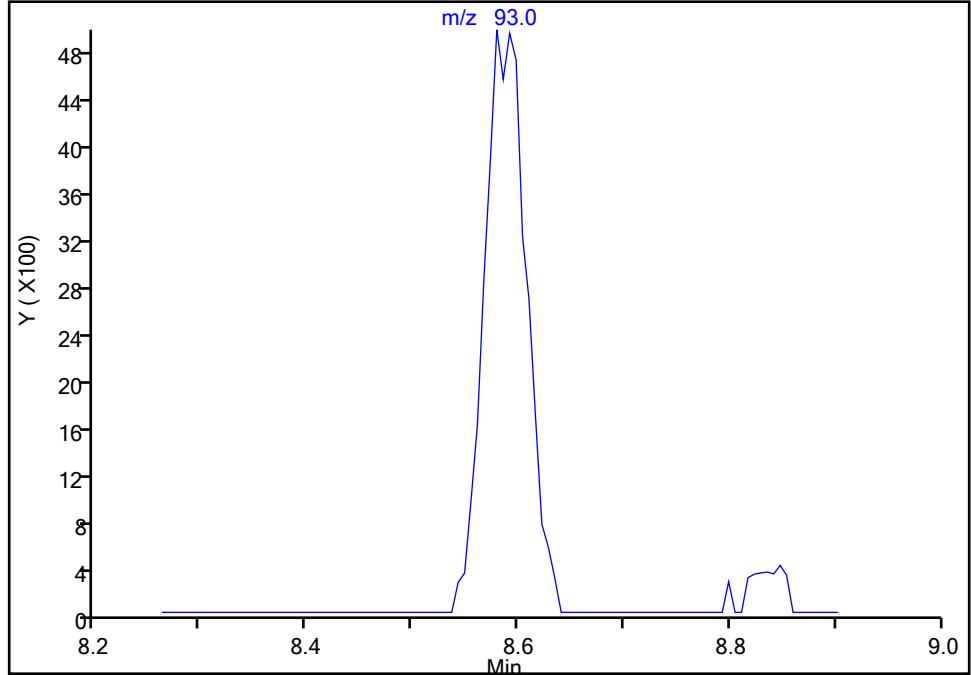
Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I06.D
Injection Date: 30-Nov-2020 14:41:30 Instrument ID: 16334
Lims ID: IC std2
Client ID:
Operator ID: DVV10203 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

73 Dibromomethane, CAS: 74-95-3

Signal: 1

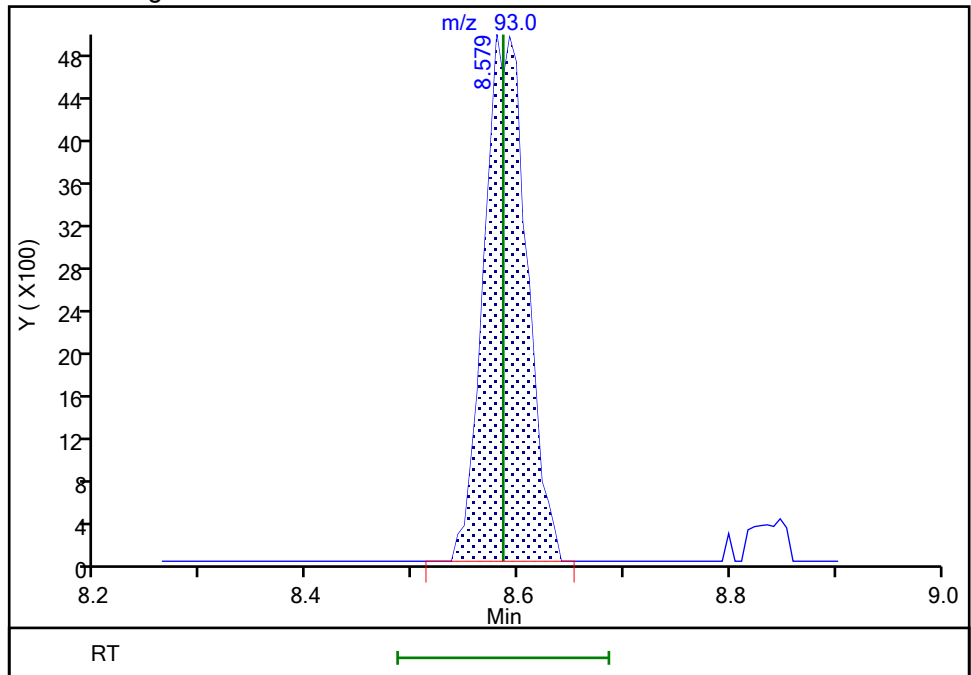
Not Detected
Expected RT: 8.59

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-trifluoroethane	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\GN30107.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

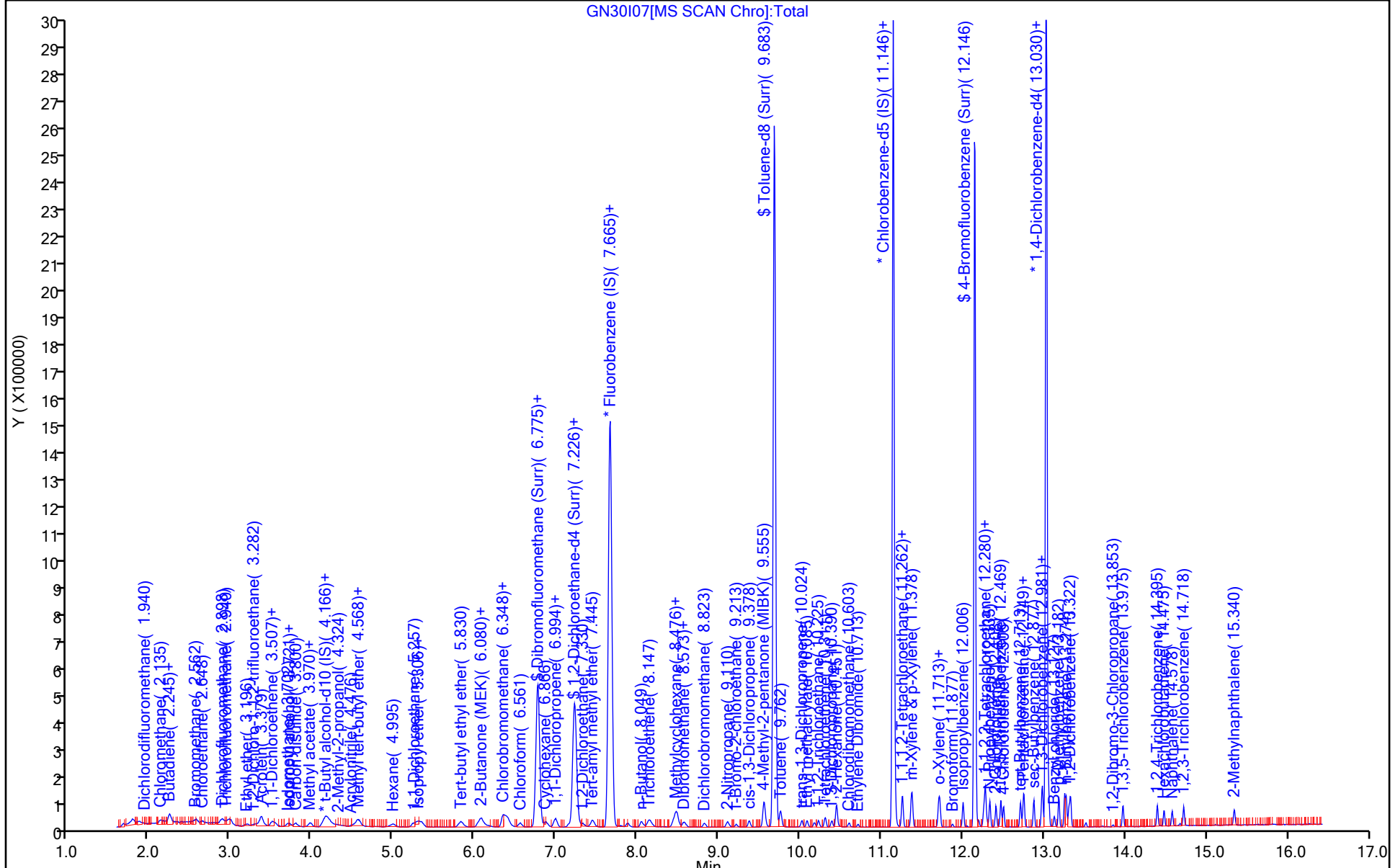
ALS Bottle#: 8

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

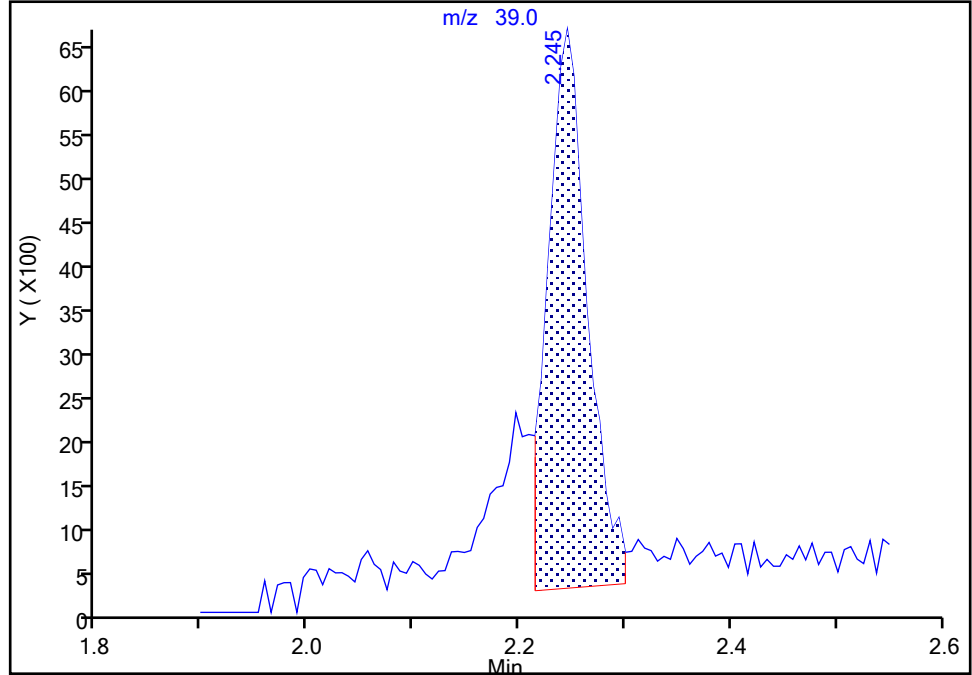
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Injection Date: 30-Nov-2020 15:03:30 Instrument ID: 16334
Lims ID: IC std1
Client ID:
Operator ID: DVV10203 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

6 Butadiene, CAS: 106-99-0

Signal: 1

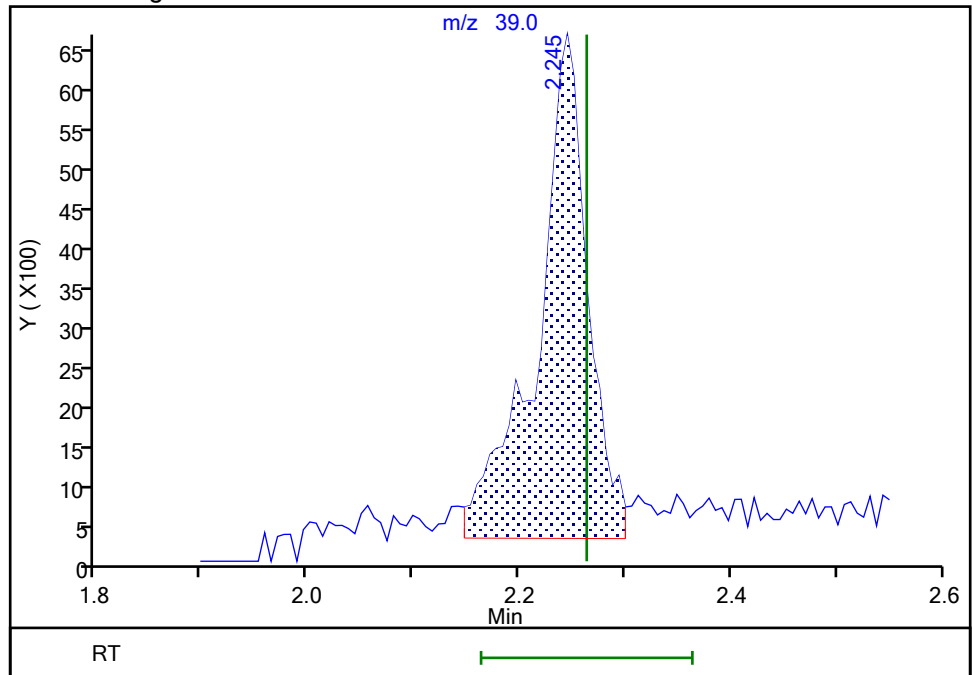
RT: 2.25
Area: 16681
Amount: 0.196763
Amount Units: ug/l

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

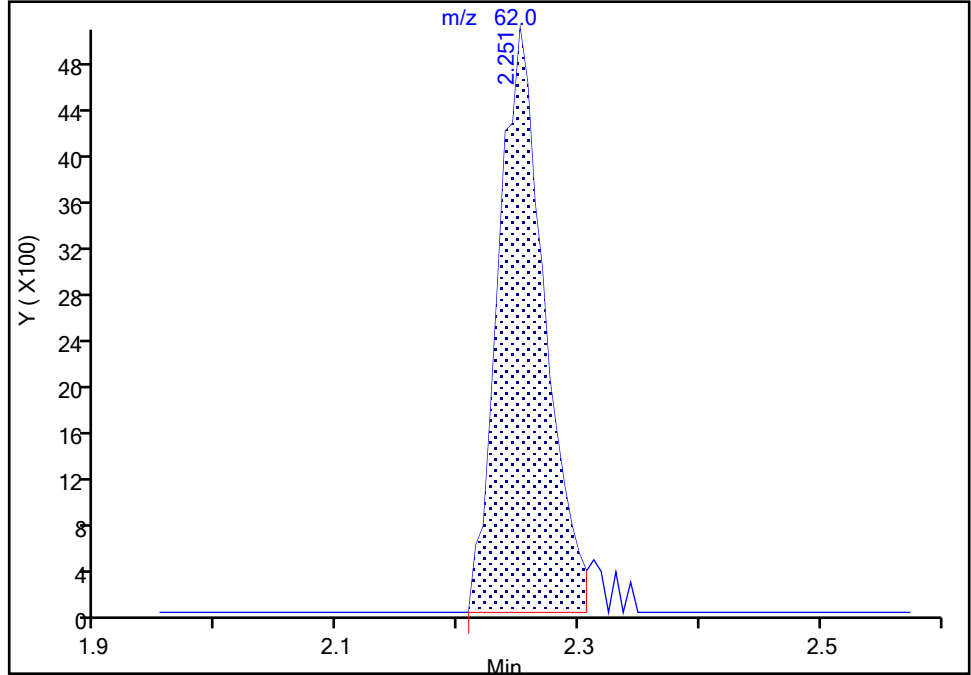
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Injection Date: 30-Nov-2020 15:03:30 Instrument ID: 16334
Lims ID: IC std1
Client ID:
Operator ID: DVV10203 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

7 Vinyl chloride, CAS: 75-01-4

Signal: 1

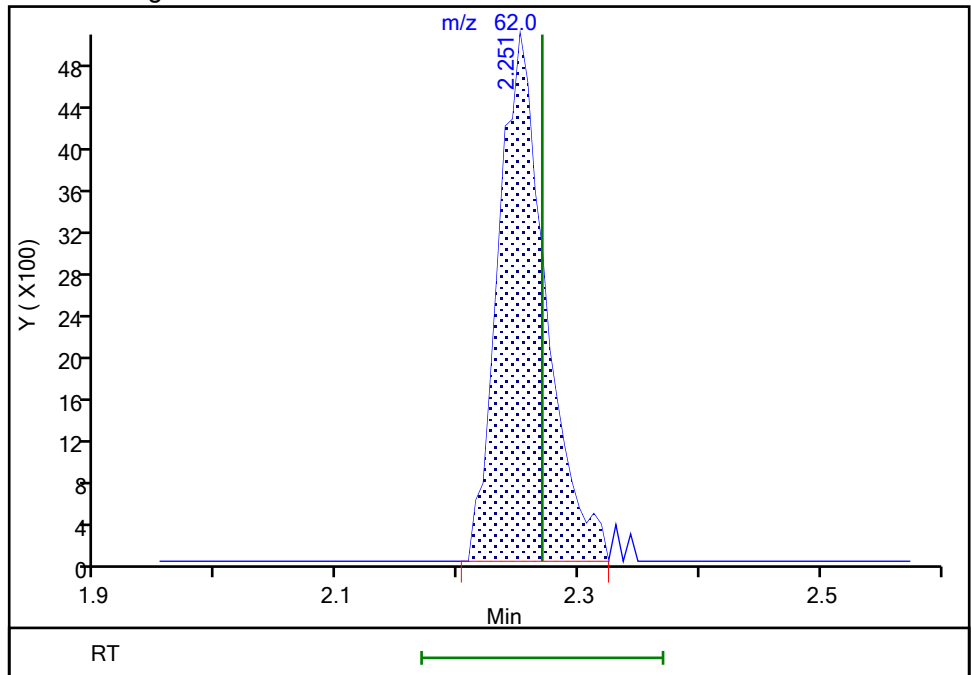
RT: 2.25
Area: 13633
Amount: 0.207129
Amount Units: ug/l

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

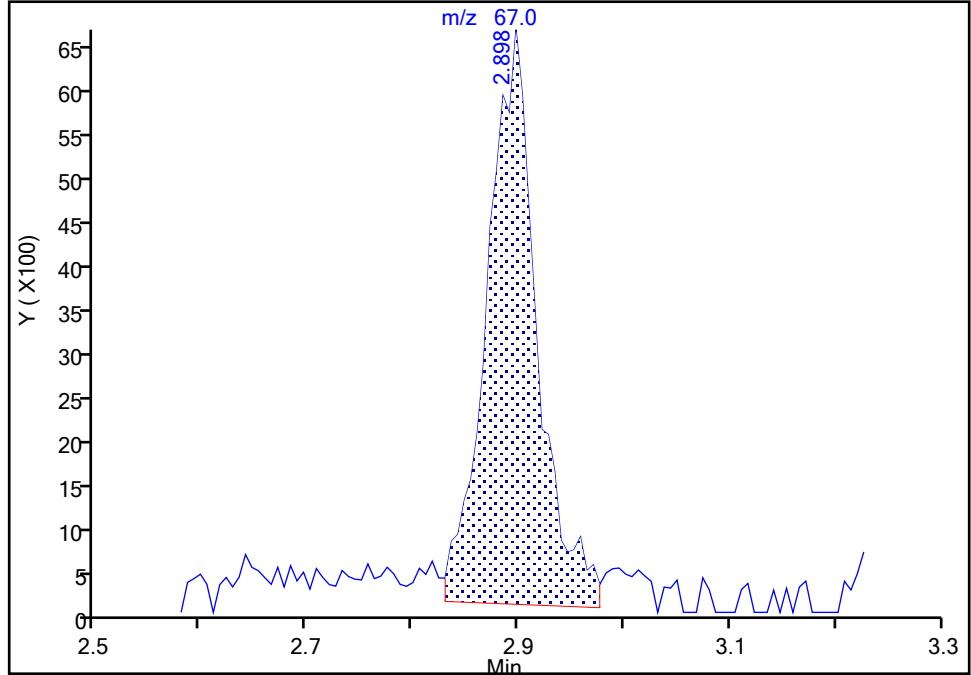
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Injection Date: 30-Nov-2020 15:03:30 Instrument ID: 16334
Lims ID: IC std1
Client ID:
Operator ID: DVV10203 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

11 Dichlorofluoromethane, CAS: 75-43-4

Signal: 1

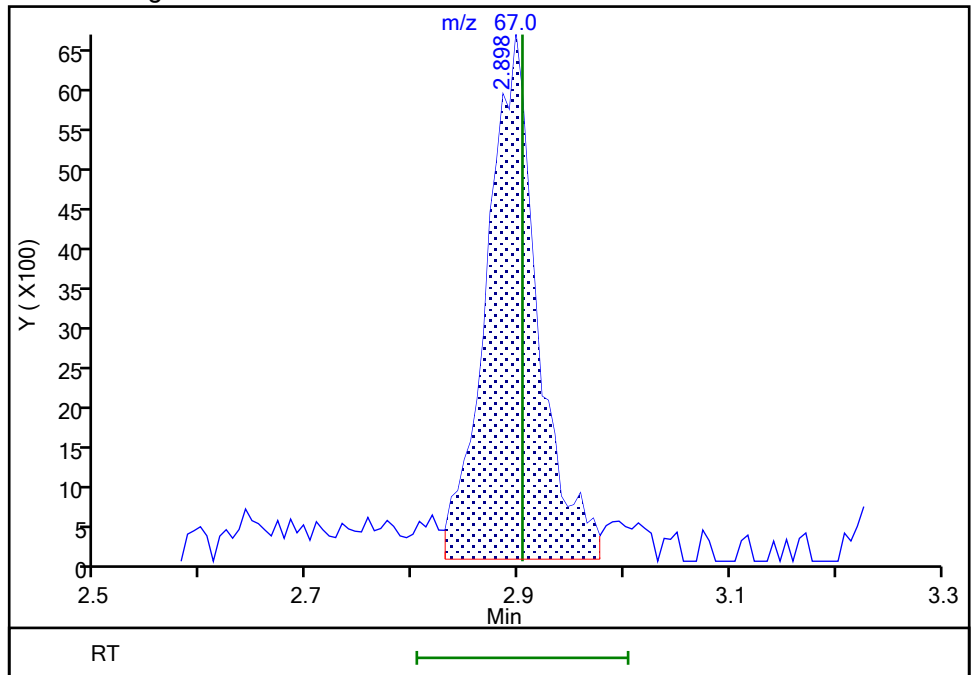
RT: 2.90
Area: 21552
Amount: 0.241088
Amount Units: ug/l

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

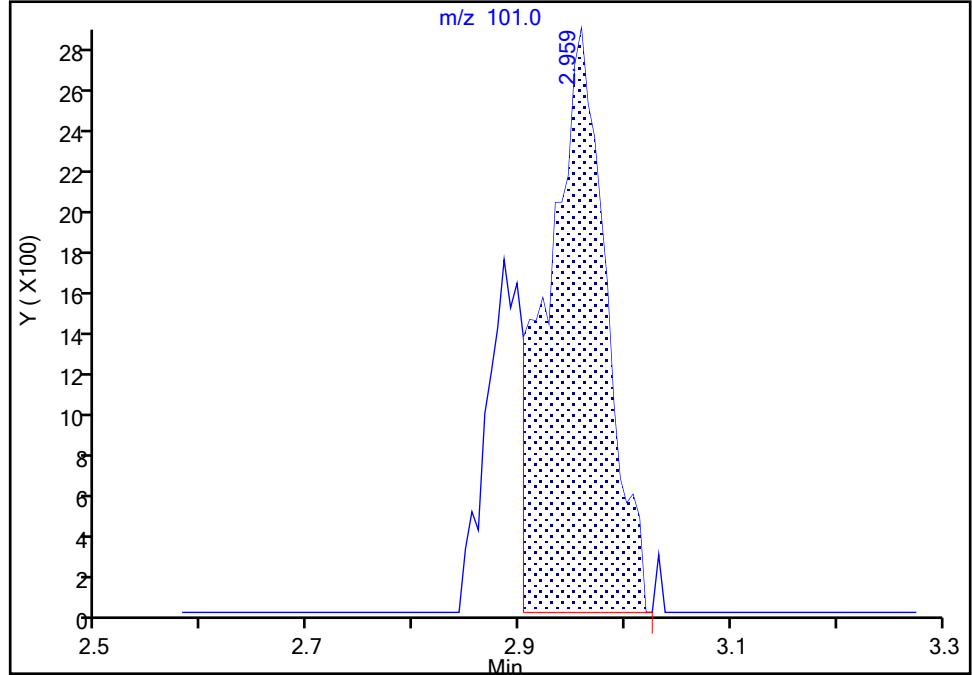
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Injection Date: 30-Nov-2020 15:03:30 Instrument ID: 16334
Lims ID: IC std1
Client ID:
Operator ID: DVV10203 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

13 Trichlorofluoromethane, CAS: 75-69-4

Signal: 1

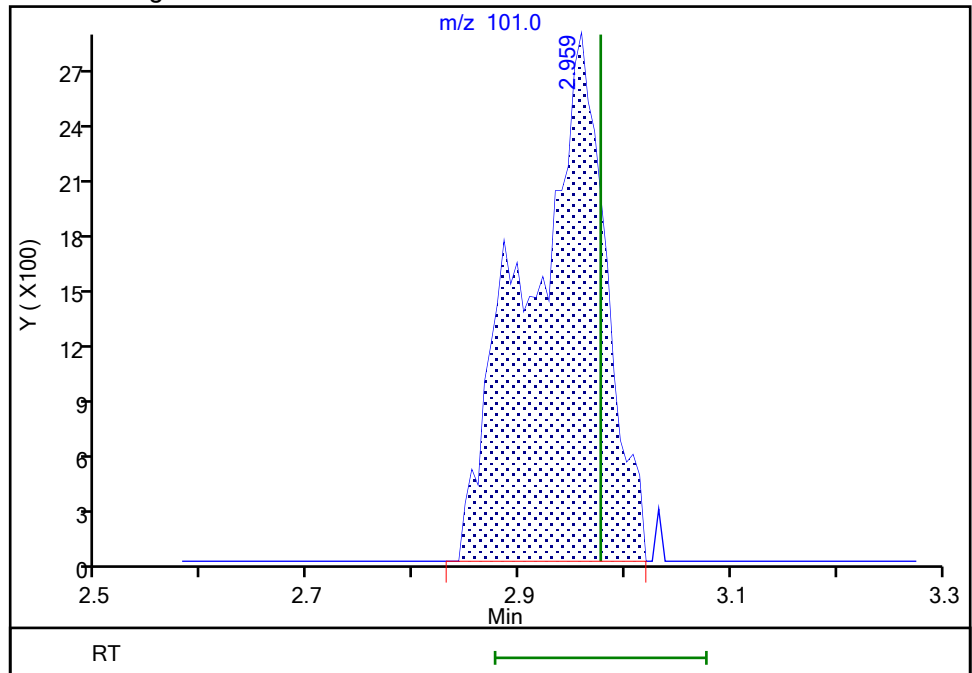
RT: 2.96
Area: 11144
Amount: 0.151648
Amount Units: ug/l

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

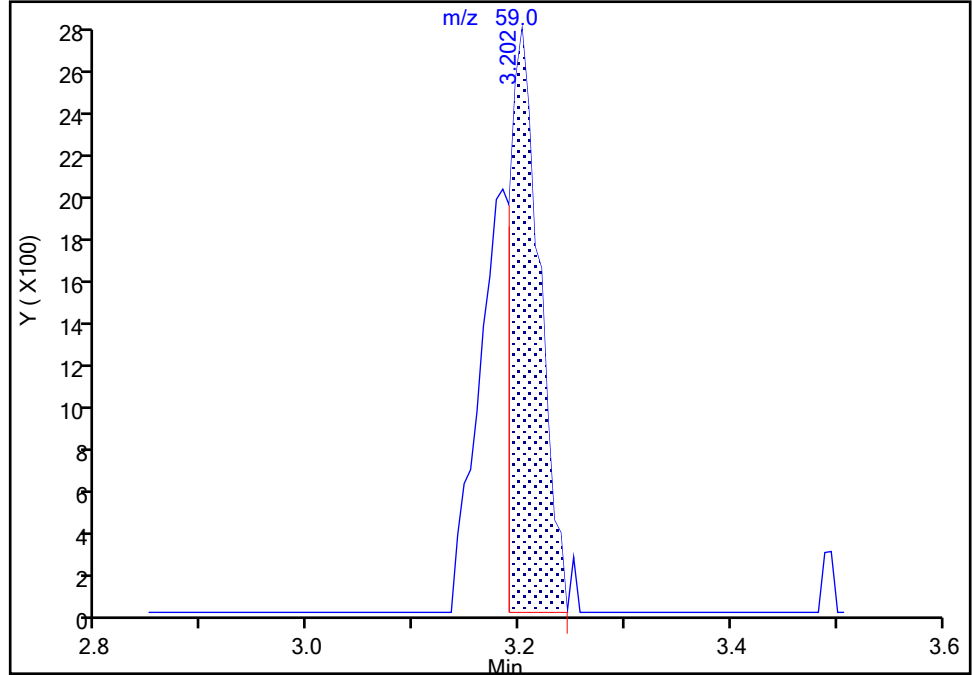
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Injection Date: 30-Nov-2020 15:03:30 Instrument ID: 16334
Lims ID: IC std1
Client ID:
Operator ID: DVV10203 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

15 Ethyl ether, CAS: 60-29-7

Signal: 1

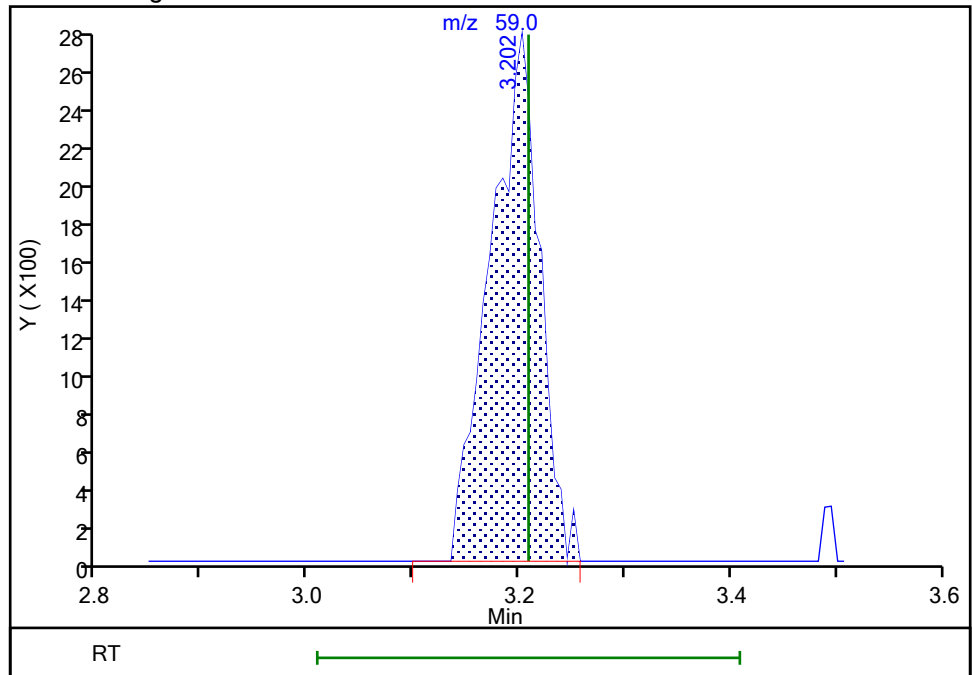
RT: 3.20
Area: 5379
Amount: 0.127140
Amount Units: ug/l

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

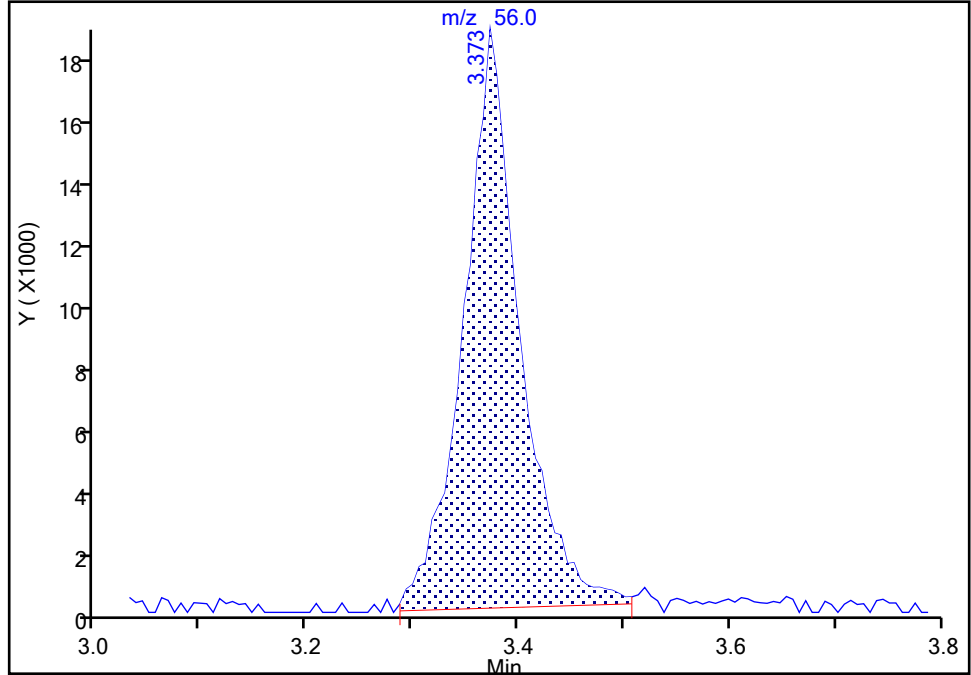
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Injection Date: 30-Nov-2020 15:03:30 Instrument ID: 16334
Lims ID: IC std1
Client ID:
Operator ID: DVV10203 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

18 Acrolein, CAS: 107-02-8

Signal: 1

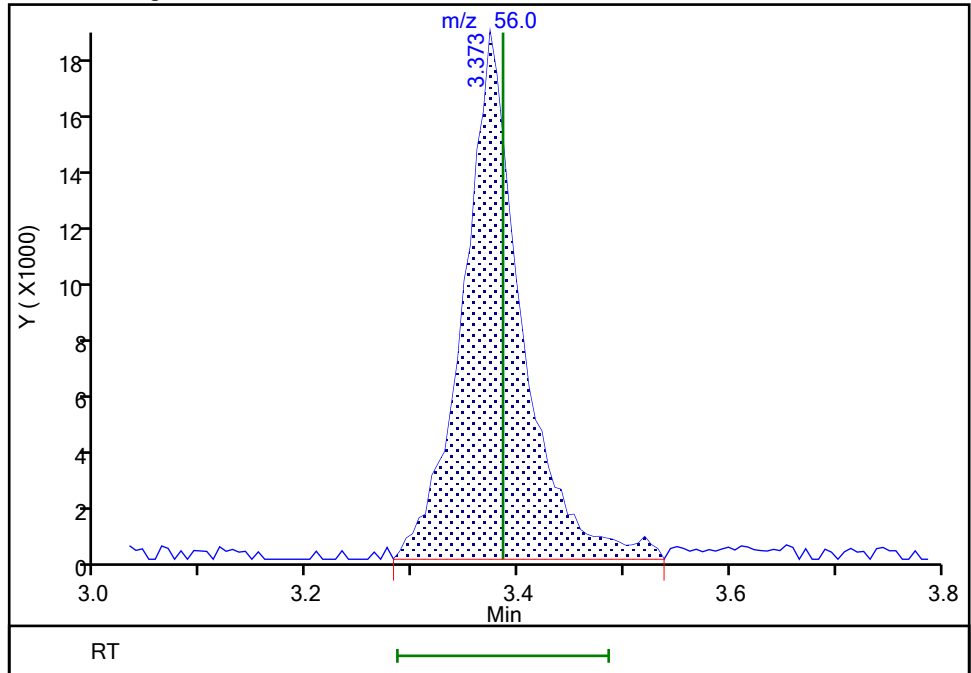
RT: 3.37
Area: 68852
Amount: 9.880650
Amount Units: ug/l

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

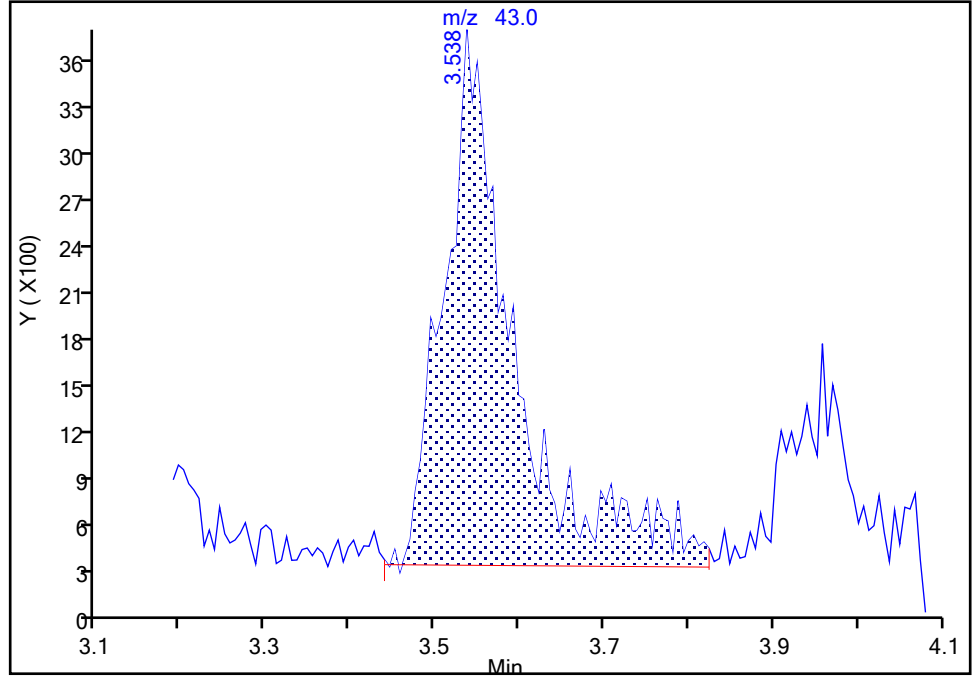
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Injection Date: 30-Nov-2020 15:03:30 Instrument ID: 16334
Lims ID: IC std1
Client ID:
Operator ID: DVV10203 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

20 Acetone, CAS: 67-64-1

Signal: 1

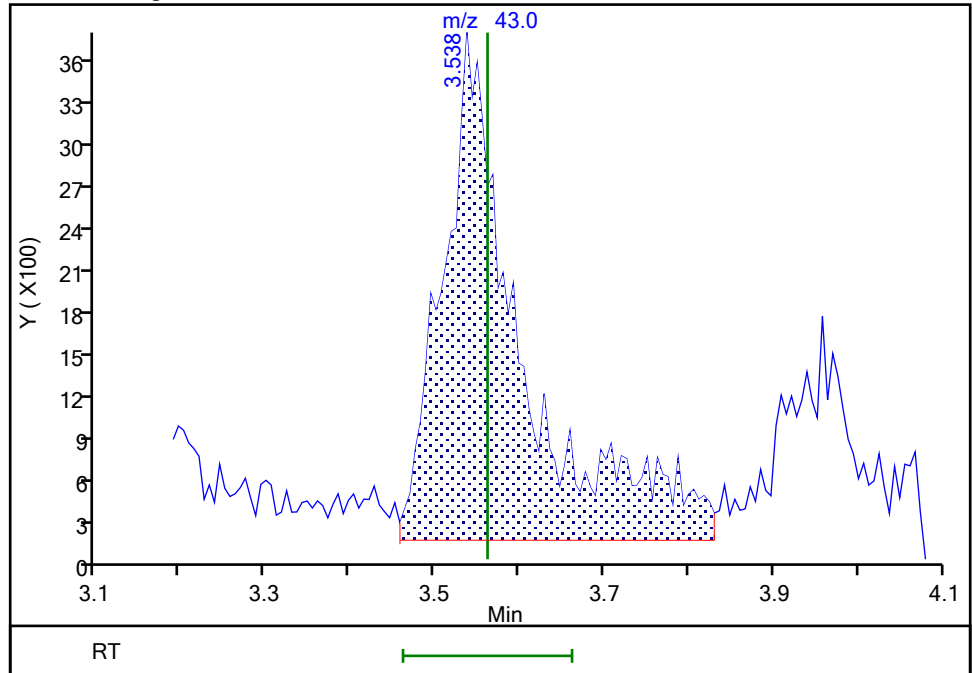
RT: 3.54
Area: 19830
Amount: 2.253640
Amount Units: ug/l

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

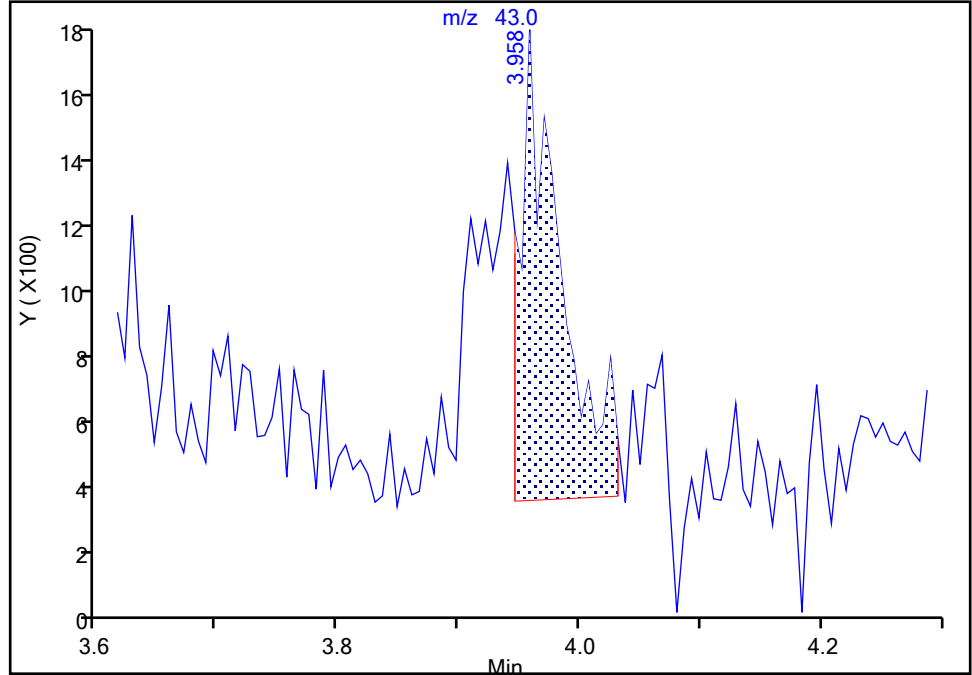
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Injection Date: 30-Nov-2020 15:03:30 Instrument ID: 16334
Lims ID: IC std1
Client ID:
Operator ID: DVV10203 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

26 Methyl acetate, CAS: 79-20-9

Signal: 1

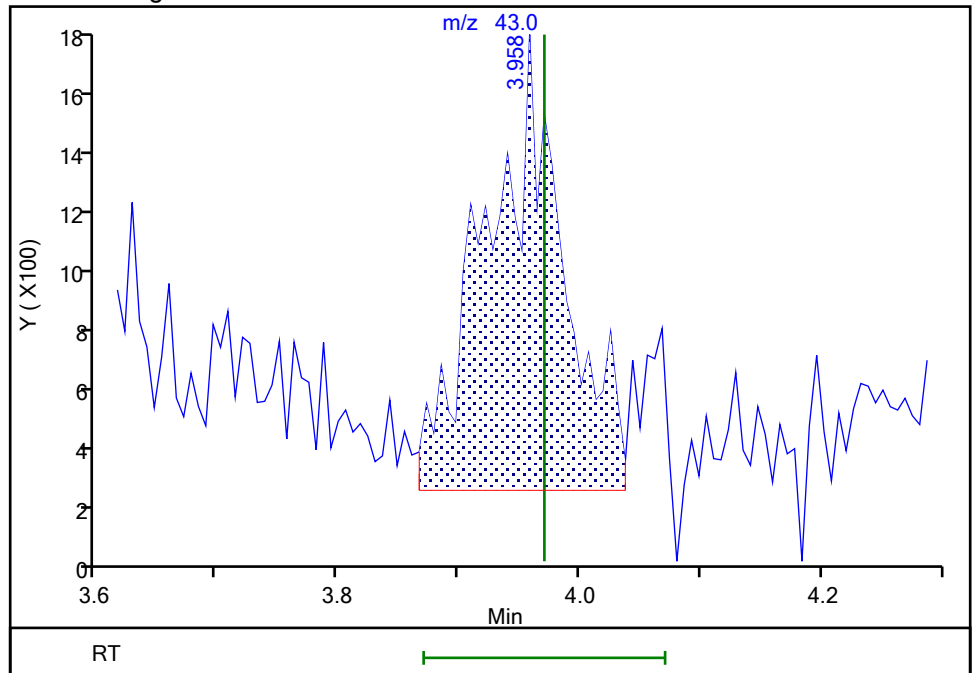
RT: 3.96
Area: 3318
Amount: 0.132791
Amount Units: ug/l

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

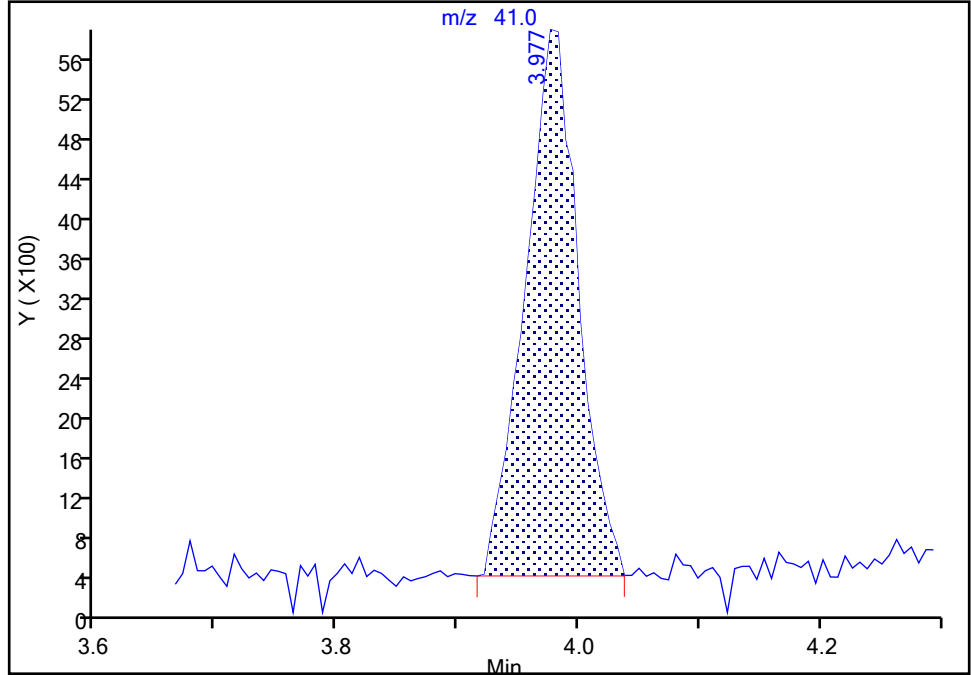
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Injection Date: 30-Nov-2020 15:03:30 Instrument ID: 16334
Lims ID: IC std1
Client ID:
Operator ID: DVV10203 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

27 3-Chloro-1-propene, CAS: 107-05-1

Signal: 1

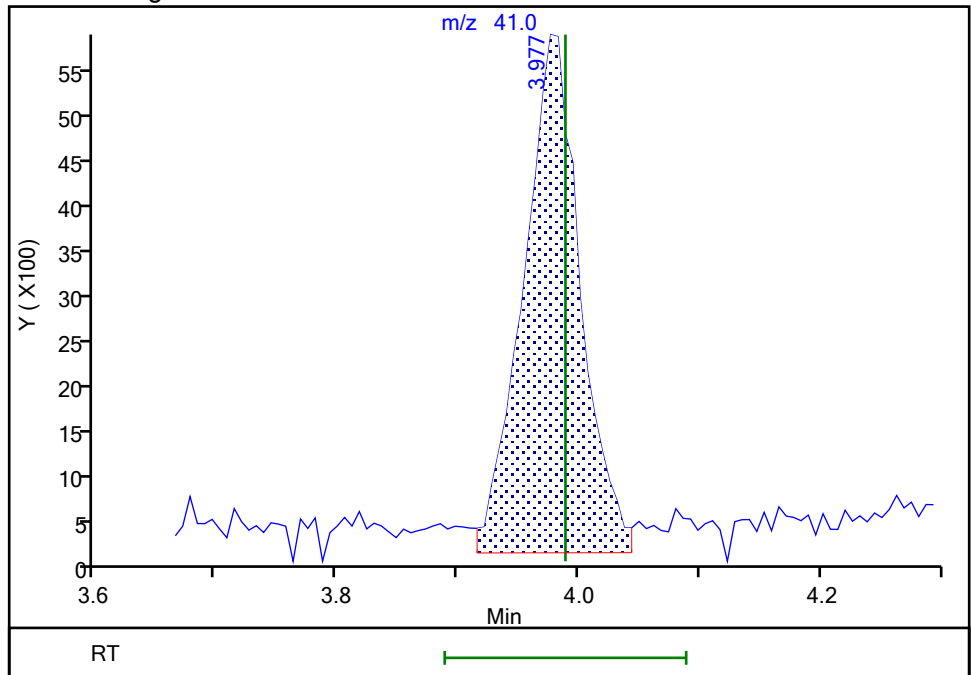
RT: 3.98
Area: 16697
Amount: 0.184837
Amount Units: ug/l

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

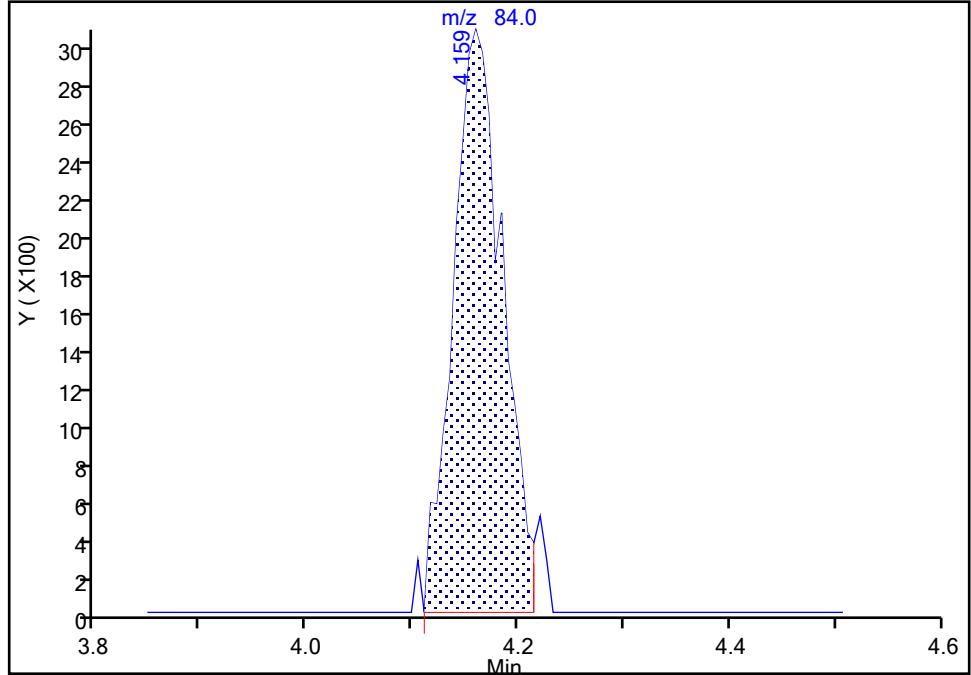
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Injection Date: 30-Nov-2020 15:03:30 Instrument ID: 16334
Lims ID: IC std1
Client ID:
Operator ID: DVV10203 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

28 Methylene Chloride, CAS: 75-09-2

Signal: 1

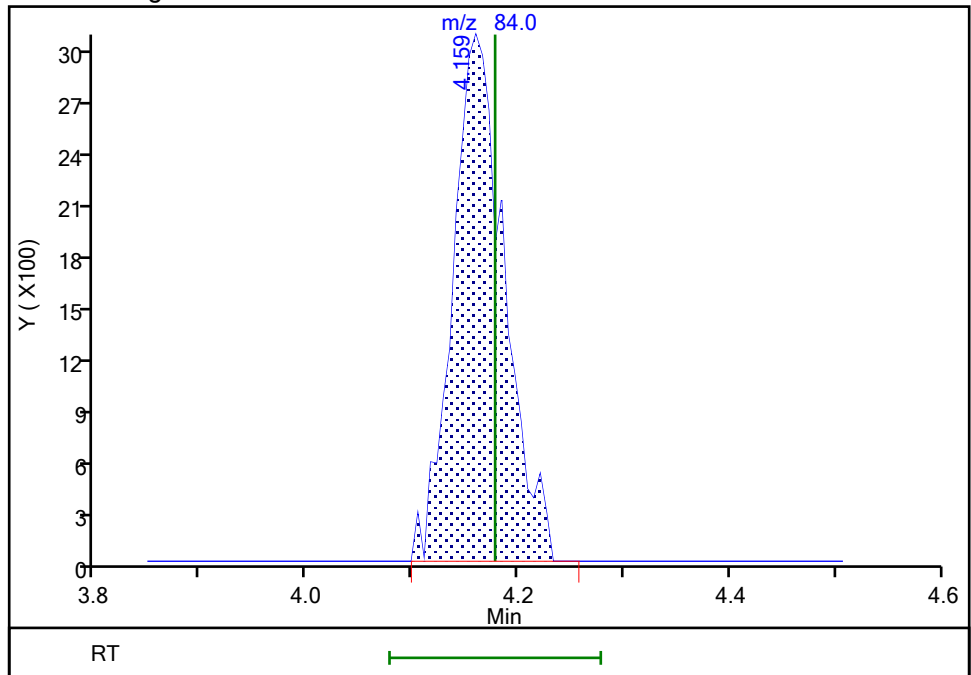
RT: 4.16
Area: 10112
Amount: 0.193174
Amount Units: ug/l

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

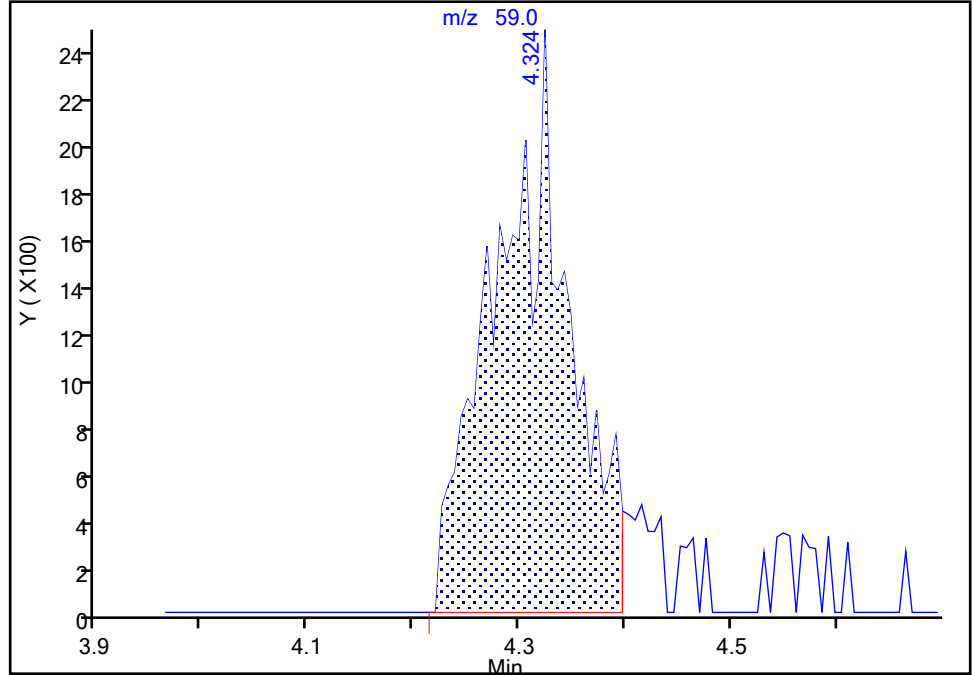
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Injection Date: 30-Nov-2020 15:03:30 Instrument ID: 16334
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Client ID:
Operator ID: DVV10203 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: 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

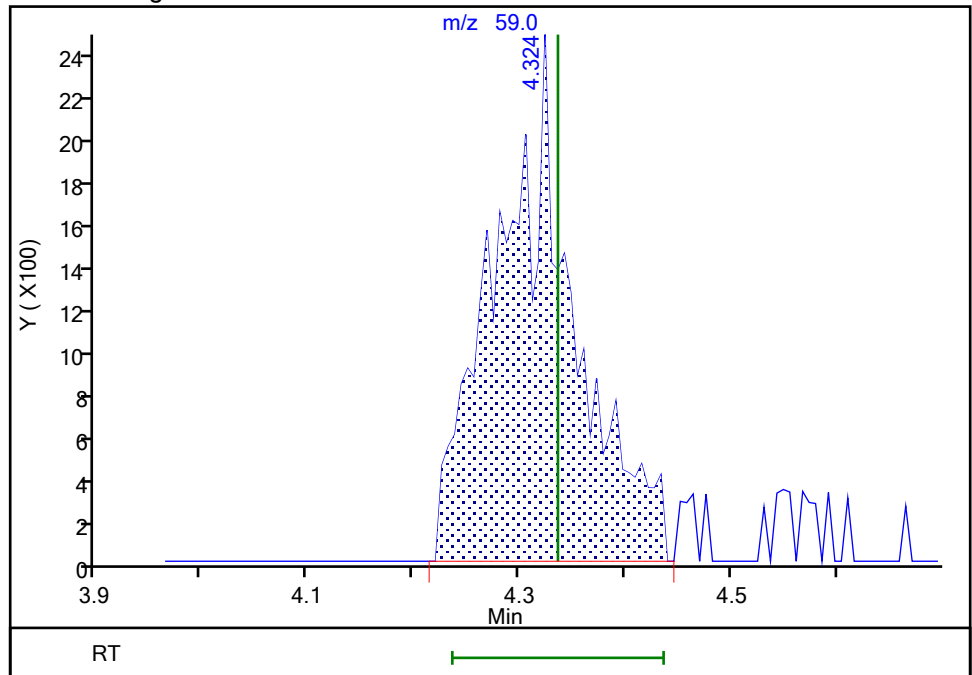
RT: 4.32
Area: 11709
Amount: 3.557640
Amount Units: ug/l

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

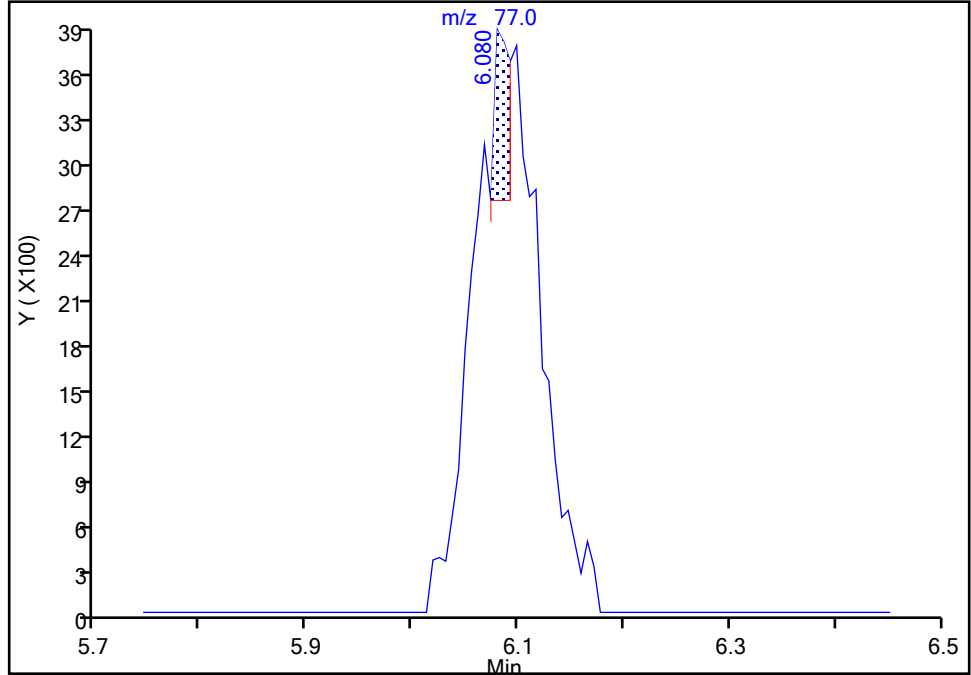
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 Injection Date: 30-Nov-2020 15:03:30 Instrument ID: 16334
 Lims ID: IC std1
 Client ID:
 Operator ID: DVV10203 ALS Bottle#: 8 Worklist Smp#: 9
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
 Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

42 2,2-Dichloropropane, CAS: 594-20-7

Signal: 1

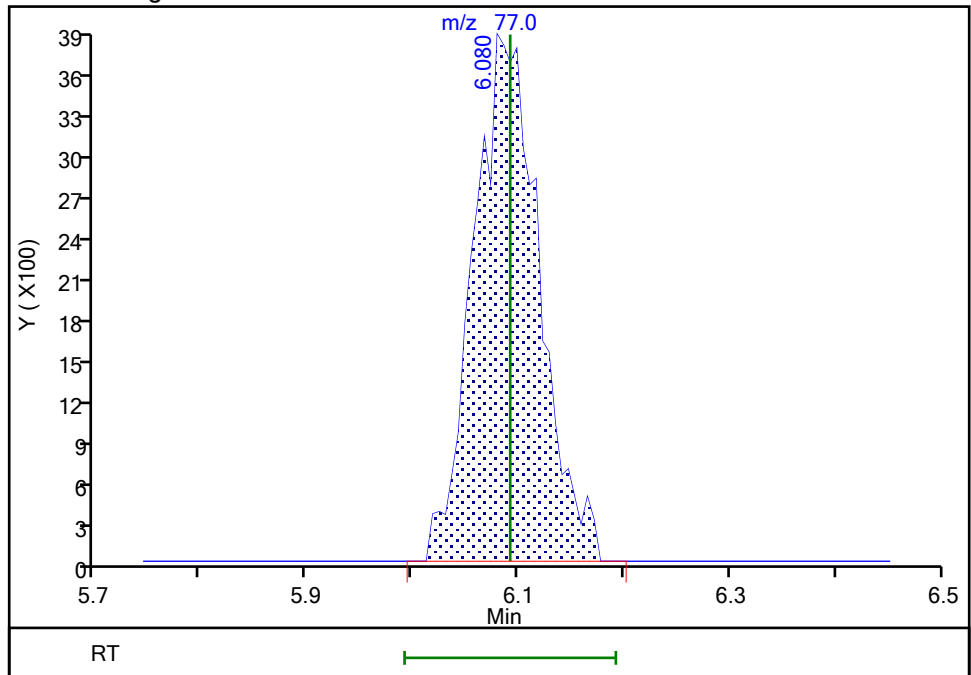
RT: 6.08
 Area: 1118
 Amount: 0.042823
 Amount Units: ug/l

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

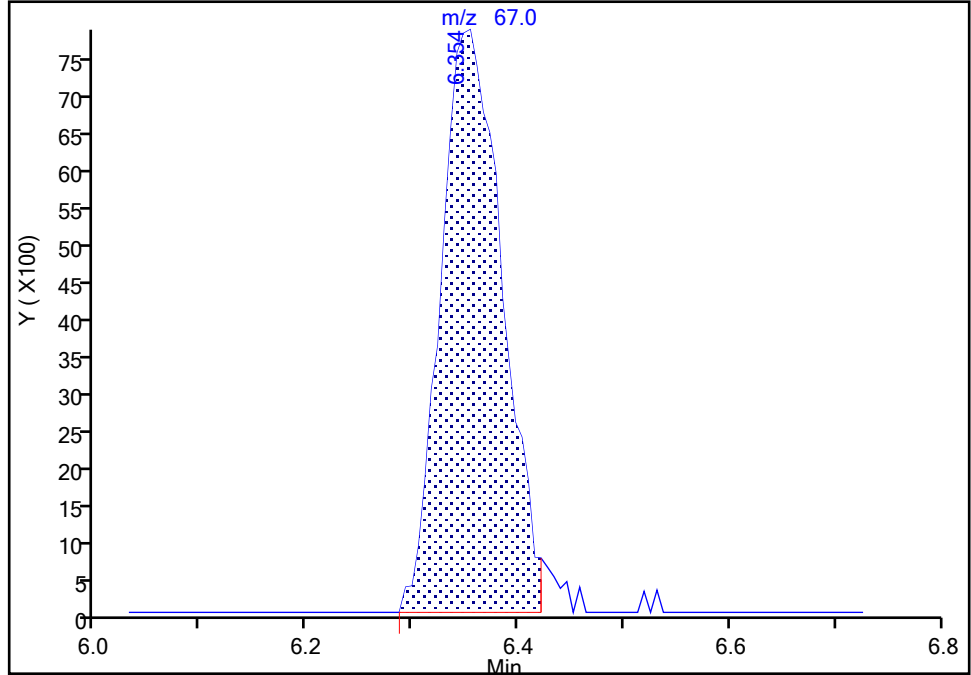
Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30107.D
Injection Date: 30-Nov-2020 15:03:30 Instrument ID: 16334
Lims ID: IC std1
Client ID:
Operator ID: DVV10203 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

46 Methacrylonitrile, CAS: 126-98-7

Signal: 1

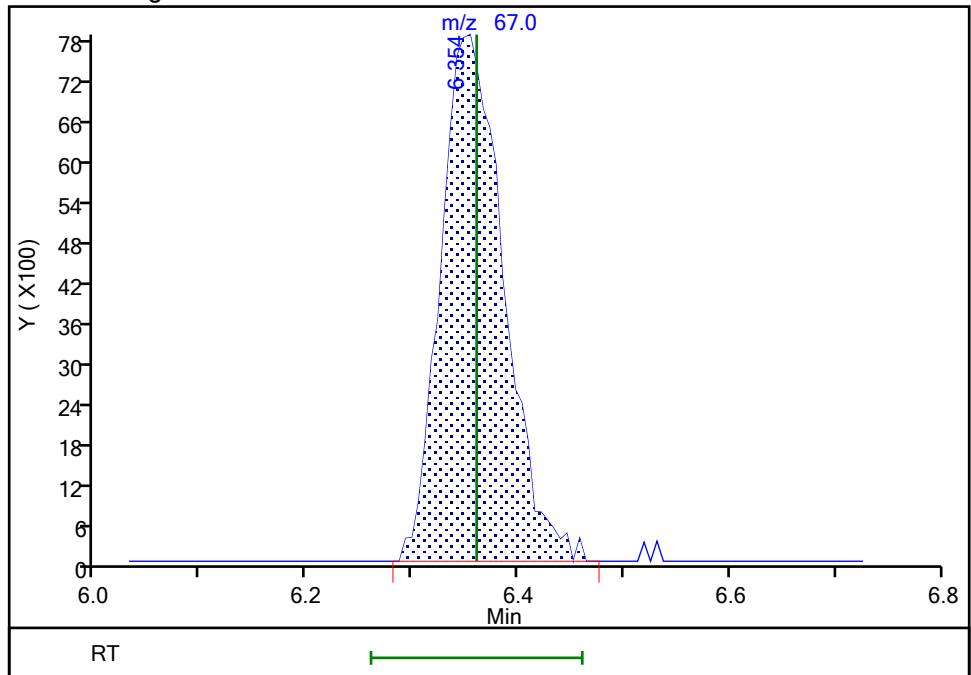
RT: 6.35
Area: 31788
Amount: 2.066779
Amount Units: ug/l

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

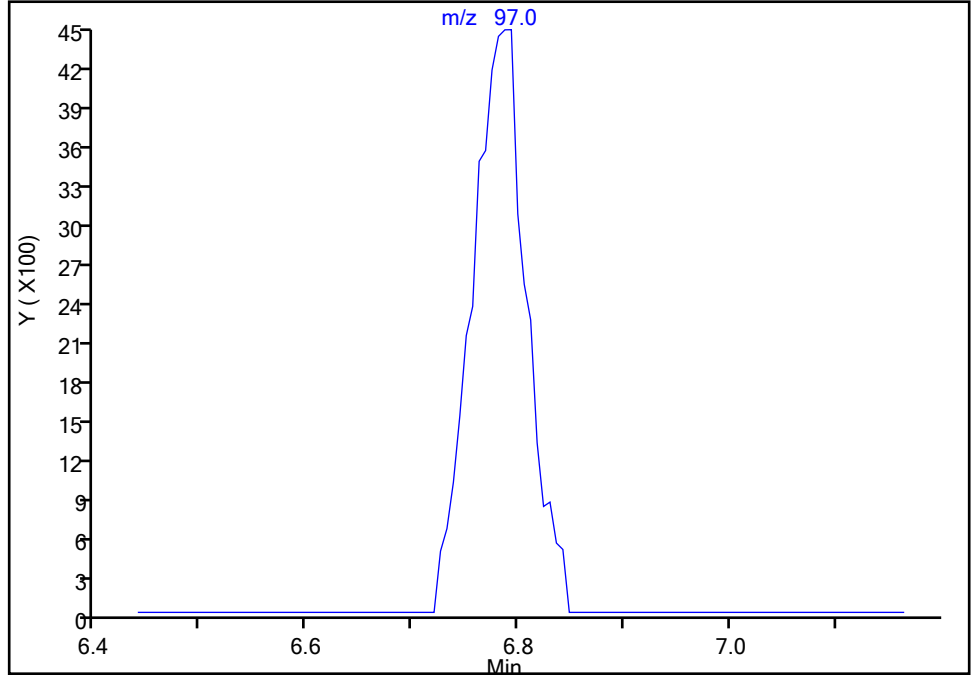
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Lims ID: IC std1
Client ID:
Operator ID: DVV10203 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

51 1,1,1-Trichloroethane, CAS: 71-55-6

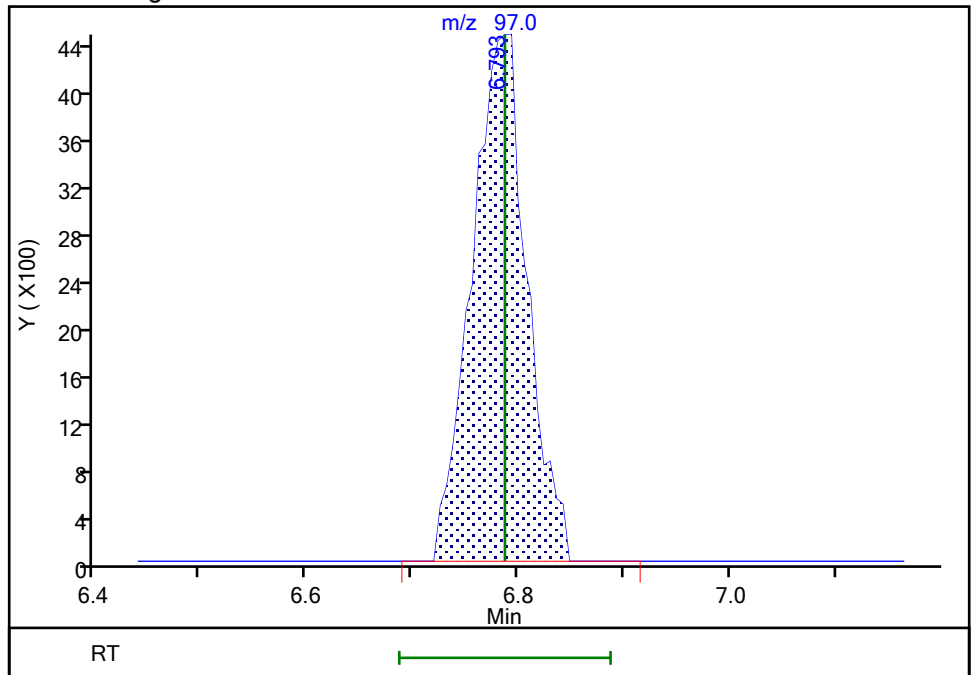
Signal: 1

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
Page 529 of 966

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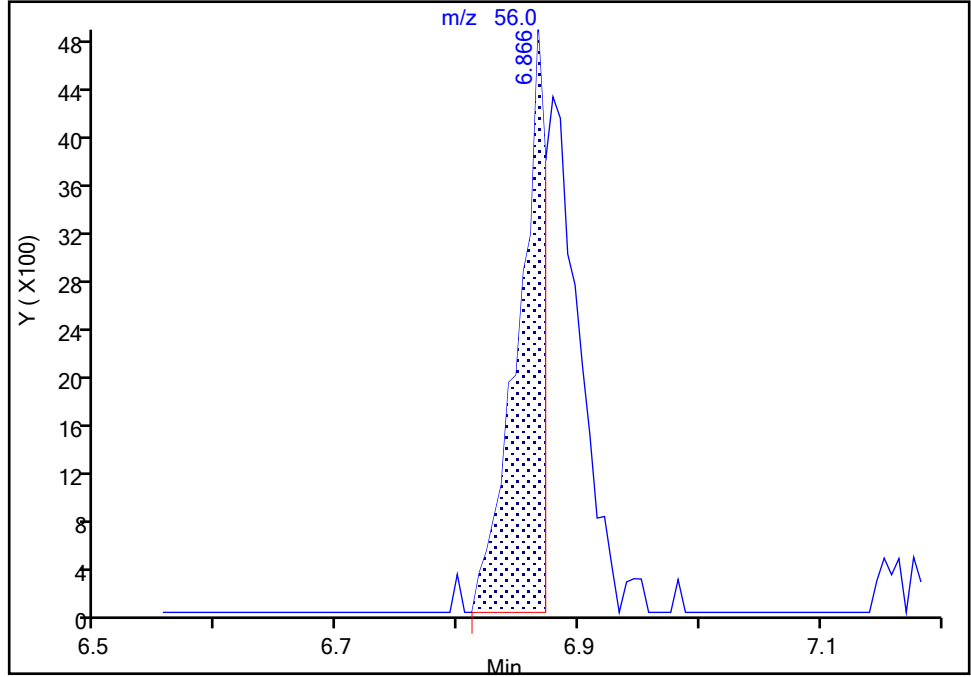
Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30107.D
Injection Date: 30-Nov-2020 15:03:30 Instrument ID: 16334
Lims ID: IC std1
Client ID:
Operator ID: DVV10203 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

53 Cyclohexane, CAS: 110-82-7

Signal: 1

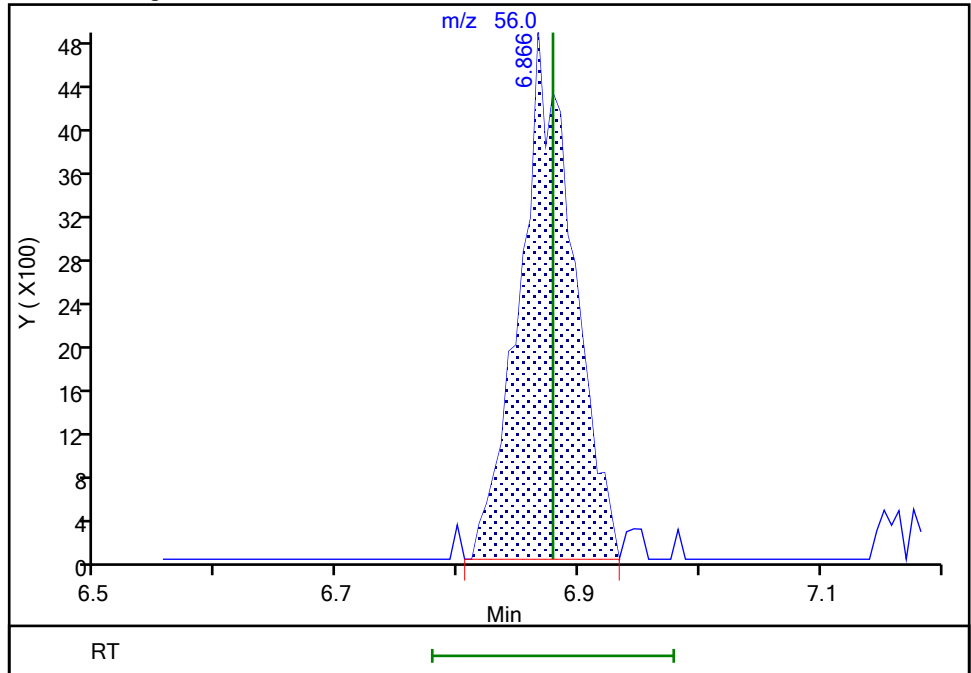
RT: 6.87
Area: 7828
Amount: 0.140707
Amount Units: ug/l

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

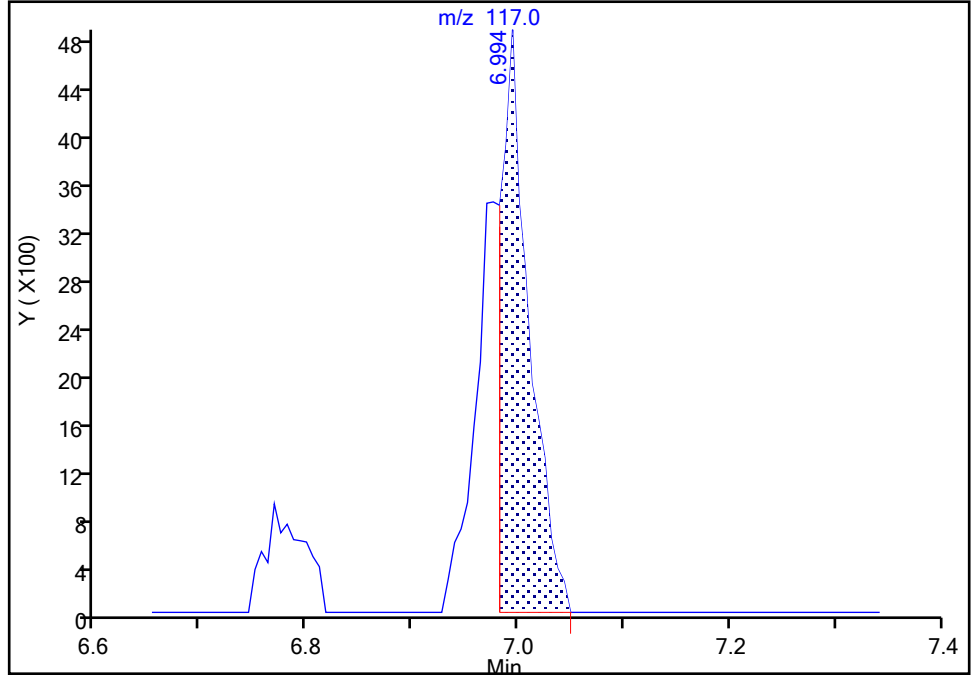
Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I07.D
Injection Date: 30-Nov-2020 15:03:30 Instrument ID: 16334
Lims ID: IC std1
Client ID:
Operator ID: DVV10203 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

56 Carbon tetrachloride, CAS: 56-23-5

Signal: 1

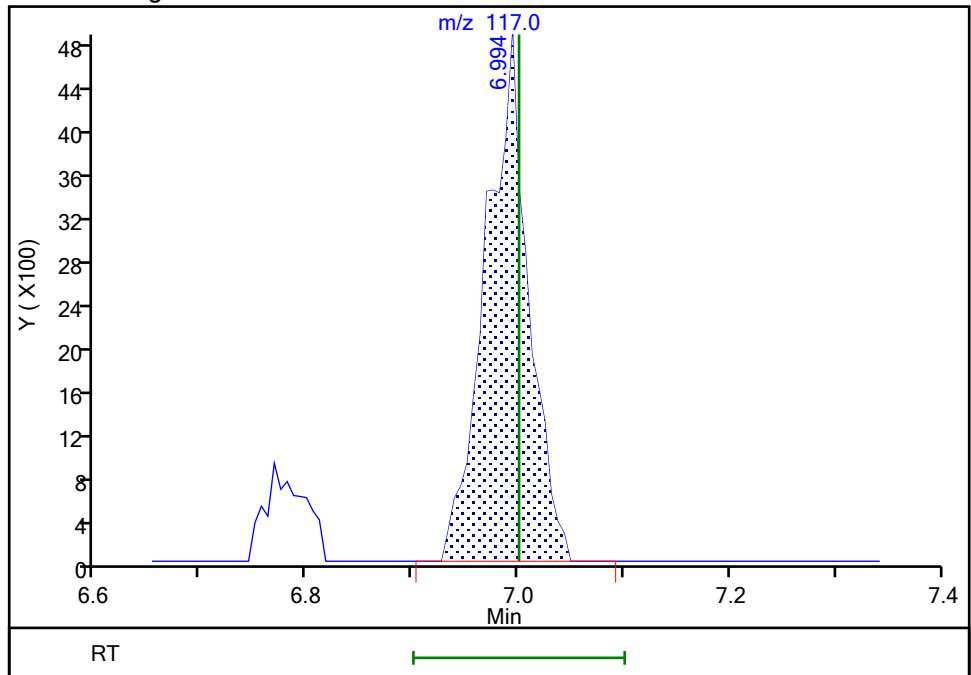
RT: 6.99
Area: 9013
Amount: 0.134991
Amount Units: ug/l

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

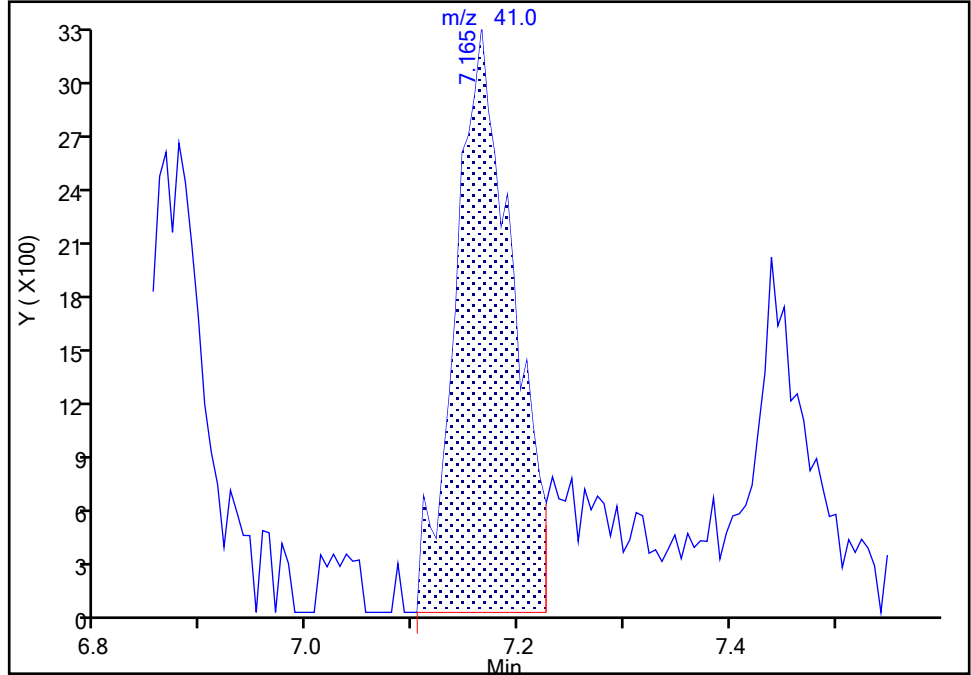
Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I07.D
Injection Date: 30-Nov-2020 15:03:30 Instrument ID: 16334
Lims ID: IC std1
Client ID:
Operator ID: DVV10203 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

57 Isobutyl alcohol, CAS: 78-83-1

Signal: 1

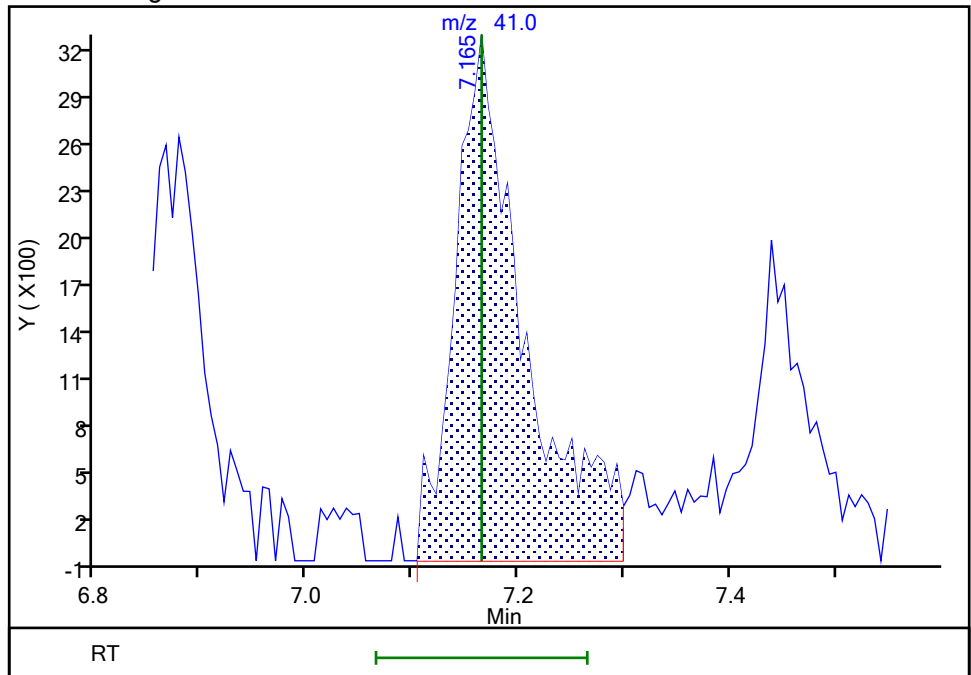
RT: 7.16
Area: 12358
Amount: 10.222385
Amount Units: ug/l

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

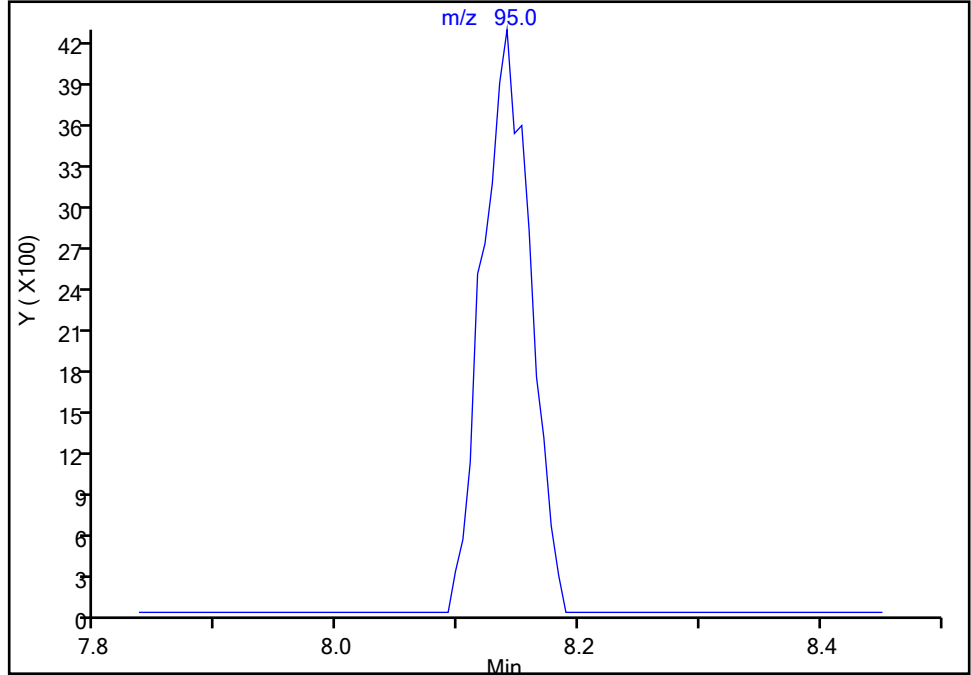
Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30107.D
Injection Date: 30-Nov-2020 15:03:30 Instrument ID: 16334
Lims ID: IC std1
Client ID:
Operator ID: DVV10203 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

67 Trichloroethene, CAS: 79-01-6

Signal: 1

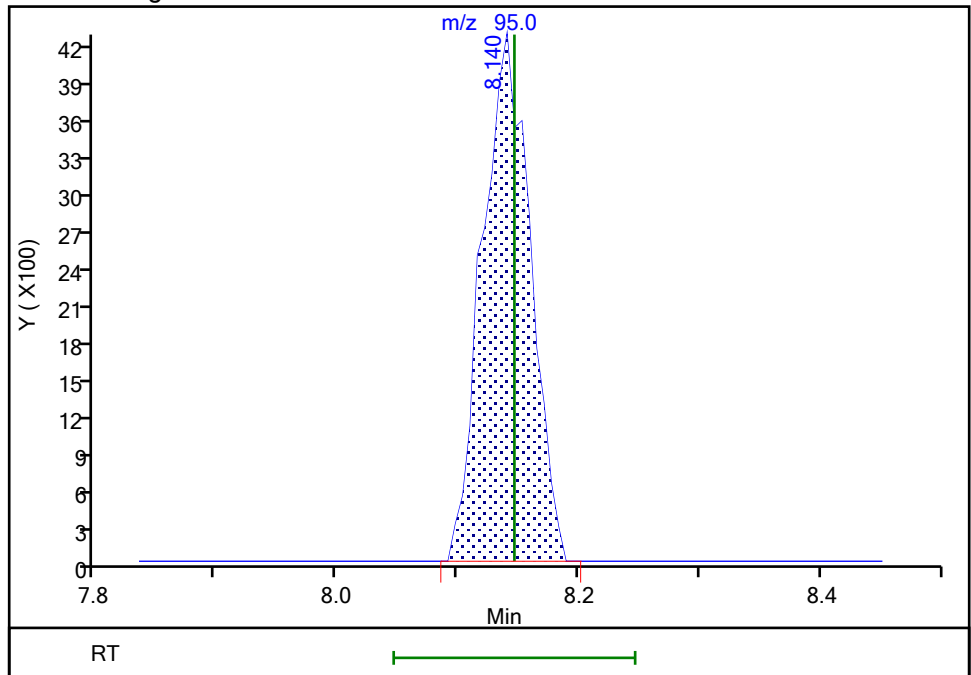
Not Detected
Expected RT: 8.15

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

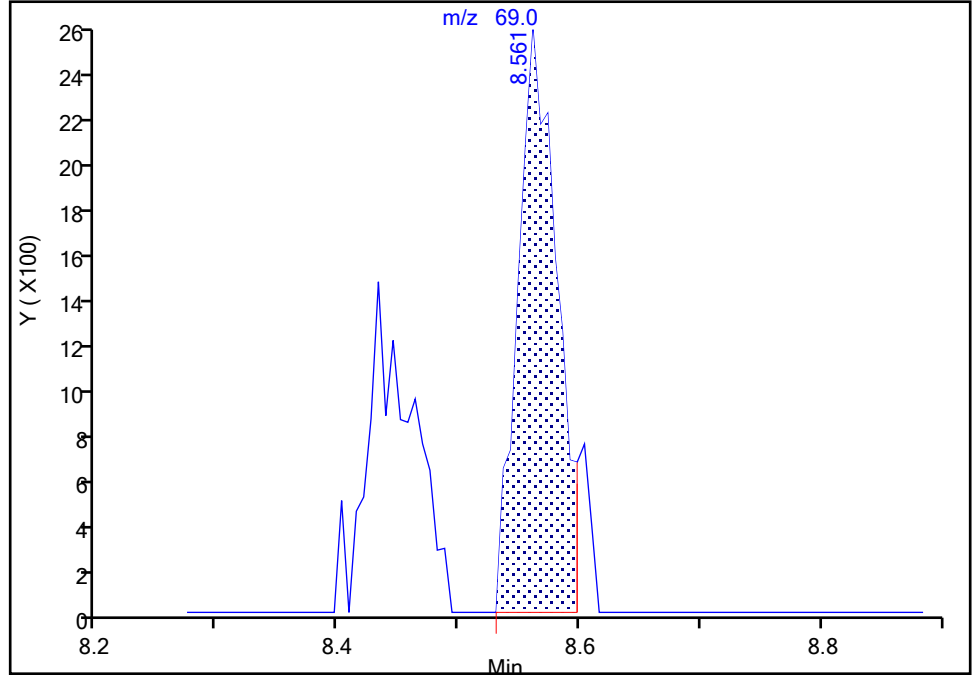
Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30107.D
Injection Date: 30-Nov-2020 15:03:30 Instrument ID: 16334
Lims ID: IC std1
Client ID:
Operator ID: DVV10203 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

71 Methyl methacrylate, CAS: 80-62-6

Signal: 1

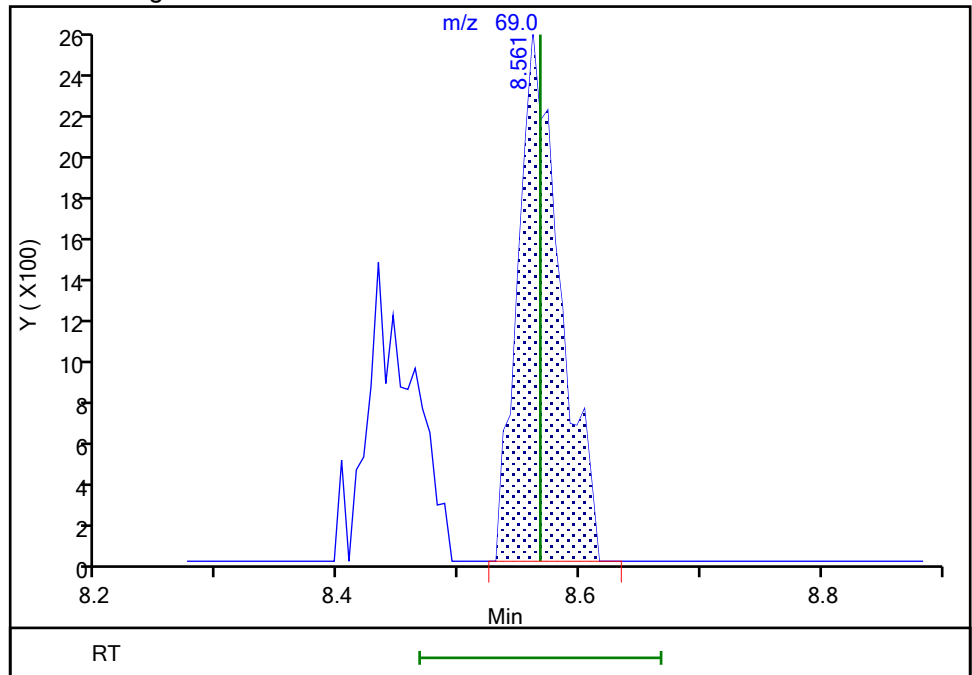
RT: 8.56
Area: 5837
Amount: 0.187386
Amount Units: ug/l

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

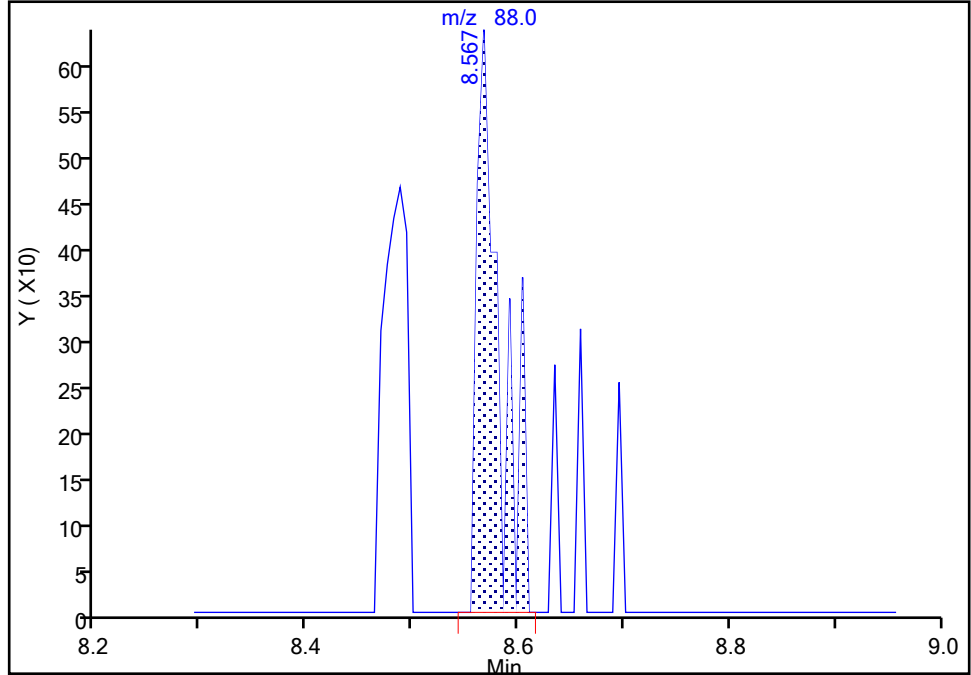
Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30107.D
Injection Date: 30-Nov-2020 15:03:30 Instrument ID: 16334
Lims ID: IC std1
Client ID:
Operator ID: DVV10203 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

72 1,4-Dioxane, CAS: 123-91-1

Signal: 1

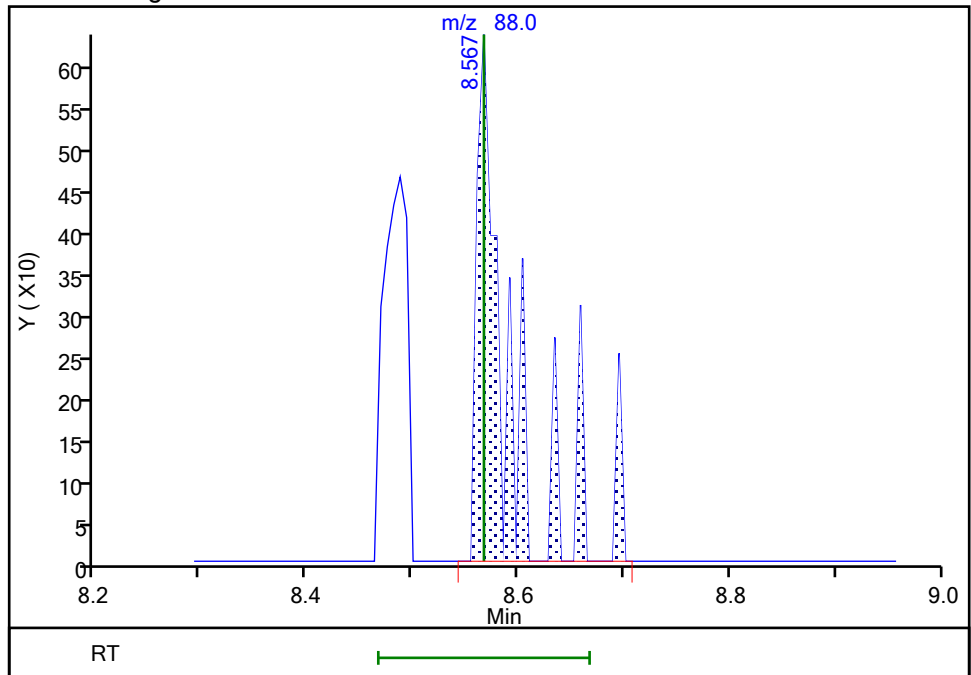
RT: 8.57
Area: 946
Amount: 4.546939
Amount Units: ug/l

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

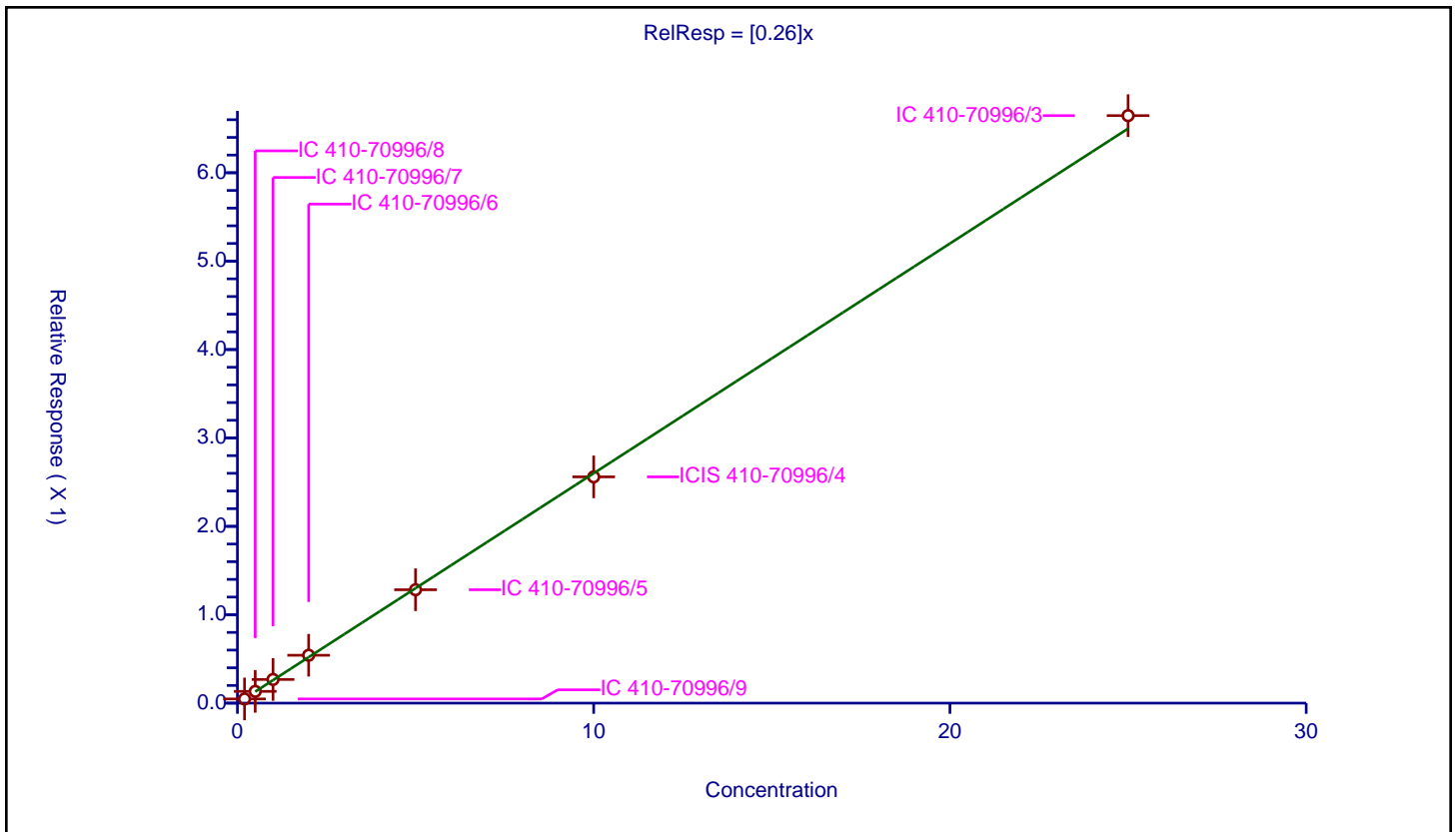
/ Dichlorodifluoromethane

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

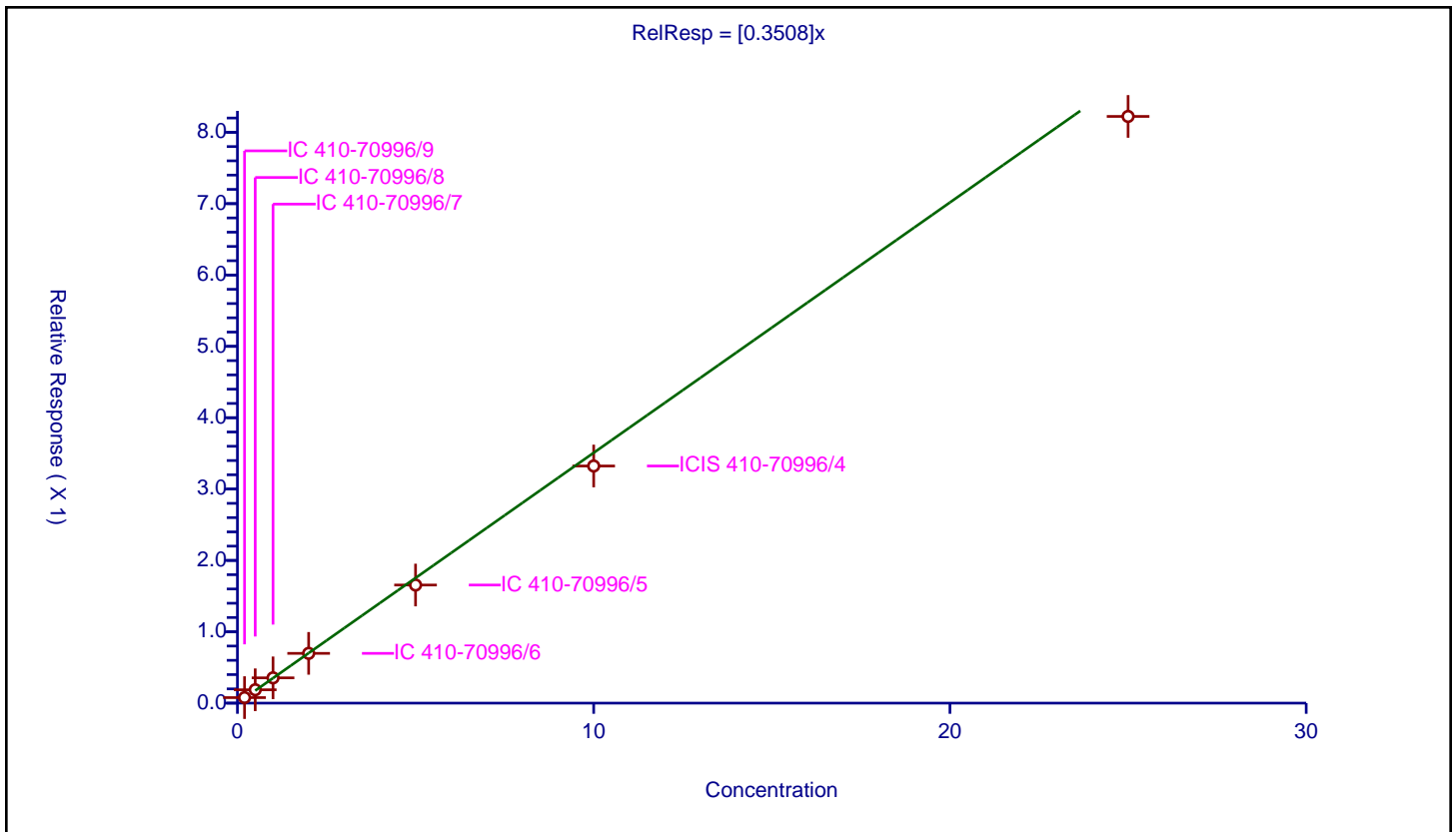
/ Chloromethane

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

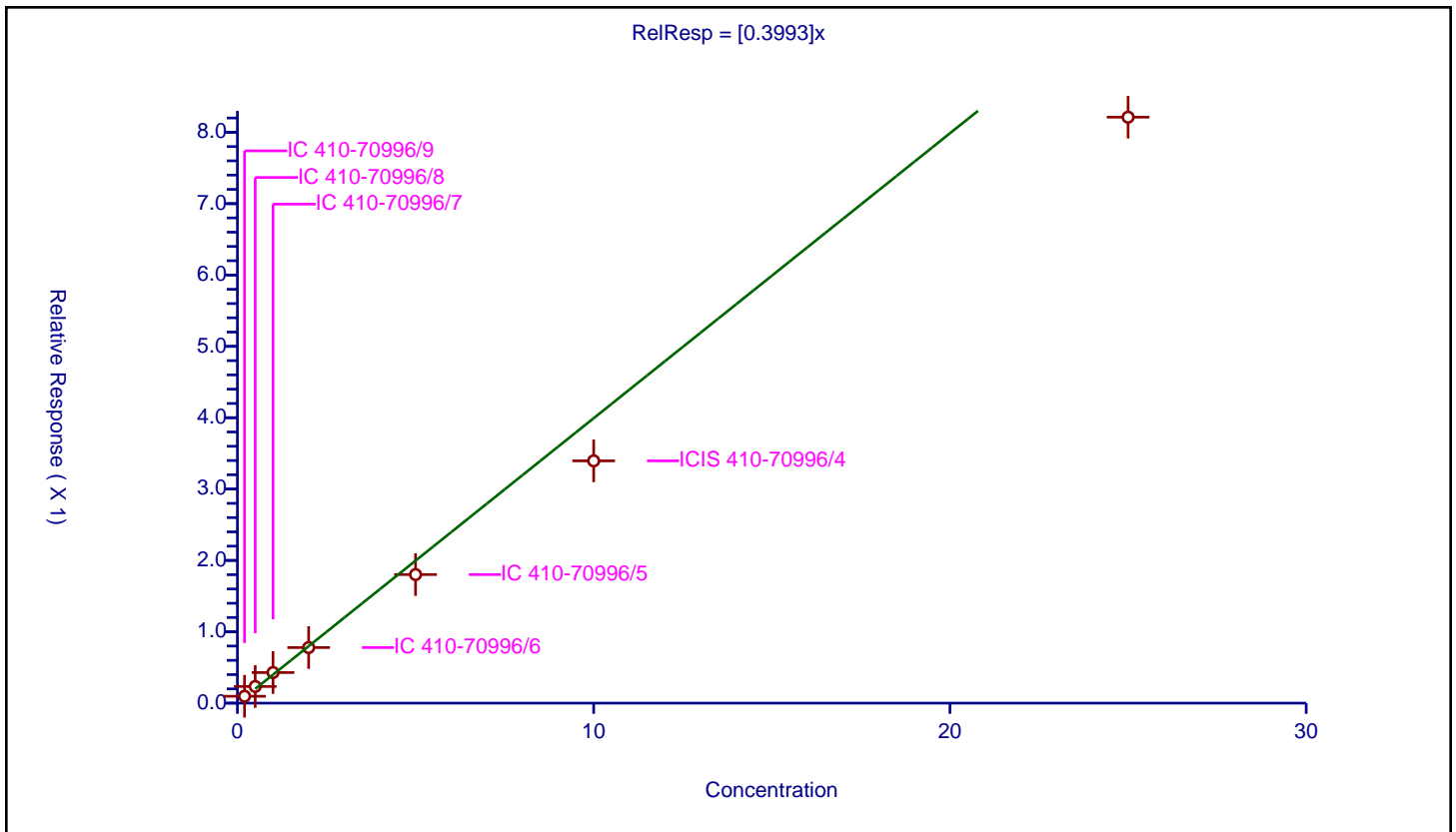
/ Butadiene

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

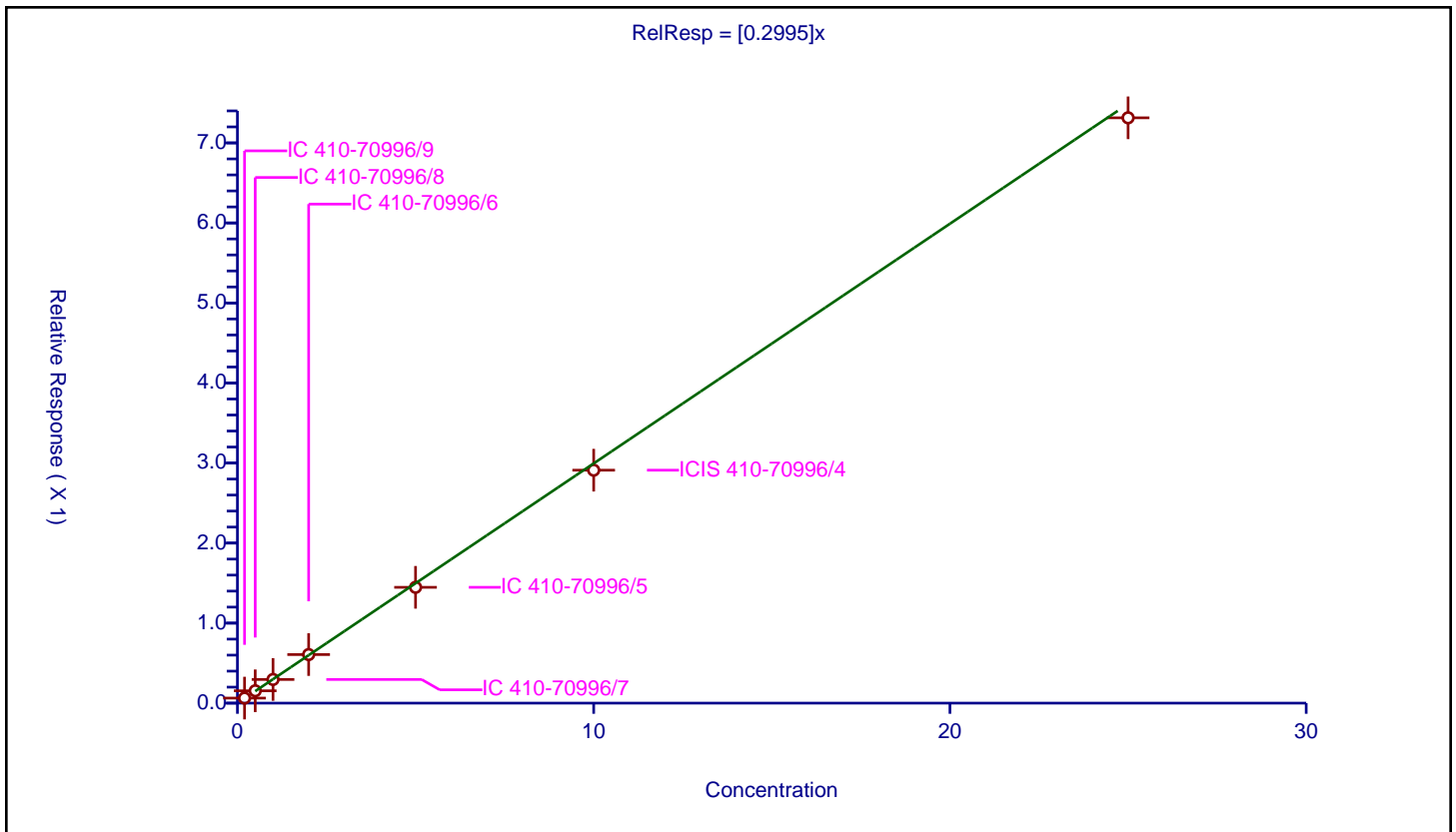
/ Vinyl chloride

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

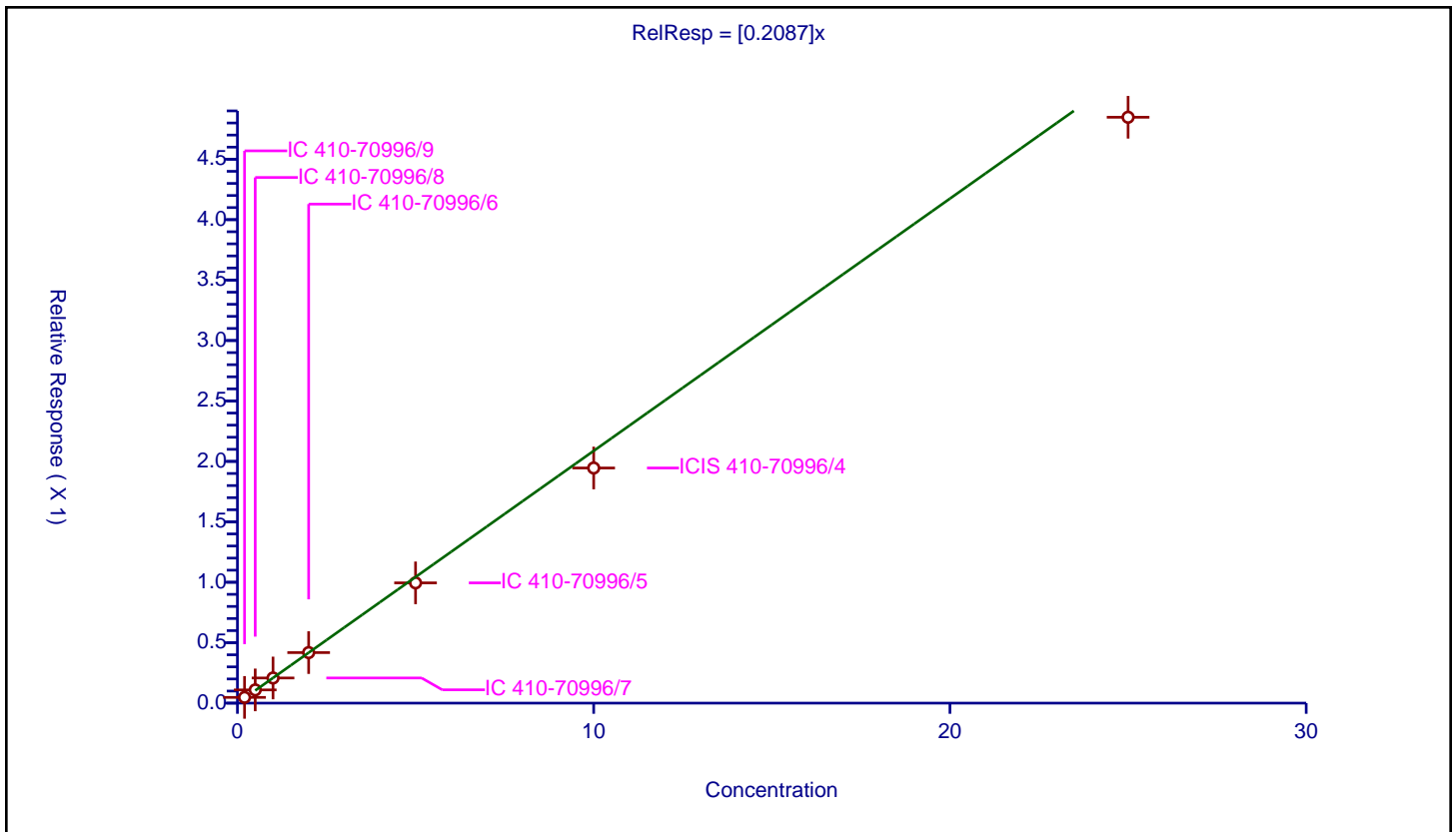
/ Bromomethane

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

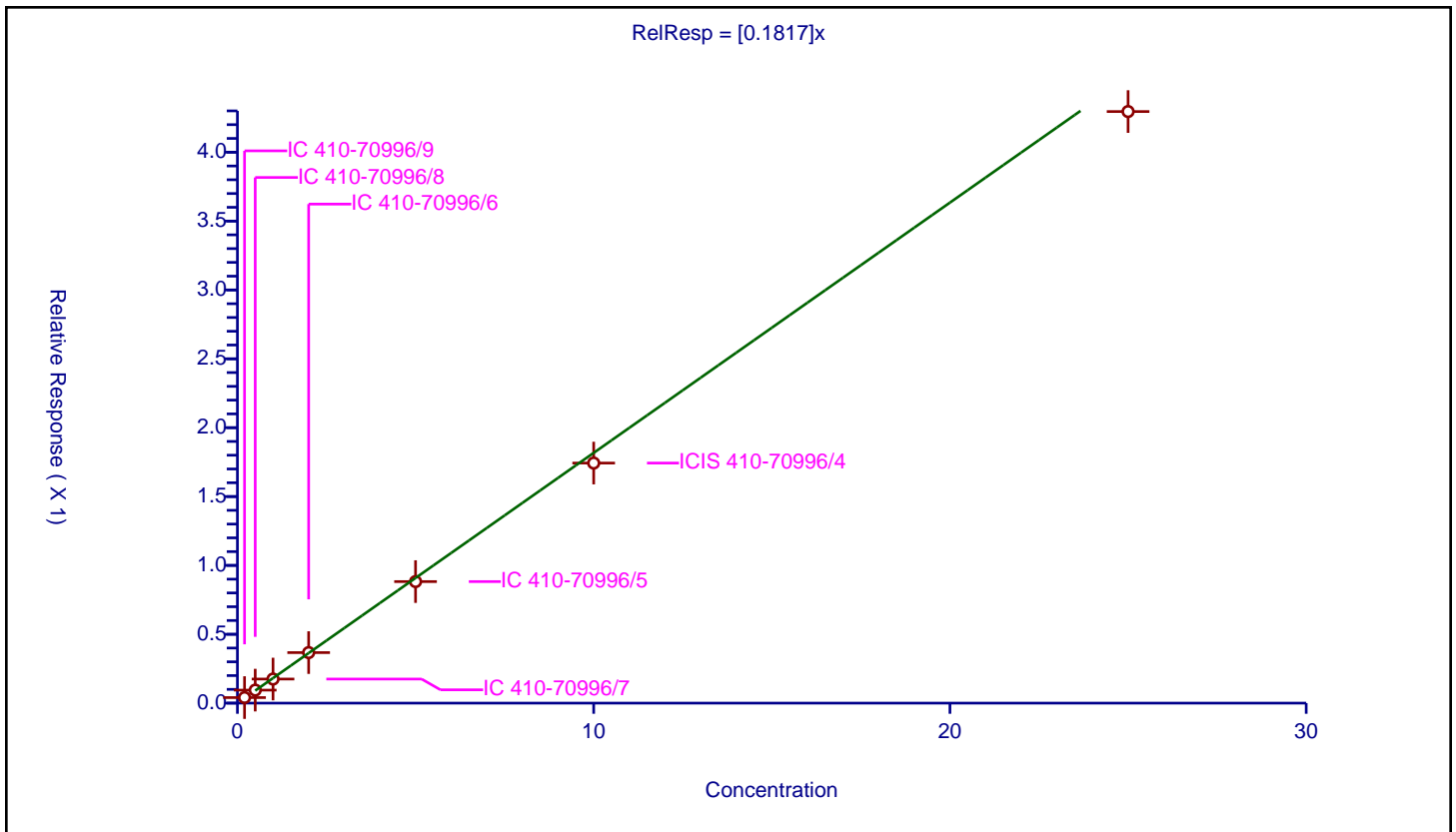
/ Chloroethane

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

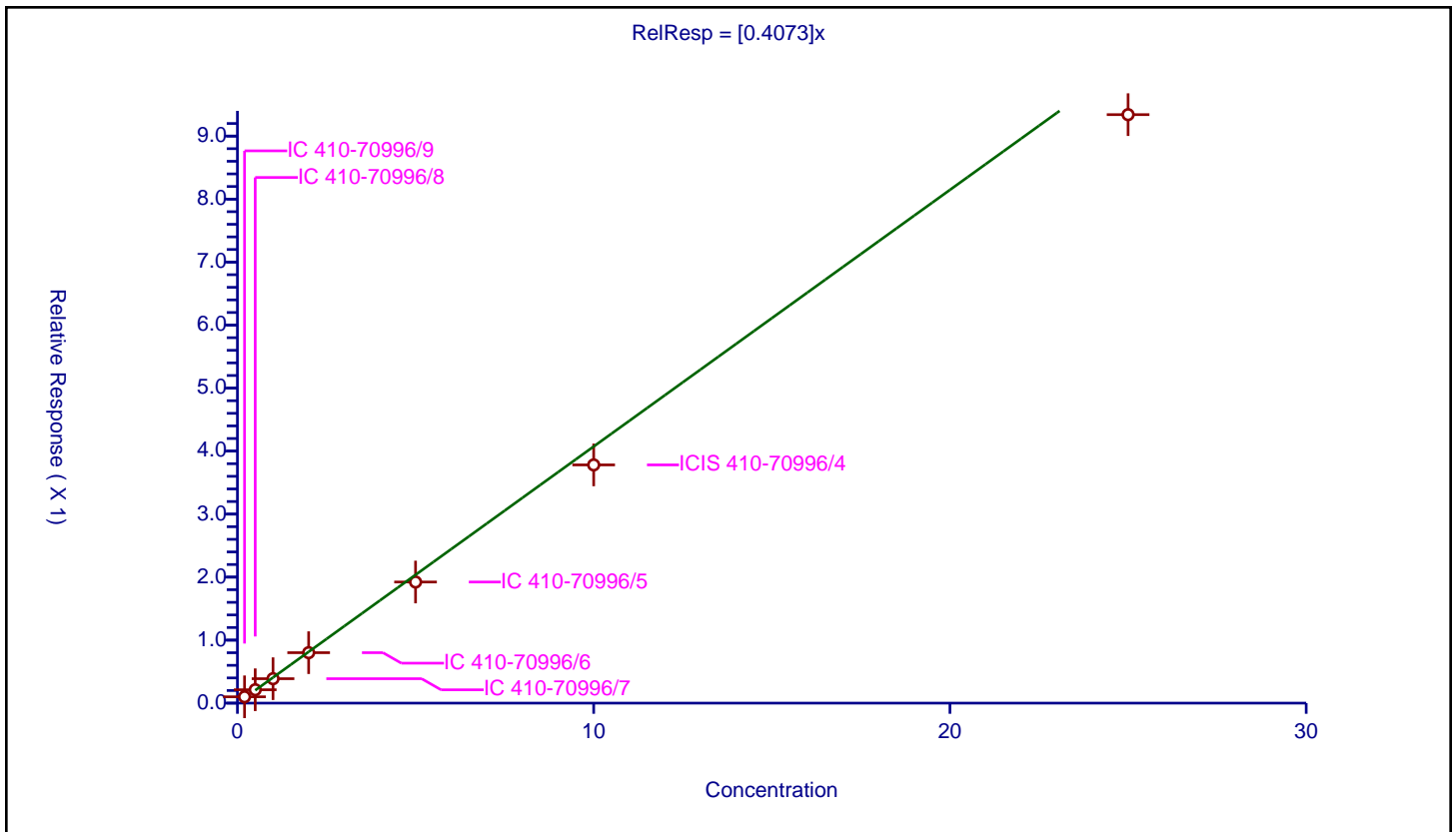
/ Dichlorofluoromethane

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

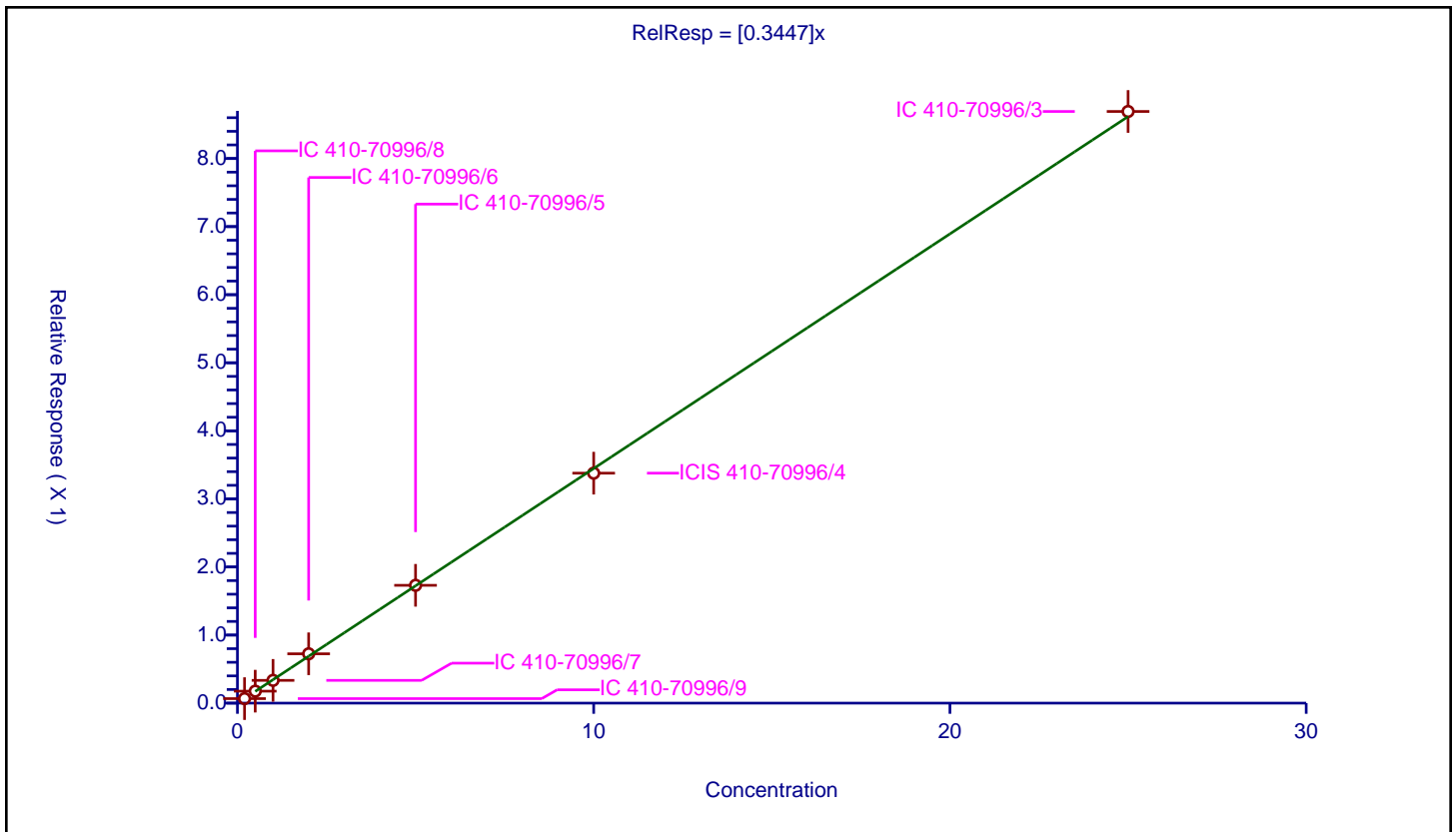
/ Trichlorofluoromethane

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

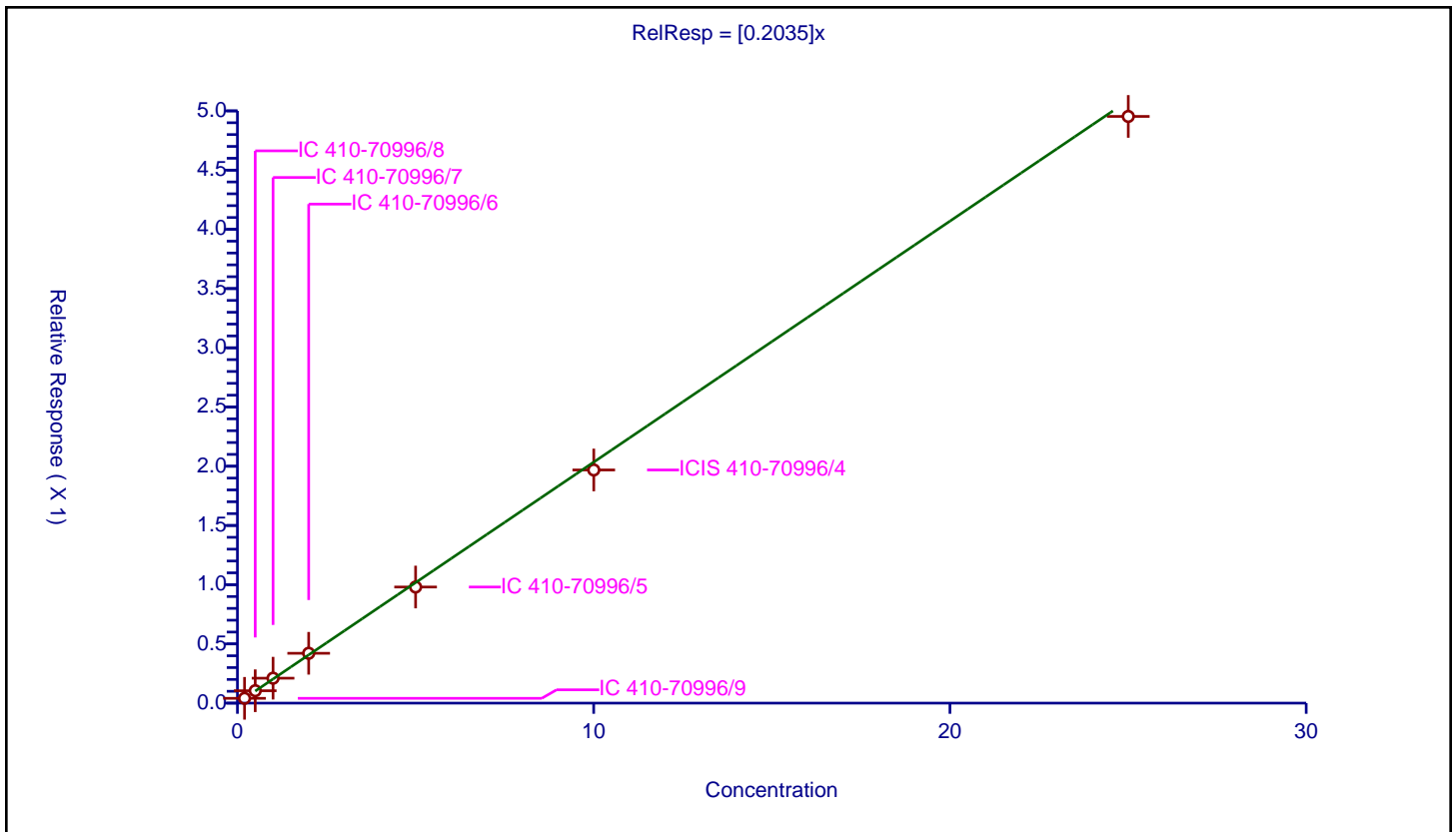
/ Ethyl ether

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

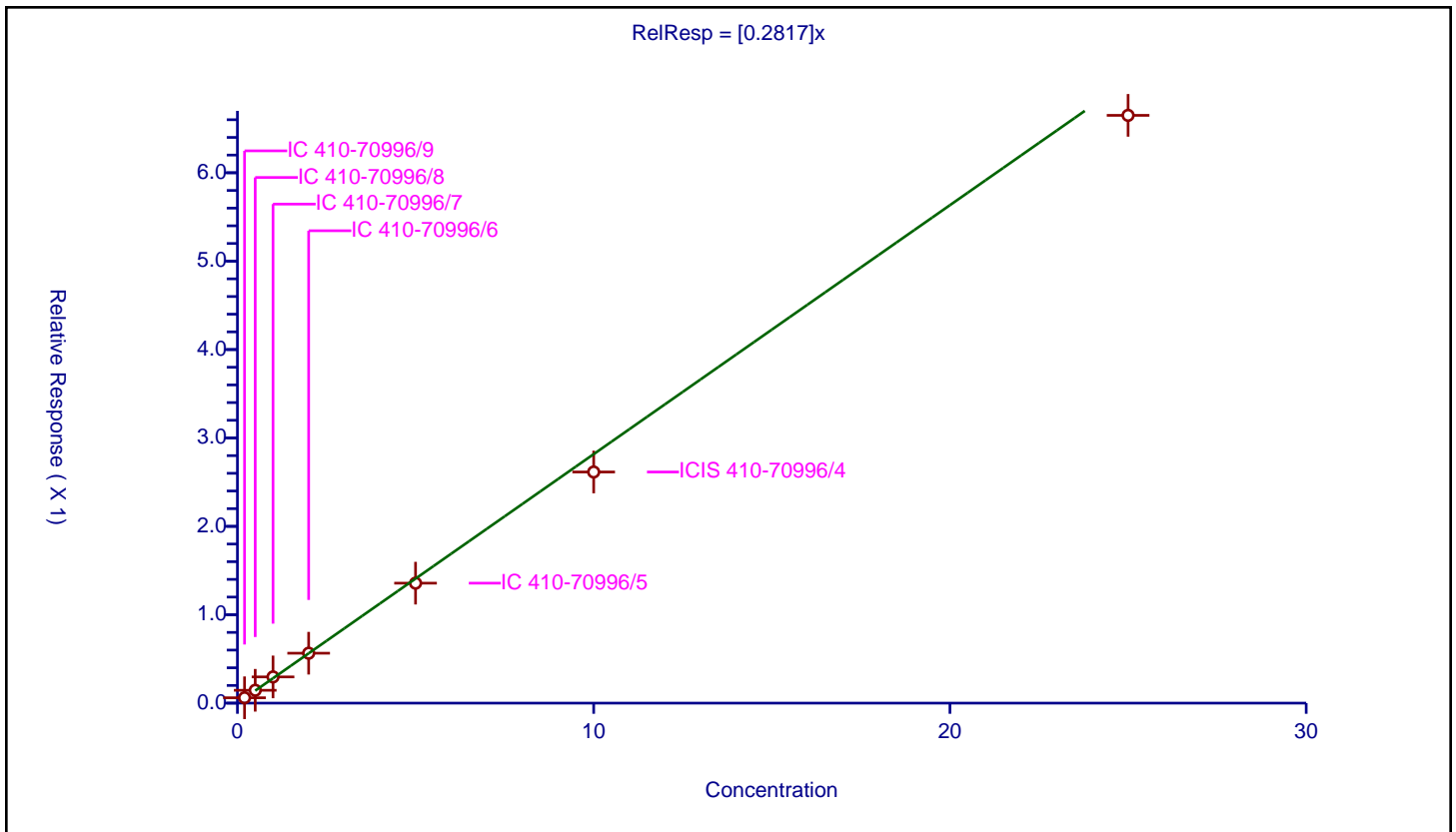
/ 1,2-Dichloro-1,1,2-trifluoroethane

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

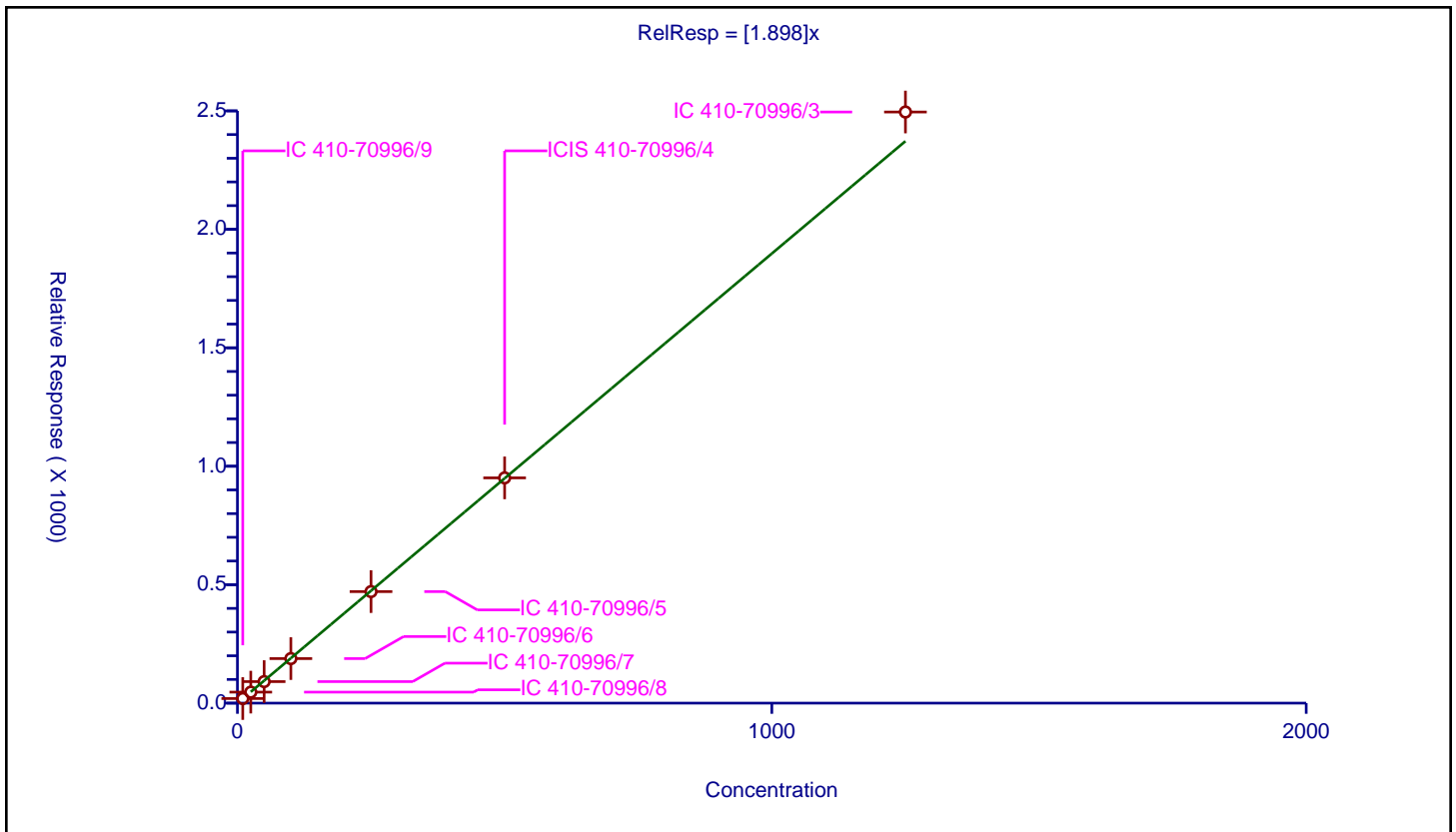
/ Acrolein

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

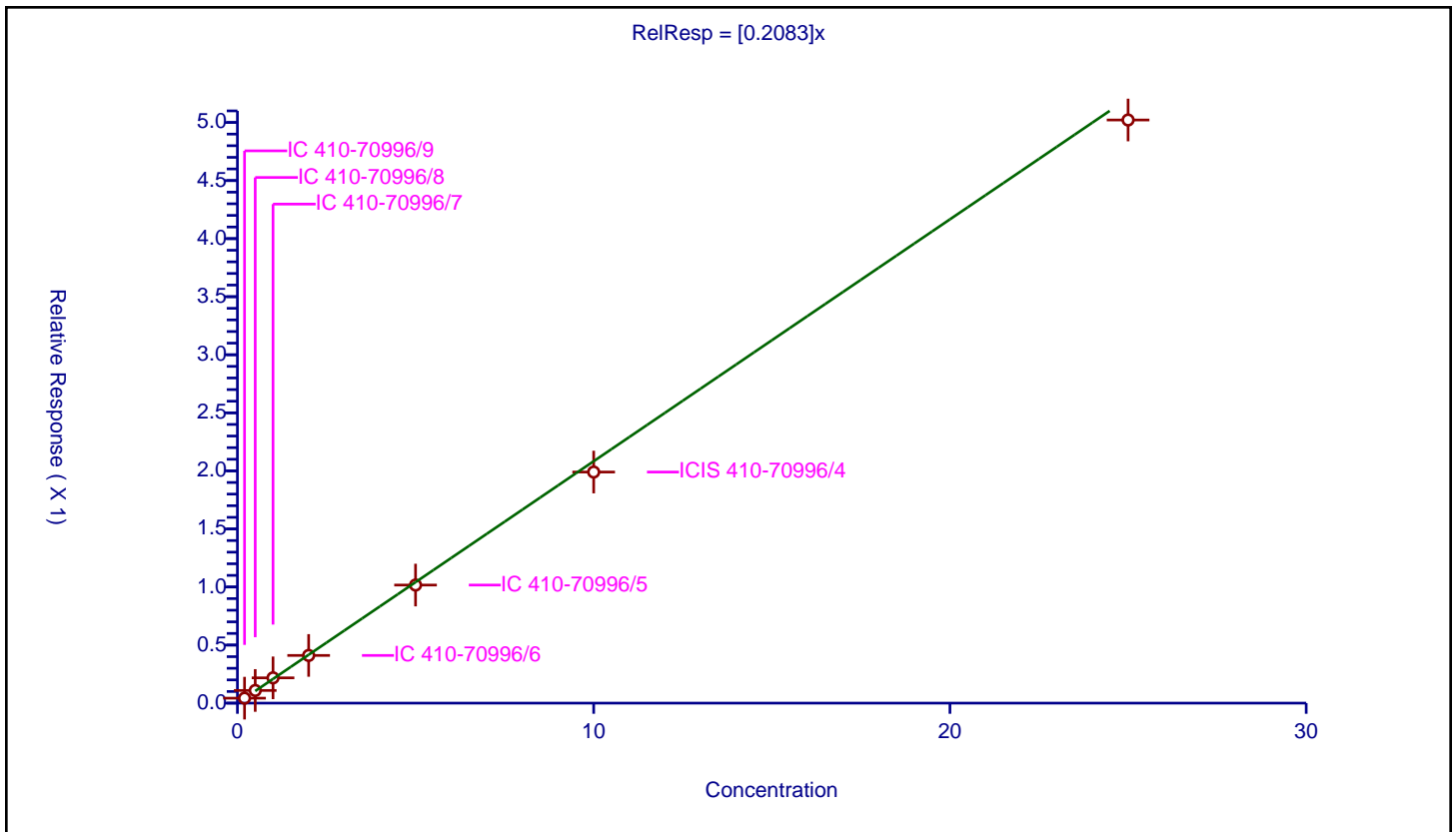
/ 1,1-Dichloroethene

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

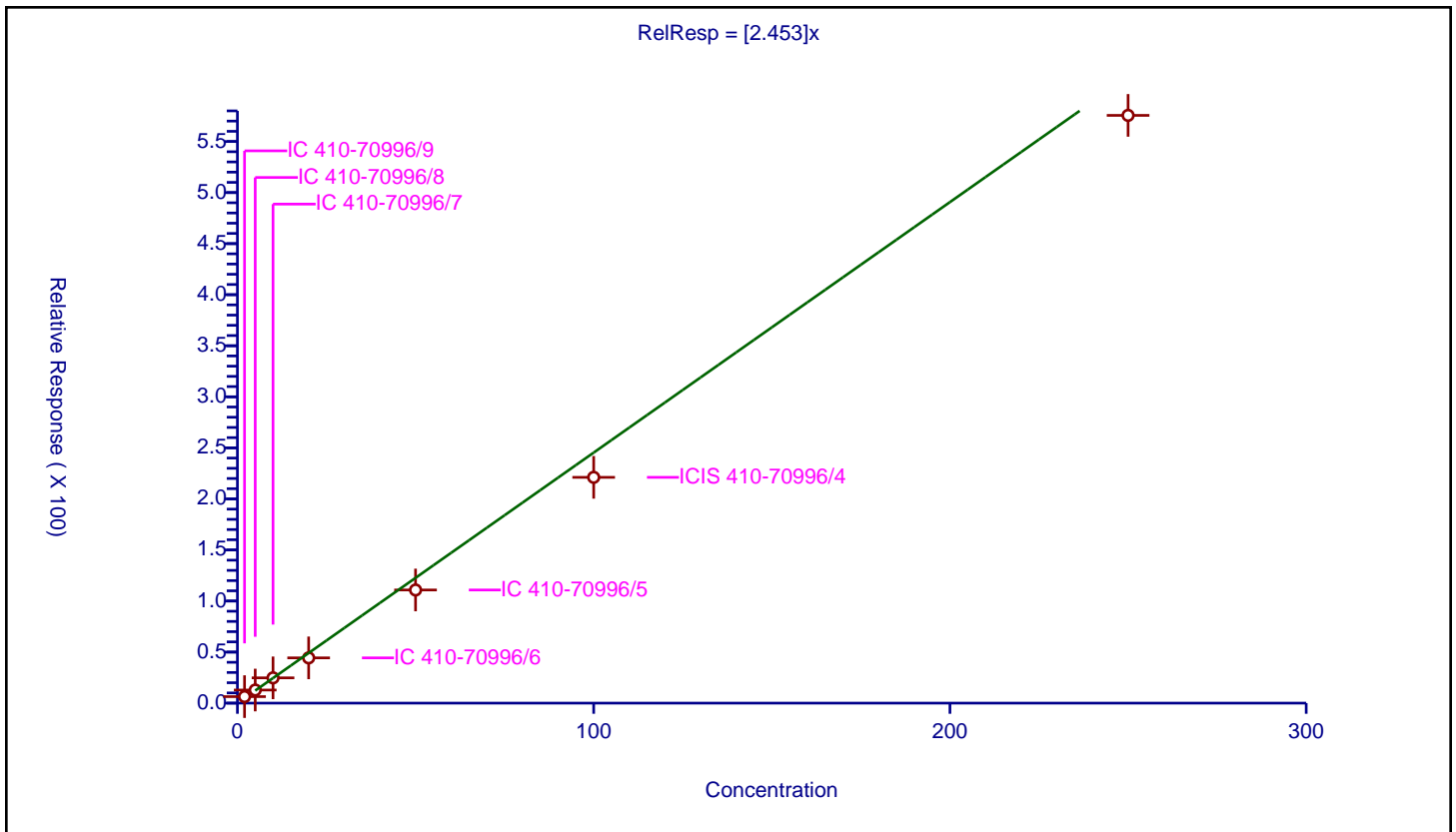
/ Acetone

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

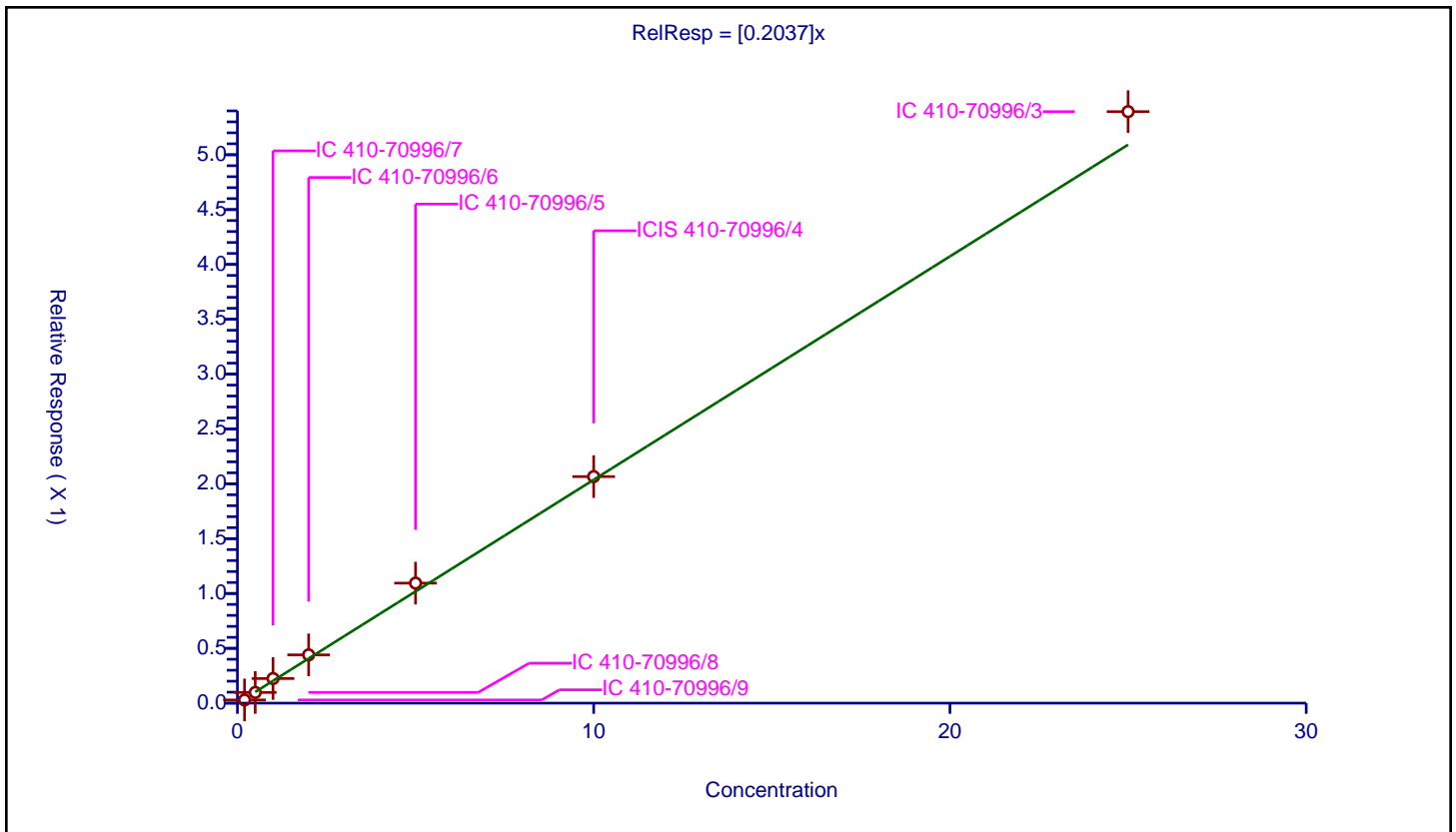
/ 1,1,2-Trichloro-1,2,2-trifluoroethane

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

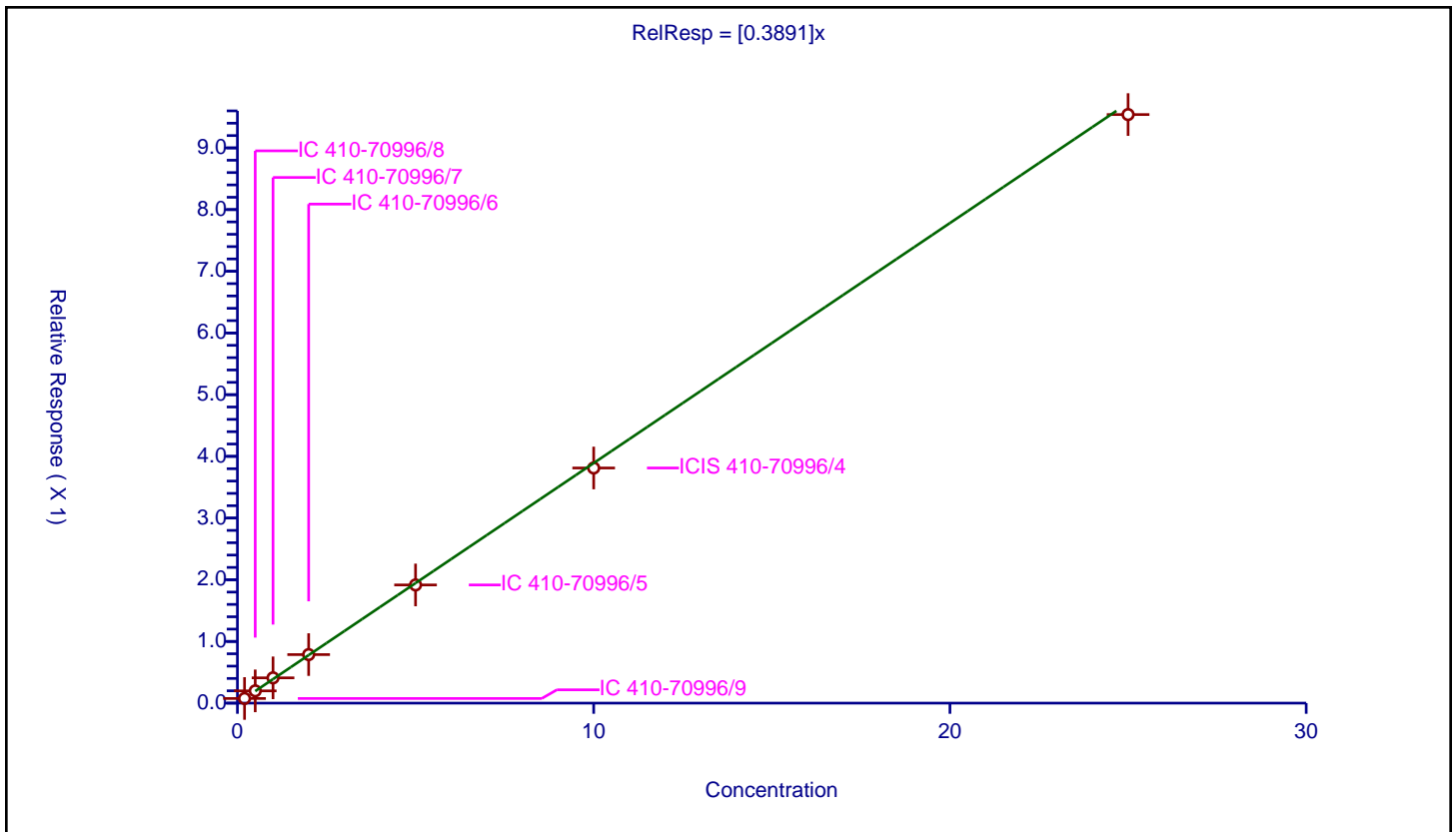
/ Iodomethane

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

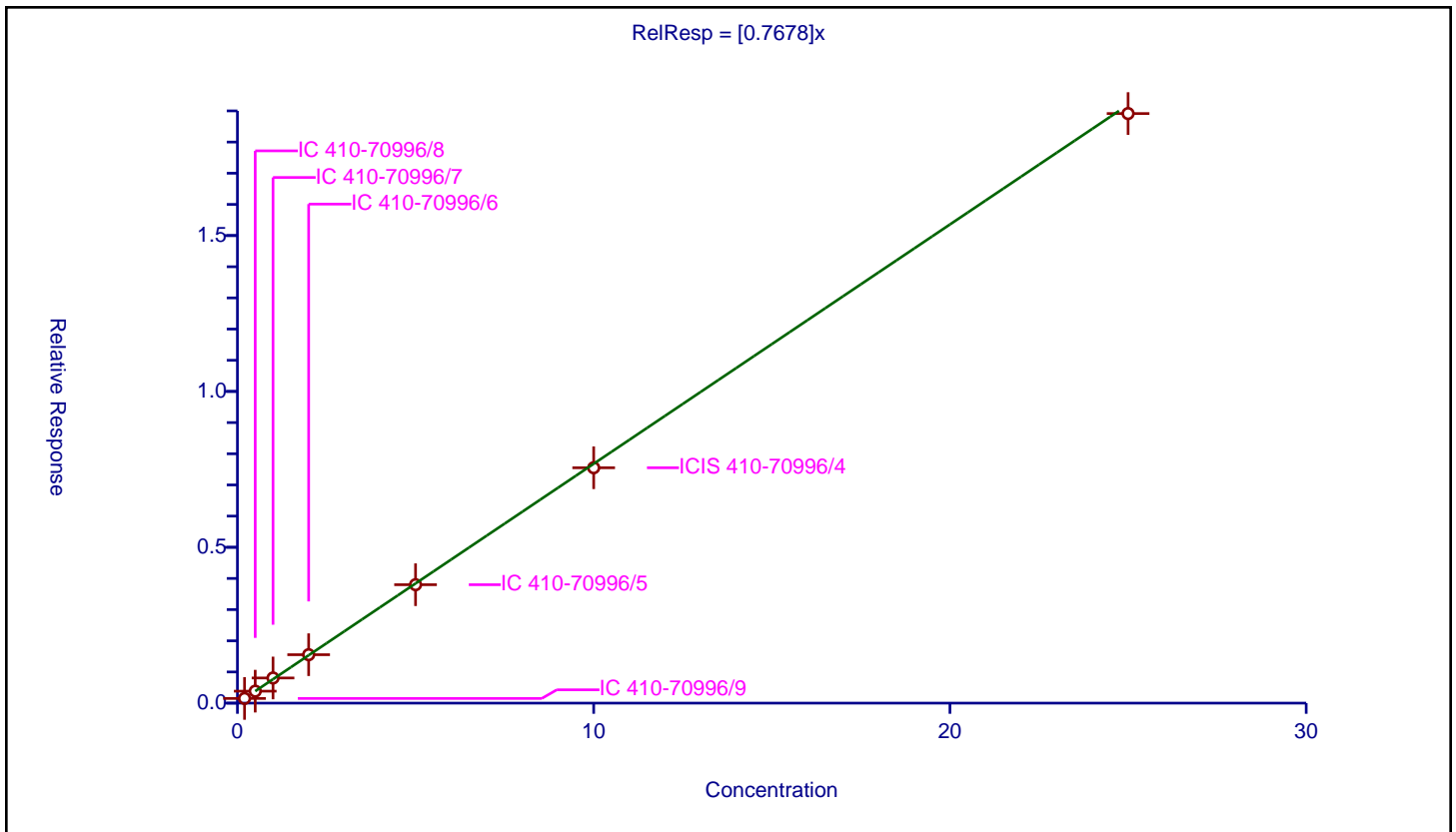
/ Carbon disulfide

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

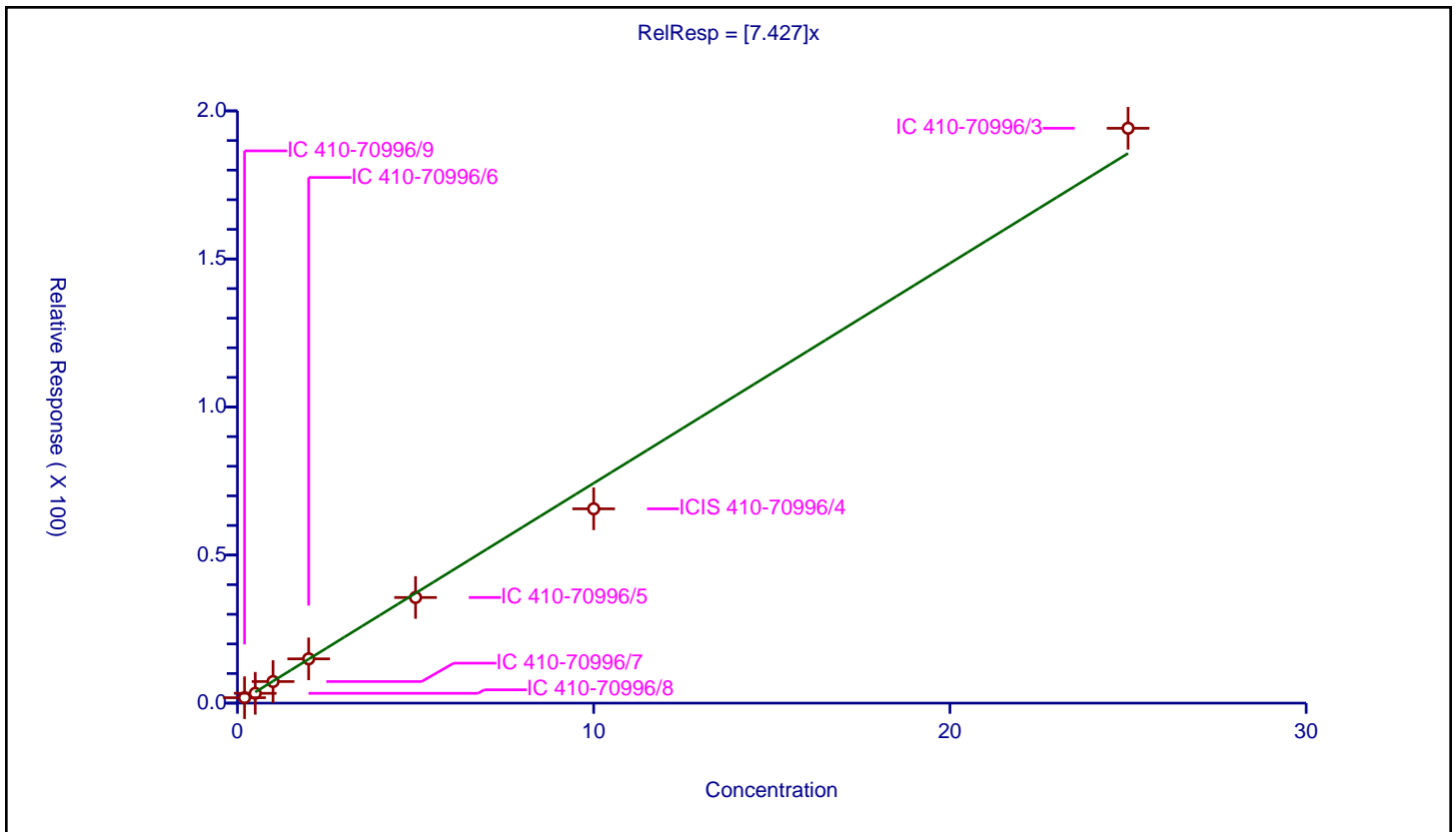
/ Methyl acetate

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

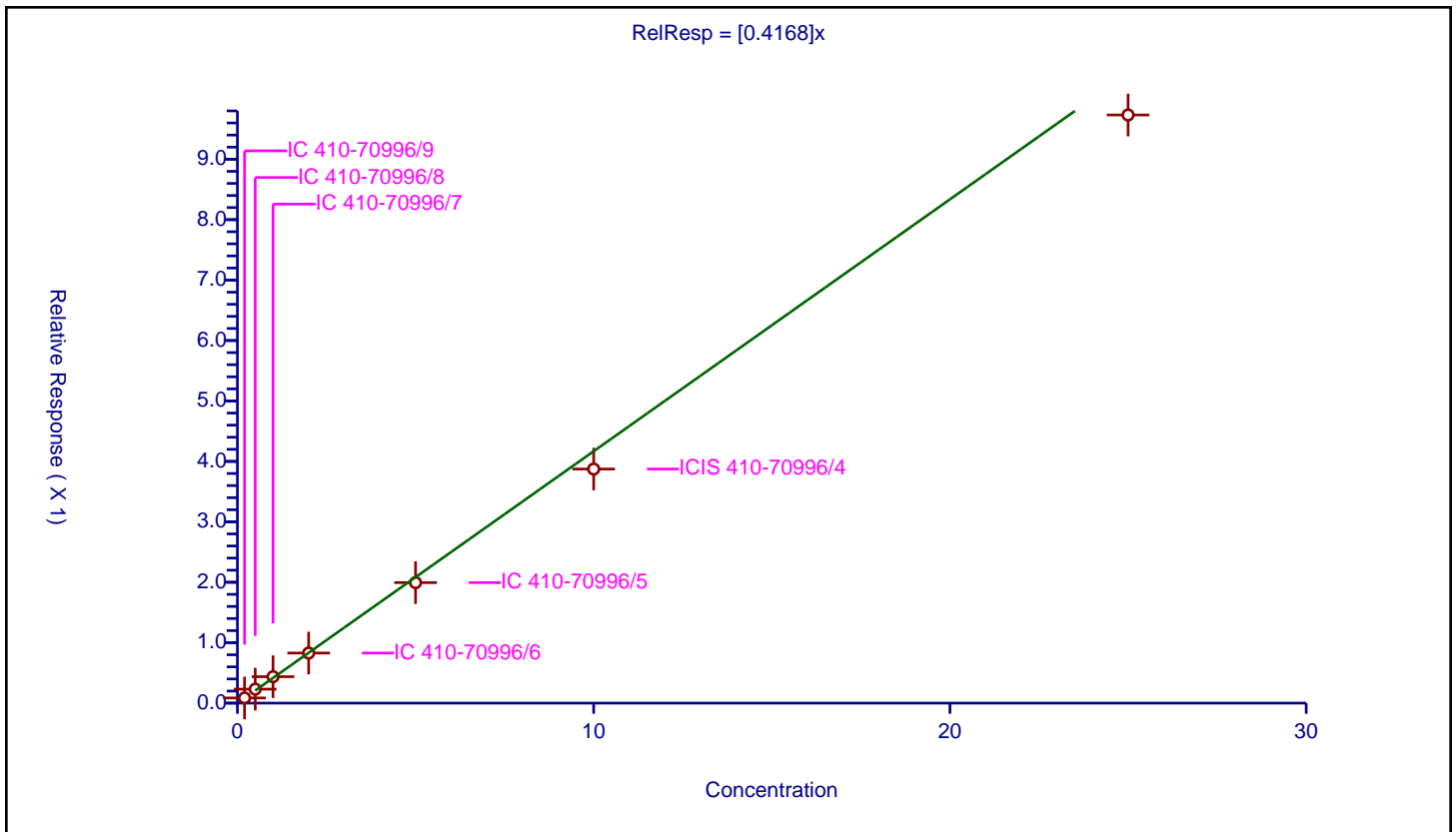
/ 3-Chloro-1-propene

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

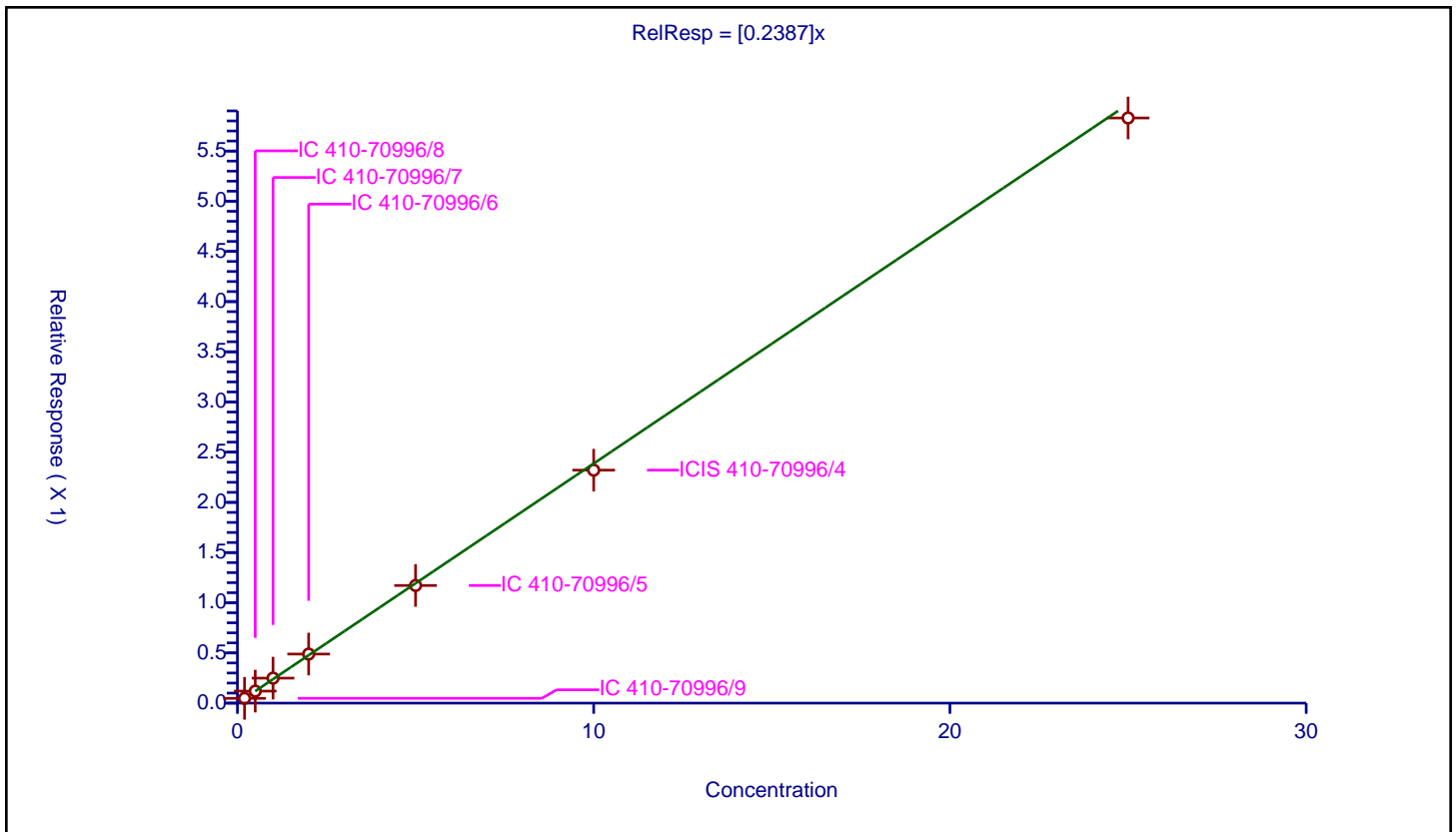
/ Methylene Chloride

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

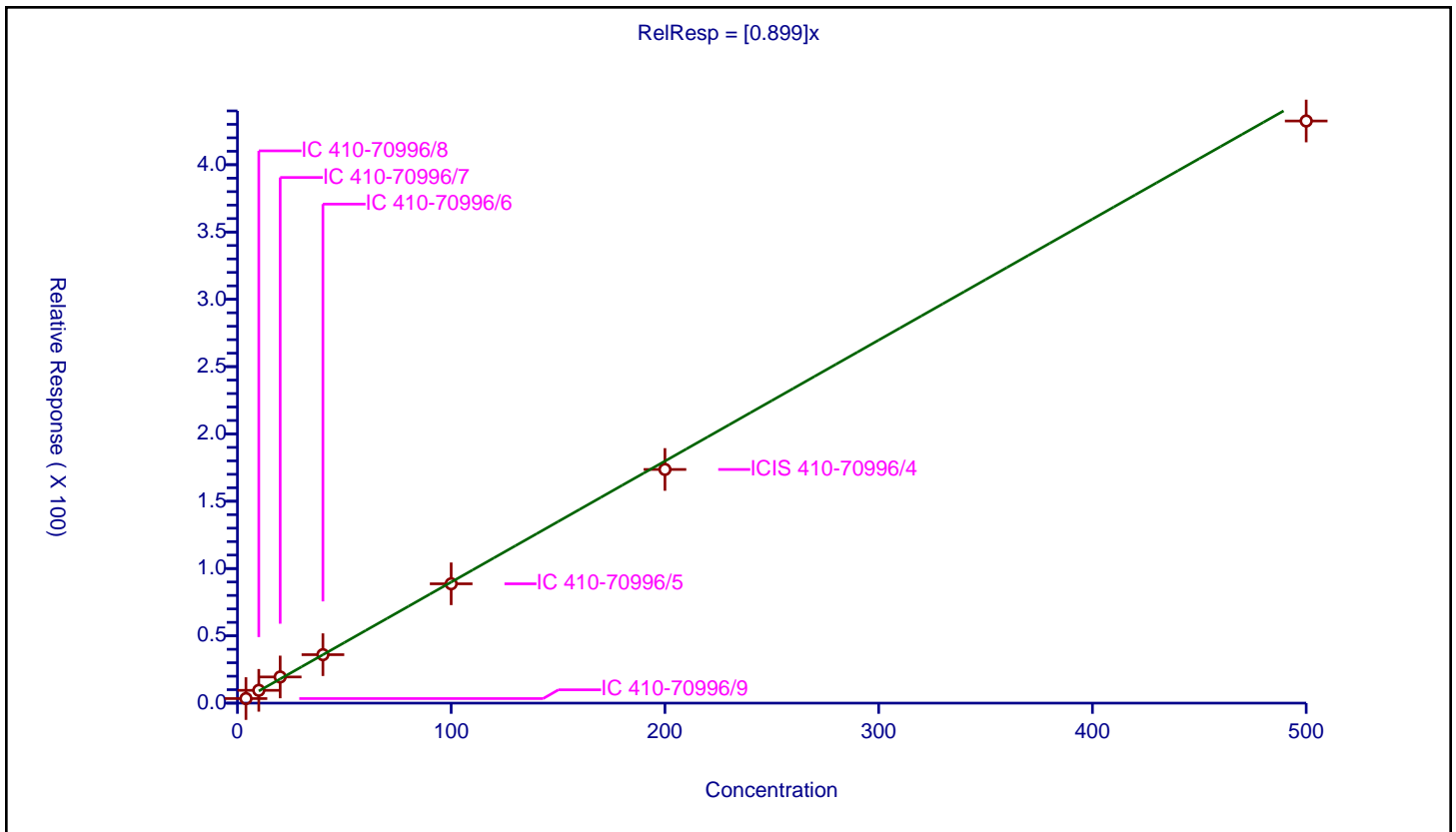
/ 2-Methyl-2-propanol

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

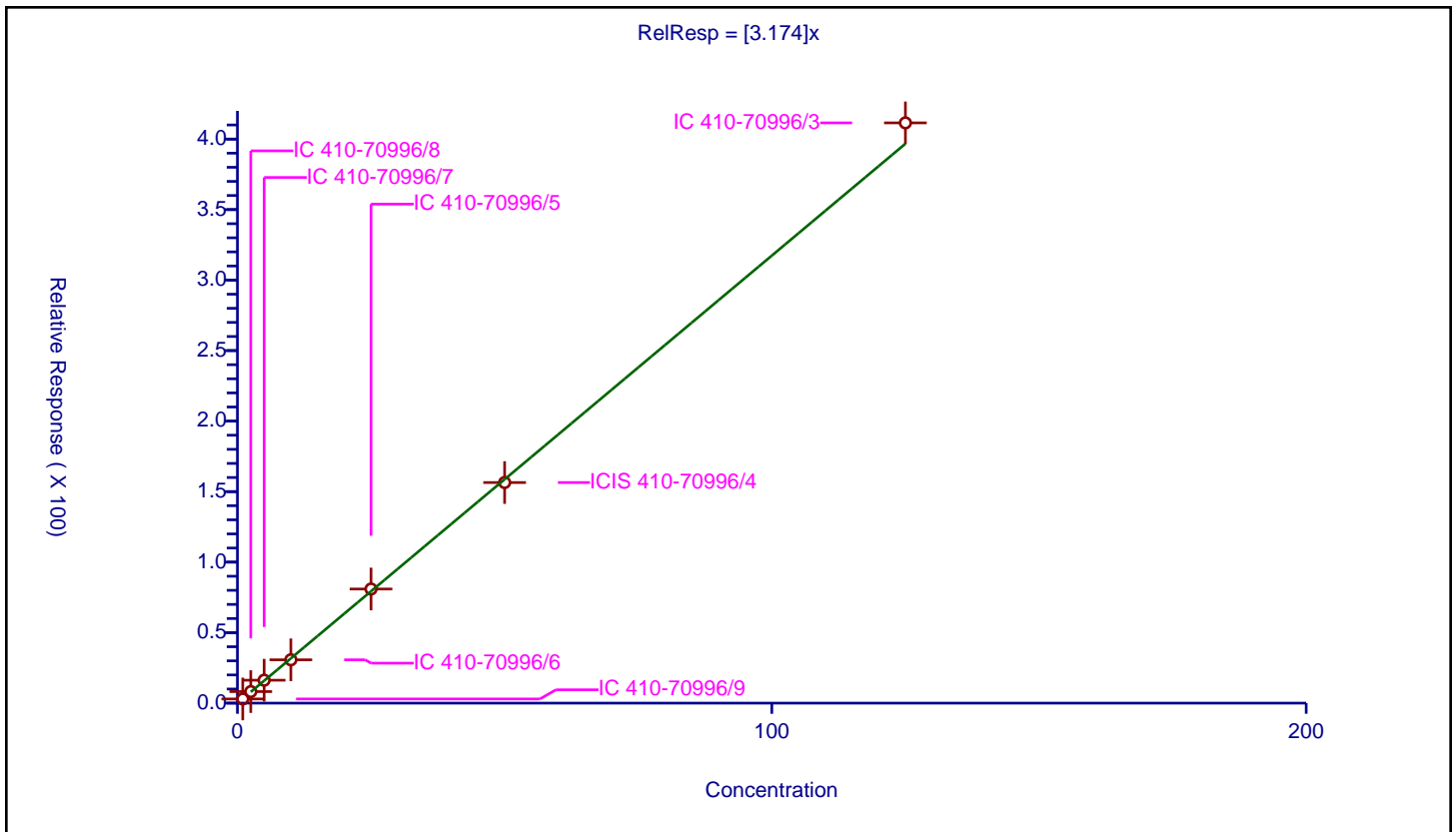
/ Acrylonitrile

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

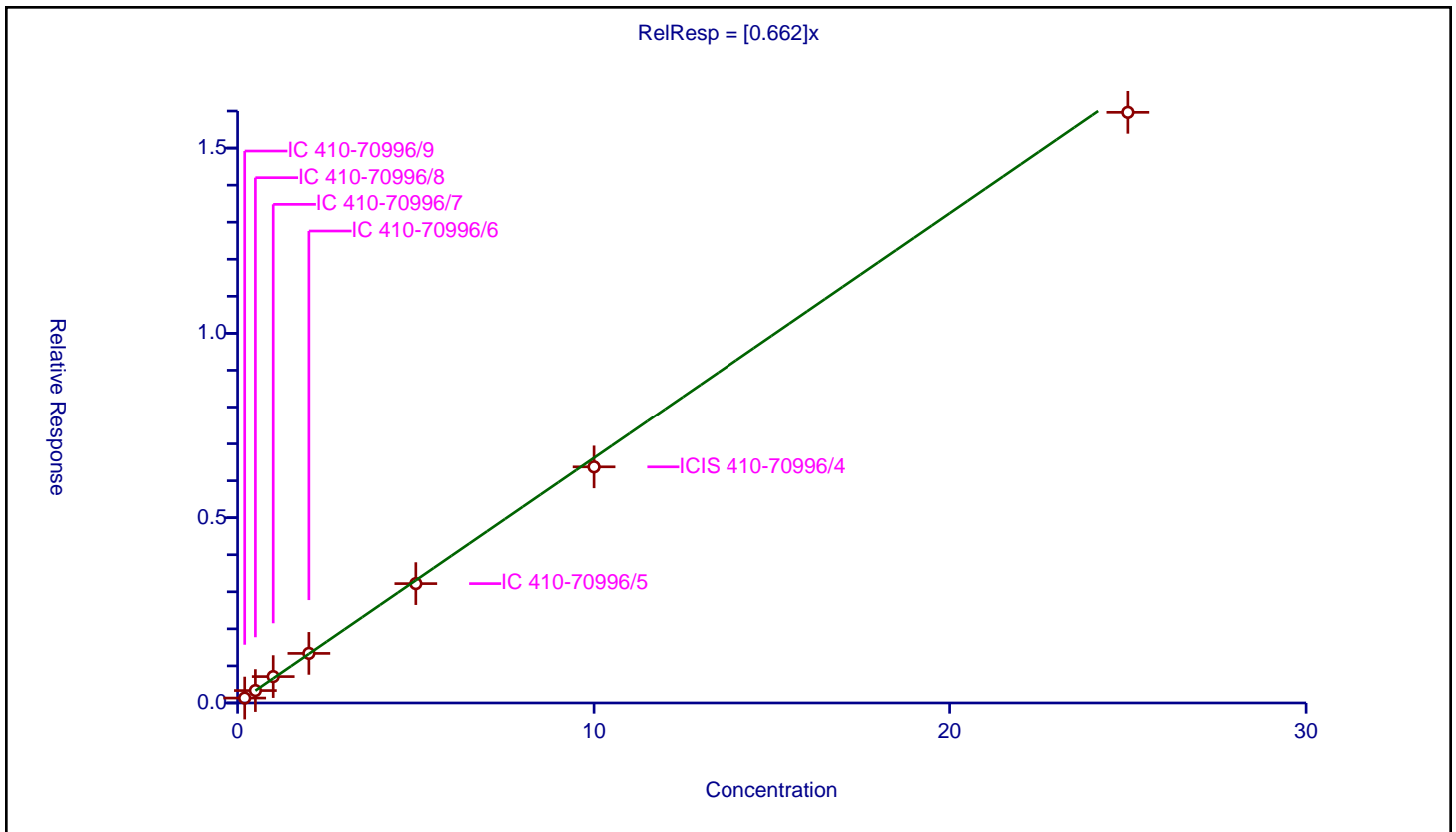
/ Methyl tert-butyl ether

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

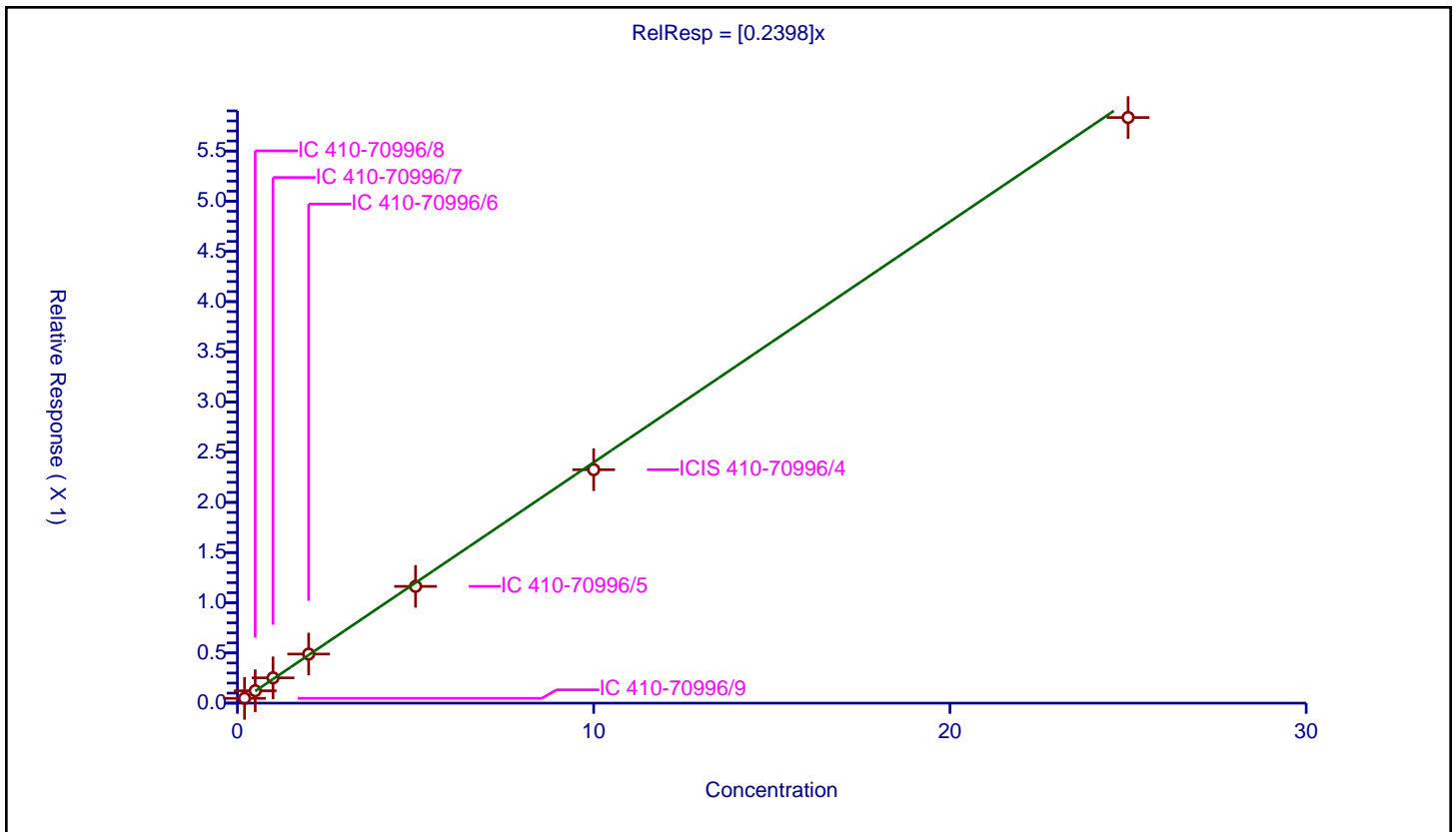
/ trans-1,2-Dichloroethene

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

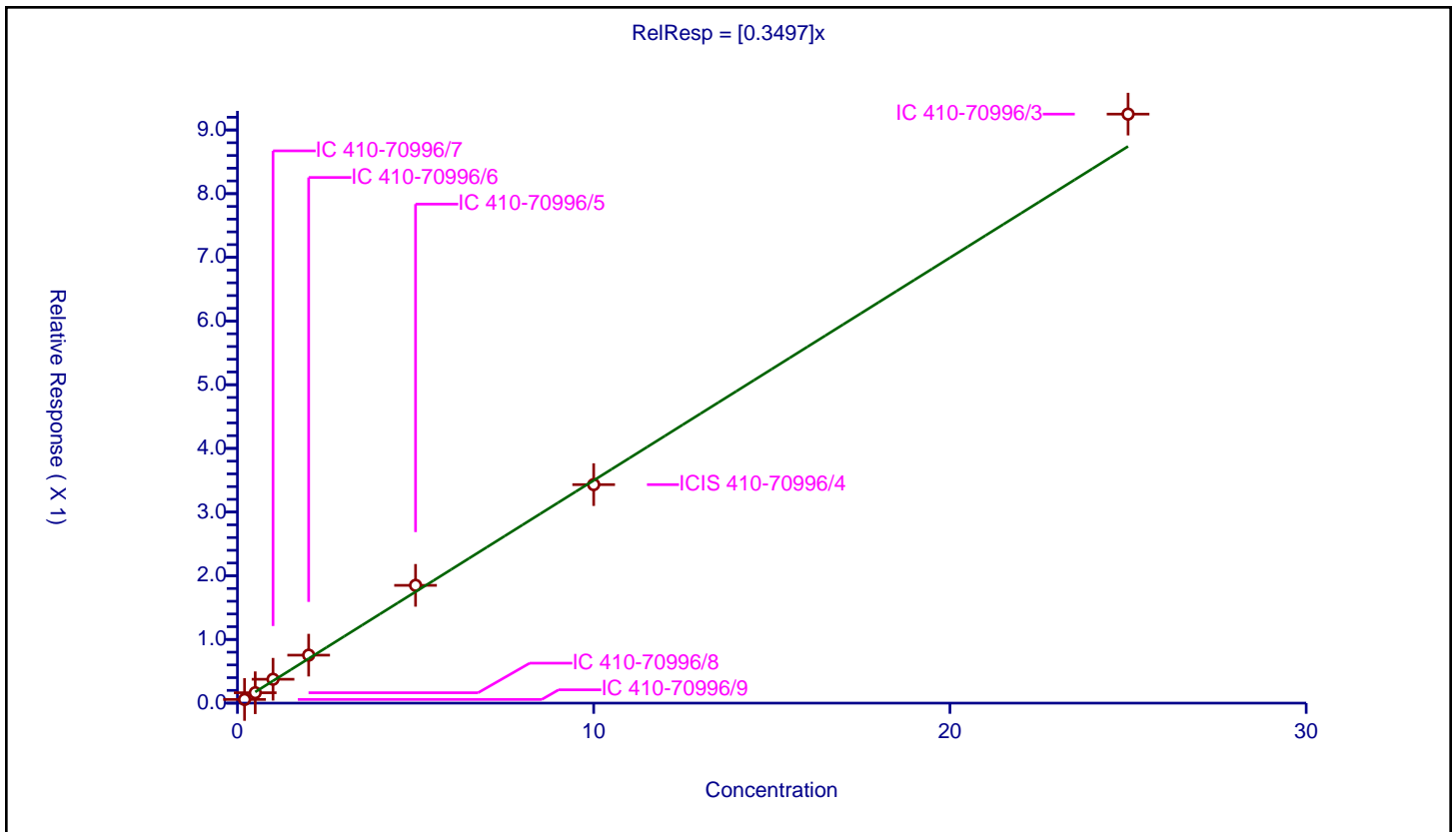
/ Hexane

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

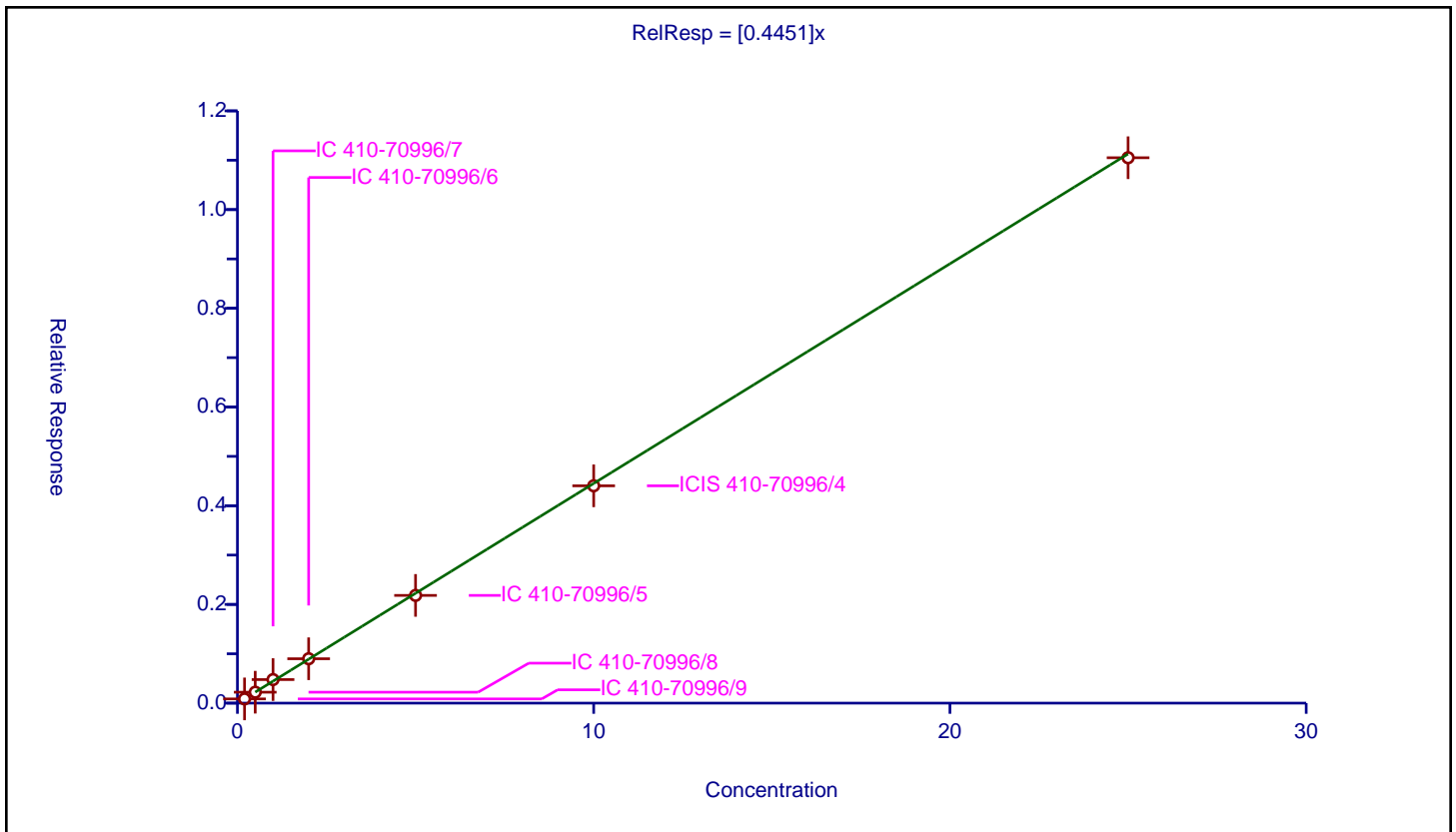
/ 1,1-Dichloroethane

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

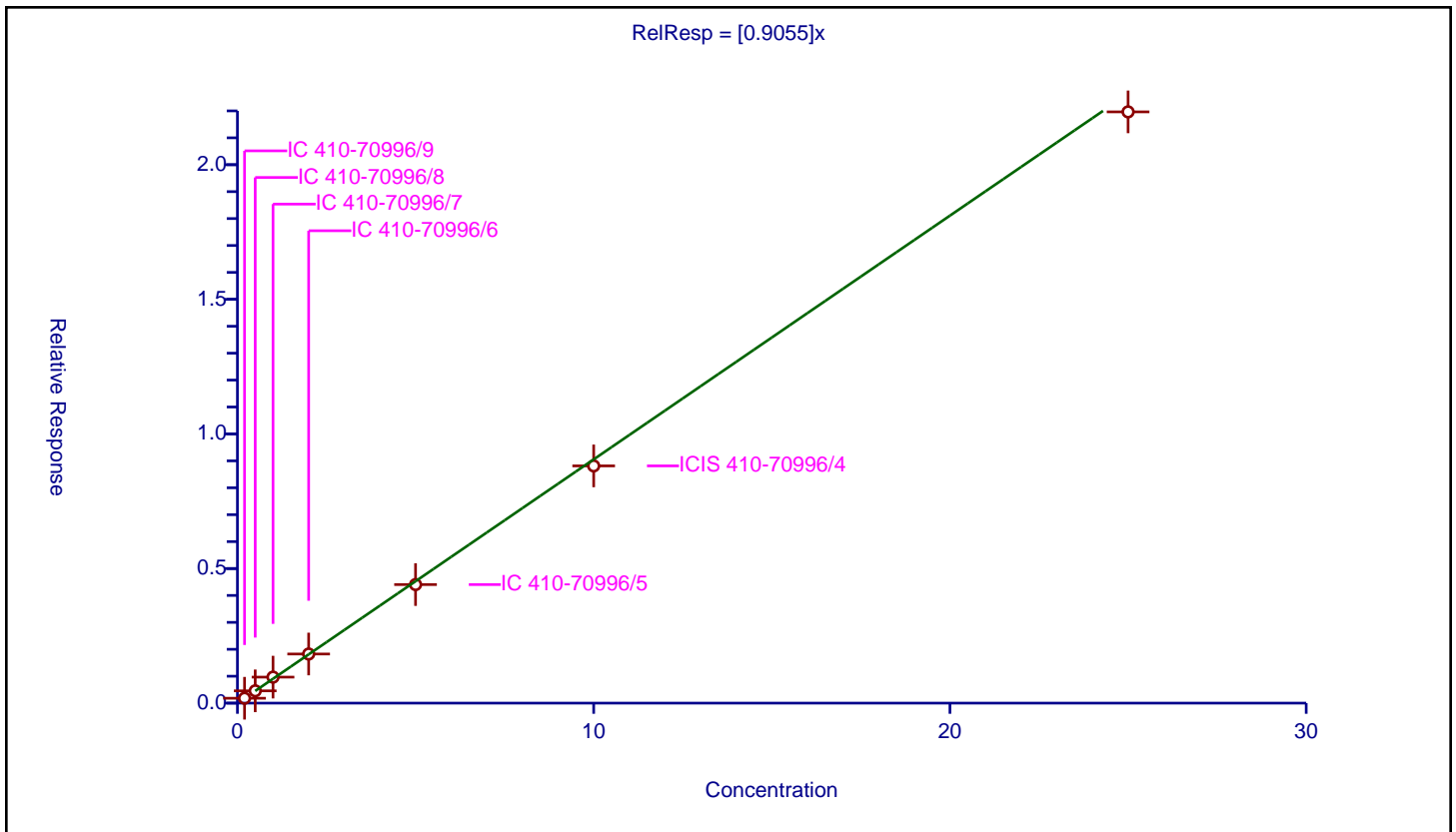
/ Isopropyl ether

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

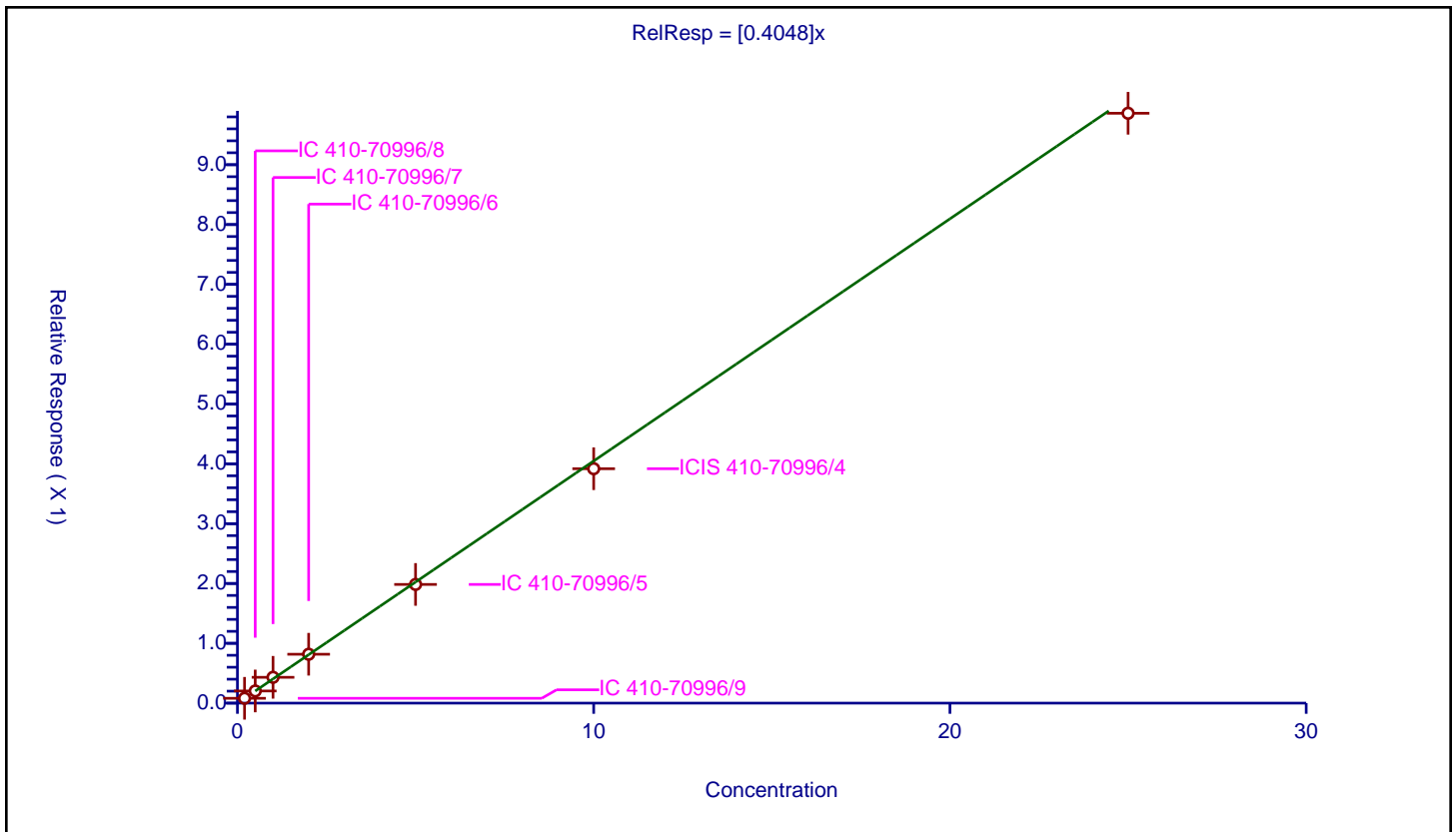
/ 2-Chloro-1,3-butadiene

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

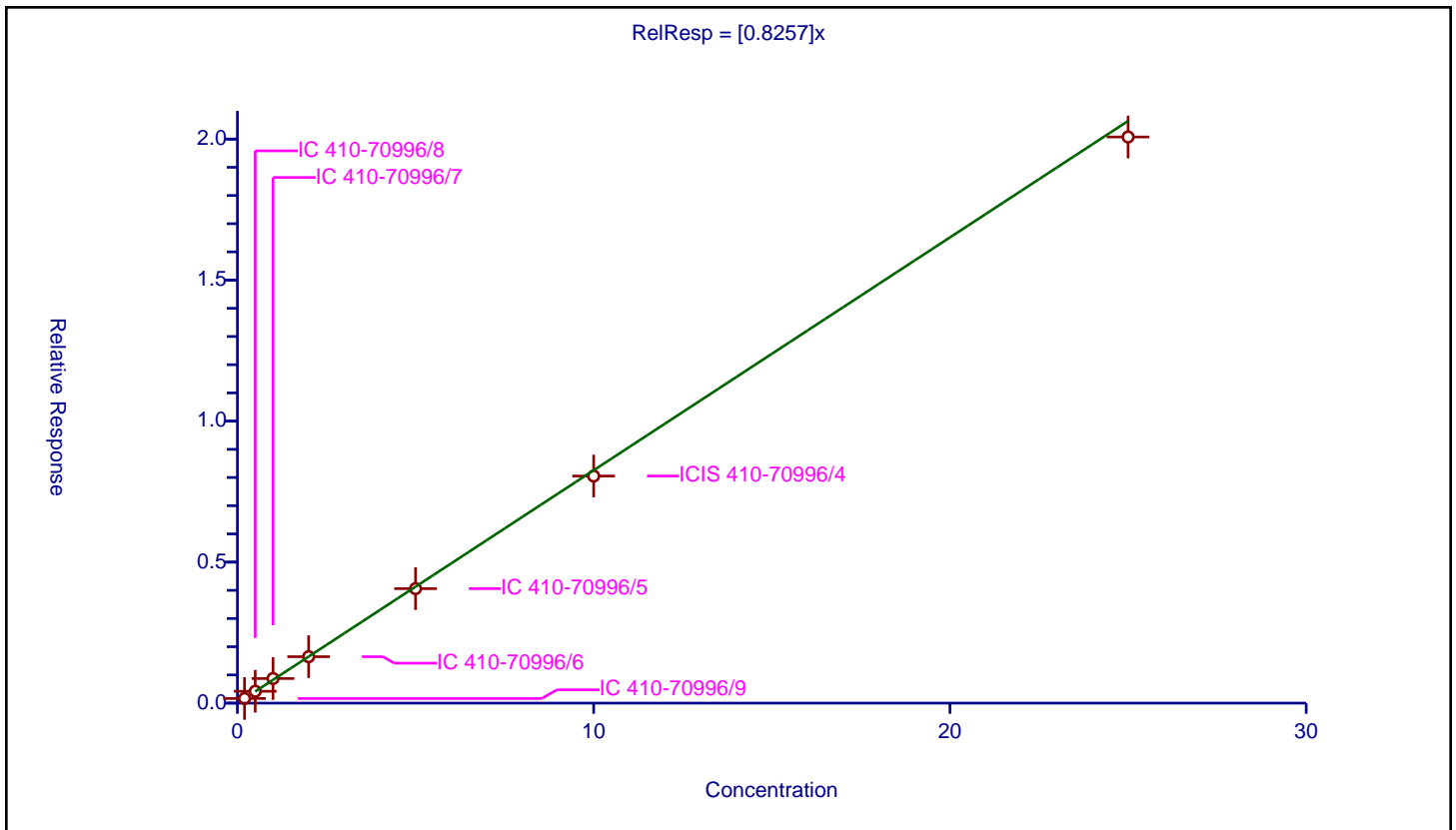
/ Tert-butyl ethyl ether

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

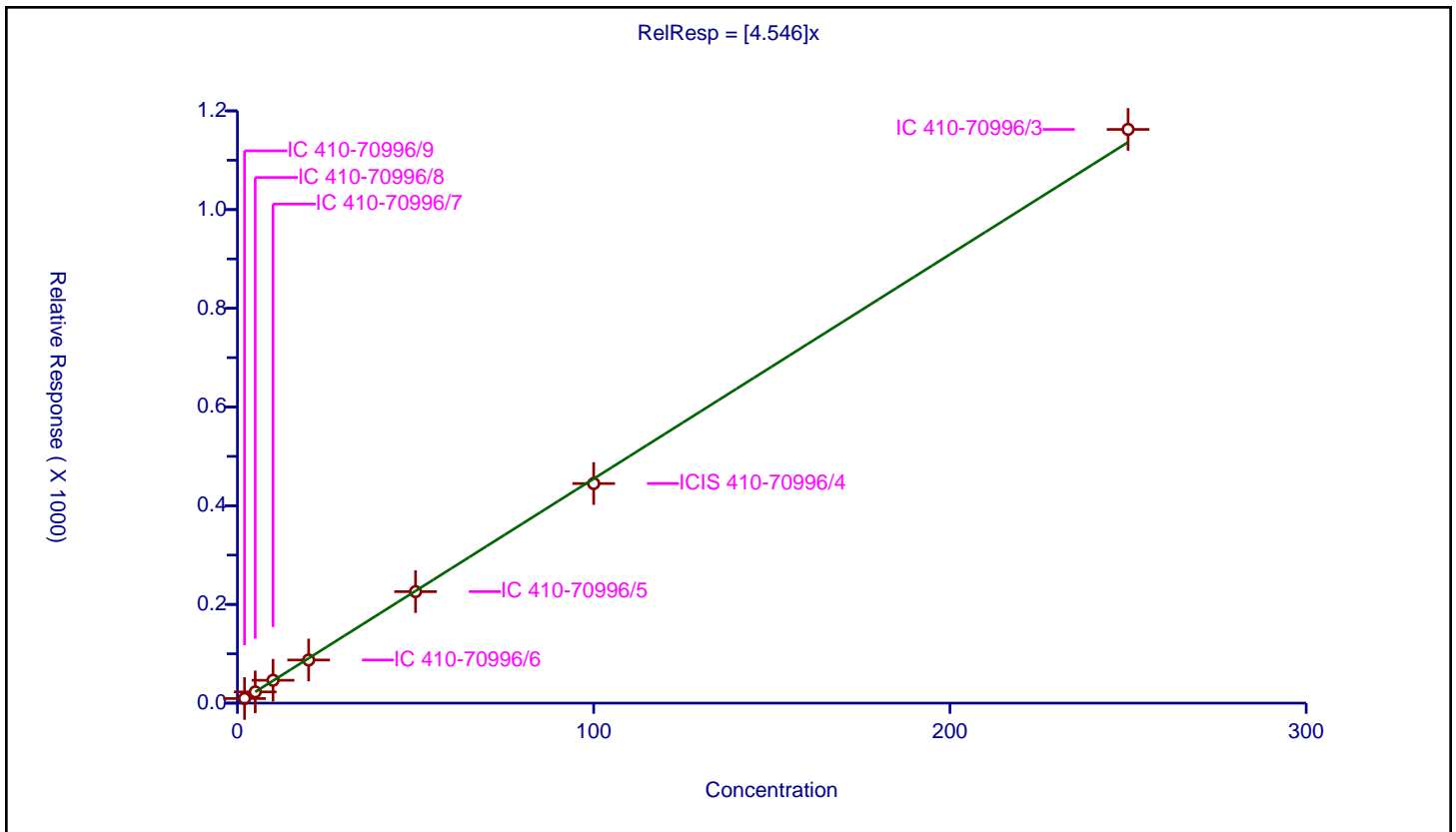
/ 2-Butanone (MEK)

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

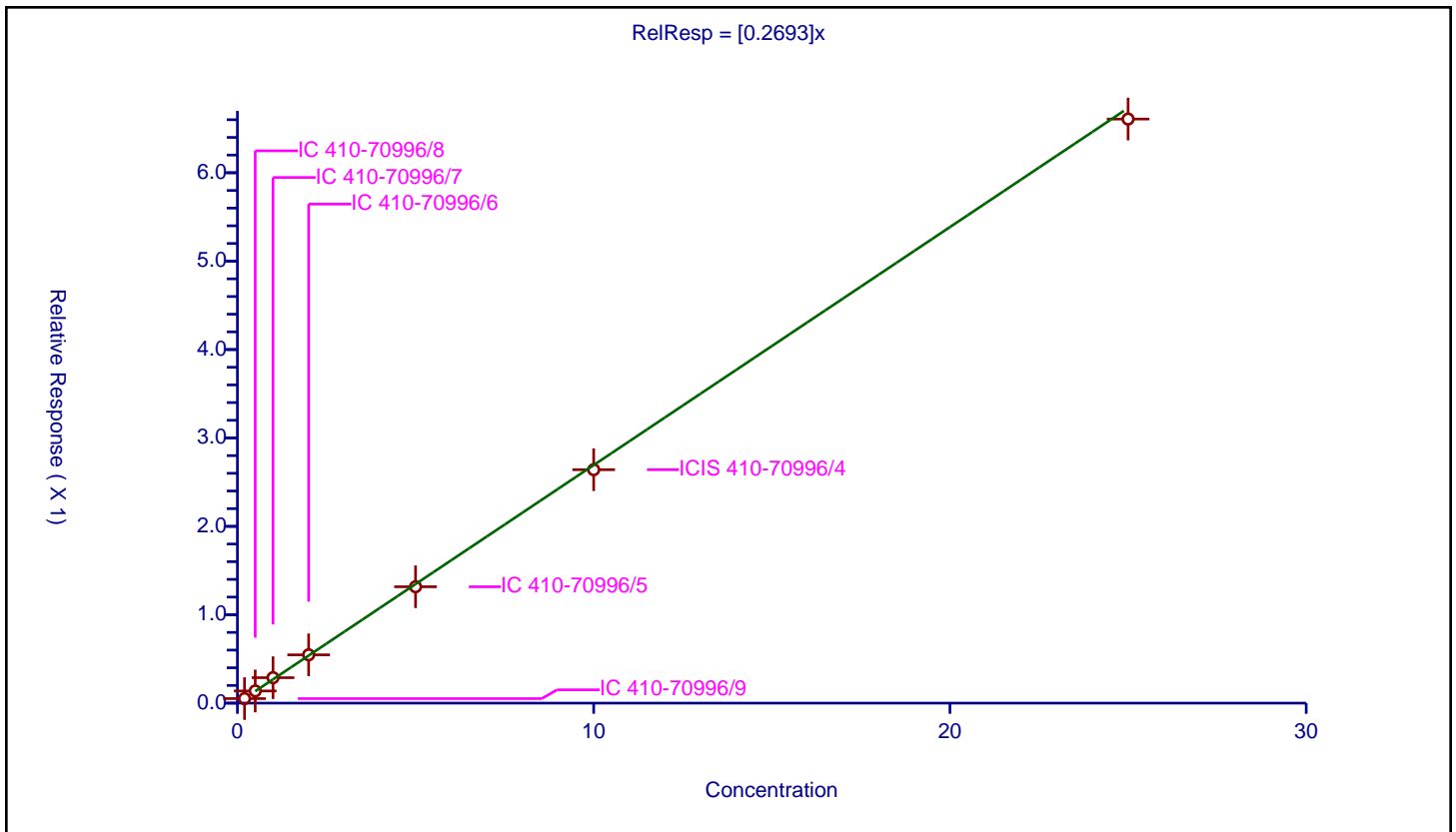
/ cis-1,2-Dichloroethene

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

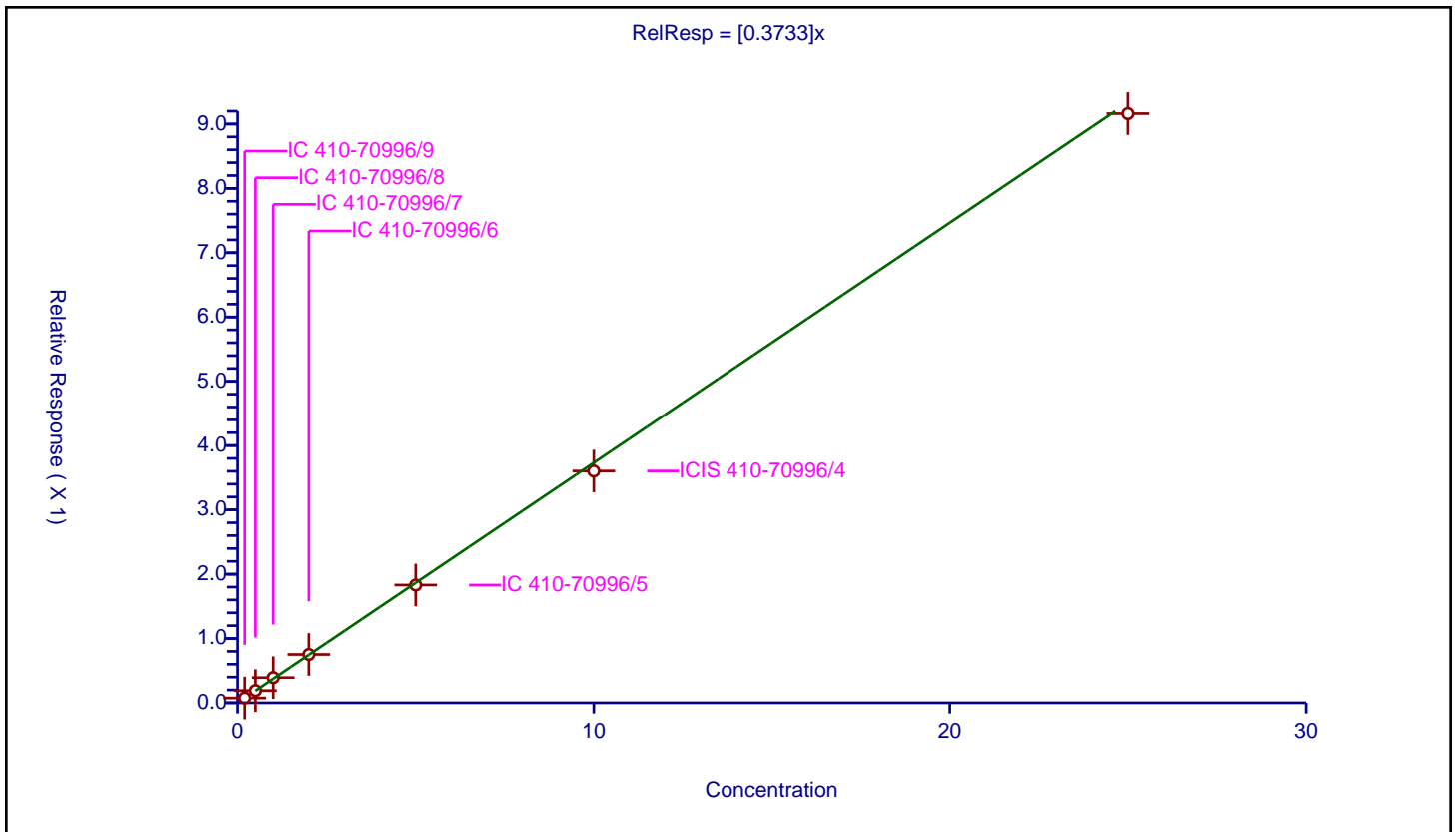
/ 2,2-Dichloropropane

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

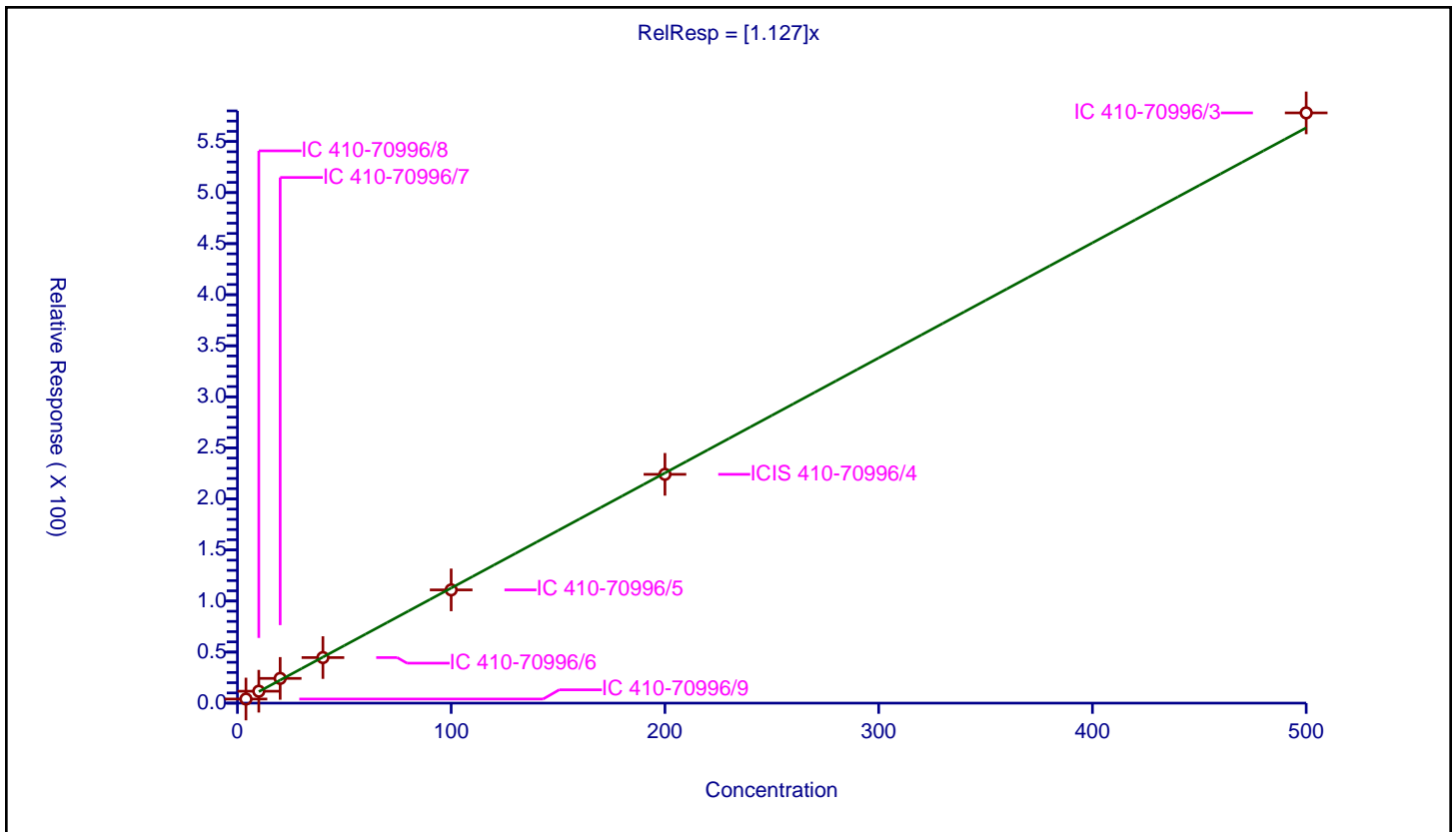
/ Propionitrile

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

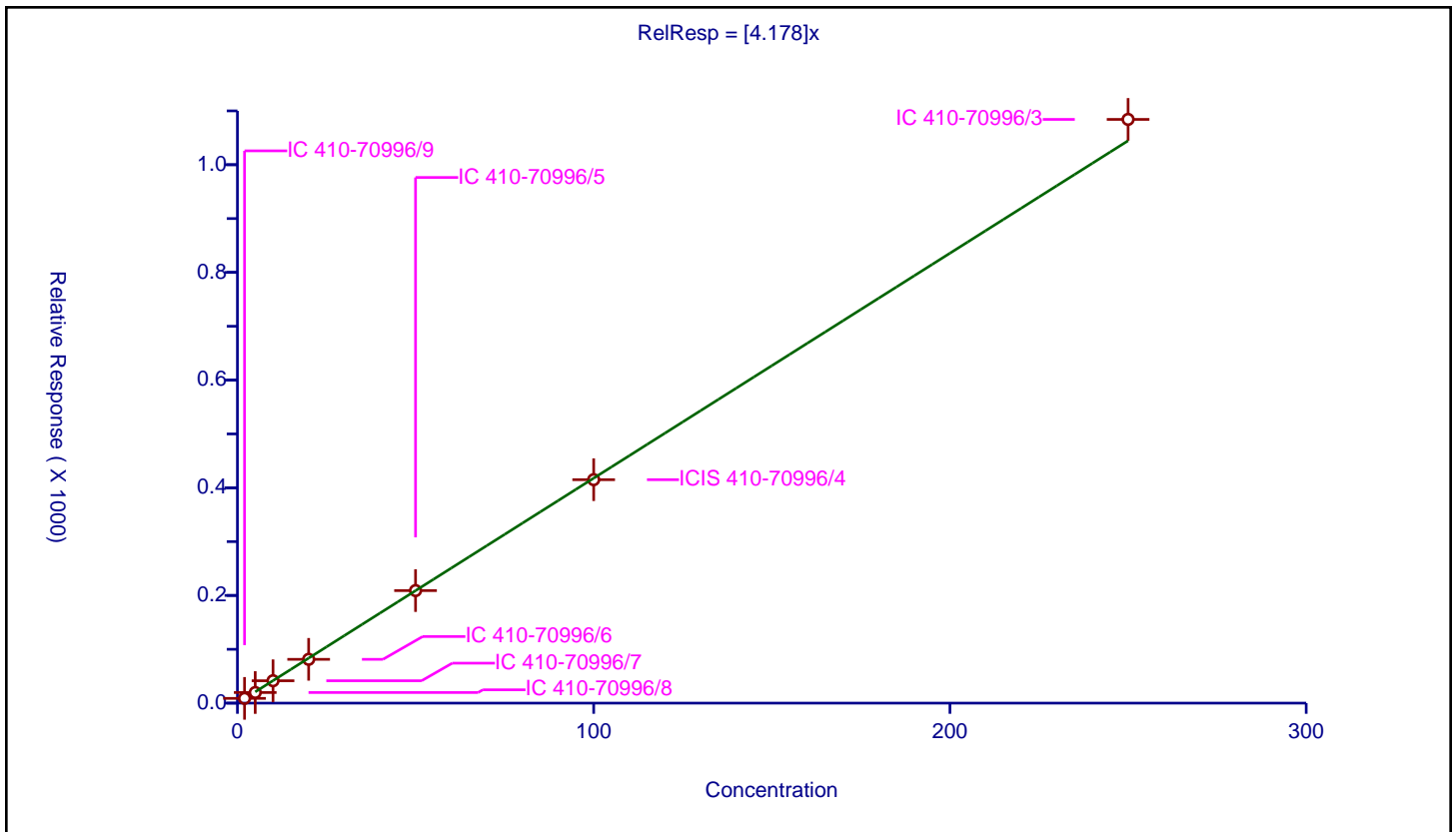
/ Methacrylonitrile

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

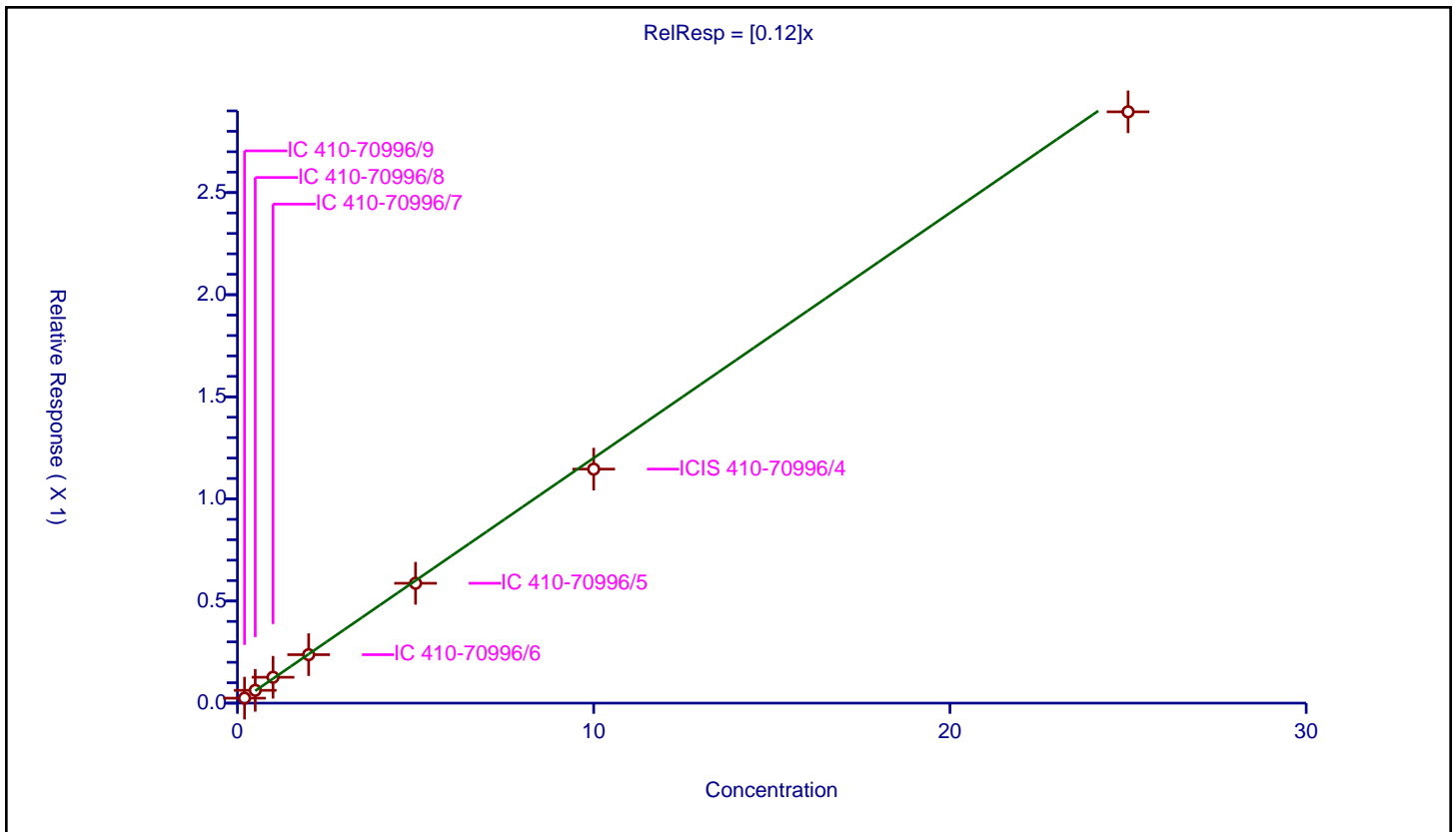
/ Chlorobromomethane

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

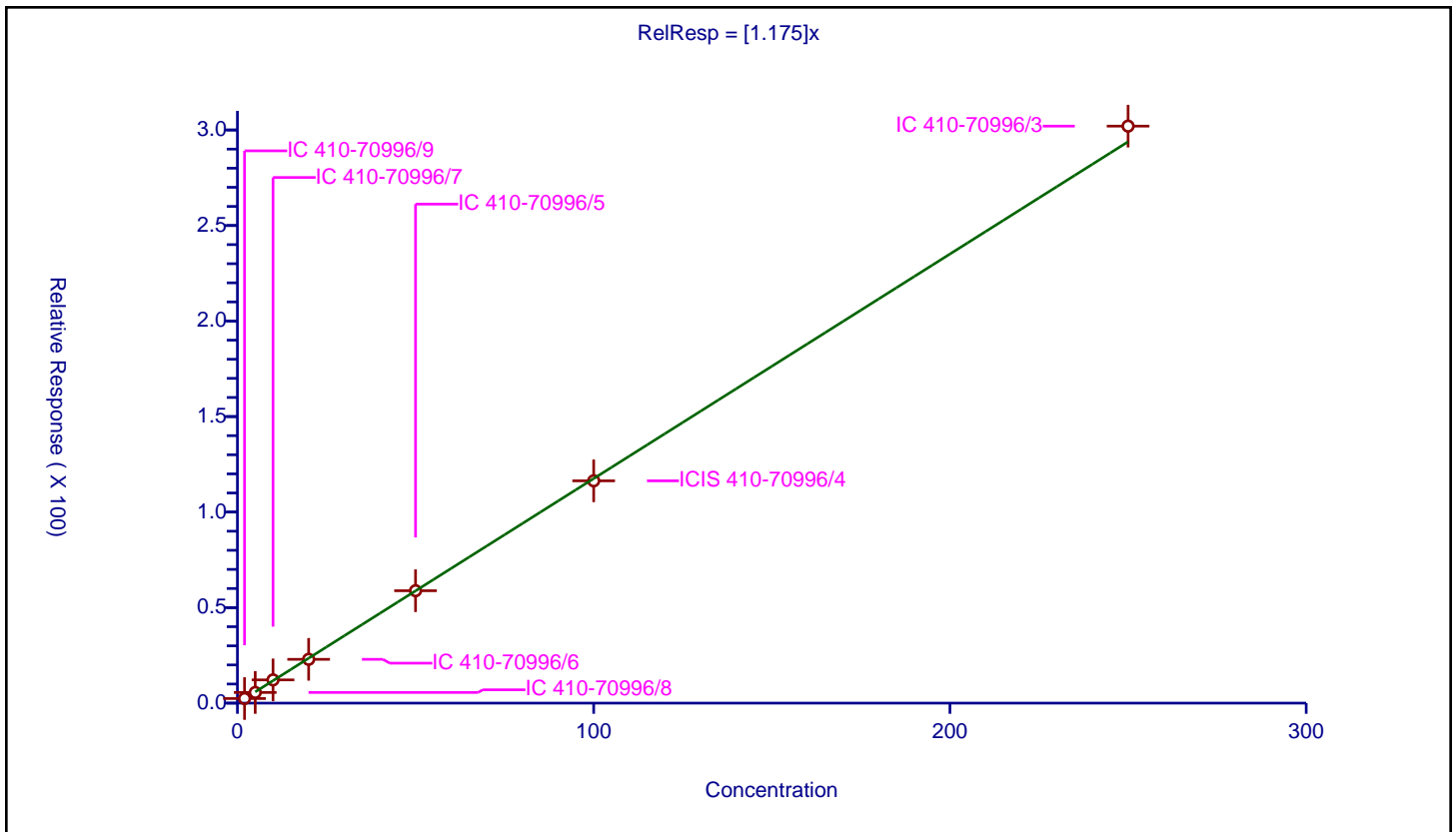
/ Tetrahydrofuran

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

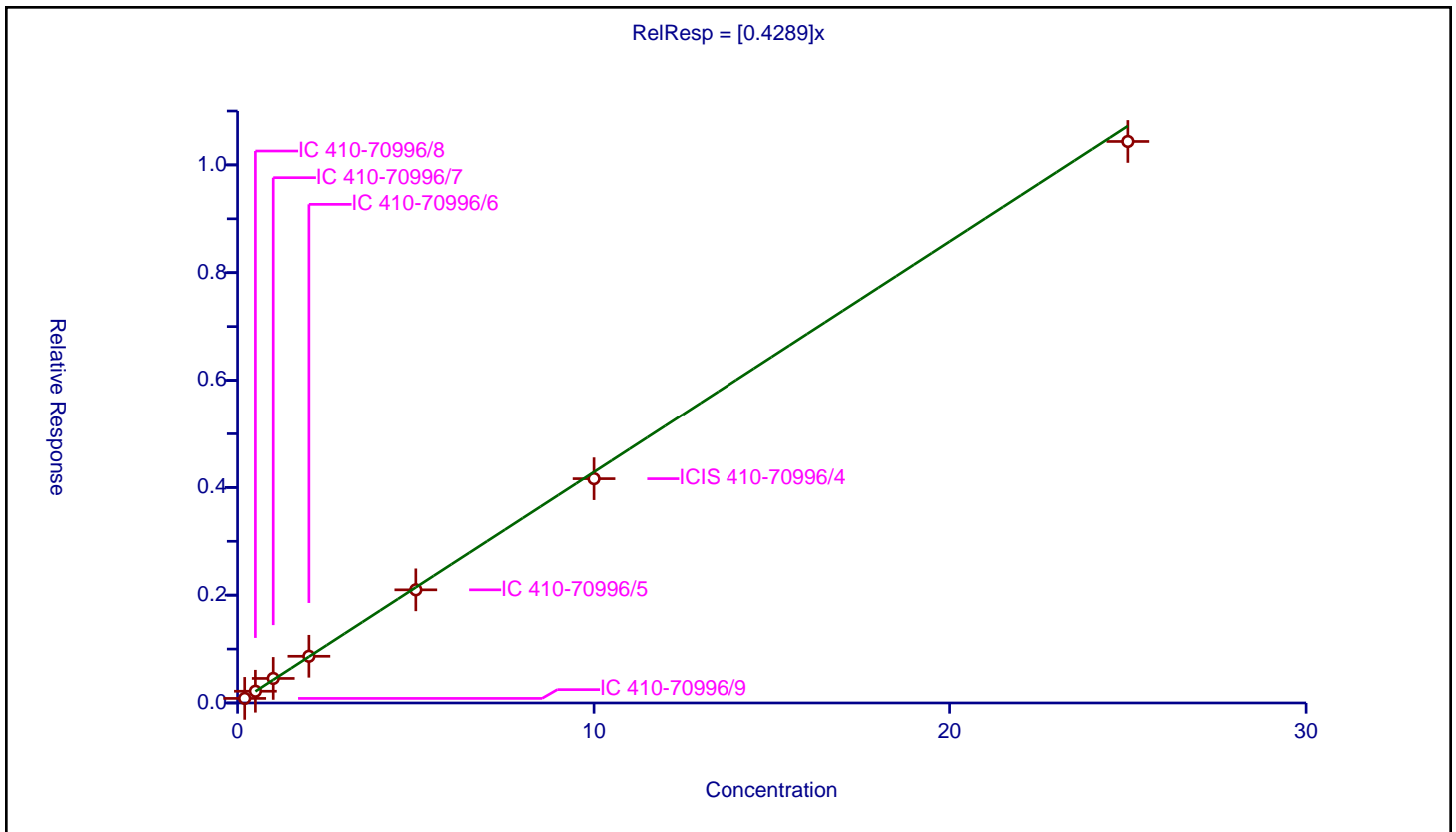
/ Chloroform

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

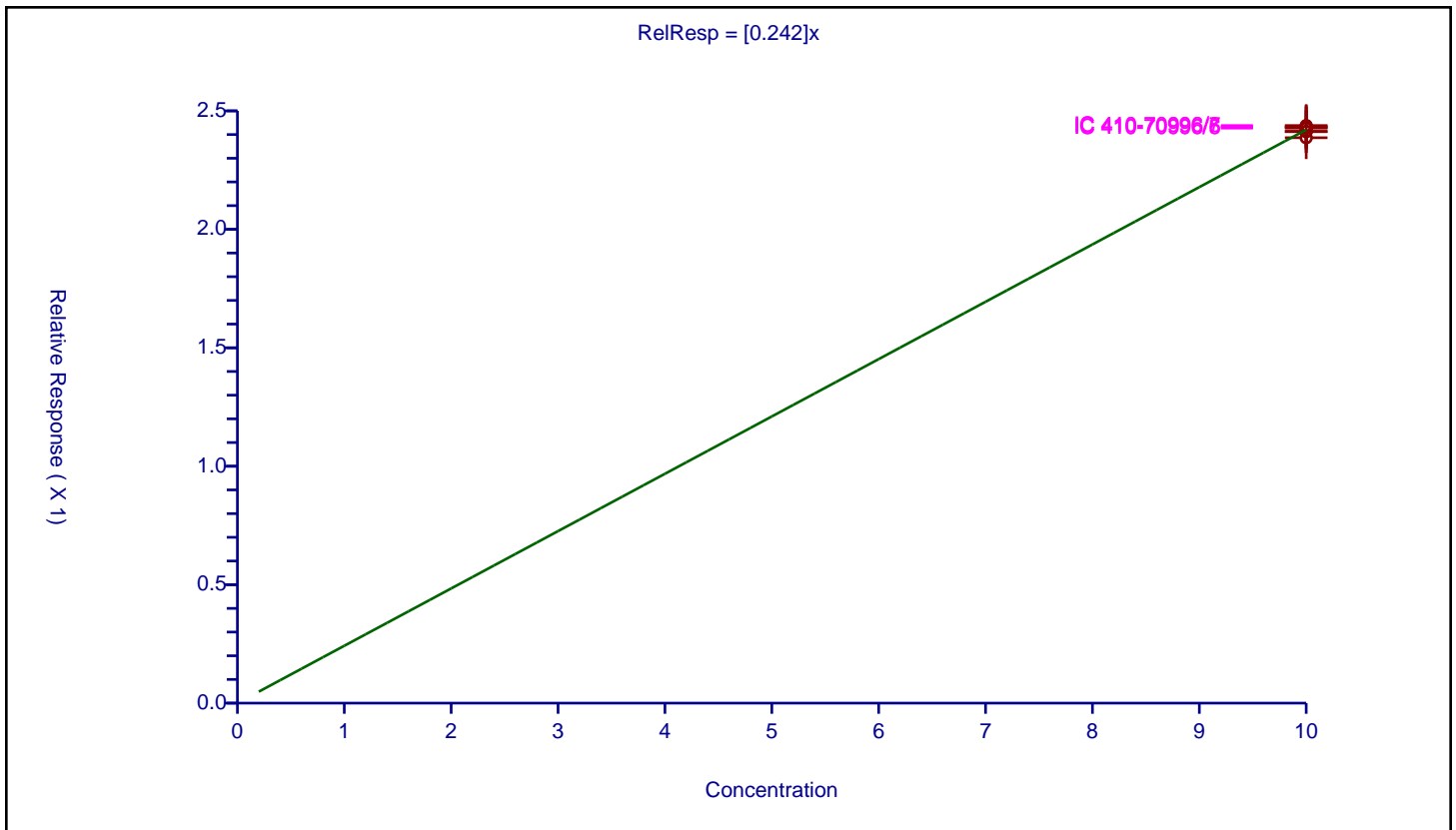
/ Dibromofluoromethane (Surr)

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

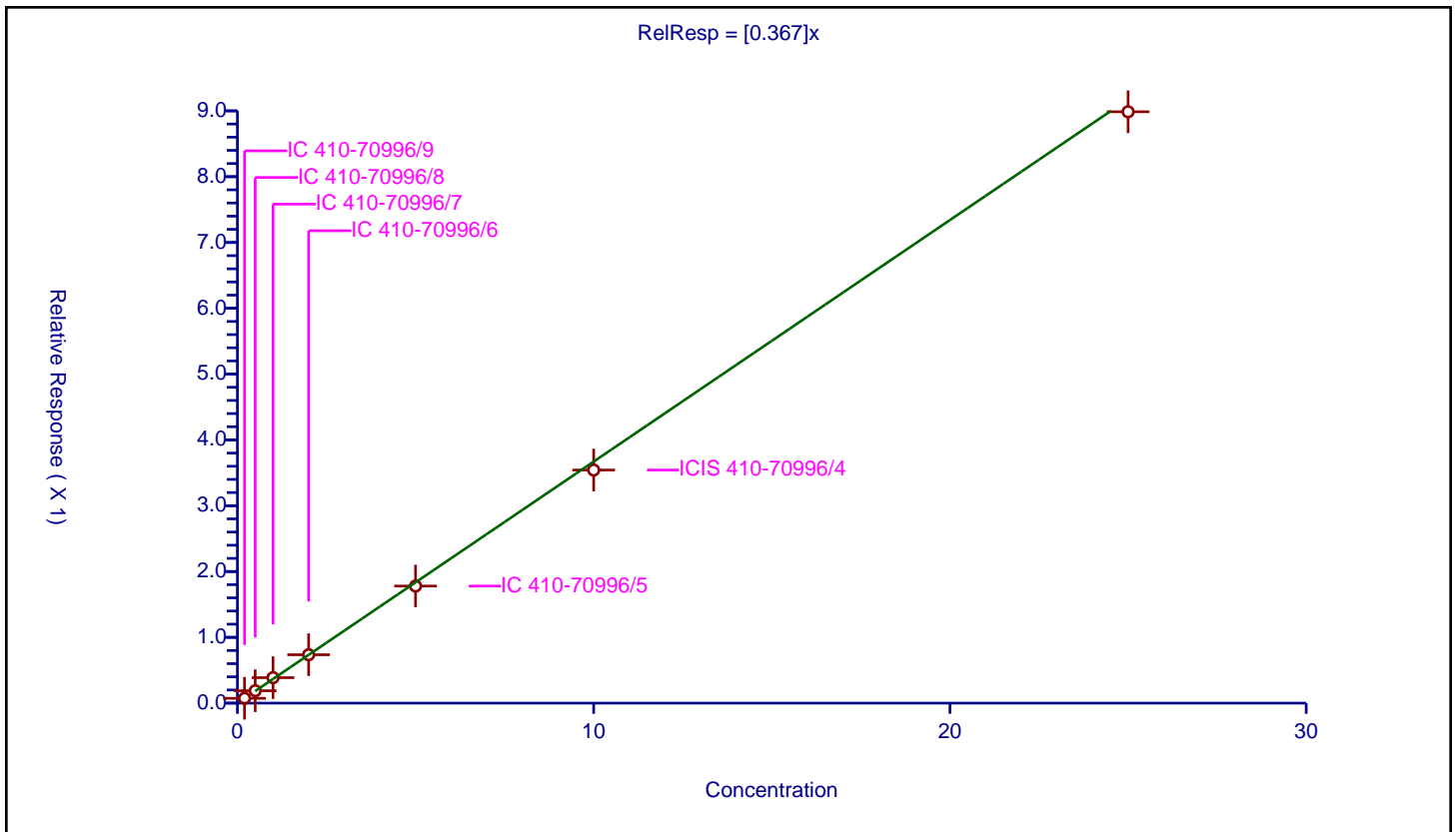
/ 1,1,1-Trichloroethane

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

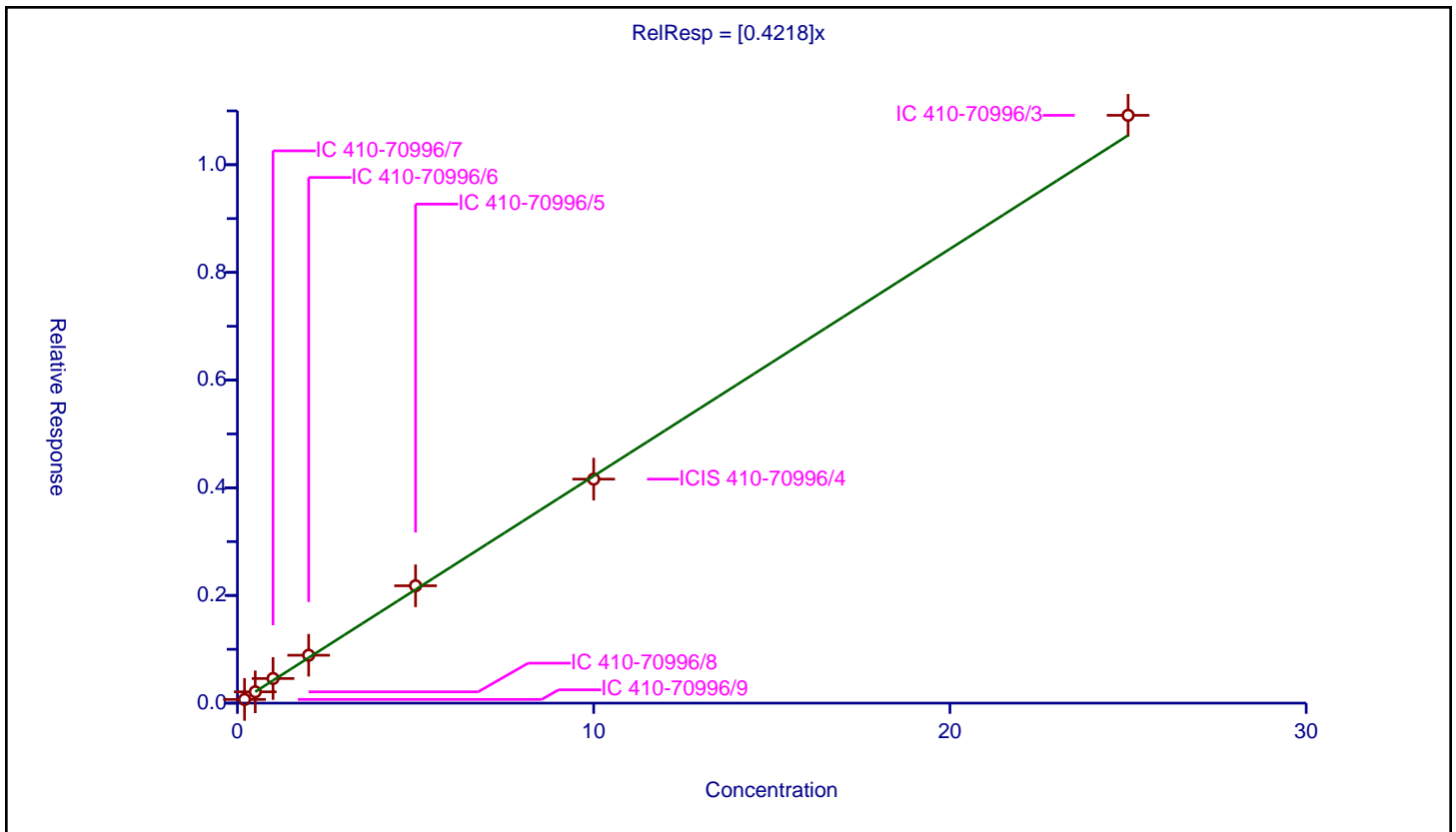
/ Cyclohexane

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

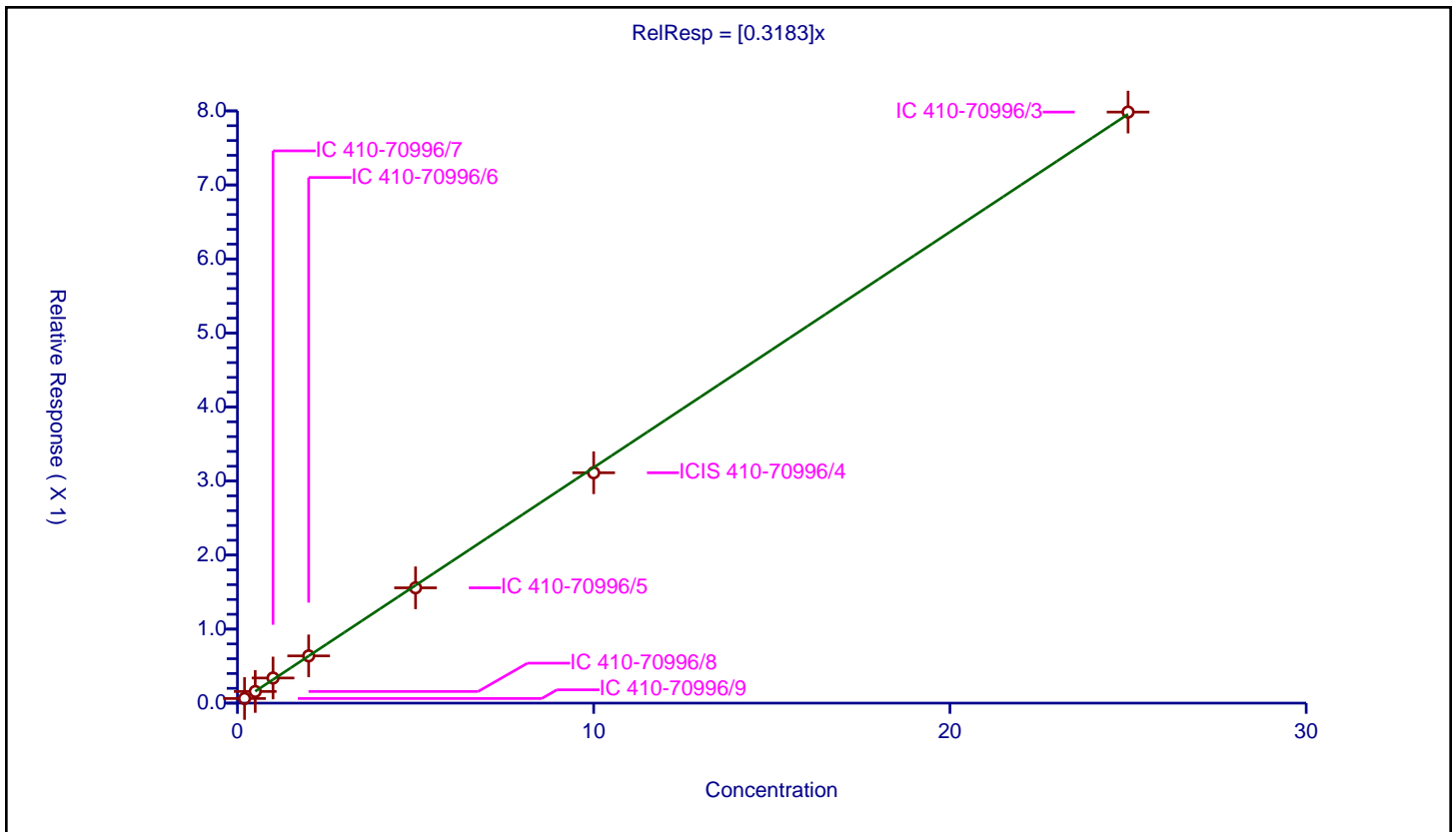
/ Carbon tetrachloride

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

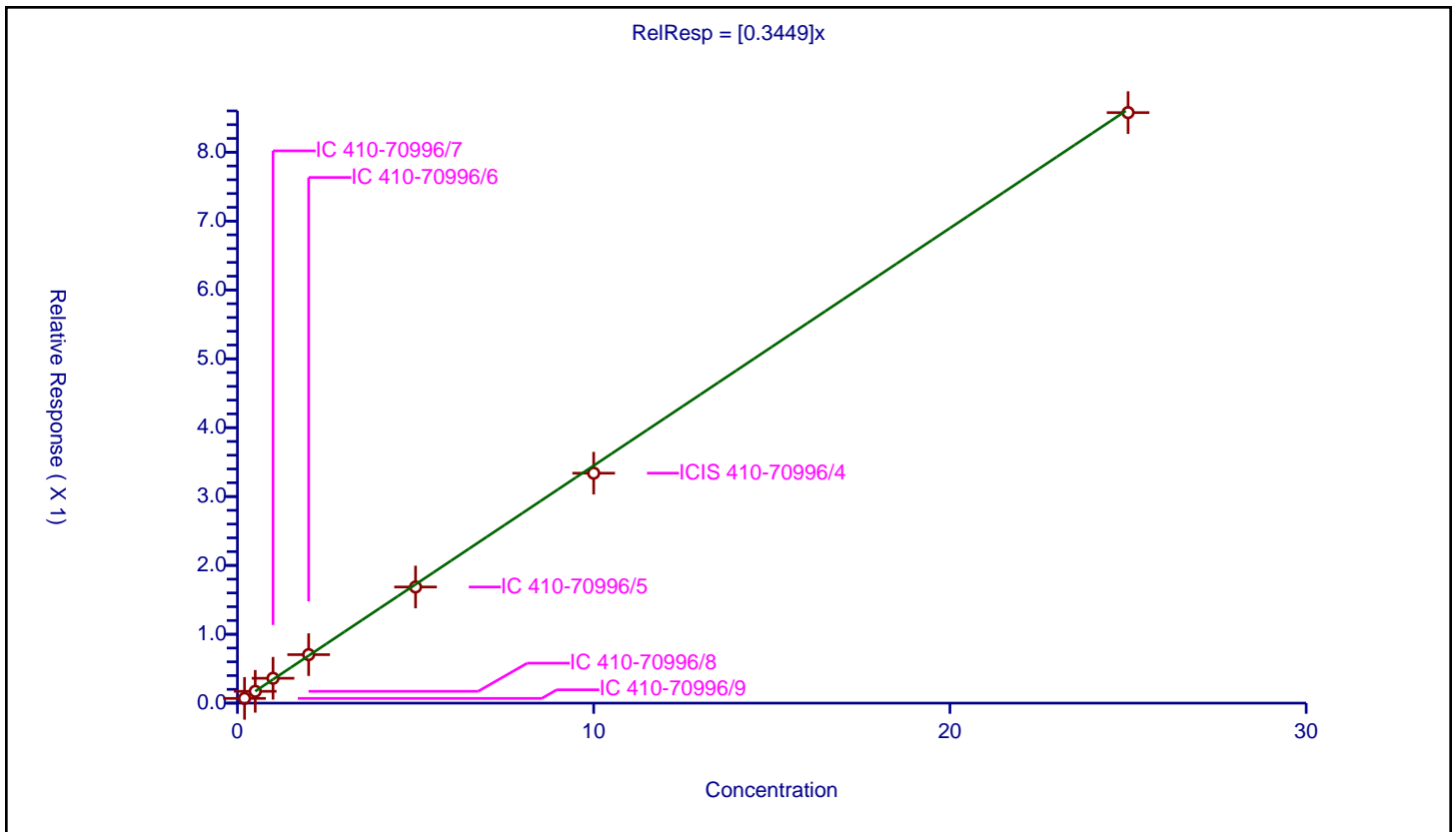
/ 1,1-Dichloropropene

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

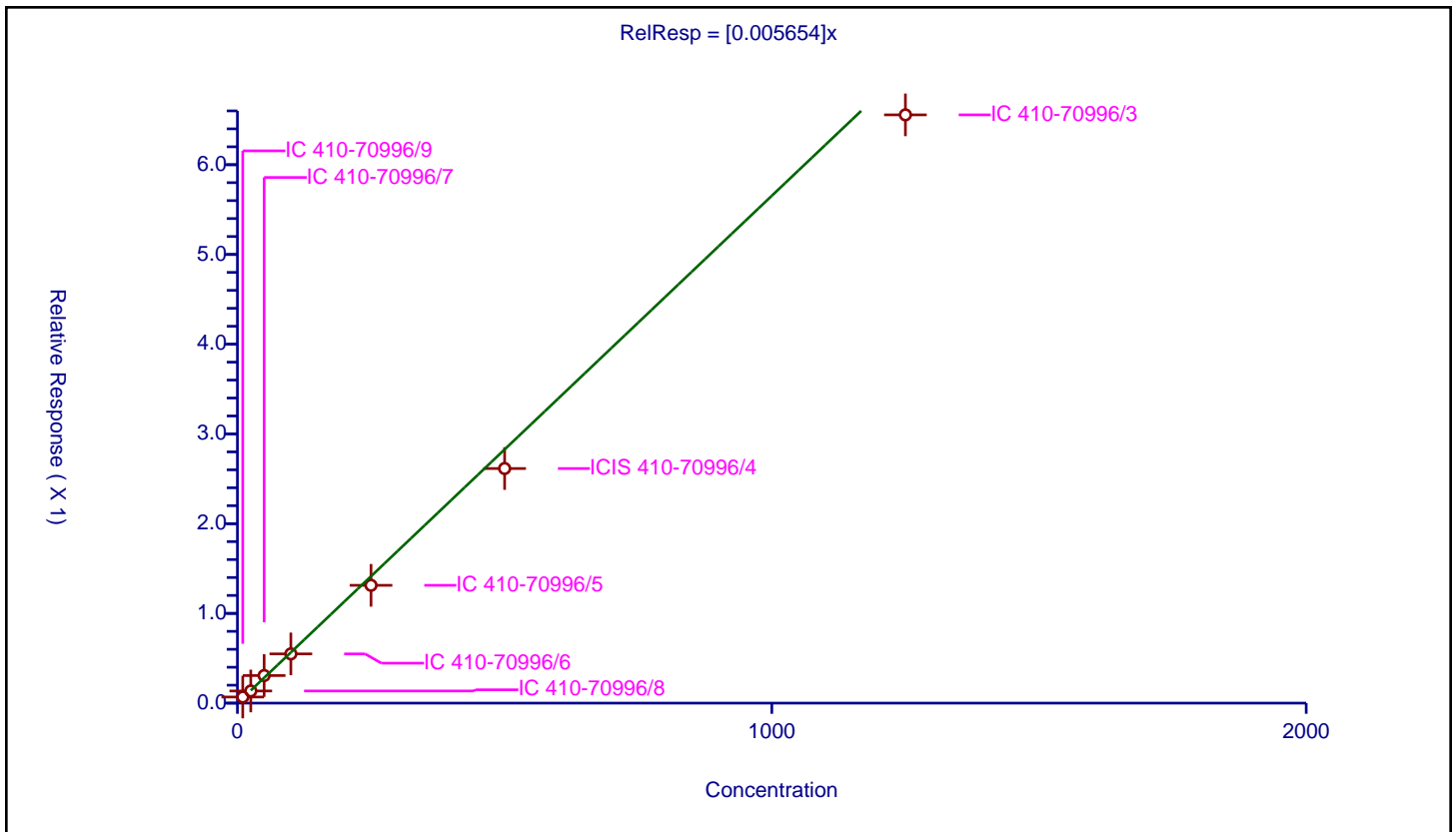
/ Isobutyl alcohol

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

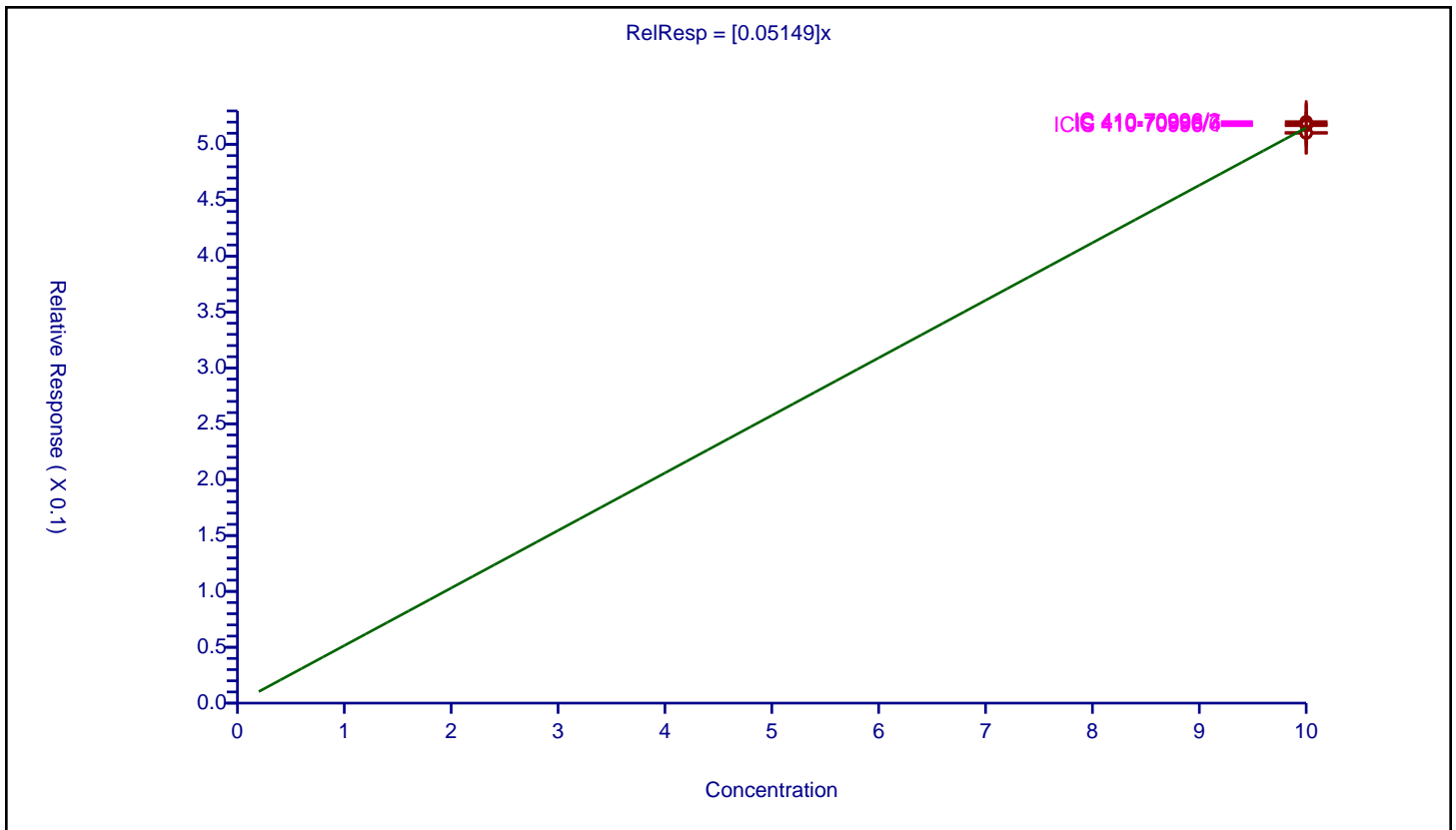
Curve Coefficients

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

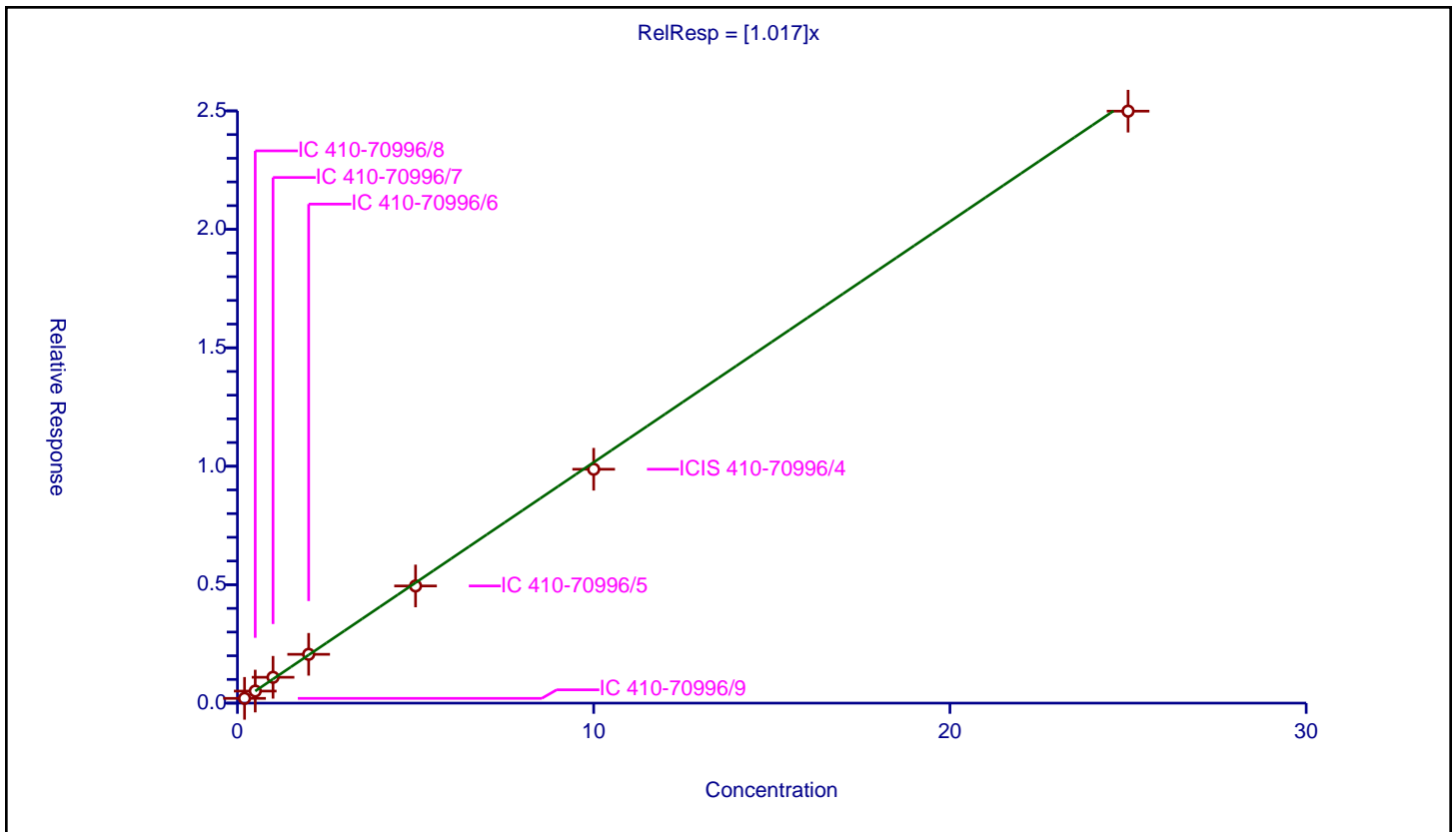
/ Benzene

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

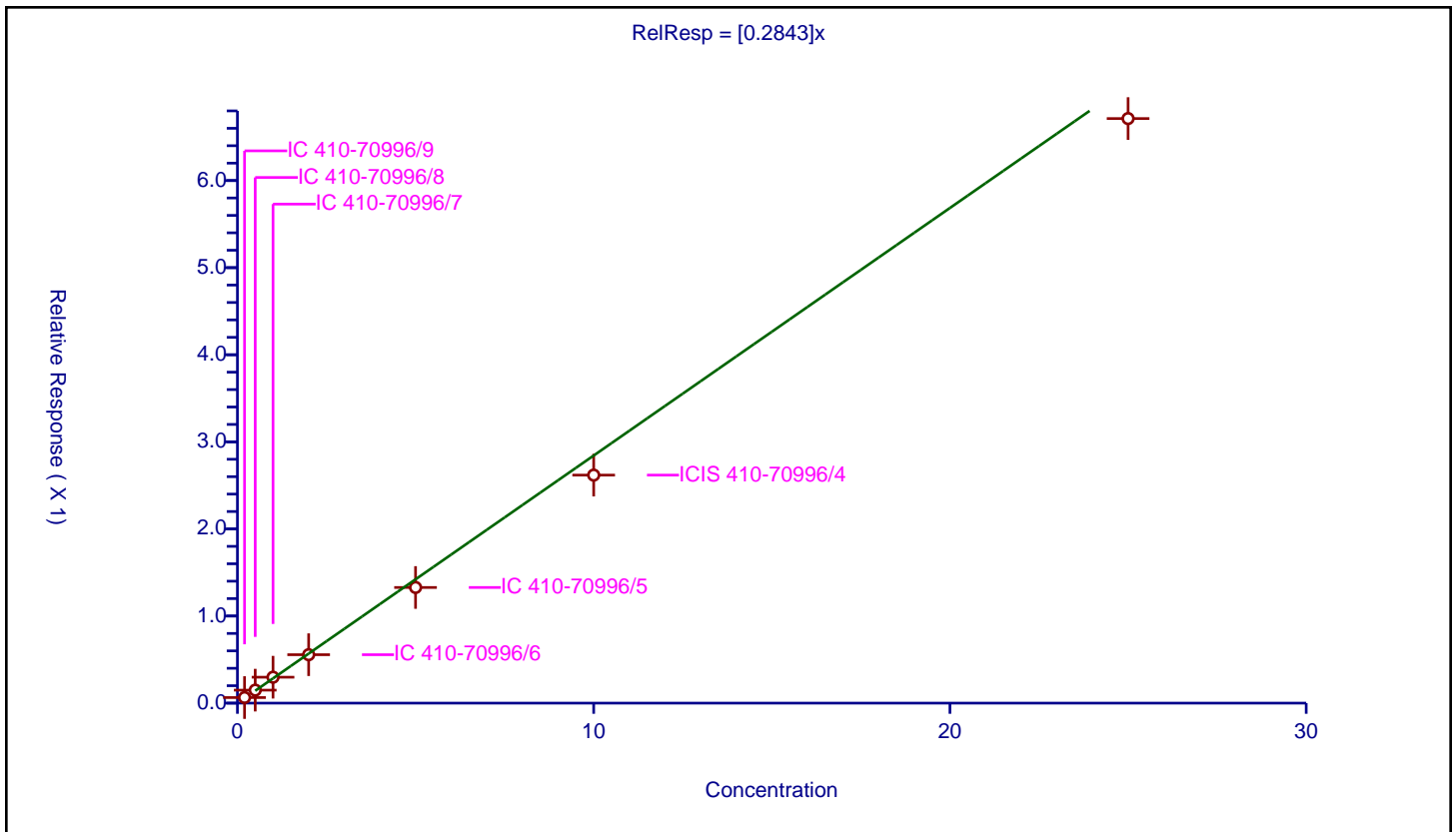
/ 1,2-Dichloroethane

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

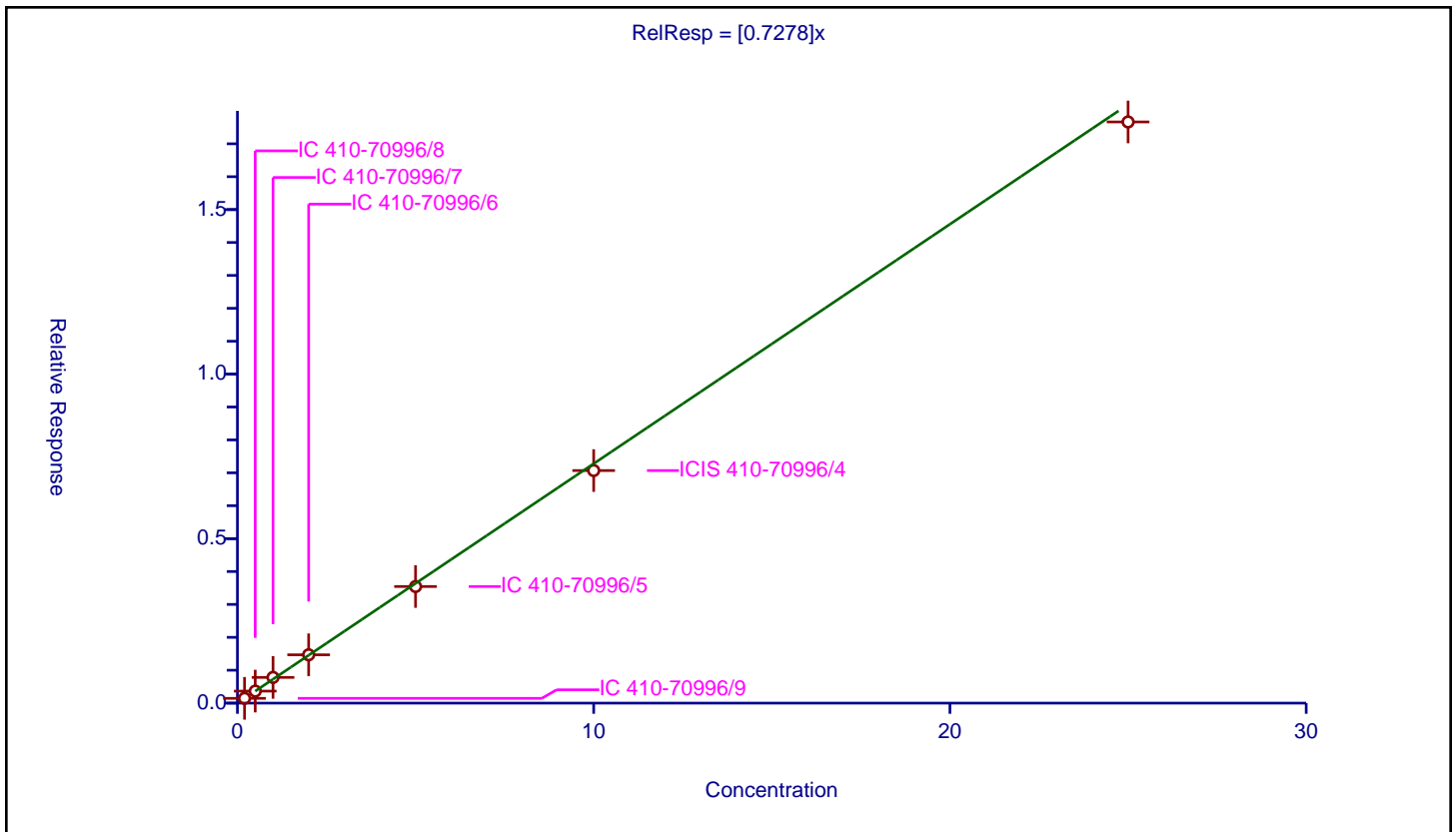
/ Tert-amyl methyl ether

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

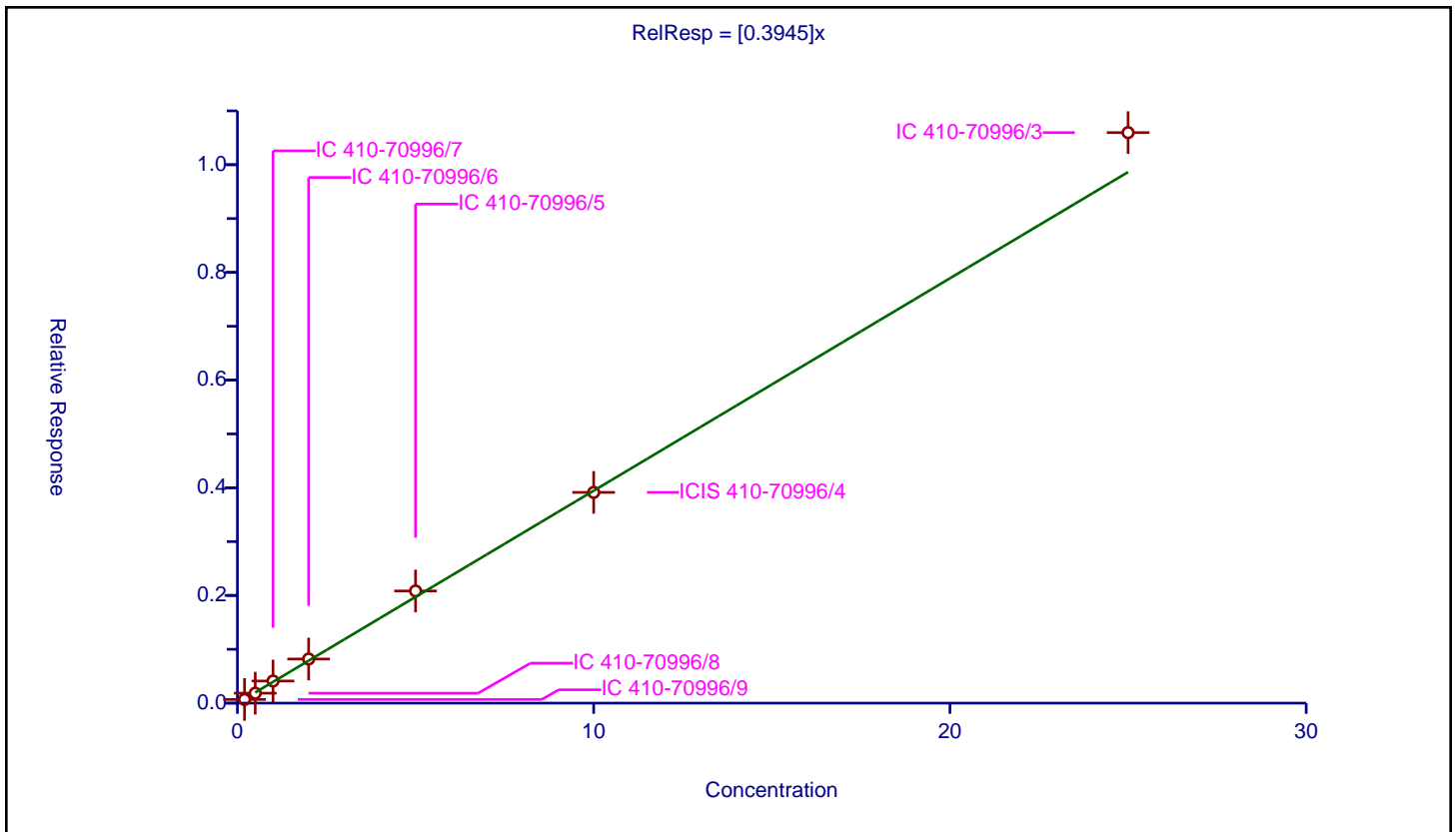
/ n-Heptane

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

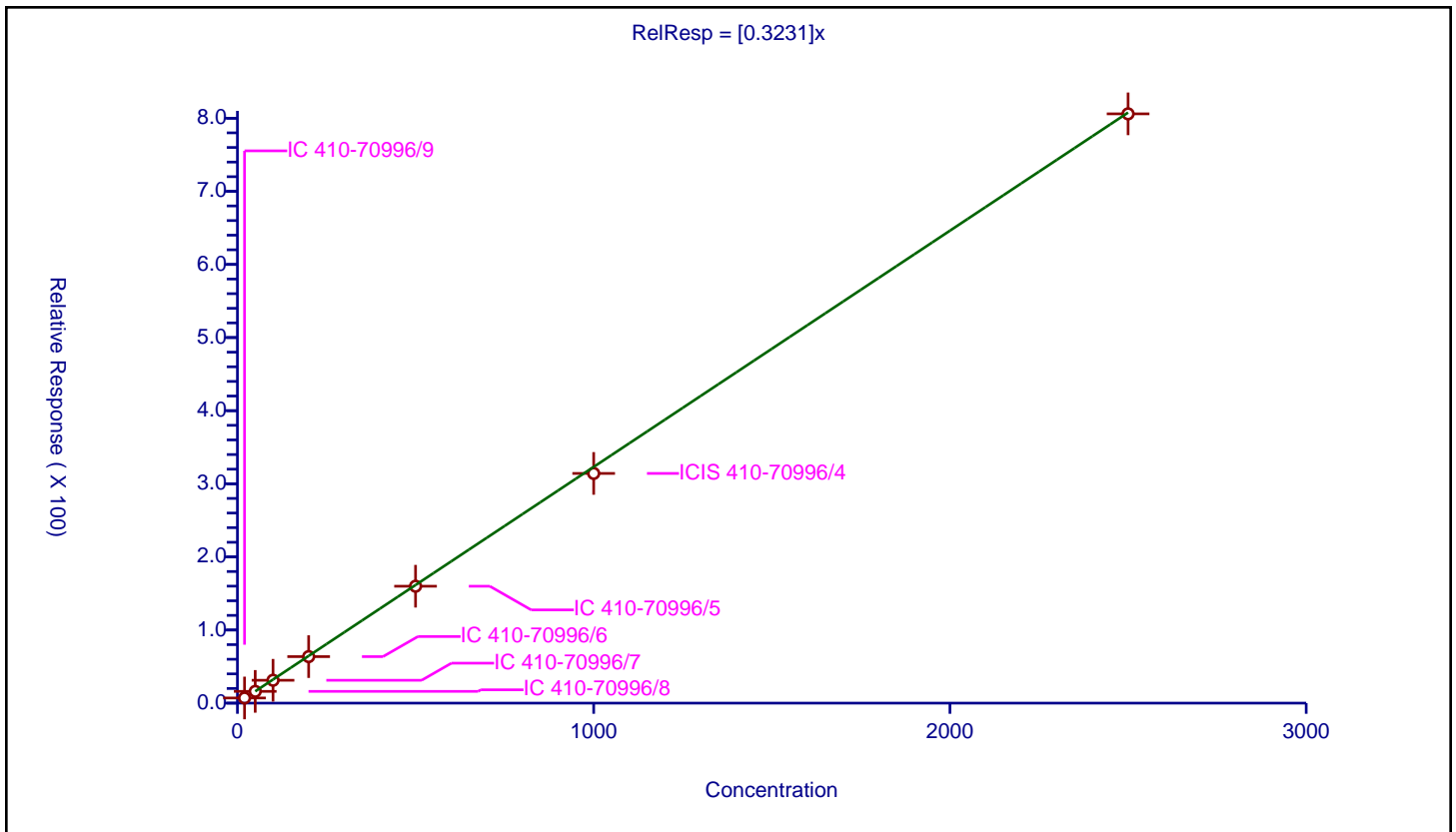
/ n-Butanol

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

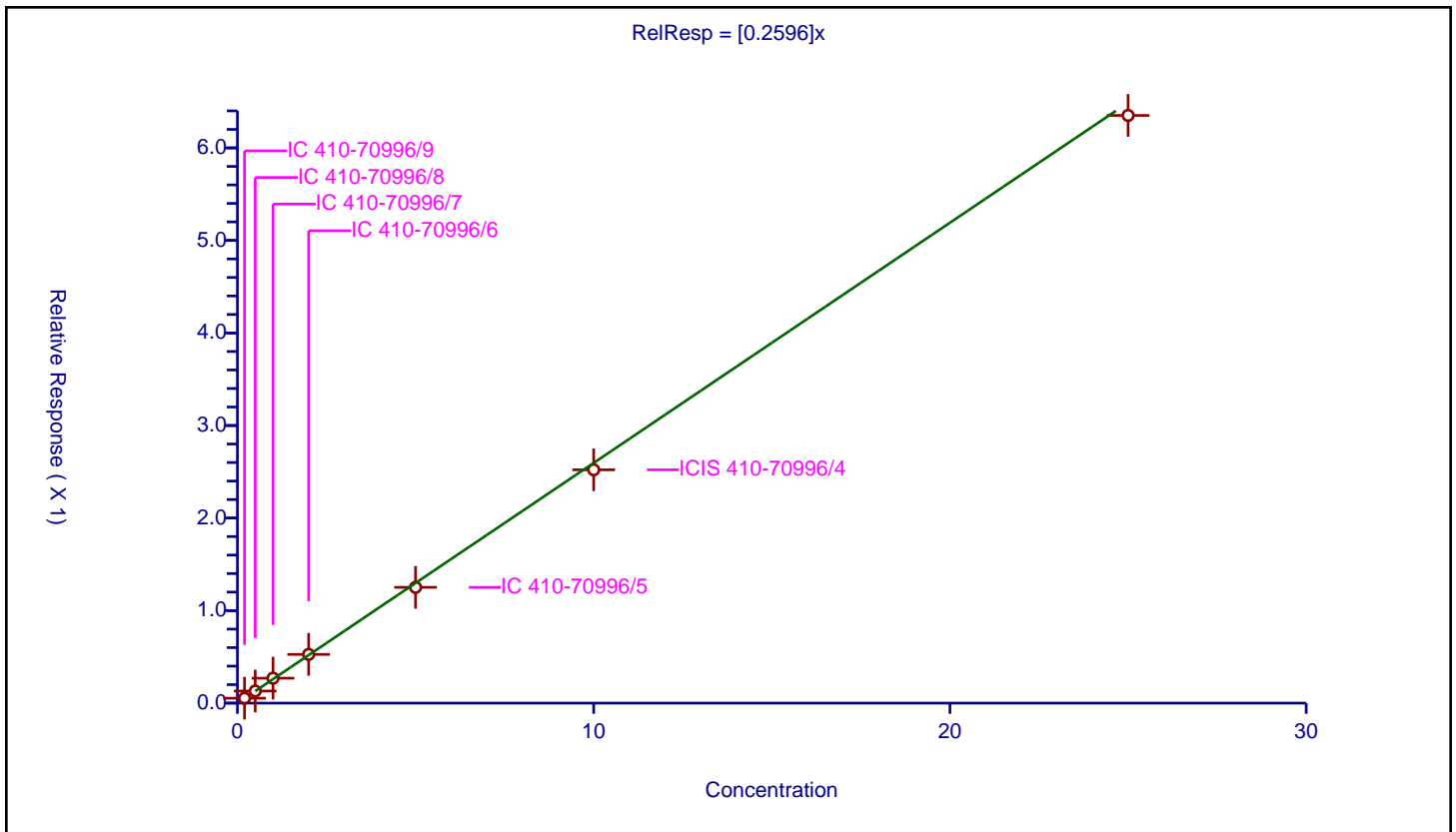
/ Trichloroethene

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

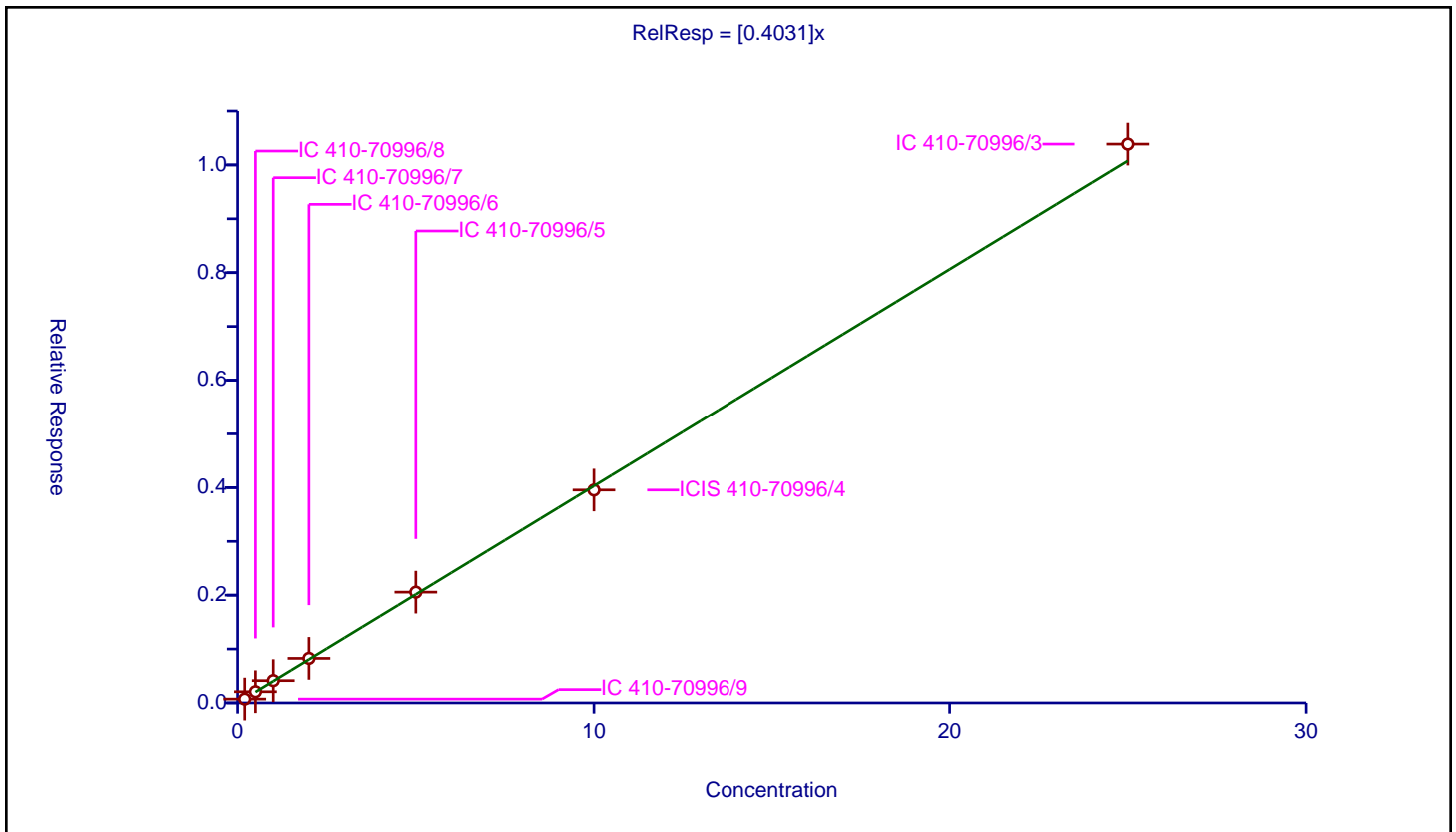
/ Methylcyclohexane

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

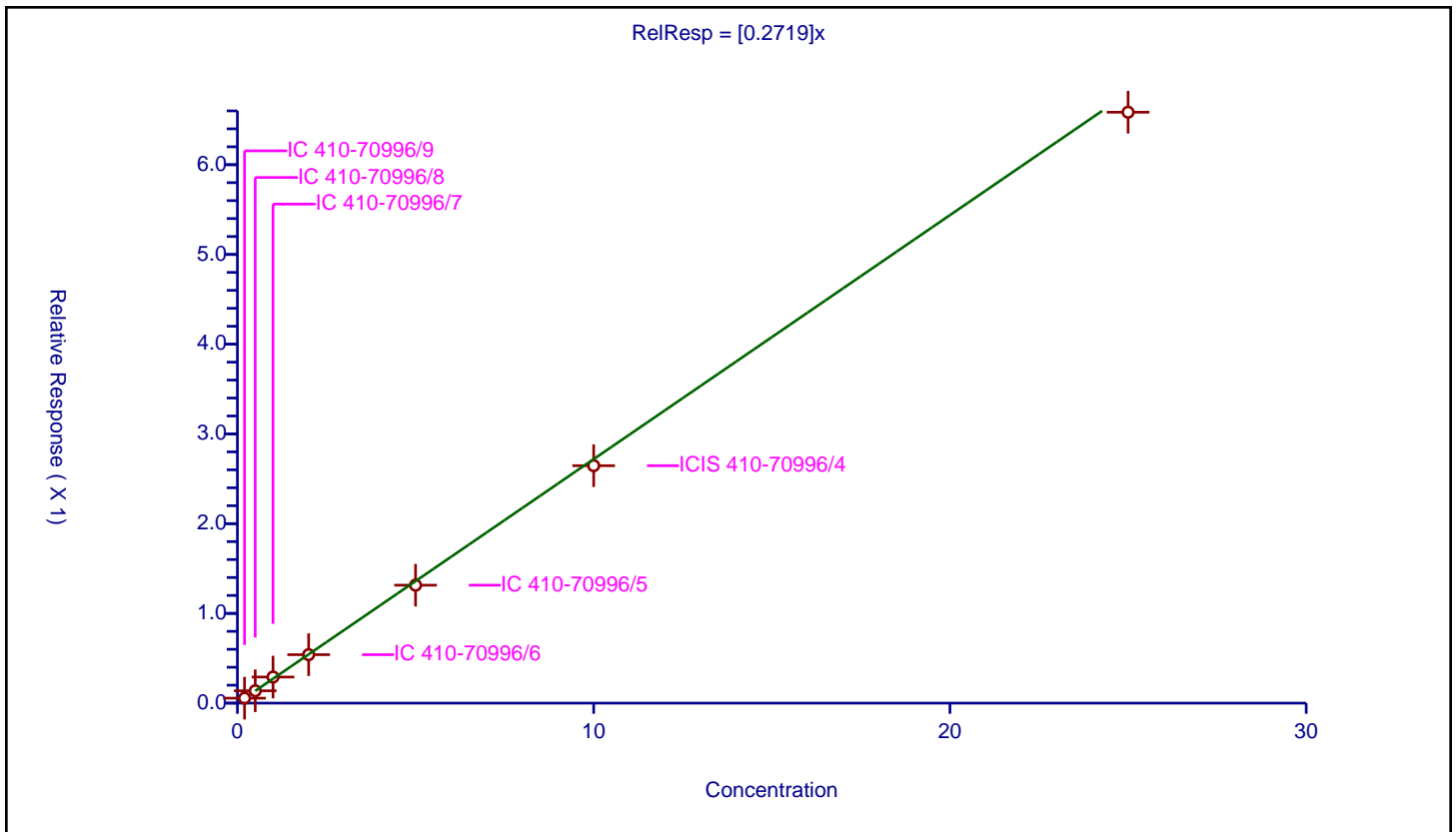
/ 1,2-Dichloropropane

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

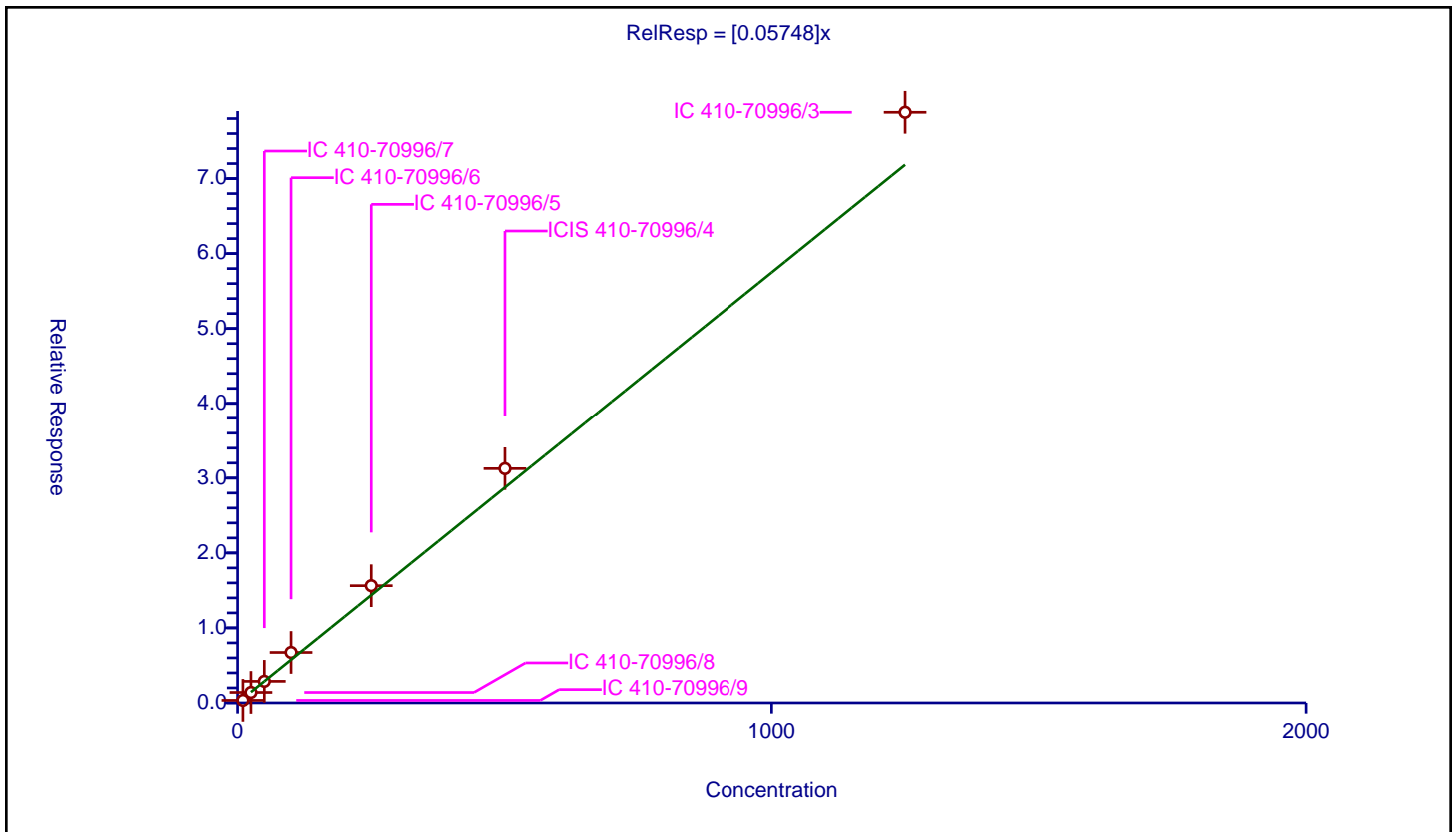
/ 1,4-Dioxane

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

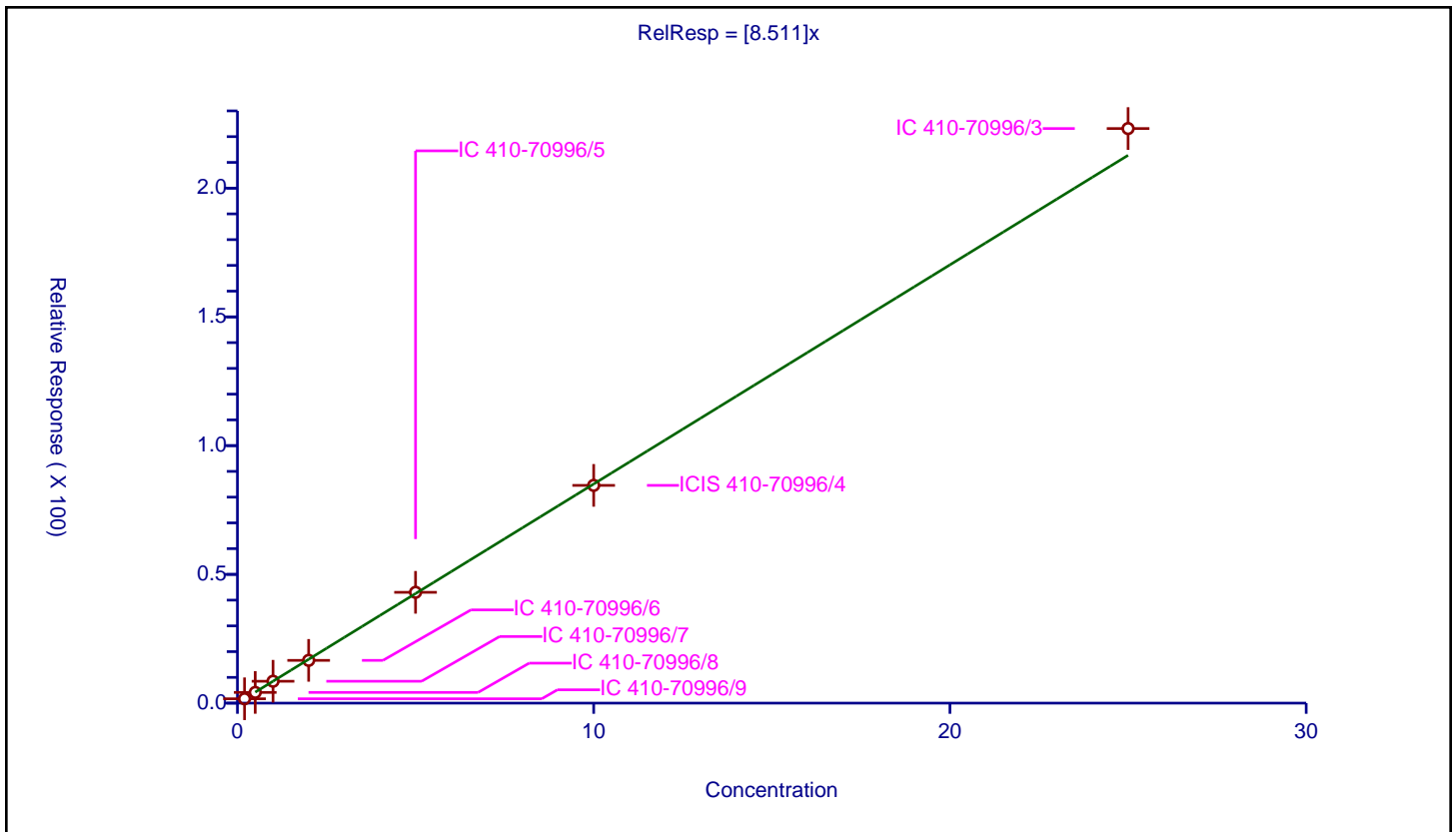
/ Methyl methacrylate

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

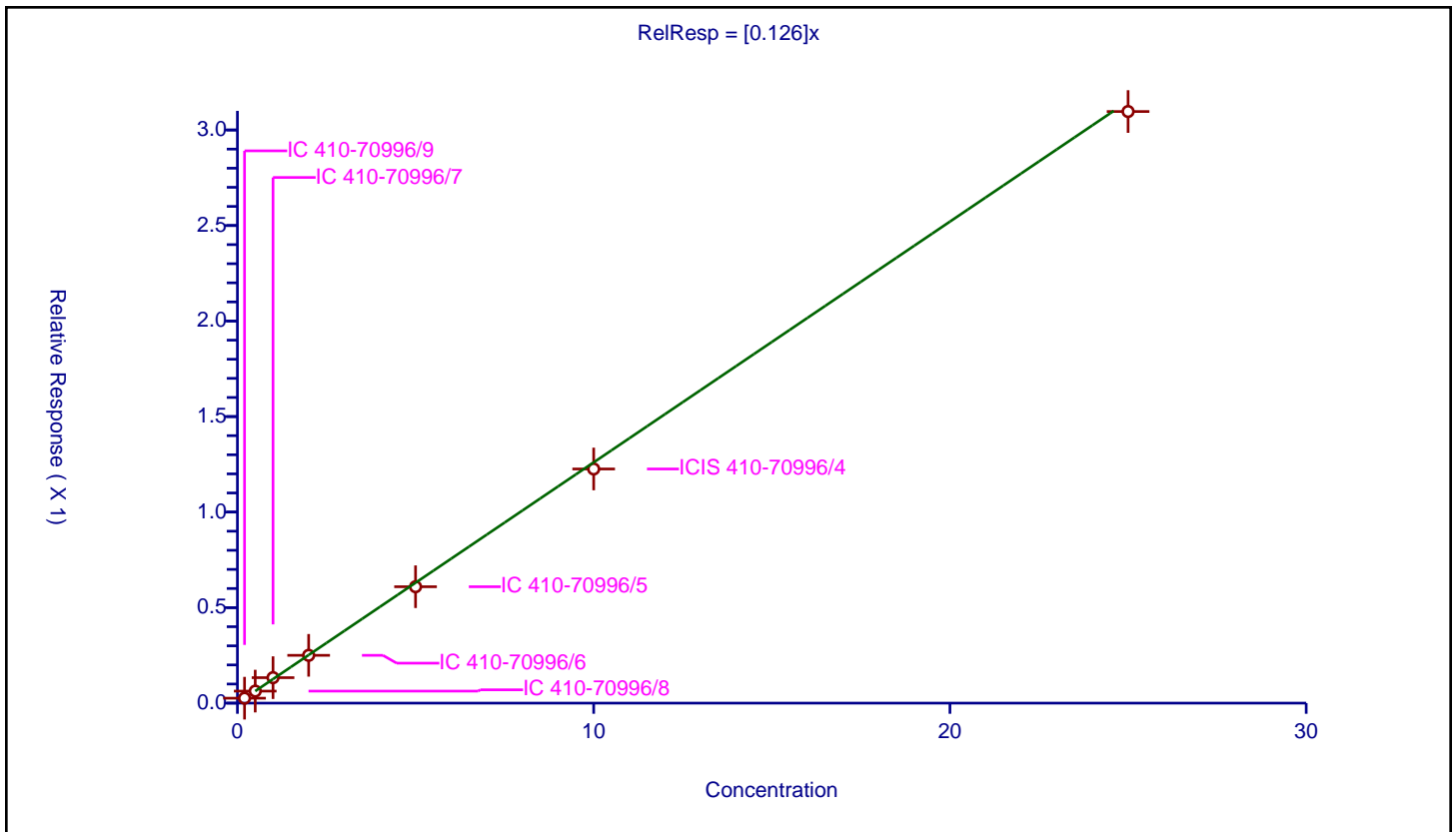
/ Dibromomethane

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

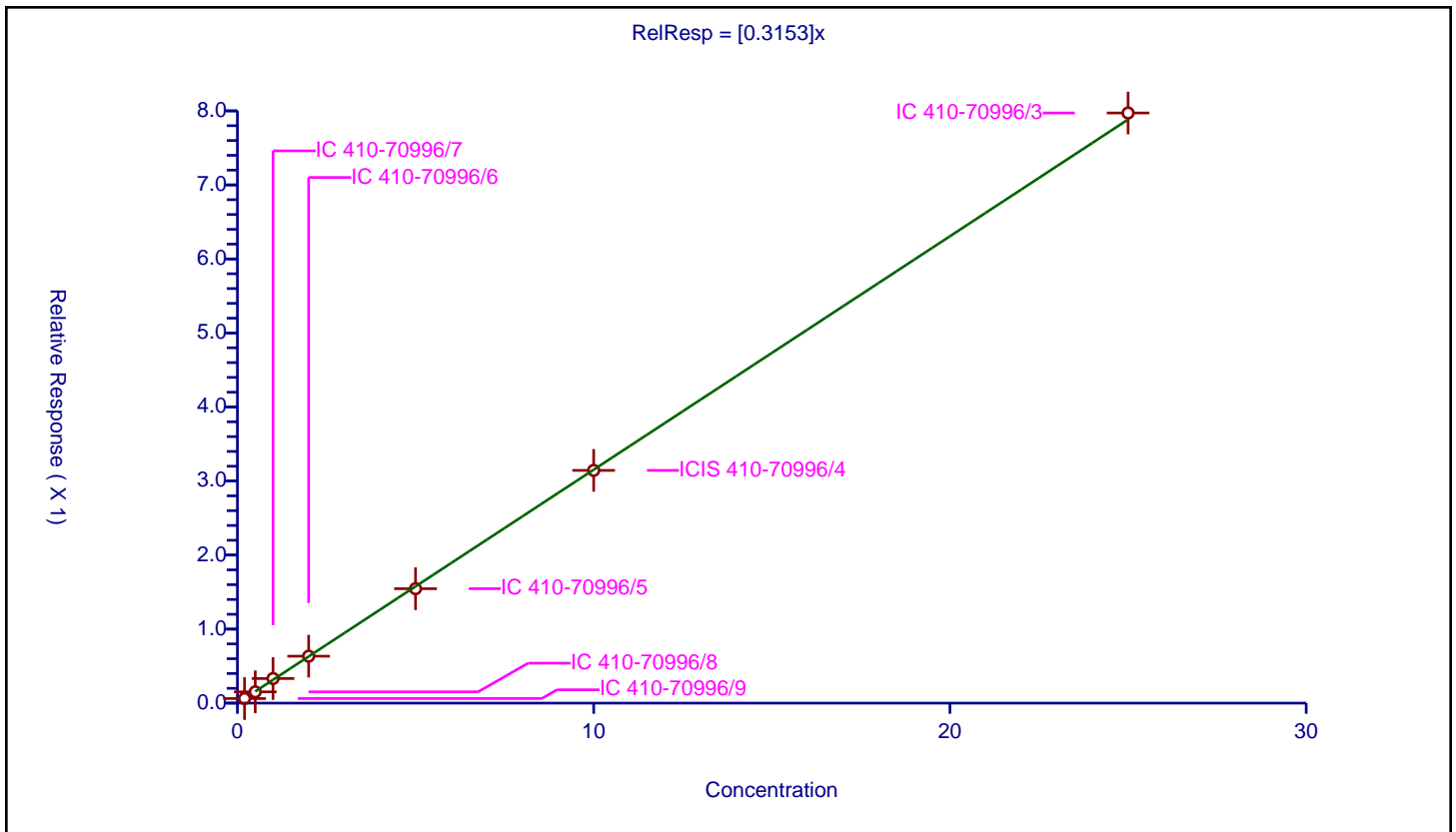
/ Dichlorobromomethane

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

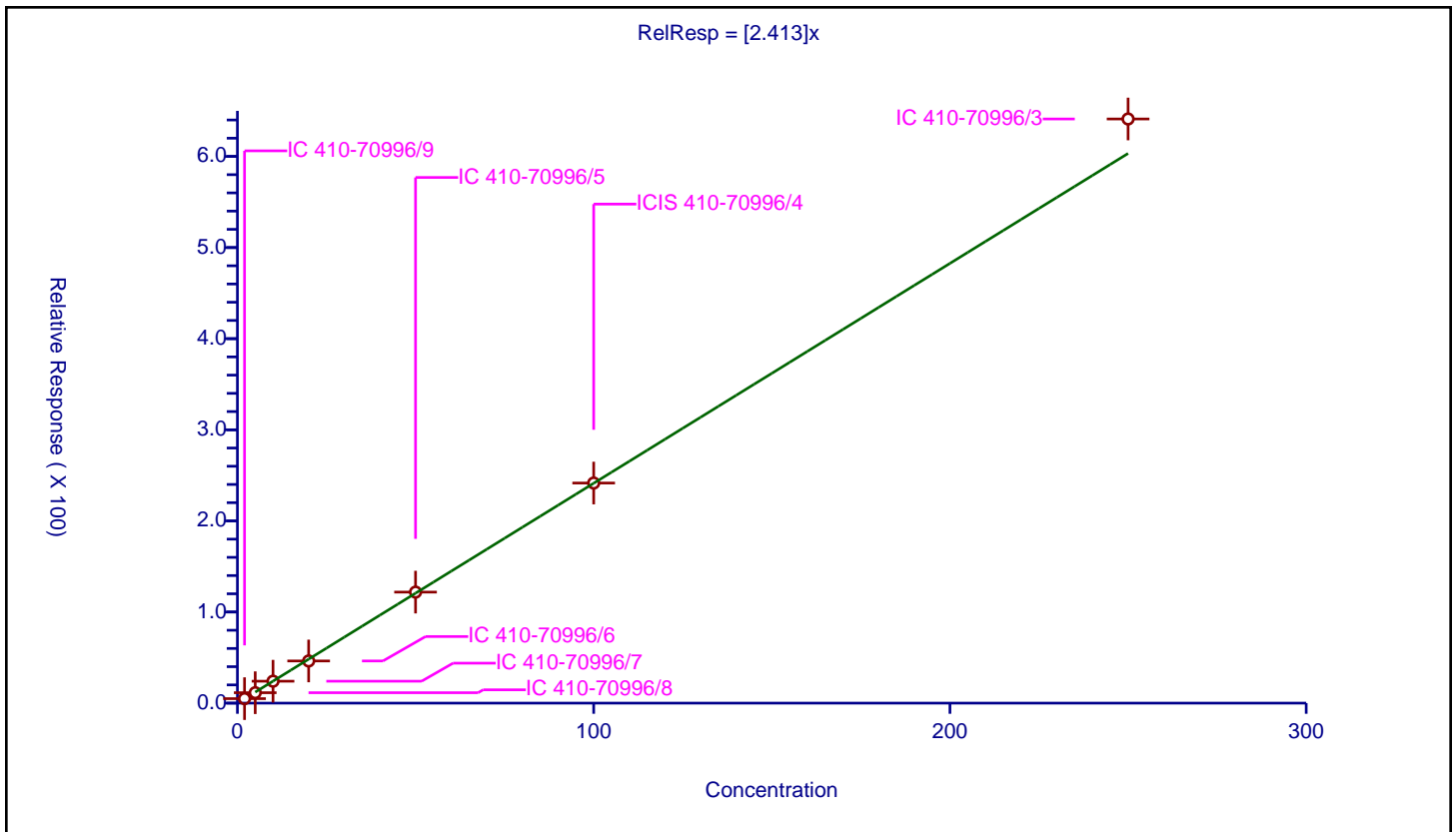
/ 2-Nitropropane

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

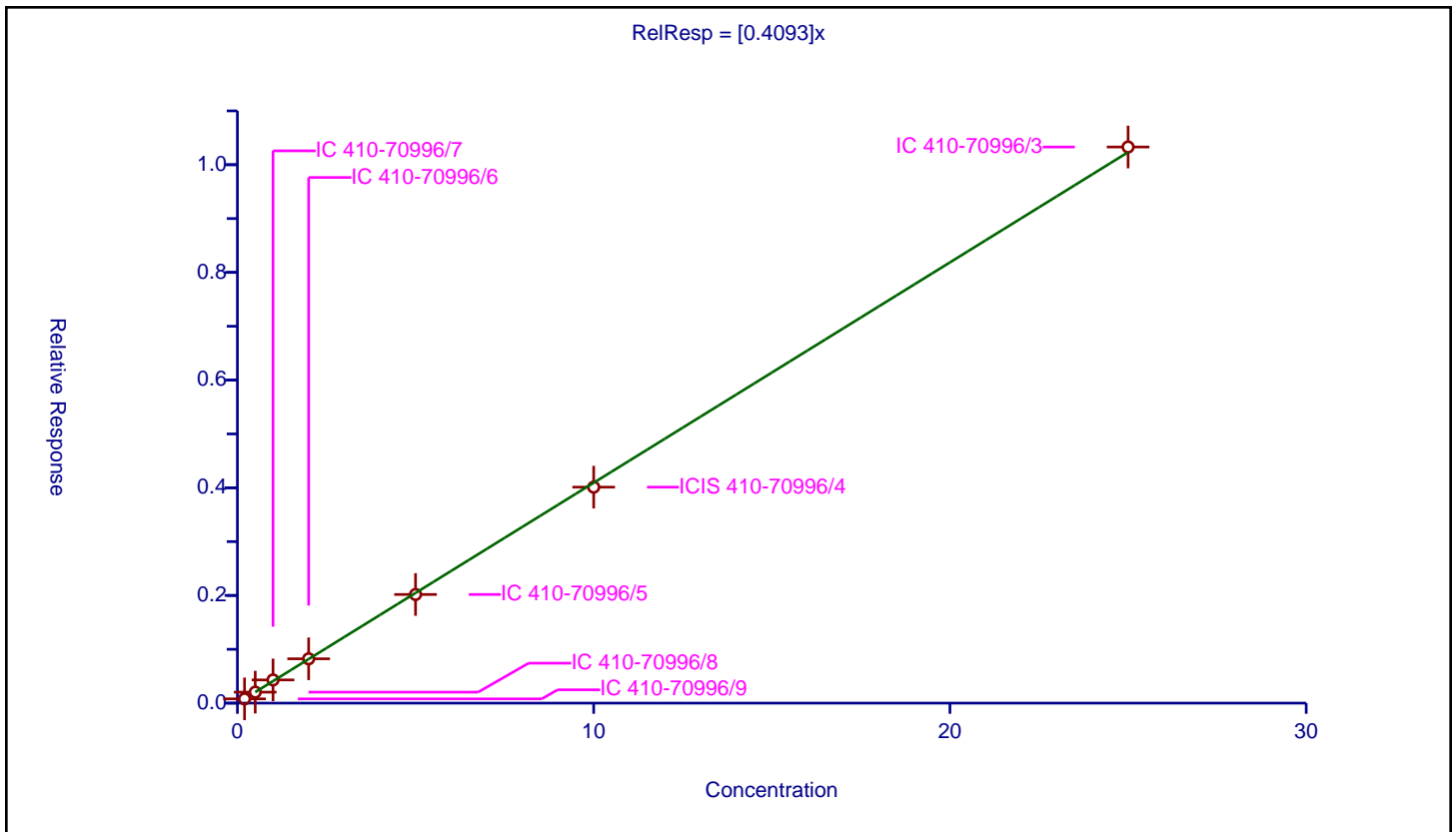
/ cis-1,3-Dichloropropene

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

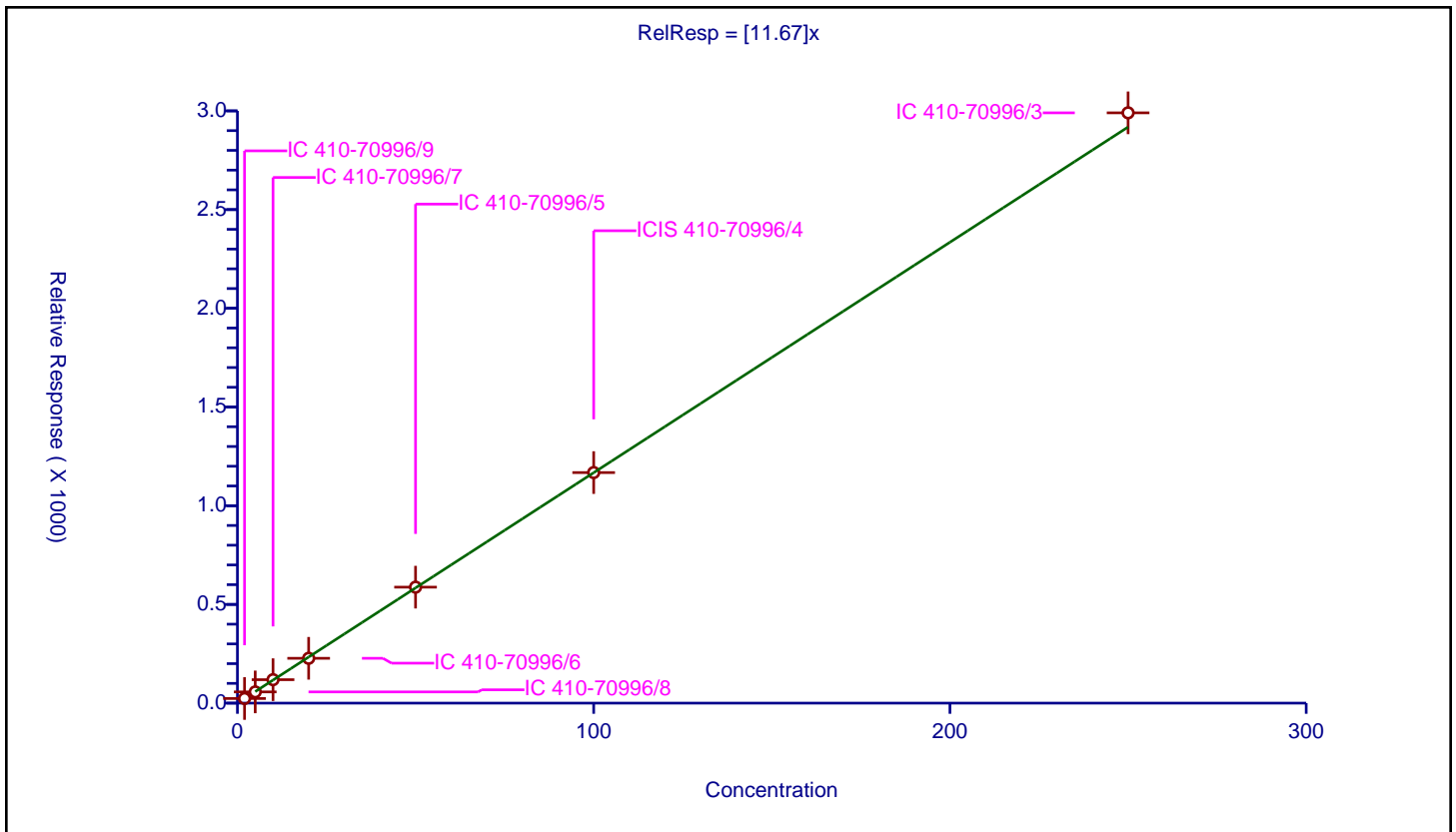
/ 4-Methyl-2-pentanone (MIBK)

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



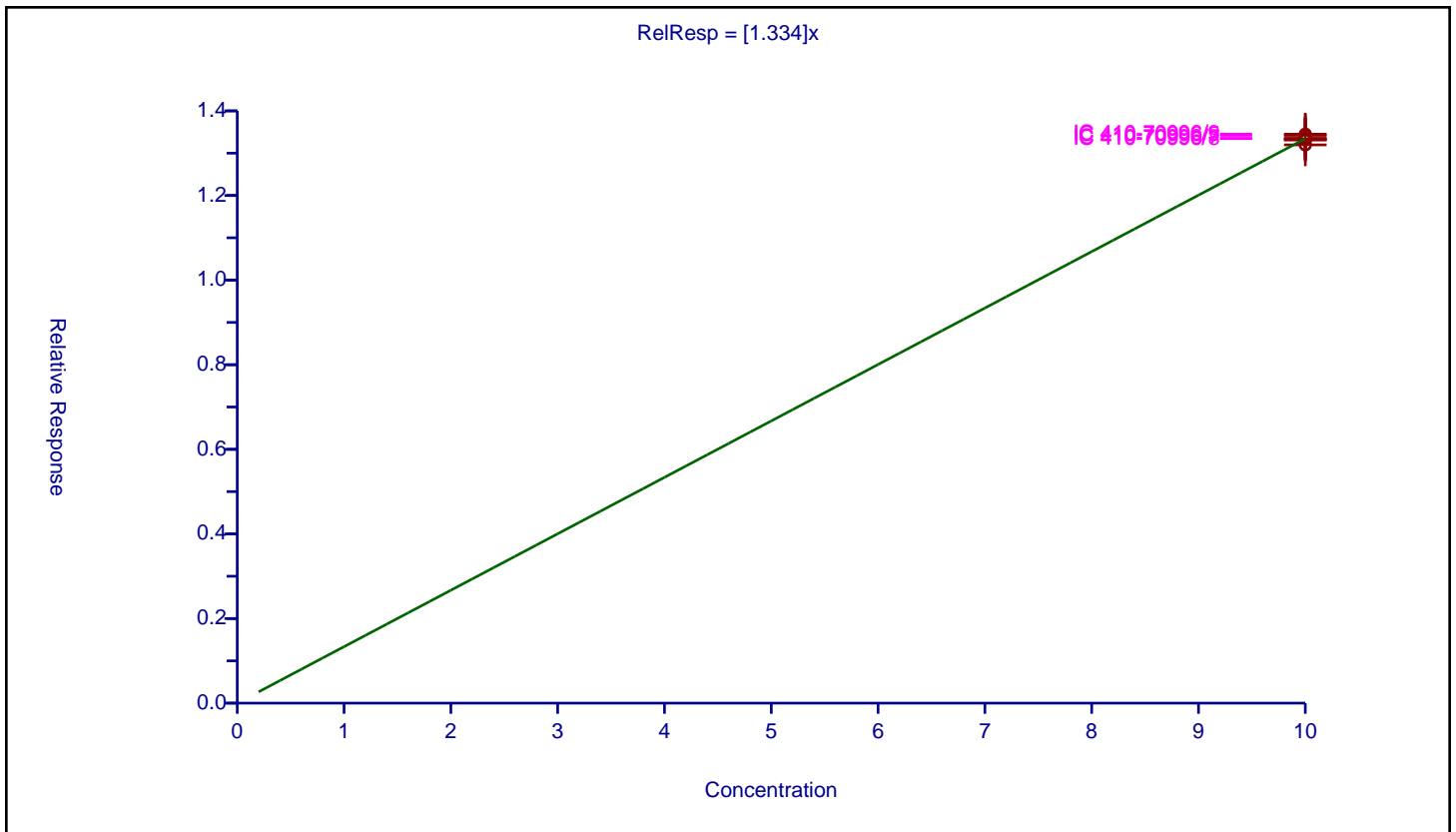
Calibration

/ 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

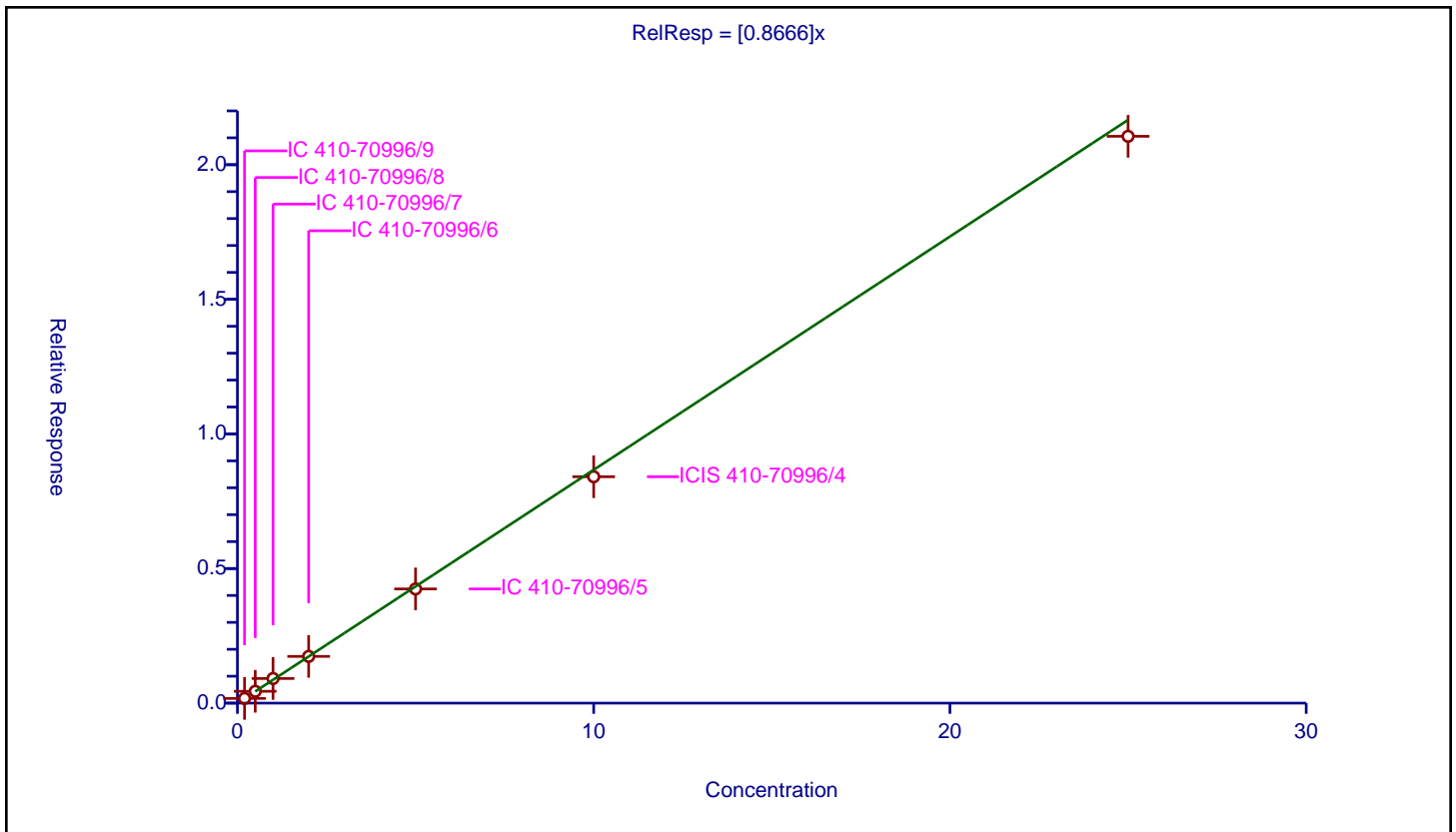
/ Toluene

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

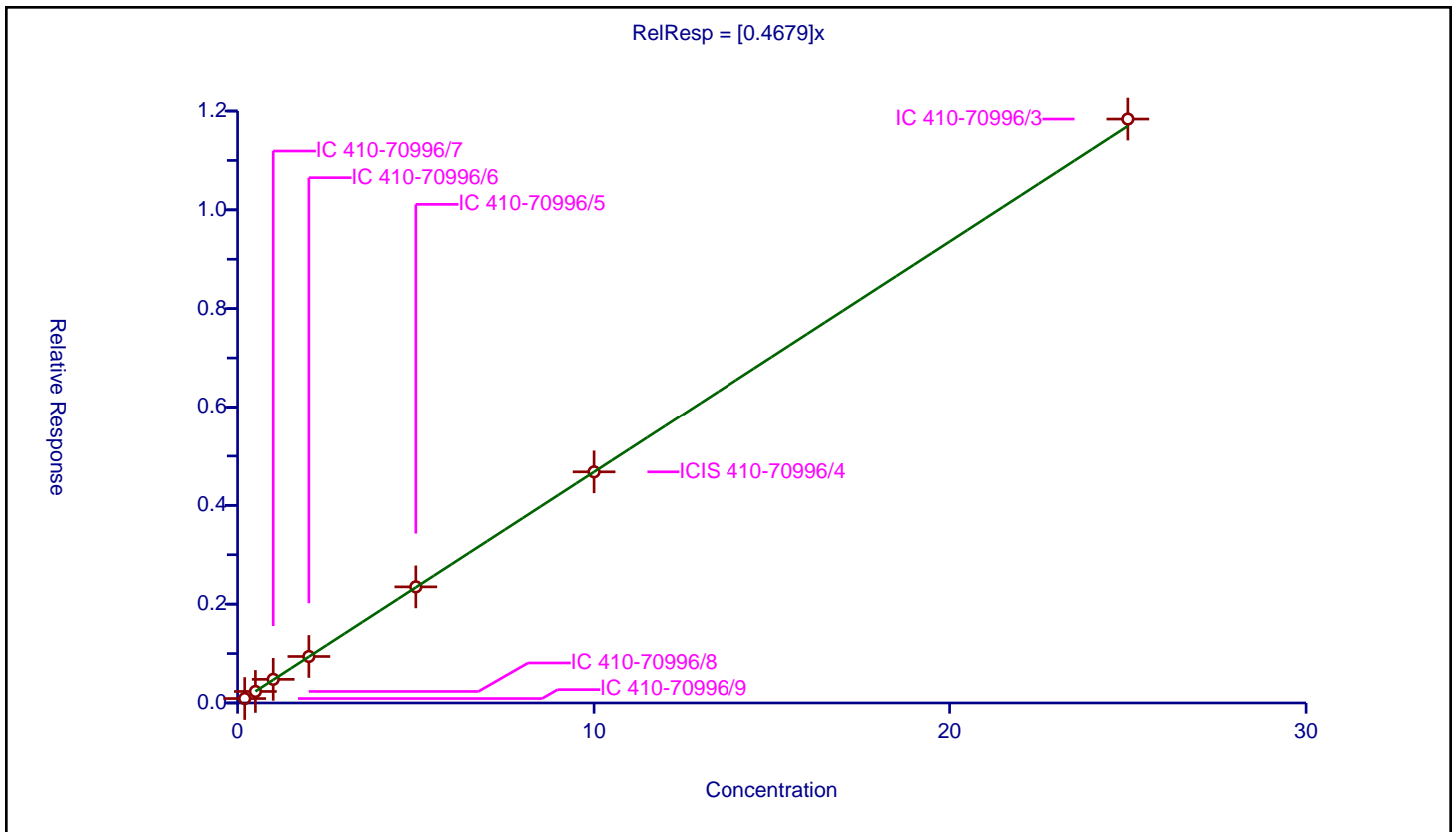
/ trans-1,3-Dichloropropene

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

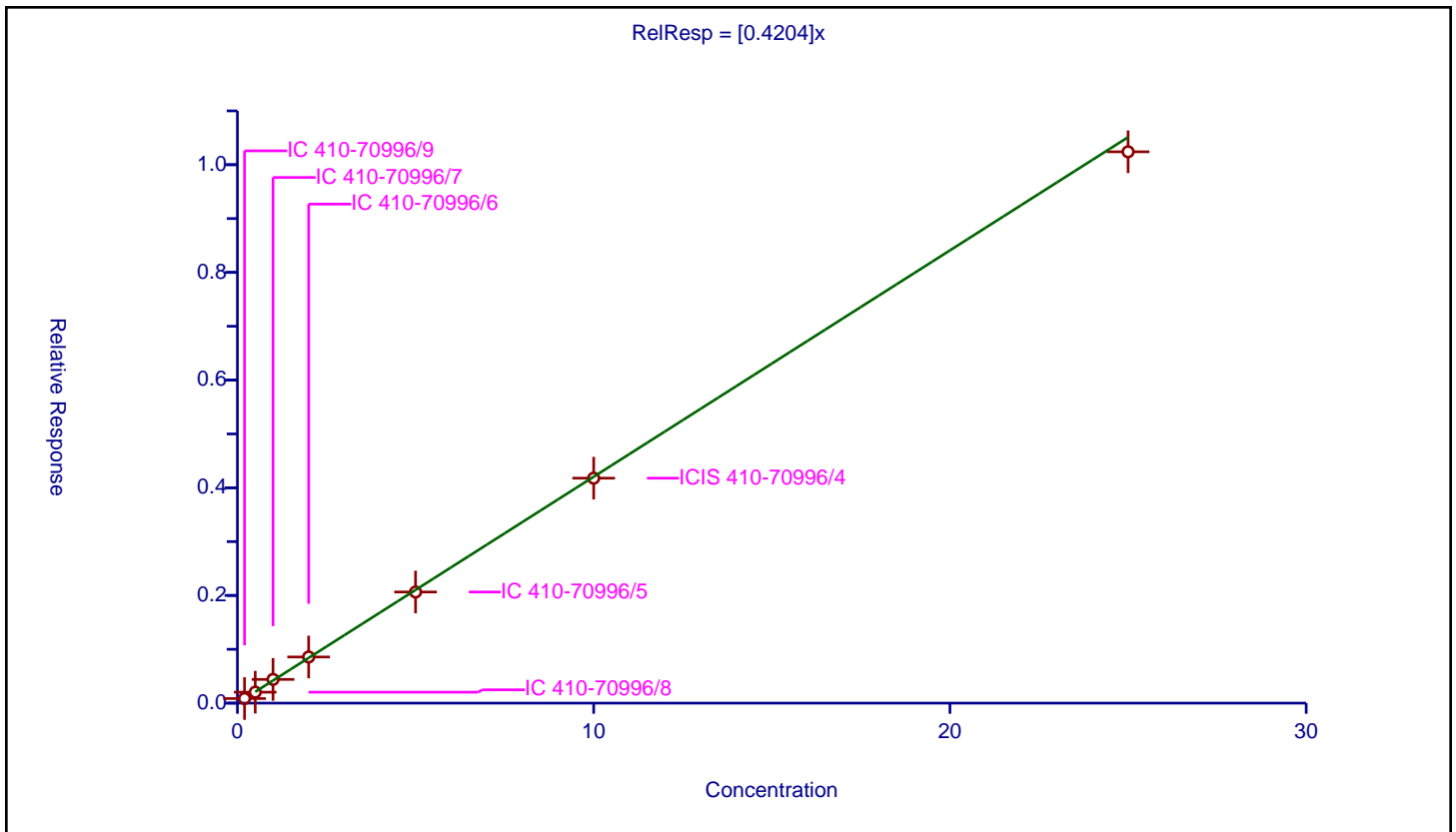
/ Ethyl methacrylate

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

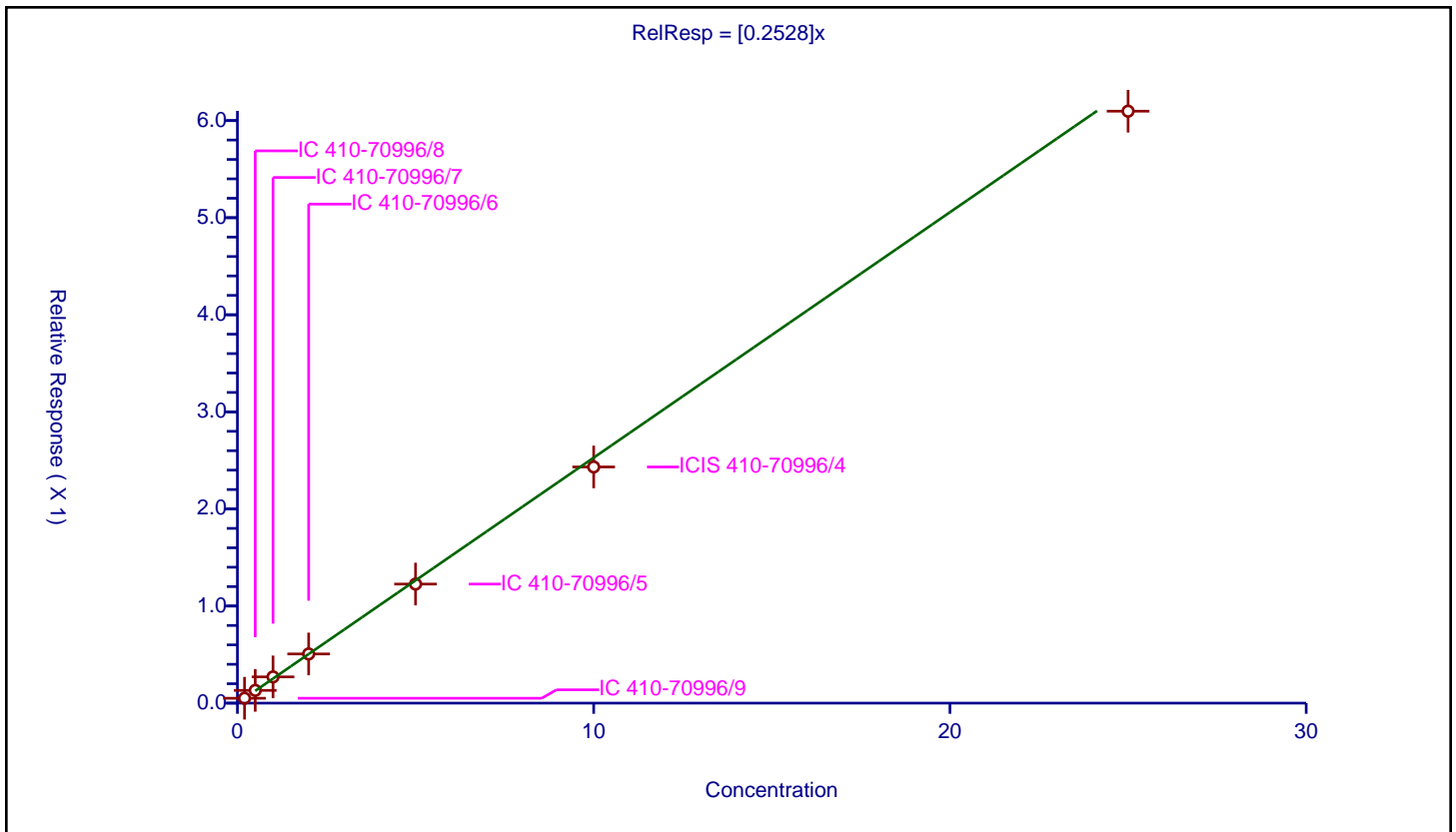
/ 1,1,2-Trichloroethane

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

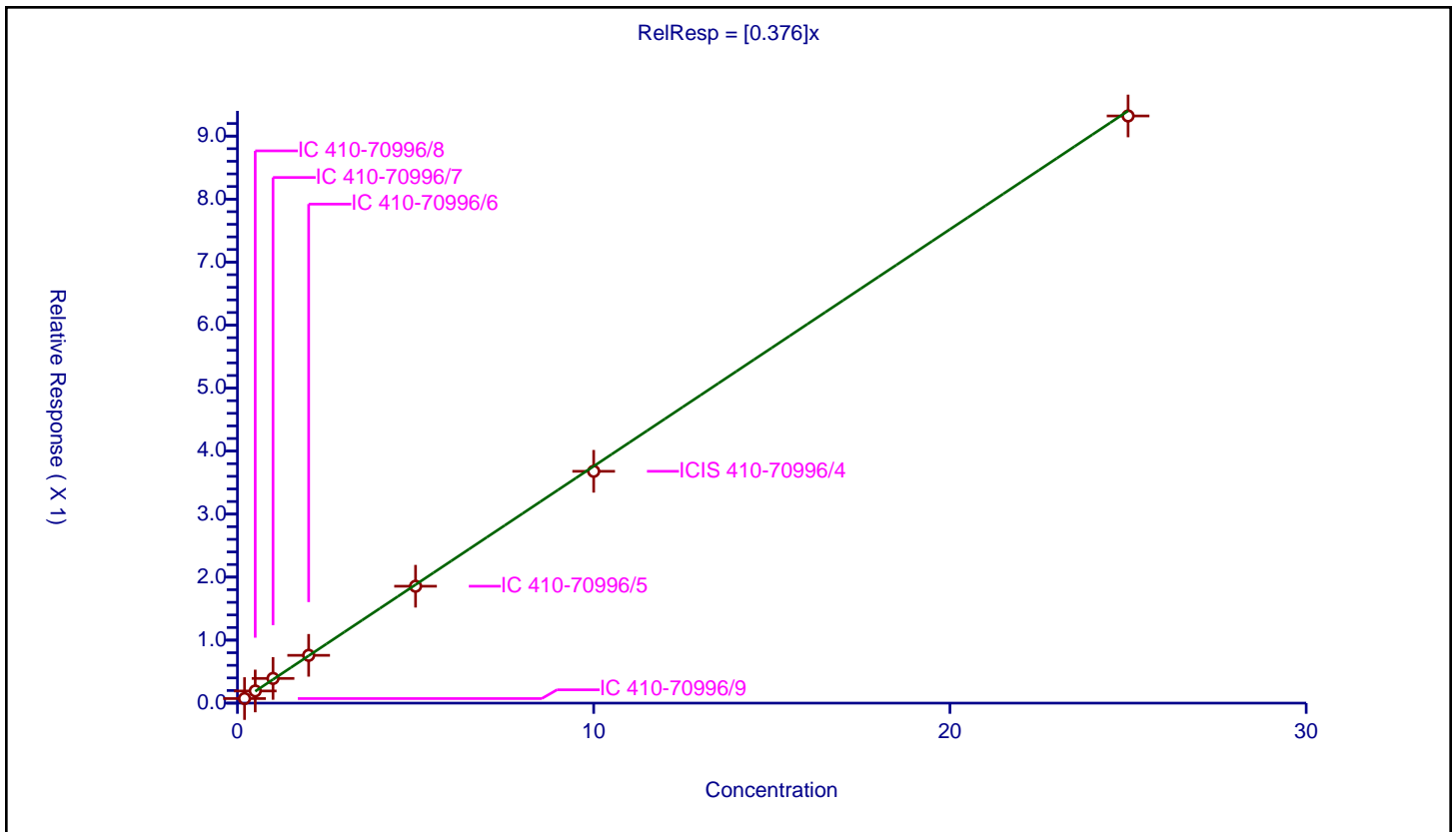
/ Tetrachloroethene

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

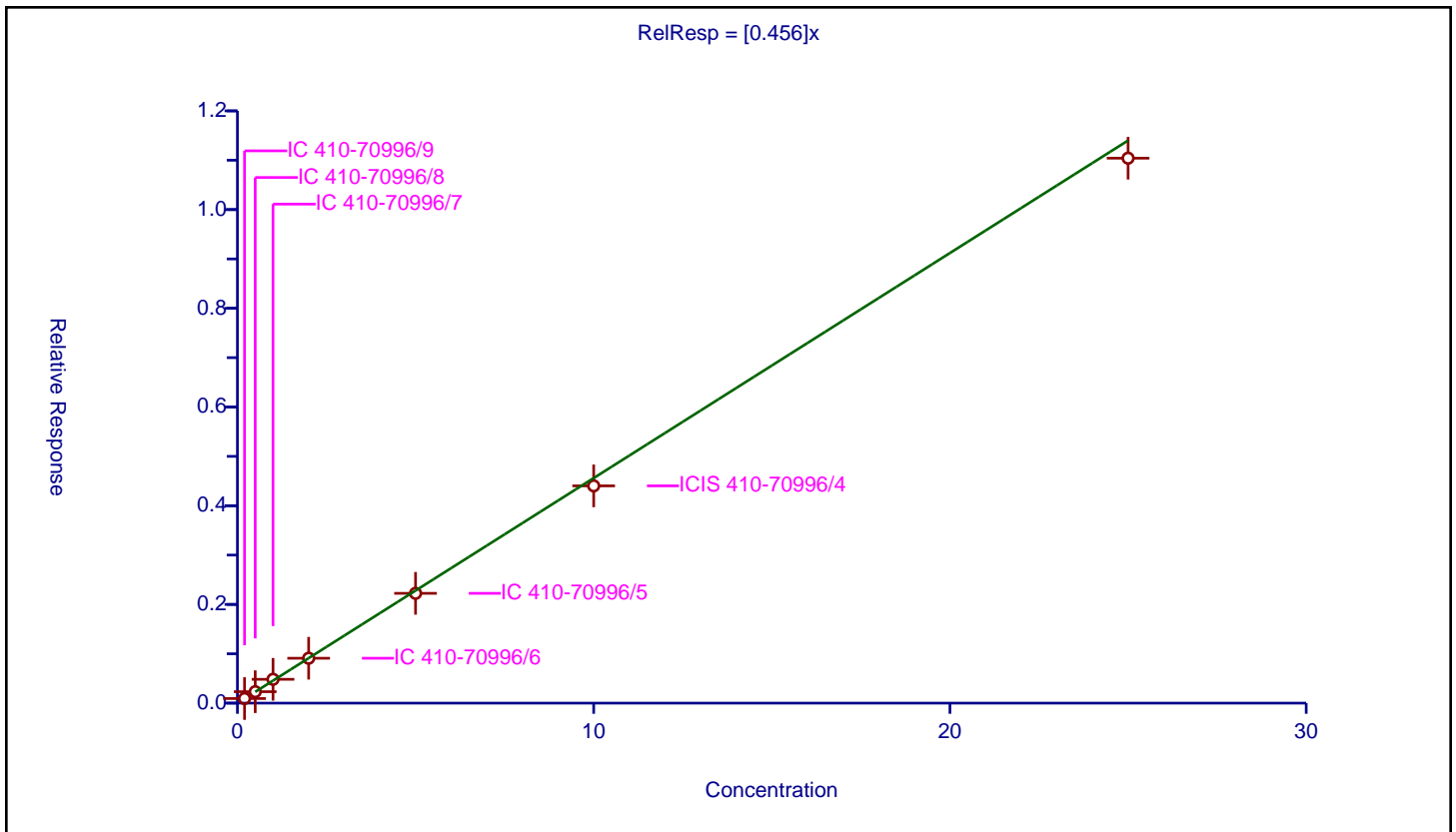
/ 1,3-Dichloropropane

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

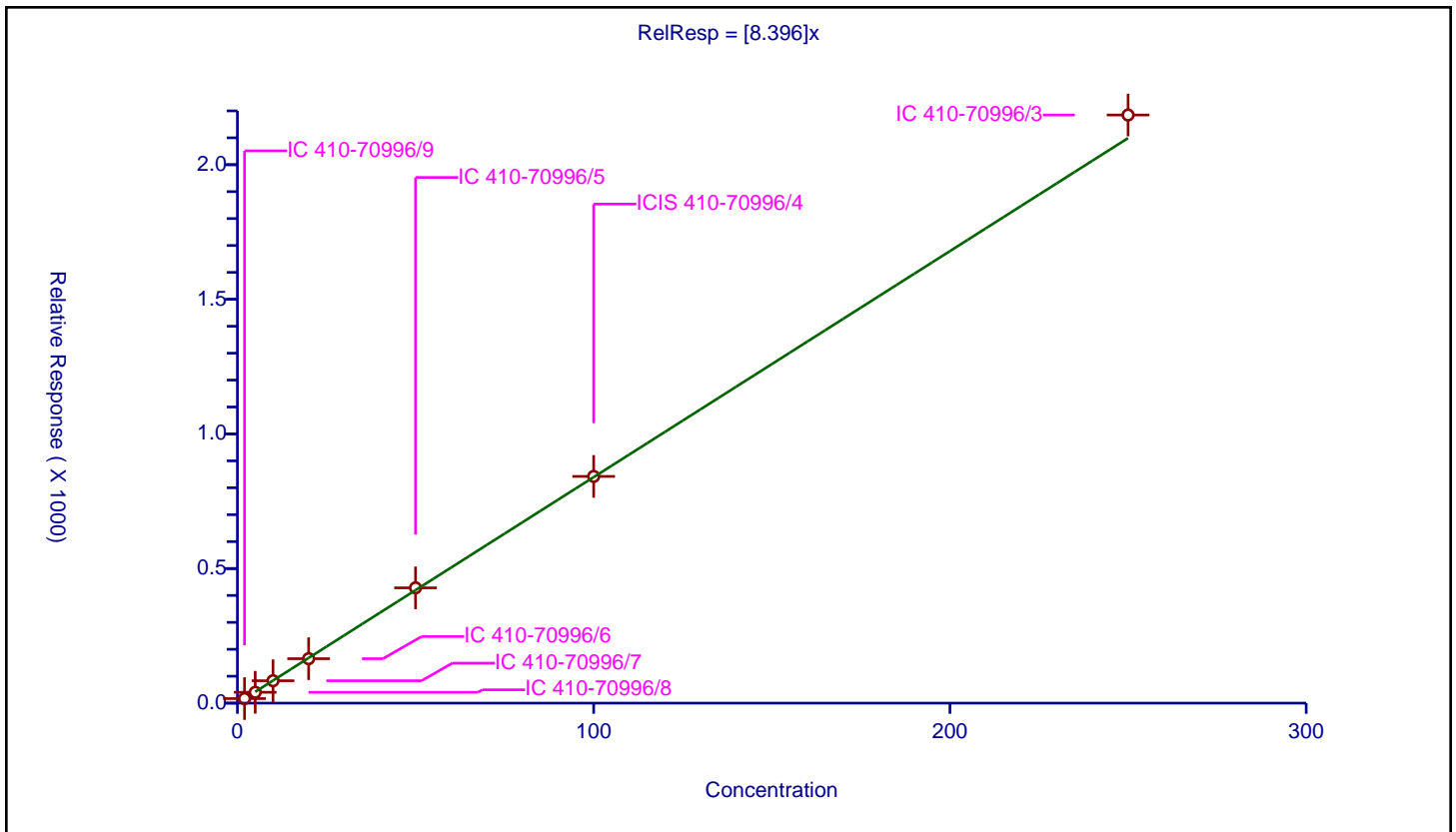
/ 2-Hexanone

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

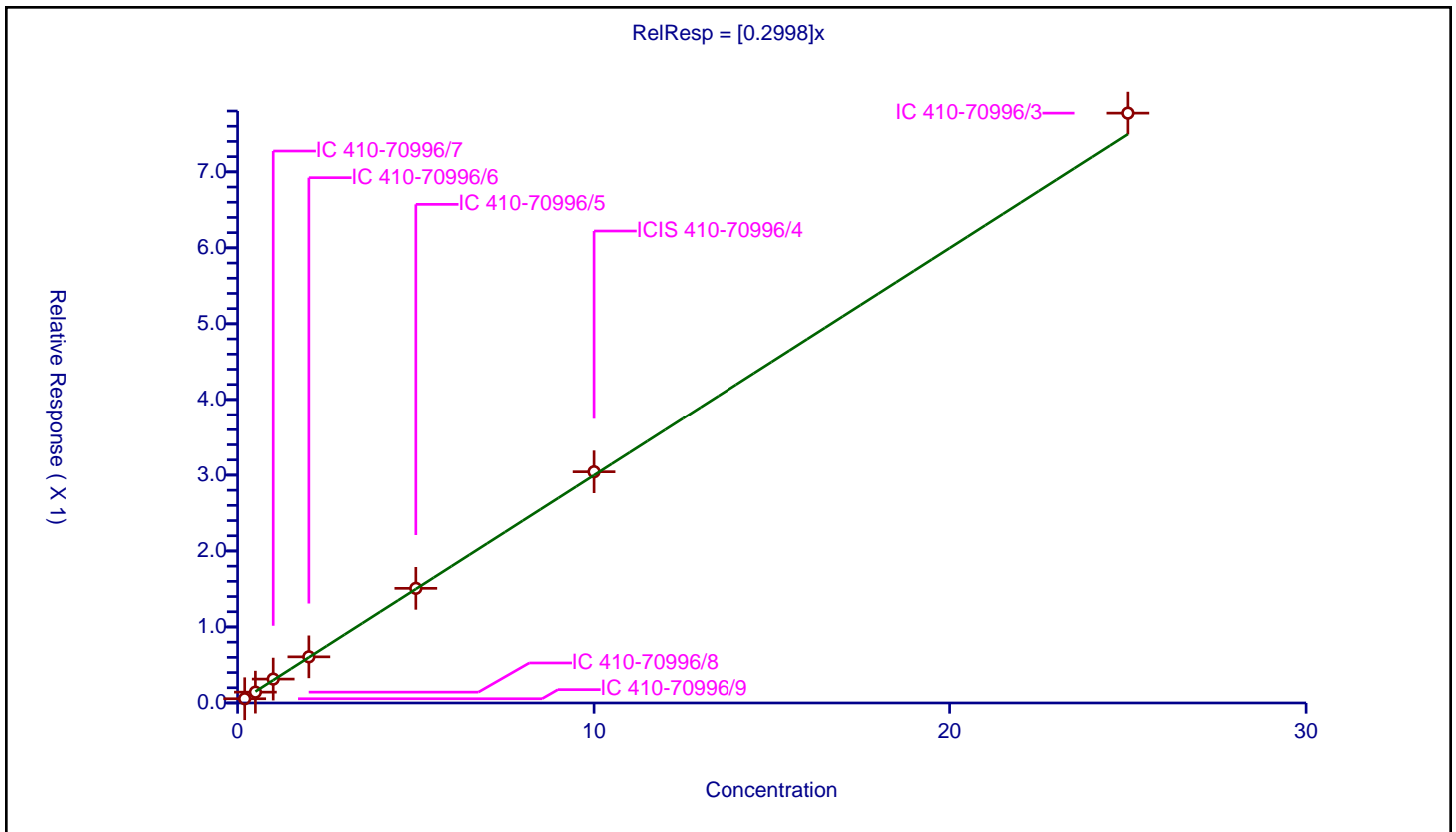
/ Chlorodibromomethane

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

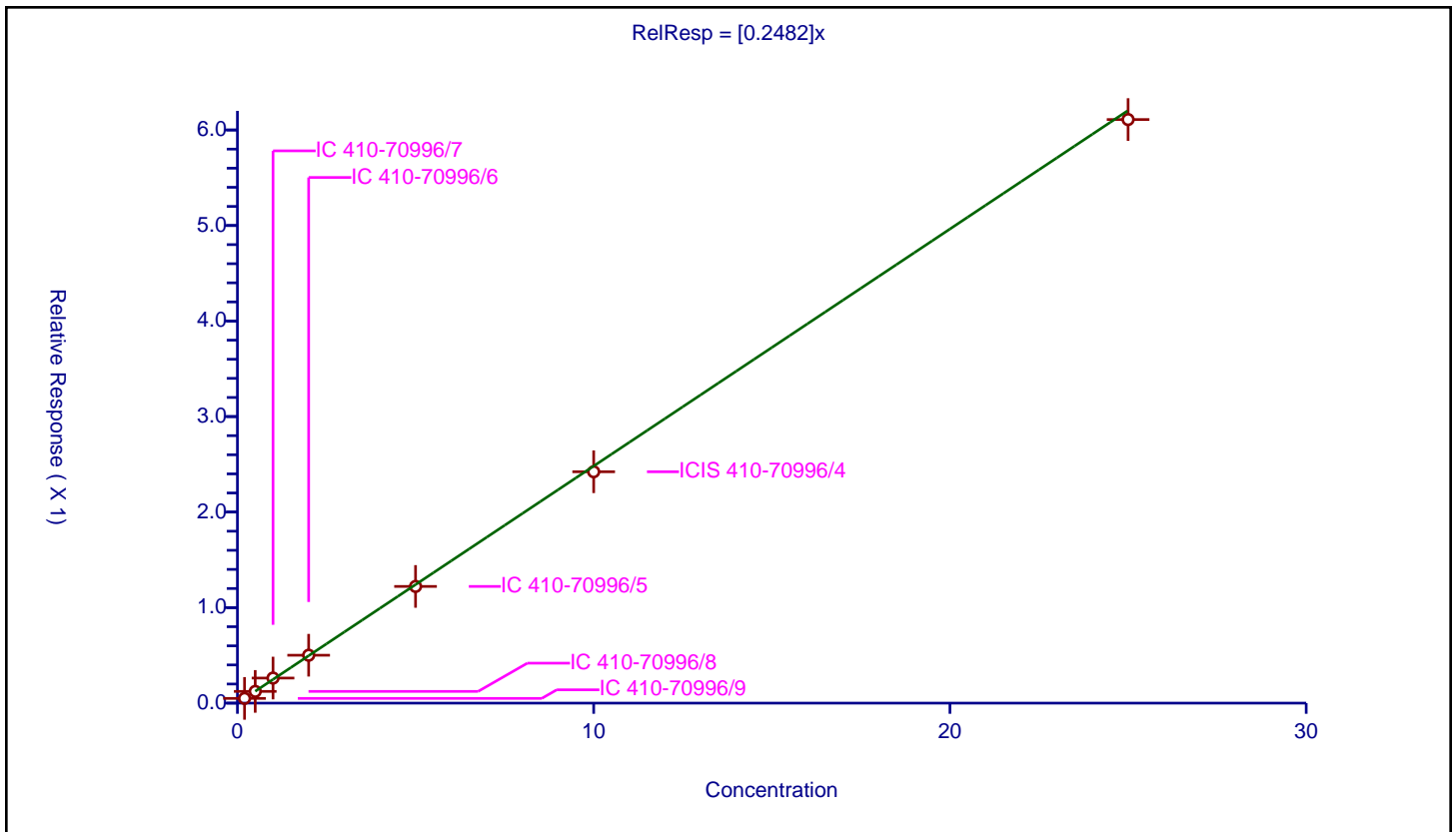
/ Ethylene Dibromide

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

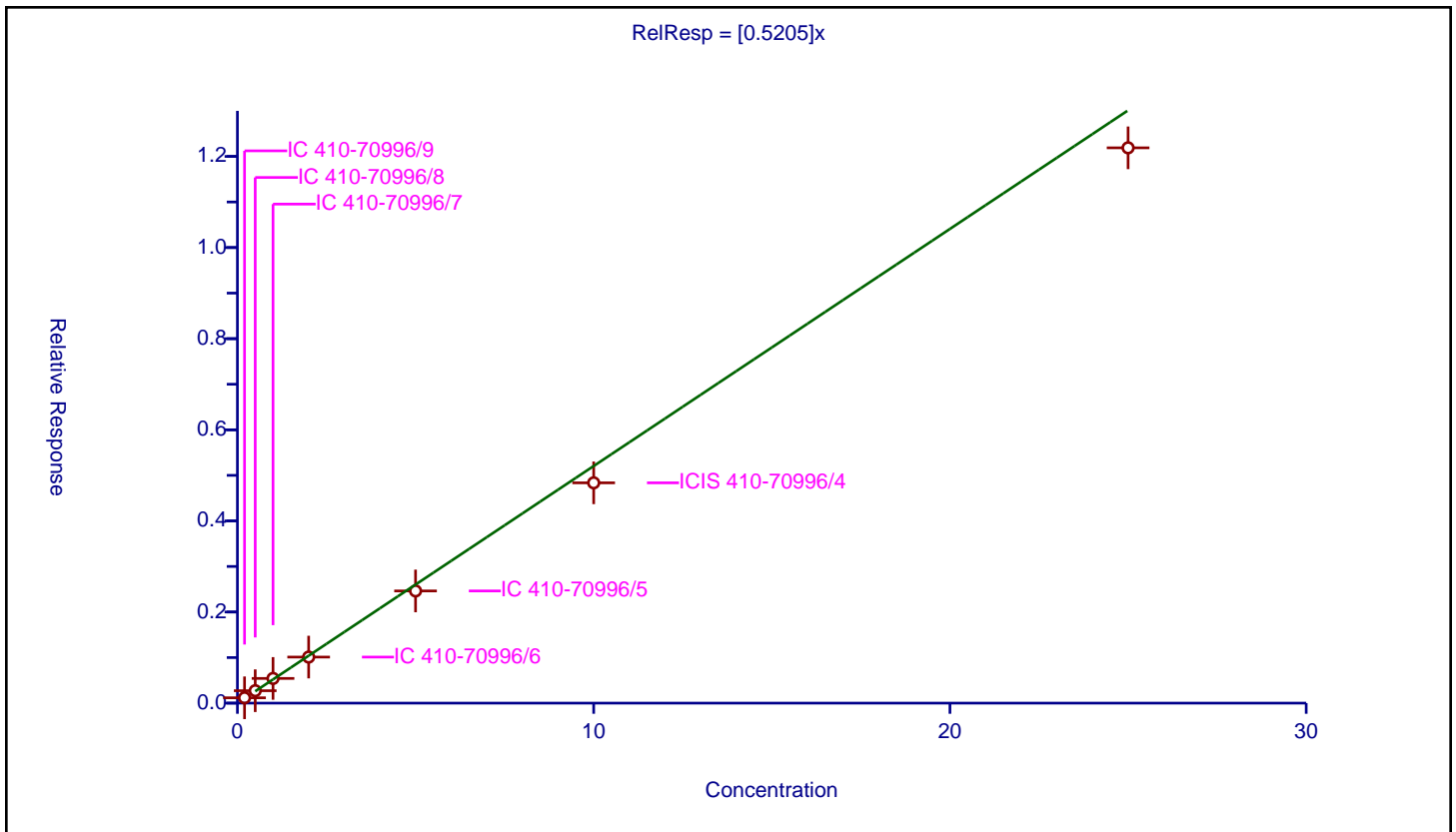
/ 1-Chlorohexane

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

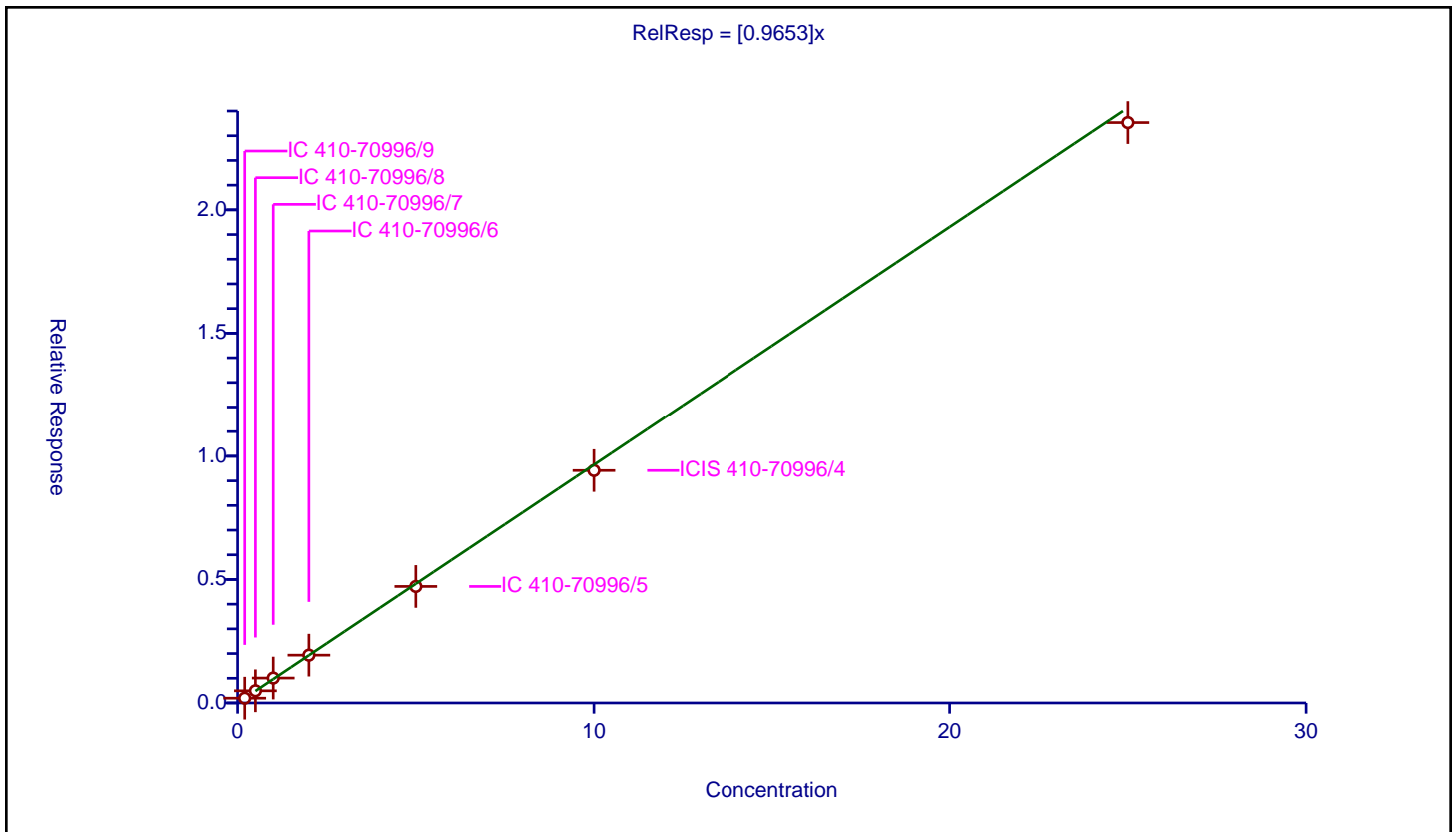
/ Chlorobenzene

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

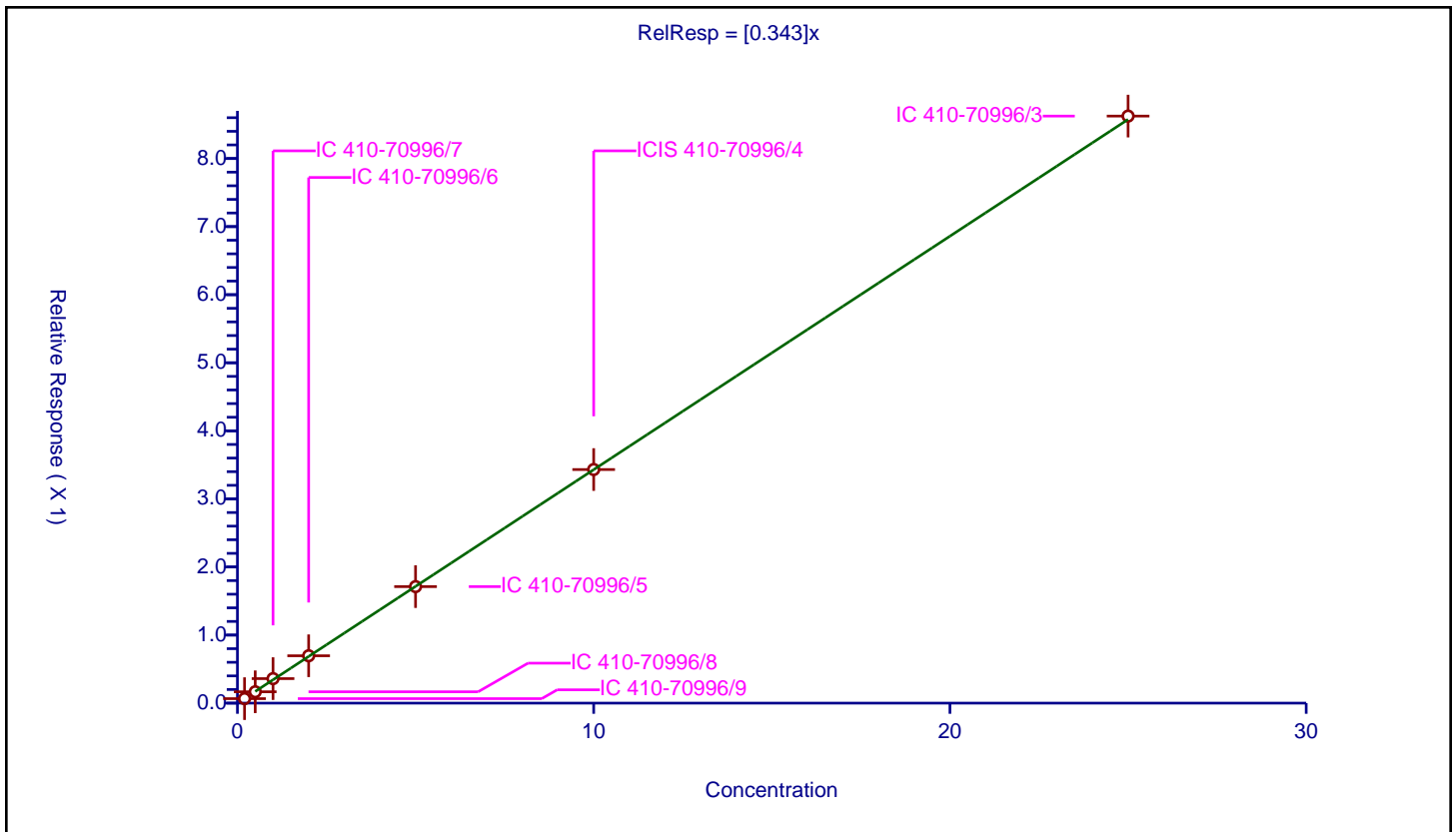
/ 1,1,1,2-Tetrachloroethane

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

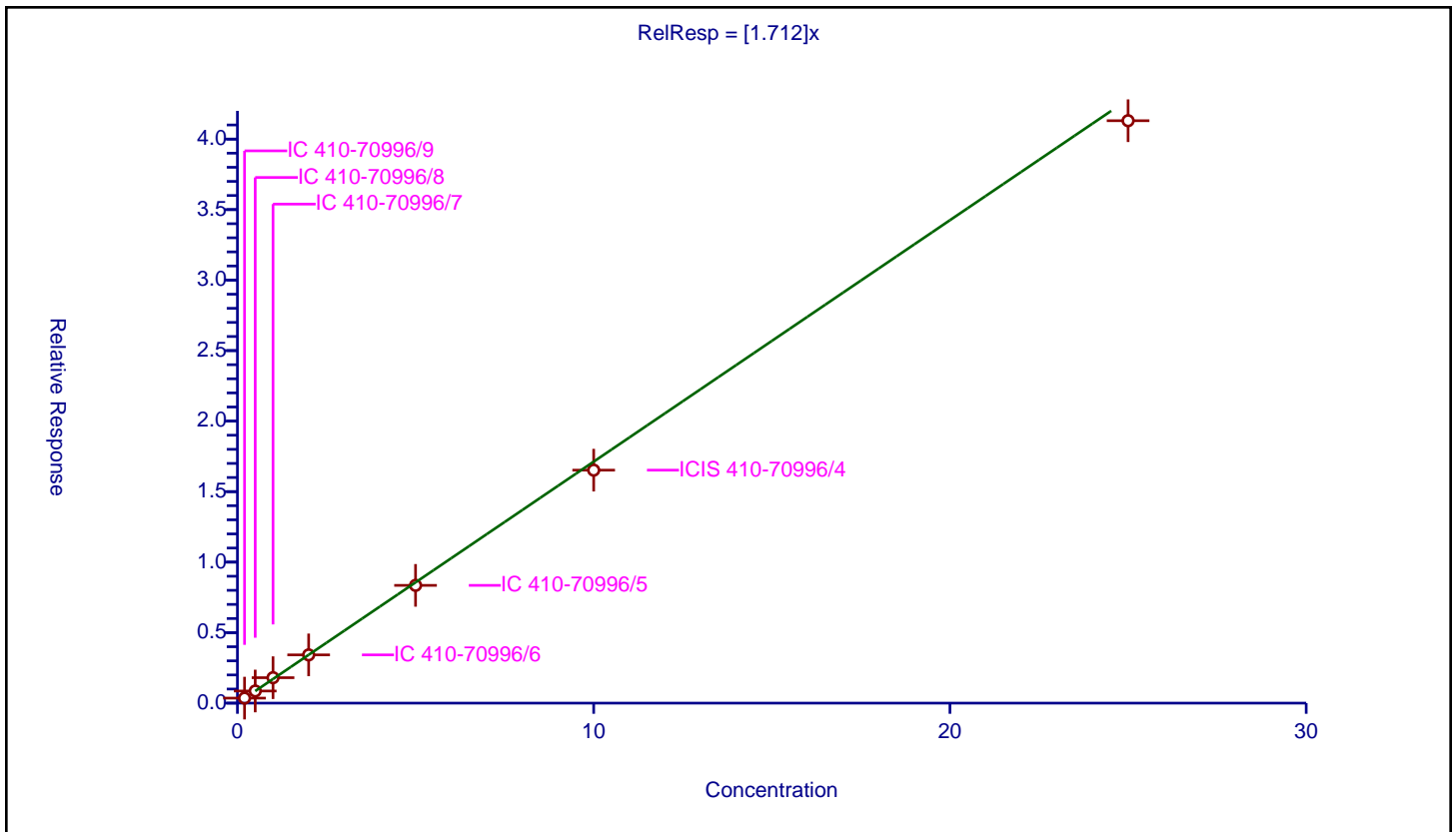
/ Ethylbenzene

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

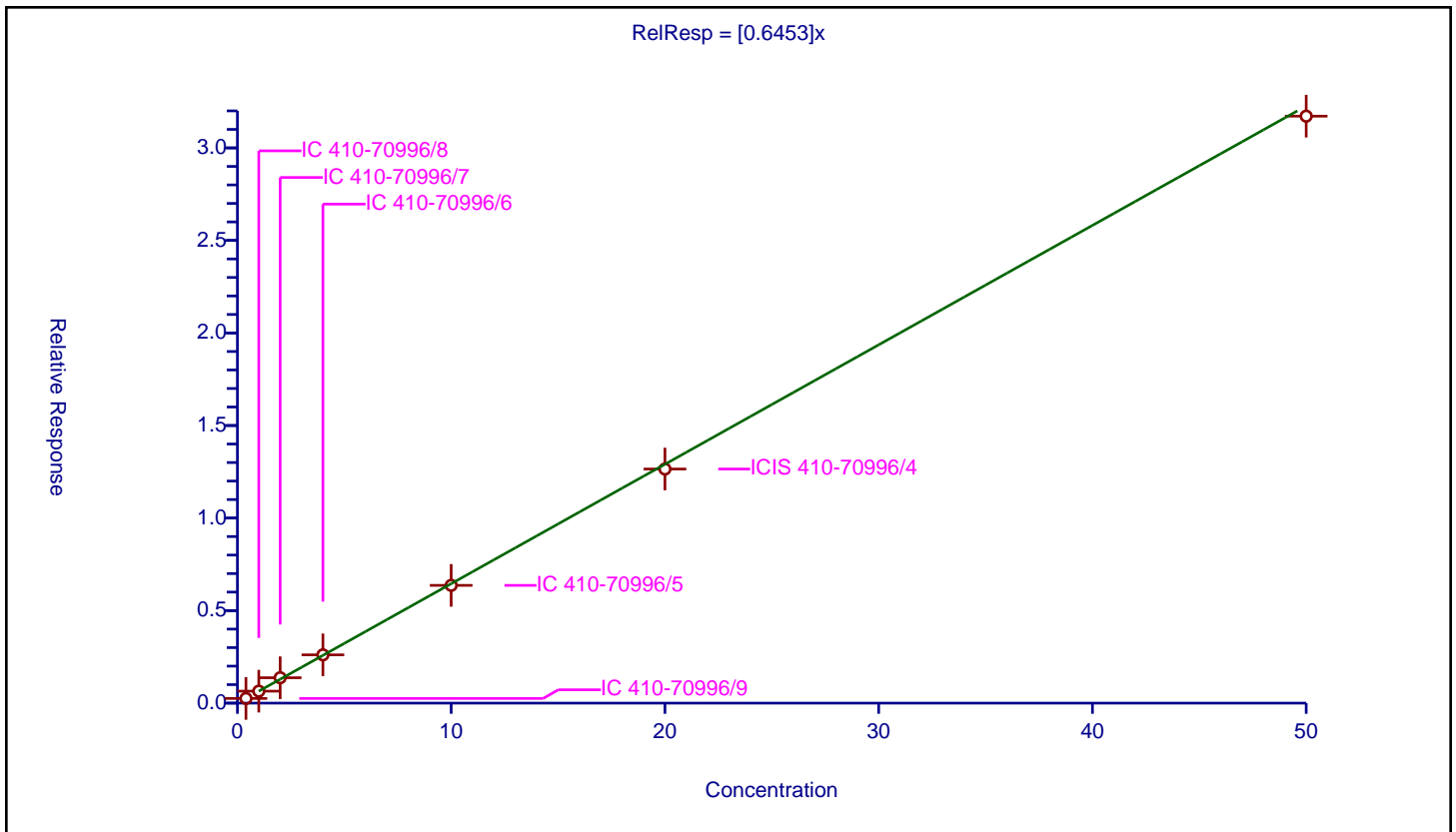
/ m-Xylene & p-Xylene

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

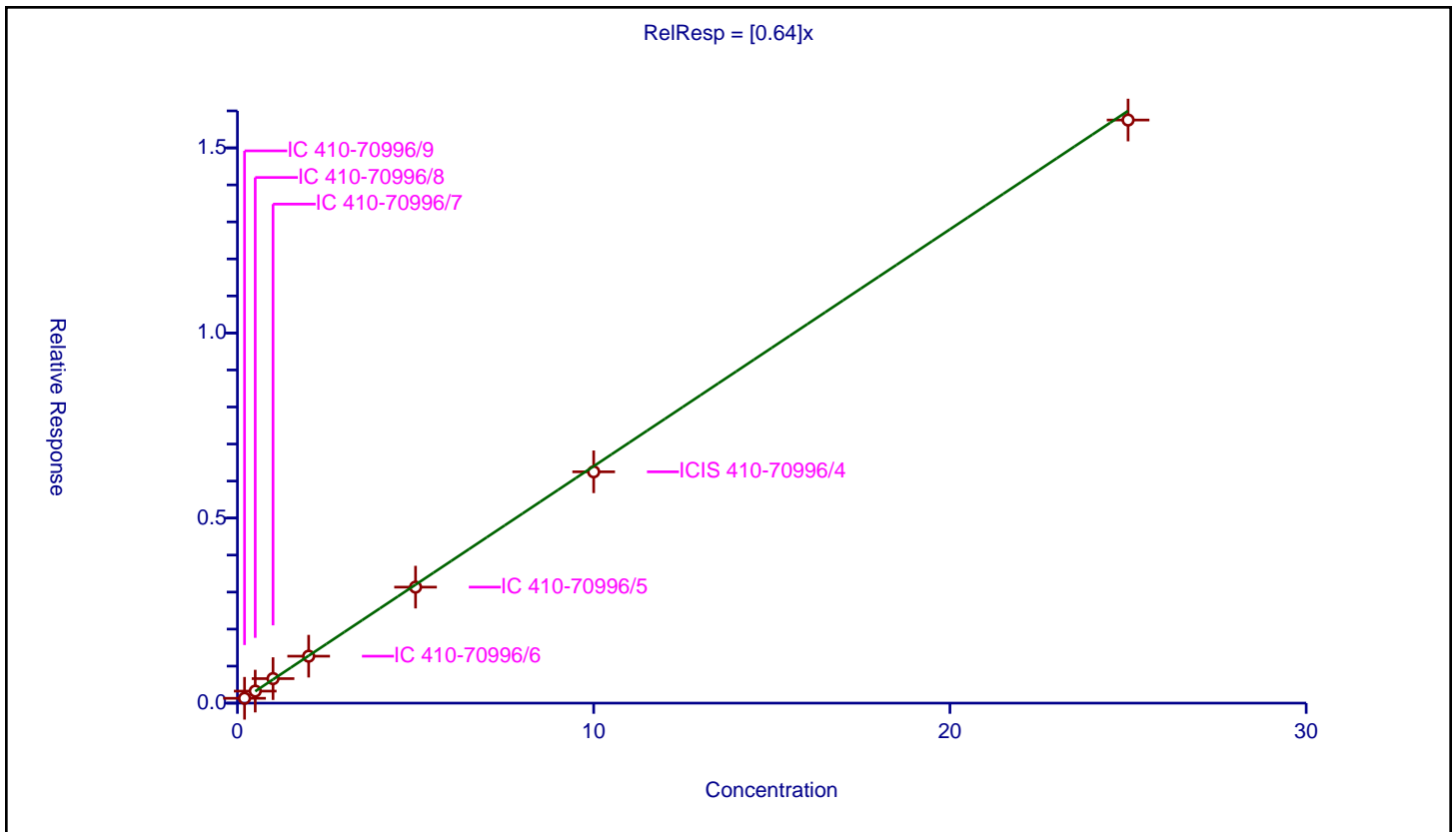
/ o-Xylene

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

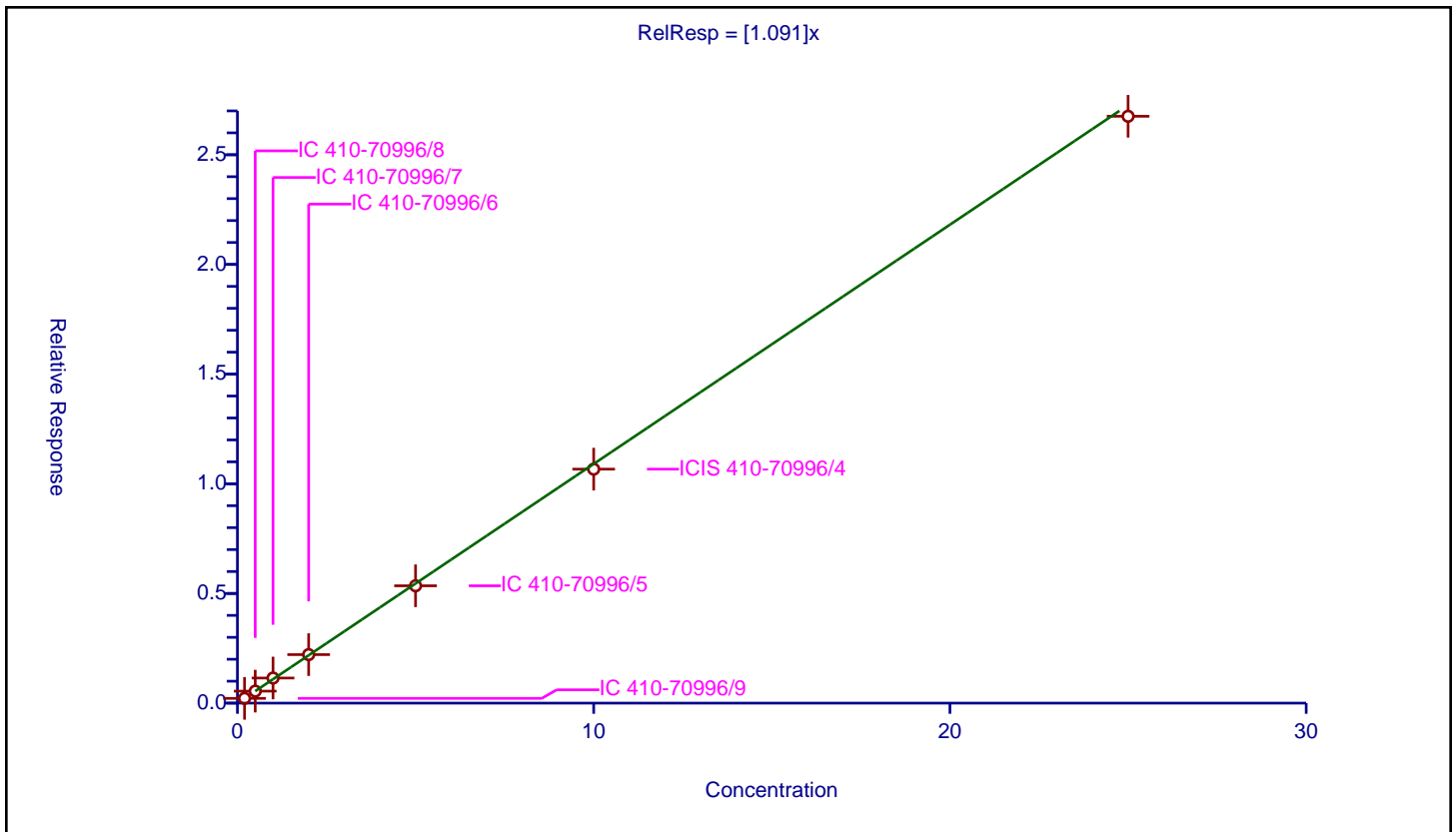
/ Styrene

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

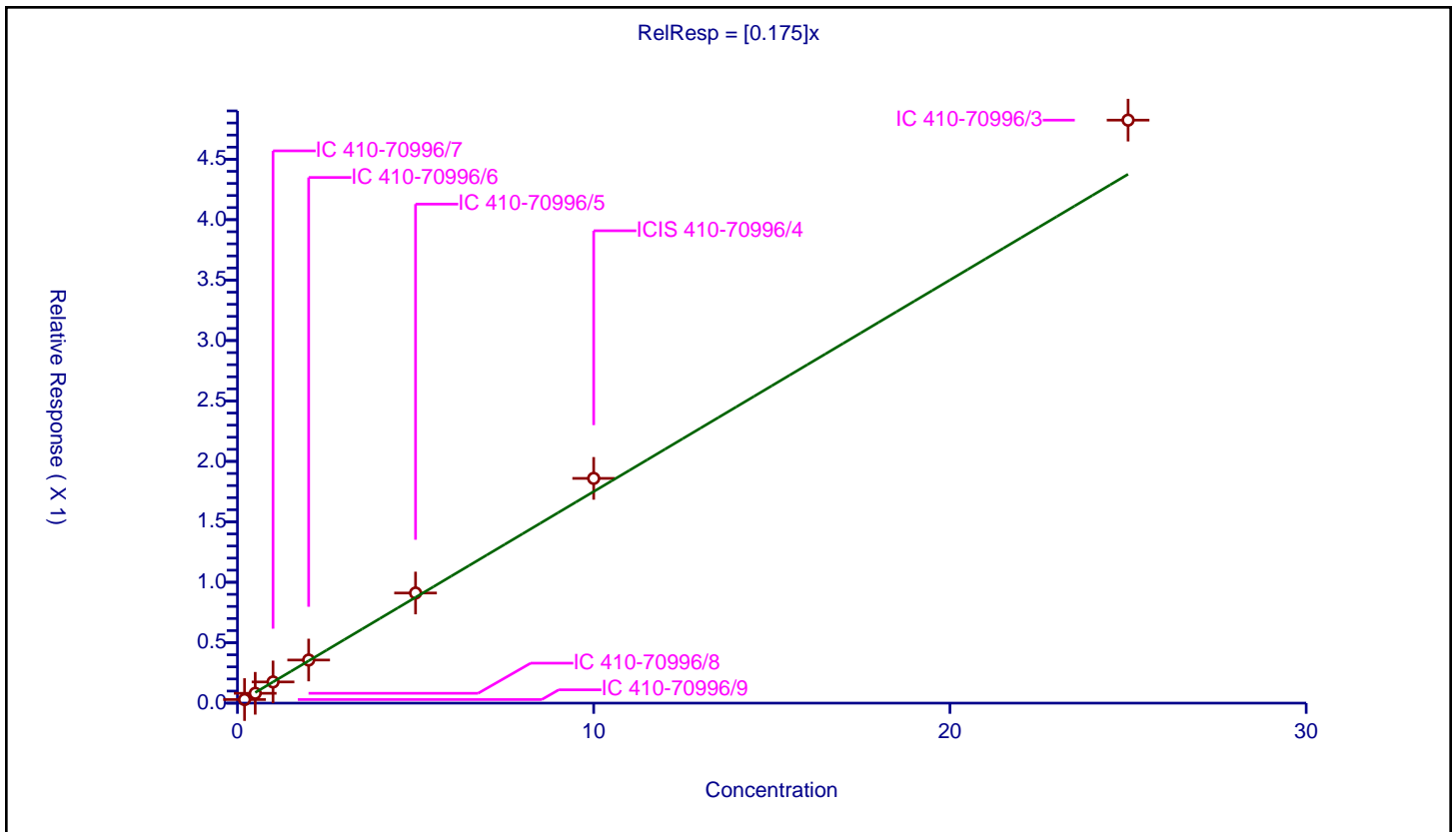
/ Bromoform

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

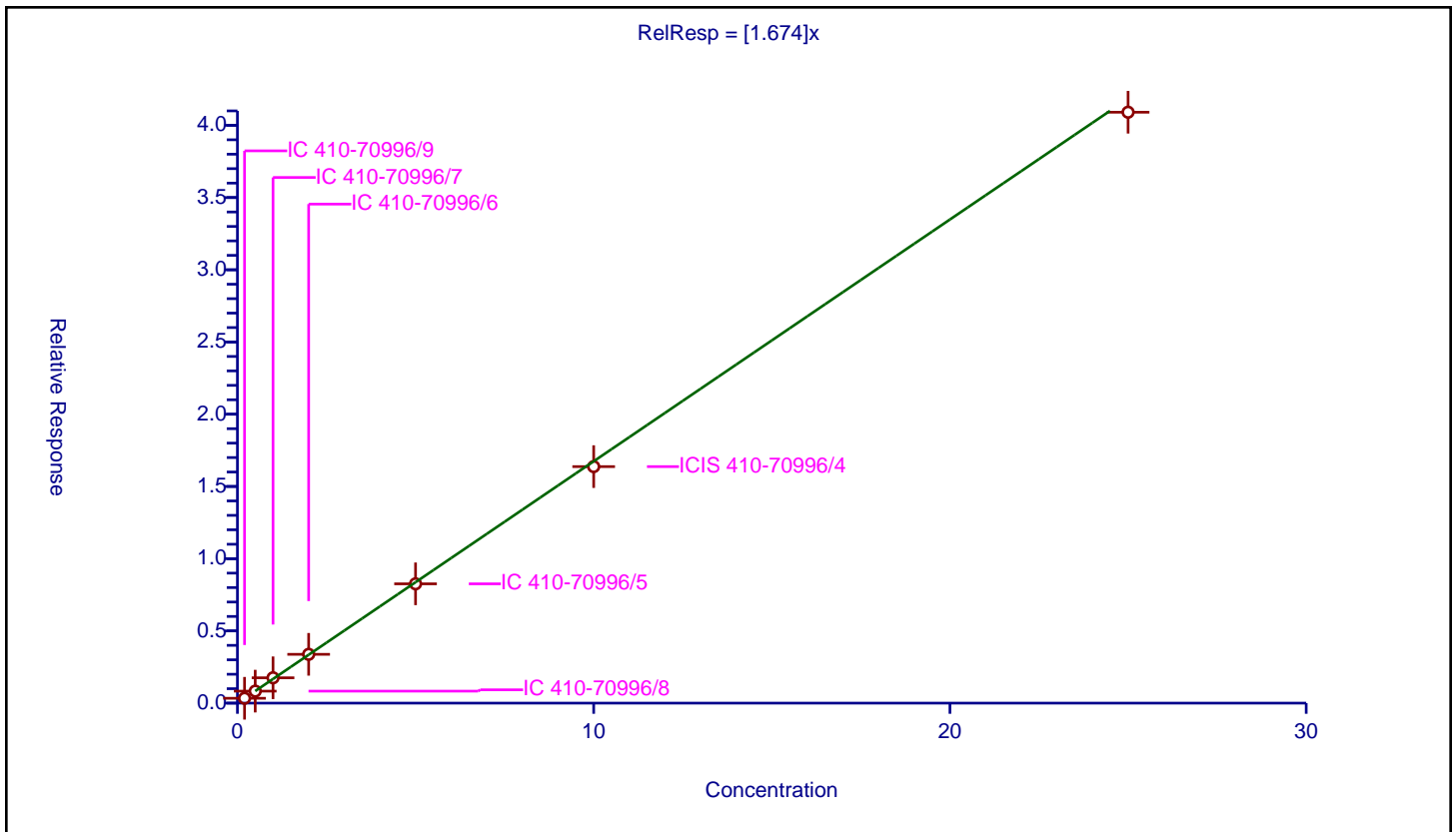
/ Isopropylbenzene

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

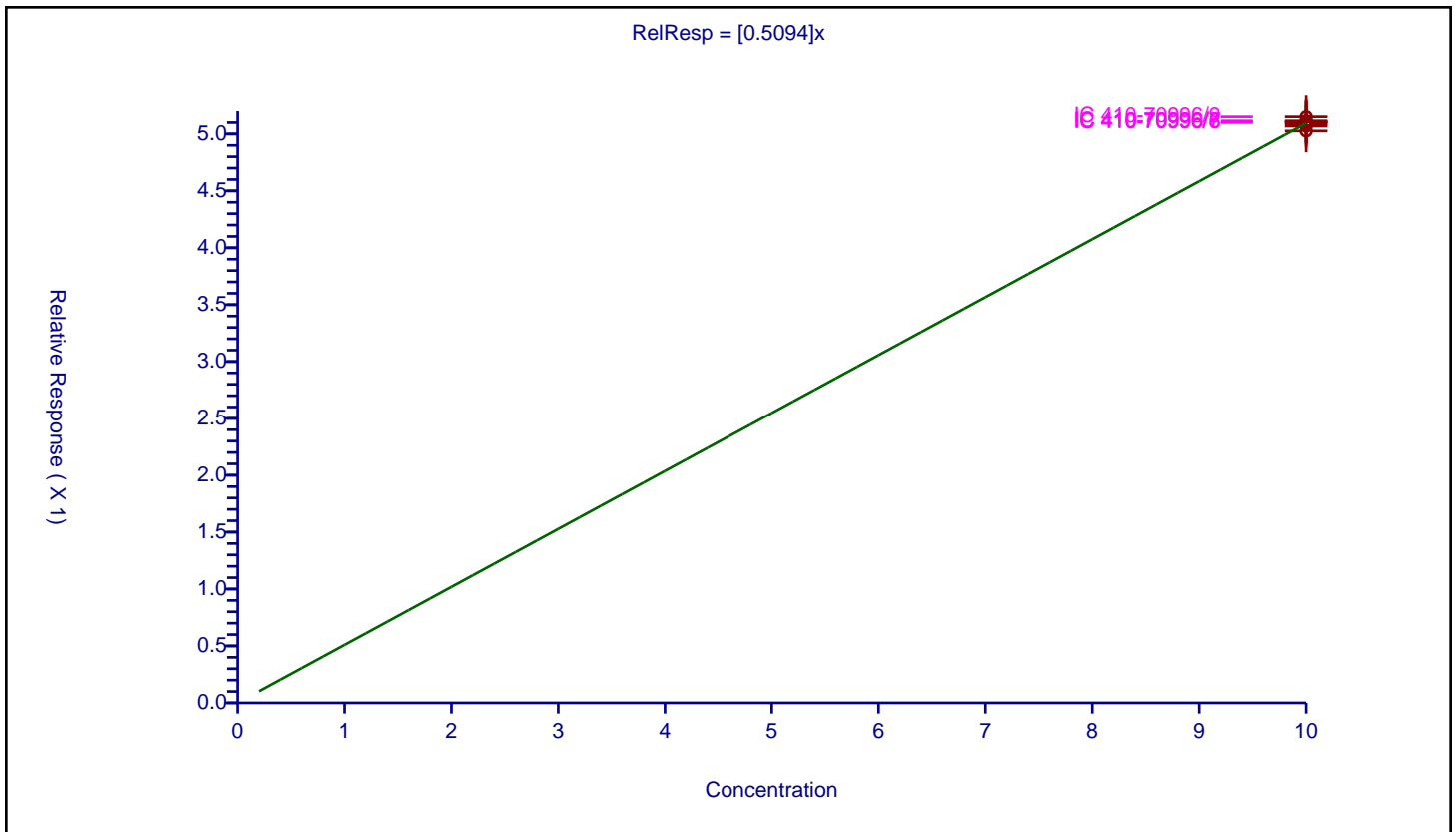
/ 4-Bromofluorobenzene (Surr)

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

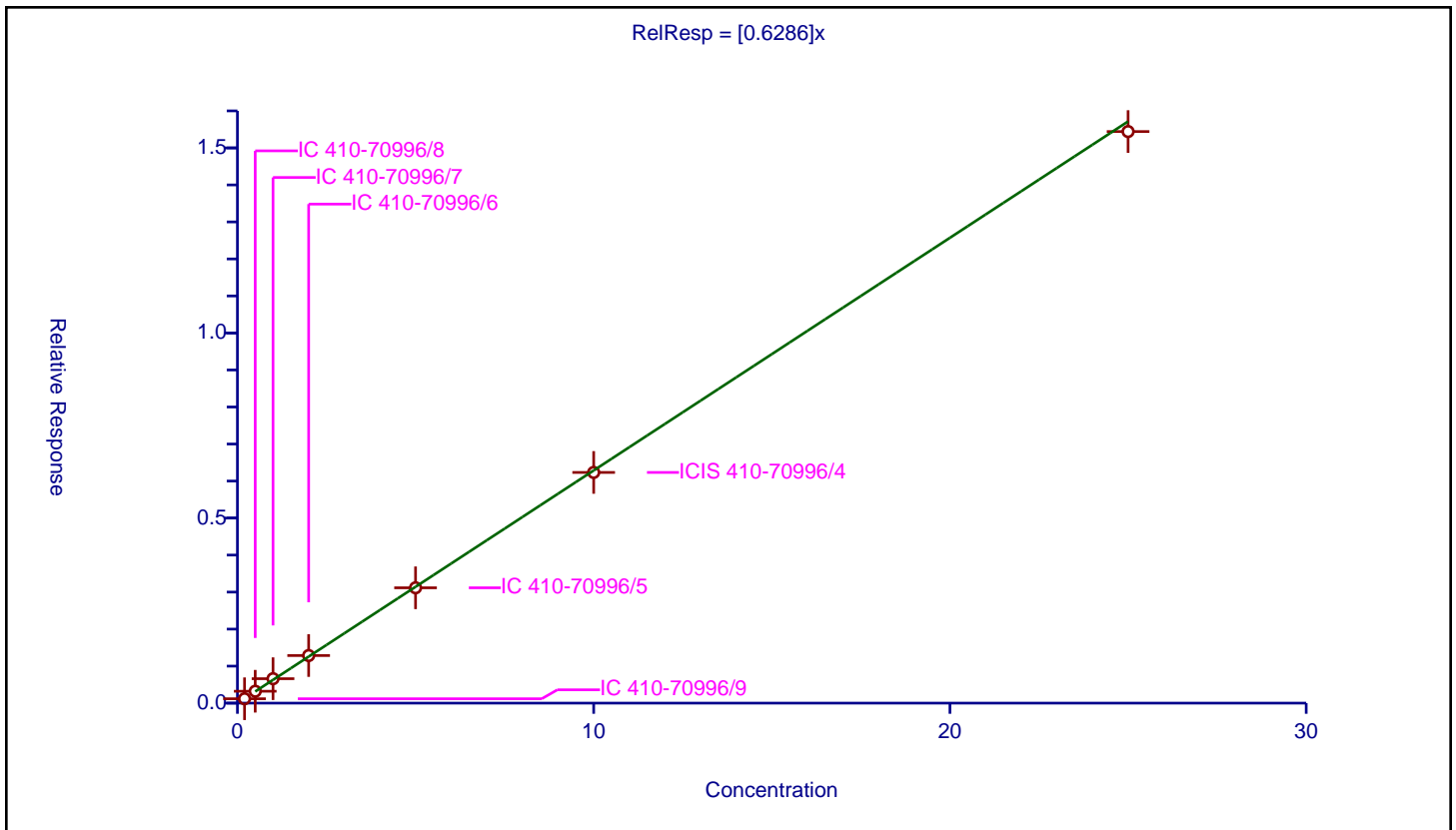
/ 1,1,2,2-Tetrachloroethane

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

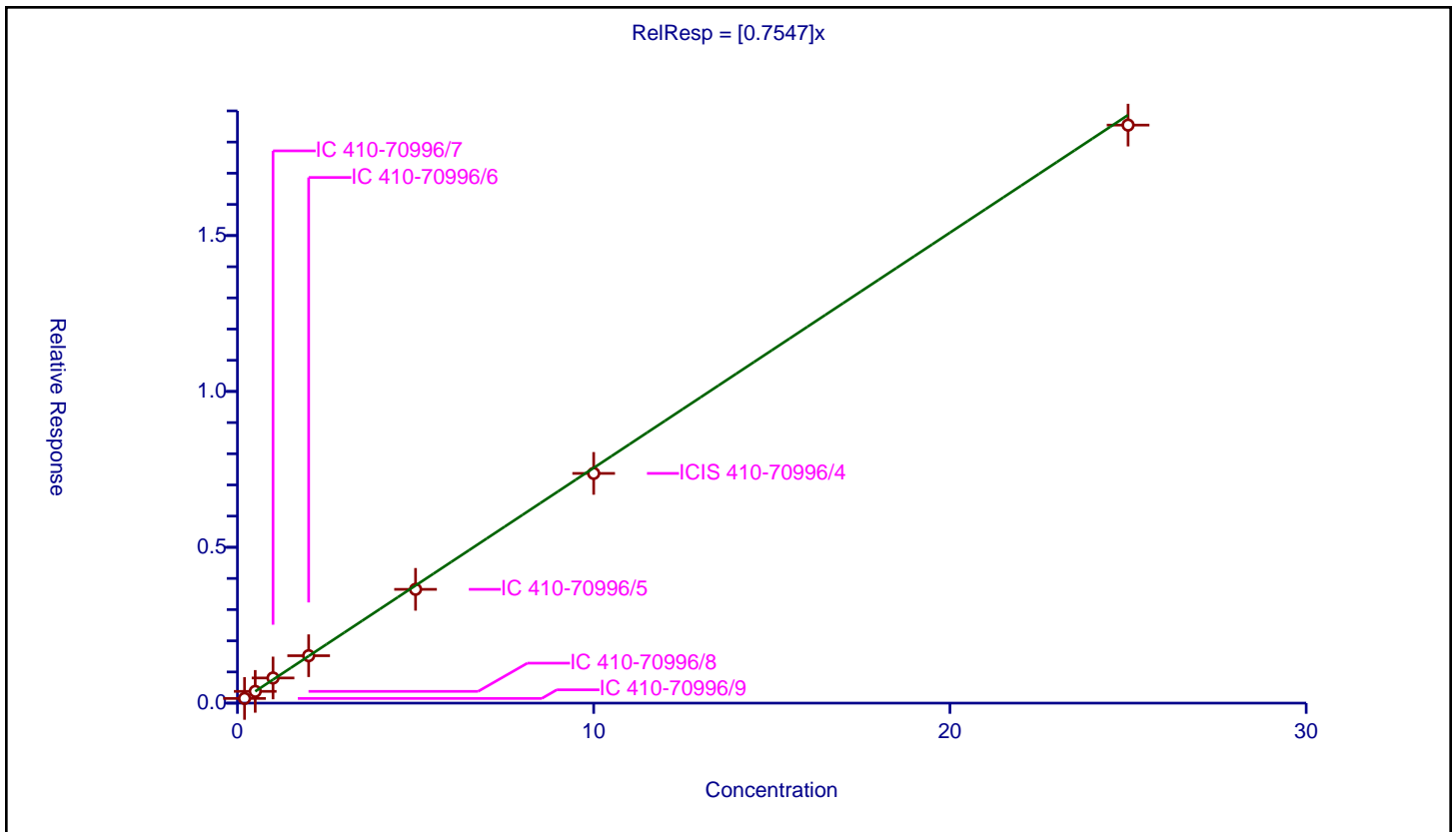
/ Bromobenzene

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

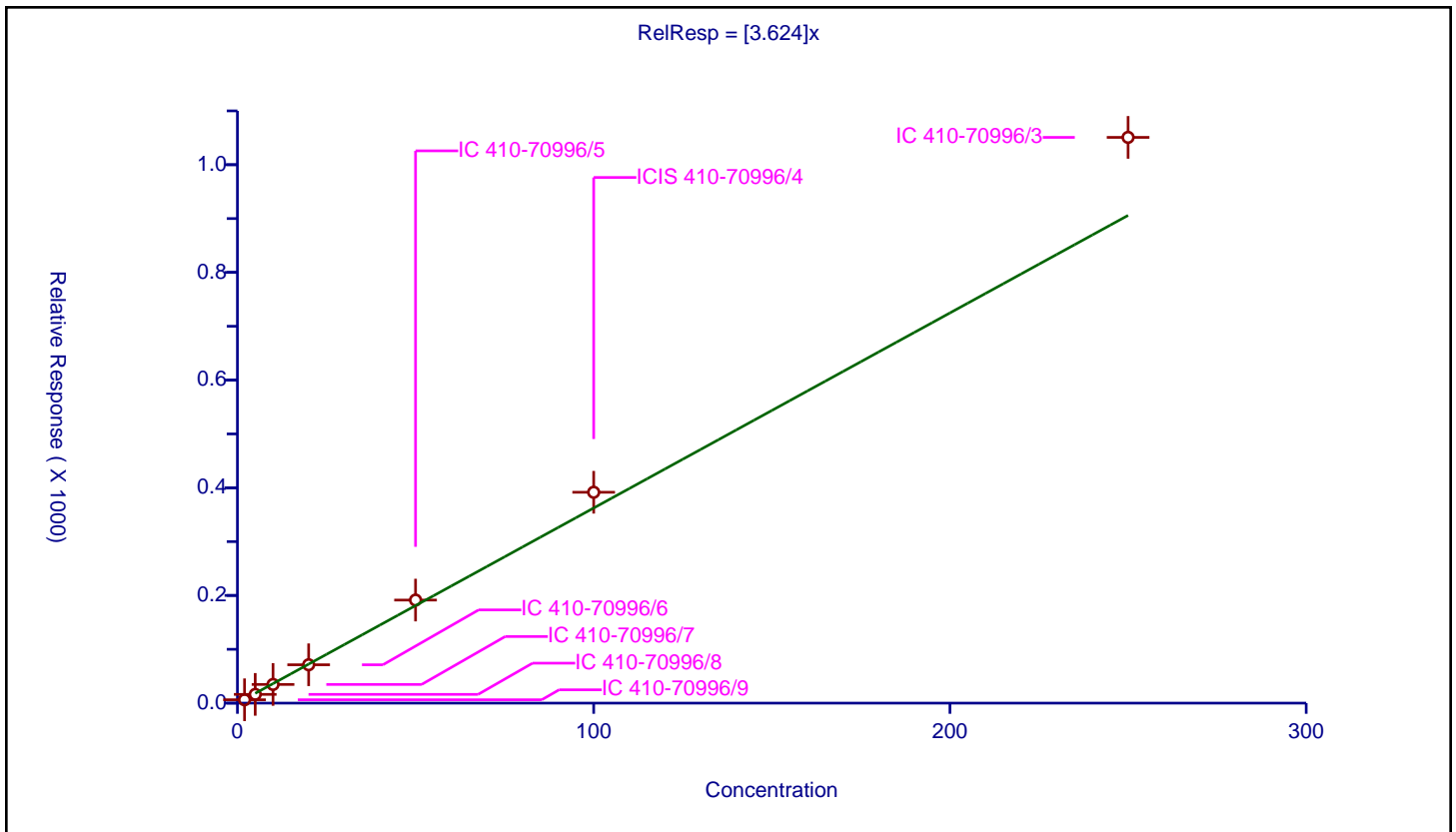
/ trans-1,4-Dichloro-2-butene

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

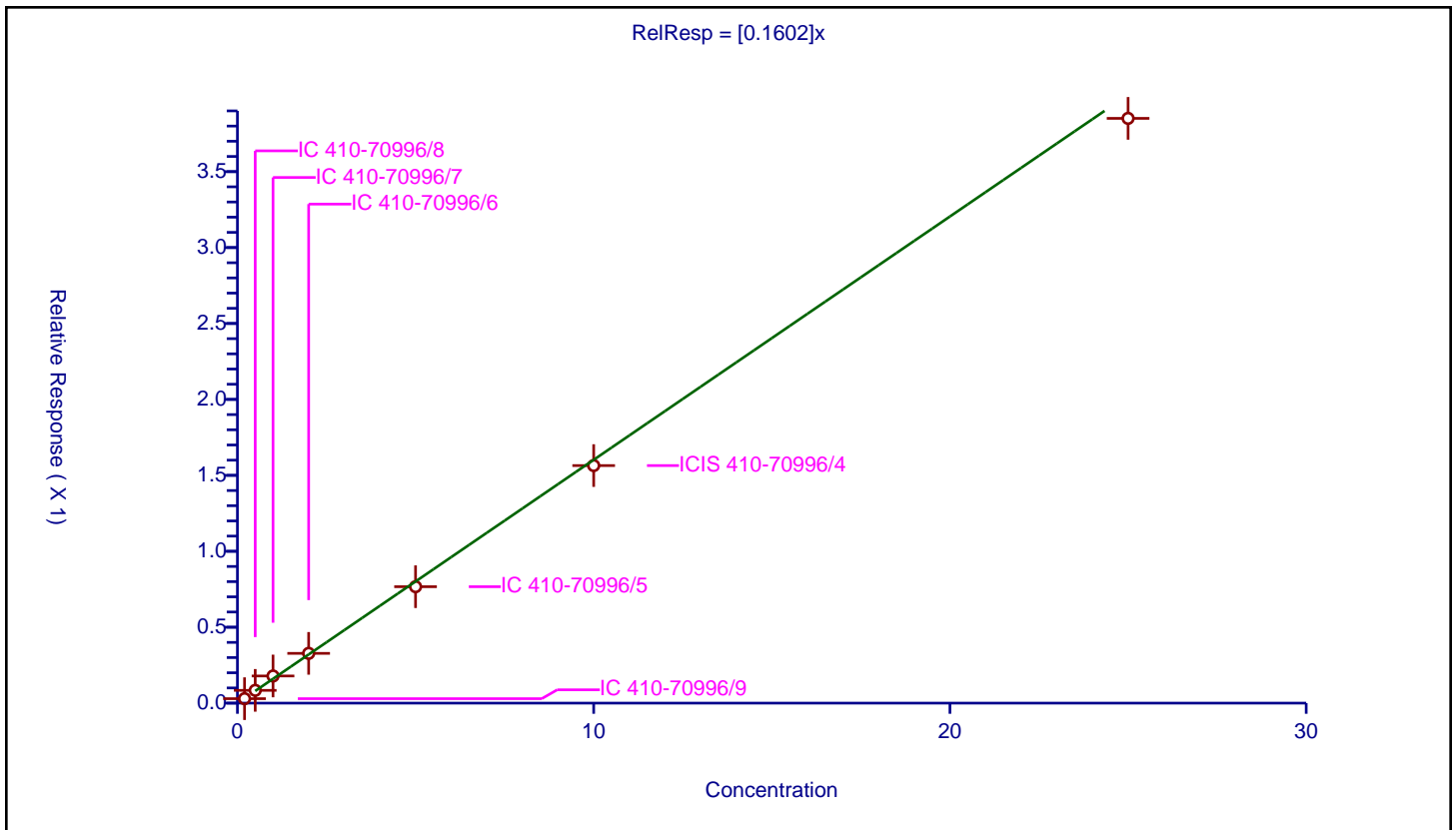
/ 1,2,3-Trichloropropane

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

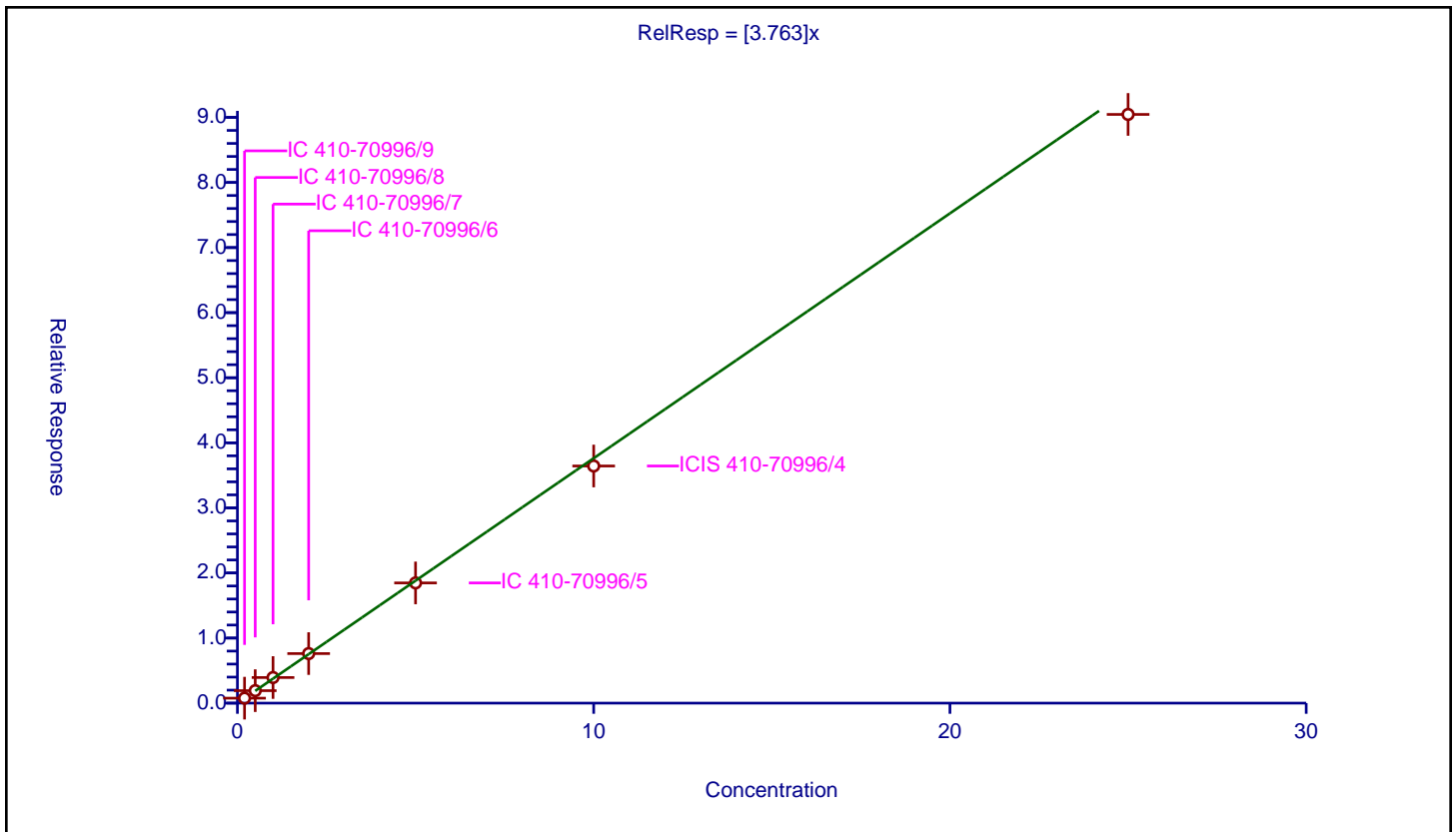
/ N-Propylbenzene

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

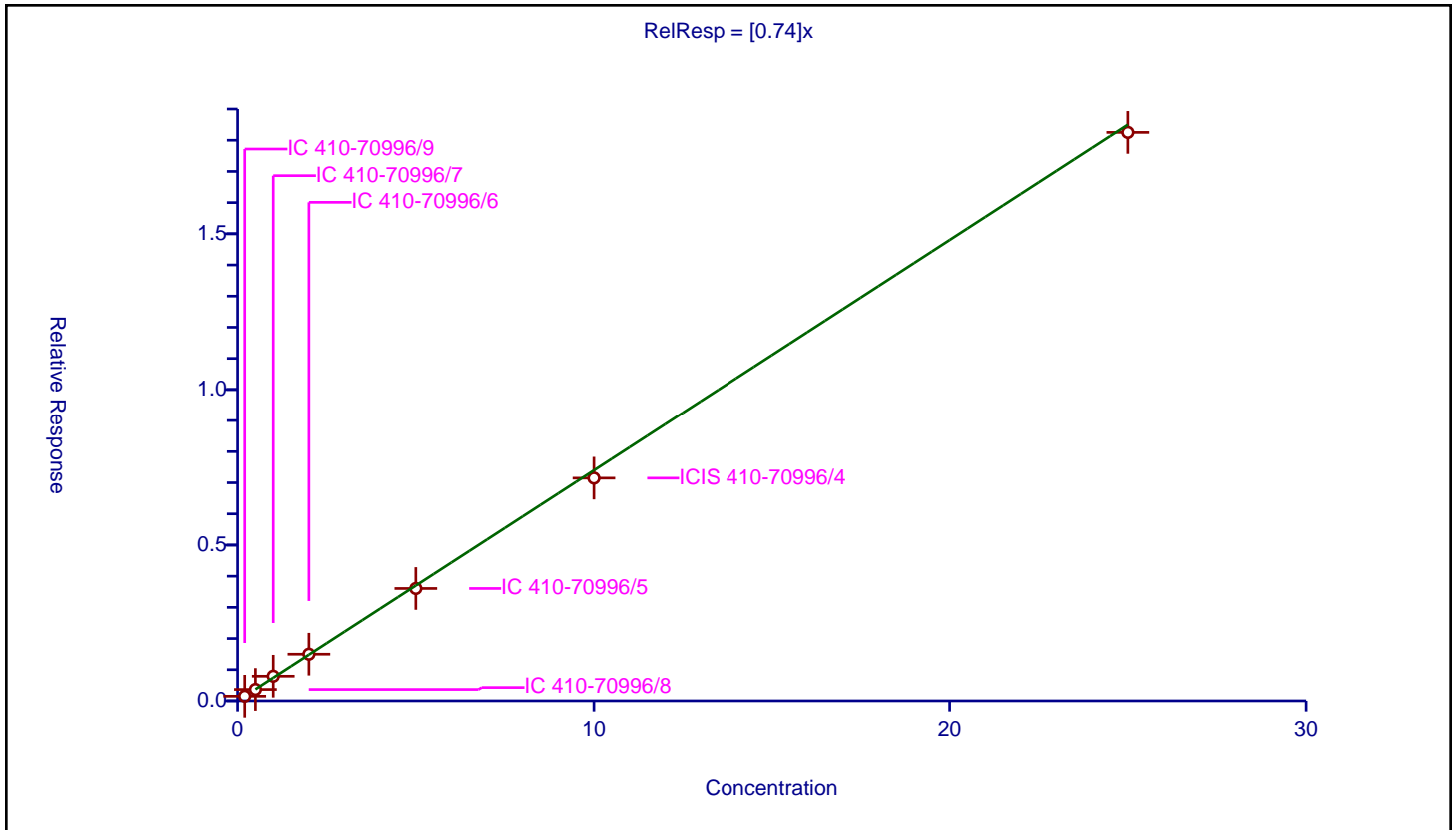
/ 2-Chlorotoluene

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

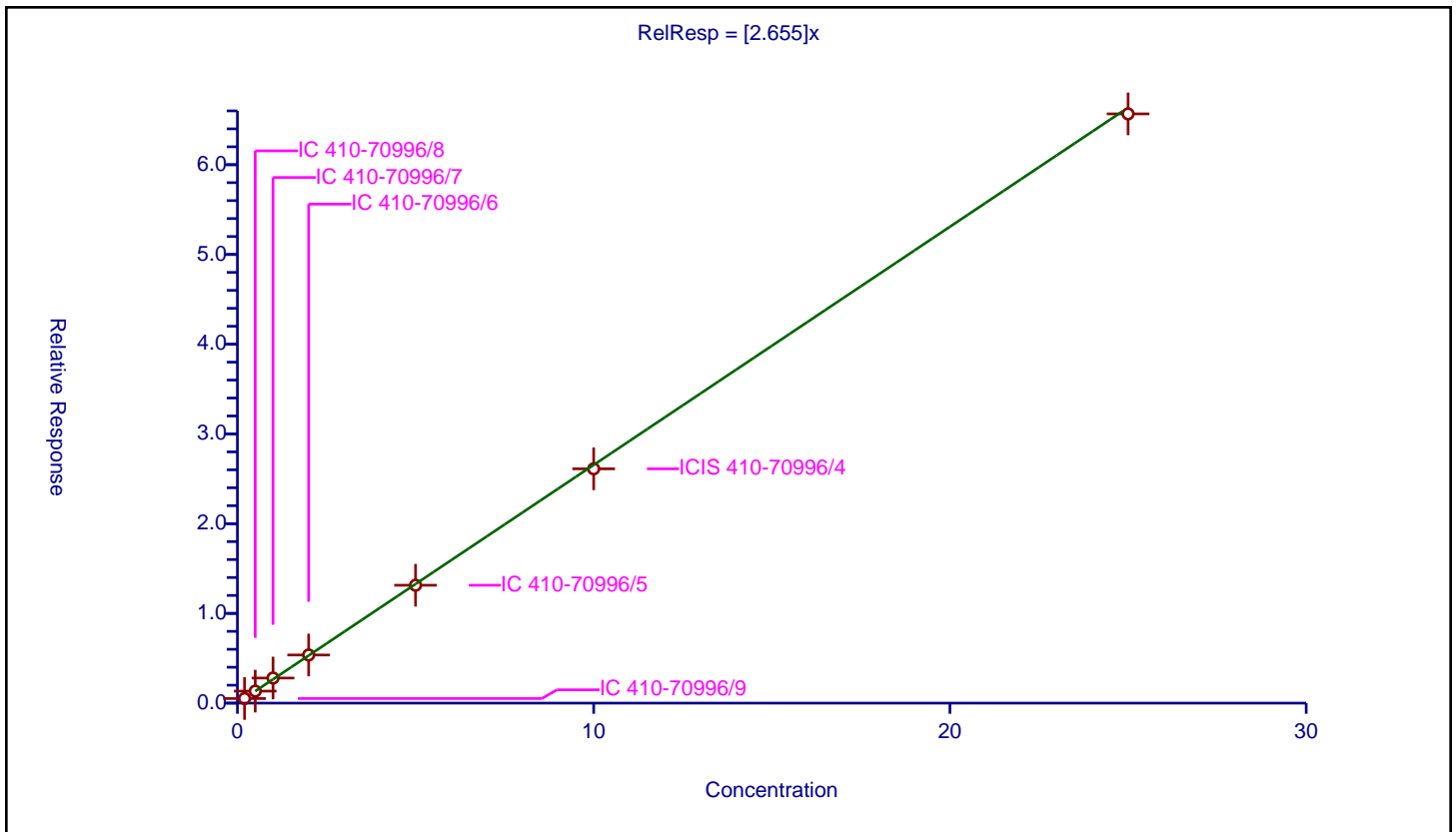
/ 1,3,5-Trimethylbenzene

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

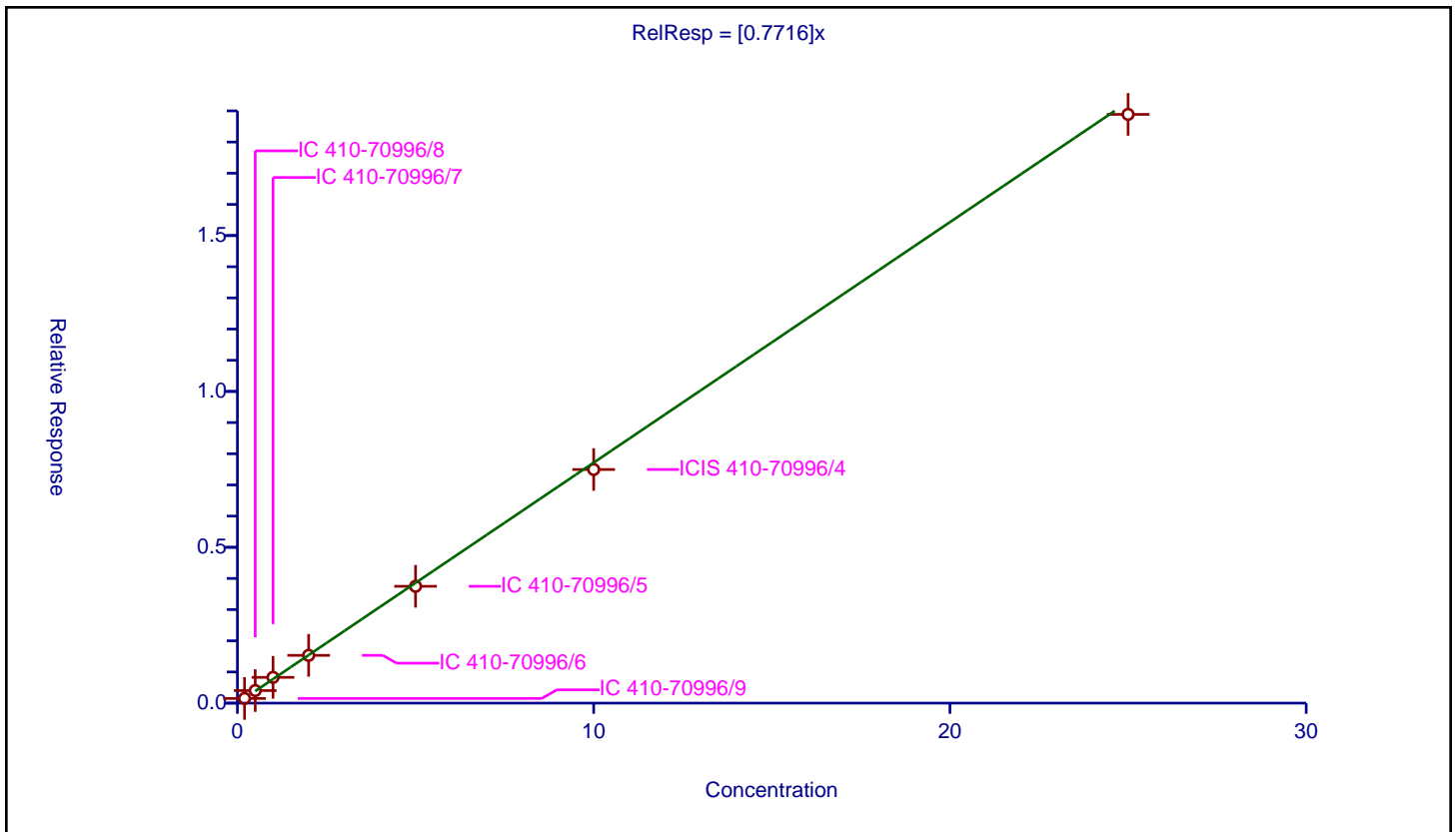
/ 4-Chlorotoluene

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

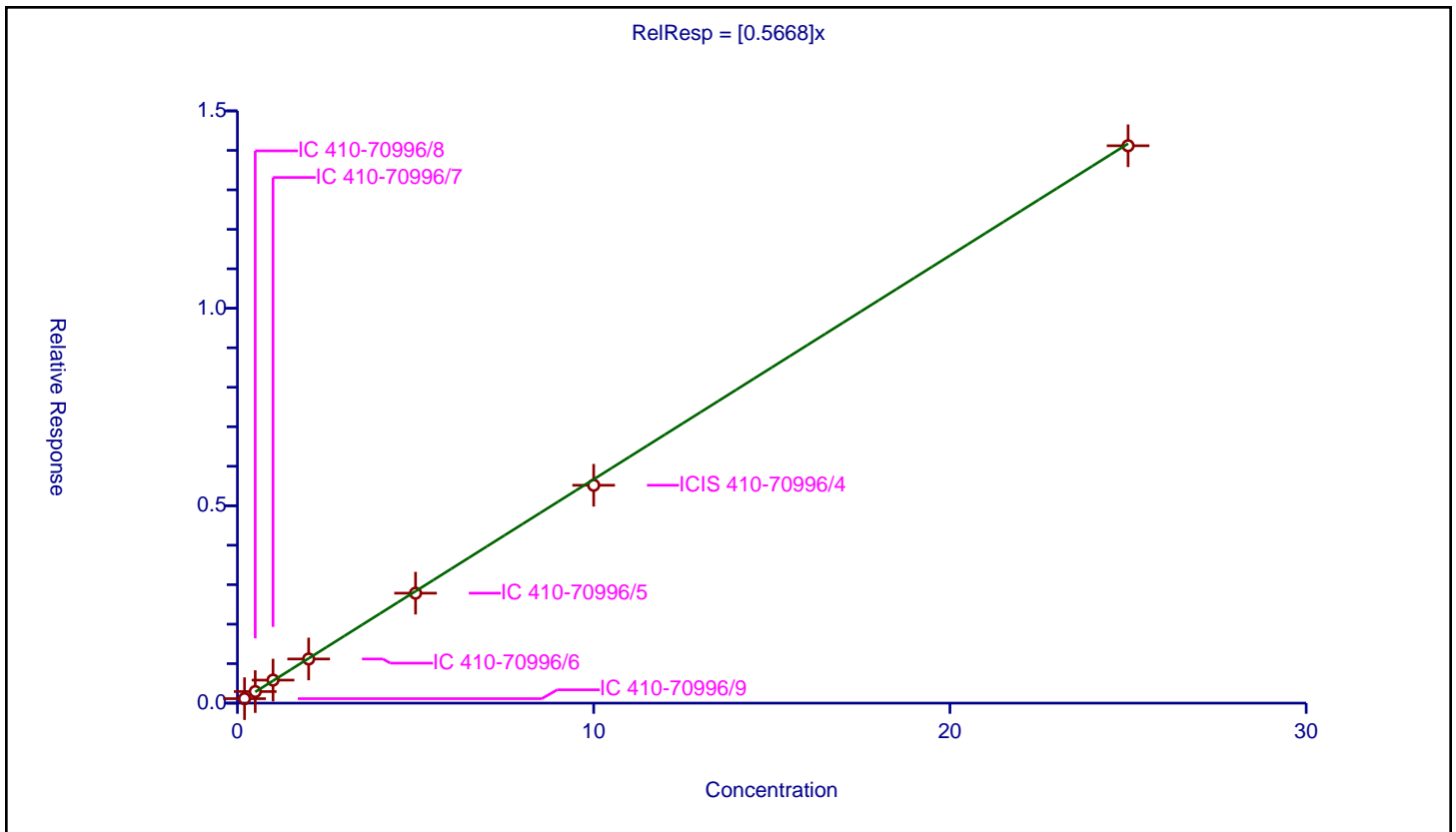
/ tert-Butylbenzene

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

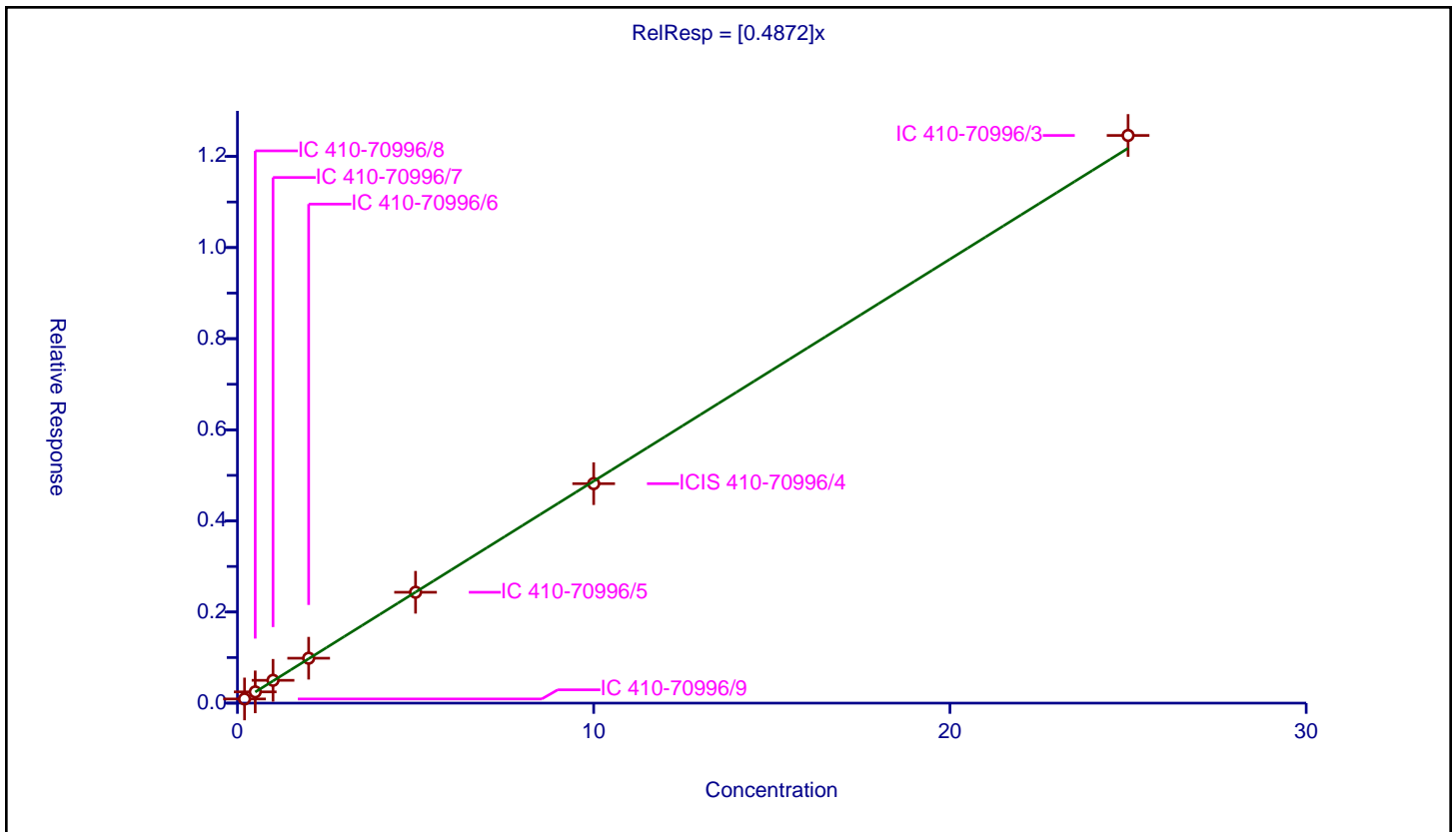
/ Pentachloroethane

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

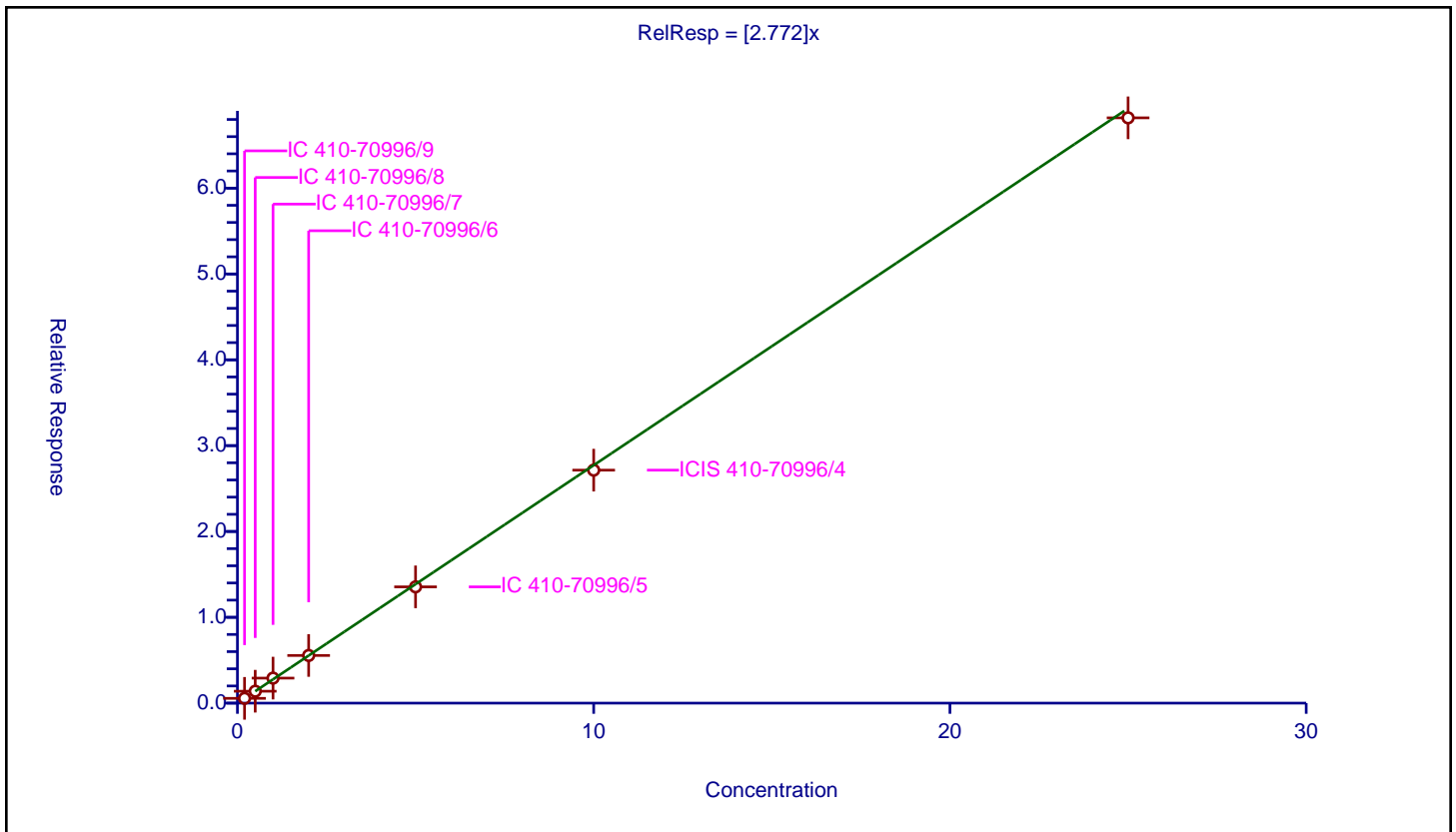
/ 1,2,4-Trimethylbenzene

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

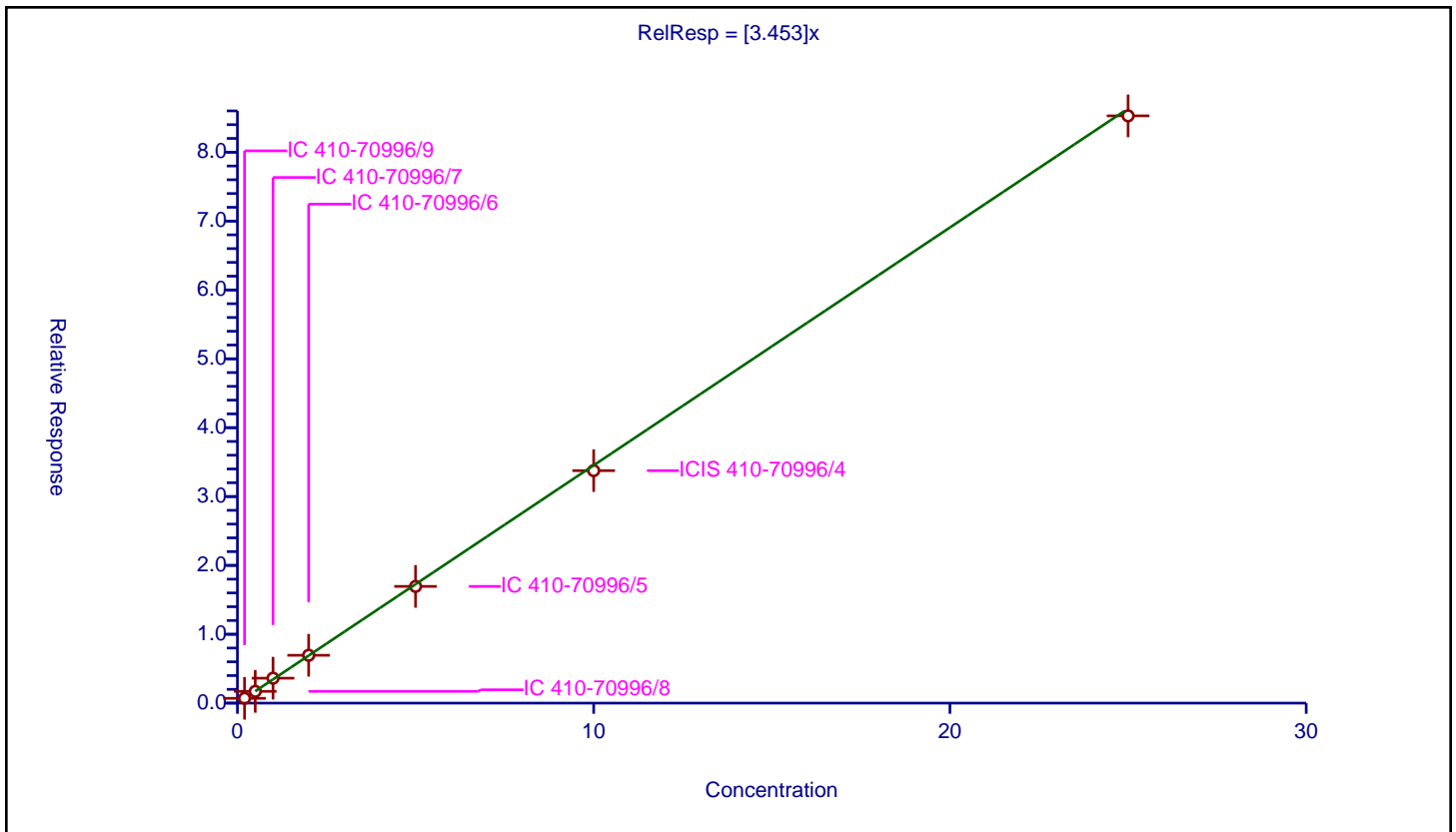
/ sec-Butylbenzene

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

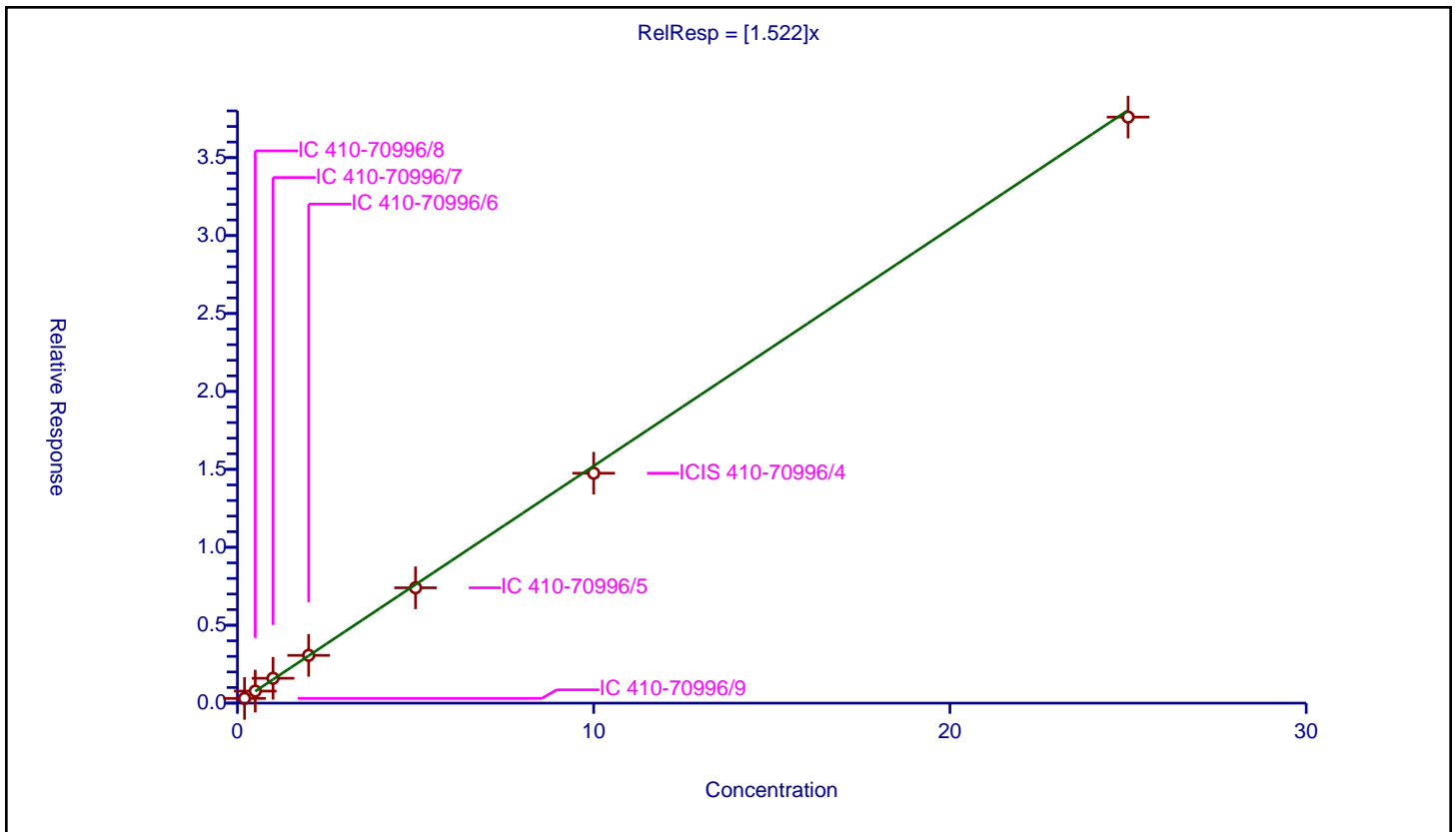
/ 1,3-Dichlorobenzene

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

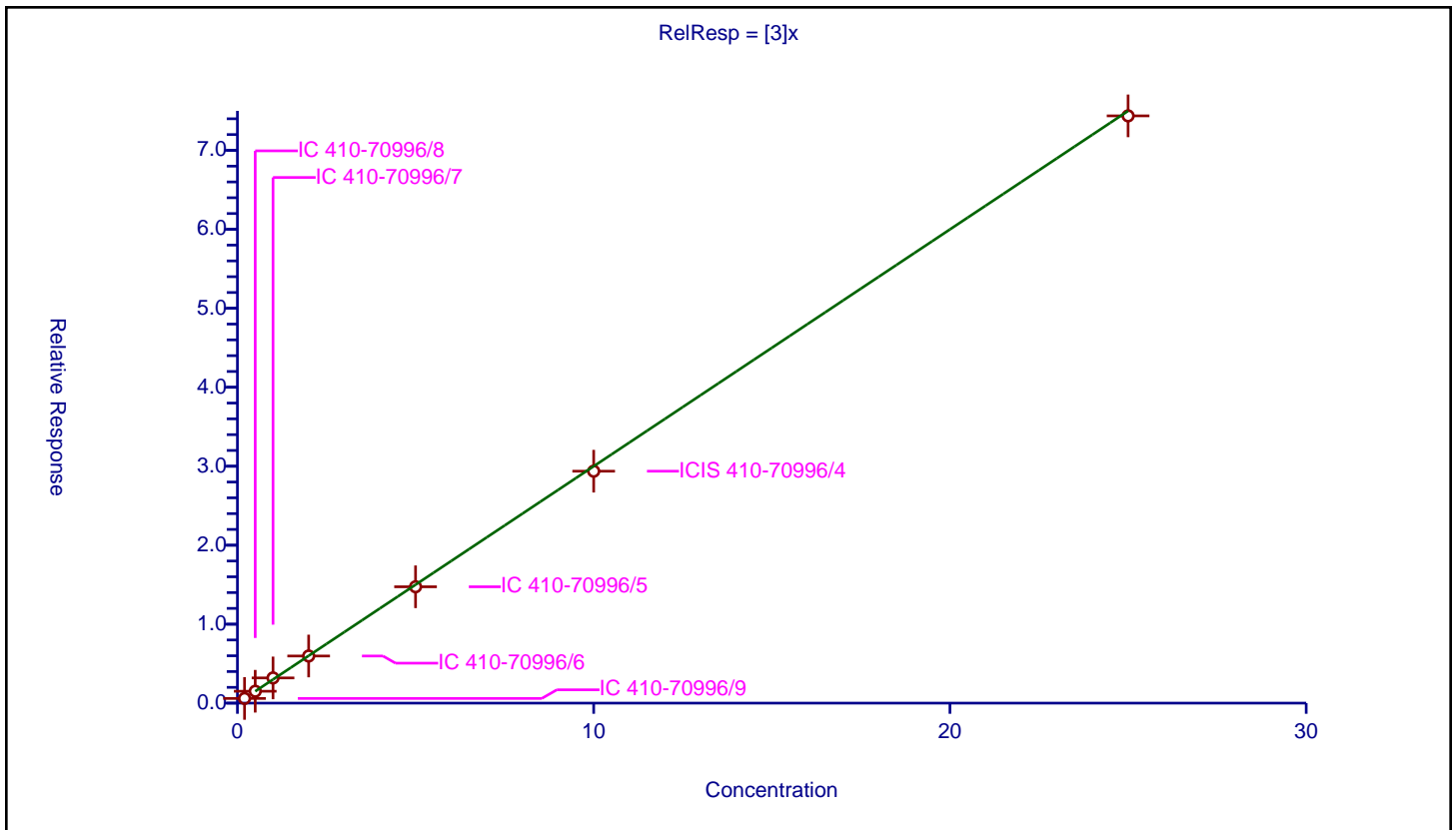
/ 4-Isopropyltoluene

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

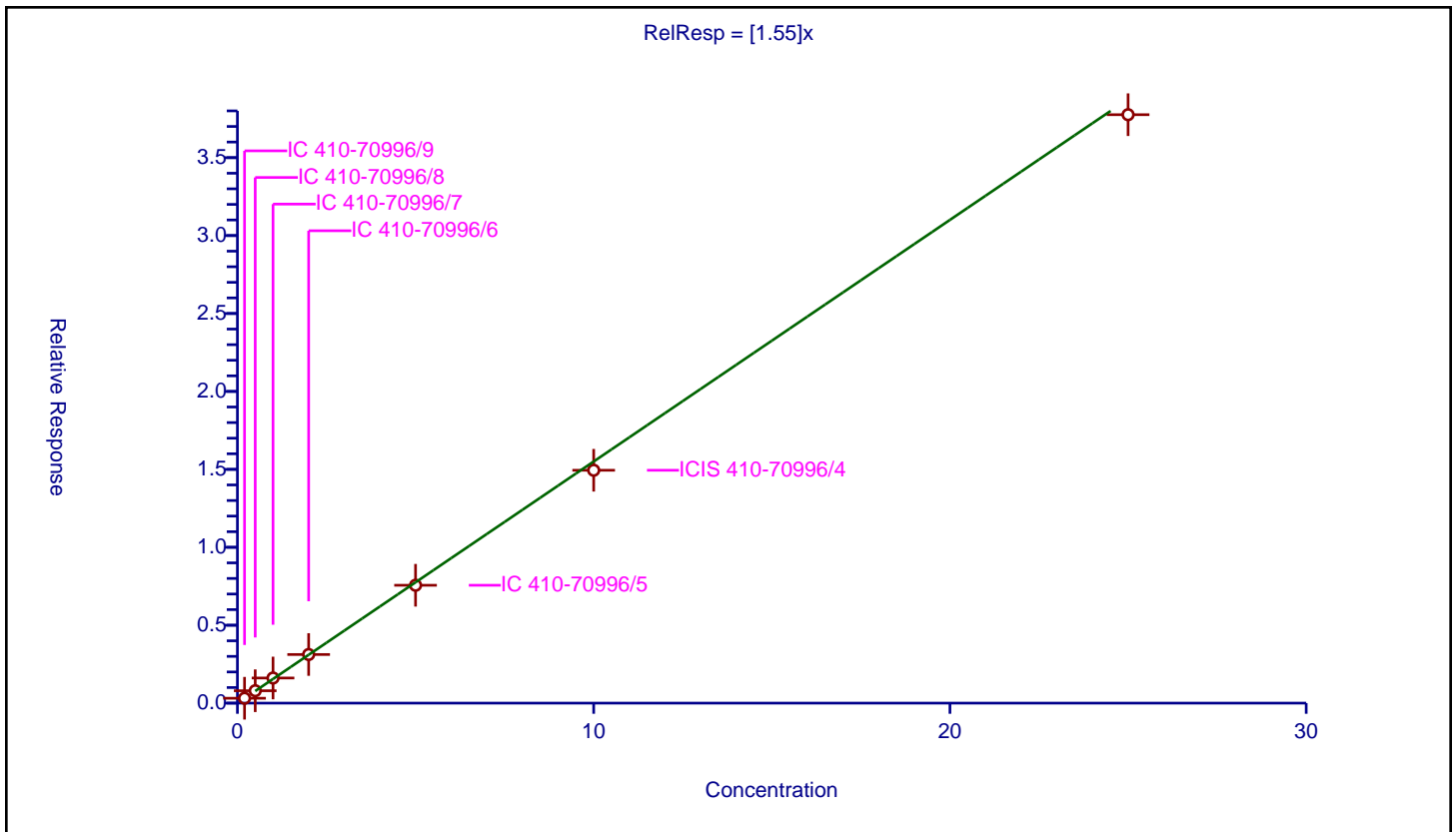
/ 1,4-Dichlorobenzene

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

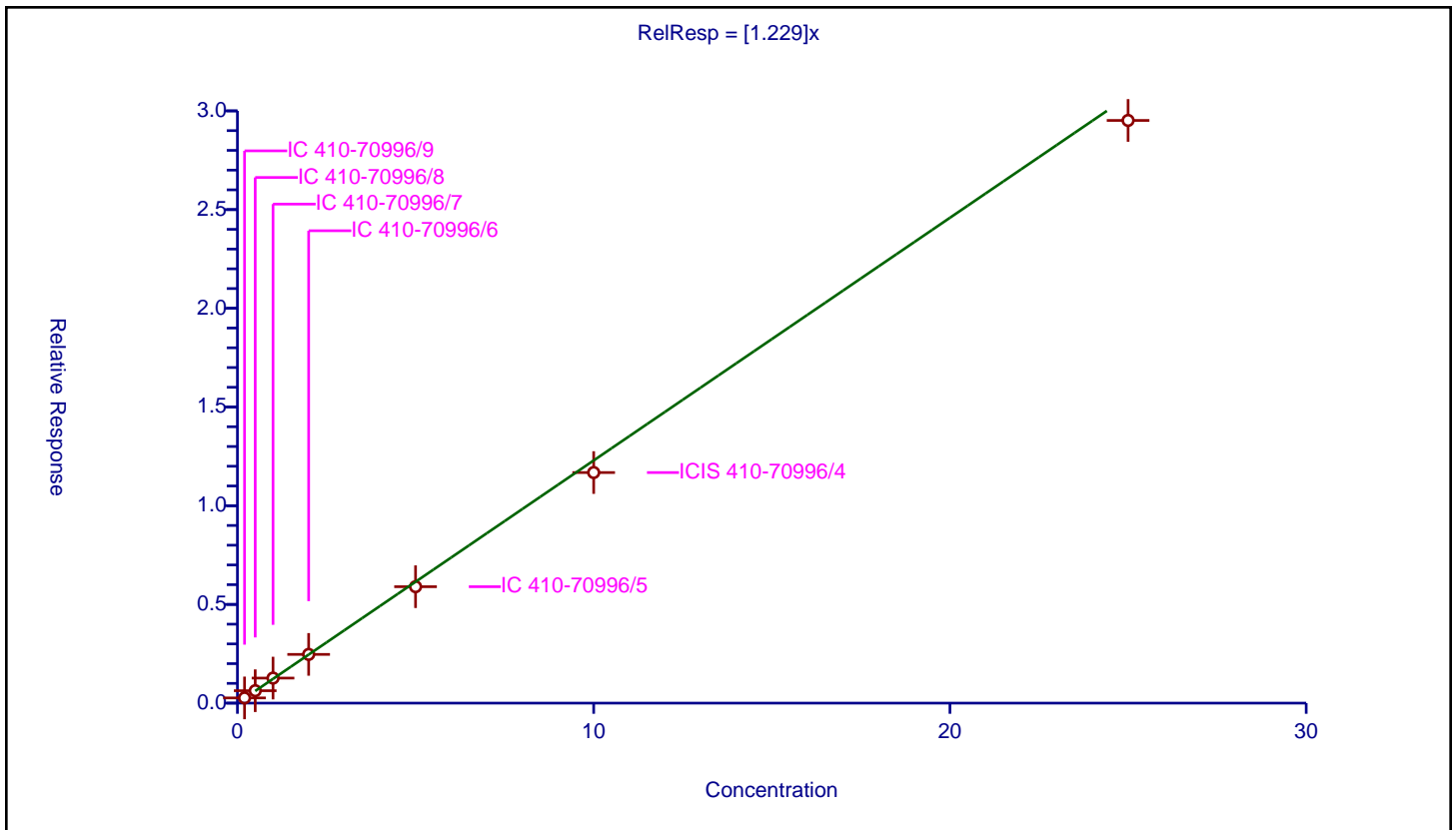
/ 1,2,3-Trimethylbenzene

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

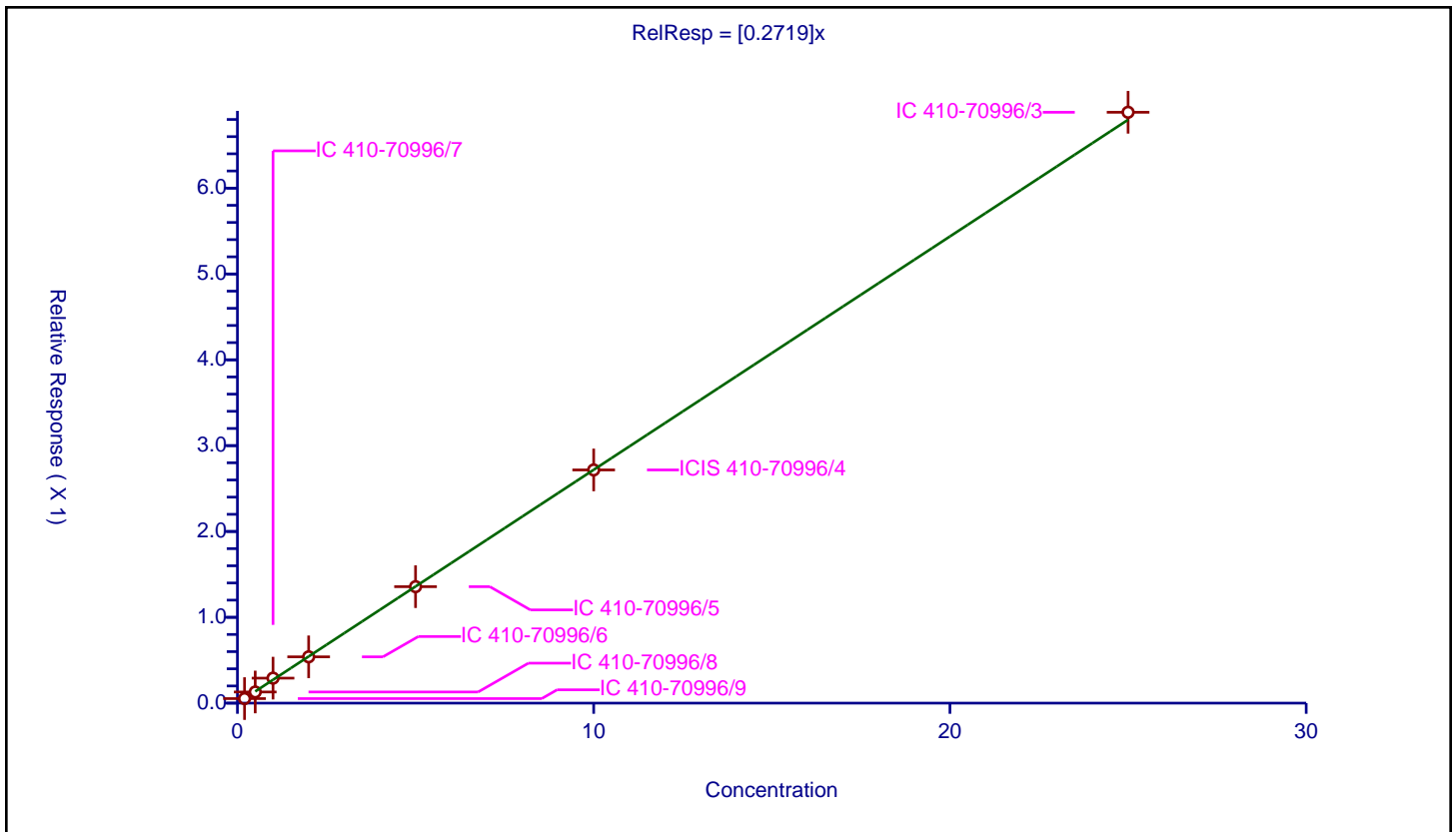
/ Benzyl chloride

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

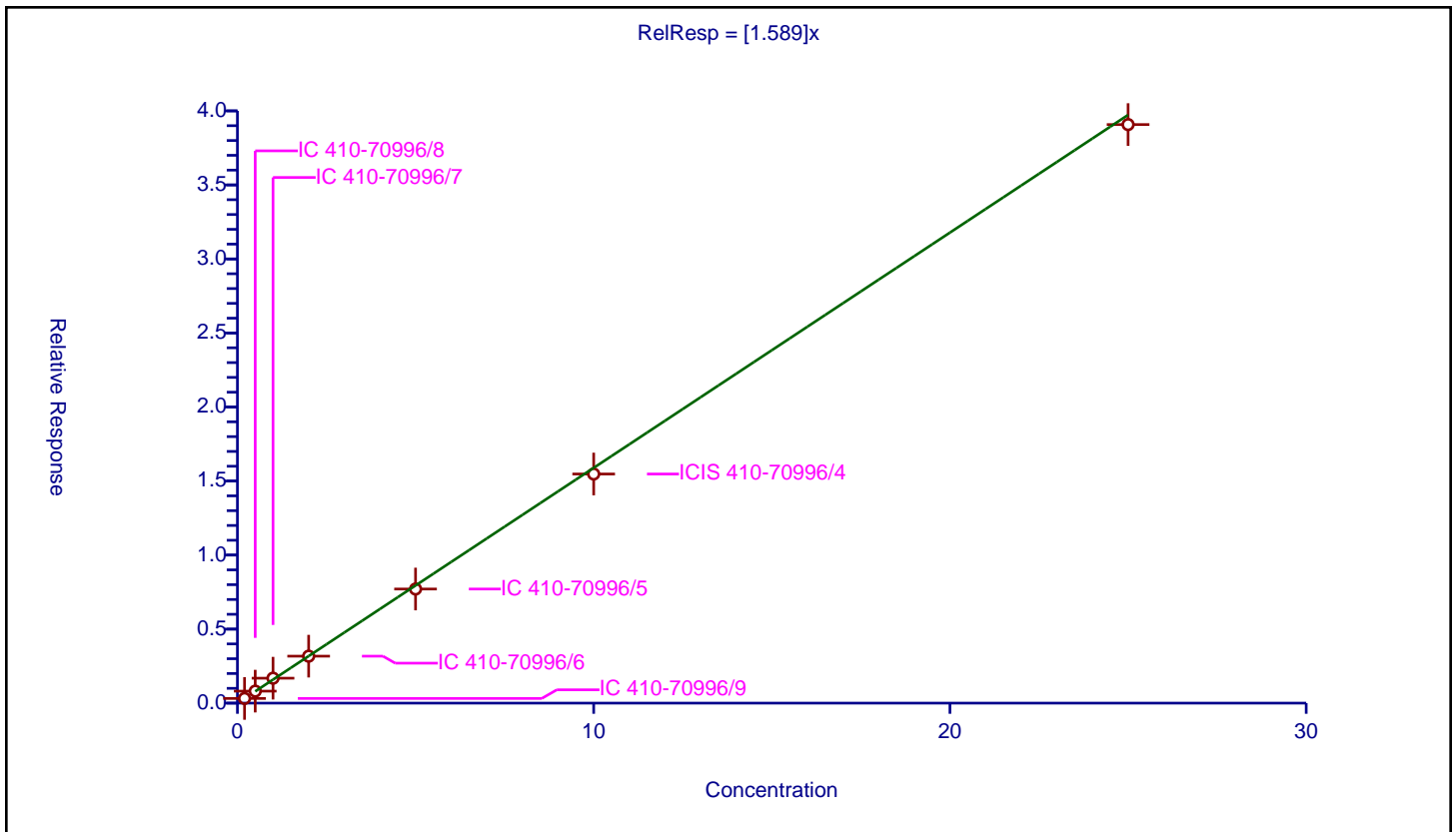
/ n-Butylbenzene

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

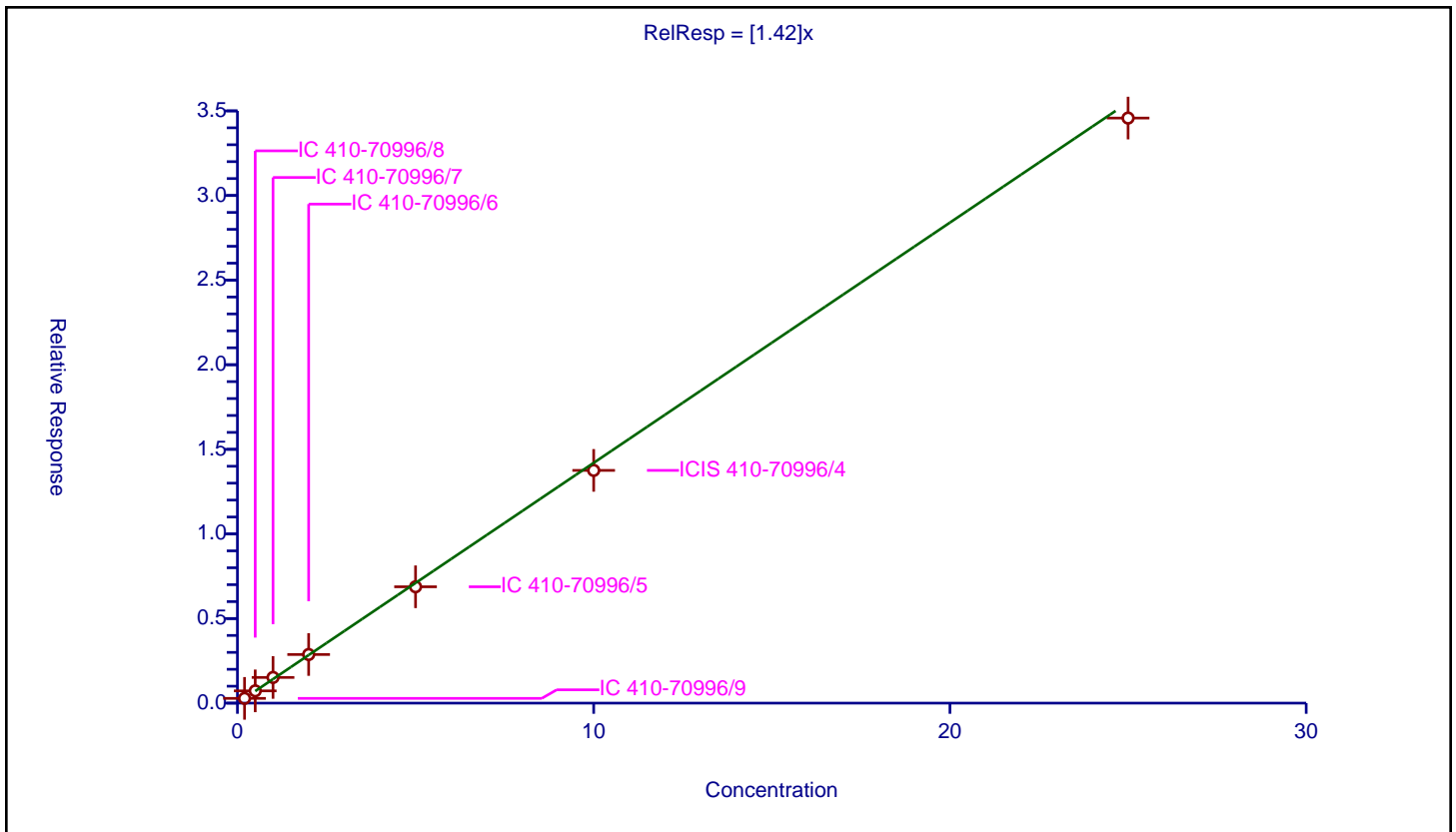
/ 1,2-Dichlorobenzene

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

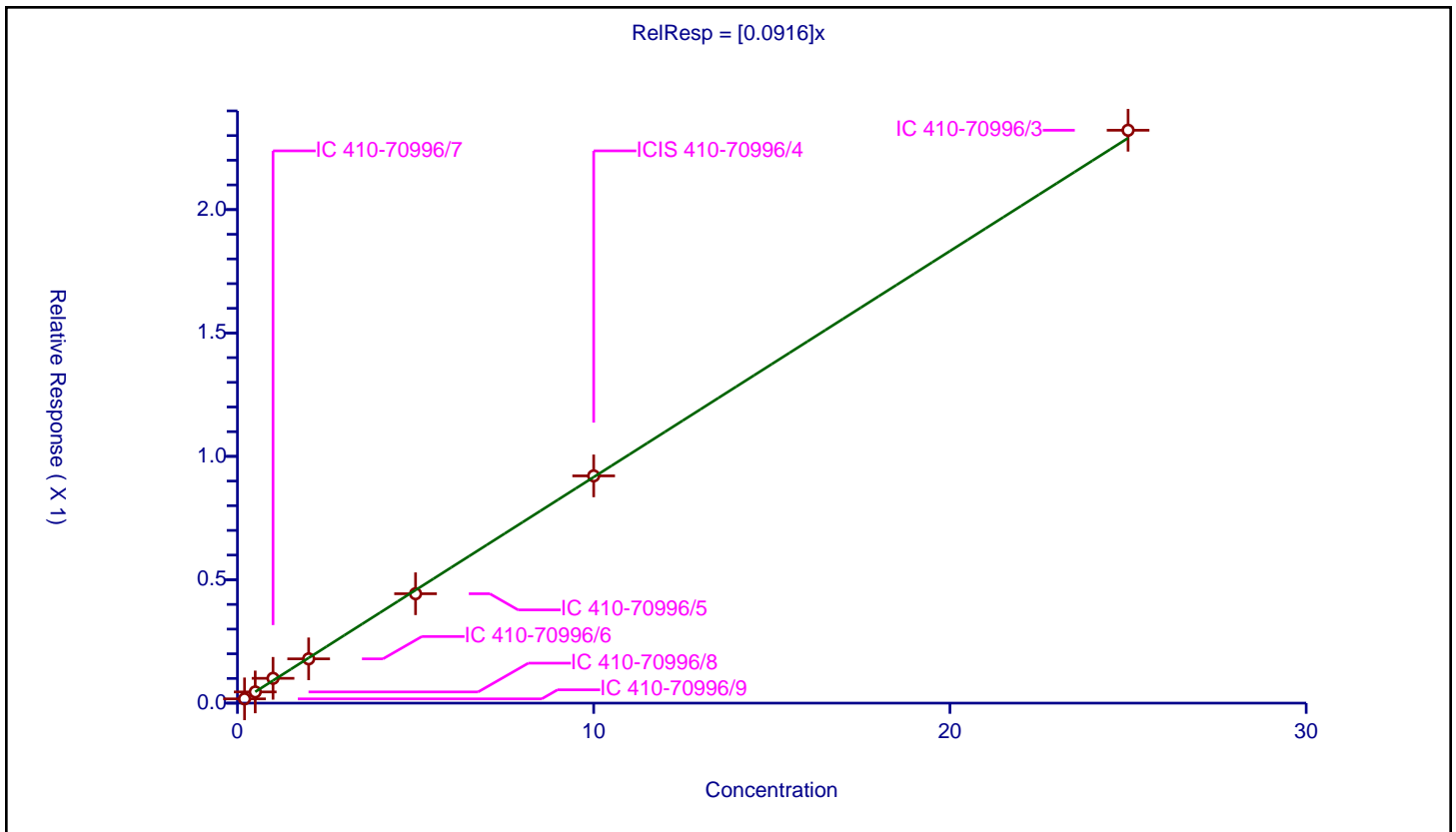
/ 1,2-Dibromo-3-Chloropropane

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

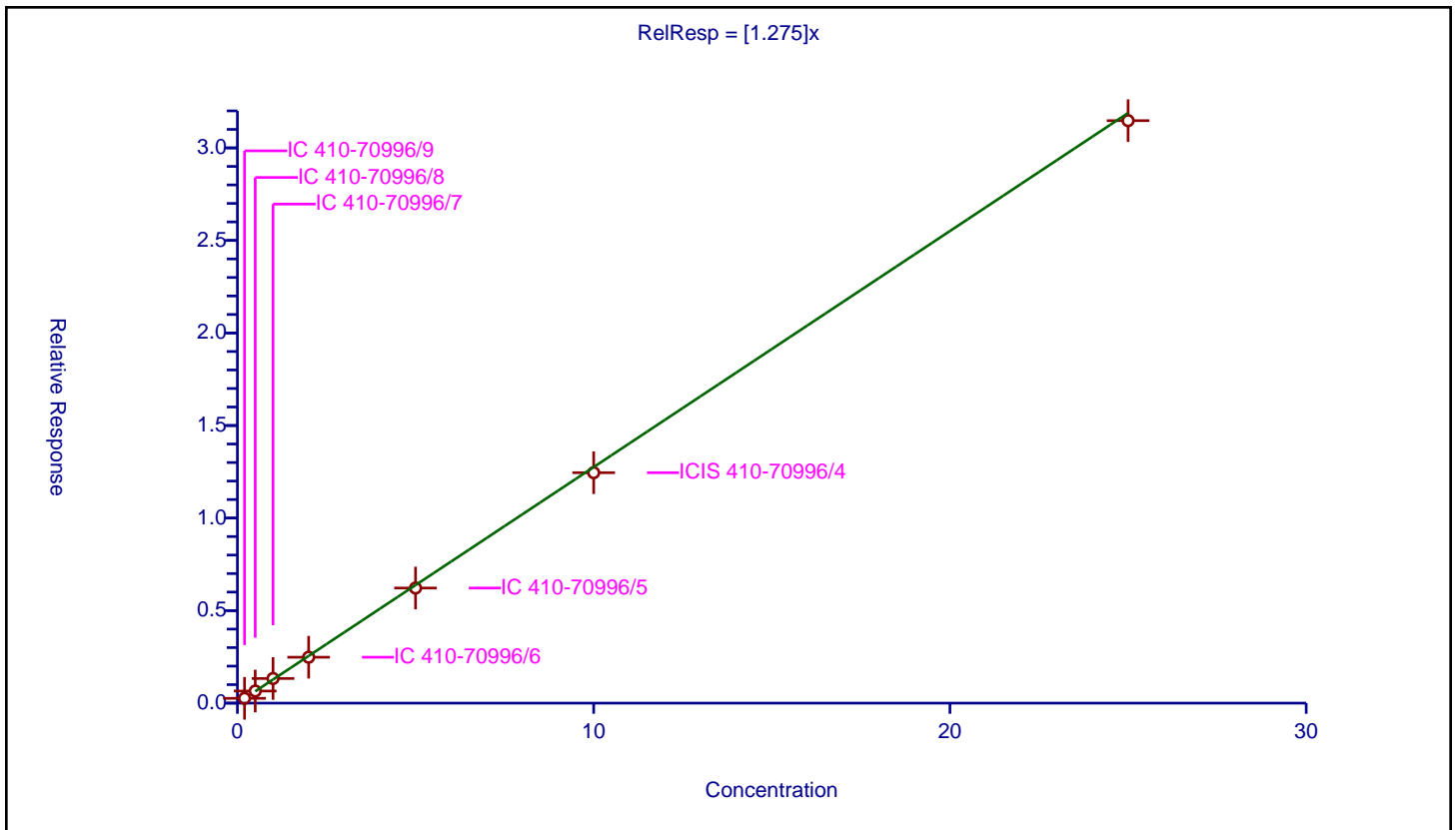
/ 1,3,5-Trichlorobenzene

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

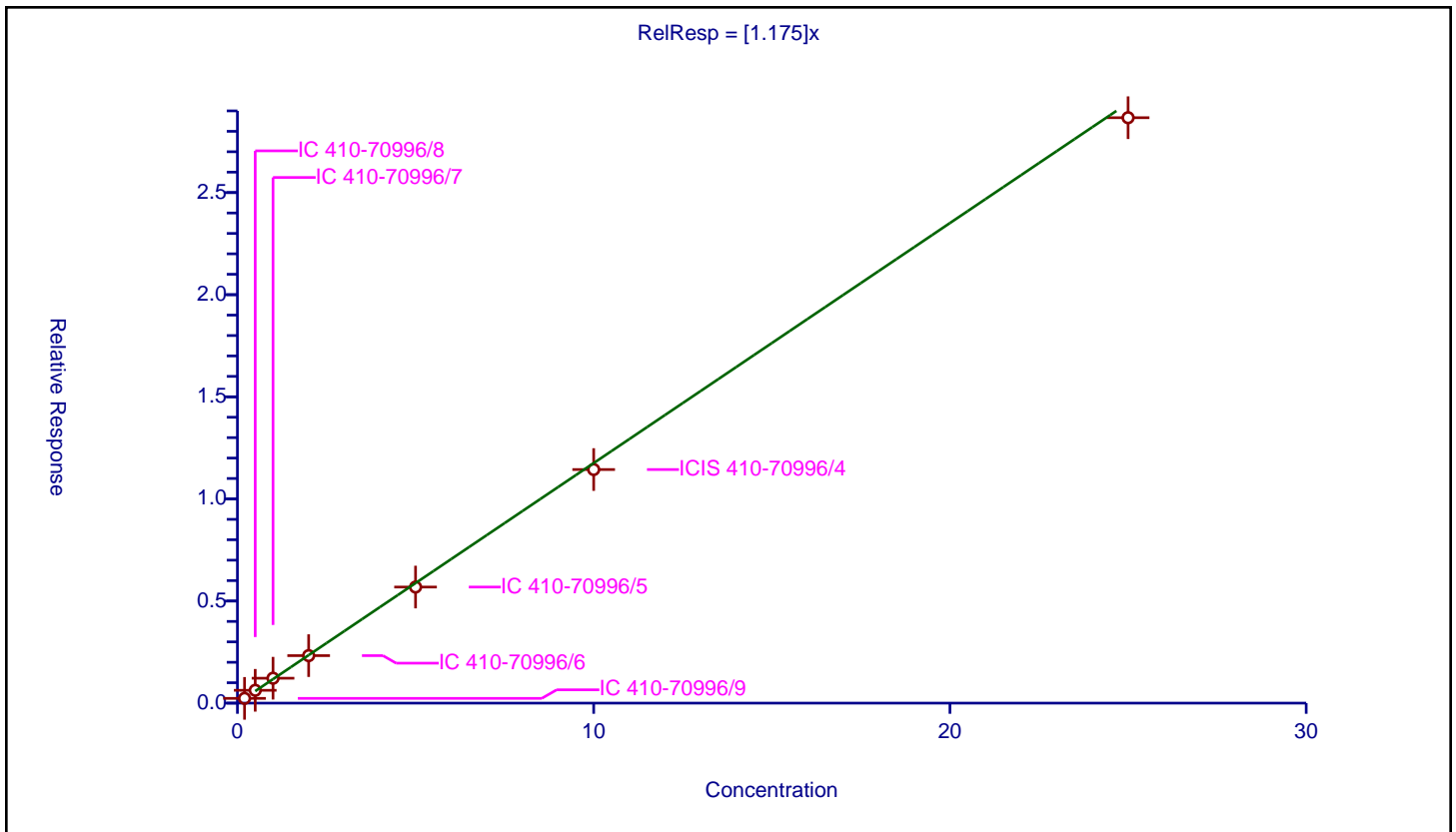
/ 1,2,4-Trichlorobenzene

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

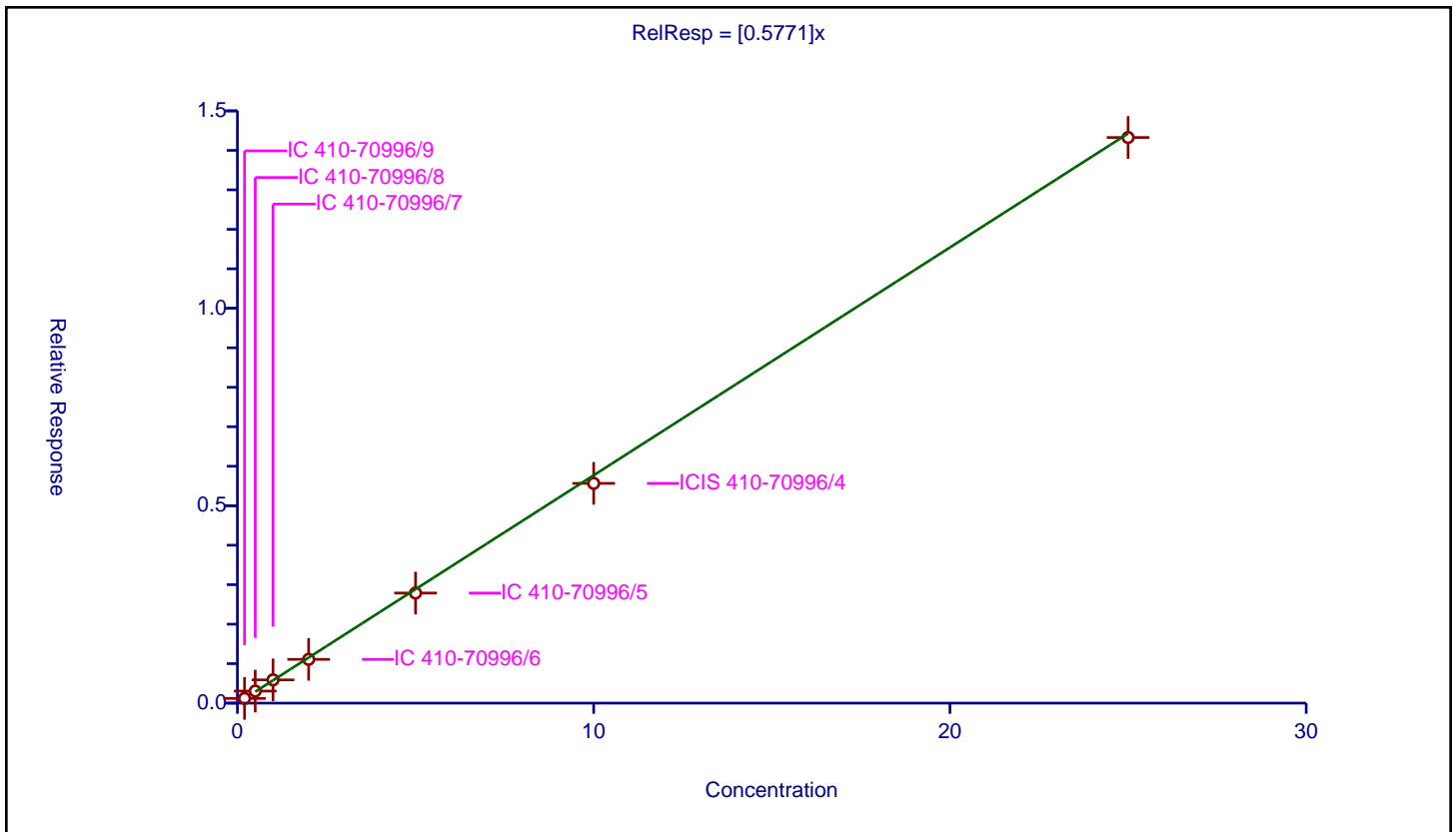
/ Hexachlorobutadiene

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

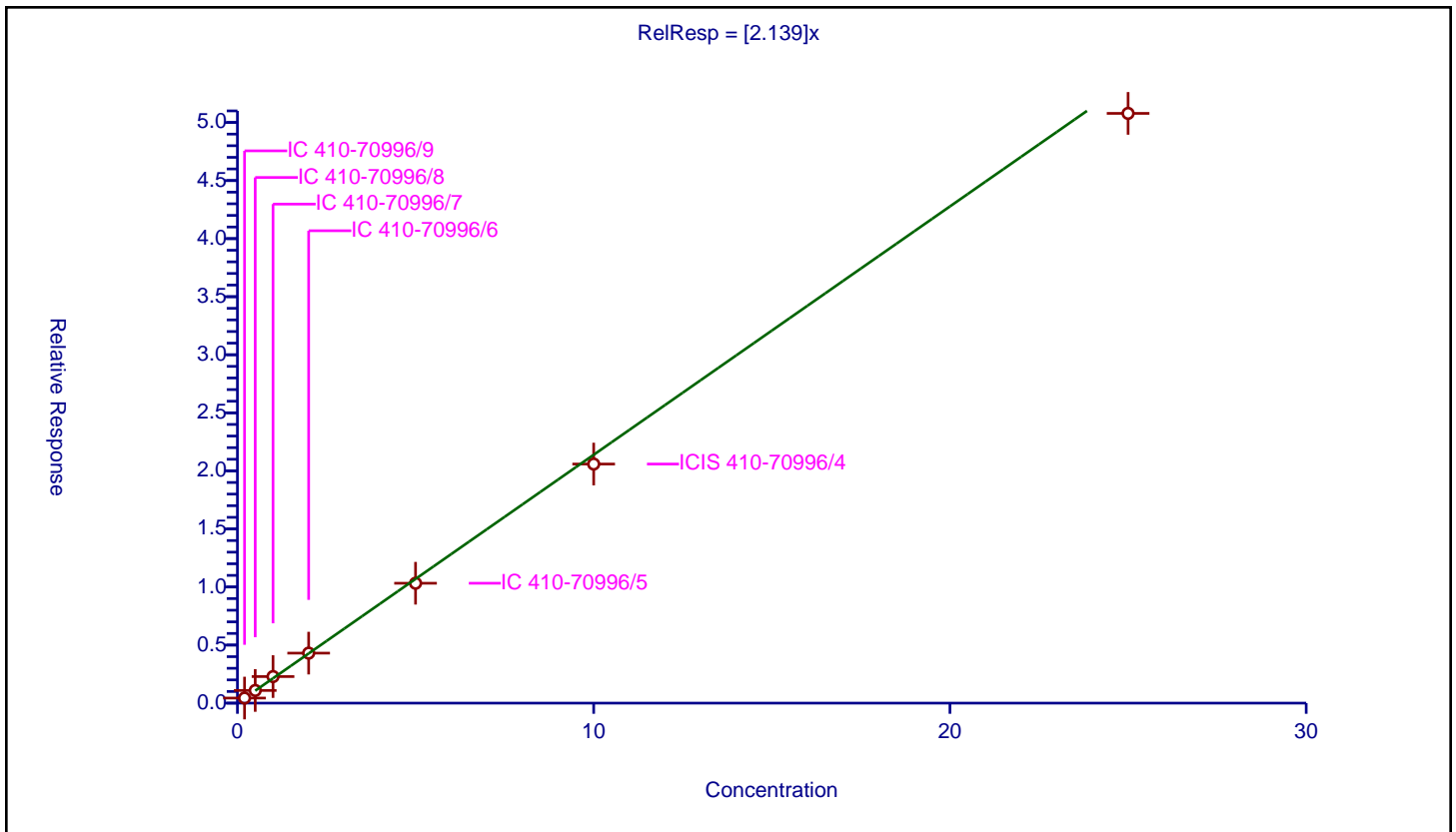
/ Naphthalene

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

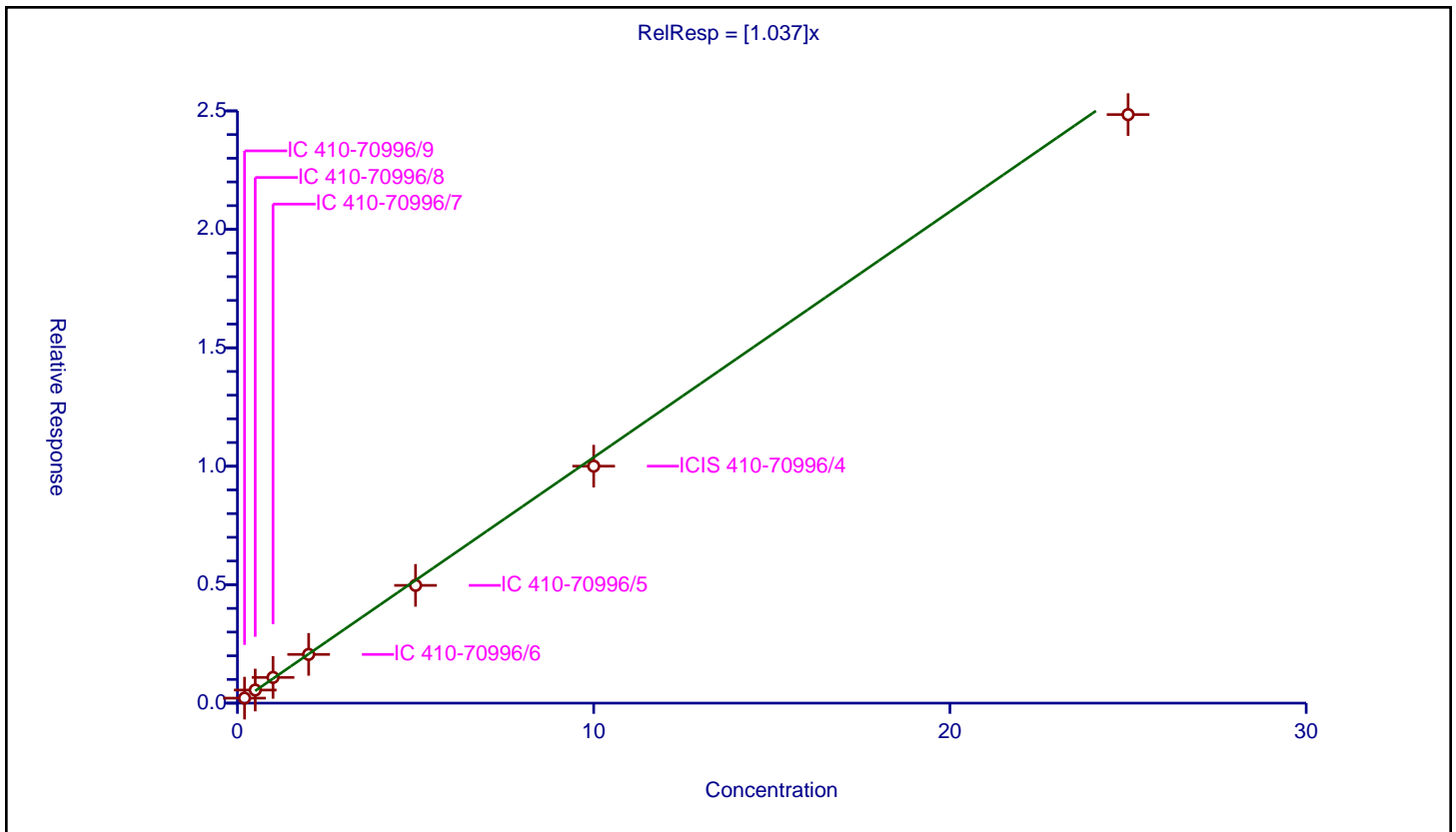
/ 1,2,3-Trichlorobenzene

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.: 410-24913-1 Analy Batch No.: 81781

SDG No.: _____

Instrument ID: 19094 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/04/2021 16:29 Calibration End Date: 01/04/2021 18:39 Calibration ID: 18295

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-81781/18	Hj04I17.D
Level 2	IC 410-81781/17	Hj04I16.D
Level 3	IC 410-81781/16	Hj04I15.D
Level 4	IC 410-81781/15	Hj04I14.D
Level 5	IC 410-81781/14	Hj04I13.D
Level 6	ICIS 410-81781/13	Hj04I12.D
Level 7	IC 410-81781/12	Hj04I11.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	0.3199 0.3728	0.2951 0.3507	0.3391	0.3326	0.3648	Ave	0.3393			0.1000	7.9		20.0				
Chloromethane	0.4724 0.4611	0.4148 0.4341	0.4322	0.4310	0.4631	Ave	0.4441			0.1000	4.8		20.0				
Vinyl chloride	0.4150 0.4214	0.3770 0.3921	0.3873	0.3860	0.4145	Ave	0.3991			0.1000	4.4		20.0				
1,3-Butadiene	0.3952 0.3670	0.4041 0.3457	0.3981	0.3693	0.3678	Ave	0.3782				5.6		20.0				
Bromomethane	0.2903 0.2742	0.2568 0.2581	0.2619	0.2603	0.2786	Ave	0.2686			0.1000	4.7		20.0				
Chloroethane	0.2579 0.2556	0.2445 0.2411	0.2443	0.2451	0.2592	Ave	0.2497			0.1000	3.0		20.0				
Dichlorofluoromethane	0.4706 0.4467	0.4321 0.4252	0.4150	0.4273	0.4579	Ave	0.4393			0.1000	4.5		20.0				
Trichlorofluoromethane	0.4790 0.4836	0.4225 0.4490	0.4463	0.4477	0.4866	Ave	0.4592			0.1000	5.2		20.0				
Ethyl ether	0.2197 0.2188	0.2300 0.2084	0.2021	0.2023	0.2275	Ave	0.2155				5.3		20.0				
Freon 123a	0.2656 0.3283	0.2896 0.3056	0.3317	0.3132	0.3258	Ave	0.3085				7.8		20.0				
Acrolein	2.5548 2.9181	2.3379 2.8215	2.7459	2.7749	2.6474	Ave	2.6858				7.2		20.0				
1,1-Dichloroethene	0.2374 0.2559	0.2221 0.2390	0.2546	0.2508	0.2487	Ave	0.2441			0.1000	4.9		20.0				
Freon 113	0.1900 0.2606	0.1977 0.2405	0.2512	0.2430	0.2487	Ave	0.2331			0.1000	11.9		20.0				
Acetone	3.0844 3.3062	3.0882 3.0655	3.3358	3.2542	3.1017	Ave	3.1766			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.: 410-24913-1 Analy Batch No.: 81781

SDG No.: _____

Instrument ID: 19094 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/04/2021 16:29 Calibration End Date: 01/04/2021 18:39 Calibration ID: 18295

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 iodide	0.3986 0.4195	0.3715 0.4002	0.4048	0.3985	0.4188	Ave		0.4017			4.0		20.0				
Carbon disulfide	0.6851 0.7821	0.6820 0.7477	0.7362	0.7344	0.7700	Ave		0.7339		0.1000	5.2		20.0				
Methyl acetate	8.8225 9.5010	9.6591 8.9151	10.183	9.5718	10.058	Ave		9.5300		0.1000	5.4		20.0				
Allyl chloride	0.4399 0.4597	0.4048 0.4344	0.4194	0.4300	0.4598	Ave		0.4354			4.6		20.0				
Methylene Chloride	0.3152 0.2845	0.3289 0.2744	0.2929	0.2745	0.2889	Ave		0.2942		0.1000	7.0		20.0				
t-Butyl alcohol	0.8565 1.1276	0.9601 0.9767	1.0830	1.0842	1.0541	Ave		1.0203			9.2		20.0				
Acrylonitrile	3.9497 4.7316	4.0084 4.6391	4.6503	4.5551	4.2854	Ave		4.4028			7.3		20.0				
Methyl tert-butyl ether	0.4935 0.5918	0.5460 0.5650	0.5235	0.5293	0.5927	Ave		0.5488		0.1000	6.7		20.0				
trans-1,2-Dichloroethene	0.2556 0.2864	0.2451 0.2749	0.2772	0.2732	0.2842	Ave		0.2709		0.1000	5.6		20.0				
n-Hexane	0.2936 0.4314	0.3114 0.4057	0.3778	0.3858	0.4038	Ave		0.3728			13.7		20.0				
1,1-Dichloroethane	0.5021 0.5628	0.5051 0.5465	0.5272	0.5350	0.5611	Ave		0.5342		0.2000	4.6		20.0				
di-Isopropyl ether	0.7165 0.8972	0.7446 0.8754	0.8176	0.8212	0.8805	Ave		0.8219			8.5		20.0				
2-Chloro-1,3-butadiene	0.3457 0.4438	0.3507 0.4301	0.3944	0.3978	0.4299	Ave		0.3989			9.8		20.0				
Ethyl t-butyl ether	0.6263 0.7662	0.6655 0.7422	0.6795	0.6990	0.7502	Ave		0.7041			7.2		20.0				
2-Butanone (MEK)	5.3095 6.0865	4.9323 6.0165	5.7998	5.6382	5.6952	Ave		5.6397		0.1000	7.2		20.0				
cis-1,2-Dichloroethene	0.2880 0.3226	0.2901 0.3164	0.3038	0.3070	0.3260	Ave		0.3077		0.1000	4.9		20.0				
2,2-Dichloropropane	0.4082 0.4452	0.3834 0.4343	0.4193	0.4308	0.4335	Ave		0.4221			4.9		20.0				
Propionitrile	1.4388 1.6085	1.3093 1.5634	1.5741	1.4916	1.4921	Ave		1.4968			6.8		20.0				
Methacrylonitrile	4.7586 6.1015	4.5135 6.0972	5.6549	5.7044	5.5752	Ave		5.4865			11.3		20.0				
Bromochloromethane	0.1055 0.1346	0.1279 0.1322	0.1216	0.1230	0.1375	Ave		0.1260			8.5		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.: 410-24913-1 Analy Batch No.: 81781

SDG No.: _____

Instrument ID: 19094 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/04/2021 16:29 Calibration End Date: 01/04/2021 18:39 Calibration ID: 18295

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															
Tetrahydrofuran	1.0972 1.6252	1.2050 1.6076	1.5118	1.5119	1.4659	Ave		1.4321			14.1		20.0				
Chloroform	0.4597 0.5322	0.4992 0.5146	0.5111	0.4999	0.5294	Ave		0.5066		0.2000	4.8		20.0				
1,1,1-Trichloroethane	0.3971 0.4573	0.4059 0.4423	0.4256	0.4294	0.4452	Ave		0.4290		0.1000	5.0		20.0				
Cyclohexane	0.3732 0.5103	0.3895 0.4931	0.4596	0.4685	0.4911	Ave		0.4551		0.1000	11.7		20.0				
1,1-Dichloropropene	0.3528 0.4339	0.3545 0.4217	0.3994	0.4026	0.4276	Ave		0.3989			8.4		20.0				
Carbon tetrachloride	0.3133 0.3968	0.3213 0.3805	0.3601	0.3735	0.3842	Ave		0.3614		0.1000	8.9		20.0				
Isobutyl alcohol	0.3622 0.4220	0.3551 0.3780	0.3759	0.3973	0.3777	Ave		0.3812			5.9		20.0				
Benzene	1.1414 1.2604	1.1069 1.2299	1.2273	1.2001	1.2373	Ave		1.2005		0.5000	4.7		20.0				
1,2-Dichloroethane	0.3429 0.3195	0.3325 0.3147	0.3044	0.3120	0.3282	Ave		0.3220		0.1000	4.1		20.0				
t-Amyl methyl ether	0.5010 0.6548	0.5595 0.6420	0.5758	0.5846	0.6520	Ave		0.5957			9.6		20.0				
n-Heptane	0.3545 0.5191	0.3781 0.4824	0.4434	0.4649	0.4945	Ave		0.4481			13.6		20.0				
n-Butanol	0.2823 0.3907	0.2889 0.3758	0.3254	0.3540	0.3538	Ave		0.3387			12.3		20.0				
Trichloroethene	0.2776 0.3161	0.2850 0.3102	0.2982	0.3042	0.3115	Ave		0.3004		0.2000	4.8		20.0				
Methylcyclohexane	0.4184 0.5808	0.4484 0.5577	0.4798	0.5224	0.5687	Ave		0.5109		0.1000	12.4		20.0				
1,2-Dichloropropane	0.2873 0.3324	0.2941 0.3274	0.3132	0.3154	0.3320	Ave		0.3145		0.1000	5.7		20.0				
Methyl methacrylate	7.1478 11.122	6.5288 10.881	9.2304	10.168	9.7257	Ave		9.2578			19.3		20.0				
1,4-Dioxane	++++ 0.0893	0.0614 0.0770	0.0686	0.0811	0.0827	Ave		0.0767		0.0050	13.2		20.0				
Dibromomethane	0.1153 0.1441	0.1341 0.1400	0.1324	0.1277	0.1450	Ave		0.1341			7.8		20.0				
Bromodichloromethane	0.3276 0.3760	0.3429 0.3745	0.3472	0.3491	0.3749	Ave		0.3560		0.2000	5.4		20.0				
2-Nitropropane	2.7876 3.2687	2.4131 3.3105	2.8148	3.0137	2.9472	Ave		2.9365			10.5		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.: 410-24913-1 Analy Batch No.: 81781

SDG No.: _____

Instrument ID: 19094 GC Column: R-624SilMS 3 ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/04/2021 16:29 Calibration End Date: 01/04/2021 18:39 Calibration ID: 18295

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															
cis-1,3-Dichloropropene	0.3477 0.4605	0.3661 0.4609	0.3966	0.4095	0.4528	Ave		0.4134			0.2000	11.2		20.0			
4-Methyl-2-pentanone (MIBK)	12.523 16.035	11.539 15.805	14.249	14.621	14.427	Ave		14.171			0.1000	11.5		20.0			
Toluene	0.9590 1.0791	0.9509 1.0545	1.0076	1.0441	1.0791	Ave		1.0249			0.4000	5.2		20.0			
trans-1,3-Dichloropropene	0.4335 0.5231	0.4398 0.5217	0.4552	0.4646	0.5259	Ave		0.4805			0.1000	8.6		20.0			
Ethyl methacrylate	0.2467 0.3780	0.3097 0.3832	0.3099	0.3263	0.3784	Ave		0.3332				15.1		20.0			
1,1,2-Trichloroethane	0.2593 0.2831	0.2677 0.2736	0.2640	0.2539	0.2913	Ave		0.2704			0.1000	4.9		20.0			
Tetrachloroethene	0.4134 0.4644	0.4036 0.4501	0.4326	0.4409	0.4569	Ave		0.4374			0.2000	5.1		20.0			
1,3-Dichloropropane	0.4300 0.5199	0.4700 0.5083	0.4605	0.4739	0.5294	Ave		0.4846				7.4		20.0			
2-Hexanone	8.2193 11.310	7.9986 11.263	9.5853	10.085	10.065	Ave		9.7894			0.1000	13.4		20.0			
Dibromochloromethane	0.2706 0.3451	0.2977 0.3403	0.2988	0.3061	0.3477	Ave		0.3152				9.4		20.0			
1,2-Dibromoethane (EDB)	0.2266 0.2701	0.2671 0.2662	0.2465	0.2326	0.2791	Ave		0.2554			0.1000	7.9		20.0			
1-Chlorohexane	0.5904 0.6396	0.5136 0.6234	0.5733	0.5815	0.6184	Ave		0.5915				7.1		20.0			
Chlorobenzene	1.0116 1.1699	1.0215 1.1415	1.1010	1.1116	1.1792	Ave		1.1052			0.5000	6.0		20.0			
1,1,1,2-Tetrachloroethane	0.3771 0.4004	0.3381 0.3976	0.3698	0.3769	0.3998	Ave		0.3799				5.9		20.0			
Ethylbenzene	1.7498 2.1355	1.6814 2.0960	1.9495	2.0060	2.1162	Ave		1.9621			0.1000	9.3		20.0			
m&p-Xylene	0.6210 0.8086	0.6303 0.7906	0.7135	0.7599	0.8069	Ave		0.7330			0.1000	11.0		20.0			
o-Xylene	0.6152 0.7795	0.6161 0.7728	0.7043	0.7212	0.7724	Ave		0.7117			0.3000	10.0		20.0			
Styrene	0.9321 1.3017	0.9383 1.2852	1.1258	1.1741	1.2963	Ave		1.1505			0.3000	14.0		20.0			
Bromoform	0.1582 0.1990	0.1763 0.1961	0.1698	0.1757	0.1993	Ave		0.1821			0.1000	8.9		20.0			
Isopropylbenzene	1.5131 2.1100	1.5642 2.0652	1.8154	1.9371	2.0585	Ave		1.8662			0.1000	13.1		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-24913-1 Analy Batch No.: 81781

SDG No.: _____

Instrument ID: 19094 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/04/2021 16:29 Calibration End Date: 01/04/2021 18:39 Calibration ID: 18295

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															
1,1,2,2-Tetrachloroethane	0.6359 0.6957	0.6724 0.6863	0.6170	0.6337	0.7205	Ave		0.6659			0.3000	5.7	20.0				
Bromobenzene	0.8170 0.8771	0.7624 0.8654	0.8248	0.8287	0.8930	Ave		0.8383				5.3	20.0				
trans-1,4-Dichloro-2-butene	4.3805 5.7034	3.8794 5.7731	5.0168	5.2158	5.0579	Ave		5.0039				13.6	20.0				
1,2,3-Trichloropropane	0.1851 0.1706	0.1616 0.1672	0.1622	0.1604	0.1810	Ave		0.1697				5.8	20.0				
N-Propylbenzene	4.0918 5.0403	4.0072 4.9320	4.6073	4.7987	5.0245	Ave		4.6431				9.3	20.0				
2-Chlorotoluene	0.7830 0.9375	0.7851 0.9239	0.8653	0.9028	0.9299	Ave		0.8753				7.6	20.0				
1,3,5-Trimethylbenzene	2.6037 3.4994	2.5868 3.4516	2.9902	3.2294	3.4099	Ave		3.1101				12.6	20.0				
4-Chlorotoluene	0.7193 0.9604	0.7704 0.9422	0.8775	0.8956	0.9691	Ave		0.8764				11.0	20.0				
tert-Butylbenzene	0.5470 0.7349	0.5519 0.7272	0.6244	0.6622	0.7187	Ave		0.6523				12.3	20.0				
Pentachloroethane	0.4523 0.5583	0.4685 0.5528	0.4745	0.5236	0.5562	Ave		0.5123				9.0	20.0				
1,2,4-Trimethylbenzene	2.6157 3.5483	2.7134 3.4995	3.0834	3.2749	3.5503	Ave		3.1836				12.4	20.0				
sec-Butylbenzene	3.3207 4.7873	3.5104 4.6758	4.0856	4.3322	4.6717	Ave		4.1977				14.0	20.0				
1,3-Dichlorobenzene	1.6005 1.7976	1.5078 1.7674	1.6893	1.7065	1.7718	Ave		1.6915			0.6000	6.2	20.0				
p-Isopropyltoluene	2.7036 3.9881	2.8165 3.9210	3.4331	3.6041	3.9054	Ave		3.4817				15.3	20.0				
1,4-Dichlorobenzene	1.6358 1.7648	1.5144 1.7405	1.6898	1.6627	1.7626	Ave		1.6815			0.5000	5.3	20.0				
1,2,3-Trimethylbenzene	1.2744 1.4623	1.2517 1.4546	1.3271	1.3870	1.4711	Ave		1.3755				6.7	20.0				
Benzyl chloride	0.1660 0.2443	0.2136 0.2516	0.1934	0.2010	0.2473	Ave		0.2167				14.9	20.0				
n-Butylbenzene	1.5494 2.1917	1.6908 2.1420	1.8670	2.0158	2.1902	Ave		1.9496				13.1	20.0				
1,2-Dichlorobenzene	1.4779 1.6054	1.4312 1.5603	1.4524	1.5159	1.6180	Ave		1.5230			0.4000	4.8	20.0				
1,2-Dibromo-3-Chloropropane	0.0793 0.0903	0.0773 0.0893	0.0803	0.0746	0.0875	Ave		0.0826			0.0500	7.6	20.0				

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-24913-1 Analy Batch No.: 81781

SDG No.: _____

Instrument ID: 19094 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/04/2021 16:29 Calibration End Date: 01/04/2021 18:39 Calibration ID: 18295

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															
1,3,5-Trichlorobenzene	1.2327 1.4181	1.1797 1.4024	1.2777	1.2811	1.3963	Ave		1.3126			7.1		20.0				
1,2,4-Trichlorobenzene	0.9415 1.2005	0.8673 1.1721	0.9728	1.0335	1.1420	Ave		1.0471		0.2000	12.2		20.0				
Hexachlorobutadiene	0.5038 0.6871	0.5747 0.6806	0.5423	0.6036	0.6935	Ave		0.6122			12.5		20.0				
Naphthalene	1.4426 2.0720	1.5872 2.0797	1.5875	1.6849	2.0637	Ave		1.7882			15.4		20.0				
1,2,3-Trichlorobenzene	0.7989 1.0386	0.8103 1.0214	0.8560	0.9226	1.0171	Ave		0.9236			11.2		20.0				
Dibromofluoromethane (Surr)	0.2491 0.2438	0.2528 0.2394	0.2455	0.2391	0.2408	Ave		0.2444			2.1		20.0				
1,2-Dichloroethane-d4 (Surr)	0.0494 0.0500	0.0542 0.0489	0.0477	0.0469	0.0523	Ave		0.0499			5.2		20.0				
Toluene-d8 (Surr)	1.3530 1.3759	1.3516 1.3679	1.3885	1.3815	1.3700	Ave		1.3698			1.0		20.0				
4-Bromofluorobenzene (Surr)	0.4778 0.4920	0.4892 0.4930	0.4953	0.4911	0.4954	Ave		0.4905			1.2		20.0				

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-24913-1 Analy Batch No.: 81781

SDG No.: _____

Instrument ID: 19094 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/04/2021 16:29 Calibration End Date: 01/04/2021 18:39 Calibration ID: 18295

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-81781/18	Hj04I17.D
Level 2	IC 410-81781/17	Hj04I16.D
Level 3	IC 410-81781/16	Hj04I15.D
Level 4	IC 410-81781/15	Hj04I14.D
Level 5	IC 410-81781/14	Hj04I13.D
Level 6	ICIS 410-81781/13	Hj04I12.D
Level 7	IC 410-81781/12	Hj04I11.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	10550 612044	20685 1413862	61601	122780	285484	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Chloromethane	FB	Ave	15576 757035	29076 1750092	78518	159098	362402	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Vinyl chloride	FB	Ave	13685 691837	26429 1580643	70365	142516	324410	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,3-Butadiene	FB	Ave	13030 602497	28327 1393706	72319	136334	287867	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Bromomethane	FB	Ave	9573 450115	18004 1040734	47581	96113	218016	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Chloroethane	FB	Ave	8503 419634	17139 971858	44384	90477	202843	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Dichlorofluoromethane	FB	Ave	15518 733455	30289 1714152	75390	157732	358351	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Trichlorofluoromethane	FB	Ave	15793 793958	29618 1810330	81082	165266	380777	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Ethyl ether	FB	Ave	7245 359368	16122 840320	36723	74713	178085	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Freon 123a	FB	Ave	8757 539036	20298 1232089	60260	115628	254948	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Acrolein	TBAd1 0	Ave	50346 2840765	125176 6647691	276655	563699	1414410	10.0 500	25.0 1250	50.0	100	250
1,1-Dichloroethene	FB	Ave	7829 420079	15566 963383	46260	92604	194632	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Freon 113	FB	Ave	6265 427798	13861 969632	45646	89700	194655	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Acetone	TBAd1 0	Ave	12156 643703	33068 1444453	67216	132206	331412	2.00 100	5.00 250	10.0	20.0	50.0
Methyl iodide	FB	Ave	13145	26042	73551	147101	327754	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.: 410-24913-1 Analy Batch No.: 81781

SDG No.: _____

Instrument ID: 19094 GC Column: R-624SilMS 3 ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/04/2021 16:29 Calibration End Date: 01/04/2021 18:39 Calibration ID: 18295

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
			688788	1613488				10.0	25.0			
Carbon disulfide	FB	Ave	22589 1283989	47803 3014487	133749	271140	602596	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Methyl acetate	TBAd1 0	Ave	3477 184979	10343 420074	20518	38887	107467	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Allyl chloride	FB	Ave	14505 754721	28377 1751178	76197	158746	359808	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Methylene Chloride	FB	Ave	10393 467119	23053 1106423	53222	101348	226122	0.200 10.0	0.500 25.0	1.00	2.00	5.00
t-Butyl alcohol	TBAd1 0	Ave	6751 439075	20561 920433	43645	88092	225268	4.00 200	10.0 500	20.0	40.0	100
Acrylonitrile	TBAd1 0	Ave	7783 460608	21461 1092963	46851	92530	228948	1.00 50.0	2.50 125	5.00	10.0	25.0
Methyl tert-butyl ether	FB	Ave	16274 971535	38269 2277992	95107	195401	463862	0.200 10.0	0.500 25.0	1.00	2.00	5.00
trans-1,2-Dichloroethene	FB	Ave	8427 470176	17182 1108345	50355	100870	222446	0.200 10.0	0.500 25.0	1.00	2.00	5.00
n-Hexane	FB	Ave	9680 708314	21830 1635786	68639	142416	316002	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,1-Dichloroethane	FB	Ave	16555 923971	35402 2203512	95780	197512	439095	0.200 10.0	0.500 25.0	1.00	2.00	5.00
di-Isopropyl ether	FB	Ave	23626 1472913	52195 3529195	148549	303183	689037	0.200 10.0	0.500 25.0	1.00	2.00	5.00
2-Chloro-1,3-butadiene	FB	Ave	11400 728651	24580 1733897	71654	146862	336405	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Ethyl t-butyl ether	FB	Ave	20650 1257905	46648 2992285	123447	258044	587074	0.200 10.0	0.500 25.0	1.00	2.00	5.00
2-Butanone (MEK)	TBAd1 0	Ave	20925 1185013	52815 2834967	116864	229064	608524	2.00 100	5.00 250	10.0	20.0	50.0
cis-1,2-Dichloroethene	FB	Ave	9496 529710	20337 1275759	55191	113320	255155	0.200 10.0	0.500 25.0	1.00	2.00	5.00
2,2-Dichloropropane	FB	Ave	13460 730858	26877 1751077	76175	159029	339235	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Propionitrile	TBAd1 0	Ave	11341 626344	28040 1473310	63435	121199	318855	4.00 200	10.0 500	20.0	40.0	100
Methacrylonitrile	TBAd1 0	Ave	18754	48331	113945	231750	595703	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.: 410-24913-1 Analy Batch No.: 81781

SDG No.: _____

Instrument ID: 19094 GC Column: R-624SilMS 3 ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/04/2021 16:29 Calibration End Date: 01/04/2021 18:39 Calibration ID: 18295

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
			1187924	2872973				100	250			
Bromochloromethane	FB	Ave	3478 221004	8968 532905	22099	45412	107571	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Tetrahydrofuran	TBAd1 0	Ave	4324	12903	30462	61422	156635	2.00	5.00	10.0	20.0	50.0
			316413	757473				100	250			
Chloroform	FB	Ave	15159 873828	34992 2074616	92850	184549	414312	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,1,1-Trichloroethane	FB	Ave	13094 750781	28449 1783392	77327	158539	348422	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Cyclohexane	FB	Ave	12307 837862	27303 1988126	83496	172976	384294	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,1-Dichloropropene	FB	Ave	11634 712303	24849 1700150	72567	148627	334650	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Carbon tetrachloride	FB	Ave	10332 651460	22523 1533986	65421	137882	300664	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Isobutyl alcohol	TBAd1 0	Ave	7138	19010	37876	80698	201791	10.0	25.0	50.0	100	250
			410840	890473				500	1250			
Benzene	FB	Ave	37635 2069357	77591 4958754	222969	443064	968257	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2-Dichloroethane	FB	Ave	11306 524590	23309 1268825	55311	115182	256853	0.200 10.0	0.500 25.0	1.00	2.00	5.00
t-Amyl methyl ether	FB	Ave	16519 1075082	39221 2588209	104611	215804	510268	0.200 10.0	0.500 25.0	1.00	2.00	5.00
n-Heptane	FB	Ave	11688 852235	26502 1945025	80551	171618	386997	0.200 10.0	0.500 25.0	1.00	2.00	5.00
n-Butanol	TBAd1 0	Ave	11127	30940	65568	143802	378067	20.0	50.0	100	200	500
			760733	1770718				1000	2500			
Trichloroethene	FB	Ave	9154 518984	19980 1250589	54169	112295	243784	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Methylcyclohexane	FB	Ave	13795 953525	31428 2248373	87170	192842	445051	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2-Dichloropropane	FB	Ave	9473 545677	20612 1320162	56895	116425	259845	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Methyl methacrylate	TBAd1 0	Ave	2817	6991	18599	41310	103918	0.200	0.500	1.00	2.00	5.00
			216546	512715				10.0	25.0			
1,4-Dioxane	TBAd1 0	Ave	+++++	3287	6911	16472	44183	+++++	25.0	50.0	100	250
			86950	181431				500	1250			

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-24913-1 Analy Batch No.: 81781

SDG No.: _____

Instrument ID: 19094 GC Column: R-624SilMS 3 ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/04/2021 16:29 Calibration End Date: 01/04/2021 18:39 Calibration ID: 18295

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Dibromomethane	FB	Ave	3803 236580	9397 564282	24056	47143	113469	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Bromodichloromethane	FB	Ave	10801 617313	24037 1510072	63072	128886	293377	0.200 10.0	0.500 25.0	1.00	2.00	5.00
2-Nitropropane	TBA d1 0	Ave	10986 636388	25839 1559889	56718	122437	314904	2.00 100	5.00 250	10.0	20.0	50.0
cis-1,3-Dichloropropene	FB	Ave	11465 756053	25665 1858042	72056	151181	354362	0.200 10.0	0.500 25.0	1.00	2.00	5.00
4-Methyl-2-pentanone (MIBK)	TBA d1 0	Ave	49356 3121826	123558 7447345	287119	594024	1541476	2.00 100	5.00 250	10.0	20.0	50.0
Toluene	CBZ d5	Ave	22516 1254572	47942 3016777	128489	270990	594339	0.200 10.0	0.500 25.0	1.00	2.00	5.00
trans-1,3-Dichloropropene	CBZ d5	Ave	10179 608087	22174 1492375	58053	120581	289666	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Ethyl methacrylate	CBZ d5	Ave	5792 439422	15617 1096299	39515	84681	208423	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,1,2-Trichloroethane	CBZ d5	Ave	6087 329156	13499 782805	33660	65897	160455	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Tetrachloroethene	CBZ d5	Ave	9707 539871	20350 1287630	55170	114443	251638	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,3-Dichloropropane	CBZ d5	Ave	10095 604437	23697 1454293	58718	122996	291590	0.200 10.0	0.500 25.0	1.00	2.00	5.00
2-Hexanone	TBA d1 0	Ave	32393 2202018	85649 5306979	193142	409710	1075390	2.00 100	5.00 250	10.0	20.0	50.0
Dibromochloromethane	CBZ d5	Ave	6353 401176	15011 973656	38102	79448	191521	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2-Dibromoethane (EDB)	CBZ d5	Ave	5321 314034	13465 761544	31431	60359	153708	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1-Chlorohexane	CBZ d5	Ave	13861 743575	25894 1783426	73103	150932	340608	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Chlorobenzene	CBZ d5	Ave	23750 1360084	51504 3265659	140405	288508	649440	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,1,1,2-Tetrachloroethane	CBZ d5	Ave	8853 465532	17044 1137563	47155	97820	220176	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Ethylbenzene	CBZ d5	Ave	41083 2482644	84772 5996169	248604	520650	1165525	0.200 10.0	0.500 25.0	1.00	2.00	5.00
m&p-Xylene	CBZ d5	Ave	29161 1880195	63562 4523398	181982	394467	888823	0.400 20.0	1.00 50.0	2.00	4.00	10.0
o-Xylene	CBZ d5	Ave	14444	31064	89815	187189	425389	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.: 410-24913-1 Analy Batch No.: 81781

SDG No.: _____

Instrument ID: 19094 GC Column: R-624SilMS 3 ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/04/2021 16:29 Calibration End Date: 01/04/2021 18:39 Calibration ID: 18295

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
			906263	2210950				10.0	25.0			
Styrene	CBZd5	Ave	21885 1513292	47306 3676796	143564	304719	713950	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Bromoform	CBZd5	Ave	3715 231355	8889 560871	21656	45614	109767	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Isopropylbenzene	CBZd5	Ave	35525 2453022	78864 5908142	231503	502763	1133714	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,1,2,2-Tetrachloroethane	DCBd4	Ave	7627 418494	17738 1014866	40709	85079	205743	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Bromobenzene	DCBd4	Ave	9799 527603	20113 1279695	54416	111261	254985	0.200 10.0	0.500 25.0	1.00	2.00	5.00
trans-1,4-Dichloro-2-butene	TBAd1 0	Ave	17264 1110413	41541 2720247	101088	211902	540436	2.00 100	5.00 250	10.0	20.0	50.0
1,2,3-Trichloropropane	DCBd4	Ave	2220 102596	4263 247176	10700	21533	51672	0.200 10.0	0.500 25.0	1.00	2.00	5.00
N-Propylbenzene	DCBd4	Ave	49078 3031739	105716 7292841	303980	644279	1434712	0.200 10.0	0.500 25.0	1.00	2.00	5.00
2-Chlorotoluene	DCBd4	Ave	9391 563882	20712 1366143	57089	121218	265517	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,3,5-Trimethylbenzene	DCBd4	Ave	31229 2104892	68243 5103857	197287	433583	973670	0.200 10.0	0.500 25.0	1.00	2.00	5.00
4-Chlorotoluene	DCBd4	Ave	8627 577667	20325 1393167	57899	120243	276728	0.200 10.0	0.500 25.0	1.00	2.00	5.00
tert-Butylbenzene	DCBd4	Ave	6561 442024	14561 1075357	41194	88907	205236	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Pentachloroethane	DCBd4	Ave	5425 335813	12361 817383	31309	70299	158832	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2,4-Trimethylbenzene	DCBd4	Ave	31373 2134322	71585 5174567	203437	439695	1013765	0.200 10.0	0.500 25.0	1.00	2.00	5.00
sec-Butylbenzene	DCBd4	Ave	39829 2879594	92609 6913932	269558	581653	1333998	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,3-Dichlorobenzene	DCBd4	Ave	19196 1081236	39777 2613476	111454	229112	505935	0.200 10.0	0.500 25.0	1.00	2.00	5.00
p-Isopropyltoluene	DCBd4	Ave	32427 2398851	74304 5797902	226510	483888	1115184	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,4-Dichlorobenzene	DCBd4	Ave	19620 1061562	39952 2573618	111489	223244	503298	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2,3-Trimethylbenzene	DCBd4	Ave	15285 879606	33022 2150875	87560	186218	420060	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Benzyl chloride	DCBd4	Ave	1991 146928	5635 372055	12759	26980	70623	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.: 410-24913-1 Analy Batch No.: 81781

SDG No.: _____

Instrument ID: 19094 GC Column: R-624SilMS 3 ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/04/2021 16:29 Calibration End Date: 01/04/2021 18:39 Calibration ID: 18295

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
n-Butylbenzene	DCBd4	Ave	18584 1318334	44605 3167287	123180	270640	625415	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2-Dichlorobenzene	DCBd4	Ave	17726 965644	37756 2307118	95827	203531	462023	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2-Dibromo-3-Chloropropane	DCBd4	Ave	951 54302	2038 132119	5297	10016	24974	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,3,5-Trichlorobenzene	DCBd4	Ave	14785 853012	31122 2073637	84298	172004	398703	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2,4-Trichlorobenzene	DCBd4	Ave	11292 722116	22881 1733177	64183	138759	326100	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Hexachlorobutadiene	DCBd4	Ave	6043 413306	15161 1006324	35781	81040	198028	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Naphthalene	DCBd4	Ave	17303 1246288	41873 3075181	104740	226220	589278	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2,3-Trichlorobenzene	DCBd4	Ave	9582 624728	21377 1510374	56478	123866	290428	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Dibromofluoromethane (Surr)	FB	Ave	410650 400330	354402 386127	445983	441359	376936	10.0 10.0	10.0 10.0	10.0	10.0	10.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	81371 82073	76050 78930	86606	86505	81916	10.0 10.0	10.0 10.0	10.0	10.0	10.0
Toluene-d8 (Surr)	CBZd5	Ave	1588281 1599529	1362893 1565369	1770566	1792763	1509092	10.0 10.0	10.0 10.0	10.0	10.0	10.0
4-Bromofluorobenzene (Surr)	CBZd5	Ave	560924 571967	493255 564147	631652	637343	545713	10.0 10.0	10.0 10.0	10.0	10.0	10.0

Curve Type Legend:

Ave = Average ISTD

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20210104-19149.b\Hj04I11.D
 Lims ID: IC std7 25
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 04-Jan-2021 16:29:30 ALS Bottle#: 11 Worklist Smp#: 12
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0019149-012
 Misc. Info.: IC STD7 25
 Operator ID: jkh09052 Instrument ID: 19094
 Sublist: chrom-MSV_19094_25mL*sub1
 Method: \\chromfs\Lancaster\ChromData\19094\20210104-19149.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 05-Jan-2021 07:50:56 Calib Date: 04-Jan-2021 18:39:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20210104-19149.b\Hj04I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1665

First Level Reviewer: howej

Date: 05-Jan-2021 06:27:00

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
3 Dichlorodifluoromethane	85	2.075	2.075	0.000	99	1413862	25.0	25.8	
6 Chloromethane	50	2.282	2.282	0.000	99	1750092	25.0	24.4	
7 Vinyl chloride	62	2.404	2.404	0.000	92	1580643	25.0	24.6	
8 Butadiene	39	2.404	2.410	-0.006	91	1393706	25.0	22.9	
9 Bromomethane	94	2.739	2.739	0.000	91	1040734	25.0	24.0	
10 Chloroethane	64	2.837	2.837	0.000	100	971858	25.0	24.1	
11 Dichlorofluoromethane	67	3.080	3.081	0.000	98	1714152	25.0	24.2	
13 Trichlorofluoromethane	101	3.148	3.154	-0.006	98	1810330	25.0	24.4	
15 Ethyl ether	59	3.428	3.422	0.006	93	840320	25.0	24.2	
16 1,2-Dichloro-1,1,2-trifluoroetha	67	3.507	3.507	0.000	95	1232089	25.0	24.8	
17 Acrolein	56	3.605	3.605	0.000	100	6647691	1250.0	1313.2	
18 1,1-Dichloroethene	96	3.751	3.751	0.000	96	963383	25.0	24.5	
20 112TCTFE	101	3.788	3.782	0.006	93	969632	25.0	25.8	
19 Acetone	43	3.788	3.794	-0.006	100	1444453	250.0	241.3	
22 Iodomethane	142	3.958	3.964	-0.006	99	1613488	25.0	24.9	
21 Isopropyl alcohol	45	3.964	3.971	-0.007	36	534512	500.0	463.4	
23 Ethyl bromide	108	3.989	3.989	0.000	98	859738	25.0	24.4	
24 Carbon disulfide	76	4.074	4.074	0.000	99	3014487	25.0	25.5	
26 Methyl acetate	43	4.227	4.214	0.013	98	420074	25.0	23.4	
27 3-Chloro-1-propene	41	4.257	4.257	0.000	93	1751178	25.0	24.9	
* 28 t-Butyl alcohol-d10 (IS)	65	4.464	4.452	0.012	0	94239	50.0	50.0	
29 Methylene Chloride	84	4.452	4.452	0.000	94	1106423	25.0	23.3	
30 2-Methyl-2-propanol	59	4.592	4.592	0.000	98	920433	500.0	478.6	
31 Acrylonitrile	53	4.800	4.794	0.006	99	1092963	125.0	131.7	
32 Methyl tert-butyl ether	73	4.867	4.855	0.012	96	2277992	25.0	25.7	
33 trans-1,2-Dichloroethene	96	4.879	4.885	-0.006	98	1108345	25.0	25.4	
34 Hexane	57	5.300	5.300	0.000	92	1635786	25.0	27.2	
35 1,1-Dichloroethane	63	5.537	5.537	0.000	96	2203512	25.0	25.6	
37 Isopropyl ether	45	5.586	5.580	0.006	96	3529195	25.0	26.6	
38 2-Chloro-1,3-butadiene	53	5.647	5.641	0.006	91	1733897	25.0	27.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
39 Tert-butyl ethyl ether	59	6.123	6.117	0.007	98	2992285	25.0	26.4	
S 40 1,2-Dichloroethene, Total	100				0			51.1	
41 2-Butanone (MEK)	43	6.318	6.312	0.006	100	2834967	250.0	266.7	
42 cis-1,2-Dichloroethene	96	6.366	6.366	0.000	84	1275759	25.0	25.7	
43 2,2-Dichloropropane	77	6.379	6.379	0.000	87	1751077	25.0	25.7	
45 Propionitrile	54	6.403	6.409	-0.006	99	1473310	500.0	522.2	
47 Methacrylonitrile	67	6.629	6.623	0.007	92	2872973	250.0	277.8	
48 Chlorobromomethane	128	6.696	6.690	0.006	93	532905	25.0	26.2	
49 Tetrahydrofuran	71	6.702	6.702	0.000	85	757473	250.0	280.6	
50 Chloroform	83	6.842	6.842	0.000	94	2074616	25.0	25.4	
\$ 51 Dibromofluoromethane (Surr)	113	7.055	7.049	0.006	92	386127	10.0	9.80	
52 1,1,1-Trichloroethane	97	7.074	7.068	0.006	99	1783392	25.0	25.8	
53 Cyclohexane	56	7.177	7.171	0.006	91	1988126	25.0	27.1	
55 1,1-Dichloropropene	75	7.287	7.281	0.006	96	1700150	25.0	26.4	
56 Carbon tetrachloride	117	7.287	7.287	0.000	84	1533986	25.0	26.3	
57 Isobutyl alcohol	41	7.409	7.409	0.000	95	890473	1250.0	1239.5	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.519	7.506	0.013	0	78930	10.0	9.81	
59 Benzene	78	7.549	7.543	0.006	96	4958754	25.0	25.6	
60 1,2-Dichloroethane	62	7.616	7.610	0.006	97	1268825	25.0	24.4	M
62 Tert-amyl methyl ether	73	7.732	7.726	0.006	98	2588209	25.0	26.9	
* 65 Fluorobenzene (IS)	96	7.951	7.939	0.012	98	1612687	10.0	10.0	
64 n-Heptane	43	7.951	7.945	0.006	92	1945025	25.0	26.9	
66 n-Butanol	56	8.287	8.287	0.000	89	1770718	2500.0	2773.7	
67 Trichloroethene	95	8.427	8.421	0.006	98	1250589	25.0	25.8	
68 Methylcyclohexane	83	8.738	8.738	0.000	95	2248373	25.0	27.3	
69 2-ethoxy-2-methyl butane	87	8.762	8.750	0.012	89	1571448	25.0	27.2	
70 1,2-Dichloropropane	63	8.762	8.756	0.006	85	1320162	25.0	26.0	
71 Methyl methacrylate	69	8.829	8.829	0.000	92	512715	25.0	29.4	
72 1,4-Dioxane	88	8.848	8.842	0.006	96	181431	1250.0	1255.3	M
73 Dibromomethane	93	8.872	8.866	0.006	96	564282	25.0	26.1	
75 Dichlorobromomethane	83	9.104	9.098	0.006	99	1510072	25.0	26.3	
76 2-Nitropropane	41	9.360	9.360	0.000	98	1559889	250.0	281.8	
79 1-Bromo-2-chloroethane	63	9.488	9.488	0.000	99	1214104	25.0	25.8	
80 cis-1,3-Dichloropropene	75	9.634	9.628	0.006	96	1858042	25.0	27.9	
81 4-Methyl-2-pentanone (MIBK)	43	9.793	9.793	0.000	97	7447345	250.0	278.8	
\$ 82 Toluene-d8 (Surr)	98	9.933	9.933	0.000	94	1565369	10.0	9.99	
83 Toluene	92	10.006	10.006	0.000	98	3016777	25.0	25.7	
S 84 1,3-Dichloropropene, Total	100				0			55.0	
85 trans-1,3-Dichloropropene	75	10.256	10.256	0.000	93	1492375	25.0	27.1	
86 Ethyl methacrylate	69	10.311	10.311	0.000	90	1096299	25.0	28.8	
87 1,1,2-Trichloroethane	97	10.457	10.457	0.000	91	782805	25.0	25.3	
88 Tetrachloroethene	166	10.549	10.549	0.000	97	1287630	25.0	25.7	
89 1,3-Dichloropropane	76	10.616	10.616	0.000	90	1454293	25.0	26.2	
91 2-Hexanone	43	10.658	10.658	0.000	98	5306979	250.0	287.6	
93 Chlorodibromomethane	129	10.835	10.829	0.006	90	973656	25.0	27.0	
94 Ethylene Dibromide	107	10.945	10.945	0.000	99	761544	25.0	26.1	
S 95 Xylenes, Total	106				0			81.1	
* 97 Chlorobenzene-d5 (IS)	117	11.365	11.365	0.000	88	1144332	10.0	10.0	
96 1-Chlorohexane	91	11.372	11.372	0.000	99	1783426	25.0	26.4	
98 Chlorobenzene	112	11.396	11.396	0.000	94	3265659	25.0	25.8	
100 Ethylbenzene	91	11.475	11.475	0.000	99	5996169	25.0	26.7	
99 1,1,1,2-Tetrachloroethane	131	11.475	11.475	0.000	95	1137563	25.0	26.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
101 m-Xylene & p-Xylene	106	11.591	11.591	0.000	98	4523398	50.0	53.9	
102 o-Xylene	106	11.920	11.920	0.000	97	2210950	25.0	27.1	
103 Styrene	104	11.932	11.932	0.000	94	3676796	25.0	27.9	
104 Bromoform	173	12.097	12.091	0.006	96	560871	25.0	26.9	
105 Isopropylbenzene	105	12.213	12.213	0.000	96	5908142	25.0	27.7	
\$ 108 4-Bromofluorobenzene (Surr)	95	12.359	12.359	0.000	87	564147	10.0	10.0	
109 1,1,2,2-Tetrachloroethane	83	12.457	12.457	0.000	93	1014866	25.0	25.8	
111 Bromobenzene	156	12.481	12.481	0.000	93	1279695	25.0	25.8	
110 trans-1,4-Dichloro-2-butene	53	12.481	12.481	0.000	89	2720247	250.0	288.4	
112 1,2,3-Trichloropropane	110	12.505	12.506	-0.001	82	247176	25.0	24.6	
113 N-Propylbenzene	91	12.542	12.542	0.000	99	7292841	25.0	26.6	
114 2-Chlorotoluene	126	12.621	12.621	0.000	96	1366143	25.0	26.4	
115 1,3,5-Trimethylbenzene	105	12.676	12.676	0.000	94	5103857	25.0	27.7	
116 4-Chlorotoluene	126	12.713	12.713	0.000	98	1393167	25.0	26.9	
118 tert-Butylbenzene	134	12.920	12.920	0.000	93	1075357	25.0	27.9	
119 Pentachloroethane	167	12.957	12.951	0.006	92	817383	25.0	27.0	
120 1,2,4-Trimethylbenzene	105	12.957	12.957	0.000	97	5174567	25.0	27.5	
121 sec-Butylbenzene	105	13.079	13.079	0.000	95	6913932	25.0	27.8	
122 1,3-Dichlorobenzene	146	13.182	13.182	0.000	97	2613476	25.0	26.1	
123 4-Isopropyltoluene	119	13.188	13.188	0.000	97	5797902	25.0	28.2	
* 124 1,4-Dichlorobenzene-d4	152	13.237	13.237	0.000	95	591470	10.0	10.0	
125 1,4-Dichlorobenzene	146	13.255	13.255	0.000	94	2573618	25.0	25.9	
126 1,2,3-Trimethylbenzene	120	13.261	13.261	0.000	99	2150875	25.0	26.4	
127 Benzyl chloride	126	13.328	13.335	-0.007	99	372055	25.0	29.0	
129 p-Diethylbenzene	119	13.456	13.457	-0.001	93	3635914	25.0	27.3	
130 n-Butylbenzene	92	13.475	13.475	0.000	98	3167287	25.0	27.5	
131 1,2-Dichlorobenzene	146	13.517	13.517	0.000	97	2307118	25.0	25.6	
134 1,2-Dibromo-3-Chloropropane	155	14.060	14.060	0.000	85	132119	25.0	27.0	
135 1,3,5-Trichlorobenzene	180	14.182	14.182	0.000	97	2073637	25.0	26.7	
136 1,2,4-Trichlorobenzene	180	14.603	14.603	0.000	94	1733177	25.0	28.0	
137 Hexachlorobutadiene	225	14.688	14.682	0.006	97	1006324	25.0	27.8	
138 Naphthalene	128	14.786	14.792	-0.006	97	3075181	25.0	29.1	
139 1,2,3-Trichlorobenzene	180	14.932	14.932	0.000	95	1510374	25.0	27.6	
140 2-Methylnaphthalene	142	15.584	15.584	0.000	92	1939398	25.0	25.1	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MSV_RV4_826_00039

Amount Added: 25.00

Units: uL

MSV_RV1_826_00034

Amount Added: 25.00

Units: uL

MSV_RV4GAS826_00105

Amount Added: 25.00

Units: uL

MSV_30_826ISS_00006

Amount Added: 5.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19094\20210104-19149.b\Hj04111.D

Injection Date: 04-Jan-2021 16:29:30

Instrument ID: 19094

Operator ID: jkh09052

Lims ID: IC std7 25

Worklist Smp#: 12

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

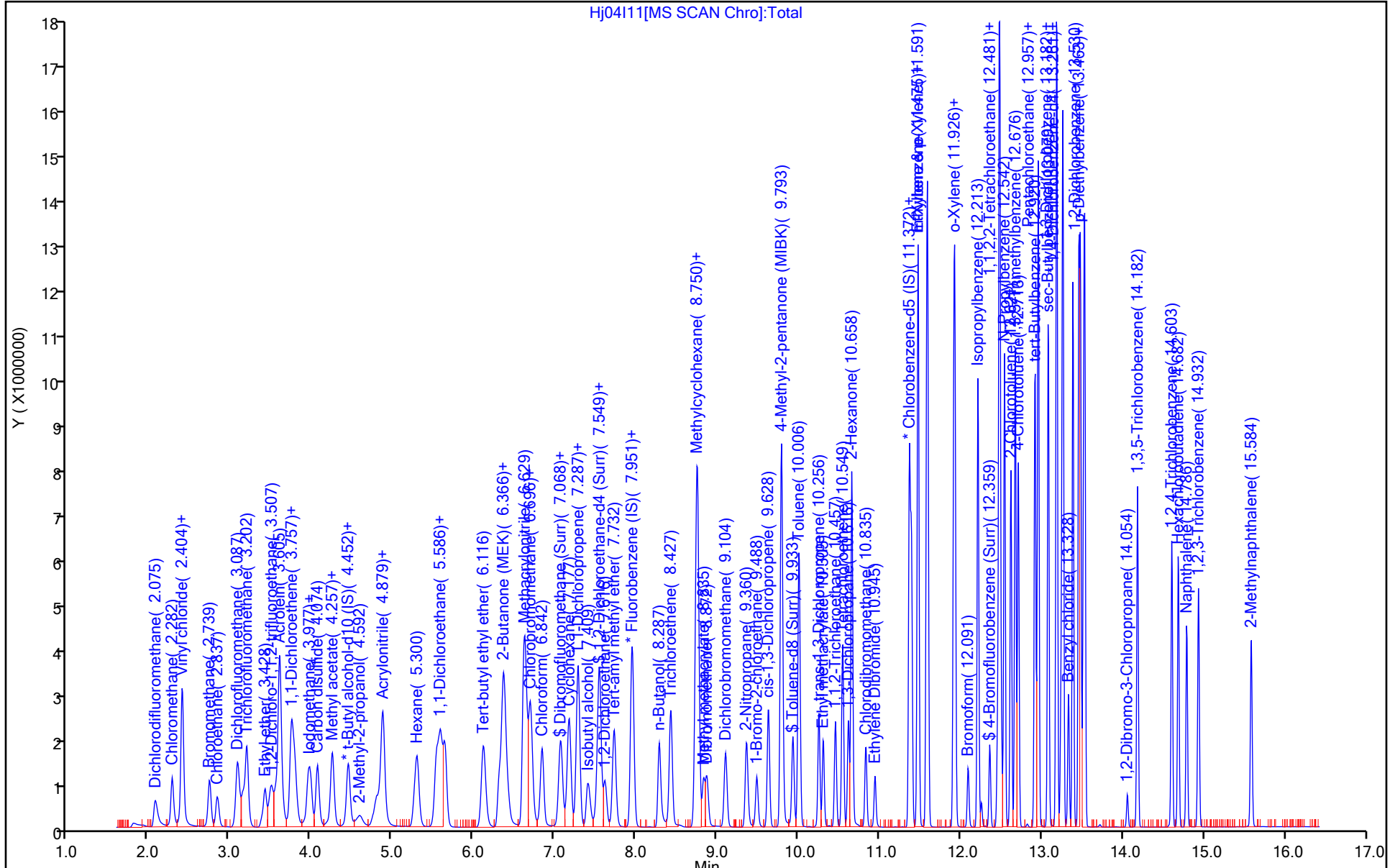
ALS Bottle#: 11

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC

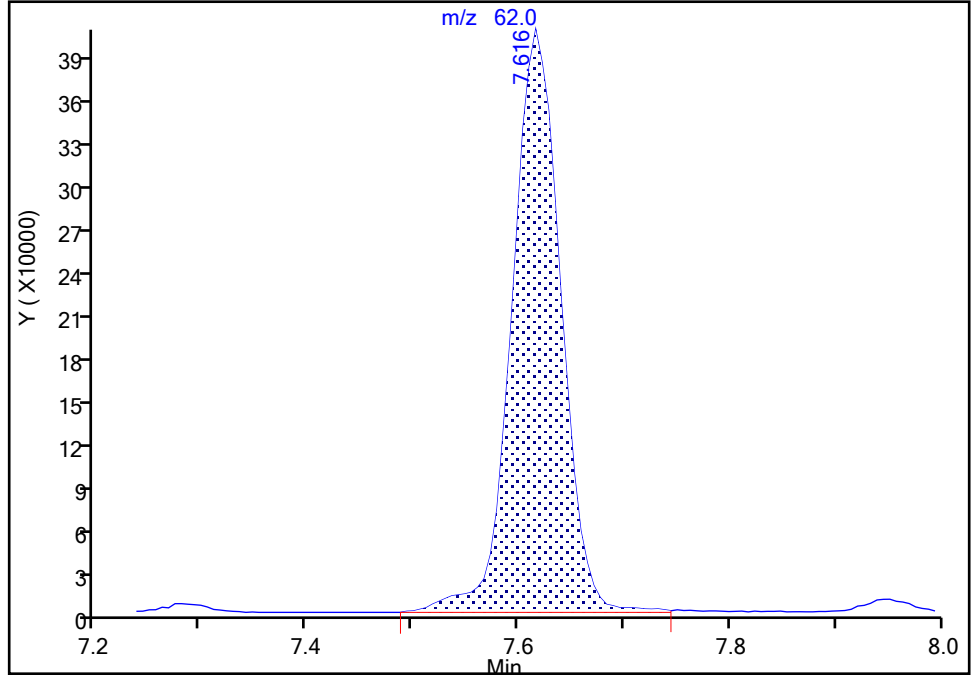
Data File: \\chromfs\Lancaster\ChromData\19094\20210104-19149.b\Hj04I11.D
Injection Date: 04-Jan-2021 16:29:30 Instrument ID: 19094
Lims ID: IC std7 25
Client ID:
Operator ID: jkh09052 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

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

Signal: 1

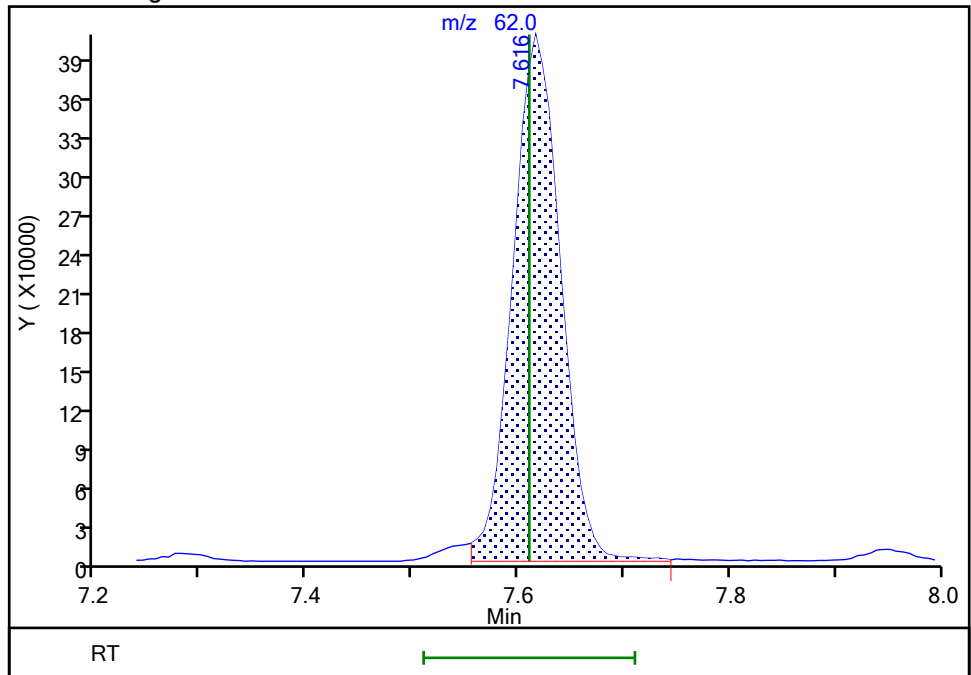
RT: 7.62
Area: 1292772
Amount: 24.757429
Amount Units: ug/l

Processing Integration Results



RT: 7.62
Area: 1268825
Amount: 24.430810
Amount Units: ug/l

Manual Integration Results



Reviewer: howej, 05-Jan-2021 06:26:20
Audit Action: Split an Integrated Peak

Audit Reason: Other

Eurofins Lancaster Laboratories Env, LLC

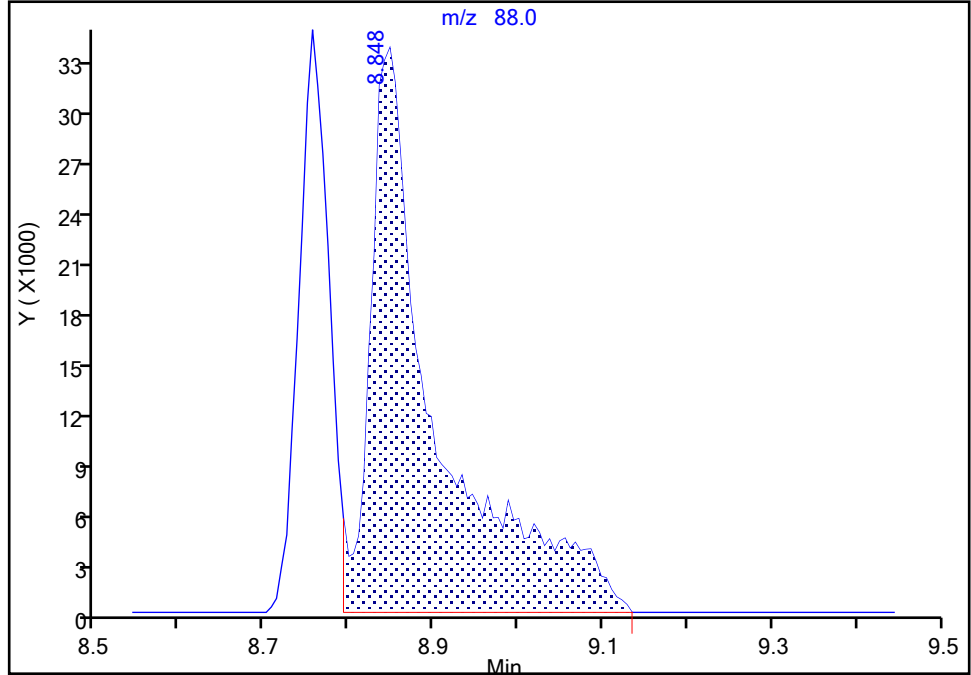
Data File:	\\chromfs\Lancaster\ChromData\19094\20210104-19149.b\Hj04I11.D		
Injection Date:	04-Jan-2021 16:29:30	Instrument ID:	19094
Lims ID:	IC std7 25		
Client ID:			
Operator ID:	jkh09052	ALS Bottle#:	11
Purge Vol:	25.000 mL	Dil. Factor:	1.0000
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D
Column:	Rxi-624Sil MS Capillary Column (0.25mm ID)	Detector:	MS Quad
		Worklist Smp#:	12

72 1,4-Dioxane, CAS: 123-91-1

Signal: 1

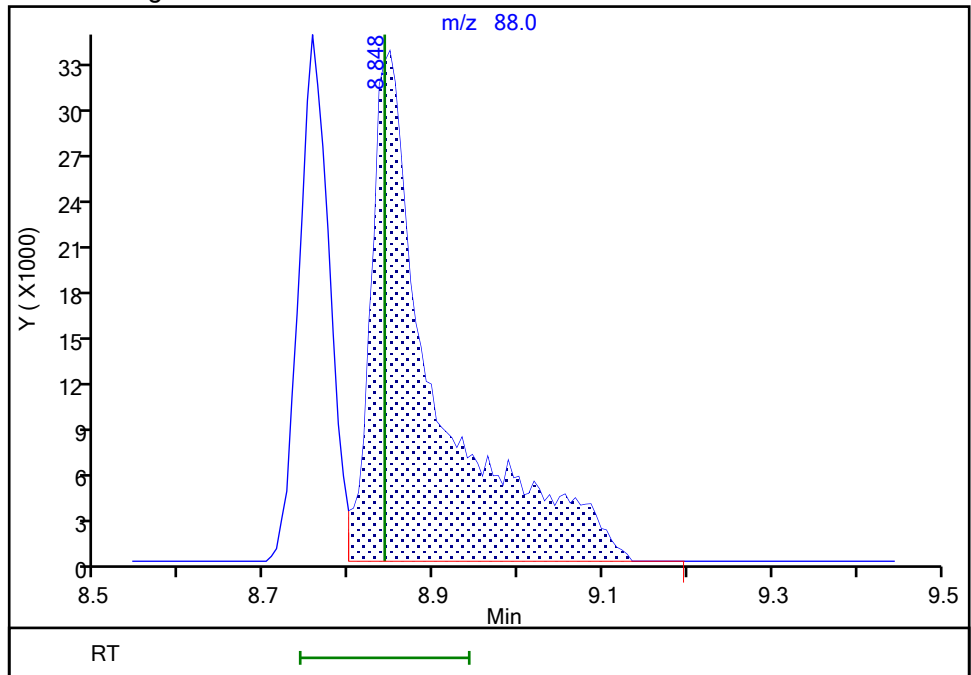
RT: 8.85
 Area: 183489
 Amount: 1180.3302
 Amount Units: ug/l

Processing Integration Results



RT: 8.85
 Area: 181431
 Amount: 1255.2816
 Amount Units: ug/l

Manual Integration Results



Reviewer: howej, 05-Jan-2021 06:26:39
 Audit Action: Split an Integrated Peak

Audit Reason: Other

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20210104-19149.b\Hj04I12.D
 Lims ID: ICIS 10
 Client ID:
 Sample Type: ICIS Calib Level: 6
 Inject. Date: 04-Jan-2021 16:51:30 ALS Bottle#: 12 Worklist Smp#: 13
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0019149-013
 Misc. Info.: ICIS 10
 Operator ID: jkh09052 Instrument ID: 19094
 Sublist: chrom-MSV_19094_25mL*sub1
 Method: \\chromfs\Lancaster\ChromData\19094\20210104-19149.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 05-Jan-2021 07:51:08 Calib Date: 04-Jan-2021 18:39:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20210104-19149.b\Hj04I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1665

First Level Reviewer: howej

Date: 05-Jan-2021 06:25:41

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
3 Dichlorodifluoromethane	85	2.075	2.075	0.000	100	612044	10.0	11.0	M
6 Chloromethane	50	2.282	2.282	0.000	99	757035	10.0	10.4	M
7 Vinyl chloride	62	2.404	2.404	0.000	93	691837	10.0	10.6	M
8 Butadiene	39	2.410	2.410	0.000	90	602497	10.0	9.70	M
9 Bromomethane	94	2.745	2.745	0.000	90	450115	10.0	10.2	
10 Chloroethane	64	2.843	2.843	0.000	100	419634	10.0	10.2	
11 Dichlorofluoromethane	67	3.081	3.081	0.000	97	733455	10.0	10.2	
13 Trichlorofluoromethane	101	3.154	3.154	0.000	98	793958	10.0	10.5	
15 Ethyl ether	59	3.428	3.428	0.000	93	359368	10.0	10.2	
16 1,2-Dichloro-1,1,2-trifluoroetha	67	3.501	3.501	0.000	95	539036	10.0	10.6	
17 Acrolein	56	3.605	3.605	0.000	99	2840765	500.0	543.3	
18 1,1-Dichloroethene	96	3.751	3.751	0.000	97	420079	10.0	10.5	
20 112TCTFE	101	3.788	3.788	0.000	93	427798	10.0	11.2	
19 Acetone	43	3.782	3.782	0.000	100	643703	100.0	104.1	
22 Iodomethane	142	3.958	3.958	0.000	99	688788	10.0	10.4	
21 Isopropyl alcohol	45	3.958	3.958	0.000	37	235326	200.0	200.4	
23 Ethyl bromide	108	3.995	3.995	0.000	99	370665	10.0	10.3	
24 Carbon disulfide	76	4.074	4.074	0.000	99	1283989	10.0	10.7	
26 Methyl acetate	43	4.233	4.233	0.000	97	184979	10.0	9.97	M
27 3-Chloro-1-propene	41	4.257	4.257	0.000	93	754721	10.0	10.6	
* 28 t-Butyl alcohol-d10 (IS)	65	4.464	4.464	0.000	0	97347	50.0	50.0	
29 Methylene Chloride	84	4.458	4.458	0.000	95	467119	10.0	9.67	
30 2-Methyl-2-propanol	59	4.586	4.586	0.000	98	439075	200.0	221.0	
31 Acrylonitrile	53	4.794	4.794	0.000	98	460608	50.0	53.7	
32 Methyl tert-butyl ether	73	4.861	4.861	0.000	96	971535	10.0	10.8	
33 trans-1,2-Dichloroethene	96	4.879	4.879	0.000	97	470176	10.0	10.6	
34 Hexane	57	5.294	5.294	0.000	93	708314	10.0	11.6	
35 1,1-Dichloroethane	63	5.537	5.537	0.000	96	923971	10.0	10.5	
37 Isopropyl ether	45	5.592	5.592	0.000	96	1472913	10.0	10.9	
38 2-Chloro-1,3-butadiene	53	5.647	5.647	0.000	91	728651	10.0	11.1	

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	6.117	6.117	0.000	98	1257905	10.0	10.9	
41 2-Butanone (MEK)	43	6.318	6.318	0.000	100	1185013	100.0	107.9	
42 cis-1,2-Dichloroethene	96	6.360	6.360	0.000	84	529710	10.0	10.5	
43 2,2-Dichloropropane	77	6.379	6.379	0.000	88	730858	10.0	10.5	
45 Propionitrile	54	6.403	6.403	0.000	99	626344	200.0	214.9	
47 Methacrylonitrile	67	6.623	6.623	0.000	92	1187924	100.0	111.2	
48 Chlorobromomethane	128	6.696	6.696	0.000	77	221004	10.0	10.7	
49 Tetrahydrofuran	71	6.696	6.696	0.000	85	316413	100.0	113.5	
50 Chloroform	83	6.842	6.842	0.000	94	873828	10.0	10.5	
\$ 51 Dibromofluoromethane (Surr)	113	7.055	7.055	0.000	93	400330	10.0	9.98	
52 1,1,1-Trichloroethane	97	7.080	7.080	0.000	99	750781	10.0	10.7	
53 Cyclohexane	56	7.171	7.171	0.000	91	837862	10.0	11.2	
55 1,1-Dichloropropene	75	7.287	7.287	0.000	96	712303	10.0	10.9	
56 Carbon tetrachloride	117	7.287	7.287	0.000	95	651460	10.0	11.0	
57 Isobutyl alcohol	41	7.403	7.403	0.000	94	410840	500.0	553.6	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.519	7.519	0.000	0	82073	10.0	10.0	
59 Benzene	78	7.543	7.543	0.000	96	2069357	10.0	10.5	
60 1,2-Dichloroethane	62	7.616	7.616	0.000	97	524590	10.0	9.92	M
62 Tert-amyl methyl ether	73	7.732	7.732	0.000	98	1075082	10.0	11.0	
* 65 Fluorobenzene (IS)	96	7.945	7.945	0.000	98	1641765	10.0	10.0	
64 n-Heptane	43	7.952	7.952	0.000	93	852235	10.0	11.6	
66 n-Butanol	56	8.287	8.287	0.000	88	760733	1000.0	1153.6	
67 Trichloroethene	95	8.427	8.427	0.000	99	518984	10.0	10.5	
68 Methylcyclohexane	83	8.738	8.738	0.000	95	953525	10.0	11.4	
69 2-ethoxy-2-methyl butane	87	8.756	8.756	0.000	92	649029	10.0	11.1	
70 1,2-Dichloropropane	63	8.762	8.762	0.000	87	545677	10.0	10.6	
71 Methyl methacrylate	69	8.829	8.829	0.000	91	216546	10.0	12.0	
72 1,4-Dioxane	88	8.854	8.854	0.000	93	86950	500.0	582.4	
73 Dibromomethane	93	8.872	8.872	0.000	96	236580	10.0	10.7	
75 Dichlorobromomethane	83	9.104	9.104	0.000	99	617313	10.0	10.6	
76 2-Nitropropane	41	9.360	9.360	0.000	98	636388	100.0	111.3	
79 1-Bromo-2-chloroethane	63	9.488	9.488	0.000	99	509060	10.0	10.6	
80 cis-1,3-Dichloropropene	75	9.628	9.628	0.000	96	756053	10.0	11.1	
81 4-Methyl-2-pentanone (MIBK)	43	9.793	9.793	0.000	97	3121826	100.0	113.1	
\$ 82 Toluene-d8 (Surr)	98	9.933	9.933	0.000	94	1599529	10.0	10.0	
83 Toluene	92	10.006	10.006	0.000	97	1254572	10.0	10.5	
85 trans-1,3-Dichloropropene	75	10.256	10.256	0.000	93	608087	10.0	10.9	
86 Ethyl methacrylate	69	10.305	10.305	0.000	90	439422	10.0	11.3	
87 1,1,2-Trichloroethane	97	10.457	10.457	0.000	91	329156	10.0	10.5	
88 Tetrachloroethene	166	10.549	10.549	0.000	97	539871	10.0	10.6	
89 1,3-Dichloropropane	76	10.616	10.616	0.000	90	604437	10.0	10.7	
91 2-Hexanone	43	10.658	10.658	0.000	98	2202018	100.0	115.5	
93 Chlorodibromomethane	129	10.829	10.829	0.000	90	401176	10.0	10.9	
94 Ethylene Dibromide	107	10.945	10.945	0.000	99	314034	10.0	10.6	
* 97 Chlorobenzene-d5 (IS)	117	11.366	11.366	0.000	87	1162561	10.0	10.0	
96 1-Chlorohexane	91	11.372	11.372	0.000	97	743575	10.0	10.8	
98 Chlorobenzene	112	11.396	11.396	0.000	94	1360084	10.0	10.6	
100 Ethylbenzene	91	11.475	11.475	0.000	99	2482644	10.0	10.9	
99 1,1,1,2-Tetrachloroethane	131	11.475	11.475	0.000	95	465532	10.0	10.5	
101 m-Xylene & p-Xylene	106	11.591	11.591	0.000	98	1880195	20.0	22.1	
102 o-Xylene	106	11.920	11.920	0.000	97	906263	10.0	11.0	
103 Styrene	104	11.932	11.932	0.000	95	1513292	10.0	11.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
104 Bromoform	173	12.091	12.091	0.000	96	231355	10.0	10.9	
105 Isopropylbenzene	105	12.213	12.213	0.000	96	2453022	10.0	11.3	
\$ 108 4-Bromofluorobenzene (Surr)	95	12.359	12.359	0.000	88	571967	10.0	10.0	
109 1,1,2,2-Tetrachloroethane	83	12.457	12.457	0.000	94	418494	10.0	10.4	
111 Bromobenzene	156	12.481	12.481	0.000	90	527603	10.0	10.5	
110 trans-1,4-Dichloro-2-butene	53	12.481	12.481	0.000	92	1110413	100.0	114.0	
112 1,2,3-Trichloropropane	110	12.506	12.506	0.000	82	102596	10.0	10.1	
113 N-Propylbenzene	91	12.542	12.542	0.000	99	3031739	10.0	10.9	
114 2-Chlorotoluene	126	12.621	12.621	0.000	96	563882	10.0	10.7	
115 1,3,5-Trimethylbenzene	105	12.676	12.676	0.000	94	2104892	10.0	11.3	
116 4-Chlorotoluene	126	12.713	12.713	0.000	98	577667	10.0	11.0	
118 tert-Butylbenzene	134	12.920	12.920	0.000	93	442024	10.0	11.3	
119 Pentachloroethane	167	12.951	12.951	0.000	92	335813	10.0	10.9	
120 1,2,4-Trimethylbenzene	105	12.957	12.957	0.000	97	2134322	10.0	11.1	
121 sec-Butylbenzene	105	13.079	13.079	0.000	95	2879594	10.0	11.4	
122 1,3-Dichlorobenzene	146	13.182	13.182	0.000	96	1081236	10.0	10.6	
123 4-Isopropyltoluene	119	13.188	13.188	0.000	97	2398851	10.0	11.5	
* 124 1,4-Dichlorobenzene-d4	152	13.237	13.237	0.000	96	601504	10.0	10.0	
125 1,4-Dichlorobenzene	146	13.255	13.255	0.000	92	1061562	10.0	10.5	
126 1,2,3-Trimethylbenzene	120	13.261	13.261	0.000	99	879606	10.0	10.6	
127 Benzyl chloride	126	13.329	13.329	0.000	99	146928	10.0	11.3	
129 p-Diethylbenzene	119	13.457	13.457	0.000	95	1515809	10.0	11.2	
130 n-Butylbenzene	92	13.475	13.475	0.000	97	1318334	10.0	11.2	
131 1,2-Dichlorobenzene	146	13.518	13.518	0.000	97	965644	10.0	10.5	
134 1,2-Dibromo-3-Chloropropane	155	14.060	14.060	0.000	84	54302	10.0	10.9	
135 1,3,5-Trichlorobenzene	180	14.182	14.182	0.000	97	853012	10.0	10.8	
136 1,2,4-Trichlorobenzene	180	14.603	14.603	0.000	93	722116	10.0	11.5	
137 Hexachlorobutadiene	225	14.688	14.688	0.000	97	413306	10.0	11.2	
138 Naphthalene	128	14.792	14.792	0.000	97	1246288	10.0	11.6	
139 1,2,3-Trichlorobenzene	180	14.932	14.932	0.000	95	624728	10.0	11.2	
140 2-Methylnaphthalene	142	15.584	15.584	0.000	92	791543	10.0	10.3	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MSV_RV1_826_00034

Amount Added: 10.00

Units: uL

MSV_RV4_826_00039

Amount Added: 10.00

Units: uL

MSV_RV4GAS826_00105

Amount Added: 10.00

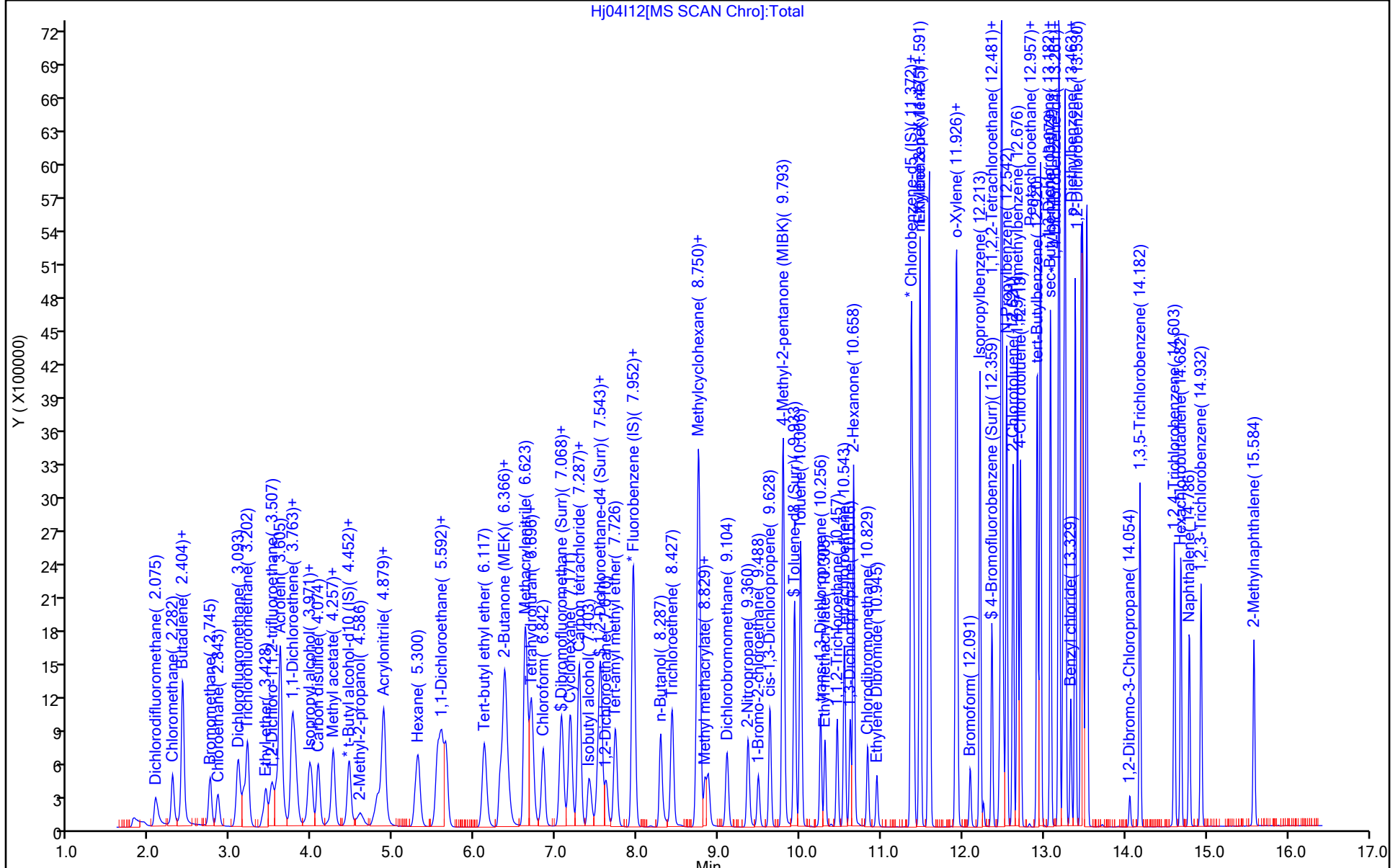
Units: uL

MSV_30_826ISS_00006

Amount Added: 5.00

Units: uL

Run Reagent



Eurofins Lancaster Laboratories Env, LLC

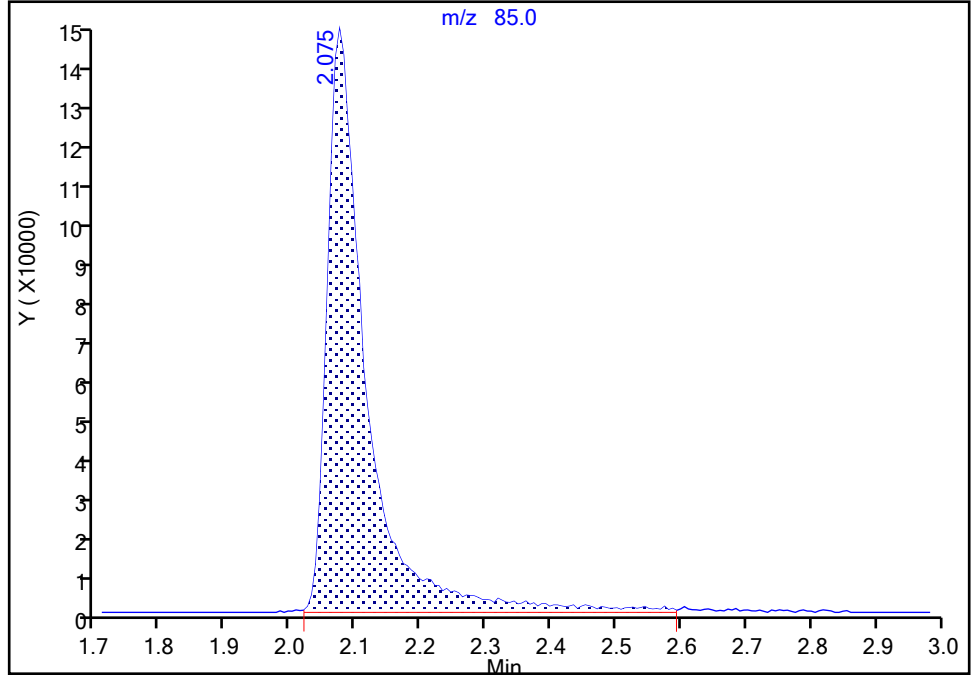
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Injection Date: 04-Jan-2021 16:51:30 Instrument ID: 19094
Lims ID: ICIS 10
Client ID:
Operator ID: jkh09052 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

3 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

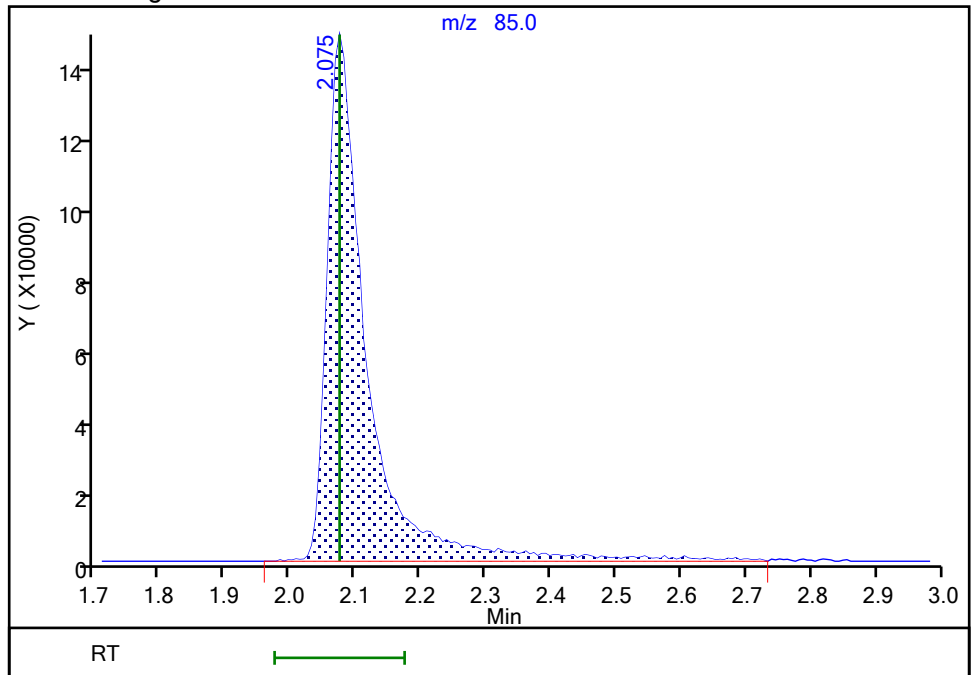
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Area: 606247
Amount: 10.899959
Amount Units: ug/l

Processing Integration Results



RT: 2.07
Area: 612044
Amount: 10.987825
Amount Units: ug/l

Manual Integration Results



Reviewer: howej, 05-Jan-2021 06:05:03
Audit Action: Manually Integrated

Audit Reason: Other

Eurofins Lancaster Laboratories Env, LLC

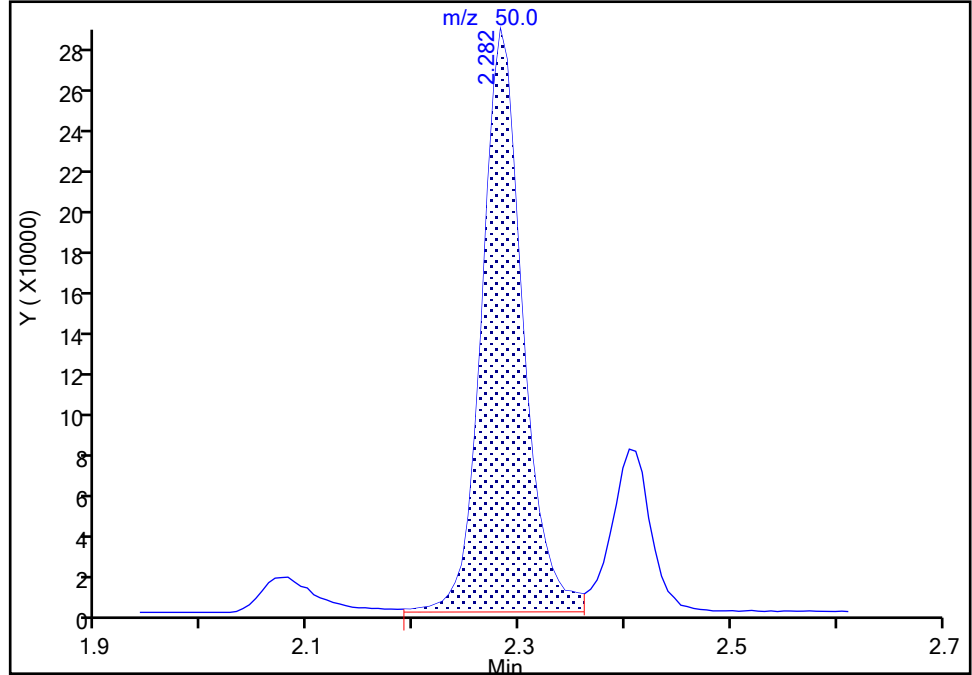
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Injection Date: 04-Jan-2021 16:51:30 Instrument ID: 19094
Lims ID: ICIS 10
Client ID:
Operator ID: jkh09052 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

6 Chloromethane, CAS: 74-87-3

Signal: 1

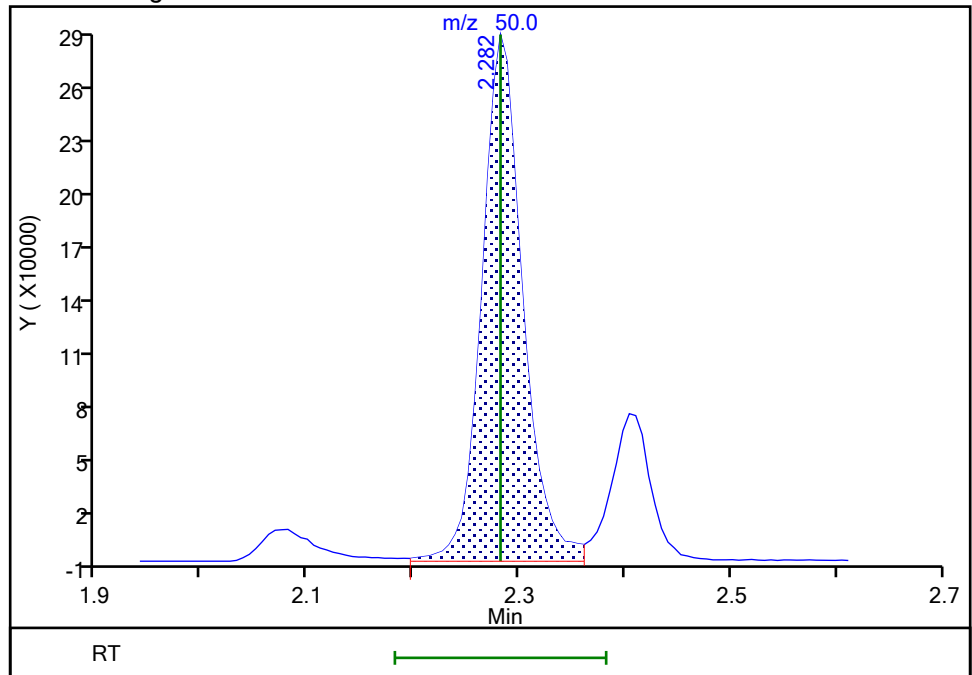
RT: 2.28
Area: 755251
Amount: 10.362557
Amount Units: ug/l

Processing Integration Results



RT: 2.28
Area: 757035
Amount: 10.383404
Amount Units: ug/l

Manual Integration Results



Reviewer: howej, 05-Jan-2021 06:05:36
Audit Action: Assigned New Baseline

Audit Reason: Other

Eurofins Lancaster Laboratories Env, LLC

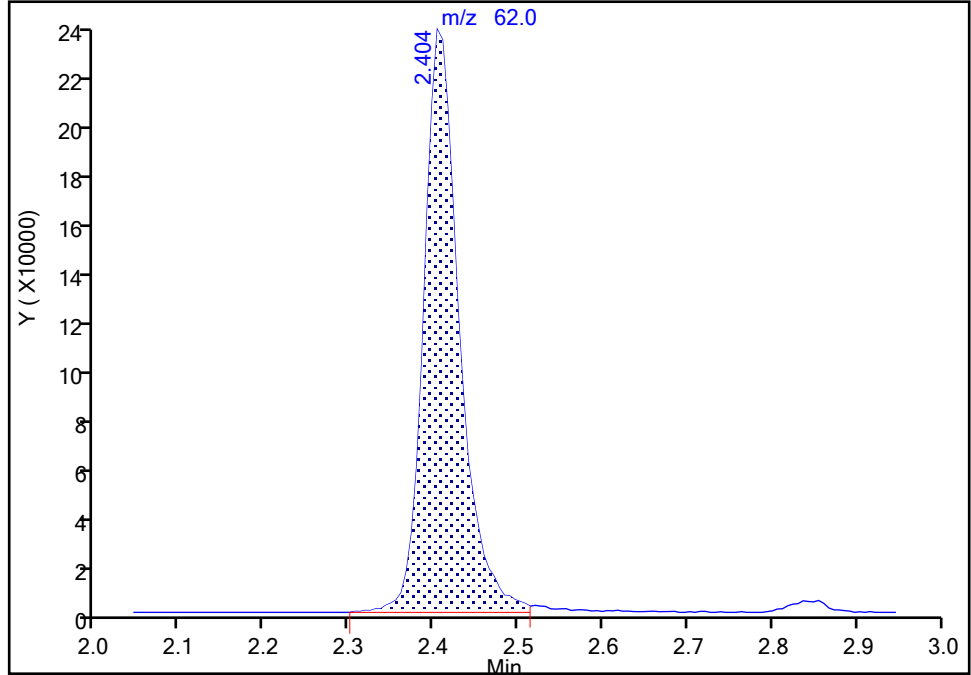
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Lims ID: ICIS 10
Client ID:
Operator ID: jkh09052 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

7 Vinyl chloride, CAS: 75-01-4

Signal: 1

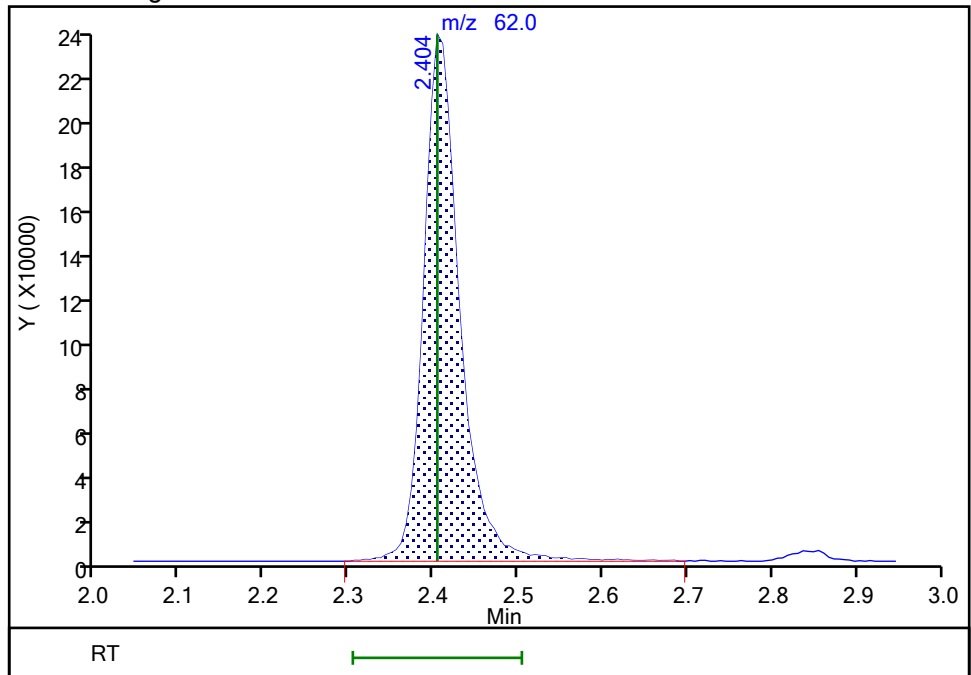
RT: 2.40
Area: 682687
Amount: 10.441029
Amount Units: ug/l

Processing Integration Results



RT: 2.40
Area: 691837
Amount: 10.559859
Amount Units: ug/l

Manual Integration Results



Reviewer: howej, 05-Jan-2021 06:05:44
Audit Action: Manually Integrated

Audit Reason: Other

Eurofins Lancaster Laboratories Env, LLC

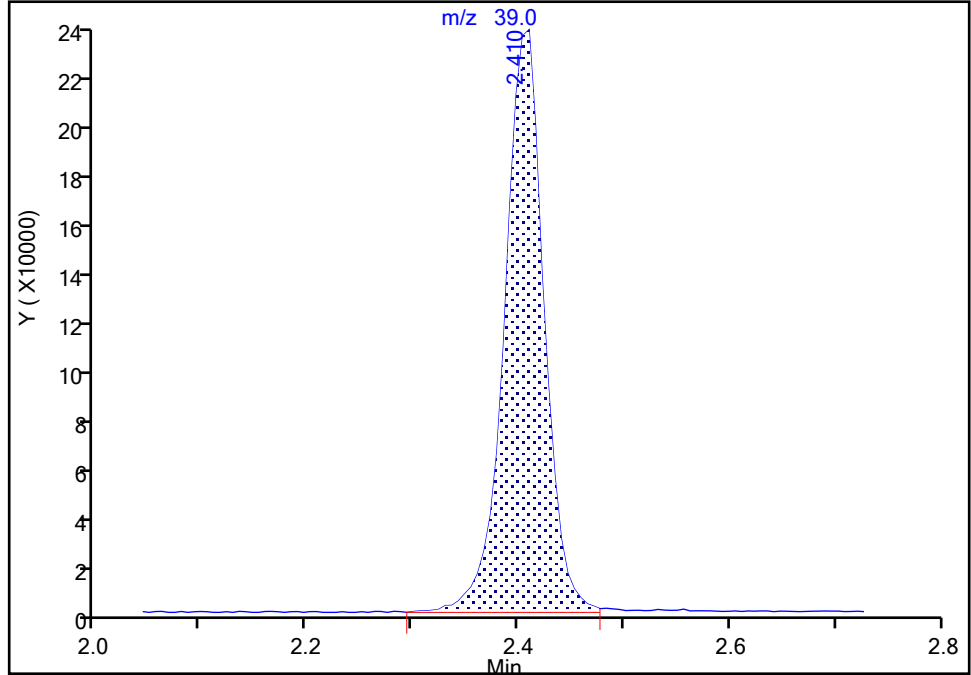
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Injection Date: 04-Jan-2021 16:51:30 Instrument ID: 19094
Lims ID: ICIS 10
Client ID:
Operator ID: jkh09052 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

8 Butadiene, CAS: 106-99-0

Signal: 1

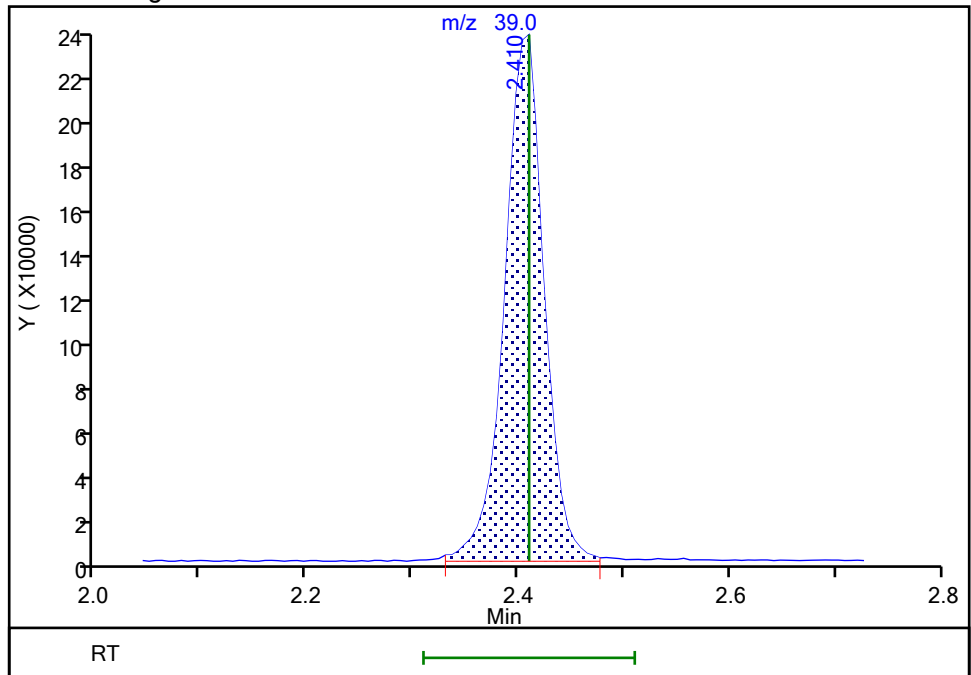
RT: 2.41
Area: 603781
Amount: 9.735702
Amount Units: ug/l

Processing Integration Results



RT: 2.41
Area: 602497
Amount: 9.704315
Amount Units: ug/l

Manual Integration Results



Reviewer: howej, 05-Jan-2021 06:05:55
Audit Action: Split an Integrated Peak

Audit Reason: Other

Eurofins Lancaster Laboratories Env, LLC

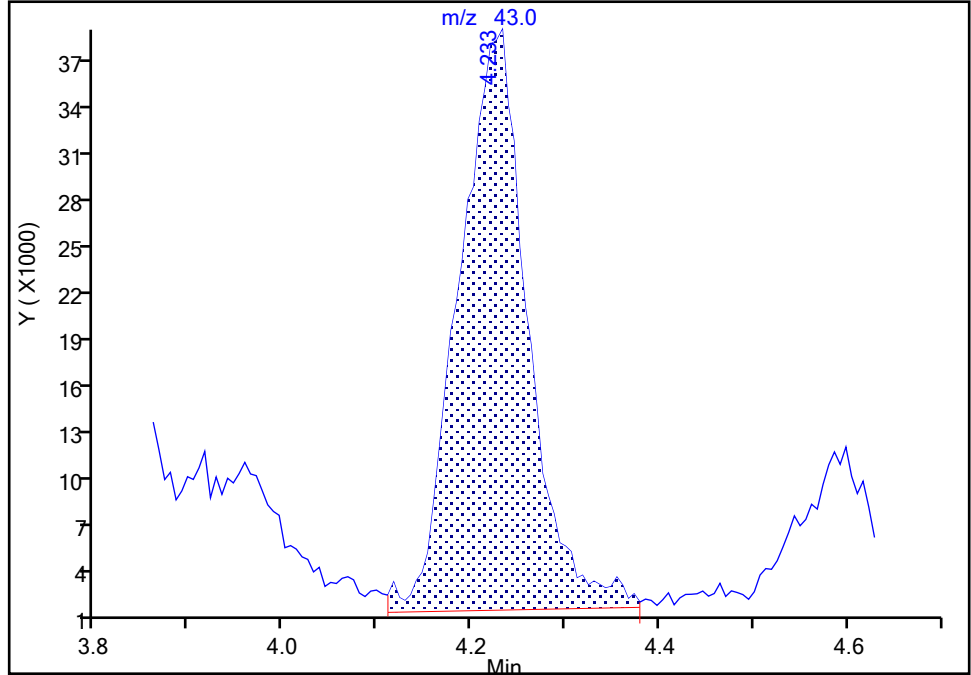
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Injection Date: 04-Jan-2021 16:51:30 Instrument ID: 19094
Lims ID: ICIS 10
Client ID:
Operator ID: jkh09052 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

26 Methyl acetate, CAS: 79-20-9

Signal: 1

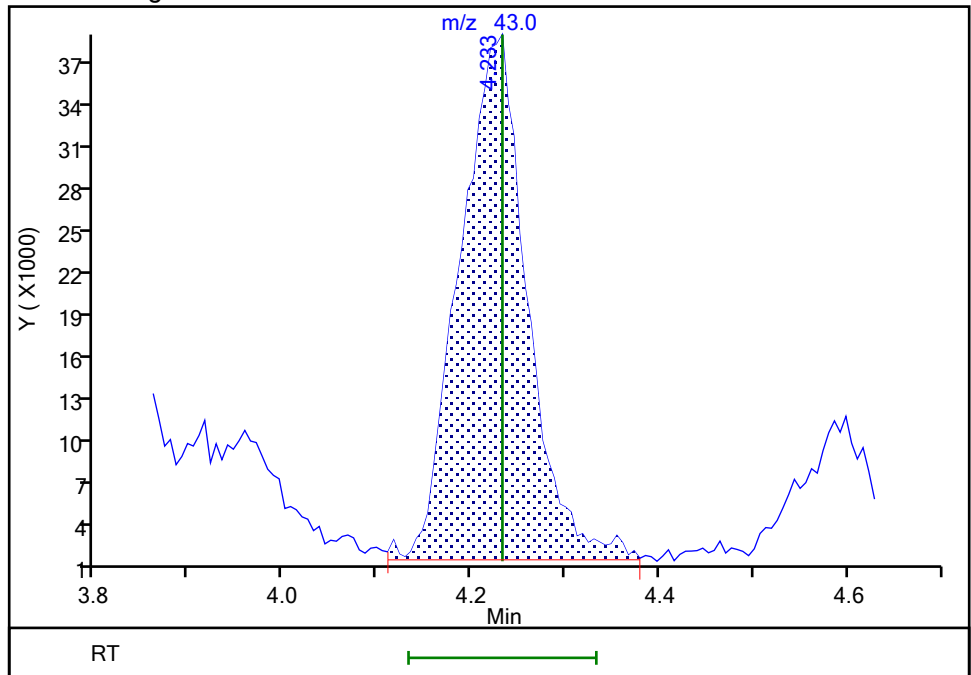
RT: 4.23
Area: 191374
Amount: 9.799252
Amount Units: ug/l

Processing Integration Results



RT: 4.23
Area: 184979
Amount: 9.969581
Amount Units: ug/l

Manual Integration Results



Reviewer: howej, 05-Jan-2021 06:06:32
Audit Action: Assigned New Baseline

Audit Reason: Other

Eurofins Lancaster Laboratories Env, LLC

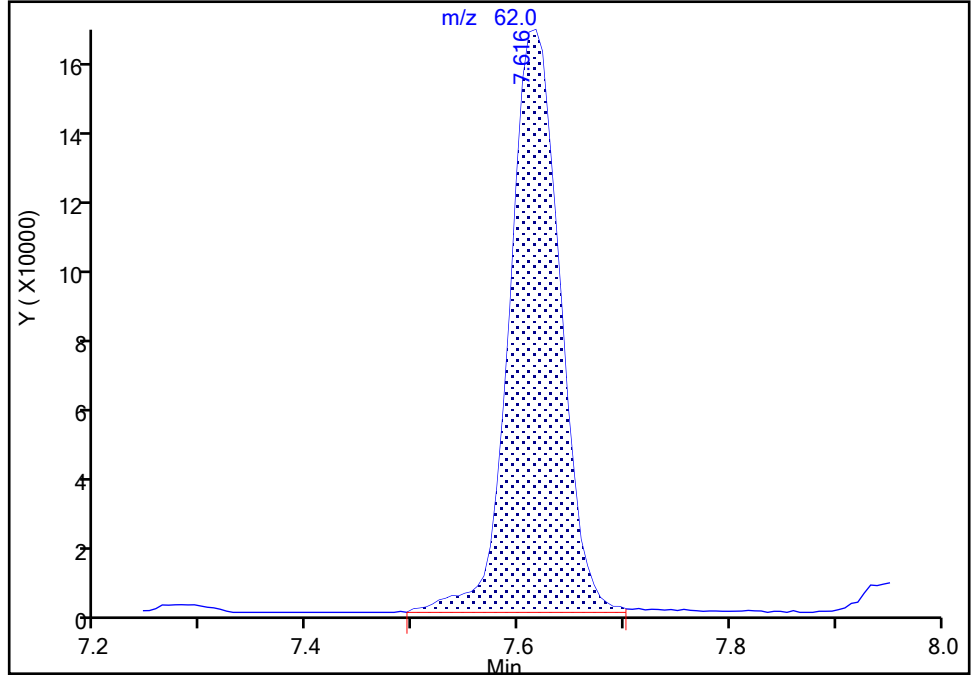
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Injection Date: 04-Jan-2021 16:51:30 Instrument ID: 19094
Lims ID: ICIS 10
Client ID:
Operator ID: jkh09052 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

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

Signal: 1

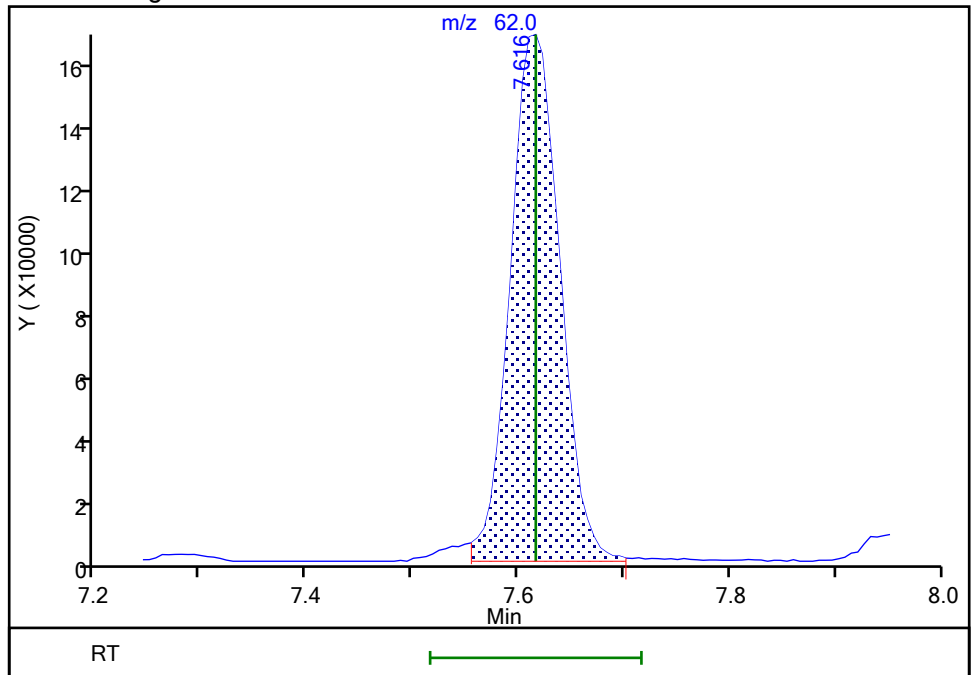
RT: 7.62
Area: 534520
Amount: 10.050784
Amount Units: ug/l

Processing Integration Results



RT: 7.62
Area: 524590
Amount: 9.921909
Amount Units: ug/l

Manual Integration Results



Reviewer: howej, 05-Jan-2021 06:06:50
Audit Action: Split an Integrated Peak

Audit Reason: Other

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20210104-19149.b\Hj04I13.D
 Lims ID: IC std5 5
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 04-Jan-2021 17:12:30 ALS Bottle#: 13 Worklist Smp#: 14
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0019149-014
 Misc. Info.: IC STD5 5
 Operator ID: jkh09052 Instrument ID: 19094
 Sublist: chrom-MSV_19094_25mL*sub1
 Method: \\chromfs\Lancaster\ChromData\19094\20210104-19149.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 05-Jan-2021 07:51:19 Calib Date: 04-Jan-2021 18:39:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20210104-19149.b\Hj04I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1665

First Level Reviewer: howej

Date: 05-Jan-2021 06:28:49

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
3 Dichlorodifluoromethane	85	2.068	2.075	-0.007	99	285484	5.00	5.38	
6 Chloromethane	50	2.276	2.282	-0.006	99	362402	5.00	5.21	
7 Vinyl chloride	62	2.398	2.404	-0.006	93	324410	5.00	5.19	
8 Butadiene	39	2.398	2.410	-0.012	90	287867	5.00	4.86	M
9 Bromomethane	94	2.733	2.745	-0.012	91	218016	5.00	5.19	
10 Chloroethane	64	2.830	2.843	-0.013	100	202843	5.00	5.19	
11 Dichlorofluoromethane	67	3.080	3.081	-0.001	97	358351	5.00	5.21	
13 Trichlorofluoromethane	101	3.147	3.154	-0.007	98	380777	5.00	5.30	
15 Ethyl ether	59	3.416	3.428	-0.012	92	178085	5.00	5.28	
16 1,2-Dichloro-1,1,2-trifluoroethane	67	3.495	3.501	-0.006	95	254948	5.00	5.28	
17 Acrolein	56	3.599	3.605	-0.006	99	1414410	250.0	246.4	
18 1,1-Dichloroethene	96	3.739	3.751	-0.012	96	194632	5.00	5.10	
19 Acetone	43	3.775	3.782	-0.007	100	331412	50.0	48.8	
20 112TCTFE	101	3.775	3.788	-0.013	91	194655	5.00	5.34	
22 Iodomethane	142	3.952	3.958	-0.006	99	327754	5.00	5.21	
21 Isopropyl alcohol	45	3.952	3.958	-0.006	38	121815	100.0	108.8	
23 Ethyl bromide	108	3.983	3.995	-0.012	98	174363	5.00	5.10	
24 Carbon disulfide	76	4.068	4.074	-0.006	99	602596	5.00	5.25	
26 Methyl acetate	43	4.214	4.233	-0.019	98	107467	5.00	5.28	
27 3-Chloro-1-propene	41	4.251	4.257	-0.006	93	359808	5.00	5.28	
29 Methylene Chloride	84	4.440	4.458	-0.018	96	226122	5.00	4.91	
* 28 t-Butyl alcohol-d10 (IS)	65	4.440	4.464	-0.024	0	106849	50.0	50.0	M
30 2-Methyl-2-propanol	59	4.592	4.586	0.006	98	225268	100.0	103.3	
31 Acrylonitrile	53	4.787	4.794	-0.007	99	228948	25.0	24.3	
32 Methyl tert-butyl ether	73	4.854	4.861	-0.007	95	463862	5.00	5.40	
33 trans-1,2-Dichloroethene	96	4.879	4.879	0.000	97	222446	5.00	5.25	
34 Hexane	57	5.287	5.294	-0.007	94	316002	5.00	5.42	
35 1,1-Dichloroethane	63	5.531	5.537	-0.006	96	439095	5.00	5.25	
37 Isopropyl ether	45	5.574	5.592	-0.018	95	689037	5.00	5.36	
38 2-Chloro-1,3-butadiene	53	5.635	5.647	-0.012	92	336405	5.00	5.39	

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	6.110	6.117	-0.007	98	587074	5.00	5.33	
S 40 1,2-Dichloroethene, Total	100				0			10.5	
41 2-Butanone (MEK)	43	6.305	6.318	-0.013	100	608524	50.0	50.5	
42 cis-1,2-Dichloroethene	96	6.360	6.360	0.000	84	255155	5.00	5.30	
43 2,2-Dichloropropane	77	6.372	6.379	-0.007	88	339235	5.00	5.13	
45 Propionitrile	54	6.397	6.403	-0.006	99	318855	100.0	99.7	
47 Methacrylonitrile	67	6.616	6.623	-0.007	92	595703	50.0	50.8	
48 Chlorobromomethane	128	6.689	6.696	-0.007	93	107571	5.00	5.45	
49 Tetrahydrofuran	71	6.689	6.696	-0.007	91	156635	50.0	51.2	
50 Chloroform	83	6.836	6.842	-0.006	93	414312	5.00	5.23	
\$ 51 Dibromofluoromethane (Surr)	113	7.049	7.055	-0.006	93	376936	10.0	9.86	
52 1,1,1-Trichloroethane	97	7.067	7.080	-0.013	99	348422	5.00	5.19	
53 Cyclohexane	56	7.171	7.171	0.000	91	384294	5.00	5.40	
55 1,1-Dichloropropene	75	7.281	7.287	-0.006	95	334650	5.00	5.36	
56 Carbon tetrachloride	117	7.281	7.287	-0.006	85	300664	5.00	5.32	
57 Isobutyl alcohol	41	7.403	7.403	0.000	94	201791	250.0	247.7	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.506	7.519	-0.013	0	81916	10.0	10.5	
59 Benzene	78	7.537	7.543	-0.006	98	968257	5.00	5.15	
60 1,2-Dichloroethane	62	7.610	7.616	-0.006	97	256853	5.00	5.10	M
62 Tert-amyl methyl ether	73	7.726	7.732	-0.006	98	510268	5.00	5.47	
* 65 Fluorobenzene (IS)	96	7.945	7.945	0.000	98	1565149	10.0	10.0	
64 n-Heptane	43	7.945	7.952	-0.007	89	386997	5.00	5.52	
66 n-Butanol	56	8.281	8.287	-0.006	90	378067	500.0	522.3	
67 Trichloroethene	95	8.421	8.427	-0.006	98	243784	5.00	5.19	
68 Methylcyclohexane	83	8.738	8.738	0.000	95	445051	5.00	5.57	
69 2-ethoxy-2-methyl butane	87	8.756	8.756	0.000	89	305233	5.00	5.45	
70 1,2-Dichloropropane	63	8.756	8.762	-0.006	85	259845	5.00	5.28	
71 Methyl methacrylate	69	8.823	8.829	-0.006	92	103918	5.00	5.25	
72 1,4-Dioxane	88	8.847	8.854	-0.007	95	44183	250.0	269.6	M
73 Dibromomethane	93	8.872	8.872	0.000	96	113469	5.00	5.41	
75 Dichlorobromomethane	83	9.097	9.104	-0.007	99	293377	5.00	5.26	
76 2-Nitropropane	41	9.360	9.360	0.000	99	314904	50.0	50.2	
79 1-Bromo-2-chloroethane	63	9.482	9.488	-0.006	99	245835	5.00	5.38	
80 cis-1,3-Dichloropropene	75	9.628	9.628	0.000	96	354362	5.00	5.48	
81 4-Methyl-2-pentanone (MIBK)	43	9.786	9.793	-0.007	97	1541476	50.0	50.9	
\$ 82 Toluene-d8 (Surr)	98	9.933	9.933	0.000	94	1509092	10.0	10.0	
83 Toluene	92	10.006	10.006	0.000	98	594339	5.00	5.26	
S 84 1,3-Dichloropropene, Total	100				0			10.9	
85 trans-1,3-Dichloropropene	75	10.250	10.256	-0.006	93	289666	5.00	5.47	
86 Ethyl methacrylate	69	10.305	10.305	0.000	90	208423	5.00	5.68	
87 1,1,2-Trichloroethane	97	10.457	10.457	0.000	91	160455	5.00	5.39	
88 Tetrachloroethene	166	10.542	10.549	-0.007	97	251638	5.00	5.22	
89 1,3-Dichloropropane	76	10.615	10.616	-0.001	91	291590	5.00	5.46	
91 2-Hexanone	43	10.658	10.658	0.000	98	1075390	50.0	51.4	
93 Chlorodibromomethane	129	10.829	10.829	0.000	90	191521	5.00	5.52	
94 Ethylene Dibromide	107	10.945	10.945	0.000	99	153708	5.00	5.46	
S 95 Xylenes, Total	106				0			16.4	
* 97 Chlorobenzene-d5 (IS)	117	11.365	11.366	-0.001	88	1101511	10.0	10.0	
96 1-Chlorohexane	91	11.371	11.372	-0.001	98	340608	5.00	5.23	
98 Chlorobenzene	112	11.396	11.396	0.000	93	649440	5.00	5.33	
100 Ethylbenzene	91	11.475	11.475	0.000	99	1165525	5.00	5.39	
99 1,1,1,2-Tetrachloroethane	131	11.475	11.475	0.000	43	220176	5.00	5.26	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
101 m-Xylene & p-Xylene	106	11.591	11.591	0.000	98	888823	10.0	11.0	
102 o-Xylene	106	11.920	11.920	0.000	97	425389	5.00	5.43	
103 Styrene	104	11.932	11.932	0.000	95	713950	5.00	5.63	
104 Bromoform	173	12.091	12.091	0.000	95	109767	5.00	5.47	
105 Isopropylbenzene	105	12.213	12.213	0.000	96	1133714	5.00	5.52	
\$ 108 4-Bromofluorobenzene (Surr)	95	12.359	12.359	0.000	88	545713	10.0	10.1	
109 1,1,2,2-Tetrachloroethane	83	12.457	12.457	0.000	92	205743	5.00	5.41	
111 Bromobenzene	156	12.481	12.481	0.000	74	254985	5.00	5.33	
110 trans-1,4-Dichloro-2-butene	53	12.481	12.481	0.000	92	540436	50.0	50.5	
112 1,2,3-Trichloropropane	110	12.505	12.506	-0.001	82	51672	5.00	5.33	
113 N-Propylbenzene	91	12.542	12.542	0.000	99	1434712	5.00	5.41	
114 2-Chlorotoluene	126	12.621	12.621	0.000	96	265517	5.00	5.31	
115 1,3,5-Trimethylbenzene	105	12.676	12.676	0.000	94	973670	5.00	5.48	
116 4-Chlorotoluene	126	12.713	12.713	0.000	98	276728	5.00	5.53	
118 tert-Butylbenzene	134	12.920	12.920	0.000	93	205236	5.00	5.51	
119 Pentachloroethane	167	12.956	12.951	0.005	90	158832	5.00	5.43	
120 1,2,4-Trimethylbenzene	105	12.956	12.957	-0.001	97	1013765	5.00	5.58	
121 sec-Butylbenzene	105	13.078	13.079	-0.001	95	1333998	5.00	5.56	
122 1,3-Dichlorobenzene	146	13.182	13.182	0.000	96	505935	5.00	5.24	
123 4-Isopropyltoluene	119	13.188	13.188	0.000	97	1115184	5.00	5.61	
* 124 1,4-Dichlorobenzene-d4	152	13.237	13.237	0.000	96	571092	10.0	10.0	
125 1,4-Dichlorobenzene	146	13.255	13.255	0.000	93	503298	5.00	5.24	
126 1,2,3-Trimethylbenzene	120	13.261	13.261	0.000	99	420060	5.00	5.35	
127 Benzyl chloride	126	13.334	13.329	0.005	99	70623	5.00	5.71	
129 p-Diethylbenzene	119	13.456	13.457	-0.001	94	730262	5.00	5.68	
130 n-Butylbenzene	92	13.475	13.475	0.000	97	625415	5.00	5.62	
131 1,2-Dichlorobenzene	146	13.517	13.518	-0.001	97	462023	5.00	5.31	
134 1,2-Dibromo-3-Chloropropane	155	14.060	14.060	0.000	83	24974	5.00	5.29	
135 1,3,5-Trichlorobenzene	180	14.182	14.182	0.000	97	398703	5.00	5.32	
136 1,2,4-Trichlorobenzene	180	14.602	14.603	-0.001	93	326100	5.00	5.45	
137 Hexachlorobutadiene	225	14.688	14.688	0.000	97	198028	5.00	5.66	
138 Naphthalene	128	14.791	14.792	-0.001	97	589278	5.00	5.77	
139 1,2,3-Trichlorobenzene	180	14.932	14.932	0.000	96	290428	5.00	5.51	
140 2-Methylnaphthalene	142	15.584	15.584	0.000	92	346499	5.00	4.90	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MSV_RV1_826_00034

Amount Added: 5.00

Units: uL

MSV_RV4_826_00039

Amount Added: 5.00

Units: uL

MSV_RV4GAS826_00105

Amount Added: 5.00

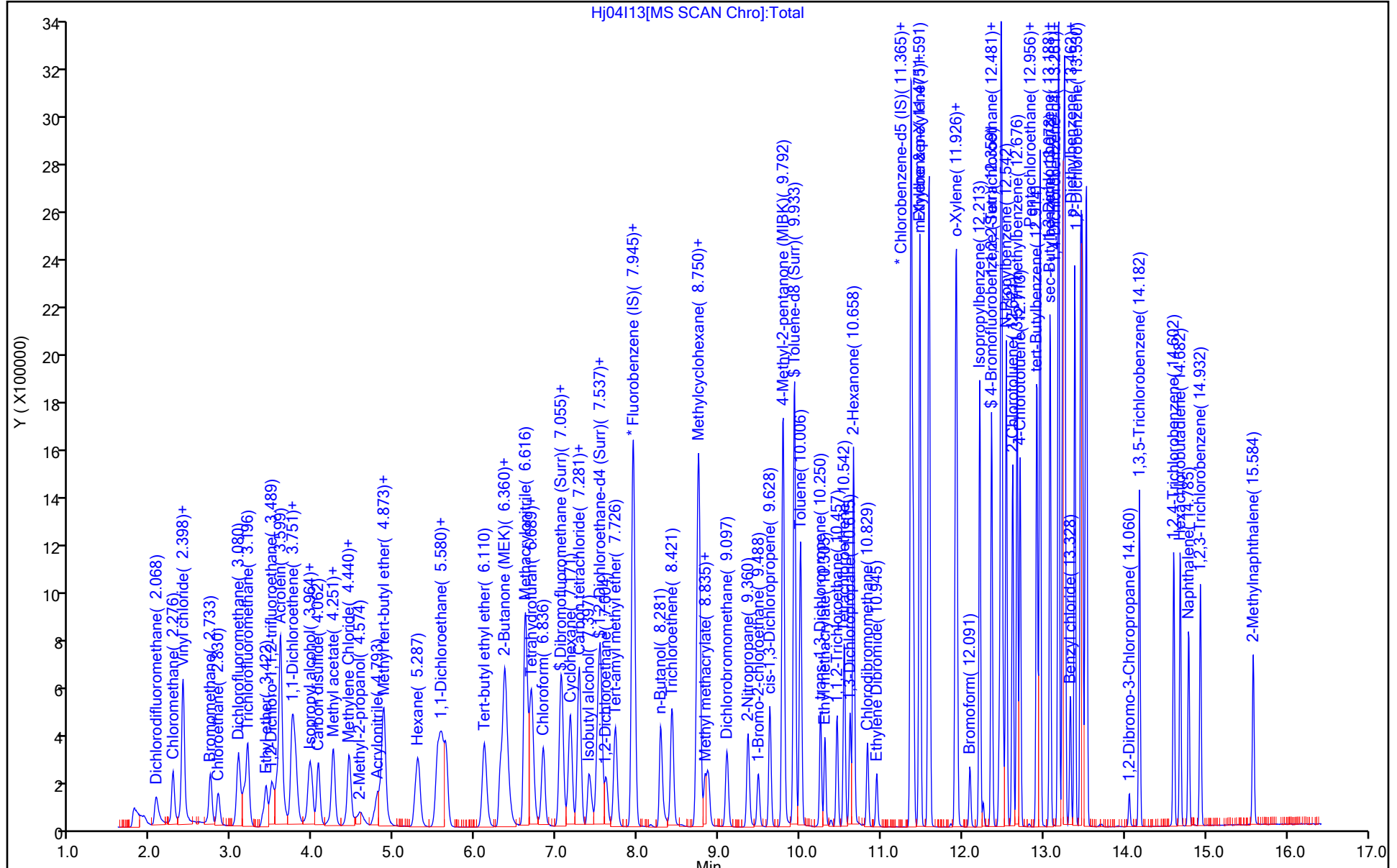
Units: uL

MSV_30_826ISS_00006

Amount Added: 5.00

Units: uL

Run Reagent



Eurofins Lancaster Laboratories Env, LLC

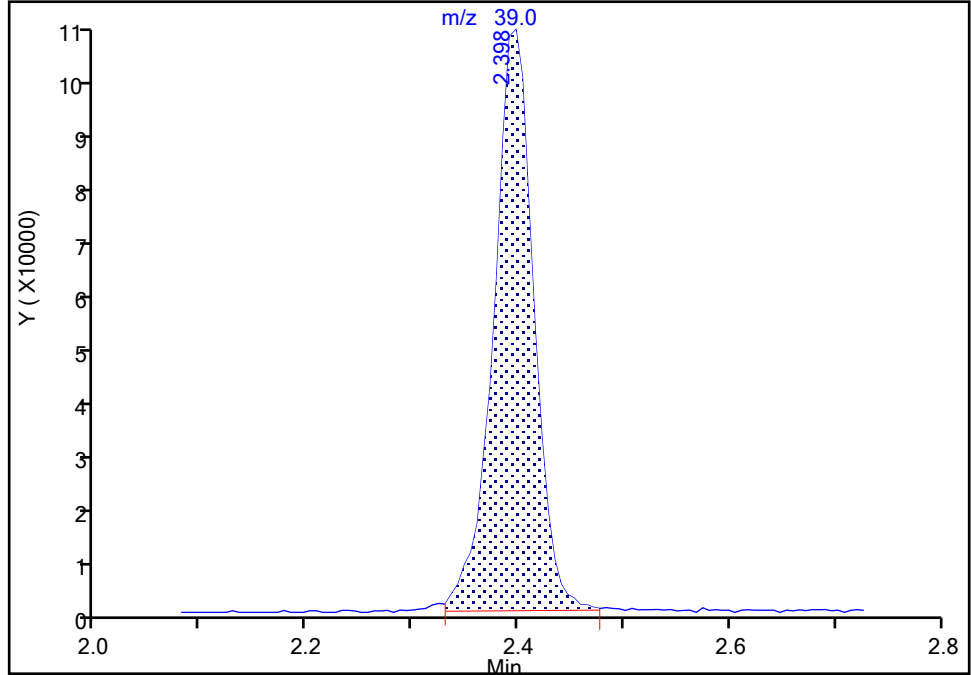
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Injection Date: 04-Jan-2021 17:12:30 Instrument ID: 19094
Lims ID: IC std5 5
Client ID:
Operator ID: jkh09052 ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

8 Butadiene, CAS: 106-99-0

Signal: 1

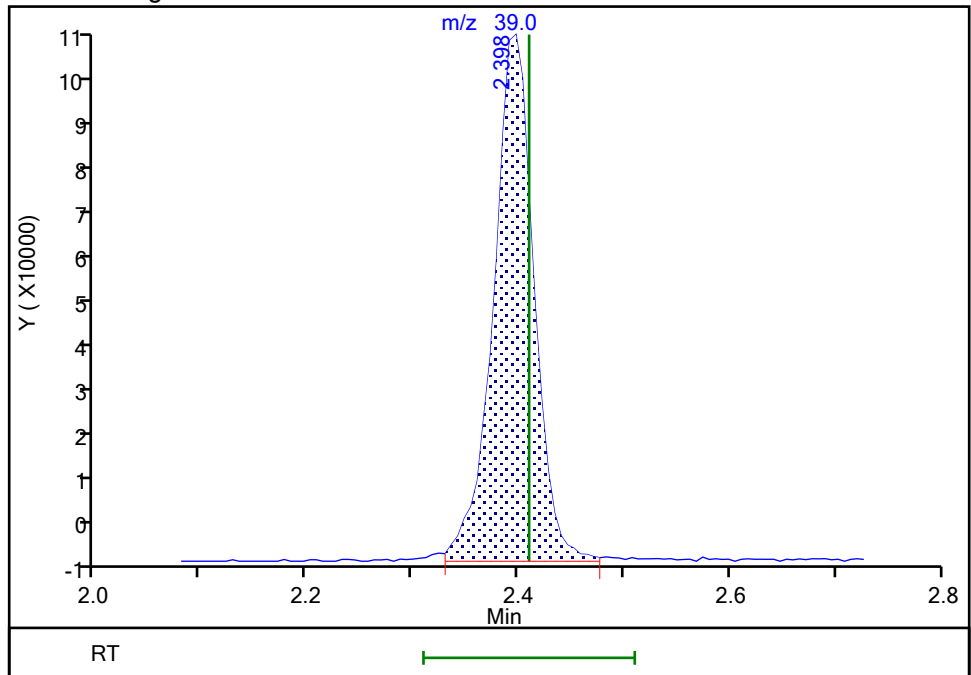
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Area: 284977
Amount: 4.821492
Amount Units: ug/l

Processing Integration Results



RT: 2.40
Area: 287867
Amount: 4.863593
Amount Units: ug/l

Manual Integration Results



Reviewer: howej, 05-Jan-2021 06:27:47
Audit Action: Assigned New Baseline

Audit Reason: Other

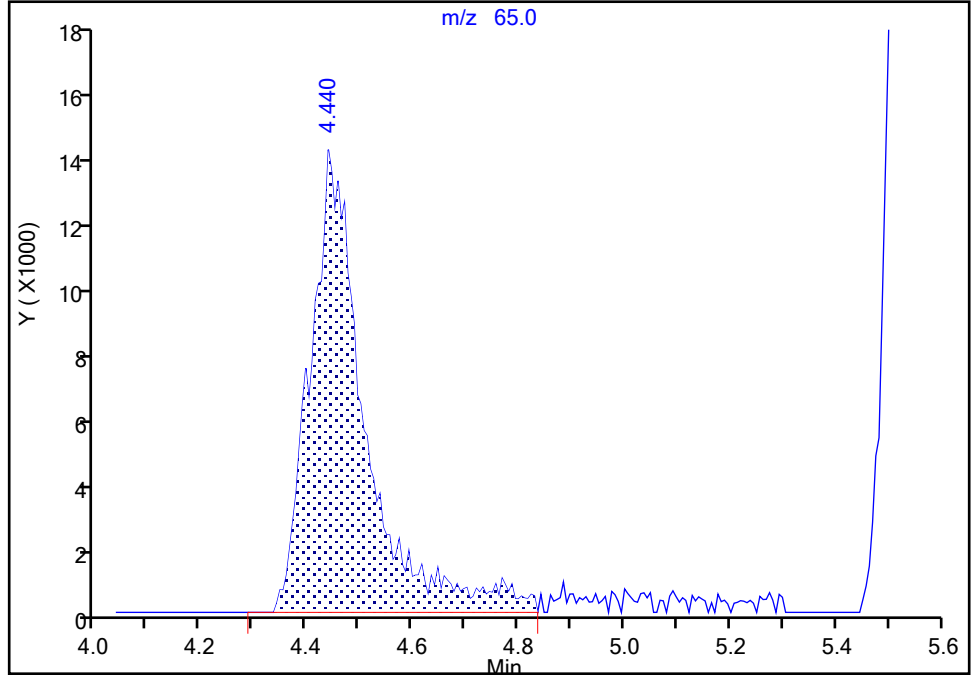
Eurofins Lancaster Laboratories Env, LLC

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Injection Date: 04-Jan-2021 17:12:30 Instrument ID: 19094
Lims ID: IC std5 5
Client ID:
Operator ID: jkh09052 ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

* 28 t-Butyl alcohol-d10 (IS), CAS: 53001-22-2
Signal: 1

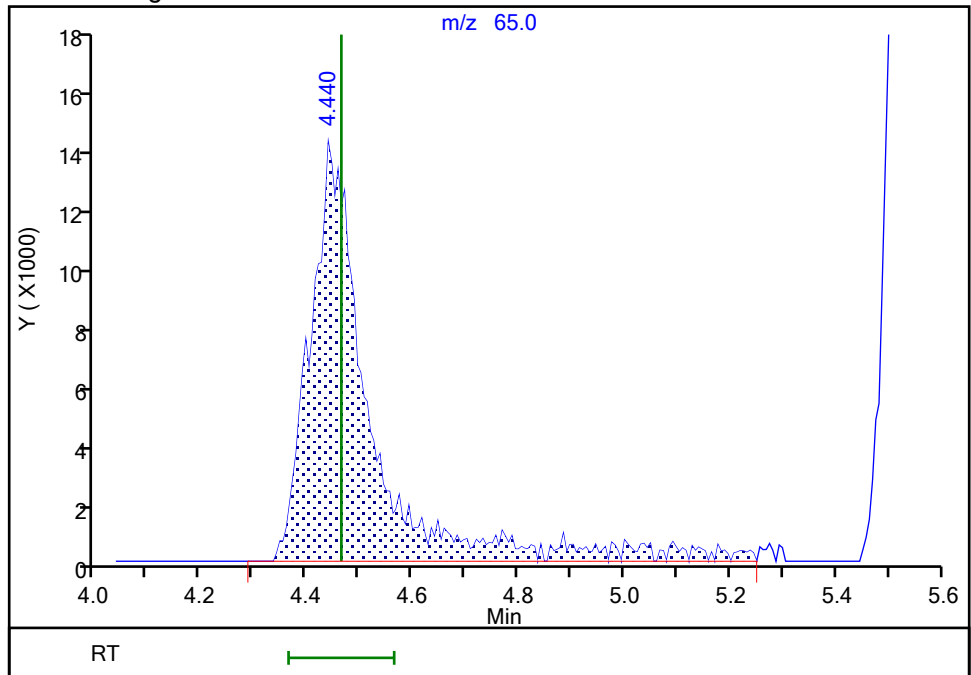
RT: 4.44
Area: 98268
Amount: 50.000000
Amount Units: ug/l

Processing Integration Results



RT: 4.44
Area: 106849
Amount: 50.000000
Amount Units: ug/l

Manual Integration Results



Reviewer: howej, 05-Jan-2021 06:31:53
Audit Action: Manually Integrated

Audit Reason: Other

Eurofins Lancaster Laboratories Env, LLC

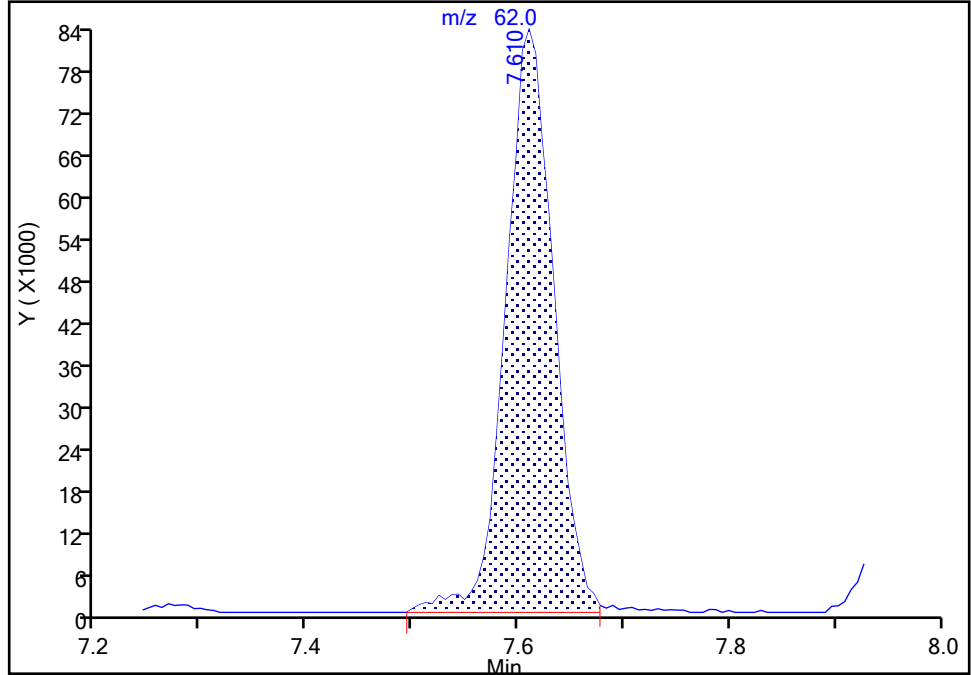
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Injection Date: 04-Jan-2021 17:12:30 Instrument ID: 19094
Lims ID: IC std5 5
Client ID:
Operator ID: jkh09052 ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

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

Signal: 1

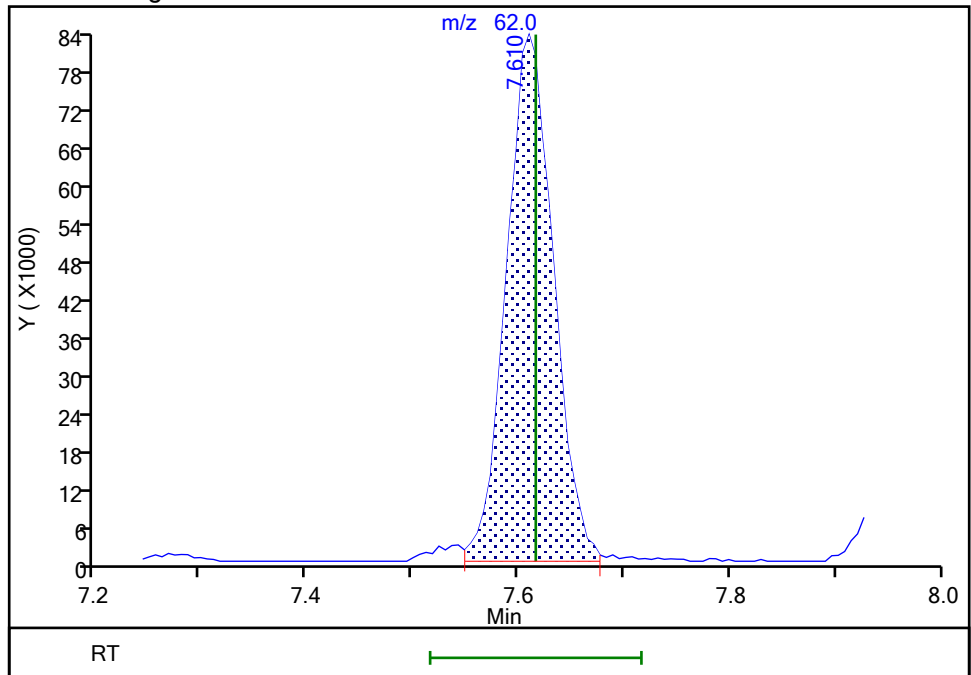
RT: 7.61
Area: 261787
Amount: 5.179236
Amount Units: ug/l

Processing Integration Results



RT: 7.61
Area: 256853
Amount: 5.095833
Amount Units: ug/l

Manual Integration Results



Reviewer: howej, 05-Jan-2021 06:28:08
Audit Action: Split an Integrated Peak

Audit Reason: Other

Eurofins Lancaster Laboratories Env, LLC

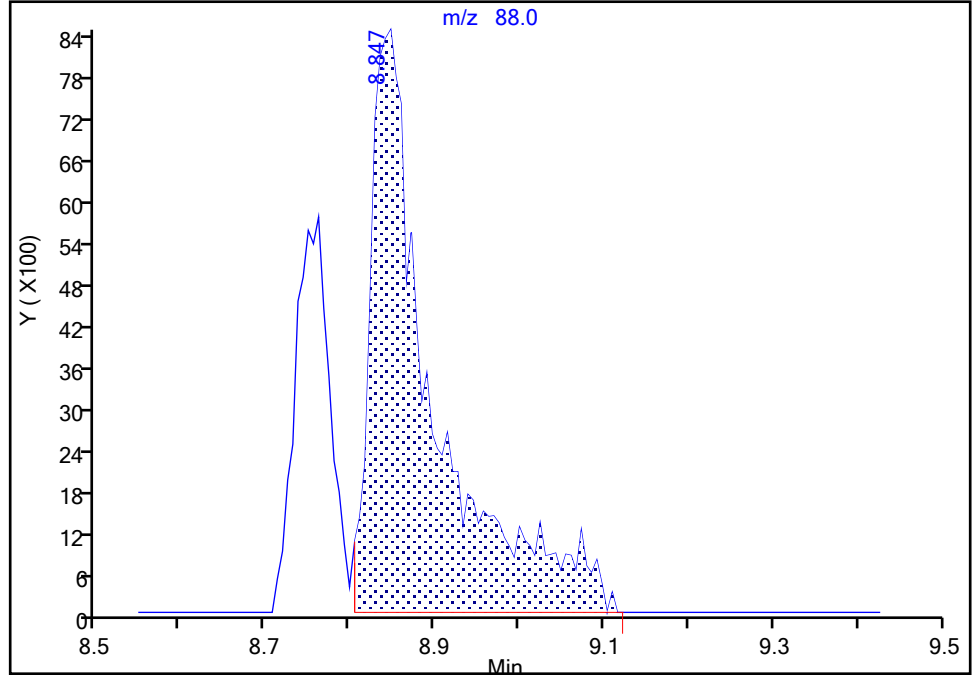
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Injection Date: 04-Jan-2021 17:12:30 Instrument ID: 19094
Lims ID: IC std5 5
Client ID:
Operator ID: jkh09052 ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

72 1,4-Dioxane, CAS: 123-91-1

Signal: 1

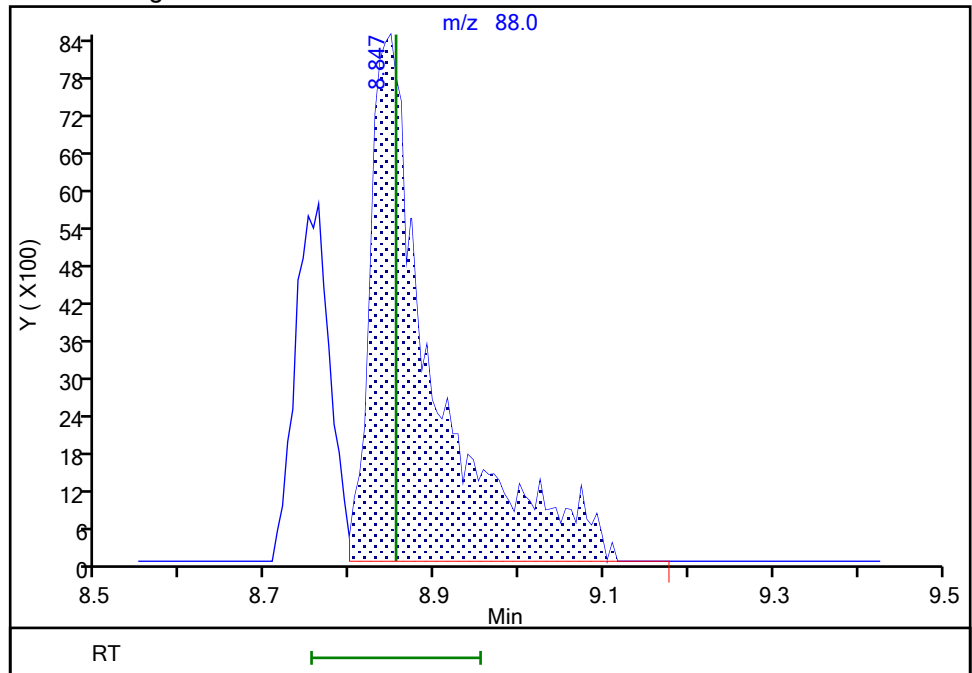
RT: 8.85
Area: 44046
Amount: 277.4515
Amount Units: ug/l

Processing Integration Results



RT: 8.85
Area: 44183
Amount: 269.6156
Amount Units: ug/l

Manual Integration Results



Reviewer: howej, 05-Jan-2021 06:28:28
Audit Action: Split an Integrated Peak

Audit Reason: Other

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20210104-19149.b\Hj04I14.D
 Lims ID: IC std4 2
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 04-Jan-2021 17:34:30 ALS Bottle#: 14 Worklist Smp#: 15
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0019149-015
 Misc. Info.: IC STD4 2
 Operator ID: jkh09052 Instrument ID: 19094
 Sublist: chrom-MSV_19094_25mL*sub1
 Method: \\chromfs\Lancaster\ChromData\19094\20210104-19149.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 05-Jan-2021 07:51:31 Calib Date: 04-Jan-2021 18:39:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20210104-19149.b\Hj04I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1665

First Level Reviewer: howej

Date: 05-Jan-2021 06:31:00

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
3 Dichlorodifluoromethane	85	2.075	2.075	0.000	99	122780	2.00	1.96	
6 Chloromethane	50	2.282	2.282	0.000	98	159098	2.00	1.94	
7 Vinyl chloride	62	2.404	2.404	0.000	96	142516	2.00	1.93	
8 Butadiene	39	2.410	2.410	0.000	95	136334	2.00	1.95	
9 Bromomethane	94	2.739	2.739	0.000	90	96113	2.00	1.94	
10 Chloroethane	64	2.837	2.837	0.000	99	90477	2.00	1.96	
11 Dichlorofluoromethane	67	3.081	3.081	0.000	97	157732	2.00	1.95	
13 Trichlorofluoromethane	101	3.154	3.154	0.000	96	165266	2.00	1.95	
15 Ethyl ether	59	3.422	3.422	0.000	93	74713	2.00	1.88	
16 1,2-Dichloro-1,1,2-trifluoroethane	67	3.507	3.507	0.000	95	115628	2.00	2.03	
17 Acrolein	56	3.605	3.605	0.000	100	563699	100.0	103.3	
18 1,1-Dichloroethene	96	3.751	3.751	0.000	97	92604	2.00	2.06	
19 Acetone	43	3.794	3.794	0.000	98	132206	20.0	20.5	
20 112TCTFE	101	3.782	3.782	0.000	82	89700	2.00	2.08	
22 Iodomethane	142	3.964	3.964	0.000	99	147101	2.00	1.98	
21 Isopropyl alcohol	45	3.971	3.971	0.000	31	50951	40.0	38.6	
23 Ethyl bromide	108	3.989	3.989	0.000	98	80729	2.00	2.00	
24 Carbon disulfide	76	4.074	4.074	0.000	99	271140	2.00	2.00	
26 Methyl acetate	43	4.214	4.214	0.000	97	38887	2.00	2.01	
27 3-Chloro-1-propene	41	4.257	4.257	0.000	92	158746	2.00	1.98	
29 Methylene Chloride	84	4.452	4.452	0.000	94	101348	2.00	1.87	
* 28 t-Butyl alcohol-d10 (IS)	65	4.446	4.446	0.000	0	101567	50.0	50.0	
30 2-Methyl-2-propanol	59	4.592	4.592	0.000	97	88092	40.0	42.5	
31 Acrylonitrile	53	4.794	4.794	0.000	99	92530	10.0	10.3	
32 Methyl tert-butyl ether	73	4.855	4.855	0.000	97	195401	2.00	1.93	
33 trans-1,2-Dichloroethene	96	4.885	4.885	0.000	98	100870	2.00	2.02	
34 Hexane	57	5.300	5.300	0.000	94	142416	2.00	2.07	
35 1,1-Dichloroethane	63	5.537	5.537	0.000	96	197512	2.00	2.00	
37 Isopropyl ether	45	5.580	5.580	0.000	96	303183	2.00	2.00	
38 2-Chloro-1,3-butadiene	53	5.641	5.641	0.000	91	146862	2.00	1.99	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
39 Tert-butyl ethyl ether	59	6.117	6.117	0.000	98	258044	2.00	1.99	
S 40 1,2-Dichloroethene, Total	100				0			4.01	
41 2-Butanone (MEK)	43	6.312	6.312	0.000	100	229064	20.0	20.0	
42 cis-1,2-Dichloroethene	96	6.366	6.366	0.000	84	113320	2.00	2.00	
43 2,2-Dichloropropane	77	6.379	6.379	0.000	86	159029	2.00	2.04	
45 Propionitrile	54	6.409	6.409	0.000	98	121199	40.0	39.9	
47 Methacrylonitrile	67	6.623	6.623	0.000	93	231750	20.0	20.8	
48 Chlorobromomethane	128	6.690	6.690	0.000	74	45412	2.00	1.95	
49 Tetrahydrofuran	71	6.702	6.702	0.000	85	61422	20.0	21.1	
50 Chloroform	83	6.842	6.842	0.000	94	184549	2.00	1.97	
\$ 51 Dibromofluoromethane (Surr)	113	7.049	7.049	0.000	93	441359	10.0	9.78	
52 1,1,1-Trichloroethane	97	7.068	7.068	0.000	99	158539	2.00	2.00	
53 Cyclohexane	56	7.171	7.171	0.000	91	172976	2.00	2.06	
55 1,1-Dichloropropene	75	7.281	7.281	0.000	95	148627	2.00	2.02	
56 Carbon tetrachloride	117	7.287	7.287	0.000	87	137882	2.00	2.07	
57 Isobutyl alcohol	41	7.409	7.409	0.000	93	80698	100.0	104.2	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.506	7.506	0.000	0	86505	10.0	9.39	
59 Benzene	78	7.543	7.543	0.000	96	443064	2.00	2.00	
60 1,2-Dichloroethane	62	7.610	7.610	0.000	97	115182	2.00	1.94	
62 Tert-amyl methyl ether	73	7.726	7.726	0.000	97	215804	2.00	1.96	
* 65 Fluorobenzene (IS)	96	7.945	7.945	0.000	98	1845881	10.0	10.0	
64 n-Heptane	43	7.945	7.945	0.000	90	171618	2.00	2.07	
66 n-Butanol	56	8.287	8.287	0.000	89	143802	200.0	209.0	
67 Trichloroethene	95	8.421	8.421	0.000	98	112295	2.00	2.03	
68 Methylcyclohexane	83	8.738	8.738	0.000	94	192842	2.00	2.05	
69 2-ethoxy-2-methyl butane	87	8.750	8.750	0.000	92	131726	2.00	2.00	
70 1,2-Dichloropropane	63	8.756	8.756	0.000	83	116425	2.00	2.01	
71 Methyl methacrylate	69	8.829	8.829	0.000	93	41310	2.00	2.20	
72 1,4-Dioxane	88	8.842	8.842	0.000	43	16472	100.0	105.7	
73 Dibromomethane	93	8.866	8.866	0.000	97	47143	2.00	1.90	
75 Dichlorobromomethane	83	9.098	9.098	0.000	99	128886	2.00	1.96	
76 2-Nitropropane	41	9.360	9.360	0.000	98	122437	20.0	20.5	
79 1-Bromo-2-chloroethane	63	9.488	9.488	0.000	99	103761	2.00	1.93	
80 cis-1,3-Dichloropropene	75	9.628	9.628	0.000	96	151181	2.00	1.98	
81 4-Methyl-2-pentanone (MIBK)	43	9.793	9.793	0.000	97	594024	20.0	20.6	
\$ 82 Toluene-d8 (Surr)	98	9.933	9.933	0.000	94	1792763	10.0	10.1	
83 Toluene	92	10.006	10.006	0.000	98	270990	2.00	2.04	
S 84 1,3-Dichloropropene, Total	100				0			3.91	
85 trans-1,3-Dichloropropene	75	10.256	10.256	0.000	94	120581	2.00	1.93	
86 Ethyl methacrylate	69	10.311	10.311	0.000	89	84681	2.00	1.96	
87 1,1,2-Trichloroethane	97	10.457	10.457	0.000	91	65897	2.00	1.88	
88 Tetrachloroethene	166	10.549	10.549	0.000	96	114443	2.00	2.02	
89 1,3-Dichloropropane	76	10.616	10.616	0.000	89	122996	2.00	1.96	
91 2-Hexanone	43	10.658	10.658	0.000	98	409710	20.0	20.6	
93 Chlorodibromomethane	129	10.829	10.829	0.000	90	79448	2.00	1.94	
94 Ethylene Dibromide	107	10.945	10.945	0.000	99	60359	2.00	1.82	
S 95 Xylenes, Total	106				0			6.17	
* 97 Chlorobenzene-d5 (IS)	117	11.365	11.365	0.000	87	1297701	10.0	10.0	
96 1-Chlorohexane	91	11.372	11.372	0.000	95	150932	2.00	1.97	
98 Chlorobenzene	112	11.396	11.396	0.000	94	288508	2.00	2.01	
100 Ethylbenzene	91	11.475	11.475	0.000	99	520650	2.00	2.04	
99 1,1,1,2-Tetrachloroethane	131	11.475	11.475	0.000	95	97820	2.00	1.98	

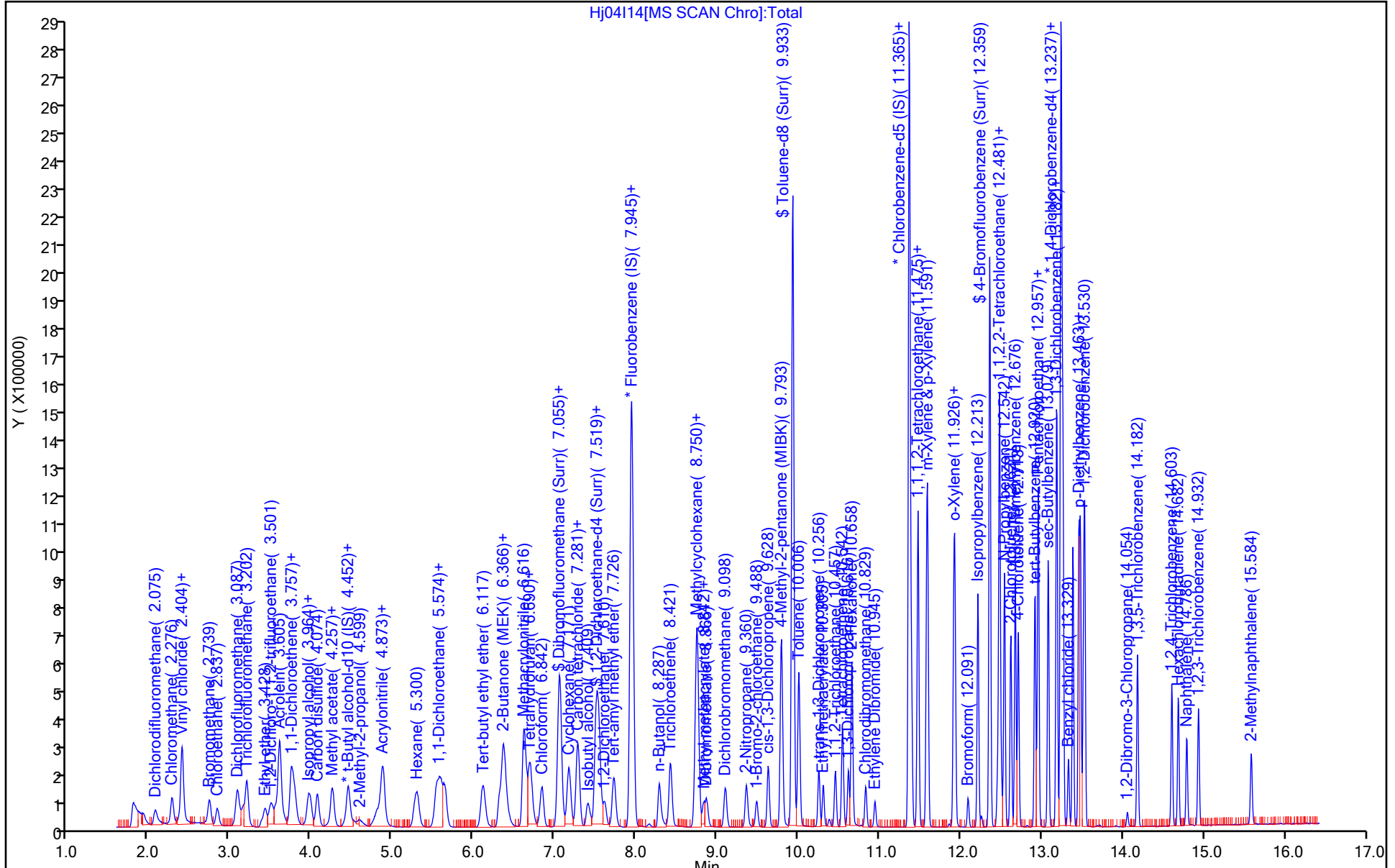
Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
101 m-Xylene & p-Xylene	106	11.591	11.591	0.000	98	394467	4.00	4.15	
102 o-Xylene	106	11.920	11.920	0.000	97	187189	2.00	2.03	
103 Styrene	104	11.932	11.932	0.000	94	304719	2.00	2.04	
104 Bromoform	173	12.091	12.091	0.000	94	45614	2.00	1.93	
105 Isopropylbenzene	105	12.213	12.213	0.000	96	502763	2.00	2.08	
\$ 108 4-Bromofluorobenzene (Surr)	95	12.359	12.359	0.000	88	637343	10.0	10.0	
109 1,1,2,2-Tetrachloroethane	83	12.457	12.457	0.000	93	85079	2.00	1.90	
111 Bromobenzene	156	12.481	12.481	0.000	80	111261	2.00	1.98	
110 trans-1,4-Dichloro-2-butene	53	12.481	12.481	0.000	92	211902	20.0	20.8	
112 1,2,3-Trichloropropane	110	12.506	12.506	0.000	83	21533	2.00	1.89	
113 N-Propylbenzene	91	12.542	12.542	0.000	99	644279	2.00	2.07	
114 2-Chlorotoluene	126	12.621	12.621	0.000	96	121218	2.00	2.06	
115 1,3,5-Trimethylbenzene	105	12.676	12.676	0.000	94	433583	2.00	2.08	
116 4-Chlorotoluene	126	12.713	12.713	0.000	98	120243	2.00	2.04	
118 tert-Butylbenzene	134	12.920	12.920	0.000	94	88907	2.00	2.03	
119 Pentachloroethane	167	12.951	12.951	0.000	92	70299	2.00	2.04	
120 1,2,4-Trimethylbenzene	105	12.957	12.957	0.000	97	439695	2.00	2.06	
121 sec-Butylbenzene	105	13.079	13.079	0.000	95	581653	2.00	2.06	
122 1,3-Dichlorobenzene	146	13.182	13.182	0.000	97	229112	2.00	2.02	
123 4-Isopropyltoluene	119	13.188	13.188	0.000	97	483888	2.00	2.07	
* 124 1,4-Dichlorobenzene-d4	152	13.237	13.237	0.000	96	671311	10.0	10.0	
125 1,4-Dichlorobenzene	146	13.255	13.255	0.000	94	223244	2.00	1.98	
126 1,2,3-Trimethylbenzene	120	13.261	13.261	0.000	98	186218	2.00	2.02	
127 Benzyl chloride	126	13.335	13.335	0.000	99	26980	2.00	1.85	
129 p-Diethylbenzene	119	13.457	13.457	0.000	93	304804	2.00	2.02	
130 n-Butylbenzene	92	13.475	13.475	0.000	98	270640	2.00	2.07	
131 1,2-Dichlorobenzene	146	13.517	13.517	0.000	97	203531	2.00	1.99	
134 1,2-Dibromo-3-Chloropropane	155	14.060	14.060	0.000	85	10016	2.00	1.81	
135 1,3,5-Trichlorobenzene	180	14.182	14.182	0.000	97	172004	2.00	1.95	
136 1,2,4-Trichlorobenzene	180	14.603	14.603	0.000	94	138759	2.00	1.97	
137 Hexachlorobutadiene	225	14.682	14.682	0.000	97	81040	2.00	1.97	
138 Naphthalene	128	14.792	14.792	0.000	97	226220	2.00	1.88	
139 1,2,3-Trichlorobenzene	180	14.932	14.932	0.000	96	123866	2.00	2.00	
140 2-Methylnaphthalene	142	15.584	15.584	0.000	91	122991	2.00	1.70	

QC Flag Legend

Processing Flags

Reagents:

MSV_RV1_826_00034	Amount Added: 2.00	Units: uL	
MSV_RV4_826_00039	Amount Added: 2.00	Units: uL	
MSV_RV4GAS826_00105	Amount Added: 2.00	Units: uL	
MSV_30_826ISS_00006	Amount Added: 5.00	Units: uL	Run Reagent



Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20210104-19149.b\Hj04I15.D
 Lims ID: IC std3 1
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 04-Jan-2021 17:56:30 ALS Bottle#: 15 Worklist Smp#: 16
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0019149-016
 Misc. Info.: IC STD3 1
 Operator ID: jkh09052 Instrument ID: 19094
 Sublist: chrom-MSV_19094_25mL*sub1

Method: \\chromfs\Lancaster\ChromData\19094\20210104-19149.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 05-Jan-2021 07:51:43 Calib Date: 04-Jan-2021 18:39:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20210104-19149.b\Hj04I17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1665

First Level Reviewer: howej

Date: 05-Jan-2021 06:33:36

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
3 Dichlorodifluoromethane	85	2.074	2.075	-0.001	98	61601	1.00	1.00	
6 Chloromethane	50	2.282	2.282	0.000	98	78518	1.00	0.9732	
7 Vinyl chloride	62	2.404	2.404	0.000	92	70365	1.00	0.9705	
8 Butadiene	39	2.404	2.410	-0.006	92	72319	1.00	1.05	
9 Bromomethane	94	2.745	2.739	0.006	91	47581	1.00	0.9750	
10 Chloroethane	64	2.836	2.837	-0.001	99	44384	1.00	0.9785	
11 Dichlorofluoromethane	67	3.086	3.081	0.006	97	75390	1.00	0.9447	
13 Trichlorofluoromethane	101	3.153	3.154	-0.001	96	81082	1.00	0.9718	
15 Ethyl ether	59	3.422	3.422	0.000	93	36723	1.00	0.9378	
16 1,2-Dichloro-1,1,2-trifluoroetha	67	3.489	3.507	-0.018	92	60260	1.00	1.08	
17 Acrolein	56	3.605	3.605	0.000	99	276655	50.0	51.1	
18 1,1-Dichloroethene	96	3.751	3.751	0.000	97	46260	1.00	1.04	
20 112TCTFE	101	3.781	3.782	-0.001	94	45646	1.00	1.08	
19 Acetone	43	3.794	3.794	0.000	95	67216	10.0	10.5	
22 Iodomethane	142	3.958	3.964	-0.006	100	73551	1.00	1.01	
21 Isopropyl alcohol	45	3.952	3.971	-0.019	30	25995	20.0	20.0	
23 Ethyl bromide	108	3.989	3.989	0.000	97	38398	1.00	0.9669	
24 Carbon disulfide	76	4.074	4.074	0.000	99	133749	1.00	1.00	
26 Methyl acetate	43	4.239	4.214	0.025	39	20518	1.00	1.07	
27 3-Chloro-1-propene	41	4.257	4.257	0.000	93	76197	1.00	0.9632	
* 28 t-Butyl alcohol-d10 (IS)	65	4.458	4.446	0.012	0	100749	50.0	50.0	M
29 Methylene Chloride	84	4.452	4.452	0.000	94	53222	1.00	1.00	
30 2-Methyl-2-propanol	59	4.568	4.592	-0.024	97	43645	20.0	21.2	
31 Acrylonitrile	53	4.800	4.794	0.006	99	46851	5.00	5.28	
32 Methyl tert-butyl ether	73	4.854	4.855	-0.001	96	95107	1.00	0.9538	
33 trans-1,2-Dichloroethene	96	4.879	4.885	-0.006	98	50355	1.00	1.02	
34 Hexane	57	5.299	5.300	-0.001	93	68639	1.00	1.01	
35 1,1-Dichloroethane	63	5.537	5.537	0.000	96	95780	1.00	0.9868	
37 Isopropyl ether	45	5.580	5.580	0.000	95	148549	1.00	0.99	
38 2-Chloro-1,3-butadiene	53	5.647	5.641	0.006	92	71654	1.00	0.9887	

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	6.116	6.117	0.000	97	123447	1.00	0.9650	
S 40 1,2-Dichloroethene, Total	100				0			2.01	
41 2-Butanone (MEK)	43	6.318	6.312	0.006	100	116864	10.0	10.3	
42 cis-1,2-Dichloroethene	96	6.366	6.366	0.000	85	55191	1.00	0.9872	
43 2,2-Dichloropropane	77	6.372	6.379	-0.007	68	76175	1.00	0.99	
45 Propionitrile	54	6.403	6.409	-0.006	99	63435	20.0	21.0	
47 Methacrylonitrile	67	6.616	6.623	-0.006	92	113945	10.0	10.3	
48 Chlorobromomethane	128	6.689	6.690	-0.001	75	22099	1.00	0.9650	
49 Tetrahydrofuran	71	6.708	6.702	0.006	87	30462	10.0	10.6	
50 Chloroform	83	6.836	6.842	-0.006	94	92850	1.00	1.01	
\$ 51 Dibromofluoromethane (Surr)	113	7.049	7.049	0.000	93	445983	10.0	10.0	
52 1,1,1-Trichloroethane	97	7.067	7.068	-0.001	40	77327	1.00	0.99	
53 Cyclohexane	56	7.171	7.171	0.000	92	83496	1.00	1.01	
55 1,1-Dichloropropene	75	7.287	7.281	0.006	95	72567	1.00	1.00	
56 Carbon tetrachloride	117	7.281	7.287	-0.006	87	65421	1.00	1.00	
57 Isobutyl alcohol	41	7.403	7.409	-0.006	93	37876	50.0	49.3	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.512	7.506	0.006	0	86606	10.0	9.55	
59 Benzene	78	7.537	7.543	-0.006	96	222969	1.00	1.02	
60 1,2-Dichloroethane	62	7.616	7.610	0.006	97	55311	1.00	0.9453	
62 Tert-amyl methyl ether	73	7.726	7.726	0.000	98	104611	1.00	0.9666	
* 65 Fluorobenzene (IS)	96	7.945	7.945	0.000	98	1816799	10.0	10.0	
64 n-Heptane	43	7.945	7.945	0.000	78	80551	1.00	0.9894	
66 n-Butanol	56	8.287	8.287	0.000	88	65568	100.0	96.1	
67 Trichloroethene	95	8.421	8.421	0.000	96	54169	1.00	0.99	
68 Methylcyclohexane	83	8.738	8.738	0.000	95	87170	1.00	0.9392	
69 2-ethoxy-2-methyl butane	87	8.756	8.750	0.006	90	62497	1.00	0.9619	
70 1,2-Dichloropropane	63	8.762	8.756	0.006	77	56895	1.00	1.00	
71 Methyl methacrylate	69	8.835	8.829	0.006	91	18599	1.00	1.00	
72 1,4-Dioxane	88	8.860	8.842	0.018	36	6911	50.0	44.7	M
73 Dibromomethane	93	8.872	8.866	0.006	97	24056	1.00	0.9875	
75 Dichlorobromomethane	83	9.104	9.098	0.006	99	63072	1.00	0.9751	
76 2-Nitropropane	41	9.360	9.360	0.000	99	56718	10.0	9.59	
79 1-Bromo-2-chloroethane	63	9.488	9.488	0.000	99	48531	1.00	0.9158	
80 cis-1,3-Dichloropropene	75	9.628	9.628	0.000	95	72056	1.00	0.9593	
81 4-Methyl-2-pentanone (MIBK)	43	9.792	9.793	-0.001	98	287119	10.0	10.1	
\$ 82 Toluene-d8 (Surr)	98	9.933	9.933	0.000	94	1770566	10.0	10.1	
83 Toluene	92	10.006	10.006	0.000	97	128489	1.00	0.9831	
S 84 1,3-Dichloropropene, Total	100				0			1.91	
85 trans-1,3-Dichloropropene	75	10.256	10.256	0.000	93	58053	1.00	0.9473	
86 Ethyl methacrylate	69	10.311	10.311	0.000	89	39515	1.00	0.9301	
87 1,1,2-Trichloroethane	97	10.457	10.457	0.000	89	33660	1.00	0.9761	
88 Tetrachloroethene	166	10.542	10.549	-0.007	97	55170	1.00	0.9890	
89 1,3-Dichloropropane	76	10.615	10.616	-0.001	89	58718	1.00	0.9502	
91 2-Hexanone	43	10.658	10.658	0.000	98	193142	10.0	9.79	
93 Chlorodibromomethane	129	10.829	10.829	0.000	91	38102	1.00	0.9479	
94 Ethylene Dibromide	107	10.945	10.945	0.000	97	31431	1.00	0.9649	
S 95 Xylenes, Total	106				0			2.94	
* 97 Chlorobenzene-d5 (IS)	117	11.365	11.365	0.000	88	1275208	10.0	10.0	
96 1-Chlorohexane	91	11.371	11.372	-0.001	92	73103	1.00	0.9692	
98 Chlorobenzene	112	11.396	11.396	0.000	94	140405	1.00	1.00	
100 Ethylbenzene	91	11.475	11.475	0.000	99	248604	1.00	0.99	
99 1,1,1,2-Tetrachloroethane	131	11.475	11.475	0.000	94	47155	1.00	0.9732	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
101 m-Xylene & p-Xylene	106	11.591	11.591	0.000	98	181982	2.00	1.95	
102 o-Xylene	106	11.920	11.920	0.000	97	89815	1.00	0.9897	
103 Styrene	104	11.932	11.932	0.000	95	143564	1.00	0.9785	
104 Bromoform	173	12.091	12.091	0.000	96	21656	1.00	0.9328	
105 Isopropylbenzene	105	12.213	12.213	0.000	96	231503	1.00	0.9728	
\$ 108 4-Bromofluorobenzene (Surr)	95	12.359	12.359	0.000	87	631652	10.0	10.1	
109 1,1,2,2-Tetrachloroethane	83	12.457	12.457	0.000	94	40709	1.00	0.9265	
111 Bromobenzene	156	12.481	12.481	0.000	93	54416	1.00	0.9838	
110 trans-1,4-Dichloro-2-butene	53	12.481	12.481	0.000	89	101088	10.0	10.0	
112 1,2,3-Trichloropropane	110	12.505	12.506	-0.001	82	10700	1.00	0.9556	
113 N-Propylbenzene	91	12.542	12.542	0.000	99	303980	1.00	0.99	
114 2-Chlorotoluene	126	12.621	12.621	0.000	96	57089	1.00	0.9885	
115 1,3,5-Trimethylbenzene	105	12.676	12.676	0.000	95	197287	1.00	0.9614	
116 4-Chlorotoluene	126	12.713	12.713	0.000	98	57899	1.00	1.00	
118 tert-Butylbenzene	134	12.920	12.920	0.000	94	41194	1.00	0.9571	
119 Pentachloroethane	167	12.956	12.951	0.005	87	31309	1.00	0.9262	
120 1,2,4-Trimethylbenzene	105	12.956	12.957	-0.001	98	203437	1.00	0.9685	
121 sec-Butylbenzene	105	13.078	13.079	-0.001	95	269558	1.00	0.9733	
122 1,3-Dichlorobenzene	146	13.182	13.182	0.000	95	111454	1.00	1.00	
123 4-Isopropyltoluene	119	13.188	13.188	0.000	97	226510	1.00	0.9860	
* 124 1,4-Dichlorobenzene-d4	152	13.237	13.237	0.000	96	659783	10.0	10.0	
125 1,4-Dichlorobenzene	146	13.255	13.255	0.000	94	111489	1.00	1.00	
126 1,2,3-Trimethylbenzene	120	13.267	13.261	0.006	98	87560	1.00	0.9648	
127 Benzyl chloride	126	13.334	13.335	-0.001	99	12759	1.00	0.8923	
129 p-Diethylbenzene	119	13.456	13.457	-0.001	94	139911	1.00	0.9425	
130 n-Butylbenzene	92	13.475	13.475	0.000	97	123180	1.00	0.9576	
131 1,2-Dichlorobenzene	146	13.517	13.517	0.000	96	95827	1.00	0.9536	
134 1,2-Dibromo-3-Chloropropane	155	14.054	14.060	-0.006	84	5297	1.00	0.9714	
135 1,3,5-Trichlorobenzene	180	14.182	14.182	0.000	96	84298	1.00	0.9734	
136 1,2,4-Trichlorobenzene	180	14.602	14.603	-0.001	94	64183	1.00	0.9290	
137 Hexachlorobutadiene	225	14.688	14.682	0.006	97	35781	1.00	0.8858	
138 Naphthalene	128	14.791	14.792	-0.001	97	104740	1.00	0.8877	
139 1,2,3-Trichlorobenzene	180	14.932	14.932	0.000	95	56478	1.00	0.9269	
140 2-Methylnaphthalene	142	15.584	15.584	0.000	92	53580	1.00	0.9263	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MSV_RV1_826_00034

Amount Added: 2.00

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MSV_RV4_826_00039

Amount Added: 2.00

Units: uL

MSV_RV4GAS826_00105

Amount Added: 2.00

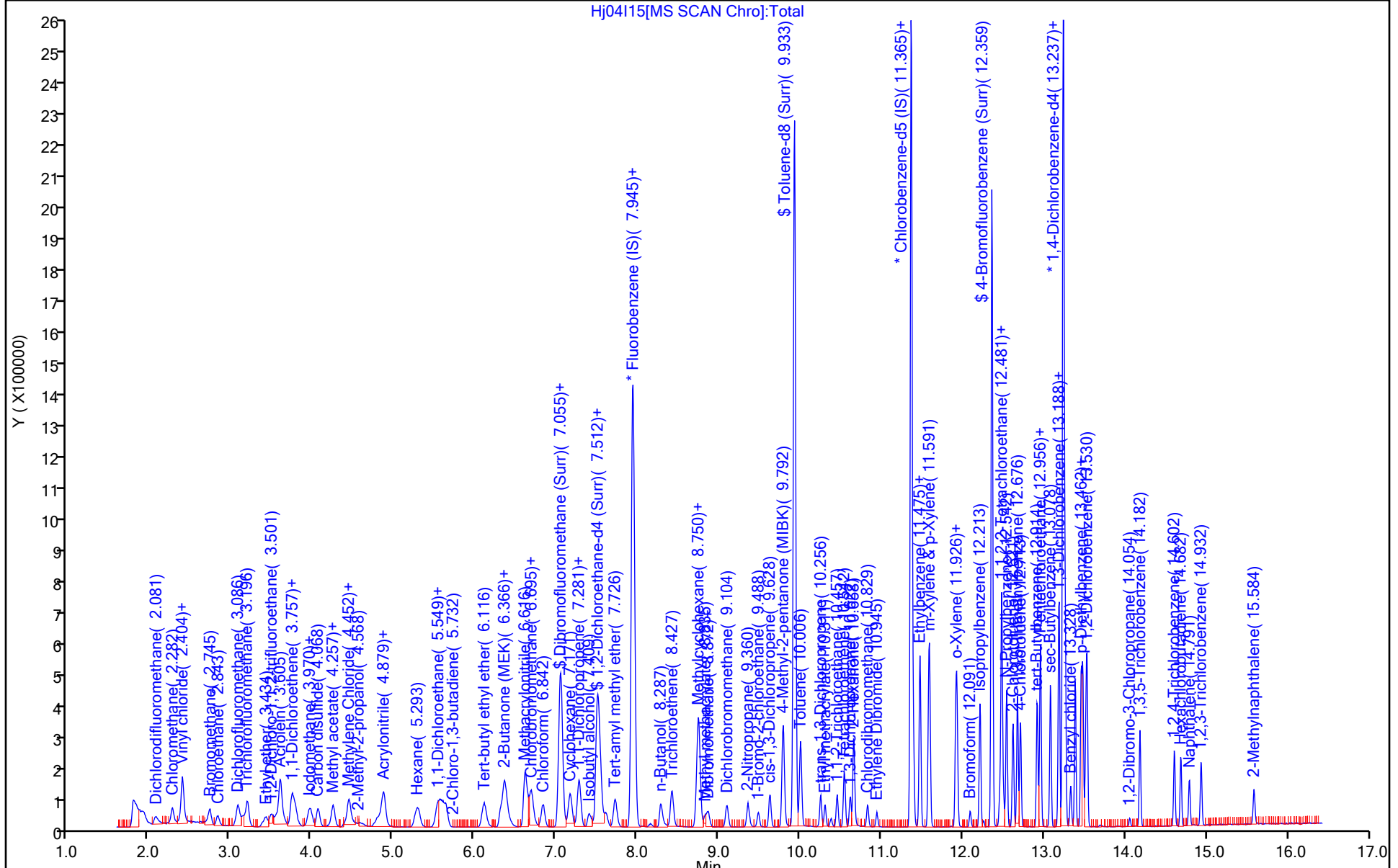
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MSV_30_826ISS_00006

Amount Added: 5.00

Units: uL

Run Reagent



Hj04115[MS SCAN Chro]:Total

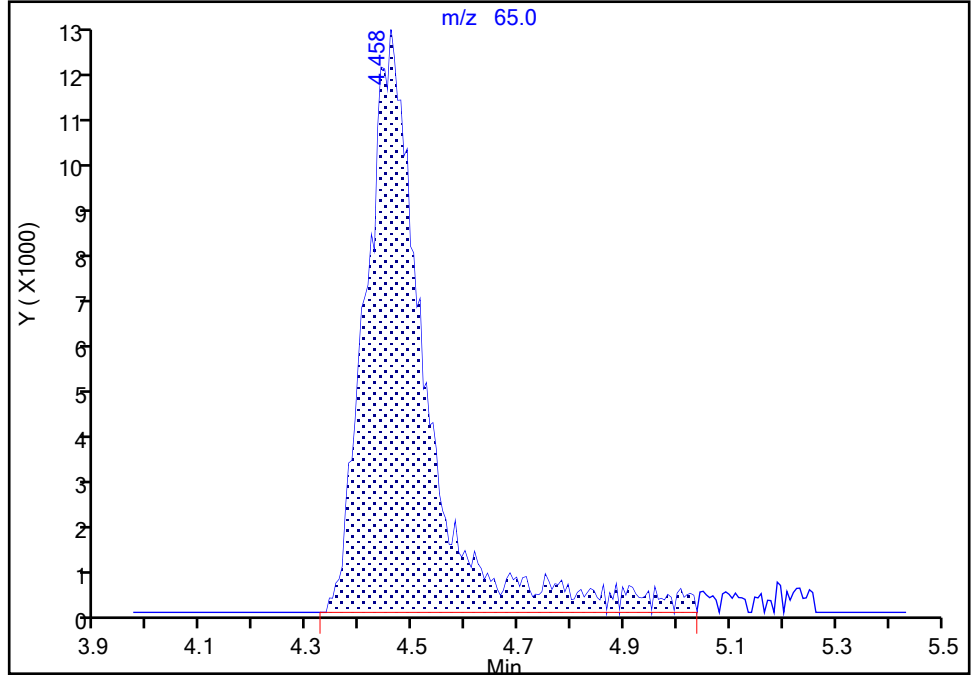
Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20210104-19149.b\Hj04I15.D
Injection Date: 04-Jan-2021 17:56:30 Instrument ID: 19094
Lims ID: IC std3 1
Client ID:
Operator ID: jkh09052 ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

* 28 t-Butyl alcohol-d10 (IS), CAS: 53001-22-2
Signal: 1

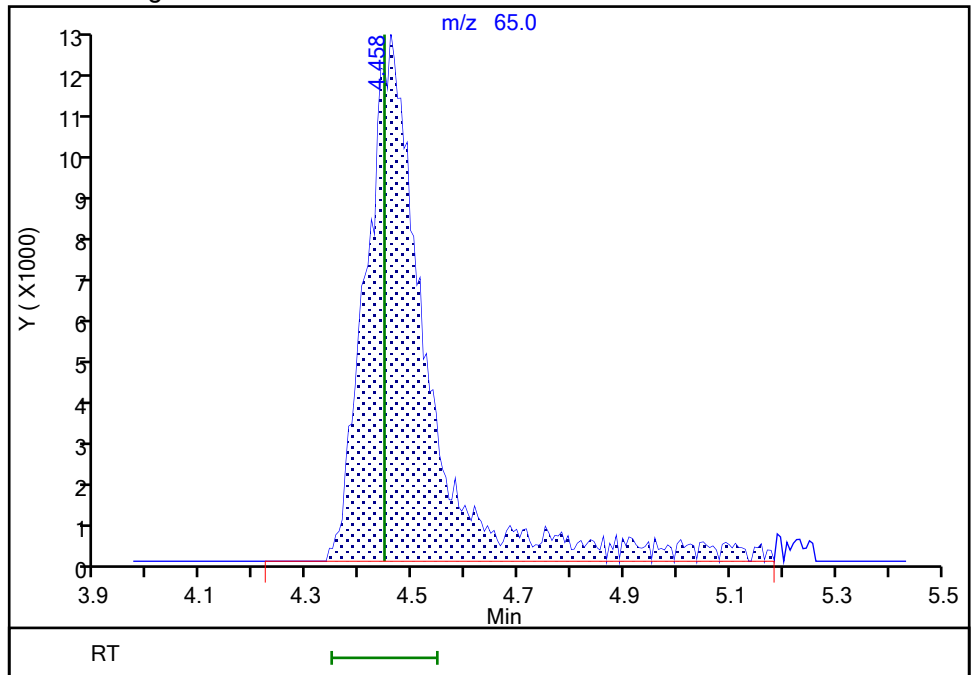
RT: 4.46
Area: 98328
Amount: 50.000000
Amount Units: ug/l

Processing Integration Results



RT: 4.46
Area: 100749
Amount: 50.000000
Amount Units: ug/l

Manual Integration Results



Reviewer: howej, 05-Jan-2021 06:32:50
Audit Action: Manually Integrated

Audit Reason: Other

Eurofins Lancaster Laboratories Env, LLC

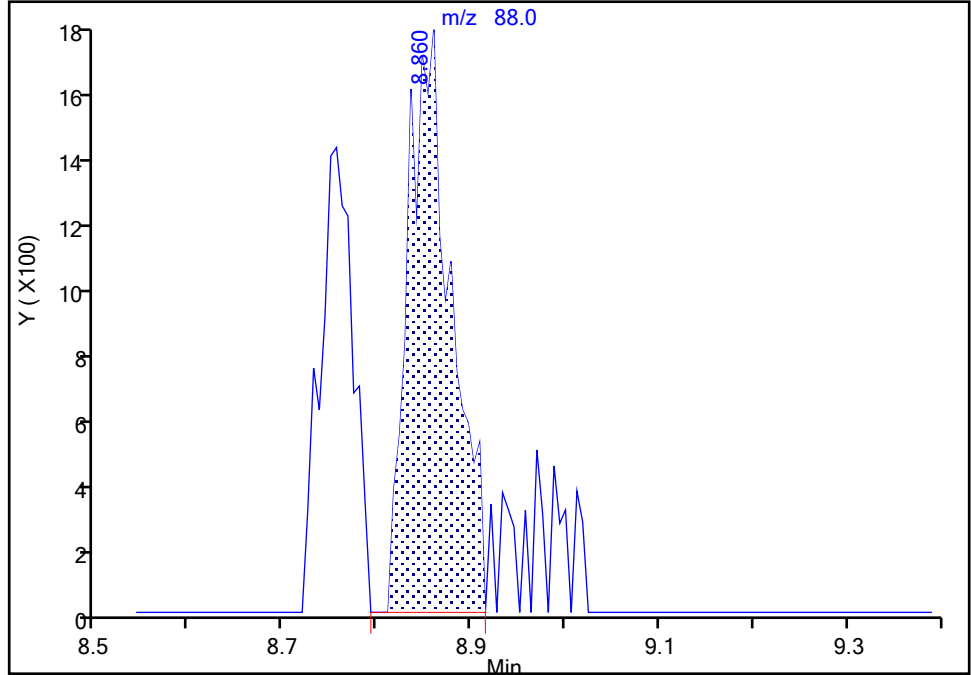
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Injection Date: 04-Jan-2021 17:56:30 Instrument ID: 19094
Lims ID: IC std3 1
Client ID:
Operator ID: jkh09052 ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

72 1,4-Dioxane, CAS: 123-91-1

Signal: 1

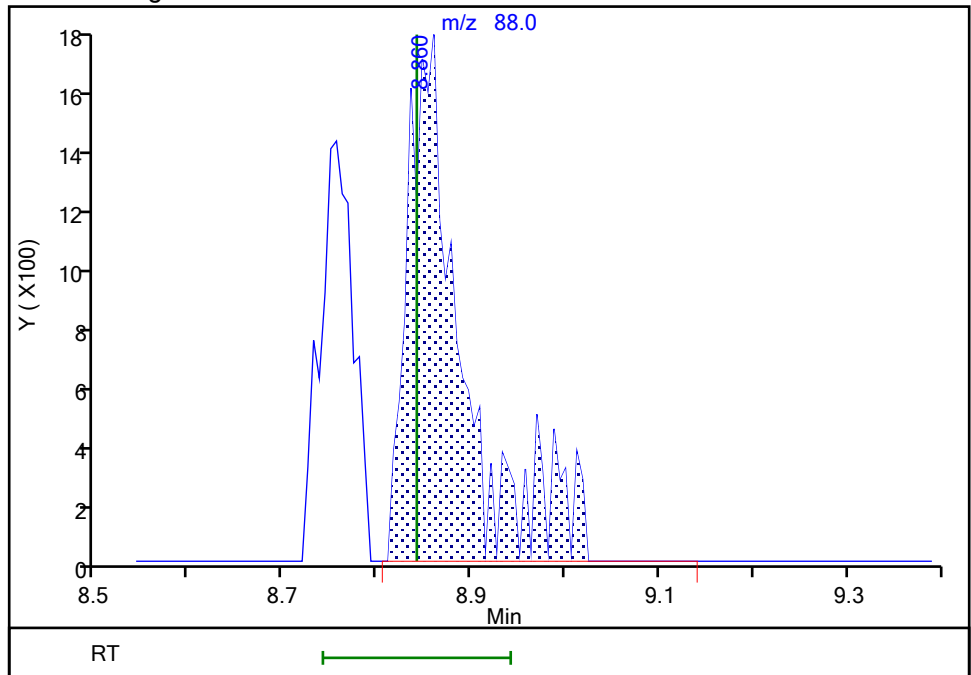
RT: 8.86
Area: 5486
Amount: 39.258830
Amount Units: ug/l

Processing Integration Results



RT: 8.86
Area: 6911
Amount: 44.726046
Amount Units: ug/l

Manual Integration Results



Reviewer: howej, 05-Jan-2021 06:33:07
Audit Action: Manually Integrated

Audit Reason: Other

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20210104-19149.b\Hj04I16.D
 Lims ID: IC std2 0.5
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 04-Jan-2021 18:17:30 ALS Bottle#: 16 Worklist Smp#: 17
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0019149-017
 Misc. Info.: IC STD2 0.5
 Operator ID: jkh09052 Instrument ID: 19094
 Sublist: chrom-MSV_19094_25mL*sub1

Method: \\chromfs\Lancaster\ChromData\19094\20210104-19149.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 05-Jan-2021 07:51:54 Calib Date: 04-Jan-2021 18:39:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20210104-19149.b\Hj04I17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1665

First Level Reviewer: howej

Date: 05-Jan-2021 06:36:26

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
3 Dichlorodifluoromethane	85	2.074	2.075	-0.001	98	20685	0.5000	0.4349	
6 Chloromethane	50	2.282	2.282	0.000	99	29076	0.5000	0.4670	
7 Vinyl chloride	62	2.404	2.404	0.000	93	26429	0.5000	0.4724	
8 Butadiene	39	2.398	2.410	-0.012	91	28327	0.5000	0.5343	
9 Bromomethane	94	2.745	2.739	0.006	91	18004	0.5000	0.4781	
10 Chloroethane	64	2.843	2.837	0.006	98	17139	0.5000	0.4897	
11 Dichlorofluoromethane	67	3.080	3.081	0.000	97	30289	0.5000	0.4919	
13 Trichlorofluoromethane	101	3.160	3.154	0.006	95	29618	0.5000	0.4600	
15 Ethyl ether	59	3.428	3.422	0.006	92	16122	0.5001	0.5335	
16 1,2-Dichloro-1,1,2-trifluoroetha	67	3.501	3.507	-0.006	94	20298	0.5000	0.4693	
17 Acrolein	56	3.611	3.605	0.006	98	125176	25.0	21.8	
18 1,1-Dichloroethene	96	3.745	3.751	-0.006	97	15566	0.5000	0.4549	
20 112TCTFE	101	3.800	3.782	0.018	84	13861	0.5000	0.4241	
19 Acetone	43	3.787	3.794	-0.007	97	33068	5.00	4.86	
22 Iodomethane	142	3.958	3.964	-0.006	100	26042	0.5000	0.4624	
21 Isopropyl alcohol	45	3.970	3.971	-0.001	39	11156	10.0	11.1	
23 Ethyl bromide	108	3.983	3.989	-0.006	95	14248	0.5002	0.4650	
24 Carbon disulfide	76	4.074	4.074	0.000	99	47803	0.5000	0.4646	
26 Methyl acetate	43	4.214	4.214	0.000	69	10343	0.5000	0.5068	
27 3-Chloro-1-propene	41	4.245	4.257	-0.012	93	28377	0.5000	0.4649	
* 28 t-Butyl alcohol-d10 (IS)	65	4.458	4.446	0.012	0	107080	50.0	50.0	
29 Methylene Chloride	84	4.458	4.452	0.006	90	23053	0.5000	0.5589	
30 2-Methyl-2-propanol	59	4.592	4.592	0.000	91	20561	10.0	9.41	
31 Acrylonitrile	53	4.806	4.794	0.012	99	21461	2.50	2.28	
32 Methyl tert-butyl ether	73	4.860	4.855	0.005	97	38269	0.5000	0.4974	
33 trans-1,2-Dichloroethene	96	4.879	4.885	-0.006	96	17182	0.5000	0.4523	
34 Hexane	57	5.287	5.300	-0.013	92	21830	0.5000	0.4177	
35 1,1-Dichloroethane	63	5.537	5.537	0.000	95	35402	0.5000	0.4727	
37 Isopropyl ether	45	5.586	5.580	0.006	95	52195	0.5000	0.4530	
38 2-Chloro-1,3-butadiene	53	5.653	5.641	0.012	92	24580	0.5000	0.4395	

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	6.110	6.117	-0.006	98	46648	0.5000	0.4726	
S 40 1,2-Dichloroethene, Total	100				0			0.9238	
41 2-Butanone (MEK)	43	6.324	6.312	0.012	100	52815	5.00	4.37	
42 cis-1,2-Dichloroethene	96	6.360	6.366	-0.006	83	20337	0.5000	0.4714	
43 2,2-Dichloropropane	77	6.378	6.379	-0.001	75	26877	0.5000	0.4542	
45 Propionitrile	54	6.409	6.409	0.000	98	28040	10.0	8.75	
47 Methacrylonitrile	67	6.616	6.623	-0.006	92	48331	5.00	4.11	
48 Chlorobromomethane	128	6.695	6.690	0.005	73	8968	0.5000	0.5075	
49 Tetrahydrofuran	71	6.702	6.702	0.000	80	12903	5.00	4.21	
50 Chloroform	83	6.848	6.842	0.006	93	34992	0.5000	0.4927	
\$ 51 Dibromofluoromethane (Surr)	113	7.055	7.049	0.006	93	354402	10.0	10.3	
52 1,1,1-Trichloroethane	97	7.073	7.068	0.005	92	28449	0.5000	0.4730	
53 Cyclohexane	56	7.177	7.171	0.006	91	27303	0.5000	0.4280	
55 1,1-Dichloropropene	75	7.275	7.281	-0.006	94	24849	0.5000	0.4443	
56 Carbon tetrachloride	117	7.281	7.287	-0.006	87	22523	0.5000	0.4446	
57 Isobutyl alcohol	41	7.415	7.409	0.006	92	19010	25.0	23.3	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.506	7.506	0.000	0	76050	10.0	10.9	
59 Benzene	78	7.543	7.543	0.000	96	77591	0.5000	0.4610	
60 1,2-Dichloroethane	62	7.610	7.610	0.000	97	23309	0.5000	0.5163	
62 Tert-amyl methyl ether	73	7.732	7.726	0.006	95	39221	0.5000	0.4697	
* 65 Fluorobenzene (IS)	96	7.945	7.945	0.000	99	1401915	10.0	10.0	
64 n-Heptane	43	7.957	7.945	0.012	37	26502	0.5000	0.4219	
66 n-Butanol	56	8.287	8.287	0.000	89	30940	50.0	42.7	
67 Trichloroethene	95	8.421	8.421	0.000	96	19980	0.5000	0.4744	
68 Methylcyclohexane	83	8.738	8.738	0.000	93	31428	0.5000	0.4388	
69 2-ethoxy-2-methyl butane	87	8.756	8.750	0.006	89	21290	0.5000	0.4247	
70 1,2-Dichloropropane	63	8.762	8.756	0.006	80	20612	0.5000	0.4674	
71 Methyl methacrylate	69	8.829	8.829	0.000	93	6991	0.5000	0.3526	
72 1,4-Dioxane	88	8.847	8.842	0.005	39	3287	25.0	20.0	
73 Dibromomethane	93	8.866	8.866	0.000	97	9397	0.5000	0.4999	
75 Dichlorobromomethane	83	9.104	9.098	0.006	99	24037	0.5000	0.4816	
76 2-Nitropropane	41	9.366	9.360	0.006	98	25839	5.00	4.11	
79 1-Bromo-2-chloroethane	63	9.481	9.488	-0.007	98	20900	0.5000	0.5111	
80 cis-1,3-Dichloropropene	75	9.628	9.628	0.000	95	25665	0.5000	0.4428	
81 4-Methyl-2-pentanone (MIBK)	43	9.792	9.793	-0.001	98	123558	5.00	4.07	
\$ 82 Toluene-d8 (Surr)	98	9.933	9.933	0.000	94	1362893	10.0	9.87	
83 Toluene	92	10.006	10.006	0.000	97	47942	0.5000	0.4639	
S 84 1,3-Dichloropropene, Total	100				0			0.9004	
85 trans-1,3-Dichloropropene	75	10.256	10.256	0.000	92	22174	0.5000	0.4576	
86 Ethyl methacrylate	69	10.311	10.311	0.000	88	15617	0.5000	0.4648	
87 1,1,2-Trichloroethane	97	10.457	10.457	0.000	90	13499	0.5000	0.4950	
88 Tetrachloroethene	166	10.542	10.549	-0.007	96	20350	0.5000	0.4614	
89 1,3-Dichloropropane	76	10.615	10.616	-0.001	92	23697	0.5000	0.4850	
91 2-Hexanone	43	10.658	10.658	0.000	99	85649	5.00	4.09	
93 Chlorodibromomethane	129	10.835	10.829	0.006	92	15011	0.5000	0.4723	
94 Ethylene Dibromide	107	10.945	10.945	0.000	96	13465	0.5000	0.5227	
S 95 Xylenes, Total	106				0			1.29	
* 97 Chlorobenzene-d5 (IS)	117	11.365	11.365	0.000	89	1008370	10.0	10.0	
96 1-Chlorohexane	91	11.371	11.372	-0.001	65	25894	0.5000	0.4342	
98 Chlorobenzene	112	11.396	11.396	0.000	94	51504	0.5000	0.4622	
100 Ethylbenzene	91	11.475	11.475	0.000	98	84772	0.5000	0.4285	
99 1,1,1,2-Tetrachloroethane	131	11.475	11.475	0.000	44	17044	0.5000	0.4449	

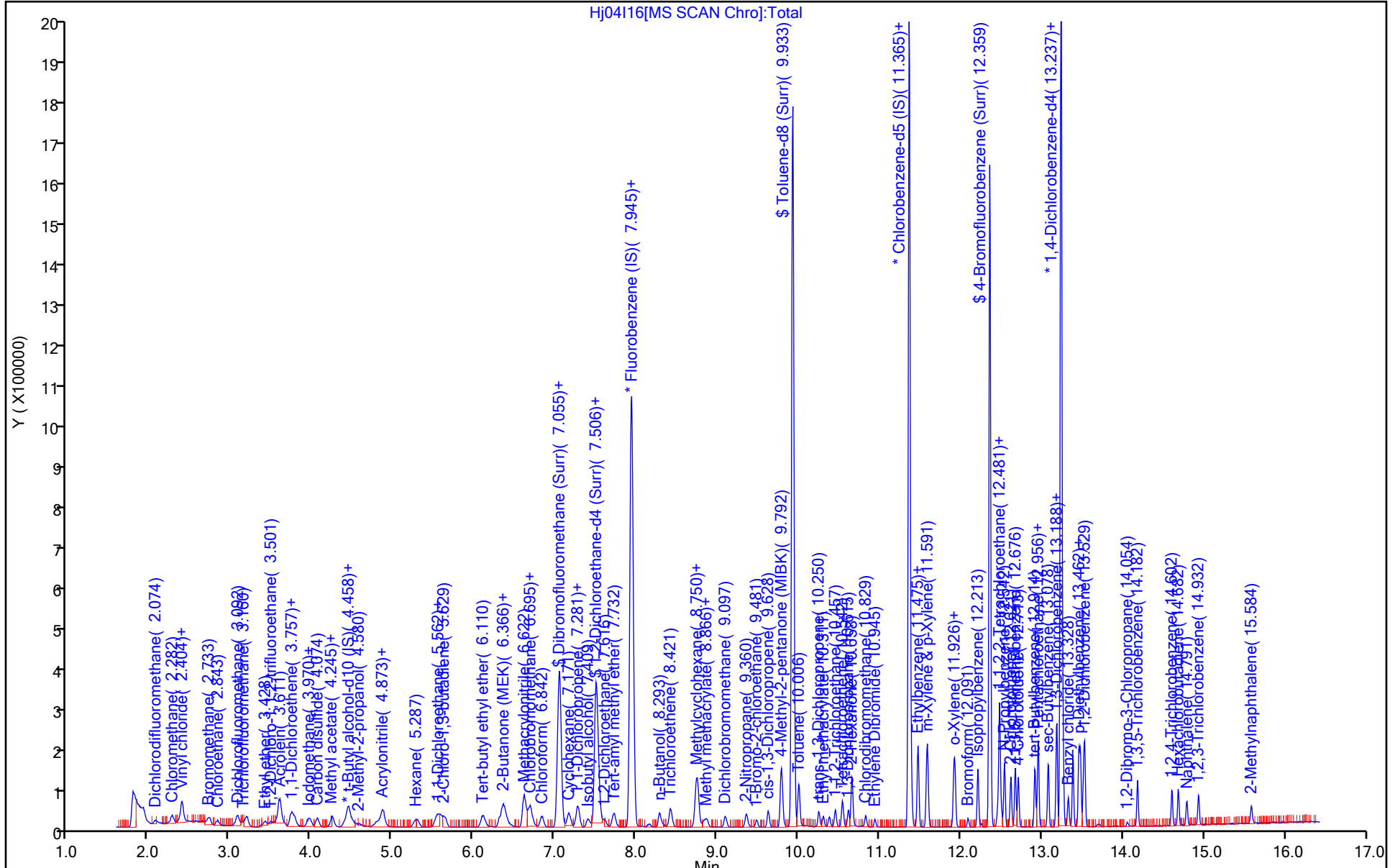
Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
101 m-Xylene & p-Xylene	106	11.591	11.591	0.000	98	63562	1.00	0.8600	
102 o-Xylene	106	11.920	11.920	0.000	96	31064	0.5000	0.4329	
103 Styrene	104	11.932	11.932	0.000	94	47306	0.5000	0.4078	
104 Bromoform	173	12.091	12.091	0.000	93	8889	0.5000	0.4842	
105 Isopropylbenzene	105	12.213	12.213	0.000	97	78864	0.5000	0.4191	
\$ 108 4-Bromofluorobenzene (Surr)	95	12.359	12.359	0.000	87	493255	10.0	9.97	
109 1,1,2,2-Tetrachloroethane	83	12.457	12.457	0.000	92	17738	0.5000	0.5048	
111 Bromobenzene	156	12.481	12.481	0.000	90	20113	0.5000	0.4547	
110 trans-1,4-Dichloro-2-butene	53	12.481	12.481	0.000	93	41541	5.00	3.88	
112 1,2,3-Trichloropropane	110	12.505	12.506	-0.001	72	4263	0.5000	0.4761	
113 N-Propylbenzene	91	12.542	12.542	0.000	99	105716	0.5000	0.4315	
114 2-Chlorotoluene	126	12.621	12.621	0.000	96	20712	0.5000	0.4485	
115 1,3,5-Trimethylbenzene	105	12.676	12.676	0.000	94	68243	0.5000	0.4159	
116 4-Chlorotoluene	126	12.713	12.713	0.000	98	20325	0.5000	0.4396	
118 tert-Butylbenzene	134	12.920	12.920	0.000	93	14561	0.5000	0.4230	
119 Pentachloroethane	167	12.956	12.951	0.005	87	12361	0.5000	0.4573	
120 1,2,4-Trimethylbenzene	105	12.956	12.957	-0.001	97	71585	0.5000	0.4262	
121 sec-Butylbenzene	105	13.078	13.079	-0.001	95	92609	0.5000	0.4181	
122 1,3-Dichlorobenzene	146	13.182	13.182	0.000	97	39777	0.5000	0.4457	
123 4-Isopropyltoluene	119	13.188	13.188	0.000	96	74304	0.5000	0.4045	
* 124 1,4-Dichlorobenzene-d4	152	13.237	13.237	0.000	96	527631	10.0	10.0	
125 1,4-Dichlorobenzene	146	13.255	13.255	0.000	93	39952	0.5000	0.4503	
126 1,2,3-Trimethylbenzene	120	13.261	13.261	0.000	95	33022	0.5000	0.4550	
127 Benzyl chloride	126	13.334	13.335	-0.001	98	5635	0.5000	0.4928	
129 p-Diethylbenzene	119	13.456	13.457	-0.001	95	53108	0.5000	0.4474	
130 n-Butylbenzene	92	13.481	13.475	0.006	98	44605	0.5000	0.4336	
131 1,2-Dichlorobenzene	146	13.517	13.517	0.000	97	37756	0.5000	0.4698	
134 1,2-Dibromo-3-Chloropropane	155	14.060	14.060	0.000	82	2038	0.5000	0.4674	
135 1,3,5-Trichlorobenzene	180	14.182	14.182	0.000	96	31122	0.5000	0.4494	
136 1,2,4-Trichlorobenzene	180	14.609	14.603	0.006	92	22881	0.5000	0.4141	
137 Hexachlorobutadiene	225	14.682	14.682	0.000	95	15161	0.5000	0.4693	
138 Naphthalene	128	14.791	14.792	-0.001	97	41873	0.5000	0.4438	
139 1,2,3-Trichlorobenzene	180	14.938	14.932	0.006	95	21377	0.5000	0.4387	
140 2-Methylnaphthalene	142	15.584	15.584	0.000	92	20581	0.5000	0.6072	

QC Flag Legend

Processing Flags

Reagents:

MSV_RV1_826_00034	Amount Added: 2.00	Units: uL	
MSV_RV4_826_00039	Amount Added: 2.00	Units: uL	
MSV_RV4GAS826_00105	Amount Added: 2.00	Units: uL	
MSV_30_826ISS_00006	Amount Added: 5.00	Units: uL	Run Reagent



Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20210104-19149.b\Hj04I17.D
 Lims ID: IC std1 0.2
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 04-Jan-2021 18:39:30 ALS Bottle#: 17 Worklist Smp#: 18
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0019149-018
 Misc. Info.: IC STD1 0.2
 Operator ID: jkh09052 Instrument ID: 19094
 Sublist: chrom-MSV_19094_25mL*sub1

Method: \\chromfs\Lancaster\ChromData\19094\20210104-19149.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 05-Jan-2021 07:52:05 Calib Date: 04-Jan-2021 18:39:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20210104-19149.b\Hj04I17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1665

First Level Reviewer: howej

Date: 05-Jan-2021 06:38:18

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
3 Dichlorodifluoromethane	85	2.069	2.075	-0.006	96	10550	0.2000	0.1886	
6 Chloromethane	50	2.282	2.282	0.000	97	15576	0.2000	0.2127	
7 Vinyl chloride	62	2.392	2.404	-0.012	93	13685	0.2000	0.2080	
8 Butadiene	39	2.398	2.410	-0.012	90	13030	0.2000	0.2090	
9 Bromomethane	94	2.745	2.739	0.006	92	9573	0.2000	0.2162	
10 Chloroethane	64	2.843	2.837	0.006	95	8503	0.2000	0.2066	
11 Dichlorofluoromethane	67	3.074	3.081	-0.006	96	15518	0.2000	0.2143	
13 Trichlorofluoromethane	101	3.154	3.154	0.000	96	15793	0.2000	0.2086	
15 Ethyl ether	59	3.428	3.422	0.006	64	7245	0.2000	0.2039	
16 1,2-Dichloro-1,1,2-trifluoroethane	67	3.501	3.507	-0.006	81	8757	0.2000	0.1722	
17 Acrolein	56	3.605	3.605	0.000	99	50346	10.0	9.51	
18 1,1-Dichloroethene	96	3.739	3.751	-0.012	97	7829	0.2000	0.1946	
20 112TCTFE	101	3.782	3.782	0.000	57	6265	0.2000	0.1630	
19 Acetone	43	3.788	3.794	-0.006	81	12156	2.00	1.94	
22 Iodomethane	142	3.958	3.964	-0.006	96	13145	0.2000	0.1985	
21 Isopropyl alcohol	45	3.952	3.971	-0.019	30	4271	4.00	3.62	
23 Ethyl bromide	108	3.989	3.989	0.000	58	7773	0.2001	0.2157	
24 Carbon disulfide	76	4.062	4.074	-0.012	99	22589	0.2000	0.1867	M
26 Methyl acetate	43	4.221	4.214	0.007	19	3477	0.2000	0.1852	
27 3-Chloro-1-propene	41	4.251	4.257	-0.006	94	14505	0.2000	0.2021	
* 28 t-Butyl alcohol-d10 (IS)	65	4.446	4.446	0.000	0	98527	50.0	50.0	
29 Methylene Chloride	84	4.452	4.452	0.000	92	10393	0.2000	0.2143	
30 2-Methyl-2-propanol	59	4.605	4.592	0.013	47	6751	4.00	3.36	
31 Acrylonitrile	53	4.800	4.794	0.006	68	7783	1.00	0.8971	
32 Methyl tert-butyl ether	73	4.861	4.855	0.006	84	16274	0.2000	0.1799	
33 trans-1,2-Dichloroethene	96	4.885	4.885	0.000	97	8427	0.2000	0.1886	
34 Hexane	57	5.287	5.300	-0.013	95	9680	0.2000	0.1575	
35 1,1-Dichloroethane	63	5.543	5.537	0.006	95	16555	0.2000	0.1880	
37 Isopropyl ether	45	5.580	5.580	0.000	93	23626	0.2000	0.1744	
38 2-Chloro-1,3-butadiene	53	5.647	5.641	0.006	39	11400	0.2000	0.1733	

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	6.104	6.117	-0.012	97	20650	0.2000	0.1779	
S 40 1,2-Dichloroethene, Total	100				0			0.3758	
41 2-Butanone (MEK)	43	6.324	6.312	0.012	99	20925	2.00	1.88	
42 cis-1,2-Dichloroethene	96	6.354	6.366	-0.012	81	9496	0.2000	0.1872	
43 2,2-Dichloropropane	77	6.366	6.379	-0.013	64	13460	0.2000	0.1934	
45 Propionitrile	54	6.409	6.409	0.000	57	11341	4.00	3.84	
47 Methacrylonitrile	67	6.629	6.623	0.007	94	18754	2.00	1.73	
48 Chlorobromomethane	128	6.696	6.690	0.006	75	3478	0.2000	0.1674	
49 Tetrahydrofuran	71	6.690	6.702	-0.012	82	4324	2.00	1.53	
50 Chloroform	83	6.830	6.842	-0.012	90	15159	0.2000	0.1815	
\$ 51 Dibromofluoromethane (Surr)	113	7.055	7.049	0.006	93	410650	10.0	10.2	
52 1,1,1-Trichloroethane	97	7.068	7.068	0.000	71	13094	0.2000	0.1851	
53 Cyclohexane	56	7.171	7.171	0.000	92	12307	0.2000	0.1640	
55 1,1-Dichloropropene	75	7.269	7.281	-0.012	88	11634	0.2000	0.1769	
56 Carbon tetrachloride	117	7.287	7.287	0.000	86	10332	0.2000	0.1734	
57 Isobutyl alcohol	41	7.421	7.409	0.012	88	7138	10.0	9.50	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.506	7.506	0.000	0	81371	10.0	9.89	
59 Benzene	78	7.543	7.543	0.000	91	37635	0.2000	0.1901	
60 1,2-Dichloroethane	62	7.616	7.610	0.006	96	11306	0.2000	0.2129	
62 Tert-amyl methyl ether	73	7.726	7.726	0.000	95	16519	0.2000	0.1682	
* 65 Fluorobenzene (IS)	96	7.939	7.945	-0.006	98	1648701	10.0	10.0	
64 n-Heptane	43	7.952	7.945	0.007	37	11688	0.2000	0.1582	
66 n-Butanol	56	8.287	8.287	0.000	94	11127	20.0	16.7	
67 Trichloroethene	95	8.427	8.421	0.006	93	9154	0.2000	0.1848	
68 Methylcyclohexane	83	8.738	8.738	0.000	94	13795	0.2000	0.1638	
69 2-ethoxy-2-methyl butane	87	8.756	8.750	0.006	87	10669	0.2000	0.1810	
70 1,2-Dichloropropane	63	8.756	8.756	0.000	77	9473	0.2000	0.1827	
71 Methyl methacrylate	69	8.835	8.829	0.006	91	2817	0.2000	0.1544	M
72 1,4-Dioxane	88	8.860	8.842	0.018	37	792	10.0	5.24	
73 Dibromomethane	93	8.866	8.866	0.000	92	3803	0.2000	0.1720	
75 Dichlorobromomethane	83	9.098	9.098	0.000	96	10801	0.2000	0.1840	
76 2-Nitropropane	41	9.360	9.360	0.000	98	10986	2.00	1.90	
79 1-Bromo-2-chloroethane	63	9.488	9.488	0.000	96	8909	0.2000	0.1852	
80 cis-1,3-Dichloropropene	75	9.628	9.628	0.000	95	11465	0.2000	0.1682	
81 4-Methyl-2-pentanone (MIBK)	43	9.793	9.793	0.000	97	49356	2.00	1.77	
\$ 82 Toluene-d8 (Surr)	98	9.933	9.933	0.000	94	1588281	10.0	9.88	
83 Toluene	92	10.006	10.006	0.000	97	22516	0.2000	0.1871	
S 84 1,3-Dichloropropene, Total	100				0			0.3486	
85 trans-1,3-Dichloropropene	75	10.256	10.256	0.000	93	10179	0.2000	0.1804	
86 Ethyl methacrylate	69	10.311	10.311	0.000	89	5792	0.2000	0.1481	
87 1,1,2-Trichloroethane	97	10.457	10.457	0.000	88	6087	0.2000	0.1917	
88 Tetrachloroethene	166	10.549	10.549	0.000	95	9707	0.2000	0.1890	
89 1,3-Dichloropropane	76	10.622	10.616	0.006	86	10095	0.2000	0.1775	
91 2-Hexanone	43	10.664	10.658	0.006	98	32393	2.00	1.68	
93 Chlorodibromomethane	129	10.829	10.829	0.000	90	6353	0.2000	0.1717	
94 Ethylene Dibromide	107	10.951	10.945	0.006	97	5321	0.2000	0.1774	
S 95 Xylenes, Total	106				0			0.5118	
* 97 Chlorobenzene-d5 (IS)	117	11.365	11.365	0.000	87	1173921	10.0	10.0	
96 1-Chlorohexane	91	11.365	11.372	-0.007	34	13861	0.2000	0.1996	
98 Chlorobenzene	112	11.390	11.396	-0.006	97	23750	0.2000	0.1831	
100 Ethylbenzene	91	11.475	11.475	0.000	99	41083	0.2000	0.1784	
99 1,1,1,2-Tetrachloroethane	131	11.475	11.475	0.000	43	8853	0.2000	0.1985	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
101 m-Xylene & p-Xylene	106	11.591	11.591	0.000	97	29161	0.4000	0.3389	
102 o-Xylene	106	11.914	11.920	-0.006	96	14444	0.2000	0.1729	
103 Styrene	104	11.932	11.932	0.000	94	21885	0.2000	0.1620	
104 Bromoform	173	12.097	12.091	0.006	93	3715	0.2000	0.1738	
105 Isopropylbenzene	105	12.213	12.213	0.000	96	35525	0.2000	0.1622	
\$ 108 4-Bromofluorobenzene (Surr)	95	12.359	12.359	0.000	88	560924	10.0	9.74	
109 1,1,2,2-Tetrachloroethane	83	12.457	12.457	0.000	92	7627	0.2000	0.1910	
111 Bromobenzene	156	12.481	12.481	0.000	80	9799	0.2000	0.1949	
110 trans-1,4-Dichloro-2-butene	53	12.481	12.481	0.000	87	17264	2.00	1.75	
112 1,2,3-Trichloropropane	110	12.499	12.506	-0.007	57	2220	0.2000	0.2181	
113 N-Propylbenzene	91	12.542	12.542	0.000	99	49078	0.2000	0.1763	
114 2-Chlorotoluene	126	12.621	12.621	0.000	96	9391	0.2000	0.1789	
115 1,3,5-Trimethylbenzene	105	12.676	12.676	0.000	95	31229	0.2000	0.1674	
116 4-Chlorotoluene	126	12.713	12.713	0.000	97	8627	0.2000	0.1642	
118 tert-Butylbenzene	134	12.914	12.920	-0.006	92	6561	0.2000	0.1677	
119 Pentachloroethane	167	12.951	12.951	0.000	83	5425	0.2000	0.1766	
120 1,2,4-Trimethylbenzene	105	12.957	12.957	0.000	97	31373	0.2000	0.1643	
121 sec-Butylbenzene	105	13.079	13.079	0.000	95	39829	0.2000	0.1582	
122 1,3-Dichlorobenzene	146	13.182	13.182	0.000	97	19196	0.2000	0.1892	
123 4-Isopropyltoluene	119	13.188	13.188	0.000	97	32427	0.2000	0.1553	
* 124 1,4-Dichlorobenzene-d4	152	13.237	13.237	0.000	96	599705	10.0	10.0	
125 1,4-Dichlorobenzene	146	13.255	13.255	0.000	91	19620	0.2000	0.1946	
126 1,2,3-Trimethylbenzene	120	13.268	13.261	0.007	96	15285	0.2000	0.1853	
127 Benzyl chloride	126	13.335	13.335	0.000	85	1991	0.2000	0.1532	
129 p-Diethylbenzene	119	13.457	13.457	0.000	92	21700	0.2000	0.1608	
130 n-Butylbenzene	92	13.475	13.475	0.000	97	18584	0.2000	0.1590	
131 1,2-Dichlorobenzene	146	13.518	13.517	0.001	97	17726	0.2000	0.1941	
134 1,2-Dibromo-3-Chloropropane	155	14.060	14.060	0.000	83	951	0.2000	0.1919	
135 1,3,5-Trichlorobenzene	180	14.182	14.182	0.000	93	14785	0.2000	0.1878	
136 1,2,4-Trichlorobenzene	180	14.609	14.603	0.006	92	11292	0.2000	0.1798	
137 Hexachlorobutadiene	225	14.682	14.682	0.000	96	6043	0.2000	0.1646	
138 Naphthalene	128	14.792	14.792	0.000	97	17303	0.2000	0.1613	
139 1,2,3-Trichlorobenzene	180	14.932	14.932	0.000	95	9582	0.2000	0.1730	
140 2-Methylnaphthalene	142	15.584	15.584	0.000	94	8639	0.2000	0.4212	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MSV_RV1_826_00034

Amount Added: 2.00

Units: uL

MSV_RV4_826_00039

Amount Added: 2.00

Units: uL

MSV_RV4GAS826_00105

Amount Added: 2.00

Units: uL

MSV_30_826ISS_00006

Amount Added: 5.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19094\20210104-19149.b\Hj04117.D

Injection Date: 04-Jan-2021 18:39:30

Instrument ID: 19094

Operator ID: jkh09052

Lims ID: IC std1 0.2

Worklist Smp#: 18

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

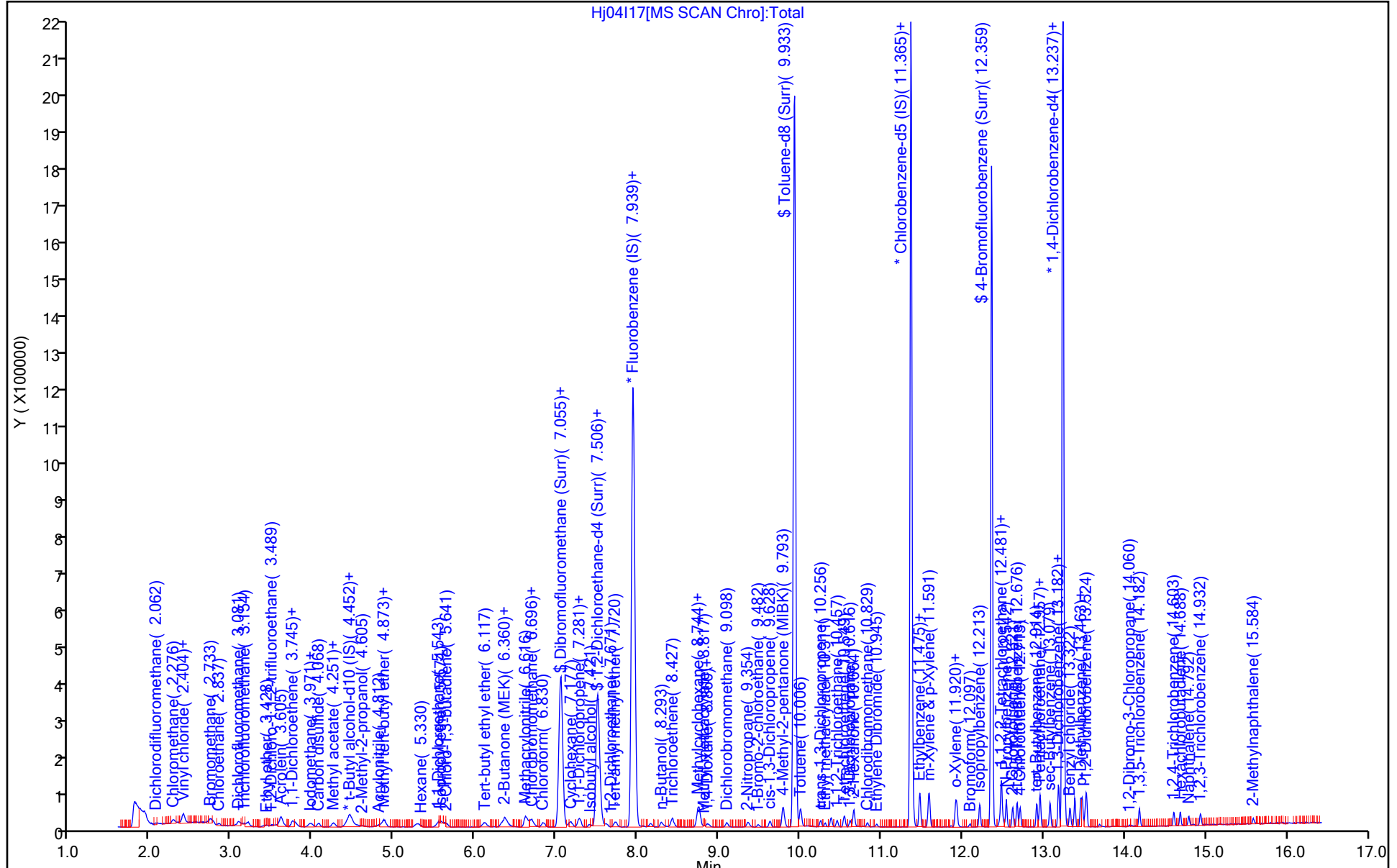
ALS Bottle#: 17

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC

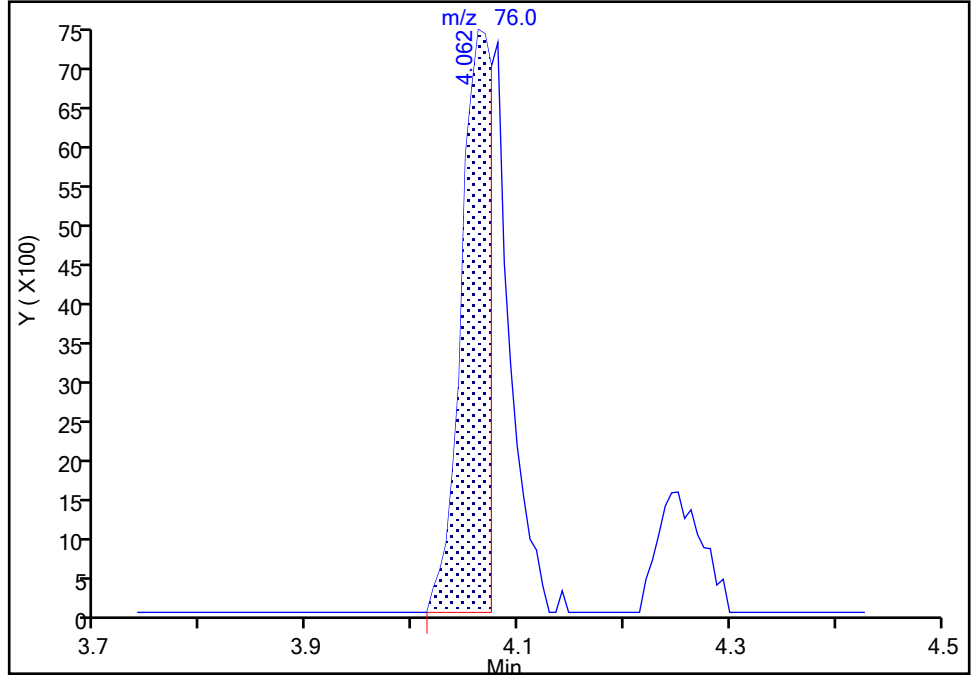
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 Injection Date: 04-Jan-2021 18:39:30 Instrument ID: 19094
 Lims ID: IC std1 0.2
 Client ID:
 Operator ID: jkh09052 ALS Bottle#: 17 Worklist Smp#: 18
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
 Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

24 Carbon disulfide, CAS: 75-15-0

Signal: 1

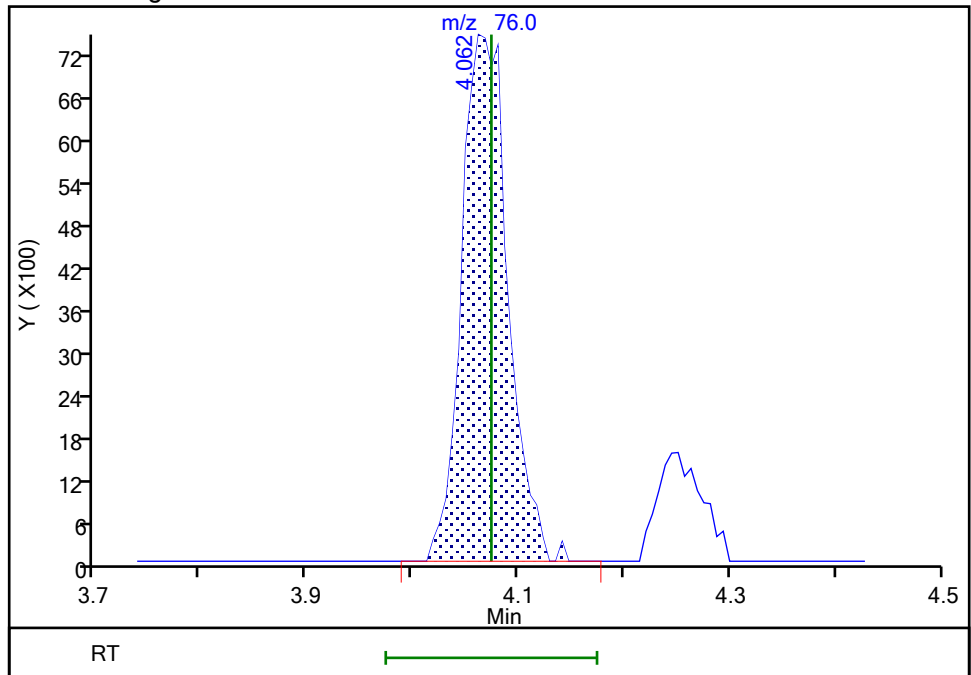
RT: 4.06
 Area: 14963
 Amount: 0.091016
 Amount Units: ug/l

Processing Integration Results



RT: 4.06
 Area: 22589
 Amount: 0.186684
 Amount Units: ug/l

Manual Integration Results



Reviewer: howej, 05-Jan-2021 06:37:10
 Audit Action: Manually Integrated

Audit Reason: Other

Eurofins Lancaster Laboratories Env, LLC

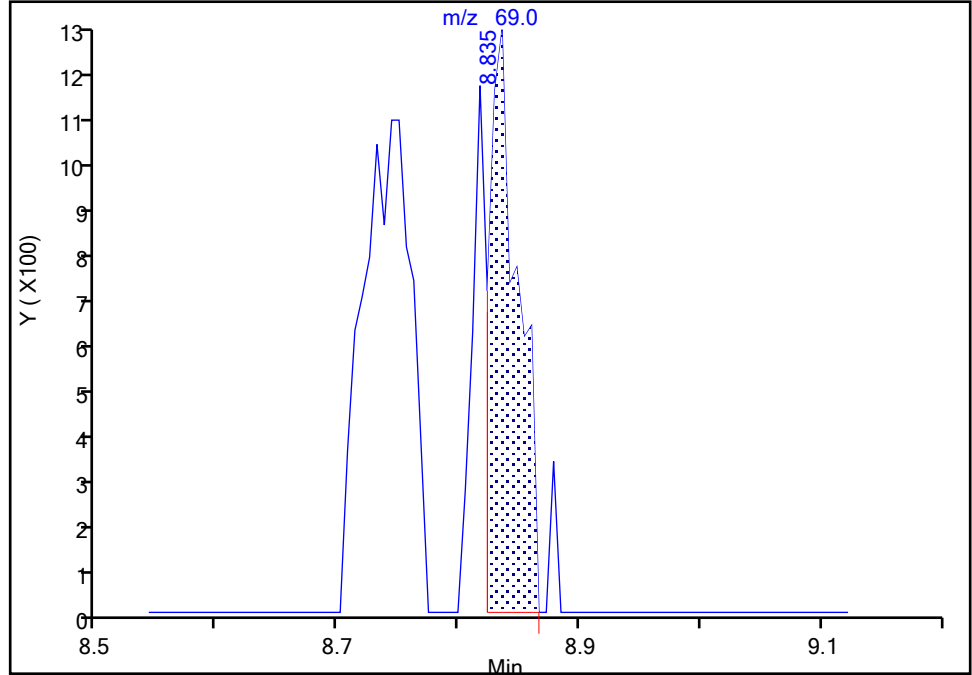
Data File: \\chromfs\Lancaster\ChromData\19094\20210104-19149.b\Hj04I17.D
 Injection Date: 04-Jan-2021 18:39:30 Instrument ID: 19094
 Lims ID: IC std1 0.2
 Client ID:
 Operator ID: jkh09052 ALS Bottle#: 17 Worklist Smp#: 18
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
 Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

71 Methyl methacrylate, CAS: 80-62-6

Signal: 1

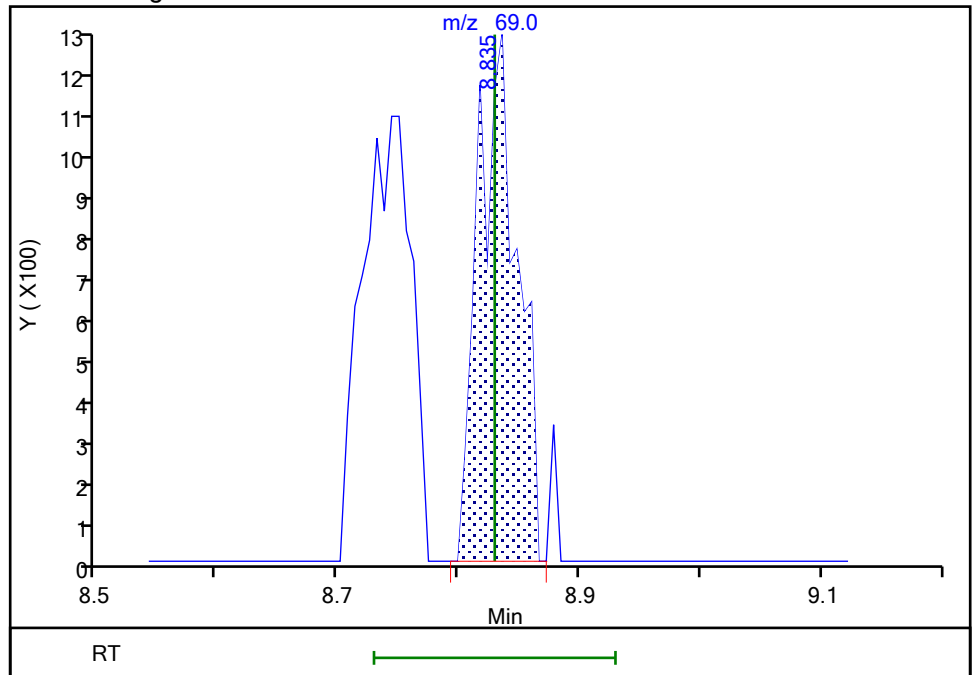
RT: 8.84
 Area: 2088
 Amount: 0.282177
 Amount Units: ug/l

Processing Integration Results



RT: 8.84
 Area: 2817
 Amount: 0.154417
 Amount Units: ug/l

Manual Integration Results



Reviewer: howej, 05-Jan-2021 06:37:45
 Audit Action: Manually Integrated

Audit Reason: Other

Calibration

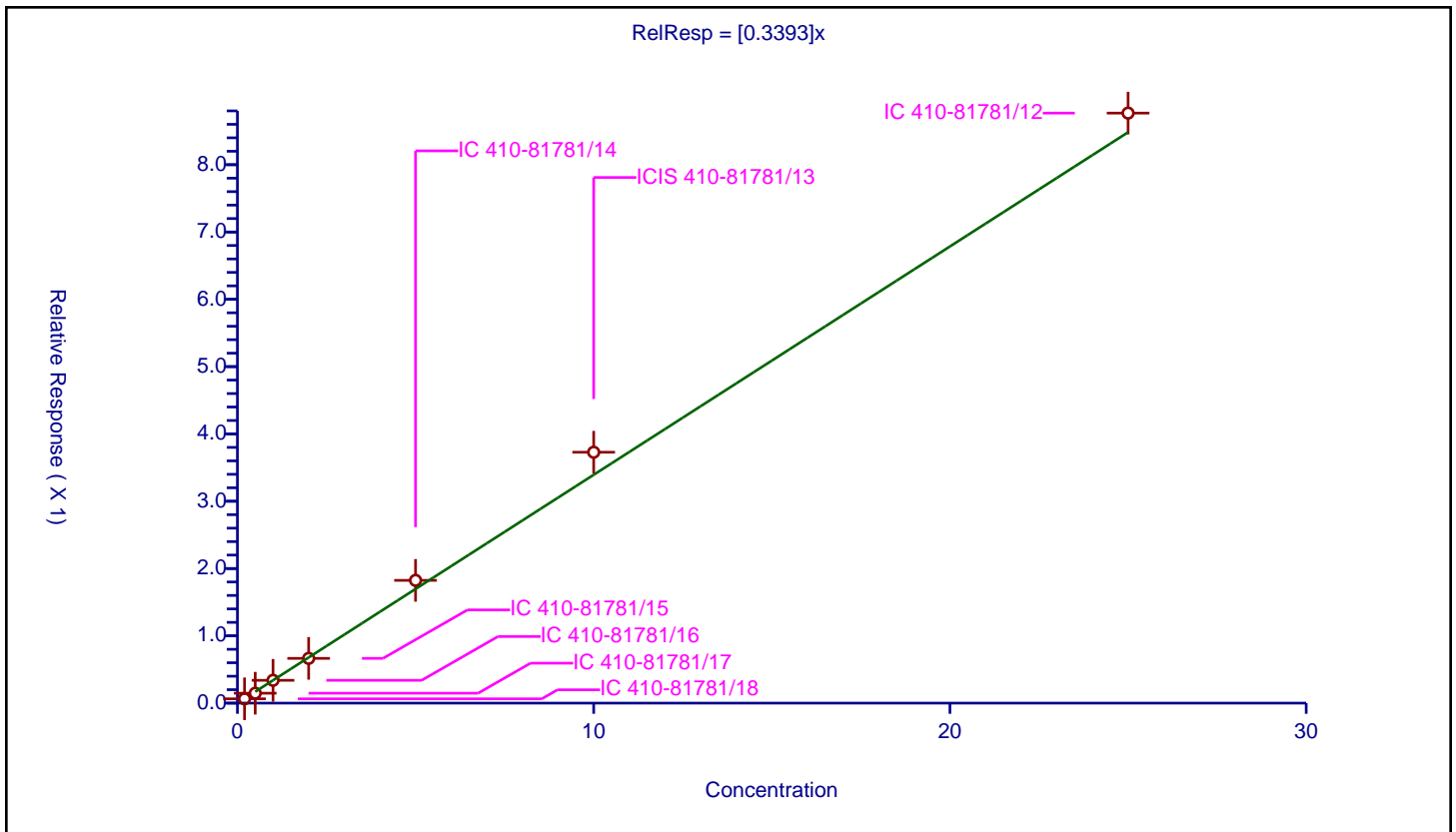
/ Dichlorodifluoromethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3393

Error Coefficients	
Standard Error:	642000
Relative Standard Error:	7.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-81781/18	0.2	0.06399	10.0	1648701.0	0.319949	Y
2	IC 410-81781/17	0.5	0.147548	10.0	1401915.0	0.295096	Y
3	IC 410-81781/16	1.0	0.339063	10.0	1816799.0	0.339063	Y
4	IC 410-81781/15	2.0	0.665157	10.0	1845881.0	0.332578	Y
5	IC 410-81781/14	5.0	1.824005	10.0	1565149.0	0.364801	Y
6	ICIS 410-81781/13	10.0	3.727964	10.0	1641765.0	0.372796	Y
7	IC 410-81781/12	25.0	8.76712	10.0	1612687.0	0.350685	Y



Calibration

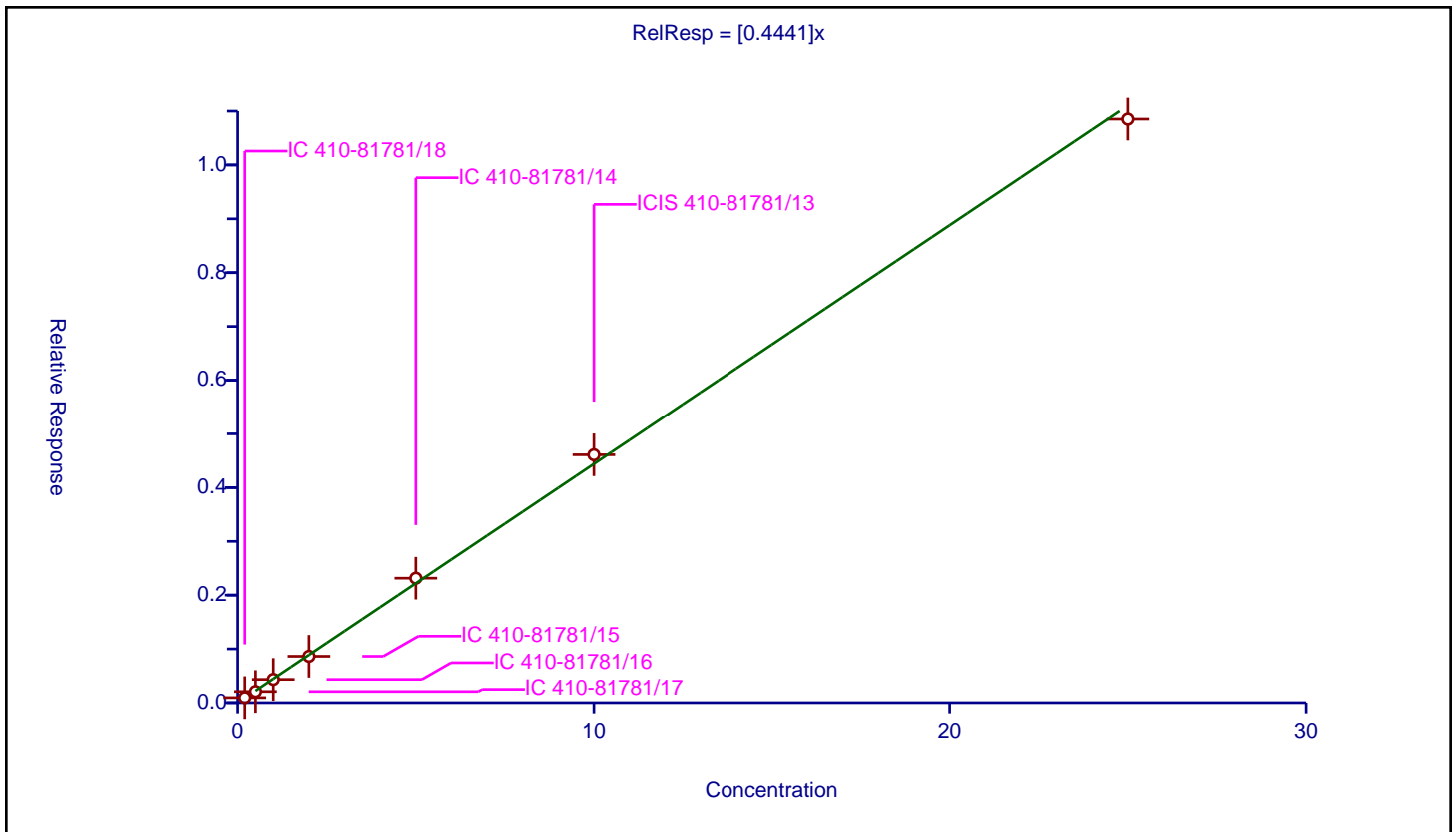
/ Chloromethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4441

Error Coefficients	
Standard Error:	796000
Relative Standard Error:	4.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-81781/18	0.2	0.094474	10.0	1648701.0	0.472372	Y
2	IC 410-81781/17	0.5	0.207402	10.0	1401915.0	0.414804	Y
3	IC 410-81781/16	1.0	0.432178	10.0	1816799.0	0.432178	Y
4	IC 410-81781/15	2.0	0.861908	10.0	1845881.0	0.430954	Y
5	IC 410-81781/14	5.0	2.315447	10.0	1565149.0	0.463089	Y
6	ICIS 410-81781/13	10.0	4.611105	10.0	1641765.0	0.46111	Y
7	IC 410-81781/12	25.0	10.852025	10.0	1612687.0	0.434081	Y



Calibration

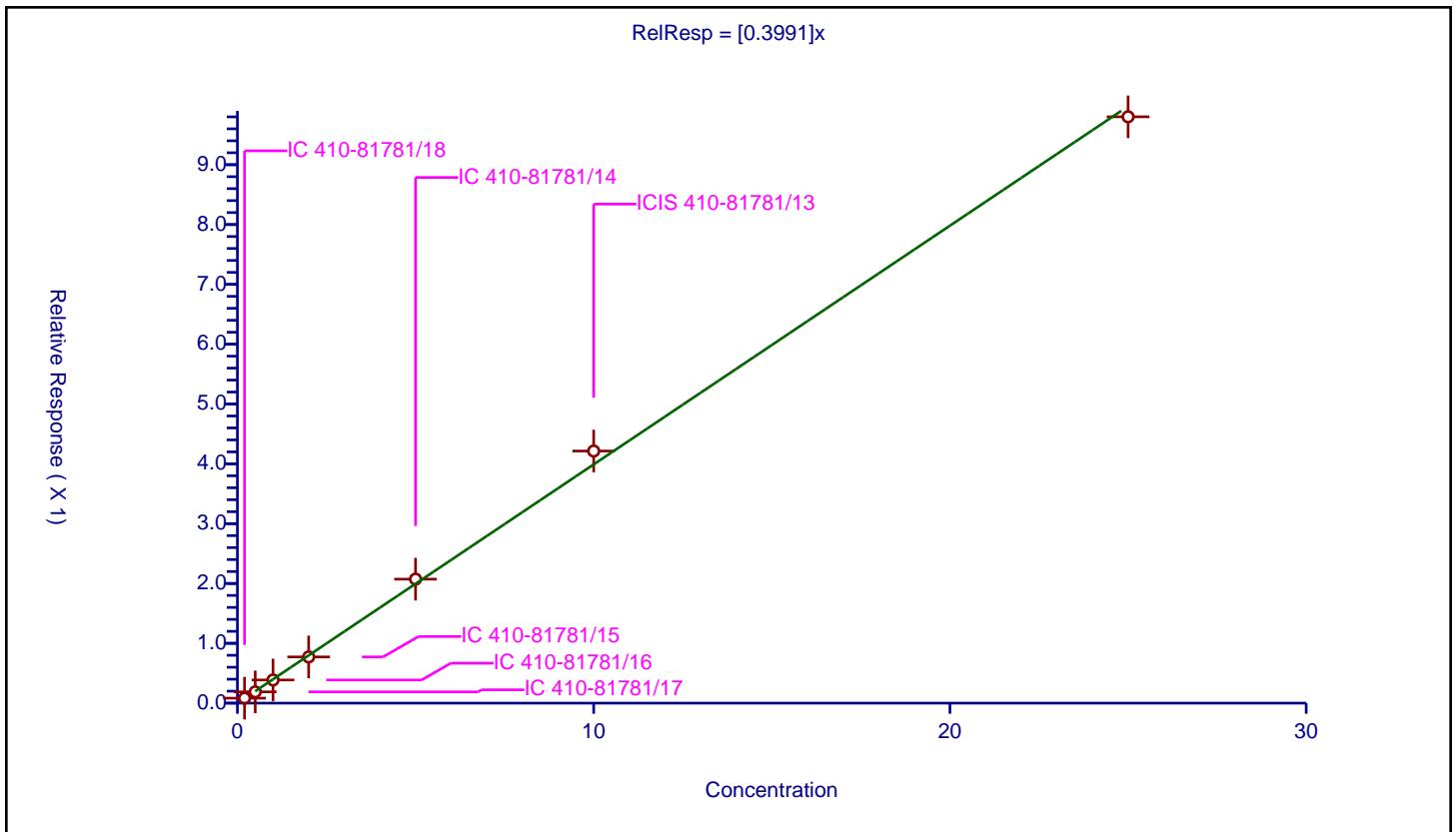
/ Vinyl chloride

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3991

Error Coefficients	
Standard Error:	720000
Relative Standard Error:	4.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-81781/18	0.2	0.083005	10.0	1648701.0	0.415024	Y
2	IC 410-81781/17	0.5	0.188521	10.0	1401915.0	0.377041	Y
3	IC 410-81781/16	1.0	0.387302	10.0	1816799.0	0.387302	Y
4	IC 410-81781/15	2.0	0.772076	10.0	1845881.0	0.386038	Y
5	IC 410-81781/14	5.0	2.07271	10.0	1565149.0	0.414542	Y
6	ICIS 410-81781/13	10.0	4.213983	10.0	1641765.0	0.421398	Y
7	IC 410-81781/12	25.0	9.801301	10.0	1612687.0	0.392052	Y



Calibration

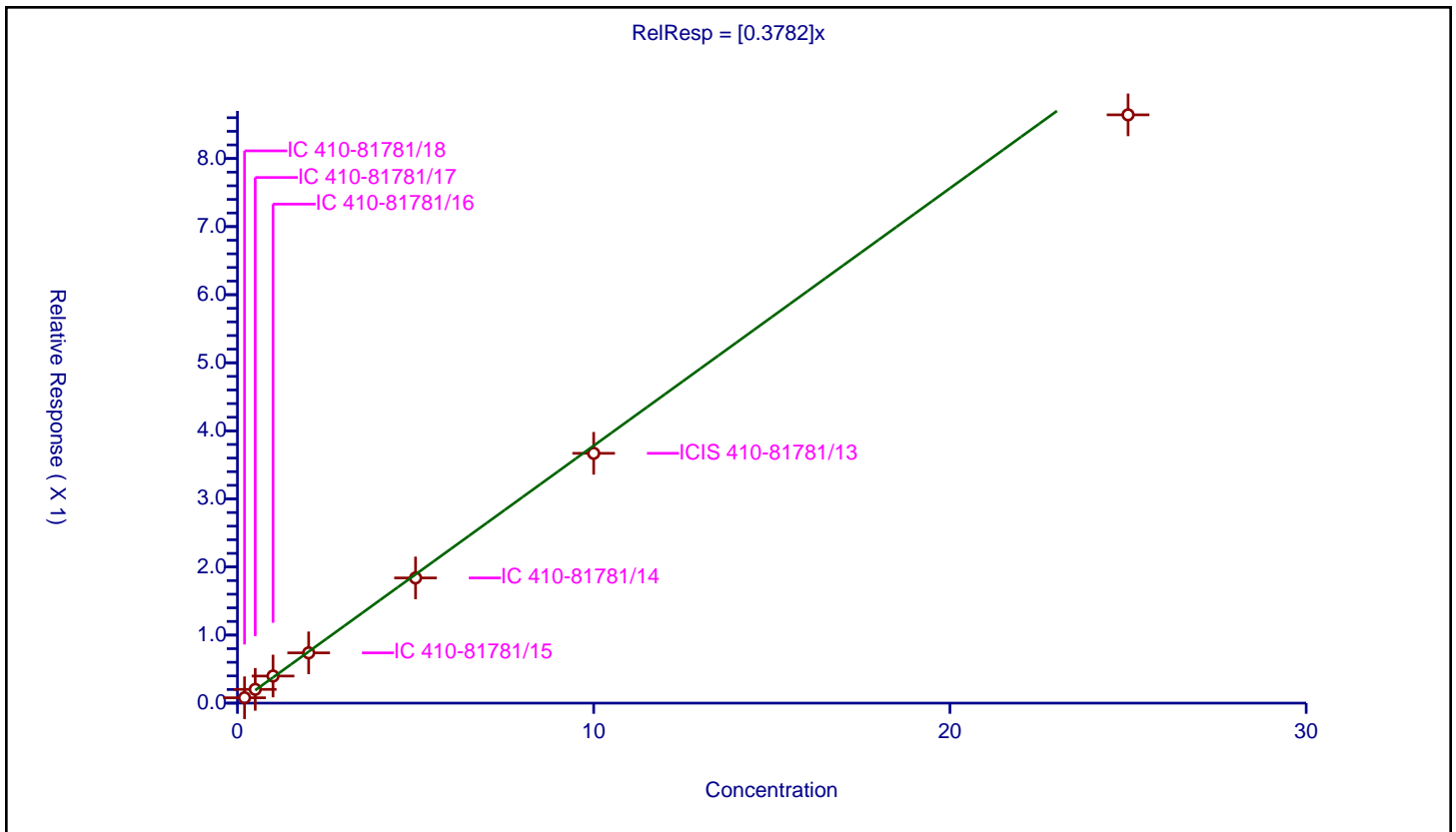
/ Butadiene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3782

Error Coefficients	
Standard Error:	634000
Relative Standard Error:	5.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-81781/18	0.2	0.079032	10.0	1648701.0	0.39516	Y
2	IC 410-81781/17	0.5	0.202059	10.0	1401915.0	0.404119	Y
3	IC 410-81781/16	1.0	0.398057	10.0	1816799.0	0.398057	Y
4	IC 410-81781/15	2.0	0.738585	10.0	1845881.0	0.369292	Y
5	IC 410-81781/14	5.0	1.839231	10.0	1565149.0	0.367846	Y
6	ICIS 410-81781/13	10.0	3.669813	10.0	1641765.0	0.366981	Y
7	IC 410-81781/12	25.0	8.642136	10.0	1612687.0	0.345685	Y



Calibration

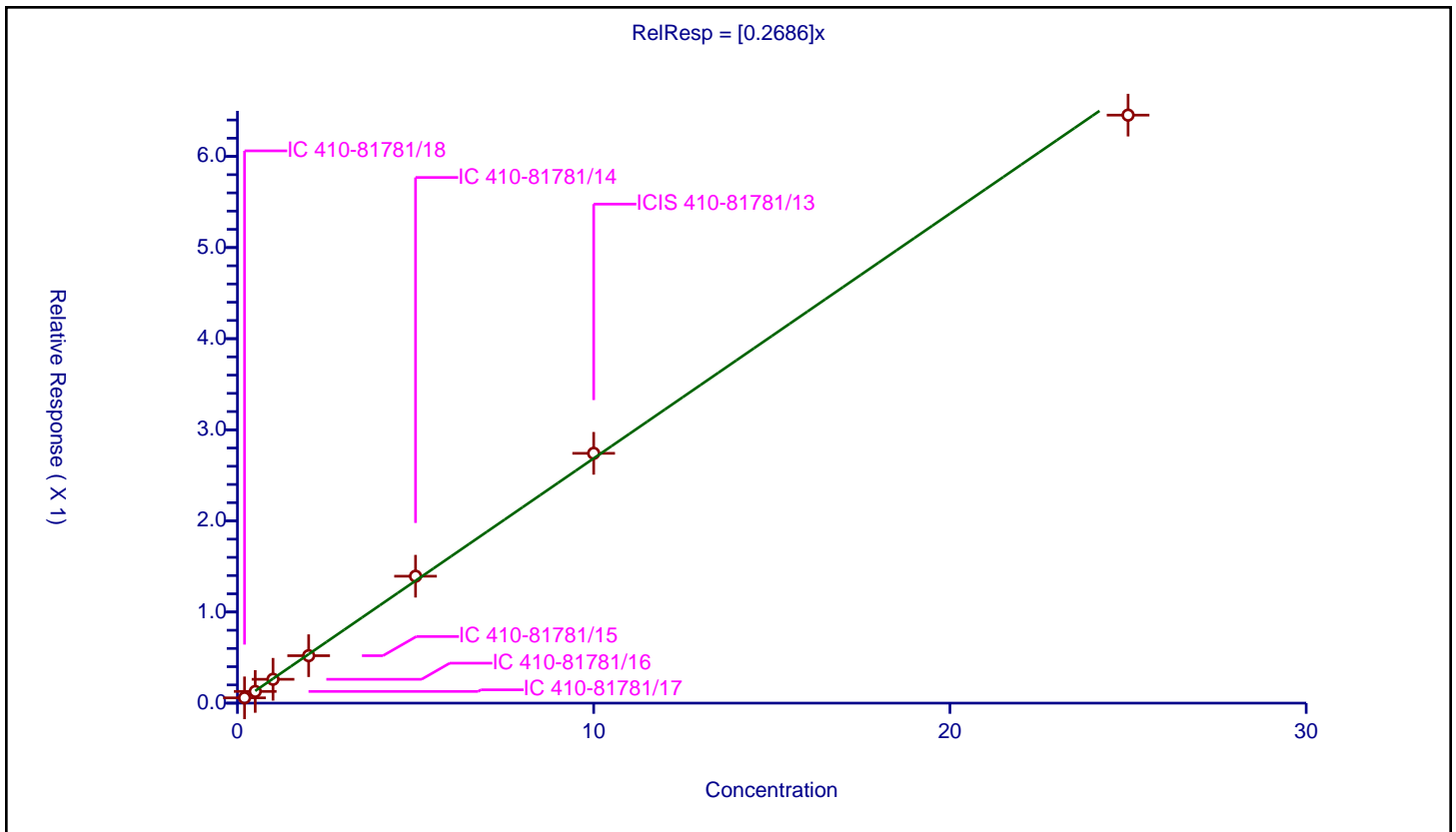
/ Bromomethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2686

Error Coefficients	
Standard Error:	473000
Relative Standard Error:	4.7
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-81781/18	0.2	0.058064	10.0	1648701.0	0.290319	Y
2	IC 410-81781/17	0.5	0.128424	10.0	1401915.0	0.256849	Y
3	IC 410-81781/16	1.0	0.261895	10.0	1816799.0	0.261895	Y
4	IC 410-81781/15	2.0	0.520689	10.0	1845881.0	0.260345	Y
5	IC 410-81781/14	5.0	1.392941	10.0	1565149.0	0.278588	Y
6	ICIS 410-81781/13	10.0	2.741653	10.0	1641765.0	0.274165	Y
7	IC 410-81781/12	25.0	6.453416	10.0	1612687.0	0.258137	Y



Calibration

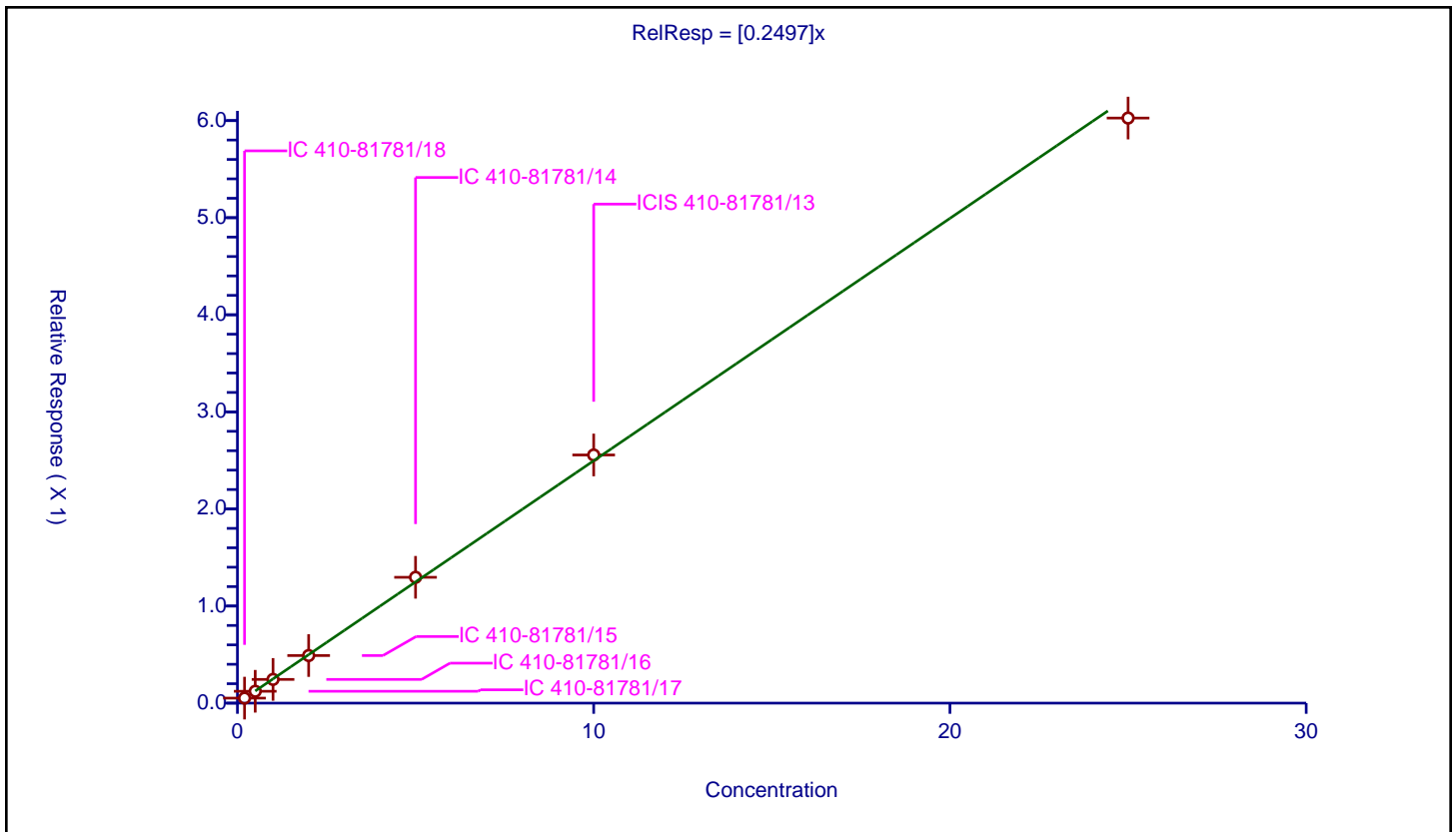
/ Chloroethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2497

Error Coefficients	
Standard Error:	442000
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 410-81781/18	0.2	0.051574	10.0	1648701.0	0.25787	Y
2	IC 410-81781/17	0.5	0.122254	10.0	1401915.0	0.244508	Y
3	IC 410-81781/16	1.0	0.244298	10.0	1816799.0	0.244298	Y
4	IC 410-81781/15	2.0	0.490156	10.0	1845881.0	0.245078	Y
5	IC 410-81781/14	5.0	1.295998	10.0	1565149.0	0.2592	Y
6	ICIS 410-81781/13	10.0	2.555993	10.0	1641765.0	0.255599	Y
7	IC 410-81781/12	25.0	6.026327	10.0	1612687.0	0.241053	Y



Calibration

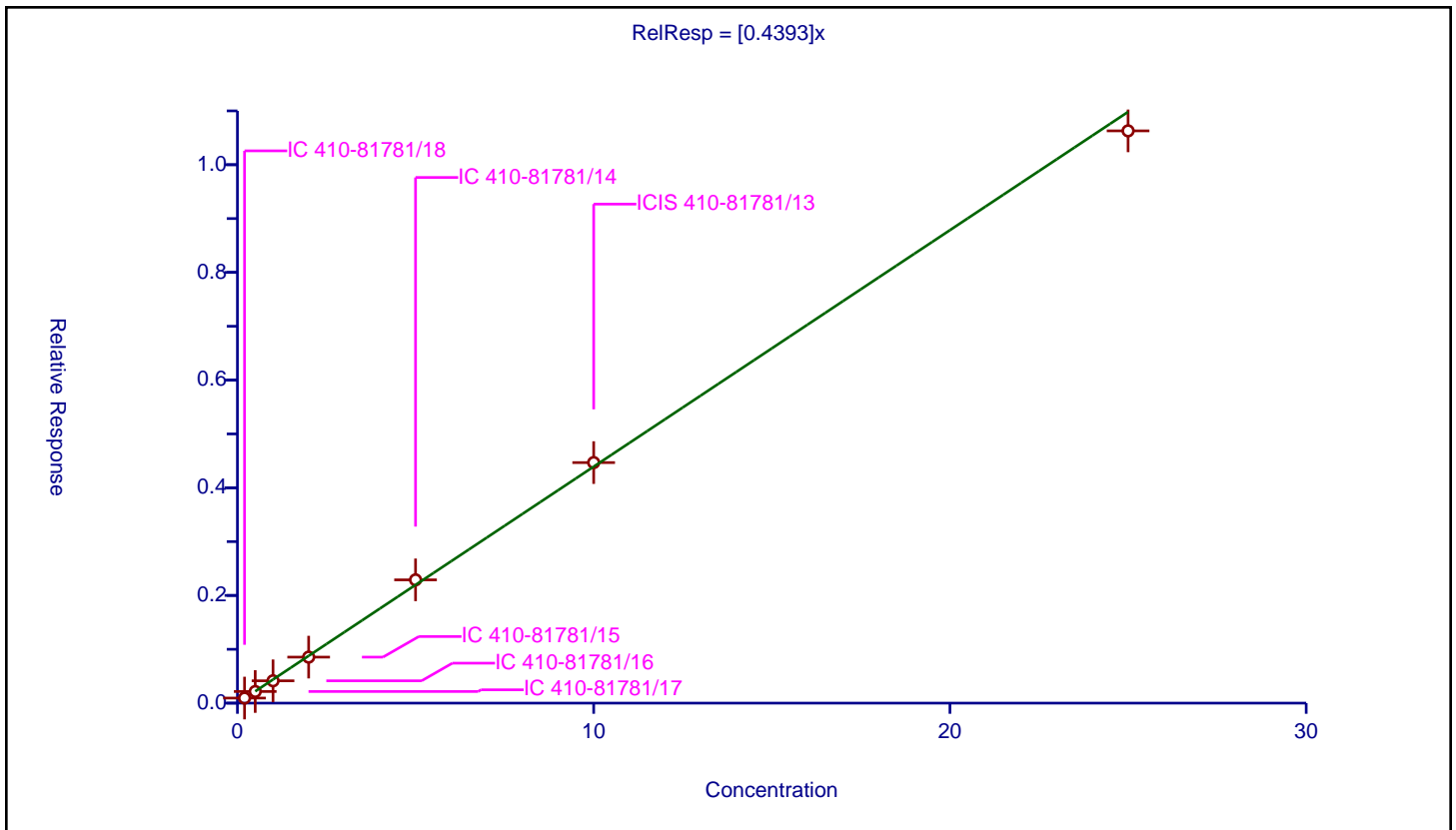
/ Dichlorofluoromethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4393

Error Coefficients	
Standard Error:	778000
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 410-81781/18	0.2	0.094123	10.0	1648701.0	0.470613	Y
2	IC 410-81781/17	0.5	0.216054	10.0	1401915.0	0.432109	Y
3	IC 410-81781/16	1.0	0.414961	10.0	1816799.0	0.414961	Y
4	IC 410-81781/15	2.0	0.854508	10.0	1845881.0	0.427254	Y
5	IC 410-81781/14	5.0	2.289565	10.0	1565149.0	0.457913	Y
6	ICIS 410-81781/13	10.0	4.467479	10.0	1641765.0	0.446748	Y
7	IC 410-81781/12	25.0	10.629167	10.0	1612687.0	0.425167	Y



Calibration

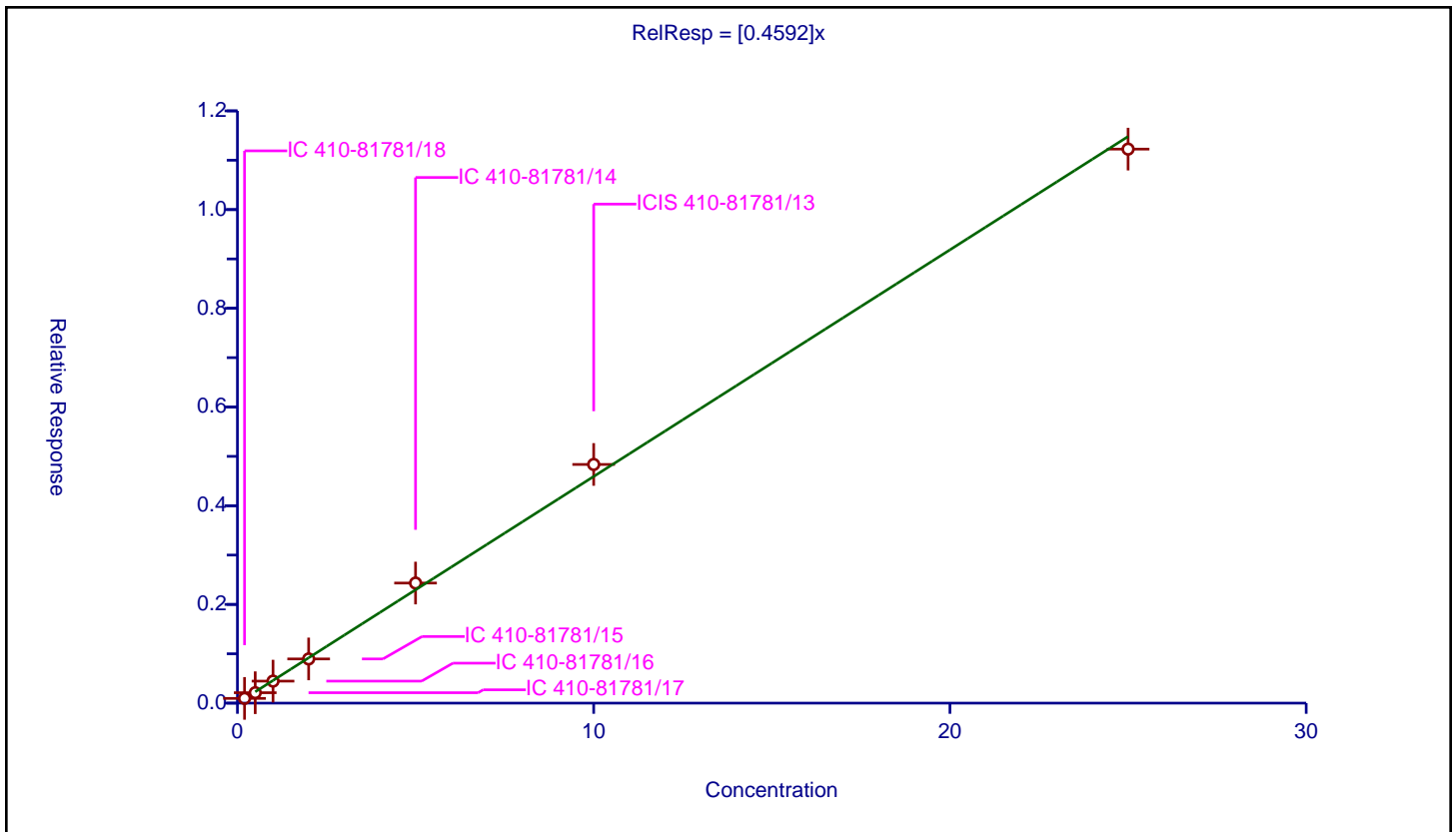
/ Trichlorofluoromethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4592

Error Coefficients	
Standard Error:	825000
Relative Standard Error:	5.2
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-81781/18	0.2	0.095791	10.0	1648701.0	0.478953	Y
2	IC 410-81781/17	0.5	0.211268	10.0	1401915.0	0.422536	Y
3	IC 410-81781/16	1.0	0.44629	10.0	1816799.0	0.44629	Y
4	IC 410-81781/15	2.0	0.895323	10.0	1845881.0	0.447662	Y
5	IC 410-81781/14	5.0	2.432848	10.0	1565149.0	0.48657	Y
6	ICIS 410-81781/13	10.0	4.836003	10.0	1641765.0	0.4836	Y
7	IC 410-81781/12	25.0	11.225551	10.0	1612687.0	0.449022	Y



Calibration

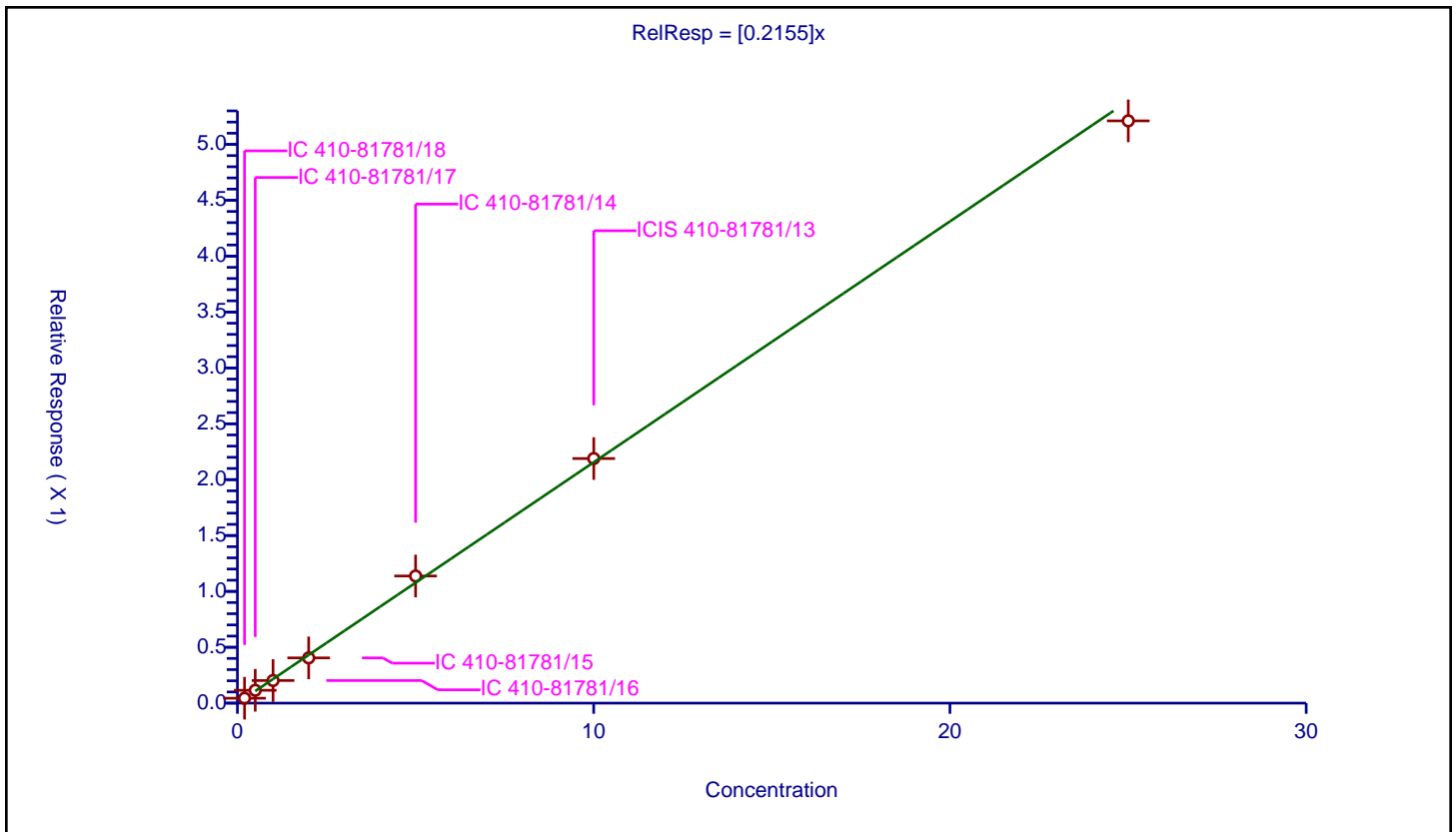
/ Ethyl ether

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2155

Error Coefficients	
Standard Error:	382000
Relative Standard Error:	5.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-81781/18	0.200043	0.043944	10.0	1648701.0	0.219671	Y
2	IC 410-81781/17	0.500108	0.115	10.0	1401915.0	0.22995	Y
3	IC 410-81781/16	1.000215	0.20213	10.0	1816799.0	0.202087	Y
4	IC 410-81781/15	2.00043	0.404755	10.0	1845881.0	0.202334	Y
5	IC 410-81781/14	5.001075	1.137815	10.0	1565149.0	0.227514	Y
6	ICIS 410-81781/13	10.00215	2.188913	10.0	1641765.0	0.218844	Y
7	IC 410-81781/12	25.005375	5.210683	10.0	1612687.0	0.208382	Y



Calibration

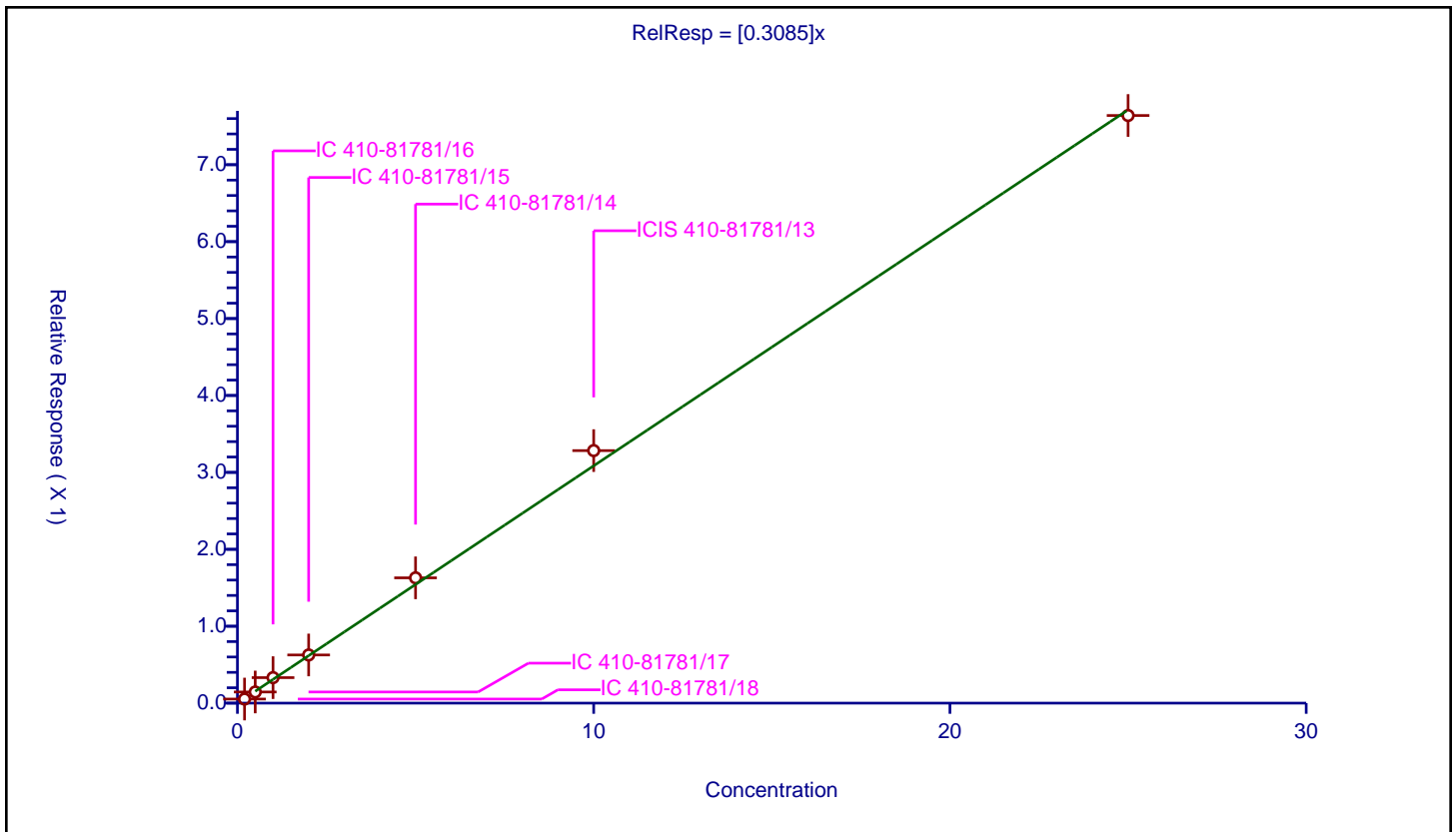
/ 1,2-Dichloro-1,1,2-trifluoroethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3085

Error Coefficients	
Standard Error:	561000
Relative Standard Error:	7.8
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-81781/18	0.2	0.053115	10.0	1648701.0	0.265573	Y
2	IC 410-81781/17	0.5	0.144788	10.0	1401915.0	0.289575	Y
3	IC 410-81781/16	1.0	0.331682	10.0	1816799.0	0.331682	Y
4	IC 410-81781/15	2.0	0.626411	10.0	1845881.0	0.313205	Y
5	IC 410-81781/14	5.0	1.628906	10.0	1565149.0	0.325781	Y
6	ICIS 410-81781/13	10.0	3.283271	10.0	1641765.0	0.328327	Y
7	IC 410-81781/12	25.0	7.639976	10.0	1612687.0	0.305599	Y



Calibration

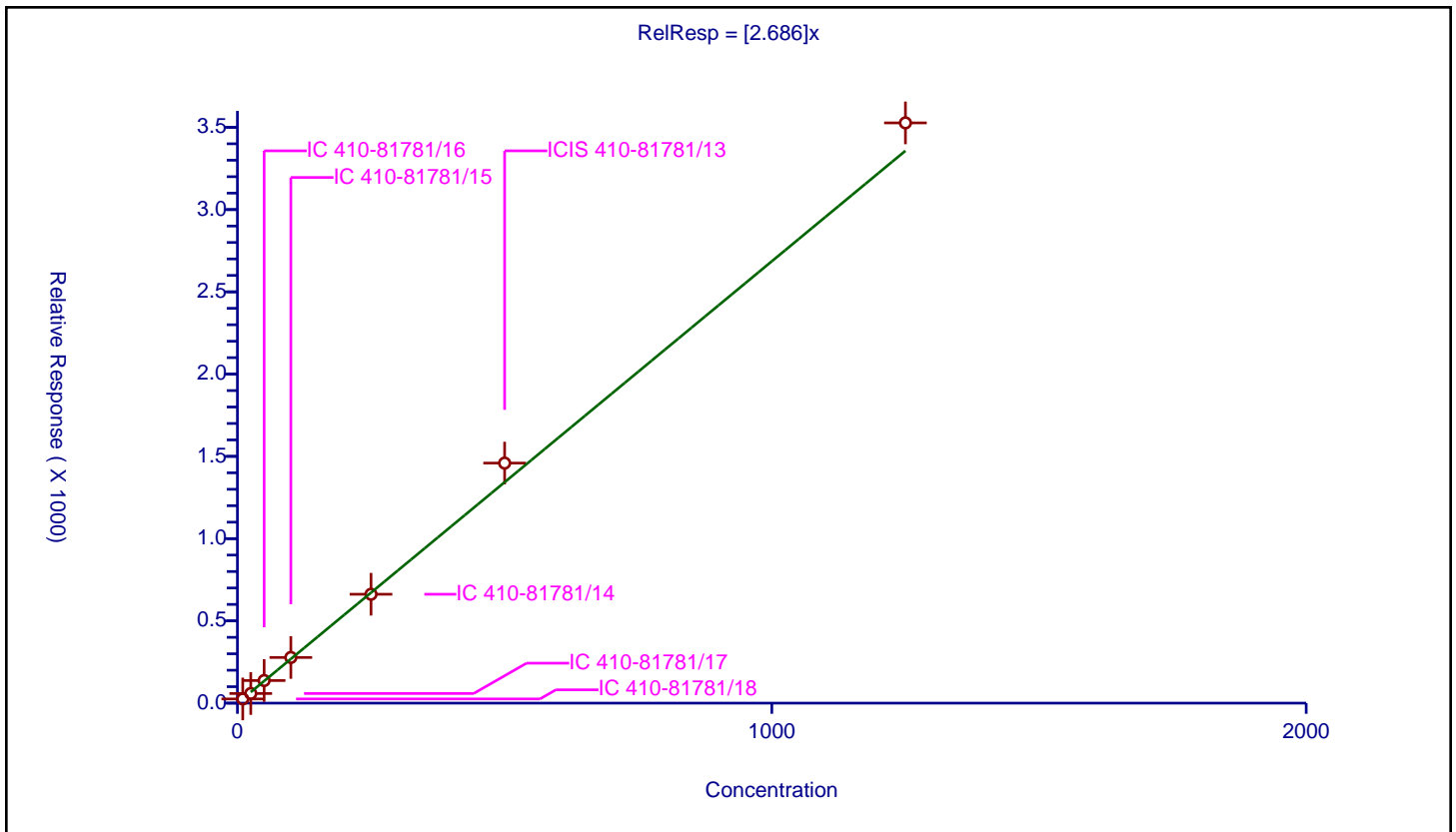
/ Acrolein

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	2.686

Error Coefficients	
Standard Error:	3020000
Relative Standard Error:	7.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-81781/18	10.000371	25.549342	50.0	98527.0	2.554839	Y
2	IC 410-81781/17	25.000927	58.449757	50.0	107080.0	2.337904	Y
3	IC 410-81781/16	50.001854	137.29913	50.0	100749.0	2.745881	Y
4	IC 410-81781/15	100.003709	277.501058	50.0	101567.0	2.774908	Y
5	IC 410-81781/14	250.009272	661.873298	50.0	106849.0	2.647395	Y
6	ICIS 410-81781/13	500.018544	1459.092217	50.0	97347.0	2.918076	Y
7	IC 410-81781/12	1250.046359	3527.038169	50.0	94239.0	2.821526	Y



Calibration

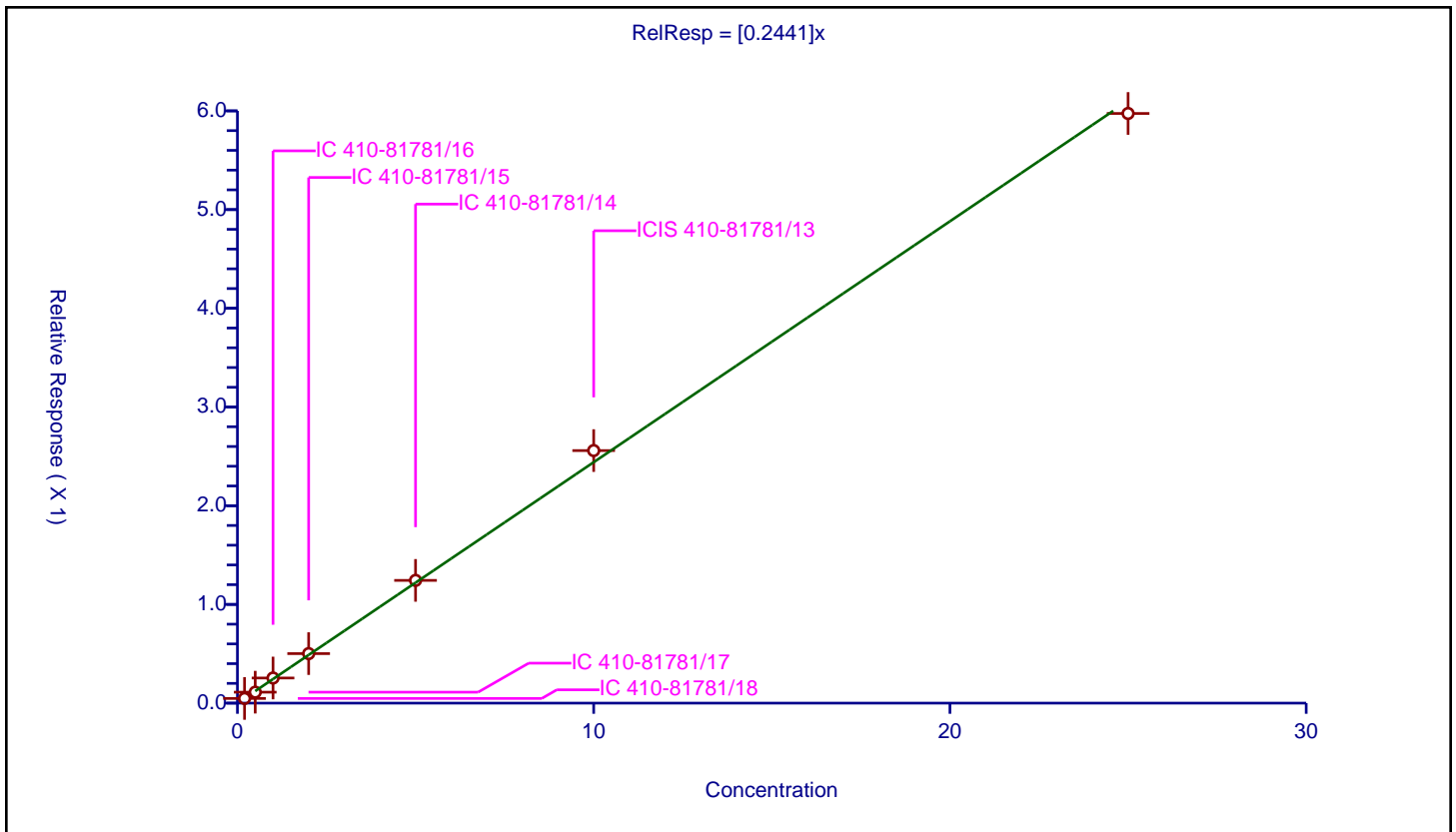
/ 1,1-Dichloroethene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2441

Error Coefficients	
Standard Error:	438000
Relative Standard Error:	4.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-81781/18	0.2	0.047486	10.0	1648701.0	0.237429	Y
2	IC 410-81781/17	0.5	0.111034	10.0	1401915.0	0.222068	Y
3	IC 410-81781/16	1.0	0.254624	10.0	1816799.0	0.254624	Y
4	IC 410-81781/15	2.0	0.501679	10.0	1845881.0	0.25084	Y
5	IC 410-81781/14	5.0	1.243537	10.0	1565149.0	0.248707	Y
6	ICIS 410-81781/13	10.0	2.558704	10.0	1641765.0	0.25587	Y
7	IC 410-81781/12	25.0	5.973775	10.0	1612687.0	0.238951	Y



Calibration

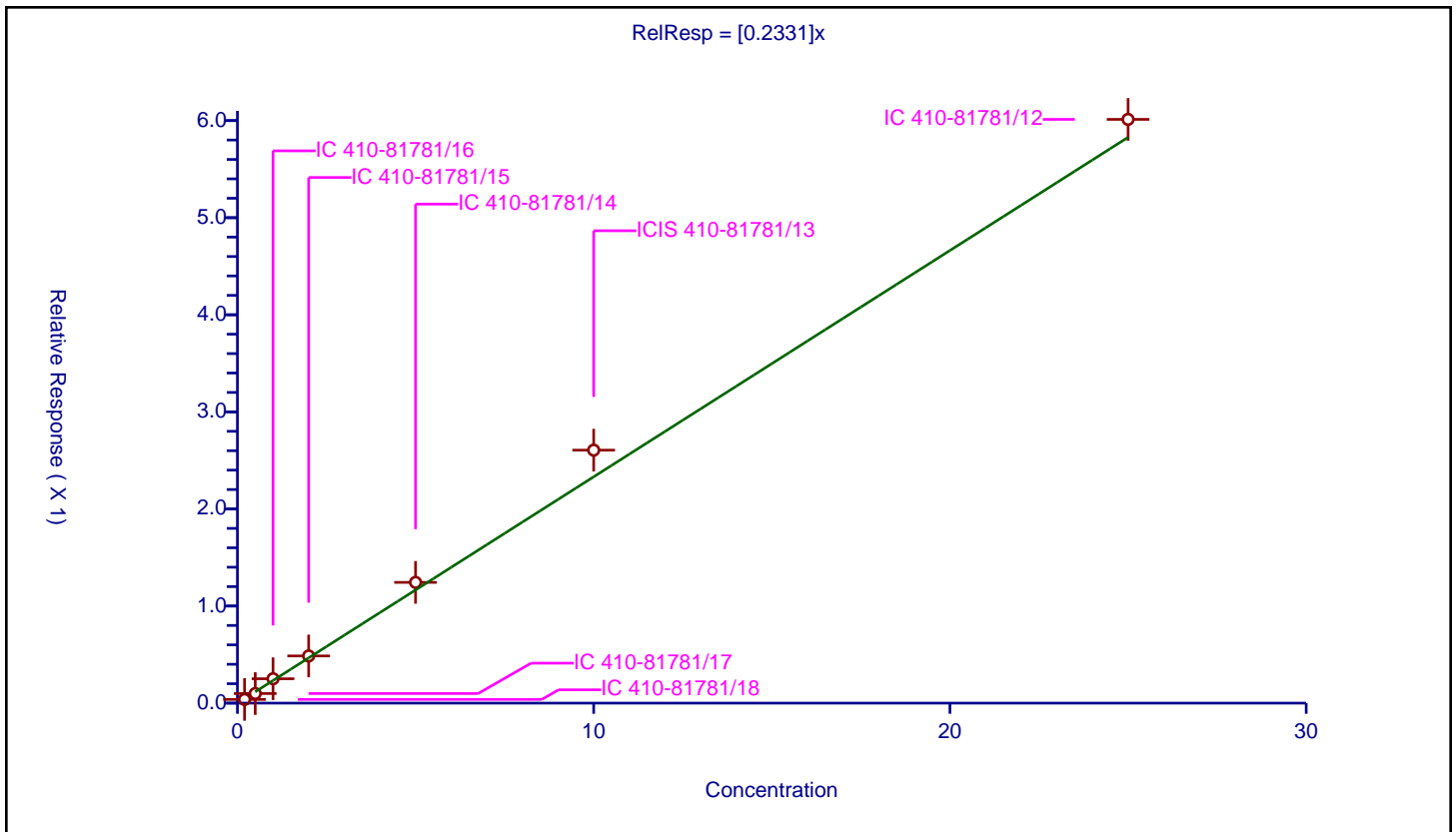
/ 1,1,2-Trichloro-1,2,2-trifluoroethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2331

Error Coefficients	
Standard Error:	442000
Relative Standard Error:	11.9
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.983

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-81781/18	0.2	0.038	10.0	1648701.0	0.189998	Y
2	IC 410-81781/17	0.5	0.098872	10.0	1401915.0	0.197744	Y
3	IC 410-81781/16	1.0	0.251244	10.0	1816799.0	0.251244	Y
4	IC 410-81781/15	2.0	0.485947	10.0	1845881.0	0.242973	Y
5	IC 410-81781/14	5.0	1.243684	10.0	1565149.0	0.248737	Y
6	ICIS 410-81781/13	10.0	2.60572	10.0	1641765.0	0.260572	Y
7	IC 410-81781/12	25.0	6.012524	10.0	1612687.0	0.240501	Y



Calibration

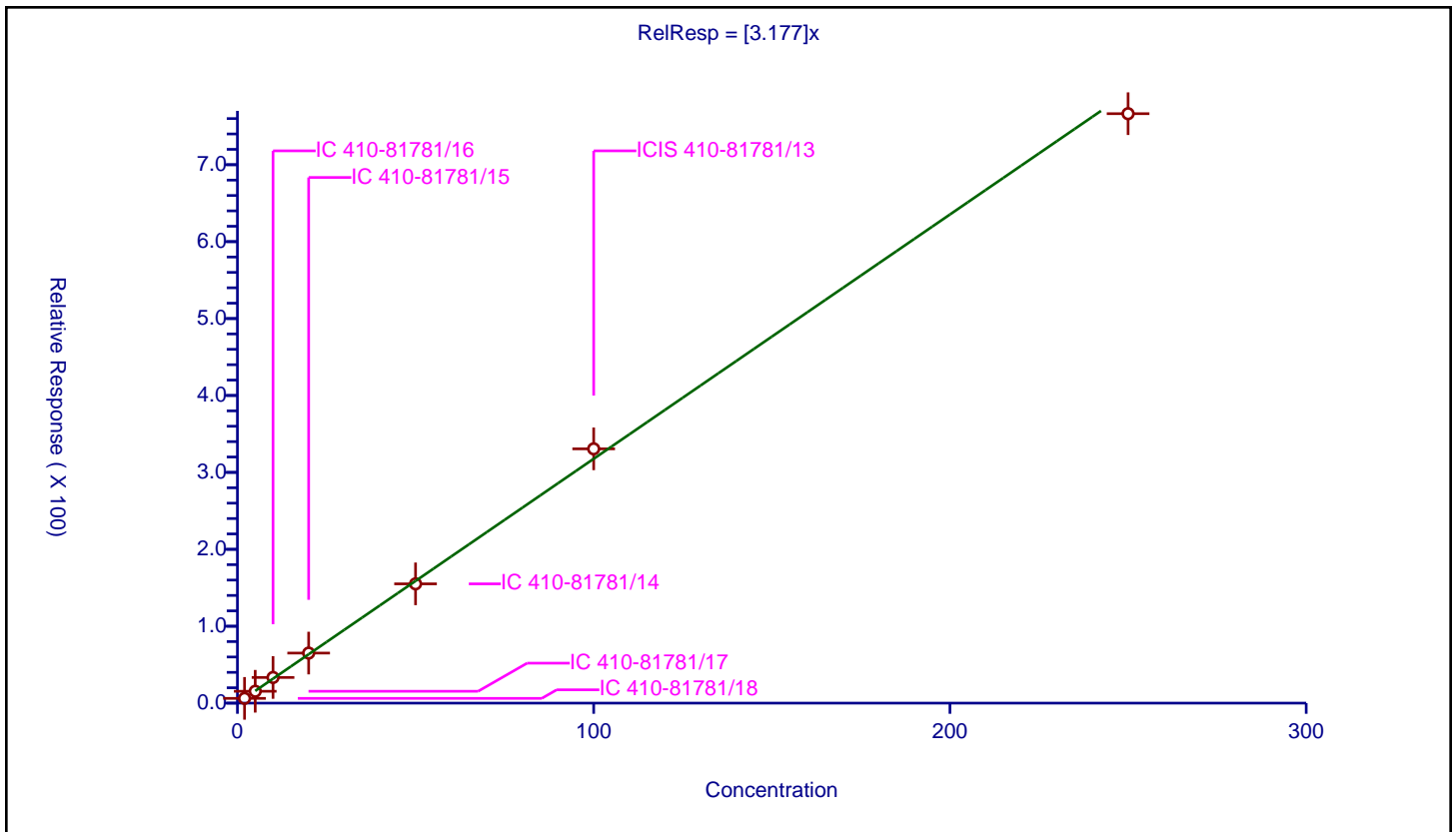
/ Acetone

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	3.177

Error Coefficients	
Standard Error:	662000
Relative Standard Error:	3.7
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-81781/18	2.0	6.168867	50.0	98527.0	3.084434	Y
2	IC 410-81781/17	5.0	15.440792	50.0	107080.0	3.088158	Y
3	IC 410-81781/16	10.0	33.358147	50.0	100749.0	3.335815	Y
4	IC 410-81781/15	20.0	65.083147	50.0	101567.0	3.254157	Y
5	IC 410-81781/14	50.0	155.084278	50.0	106849.0	3.101686	Y
6	ICIS 410-81781/13	100.0	330.622926	50.0	97347.0	3.306229	Y
7	IC 410-81781/12	250.0	766.377508	50.0	94239.0	3.06551	Y



Calibration

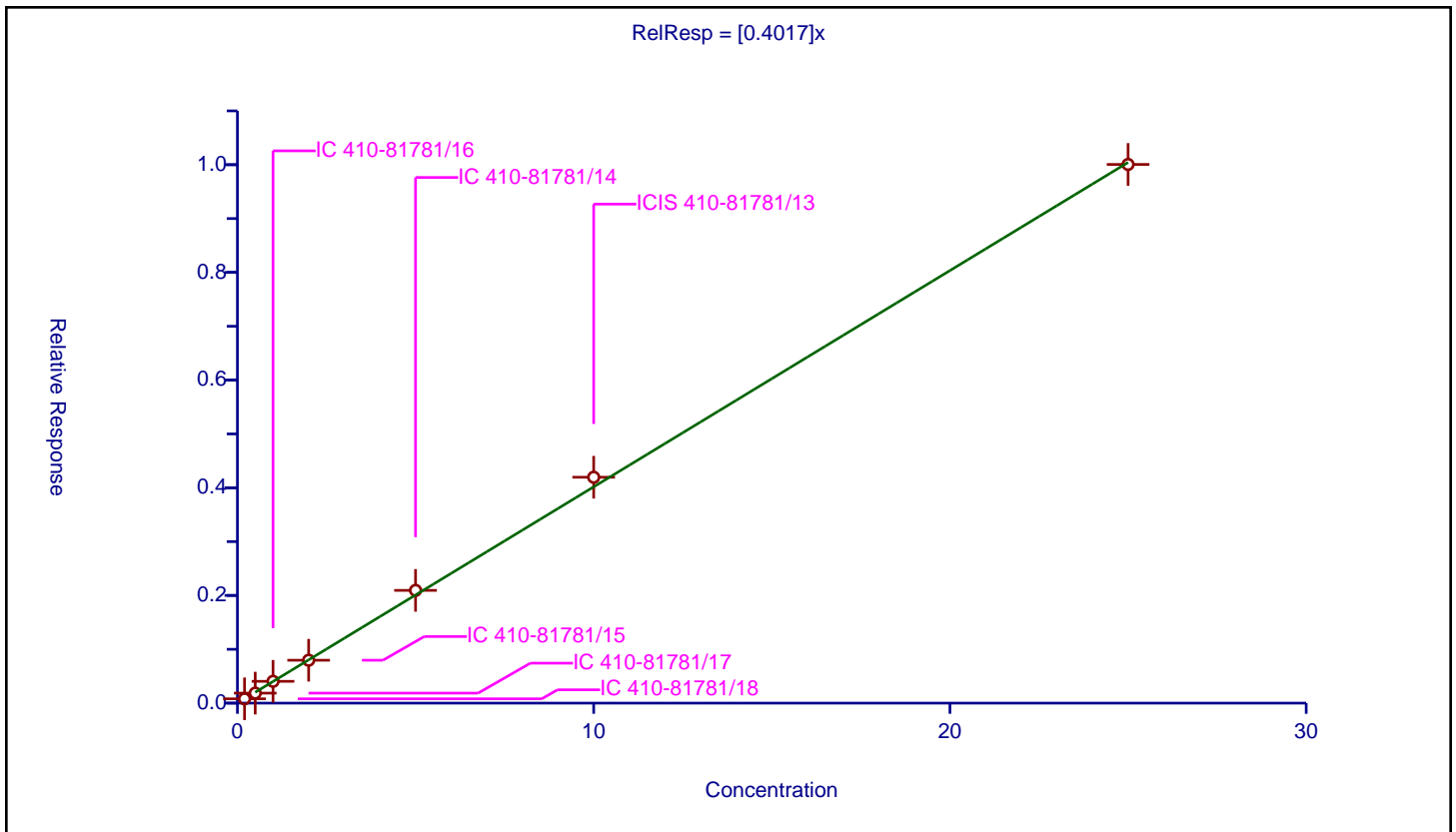
/ Iodomethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4017

Error Coefficients	
Standard Error:	732000
Relative Standard Error:	4.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-81781/18	0.2	0.079729	10.0	1648701.0	0.398647	Y
2	IC 410-81781/17	0.5	0.18576	10.0	1401915.0	0.37152	Y
3	IC 410-81781/16	1.0	0.404838	10.0	1816799.0	0.404838	Y
4	IC 410-81781/15	2.0	0.796915	10.0	1845881.0	0.398457	Y
5	IC 410-81781/14	5.0	2.094075	10.0	1565149.0	0.418815	Y
6	ICIS 410-81781/13	10.0	4.195412	10.0	1641765.0	0.419541	Y
7	IC 410-81781/12	25.0	10.004967	10.0	1612687.0	0.400199	Y



Calibration

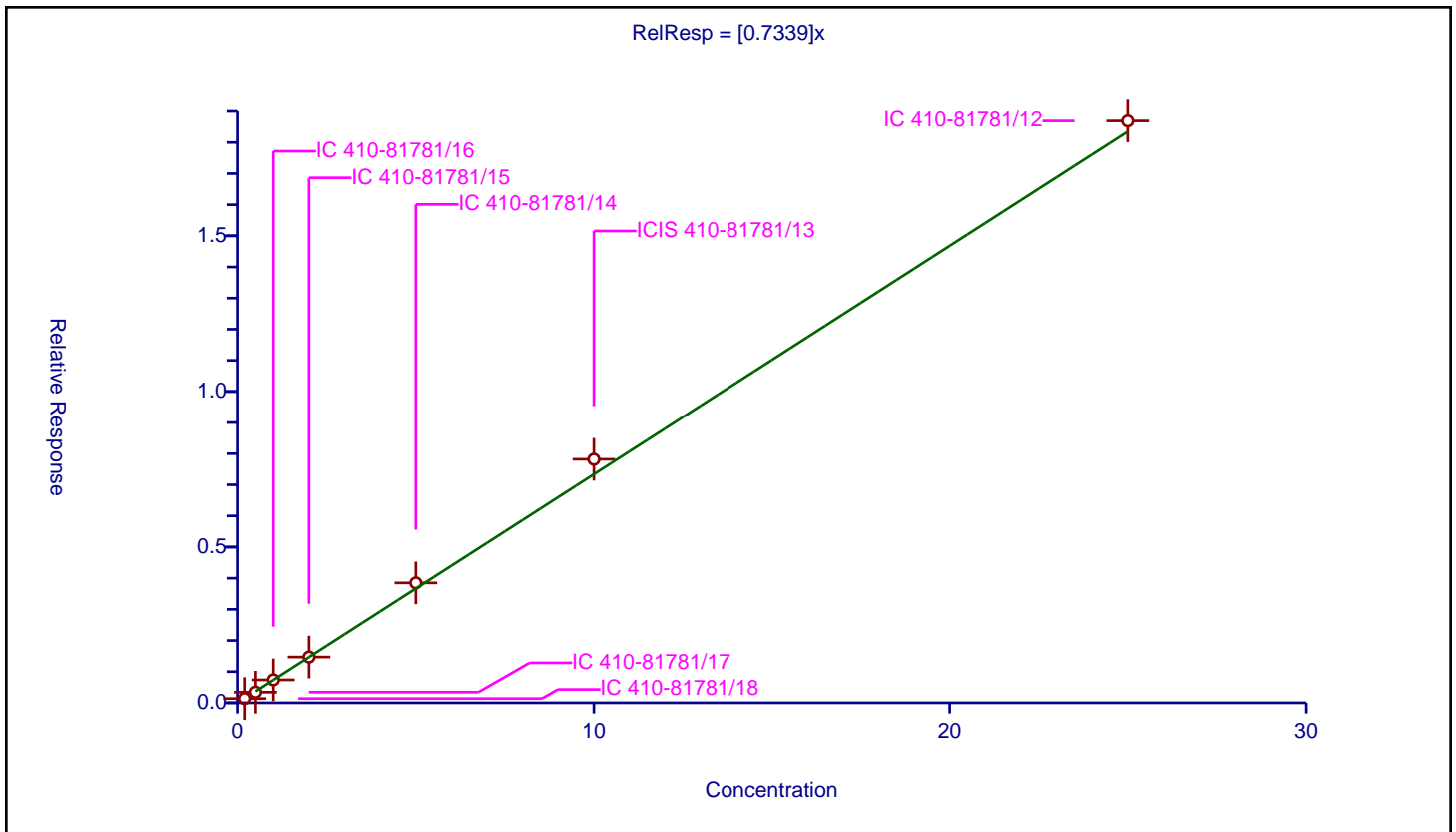
/ Carbon disulfide

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.7339

Error Coefficients	
Standard Error:	1370000
Relative Standard Error:	5.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-81781/18	0.2	0.137011	10.0	1648701.0	0.685054	Y
2	IC 410-81781/17	0.5	0.340984	10.0	1401915.0	0.681967	Y
3	IC 410-81781/16	1.0	0.736179	10.0	1816799.0	0.736179	Y
4	IC 410-81781/15	2.0	1.468892	10.0	1845881.0	0.734446	Y
5	IC 410-81781/14	5.0	3.850087	10.0	1565149.0	0.770017	Y
6	ICIS 410-81781/13	10.0	7.820784	10.0	1641765.0	0.782078	Y
7	IC 410-81781/12	25.0	18.692325	10.0	1612687.0	0.747693	Y



Calibration

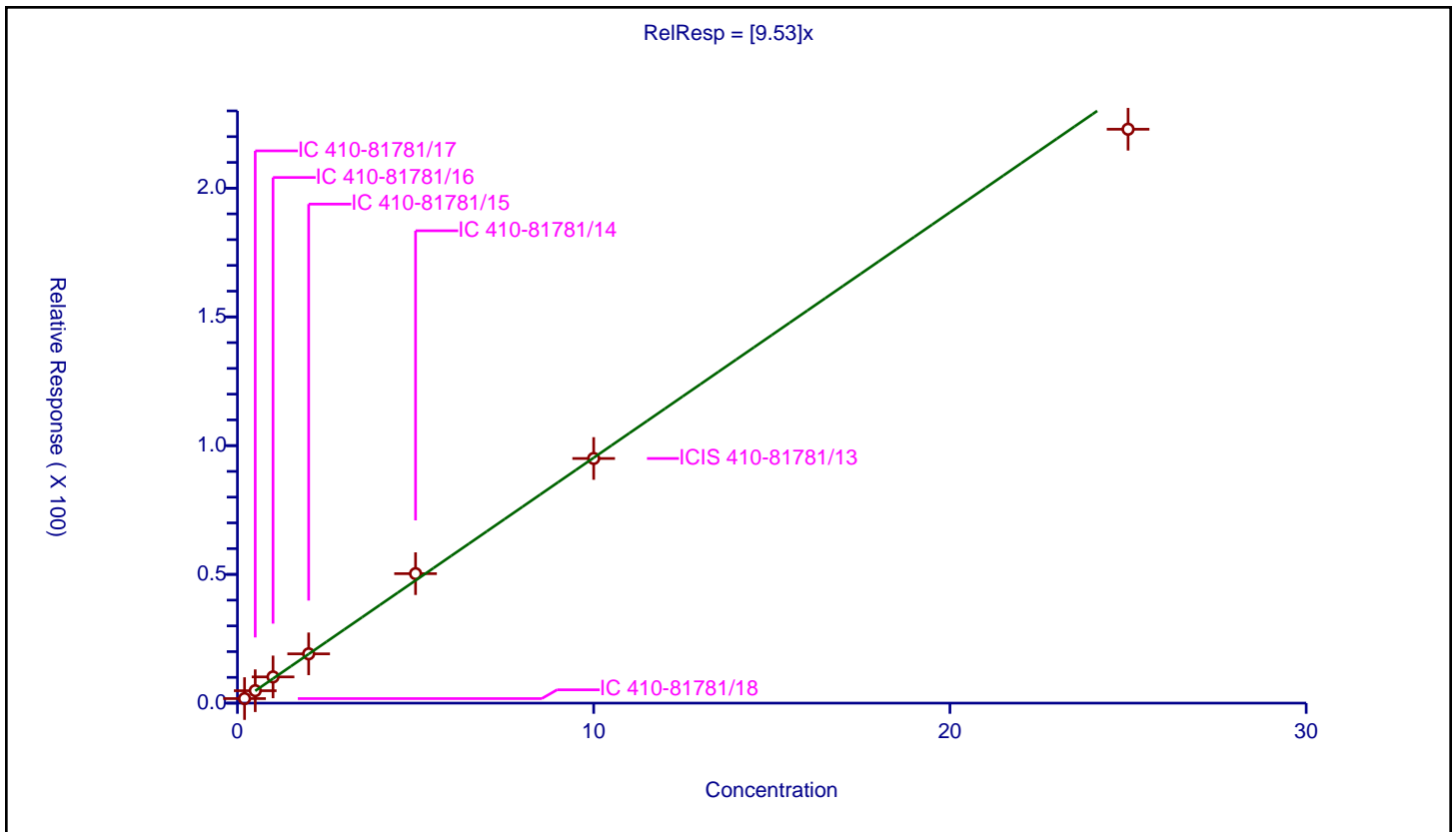
/ Methyl acetate

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	9.53

Error Coefficients	
Standard Error:	193000
Relative Standard Error:	5.4
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-81781/18	0.2	1.764491	50.0	98527.0	8.822455	Y
2	IC 410-81781/17	0.5	4.829567	50.0	107080.0	9.659133	Y
3	IC 410-81781/16	1.0	10.182731	50.0	100749.0	10.182731	Y
4	IC 410-81781/15	2.0	19.143521	50.0	101567.0	9.571761	Y
5	IC 410-81781/14	5.0	50.289193	50.0	106849.0	10.057839	Y
6	ICIS 410-81781/13	10.0	95.010118	50.0	97347.0	9.501012	Y
7	IC 410-81781/12	25.0	222.876941	50.0	94239.0	8.915078	Y



Calibration

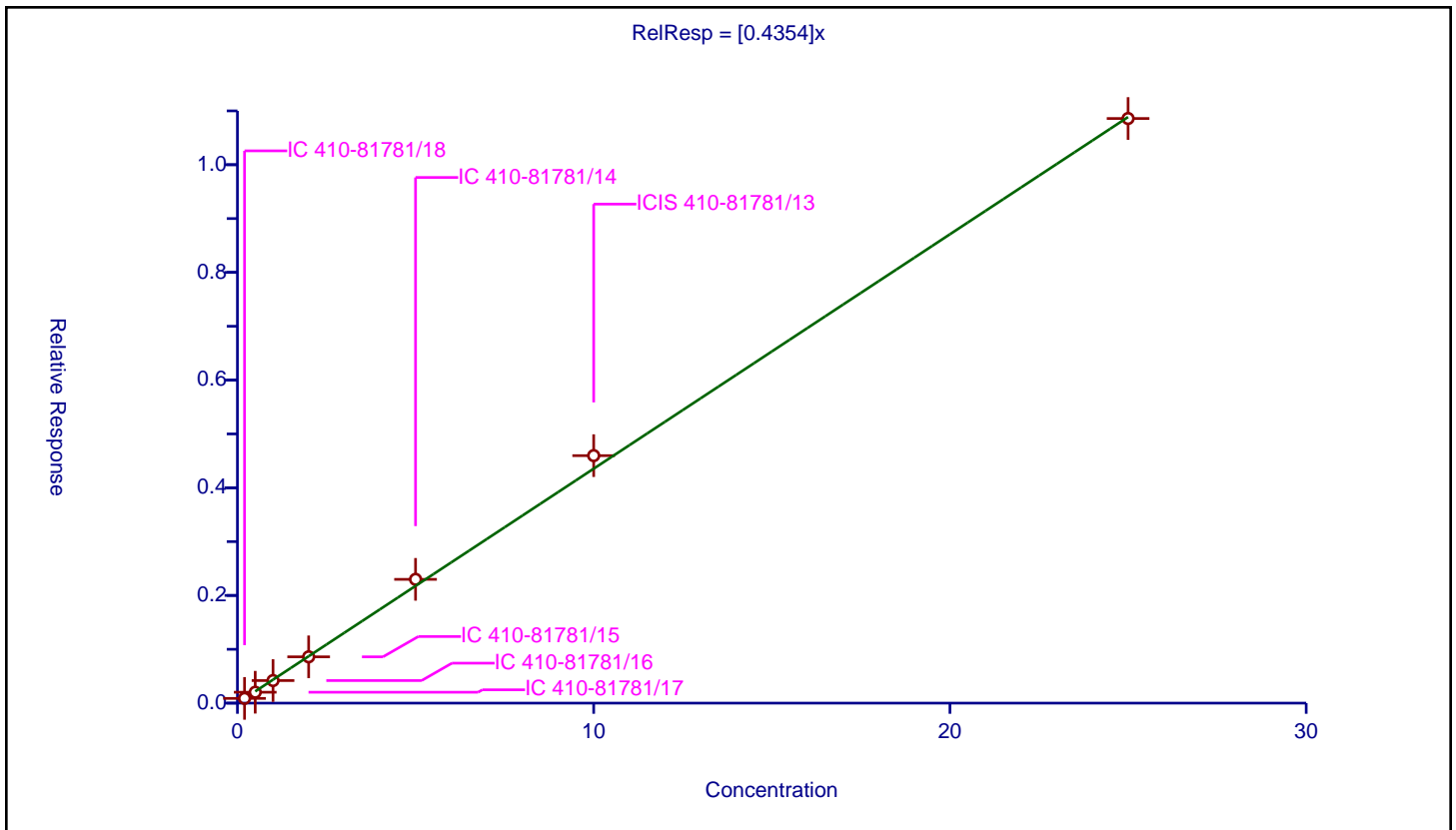
/ 3-Chloro-1-propene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4354

Error Coefficients	
Standard Error:	796000
Relative Standard Error:	4.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-81781/18	0.2	0.087978	10.0	1648701.0	0.439892	Y
2	IC 410-81781/17	0.5	0.202416	10.0	1401915.0	0.404832	Y
3	IC 410-81781/16	1.0	0.419402	10.0	1816799.0	0.419402	Y
4	IC 410-81781/15	2.0	0.860001	10.0	1845881.0	0.430001	Y
5	IC 410-81781/14	5.0	2.298874	10.0	1565149.0	0.459775	Y
6	ICIS 410-81781/13	10.0	4.59701	10.0	1641765.0	0.459701	Y
7	IC 410-81781/12	25.0	10.858759	10.0	1612687.0	0.43435	Y



Calibration

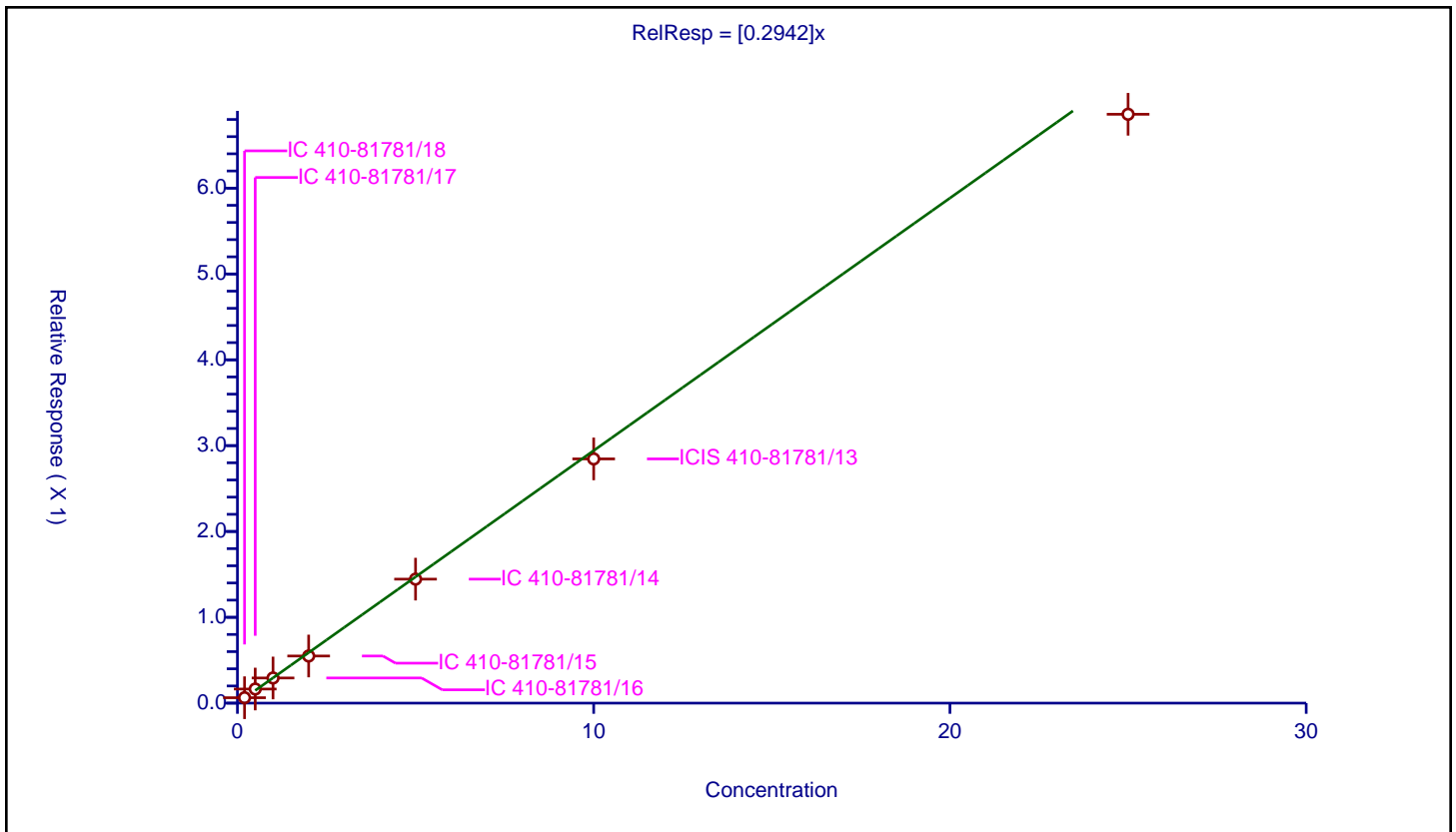
/ Methylene Chloride

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2942

Error Coefficients	
Standard Error:	501000
Relative Standard Error:	7.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-81781/18	0.2	0.063038	10.0	1648701.0	0.315188	Y
2	IC 410-81781/17	0.5	0.164439	10.0	1401915.0	0.328879	Y
3	IC 410-81781/16	1.0	0.292944	10.0	1816799.0	0.292944	Y
4	IC 410-81781/15	2.0	0.549049	10.0	1845881.0	0.274525	Y
5	IC 410-81781/14	5.0	1.444731	10.0	1565149.0	0.288946	Y
6	ICIS 410-81781/13	10.0	2.845224	10.0	1641765.0	0.284522	Y
7	IC 410-81781/12	25.0	6.860742	10.0	1612687.0	0.27443	Y



Calibration

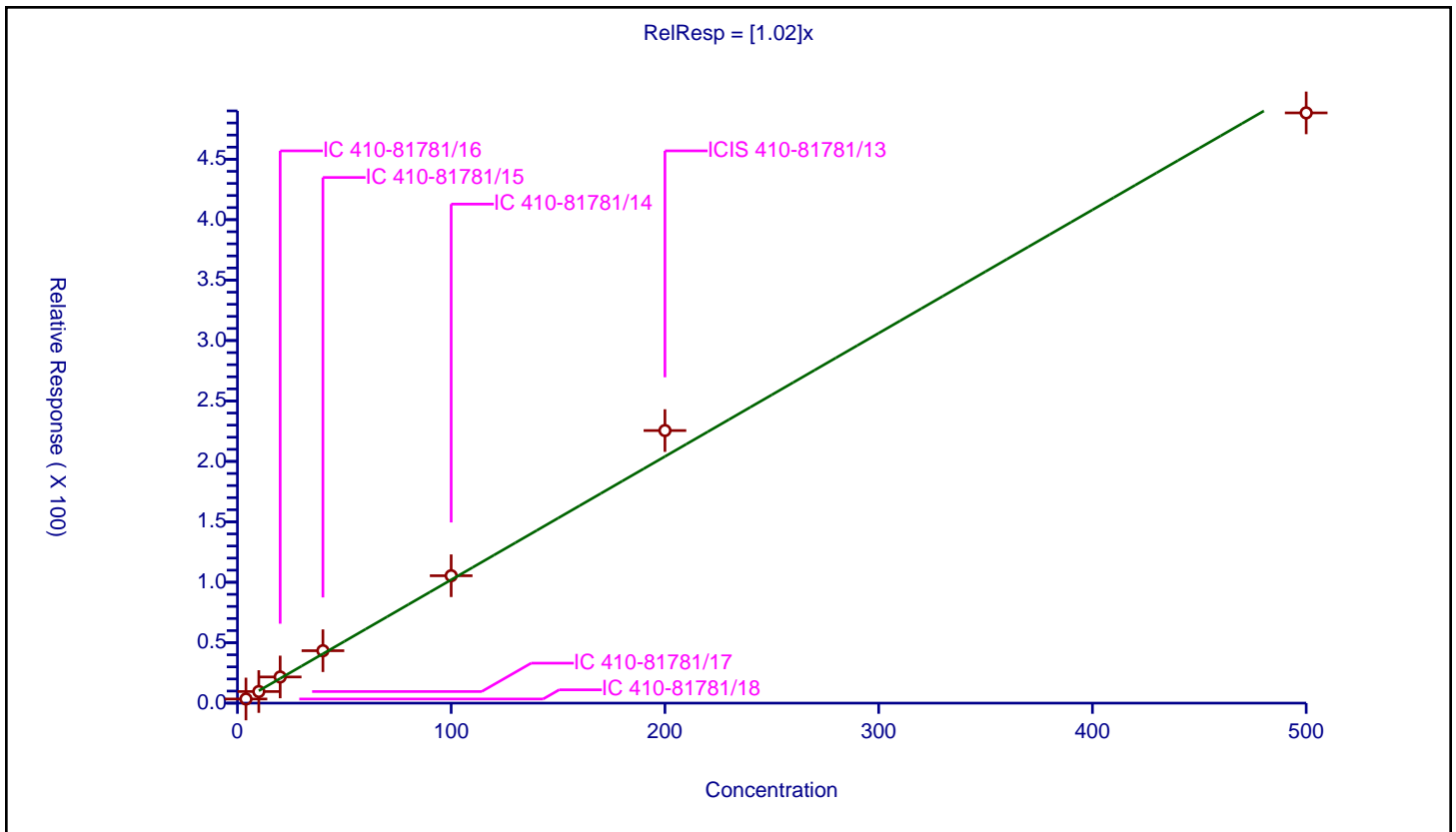
/ 2-Methyl-2-propanol

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.02

Error Coefficients	
Standard Error:	428000
Relative Standard Error:	9.2
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-81781/18	4.0	3.425964	50.0	98527.0	0.856491	Y
2	IC 410-81781/17	10.0	9.600766	50.0	107080.0	0.960077	Y
3	IC 410-81781/16	20.0	21.660265	50.0	100749.0	1.083013	Y
4	IC 410-81781/15	40.0	43.366448	50.0	101567.0	1.084161	Y
5	IC 410-81781/14	100.0	105.414183	50.0	106849.0	1.054142	Y
6	ICIS 410-81781/13	200.0	225.52056	50.0	97347.0	1.127603	Y
7	IC 410-81781/12	500.0	488.350364	50.0	94239.0	0.976701	Y



Calibration

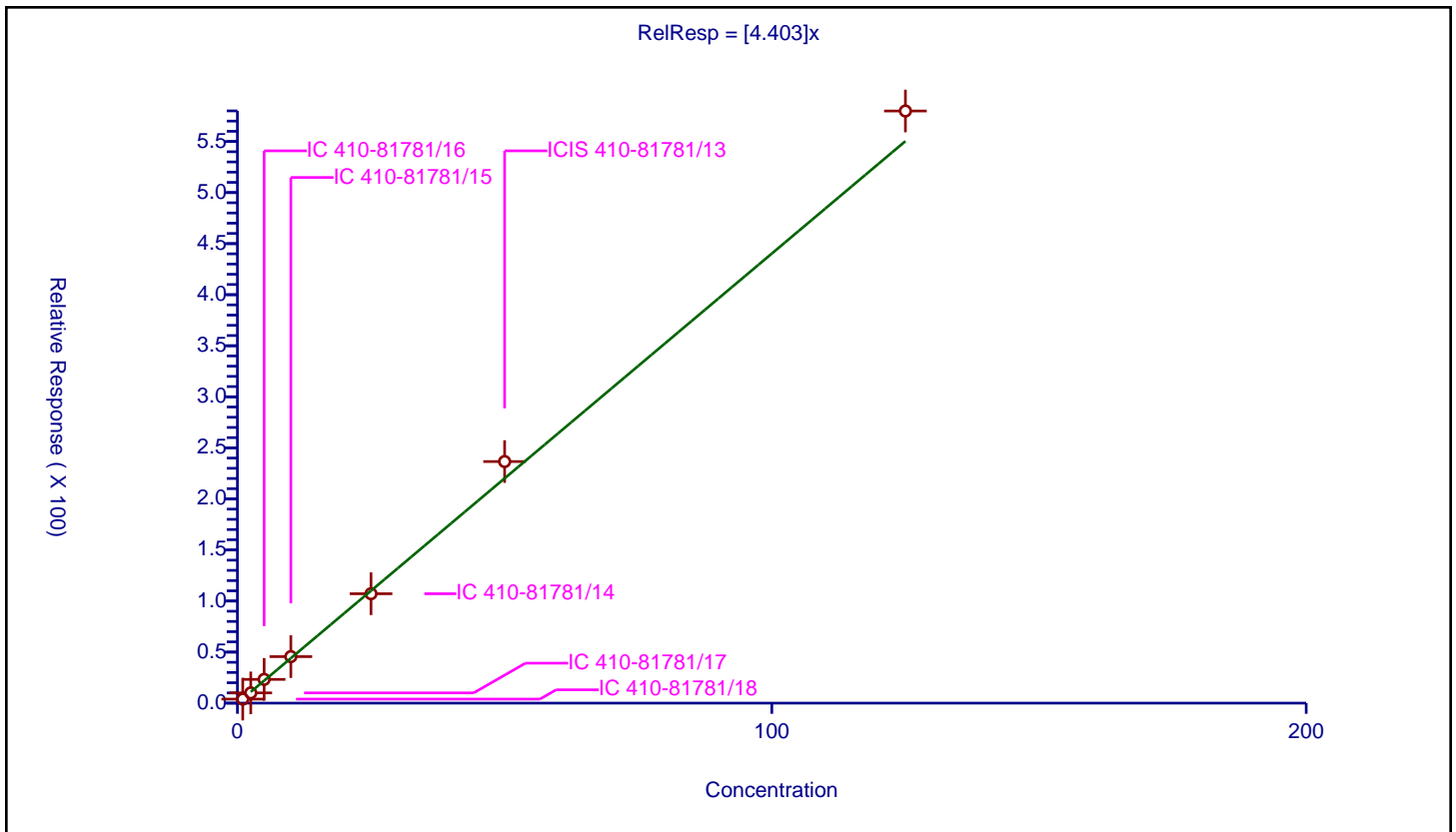
/ Acrylonitrile

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	4.403

Error Coefficients	
Standard Error:	495000
Relative Standard Error:	7.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-81781/18	1.0	3.949679	50.0	98527.0	3.949679	Y
2	IC 410-81781/17	2.5	10.021012	50.0	107080.0	4.008405	Y
3	IC 410-81781/16	5.0	23.251347	50.0	100749.0	4.650269	Y
4	IC 410-81781/15	10.0	45.551213	50.0	101567.0	4.555121	Y
5	IC 410-81781/14	25.0	107.136239	50.0	106849.0	4.28545	Y
6	ICIS 410-81781/13	50.0	236.58048	50.0	97347.0	4.73161	Y
7	IC 410-81781/12	125.0	579.8889	50.0	94239.0	4.639111	Y



Calibration

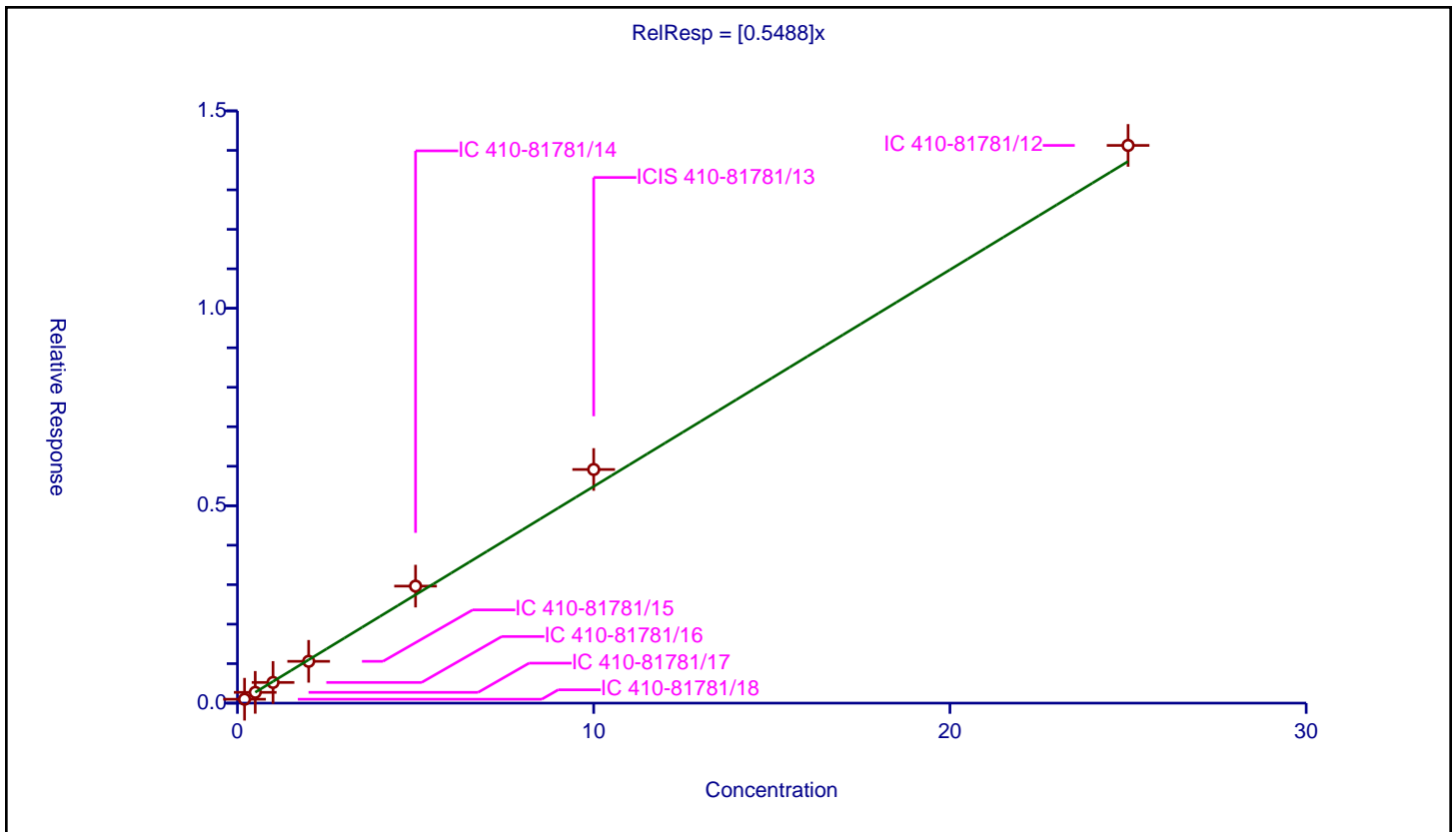
/ Methyl tert-butyl ether

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.5488

Error Coefficients	
Standard Error:	1030000
Relative Standard Error:	6.7
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-81781/18	0.2	0.098708	10.0	1648701.0	0.49354	Y
2	IC 410-81781/17	0.5	0.272977	10.0	1401915.0	0.545953	Y
3	IC 410-81781/16	1.0	0.523487	10.0	1816799.0	0.523487	Y
4	IC 410-81781/15	2.0	1.058579	10.0	1845881.0	0.529289	Y
5	IC 410-81781/14	5.0	2.963692	10.0	1565149.0	0.592738	Y
6	ICIS 410-81781/13	10.0	5.917625	10.0	1641765.0	0.591763	Y
7	IC 410-81781/12	25.0	14.125444	10.0	1612687.0	0.565018	Y



Calibration

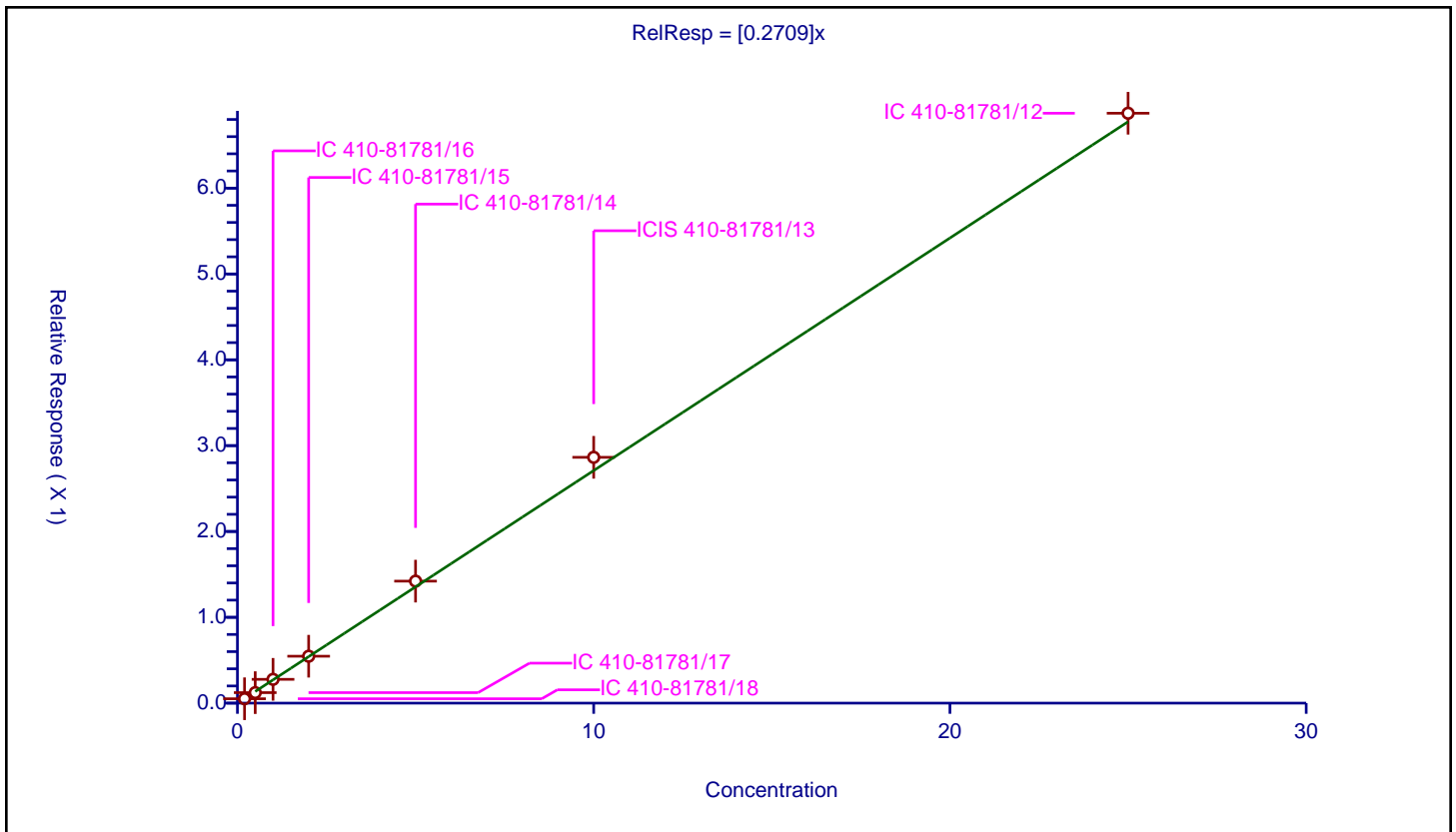
/ trans-1,2-Dichloroethene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2709

Error Coefficients	
Standard Error:	502000
Relative Standard Error:	5.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-81781/18	0.2	0.051113	10.0	1648701.0	0.255565	Y
2	IC 410-81781/17	0.5	0.122561	10.0	1401915.0	0.245122	Y
3	IC 410-81781/16	1.0	0.277163	10.0	1816799.0	0.277163	Y
4	IC 410-81781/15	2.0	0.54646	10.0	1845881.0	0.27323	Y
5	IC 410-81781/14	5.0	1.421245	10.0	1565149.0	0.284249	Y
6	ICIS 410-81781/13	10.0	2.863845	10.0	1641765.0	0.286384	Y
7	IC 410-81781/12	25.0	6.87266	10.0	1612687.0	0.274906	Y



Calibration

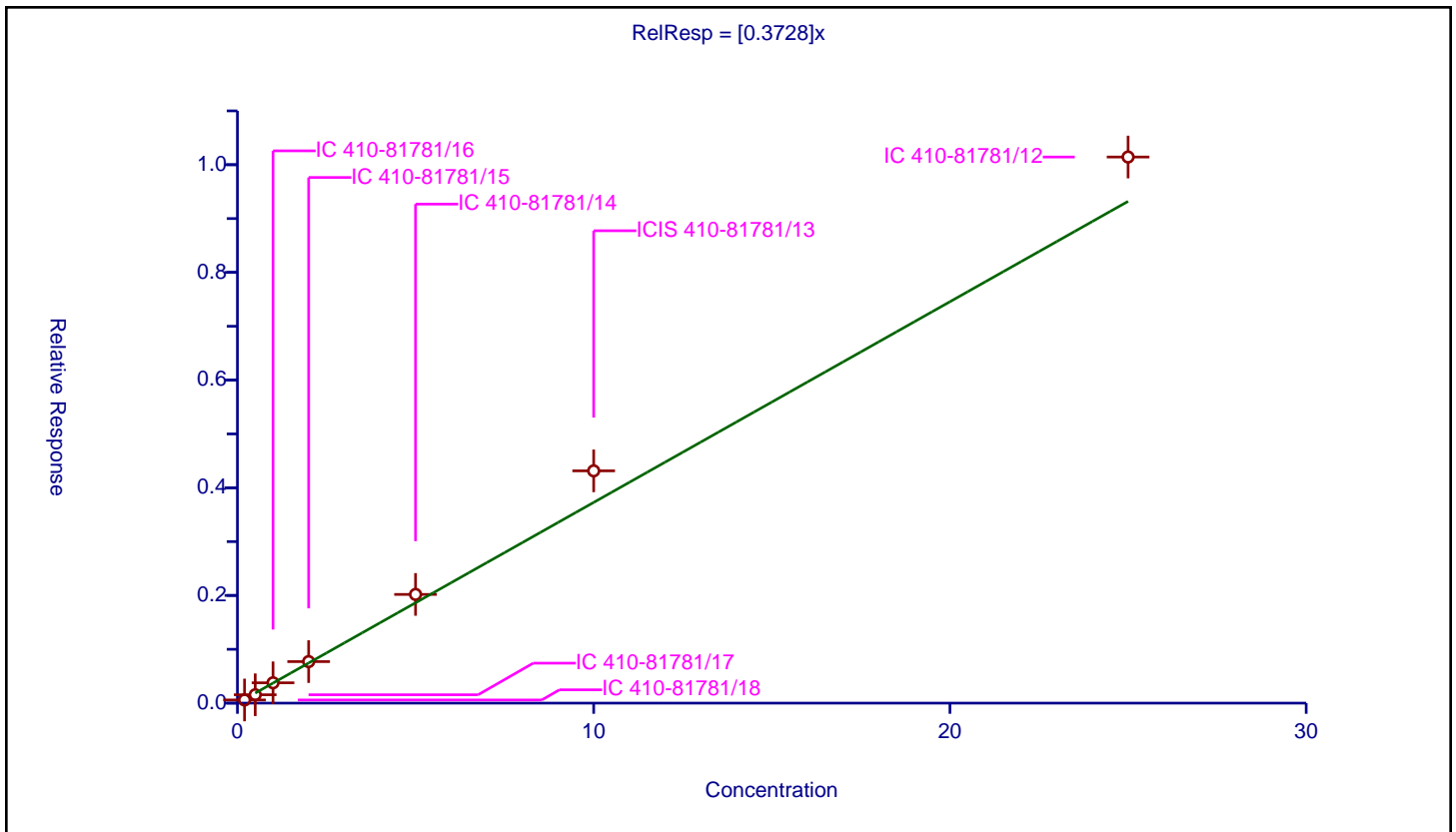
/ Hexane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3728

Error Coefficients	
Standard Error:	742000
Relative Standard Error:	13.7
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.978

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-81781/18	0.2	0.058713	10.0	1648701.0	0.293564	Y
2	IC 410-81781/17	0.5	0.155716	10.0	1401915.0	0.311431	Y
3	IC 410-81781/16	1.0	0.377802	10.0	1816799.0	0.377802	Y
4	IC 410-81781/15	2.0	0.771534	10.0	1845881.0	0.385767	Y
5	IC 410-81781/14	5.0	2.01899	10.0	1565149.0	0.403798	Y
6	ICIS 410-81781/13	10.0	4.314345	10.0	1641765.0	0.431434	Y
7	IC 410-81781/12	25.0	10.143233	10.0	1612687.0	0.405729	Y



Calibration

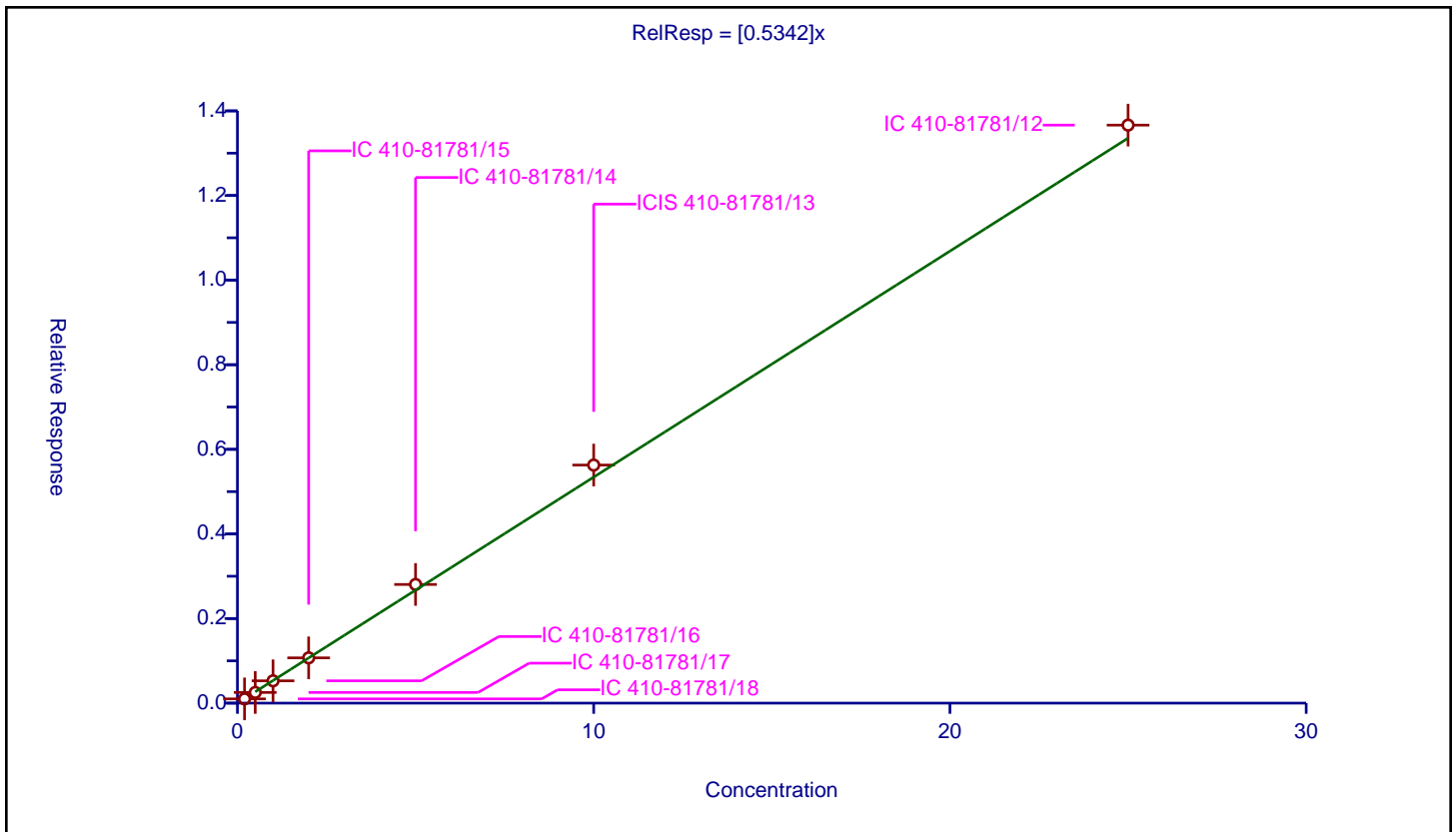
/ 1,1-Dichloroethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.5342

Error Coefficients	
Standard Error:	996000
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 410-81781/18	0.2	0.100412	10.0	1648701.0	0.502062	Y
2	IC 410-81781/17	0.5	0.252526	10.0	1401915.0	0.505052	Y
3	IC 410-81781/16	1.0	0.527191	10.0	1816799.0	0.527191	Y
4	IC 410-81781/15	2.0	1.070015	10.0	1845881.0	0.535007	Y
5	IC 410-81781/14	5.0	2.805452	10.0	1565149.0	0.56109	Y
6	ICIS 410-81781/13	10.0	5.627913	10.0	1641765.0	0.562791	Y
7	IC 410-81781/12	25.0	13.663606	10.0	1612687.0	0.546544	Y



Calibration

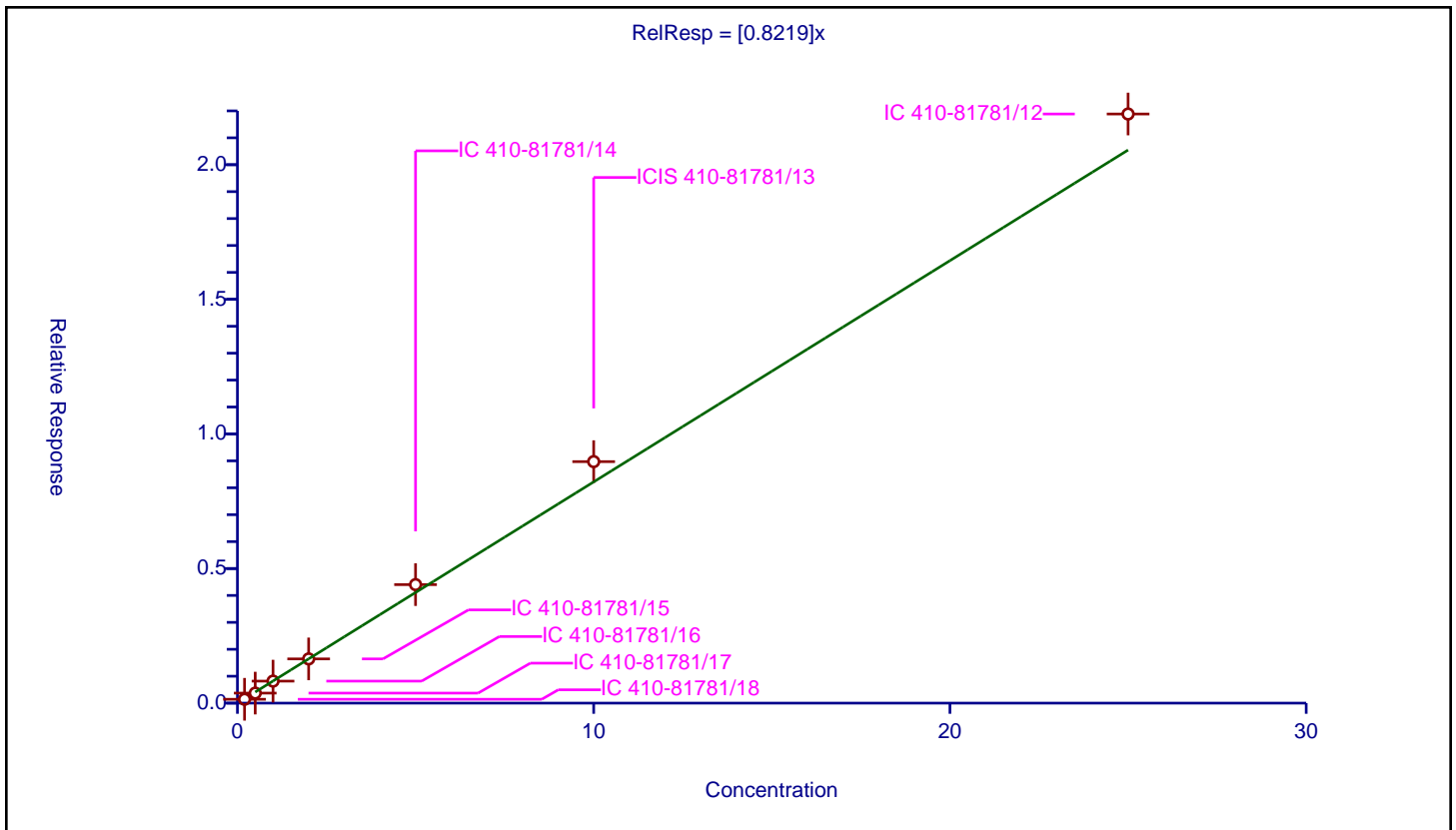
/ Isopropyl ether

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.8219

Error Coefficients	
Standard Error:	1590000
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 410-81781/18	0.2	0.143301	10.0	1648701.0	0.716503	Y
2	IC 410-81781/17	0.5	0.372312	10.0	1401915.0	0.744624	Y
3	IC 410-81781/16	1.0	0.817641	10.0	1816799.0	0.817641	Y
4	IC 410-81781/15	2.0	1.642484	10.0	1845881.0	0.821242	Y
5	IC 410-81781/14	5.0	4.402373	10.0	1565149.0	0.880475	Y
6	ICIS 410-81781/13	10.0	8.971522	10.0	1641765.0	0.897152	Y
7	IC 410-81781/12	25.0	21.883943	10.0	1612687.0	0.875358	Y



Calibration

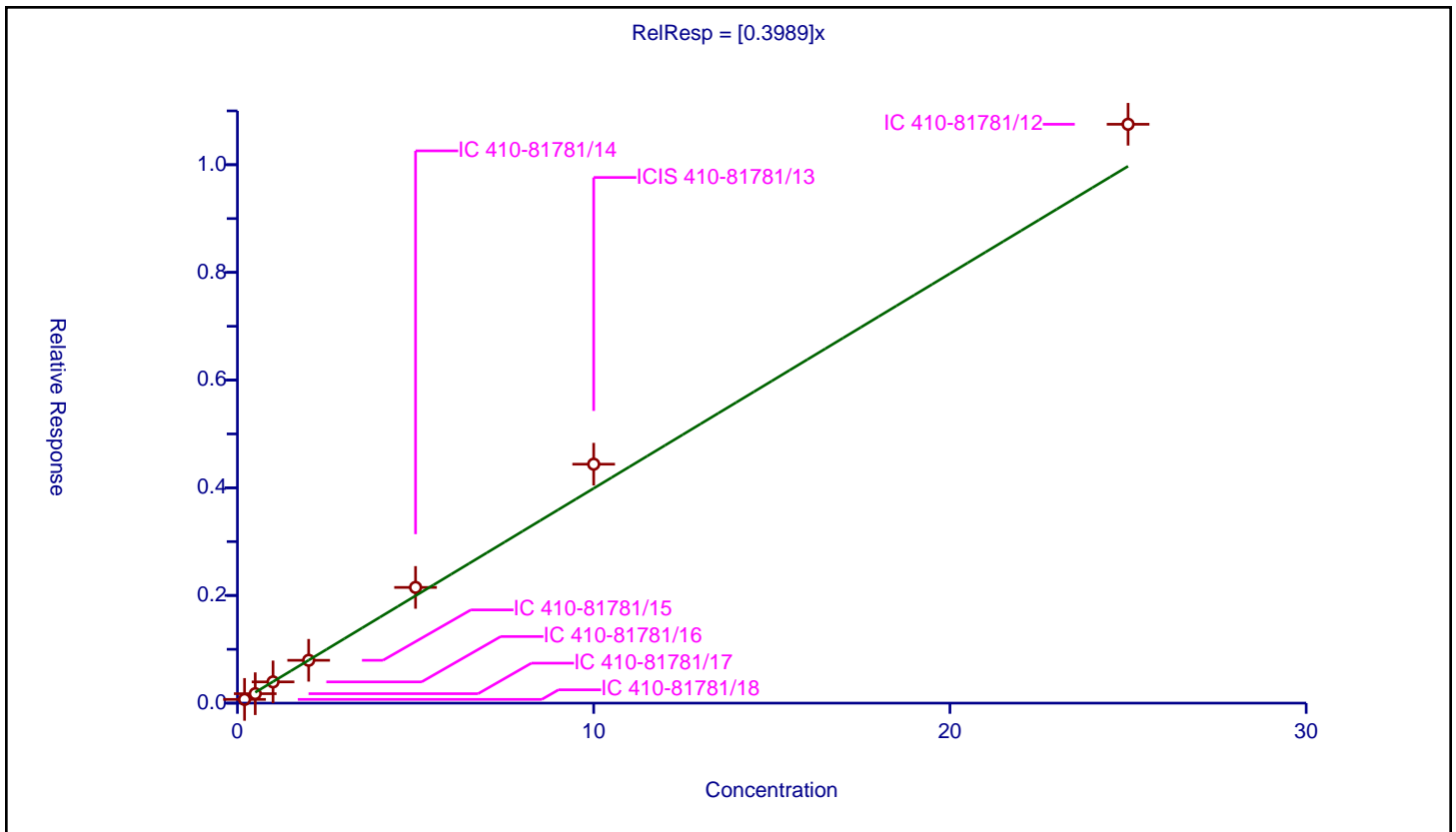
/ 2-Chloro-1,3-butadiene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3989

Error Coefficients	
Standard Error:	783000
Relative Standard Error:	9.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-81781/18	0.2	0.069145	10.0	1648701.0	0.345727	Y
2	IC 410-81781/17	0.5	0.175332	10.0	1401915.0	0.350663	Y
3	IC 410-81781/16	1.0	0.394397	10.0	1816799.0	0.394397	Y
4	IC 410-81781/15	2.0	0.79562	10.0	1845881.0	0.39781	Y
5	IC 410-81781/14	5.0	2.149348	10.0	1565149.0	0.42987	Y
6	ICIS 410-81781/13	10.0	4.438217	10.0	1641765.0	0.443822	Y
7	IC 410-81781/12	25.0	10.751603	10.0	1612687.0	0.430064	Y



Calibration

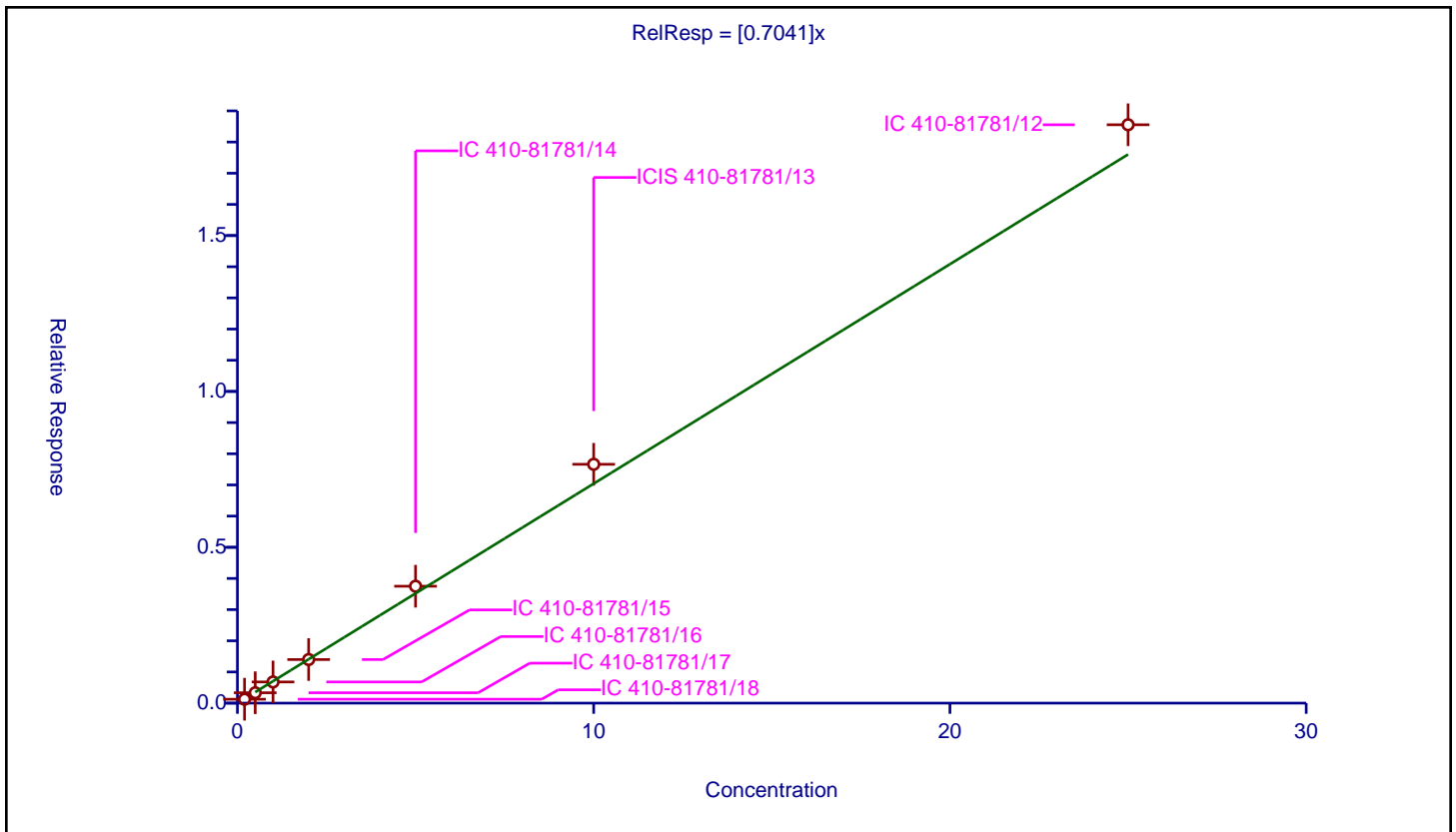
/ Tert-butyl ethyl ether

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.7041

Error Coefficients	
Standard Error:	1350000
Relative Standard Error:	7.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-81781/18	0.2	0.12525	10.0	1648701.0	0.626251	Y
2	IC 410-81781/17	0.5	0.332745	10.0	1401915.0	0.66549	Y
3	IC 410-81781/16	1.0	0.679475	10.0	1816799.0	0.679475	Y
4	IC 410-81781/15	2.0	1.397945	10.0	1845881.0	0.698972	Y
5	IC 410-81781/14	5.0	3.750914	10.0	1565149.0	0.750183	Y
6	ICIS 410-81781/13	10.0	7.661907	10.0	1641765.0	0.766191	Y
7	IC 410-81781/12	25.0	18.554654	10.0	1612687.0	0.742186	Y



Calibration

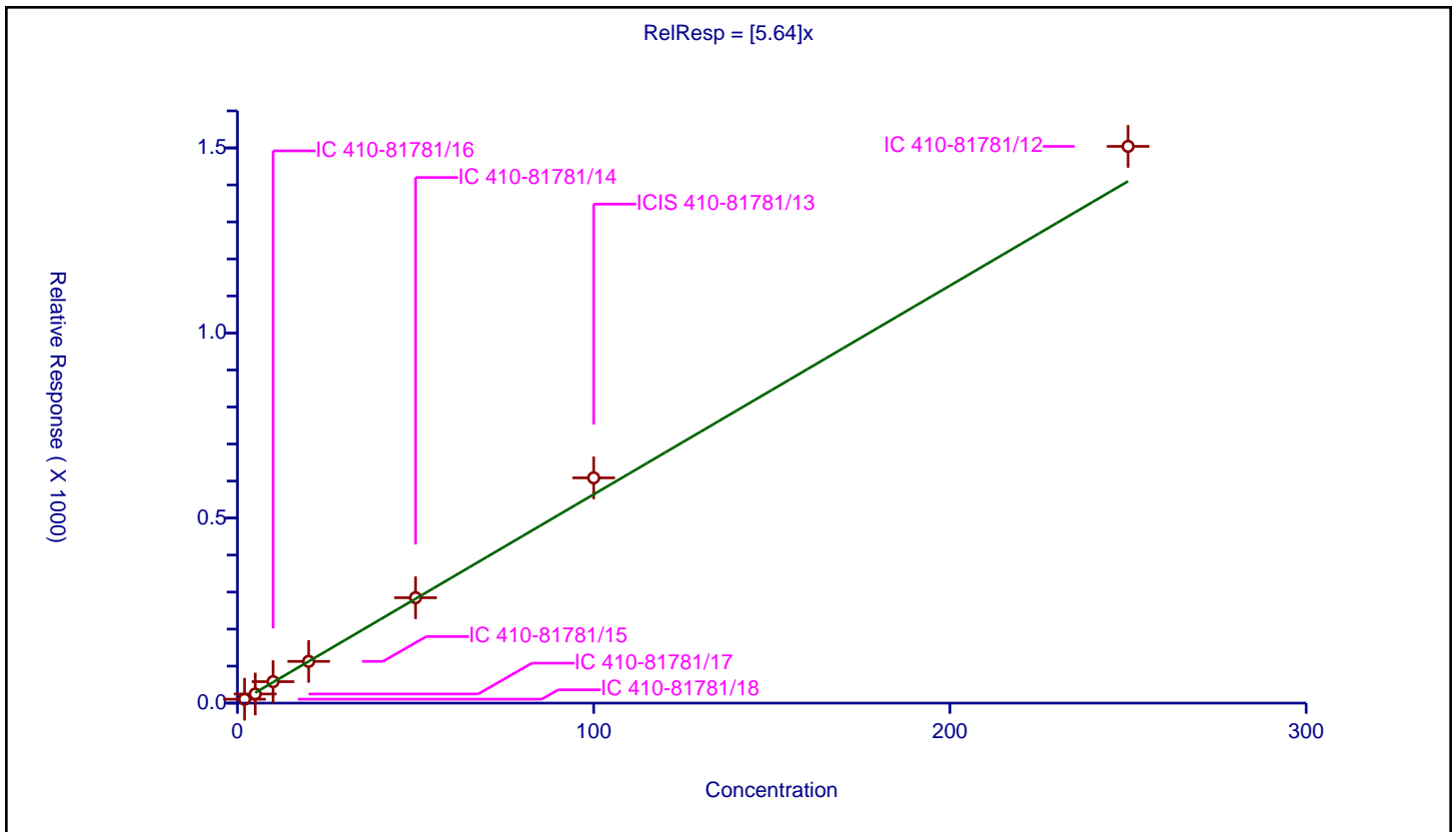
/ 2-Butanone (MEK)

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	5.64

Error Coefficients	
Standard Error:	1280000
Relative Standard Error:	7.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-81781/18	2.0	10.618917	50.0	98527.0	5.309458	Y
2	IC 410-81781/17	5.0	24.661468	50.0	107080.0	4.932294	Y
3	IC 410-81781/16	10.0	57.997598	50.0	100749.0	5.79976	Y
4	IC 410-81781/15	20.0	112.764973	50.0	101567.0	5.638249	Y
5	IC 410-81781/14	50.0	284.758865	50.0	106849.0	5.695177	Y
6	ICIS 410-81781/13	100.0	608.654093	50.0	97347.0	6.086541	Y
7	IC 410-81781/12	250.0	1504.136822	50.0	94239.0	6.016547	Y



Calibration

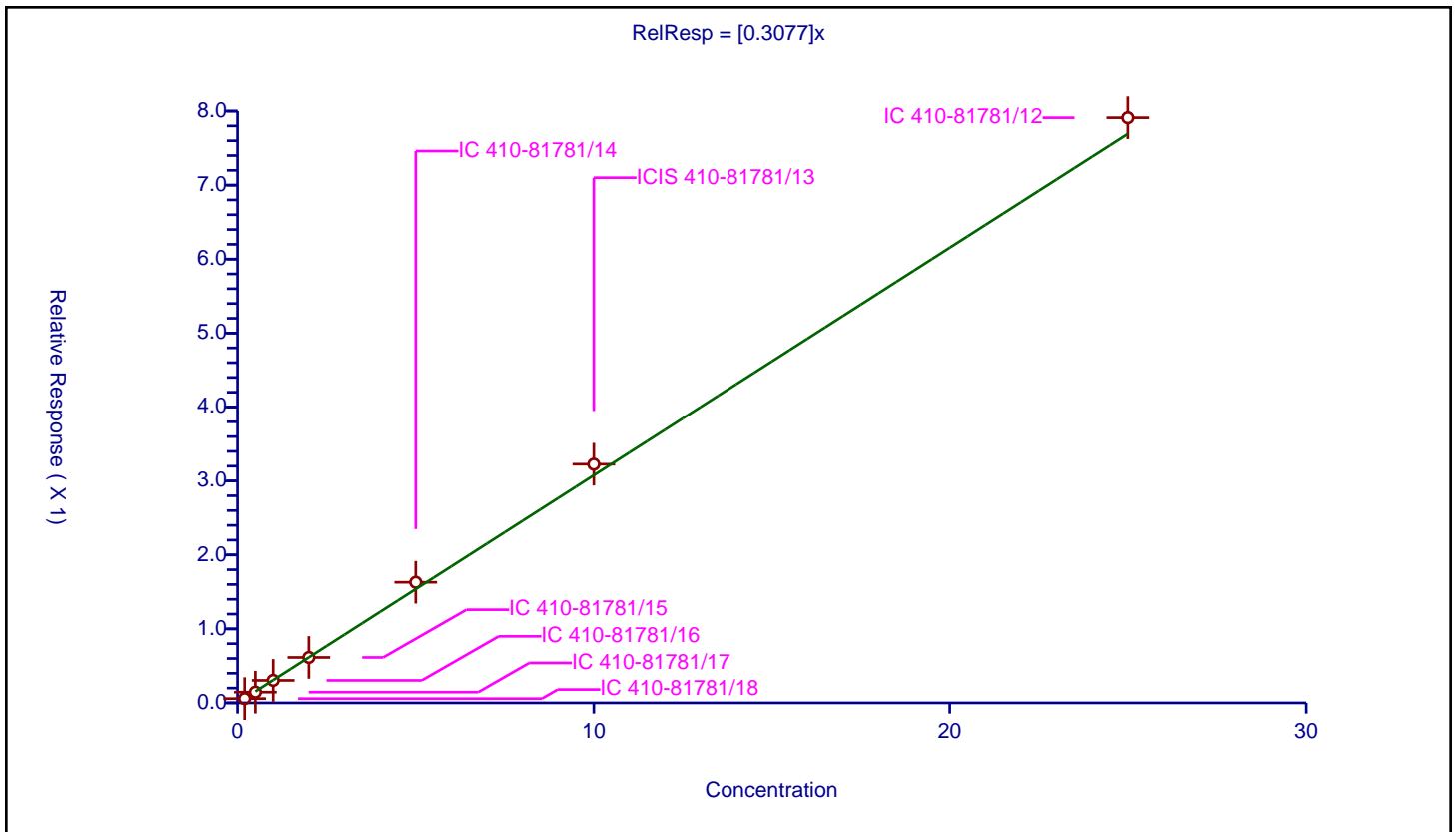
/ cis-1,2-Dichloroethene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3077

Error Coefficients	
Standard Error:	576000
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 410-81781/18	0.2	0.057597	10.0	1648701.0	0.287984	Y
2	IC 410-81781/17	0.5	0.145066	10.0	1401915.0	0.290132	Y
3	IC 410-81781/16	1.0	0.303782	10.0	1816799.0	0.303782	Y
4	IC 410-81781/15	2.0	0.613907	10.0	1845881.0	0.306954	Y
5	IC 410-81781/14	5.0	1.630228	10.0	1565149.0	0.326046	Y
6	ICIS 410-81781/13	10.0	3.226467	10.0	1641765.0	0.322647	Y
7	IC 410-81781/12	25.0	7.910766	10.0	1612687.0	0.316431	Y



Calibration

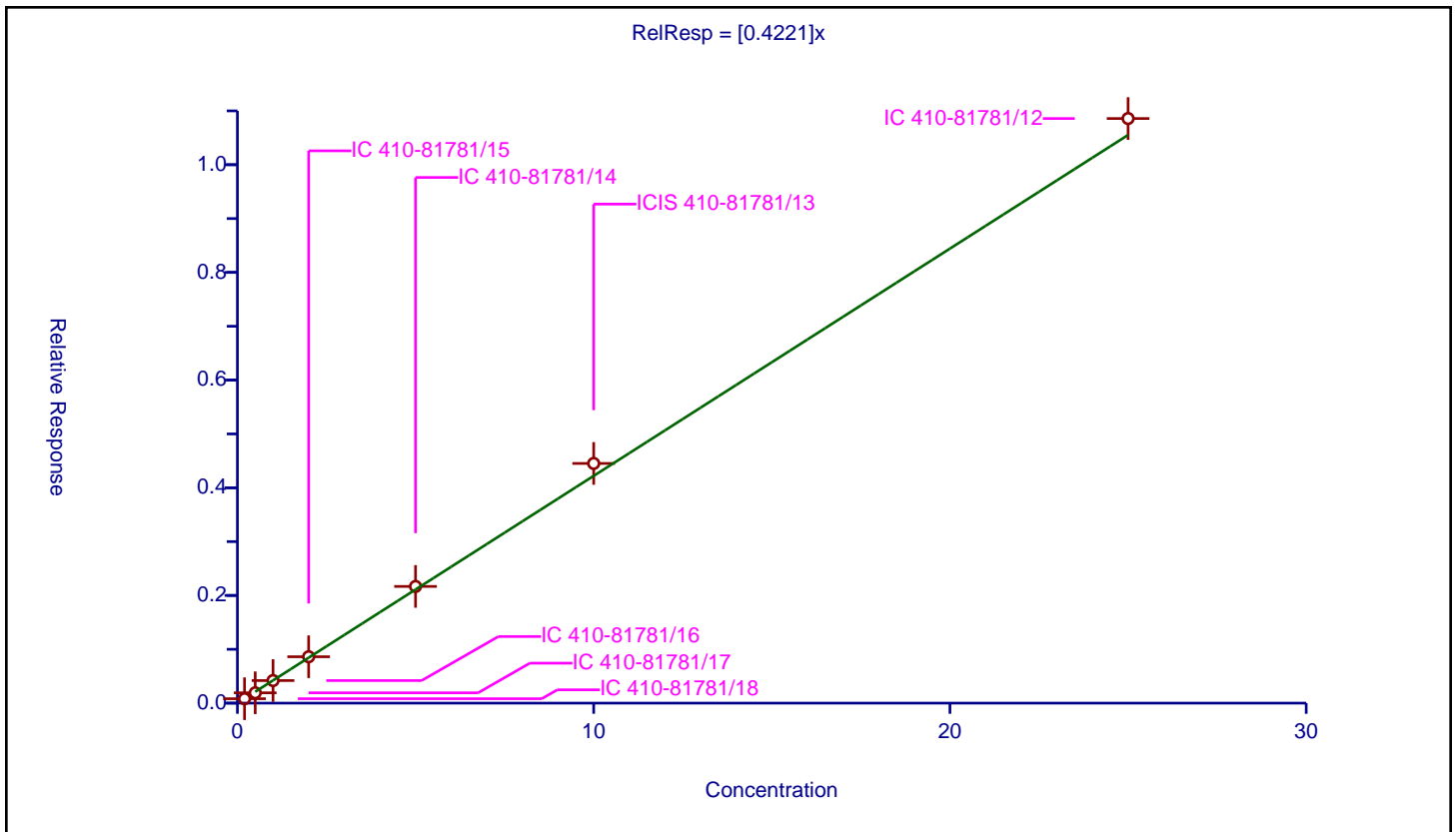
/ 2,2-Dichloropropane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4221

Error Coefficients	
Standard Error:	790000
Relative Standard Error:	4.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-81781/18	0.2	0.08164	10.0	1648701.0	0.4082	Y
2	IC 410-81781/17	0.5	0.191716	10.0	1401915.0	0.383433	Y
3	IC 410-81781/16	1.0	0.419281	10.0	1816799.0	0.419281	Y
4	IC 410-81781/15	2.0	0.861534	10.0	1845881.0	0.430767	Y
5	IC 410-81781/14	5.0	2.167429	10.0	1565149.0	0.433486	Y
6	ICIS 410-81781/13	10.0	4.45166	10.0	1641765.0	0.445166	Y
7	IC 410-81781/12	25.0	10.858133	10.0	1612687.0	0.434325	Y



Calibration

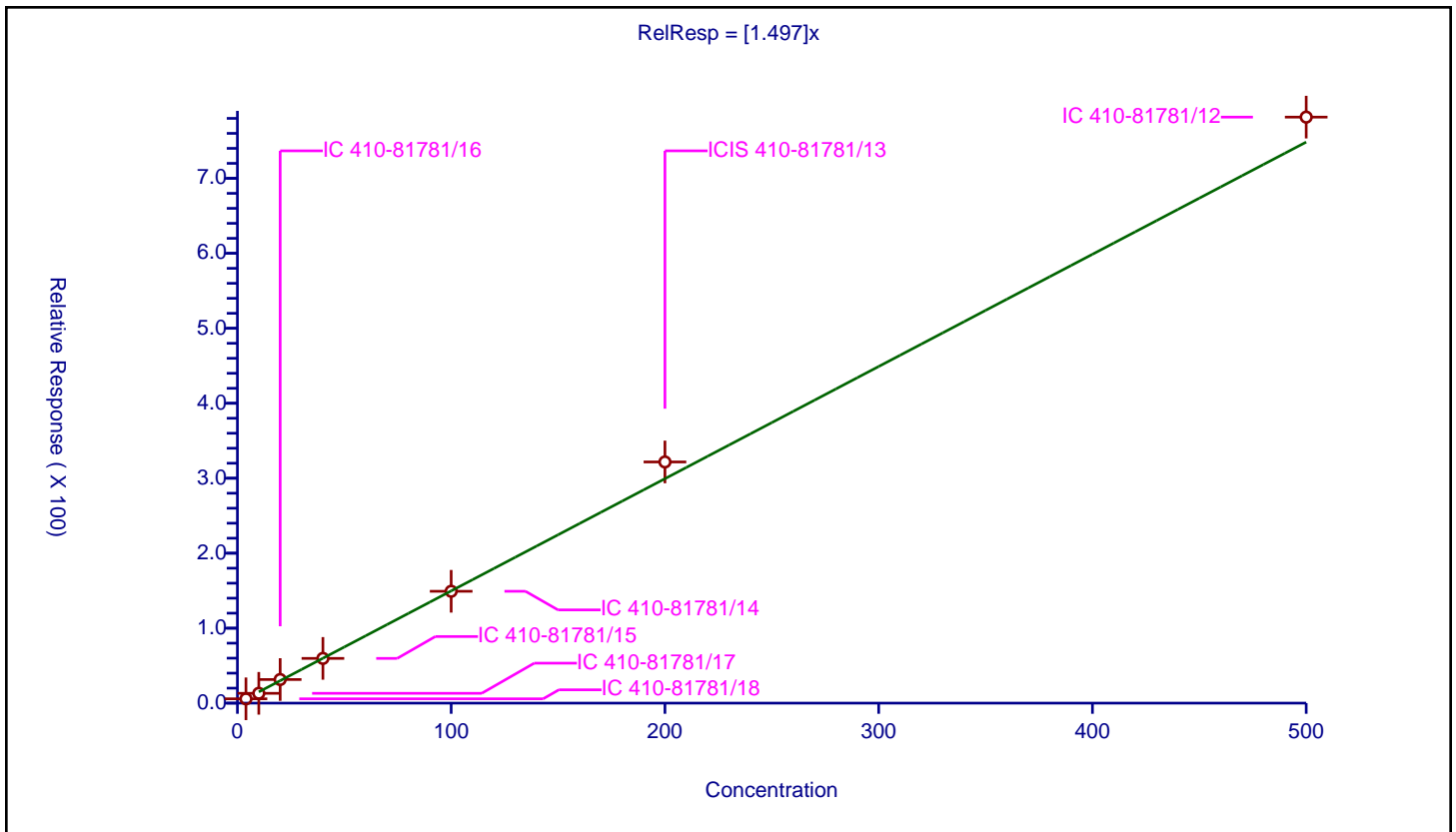
/ Propionitrile

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.497

Error Coefficients	
Standard Error:	669000
Relative Standard Error:	6.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-81781/18	4.0	5.755275	50.0	98527.0	1.438819	Y
2	IC 410-81781/17	10.0	13.093015	50.0	107080.0	1.309301	Y
3	IC 410-81781/16	20.0	31.481702	50.0	100749.0	1.574085	Y
4	IC 410-81781/15	40.0	59.664556	50.0	101567.0	1.491614	Y
5	IC 410-81781/14	100.0	149.208228	50.0	106849.0	1.492082	Y
6	ICIS 410-81781/13	200.0	321.706884	50.0	97347.0	1.608534	Y
7	IC 410-81781/12	500.0	781.688048	50.0	94239.0	1.563376	Y



Calibration

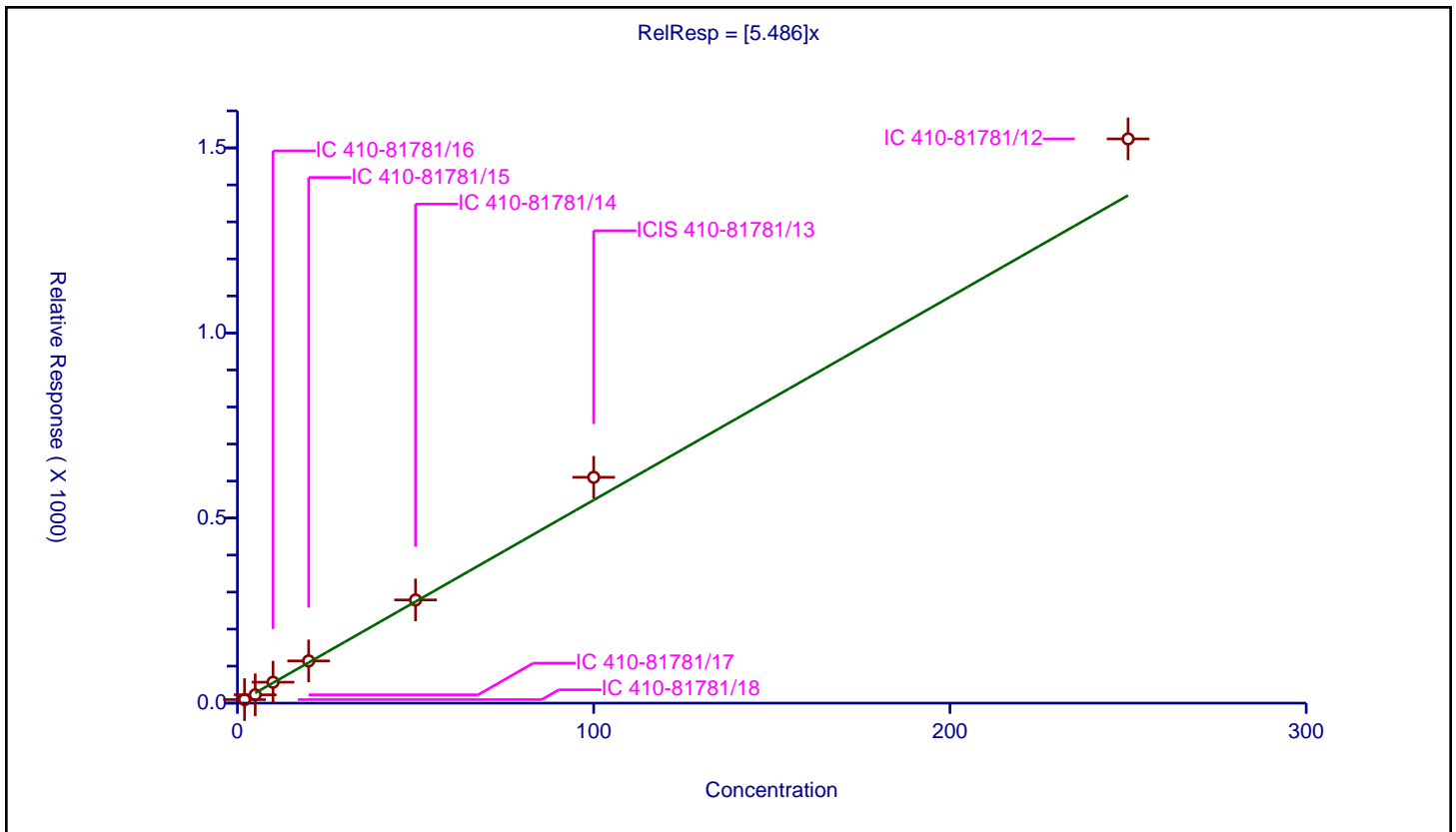
/ Methacrylonitrile

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	5.486

Error Coefficients	
Standard Error:	1300000
Relative Standard Error:	11.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.985

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-81781/18	2.0	9.517188	50.0	98527.0	4.758594	Y
2	IC 410-81781/17	5.0	22.567706	50.0	107080.0	4.513541	Y
3	IC 410-81781/16	10.0	56.548948	50.0	100749.0	5.654895	Y
4	IC 410-81781/15	20.0	114.087253	50.0	101567.0	5.704363	Y
5	IC 410-81781/14	50.0	278.759277	50.0	106849.0	5.575186	Y
6	ICIS 410-81781/13	100.0	610.14926	50.0	97347.0	6.101493	Y
7	IC 410-81781/12	250.0	1524.30151	50.0	94239.0	6.097206	Y



Calibration

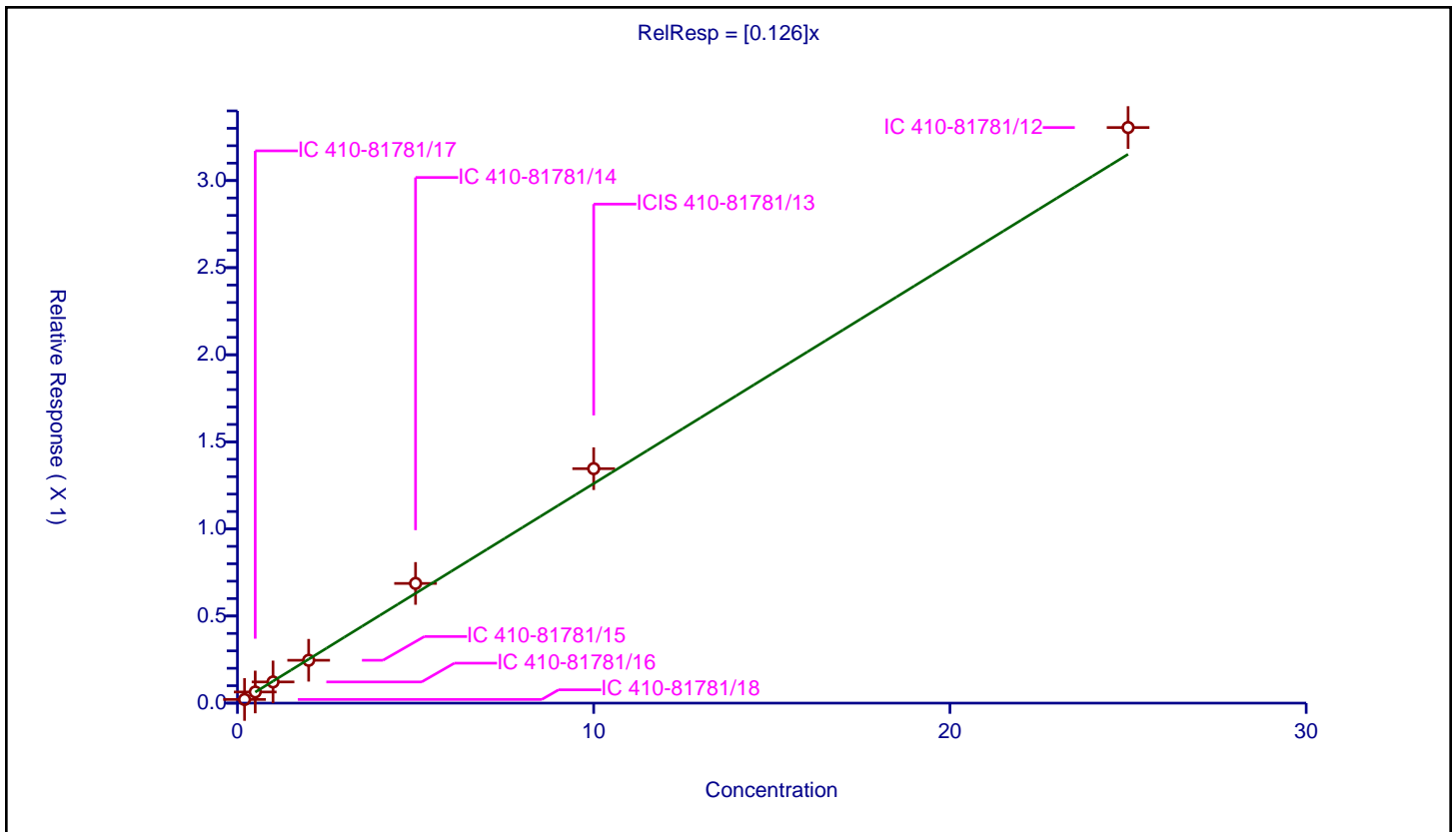
/ Chlorobromomethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.126

Error Coefficients	
Standard Error:	240000
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 410-81781/18	0.2	0.021095	10.0	1648701.0	0.105477	Y
2	IC 410-81781/17	0.5	0.06397	10.0	1401915.0	0.127939	Y
3	IC 410-81781/16	1.0	0.121637	10.0	1816799.0	0.121637	Y
4	IC 410-81781/15	2.0	0.246018	10.0	1845881.0	0.123009	Y
5	IC 410-81781/14	5.0	0.687289	10.0	1565149.0	0.137458	Y
6	ICIS 410-81781/13	10.0	1.346137	10.0	1641765.0	0.134614	Y
7	IC 410-81781/12	25.0	3.304454	10.0	1612687.0	0.132178	Y



Calibration

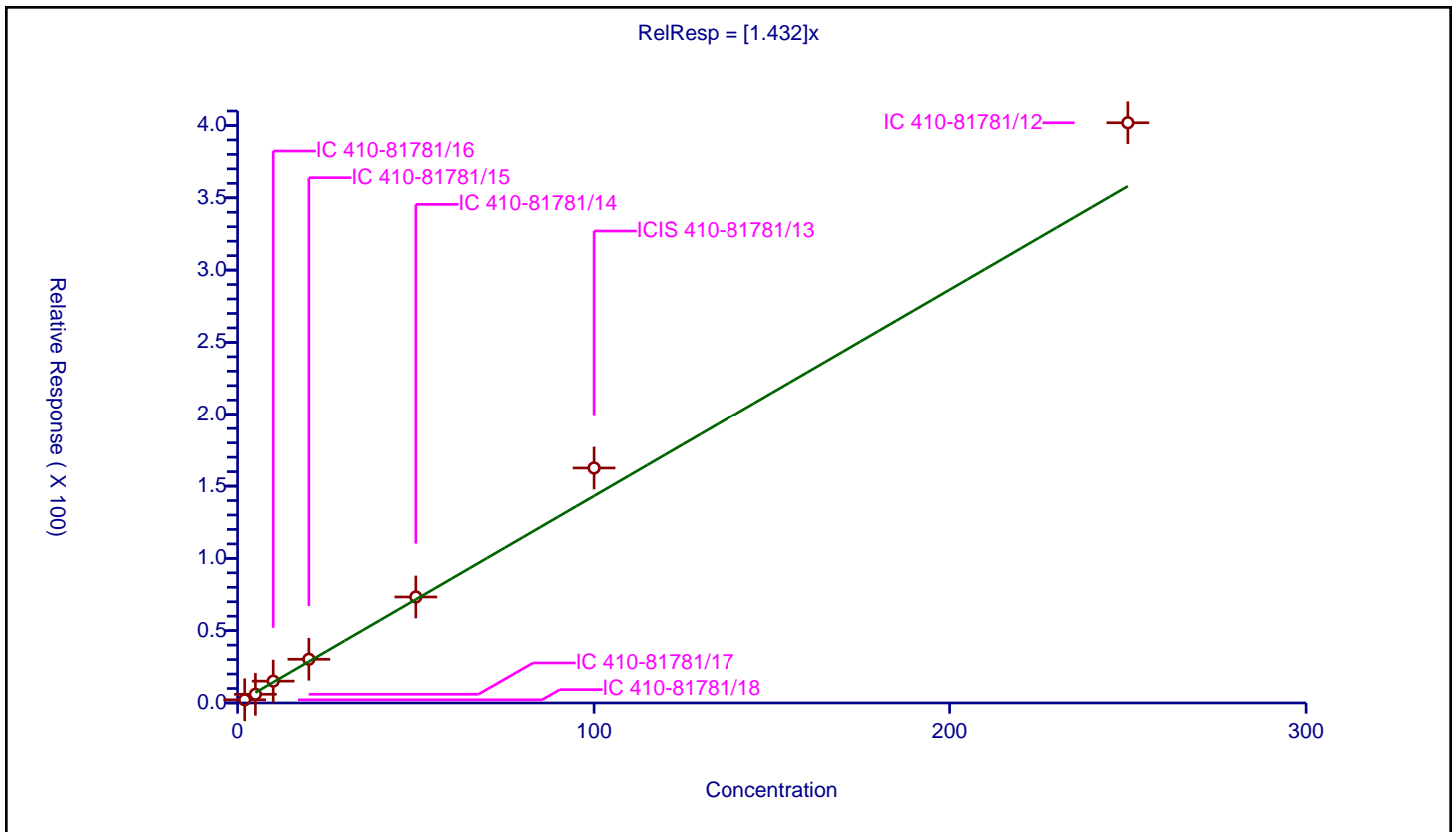
/ Tetrahydrofuran

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.432

Error Coefficients	
Standard Error:	342000
Relative Standard Error:	14.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.977

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-81781/18	2.0	2.194322	50.0	98527.0	1.097161	Y
2	IC 410-81781/17	5.0	6.024935	50.0	107080.0	1.204987	Y
3	IC 410-81781/16	10.0	15.117768	50.0	100749.0	1.511777	Y
4	IC 410-81781/15	20.0	30.237183	50.0	101567.0	1.511859	Y
5	IC 410-81781/14	50.0	73.297364	50.0	106849.0	1.465947	Y
6	ICIS 410-81781/13	100.0	162.518105	50.0	97347.0	1.625181	Y
7	IC 410-81781/12	250.0	401.889345	50.0	94239.0	1.607557	Y



Calibration

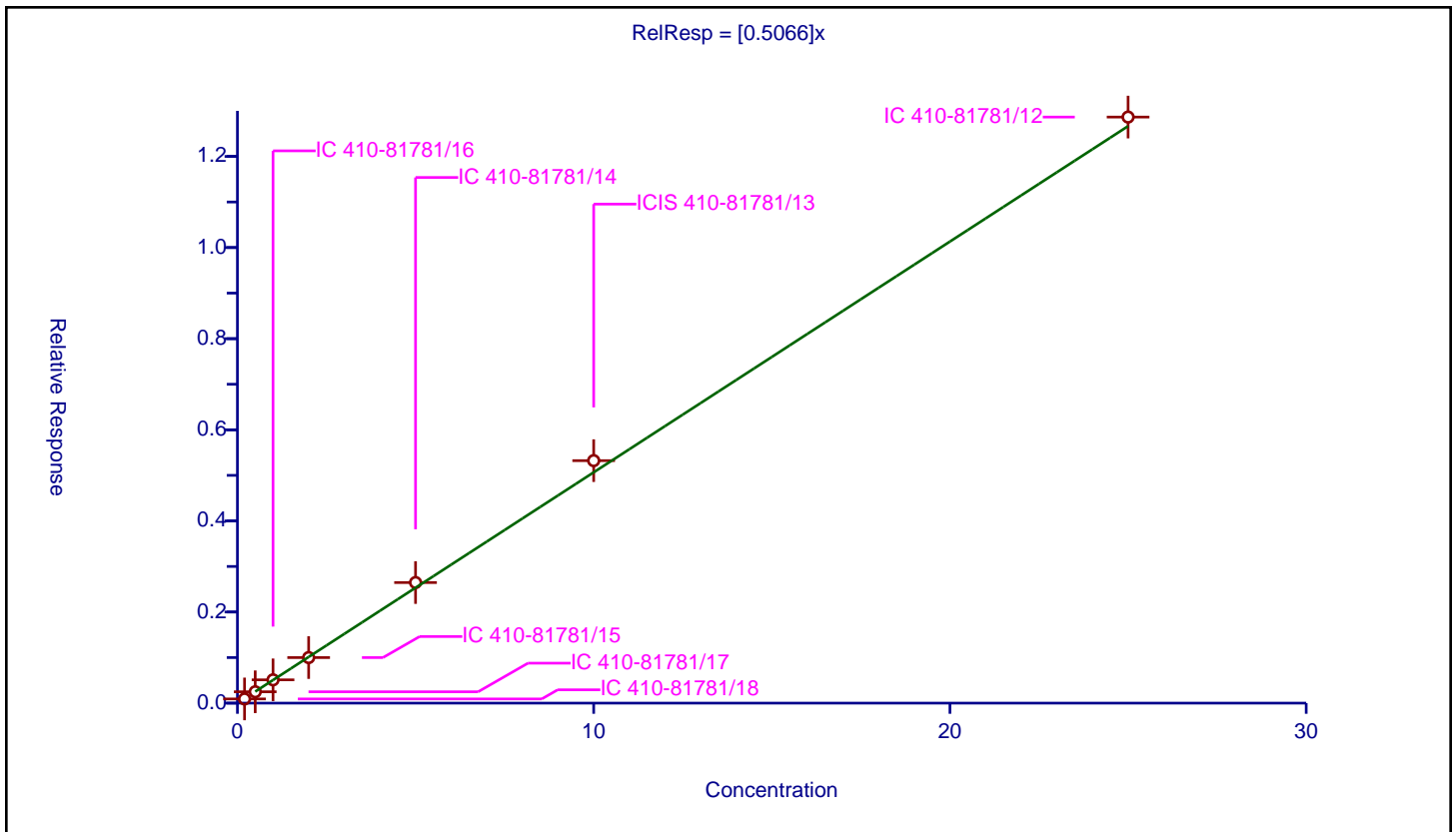
/ Chloroform

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.5066

Error Coefficients	
Standard Error:	938000
Relative Standard Error:	4.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-81781/18	0.2	0.091945	10.0	1648701.0	0.459726	Y
2	IC 410-81781/17	0.5	0.249601	10.0	1401915.0	0.499203	Y
3	IC 410-81781/16	1.0	0.511064	10.0	1816799.0	0.511064	Y
4	IC 410-81781/15	2.0	0.999788	10.0	1845881.0	0.499894	Y
5	IC 410-81781/14	5.0	2.647109	10.0	1565149.0	0.529422	Y
6	ICIS 410-81781/13	10.0	5.322491	10.0	1641765.0	0.532249	Y
7	IC 410-81781/12	25.0	12.864344	10.0	1612687.0	0.514574	Y



Calibration

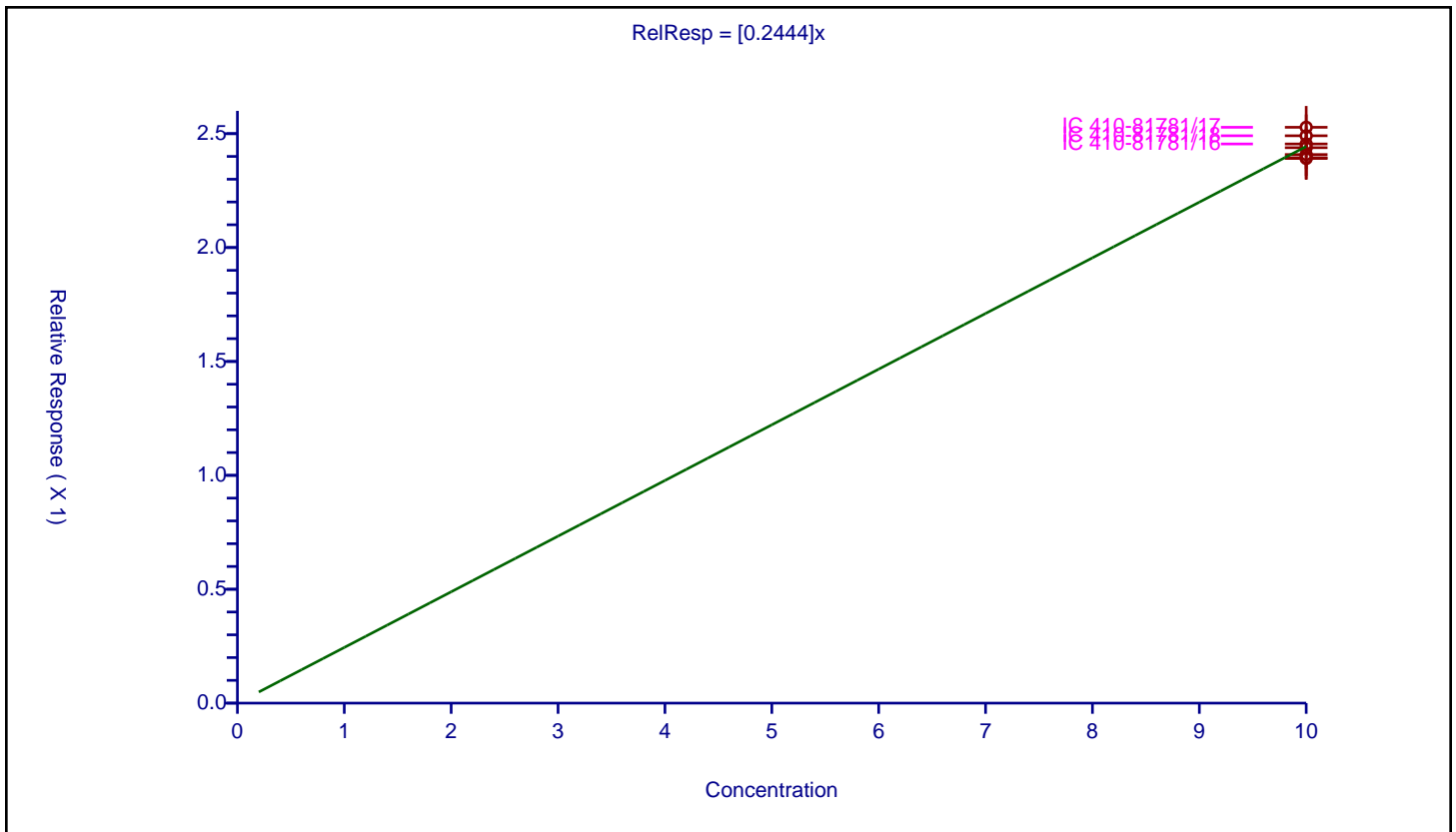
/ Dibromofluoromethane (Surr)

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2444

Error Coefficients	
Standard Error:	436000
Relative Standard Error:	2.1
Correlation Coefficient:	NA
Coefficient of Determination (Adjusted):	0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-81781/12	10.0	2.394308	10.0	1612687.0	0.239431	Y
2	ICIS 410-81781/13	10.0	2.438412	10.0	1641765.0	0.243841	Y
3	IC 410-81781/14	10.0	2.408307	10.0	1565149.0	0.240831	Y
4	IC 410-81781/15	10.0	2.391048	10.0	1845881.0	0.239105	Y
5	IC 410-81781/16	10.0	2.454773	10.0	1816799.0	0.245477	Y
6	IC 410-81781/17	10.0	2.527985	10.0	1401915.0	0.252798	Y
7	IC 410-81781/18	10.0	2.490749	10.0	1648701.0	0.249075	Y



Calibration

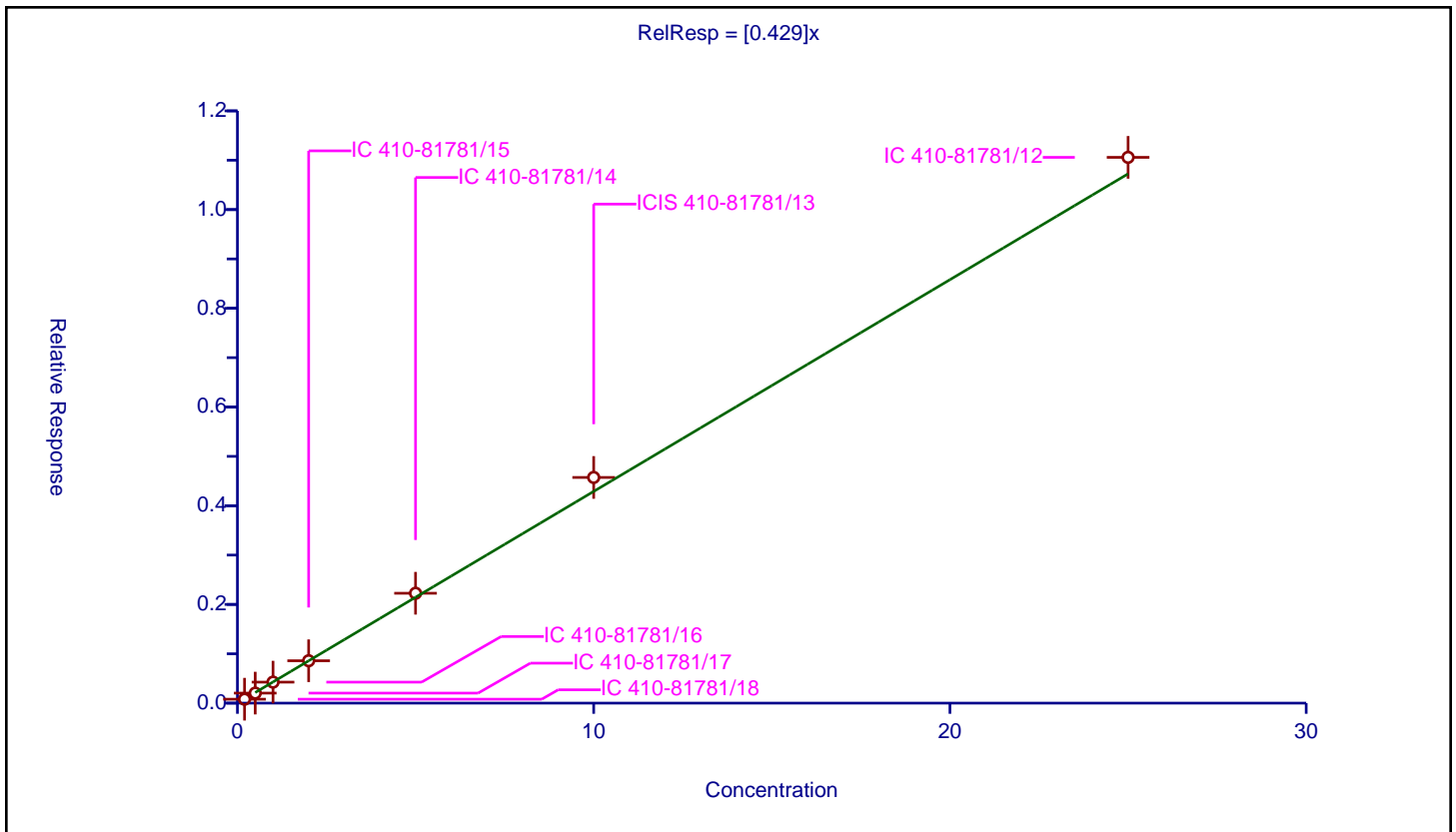
/ 1,1,1-Trichloroethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.429

Error Coefficients	
Standard Error:	806000
Relative Standard Error:	5.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-81781/18	0.2	0.07942	10.0	1648701.0	0.397101	Y
2	IC 410-81781/17	0.5	0.20293	10.0	1401915.0	0.405859	Y
3	IC 410-81781/16	1.0	0.425622	10.0	1816799.0	0.425622	Y
4	IC 410-81781/15	2.0	0.85888	10.0	1845881.0	0.42944	Y
5	IC 410-81781/14	5.0	2.226127	10.0	1565149.0	0.445225	Y
6	ICIS 410-81781/13	10.0	4.573011	10.0	1641765.0	0.457301	Y
7	IC 410-81781/12	25.0	11.058513	10.0	1612687.0	0.442341	Y



Calibration

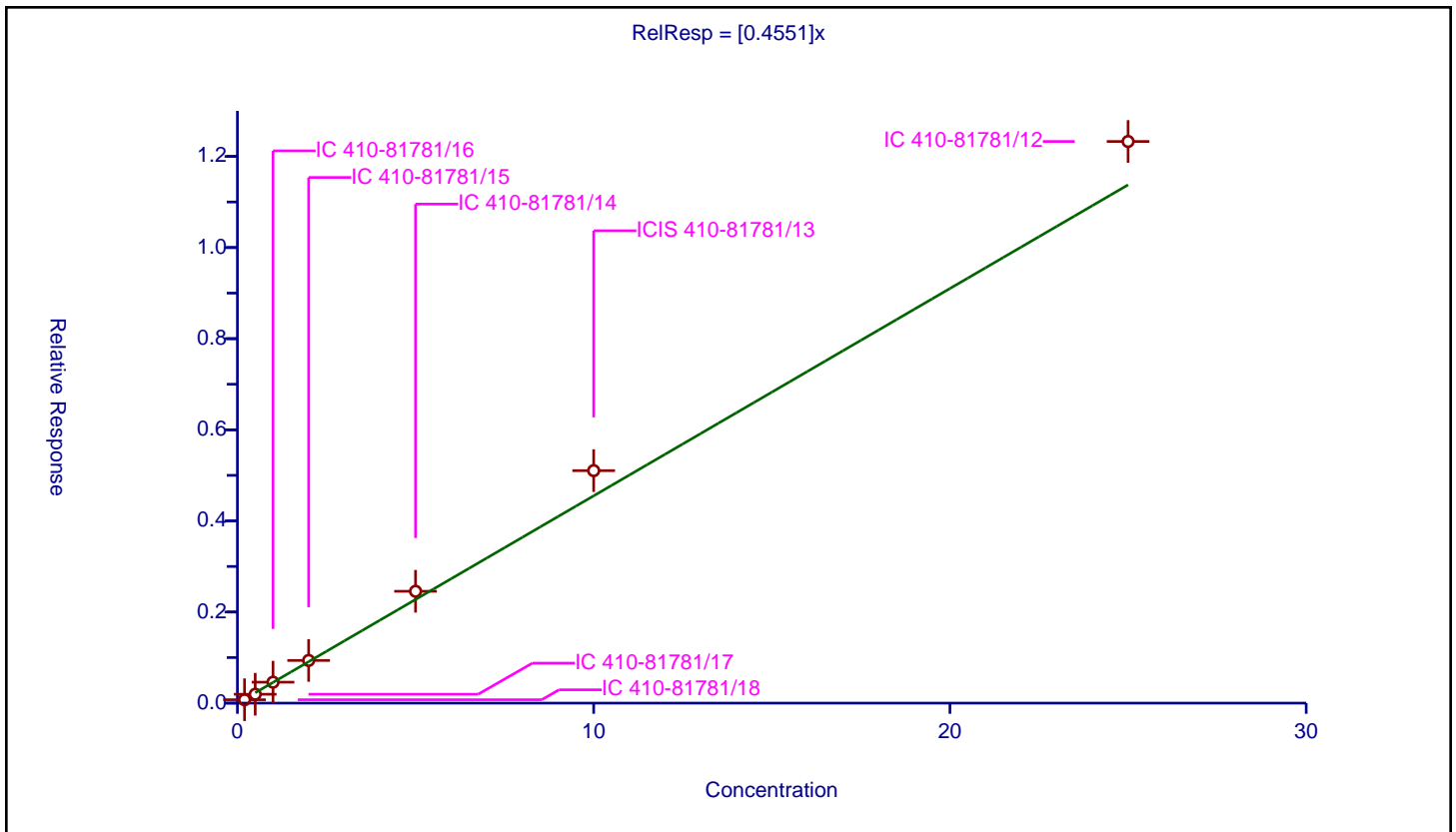
/ Cyclohexane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4551

Error Coefficients	
Standard Error:	898000
Relative Standard Error:	11.7
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.984

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-81781/18	0.2	0.074647	10.0	1648701.0	0.373233	Y
2	IC 410-81781/17	0.5	0.194755	10.0	1401915.0	0.38951	Y
3	IC 410-81781/16	1.0	0.459578	10.0	1816799.0	0.459578	Y
4	IC 410-81781/15	2.0	0.937092	10.0	1845881.0	0.468546	Y
5	IC 410-81781/14	5.0	2.455319	10.0	1565149.0	0.491064	Y
6	ICIS 410-81781/13	10.0	5.103422	10.0	1641765.0	0.510342	Y
7	IC 410-81781/12	25.0	12.328034	10.0	1612687.0	0.493121	Y



Calibration

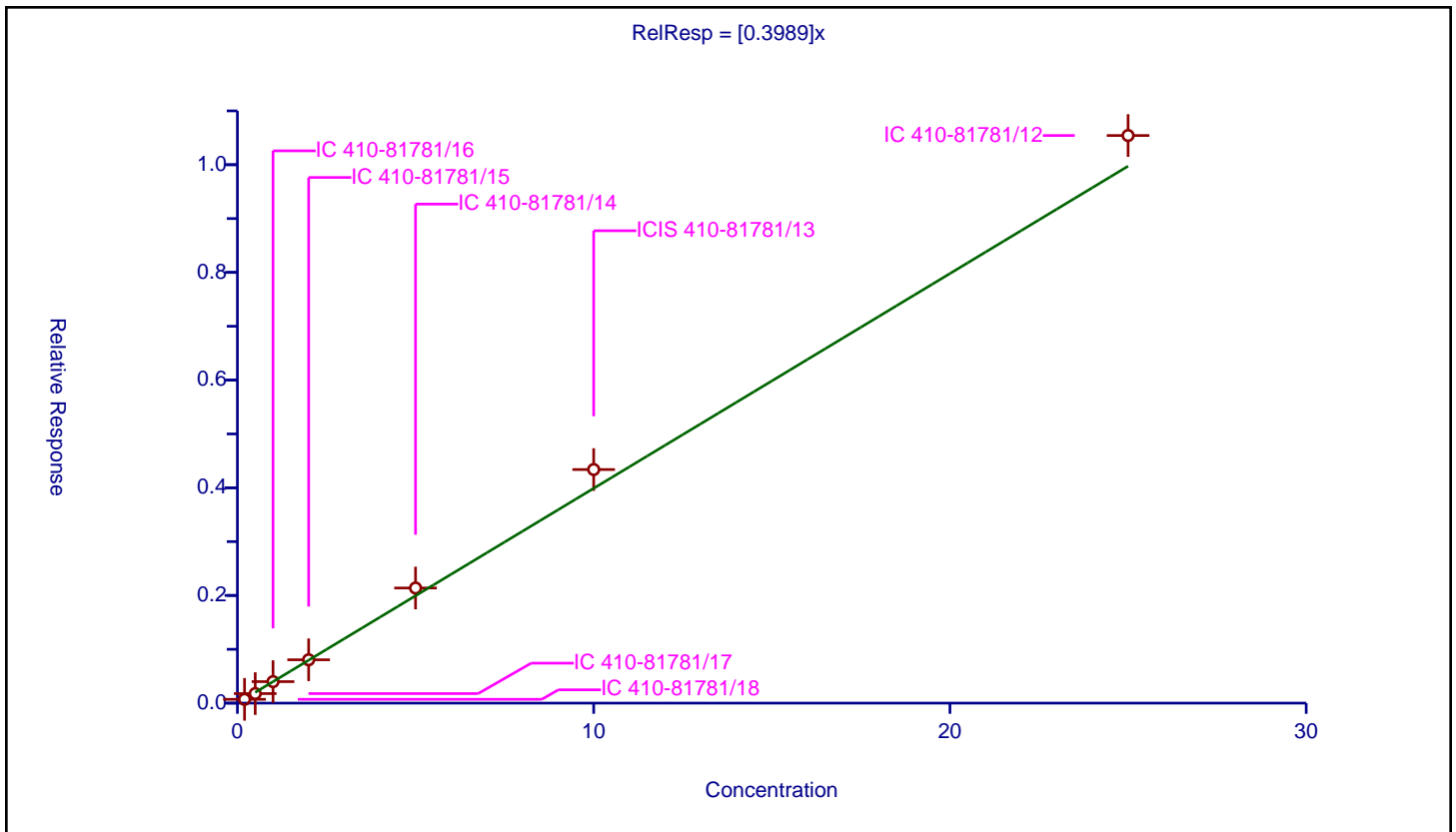
/ 1,1-Dichloropropene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3989

Error Coefficients	
Standard Error:	768000
Relative Standard Error:	8.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-81781/18	0.2	0.070565	10.0	1648701.0	0.352823	Y
2	IC 410-81781/17	0.5	0.17725	10.0	1401915.0	0.354501	Y
3	IC 410-81781/16	1.0	0.399422	10.0	1816799.0	0.399422	Y
4	IC 410-81781/15	2.0	0.805182	10.0	1845881.0	0.402591	Y
5	IC 410-81781/14	5.0	2.138135	10.0	1565149.0	0.427627	Y
6	ICIS 410-81781/13	10.0	4.338642	10.0	1641765.0	0.433864	Y
7	IC 410-81781/12	25.0	10.542343	10.0	1612687.0	0.421694	Y



Calibration

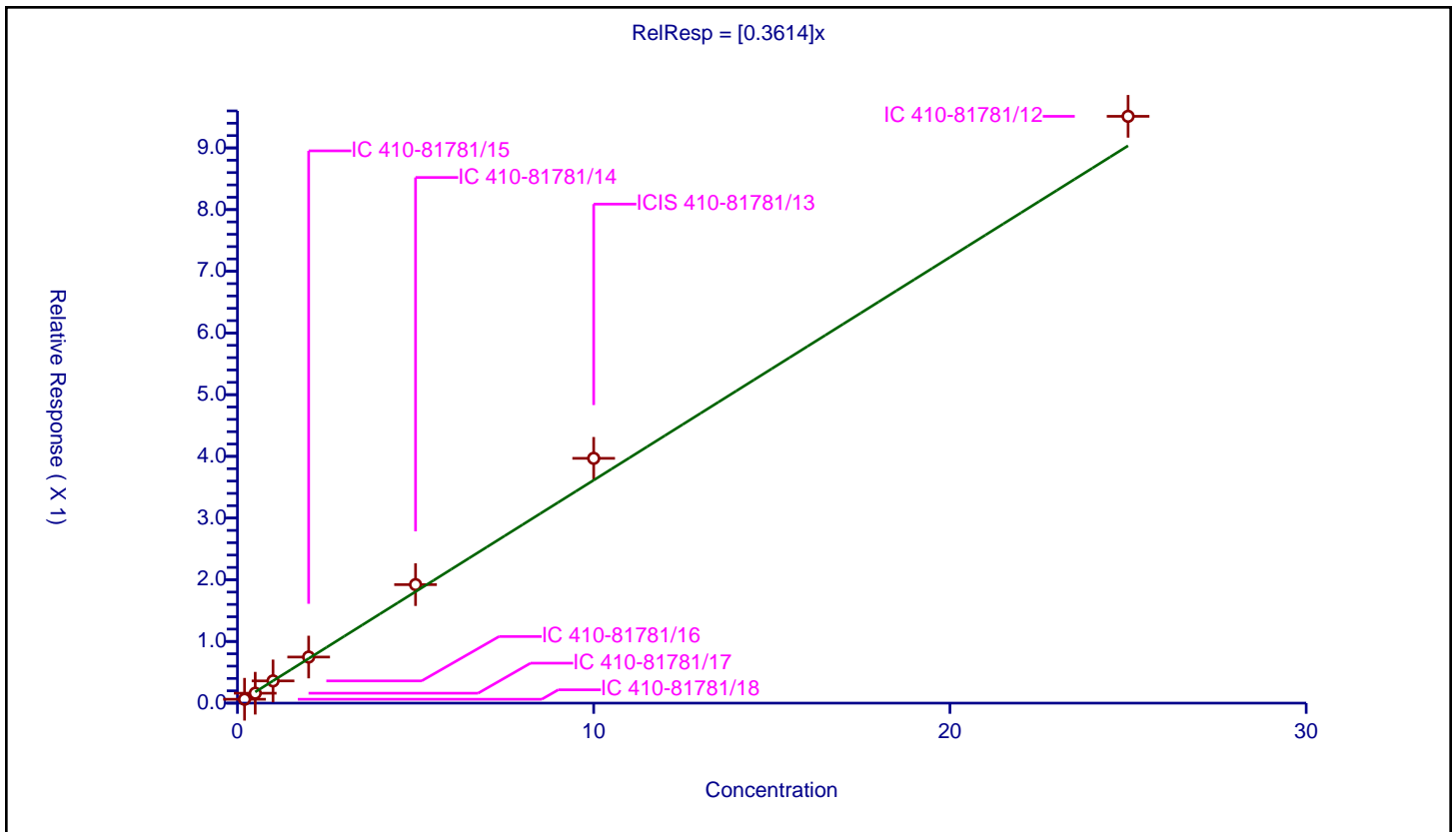
/ Carbon tetrachloride

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3614

Error Coefficients	
Standard Error:	694000
Relative Standard Error:	8.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-81781/18	0.2	0.062668	10.0	1648701.0	0.313338	Y
2	IC 410-81781/17	0.5	0.160659	10.0	1401915.0	0.321318	Y
3	IC 410-81781/16	1.0	0.360089	10.0	1816799.0	0.360089	Y
4	IC 410-81781/15	2.0	0.746971	10.0	1845881.0	0.373486	Y
5	IC 410-81781/14	5.0	1.920993	10.0	1565149.0	0.384199	Y
6	ICIS 410-81781/13	10.0	3.968047	10.0	1641765.0	0.396805	Y
7	IC 410-81781/12	25.0	9.511988	10.0	1612687.0	0.38048	Y



Calibration

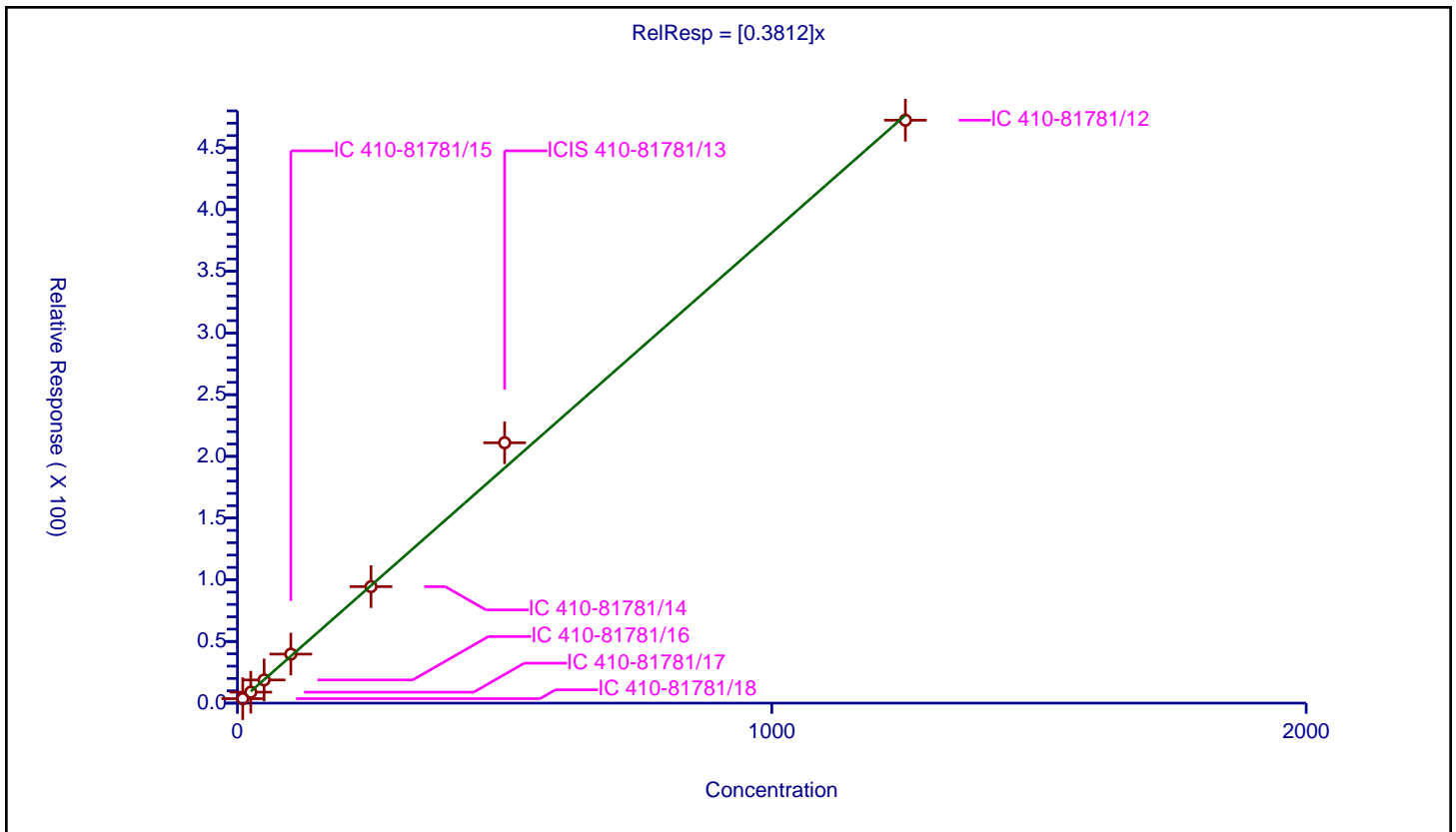
/ Isobutyl alcohol

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3812

Error Coefficients	
Standard Error:	410000
Relative Standard Error:	5.9
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-81781/18	10.0	3.622357	50.0	98527.0	0.362236	Y
2	IC 410-81781/17	25.0	8.876541	50.0	107080.0	0.355062	Y
3	IC 410-81781/16	50.0	18.797209	50.0	100749.0	0.375944	Y
4	IC 410-81781/15	100.0	39.726486	50.0	101567.0	0.397265	Y
5	IC 410-81781/14	250.0	94.428118	50.0	106849.0	0.377712	Y
6	ICIS 410-81781/13	500.0	211.018316	50.0	97347.0	0.422037	Y
7	IC 410-81781/12	1250.0	472.45461	50.0	94239.0	0.377964	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

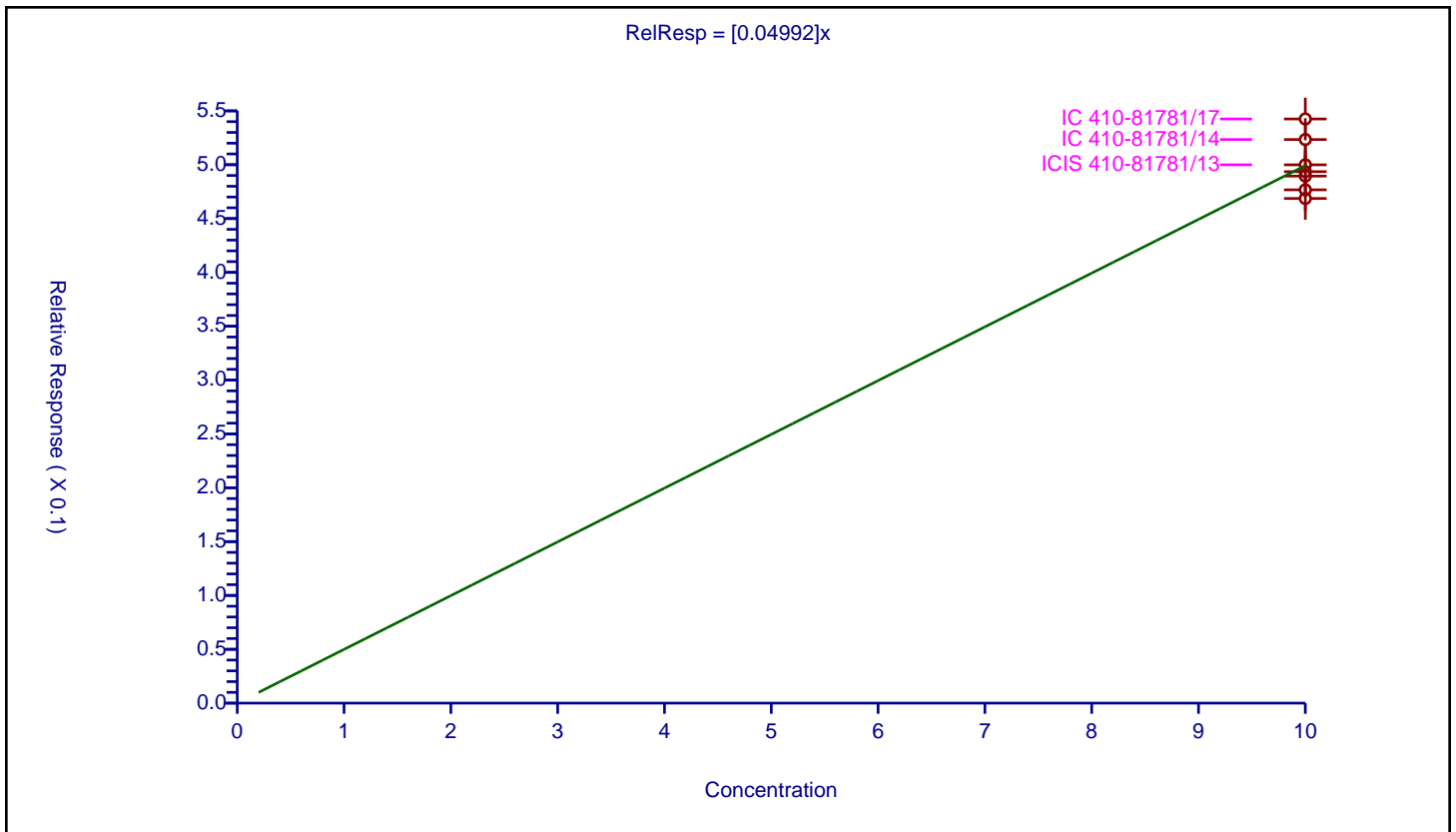
Curve Coefficients

Intercept: 0
 Slope: 0.04992

Error Coefficients

Standard Error: 88600
 Relative Standard Error: 5.2
 Correlation Coefficient: NA
 Coefficient of Determination (Adjusted): 0.000000000000000222

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-81781/12	10.0	0.489432	10.0	1612687.0	0.048943	Y
2	ICIS 410-81781/13	10.0	0.499907	10.0	1641765.0	0.049991	Y
3	IC 410-81781/14	10.0	0.523375	10.0	1565149.0	0.052338	Y
4	IC 410-81781/15	10.0	0.468638	10.0	1845881.0	0.046864	Y
5	IC 410-81781/16	10.0	0.476696	10.0	1816799.0	0.04767	Y
6	IC 410-81781/17	10.0	0.542472	10.0	1401915.0	0.054247	Y
7	IC 410-81781/18	10.0	0.493546	10.0	1648701.0	0.049355	Y



Calibration

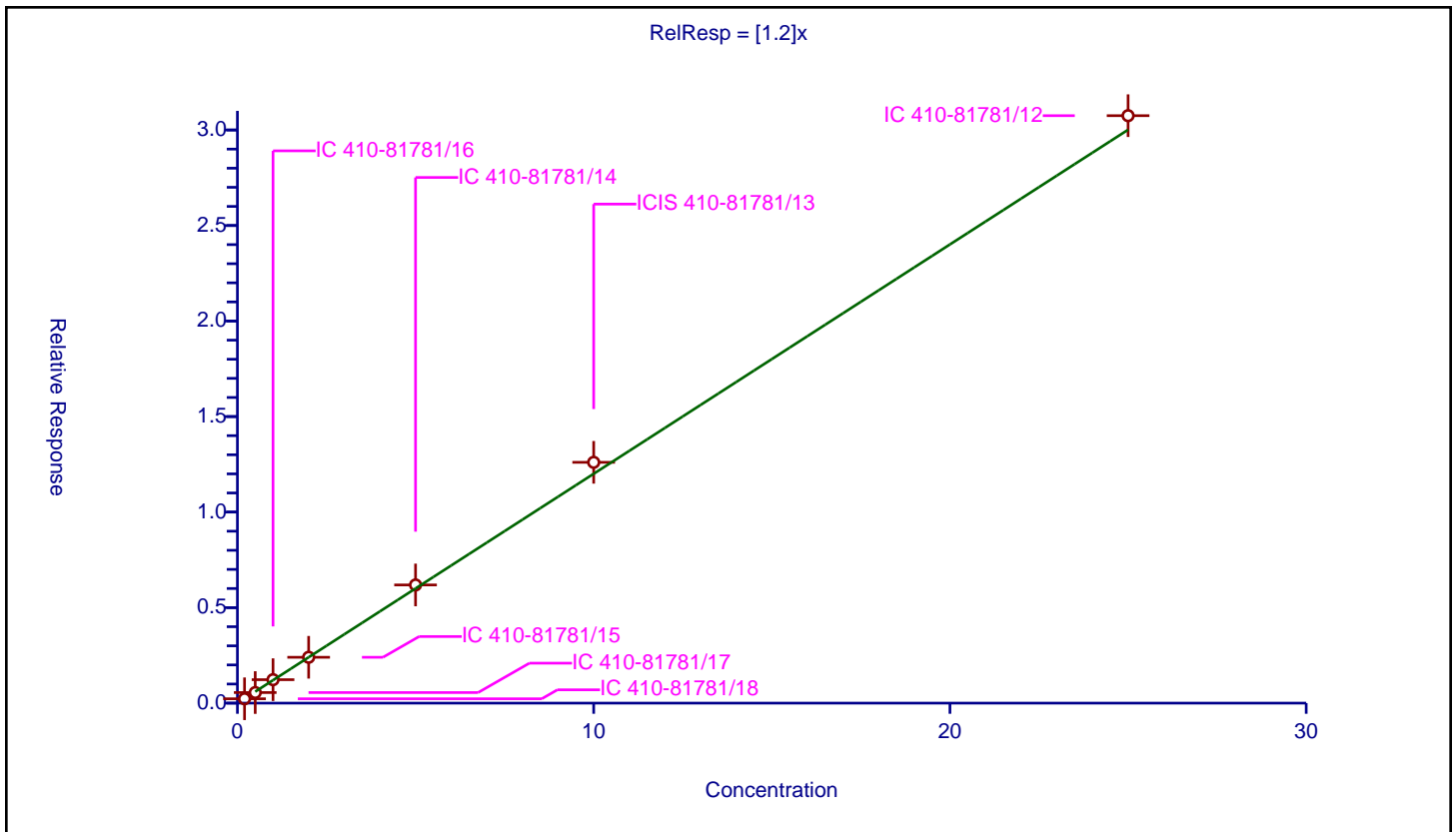
/ Benzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.2

Error Coefficients	
Standard Error:	2240000
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 410-81781/18	0.2	0.228271	10.0	1648701.0	1.141353	Y
2	IC 410-81781/17	0.5	0.553464	10.0	1401915.0	1.106929	Y
3	IC 410-81781/16	1.0	1.227263	10.0	1816799.0	1.227263	Y
4	IC 410-81781/15	2.0	2.400285	10.0	1845881.0	1.200142	Y
5	IC 410-81781/14	5.0	6.186357	10.0	1565149.0	1.237271	Y
6	ICIS 410-81781/13	10.0	12.604465	10.0	1641765.0	1.260447	Y
7	IC 410-81781/12	25.0	30.748397	10.0	1612687.0	1.229936	Y



Calibration

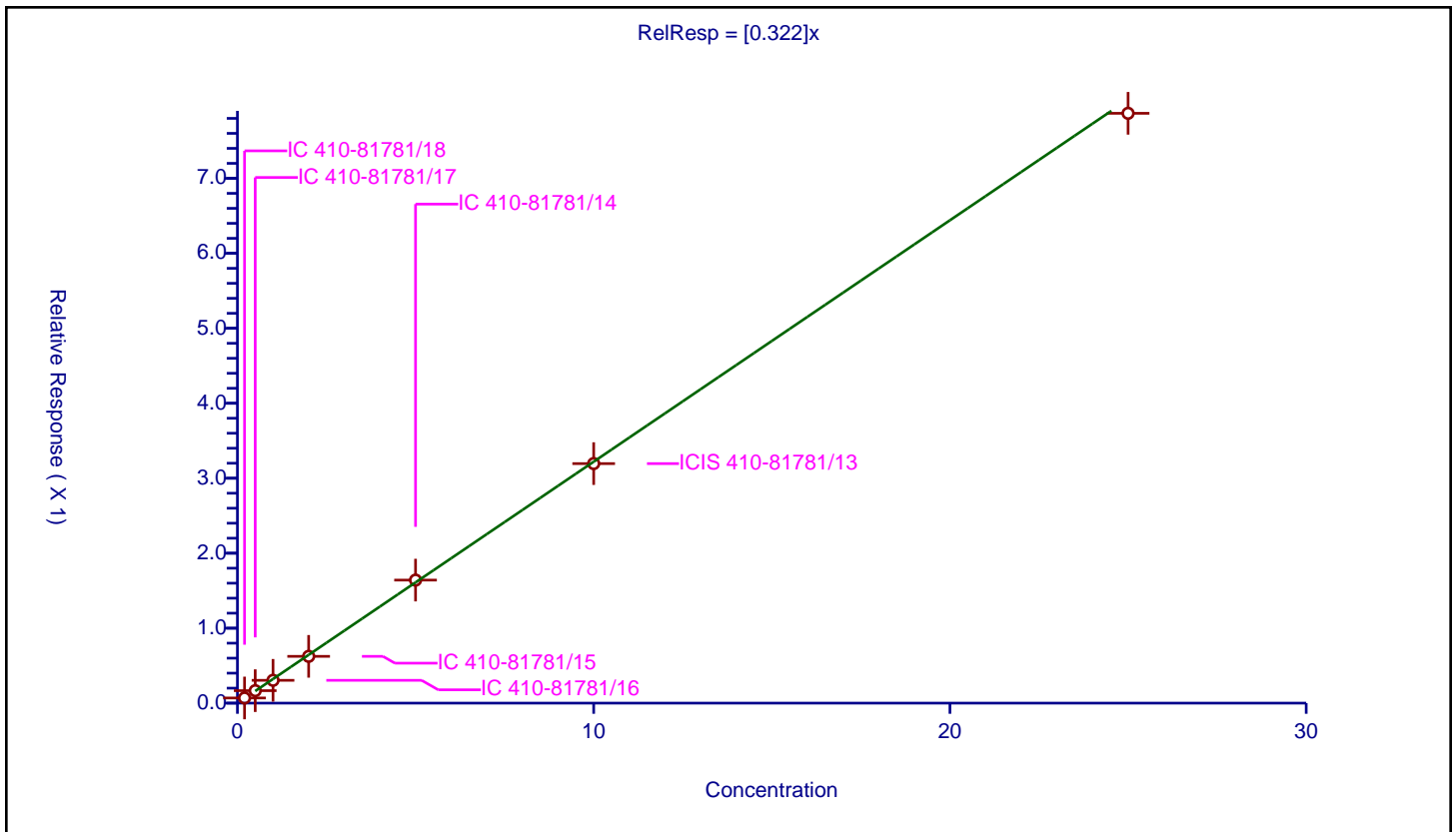
/ 1,2-Dichloroethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.322

Error Coefficients	
Standard Error:	573000
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 410-81781/18	0.2	0.068575	10.0	1648701.0	0.342876	Y
2	IC 410-81781/17	0.5	0.166265	10.0	1401915.0	0.332531	Y
3	IC 410-81781/16	1.0	0.304442	10.0	1816799.0	0.304442	Y
4	IC 410-81781/15	2.0	0.623995	10.0	1845881.0	0.311997	Y
5	IC 410-81781/14	5.0	1.641077	10.0	1565149.0	0.328215	Y
6	ICIS 410-81781/13	10.0	3.195281	10.0	1641765.0	0.319528	Y
7	IC 410-81781/12	25.0	7.86777	10.0	1612687.0	0.314711	Y



Calibration

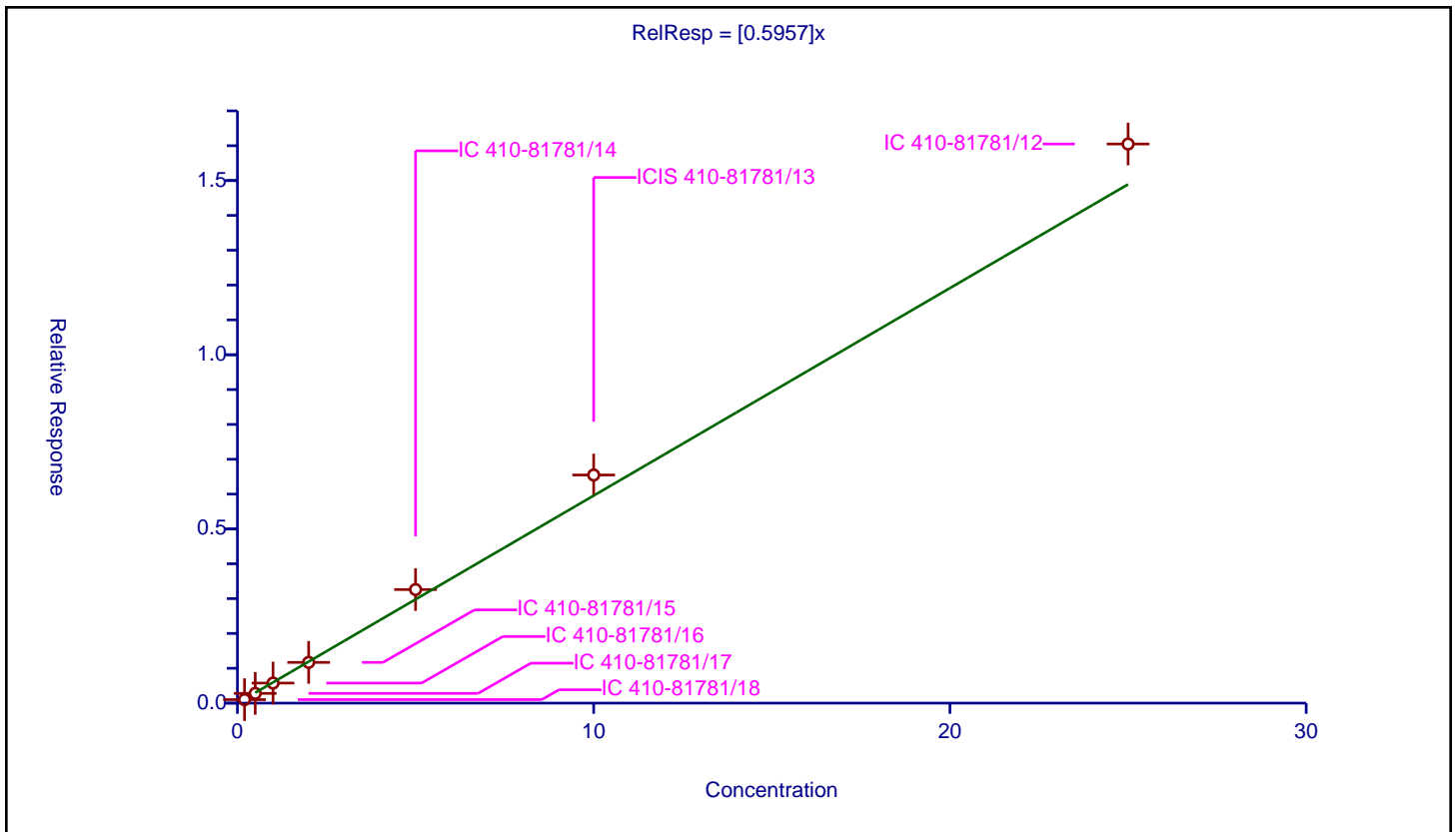
/ Tert-amyl methyl ether

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.5957

Error Coefficients	
Standard Error:	1170000
Relative Standard Error:	9.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-81781/18	0.2	0.100194	10.0	1648701.0	0.50097	Y
2	IC 410-81781/17	0.5	0.279767	10.0	1401915.0	0.559535	Y
3	IC 410-81781/16	1.0	0.575798	10.0	1816799.0	0.575798	Y
4	IC 410-81781/15	2.0	1.169111	10.0	1845881.0	0.584556	Y
5	IC 410-81781/14	5.0	3.260188	10.0	1565149.0	0.652038	Y
6	ICIS 410-81781/13	10.0	6.548331	10.0	1641765.0	0.654833	Y
7	IC 410-81781/12	25.0	16.049047	10.0	1612687.0	0.641962	Y



Calibration

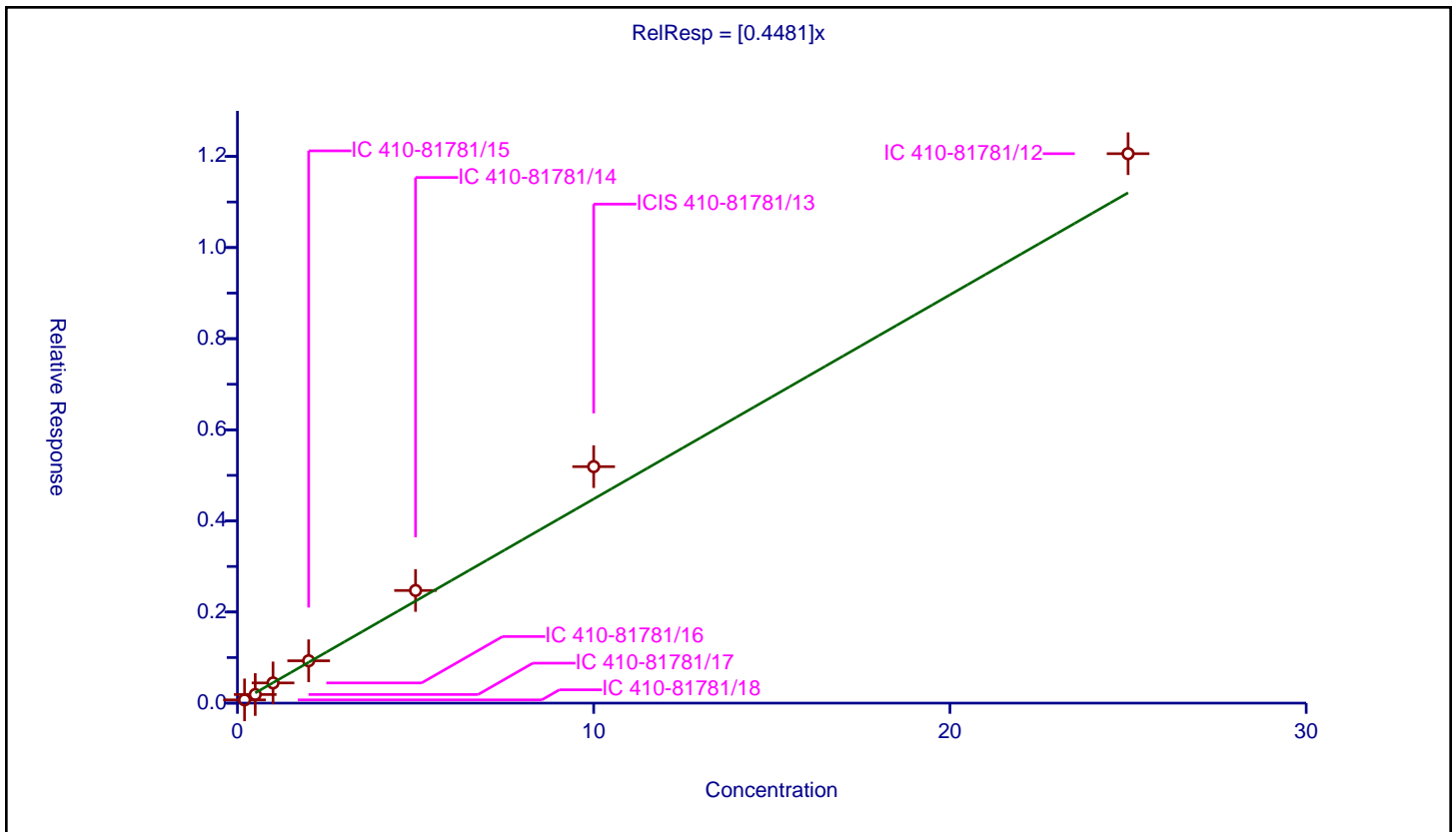
/ n-Heptane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4481

Error Coefficients	
Standard Error:	885000
Relative Standard Error:	13.6
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.979

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-81781/18	0.2	0.070892	10.0	1648701.0	0.354461	Y
2	IC 410-81781/17	0.5	0.189041	10.0	1401915.0	0.378083	Y
3	IC 410-81781/16	1.0	0.443368	10.0	1816799.0	0.443368	Y
4	IC 410-81781/15	2.0	0.929735	10.0	1845881.0	0.464867	Y
5	IC 410-81781/14	5.0	2.472589	10.0	1565149.0	0.494518	Y
6	ICIS 410-81781/13	10.0	5.190968	10.0	1641765.0	0.519097	Y
7	IC 410-81781/12	25.0	12.060772	10.0	1612687.0	0.482431	Y



Calibration

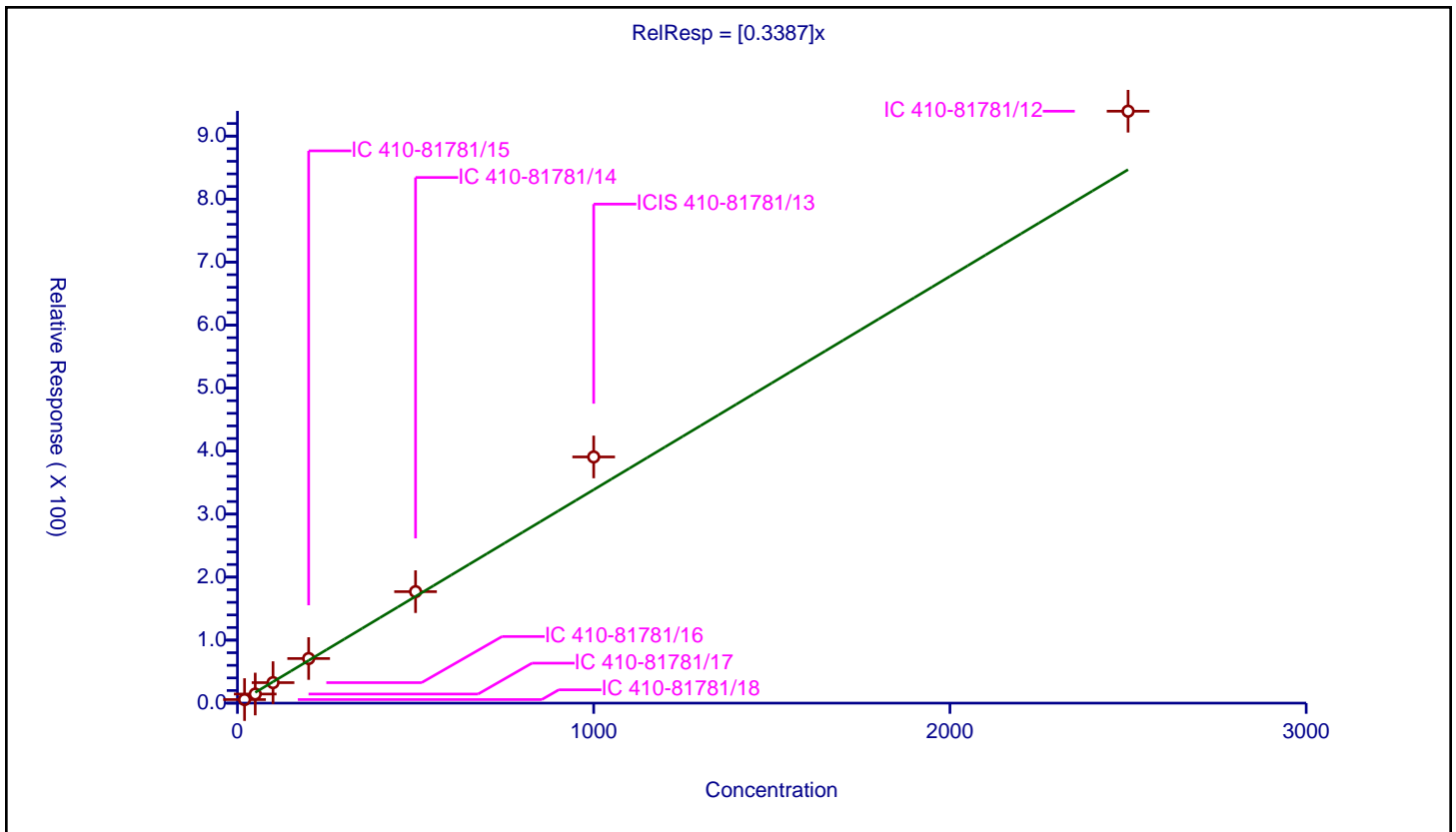
/ n-Butanol

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3387

Error Coefficients	
Standard Error:	804000
Relative Standard Error:	12.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.982

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-81781/18	20.0	5.646676	50.0	98527.0	0.282334	Y
2	IC 410-81781/17	50.0	14.447142	50.0	107080.0	0.288943	Y
3	IC 410-81781/16	100.0	32.540273	50.0	100749.0	0.325403	Y
4	IC 410-81781/15	200.0	70.791694	50.0	101567.0	0.353958	Y
5	IC 410-81781/14	500.0	176.91649	50.0	106849.0	0.353833	Y
6	ICIS 410-81781/13	1000.0	390.732637	50.0	97347.0	0.390733	Y
7	IC 410-81781/12	2500.0	939.482592	50.0	94239.0	0.375793	Y



Calibration

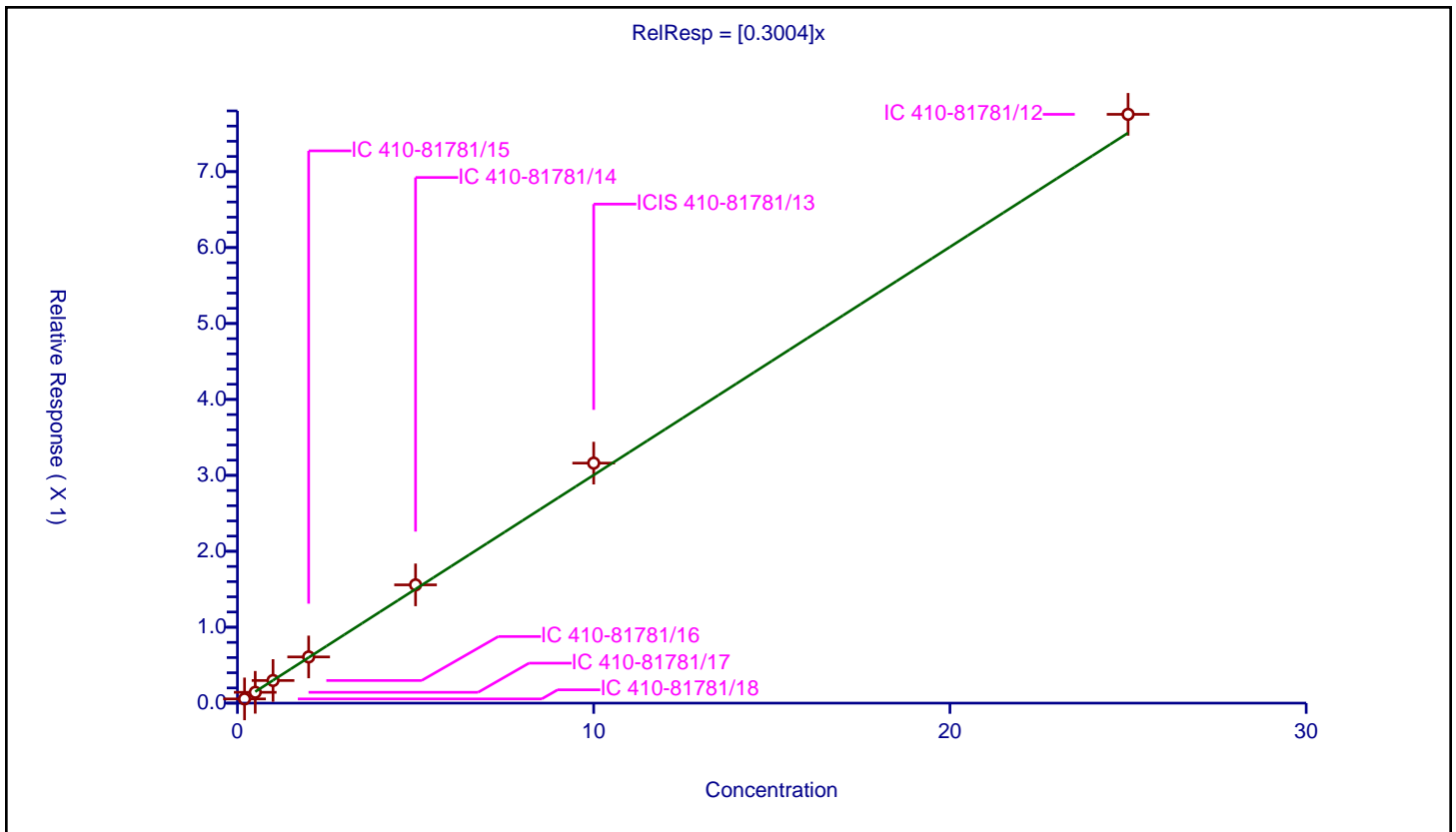
/ Trichloroethene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3004

Error Coefficients	
Standard Error:	564000
Relative Standard Error:	4.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-81781/18	0.2	0.055522	10.0	1648701.0	0.277612	Y
2	IC 410-81781/17	0.5	0.142519	10.0	1401915.0	0.285039	Y
3	IC 410-81781/16	1.0	0.298156	10.0	1816799.0	0.298156	Y
4	IC 410-81781/15	2.0	0.608354	10.0	1845881.0	0.304177	Y
5	IC 410-81781/14	5.0	1.557577	10.0	1565149.0	0.311515	Y
6	ICIS 410-81781/13	10.0	3.161135	10.0	1641765.0	0.316113	Y
7	IC 410-81781/12	25.0	7.754691	10.0	1612687.0	0.310188	Y



Calibration

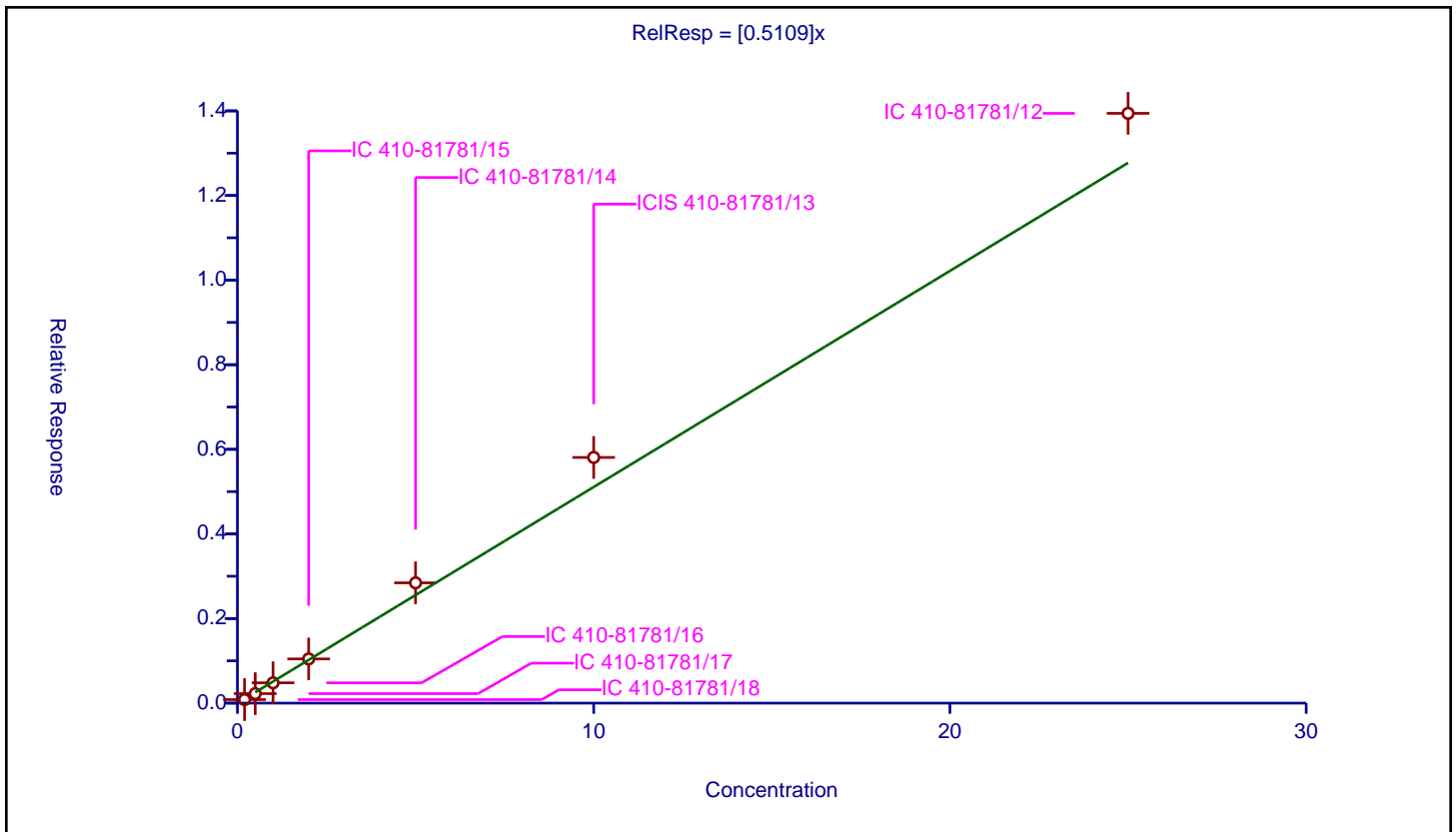
/ Methylcyclohexane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.5109

Error Coefficients	
Standard Error:	1020000
Relative Standard Error:	12.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.982

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-81781/18	0.2	0.083672	10.0	1648701.0	0.41836	Y
2	IC 410-81781/17	0.5	0.224179	10.0	1401915.0	0.448358	Y
3	IC 410-81781/16	1.0	0.4798	10.0	1816799.0	0.4798	Y
4	IC 410-81781/15	2.0	1.044715	10.0	1845881.0	0.522358	Y
5	IC 410-81781/14	5.0	2.843506	10.0	1565149.0	0.568701	Y
6	ICIS 410-81781/13	10.0	5.807926	10.0	1641765.0	0.580793	Y
7	IC 410-81781/12	25.0	13.941782	10.0	1612687.0	0.557671	Y



Calibration

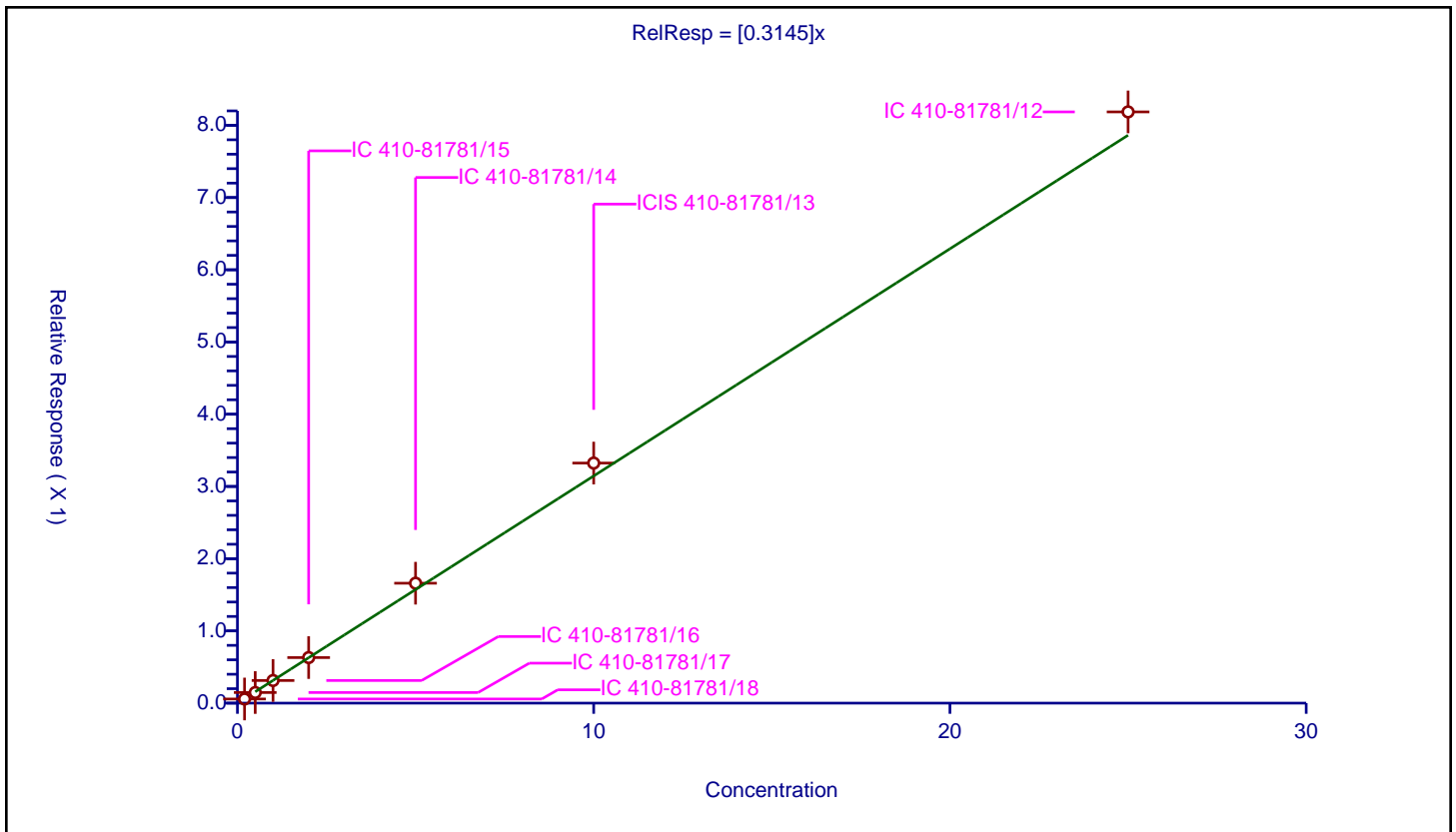
/ 1,2-Dichloropropane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3145

Error Coefficients	
Standard Error:	595000
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 410-81781/18	0.2	0.057457	10.0	1648701.0	0.287287	Y
2	IC 410-81781/17	0.5	0.147027	10.0	1401915.0	0.294055	Y
3	IC 410-81781/16	1.0	0.313161	10.0	1816799.0	0.313161	Y
4	IC 410-81781/15	2.0	0.630729	10.0	1845881.0	0.315364	Y
5	IC 410-81781/14	5.0	1.660193	10.0	1565149.0	0.332039	Y
6	ICIS 410-81781/13	10.0	3.323722	10.0	1641765.0	0.332372	Y
7	IC 410-81781/12	25.0	8.186102	10.0	1612687.0	0.327444	Y



Calibration

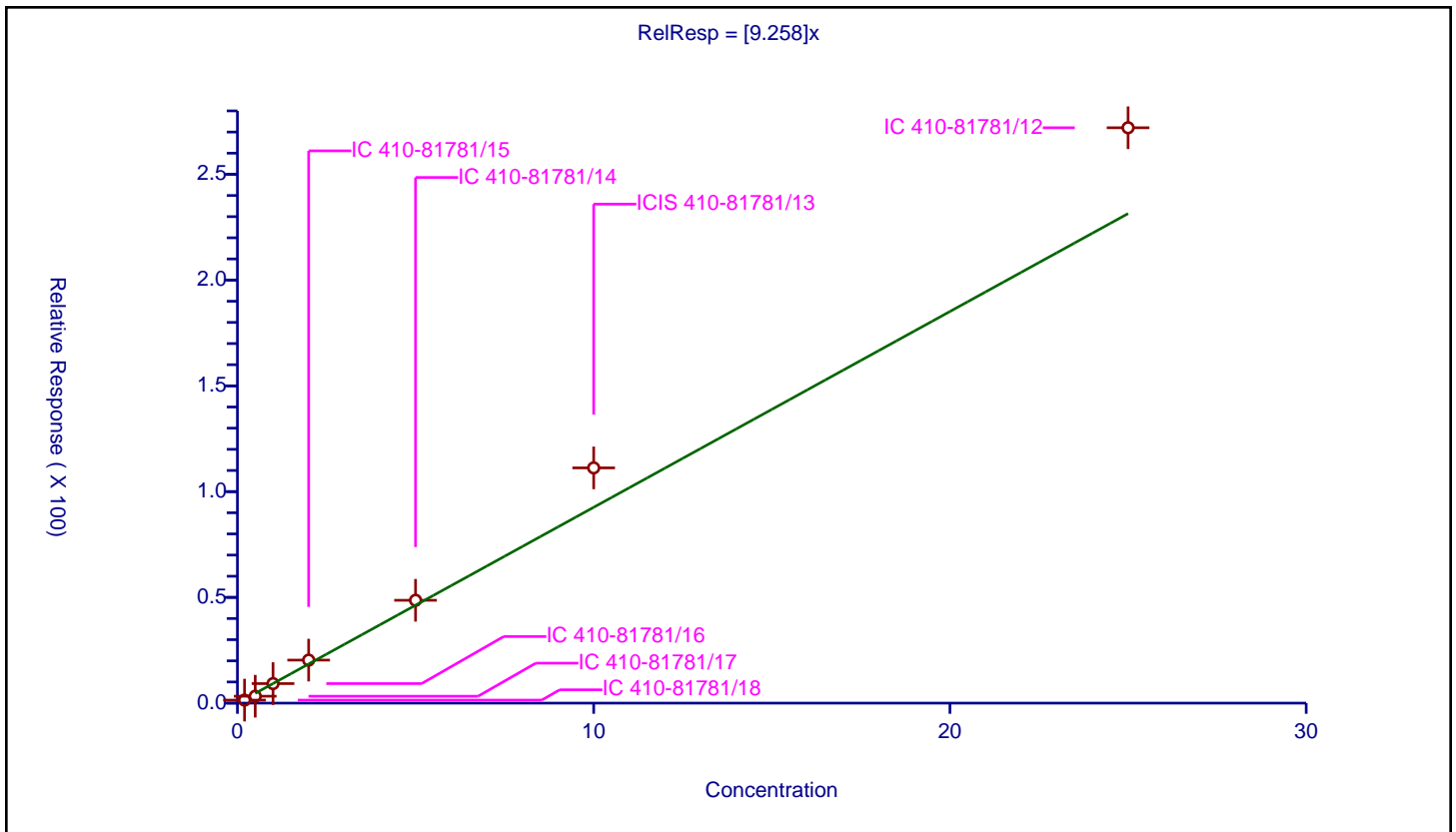
/ Methyl methacrylate

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	9.258

Error Coefficients	
Standard Error:	232000
Relative Standard Error:	19.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.960

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-81781/18	0.2	1.429557	50.0	98527.0	7.147787	Y
2	IC 410-81781/17	0.5	3.264382	50.0	107080.0	6.528764	Y
3	IC 410-81781/16	1.0	9.230365	50.0	100749.0	9.230365	Y
4	IC 410-81781/15	2.0	20.33633	50.0	101567.0	10.168165	Y
5	IC 410-81781/14	5.0	48.628438	50.0	106849.0	9.725688	Y
6	ICIS 410-81781/13	10.0	111.223767	50.0	97347.0	11.122377	Y
7	IC 410-81781/12	25.0	272.029096	50.0	94239.0	10.881164	Y



Calibration

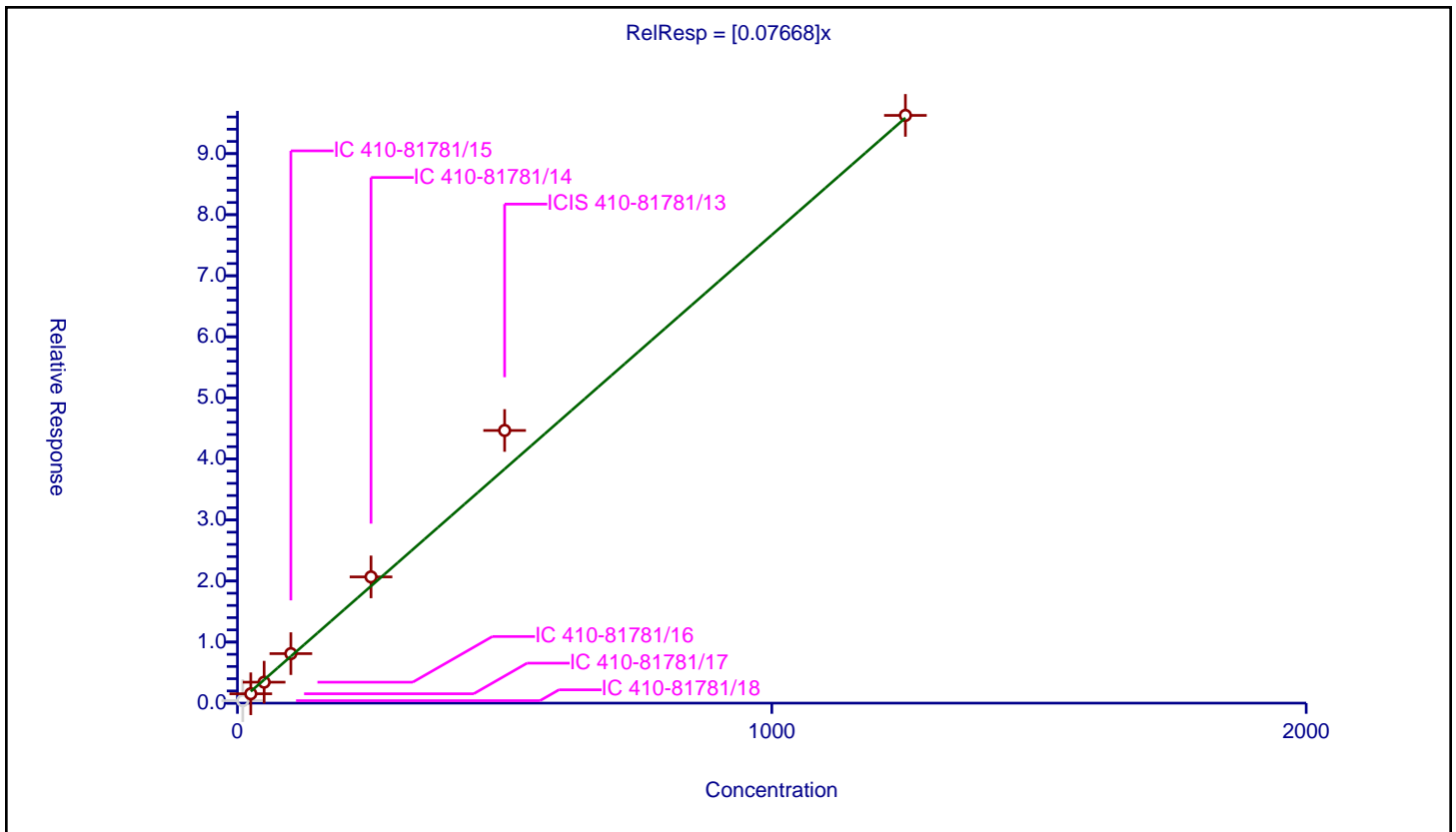
/ 1,4-Dioxane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.07668

Error Coefficients	
Standard Error:	92400
Relative Standard Error:	13.2
Correlation Coefficient:	0.992
Coefficient of Determination (Adjusted):	0.978

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-81781/18	10.0	0.40192	50.0	98527.0	0.040192	N
2	IC 410-81781/17	25.0	1.534834	50.0	107080.0	0.061393	Y
3	IC 410-81781/16	50.0	3.429811	50.0	100749.0	0.068596	Y
4	IC 410-81781/15	100.0	8.108933	50.0	101567.0	0.081089	Y
5	IC 410-81781/14	250.0	20.675439	50.0	106849.0	0.082702	Y
6	ICIS 410-81781/13	500.0	44.659825	50.0	97347.0	0.08932	Y
7	IC 410-81781/12	1250.0	96.261102	50.0	94239.0	0.077009	Y



Calibration

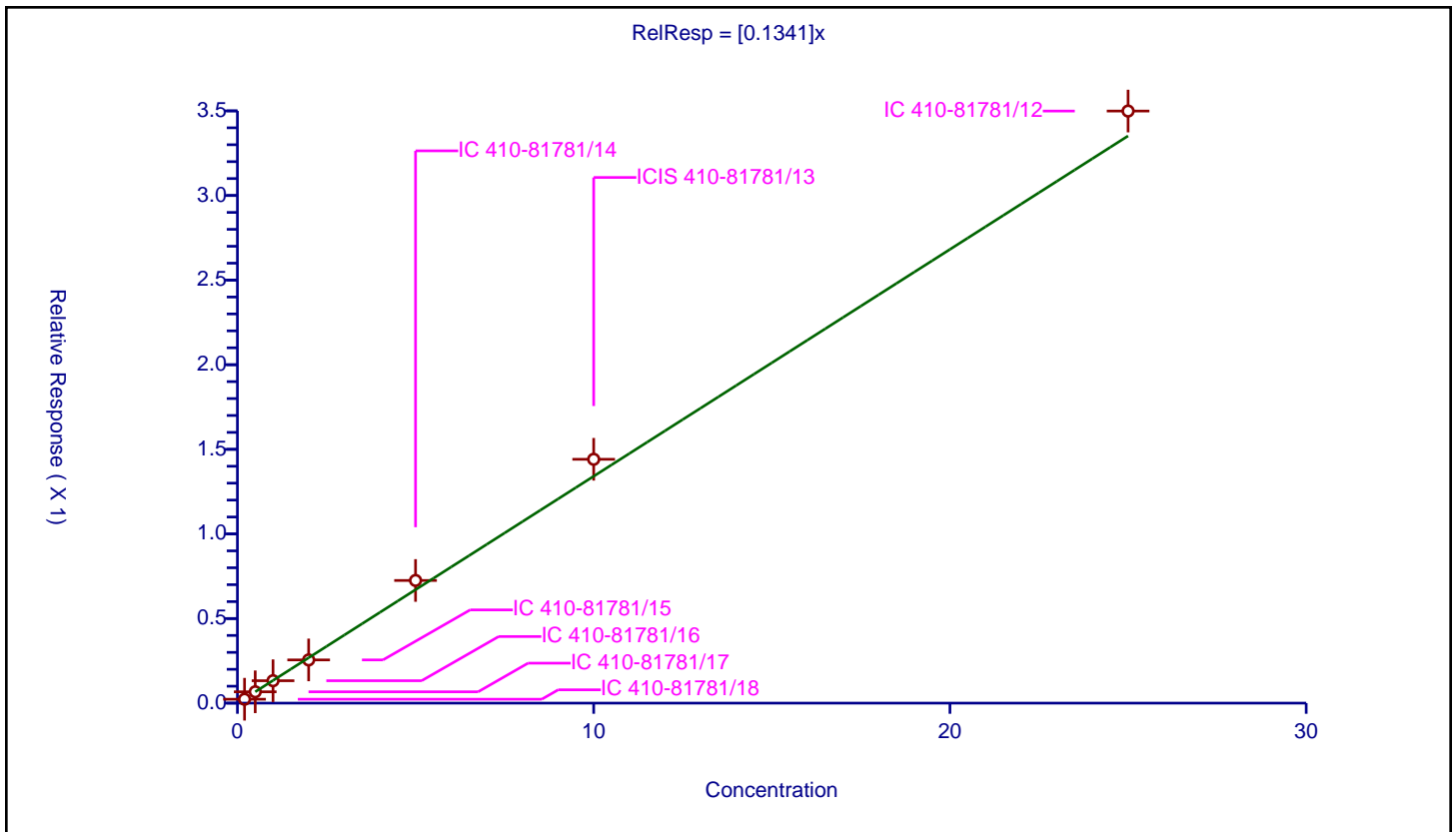
/ Dibromomethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.1341

Error Coefficients	
Standard Error:	255000
Relative Standard Error:	7.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-81781/18	0.2	0.023067	10.0	1648701.0	0.115333	Y
2	IC 410-81781/17	0.5	0.06703	10.0	1401915.0	0.134059	Y
3	IC 410-81781/16	1.0	0.132409	10.0	1816799.0	0.132409	Y
4	IC 410-81781/15	2.0	0.255396	10.0	1845881.0	0.127698	Y
5	IC 410-81781/14	5.0	0.724973	10.0	1565149.0	0.144995	Y
6	ICIS 410-81781/13	10.0	1.44101	10.0	1641765.0	0.144101	Y
7	IC 410-81781/12	25.0	3.499017	10.0	1612687.0	0.139961	Y



Calibration

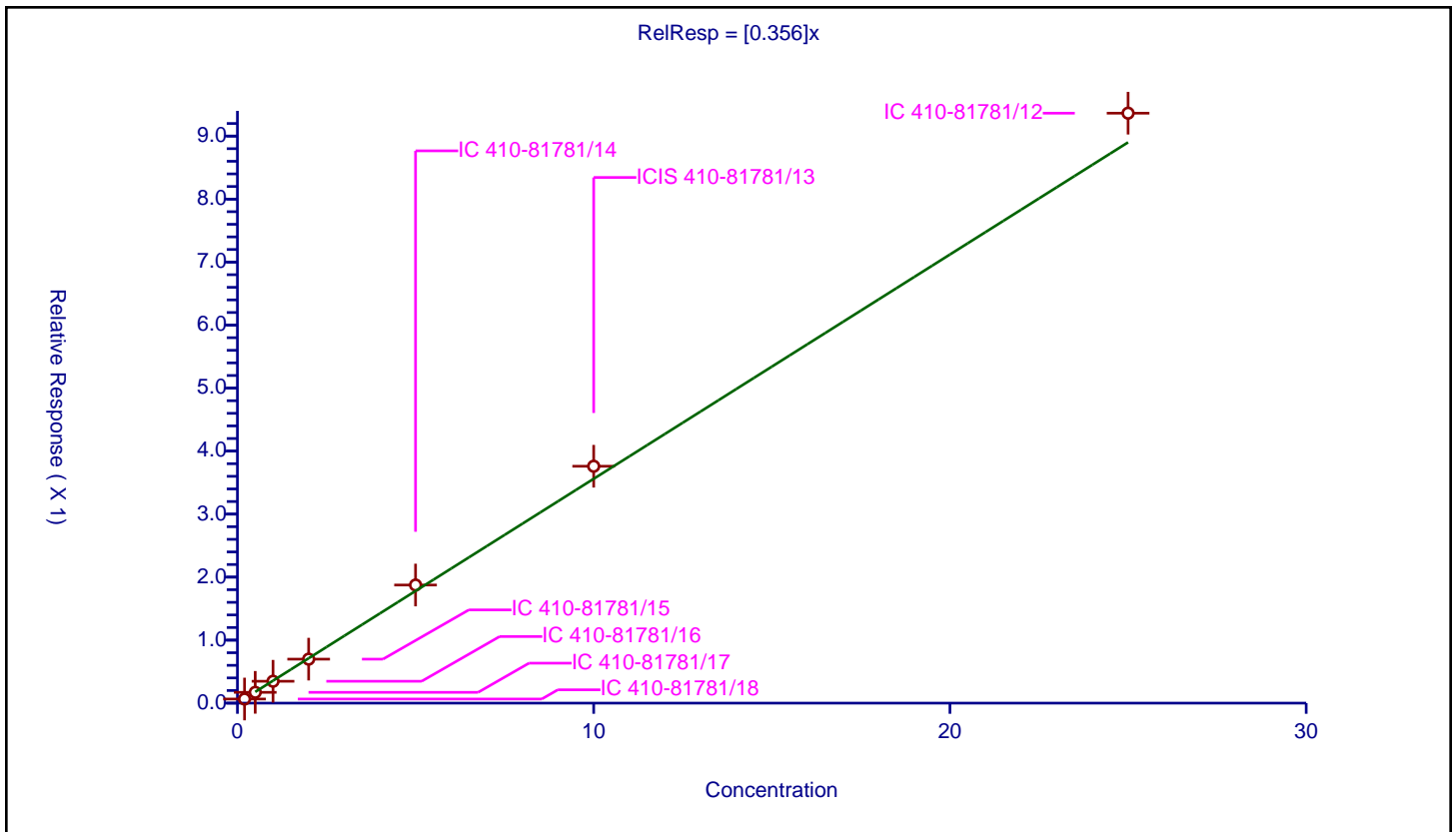
/ Dichlorobromomethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.356

Error Coefficients	
Standard Error:	679000
Relative Standard Error:	5.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-81781/18	0.2	0.065512	10.0	1648701.0	0.327561	Y
2	IC 410-81781/17	0.5	0.171458	10.0	1401915.0	0.342917	Y
3	IC 410-81781/16	1.0	0.34716	10.0	1816799.0	0.34716	Y
4	IC 410-81781/15	2.0	0.698236	10.0	1845881.0	0.349118	Y
5	IC 410-81781/14	5.0	1.874435	10.0	1565149.0	0.374887	Y
6	ICIS 410-81781/13	10.0	3.760057	10.0	1641765.0	0.376006	Y
7	IC 410-81781/12	25.0	9.363702	10.0	1612687.0	0.374548	Y



Calibration

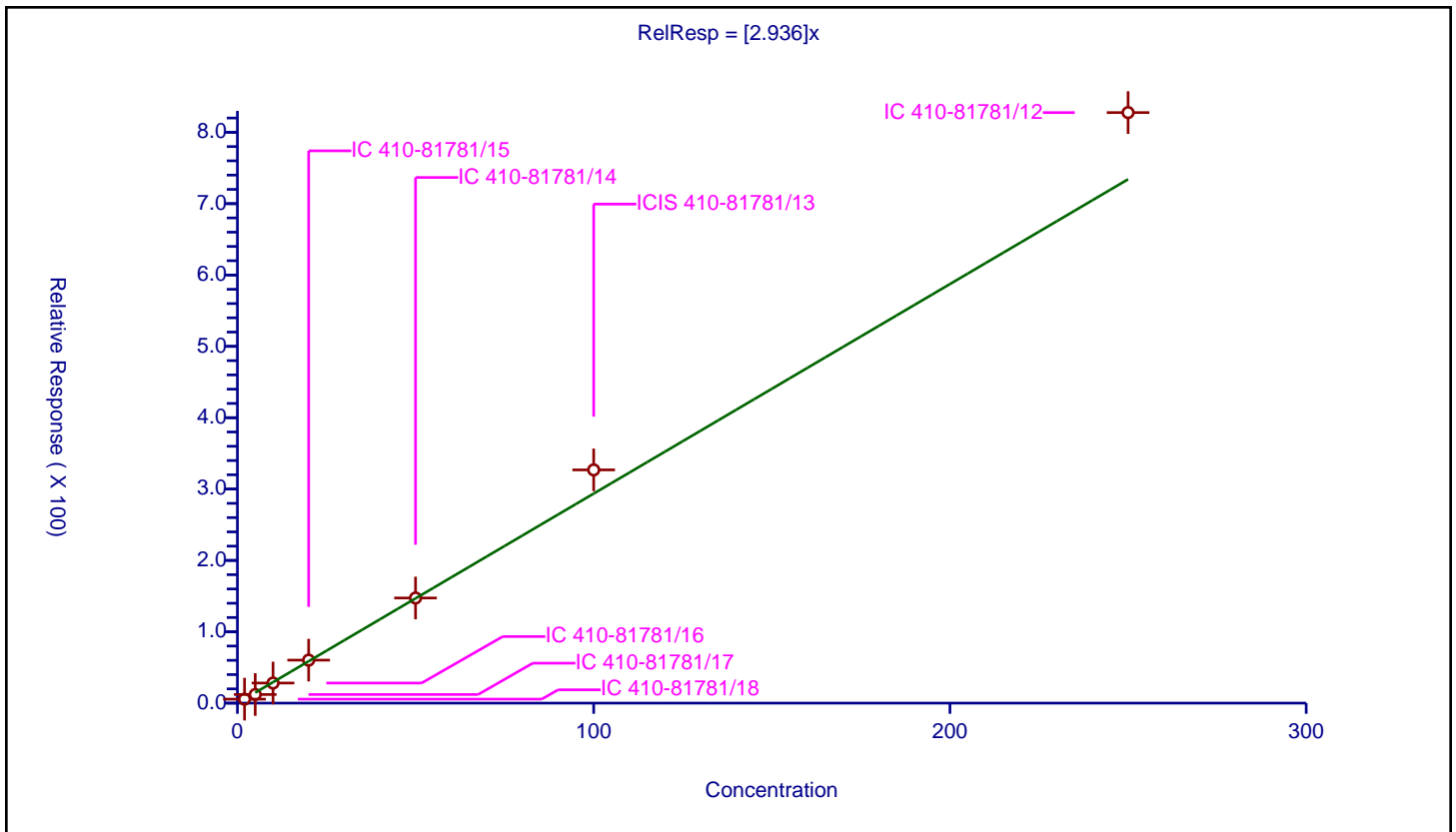
/ 2-Nitropropane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	2.936

Error Coefficients	
Standard Error:	702000
Relative Standard Error:	10.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.986

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-81781/18	2.0	5.575122	50.0	98527.0	2.787561	Y
2	IC 410-81781/17	5.0	12.065278	50.0	107080.0	2.413056	Y
3	IC 410-81781/16	10.0	28.14817	50.0	100749.0	2.814817	Y
4	IC 410-81781/15	20.0	60.274006	50.0	101567.0	3.0137	Y
5	IC 410-81781/14	50.0	147.359358	50.0	106849.0	2.947187	Y
6	ICIS 410-81781/13	100.0	326.865748	50.0	97347.0	3.268657	Y
7	IC 410-81781/12	250.0	827.623914	50.0	94239.0	3.310496	Y



Calibration

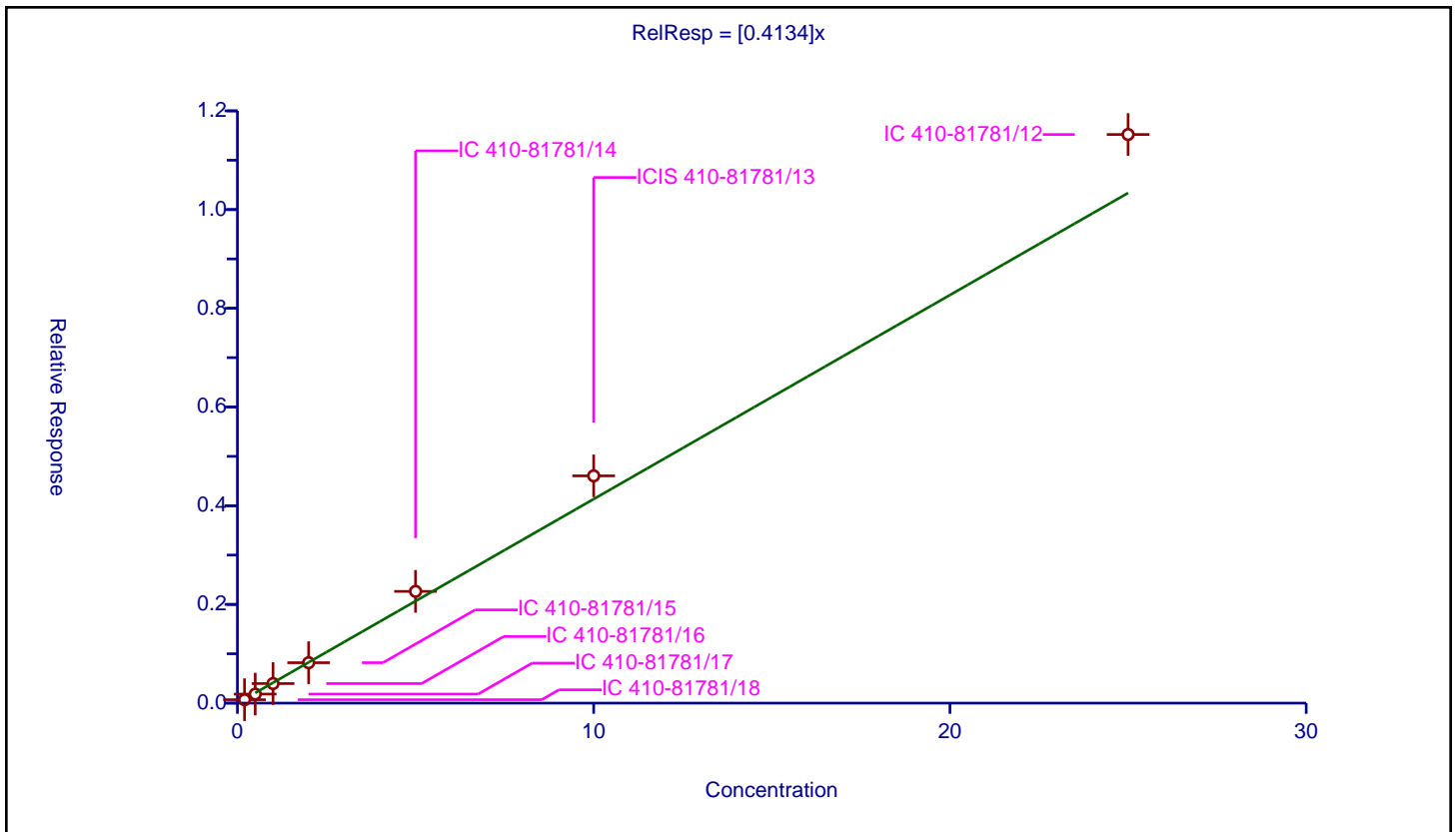
/ cis-1,3-Dichloropropene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4134

Error Coefficients	
Standard Error:	834000
Relative Standard Error:	11.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.985

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-81781/18	0.2	0.06954	10.0	1648701.0	0.347698	Y
2	IC 410-81781/17	0.5	0.183071	10.0	1401915.0	0.366142	Y
3	IC 410-81781/16	1.0	0.39661	10.0	1816799.0	0.39661	Y
4	IC 410-81781/15	2.0	0.819018	10.0	1845881.0	0.409509	Y
5	IC 410-81781/14	5.0	2.264078	10.0	1565149.0	0.452816	Y
6	ICIS 410-81781/13	10.0	4.605123	10.0	1641765.0	0.460512	Y
7	IC 410-81781/12	25.0	11.521405	10.0	1612687.0	0.460856	Y



Calibration

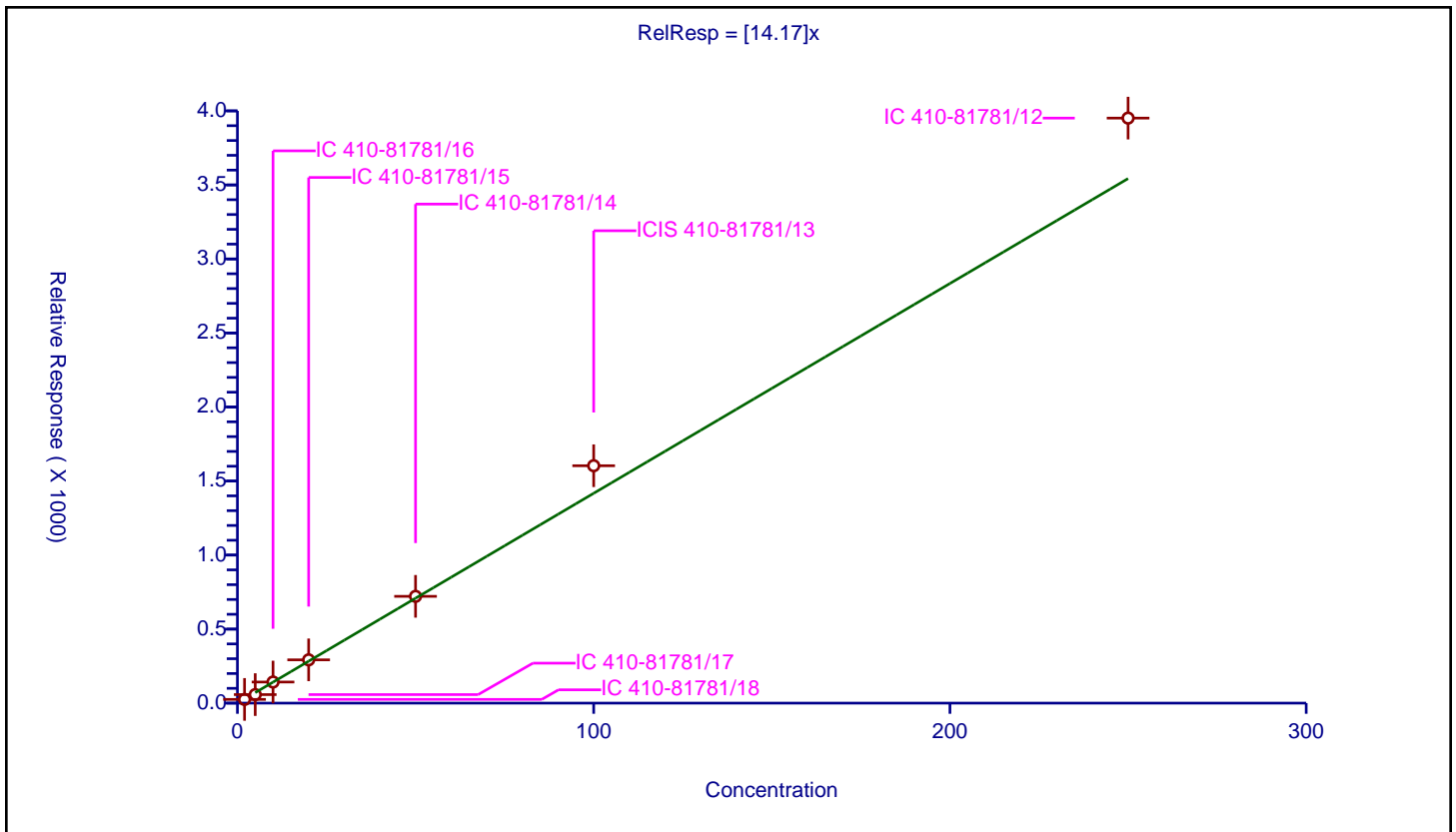
/ 4-Methyl-2-pentanone (MIBK)

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	14.17

Error Coefficients	
Standard Error:	3370000
Relative Standard Error:	11.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.984

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-81781/18	2.0	25.046941	50.0	98527.0	12.523471	Y
2	IC 410-81781/17	5.0	57.694247	50.0	107080.0	11.538849	Y
3	IC 410-81781/16	10.0	142.492233	50.0	100749.0	14.249223	Y
4	IC 410-81781/15	20.0	292.429628	50.0	101567.0	14.621481	Y
5	IC 410-81781/14	50.0	721.333845	50.0	106849.0	14.426677	Y
6	ICIS 410-81781/13	100.0	1603.452597	50.0	97347.0	16.034526	Y
7	IC 410-81781/12	250.0	3951.307314	50.0	94239.0	15.805229	Y



Calibration

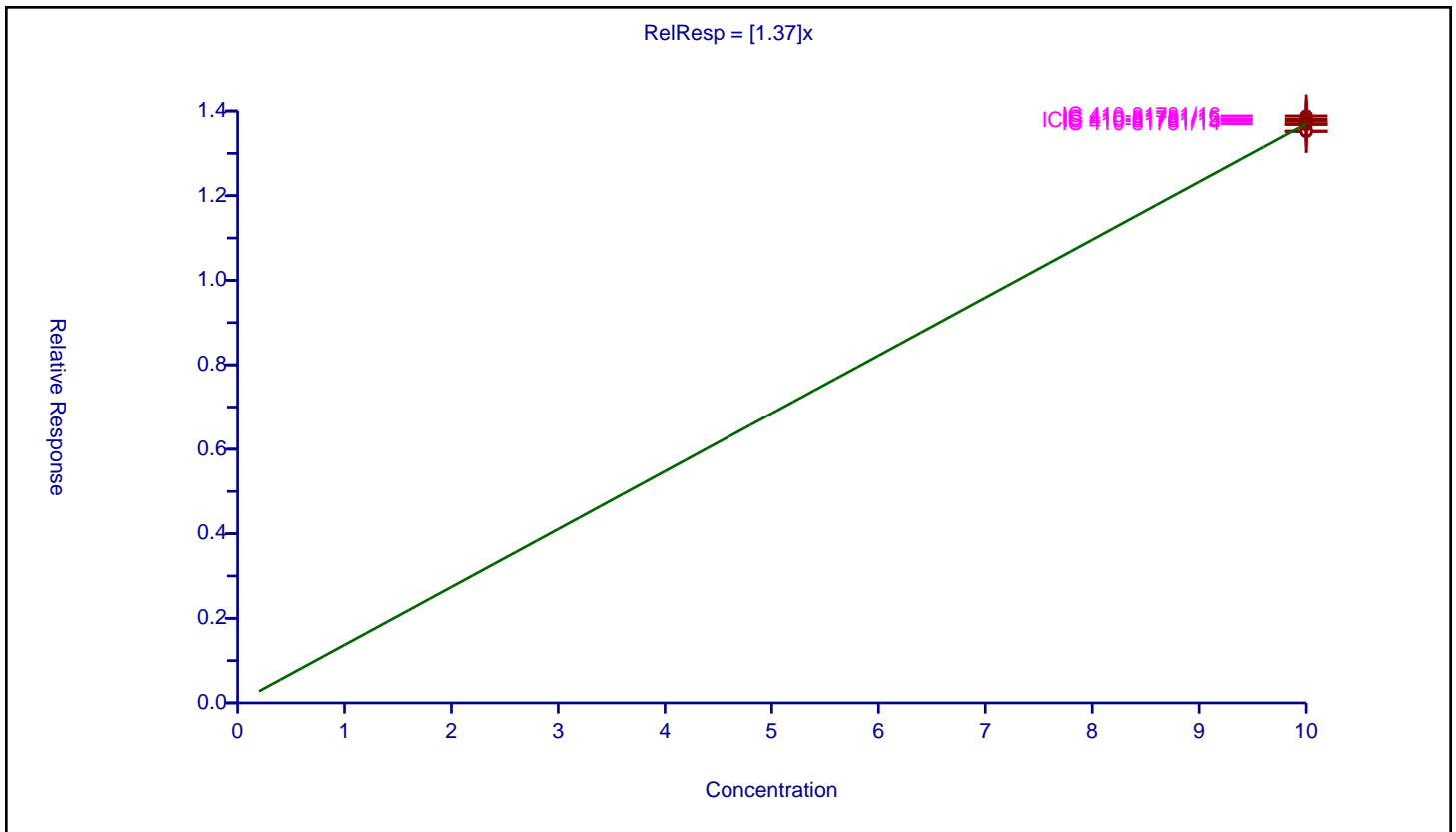
/ Toluene-d8 (Surr)

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.37

Error Coefficients	
Standard Error:	1730000
Relative Standard Error:	1.0
Correlation Coefficient:	0.00000000000000000000
Coefficient of Determination (Adjusted):	0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-81781/12	10.0	13.679326	10.0	1144332.0	1.367933	Y
2	ICIS 410-81781/13	10.0	13.758667	10.0	1162561.0	1.375867	Y
3	IC 410-81781/14	10.0	13.700199	10.0	1101511.0	1.37002	Y
4	IC 410-81781/15	10.0	13.814916	10.0	1297701.0	1.381492	Y
5	IC 410-81781/16	10.0	13.884527	10.0	1275208.0	1.388453	Y
6	IC 410-81781/17	10.0	13.515803	10.0	1008370.0	1.35158	Y
7	IC 410-81781/18	10.0	13.529709	10.0	1173921.0	1.352971	Y



Calibration

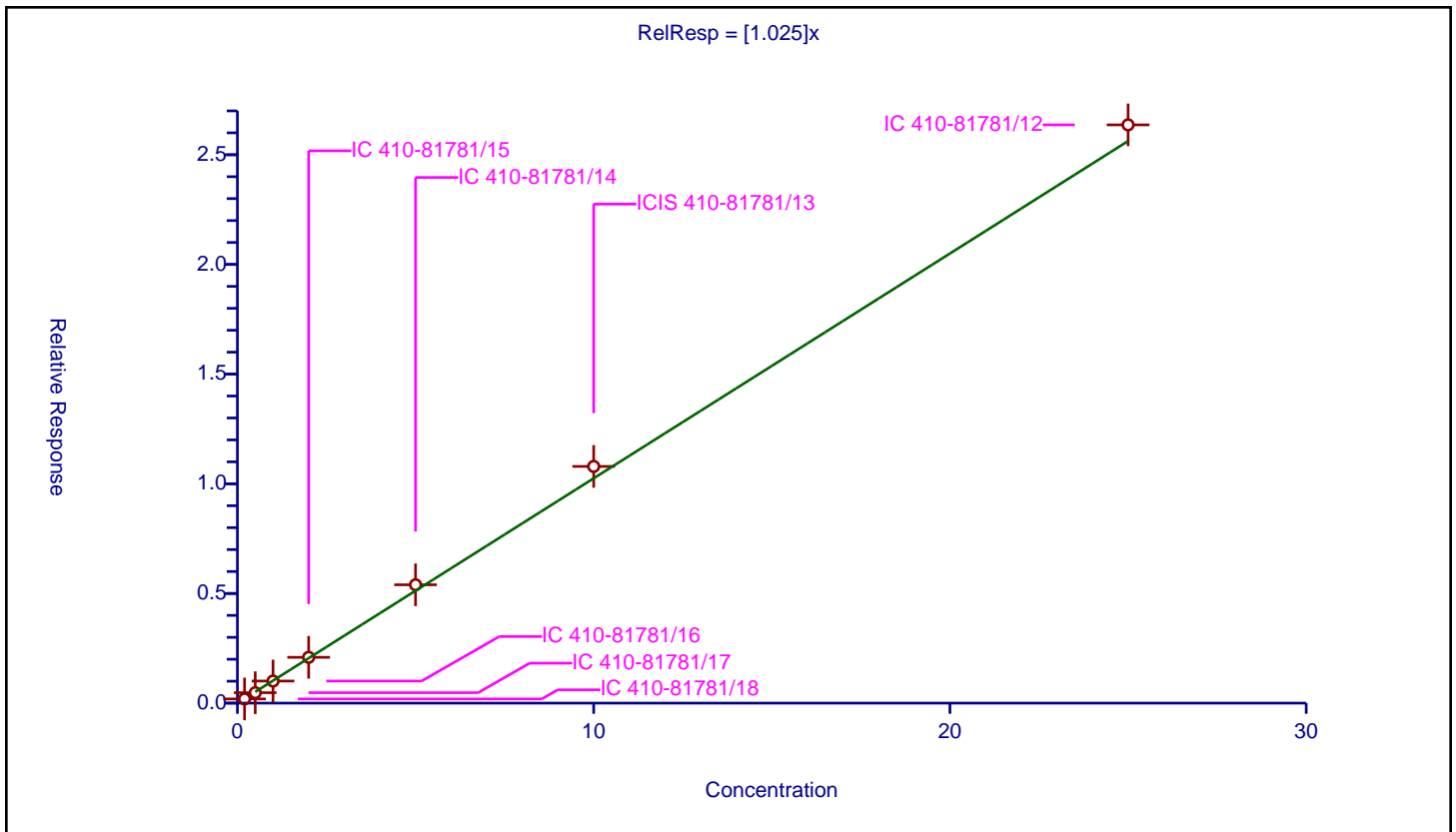
/ Toluene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.025

Error Coefficients	
Standard Error:	1360000
Relative Standard Error:	5.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-81781/18	0.2	0.191802	10.0	1173921.0	0.959008	Y
2	IC 410-81781/17	0.5	0.475441	10.0	1008370.0	0.950881	Y
3	IC 410-81781/16	1.0	1.007592	10.0	1275208.0	1.007592	Y
4	IC 410-81781/15	2.0	2.088231	10.0	1297701.0	1.044116	Y
5	IC 410-81781/14	5.0	5.39567	10.0	1101511.0	1.079134	Y
6	ICIS 410-81781/13	10.0	10.791451	10.0	1162561.0	1.079145	Y
7	IC 410-81781/12	25.0	26.362778	10.0	1144332.0	1.054511	Y



Calibration

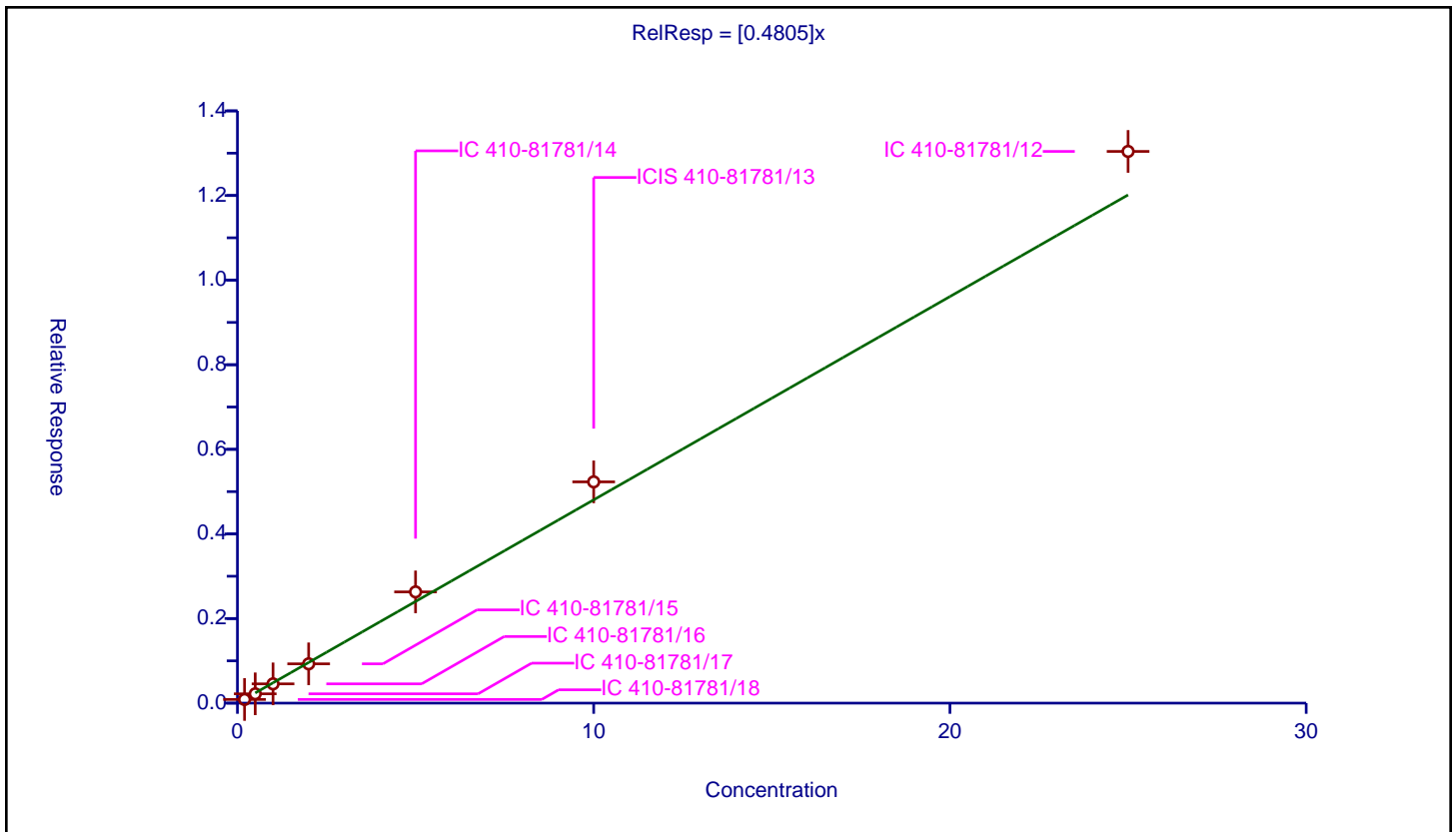
/ trans-1,3-Dichloropropene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4805

Error Coefficients	
Standard Error:	671000
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 410-81781/18	0.2	0.086709	10.0	1173921.0	0.433547	Y
2	IC 410-81781/17	0.5	0.219899	10.0	1008370.0	0.439799	Y
3	IC 410-81781/16	1.0	0.455243	10.0	1275208.0	0.455243	Y
4	IC 410-81781/15	2.0	0.929189	10.0	1297701.0	0.464595	Y
5	IC 410-81781/14	5.0	2.629715	10.0	1101511.0	0.525943	Y
6	ICIS 410-81781/13	10.0	5.230581	10.0	1162561.0	0.523058	Y
7	IC 410-81781/12	25.0	13.041451	10.0	1144332.0	0.521658	Y



Calibration

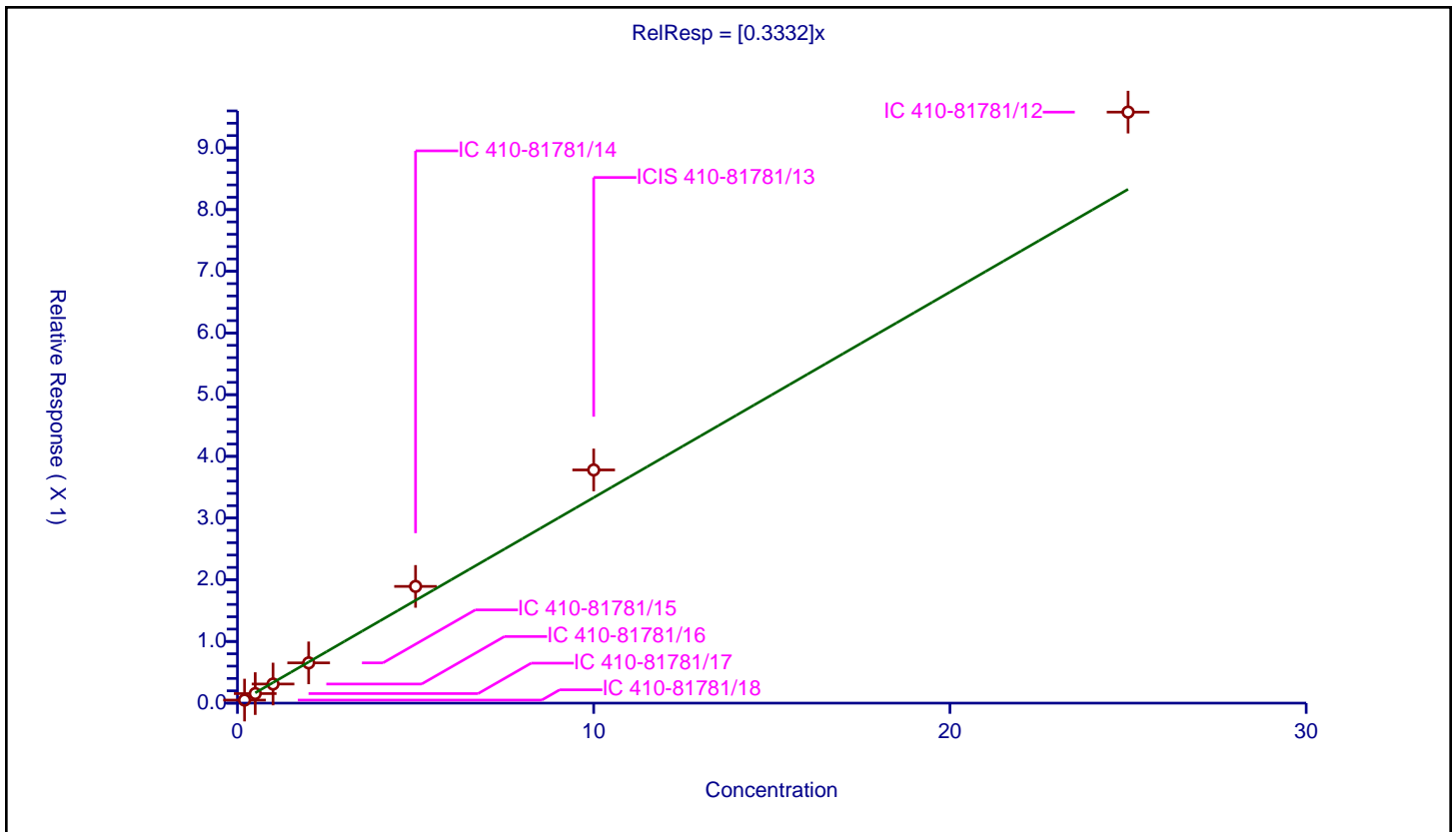
/ Ethyl methacrylate

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3332

Error Coefficients	
Standard Error:	491000
Relative Standard Error:	15.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.974

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-81781/18	0.2	0.049339	10.0	1173921.0	0.246695	Y
2	IC 410-81781/17	0.5	0.154874	10.0	1008370.0	0.309747	Y
3	IC 410-81781/16	1.0	0.309871	10.0	1275208.0	0.309871	Y
4	IC 410-81781/15	2.0	0.652546	10.0	1297701.0	0.326273	Y
5	IC 410-81781/14	5.0	1.892155	10.0	1101511.0	0.378431	Y
6	ICIS 410-81781/13	10.0	3.779776	10.0	1162561.0	0.377978	Y
7	IC 410-81781/12	25.0	9.580253	10.0	1144332.0	0.38321	Y



Calibration

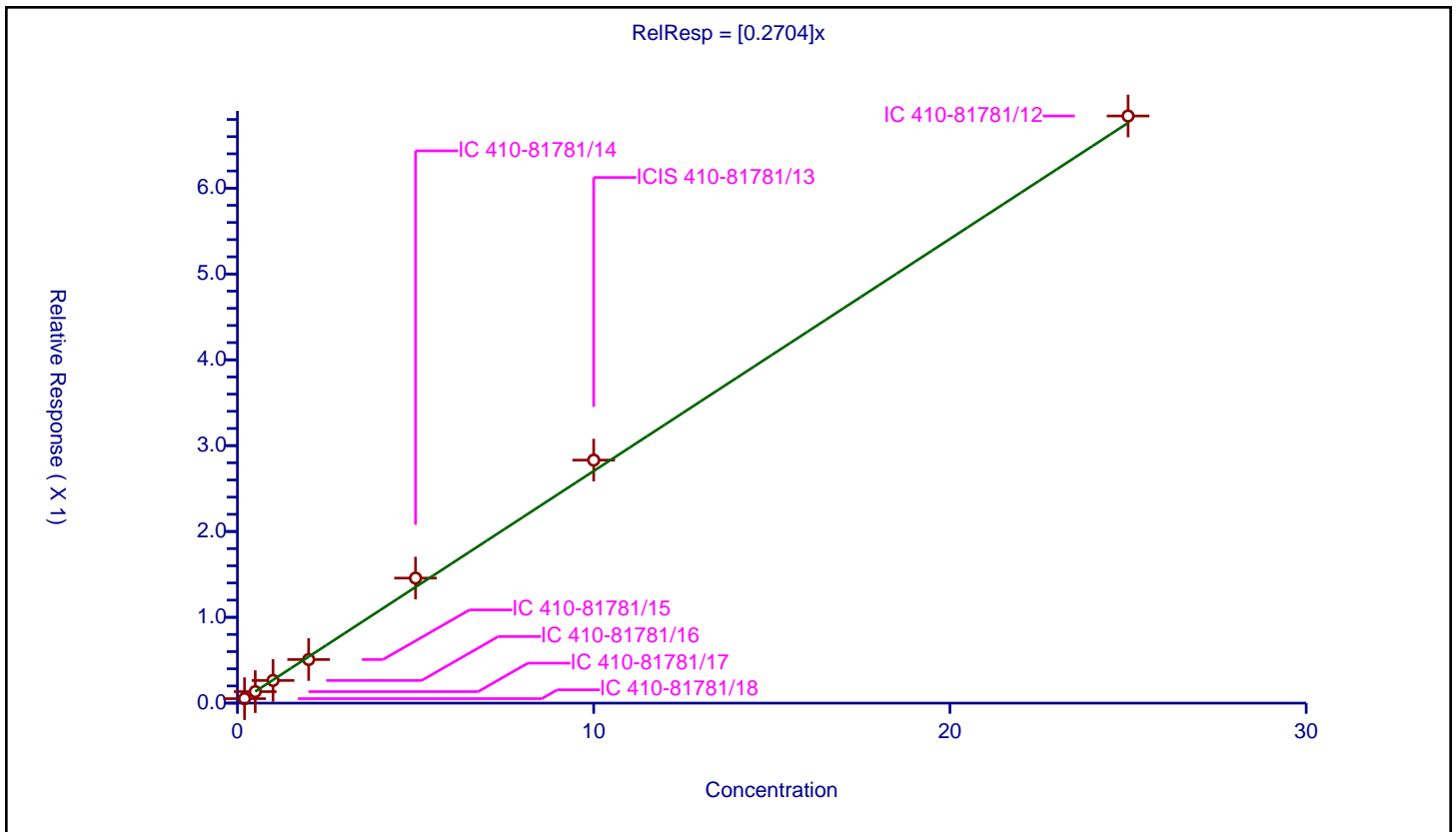
/ 1,1,2-Trichloroethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2704

Error Coefficients	
Standard Error:	354000
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 410-81781/18	0.2	0.051852	10.0	1173921.0	0.259259	Y
2	IC 410-81781/17	0.5	0.13387	10.0	1008370.0	0.267739	Y
3	IC 410-81781/16	1.0	0.263957	10.0	1275208.0	0.263957	Y
4	IC 410-81781/15	2.0	0.507798	10.0	1297701.0	0.253899	Y
5	IC 410-81781/14	5.0	1.456681	10.0	1101511.0	0.291336	Y
6	ICIS 410-81781/13	10.0	2.831301	10.0	1162561.0	0.28313	Y
7	IC 410-81781/12	25.0	6.840716	10.0	1144332.0	0.273629	Y



Calibration

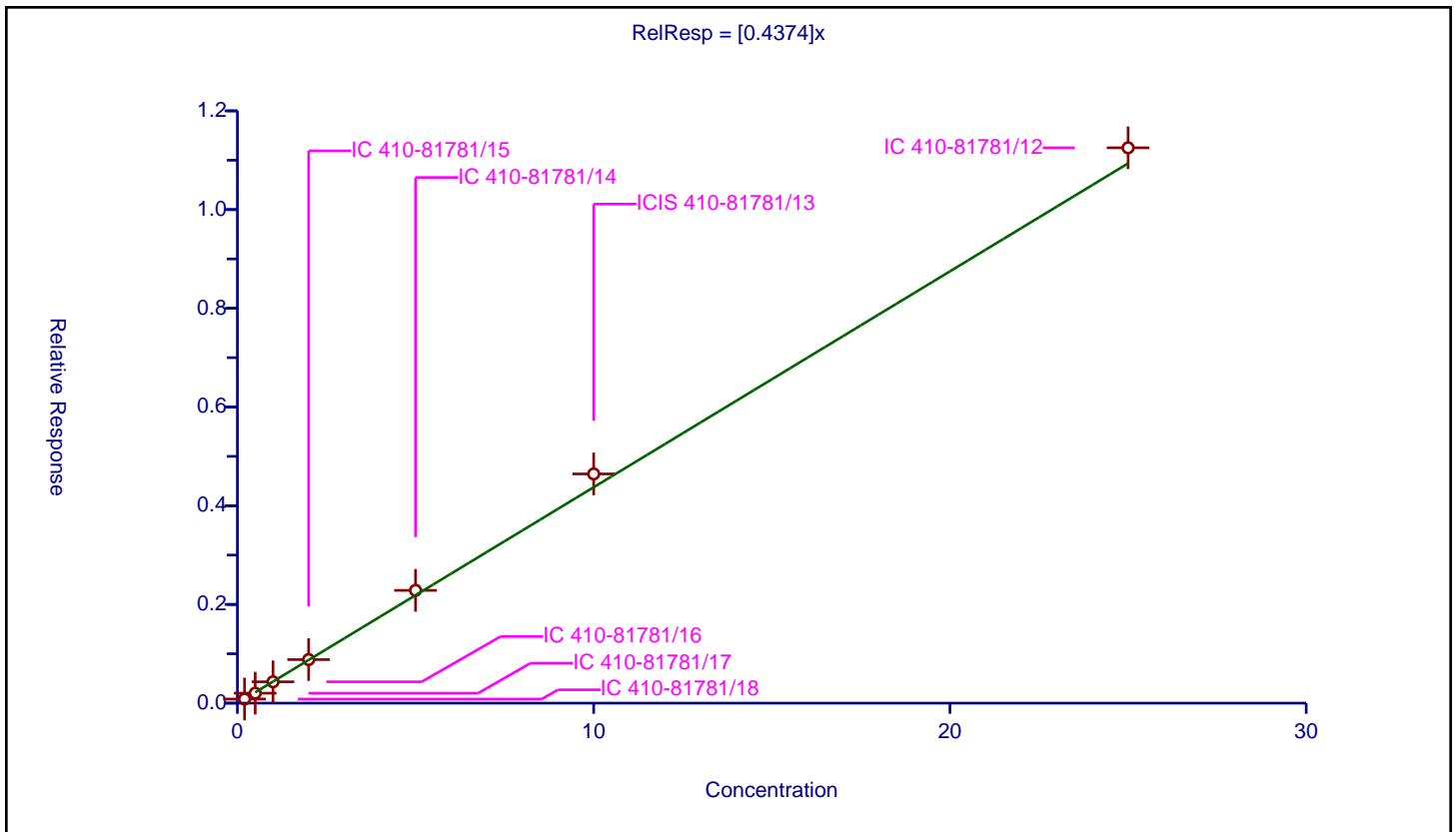
/ Tetrachloroethene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4374

Error Coefficients	
Standard Error:	582000
Relative Standard Error:	5.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-81781/18	0.2	0.082689	10.0	1173921.0	0.413443	Y
2	IC 410-81781/17	0.5	0.201811	10.0	1008370.0	0.403622	Y
3	IC 410-81781/16	1.0	0.432635	10.0	1275208.0	0.432635	Y
4	IC 410-81781/15	2.0	0.88189	10.0	1297701.0	0.440945	Y
5	IC 410-81781/14	5.0	2.28448	10.0	1101511.0	0.456896	Y
6	ICIS 410-81781/13	10.0	4.643808	10.0	1162561.0	0.464381	Y
7	IC 410-81781/12	25.0	11.252241	10.0	1144332.0	0.45009	Y



Calibration

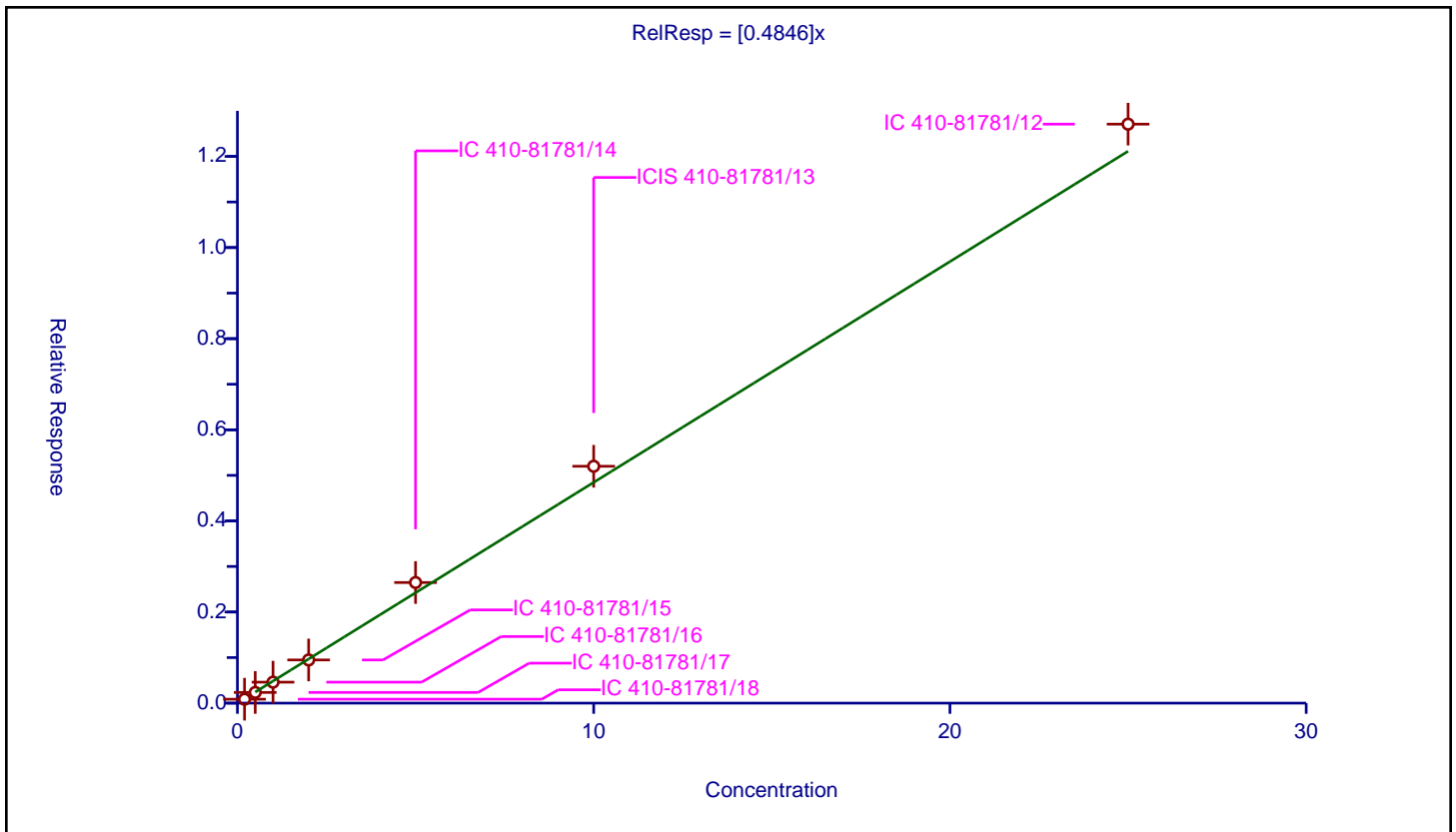
/ 1,3-Dichloropropane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4846

Error Coefficients	
Standard Error:	656000
Relative Standard Error:	7.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-81781/18	0.2	0.085994	10.0	1173921.0	0.429969	Y
2	IC 410-81781/17	0.5	0.235003	10.0	1008370.0	0.470006	Y
3	IC 410-81781/16	1.0	0.460458	10.0	1275208.0	0.460458	Y
4	IC 410-81781/15	2.0	0.947799	10.0	1297701.0	0.4739	Y
5	IC 410-81781/14	5.0	2.647182	10.0	1101511.0	0.529436	Y
6	ICIS 410-81781/13	10.0	5.199185	10.0	1162561.0	0.519919	Y
7	IC 410-81781/12	25.0	12.708663	10.0	1144332.0	0.508347	Y



Calibration

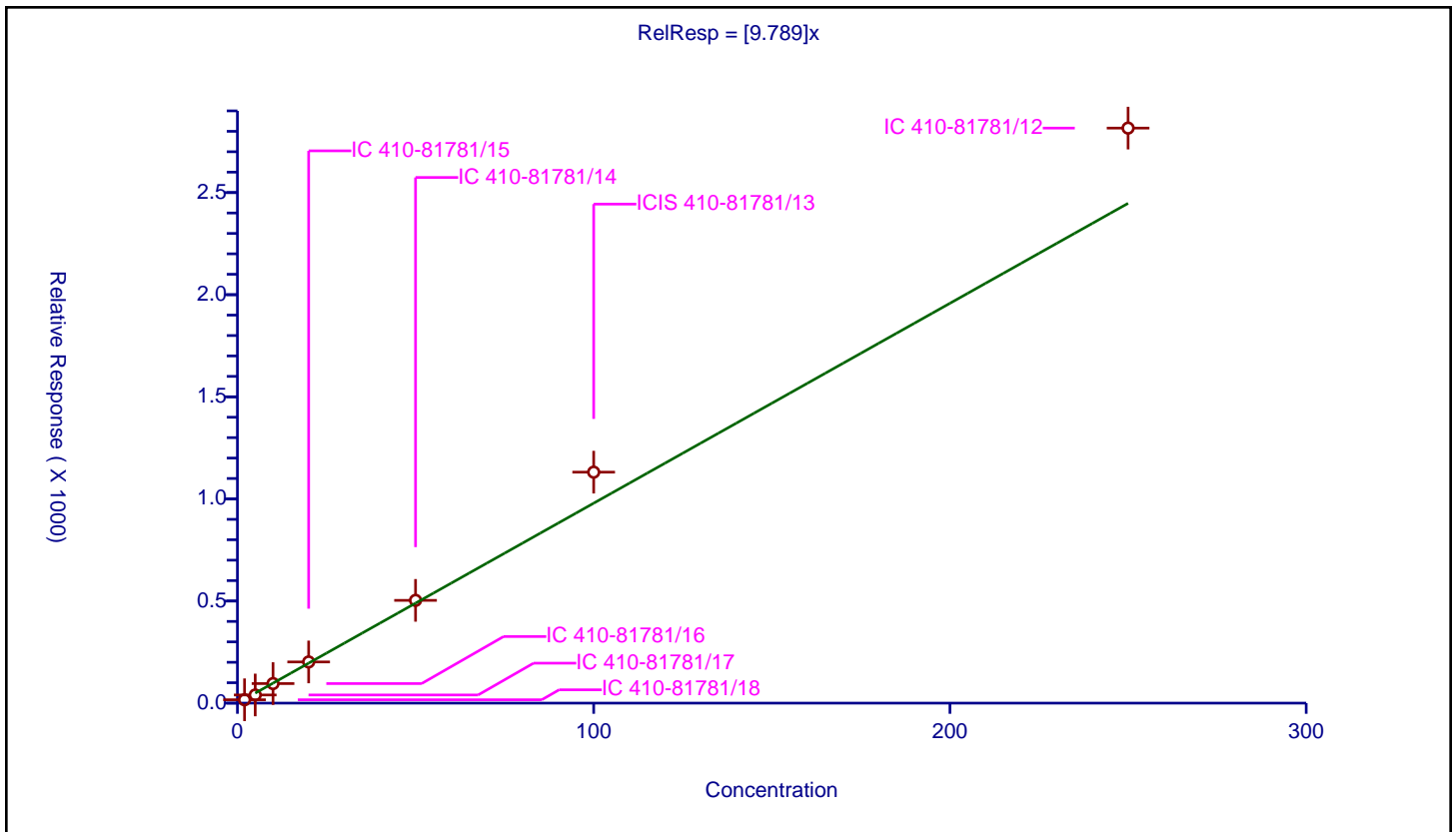
/ 2-Hexanone

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	9.789

Error Coefficients	
Standard Error:	2390000
Relative Standard Error:	13.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.979

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-81781/18	2.0	16.438641	50.0	98527.0	8.219321	Y
2	IC 410-81781/17	5.0	39.992996	50.0	107080.0	7.998599	Y
3	IC 410-81781/16	10.0	95.853061	50.0	100749.0	9.585306	Y
4	IC 410-81781/15	20.0	201.694448	50.0	101567.0	10.084722	Y
5	IC 410-81781/14	50.0	503.228856	50.0	106849.0	10.064577	Y
6	ICIS 410-81781/13	100.0	1131.014823	50.0	97347.0	11.310148	Y
7	IC 410-81781/12	250.0	2815.702098	50.0	94239.0	11.262808	Y



Calibration

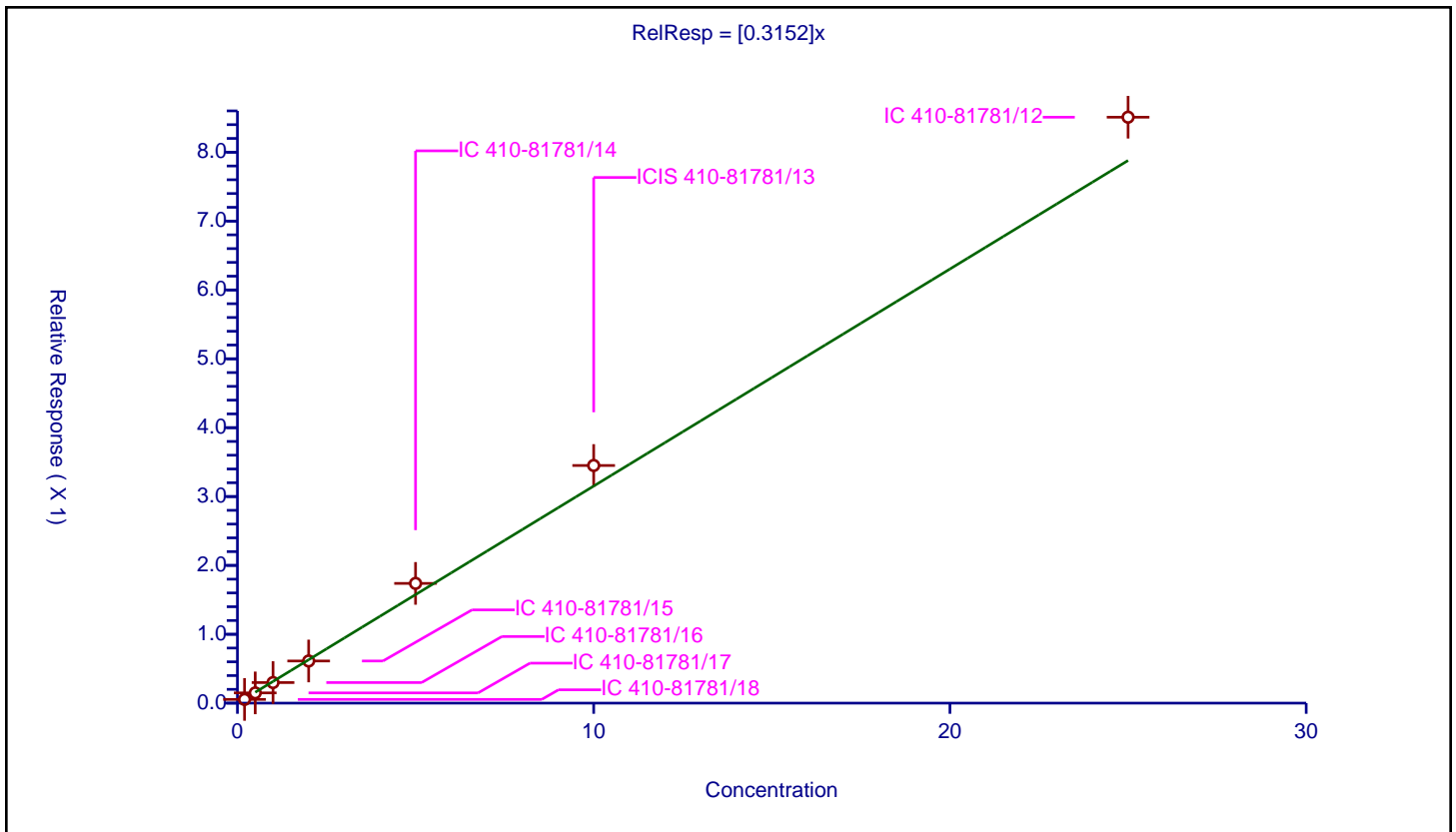
/ Chlorodibromomethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3152

Error Coefficients	
Standard Error:	438000
Relative Standard Error:	9.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-81781/18	0.2	0.054118	10.0	1173921.0	0.270589	Y
2	IC 410-81781/17	0.5	0.148864	10.0	1008370.0	0.297728	Y
3	IC 410-81781/16	1.0	0.29879	10.0	1275208.0	0.29879	Y
4	IC 410-81781/15	2.0	0.612221	10.0	1297701.0	0.306111	Y
5	IC 410-81781/14	5.0	1.738712	10.0	1101511.0	0.347742	Y
6	ICIS 410-81781/13	10.0	3.450795	10.0	1162561.0	0.34508	Y
7	IC 410-81781/12	25.0	8.50851	10.0	1144332.0	0.34034	Y



Calibration

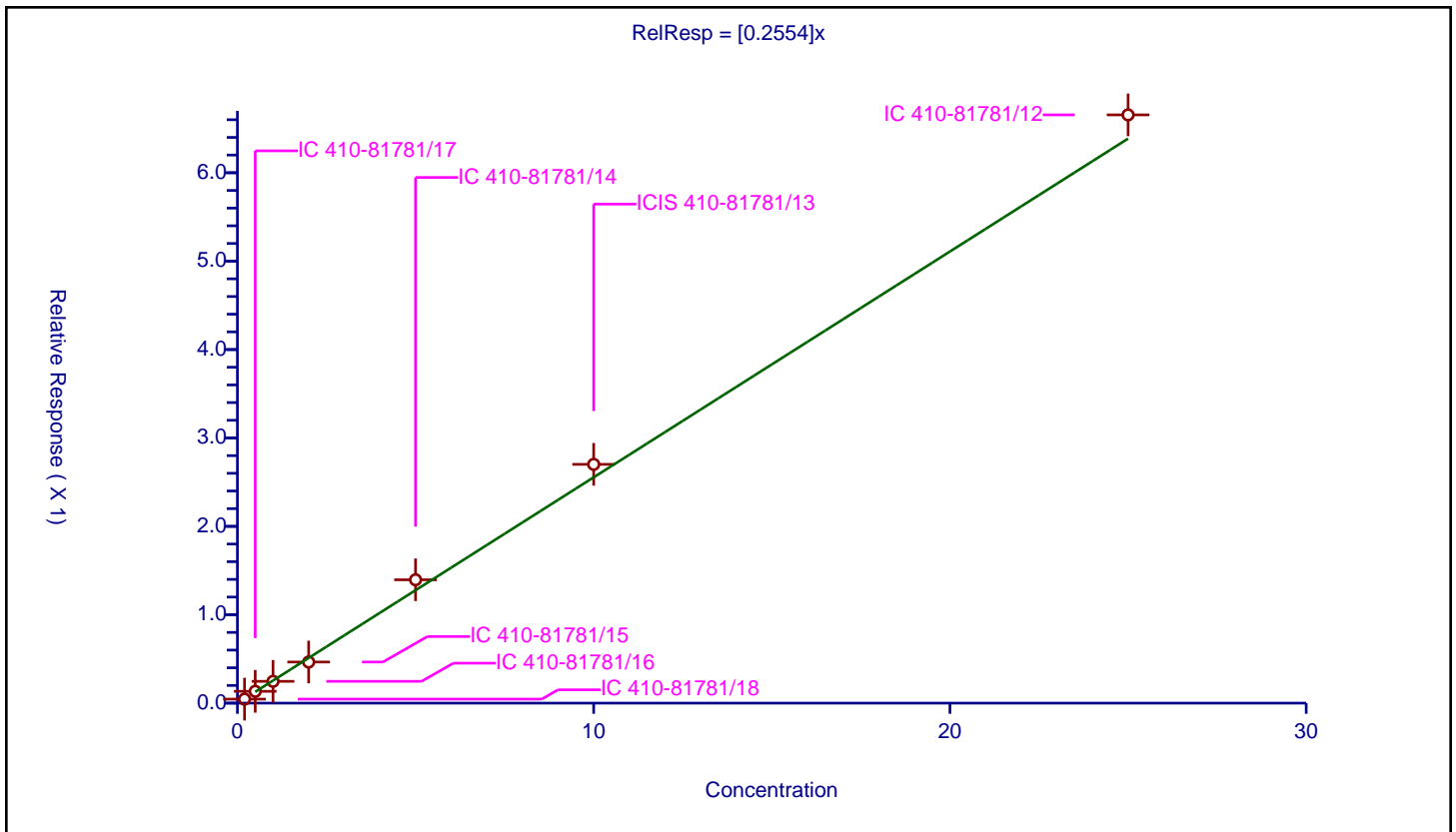
/ Ethylene Dibromide

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2554

Error Coefficients	
Standard Error:	343000
Relative Standard Error:	7.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-81781/18	0.2	0.045327	10.0	1173921.0	0.226634	Y
2	IC 410-81781/17	0.5	0.133532	10.0	1008370.0	0.267065	Y
3	IC 410-81781/16	1.0	0.246477	10.0	1275208.0	0.246477	Y
4	IC 410-81781/15	2.0	0.465123	10.0	1297701.0	0.232561	Y
5	IC 410-81781/14	5.0	1.395429	10.0	1101511.0	0.279086	Y
6	ICIS 410-81781/13	10.0	2.701226	10.0	1162561.0	0.270123	Y
7	IC 410-81781/12	25.0	6.654922	10.0	1144332.0	0.266197	Y



Calibration

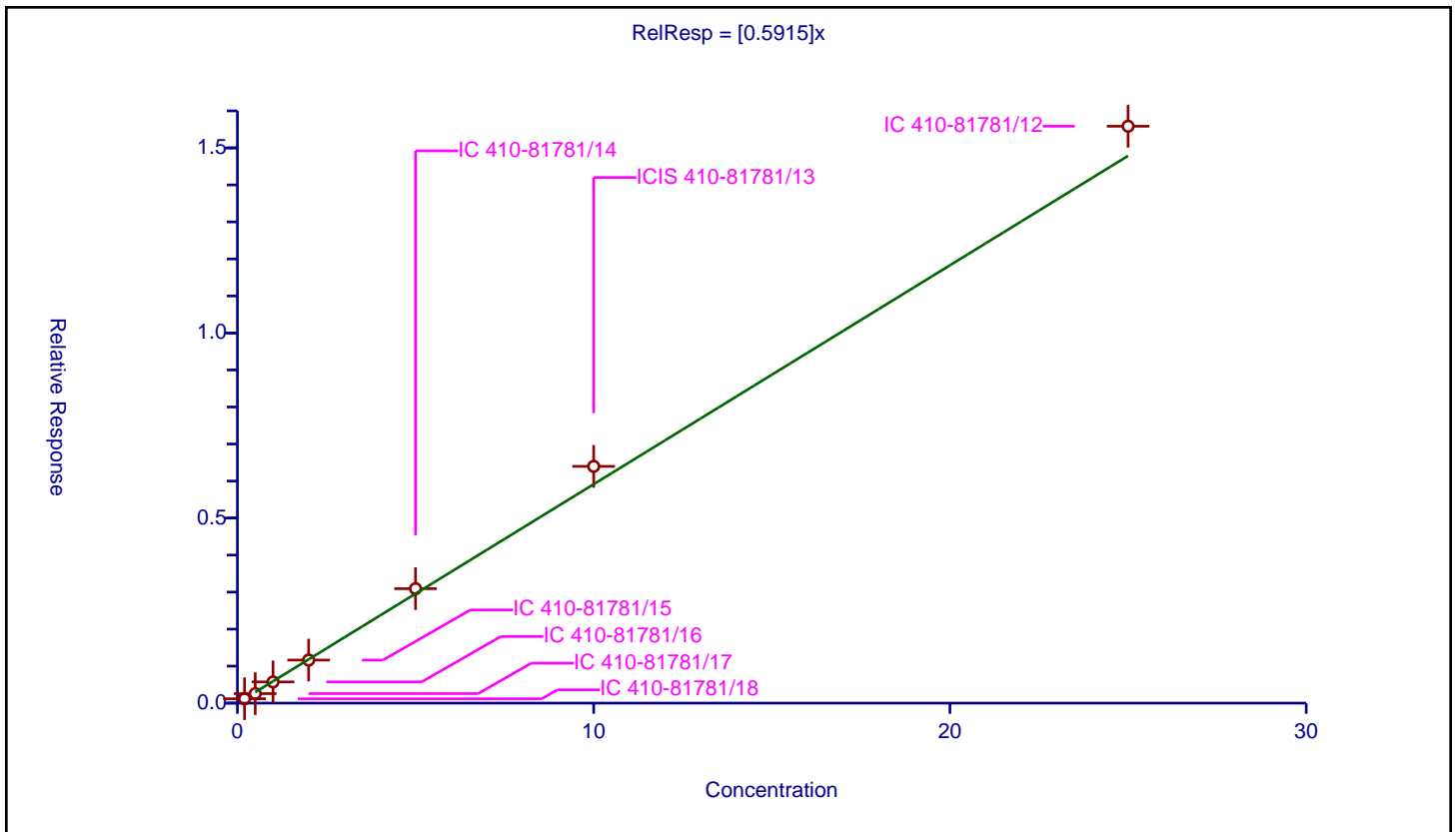
/ 1-Chlorohexane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.5915

Error Coefficients	
Standard Error:	804000
Relative Standard Error:	7.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-81781/18	0.2	0.118074	10.0	1173921.0	0.590372	Y
2	IC 410-81781/17	0.5	0.256791	10.0	1008370.0	0.513581	Y
3	IC 410-81781/16	1.0	0.573263	10.0	1275208.0	0.573263	Y
4	IC 410-81781/15	2.0	1.163072	10.0	1297701.0	0.581536	Y
5	IC 410-81781/14	5.0	3.092189	10.0	1101511.0	0.618438	Y
6	ICIS 410-81781/13	10.0	6.396008	10.0	1162561.0	0.639601	Y
7	IC 410-81781/12	25.0	15.584865	10.0	1144332.0	0.623395	Y



Calibration

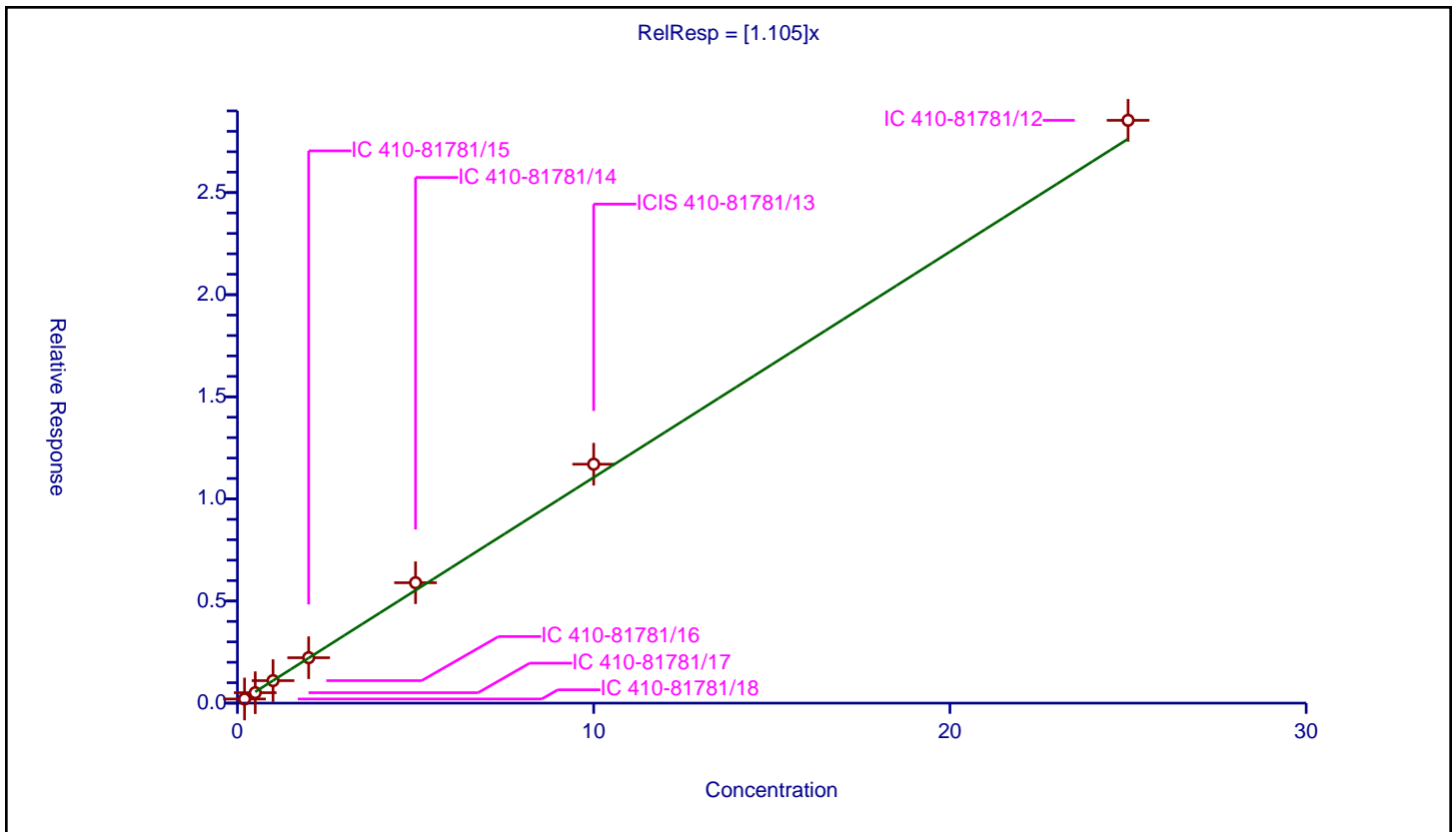
/ Chlorobenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.105

Error Coefficients	
Standard Error:	1470000
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 410-81781/18	0.2	0.202313	10.0	1173921.0	1.011567	Y
2	IC 410-81781/17	0.5	0.510765	10.0	1008370.0	1.02153	Y
3	IC 410-81781/16	1.0	1.101036	10.0	1275208.0	1.101036	Y
4	IC 410-81781/15	2.0	2.223224	10.0	1297701.0	1.111612	Y
5	IC 410-81781/14	5.0	5.895901	10.0	1101511.0	1.17918	Y
6	ICIS 410-81781/13	10.0	11.699033	10.0	1162561.0	1.169903	Y
7	IC 410-81781/12	25.0	28.537688	10.0	1144332.0	1.141508	Y



Calibration

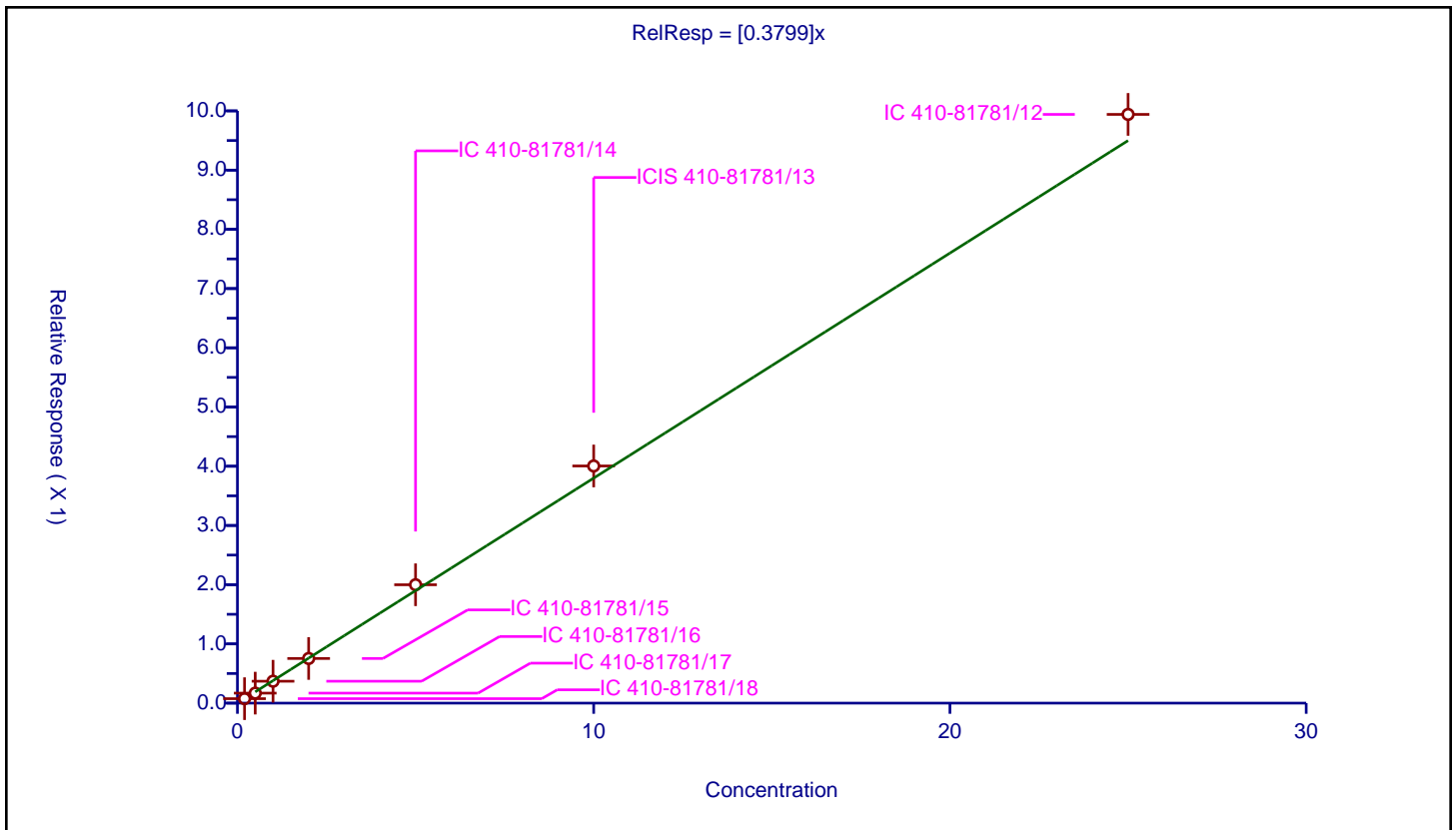
/ 1,1,1,2-Tetrachloroethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3799

Error Coefficients	
Standard Error:	512000
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 410-81781/18	0.2	0.075414	10.0	1173921.0	0.37707	Y
2	IC 410-81781/17	0.5	0.169025	10.0	1008370.0	0.338051	Y
3	IC 410-81781/16	1.0	0.369783	10.0	1275208.0	0.369783	Y
4	IC 410-81781/15	2.0	0.753795	10.0	1297701.0	0.376897	Y
5	IC 410-81781/14	5.0	1.998854	10.0	1101511.0	0.399771	Y
6	ICIS 410-81781/13	10.0	4.004366	10.0	1162561.0	0.400437	Y
7	IC 410-81781/12	25.0	9.940848	10.0	1144332.0	0.397634	Y



Calibration

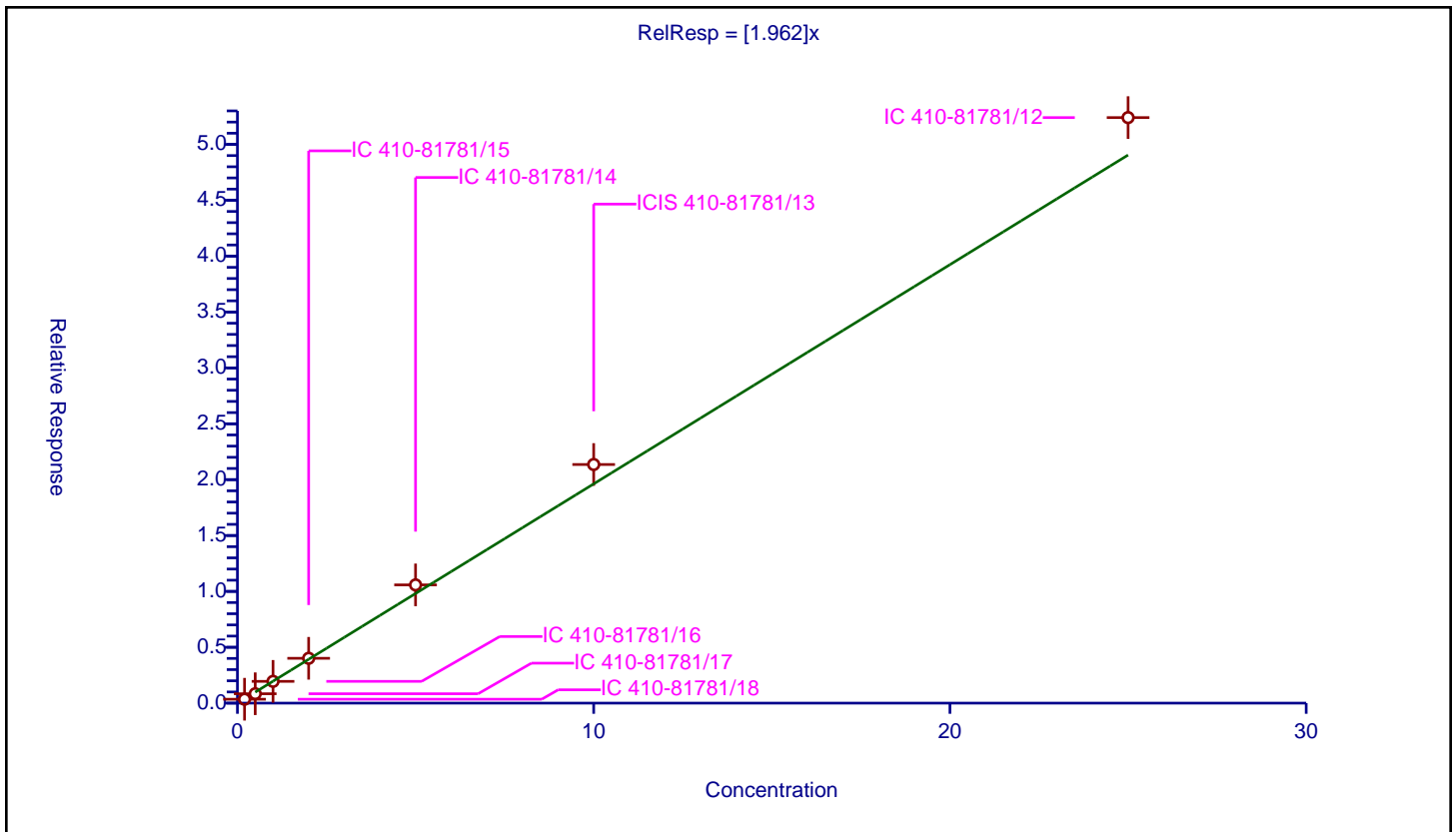
/ Ethylbenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.962

Error Coefficients	
Standard Error:	2700000
Relative Standard Error:	9.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-81781/18	0.2	0.349964	10.0	1173921.0	1.74982	Y
2	IC 410-81781/17	0.5	0.840683	10.0	1008370.0	1.681367	Y
3	IC 410-81781/16	1.0	1.949517	10.0	1275208.0	1.949517	Y
4	IC 410-81781/15	2.0	4.012095	10.0	1297701.0	2.006048	Y
5	IC 410-81781/14	5.0	10.581147	10.0	1101511.0	2.116229	Y
6	ICIS 410-81781/13	10.0	21.354957	10.0	1162561.0	2.135496	Y
7	IC 410-81781/12	25.0	52.398858	10.0	1144332.0	2.095954	Y



Calibration

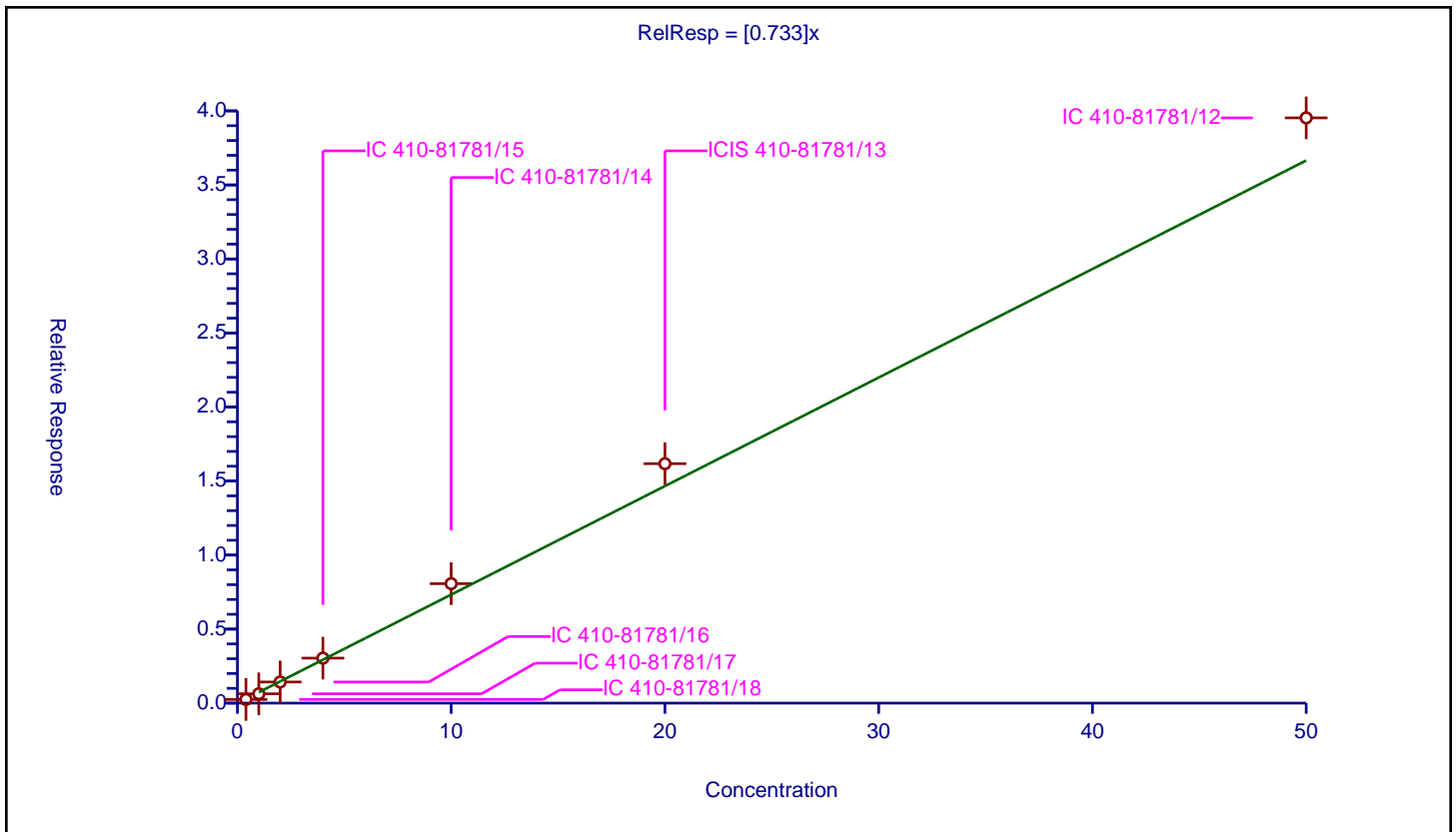
/ m-Xylene & p-Xylene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.733

Error Coefficients	
Standard Error:	2040000
Relative Standard Error:	11.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.986

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-81781/18	0.4	0.248407	10.0	1173921.0	0.621017	Y
2	IC 410-81781/17	1.0	0.630344	10.0	1008370.0	0.630344	Y
3	IC 410-81781/16	2.0	1.427077	10.0	1275208.0	0.713538	Y
4	IC 410-81781/15	4.0	3.039737	10.0	1297701.0	0.759934	Y
5	IC 410-81781/14	10.0	8.069125	10.0	1101511.0	0.806913	Y
6	ICIS 410-81781/13	20.0	16.172872	10.0	1162561.0	0.808644	Y
7	IC 410-81781/12	50.0	39.528721	10.0	1144332.0	0.790574	Y



Calibration

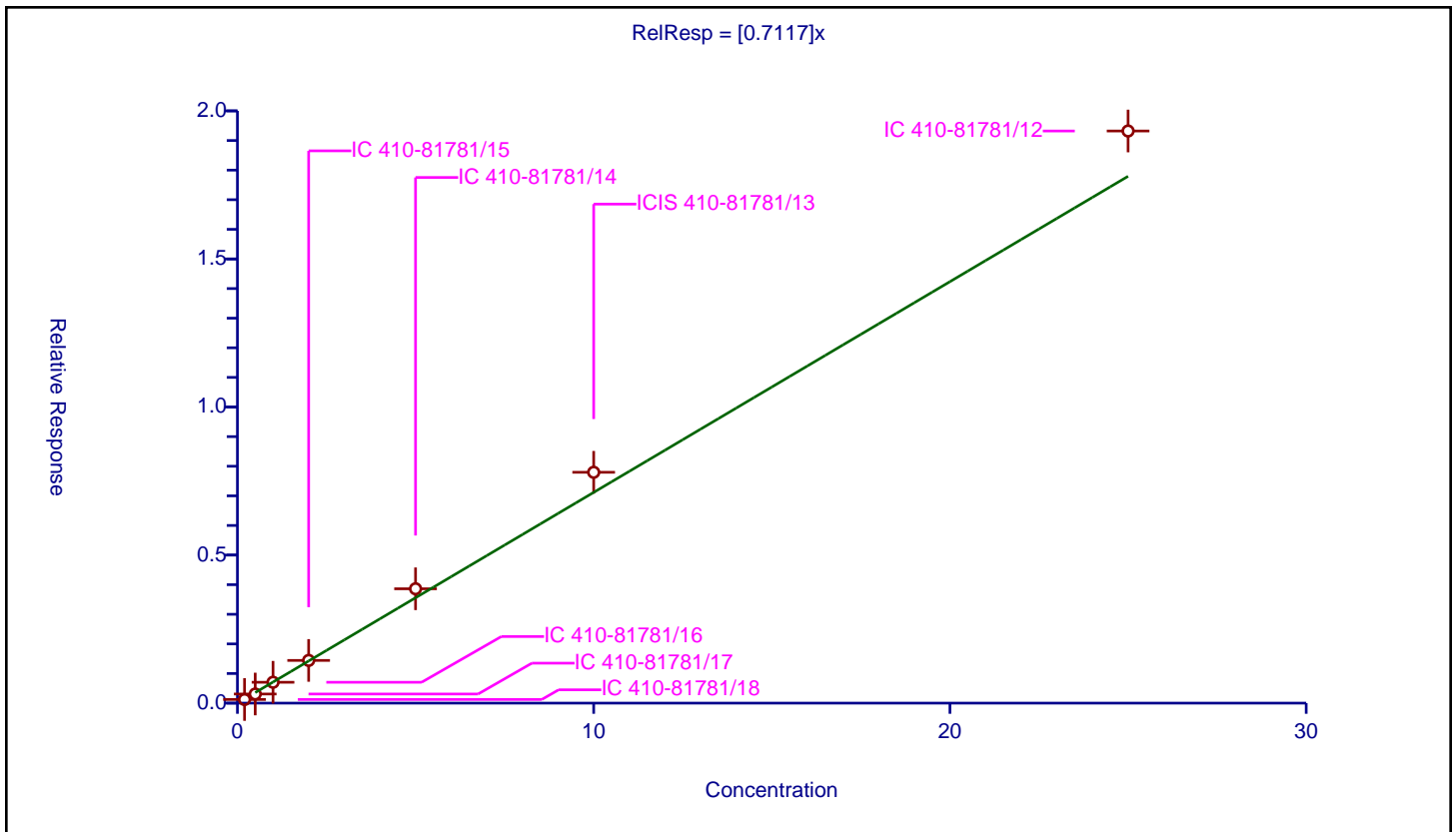
/ o-Xylene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.7117

Error Coefficients	
Standard Error:	995000
Relative Standard Error:	10.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-81781/18	0.2	0.123041	10.0	1173921.0	0.615203	Y
2	IC 410-81781/17	0.5	0.308062	10.0	1008370.0	0.616123	Y
3	IC 410-81781/16	1.0	0.704316	10.0	1275208.0	0.704316	Y
4	IC 410-81781/15	2.0	1.442466	10.0	1297701.0	0.721233	Y
5	IC 410-81781/14	5.0	3.861868	10.0	1101511.0	0.772374	Y
6	ICIS 410-81781/13	10.0	7.795402	10.0	1162561.0	0.77954	Y
7	IC 410-81781/12	25.0	19.320879	10.0	1144332.0	0.772835	Y



Calibration

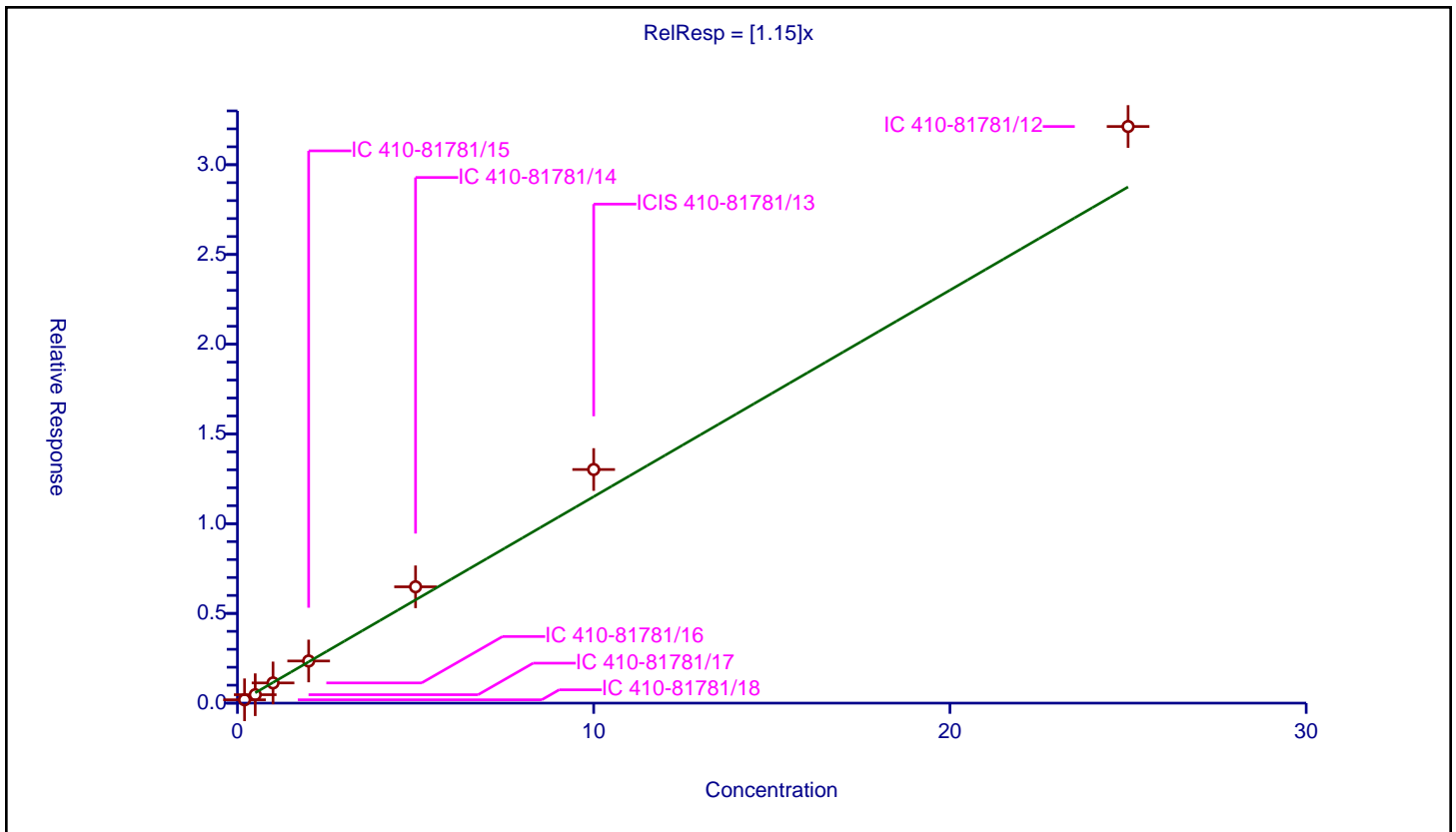
/ Styrene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.15

Error Coefficients	
Standard Error:	1660000
Relative Standard Error:	14.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.977

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-81781/18	0.2	0.186427	10.0	1173921.0	0.932133	Y
2	IC 410-81781/17	0.5	0.469133	10.0	1008370.0	0.938267	Y
3	IC 410-81781/16	1.0	1.125808	10.0	1275208.0	1.125808	Y
4	IC 410-81781/15	2.0	2.348145	10.0	1297701.0	1.174072	Y
5	IC 410-81781/14	5.0	6.481551	10.0	1101511.0	1.29631	Y
6	ICIS 410-81781/13	10.0	13.016883	10.0	1162561.0	1.301688	Y
7	IC 410-81781/12	25.0	32.130501	10.0	1144332.0	1.28522	Y



Calibration

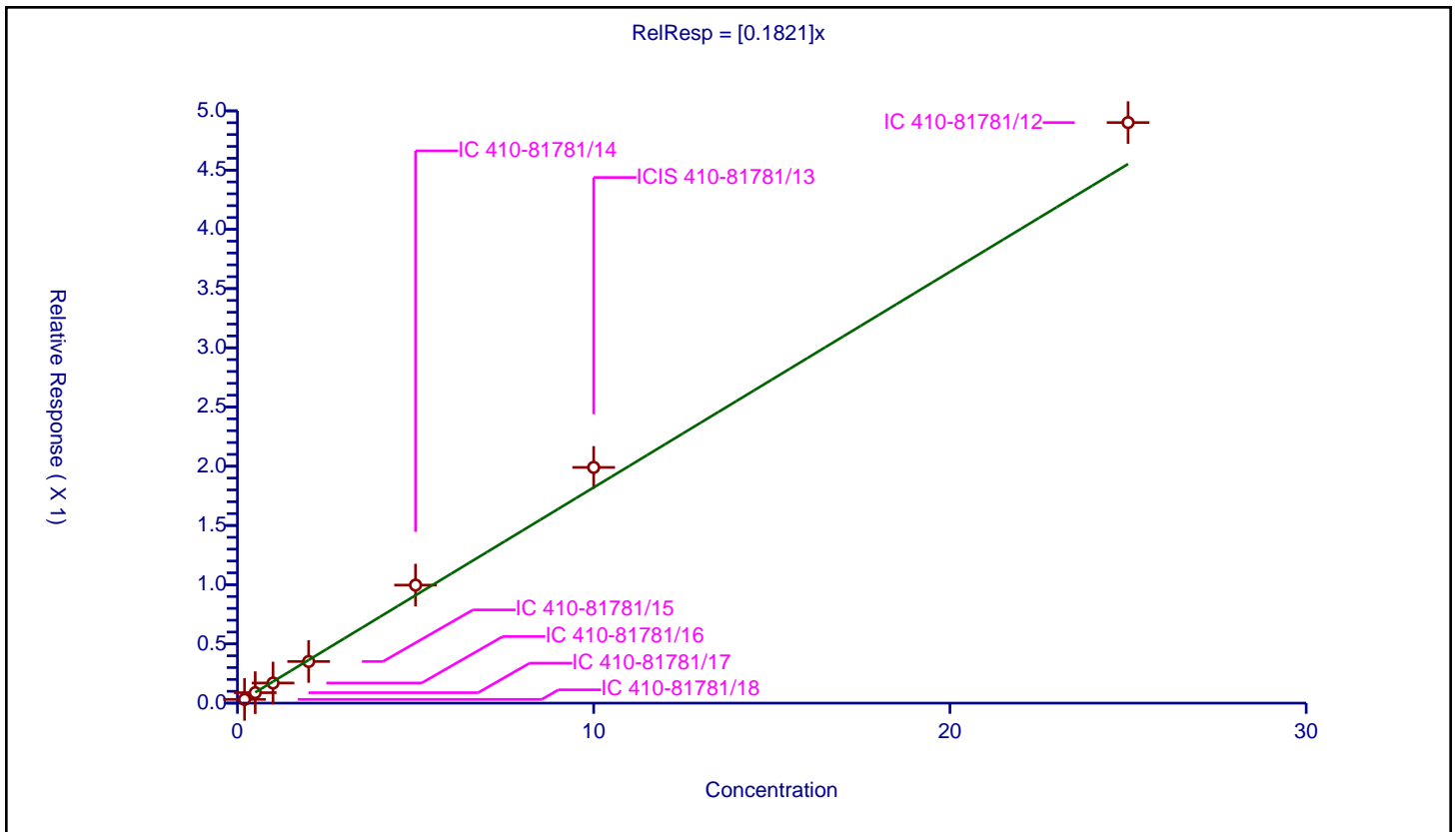
/ Bromoform

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.1821

Error Coefficients	
Standard Error:	253000
Relative Standard Error:	8.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-81781/18	0.2	0.031646	10.0	1173921.0	0.15823	Y
2	IC 410-81781/17	0.5	0.088152	10.0	1008370.0	0.176304	Y
3	IC 410-81781/16	1.0	0.169823	10.0	1275208.0	0.169823	Y
4	IC 410-81781/15	2.0	0.351499	10.0	1297701.0	0.175749	Y
5	IC 410-81781/14	5.0	0.996513	10.0	1101511.0	0.199303	Y
6	ICIS 410-81781/13	10.0	1.990046	10.0	1162561.0	0.199005	Y
7	IC 410-81781/12	25.0	4.901296	10.0	1144332.0	0.196052	Y



Calibration

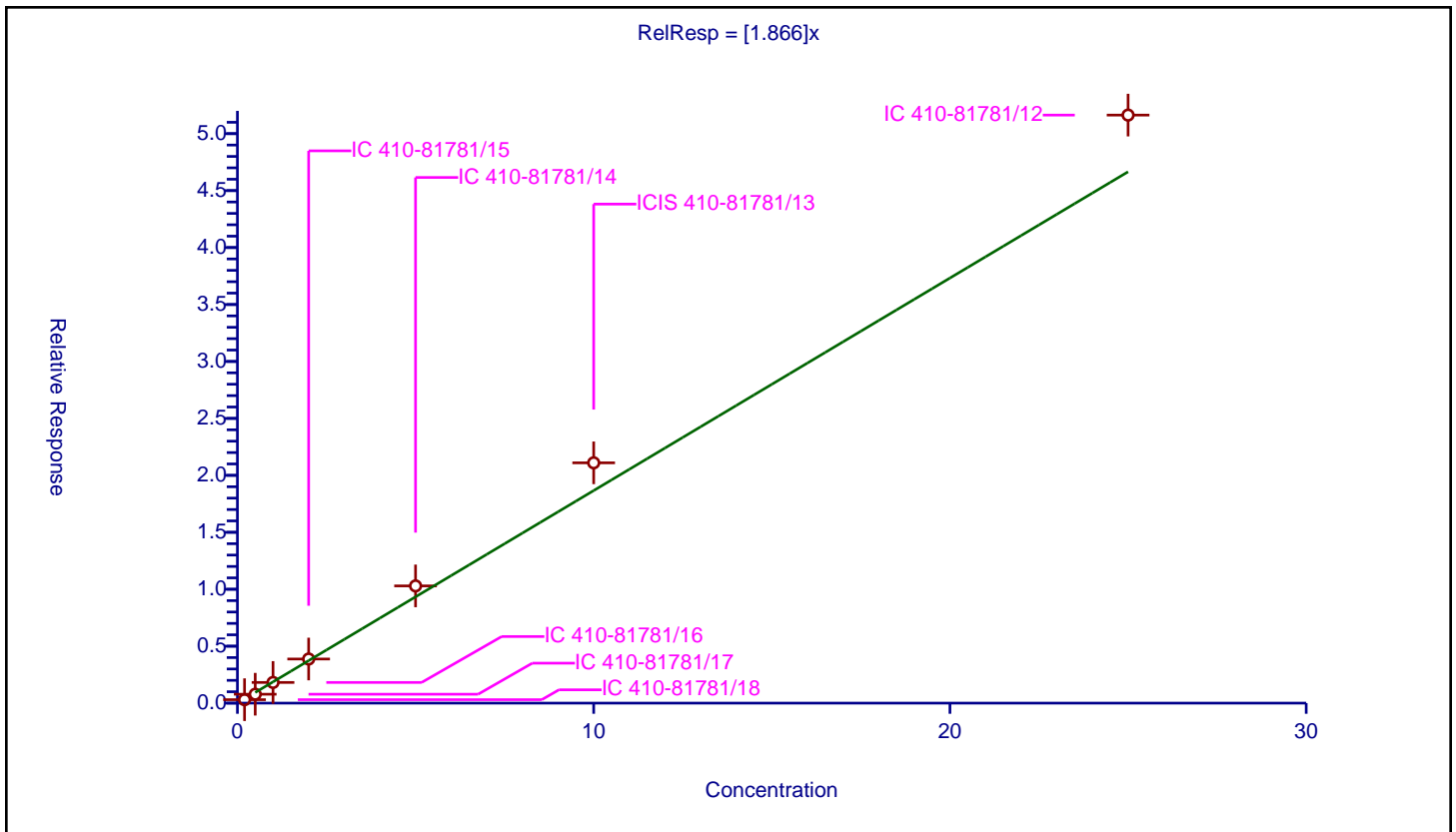
/ Isopropylbenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.866

Error Coefficients	
Standard Error:	2660000
Relative Standard Error:	13.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.980

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-81781/18	0.2	0.302618	10.0	1173921.0	1.513092	Y
2	IC 410-81781/17	0.5	0.782094	10.0	1008370.0	1.564188	Y
3	IC 410-81781/16	1.0	1.815414	10.0	1275208.0	1.815414	Y
4	IC 410-81781/15	2.0	3.874259	10.0	1297701.0	1.93713	Y
5	IC 410-81781/14	5.0	10.292353	10.0	1101511.0	2.058471	Y
6	ICIS 410-81781/13	10.0	21.100157	10.0	1162561.0	2.110016	Y
7	IC 410-81781/12	25.0	51.629614	10.0	1144332.0	2.065185	Y



Calibration

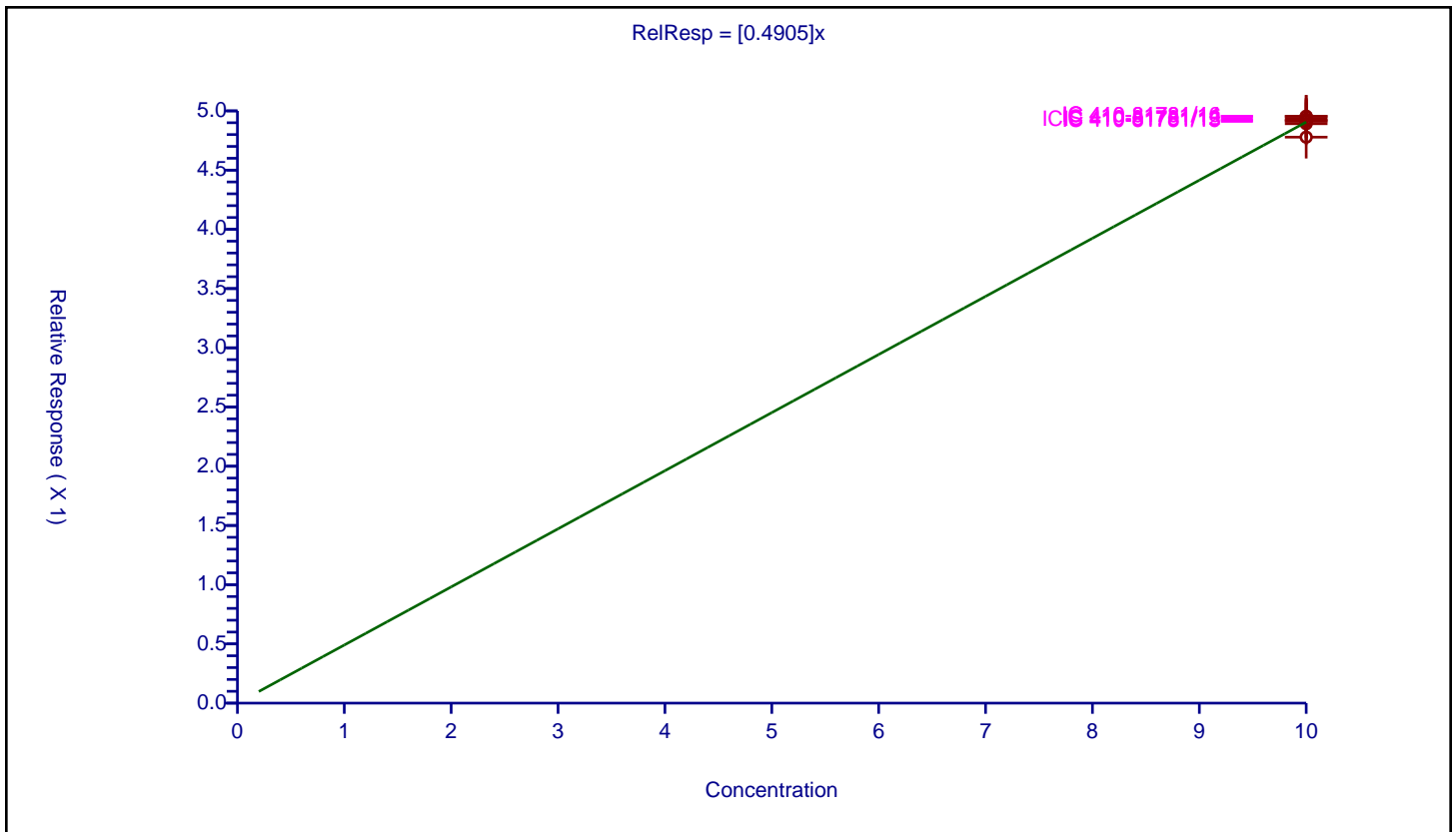
/ 4-Bromofluorobenzene (Surr)

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4905

Error Coefficients	
Standard Error:	620000
Relative Standard Error:	1.2
Correlation Coefficient:	0
Coefficient of Determination (Adjusted):	0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-81781/12	10.0	4.929924	10.0	1144332.0	0.492992	Y
2	ICIS 410-81781/13	10.0	4.919888	10.0	1162561.0	0.491989	Y
3	IC 410-81781/14	10.0	4.954222	10.0	1101511.0	0.495422	Y
4	IC 410-81781/15	10.0	4.911324	10.0	1297701.0	0.491132	Y
5	IC 410-81781/16	10.0	4.953325	10.0	1275208.0	0.495333	Y
6	IC 410-81781/17	10.0	4.891607	10.0	1008370.0	0.489161	Y
7	IC 410-81781/18	10.0	4.778209	10.0	1173921.0	0.477821	Y



Calibration

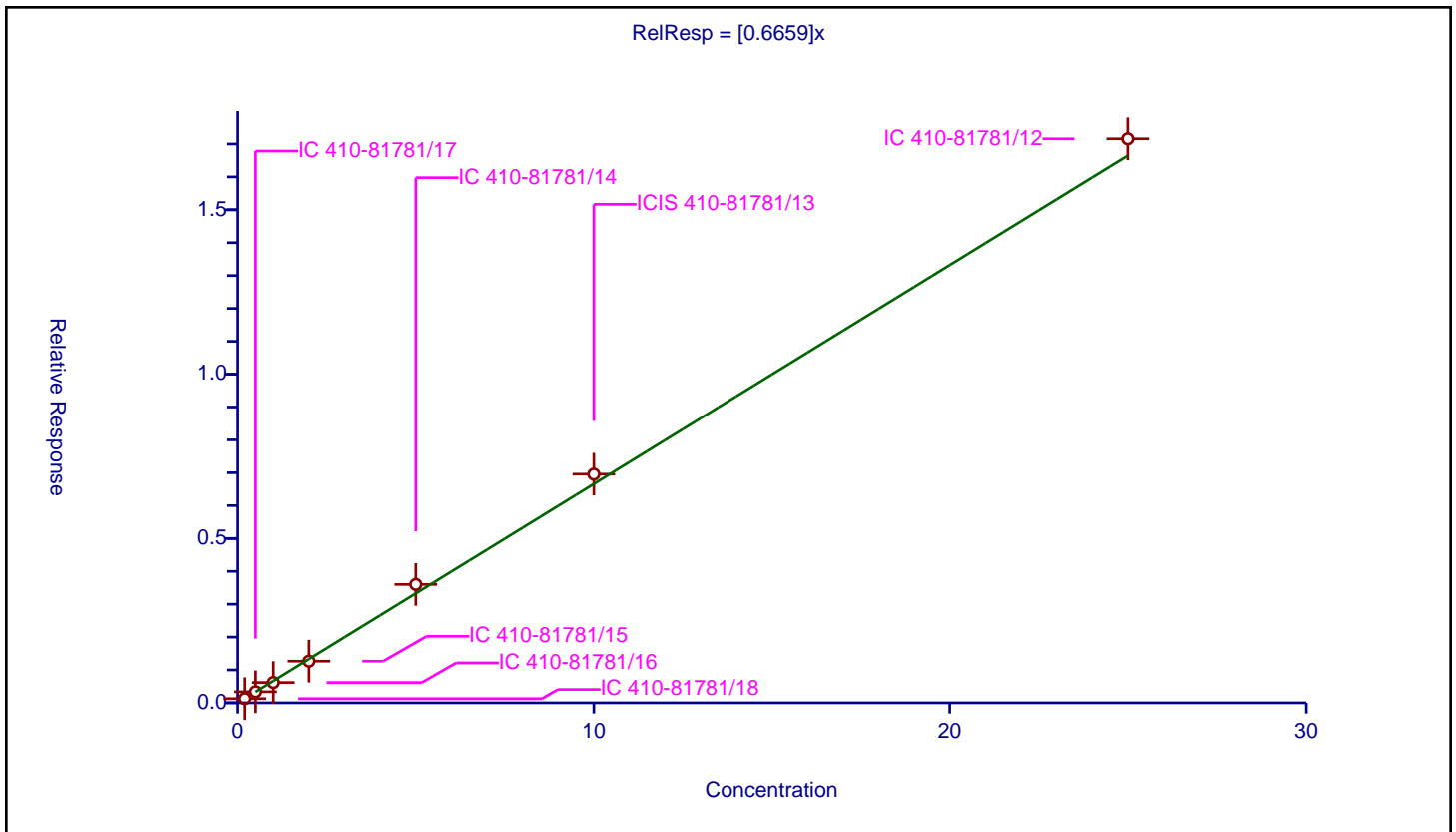
/ 1,1,2,2-Tetrachloroethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.6659

Error Coefficients	
Standard Error:	458000
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 410-81781/18	0.2	0.127179	10.0	599705.0	0.635896	Y
2	IC 410-81781/17	0.5	0.336182	10.0	527631.0	0.672364	Y
3	IC 410-81781/16	1.0	0.617006	10.0	659783.0	0.617006	Y
4	IC 410-81781/15	2.0	1.267356	10.0	671311.0	0.633678	Y
5	IC 410-81781/14	5.0	3.602624	10.0	571092.0	0.720525	Y
6	ICIS 410-81781/13	10.0	6.95746	10.0	601504.0	0.695746	Y
7	IC 410-81781/12	25.0	17.158368	10.0	591470.0	0.686335	Y



Calibration

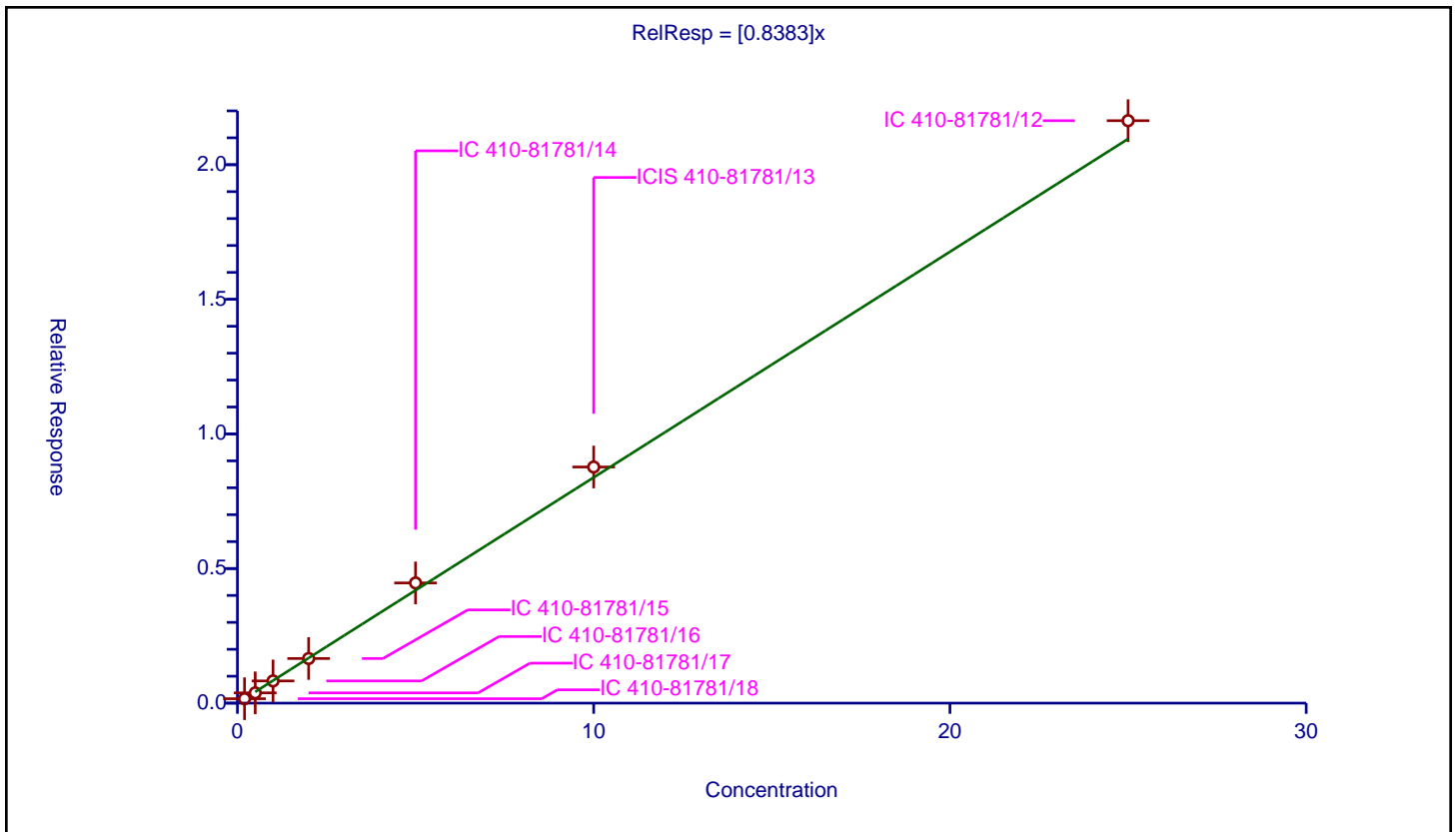
/ Bromobenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.8383

Error Coefficients	
Standard Error:	577000
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 410-81781/18	0.2	0.163397	10.0	599705.0	0.816985	Y
2	IC 410-81781/17	0.5	0.381194	10.0	527631.0	0.762389	Y
3	IC 410-81781/16	1.0	0.824756	10.0	659783.0	0.824756	Y
4	IC 410-81781/15	2.0	1.657369	10.0	671311.0	0.828684	Y
5	IC 410-81781/14	5.0	4.464867	10.0	571092.0	0.892973	Y
6	ICIS 410-81781/13	10.0	8.771396	10.0	601504.0	0.87714	Y
7	IC 410-81781/12	25.0	21.63584	10.0	591470.0	0.865434	Y



Calibration

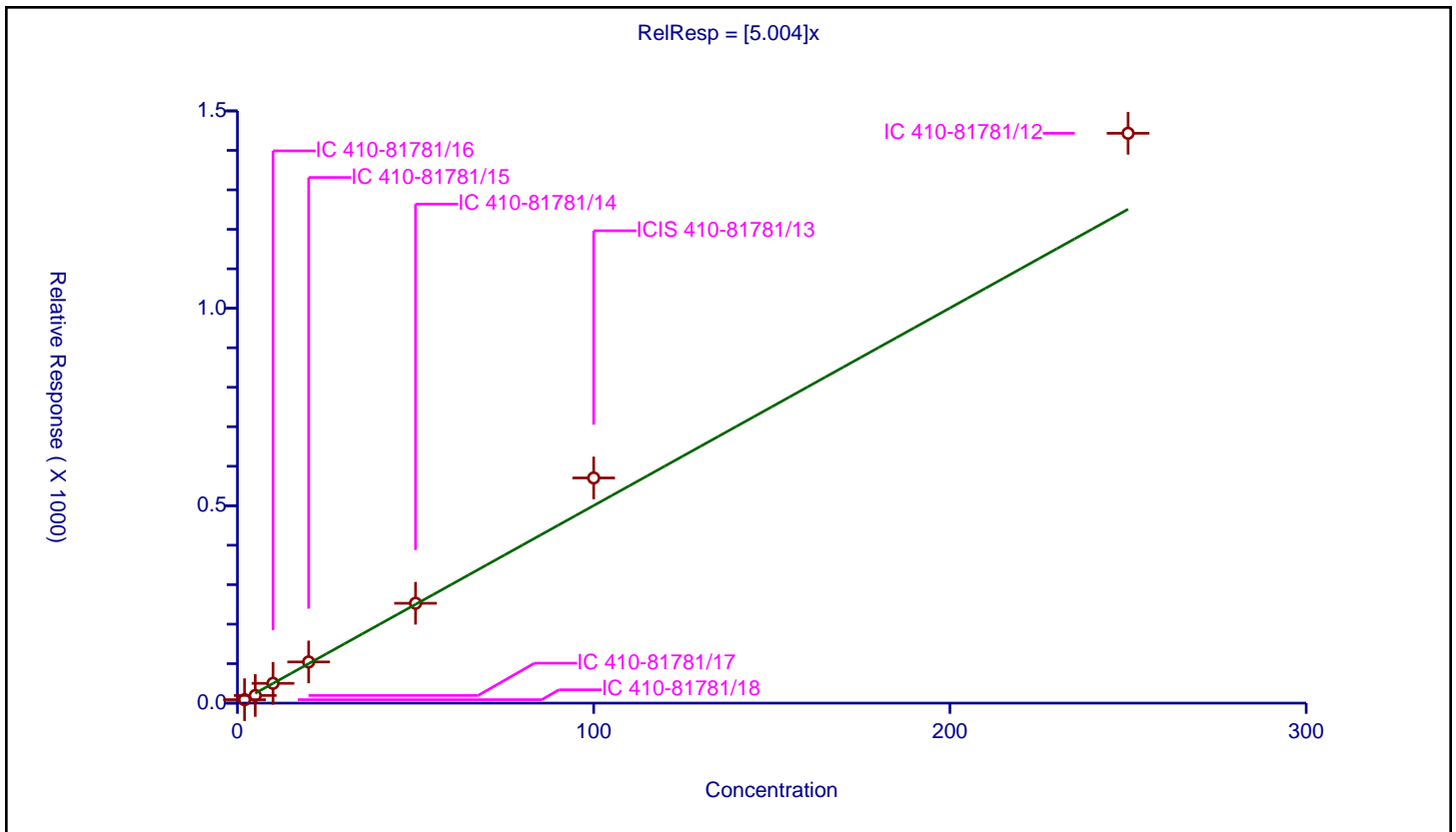
/ trans-1,4-Dichloro-2-butene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	5.004

Error Coefficients	
Standard Error:	1220000
Relative Standard Error:	13.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.978

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-81781/18	2.0	8.76105	50.0	98527.0	4.380525	Y
2	IC 410-81781/17	5.0	19.39718	50.0	107080.0	3.879436	Y
3	IC 410-81781/16	10.0	50.16824	50.0	100749.0	5.016824	Y
4	IC 410-81781/15	20.0	104.316363	50.0	101567.0	5.215818	Y
5	IC 410-81781/14	50.0	252.897079	50.0	106849.0	5.057942	Y
6	ICIS 410-81781/13	100.0	570.337555	50.0	97347.0	5.703376	Y
7	IC 410-81781/12	250.0	1443.270302	50.0	94239.0	5.773081	Y



Calibration

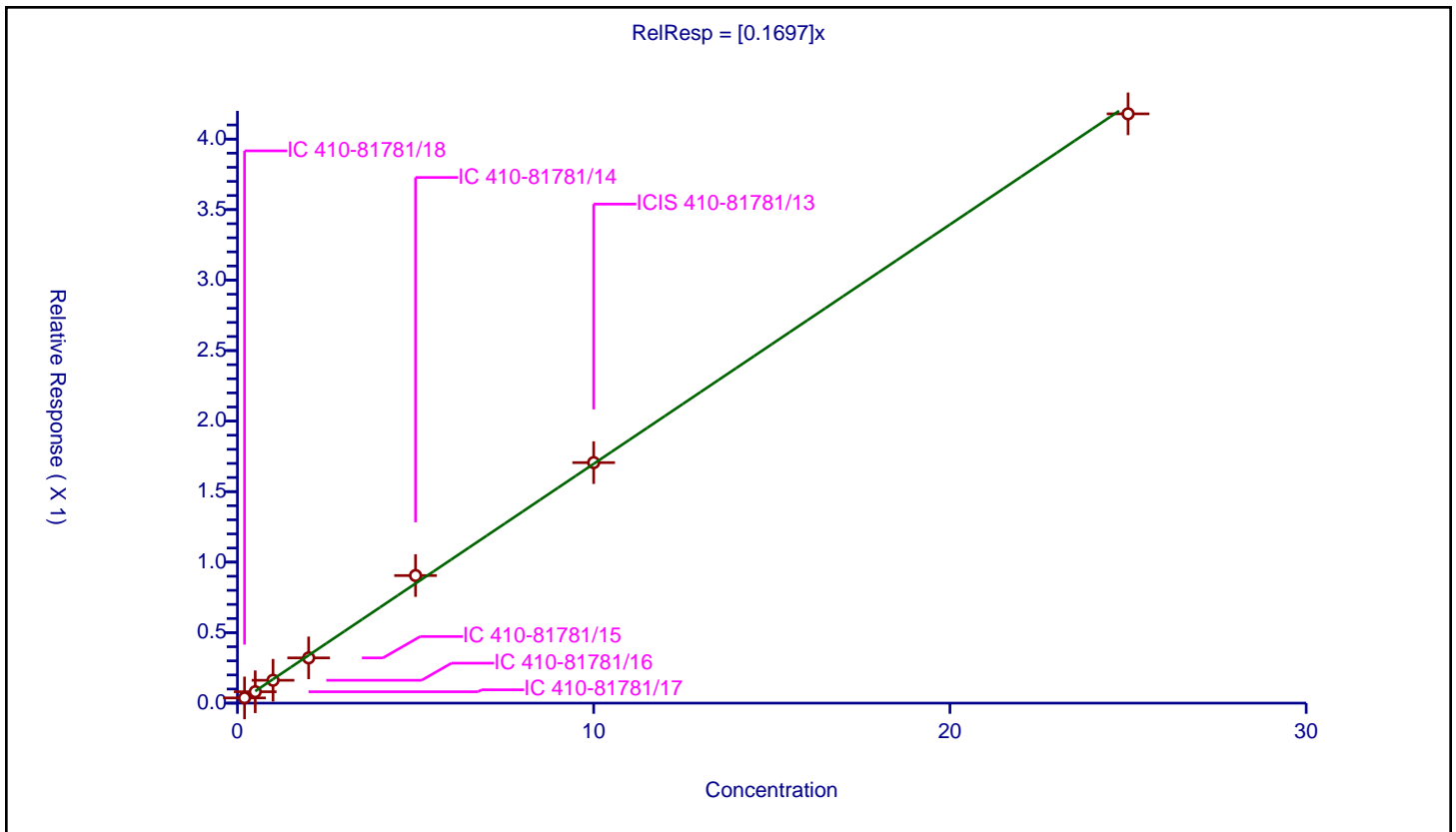
/ 1,2,3-Trichloropropane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.1697

Error Coefficients	
Standard Error:	112000
Relative Standard Error:	5.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-81781/18	0.2	0.037018	10.0	599705.0	0.185091	Y
2	IC 410-81781/17	0.5	0.080795	10.0	527631.0	0.16159	Y
3	IC 410-81781/16	1.0	0.162175	10.0	659783.0	0.162175	Y
4	IC 410-81781/15	2.0	0.32076	10.0	671311.0	0.16038	Y
5	IC 410-81781/14	5.0	0.904793	10.0	571092.0	0.180959	Y
6	ICIS 410-81781/13	10.0	1.705658	10.0	601504.0	0.170566	Y
7	IC 410-81781/12	25.0	4.179012	10.0	591470.0	0.16716	Y



Calibration

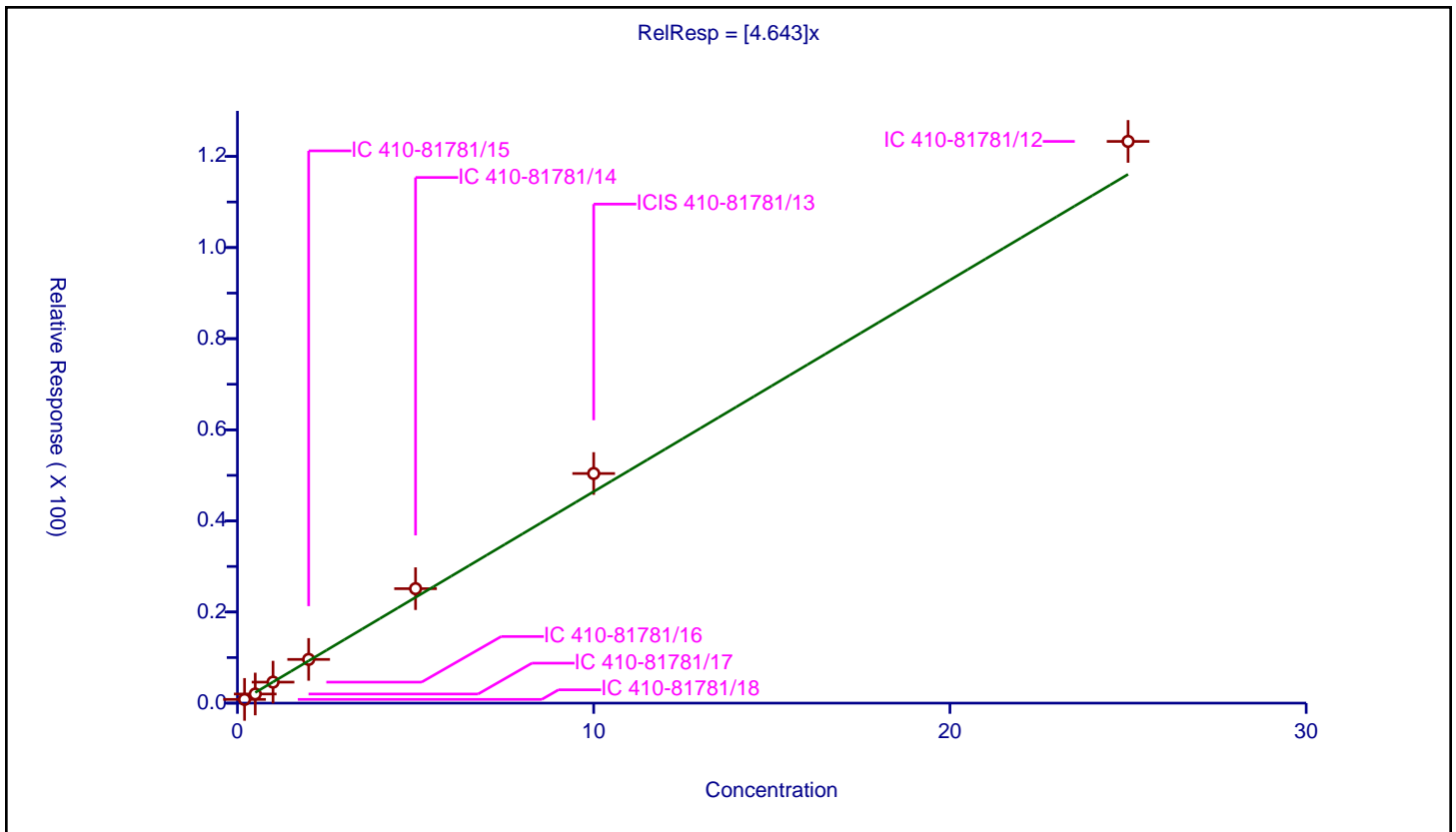
/ N-Propylbenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	4.643

Error Coefficients	
Standard Error:	3290000
Relative Standard Error:	9.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-81781/18	0.2	0.818369	10.0	599705.0	4.091845	Y
2	IC 410-81781/17	0.5	2.003597	10.0	527631.0	4.007194	Y
3	IC 410-81781/16	1.0	4.607272	10.0	659783.0	4.607272	Y
4	IC 410-81781/15	2.0	9.597325	10.0	671311.0	4.798663	Y
5	IC 410-81781/14	5.0	25.122257	10.0	571092.0	5.024451	Y
6	ICIS 410-81781/13	10.0	50.402641	10.0	601504.0	5.040264	Y
7	IC 410-81781/12	25.0	123.300269	10.0	591470.0	4.932011	Y



Calibration

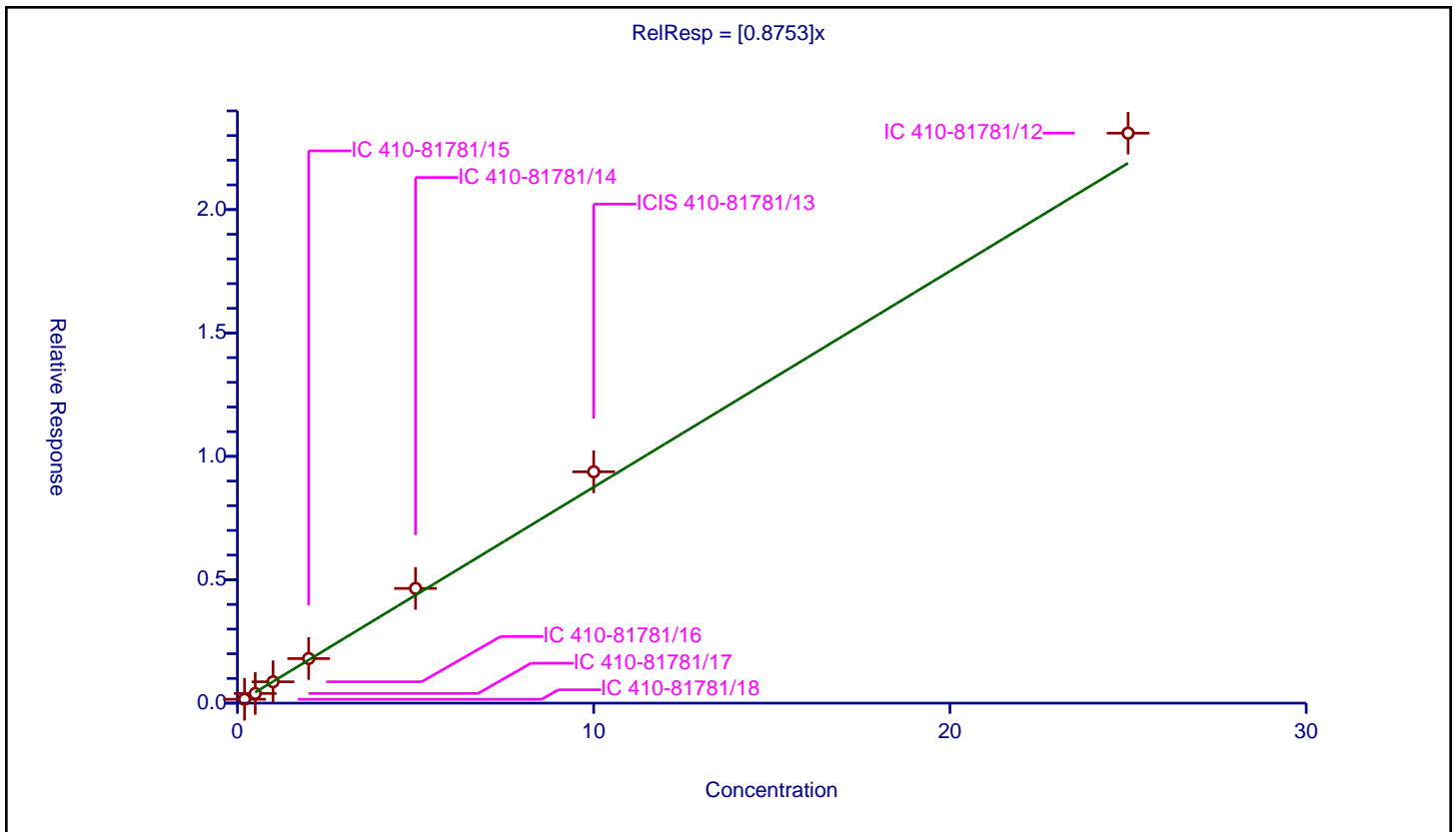
/ 2-Chlorotoluene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.8753

Error Coefficients	
Standard Error:	616000
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 410-81781/18	0.2	0.156594	10.0	599705.0	0.782968	Y
2	IC 410-81781/17	0.5	0.392547	10.0	527631.0	0.785094	Y
3	IC 410-81781/16	1.0	0.865269	10.0	659783.0	0.865269	Y
4	IC 410-81781/15	2.0	1.805691	10.0	671311.0	0.902845	Y
5	IC 410-81781/14	5.0	4.649286	10.0	571092.0	0.929857	Y
6	ICIS 410-81781/13	10.0	9.374535	10.0	601504.0	0.937453	Y
7	IC 410-81781/12	25.0	23.097418	10.0	591470.0	0.923897	Y



Calibration

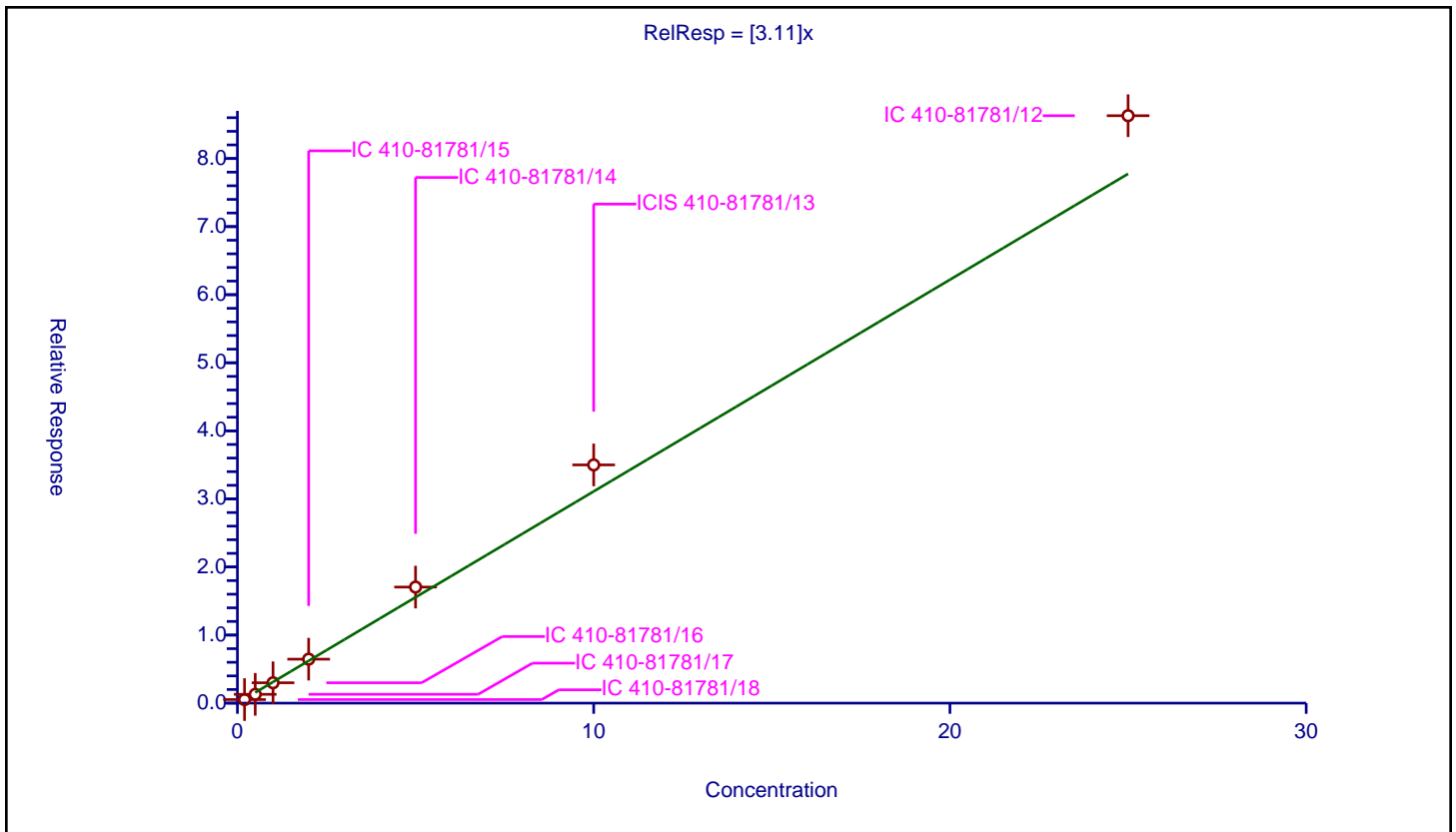
/ 1,3,5-Trimethylbenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	3.11

Error Coefficients	
Standard Error:	2300000
Relative Standard Error:	12.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.982

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-81781/18	0.2	0.520739	10.0	599705.0	2.603697	Y
2	IC 410-81781/17	0.5	1.293385	10.0	527631.0	2.58677	Y
3	IC 410-81781/16	1.0	2.99018	10.0	659783.0	2.99018	Y
4	IC 410-81781/15	2.0	6.45875	10.0	671311.0	3.229375	Y
5	IC 410-81781/14	5.0	17.049267	10.0	571092.0	3.409853	Y
6	ICIS 410-81781/13	10.0	34.993816	10.0	601504.0	3.499382	Y
7	IC 410-81781/12	25.0	86.291054	10.0	591470.0	3.451642	Y



Calibration

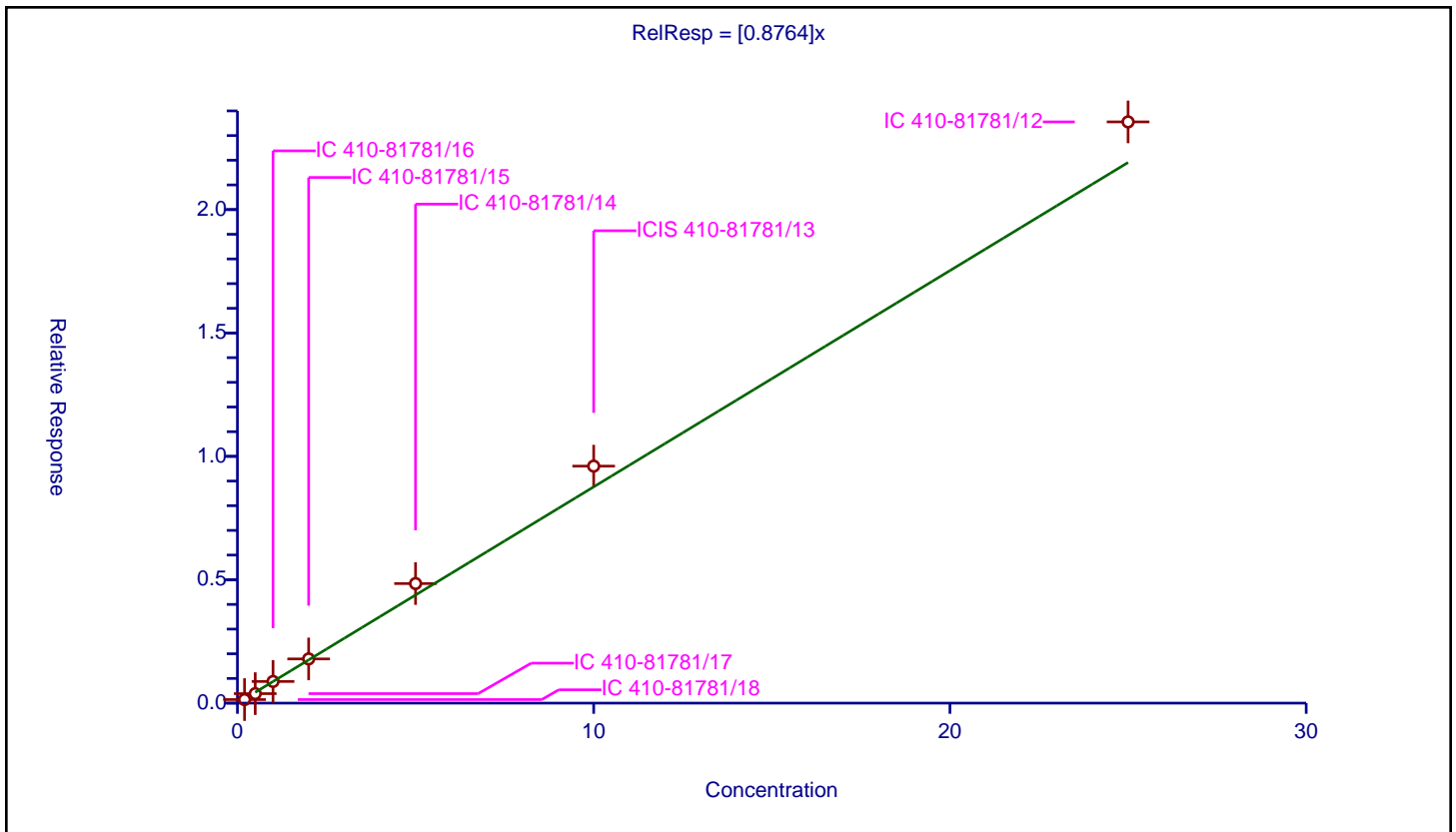
/ 4-Chlorotoluene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.8764

Error Coefficients	
Standard Error:	628000
Relative Standard Error:	11.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.986

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-81781/18	0.2	0.143854	10.0	599705.0	0.71927	Y
2	IC 410-81781/17	0.5	0.385212	10.0	527631.0	0.770425	Y
3	IC 410-81781/16	1.0	0.877546	10.0	659783.0	0.877546	Y
4	IC 410-81781/15	2.0	1.791167	10.0	671311.0	0.895583	Y
5	IC 410-81781/14	5.0	4.845594	10.0	571092.0	0.969119	Y
6	ICIS 410-81781/13	10.0	9.60371	10.0	601504.0	0.960371	Y
7	IC 410-81781/12	25.0	23.554314	10.0	591470.0	0.942173	Y



Calibration

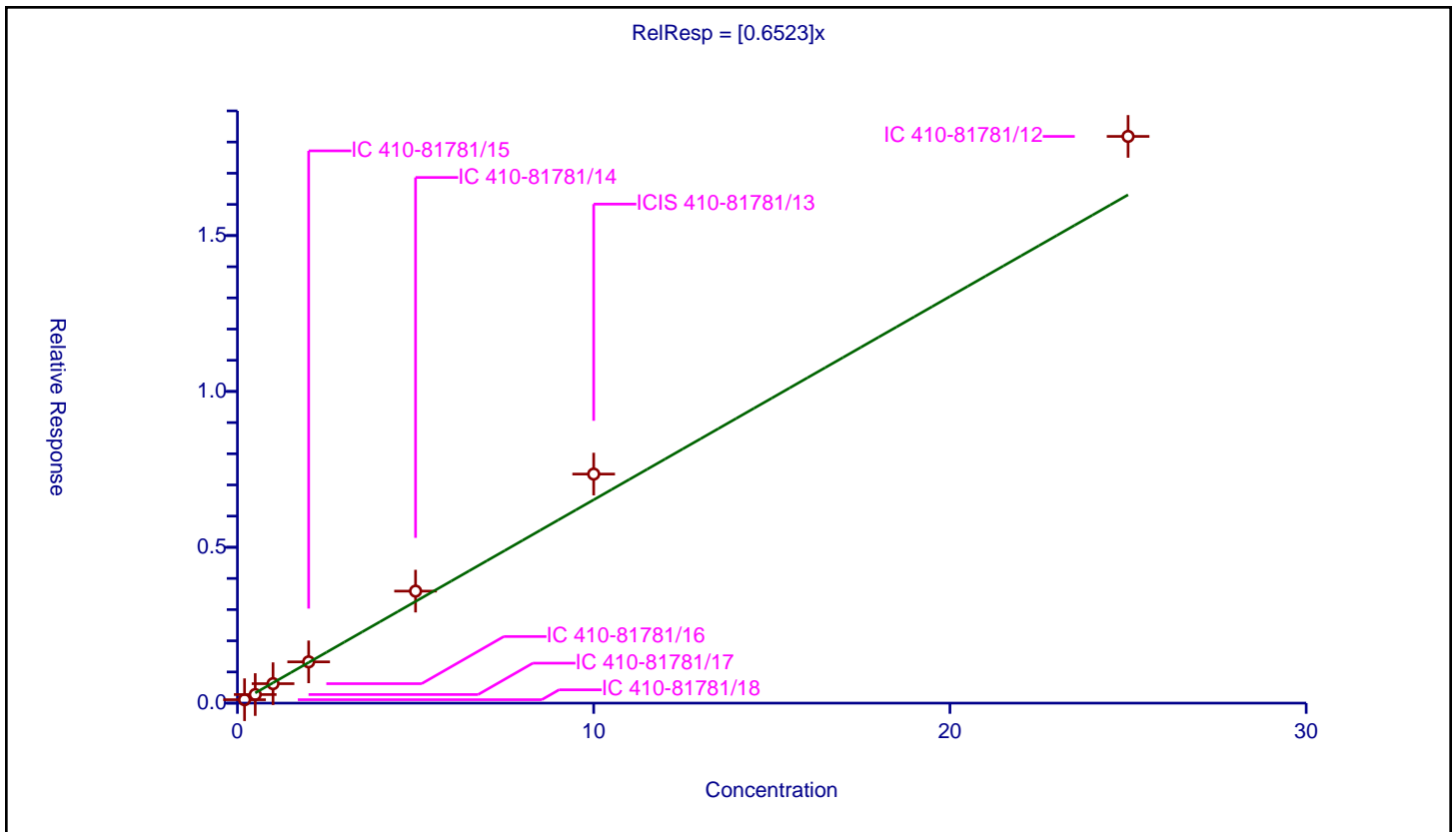
/ tert-Butylbenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.6523

Error Coefficients	
Standard Error:	484000
Relative Standard Error:	12.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.982

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-81781/18	0.2	0.109404	10.0	599705.0	0.547019	Y
2	IC 410-81781/17	0.5	0.275969	10.0	527631.0	0.551939	Y
3	IC 410-81781/16	1.0	0.624357	10.0	659783.0	0.624357	Y
4	IC 410-81781/15	2.0	1.324379	10.0	671311.0	0.662189	Y
5	IC 410-81781/14	5.0	3.593747	10.0	571092.0	0.718749	Y
6	ICIS 410-81781/13	10.0	7.348646	10.0	601504.0	0.734865	Y
7	IC 410-81781/12	25.0	18.181091	10.0	591470.0	0.727244	Y



Calibration

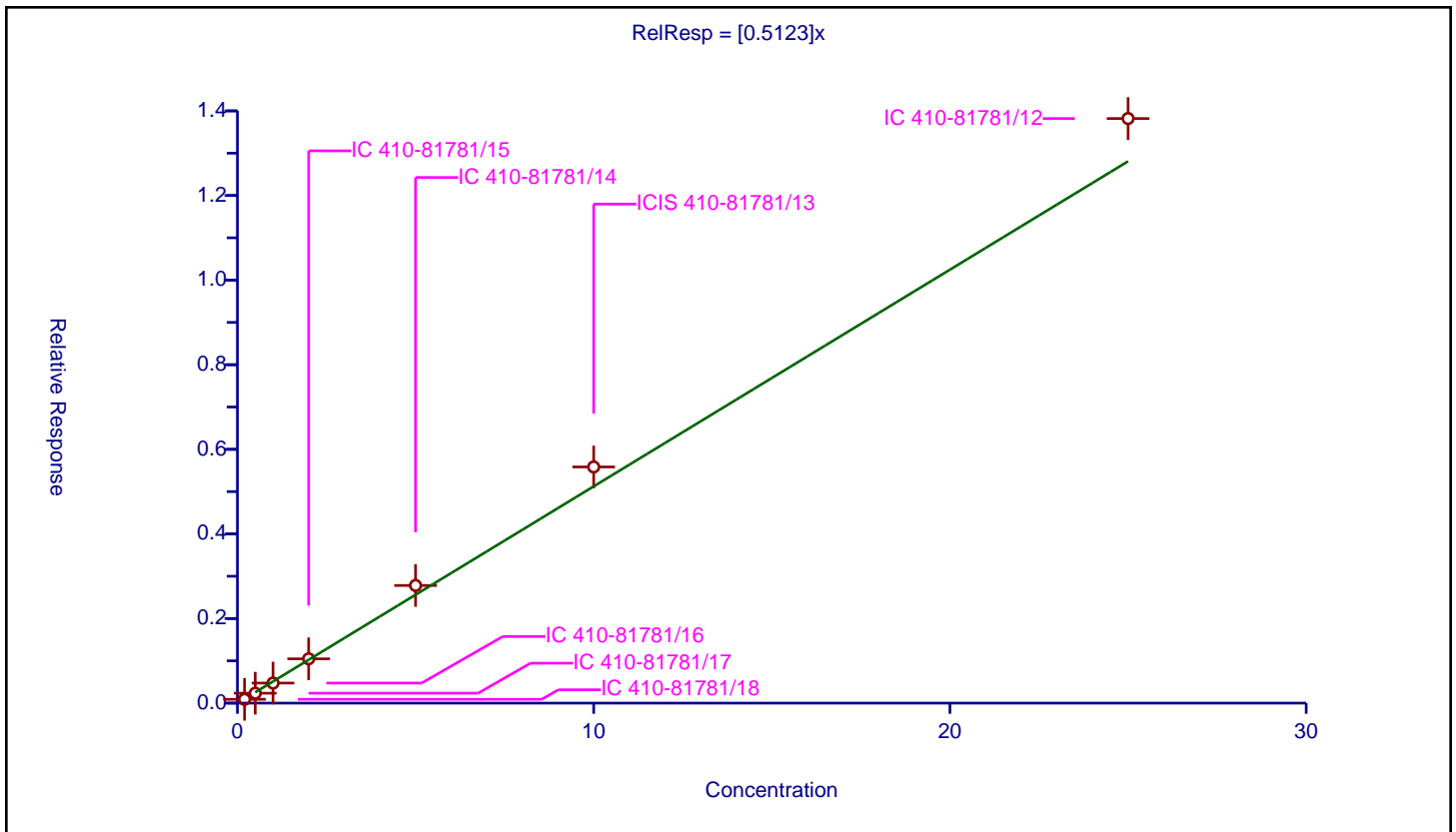
/ Pentachloroethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.5123

Error Coefficients	
Standard Error:	368000
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 410-81781/18	0.2	0.090461	10.0	599705.0	0.452306	Y
2	IC 410-81781/17	0.5	0.234274	10.0	527631.0	0.468547	Y
3	IC 410-81781/16	1.0	0.474535	10.0	659783.0	0.474535	Y
4	IC 410-81781/15	2.0	1.04719	10.0	671311.0	0.523595	Y
5	IC 410-81781/14	5.0	2.781198	10.0	571092.0	0.55624	Y
6	ICIS 410-81781/13	10.0	5.582889	10.0	601504.0	0.558289	Y
7	IC 410-81781/12	25.0	13.819517	10.0	591470.0	0.552781	Y



Calibration

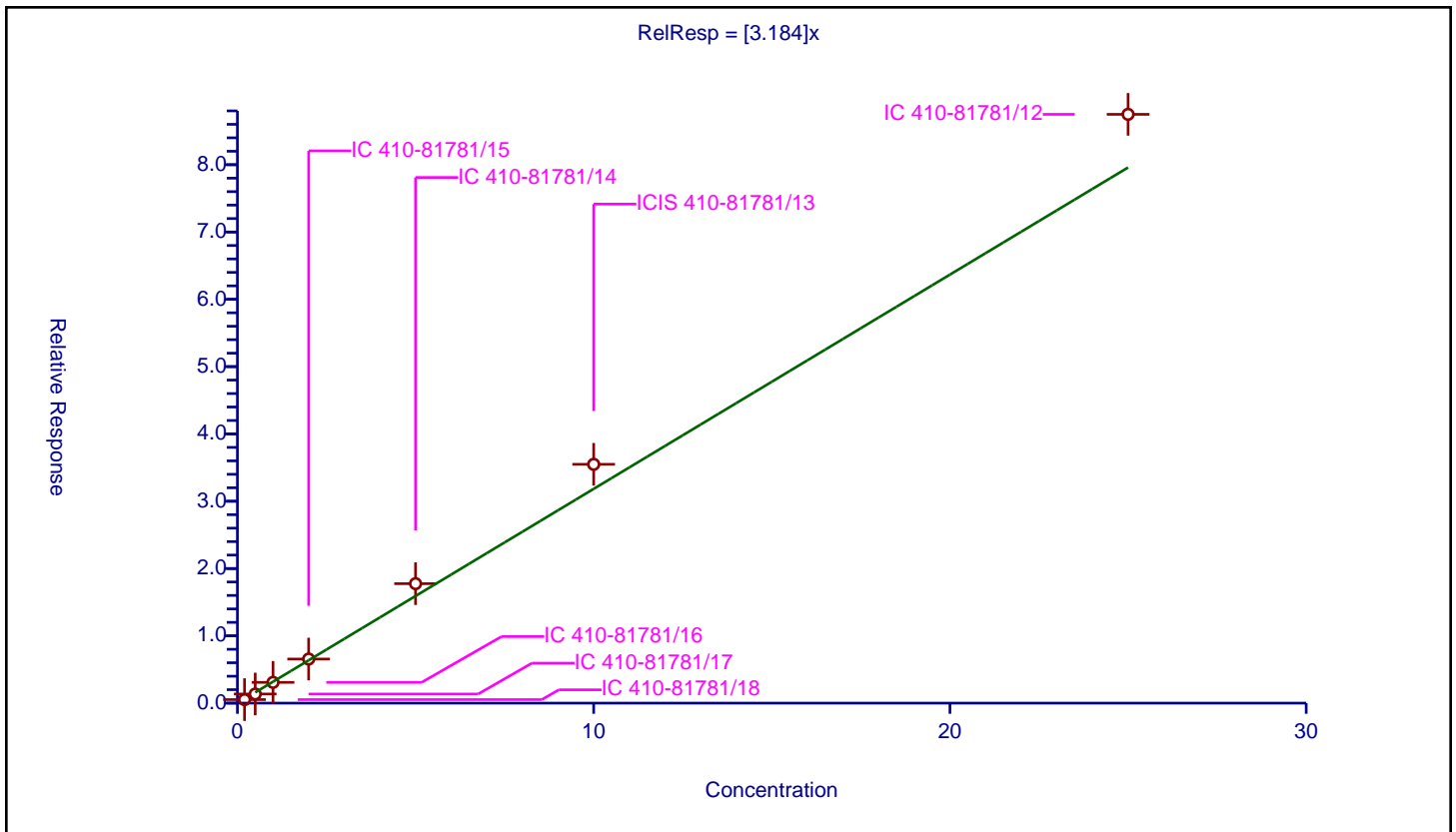
/ 1,2,4-Trimethylbenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	3.184

Error Coefficients	
Standard Error:	2330000
Relative Standard Error:	12.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.982

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-81781/18	0.2	0.523141	10.0	599705.0	2.615703	Y
2	IC 410-81781/17	0.5	1.356725	10.0	527631.0	2.713449	Y
3	IC 410-81781/16	1.0	3.083393	10.0	659783.0	3.083393	Y
4	IC 410-81781/15	2.0	6.549796	10.0	671311.0	3.274898	Y
5	IC 410-81781/14	5.0	17.751343	10.0	571092.0	3.550269	Y
6	ICIS 410-81781/13	10.0	35.483089	10.0	601504.0	3.548309	Y
7	IC 410-81781/12	25.0	87.48655	10.0	591470.0	3.499462	Y



Calibration

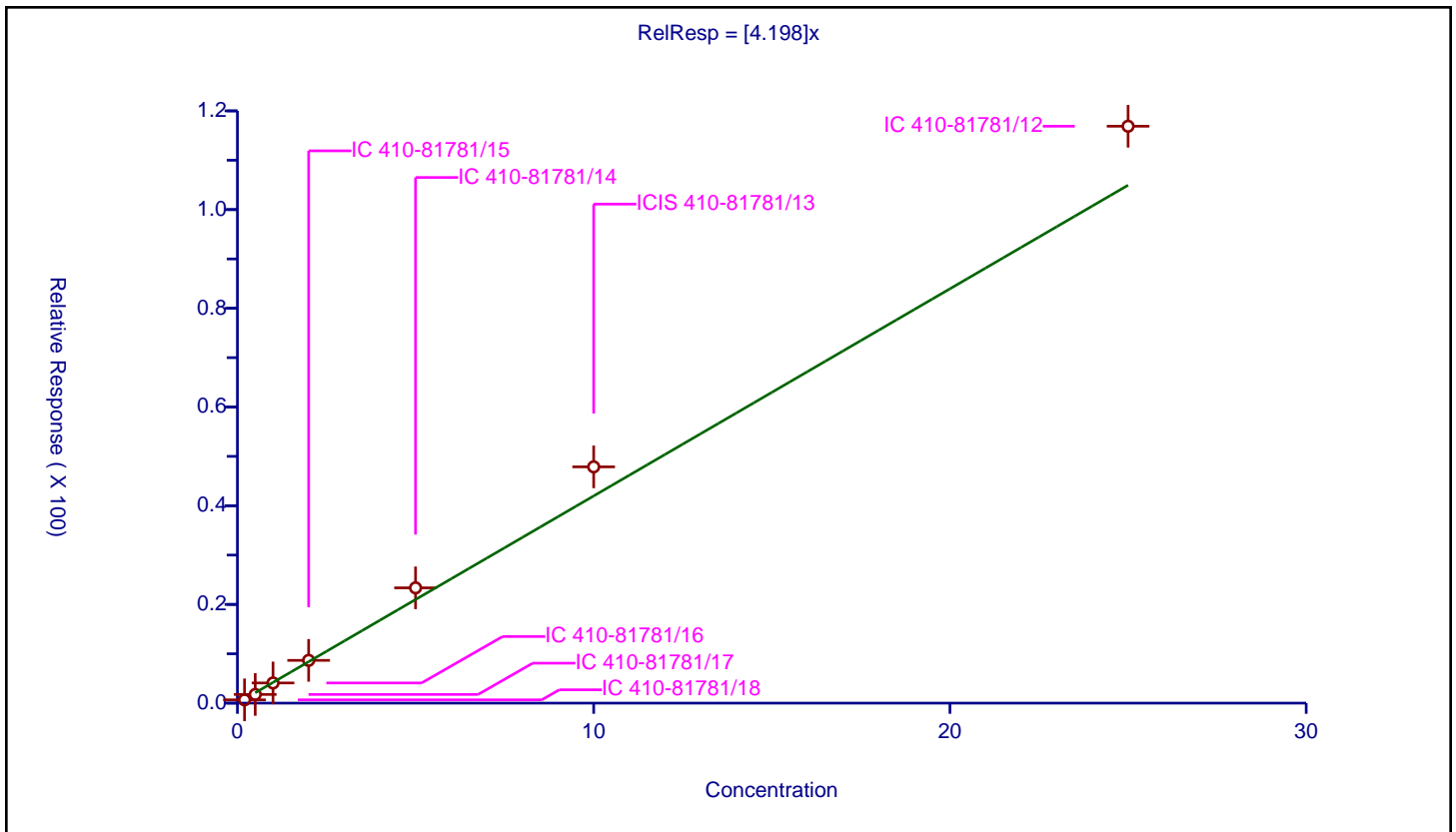
/ sec-Butylbenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	4.198

Error Coefficients	
Standard Error:	3120000
Relative Standard Error:	14.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.978

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-81781/18	0.2	0.664143	10.0	599705.0	3.320716	Y
2	IC 410-81781/17	0.5	1.755185	10.0	527631.0	3.51037	Y
3	IC 410-81781/16	1.0	4.085555	10.0	659783.0	4.085555	Y
4	IC 410-81781/15	2.0	8.664434	10.0	671311.0	4.332217	Y
5	IC 410-81781/14	5.0	23.358723	10.0	571092.0	4.671745	Y
6	ICIS 410-81781/13	10.0	47.873231	10.0	601504.0	4.787323	Y
7	IC 410-81781/12	25.0	116.894044	10.0	591470.0	4.675762	Y



Calibration

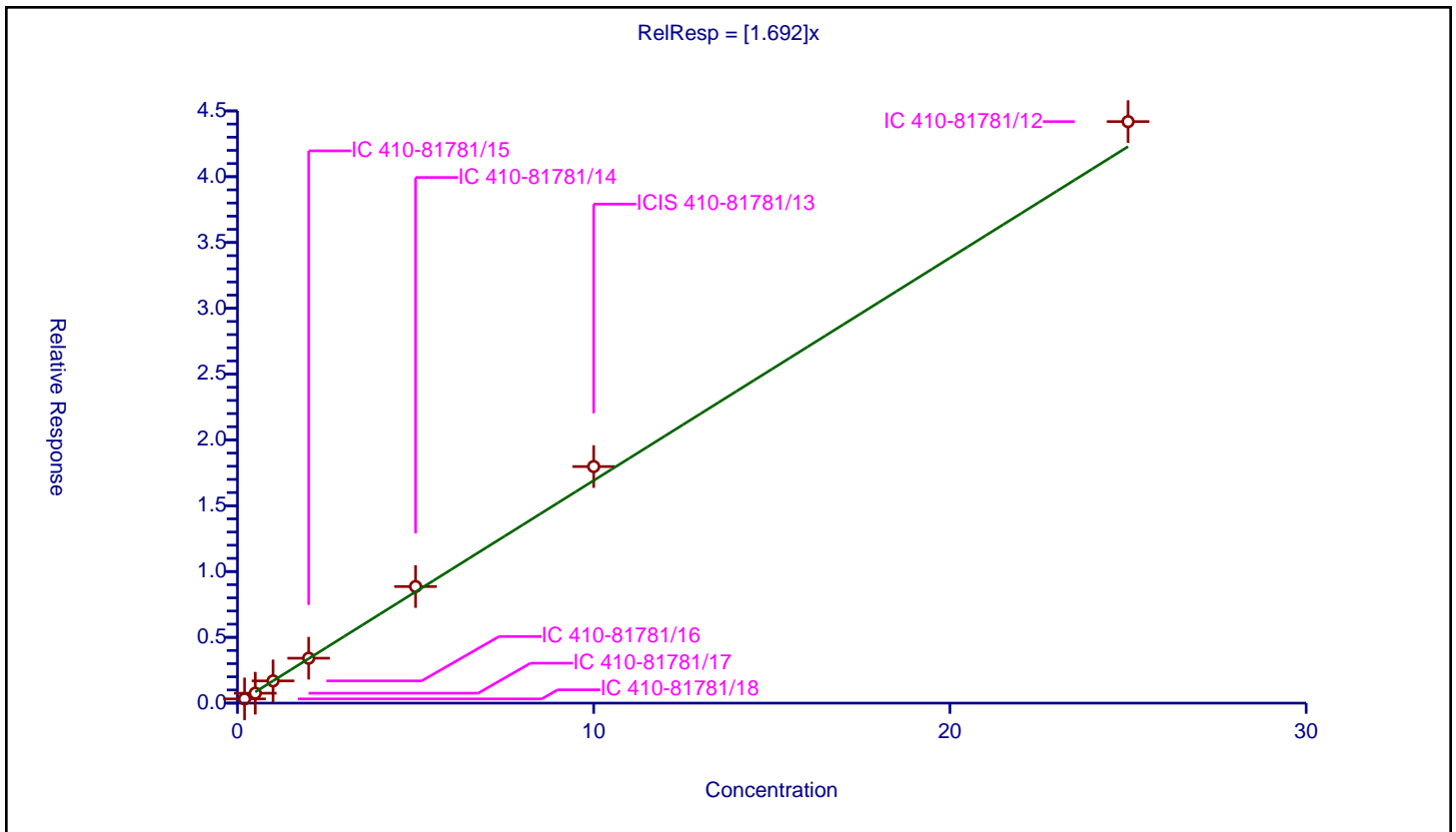
/ 1,3-Dichlorobenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.692

Error Coefficients	
Standard Error:	1180000
Relative Standard Error:	6.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-81781/18	0.2	0.320091	10.0	599705.0	1.600454	Y
2	IC 410-81781/17	0.5	0.753879	10.0	527631.0	1.507758	Y
3	IC 410-81781/16	1.0	1.689252	10.0	659783.0	1.689252	Y
4	IC 410-81781/15	2.0	3.412904	10.0	671311.0	1.706452	Y
5	IC 410-81781/14	5.0	8.85908	10.0	571092.0	1.771816	Y
6	ICIS 410-81781/13	10.0	17.975541	10.0	601504.0	1.797554	Y
7	IC 410-81781/12	25.0	44.186113	10.0	591470.0	1.767445	Y



Calibration

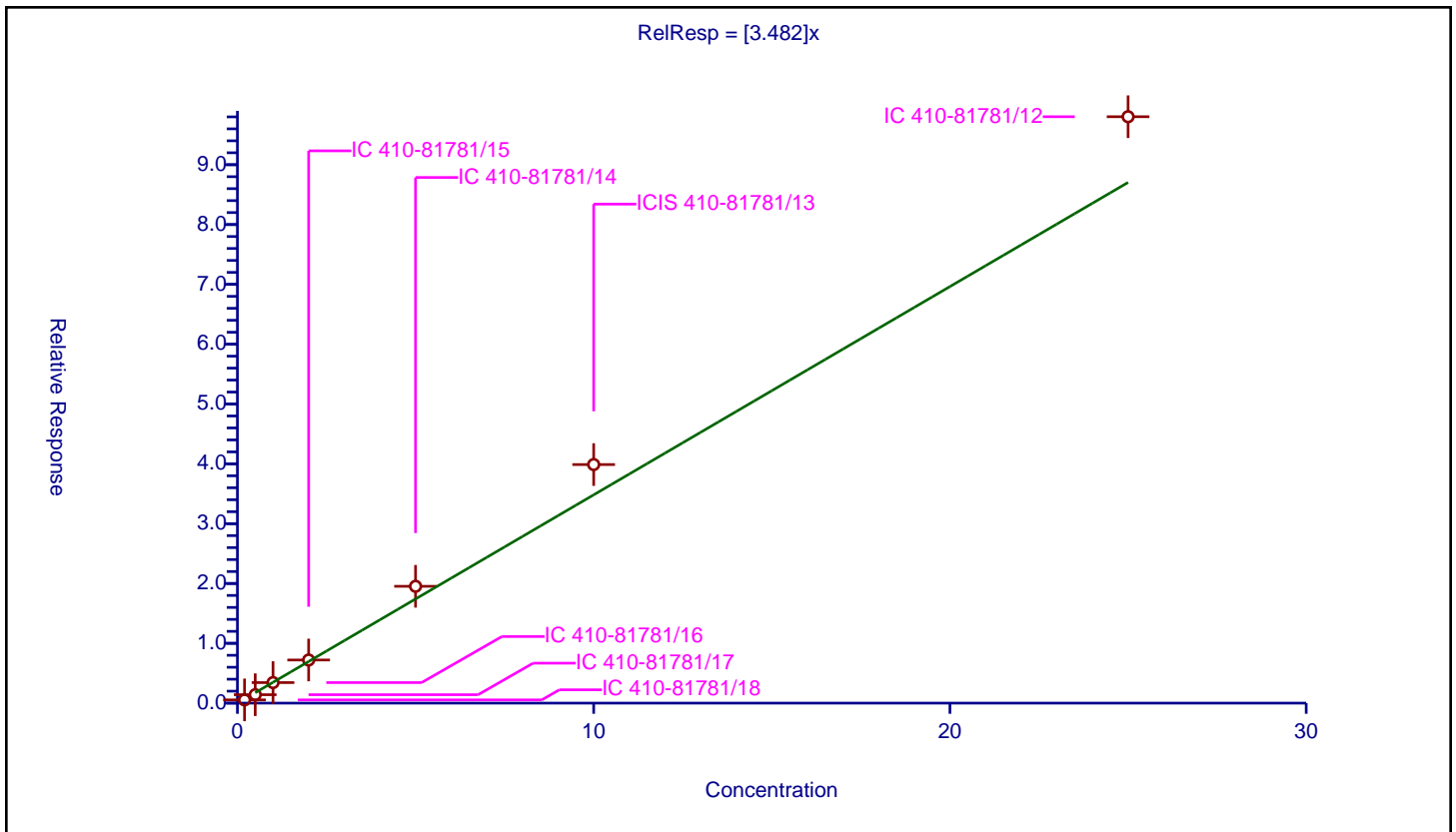
/ 4-Isopropyltoluene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	3.482

Error Coefficients	
Standard Error:	2610000
Relative Standard Error:	15.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.974

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-81781/18	0.2	0.540716	10.0	599705.0	2.703579	Y
2	IC 410-81781/17	0.5	1.408257	10.0	527631.0	2.816514	Y
3	IC 410-81781/16	1.0	3.433098	10.0	659783.0	3.433098	Y
4	IC 410-81781/15	2.0	7.208105	10.0	671311.0	3.604052	Y
5	IC 410-81781/14	5.0	19.527222	10.0	571092.0	3.905444	Y
6	ICIS 410-81781/13	10.0	39.880882	10.0	601504.0	3.988088	Y
7	IC 410-81781/12	25.0	98.025293	10.0	591470.0	3.921012	Y



Calibration

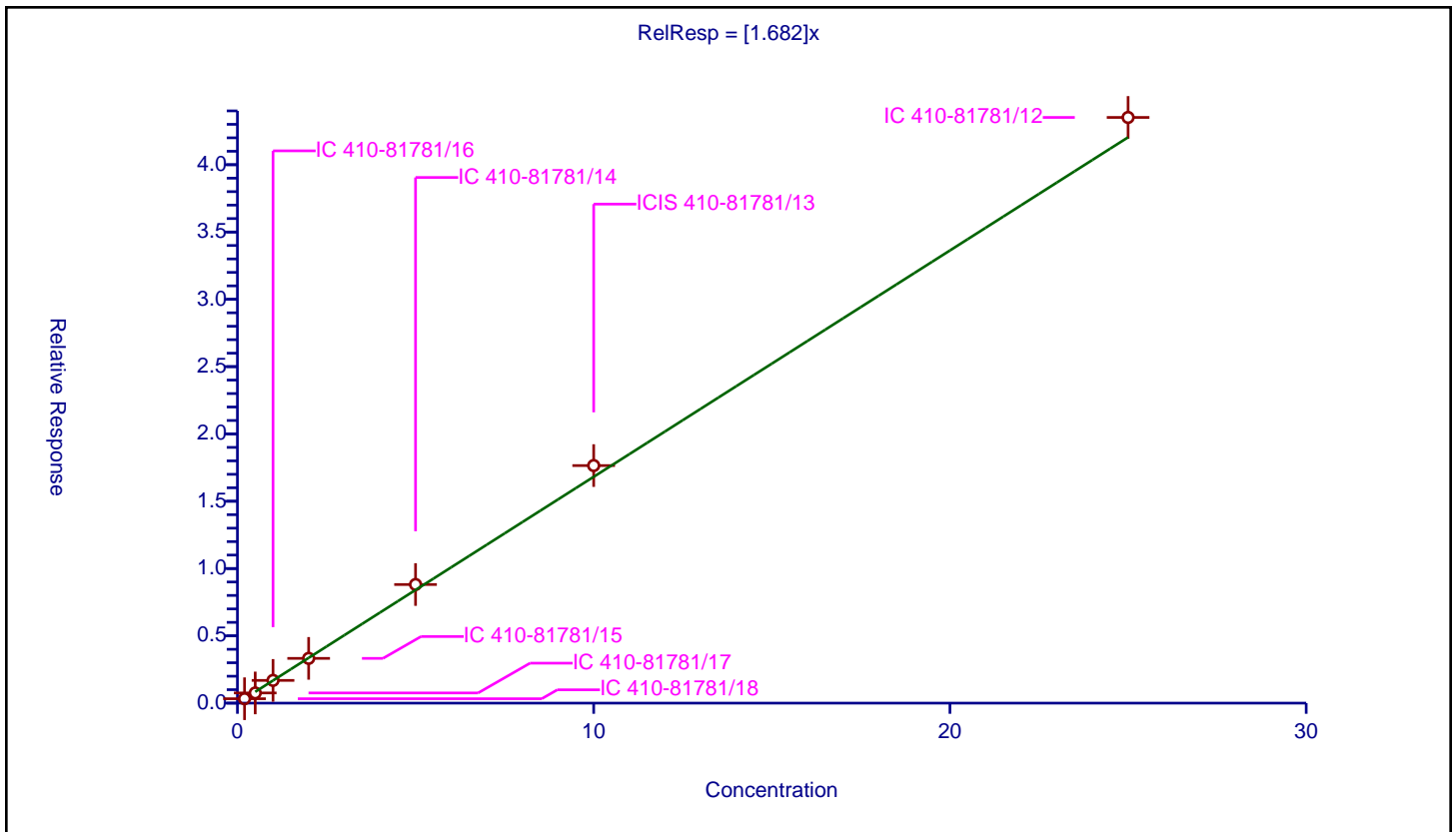
/ 1,4-Dichlorobenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.682

Error Coefficients	
Standard Error:	1160000
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 410-81781/18	0.2	0.327161	10.0	599705.0	1.635804	Y
2	IC 410-81781/17	0.5	0.757196	10.0	527631.0	1.514392	Y
3	IC 410-81781/16	1.0	1.689783	10.0	659783.0	1.689783	Y
4	IC 410-81781/15	2.0	3.325493	10.0	671311.0	1.662746	Y
5	IC 410-81781/14	5.0	8.812906	10.0	571092.0	1.762581	Y
6	ICIS 410-81781/13	10.0	17.648461	10.0	601504.0	1.764846	Y
7	IC 410-81781/12	25.0	43.512232	10.0	591470.0	1.740489	Y



Calibration

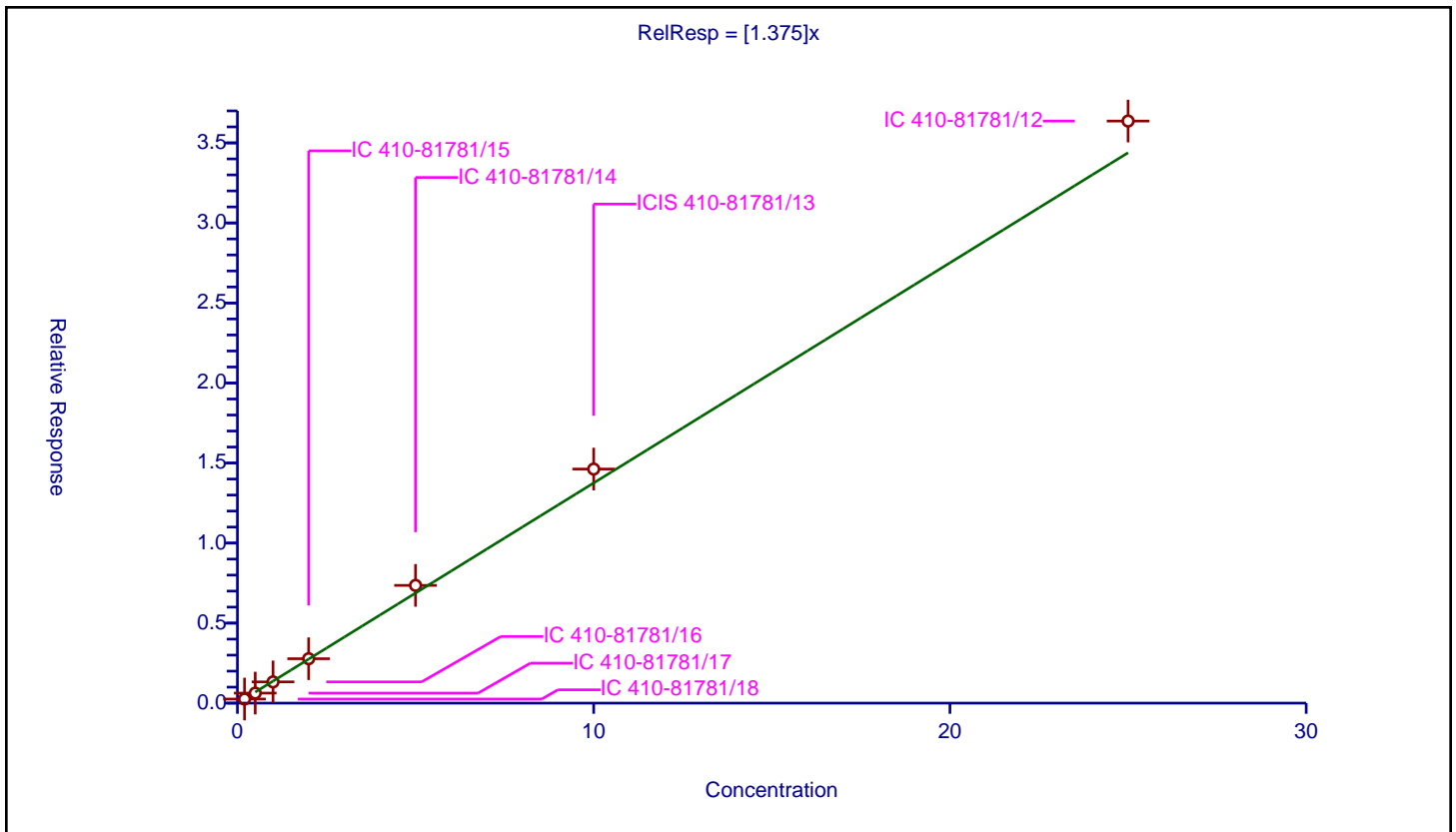
/ 1,2,3-Trimethylbenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.375

Error Coefficients	
Standard Error:	968000
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 410-81781/18	0.2	0.254875	10.0	599705.0	1.274377	Y
2	IC 410-81781/17	0.5	0.625854	10.0	527631.0	1.251708	Y
3	IC 410-81781/16	1.0	1.327103	10.0	659783.0	1.327103	Y
4	IC 410-81781/15	2.0	2.773945	10.0	671311.0	1.386973	Y
5	IC 410-81781/14	5.0	7.355382	10.0	571092.0	1.471076	Y
6	ICIS 410-81781/13	10.0	14.623444	10.0	601504.0	1.462344	Y
7	IC 410-81781/12	25.0	36.364904	10.0	591470.0	1.454596	Y



Calibration

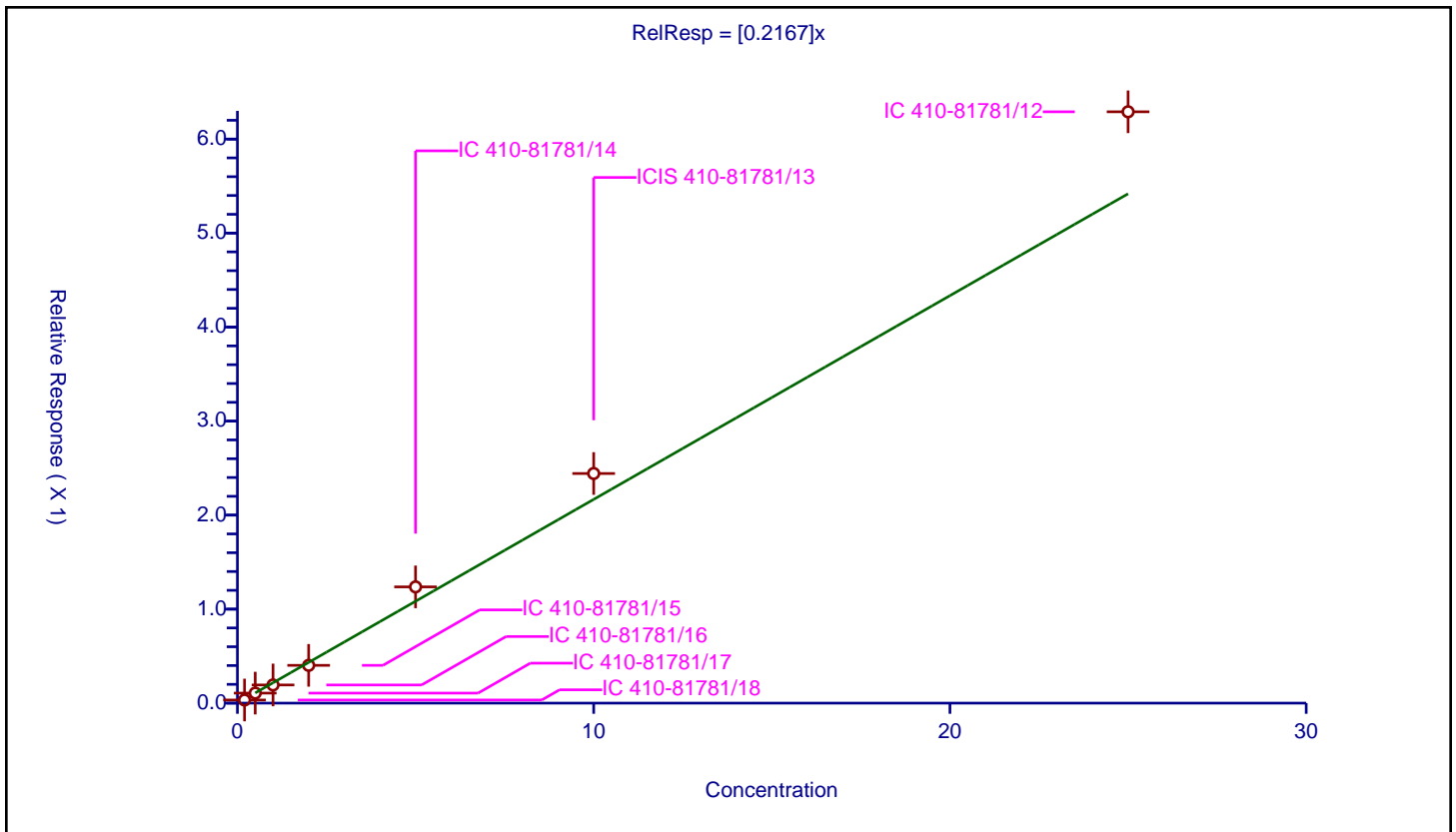
/ Benzyl chloride

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2167

Error Coefficients	
Standard Error:	166000
Relative Standard Error:	14.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.975

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-81781/18	0.2	0.0332	10.0	599705.0	0.165998	Y
2	IC 410-81781/17	0.5	0.106798	10.0	527631.0	0.213596	Y
3	IC 410-81781/16	1.0	0.193382	10.0	659783.0	0.193382	Y
4	IC 410-81781/15	2.0	0.4019	10.0	671311.0	0.20095	Y
5	IC 410-81781/14	5.0	1.236631	10.0	571092.0	0.247326	Y
6	ICIS 410-81781/13	10.0	2.442677	10.0	601504.0	0.244268	Y
7	IC 410-81781/12	25.0	6.290344	10.0	591470.0	0.251614	Y



Calibration

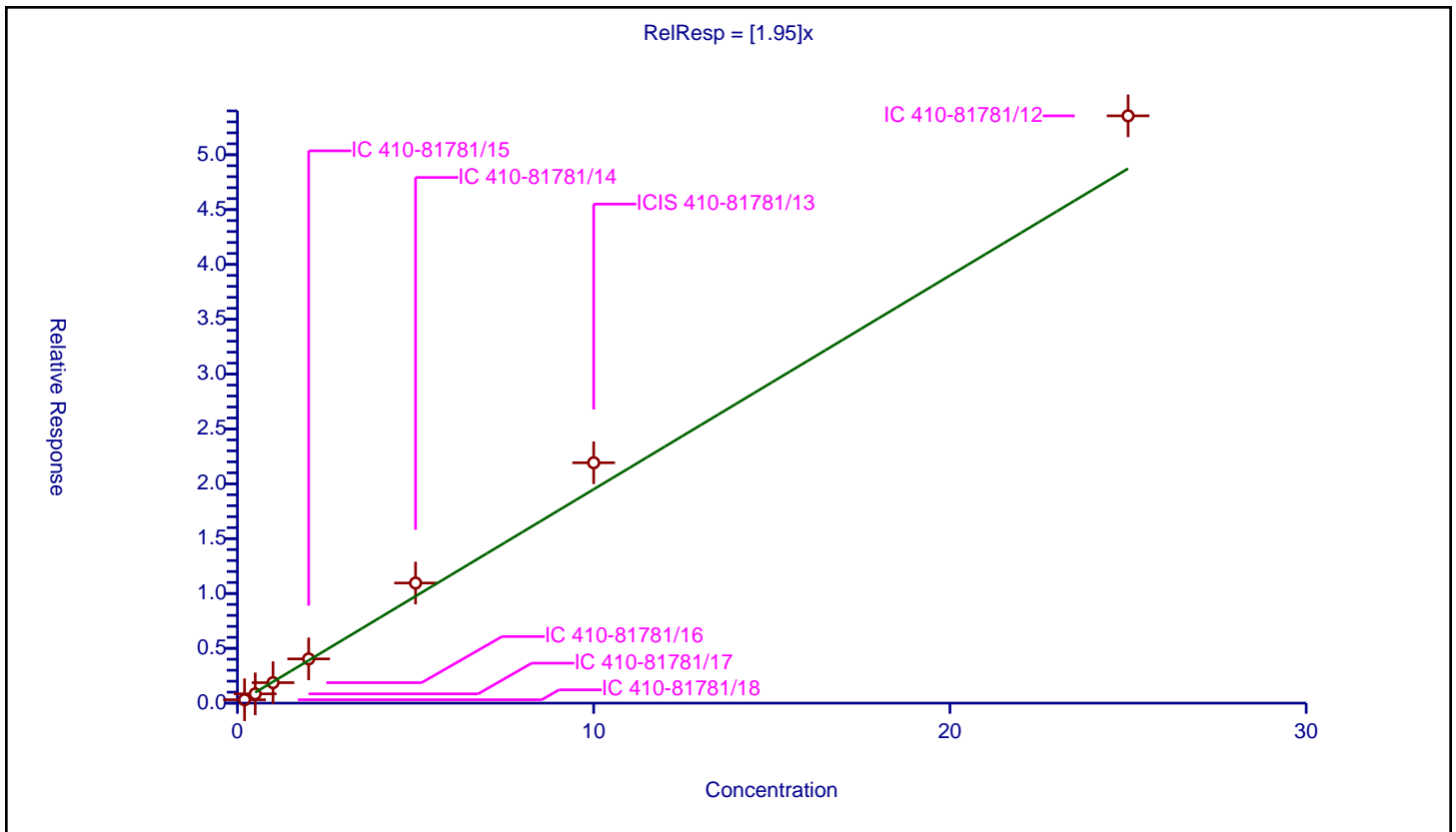
/ n-Butylbenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.95

Error Coefficients	
Standard Error:	1430000
Relative Standard Error:	13.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.980

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-81781/18	0.2	0.309886	10.0	599705.0	1.549428	Y
2	IC 410-81781/17	0.5	0.845382	10.0	527631.0	1.690765	Y
3	IC 410-81781/16	1.0	1.866977	10.0	659783.0	1.866977	Y
4	IC 410-81781/15	2.0	4.031514	10.0	671311.0	2.015757	Y
5	IC 410-81781/14	5.0	10.951213	10.0	571092.0	2.190243	Y
6	ICIS 410-81781/13	10.0	21.917294	10.0	601504.0	2.191729	Y
7	IC 410-81781/12	25.0	53.549411	10.0	591470.0	2.141976	Y



Calibration

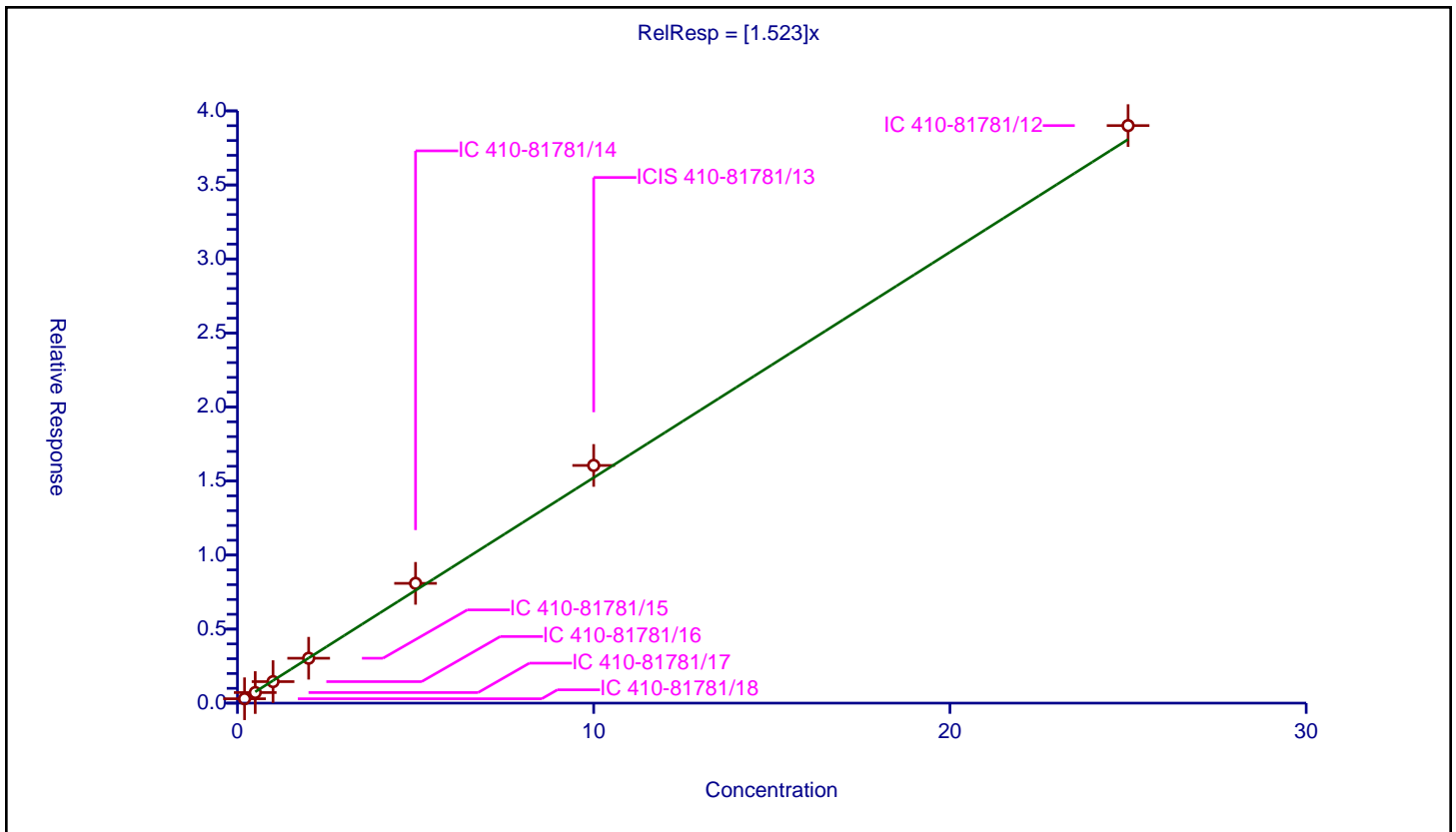
/ 1,2-Dichlorobenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.523

Error Coefficients	
Standard Error:	1040000
Relative Standard Error:	4.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-81781/18	0.2	0.295579	10.0	599705.0	1.477893	Y
2	IC 410-81781/17	0.5	0.715576	10.0	527631.0	1.431152	Y
3	IC 410-81781/16	1.0	1.452402	10.0	659783.0	1.452402	Y
4	IC 410-81781/15	2.0	3.031844	10.0	671311.0	1.515922	Y
5	IC 410-81781/14	5.0	8.090168	10.0	571092.0	1.618034	Y
6	ICIS 410-81781/13	10.0	16.053825	10.0	601504.0	1.605383	Y
7	IC 410-81781/12	25.0	39.006509	10.0	591470.0	1.56026	Y



Calibration

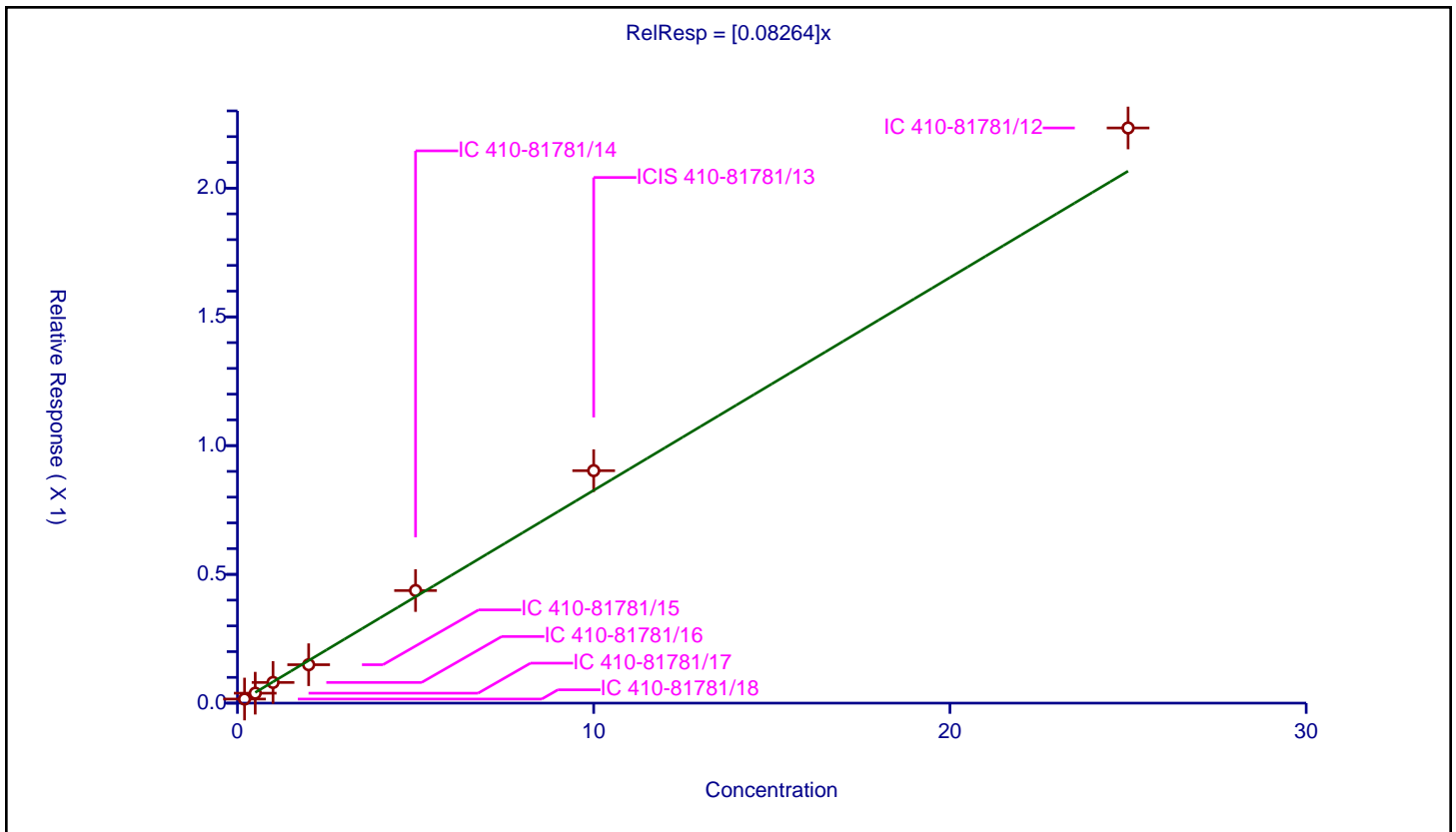
/ 1,2-Dibromo-3-Chloropropane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.08264

Error Coefficients	
Standard Error:	59400
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 410-81781/18	0.2	0.015858	10.0	599705.0	0.079289	Y
2	IC 410-81781/17	0.5	0.038625	10.0	527631.0	0.077251	Y
3	IC 410-81781/16	1.0	0.080284	10.0	659783.0	0.080284	Y
4	IC 410-81781/15	2.0	0.149201	10.0	671311.0	0.0746	Y
5	IC 410-81781/14	5.0	0.437303	10.0	571092.0	0.087461	Y
6	ICIS 410-81781/13	10.0	0.90277	10.0	601504.0	0.090277	Y
7	IC 410-81781/12	25.0	2.23374	10.0	591470.0	0.08935	Y



Calibration

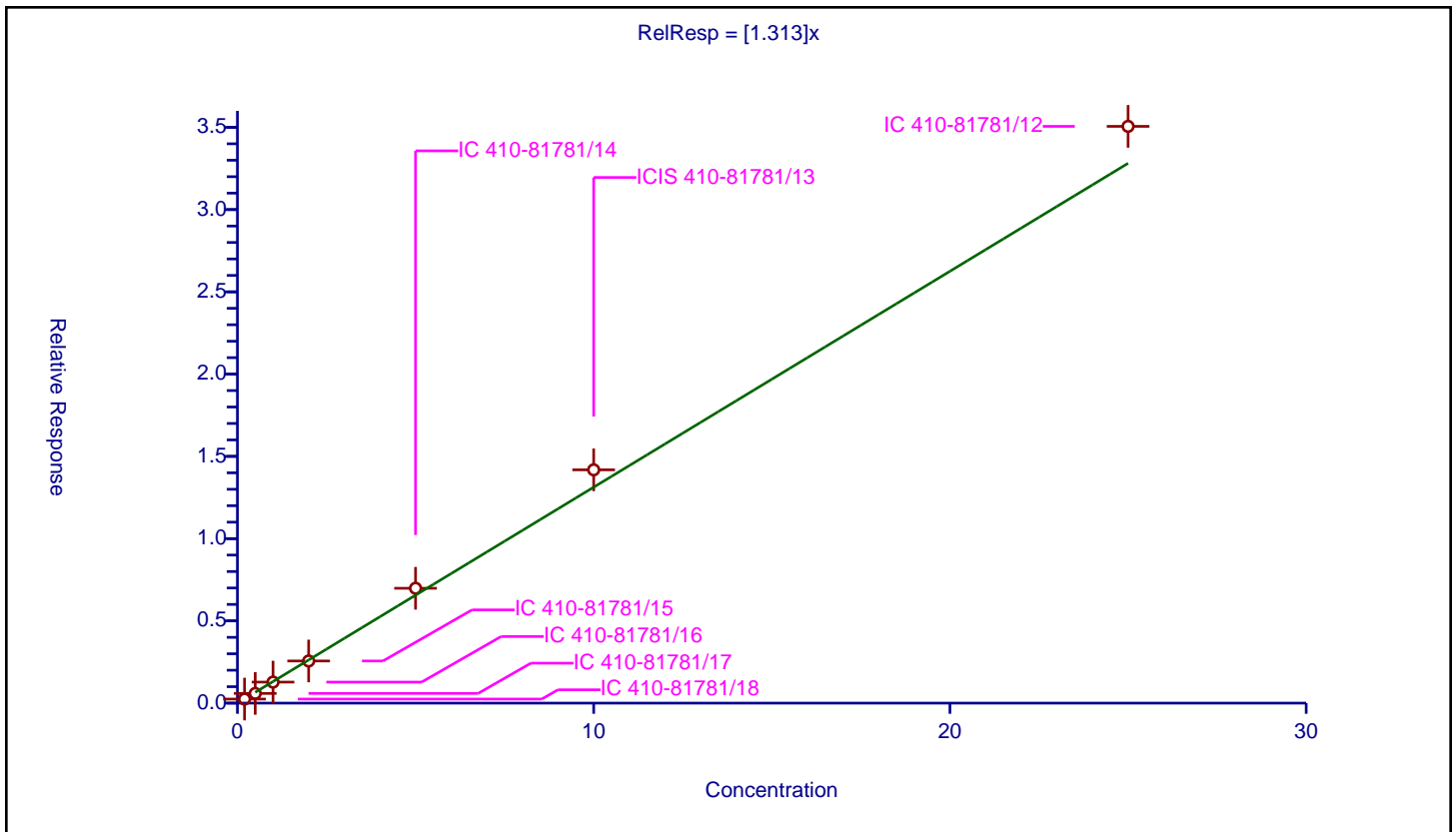
/ 1,3,5-Trichlorobenzene

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.313

Error Coefficients	
Standard Error:	933000
Relative Standard Error:	7.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-81781/18	0.2	0.246538	10.0	599705.0	1.232689	Y
2	IC 410-81781/17	0.5	0.589844	10.0	527631.0	1.179688	Y
3	IC 410-81781/16	1.0	1.277663	10.0	659783.0	1.277663	Y
4	IC 410-81781/15	2.0	2.56221	10.0	671311.0	1.281105	Y
5	IC 410-81781/14	5.0	6.981415	10.0	571092.0	1.396283	Y
6	ICIS 410-81781/13	10.0	14.181319	10.0	601504.0	1.418132	Y
7	IC 410-81781/12	25.0	35.059039	10.0	591470.0	1.402362	Y



Calibration

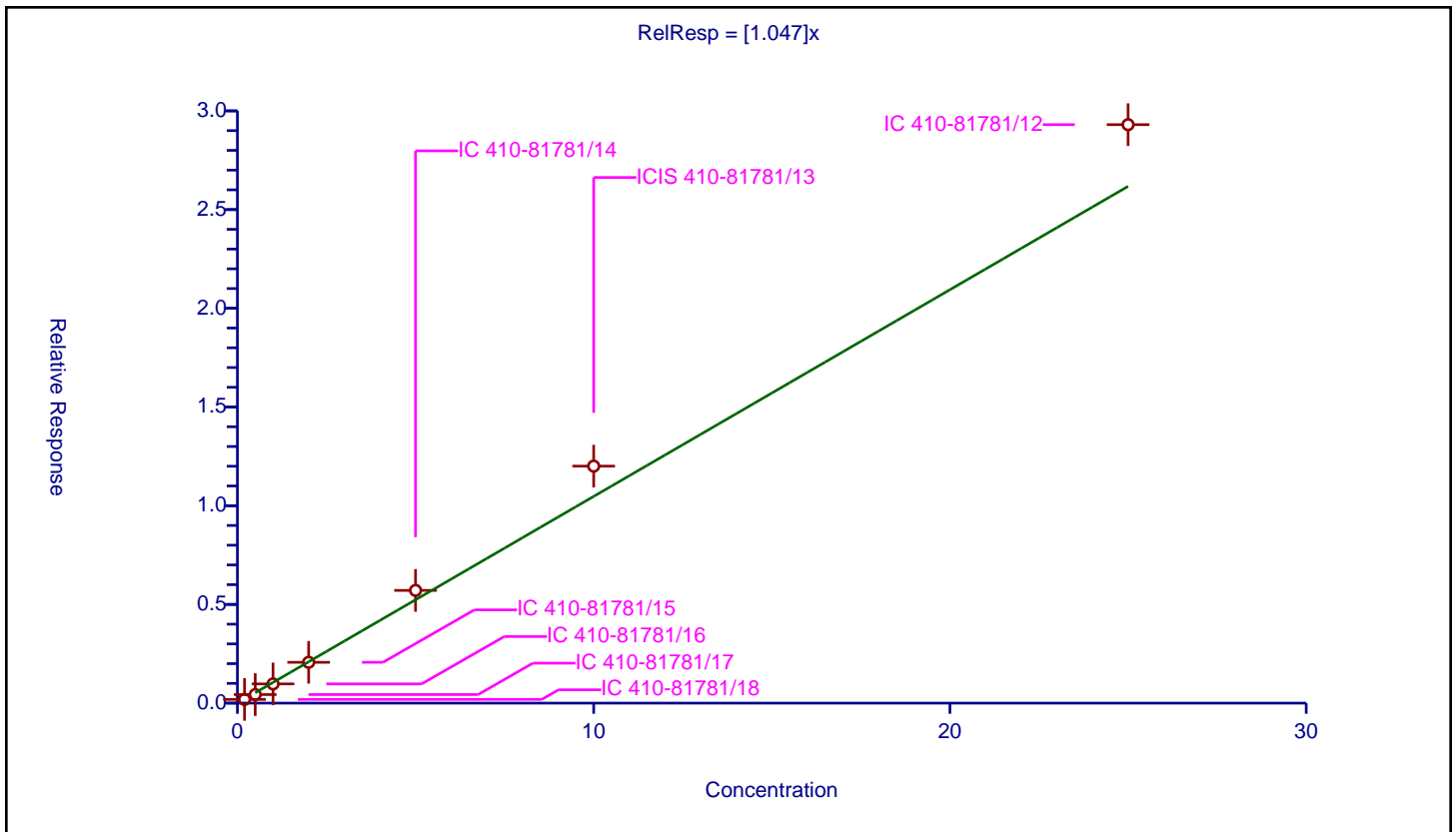
/ 1,2,4-Trichlorobenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.047

Error Coefficients	
Standard Error:	781000
Relative Standard Error:	12.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.982

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-81781/18	0.2	0.188293	10.0	599705.0	0.941463	Y
2	IC 410-81781/17	0.5	0.433655	10.0	527631.0	0.867311	Y
3	IC 410-81781/16	1.0	0.97279	10.0	659783.0	0.97279	Y
4	IC 410-81781/15	2.0	2.066985	10.0	671311.0	1.033493	Y
5	IC 410-81781/14	5.0	5.710113	10.0	571092.0	1.142023	Y
6	ICIS 410-81781/13	10.0	12.005174	10.0	601504.0	1.200517	Y
7	IC 410-81781/12	25.0	29.302873	10.0	591470.0	1.172115	Y



Calibration

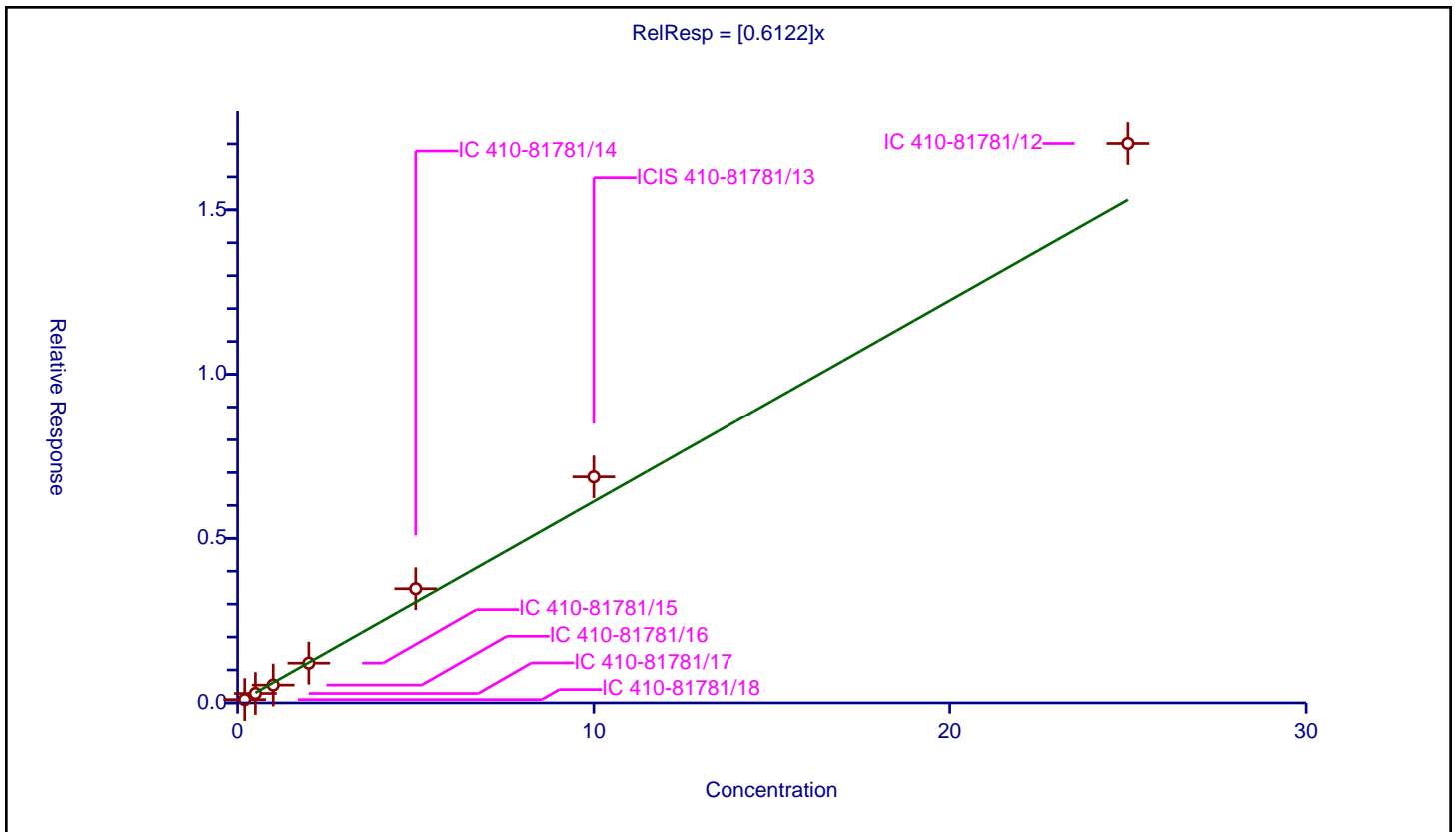
/ Hexachlorobutadiene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.6122

Error Coefficients	
Standard Error:	453000
Relative Standard Error:	12.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.982

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-81781/18	0.2	0.100766	10.0	599705.0	0.503831	Y
2	IC 410-81781/17	0.5	0.287341	10.0	527631.0	0.574682	Y
3	IC 410-81781/16	1.0	0.542315	10.0	659783.0	0.542315	Y
4	IC 410-81781/15	2.0	1.20719	10.0	671311.0	0.603595	Y
5	IC 410-81781/14	5.0	3.467532	10.0	571092.0	0.693506	Y
6	ICIS 410-81781/13	10.0	6.87121	10.0	601504.0	0.687121	Y
7	IC 410-81781/12	25.0	17.013948	10.0	591470.0	0.680558	Y



Calibration

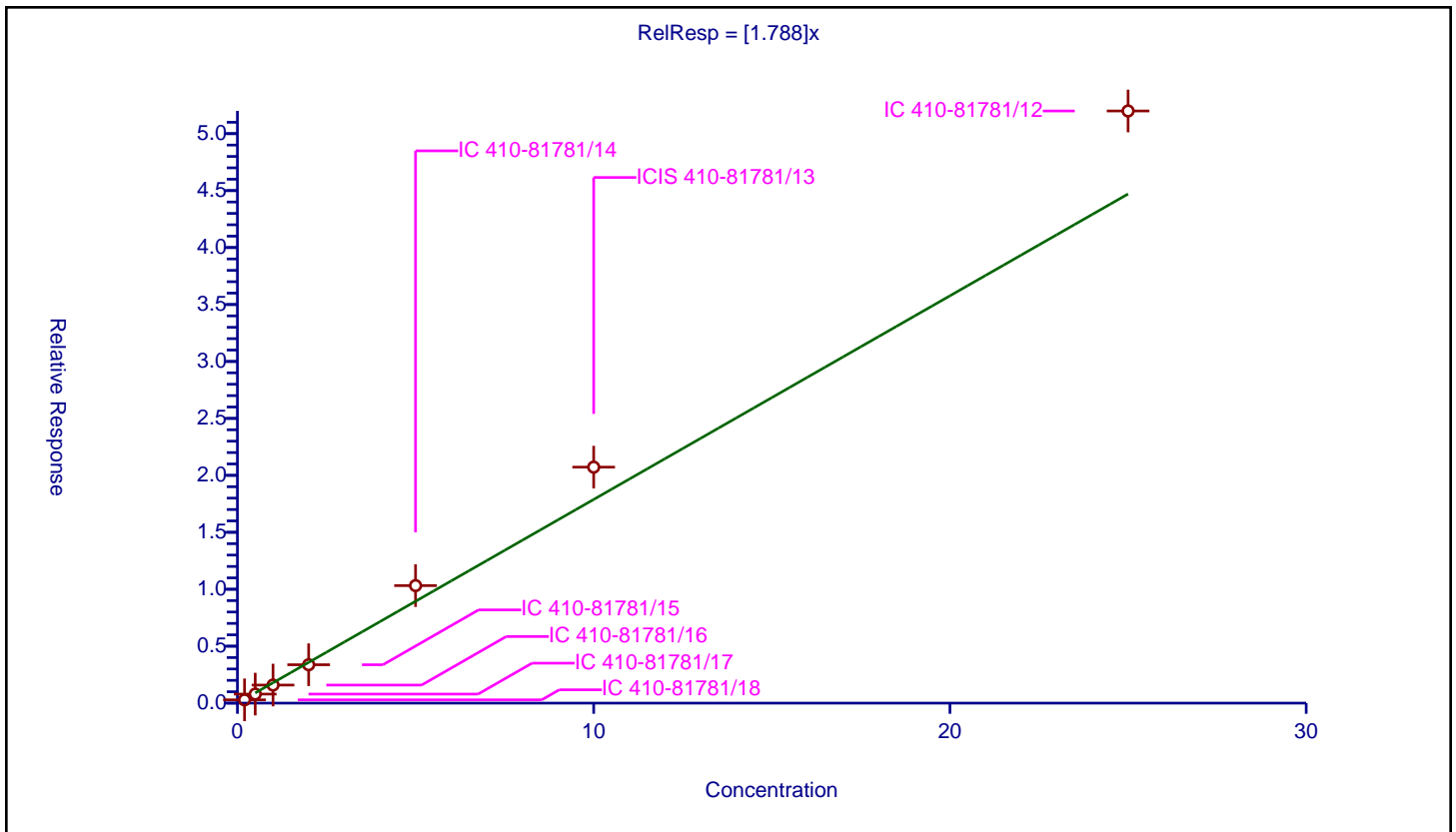
/ Naphthalene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.788

Error Coefficients	
Standard Error:	1380000
Relative Standard Error:	15.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.973

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-81781/18	0.2	0.288525	10.0	599705.0	1.442626	Y
2	IC 410-81781/17	0.5	0.793604	10.0	527631.0	1.587208	Y
3	IC 410-81781/16	1.0	1.587492	10.0	659783.0	1.587492	Y
4	IC 410-81781/15	2.0	3.369824	10.0	671311.0	1.684912	Y
5	IC 410-81781/14	5.0	10.318443	10.0	571092.0	2.063689	Y
6	ICIS 410-81781/13	10.0	20.71953	10.0	601504.0	2.071953	Y
7	IC 410-81781/12	25.0	51.992172	10.0	591470.0	2.079687	Y



Calibration

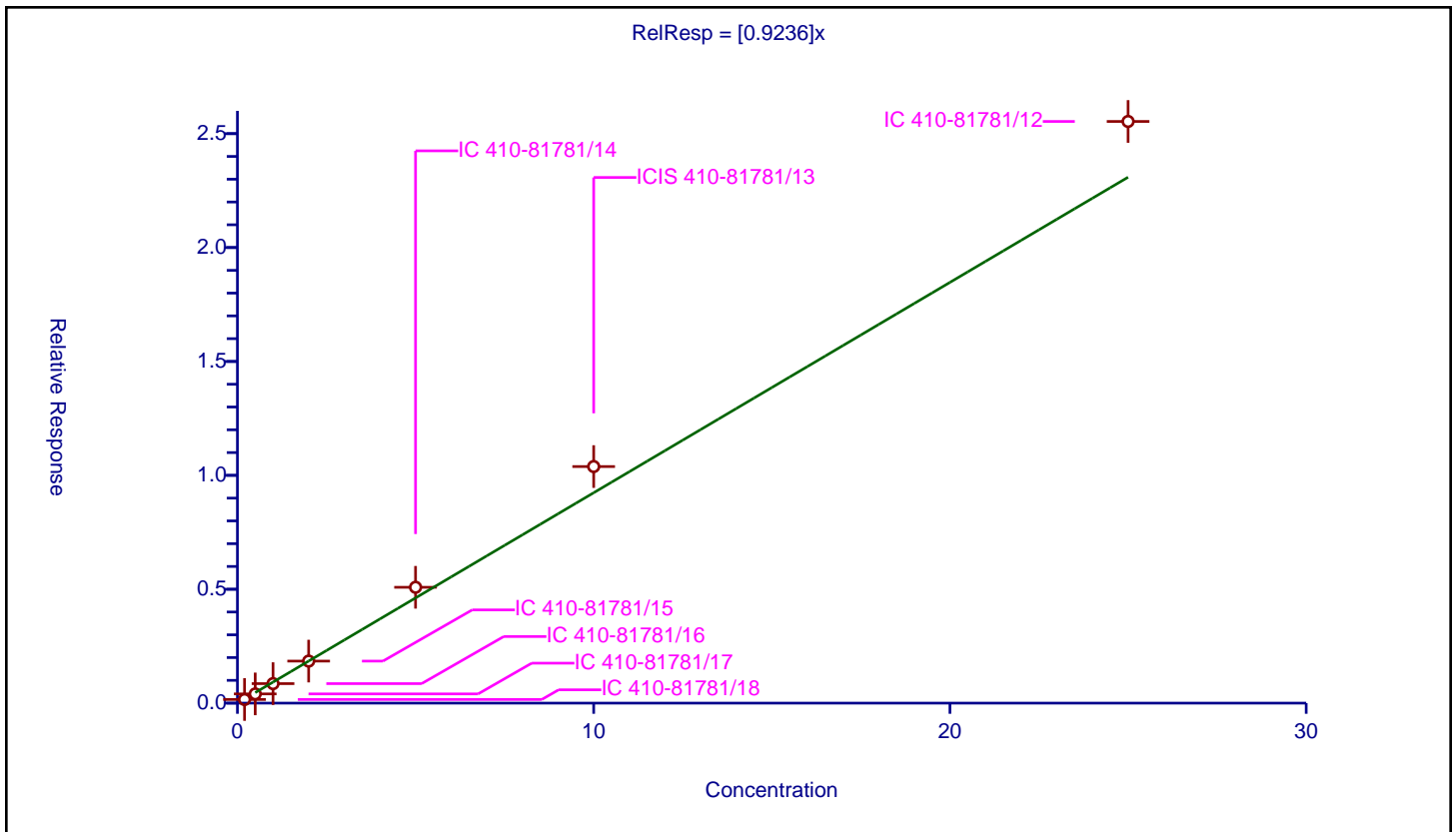
/ 1,2,3-Trichlorobenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.9236

Error Coefficients	
Standard Error:	680000
Relative Standard Error:	11.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.985

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-81781/18	0.2	0.159779	10.0	599705.0	0.798893	Y
2	IC 410-81781/17	0.5	0.405151	10.0	527631.0	0.810301	Y
3	IC 410-81781/16	1.0	0.856009	10.0	659783.0	0.856009	Y
4	IC 410-81781/15	2.0	1.845136	10.0	671311.0	0.922568	Y
5	IC 410-81781/14	5.0	5.085485	10.0	571092.0	1.017097	Y
6	ICIS 410-81781/13	10.0	10.386099	10.0	601504.0	1.03861	Y
7	IC 410-81781/12	25.0	25.535936	10.0	591470.0	1.021437	Y



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-24913-1
 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.: 410-24913-1

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.: 410-24913-1
 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

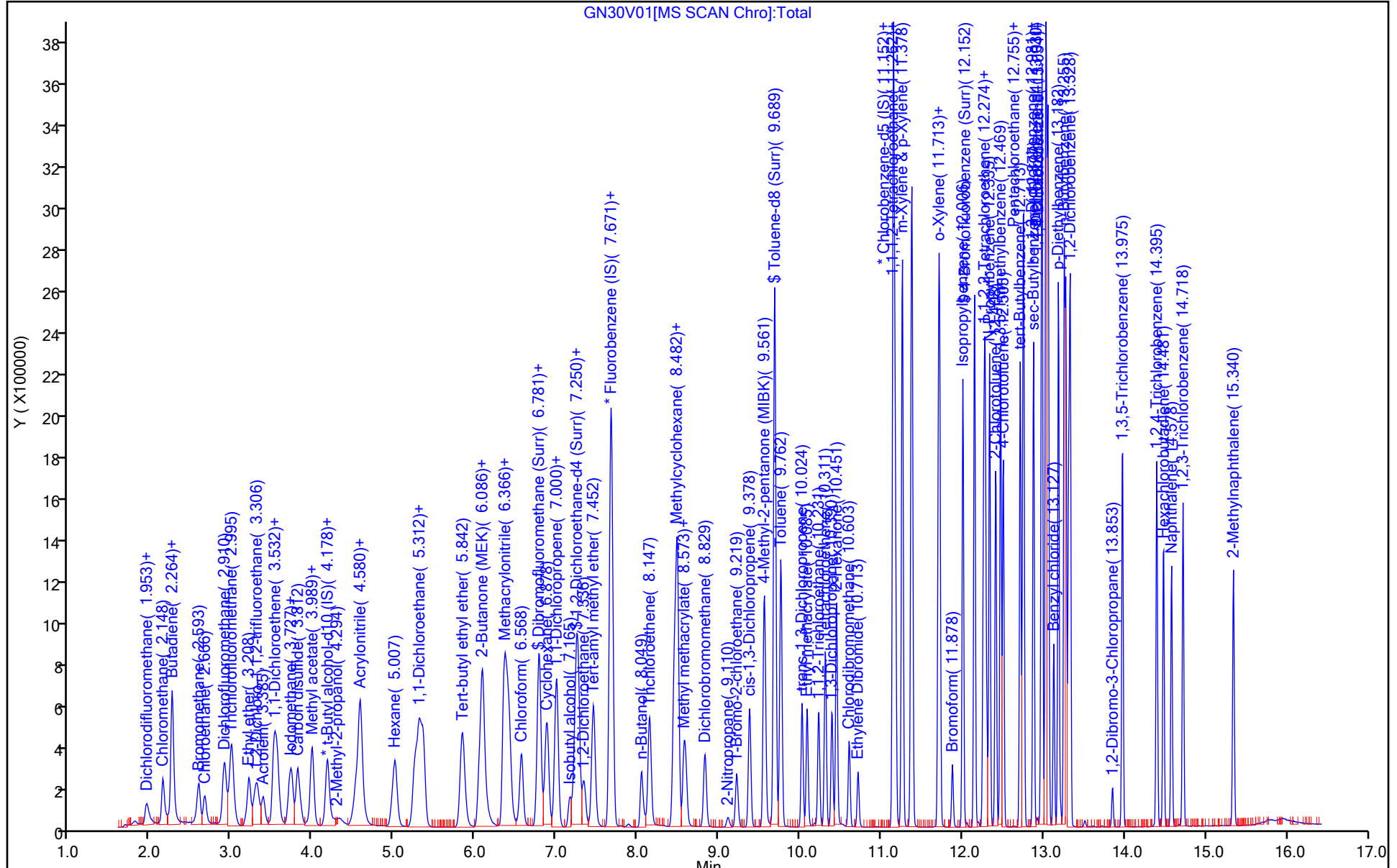
ND - Not Detected or Marked ND

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



GN30V01[MS SCAN Chrom]:Total

Eurofins Lancaster Laboratories Env, LLC

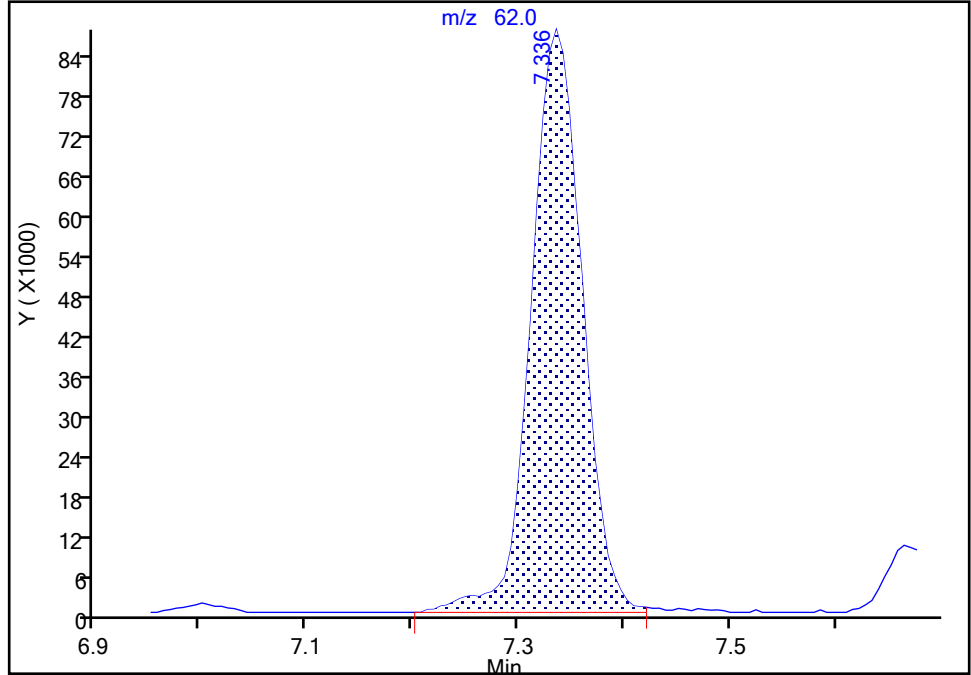
Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30V01.D
Injection Date: 30-Nov-2020 15:26:30 Instrument ID: 16334
Lims ID: ICV
Client ID:
Operator ID: DVV10203 ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

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

Signal: 1

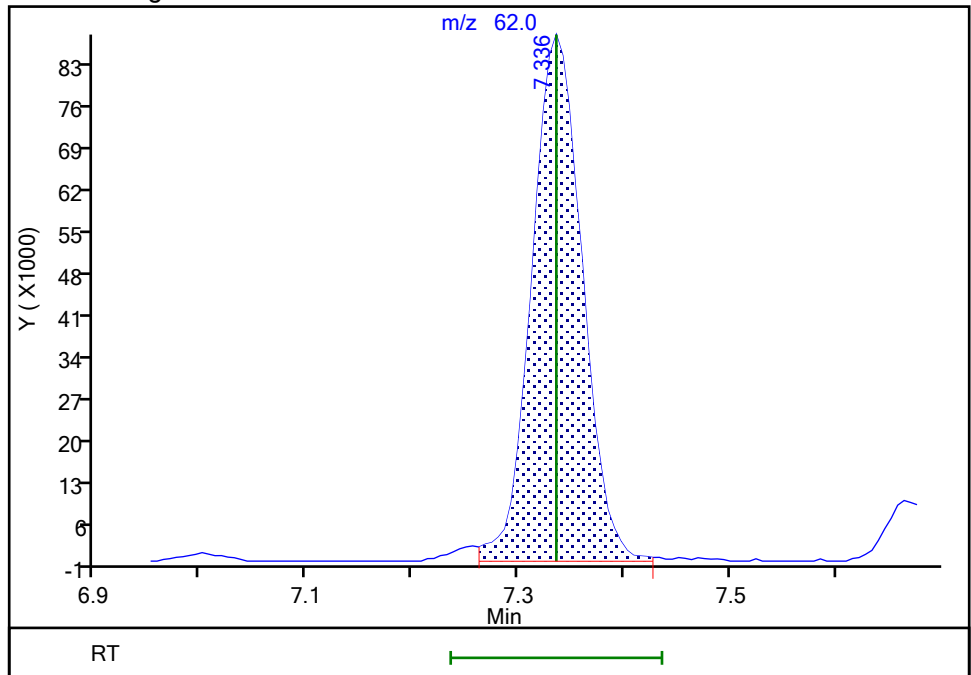
RT: 7.34
Area: 294206
Amount: 4.680182
Amount Units: ug/l

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

Eurofins Lancaster Laboratories Env, LLC

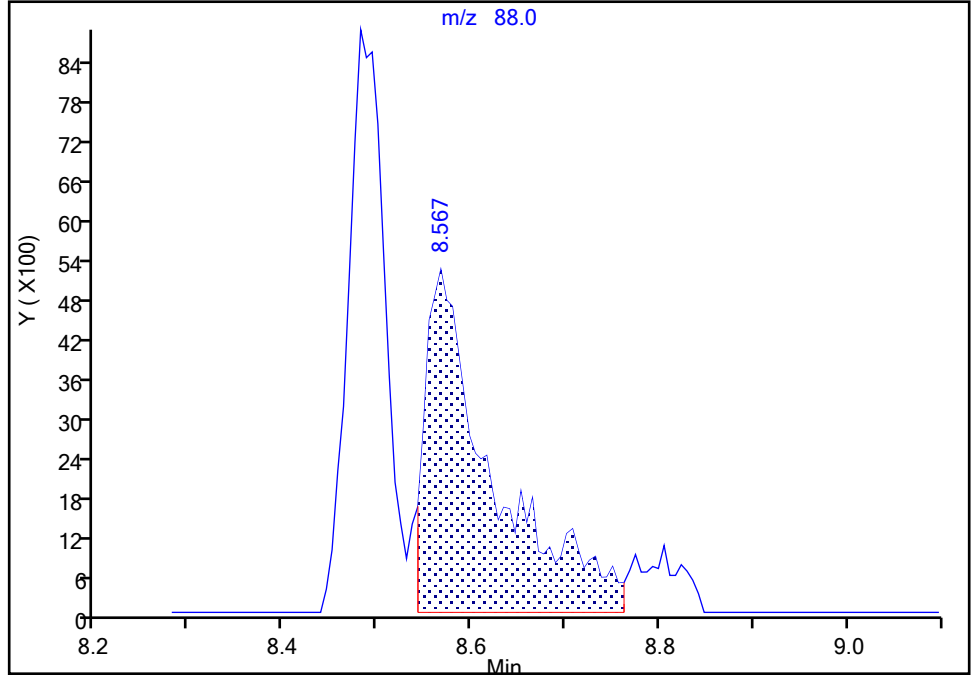
Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30V01.D
Injection Date: 30-Nov-2020 15:26:30 Instrument ID: 16334
Lims ID: ICV
Client ID:
Operator ID: DVV10203 ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

72 1,4-Dioxane, CAS: 123-91-1

Signal: 1

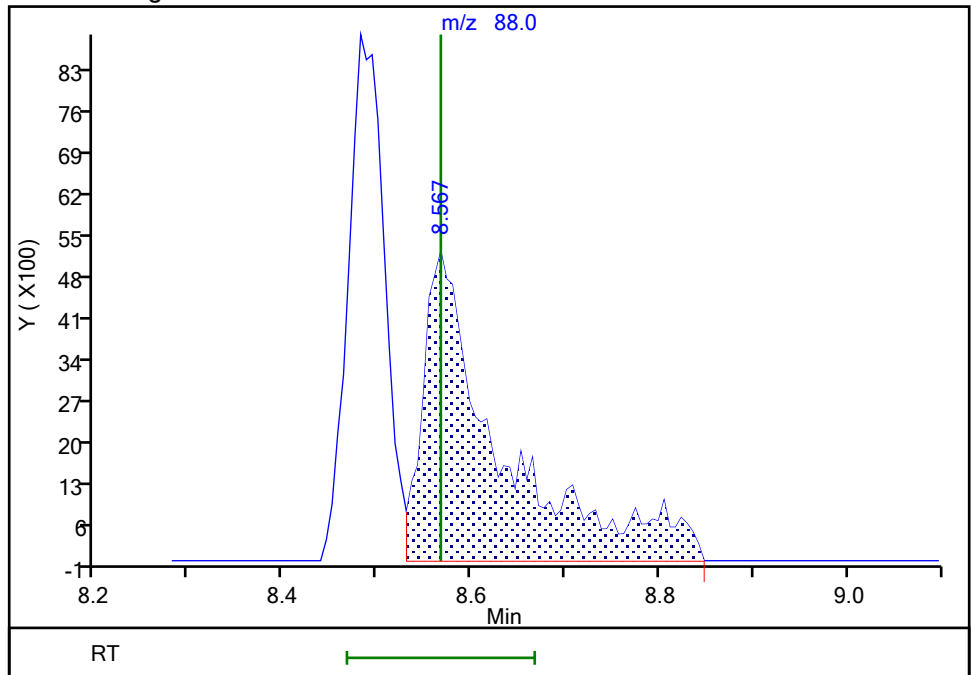
RT: 8.57
Area: 25930
Amount: 125.7342
Amount Units: ug/l

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.: 410-24913-1
 SDG No.: _____
 Lab Sample ID: CCVIS 410-81468/4 Calibration Date: 12/31/2020 17:09
 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: GD31C32.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	0.2308	0.1000	11.1	12.5	-11.2	20.0
Chloromethane	Ave	0.3508	0.2813	0.1000	10.0	12.5	-19.8	20.0
1,3-Butadiene	Ave	0.3993	0.6083		19.0	12.5	52.3*	20.0
Vinyl chloride	Ave	0.2995	0.2479	0.1000	10.3	12.5	-17.2	20.0
Bromomethane	Ave	0.2087	0.1706	0.1000	10.2	12.5	-18.3	20.0
Chloroethane	Ave	0.1817	0.1487	0.1000	10.2	12.5	-18.1	20.0
Dichlorofluoromethane	Ave	0.4073	0.3310		10.2	12.5	-18.7	20.0
Trichlorofluoromethane	Ave	0.3447	0.3117	0.1000	11.3	12.5	-9.6	20.0
Ethyl ether	Ave	0.2035	0.1868		11.5	12.5	-8.2	20.0
Freon 123a	Ave	0.2817	0.2455		10.9	12.5	-12.8	20.0
Acrolein	Ave	1.898	1.637		539	625	-13.7	20.0
1,1-Dichloroethene	Ave	0.2083	0.1806	0.1000	10.8	12.5	-13.3	20.0
Freon 113	Ave	0.2037	0.2058	0.1000	12.6	12.5	1.0	20.0
Acetone	Ave	2.453	1.840	0.1000	93.7	125	-25.0*	20.0
Methyl iodide	Ave	0.3891	0.3450		11.1	12.5	-11.3	20.0
Ethyl bromide	Ave	0.1814	0.1650		11.4	12.5	-9.0	20.0
Carbon disulfide	Ave	0.7678	0.6533	0.1000	10.6	12.5	-14.9	20.0
Methyl acetate	Ave	7.427	5.426	0.1000	9.13	12.5	-26.9*	20.0
Allyl chloride	Ave	0.4168	0.3529		10.6	12.5	-15.3	20.0
Methylene Chloride	Ave	0.2387	0.2095	0.1000	11.0	12.5	-12.2	20.0
t-Butyl alcohol	Ave	0.8990	0.6457		180	250	-28.2*	20.0
Acrylonitrile	Ave	3.174	2.781		54.8	62.5	-12.4	20.0
Methyl tert-butyl ether	Ave	0.6620	0.5905	0.1000	11.1	12.5	-10.8	20.0
trans-1,2-Dichloroethene	Ave	0.2398	0.2113	0.1000	11.0	12.5	-11.9	20.0
n-Hexane	Ave	0.3497	0.3422		12.2	12.5	-2.1	20.0
1,1-Dichloroethane	Ave	0.4451	0.4032	0.2000	11.3	12.5	-9.4	20.0
di-Isopropyl ether	Ave	0.9055	0.8015		11.1	12.5	-11.5	20.0
2-Chloro-1,3-butadiene	Ave	0.4048	0.3632		11.2	12.5	-10.3	20.0
Ethyl t-butyl ether	Ave	0.8257	0.7266		11.0	12.5	-12.0	20.0
2-Butanone (MEK)	Ave	4.546	3.992	0.1000	110	125	-12.2	20.0
cis-1,2-Dichloroethene	Ave	0.2693	0.2385	0.1000	11.1	12.5	-11.4	20.0
2,2-Dichloropropane	Ave	0.3733	0.3244		10.9	12.5	-13.1	20.0
Propionitrile	Ave	1.127	1.021		227	250	-9.4	20.0
Methacrylonitrile	Ave	4.178	3.710		111	125	-11.2	20.0
Bromochloromethane	Ave	0.1200	0.1086		11.3	12.5	-9.5	20.0
Tetrahydrofuran	Ave	1.175	1.059		113	125	-9.9	20.0
Chloroform	Ave	0.4289	0.3842	0.2000	11.2	12.5	-10.4	20.0
1,1,1-Trichloroethane	Ave	0.3670	0.3300	0.1000	11.2	12.5	-10.1	20.0
Cyclohexane	Ave	0.4218	0.4088	0.1000	12.1	12.5	-3.1	20.0
Carbon tetrachloride	Ave	0.3183	0.2867	0.1000	11.3	12.5	-9.9	20.0
1,1-Dichloropropene	Ave	0.3449	0.3148		11.4	12.5	-8.7	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-24913-1
 SDG No.: _____
 Lab Sample ID: CCVIS 410-81468/4 Calibration Date: 12/31/2020 17:09
 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: GD31C32.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	0.0048		531	625	-15.0	20.0
Benzene	Ave	1.017	0.9096	0.5000	11.2	12.5	-10.5	20.0
1,2-Dichloroethane	Ave	0.2843	0.2534	0.1000	11.1	12.5	-10.9	20.0
t-Amyl methyl ether	Ave	0.7278	0.6365		10.9	12.5	-12.5	20.0
n-Heptane	Ave	0.3945	0.3828		12.1	12.5	-3.0	20.0
n-Butanol	Ave	0.3231	0.2949		1140	1250	-8.7	20.0
Trichloroethene	Ave	0.2596	0.2384	0.2000	11.5	12.5	-8.2	20.0
Methylcyclohexane	Ave	0.4031	0.4092	0.1000	12.7	12.5	1.5	20.0
1,2-Dichloropropane	Ave	0.2719	0.2451	0.1000	11.3	12.5	-9.8	20.0
1,4-Dioxane	Ave	0.0575	0.0619	0.0050	673	625	7.6	20.0
Methyl methacrylate	Ave	8.511	7.647		11.2	12.5	-10.1	20.0
Dibromomethane	Ave	0.1260	0.1144		11.3	12.5	-9.2	20.0
Bromodichloromethane	Ave	0.3153	0.2858	0.2000	11.3	12.5	-9.4	20.0
2-Nitropropane	Ave	2.413	2.260		117	125	-6.3	20.0
1-Bromo-2-chloroethane	Ave	0.2915	0.2503		10.7	12.5	-14.1	20.0
cis-1,3-Dichloropropene	Ave	0.4093	0.3635	0.2000	11.1	12.5	-11.2	20.0
4-Methyl-2-pentanone (MIBK)	Ave	11.67	11.09	0.1000	119	125	-5.0	20.0
Toluene	Ave	0.8666	0.7875	0.4000	11.4	12.5	-9.1	20.0
trans-1,3-Dichloropropene	Ave	0.4679	0.4162	0.1000	11.1	12.5	-11.0	20.0
Ethyl methacrylate	Ave	0.4204	0.3837		11.4	12.5	-8.7	20.0
1,1,2-Trichloroethane	Ave	0.2528	0.2289	0.1000	11.3	12.5	-9.5	20.0
Tetrachloroethene	Ave	0.3760	0.3509	0.2000	11.7	12.5	-6.7	20.0
1,3-Dichloropropane	Ave	0.4560	0.4244		11.6	12.5	-6.9	20.0
2-Hexanone	Ave	8.396	8.105	0.1000	121	125	-3.5	20.0
Dibromochloromethane	Ave	0.2998	0.2776		11.6	12.5	-7.4	20.0
1,2-Dibromoethane (EDB)	Ave	0.2482	0.2270	0.1000	11.4	12.5	-8.5	20.0
1-Chlorohexane	Ave	0.5205	0.4622		11.1	12.5	-11.2	20.0
Chlorobenzene	Ave	0.9653	0.8862	0.5000	11.5	12.5	-8.2	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3430	0.3160		11.5	12.5	-7.9	20.0
Ethylbenzene	Ave	1.712	1.542	0.1000	11.3	12.5	-10.0	20.0
m&p-Xylene	Ave	0.6453	0.5996	0.1000	23.2	25.0	-7.1	20.0
o-Xylene	Ave	0.6400	0.5887	0.3000	11.5	12.5	-8.0	20.0
Styrene	Ave	1.091	1.009	0.3000	11.6	12.5	-7.5	20.0
Bromoform	Ave	0.1750	0.1644	0.1000	11.7	12.5	-6.1	20.0
Isopropylbenzene	Ave	1.674	1.559	0.1000	11.6	12.5	-6.9	20.0
1,1,2,2-Tetrachloroethane	Ave	0.6286	0.5845	0.3000	11.6	12.5	-7.0	20.0
Bromobenzene	Ave	0.7547	0.7039		11.7	12.5	-6.7	20.0
trans-1,4-Dichloro-2-butene	Ave	3.624	2.686		92.6	125	-25.9*	20.0
1,2,3-Trichloropropane	Ave	0.1602	0.1491		11.6	12.5	-6.9	20.0
N-Propylbenzene	Ave	3.763	3.365		11.2	12.5	-10.6	20.0
2-Chlorotoluene	Ave	0.7400	0.6837		11.5	12.5	-7.6	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-24913-1
 SDG No.: _____
 Lab Sample ID: CCVIS 410-81468/4 Calibration Date: 12/31/2020 17:09
 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: GD31C32.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	2.486		11.7	12.5	-6.4	20.0
4-Chlorotoluene	Ave	0.7716	0.7009		11.4	12.5	-9.2	20.0
tert-Butylbenzene	Ave	0.5668	0.5255		11.6	12.5	-7.3	20.0
Pentachloroethane	Ave	0.4872	0.4485		11.5	12.5	-7.9	20.0
1,2,4-Trimethylbenzene	Ave	2.772	2.565		11.6	12.5	-7.4	20.0
sec-Butylbenzene	Ave	3.453	3.220		11.7	12.5	-6.8	20.0
1,3-Dichlorobenzene	Ave	1.522	1.397	0.6000	11.5	12.5	-8.2	20.0
p-Isopropyltoluene	Ave	3.000	2.765		11.5	12.5	-7.8	20.0
1,4-Dichlorobenzene	Ave	1.550	1.417	0.5000	11.4	12.5	-8.6	20.0
1,2,3-Trimethylbenzene	Ave	1.229	1.119		11.4	12.5	-9.0	20.0
Benzyl chloride	Ave	0.2719	0.2351		10.8	12.5	-13.5	20.0
n-Butylbenzene	Ave	1.589	1.421		11.2	12.5	-10.6	20.0
1,2-Dichlorobenzene	Ave	1.420	1.300	0.4000	11.4	12.5	-8.4	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.0916	0.0851	0.0500	11.6	12.5	-7.1	20.0
1,3,5-Trichlorobenzene	Ave	1.275	1.162		11.4	12.5	-8.9	20.0
1,2,4-Trichlorobenzene	Ave	1.175	1.067	0.2000	11.3	12.5	-9.2	20.0
Hexachlorobutadiene	Ave	0.5771	0.5352		11.6	12.5	-7.3	20.0
Naphthalene	Ave	2.139	1.954		11.4	12.5	-8.6	20.0
1,2,3-Trichlorobenzene	Ave	1.037	0.9555		11.5	12.5	-7.9	20.0
Dibromofluoromethane (Surr)	Ave	0.2420	0.2372		9.80	10.0	-2.0	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.0515	0.0506		9.83	10.0	-1.7	20.0
Toluene-d8 (Surr)	Ave	1.334	1.339		10.0	10.0	0.4	20.0
4-Bromofluorobenzene (Surr)	Ave	0.5094	0.5017		9.85	10.0	-1.5	20.0

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20201231-19071.b\GD31C32.D
 Lims ID: CCVIS VSTD12.5
 Client ID:
 Sample Type: CCVIS
 Inject. Date: 31-Dec-2020 17:09:30 ALS Bottle#: 3 Worklist Smp#: 4
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0019071-004
 Misc. Info.: CCVIS VSTD12.5
 Operator ID: MEC29284 Instrument ID: 16334
 Sublist: chrom-MSV_16334_25mL*sub4
 Method: \\chromfs\Lancaster\ChromData\16334\20201231-19071.b\MSV_16334_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 31-Dec-2020 18:24:51 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: CTX1665

First Level Reviewer: campbellme Date: 31-Dec-2020 17:36:52

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.934	1.934	0.000	99	549494	12.5	11.1	
5 Chloromethane	50	2.135	2.135	0.000	99	669658	12.5	10.0	
8 Vinyl chloride	62	2.245	2.245	0.000	61	590211	12.5	10.3	
7 Butadiene	39	2.245	2.245	0.000	94	1448091	12.5	19.0	
9 Bromomethane	94	2.580	2.580	0.000	90	406035	12.5	10.2	
10 Chloroethane	64	2.660	2.660	0.000	100	354077	12.5	10.2	
12 Dichlorofluoromethane	67	2.897	2.897	0.000	97	787981	12.5	10.2	
13 Trichlorofluoromethane	101	2.958	2.958	0.000	96	742023	12.5	11.3	M
15 Ethyl ether	59	3.196	3.196	0.000	93	444828	12.5	11.5	
17 1,2-Dichloro-1,1,2-trifluoroethane	67	3.288	3.288	0.000	93	584501	12.5	10.9	
18 Acrolein	56	3.367	3.367	0.000	100	3232844	625.0	539.1	
19 1,1-Dichloroethene	96	3.501	3.501	0.000	97	429884	12.5	10.8	
20 112TCTFE	101	3.538	3.538	0.000	92	489854	12.5	12.6	
21 Acetone	43	3.544	3.544	0.000	100	726710	125.0	93.7	
23 Iodomethane	142	3.690	3.690	0.000	99	821416	12.5	11.1	
22 Isopropyl alcohol	45	3.678	3.678	0.000	98	233940	250.0	154.9	
24 Ethyl bromide	108	3.720	3.720	0.000	98	393047	12.5	11.4	
25 Carbon disulfide	76	3.787	3.787	0.000	99	1555374	12.5	10.6	
27 Methyl acetate	43	3.946	3.946	0.000	99	214337	12.5	9.13	
28 3-Chloro-1-propene	41	3.976	3.976	0.000	93	840168	12.5	10.6	
29 Methylene Chloride	84	4.159	4.159	0.000	95	498754	12.5	11.0	
* 30 t-Butyl alcohol-d10 (IS)	65	4.184	4.184	0.000	0	157993	50.0	50.0	M
31 2-Methyl-2-propanol	59	4.306	4.306	0.000	99	510062	250.0	179.5	M
32 Acrylonitrile	53	4.507	4.507	0.000	100	549128	62.5	54.8	
33 Methyl tert-butyl ether	73	4.562	4.562	0.000	91	1405892	12.5	11.1	
34 trans-1,2-Dichloroethene	96	4.562	4.562	0.000	97	503046	12.5	11.0	
35 Hexane	57	4.995	4.995	0.000	94	814756	12.5	12.2	
37 1,1-Dichloroethane	63	5.238	5.238	0.000	96	959895	12.5	11.3	
38 Isopropyl ether	45	5.293	5.293	0.000	96	1908082	12.5	11.1	
39 2-Chloro-1,3-butadiene	53	5.348	5.348	0.000	91	864781	12.5	11.2	

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	5.836	5.836	0.000	98	1729787	12.5	11.0	
41 2-Butanone (MEK)	43	6.037	6.037	0.000	100	1576802	125.0	109.8	
42 cis-1,2-Dichloroethene	96	6.080	6.080	0.000	83	567714	12.5	11.1	
43 2,2-Dichloropropane	77	6.086	6.086	0.000	86	772379	12.5	10.9	
45 Propionitrile	54	6.135	6.135	0.000	99	806694	250.0	226.5	
48 Methacrylonitrile	67	6.354	6.354	0.000	94	1465256	125.0	111.0	
49 Chlorobromomethane	128	6.409	6.409	0.000	79	258505	12.5	11.3	
50 Tetrahydrofuran	71	6.409	6.409	0.000	80	418258	125.0	112.6	
51 Chloroform	83	6.561	6.561	0.000	93	914562	12.5	11.2	
\$ 52 Dibromofluoromethane (Surr)	113	6.781	6.781	0.000	94	451702	10.0	9.80	
53 1,1,1-Trichloroethane	97	6.781	6.781	0.000	98	785731	12.5	11.2	
54 Cyclohexane	56	6.878	6.878	0.000	92	973356	12.5	12.1	
56 Carbon tetrachloride	117	6.988	6.988	0.000	97	682674	12.5	11.3	
57 1,1-Dichloropropene	75	7.000	7.000	0.000	97	749367	12.5	11.4	
58 Isobutyl alcohol	41	7.159	7.159	0.000	95	572240	625.0	531.4	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.238	7.238	0.000	0	96395	10.0	9.83	
60 Benzene	78	7.262	7.262	0.000	97	2165588	12.5	11.2	
61 1,2-Dichloroethane	62	7.336	7.336	0.000	97	603308	12.5	11.1	
63 Tert-amyl methyl ether	73	7.451	7.451	0.000	98	1515395	12.5	10.9	
* 64 Fluorobenzene (IS)	96	7.671	7.671	0.000	98	1904585	10.0	10.0	
65 n-Heptane	43	7.677	7.677	0.000	94	911235	12.5	12.1	
67 n-Butanol	56	8.049	8.049	0.000	90	1164878	1250.0	1141.1	
68 Trichloroethene	95	8.146	8.146	0.000	99	567506	12.5	11.5	
69 Methylcyclohexane	83	8.451	8.451	0.000	92	974161	12.5	12.7	
70 1,2-Dichloropropane	63	8.482	8.482	0.000	96	583604	12.5	11.3	
71 2-ethoxy-2-methyl butane	87	8.494	8.494	0.000	92	863586	12.5	11.4	
73 1,4-Dioxane	88	8.567	8.567	0.000	31	122188	625.0	672.7	M
72 Methyl methacrylate	69	8.573	8.573	0.000	92	302038	12.5	11.2	
74 Dibromomethane	93	8.591	8.591	0.000	95	272410	12.5	11.3	
76 Dichlorobromomethane	83	8.829	8.829	0.000	100	680500	12.5	11.3	
77 2-Nitropropane	41	9.116	9.116	0.000	97	892788	125.0	117.1	
80 1-Bromo-2-chloroethane	63	9.219	9.219	0.000	98	595957	12.5	10.7	
81 cis-1,3-Dichloropropene	75	9.384	9.384	0.000	95	865433	12.5	11.1	
82 4-Methyl-2-pentanone (MIBK)	43	9.561	9.561	0.000	97	4378678	125.0	118.7	
\$ 83 Toluene-d8 (Surr)	98	9.689	9.689	0.000	94	1859773	10.0	10.0	
84 Toluene	92	9.768	9.768	0.000	98	1367017	12.5	11.4	
96 trans-1,3-Dichloropropene	75	10.030	10.030	0.000	93	722535	12.5	11.1	
98 Ethyl methacrylate	69	10.091	10.091	0.000	90	666037	12.5	11.4	
99 1,1,2-Trichloroethane	97	10.231	10.231	0.000	90	397361	12.5	11.3	
100 Tetrachloroethene	166	10.317	10.317	0.000	98	609169	12.5	11.7	
101 1,3-Dichloropropane	76	10.396	10.396	0.000	91	736656	12.5	11.6	
102 2-Hexanone	43	10.451	10.451	0.000	98	3201428	125.0	120.7	
104 Chlorodibromomethane	129	10.609	10.609	0.000	90	481952	12.5	11.6	
105 Ethylene Dibromide	107	10.719	10.719	0.000	98	394024	12.5	11.4	
* 106 Chlorobenzene-d5 (IS)	117	11.152	11.152	0.000	86	1388757	10.0	10.0	
107 1-Chlorohexane	91	11.158	11.158	0.000	99	802296	12.5	11.1	
108 Chlorobenzene	112	11.176	11.176	0.000	94	1538395	12.5	11.5	
110 1,1,1,2-Tetrachloroethane	131	11.262	11.262	0.000	97	548580	12.5	11.5	
111 Ethylbenzene	91	11.262	11.262	0.000	98	2676079	12.5	11.3	
112 m-Xylene & p-Xylene	106	11.377	11.377	0.000	97	2081684	25.0	23.2	
113 o-Xylene	106	11.707	11.707	0.000	97	1021925	12.5	11.5	
114 Styrene	104	11.719	11.719	0.000	95	1751266	12.5	11.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
115 Bromoform	173	11.877	11.877	0.000	97	285407	12.5	11.7	
116 Isopropylbenzene	105	12.005	12.005	0.000	96	2706075	12.5	11.6	
\$ 119 4-Bromofluorobenzene (Surr)	95	12.146	12.146	0.000	90	696702	10.0	9.85	
120 1,1,2,2-Tetrachloroethane	83	12.255	12.255	0.000	92	550025	12.5	11.6	
121 Bromobenzene	156	12.261	12.261	0.000	95	662390	12.5	11.7	
122 trans-1,4-Dichloro-2-butene	53	12.280	12.280	0.000	91	1060733	125.0	92.6	
123 1,2,3-Trichloropropane	110	12.298	12.298	0.000	81	140343	12.5	11.6	
124 N-Propylbenzene	91	12.335	12.335	0.000	99	3167227	12.5	11.2	
125 2-Chlorotoluene	126	12.408	12.408	0.000	96	643463	12.5	11.5	
126 1,3,5-Trimethylbenzene	105	12.469	12.469	0.000	94	2339270	12.5	11.7	
127 4-Chlorotoluene	126	12.499	12.499	0.000	98	659606	12.5	11.4	
128 tert-Butylbenzene	134	12.713	12.713	0.000	93	494551	12.5	11.6	
129 Pentachloroethane	167	12.743	12.743	0.000	95	422093	12.5	11.5	
130 1,2,4-Trimethylbenzene	105	12.749	12.749	0.000	97	2414337	12.5	11.6	
131 sec-Butylbenzene	105	12.871	12.871	0.000	94	3030632	12.5	11.7	
132 1,3-Dichlorobenzene	146	12.969	12.969	0.000	98	1315092	12.5	11.5	
133 4-Isopropyltoluene	119	12.981	12.981	0.000	97	2601941	12.5	11.5	
* 134 1,4-Dichlorobenzene-d4	152	13.023	13.023	0.000	95	752875	10.0	10.0	
135 1,4-Dichlorobenzene	146	13.042	13.042	0.000	94	1333729	12.5	11.4	
136 1,2,3-Trimethylbenzene	120	13.054	13.054	0.000	99	1052884	12.5	11.4	
137 Benzyl chloride	126	13.121	13.121	0.000	99	221285	12.5	10.8	
138 p-Diethylbenzene	119	13.176	13.176	0.000	91	1572808	12.5	11.5	
139 n-Butylbenzene	92	13.267	13.267	0.000	98	1337281	12.5	11.2	
140 1,2-Dichlorobenzene	146	13.304	13.304	0.000	98	1223631	12.5	11.4	
142 1,2-Dibromo-3-Chloropropane	155	13.840	13.840	0.000	87	80111	12.5	11.6	
143 1,3,5-Trichlorobenzene	180	13.962	13.962	0.000	98	1093531	12.5	11.4	
144 1,2,4-Trichlorobenzene	180	14.383	14.383	0.000	94	1003923	12.5	11.3	
145 Hexachlorobutadiene	225	14.468	14.468	0.000	96	503642	12.5	11.6	
146 Naphthalene	128	14.566	14.566	0.000	97	1838850	12.5	11.4	
147 1,2,3-Trichlorobenzene	180	14.706	14.706	0.000	96	899236	12.5	11.5	
148 2-Methylnaphthalene	142	15.322	15.322	0.000	92	1283399	12.5	11.1	
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_RV1_826_00033

Amount Added: 25.00

Units: uL

MSV_RV4GAS826_00104

Amount Added: 25.00

Units: uL

MSV_RV4_826_00038

Amount Added: 25.00

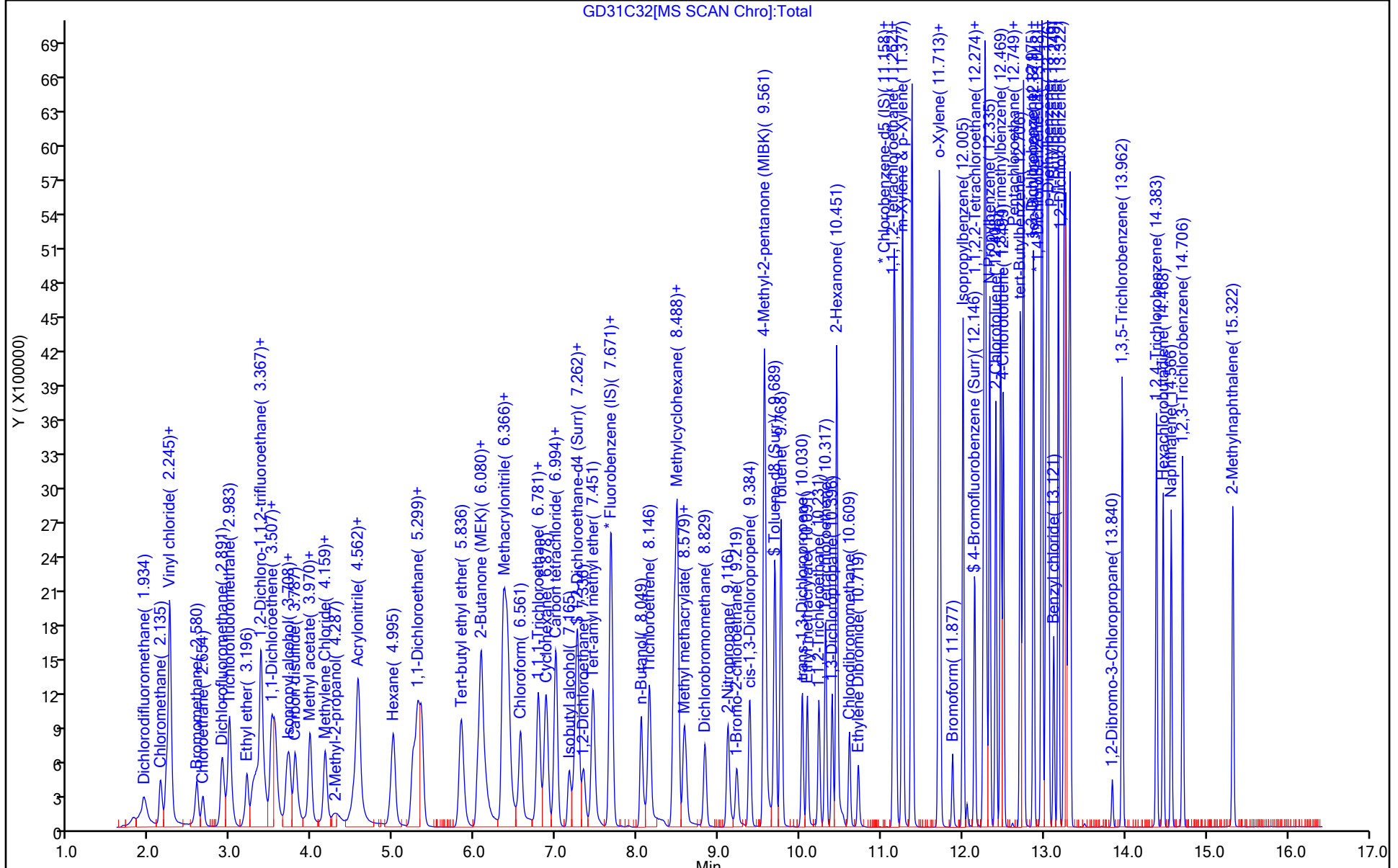
Units: uL

MSV_29_826ISS_00014

Amount Added: 1.00

Units: uL

Run Reagent



GD31C32[MS SCAN Chrom]:Total

Eurofins Lancaster Laboratories Env, LLC

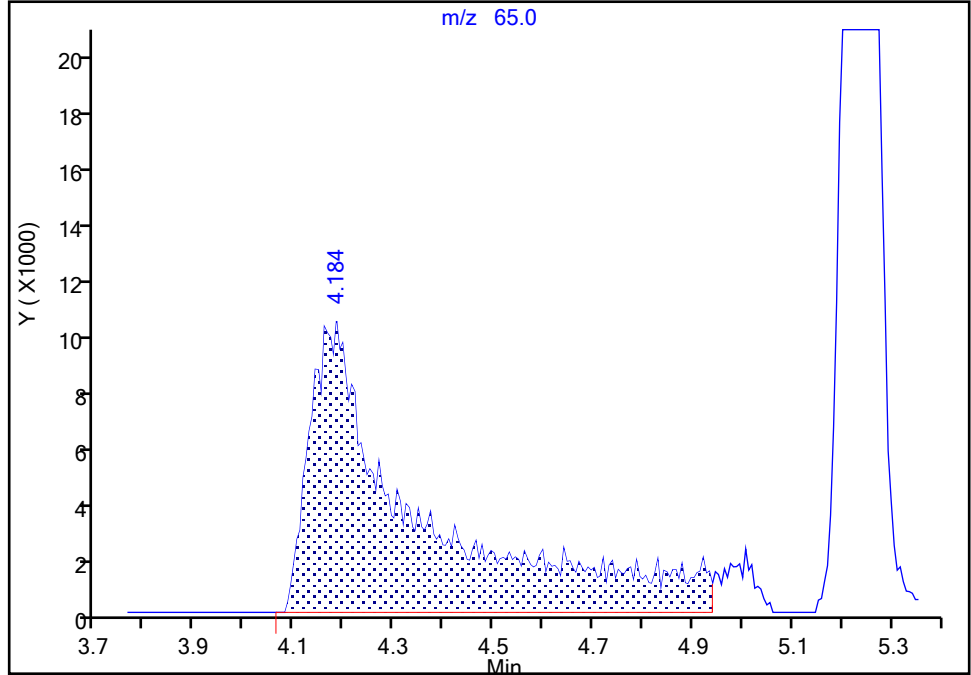
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Injection Date: 31-Dec-2020 17:09:30 Instrument ID: 16334
Lims ID: CCVIS VSTD12.5
Client ID:
Operator ID: MEC29284 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

* 30 t-Butyl alcohol-d10 (IS), CAS: 53001-22-2

Signal: 1

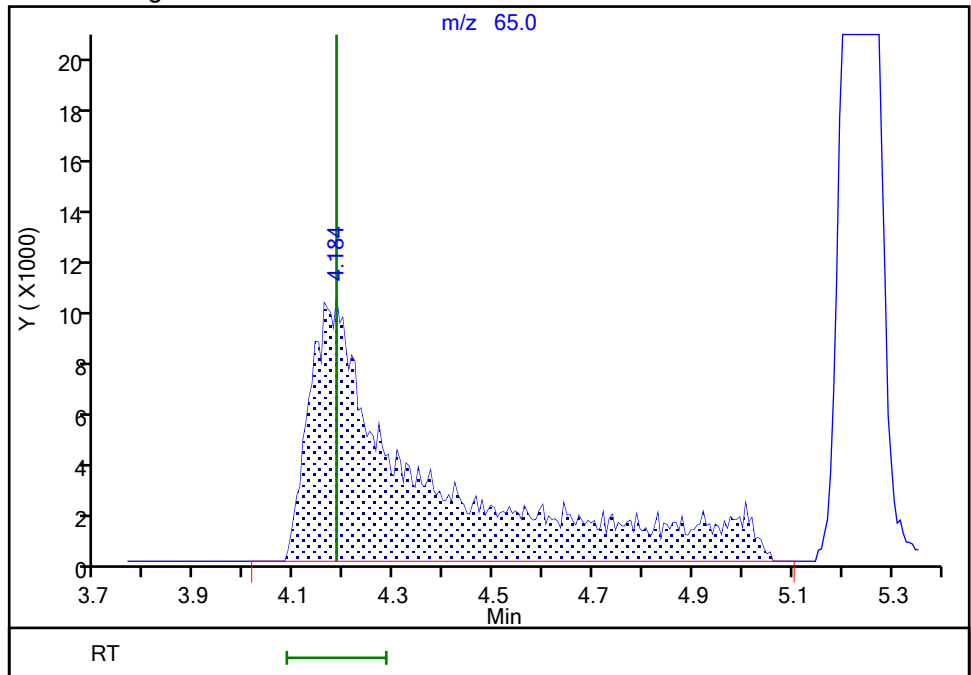
RT: 4.18
Area: 149540
Amount: 50.000000
Amount Units: ug/l

Processing Integration Results



RT: 4.18
Area: 157993
Amount: 50.000000
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 31-Dec-2020 17:36:03
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

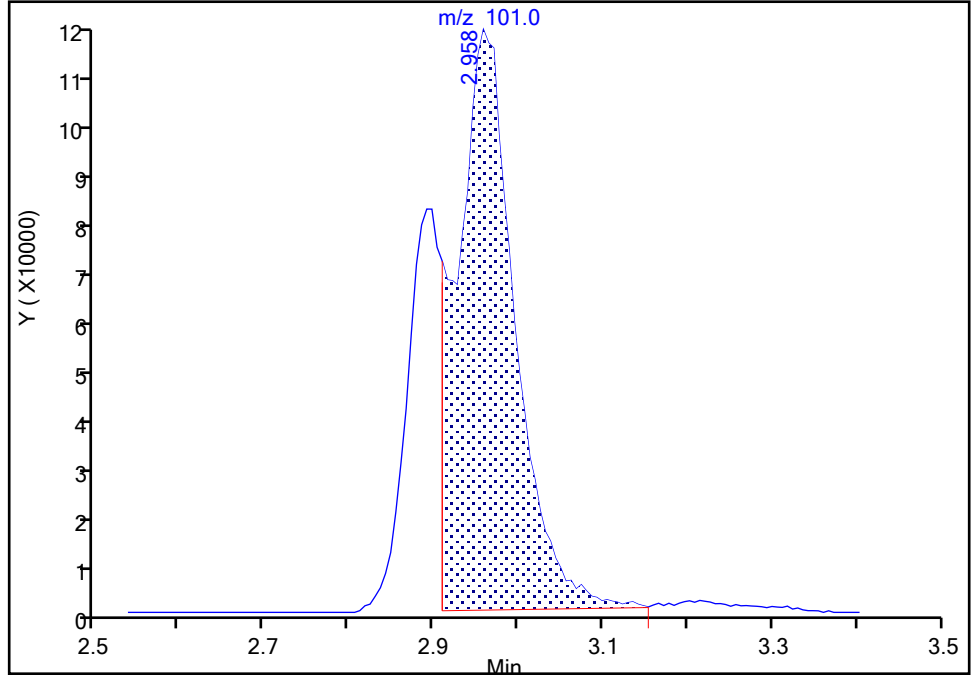
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Injection Date: 31-Dec-2020 17:09:30 Instrument ID: 16334
Lims ID: CCVIS VSTD12.5
Client ID:
Operator ID: MEC29284 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

13 Trichlorofluoromethane, CAS: 75-69-4

Signal: 1

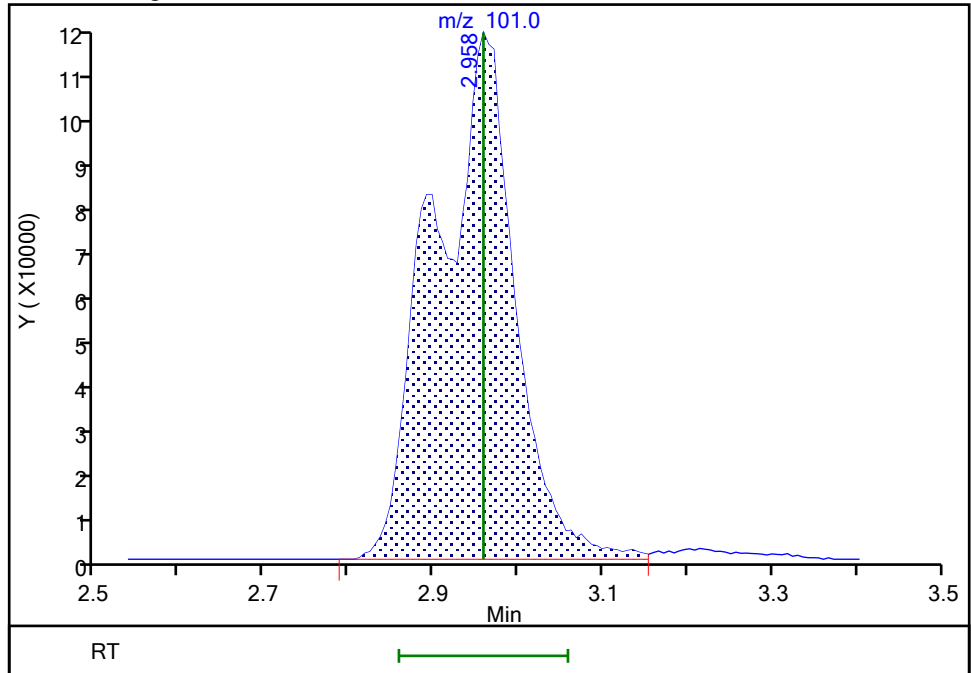
RT: 2.96
Area: 537157
Amount: 8.182895
Amount Units: ug/l

Processing Integration Results



RT: 2.96
Area: 742023
Amount: 11.303765
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 31-Dec-2020 17:34:06
Audit Action: Split an Integrated Peak

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

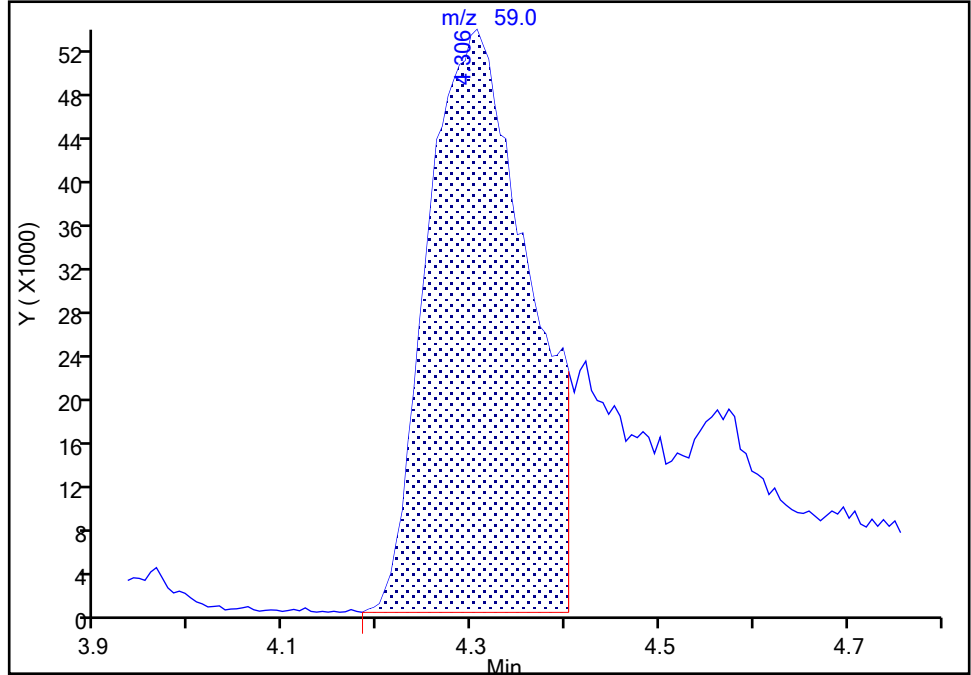
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Injection Date: 31-Dec-2020 17:09:30 Instrument ID: 16334
Lims ID: CCVIS VSTD12.5
Client ID:
Operator ID: MEC29284 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

31 2-Methyl-2-propanol, CAS: 75-65-0

Signal: 1

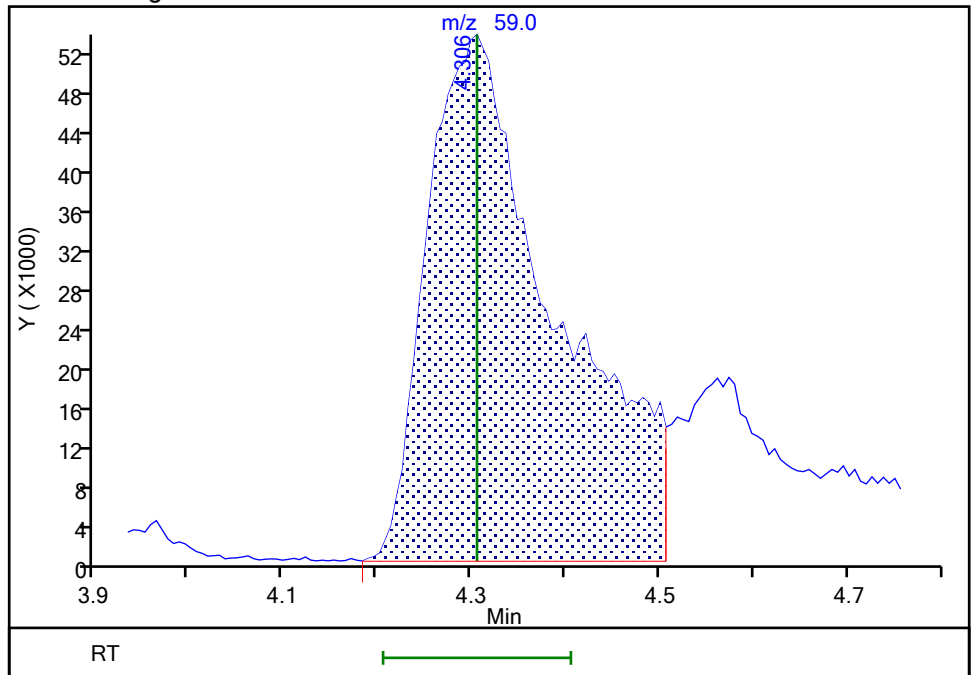
RT: 4.31
Area: 398906
Amount: 148.3585
Amount Units: ug/l

Processing Integration Results



RT: 4.31
Area: 510062
Amount: 179.5495
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 31-Dec-2020 17:34:27
Audit Action: Assigned New Baseline

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

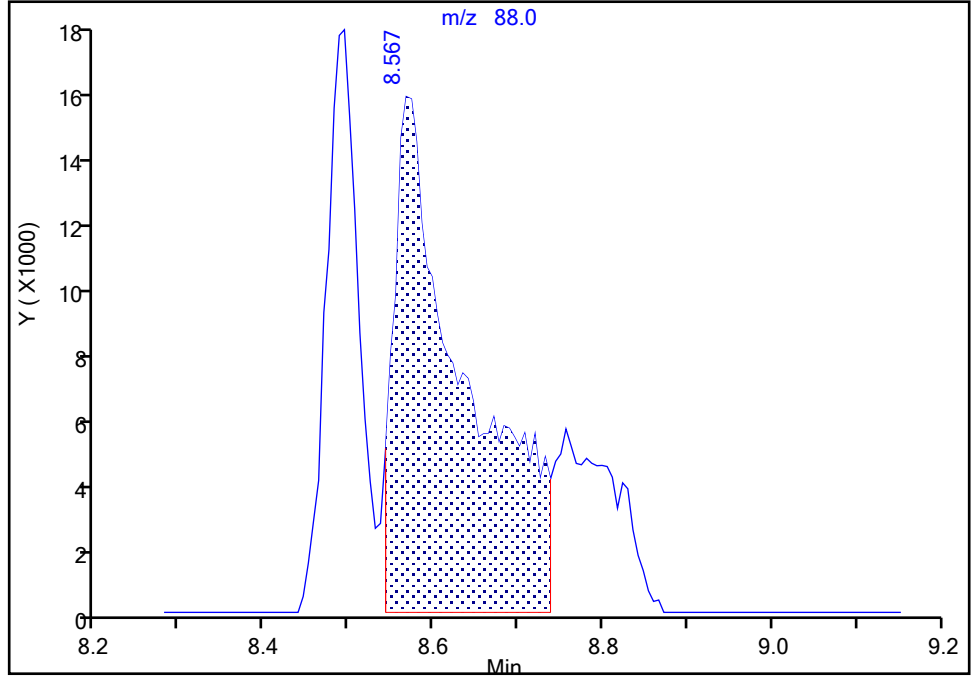
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Injection Date: 31-Dec-2020 17:09:30 Instrument ID: 16334
Lims ID: CCVIS VSTD12.5
Client ID:
Operator ID: MEC29284 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

73 1,4-Dioxane, CAS: 123-91-1

Signal: 1

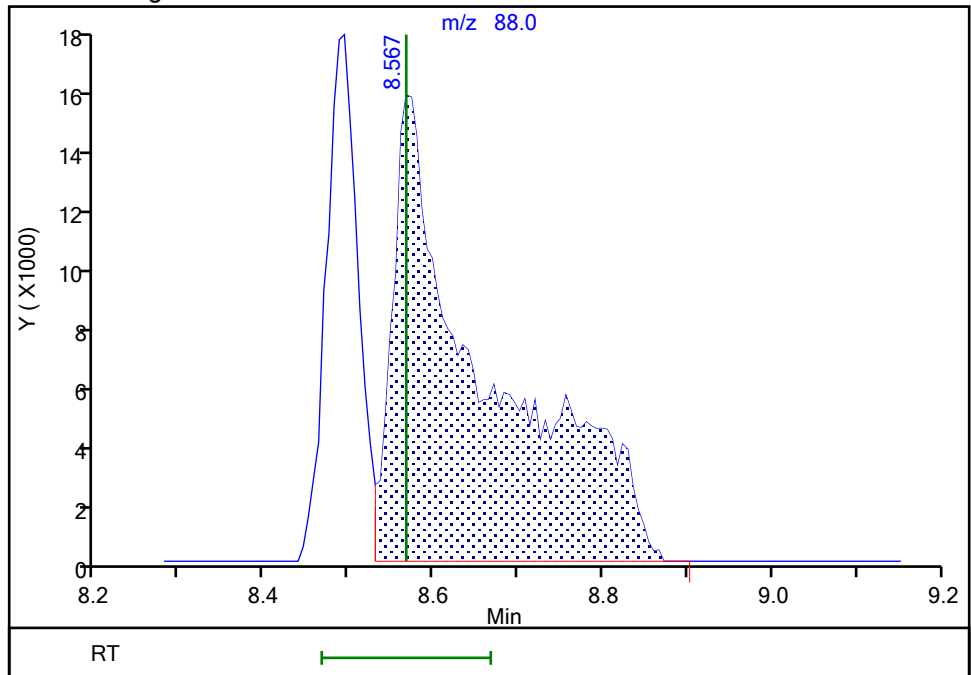
RT: 8.57
Area: 93134
Amount: 541.7576
Amount Units: ug/l

Processing Integration Results



RT: 8.57
Area: 122188
Amount: 672.7362
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 31-Dec-2020 17:34:55
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.: 410-24913-1
 SDG No.: _____
 Lab Sample ID: CCVIS 410-81892/3 Calibration Date: 01/04/2021 18:55
 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: GJ04C31.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	0.2547	0.1000	12.2	12.5	-2.0	20.0
Chloromethane	Ave	0.3508	0.2982	0.1000	10.6	12.5	-15.0	20.0
1,3-Butadiene	Ave	0.3993	0.2877		9.01	12.5	-27.9*	20.0
Vinyl chloride	Ave	0.2995	0.2582	0.1000	10.8	12.5	-13.8	20.0
Bromomethane	Ave	0.2087	0.1861	0.1000	11.1	12.5	-10.8	20.0
Chloroethane	Ave	0.1817	0.1574	0.1000	10.8	12.5	-13.4	20.0
Dichlorofluoromethane	Ave	0.4073	0.2827		8.67	12.5	-30.6*	20.0
Trichlorofluoromethane	Ave	0.3447	0.3274	0.1000	11.9	12.5	-5.0	20.0
Ethyl ether	Ave	0.2035	0.1823		11.2	12.5	-10.4	20.0
Freon 123a	Ave	0.2817	0.2243		9.95	12.5	-20.4*	20.0
Acrolein	Ave	1.898	1.442		475	625	-24.0*	20.0
1,1-Dichloroethene	Ave	0.2083	0.1942	0.1000	11.7	12.5	-6.8	20.0
Acetone	Ave	2.453	2.034	0.1000	104	125	-17.1	20.0
Freon 113	Ave	0.2037	0.1962	0.1000	12.0	12.5	-3.7	20.0
Methyl iodide	Ave	0.3891	0.3350		10.8	12.5	-13.9	20.0
Ethyl bromide	Ave	0.1814	0.1704		11.7	12.5	-6.1	20.0
Carbon disulfide	Ave	0.7678	0.6187	0.1000	10.1	12.5	-19.4	20.0
Methyl acetate	Ave	7.427	6.065	0.1000	10.2	12.5	-18.3	20.0
Allyl chloride	Ave	0.4168	0.3276		9.82	12.5	-21.4*	20.0
Methylene Chloride	Ave	0.2387	0.2201	0.1000	11.5	12.5	-7.8	20.0
t-Butyl alcohol	Ave	0.8990	0.7109		198	250	-20.9*	20.0
Acrylonitrile	Ave	3.174	3.332		65.6	62.5	5.0	20.0
Methyl tert-butyl ether	Ave	0.6620	0.5376	0.1000	10.2	12.5	-18.8	20.0
trans-1,2-Dichloroethene	Ave	0.2398	0.2232	0.1000	11.6	12.5	-6.9	20.0
n-Hexane	Ave	0.3497	0.3071		11.0	12.5	-12.2	20.0
1,1-Dichloroethane	Ave	0.4451	0.4015	0.2000	11.3	12.5	-9.8	20.0
di-Isopropyl ether	Ave	0.9055	0.6827		9.42	12.5	-24.6*	20.0
2-Chloro-1,3-butadiene	Ave	0.4048	0.3104		9.59	12.5	-23.3*	20.0
Ethyl t-butyl ether	Ave	0.8257	0.6514		9.86	12.5	-21.1*	20.0
2-Butanone (MEK)	Ave	4.546	4.412	0.1000	121	125	-2.9	20.0
cis-1,2-Dichloroethene	Ave	0.2693	0.2532	0.1000	11.8	12.5	-6.0	20.0
2,2-Dichloropropane	Ave	0.3733	0.3250		10.9	12.5	-12.9	20.0
Propionitrile	Ave	1.127	1.159		257	250	2.8	20.0
Methacrylonitrile	Ave	4.178	4.428		132	125	6.0	20.0
Bromochloromethane	Ave	0.1200	0.1161		12.1	12.5	-3.2	20.0
Tetrahydrofuran	Ave	1.175	1.281		136	125	9.0	20.0
Chloroform	Ave	0.4289	0.3873	0.2000	11.3	12.5	-9.7	20.0
1,1,1-Trichloroethane	Ave	0.3670	0.3332	0.1000	11.3	12.5	-9.2	20.0
Cyclohexane	Ave	0.4218	0.3598	0.1000	10.7	12.5	-14.7	20.0
Carbon tetrachloride	Ave	0.3183	0.2965	0.1000	11.6	12.5	-6.8	20.0
1,1-Dichloropropene	Ave	0.3449	0.3154		11.4	12.5	-8.5	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-24913-1
 SDG No.: _____
 Lab Sample ID: CCVIS 410-81892/3 Calibration Date: 01/04/2021 18:55
 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: GJ04C31.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		453	625	-27.5*	20.0
Benzene	Ave	1.017	0.9340	0.5000	11.5	12.5	-8.1	20.0
1,2-Dichloroethane	Ave	0.2843	0.2301	0.1000	10.1	12.5	-19.1	20.0
t-Amyl methyl ether	Ave	0.7278	0.5871		10.1	12.5	-19.3	20.0
n-Heptane	Ave	0.3945	0.3330		10.5	12.5	-15.6	20.0
n-Butanol	Ave	0.3231	0.3049		1180	1250	-5.6	20.0
Trichloroethene	Ave	0.2596	0.2422	0.2000	11.7	12.5	-6.7	20.0
Methylcyclohexane	Ave	0.4031	0.4269	0.1000	13.2	12.5	5.9	20.0
1,2-Dichloropropane	Ave	0.2719	0.2423	0.1000	11.1	12.5	-10.9	20.0
1,4-Dioxane	Ave	0.0575	0.0622	0.0050	676	625	8.2	20.0
Methyl methacrylate	Ave	8.511	8.228		12.1	12.5	-3.3	20.0
Dibromomethane	Ave	0.1260	0.1195		11.9	12.5	-5.2	20.0
Bromodichloromethane	Ave	0.3153	0.2928	0.2000	11.6	12.5	-7.1	20.0
2-Nitropropane	Ave	2.413	2.340		121	125	-3.0	20.0
1-Bromo-2-chloroethane	Ave	0.2915	0.2453		10.5	12.5	-15.9	20.0
cis-1,3-Dichloropropene	Ave	0.4093	0.3737	0.2000	11.4	12.5	-8.7	20.0
4-Methyl-2-pentanone (MIBK)	Ave	11.67	12.04	0.1000	129	125	3.1	20.0
Toluene	Ave	0.8666	0.7835	0.4000	11.3	12.5	-9.6	20.0
trans-1,3-Dichloropropene	Ave	0.4679	0.4133	0.1000	11.0	12.5	-11.7	20.0
Ethyl methacrylate	Ave	0.4204	0.3410		10.1	12.5	-18.9	20.0
1,1,2-Trichloroethane	Ave	0.2528	0.2302	0.1000	11.4	12.5	-8.9	20.0
Tetrachloroethene	Ave	0.3760	0.3685	0.2000	12.3	12.5	-2.0	20.0
1,3-Dichloropropane	Ave	0.4560	0.4127		11.3	12.5	-9.5	20.0
2-Hexanone	Ave	8.396	8.632	0.1000	129	125	2.8	20.0
Dibromochloromethane	Ave	0.2998	0.2910		12.1	12.5	-3.0	20.0
1,2-Dibromoethane (EDB)	Ave	0.2482	0.2288	0.1000	11.5	12.5	-7.8	20.0
1-Chlorohexane	Ave	0.5205	0.4629		11.1	12.5	-11.1	20.0
Chlorobenzene	Ave	0.9653	0.8998	0.5000	11.7	12.5	-6.8	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3430	0.3257		11.9	12.5	-5.0	20.0
Ethylbenzene	Ave	1.712	1.543	0.1000	11.3	12.5	-9.9	20.0
m&p-Xylene	Ave	0.6453	0.6024	0.1000	23.3	25.0	-6.7	20.0
o-Xylene	Ave	0.6400	0.5966	0.3000	11.7	12.5	-6.8	20.0
Styrene	Ave	1.091	1.020	0.3000	11.7	12.5	-6.4	20.0
Bromoform	Ave	0.1750	0.1851	0.1000	13.2	12.5	5.7	20.0
Isopropylbenzene	Ave	1.674	1.552	0.1000	11.6	12.5	-7.3	20.0
1,1,2,2-Tetrachloroethane	Ave	0.6286	0.5548	0.3000	11.0	12.5	-11.7	20.0
Bromobenzene	Ave	0.7547	0.7087		11.7	12.5	-6.1	20.0
trans-1,4-Dichloro-2-butene	Ave	3.624	3.209		111	125	-11.4	20.0
1,2,3-Trichloropropane	Ave	0.1602	0.1452		11.3	12.5	-9.4	20.0
N-Propylbenzene	Ave	3.763	3.310		11.0	12.5	-12.0	20.0
2-Chlorotoluene	Ave	0.7400	0.6800		11.5	12.5	-8.1	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-24913-1
 SDG No.: _____
 Lab Sample ID: CCVIS 410-81892/3 Calibration Date: 01/04/2021 18:55
 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: GJ04C31.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	2.416		11.4	12.5	-9.0	20.0
4-Chlorotoluene	Ave	0.7716	0.7073		11.5	12.5	-8.3	20.0
tert-Butylbenzene	Ave	0.5668	0.5362		11.8	12.5	-5.4	20.0
Pentachloroethane	Ave	0.4872	0.4614		11.8	12.5	-5.3	20.0
1,2,4-Trimethylbenzene	Ave	2.772	2.511		11.3	12.5	-9.4	20.0
sec-Butylbenzene	Ave	3.453	3.161		11.4	12.5	-8.5	20.0
1,3-Dichlorobenzene	Ave	1.522	1.420	0.6000	11.7	12.5	-6.7	20.0
p-Isopropyltoluene	Ave	3.000	2.772		11.6	12.5	-7.6	20.0
1,4-Dichlorobenzene	Ave	1.550	1.432	0.5000	11.5	12.5	-7.7	20.0
1,2,3-Trimethylbenzene	Ave	1.229	1.108		11.3	12.5	-9.9	20.0
Benzyl chloride	Ave	0.2719	0.2301		10.6	12.5	-15.4	20.0
n-Butylbenzene	Ave	1.589	1.404		11.0	12.5	-11.6	20.0
1,2-Dichlorobenzene	Ave	1.420	1.307	0.4000	11.5	12.5	-7.9	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.0916	0.0872	0.0500	11.9	12.5	-4.8	20.0
1,3,5-Trichlorobenzene	Ave	1.275	1.182		11.6	12.5	-7.4	20.0
1,2,4-Trichlorobenzene	Ave	1.175	1.090	0.2000	11.6	12.5	-7.3	20.0
Hexachlorobutadiene	Ave	0.5771	0.5568		12.1	12.5	-3.5	20.0
Naphthalene	Ave	2.139	1.896		11.1	12.5	-11.3	20.0
1,2,3-Trichlorobenzene	Ave	1.037	0.9515		11.5	12.5	-8.3	20.0
Dibromofluoromethane (Surr)	Ave	0.2420	0.2392		9.88	10.0	-1.2	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.0515	0.0514		9.99	10.0	-0.1	20.0
Toluene-d8 (Surr)	Ave	1.334	1.289		9.66	10.0	-3.4	20.0
4-Bromofluorobenzene (Surr)	Ave	0.5094	0.4841		9.50	10.0	-5.0	20.0

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20210104-19179.b\GJ04C31.D
 Lims ID: CCVIS VSTD12.5
 Client ID:
 Sample Type: CCVIS
 Inject. Date: 04-Jan-2021 18:55:30 ALS Bottle#: 2 Worklist Smp#: 3
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0019179-003
 Misc. Info.: CCVIS VSTD12.5
 Operator ID: MEC29284 Instrument ID: 16334
 Sublist: chrom-MSV_16334_25mL*sub4
 Method: \\chromfs\Lancaster\ChromData\16334\20210104-19179.b\MSV_16334_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 04-Jan-2021 19:55:34 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: campbellme

Date: 04-Jan-2021 19:24:53

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.946	1.946	0.000	99	676477	12.5	12.2	
5 Chloromethane	50	2.141	2.141	0.000	98	791927	12.5	10.6	
8 Vinyl chloride	62	2.257	2.257	0.000	98	685742	12.5	10.8	
7 Butadiene	39	2.257	2.257	0.000	90	764113	12.5	9.01	
9 Bromomethane	94	2.587	2.587	0.000	90	494127	12.5	11.1	
10 Chloroethane	64	2.666	2.666	0.000	100	417885	12.5	10.8	
12 Dichlorofluoromethane	67	2.904	2.904	0.000	96	750634	12.5	8.67	
13 Trichlorofluoromethane	101	2.971	2.971	0.000	97	869315	12.5	11.9	M
15 Ethyl ether	59	3.202	3.202	0.000	91	484229	12.5	11.2	
17 1,2-Dichloro-1,1,2-trifluoroethane	67	3.294	3.294	0.000	93	595504	12.5	9.95	
18 Acrolein	56	3.379	3.379	0.000	100	2720335	625.0	474.9	
19 1,1-Dichloroethene	96	3.507	3.507	0.000	97	515801	12.5	11.7	
20 112TCTFE	101	3.550	3.550	0.000	91	520909	12.5	12.0	
21 Acetone	43	3.550	3.550	0.000	92	767196	125.0	103.6	
23 Iodomethane	142	3.702	3.702	0.000	98	889521	12.5	10.8	
22 Isopropyl alcohol	45	3.714	3.714	0.000	37	240911	250.0	143.0	
24 Ethyl bromide	108	3.733	3.733	0.000	97	452639	12.5	11.7	
25 Carbon disulfide	76	3.800	3.800	0.000	99	1642954	12.5	10.1	
27 Methyl acetate	43	3.958	3.958	0.000	97	228804	12.5	10.2	M
28 3-Chloro-1-propene	41	3.983	3.983	0.000	95	869815	12.5	9.82	
29 Methylene Chloride	84	4.172	4.172	0.000	92	584408	12.5	11.5	
* 30 t-Butyl alcohol-d10 (IS)	65	4.190	4.190	0.000	0	150910	50.0	50.0	M
31 2-Methyl-2-propanol	59	4.318	4.318	0.000	100	536440	250.0	197.7	M
32 Acrylonitrile	53	4.513	4.513	0.000	98	628459	62.5	65.6	
33 Methyl tert-butyl ether	73	4.568	4.568	0.000	94	1427589	12.5	10.2	
34 trans-1,2-Dichloroethene	96	4.574	4.574	0.000	100	592764	12.5	11.6	
35 Hexane	57	5.001	5.001	0.000	92	815425	12.5	11.0	
37 1,1-Dichloroethane	63	5.245	5.245	0.000	96	1066113	12.5	11.3	
38 Isopropyl ether	45	5.305	5.305	0.000	95	1812898	12.5	9.42	
39 2-Chloro-1,3-butadiene	53	5.354	5.354	0.000	90	824267	12.5	9.59	

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	5.836	5.836	0.000	98	1729683	12.5	9.86	
41 2-Butanone (MEK)	43	6.043	6.043	0.000	100	1664650	125.0	121.3	
42 cis-1,2-Dichloroethene	96	6.080	6.080	0.000	81	672435	12.5	11.8	
43 2,2-Dichloropropane	77	6.098	6.098	0.000	84	863069	12.5	10.9	
45 Propionitrile	54	6.141	6.141	0.000	99	874333	250.0	257.1	
48 Methacrylonitrile	67	6.360	6.360	0.000	91	1670469	125.0	132.5	
49 Chlorobromomethane	128	6.409	6.409	0.000	91	308431	12.5	12.1	
50 Tetrahydrofuran	71	6.415	6.415	0.000	88	483427	125.0	136.3	
51 Chloroform	83	6.567	6.567	0.000	92	1028547	12.5	11.3	
\$ 52 Dibromofluoromethane (Surr)	113	6.787	6.787	0.000	94	508185	10.0	9.88	
53 1,1,1-Trichloroethane	97	6.787	6.787	0.000	98	884783	12.5	11.3	
54 Cyclohexane	56	6.878	6.878	0.000	91	955470	12.5	10.7	
56 Carbon tetrachloride	117	6.994	6.994	0.000	97	787391	12.5	11.6	
57 1,1-Dichloropropene	75	7.000	7.000	0.000	98	837607	12.5	11.4	
58 Isobutyl alcohol	41	7.159	7.159	0.000	95	544047	625.0	452.9	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.238	7.238	0.000	0	109234	10.0	9.99	
60 Benzene	78	7.262	7.262	0.000	96	2480249	12.5	11.5	
61 1,2-Dichloroethane	62	7.336	7.336	0.000	97	610944	12.5	10.1	
63 Tert-amyl methyl ether	73	7.458	7.458	0.000	99	1558953	12.5	10.1	
* 64 Fluorobenzene (IS)	96	7.671	7.671	0.000	99	2124391	10.0	10.0	
65 n-Heptane	43	7.677	7.677	0.000	91	884182	12.5	10.5	
67 n-Butanol	56	8.049	8.049	0.000	89	1150271	1250.0	1179.6	
68 Trichloroethene	95	8.146	8.146	0.000	98	643289	12.5	11.7	
69 Methylcyclohexane	83	8.451	8.451	0.000	93	1133613	12.5	13.2	
70 1,2-Dichloropropane	63	8.488	8.488	0.000	98	643513	12.5	11.1	
71 2-ethoxy-2-methyl butane	87	8.494	8.494	0.000	93	915528	12.5	10.8	
73 1,4-Dioxane	88	8.573	8.573	0.000	36	117324	625.0	676.3	M
72 Methyl methacrylate	69	8.573	8.573	0.000	91	310415	12.5	12.1	
74 Dibromomethane	93	8.591	8.591	0.000	95	317372	12.5	11.9	
76 Dichlorobromomethane	83	8.835	8.835	0.000	100	777530	12.5	11.6	
77 2-Nitropropane	41	9.116	9.116	0.000	96	882775	125.0	121.2	
80 1-Bromo-2-chloroethane	63	9.219	9.219	0.000	98	651278	12.5	10.5	
81 cis-1,3-Dichloropropene	75	9.378	9.378	0.000	97	992235	12.5	11.4	
82 4-Methyl-2-pentanone (MIBK)	43	9.561	9.561	0.000	96	4540976	125.0	128.9	
\$ 83 Toluene-d8 (Surr)	98	9.689	9.689	0.000	93	2058740	10.0	9.66	
84 Toluene	92	9.768	9.768	0.000	98	1564773	12.5	11.3	
96 trans-1,3-Dichloropropene	75	10.030	10.030	0.000	91	825449	12.5	11.0	
98 Ethyl methacrylate	69	10.091	10.091	0.000	89	681049	12.5	10.1	
99 1,1,2-Trichloroethane	97	10.231	10.231	0.000	90	459738	12.5	11.4	
100 Tetrachloroethene	166	10.317	10.317	0.000	98	735993	12.5	12.3	
101 1,3-Dichloropropane	76	10.396	10.396	0.000	88	824188	12.5	11.3	
102 2-Hexanone	43	10.451	10.451	0.000	96	3256546	125.0	128.5	
104 Chlorodibromomethane	129	10.609	10.609	0.000	90	581105	12.5	12.1	
105 Ethylene Dibromide	107	10.719	10.719	0.000	99	456843	12.5	11.5	
* 106 Chlorobenzene-d5 (IS)	117	11.152	11.152	0.000	85	1597660	10.0	10.0	
107 1-Chlorohexane	91	11.158	11.158	0.000	96	924437	12.5	11.1	
108 Chlorobenzene	112	11.176	11.176	0.000	95	1796874	12.5	11.7	
110 1,1,1,2-Tetrachloroethane	131	11.256	11.256	0.000	96	650384	12.5	11.9	
111 Ethylbenzene	91	11.262	11.262	0.000	98	3082230	12.5	11.3	
112 m-Xylene & p-Xylene	106	11.377	11.377	0.000	97	2405914	25.0	23.3	
113 o-Xylene	106	11.707	11.707	0.000	96	1191457	12.5	11.7	
114 Styrene	104	11.719	11.719	0.000	94	2037581	12.5	11.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
115 Bromoform	173	11.877	11.877	0.000	98	369618	12.5	13.2	
116 Isopropylbenzene	105	12.005	12.005	0.000	95	3099169	12.5	11.6	
\$ 119 4-Bromofluorobenzene (Surr)	95	12.146	12.146	0.000	92	773448	10.0	9.50	
120 1,1,2,2-Tetrachloroethane	83	12.249	12.249	0.000	92	614464	12.5	11.0	
121 Bromobenzene	156	12.261	12.261	0.000	95	784970	12.5	11.7	
122 trans-1,4-Dichloro-2-butene	53	12.280	12.280	0.000	89	1210743	125.0	110.7	
123 1,2,3-Trichloropropane	110	12.298	12.298	0.000	81	160804	12.5	11.3	
124 N-Propylbenzene	91	12.335	12.335	0.000	99	3665670	12.5	11.0	
125 2-Chlorotoluene	126	12.408	12.408	0.000	97	753181	12.5	11.5	
126 1,3,5-Trimethylbenzene	105	12.469	12.469	0.000	94	2676218	12.5	11.4	
127 4-Chlorotoluene	126	12.499	12.499	0.000	97	783422	12.5	11.5	
128 tert-Butylbenzene	134	12.706	12.706	0.000	93	593865	12.5	11.8	
129 Pentachloroethane	167	12.743	12.743	0.000	95	511008	12.5	11.8	
130 1,2,4-Trimethylbenzene	105	12.749	12.749	0.000	97	2780626	12.5	11.3	
131 sec-Butylbenzene	105	12.871	12.871	0.000	94	3500812	12.5	11.4	
132 1,3-Dichlorobenzene	146	12.969	12.969	0.000	98	1572394	12.5	11.7	
133 4-Isopropyltoluene	119	12.981	12.981	0.000	97	3070032	12.5	11.6	
* 134 1,4-Dichlorobenzene-d4	152	13.024	13.024	0.000	96	886059	10.0	10.0	
135 1,4-Dichlorobenzene	146	13.042	13.042	0.000	95	1585507	12.5	11.5	
136 1,2,3-Trimethylbenzene	120	13.054	13.054	0.000	98	1227083	12.5	11.3	
137 Benzyl chloride	126	13.121	13.121	0.000	98	254887	12.5	10.6	
138 p-Diethylbenzene	119	13.176	13.176	0.000	92	1843980	12.5	11.4	
139 n-Butylbenzene	92	13.267	13.267	0.000	97	1554958	12.5	11.0	
140 1,2-Dichlorobenzene	146	13.304	13.304	0.000	99	1448107	12.5	11.5	
142 1,2-Dibromo-3-Chloropropane	155	13.840	13.840	0.000	89	96556	12.5	11.9	
143 1,3,5-Trichlorobenzene	180	13.962	13.962	0.000	98	1308633	12.5	11.6	
144 1,2,4-Trichlorobenzene	180	14.383	14.383	0.000	94	1206845	12.5	11.6	
145 Hexachlorobutadiene	225	14.468	14.468	0.000	95	616728	12.5	12.1	
146 Naphthalene	128	14.566	14.566	0.000	97	2100010	12.5	11.1	
147 1,2,3-Trichlorobenzene	180	14.706	14.706	0.000	96	1053832	12.5	11.5	
148 2-Methylnaphthalene	142	15.322	15.322	0.000	92	1451970	12.5	10.7	
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_RV1_826_00034

Amount Added: 25.00

Units: uL

MSV_RV4_826_00039

Amount Added: 25.00

Units: uL

MSV_RV4GAS826_00105

Amount Added: 25.00

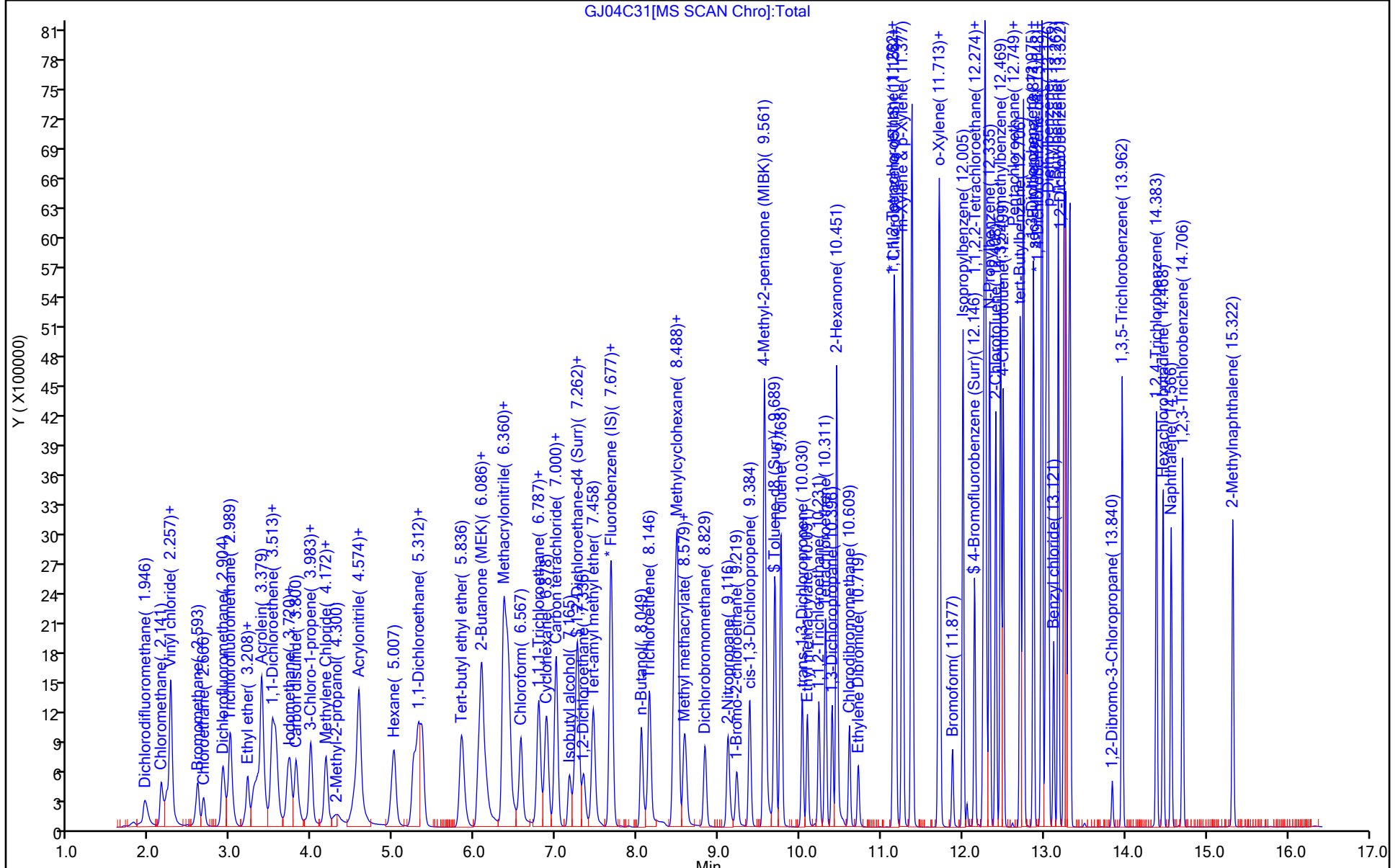
Units: uL

MSV_29_826ISS_00014

Amount Added: 1.00

Units: uL

Run Reagent



GJ04C31[MS SCAN Chrom]:Total

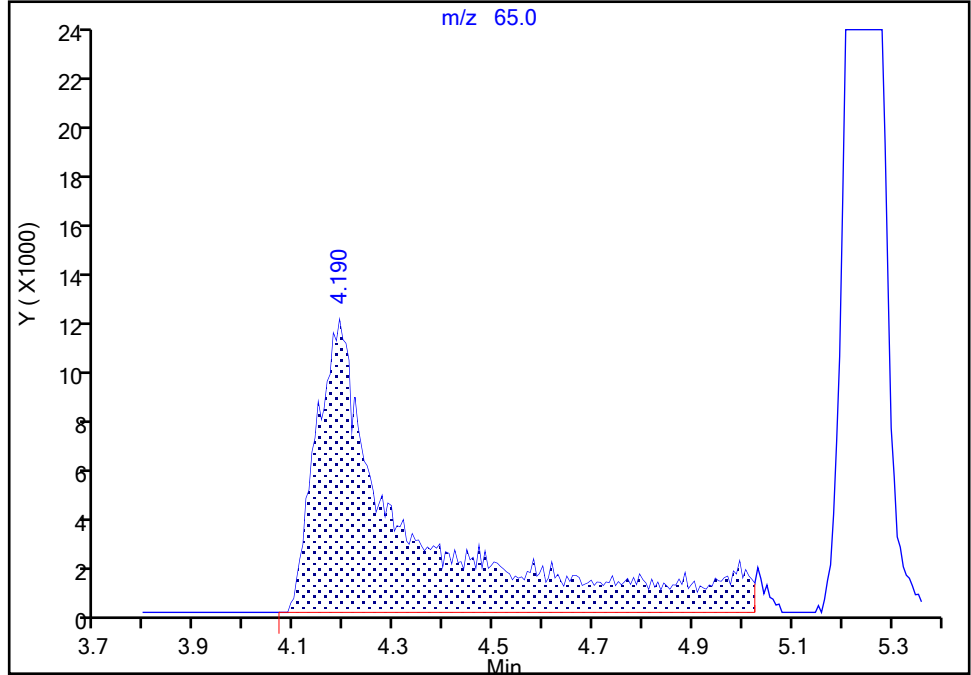
Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20210104-19179.b\GJ04C31.D
Injection Date: 04-Jan-2021 18:55:30 Instrument ID: 16334
Lims ID: CCVIS VSTD12.5
Client ID:
Operator ID: MEC29284 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

* 30 t-Butyl alcohol-d10 (IS), CAS: 53001-22-2
Signal: 1

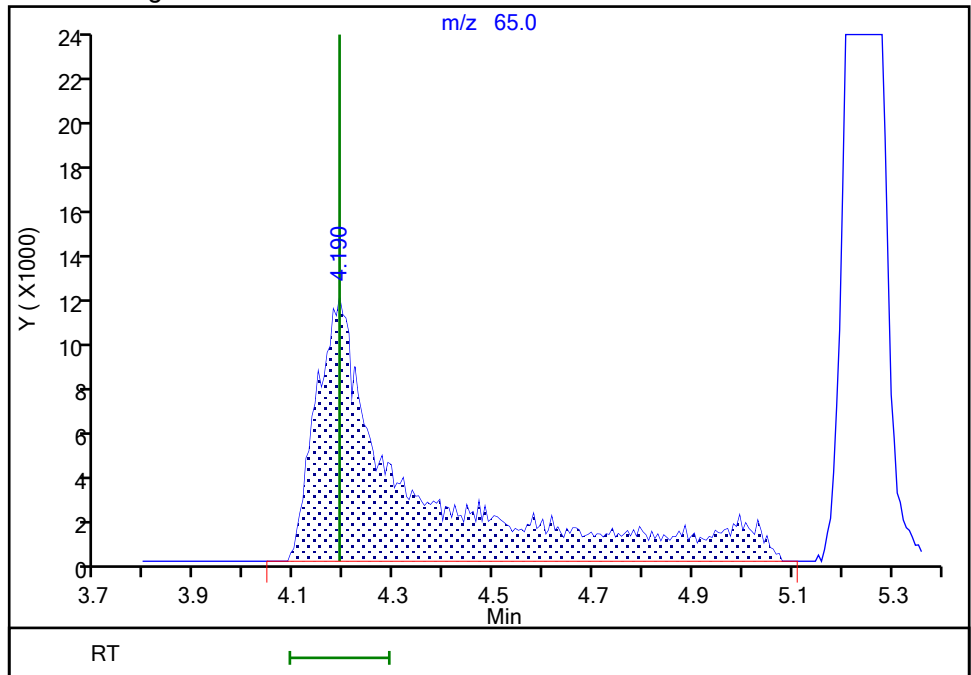
RT: 4.19
Area: 148468
Amount: 50.000000
Amount Units: ug/l

Processing Integration Results



RT: 4.19
Area: 150910
Amount: 50.000000
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 04-Jan-2021 19:23:03
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration
Page 825 of 966

Eurofins Lancaster Laboratories Env, LLC

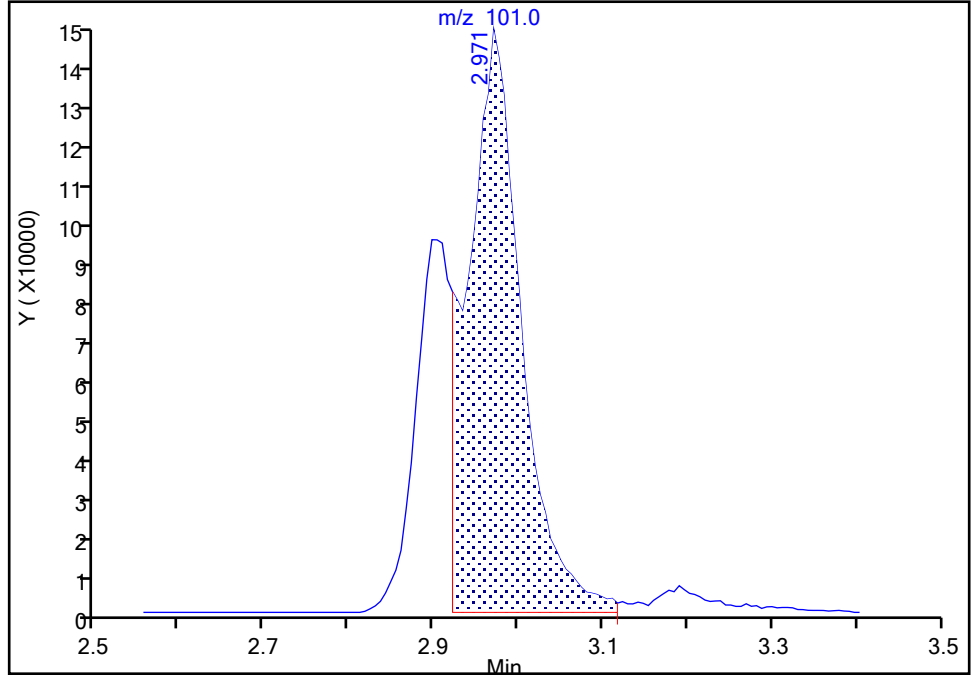
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Injection Date: 04-Jan-2021 18:55:30 Instrument ID: 16334
Lims ID: CCVIS VSTD12.5
Client ID:
Operator ID: MEC29284 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

13 Trichlorofluoromethane, CAS: 75-69-4

Signal: 1

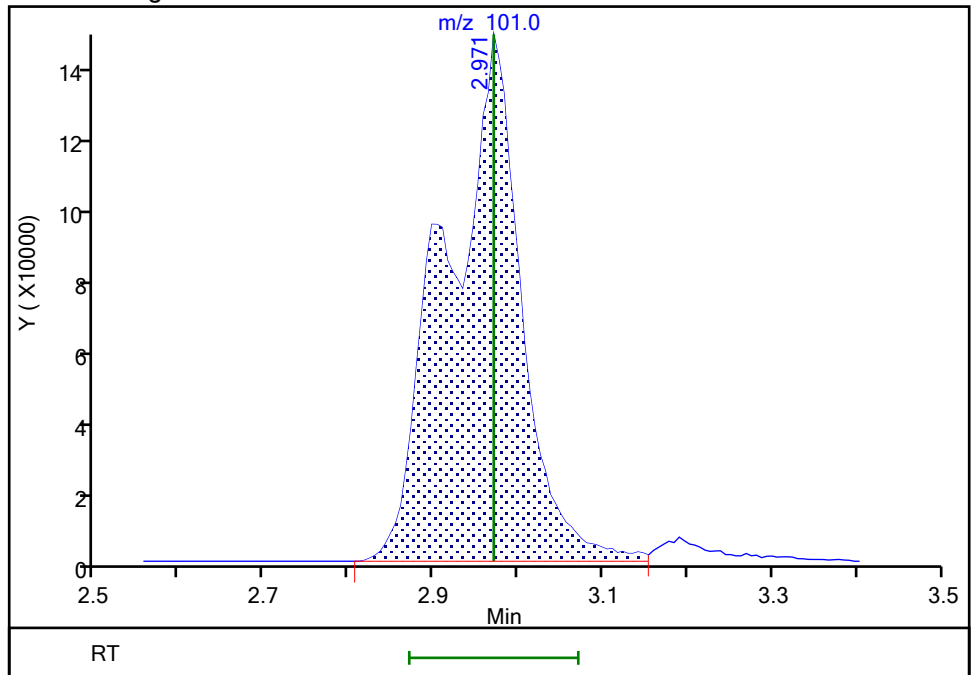
RT: 2.97
Area: 625965
Amount: 8.549126
Amount Units: ug/l

Processing Integration Results



RT: 2.97
Area: 869315
Amount: 11.872682
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 04-Jan-2021 19:22:27
Audit Action: Split an Integrated Peak

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

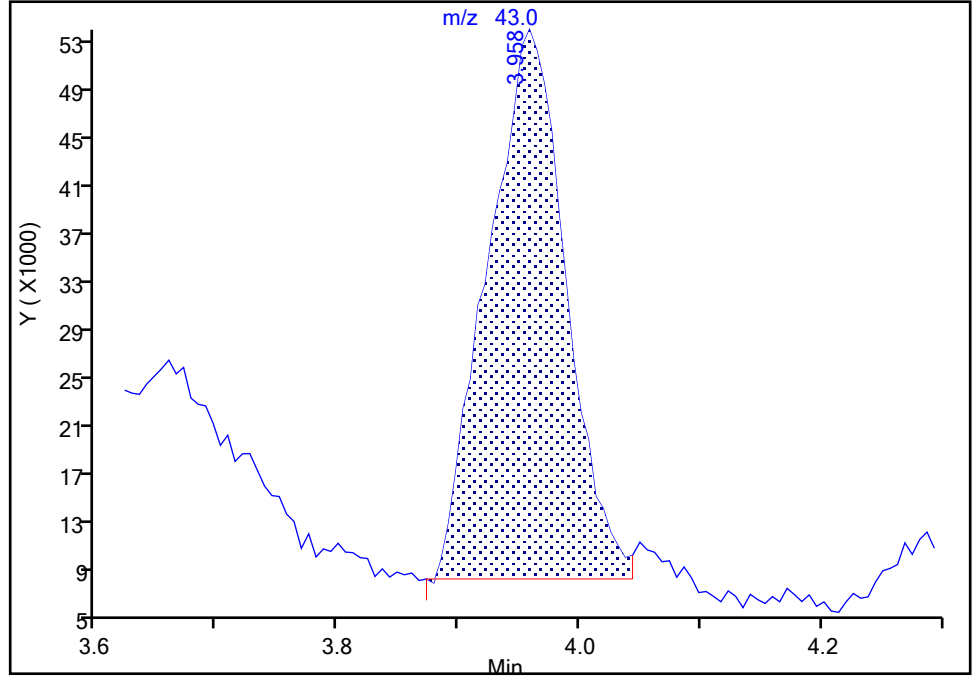
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Injection Date: 04-Jan-2021 18:55:30 Instrument ID: 16334
Lims ID: CCVIS VSTD12.5
Client ID:
Operator ID: MEC29284 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

27 Methyl acetate, CAS: 79-20-9

Signal: 1

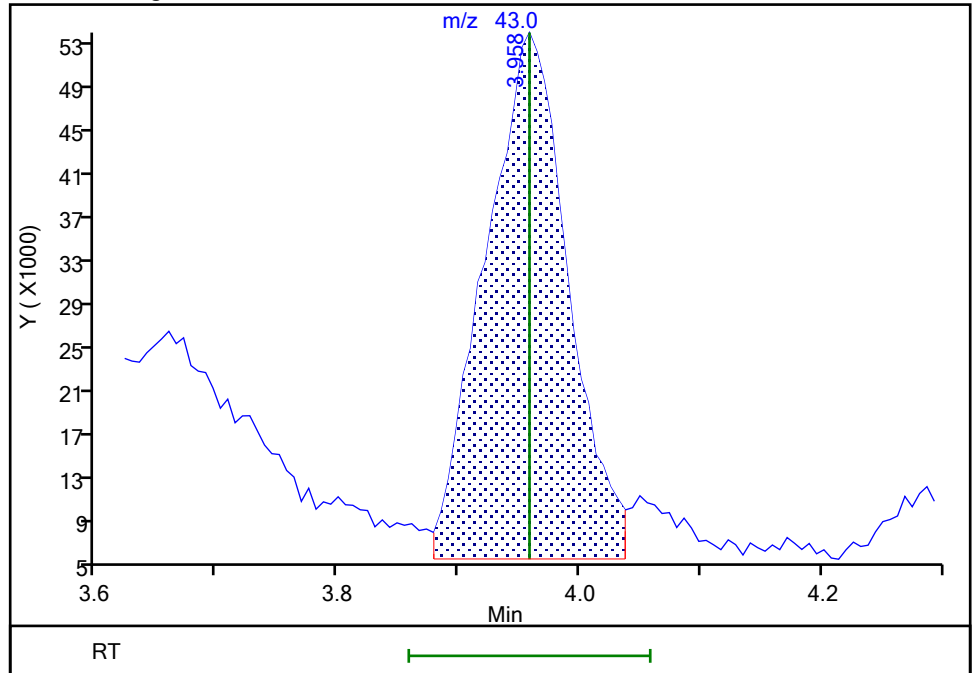
RT: 3.96
Area: 202695
Amount: 9.191487
Amount Units: ug/l

Processing Integration Results



RT: 3.96
Area: 228804
Amount: 10.207542
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 04-Jan-2021 19:22:52
Audit Action: Assigned New Baseline

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

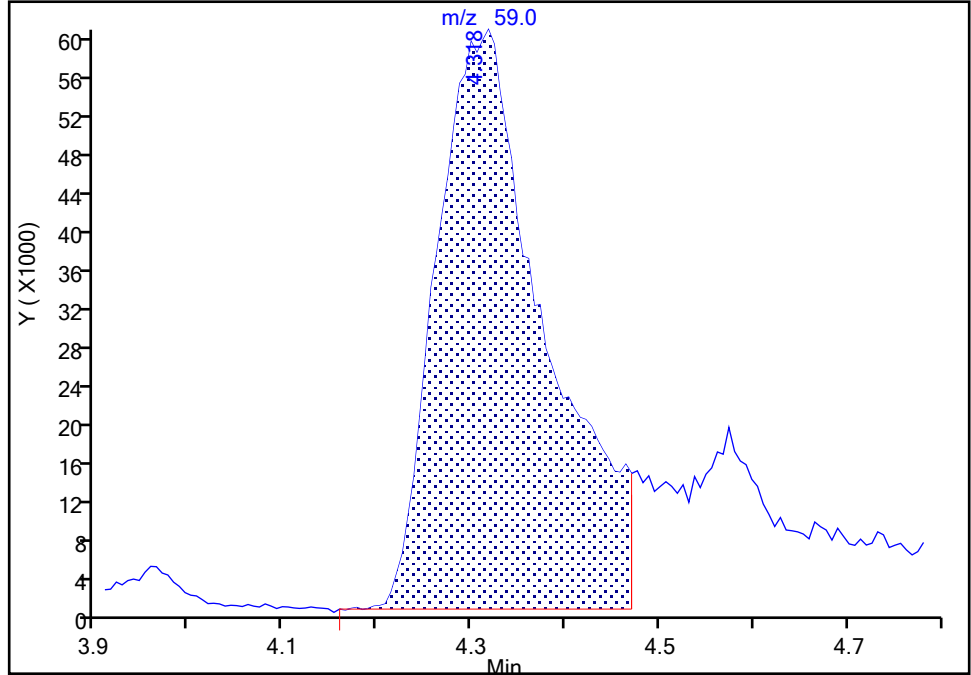
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Injection Date: 04-Jan-2021 18:55:30 Instrument ID: 16334
Lims ID: CCVIS VSTD12.5
Client ID:
Operator ID: MEC29284 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

31 2-Methyl-2-propanol, CAS: 75-65-0

Signal: 1

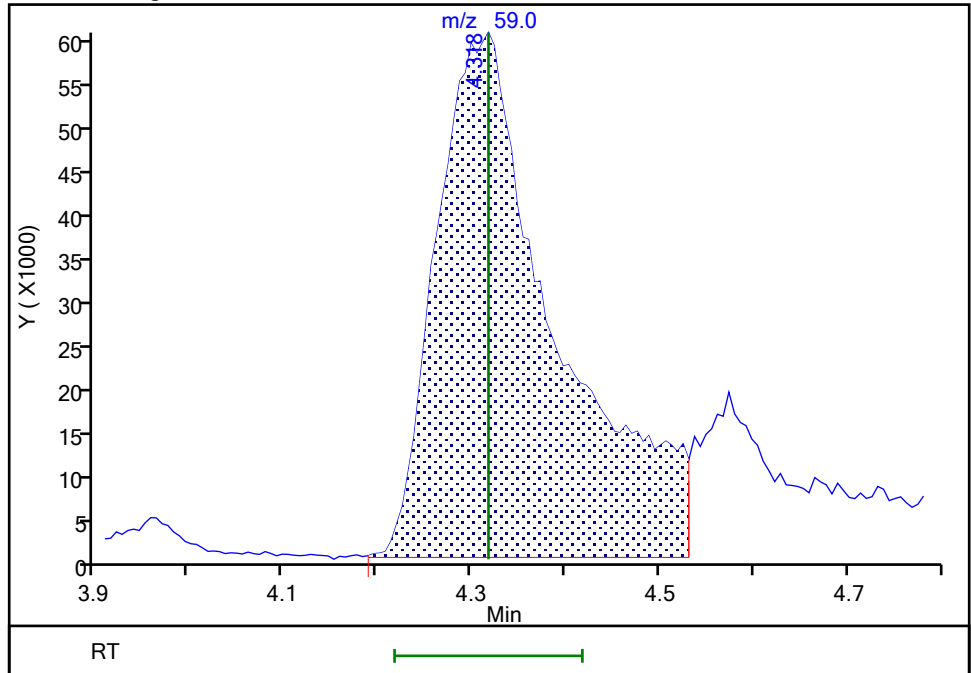
RT: 4.32
Area: 486731
Amount: 179.3784
Amount Units: ug/l

Processing Integration Results



RT: 4.32
Area: 536440
Amount: 197.6980
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 04-Jan-2021 19:23:22
Audit Action: Assigned New Baseline

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

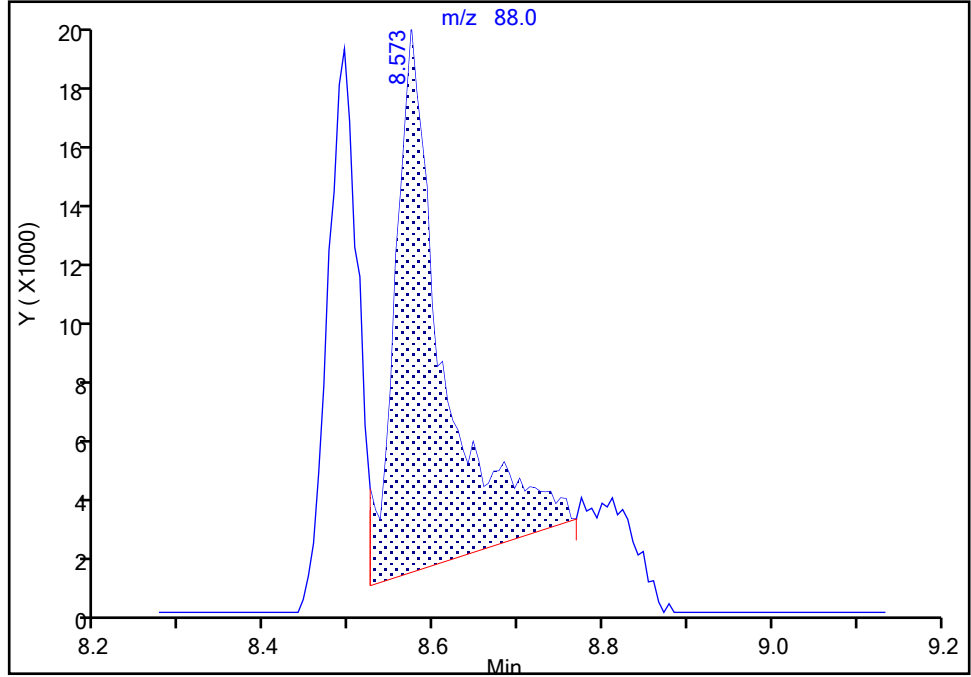
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Lims ID: CCVIS VSTD12.5
Client ID:
Operator ID: MEC29284 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

73 1,4-Dioxane, CAS: 123-91-1

Signal: 1

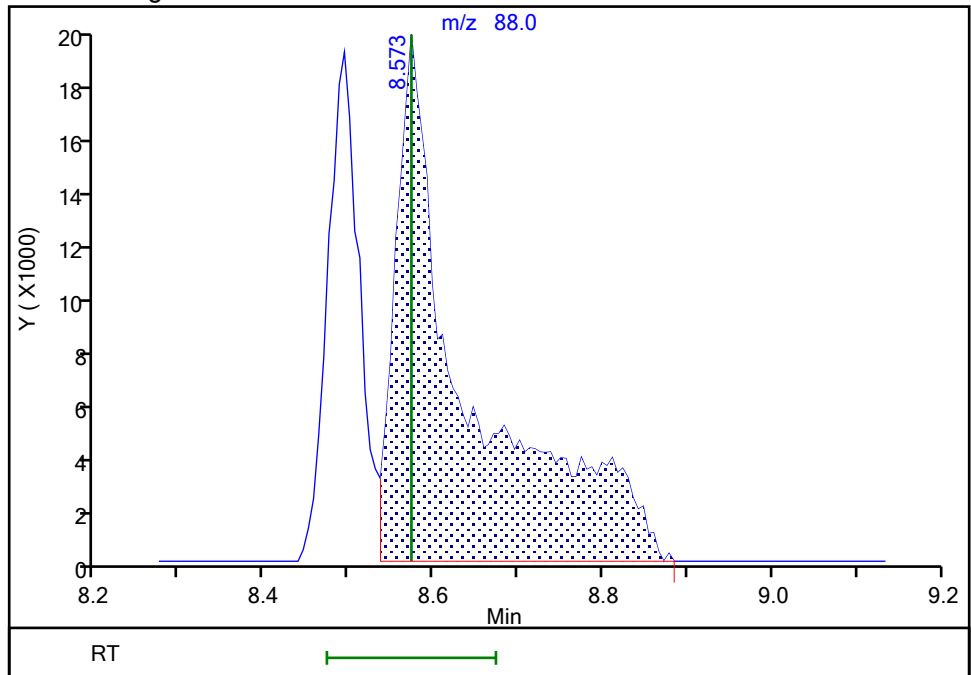
RT: 8.57
Area: 73253
Amount: 422.2421
Amount Units: ug/l

Processing Integration Results



RT: 8.57
Area: 117324
Amount: 676.2744
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 04-Jan-2021 19:23:52
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.: 410-24913-1
 SDG No.: _____
 Lab Sample ID: ICV 410-81781/19 Calibration Date: 01/04/2021 19:01
 Instrument ID: 19094 Calib Start Date: 01/04/2021 16:29
 GC Column: R-624SilMS 30m ID: 0.25 (mm) Calib End Date: 01/04/2021 18:39
 Lab File ID: Hj04V11.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	0.3393	0.2939	0.1000	4.33	5.00	-13.4	30.0
Chloromethane	Ave	0.4441	0.4130	0.1000	4.65	5.00	-7.0	30.0
1,3-Butadiene	Ave	0.3782	0.3828		5.06	5.00	1.2	30.0
Vinyl chloride	Ave	0.3991	0.3975	0.1000	4.98	5.00	-0.4	30.0
Bromomethane	Ave	0.2686	0.2601	0.1000	4.84	5.00	-3.2	30.0
Chloroethane	Ave	0.2497	0.2380	0.1000	4.77	5.00	-4.7	30.0
Dichlorofluoromethane	Ave	0.4393	0.4277		4.87	5.00	-2.6	30.0
Trichlorofluoromethane	Ave	0.4592	0.4505	0.1000	4.91	5.00	-1.9	30.0
Ethyl ether	Ave	0.2155	0.2298		5.33	5.00	6.6	30.0
Freon 123a	Ave	0.3085	0.3471		5.63	5.00	12.5	30.0
Acrolein	Ave	2.686	2.517		35.2	37.5	-6.3	30.0
1,1-Dichloroethene	Ave	0.2441	0.2465	0.1000	5.05	5.00	1.0	30.0
Acetone	Ave	3.177	3.052	0.1000	36.0	37.5	-3.9	30.0
Freon 113	Ave	0.2331	0.2490	0.1000	5.34	5.00	6.8	30.0
Methyl iodide	Ave	0.4017	0.4227		5.26	5.00	5.2	30.0
Ethyl bromide	Ave	0.2186	0.2027		4.67	5.03	-7.3	30.0
Carbon disulfide	Ave	0.7339	0.8106	0.1000	5.52	5.00	10.4	30.0
Methyl acetate	Ave	9.530	8.644	0.1000	4.54	5.00	-9.3	30.0
Allyl chloride	Ave	0.4354	0.4132		4.74	5.00	-5.1	30.0
Methylene Chloride	Ave	0.2942	0.2780	0.1000	4.72	5.00	-5.5	30.0
t-Butyl alcohol	Ave	1.020	1.029		50.4	50.0	0.8	30.0
Acrylonitrile	Ave	4.403	4.484		25.5	25.0	1.8	30.0
Methyl tert-butyl ether	Ave	0.5488	0.5558	0.1000	5.06	5.00	1.3	30.0
trans-1,2-Dichloroethene	Ave	0.2709	0.2694	0.1000	4.97	5.00	-0.6	30.0
n-Hexane	Ave	0.3728	0.4095		5.49	5.00	9.9	30.0
1,1-Dichloroethane	Ave	0.5342	0.5397	0.2000	5.05	5.00	1.0	30.0
di-Isopropyl ether	Ave	0.8219	0.9069		5.52	5.00	10.3	30.0
2-Chloro-1,3-butadiene	Ave	0.3989	0.4505		5.65	5.00	12.9	30.0
Ethyl t-butyl ether	Ave	0.7041	0.7591		5.39	5.00	7.8	30.0
2-Butanone (MEK)	Ave	5.640	5.786	0.1000	38.5	37.5	2.6	30.0
cis-1,2-Dichloroethene	Ave	0.3077	0.3181	0.1000	5.17	5.00	3.4	30.0
2,2-Dichloropropane	Ave	0.4221	0.4158		4.92	5.00	-1.5	30.0
Propionitrile	Ave	1.497	1.463		36.6	37.5	-2.3	30.0
Methacrylonitrile	Ave	5.486	5.767		39.4	37.5	5.1	30.0
Bromochloromethane	Ave	0.1260	0.1165		4.62	5.00	-7.6	30.0
Tetrahydrofuran	Ave	1.432	1.554		27.1	25.0	8.5	30.0
Chloroform	Ave	0.5066	0.5069	0.2000	5.00	5.00	0.0	30.0
1,1,1-Trichloroethane	Ave	0.4290	0.4219	0.1000	4.92	5.00	-1.7	30.0
Cyclohexane	Ave	0.4551	0.5067	0.1000	5.57	5.00	11.4	30.0
Carbon tetrachloride	Ave	0.3614	0.3686	0.1000	5.10	5.00	2.0	30.0
1,1-Dichloropropene	Ave	0.3989	0.4001		5.01	5.00	0.3	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-24913-1
 SDG No.: _____
 Lab Sample ID: ICV 410-81781/19 Calibration Date: 01/04/2021 19:01
 Instrument ID: 19094 Calib Start Date: 01/04/2021 16:29
 GC Column: R-624SilMS 30m ID: 0.25 (mm) Calib End Date: 01/04/2021 18:39
 Lab File ID: Hj04V11.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	0.3812	0.3661		120	125	-4.0	30.0
Benzene	Ave	1.200	1.176	0.5000	4.90	5.00	-2.0	30.0
1,2-Dichloroethane	Ave	0.3220	0.2970	0.1000	4.61	5.00	-7.8	30.0
t-Amyl methyl ether	Ave	0.5957	0.6495		5.45	5.00	9.0	30.0
n-Heptane	Ave	0.4481	0.4674		5.22	5.00	4.3	30.0
n-Butanol	Ave	0.3387	0.3467		256	250	2.3	30.0
Trichloroethene	Ave	0.3004	0.2964	0.2000	4.93	5.00	-1.3	30.0
Methylcyclohexane	Ave	0.5109	0.4931	0.1000	4.83	5.00	-3.5	30.0
1,2-Dichloropropane	Ave	0.3145	0.3148	0.1000	5.00	5.00	0.0	30.0
Methyl methacrylate	Ave	9.258	11.12		6.00	5.00	20.1	30.0
1,4-Dioxane	Ave	0.0767	0.0825	0.0050	134	125	7.5	30.0
Dibromomethane	Ave	0.1341	0.1337		4.99	5.00	-0.3	30.0
Bromodichloromethane	Ave	0.3560	0.3495	0.2000	4.91	5.00	-1.8	30.0
2-Nitropropane	Ave	2.936	2.818		4.80	5.00	-4.0	30.0
1-Bromo-2-chloroethane	Ave	0.2917	0.2813		4.82	5.00	-3.6	30.0
cis-1,3-Dichloropropene	Ave	0.4134	0.3968	0.2000	4.80	5.00	-4.0	30.0
4-Methyl-2-pentanone (MIBK)	Ave	14.17	14.56	0.1000	25.7	25.0	2.8	30.0
Toluene	Ave	1.025	1.003	0.4000	4.89	5.00	-2.2	30.0
trans-1,3-Dichloropropene	Ave	0.4805	0.4591	0.1000	4.78	5.00	-4.5	30.0
Ethyl methacrylate	Ave	0.3332	0.3579		5.37	5.00	7.4	30.0
1,1,2-Trichloroethane	Ave	0.2704	0.2629	0.1000	4.86	5.00	-2.8	30.0
Tetrachloroethene	Ave	0.4374	0.4238	0.2000	4.84	5.00	-3.1	30.0
1,3-Dichloropropane	Ave	0.4846	0.4717		4.87	5.00	-2.7	30.0
2-Hexanone	Ave	9.789	10.12	0.1000	25.8	25.0	3.3	30.0
Dibromochloromethane	Ave	0.3152	0.3169		5.03	5.00	0.5	30.0
1,2-Dibromoethane (EDB)	Ave	0.2554	0.2425	0.1000	4.75	5.00	-5.1	30.0
1-Chlorohexane	Ave	0.5915	0.5604		4.74	5.00	-5.3	30.0
Chlorobenzene	Ave	1.105	1.092	0.5000	4.94	5.00	-1.2	30.0
1,1,1,2-Tetrachloroethane	Ave	0.3799	0.3644		4.80	5.00	-4.1	30.0
Ethylbenzene	Ave	1.962	1.951	0.1000	4.97	5.00	-0.5	30.0
m&p-Xylene	Ave	0.7330	0.7500	0.1000	10.2	10.0	2.3	30.0
o-Xylene	Ave	0.7117	0.7043	0.3000	4.95	5.00	-1.0	30.0
Styrene	Ave	1.150	1.187	0.3000	5.16	5.00	3.2	30.0
Bromoform	Ave	0.1821	0.1713	0.1000	4.70	5.00	-5.9	30.0
Isopropylbenzene	Ave	1.866	1.930	0.1000	5.17	5.00	3.4	30.0
1,1,2,2-Tetrachloroethane	Ave	0.6659	0.6216	0.3000	4.67	5.00	-6.7	30.0
Bromobenzene	Ave	0.8383	0.8273		4.93	5.00	-1.3	30.0
trans-1,4-Dichloro-2-butene	Ave	5.004	5.130		25.6	25.0	2.5	30.0
1,2,3-Trichloropropane	Ave	0.1697	0.1612		4.75	5.00	-5.0	30.0
N-Propylbenzene	Ave	4.643	4.721		5.08	5.00	1.7	30.0
2-Chlorotoluene	Ave	0.8753	0.8944		5.11	5.00	2.2	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-24913-1
 SDG No.: _____
 Lab Sample ID: ICV 410-81781/19 Calibration Date: 01/04/2021 19:01
 Instrument ID: 19094 Calib Start Date: 01/04/2021 16:29
 GC Column: R-624SilMS 30m ID: 0.25 (mm) Calib End Date: 01/04/2021 18:39
 Lab File ID: Hj04V11.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	3.110	3.193		5.13	5.00	2.7	30.0
4-Chlorotoluene	Ave	0.8764	0.8964		5.11	5.00	2.3	30.0
tert-Butylbenzene	Ave	0.6523	0.6729		5.16	5.00	3.2	30.0
Pentachloroethane	Ave	0.5123	0.5065		4.94	5.00	-1.1	30.0
1,2,4-Trimethylbenzene	Ave	3.184	3.255		5.11	5.00	2.2	30.0
sec-Butylbenzene	Ave	4.198	4.303		5.13	5.00	2.5	30.0
1,3-Dichlorobenzene	Ave	1.692	1.667	0.6000	4.93	5.00	-1.5	30.0
p-Isopropyltoluene	Ave	3.482	3.661		5.26	5.00	5.2	30.0
1,4-Dichlorobenzene	Ave	1.682	1.668	0.5000	4.96	5.00	-0.8	30.0
1,2,3-Trimethylbenzene	Ave	1.375	1.484		5.40	5.00	7.9	30.0
Benzyl chloride	Ave	0.2167	0.2259		5.21	5.00	4.2	30.0
n-Butylbenzene	Ave	1.950	2.006		5.14	5.00	2.9	30.0
1,2-Dichlorobenzene	Ave	1.523	1.538	0.4000	5.05	5.00	1.0	30.0
1,2-Dibromo-3-Chloropropane	Ave	0.0826	0.0813	0.0500	4.92	5.00	-1.6	30.0
1,3,5-Trichlorobenzene	Ave	1.313	1.318		5.02	5.00	0.4	30.0
1,2,4-Trichlorobenzene	Ave	1.047	1.095	0.2000	5.23	5.00	4.6	30.0
Hexachlorobutadiene	Ave	0.6122	0.5962		4.87	5.00	-2.6	30.0
Naphthalene	Ave	1.788	1.838		5.14	5.00	2.8	30.0
1,2,3-Trichlorobenzene	Ave	0.9236	0.9586		5.19	5.00	3.8	30.0
Dibromofluoromethane (Surr)	Ave	0.2444	0.2453		10.0	10.0	0.4	30.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.0499	0.0490		9.81	10.0	-1.9	30.0
Toluene-d8 (Surr)	Ave	1.370	1.373		10.0	10.0	0.2	30.0
4-Bromofluorobenzene (Surr)	Ave	0.4905	0.4930		10.0	10.0	0.5	30.0

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20210104-19149.b\Hj04V11.D
 Lims ID: ICV
 Client ID:
 Sample Type: ICV
 Inject. Date: 04-Jan-2021 19:01:30 ALS Bottle#: 18 Worklist Smp#: 19
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0019149-019
 Misc. Info.: ICV
 Operator ID: jkh09052 Instrument ID: 19094
 Sublist:

Method: \\chromfs\Lancaster\ChromData\19094\20210104-19149.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 05-Jan-2021 07:52:40 Calib Date: 04-Jan-2021 18:39:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20210104-19149.b\Hj04I17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1665

First Level Reviewer: howej Date: 05-Jan-2021 06:39:06

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
3 Dichlorodifluoromethane	85	2.062	2.075	-0.013	99	254508	5.00	4.33	
6 Chloromethane	50	2.270	2.282	-0.012	99	357706	5.00	4.65	
7 Vinyl chloride	62	2.398	2.404	-0.006	87	344308	5.00	4.98	
8 Butadiene	39	2.398	2.410	-0.012	91	331545	5.00	5.06	M
9 Bromomethane	94	2.733	2.739	-0.006	90	225265	5.00	4.84	
10 Chloroethane	64	2.830	2.837	-0.007	100	206105	5.00	4.77	
11 Dichlorofluoromethane	67	3.080	3.081	0.000	97	370392	5.00	4.87	
13 Trichlorofluoromethane	101	3.148	3.154	-0.006	97	390217	5.00	4.91	
15 Ethyl ether	59	3.416	3.422	-0.006	94	199072	5.00	5.33	
16 1,2-Dichloro-1,1,2-trifluoroethane	67	3.495	3.507	-0.012	95	300662	5.00	5.63	
17 Acrolein	56	3.605	3.605	0.000	99	184969	37.5	35.2	
18 1,1-Dichloroethene	96	3.745	3.751	-0.006	97	213510	5.00	5.05	
20 112TCTFE	101	3.782	3.782	0.000	94	215647	5.00	5.34	
19 Acetone	43	3.782	3.794	-0.012	87	224209	37.5	36.0	
22 Iodomethane	142	3.952	3.964	-0.012	99	366130	5.00	5.26	
21 Isopropyl alcohol	45	3.964	3.971	-0.007	27	44332	37.5	35.8	
23 Ethyl bromide	108	3.983	3.989	-0.006	98	176733	5.03	4.67	
24 Carbon disulfide	76	4.062	4.074	-0.012	99	702025	5.00	5.52	
26 Methyl acetate	43	4.220	4.214	0.006	97	84671	5.00	4.54	
27 3-Chloro-1-propene	41	4.245	4.257	-0.012	93	357859	5.00	4.74	
* 28 t-Butyl alcohol-d10 (IS)	65	4.452	4.446	0.006	0	97955	50.0	50.0	
29 Methylene Chloride	84	4.446	4.452	-0.006	96	240746	5.00	4.72	
30 2-Methyl-2-propanol	59	4.580	4.592	-0.012	98	100755	50.0	50.4	
31 Acrylonitrile	53	4.787	4.794	-0.007	98	219617	25.0	25.5	
32 Methyl tert-butyl ether	73	4.854	4.855	-0.001	97	481396	5.00	5.06	
33 trans-1,2-Dichloroethene	96	4.873	4.885	-0.012	97	233294	5.00	4.97	
34 Hexane	57	5.287	5.300	-0.013	92	354682	5.00	5.49	
35 1,1-Dichloroethane	63	5.531	5.537	-0.006	96	467429	5.00	5.05	
37 Isopropyl ether	45	5.574	5.580	-0.006	95	785437	5.00	5.52	
38 2-Chloro-1,3-butadiene	53	5.635	5.641	-0.006	91	390199	5.00	5.65	

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	6.110	6.117	-0.006	99	657502	5.00	5.39	
41 2-Butanone (MEK)	43	6.305	6.312	-0.007	100	425072	37.5	38.5	
42 cis-1,2-Dichloroethene	96	6.354	6.366	-0.012	84	275509	5.00	5.17	
43 2,2-Dichloropropane	77	6.372	6.379	-0.007	88	360089	5.00	4.92	
45 Propionitrile	54	6.397	6.409	-0.012	99	107447	37.5	36.6	
47 Methacrylonitrile	67	6.616	6.623	-0.006	93	423689	37.5	39.4	
48 Chlorobromomethane	128	6.690	6.690	0.000	95	100908	5.00	4.62	
49 Tetrahydrofuran	71	6.690	6.702	-0.012	80	76123	25.0	27.1	
50 Chloroform	83	6.836	6.842	-0.006	94	439066	5.00	5.00	
\$ 51 Dibromofluoromethane (Surr)	113	7.049	7.049	0.000	93	424870	10.0	10.0	
52 1,1,1-Trichloroethane	97	7.067	7.068	-0.001	99	365381	5.00	4.92	
53 Cyclohexane	56	7.171	7.171	0.000	91	438896	5.00	5.57	
55 1,1-Dichloropropene	75	7.281	7.281	0.000	95	346508	5.00	5.01	
56 Carbon tetrachloride	117	7.275	7.287	-0.012	86	319238	5.00	5.10	
57 Isobutyl alcohol	41	7.409	7.409	0.000	95	89657	125.0	120.1	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.506	7.506	0.000	0	84813	10.0	9.81	
59 Benzene	78	7.543	7.543	0.000	97	1018809	5.00	4.90	
60 1,2-Dichloroethane	62	7.610	7.610	0.000	97	257254	5.00	4.61	M
62 Tert-amyl methyl ether	73	7.726	7.726	0.000	98	562545	5.00	5.45	
* 65 Fluorobenzene (IS)	96	7.939	7.945	-0.006	96	1732208	10.0	10.0	
64 n-Heptane	43	7.945	7.945	0.000	63	404808	5.00	5.22	
66 n-Butanol	56	8.287	8.287	0.000	91	169785	250.0	255.9	
67 Trichloroethene	95	8.421	8.421	0.000	99	256722	5.00	4.93	
68 Methylcyclohexane	83	8.738	8.738	0.000	96	427100	5.00	4.83	
69 2-ethoxy-2-methyl butane	87	8.756	8.750	0.006	91	347668	5.00	5.61	
70 1,2-Dichloropropane	63	8.756	8.756	0.000	80	272636	5.00	5.00	
71 Methyl methacrylate	69	8.829	8.829	0.000	91	108897	5.00	6.00	
72 1,4-Dioxane	88	8.848	8.842	0.006	31	20195	125.0	134.4	
73 Dibromomethane	93	8.866	8.866	0.000	96	115780	5.00	4.99	
75 Dichlorobromomethane	83	9.098	9.098	0.000	98	302722	5.00	4.91	
76 2-Nitropropane	41	9.354	9.360	-0.006	98	27604	5.00	4.80	
78 2-Chloroethyl vinyl ether	63		9.445				ND	ND	
79 1-Bromo-2-chloroethane	63	9.488	9.488	0.000	99	243596	5.00	4.82	
80 cis-1,3-Dichloropropene	75	9.628	9.628	0.000	95	343664	5.00	4.80	
81 4-Methyl-2-pentanone (MIBK)	43	9.793	9.793	0.000	98	713310	25.0	25.7	
\$ 82 Toluene-d8 (Surr)	98	9.933	9.933	0.000	94	1686712	10.0	10.0	
83 Toluene	92	10.006	10.006	0.000	98	616182	5.00	4.89	
85 trans-1,3-Dichloropropene	75	10.250	10.256	-0.006	93	282106	5.00	4.78	
86 Ethyl methacrylate	69	10.305	10.311	-0.006	90	219919	5.00	5.37	
87 1,1,2-Trichloroethane	97	10.457	10.457	0.000	91	161569	5.00	4.86	
88 Tetrachloroethene	166	10.542	10.549	-0.007	95	260405	5.00	4.84	
89 1,3-Dichloropropane	76	10.616	10.616	0.000	90	289859	5.00	4.87	
91 2-Hexanone	43	10.658	10.658	0.000	98	495449	25.0	25.8	
93 Chlorodibromomethane	129	10.835	10.829	0.006	90	194706	5.00	5.03	
94 Ethylene Dibromide	107	10.945	10.945	0.000	98	149012	5.00	4.75	
* 97 Chlorobenzene-d5 (IS)	117	11.365	11.365	0.000	88	1228925	10.0	10.0	
96 1-Chlorohexane	91	11.372	11.372	0.000	99	344322	5.00	4.74	
98 Chlorobenzene	112	11.390	11.396	-0.006	93	671022	5.00	4.94	
100 Ethylbenzene	91	11.475	11.475	0.000	99	1198989	5.00	4.97	
99 1,1,1,2-Tetrachloroethane	131	11.475	11.475	0.000	95	223915	5.00	4.80	
101 m-Xylene & p-Xylene	106	11.591	11.591	0.000	98	921653	10.0	10.2	
102 o-Xylene	106	11.914	11.920	-0.006	97	432779	5.00	4.95	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
103 Styrene	104	11.932	11.932	0.000	95	729462	5.00	5.16	
104 Bromoform	173	12.091	12.091	0.000	96	105230	5.00	4.70	
105 Isopropylbenzene	105	12.213	12.213	0.000	96	1186085	5.00	5.17	
\$ 108 4-Bromofluorobenzene (Surr)	95	12.359	12.359	0.000	87	605824	10.0	10.0	
109 1,1,2,2-Tetrachloroethane	83	12.457	12.457	0.000	93	195688	5.00	4.67	
111 Bromobenzene	156	12.481	12.481	0.000	95	260437	5.00	4.93	
110 trans-1,4-Dichloro-2-butene	53	12.481	12.481	0.000	93	251277	25.0	25.6	
112 1,2,3-Trichloropropane	110	12.505	12.506	-0.001	84	50754	5.00	4.75	
113 N-Propylbenzene	91	12.542	12.542	0.000	99	1486249	5.00	5.08	
114 2-Chlorotoluene	126	12.621	12.621	0.000	96	281559	5.00	5.11	
115 1,3,5-Trimethylbenzene	105	12.676	12.676	0.000	94	1005272	5.00	5.13	
116 4-Chlorotoluene	126	12.713	12.713	0.000	98	282210	5.00	5.11	
118 tert-Butylbenzene	134	12.920	12.920	0.000	94	211839	5.00	5.16	
119 Pentachloroethane	167	12.950	12.951	-0.001	71	159469	5.00	4.94	
120 1,2,4-Trimethylbenzene	105	12.957	12.957	0.000	97	1024701	5.00	5.11	
121 sec-Butylbenzene	105	13.078	13.079	-0.001	95	1354595	5.00	5.13	
122 1,3-Dichlorobenzene	146	13.182	13.182	0.000	97	524680	5.00	4.93	
123 4-Isopropyltoluene	119	13.188	13.188	0.000	97	1152658	5.00	5.26	
* 124 1,4-Dichlorobenzene-d4	152	13.237	13.237	0.000	95	629636	10.0	10.0	
125 1,4-Dichlorobenzene	146	13.255	13.255	0.000	93	525050	5.00	4.96	
126 1,2,3-Trimethylbenzene	120	13.261	13.261	0.000	99	467235	5.00	5.40	
127 Benzyl chloride	126	13.335	13.335	0.000	99	71129	5.00	5.21	
129 p-Diethylbenzene	119	13.456	13.457	-0.001	93	731027	5.00	5.16	
130 n-Butylbenzene	92	13.475	13.475	0.000	98	631524	5.00	5.14	
131 1,2-Dichlorobenzene	146	13.517	13.517	0.000	97	484292	5.00	5.05	
134 1,2-Dibromo-3-Chloropropane	155	14.054	14.060	-0.006	83	25602	5.00	4.92	
135 1,3,5-Trichlorobenzene	180	14.182	14.182	0.000	97	414964	5.00	5.02	
136 1,2,4-Trichlorobenzene	180	14.603	14.603	0.000	94	344733	5.00	5.23	
137 Hexachlorobutadiene	225	14.688	14.682	0.006	97	187710	5.00	4.87	
138 Naphthalene	128	14.792	14.792	0.000	97	578588	5.00	5.14	
139 1,2,3-Trichlorobenzene	180	14.932	14.932	0.000	95	301776	5.00	5.19	
140 2-Methylnaphthalene	142	15.584	15.584	0.000	92	318070	5.00	4.13	

QC Flag Legend

Processing Flags

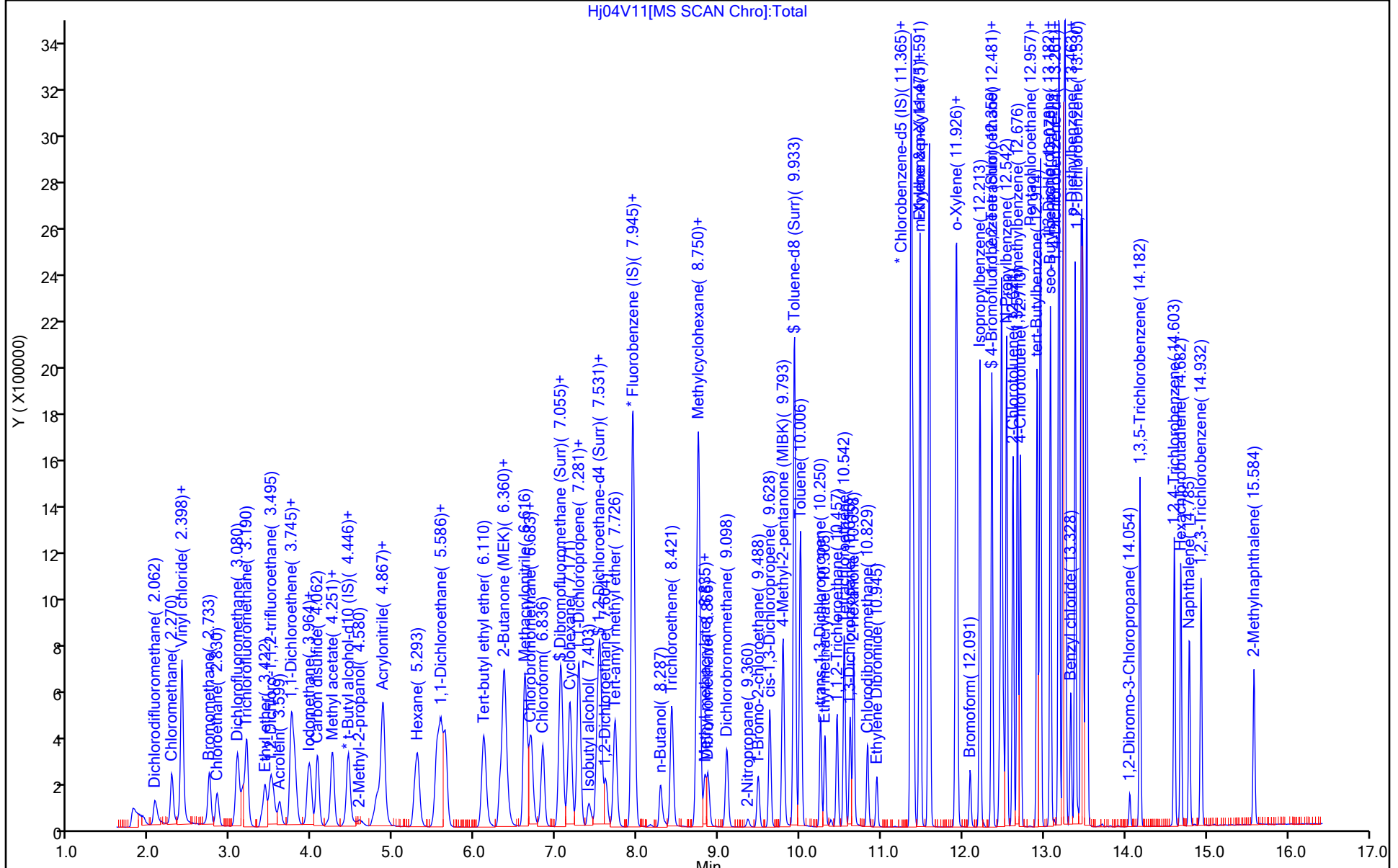
ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

MSV_Q_QVOA1_00062	Amount Added: 12.50	Units: uL	
MSV_Q_QVOA6_00059	Amount Added: 12.50	Units: uL	
MSV_Q_QARC_00061	Amount Added: 12.50	Units: uL	
MSV_QGAS_826_00101	Amount Added: 12.50	Units: uL	
MSV_Q_EE_00003	Amount Added: 12.50	Units: uL	
MSV_Q_ETBR_00006	Amount Added: 12.50	Units: uL	
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Hj04V11[MS SCAN Chrom]:Total

Eurofins Lancaster Laboratories Env, LLC

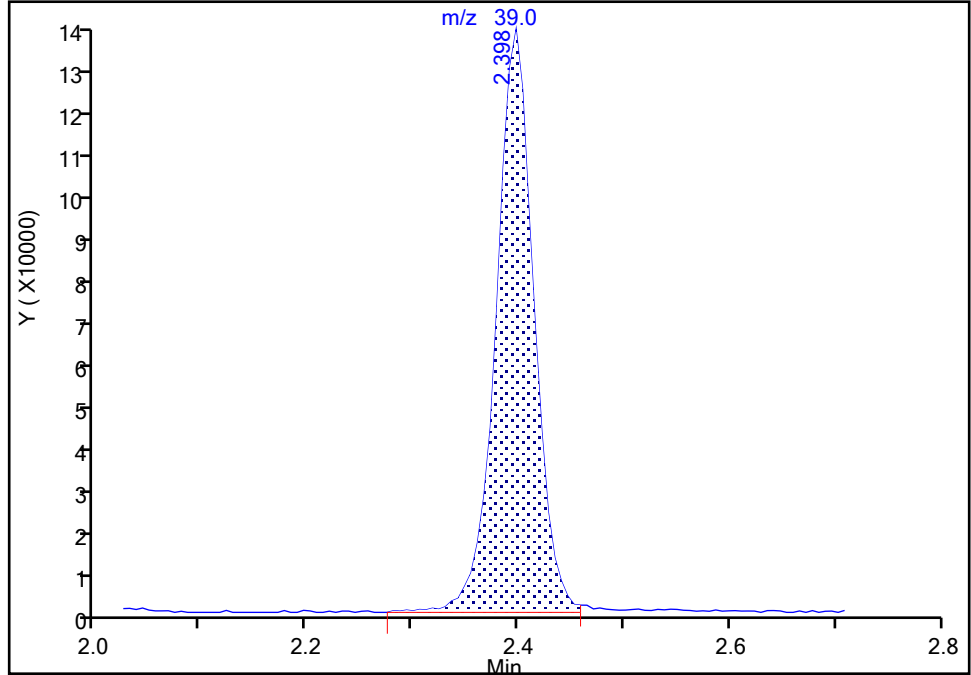
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Injection Date: 04-Jan-2021 19:01:30 Instrument ID: 19094
Lims ID: ICV
Client ID:
Operator ID: jkh09052 ALS Bottle#: 18 Worklist Smp#: 19
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

8 Butadiene, CAS: 106-99-0

Signal: 1

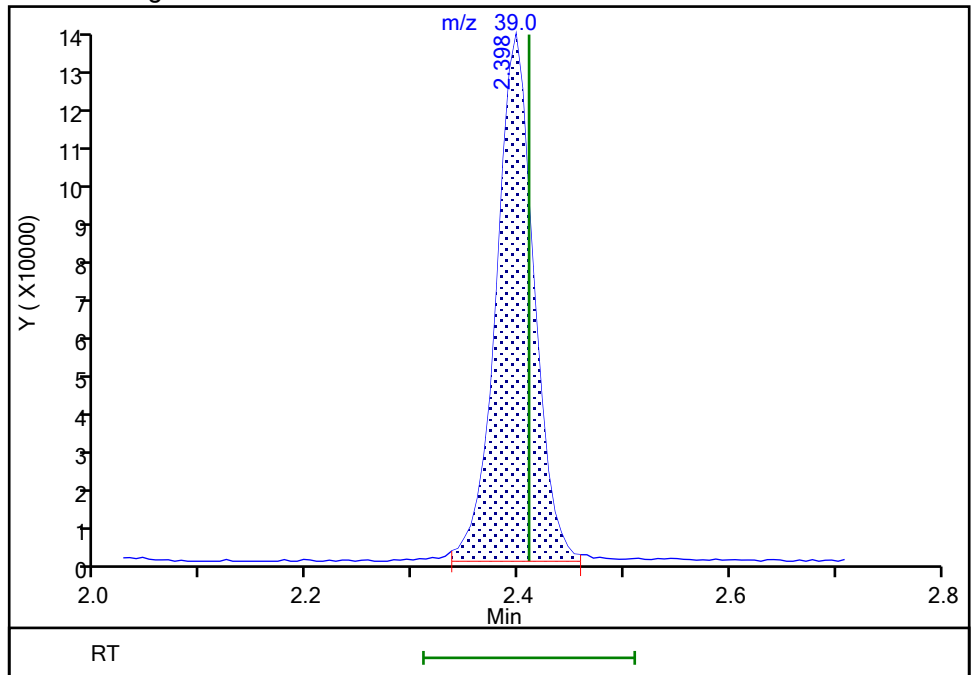
RT: 2.40
Area: 333634
Amount: 5.093206
Amount Units: ug/l

Processing Integration Results



RT: 2.40
Area: 331545
Amount: 5.061316
Amount Units: ug/l

Manual Integration Results



Reviewer: howej, 05-Jan-2021 07:28:30
Audit Action: Split an Integrated Peak

Audit Reason: Other

Eurofins Lancaster Laboratories Env, LLC

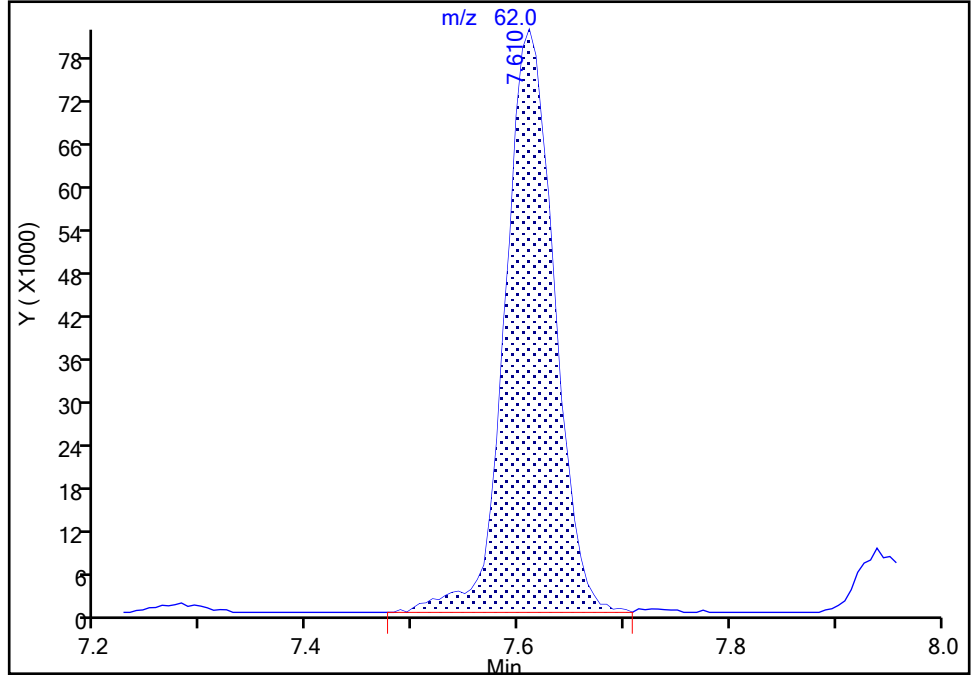
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Injection Date: 04-Jan-2021 19:01:30 Instrument ID: 19094
Lims ID: ICV
Client ID:
Operator ID: jkh09052 ALS Bottle#: 18 Worklist Smp#: 19
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

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

Signal: 1

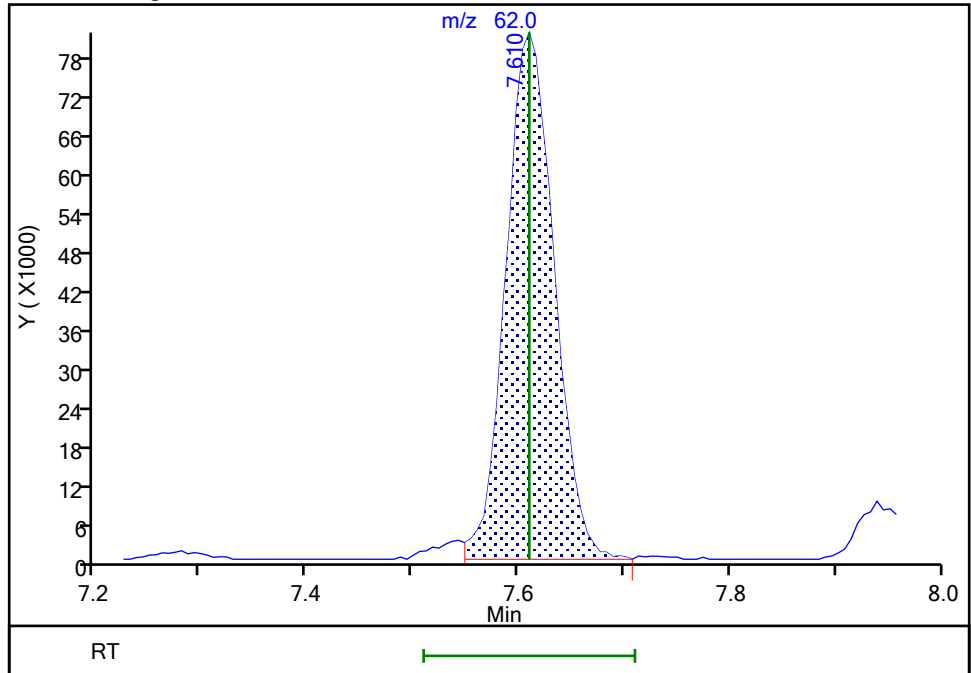
RT: 7.61
Area: 262763
Amount: 4.710320
Amount Units: ug/l

Processing Integration Results



RT: 7.61
Area: 257254
Amount: 4.611565
Amount Units: ug/l

Manual Integration Results



Reviewer: howej, 05-Jan-2021 07:28:49
Audit Action: Split an Integrated Peak

Audit Reason: Other

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-24913-1
 SDG No.: _____
 Lab Sample ID: CCVIS 410-82059/3 Calibration Date: 01/05/2021 09:40
 Instrument ID: 19094 Calib Start Date: 01/04/2021 16:29
 GC Column: R-624SilMS 30m ID: 0.25 (mm) Calib End Date: 01/04/2021 18:39
 Lab File ID: HJ05C01.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	0.3393	0.3485	0.1000	10.3	10.0	2.7	20.0
Chloromethane	Ave	0.4441	0.4390	0.1000	9.89	10.0	-1.1	20.0
1,3-Butadiene	Ave	0.3782	0.3212		8.49	10.0	-15.1	20.0
Vinyl chloride	Ave	0.3991	0.3871	0.1000	9.70	10.0	-3.0	20.0
Bromomethane	Ave	0.2686	0.2553	0.1000	9.51	10.0	-4.9	20.0
Chloroethane	Ave	0.2497	0.2406	0.1000	9.64	10.0	-3.6	20.0
Dichlorofluoromethane	Ave	0.4393	0.4190		9.54	10.0	-4.6	20.0
Trichlorofluoromethane	Ave	0.4592	0.4553	0.1000	9.91	10.0	-0.9	20.0
Ethyl ether	Ave	0.2155	0.2174		10.1	10.0	0.9	20.0
Freon 123a	Ave	0.3085	0.3109		10.1	10.0	0.8	20.0
Acrolein	Ave	2.686	2.577		480	500	-4.0	20.0
1,1-Dichloroethene	Ave	0.2441	0.2392	0.1000	9.80	10.0	-2.0	20.0
Acetone	Ave	3.177	2.950	0.1000	92.9	100	-7.1	20.0
Freon 113	Ave	0.2331	0.2418	0.1000	10.4	10.0	3.7	20.0
Methyl iodide	Ave	0.4017	0.3918		9.75	10.0	-2.5	20.0
Ethyl bromide	Ave	0.2186	0.2081		9.52	10.0	-4.8	20.0
Carbon disulfide	Ave	0.7339	0.7375	0.1000	10.0	10.0	0.5	20.0
Methyl acetate	Ave	9.530	8.222	0.1000	8.63	10.0	-13.7	20.0
Allyl chloride	Ave	0.4354	0.4220		9.69	10.0	-3.1	20.0
Methylene Chloride	Ave	0.2942	0.2757	0.1000	9.37	10.0	-6.3	20.0
t-Butyl alcohol	Ave	1.020	0.9867		193	200	-3.3	20.0
Acrylonitrile	Ave	4.403	4.239		48.1	50.0	-3.7	20.0
Methyl tert-butyl ether	Ave	0.5488	0.5815	0.1000	10.6	10.0	6.0	20.0
trans-1,2-Dichloroethene	Ave	0.2709	0.2671	0.1000	9.86	10.0	-1.4	20.0
n-Hexane	Ave	0.3728	0.3995		10.7	10.0	7.2	20.0
1,1-Dichloroethane	Ave	0.5342	0.5347	0.2000	10.0	10.0	0.0	20.0
di-Isopropyl ether	Ave	0.8219	0.8542		10.4	10.0	3.9	20.0
2-Chloro-1,3-butadiene	Ave	0.3989	0.4167		10.4	10.0	4.5	20.0
Ethyl t-butyl ether	Ave	0.7041	0.7311		10.4	10.0	3.8	20.0
2-Butanone (MEK)	Ave	5.640	5.509	0.1000	97.7	100	-2.3	20.0
cis-1,2-Dichloroethene	Ave	0.3077	0.3047	0.1000	9.90	10.0	-1.0	20.0
2,2-Dichloropropane	Ave	0.4221	0.4220		10.0	10.0	-0.0	20.0
Propionitrile	Ave	1.497	1.476		197	200	-1.4	20.0
Methacrylonitrile	Ave	5.486	5.229		95.3	100	-4.7	20.0
Bromochloromethane	Ave	0.1260	0.1302		10.3	10.0	3.3	20.0
Tetrahydrofuran	Ave	1.432	1.463		102	100	2.2	20.0
Chloroform	Ave	0.5066	0.5003	0.2000	9.88	10.0	-1.2	20.0
1,1,1-Trichloroethane	Ave	0.4290	0.4209	0.1000	9.81	10.0	-1.9	20.0
Cyclohexane	Ave	0.4551	0.4715	0.1000	10.4	10.0	3.6	20.0
1,1-Dichloropropene	Ave	0.3989	0.4095		10.3	10.0	2.6	20.0
Carbon tetrachloride	Ave	0.3614	0.3657	0.1000	10.1	10.0	1.2	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-24913-1
 SDG No.: _____
 Lab Sample ID: CCVIS 410-82059/3 Calibration Date: 01/05/2021 09:40
 Instrument ID: 19094 Calib Start Date: 01/04/2021 16:29
 GC Column: R-624SilMS 30m ID: 0.25 (mm) Calib End Date: 01/04/2021 18:39
 Lab File ID: HJ05C01.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	0.3812	0.3533		464	500	-7.3	20.0
Benzene	Ave	1.200	1.172	0.5000	9.77	10.0	-2.3	20.0
1,2-Dichloroethane	Ave	0.3220	0.3238	0.1000	10.1	10.0	0.6	20.0
t-Amyl methyl ether	Ave	0.5957	0.6431		10.8	10.0	8.0	20.0
n-Heptane	Ave	0.4481	0.4834		10.8	10.0	7.9	20.0
n-Butanol	Ave	0.3387	0.3264		964	1000	-3.6	20.0
Trichloroethene	Ave	0.3004	0.2973	0.2000	9.90	10.0	-1.0	20.0
Methylcyclohexane	Ave	0.5109	0.5330	0.1000	10.4	10.0	4.3	20.0
1,2-Dichloropropane	Ave	0.3145	0.3222	0.1000	10.2	10.0	2.4	20.0
Methyl methacrylate	Ave	9.258	9.143		9.88	10.0	-1.2	20.0
1,4-Dioxane	Ave	0.0767	0.0757	0.0050	493	500	-1.3	20.0
Dibromomethane	Ave	0.1341	0.1441		10.7	10.0	7.5	20.0
Bromodichloromethane	Ave	0.3560	0.3669	0.2000	10.3	10.0	3.1	20.0
2-Nitropropane	Ave	2.936	2.813		95.8	100	-4.2	20.0
1-Bromo-2-chloroethane	Ave	0.2917	0.3092		10.6	10.0	6.0	20.0
cis-1,3-Dichloropropene	Ave	0.4134	0.4510	0.2000	10.9	10.0	9.1	20.0
4-Methyl-2-pentanone (MIBK)	Ave	14.17	13.74	0.1000	96.9	100	-3.1	20.0
Toluene	Ave	1.025	0.9878	0.4000	9.64	10.0	-3.6	20.0
trans-1,3-Dichloropropene	Ave	0.4805	0.5104	0.1000	10.6	10.0	6.2	20.0
Ethyl methacrylate	Ave	0.3332	0.3740		11.2	10.0	12.3	20.0
1,1,2-Trichloroethane	Ave	0.2704	0.2738	0.1000	10.1	10.0	1.3	20.0
Tetrachloroethene	Ave	0.4374	0.4234	0.2000	9.68	10.0	-3.2	20.0
1,3-Dichloropropane	Ave	0.4846	0.5064		10.4	10.0	4.5	20.0
2-Hexanone	Ave	9.789	9.840	0.1000	101	100	0.5	20.0
Dibromochloromethane	Ave	0.3152	0.3364		10.7	10.0	6.7	20.0
1,2-Dibromoethane (EDB)	Ave	0.2554	0.2739	0.1000	10.7	10.0	7.2	20.0
1-Chlorohexane	Ave	0.5915	0.5884		9.95	10.0	-0.5	20.0
Chlorobenzene	Ave	1.105	1.097	0.5000	9.92	10.0	-0.8	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3799	0.3838		10.1	10.0	1.0	20.0
Ethylbenzene	Ave	1.962	1.983	0.1000	10.1	10.0	1.1	20.0
m&p-Xylene	Ave	0.7330	0.7528	0.1000	20.5	20.0	2.7	20.0
o-Xylene	Ave	0.7117	0.7345	0.3000	10.3	10.0	3.2	20.0
Styrene	Ave	1.150	1.227	0.3000	10.7	10.0	6.6	20.0
Bromoform	Ave	0.1821	0.2012	0.1000	11.0	10.0	10.5	20.0
Isopropylbenzene	Ave	1.866	1.967	0.1000	10.5	10.0	5.4	20.0
1,1,2,2-Tetrachloroethane	Ave	0.6659	0.7286	0.3000	10.9	10.0	9.4	20.0
Bromobenzene	Ave	0.8383	0.8605		10.3	10.0	2.6	20.0
trans-1,4-Dichloro-2-butene	Ave	5.004	5.233		105	100	4.6	20.0
1,2,3-Trichloropropane	Ave	0.1697	0.1794		10.6	10.0	5.7	20.0
N-Propylbenzene	Ave	4.643	4.772		10.3	10.0	2.8	20.0
2-Chlorotoluene	Ave	0.8753	0.8885		10.2	10.0	1.5	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-24913-1
 SDG No.: _____
 Lab Sample ID: CCVIS 410-82059/3 Calibration Date: 01/05/2021 09:40
 Instrument ID: 19094 Calib Start Date: 01/04/2021 16:29
 GC Column: R-624SilMS 30m ID: 0.25 (mm) Calib End Date: 01/04/2021 18:39
 Lab File ID: HJ05C01.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	3.110	3.314		10.7	10.0	6.5	20.0
4-Chlorotoluene	Ave	0.8764	0.9068		10.3	10.0	3.5	20.0
tert-Butylbenzene	Ave	0.6523	0.6901		10.6	10.0	5.8	20.0
1,2,4-Trimethylbenzene	Ave	3.184	3.385		10.6	10.0	6.3	20.0
Pentachloroethane	Ave	0.5123	0.5342		10.4	10.0	4.3	20.0
sec-Butylbenzene	Ave	4.198	4.498		10.7	10.0	7.2	20.0
1,3-Dichlorobenzene	Ave	1.692	1.700	0.6000	10.1	10.0	0.5	20.0
p-Isopropyltoluene	Ave	3.482	3.785		10.9	10.0	8.7	20.0
1,4-Dichlorobenzene	Ave	1.682	1.687	0.5000	10.0	10.0	0.3	20.0
1,2,3-Trimethylbenzene	Ave	1.375	1.380		10.0	10.0	0.4	20.0
Benzyl chloride	Ave	0.2167	0.2558		11.8	10.0	18.0	20.0
n-Butylbenzene	Ave	1.950	2.109		10.8	10.0	8.2	20.0
1,2-Dichlorobenzene	Ave	1.523	1.556	0.4000	10.2	10.0	2.1	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.0826	0.0962	0.0500	11.6	10.0	16.5	20.0
1,3,5-Trichlorobenzene	Ave	1.313	1.345		10.2	10.0	2.5	20.0
1,2,4-Trichlorobenzene	Ave	1.047	1.112	0.2000	10.6	10.0	6.2	20.0
Hexachlorobutadiene	Ave	0.6122	0.6684		10.9	10.0	9.2	20.0
Naphthalene	Ave	1.788	2.087		11.7	10.0	16.7	20.0
1,2,3-Trichlorobenzene	Ave	0.9236	0.9940		10.8	10.0	7.6	20.0
Dibromofluoromethane (Surr)	Ave	0.2444	0.2467		10.1	10.0	0.9	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.0499	0.0527		10.6	10.0	5.6	20.0
Toluene-d8 (Surr)	Ave	1.370	1.322		9.65	10.0	-3.5	20.0
4-Bromofluorobenzene (Surr)	Ave	0.4905	0.4905		10.0	10.0	0.0	20.0

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20210105-19216.b\HJ05C01.D
 Lims ID: CCVIS VSTD
 Client ID:
 Sample Type: CCVIS
 Inject. Date: 05-Jan-2021 09:40:30 ALS Bottle#: 2 Worklist Smp#: 3
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0019216-003
 Misc. Info.: CCVIS VSTD010
 Operator ID: jkh09052 Instrument ID: 19094
 Sublist: chrom-MSV_19094_25mL*sub1
 Method: \\chromfs\Lancaster\ChromData\19094\20210105-19216.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 06-Jan-2021 09:42:13 Calib Date: 04-Jan-2021 18:39:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20210104-19149.b\Hj04I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1619

First Level Reviewer: spositok

Date: 06-Jan-2021 09:41:41

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
3 Dichlorodifluoromethane	85	2.075	2.075	0.000	99	500020	10.0	10.3	
6 Chloromethane	50	2.282	2.282	0.000	99	629931	10.0	9.89	
8 Butadiene	39	2.404	2.404	0.000	91	460920	10.0	8.49	
7 Vinyl chloride	62	2.410	2.410	0.000	96	555380	10.0	9.70	
9 Bromomethane	94	2.745	2.745	0.000	91	366365	10.0	9.51	
10 Chloroethane	64	2.843	2.843	0.000	100	345245	10.0	9.64	
11 Dichlorofluoromethane	67	3.087	3.087	0.000	97	601171	10.0	9.54	
13 Trichlorofluoromethane	101	3.160	3.160	0.000	98	653271	10.0	9.91	
15 Ethyl ether	59	3.422	3.422	0.000	94	311977	10.0	10.1	
16 1,2-Dichloro-1,1,2-trifluoroethane	67	3.507	3.507	0.000	95	446099	10.0	10.1	
17 Acrolein	56	3.605	3.605	0.000	100	2713650	500.0	479.8	
18 1,1-Dichloroethene	96	3.751	3.751	0.000	96	343278	10.0	9.80	
19 Acetone	43	3.782	3.782	0.000	100	621115	100.0	92.9	
20 112TCTFE	101	3.788	3.788	0.000	86	346892	10.0	10.4	
21 Isopropyl alcohol	45	3.952	3.952	0.000	40	222727	200.0	217.0	
22 Iodomethane	142	3.958	3.958	0.000	99	562117	10.0	9.75	
23 Ethyl bromide	108	3.989	3.989	0.000	98	298679	10.0	9.52	
24 Carbon disulfide	76	4.074	4.074	0.000	99	1058170	10.0	10.0	
26 Methyl acetate	43	4.220	4.220	0.000	98	173139	10.0	8.63	
27 3-Chloro-1-propene	41	4.257	4.257	0.000	93	605457	10.0	9.69	
29 Methylene Chloride	84	4.452	4.452	0.000	95	395610	10.0	9.37	
* 28 t-Butyl alcohol-d10 (IS)	65	4.458	4.458	0.000	0	105284	50.0	50.0	M
30 2-Methyl-2-propanol	59	4.586	4.586	0.000	99	415535	200.0	193.4	
31 Acrylonitrile	53	4.794	4.794	0.000	100	446253	50.0	48.1	
32 Methyl tert-butyl ether	73	4.867	4.867	0.000	96	834380	10.0	10.6	
33 trans-1,2-Dichloroethene	96	4.885	4.885	0.000	97	383205	10.0	9.86	
34 Hexane	57	5.300	5.300	0.000	92	573200	10.0	10.7	
35 1,1-Dichloroethane	63	5.537	5.537	0.000	96	767295	10.0	10.0	
37 Isopropyl ether	45	5.586	5.586	0.000	96	1225692	10.0	10.4	
38 2-Chloro-1,3-butadiene	53	5.647	5.647	0.000	91	597951	10.0	10.4	

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	6.116	6.116	0.000	98	1049079	10.0	10.4	
41 2-Butanone (MEK)	43	6.312	6.312	0.000	100	1160041	100.0	97.7	
42 cis-1,2-Dichloroethene	96	6.360	6.360	0.000	84	437133	10.0	9.90	
43 2,2-Dichloropropane	77	6.379	6.379	0.000	89	605561	10.0	10.0	
45 Propionitrile	54	6.403	6.403	0.000	99	621669	200.0	197.2	
47 Methacrylonitrile	67	6.622	6.622	0.000	92	1101107	100.0	95.3	
48 Chlorobromomethane	128	6.696	6.696	0.000	94	186809	10.0	10.3	
49 Tetrahydrofuran	71	6.696	6.696	0.000	90	308108	100.0	102.2	
50 Chloroform	83	6.842	6.842	0.000	94	717814	10.0	9.88	
\$ 51 Dibromofluoromethane (Surr)	113	7.061	7.061	0.000	93	353957	10.0	10.1	
52 1,1,1-Trichloroethane	97	7.074	7.074	0.000	99	603894	10.0	9.81	
53 Cyclohexane	56	7.177	7.177	0.000	92	676578	10.0	10.4	
55 1,1-Dichloropropene	75	7.281	7.281	0.000	96	587510	10.0	10.3	
56 Carbon tetrachloride	117	7.287	7.287	0.000	96	524725	10.0	10.1	
57 Isobutyl alcohol	41	7.409	7.409	0.000	95	372020	500.0	463.5	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.512	7.512	0.000	0	75640	10.0	10.6	
59 Benzene	78	7.543	7.543	0.000	97	1682155	10.0	9.77	
60 1,2-Dichloroethane	62	7.616	7.616	0.000	97	464636	10.0	10.1	
62 Tert-amyl methyl ether	73	7.732	7.732	0.000	98	922764	10.0	10.8	
* 65 Fluorobenzene (IS)	96	7.945	7.945	0.000	99	1434869	10.0	10.0	
64 n-Heptane	43	7.951	7.951	0.000	92	693566	10.0	10.8	
66 n-Butanol	56	8.287	8.287	0.000	88	687307	1000.0	963.7	
67 Trichloroethene	95	8.427	8.427	0.000	99	426547	10.0	9.90	
68 Methylcyclohexane	83	8.738	8.738	0.000	95	764813	10.0	10.4	
69 2-ethoxy-2-methyl butane	87	8.762	8.762	0.000	91	533382	10.0	10.4	
70 1,2-Dichloropropane	63	8.762	8.762	0.000	87	462354	10.0	10.2	
71 Methyl methacrylate	69	8.829	8.829	0.000	92	192515	10.0	9.88	
72 1,4-Dioxane	88	8.848	8.848	0.000	95	79660	500.0	493.3	
73 Dibromomethane	93	8.872	8.872	0.000	95	206779	10.0	10.7	
75 Dichlorobromomethane	83	9.104	9.104	0.000	99	526473	10.0	10.3	
76 2-Nitropropane	41	9.360	9.360	0.000	97	592407	100.0	95.8	
79 1-Bromo-2-chloroethane	63	9.488	9.488	0.000	99	443673	10.0	10.6	
80 cis-1,3-Dichloropropene	75	9.628	9.628	0.000	95	647095	10.0	10.9	
81 4-Methyl-2-pentanone (MIBK)	43	9.793	9.793	0.000	97	2892211	100.0	96.9	
\$ 82 Toluene-d8 (Surr)	98	9.933	9.933	0.000	94	1390426	10.0	9.65	
83 Toluene	92	10.006	10.006	0.000	97	1038909	10.0	9.64	
85 trans-1,3-Dichloropropene	75	10.256	10.256	0.000	93	536788	10.0	10.6	
86 Ethyl methacrylate	69	10.305	10.305	0.000	90	393390	10.0	11.2	
87 1,1,2-Trichloroethane	97	10.457	10.457	0.000	91	287984	10.0	10.1	
88 Tetrachloroethene	166	10.548	10.548	0.000	96	445320	10.0	9.68	
89 1,3-Dichloropropane	76	10.616	10.616	0.000	91	532553	10.0	10.4	
91 2-Hexanone	43	10.658	10.658	0.000	98	2071907	100.0	100.5	
93 Chlorodibromomethane	129	10.829	10.829	0.000	90	353834	10.0	10.7	
94 Ethylene Dibromide	107	10.945	10.945	0.000	98	288106	10.0	10.7	
* 97 Chlorobenzene-d5 (IS)	117	11.365	11.365	0.000	88	1051723	10.0	10.0	
96 1-Chlorohexane	91	11.372	11.372	0.000	98	618793	10.0	9.95	
98 Chlorobenzene	112	11.396	11.396	0.000	94	1153235	10.0	9.92	
100 Ethylbenzene	91	11.475	11.475	0.000	99	2085478	10.0	10.1	
99 1,1,1,2-Tetrachloroethane	131	11.475	11.475	0.000	94	403668	10.0	10.1	
101 m-Xylene & p-Xylene	106	11.591	11.591	0.000	98	1583485	20.0	20.5	
102 o-Xylene	106	11.920	11.920	0.000	97	772471	10.0	10.3	
103 Styrene	104	11.932	11.932	0.000	95	1290300	10.0	10.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
104 Bromoform	173	12.097	12.097	0.000	96	211577	10.0	11.0	
105 Isopropylbenzene	105	12.213	12.213	0.000	96	2069181	10.0	10.5	
\$ 108 4-Bromofluorobenzene (Surr)	95	12.359	12.359	0.000	88	515913	10.0	10.0	
109 1,1,2,2-Tetrachloroethane	83	12.457	12.457	0.000	92	395298	10.0	10.9	
111 Bromobenzene	156	12.481	12.481	0.000	73	466895	10.0	10.3	
110 trans-1,4-Dichloro-2-butene	53	12.481	12.481	0.000	93	1101995	100.0	104.6	
112 1,2,3-Trichloropropane	110	12.505	12.505	0.000	82	97355	10.0	10.6	
113 N-Propylbenzene	91	12.542	12.542	0.000	99	2589390	10.0	10.3	
114 2-Chlorotoluene	126	12.621	12.621	0.000	96	482073	10.0	10.2	
115 1,3,5-Trimethylbenzene	105	12.676	12.676	0.000	94	1797978	10.0	10.7	
116 4-Chlorotoluene	126	12.713	12.713	0.000	98	492018	10.0	10.3	
118 tert-Butylbenzene	134	12.920	12.920	0.000	93	374424	10.0	10.6	
119 Pentachloroethane	167	12.957	12.957	0.000	92	289867	10.0	10.4	
120 1,2,4-Trimethylbenzene	105	12.957	12.957	0.000	97	1836516	10.0	10.6	
121 sec-Butylbenzene	105	13.078	13.078	0.000	95	2440607	10.0	10.7	
122 1,3-Dichlorobenzene	146	13.182	13.182	0.000	97	922532	10.0	10.1	
123 4-Isopropyltoluene	119	13.188	13.188	0.000	97	2053869	10.0	10.9	
* 124 1,4-Dichlorobenzene-d4	152	13.237	13.237	0.000	95	542574	10.0	10.0	
125 1,4-Dichlorobenzene	146	13.255	13.255	0.000	93	915245	10.0	10.0	
126 1,2,3-Trimethylbenzene	120	13.261	13.261	0.000	99	748918	10.0	10.0	
127 Benzyl chloride	126	13.335	13.335	0.000	99	138776	10.0	11.8	
129 p-Diethylbenzene	119	13.456	13.456	0.000	93	1297087	10.0	10.6	
130 n-Butylbenzene	92	13.475	13.475	0.000	97	1144511	10.0	10.8	
131 1,2-Dichlorobenzene	146	13.517	13.517	0.000	97	844090	10.0	10.2	
134 1,2-Dibromo-3-Chloropropane	155	14.060	14.060	0.000	88	52220	10.0	11.6	
135 1,3,5-Trichlorobenzene	180	14.182	14.182	0.000	97	729877	10.0	10.2	
136 1,2,4-Trichlorobenzene	180	14.603	14.603	0.000	94	603249	10.0	10.6	
137 Hexachlorobutadiene	225	14.688	14.688	0.000	97	362651	10.0	10.9	
138 Naphthalene	128	14.792	14.792	0.000	97	1132129	10.0	11.7	
139 1,2,3-Trichlorobenzene	180	14.932	14.932	0.000	95	539329	10.0	10.8	
140 2-Methylnaphthalene	142	15.584	15.584	0.000	92	667056	10.0	9.61	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MSV_RV1_826_00033

Amount Added: 20.00

Units: uL

MSV_RV4GAS826_00105

Amount Added: 20.00

Units: uL

MSV_RV4_826_00039

Amount Added: 20.00

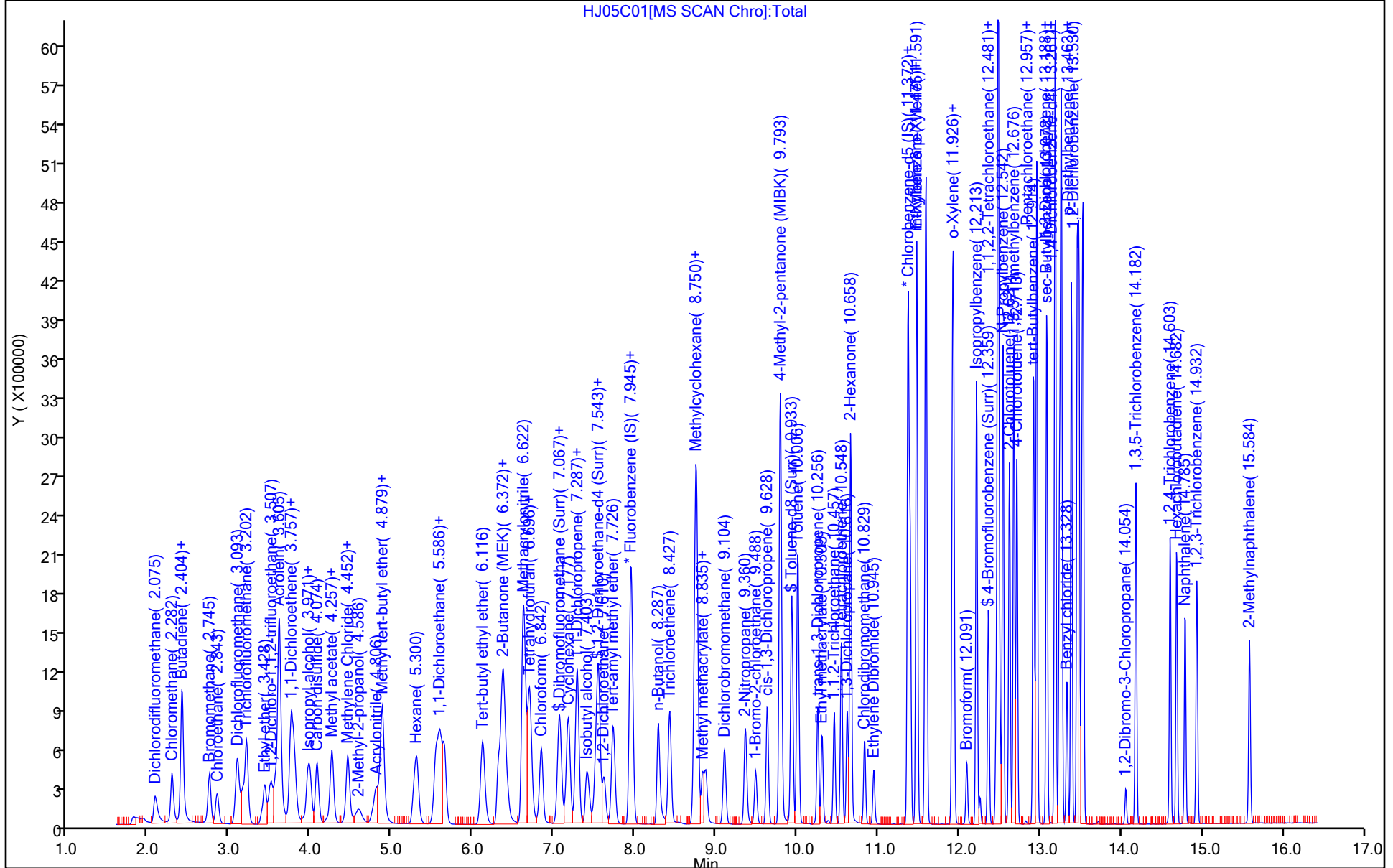
Units: uL

MSV_30_826ISS_00006

Amount Added: 5.00

Units: uL

Run Reagent



HJ05C01[MS SCAN Chrom]:Total

Eurofins Lancaster Laboratories Env, LLC

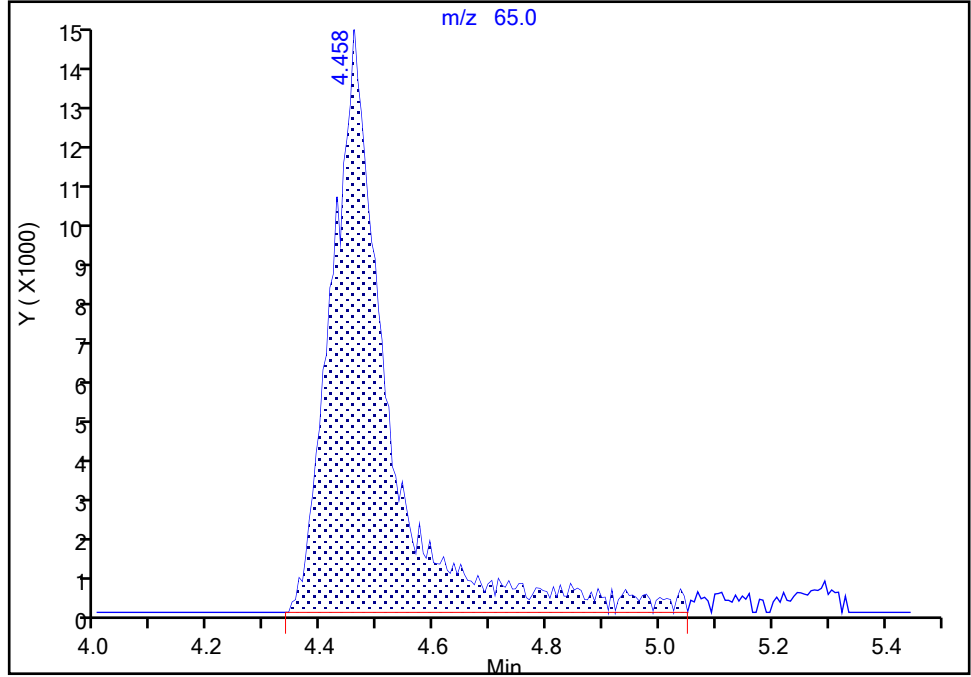
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Injection Date: 05-Jan-2021 09:40:30 Instrument ID: 19094
Lims ID: CCVIS VSTD
Client ID:
Operator ID: jkh09052 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

* 28 t-Butyl alcohol-d10 (IS), CAS: 53001-22-2

Signal: 1

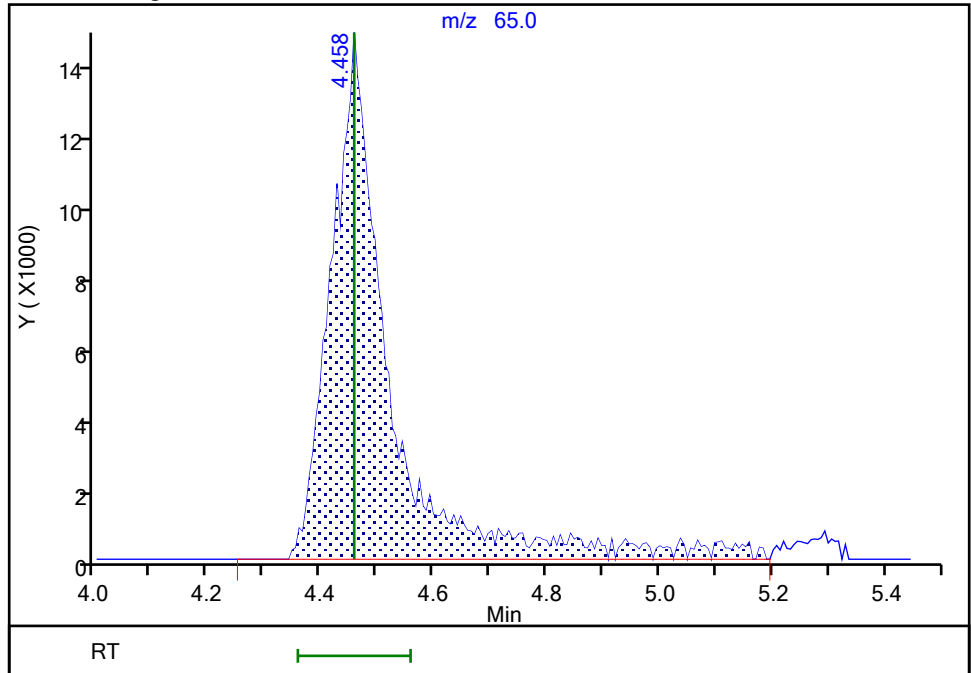
RT: 4.46
Area: 102705
Amount: 50.000000
Amount Units: ug/l

Processing Integration Results



RT: 4.46
Area: 105284
Amount: 50.000000
Amount Units: ug/l

Manual Integration Results



Reviewer: spositok, 06-Jan-2021 09:41:34
Audit Action: Manually Integrated

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

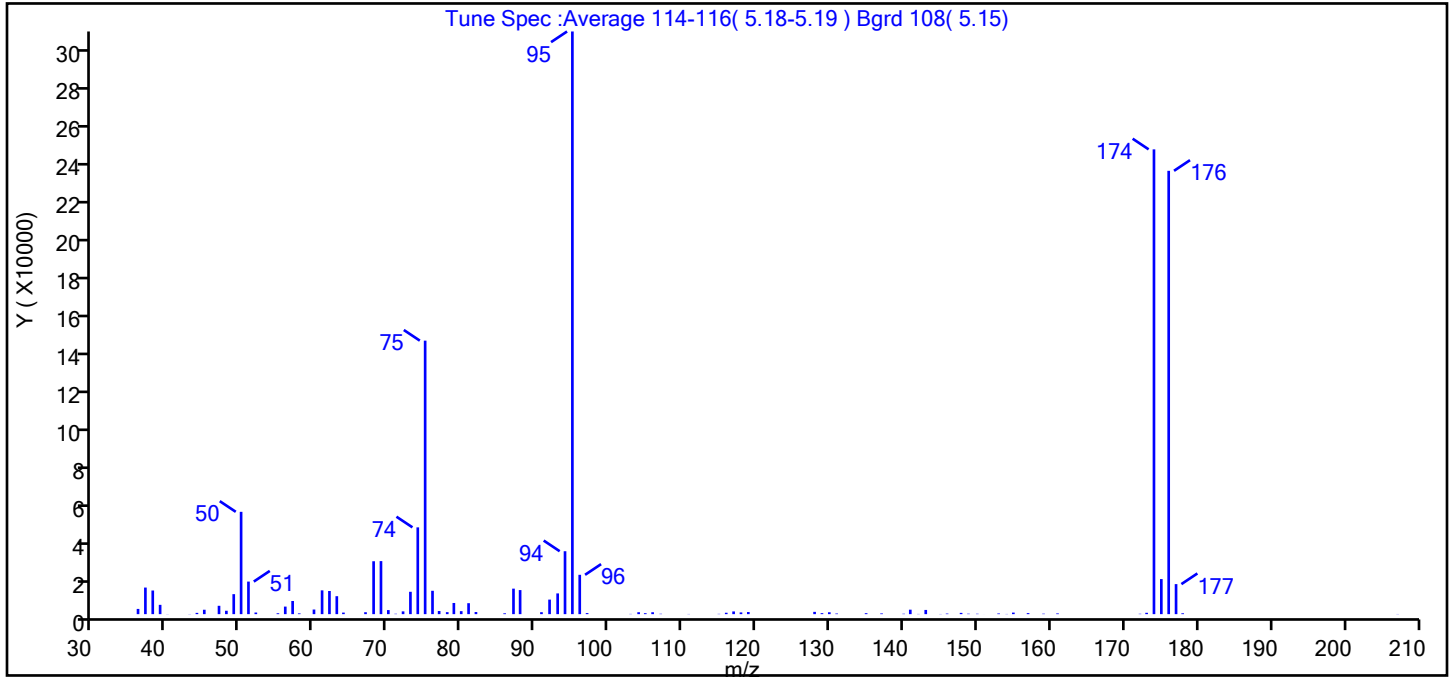
Reagents:

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

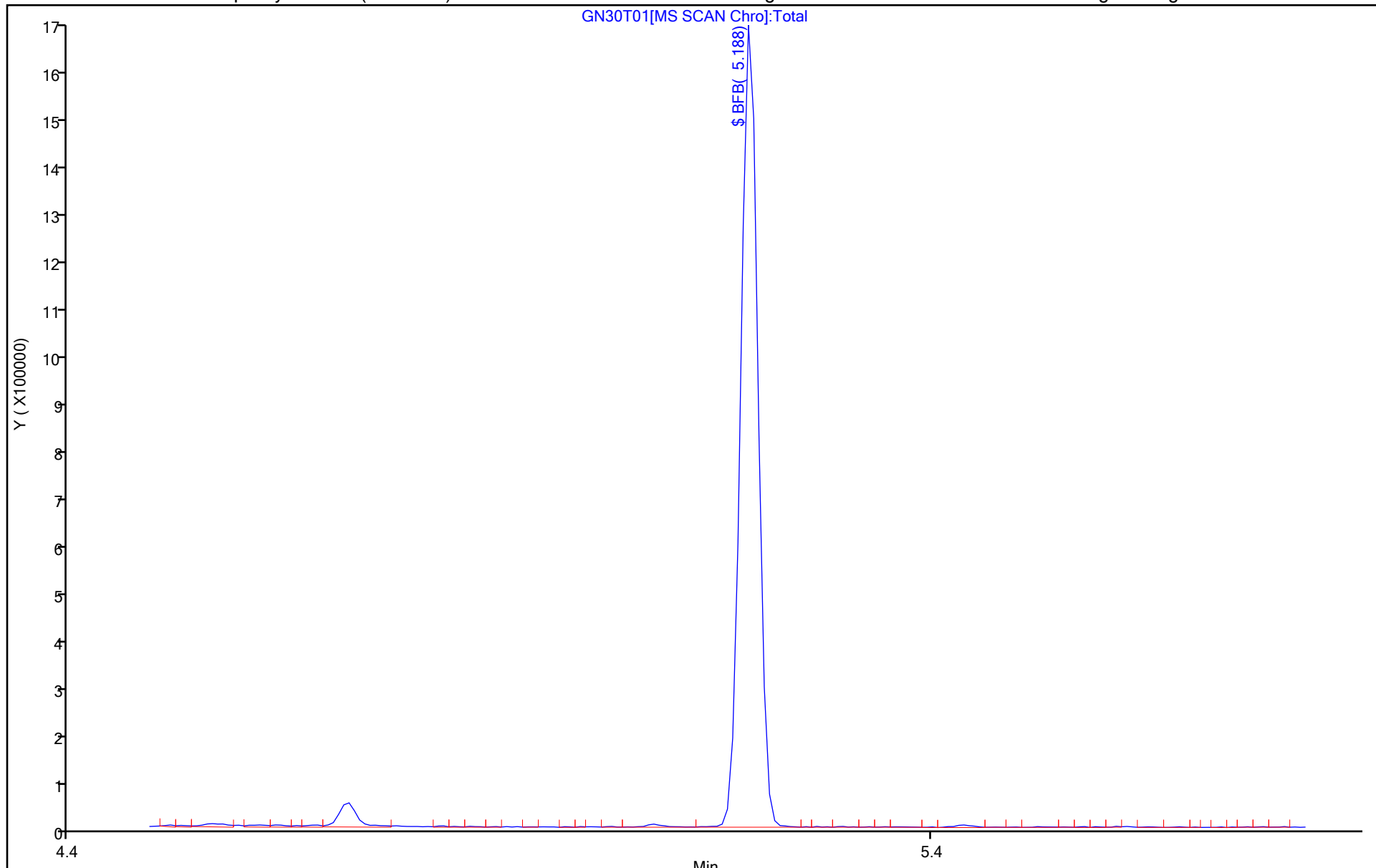
ALS Bottle#: 1

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\20201231-19071.b\GD31T31.D
 Lims ID: BFB
 Client ID:
 Sample Type: BFB
 Inject. Date: 31-Dec-2020 16:11:30 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: 16334
 Method: \\chromfs\Lancaster\ChromData\16334\20201231-19071.b\MSV_16334_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 31-Dec-2020 18:25:14 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: CTX1665

First Level Reviewer: campbellme Date: 31-Dec-2020 16:23:16

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	5.188	5.188	0.000	90	546560	NR	NR	
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QC Flag Legend

Processing Flags

NR - Missing Quant Standard

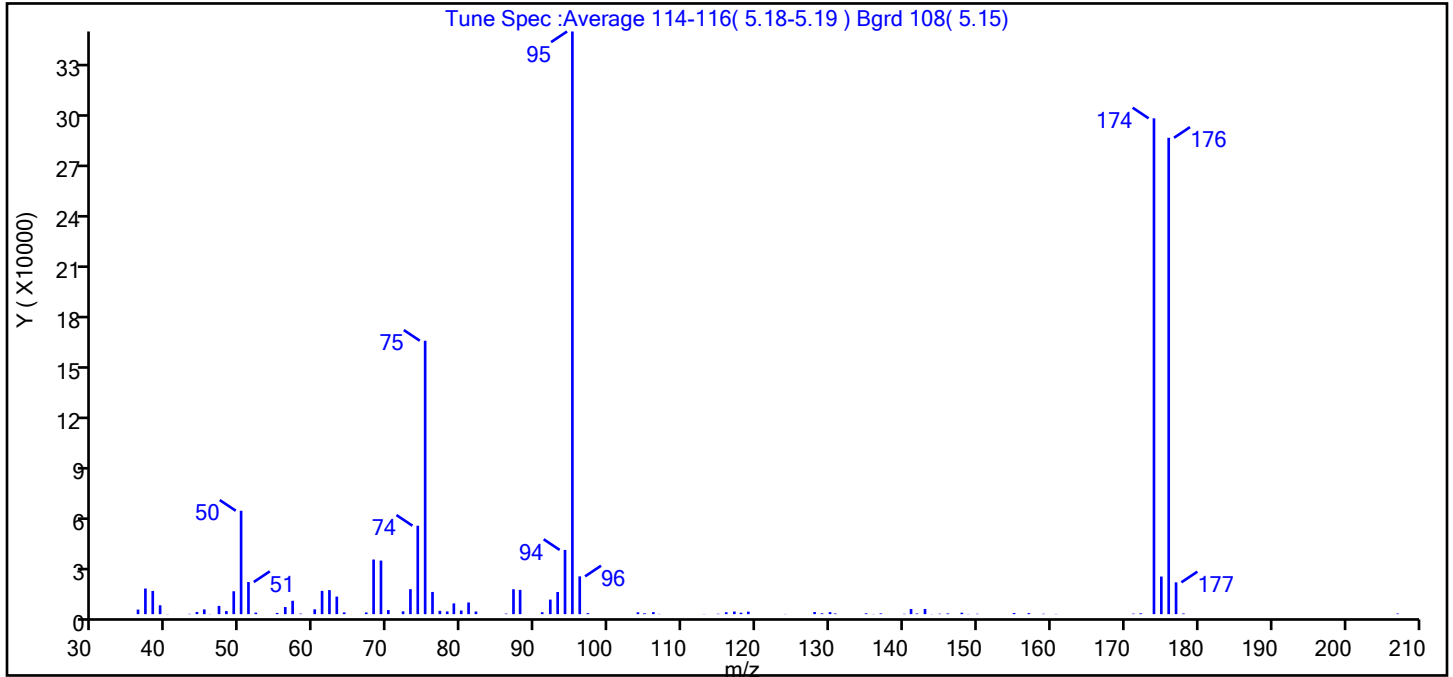
Reagents:

MSV_V_BFB_00003 Amount Added: 1.00 Units: uL

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20201231-19071.b\GD31T31.D
 Injection Date: 31-Dec-2020 16:11:30 Instrument ID: 16334
 Lims ID: BFB
 Client ID:
 Operator ID: MEC29284 ALS Bottle#: 1 Worklist Smp#: 1
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Method: MSV_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	17.7
75	30 to 60% of m/z 95	46.9
96	5 to 9% of m/z 95	6.5
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	85.1
175	5 to 9% of m/z 174	6.5 (7.6)
176	Greater than 95% but less than 101% of m/z 174	81.8 (96.1)
177	5 to 9% of m/z 176	5.5 (6.7)

Data File: \\chromfs\Lancaster\ChromData\16334\20201231-19071.b\GD31T31.D\MSV_16334_25mL.rsl\spectra.d
 Injection Date: 31-Dec-2020 16:11:30
 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: 89

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2704	64.00	1040	95.00	343424	142.00	405
37.00	15088	67.00	1004	96.00	22264	143.00	3059
38.00	13670	68.00	32192	97.00	594	144.00	91
39.00	5224	69.00	31568	104.00	1077	145.00	262
40.00	94	70.00	2381	105.00	499	146.00	425
43.00	197	72.00	1646	106.00	1192	148.00	843
44.00	1285	73.00	14715	107.00	136	149.00	102
45.00	2787	74.00	52112	113.00	110	150.00	232
46.00	107	75.00	161152	115.00	240	155.00	695
47.00	4865	76.00	13085	116.00	1130	157.00	600
48.00	1783	77.00	1967	117.00	1546	159.00	235
49.00	13496	78.00	1574	118.00	866	161.00	124
50.00	60944	79.00	6339	119.00	1471	171.00	300
51.00	18936	80.00	2138	124.00	110	172.00	477
52.00	900	81.00	6875	128.00	1245	174.00	292224
55.00	730	82.00	1548	129.00	481	175.00	22160
56.00	4202	86.00	311	130.00	1208	176.00	280768
57.00	7878	87.00	14667	131.00	405	177.00	18752
58.00	302	88.00	14302	135.00	477	178.00	393
60.00	2844	91.00	1112	136.00	111	207.00	364
61.00	13724	92.00	8586	137.00	443		
62.00	14171	93.00	13060	140.00	210		
63.00	10337	94.00	37840	141.00	3028		

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20201231-19071.b\GD31T31.D

Injection Date: 31-Dec-2020 16:11:30

Instrument ID: 16334

Operator ID: MEC29284

Lims ID: BFB

Worklist Smp#: 1

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

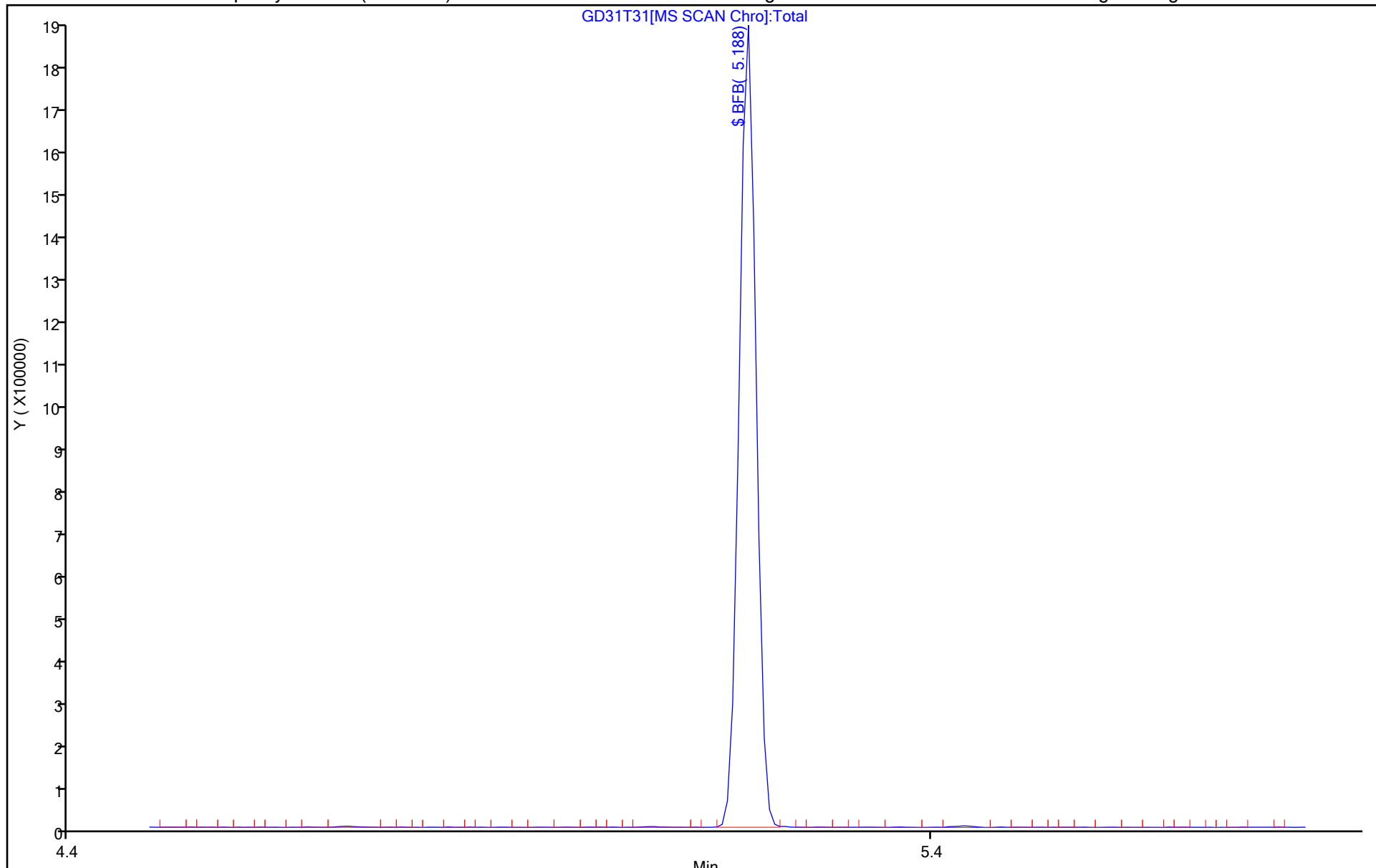
ALS Bottle#: 1

Method: MSV_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\20210104-19179.b\GJ04T31.D
 Lims ID: BFB
 Client ID:
 Sample Type: BFB
 Inject. Date: 04-Jan-2021 18:20:30 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: 16334
 Method: \\chromfs\Lancaster\ChromData\16334\20210104-19179.b\MSV_16334_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 04-Jan-2021 19:55:48 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: campbellme Date: 04-Jan-2021 18:31:17

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	5.188	5.188	0.000	93	277834	NR	NR	
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QC Flag Legend

Processing Flags

NR - Missing Quant Standard

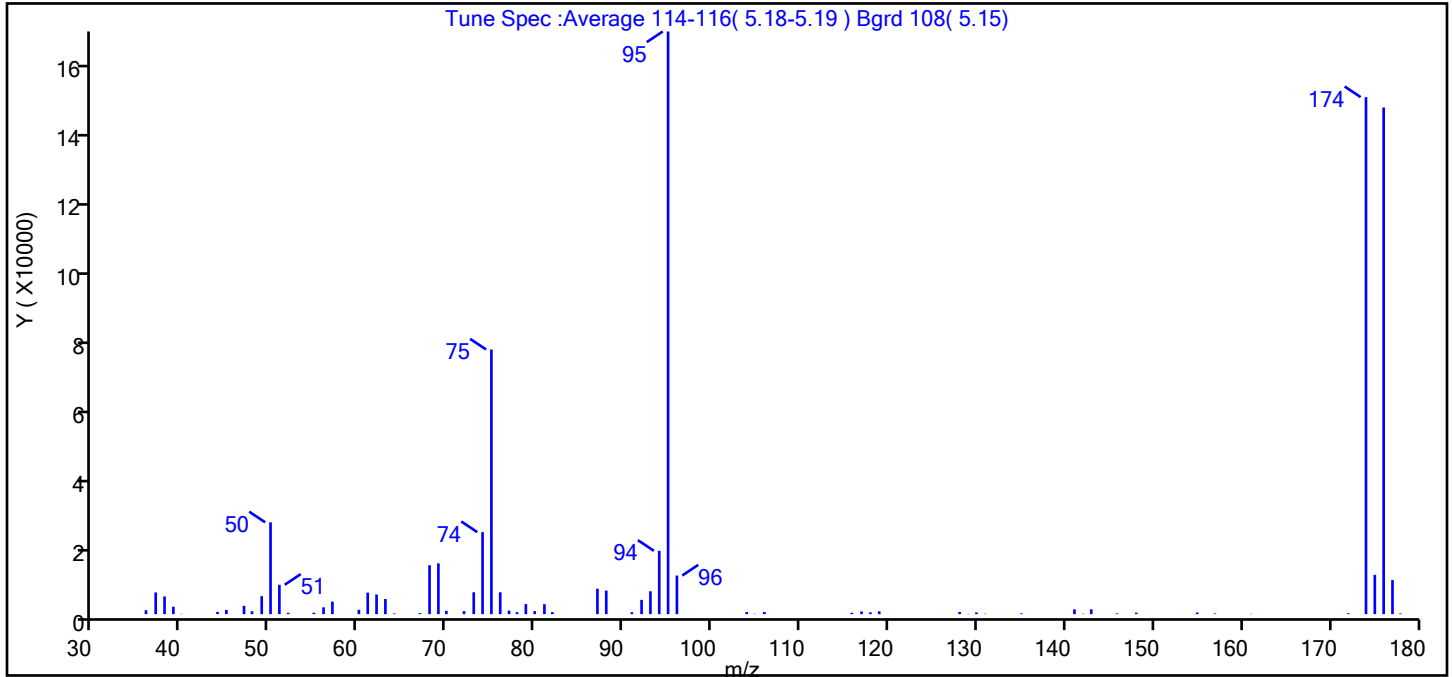
Reagents:

MSV_V_BFB_00003 Amount Added: 1.00 Units: uL

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20210104-19179.b\GJ04T31.D
 Injection Date: 04-Jan-2021 18:20:30 Instrument ID: 16334
 Lims ID: BFB
 Client ID:
 Operator ID: MEC29284 ALS Bottle#: 1 Worklist Smp#: 1
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Method: MSV_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	15.8
75	30 to 60% of m/z 95	45.4
96	5 to 9% of m/z 95	6.6
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	88.7
175	5 to 9% of m/z 174	6.7 (7.6)
176	Greater than 95% but less than 101% of m/z 174	87.0 (98.0)
177	5 to 9% of m/z 176	5.8 (6.7)

Data File: \\chromfs\Lancaster\ChromData\16334\20210104-19179.b\GJ04T31.D\MSV_16334_25mL.rslt\spectra.d
 Injection Date: 04-Jan-2021 18:20:30
 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: 70

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1147	62.00	5731	87.00	7417	131.00	99
37.00	6317	63.00	4417	88.00	6865	135.00	231
38.00	5163	64.00	192	91.00	564	141.00	1395
39.00	2156	67.00	306	92.00	4154	142.00	112
40.00	88	68.00	14254	93.00	6663	143.00	1405
44.00	664	69.00	14801	94.00	18448	146.00	225
45.00	1226	70.00	974	95.00	169792	148.00	441
47.00	2431	72.00	870	96.00	11253	155.00	475
48.00	846	73.00	6369	104.00	615	157.00	191
49.00	5235	74.00	23904	105.00	92	161.00	89
50.00	26752	75.00	77120	106.00	633	172.00	258
51.00	8557	76.00	6373	116.00	406	174.00	150656
52.00	397	77.00	1033	117.00	785	175.00	11453
55.00	416	78.00	563	118.00	535	176.00	147648
56.00	1984	79.00	2929	119.00	823	177.00	9916
57.00	3647	80.00	881	128.00	626	178.00	199
60.00	1282	81.00	2895	129.00	86		
61.00	6272	82.00	594	130.00	492		

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20210104-19179.b\GJ04T31.D

Injection Date: 04-Jan-2021 18:20:30

Instrument ID: 16334

Operator ID: MEC29284

Lims ID: BFB

Worklist Smp#: 1

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

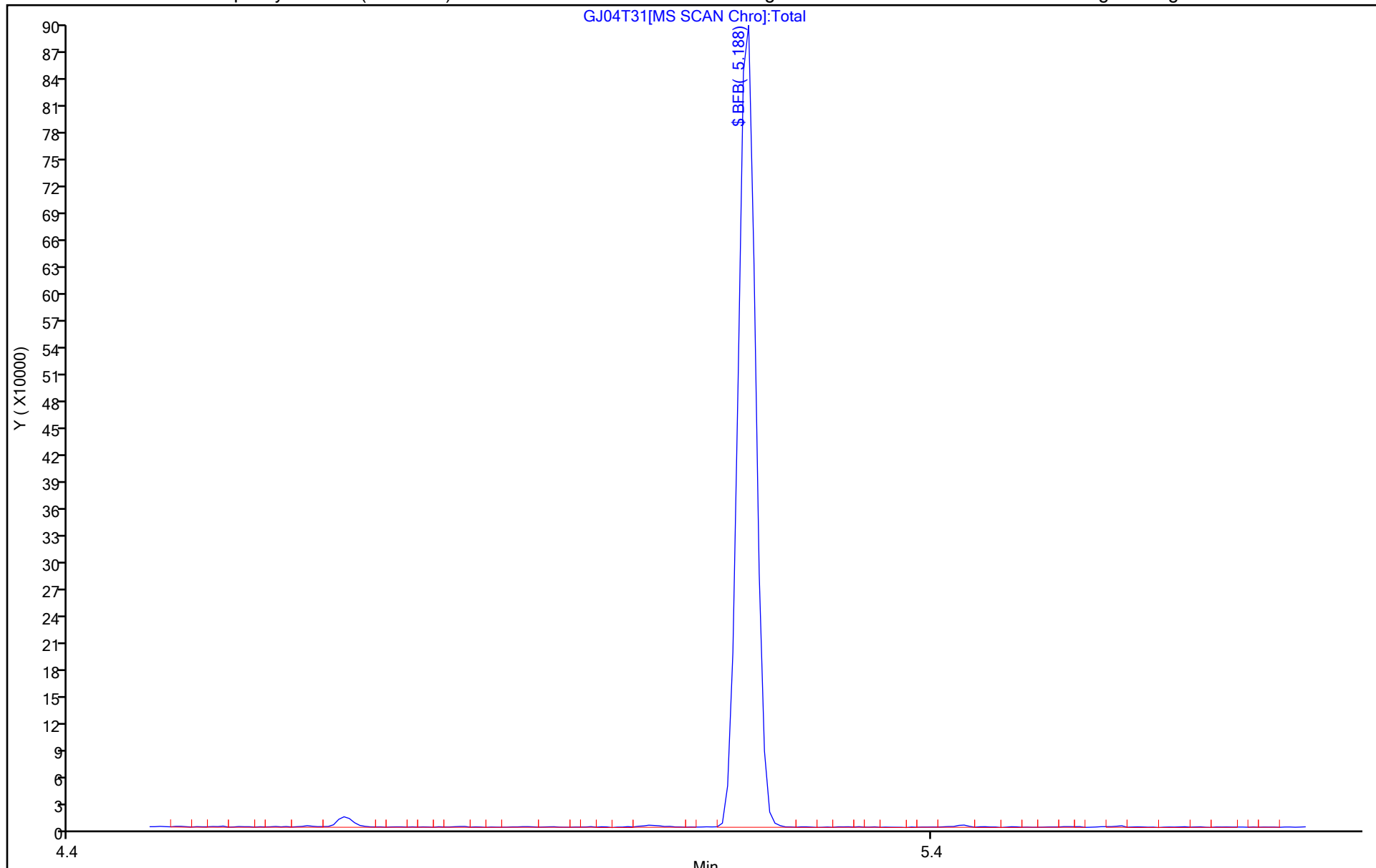
ALS Bottle#: 1

Method: MSV_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\19094\20210104-19149.b\Hj04T02.D
 Lims ID: bfb
 Client ID:
 Sample Type: BFB
 Inject. Date: 04-Jan-2021 12:39:30 ALS Bottle#: 1 Worklist Smp#: 1
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 410-0019149-001
 Misc. Info.: BFB JUL22-20
 Operator ID: jkh09052 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20210104-19149.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 05-Jan-2021 07:52:40 Calib Date: 04-Jan-2021 18:39:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20210104-19149.b\Hj04I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1665

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	5.343	5.343	0.000	87	370544	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\19094\20210104-19149.b\Hj04T02.D

Injection Date: 04-Jan-2021 12:39:30

Instrument ID: 19094

Lims ID: bfb

Client ID:

Operator ID: jkh09052

ALS Bottle#: 1

Worklist Smp#: 1

Injection Vol: 1.0 uL

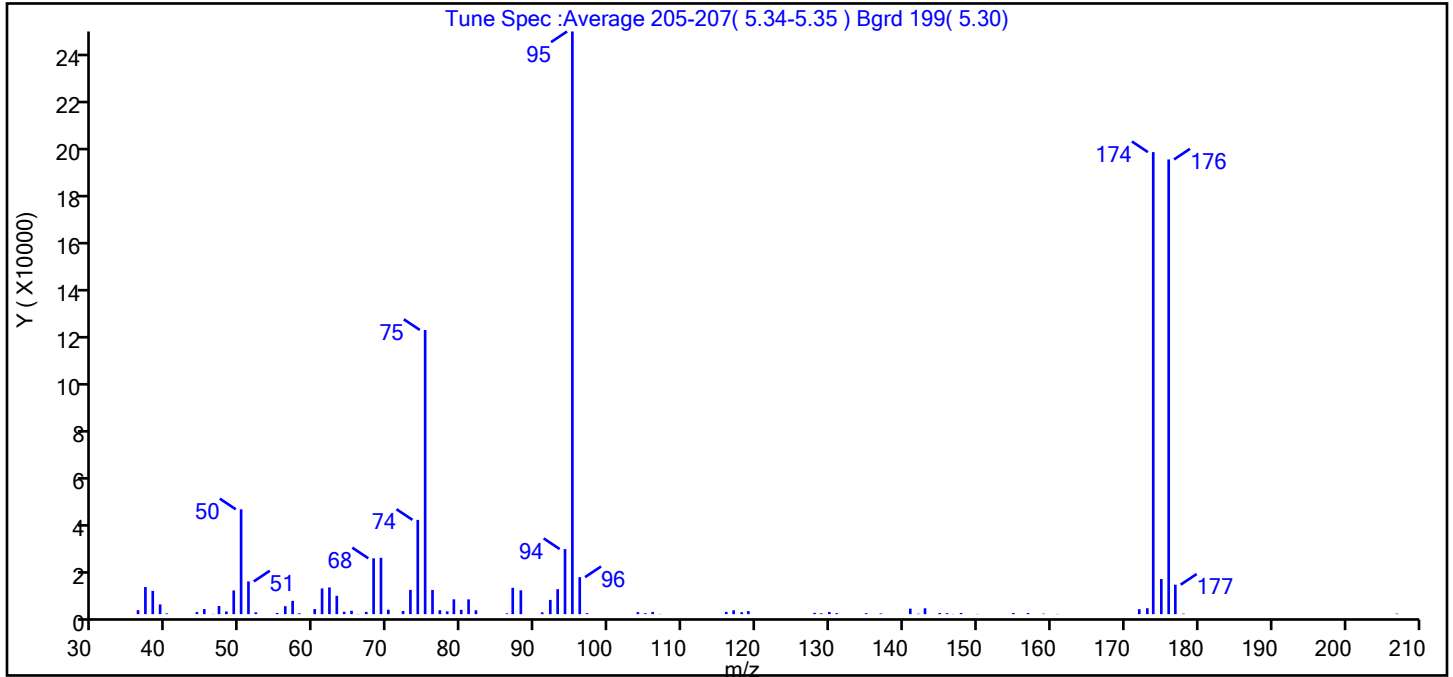
Dil. Factor: 1.0000

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

Tune Method: BFB Method 8260

\$ 165 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	18.0
75	30 to 60% of m/z 95	48.8
96	5 to 9% of m/z 95	6.4
173	Less than 2% of m/z 174	1.0 (1.3)
174	50 to 120% of m/z 95	79.3
175	5 to 9% of m/z 174	6.0 (7.6)
176	Greater than 95% but less than 101% of m/z 174	78.0 (98.4)
177	5 to 9% of m/z 176	5.1 (6.5)

Data File: \\chromfs\Lancaster\ChromData\19094\20210104-19149.b\Hj04T02.D\MSV_19094_25mL.rsl\spectra.d
Injection Date: 04-Jan-2021 12:39:30
Spectrum: Tune Spec :Average 205-207(5.34-5.35) Bgrd 199(5.30)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 84

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1660	63.00	7669	88.00	9955	137.00	280
37.00	11332	64.00	995	91.00	760	141.00	2306
38.00	9735	65.00	1408	92.00	5944	142.00	196
39.00	4070	66.00	89	93.00	10439	143.00	2455
40.00	318	67.00	932	94.00	27208	145.00	486
44.00	864	68.00	23344	95.00	243584	146.00	408
45.00	2124	69.00	23552	96.00	15478	147.00	84
46.00	104	70.00	1865	97.00	403	148.00	508
47.00	3397	72.00	1303	104.00	842	150.00	93
48.00	1119	73.00	10154	105.00	391	155.00	466
49.00	9908	74.00	39408	106.00	926	157.00	478
50.00	43832	75.00	118800	107.00	88	159.00	202
51.00	13676	76.00	10101	116.00	919	161.00	96
52.00	771	77.00	1655	117.00	1622	172.00	2075
55.00	497	78.00	1157	118.00	805	173.00	2465
56.00	3321	79.00	6203	119.00	1255	174.00	193152
57.00	5562	80.00	1822	128.00	536	175.00	14684
58.00	360	81.00	6176	129.00	353	176.00	190080
60.00	2130	82.00	1607	130.00	900	177.00	12316
61.00	10743	86.00	329	131.00	418	178.00	206
62.00	11170	87.00	11012	135.00	399	207.00	228

Data File: \\chromfs\Lancaster\ChromData\19094\20210104-19149.b\Hj04T02.D

Injection Date: 04-Jan-2021 12:39:30

Instrument ID: 19094

Operator ID: jkh09052

Lims ID: bfb

Worklist Smp#: 1

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

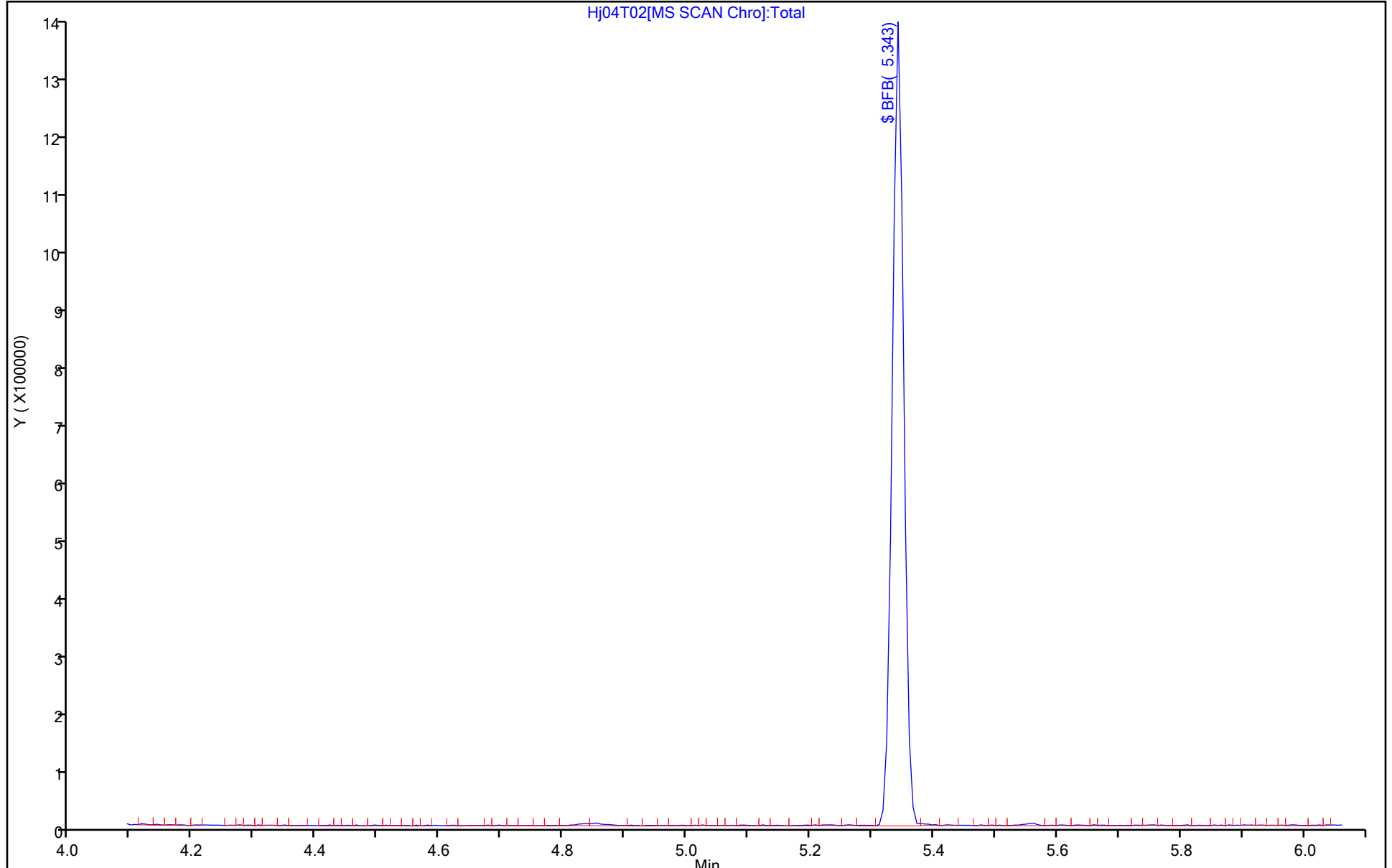
ALS Bottle#: 1

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC
 Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20210105-19216.b\Hj05T02.D
 Lims ID: BFB
 Client ID:
 Sample Type: BFB
 Inject. Date: 05-Jan-2021 09:04:30 ALS Bottle#: 1 Worklist Smp#: 1
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 410-0019216-001
 Misc. Info.: BFB
 Operator ID: jkh09052 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20210105-19216.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 05-Jan-2021 11:32:47 Calib Date: 04-Jan-2021 18:39:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20210104-19149.b\Hj04I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1665

First Level Reviewer: howej Date: 05-Jan-2021 09:16:03

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	5.343	5.343	0.000	87	133633	NR	NR	
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QC Flag Legend

Processing Flags

NR - Missing Quant Standard

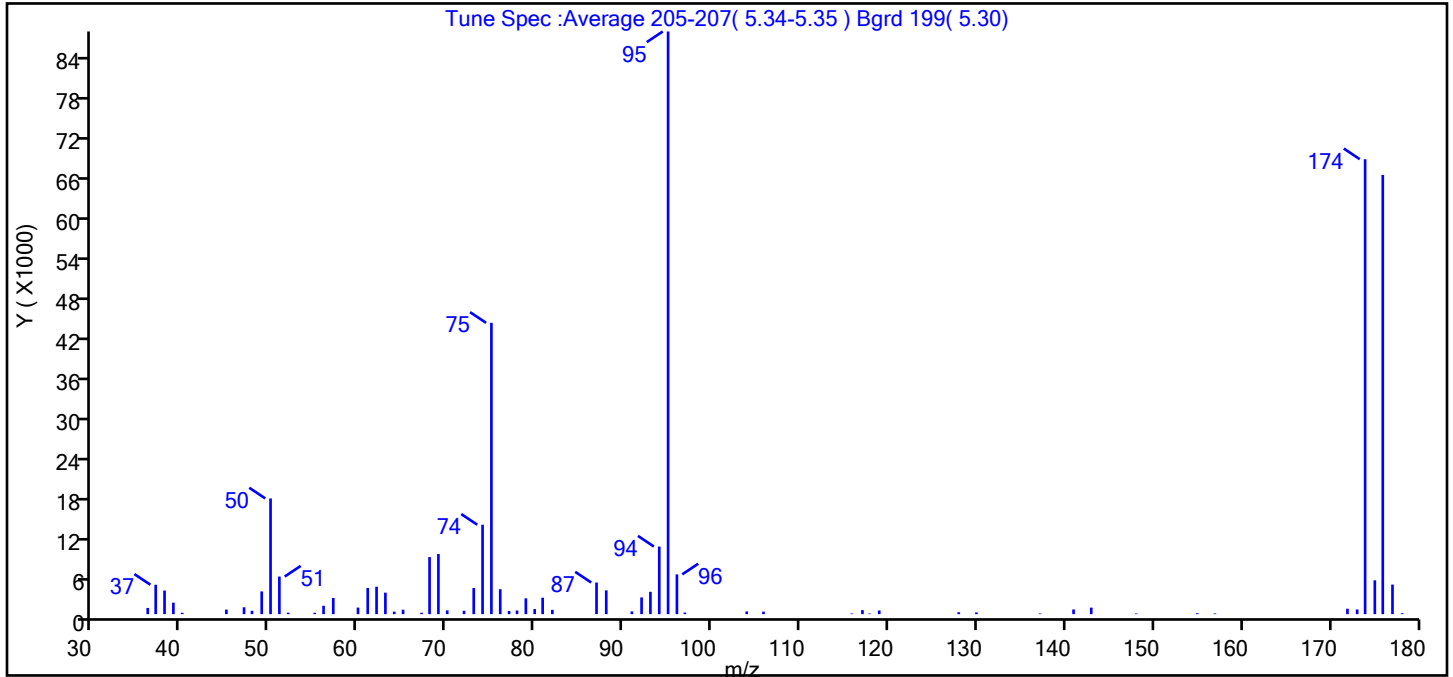
Reagents:

MSV_V_BFB_00003 Amount Added: 1.00 Units: uL

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20210105-19216.b\Hj05T02.D
 Injection Date: 05-Jan-2021 09:04:30 Instrument ID: 19094
 Lims ID: BFB
 Client ID:
 Operator ID: jkh09052 ALS Bottle#: 1 Worklist Smp#: 1
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
 Tune Method: BFB Method 8260

\$ 165 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	19.9
75	30 to 60% of m/z 95	50.0
96	5 to 9% of m/z 95	6.8
173	Less than 2% of m/z 174	0.8 (1.0)
174	50 to 120% of m/z 95	78.1
175	5 to 9% of m/z 174	5.8 (7.4)
176	Greater than 95% but less than 101% of m/z 174	75.4 (96.5)
177	5 to 9% of m/z 176	5.1 (6.7)

Data File: \\chromfs\Lancaster\ChromData\19094\20210105-19216.b\Hj05T02.D\MSV_19094_25mL.rsl\spectra.d
 Injection Date: 05-Jan-2021 09:04:30
 Spectrum: Tune Spec :Average 205-207(5.34-5.35) Bgrd 199(5.30)
 Base Peak: 95.00
 Minimum % Base Peak: 0
 Number of Points: 66

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	932	62.00	4116	81.00	2465	128.00	282
37.00	4413	63.00	3228	82.00	648	130.00	259
38.00	3544	64.00	376	87.00	4749	137.00	104
39.00	1722	65.00	664	88.00	3570	141.00	703
40.00	208	67.00	211	91.00	411	143.00	977
45.00	685	68.00	8563	92.00	2509	148.00	97
47.00	1032	69.00	9030	93.00	3353	155.00	136
48.00	505	70.00	565	94.00	10146	157.00	106
49.00	3415	72.00	504	95.00	87480	172.00	811
50.00	17376	73.00	3917	96.00	5973	173.00	701
51.00	5642	74.00	13425	97.00	238	174.00	68304
52.00	224	75.00	43736	104.00	404	175.00	5079
55.00	203	76.00	3741	106.00	378	176.00	65944
56.00	1252	77.00	469	116.00	99	177.00	4436
57.00	2426	78.00	552	117.00	608	178.00	136
60.00	986	79.00	2376	118.00	91		
61.00	3926	80.00	763	119.00	552		

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20210105-19216.b\Hj05T02.D

Injection Date: 05-Jan-2021 09:04:30

Instrument ID: 19094

Operator ID: jkh09052

Lims ID: BFB

Worklist Smp#: 1

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

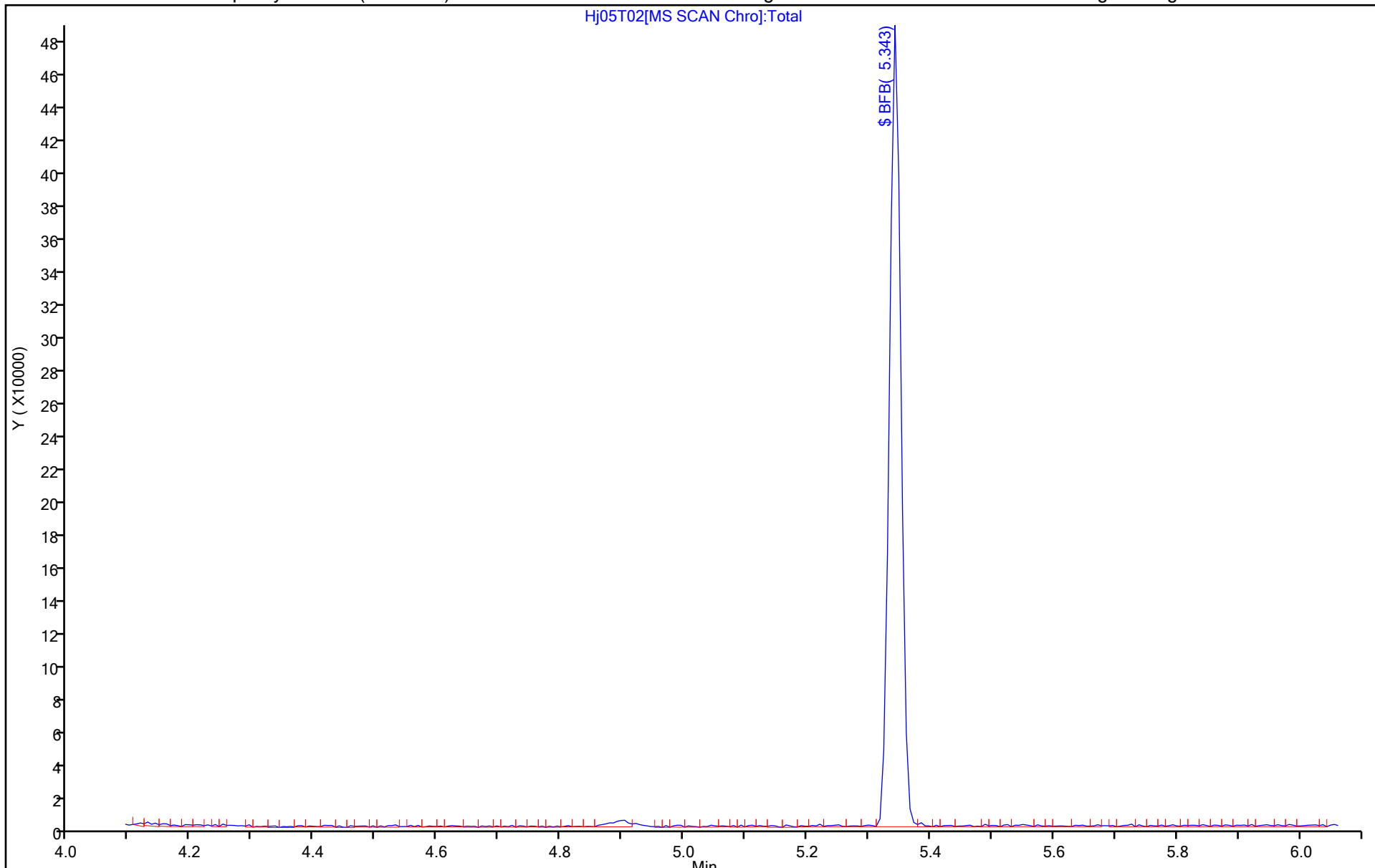
ALS Bottle#: 1

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-24913-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 410-81468/9
 Matrix: Water Lab File ID: GD31B31.D
 Analysis Method: 8260D Date Collected: _____
 Sample wt/vol: 25 (mL) Date Analyzed: 12/31/2020 18:59
 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.: 81468 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.070
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.060
75-34-3	1,1-Dichloroethane	ND		0.50	0.070
75-35-4	1,1-Dichloroethene	ND		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.060
107-06-2	1,2-Dichloroethane	ND		0.50	0.050
78-87-5	1,2-Dichloropropane	ND		0.50	0.060
78-93-3	2-Butanone (MEK)	ND		5.0	0.60
591-78-6	2-Hexanone	ND		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70
67-64-1	Acetone	ND		5.0	0.90
71-43-2	Benzene	ND		0.50	0.050
74-97-5	Bromochloromethane	ND		0.50	0.050
75-27-4	Bromodichloromethane	ND		0.50	0.050
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.070
75-15-0	Carbon disulfide	ND		1.0	0.060
56-23-5	Carbon tetrachloride	ND		0.50	0.070
108-90-7	Chlorobenzene	ND		0.50	0.060
75-00-3	Chloroethane	ND		0.50	0.070
67-66-3	Chloroform	ND		0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	ND		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.050
124-48-1	Dibromochloromethane	ND		0.50	0.070
100-41-4	Ethylbenzene	ND		0.50	0.060
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.050
75-09-2	Methylene Chloride	ND		0.50	0.070
100-42-5	Styrene	ND		0.50	0.050
127-18-4	Tetrachloroethene	ND		0.50	0.060
108-88-3	Toluene	ND		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	ND		0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-24913-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 410-81468/9
 Matrix: Water Lab File ID: GD31B31.D
 Analysis Method: 8260D Date Collected: _____
 Sample wt/vol: 25 (mL) Date Analyzed: 12/31/2020 18:59
 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.: 81468 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)	95		80-120
460-00-4	4-Bromofluorobenzene (Surr)	98		80-120
1868-53-7	Dibromofluoromethane (Surr)	97		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\16334\20201231-19071.b\GD31B31.D
 Lims ID: MB
 Client ID:
 Sample Type: MB
 Inject. Date: 31-Dec-2020 18:59:30 ALS Bottle#: 8 Worklist Smp#: 9
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0019071-009
 Misc. Info.: MB
 Operator ID: MEC29284 Instrument ID: 16334
 Method: \\chromfs\Lancaster\ChromData\16334\20201231-19071.b\MSV_16334_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 31-Dec-2020 19:23:35 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: CTX1665

First Level Reviewer: campbellme Date: 31-Dec-2020 19:23:35

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		1.934					ND	
3 Chlorodifluoromethane	51		1.959					ND	
4 Dimethyl ether	45	2.032	2.032	0.000	97	3965		0.0650	
5 Chloromethane	50		2.135					ND	
6 2-Chloro-1,1,1-Trifluoroethane	118		2.233					ND	
8 Vinyl chloride	62		2.245					ND	
7 Butadiene	39		2.245					ND	7
9 Bromomethane	94		2.580					ND	
10 Chloroethane	64		2.660					ND	
12 Dichlorofluoromethane	67		2.897					ND	
13 Trichlorofluoromethane	101		2.958					ND	
14 Ethanol	45		3.111					ND	
15 Ethyl ether	59		3.196					ND	
17 1,2-Dichloro-1,1,2-trifluoroethane	67		3.288					ND	
18 Acrolein	56		3.367					ND	
19 1,1-Dichloroethene	96		3.501					ND	
20 112TCTFE	101		3.538					ND	
21 Acetone	43		3.544					ND	
22 Isopropyl alcohol	45		3.678					ND	
23 Iodomethane	142		3.690					ND	
24 Ethyl bromide	108		3.720					ND	
25 Carbon disulfide	76		3.787					ND	
26 Acetonitrile	41		3.940					ND	
27 Methyl acetate	43		3.946					ND	7
28 3-Chloro-1-propene	41		3.976					ND	
29 Methylene Chloride	84		4.159					ND	
* 30 t-Butyl alcohol-d10 (IS)	65	4.190	4.184	0.006	0	148461	50.0	50.0	M
31 2-Methyl-2-propanol	59		4.306					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		4.562					ND	
35 Hexane	57		4.995					ND	
36 Vinyl acetate	43		5.233					ND	
37 1,1-Dichloroethane	63		5.238					ND	
38 Isopropyl ether	45		5.293					ND	
39 2-Chloro-1,3-butadiene	53		5.348					ND	
40 Tert-butyl ethyl ether	59		5.836					ND	
41 2-Butanone (MEK)	43		6.037					ND	
42 cis-1,2-Dichloroethene	96		6.080					ND	
43 2,2-Dichloropropane	77		6.086					ND	
44 Ethyl acetate	43		6.104					ND	
45 Propionitrile	54		6.135					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		6.409					ND	
50 Tetrahydrofuran	71		6.409					ND	
51 Chloroform	83		6.561					ND	
\$ 52 Dibromofluoromethane (Surr)	113	6.787	6.781	0.006	94	436507	10.0	9.73	
53 1,1,1-Trichloroethane	97		6.781					ND	
54 Cyclohexane	56		6.878					ND	
55 1-Chlorobutane	56		6.940					ND	
56 Carbon tetrachloride	117		6.988					ND	
57 1,1-Dichloropropene	75		7.000					ND	
58 Isobutyl alcohol	41		7.159					ND	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.238	7.238	0.000	0	90801	10.0	9.51	
60 Benzene	78		7.262					ND	
61 1,2-Dichloroethane	62		7.336					ND	
62 Isopropyl acetate	43		7.348					ND	
63 Tert-amyl methyl ether	73		7.451					ND	
* 64 Fluorobenzene (IS)	96	7.671	7.671	0.000	98	1854329	10.0	10.0	
65 n-Heptane	43		7.677					ND	7
66 t-Amyl alcohol	73		7.842					ND	
67 n-Butanol	56		8.049					ND	
68 Trichloroethene	95		8.146					ND	
69 Methylcyclohexane	83		8.451					ND	
70 1,2-Dichloropropane	63		8.482					ND	
71 2-ethoxy-2-methyl butane	87		8.494					ND	
73 1,4-Dioxane	88		8.567					ND	
72 Methyl methacrylate	69		8.573					ND	
74 Dibromomethane	93		8.591					ND	
75 n-Propyl acetate	61		8.646					ND	
76 Dichlorobromomethane	83		8.829					ND	
77 2-Nitropropane	41		9.116					ND	
78 Chloroacetonitrile	75		9.189					ND	
79 2-Chloroethyl vinyl ether	63		9.195					ND	
80 1-Bromo-2-chloroethane	63		9.219					ND	
81 cis-1,3-Dichloropropene	75		9.384					ND	
82 4-Methyl-2-pentanone (MIBK)	43		9.561					ND	7
\$ 83 Toluene-d8 (Surr)	98	9.689	9.689	0.000	94	1802806	10.0	10.0	
84 Toluene	92		9.768					ND	
96 trans-1,3-Dichloropropene	75		10.030					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		10.091					ND	
99 1,1,2-Trichloroethane	97		10.231					ND	
100 Tetrachloroethene	166		10.317					ND	
101 1,3-Dichloropropane	76		10.396					ND	
102 2-Hexanone	43		10.451					ND	
103 n-Butyl acetate	43		10.567					ND	
104 Chlorodibromomethane	129		10.609					ND	
105 Ethylene Dibromide	107		10.719					ND	
* 106 Chlorobenzene-d5 (IS)	117	11.152	11.152	0.000	86	1348051	10.0	10.0	
107 1-Chlorohexane	91		11.158					ND	7
108 Chlorobenzene	112		11.176					ND	
S 109 Xylenes, Total	106		11.245					ND	7
110 1,1,1,2-Tetrachloroethane	131		11.262					ND	
111 Ethylbenzene	91		11.262					ND	
112 m-Xylene & p-Xylene	106		11.377					ND	
113 o-Xylene	106		11.707					ND	
114 Styrene	104		11.719					ND	
115 Bromoform	173		11.877					ND	
116 Isopropylbenzene	105		12.005					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	12.146	12.146	0.000	90	673714	10.0	9.81	
120 1,1,2,2-Tetrachloroethane	83		12.255					ND	
121 Bromobenzene	156		12.261					ND	
122 trans-1,4-Dichloro-2-butene	53		12.280					ND	
123 1,2,3-Trichloropropane	110		12.298					ND	
124 N-Propylbenzene	91		12.335					ND	
125 2-Chlorotoluene	126		12.408					ND	
126 1,3,5-Trimethylbenzene	105		12.469					ND	
127 4-Chlorotoluene	126		12.499					ND	
128 tert-Butylbenzene	134		12.713					ND	
129 Pentachloroethane	167		12.743					ND	
130 1,2,4-Trimethylbenzene	105		12.749					ND	
131 sec-Butylbenzene	105		12.871					ND	
132 1,3-Dichlorobenzene	146		12.969					ND	7
133 4-Isopropyltoluene	119		12.981					ND	7
* 134 1,4-Dichlorobenzene-d4	152	13.023	13.023	0.000	97	730578	10.0	10.0	
135 1,4-Dichlorobenzene	146		13.042					ND	7
136 1,2,3-Trimethylbenzene	120		13.054					ND	7
137 Benzyl chloride	126		13.121					ND	
138 p-Diethylbenzene	119		13.176					ND	
139 n-Butylbenzene	92		13.267					ND	
140 1,2-Dichlorobenzene	146		13.304					ND	
141 Hexachloroethane	201		13.505					ND	
142 1,2-Dibromo-3-Chloropropane	155		13.840					ND	
143 1,3,5-Trichlorobenzene	180		13.962					ND	7
144 1,2,4-Trichlorobenzene	180		14.383					ND	
145 Hexachlorobutadiene	225		14.468					ND	
146 Naphthalene	128		14.566					ND	7
147 1,2,3-Trichlorobenzene	180		14.706					ND	
148 2-Methylnaphthalene	142	15.322	15.322	0.000	90	3200		0.0286	

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

M - Manually Integrated

U - Marked Undetected

Reagents:

MSV_29_826ISS_00014

Amount Added: 1.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\16334\20201231-19071.b\GD31B31.D

Injection Date: 31-Dec-2020 18:59:30

Instrument ID: 16334

Operator ID: MEC29284

Lims ID: MB

Worklist Smp#: 9

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

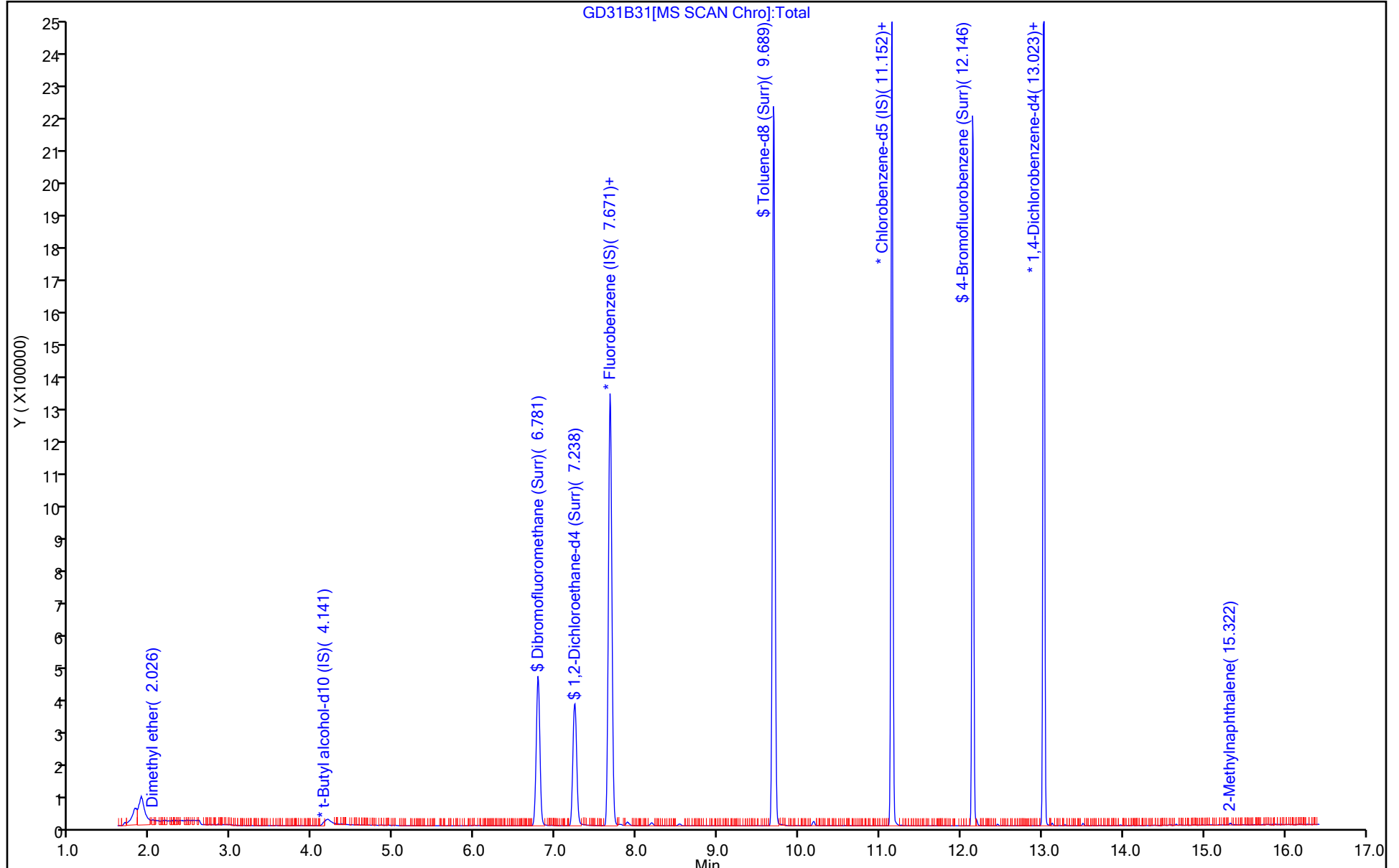
ALS Bottle#: 8

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
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\16334\20201231-19071.b\GD31B31.D
 Lims ID: MB
 Client ID:
 Sample Type: MB
 Inject. Date: 31-Dec-2020 18:59:30 ALS Bottle#: 8 Worklist Smp#: 9
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0019071-009
 Misc. Info.: MB
 Operator ID: MEC29284 Instrument ID: 16334
 Method: \\chromfs\Lancaster\ChromData\16334\20201231-19071.b\MSV_16334_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 31-Dec-2020 19:23:35 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: CTX1665

First Level Reviewer: campbellme Date: 31-Dec-2020 19:23:35

Compound	Amount Added	Amount Recovered	% Rec.
\$ 52 Dibromofluoromethane (Surr)	10.0	9.73	97.26
\$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	9.51	95.09
\$ 83 Toluene-d8 (Surr)	10.0	10.0	100.24
\$ 119 4-Bromofluorobenzene (Surr)	10.0	9.81	98.11

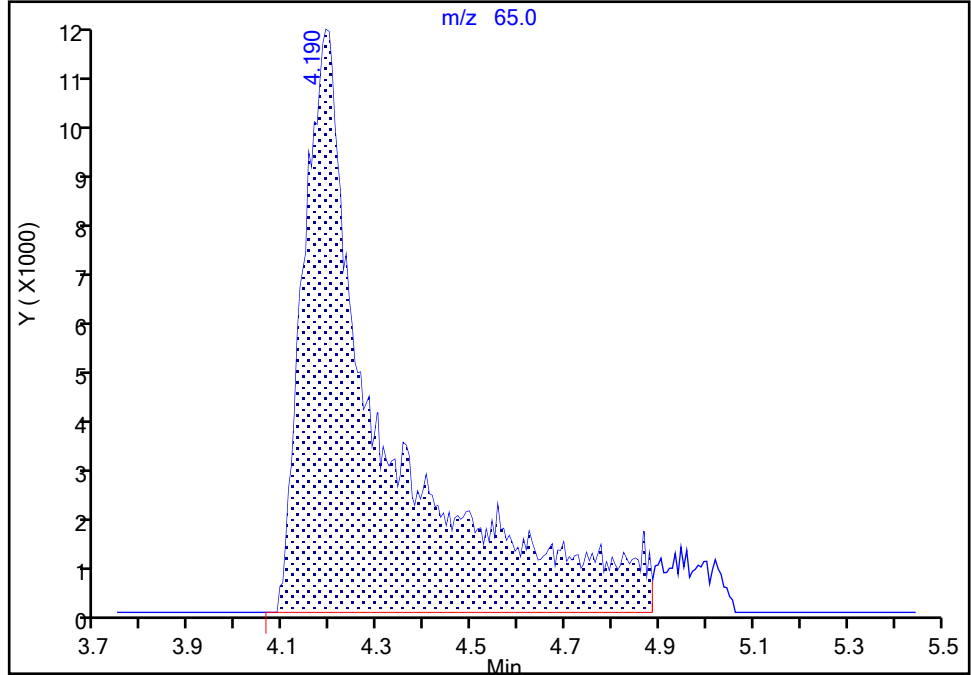
Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20201231-19071.b\GD31B31.D
Injection Date: 31-Dec-2020 18:59:30 Instrument ID: 16334
Lims ID: MB
Client ID:
Operator ID: MEC29284 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 t-Butyl alcohol-d10 (IS), CAS: 53001-22-2
Signal: 1

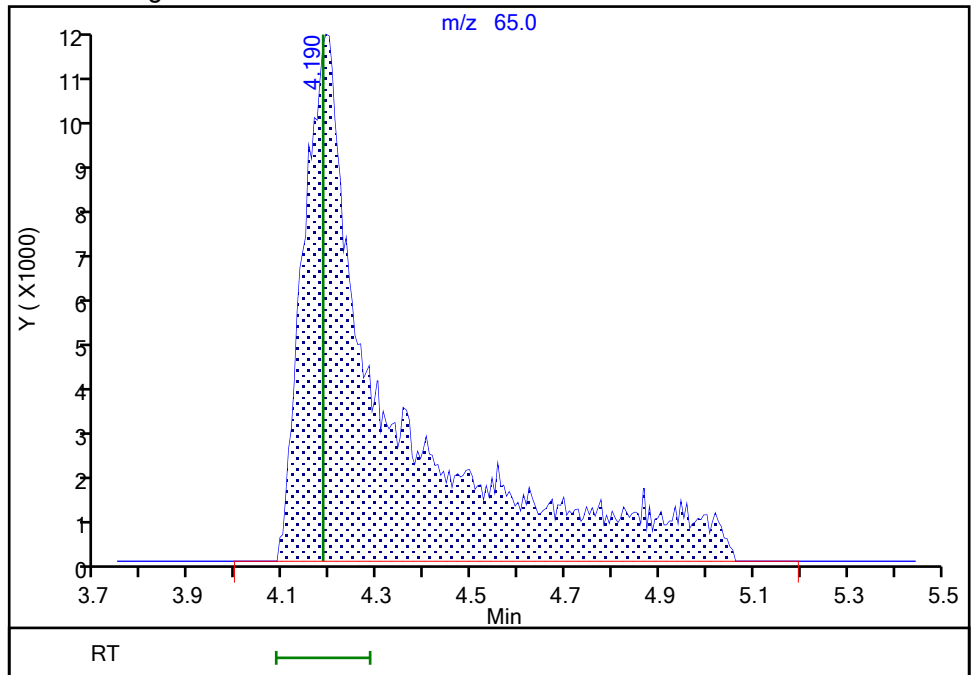
RT: 4.19
Area: 139704
Amount: 50.000000
Amount Units: ug/l

Processing Integration Results



RT: 4.19
Area: 148461
Amount: 50.000000
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 31-Dec-2020 19:23:11
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-24913-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 410-81892/10
 Matrix: Water Lab File ID: GJ04B31.D
 Analysis Method: 8260D Date Collected: _____
 Sample wt/vol: 25 (mL) Date Analyzed: 01/04/2021 21:29
 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.: 81892 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.070
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.060
75-34-3	1,1-Dichloroethane	ND		0.50	0.070
75-35-4	1,1-Dichloroethene	ND		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.060
107-06-2	1,2-Dichloroethane	ND		0.50	0.050
78-87-5	1,2-Dichloropropane	ND		0.50	0.060
78-93-3	2-Butanone (MEK)	ND		5.0	0.60
591-78-6	2-Hexanone	ND		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70
67-64-1	Acetone	ND		5.0	0.90
71-43-2	Benzene	ND		0.50	0.050
74-97-5	Bromochloromethane	ND		0.50	0.050
75-27-4	Bromodichloromethane	ND		0.50	0.050
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.070
75-15-0	Carbon disulfide	ND		1.0	0.060
56-23-5	Carbon tetrachloride	ND		0.50	0.070
108-90-7	Chlorobenzene	ND		0.50	0.060
75-00-3	Chloroethane	ND		0.50	0.070
67-66-3	Chloroform	ND		0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	ND		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.050
124-48-1	Dibromochloromethane	ND		0.50	0.070
100-41-4	Ethylbenzene	ND		0.50	0.060
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.050
75-09-2	Methylene Chloride	ND		0.50	0.070
100-42-5	Styrene	ND		0.50	0.050
127-18-4	Tetrachloroethene	ND		0.50	0.060
108-88-3	Toluene	ND		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	ND		0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-24913-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 410-81892/10
 Matrix: Water Lab File ID: GJ04B31.D
 Analysis Method: 8260D Date Collected: _____
 Sample wt/vol: 25 (mL) Date Analyzed: 01/04/2021 21:29
 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.: 81892 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)	96		80-120
1868-53-7	Dibromofluoromethane (Surr)	97		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\16334\20210104-19179.b\GJ04B31.D
 Lims ID: MB
 Client ID:
 Sample Type: MB
 Inject. Date: 04-Jan-2021 21:29:30 ALS Bottle#: 9 Worklist Smp#: 10
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0019179-010
 Misc. Info.: MB
 Operator ID: MEC29284 Instrument ID: 16334
 Method: \\chromfs\Lancaster\ChromData\16334\20210104-19179.b\MSV_16334_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 04-Jan-2021 21:53:23 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: campbellme Date: 04-Jan-2021 21:53:23

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116		1.885					ND	
2 Dichlorodifluoromethane	85		1.946					ND	
3 Chlorodifluoromethane	51		1.959					ND	
4 Dimethyl ether	45		2.032					ND	7
5 Chloromethane	50		2.141					ND	
6 2-Chloro-1,1,1-Trifluoroethane	118		2.233					ND	
8 Vinyl chloride	62		2.257					ND	
7 Butadiene	39		2.257					ND	7
9 Bromomethane	94		2.587					ND	
10 Chloroethane	64		2.666					ND	
12 Dichlorofluoromethane	67		2.904					ND	
13 Trichlorofluoromethane	101		2.971					ND	
14 Ethanol	45		3.111					ND	
15 Ethyl ether	59		3.202					ND	
17 1,2-Dichloro-1,1,2-trifluoroetha	67		3.294					ND	
18 Acrolein	56		3.379					ND	
19 1,1-Dichloroethene	96		3.507					ND	
20 112TCTFE	101		3.550					ND	
21 Acetone	43		3.550					ND	
23 Iodomethane	142		3.702					ND	
22 Isopropyl alcohol	45		3.714					ND	
24 Ethyl bromide	108		3.733					ND	
25 Carbon disulfide	76		3.800					ND	
26 Acetonitrile	41		3.940					ND	
27 Methyl acetate	43		3.958					ND	
28 3-Chloro-1-propene	41		3.983					ND	
29 Methylene Chloride	84		4.172					ND	
* 30 t-Butyl alcohol-d10 (IS)	65	4.178	4.190	-0.012	0	145623	50.0	50.0	
31 2-Methyl-2-propanol	59		4.318					ND	
32 Acrylonitrile	53		4.513					ND	
33 Methyl tert-butyl ether	73		4.568					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		4.574					ND	
35 Hexane	57		5.001					ND	
36 Vinyl acetate	43		5.233					ND	
37 1,1-Dichloroethane	63		5.245					ND	
38 Isopropyl ether	45		5.305					ND	
39 2-Chloro-1,3-butadiene	53		5.354					ND	
40 Tert-butyl ethyl ether	59		5.836					ND	
41 2-Butanone (MEK)	43		6.043					ND	
42 cis-1,2-Dichloroethene	96		6.080					ND	
43 2,2-Dichloropropane	77		6.098					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		6.360					ND	
49 Chlorobromomethane	128		6.409					ND	
50 Tetrahydrofuran	71		6.415					ND	
51 Chloroform	83		6.567					ND	
\$ 52 Dibromofluoromethane (Surr)	113	6.781	6.787	-0.006	94	494653	10.0	9.73	
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		7.000					ND	
58 Isobutyl alcohol	41		7.159					ND	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.232	7.238	-0.006	0	105894	10.0	9.79	
60 Benzene	78		7.262					ND	
61 1,2-Dichloroethane	62		7.336					ND	
62 Isopropyl acetate	43		7.348					ND	
63 Tert-amyl methyl ether	73		7.458					ND	
* 64 Fluorobenzene (IS)	96	7.671	7.671	0.000	99	2100142	10.0	10.0	
65 n-Heptane	43		7.677					ND	
66 t-Amyl alcohol	73		7.842					ND	
67 n-Butanol	56		8.049					ND	
68 Trichloroethene	95		8.146					ND	
69 Methylcyclohexane	83		8.451					ND	
70 1,2-Dichloropropane	63		8.488					ND	
71 2-ethoxy-2-methyl butane	87		8.494					ND	
73 1,4-Dioxane	88		8.573					ND	
72 Methyl methacrylate	69		8.573					ND	
74 Dibromomethane	93		8.591					ND	
75 n-Propyl acetate	61		8.646					ND	
76 Dichlorobromomethane	83		8.835					ND	
77 2-Nitropropane	41		9.116					ND	
78 Chloroacetonitrile	75		9.189					ND	
79 2-Chloroethyl vinyl ether	63		9.195					ND	
80 1-Bromo-2-chloroethane	63		9.219					ND	
81 cis-1,3-Dichloropropene	75		9.378					ND	
82 4-Methyl-2-pentanone (MIBK)	43		9.561					ND	7
\$ 83 Toluene-d8 (Surr)	98	9.689	9.689	0.000	93	2027917	10.0	9.86	
84 Toluene	92		9.768					ND	
96 trans-1,3-Dichloropropene	75		10.030					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		10.091					ND	
99 1,1,2-Trichloroethane	97		10.231					ND	
100 Tetrachloroethene	166		10.317					ND	
101 1,3-Dichloropropane	76		10.396					ND	
102 2-Hexanone	43		10.451					ND	
103 n-Butyl acetate	43	10.561	10.567	-0.006	1	907		0.0116	
104 Chlorodibromomethane	129		10.609					ND	
105 Ethylene Dibromide	107		10.719					ND	
* 106 Chlorobenzene-d5 (IS)	117	11.146	11.152	-0.006	85	1541085	10.0	10.0	
107 1-Chlorohexane	91		11.158					ND	7
108 Chlorobenzene	112		11.176					ND	
S 109 Xylenes, Total	106		11.245					ND	7
110 1,1,1,2-Tetrachloroethane	131		11.256					ND	
111 Ethylbenzene	91		11.262					ND	
112 m-Xylene & p-Xylene	106		11.377					ND	
113 o-Xylene	106		11.707					ND	
114 Styrene	104		11.719					ND	
115 Bromoform	173		11.877					ND	
116 Isopropylbenzene	105		12.005					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	12.146	12.146	0.000	92	755616	10.0	9.63	
120 1,1,2,2-Tetrachloroethane	83		12.249					ND	
121 Bromobenzene	156		12.261					ND	
122 trans-1,4-Dichloro-2-butene	53		12.280					ND	
123 1,2,3-Trichloropropane	110		12.298					ND	
124 N-Propylbenzene	91		12.335					ND	
125 2-Chlorotoluene	126		12.408					ND	
126 1,3,5-Trimethylbenzene	105		12.469					ND	
127 4-Chlorotoluene	126		12.499					ND	
128 tert-Butylbenzene	134		12.706					ND	
129 Pentachloroethane	167		12.743					ND	
130 1,2,4-Trimethylbenzene	105		12.749					ND	
131 sec-Butylbenzene	105		12.871					ND	
132 1,3-Dichlorobenzene	146		12.969					ND	
133 4-Isopropyltoluene	119		12.981					ND	
* 134 1,4-Dichlorobenzene-d4	152	13.023	13.024	-0.001	94	856967	10.0	10.0	
135 1,4-Dichlorobenzene	146		13.042					ND	
136 1,2,3-Trimethylbenzene	120		13.054					ND	7
137 Benzyl chloride	126		13.121					ND	
138 p-Diethylbenzene	119		13.176					ND	
139 n-Butylbenzene	92		13.267					ND	
140 1,2-Dichlorobenzene	146		13.304					ND	
141 Hexachloroethane	201		13.505					ND	
142 1,2-Dibromo-3-Chloropropane	155		13.840					ND	
143 1,3,5-Trichlorobenzene	180		13.962					ND	
144 1,2,4-Trichlorobenzene	180		14.383					ND	
145 Hexachlorobutadiene	225		14.468					ND	
146 Naphthalene	128		14.566					ND	7
147 1,2,3-Trichlorobenzene	180		14.706					ND	
148 2-Methylnaphthalene	142	15.322	15.322	0.000	86	1834		0.0140	

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_00014

Amount Added: 1.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\16334\20210104-19179.b\GJ04B31.D

Injection Date: 04-Jan-2021 21:29:30

Instrument ID: 16334

Operator ID: MEC29284

Lims ID: MB

Worklist Smp#: 10

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

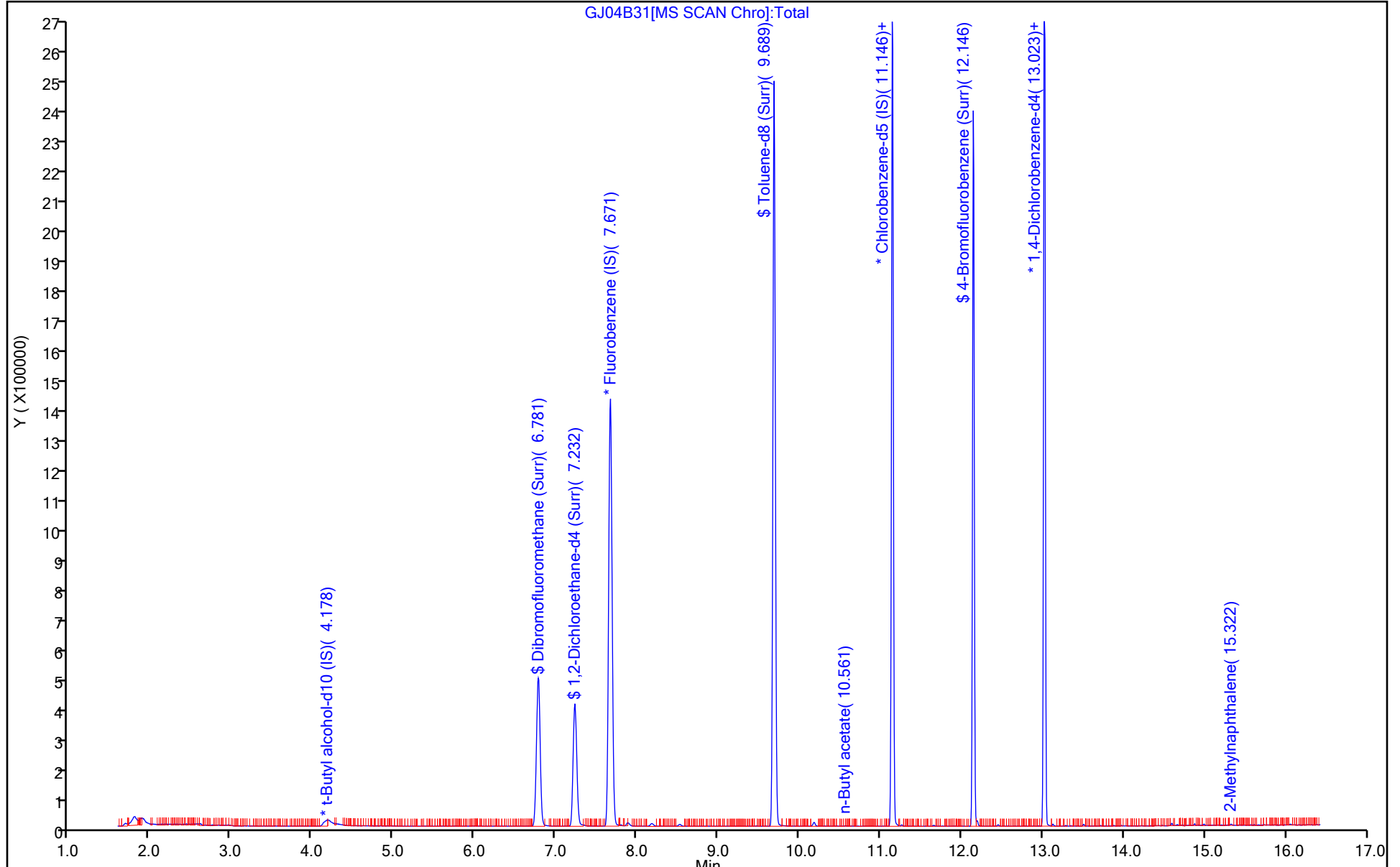
ALS Bottle#: 9

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\20210104-19179.b\GJ04B31.D
 Lims ID: MB
 Client ID:
 Sample Type: MB
 Inject. Date: 04-Jan-2021 21:29:30 ALS Bottle#: 9 Worklist Smp#: 10
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0019179-010
 Misc. Info.: MB
 Operator ID: MEC29284 Instrument ID: 16334
 Method: \\chromfs\Lancaster\ChromData\16334\20210104-19179.b\MSV_16334_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 04-Jan-2021 21:53:23 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: campbellme

Date: 04-Jan-2021 21:53:23

Compound	Amount Added	Amount Recovered	% Rec.
\$ 52 Dibromofluoromethane (Surr)	10.0	9.73	97.32
\$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	9.79	97.92
\$ 83 Toluene-d8 (Surr)	10.0	9.86	98.63
\$ 119 4-Bromofluorobenzene (Surr)	10.0	9.63	96.25

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-24913-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 410-82059/7
 Matrix: Water Lab File ID: HJ05B01.D
 Analysis Method: 8260D Date Collected: _____
 Sample wt/vol: 25 (mL) Date Analyzed: 01/05/2021 11:06
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: R-624SilMS 30m ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 82059 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.070
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.060
75-34-3	1,1-Dichloroethane	ND		0.50	0.070
75-35-4	1,1-Dichloroethene	ND		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.060
107-06-2	1,2-Dichloroethane	ND		0.50	0.050
78-87-5	1,2-Dichloropropane	ND		0.50	0.060
78-93-3	2-Butanone (MEK)	ND		5.0	0.60
591-78-6	2-Hexanone	ND		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70
67-64-1	Acetone	ND		5.0	0.90
71-43-2	Benzene	ND		0.50	0.050
74-97-5	Bromochloromethane	ND		0.50	0.050
75-27-4	Bromodichloromethane	ND		0.50	0.050
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.070
75-15-0	Carbon disulfide	ND		1.0	0.060
56-23-5	Carbon tetrachloride	ND		0.50	0.070
108-90-7	Chlorobenzene	ND		0.50	0.060
75-00-3	Chloroethane	ND		0.50	0.070
67-66-3	Chloroform	ND		0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	ND		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.050
124-48-1	Dibromochloromethane	ND		0.50	0.070
100-41-4	Ethylbenzene	ND		0.50	0.060
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.050
75-09-2	Methylene Chloride	ND		0.50	0.070
100-42-5	Styrene	ND		0.50	0.050
127-18-4	Tetrachloroethene	ND		0.50	0.060
108-88-3	Toluene	ND		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	ND		0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-24913-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 410-82059/7
 Matrix: Water Lab File ID: HJ05B01.D
 Analysis Method: 8260D Date Collected: _____
 Sample wt/vol: 25 (mL) Date Analyzed: 01/05/2021 11:06
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: R-624SilMS 30m ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 82059 Units: ug/L

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

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	98		80-120
460-00-4	4-Bromofluorobenzene (Surr)	97		80-120
1868-53-7	Dibromofluoromethane (Surr)	101		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\19094\20210105-19216.b\HJ05B01.D
 Lims ID: MB
 Client ID:
 Sample Type: MB
 Inject. Date: 05-Jan-2021 11:06:30 ALS Bottle#: 6 Worklist Smp#: 7
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0019216-007
 Misc. Info.: MB
 Operator ID: jkh09052 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20210105-19216.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 05-Jan-2021 11:32:47 Calib Date: 04-Jan-2021 18:39:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20210104-19149.b\Hj04I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1665

First Level Reviewer: howej

Date: 05-Jan-2021 11:31:54

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116		1.885					ND	
3 Dichlorodifluoromethane	85		2.075					ND	
2 Chlorodifluoromethane	51		2.081					ND	
4 Dimethyl ether	45		2.154					ND	
5 2-Chloro-1,1,1-Trifluoroethane	118		2.233					ND	
6 Chloromethane	50		2.282					ND	7
8 Butadiene	39		2.404					ND	7
7 Vinyl chloride	62		2.410					ND	
9 Bromomethane	94		2.745					ND	
10 Chloroethane	64		2.843					ND	
11 Dichlorofluoromethane	67		3.087					ND	
12 Ethanol	45		3.111					ND	
13 Trichlorofluoromethane	101		3.160					ND	
15 Ethyl ether	59		3.422					ND	
16 1,2-Dichloro-1,1,2-trifluoroethane	67		3.507					ND	
17 Acrolein	56		3.605					ND	
18 1,1-Dichloroethene	96		3.751					ND	
19 Acetone	43		3.782					ND	
20 112TCTFE	101		3.788					ND	
21 Isopropyl alcohol	45		3.952					ND	
22 Iodomethane	142		3.958					ND	
23 Ethyl bromide	108		3.989					ND	
24 Carbon disulfide	76		4.074					ND	7
25 Acetonitrile	41		4.166					ND	
26 Methyl acetate	43		4.220					ND	
27 3-Chloro-1-propene	41		4.257					ND	
29 Methylene Chloride	84		4.452					ND	
* 28 t-Butyl alcohol-d10 (IS)	65	4.458	4.458	0.000	0	97942	50.0	50.0	
30 2-Methyl-2-propanol	59		4.586					ND	
31 Acrylonitrile	53		4.794					ND	
32 Methyl tert-butyl ether	73		4.867					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
33 trans-1,2-Dichloroethene	96		4.885					ND	
34 Hexane	57		5.300					ND	
36 Vinyl acetate	43		5.507					ND	
35 1,1-Dichloroethane	63		5.537					ND	
37 Isopropyl ether	45		5.586					ND	
38 2-Chloro-1,3-butadiene	53		5.647					ND	
39 Tert-butyl ethyl ether	59		6.116					ND	
S 40 1,2-Dichloroethene, Total	100		6.155					ND	7
41 2-Butanone (MEK)	43		6.312					ND	
42 cis-1,2-Dichloroethene	96		6.360					ND	
43 2,2-Dichloropropane	77		6.379					ND	
44 Ethyl acetate	43		6.385					ND	
45 Propionitrile	54		6.403					ND	
46 Methyl acrylate	55		6.440					ND	
47 Methacrylonitrile	67		6.622					ND	
48 Chlorobromomethane	128		6.696					ND	
49 Tetrahydrofuran	71		6.696					ND	
50 Chloroform	83		6.842					ND	
\$ 51 Dibromofluoromethane (Surr)	113	7.049	7.061	-0.012	93	426457	10.0	10.1	
52 1,1,1-Trichloroethane	97		7.074					ND	
53 Cyclohexane	56		7.177					ND	
54 1-Chlorobutane	56		7.220					ND	
55 1,1-Dichloropropene	75		7.281					ND	
56 Carbon tetrachloride	117		7.287					ND	
57 Isobutyl alcohol	41		7.409					ND	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.506	7.512	-0.006	0	84536	10.0	9.78	
59 Benzene	78		7.543					ND	
61 Isopropyl acetate	43		7.610					ND	
60 1,2-Dichloroethane	62		7.616					ND	7
62 Tert-amyl methyl ether	73		7.732					ND	
63 t-Amyl alcohol	73	7.939	7.842	0.097	27	14276		NC	
* 65 Fluorobenzene (IS)	96	7.945	7.945	0.000	98	1731796	10.0	10.0	
64 n-Heptane	43		7.951					ND	7
66 n-Butanol	56		8.287					ND	
67 Trichloroethene	95		8.427					ND	
68 Methylcyclohexane	83		8.738					ND	
69 2-ethoxy-2-methyl butane	87		8.762					ND	
70 1,2-Dichloropropane	63		8.762					ND	
71 Methyl methacrylate	69		8.829					ND	
72 1,4-Dioxane	88		8.848					ND	
73 Dibromomethane	93		8.872					ND	
74 n-Propyl acetate	61		8.909					ND	
75 Dichlorobromomethane	83		9.104					ND	
76 2-Nitropropane	41		9.360					ND	
77 Chloroacetonitrile	75		9.415					ND	
78 2-Chloroethyl vinyl ether	63		9.445					ND	
79 1-Bromo-2-chloroethane	63		9.488					ND	
80 cis-1,3-Dichloropropene	75		9.628					ND	
81 4-Methyl-2-pentanone (MIBK)	43		9.793					ND	
\$ 82 Toluene-d8 (Surr)	98	9.933	9.933	0.000	94	1679984	10.0	9.95	
83 Toluene	92		10.006					ND	
S 84 1,3-Dichloropropene, Total	100		10.060					ND	7

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
85 trans-1,3-Dichloropropene	75		10.256					ND	
86 Ethyl methacrylate	69		10.305					ND	
87 1,1,2-Trichloroethane	97		10.457					ND	
88 Tetrachloroethene	166		10.548					ND	
89 1,3-Dichloropropane	76		10.616					ND	
91 2-Hexanone	43		10.658					ND	
92 n-Butyl acetate	43		10.774					ND	
93 Chlorodibromomethane	129		10.829					ND	
94 Ethylene Dibromide	107		10.945					ND	
S 95 Xylenes, Total	106		11.245					ND	7
* 97 Chlorobenzene-d5 (IS)	117	11.365	11.365	0.000	87	1232345	10.0	10.0	
96 1-Chlorohexane	91		11.372					ND	7
98 Chlorobenzene	112		11.396					ND	
100 Ethylbenzene	91		11.475					ND	
99 1,1,1,2-Tetrachloroethane	131		11.475					ND	
101 m-Xylene & p-Xylene	106		11.591					ND	
102 o-Xylene	106		11.920					ND	
103 Styrene	104		11.932					ND	7
104 Bromoform	173		12.097					ND	
105 Isopropylbenzene	105		12.213					ND	
106 cis-1,4-Dichloro-2-butene	88		12.256					ND	
107 Cyclohexanone	55		12.292					ND	
\$ 108 4-Bromofluorobenzene (Surr)	95	12.359	12.359	0.000	88	588325	10.0	9.73	
109 1,1,2,2-Tetrachloroethane	83		12.457					ND	
111 Bromobenzene	156		12.481					ND	
110 trans-1,4-Dichloro-2-butene	53		12.481					ND	
112 1,2,3-Trichloropropane	110		12.505					ND	
113 N-Propylbenzene	91		12.542					ND	
114 2-Chlorotoluene	126		12.621					ND	
115 1,3,5-Trimethylbenzene	105		12.676					ND	
116 4-Chlorotoluene	126		12.713					ND	
118 tert-Butylbenzene	134		12.920					ND	
119 Pentachloroethane	167		12.957					ND	
120 1,2,4-Trimethylbenzene	105		12.957					ND	
121 sec-Butylbenzene	105		13.078					ND	
122 1,3-Dichlorobenzene	146		13.182					ND	7
123 4-Isopropyltoluene	119		13.188					ND	
* 124 1,4-Dichlorobenzene-d4	152	13.237	13.237	0.000	96	629324	10.0	10.0	
125 1,4-Dichlorobenzene	146		13.255					ND	7
126 1,2,3-Trimethylbenzene	120		13.261					ND	7
127 Benzyl chloride	126		13.335					ND	
129 p-Diethylbenzene	119		13.456					ND	
130 n-Butylbenzene	92		13.475					ND	
131 1,2-Dichlorobenzene	146		13.517					ND	
133 Hexachloroethane	201		13.719					ND	
134 1,2-Dibromo-3-Chloropropane	155		14.060					ND	
135 1,3,5-Trichlorobenzene	180		14.182					ND	7
136 1,2,4-Trichlorobenzene	180		14.603					ND	
137 Hexachlorobutadiene	225		14.688					ND	7
138 Naphthalene	128		14.792					ND	7
139 1,2,3-Trichlorobenzene	180		14.932					ND	7
140 2-Methylnaphthalene	142		15.584					ND	U

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
151 tert-Butyl Formate	1		0.000						ND
152 Dodecane	57		0.000						ND
157 Methylal	1		0.000						ND
142 1,1-Dichloro-1-fluoroethane	1		0.000						ND
150 Propene oxide	1		0.000						ND
162 1-Chloropropane	1		0.000						ND
163 1-Bromo-3-Chloropropane	1		0.000						ND
160 n-Decane	57		0.000						ND
161 2-Bromo-1-chloropropane	1		0.000						ND
186 Isopropyl alcohol TIC	1		0.000						ND

QC Flag Legend

Processing Flags

NC - Not Calibrated

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

MSV_30_826ISS_00006

Amount Added: 5.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19094\20210105-19216.b\HJ05B01.D

Injection Date: 05-Jan-2021 11:06:30

Instrument ID: 19094

Operator ID: jkh09052

Lims ID: MB

Worklist Smp#: 7

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

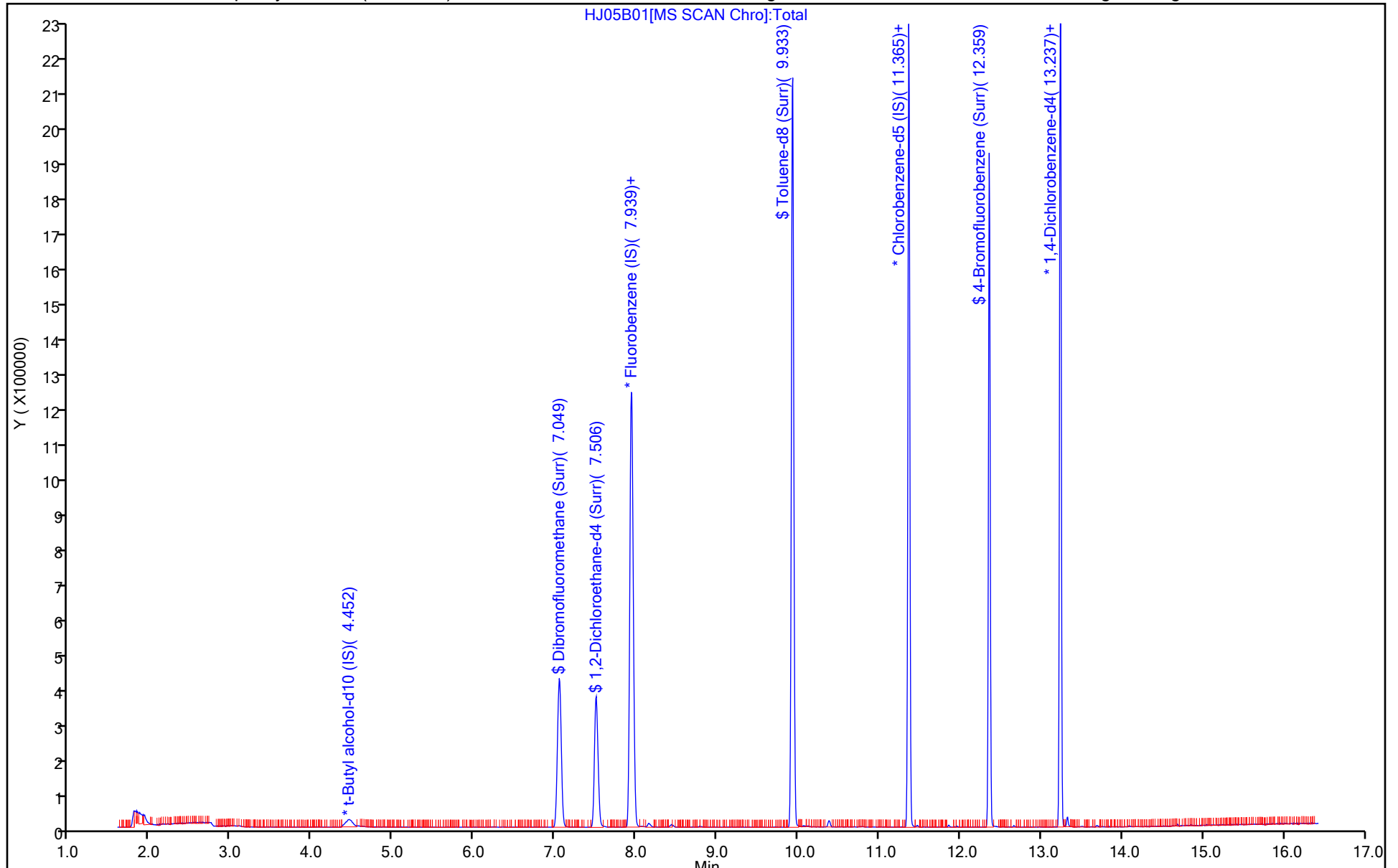
ALS Bottle#: 6

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20210105-19216.b\HJ05B01.D
 Lims ID: MB
 Client ID:
 Sample Type: MB
 Inject. Date: 05-Jan-2021 11:06:30 ALS Bottle#: 6 Worklist Smp#: 7
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0019216-007
 Misc. Info.: MB
 Operator ID: jkh09052 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20210105-19216.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 05-Jan-2021 11:32:47 Calib Date: 04-Jan-2021 18:39:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20210104-19149.b\Hj04I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1665

First Level Reviewer: howej

Date: 05-Jan-2021 11:31:54

Compound	Amount Added	Amount Recovered	% Rec.
\$ 51 Dibromofluoromethane (Surr)	10.0	10.1	100.77
\$ 58 1,2-Dichloroethane-d4 (Surr)	10.0	9.78	97.79
\$ 82 Toluene-d8 (Surr)	10.0	9.95	99.52
\$ 108 4-Bromofluorobenzene (Surr)	10.0	9.73	97.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-24913-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 410-81468/6
 Matrix: Water Lab File ID: GD31L31.D
 Analysis Method: 8260D Date Collected: _____
 Sample wt/vol: 25 (mL) Date Analyzed: 12/31/2020 17:52
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: R-624SilMS 30m ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 81468 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	4.73		0.50	0.070
71-55-6	1,1,1-Trichloroethane	4.50		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	4.60		0.50	0.070
79-00-5	1,1,2-Trichloroethane	4.79		0.50	0.060
75-34-3	1,1-Dichloroethane	4.61		0.50	0.070
75-35-4	1,1-Dichloroethene	4.59		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	4.62		0.50	0.060
107-06-2	1,2-Dichloroethane	4.36		0.50	0.050
78-87-5	1,2-Dichloropropane	4.59		0.50	0.060
78-93-3	2-Butanone (MEK)	35.1		5.0	0.60
591-78-6	2-Hexanone	25.7		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	24.2		5.0	0.70
67-64-1	Acetone	29.7		5.0	0.90
71-43-2	Benzene	4.53		0.50	0.050
74-97-5	Bromochloromethane	4.47		0.50	0.050
75-27-4	Bromodichloromethane	4.59		0.50	0.050
75-25-2	Bromoform	4.79		1.0	0.30
74-83-9	Bromomethane	4.39		0.50	0.070
75-15-0	Carbon disulfide	4.35		1.0	0.060
56-23-5	Carbon tetrachloride	4.55		0.50	0.070
108-90-7	Chlorobenzene	4.70		0.50	0.060
75-00-3	Chloroethane	4.14		0.50	0.070
67-66-3	Chloroform	4.52		0.50	0.090
74-87-3	Chloromethane	4.21		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	4.79		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	4.47		0.50	0.050
124-48-1	Dibromochloromethane	4.78		0.50	0.070
100-41-4	Ethylbenzene	4.57		0.50	0.060
1634-04-4	Methyl tert-butyl ether	4.29		0.50	0.050
75-09-2	Methylene Chloride	4.64		0.50	0.070
100-42-5	Styrene	4.70		0.50	0.050
127-18-4	Tetrachloroethene	4.79		0.50	0.060
108-88-3	Toluene	4.59		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	4.45		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	4.48		0.50	0.060
79-01-6	Trichloroethene	4.60		0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-24913-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 410-81468/6
 Matrix: Water Lab File ID: GD31L31.D
 Analysis Method: 8260D Date Collected: _____
 Sample wt/vol: 25 (mL) Date Analyzed: 12/31/2020 17:52
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: R-624SilMS 30m ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 81468 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-01-4	Vinyl chloride	4.60		0.50	0.10
1330-20-7	Xylenes, Total	14.2		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)	99		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\16334\20201231-19071.b\GD31L31.D
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 31-Dec-2020 17:52:30 ALS Bottle#: 5 Worklist Smp#: 6
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0019071-006
 Misc. Info.: LCS
 Operator ID: MEC29284 Instrument ID: 16334
 Method: \\chromfs\Lancaster\ChromData\16334\20201231-19071.b\MSV_16334_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 31-Dec-2020 18:25:01 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: CTX1665

First Level Reviewer: campbellme

Date: 31-Dec-2020 18:24:00

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.946	1.934	0.012	99	216011	5.00	4.41	
5 Chloromethane	50	2.148	2.135	0.013	99	278162	5.00	4.21	
8 Vinyl chloride	62	2.257	2.245	0.012	97	259583	5.00	4.60	
7 Butadiene	39	2.263	2.245	0.018	94	364981	5.00	4.85	
9 Bromomethane	94	2.593	2.580	0.013	91	172622	5.00	4.39	
10 Chloroethane	64	2.666	2.660	0.006	99	141801	5.00	4.14	
12 Dichlorofluoromethane	67	2.904	2.897	0.007	97	306260	5.00	3.99	
13 Trichlorofluoromethane	101	2.977	2.958	0.019	95	291651	5.00	4.49	M
15 Ethyl ether	59	3.208	3.196	0.012	93	186561	5.00	4.87	
17 1,2-Dichloro-1,1,2-trifluoroetha	67	3.288	3.288	0.000	93	234819	5.00	4.43	
18 Acrolein	56	3.385	3.367	0.018	100	166712	37.5	29.1	
19 1,1-Dichloroethene	96	3.513	3.501	0.012	97	180128	5.00	4.59	
20 112TCTFE	101	3.556	3.538	0.018	92	179625	5.00	4.68	
21 Acetone	43	3.550	3.544	0.006	79	219725	37.5	29.7	
22 Isopropyl alcohol	45	3.690	3.678	0.012	27	44280	37.5	29.7	M
23 Iodomethane	142	3.702	3.690	0.012	99	316107	5.00	4.32	
24 Ethyl bromide	108	3.733	3.720	0.013	97	154316	5.03	4.52	
25 Carbon disulfide	76	3.806	3.787	0.019	99	629570	5.00	4.35	
27 Methyl acetate	43	3.970	3.946	0.024	39	89261	5.00	3.98	
28 3-Chloro-1-propene	41	3.983	3.976	0.007	92	335892	5.00	4.28	
29 Methylene Chloride	84	4.172	4.159	0.013	95	208544	5.00	4.64	
* 30 t-Butyl alcohol-d10 (IS)	65	4.190	4.184	0.006	0	150892	50.0	50.0	M
31 2-Methyl-2-propanol	59	4.318	4.306	0.012	95	104110	50.0	38.4	
32 Acrylonitrile	53	4.519	4.507	0.012	98	221765	25.0	23.2	
33 Methyl tert-butyl ether	73	4.574	4.562	0.012	96	535018	5.00	4.29	
34 trans-1,2-Dichloroethene	96	4.574	4.562	0.012	97	201080	5.00	4.45	
35 Hexane	57	5.007	4.995	0.012	94	310165	5.00	4.71	
37 1,1-Dichloroethane	63	5.245	5.238	0.007	96	385992	5.00	4.61	
38 Isopropyl ether	45	5.305	5.293	0.012	95	742299	5.00	4.35	
39 2-Chloro-1,3-butadiene	53	5.354	5.348	0.006	91	334408	5.00	4.39	
40 Tert-butyl ethyl ether	59	5.842	5.836	0.006	99	690631	5.00	4.44	

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	6.037	0.012	100	481671	37.5	35.1	
42 cis-1,2-Dichloroethene	96	6.086	6.080	0.006	83	242717	5.00	4.79	
43 2,2-Dichloropropane	77	6.098	6.086	0.012	87	309559	5.00	4.40	
45 Propionitrile	54	6.147	6.135	0.012	98	89388	37.5	26.3	
48 Methacrylonitrile	67	6.360	6.354	0.006	93	439246	37.5	34.8	
49 Chlorobromomethane	128	6.415	6.409	0.006	95	101009	5.00	4.47	
50 Tetrahydrofuran	71	6.409	6.409	0.000	76	87135	25.0	24.6	
51 Chloroform	83	6.567	6.561	0.006	93	365122	5.00	4.52	
\$ 52 Dibromofluoromethane (Surr)	113	6.781	6.781	0.000	94	449811	10.0	9.87	
53 1,1,1-Trichloroethane	97	6.787	6.781	0.006	70	310650	5.00	4.50	
54 Cyclohexane	56	6.884	6.878	0.006	92	371282	5.00	4.67	
56 Carbon tetrachloride	117	6.994	6.988	0.006	89	272531	5.00	4.55	
57 1,1-Dichloropropene	75	7.000	7.000	0.000	95	299614	5.00	4.61	
58 Isobutyl alcohol	41	7.171	7.159	0.012	93	103559	125.0	97.3	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.238	7.238	0.000	0	93947	10.0	9.69	
60 Benzene	78	7.269	7.262	0.007	97	866543	5.00	4.53	
61 1,2-Dichloroethane	62	7.342	7.336	0.006	97	233397	5.00	4.36	
63 Tert-amyl methyl ether	73	7.458	7.451	0.007	99	612954	5.00	4.47	
* 64 Fluorobenzene (IS)	96	7.677	7.671	0.006	98	1882752	10.0	10.0	
65 n-Heptane	43	7.677	7.677	0.000	93	341518	5.00	4.60	
67 n-Butanol	56	8.055	8.049	0.006	90	225238	250.0	231.0	
68 Trichloroethene	95	8.152	8.146	0.006	98	224643	5.00	4.60	
69 Methylcyclohexane	83	8.457	8.451	0.006	94	380379	5.00	5.01	
70 1,2-Dichloropropane	63	8.488	8.482	0.006	97	235079	5.00	4.59	
71 2-ethoxy-2-methyl butane	87	8.494	8.494	0.000	92	341916	5.00	4.57	
73 1,4-Dioxane	88	8.579	8.567	0.012	29	24922	125.0	143.7	M
72 Methyl methacrylate	69	8.573	8.573	0.000	93	124153	5.00	4.83	
74 Dibromomethane	93	8.591	8.591	0.000	96	108188	5.00	4.56	
76 Dichlorobromomethane	83	8.835	8.829	0.006	99	272231	5.00	4.59	
77 2-Nitropropane	41	9.110	9.116	-0.006	97	37161	5.00	5.10	
79 2-Chloroethyl vinyl ether	63		9.195				ND	ND	
80 1-Bromo-2-chloroethane	63	9.225	9.219	0.006	98	251492	5.00	4.58	
81 cis-1,3-Dichloropropene	75	9.384	9.384	0.000	95	344152	5.00	4.47	
82 4-Methyl-2-pentanone (MIBK)	43	9.561	9.561	0.000	97	853059	25.0	24.2	
\$ 83 Toluene-d8 (Surr)	98	9.689	9.689	0.000	94	1832087	10.0	10.1	
84 Toluene	92	9.768	9.768	0.000	98	543043	5.00	4.59	
96 trans-1,3-Dichloropropene	75	10.030	10.030	0.000	93	285971	5.00	4.48	
98 Ethyl methacrylate	69	10.091	10.091	0.000	91	260255	5.00	4.53	
99 1,1,2-Trichloroethane	97	10.231	10.231	0.000	91	165464	5.00	4.79	
100 Tetrachloroethene	166	10.317	10.317	0.000	98	245767	5.00	4.79	
101 1,3-Dichloropropane	76	10.396	10.396	0.000	91	285957	5.00	4.59	
102 2-Hexanone	43	10.451	10.451	0.000	98	650533	25.0	25.7	
104 Chlorodibromomethane	129	10.609	10.609	0.000	90	195837	5.00	4.78	
105 Ethylene Dibromide	107	10.719	10.719	0.000	98	156722	5.00	4.62	
* 106 Chlorobenzene-d5 (IS)	117	11.152	11.152	0.000	87	1365485	10.0	10.0	
107 1-Chlorohexane	91	11.158	11.158	0.000	97	311632	5.00	4.38	
108 Chlorobenzene	112	11.176	11.176	0.000	95	619899	5.00	4.70	
110 1,1,1,2-Tetrachloroethane	131	11.262	11.262	0.000	95	221578	5.00	4.73	
111 Ethylbenzene	91	11.262	11.262	0.000	98	1068743	5.00	4.57	
112 m-Xylene & p-Xylene	106	11.377	11.377	0.000	97	835174	10.0	9.48	
113 o-Xylene	106	11.707	11.707	0.000	96	408294	5.00	4.67	
114 Styrene	104	11.719	11.719	0.000	94	699208	5.00	4.70	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
115 Bromoform	173	11.877	11.877	0.000	98	114486	5.00	4.79	
116 Isopropylbenzene	105	12.005	12.005	0.000	96	1075159	5.00	4.70	
\$ 119 4-Bromofluorobenzene (Surr)	95	12.146	12.146	0.000	90	685919	10.0	9.86	
120 1,1,2,2-Tetrachloroethane	83	12.255	12.255	0.000	93	215551	5.00	4.60	
121 Bromobenzene	156	12.261	12.261	0.000	97	263523	5.00	4.68	
122 trans-1,4-Dichloro-2-butene	53	12.280	12.280	0.000	93	217153	25.0	19.9	
123 1,2,3-Trichloropropane	110	12.298	12.298	0.000	82	56444	5.00	4.73	
124 N-Propylbenzene	91	12.335	12.335	0.000	99	1280882	5.00	4.57	
125 2-Chlorotoluene	126	12.408	12.408	0.000	96	254831	5.00	4.62	
126 1,3,5-Trimethylbenzene	105	12.469	12.469	0.000	94	912025	5.00	4.61	
127 4-Chlorotoluene	126	12.499	12.499	0.000	98	262990	5.00	4.57	
128 tert-Butylbenzene	134	12.713	12.713	0.000	93	188960	5.00	4.47	
129 Pentachloroethane	167	12.743	12.743	0.000	94	165710	5.00	4.56	
130 1,2,4-Trimethylbenzene	105	12.749	12.749	0.000	97	944734	5.00	4.57	
131 sec-Butylbenzene	105	12.871	12.871	0.000	94	1204355	5.00	4.68	
132 1,3-Dichlorobenzene	146	12.969	12.969	0.000	98	523398	5.00	4.61	
133 4-Isopropyltoluene	119	12.981	12.981	0.000	97	1047230	5.00	4.68	
* 134 1,4-Dichlorobenzene-d4	152	13.023	13.023	0.000	95	745344	10.0	10.0	
135 1,4-Dichlorobenzene	146	13.042	13.042	0.000	94	538836	5.00	4.66	
136 1,2,3-Trimethylbenzene	120	13.054	13.054	0.000	99	439571	5.00	4.80	
137 Benzyl chloride	126	13.121	13.121	0.000	99	84796	5.00	4.18	
138 p-Diethylbenzene	119	13.176	13.176	0.000	92	619198	5.00	4.56	
139 n-Butylbenzene	92	13.267	13.267	0.000	98	527429	5.00	4.45	
140 1,2-Dichlorobenzene	146	13.304	13.304	0.000	98	491357	5.00	4.64	
142 1,2-Dibromo-3-Chloropropane	155	13.840	13.840	0.000	84	31427	5.00	4.60	
143 1,3,5-Trichlorobenzene	180	13.962	13.962	0.000	98	429059	5.00	4.51	
144 1,2,4-Trichlorobenzene	180	14.383	14.383	0.000	94	400708	5.00	4.57	
145 Hexachlorobutadiene	225	14.468	14.468	0.000	96	204301	5.00	4.75	
146 Naphthalene	128	14.566	14.566	0.000	97	696271	5.00	4.37	
147 1,2,3-Trichlorobenzene	180	14.706	14.706	0.000	95	348044	5.00	4.50	
148 2-Methylnaphthalene	142	15.322	15.322	0.000	92	451252	5.00	3.96	
160 Pentane	43		0.000				ND	ND	

QC Flag Legend

Processing Flags

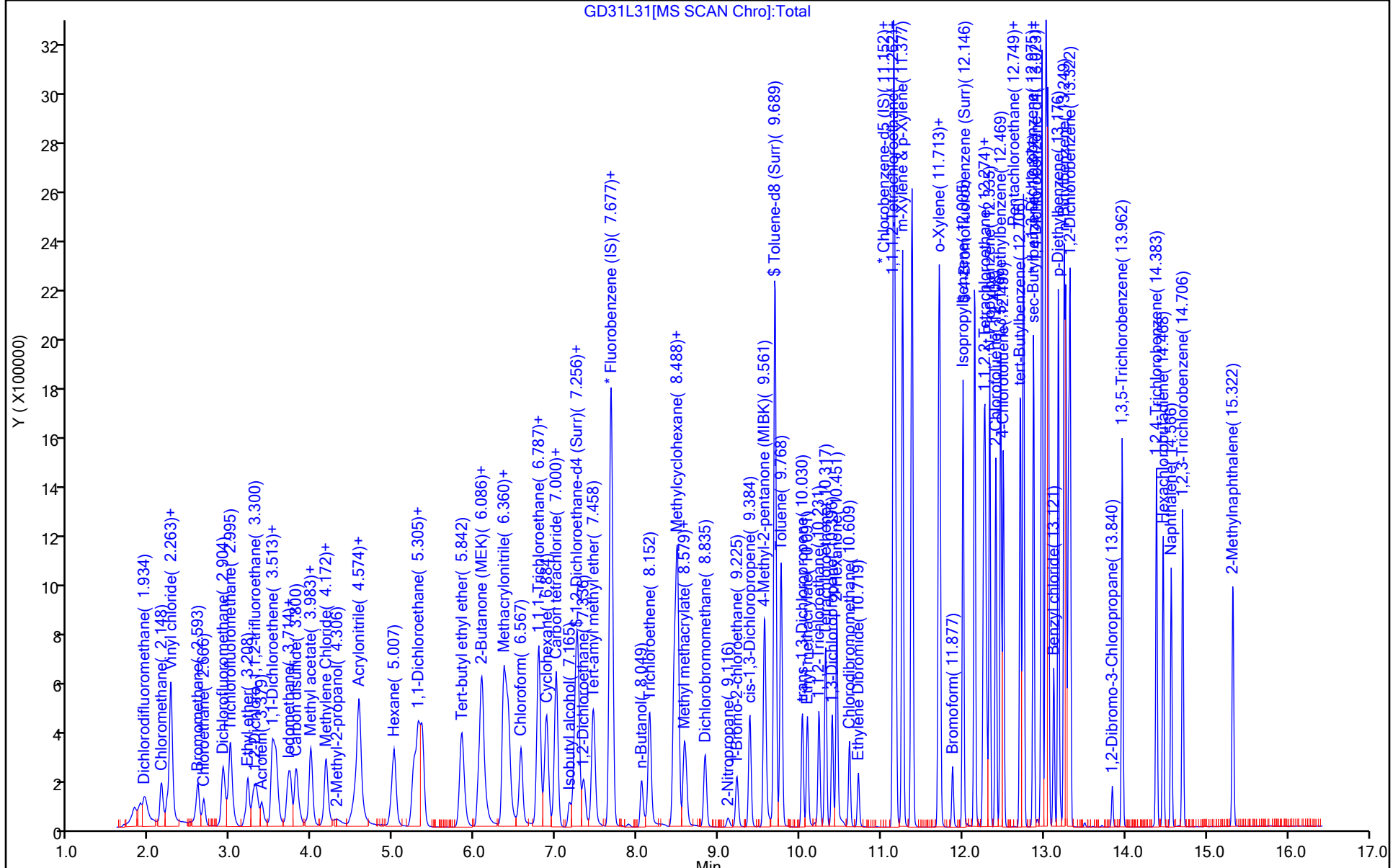
ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

MSV_Q_QVOA1_00061	Amount Added: 12.50	Units: uL	
MSV_Q_QARC_00060	Amount Added: 12.50	Units: uL	
MSV_Q_EE_00003	Amount Added: 12.50	Units: uL	
MSV_Q_QVOA6_00059	Amount Added: 12.50	Units: uL	
MSV_QGAS_826_00100	Amount Added: 12.50	Units: uL	
MSV_Q_ETBR_00006	Amount Added: 12.50	Units: uL	
MSV_29_826ISS_00014	Amount Added: 1.00	Units: uL	Run Reagent



GD31L31[MS SCAN Chrom]:Total

Eurofins Lancaster Laboratories Env, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\16334\20201231-19071.b\GD31L31.D
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 31-Dec-2020 17:52:30 ALS Bottle#: 5 Worklist Smp#: 6
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0019071-006
 Misc. Info.: LCS
 Operator ID: MEC29284 Instrument ID: 16334
 Method: \\chromfs\Lancaster\ChromData\16334\20201231-19071.b\MSV_16334_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 31-Dec-2020 18:25:01 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: CTX1665

First Level Reviewer: campbellme Date: 31-Dec-2020 18:24:00

Compound	Amount Added	Amount Recovered	% Rec.
\$ 52 Dibromofluoromethane (Surr)	10.0	9.87	98.71
\$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	9.69	96.90
\$ 83 Toluene-d8 (Surr)	10.0	10.1	100.56
\$ 119 4-Bromofluorobenzene (Surr)	10.0	9.86	98.61

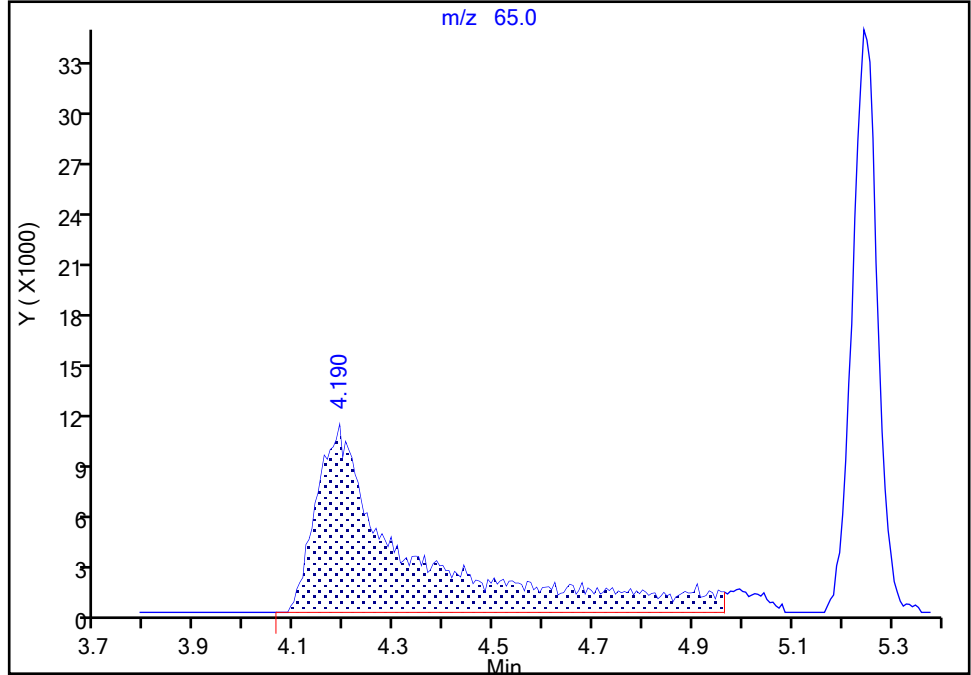
Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20201231-19071.b\GD31L31.D
Injection Date: 31-Dec-2020 17:52:30 Instrument ID: 16334
Lims ID: LCS
Client ID:
Operator ID: MEC29284 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 t-Butyl alcohol-d10 (IS), CAS: 53001-22-2
Signal: 1

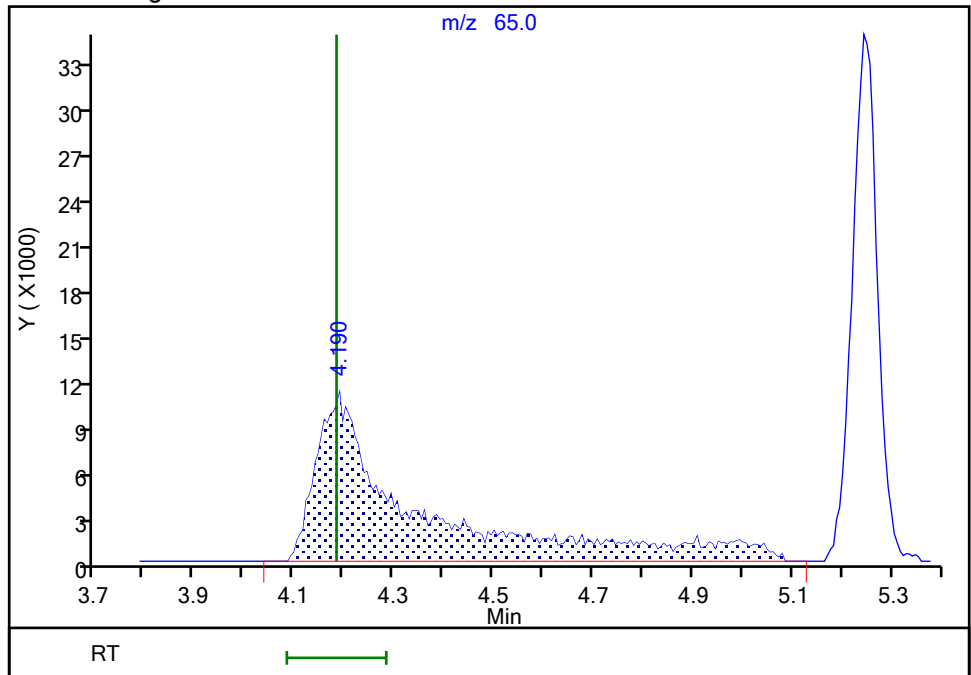
RT: 4.19
Area: 144223
Amount: 50.000000
Amount Units: ug/l

Processing Integration Results



RT: 4.19
Area: 150892
Amount: 50.000000
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 31-Dec-2020 18:23:15
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-24913-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 410-81892/5
 Matrix: Water Lab File ID: GJ04L31.D
 Analysis Method: 8260D Date Collected: _____
 Sample wt/vol: 25 (mL) Date Analyzed: 01/04/2021 19:39
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: R-624SilMS 30m ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 81892 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	4.63		0.50	0.070
71-55-6	1,1,1-Trichloroethane	4.38		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	4.35		0.50	0.070
79-00-5	1,1,2-Trichloroethane	4.68		0.50	0.060
75-34-3	1,1-Dichloroethane	4.37		0.50	0.070
75-35-4	1,1-Dichloroethene	4.61		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	4.61		0.50	0.060
107-06-2	1,2-Dichloroethane	4.21		0.50	0.050
78-87-5	1,2-Dichloropropane	4.44		0.50	0.060
78-93-3	2-Butanone (MEK)	37.7		5.0	0.60
591-78-6	2-Hexanone	26.5		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	25.8		5.0	0.70
67-64-1	Acetone	31.5		5.0	0.90
71-43-2	Benzene	4.49		0.50	0.050
74-97-5	Bromochloromethane	4.56		0.50	0.050
75-27-4	Bromodichloromethane	4.58		0.50	0.050
75-25-2	Bromoform	5.07		1.0	0.30
74-83-9	Bromomethane	4.43		0.50	0.070
75-15-0	Carbon disulfide	4.38		1.0	0.060
56-23-5	Carbon tetrachloride	4.50		0.50	0.070
108-90-7	Chlorobenzene	4.71		0.50	0.060
75-00-3	Chloroethane	4.09		0.50	0.070
67-66-3	Chloroform	4.49		0.50	0.090
74-87-3	Chloromethane	3.81		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	4.82		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	4.41		0.50	0.050
124-48-1	Dibromochloromethane	4.82		0.50	0.070
100-41-4	Ethylbenzene	4.45		0.50	0.060
1634-04-4	Methyl tert-butyl ether	4.18		0.50	0.050
75-09-2	Methylene Chloride	4.60		0.50	0.070
100-42-5	Styrene	4.55		0.50	0.050
127-18-4	Tetrachloroethene	4.84		0.50	0.060
108-88-3	Toluene	4.51		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	4.54		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	4.33		0.50	0.060
79-01-6	Trichloroethene	4.56		0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-24913-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 410-81892/5
 Matrix: Water Lab File ID: GJ04L31.D
 Analysis Method: 8260D Date Collected: _____
 Sample wt/vol: 25 (mL) Date Analyzed: 01/04/2021 19:39
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: R-624SilMS 30m ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 81892 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-01-4	Vinyl chloride	4.28		0.50	0.10
1330-20-7	Xylenes, Total	13.9		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)	95		80-120
1868-53-7	Dibromofluoromethane (Surr)	98		80-120
2037-26-5	Toluene-d8 (Surr)	98		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20210104-19179.b\GJ04L31.D
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 04-Jan-2021 19:39:30 ALS Bottle#: 4 Worklist Smp#: 5
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0019179-005
 Misc. Info.: LCS
 Operator ID: MEC29284 Instrument ID: 16334
 Method: \\chromfs\Lancaster\ChromData\16334\20210104-19179.b\MSV_16334_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 04-Jan-2021 21:01:00 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: campbellme

Date: 04-Jan-2021 20:24:33

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.946	1.946	0.000	99	215299	5.00	3.93	
5 Chloromethane	50	2.148	2.141	0.007	99	281864	5.00	3.81	
8 Vinyl chloride	62	2.257	2.257	0.000	97	270636	5.00	4.28	
7 Butadiene	39	2.257	2.257	0.000	91	334585	5.00	3.97	
9 Bromomethane	94	2.587	2.587	0.001	90	194864	5.00	4.43	
10 Chloroethane	64	2.660	2.666	-0.006	100	156590	5.00	4.09	
12 Dichlorofluoromethane	67	2.904	2.904	0.000	97	294205	5.00	3.42	
13 Trichlorofluoromethane	101	2.971	2.971	0.000	97	326776	5.00	4.49	M
15 Ethyl ether	59	3.208	3.202	0.006	92	205494	5.00	4.79	
17 1,2-Dichloro-1,1,2-trifluoroethane	67	3.300	3.294	0.006	92	251409	5.00	4.23	
18 Acrolein	56	3.379	3.379	0.000	100	188587	37.5	34.6	
19 1,1-Dichloroethene	96	3.513	3.507	0.006	98	202471	5.00	4.61	
20 112TCTFE	101	3.562	3.550	0.012	91	196786	5.00	4.58	
21 Acetone	43	3.544	3.550	-0.006	80	221682	37.5	31.5	
23 Iodomethane	142	3.702	3.702	0.000	98	369322	5.00	4.50	
22 Isopropyl alcohol	45	3.714	3.714	0.000	34	31820	37.5	19.0	
24 Ethyl bromide	108	3.733	3.733	0.000	98	171566	5.03	4.48	
25 Carbon disulfide	76	3.806	3.800	0.006	99	709779	5.00	4.38	
27 Methyl acetate	43	3.958	3.958	0.000	97	90271	5.00	4.23	
28 3-Chloro-1-propene	41	3.983	3.983	0.000	94	319579	5.00	3.63	
29 Methylene Chloride	84	4.166	4.172	-0.006	91	231593	5.00	4.60	
* 30 t-Butyl alcohol-d10 (IS)	65	4.178	4.190	-0.012	0	143565	50.0	50.0	M
31 2-Methyl-2-propanol	59	4.294	4.318	-0.024	99	111102	50.0	43.0	M
32 Acrylonitrile	53	4.519	4.513	0.006	99	238605	25.0	26.2	
33 Methyl tert-butyl ether	73	4.568	4.568	0.000	94	584414	5.00	4.18	
34 trans-1,2-Dichloroethene	96	4.580	4.574	0.006	99	229812	5.00	4.54	
35 Hexane	57	5.007	5.001	0.006	92	320588	5.00	4.35	
37 1,1-Dichloroethane	63	5.251	5.245	0.006	96	410787	5.00	4.37	
38 Isopropyl ether	45	5.306	5.305	0.001	95	758383	5.00	3.97	
39 2-Chloro-1,3-butadiene	53	5.354	5.354	0.000	89	341082	5.00	3.99	
40 Tert-butyl ethyl ether	59	5.836	5.836	0.000	97	724978	5.00	4.16	

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	6.043	0.006	100	492458	37.5	37.7	
42 cis-1,2-Dichloroethene	96	6.080	6.080	0.000	81	273913	5.00	4.82	
43 2,2-Dichloropropane	77	6.092	6.098	-0.006	90	341359	5.00	4.33	
45 Propionitrile	54	6.147	6.141	0.006	98	123057	37.5	38.0	
48 Methacrylonitrile	67	6.360	6.360	0.000	91	493669	37.5	41.1	
49 Chlorobromomethane	128	6.415	6.409	0.006	93	115571	5.00	4.56	
50 Tetrahydrofuran	71	6.409	6.415	-0.006	77	94218	25.0	27.9	
51 Chloroform	83	6.567	6.567	0.000	93	406026	5.00	4.49	
\$ 52 Dibromofluoromethane (Surr)	113	6.781	6.787	-0.006	94	501305	10.0	9.82	
53 1,1,1-Trichloroethane	97	6.793	6.787	0.006	96	339445	5.00	4.38	
54 Cyclohexane	56	6.878	6.878	0.000	89	385555	5.00	4.33	
56 Carbon tetrachloride	117	6.994	6.994	0.000	97	301974	5.00	4.50	
57 1,1-Dichloropropene	75	7.000	7.000	0.000	98	321726	5.00	4.42	
58 Isobutyl alcohol	41	7.171	7.159	0.012	95	94817	125.0	79.5	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.238	7.238	0.000	0	104777	10.0	9.65	
60 Benzene	78	7.262	7.262	0.000	97	963322	5.00	4.49	
61 1,2-Dichloroethane	62	7.342	7.336	0.006	97	252594	5.00	4.21	
63 Tert-amyl methyl ether	73	7.458	7.458	0.000	99	667663	5.00	4.35	
* 64 Fluorobenzene (IS)	96	7.671	7.671	0.000	99	2109496	10.0	10.0	
65 n-Heptane	43	7.677	7.677	0.000	90	348661	5.00	4.19	
67 n-Butanol	56	8.049	8.049	0.000	86	190892	250.0	205.8	
68 Trichloroethene	95	8.146	8.146	0.000	97	249900	5.00	4.56	
69 Methylcyclohexane	83	8.457	8.451	0.006	92	393788	5.00	4.63	
70 1,2-Dichloropropane	63	8.482	8.488	-0.006	97	254930	5.00	4.44	
71 2-ethoxy-2-methyl butane	87	8.494	8.494	0.000	93	384436	5.00	4.58	
73 1,4-Dioxane	88	8.579	8.573	0.006	30	21676	125.0	131.3	M
72 Methyl methacrylate	69	8.567	8.573	-0.006	90	136756	5.00	5.60	
74 Dibromomethane	93	8.591	8.591	0.000	95	124438	5.00	4.68	
76 Dichlorobromomethane	83	8.829	8.835	-0.006	99	304916	5.00	4.58	
77 2-Nitropropane	41	9.116	9.116	0.000	99	34456	5.00	4.97	
79 2-Chloroethyl vinyl ether	63		9.195				ND	ND	
80 1-Bromo-2-chloroethane	63	9.225	9.219	0.006	98	257372	5.00	4.19	
81 cis-1,3-Dichloropropene	75	9.378	9.378	0.000	97	380357	5.00	4.41	
82 4-Methyl-2-pentanone (MIBK)	43	9.561	9.561	0.000	96	863771	25.0	25.8	
\$ 83 Toluene-d8 (Surr)	98	9.689	9.689	0.000	93	2046963	10.0	9.82	
84 Toluene	92	9.768	9.768	0.000	98	609860	5.00	4.51	
96 trans-1,3-Dichloropropene	75	10.030	10.030	0.000	91	316468	5.00	4.33	
98 Ethyl methacrylate	69	10.091	10.091	0.000	89	282629	5.00	4.30	
99 1,1,2-Trichloroethane	97	10.231	10.231	0.000	89	184906	5.00	4.68	
100 Tetrachloroethene	166	10.311	10.317	-0.006	97	284196	5.00	4.84	
101 1,3-Dichloropropane	76	10.396	10.396	0.000	89	317226	5.00	4.45	
102 2-Hexanone	43	10.451	10.451	0.000	96	638384	25.0	26.5	
104 Chlorodibromomethane	129	10.609	10.609	0.000	90	225959	5.00	4.82	
105 Ethylene Dibromide	107	10.713	10.719	-0.006	98	178546	5.00	4.61	
* 106 Chlorobenzene-d5 (IS)	117	11.152	11.152	0.000	85	1562063	10.0	10.0	
107 1-Chlorohexane	91	11.158	11.158	0.000	97	344152	5.00	4.23	
108 Chlorobenzene	112	11.176	11.176	0.000	95	710360	5.00	4.71	
110 1,1,1,2-Tetrachloroethane	131	11.256	11.256	0.000	97	247961	5.00	4.63	
111 Ethylbenzene	91	11.262	11.262	0.000	98	1190723	5.00	4.45	
112 m-Xylene & p-Xylene	106	11.378	11.377	0.001	97	933152	10.0	9.26	
113 o-Xylene	106	11.707	11.707	0.000	97	460835	5.00	4.61	
114 Styrene	104	11.719	11.719	0.000	94	775127	5.00	4.55	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
115 Bromoform	173	11.877	11.877	0.000	98	138743	5.00	5.07	
116 Isopropylbenzene	105	12.005	12.005	0.000	95	1196401	5.00	4.58	
\$ 119 4-Bromofluorobenzene (Surr)	95	12.146	12.146	0.000	92	757317	10.0	9.52	
120 1,1,2,2-Tetrachloroethane	83	12.249	12.249	0.000	93	235272	5.00	4.35	
121 Bromobenzene	156	12.261	12.261	0.000	96	306661	5.00	4.72	
122 trans-1,4-Dichloro-2-butene	53	12.280	12.280	0.000	92	199197	25.0	19.1	
123 1,2,3-Trichloropropane	110	12.298	12.298	0.000	83	64739	5.00	4.69	
124 N-Propylbenzene	91	12.335	12.335	0.000	99	1425365	5.00	4.40	
125 2-Chlorotoluene	126	12.408	12.408	0.000	97	293319	5.00	4.61	
126 1,3,5-Trimethylbenzene	105	12.469	12.469	0.000	94	1016340	5.00	4.45	
127 4-Chlorotoluene	126	12.499	12.499	0.000	97	304814	5.00	4.59	
128 tert-Butylbenzene	134	12.707	12.706	0.001	93	217051	5.00	4.45	
129 Pentachloroethane	167	12.743	12.743	0.000	94	191920	5.00	4.58	
130 1,2,4-Trimethylbenzene	105	12.749	12.749	0.000	97	1056004	5.00	4.43	
131 sec-Butylbenzene	105	12.871	12.871	0.000	94	1336858	5.00	4.50	
132 1,3-Dichlorobenzene	146	12.969	12.969	0.000	98	608527	5.00	4.65	
133 4-Isopropyltoluene	119	12.981	12.981	0.000	97	1167821	5.00	4.52	
* 134 1,4-Dichlorobenzene-d4	152	13.024	13.024	0.000	94	860664	10.0	10.0	
135 1,4-Dichlorobenzene	146	13.042	13.042	0.000	96	620260	5.00	4.65	
136 1,2,3-Trimethylbenzene	120	13.054	13.054	0.000	98	492415	5.00	4.65	
137 Benzyl chloride	126	13.121	13.121	0.000	98	101781	5.00	4.35	
138 p-Diethylbenzene	119	13.176	13.176	0.000	92	703308	5.00	4.48	
139 n-Butylbenzene	92	13.267	13.267	0.000	97	582429	5.00	4.26	
140 1,2-Dichlorobenzene	146	13.304	13.304	0.000	99	568392	5.00	4.65	
142 1,2-Dibromo-3-Chloropropane	155	13.840	13.840	0.000	89	36002	5.00	4.57	
143 1,3,5-Trichlorobenzene	180	13.962	13.962	0.000	98	499939	5.00	4.55	
144 1,2,4-Trichlorobenzene	180	14.383	14.383	0.000	94	466736	5.00	4.61	
145 Hexachlorobutadiene	225	14.468	14.468	0.000	96	234120	5.00	4.71	
146 Naphthalene	128	14.566	14.566	0.000	97	799086	5.00	4.34	
147 1,2,3-Trichlorobenzene	180	14.706	14.706	0.000	96	409439	5.00	4.59	
148 2-Methylnaphthalene	142	15.322	15.322	0.000	92	533285	5.00	4.05	
160 Pentane	43		0.000				ND	ND	

QC Flag Legend

Processing Flags

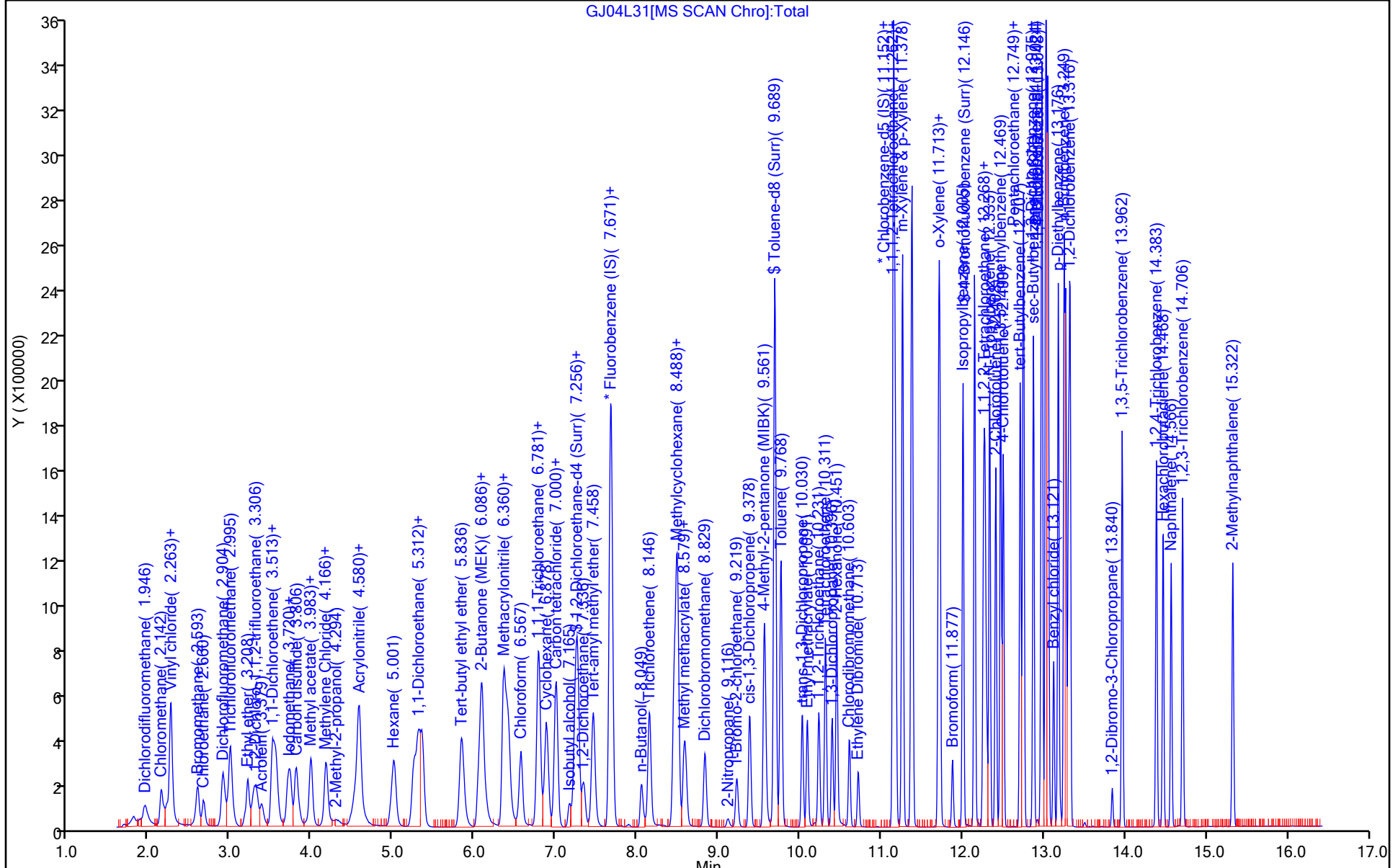
ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

MSV_Q_QVOA1_00062	Amount Added: 12.50	Units: uL	
MSV_Q_QARC_00061	Amount Added: 12.50	Units: uL	
MSV_Q_EE_00003	Amount Added: 12.50	Units: uL	
MSV_Q_QVOA6_00059	Amount Added: 12.50	Units: uL	
MSV_Q_ETBR_00006	Amount Added: 12.50	Units: uL	
MSV_QGAS_826_00101	Amount Added: 12.50	Units: uL	
MSV_29_826ISS_00014	Amount Added: 1.00	Units: uL	Run Reagent



GJ04L31[MS SCAN Chrom]:Total

Eurofins Lancaster Laboratories Env, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\16334\20210104-19179.b\GJ04L31.D
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 04-Jan-2021 19:39:30 ALS Bottle#: 4 Worklist Smp#: 5
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0019179-005
 Misc. Info.: LCS
 Operator ID: MEC29284 Instrument ID: 16334
 Method: \\chromfs\Lancaster\ChromData\16334\20210104-19179.b\MSV_16334_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 04-Jan-2021 21:01:00 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: campbellme

Date: 04-Jan-2021 20:24:33

Compound	Amount Added	Amount Recovered	% Rec.
\$ 52 Dibromofluoromethane (Surr)	10.0	9.82	98.19
\$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	9.65	96.45
\$ 83 Toluene-d8 (Surr)	10.0	9.82	98.22
\$ 119 4-Bromofluorobenzene (Surr)	10.0	9.52	95.17

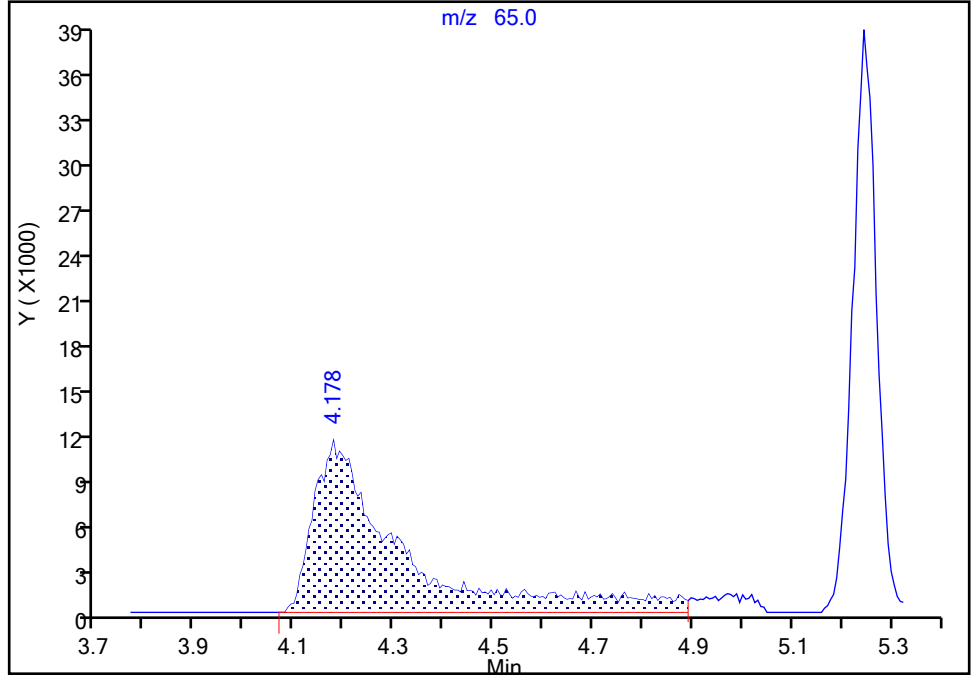
Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20210104-19179.b\GJ04L31.D
Injection Date: 04-Jan-2021 19:39:30 Instrument ID: 16334
Lims ID: LCS
Client ID:
Operator ID: MEC29284 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

* 30 t-Butyl alcohol-d10 (IS), CAS: 53001-22-2
Signal: 1

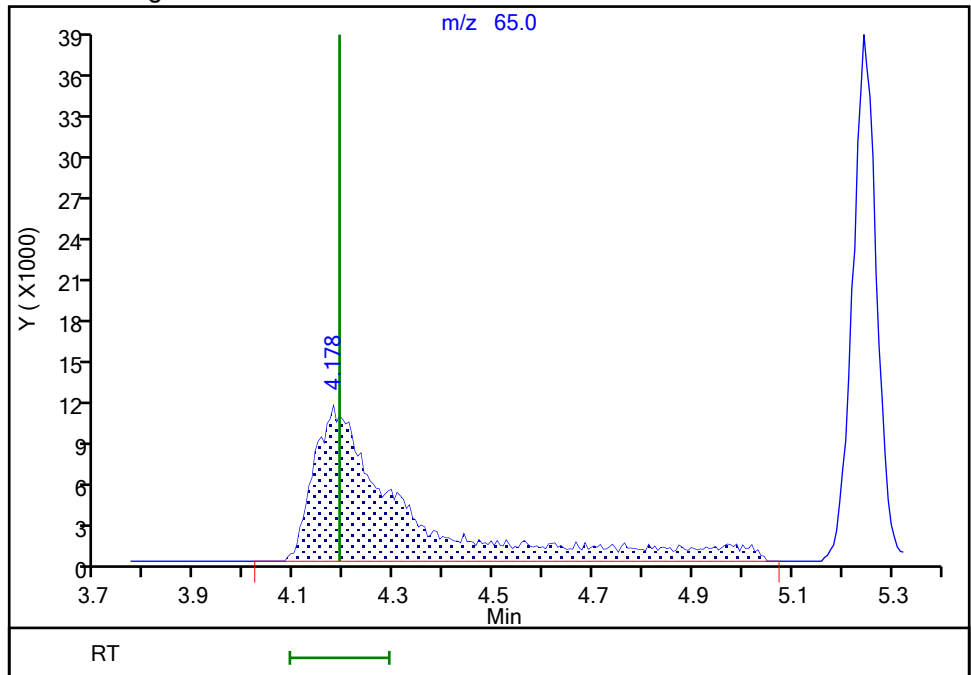
RT: 4.18
Area: 135227
Amount: 50.000000
Amount Units: ug/l

Processing Integration Results



RT: 4.18
Area: 143565
Amount: 50.000000
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 04-Jan-2021 20:22:45
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-24913-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 410-82059/4
 Matrix: Water Lab File ID: HJ05L01.D
 Analysis Method: 8260D Date Collected: _____
 Sample wt/vol: 25 (mL) Date Analyzed: 01/05/2021 10:01
 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.: 82059 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	5.03		0.50	0.070
71-55-6	1,1,1-Trichloroethane	5.08		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	5.13		0.50	0.070
79-00-5	1,1,2-Trichloroethane	5.28		0.50	0.060
75-34-3	1,1-Dichloroethane	5.14		0.50	0.070
75-35-4	1,1-Dichloroethene	5.08		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	5.31		0.50	0.060
107-06-2	1,2-Dichloroethane	4.94		0.50	0.050
78-87-5	1,2-Dichloropropane	5.27		0.50	0.060
78-93-3	2-Butanone (MEK)	38.2		5.0	0.60
591-78-6	2-Hexanone	25.5		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	24.7		5.0	0.70
67-64-1	Acetone	37.1		5.0	0.90
71-43-2	Benzene	5.00		0.50	0.050
74-97-5	Bromochloromethane	4.97		0.50	0.050
75-27-4	Bromodichloromethane	5.20		0.50	0.050
75-25-2	Bromoform	5.21		1.0	0.30
74-83-9	Bromomethane	4.85		0.50	0.070
75-15-0	Carbon disulfide	5.78		1.0	0.060
56-23-5	Carbon tetrachloride	5.28		0.50	0.070
108-90-7	Chlorobenzene	5.11		0.50	0.060
75-00-3	Chloroethane	4.70		0.50	0.070
67-66-3	Chloroform	5.19		0.50	0.090
74-87-3	Chloromethane	4.62		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	5.37		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	5.29		0.50	0.050
124-48-1	Dibromochloromethane	5.41		0.50	0.070
100-41-4	Ethylbenzene	5.19		0.50	0.060
1634-04-4	Methyl tert-butyl ether	5.55		0.50	0.050
75-09-2	Methylene Chloride	4.82		0.50	0.070
100-42-5	Styrene	5.34		0.50	0.050
127-18-4	Tetrachloroethene	5.11		0.50	0.060
108-88-3	Toluene	5.02		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	5.08		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	5.19		0.50	0.060
79-01-6	Trichloroethene	5.04		0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-24913-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 410-82059/4
 Matrix: Water Lab File ID: HJ05L01.D
 Analysis Method: 8260D Date Collected: _____
 Sample wt/vol: 25 (mL) Date Analyzed: 01/05/2021 10:01
 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.: 82059 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-01-4	Vinyl chloride	4.92		0.50	0.10
1330-20-7	Xylenes, Total	15.8		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)	102		80-120
1868-53-7	Dibromofluoromethane (Surr)	101		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\19094\20210105-19216.b\HJ05L01.D
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 05-Jan-2021 10:01:30 ALS Bottle#: 3 Worklist Smp#: 4
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0019216-004
 Misc. Info.: LCS
 Operator ID: jkh09052 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20210105-19216.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 05-Jan-2021 11:32:09 Calib Date: 04-Jan-2021 18:39:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20210104-19149.b\Hj04I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1665

First Level Reviewer: howej

Date: 05-Jan-2021 10:31:10

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
3 Dichlorodifluoromethane	85	2.062	2.075	-0.013	100	221795	5.00	4.17	
6 Chloromethane	50	2.269	2.282	-0.013	99	321767	5.00	4.62	
8 Butadiene	39	2.397	2.404	-0.007	90	273788	5.00	4.62	
7 Vinyl chloride	62	2.397	2.410	-0.013	87	307573	5.00	4.92	
9 Bromomethane	94	2.733	2.745	-0.012	91	204395	5.00	4.85	
10 Chloroethane	64	2.830	2.843	-0.013	100	183931	5.00	4.70	
11 Dichlorofluoromethane	67	3.074	3.087	-0.013	98	337937	5.00	4.91	
13 Trichlorofluoromethane	101	3.141	3.160	-0.019	97	354026	5.00	4.92	
15 Ethyl ether	59	3.416	3.422	-0.006	92	186302	5.00	5.51	
16 1,2-Dichloro-1,1,2-trifluoroethane	67	3.495	3.507	-0.012	94	276934	5.00	5.73	
17 Acrolein	56	3.592	3.605	-0.013	99	203551	37.5	36.3	
18 1,1-Dichloroethene	96	3.739	3.751	-0.012	96	194415	5.00	5.08	
19 Acetone	43	3.781	3.782	-0.001	99	245884	37.5	37.1	
20 112TCTFE	101	3.775	3.788	-0.013	94	199578	5.00	5.46	
21 Isopropyl alcohol	45	3.958	3.952	0.006	27	54752	37.5	48.8	
22 Iodomethane	142	3.952	3.958	-0.006	99	340805	5.00	5.41	
23 Ethyl bromide	108	3.983	3.989	-0.007	98	158608	5.03	4.63	
24 Carbon disulfide	76	4.062	4.074	-0.012	99	665218	5.00	5.78	
26 Methyl acetate	43	4.214	4.220	-0.006	98	85065	5.00	4.28	
27 3-Chloro-1-propene	41	4.245	4.257	-0.012	92	324568	5.00	4.76	
29 Methylene Chloride	84	4.446	4.452	-0.006	95	222159	5.00	4.82	
* 28 t-Butyl alcohol-d10 (IS)	65	4.446	4.458	-0.012	0	104329	50.0	50.0	
30 2-Methyl-2-propanol	59	4.574	4.586	-0.012	99	108965	50.0	51.2	
31 Acrylonitrile	53	4.787	4.794	-0.007	99	229542	25.0	25.0	
32 Methyl tert-butyl ether	73	4.860	4.867	-0.007	96	477152	5.00	5.55	
33 trans-1,2-Dichloroethene	96	4.873	4.885	-0.012	97	215896	5.00	5.08	
34 Hexane	57	5.293	5.300	-0.007	92	352087	5.00	6.03	
35 1,1-Dichloroethane	63	5.531	5.537	-0.006	96	430643	5.00	5.14	
37 Isopropyl ether	45	5.580	5.586	-0.006	95	725262	5.00	5.63	
38 2-Chloro-1,3-butadiene	53	5.635	5.647	-0.012	91	360486	5.00	5.77	
39 Tert-butyl ethyl ether	59	6.110	6.116	-0.006	98	619453	5.00	5.61	

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	6.311	6.312	-0.001	100	449589	37.5	38.2	
42 cis-1,2-Dichloroethene	96	6.354	6.360	-0.006	84	259249	5.00	5.37	
43 2,2-Dichloropropane	77	6.372	6.379	-0.007	89	349294	5.00	5.28	
45 Propionitrile	54	6.403	6.403	0.000	98	120010	37.5	38.4	
47 Methacrylonitrile	67	6.616	6.622	-0.006	92	433518	37.5	37.9	
48 Chlorobromomethane	128	6.683	6.696	-0.013	95	98154	5.00	4.97	
49 Tetrahydrofuran	71	6.695	6.696	-0.001	86	79732	25.0	26.7	
50 Chloroform	83	6.836	6.842	-0.006	94	412224	5.00	5.19	
\$ 51 Dibromofluoromethane (Surr)	113	7.049	7.061	-0.012	93	387132	10.0	10.1	
52 1,1,1-Trichloroethane	97	7.073	7.074	-0.001	99	341675	5.00	5.08	
53 Cyclohexane	56	7.171	7.177	-0.006	93	410540	5.00	5.76	
55 1,1-Dichloropropene	75	7.275	7.281	-0.006	95	329238	5.00	5.26	
56 Carbon tetrachloride	117	7.281	7.287	-0.006	87	299378	5.00	5.28	
57 Isobutyl alcohol	41	7.403	7.409	-0.006	95	106239	125.0	133.6	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.506	7.512	-0.006	0	78921	10.0	10.1	
59 Benzene	78	7.543	7.543	0.000	97	940508	5.00	5.00	
60 1,2-Dichloroethane	62	7.610	7.616	-0.006	97	249478	5.00	4.94	M
62 Tert-amyl methyl ether	73	7.726	7.732	-0.006	98	538706	5.00	5.77	
* 65 Fluorobenzene (IS)	96	7.939	7.945	-0.006	98	1567525	10.0	10.0	
64 n-Heptane	43	7.945	7.951	-0.006	91	417546	5.00	5.94	
66 n-Butanol	56	8.287	8.287	0.000	88	183668	250.0	259.9	
67 Trichloroethene	95	8.427	8.427	0.000	99	237208	5.00	5.04	
68 Methylcyclohexane	83	8.738	8.738	0.000	95	397843	5.00	4.97	
69 2-ethoxy-2-methyl butane	87	8.750	8.762	-0.012	90	320907	5.00	5.72	
70 1,2-Dichloropropane	63	8.762	8.762	0.000	80	259696	5.00	5.27	
71 Methyl methacrylate	69	8.823	8.829	-0.006	89	110516	5.00	5.72	
72 1,4-Dioxane	88	8.841	8.848	-0.007	31	27405	125.0	171.3	
73 Dibromomethane	93	8.866	8.872	-0.006	97	111342	5.00	5.30	
75 Dichlorobromomethane	83	9.097	9.104	-0.007	99	289937	5.00	5.20	
76 2-Nitropropane	41	9.360	9.360	0.000	98	29493	5.00	4.81	
78 2-Chloroethyl vinyl ether	63		9.445				ND	ND	
79 1-Bromo-2-chloroethane	63	9.488	9.488	0.000	99	240495	5.00	5.26	
80 cis-1,3-Dichloropropene	75	9.628	9.628	0.000	96	342897	5.00	5.29	
81 4-Methyl-2-pentanone (MIBK)	43	9.786	9.793	-0.007	97	728981	25.0	24.7	
\$ 82 Toluene-d8 (Surr)	98	9.933	9.933	0.000	94	1533957	10.0	10.1	
83 Toluene	92	10.006	10.006	0.000	97	570699	5.00	5.02	
85 trans-1,3-Dichloropropene	75	10.250	10.256	-0.006	93	277109	5.00	5.19	
86 Ethyl methacrylate	69	10.304	10.305	-0.001	90	214366	5.00	5.80	
87 1,1,2-Trichloroethane	97	10.457	10.457	0.000	90	158481	5.00	5.28	
88 Tetrachloroethene	166	10.548	10.548	0.000	97	248246	5.00	5.11	
89 1,3-Dichloropropane	76	10.615	10.616	-0.001	91	281414	5.00	5.23	
91 2-Hexanone	43	10.658	10.658	0.000	97	520526	25.0	25.5	
93 Chlorodibromomethane	129	10.829	10.829	0.000	91	189174	5.00	5.41	
94 Ethylene Dibromide	107	10.945	10.945	0.000	96	150493	5.00	5.31	
* 97 Chlorobenzene-d5 (IS)	117	11.365	11.365	0.000	88	1110051	10.0	10.0	
96 1-Chlorohexane	91	11.371	11.372	-0.001	97	327066	5.00	4.98	
98 Chlorobenzene	112	11.396	11.396	0.000	94	626870	5.00	5.11	
100 Ethylbenzene	91	11.475	11.475	0.000	99	1130574	5.00	5.19	
99 1,1,1,2-Tetrachloroethane	131	11.475	11.475	0.000	43	212349	5.00	5.03	
101 m-Xylene & p-Xylene	106	11.591	11.591	0.000	98	861274	10.0	10.6	
102 o-Xylene	106	11.920	11.920	0.000	97	412168	5.00	5.22	
103 Styrene	104	11.932	11.932	0.000	94	681690	5.00	5.34	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
104 Bromoform	173	12.091	12.097	-0.006	96	105218	5.00	5.21	
105 Isopropylbenzene	105	12.213	12.213	0.000	96	1117506	5.00	5.39	
\$ 108 4-Bromofluorobenzene (Surr)	95	12.359	12.359	0.000	87	554029	10.0	10.2	
109 1,1,2,2-Tetrachloroethane	83	12.456	12.457	-0.001	93	197799	5.00	5.13	
111 Bromobenzene	156	12.481	12.481	0.000	94	248547	5.00	5.12	
110 trans-1,4-Dichloro-2-butene	53	12.481	12.481	0.000	84	274462	25.0	26.3	
112 1,2,3-Trichloropropane	110	12.505	12.505	0.000	84	51433	5.00	5.23	
113 N-Propylbenzene	91	12.542	12.542	0.000	99	1413212	5.00	5.26	
114 2-Chlorotoluene	126	12.621	12.621	0.000	96	261535	5.00	5.16	
115 1,3,5-Trimethylbenzene	105	12.676	12.676	0.000	94	960858	5.00	5.34	
116 4-Chlorotoluene	126	12.713	12.713	0.000	98	268267	5.00	5.29	
118 tert-Butylbenzene	134	12.920	12.920	0.000	93	200254	5.00	5.30	
119 Pentachloroethane	167	12.956	12.957	-0.001	89	153637	5.00	5.18	
120 1,2,4-Trimethylbenzene	105	12.956	12.957	-0.001	97	958596	5.00	5.20	
121 sec-Butylbenzene	105	13.078	13.078	0.000	95	1303538	5.00	5.36	
122 1,3-Dichlorobenzene	146	13.182	13.182	0.000	96	491216	5.00	5.02	
123 4-Isopropyltoluene	119	13.188	13.188	0.000	97	1104079	5.00	5.48	
* 124 1,4-Dichlorobenzene-d4	152	13.237	13.237	0.000	98	579051	10.0	10.0	
125 1,4-Dichlorobenzene	146	13.255	13.255	0.000	94	496452	5.00	5.10	
126 1,2,3-Trimethylbenzene	120	13.261	13.261	0.000	99	426098	5.00	5.35	
127 Benzyl chloride	126	13.328	13.335	-0.007	99	75022	5.00	5.98	
129 p-Diethylbenzene	119	13.456	13.456	0.000	94	698415	5.00	5.36	
130 n-Butylbenzene	92	13.475	13.475	0.000	97	604317	5.00	5.35	
131 1,2-Dichlorobenzene	146	13.517	13.517	0.000	97	451825	5.00	5.12	
134 1,2-Dibromo-3-Chloropropane	155	14.060	14.060	0.000	83	25121	5.00	5.25	
135 1,3,5-Trichlorobenzene	180	14.182	14.182	0.000	96	385881	5.00	5.08	
136 1,2,4-Trichlorobenzene	180	14.602	14.603	-0.001	94	320662	5.00	5.29	
137 Hexachlorobutadiene	225	14.682	14.688	-0.006	97	193914	5.00	5.47	
138 Naphthalene	128	14.791	14.792	-0.001	97	559639	5.00	5.40	
139 1,2,3-Trichlorobenzene	180	14.932	14.932	0.000	95	288625	5.00	5.40	
140 2-Methylnaphthalene	142	15.584	15.584	0.000	93	323366	5.00	4.53	

QC Flag Legend

Processing Flags

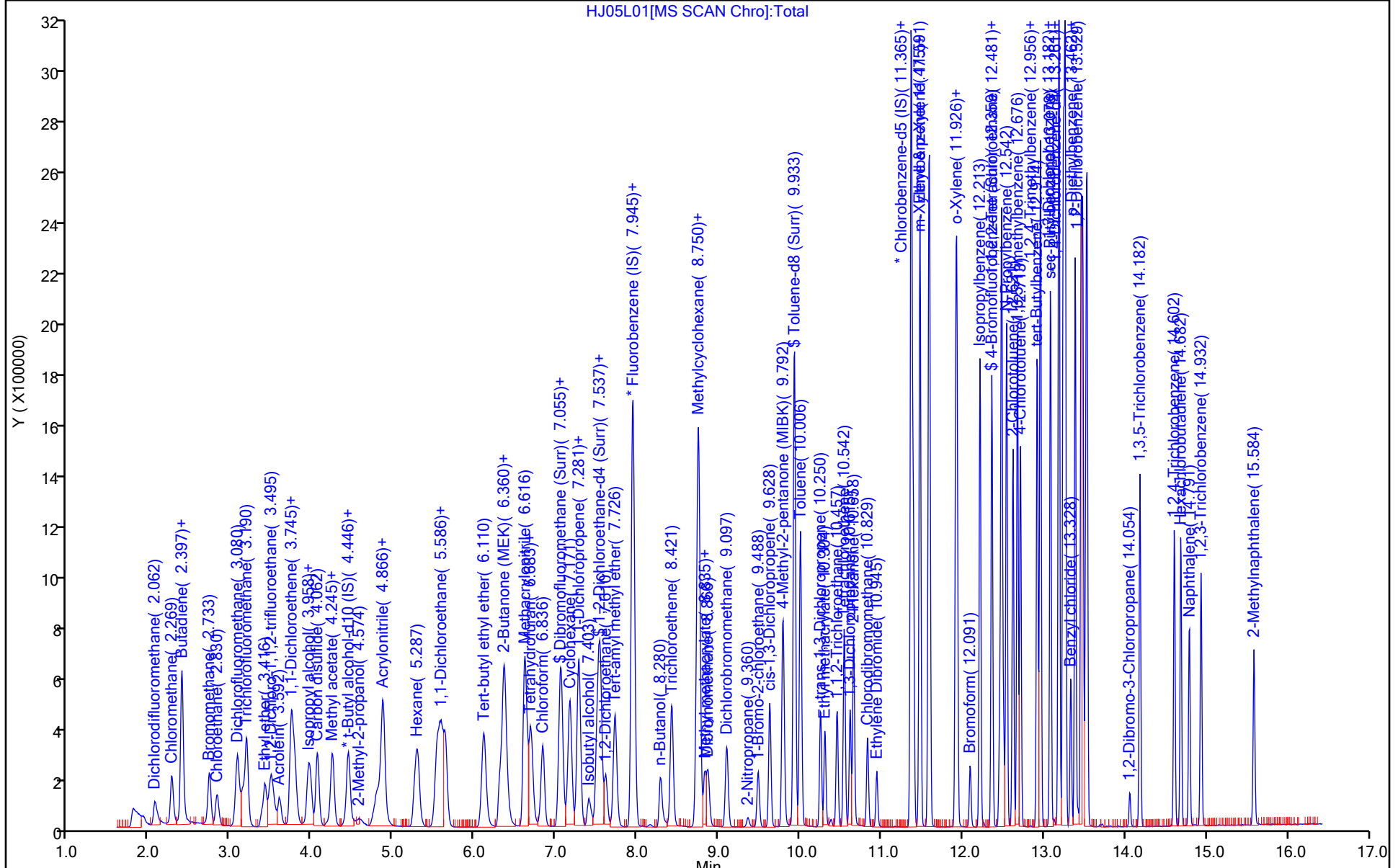
ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

MSV_Q_QVOA1_00062	Amount Added: 12.50	Units: uL	
MSV_Q_QARC_00061	Amount Added: 12.50	Units: uL	
MSV_Q_QVOA6_00059	Amount Added: 12.50	Units: uL	
MSV_Q_EE_00003	Amount Added: 12.50	Units: uL	
MSV_Q_ETBR_00006	Amount Added: 12.50	Units: uL	
MSV_QGAS_826_00101	Amount Added: 12.50	Units: uL	
MSV_30_826ISS_00006	Amount Added: 5.00	Units: uL	Run Reagent



HJ05L01[MS SCAN Chrom]:Total

Eurofins Lancaster Laboratories Env, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20210105-19216.b\HJ05L01.D
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 05-Jan-2021 10:01:30 ALS Bottle#: 3 Worklist Smp#: 4
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0019216-004
 Misc. Info.: LCS
 Operator ID: jkh09052 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20210105-19216.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 05-Jan-2021 11:32:09 Calib Date: 04-Jan-2021 18:39:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20210104-19149.b\Hj04I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1665

First Level Reviewer: howej Date: 05-Jan-2021 10:31:10

Compound	Amount Added	Amount Recovered	% Rec.
\$ 51 Dibromofluoromethane (Surr)	10.0	10.1	101.07
\$ 58 1,2-Dichloroethane-d4 (Surr)	10.0	10.1	100.87
\$ 82 Toluene-d8 (Surr)	10.0	10.1	100.88
\$ 108 4-Bromofluorobenzene (Surr)	10.0	10.2	101.74

Eurofins Lancaster Laboratories Env, LLC

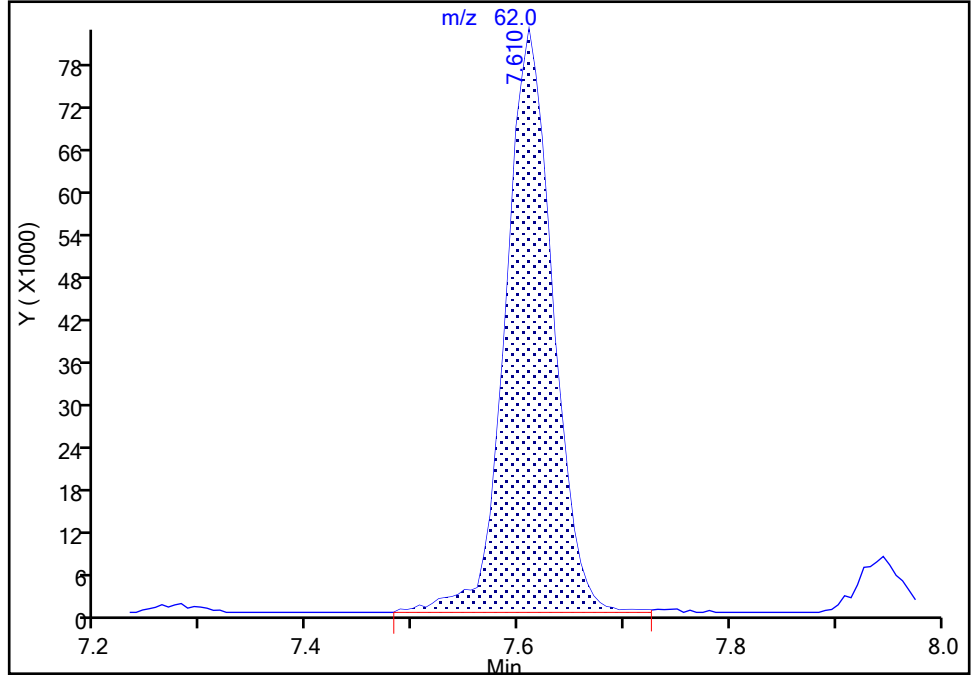
Data File: \\chromfs\Lancaster\ChromData\19094\20210105-19216.b\HJ05L01.D
Injection Date: 05-Jan-2021 10:01:30 Instrument ID: 19094
Lims ID: LCS
Client ID:
Operator ID: jkh09052 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

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

Signal: 1

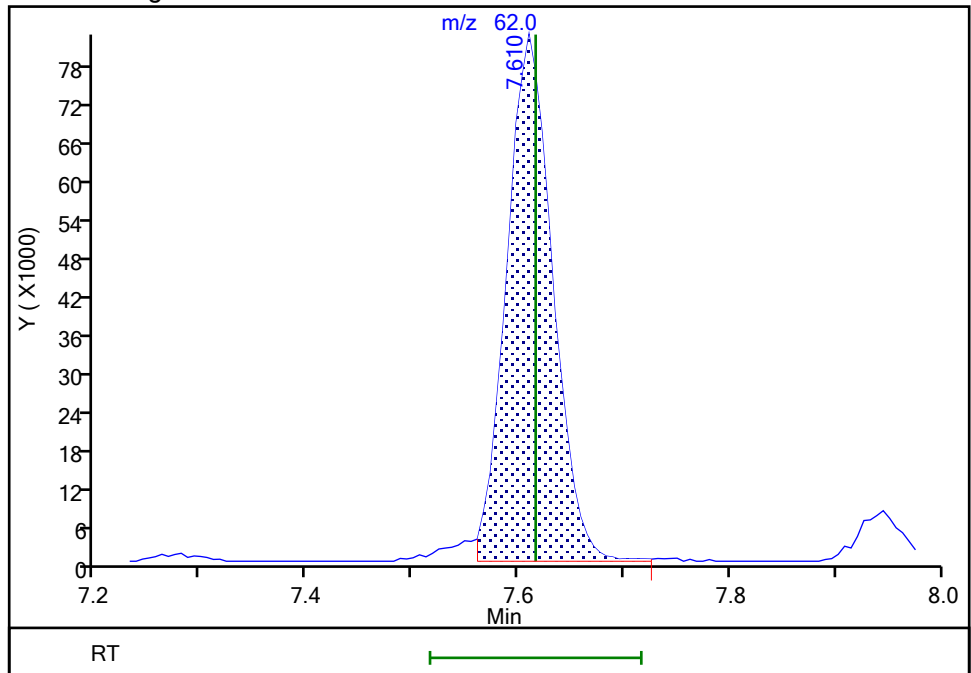
RT: 7.61
Area: 256498
Amount: 5.081077
Amount Units: ug/l

Processing Integration Results



RT: 7.61
Area: 249478
Amount: 4.942014
Amount Units: ug/l

Manual Integration Results



Reviewer: howej, 05-Jan-2021 10:30:44
Audit Action: Split an Integrated Peak

Audit Reason: Other

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-24913-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCSD 410-81892/6
 Matrix: Water Lab File ID: GJ04L32.D
 Analysis Method: 8260D Date Collected: _____
 Sample wt/vol: 25 (mL) Date Analyzed: 01/04/2021 20:01
 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.: 81892 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	4.64		0.50	0.070
71-55-6	1,1,1-Trichloroethane	4.38		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	4.39		0.50	0.070
79-00-5	1,1,2-Trichloroethane	4.77		0.50	0.060
75-34-3	1,1-Dichloroethane	4.30		0.50	0.070
75-35-4	1,1-Dichloroethene	4.55		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	4.55		0.50	0.060
107-06-2	1,2-Dichloroethane	4.23		0.50	0.050
78-87-5	1,2-Dichloropropane	4.48		0.50	0.060
78-93-3	2-Butanone (MEK)	39.1		5.0	0.60
591-78-6	2-Hexanone	27.5		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	26.5		5.0	0.70
67-64-1	Acetone	31.7		5.0	0.90
71-43-2	Benzene	4.51		0.50	0.050
74-97-5	Bromochloromethane	4.58		0.50	0.050
75-27-4	Bromodichloromethane	4.55		0.50	0.050
75-25-2	Bromoform	4.83		1.0	0.30
74-83-9	Bromomethane	4.42		0.50	0.070
75-15-0	Carbon disulfide	4.38		1.0	0.060
56-23-5	Carbon tetrachloride	4.50		0.50	0.070
108-90-7	Chlorobenzene	4.64		0.50	0.060
75-00-3	Chloroethane	4.06		0.50	0.070
67-66-3	Chloroform	4.51		0.50	0.090
74-87-3	Chloromethane	3.99		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	4.91		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	4.34		0.50	0.050
124-48-1	Dibromochloromethane	4.81		0.50	0.070
100-41-4	Ethylbenzene	4.42		0.50	0.060
1634-04-4	Methyl tert-butyl ether	4.24		0.50	0.050
75-09-2	Methylene Chloride	4.59		0.50	0.070
100-42-5	Styrene	4.55		0.50	0.050
127-18-4	Tetrachloroethene	4.78		0.50	0.060
108-88-3	Toluene	4.50		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	4.59		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	4.23		0.50	0.060
79-01-6	Trichloroethene	4.60		0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-24913-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCSD 410-81892/6
 Matrix: Water Lab File ID: GJ04L32.D
 Analysis Method: 8260D Date Collected: _____
 Sample wt/vol: 25 (mL) Date Analyzed: 01/04/2021 20:01
 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.: 81892 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-01-4	Vinyl chloride	4.25		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)	97		80-120
460-00-4	4-Bromofluorobenzene (Surr)	94		80-120
1868-53-7	Dibromofluoromethane (Surr)	99		80-120
2037-26-5	Toluene-d8 (Surr)	97		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20210104-19179.b\GJ04L32.D
 Lims ID: LCSD
 Client ID:
 Sample Type: LCSD
 Inject. Date: 04-Jan-2021 20:01:30 ALS Bottle#: 5 Worklist Smp#: 6
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0019179-006
 Misc. Info.: LCSD
 Operator ID: MEC29284 Instrument ID: 16334
 Method: \\chromfs\Lancaster\ChromData\16334\20210104-19179.b\MSV_16334_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 04-Jan-2021 21:01:00 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: campbellme

Date: 04-Jan-2021 20:43:58

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	1.946	0.007	99	214826	5.00	3.94	M
5 Chloromethane	50	2.142	2.141	0.001	98	293658	5.00	3.99	
8 Vinyl chloride	62	2.257	2.257	0.000	84	267059	5.00	4.25	
7 Butadiene	39	2.257	2.257	0.000	90	343191	5.00	4.10	
9 Bromomethane	94	2.593	2.587	0.007	90	193423	5.00	4.42	
10 Chloroethane	64	2.666	2.666	0.000	100	154864	5.00	4.06	
12 Dichlorofluoromethane	67	2.897	2.904	-0.007	96	290981	5.00	3.41	
13 Trichlorofluoromethane	101	2.971	2.971	0.000	98	327346	5.00	4.53	M
15 Ethyl ether	59	3.208	3.202	0.006	92	204671	5.00	4.80	
17 1,2-Dichloro-1,1,2-trifluoroethane	67	3.300	3.294	0.006	92	252792	5.00	4.28	
18 Acrolein	56	3.379	3.379	0.000	99	170340	37.5	32.8	
19 1,1-Dichloroethene	96	3.507	3.507	0.000	98	198841	5.00	4.55	
20 112TCTFE	101	3.550	3.550	0.000	91	199713	5.00	4.68	
21 Acetone	43	3.550	3.550	0.000	74	212900	37.5	31.7	
23 Iodomethane	142	3.702	3.702	0.000	98	368316	5.00	4.51	
22 Isopropyl alcohol	45	3.702	3.714	-0.012	97	27089	37.5	16.3	
24 Ethyl bromide	108	3.733	3.733	0.000	97	170951	5.03	4.49	
25 Carbon disulfide	76	3.806	3.800	0.006	98	705915	5.00	4.38	
27 Methyl acetate	43	3.958	3.958	0.000	98	77198	5.00	3.80	
28 3-Chloro-1-propene	41	3.983	3.983	0.000	95	313159	5.00	3.58	
29 Methylene Chloride	84	4.172	4.172	0.000	91	229701	5.00	4.59	
* 30 t-Butyl alcohol-d10 (IS)	65	4.196	4.190	0.006	0	136819	50.0	50.0	M
31 2-Methyl-2-propanol	59	4.300	4.318	-0.018	98	113725	50.0	46.2	M
32 Acrylonitrile	53	4.519	4.513	0.006	98	233136	25.0	26.8	
33 Methyl tert-butyl ether	73	4.574	4.568	0.006	95	589320	5.00	4.24	
34 trans-1,2-Dichloroethene	96	4.580	4.574	0.006	100	230705	5.00	4.59	
35 Hexane	57	5.001	5.001	0.000	91	319397	5.00	4.36	
37 1,1-Dichloroethane	63	5.245	5.245	0.000	96	401201	5.00	4.30	
38 Isopropyl ether	45	5.306	5.305	0.001	96	759218	5.00	4.00	
39 2-Chloro-1,3-butadiene	53	5.354	5.354	0.000	90	338129	5.00	3.98	
40 Tert-butyl ethyl ether	59	5.836	5.836	0.000	98	720200	5.00	4.16	

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	6.043	6.043	0.000	100	486779	37.5	39.1	
42 cis-1,2-Dichloroethene	96	6.086	6.080	0.006	81	277542	5.00	4.91	
43 2,2-Dichloropropane	77	6.092	6.098	-0.006	85	340905	5.00	4.35	a
45 Propionitrile	54	6.135	6.141	-0.006	98	126794	37.5	41.1	
48 Methacrylonitrile	67	6.354	6.360	-0.006	91	486719	37.5	42.6	
49 Chlorobromomethane	128	6.415	6.409	0.006	91	115353	5.00	4.58	
50 Tetrahydrofuran	71	6.403	6.415	-0.012	76	92347	25.0	28.7	
51 Chloroform	83	6.567	6.567	0.000	93	405347	5.00	4.51	
\$ 52 Dibromofluoromethane (Surr)	113	6.781	6.787	-0.006	94	503088	10.0	9.91	
53 1,1,1-Trichloroethane	97	6.793	6.787	0.006	98	337457	5.00	4.38	
54 Cyclohexane	56	6.878	6.878	0.000	89	384030	5.00	4.34	
56 Carbon tetrachloride	117	7.000	6.994	0.006	96	300029	5.00	4.50	
57 1,1-Dichloropropene	75	7.000	7.000	0.000	97	321246	5.00	4.44	
58 Isobutyl alcohol	41	7.171	7.159	0.012	96	100447	125.0	84.7	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.232	7.238	-0.006	0	104761	10.0	9.70	
60 Benzene	78	7.262	7.262	0.000	97	960863	5.00	4.51	
61 1,2-Dichloroethane	62	7.336	7.336	0.000	97	252010	5.00	4.23	
63 Tert-amyl methyl ether	73	7.458	7.458	0.000	99	663047	5.00	4.34	
* 64 Fluorobenzene (IS)	96	7.671	7.671	0.000	99	2097085	10.0	10.0	
65 n-Heptane	43	7.677	7.677	0.000	91	339797	5.00	4.11	
67 n-Butanol	56	8.049	8.049	0.000	89	211533	250.0	239.3	
68 Trichloroethene	95	8.146	8.146	0.000	97	250405	5.00	4.60	
69 Methylcyclohexane	83	8.451	8.451	0.000	91	389362	5.00	4.61	
70 1,2-Dichloropropane	63	8.482	8.488	-0.006	97	255593	5.00	4.48	
71 2-ethoxy-2-methyl butane	87	8.494	8.494	0.000	93	380653	5.00	4.56	
73 1,4-Dioxane	88	8.573	8.573	0.000	28	21076	125.0	134.0	M
72 Methyl methacrylate	69	8.573	8.573	0.000	92	129180	5.00	5.55	
74 Dibromomethane	93	8.585	8.591	-0.006	95	123534	5.00	4.67	
76 Dichlorobromomethane	83	8.829	8.835	-0.006	100	301213	5.00	4.55	
77 2-Nitropropane	41	9.116	9.116	0.000	99	32379	5.00	4.90	
79 2-Chloroethyl vinyl ether	63		9.195				ND	ND	
80 1-Bromo-2-chloroethane	63	9.219	9.219	0.000	98	254152	5.00	4.16	
81 cis-1,3-Dichloropropene	75	9.378	9.378	0.000	97	372827	5.00	4.34	
82 4-Methyl-2-pentanone (MIBK)	43	9.561	9.561	0.000	96	847875	25.0	26.5	
\$ 83 Toluene-d8 (Surr)	98	9.689	9.689	0.000	93	2035889	10.0	9.73	
84 Toluene	92	9.768	9.768	0.000	98	611682	5.00	4.50	
96 trans-1,3-Dichloropropene	75	10.030	10.030	0.000	91	310451	5.00	4.23	
98 Ethyl methacrylate	69	10.091	10.091	0.000	89	285657	5.00	4.33	
99 1,1,2-Trichloroethane	97	10.231	10.231	0.000	89	189071	5.00	4.77	
100 Tetrachloroethene	166	10.311	10.317	-0.006	97	282063	5.00	4.78	
101 1,3-Dichloropropane	76	10.396	10.396	0.000	89	315956	5.00	4.42	
102 2-Hexanone	43	10.451	10.451	0.000	96	632102	25.0	27.5	
104 Chlorodibromomethane	129	10.609	10.609	0.000	90	226393	5.00	4.81	
105 Ethylene Dibromide	107	10.719	10.719	0.000	98	177315	5.00	4.55	
* 106 Chlorobenzene-d5 (IS)	117	11.152	11.152	0.000	89	1568799	10.0	10.0	
107 1-Chlorohexane	91	11.158	11.158	0.000	97	341501	5.00	4.18	
108 Chlorobenzene	112	11.176	11.176	0.000	95	702677	5.00	4.64	
110 1,1,1,2-Tetrachloroethane	131	11.256	11.256	0.000	96	249406	5.00	4.64	
111 Ethylbenzene	91	11.262	11.262	0.000	98	1186743	5.00	4.42	
112 m-Xylene & p-Xylene	106	11.378	11.377	0.001	97	930099	10.0	9.19	
113 o-Xylene	106	11.707	11.707	0.000	96	459913	5.00	4.58	
114 Styrene	104	11.719	11.719	0.000	94	777887	5.00	4.55	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
115 Bromoform	173	11.877	11.877	0.000	98	132666	5.00	4.83	
116 Isopropylbenzene	105	12.005	12.005	0.000	95	1196274	5.00	4.56	
\$ 119 4-Bromofluorobenzene (Surr)	95	12.146	12.146	0.000	92	752632	10.0	9.42	
120 1,1,2,2-Tetrachloroethane	83	12.249	12.249	0.000	94	235491	5.00	4.39	
121 Bromobenzene	156	12.261	12.261	0.000	95	304776	5.00	4.74	
122 trans-1,4-Dichloro-2-butene	53	12.280	12.280	0.000	92	188254	25.0	19.0	
123 1,2,3-Trichloropropane	110	12.298	12.298	0.000	82	62469	5.00	4.57	
124 N-Propylbenzene	91	12.335	12.335	0.000	99	1422773	5.00	4.43	
125 2-Chlorotoluene	126	12.408	12.408	0.000	97	293693	5.00	4.65	
126 1,3,5-Trimethylbenzene	105	12.469	12.469	0.000	94	1018254	5.00	4.50	
127 4-Chlorotoluene	126	12.499	12.499	0.000	97	302457	5.00	4.60	
128 tert-Butylbenzene	134	12.707	12.706	0.001	93	219444	5.00	4.54	
129 Pentachloroethane	167	12.743	12.743	0.000	95	194050	5.00	4.67	
130 1,2,4-Trimethylbenzene	105	12.749	12.749	0.000	97	1052147	5.00	4.45	
131 sec-Butylbenzene	105	12.871	12.871	0.000	94	1327736	5.00	4.51	
132 1,3-Dichlorobenzene	146	12.969	12.969	0.000	98	605256	5.00	4.66	
133 4-Isopropyltoluene	119	12.981	12.981	0.000	97	1173535	5.00	4.59	
* 134 1,4-Dichlorobenzene-d4	152	13.024	13.024	0.000	94	852907	10.0	10.0	
135 1,4-Dichlorobenzene	146	13.042	13.042	0.000	95	614262	5.00	4.65	
136 1,2,3-Trimethylbenzene	120	13.054	13.054	0.000	98	500063	5.00	4.77	
137 Benzyl chloride	126	13.121	13.121	0.000	98	100937	5.00	4.35	
138 p-Diethylbenzene	119	13.176	13.176	0.000	92	703238	5.00	4.52	
139 n-Butylbenzene	92	13.267	13.267	0.000	96	582477	5.00	4.30	
140 1,2-Dichlorobenzene	146	13.304	13.304	0.000	99	564647	5.00	4.66	
142 1,2-Dibromo-3-Chloropropane	155	13.840	13.840	0.000	89	36643	5.00	4.69	
143 1,3,5-Trichlorobenzene	180	13.962	13.962	0.000	98	503075	5.00	4.62	
144 1,2,4-Trichlorobenzene	180	14.383	14.383	0.000	94	466211	5.00	4.65	
145 Hexachlorobutadiene	225	14.468	14.468	0.000	95	234298	5.00	4.76	
146 Naphthalene	128	14.566	14.566	0.000	97	812503	5.00	4.45	
147 1,2,3-Trichlorobenzene	180	14.706	14.706	0.000	96	414698	5.00	4.69	
148 2-Methylnaphthalene	142	15.322	15.322	0.000	92	555529	5.00	4.26	
160 Pentane	43		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

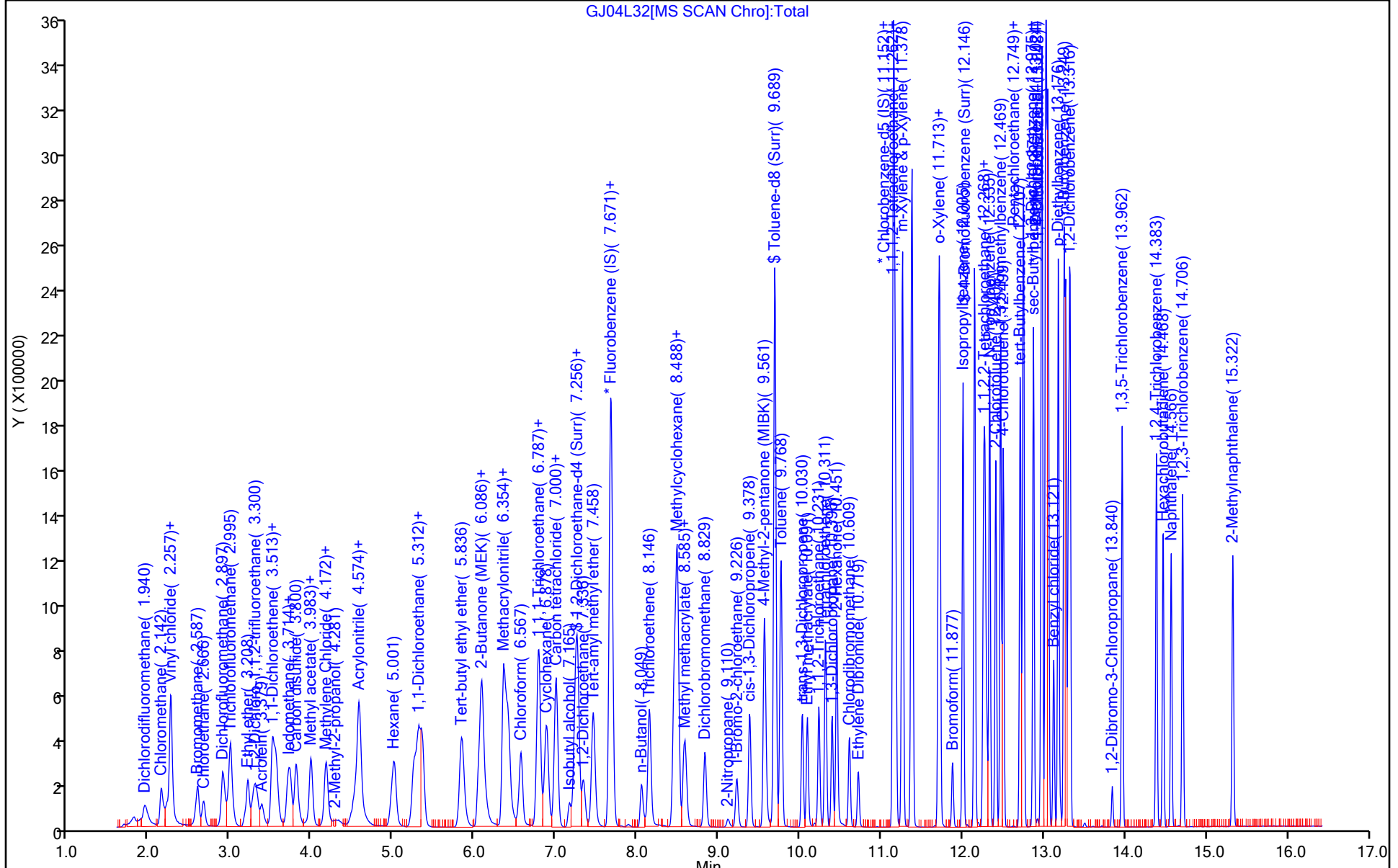
Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MSV_Q_QVOA1_00062	Amount Added: 12.50	Units: uL	
MSV_Q_QARC_00061	Amount Added: 12.50	Units: uL	
MSV_Q_QVOA6_00059	Amount Added: 12.50	Units: uL	
MSV_Q_EE_00003	Amount Added: 12.50	Units: uL	
MSV_Q_ETBR_00006	Amount Added: 12.50	Units: uL	
MSV_QGAS_826_00101	Amount Added: 12.50	Units: uL	
MSV_29_826ISS_00014	Amount Added: 1.00	Units: uL	Run Reagent



GJ04L32[MS SCAN Chrom]:Total

Eurofins Lancaster Laboratories Env, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\16334\20210104-19179.b\GJ04L32.D
 Lims ID: LCSD
 Client ID:
 Sample Type: LCSD
 Inject. Date: 04-Jan-2021 20:01:30 ALS Bottle#: 5 Worklist Smp#: 6
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0019179-006
 Misc. Info.: LCSD
 Operator ID: MEC29284 Instrument ID: 16334
 Method: \\chromfs\Lancaster\ChromData\16334\20210104-19179.b\MSV_16334_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 04-Jan-2021 21:01:00 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: campbellme Date: 04-Jan-2021 20:43:58

Compound	Amount Added	Amount Recovered	% Rec.
\$ 52 Dibromofluoromethane (Surr)	10.0	9.91	99.12
\$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	9.70	97.01
\$ 83 Toluene-d8 (Surr)	10.0	9.73	97.27
\$ 119 4-Bromofluorobenzene (Surr)	10.0	9.42	94.18

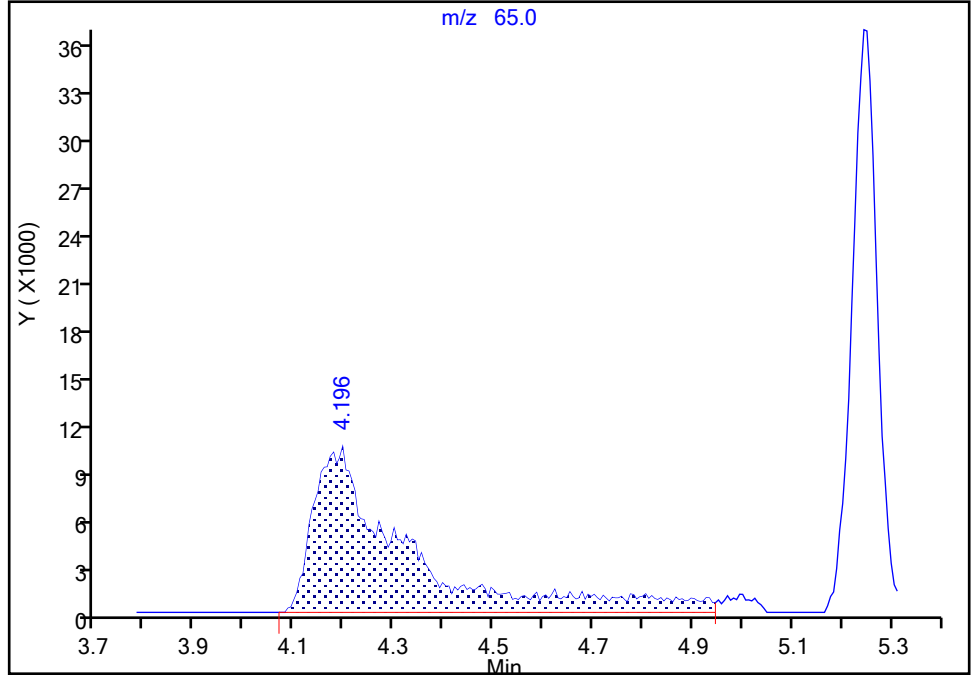
Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20210104-19179.b\GJ04L32.D
Injection Date: 04-Jan-2021 20:01:30 Instrument ID: 16334
Lims ID: LCSD
Client ID:
Operator ID: MEC29284 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 t-Butyl alcohol-d10 (IS), CAS: 53001-22-2
Signal: 1

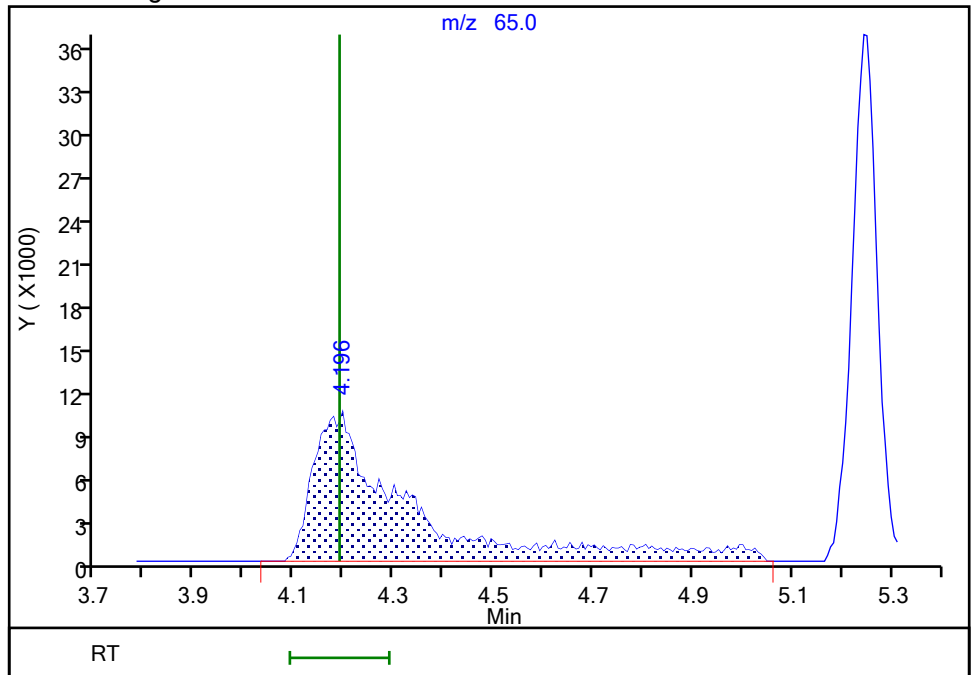
RT: 4.20
Area: 132279
Amount: 50.000000
Amount Units: ug/l

Processing Integration Results



RT: 4.20
Area: 136819
Amount: 50.000000
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 04-Jan-2021 20:43:00
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-24913-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCSD 410-82059/5
 Matrix: Water Lab File ID: HJ05L02.D
 Analysis Method: 8260D Date Collected: _____
 Sample wt/vol: 25 (mL) Date Analyzed: 01/05/2021 10:23
 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.: 82059 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	4.96		0.50	0.070
71-55-6	1,1,1-Trichloroethane	5.01		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	5.02		0.50	0.070
79-00-5	1,1,2-Trichloroethane	5.08		0.50	0.060
75-34-3	1,1-Dichloroethane	5.15		0.50	0.070
75-35-4	1,1-Dichloroethene	4.97		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	5.05		0.50	0.060
107-06-2	1,2-Dichloroethane	4.96		0.50	0.050
78-87-5	1,2-Dichloropropane	5.02		0.50	0.060
78-93-3	2-Butanone (MEK)	38.5		5.0	0.60
591-78-6	2-Hexanone	26.1		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	25.2		5.0	0.70
67-64-1	Acetone	37.2		5.0	0.90
71-43-2	Benzene	4.93		0.50	0.050
74-97-5	Bromochloromethane	4.90		0.50	0.050
75-27-4	Bromodichloromethane	5.09		0.50	0.050
75-25-2	Bromoform	5.06		1.0	0.30
74-83-9	Bromomethane	4.75		0.50	0.070
75-15-0	Carbon disulfide	5.62		1.0	0.060
56-23-5	Carbon tetrachloride	5.15		0.50	0.070
108-90-7	Chlorobenzene	5.05		0.50	0.060
75-00-3	Chloroethane	4.69		0.50	0.070
67-66-3	Chloroform	5.08		0.50	0.090
74-87-3	Chloromethane	4.59		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	5.34		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	5.07		0.50	0.050
124-48-1	Dibromochloromethane	5.31		0.50	0.070
100-41-4	Ethylbenzene	5.10		0.50	0.060
1634-04-4	Methyl tert-butyl ether	5.44		0.50	0.050
75-09-2	Methylene Chloride	4.72		0.50	0.070
100-42-5	Styrene	5.27		0.50	0.050
127-18-4	Tetrachloroethene	5.04		0.50	0.060
108-88-3	Toluene	4.94		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	5.07		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	5.07		0.50	0.060
79-01-6	Trichloroethene	4.98		0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-24913-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCSD 410-82059/5
 Matrix: Water Lab File ID: HJ05L02.D
 Analysis Method: 8260D Date Collected: _____
 Sample wt/vol: 25 (mL) Date Analyzed: 01/05/2021 10:23
 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.: 82059 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-01-4	Vinyl chloride	4.82		0.50	0.10
1330-20-7	Xylenes, Total	15.6		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)	100		80-120
1868-53-7	Dibromofluoromethane (Surr)	100		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\19094\20210105-19216.b\HJ05L02.D
 Lims ID: LCSD
 Client ID:
 Sample Type: LCSD
 Inject. Date: 05-Jan-2021 10:23:30 ALS Bottle#: 4 Worklist Smp#: 5
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0019216-005
 Misc. Info.: LCSD
 Operator ID: jkh09052 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20210105-19216.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 05-Jan-2021 11:32:09 Calib Date: 04-Jan-2021 18:39:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20210104-19149.b\Hj04I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1665

First Level Reviewer: howej

Date: 05-Jan-2021 10:49:25

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
3 Dichlorodifluoromethane	85	2.081	2.075	0.006	99	226879	5.00	4.07	
6 Chloromethane	50	2.282	2.282	0.000	99	335342	5.00	4.59	
8 Butadiene	39	2.410	2.404	0.006	91	288060	5.00	4.63	
7 Vinyl chloride	62	2.410	2.410	0.000	87	316054	5.00	4.82	
9 Bromomethane	94	2.751	2.745	0.006	90	209663	5.00	4.75	
10 Chloroethane	64	2.837	2.843	-0.007	100	192507	5.00	4.69	
11 Dichlorofluoromethane	67	3.086	3.087	-0.001	97	348931	5.00	4.83	
13 Trichlorofluoromethane	101	3.154	3.160	-0.006	96	358658	5.00	4.75	
15 Ethyl ether	59	3.428	3.422	0.006	93	190309	5.00	5.37	
16 1,2-Dichloro-1,1,2-trifluoroethane	67	3.507	3.507	0.000	95	287564	5.00	5.67	
17 Acrolein	56	3.605	3.605	0.000	99	196879	37.5	35.8	
18 1,1-Dichloroethene	96	3.751	3.751	0.000	96	199291	5.00	4.97	
19 Acetone	43	3.788	3.782	0.006	93	242057	37.5	37.2	
20 112TCTFE	101	3.788	3.788	0.000	94	203201	5.00	5.30	
21 Isopropyl alcohol	45	3.958	3.952	0.006	30	44110	37.5	37.5	
22 Iodomethane	142	3.964	3.958	0.006	99	350228	5.00	5.30	
23 Ethyl bromide	108	3.989	3.989	0.000	98	167544	5.03	4.66	
24 Carbon disulfide	76	4.074	4.074	0.000	99	678793	5.00	5.62	
26 Methyl acetate	43	4.239	4.220	0.019	98	93188	5.00	4.78	
27 3-Chloro-1-propene	41	4.263	4.257	0.006	92	330413	5.00	4.61	
29 Methylene Chloride	84	4.452	4.452	0.000	95	228249	5.00	4.72	
* 28 t-Butyl alcohol-d10 (IS)	65	4.464	4.458	0.006	0	102348	50.0	50.0	
30 2-Methyl-2-propanol	59	4.611	4.586	0.025	100	111597	50.0	53.4	
31 Acrylonitrile	53	4.806	4.794	0.012	99	231877	25.0	25.7	
32 Methyl tert-butyl ether	73	4.867	4.867	0.000	96	490735	5.00	5.44	
33 trans-1,2-Dichloroethene	96	4.879	4.885	-0.006	97	225882	5.00	5.07	
34 Hexane	57	5.299	5.300	-0.001	92	353695	5.00	5.77	
35 1,1-Dichloroethane	63	5.537	5.537	0.000	96	451975	5.00	5.15	
37 Isopropyl ether	45	5.592	5.586	0.006	95	748975	5.00	5.54	
38 2-Chloro-1,3-butadiene	53	5.647	5.647	0.000	91	369117	5.00	5.63	
39 Tert-butyl ethyl ether	59	6.116	6.116	0.000	98	644116	5.00	5.56	

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	6.318	6.312	0.006	100	444077	37.5	38.5	
42 cis-1,2-Dichloroethene	96	6.366	6.360	0.006	84	270128	5.00	5.34	
43 2,2-Dichloropropane	77	6.372	6.379	-0.007	89	358057	5.00	5.16	
45 Propionitrile	54	6.403	6.403	0.000	98	122556	37.5	40.0	
47 Methacrylonitrile	67	6.622	6.622	0.000	92	435117	37.5	38.7	
48 Chlorobromomethane	128	6.696	6.696	0.000	96	101566	5.00	4.90	
49 Tetrahydrofuran	71	6.696	6.696	0.000	80	79642	25.0	27.2	
50 Chloroform	83	6.842	6.842	0.000	94	423411	5.00	5.08	
\$ 51 Dibromofluoromethane (Surr)	113	7.055	7.061	-0.006	93	400259	10.0	9.96	
52 1,1,1-Trichloroethane	97	7.073	7.074	-0.001	99	353702	5.00	5.01	
53 Cyclohexane	56	7.177	7.177	0.000	92	423180	5.00	5.66	
55 1,1-Dichloropropene	75	7.281	7.281	0.000	95	333439	5.00	5.08	
56 Carbon tetrachloride	117	7.287	7.287	0.000	93	306105	5.00	5.15	
57 Isobutyl alcohol	41	7.409	7.409	0.000	93	99583	125.0	127.6	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.512	7.512	0.000	0	81351	10.0	9.91	
59 Benzene	78	7.549	7.543	0.006	97	972803	5.00	4.93	
60 1,2-Dichloroethane	62	7.616	7.616	0.000	97	262544	5.00	4.96	
62 Tert-amyl methyl ether	73	7.732	7.732	0.000	98	557282	5.00	5.69	
* 65 Fluorobenzene (IS)	96	7.945	7.945	0.000	98	1644297	10.0	10.0	
64 n-Heptane	43	7.951	7.951	0.000	92	420506	5.00	5.71	
66 n-Butanol	56	8.287	8.287	0.000	89	169919	250.0	245.1	
67 Trichloroethene	95	8.421	8.427	-0.006	98	245774	5.00	4.98	
68 Methylcyclohexane	83	8.738	8.738	0.000	96	408149	5.00	4.86	
69 2-ethoxy-2-methyl butane	87	8.762	8.762	0.000	88	333310	5.00	5.67	
70 1,2-Dichloropropane	63	8.756	8.762	-0.006	85	259480	5.00	5.02	
71 Methyl methacrylate	69	8.829	8.829	0.000	93	113415	5.00	5.98	
72 1,4-Dioxane	88	8.854	8.848	0.006	86	24352	125.0	155.1	
73 Dibromomethane	93	8.872	8.872	0.000	97	113391	5.00	5.14	
75 Dichlorobromomethane	83	9.104	9.104	0.000	99	297937	5.00	5.09	
76 2-Nitropropane	41	9.360	9.360	0.000	98	30187	5.00	5.02	
78 2-Chloroethyl vinyl ether	63		9.445				ND	ND	
79 1-Bromo-2-chloroethane	63	9.488	9.488	0.000	99	240540	5.00	5.02	
80 cis-1,3-Dichloropropene	75	9.628	9.628	0.000	96	345013	5.00	5.07	
81 4-Methyl-2-pentanone (MIBK)	43	9.792	9.793	-0.001	97	730700	25.0	25.2	
\$ 82 Toluene-d8 (Surr)	98	9.933	9.933	0.000	94	1589658	10.0	10.0	
83 Toluene	92	10.006	10.006	0.000	98	587431	5.00	4.94	
85 trans-1,3-Dichloropropene	75	10.256	10.256	0.000	93	282758	5.00	5.07	
86 Ethyl methacrylate	69	10.305	10.305	0.000	90	218671	5.00	5.66	
87 1,1,2-Trichloroethane	97	10.457	10.457	0.000	90	159324	5.00	5.08	
88 Tetrachloroethene	166	10.548	10.548	0.000	97	255850	5.00	5.04	
89 1,3-Dichloropropane	76	10.622	10.616	0.006	89	285747	5.00	5.08	
91 2-Hexanone	43	10.658	10.658	0.000	98	522863	25.0	26.1	
93 Chlorodibromomethane	129	10.835	10.829	0.006	90	194306	5.00	5.31	
94 Ethylene Dibromide	107	10.945	10.945	0.000	99	149795	5.00	5.05	
* 97 Chlorobenzene-d5 (IS)	117	11.365	11.365	0.000	88	1160243	10.0	10.0	
96 1-Chlorohexane	91	11.371	11.372	-0.001	98	333205	5.00	4.86	
98 Chlorobenzene	112	11.396	11.396	0.000	93	647563	5.00	5.05	
100 Ethylbenzene	91	11.475	11.475	0.000	99	1161412	5.00	5.10	
99 1,1,1,2-Tetrachloroethane	131	11.475	11.475	0.000	94	218666	5.00	4.96	
101 m-Xylene & p-Xylene	106	11.591	11.591	0.000	98	885618	10.0	10.4	
102 o-Xylene	106	11.920	11.920	0.000	96	427529	5.00	5.18	
103 Styrene	104	11.932	11.932	0.000	94	703786	5.00	5.27	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
104 Bromoform	173	12.097	12.097	0.000	95	106932	5.00	5.06	
105 Isopropylbenzene	105	12.213	12.213	0.000	97	1139297	5.00	5.26	
\$ 108 4-Bromofluorobenzene (Surr)	95	12.359	12.359	0.000	87	571329	10.0	10.0	
109 1,1,2,2-Tetrachloroethane	83	12.457	12.457	0.000	94	200095	5.00	5.02	
111 Bromobenzene	156	12.481	12.481	0.000	93	251952	5.00	5.02	
110 trans-1,4-Dichloro-2-butene	53	12.481	12.481	0.000	86	277161	25.0	27.1	
112 1,2,3-Trichloropropane	110	12.505	12.505	0.000	83	51395	5.00	5.06	
113 N-Propylbenzene	91	12.542	12.542	0.000	99	1451779	5.00	5.23	
114 2-Chlorotoluene	126	12.621	12.621	0.000	96	271101	5.00	5.18	
115 1,3,5-Trimethylbenzene	105	12.676	12.676	0.000	94	985231	5.00	5.29	
116 4-Chlorotoluene	126	12.713	12.713	0.000	98	269357	5.00	5.14	
118 tert-Butylbenzene	134	12.920	12.920	0.000	93	207000	5.00	5.30	
119 Pentachloroethane	167	12.956	12.957	-0.001	90	155711	5.00	5.08	
120 1,2,4-Trimethylbenzene	105	12.956	12.957	-0.001	97	1002779	5.00	5.26	
121 sec-Butylbenzene	105	13.078	13.078	0.000	95	1334946	5.00	5.31	
122 1,3-Dichlorobenzene	146	13.182	13.182	0.000	97	507433	5.00	5.01	
123 4-Isopropyltoluene	119	13.188	13.188	0.000	97	1114570	5.00	5.35	
* 124 1,4-Dichlorobenzene-d4	152	13.237	13.237	0.000	96	598371	10.0	10.0	
125 1,4-Dichlorobenzene	146	13.255	13.255	0.000	93	509885	5.00	5.07	
126 1,2,3-Trimethylbenzene	120	13.261	13.261	0.000	98	434189	5.00	5.28	
127 Benzyl chloride	126	13.328	13.335	-0.007	99	75871	5.00	5.85	
129 p-Diethylbenzene	119	13.456	13.456	0.000	93	701631	5.00	5.21	
130 n-Butylbenzene	92	13.481	13.475	0.006	97	610107	5.00	5.23	
131 1,2-Dichlorobenzene	146	13.517	13.517	0.000	97	466529	5.00	5.12	
134 1,2-Dibromo-3-Chloropropane	155	14.054	14.060	-0.006	84	26798	5.00	5.42	
135 1,3,5-Trichlorobenzene	180	14.182	14.182	0.000	97	392131	5.00	4.99	
136 1,2,4-Trichlorobenzene	180	14.603	14.603	-0.001	93	332946	5.00	5.31	
137 Hexachlorobutadiene	225	14.682	14.688	-0.006	97	185254	5.00	5.06	
138 Naphthalene	128	14.791	14.792	-0.001	97	574773	5.00	5.37	
139 1,2,3-Trichlorobenzene	180	14.932	14.932	0.000	95	291356	5.00	5.27	
140 2-Methylnaphthalene	142	15.584	15.584	0.000	92	317269	5.00	4.32	

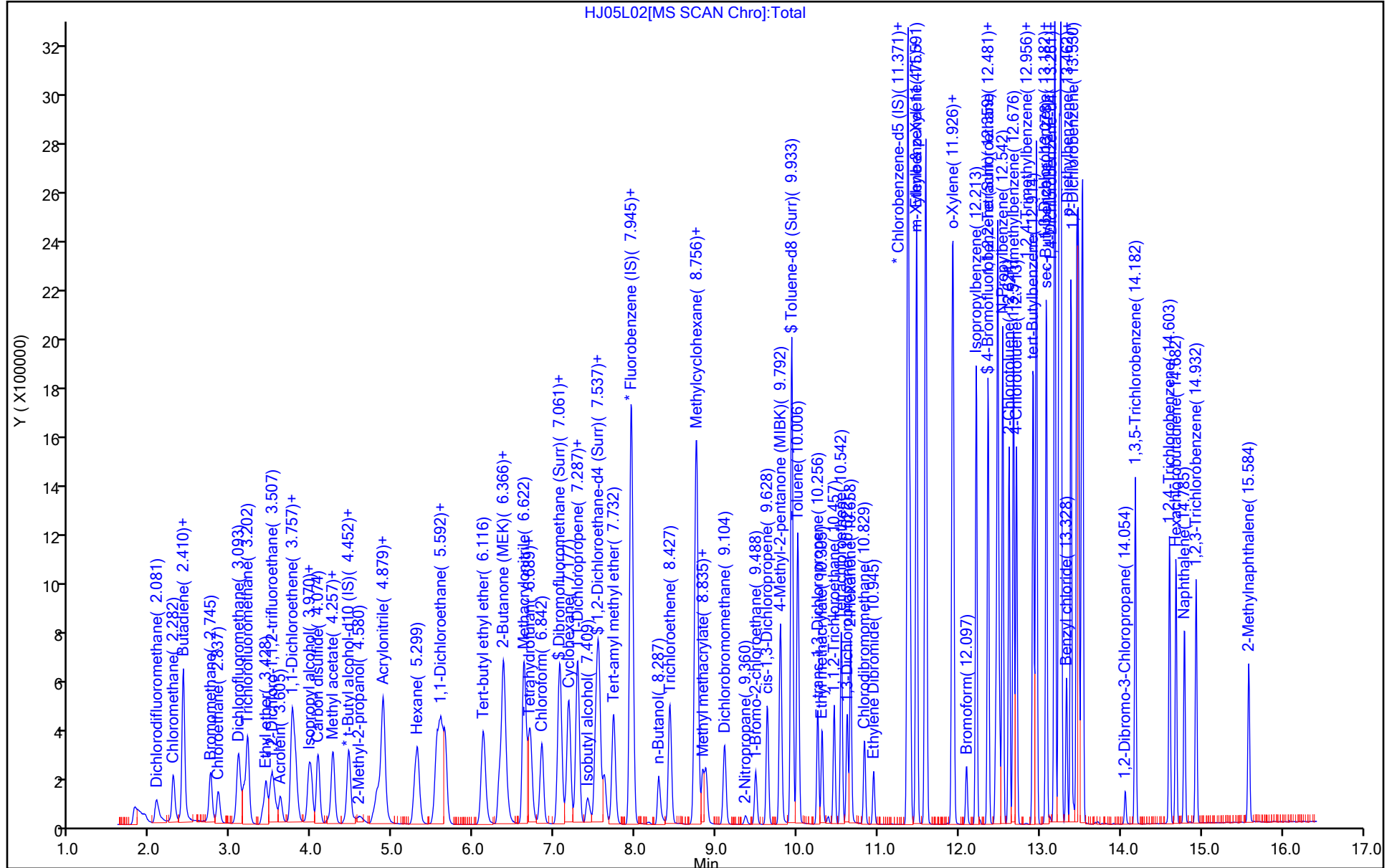
QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

MSV_Q_EE_00003	Amount Added: 12.50	Units: uL	
MSV_Q_ETBR_00006	Amount Added: 12.50	Units: uL	
MSV_Q_QARC_00061	Amount Added: 12.50	Units: uL	
MSV_Q_QVOA1_00062	Amount Added: 12.50	Units: uL	
MSV_Q_QVOA6_00059	Amount Added: 12.50	Units: uL	
MSV_QGAS_826_00101	Amount Added: 12.50	Units: uL	
MSV_30_826ISS_00006	Amount Added: 5.00	Units: uL	Run Reagent



Eurofins Lancaster Laboratories Env, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20210105-19216.b\HJ05L02.D
 Lims ID: LCSD
 Client ID:
 Sample Type: LCSD
 Inject. Date: 05-Jan-2021 10:23:30 ALS Bottle#: 4 Worklist Smp#: 5
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0019216-005
 Misc. Info.: LCSD
 Operator ID: jkh09052 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20210105-19216.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 05-Jan-2021 11:32:09 Calib Date: 04-Jan-2021 18:39:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20210104-19149.b\Hj04I17.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1665

First Level Reviewer: howej

Date: 05-Jan-2021 10:49:25

Compound	Amount Added	Amount Recovered	% Rec.
\$ 51 Dibromofluoromethane (Surr)	10.0	9.96	99.61
\$ 58 1,2-Dichloroethane-d4 (Surr)	10.0	9.91	99.12
\$ 82 Toluene-d8 (Surr)	10.0	10.0	100.03
\$ 108 4-Bromofluorobenzene (Surr)	10.0	10.0	100.38

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-24913-1
 SDG No.: _____
 Client Sample ID: HD-COD-SW-15-0/1-0 MS Lab Sample ID: 410-24913-6 MS
 Matrix: Water Lab File ID: GJ04S09.D
 Analysis Method: 8260D Date Collected: 12/23/2020 11:45
 Sample wt/vol: 25 (mL) Date Analyzed: 01/05/2021 01:04
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: R-624SilMS 30m ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 81892 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	4.94		0.50	0.070
71-55-6	1,1,1-Trichloroethane	5.00		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	4.54		0.50	0.070
79-00-5	1,1,2-Trichloroethane	4.88		0.50	0.060
75-34-3	1,1-Dichloroethane	4.80		0.50	0.070
75-35-4	1,1-Dichloroethene	5.35		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	4.73		0.50	0.060
107-06-2	1,2-Dichloroethane	4.27		0.50	0.050
78-87-5	1,2-Dichloropropane	4.74		0.50	0.060
78-93-3	2-Butanone (MEK)	38.5		5.0	0.60
591-78-6	2-Hexanone	27.1		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	26.0		5.0	0.70
67-64-1	Acetone	32.6		5.0	0.90
71-43-2	Benzene	4.86		0.50	0.050
74-97-5	Bromochloromethane	4.65		0.50	0.050
75-27-4	Bromodichloromethane	4.71		0.50	0.050
75-25-2	Bromoform	4.96		1.0	0.30
74-83-9	Bromomethane	4.85		0.50	0.070
75-15-0	Carbon disulfide	4.97		1.0	0.060
56-23-5	Carbon tetrachloride	5.15		0.50	0.070
108-90-7	Chlorobenzene	5.03		0.50	0.060
75-00-3	Chloroethane	4.54		0.50	0.070
67-66-3	Chloroform	5.07		0.50	0.090
74-87-3	Chloromethane	4.31		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	6.08		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	4.58		0.50	0.050
124-48-1	Dibromochloromethane	4.94		0.50	0.070
100-41-4	Ethylbenzene	4.91		0.50	0.060
1634-04-4	Methyl tert-butyl ether	4.31		0.50	0.050
75-09-2	Methylene Chloride	4.94		0.50	0.070
100-42-5	Styrene	4.90		0.50	0.050
127-18-4	Tetrachloroethene	8.25		0.50	0.060
108-88-3	Toluene	4.85		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	5.04		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	4.41		0.50	0.060
79-01-6	Trichloroethene	5.97		0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-24913-1
 SDG No.: _____
 Client Sample ID: HD-COD-SW-15-0/1-0 MS Lab Sample ID: 410-24913-6 MS
 Matrix: Water Lab File ID: GJ04S09.D
 Analysis Method: 8260D Date Collected: 12/23/2020 11:45
 Sample wt/vol: 25 (mL) Date Analyzed: 01/05/2021 01:04
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: R-624SilMS 30m ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 81892 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-01-4	Vinyl chloride	4.95		0.50	0.10
1330-20-7	Xylenes, Total	15.2		1.0	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		80-120
460-00-4	4-Bromofluorobenzene (Surr)	95		80-120
1868-53-7	Dibromofluoromethane (Surr)	98		80-120
2037-26-5	Toluene-d8 (Surr)	99		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20210104-19179.b\GJ04S09.D
 Lims ID: 410-24913-A-6 MS
 Client ID: HD-COD-SW-15-0/1-0
 Sample Type: MS
 Inject. Date: 05-Jan-2021 01:04:30 ALS Bottle#: 18 Worklist Smp#: 19
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0019179-019
 Misc. Info.: 410-24913-A-6 MS
 Operator ID: MEC29284 Instrument ID: 16334
 Method: \\chromfs\Lancaster\ChromData\16334\20210104-19179.b\MSV_16334_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 05-Jan-2021 09:14:42 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: CTX1665

First Level Reviewer: howej

Date: 05-Jan-2021 08:59:16

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.947	1.946	0.001	99	248541	5.00	4.60	
5 Chloromethane	50	2.142	2.141	0.001	98	314263	5.00	4.31	M
8 Vinyl chloride	62	2.257	2.257	0.000	97	307867	5.00	4.95	
7 Butadiene	39	2.264	2.257	0.007	90	324325	5.00	3.91	M
9 Bromomethane	94	2.587	2.587	0.001	91	210522	5.00	4.85	
10 Chloroethane	64	2.660	2.666	-0.006	100	171610	5.00	4.54	
12 Dichlorofluoromethane	67	2.904	2.904	0.000	97	322122	5.00	3.81	
13 Trichlorofluoromethane	101	2.971	2.971	0.000	96	378560	5.00	5.29	M
15 Ethyl ether	59	3.208	3.202	0.006	92	206449	5.01	4.88	
17 1,2-Dichloro-1,1,2-trifluoroetha	67	3.300	3.294	0.006	91	289709	5.00	4.95	
18 Acrolein	56	3.385	3.379	0.006	99	165791	37.5	31.4	
19 1,1-Dichloroethene	96	3.513	3.507	0.006	98	231368	5.00	5.35	
20 112TCTFE	101	3.556	3.550	0.006	91	234033	5.00	5.53	
21 Acetone	43	3.550	3.550	0.000	68	222355	37.5	32.6	
23 Iodomethane	142	3.702	3.702	0.000	99	397054	5.00	4.91	
22 Isopropyl alcohol	45	3.684	3.714	-0.030	93	38355	37.5	23.3	
24 Ethyl bromide	108	3.733	3.733	0.000	98	178481	5.04	4.73	
25 Carbon disulfide	76	3.800	3.800	0.000	99	792223	5.00	4.97	
27 Methyl acetate	43	3.971	3.958	0.013	97	77136	5.00	3.74	
28 3-Chloro-1-propene	41	3.989	3.983	0.006	94	335758	5.00	3.88	
29 Methylene Chloride	84	4.172	4.172	0.000	92	244940	5.00	4.94	
* 30 t-Butyl alcohol-d10 (IS)	65	4.184	4.190	-0.006	0	138925	50.0	50.0	
31 2-Methyl-2-propanol	59	4.306	4.318	-0.012	99	108296	50.0	43.4	
32 Acrylonitrile	53	4.513	4.513	0.000	98	229706	25.0	26.0	
33 Methyl tert-butyl ether	73	4.568	4.568	0.000	89	592899	5.00	4.31	
34 trans-1,2-Dichloroethene	96	4.580	4.574	0.006	100	251123	5.00	5.04	
35 Hexane	57	5.007	5.001	0.006	92	384747	5.00	5.29	
37 1,1-Dichloroethane	63	5.245	5.245	0.000	96	444295	5.00	4.80	
38 Isopropyl ether	45	5.312	5.305	0.007	95	786754	5.00	4.18	
39 2-Chloro-1,3-butadiene	53	5.354	5.354	0.000	89	376160	5.00	4.47	
40 Tert-butyl ethyl ether	59	5.842	5.836	0.006	98	745709	5.00	4.35	

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	6.043	0.006	100	486937	37.5	38.5	
42 cis-1,2-Dichloroethene	96	6.080	6.080	0.000	81	340064	5.00	6.08	
43 2,2-Dichloropropane	77	6.092	6.098	-0.006	83	369203	5.00	4.76	
45 Propionitrile	54	6.141	6.141	0.000	98	110753	37.5	35.4	
48 Methacrylonitrile	67	6.360	6.360	0.000	91	488011	37.5	42.0	
49 Chlorobromomethane	128	6.409	6.409	0.000	92	115964	5.00	4.65	
50 Tetrahydrofuran	71	6.409	6.415	-0.006	76	92885	25.0	28.4	
51 Chloroform	83	6.568	6.567	0.001	93	452211	5.00	5.07	
\$ 52 Dibromofluoromethane (Surr)	113	6.781	6.787	-0.006	94	492869	10.0	9.80	
53 1,1,1-Trichloroethane	97	6.787	6.787	0.000	97	381468	5.00	5.00	
54 Cyclohexane	56	6.878	6.878	0.000	90	454429	5.00	5.18	
56 Carbon tetrachloride	117	6.994	6.994	0.000	97	340375	5.00	5.15	
57 1,1-Dichloropropene	75	7.000	7.000	0.000	97	362733	5.00	5.06	
58 Isobutyl alcohol	41	7.165	7.159	0.006	94	96088	125.1	81.8	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.238	7.238	0.000	0	105470	10.0	9.86	
60 Benzene	78	7.263	7.262	0.001	97	1026126	5.00	4.86	
61 1,2-Dichloroethane	62	7.336	7.336	0.000	97	252197	5.00	4.27	
63 Tert-amyl methyl ether	73	7.458	7.458	0.000	99	667944	5.00	4.42	
* 64 Fluorobenzene (IS)	96	7.671	7.671	0.000	99	2077996	10.0	10.0	
65 n-Heptane	43	7.677	7.677	0.000	92	412538	5.00	5.03	
67 n-Butanol	56	8.049	8.049	0.000	89	204542	250.2	227.9	
68 Trichloroethene	95	8.147	8.146	0.001	97	322140	5.00	5.97	
69 Methylcyclohexane	83	8.451	8.451	0.000	89	463624	5.00	5.53	
70 1,2-Dichloropropane	63	8.482	8.488	-0.006	96	267970	5.00	4.74	
71 2-ethoxy-2-methyl butane	87	8.494	8.494	0.000	93	386045	5.00	4.67	
73 1,4-Dioxane	88	8.573	8.573	0.000	28	21794	125.1	136.5	M
72 Methyl methacrylate	69	8.573	8.573	0.000	91	133068	5.00	5.63	
74 Dibromomethane	93	8.592	8.591	0.001	93	125370	5.00	4.79	
76 Dichlorobromomethane	83	8.829	8.835	-0.006	99	308720	5.00	4.71	
77 2-Nitropropane	41	9.116	9.116	0.000	98	31425	5.00	4.69	
79 2-Chloroethyl vinyl ether	63		9.195				ND	ND	
80 1-Bromo-2-chloroethane	63	9.219	9.219	0.000	98	260364	5.00	4.30	
81 cis-1,3-Dichloropropene	75	9.378	9.378	0.000	97	389340	5.00	4.58	
82 4-Methyl-2-pentanone (MIBK)	43	9.561	9.561	0.000	96	842842	25.0	26.0	
\$ 83 Toluene-d8 (Surr)	98	9.689	9.689	0.000	93	2011086	10.0	9.86	
84 Toluene	92	9.762	9.768	-0.006	98	642534	5.00	4.85	
96 trans-1,3-Dichloropropene	75	10.024	10.030	-0.006	91	315416	5.00	4.41	
98 Ethyl methacrylate	69	10.091	10.091	0.000	89	286960	5.00	4.46	
99 1,1,2-Trichloroethane	97	10.231	10.231	0.000	90	188726	5.00	4.88	
100 Tetrachloroethene	166	10.311	10.317	-0.006	97	474690	5.00	8.25	
101 1,3-Dichloropropane	76	10.396	10.396	0.000	89	322260	5.00	4.62	
102 2-Hexanone	43	10.451	10.451	0.000	96	633311	25.0	27.1	
104 Chlorodibromomethane	129	10.609	10.609	0.000	90	226404	5.00	4.94	
105 Ethylene Dibromide	107	10.719	10.719	0.000	98	179615	5.00	4.73	
* 106 Chlorobenzene-d5 (IS)	117	11.146	11.152	-0.006	85	1529454	10.0	10.0	
107 1-Chlorohexane	91	11.158	11.158	0.000	96	385502	5.00	4.84	
108 Chlorobenzene	112	11.176	11.176	0.000	95	742429	5.00	5.03	
110 1,1,1,2-Tetrachloroethane	131	11.256	11.256	0.000	96	259059	5.00	4.94	
111 Ethylbenzene	91	11.262	11.262	0.000	98	1285301	5.00	4.91	
112 m-Xylene & p-Xylene	106	11.378	11.377	0.001	97	1004584	10.0	10.2	
113 o-Xylene	106	11.707	11.707	0.000	96	486782	5.00	4.97	
114 Styrene	104	11.719	11.719	0.000	94	817812	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
115 Bromoform	173	11.878	11.877	0.001	97	132855	5.00	4.96	
116 Isopropylbenzene	105	12.006	12.005	0.001	95	1301501	5.00	5.08	
\$ 119 4-Bromofluorobenzene (Surr)	95	12.146	12.146	0.000	92	742693	10.0	9.53	
120 1,1,2,2-Tetrachloroethane	83	12.249	12.249	0.000	93	239267	5.00	4.54	
121 Bromobenzene	156	12.262	12.261	0.001	95	317672	5.00	5.03	
122 trans-1,4-Dichloro-2-butene	53	12.274	12.280	-0.006	93	201362	25.0	20.0	
123 1,2,3-Trichloropropane	110	12.298	12.298	0.000	83	63098	5.00	4.70	
124 N-Propylbenzene	91	12.329	12.335	-0.006	99	1559345	5.00	4.95	
125 2-Chlorotoluene	126	12.408	12.408	0.000	97	312280	5.00	5.04	
126 1,3,5-Trimethylbenzene	105	12.469	12.469	0.000	94	1095923	5.00	4.93	
127 4-Chlorotoluene	126	12.499	12.499	0.000	97	319896	5.00	4.95	
128 tert-Butylbenzene	134	12.707	12.706	0.001	93	246831	5.00	5.20	
129 Pentachloroethane	167	12.743	12.743	0.000	92	194425	5.00	4.76	
130 1,2,4-Trimethylbenzene	105	12.749	12.749	0.000	97	1118276	5.00	4.82	
131 sec-Butylbenzene	105	12.871	12.871	0.000	94	1462744	5.00	5.06	
132 1,3-Dichlorobenzene	146	12.969	12.969	0.000	98	635318	5.00	4.98	
133 4-Isopropyltoluene	119	12.975	12.981	-0.006	97	1263816	5.00	5.03	
* 134 1,4-Dichlorobenzene-d4	152	13.024	13.024	0.000	95	837538	10.0	10.0	
135 1,4-Dichlorobenzene	146	13.042	13.042	0.000	96	643315	5.00	4.95	
136 1,2,3-Trimethylbenzene	120	13.054	13.054	0.000	98	516895	5.00	5.02	
137 Benzyl chloride	126	13.121	13.121	0.000	98	98731	5.00	4.34	
138 p-Diethylbenzene	119	13.176	13.176	0.000	91	750705	5.00	4.92	
139 n-Butylbenzene	92	13.267	13.267	0.000	97	637451	5.00	4.79	
140 1,2-Dichlorobenzene	146	13.304	13.304	0.000	99	594098	5.00	5.00	
142 1,2-Dibromo-3-Chloropropane	155	13.841	13.840	0.001	88	35975	5.00	4.69	
143 1,3,5-Trichlorobenzene	180	13.962	13.962	0.000	98	531349	5.00	4.97	
144 1,2,4-Trichlorobenzene	180	14.383	14.383	0.000	94	486903	5.00	4.95	
145 Hexachlorobutadiene	225	14.468	14.468	0.000	96	257384	5.00	5.33	
146 Naphthalene	128	14.566	14.566	0.000	97	814948	5.00	4.55	
147 1,2,3-Trichlorobenzene	180	14.706	14.706	0.000	96	423720	5.00	4.88	
148 2-Methylnaphthalene	142	15.322	15.322	0.000	92	533711	5.00	4.17	
160 Pentane	43		0.000				ND	ND	

QC Flag Legend

Processing Flags

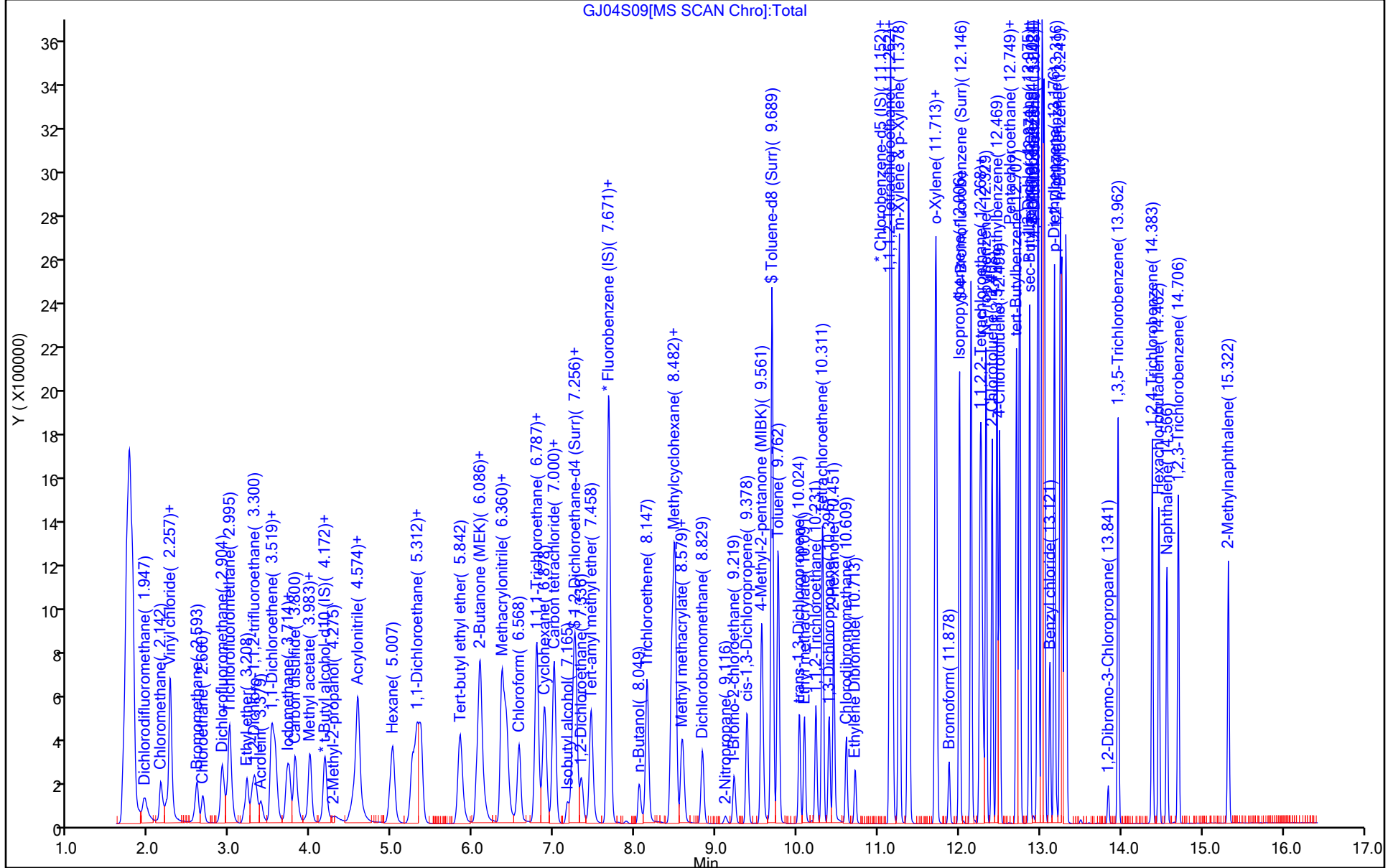
ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

MSV_Q_QVOA1_00062	Amount Added: 5.38	Units: uL	
MSV_Q_QARC_00061	Amount Added: 5.38	Units: uL	
MSV_Q_QVOA6_00059	Amount Added: 5.38	Units: uL	
MSV_Q_EE_00003	Amount Added: 5.38	Units: uL	
MSV_Q_ETBR_00006	Amount Added: 5.38	Units: uL	
MSV_QGAS_826_00101	Amount Added: 5.38	Units: uL	
MSV_29_826ISS_00014	Amount Added: 1.00	Units: uL	Run Reagent



Eurofins Lancaster Laboratories Env, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\16334\20210104-19179.b\GJ04S09.D
 Lims ID: 410-24913-A-6 MS
 Client ID: HD-COD-SW-15-0/1-0
 Sample Type: MS
 Inject. Date: 05-Jan-2021 01:04:30 ALS Bottle#: 18 Worklist Smp#: 19
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0019179-019
 Misc. Info.: 410-24913-A-6 MS
 Operator ID: MEC29284 Instrument ID: 16334
 Method: \\chromfs\Lancaster\ChromData\16334\20210104-19179.b\MSV_16334_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 05-Jan-2021 09:14:42 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: CTX1665

First Level Reviewer: howej Date: 05-Jan-2021 08:59:16

Compound	Amount Added	Amount Recovered	% Rec.
\$ 52 Dibromofluoromethane (Surr)	10.0	9.80	98.00
\$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	9.86	98.56
\$ 83 Toluene-d8 (Surr)	10.0	9.86	98.56
\$ 119 4-Bromofluorobenzene (Surr)	10.0	9.53	95.33

Eurofins Lancaster Laboratories Env, LLC

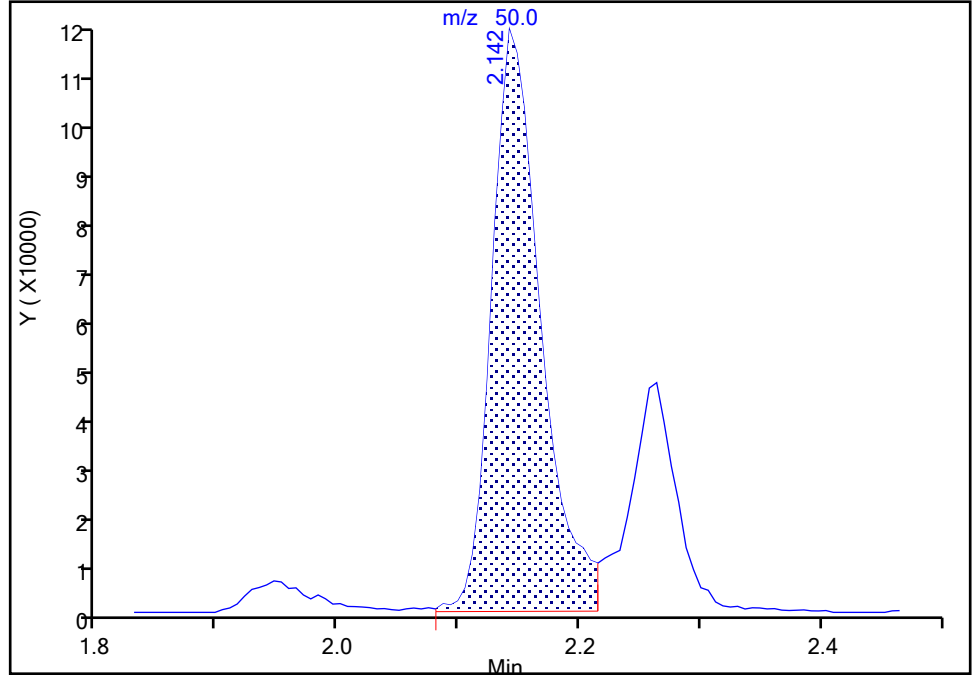
Data File: \\chromfs\Lancaster\ChromData\16334\20210104-19179.b\GJ04S09.D
Injection Date: 05-Jan-2021 01:04:30 Instrument ID: 16334
Lims ID: 410-24913-A-6 MS
Client ID: HD-COD-SW-15-0/1-0
Operator ID: MEC29284 ALS Bottle#: 18 Worklist Smp#: 19
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

5 Chloromethane, CAS: 74-87-3

Signal: 1

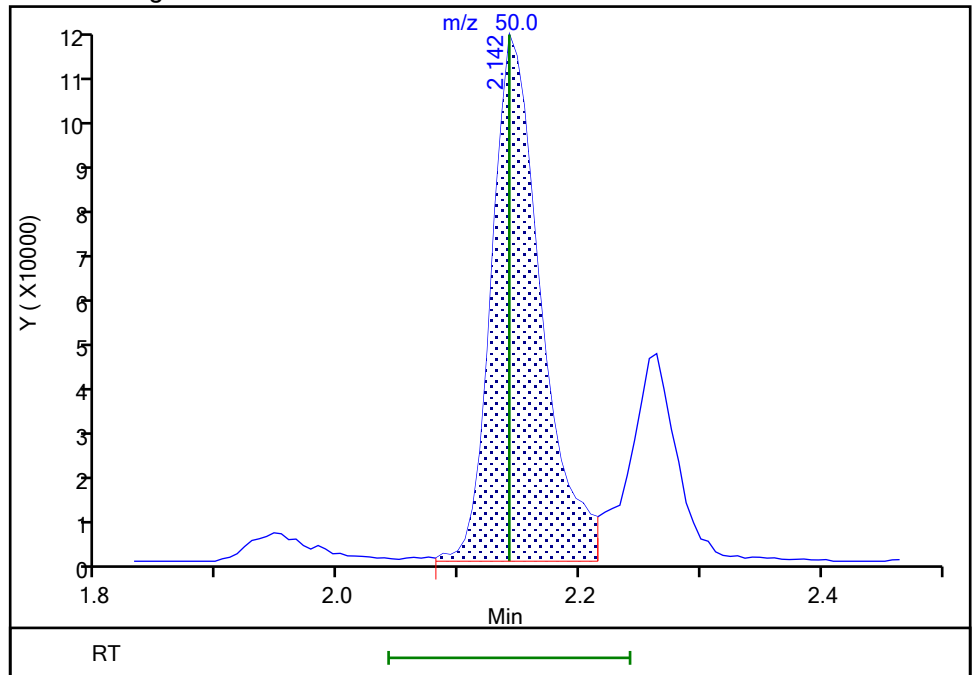
RT: 2.14
Area: 312782
Amount: 4.290408
Amount Units: ug/l

Processing Integration Results



RT: 2.14
Area: 314263
Amount: 4.310723
Amount Units: ug/l

Manual Integration Results



Reviewer: howej, 05-Jan-2021 08:57:52
Audit Action: Assigned New Baseline

Audit Reason: Other

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-24913-1
 SDG No.: _____
 Client Sample ID: HD-COD-SW-15-0/1-0 MSD Lab Sample ID: 410-24913-6 MSD
 Matrix: Water Lab File ID: GJ04S10.D
 Analysis Method: 8260D Date Collected: 12/23/2020 11:45
 Sample wt/vol: 25 (mL) Date Analyzed: 01/05/2021 01:26
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: R-624SilMS 30m ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 81892 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	4.92		0.50	0.070
71-55-6	1,1,1-Trichloroethane	5.03		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	4.50		0.50	0.070
79-00-5	1,1,2-Trichloroethane	4.97		0.50	0.060
75-34-3	1,1-Dichloroethane	4.86		0.50	0.070
75-35-4	1,1-Dichloroethene	5.33		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	4.77		0.50	0.060
107-06-2	1,2-Dichloroethane	4.34		0.50	0.050
78-87-5	1,2-Dichloropropane	4.67		0.50	0.060
78-93-3	2-Butanone (MEK)	37.8		5.0	0.60
591-78-6	2-Hexanone	27.1		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	26.9		5.0	0.70
67-64-1	Acetone	31.0		5.0	0.90
71-43-2	Benzene	4.90		0.50	0.050
74-97-5	Bromochloromethane	4.72		0.50	0.050
75-27-4	Bromodichloromethane	4.74		0.50	0.050
75-25-2	Bromoform	4.81		1.0	0.30
74-83-9	Bromomethane	4.71		0.50	0.070
75-15-0	Carbon disulfide	4.93		1.0	0.060
56-23-5	Carbon tetrachloride	5.13		0.50	0.070
108-90-7	Chlorobenzene	5.04		0.50	0.060
75-00-3	Chloroethane	4.42		0.50	0.070
67-66-3	Chloroform	5.01		0.50	0.090
74-87-3	Chloromethane	4.29		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	6.05		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	4.54		0.50	0.050
124-48-1	Dibromochloromethane	4.91		0.50	0.070
100-41-4	Ethylbenzene	4.87		0.50	0.060
1634-04-4	Methyl tert-butyl ether	4.34		0.50	0.050
75-09-2	Methylene Chloride	4.93		0.50	0.070
100-42-5	Styrene	4.89		0.50	0.050
127-18-4	Tetrachloroethene	8.10		0.50	0.060
108-88-3	Toluene	4.93		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	5.10		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	4.34		0.50	0.060
79-01-6	Trichloroethene	5.99		0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-24913-1
 SDG No.: _____
 Client Sample ID: HD-COD-SW-15-0/1-0 MSD Lab Sample ID: 410-24913-6 MSD
 Matrix: Water Lab File ID: GJ04S10.D
 Analysis Method: 8260D Date Collected: 12/23/2020 11:45
 Sample wt/vol: 25 (mL) Date Analyzed: 01/05/2021 01:26
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: R-624SilMS 30m ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 81892 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-01-4	Vinyl chloride	4.67		0.50	0.10
1330-20-7	Xylenes, Total	15.2		1.0	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		80-120
460-00-4	4-Bromofluorobenzene (Surr)	95		80-120
1868-53-7	Dibromofluoromethane (Surr)	98		80-120
2037-26-5	Toluene-d8 (Surr)	99		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20210104-19179.b\GJ04S10.D
 Lims ID: 410-24913-A-6 MSD
 Client ID: HD-COD-SW-15-0/1-0
 Sample Type: MSD
 Inject. Date: 05-Jan-2021 01:26:30 ALS Bottle#: 19 Worklist Smp#: 20
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0019179-020
 Misc. Info.: 410-24913-A-6 MSD
 Operator ID: MEC29284 Instrument ID: 16334
 Method: \\chromfs\Lancaster\ChromData\16334\20210104-19179.b\MSV_16334_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 05-Jan-2021 09:26:18 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: CTX1665

First Level Reviewer: howej

Date: 05-Jan-2021 09:15:53

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.940	1.946	-0.006	99	244041	5.00	4.53	
5 Chloromethane	50	2.136	2.141	-0.005	99	311501	5.00	4.29	
8 Vinyl chloride	62	2.251	2.257	-0.006	81	289866	5.00	4.67	
7 Butadiene	39	2.251	2.257	-0.006	90	337776	5.00	4.09	M
9 Bromomethane	94	2.581	2.587	-0.005	91	203528	5.00	4.71	
10 Chloroethane	64	2.660	2.666	-0.006	99	166139	5.00	4.42	
12 Dichlorofluoromethane	67	2.898	2.904	-0.006	96	310202	5.00	3.68	
13 Trichlorofluoromethane	101	2.965	2.971	-0.006	96	369002	5.00	5.17	
15 Ethyl ether	59	3.202	3.202	0.000	91	205869	5.01	4.89	
17 1,2-Dichloro-1,1,2-trifluoroethane	67	3.288	3.294	-0.006	92	286070	5.00	4.90	
18 Acrolein	56	3.373	3.379	-0.006	99	167427	37.5	32.2	
19 1,1-Dichloroethene	96	3.507	3.507	0.000	98	229845	5.00	5.33	
20 112TCTFE	101	3.544	3.550	-0.006	92	230563	5.00	5.47	
21 Acetone	43	3.538	3.550	-0.012	93	208046	37.5	31.0	
23 Iodomethane	142	3.702	3.702	0.000	98	391841	5.00	4.86	
22 Isopropyl alcohol	45	3.678	3.714	-0.036	26	36510	37.5	22.2	
24 Ethyl bromide	108	3.727	3.733	-0.006	98	179792	5.04	4.79	
25 Carbon disulfide	76	3.800	3.800	0.000	99	783994	5.00	4.93	
27 Methyl acetate	43	3.952	3.958	-0.006	97	77737	5.00	3.82	
28 3-Chloro-1-propene	41	3.977	3.983	-0.006	94	338076	5.00	3.92	
29 Methylene Chloride	84	4.166	4.172	-0.006	91	243685	5.00	4.93	
* 30 t-Butyl alcohol-d10 (IS)	65	4.196	4.190	0.006	0	136888	50.0	50.0	
31 2-Methyl-2-propanol	59	4.294	4.318	-0.024	99	103849	50.0	42.2	
32 Acrylonitrile	53	4.513	4.513	0.000	99	230619	25.0	26.5	
33 Methyl tert-butyl ether	73	4.562	4.568	-0.006	89	595212	5.00	4.34	
34 trans-1,2-Dichloroethene	96	4.574	4.574	0.000	100	253078	5.00	5.10	
35 Hexane	57	5.001	5.001	0.000	92	377293	5.00	5.21	
37 1,1-Dichloroethane	63	5.245	5.245	0.000	96	447656	5.00	4.86	
38 Isopropyl ether	45	5.300	5.305	-0.005	96	778463	5.00	4.15	
39 2-Chloro-1,3-butadiene	53	5.354	5.354	0.000	90	377073	5.00	4.50	
40 Tert-butyl ethyl ether	59	5.836	5.836	0.000	99	736690	5.00	4.31	

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	6.043	6.043	0.000	100	470280	37.5	37.8	
42 cis-1,2-Dichloroethene	96	6.080	6.080	0.000	80	337289	5.00	6.05	
43 2,2-Dichloropropane	77	6.092	6.098	-0.006	86	365595	5.00	4.73	
45 Propionitrile	54	6.141	6.141	0.000	98	120013	37.5	38.9	
48 Methacrylonitrile	67	6.354	6.360	-0.006	91	488824	37.5	42.7	
49 Chlorobromomethane	128	6.409	6.409	0.000	91	117231	5.00	4.72	
50 Tetrahydrofuran	71	6.409	6.415	-0.006	76	93013	25.0	28.9	
51 Chloroform	83	6.562	6.567	-0.005	92	445097	5.00	5.01	
\$ 52 Dibromofluoromethane (Surr)	113	6.781	6.787	-0.006	94	491295	10.0	9.80	
53 1,1,1-Trichloroethane	97	6.787	6.787	0.000	97	382622	5.00	5.03	
54 Cyclohexane	56	6.872	6.878	-0.006	90	451621	5.00	5.17	
56 Carbon tetrachloride	117	6.994	6.994	0.000	97	337848	5.00	5.13	
57 1,1-Dichloropropene	75	7.000	7.000	0.000	98	358725	5.00	5.02	
58 Isobutyl alcohol	41	7.165	7.159	0.006	96	96676	125.1	82.6	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.232	7.238	-0.006	0	105555	10.0	9.90	
60 Benzene	78	7.263	7.262	0.001	96	1031567	5.00	4.90	
61 1,2-Dichloroethane	62	7.330	7.336	-0.006	97	255183	5.00	4.34	
63 Tert-amyl methyl ether	73	7.452	7.458	-0.006	99	671480	5.00	4.46	
* 64 Fluorobenzene (IS)	96	7.671	7.671	0.000	99	2070536	10.0	10.0	
65 n-Heptane	43	7.677	7.677	0.000	91	398244	5.00	4.88	
67 n-Butanol	56	8.049	8.049	0.000	88	208183	250.2	235.4	
68 Trichloroethene	95	8.140	8.146	-0.006	97	321714	5.00	5.99	
69 Methylcyclohexane	83	8.451	8.451	0.000	91	457911	5.00	5.49	
70 1,2-Dichloropropane	63	8.482	8.488	-0.006	96	263151	5.00	4.67	
71 2-ethoxy-2-methyl butane	87	8.494	8.494	0.000	93	388151	5.00	4.71	
73 1,4-Dioxane	88	8.573	8.573	0.000	30	21967	125.1	139.6	M
72 Methyl methacrylate	69	8.567	8.573	-0.006	92	132614	5.00	5.69	
74 Dibromomethane	93	8.586	8.591	-0.005	95	125033	5.00	4.79	
76 Dichlorobromomethane	83	8.829	8.835	-0.006	99	309453	5.00	4.74	
77 2-Nitropropane	41	9.116	9.116	0.000	97	31414	5.00	4.75	
79 2-Chloroethyl vinyl ether	63		9.195				ND	ND	
80 1-Bromo-2-chloroethane	63	9.220	9.219	0.001	98	254313	5.00	4.21	
81 cis-1,3-Dichloropropene	75	9.378	9.378	0.000	97	384721	5.00	4.54	
82 4-Methyl-2-pentanone (MIBK)	43	9.561	9.561	0.000	96	859945	25.0	26.9	
\$ 83 Toluene-d8 (Surr)	98	9.689	9.689	0.000	93	2009674	10.0	9.88	
84 Toluene	92	9.762	9.768	-0.006	98	651794	5.00	4.93	
96 trans-1,3-Dichloropropene	75	10.024	10.030	-0.006	91	309723	5.00	4.34	
98 Ethyl methacrylate	69	10.085	10.091	-0.006	88	287332	5.00	4.48	
99 1,1,2-Trichloroethane	97	10.232	10.231	0.001	89	191450	5.00	4.97	
100 Tetrachloroethene	166	10.311	10.317	-0.006	97	464276	5.00	8.10	
101 1,3-Dichloropropane	76	10.396	10.396	0.000	88	317628	5.00	4.57	
102 2-Hexanone	43	10.451	10.451	0.000	96	622937	25.0	27.1	
104 Chlorodibromomethane	129	10.603	10.609	-0.006	90	224515	5.00	4.91	
105 Ethylene Dibromide	107	10.713	10.719	-0.006	98	180572	5.00	4.77	
* 106 Chlorobenzene-d5 (IS)	117	11.146	11.152	-0.006	85	1524700	10.0	10.0	
107 1-Chlorohexane	91	11.158	11.158	0.000	97	385350	5.00	4.86	
108 Chlorobenzene	112	11.176	11.176	0.000	95	741061	5.00	5.04	
110 1,1,1,2-Tetrachloroethane	131	11.256	11.256	0.000	97	257290	5.00	4.92	
111 Ethylbenzene	91	11.262	11.262	0.000	98	1272034	5.00	4.87	
112 m-Xylene & p-Xylene	106	11.378	11.377	0.001	97	999566	10.0	10.2	
113 o-Xylene	106	11.707	11.707	0.000	96	483520	5.00	4.95	
114 Styrene	104	11.719	11.719	0.000	95	813591	5.00	4.89	

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	11.877	-0.006	97	128294	5.00	4.81	
116 Isopropylbenzene	105	12.006	12.005	0.001	95	1280564	5.00	5.02	
\$ 119 4-Bromofluorobenzene (Surr)	95	12.146	12.146	0.000	92	739357	10.0	9.52	
120 1,1,2,2-Tetrachloroethane	83	12.249	12.249	0.000	93	237505	5.00	4.50	
121 Bromobenzene	156	12.262	12.261	0.001	96	314728	5.00	4.96	
122 trans-1,4-Dichloro-2-butene	53	12.274	12.280	-0.006	88	184460	25.0	18.6	
123 1,2,3-Trichloropropane	110	12.298	12.298	0.000	82	62723	5.00	4.66	
124 N-Propylbenzene	91	12.329	12.335	-0.006	99	1538981	5.00	4.87	
125 2-Chlorotoluene	126	12.408	12.408	0.000	97	307956	5.00	4.95	
126 1,3,5-Trimethylbenzene	105	12.469	12.469	0.000	94	1086050	5.00	4.87	
127 4-Chlorotoluene	126	12.499	12.499	0.000	97	318615	5.00	4.91	
128 tert-Butylbenzene	134	12.707	12.706	0.001	93	238548	5.00	5.01	
129 Pentachloroethane	167	12.743	12.743	0.000	92	193220	5.00	4.72	
130 1,2,4-Trimethylbenzene	105	12.749	12.749	0.000	97	1101886	5.00	4.73	
131 sec-Butylbenzene	105	12.871	12.871	0.000	94	1446474	5.00	4.98	
132 1,3-Dichlorobenzene	146	12.969	12.969	0.000	98	625457	5.00	4.89	
133 4-Isopropyltoluene	119	12.975	12.981	-0.006	97	1253237	5.00	4.97	
* 134 1,4-Dichlorobenzene-d4	152	13.024	13.024	0.000	94	840481	10.0	10.0	
135 1,4-Dichlorobenzene	146	13.042	13.042	0.000	95	643189	5.00	4.94	
136 1,2,3-Trimethylbenzene	120	13.054	13.054	0.000	98	508603	5.00	4.92	
137 Benzyl chloride	126	13.121	13.121	0.000	98	99062	5.00	4.34	
138 p-Diethylbenzene	119	13.176	13.176	0.000	92	739469	5.00	4.83	
139 n-Butylbenzene	92	13.268	13.267	0.001	97	633255	5.00	4.74	
140 1,2-Dichlorobenzene	146	13.298	13.304	-0.006	99	576704	5.00	4.83	
142 1,2-Dibromo-3-Chloropropane	155	13.841	13.840	0.001	87	36066	5.00	4.68	
143 1,3,5-Trichlorobenzene	180	13.963	13.962	0.001	98	527959	5.00	4.93	
144 1,2,4-Trichlorobenzene	180	14.383	14.383	0.000	94	475780	5.00	4.82	
145 Hexachlorobutadiene	225	14.469	14.468	0.001	96	256427	5.00	5.29	
146 Naphthalene	128	14.566	14.566	0.000	97	811937	5.00	4.52	
147 1,2,3-Trichlorobenzene	180	14.706	14.706	0.000	96	420746	5.00	4.83	
148 2-Methylnaphthalene	142	15.322	15.322	0.000	92	550038	5.00	4.28	
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_QARC_00061	Amount Added: 5.38	Units: uL
MSV_Q_QVOA6_00059	Amount Added: 5.38	Units: uL
MSV_Q_EE_00003	Amount Added: 5.38	Units: uL
MSV_Q_ETBR_00006	Amount Added: 5.38	Units: uL
MSV_QGAS_826_00101	Amount Added: 5.38	Units: uL
MSV_Q_QVOA1_00062	Amount Added: 5.38	Units: uL
MSV_29_826ISS_00014	Amount Added: 1.00	Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\16334\20210104-19179.b\GJ04S10.D

Injection Date: 05-Jan-2021 01:26:30

Instrument ID: 16334

Operator ID: MEC29284

Lims ID: 410-24913-A-6 MSD

Worklist Smp#: 20

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

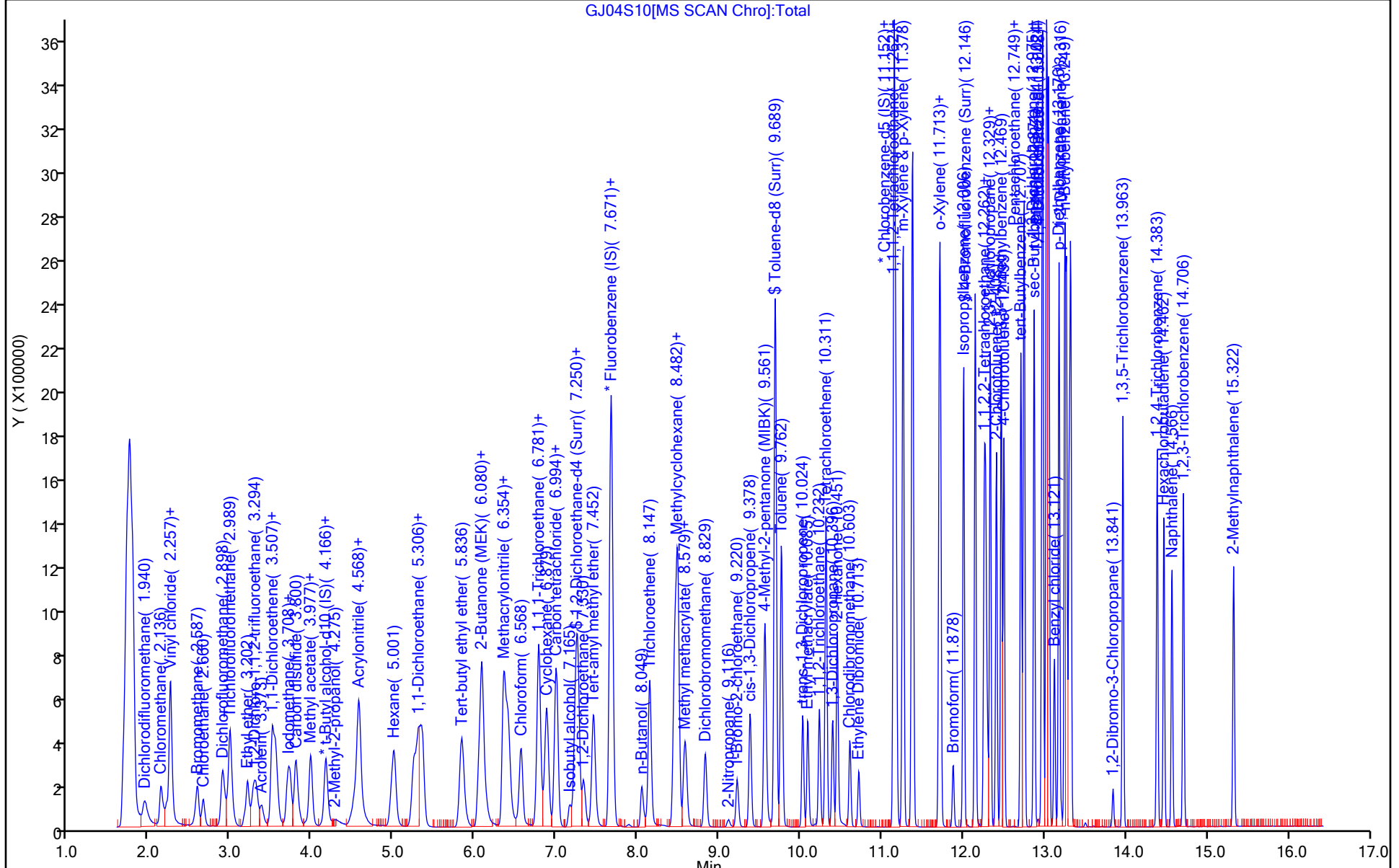
ALS Bottle#: 19

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\20210104-19179.b\GJ04S10.D
 Lims ID: 410-24913-A-6 MSD
 Client ID: HD-COD-SW-15-0/1-0
 Sample Type: MSD
 Inject. Date: 05-Jan-2021 01:26:30 ALS Bottle#: 19 Worklist Smp#: 20
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0019179-020
 Misc. Info.: 410-24913-A-6 MSD
 Operator ID: MEC29284 Instrument ID: 16334
 Method: \\chromfs\Lancaster\ChromData\16334\20210104-19179.b\MSV_16334_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 05-Jan-2021 09:26:18 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: CTX1665

First Level Reviewer: howej

Date: 05-Jan-2021 09:15:53

Compound	Amount Added	Amount Recovered	% Rec.
\$ 52 Dibromofluoromethane (Surr)	10.0	9.80	98.04
\$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	9.90	99.00
\$ 83 Toluene-d8 (Surr)	10.0	9.88	98.79
\$ 119 4-Bromofluorobenzene (Surr)	10.0	9.52	95.19

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-24913-1

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-624Si1MS 30m 0.25 (mm)
IC 410-70996/3		11/30/2020 12:50	1	GN30I01.D	R-624Si1MS 30m 0.25 (mm)
ICIS 410-70996/4		11/30/2020 13:12	1	GN30I02.D	R-624Si1MS 30m 0.25 (mm)
IC 410-70996/5		11/30/2020 13:34	1	GN30I03.D	R-624Si1MS 30m 0.25 (mm)
IC 410-70996/6		11/30/2020 13:56	1	GN30I04.D	R-624Si1MS 30m 0.25 (mm)
IC 410-70996/7		11/30/2020 14:19	1	GN30I05.D	R-624Si1MS 30m 0.25 (mm)
IC 410-70996/8		11/30/2020 14:41	1	GN30I06.D	R-624Si1MS 30m 0.25 (mm)
IC 410-70996/9		11/30/2020 15:03	1	GN30I07.D	R-624Si1MS 30m 0.25 (mm)
ICV 410-70996/10		11/30/2020 15:26	1	GN30V01.D	R-624Si1MS 30m 0.25 (mm)
IC 410-70996/12		11/30/2020 16:10	1		R-624Si1MS 30m 0.25 (mm)
IC 410-70996/13		11/30/2020 16:32	1		R-624Si1MS 30m 0.25 (mm)
IC 410-70996/14		11/30/2020 16:54	1		R-624Si1MS 30m 0.25 (mm)
IC 410-70996/15		11/30/2020 17:16	1		R-624Si1MS 30m 0.25 (mm)
IC 410-70996/16		11/30/2020 17:39	1		R-624Si1MS 30m 0.25 (mm)
IC 410-70996/17		11/30/2020 18:01	1		R-624Si1MS 30m 0.25 (mm)
IC 410-70996/18		11/30/2020 18:23	1		R-624Si1MS 30m 0.25 (mm)
ICV 410-70996/19		11/30/2020 18:45	1		R-624Si1MS 30m 0.25 (mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-24913-1

SDG No.: _____

Instrument ID: 16334 Start Date: 12/31/2020 16:11Analysis Batch Number: 81468 End Date: 01/01/2021 03:24

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 410-81468/1		12/31/2020 16:11	1	GD31T31.D	R-624Si1MS 30m 0.25 (mm)
CCVIS 410-81468/3		12/31/2020 16:47	1		R-624Si1MS 30m 0.25 (mm)
CCVIS 410-81468/4		12/31/2020 17:09	1	GD31C32.D	R-624Si1MS 30m 0.25 (mm)
CCV 410-81468/5		12/31/2020 17:30	1		R-624Si1MS 30m 0.25 (mm)
LCS 410-81468/6		12/31/2020 17:52	1	GD31L31.D	R-624Si1MS 30m 0.25 (mm)
ZZZZZ		12/31/2020 18:14	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		12/31/2020 18:36	1		R-624Si1MS 30m 0.25 (mm)
MB 410-81468/9		12/31/2020 18:59	1	GD31B31.D	R-624Si1MS 30m 0.25 (mm)
ZZZZZ		12/31/2020 19:21	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		12/31/2020 19:43	100		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		12/31/2020 20:04	10		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		12/31/2020 20:26	10		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		12/31/2020 20:48	100		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		12/31/2020 21:10	10		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		12/31/2020 21:33	10		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		12/31/2020 21:55	10		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		12/31/2020 22:17	10		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		12/31/2020 22:39	10		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		12/31/2020 23:00	10		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		12/31/2020 23:22	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		12/31/2020 23:44	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		01/01/2021 00:07	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		01/01/2021 00:29	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		01/01/2021 00:51	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		01/01/2021 01:13	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		01/01/2021 01:35	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		01/01/2021 01:57	1		R-624Si1MS 30m 0.25 (mm)
410-24913-1	HD-COD-SW-6-0/1-0	01/01/2021 02:18	1	GD31S20.D	R-624Si1MS 30m 0.25 (mm)
410-24913-2	HD-COD-SW-7-0/1-0	01/01/2021 02:40	1	GD31S21.D	R-624Si1MS 30m 0.25 (mm)
410-24913-3	HD-COD-SW-8-0/1-0	01/01/2021 03:03	1	GD31S22.D	R-624Si1MS 30m 0.25 (mm)
410-24913-4	HD-COD-SW-9-0/1-0	01/01/2021 03:24	1	GD31S23.D	R-624Si1MS 30m 0.25 (mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-24913-1

SDG No.: _____

Instrument ID: 19094 Start Date: 01/04/2021 12:39Analysis Batch Number: 81781 End Date: 01/04/2021 19:01

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 410-81781/1		01/04/2021 12:39	1	Hj04T02.D	R-624Si1MS 30m 0.25 (mm)
IC 410-81781/3		01/04/2021 13:14	1		R-624Si1MS 30m 0.25 (mm)
IC 410-81781/4		01/04/2021 13:35	1		R-624Si1MS 30m 0.25 (mm)
IC 410-81781/5		01/04/2021 13:57	1		R-624Si1MS 30m 0.25 (mm)
IC 410-81781/6		01/04/2021 14:19	1		R-624Si1MS 30m 0.25 (mm)
IC 410-81781/7		01/04/2021 14:40	1		R-624Si1MS 30m 0.25 (mm)
IC 410-81781/8		01/04/2021 15:02	1		R-624Si1MS 30m 0.25 (mm)
IC 410-81781/9		01/04/2021 15:24	1		R-624Si1MS 30m 0.25 (mm)
ICV 410-81781/10		01/04/2021 15:46	1		R-624Si1MS 30m 0.25 (mm)
IC 410-81781/12		01/04/2021 16:29	1	Hj04I11.D	R-624Si1MS 30m 0.25 (mm)
ICIS 410-81781/13		01/04/2021 16:51	1	Hj04I12.D	R-624Si1MS 30m 0.25 (mm)
IC 410-81781/14		01/04/2021 17:12	1	Hj04I13.D	R-624Si1MS 30m 0.25 (mm)
IC 410-81781/15		01/04/2021 17:34	1	Hj04I14.D	R-624Si1MS 30m 0.25 (mm)
IC 410-81781/16		01/04/2021 17:56	1	Hj04I15.D	R-624Si1MS 30m 0.25 (mm)
IC 410-81781/17		01/04/2021 18:17	1	Hj04I16.D	R-624Si1MS 30m 0.25 (mm)
IC 410-81781/18		01/04/2021 18:39	1	Hj04I17.D	R-624Si1MS 30m 0.25 (mm)
ICV 410-81781/19		01/04/2021 19:01	1	Hj04V11.D	R-624Si1MS 30m 0.25 (mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-24913-1

SDG No.: _____

Instrument ID: 16334 Start Date: 01/04/2021 18:20

Analysis Batch Number: 81892 End Date: 01/05/2021 05:27

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 410-81892/1		01/04/2021 18:20	1	GJ04T31.D	R-624Si1MS 30m 0.25 (mm)
CCVIS 410-81892/3		01/04/2021 18:55	1	GJ04C31.D	R-624Si1MS 30m 0.25 (mm)
CCV 410-81892/4		01/04/2021 19:17	1		R-624Si1MS 30m 0.25 (mm)
LCS 410-81892/5		01/04/2021 19:39	1	GJ04L31.D	R-624Si1MS 30m 0.25 (mm)
LCSD 410-81892/6		01/04/2021 20:01	1	GJ04L32.D	R-624Si1MS 30m 0.25 (mm)
ZZZZZ		01/04/2021 20:23	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		01/04/2021 20:45	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		01/04/2021 21:07	1		R-624Si1MS 30m 0.25 (mm)
MB 410-81892/10		01/04/2021 21:29	1	GJ04B31.D	R-624Si1MS 30m 0.25 (mm)
ZZZZZ		01/04/2021 22:08	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		01/04/2021 22:30	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		01/04/2021 22:52	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		01/04/2021 23:14	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		01/04/2021 23:36	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		01/04/2021 23:58	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		01/05/2021 00:20	1		R-624Si1MS 30m 0.25 (mm)
410-24913-6	HD-COD-SW-15-0/1-0	01/05/2021 00:42	1	GJ04S08.D	R-624Si1MS 30m 0.25 (mm)
410-24913-6 MS	HD-COD-SW-15-0/1-0 MS	01/05/2021 01:04	1	GJ04S09.D	R-624Si1MS 30m 0.25 (mm)
410-24913-6 MSD	HD-COD-SW-15-0/1-0 MSD	01/05/2021 01:26	1	GJ04S10.D	R-624Si1MS 30m 0.25 (mm)
ZZZZZ		01/05/2021 02:10	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		01/05/2021 02:31	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		01/05/2021 02:53	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		01/05/2021 03:15	1		R-624Si1MS 30m 0.25 (mm)
410-24913-7	HD-COD-SW-16-0/1-0	01/05/2021 03:37	1	GJ04S16.D	R-624Si1MS 30m 0.25 (mm)
410-24913-8	HD-COD-SW-17-0/1-0	01/05/2021 03:59	1	GJ04S17.D	R-624Si1MS 30m 0.25 (mm)
410-24913-9	HD-COD-SW-26-0/1-0	01/05/2021 04:21	1	GJ04S18.D	R-624Si1MS 30m 0.25 (mm)
410-24913-10	HD-COD-SW-27-0/1-0	01/05/2021 04:43	1	GJ04S19.D	R-624Si1MS 30m 0.25 (mm)
410-24913-11	HD-COD-SW-28-0/1-0	01/05/2021 05:05	1	GJ04S20.D	R-624Si1MS 30m 0.25 (mm)
410-24913-12	HD-COD-SW-29-0/1-0	01/05/2021 05:27	1	GJ04S21.D	R-624Si1MS 30m 0.25 (mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-24913-1

SDG No.: _____

Instrument ID: 19094 Start Date: 01/05/2021 09:04

Analysis Batch Number: 82059 End Date: 01/05/2021 20:31

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 410-82059/1		01/05/2021 09:04	1	Hj05T02.D	R-624Si1MS 30m 0.25 (mm)
CCVIS 410-82059/3		01/05/2021 09:40	1	HJ05C01.D	R-624Si1MS 30m 0.25 (mm)
LCS 410-82059/4		01/05/2021 10:01	1	HJ05L01.D	R-624Si1MS 30m 0.25 (mm)
LCSD 410-82059/5		01/05/2021 10:23	1	HJ05L02.D	R-624Si1MS 30m 0.25 (mm)
MB 410-82059/7		01/05/2021 11:06	1	HJ05B01.D	R-624Si1MS 30m 0.25 (mm)
410-24913-13	HD-QC1-0/1-1	01/05/2021 11:28	1	HJ05S01.D	R-624Si1MS 30m 0.25 (mm)
410-24913-14	HD-QC1-0/1-2	01/05/2021 11:50	1	HJ05S02.D	R-624Si1MS 30m 0.25 (mm)
ZZZZZ		01/05/2021 12:12	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		01/05/2021 12:34	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		01/05/2021 12:55	1		R-624Si1MS 30m 0.25 (mm)
410-24913-5	HD-COD-SW-13-0/1-0	01/05/2021 13:17	1	HJ05S06.D	R-624Si1MS 30m 0.25 (mm)
ZZZZZ		01/05/2021 13:38	10		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		01/05/2021 14:00	100		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		01/05/2021 14:22	20		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		01/05/2021 14:43	10		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		01/05/2021 15:05	100		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		01/05/2021 15:27	10		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		01/05/2021 15:49	100		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		01/05/2021 16:11	50		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		01/05/2021 16:32	500		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		01/05/2021 16:54	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		01/05/2021 17:15	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		01/05/2021 17:37	10		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		01/05/2021 17:59	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		01/05/2021 18:21	10		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		01/05/2021 18:42	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		01/05/2021 19:04	10		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		01/05/2021 19:26	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		01/05/2021 20:09	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		01/05/2021 20:31	1		R-624Si1MS 30m 0.25 (mm)

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-24913-1

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 Laboratories Job No.: 410-24913-1

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 Laboratories Job No.: 410-24913-1

SDG No.: _____

Batch Number: 81468 Batch Start Date: 12/31/20 16:11 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 410-81468/1		8260D		1 uL	1 uL				
CCVIS 410-81468/4		8260D		25 mL	25 mL				0126201F
LCS 410-81468/6		8260D		25 mL	25 mL				0126201F
MB 410-81468/9		8260D		25 mL	25 mL				0126201F
410-24913-A-1	HD-COD-SW-6-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-24913-A-2	HD-COD-SW-7-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-24913-A-3	HD-COD-SW-8-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-24913-A-4	HD-COD-SW-9-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_29_826ISS 00014	MSV_Q_EE 00003	MSV_Q_ETBR 00006	MSV_Q_QARC 00060	MSV_Q_QVOA1 00061	MSV_Q_QVOA6 00059
BFB 410-81468/1		8260D							
CCVIS 410-81468/4		8260D		1 uL					
LCS 410-81468/6		8260D		1 uL	12.5 uL	12.5 uL	12.5 uL	12.5 uL	12.5 uL
MB 410-81468/9		8260D		1 uL					
410-24913-A-1	HD-COD-SW-6-0/1-0	8260D	T	1 uL					
410-24913-A-2	HD-COD-SW-7-0/1-0	8260D	T	1 uL					
410-24913-A-3	HD-COD-SW-8-0/1-0	8260D	T	1 uL					
410-24913-A-4	HD-COD-SW-9-0/1-0	8260D	T	1 uL					

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_QGAS_826 00100	MSV_RV1_826 00033	MSV_RV4_826 00038	MSV_RV4GAS826 00104	MSV_V_BFB 00003
BFB 410-81468/1		8260D						1 uL
CCVIS 410-81468/4		8260D			25 uL	25 uL	25 uL	
LCS 410-81468/6		8260D		12.5 uL				
MB 410-81468/9		8260D						

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-24913-1

SDG No.: _____

Batch Number: 81468 Batch Start Date: 12/31/20 16:11 Batch Analyst: Campbell, Miranda E

Batch Method: 8260D Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_QGAS_826 00100	MSV_RV1_826 00033	MSV_RV4_826 00038	MSV_RV4GAS826 00104	MSV_V_BFB 00003	
410-24913-A-1	HD-COD-SW-6-0/1-0	8260D	T						
410-24913-A-2	HD-COD-SW-7-0/1-0	8260D	T						
410-24913-A-3	HD-COD-SW-8-0/1-0	8260D	T						
410-24913-A-4	HD-COD-SW-9-0/1-0	8260D	T						

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-24913-1

SDG No.: _____

Batch Number: 81781 Batch Start Date: 01/04/21 12:39 Batch Analyst: Howe, Jennifer K

Batch Method: 8260D Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Lot#Vial	MSV_30_826ISS 00006	MSV_Q_EE 00003	MSV_Q_ETBR 00006
BFB 410-81781/1		8260D		1 uL	1 uL				
IC 410-81781/12		8260D		25 mL	25 mL	0126201F	5 uL		
ICIS 410-81781/13		8260D		25 mL	25 mL	0126201F	5 uL		
IC 410-81781/14		8260D		25 mL	25 mL	0126201F	5 uL		
IC 410-81781/15		8260D		25 mL	25 mL	0126201F	5 uL		
IC 410-81781/16		8260D		25 mL	25 mL	0126201F	5 uL		
IC 410-81781/17		8260D		25 mL	25 mL	0126201F	5 uL		
IC 410-81781/18		8260D		25 mL	25 mL	0126201F	5 uL		
ICV 410-81781/19		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 00061	MSV_Q_QVOA1 00062	MSV_Q_QVOA6 00059	MSV_QGAS_826 00101	MSV_RV1_826 00034	MSV_RV4_826 00039
BFB 410-81781/1		8260D							
IC 410-81781/12		8260D						25 uL	25 uL
ICIS 410-81781/13		8260D						10 uL	10 uL
IC 410-81781/14		8260D						5 uL	5 uL
IC 410-81781/15		8260D						2 uL	2 uL
IC 410-81781/16		8260D						2 uL	2 uL
IC 410-81781/17		8260D						2 uL	2 uL
IC 410-81781/18		8260D						2 uL	2 uL
ICV 410-81781/19		8260D		12.5 uL	12.5 uL	12.5 uL	12.5 uL		

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_RV4GAS826 00105	MSV_V_BFB 00003				
BFB 410-81781/1		8260D			1 uL				
IC 410-81781/12		8260D		25 uL					
ICIS 410-81781/13		8260D		10 uL					
IC 410-81781/14		8260D		5 uL					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-24913-1

SDG No.: _____

Batch Number: 81781 Batch Start Date: 01/04/21 12:39 Batch Analyst: Howe, Jennifer K

Batch Method: 8260D Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_RV4GAS826 00105	MSV_V_BFB 00003				
IC 410-81781/15		8260D		2 uL					
IC 410-81781/16		8260D		2 uL					
IC 410-81781/17		8260D		2 uL					
IC 410-81781/18		8260D		2 uL					
ICV 410-81781/19		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 Laboratories Job No.: 410-24913-1

SDG No.: _____

Batch Number: 81892 Batch Start Date: 01/04/21 18:20 Batch Analyst: Howe, Jennifer K

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 410-81892/1		8260D		1 uL	1 uL				
CCVIS 410-81892/3		8260D		25 mL	25 mL				0126201F
LCS 410-81892/5		8260D		25 mL	25 mL				0126201F
LCSD 410-81892/6		8260D		25 mL	25 mL				0126201F
MB 410-81892/10		8260D		25 mL	25 mL				0126201F
410-24913-A-6	HD-COD-SW-15-0/1 -0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-24913-A-6 MS	HD-COD-SW-15-0/1 -0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-24913-A-6 MSD	HD-COD-SW-15-0/1 -0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-24913-A-7	HD-COD-SW-16-0/1 -0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-24913-A-8	HD-COD-SW-17-0/1 -0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-24913-A-9	HD-COD-SW-26-0/1 -0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-24913-A-10	HD-COD-SW-27-0/1 -0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-24913-A-11	HD-COD-SW-28-0/1 -0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-24913-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 00014	MSV_Q_EE 00003	MSV_Q_ETBR 00006	MSV_Q_QARC 00061	MSV_Q_QVOA1 00062	MSV_Q_QVOA6 00059
BFB 410-81892/1		8260D							
CCVIS 410-81892/3		8260D		1 uL					
LCS 410-81892/5		8260D		1 uL	12.5 uL	12.5 uL	12.5 uL	12.5 uL	12.5 uL
LCSD 410-81892/6		8260D		1 uL	12.5 uL	12.5 uL	12.5 uL	12.5 uL	12.5 uL
MB 410-81892/10		8260D		1 uL					
410-24913-A-6	HD-COD-SW-15-0/1 -0	8260D	T	1 uL					
410-24913-A-6 MS	HD-COD-SW-15-0/1 -0	8260D	T	1 uL	5.38 uL	5.38 uL	5.38 uL	5.38 uL	5.38 uL

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-24913-1

SDG No.: _____

Batch Number: 81892 Batch Start Date: 01/04/21 18:20 Batch Analyst: Howe, Jennifer K

Batch Method: 8260D Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_29_826ISS 00014	MSV_Q_EE 00003	MSV_Q_ETBR 00006	MSV_Q_QARC 00061	MSV_Q_QVOA1 00062	MSV_Q_QVOA6 00059
410-24913-A-6 MSD	HD-COD-SW-15-0/1 -0	8260D	T	1 uL	5.38 uL	5.38 uL	5.38 uL	5.38 uL	5.38 uL
410-24913-A-7	HD-COD-SW-16-0/1 -0	8260D	T	1 uL					
410-24913-A-8	HD-COD-SW-17-0/1 -0	8260D	T	1 uL					
410-24913-A-9	HD-COD-SW-26-0/1 -0	8260D	T	1 uL					
410-24913-A-10	HD-COD-SW-27-0/1 -0	8260D	T	1 uL					
410-24913-A-11	HD-COD-SW-28-0/1 -0	8260D	T	1 uL					
410-24913-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 00101	MSV_RV1_826 00034	MSV_RV4_826 00039	MSV_RV4GAS826 00105	MSV_V_BFB 00003	
BFB 410-81892/1		8260D						1 uL	
CCVIS 410-81892/3		8260D			25 uL	25 uL	25 uL		
LCS 410-81892/5		8260D		12.5 uL					
LCSD 410-81892/6		8260D		12.5 uL					
MB 410-81892/10		8260D							
410-24913-A-6	HD-COD-SW-15-0/1 -0	8260D	T						
410-24913-A-6 MS	HD-COD-SW-15-0/1 -0	8260D	T	5.38 uL					
410-24913-A-6 MSD	HD-COD-SW-15-0/1 -0	8260D	T	5.38 uL					
410-24913-A-7	HD-COD-SW-16-0/1 -0	8260D	T						
410-24913-A-8	HD-COD-SW-17-0/1 -0	8260D	T						
410-24913-A-9	HD-COD-SW-26-0/1 -0	8260D	T						
410-24913-A-10	HD-COD-SW-27-0/1 -0	8260D	T						
410-24913-A-11	HD-COD-SW-28-0/1 -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 Laboratories Job No.: 410-24913-1

SDG No.: _____

Batch Number: 81892 Batch Start Date: 01/04/21 18:20 Batch Analyst: Howe, Jennifer K

Batch Method: 8260D Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_QGAS_826 00101	MSV_RV1_826 00034	MSV_RV4_826 00039	MSV_RV4GAS826 00105	MSV_V_BFB 00003	
410-24913-A-12	HD-COD-SW-29-0/1 -0	8260D	T						

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-24913-1

SDG No.: _____

Batch Number: 82059 Batch Start Date: 01/05/21 09:04 Batch Analyst: Howe, Jennifer K

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 410-82059/1		8260D		1 uL	1 uL				
CCVIS 410-82059/3		8260D		25 mL	25 mL				0126201f
LCS 410-82059/4		8260D		25 mL	25 mL				0126201f
LCS 410-82059/5		8260D		25 mL	25 mL				0126201f
MB 410-82059/7		8260D		25 mL	25 mL				0126201f
410-24913-A-13	HD-QC1-0/1-1	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-24913-A-14	HD-QC1-0/1-2	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-24913-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_30_826ISS 00006	MSV_Q_EE 00003	MSV_Q_ETBR 00006	MSV_Q_QARC 00061	MSV_Q_QVOA1 00062	MSV_Q_QVOA6 00059
BFB 410-82059/1		8260D							
CCVIS 410-82059/3		8260D		5 uL					
LCS 410-82059/4		8260D		5 uL	12.5 uL	12.5 uL	12.5 uL	12.5 uL	12.5 uL
LCS 410-82059/5		8260D		5 uL	12.5 uL	12.5 uL	12.5 uL	12.5 uL	12.5 uL
MB 410-82059/7		8260D		5 uL					
410-24913-A-13	HD-QC1-0/1-1	8260D	T	5 uL					
410-24913-A-14	HD-QC1-0/1-2	8260D	T	5 uL					
410-24913-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 00101	MSV_RV1 826 00033	MSV_RV4 826 00039	MSV_RV4GAS826 00105	MSV_V_BFB 00003	
BFB 410-82059/1		8260D						1 uL	
CCVIS 410-82059/3		8260D			20 uL	20 uL	20 uL		
LCS 410-82059/4		8260D		12.5 uL					
LCS 410-82059/5		8260D		12.5 uL					
MB 410-82059/7		8260D							

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-24913-1

SDG No.: _____

Batch Number: 82059 Batch Start Date: 01/05/21 09:04 Batch Analyst: Howe, Jennifer K

Batch Method: 8260D Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_QGAS_826 00101	MSV_RV1_826 00033	MSV_RV4_826 00039	MSV_RV4GAS826 00105	MSV_V_BFB 00003	
410-24913-A-13	HD-QC1-0/1-1	8260D	T						
410-24913-A-14	HD-QC1-0/1-2	8260D	T						
410-24913-A-5	HD-COD-SW-13-0/1 -0	8260D	T						

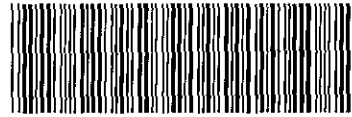
Batch Notes	

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.

Shipping and Receiving Documents

Env



410-24913 Chain of Custody

Request/Chain of Custody



Lancaster Laboratories Environmental

Sample #

Client: Groundwater Sciences Corporation				Matrix			Analyses Requested										For Lab Use Only	
Project Name/#: FYNOP Monthly Surface Water		Site ID #: FYNOP 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												SCR #: _____	
Sampler: Casey Littlefield		PWSID #: N/A		<input type="checkbox"/> Soil	<input type="checkbox"/> Sediment	<input type="checkbox"/> Other											Preservation Codes	
Phone #: (717) 901-8176 / (717) 756-1246		Quote #:															H HCl T Thiosulfate	
State where samples were collected York, PA		For Compliance: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>															N HNO ₃ B NaOH	
																	S H ₂ SO ₄ P H ₃ PO ₄	
																	O Other	
Sample Identification		Collection		Grab	Composite	Total # of Containers	Aqueous VOCs via 8260g (low level) 25 ml purge)										Remarks	
		Date	Time				ADDITIONAL GAPP LIST											
HD-COD-SW-6-0/1-0		12-23-20	1045	X		3	X											
HD-COD-SW-7-0/1-0			1125	X		3	X											
HD-COD-SW-8-0/1-0			0935	X		3	X											
HD-COD-SW-9-0/1-0			1215	X		3	X											
HD-COD-SW-13-0/1-0			0955	X		3	X											
HD-COD-SW-15-0/1-0			1145	X		3	X											
HD-COD-SW-15-0/1-0 MS			1145	X		3	X											
HD-COD-SW 15-0/1-0 MSD			1145	X		3	X											
HD-COD-SW 16-0/1-0			1010	X		3	X											
HD-COD-SW 17-0/1-0		✓	1025	X		3	X											
Turnaround Time Requested (TAT) (please check):				Standard <input checked="" type="checkbox"/> Rush <input type="checkbox"/>		Relinquished by:		Date	Time	Received by:		Date	Time					
(Rush TAT is subject to laboratory approval and surcharges.)						<i>[Signature]</i>		12/23/20	1345									
Date results are needed						Relinquished by:		Date	Time	Received by:		Date	Time					
Rush results requested by (please check):				E-Mail <input type="checkbox"/> Phone <input type="checkbox"/>		Relinquished by:		Date	Time	Received by:		Date	Time					
E-mail Address						Relinquished by:		Date	Time	Received by:		Date	Time					
Phone:						Relinquished by:		Date	Time	Received by:		Date	Time					
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"/>				Relinquished by:		Date	Time	Received by:		Date	Time					
Type III (Reduced non-CLP) <input type="checkbox"/>		CT RCP <input type="checkbox"/>				Relinquished by:		Date	Time	Received by:		Date	Time					
Type VI (Raw Data Only) <input type="checkbox"/>		TX TRRP-13 <input type="checkbox"/>				Relinquished by:		Date	Time	Received by:		Date	Time					
NJ DKQP <input type="checkbox"/>		NYSDEC Category <input type="checkbox"/> A or <input type="checkbox"/> B				Relinquished by Commercial Carrier:				Received by:		12/23/20	1345					
CLP Like Deliverables, Project Specific Analyte List						Temperature upon receipt						0-7	°C					
EDD Required? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>				If yes, format: _____		UPS _____ FedEx _____ Other _____												

Environmental Analysis Request/Chain of Custody



Lancaster Laboratories
Environmental

Acct. # _____ Group # _____ Sample # _____

Client: Groundwater Sciences Corporation				Matrix			Analyses Requested										For Lab Use Only									
Project Name/#: FYNOP Monthly Surface Water		Site ID #: FYNOP 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"/> Other Trip Blank											SCR #: _____									
Sampler: Casey Littlefield		PWSID #: N/A		<input type="checkbox"/> Soil	<input type="checkbox"/> Water												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 #:																								
State where samples were collected York, PA		For Compliance: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>																								
Sample Identification		Collection		Grab	Composite	Soil	Water	Other	Total # of Containers	Aqueous VOCs via 8260D (low level, 25 ml purge)	MODIFIED GRAP LIST											Remarks				
		Date	Time																							
HD-COD-SW-26-0/1-0		12-23-20	1105	X			X		3	X																
HD-COD-SW-27-0/1-0			1135	X			X		3	X																
HD-COD-SW-28-0/1-0			1225	X			X		3	X																
HD-COD-SW-29-0/1-0			0925	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: 12/23/20		Time: 1345		Received by:		Date:		Time:											
(Rush TAT is subject to laboratory approval and surcharges.)				Relinquished by:			Date:		Time:		Received by:		Date:		Time:											
Date results are needed				Relinquished by:			Date:		Time:		Received by:		Date:		Time:											
Rush results requested by (please check): E-Mail <input type="checkbox"/> Phone <input type="checkbox"/>				Relinquished by:			Date:		Time:		Received by:		Date:		Time:											
E-mail Address:				Relinquished by:			Date:		Time:		Received by:		Date:		Time:											
Phone:				Relinquished by:			Date:		Time:		Received by:		Date:		Time:											
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"/>		Relinquished by:			Date:		Time:		Received by:		Date:		Time:											
Type III (Reduced non-CLP) <input type="checkbox"/>		CT RCP <input type="checkbox"/>		Relinquished by:			Date:		Time:		Received by:		Date:		Time:											
Type VI (Raw Data Only) <input type="checkbox"/>		TX TRRP-13 <input type="checkbox"/>		Relinquished by:			Date:		Time:		Received by:		Date:		Time:											
NJ DKQP <input type="checkbox"/>		NYSDEC Category <input type="checkbox"/> A or <input type="checkbox"/> B		Relinquished by Commercial Carrier			Date:		Time:		Received by:		Date:		Time:											
EDD Required? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> If yes, format: _____ <small>CLP Like Deliverables, Project Specific Analyte List</small>				UPS _____ FedEx _____ Other _____			Date:		Time:		Received by:		Date:		Time:											
											Temperature upon receipt 0.7 °C															

Login Sample Receipt Checklist

Client: Groundwater Sciences Corporation

Job Number: 410-24913-1

Login Number: 24913

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	