

## ANALYTICAL REPORT

Job Number: 410-30627-1

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  
3/9/2021 3:26 PM

---

Marrison C Williams, Project Manager  
2425 New Holland Pike, Lancaster, PA, 17601  
(717)556-7246  
Marrison.Williams@eurofinset.com  
03/09/2021

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of TestAmerica and its client. All questions regarding this report should be directed to the TestAmerica Project Manager or designee who has signed this report.

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

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

# Table of Contents

Cover Title Page . . . . .	1
Data Summaries . . . . .	4
Definitions . . . . .	4
Case Narrative . . . . .	5
Detection Summary . . . . .	6
Client Sample Results . . . . .	8
Default Detection Limits . . . . .	22
Surrogate Summary . . . . .	23
QC Sample Results . . . . .	24
QC Association . . . . .	31
Chronicle . . . . .	32
Certification Summary . . . . .	34
Method Summary . . . . .	35
Sample Summary . . . . .	36
Manual Integration Summary . . . . .	37
Reagent Traceability . . . . .	50
COAs . . . . .	69
Organic Sample Data . . . . .	285
GC/MS VOA . . . . .	285
Method 8260D Low Level . . . . .	285
Method 8260D Low Level QC Summary . . . . .	286
Method 8260D Low Level Sample Data . . . . .	306
Standards Data . . . . .	468
Method 8260D Low Level ICAL Data . . . . .	468
Method 8260D Low Level CCAL Data . . . . .	846
Raw QC Data . . . . .	883

# Table of Contents

Method 8260D Low Level Tune Data .....	883
Method 8260D Low Level Blank Data .....	899
Method 8260D Low Level LCS/LCSD Data .....	915
Method 8260D Low Level MS/MSD Data .....	936
Method 8260D Low Level Run Logs .....	950
Method 8260D Low Level Prep Data .....	954
Shipping and Receiving Documents .....	963
Client Chain of Custody .....	964
Sample Receipt Checklist .....	966

# Definitions/Glossary

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

Job ID: 410-30627-1

## 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**  
**410-30627-1**

**Receipt**

The samples were received on 2/26/2021 5:02 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 0.5°C

**Receipt Exceptions**

The container label for the following sample did not match the information listed on the Chain-of-Custody (COC): HD-COD-SW-16-0/1-0 (410-30627-7). There is a time discrepancy, the COC lists a collection time of 1225, however the container lists a collection time of 1025. The sample was entered following the COC. The client was contacted and confirmed the sample collection time 10:25 is correct.

**GC/MS VOA**

Method 8260D\_LL: The continuing calibration verification (CCV) associated with batch 410-99025 recovered outside acceptance criteria, low biased, for Chloromethane. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Non-detections of the affected analytes are reported. Any detections are considered estimated.

Method 8260D\_LL: The continuing calibration verification (CCV) associated with batch 410-99333 recovered above the upper control limit for 2-Hexanone. Non-detections of the affected analytes are reported. Any detections are considered estimated.

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

# Detection Summary

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

Job ID: 410-30627-1

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

## Lab Sample ID: 410-30627-1

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

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

## Lab Sample ID: 410-30627-2

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

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

## Lab Sample ID: 410-30627-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	1.4	J	5.0	0.90	ug/L	1		8260D	Total/NA

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

## Lab Sample ID: 410-30627-4

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
Carbon disulfide	0.064	J	1.0	0.060	ug/L	1		8260D	Total/NA
Methylene Chloride	0.091	J	0.50	0.070	ug/L	1		8260D	Total/NA
Tetrachloroethene	0.076	J	0.50	0.060	ug/L	1		8260D	Total/NA

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

## Lab Sample ID: 410-30627-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	1.6	J	5.0	0.90	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.051	J	0.50	0.050	ug/L	1		8260D	Total/NA

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

## Lab Sample ID: 410-30627-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.10	J	0.50	0.060	ug/L	1		8260D	Total/NA
1,1-Dichloroethene	0.064	J	0.50	0.060	ug/L	1		8260D	Total/NA
Acetone	1.2	J	5.0	0.90	ug/L	1		8260D	Total/NA
Chloroform	0.14	J	0.50	0.090	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.43	J	0.50	0.050	ug/L	1		8260D	Total/NA
Tetrachloroethene	1.5		0.50	0.060	ug/L	1		8260D	Total/NA
Trichloroethene	0.53		0.50	0.060	ug/L	1		8260D	Total/NA

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

## Lab Sample ID: 410-30627-7

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

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

## Lab Sample ID: 410-30627-8

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	0.051	J	0.50	0.050	ug/L	1		8260D	Total/NA

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

## Lab Sample ID: 410-30627-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	1.4	J	5.0	0.90	ug/L	1		8260D	Total/NA
Chloroform	0.11	J	0.50	0.090	ug/L	1		8260D	Total/NA
Tetrachloroethene	0.42	J	0.50	0.060	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

# Detection Summary

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

Job ID: 410-30627-1

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

## Lab Sample ID: 410-30627-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	1.5	J	5.0	0.90	ug/L	1		8260D	Total/NA
Carbon disulfide	0.062	J	1.0	0.060	ug/L	1		8260D	Total/NA
Tetrachloroethene	0.063	J	0.50	0.060	ug/L	1		8260D	Total/NA

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

## Lab Sample ID: 410-30627-11

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
Methylene Chloride	0.098	J	0.50	0.070	ug/L	1		8260D	Total/NA
Tetrachloroethene	0.11	J	0.50	0.060	ug/L	1		8260D	Total/NA

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

## Lab Sample ID: 410-30627-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	1.7	J	5.0	0.90	ug/L	1		8260D	Total/NA

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

## Lab Sample ID: 410-30627-13

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

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

## Lab Sample ID: 410-30627-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	0.18	J	0.50	0.070	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

# Client Sample Results

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

Job ID: 410-30627-1

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

**Lab Sample ID: 410-30627-1**

**Date Collected: 02/25/21 11:05**

**Matrix: Water**

**Date Received: 02/26/21 17:02**

**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			03/03/21 15:30	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			03/03/21 15:30	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			03/03/21 15:30	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			03/03/21 15:30	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			03/03/21 15:30	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			03/03/21 15:30	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			03/03/21 15:30	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			03/03/21 15:30	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			03/03/21 15:30	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			03/03/21 15:30	1
2-Hexanone	ND		5.0	0.60	ug/L			03/03/21 15:30	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			03/03/21 15:30	1
<b>Acetone</b>	<b>1.5</b>	<b>J</b>	5.0	0.90	ug/L			03/03/21 15:30	1
Benzene	ND		0.50	0.050	ug/L			03/03/21 15:30	1
Bromochloromethane	ND		0.50	0.050	ug/L			03/03/21 15:30	1
Bromodichloromethane	ND		0.50	0.050	ug/L			03/03/21 15:30	1
Bromoform	ND		1.0	0.30	ug/L			03/03/21 15:30	1
Bromomethane	ND		0.50	0.070	ug/L			03/03/21 15:30	1
Carbon disulfide	ND		1.0	0.060	ug/L			03/03/21 15:30	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			03/03/21 15:30	1
Chlorobenzene	ND		0.50	0.060	ug/L			03/03/21 15:30	1
Chloroethane	ND		0.50	0.070	ug/L			03/03/21 15:30	1
Chloroform	ND		0.50	0.090	ug/L			03/03/21 15:30	1
Chloromethane	ND	^c	0.50	0.060	ug/L			03/03/21 15:30	1
cis-1,2-Dichloroethene	ND		0.50	0.050	ug/L			03/03/21 15:30	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			03/03/21 15:30	1
Dibromochloromethane	ND		0.50	0.070	ug/L			03/03/21 15:30	1
Ethylbenzene	ND		0.50	0.060	ug/L			03/03/21 15:30	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			03/03/21 15:30	1
Methylene Chloride	ND		0.50	0.070	ug/L			03/03/21 15:30	1
Styrene	ND		0.50	0.050	ug/L			03/03/21 15:30	1
Tetrachloroethene	ND		0.50	0.060	ug/L			03/03/21 15:30	1
Toluene	ND		0.50	0.070	ug/L			03/03/21 15:30	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			03/03/21 15:30	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			03/03/21 15:30	1
Trichloroethene	ND		0.50	0.060	ug/L			03/03/21 15:30	1
Vinyl chloride	ND		0.50	0.10	ug/L			03/03/21 15:30	1
Xylenes, Total	ND		1.0	0.15	ug/L			03/03/21 15:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		80 - 120		03/03/21 15:30	1
4-Bromofluorobenzene (Surr)	97		80 - 120		03/03/21 15:30	1
Dibromofluoromethane (Surr)	99		80 - 120		03/03/21 15:30	1
Toluene-d8 (Surr)	101		80 - 120		03/03/21 15:30	1



# Client Sample Results

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

Job ID: 410-30627-1

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

**Lab Sample ID: 410-30627-2**

**Date Collected: 02/25/21 11:45**

**Matrix: Water**

**Date Received: 02/26/21 17:02**

**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			03/03/21 15:52	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			03/03/21 15:52	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			03/03/21 15:52	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			03/03/21 15:52	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			03/03/21 15:52	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			03/03/21 15:52	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			03/03/21 15:52	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			03/03/21 15:52	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			03/03/21 15:52	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			03/03/21 15:52	1
2-Hexanone	ND		5.0	0.60	ug/L			03/03/21 15:52	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			03/03/21 15:52	1
<b>Acetone</b>	<b>1.5</b>	<b>J</b>	5.0	0.90	ug/L			03/03/21 15:52	1
Benzene	ND		0.50	0.050	ug/L			03/03/21 15:52	1
Bromochloromethane	ND		0.50	0.050	ug/L			03/03/21 15:52	1
Bromodichloromethane	ND		0.50	0.050	ug/L			03/03/21 15:52	1
Bromoform	ND		1.0	0.30	ug/L			03/03/21 15:52	1
Bromomethane	ND		0.50	0.070	ug/L			03/03/21 15:52	1
Carbon disulfide	ND		1.0	0.060	ug/L			03/03/21 15:52	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			03/03/21 15:52	1
Chlorobenzene	ND		0.50	0.060	ug/L			03/03/21 15:52	1
Chloroethane	ND		0.50	0.070	ug/L			03/03/21 15:52	1
Chloroform	ND		0.50	0.090	ug/L			03/03/21 15:52	1
Chloromethane	ND	^c	0.50	0.060	ug/L			03/03/21 15:52	1
cis-1,2-Dichloroethene	ND		0.50	0.050	ug/L			03/03/21 15:52	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			03/03/21 15:52	1
Dibromochloromethane	ND		0.50	0.070	ug/L			03/03/21 15:52	1
Ethylbenzene	ND		0.50	0.060	ug/L			03/03/21 15:52	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			03/03/21 15:52	1
Methylene Chloride	ND		0.50	0.070	ug/L			03/03/21 15:52	1
Styrene	ND		0.50	0.050	ug/L			03/03/21 15:52	1
Tetrachloroethene	ND		0.50	0.060	ug/L			03/03/21 15:52	1
Toluene	ND		0.50	0.070	ug/L			03/03/21 15:52	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			03/03/21 15:52	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			03/03/21 15:52	1
Trichloroethene	ND		0.50	0.060	ug/L			03/03/21 15:52	1
Vinyl chloride	ND		0.50	0.10	ug/L			03/03/21 15:52	1
Xylenes, Total	ND		1.0	0.15	ug/L			03/03/21 15:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		80 - 120		03/03/21 15:52	1
4-Bromofluorobenzene (Surr)	97		80 - 120		03/03/21 15:52	1
Dibromofluoromethane (Surr)	100		80 - 120		03/03/21 15:52	1
Toluene-d8 (Surr)	101		80 - 120		03/03/21 15:52	1

# Client Sample Results

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

Job ID: 410-30627-1

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

**Lab Sample ID: 410-30627-3**

**Date Collected: 02/25/21 09:40**

**Matrix: Water**

**Date Received: 02/26/21 17:02**

**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			03/03/21 16:14	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			03/03/21 16:14	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			03/03/21 16:14	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			03/03/21 16:14	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			03/03/21 16:14	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			03/03/21 16:14	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			03/03/21 16:14	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			03/03/21 16:14	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			03/03/21 16:14	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			03/03/21 16:14	1
2-Hexanone	ND		5.0	0.60	ug/L			03/03/21 16:14	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			03/03/21 16:14	1
<b>Acetone</b>	<b>1.4</b>	<b>J</b>	5.0	0.90	ug/L			03/03/21 16:14	1
Benzene	ND		0.50	0.050	ug/L			03/03/21 16:14	1
Bromochloromethane	ND		0.50	0.050	ug/L			03/03/21 16:14	1
Bromodichloromethane	ND		0.50	0.050	ug/L			03/03/21 16:14	1
Bromoform	ND		1.0	0.30	ug/L			03/03/21 16:14	1
Bromomethane	ND		0.50	0.070	ug/L			03/03/21 16:14	1
Carbon disulfide	ND		1.0	0.060	ug/L			03/03/21 16:14	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			03/03/21 16:14	1
Chlorobenzene	ND		0.50	0.060	ug/L			03/03/21 16:14	1
Chloroethane	ND		0.50	0.070	ug/L			03/03/21 16:14	1
Chloroform	ND		0.50	0.090	ug/L			03/03/21 16:14	1
Chloromethane	ND	^c	0.50	0.060	ug/L			03/03/21 16:14	1
cis-1,2-Dichloroethene	ND		0.50	0.050	ug/L			03/03/21 16:14	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			03/03/21 16:14	1
Dibromochloromethane	ND		0.50	0.070	ug/L			03/03/21 16:14	1
Ethylbenzene	ND		0.50	0.060	ug/L			03/03/21 16:14	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			03/03/21 16:14	1
Methylene Chloride	ND		0.50	0.070	ug/L			03/03/21 16:14	1
Styrene	ND		0.50	0.050	ug/L			03/03/21 16:14	1
Tetrachloroethene	ND		0.50	0.060	ug/L			03/03/21 16:14	1
Toluene	ND		0.50	0.070	ug/L			03/03/21 16:14	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			03/03/21 16:14	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			03/03/21 16:14	1
Trichloroethene	ND		0.50	0.060	ug/L			03/03/21 16:14	1
Vinyl chloride	ND		0.50	0.10	ug/L			03/03/21 16:14	1
Xylenes, Total	ND		1.0	0.15	ug/L			03/03/21 16:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		80 - 120		03/03/21 16:14	1
4-Bromofluorobenzene (Surr)	97		80 - 120		03/03/21 16:14	1
Dibromofluoromethane (Surr)	101		80 - 120		03/03/21 16:14	1
Toluene-d8 (Surr)	102		80 - 120		03/03/21 16:14	1

# Client Sample Results

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

Job ID: 410-30627-1

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

**Lab Sample ID: 410-30627-4**

**Date Collected: 02/25/21 12:45**

**Matrix: Water**

**Date Received: 02/26/21 17:02**

**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			03/03/21 23:02	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			03/03/21 23:02	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			03/03/21 23:02	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			03/03/21 23:02	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			03/03/21 23:02	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			03/03/21 23:02	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			03/03/21 23:02	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			03/03/21 23:02	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			03/03/21 23:02	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			03/03/21 23:02	1
2-Hexanone	ND	^c	5.0	0.60	ug/L			03/03/21 23:02	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			03/03/21 23:02	1
<b>Acetone</b>	<b>1.9</b>	<b>J</b>	5.0	0.90	ug/L			03/03/21 23:02	1
Benzene	ND		0.50	0.050	ug/L			03/03/21 23:02	1
Bromochloromethane	ND		0.50	0.050	ug/L			03/03/21 23:02	1
Bromodichloromethane	ND		0.50	0.050	ug/L			03/03/21 23:02	1
Bromoform	ND		1.0	0.30	ug/L			03/03/21 23:02	1
Bromomethane	ND		0.50	0.070	ug/L			03/03/21 23:02	1
<b>Carbon disulfide</b>	<b>0.064</b>	<b>J</b>	1.0	0.060	ug/L			03/03/21 23:02	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			03/03/21 23:02	1
Chlorobenzene	ND		0.50	0.060	ug/L			03/03/21 23:02	1
Chloroethane	ND		0.50	0.070	ug/L			03/03/21 23:02	1
Chloroform	ND		0.50	0.090	ug/L			03/03/21 23:02	1
Chloromethane	ND		0.50	0.060	ug/L			03/03/21 23:02	1
cis-1,2-Dichloroethene	ND		0.50	0.050	ug/L			03/03/21 23:02	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			03/03/21 23:02	1
Dibromochloromethane	ND		0.50	0.070	ug/L			03/03/21 23:02	1
Ethylbenzene	ND		0.50	0.060	ug/L			03/03/21 23:02	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			03/03/21 23:02	1
<b>Methylene Chloride</b>	<b>0.091</b>	<b>J</b>	0.50	0.070	ug/L			03/03/21 23:02	1
Styrene	ND		0.50	0.050	ug/L			03/03/21 23:02	1
<b>Tetrachloroethene</b>	<b>0.076</b>	<b>J</b>	0.50	0.060	ug/L			03/03/21 23:02	1
Toluene	ND		0.50	0.070	ug/L			03/03/21 23:02	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			03/03/21 23:02	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			03/03/21 23:02	1
Trichloroethene	ND		0.50	0.060	ug/L			03/03/21 23:02	1
Vinyl chloride	ND		0.50	0.10	ug/L			03/03/21 23:02	1
Xylenes, Total	ND		1.0	0.15	ug/L			03/03/21 23:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		80 - 120		03/03/21 23:02	1
4-Bromofluorobenzene (Surr)	97		80 - 120		03/03/21 23:02	1
Dibromofluoromethane (Surr)	103		80 - 120		03/03/21 23:02	1
Toluene-d8 (Surr)	98		80 - 120		03/03/21 23:02	1

# Client Sample Results

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

Job ID: 410-30627-1

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

**Lab Sample ID: 410-30627-5**

**Date Collected: 02/25/21 10:00**

**Matrix: Water**

**Date Received: 02/26/21 17:02**

**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			03/03/21 23:23	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			03/03/21 23:23	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			03/03/21 23:23	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			03/03/21 23:23	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			03/03/21 23:23	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			03/03/21 23:23	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			03/03/21 23:23	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			03/03/21 23:23	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			03/03/21 23:23	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			03/03/21 23:23	1
2-Hexanone	ND	^c	5.0	0.60	ug/L			03/03/21 23:23	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			03/03/21 23:23	1
<b>Acetone</b>	<b>1.6</b>	<b>J</b>	5.0	0.90	ug/L			03/03/21 23:23	1
Benzene	ND		0.50	0.050	ug/L			03/03/21 23:23	1
Bromochloromethane	ND		0.50	0.050	ug/L			03/03/21 23:23	1
Bromodichloromethane	ND		0.50	0.050	ug/L			03/03/21 23:23	1
Bromoform	ND		1.0	0.30	ug/L			03/03/21 23:23	1
Bromomethane	ND		0.50	0.070	ug/L			03/03/21 23:23	1
Carbon disulfide	ND		1.0	0.060	ug/L			03/03/21 23:23	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			03/03/21 23:23	1
Chlorobenzene	ND		0.50	0.060	ug/L			03/03/21 23:23	1
Chloroethane	ND		0.50	0.070	ug/L			03/03/21 23:23	1
Chloroform	ND		0.50	0.090	ug/L			03/03/21 23:23	1
Chloromethane	ND		0.50	0.060	ug/L			03/03/21 23:23	1
<b>cis-1,2-Dichloroethene</b>	<b>0.051</b>	<b>J</b>	0.50	0.050	ug/L			03/03/21 23:23	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			03/03/21 23:23	1
Dibromochloromethane	ND		0.50	0.070	ug/L			03/03/21 23:23	1
Ethylbenzene	ND		0.50	0.060	ug/L			03/03/21 23:23	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			03/03/21 23:23	1
Methylene Chloride	ND		0.50	0.070	ug/L			03/03/21 23:23	1
Styrene	ND		0.50	0.050	ug/L			03/03/21 23:23	1
Tetrachloroethene	ND		0.50	0.060	ug/L			03/03/21 23:23	1
Toluene	ND		0.50	0.070	ug/L			03/03/21 23:23	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			03/03/21 23:23	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			03/03/21 23:23	1
Trichloroethene	ND		0.50	0.060	ug/L			03/03/21 23:23	1
Vinyl chloride	ND		0.50	0.10	ug/L			03/03/21 23:23	1
Xylenes, Total	ND		1.0	0.15	ug/L			03/03/21 23:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		80 - 120		03/03/21 23:23	1
4-Bromofluorobenzene (Surr)	97		80 - 120		03/03/21 23:23	1
Dibromofluoromethane (Surr)	103		80 - 120		03/03/21 23:23	1
Toluene-d8 (Surr)	97		80 - 120		03/03/21 23:23	1

# Client Sample Results

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

Job ID: 410-30627-1

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

**Lab Sample ID: 410-30627-6**

Date Collected: 02/25/21 12:10

Matrix: Water

Date Received: 02/26/21 17:02

**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			03/03/21 23:44	1
<b>1,1,1-Trichloroethane</b>	<b>0.10</b>	<b>J</b>	0.50	0.060	ug/L			03/03/21 23:44	1
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			03/03/21 23:44	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			03/03/21 23:44	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			03/03/21 23:44	1
<b>1,1-Dichloroethene</b>	<b>0.064</b>	<b>J</b>	0.50	0.060	ug/L			03/03/21 23:44	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			03/03/21 23:44	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			03/03/21 23:44	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			03/03/21 23:44	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			03/03/21 23:44	1
2-Hexanone	ND	^c	5.0	0.60	ug/L			03/03/21 23:44	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			03/03/21 23:44	1
<b>Acetone</b>	<b>1.2</b>	<b>J</b>	5.0	0.90	ug/L			03/03/21 23:44	1
Benzene	ND		0.50	0.050	ug/L			03/03/21 23:44	1
Bromochloromethane	ND		0.50	0.050	ug/L			03/03/21 23:44	1
Bromodichloromethane	ND		0.50	0.050	ug/L			03/03/21 23:44	1
Bromoform	ND		1.0	0.30	ug/L			03/03/21 23:44	1
Bromomethane	ND		0.50	0.070	ug/L			03/03/21 23:44	1
Carbon disulfide	ND		1.0	0.060	ug/L			03/03/21 23:44	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			03/03/21 23:44	1
Chlorobenzene	ND		0.50	0.060	ug/L			03/03/21 23:44	1
Chloroethane	ND		0.50	0.070	ug/L			03/03/21 23:44	1
<b>Chloroform</b>	<b>0.14</b>	<b>J</b>	0.50	0.090	ug/L			03/03/21 23:44	1
Chloromethane	ND		0.50	0.060	ug/L			03/03/21 23:44	1
<b>cis-1,2-Dichloroethene</b>	<b>0.43</b>	<b>J</b>	0.50	0.050	ug/L			03/03/21 23:44	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			03/03/21 23:44	1
Dibromochloromethane	ND		0.50	0.070	ug/L			03/03/21 23:44	1
Ethylbenzene	ND		0.50	0.060	ug/L			03/03/21 23:44	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			03/03/21 23:44	1
Methylene Chloride	ND		0.50	0.070	ug/L			03/03/21 23:44	1
Styrene	ND		0.50	0.050	ug/L			03/03/21 23:44	1
<b>Tetrachloroethene</b>	<b>1.5</b>		0.50	0.060	ug/L			03/03/21 23:44	1
Toluene	ND		0.50	0.070	ug/L			03/03/21 23:44	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			03/03/21 23:44	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			03/03/21 23:44	1
<b>Trichloroethene</b>	<b>0.53</b>		0.50	0.060	ug/L			03/03/21 23:44	1
Vinyl chloride	ND		0.50	0.10	ug/L			03/03/21 23:44	1
Xylenes, Total	ND		1.0	0.15	ug/L			03/03/21 23:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		80 - 120		03/03/21 23:44	1
4-Bromofluorobenzene (Surr)	97		80 - 120		03/03/21 23:44	1
Dibromofluoromethane (Surr)	102		80 - 120		03/03/21 23:44	1
Toluene-d8 (Surr)	97		80 - 120		03/03/21 23:44	1

# Client Sample Results

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

Job ID: 410-30627-1

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

**Lab Sample ID: 410-30627-7**

**Date Collected: 02/25/21 10:25**

**Matrix: Water**

**Date Received: 02/26/21 17:02**

**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			03/04/21 01:31	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			03/04/21 01:31	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			03/04/21 01:31	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			03/04/21 01:31	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			03/04/21 01:31	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			03/04/21 01:31	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			03/04/21 01:31	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			03/04/21 01:31	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			03/04/21 01:31	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			03/04/21 01:31	1
2-Hexanone	ND	^c	5.0	0.60	ug/L			03/04/21 01:31	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			03/04/21 01:31	1
<b>Acetone</b>	<b>1.5</b>	<b>J</b>	5.0	0.90	ug/L			03/04/21 01:31	1
Benzene	ND		0.50	0.050	ug/L			03/04/21 01:31	1
Bromochloromethane	ND		0.50	0.050	ug/L			03/04/21 01:31	1
Bromodichloromethane	ND		0.50	0.050	ug/L			03/04/21 01:31	1
Bromoform	ND		1.0	0.30	ug/L			03/04/21 01:31	1
Bromomethane	ND		0.50	0.070	ug/L			03/04/21 01:31	1
Carbon disulfide	ND		1.0	0.060	ug/L			03/04/21 01:31	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			03/04/21 01:31	1
Chlorobenzene	ND		0.50	0.060	ug/L			03/04/21 01:31	1
Chloroethane	ND		0.50	0.070	ug/L			03/04/21 01:31	1
Chloroform	ND		0.50	0.090	ug/L			03/04/21 01:31	1
Chloromethane	ND		0.50	0.060	ug/L			03/04/21 01:31	1
cis-1,2-Dichloroethene	ND		0.50	0.050	ug/L			03/04/21 01:31	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			03/04/21 01:31	1
Dibromochloromethane	ND		0.50	0.070	ug/L			03/04/21 01:31	1
Ethylbenzene	ND		0.50	0.060	ug/L			03/04/21 01:31	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			03/04/21 01:31	1
Methylene Chloride	ND		0.50	0.070	ug/L			03/04/21 01:31	1
Styrene	ND		0.50	0.050	ug/L			03/04/21 01:31	1
Tetrachloroethene	ND		0.50	0.060	ug/L			03/04/21 01:31	1
Toluene	ND		0.50	0.070	ug/L			03/04/21 01:31	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			03/04/21 01:31	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			03/04/21 01:31	1
Trichloroethene	ND		0.50	0.060	ug/L			03/04/21 01:31	1
Vinyl chloride	ND		0.50	0.10	ug/L			03/04/21 01:31	1
Xylenes, Total	ND		1.0	0.15	ug/L			03/04/21 01:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		80 - 120		03/04/21 01:31	1
4-Bromofluorobenzene (Surr)	96		80 - 120		03/04/21 01:31	1
Dibromofluoromethane (Surr)	104		80 - 120		03/04/21 01:31	1
Toluene-d8 (Surr)	98		80 - 120		03/04/21 01:31	1

# Client Sample Results

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

Job ID: 410-30627-1

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

**Lab Sample ID: 410-30627-8**

**Date Collected: 02/25/21 10:40**

**Matrix: Water**

**Date Received: 02/26/21 17:02**

**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			03/04/21 01:52	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			03/04/21 01:52	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			03/04/21 01:52	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			03/04/21 01:52	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			03/04/21 01:52	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			03/04/21 01:52	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			03/04/21 01:52	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			03/04/21 01:52	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			03/04/21 01:52	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			03/04/21 01:52	1
2-Hexanone	ND	^c	5.0	0.60	ug/L			03/04/21 01:52	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			03/04/21 01:52	1
<b>Acetone</b>	<b>1.5</b>	<b>J</b>	5.0	0.90	ug/L			03/04/21 01:52	1
Benzene	ND		0.50	0.050	ug/L			03/04/21 01:52	1
Bromochloromethane	ND		0.50	0.050	ug/L			03/04/21 01:52	1
Bromodichloromethane	ND		0.50	0.050	ug/L			03/04/21 01:52	1
Bromoform	ND		1.0	0.30	ug/L			03/04/21 01:52	1
Bromomethane	ND		0.50	0.070	ug/L			03/04/21 01:52	1
Carbon disulfide	ND		1.0	0.060	ug/L			03/04/21 01:52	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			03/04/21 01:52	1
Chlorobenzene	ND		0.50	0.060	ug/L			03/04/21 01:52	1
Chloroethane	ND		0.50	0.070	ug/L			03/04/21 01:52	1
Chloroform	ND		0.50	0.090	ug/L			03/04/21 01:52	1
Chloromethane	ND		0.50	0.060	ug/L			03/04/21 01:52	1
<b>cis-1,2-Dichloroethene</b>	<b>0.051</b>	<b>J</b>	0.50	0.050	ug/L			03/04/21 01:52	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			03/04/21 01:52	1
Dibromochloromethane	ND		0.50	0.070	ug/L			03/04/21 01:52	1
Ethylbenzene	ND		0.50	0.060	ug/L			03/04/21 01:52	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			03/04/21 01:52	1
Methylene Chloride	ND		0.50	0.070	ug/L			03/04/21 01:52	1
Styrene	ND		0.50	0.050	ug/L			03/04/21 01:52	1
Tetrachloroethene	ND		0.50	0.060	ug/L			03/04/21 01:52	1
Toluene	ND		0.50	0.070	ug/L			03/04/21 01:52	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			03/04/21 01:52	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			03/04/21 01:52	1
Trichloroethene	ND		0.50	0.060	ug/L			03/04/21 01:52	1
Vinyl chloride	ND		0.50	0.10	ug/L			03/04/21 01:52	1
Xylenes, Total	ND		1.0	0.15	ug/L			03/04/21 01:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		80 - 120		03/04/21 01:52	1
4-Bromofluorobenzene (Surr)	96		80 - 120		03/04/21 01:52	1
Dibromofluoromethane (Surr)	103		80 - 120		03/04/21 01:52	1
Toluene-d8 (Surr)	98		80 - 120		03/04/21 01:52	1

# Client Sample Results

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

Job ID: 410-30627-1

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

**Lab Sample ID: 410-30627-9**

Date Collected: 02/25/21 11:25

Matrix: Water

Date Received: 02/26/21 17:02

**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			03/04/21 02:13	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			03/04/21 02:13	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			03/04/21 02:13	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			03/04/21 02:13	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			03/04/21 02:13	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			03/04/21 02:13	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			03/04/21 02:13	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			03/04/21 02:13	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			03/04/21 02:13	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			03/04/21 02:13	1
2-Hexanone	ND	^c	5.0	0.60	ug/L			03/04/21 02:13	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			03/04/21 02:13	1
<b>Acetone</b>	<b>1.4</b>	<b>J</b>	5.0	0.90	ug/L			03/04/21 02:13	1
Benzene	ND		0.50	0.050	ug/L			03/04/21 02:13	1
Bromochloromethane	ND		0.50	0.050	ug/L			03/04/21 02:13	1
Bromodichloromethane	ND		0.50	0.050	ug/L			03/04/21 02:13	1
Bromoform	ND		1.0	0.30	ug/L			03/04/21 02:13	1
Bromomethane	ND		0.50	0.070	ug/L			03/04/21 02:13	1
Carbon disulfide	ND		1.0	0.060	ug/L			03/04/21 02:13	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			03/04/21 02:13	1
Chlorobenzene	ND		0.50	0.060	ug/L			03/04/21 02:13	1
Chloroethane	ND		0.50	0.070	ug/L			03/04/21 02:13	1
<b>Chloroform</b>	<b>0.11</b>	<b>J</b>	0.50	0.090	ug/L			03/04/21 02:13	1
Chloromethane	ND		0.50	0.060	ug/L			03/04/21 02:13	1
cis-1,2-Dichloroethene	ND		0.50	0.050	ug/L			03/04/21 02:13	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			03/04/21 02:13	1
Dibromochloromethane	ND		0.50	0.070	ug/L			03/04/21 02:13	1
Ethylbenzene	ND		0.50	0.060	ug/L			03/04/21 02:13	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			03/04/21 02:13	1
Methylene Chloride	ND		0.50	0.070	ug/L			03/04/21 02:13	1
Styrene	ND		0.50	0.050	ug/L			03/04/21 02:13	1
<b>Tetrachloroethene</b>	<b>0.42</b>	<b>J</b>	0.50	0.060	ug/L			03/04/21 02:13	1
Toluene	ND		0.50	0.070	ug/L			03/04/21 02:13	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			03/04/21 02:13	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			03/04/21 02:13	1
Trichloroethene	ND		0.50	0.060	ug/L			03/04/21 02:13	1
Vinyl chloride	ND		0.50	0.10	ug/L			03/04/21 02:13	1
Xylenes, Total	ND		1.0	0.15	ug/L			03/04/21 02:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		80 - 120		03/04/21 02:13	1
4-Bromofluorobenzene (Surr)	97		80 - 120		03/04/21 02:13	1
Dibromofluoromethane (Surr)	103		80 - 120		03/04/21 02:13	1
Toluene-d8 (Surr)	98		80 - 120		03/04/21 02:13	1



# Client Sample Results

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

Job ID: 410-30627-1

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

**Lab Sample ID: 410-30627-10**

**Date Collected: 02/25/21 12:05**

**Matrix: Water**

**Date Received: 02/26/21 17:02**

**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			03/04/21 02:35	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			03/04/21 02:35	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			03/04/21 02:35	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			03/04/21 02:35	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			03/04/21 02:35	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			03/04/21 02:35	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			03/04/21 02:35	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			03/04/21 02:35	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			03/04/21 02:35	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			03/04/21 02:35	1
2-Hexanone	ND	^c	5.0	0.60	ug/L			03/04/21 02:35	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			03/04/21 02:35	1
<b>Acetone</b>	<b>1.5</b>	<b>J</b>	5.0	0.90	ug/L			03/04/21 02:35	1
Benzene	ND		0.50	0.050	ug/L			03/04/21 02:35	1
Bromochloromethane	ND		0.50	0.050	ug/L			03/04/21 02:35	1
Bromodichloromethane	ND		0.50	0.050	ug/L			03/04/21 02:35	1
Bromoform	ND		1.0	0.30	ug/L			03/04/21 02:35	1
Bromomethane	ND		0.50	0.070	ug/L			03/04/21 02:35	1
<b>Carbon disulfide</b>	<b>0.062</b>	<b>J</b>	1.0	0.060	ug/L			03/04/21 02:35	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			03/04/21 02:35	1
Chlorobenzene	ND		0.50	0.060	ug/L			03/04/21 02:35	1
Chloroethane	ND		0.50	0.070	ug/L			03/04/21 02:35	1
Chloroform	ND		0.50	0.090	ug/L			03/04/21 02:35	1
Chloromethane	ND		0.50	0.060	ug/L			03/04/21 02:35	1
cis-1,2-Dichloroethene	ND		0.50	0.050	ug/L			03/04/21 02:35	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			03/04/21 02:35	1
Dibromochloromethane	ND		0.50	0.070	ug/L			03/04/21 02:35	1
Ethylbenzene	ND		0.50	0.060	ug/L			03/04/21 02:35	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			03/04/21 02:35	1
Methylene Chloride	ND		0.50	0.070	ug/L			03/04/21 02:35	1
Styrene	ND		0.50	0.050	ug/L			03/04/21 02:35	1
<b>Tetrachloroethene</b>	<b>0.063</b>	<b>J</b>	0.50	0.060	ug/L			03/04/21 02:35	1
Toluene	ND		0.50	0.070	ug/L			03/04/21 02:35	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			03/04/21 02:35	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			03/04/21 02:35	1
Trichloroethene	ND		0.50	0.060	ug/L			03/04/21 02:35	1
Vinyl chloride	ND		0.50	0.10	ug/L			03/04/21 02:35	1
Xylenes, Total	ND		1.0	0.15	ug/L			03/04/21 02:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		80 - 120		03/04/21 02:35	1
4-Bromofluorobenzene (Surr)	96		80 - 120		03/04/21 02:35	1
Dibromofluoromethane (Surr)	104		80 - 120		03/04/21 02:35	1
Toluene-d8 (Surr)	97		80 - 120		03/04/21 02:35	1

# Client Sample Results

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

Job ID: 410-30627-1

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

**Lab Sample ID: 410-30627-11**

**Date Collected: 02/25/21 12:55**

**Matrix: Water**

**Date Received: 02/26/21 17:02**

**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			03/04/21 02:56	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			03/04/21 02:56	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			03/04/21 02:56	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			03/04/21 02:56	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			03/04/21 02:56	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			03/04/21 02:56	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			03/04/21 02:56	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			03/04/21 02:56	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			03/04/21 02:56	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			03/04/21 02:56	1
2-Hexanone	ND	^c	5.0	0.60	ug/L			03/04/21 02:56	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			03/04/21 02:56	1
<b>Acetone</b>	<b>2.2</b>	<b>J</b>	5.0	0.90	ug/L			03/04/21 02:56	1
Benzene	ND		0.50	0.050	ug/L			03/04/21 02:56	1
Bromochloromethane	ND		0.50	0.050	ug/L			03/04/21 02:56	1
Bromodichloromethane	ND		0.50	0.050	ug/L			03/04/21 02:56	1
Bromoform	ND		1.0	0.30	ug/L			03/04/21 02:56	1
Bromomethane	ND		0.50	0.070	ug/L			03/04/21 02:56	1
Carbon disulfide	ND		1.0	0.060	ug/L			03/04/21 02:56	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			03/04/21 02:56	1
Chlorobenzene	ND		0.50	0.060	ug/L			03/04/21 02:56	1
Chloroethane	ND		0.50	0.070	ug/L			03/04/21 02:56	1
Chloroform	ND		0.50	0.090	ug/L			03/04/21 02:56	1
Chloromethane	ND		0.50	0.060	ug/L			03/04/21 02:56	1
cis-1,2-Dichloroethene	ND		0.50	0.050	ug/L			03/04/21 02:56	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			03/04/21 02:56	1
Dibromochloromethane	ND		0.50	0.070	ug/L			03/04/21 02:56	1
Ethylbenzene	ND		0.50	0.060	ug/L			03/04/21 02:56	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			03/04/21 02:56	1
<b>Methylene Chloride</b>	<b>0.098</b>	<b>J</b>	0.50	0.070	ug/L			03/04/21 02:56	1
Styrene	ND		0.50	0.050	ug/L			03/04/21 02:56	1
<b>Tetrachloroethene</b>	<b>0.11</b>	<b>J</b>	0.50	0.060	ug/L			03/04/21 02:56	1
Toluene	ND		0.50	0.070	ug/L			03/04/21 02:56	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			03/04/21 02:56	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			03/04/21 02:56	1
Trichloroethene	ND		0.50	0.060	ug/L			03/04/21 02:56	1
Vinyl chloride	ND		0.50	0.10	ug/L			03/04/21 02:56	1
Xylenes, Total	ND		1.0	0.15	ug/L			03/04/21 02:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		80 - 120		03/04/21 02:56	1
4-Bromofluorobenzene (Surr)	96		80 - 120		03/04/21 02:56	1
Dibromofluoromethane (Surr)	103		80 - 120		03/04/21 02:56	1
Toluene-d8 (Surr)	98		80 - 120		03/04/21 02:56	1

# Client Sample Results

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

Job ID: 410-30627-1

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

**Lab Sample ID: 410-30627-12**

**Date Collected: 02/25/21 09:25**

**Matrix: Water**

**Date Received: 02/26/21 17:02**

**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			03/04/21 03:17	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			03/04/21 03:17	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			03/04/21 03:17	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			03/04/21 03:17	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			03/04/21 03:17	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			03/04/21 03:17	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			03/04/21 03:17	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			03/04/21 03:17	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			03/04/21 03:17	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			03/04/21 03:17	1
2-Hexanone	ND	^c	5.0	0.60	ug/L			03/04/21 03:17	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			03/04/21 03:17	1
<b>Acetone</b>	<b>1.7</b>	<b>J</b>	5.0	0.90	ug/L			03/04/21 03:17	1
Benzene	ND		0.50	0.050	ug/L			03/04/21 03:17	1
Bromochloromethane	ND		0.50	0.050	ug/L			03/04/21 03:17	1
Bromodichloromethane	ND		0.50	0.050	ug/L			03/04/21 03:17	1
Bromoform	ND		1.0	0.30	ug/L			03/04/21 03:17	1
Bromomethane	ND		0.50	0.070	ug/L			03/04/21 03:17	1
Carbon disulfide	ND		1.0	0.060	ug/L			03/04/21 03:17	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			03/04/21 03:17	1
Chlorobenzene	ND		0.50	0.060	ug/L			03/04/21 03:17	1
Chloroethane	ND		0.50	0.070	ug/L			03/04/21 03:17	1
Chloroform	ND		0.50	0.090	ug/L			03/04/21 03:17	1
Chloromethane	ND		0.50	0.060	ug/L			03/04/21 03:17	1
cis-1,2-Dichloroethene	ND		0.50	0.050	ug/L			03/04/21 03:17	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			03/04/21 03:17	1
Dibromochloromethane	ND		0.50	0.070	ug/L			03/04/21 03:17	1
Ethylbenzene	ND		0.50	0.060	ug/L			03/04/21 03:17	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			03/04/21 03:17	1
Methylene Chloride	ND		0.50	0.070	ug/L			03/04/21 03:17	1
Styrene	ND		0.50	0.050	ug/L			03/04/21 03:17	1
Tetrachloroethene	ND		0.50	0.060	ug/L			03/04/21 03:17	1
Toluene	ND		0.50	0.070	ug/L			03/04/21 03:17	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			03/04/21 03:17	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			03/04/21 03:17	1
Trichloroethene	ND		0.50	0.060	ug/L			03/04/21 03:17	1
Vinyl chloride	ND		0.50	0.10	ug/L			03/04/21 03:17	1
Xylenes, Total	ND		1.0	0.15	ug/L			03/04/21 03:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		80 - 120		03/04/21 03:17	1
4-Bromofluorobenzene (Surr)	97		80 - 120		03/04/21 03:17	1
Dibromofluoromethane (Surr)	104		80 - 120		03/04/21 03:17	1
Toluene-d8 (Surr)	97		80 - 120		03/04/21 03:17	1

# Client Sample Results

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

Job ID: 410-30627-1

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

**Lab Sample ID: 410-30627-13**

**Date Collected: 02/25/21 12:00**

**Matrix: Water**

**Date Received: 02/26/21 17:02**

**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			03/04/21 03:38	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			03/04/21 03:38	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			03/04/21 03:38	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			03/04/21 03:38	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			03/04/21 03:38	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			03/04/21 03:38	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			03/04/21 03:38	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			03/04/21 03:38	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			03/04/21 03:38	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			03/04/21 03:38	1
2-Hexanone	ND	^c	5.0	0.60	ug/L			03/04/21 03:38	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			03/04/21 03:38	1
<b>Acetone</b>	<b>1.5</b>	<b>J</b>	5.0	0.90	ug/L			03/04/21 03:38	1
Benzene	ND		0.50	0.050	ug/L			03/04/21 03:38	1
Bromochloromethane	ND		0.50	0.050	ug/L			03/04/21 03:38	1
Bromodichloromethane	ND		0.50	0.050	ug/L			03/04/21 03:38	1
Bromoform	ND		1.0	0.30	ug/L			03/04/21 03:38	1
Bromomethane	ND		0.50	0.070	ug/L			03/04/21 03:38	1
Carbon disulfide	ND		1.0	0.060	ug/L			03/04/21 03:38	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			03/04/21 03:38	1
Chlorobenzene	ND		0.50	0.060	ug/L			03/04/21 03:38	1
Chloroethane	ND		0.50	0.070	ug/L			03/04/21 03:38	1
Chloroform	ND		0.50	0.090	ug/L			03/04/21 03:38	1
Chloromethane	ND		0.50	0.060	ug/L			03/04/21 03:38	1
cis-1,2-Dichloroethene	ND		0.50	0.050	ug/L			03/04/21 03:38	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			03/04/21 03:38	1
Dibromochloromethane	ND		0.50	0.070	ug/L			03/04/21 03:38	1
Ethylbenzene	ND		0.50	0.060	ug/L			03/04/21 03:38	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			03/04/21 03:38	1
Methylene Chloride	ND		0.50	0.070	ug/L			03/04/21 03:38	1
Styrene	ND		0.50	0.050	ug/L			03/04/21 03:38	1
Tetrachloroethene	ND		0.50	0.060	ug/L			03/04/21 03:38	1
Toluene	ND		0.50	0.070	ug/L			03/04/21 03:38	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			03/04/21 03:38	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			03/04/21 03:38	1
Trichloroethene	ND		0.50	0.060	ug/L			03/04/21 03:38	1
Vinyl chloride	ND		0.50	0.10	ug/L			03/04/21 03:38	1
Xylenes, Total	ND		1.0	0.15	ug/L			03/04/21 03:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		80 - 120		03/04/21 03:38	1
4-Bromofluorobenzene (Surr)	97		80 - 120		03/04/21 03:38	1
Dibromofluoromethane (Surr)	102		80 - 120		03/04/21 03:38	1
Toluene-d8 (Surr)	98		80 - 120		03/04/21 03:38	1

# Client Sample Results

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

Job ID: 410-30627-1

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

**Lab Sample ID: 410-30627-14**

**Date Collected: 02/25/21 00:00**

**Matrix: Water**

**Date Received: 02/26/21 17:02**

**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			03/03/21 21:36	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			03/03/21 21:36	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			03/03/21 21:36	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			03/03/21 21:36	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			03/03/21 21:36	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			03/03/21 21:36	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			03/03/21 21:36	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			03/03/21 21:36	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			03/03/21 21:36	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			03/03/21 21:36	1
2-Hexanone	ND	^c	5.0	0.60	ug/L			03/03/21 21:36	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			03/03/21 21:36	1
Acetone	ND		5.0	0.90	ug/L			03/03/21 21:36	1
Benzene	ND		0.50	0.050	ug/L			03/03/21 21:36	1
Bromochloromethane	ND		0.50	0.050	ug/L			03/03/21 21:36	1
Bromodichloromethane	ND		0.50	0.050	ug/L			03/03/21 21:36	1
Bromoform	ND		1.0	0.30	ug/L			03/03/21 21:36	1
Bromomethane	ND		0.50	0.070	ug/L			03/03/21 21:36	1
Carbon disulfide	ND		1.0	0.060	ug/L			03/03/21 21:36	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			03/03/21 21:36	1
Chlorobenzene	ND		0.50	0.060	ug/L			03/03/21 21:36	1
Chloroethane	ND		0.50	0.070	ug/L			03/03/21 21:36	1
Chloroform	ND		0.50	0.090	ug/L			03/03/21 21:36	1
Chloromethane	ND		0.50	0.060	ug/L			03/03/21 21:36	1
cis-1,2-Dichloroethene	ND		0.50	0.050	ug/L			03/03/21 21:36	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			03/03/21 21:36	1
Dibromochloromethane	ND		0.50	0.070	ug/L			03/03/21 21:36	1
Ethylbenzene	ND		0.50	0.060	ug/L			03/03/21 21:36	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			03/03/21 21:36	1
<b>Methylene Chloride</b>	<b>0.18</b>	<b>J</b>	0.50	0.070	ug/L			03/03/21 21:36	1
Styrene	ND		0.50	0.050	ug/L			03/03/21 21:36	1
Tetrachloroethene	ND		0.50	0.060	ug/L			03/03/21 21:36	1
Toluene	ND		0.50	0.070	ug/L			03/03/21 21:36	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			03/03/21 21:36	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			03/03/21 21:36	1
Trichloroethene	ND		0.50	0.060	ug/L			03/03/21 21:36	1
Vinyl chloride	ND		0.50	0.10	ug/L			03/03/21 21:36	1
Xylenes, Total	ND		1.0	0.15	ug/L			03/03/21 21:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		80 - 120		03/03/21 21:36	1
4-Bromofluorobenzene (Surr)	97		80 - 120		03/03/21 21:36	1
Dibromofluoromethane (Surr)	102		80 - 120		03/03/21 21:36	1
Toluene-d8 (Surr)	98		80 - 120		03/03/21 21:36	1

# Default Detection Limits

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

Job ID: 410-30627-1

## 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: 410-30627-1

## 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)
410-30627-1	HD-COD-SW-6-0/1-0	101	97	99	101
410-30627-2	HD-COD-SW-7-0/1-0	101	97	100	101
410-30627-3	HD-COD-SW-8-0/1-0	101	97	101	102
410-30627-4	HD-COD-SW-9-0/1-0	101	97	103	98
410-30627-5	HD-COD-SW-13-0/1-0	103	97	103	97
410-30627-6	HD-COD-SW-15-0/1-0	101	97	102	97
410-30627-6 MS	HD-COD-SW-15-0/1-0	98	99	101	99
410-30627-6 MSD	HD-COD-SW-15-0/1-0	100	99	100	98
410-30627-7	HD-COD-SW-16-0/1-0	104	96	104	98
410-30627-8	HD-COD-SW-17-0/1-0	102	96	103	98
410-30627-9	HD-COD-SW-26-0/1-0	103	97	103	98
410-30627-10	HD-COD-SW-27-0/1-0	101	96	104	97
410-30627-11	HD-COD-SW-28-0/1-0	102	96	103	98
410-30627-12	HD-COD-SW-29-0/1-0	102	97	104	97
410-30627-13	HD-QC1-0/1-1	104	97	102	98
410-30627-14	HD-QC1-0/1-2	103	97	102	98
LCS 410-99025/5	Lab Control Sample	103	97	101	101
LCS 410-99333/5	Lab Control Sample	102	99	100	98
LCSD 410-99025/6	Lab Control Sample Dup	100	97	102	101
MB 410-99025/10	Method Blank	102	96	100	101
MB 410-99333/8	Method Blank	102	97	102	98

### 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: 410-30627-1

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

**Lab Sample ID: MB 410-99025/10**

**Matrix: Water**

**Analysis Batch: 99025**

**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			03/03/21 11:51	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			03/03/21 11:51	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			03/03/21 11:51	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			03/03/21 11:51	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			03/03/21 11:51	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			03/03/21 11:51	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			03/03/21 11:51	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			03/03/21 11:51	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			03/03/21 11:51	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			03/03/21 11:51	1
2-Hexanone	ND		5.0	0.60	ug/L			03/03/21 11:51	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			03/03/21 11:51	1
Acetone	ND		5.0	0.90	ug/L			03/03/21 11:51	1
Benzene	ND		0.50	0.050	ug/L			03/03/21 11:51	1
Bromochloromethane	ND		0.50	0.050	ug/L			03/03/21 11:51	1
Bromodichloromethane	ND		0.50	0.050	ug/L			03/03/21 11:51	1
Bromoform	ND		1.0	0.30	ug/L			03/03/21 11:51	1
Bromomethane	ND		0.50	0.070	ug/L			03/03/21 11:51	1
Carbon disulfide	ND		1.0	0.060	ug/L			03/03/21 11:51	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			03/03/21 11:51	1
Chlorobenzene	ND		0.50	0.060	ug/L			03/03/21 11:51	1
Chloroethane	ND		0.50	0.070	ug/L			03/03/21 11:51	1
Chloroform	ND		0.50	0.090	ug/L			03/03/21 11:51	1
Chloromethane	ND		0.50	0.060	ug/L			03/03/21 11:51	1
cis-1,2-Dichloroethene	ND		0.50	0.050	ug/L			03/03/21 11:51	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			03/03/21 11:51	1
Dibromochloromethane	ND		0.50	0.070	ug/L			03/03/21 11:51	1
Ethylbenzene	ND		0.50	0.060	ug/L			03/03/21 11:51	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			03/03/21 11:51	1
Methylene Chloride	ND		0.50	0.070	ug/L			03/03/21 11:51	1
Styrene	ND		0.50	0.050	ug/L			03/03/21 11:51	1
Tetrachloroethene	ND		0.50	0.060	ug/L			03/03/21 11:51	1
Toluene	ND		0.50	0.070	ug/L			03/03/21 11:51	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			03/03/21 11:51	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			03/03/21 11:51	1
Trichloroethene	ND		0.50	0.060	ug/L			03/03/21 11:51	1
Vinyl chloride	ND		0.50	0.10	ug/L			03/03/21 11:51	1
Xylenes, Total	ND		1.0	0.15	ug/L			03/03/21 11:51	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	102		80 - 120		03/03/21 11:51	1
4-Bromofluorobenzene (Surr)	96		80 - 120		03/03/21 11:51	1
Dibromofluoromethane (Surr)	100		80 - 120		03/03/21 11:51	1
Toluene-d8 (Surr)	101		80 - 120		03/03/21 11:51	1



# QC Sample Results

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

Job ID: 410-30627-1

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

**Lab Sample ID: LCS 410-99025/5**

**Matrix: Water**

**Analysis Batch: 99025**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	5.00	4.79		ug/L		96	71 - 134
1,1,1-Trichloroethane	5.00	4.67		ug/L		93	78 - 126
1,1,2,2-Tetrachloroethane	5.00	4.67		ug/L		93	75 - 123
1,1,2-Trichloroethane	5.00	4.78		ug/L		96	80 - 120
1,1-Dichloroethane	5.00	4.48		ug/L		90	74 - 120
1,1-Dichloroethene	5.00	4.75		ug/L		95	80 - 131
1,2-Dibromoethane (EDB)	5.00	4.75		ug/L		95	80 - 120
1,2-Dichloroethane	5.00	4.35		ug/L		87	69 - 122
1,2-Dichloropropane	5.00	4.61		ug/L		92	80 - 120
2-Butanone (MEK)	37.5	35.9		ug/L		96	59 - 141
2-Hexanone	25.0	23.2		ug/L		93	52 - 140
4-Methyl-2-pentanone (MIBK)	25.0	23.3		ug/L		93	55 - 140
Acetone	37.5	33.3		ug/L		89	60 - 146
Benzene	5.00	4.55		ug/L		91	80 - 120
Bromochloromethane	5.00	4.80		ug/L		96	80 - 120
Bromodichloromethane	5.00	4.64		ug/L		93	73 - 124
Bromoform	5.00	4.87		ug/L		97	49 - 144
Bromomethane	5.00	4.41		ug/L		88	60 - 136
Carbon disulfide	5.00	4.55		ug/L		91	67 - 130
Carbon tetrachloride	5.00	4.80		ug/L		96	64 - 141
Chlorobenzene	5.00	4.86		ug/L		97	80 - 120
Chloroethane	5.00	4.28		ug/L		86	63 - 120
Chloroform	5.00	4.65		ug/L		93	80 - 120
Chloromethane	5.00	4.02		ug/L		80	56 - 124
cis-1,2-Dichloroethene	5.00	4.76		ug/L		95	80 - 122
cis-1,3-Dichloropropene	5.00	4.42		ug/L		88	67 - 121
Dibromochloromethane	5.00	4.79		ug/L		96	64 - 138
Ethylbenzene	5.00	4.66		ug/L		93	80 - 120
Methyl tert-butyl ether	5.00	4.32		ug/L		86	69 - 120
Methylene Chloride	5.00	4.77		ug/L		95	80 - 120
Styrene	5.00	4.77		ug/L		95	80 - 120
Tetrachloroethene	5.00	4.97		ug/L		99	80 - 120
Toluene	5.00	4.69		ug/L		94	80 - 120
trans-1,2-Dichloroethene	5.00	4.74		ug/L		95	80 - 122
trans-1,3-Dichloropropene	5.00	4.61		ug/L		92	61 - 129
Trichloroethene	5.00	4.66		ug/L		93	80 - 120
Vinyl chloride	5.00	4.47		ug/L		89	60 - 125
Xylenes, Total	15.0	14.5		ug/L		97	80 - 120

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	103		80 - 120
4-Bromofluorobenzene (Surr)	97		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: 410-30627-1

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

**Lab Sample ID: LCSD 410-99025/6**

**Matrix: Water**

**Analysis Batch: 99025**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD
									Limit
1,1,1,2-Tetrachloroethane	5.00	4.76		ug/L		95	71 - 134	1	30
1,1,1-Trichloroethane	5.00	4.69		ug/L		94	78 - 126	0	30
1,1,2,2-Tetrachloroethane	5.00	4.67		ug/L		93	75 - 123	0	30
1,1,2-Trichloroethane	5.00	4.88		ug/L		98	80 - 120	2	30
1,1-Dichloroethane	5.00	4.45		ug/L		89	74 - 120	1	30
1,1-Dichloroethene	5.00	4.69		ug/L		94	80 - 131	1	30
1,2-Dibromoethane (EDB)	5.00	4.65		ug/L		93	80 - 120	2	30
1,2-Dichloroethane	5.00	4.33		ug/L		87	69 - 122	1	30
1,2-Dichloropropane	5.00	4.58		ug/L		92	80 - 120	1	30
2-Butanone (MEK)	37.5	36.7		ug/L		98	59 - 141	2	30
2-Hexanone	25.0	24.5		ug/L		98	52 - 140	5	30
4-Methyl-2-pentanone (MIBK)	25.0	24.3		ug/L		97	55 - 140	4	30
Acetone	37.5	34.8		ug/L		93	60 - 146	4	30
Benzene	5.00	4.53		ug/L		91	80 - 120	0	30
Bromochloromethane	5.00	4.76		ug/L		95	80 - 120	1	30
Bromodichloromethane	5.00	4.60		ug/L		92	73 - 124	1	30
Bromoform	5.00	4.76		ug/L		95	49 - 144	2	30
Bromomethane	5.00	4.36		ug/L		87	60 - 136	1	30
Carbon disulfide	5.00	4.47		ug/L		89	67 - 130	2	30
Carbon tetrachloride	5.00	4.72		ug/L		94	64 - 141	2	30
Chlorobenzene	5.00	4.83		ug/L		97	80 - 120	1	30
Chloroethane	5.00	4.26		ug/L		85	63 - 120	1	30
Chloroform	5.00	4.60		ug/L		92	80 - 120	1	30
Chloromethane	5.00	4.01		ug/L		80	56 - 124	0	30
cis-1,2-Dichloroethene	5.00	4.73		ug/L		95	80 - 122	1	30
cis-1,3-Dichloropropene	5.00	4.33		ug/L		87	67 - 121	2	30
Dibromochloromethane	5.00	4.64		ug/L		93	64 - 138	3	30
Ethylbenzene	5.00	4.62		ug/L		92	80 - 120	1	30
Methyl tert-butyl ether	5.00	4.31		ug/L		86	69 - 120	0	30
Methylene Chloride	5.00	4.72		ug/L		94	80 - 120	1	30
Styrene	5.00	4.76		ug/L		95	80 - 120	0	30
Tetrachloroethene	5.00	4.98		ug/L		100	80 - 120	0	30
Toluene	5.00	4.62		ug/L		92	80 - 120	1	30
trans-1,2-Dichloroethene	5.00	4.64		ug/L		93	80 - 122	2	30
trans-1,3-Dichloropropene	5.00	4.46		ug/L		89	61 - 129	3	30
Trichloroethene	5.00	4.72		ug/L		94	80 - 120	1	30
Vinyl chloride	5.00	4.22		ug/L		84	60 - 125	6	30
Xylenes, Total	15.0	14.4		ug/L		96	80 - 120	1	30

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	100		80 - 120
4-Bromofluorobenzene (Surr)	97		80 - 120
Dibromofluoromethane (Surr)	102		80 - 120
Toluene-d8 (Surr)	101		80 - 120

# QC Sample Results

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

Job ID: 410-30627-1

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

**Lab Sample ID: MB 410-99333/8**

**Matrix: Water**

**Analysis Batch: 99333**

**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			03/03/21 21:15	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			03/03/21 21:15	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			03/03/21 21:15	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			03/03/21 21:15	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			03/03/21 21:15	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			03/03/21 21:15	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			03/03/21 21:15	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			03/03/21 21:15	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			03/03/21 21:15	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			03/03/21 21:15	1
2-Hexanone	ND		5.0	0.60	ug/L			03/03/21 21:15	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			03/03/21 21:15	1
Acetone	ND		5.0	0.90	ug/L			03/03/21 21:15	1
Benzene	ND		0.50	0.050	ug/L			03/03/21 21:15	1
Bromochloromethane	ND		0.50	0.050	ug/L			03/03/21 21:15	1
Bromodichloromethane	ND		0.50	0.050	ug/L			03/03/21 21:15	1
Bromoform	ND		1.0	0.30	ug/L			03/03/21 21:15	1
Bromomethane	ND		0.50	0.070	ug/L			03/03/21 21:15	1
Carbon disulfide	ND		1.0	0.060	ug/L			03/03/21 21:15	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			03/03/21 21:15	1
Chlorobenzene	ND		0.50	0.060	ug/L			03/03/21 21:15	1
Chloroethane	ND		0.50	0.070	ug/L			03/03/21 21:15	1
Chloroform	ND		0.50	0.090	ug/L			03/03/21 21:15	1
Chloromethane	ND		0.50	0.060	ug/L			03/03/21 21:15	1
cis-1,2-Dichloroethene	ND		0.50	0.050	ug/L			03/03/21 21:15	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			03/03/21 21:15	1
Dibromochloromethane	ND		0.50	0.070	ug/L			03/03/21 21:15	1
Ethylbenzene	ND		0.50	0.060	ug/L			03/03/21 21:15	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			03/03/21 21:15	1
Methylene Chloride	ND		0.50	0.070	ug/L			03/03/21 21:15	1
Styrene	ND		0.50	0.050	ug/L			03/03/21 21:15	1
Tetrachloroethene	ND		0.50	0.060	ug/L			03/03/21 21:15	1
Toluene	ND		0.50	0.070	ug/L			03/03/21 21:15	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			03/03/21 21:15	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			03/03/21 21:15	1
Trichloroethene	ND		0.50	0.060	ug/L			03/03/21 21:15	1
Vinyl chloride	ND		0.50	0.10	ug/L			03/03/21 21:15	1
Xylenes, Total	ND		1.0	0.15	ug/L			03/03/21 21:15	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	102		80 - 120		03/03/21 21:15	1
4-Bromofluorobenzene (Surr)	97		80 - 120		03/03/21 21:15	1
Dibromofluoromethane (Surr)	102		80 - 120		03/03/21 21:15	1
Toluene-d8 (Surr)	98		80 - 120		03/03/21 21:15	1

# QC Sample Results

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

Job ID: 410-30627-1

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

**Lab Sample ID: LCS 410-99333/5**

**Matrix: Water**

**Analysis Batch: 99333**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	5.00	4.79		ug/L		96	71 - 134
1,1,1-Trichloroethane	5.00	4.90		ug/L		98	78 - 126
1,1,2,2-Tetrachloroethane	5.00	4.77		ug/L		95	75 - 123
1,1,2-Trichloroethane	5.00	4.81		ug/L		96	80 - 120
1,1-Dichloroethane	5.00	4.81		ug/L		96	74 - 120
1,1-Dichloroethene	5.00	4.84		ug/L		97	80 - 131
1,2-Dibromoethane (EDB)	5.00	4.75		ug/L		95	80 - 120
1,2-Dichloroethane	5.00	4.88		ug/L		98	69 - 122
1,2-Dichloropropane	5.00	5.00		ug/L		100	80 - 120
2-Butanone (MEK)	37.5	44.4		ug/L		118	59 - 141
2-Hexanone	25.0	30.7		ug/L		123	52 - 140
4-Methyl-2-pentanone (MIBK)	25.0	30.5		ug/L		122	55 - 140
Acetone	37.5	36.9		ug/L		99	60 - 146
Benzene	5.00	4.80		ug/L		96	80 - 120
Bromochloromethane	5.00	4.73		ug/L		95	80 - 120
Bromodichloromethane	5.00	4.96		ug/L		99	73 - 124
Bromoform	5.00	4.75		ug/L		95	49 - 144
Bromomethane	5.00	4.96		ug/L		99	60 - 136
Carbon disulfide	5.00	4.71		ug/L		94	67 - 130
Carbon tetrachloride	5.00	4.95		ug/L		99	64 - 141
Chlorobenzene	5.00	4.71		ug/L		94	80 - 120
Chloroethane	5.00	4.86		ug/L		97	63 - 120
Chloroform	5.00	4.87		ug/L		97	80 - 120
Chloromethane	5.00	4.84		ug/L		97	56 - 124
cis-1,2-Dichloroethene	5.00	4.77		ug/L		95	80 - 122
cis-1,3-Dichloropropene	5.00	4.97		ug/L		99	67 - 121
Dibromochloromethane	5.00	4.74		ug/L		95	64 - 138
Ethylbenzene	5.00	4.64		ug/L		93	80 - 120
Methyl tert-butyl ether	5.00	4.71		ug/L		94	69 - 120
Methylene Chloride	5.00	4.76		ug/L		95	80 - 120
Styrene	5.00	4.73		ug/L		95	80 - 120
Tetrachloroethene	5.00	4.60		ug/L		92	80 - 120
Toluene	5.00	4.58		ug/L		92	80 - 120
trans-1,2-Dichloroethene	5.00	4.76		ug/L		95	80 - 122
trans-1,3-Dichloropropene	5.00	5.13		ug/L		103	61 - 129
Trichloroethene	5.00	4.76		ug/L		95	80 - 120
Vinyl chloride	5.00	5.05		ug/L		101	60 - 125
Xylenes, Total	15.0	13.9		ug/L		93	80 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	102		80 - 120
4-Bromofluorobenzene (Surr)	99		80 - 120
Dibromofluoromethane (Surr)	100		80 - 120
Toluene-d8 (Surr)	98		80 - 120

# QC Sample Results

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

Job ID: 410-30627-1

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

**Lab Sample ID: 410-30627-6 MS**

**Matrix: Water**

**Analysis Batch: 99333**

**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				
1,1,1,2-Tetrachloroethane	ND		5.00	4.93		ug/L		99	71 - 134
1,1,1-Trichloroethane	0.10	J	5.00	5.21		ug/L		102	78 - 126
1,1,2,2-Tetrachloroethane	ND		5.00	4.82		ug/L		96	75 - 123
1,1,2-Trichloroethane	ND		5.00	4.92		ug/L		98	80 - 120
1,1-Dichloroethane	ND		5.00	4.91		ug/L		98	74 - 120
1,1-Dichloroethene	0.064	J	5.00	5.16		ug/L		102	80 - 131
1,2-Dibromoethane (EDB)	ND		5.00	4.72		ug/L		94	80 - 120
1,2-Dichloroethane	ND		5.00	4.85		ug/L		97	69 - 122
1,2-Dichloropropane	ND		5.00	5.00		ug/L		100	80 - 120
2-Butanone (MEK)	ND		37.5	34.9		ug/L		93	59 - 141
2-Hexanone	ND	^c	25.0	24.4		ug/L		97	52 - 140
4-Methyl-2-pentanone (MIBK)	ND		25.0	23.2		ug/L		93	55 - 140
Acetone	1.2	J	37.5	31.4		ug/L		80	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	4.97		ug/L		99	73 - 124
Bromoform	ND		5.00	4.80		ug/L		96	49 - 144
Bromomethane	ND		5.00	4.92		ug/L		98	60 - 136
Carbon disulfide	ND		5.00	4.75		ug/L		95	67 - 130
Carbon tetrachloride	ND		5.00	5.19		ug/L		104	64 - 141
Chlorobenzene	ND		5.00	4.88		ug/L		97	80 - 120
Chloroethane	ND		5.00	4.96		ug/L		99	63 - 120
Chloroform	0.14	J	5.00	5.13		ug/L		100	80 - 120
Chloromethane	ND		5.00	4.96		ug/L		99	80 - 120
cis-1,2-Dichloroethene	0.43	J	5.00	5.21		ug/L		95	80 - 122
cis-1,3-Dichloropropene	ND		5.00	4.90		ug/L		98	67 - 121
Dibromochloromethane	ND		5.00	4.89		ug/L		98	64 - 138
Ethylbenzene	ND		5.00	4.88		ug/L		98	80 - 120
Methyl tert-butyl ether	ND		5.00	4.59		ug/L		92	69 - 120
Methylene Chloride	ND		5.00	4.78		ug/L		96	80 - 120
Styrene	ND		5.00	4.92		ug/L		98	80 - 120
Tetrachloroethene	1.5		5.00	6.46		ug/L		99	80 - 120
Toluene	ND		5.00	4.81		ug/L		96	80 - 120
trans-1,2-Dichloroethene	ND		5.00	4.83		ug/L		97	80 - 122
trans-1,3-Dichloropropene	ND		5.00	4.99		ug/L		100	61 - 129
Trichloroethene	0.53		5.00	5.53		ug/L		100	80 - 120
Vinyl chloride	ND		5.00	5.21		ug/L		104	60 - 125
Xylenes, Total	ND		15.0	14.7		ug/L		98	80 - 120

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

# QC Sample Results

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

Job ID: 410-30627-1

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

**Lab Sample ID: 410-30627-6 MSD**

**Matrix: Water**

**Analysis Batch: 99333**

**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	5.00		ug/L		100	71 - 134	1	30
1,1,1-Trichloroethane	0.10	J	5.00	5.24		ug/L		103	78 - 126	1	30
1,1,2,2-Tetrachloroethane	ND		5.00	4.81		ug/L		96	75 - 123	0	30
1,1,2-Trichloroethane	ND		5.00	4.91		ug/L		98	80 - 120	0	30
1,1-Dichloroethane	ND		5.00	4.93		ug/L		99	74 - 120	0	30
1,1-Dichloroethene	0.064	J	5.00	5.09		ug/L		101	80 - 131	1	30
1,2-Dibromoethane (EDB)	ND		5.00	4.77		ug/L		95	80 - 120	1	30
1,2-Dichloroethane	ND		5.00	4.82		ug/L		96	69 - 122	0	30
1,2-Dichloropropane	ND		5.00	5.06		ug/L		101	80 - 120	1	30
2-Butanone (MEK)	ND		37.5	34.9		ug/L		93	59 - 141	0	30
2-Hexanone	ND	^c	25.0	24.3		ug/L		97	52 - 140	0	30
4-Methyl-2-pentanone (MIBK)	ND		25.0	23.5		ug/L		94	55 - 140	1	30
Acetone	1.2	J	37.5	31.3		ug/L		80	60 - 146	0	30
Benzene	ND		5.00	4.89		ug/L		98	80 - 120	1	30
Bromochloromethane	ND		5.00	4.72		ug/L		94	80 - 120	1	30
Bromodichloromethane	ND		5.00	4.98		ug/L		100	73 - 124	0	30
Bromoform	ND		5.00	4.86		ug/L		97	49 - 144	1	30
Bromomethane	ND		5.00	5.07		ug/L		101	60 - 136	3	30
Carbon disulfide	ND		5.00	4.72		ug/L		94	67 - 130	1	30
Carbon tetrachloride	ND		5.00	5.24		ug/L		105	64 - 141	1	30
Chlorobenzene	ND		5.00	4.89		ug/L		98	80 - 120	0	30
Chloroethane	ND		5.00	4.97		ug/L		99	63 - 120	0	30
Chloroform	0.14	J	5.00	5.11		ug/L		99	80 - 120	0	30
Chloromethane	ND		5.00	5.07		ug/L		101	80 - 120	2	30
cis-1,2-Dichloroethene	0.43	J	5.00	5.27		ug/L		97	80 - 122	1	30
cis-1,3-Dichloropropene	ND		5.00	4.99		ug/L		100	67 - 121	2	30
Dibromochloromethane	ND		5.00	4.84		ug/L		97	64 - 138	1	30
Ethylbenzene	ND		5.00	4.91		ug/L		98	80 - 120	0	30
Methyl tert-butyl ether	ND		5.00	4.67		ug/L		93	69 - 120	2	30
Methylene Chloride	ND		5.00	4.75		ug/L		95	80 - 120	1	30
Styrene	ND		5.00	4.88		ug/L		97	80 - 120	1	30
Tetrachloroethene	1.5		5.00	6.56		ug/L		100	80 - 120	1	30
Toluene	ND		5.00	4.82		ug/L		96	80 - 120	0	30
trans-1,2-Dichloroethene	ND		5.00	4.91		ug/L		98	80 - 122	2	30
trans-1,3-Dichloropropene	ND		5.00	5.17		ug/L		103	61 - 129	4	30
Trichloroethene	0.53		5.00	5.50		ug/L		99	80 - 120	1	30
Vinyl chloride	ND		5.00	5.34		ug/L		107	60 - 125	3	30
Xylenes, Total	ND		15.0	14.6		ug/L		97	80 - 120	0	30

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

# QC Association Summary

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

Job ID: 410-30627-1

## GC/MS VOA

### Analysis Batch: 99025

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-30627-1	HD-COD-SW-6-0/1-0	Total/NA	Water	8260D	
410-30627-2	HD-COD-SW-7-0/1-0	Total/NA	Water	8260D	
410-30627-3	HD-COD-SW-8-0/1-0	Total/NA	Water	8260D	
MB 410-99025/10	Method Blank	Total/NA	Water	8260D	
LCS 410-99025/5	Lab Control Sample	Total/NA	Water	8260D	
LCSD 410-99025/6	Lab Control Sample Dup	Total/NA	Water	8260D	

### Analysis Batch: 99333

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-30627-4	HD-COD-SW-9-0/1-0	Total/NA	Water	8260D	
410-30627-5	HD-COD-SW-13-0/1-0	Total/NA	Water	8260D	
410-30627-6	HD-COD-SW-15-0/1-0	Total/NA	Water	8260D	
410-30627-7	HD-COD-SW-16-0/1-0	Total/NA	Water	8260D	
410-30627-8	HD-COD-SW-17-0/1-0	Total/NA	Water	8260D	
410-30627-9	HD-COD-SW-26-0/1-0	Total/NA	Water	8260D	
410-30627-10	HD-COD-SW-27-0/1-0	Total/NA	Water	8260D	
410-30627-11	HD-COD-SW-28-0/1-0	Total/NA	Water	8260D	
410-30627-12	HD-COD-SW-29-0/1-0	Total/NA	Water	8260D	
410-30627-13	HD-QC1-0/1-1	Total/NA	Water	8260D	
410-30627-14	HD-QC1-0/1-2	Total/NA	Water	8260D	
MB 410-99333/8	Method Blank	Total/NA	Water	8260D	
LCS 410-99333/5	Lab Control Sample	Total/NA	Water	8260D	
410-30627-6 MS	HD-COD-SW-15-0/1-0	Total/NA	Water	8260D	
410-30627-6 MSD	HD-COD-SW-15-0/1-0	Total/NA	Water	8260D	

# Lab Chronicle

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

Job ID: 410-30627-1

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

**Lab Sample ID: 410-30627-1**

Date Collected: 02/25/21 11:05

Matrix: Water

Date Received: 02/26/21 17:02

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	99025	03/03/21 15:30	K4WN	ELLE

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

**Lab Sample ID: 410-30627-2**

Date Collected: 02/25/21 11:45

Matrix: Water

Date Received: 02/26/21 17:02

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	99025	03/03/21 15:52	K4WN	ELLE

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

**Lab Sample ID: 410-30627-3**

Date Collected: 02/25/21 09:40

Matrix: Water

Date Received: 02/26/21 17:02

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	99025	03/03/21 16:14	K4WN	ELLE

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

**Lab Sample ID: 410-30627-4**

Date Collected: 02/25/21 12:45

Matrix: Water

Date Received: 02/26/21 17:02

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	99333	03/03/21 23:02	J5QQ	ELLE

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

**Lab Sample ID: 410-30627-5**

Date Collected: 02/25/21 10:00

Matrix: Water

Date Received: 02/26/21 17:02

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	99333	03/03/21 23:23	J5QQ	ELLE

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

**Lab Sample ID: 410-30627-6**

Date Collected: 02/25/21 12:10

Matrix: Water

Date Received: 02/26/21 17:02

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	99333	03/03/21 23:44	J5QQ	ELLE

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

**Lab Sample ID: 410-30627-7**

Date Collected: 02/25/21 10:25

Matrix: Water

Date Received: 02/26/21 17:02

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	99333	03/04/21 01:31	J5QQ	ELLE



# Lab Chronicle

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

Job ID: 410-30627-1

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

**Lab Sample ID: 410-30627-8**

Date Collected: 02/25/21 10:40

Matrix: Water

Date Received: 02/26/21 17:02

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	99333	03/04/21 01:52	J5QQ	ELLE

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

**Lab Sample ID: 410-30627-9**

Date Collected: 02/25/21 11:25

Matrix: Water

Date Received: 02/26/21 17:02

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	99333	03/04/21 02:13	J5QQ	ELLE

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

**Lab Sample ID: 410-30627-10**

Date Collected: 02/25/21 12:05

Matrix: Water

Date Received: 02/26/21 17:02

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	99333	03/04/21 02:35	J5QQ	ELLE

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

**Lab Sample ID: 410-30627-11**

Date Collected: 02/25/21 12:55

Matrix: Water

Date Received: 02/26/21 17:02

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	99333	03/04/21 02:56	J5QQ	ELLE

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

**Lab Sample ID: 410-30627-12**

Date Collected: 02/25/21 09:25

Matrix: Water

Date Received: 02/26/21 17:02

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	99333	03/04/21 03:17	J5QQ	ELLE

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

**Lab Sample ID: 410-30627-13**

Date Collected: 02/25/21 12:00

Matrix: Water

Date Received: 02/26/21 17:02

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	99333	03/04/21 03:38	J5QQ	ELLE

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

**Lab Sample ID: 410-30627-14**

Date Collected: 02/25/21 00:00

Matrix: Water

Date Received: 02/26/21 17:02

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	99333	03/03/21 21:36	J5QQ	ELLE

## Laboratory References:

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

# Accreditation/Certification Summary

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

Job ID: 410-30627-1

---

## Laboratory: Eurofins Lancaster Laboratories Env, LLC

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

---

<b>Authority</b>	<b>Program</b>	<b>Identification Number</b>	<b>Expiration Date</b>
Pennsylvania	NELAP	36-00037	01-31-22

# Method Summary

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

Job ID: 410-30627-1

---

---

<b>Method</b>	<b>Method Description</b>	<b>Protocol</b>	<b>Laboratory</b>
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: 410-30627-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
410-30627-1	HD-COD-SW-6-0/1-0	Water	02/25/21 11:05	02/26/21 17:02	
410-30627-2	HD-COD-SW-7-0/1-0	Water	02/25/21 11:45	02/26/21 17:02	
410-30627-3	HD-COD-SW-8-0/1-0	Water	02/25/21 09:40	02/26/21 17:02	
410-30627-4	HD-COD-SW-9-0/1-0	Water	02/25/21 12:45	02/26/21 17:02	
410-30627-5	HD-COD-SW-13-0/1-0	Water	02/25/21 10:00	02/26/21 17:02	
410-30627-6	HD-COD-SW-15-0/1-0	Water	02/25/21 12:10	02/26/21 17:02	
410-30627-7	HD-COD-SW-16-0/1-0	Water	02/25/21 10:25	02/26/21 17:02	
410-30627-8	HD-COD-SW-17-0/1-0	Water	02/25/21 10:40	02/26/21 17:02	
410-30627-9	HD-COD-SW-26-0/1-0	Water	02/25/21 11:25	02/26/21 17:02	
410-30627-10	HD-COD-SW-27-0/1-0	Water	02/25/21 12:05	02/26/21 17:02	
410-30627-11	HD-COD-SW-28-0/1-0	Water	02/25/21 12:55	02/26/21 17:02	
410-30627-12	HD-COD-SW-29-0/1-0	Water	02/25/21 09:25	02/26/21 17:02	
410-30627-13	HD-QC1-0/1-1	Water	02/25/21 12:00	02/26/21 17:02	
410-30627-14	HD-QC1-0/1-2	Water	02/25/21 00:00	02/26/21 17:02	

## GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-30627-1

SDG No.: \_\_\_\_\_

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

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

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

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

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

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

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

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

## GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-30627-1

SDG No.: \_\_\_\_\_

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

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

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

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

## GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-30627-1

SDG No.: \_\_\_\_\_

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

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

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

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

## GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-30627-1

SDG No.: \_\_\_\_\_

Instrument ID: 16334 Analysis Batch Number: 99025Lab Sample ID: CCVIS 410-99025/3 Client Sample ID: \_\_\_\_\_Date Analyzed: 03/03/21 09:17 Lab File ID: GM03X03.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.57	Incomplete Integration	knouses	03/03/21 09:59

Lab Sample ID: 410-30627-1 Client Sample ID: HD-COD-SW-6-0/1-0Date Analyzed: 03/03/21 15:30 Lab File ID: GM03X20.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon disulfide	3.81	Incomplete Integration	campbellm e	03/03/21 17:58
Methylene Chloride	4.17	Incomplete Integration	campbellm e	03/03/21 17:58

Lab Sample ID: 410-30627-2 Client Sample ID: HD-COD-SW-7-0/1-0Date Analyzed: 03/03/21 15:52 Lab File ID: GM03X21.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon disulfide	3.80	Incomplete Integration	campbellm e	03/03/21 17:59
Methylene Chloride	4.17	Incomplete Integration	campbellm e	03/03/21 17:59
cis-1,2-Dichloroethene	6.07	Incomplete Integration	campbellm e	03/03/21 17:59
Chloroform	6.57	Incomplete Integration	campbellm e	03/03/21 17:59



GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-30627-1

SDG No.: \_\_\_\_\_

Instrument ID: 16334 Analysis Batch Number: 99025

Lab Sample ID: 410-30627-3 Client Sample ID: HD-COD-SW-8-0/1-0

Date Analyzed: 03/03/21 16:14 Lab File ID: GM03X22.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon disulfide	3.80	Incomplete Integration	campbellm e	03/03/21 17:59
Methylene Chloride	4.15	Incomplete Integration	campbellm e	03/03/21 17:59

## GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-30627-1

SDG No.: \_\_\_\_\_

Instrument ID: 19930 Analysis Batch Number: 69397Lab Sample ID: IC 410-69397/3 Client Sample ID: \_\_\_\_\_Date Analyzed: 11/23/20 12:45 Lab File ID: IN23I01.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

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

Lab Sample ID: ICIS 410-69397/4 Client Sample ID: \_\_\_\_\_Date Analyzed: 11/23/20 13:06 Lab File ID: IN23I02.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

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

## GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-30627-1

SDG No.: \_\_\_\_\_

Instrument ID: 19930 Analysis Batch Number: 69397Lab Sample ID: IC 410-69397/5 Client Sample ID: \_\_\_\_\_Date Analyzed: 11/23/20 13:28 Lab File ID: IN23I03.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

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

Lab Sample ID: IC 410-69397/6 Client Sample ID: \_\_\_\_\_Date Analyzed: 11/23/20 13:49 Lab File ID: IN23I04.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

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

## GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-30627-1

SDG No.: \_\_\_\_\_

Instrument ID: 19930 Analysis Batch Number: 69397Lab Sample ID: IC 410-69397/7 Client Sample ID: \_\_\_\_\_Date Analyzed: 11/23/20 14:10 Lab File ID: IN23I05.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

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

Lab Sample ID: IC 410-69397/8 Client Sample ID: \_\_\_\_\_Date Analyzed: 11/23/20 14:31 Lab File ID: IN23I06.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

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

## GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-30627-1

SDG No.: \_\_\_\_\_

Instrument ID: 19930 Analysis Batch Number: 69397Lab Sample ID: IC 410-69397/9 Client Sample ID: \_\_\_\_\_Date Analyzed: 11/23/20 14:53 Lab File ID: IN23I07.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

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

Lab Sample ID: ICV 410-69397/10 Client Sample ID: \_\_\_\_\_Date Analyzed: 11/23/20 15:14 Lab File ID: IN23V01.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

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

## GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-30627-1

SDG No.: \_\_\_\_\_

Instrument ID: 19930 Analysis Batch Number: 99333Lab Sample ID: CCVIS 410-99333/3 Client Sample ID: \_\_\_\_\_Date Analyzed: 03/03/21 19:28 Lab File ID: IM03C31.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	1.98	Incomplete Integration	campbellm e	03/03/21 20:11
1,4-Dioxane	8.63	Incomplete Integration	campbellm e	03/03/21 20:12

Lab Sample ID: 410-30627-14 Client Sample ID: HD-QC1-0/1-2Date Analyzed: 03/03/21 21:36 Lab File ID: IM03S31.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dichloroethane	7.43	Missed Peak	knouses	03/04/21 12:19

Lab Sample ID: 410-30627-4 Client Sample ID: HD-COD-SW-9-0/1-0Date Analyzed: 03/03/21 23:02 Lab File ID: IM03S35.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloromethane	2.19	Incomplete Integration	knouses	03/04/21 12:33
Benzene	7.33	Incomplete Integration	knouses	03/04/21 12:34
Trichloroethene	8.21	Incomplete Integration	knouses	03/04/21 12:36
Bromodichloromethane	8.90	Incomplete Integration	knouses	03/04/21 12:36
Styrene	11.76	Incomplete Integration	knouses	03/04/21 12:37

Lab Sample ID: 410-30627-5 Client Sample ID: HD-COD-SW-13-0/1-0Date Analyzed: 03/03/21 23:23 Lab File ID: IM03S36.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloromethane	2.17	Incomplete Integration	knouses	03/04/21 12:37
Chloroform	6.65	Missed Peak	knouses	03/04/21 12:38

## GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-30627-1

SDG No.: \_\_\_\_\_

Instrument ID: 19930 Analysis Batch Number: 99333Lab Sample ID: 410-30627-6 Client Sample ID: HD-COD-SW-15-0/1-0Date Analyzed: 03/03/21 23:44 Lab File ID: IM03S37.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methyl tert-butyl ether	4.66	Incomplete Integration	knouses	03/04/21 12:39
Benzene	7.34	Missed Peak	knouses	03/04/21 12:40

Lab Sample ID: 410-30627-7 Client Sample ID: HD-COD-SW-16-0/1-0Date Analyzed: 03/04/21 01:31 Lab File ID: IM03S42.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloromethane	2.20	Missed Peak	knouses	03/04/21 12:44
Carbon disulfide	3.89	Incomplete Integration	knouses	03/04/21 12:44
Chloroform	6.66	Missed Peak	knouses	03/04/21 12:45
1,2-Dichloroethane	7.40	Missed Peak	knouses	03/04/21 12:45

Lab Sample ID: 410-30627-8 Client Sample ID: HD-COD-SW-17-0/1-0Date Analyzed: 03/04/21 01:52 Lab File ID: IM03S43.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
cis-1,2-Dichloroethene	6.17	Missed Peak	knouses	03/04/21 12:46
1,2-Dichloroethane	7.41	Missed Peak	knouses	03/04/21 12:46
Trichloroethene	8.22	Incomplete Integration	knouses	03/04/21 12:46

Lab Sample ID: 410-30627-9 Client Sample ID: HD-COD-SW-26-0/1-0Date Analyzed: 03/04/21 02:13 Lab File ID: IM03S44.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dichloroethane	7.40	Missed Peak	knouses	03/04/21 12:47

## GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-30627-1

SDG No.: \_\_\_\_\_

Instrument ID: 19930 Analysis Batch Number: 99333Lab Sample ID: 410-30627-10 Client Sample ID: HD-COD-SW-27-0/1-0Date Analyzed: 03/04/21 02:35 Lab File ID: IM03S45.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloroform	6.64	Missed Peak	knouses	03/04/21 12:48
Benzene	7.33	Incomplete Integration	knouses	03/04/21 12:48
1,2-Dichloroethane	7.42	Missed Peak	knouses	03/04/21 12:49

Lab Sample ID: 410-30627-11 Client Sample ID: HD-COD-SW-28-0/1-0Date Analyzed: 03/04/21 02:56 Lab File ID: IM03S46.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
cis-1,2-Dichloroethene	6.15	Missed Peak	knouses	03/04/21 12:49
Benzene	7.34	Incomplete Integration	knouses	03/04/21 12:50
1,2-Dichloroethane	7.41	Missed Peak	knouses	03/04/21 12:50
Trichloroethene	8.23	Incomplete Integration	knouses	03/04/21 12:50
Bromodichloromethane	8.89	Incomplete Integration	knouses	03/04/21 12:50
Styrene	11.77	Incomplete Integration	knouses	03/04/21 12:51

Lab Sample ID: 410-30627-12 Client Sample ID: HD-COD-SW-29-0/1-0Date Analyzed: 03/04/21 03:17 Lab File ID: IM03S47.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
cis-1,2-Dichloroethene	6.17	Missed Peak	knouses	03/04/21 12:52
Chloroform	6.64	Missed Peak	knouses	03/04/21 12:52
1,2-Dichloroethane	7.41	Missed Peak	knouses	03/04/21 12:52
Tetrachloroethene	10.35	Incomplete Integration	knouses	03/04/21 12:52



GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-30627-1

SDG No.: \_\_\_\_\_

Instrument ID: 19930 Analysis Batch Number: 99333

Lab Sample ID: 410-30627-13 Client Sample ID: HD-QC1-0/1-1

Date Analyzed: 03/04/21 03:38 Lab File ID: IM03S48.D GC Column: R-624SilMS 30 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloromethane	2.19	Missed Peak	knouses	03/04/21 12:53
Chloroform	6.64	Missed Peak	knouses	03/04/21 12:53
Benzene	7.33	Incomplete Integration	knouses	03/04/21 12:54
1,2-Dichloroethane	7.41	Missed Peak	knouses	03/04/21 12:54
Trichloroethene	8.23	Incomplete Integration	knouses	03/04/21 12:54
o-Xylene	11.74	Missed Peak	knouses	03/04/21 12:55

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-30627-1

SDG No.: \_\_\_\_\_

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration					
					Reagent ID	Volume Added							
<b>MSV_29_826ISS_00013</b>	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_8260_SS_00263	03/31/22		Restek, Lot A0146938		(Purchased Reagent)		Toluene-d8 (Surr)	250 ug/mL
												1,4-Dichlorobenzene-d4	250 ug/mL
												Chlorobenzene-d5 (IS)	250 ug/mL
												Fluorobenzene (IS)	250 ug/mL
.MSV_Cus826_IS_00151	05/31/21		Restek, Lot A0138205		(Purchased Reagent)		t-Butyl alcohol-d10 (IS)	1250 ug/mL					
							1,2-Dichloroethane-d4 (Surr)	2500 ug/mL					
							4-Bromofluorobenzene (Surr)	2500 ug/mL					
							Dibromofluoromethane (Surr)	2500 ug/mL					
.MSV_Cus826_IS_00151	05/31/21		Restek, Lot A0138205		(Purchased Reagent)		Toluene-d8 (Surr)	2500 ug/mL					
							1,4-Dichlorobenzene-d4	2500 ug/mL					
							Chlorobenzene-d5 (IS)	2500 ug/mL					
							Fluorobenzene (IS)	2500 ug/mL					
.MSV_Cus826_IS_00151	05/31/21		Restek, Lot A0138205		(Purchased Reagent)		t-Butyl alcohol-d10 (IS)	12500 ug/mL					
							1,4-Dichlorobenzene-d4	2500 ug/mL					
							Chlorobenzene-d5 (IS)	2500 ug/mL					
							Fluorobenzene (IS)	2500 ug/mL					
<b>MSV_29_826ISS_00015</b>	05/31/21	02/09/21	Methanol, Lot DZ644	10 mL	MSV_Cus826_IS_00180	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_00180	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					
<b>MSV_29_826ISS_00015</b>	05/31/21	02/09/21	Methanol, Lot DZ644	10 mL	MSV_8260_SS_00294	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_00294	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					
<b>MSV_31_826ISS_00003</b>	01/27/21	07/27/20	Methanol, Lot DX212	50 mL	MSV_8260_SS_00160	1 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL					
							4-Bromofluorobenzene (Surr)	50 ug/mL					
							Dibromofluoromethane (Surr)	50 ug/mL					
					.MSV_8260_SS_00160	03/31/22		Restek, Lot A0146938		(Purchased Reagent)		Toluene-d8 (Surr)	50 ug/mL
												1,4-Dichlorobenzene-d4	50 ug/mL
												Chlorobenzene-d5 (IS)	50 ug/mL
												Fluorobenzene (IS)	50 ug/mL
.MSV_Cus826_IS_00099	05/31/21		Restek, Lot A0138205		(Purchased Reagent)		t-Butyl alcohol-d10 (IS)	250 ug/mL					
							1,2-Dichloroethane-d4 (Surr)	2500 ug/mL					
							4-Bromofluorobenzene (Surr)	2500 ug/mL					
.MSV_Cus826_IS_00099	05/31/21		Restek, Lot A0138205		(Purchased Reagent)		Dibromofluoromethane (Surr)	2500 ug/mL					
							Toluene-d8 (Surr)	2500 ug/mL					
							1,4-Dichlorobenzene-d4	2500 ug/mL					
							Chlorobenzene-d5 (IS)	2500 ug/mL					
.MSV_Cus826_IS_00099	05/31/21		Restek, Lot A0138205		(Purchased Reagent)		Fluorobenzene (IS)	2500 ug/mL					
							Fluorobenzene (IS)	2500 ug/mL					

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-30627-1

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
<b>MSV_31_826ISS_00004</b>	05/31/21	01/26/21	Methanol, Lot DZ644	50 mL	MSV_Cus826_IS_00173	1 mL	1,4-Dichlorobenzene-d4	50 ug/mL
							Chlorobenzene-d5 (IS)	50 ug/mL
							Fluorobenzene (IS)	50 ug/mL
							t-Butyl alcohol-d10 (IS)	250 ug/mL
.MSV_Cus826_IS_00173	05/31/21		Restek, Lot A0138205		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2500 ug/mL
							Chlorobenzene-d5 (IS)	2500 ug/mL
							Fluorobenzene (IS)	2500 ug/mL
							t-Butyl alcohol-d10 (IS)	12500 ug/mL
<b>MSV_31_826ISS_00004</b>	05/31/21	01/26/21	Methanol, Lot DZ644	50 mL	MSV_8260_SS_00284	1 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							4-Bromofluorobenzene (Surr)	50 ug/mL
							Dibromofluoromethane (Surr)	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL
.MSV_8260_SS_00284	03/31/22		Restek, Lot A0146938		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
<b>MSV_Q_QVOA1_00056</b>	12/23/20	11/23/20	Methanol, Lot DZ644	25 mL	MSV_Q#1B_00070	1 mL	1,1,1,2-Tetrachloroethane	40 mg/L
							1,1,1-Trichloroethane	40 mg/L
							1,1,2,2-Tetrachloroethane	40 mg/L
							1,1,2-Trichloroethane	40 mg/L
							1,1-Dichloroethane	40 mg/L
							1,1-Dichloroethene	40 mg/L
							1,2-Dibromoethane (EDB)	40 mg/L
							1,2-Dichloroethane	40 mg/L
							1,2-Dichloropropane	40 mg/L
							Benzene	40 mg/L
							Bromodichloromethane	40 mg/L
							Bromoform	40 mg/L
							Carbon tetrachloride	40 mg/L
							Chlorobenzene	40 mg/L
							Chloroform	40 mg/L
							cis-1,2-Dichloroethene	40 mg/L
							cis-1,3-Dichloropropene	40 mg/L
							Dibromochloromethane	40 mg/L
							Ethylbenzene	40 mg/L
							Methylene Chloride	40 mg/L
							Styrene	40 mg/L
							Tetrachloroethene	40 mg/L
							Toluene	40 mg/L
							trans-1,2-Dichloroethene	40 mg/L
							trans-1,3-Dichloropropene	40 mg/L
							Trichloroethene	40 mg/L
					MSV_Q#3B_00062	1 mL	2-Butanone (MEK)	300 mg/L
							2-Hexanone	200 mg/L
							4-Methyl-2-pentanone (MIBK)	200 mg/L
							Acetone	300 mg/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-30627-1

SDG No.:

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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-30627-1

SDG No.: \_\_\_\_\_

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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-30627-1

SDG No.: \_\_\_\_\_

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration					
					Reagent ID	Volume Added							
.MSV_Q#4C_00066	03/31/21		Restek, Lot A0158704		(Purchased Reagent)		Acetone	7500 ug/mL					
							Carbon disulfide	1000 ug/mL					
							Methyl tert-butyl ether	1000 ug/mL					
MSV_Q_QVOA1_00070	03/31/21	03/01/21	Methanol, Lot DZ644	25 mL	MSV_Q#1B_00088	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_00078						1 mL	2-Butanone (MEK)	300 mg/L
												2-Hexanone	200 mg/L
												4-Methyl-2-pentanone (MIBK)	200 mg/L
					MSV_Q#4C_00085						1 mL	Acetone	300 mg/L
												Carbon disulfide	40 mg/L
					.MSV_Q#1B_00088	04/30/22		Restek, Lot A0165522		(Purchased Reagent)		Methyl tert-butyl ether	40 mg/L
												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												

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-30627-1

SDG No.: \_\_\_\_\_

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00078	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_00085	03/31/21		Restek, Lot A0158704		(Purchased Reagent)		Carbon disulfide	1000 ug/mL
							Methyl tert-butyl ether	1000 ug/mL
<b>MSV_Q_QVOA6_00053</b>	12/19/20	11/19/20	Methanol, Lot DZ644	25 mL	MSV_QCS#6Std_00064	1 mL	Bromochloromethane	40 ug/mL
.MSV_QCS#6Std_00064	12/19/20		Restek, Lot A0158906		(Purchased Reagent)		Bromochloromethane	1000 ug/mL
<b>MSV_Q_QVOA6_00054</b>	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
<b>MSV_Q_QVOA6_00068</b>	03/31/21	03/01/21	Methanol, Lot DZ644	25 mL	MSV_QCS#6Std_00084	1 mL	Bromochloromethane	40 ug/mL
.MSV_QCS#6Std_00084	09/30/21		Restek, Lot A0158906		(Purchased Reagent)		Bromochloromethane	1000 ug/mL
<b>MSV_QGAS_826_00092</b>	11/30/20	11/23/20	Methanol, Lot DZ644	1 mL	MSV_502QGas_00119	20 uL	Bromomethane	40 ug/mL
							Chloroethane	40 ug/mL
							Chloromethane	40 ug/mL
							Vinyl chloride	40 ug/mL
.MSV_502QGas_00119	11/30/20		Restek, Lot A0155823		(Purchased Reagent)		Bromomethane	2000 ug/mL
							Chloroethane	2000 ug/mL
							Chloromethane	2000 ug/mL
							Vinyl chloride	2000 ug/mL
<b>MSV_QGAS_826_00093</b>	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
<b>MSV_QGAS_826_00112</b>	03/08/21	03/01/21	Methanol, Lot DZ644	1 mL	MSV_502QGas_00150	20 uL	Bromomethane	40 ug/mL
							Chloroethane	40 ug/mL
							Chloromethane	40 ug/mL
							Vinyl chloride	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-30627-1

SDG No.: \_\_\_\_\_

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.MSV_502QGas_00150	03/08/21		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_00030	12/23/20	11/23/20	Methanol, Lot DZ644	1 mL	MSV_V#1B_00126	10 uL	1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dibromoethane (EDB)	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3,5-Trichlorobenzene	50 ug/mL
							1,3,5-Trimethylbenzene	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							1-Chlorohexane	50 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							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							



REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-30627-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							N-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							Trichloroethene	50 ug/mL
					MSV_V#2B_00159	10 uL	1,4-Dioxane	2500 ug/mL
							2-Methyl-2-propanol	1000 ug/mL
							Isobutyl alcohol	2500 ug/mL
							Methacrylonitrile	500 ug/mL
							n-Butanol	5000 ug/mL
							Propionitrile	1000 ug/mL
							trans-1,4-Dichloro-2-butene	500 ug/mL
					MSV_V#4C_00106	10 uL	1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,2-Dichloro-1,1,2-trifluoroethane	50 ug/mL
							2-Chloro-1,3-butadiene	50 ug/mL
							Benzyl chloride	50 ug/mL
							Butadiene	50 ug/mL
							Carbon disulfide	50 ug/mL
							Cyclohexane	50 ug/mL
							Ethyl methacrylate	50 ug/mL
							Hexane	50 ug/mL
							Iodomethane	50 ug/mL
							Isopropyl ether	50 ug/mL
							Methyl methacrylate	50 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							n-Heptane	50 ug/mL
							Tert-amyl methyl ether	50 ug/mL
							Tert-butyl ethyl ether	50 ug/mL
					MSV_V_VOA2_00059	150 uL	1,4-Dioxane	2500 ug/mL
							2-Methyl-2-propanol	1000 ug/mL
							Isobutyl alcohol	2500 ug/mL
							Methacrylonitrile	500 ug/mL
							n-Butanol	5000 ug/mL
							Propionitrile	1000 ug/mL
							trans-1,4-Dichloro-2-butene	500 ug/mL
					MSV_V_VOA3_00056	100 uL	2-Butanone (MEK)	500 ug/mL
							2-Hexanone	500 ug/mL
							2-Nitropropane	500 ug/mL
							4-Methyl-2-pentanone (MIBK)	500 ug/mL
							Acetone	500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-30627-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Acrylonitrile	250 ug/mL
							Tetrahydrofuran	500 ug/mL
							Acrolein	2500.07 ug/mL
.MSV_V#1B_00126	12/23/20		Restek, Lot A0158586		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	5000 ug/mL
							1,1,1-Trichloroethane	5000 ug/mL
							1,1,2,2-Tetrachloroethane	5000 ug/mL
							1,1,2-Trichloroethane	5000 ug/mL
							1,1-Dichloroethane	5000 ug/mL
							1,1-Dichloroethene	5000 ug/mL
							1,1-Dichloropropene	5000 ug/mL
							1,2,3-Trichlorobenzene	5000 ug/mL
							1,2,3-Trichloropropane	5000 ug/mL
							1,2,4-Trichlorobenzene	5000 ug/mL
							1,2,4-Trimethylbenzene	5000 ug/mL
							1,2-Dibromo-3-Chloropropane	5000 ug/mL
							1,2-Dibromoethane (EDB)	5000 ug/mL
							1,2-Dichlorobenzene	5000 ug/mL
							1,2-Dichloroethane	5000 ug/mL
							1,2-Dichloropropane	5000 ug/mL
							1,3,5-Trichlorobenzene	5000 ug/mL
							1,3,5-Trimethylbenzene	5000 ug/mL
							1,3-Dichlorobenzene	5000 ug/mL
							1,3-Dichloropropane	5000 ug/mL
							1,4-Dichlorobenzene	5000 ug/mL
							1-Chlorohexane	5000 ug/mL
							2,2-Dichloropropane	5000 ug/mL
							2-Chlorotoluene	5000 ug/mL
							4-Chlorotoluene	5000 ug/mL
							4-Isopropyltoluene	5000 ug/mL
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-30627-1

SDG No.: \_\_\_\_\_

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							o-Xylene	5000 ug/mL
							sec-Butylbenzene	5000 ug/mL
							Styrene	5000 ug/mL
							tert-Butylbenzene	5000 ug/mL
							Tetrachloroethene	5000 ug/mL
							Toluene	5000 ug/mL
							trans-1,2-Dichloroethene	5000 ug/mL
							trans-1,3-Dichloropropene	5000 ug/mL
							Trichloroethene	5000 ug/mL
.MSV_V#2B_00159	12/23/20		Restek, Lot A0159694		(Purchased Reagent)		1,4-Dioxane	62500 ug/mL
							2-Methyl-2-propanol	25000 ug/mL
							Isobutyl alcohol	62500 ug/mL
							Methacrylonitrile	12500 ug/mL
							n-Butanol	125000 ug/mL
							Propionitrile	25000 ug/mL
							trans-1,4-Dichloro-2-butene	12500 ug/mL
.MSV_V#4C_00106	12/23/20		Restek, Lot A0158660		(Purchased Reagent)		1,1,2-Trichloro-1,2,2-trifluoroethane	5000 ug/mL
							1,2-Dichloro-1,1,2-trifluoroethane	5000 ug/mL
							2-Chloro-1,3-butadiene	5000 ug/mL
							Benzyl chloride	5000 ug/mL
							Butadiene	5000 ug/mL
							Carbon disulfide	5000 ug/mL
							Cyclohexane	5000 ug/mL
							Ethyl methacrylate	5000 ug/mL
							Hexane	5000 ug/mL
							Iodomethane	5000 ug/mL
							Isopropyl ether	5000 ug/mL
							Methyl methacrylate	5000 ug/mL
							Methyl tert-butyl ether	5000 ug/mL
							n-Heptane	5000 ug/mL
							Tert-amyl methyl ether	5000 ug/mL
							Tert-butyl ethyl ether	5000 ug/mL
.MSV_V_VOA2_00059	12/23/20	11/23/20	Methanol, Lot D2644	5 mL	MSV_V#2B_00159	1 mL	1,4-Dioxane	12500 ug/mL
							2-Methyl-2-propanol	5000 ug/mL
							Isobutyl alcohol	12500 ug/mL
							Methacrylonitrile	2500 ug/mL
							n-Butanol	25000 ug/mL
							Propionitrile	5000 ug/mL
							trans-1,4-Dichloro-2-butene	2500 ug/mL
..MSV_V#2B_00159	12/23/20		Restek, Lot A0159694		(Purchased Reagent)		1,4-Dioxane	62500 ug/mL
							2-Methyl-2-propanol	25000 ug/mL
							Isobutyl alcohol	62500 ug/mL
							Methacrylonitrile	12500 ug/mL
							n-Butanol	125000 ug/mL
							Propionitrile	25000 ug/mL
							trans-1,4-Dichloro-2-butene	12500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-30627-1

SDG No.: \_\_\_\_\_

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration		
					Reagent ID	Volume Added				
.MSV_V_VOA3_00056	12/23/20	11/23/20	Methanol, Lot DZ644	5 mL	MSV_V#3B_00069	1 mL	2-Butanone (MEK)	5000 ug/mL		
							2-Hexanone	5000 ug/mL		
							2-Nitropropane	5000 ug/mL		
							4-Methyl-2-pentanone (MIBK)	5000 ug/mL		
							Acetone	5000 ug/mL		
							Acrylonitrile	2500 ug/mL		
							Tetrahydrofuran	5000 ug/mL		
..MSV_V#3B_00069	12/23/20		Restek, Lot A0158677		(Purchased Reagent)		MSV_VACR_00013	1 mL	Acrolein	25000.7 ug/mL
							2-Butanone (MEK)	25000 ug/mL		
							2-Hexanone	25000 ug/mL		
							2-Nitropropane	25000 ug/mL		
							4-Methyl-2-pentanone (MIBK)	25000 ug/mL		
							Acetone	25000 ug/mL		
							Acrylonitrile	12500 ug/mL		
Tetrahydrofuran	25000 ug/mL									
..MSV_VACR_00013	12/26/20	10/27/20	Methanol, Lot DX212	10 mL	MSV_VACR_STK_00015	9.067 mL	Acrolein	125004 ug/mL		
...MSV_VACR_STK_00015	12/26/20	10/27/20	Methanol, Lot DX212	10 mL	MSV_ACROLEIN_00008	1.462 g	Acrolein	137867 ug/mL		
...MSV_ACROLEIN_00008	12/31/20		Chem Service, Lot 10410200		(Purchased Reagent)		Acrolein	0.943 g/g		
MSV_RV1_826_00031	12/26/20	11/30/20	Methanol, Lot DZ644	1 mL	MSV_V#1B_00127	10 uL	1,1,1,2-Tetrachloroethane	50 ug/mL		
							1,1,1-Trichloroethane	50 ug/mL		
							1,1,2,2-Tetrachloroethane	50 ug/mL		
							1,1,2-Trichloroethane	50 ug/mL		
							1,1-Dichloroethane	50 ug/mL		
							1,1-Dichloroethene	50 ug/mL		
							1,1-Dichloropropene	50 ug/mL		
							1,2,3-Trichlorobenzene	50 ug/mL		
							1,2,3-Trichloropropene	50 ug/mL		
							1,2,4-Trichlorobenzene	50 ug/mL		
							1,2,4-Trimethylbenzene	50 ug/mL		
							1,2-Dibromo-3-Chloropropene	50 ug/mL		
							1,2-Dibromoethane (EDB)	50 ug/mL		
							1,2-Dichlorobenzene	50 ug/mL		
							1,2-Dichloroethane	50 ug/mL		
							1,2-Dichloropropene	50 ug/mL		
							1,3,5-Trichlorobenzene	50 ug/mL		
							1,3,5-Trimethylbenzene	50 ug/mL		
							1,3-Dichlorobenzene	50 ug/mL		
							1,3-Dichloropropene	50 ug/mL		
							1,4-Dichlorobenzene	50 ug/mL		
							1-Chlorohexane	50 ug/mL		
							2,2-Dichloropropene	50 ug/mL		
							2-Chlorotoluene	50 ug/mL		
							4-Chlorotoluene	50 ug/mL		
							4-Isopropyltoluene	50 ug/mL		
							Benzene	50 ug/mL		
Bromobenzene	50 ug/mL									
Bromodichloromethane	50 ug/mL									

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-30627-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Bromoform	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Dibromochloromethane	50 ug/mL
							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
					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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-30627-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration	
					Reagent ID	Volume Added			
					MSV_V_VOA2_00060	150 uL	Tert-amyl methyl ether	50 ug/mL	
							Tert-butyl ethyl ether	50 ug/mL	
							1,4-Dioxane	2500 ug/mL	
							2-Methyl-2-propanol	1000 ug/mL	
							Isobutyl alcohol	2500 ug/mL	
							Methacrylonitrile	500 ug/mL	
							n-Butanol	5000 ug/mL	
					MSV_V_VOA3_00057	100 uL	Propionitrile	1000 ug/mL	
							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)	1,1,1,2-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-Trichloropropene	5000 ug/mL	
							1,2,4-Trichlorobenzene	5000 ug/mL	
							1,2,4-Trimethylbenzene	5000 ug/mL	
							1,2-Dibromo-3-Chloropropene	5000 ug/mL	
							1,2-Dibromoethane (EDB)	5000 ug/mL	
							1,2-Dichlorobenzene	5000 ug/mL	
							1,2-Dichloroethane	5000 ug/mL	
							1,2-Dichloropropene	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-Dichloropropene	5000 ug/mL	
							1,4-Dichlorobenzene	5000 ug/mL	
							1-Chlorohexane	5000 ug/mL	
							2,2-Dichloropropene	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	

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-30627-1

SDG No.:

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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-30627-1

SDG No.: \_\_\_\_\_

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration	
					Reagent ID	Volume Added			
.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	
..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	
.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	
..MSV_V#3B_00070	12/30/20		Restek, Lot A0158677				(Purchased Reagent)	2-Butanone (MEK)	25000 ug/mL
							2-Hexanone	25000 ug/mL	
							2-Nitropropane	25000 ug/mL	
							4-Methyl-2-pentanone (MIBK)	25000 ug/mL	
							Acetone	25000 ug/mL	
							Acrylonitrile	12500 ug/mL	
..MSV_VACR_00013	12/26/20	10/27/20	Methanol, Lot DX212	10 mL	MSV_VACR_STK_00015	9.067 mL	Acrolein	125004 ug/mL	
...MSV_VACR_STK_00015	12/26/20	10/27/20	Methanol, Lot DX212	10 mL	MSV_ACROLEIN_00008	1.462 g	Acrolein	137867 ug/mL	
...MSV_ACROLEIN_00008	12/31/20		Chem Service, Lot 10410200				(Purchased Reagent)	Acrolein	0.943 g/g
MSV_RV1_826_00040	03/24/21	02/22/21	Methanol, Lot DZ644	1 mL	MSV_V#1B_00144	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								



REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-30627-1

SDG No.: \_\_\_\_\_

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00124	10 uL	Carbon disulfide	50 ug/mL
					MSV_V_VOA3_00070	100 uL	Methyl tert-butyl ether	50 ug/mL
							2-Butanone (MEK)	500 ug/mL
							2-Hexanone	500 ug/mL
							4-Methyl-2-pentanone (MIBK)	500 ug/mL
							Acetone	500 ug/mL
.MSV_V#1B_00144	03/24/21		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
							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_00124	03/24/21		Restek, Lot A0158660		(Purchased Reagent)		Carbon disulfide	5000 ug/mL
							Methyl tert-butyl ether	5000 ug/mL
.MSV_V_VOA3_00070	03/24/21	02/22/21	Methanol, Lot DZ644	5 mL	MSV_V#3B_00083	1 mL	2-Butanone (MEK)	5000 ug/mL
							2-Hexanone	5000 ug/mL
							4-Methyl-2-pentanone (MIBK)	5000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-30627-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..MSV_V#3B_00083	03/31/23		Restek, Lot A0158677		(Purchased Reagent)		Acetone	5000 ug/mL
							2-Butanone (MEK)	25000 ug/mL
							2-Hexanone	25000 ug/mL
							4-Methyl-2-pentanone (MIBK)	25000 ug/mL
			Acetone	25000 ug/mL				
MSV_RV4_826_00034	12/19/20	11/23/20	Methanol, Lot DZ644	1 mL	MSV_V_EE_00004	50 uL	Ethyl ether	50.0108 ug/mL
					MSV_V_VOA6_00062	50 uL	1,2,3-Trimethylbenzene	50 ug/mL
							3-Chloro-1-propene	50 ug/mL
							Bromochloromethane	50 ug/mL
							Methyl acetate	50 ug/mL
							Methylcyclohexane	50 ug/mL
							Pentachloroethane	50 ug/mL
.MSV_V_EE_00004	04/21/21	10/21/20	Methanol, Lot DX212	100 mL	MSV_EE_MISCSK_00005	1.434 mL	Ethyl ether	1000.22 ug/mL
..MSV_EE_MISCSK_00005	04/21/21	10/21/20	Methanol, Lot DX212	10 mL	MSV_EE_Neat_00003	0.6975 g	Ethyl ether	69750 ug/g
...MSV_EE_Neat_00003	11/30/21		Chem Service, Lot 7967000		(Purchased Reagent)		Ethyl ether	1 g/g
.MSV_V_VOA6_00062	12/19/20	11/19/20	Methanol, Lot DZ644	5 mL	MSV_V#6_00045	1 mL	1,2,3-Trimethylbenzene	1000 ug/mL
							3-Chloro-1-propene	1000 ug/mL
							Bromochloromethane	1000 ug/mL
							Methyl acetate	1000 ug/mL
							Methylcyclohexane	1000 ug/mL
							Pentachloroethane	1000 ug/mL
..MSV_V#6_00045	12/19/20		Restek, Lot A0158625		(Purchased Reagent)		1,2,3-Trimethylbenzene	5000 ug/mL
							3-Chloro-1-propene	5000 ug/mL
							Bromochloromethane	5000 ug/mL
							Methyl acetate	5000 ug/mL
							Methylcyclohexane	5000 ug/mL
							Pentachloroethane	5000 ug/mL
MSV_RV4_826_00035	12/19/20	11/30/20	Methanol, Lot DZ644	1 mL	MSV_V_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
.MSV_V_EE_00004	04/21/21	10/21/20	Methanol, Lot DX212	100 mL	MSV_EE_MISCSK_00005	1.434 mL	Ethyl ether	1000.22 ug/mL
..MSV_EE_MISCSK_00005	04/21/21	10/21/20	Methanol, Lot DX212	10 mL	MSV_EE_Neat_00003	0.6975 g	Ethyl ether	69750 ug/mL
...MSV_EE_Neat_00003	11/30/21		Chem Service, Lot 7967000		(Purchased Reagent)		Ethyl ether	1 g/g
.MSV_V_VOA6_00063	12/25/20	11/25/20	Methanol, Lot DZ644	5 mL	MSV_V#6_00046	1 mL	1,2,3-Trimethylbenzene	1000 ug/mL
							3-Chloro-1-propene	1000 ug/mL
							Bromochloromethane	1000 ug/mL
							Methyl acetate	1000 ug/mL
							Methylcyclohexane	1000 ug/mL
							Pentachloroethane	1000 ug/mL
..MSV_V#6_00046	12/25/20		Restek, Lot A0158625		(Purchased Reagent)		1,2,3-Trimethylbenzene	5000 ug/mL
							3-Chloro-1-propene	5000 ug/mL
							Bromochloromethane	5000 ug/mL
							Methyl acetate	5000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-30627-1

SDG No.: \_\_\_\_\_

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methylcyclohexane	5000 ug/mL
							Pentachloroethane	5000 ug/mL
<b>MSV_RV4_826_00045</b>	03/24/21	02/22/21	Methanol, Lot DZ644	1 mL	MSV_V_VOA6_00076	50 uL	Bromochloromethane	50 ug/mL
.MSV_V_VOA6_00076	03/24/21	02/22/21	Methanol, Lot DZ644	5 mL	MSV_V#6_00060	1 mL	Bromochloromethane	1000 ug/mL
..MSV_V#6_00060	03/24/21		Restek, Lot A0158625		(Purchased Reagent)		Bromochloromethane	5000 ug/mL
<b>MSV_RV4GAS826_00096</b>	11/30/20	11/23/20	Methanol, Lot DZ644	1 mL	MSV_DCFM_00030	25 uL	Dichlorofluoromethane	50 ug/mL
					MSV_V_Gas_00175	25 uL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.MSV_DCFM_00030	12/19/20		AccuStandard, Lot 220101035		(Purchased Reagent)		Dichlorofluoromethane	2000 ug/mL
.MSV_V_Gas_00175	11/30/20		Restek, Lot A0159812		(Purchased Reagent)		Bromomethane	2000 ug/mL
							Chloroethane	2000 ug/mL
							Chloromethane	2000 ug/mL
							Dichlorodifluoromethane	2000 ug/mL
							Trichlorofluoromethane	2000 ug/mL
							Vinyl chloride	2000 ug/mL
<b>MSV_RV4GAS826_00097</b>	12/07/20	11/30/20	Methanol, Lot DZ644	1 mL	MSV_DCFM_00030	25 uL	Dichlorofluoromethane	50 ug/mL
					MSV_V_Gas_00176	25 uL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.MSV_DCFM_00030	12/19/20		AccuStandard, Lot 220101035		(Purchased Reagent)		Dichlorofluoromethane	2000 ug/mL
.MSV_V_Gas_00176	12/07/20		Restek, Lot A0159812		(Purchased Reagent)		Bromomethane	2000 ug/mL
							Chloroethane	2000 ug/mL
							Chloromethane	2000 ug/mL
							Dichlorodifluoromethane	2000 ug/mL
							Trichlorofluoromethane	2000 ug/mL
							Vinyl chloride	2000 ug/mL
<b>MSV_RV4GAS826_00115</b>	03/08/21	03/01/21	Methanol, Lot DZ644	1 mL	MSV_V_Gas_00220	25 uL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.MSV_V_Gas_00220	03/08/21		Restek, Lot A0159812		(Purchased Reagent)		Bromomethane	2000 ug/mL
							Chloroethane	2000 ug/mL
							Chloromethane	2000 ug/mL
							Vinyl chloride	2000 ug/mL
<b>MSV_V_BFB_00003</b>							1,2-Dichloroethene, Total	
							1,3-Dichlorobutene-2 (total)	
							1,3-Dichloropropene, Total	
							divinyl benzene	

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-30627-1

SDG No.: \_\_\_\_\_

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Tentatively Identified Compound	
							Total Diethylbenzene	
							Xylenes, Total	
.MSV VBFB STK 00004	01/22/21	07/22/20	Methanol, Lot DX212	10 mL	MSV VBFB STK 00004	0.117 mL	BFB	50.0245 ug/mL
..MSV 4BFB NEAT 00002	01/31/21		Chem Service, Lot 8601300		MSV 4BFB NEAT 00002	1.0689 g	BFB	106890 ug/mL
						(Purchased Reagent)	BFB	1 g/g
<b>MSV_V_BFB_00004</b>							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 00005	07/14/21	01/14/21	Methanol, Lot DZ644	10 mL	MSV VBFB STK 00005	0.124 mL	BFB	49.8282 ug/mL
..MSV 4BFB NEAT 00004	02/28/25		Chem Service, Lot 10727100		MSV 4BFB NEAT 00004	1.0046 g	BFB	100460 ug/mL
						(Purchased Reagent)	BFB	1 g/g

Reagent

---

**MSV\_4BFB\_NEAT\_00002**

## CERTIFICATE OF ANALYSIS

### 4-Bromofluorobenzene

CATALOG NUMBER N-10809-1G ✓✓  
LOT NUMBER 8601300 ✓✓  
DATE CERTIFIED 01/06/16 ✓  
EXPIRATION DATE 01/31/21 ✓✓  
CAS NUMBER 460-00-4  
MOLECULAR FORMULA C<sub>6</sub>H<sub>4</sub>BrF  
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 ✓✓

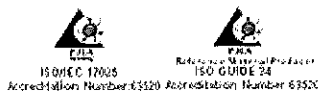
Chem Service, Inc. guarantees the purity to be +/- 0.5% deviation prior to the expiration date shown on the label and exclusive of any customer contamination.

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



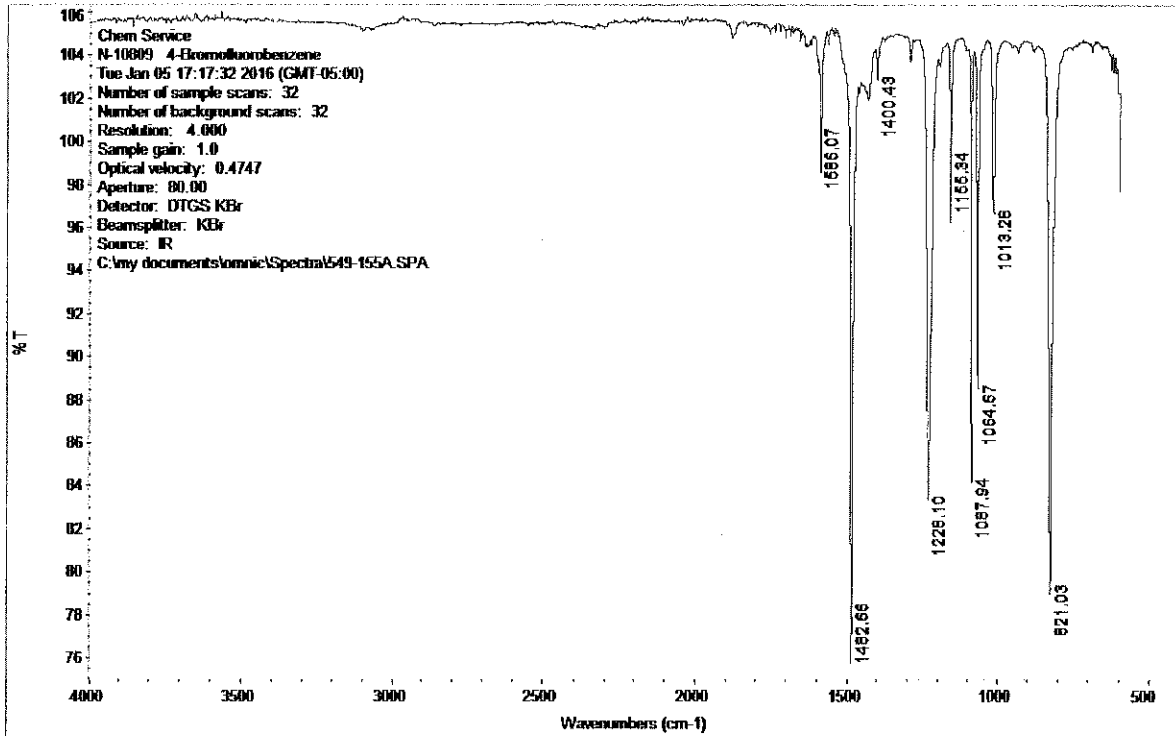


660 Tower Lane • P.O. Box 599 • West Chester, PA 19381-0599  
1-800-452-9994 • 1-610-692-3026 • Fax 1-610-692-8729  
[info@chemservice.com](mailto:info@chemservice.com) • [www.chemservice.com](http://www.chemservice.com)

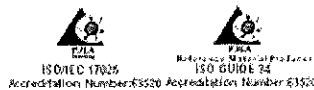
## CERTIFICATE OF ANALYSIS

Analysis Method: FTIR- Spectroscopy

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



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









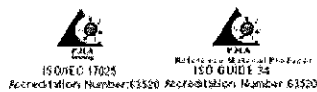
660 Tower Lane • P.O. Box 599 • West Chester, PA 19381-0599  
1-800-452-9994 • 1-610-692-3026 • Fax 1-610-692-8729  
[info@chemservice.com](mailto:info@chemservice.com) • [www.chemservice.com](http://www.chemservice.com)

## 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



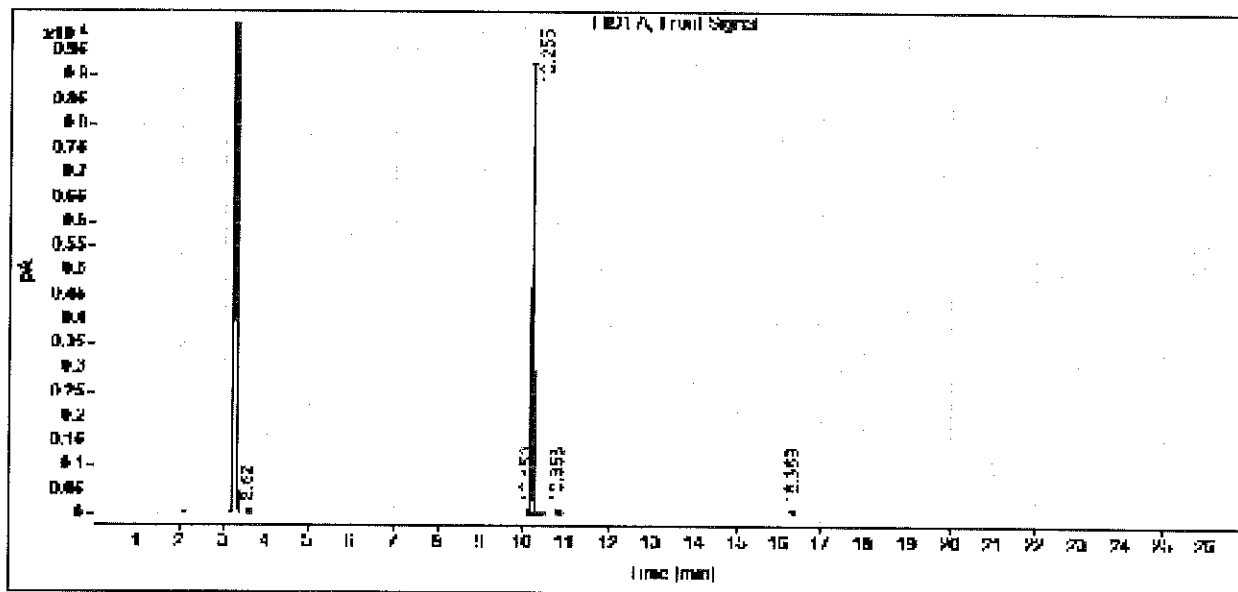


660 Tower Lane • P.O. Box 599 • West Chester, PA 19381-0599  
 1-800-452-9994 • 1-610-692-3026 • Fax 1-610-692-8729  
[info@chemservice.com](mailto:info@chemservice.com) • [www.chemservice.com](http://www.chemservice.com)

## CERTIFICATE OF ANALYSIS

### Gas Chromatography / Flame Ionization Detector (GC/FID)

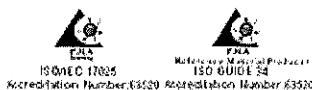
**Data file:** C:\CHEM32\1\DATA\1215\SIG1007347.D  
**Sample name:** N-10809/CH2CL2  
**Instrument:** GC 1 **Sample type:** Sample  
**Injection date:** 1/5/2016 4:20:37 PM **Location:** Vial 6  
**Acq. method:** MIX1.M **Injection volume:** 1.0uL  
**Column name:** DB-824 (30m x 0.53mm x 3.0um)



Signal: FID1 A, Front Signal

RT [min]	Type	Width [min]	Area	Height	Area%
3.620	BB	0.0403	3.8748	1.1723	0.0145
10.156	BV	0.0195	0.7424	0.4889	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\_00119**



# 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)

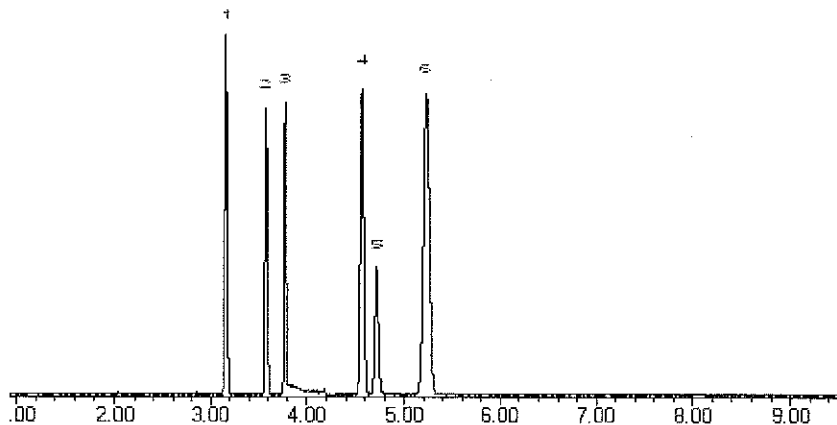
**Carrier Gas:**  
helium-constant flow 2.0 mL/min.

**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*  
Lane Kibe - Mix Technician

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

*Amanda Miller*  
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](http://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](http://www.restek.com/Contact-Us).
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

### Manufacturing Notes:

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

### Handling Notes:

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



Reagent

---

**MSV\_502QGas\_00120**



# 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)

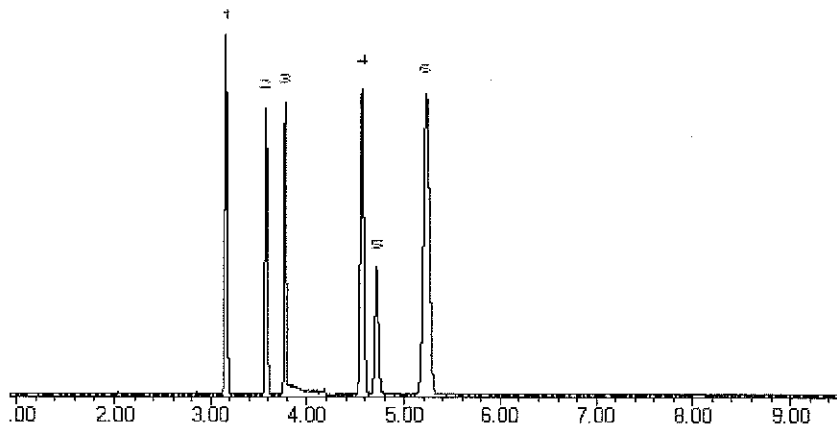
**Carrier Gas:**  
helium-constant flow 2.0 mL/min.

**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*  
Lane Kibe - Mix Technician

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

*Amanda Miller*  
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](http://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](http://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\_00150**





# 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)

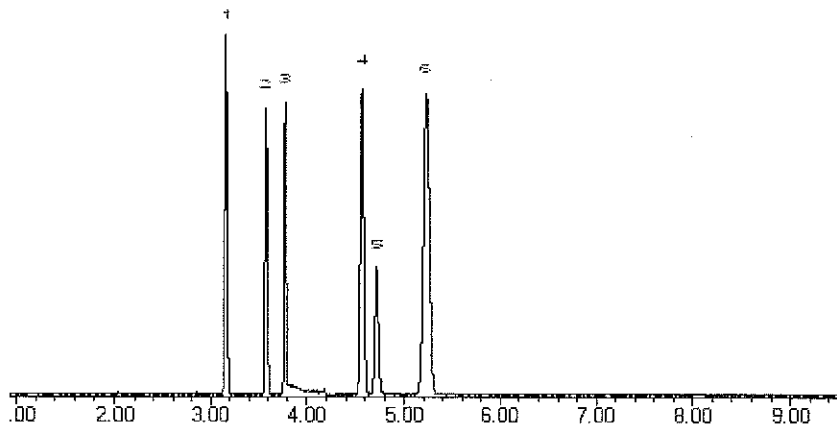
**Carrier Gas:**  
helium-constant flow 2.0 mL/min.

**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](http://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](http://www.restek.com/Contact-Us).
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

### Manufacturing Notes:

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

### Handling Notes:

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



Reagent

---

**MSV\_8260\_SS\_00160**



# 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:**

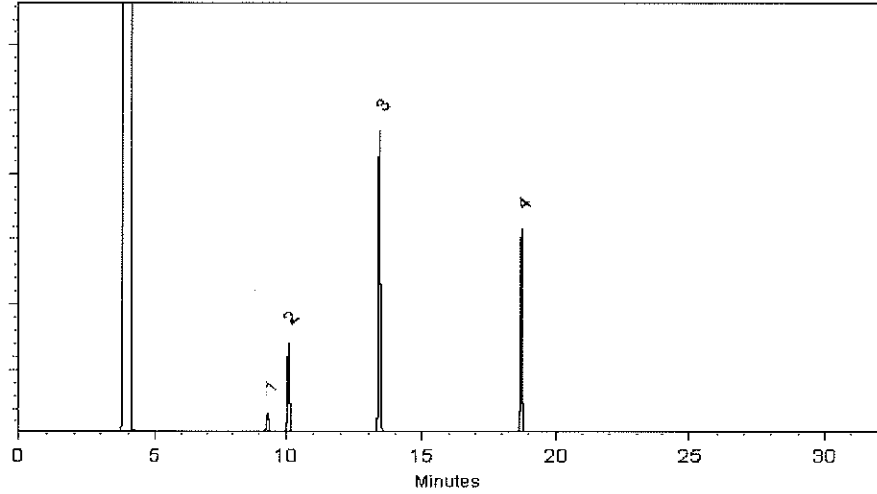
200°C

**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](http://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](http://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:**

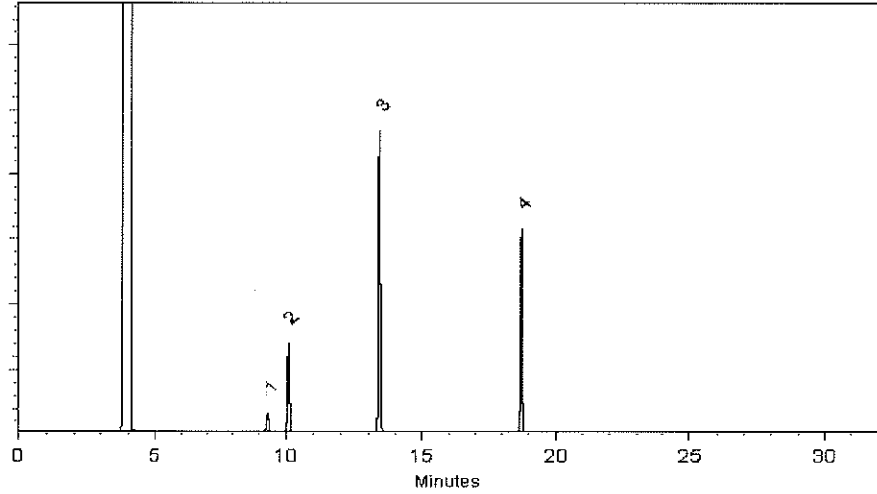
200°C

**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/ $\mu$ 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](http://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](http://www.restek.com/Contact-Us).
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

### Manufacturing Notes:

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

### Handling Notes:

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



Reagent

---

**MSV\_8260\_SS\_00284**



# CERTIFIED REFERENCE MATERIAL

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

www.restek.com

## Certificate of Analysis



### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

**Catalog No. :** 55671 **Lot No.:** A0146938  
**Description :** 8260A Surrogate Mix  
8260A Surrogate Mix 2,500µg/mL, P&T Methanol, 1mL/ampul  
**Container Size :** 2 mL **Pkg Amt:** > 1 mL  
**Expiration Date :** March 31, 2022 **Storage:** 0°C or colder

### CERTIFIED VALUES

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

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



**Column:**

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

**Carrier Gas:**

hydrogen-constant pressure 11.0 psi.

**Temp. Program:**

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

**Inj. Temp:**

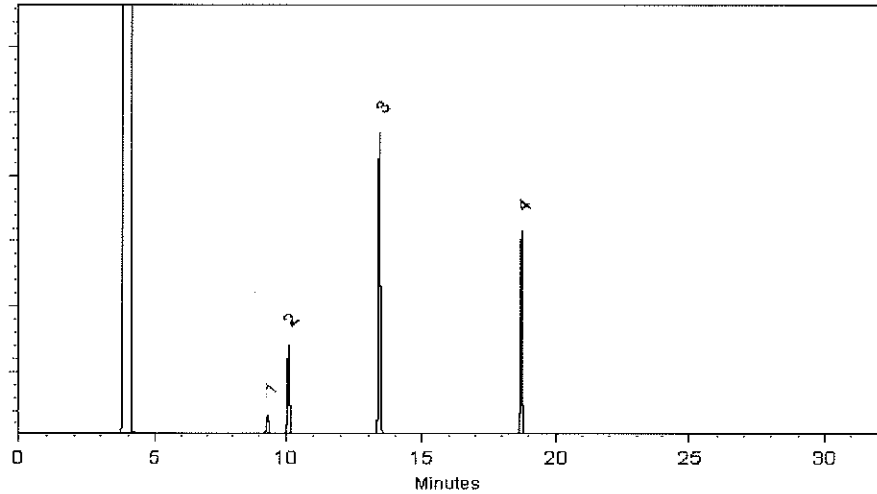
200°C

**Det. Temp:**

250°C

**Det. Type:**

FID



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

*Maggie Wang*

Maggie Wang - Operations Technician I

Date Mixed: 12-Mar-2019

Balance: 1128342314

*Jennifer J Pollino*

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 15-Mar-2019

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

## General Certified Reference Material Notes

### Expiration Notes:

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

### Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/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](http://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](http://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\_00294**



# 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:**

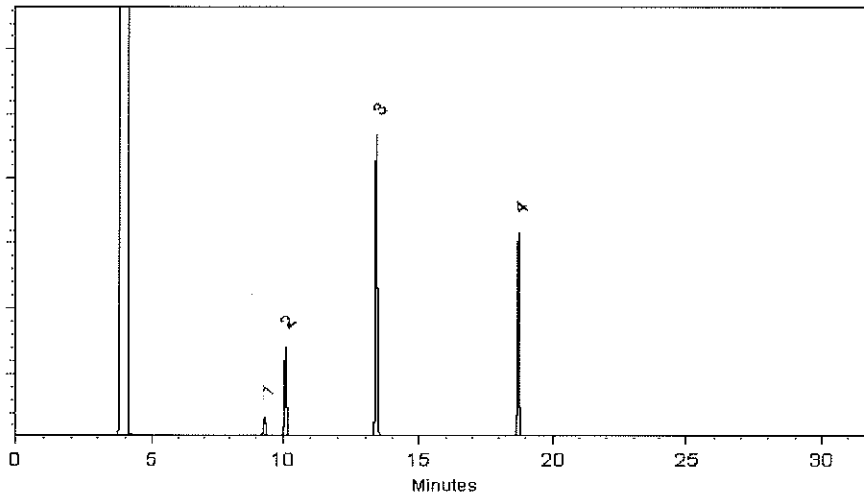
200°C

**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](http://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](http://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](mailto:info@chemservice.com) • [www.chemservice.com](http://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 C<sub>3</sub>H<sub>4</sub>O  
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

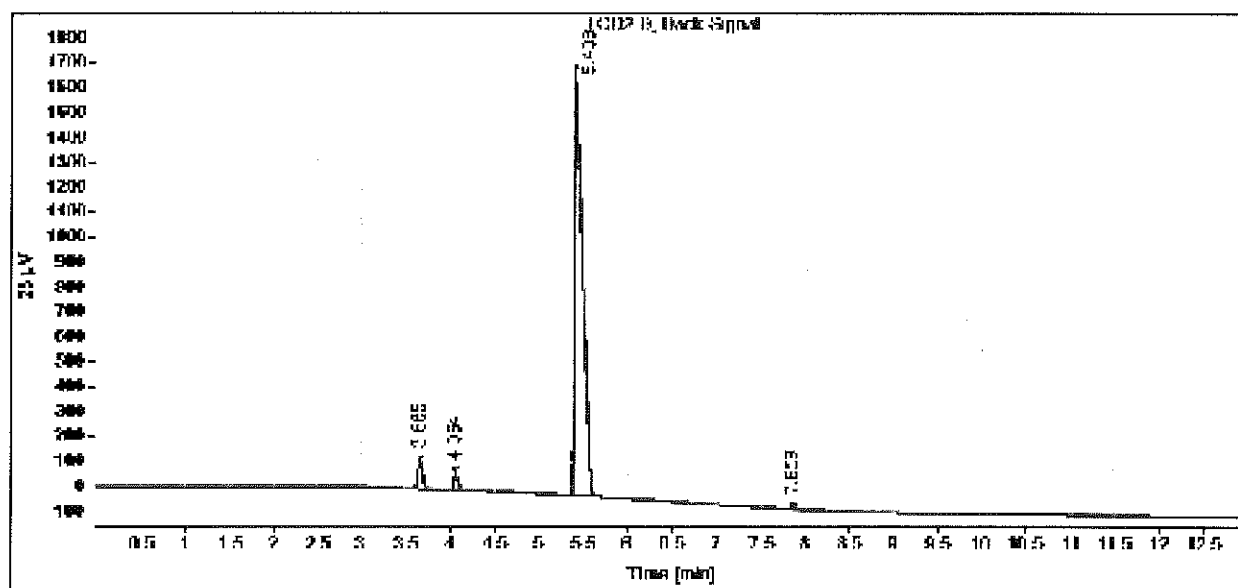


COA Form  
Revision 3 (3/2015)

## 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  
 Injection date: 12/8/2018 10:34:12 AM  
 Acq. method: GASBOMB\_TCD.M  
 Column name: DB-824 (30m x 0.53mm x 3.0um)  
 Sample type: Sample  
 Location: Vial 11  
 Injection volume: 1.0uL



Signal: TCD2 B, Back Signal

RT [min]	Type	Width [min]	Area	Height	Area%
3.665	BB	0.0554	405.7875	114.3327	3.5675
4.064	BB	0.0475	217.2787	71.5037	1.9102
5.408	BV	0.0795	10720.3574	1725.8987	94.2472
7.858	BB	0.1249	31.2959	3.7665	0.2751
Sum			11374.7178		



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](mailto:info@chemservice.com) • [www.chemservice.com](http://www.chemservice.com)

### CERTIFICATE OF ANALYSIS

#### Analysis Method:

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

---

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



Reagent

---

**MSV\_Cus826\_IS\_00099**



# 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)

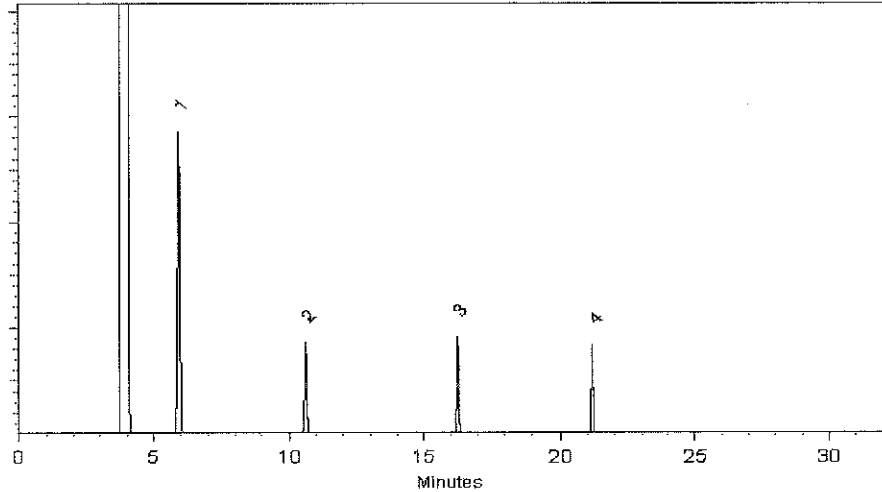
**Carrier Gas:**  
hydrogen-constant pressure 11.0 psi.

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

**Inj. Temp:**  
200°C

**Det. Temp:**  
250°C

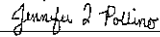
**Det. Type:**  
FID



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/ $\mu$ 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](http://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](http://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\_00151**



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

www.restek.com

# CERTIFIED REFERENCE MATERIAL

## 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)

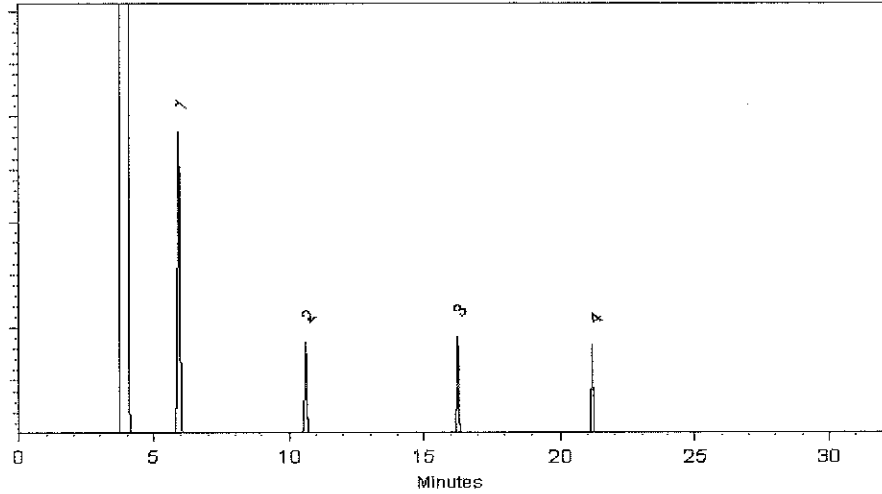
**Carrier Gas:**  
hydrogen-constant pressure 11.0 psi.

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

**Inj. Temp:**  
200°C

**Det. Temp:**  
250°C

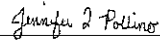
**Det. Type:**  
FID



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/ $\mu$ 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](http://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](http://www.restek.com/Contact-Us).
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

### Manufacturing Notes:

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

### Handling Notes:

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



Reagent

---

**MSV\_Cus826\_IS\_00173**



# CERTIFIED REFERENCE MATERIAL

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

www.restek.com

## Certificate of Analysis



### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

**Catalog No. :** 558267 **Lot No.:** A0138205  
**Description :** Custom 8260A IS Mix  
Custom 8260A IS Mix 2,500-12,500µg/mL, P&T Methanol, 1mL/ampul  
**Container Size :** 2 mL **Pkg Amt:** > 1 mL  
**Expiration Date :** May 31, 2021 **Storage:** 0°C or colder

### CERTIFIED VALUES

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

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



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

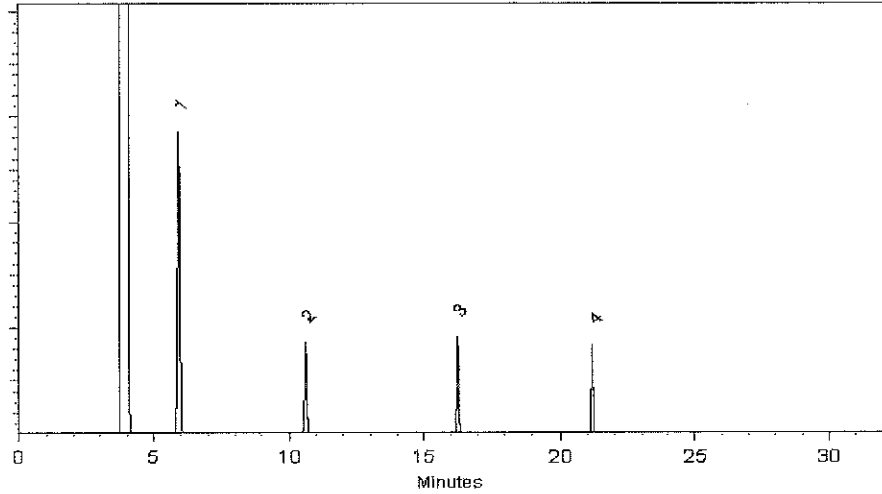
**Carrier Gas:**  
hydrogen-constant pressure 11.0 psi.

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

**Inj. Temp:**  
200°C

**Det. Temp:**  
250°C

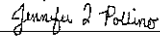
**Det. Type:**  
FID



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

  
Tom Suckar - Mix Technician

Date Mixed: 21-May-2018      Balance: 1128342314

  
Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 23-May-2018

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

## General Certified Reference Material Notes

### Expiration Notes:

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

### Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/ $\mu$ 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](http://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](http://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\_00180**



# CERTIFIED REFERENCE MATERIAL

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

www.restek.com

## Certificate of Analysis



**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

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

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

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

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

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

### CERTIFIED VALUES

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

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

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

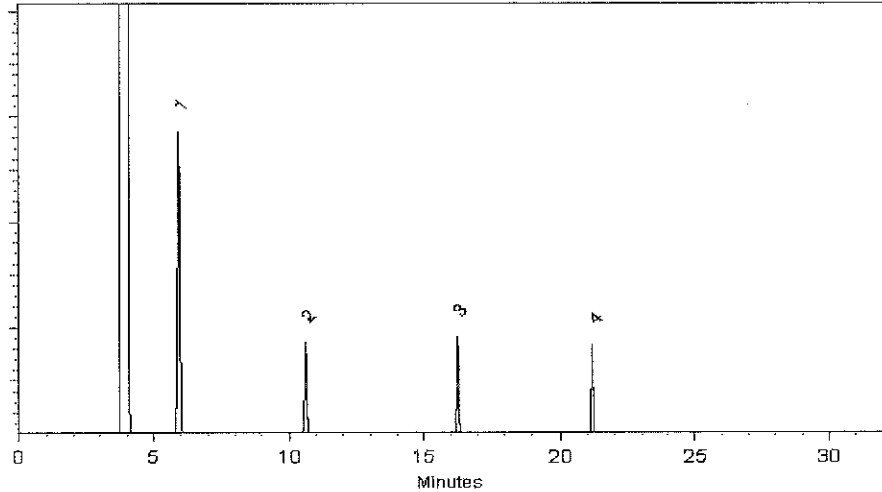
**Carrier Gas:**  
hydrogen-constant pressure 11.0 psi.

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

**Inj. Temp:**  
200°C

**Det. Temp:**  
250°C

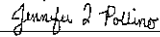
**Det. Type:**  
FID



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

  
Tom Suckar - Mix Technician

Date Mixed: 21-May-2018      Balance: 1128342314

  
Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 23-May-2018

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

## General Certified Reference Material Notes

### Expiration Notes:

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

### Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/ $\mu$ 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](http://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](http://www.restek.com/Contact-Us).
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

### Manufacturing Notes:

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

### Handling Notes:

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





Reagent

---

**MSV\_DCFM\_00030**



# CERTIFICATE OF ANALYSIS

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

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



Signal Word: Danger

### Certified Reference Material



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

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

<sup>1</sup> Certified Analyte Concentration = Purity x Prepared Concentration.

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

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

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

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

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

Certified By:   
Larry Decker, Organic QC Manager

**1. Quality Standards:**

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

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

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

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

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

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

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

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

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

Reagent

---

**MSV\_EE\_Neat\_00003**

## CERTIFICATE OF ANALYSIS

### Ethyl ether

CATALOG NUMBER N-11897-1G  
LOT NUMBER 7967000  
DATE CERTIFIED 11/16/18  
EXPIRATION DATE 11/30/21  
CAS NUMBER 60-29-7  
MOLECULAR FORMULA C<sub>4</sub>H<sub>10</sub>O  
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:

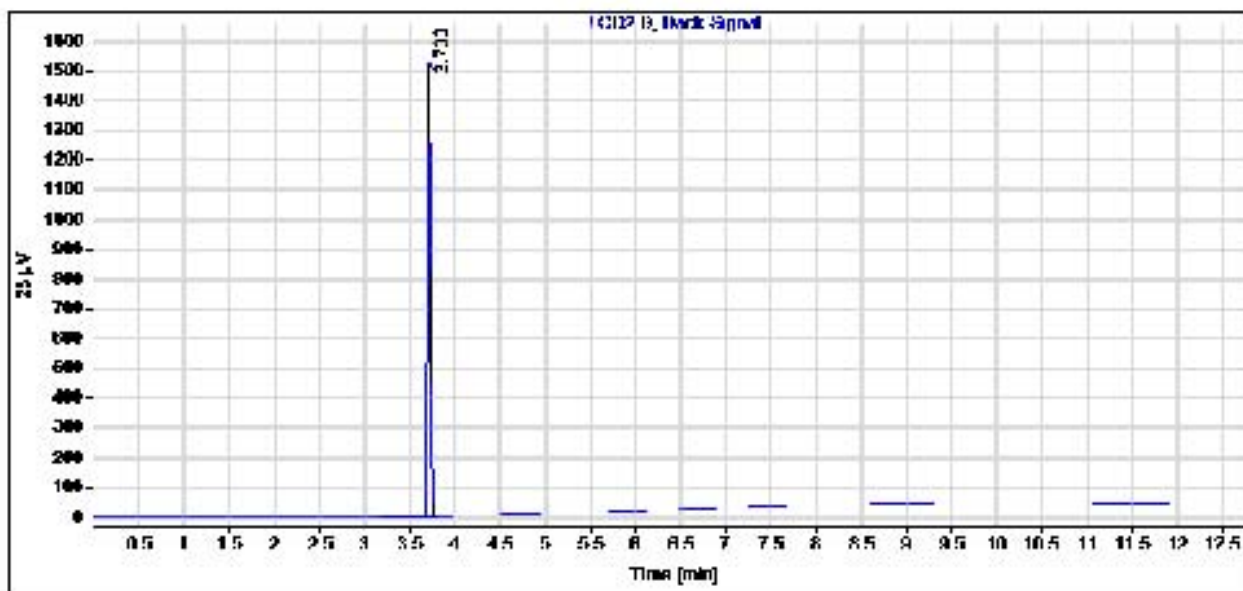
*Mary Beth O'Donnell*

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

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

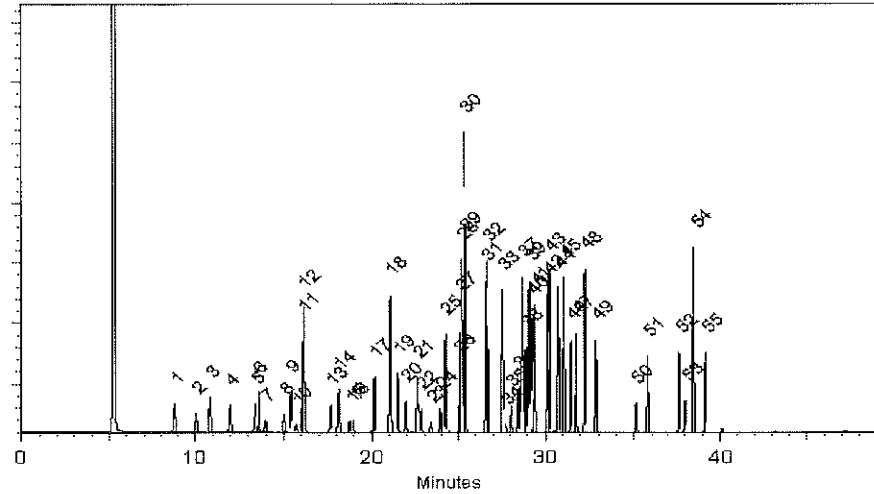
Carrier Gas:  
hydrogen-constant pressure 8.0 psi.

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/ $\mu$ 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](http://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](http://www.restek.com/Contact-Us).
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

### Manufacturing Notes:

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

### Handling Notes:

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

Reagent

---

**MSV\_Q#1B\_00071**



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

www.restek.com

# CERTIFIED REFERENCE MATERIAL

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



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

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

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

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

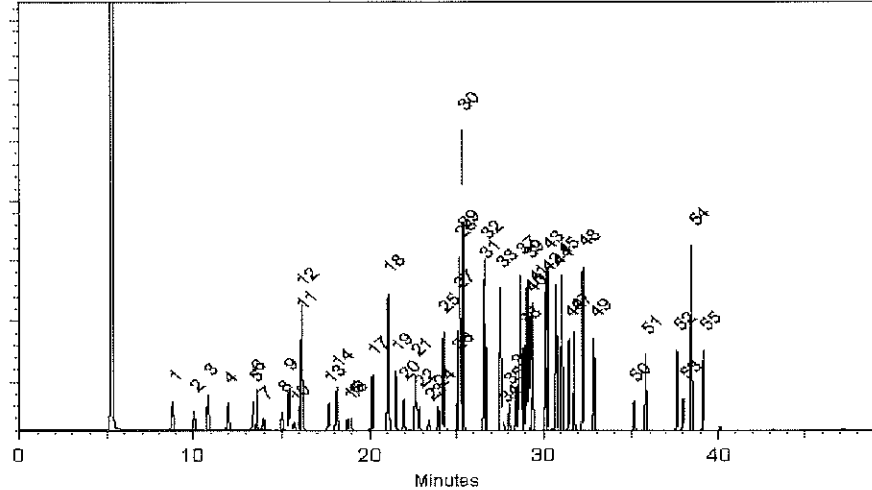
Carrier Gas:  
hydrogen-constant pressure 8.0 psi.

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

Inj. Temp:  
200°C

Det. Temp:  
250°C

Det. Type:  
FID



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

*Michael Maje*

Date Mixed: 26-Apr-2019 Balance: 1127510105

*Jennifer J. Pollino*  
Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 30-Apr-2019

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

## General Certified Reference Material Notes

### Expiration Notes:

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

### Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/ $\mu$ 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](http://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](http://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\_00088**



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

CERTIFIED VALUES

Table with 4 main columns: Elution Order, Compound, Grav. Conc. (weight/volume), and Expanded Uncertainty (95% C.L.; K=2). It lists 7 different compounds with their respective CAS numbers, purities, and certified values.

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

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



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

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

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

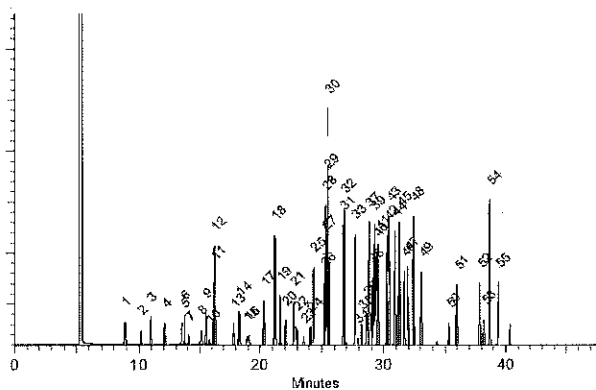
**Carrier Gas:**  
hydrogen-constant pressure 8.0 psi.

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

**Inj. Temp:**  
200°C

**Det. Temp:**  
250°C

**Det. Type:**  
FID



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

*Michael Mage*

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

**Balance:** 1128342314

*Justin Albers*  
Justin Albers - Operations Tech-ARM GC

**Date Passed:** 23-Oct-2020

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

## General Certified Reference Material Notes

### Expiration Notes:

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

### Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/ $\mu$ 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](http://www.restek.com/Contact-Us) for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

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

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

### Manufacturing Notes:

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

### Handling Notes:

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

Reagent

---

**MSV\_Q#3B\_00062**



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

Table with 7 rows and 7 columns: Elution Order, Compound (CAS #, Purity), Grav. Conc. (weight/volume), Expanded Uncertainty (95% C.L.; K=2), and measurement method (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)

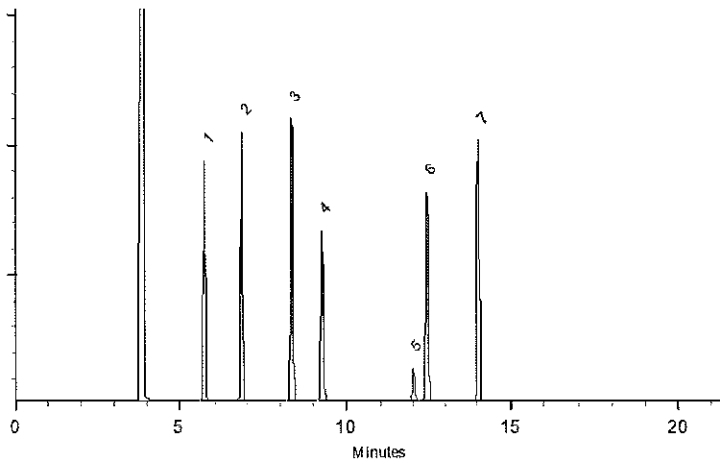
**Carrier Gas:**  
hydrogen-constant pressure 11.0 psi.

**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.

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/ $\mu$ 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](http://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](http://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)

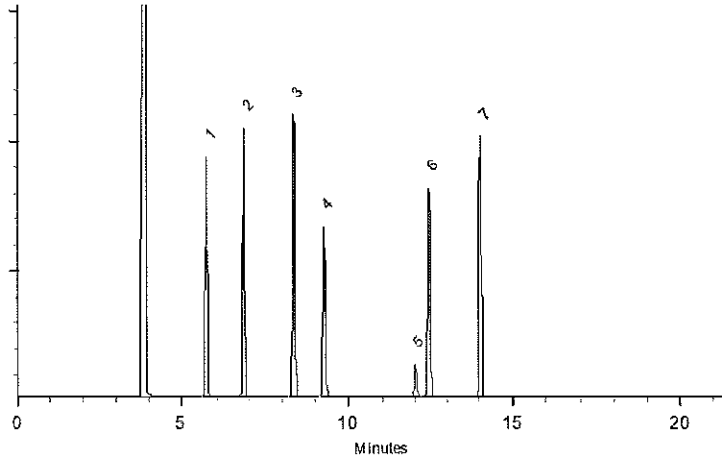
**Carrier Gas:**  
hydrogen-constant pressure 11.0 psi.

**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 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/ $\mu$ 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](http://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](http://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\_00078**



# CERTIFIED REFERENCE MATERIAL

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

www.restek.com

## Certificate of Analysis



### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

**Description :** Custom Q #3B Standard

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

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

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

### CERTIFIED VALUES

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

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

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

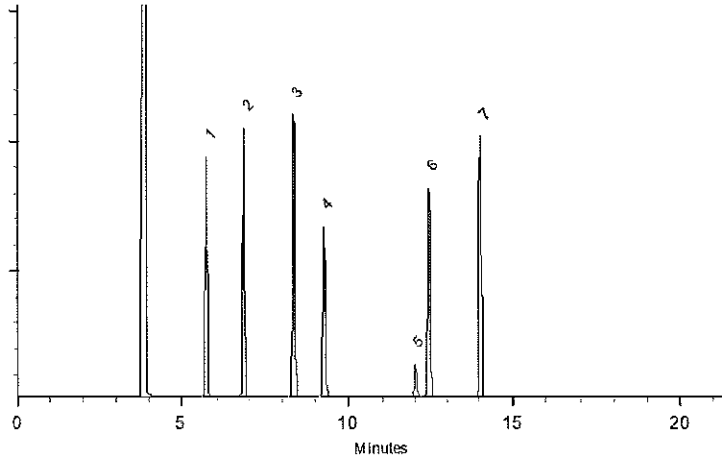
**Carrier Gas:**  
hydrogen-constant pressure 11.0 psi.

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

**Inj. Temp:**  
200°C

**Det. Temp:**  
250°C

**Det. Type:**  
FID



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

Brandon Reish - Mix Technician

Date Mixed: 11-Mar-2020 Balance: 1127510105

  
Justine 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/ $\mu$ 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](http://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](http://www.restek.com/Contact-Us).
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

### Manufacturing Notes:

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

### Handling Notes:

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

Reagent

---

**MSV\_Q#4C\_00065**





# 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
	<b>CAS #</b>	110-54-3.SEC (Lot 10188491)			+/-	60.4604	µg/mL	Unstressed
	<b>Purity</b>	99%			+/-	60.6039	µg/mL	Stressed
9	Diisopropyl ether ( DIPE )		1,003.0	µg/mL	+/-	5.8862	µg/mL	Gravimetric
	<b>CAS #</b>	108-20-3.SEC (Lot LL7TN-SH)			+/-	60.5207	µg/mL	Unstressed
	<b>Purity</b>	99%			+/-	60.6644	µg/mL	Stressed
10	Chloroprene (2-chloro-1,3-butadiene)		1,001.5	µg/mL	+/-	5.8774	µg/mL	Gravimetric
	<b>CAS #</b>	126-99-8 * (Lot 191204JLM)			+/-	60.4302	µg/mL	Unstressed
	<b>Purity</b>	99%			+/-	60.5737	µg/mL	Stressed
11	Ethyl-tert-butyl ether (ETBE)		1,001.0	µg/mL	+/-	5.8744	µg/mL	Gravimetric
	<b>CAS #</b>	637-92-3.SEC (Lot MHBjG-QK)			+/-	60.4000	µg/mL	Unstressed
	<b>Purity</b>	99%			+/-	60.5434	µg/mL	Stressed
12	Cyclohexane		1,001.5	µg/mL	+/-	5.8774	µg/mL	Gravimetric
	<b>CAS #</b>	110-82-7.SEC (Lot YADRA)			+/-	60.4302	µg/mL	Unstressed
	<b>Purity</b>	99%			+/-	60.5737	µg/mL	Stressed
13	tert-Amyl methyl ether (TAME)		1,006.0	µg/mL	+/-	5.9038	µg/mL	Gravimetric
	<b>CAS #</b>	994-05-8.SEC (Lot 8471400)			+/-	60.7017	µg/mL	Unstressed
	<b>Purity</b>	99%			+/-	60.8458	µg/mL	Stressed
14	n-Heptane (C7)		1,006.0	µg/mL	+/-	5.9038	µg/mL	Gravimetric
	<b>CAS #</b>	142-82-5.SEC (Lot OGM01)			+/-	60.7017	µg/mL	Unstressed
	<b>Purity</b>	99%			+/-	60.8458	µg/mL	Stressed
15	tert-Amyl ethyl ether (TAEE)		1,006.0	µg/mL	+/-	5.9038	µg/mL	Gravimetric
	<b>CAS #</b>	919-94-8.SEC (Lot 6455100)			+/-	60.7017	µg/mL	Unstressed
	<b>Purity</b>	99%			+/-	60.8458	µg/mL	Stressed
16	Methyl methacrylate		1,006.0	µg/mL	+/-	5.9038	µg/mL	Gravimetric
	<b>CAS #</b>	80-62-6.SEC (Lot G01X021)			+/-	60.7017	µg/mL	Unstressed
	<b>Purity</b>	99%			+/-	60.8458	µg/mL	Stressed
17	Ethyl methacrylate		1,004.5	µg/mL	+/-	5.8950	µg/mL	Gravimetric
	<b>CAS #</b>	97-63-2.SEC (Lot MLWYK-LS)			+/-	60.6112	µg/mL	Unstressed
	<b>Purity</b>	99%			+/-	60.7551	µg/mL	Stressed
18	Benzyl chloride		1,003.5	µg/mL	+/-	5.8891	µg/mL	Gravimetric
	<b>CAS #</b>	100-44-7.SEC (Lot H29N03)			+/-	60.5509	µg/mL	Unstressed
	<b>Purity</b>	99%			+/-	60.6946	µg/mL	Stressed
<b>Solvent:</b>	P&T Methanol							
	<b>CAS #</b>	67-56-1						
	<b>Purity</b>	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)

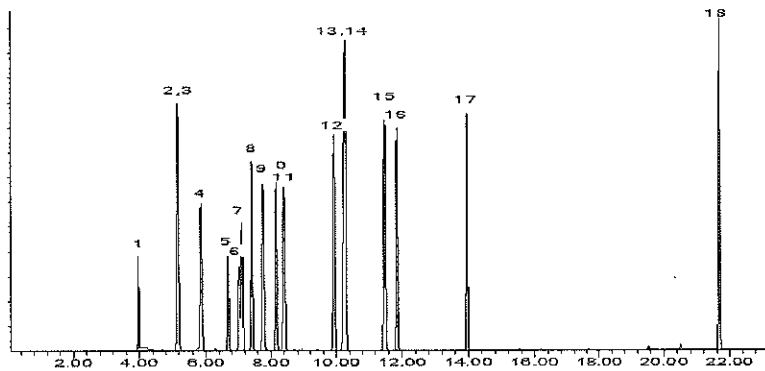
**Carrier Gas:**  
helium-constant pressure 30 psi

**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/ $\mu$ 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](http://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](http://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
<b>Solvent:</b>		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)

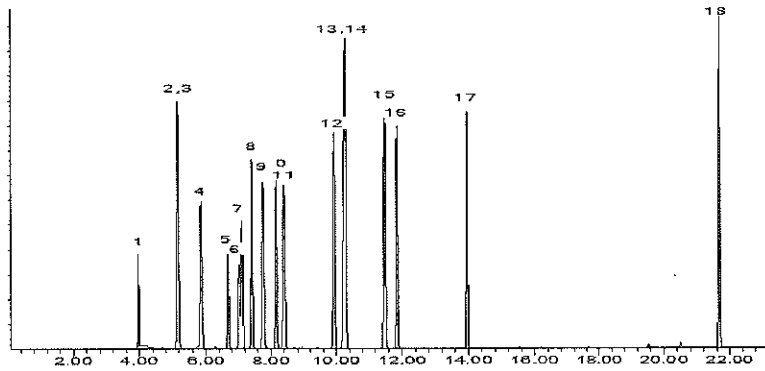
**Carrier Gas:**  
helium-constant pressure 30 psi

**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/ $\mu$ 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](http://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](http://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\_00085**



# 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
<b>Solvent:</b>		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)

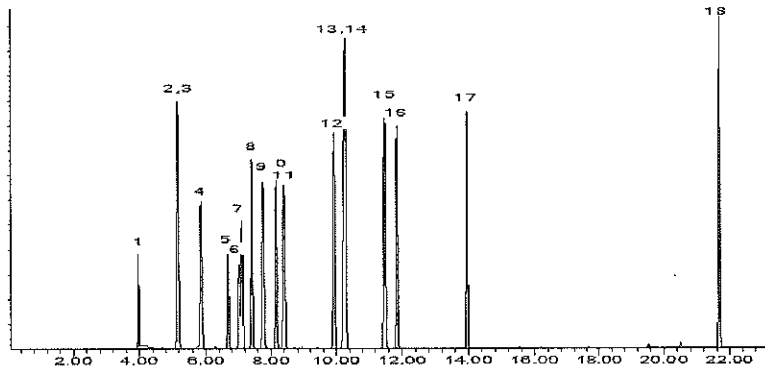
**Carrier Gas:**  
helium-constant pressure 30 psi

**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/ $\mu$ 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](http://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](http://www.restek.com/Contact-Us).
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

### Manufacturing Notes:

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

### Handling Notes:

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

Reagent

---

**MSV\_QCS#6Std\_00064**



# 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:**

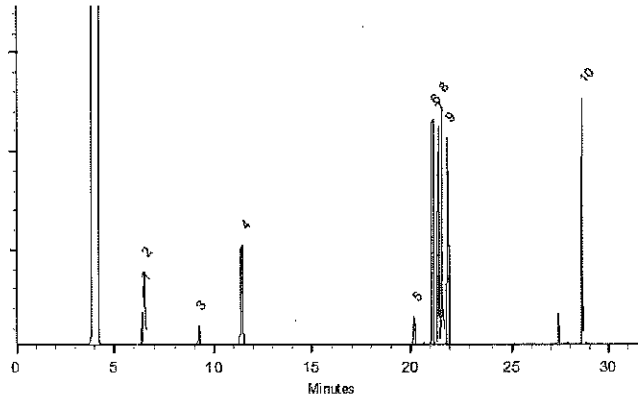
200°C

**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](http://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](http://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)

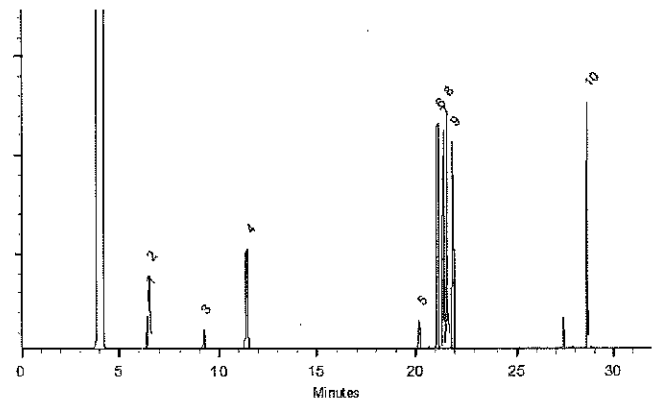
**Carrier Gas:**  
hydrogen-constant pressure 11.0 psi.

**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/ $\mu$ 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](http://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](http://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\_00084**



# 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)

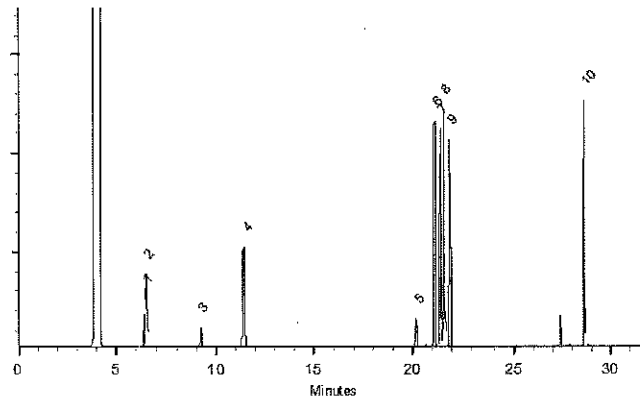
**Carrier Gas:**  
hydrogen-constant pressure 11.0 psi.

**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/ $\mu$ 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](http://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](http://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\_00126**



# CERTIFIED REFERENCE MATERIAL

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

www.restek.com

## Certificate of Analysis



### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

**Description :** Custom Revised V #1B Standard

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

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

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

### CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	1,1-dichloroethene CAS # 75-35-4 Purity 99% (Lot SHBK2437)	5,011.4 µg/mL	+/- 31.9644 µg/mL	+/- 281.2901 µg/mL	+/- 287.8577 µg/mL	Gravimetric Unstressed Stressed
2	Methylene chloride (dichloromethane) CAS # 75-09-2 Purity 99% (Lot SHBL3107)	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 Purity 99% (Lot MKBH9850V)	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 Purity 99% (Lot 580900)	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 Purity 99% (Lot BCBT5124)	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 Purity 99% (Lot MKBX5945V)	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 Purity 99% (Lot SHBJ9076)	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	µg/mL	Gravimetric
					+/-	280.7250	µg/mL	Unstressed
					+/-	287.2795	µg/mL	Stressed
9	1,1-Dichloropropene CAS # 563-58-6 Purity 99%	(Lot 170301JLM)	5,048.9	µg/mL	+/-	32.0131	µg/mL	Gravimetric
					+/-	283.3734	µg/mL	Unstressed
					+/-	289.9907	µg/mL	Stressed
10	carbon tetrachloride CAS # 56-23-5 Purity 99%	(Lot SHBG8938V)	5,022.9	µg/mL	+/-	32.0378	µg/mL	Gravimetric
					+/-	281.9356	µg/mL	Unstressed
					+/-	288.5183	µg/mL	Stressed
11	1,2-Dichloroethane CAS # 107-06-2 Purity 99%	(Lot MKCH9948)	5,007.9	µg/mL	+/-	31.9421	µg/mL	Gravimetric
					+/-	281.0937	µg/mL	Unstressed
					+/-	287.6567	µg/mL	Stressed
12	Benzene CAS # 71-43-2 Purity 99%	(Lot SHBG7317V)	5,042.9	µg/mL	+/-	31.9750	µg/mL	Gravimetric
					+/-	283.0367	µg/mL	Unstressed
					+/-	289.6461	µg/mL	Stressed
13	Trichloroethene CAS # 79-01-6 Purity 99%	(Lot SHBJ4611)	5,012.9	µg/mL	+/-	31.9740	µg/mL	Gravimetric
					+/-	281.3743	µg/mL	Unstressed
					+/-	287.9439	µg/mL	Stressed
14	1,2-Dichloropropane CAS # 78-87-5 Purity 99%	(Lot BCBR0882V)	5,012.6	µg/mL	+/-	31.9724	µg/mL	Gravimetric
					+/-	281.3603	µg/mL	Unstressed
					+/-	287.9295	µg/mL	Stressed
15	bromodichloromethane CAS # 75-27-4 Purity 99%	(Lot MKCJ0238)	5,039.1	µg/mL	+/-	32.1414	µg/mL	Gravimetric
					+/-	282.8477	µg/mL	Unstressed
					+/-	289.4517	µg/mL	Stressed
16	Dibromomethane CAS # 74-95-3 Purity 99%	(Lot 10201030)	5,047.3	µg/mL	+/-	32.0027	µg/mL	Gravimetric
					+/-	283.2822	µg/mL	Unstressed
					+/-	289.8973	µg/mL	Stressed
17	cis-1,3-Dichloropropene CAS # 10061-01-5 Purity 99%	(Lot 200107JLM)	5,015.1	µg/mL	+/-	31.9883	µg/mL	Gravimetric
					+/-	281.5006	µg/mL	Unstressed
					+/-	288.0731	µg/mL	Stressed
18	Toluene CAS # 108-88-3 Purity 99%	(Lot SHBH9895)	5,031.9	µg/mL	+/-	31.9053	µg/mL	Gravimetric
					+/-	282.4193	µg/mL	Unstressed
					+/-	289.0143	µg/mL	Stressed
19	trans-1,3-Dichloropropene CAS # 10061-02-6 Purity 99%	(Lot 19420164-D1219)	5,003.8	µg/mL	+/-	31.9158	µg/mL	Gravimetric
					+/-	280.8621	µg/mL	Unstressed
					+/-	287.4198	µg/mL	Stressed
20	1,1,2-Trichloroethane CAS # 79-00-5 Purity 99%	(Lot FGB01)	5,015.4	µg/mL	+/-	31.9899	µg/mL	Gravimetric
					+/-	281.5146	µg/mL	Unstressed
					+/-	288.0875	µg/mL	Stressed
21	1,3-Dichloropropane CAS # 142-28-9 Purity 99%	(Lot BCBG2162V)	5,042.4	µg/mL	+/-	31.9718	µg/mL	Gravimetric
					+/-	283.0086	µg/mL	Unstressed
					+/-	289.6173	µg/mL	Stressed
22	Tetrachloroethene CAS # 127-18-4 Purity 99%	(Lot SHBJ7422)	5,014.3	µg/mL	+/-	31.9827	µg/mL	Gravimetric
					+/-	281.4515	µg/mL	Unstressed
					+/-	288.0229	µg/mL	Stressed
23	dibromochloromethane CAS # 124-48-1 Purity 99%	(Lot MKCK6472)	5,016.1	µg/mL	+/-	31.9947	µg/mL	Gravimetric
					+/-	281.5567	µg/mL	Unstressed
					+/-	288.1306	µg/mL	Stressed

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

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

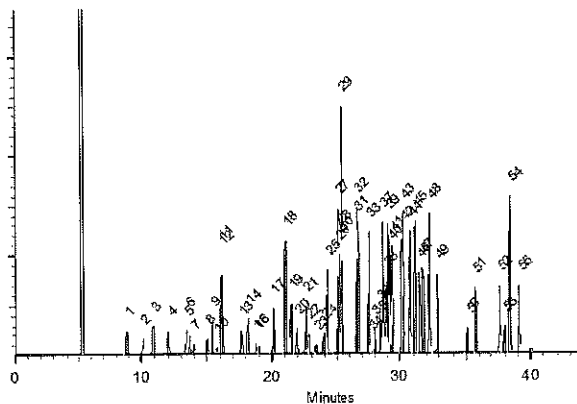
Carrier Gas:  
hydrogen-constant pressure 8.0 psi.

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/ $\mu$ 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](http://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](http://www.restek.com/Contact-Us).
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

### Manufacturing Notes:

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

### Handling Notes:

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

Reagent

---

**MSV\_V#1B\_00127**



# CERTIFIED REFERENCE MATERIAL

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

www.restek.com

## Certificate of Analysis



### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

**Description :** Custom Revised V #1B Standard

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

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

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

### CERTIFIED VALUES

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

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

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

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

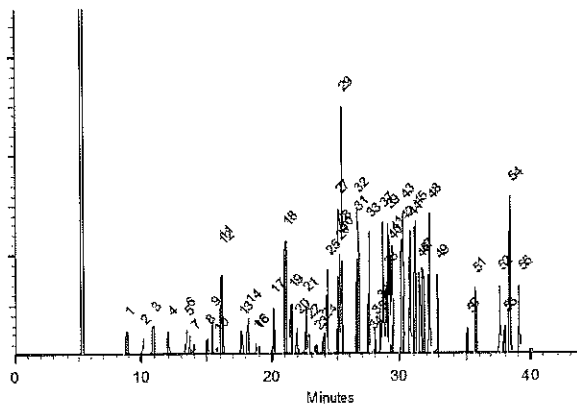
Carrier Gas:  
hydrogen-constant pressure 8.0 psi.

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/ $\mu$ 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](http://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](http://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\_00144**



# CERTIFIED REFERENCE MATERIAL

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

www.restek.com

## Certificate of Analysis



### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

**Description :** Custom Revised V #1B Standard

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

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

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

### CERTIFIED VALUES

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

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

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

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

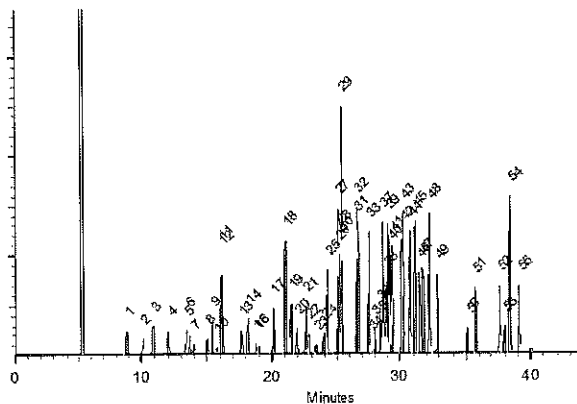
Carrier Gas:  
hydrogen-constant pressure 8.0 psi.

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/ $\mu$ 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](http://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](http://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
<b>Solvent:</b>	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)

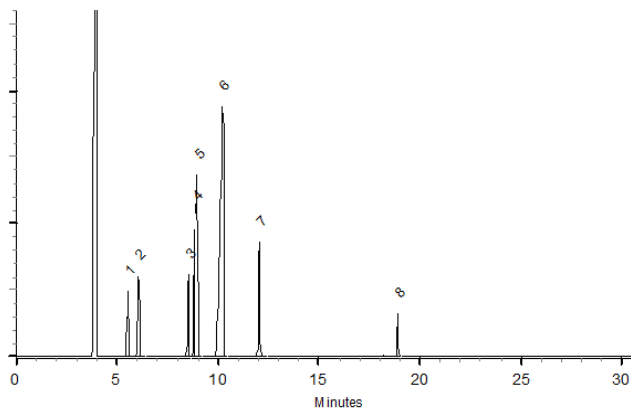
**Carrier Gas:**  
hydrogen-constant pressure 11.0 psi.

**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/ $\mu$ 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\_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 **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)

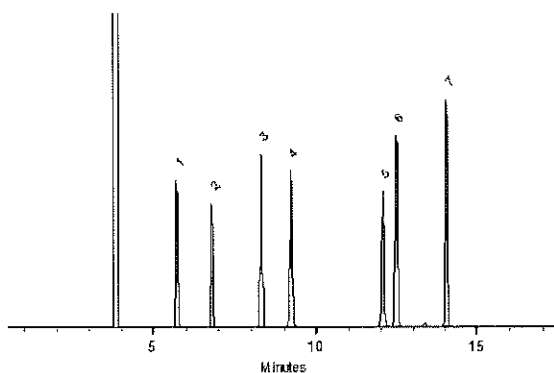
**Carrier Gas:**  
hydrogen-constant pressure 11.0 psi.

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

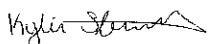
**Inj. Temp:**  
200°C

**Det. Temp:**  
250°C

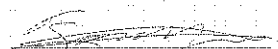
**Det. Type:**  
FID



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/ $\mu$ 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](http://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](http://www.restek.com/Contact-Us).
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

### Manufacturing Notes:

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

### Handling Notes:

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





Reagent

---

**MSV\_V#3B\_00070**



# 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)

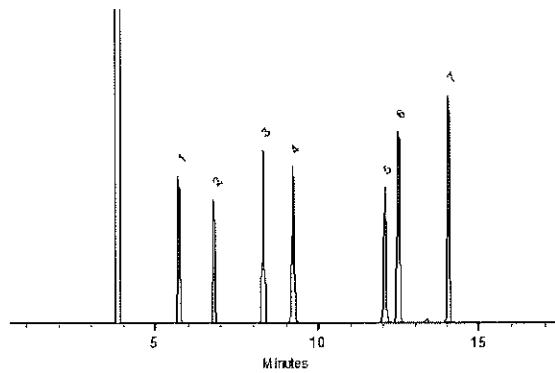
**Carrier Gas:**  
hydrogen-constant pressure 11.0 psi.

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

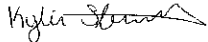
**Inj. Temp:**  
200°C

**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](http://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](http://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\_00083**



# 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)

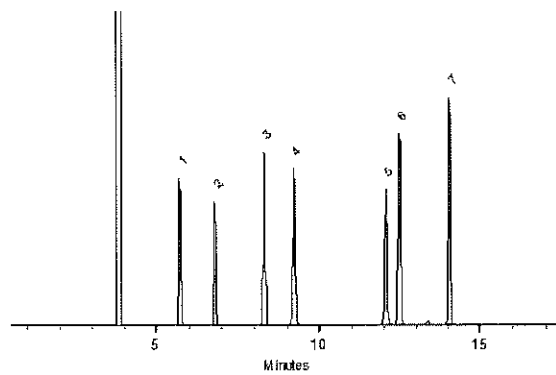
**Carrier Gas:**  
hydrogen-constant pressure 11.0 psi.

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

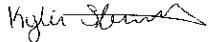
**Inj. Temp:**  
200°C

**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](http://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](http://www.restek.com/Contact-Us).
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

### Manufacturing Notes:

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

### Handling Notes:

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



Reagent

---

**MSV\_V#4C\_00106**



# 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
<b>Solvent:</b>	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)

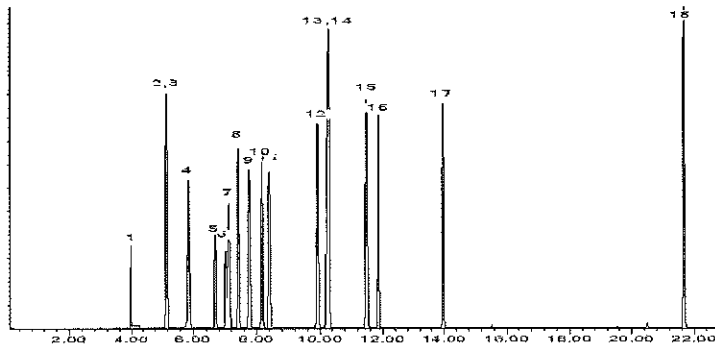
**Carrier Gas:**  
helium-constant pressure 30 psi

**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

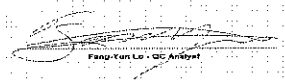


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

  
Tom Suckal - Mix Technician

Date Mixed: 10-Mar-2020

Balance: B707717271

  
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/ $\mu$ 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](http://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](http://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

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
<b>Solvent:</b>	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-S02.2 (cat.#10916)

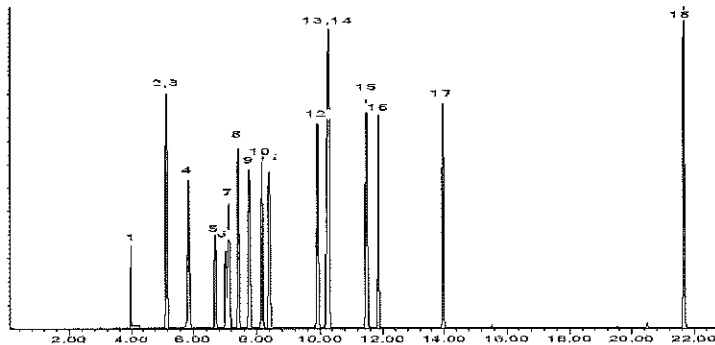
**Carrier Gas:**  
helium-constant pressure 30 psi

**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

  
Fang-Tsun 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/ $\mu$ 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](http://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](http://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\_00124**



# 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
<b>Solvent:</b>	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)

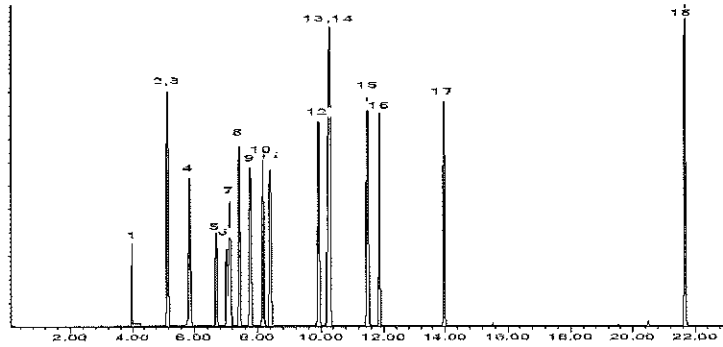
**Carrier Gas:**  
helium-constant pressure 30 psi

**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

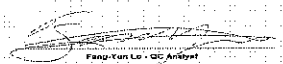


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

  
Tom Suckal - Mix Technician

Date Mixed: 10-Mar-2020

Balance: B707717271

  
Fang-Tsun 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/ $\mu$ 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](http://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](http://www.restek.com/Contact-Us).
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

### Manufacturing Notes:

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

### Handling Notes:

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

Reagent

---

**MSV\_V#6\_00045**



# 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)

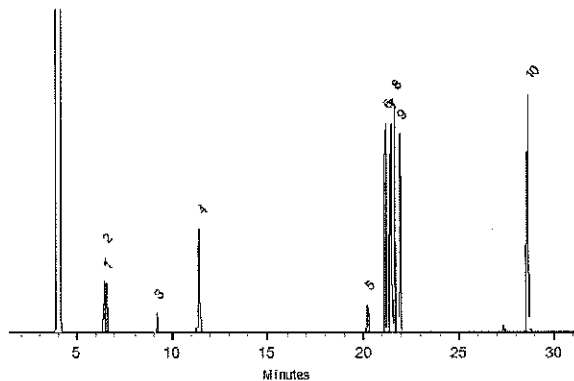
**Carrier Gas:**  
hydrogen-constant pressure 11.0 psi.

**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/ $\mu$ 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](http://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](http://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	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)

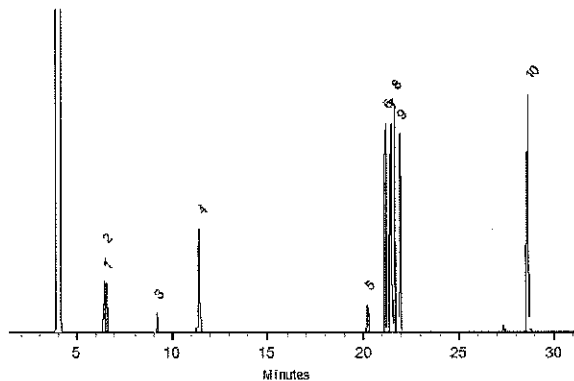
**Carrier Gas:**  
hydrogen-constant pressure 11.0 psi.

**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 - Mix Technician

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/ $\mu$ 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](http://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](http://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\_00060**



# 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)

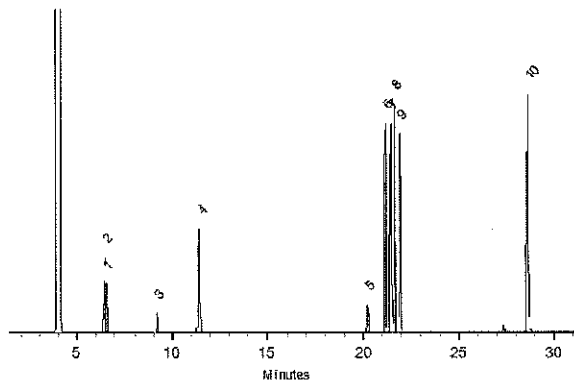
**Carrier Gas:**  
hydrogen-constant pressure 11.0 psi.

**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 - Mix Technician

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/ $\mu$ 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](http://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](http://www.restek.com/Contact-Us).
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

### Manufacturing Notes:

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

### Handling Notes:

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





Reagent

---

**MSV\_V\_Gas\_00175**



# 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)

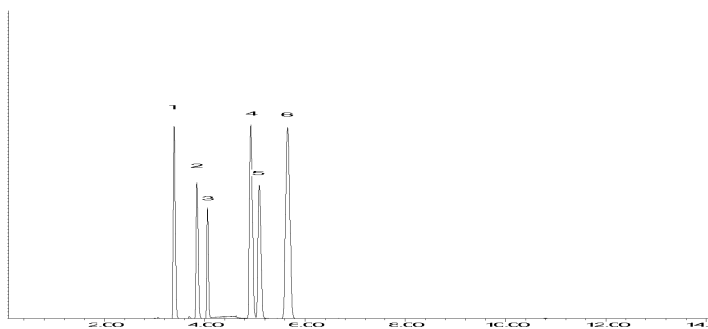
**Carrier Gas:**  
helium-constant flow 2.0 mL/min.

**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](http://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](http://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)

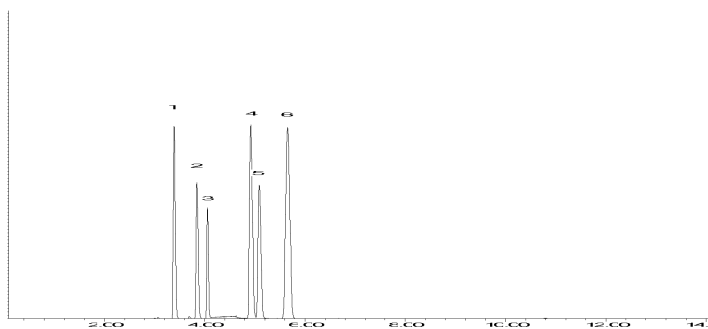
**Carrier Gas:**  
helium-constant flow 2.0 mL/min.

**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](http://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](http://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\_00220**



# 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)

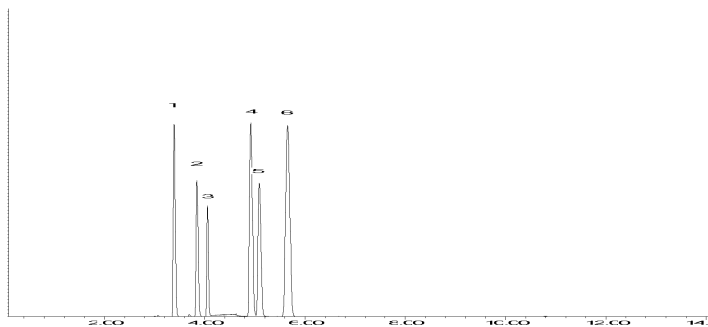
**Carrier Gas:**  
helium-constant flow 2.0 mL/min.

**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](http://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](http://www.restek.com/Contact-Us).
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

### Manufacturing Notes:

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

### Handling Notes:

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

# Method 8260D Low Level

---

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

FORM II  
GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-30627-1

SDG No.: \_\_\_\_\_

Matrix: Water Level: Low

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

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
HD-COD-SW-6-0/1-0	410-30627-1	99	101	101	97
HD-COD-SW-7-0/1-0	410-30627-2	100	101	101	97
HD-COD-SW-8-0/1-0	410-30627-3	101	101	102	97
HD-COD-SW-9-0/1-0	410-30627-4	103	101	98	97
HD-COD-SW-13-0/1-0	410-30627-5	103	103	97	97
HD-COD-SW-15-0/1-0	410-30627-6	102	101	97	97
HD-COD-SW-16-0/1-0	410-30627-7	104	104	98	96
HD-COD-SW-17-0/1-0	410-30627-8	103	102	98	96
HD-COD-SW-26-0/1-0	410-30627-9	103	103	98	97
HD-COD-SW-27-0/1-0	410-30627-10	104	101	97	96
HD-COD-SW-28-0/1-0	410-30627-11	103	102	98	96
HD-COD-SW-29-0/1-0	410-30627-12	104	102	97	97
HD-QC1-0/1-1	410-30627-13	102	104	98	97
HD-QC1-0/1-2	410-30627-14	102	103	98	97
	MB 410-99025/10	100	102	101	96
	MB 410-99333/8	102	102	98	97
	LCS 410-99025/5	101	103	101	97
	LCS 410-99333/5	100	102	98	99
	LCSD 410-99025/6	102	100	101	97
HD-COD-SW-15-0/1-0 MS	410-30627-6 MS	101	98	99	99
HD-COD-SW-15-0/1-0 MSD	410-30627-6 MSD	100	100	98	99

QC LIMITS

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

# Column to be used to flag recovery values

FORM II 8260D

FORM III  
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-30627-1

SDG No.: \_\_\_\_\_

Matrix: Water Level: Low Lab File ID: GM03X05.D

Lab ID: LCS 410-99025/5 Client ID: \_\_\_\_\_

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	5.00	4.79	96	71-134	
1,1,1-Trichloroethane	5.00	4.67	93	78-126	
1,1,2,2-Tetrachloroethane	5.00	4.67	93	75-123	
1,1,2-Trichloroethane	5.00	4.78	96	80-120	
1,1-Dichloroethane	5.00	4.48	90	74-120	
1,1-Dichloroethene	5.00	4.75	95	80-131	
1,2-Dibromoethane (EDB)	5.00	4.75	95	80-120	
1,2-Dichloroethane	5.00	4.35	87	69-122	
1,2-Dichloropropane	5.00	4.61	92	80-120	
2-Butanone (MEK)	37.5	35.9	96	59-141	
2-Hexanone	25.0	23.2	93	52-140	
4-Methyl-2-pentanone (MIBK)	25.0	23.3	93	55-140	
Acetone	37.5	33.3	89	60-146	
Benzene	5.00	4.55	91	80-120	
Bromochloromethane	5.00	4.80	96	80-120	
Bromodichloromethane	5.00	4.64	93	73-124	
Bromoform	5.00	4.87	97	49-144	
Bromomethane	5.00	4.41	88	60-136	
Carbon disulfide	5.00	4.55	91	67-130	
Carbon tetrachloride	5.00	4.80	96	64-141	
Chlorobenzene	5.00	4.86	97	80-120	
Chloroethane	5.00	4.28	86	63-120	
Chloroform	5.00	4.65	93	80-120	
Chloromethane	5.00	4.02	80	56-124	
cis-1,2-Dichloroethene	5.00	4.76	95	80-122	
cis-1,3-Dichloropropene	5.00	4.42	88	67-121	
Dibromochloromethane	5.00	4.79	96	64-138	
Ethylbenzene	5.00	4.66	93	80-120	
Methyl tert-butyl ether	5.00	4.32	86	69-120	
Methylene Chloride	5.00	4.77	95	80-120	
Styrene	5.00	4.77	95	80-120	
Tetrachloroethene	5.00	4.97	99	80-120	
Toluene	5.00	4.69	94	80-120	
trans-1,2-Dichloroethene	5.00	4.74	95	80-122	
trans-1,3-Dichloropropene	5.00	4.61	92	61-129	
Trichloroethene	5.00	4.66	93	80-120	
Vinyl chloride	5.00	4.47	89	60-125	
Xylenes, Total	15.0	14.5	97	80-120	

# Column to be used to flag recovery and RPD values

FORM III  
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-30627-1

SDG No.: \_\_\_\_\_

Matrix: Water Level: Low Lab File ID: IM03L31.D

Lab ID: LCS 410-99333/5 Client ID: \_\_\_\_\_

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	5.00	4.79	96	71-134	
1,1,1-Trichloroethane	5.00	4.90	98	78-126	
1,1,2,2-Tetrachloroethane	5.00	4.77	95	75-123	
1,1,2-Trichloroethane	5.00	4.81	96	80-120	
1,1-Dichloroethane	5.00	4.81	96	74-120	
1,1-Dichloroethene	5.00	4.84	97	80-131	
1,2-Dibromoethane (EDB)	5.00	4.75	95	80-120	
1,2-Dichloroethane	5.00	4.88	98	69-122	
1,2-Dichloropropane	5.00	5.00	100	80-120	
2-Butanone (MEK)	37.5	44.4	118	59-141	
2-Hexanone	25.0	30.7	123	52-140	
4-Methyl-2-pentanone (MIBK)	25.0	30.5	122	55-140	
Acetone	37.5	36.9	99	60-146	
Benzene	5.00	4.80	96	80-120	
Bromochloromethane	5.00	4.73	95	80-120	
Bromodichloromethane	5.00	4.96	99	73-124	
Bromoform	5.00	4.75	95	49-144	
Bromomethane	5.00	4.96	99	60-136	
Carbon disulfide	5.00	4.71	94	67-130	
Carbon tetrachloride	5.00	4.95	99	64-141	
Chlorobenzene	5.00	4.71	94	80-120	
Chloroethane	5.00	4.86	97	63-120	
Chloroform	5.00	4.87	97	80-120	
Chloromethane	5.00	4.84	97	56-124	
cis-1,2-Dichloroethene	5.00	4.77	95	80-122	
cis-1,3-Dichloropropene	5.00	4.97	99	67-121	
Dibromochloromethane	5.00	4.74	95	64-138	
Ethylbenzene	5.00	4.64	93	80-120	
Methyl tert-butyl ether	5.00	4.71	94	69-120	
Methylene Chloride	5.00	4.76	95	80-120	
Styrene	5.00	4.73	95	80-120	
Tetrachloroethene	5.00	4.60	92	80-120	
Toluene	5.00	4.58	92	80-120	
trans-1,2-Dichloroethene	5.00	4.76	95	80-122	
trans-1,3-Dichloropropene	5.00	5.13	103	61-129	
Trichloroethene	5.00	4.76	95	80-120	
Vinyl chloride	5.00	5.05	101	60-125	
Xylenes, Total	15.0	13.9	93	80-120	

# Column to be used to flag recovery and RPD values



FORM III  
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-30627-1

SDG No.: \_\_\_\_\_

Matrix: Water Level: Low Lab File ID: GM03X06.D

Lab ID: LCSD 410-99025/6 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	4.76	95	1	30	71-134	
1,1,1-Trichloroethane	5.00	4.69	94	0	30	78-126	
1,1,2,2-Tetrachloroethane	5.00	4.67	93	0	30	75-123	
1,1,2-Trichloroethane	5.00	4.88	98	2	30	80-120	
1,1-Dichloroethane	5.00	4.45	89	1	30	74-120	
1,1-Dichloroethene	5.00	4.69	94	1	30	80-131	
1,2-Dibromoethane (EDB)	5.00	4.65	93	2	30	80-120	
1,2-Dichloroethane	5.00	4.33	87	1	30	69-122	
1,2-Dichloropropane	5.00	4.58	92	1	30	80-120	
2-Butanone (MEK)	37.5	36.7	98	2	30	59-141	
2-Hexanone	25.0	24.5	98	5	30	52-140	
4-Methyl-2-pentanone (MIBK)	25.0	24.3	97	4	30	55-140	
Acetone	37.5	34.8	93	4	30	60-146	
Benzene	5.00	4.53	91	0	30	80-120	
Bromochloromethane	5.00	4.76	95	1	30	80-120	
Bromodichloromethane	5.00	4.60	92	1	30	73-124	
Bromoform	5.00	4.76	95	2	30	49-144	
Bromomethane	5.00	4.36	87	1	30	60-136	
Carbon disulfide	5.00	4.47	89	2	30	67-130	
Carbon tetrachloride	5.00	4.72	94	2	30	64-141	
Chlorobenzene	5.00	4.83	97	1	30	80-120	
Chloroethane	5.00	4.26	85	1	30	63-120	
Chloroform	5.00	4.60	92	1	30	80-120	
Chloromethane	5.00	4.01	80	0	30	56-124	
cis-1,2-Dichloroethene	5.00	4.73	95	1	30	80-122	
cis-1,3-Dichloropropene	5.00	4.33	87	2	30	67-121	
Dibromochloromethane	5.00	4.64	93	3	30	64-138	
Ethylbenzene	5.00	4.62	92	1	30	80-120	
Methyl tert-butyl ether	5.00	4.31	86	0	30	69-120	
Methylene Chloride	5.00	4.72	94	1	30	80-120	
Styrene	5.00	4.76	95	0	30	80-120	
Tetrachloroethene	5.00	4.98	100	0	30	80-120	
Toluene	5.00	4.62	92	1	30	80-120	
trans-1,2-Dichloroethene	5.00	4.64	93	2	30	80-122	
trans-1,3-Dichloropropene	5.00	4.46	89	3	30	61-129	
Trichloroethene	5.00	4.72	94	1	30	80-120	
Vinyl chloride	5.00	4.22	84	6	30	60-125	
Xylenes, Total	15.0	14.4	96	1	30	80-120	

# Column to be used to flag recovery and RPD values

FORM III  
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins Lancaster Laboratories

Job No.: 410-30627-1

SDG No.: \_\_\_\_\_

Matrix: Water

Level: Low

Lab File ID: IM03S38.D

Lab ID: 410-30627-6 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	4.93	99	71-134	
1,1,1-Trichloroethane	5.00	0.10 J	5.21	102	78-126	
1,1,2,2-Tetrachloroethane	5.00	ND	4.82	96	75-123	
1,1,2-Trichloroethane	5.00	ND	4.92	98	80-120	
1,1-Dichloroethane	5.00	ND	4.91	98	74-120	
1,1-Dichloroethene	5.00	0.064 J	5.16	102	80-131	
1,2-Dibromoethane (EDB)	5.00	ND	4.72	94	80-120	
1,2-Dichloroethane	5.00	ND	4.85	97	69-122	
1,2-Dichloropropane	5.00	ND	5.00	100	80-120	
2-Butanone (MEK)	37.5	ND	34.9	93	59-141	
2-Hexanone	25.0	ND	24.4	97	52-140	
4-Methyl-2-pentanone (MIBK)	25.0	ND	23.2	93	55-140	
Acetone	37.5	1.2 J	31.4	80	60-146	
Benzene	5.00	ND	4.86	97	80-120	
Bromochloromethane	5.00	ND	4.65	93	80-120	
Bromodichloromethane	5.00	ND	4.97	99	73-124	
Bromoform	5.00	ND	4.80	96	49-144	
Bromomethane	5.00	ND	4.92	98	60-136	
Carbon disulfide	5.00	ND	4.75	95	67-130	
Carbon tetrachloride	5.00	ND	5.19	104	64-141	
Chlorobenzene	5.00	ND	4.88	97	80-120	
Chloroethane	5.00	ND	4.96	99	63-120	
Chloroform	5.00	0.14 J	5.13	100	80-120	
Chloromethane	5.00	ND	4.96	99	80-120	
cis-1,2-Dichloroethene	5.00	0.43 J	5.21	95	80-122	
cis-1,3-Dichloropropene	5.00	ND	4.90	98	67-121	
Dibromochloromethane	5.00	ND	4.89	98	64-138	
Ethylbenzene	5.00	ND	4.88	98	80-120	
Methyl tert-butyl ether	5.00	ND	4.59	92	69-120	
Methylene Chloride	5.00	ND	4.78	96	80-120	
Styrene	5.00	ND	4.92	98	80-120	
Tetrachloroethene	5.00	1.5	6.46	99	80-120	
Toluene	5.00	ND	4.81	96	80-120	
trans-1,2-Dichloroethene	5.00	ND	4.83	97	80-122	
trans-1,3-Dichloropropene	5.00	ND	4.99	100	61-129	
Trichloroethene	5.00	0.53	5.53	100	80-120	
Vinyl chloride	5.00	ND	5.21	104	60-125	
Xylenes, Total	15.0	ND	14.7	98	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

Job No.: 410-30627-1

SDG No.: \_\_\_\_\_

Matrix: Water

Level: Low

Lab File ID: IM03S39.D

Lab ID: 410-30627-6 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	5.00	100	1	30	71-134	
1,1,1-Trichloroethane	5.00	5.24	103	1	30	78-126	
1,1,2,2-Tetrachloroethane	5.00	4.81	96	0	30	75-123	
1,1,2-Trichloroethane	5.00	4.91	98	0	30	80-120	
1,1-Dichloroethane	5.00	4.93	99	0	30	74-120	
1,1-Dichloroethene	5.00	5.09	101	1	30	80-131	
1,2-Dibromoethane (EDB)	5.00	4.77	95	1	30	80-120	
1,2-Dichloroethane	5.00	4.82	96	0	30	69-122	
1,2-Dichloropropane	5.00	5.06	101	1	30	80-120	
2-Butanone (MEK)	37.5	34.9	93	0	30	59-141	
2-Hexanone	25.0	24.3	97	0	30	52-140	
4-Methyl-2-pentanone (MIBK)	25.0	23.5	94	1	30	55-140	
Acetone	37.5	31.3	80	0	30	60-146	
Benzene	5.00	4.89	98	1	30	80-120	
Bromochloromethane	5.00	4.72	94	1	30	80-120	
Bromodichloromethane	5.00	4.98	100	0	30	73-124	
Bromoform	5.00	4.86	97	1	30	49-144	
Bromomethane	5.00	5.07	101	3	30	60-136	
Carbon disulfide	5.00	4.72	94	1	30	67-130	
Carbon tetrachloride	5.00	5.24	105	1	30	64-141	
Chlorobenzene	5.00	4.89	98	0	30	80-120	
Chloroethane	5.00	4.97	99	0	30	63-120	
Chloroform	5.00	5.11	99	0	30	80-120	
Chloromethane	5.00	5.07	101	2	30	80-120	
cis-1,2-Dichloroethene	5.00	5.27	97	1	30	80-122	
cis-1,3-Dichloropropene	5.00	4.99	100	2	30	67-121	
Dibromochloromethane	5.00	4.84	97	1	30	64-138	
Ethylbenzene	5.00	4.91	98	0	30	80-120	
Methyl tert-butyl ether	5.00	4.67	93	2	30	69-120	
Methylene Chloride	5.00	4.75	95	1	30	80-120	
Styrene	5.00	4.88	97	1	30	80-120	
Tetrachloroethene	5.00	6.56	100	1	30	80-120	
Toluene	5.00	4.82	96	0	30	80-120	
trans-1,2-Dichloroethene	5.00	4.91	98	2	30	80-122	
trans-1,3-Dichloropropene	5.00	5.17	103	4	30	61-129	
Trichloroethene	5.00	5.50	99	1	30	80-120	
Vinyl chloride	5.00	5.34	107	3	30	60-125	
Xylenes, Total	15.0	14.6	97	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 Job No.: 410-30627-1  
 SDG No.: \_\_\_\_\_  
 Lab File ID: GM03X10.D Lab Sample ID: MB 410-99025/10  
 Matrix: Water Heated Purge: (Y/N) N  
 Instrument ID: 16334 Date Analyzed: 03/03/2021 11:51  
 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 410-99025/5	GM03X05.D	03/03/2021 10:01
	LCSD 410-99025/6	GM03X06.D	03/03/2021 10:23
HD-COD-SW-6-0/1-0	410-30627-1	GM03X20.D	03/03/2021 15:30
HD-COD-SW-7-0/1-0	410-30627-2	GM03X21.D	03/03/2021 15:52
HD-COD-SW-8-0/1-0	410-30627-3	GM03X22.D	03/03/2021 16:14

FORM IV  
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-30627-1  
 SDG No.: \_\_\_\_\_  
 Lab File ID: IM03B31.D Lab Sample ID: MB 410-99333/8  
 Matrix: Water Heated Purge: (Y/N) N  
 Instrument ID: 19930 Date Analyzed: 03/03/2021 21:15  
 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 410-99333/5	IM03L31.D	03/03/2021 20:11
HD-QC1-0/1-2	410-30627-14	IM03S31.D	03/03/2021 21:36
HD-COD-SW-9-0/1-0	410-30627-4	IM03S35.D	03/03/2021 23:02
HD-COD-SW-13-0/1-0	410-30627-5	IM03S36.D	03/03/2021 23:23
HD-COD-SW-15-0/1-0	410-30627-6	IM03S37.D	03/03/2021 23:44
HD-COD-SW-15-0/1-0 MS	410-30627-6 MS	IM03S38.D	03/04/2021 00:05
HD-COD-SW-15-0/1-0 MSD	410-30627-6 MSD	IM03S39.D	03/04/2021 00:27
HD-COD-SW-16-0/1-0	410-30627-7	IM03S42.D	03/04/2021 01:31
HD-COD-SW-17-0/1-0	410-30627-8	IM03S43.D	03/04/2021 01:52
HD-COD-SW-26-0/1-0	410-30627-9	IM03S44.D	03/04/2021 02:13
HD-COD-SW-27-0/1-0	410-30627-10	IM03S45.D	03/04/2021 02:35
HD-COD-SW-28-0/1-0	410-30627-11	IM03S46.D	03/04/2021 02:56
HD-COD-SW-29-0/1-0	410-30627-12	IM03S47.D	03/04/2021 03:17
HD-QC1-0/1-1	410-30627-13	IM03S48.D	03/04/2021 03:38

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

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-30627-1

SDG No.: \_\_\_\_\_

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

Instrument ID: 16334 BFB Injection Time: 11:46

Analysis Batch No.: 70996

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	17.6	
75	30.0 - 60.0 % of mass 95	46.9	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.8	
173	Less than 2.0 % of mass 174	0.2	(0.3) 1
174	Greater than 50% of mass 95	79.8	
175	5.0 - 9.0 % of mass 174	6.0	(7.5) 1
176	95.0 - 101.0 % of mass 174	76.1	(95.4) 1
177	5.0 - 9.0 % of mass 176	5.2	(6.8) 2

1-Value is % mass 174

2-Value is % mass 176

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 410-70996/3	GN30I01.D	11/30/2020	12:50
	ICIS 410-70996/4	GN30I02.D	11/30/2020	13:12
	IC 410-70996/5	GN30I03.D	11/30/2020	13:34
	IC 410-70996/6	GN30I04.D	11/30/2020	13:56
	IC 410-70996/7	GN30I05.D	11/30/2020	14:19
	IC 410-70996/8	GN30I06.D	11/30/2020	14:41
	IC 410-70996/9	GN30I07.D	11/30/2020	15:03
	ICV 410-70996/10	GN30V01.D	11/30/2020	15:26

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

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-30627-1

SDG No.: \_\_\_\_\_

Lab File ID: GM03T02.D BFB Injection Date: 03/03/2021

Instrument ID: 16334 BFB Injection Time: 08:28

Analysis Batch No.: 99025

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	16.0	
75	30.0 - 60.0 % of mass 95	46.3	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.1	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	Greater than 50% of mass 95	85.9	
175	5.0 - 9.0 % of mass 174	7.1	(8.2) 1
176	95.0 - 101.0 % of mass 174	83.8	(97.6) 1
177	5.0 - 9.0 % of mass 176	5.5	(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
	CCVIS 410-99025/3	GM03X03.D	03/03/2021	9:17
	LCS 410-99025/5	GM03X05.D	03/03/2021	10:01
	LCSD 410-99025/6	GM03X06.D	03/03/2021	10:23
	MB 410-99025/10	GM03X10.D	03/03/2021	11:51
HD-COD-SW-6-0/1-0	410-30627-1	GM03X20.D	03/03/2021	15:30
HD-COD-SW-7-0/1-0	410-30627-2	GM03X21.D	03/03/2021	15:52
HD-COD-SW-8-0/1-0	410-30627-3	GM03X22.D	03/03/2021	16:14

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

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-30627-1

SDG No.: \_\_\_\_\_

Lab File ID: IN23T01.D BFB Injection Date: 11/23/2020

Instrument ID: 19930 BFB Injection Time: 11:57

Analysis Batch No.: 69397

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	15.4
75	30.0 - 60.0 % of mass 95	46.0
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	6.8
173	Less than 2.0 % of mass 174	0.8 (0.9) 1
174	Greater than 50% of mass 95	85.9
175	5.0 - 9.0 % of mass 174	6.4 (7.4) 1
176	95.0 - 101.0 % of mass 174	83.0 (96.6) 1
177	5.0 - 9.0 % of mass 176	5.6 (6.7) 2

1-Value is % mass 174

2-Value is % mass 176

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 410-69397/3	IN23I01.D	11/23/2020	12:45
	ICIS 410-69397/4	IN23I02.D	11/23/2020	13:06
	IC 410-69397/5	IN23I03.D	11/23/2020	13:28
	IC 410-69397/6	IN23I04.D	11/23/2020	13:49
	IC 410-69397/7	IN23I05.D	11/23/2020	14:10
	IC 410-69397/8	IN23I06.D	11/23/2020	14:31
	IC 410-69397/9	IN23I07.D	11/23/2020	14:53
	ICV 410-69397/10	IN23V01.D	11/23/2020	15:14



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

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-30627-1

SDG No.: \_\_\_\_\_

Lab File ID: IM03T31.D BFB Injection Date: 03/03/2021

Instrument ID: 19930 BFB Injection Time: 18:52

Analysis Batch No.: 99333

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	16.6
75	30.0 - 60.0 % of mass 95	46.0
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	6.7
173	Less than 2.0 % of mass 174	1.0 (1.1) 1
174	Greater than 50% of mass 95	89.4
175	5.0 - 9.0 % of mass 174	6.6 (7.4) 1
176	95.0 - 101.0 % of mass 174	86.0 (96.1) 1
177	5.0 - 9.0 % of mass 176	5.7 (6.6) 2

1-Value is % mass 174

2-Value is % mass 176

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 410-99333/3	IM03C31.D	03/03/2021	19:28
	LCS 410-99333/5	IM03L31.D	03/03/2021	20:11
	MB 410-99333/8	IM03B31.D	03/03/2021	21:15
HD-QC1-0/1-2	410-30627-14	IM03S31.D	03/03/2021	21:36
HD-COD-SW-9-0/1-0	410-30627-4	IM03S35.D	03/03/2021	23:02
HD-COD-SW-13-0/1-0	410-30627-5	IM03S36.D	03/03/2021	23:23
HD-COD-SW-15-0/1-0	410-30627-6	IM03S37.D	03/03/2021	23:44
HD-COD-SW-15-0/1-0 MS	410-30627-6 MS	IM03S38.D	03/04/2021	0:05
HD-COD-SW-15-0/1-0 MSD	410-30627-6 MSD	IM03S39.D	03/04/2021	0:27
HD-COD-SW-16-0/1-0	410-30627-7	IM03S42.D	03/04/2021	1:31
HD-COD-SW-17-0/1-0	410-30627-8	IM03S43.D	03/04/2021	1:52
HD-COD-SW-26-0/1-0	410-30627-9	IM03S44.D	03/04/2021	2:13
HD-COD-SW-27-0/1-0	410-30627-10	IM03S45.D	03/04/2021	2:35
HD-COD-SW-28-0/1-0	410-30627-11	IM03S46.D	03/04/2021	2:56
HD-COD-SW-29-0/1-0	410-30627-12	IM03S47.D	03/04/2021	3:17
HD-QC1-0/1-1	410-30627-13	IM03S48.D	03/04/2021	3:38

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

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-30627-1  
 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 410-99025/3	167452	4.18	1989071	7.67	1435532	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 E Job No.: 410-30627-1  
 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 410-99025/3		795212	13.02			

DCBd4 = 1,4-Dichlorobenzene-d4

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

# Column used to flag values outside QC limits

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

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-30627-1  
 SDG No.: \_\_\_\_\_  
 Sample No.: CCVIS 410-99025/3 Date Analyzed: 03/03/2021 09:17  
 Instrument ID: 16334 GC Column: R-624SilMS 30m ID: 0.25 (mm)  
 Lab File ID (Standard): GM03X03.D Heated Purge: (Y/N) N  
 Calibration ID: 16334

	TBAd10		FB		CBzd5		
	AREA #	RT #	AREA #	RT #	AREA #	RT #	
12/24 HOUR STD	167452	4.18	1989071	7.67	1435532	11.15	
UPPER LIMIT	334904	4.68	3978142	8.17	2871064	11.65	
LOWER LIMIT	83726	3.68	994536	7.17	717766	10.65	
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 410-99025/5		156614	4.19	1948700	7.67	1411163	11.15
LCSD 410-99025/6		148787	4.18	1947371	7.67	1413917	11.15
MB 410-99025/10		171790	4.20	1917321	7.67	1388571	11.15
410-30627-1	HD-COD-SW-6-0/1-0	159054	4.19	1917229	7.67	1388737	11.15
410-30627-2	HD-COD-SW-7-0/1-0	157676	4.19	1921480	7.67	1389459	11.15
410-30627-3	HD-COD-SW-8-0/1-0	155516	4.18	1917371	7.67	1379529	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 E Job No.: 410-30627-1  
 SDG No.: \_\_\_\_\_  
 Sample No.: CCVIS 410-99025/3 Date Analyzed: 03/03/2021 09:17  
 Instrument ID: 16334 GC Column: R-624SilMS 30m ID: 0.25 (mm)  
 Lab File ID (Standard): GM03X03.D Heated Purge: (Y/N) N  
 Calibration ID: 16334

		DCBd4					
		AREA #	RT #	#	RT #	#	RT #
12/24 HOUR STD		795212	13.02				
UPPER LIMIT		1590424	13.52				
LOWER LIMIT		397606	12.52				
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 410-99025/5		773424	13.02				
LCSD 410-99025/6		773988	13.02				
MB 410-99025/10		774763	13.02				
410-30627-1	HD-COD-SW-6-0/1-0	770749	13.02				
410-30627-2	HD-COD-SW-7-0/1-0	772772	13.02				
410-30627-3	HD-COD-SW-8-0/1-0	770528	13.02				

DCBd4 = 1,4-Dichlorobenzene-d4

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

# Column used to flag values outside QC limits

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

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-30627-1  
 SDG No.: \_\_\_\_\_  
 Sample No.: ICIS 410-69397/4 Date Analyzed: 11/23/2020 13:06  
 Instrument ID: 19930 GC Column: R-624SilMS 30m ID: 0.25 (mm)  
 Lab File ID (Standard): IN23I02.D Heated Purge: (Y/N) N  
 Calibration ID: 16044

	TBAd10		FB		CBZd5	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT	174562	4.26	2065893	7.74	1570516	11.19
UPPER LIMIT	349124	4.76	4131786	8.24	3141032	11.69
LOWER LIMIT	87281	3.76	1032947	7.24	785258	10.69
LAB SAMPLE ID	CLIENT SAMPLE ID					
ICV 410-69397/10	161987	4.27	1977703	7.74	1497197	11.19
CCVIS 410-99333/3	177432	4.28	2405431	7.74	1896963	11.19

TBAd10 = t-Butyl alcohol-d10 (IS)  
 FB = Fluorobenzene (IS)  
 CBZd5 = Chlorobenzene-d5 (IS)

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

# Column used to flag values outside QC limits

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

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-30627-1  
 SDG No.: \_\_\_\_\_  
 Sample No.: ICIS 410-69397/4 Date Analyzed: 11/23/2020 13:06  
 Instrument ID: 19930 GC Column: R-624SilMS 30m ID: 0.25 (mm)  
 Lab File ID (Standard): IN23I02.D Heated Purge: (Y/N) N  
 Calibration ID: 16044

	DCBd4		#	RT #	#	RT #
	AREA #	RT #				
INITIAL CALIBRATION MID-POINT	891775	13.07				
UPPER LIMIT	1783550	13.57				
LOWER LIMIT	445888	12.57				
LAB SAMPLE ID	CLIENT SAMPLE ID					
ICV 410-69397/10		852390	13.07			
CCVIS 410-99333/3		1096331	13.07			

DCBd4 = 1,4-Dichlorobenzene-d4

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

# Column used to flag values outside QC limits

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

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-30627-1  
 SDG No.: \_\_\_\_\_  
 Sample No.: CCVIS 410-99333/3 Date Analyzed: 03/03/2021 19:28  
 Instrument ID: 19930 GC Column: R-624SilMS 30m ID: 0.25 (mm)  
 Lab File ID (Standard): IM03C31.D Heated Purge: (Y/N) N  
 Calibration ID: 16044

	TBAd10		FB		CBZd5		
	AREA #	RT #	AREA #	RT #	AREA #	RT #	
12/24 HOUR STD	177432	4.28	2405431	7.74	1896963	11.19	
UPPER LIMIT	354864	4.78	4810862	8.24	3793926	11.69	
LOWER LIMIT	88716	3.78	1202716	7.24	948482	10.69	
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 410-99333/5		161249	4.26	2245786	7.74	1753429	11.19
MB 410-99333/8		179232	4.26	2203806	7.74	1698029	11.19
410-30627-14	HD-QC1-0/1-2	168591	4.26	2179616	7.74	1688476	11.19
410-30627-4	HD-COD-SW-9-0/1-0	180854	4.27	2105307	7.74	1647077	11.19
410-30627-5	HD-COD-SW-13-0/1-0	182612	4.25	2114879	7.74	1654452	11.19
410-30627-6	HD-COD-SW-15-0/1-0	188788	4.28	2117422	7.74	1644384	11.19
410-30627-6 MS	HD-COD-SW-15-0/1-0 MS	193518	4.29	2156375	7.74	1661378	11.19
410-30627-6 MSD	HD-COD-SW-15-0/1-0 MSD	194375	4.28	2131764	7.74	1650321	11.19
410-30627-7	HD-COD-SW-16-0/1-0	192932	4.28	2123637	7.74	1667506	11.19
410-30627-8	HD-COD-SW-17-0/1-0	186459	4.26	2098535	7.74	1644777	11.19
410-30627-9	HD-COD-SW-26-0/1-0	181118	4.26	2044499	7.74	1588889	11.19
410-30627-10	HD-COD-SW-27-0/1-0	171510	4.27	2097826	7.74	1641455	11.19
410-30627-11	HD-COD-SW-28-0/1-0	189916	4.27	2088659	7.74	1630216	11.19
410-30627-12	HD-COD-SW-29-0/1-0	172533	4.27	2014856	7.74	1581773	11.19
410-30627-13	HD-QC1-0/1-1	179372	4.25	2081917	7.74	1617598	11.19

TBAd10 = t-Butyl alcohol-d10 (IS)  
 FB = Fluorobenzene (IS)  
 CBZd5 = Chlorobenzene-d5 (IS)

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

# Column used to flag values outside QC limits



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

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-30627-1  
 SDG No.: \_\_\_\_\_  
 Sample No.: CCVIS 410-99333/3 Date Analyzed: 03/03/2021 19:28  
 Instrument ID: 19930 GC Column: R-624SilMS 30m ID: 0.25 (mm)  
 Lab File ID (Standard): IM03C31.D Heated Purge: (Y/N) N  
 Calibration ID: 16044

		DCBd4					
		AREA #	RT #	#	RT #	#	RT #
12/24 HOUR STD		1096331	13.07				
UPPER LIMIT		2192662	13.57				
LOWER LIMIT		548166	12.57				
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 410-99333/5		988861	13.07				
MB 410-99333/8		963700	13.07				
410-30627-14	HD-QC1-0/1-2	958169	13.07				
410-30627-4	HD-COD-SW-9-0/1-0	943157	13.07				
410-30627-5	HD-COD-SW-13-0/1-0	938478	13.07				
410-30627-6	HD-COD-SW-15-0/1-0	932139	13.07				
410-30627-6 MS	HD-COD-SW-15-0/1-0 MS	962745	13.07				
410-30627-6 MSD	HD-COD-SW-15-0/1-0 MSD	945965	13.07				
410-30627-7	HD-COD-SW-16-0/1-0	946853	13.07				
410-30627-8	HD-COD-SW-17-0/1-0	933092	13.07				
410-30627-9	HD-COD-SW-26-0/1-0	907388	13.07				
410-30627-10	HD-COD-SW-27-0/1-0	934420	13.07				
410-30627-11	HD-COD-SW-28-0/1-0	931344	13.07				
410-30627-12	HD-COD-SW-29-0/1-0	897657	13.07				
410-30627-13	HD-QC1-0/1-1	929958	13.07				

DCBd4 = 1,4-Dichlorobenzene-d4

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

# Column used to flag values outside QC limits

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-30627-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: HD-COD-SW-6-0/1-0 Lab Sample ID: 410-30627-1  
 Matrix: Water Lab File ID: GM03X20.D  
 Analysis Method: 8260D Date Collected: 02/25/2021 11:05  
 Sample wt/vol: 25 (mL) Date Analyzed: 03/03/2021 15:30  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: R-624SilMS 30m ID: 0.25 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 99025 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	^c	0.50	0.060
156-59-2	cis-1,2-Dichloroethene	ND		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.050
124-48-1	Dibromochloromethane	ND		0.50	0.070
100-41-4	Ethylbenzene	ND		0.50	0.060
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.050
75-09-2	Methylene Chloride	ND		0.50	0.070
100-42-5	Styrene	ND		0.50	0.050
127-18-4	Tetrachloroethene	ND		0.50	0.060
108-88-3	Toluene	ND		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	ND		0.50	0.060

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-30627-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: HD-COD-SW-6-0/1-0 Lab Sample ID: 410-30627-1  
 Matrix: Water Lab File ID: GM03X20.D  
 Analysis Method: 8260D Date Collected: 02/25/2021 11:05  
 Sample wt/vol: 25 (mL) Date Analyzed: 03/03/2021 15:30  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: R-624SilMS 30m ID: 0.25 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 99025 Units: ug/L

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

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		80-120
460-00-4	4-Bromofluorobenzene (Surr)	97		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\20210303-23166.b\GM03X20.D  
 Lims ID: 410-30627-A-1  
 Client ID: HD-COD-SW-6-0/1-0  
 Sample Type: Client  
 Inject. Date: 03-Mar-2021 15:30:30 ALS Bottle#: 20 Worklist Smp#: 20  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0023166-020  
 Misc. Info.: 410-30627-A-2  
 Operator ID: SRK36897 Instrument ID: 16334  
 Method: \\chromfs\Lancaster\ChromData\16334\20210303-23166.b\MSV\_16334\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 03-Mar-2021 18:00:06 Calib Date: 30-Nov-2020 18:23:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I17.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1646

First Level Reviewer: campbellme

Date: 03-Mar-2021 17:59:09

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
5 Chloromethane	50		2.136				ND	
8 Vinyl chloride	62		2.251				ND	
9 Bromomethane	94		2.568				ND	
10 Chloroethane	64		2.660				ND	
19 1,1-Dichloroethene	96		3.507				ND	
21 Acetone	43	3.556	3.544	0.012	98	11838	1.52	
25 Carbon disulfide	76	3.812	3.794	0.018	53	4129	0.0280	7M
29 Methylene Chloride	84	4.166	4.166	0.000	32	1638	0.0358	M
* 30 t-Butyl alcohol-d10 (IS)	65	4.190	4.178	0.012	0	159054	50.0	
33 Methyl tert-butyl ether	73		4.568				ND	
34 trans-1,2-Dichloroethene	96		4.568				ND	
37 1,1-Dichloroethane	63		5.239				ND	
41 2-Butanone (MEK)	43		6.049				ND	
42 cis-1,2-Dichloroethene	96		6.080				ND	
49 Chlorobromomethane	128		6.403				ND	
51 Chloroform	83		6.562				ND	
\$ 52 Dibromofluoromethane (Surr)	113	6.787	6.775	0.012	94	461527	9.95	
53 1,1,1-Trichloroethane	97		6.787				ND	
56 Carbon tetrachloride	117		6.988				ND	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.232	7.232	0.000	0	100051	10.1	
60 Benzene	78		7.263				ND	7
61 1,2-Dichloroethane	62		7.336				ND	
* 64 Fluorobenzene (IS)	96	7.671	7.665	0.006	99	1917229	10.0	
68 Trichloroethene	95		8.140				ND	
70 1,2-Dichloropropane	63		8.482				ND	
76 Dichlorobromomethane	83		8.823				ND	
81 cis-1,3-Dichloropropene	75		9.372				ND	
82 4-Methyl-2-pentanone (MIBK)	43		9.555				ND	7
\$ 83 Toluene-d8 (Surr)	98	9.683	9.683	0.000	94	1865459	10.1	
84 Toluene	92	9.762	9.762	0.000	96	3757	0.0312	
96 trans-1,3-Dichloropropene	75		10.018				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
99 1,1,2-Trichloroethane	97		10.225				ND	
100 Tetrachloroethene	166	10.311	10.311	0.000	84	2218	0.0425	
102 2-Hexanone	43		10.445				ND	7
104 Chlorodibromomethane	129		10.603				ND	
105 Ethylene Dibromide	107		10.707				ND	
* 106 Chlorobenzene-d5 (IS)	117	11.146	11.146	0.000	85	1388737	10.0	
108 Chlorobenzene	112		11.170				ND	
S 109 Xylenes, Total	106		11.245				ND	7
110 1,1,1,2-Tetrachloroethane	131		11.250				ND	
111 Ethylbenzene	91		11.256				ND	
112 m-Xylene & p-Xylene	106		11.372				ND	7
113 o-Xylene	106		11.701				ND	7
114 Styrene	104		11.713				ND	
115 Bromoform	173		11.871				ND	
\$ 119 4-Bromofluorobenzene (Surr)	95	12.140	12.140	0.000	92	689044	9.74	
120 1,1,2,2-Tetrachloroethane	83		12.249				ND	
* 134 1,4-Dichlorobenzene-d4	152	13.017	13.018	-0.001	95	770749	10.0	

### QC Flag Legend

#### Processing Flags

7 - Failed Limit of Detection

#### Review Flags

M - Manually Integrated

### Reagents:

MSV\_29\_826ISS\_00015

Amount Added: 1.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\16334\20210303-23166.b\GM03X20.D

Injection Date: 03-Mar-2021 15:30:30

Instrument ID: 16334

Operator ID: SRK36897

Lims ID: 410-30627-A-1

Lab Sample ID: 410-30627-1

Worklist Smp#: 20

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

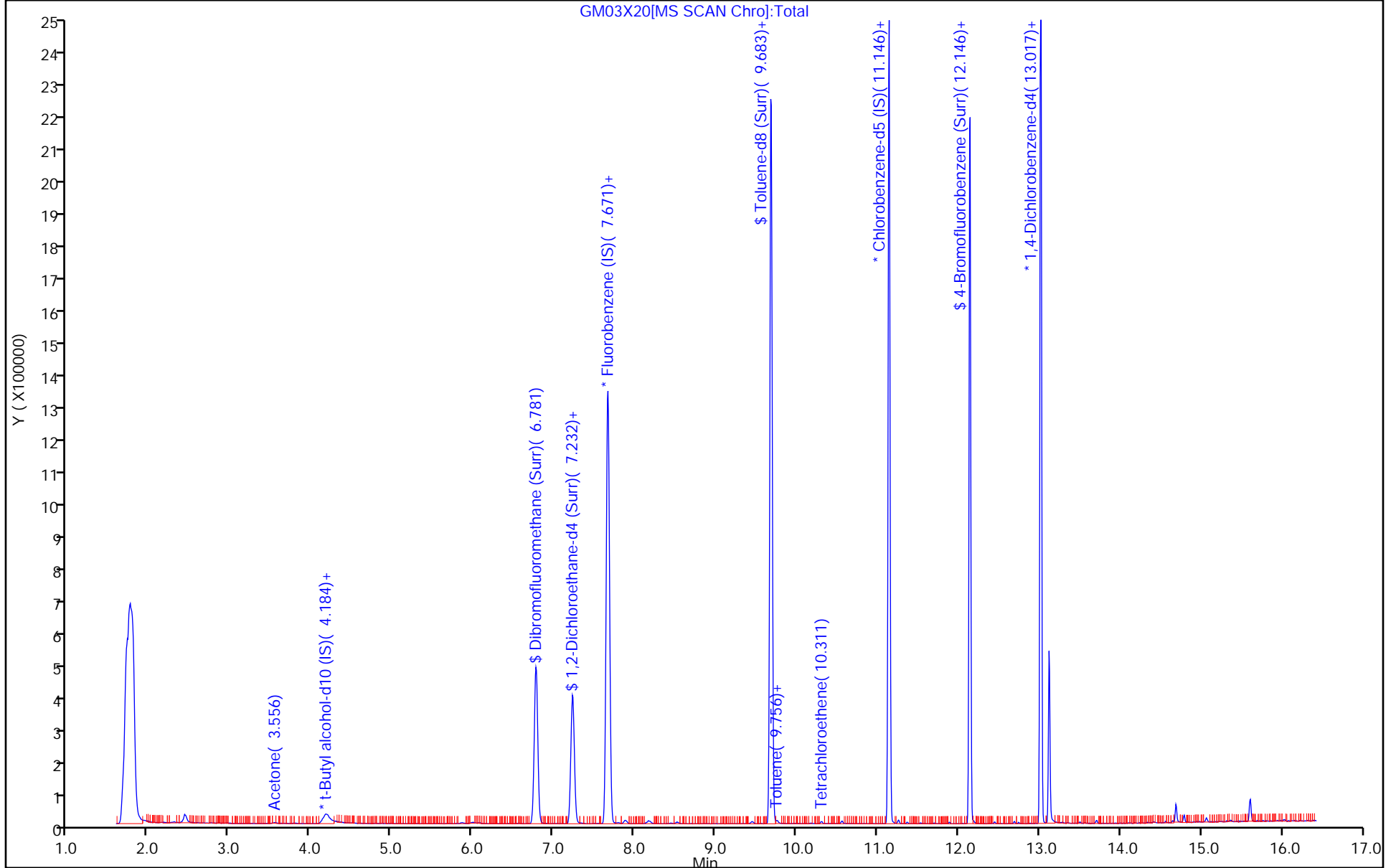
ALS Bottle#: 20

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\20210303-23166.b\GM03X20.D  
 Lims ID: 410-30627-A-1  
 Client ID: HD-COD-SW-6-0/1-0  
 Sample Type: Client  
 Inject. Date: 03-Mar-2021 15:30:30 ALS Bottle#: 20 Worklist Smp#: 20  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0023166-020  
 Misc. Info.: 410-30627-A-2  
 Operator ID: SRK36897 Instrument ID: 16334  
 Method: \\chromfs\Lancaster\ChromData\16334\20210303-23166.b\MSV\_16334\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 03-Mar-2021 18:00:06 Calib Date: 30-Nov-2020 18:23:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I17.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1646

First Level Reviewer: campbellme

Date: 03-Mar-2021 17:59:09

Compound	Amount Added	Amount Recovered	% Rec.
\$ 52 Dibromofluoromethane (Surr)	10.0	9.95	99.46
\$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	10.1	101.34
\$ 83 Toluene-d8 (Surr)	10.0	10.1	100.68
\$ 119 4-Bromofluorobenzene (Surr)	10.0	9.74	97.40

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20210303-23166.b\GM03X20.D

Injection Date: 03-Mar-2021 15:30:30

Instrument ID: 16334

Lims ID: 410-30627-A-1

Lab Sample ID: 410-30627-1

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

Operator ID: SRK36897

ALS Bottle#: 20

Worklist Smp#: 20

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

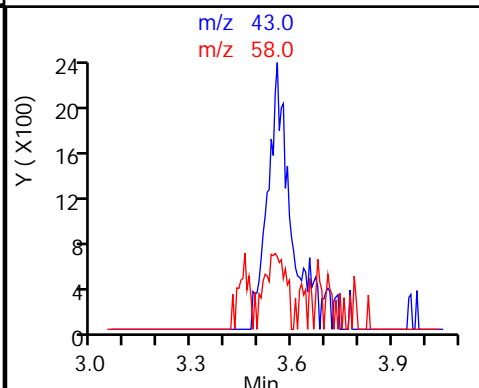
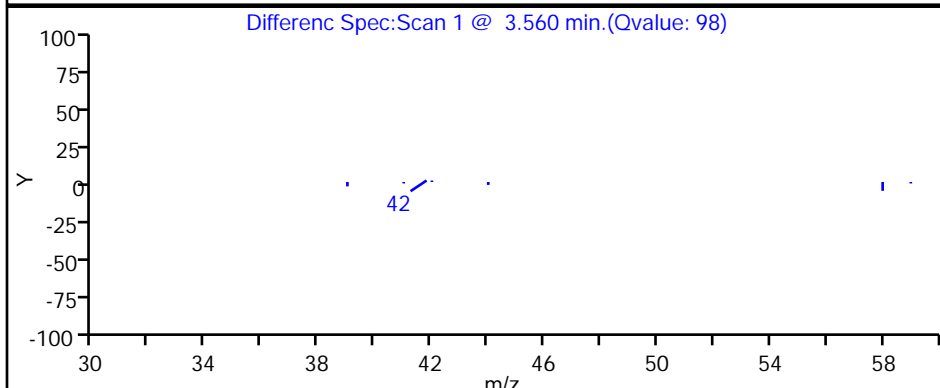
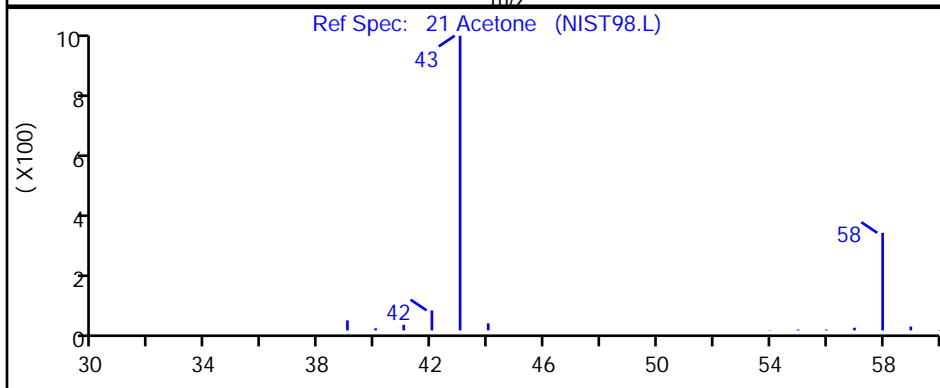
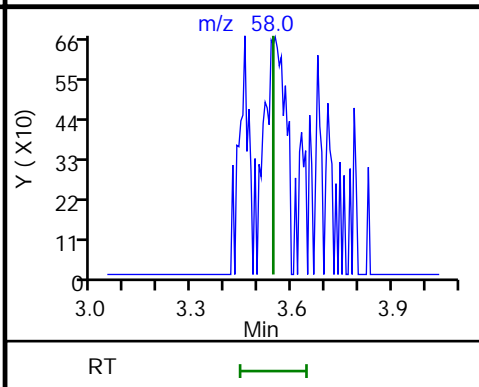
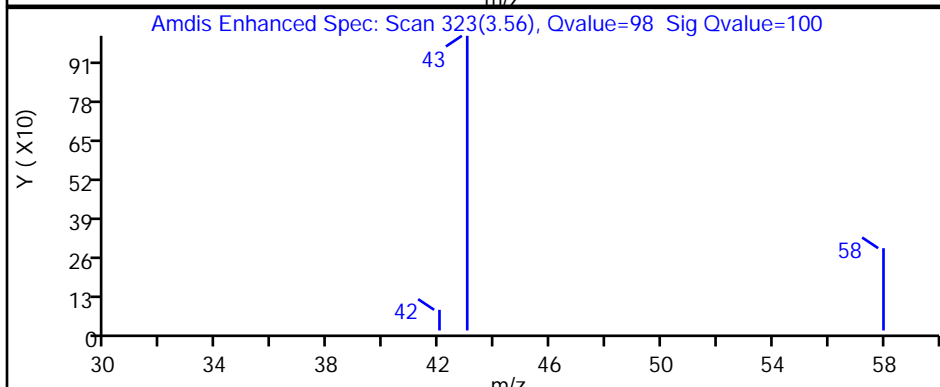
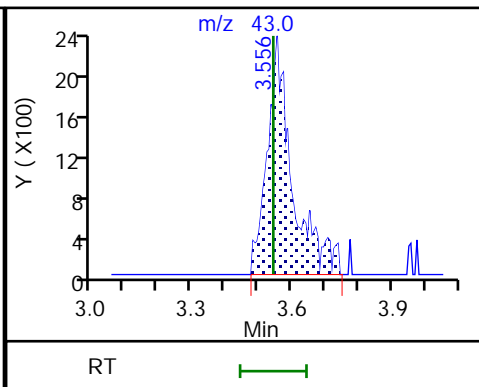
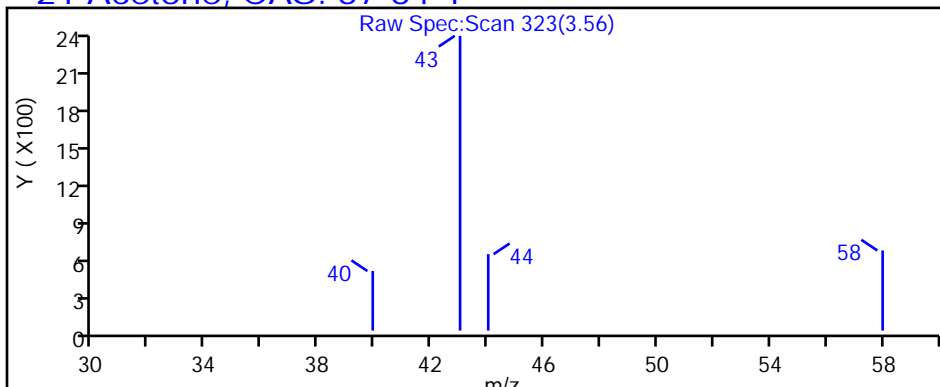
Method: MSV\_16334\_25mL

Limit Group: MSV - 8260C\_D

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

MS Quad

21 Acetone, CAS: 67-64-1





Euofins Lancaster Laboratories Env, LLC

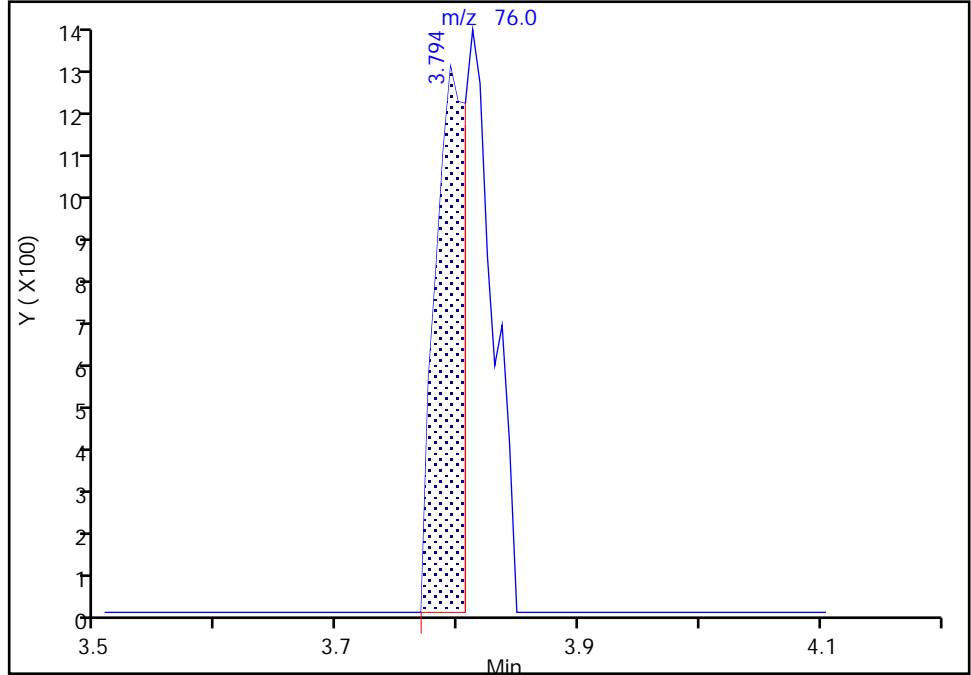
Data File: \\chromfs\Lancaster\ChromData\16334\20210303-23166.b\GM03X20.D  
Injection Date: 03-Mar-2021 15:30:30 Instrument ID: 16334  
Lims ID: 410-30627-A-1 Lab Sample ID: 410-30627-1  
Client ID: HD-COD-SW-6-0/1-0  
Operator ID: SRK36897 ALS Bottle#: 20 Worklist Smp#: 20  
Purge Vol: 25.000 mL Dil. 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

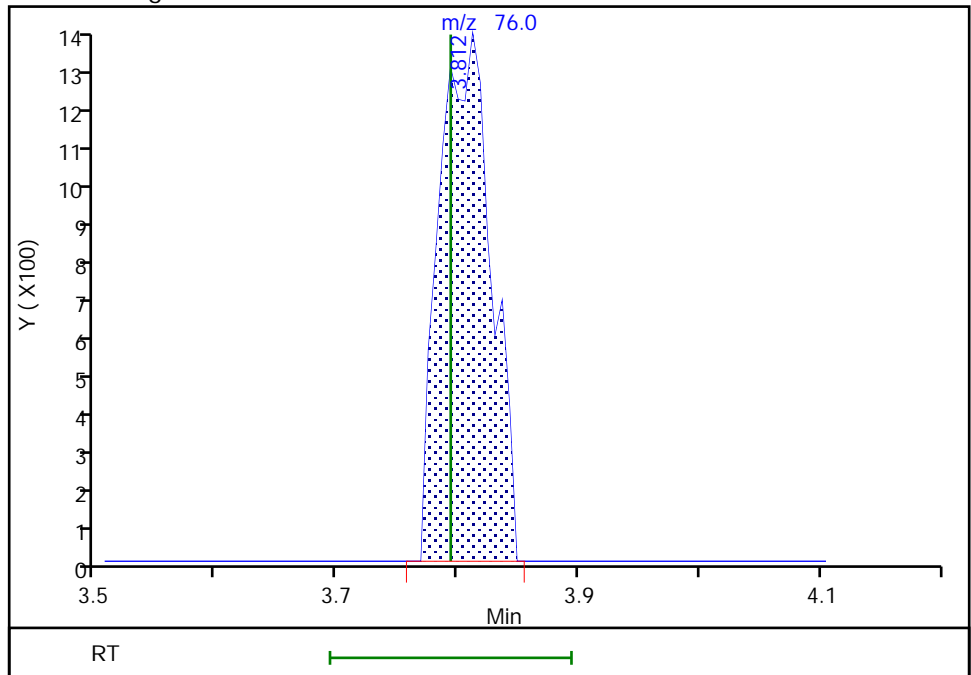
RT: 3.79  
Area: 2249  
Amount: 0.015277  
Amount Units: ug/l

Processing Integration Results



RT: 3.81  
Area: 4129  
Amount: 0.028048  
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 03-Mar-2021 17:58:50  
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

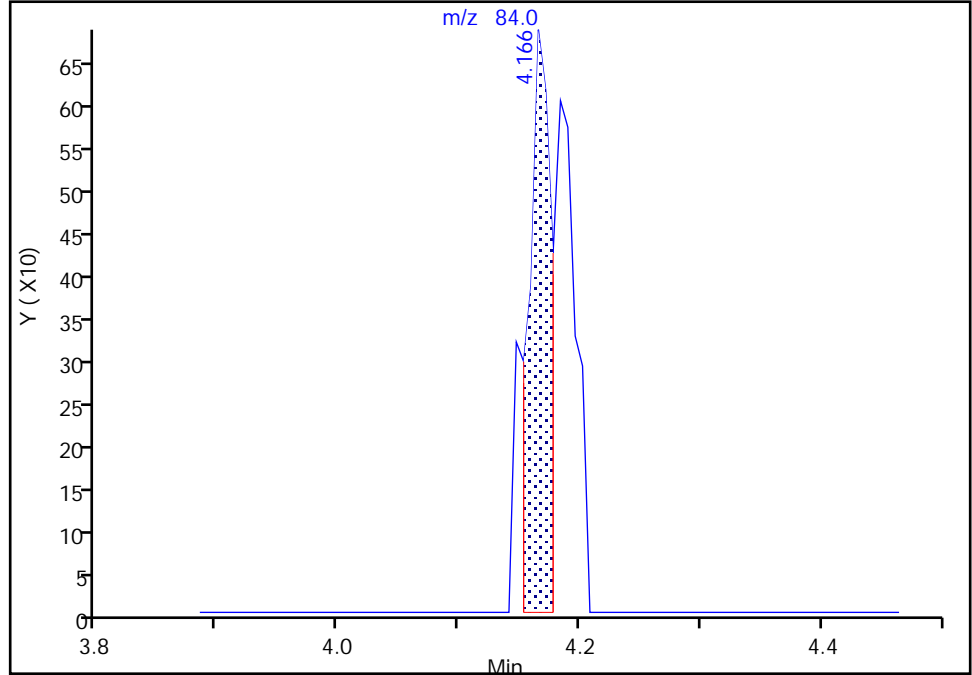
Data File: \\chromfs\Lancaster\ChromData\16334\20210303-23166.b\GM03X20.D  
Injection Date: 03-Mar-2021 15:30:30 Instrument ID: 16334  
Lims ID: 410-30627-A-1 Lab Sample ID: 410-30627-1  
Client ID: HD-COD-SW-6-0/1-0  
Operator ID: SRK36897 ALS Bottle#: 20 Worklist Smp#: 20  
Purge Vol: 25.000 mL Dil. 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

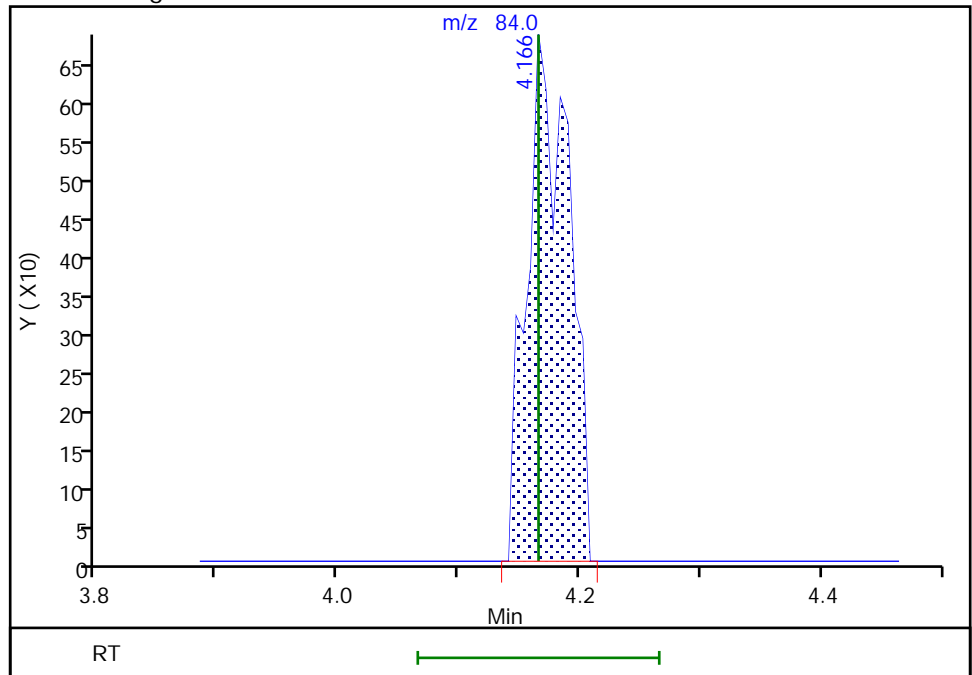
RT: 4.17  
Area: 873  
Amount: 0.019077  
Amount Units: ug/l

Processing Integration Results



RT: 4.17  
Area: 1638  
Amount: 0.035794  
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 03-Mar-2021 17:58:54  
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-30627-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: HD-COD-SW-7-0/1-0 Lab Sample ID: 410-30627-2  
 Matrix: Water Lab File ID: GM03X21.D  
 Analysis Method: 8260D Date Collected: 02/25/2021 11:45  
 Sample wt/vol: 25 (mL) Date Analyzed: 03/03/2021 15:52  
 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.: 99025 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	^c	0.50	0.060
156-59-2	cis-1,2-Dichloroethene	ND		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.050
124-48-1	Dibromochloromethane	ND		0.50	0.070
100-41-4	Ethylbenzene	ND		0.50	0.060
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.050
75-09-2	Methylene Chloride	ND		0.50	0.070
100-42-5	Styrene	ND		0.50	0.050
127-18-4	Tetrachloroethene	ND		0.50	0.060
108-88-3	Toluene	ND		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	ND		0.50	0.060

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-30627-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: HD-COD-SW-7-0/1-0 Lab Sample ID: 410-30627-2  
 Matrix: Water Lab File ID: GM03X21.D  
 Analysis Method: 8260D Date Collected: 02/25/2021 11:45  
 Sample wt/vol: 25 (mL) Date Analyzed: 03/03/2021 15:52  
 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.: 99025 Units: ug/L

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

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		80-120
460-00-4	4-Bromofluorobenzene (Surr)	97		80-120
1868-53-7	Dibromofluoromethane (Surr)	100		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\20210303-23166.b\GM03X21.D  
 Lims ID: 410-30627-A-2  
 Client ID: HD-COD-SW-7-0/1-0  
 Sample Type: Client  
 Inject. Date: 03-Mar-2021 15:52:30 ALS Bottle#: 21 Worklist Smp#: 21  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0023166-021  
 Misc. Info.: 410-30627-A-2  
 Operator ID: SRK36897 Instrument ID: 16334  
 Method: \\chromfs\Lancaster\ChromData\16334\20210303-23166.b\MSV\_16334\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 03-Mar-2021 18:00:06 Calib Date: 30-Nov-2020 18:23:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I17.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1646

First Level Reviewer: campbellme

Date: 03-Mar-2021 17:59:42

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
5 Chloromethane	50		2.136				ND	
8 Vinyl chloride	62		2.251				ND	
9 Bromomethane	94		2.568				ND	
10 Chloroethane	64		2.660				ND	
19 1,1-Dichloroethene	96		3.507				ND	
21 Acetone	43	3.556	3.544	0.012	79	11739	1.52	
25 Carbon disulfide	76	3.800	3.794	0.006	97	6847	0.0464	M
29 Methylene Chloride	84	4.172	4.166	0.006	33	1966	0.0429	M
* 30 t-Butyl alcohol-d10 (IS)	65	4.190	4.178	0.012	0	157676	50.0	
33 Methyl tert-butyl ether	73		4.568				ND	
34 trans-1,2-Dichloroethene	96		4.568				ND	
37 1,1-Dichloroethane	63		5.239				ND	
41 2-Butanone (MEK)	43		6.049				ND	
42 cis-1,2-Dichloroethene	96	6.074	6.080	-0.006	1	2398	0.0463	a
49 Chlorobromomethane	128		6.403				ND	
51 Chloroform	83	6.567	6.562	0.005	19	2526	0.0307	a
\$ 52 Dibromofluoromethane (Surr)	113	6.781	6.775	0.006	94	463196	9.96	
53 1,1,1-Trichloroethane	97		6.787				ND	
56 Carbon tetrachloride	117		6.988				ND	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.238	7.232	0.006	0	99713	10.1	
60 Benzene	78		7.263				ND	
61 1,2-Dichloroethane	62		7.336				ND	
* 64 Fluorobenzene (IS)	96	7.671	7.665	0.006	99	1921480	10.0	
68 Trichloroethene	95		8.140				ND	
70 1,2-Dichloropropane	63		8.482				ND	
76 Dichlorobromomethane	83		8.823				ND	
81 cis-1,3-Dichloropropene	75		9.372				ND	
82 4-Methyl-2-pentanone (MIBK)	43		9.555				ND	7
\$ 83 Toluene-d8 (Surr)	98	9.689	9.683	0.006	93	1878626	10.1	
84 Toluene	92	9.762	9.762	0.000	96	4940	0.0410	
96 trans-1,3-Dichloropropene	75		10.018				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
99 1,1,2-Trichloroethane	97		10.225				ND	
100 Tetrachloroethene	166	10.311	10.311	0.000	83	2750	0.0526	
102 2-Hexanone	43		10.445				ND	
104 Chlorodibromomethane	129		10.603				ND	
105 Ethylene Dibromide	107		10.707				ND	
* 106 Chlorobenzene-d5 (IS)	117	11.146	11.146	0.000	86	1389459	10.0	
108 Chlorobenzene	112		11.170				ND	
S 109 Xylenes, Total	106		11.245				ND	7
110 1,1,1,2-Tetrachloroethane	131		11.250				ND	
111 Ethylbenzene	91		11.256				ND	
112 m-Xylene & p-Xylene	106		11.372				ND	7
113 o-Xylene	106		11.701				ND	
114 Styrene	104		11.713				ND	
115 Bromoform	173		11.871				ND	
\$ 119 4-Bromofluorobenzene (Surr)	95	12.140	12.140	0.000	91	690084	9.75	
120 1,1,2,2-Tetrachloroethane	83		12.249				ND	
* 134 1,4-Dichlorobenzene-d4	152	13.017	13.018	-0.001	95	772772	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\_00015

Amount Added: 1.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\16334\20210303-23166.b\GM03X21.D

Injection Date: 03-Mar-2021 15:52:30

Instrument ID: 16334

Operator ID: SRK36897

Lims ID: 410-30627-A-2

Lab Sample ID: 410-30627-2

Worklist Smp#: 21

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

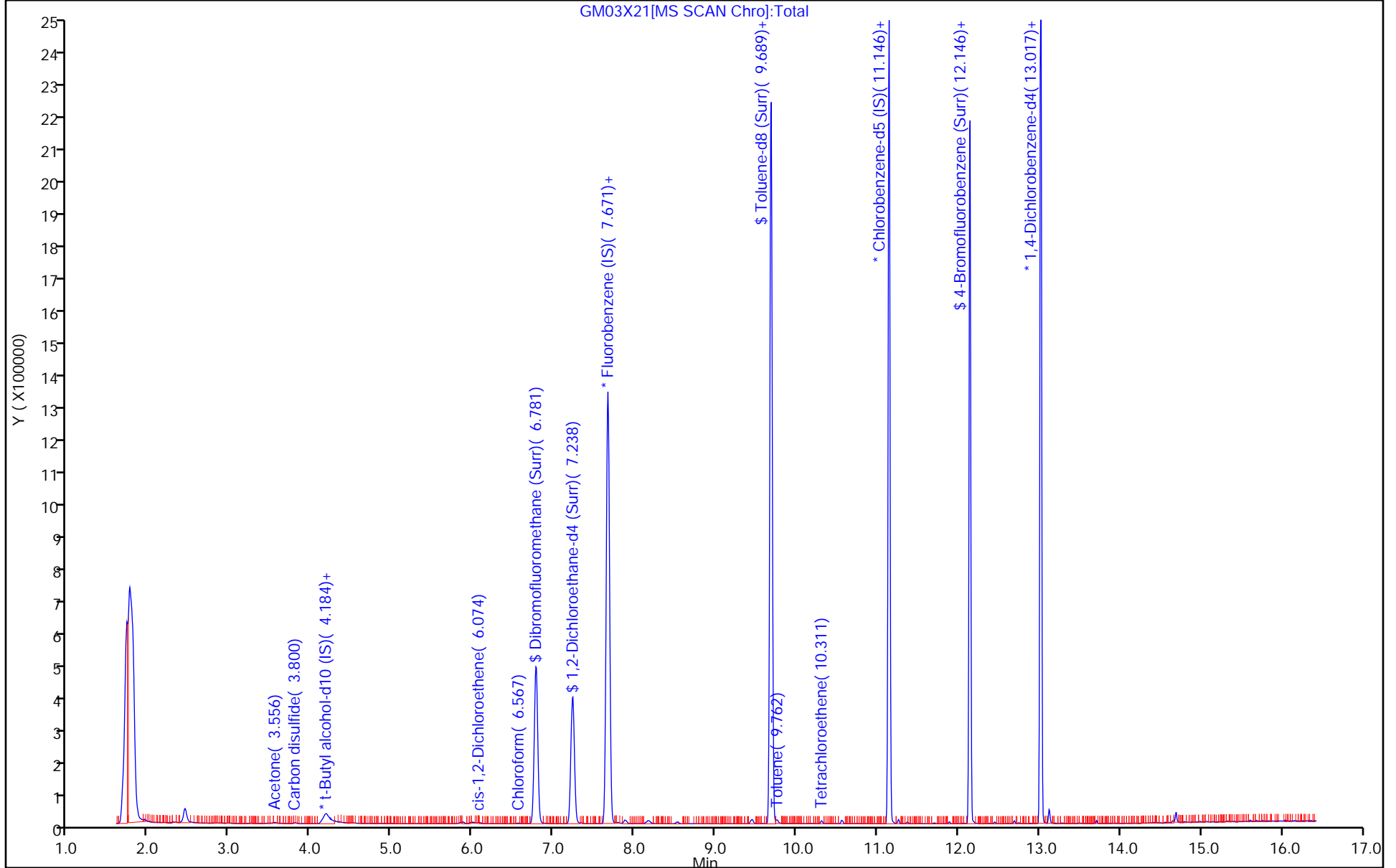
ALS Bottle#: 21

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\20210303-23166.b\GM03X21.D  
 Lims ID: 410-30627-A-2  
 Client ID: HD-COD-SW-7-0/1-0  
 Sample Type: Client  
 Inject. Date: 03-Mar-2021 15:52:30 ALS Bottle#: 21 Worklist Smp#: 21  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0023166-021  
 Misc. Info.: 410-30627-A-2  
 Operator ID: SRK36897 Instrument ID: 16334  
 Method: \\chromfs\Lancaster\ChromData\16334\20210303-23166.b\MSV\_16334\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 03-Mar-2021 18:00:06 Calib Date: 30-Nov-2020 18:23:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I17.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1646

First Level Reviewer: campbellme Date: 03-Mar-2021 17:59:42

Compound	Amount Added	Amount Recovered	% Rec.
\$ 52 Dibromofluoromethane (Surr)	10.0	9.96	99.60
\$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	10.1	100.77
\$ 83 Toluene-d8 (Surr)	10.0	10.1	101.34
\$ 119 4-Bromofluorobenzene (Surr)	10.0	9.75	97.50



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20210303-23166.b\GM03X21.D

Injection Date: 03-Mar-2021 15:52:30

Instrument ID: 16334

Lims ID: 410-30627-A-2

Lab Sample ID: 410-30627-2

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

Operator ID: SRK36897

ALS Bottle#: 21

Worklist Smp#: 21

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

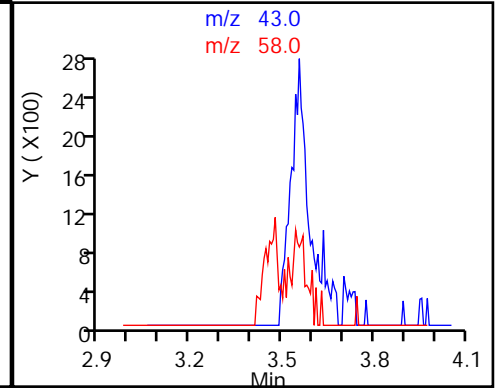
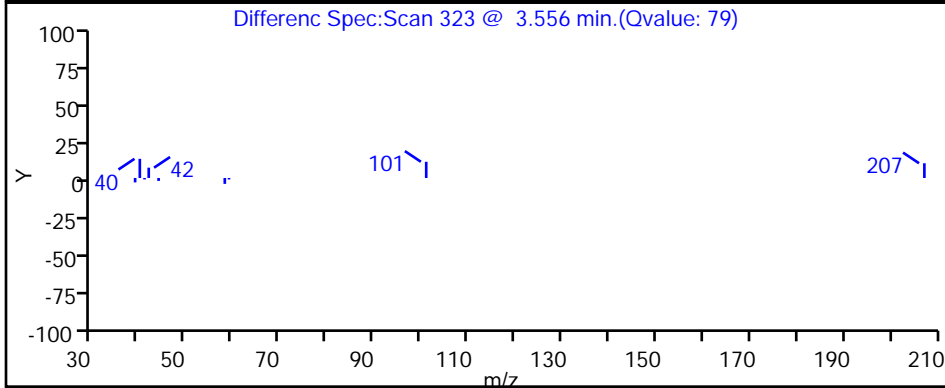
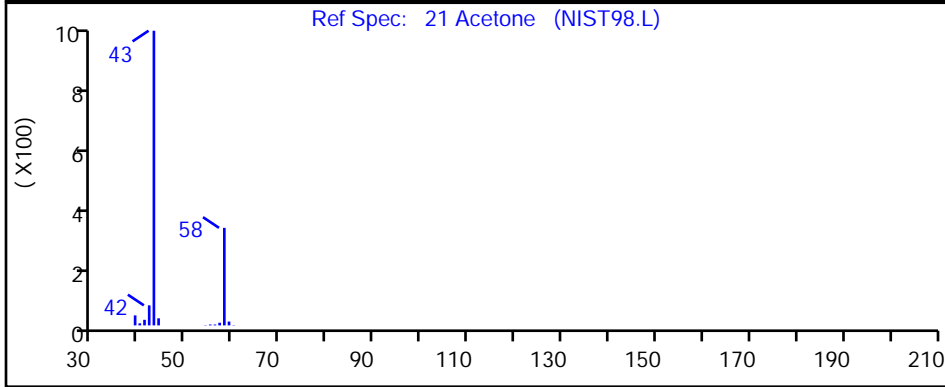
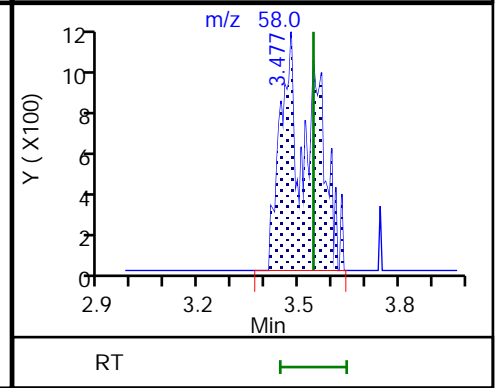
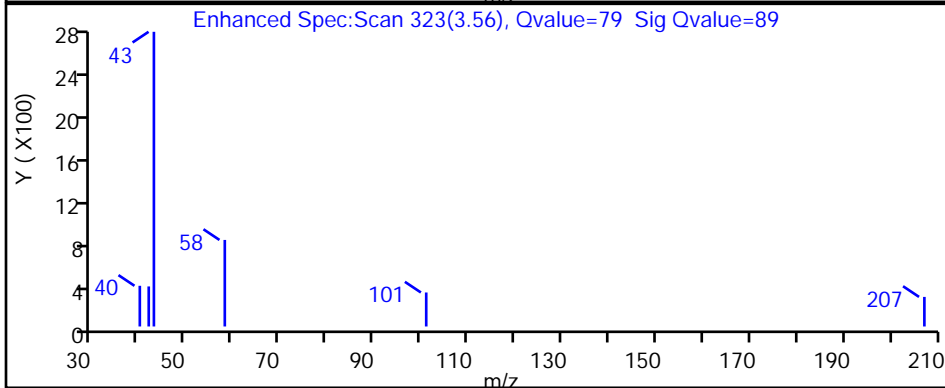
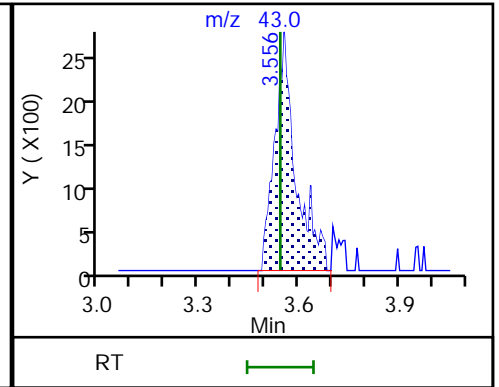
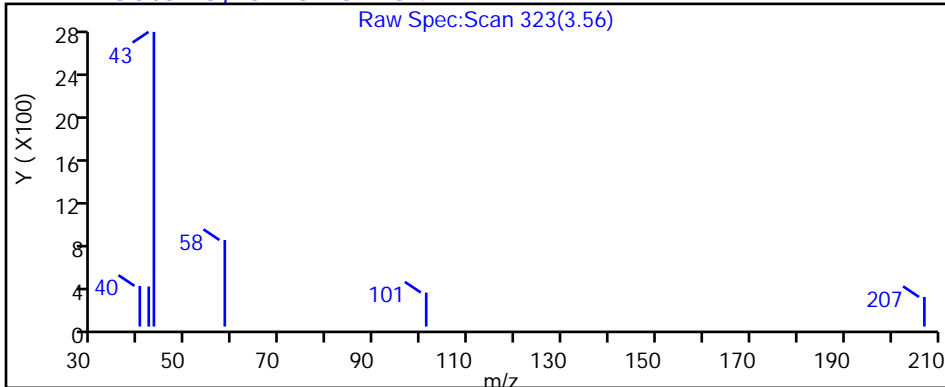
Method: MSV\_16334\_25mL

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

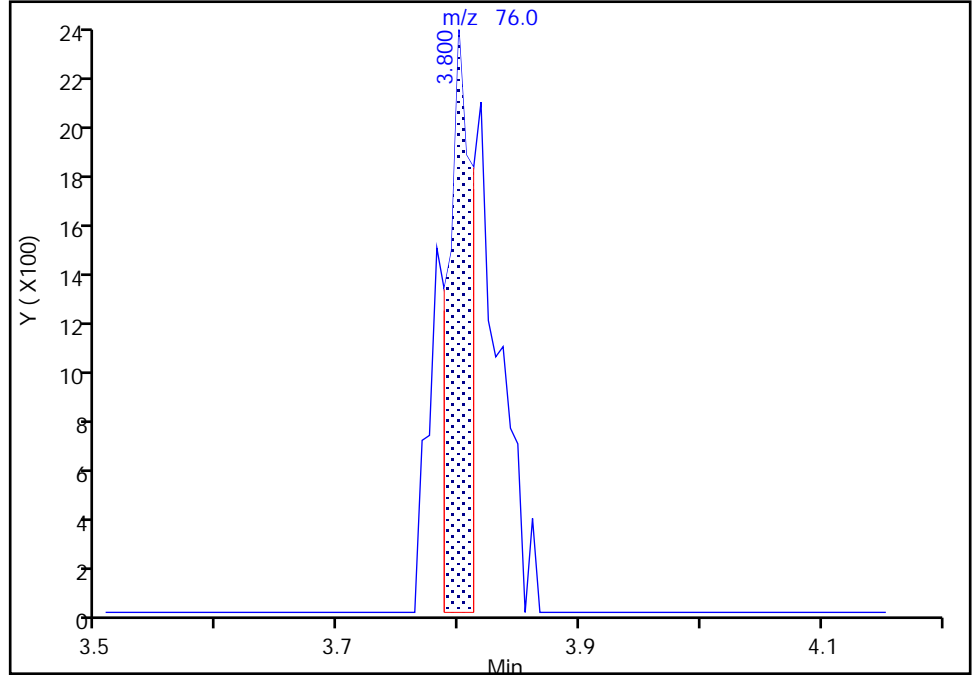
Data File: \\chromfs\Lancaster\ChromData\16334\20210303-23166.b\GM03X21.D  
Injection Date: 03-Mar-2021 15:52:30 Instrument ID: 16334  
Lims ID: 410-30627-A-2 Lab Sample ID: 410-30627-2  
Client ID: HD-COD-SW-7-0/1-0  
Operator ID: SRK36897 ALS Bottle#: 21 Worklist Smp#: 21  
Purge Vol: 25.000 mL Dil. 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

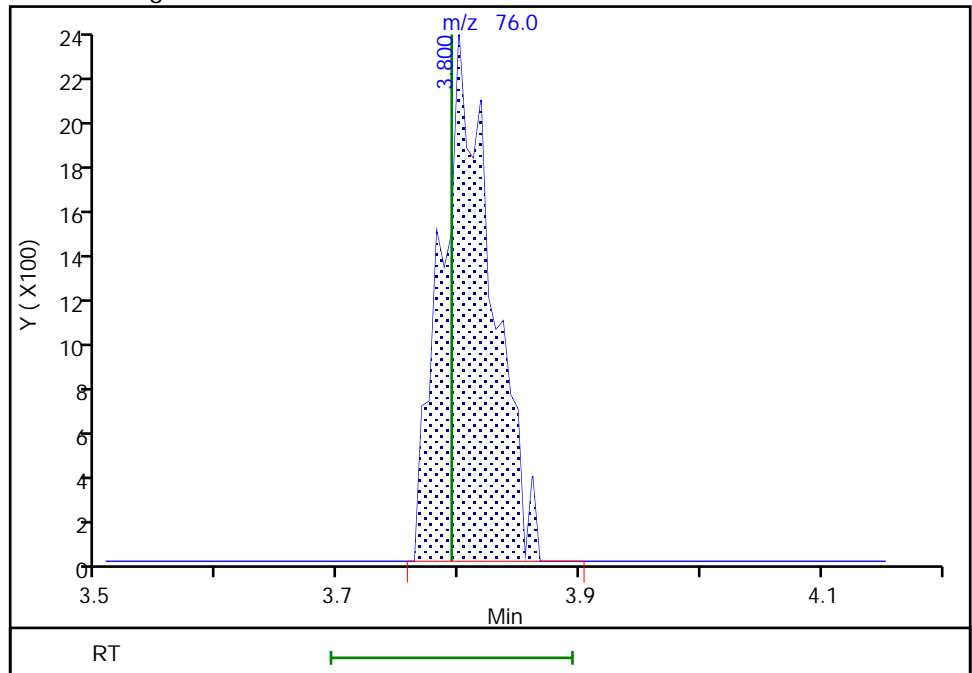
RT: 3.80  
Area: 3192  
Amount: 0.021635  
Amount Units: ug/l

Processing Integration Results



RT: 3.80  
Area: 6847  
Amount: 0.046409  
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 03-Mar-2021 17:59:19  
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

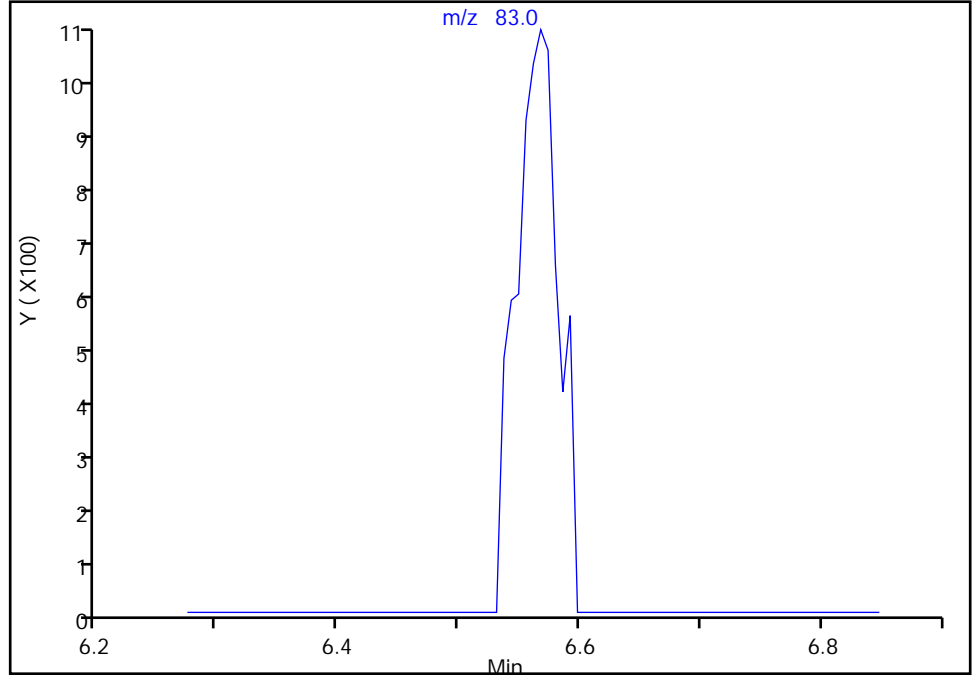
Data File: \\chromfs\Lancaster\ChromData\16334\20210303-23166.b\GM03X21.D  
Injection Date: 03-Mar-2021 15:52:30 Instrument ID: 16334  
Lims ID: 410-30627-A-2 Lab Sample ID: 410-30627-2  
Client ID: HD-COD-SW-7-0/1-0  
Operator ID: SRK36897 ALS Bottle#: 21 Worklist Smp#: 21  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_16334\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

51 Chloroform, CAS: 67-66-3

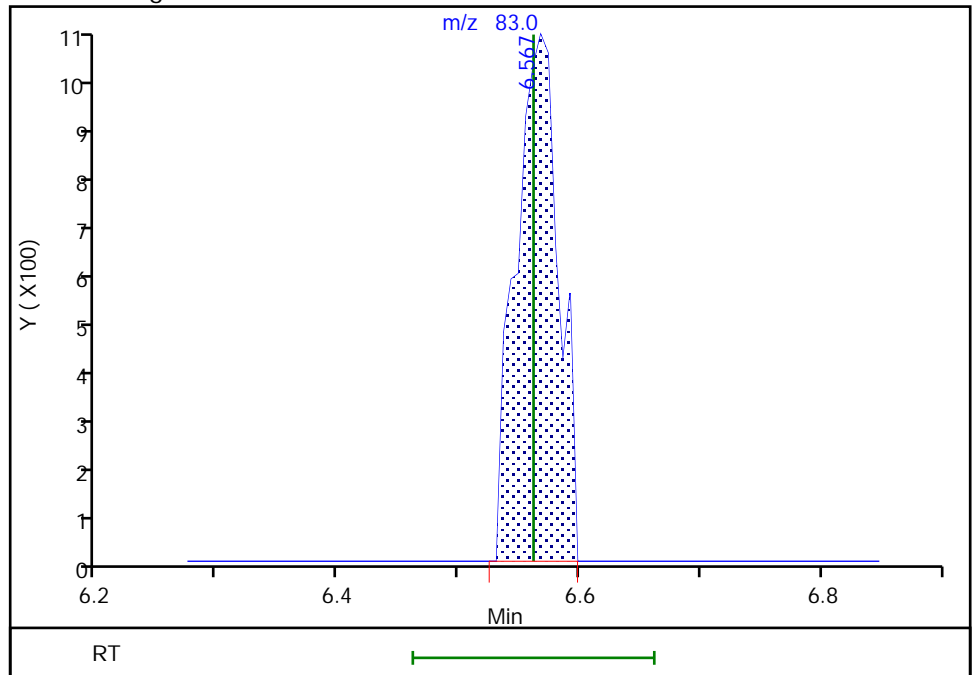
Signal: 1

Not Detected  
Expected RT: 6.56

Processing Integration Results



Manual Integration Results



RT: 6.57  
Area: 2526  
Amount: 0.030651  
Amount Units: ug/l

Eurofins Lancaster Laboratories Env, LLC

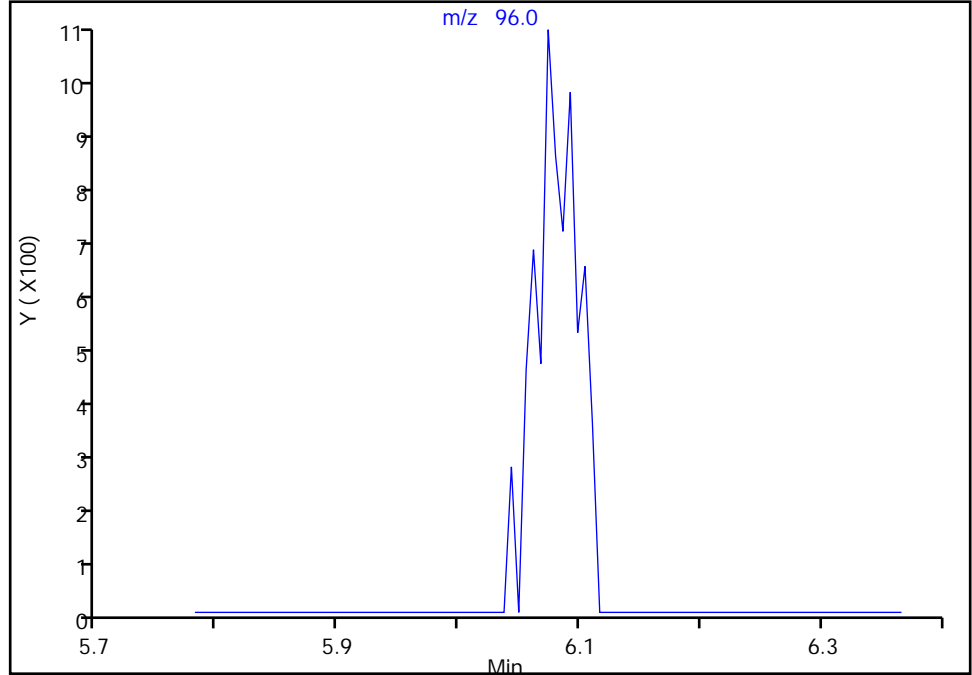
Data File: \\chromfs\Lancaster\ChromData\16334\20210303-23166.b\GM03X21.D  
Injection Date: 03-Mar-2021 15:52:30 Instrument ID: 16334  
Lims ID: 410-30627-A-2 Lab Sample ID: 410-30627-2  
Client ID: HD-COD-SW-7-0/1-0  
Operator ID: SRK36897 ALS Bottle#: 21 Worklist Smp#: 21  
Purge Vol: 25.000 mL Dil. 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

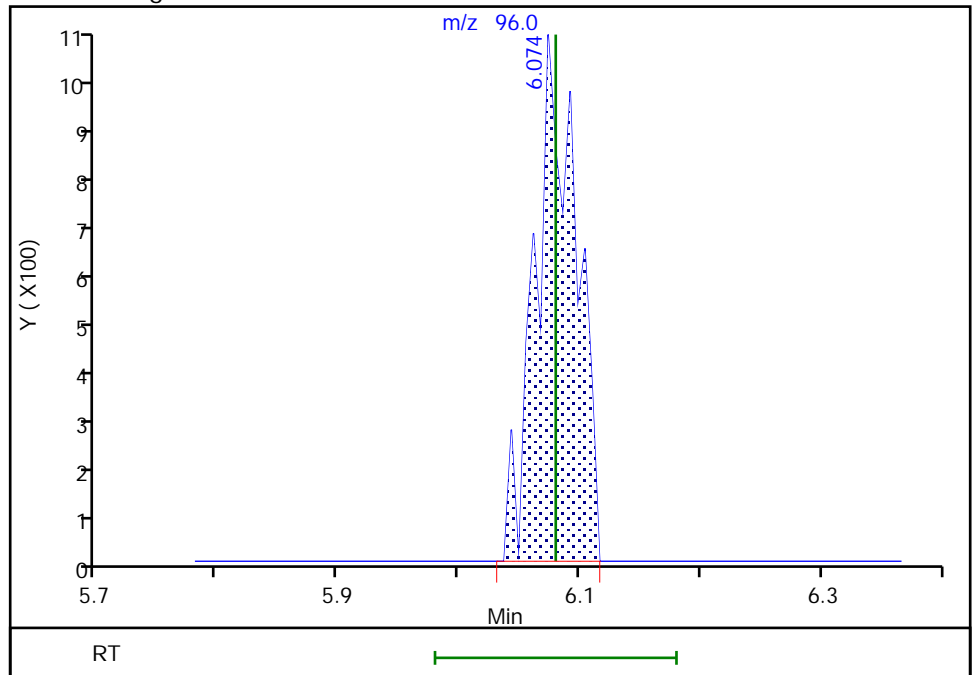
Not Detected  
Expected RT: 6.08

Processing Integration Results



Manual Integration Results

RT: 6.07  
Area: 2398  
Amount: 0.046346  
Amount Units: ug/l



Reviewer: campbellme, 03-Mar-2021 17:59:29  
Audit Action: Assigned Compound ID

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

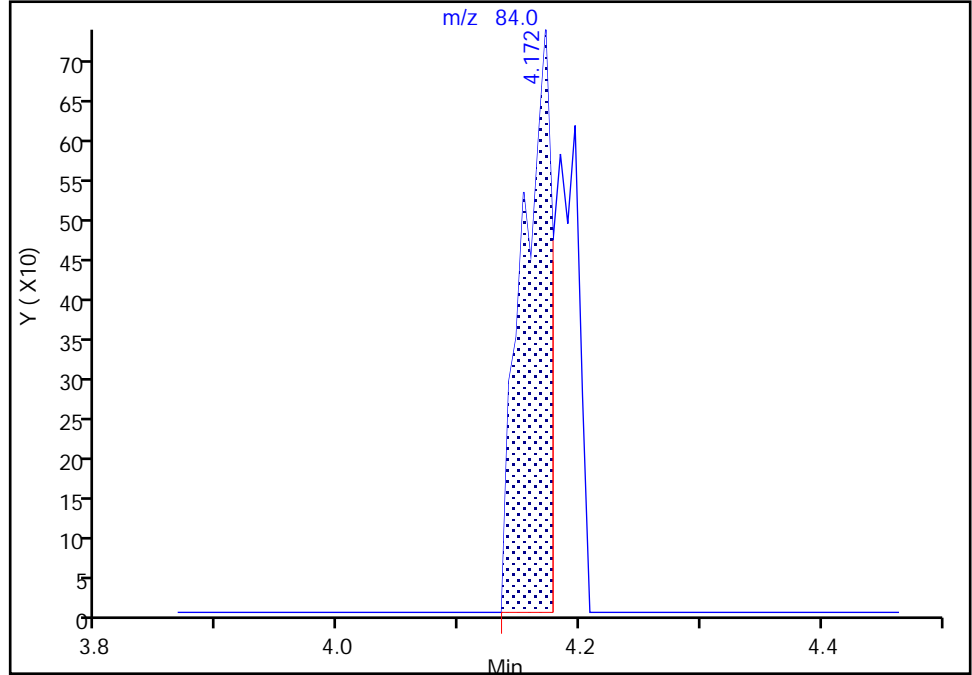
Data File: \\chromfs\Lancaster\ChromData\16334\20210303-23166.b\GM03X21.D  
Injection Date: 03-Mar-2021 15:52:30 Instrument ID: 16334  
Lims ID: 410-30627-A-2 Lab Sample ID: 410-30627-2  
Client ID: HD-COD-SW-7-0/1-0  
Operator ID: SRK36897 ALS Bottle#: 21 Worklist Smp#: 21  
Purge Vol: 25.000 mL Dil. 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

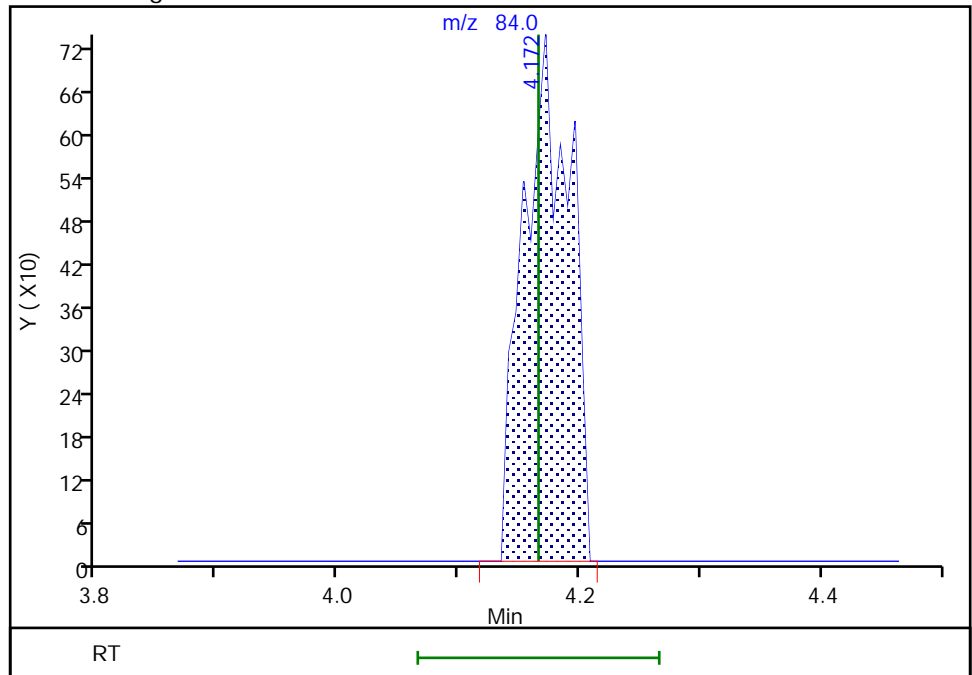
RT: 4.17  
Area: 1249  
Amount: 0.027233  
Amount Units: ug/l

Processing Integration Results



RT: 4.17  
Area: 1966  
Amount: 0.042866  
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 03-Mar-2021 17:59:22  
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-30627-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: HD-COD-SW-8-0/1-0 Lab Sample ID: 410-30627-3  
 Matrix: Water Lab File ID: GM03X22.D  
 Analysis Method: 8260D Date Collected: 02/25/2021 09:40  
 Sample wt/vol: 25 (mL) Date Analyzed: 03/03/2021 16:14  
 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.: 99025 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.070
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.060
75-34-3	1,1-Dichloroethane	ND		0.50	0.070
75-35-4	1,1-Dichloroethene	ND		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.060
107-06-2	1,2-Dichloroethane	ND		0.50	0.050
78-87-5	1,2-Dichloropropane	ND		0.50	0.060
78-93-3	2-Butanone (MEK)	ND		5.0	0.60
591-78-6	2-Hexanone	ND		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70
67-64-1	Acetone	1.4	J	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	^c	0.50	0.060
156-59-2	cis-1,2-Dichloroethene	ND		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.050
124-48-1	Dibromochloromethane	ND		0.50	0.070
100-41-4	Ethylbenzene	ND		0.50	0.060
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.050
75-09-2	Methylene Chloride	ND		0.50	0.070
100-42-5	Styrene	ND		0.50	0.050
127-18-4	Tetrachloroethene	ND		0.50	0.060
108-88-3	Toluene	ND		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	ND		0.50	0.060

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-30627-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: HD-COD-SW-8-0/1-0 Lab Sample ID: 410-30627-3  
 Matrix: Water Lab File ID: GM03X22.D  
 Analysis Method: 8260D Date Collected: 02/25/2021 09:40  
 Sample wt/vol: 25 (mL) Date Analyzed: 03/03/2021 16:14  
 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.: 99025 Units: ug/L

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

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		80-120
460-00-4	4-Bromofluorobenzene (Surr)	97		80-120
1868-53-7	Dibromofluoromethane (Surr)	101		80-120
2037-26-5	Toluene-d8 (Surr)	102		80-120

Eurofins Lancaster Laboratories Env, LLC  
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20210303-23166.b\GM03X22.D  
 Lims ID: 410-30627-A-3  
 Client ID: HD-COD-SW-8-0/1-0  
 Sample Type: Client  
 Inject. Date: 03-Mar-2021 16:14:30 ALS Bottle#: 22 Worklist Smp#: 22  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0023166-022  
 Misc. Info.: 410-30627-A-3  
 Operator ID: SRK36897 Instrument ID: 16334  
 Method: \\chromfs\Lancaster\ChromData\16334\20210303-23166.b\MSV\_16334\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 03-Mar-2021 18:00:06 Calib Date: 30-Nov-2020 18:23:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I17.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1646

First Level Reviewer: campbellme

Date: 03-Mar-2021 18:00:06

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
5 Chloromethane	50		2.136				ND	
8 Vinyl chloride	62		2.251				ND	
9 Bromomethane	94		2.568				ND	
10 Chloroethane	64		2.660				ND	
19 1,1-Dichloroethene	96		3.507				ND	
21 Acetone	43	3.538	3.544	-0.006	84	10884	1.43	
25 Carbon disulfide	76	3.800	3.794	0.006	94	3534	0.0240	7M
29 Methylene Chloride	84	4.153	4.166	-0.013	33	1998	0.0437	M
* 30 t-Butyl alcohol-d10 (IS)	65	4.184	4.178	0.006	0	155516	50.0	
33 Methyl tert-butyl ether	73		4.568				ND	
34 trans-1,2-Dichloroethene	96		4.568				ND	
37 1,1-Dichloroethane	63		5.239				ND	
41 2-Butanone (MEK)	43		6.049				ND	
42 cis-1,2-Dichloroethene	96	6.074	6.080	-0.006	1	2128	0.0412	
49 Chlorobromomethane	128		6.403				ND	
51 Chloroform	83		6.562				ND	
\$ 52 Dibromofluoromethane (Surr)	113	6.781	6.775	0.006	94	466645	10.1	
53 1,1,1-Trichloroethane	97		6.787				ND	
56 Carbon tetrachloride	117		6.988				ND	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.232	7.232	0.000	0	99866	10.1	
60 Benzene	78		7.263				ND	
61 1,2-Dichloroethane	62		7.336				ND	
* 64 Fluorobenzene (IS)	96	7.665	7.665	0.000	99	1917371	10.0	
68 Trichloroethene	95	8.147	8.140	0.007	45	1962	0.0394	
70 1,2-Dichloropropane	63		8.482				ND	
76 Dichlorobromomethane	83		8.823				ND	
81 cis-1,3-Dichloropropene	75		9.372				ND	
82 4-Methyl-2-pentanone (MIBK)	43		9.555				ND	7
\$ 83 Toluene-d8 (Surr)	98	9.683	9.683	0.000	93	1869270	10.2	
84 Toluene	92	9.768	9.762	0.006	96	4455	0.0373	
96 trans-1,3-Dichloropropene	75		10.018				ND	



Compound	Sig	RT (min.)	Exp RT (min.)	Diff RT (min.)	Q	Response	OnCol Amt ug/l	Flags
99 1,1,2-Trichloroethane	97		10.225				ND	
100 Tetrachloroethene	166	10.305	10.311	-0.006	63	1675	0.0323	
102 2-Hexanone	43		10.445				ND	
104 Chlorodibromomethane	129		10.603				ND	
105 Ethylene Dibromide	107		10.707				ND	
* 106 Chlorobenzene-d5 (IS)	117	11.146	11.146	0.000	86	1379529	10.0	
108 Chlorobenzene	112		11.170				ND	
S 109 Xylenes, Total	106		11.245				ND	7
110 1,1,1,2-Tetrachloroethane	131		11.250				ND	
111 Ethylbenzene	91		11.256				ND	
112 m-Xylene & p-Xylene	106		11.372				ND	7
113 o-Xylene	106		11.701				ND	
114 Styrene	104		11.713				ND	
115 Bromoform	173		11.871				ND	
\$ 119 4-Bromofluorobenzene (Surr)	95	12.140	12.140	0.000	92	681896	9.70	
120 1,1,2,2-Tetrachloroethane	83		12.249				ND	
* 134 1,4-Dichlorobenzene-d4	152	13.018	13.018	0.000	95	770528	10.0	

### QC Flag Legend

#### Processing Flags

7 - Failed Limit of Detection

#### Review Flags

M - Manually Integrated

### Reagents:

MSV\_29\_826ISS\_00015

Amount Added: 1.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\16334\20210303-23166.b\GM03X22.D

Injection Date: 03-Mar-2021 16:14:30

Instrument ID: 16334

Operator ID: SRK36897

Lims ID: 410-30627-A-3

Lab Sample ID: 410-30627-3

Worklist Smp#: 22

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

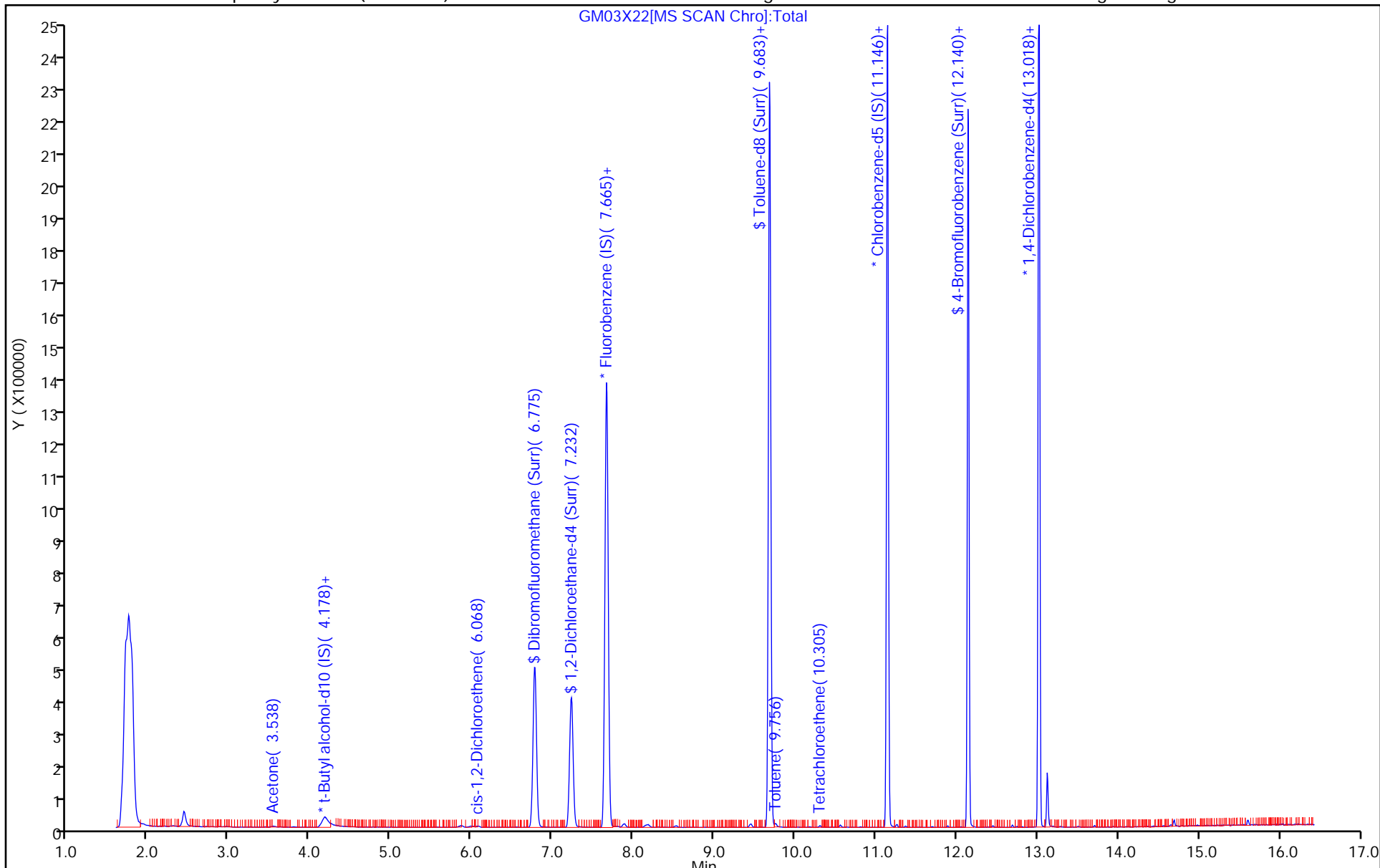
ALS Bottle#: 22

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\20210303-23166.b\GM03X22.D  
 Lims ID: 410-30627-A-3  
 Client ID: HD-COD-SW-8-0/1-0  
 Sample Type: Client  
 Inject. Date: 03-Mar-2021 16:14:30 ALS Bottle#: 22 Worklist Smp#: 22  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0023166-022  
 Misc. Info.: 410-30627-A-3  
 Operator ID: SRK36897 Instrument ID: 16334  
 Method: \\chromfs\Lancaster\ChromData\16334\20210303-23166.b\MSV\_16334\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 03-Mar-2021 18:00:06 Calib Date: 30-Nov-2020 18:23:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I17.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1646

First Level Reviewer: campbellme

Date: 03-Mar-2021 18:00:06

Compound	Amount Added	Amount Recovered	% Rec.
\$ 52 Dibromofluoromethane (Surr)	10.0	10.1	100.56
\$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	10.1	101.15
\$ 83 Toluene-d8 (Surr)	10.0	10.2	101.56
\$ 119 4-Bromofluorobenzene (Surr)	10.0	9.70	97.03

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20210303-23166.b\GM03X22.D

Injection Date: 03-Mar-2021 16:14:30

Instrument ID: 16334

Lims ID: 410-30627-A-3

Lab Sample ID: 410-30627-3

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

Operator ID: SRK36897

ALS Bottle#: 22

Worklist Smp#: 22

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

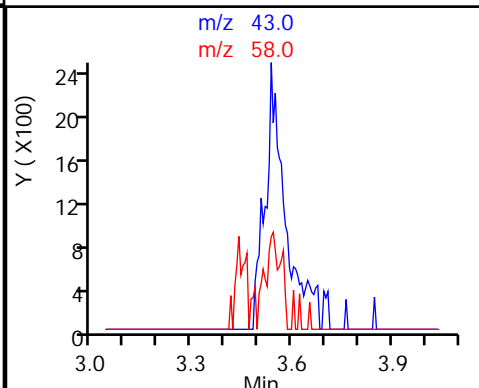
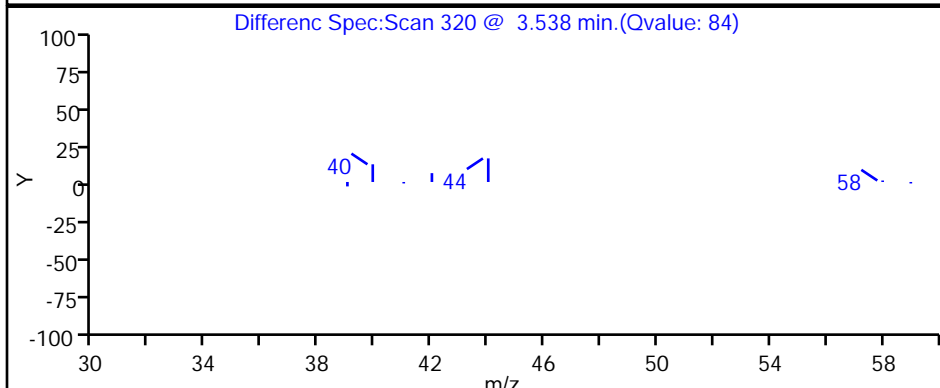
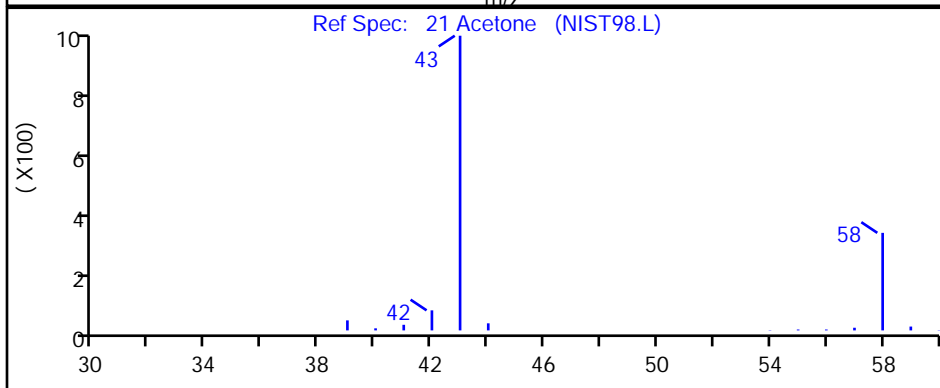
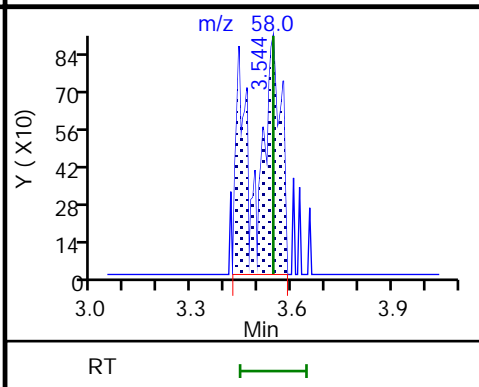
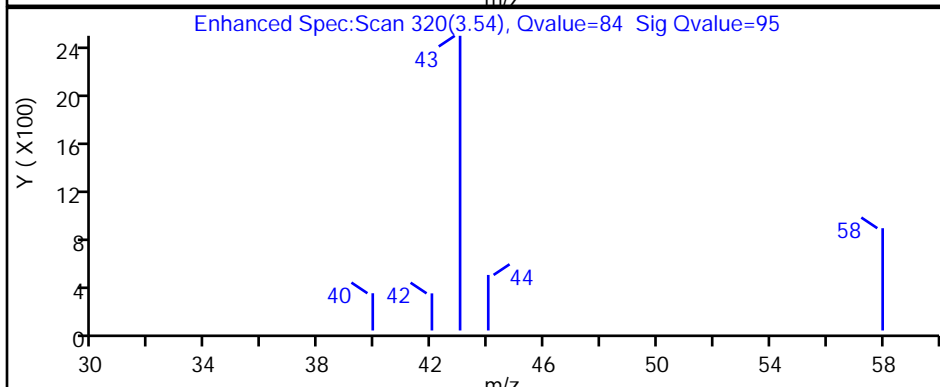
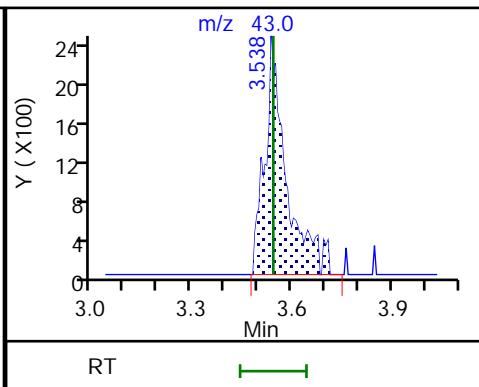
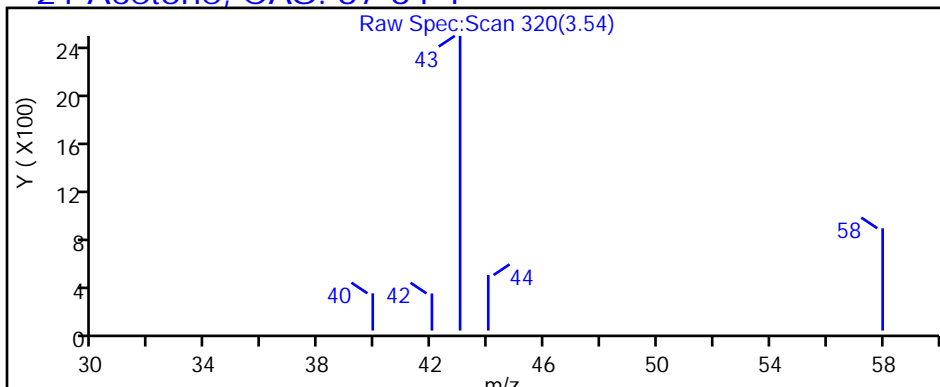
Method: MSV\_16334\_25mL

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

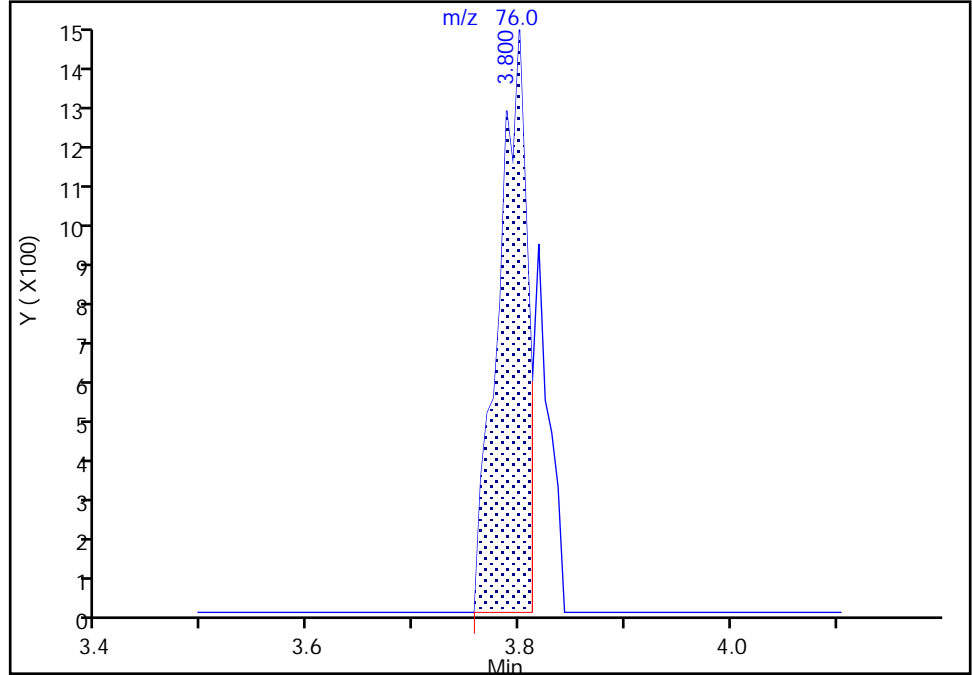
Data File: \\chromfs\Lancaster\ChromData\16334\20210303-23166.b\GM03X22.D  
Injection Date: 03-Mar-2021 16:14:30 Instrument ID: 16334  
Lims ID: 410-30627-A-3 Lab Sample ID: 410-30627-3  
Client ID: HD-COD-SW-8-0/1-0  
Operator ID: SRK36897 ALS Bottle#: 22 Worklist Smp#: 22  
Purge Vol: 25.000 mL Dil. 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

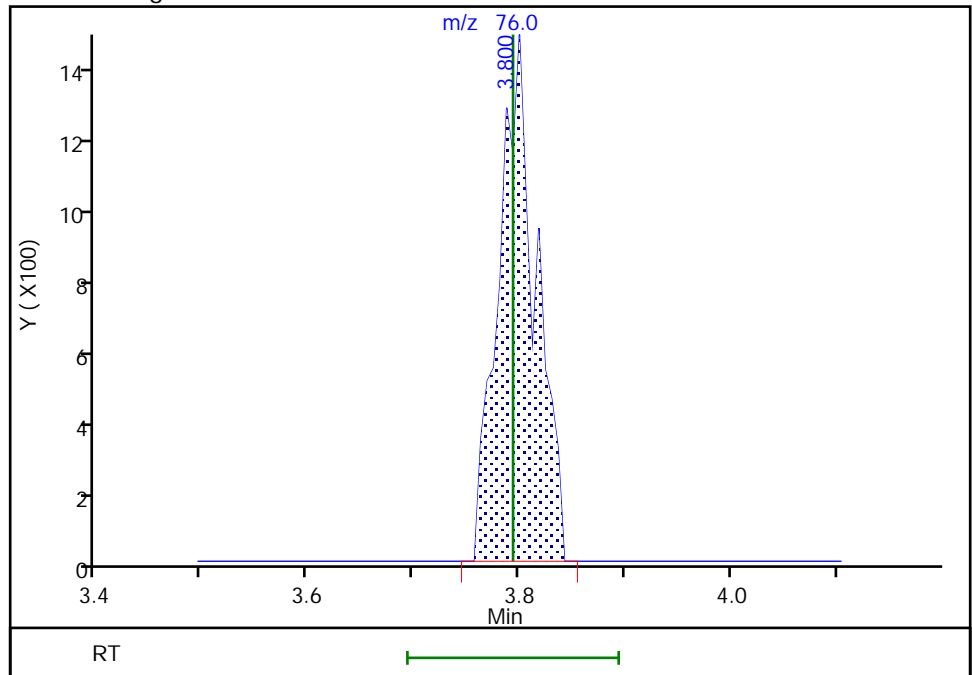
RT: 3.80  
Area: 2734  
Amount: 0.018571  
Amount Units: ug/l

Processing Integration Results



RT: 3.80  
Area: 3534  
Amount: 0.024005  
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 03-Mar-2021 17:59:52  
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

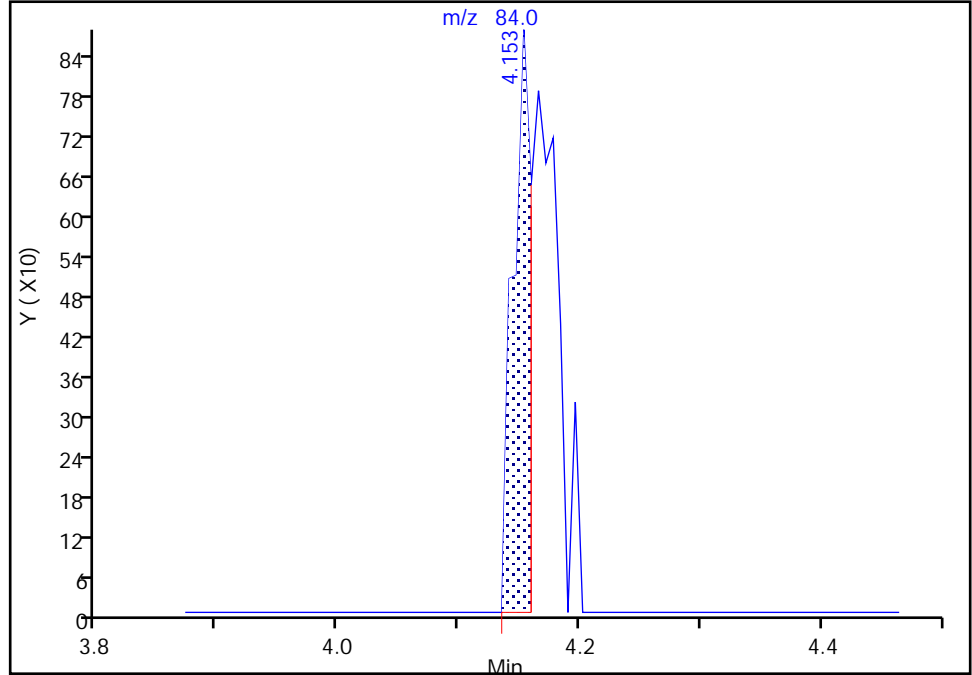
Data File: \\chromfs\Lancaster\ChromData\16334\20210303-23166.b\GM03X22.D  
Injection Date: 03-Mar-2021 16:14:30 Instrument ID: 16334  
Lims ID: 410-30627-A-3 Lab Sample ID: 410-30627-3  
Client ID: HD-COD-SW-8-0/1-0  
Operator ID: SRK36897 ALS Bottle#: 22 Worklist Smp#: 22  
Purge Vol: 25.000 mL Dil. 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

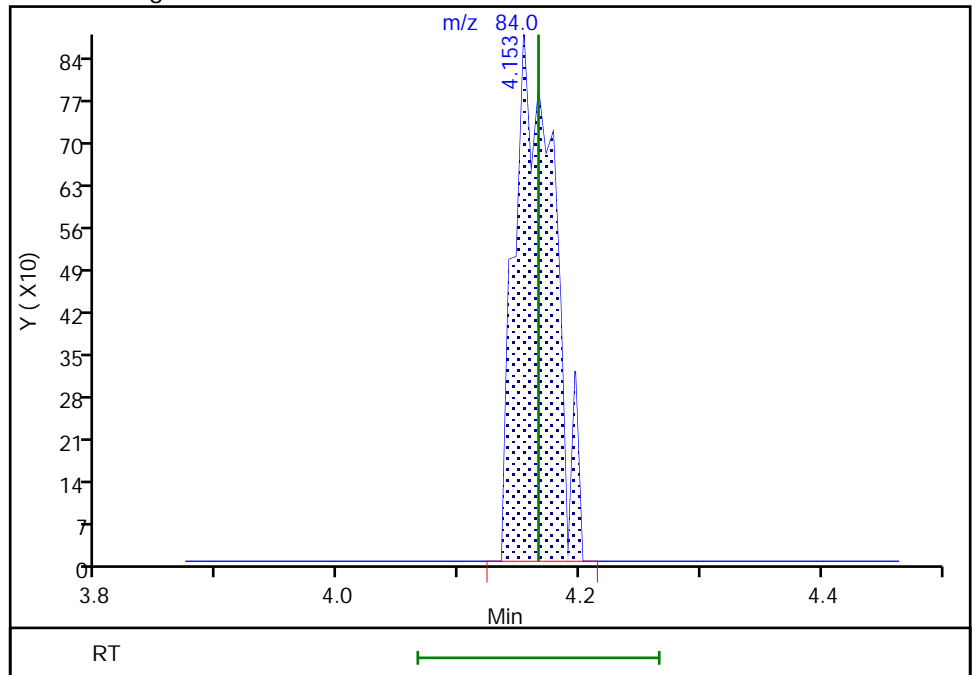
RT: 4.15  
Area: 926  
Amount: 0.020234  
Amount Units: ug/l

Processing Integration Results



RT: 4.15  
Area: 1998  
Amount: 0.043657  
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 03-Mar-2021 17:59:54  
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-30627-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: HD-COD-SW-9-0/1-0 Lab Sample ID: 410-30627-4  
 Matrix: Water Lab File ID: IM03S35.D  
 Analysis Method: 8260D Date Collected: 02/25/2021 12:45  
 Sample wt/vol: 25 (mL) Date Analyzed: 03/03/2021 23:02  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: R-624SilMS 30m ID: 0.25 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 99333 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	^c	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	0.064	J	1.0	0.060
56-23-5	Carbon tetrachloride	ND		0.50	0.070
108-90-7	Chlorobenzene	ND		0.50	0.060
75-00-3	Chloroethane	ND		0.50	0.070
67-66-3	Chloroform	ND		0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	ND		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.050
124-48-1	Dibromochloromethane	ND		0.50	0.070
100-41-4	Ethylbenzene	ND		0.50	0.060
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.050
75-09-2	Methylene Chloride	0.091	J	0.50	0.070
100-42-5	Styrene	ND		0.50	0.050
127-18-4	Tetrachloroethene	0.076	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 E Job No.: 410-30627-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: HD-COD-SW-9-0/1-0 Lab Sample ID: 410-30627-4  
 Matrix: Water Lab File ID: IM03S35.D  
 Analysis Method: 8260D Date Collected: 02/25/2021 12:45  
 Sample wt/vol: 25 (mL) Date Analyzed: 03/03/2021 23:02  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: R-624SilMS 30m ID: 0.25 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 99333 Units: ug/L

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

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		80-120
460-00-4	4-Bromofluorobenzene (Surr)	97		80-120
1868-53-7	Dibromofluoromethane (Surr)	103		80-120
2037-26-5	Toluene-d8 (Surr)	98		80-120



Eurofins Lancaster Laboratories Env, LLC  
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S35.D  
 Lims ID: 410-30627-A-4  
 Client ID: HD-COD-SW-9-0/1-0  
 Sample Type: Client  
 Inject. Date: 03-Mar-2021 23:02:30 ALS Bottle#: 12 Worklist Smp#: 13  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0023228-013  
 Misc. Info.: 410-30627-A-4  
 Operator ID: MEC29284 Instrument ID: 19930  
 Method: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\8260 25ml HP31.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 04-Mar-2021 13:06:32 Calib Date: 23-Nov-2020 18:05:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23117.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1631

First Level Reviewer: knouses

Date: 04-Mar-2021 12:37:32

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
4 Chloromethane	50	2.190	2.184	0.006	86	4668	0.0535	M
5 Vinyl chloride	62		2.306				ND	
7 Bromomethane	94		2.629				ND	
8 Chloroethane	64		2.709				ND	
14 1,1-Dichloroethene	96		3.574				ND	
15 Acetone	43	3.611	3.605	0.006	99	18795	1.91	
19 Carbon disulfide	76	3.879	3.885	-0.006	95	10401	0.0639	
23 Methylene Chloride	84	4.257	4.251	0.006	36	5644	0.0907	
* 24 t-Butyl alcohol-d10 (IS)	65	4.269	4.275	-0.006	0	180854	50.0	
27 Methyl tert-butyl ether	73		4.659				ND	
28 trans-1,2-Dichloroethene	96		4.672				ND	
31 1,1-Dichloroethane	63		5.330				ND	
36 2-Butanone (MEK)	43		6.122				ND	7
37 cis-1,2-Dichloroethene	96	6.171	6.159	0.012	75	2763	0.0384	
43 Chlorobromomethane	128		6.488				ND	
45 Chloroform	83	6.647	6.641	0.006	90	8691	0.0787	
\$ 46 Dibromofluoromethane (Surr)	113	6.854	6.854	0.000	94	537800	10.3	
47 1,1,1-Trichloroethane	97		6.866				ND	
50 Carbon tetrachloride	117		7.080				ND	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.311	7.305	0.006	0	106029	10.1	
54 Benzene	78	7.330	7.336	-0.006	82	4006	0.0150	7M
56 1,2-Dichloroethane	62		7.409				ND	
* 58 Fluorobenzene (IS)	96	7.744	7.738	0.006	99	2105307	10.0	
61 Trichloroethene	95	8.214	8.214	0.000	77	3454	0.0495	M
63 1,2-Dichloropropane	63		8.549				ND	
68 Dichlorobromomethane	83	8.903	8.890	0.012	1	1005	0.0128	7M
73 cis-1,3-Dichloropropene	75		9.433				ND	
74 4-Methyl-2-pentanone (MIBK)	43		9.597				ND	7
\$ 75 Toluene-d8 (Surr)	98	9.744	9.738	0.006	93	2102879	9.78	
76 Toluene	92	9.823	9.817	0.006	99	7664	0.0427	
78 trans-1,3-Dichloropropene	75		10.067				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Diff RT (min.)	Q	Response	OnCol Amt ug/l	Flags
80 1,1,2-Trichloroethane	97		10.274				ND	
81 Tetrachloroethene	166	10.366	10.366	0.000	95	6617	0.0761	
83 2-Hexanone	43		10.481				ND	
85 Chlorodibromomethane	129		10.652				ND	
86 Ethylene Dibromide	107		10.762				ND	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.189	0.000	85	1647077	10.0	
90 Chlorobenzene	112		11.213				ND	
S 89 Xylenes, Total	106		11.245				ND	7
91 1,1,1,2-Tetrachloroethane	131		11.298				ND	
92 Ethylbenzene	91		11.298				ND	7
93 m-Xylene & p-Xylene	106		11.414				ND	7
94 o-Xylene	106		11.743				ND	7
95 Styrene	104	11.762	11.756	0.006	1	907	0.004258	7M
96 Bromoform	173		11.914				ND	
\$ 100 4-Bromofluorobenzene (Surr)	95	12.188	12.182	0.006	95	771897	9.69	
101 1,1,2,2-Tetrachloroethane	83		12.286				ND	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	94	943157	10.0	

### QC Flag Legend

#### Processing Flags

7 - Failed Limit of Detection

#### Review Flags

M - Manually Integrated

### Reagents:

MSV\_31\_826ISS\_00004

Amount Added: 5.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S35.D

Injection Date: 03-Mar-2021 23:02:30

Instrument ID: 19930

Operator ID: MEC29284

Lims ID: 410-30627-A-4

Lab Sample ID: 410-30627-4

Worklist Smp#: 13

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

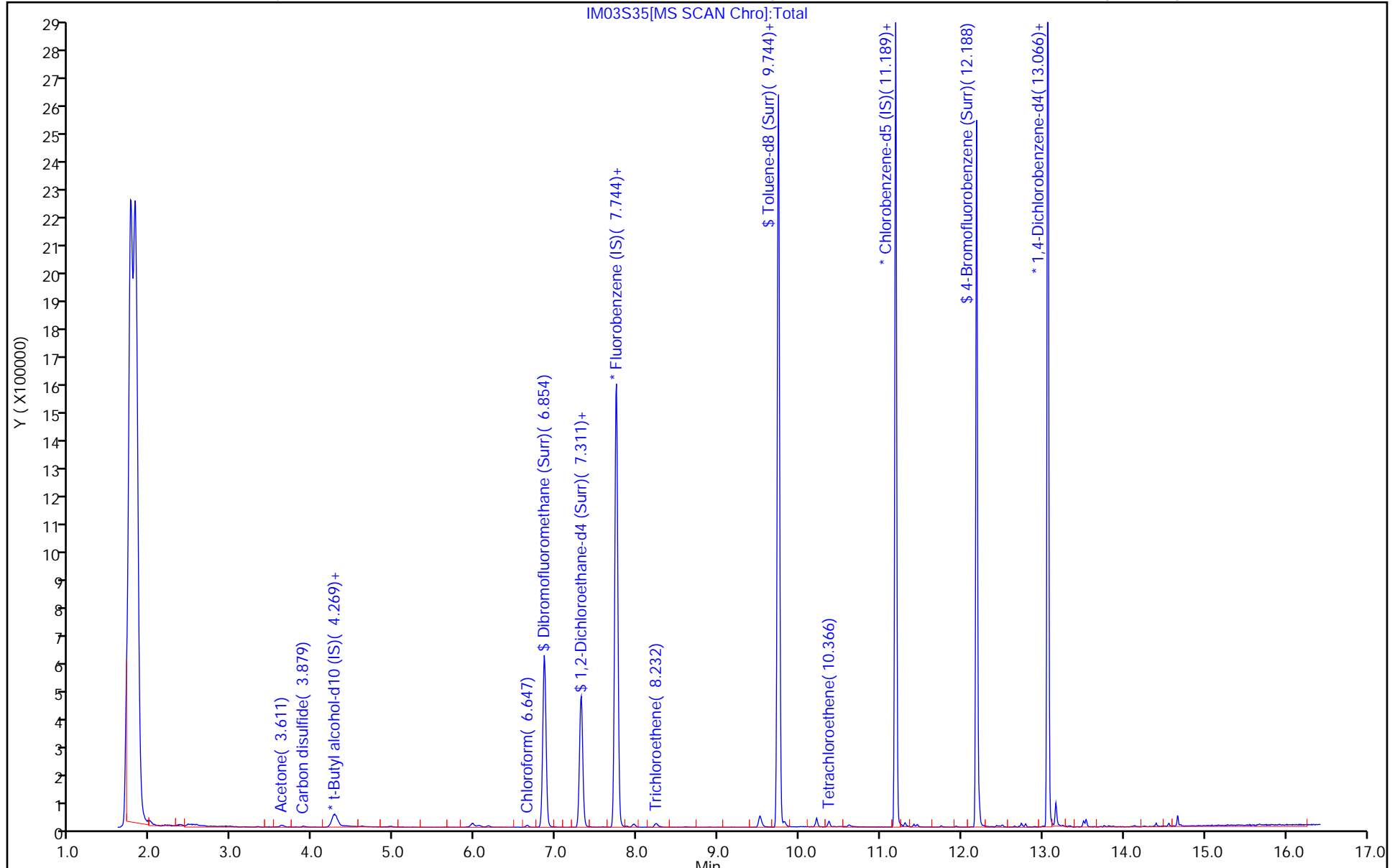
ALS Bottle#: 12

Method: 8260 25ml HP31

Limit Group: MSV - 8260C\_D

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

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



Eurofins Lancaster Laboratories Env, LLC  
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S35.D  
 Lims ID: 410-30627-A-4  
 Client ID: HD-COD-SW-9-0/1-0  
 Sample Type: Client  
 Inject. Date: 03-Mar-2021 23:02:30 ALS Bottle#: 12 Worklist Smp#: 13  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0023228-013  
 Misc. Info.: 410-30627-A-4  
 Operator ID: MEC29284 Instrument ID: 19930  
 Method: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\8260 25ml HP31.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 04-Mar-2021 13:06:32 Calib Date: 23-Nov-2020 18:05:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I17.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1631

First Level Reviewer: knouses

Date: 04-Mar-2021 12:37:32

Compound	Amount Added	Amount Recovered	% Rec.
\$ 46 Dibromofluoromethane (Surr)	10.0	10.3	103.46
\$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	10.1	101.17
\$ 75 Toluene-d8 (Surr)	10.0	9.78	97.76
\$ 100 4-Bromofluorobenzene (Surr)	10.0	9.69	96.90

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S35.D

Injection Date: 03-Mar-2021 23:02:30

Instrument ID: 19930

Lims ID: 410-30627-A-4

Lab Sample ID: 410-30627-4

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

Operator ID: MEC29284

ALS Bottle#: 12

Worklist Smp#: 13

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

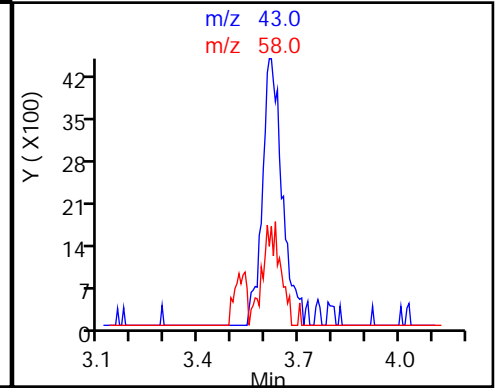
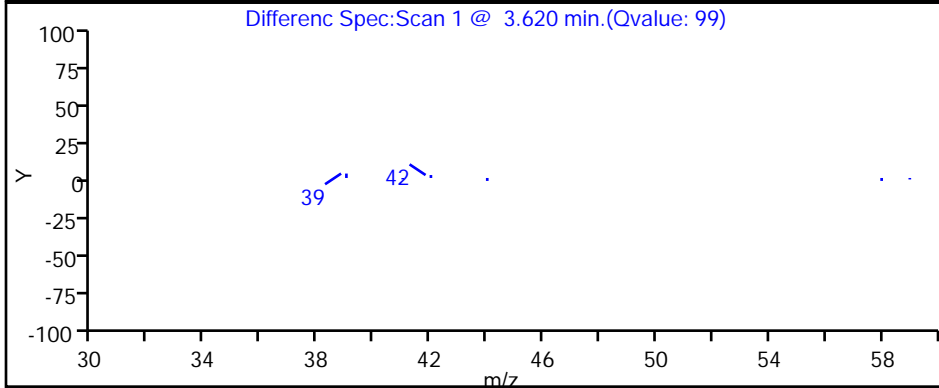
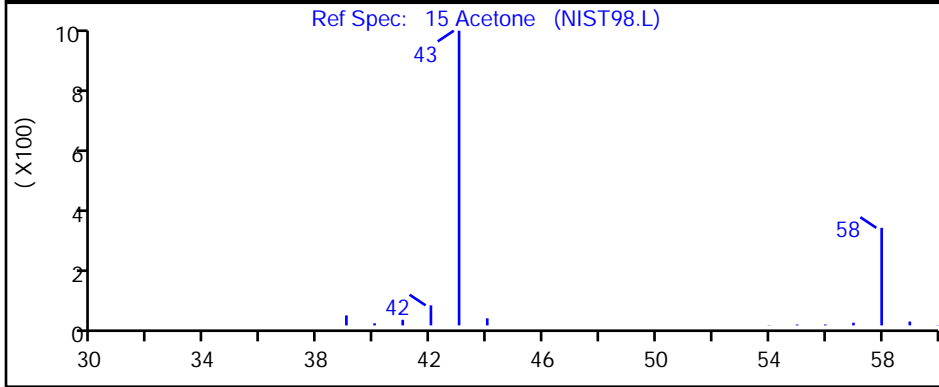
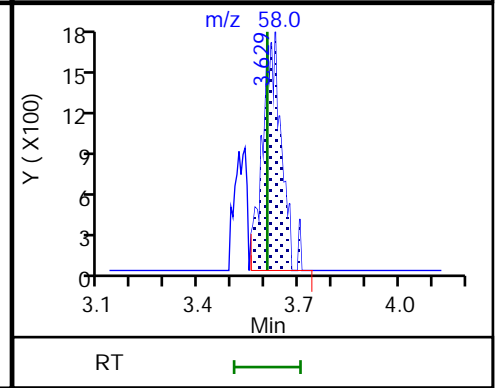
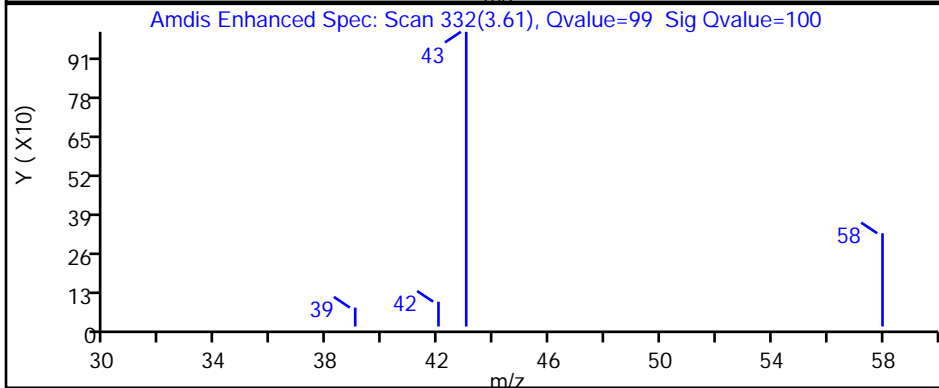
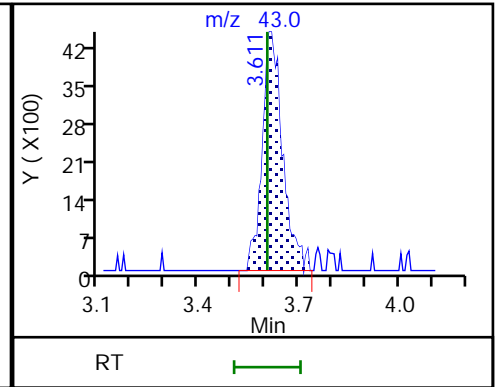
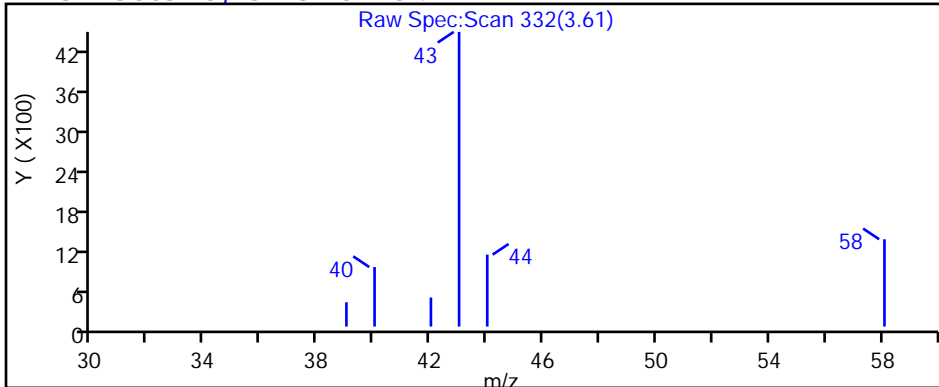
Method: 8260 25ml HP31

Limit Group: MSV - 8260C\_D

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

MS Quad

15 Acetone, CAS: 67-64-1



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S35.D

Injection Date: 03-Mar-2021 23:02:30

Instrument ID: 19930

Lims ID: 410-30627-A-4

Lab Sample ID: 410-30627-4

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

Operator ID: MEC29284

ALS Bottle#: 12

Worklist Smp#: 13

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

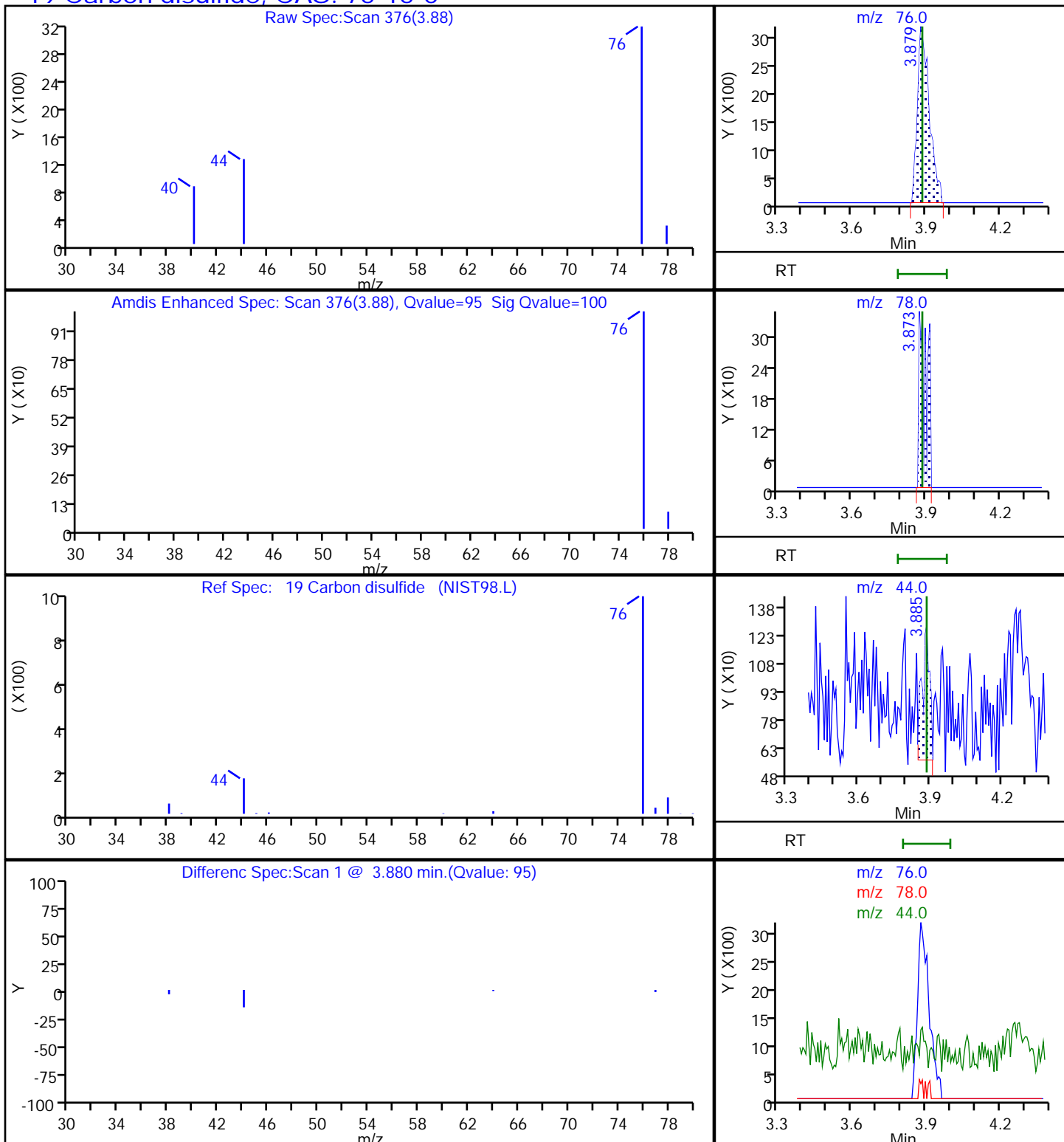
Method: 8260 25ml HP31

Limit Group: MSV - 8260C\_D

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

MS Quad

### 19 Carbon disulfide, CAS: 75-15-0



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S35.D

Injection Date: 03-Mar-2021 23:02:30

Instrument ID: 19930

Lims ID: 410-30627-A-4

Lab Sample ID: 410-30627-4

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

Operator ID: MEC29284

ALS Bottle#: 12

Worklist Smp#: 13

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

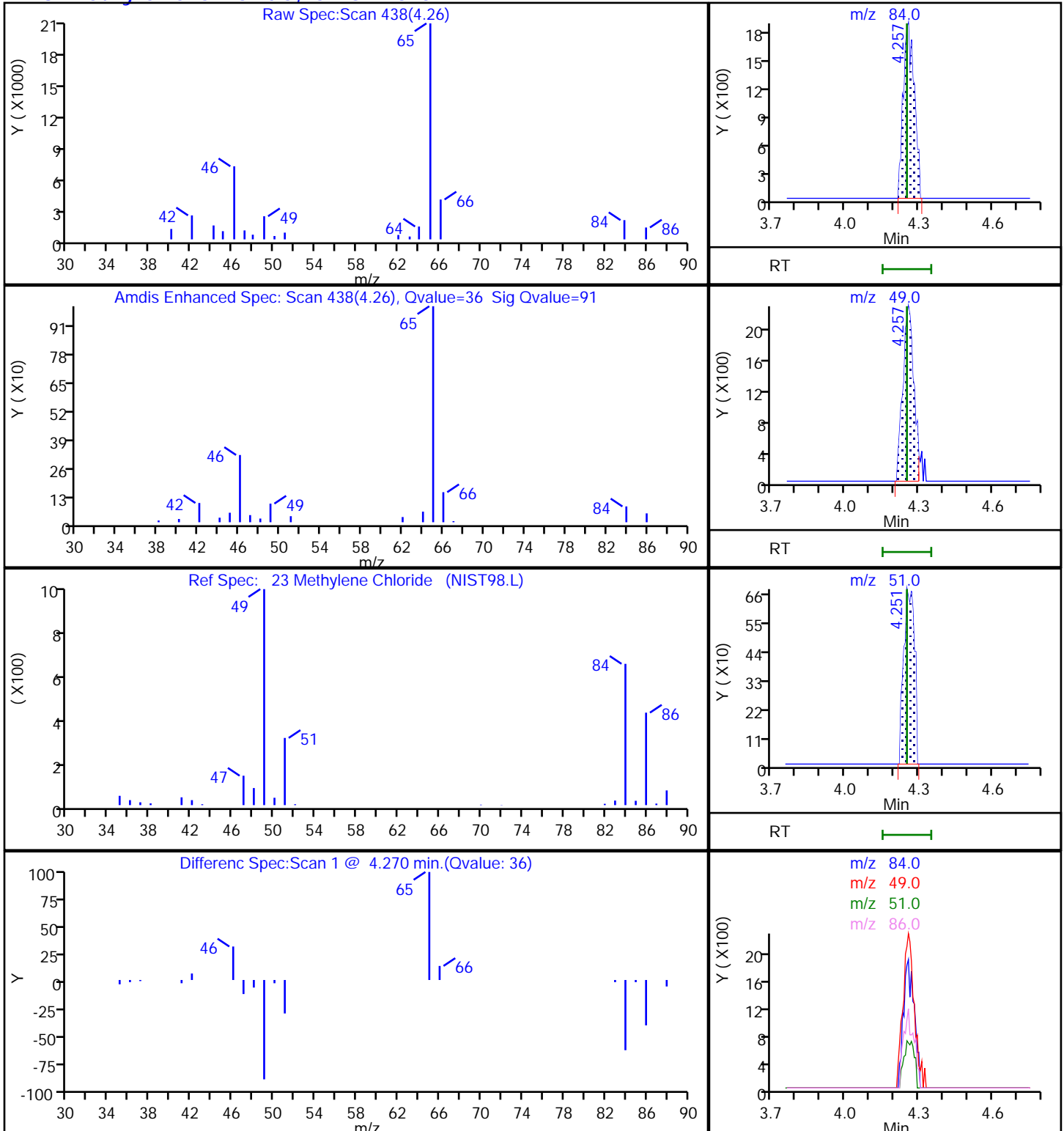
Method: 8260 25ml HP31

Limit Group: MSV - 8260C\_D

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

MS Quad

### 23 Methylene Chloride, CAS: 75-09-2



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S35.D

Injection Date: 03-Mar-2021 23:02:30

Instrument ID: 19930

Lims ID: 410-30627-A-4

Lab Sample ID: 410-30627-4

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

Operator ID: MEC29284

ALS Bottle#: 12

Worklist Smp#: 13

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

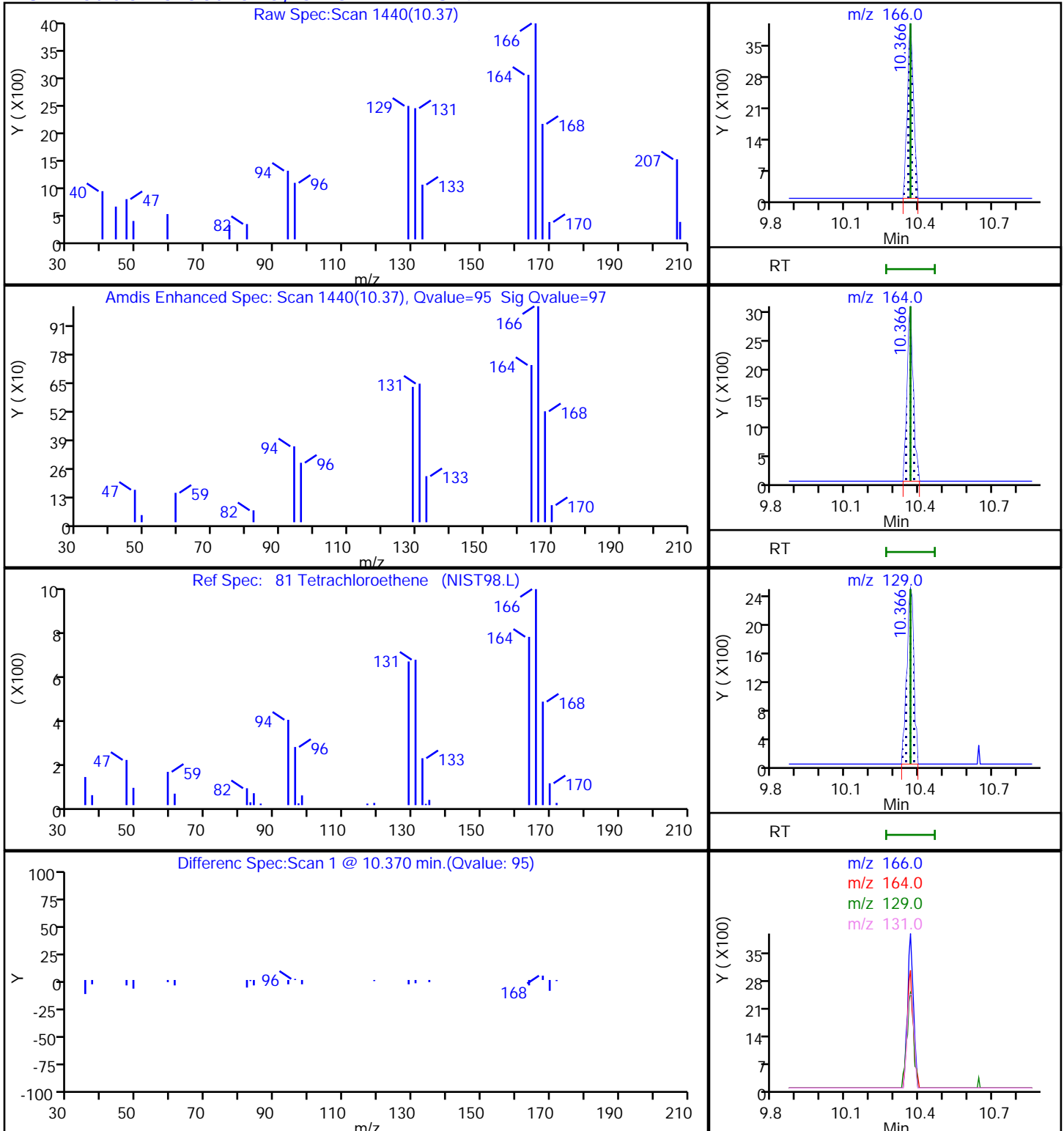
Method: 8260 25ml HP31

Limit Group: MSV - 8260C\_D

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

MS Quad

### 81 Tetrachloroethene, CAS: 127-18-4





Eurofins Lancaster Laboratories Env, LLC

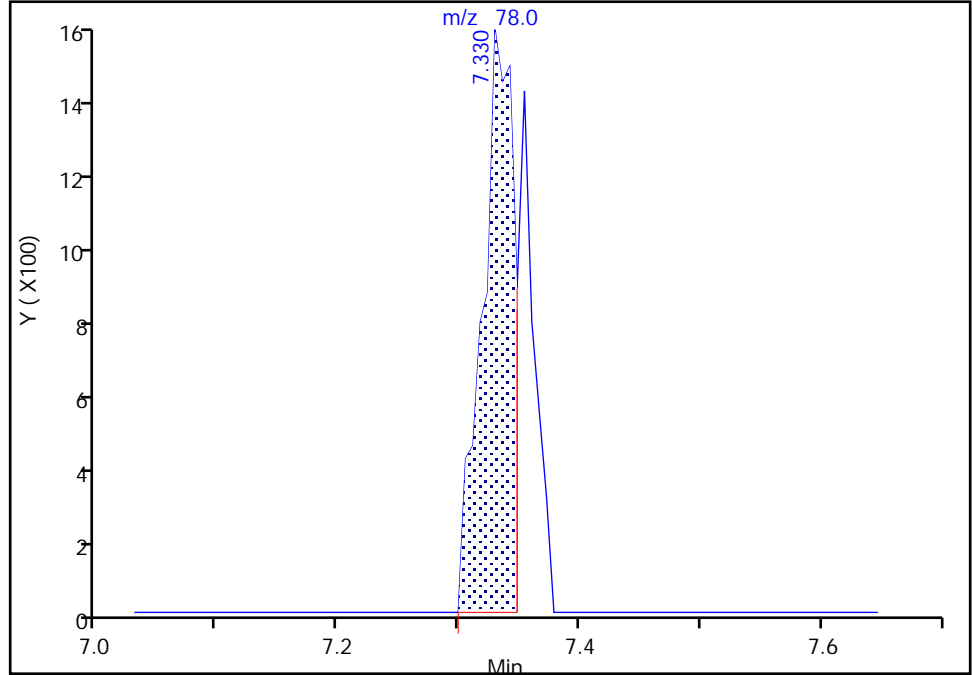
Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S35.D  
Injection Date: 03-Mar-2021 23:02:30 Instrument ID: 19930  
Lims ID: 410-30627-A-4 Lab Sample ID: 410-30627-4  
Client ID: HD-COD-SW-9-0/1-0  
Operator ID: MEC29284 ALS Bottle#: 12 Worklist Smp#: 13  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: 8260 25ml HP31 Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

54 Benzene, CAS: 71-43-2

Signal: 1

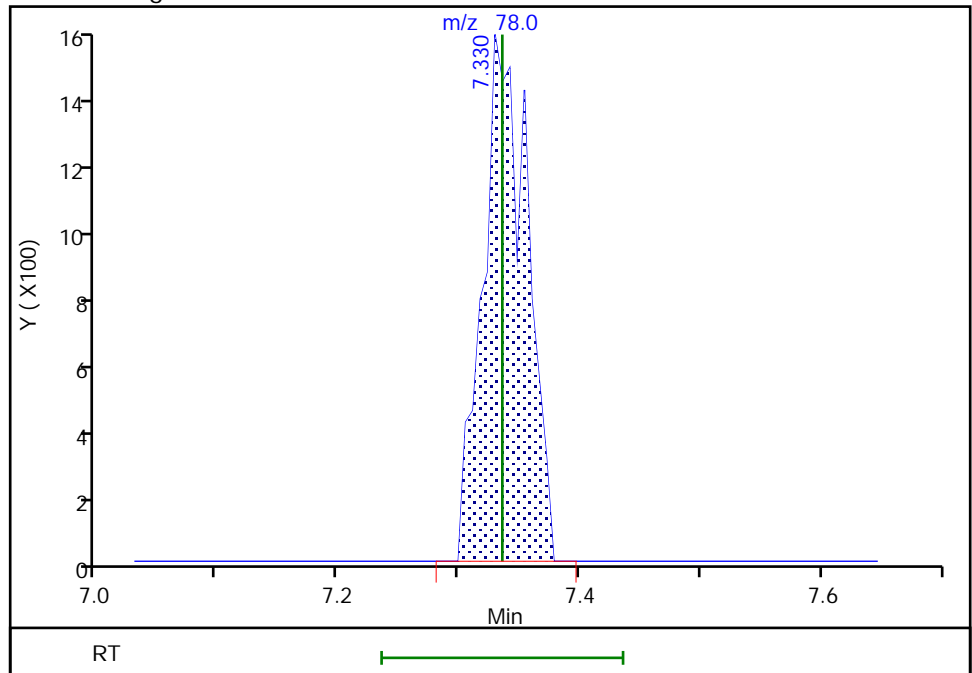
RT: 7.33  
Area: 2888  
Amount: 0.010827  
Amount Units: ug/l

Processing Integration Results



RT: 7.33  
Area: 4006  
Amount: 0.015018  
Amount Units: ug/l

Manual Integration Results



Reviewer: knouses, 04-Mar-2021 12:34:25  
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

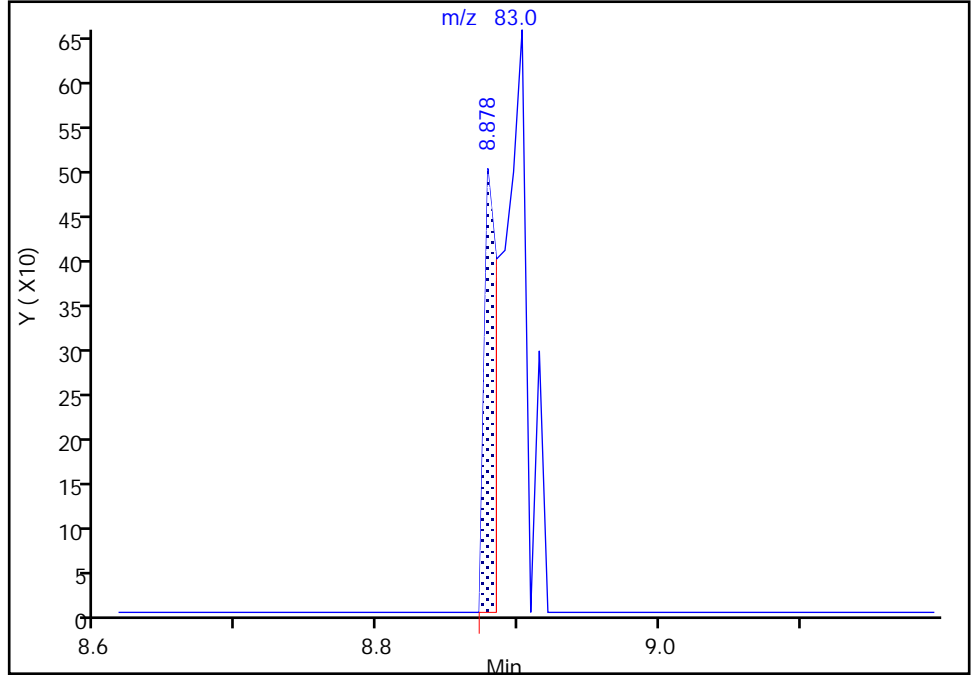
Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S35.D  
Injection Date: 03-Mar-2021 23:02:30 Instrument ID: 19930  
Lims ID: 410-30627-A-4 Lab Sample ID: 410-30627-4  
Client ID: HD-COD-SW-9-0/1-0  
Operator ID: MEC29284 ALS Bottle#: 12 Worklist Smp#: 13  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: 8260 25ml HP31 Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

68 Dichlorobromomethane, CAS: 75-27-4

Signal: 1

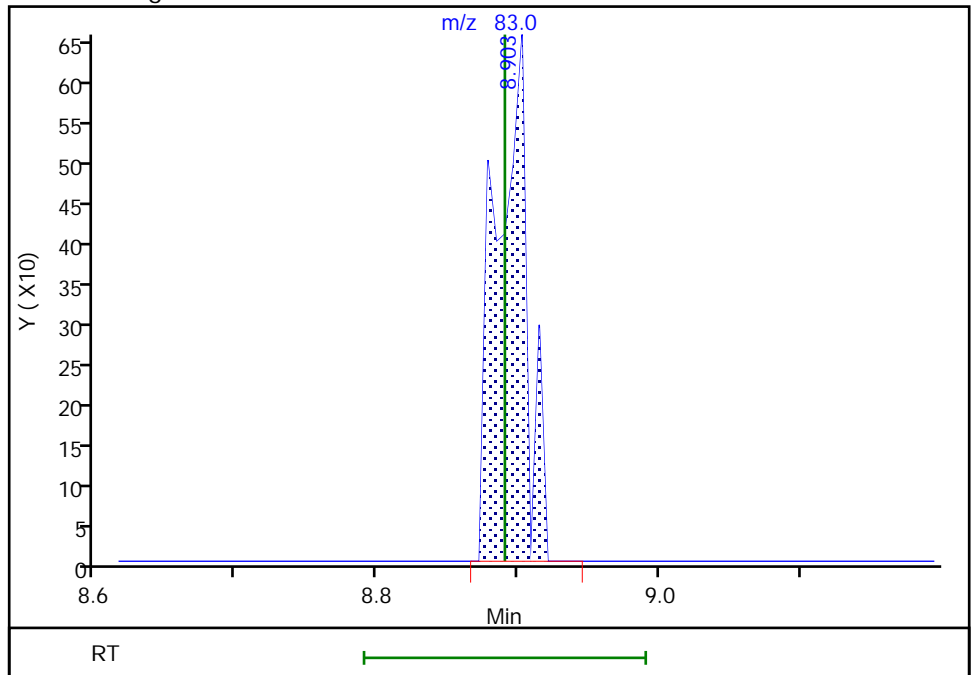
RT: 8.88  
Area: 328  
Amount: 0.004174  
Amount Units: ug/l

Processing Integration Results



RT: 8.90  
Area: 1005  
Amount: 0.012790  
Amount Units: ug/l

Manual Integration Results



Reviewer: knouses, 04-Mar-2021 12:36:52  
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

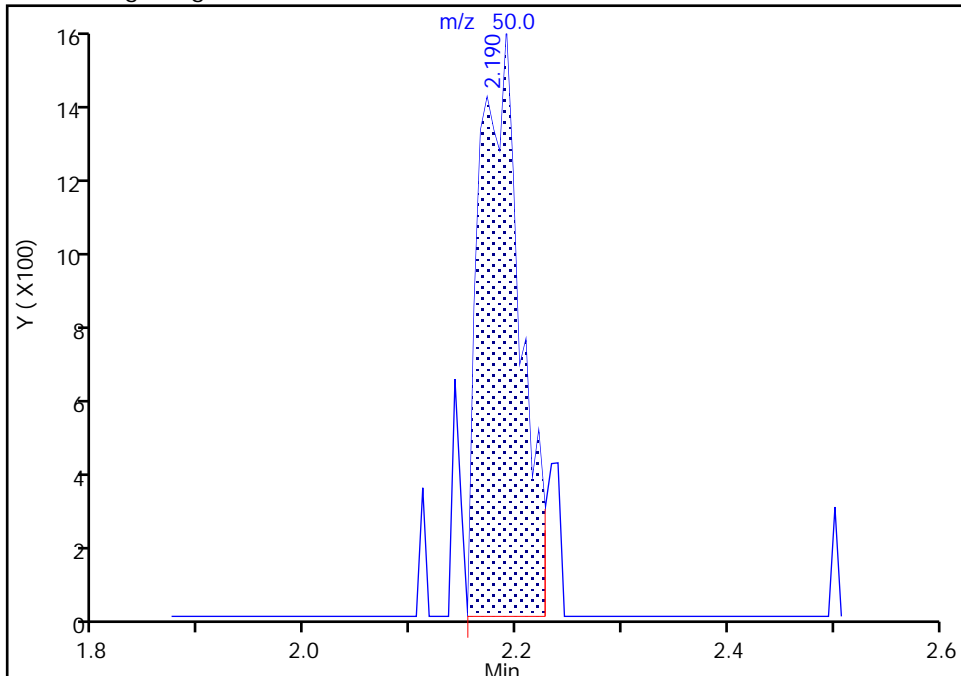
Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S35.D  
Injection Date: 03-Mar-2021 23:02:30 Instrument ID: 19930  
Lims ID: 410-30627-A-4 Lab Sample ID: 410-30627-4  
Client ID: HD-COD-SW-9-0/1-0  
Operator ID: MEC29284 ALS Bottle#: 12 Worklist Smp#: 13  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: 8260 25ml HP31 Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

4 Chloromethane, CAS: 74-87-3

Signal: 1

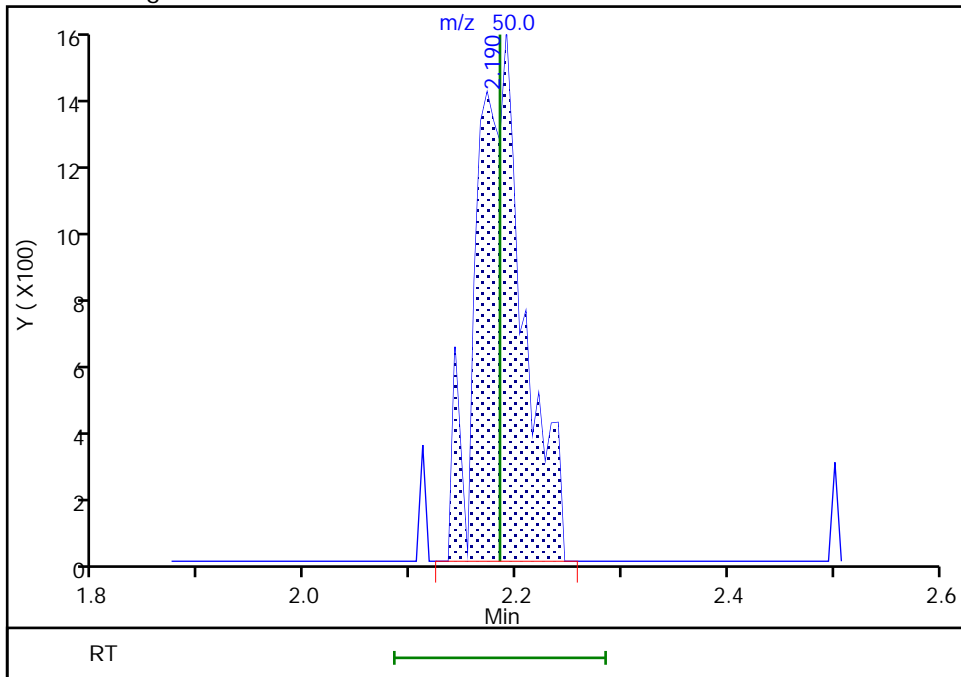
RT: 2.19  
Area: 4044  
Amount: 0.046382  
Amount Units: ug/l

Processing Integration Results



RT: 2.19  
Area: 4668  
Amount: 0.053539  
Amount Units: ug/l

Manual Integration Results



Reviewer: knouses, 04-Mar-2021 12:33:42  
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

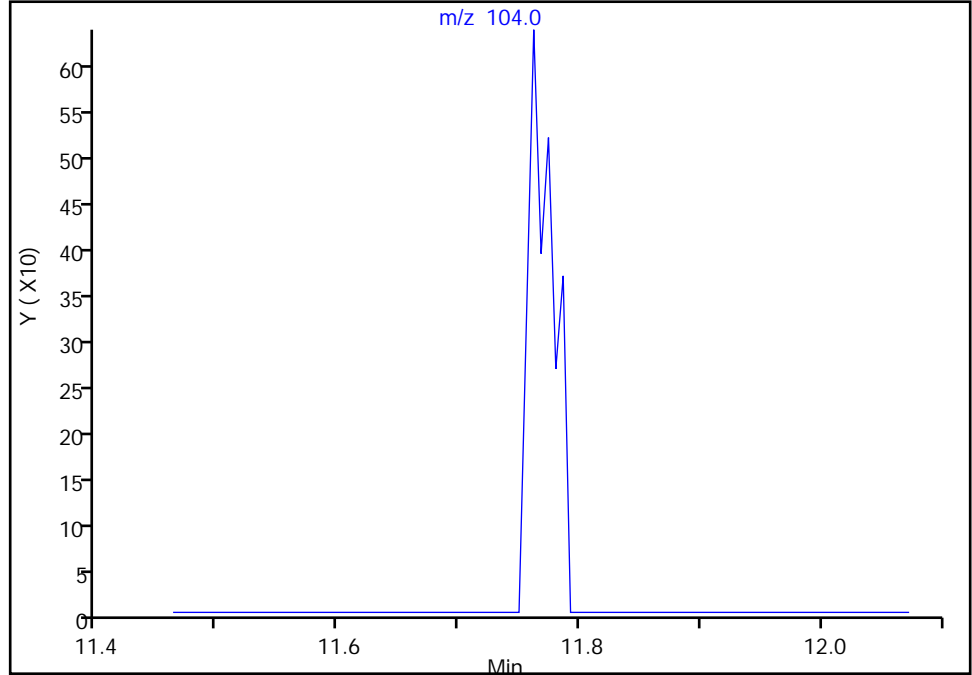
Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S35.D  
Injection Date: 03-Mar-2021 23:02:30 Instrument ID: 19930  
Lims ID: 410-30627-A-4 Lab Sample ID: 410-30627-4  
Client ID: HD-COD-SW-9-0/1-0  
Operator ID: MEC29284 ALS Bottle#: 12 Worklist Smp#: 13  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: 8260 25ml HP31 Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

95 Styrene, CAS: 100-42-5

Signal: 1

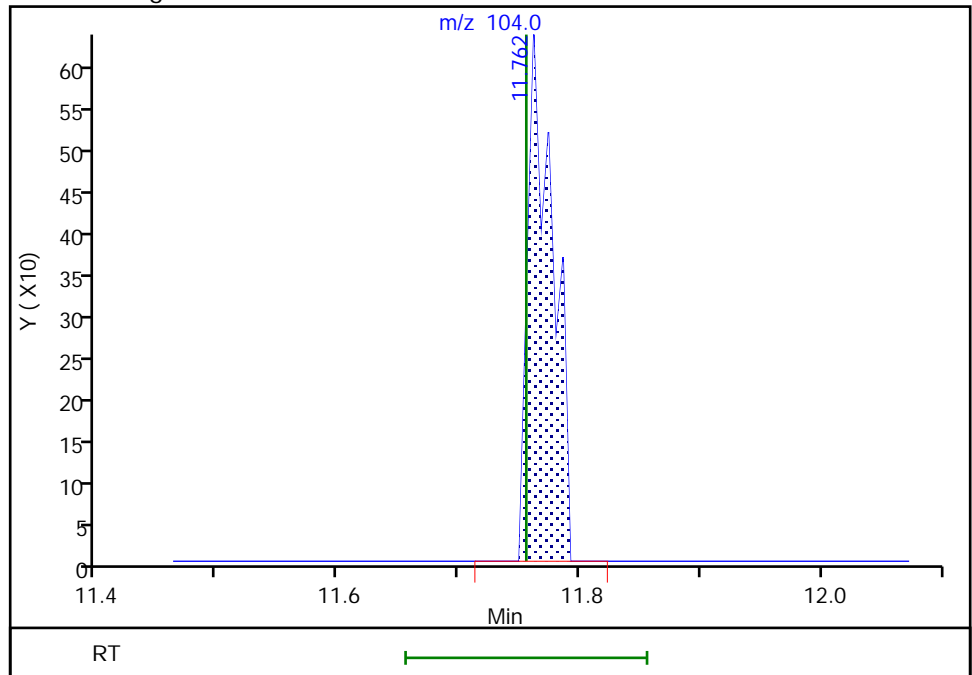
Not Detected  
Expected RT: 11.76

Processing Integration Results



Manual Integration Results

RT: 11.76  
Area: 907  
Amount: 0.004258  
Amount Units: ug/l



Reviewer: knouses, 04-Mar-2021 12:37:18  
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

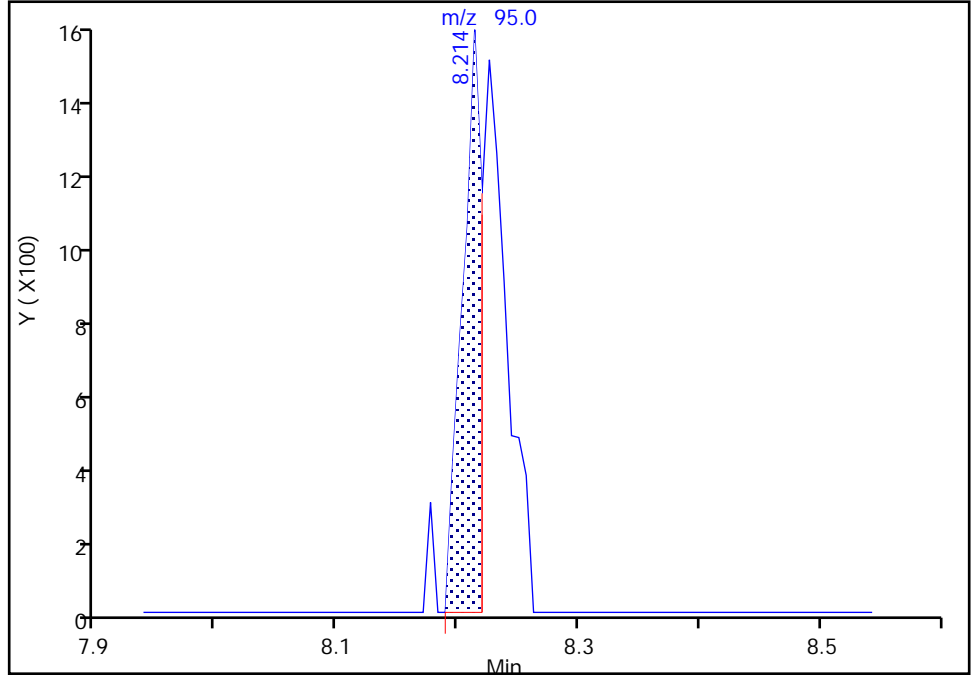
Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S35.D  
Injection Date: 03-Mar-2021 23:02:30 Instrument ID: 19930  
Lims ID: 410-30627-A-4 Lab Sample ID: 410-30627-4  
Client ID: HD-COD-SW-9-0/1-0  
Operator ID: MEC29284 ALS Bottle#: 12 Worklist Smp#: 13  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: 8260 25ml HP31 Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

61 Trichloroethene, CAS: 79-01-6

Signal: 1

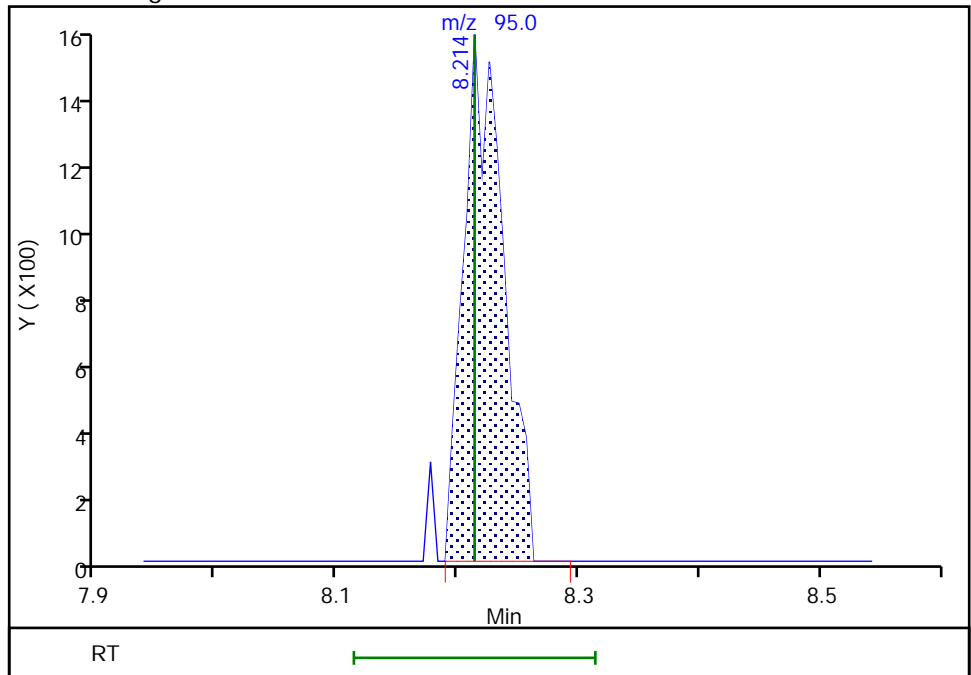
RT: 8.21  
Area: 1719  
Amount: 0.024620  
Amount Units: ug/l

Processing Integration Results



RT: 8.21  
Area: 3454  
Amount: 0.049468  
Amount Units: ug/l

Manual Integration Results



Reviewer: knouses, 04-Mar-2021 12:36:41  
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-30627-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: HD-COD-SW-13-0/1-0 Lab Sample ID: 410-30627-5  
 Matrix: Water Lab File ID: IM03S36.D  
 Analysis Method: 8260D Date Collected: 02/25/2021 10:00  
 Sample wt/vol: 25 (mL) Date Analyzed: 03/03/2021 23:23  
 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.: 99333 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	^c	5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70
67-64-1	Acetone	1.6	J	5.0	0.90
71-43-2	Benzene	ND		0.50	0.050
74-97-5	Bromochloromethane	ND		0.50	0.050
75-27-4	Bromodichloromethane	ND		0.50	0.050
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.070
75-15-0	Carbon disulfide	ND		1.0	0.060
56-23-5	Carbon tetrachloride	ND		0.50	0.070
108-90-7	Chlorobenzene	ND		0.50	0.060
75-00-3	Chloroethane	ND		0.50	0.070
67-66-3	Chloroform	ND		0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	0.051	J	0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.050
124-48-1	Dibromochloromethane	ND		0.50	0.070
100-41-4	Ethylbenzene	ND		0.50	0.060
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.050
75-09-2	Methylene Chloride	ND		0.50	0.070
100-42-5	Styrene	ND		0.50	0.050
127-18-4	Tetrachloroethene	ND		0.50	0.060
108-88-3	Toluene	ND		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	ND		0.50	0.060

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-30627-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: HD-COD-SW-13-0/1-0 Lab Sample ID: 410-30627-5  
 Matrix: Water Lab File ID: IM03S36.D  
 Analysis Method: 8260D Date Collected: 02/25/2021 10:00  
 Sample wt/vol: 25 (mL) Date Analyzed: 03/03/2021 23:23  
 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.: 99333 Units: ug/L

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

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		80-120
460-00-4	4-Bromofluorobenzene (Surr)	97		80-120
1868-53-7	Dibromofluoromethane (Surr)	103		80-120
2037-26-5	Toluene-d8 (Surr)	97		80-120

Eurofins Lancaster Laboratories Env, LLC  
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S36.D  
 Lims ID: 410-30627-A-5  
 Client ID: HD-COD-SW-13-0/1-0  
 Sample Type: Client  
 Inject. Date: 03-Mar-2021 23:23:30 ALS Bottle#: 13 Worklist Smp#: 14  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0023228-014  
 Misc. Info.: 410-30627-A-5  
 Operator ID: MEC29284 Instrument ID: 19930  
 Method: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\8260 25ml HP31.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 04-Mar-2021 13:06:32 Calib Date: 23-Nov-2020 18:05:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23117.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1631

First Level Reviewer: knouses

Date: 04-Mar-2021 12:38:51

Compound	Sig	RT (min.)	Exp RT (min.)	Diff RT (min.)	Q	Response	OnCol Amt ug/l	Flags
4 Chloromethane	50	2.172	2.184	-0.012	1	3574	0.0408	M
5 Vinyl chloride	62		2.306				ND	
7 Bromomethane	94		2.629				ND	
8 Chloroethane	64		2.709				ND	
14 1,1-Dichloroethene	96		3.574				ND	
15 Acetone	43	3.605	3.605	0.000	97	15852	1.59	
19 Carbon disulfide	76	3.873	3.885	-0.012	99	8935	0.0547	
23 Methylene Chloride	84		4.251				ND	7
* 24 t-Butyl alcohol-d10 (IS)	65	4.251	4.275	-0.024	0	182612	50.0	
27 Methyl tert-butyl ether	73		4.659				ND	
28 trans-1,2-Dichloroethene	96		4.672				ND	
31 1,1-Dichloroethane	63		5.330				ND	
36 2-Butanone (MEK)	43		6.122				ND	7
37 cis-1,2-Dichloroethene	96	6.159	6.159	0.000	73	3656	0.0505	
43 Chlorobromomethane	128		6.488				ND	
45 Chloroform	83	6.647	6.641	0.006	0	1554	0.0140	7M
\$ 46 Dibromofluoromethane (Surr)	113	6.848	6.854	-0.006	94	539300	10.3	
47 1,1,1-Trichloroethane	97		6.866				ND	
50 Carbon tetrachloride	117		7.080				ND	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.299	7.305	-0.006	0	108899	10.3	
54 Benzene	78		7.336				ND	7
56 1,2-Dichloroethane	62		7.409				ND	
* 58 Fluorobenzene (IS)	96	7.738	7.738	0.000	99	2114879	10.0	
61 Trichloroethene	95	8.220	8.214	0.006	88	3370	0.0480	
63 1,2-Dichloropropane	63		8.549				ND	
68 Dichlorobromomethane	83		8.890				ND	
73 cis-1,3-Dichloropropene	75		9.433				ND	
74 4-Methyl-2-pentanone (MIBK)	43		9.597				ND	7
\$ 75 Toluene-d8 (Surr)	98	9.744	9.738	0.006	93	2105345	9.74	
76 Toluene	92	9.817	9.817	0.000	95	5632	0.0312	
78 trans-1,3-Dichloropropene	75		10.067				ND	



Compound	Sig	RT (min.)	Exp RT (min.)	Diff RT (min.)	Q	Response	OnCol Amt ug/l	Flags
80 1,1,2-Trichloroethane	97		10.274				ND	
81 Tetrachloroethene	166	10.359	10.366	-0.007	93	3431	0.0393	
83 2-Hexanone	43		10.481				ND	
85 Chlorodibromomethane	129		10.652				ND	
86 Ethylene Dibromide	107		10.762				ND	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.189	0.000	85	1654452	10.0	
90 Chlorobenzene	112		11.213				ND	
S 89 Xylenes, Total	106		11.245				ND	7
91 1,1,1,2-Tetrachloroethane	131		11.298				ND	
92 Ethylbenzene	91		11.298				ND	7
93 m-Xylene & p-Xylene	106		11.414				ND	7
94 o-Xylene	106		11.743				ND	
95 Styrene	104		11.756				ND	
96 Bromoform	173		11.914				ND	
\$ 100 4-Bromofluorobenzene (Surr)	95	12.188	12.182	0.006	95	774115	9.67	
101 1,1,2,2-Tetrachloroethane	83		12.286				ND	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	94	938478	10.0	

### QC Flag Legend

#### Processing Flags

7 - Failed Limit of Detection

#### Review Flags

M - Manually Integrated

### Reagents:

MSV\_31\_826ISS\_00004

Amount Added: 5.00

Units: uL

Run Reagent

Eurolins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S36.D

Injection Date: 03-Mar-2021 23:23:30

Instrument ID: 19930

Operator ID: MEC29284

Lims ID: 410-30627-A-5

Lab Sample ID: 410-30627-5

Worklist Smp#: 14

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

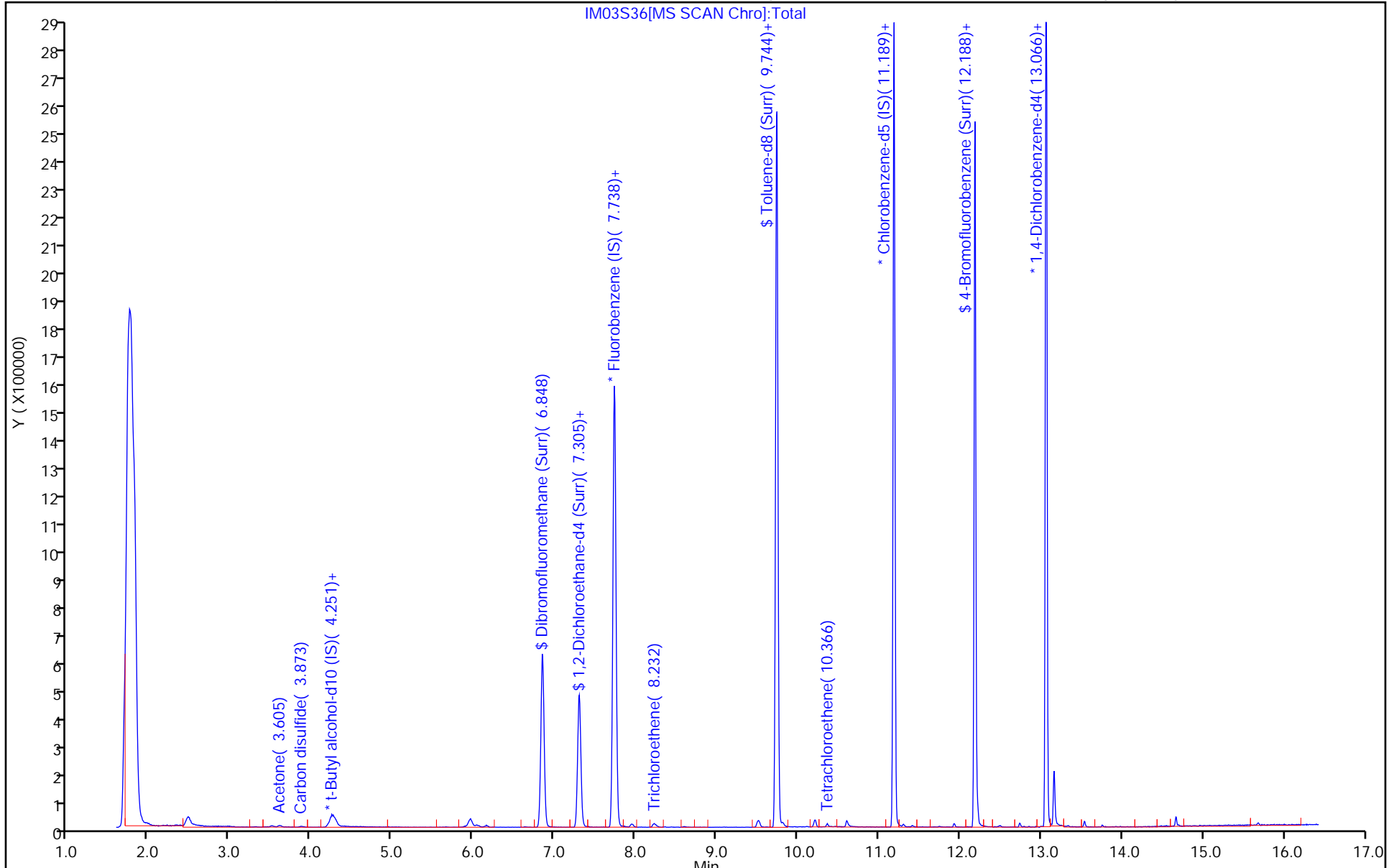
ALS Bottle#: 13

Method: 8260 25ml HP31

Limit Group: MSV - 8260C\_D

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

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



Eurofins Lancaster Laboratories Env, LLC  
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S36.D  
 Lims ID: 410-30627-A-5  
 Client ID: HD-COD-SW-13-0/1-0  
 Sample Type: Client  
 Inject. Date: 03-Mar-2021 23:23:30 ALS Bottle#: 13 Worklist Smp#: 14  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0023228-014  
 Misc. Info.: 410-30627-A-5  
 Operator ID: MEC29284 Instrument ID: 19930  
 Method: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\8260 25ml HP31.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 04-Mar-2021 13:06:32 Calib Date: 23-Nov-2020 18:05:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I17.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1631

First Level Reviewer: knouses Date: 04-Mar-2021 12:38:51

Compound	Amount Added	Amount Recovered	% Rec.
\$ 46 Dibromofluoromethane (Surr)	10.0	10.3	103.28
\$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	10.3	103.44
\$ 75 Toluene-d8 (Surr)	10.0	9.74	97.44
\$ 100 4-Bromofluorobenzene (Surr)	10.0	9.67	96.75

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S36.D

Injection Date: 03-Mar-2021 23:23:30

Instrument ID: 19930

Lims ID: 410-30627-A-5

Lab Sample ID: 410-30627-5

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

Operator ID: MEC29284

ALS Bottle#: 13

Worklist Smp#: 14

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

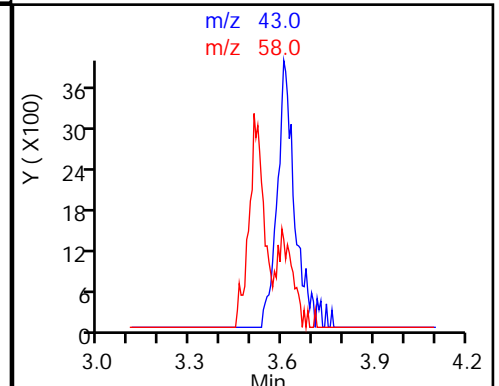
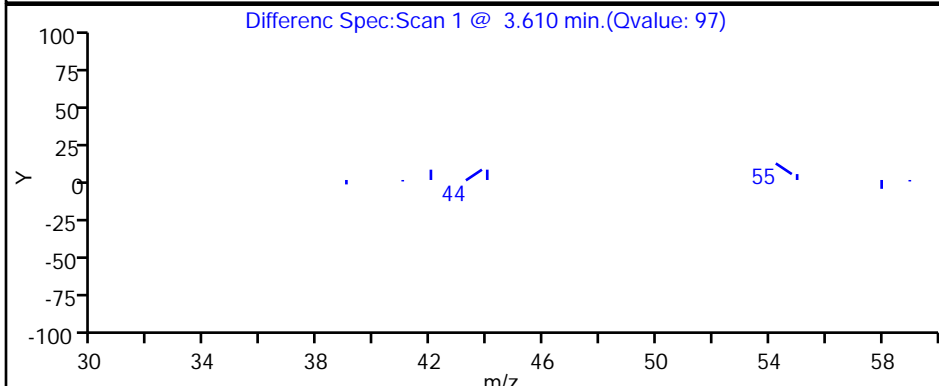
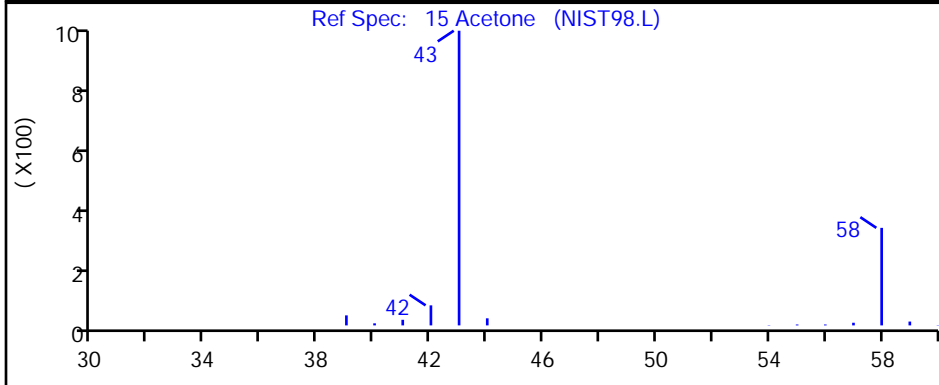
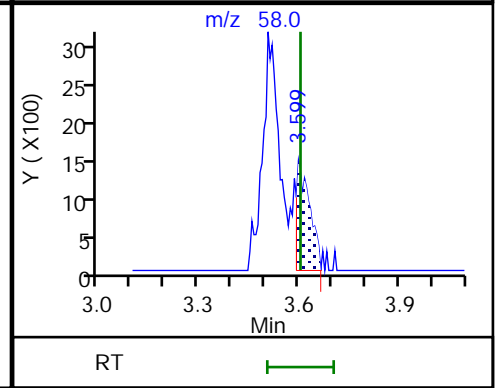
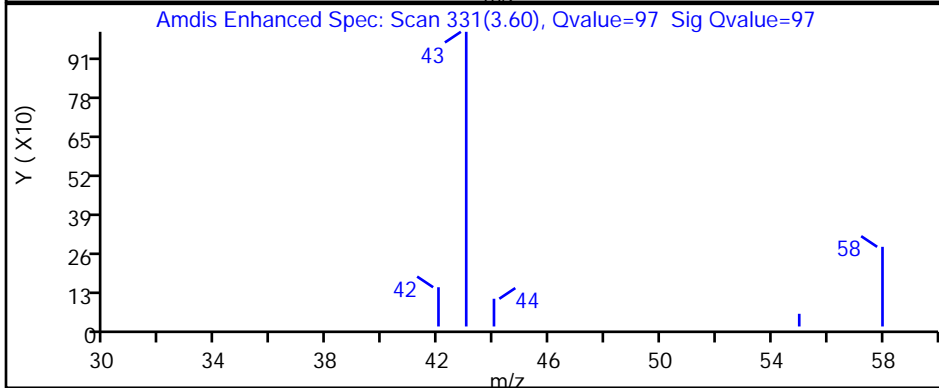
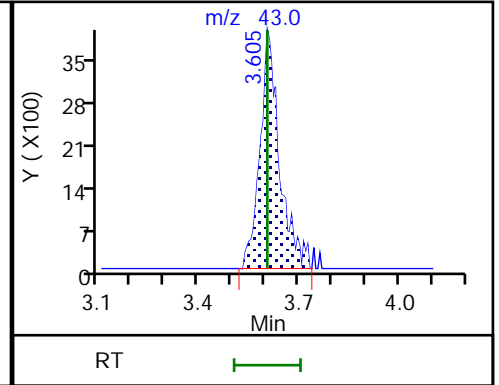
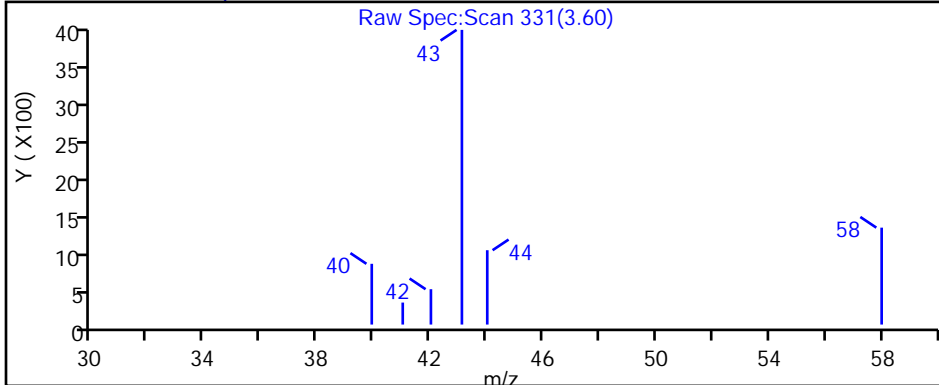
Method: 8260 25ml HP31

Limit Group: MSV - 8260C\_D

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

MS Quad

15 Acetone, CAS: 67-64-1



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S36.D

Injection Date: 03-Mar-2021 23:23:30

Instrument ID: 19930

Lims ID: 410-30627-A-5

Lab Sample ID: 410-30627-5

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

Operator ID: MEC29284

ALS Bottle#: 13

Worklist Smp#: 14

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

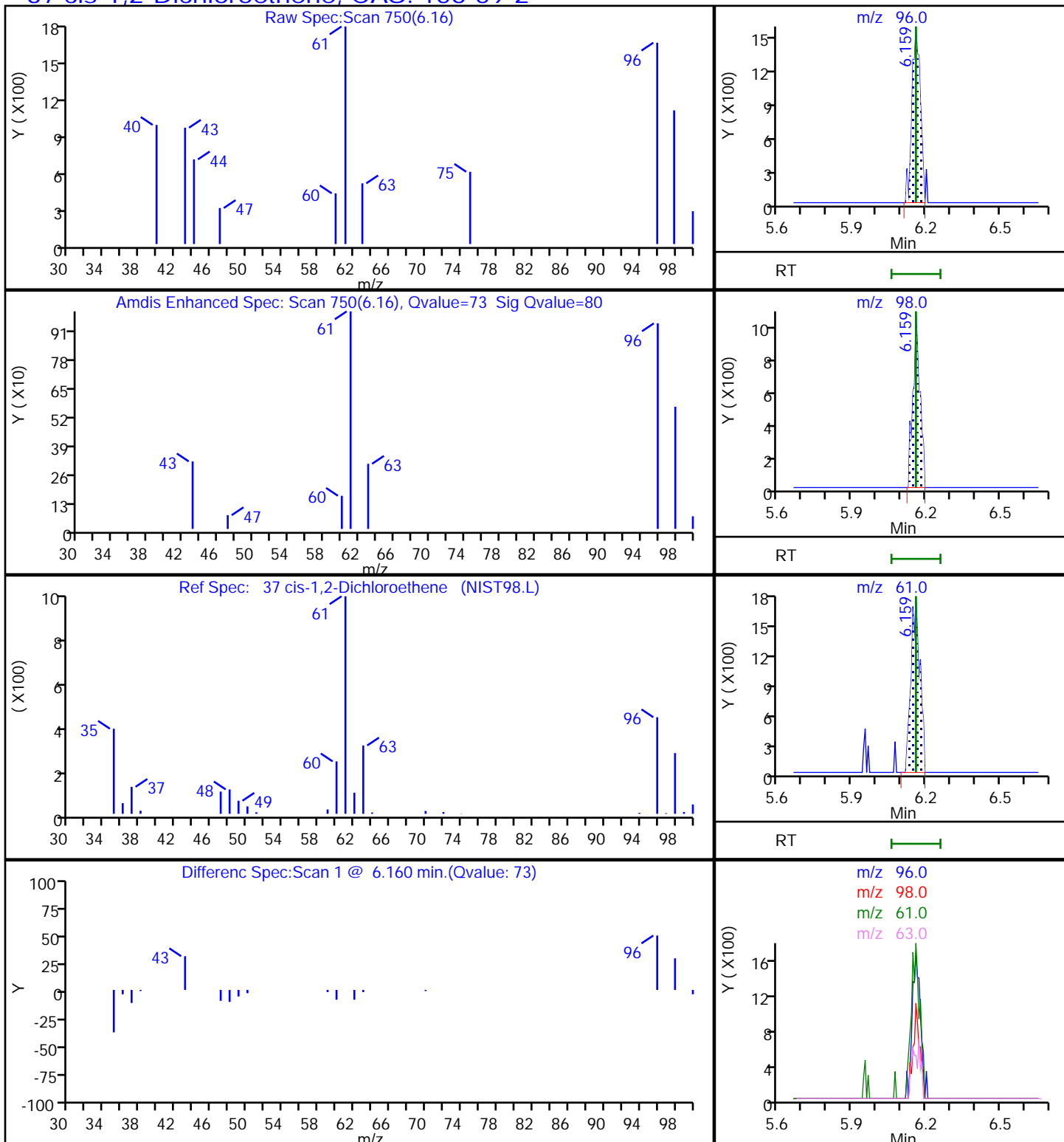
Method: 8260 25ml HP31

Limit Group: MSV - 8260C\_D

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

MS Quad

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



Eurofins Lancaster Laboratories Env, LLC

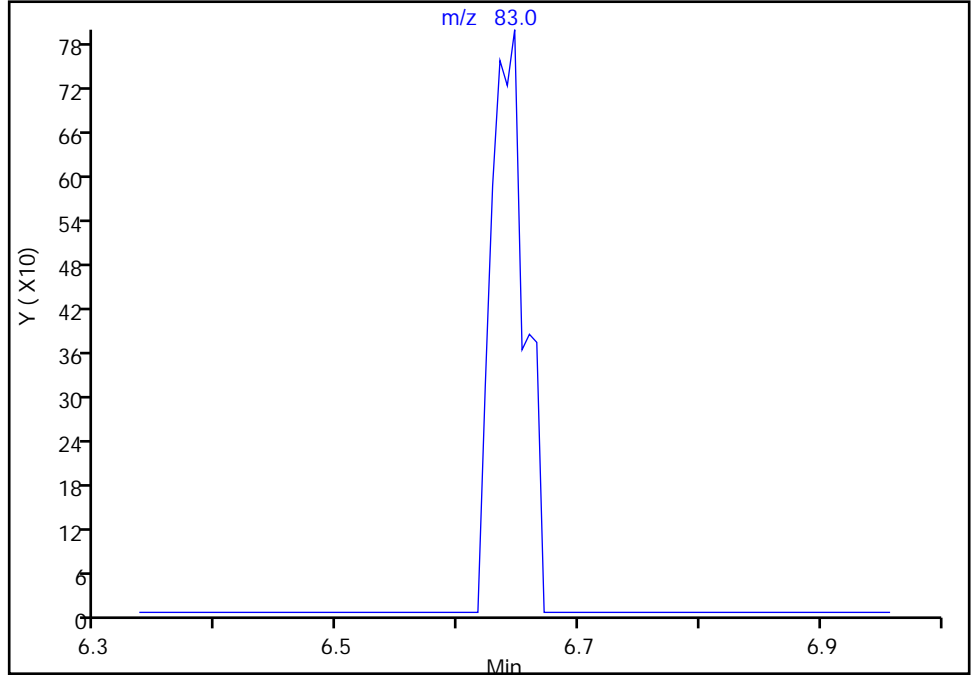
Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S36.D  
Injection Date: 03-Mar-2021 23:23:30 Instrument ID: 19930  
Lims ID: 410-30627-A-5 Lab Sample ID: 410-30627-5  
Client ID: HD-COD-SW-13-0/1-0  
Operator ID: MEC29284 ALS Bottle#: 13 Worklist Smp#: 14  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: 8260 25ml HP31 Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

45 Chloroform, CAS: 67-66-3

Signal: 1

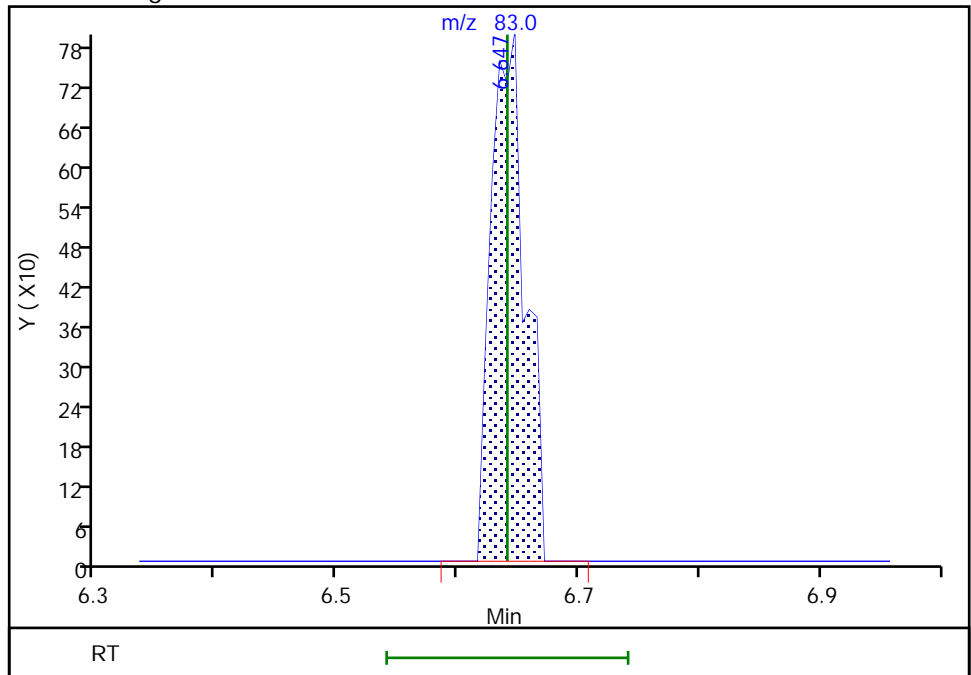
Not Detected  
Expected RT: 6.64

Processing Integration Results



Manual Integration Results

RT: 6.65  
Area: 1554  
Amount: 0.014009  
Amount Units: ug/l



Reviewer: knouses, 04-Mar-2021 12:38:25  
Audit Action: Manually Integrated

Audit Reason: Missed Peak

Eurofins Lancaster Laboratories Env, LLC

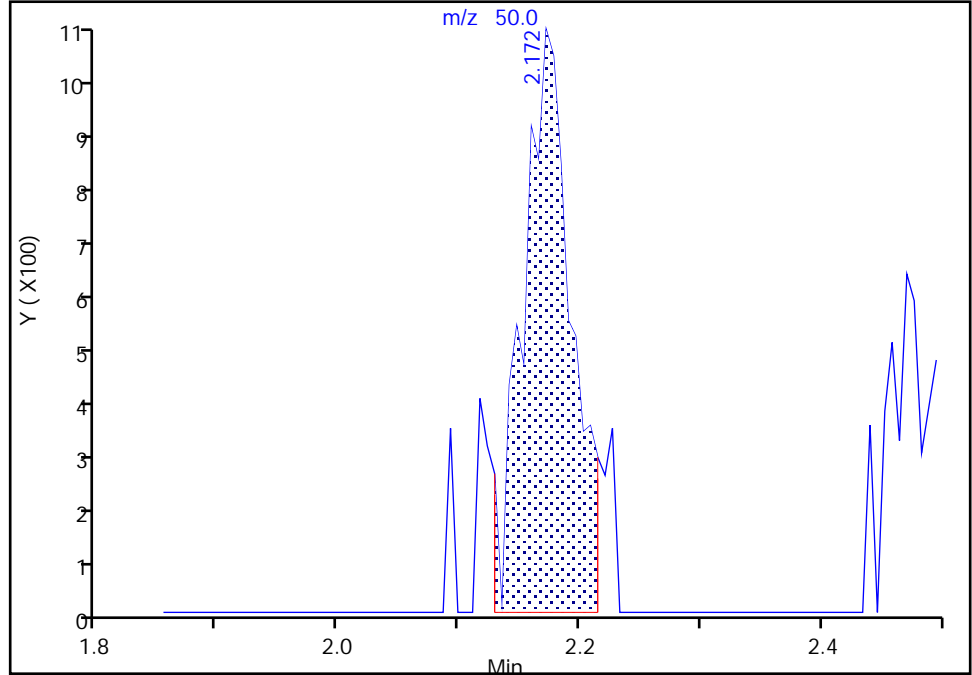
Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S36.D  
Injection Date: 03-Mar-2021 23:23:30 Instrument ID: 19930  
Lims ID: 410-30627-A-5 Lab Sample ID: 410-30627-5  
Client ID: HD-COD-SW-13-0/1-0  
Operator ID: MEC29284 ALS Bottle#: 13 Worklist Smp#: 14  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: 8260 25ml HP31 Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

4 Chloromethane, CAS: 74-87-3

Signal: 1

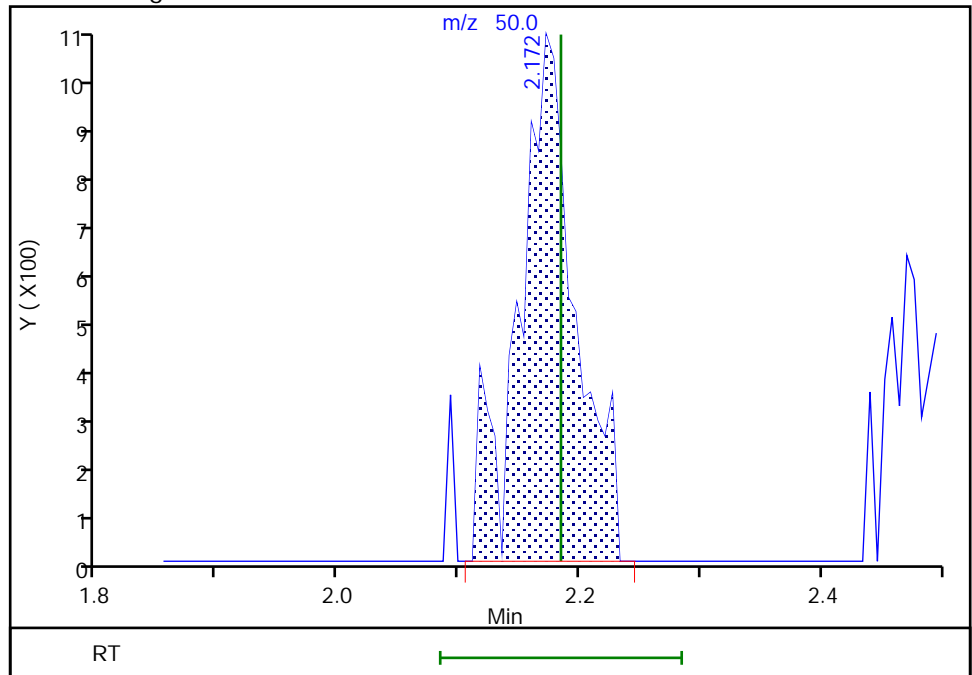
RT: 2.17  
Area: 3093  
Amount: 0.035314  
Amount Units: ug/l

Processing Integration Results



RT: 2.17  
Area: 3574  
Amount: 0.040806  
Amount Units: ug/l

Manual Integration Results



Reviewer: knouses, 04-Mar-2021 12:37:55  
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-30627-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: HD-COD-SW-15-0/1-0 Lab Sample ID: 410-30627-6  
 Matrix: Water Lab File ID: IM03S37.D  
 Analysis Method: 8260D Date Collected: 02/25/2021 12:10  
 Sample wt/vol: 25 (mL) Date Analyzed: 03/03/2021 23:44  
 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.: 99333 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	0.10	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	0.064	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	^c	5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70
67-64-1	Acetone	1.2	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	0.14	J	0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	0.43	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	1.5		0.50	0.060
108-88-3	Toluene	ND		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	0.53		0.50	0.060



FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-30627-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: HD-COD-SW-15-0/1-0 Lab Sample ID: 410-30627-6  
 Matrix: Water Lab File ID: IM03S37.D  
 Analysis Method: 8260D Date Collected: 02/25/2021 12:10  
 Sample wt/vol: 25 (mL) Date Analyzed: 03/03/2021 23:44  
 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.: 99333 Units: ug/L

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

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		80-120
460-00-4	4-Bromofluorobenzene (Surr)	97		80-120
1868-53-7	Dibromofluoromethane (Surr)	102		80-120
2037-26-5	Toluene-d8 (Surr)	97		80-120

Eurofins Lancaster Laboratories Env, LLC  
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S37.D  
 Lims ID: 410-30627-A-6  
 Client ID: HD-COD-SW-15-0/1-0  
 Sample Type: Client  
 Inject. Date: 03-Mar-2021 23:44:30 ALS Bottle#: 14 Worklist Smp#: 15  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0023228-015  
 Misc. Info.: 410-30627-A-6  
 Operator ID: MEC29284 Instrument ID: 19930  
 Method: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\8260 25ml HP31.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 04-Mar-2021 13:06:32 Calib Date: 23-Nov-2020 18:05:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23117.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1631

First Level Reviewer: knouses

Date: 04-Mar-2021 12:41:57

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85		1.983				ND	
2 Chlorodifluoromethane	51		1.983				ND	
3 Dimethyl ether	45		2.050				ND	
4 Chloromethane	50		2.184				ND	
6 Butadiene	39		2.294				ND	7
5 Vinyl chloride	62		2.306				ND	
7 Bromomethane	94		2.629				ND	
8 Chloroethane	64		2.709				ND	
9 Dichlorofluoromethane	67		2.952				ND	7
10 Trichlorofluoromethane	101		3.019				ND	
11 Ethyl ether	59		3.263				ND	
T 200 Ethanol TIC	45		3.288				ND	7
12 1,2-Dichloro-1,1,2-trifluoroethane	67		3.343				ND	
13 Acrolein	56		3.434				ND	
14 1,1-Dichloroethene	96	3.580	3.574	0.006	94	3588	0.0636	
15 Acetone	43	3.611	3.605	0.006	96	11939	1.16	
16 112TCTFE	101		3.623				ND	
17 Iodomethane	142		3.775				ND	
18 Ethyl bromide	108		3.806				ND	
19 Carbon disulfide	76	3.891	3.885	0.006	57	7018	0.0429	
20 Acetonitrile	41		3.989				ND	
21 Methyl acetate	43		4.025				ND	
22 3-Chloro-1-propene	41		4.062				ND	
23 Methylene Chloride	84		4.251				ND	7
* 24 t-Butyl alcohol-d10 (IS)	65	4.275	4.275	0.000	0	188788	50.0	
25 2-Methyl-2-propanol	59		4.397				ND	
26 Acrylonitrile	53		4.586				ND	
27 Methyl tert-butyl ether	73	4.659	4.659	0.000	1	3441	0.0228	7M
28 trans-1,2-Dichloroethene	96		4.672				ND	
29 Hexane	57		5.098				ND	
31 1,1-Dichloroethane	63	5.348	5.330	0.018	90	4921	0.0437	

Compound	Sig	RT (min.)	Exp RT (min.)	Diff RT (min.)	Q	Response	OnCol Amt ug/l	Flags
30 Vinyl acetate	43		5.336				ND	
32 Isopropyl ether	45		5.385				ND	
33 2-Chloro-1,3-butadiene	53		5.440				ND	
34 Tert-butyl ethyl ether	59		5.921				ND	7
36 2-Butanone (MEK)	43		6.122				ND	7
S 35 1,2-Dichloroethene, Total	100				0		0.4350	
37 cis-1,2-Dichloroethene	96	6.165	6.159	0.006	77	31502	0.4350	
38 2,2-Dichloropropane	77		6.177				ND	
39 Ethyl acetate	43	6.171	6.196	-0.025	16	1350	0.0343	
40 Propionitrile	54		6.214				ND	
41 Methyl acrylate	55		6.263				ND	
42 Methacrylonitrile	67		6.433				ND	
43 Chlorobromomethane	128		6.488				ND	
44 Tetrahydrofuran	71		6.494				ND	
45 Chloroform	83	6.641	6.641	0.000	90	15210	0.1370	
\$ 46 Dibromofluoromethane (Surr)	113	6.854	6.854	0.000	94	531096	10.2	
47 1,1,1-Trichloroethane	97	6.866	6.866	0.000	35	10080	0.1010	
48 Cyclohexane	56		6.964				ND	
49 1-Chlorobutane	56		7.025				ND	
51 1,1-Dichloropropene	75		7.074				ND	
50 Carbon tetrachloride	117		7.080				ND	7
52 Isobutyl alcohol	41		7.226				ND	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.305	7.305	0.000	0	106954	10.1	
54 Benzene	78	7.342	7.336	0.006	8	2946	0.0110	7M
56 1,2-Dichloroethane	62		7.409				ND	
55 Isopropyl acetate	43		7.421				ND	
57 Tert-amyl methyl ether	73		7.525				ND	
* 58 Fluorobenzene (IS)	96	7.744	7.738	0.006	99	2117422	10.0	
59 n-Heptane	43		7.750				ND	7
60 n-Butanol	56		8.092				ND	
61 Trichloroethene	95	8.226	8.214	0.012	96	37291	0.5310	
62 Methylcyclohexane	83		8.524				ND	
63 1,2-Dichloropropane	63		8.549				ND	
64 Methyl methacrylate	69		8.628				ND	
65 1,4-Dioxane	88		8.628				ND	
66 Dibromomethane	93		8.659				ND	
67 n-Propyl acetate	43		8.714				ND	
68 Dichlorobromomethane	83		8.890				ND	
69 2-Nitropropane	41		9.158				ND	
70 Chloroacetonitrile	75		9.232				ND	
71 2-Chloroethyl vinyl ether	63		9.250				ND	
72 1-Bromo-2-chloroethane	63		9.280				ND	
73 cis-1,3-Dichloropropene	75		9.433				ND	
74 4-Methyl-2-pentanone (MIBK)	43		9.597				ND	
\$ 75 Toluene-d8 (Surr)	98	9.744	9.738	0.006	93	2090896	9.74	
76 Toluene	92	9.817	9.817	0.000	95	6381	0.0356	
T 155 Ethylene oxide TIC	44		10.000				ND	
T 154 2-Bromo-3-chloropropene TIC	75	9.750	10.000	-0.250	1	175	0.000826	
T 153 Epichlorohydrin TIC	57	9.750	10.000	-0.250	29	1186	0.005601	
T 152 Vinyl bromide TIC	106	9.536	10.000	-0.464	1	269	0.001270	
T 148 Monochloroacetic acid TIC	50		10.000				ND	
T 150 Epibromohydrin TIC	57	9.750	10.000	-0.250	12	1186	0.005601	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
T 149 2-Chloroethanol TIC	44	9.939	10.000	-0.061	1	518	0.002446	
T 156 2,3-Dibromopropene TIC	119	10.201	10.000	0.201	1	298	0.001407	
T 147 2-Bromoethanol TIC	45	9.744	10.000	-0.256	14	1561	0.007372	
T 151 Chloroacetaldehyde TIC	50		10.000				ND	
T 146 2,3-Dibromo-1-propanol TIC	57	9.750	10.000	-0.250	1	1186	0.005601	
T 157 3-Chloro-1,2-propanediol TIC	44	9.939	10.000	-0.061	1	518	0.002446	
S 77 1,3-Dichloropropene, Total	100		10.060				ND	7
78 trans-1,3-Dichloropropene	75		10.067				ND	
79 Ethyl methacrylate	69		10.128				ND	
80 1,1,2-Trichloroethane	97		10.274				ND	
81 Tetrachloroethene	166	10.366	10.366	0.000	97	132771	1.53	
82 1,3-Dichloropropane	76		10.433				ND	
83 2-Hexanone	43		10.481				ND	
84 n-Butyl acetate	43	10.622	10.610	0.012	7	997	0.0151	M
85 Chlorodibromomethane	129		10.652				ND	
86 Ethylene Dibromide	107		10.762				ND	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.189	0.000	85	1644384	10.0	
88 1-Chlorohexane	91		11.195				ND	7
90 Chlorobenzene	112		11.213				ND	
S 89 Xylenes, Total	106		11.245				ND	7
91 1,1,1,2-Tetrachloroethane	131		11.298				ND	
92 Ethylbenzene	91		11.298				ND	7
93 m-Xylene & p-Xylene	106		11.414				ND	7
94 o-Xylene	106		11.743				ND	7
95 Styrene	104		11.756				ND	
96 Bromoform	173		11.914				ND	
97 Isopropylbenzene	105		12.042				ND	
98 cis-1,4-Dichloro-2-butene	88		12.085				ND	
99 Cyclohexanone	55		12.121				ND	
\$ 100 4-Bromofluorobenzene (Surr)	95	12.182	12.182	0.000	94	771931	9.71	
101 1,1,2,2-Tetrachloroethane	83		12.286				ND	
102 Bromobenzene	156		12.304				ND	
103 trans-1,4-Dichloro-2-butene	53		12.310				ND	
104 1,2,3-Trichloropropane	110		12.329				ND	
105 N-Propylbenzene	91		12.371				ND	7
106 2-Chlorotoluene	126		12.444				ND	
107 1,3,5-Trimethylbenzene	105	12.438	12.505	-0.067	84	4305	0.0146	7M
108 4-Chlorotoluene	126		12.536				ND	
109 tert-Butylbenzene	134		12.743				ND	
110 Pentachloroethane	167		12.780				ND	
111 1,2,4-Trimethylbenzene	105		12.786				ND	7
112 sec-Butylbenzene	105		12.908				ND	
113 1,3-Dichlorobenzene	146		13.011				ND	7
114 4-Isopropyltoluene	119		13.017				ND	7
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	94	932139	10.0	
116 1,4-Dichlorobenzene	146		13.085				ND	7
117 1,2,3-Trimethylbenzene	120		13.091				ND	7
118 Benzyl chloride	126		13.158				ND	
119 n-Butylbenzene	92		13.310				ND	
120 1,2-Dichlorobenzene	146		13.341				ND	
121 Hexachloroethane	117		13.542				ND	
122 1,2-Dibromo-3-Chloropropane	155		13.883				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
123 1,3,5-Trichlorobenzene	180		14.011				ND	
124 1,2,4-Trichlorobenzene	180		14.432				ND	
125 Hexachlorobutadiene	225		14.517				ND	
126 Naphthalene	128		14.615				ND	7
127 1,2,3-Trichlorobenzene	180		14.755				ND	
128 Dodecane	57		0.000				ND	
206 Pentachloroethane TIC	1		0.000				ND	
142 2-Bromo-1-chloropropane	1		0.000				ND	
131 tert-Butyl Formate	1		0.000				ND	
132 Methylal	1		0.000				ND	
133 t-Amyl alcohol	1		0.000				ND	
T 201 Isopropyl alcohol TIC	45	1.757	0.000	1.757	1	91862	0.4338	
134 Isopropyl alcohol	45		0.000				ND	
141 1-Chloropropane	1		0.000				ND	
129 Propene oxide	1		0.000				ND	
130 Chlorotrifluoroethene	1		0.000				ND	
139 1-Bromo-3-Chloropropane	1		0.000				ND	
143 n-Decane	57		0.000				ND	
205 1,1-Dichloroacetone	1		0.000				ND	
144 2-ethoxy-2-methyl butane	1		0.000				ND	
136 2-Chloro-1,1,1-Trifluoroethane	1		0.000				ND	
135 p-Diethylbenzene	1		0.000				ND	
137 2-Methylnaphthalene	142		0.000				ND	
138 1,1-Dichloro-1-fluoroethane	1		0.000				ND	
202 1,3-Dichloro-2-propanol TIC	1		0.000				ND	
203 Propargyl alcohol TIC	1		0.000				ND	
204 Pentane	43		0.000				ND	
140 Ethanol	45		3.288				ND	

### QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

### Reagents:

MSV\_31\_826ISS\_00004

Amount Added: 5.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S37.D

Injection Date: 03-Mar-2021 23:44:30

Instrument ID: 19930

Operator ID: MEC29284

Lims ID: 410-30627-A-6

Lab Sample ID: 410-30627-6

Worklist Smp#: 15

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

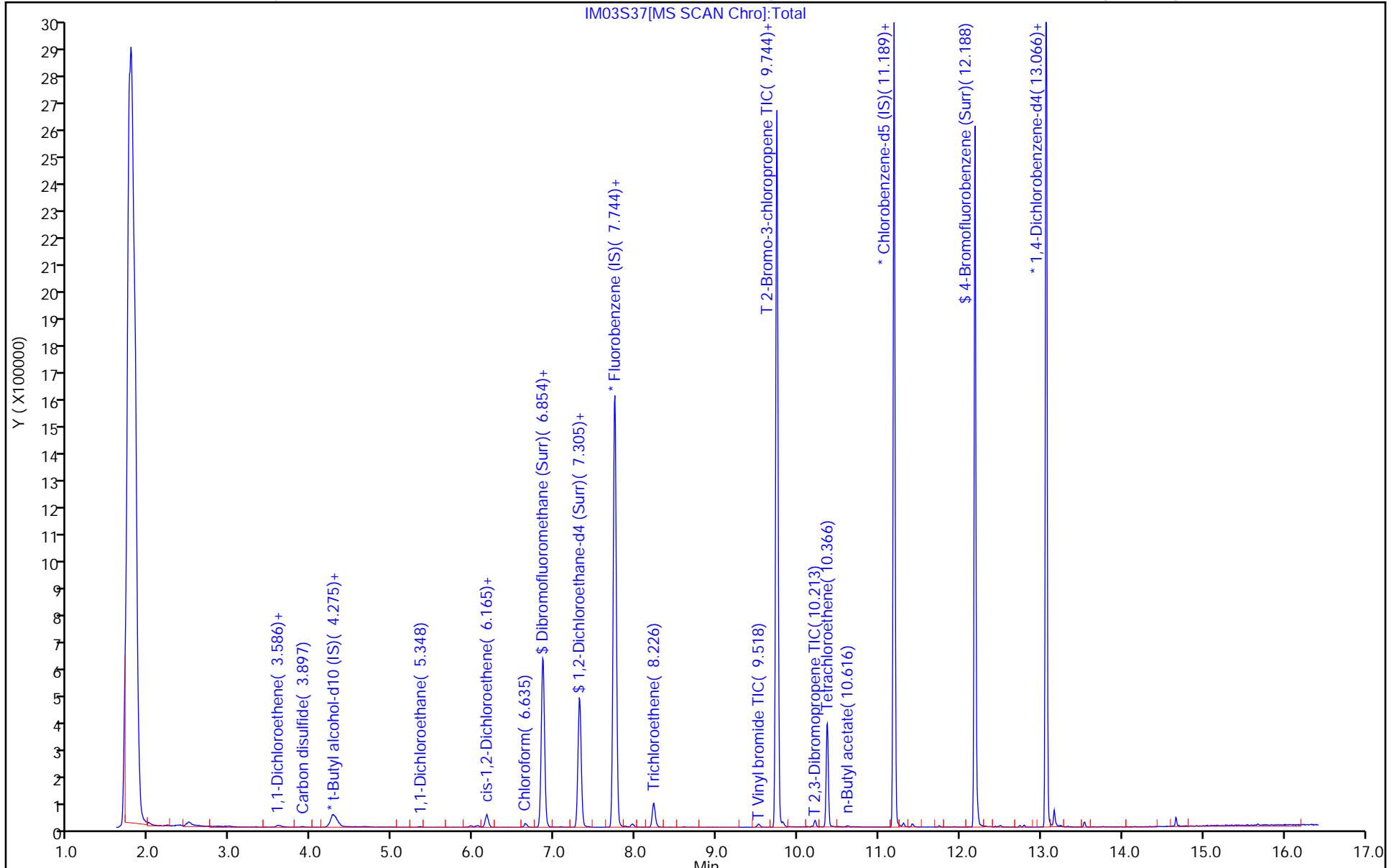
ALS Bottle#: 14

Method: 8260 25ml HP31

Limit Group: MSV - 8260C\_D

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

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



Eurofins Lancaster Laboratories Env, LLC  
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S37.D  
 Lims ID: 410-30627-A-6  
 Client ID: HD-COD-SW-15-0/1-0  
 Sample Type: Client  
 Inject. Date: 03-Mar-2021 23:44:30 ALS Bottle#: 14 Worklist Smp#: 15  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0023228-015  
 Misc. Info.: 410-30627-A-6  
 Operator ID: MEC29284 Instrument ID: 19930  
 Method: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\8260 25ml HP31.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 04-Mar-2021 13:06:32 Calib Date: 23-Nov-2020 18:05:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I17.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1631

First Level Reviewer: knouses

Date: 04-Mar-2021 12:41:57

Compound	Amount Added	Amount Recovered	% Rec.
\$ 46 Dibromofluoromethane (Surr)	10.0	10.2	101.58
\$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	10.1	101.47
\$ 75 Toluene-d8 (Surr)	10.0	9.74	97.37
\$ 100 4-Bromofluorobenzene (Surr)	10.0	9.71	97.07

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S37.D

Injection Date: 03-Mar-2021 23:44:30

Instrument ID: 19930

Lims ID: 410-30627-A-6

Lab Sample ID: 410-30627-6

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

Operator ID: MEC29284

ALS Bottle#: 14

Worklist Smp#: 15

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

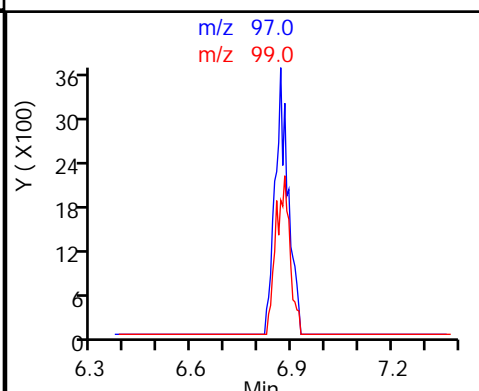
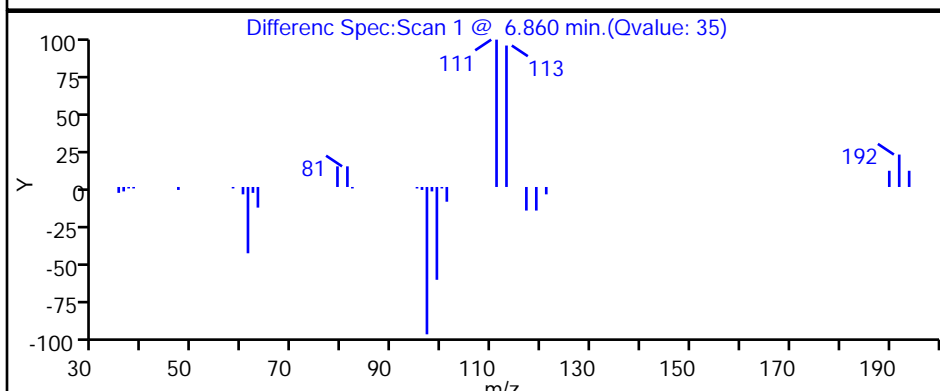
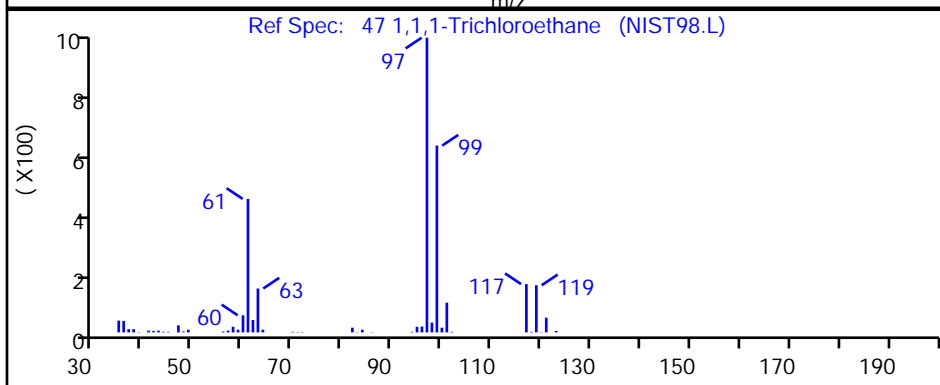
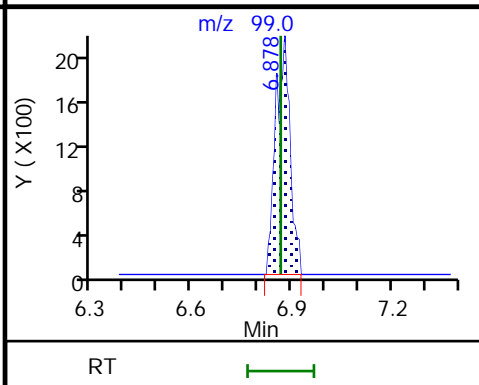
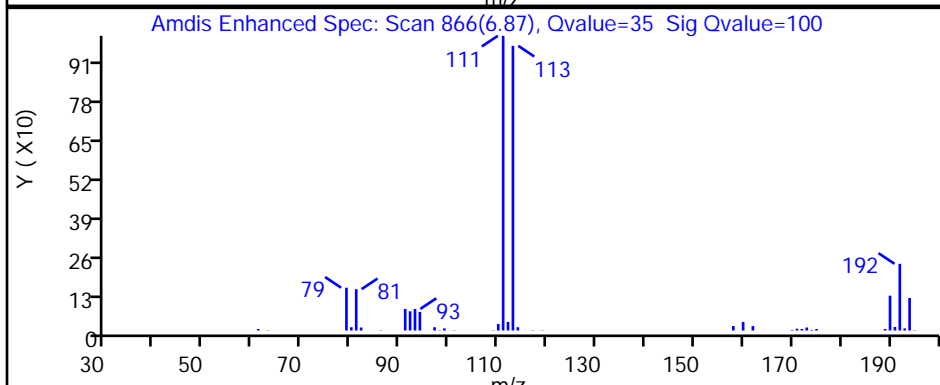
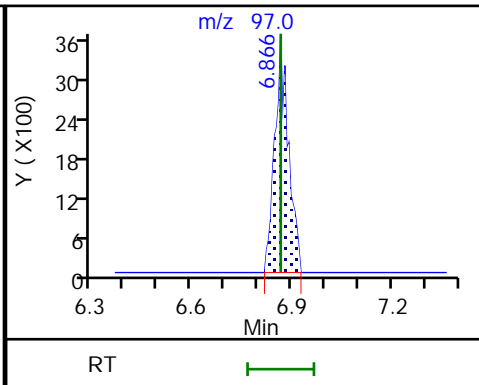
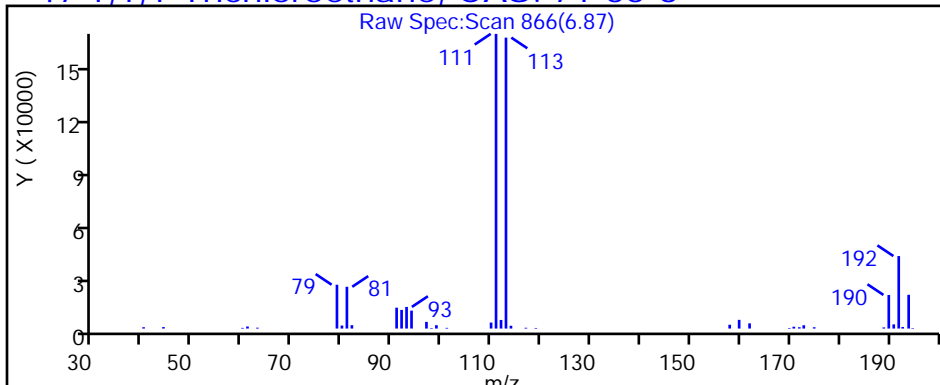
Method: 8260 25ml HP31

Limit Group: MSV - 8260C\_D

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

MS Quad

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





Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S37.D

Injection Date: 03-Mar-2021 23:44:30

Instrument ID: 19930

Lims ID: 410-30627-A-6

Lab Sample ID: 410-30627-6

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

Operator ID: MEC29284

ALS Bottle#: 14

Worklist Smp#: 15

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

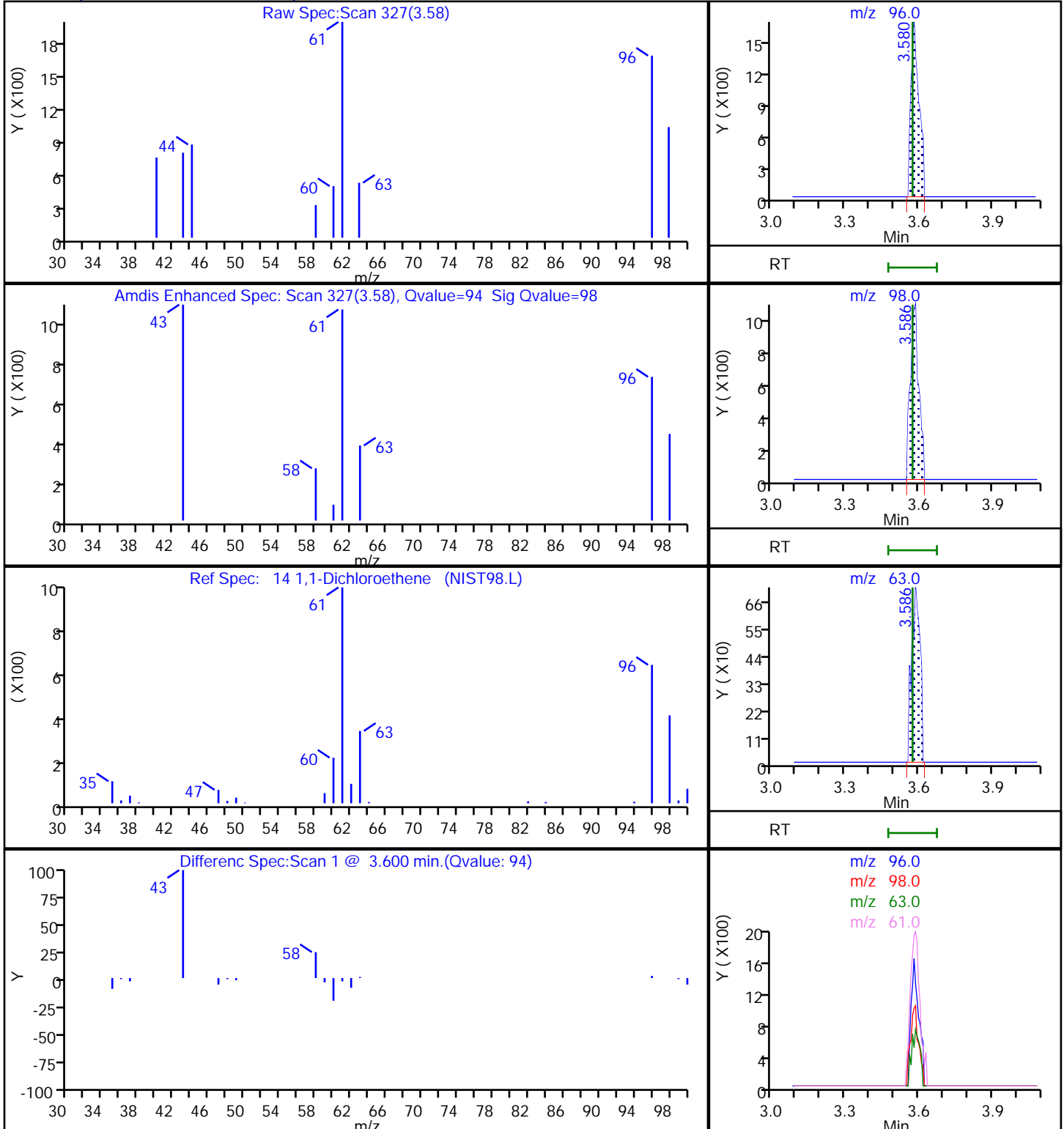
Method: 8260 25ml HP31

Limit Group: MSV - 8260C\_D

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

MS Quad

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



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S37.D

Injection Date: 03-Mar-2021 23:44:30

Instrument ID: 19930

Lims ID: 410-30627-A-6

Lab Sample ID: 410-30627-6

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

Operator ID: MEC29284

ALS Bottle#: 14

Worklist Smp#: 15

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

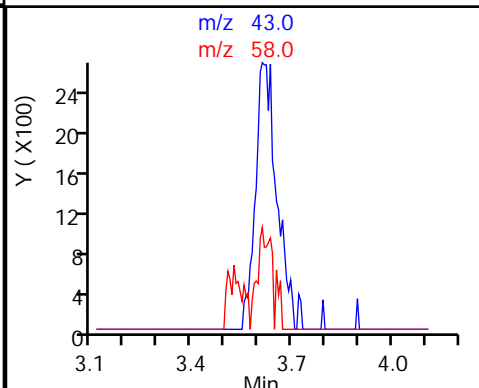
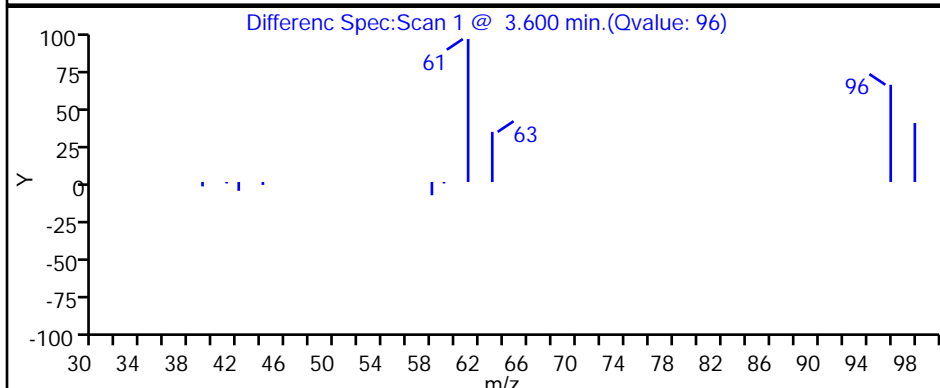
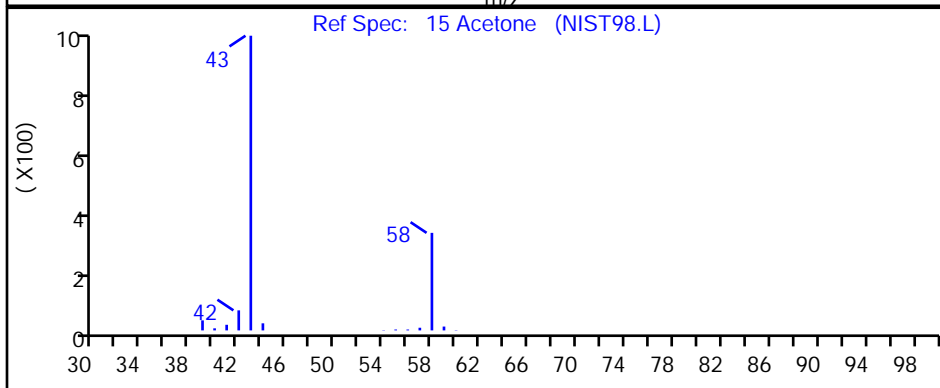
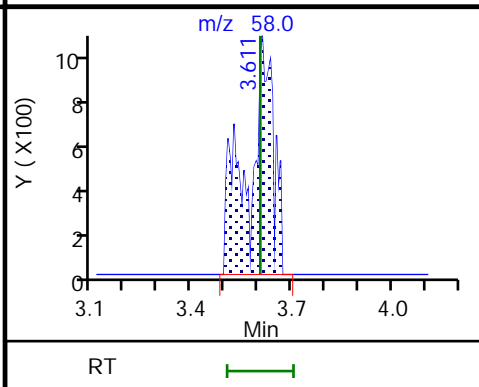
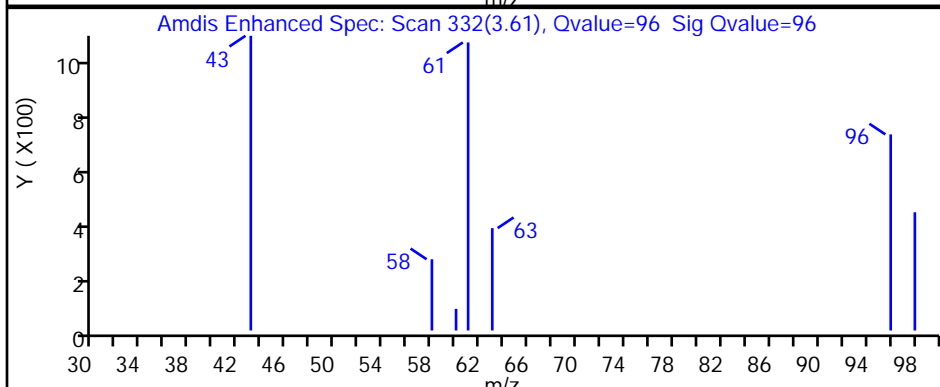
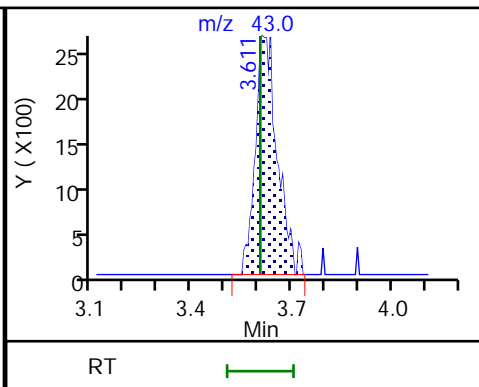
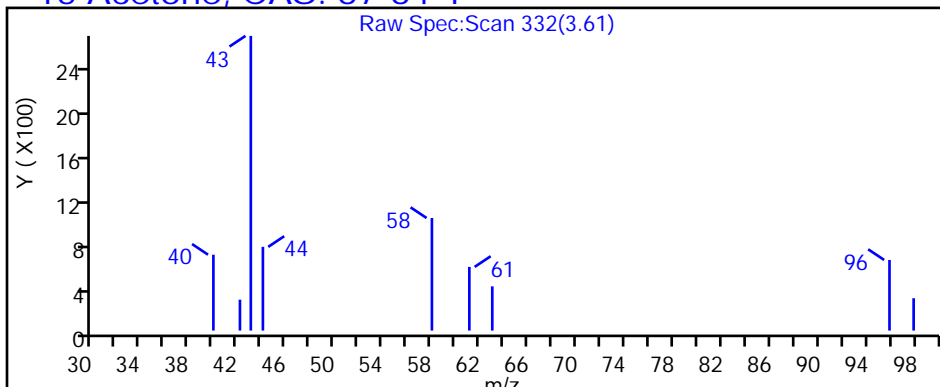
Method: 8260 25ml HP31

Limit Group: MSV - 8260C\_D

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

MS Quad

15 Acetone, CAS: 67-64-1



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S37.D

Injection Date: 03-Mar-2021 23:44:30

Instrument ID: 19930

Lims ID: 410-30627-A-6

Lab Sample ID: 410-30627-6

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

Operator ID: MEC29284

ALS Bottle#: 14

Worklist Smp#: 15

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

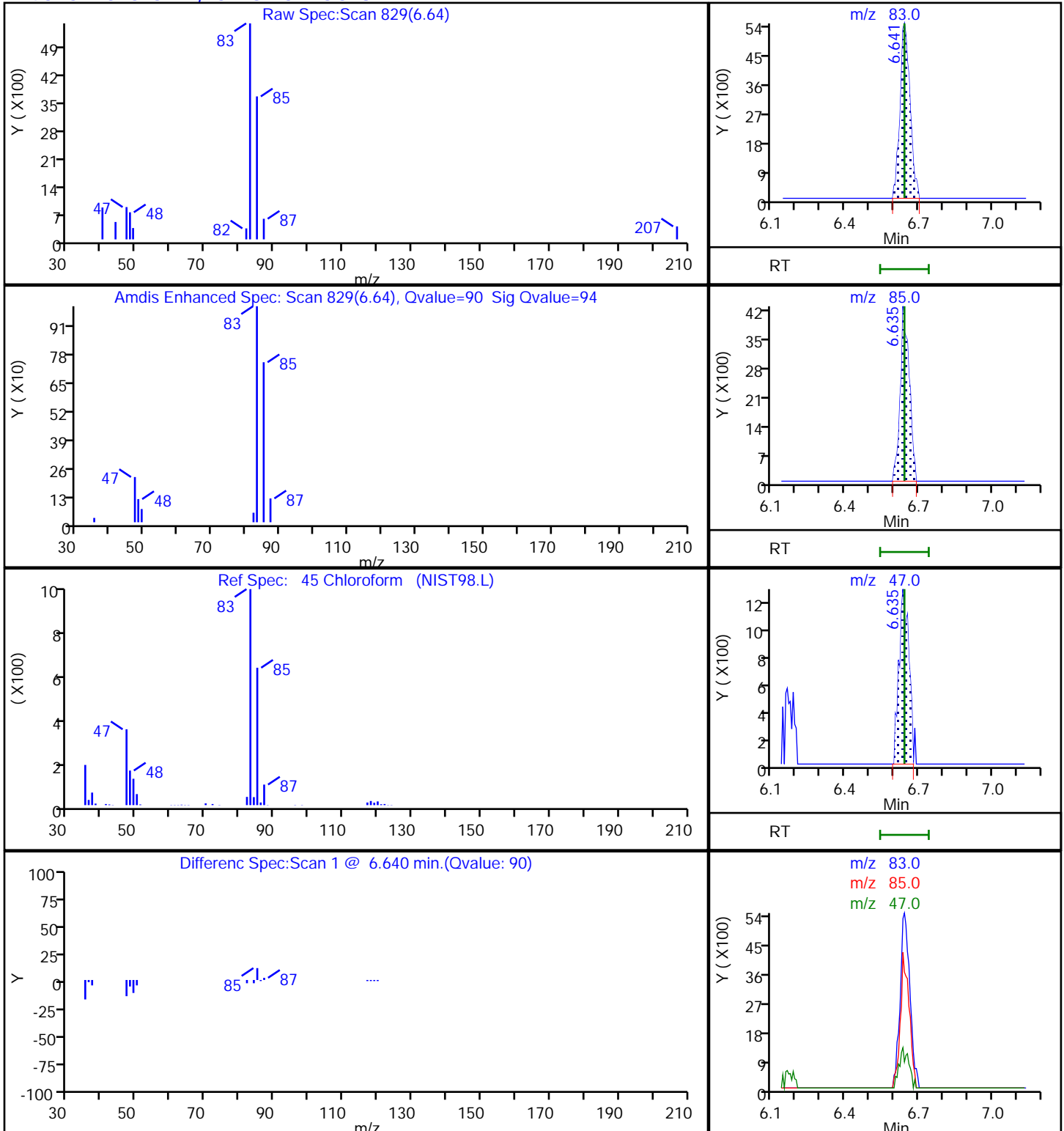
Method: 8260 25ml HP31

Limit Group: MSV - 8260C\_D

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

MS Quad

### 45 Chloroform, CAS: 67-66-3



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S37.D

Injection Date: 03-Mar-2021 23:44:30

Instrument ID: 19930

Lims ID: 410-30627-A-6

Lab Sample ID: 410-30627-6

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

Operator ID: MEC29284

ALS Bottle#: 14

Worklist Smp#: 15

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

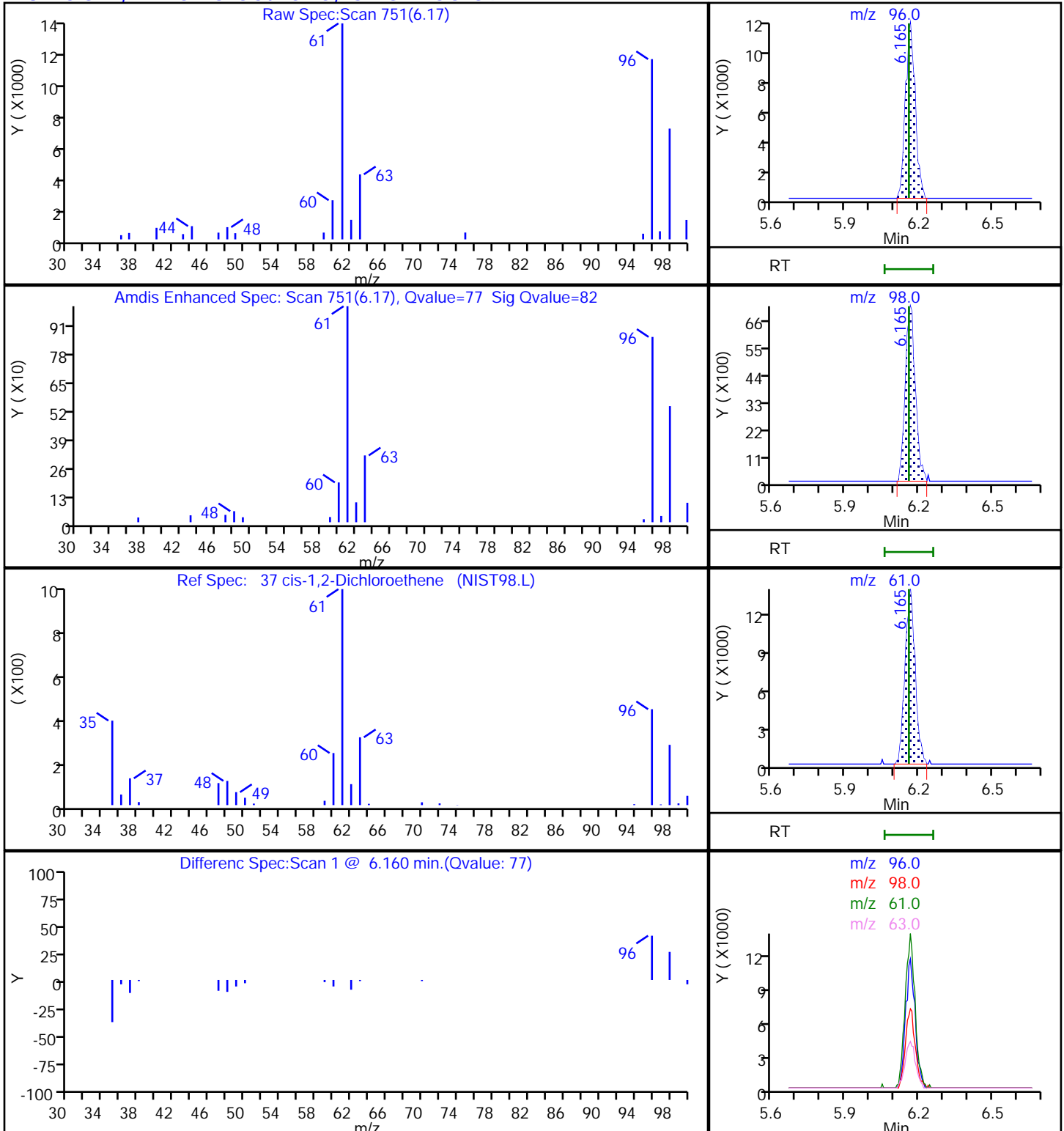
Method: 8260 25ml HP31

Limit Group: MSV - 8260C\_D

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

MS Quad

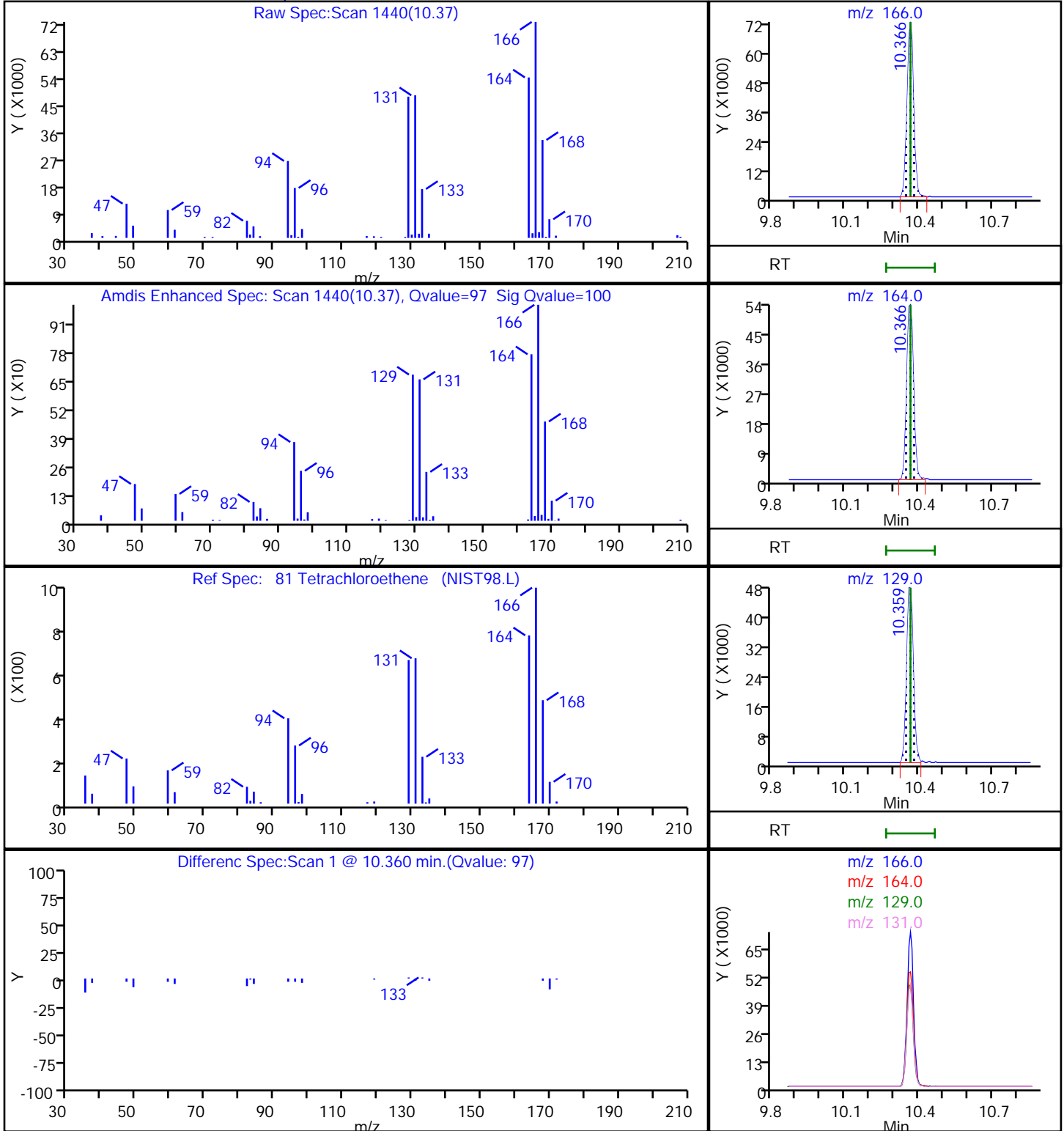
**37 cis-1,2-Dichloroethene, CAS: 156-59-2**



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S37.D  
Injection Date: 03-Mar-2021 23:44:30 Instrument ID: 19930  
Lims ID: 410-30627-A-6 Lab Sample ID: 410-30627-6  
Client ID: HD-COD-SW-15-0/1-0  
Operator ID: MEC29284 ALS Bottle#: 14 Worklist Smp#: 15  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: 8260 25ml HP31 Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

81 Tetrachloroethene, CAS: 127-18-4



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S37.D

Injection Date: 03-Mar-2021 23:44:30

Instrument ID: 19930

Lims ID: 410-30627-A-6

Lab Sample ID: 410-30627-6

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

Operator ID: MEC29284

ALS Bottle#: 14

Worklist Smp#: 15

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

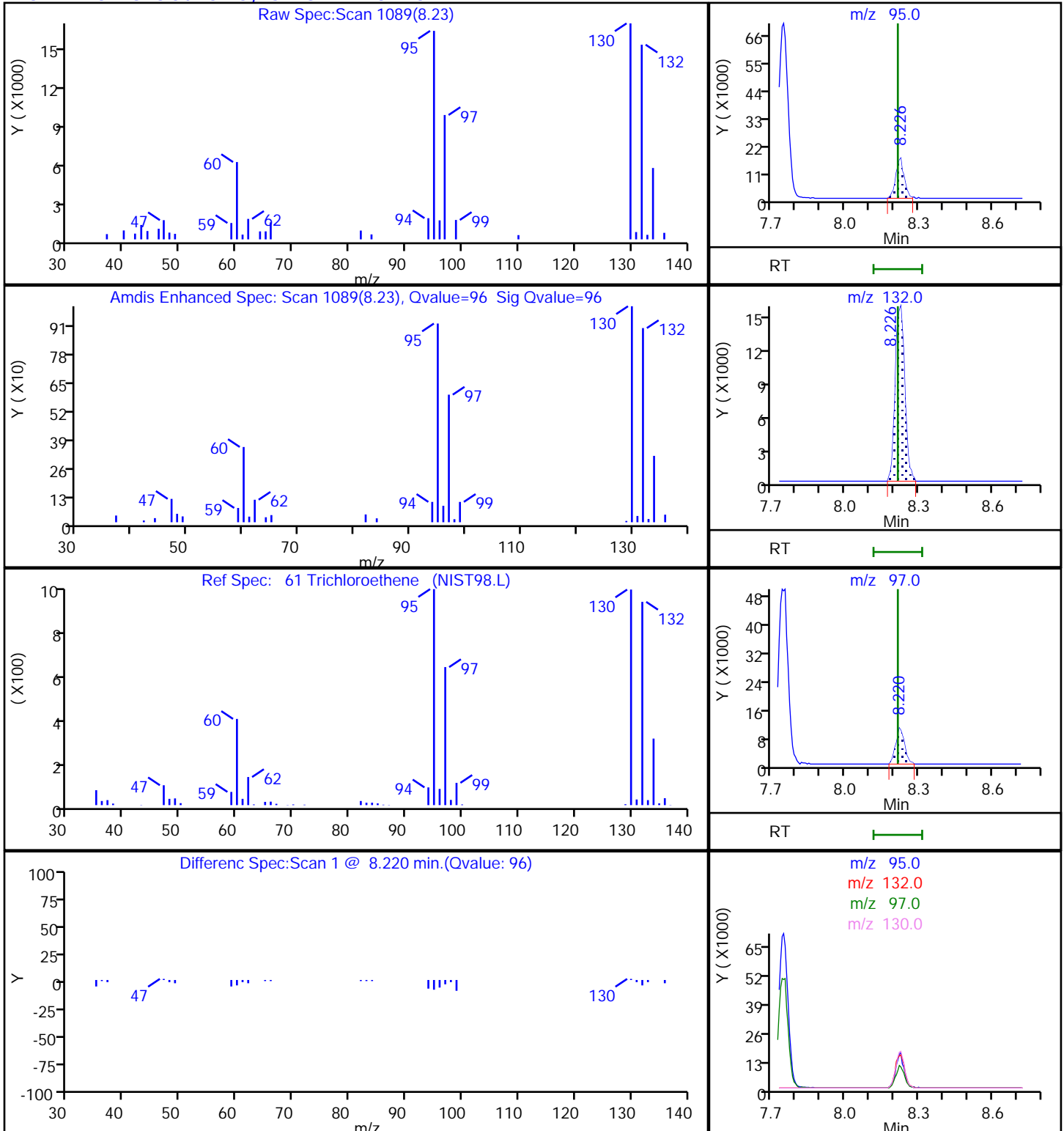
Method: 8260 25ml HP31

Limit Group: MSV - 8260C\_D

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

MS Quad

61 Trichloroethene, CAS: 79-01-6



Eurofins Lancaster Laboratories Env, LLC

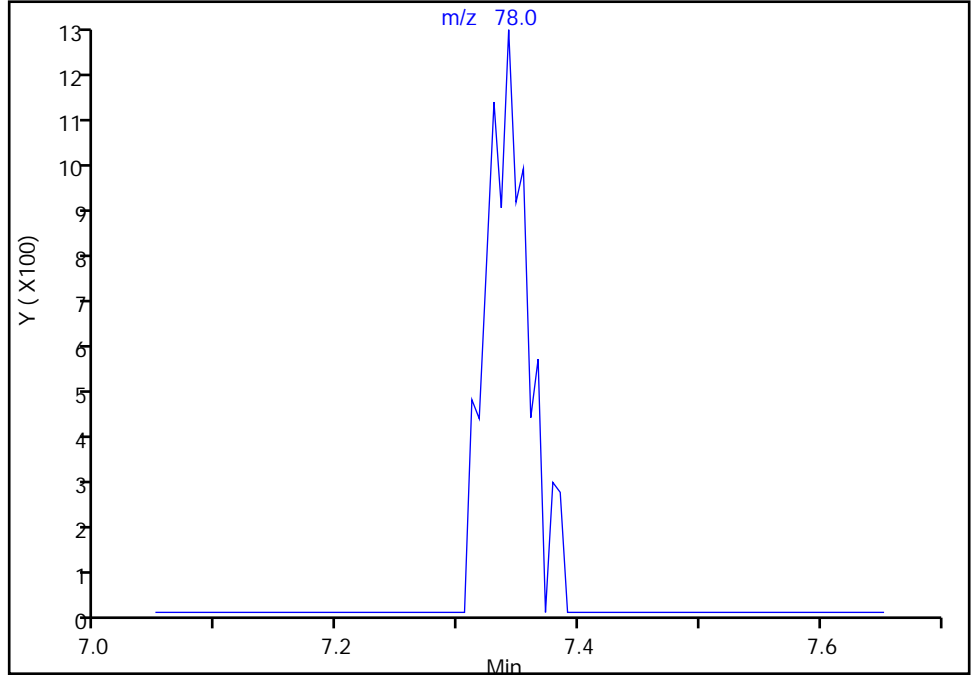
Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S37.D  
Injection Date: 03-Mar-2021 23:44:30 Instrument ID: 19930  
Lims ID: 410-30627-A-6 Lab Sample ID: 410-30627-6  
Client ID: HD-COD-SW-15-0/1-0  
Operator ID: MEC29284 ALS Bottle#: 14 Worklist Smp#: 15  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: 8260 25ml HP31 Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

54 Benzene, CAS: 71-43-2

Signal: 1

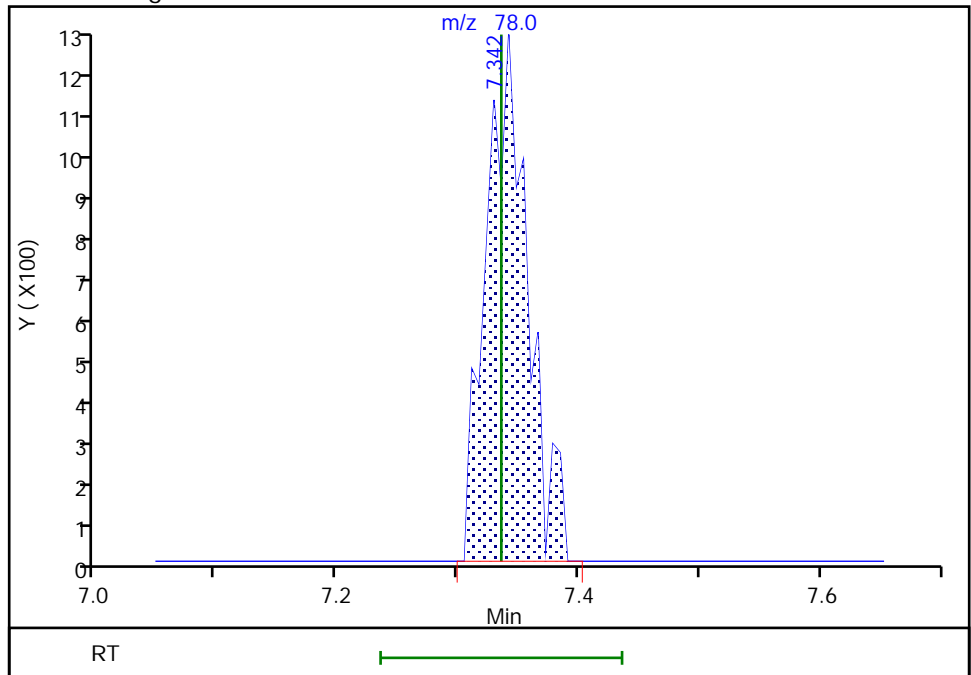
Not Detected  
Expected RT: 7.34

Processing Integration Results



Manual Integration Results

RT: 7.34  
Area: 2946  
Amount: 0.010981  
Amount Units: ug/l



Reviewer: knouses, 04-Mar-2021 12:40:35  
Audit Action: Manually Integrated

Audit Reason: Missed Peak

Eurofins Lancaster Laboratories Env, LLC

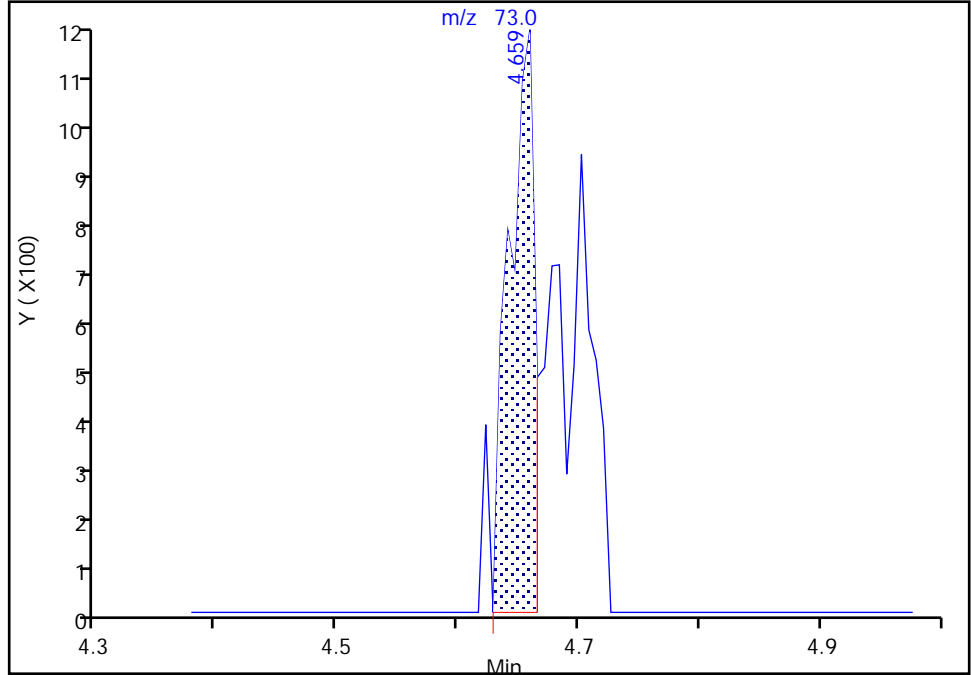
Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S37.D  
Injection Date: 03-Mar-2021 23:44:30 Instrument ID: 19930  
Lims ID: 410-30627-A-6 Lab Sample ID: 410-30627-6  
Client ID: HD-COD-SW-15-0/1-0  
Operator ID: MEC29284 ALS Bottle#: 14 Worklist Smp#: 15  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: 8260 25ml HP31 Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

27 Methyl tert-butyl ether, CAS: 1634-04-4

Signal: 1

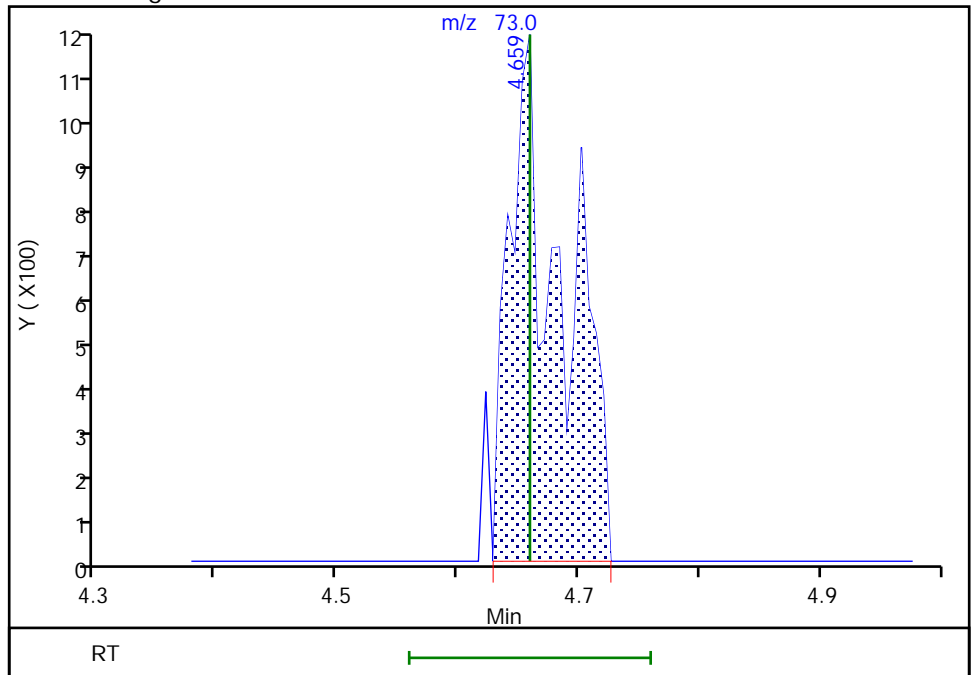
RT: 4.66  
Area: 1667  
Amount: 0.011031  
Amount Units: ug/l

Processing Integration Results



RT: 4.66  
Area: 3441  
Amount: 0.022769  
Amount Units: ug/l

Manual Integration Results



Reviewer: knouses, 04-Mar-2021 12:39:52  
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration



FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-30627-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: HD-COD-SW-16-0/1-0 Lab Sample ID: 410-30627-7  
 Matrix: Water Lab File ID: IM03S42.D  
 Analysis Method: 8260D Date Collected: 02/25/2021 10:25  
 Sample wt/vol: 25 (mL) Date Analyzed: 03/04/2021 01:31  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: R-624SilMS 30m ID: 0.25 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 99333 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	^c	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	ND		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.050
124-48-1	Dibromochloromethane	ND		0.50	0.070
100-41-4	Ethylbenzene	ND		0.50	0.060
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.050
75-09-2	Methylene Chloride	ND		0.50	0.070
100-42-5	Styrene	ND		0.50	0.050
127-18-4	Tetrachloroethene	ND		0.50	0.060
108-88-3	Toluene	ND		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	ND		0.50	0.060

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-30627-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: HD-COD-SW-16-0/1-0 Lab Sample ID: 410-30627-7  
 Matrix: Water Lab File ID: IM03S42.D  
 Analysis Method: 8260D Date Collected: 02/25/2021 10:25  
 Sample wt/vol: 25 (mL) Date Analyzed: 03/04/2021 01:31  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: R-624SilMS 30m ID: 0.25 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 99333 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)	96		80-120
1868-53-7	Dibromofluoromethane (Surr)	104		80-120
2037-26-5	Toluene-d8 (Surr)	98		80-120

Eurofins Lancaster Laboratories Env, LLC  
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S42.D  
 Lims ID: 410-30627-A-7  
 Client ID: HD-COD-SW-16-0/1-0  
 Sample Type: Client  
 Inject. Date: 04-Mar-2021 01:31:30 ALS Bottle#: 19 Worklist Smp#: 20  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0023228-020  
 Misc. Info.: 410-30627-A-7  
 Operator ID: MEC29284 Instrument ID: 19930  
 Method: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\8260 25ml HP31.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 04-Mar-2021 13:06:32 Calib Date: 23-Nov-2020 18:05:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23117.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1631

First Level Reviewer: knouses

Date: 04-Mar-2021 12:45:37

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
4 Chloromethane	50	2.197	2.184	0.013	1	3116	0.0354	M
5 Vinyl chloride	62		2.306				ND	
7 Bromomethane	94		2.629				ND	
8 Chloroethane	64		2.709				ND	
14 1,1-Dichloroethene	96		3.574				ND	
15 Acetone	43	3.617	3.605	0.012	100	15386	1.46	
19 Carbon disulfide	76	3.885	3.885	0.000	95	7347	0.0448	M
23 Methylene Chloride	84		4.251				ND	7
* 24 t-Butyl alcohol-d10 (IS)	65	4.275	4.275	0.000	0	192932	50.0	
27 Methyl tert-butyl ether	73		4.659				ND	
28 trans-1,2-Dichloroethene	96		4.672				ND	
31 1,1-Dichloroethane	63		5.330				ND	
36 2-Butanone (MEK)	43		6.122				ND	7
37 cis-1,2-Dichloroethene	96	6.165	6.159	0.006	76	2947	0.0406	
43 Chlorobromomethane	128		6.488				ND	
45 Chloroform	83	6.659	6.641	0.018	1	1918	0.0172	7M
\$ 46 Dibromofluoromethane (Surr)	113	6.854	6.854	0.000	94	543418	10.4	
47 1,1,1-Trichloroethane	97		6.866				ND	
50 Carbon tetrachloride	117		7.080				ND	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.311	7.305	0.006	0	110232	10.4	
54 Benzene	78		7.336				ND	7
56 1,2-Dichloroethane	62	7.403	7.409	-0.006	13	2363	0.0360	M
* 58 Fluorobenzene (IS)	96	7.744	7.738	0.006	99	2123637	10.0	
61 Trichloroethene	95	8.220	8.214	0.006	75	2891	0.0410	
63 1,2-Dichloropropane	63		8.549				ND	
68 Dichlorobromomethane	83		8.890				ND	
73 cis-1,3-Dichloropropene	75		9.433				ND	
74 4-Methyl-2-pentanone (MIBK)	43		9.597				ND	7
\$ 75 Toluene-d8 (Surr)	98	9.744	9.738	0.006	93	2124991	9.76	
76 Toluene	92	9.823	9.817	0.006	98	4920	0.0271	
78 trans-1,3-Dichloropropene	75		10.067				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
80 1,1,2-Trichloroethane	97		10.274				ND	
81 Tetrachloroethene	166	10.372	10.366	0.006	83	2927	0.0333	
83 2-Hexanone	43		10.481				ND	
85 Chlorodibromomethane	129		10.652				ND	
86 Ethylene Dibromide	107		10.762				ND	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.189	0.000	85	1667506	10.0	
90 Chlorobenzene	112		11.213				ND	
S 89 Xylenes, Total	106		11.245				ND	7
91 1,1,1,2-Tetrachloroethane	131		11.298				ND	
92 Ethylbenzene	91		11.298				ND	
93 m-Xylene & p-Xylene	106		11.414				ND	7
94 o-Xylene	106		11.743				ND	7
95 Styrene	104		11.756				ND	
96 Bromoform	173		11.914				ND	
\$ 100 4-Bromofluorobenzene (Surr)	95	12.188	12.182	0.006	95	777342	9.64	
101 1,1,2,2-Tetrachloroethane	83		12.286				ND	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	94	946853	10.0	

### QC Flag Legend

#### Processing Flags

7 - Failed Limit of Detection

#### Review Flags

M - Manually Integrated

### Reagents:

MSV\_31\_826ISS\_00004

Amount Added: 5.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S42.D

Injection Date: 04-Mar-2021 01:31:30

Instrument ID: 19930

Operator ID: MEC29284

Lims ID: 410-30627-A-7

Lab Sample ID: 410-30627-7

Worklist Smp#: 20

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

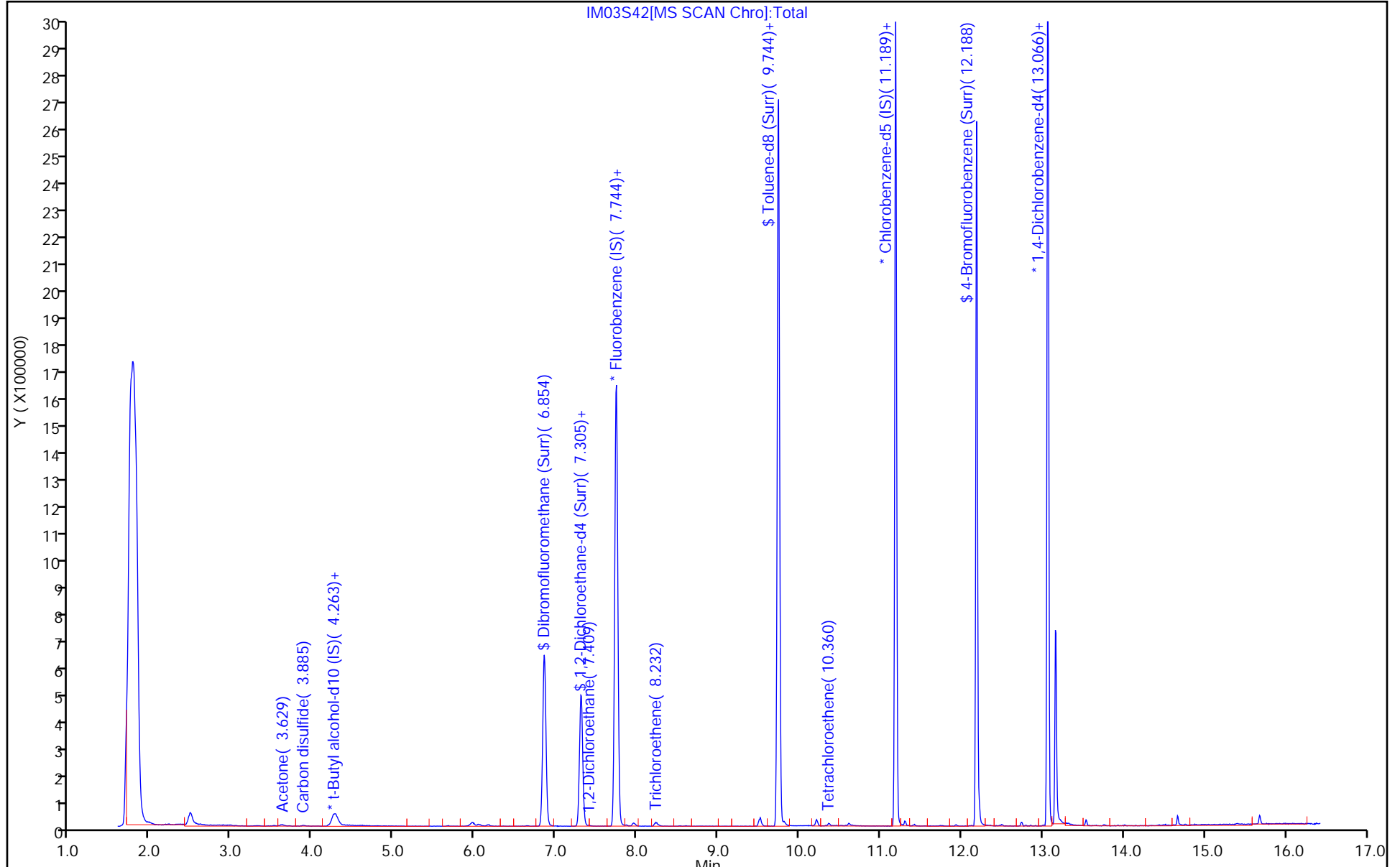
ALS Bottle#: 19

Method: 8260 25ml HP31

Limit Group: MSV - 8260C\_D

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

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



Eurofins Lancaster Laboratories Env, LLC  
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S42.D  
 Lims ID: 410-30627-A-7  
 Client ID: HD-COD-SW-16-0/1-0  
 Sample Type: Client  
 Inject. Date: 04-Mar-2021 01:31:30 ALS Bottle#: 19 Worklist Smp#: 20  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0023228-020  
 Misc. Info.: 410-30627-A-7  
 Operator ID: MEC29284 Instrument ID: 19930  
 Method: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\8260 25ml HP31.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 04-Mar-2021 13:06:32 Calib Date: 23-Nov-2020 18:05:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I17.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1631

First Level Reviewer: knouses Date: 04-Mar-2021 12:45:37

Compound	Amount Added	Amount Recovered	% Rec.
\$ 46 Dibromofluoromethane (Surr)	10.0	10.4	103.64
\$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	10.4	104.27
\$ 75 Toluene-d8 (Surr)	10.0	9.76	97.58
\$ 100 4-Bromofluorobenzene (Surr)	10.0	9.64	96.39

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S42.D

Injection Date: 04-Mar-2021 01:31:30

Instrument ID: 19930

Lims ID: 410-30627-A-7

Lab Sample ID: 410-30627-7

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

Operator ID: MEC29284

ALS Bottle#: 19

Worklist Smp#: 20

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

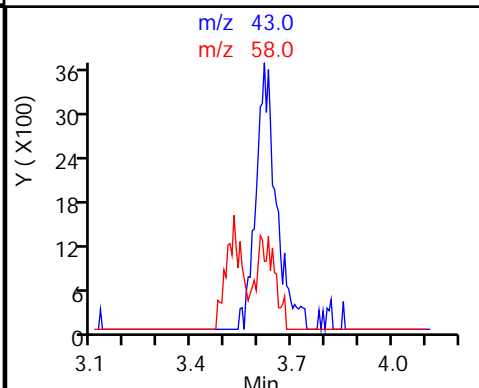
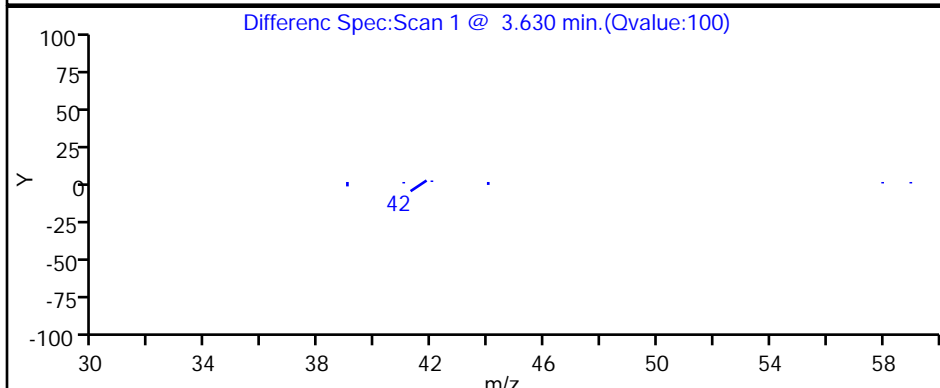
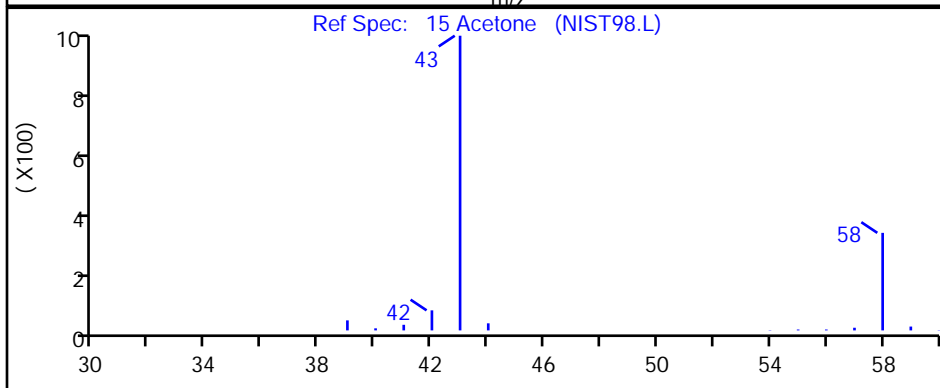
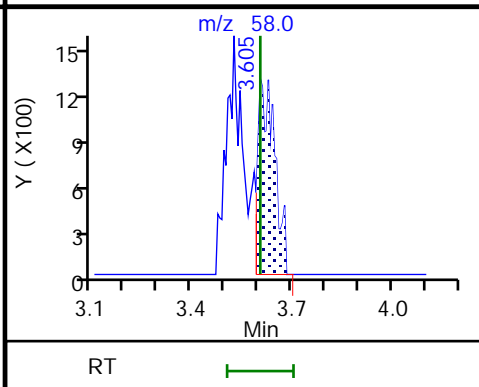
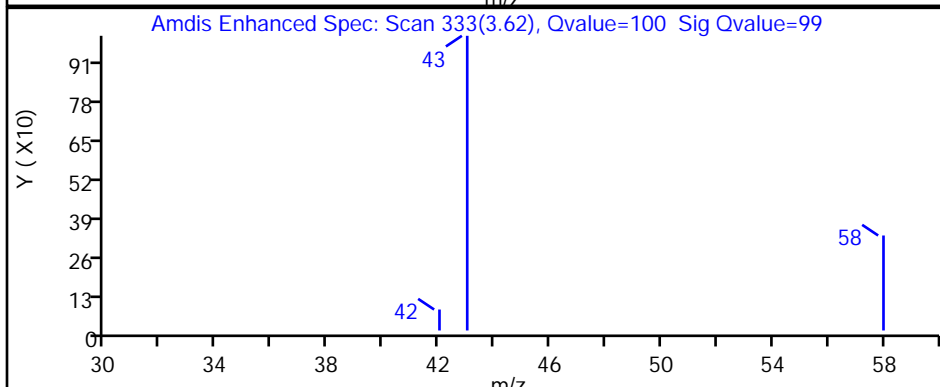
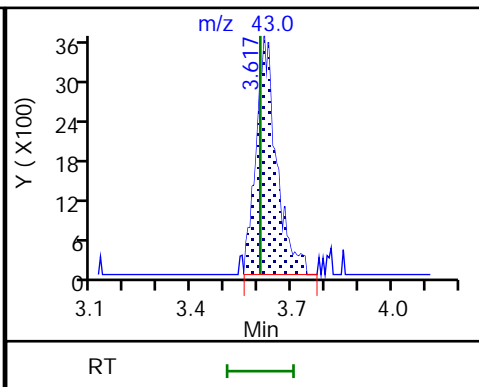
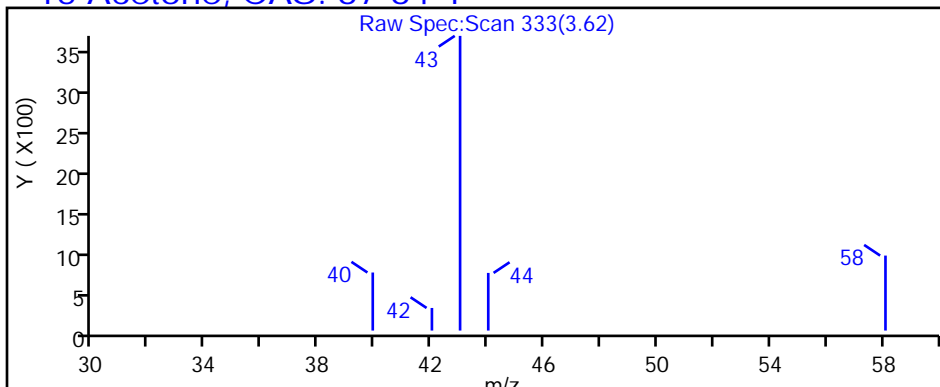
Method: 8260 25ml HP31

Limit Group: MSV - 8260C\_D

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

MS Quad

15 Acetone, CAS: 67-64-1



Eurofins Lancaster Laboratories Env, LLC

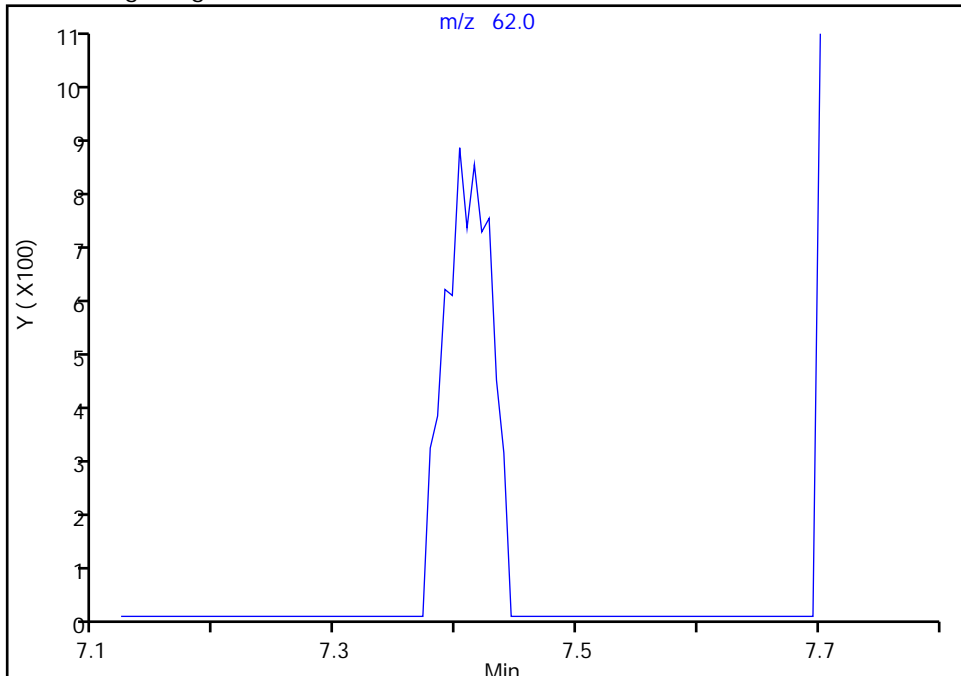
Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S42.D  
Injection Date: 04-Mar-2021 01:31:30 Instrument ID: 19930  
Lims ID: 410-30627-A-7 Lab Sample ID: 410-30627-7  
Client ID: HD-COD-SW-16-0/1-0  
Operator ID: MEC29284 ALS Bottle#: 19 Worklist Smp#: 20  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: 8260 25ml HP31 Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

56 1,2-Dichloroethane, CAS: 107-06-2

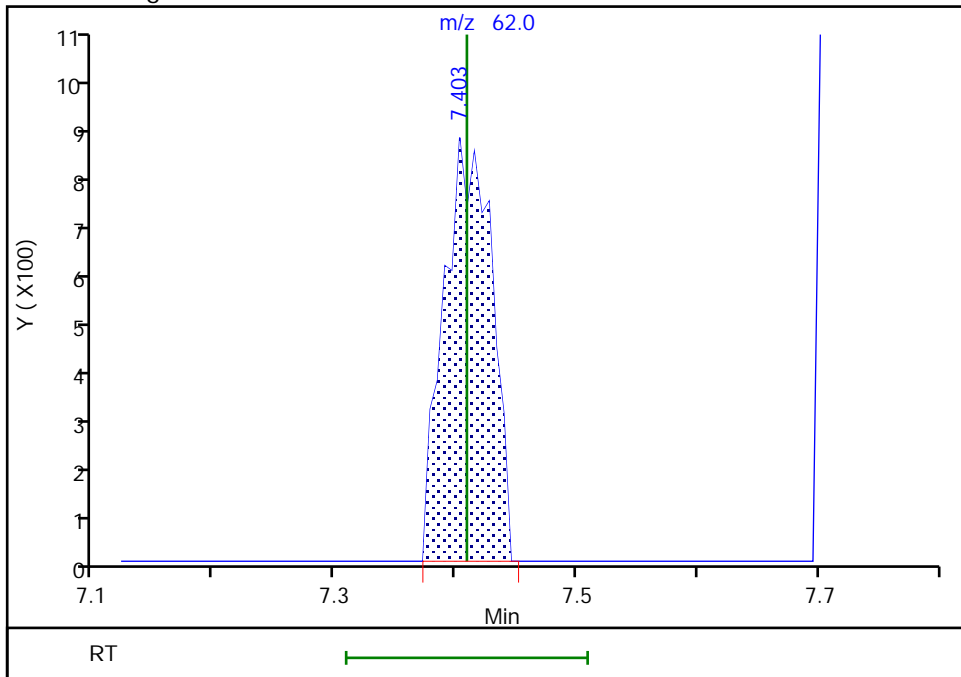
Signal: 1

Not Detected  
Expected RT: 7.41

Processing Integration Results



Manual Integration Results



RT: 7.40  
Area: 2363  
Amount: 0.035969  
Amount Units: ug/l

Reviewer: knouses, 04-Mar-2021 12:45:11  
Audit Action: Manually Integrated

Audit Reason: Missed Peak



Euofins Lancaster Laboratories Env, LLC

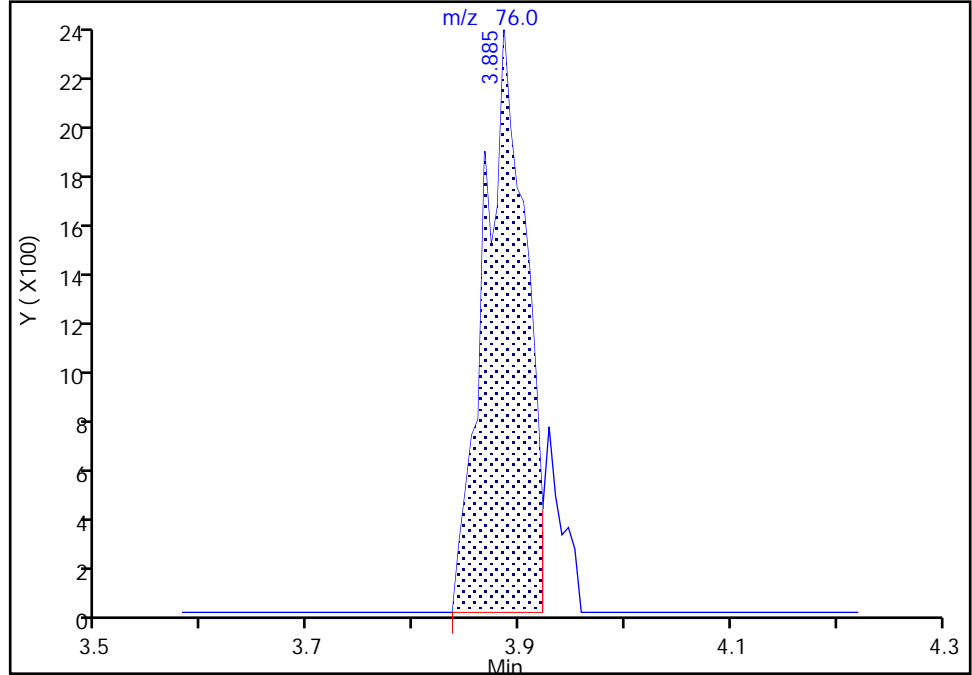
Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S42.D  
Injection Date: 04-Mar-2021 01:31:30 Instrument ID: 19930  
Lims ID: 410-30627-A-7 Lab Sample ID: 410-30627-7  
Client ID: HD-COD-SW-16-0/1-0  
Operator ID: MEC29284 ALS Bottle#: 19 Worklist Smp#: 20  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: 8260 25ml HP31 Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

19 Carbon disulfide, CAS: 75-15-0

Signal: 1

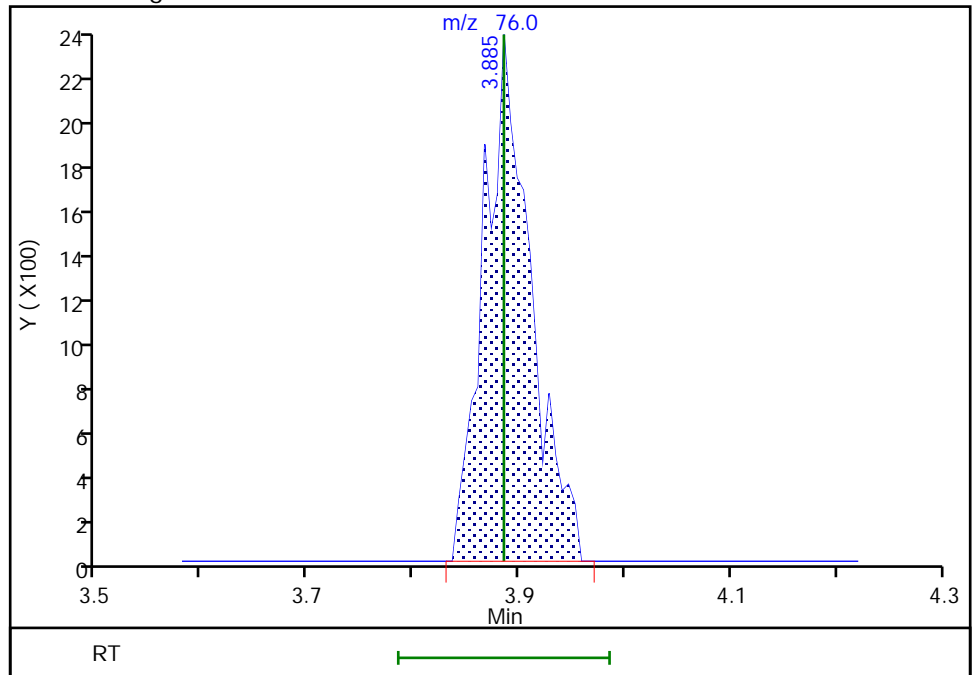
RT: 3.89  
Area: 6555  
Amount: 0.039929  
Amount Units: ug/l

Processing Integration Results



RT: 3.89  
Area: 7347  
Amount: 0.044753  
Amount Units: ug/l

Manual Integration Results



Reviewer: knouses, 04-Mar-2021 12:44:21  
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

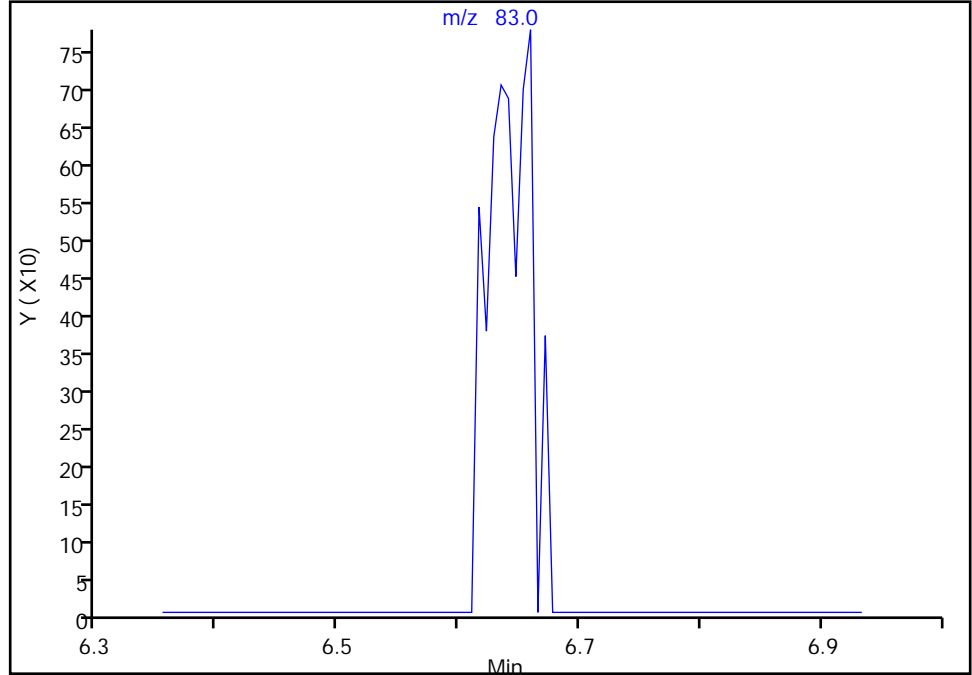
Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S42.D  
Injection Date: 04-Mar-2021 01:31:30 Instrument ID: 19930  
Lims ID: 410-30627-A-7 Lab Sample ID: 410-30627-7  
Client ID: HD-COD-SW-16-0/1-0  
Operator ID: MEC29284 ALS Bottle#: 19 Worklist Smp#: 20  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: 8260 25ml HP31 Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

45 Chloroform, CAS: 67-66-3

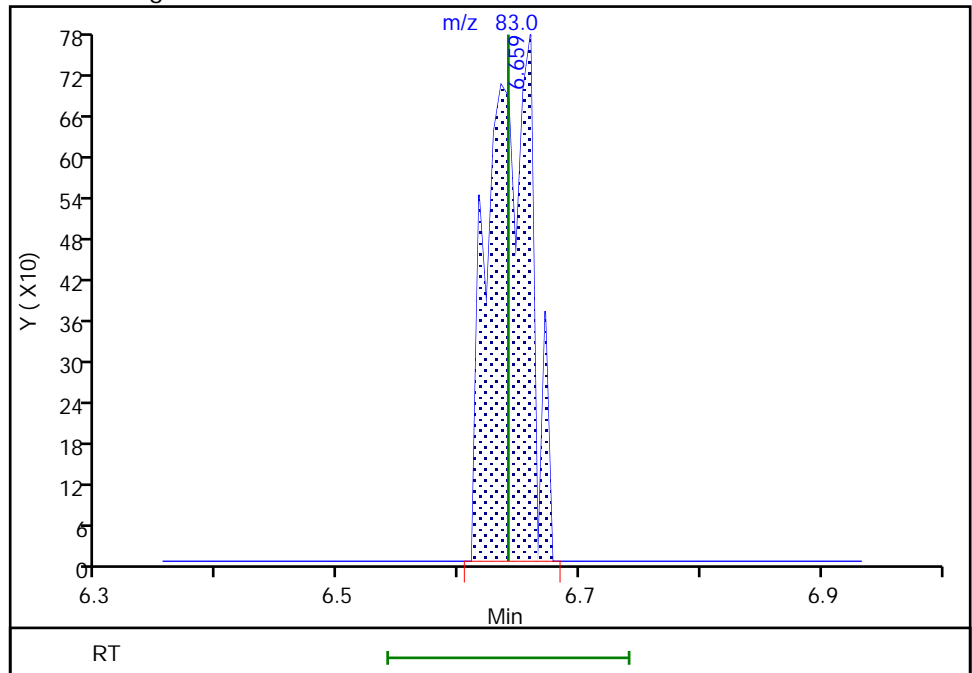
Signal: 1

Not Detected  
Expected RT: 6.64

Processing Integration Results



Manual Integration Results



RT: 6.66  
Area: 1918  
Amount: 0.017219  
Amount Units: ug/l

Reviewer: knouses, 04-Mar-2021 12:45:00  
Audit Action: Manually Integrated

Audit Reason: Missed Peak

Eurofins Lancaster Laboratories Env, LLC

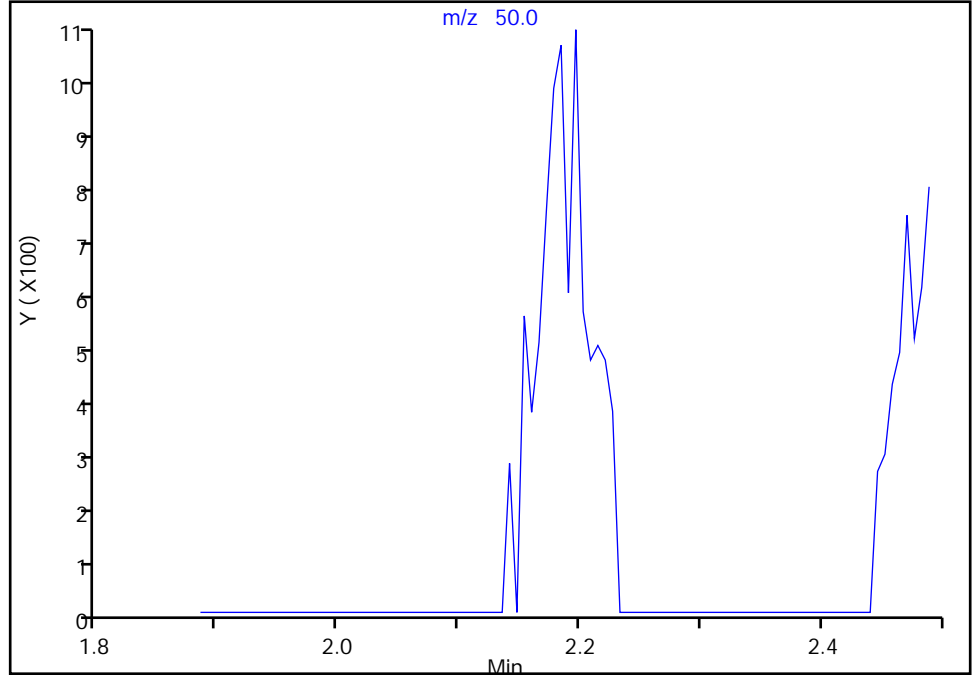
Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S42.D  
Injection Date: 04-Mar-2021 01:31:30 Instrument ID: 19930  
Lims ID: 410-30627-A-7 Lab Sample ID: 410-30627-7  
Client ID: HD-COD-SW-16-0/1-0  
Operator ID: MEC29284 ALS Bottle#: 19 Worklist Smp#: 20  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: 8260 25ml HP31 Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

4 Chloromethane, CAS: 74-87-3

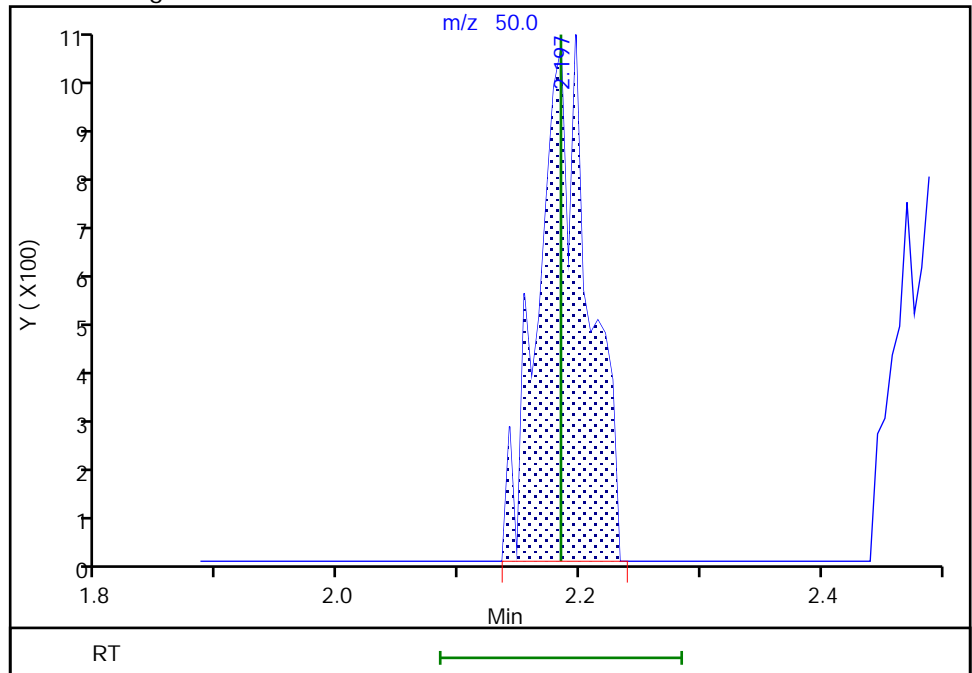
Signal: 1

Not Detected  
Expected RT: 2.18

Processing Integration Results



Manual Integration Results



RT: 2.20  
Area: 3116  
Amount: 0.035430  
Amount Units: ug/l

Reviewer: knouses, 04-Mar-2021 12:44:03  
Audit Action: Manually Integrated

Audit Reason: Missed Peak

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-30627-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: HD-COD-SW-17-0/1-0 Lab Sample ID: 410-30627-8  
 Matrix: Water Lab File ID: IM03S43.D  
 Analysis Method: 8260D Date Collected: 02/25/2021 10:40  
 Sample wt/vol: 25 (mL) Date Analyzed: 03/04/2021 01:52  
 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.: 99333 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	^c	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	0.051	J	0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.050
124-48-1	Dibromochloromethane	ND		0.50	0.070
100-41-4	Ethylbenzene	ND		0.50	0.060
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.050
75-09-2	Methylene Chloride	ND		0.50	0.070
100-42-5	Styrene	ND		0.50	0.050
127-18-4	Tetrachloroethene	ND		0.50	0.060
108-88-3	Toluene	ND		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	ND		0.50	0.060

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-30627-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: HD-COD-SW-17-0/1-0 Lab Sample ID: 410-30627-8  
 Matrix: Water Lab File ID: IM03S43.D  
 Analysis Method: 8260D Date Collected: 02/25/2021 10:40  
 Sample wt/vol: 25 (mL) Date Analyzed: 03/04/2021 01:52  
 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.: 99333 Units: ug/L

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

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		80-120
460-00-4	4-Bromofluorobenzene (Surr)	96		80-120
1868-53-7	Dibromofluoromethane (Surr)	103		80-120
2037-26-5	Toluene-d8 (Surr)	98		80-120

Eurofins Lancaster Laboratories Env, LLC  
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S43.D  
 Lims ID: 410-30627-A-8  
 Client ID: HD-COD-SW-17-0/1-0  
 Sample Type: Client  
 Inject. Date: 04-Mar-2021 01:52:30 ALS Bottle#: 20 Worklist Smp#: 21  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0023228-021  
 Misc. Info.: 410-30627-A-8  
 Operator ID: MEC29284 Instrument ID: 19930  
 Method: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\8260 25ml HP31.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 04-Mar-2021 13:06:32 Calib Date: 23-Nov-2020 18:05:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23117.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1631

First Level Reviewer: knouses

Date: 04-Mar-2021 12:46:58

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
4 Chloromethane	50		2.184				ND	7
5 Vinyl chloride	62		2.306				ND	
7 Bromomethane	94		2.629				ND	
8 Chloroethane	64		2.709				ND	
14 1,1-Dichloroethene	96		3.574				ND	
15 Acetone	43	3.605	3.605	0.000	98	14847	1.46	
19 Carbon disulfide	76	3.873	3.885	-0.012	68	7734	0.0477	
23 Methylene Chloride	84		4.251				ND	7
* 24 t-Butyl alcohol-d10 (IS)	65	4.263	4.275	-0.012	0	186459	50.0	
27 Methyl tert-butyl ether	73		4.659				ND	7
28 trans-1,2-Dichloroethene	96		4.672				ND	
31 1,1-Dichloroethane	63		5.330				ND	
36 2-Butanone (MEK)	43		6.122				ND	7
37 cis-1,2-Dichloroethene	96	6.171	6.159	0.012	10	3637	0.0507	M
43 Chlorobromomethane	128		6.488				ND	
45 Chloroform	83		6.641				ND	7
\$ 46 Dibromofluoromethane (Surr)	113	6.848	6.854	-0.006	94	531591	10.3	
47 1,1,1-Trichloroethane	97		6.866				ND	
50 Carbon tetrachloride	117		7.080				ND	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.305	7.305	0.000	0	106386	10.2	
54 Benzene	78		7.336				ND	7
56 1,2-Dichloroethane	62	7.409	7.409	0.000	9	2208	0.0340	M
* 58 Fluorobenzene (IS)	96	7.738	7.738	0.000	99	2098535	10.0	
61 Trichloroethene	95	8.220	8.214	0.006	86	3685	0.0529	M
63 1,2-Dichloropropane	63		8.549				ND	
68 Dichlorobromomethane	83		8.890				ND	
73 cis-1,3-Dichloropropene	75		9.433				ND	
74 4-Methyl-2-pentanone (MIBK)	43		9.597				ND	7
\$ 75 Toluene-d8 (Surr)	98	9.738	9.738	0.000	93	2096967	9.76	
76 Toluene	92		9.817				ND	7
78 trans-1,3-Dichloropropene	75		10.067				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
80 1,1,2-Trichloroethane	97		10.274				ND	
81 Tetrachloroethene	166	10.366	10.366	0.000	93	4618	0.0532	
83 2-Hexanone	43		10.481				ND	
85 Chlorodibromomethane	129		10.652				ND	
86 Ethylene Dibromide	107		10.762				ND	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.189	-0.001	85	1644777	10.0	
90 Chlorobenzene	112		11.213				ND	
S 89 Xylenes, Total	106		11.245				ND	7
91 1,1,1,2-Tetrachloroethane	131		11.298				ND	
92 Ethylbenzene	91		11.298				ND	7
93 m-Xylene & p-Xylene	106		11.414				ND	7
94 o-Xylene	106		11.743				ND	
95 Styrene	104		11.756				ND	
96 Bromoform	173		11.914				ND	
\$ 100 4-Bromofluorobenzene (Surr)	95	12.188	12.182	0.006	97	764390	9.61	
101 1,1,2,2-Tetrachloroethane	83		12.286				ND	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	94	933092	10.0	

### QC Flag Legend

#### Processing Flags

7 - Failed Limit of Detection

#### Review Flags

M - Manually Integrated

### Reagents:

MSV\_31\_826ISS\_00004

Amount Added: 5.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S43.D

Injection Date: 04-Mar-2021 01:52:30

Instrument ID: 19930

Operator ID: MEC29284

Lims ID: 410-30627-A-8

Lab Sample ID: 410-30627-8

Worklist Smp#: 21

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

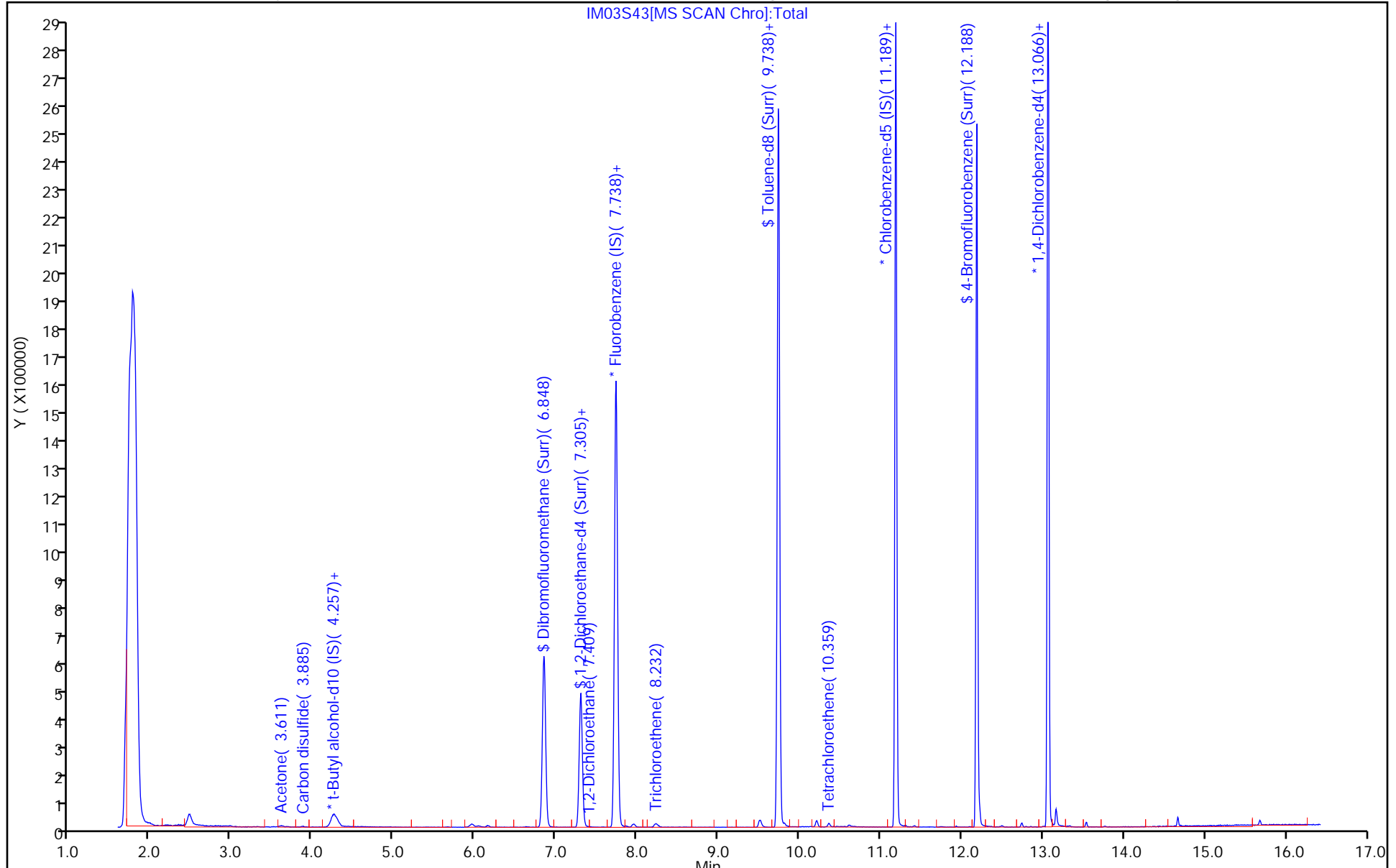
ALS Bottle#: 20

Method: 8260 25ml HP31

Limit Group: MSV - 8260C\_D

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

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





Eurofins Lancaster Laboratories Env, LLC  
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S43.D  
 Lims ID: 410-30627-A-8  
 Client ID: HD-COD-SW-17-0/1-0  
 Sample Type: Client  
 Inject. Date: 04-Mar-2021 01:52:30 ALS Bottle#: 20 Worklist Smp#: 21  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0023228-021  
 Misc. Info.: 410-30627-A-8  
 Operator ID: MEC29284 Instrument ID: 19930  
 Method: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\8260 25ml HP31.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 04-Mar-2021 13:06:32 Calib Date: 23-Nov-2020 18:05:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I17.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1631

First Level Reviewer: knouses Date: 04-Mar-2021 12:46:58

Compound	Amount Added	Amount Recovered	% Rec.
\$ 46 Dibromofluoromethane (Surr)	10.0	10.3	102.59
\$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	10.2	101.84
\$ 75 Toluene-d8 (Surr)	10.0	9.76	97.63
\$ 100 4-Bromofluorobenzene (Surr)	10.0	9.61	96.09

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S43.D

Injection Date: 04-Mar-2021 01:52:30

Instrument ID: 19930

Lims ID: 410-30627-A-8

Lab Sample ID: 410-30627-8

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

Operator ID: MEC29284

ALS Bottle#: 20

Worklist Smp#: 21

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

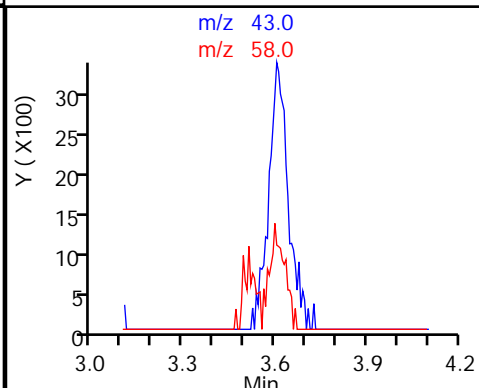
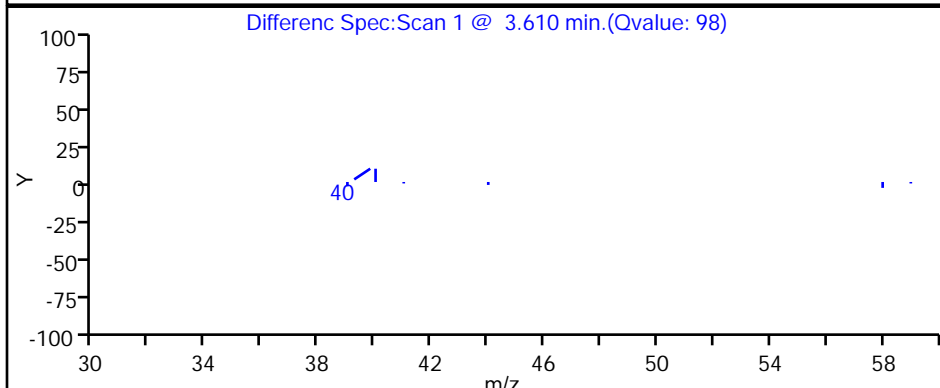
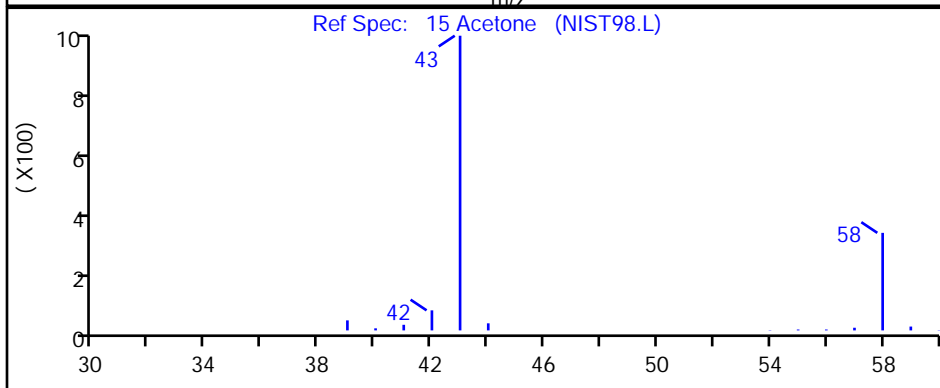
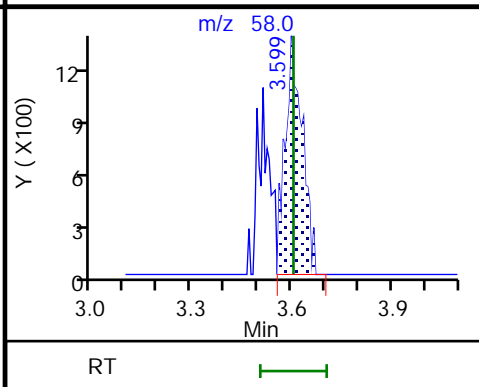
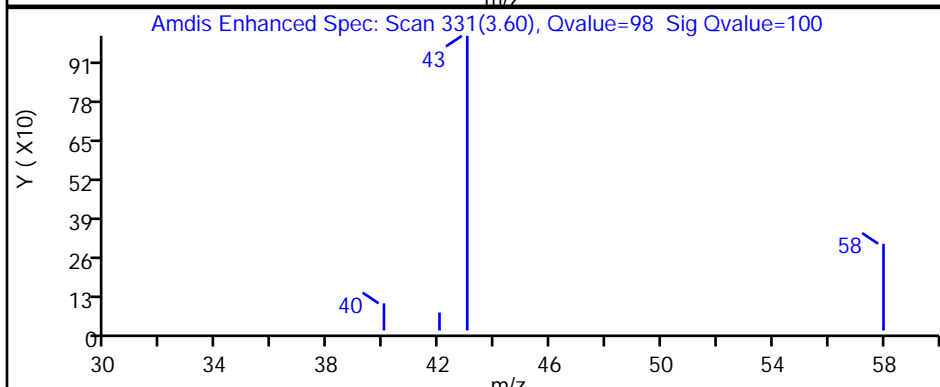
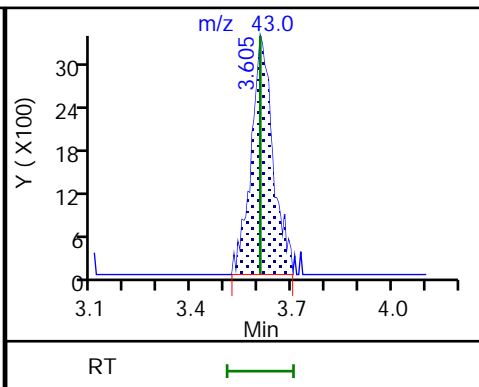
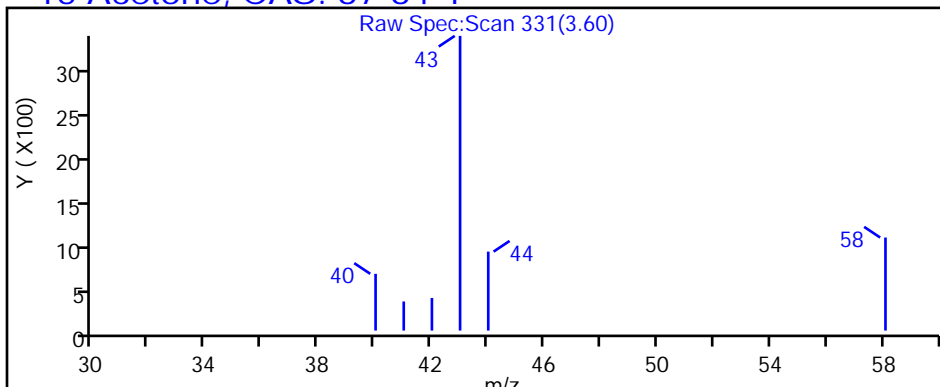
Method: 8260 25ml HP31

Limit Group: MSV - 8260C\_D

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

MS Quad

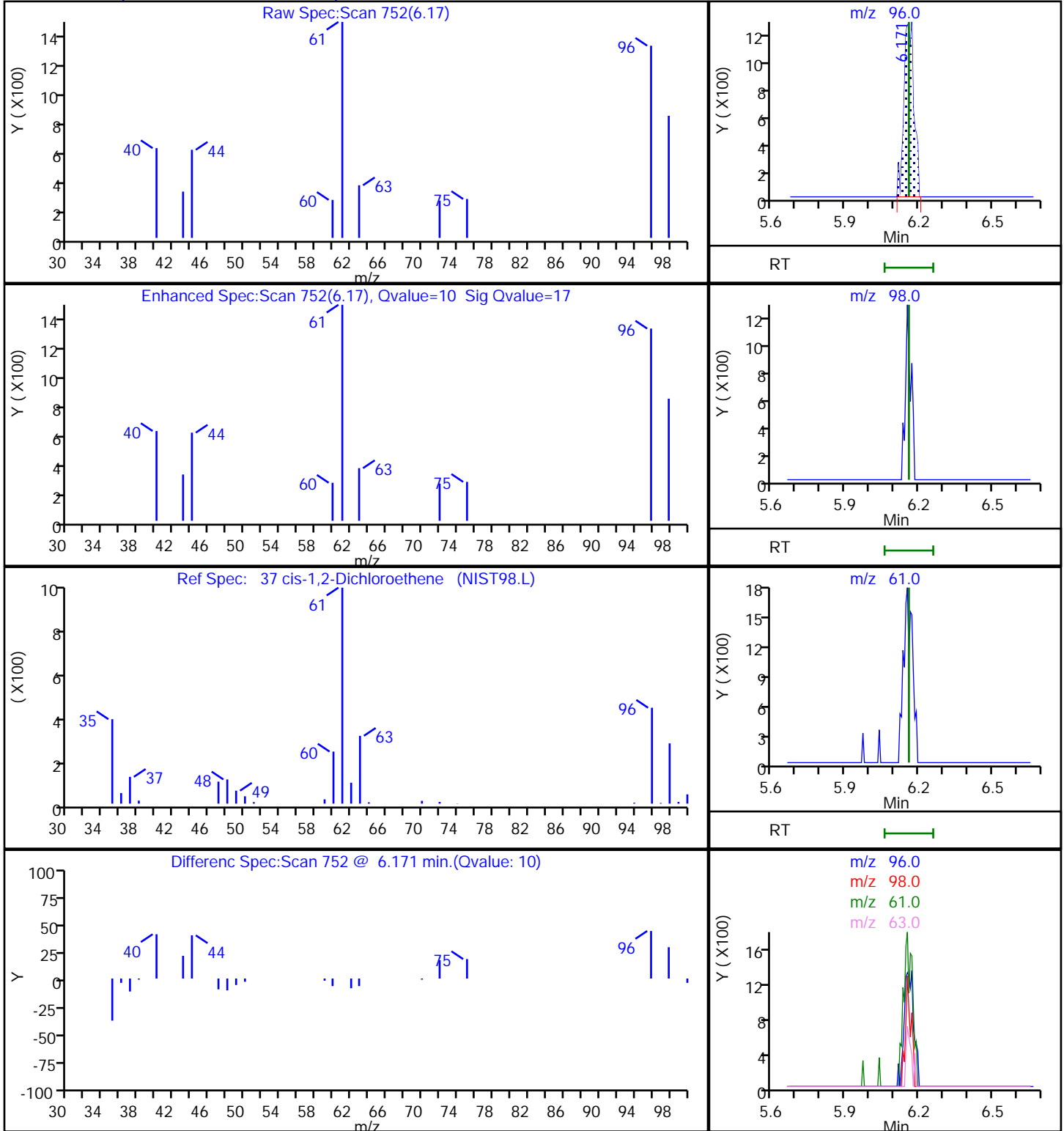
15 Acetone, CAS: 67-64-1



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S43.D  
Injection Date: 04-Mar-2021 01:52:30 Instrument ID: 19930  
Lims ID: 410-30627-A-8 Lab Sample ID: 410-30627-8  
Client ID: HD-COD-SW-17-0/1-0  
Operator ID: MEC29284 ALS Bottle#: 20 Worklist Smp#: 21  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: 8260 25ml HP31 Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

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



Eurofins Lancaster Laboratories Env, LLC

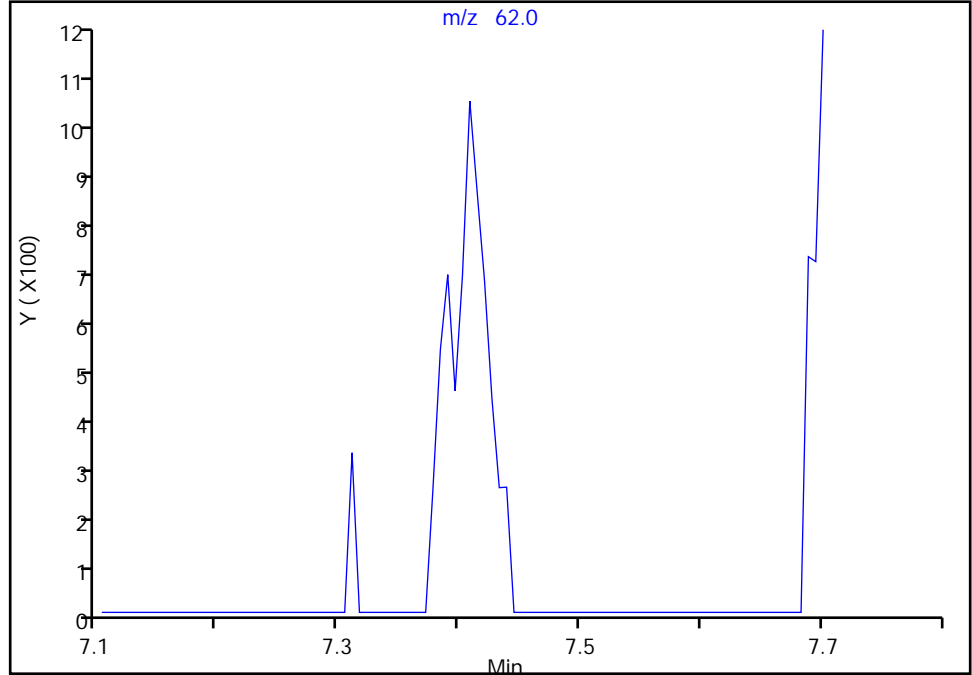
Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S43.D  
Injection Date: 04-Mar-2021 01:52:30 Instrument ID: 19930  
Lims ID: 410-30627-A-8 Lab Sample ID: 410-30627-8  
Client ID: HD-COD-SW-17-0/1-0  
Operator ID: MEC29284 ALS Bottle#: 20 Worklist Smp#: 21  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: 8260 25ml HP31 Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

56 1,2-Dichloroethane, CAS: 107-06-2

Signal: 1

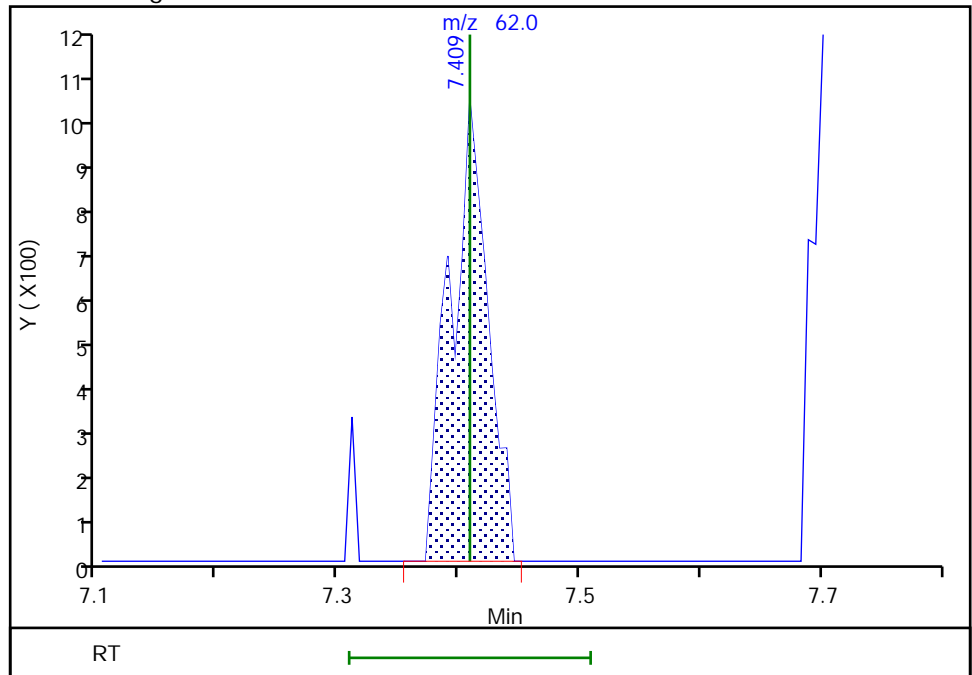
Not Detected  
Expected RT: 7.41

Processing Integration Results



Manual Integration Results

RT: 7.41  
Area: 2208  
Amount: 0.034011  
Amount Units: ug/l



Reviewer: knouses, 04-Mar-2021 12:46:21  
Audit Action: Manually Integrated

Audit Reason: Missed Peak

Eurofins Lancaster Laboratories Env, LLC

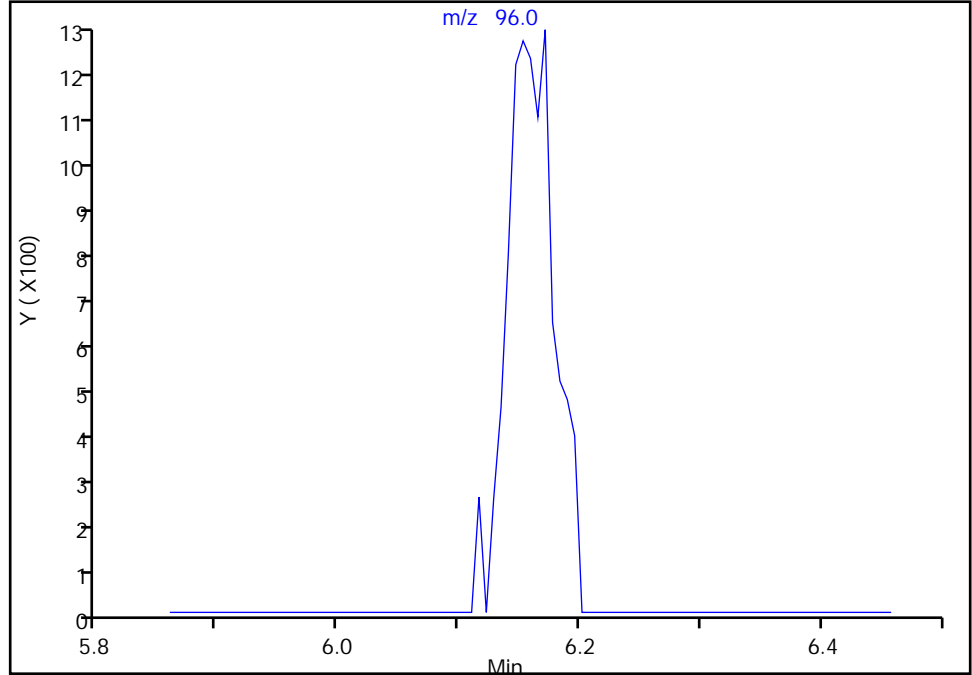
Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S43.D  
Injection Date: 04-Mar-2021 01:52:30 Instrument ID: 19930  
Lims ID: 410-30627-A-8 Lab Sample ID: 410-30627-8  
Client ID: HD-COD-SW-17-0/1-0  
Operator ID: MEC29284 ALS Bottle#: 20 Worklist Smp#: 21  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: 8260 25ml HP31 Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

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

Signal: 1

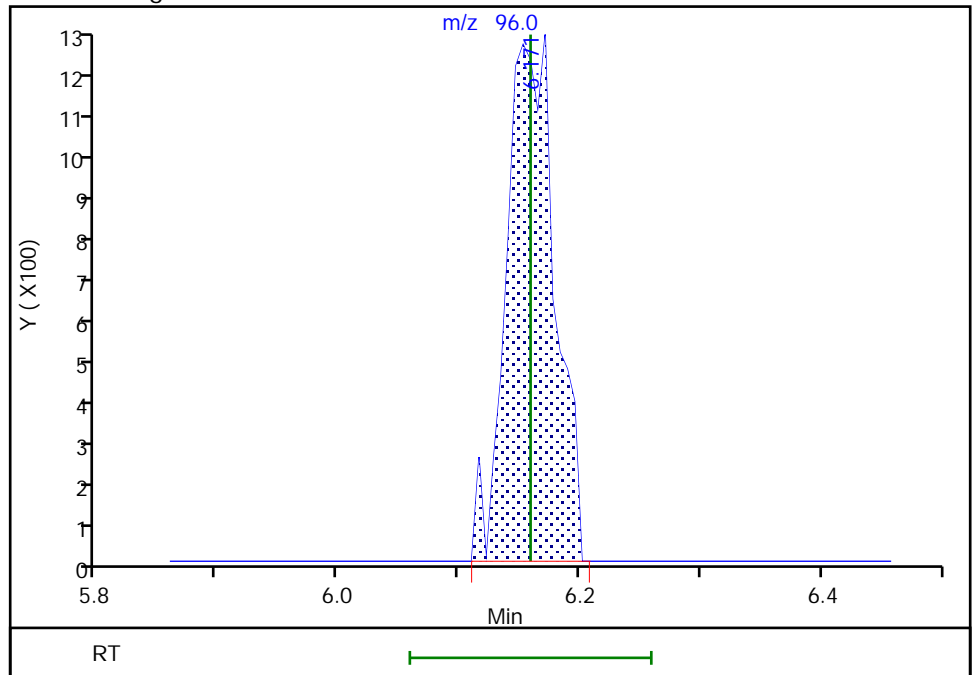
Not Detected  
Expected RT: 6.16

Processing Integration Results



Manual Integration Results

RT: 6.17  
Area: 3637  
Amount: 0.050671  
Amount Units: ug/l



Reviewer: knouses, 04-Mar-2021 12:46:08  
Audit Action: Manually Integrated

Audit Reason: Missed Peak

Eurofins Lancaster Laboratories Env, LLC

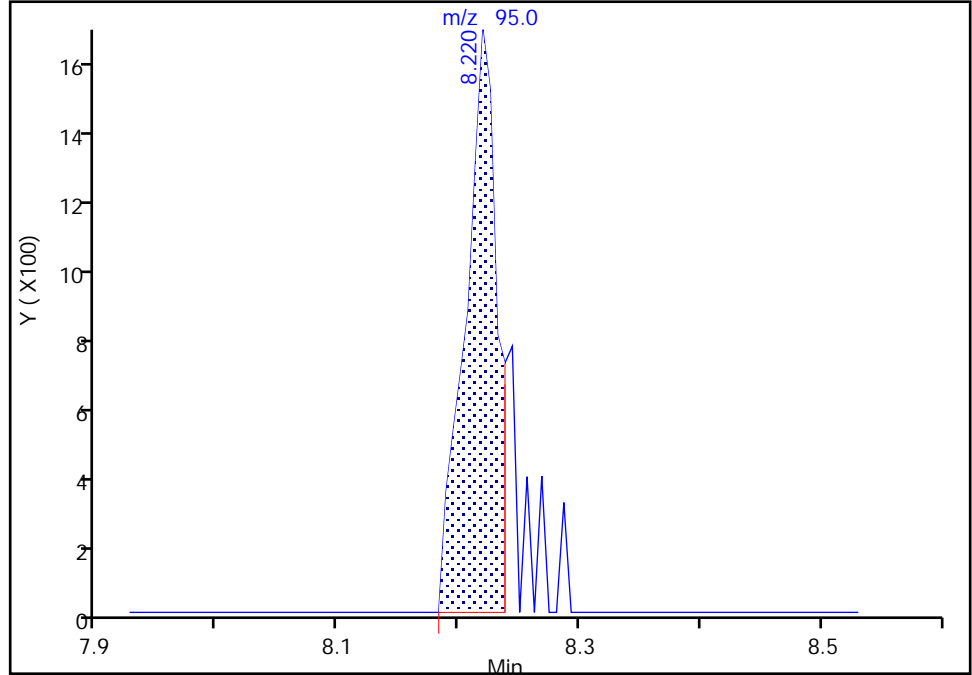
Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S43.D  
Injection Date: 04-Mar-2021 01:52:30 Instrument ID: 19930  
Lims ID: 410-30627-A-8 Lab Sample ID: 410-30627-8  
Client ID: HD-COD-SW-17-0/1-0  
Operator ID: MEC29284 ALS Bottle#: 20 Worklist Smp#: 21  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: 8260 25ml HP31 Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

61 Trichloroethene, CAS: 79-01-6

Signal: 1

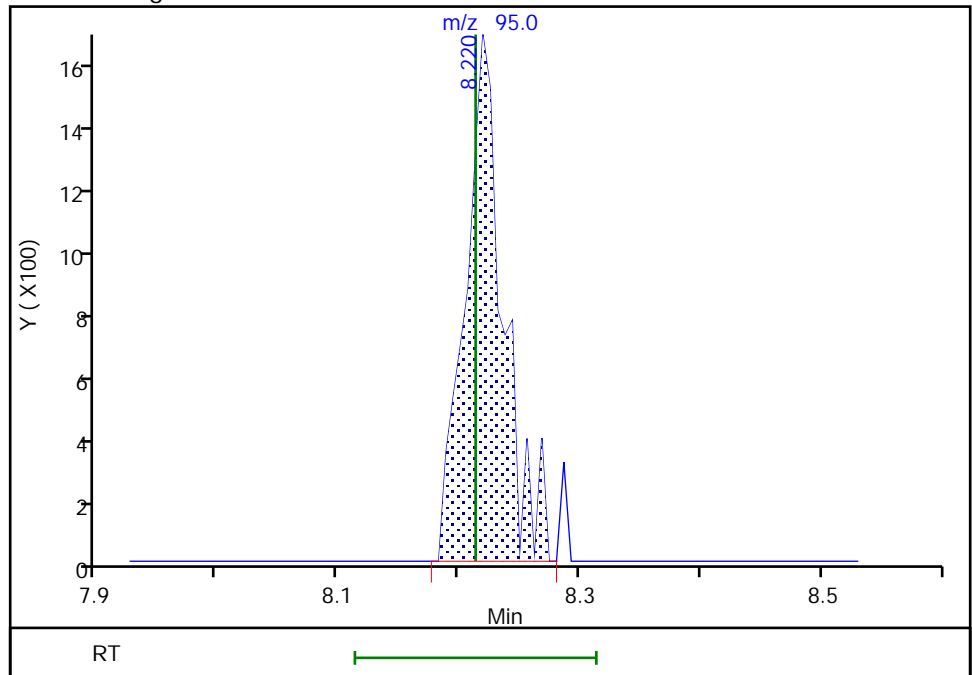
RT: 8.22  
Area: 3114  
Amount: 0.044743  
Amount Units: ug/l

Processing Integration Results



RT: 8.22  
Area: 3685  
Amount: 0.052947  
Amount Units: ug/l

Manual Integration Results



Reviewer: knouses, 04-Mar-2021 12:46:39  
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-30627-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: HD-COD-SW-26-0/1-0 Lab Sample ID: 410-30627-9  
 Matrix: Water Lab File ID: IM03S44.D  
 Analysis Method: 8260D Date Collected: 02/25/2021 11:25  
 Sample wt/vol: 25 (mL) Date Analyzed: 03/04/2021 02:13  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: R-624SilMS 30m ID: 0.25 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 99333 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	^c	5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70
67-64-1	Acetone	1.4	J	5.0	0.90
71-43-2	Benzene	ND		0.50	0.050
74-97-5	Bromochloromethane	ND		0.50	0.050
75-27-4	Bromodichloromethane	ND		0.50	0.050
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.070
75-15-0	Carbon disulfide	ND		1.0	0.060
56-23-5	Carbon tetrachloride	ND		0.50	0.070
108-90-7	Chlorobenzene	ND		0.50	0.060
75-00-3	Chloroethane	ND		0.50	0.070
67-66-3	Chloroform	0.11	J	0.50	0.090
74-87-3	Chloromethane	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	0.42	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 E Job No.: 410-30627-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: HD-COD-SW-26-0/1-0 Lab Sample ID: 410-30627-9  
 Matrix: Water Lab File ID: IM03S44.D  
 Analysis Method: 8260D Date Collected: 02/25/2021 11:25  
 Sample wt/vol: 25 (mL) Date Analyzed: 03/04/2021 02:13  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: R-624SilMS 30m ID: 0.25 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 99333 Units: ug/L

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

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		80-120
460-00-4	4-Bromofluorobenzene (Surr)	97		80-120
1868-53-7	Dibromofluoromethane (Surr)	103		80-120
2037-26-5	Toluene-d8 (Surr)	98		80-120



Eurofins Lancaster Laboratories Env, LLC  
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S44.D  
 Lims ID: 410-30627-A-9  
 Client ID: HD-COD-SW-26-0/1-0  
 Sample Type: Client  
 Inject. Date: 04-Mar-2021 02:13:30 ALS Bottle#: 21 Worklist Smp#: 22  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0023228-022  
 Misc. Info.: 410-30627-A-9  
 Operator ID: MEC29284 Instrument ID: 19930  
 Method: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\8260 25ml HP31.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 04-Mar-2021 13:06:32 Calib Date: 23-Nov-2020 18:05:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23117.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1631

First Level Reviewer: knouses

Date: 04-Mar-2021 12:47:44

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
4 Chloromethane	50		2.184				ND	7
5 Vinyl chloride	62		2.306				ND	
7 Bromomethane	94		2.629				ND	
8 Chloroethane	64		2.709				ND	
14 1,1-Dichloroethene	96		3.574				ND	7
15 Acetone	43	3.605	3.605	0.000	97	14112	1.43	
19 Carbon disulfide	76	3.873	3.885	-0.012	76	8001	0.0506	
23 Methylene Chloride	84		4.251				ND	7
* 24 t-Butyl alcohol-d10 (IS)	65	4.257	4.275	-0.018	0	181118	50.0	
27 Methyl tert-butyl ether	73		4.659				ND	7
28 trans-1,2-Dichloroethene	96		4.672				ND	
31 1,1-Dichloroethane	63		5.330				ND	
36 2-Butanone (MEK)	43		6.122				ND	7
37 cis-1,2-Dichloroethene	96	6.153	6.159	-0.006	76	2941	0.0421	
43 Chlorobromomethane	128		6.488				ND	
45 Chloroform	83	6.641	6.641	0.000	89	12194	0.1137	
\$ 46 Dibromofluoromethane (Surr)	113	6.848	6.854	-0.006	93	519498	10.3	
47 1,1,1-Trichloroethane	97		6.866				ND	
50 Carbon tetrachloride	117		7.080				ND	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.305	7.305	0.000	0	104648	10.3	
54 Benzene	78		7.336				ND	7
56 1,2-Dichloroethane	62	7.403	7.409	-0.006	1	2139	0.0338	M
* 58 Fluorobenzene (IS)	96	7.738	7.738	0.000	99	2044499	10.0	
61 Trichloroethene	95	8.219	8.214	0.005	93	3940	0.0581	
63 1,2-Dichloropropane	63		8.549				ND	
68 Dichlorobromomethane	83		8.890				ND	7
73 cis-1,3-Dichloropropene	75		9.433				ND	
74 4-Methyl-2-pentanone (MIBK)	43		9.597				ND	7
\$ 75 Toluene-d8 (Surr)	98	9.737	9.738	-0.001	93	2026406	9.77	
76 Toluene	92	9.817	9.817	0.000	96	5379	0.0310	
78 trans-1,3-Dichloropropene	75		10.067				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Diff RT (min.)	Q	Response	OnCol Amt ug/l	Flags
80 1,1,2-Trichloroethane	97		10.274				ND	
81 Tetrachloroethene	166	10.359	10.366	-0.007	98	35474	0.4230	
83 2-Hexanone	43		10.481				ND	
85 Chlorodibromomethane	129		10.652				ND	
86 Ethylene Dibromide	107		10.762				ND	
* 87 Chlorobenzene-d5 (IS)	117	11.188	11.189	-0.001	85	1588889	10.0	
90 Chlorobenzene	112		11.213				ND	
S 89 Xylenes, Total	106		11.245				ND	7
91 1,1,1,2-Tetrachloroethane	131		11.298				ND	
92 Ethylbenzene	91		11.298				ND	7
93 m-Xylene & p-Xylene	106		11.414				ND	7
94 o-Xylene	106		11.743				ND	7
95 Styrene	104		11.756				ND	
96 Bromoform	173		11.914				ND	
\$ 100 4-Bromofluorobenzene (Surr)	95	12.188	12.182	0.006	95	747931	9.73	
101 1,1,2,2-Tetrachloroethane	83		12.286				ND	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	94	907388	10.0	

### QC Flag Legend

#### Processing Flags

7 - Failed Limit of Detection

#### Review Flags

M - Manually Integrated

### Reagents:

MSV\_31\_826ISS\_00004

Amount Added: 5.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S44.D

Injection Date: 04-Mar-2021 02:13:30

Instrument ID: 19930

Operator ID: MEC29284

Lims ID: 410-30627-A-9

Lab Sample ID: 410-30627-9

Worklist Smp#: 22

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

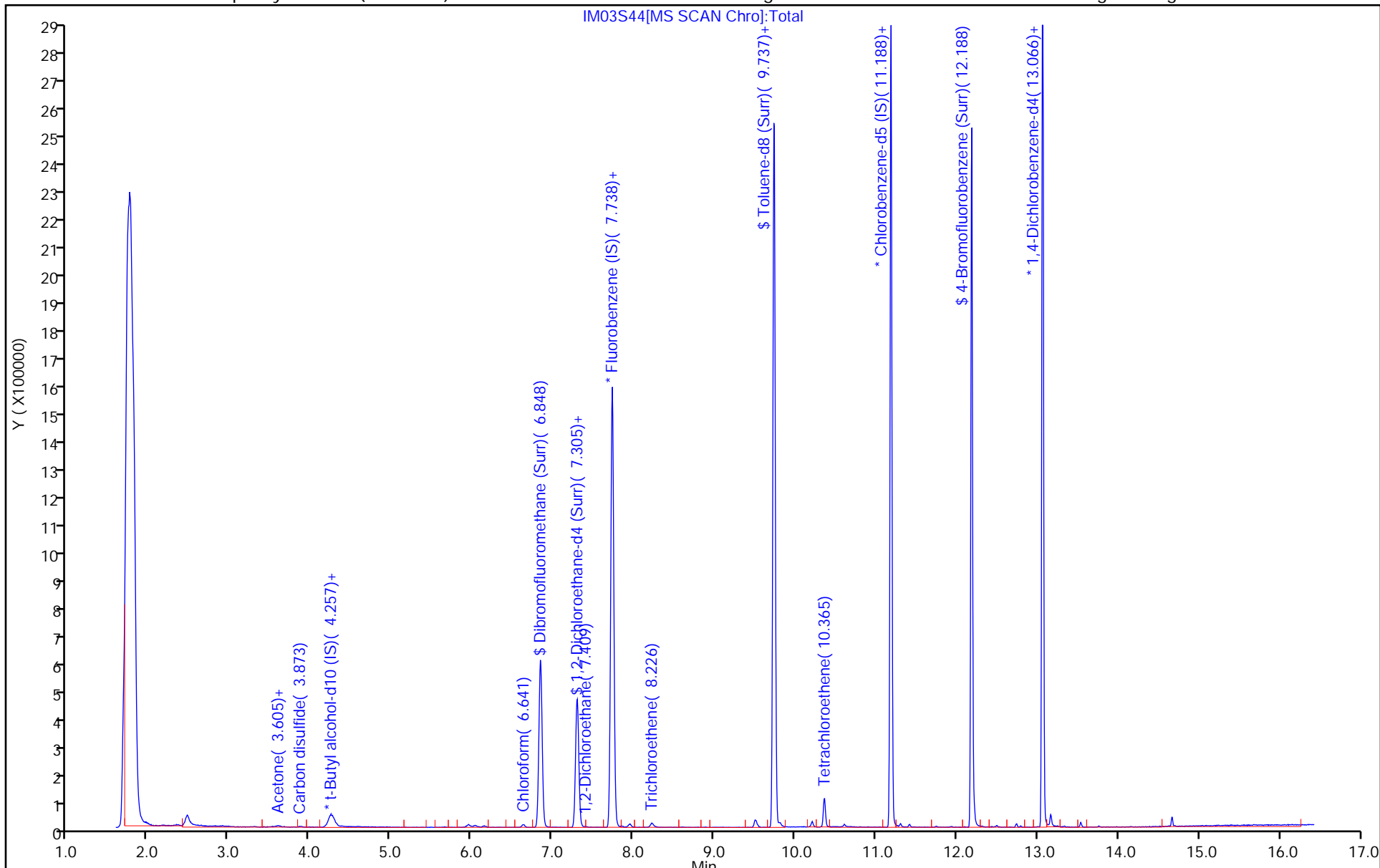
ALS Bottle#: 21

Method: 8260 25ml HP31

Limit Group: MSV - 8260C\_D

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

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



Eurofins Lancaster Laboratories Env, LLC  
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S44.D  
 Lims ID: 410-30627-A-9  
 Client ID: HD-COD-SW-26-0/1-0  
 Sample Type: Client  
 Inject. Date: 04-Mar-2021 02:13:30 ALS Bottle#: 21 Worklist Smp#: 22  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0023228-022  
 Misc. Info.: 410-30627-A-9  
 Operator ID: MEC29284 Instrument ID: 19930  
 Method: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\8260 25ml HP31.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 04-Mar-2021 13:06:32 Calib Date: 23-Nov-2020 18:05:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I17.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1631

First Level Reviewer: knouses

Date: 04-Mar-2021 12:47:44

Compound	Amount Added	Amount Recovered	% Rec.
\$ 46 Dibromofluoromethane (Surr)	10.0	10.3	102.91
\$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	10.3	102.82
\$ 75 Toluene-d8 (Surr)	10.0	9.77	97.66
\$ 100 4-Bromofluorobenzene (Surr)	10.0	9.73	97.33

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S44.D

Injection Date: 04-Mar-2021 02:13:30

Instrument ID: 19930

Lims ID: 410-30627-A-9

Lab Sample ID: 410-30627-9

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

Operator ID: MEC29284

ALS Bottle#: 21

Worklist Smp#: 22

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

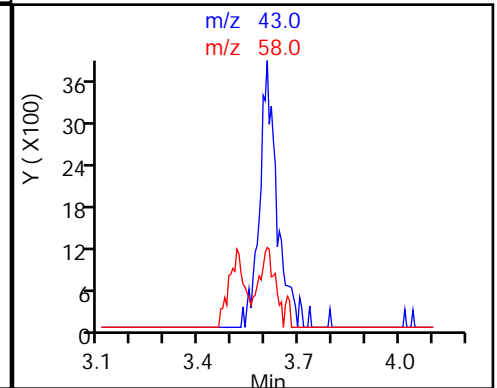
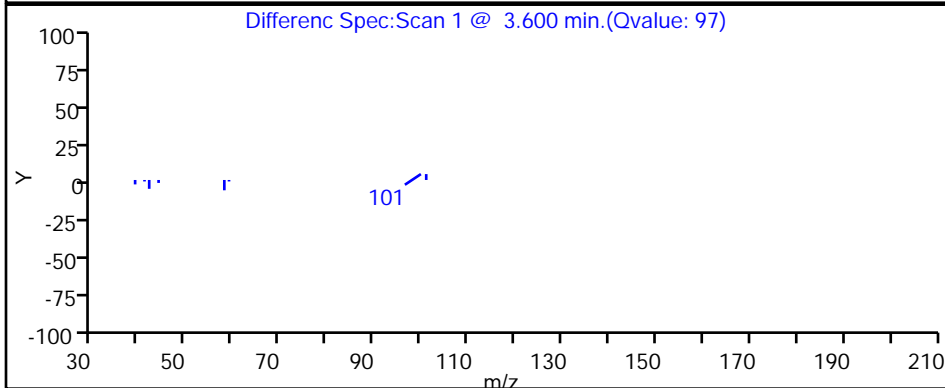
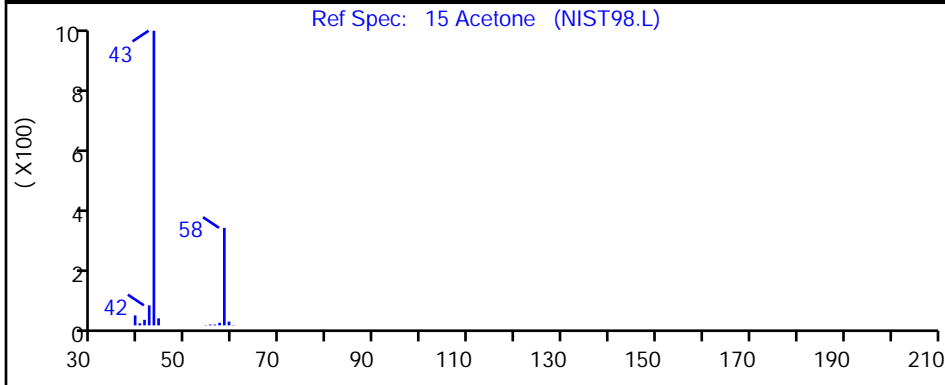
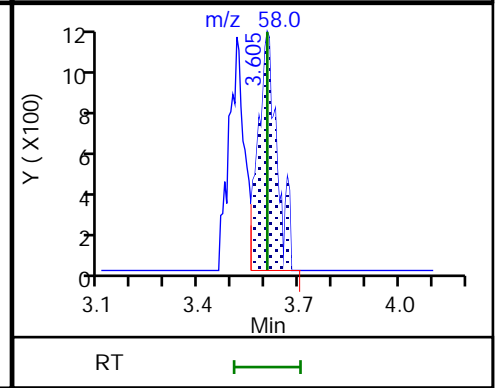
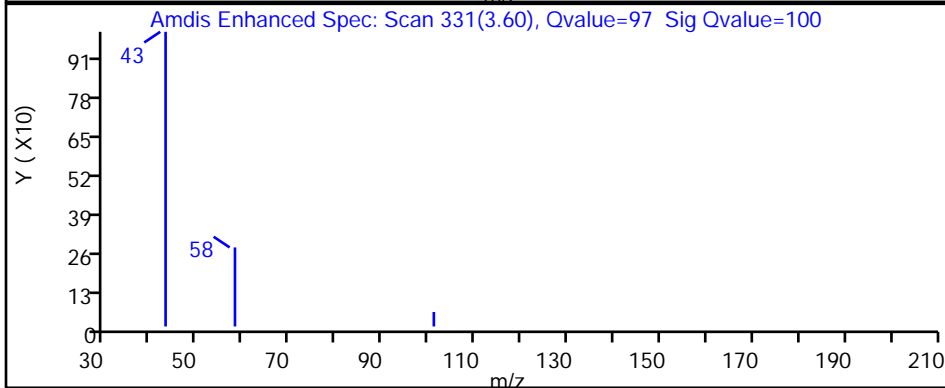
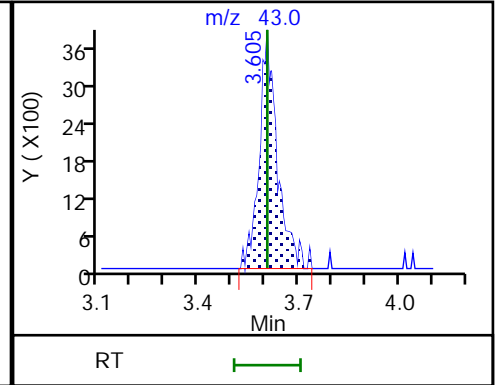
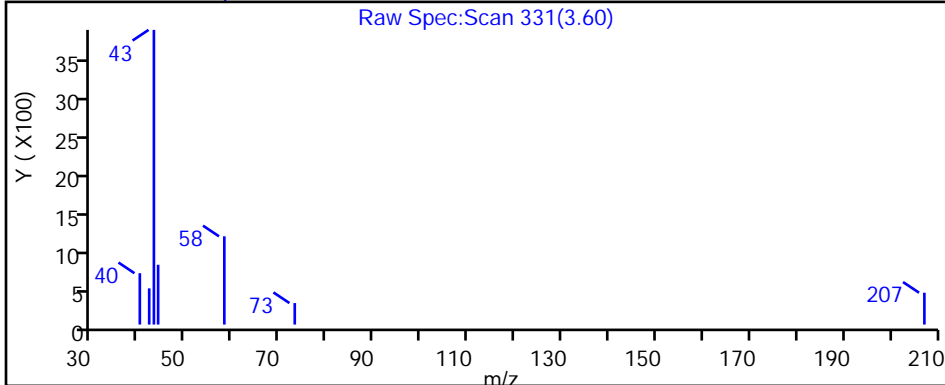
Method: 8260 25ml HP31

Limit Group: MSV - 8260C\_D

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

MS Quad

15 Acetone, CAS: 67-64-1



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S44.D

Injection Date: 04-Mar-2021 02:13:30

Instrument ID: 19930

Lims ID: 410-30627-A-9

Lab Sample ID: 410-30627-9

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

Operator ID: MEC29284

ALS Bottle#: 21

Worklist Smp#: 22

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

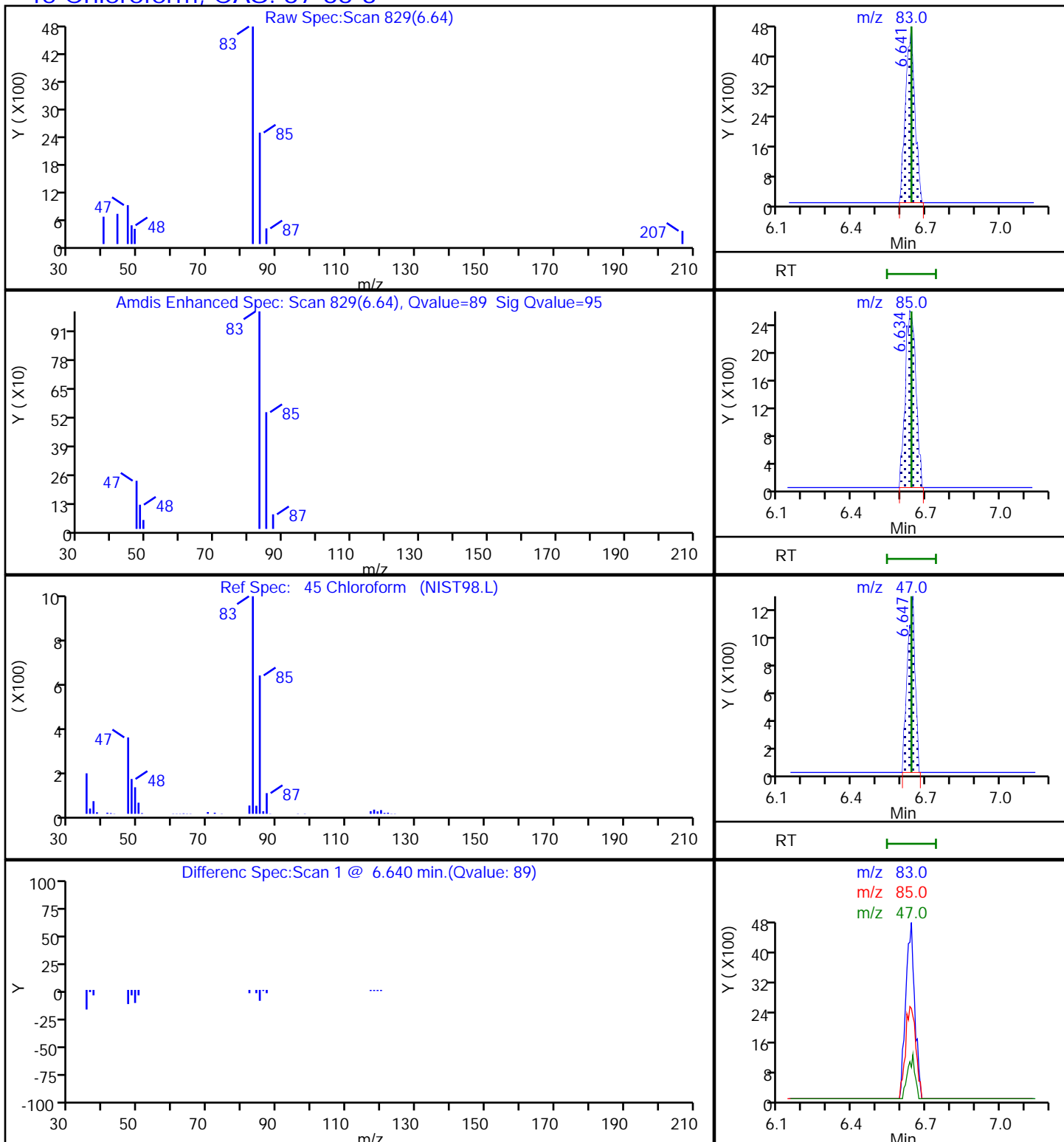
Method: 8260 25ml HP31

Limit Group: MSV - 8260C\_D

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

MS Quad

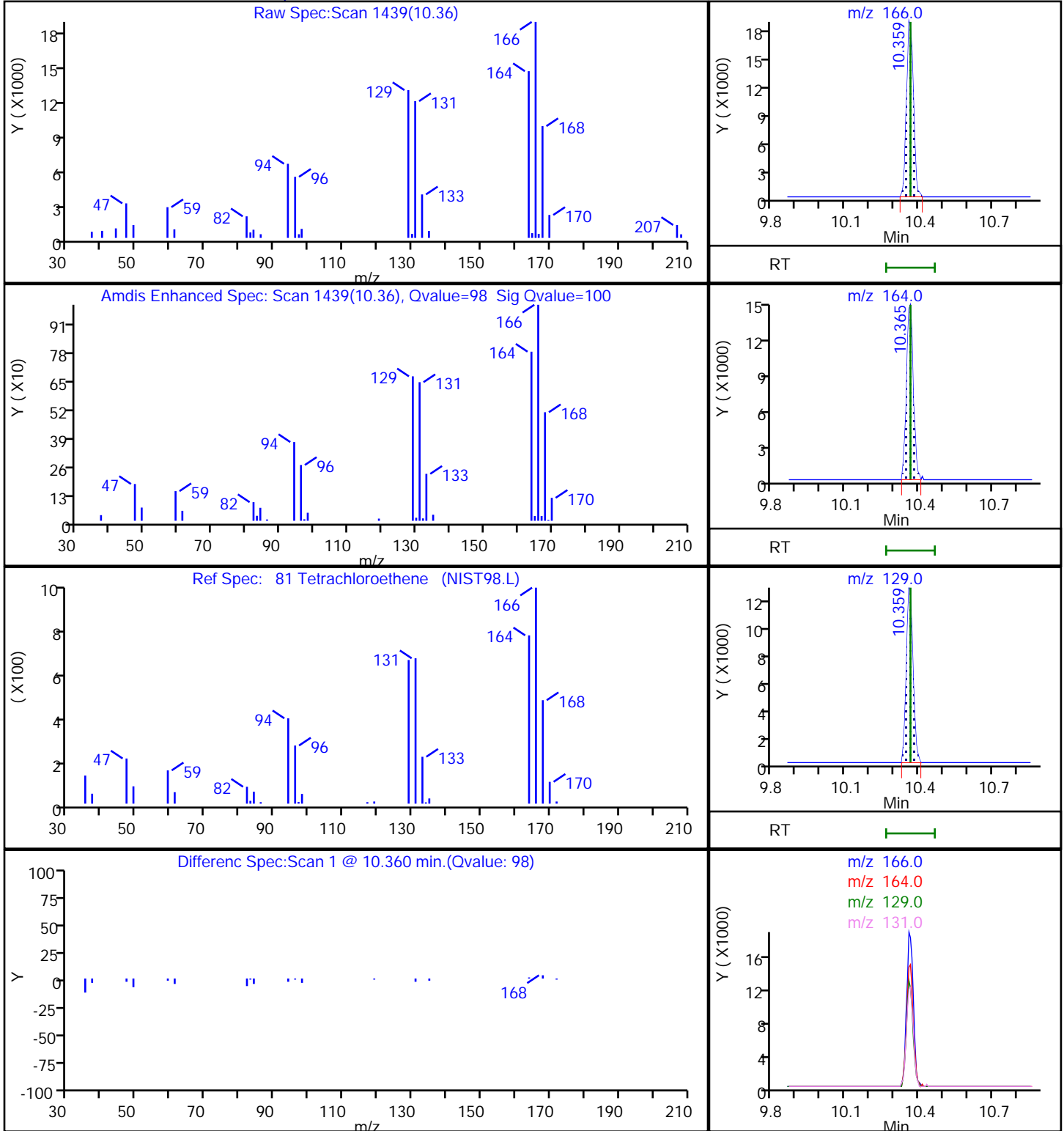
### 45 Chloroform, CAS: 67-66-3



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S44.D  
Injection Date: 04-Mar-2021 02:13:30 Instrument ID: 19930  
Lims ID: 410-30627-A-9 Lab Sample ID: 410-30627-9  
Client ID: HD-COD-SW-26-0/1-0  
Operator ID: MEC29284 ALS Bottle#: 21 Worklist Smp#: 22  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: 8260 25ml HP31 Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

81 Tetrachloroethene, CAS: 127-18-4



Eurofins Lancaster Laboratories Env, LLC

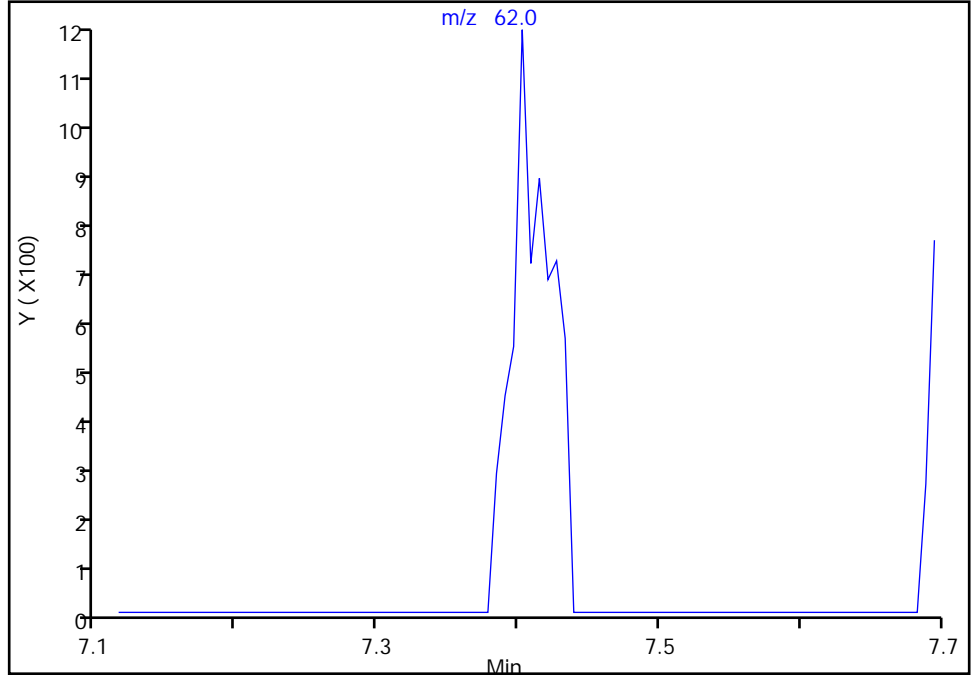
Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S44.D  
Injection Date: 04-Mar-2021 02:13:30 Instrument ID: 19930  
Lims ID: 410-30627-A-9 Lab Sample ID: 410-30627-9  
Client ID: HD-COD-SW-26-0/1-0  
Operator ID: MEC29284 ALS Bottle#: 21 Worklist Smp#: 22  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: 8260 25ml HP31 Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

56 1,2-Dichloroethane, CAS: 107-06-2

Signal: 1

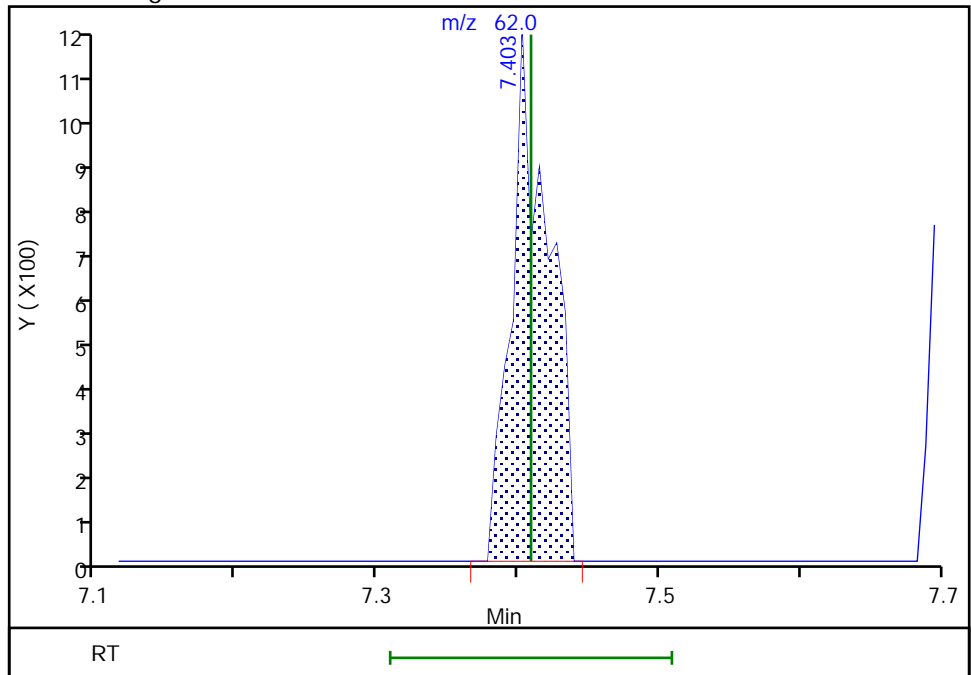
Not Detected  
Expected RT: 7.41

Processing Integration Results



Manual Integration Results

RT: 7.40  
Area: 2139  
Amount: 0.033819  
Amount Units: ug/l



Reviewer: knouses, 04-Mar-2021 12:47:29  
Audit Action: Manually Integrated

Audit Reason: Missed Peak



FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-30627-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: HD-COD-SW-27-0/1-0 Lab Sample ID: 410-30627-10  
 Matrix: Water Lab File ID: IM03S45.D  
 Analysis Method: 8260D Date Collected: 02/25/2021 12:05  
 Sample wt/vol: 25 (mL) Date Analyzed: 03/04/2021 02:35  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: R-624SilMS 30m ID: 0.25 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 99333 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	^c	5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70
67-64-1	Acetone	1.5	J	5.0	0.90
71-43-2	Benzene	ND		0.50	0.050
74-97-5	Bromochloromethane	ND		0.50	0.050
75-27-4	Bromodichloromethane	ND		0.50	0.050
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.070
75-15-0	Carbon disulfide	0.062	J	1.0	0.060
56-23-5	Carbon tetrachloride	ND		0.50	0.070
108-90-7	Chlorobenzene	ND		0.50	0.060
75-00-3	Chloroethane	ND		0.50	0.070
67-66-3	Chloroform	ND		0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	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	0.063	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 E Job No.: 410-30627-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: HD-COD-SW-27-0/1-0 Lab Sample ID: 410-30627-10  
 Matrix: Water Lab File ID: IM03S45.D  
 Analysis Method: 8260D Date Collected: 02/25/2021 12:05  
 Sample wt/vol: 25 (mL) Date Analyzed: 03/04/2021 02:35  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: R-624SilMS 30m ID: 0.25 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 99333 Units: ug/L

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

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		80-120
460-00-4	4-Bromofluorobenzene (Surr)	96		80-120
1868-53-7	Dibromofluoromethane (Surr)	104		80-120
2037-26-5	Toluene-d8 (Surr)	97		80-120

Eurofins Lancaster Laboratories Env, LLC  
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S45.D  
 Lims ID: 410-30627-A-10  
 Client ID: HD-COD-SW-27-0/1-0  
 Sample Type: Client  
 Inject. Date: 04-Mar-2021 02:35:30 ALS Bottle#: 22 Worklist Smp#: 23  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0023228-023  
 Misc. Info.: 410-30627-A-10  
 Operator ID: MEC29284 Instrument ID: 19930  
 Method: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\8260 25ml HP31.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 04-Mar-2021 13:06:32 Calib Date: 23-Nov-2020 18:05:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23117.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1631

First Level Reviewer: knouses

Date: 04-Mar-2021 12:49:20

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
4 Chloromethane	50		2.184				ND	7
5 Vinyl chloride	62		2.306				ND	
7 Bromomethane	94		2.629				ND	
8 Chloroethane	64		2.709				ND	
14 1,1-Dichloroethene	96		3.574				ND	
15 Acetone	43	3.617	3.605	0.012	100	14353	1.53	
19 Carbon disulfide	76	3.873	3.885	-0.012	95	10012	0.0617	
23 Methylene Chloride	84		4.251				ND	7
* 24 t-Butyl alcohol-d10 (IS)	65	4.269	4.275	-0.006	0	171510	50.0	
27 Methyl tert-butyl ether	73		4.659				ND	
28 trans-1,2-Dichloroethene	96		4.672				ND	
31 1,1-Dichloroethane	63		5.330				ND	
36 2-Butanone (MEK)	43		6.122				ND	7
37 cis-1,2-Dichloroethene	96	6.153	6.159	-0.006	69	3021	0.0421	
43 Chlorobromomethane	128		6.488				ND	
45 Chloroform	83	6.635	6.641	-0.006	19	3069	0.0279	M
\$ 46 Dibromofluoromethane (Surr)	113	6.848	6.854	-0.006	94	536593	10.4	
47 1,1,1-Trichloroethane	97		6.866				ND	
50 Carbon tetrachloride	117		7.080				ND	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.311	7.305	0.006	0	105842	10.1	
54 Benzene	78	7.330	7.336	-0.006	85	3499	0.0132	M
56 1,2-Dichloroethane	62	7.415	7.409	0.006	2	2139	0.0330	M
* 58 Fluorobenzene (IS)	96	7.738	7.738	0.000	99	2097826	10.0	
61 Trichloroethene	95	8.226	8.214	0.012	86	3904	0.0561	
63 1,2-Dichloropropane	63		8.549				ND	
68 Dichlorobromomethane	83		8.890				ND	
73 cis-1,3-Dichloropropene	75		9.433				ND	
74 4-Methyl-2-pentanone (MIBK)	43		9.597				ND	
\$ 75 Toluene-d8 (Surr)	98	9.744	9.738	0.006	93	2088941	9.74	
76 Toluene	92	9.823	9.817	0.006	97	5853	0.0327	
78 trans-1,3-Dichloropropene	75		10.067				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
80 1,1,2-Trichloroethane	97		10.274				ND	
81 Tetrachloroethene	166	10.372	10.366	0.006	94	5485	0.0633	
83 2-Hexanone	43		10.481				ND	
85 Chlorodibromomethane	129		10.652				ND	
86 Ethylene Dibromide	107		10.762				ND	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.189	0.000	85	1641455	10.0	
90 Chlorobenzene	112		11.213				ND	
S 89 Xylenes, Total	106		11.245				ND	7
91 1,1,1,2-Tetrachloroethane	131		11.298				ND	
92 Ethylbenzene	91		11.298				ND	7
93 m-Xylene & p-Xylene	106		11.414				ND	7
94 o-Xylene	106		11.743				ND	7
95 Styrene	104		11.756				ND	
96 Bromoform	173		11.914				ND	
\$ 100 4-Bromofluorobenzene (Surr)	95	12.188	12.182	0.006	96	764193	9.63	
101 1,1,2,2-Tetrachloroethane	83		12.286				ND	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	94	934420	10.0	

### QC Flag Legend

#### Processing Flags

7 - Failed Limit of Detection

#### Review Flags

M - Manually Integrated

### Reagents:

MSV\_31\_826ISS\_00004

Amount Added: 5.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S45.D

Injection Date: 04-Mar-2021 02:35:30

Instrument ID: 19930

Operator ID: MEC29284

Lims ID: 410-30627-A-10

Lab Sample ID: 410-30627-10

Worklist Smp#: 23

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

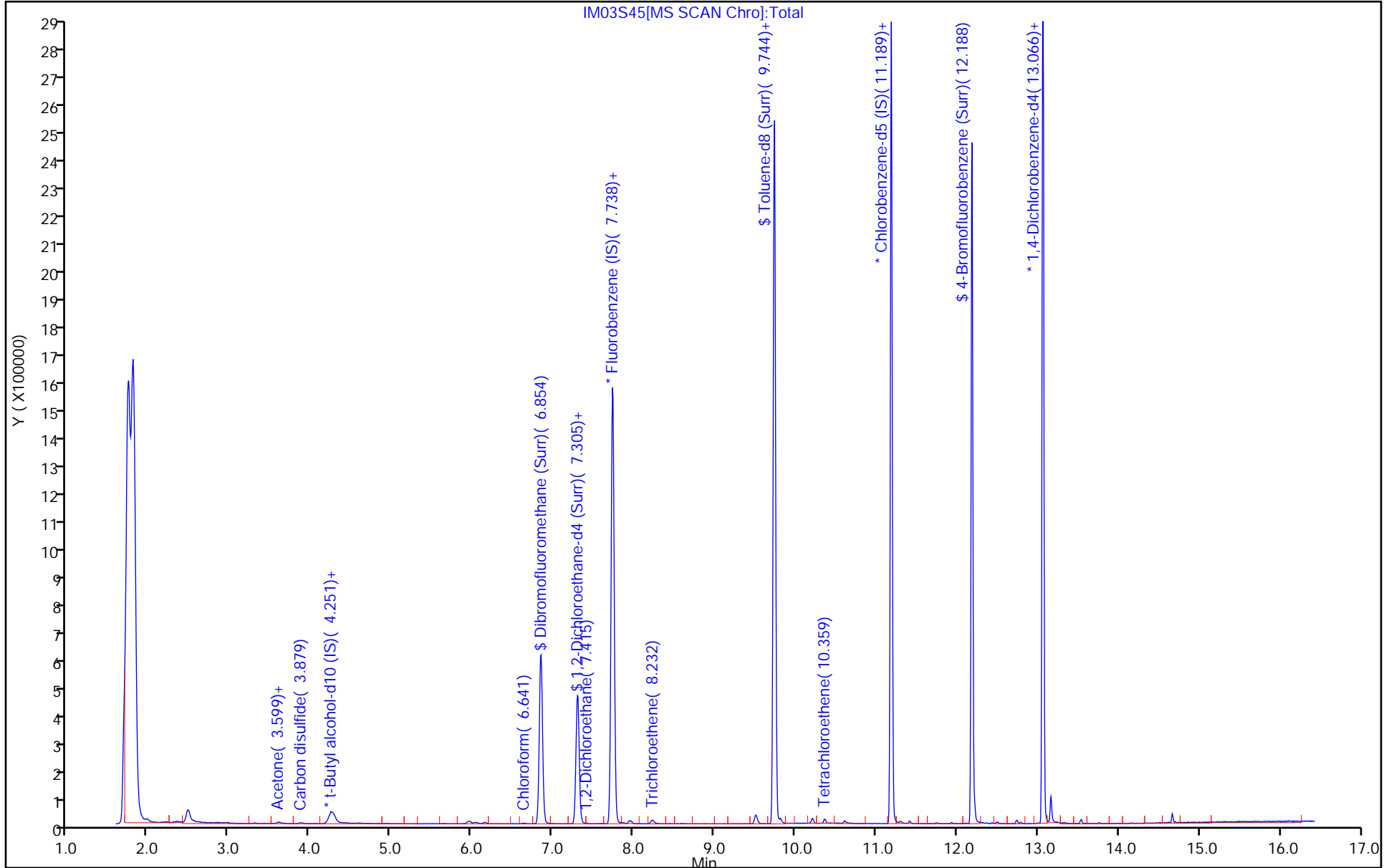
ALS Bottle#: 22

Method: 8260 25ml HP31

Limit Group: MSV - 8260C\_D

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

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



Eurofins Lancaster Laboratories Env, LLC  
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S45.D  
 Lims ID: 410-30627-A-10  
 Client ID: HD-COD-SW-27-0/1-0  
 Sample Type: Client  
 Inject. Date: 04-Mar-2021 02:35:30 ALS Bottle#: 22 Worklist Smp#: 23  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0023228-023  
 Misc. Info.: 410-30627-A-10  
 Operator ID: MEC29284 Instrument ID: 19930  
 Method: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\8260 25ml HP31.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 04-Mar-2021 13:06:32 Calib Date: 23-Nov-2020 18:05:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I17.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1631

First Level Reviewer: knouses

Date: 04-Mar-2021 12:49:20

Compound	Amount Added	Amount Recovered	% Rec.
\$ 46 Dibromofluoromethane (Surr)	10.0	10.4	103.59
\$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	10.1	101.35
\$ 75 Toluene-d8 (Surr)	10.0	9.74	97.45
\$ 100 4-Bromofluorobenzene (Surr)	10.0	9.63	96.26

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S45.D

Injection Date: 04-Mar-2021 02:35:30

Instrument ID: 19930

Lims ID: 410-30627-A-10

Lab Sample ID: 410-30627-10

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

Operator ID: MEC29284

ALS Bottle#: 22

Worklist Smp#: 23

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

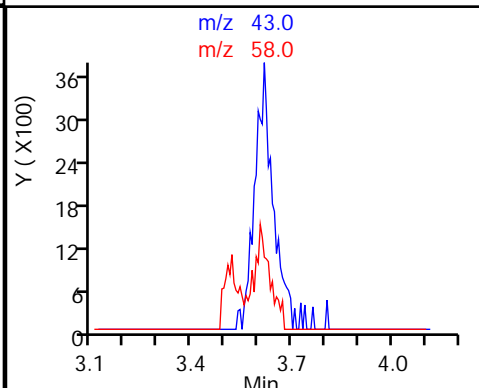
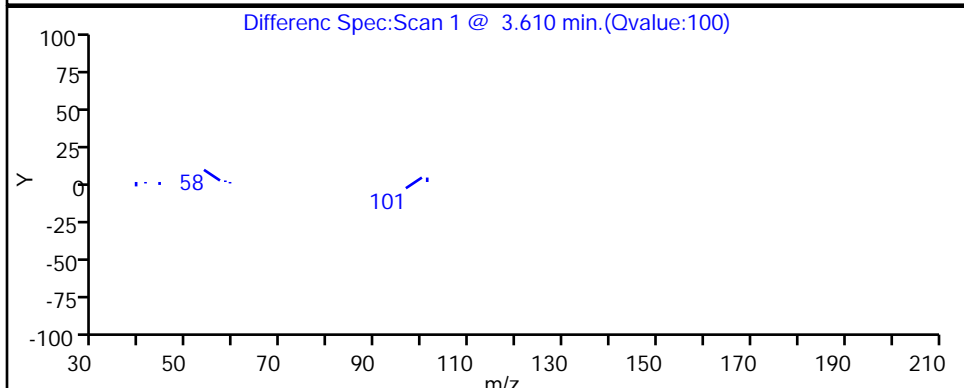
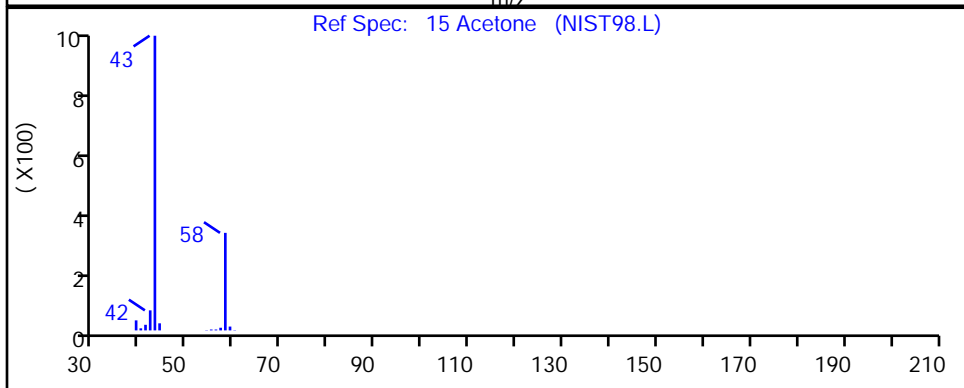
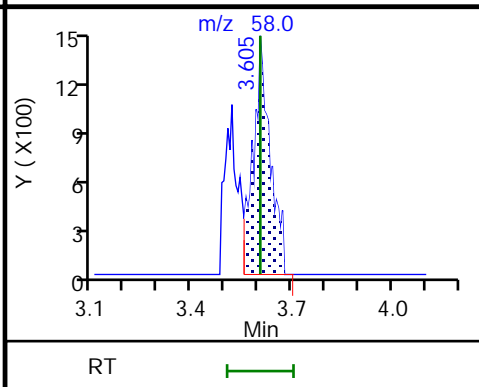
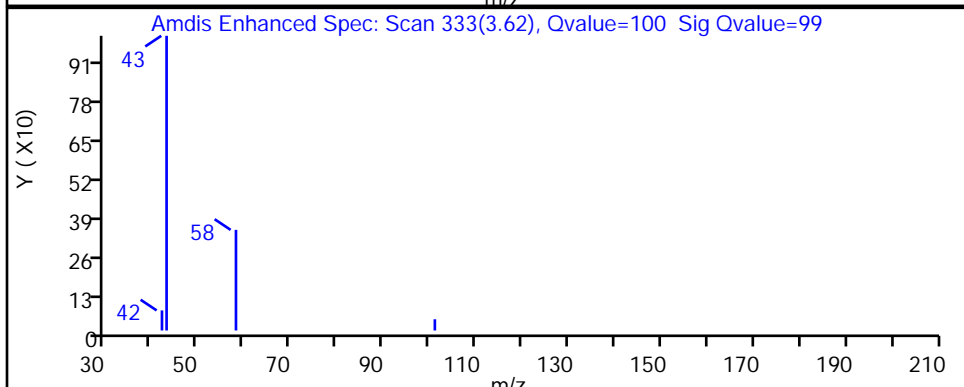
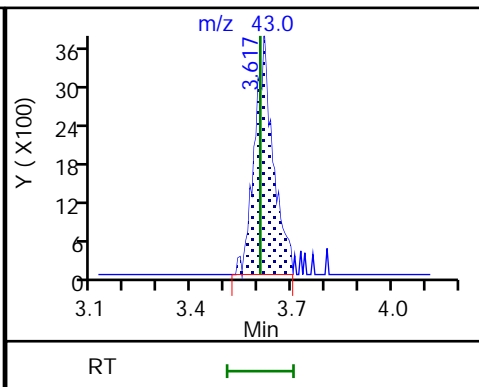
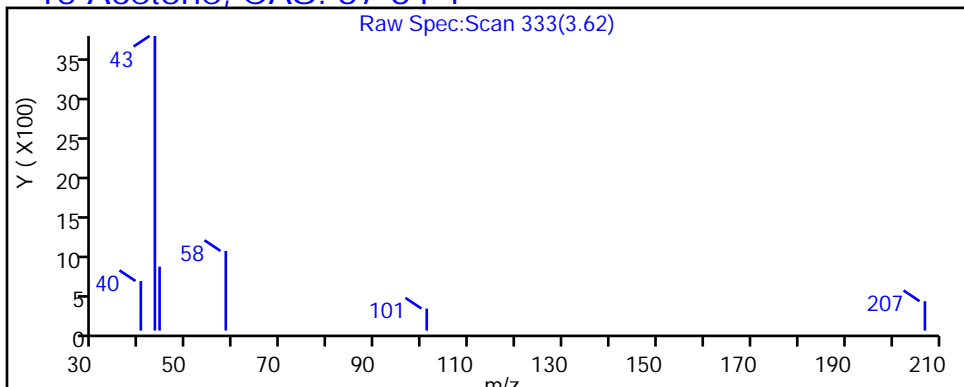
Method: 8260 25ml HP31

Limit Group: MSV - 8260C\_D

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

MS Quad

### 15 Acetone, CAS: 67-64-1



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S45.D

Injection Date: 04-Mar-2021 02:35:30

Instrument ID: 19930

Lims ID: 410-30627-A-10

Lab Sample ID: 410-30627-10

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

Operator ID: MEC29284

ALS Bottle#: 22

Worklist Smp#: 23

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

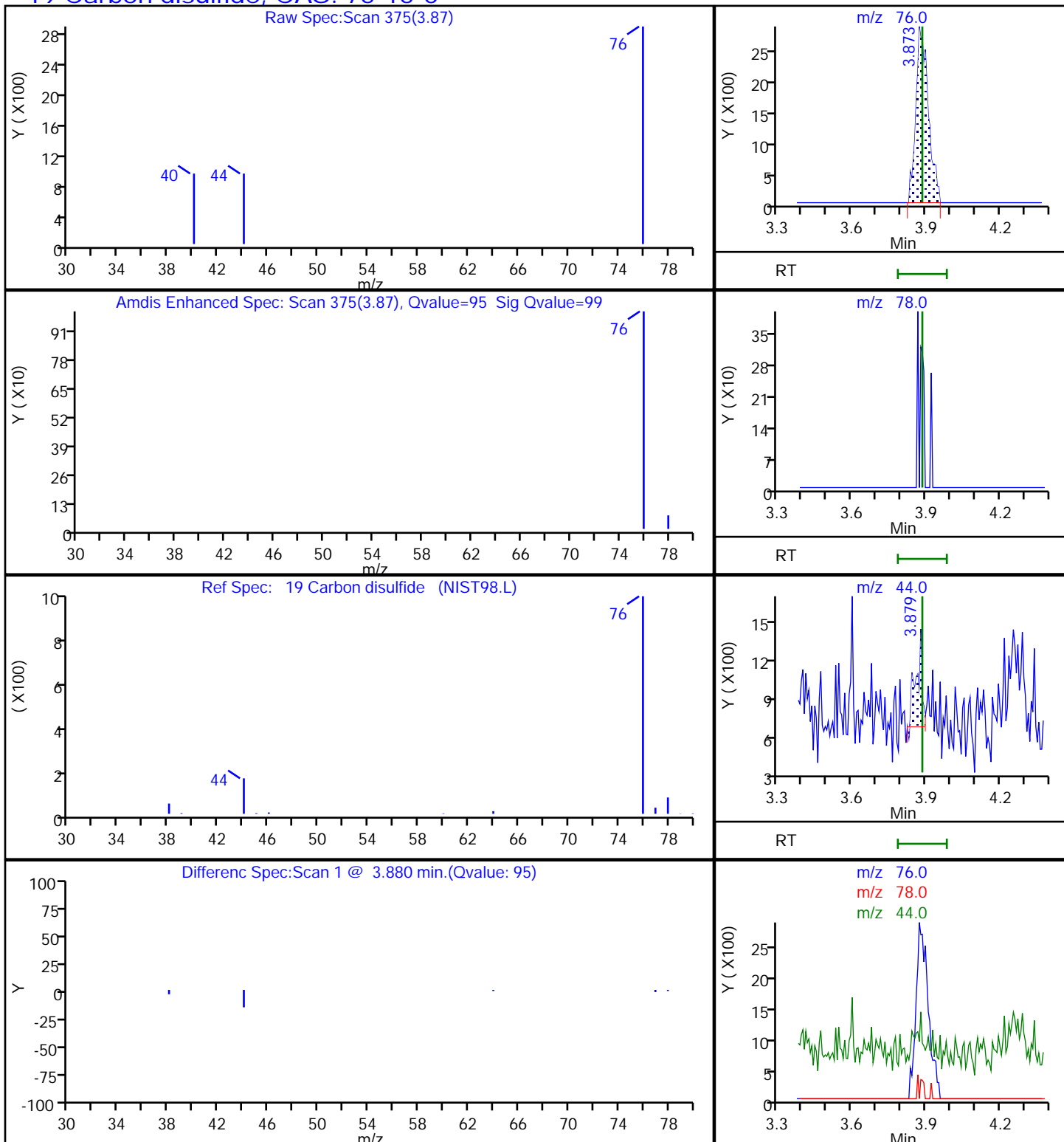
Method: 8260 25ml HP31

Limit Group: MSV - 8260C\_D

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

MS Quad

### 19 Carbon disulfide, CAS: 75-15-0





Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S45.D

Injection Date: 04-Mar-2021 02:35:30

Instrument ID: 19930

Lims ID: 410-30627-A-10

Lab Sample ID: 410-30627-10

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

Operator ID: MEC29284

ALS Bottle#: 22

Worklist Smp#: 23

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

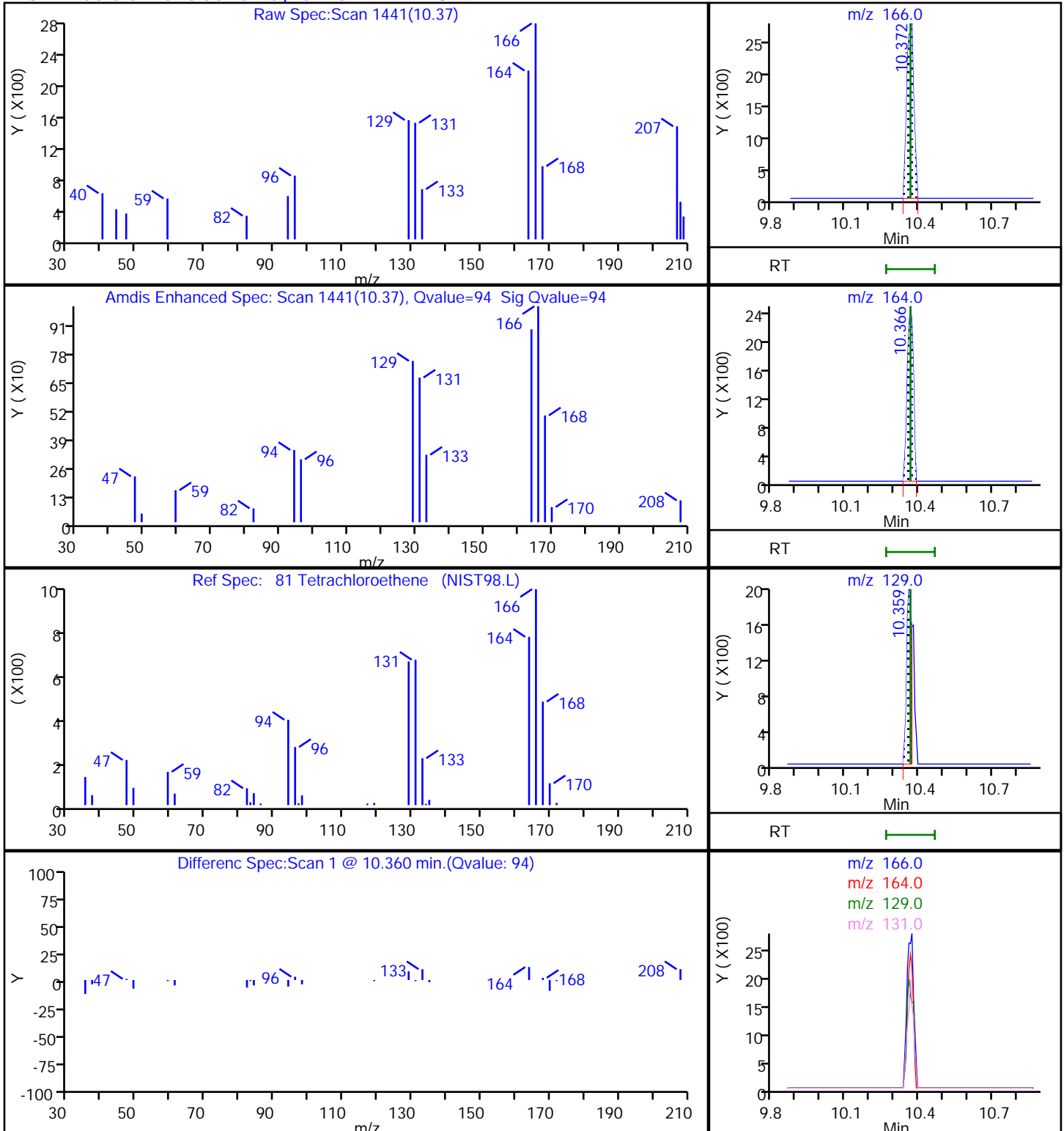
Method: 8260 25ml HP31

Limit Group: MSV - 8260C\_D

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

MS Quad

### 81 Tetrachloroethene, CAS: 127-18-4



Eurofins Lancaster Laboratories Env, LLC

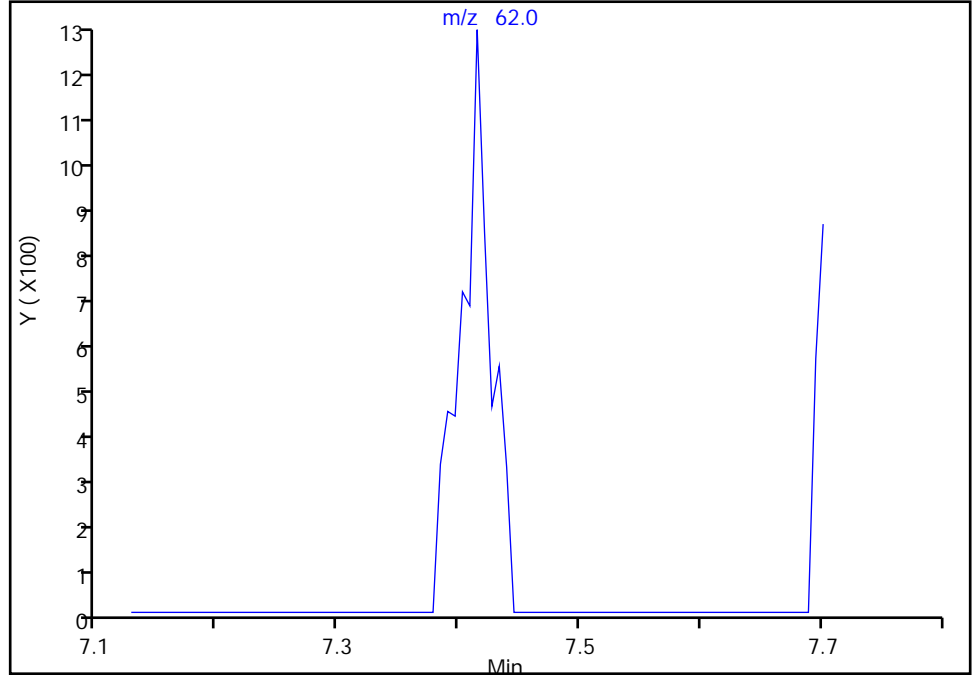
Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S45.D  
Injection Date: 04-Mar-2021 02:35:30 Instrument ID: 19930  
Lims ID: 410-30627-A-10 Lab Sample ID: 410-30627-10  
Client ID: HD-COD-SW-27-0/1-0  
Operator ID: MEC29284 ALS Bottle#: 22 Worklist Smp#: 23  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: 8260 25ml HP31 Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

56 1,2-Dichloroethane, CAS: 107-06-2

Signal: 1

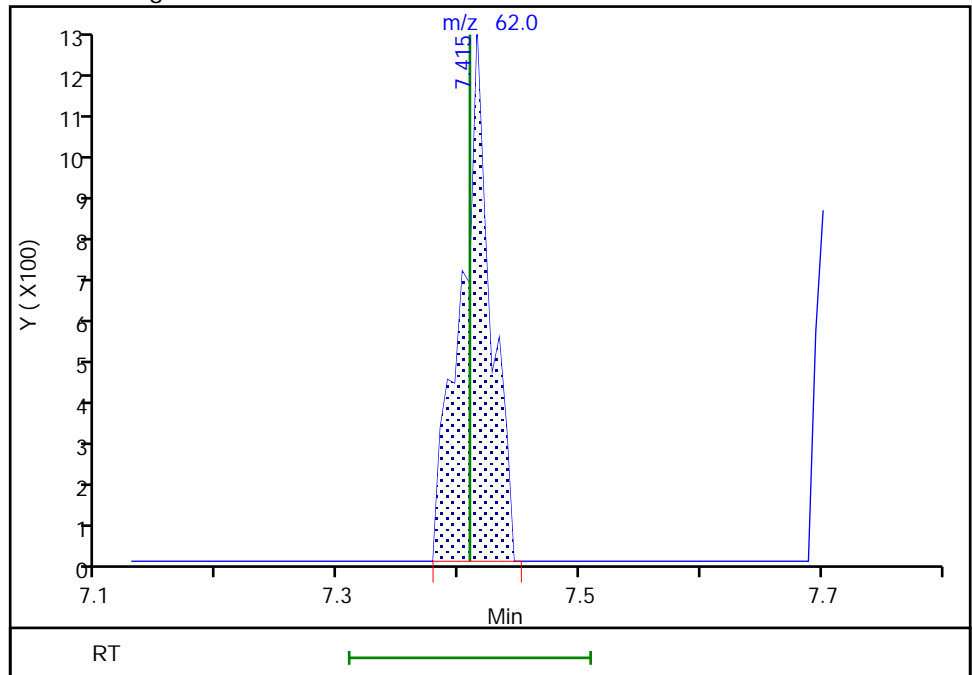
Not Detected  
Expected RT: 7.41

Processing Integration Results



Manual Integration Results

RT: 7.41  
Area: 2139  
Amount: 0.032959  
Amount Units: ug/l



Reviewer: knouses, 04-Mar-2021 12:49:06  
Audit Action: Manually Integrated

Audit Reason: Missed Peak

Eurofins Lancaster Laboratories Env, LLC

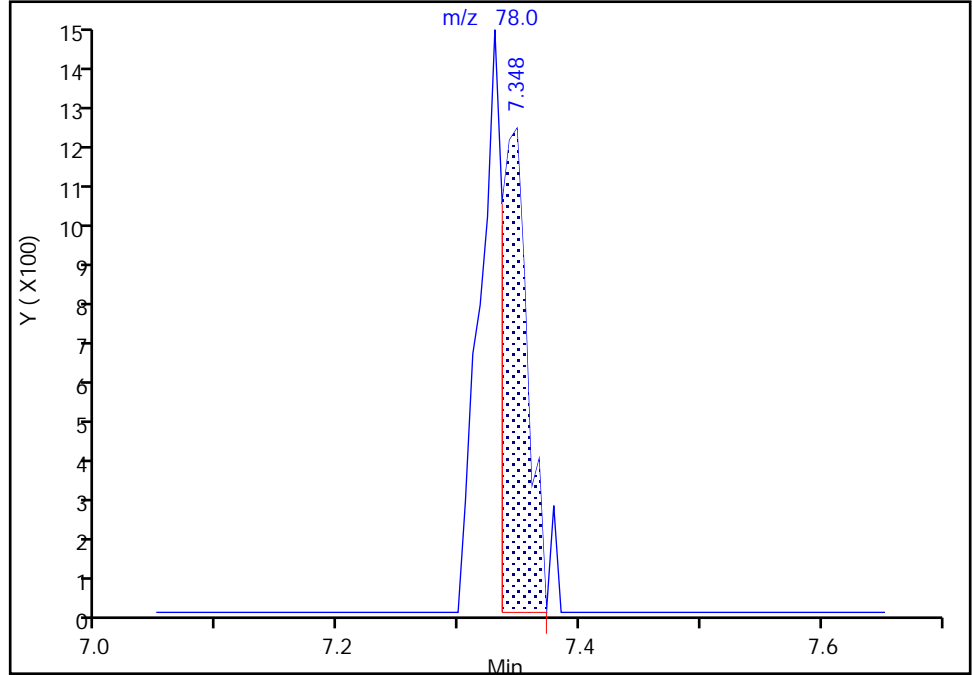
Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S45.D  
Injection Date: 04-Mar-2021 02:35:30 Instrument ID: 19930  
Lims ID: 410-30627-A-10 Lab Sample ID: 410-30627-10  
Client ID: HD-COD-SW-27-0/1-0  
Operator ID: MEC29284 ALS Bottle#: 22 Worklist Smp#: 23  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: 8260 25ml HP31 Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

54 Benzene, CAS: 71-43-2

Signal: 1

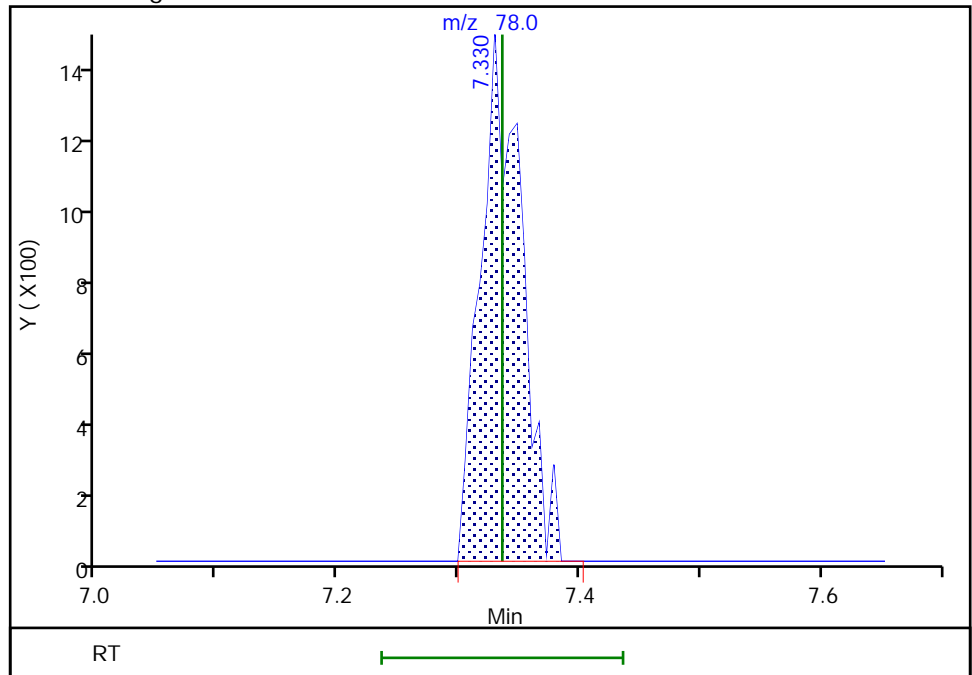
RT: 7.35  
Area: 1851  
Amount: 0.006964  
Amount Units: ug/l

Processing Integration Results



RT: 7.33  
Area: 3499  
Amount: 0.013164  
Amount Units: ug/l

Manual Integration Results



Reviewer: knouses, 04-Mar-2021 12:48:54  
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

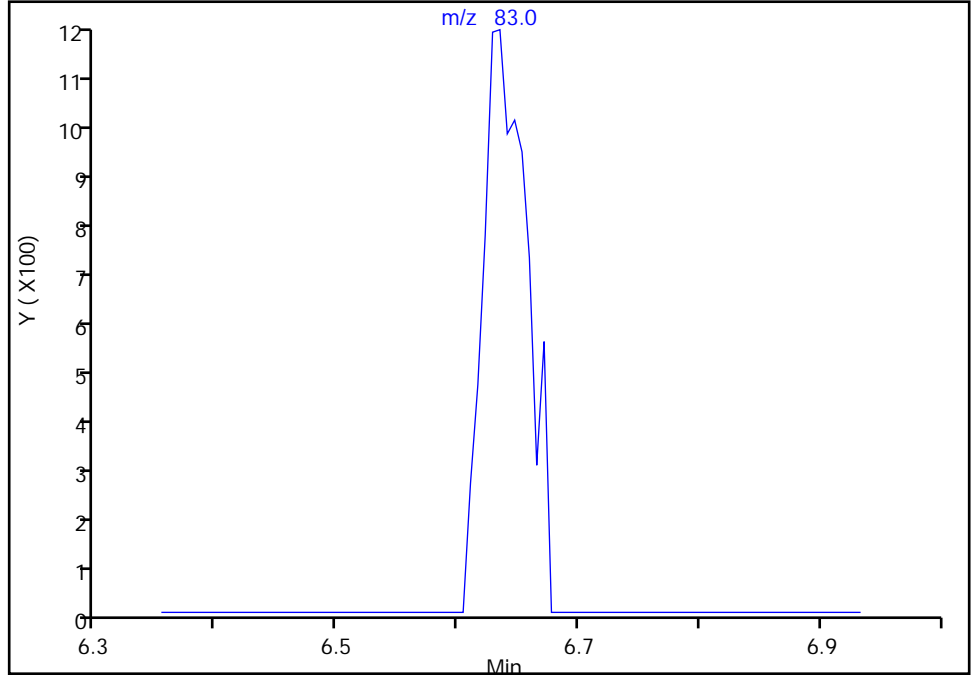
Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S45.D  
Injection Date: 04-Mar-2021 02:35:30 Instrument ID: 19930  
Lims ID: 410-30627-A-10 Lab Sample ID: 410-30627-10  
Client ID: HD-COD-SW-27-0/1-0  
Operator ID: MEC29284 ALS Bottle#: 22 Worklist Smp#: 23  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: 8260 25ml HP31 Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

45 Chloroform, CAS: 67-66-3

Signal: 1

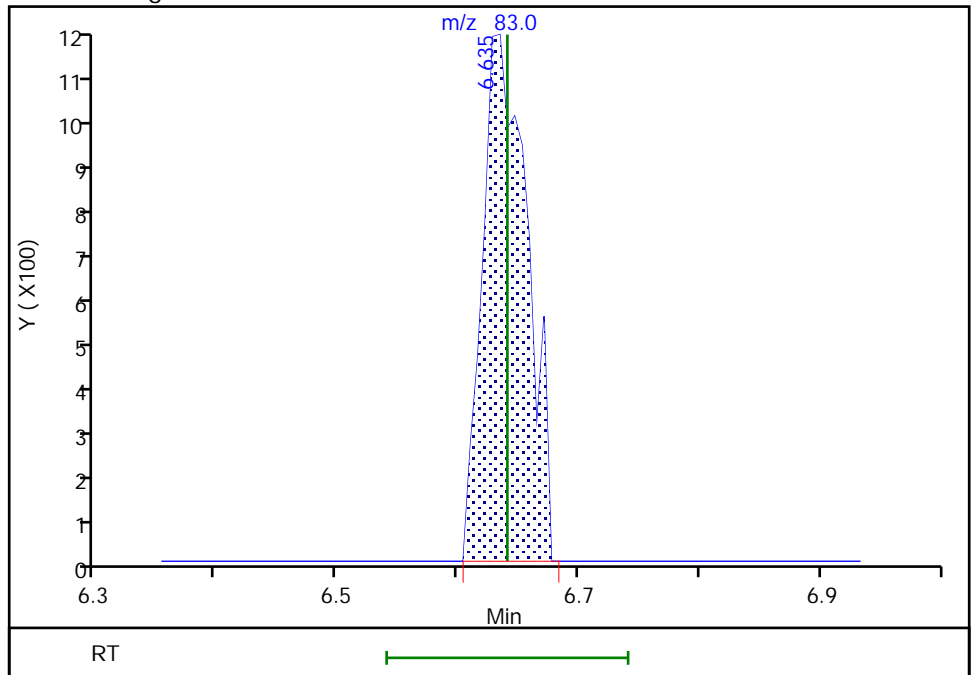
Not Detected  
Expected RT: 6.64

Processing Integration Results



Manual Integration Results

RT: 6.63  
Area: 3069  
Amount: 0.027891  
Amount Units: ug/l



Reviewer: knouses, 04-Mar-2021 12:48:37  
Audit Action: Manually Integrated

Audit Reason: Missed Peak

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-30627-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: HD-COD-SW-28-0/1-0 Lab Sample ID: 410-30627-11  
 Matrix: Water Lab File ID: IM03S46.D  
 Analysis Method: 8260D Date Collected: 02/25/2021 12:55  
 Sample wt/vol: 25 (mL) Date Analyzed: 03/04/2021 02:56  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: R-624SilMS 30m ID: 0.25 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 99333 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	^c	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	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	0.098	J	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	ND		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	ND		0.50	0.060

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-30627-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: HD-COD-SW-28-0/1-0 Lab Sample ID: 410-30627-11  
 Matrix: Water Lab File ID: IM03S46.D  
 Analysis Method: 8260D Date Collected: 02/25/2021 12:55  
 Sample wt/vol: 25 (mL) Date Analyzed: 03/04/2021 02:56  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: R-624SilMS 30m ID: 0.25 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 99333 Units: ug/L

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

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		80-120
460-00-4	4-Bromofluorobenzene (Surr)	96		80-120
1868-53-7	Dibromofluoromethane (Surr)	103		80-120
2037-26-5	Toluene-d8 (Surr)	98		80-120

Eurofins Lancaster Laboratories Env, LLC  
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S46.D  
 Lims ID: 410-30627-A-11  
 Client ID: HD-COD-SW-28-0/1-0  
 Sample Type: Client  
 Inject. Date: 04-Mar-2021 02:56:30 ALS Bottle#: 23 Worklist Smp#: 24  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0023228-024  
 Misc. Info.: 410-30627-A-11  
 Operator ID: MEC29284 Instrument ID: 19930  
 Method: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\8260 25ml HP31.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 04-Mar-2021 13:06:32 Calib Date: 23-Nov-2020 18:05:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23117.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1631

First Level Reviewer: knouses

Date: 04-Mar-2021 12:51:33

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
4 Chloromethane	50	2.166	2.184	-0.018	1	3475	0.0402	
5 Vinyl chloride	62		2.306				ND	
7 Bromomethane	94		2.629				ND	
8 Chloroethane	64		2.709				ND	
14 1,1-Dichloroethene	96		3.574				ND	
15 Acetone	43	3.611	3.605	0.006	99	22649	2.19	
19 Carbon disulfide	76	3.885	3.885	0.000	55	7350	0.0455	
23 Methylene Chloride	84	4.245	4.251	-0.006	84	6031	0.0977	
* 24 t-Butyl alcohol-d10 (IS)	65	4.269	4.275	-0.006	0	189916	50.0	
27 Methyl tert-butyl ether	73		4.659				ND	
28 trans-1,2-Dichloroethene	96		4.672				ND	
31 1,1-Dichloroethane	63		5.330				ND	
36 2-Butanone (MEK)	43		6.122				ND	7
37 cis-1,2-Dichloroethene	96	6.147	6.159	-0.012	1	2451	0.0343	M
43 Chlorobromomethane	128		6.488				ND	
45 Chloroform	83	6.635	6.641	-0.006	90	9252	0.0845	
\$ 46 Dibromofluoromethane (Surr)	113	6.854	6.854	0.000	94	529676	10.3	
47 1,1,1-Trichloroethane	97		6.866				ND	
50 Carbon tetrachloride	117		7.080				ND	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.305	7.305	0.000	0	106064	10.2	
54 Benzene	78	7.336	7.336	0.000	58	4439	0.0168	7M
56 1,2-Dichloroethane	62	7.409	7.409	0.000	0	1834	0.0284	M
* 58 Fluorobenzene (IS)	96	7.738	7.738	0.000	99	2088659	10.0	
61 Trichloroethene	95	8.232	8.214	0.018	87	3720	0.0537	M
63 1,2-Dichloropropane	63		8.549				ND	
68 Dichlorobromomethane	83	8.890	8.890	0.000	1	1135	0.0146	7M
73 cis-1,3-Dichloropropene	75		9.433				ND	
74 4-Methyl-2-pentanone (MIBK)	43		9.597				ND	7
\$ 75 Toluene-d8 (Surr)	98	9.744	9.738	0.006	93	2084640	9.79	
76 Toluene	92	9.817	9.817	0.000	98	10228	0.0575	
78 trans-1,3-Dichloropropene	75		10.067				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
80 1,1,2-Trichloroethane	97		10.274				ND	
81 Tetrachloroethene	166	10.366	10.366	0.000	95	9355	0.1087	
83 2-Hexanone	43		10.481				ND	
85 Chlorodibromomethane	129		10.652				ND	
86 Ethylene Dibromide	107		10.762				ND	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.189	0.000	85	1630216	10.0	
90 Chlorobenzene	112		11.213				ND	
S 89 Xylenes, Total	106		11.245				ND	7
91 1,1,1,2-Tetrachloroethane	131		11.298				ND	
92 Ethylbenzene	91		11.298				ND	7
93 m-Xylene & p-Xylene	106	11.420	11.414	0.006	98	5603	0.0413	
94 o-Xylene	106		11.743				ND	7
95 Styrene	104	11.774	11.756	0.018	47	876	0.004155	M
96 Bromoform	173		11.914				ND	
\$ 100 4-Bromofluorobenzene (Surr)	95	12.182	12.182	0.000	94	760166	9.64	
101 1,1,2,2-Tetrachloroethane	83		12.286				ND	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	94	931344	10.0	

### QC Flag Legend

#### Processing Flags

7 - Failed Limit of Detection

#### Review Flags

M - Manually Integrated

### Reagents:

MSV\_31\_826ISS\_00004

Amount Added: 5.00

Units: uL

Run Reagent



Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S46.D

Injection Date: 04-Mar-2021 02:56:30

Instrument ID: 19930

Operator ID: MEC29284

Lims ID: 410-30627-A-11

Lab Sample ID: 410-30627-11

Worklist Smp#: 24

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

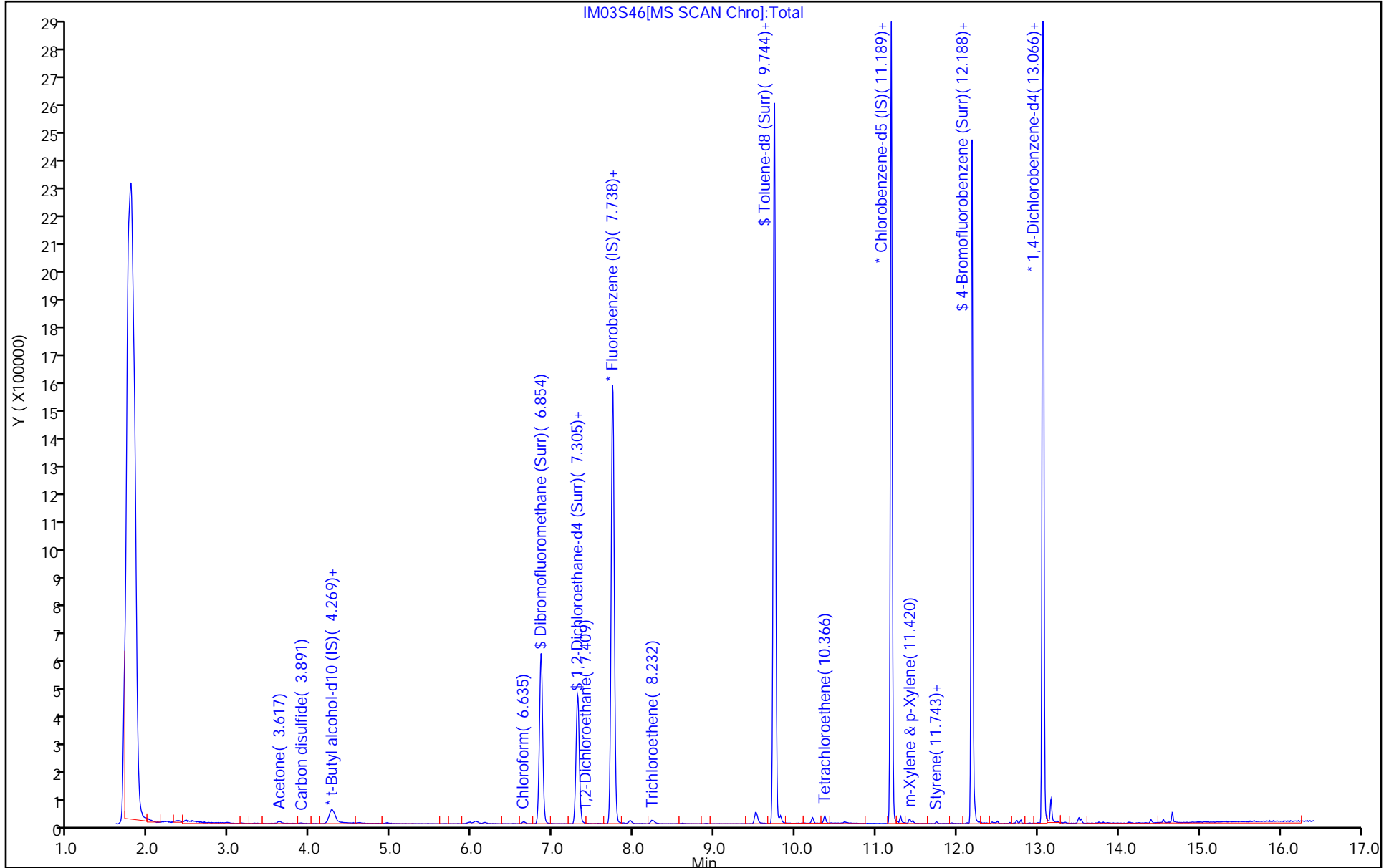
ALS Bottle#: 23

Method: 8260 25ml HP31

Limit Group: MSV - 8260C\_D

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

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



Eurofins Lancaster Laboratories Env, LLC  
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S46.D  
 Lims ID: 410-30627-A-11  
 Client ID: HD-COD-SW-28-0/1-0  
 Sample Type: Client  
 Inject. Date: 04-Mar-2021 02:56:30 ALS Bottle#: 23 Worklist Smp#: 24  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0023228-024  
 Misc. Info.: 410-30627-A-11  
 Operator ID: MEC29284 Instrument ID: 19930  
 Method: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\8260 25ml HP31.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 04-Mar-2021 13:06:32 Calib Date: 23-Nov-2020 18:05:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I17.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1631

First Level Reviewer: knouses

Date: 04-Mar-2021 12:51:33

Compound	Amount Added	Amount Recovered	% Rec.
\$ 46 Dibromofluoromethane (Surr)	10.0	10.3	102.71
\$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	10.2	102.01
\$ 75 Toluene-d8 (Surr)	10.0	9.79	97.92
\$ 100 4-Bromofluorobenzene (Surr)	10.0	9.64	96.42

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S46.D

Injection Date: 04-Mar-2021 02:56:30

Instrument ID: 19930

Lims ID: 410-30627-A-11

Lab Sample ID: 410-30627-11

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

Operator ID: MEC29284

ALS Bottle#: 23

Worklist Smp#: 24

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

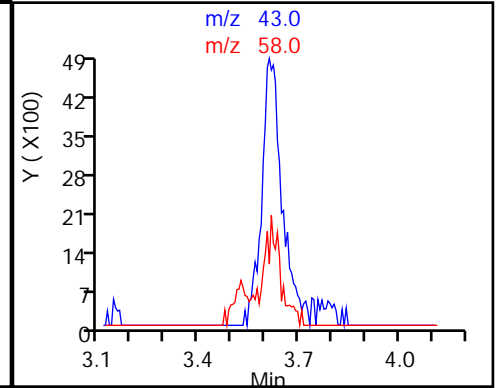
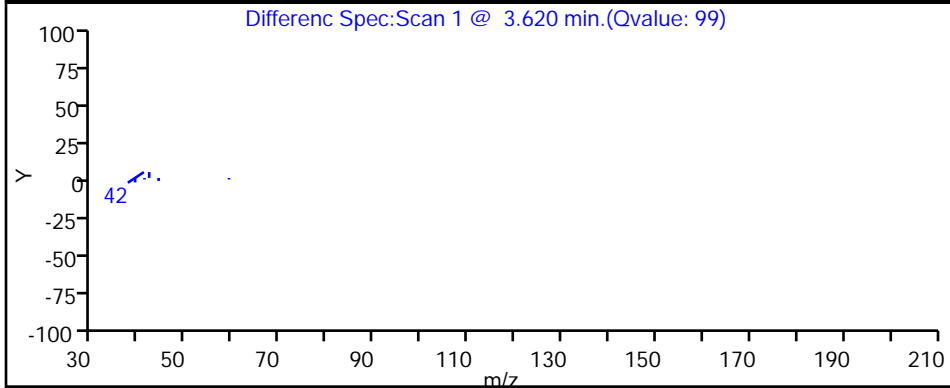
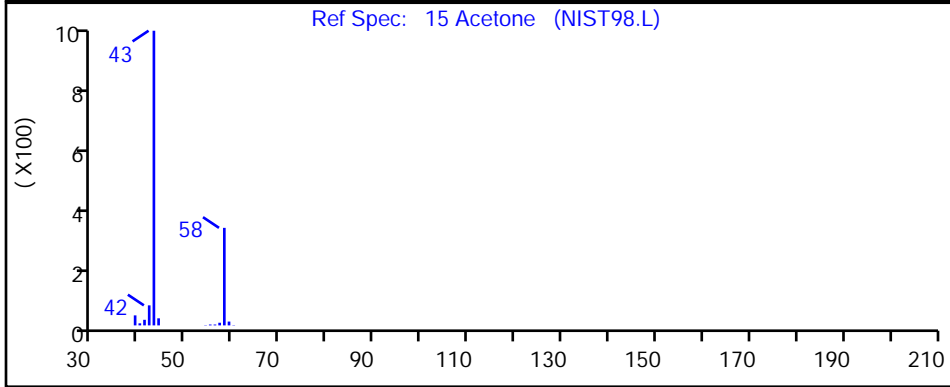
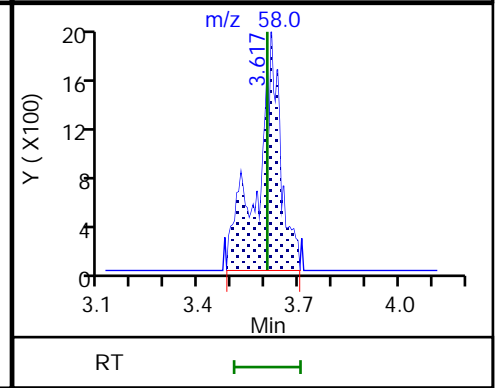
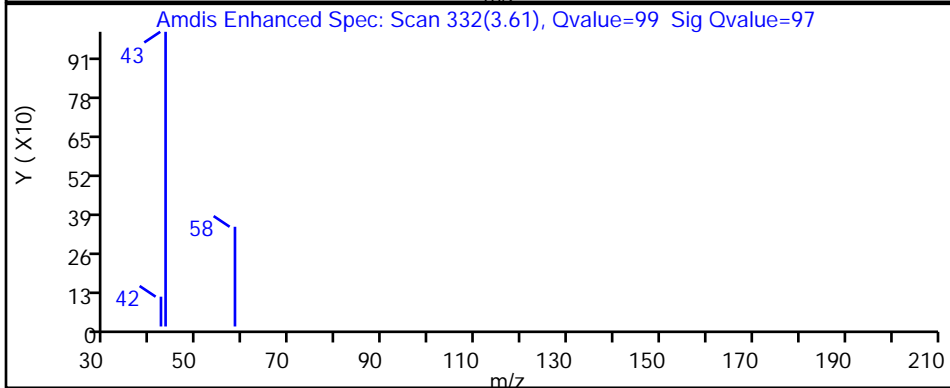
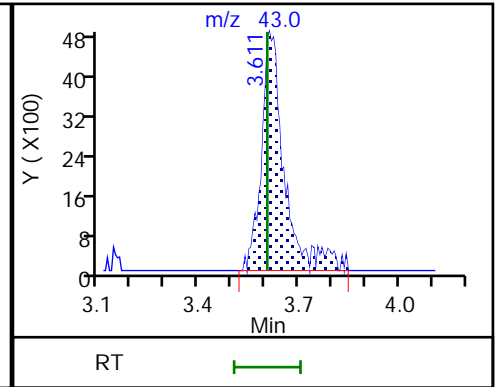
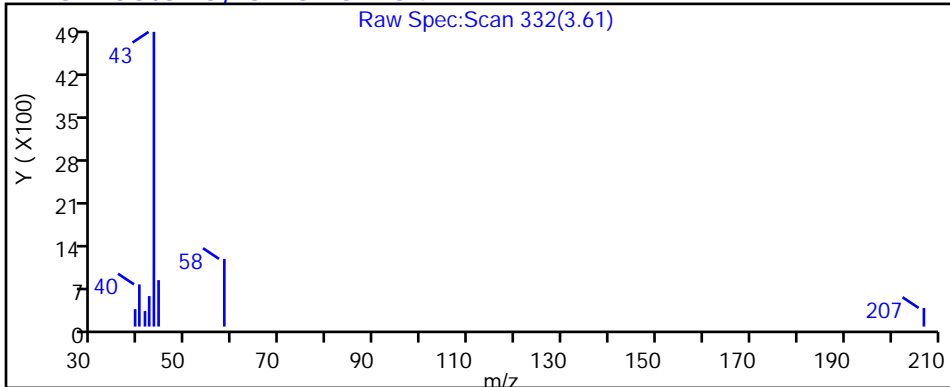
Method: 8260 25ml HP31

Limit Group: MSV - 8260C\_D

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

MS Quad

### 15 Acetone, CAS: 67-64-1



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S46.D

Injection Date: 04-Mar-2021 02:56:30

Instrument ID: 19930

Lims ID: 410-30627-A-11

Lab Sample ID: 410-30627-11

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

Operator ID: MEC29284

ALS Bottle#: 23

Worklist Smp#: 24

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

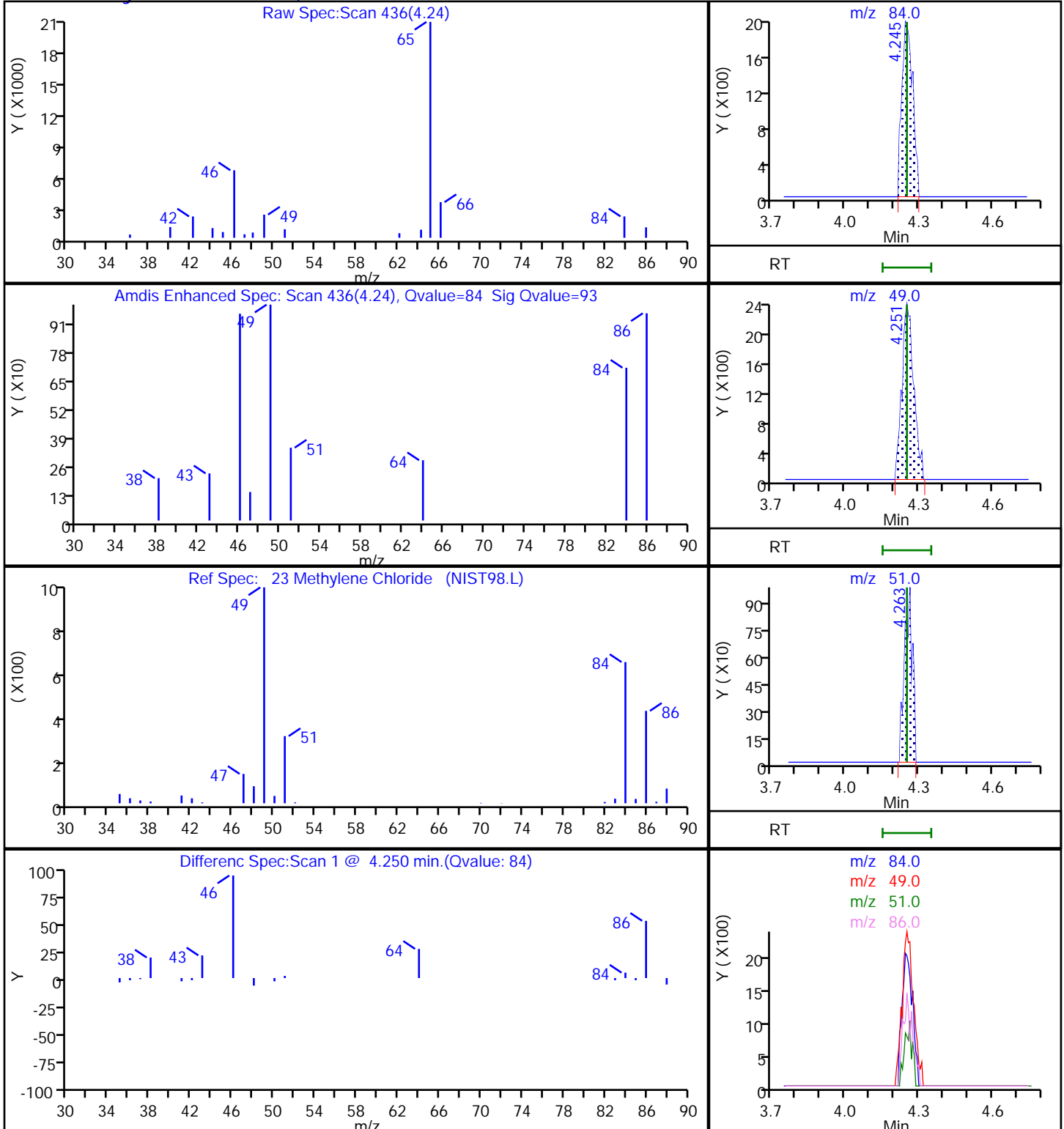
Method: 8260 25ml HP31

Limit Group: MSV - 8260C\_D

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

MS Quad

### 23 Methylene Chloride, CAS: 75-09-2



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S46.D

Injection Date: 04-Mar-2021 02:56:30

Instrument ID: 19930

Lims ID: 410-30627-A-11

Lab Sample ID: 410-30627-11

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

Operator ID: MEC29284

ALS Bottle#: 23

Worklist Smp#: 24

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

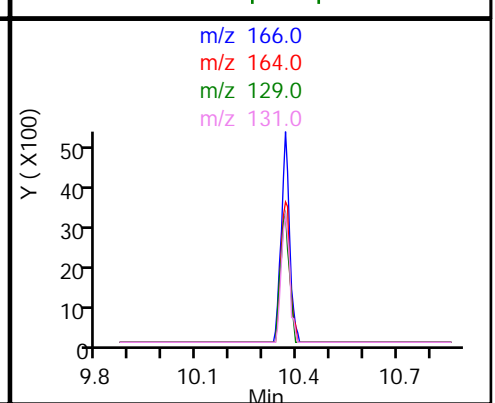
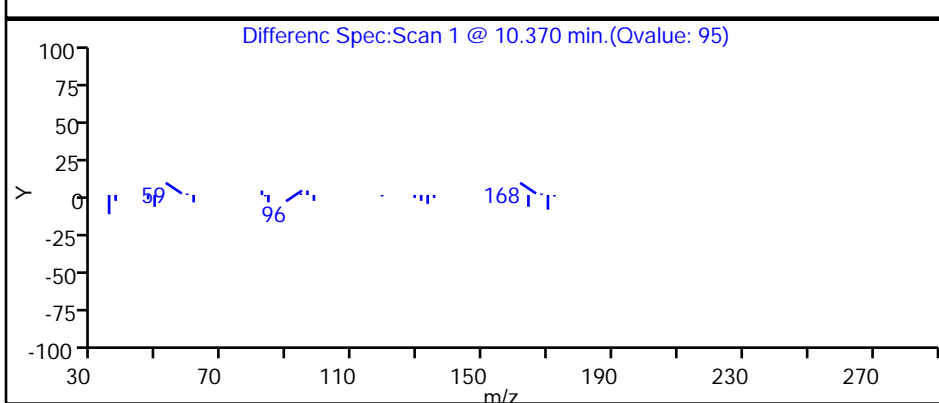
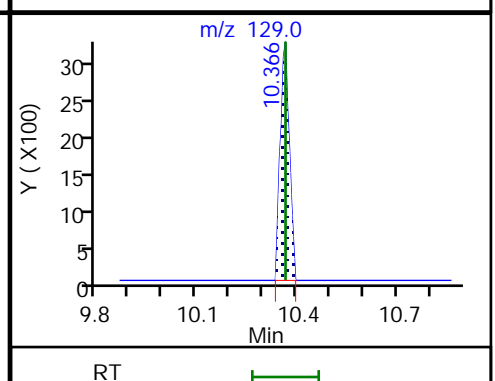
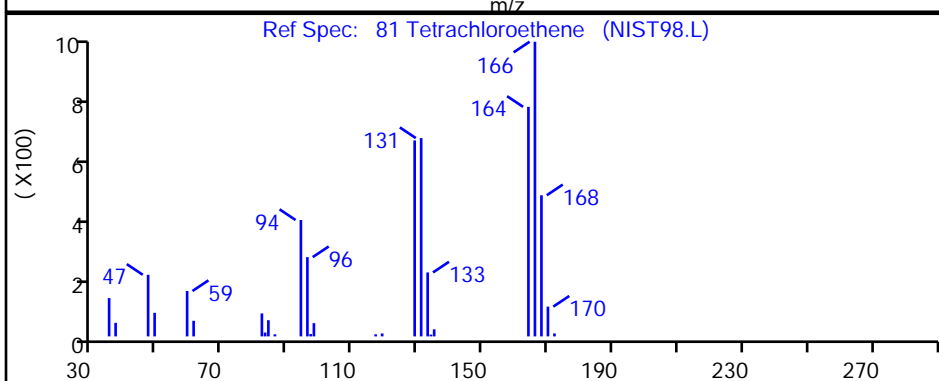
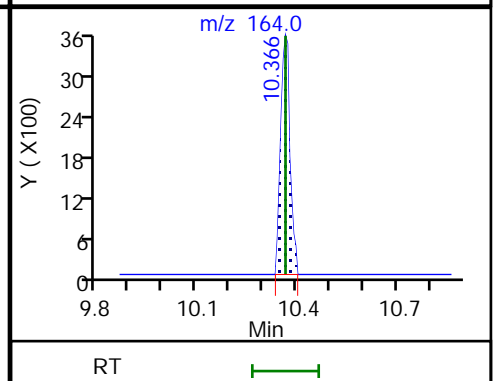
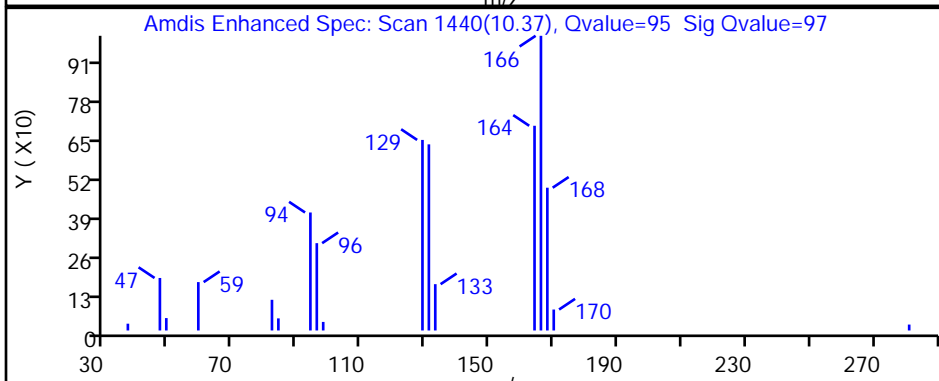
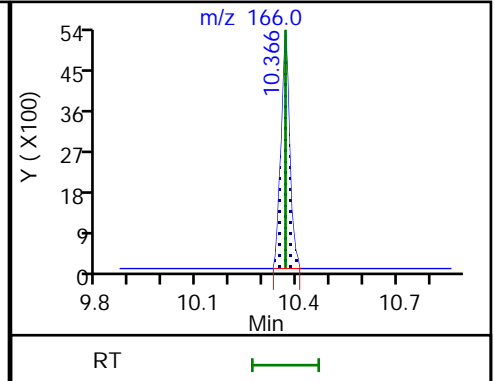
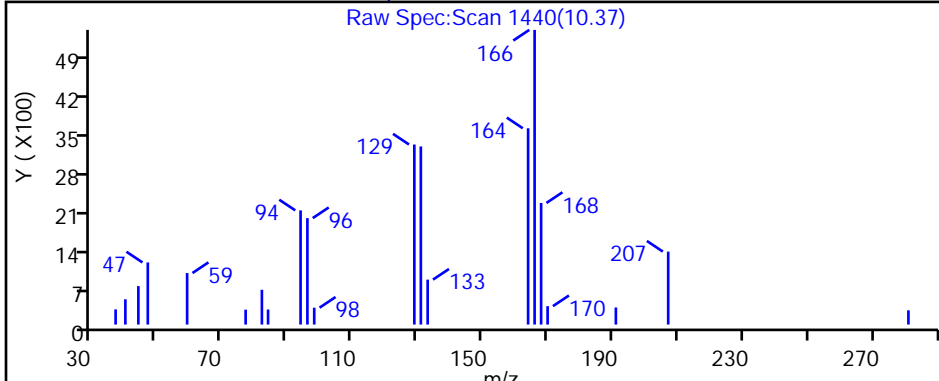
Method: 8260 25ml HP31

Limit Group: MSV - 8260C\_D

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

MS Quad

### 81 Tetrachloroethene, CAS: 127-18-4



Eurofins Lancaster Laboratories Env, LLC

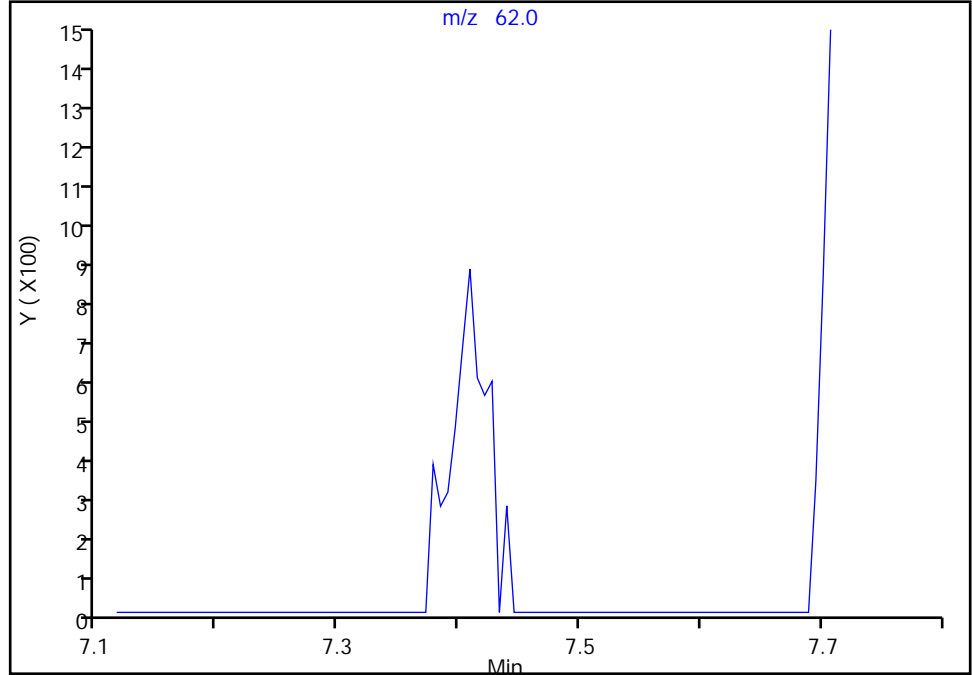
Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S46.D  
Injection Date: 04-Mar-2021 02:56:30 Instrument ID: 19930  
Lims ID: 410-30627-A-11 Lab Sample ID: 410-30627-11  
Client ID: HD-COD-SW-28-0/1-0  
Operator ID: MEC29284 ALS Bottle#: 23 Worklist Smp#: 24  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: 8260 25ml HP31 Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

56 1,2-Dichloroethane, CAS: 107-06-2

Signal: 1

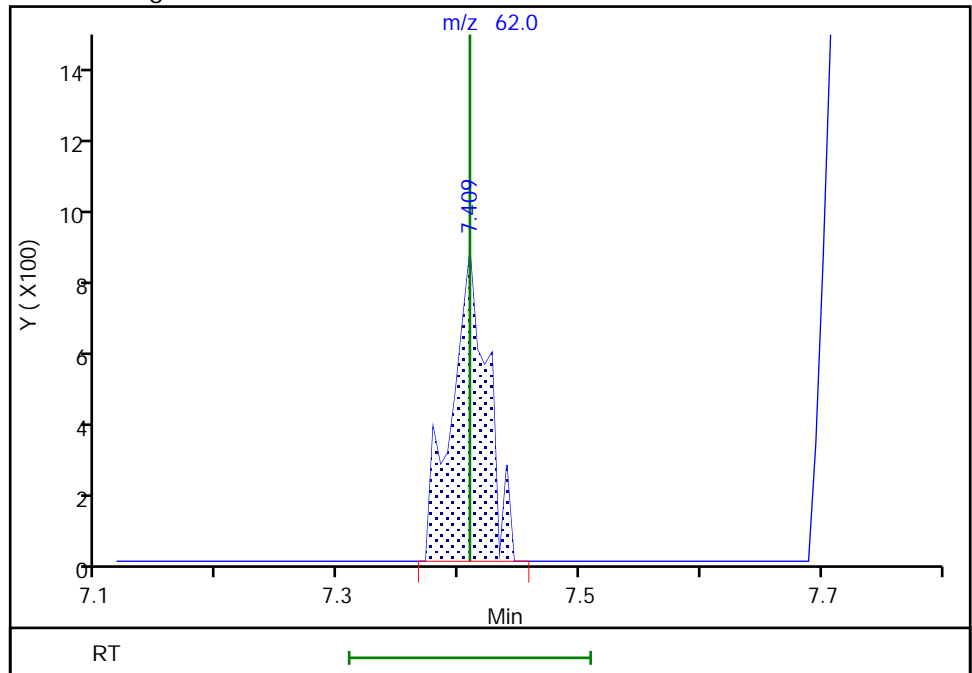
Not Detected  
Expected RT: 7.41

Processing Integration Results



Manual Integration Results

RT: 7.41  
Area: 1834  
Amount: 0.028384  
Amount Units: ug/l



Reviewer: knouses, 04-Mar-2021 12:50:13  
Audit Action: Manually Integrated

Audit Reason: Missed Peak

Eurofins Lancaster Laboratories Env, LLC

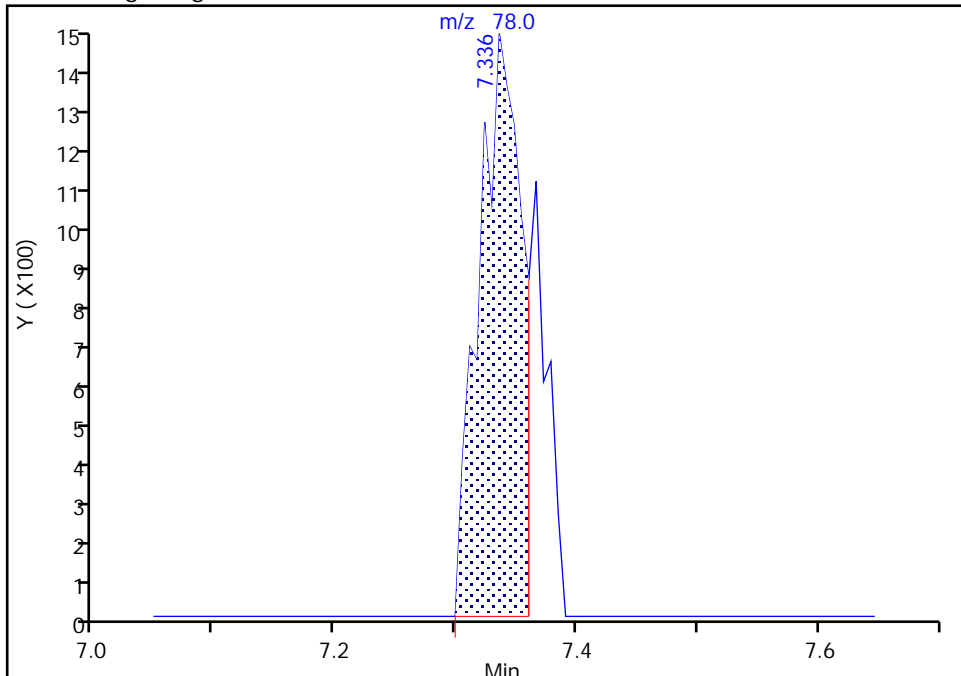
Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S46.D  
Injection Date: 04-Mar-2021 02:56:30 Instrument ID: 19930  
Lims ID: 410-30627-A-11 Lab Sample ID: 410-30627-11  
Client ID: HD-COD-SW-28-0/1-0  
Operator ID: MEC29284 ALS Bottle#: 23 Worklist Smp#: 24  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: 8260 25ml HP31 Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

54 Benzene, CAS: 71-43-2

Signal: 1

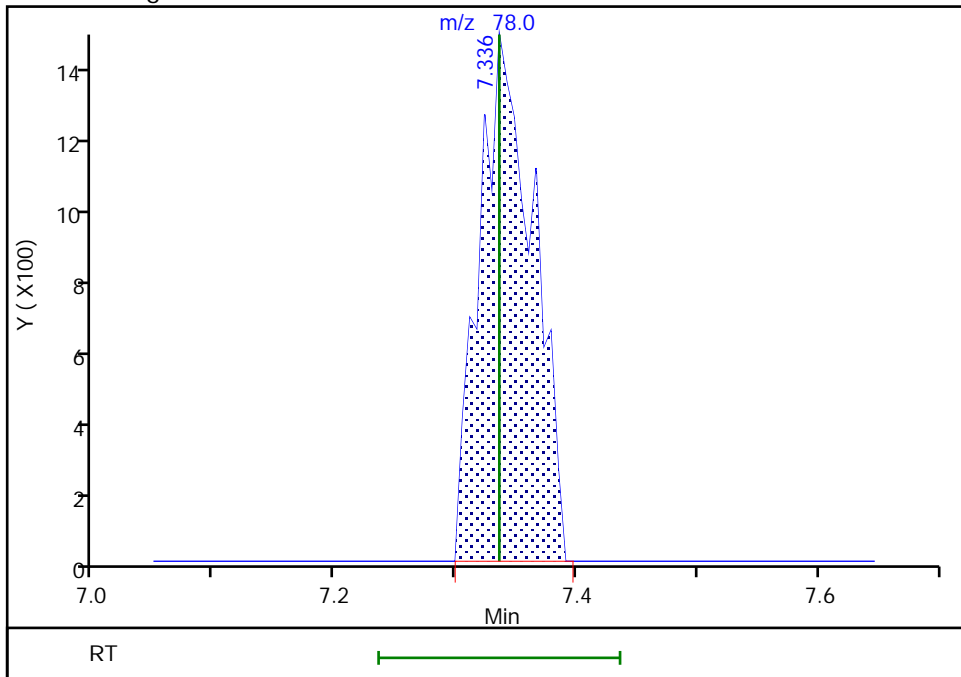
RT: 7.34  
Area: 3517  
Amount: 0.013290  
Amount Units: ug/l

Processing Integration Results



RT: 7.34  
Area: 4439  
Amount: 0.016774  
Amount Units: ug/l

Manual Integration Results



Reviewer: knouses, 04-Mar-2021 12:50:01  
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

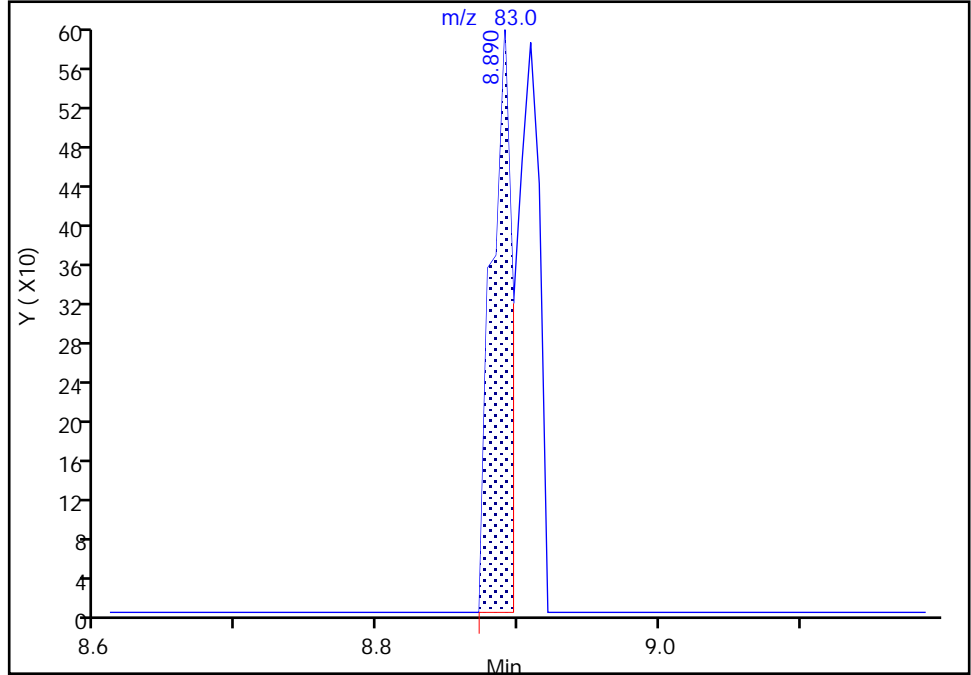
Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S46.D  
Injection Date: 04-Mar-2021 02:56:30 Instrument ID: 19930  
Lims ID: 410-30627-A-11 Lab Sample ID: 410-30627-11  
Client ID: HD-COD-SW-28-0/1-0  
Operator ID: MEC29284 ALS Bottle#: 23 Worklist Smp#: 24  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: 8260 25ml HP31 Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

68 Dichlorobromomethane, CAS: 75-27-4

Signal: 1

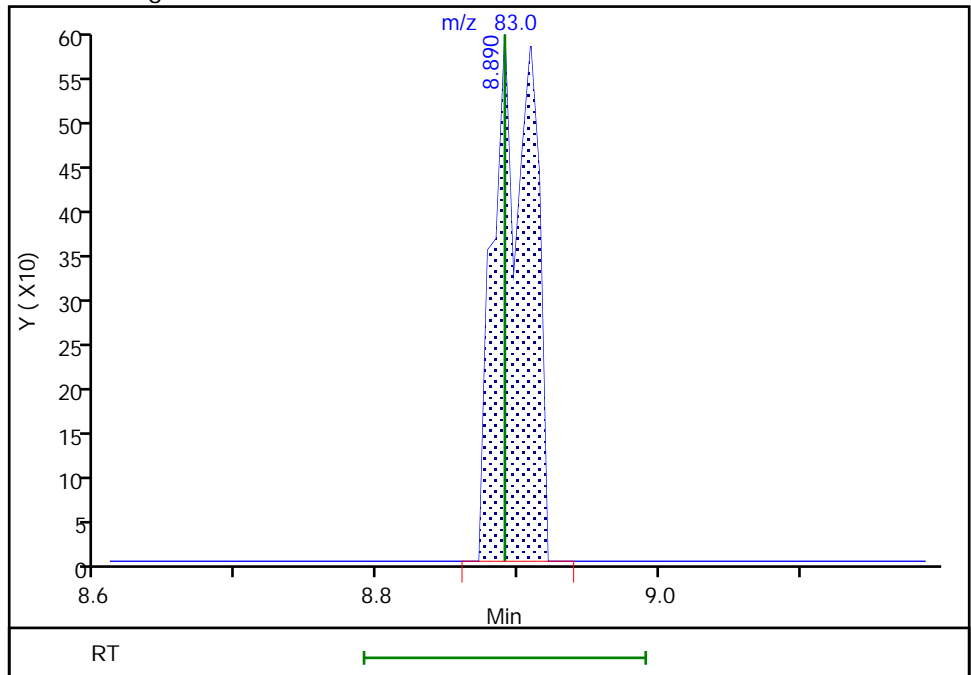
RT: 8.89  
Area: 594  
Amount: 0.007620  
Amount Units: ug/l

Processing Integration Results



RT: 8.89  
Area: 1135  
Amount: 0.014560  
Amount Units: ug/l

Manual Integration Results



Reviewer: knouses, 04-Mar-2021 12:50:35  
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration



Euofins Lancaster Laboratories Env, LLC

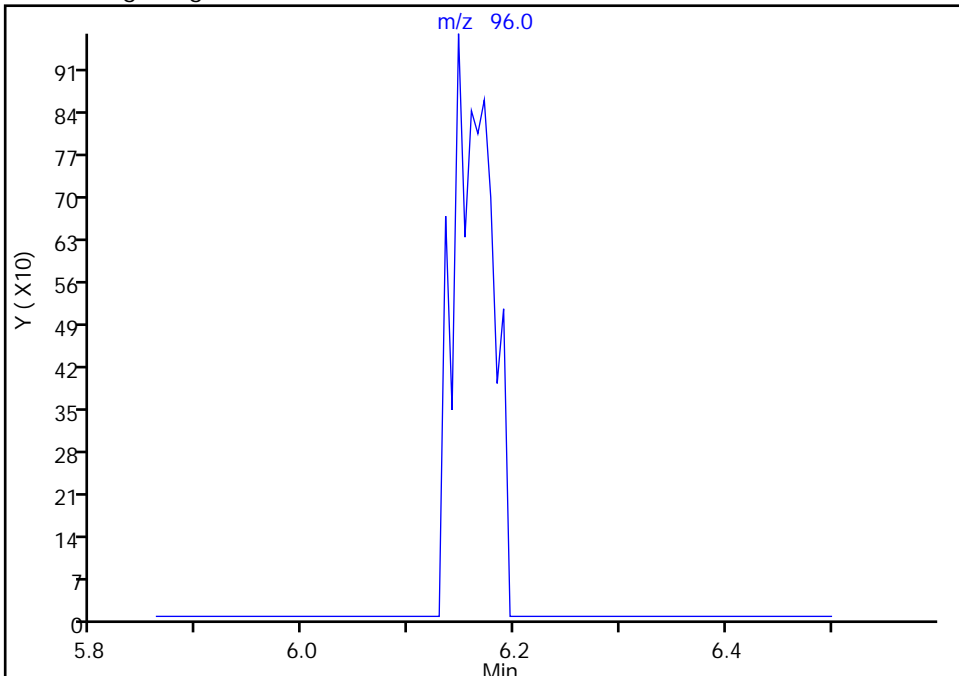
Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\1M03S46.D  
Injection Date: 04-Mar-2021 02:56:30 Instrument ID: 19930  
Lims ID: 410-30627-A-11 Lab Sample ID: 410-30627-11  
Client ID: HD-COD-SW-28-0/1-0  
Operator ID: MEC29284 ALS Bottle#: 23 Worklist Smp#: 24  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: 8260 25ml HP31 Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

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

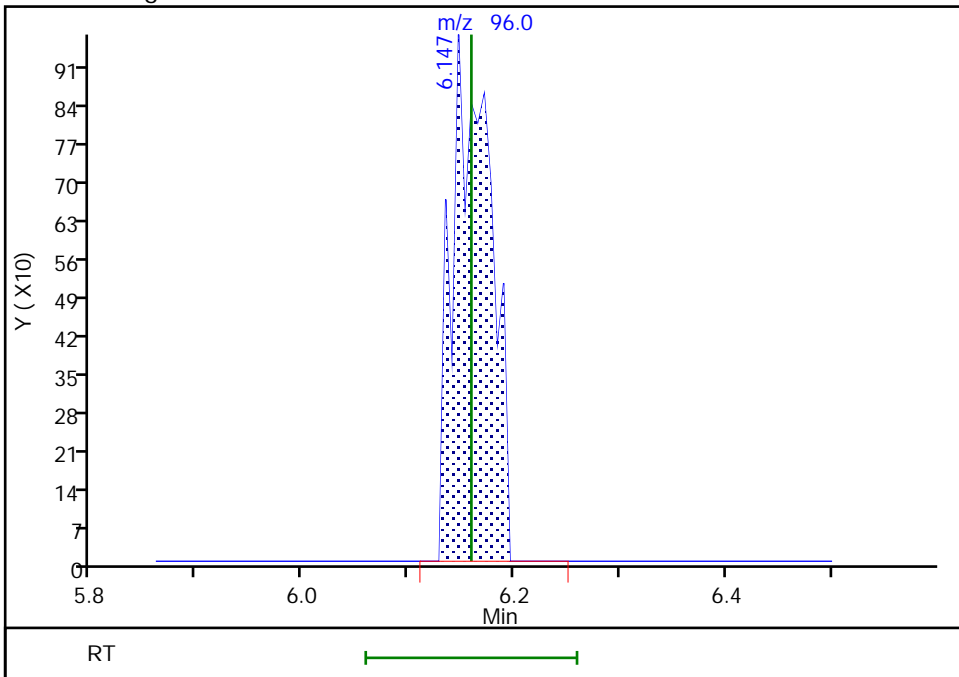
Signal: 1

Not Detected  
Expected RT: 6.16

Processing Integration Results



Manual Integration Results



RT: 6.15  
Area: 2451  
Amount: 0.034309  
Amount Units: ug/l

Reviewer: knouses, 04-Mar-2021 12:49:46  
Audit Action: Manually Integrated

Audit Reason: Missed Peak

Eurofins Lancaster Laboratories Env, LLC

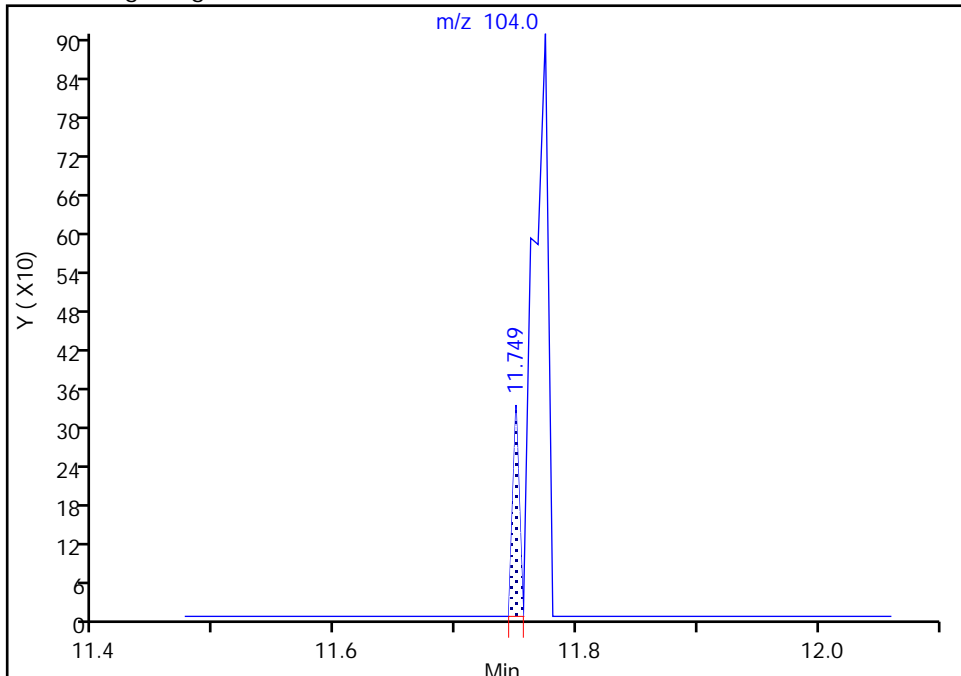
Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S46.D  
Injection Date: 04-Mar-2021 02:56:30 Instrument ID: 19930  
Lims ID: 410-30627-A-11 Lab Sample ID: 410-30627-11  
Client ID: HD-COD-SW-28-0/1-0  
Operator ID: MEC29284 ALS Bottle#: 23 Worklist Smp#: 24  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: 8260 25ml HP31 Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

95 Styrene, CAS: 100-42-5

Signal: 1

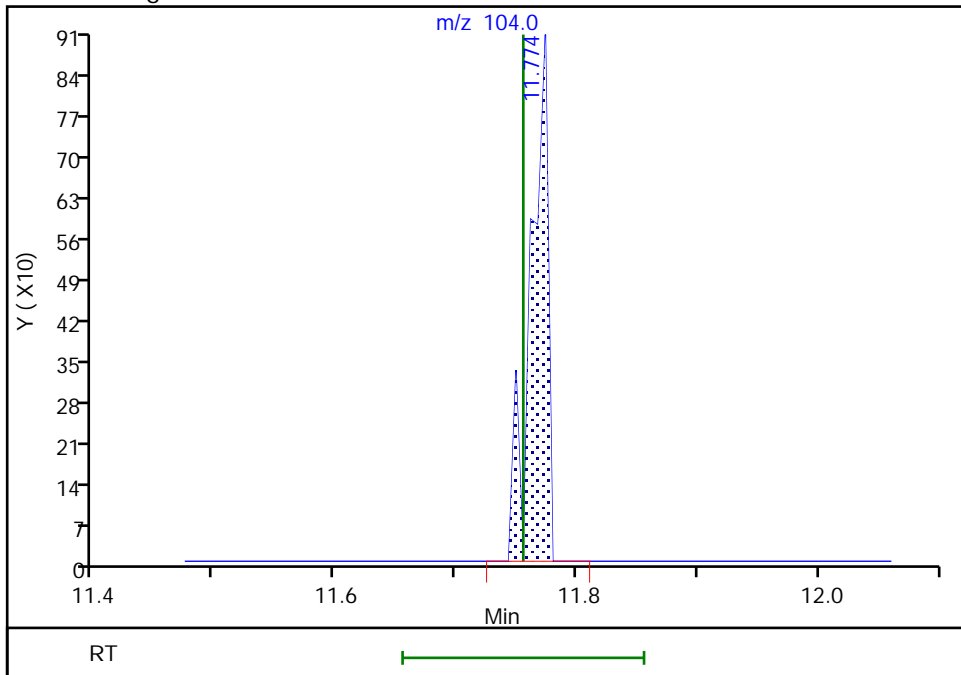
RT: 11.75  
Area: 120  
Amount: 0.000569  
Amount Units: ug/l

Processing Integration Results



RT: 11.77  
Area: 876  
Amount: 0.004155  
Amount Units: ug/l

Manual Integration Results



Reviewer: knouses, 04-Mar-2021 12:51:26  
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

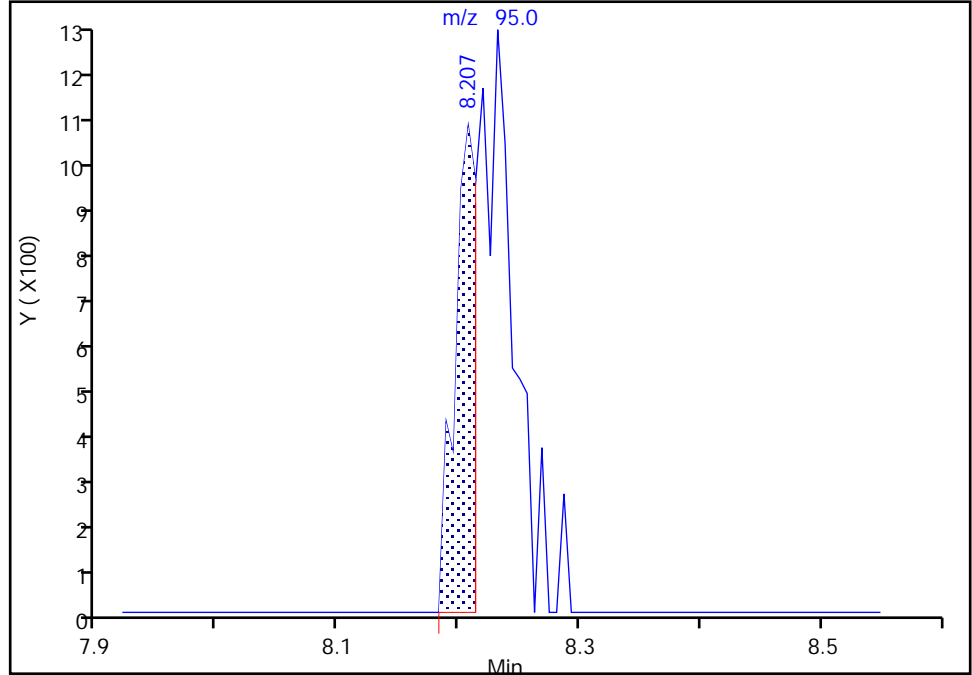
Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S46.D  
Injection Date: 04-Mar-2021 02:56:30 Instrument ID: 19930  
Lims ID: 410-30627-A-11 Lab Sample ID: 410-30627-11  
Client ID: HD-COD-SW-28-0/1-0  
Operator ID: MEC29284 ALS Bottle#: 23 Worklist Smp#: 24  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: 8260 25ml HP31 Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

61 Trichloroethene, CAS: 79-01-6

Signal: 1

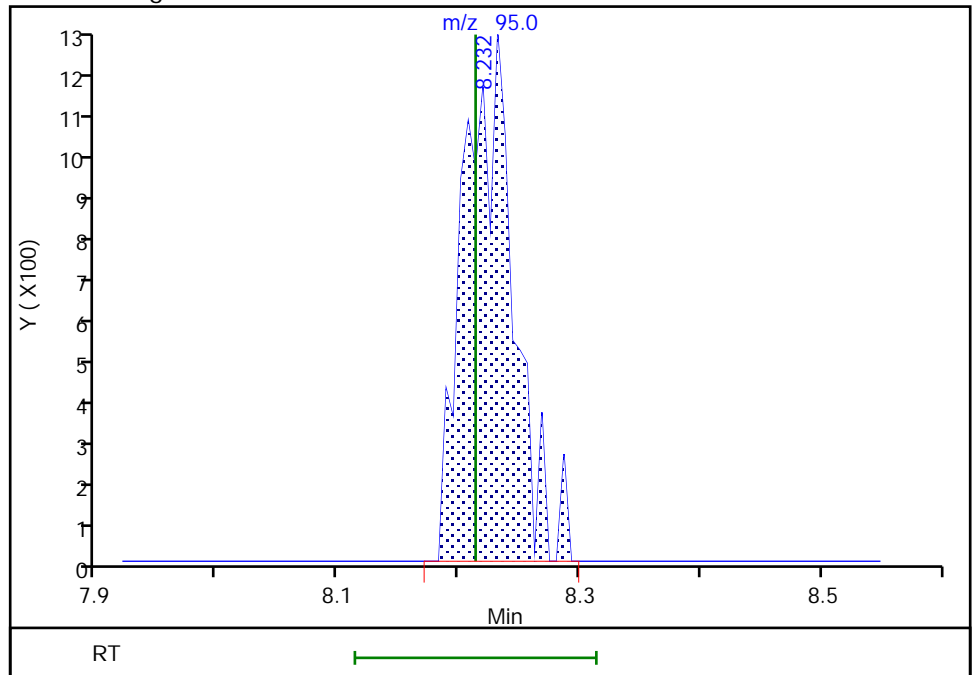
RT: 8.21  
Area: 1365  
Amount: 0.019705  
Amount Units: ug/l

Processing Integration Results



RT: 8.23  
Area: 3720  
Amount: 0.053703  
Amount Units: ug/l

Manual Integration Results



Reviewer: knouses, 04-Mar-2021 12:50:24  
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-30627-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: HD-COD-SW-29-0/1-0 Lab Sample ID: 410-30627-12  
 Matrix: Water Lab File ID: IM03S47.D  
 Analysis Method: 8260D Date Collected: 02/25/2021 09:25  
 Sample wt/vol: 25 (mL) Date Analyzed: 03/04/2021 03:17  
 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.: 99333 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	^c	5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70
67-64-1	Acetone	1.7	J	5.0	0.90
71-43-2	Benzene	ND		0.50	0.050
74-97-5	Bromochloromethane	ND		0.50	0.050
75-27-4	Bromodichloromethane	ND		0.50	0.050
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.070
75-15-0	Carbon disulfide	ND		1.0	0.060
56-23-5	Carbon tetrachloride	ND		0.50	0.070
108-90-7	Chlorobenzene	ND		0.50	0.060
75-00-3	Chloroethane	ND		0.50	0.070
67-66-3	Chloroform	ND		0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	ND		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.050
124-48-1	Dibromochloromethane	ND		0.50	0.070
100-41-4	Ethylbenzene	ND		0.50	0.060
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.050
75-09-2	Methylene Chloride	ND		0.50	0.070
100-42-5	Styrene	ND		0.50	0.050
127-18-4	Tetrachloroethene	ND		0.50	0.060
108-88-3	Toluene	ND		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	ND		0.50	0.060

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-30627-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: HD-COD-SW-29-0/1-0 Lab Sample ID: 410-30627-12  
 Matrix: Water Lab File ID: IM03S47.D  
 Analysis Method: 8260D Date Collected: 02/25/2021 09:25  
 Sample wt/vol: 25 (mL) Date Analyzed: 03/04/2021 03:17  
 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.: 99333 Units: ug/L

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

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		80-120
460-00-4	4-Bromofluorobenzene (Surr)	97		80-120
1868-53-7	Dibromofluoromethane (Surr)	104		80-120
2037-26-5	Toluene-d8 (Surr)	97		80-120

Eurofins Lancaster Laboratories Env, LLC  
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S47.D  
 Lims ID: 410-30627-A-12  
 Client ID: HD-COD-SW-29-0/1-0  
 Sample Type: Client  
 Inject. Date: 04-Mar-2021 03:17:30 ALS Bottle#: 24 Worklist Smp#: 25  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0023228-025  
 Misc. Info.: 410-30627-A-12  
 Operator ID: MEC29284 Instrument ID: 19930  
 Method: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\8260 25ml HP31.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 04-Mar-2021 13:06:32 Calib Date: 23-Nov-2020 18:05:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23117.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1631

First Level Reviewer: knouses

Date: 04-Mar-2021 12:53:05

Compound	Sig	RT (min.)	Exp RT (min.)	Diff RT (min.)	Q	Response	OnCol Amt ug/l	Flags
4 Chloromethane	50	2.172	2.184	-0.012	91	3281	0.0393	
5 Vinyl chloride	62		2.306				ND	
7 Bromomethane	94		2.629				ND	
8 Chloroethane	64		2.709				ND	
14 1,1-Dichloroethene	96		3.574				ND	
15 Acetone	43	3.611	3.605	0.006	99	16151	1.72	
19 Carbon disulfide	76	3.873	3.885	-0.012	94	7020	0.0451	
23 Methylene Chloride	84		4.251				ND	7
* 24 t-Butyl alcohol-d10 (IS)	65	4.269	4.275	-0.006	0	172533	50.0	
27 Methyl tert-butyl ether	73		4.659				ND	
28 trans-1,2-Dichloroethene	96		4.672				ND	
31 1,1-Dichloroethane	63		5.330				ND	
36 2-Butanone (MEK)	43		6.122				ND	7
37 cis-1,2-Dichloroethene	96	6.165	6.159	0.006	1	2931	0.0425	M
43 Chlorobromomethane	128		6.488				ND	
45 Chloroform	83	6.635	6.641	-0.006	28	2247	0.0213	7M
\$ 46 Dibromofluoromethane (Surr)	113	6.848	6.854	-0.006	94	516640	10.4	
47 1,1,1-Trichloroethane	97		6.866				ND	
50 Carbon tetrachloride	117		7.080				ND	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.305	7.305	0.000	0	102291	10.2	
54 Benzene	78		7.336				ND	7
56 1,2-Dichloroethane	62	7.409	7.409	0.000	1	1692	0.0271	M
* 58 Fluorobenzene (IS)	96	7.738	7.738	0.000	99	2014856	10.0	
61 Trichloroethene	95	8.220	8.214	0.006	88	2593	0.0388	
63 1,2-Dichloropropane	63		8.549				ND	
68 Dichlorobromomethane	83		8.890				ND	
73 cis-1,3-Dichloropropene	75		9.433				ND	
74 4-Methyl-2-pentanone (MIBK)	43		9.597				ND	
\$ 75 Toluene-d8 (Surr)	98	9.738	9.738	0.000	93	2010634	9.73	
76 Toluene	92	9.823	9.817	0.006	94	4555	0.0264	
78 trans-1,3-Dichloropropene	75		10.067				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Diff RT (min.)	Q	Response	OnCol Amt ug/l	Flags
80 1,1,2-Trichloroethane	97		10.274				ND	
81 Tetrachloroethene	166	10.353	10.366	-0.013	91	3781	0.0453	M
83 2-Hexanone	43		10.481				ND	7
85 Chlorodibromomethane	129		10.652				ND	
86 Ethylene Dibromide	107		10.762				ND	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.189	0.000	85	1581773	10.0	
90 Chlorobenzene	112		11.213				ND	
S 89 Xylenes, Total	106		11.245				ND	7
91 1,1,1,2-Tetrachloroethane	131		11.298				ND	
92 Ethylbenzene	91		11.298				ND	
93 m-Xylene & p-Xylene	106		11.414				ND	7
94 o-Xylene	106		11.743				ND	
95 Styrene	104		11.756				ND	
96 Bromoform	173		11.914				ND	
\$ 100 4-Bromofluorobenzene (Surr)	95	12.188	12.182	0.006	95	742783	9.71	
101 1,1,2,2-Tetrachloroethane	83		12.286				ND	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	94	897657	10.0	

### QC Flag Legend

#### Processing Flags

7 - Failed Limit of Detection

#### Review Flags

M - Manually Integrated

### Reagents:

MSV\_31\_826ISS\_00004

Amount Added: 5.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S47.D

Injection Date: 04-Mar-2021 03:17:30

Instrument ID: 19930

Operator ID: MEC29284

Lims ID: 410-30627-A-12

Lab Sample ID: 410-30627-12

Worklist Smp#: 25

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

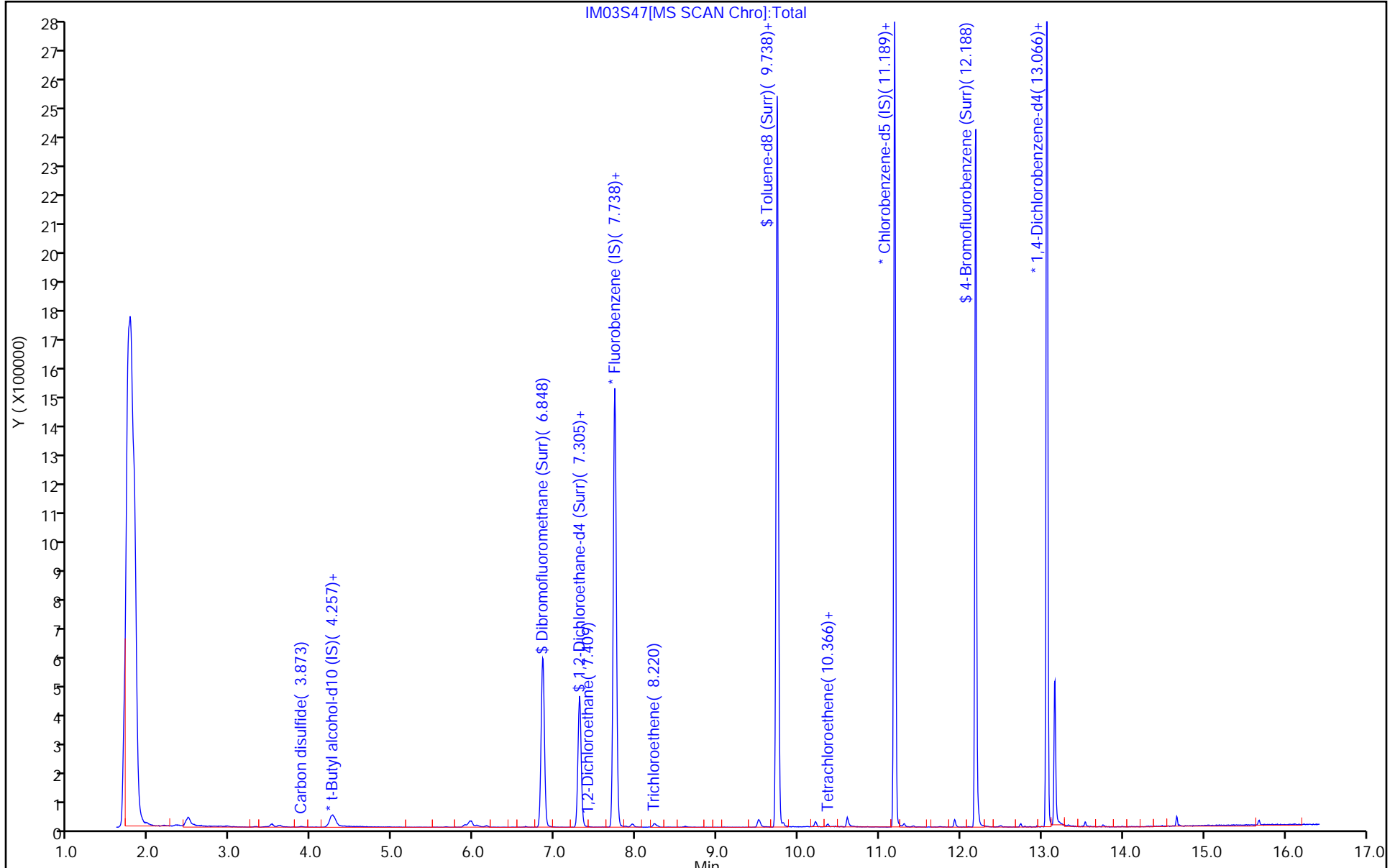
ALS Bottle#: 24

Method: 8260 25ml HP31

Limit Group: MSV - 8260C\_D

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

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





Eurofins Lancaster Laboratories Env, LLC  
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S47.D  
 Lims ID: 410-30627-A-12  
 Client ID: HD-COD-SW-29-0/1-0  
 Sample Type: Client  
 Inject. Date: 04-Mar-2021 03:17:30 ALS Bottle#: 24 Worklist Smp#: 25  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0023228-025  
 Misc. Info.: 410-30627-A-12  
 Operator ID: MEC29284 Instrument ID: 19930  
 Method: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\8260 25ml HP31.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 04-Mar-2021 13:06:32 Calib Date: 23-Nov-2020 18:05:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I17.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1631

First Level Reviewer: knouses Date: 04-Mar-2021 12:53:05

Compound	Amount Added	Amount Recovered	% Rec.
\$ 46 Dibromofluoromethane (Surr)	10.0	10.4	103.85
\$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	10.2	101.98
\$ 75 Toluene-d8 (Surr)	10.0	9.73	97.33
\$ 100 4-Bromofluorobenzene (Surr)	10.0	9.71	97.10

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S47.D

Injection Date: 04-Mar-2021 03:17:30

Instrument ID: 19930

Lims ID: 410-30627-A-12

Lab Sample ID: 410-30627-12

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

Operator ID: MEC29284

ALS Bottle#: 24

Worklist Smp#: 25

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

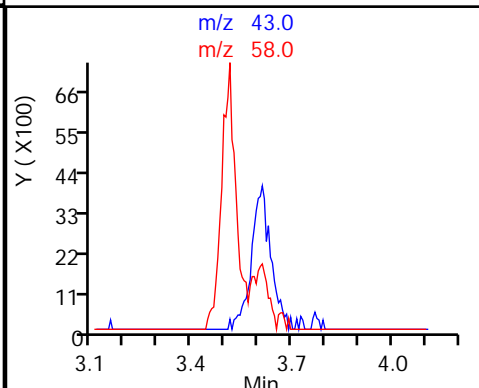
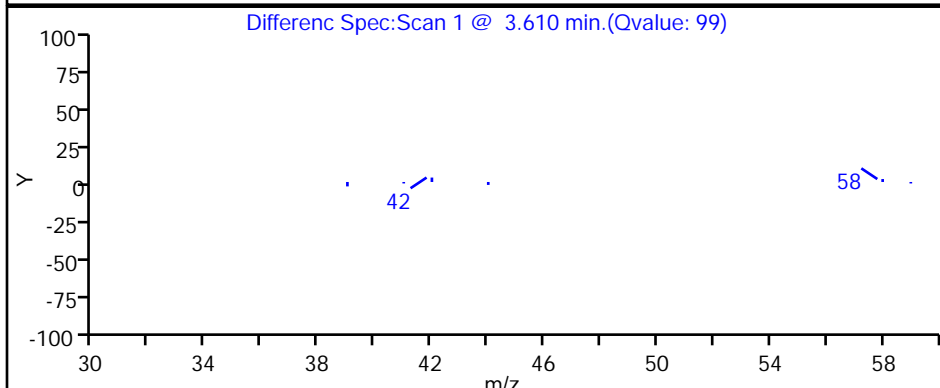
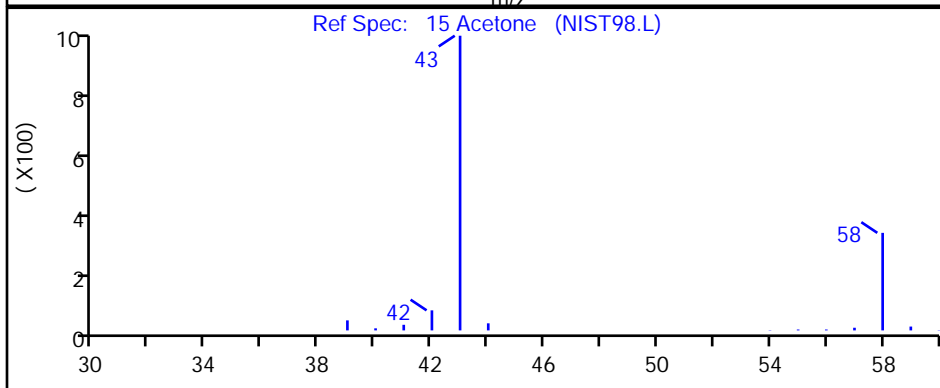
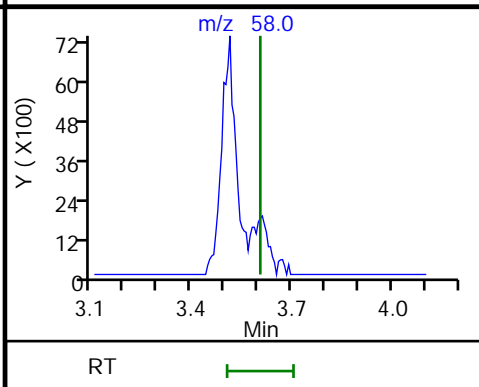
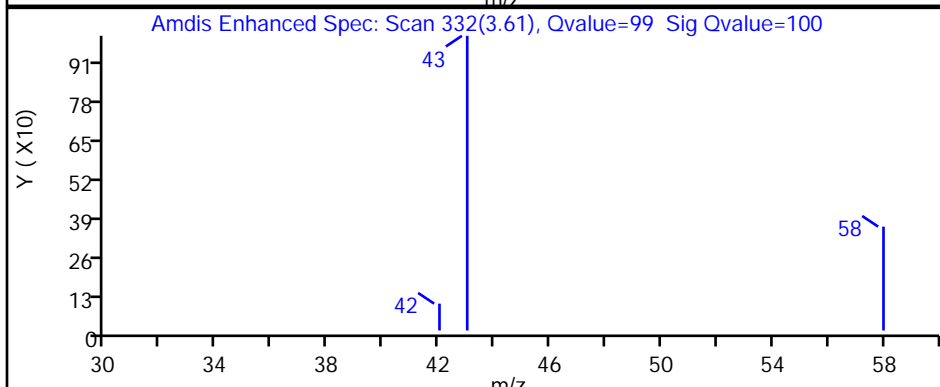
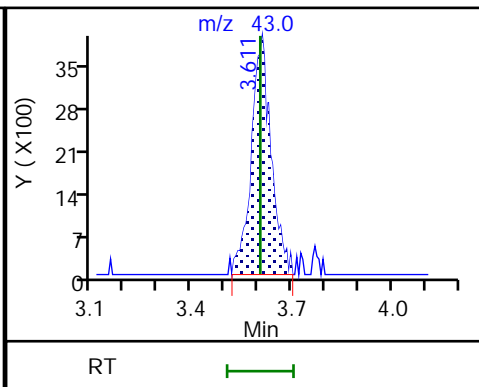
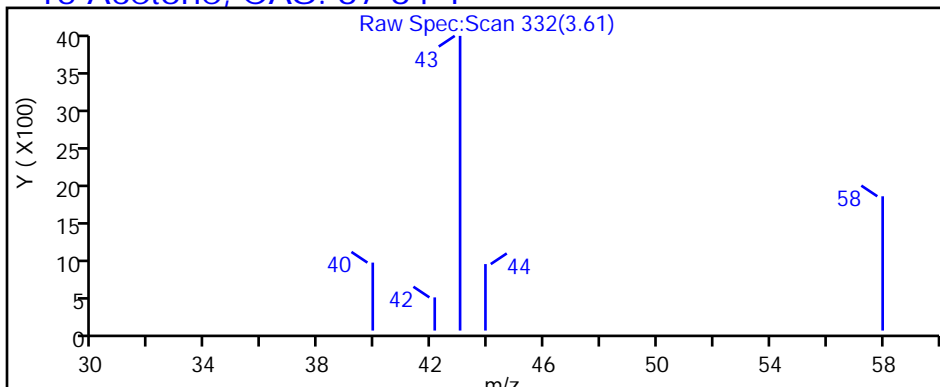
Method: 8260 25ml HP31

Limit Group: MSV - 8260C\_D

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

MS Quad

15 Acetone, CAS: 67-64-1



Euofins Lancaster Laboratories Env, LLC

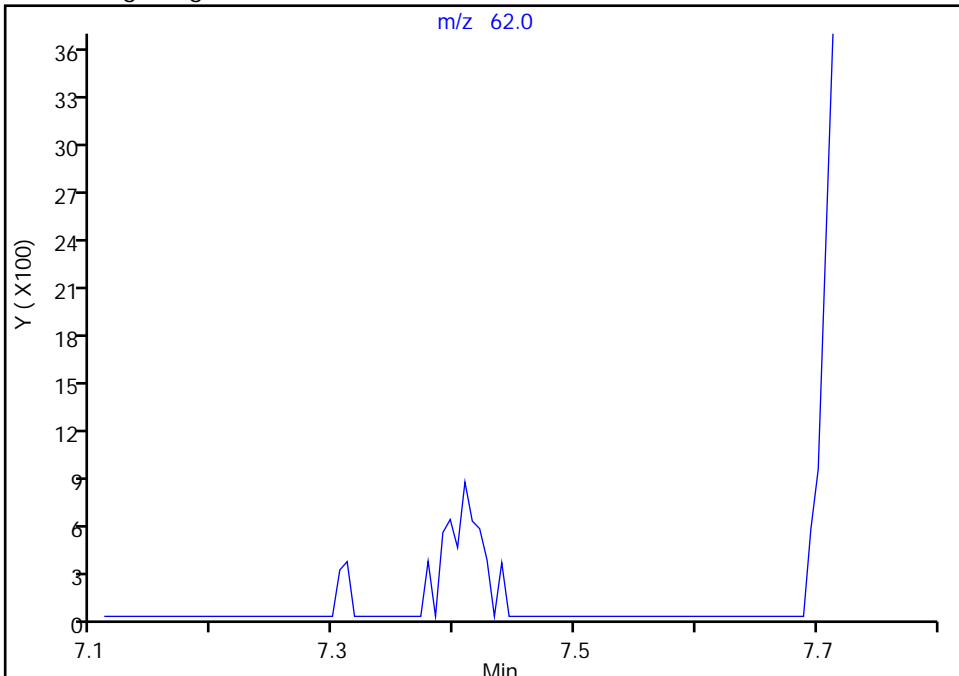
Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S47.D  
Injection Date: 04-Mar-2021 03:17:30 Instrument ID: 19930  
Lims ID: 410-30627-A-12 Lab Sample ID: 410-30627-12  
Client ID: HD-COD-SW-29-0/1-0  
Operator ID: MEC29284 ALS Bottle#: 24 Worklist Smp#: 25  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: 8260 25ml HP31 Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

56 1,2-Dichloroethane, CAS: 107-06-2

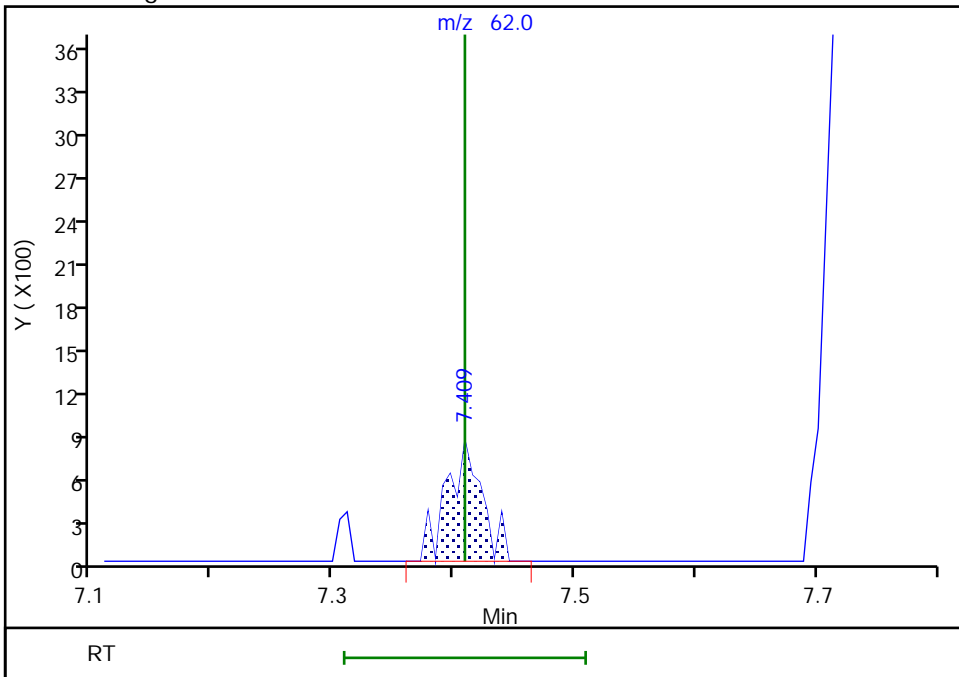
Signal: 1

Not Detected  
Expected RT: 7.41

Processing Integration Results



Manual Integration Results



RT: 7.41  
Area: 1692  
Amount: 0.027145  
Amount Units: ug/l

Reviewer: knouses, 04-Mar-2021 12:52:29  
Audit Action: Manually Integrated

Audit Reason: Missed Peak

Eurofins Lancaster Laboratories Env, LLC

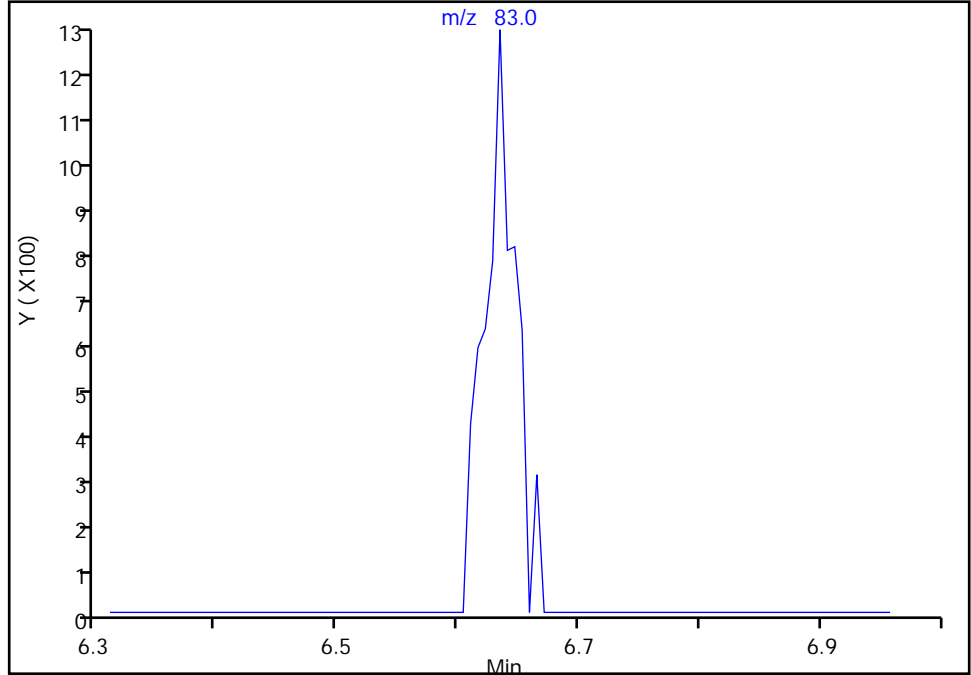
Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S47.D  
Injection Date: 04-Mar-2021 03:17:30 Instrument ID: 19930  
Lims ID: 410-30627-A-12 Lab Sample ID: 410-30627-12  
Client ID: HD-COD-SW-29-0/1-0  
Operator ID: MEC29284 ALS Bottle#: 24 Worklist Smp#: 25  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: 8260 25ml HP31 Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

45 Chloroform, CAS: 67-66-3

Signal: 1

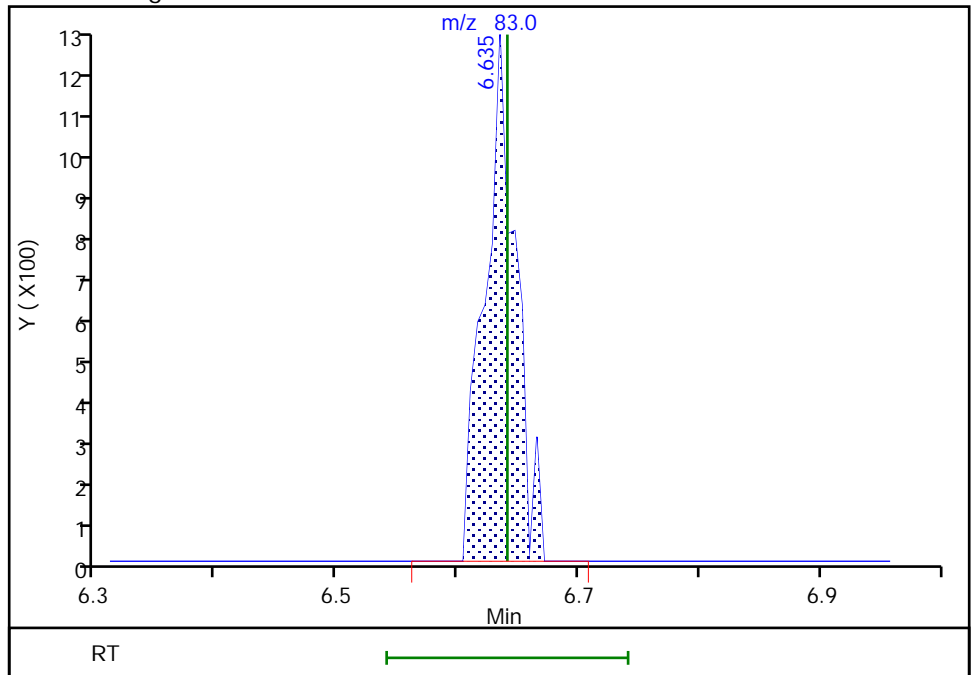
Not Detected  
Expected RT: 6.64

Processing Integration Results



Manual Integration Results

RT: 6.63  
Area: 2247  
Amount: 0.021262  
Amount Units: ug/l



Reviewer: knouses, 04-Mar-2021 12:52:17  
Audit Action: Manually Integrated

Audit Reason: Missed Peak

Eurofins Lancaster Laboratories Env, LLC

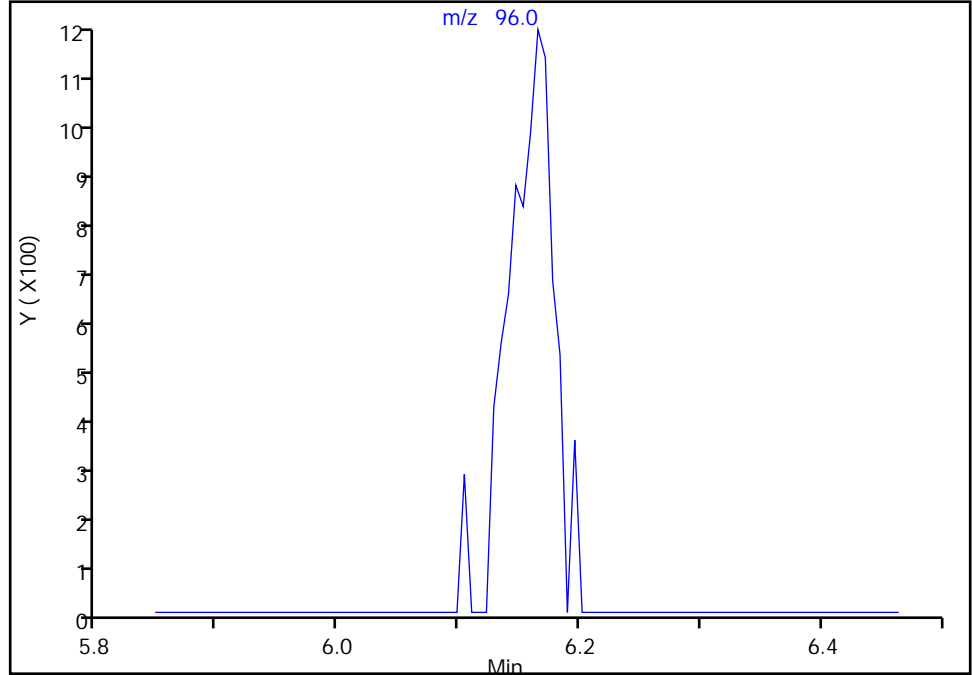
Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S47.D  
Injection Date: 04-Mar-2021 03:17:30 Instrument ID: 19930  
Lims ID: 410-30627-A-12 Lab Sample ID: 410-30627-12  
Client ID: HD-COD-SW-29-0/1-0  
Operator ID: MEC29284 ALS Bottle#: 24 Worklist Smp#: 25  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: 8260 25ml HP31 Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

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

Signal: 1

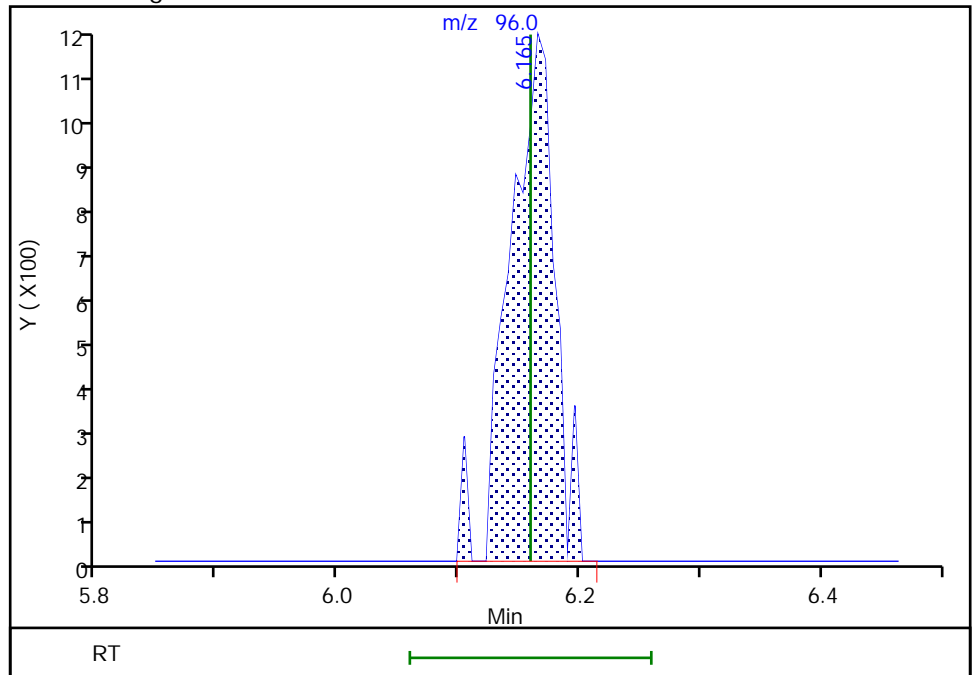
Not Detected  
Expected RT: 6.16

Processing Integration Results



Manual Integration Results

RT: 6.17  
Area: 2931  
Amount: 0.042531  
Amount Units: ug/l



Reviewer: knouses, 04-Mar-2021 12:52:05  
Audit Action: Manually Integrated

Audit Reason: Missed Peak

Eurofins Lancaster Laboratories Env, LLC

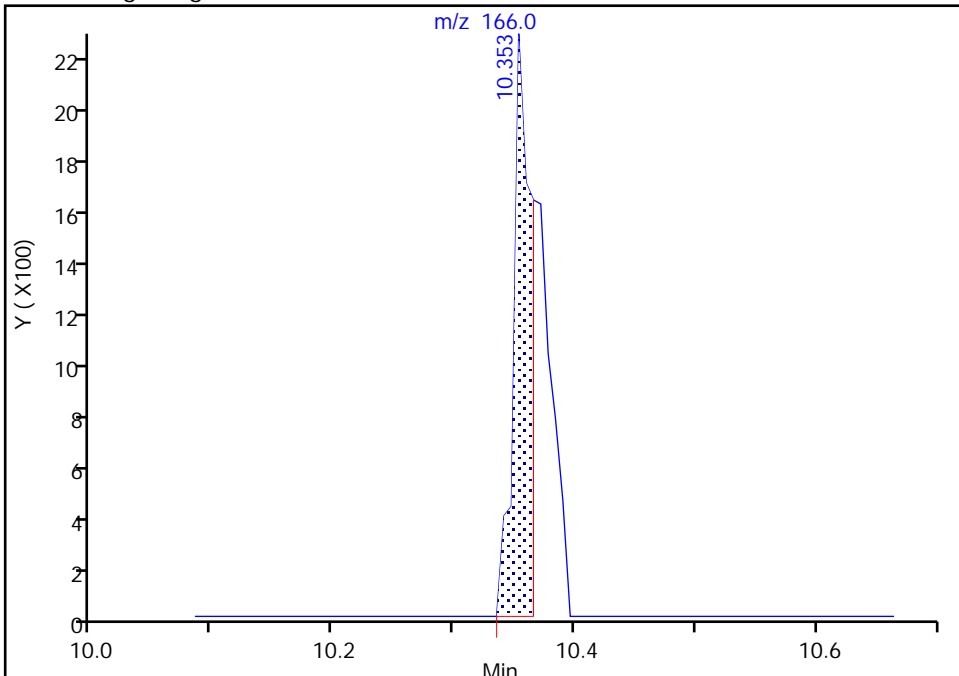
Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S47.D  
Injection Date: 04-Mar-2021 03:17:30 Instrument ID: 19930  
Lims ID: 410-30627-A-12 Lab Sample ID: 410-30627-12  
Client ID: HD-COD-SW-29-0/1-0  
Operator ID: MEC29284 ALS Bottle#: 24 Worklist Smp#: 25  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: 8260 25ml HP31 Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

81 Tetrachloroethene, CAS: 127-18-4

Signal: 1

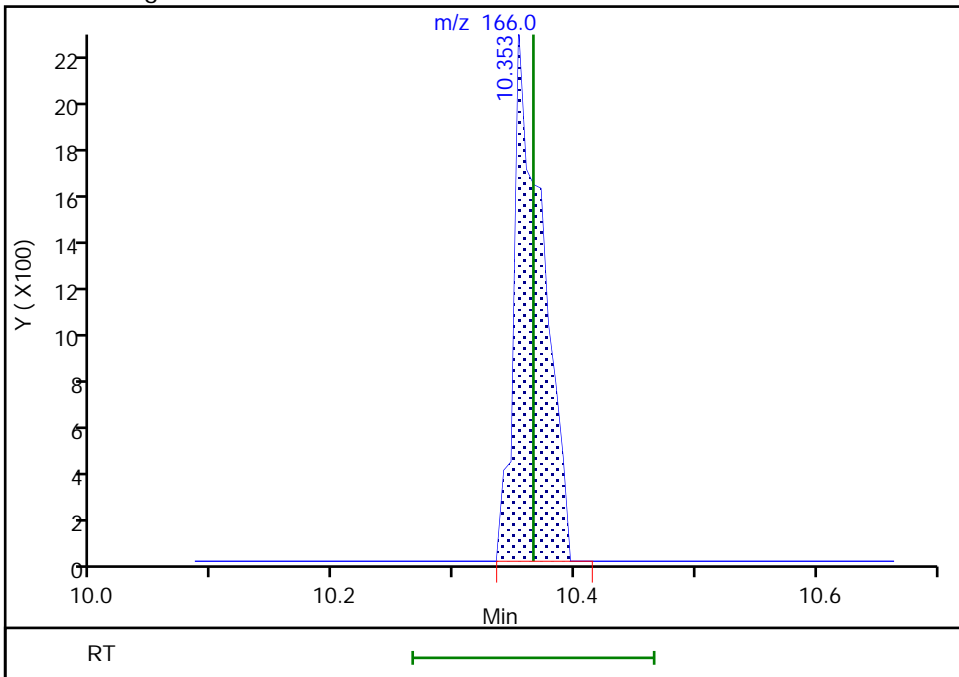
RT: 10.35  
Area: 2362  
Amount: 0.028290  
Amount Units: ug/l

Processing Integration Results



RT: 10.35  
Area: 3781  
Amount: 0.045286  
Amount Units: ug/l

Manual Integration Results



Reviewer: knouses, 04-Mar-2021 12:52:48  
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-30627-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: HD-QC1-0/1-1 Lab Sample ID: 410-30627-13  
 Matrix: Water Lab File ID: IM03S48.D  
 Analysis Method: 8260D Date Collected: 02/25/2021 12:00  
 Sample wt/vol: 25 (mL) Date Analyzed: 03/04/2021 03:38  
 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.: 99333 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	^c	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	ND		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.050
124-48-1	Dibromochloromethane	ND		0.50	0.070
100-41-4	Ethylbenzene	ND		0.50	0.060
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.050
75-09-2	Methylene Chloride	ND		0.50	0.070
100-42-5	Styrene	ND		0.50	0.050
127-18-4	Tetrachloroethene	ND		0.50	0.060
108-88-3	Toluene	ND		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	ND		0.50	0.060

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-30627-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: HD-QC1-0/1-1 Lab Sample ID: 410-30627-13  
 Matrix: Water Lab File ID: IM03S48.D  
 Analysis Method: 8260D Date Collected: 02/25/2021 12:00  
 Sample wt/vol: 25 (mL) Date Analyzed: 03/04/2021 03:38  
 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.: 99333 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)	97		80-120
1868-53-7	Dibromofluoromethane (Surr)	102		80-120
2037-26-5	Toluene-d8 (Surr)	98		80-120



Eurofins Lancaster Laboratories Env, LLC  
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S48.D  
 Lims ID: 410-30627-A-13  
 Client ID: HD-QC1-0/1-1  
 Sample Type: Client  
 Inject. Date: 04-Mar-2021 03:38:30 ALS Bottle#: 25 Worklist Smp#: 26  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0023228-026  
 Misc. Info.: 410-30627-A-13  
 Operator ID: MEC29284 Instrument ID: 19930  
 Method: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\8260 25ml HP31.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 04-Mar-2021 13:06:32 Calib Date: 23-Nov-2020 18:05:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23117.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1631

First Level Reviewer: knouses

Date: 04-Mar-2021 12:55:14

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
4 Chloromethane	50	2.190	2.184	0.006	1	3370	0.0391	M
5 Vinyl chloride	62		2.306				ND	
7 Bromomethane	94		2.629				ND	
8 Chloroethane	64		2.709				ND	
14 1,1-Dichloroethene	96		3.574				ND	
15 Acetone	43	3.611	3.605	0.006	97	14746	1.51	
19 Carbon disulfide	76	3.873	3.885	-0.012	99	7318	0.0455	
23 Methylene Chloride	84		4.251				ND	7
* 24 t-Butyl alcohol-d10 (IS)	65	4.251	4.275	-0.024	0	179372	50.0	
27 Methyl tert-butyl ether	73		4.659				ND	
28 trans-1,2-Dichloroethene	96		4.672				ND	
31 1,1-Dichloroethane	63		5.330				ND	
36 2-Butanone (MEK)	43		6.122				ND	7
37 cis-1,2-Dichloroethene	96	6.165	6.159	0.006	77	3259	0.0458	
43 Chlorobromomethane	128		6.488				ND	
45 Chloroform	83	6.635	6.641	-0.006	12	2220	0.0203	7M
\$ 46 Dibromofluoromethane (Surr)	113	6.854	6.854	0.000	94	526711	10.2	
47 1,1,1-Trichloroethane	97		6.866				ND	
50 Carbon tetrachloride	117		7.080				ND	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.311	7.305	0.006	0	107382	10.4	
54 Benzene	78	7.330	7.336	-0.006	87	3517	0.0133	7M
56 1,2-Dichloroethane	62	7.409	7.409	0.000	1	2057	0.0319	M
* 58 Fluorobenzene (IS)	96	7.738	7.738	0.000	99	2081917	10.0	
61 Trichloroethene	95	8.226	8.214	0.012	86	3745	0.0542	M
63 1,2-Dichloropropane	63		8.549				ND	
68 Dichlorobromomethane	83		8.890				ND	
73 cis-1,3-Dichloropropene	75		9.433				ND	
74 4-Methyl-2-pentanone (MIBK)	43		9.597				ND	7
\$ 75 Toluene-d8 (Surr)	98	9.744	9.738	0.006	93	2060223	9.75	
76 Toluene	92		9.817				ND	7
78 trans-1,3-Dichloropropene	75		10.067				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
80 1,1,2-Trichloroethane	97		10.274				ND	
81 Tetrachloroethene	166	10.372	10.366	0.006	93	4076	0.0477	
83 2-Hexanone	43		10.481				ND	
85 Chlorodibromomethane	129		10.652				ND	
86 Ethylene Dibromide	107		10.762				ND	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.189	0.000	85	1617598	10.0	
90 Chlorobenzene	112		11.213				ND	
S 89 Xylenes, Total	106		11.245				ND	7
91 1,1,1,2-Tetrachloroethane	131		11.298				ND	
92 Ethylbenzene	91		11.298				ND	7
93 m-Xylene & p-Xylene	106		11.414				ND	7
94 o-Xylene	106	11.743	11.743	0.000	1	907	0.006940	7M
95 Styrene	104		11.756				ND	
96 Bromoform	173		11.914				ND	
\$ 100 4-Bromofluorobenzene (Surr)	95	12.182	12.182	0.000	94	760940	9.73	
101 1,1,2,2-Tetrachloroethane	83		12.286				ND	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	94	929958	10.0	

### QC Flag Legend

#### Processing Flags

7 - Failed Limit of Detection

#### Review Flags

M - Manually Integrated

### Reagents:

MSV\_31\_826ISS\_00004

Amount Added: 5.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S48.D

Injection Date: 04-Mar-2021 03:38:30

Instrument ID: 19930

Operator ID: MEC29284

Lims ID: 410-30627-A-13

Lab Sample ID: 410-30627-13

Worklist Smp#: 26

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

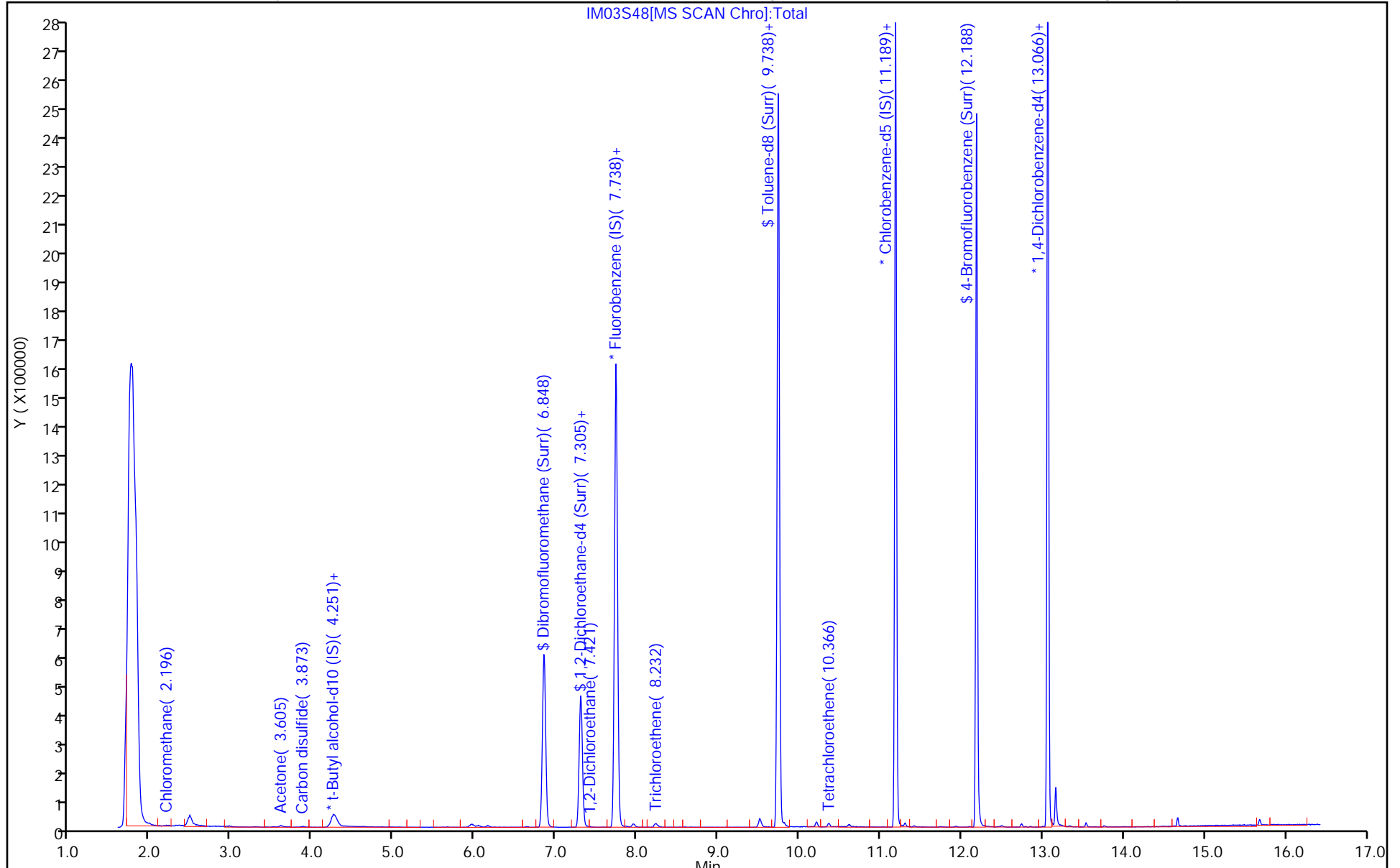
ALS Bottle#: 25

Method: 8260 25ml HP31

Limit Group: MSV - 8260C\_D

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

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



Eurofins Lancaster Laboratories Env, LLC  
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S48.D  
 Lims ID: 410-30627-A-13  
 Client ID: HD-QC1-0/1-1  
 Sample Type: Client  
 Inject. Date: 04-Mar-2021 03:38:30 ALS Bottle#: 25 Worklist Smp#: 26  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0023228-026  
 Misc. Info.: 410-30627-A-13  
 Operator ID: MEC29284 Instrument ID: 19930  
 Method: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\8260 25ml HP31.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 04-Mar-2021 13:06:32 Calib Date: 23-Nov-2020 18:05:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I17.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1631

First Level Reviewer: knouses

Date: 04-Mar-2021 12:55:14

Compound	Amount Added	Amount Recovered	% Rec.
\$ 46 Dibromofluoromethane (Surr)	10.0	10.2	102.46
\$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	10.4	103.61
\$ 75 Toluene-d8 (Surr)	10.0	9.75	97.53
\$ 100 4-Bromofluorobenzene (Surr)	10.0	9.73	97.27

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S48.D

Injection Date: 04-Mar-2021 03:38:30

Instrument ID: 19930

Lims ID: 410-30627-A-13

Lab Sample ID: 410-30627-13

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

Operator ID: MEC29284

ALS Bottle#: 25

Worklist Smp#: 26

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

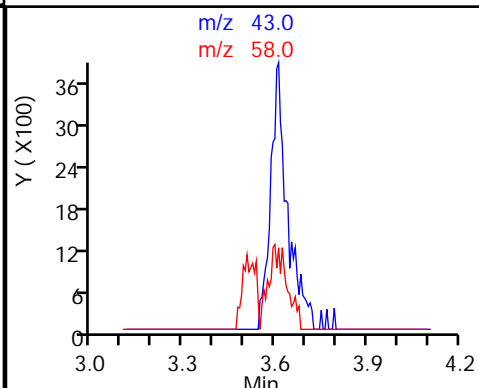
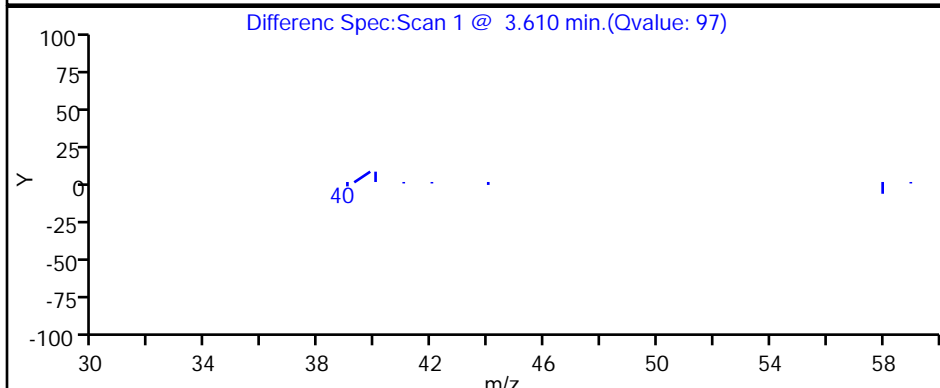
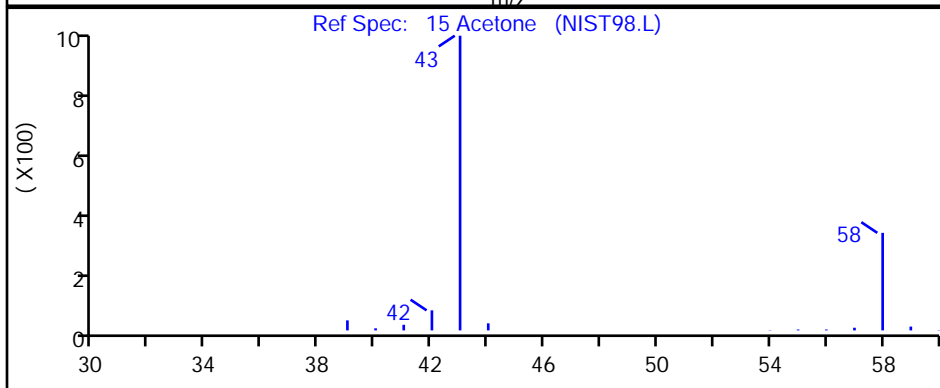
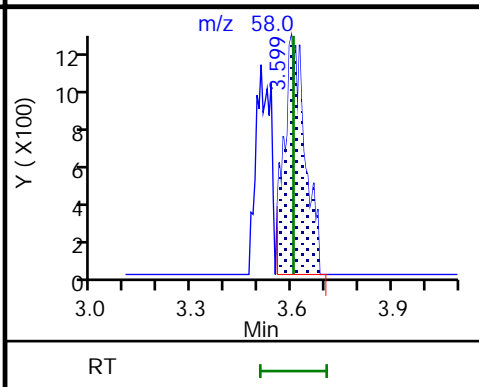
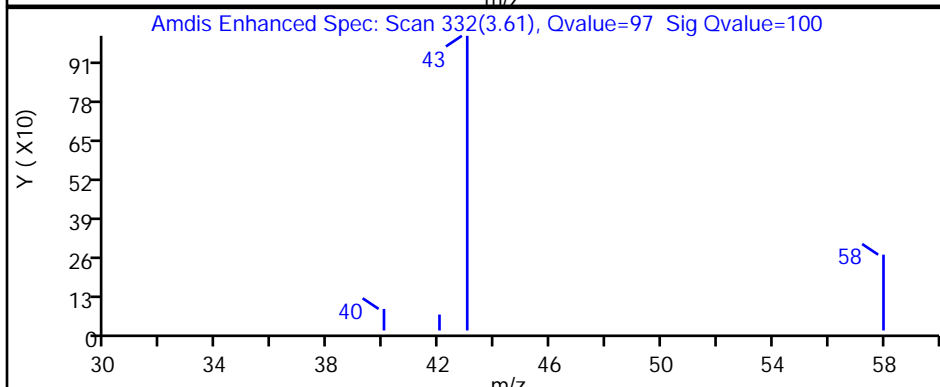
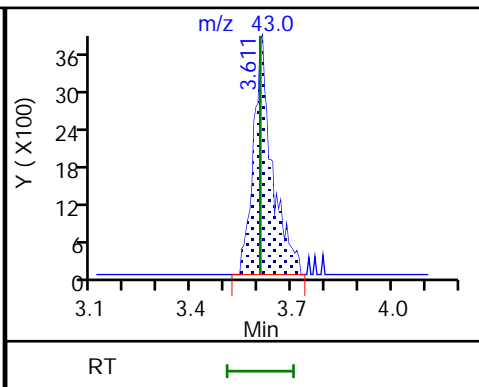
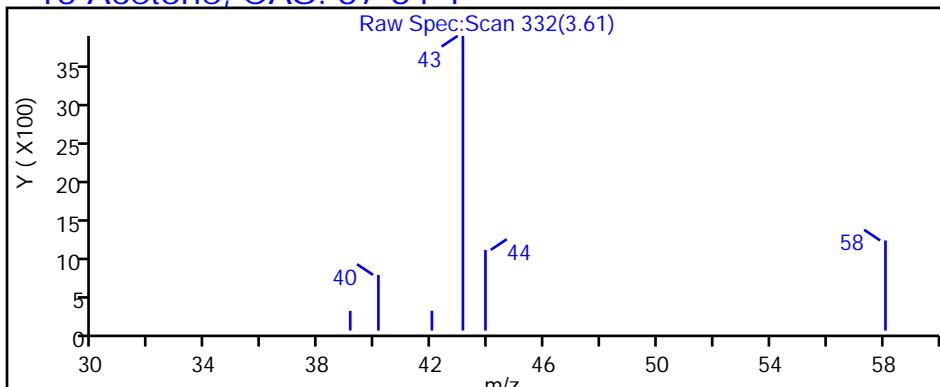
Method: 8260 25ml HP31

Limit Group: MSV - 8260C\_D

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

MS Quad

15 Acetone, CAS: 67-64-1



Eurofins Lancaster Laboratories Env, LLC

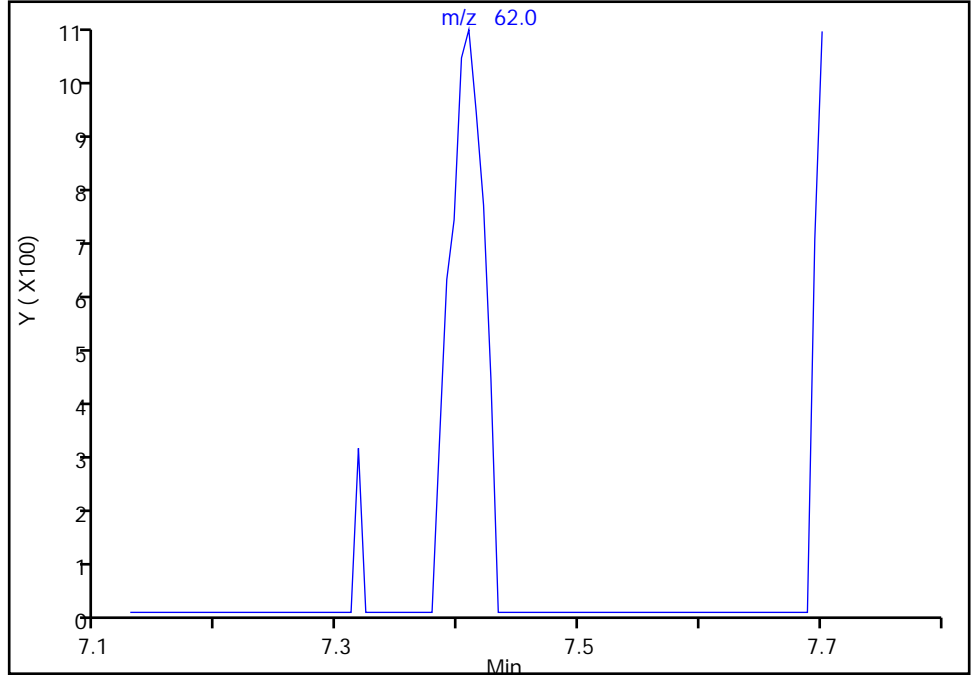
Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S48.D  
Injection Date: 04-Mar-2021 03:38:30 Instrument ID: 19930  
Lims ID: 410-30627-A-13 Lab Sample ID: 410-30627-13  
Client ID: HD-QC1-0/1-1  
Operator ID: MEC29284 ALS Bottle#: 25 Worklist Smp#: 26  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: 8260 25ml HP31 Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

56 1,2-Dichloroethane, CAS: 107-06-2

Signal: 1

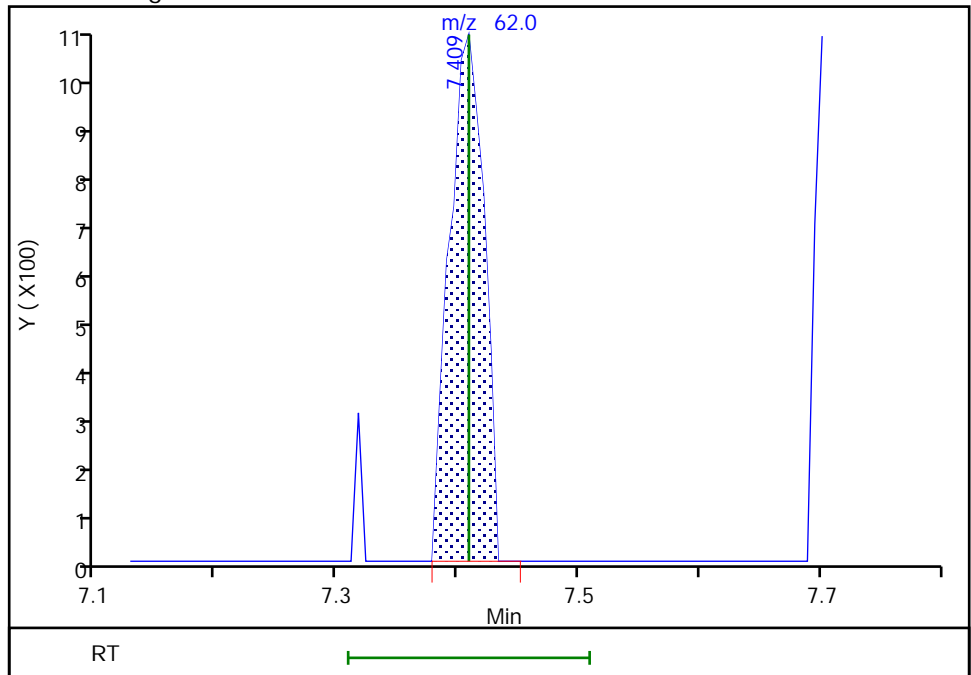
Not Detected  
Expected RT: 7.41

Processing Integration Results



Manual Integration Results

RT: 7.41  
Area: 2057  
Amount: 0.031938  
Amount Units: ug/l



Reviewer: knouses, 04-Mar-2021 12:54:18  
Audit Action: Manually Integrated

Audit Reason: Missed Peak

Eurofins Lancaster Laboratories Env, LLC

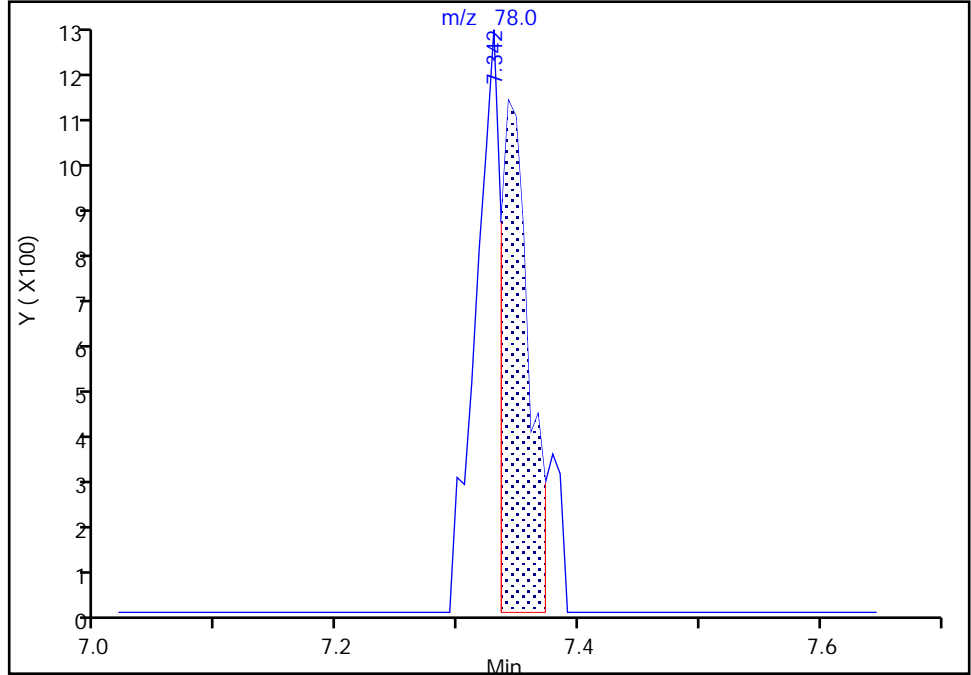
Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S48.D  
Injection Date: 04-Mar-2021 03:38:30 Instrument ID: 19930  
Lims ID: 410-30627-A-13 Lab Sample ID: 410-30627-13  
Client ID: HD-QC1-0/1-1  
Operator ID: MEC29284 ALS Bottle#: 25 Worklist Smp#: 26  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: 8260 25ml HP31 Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

54 Benzene, CAS: 71-43-2

Signal: 1

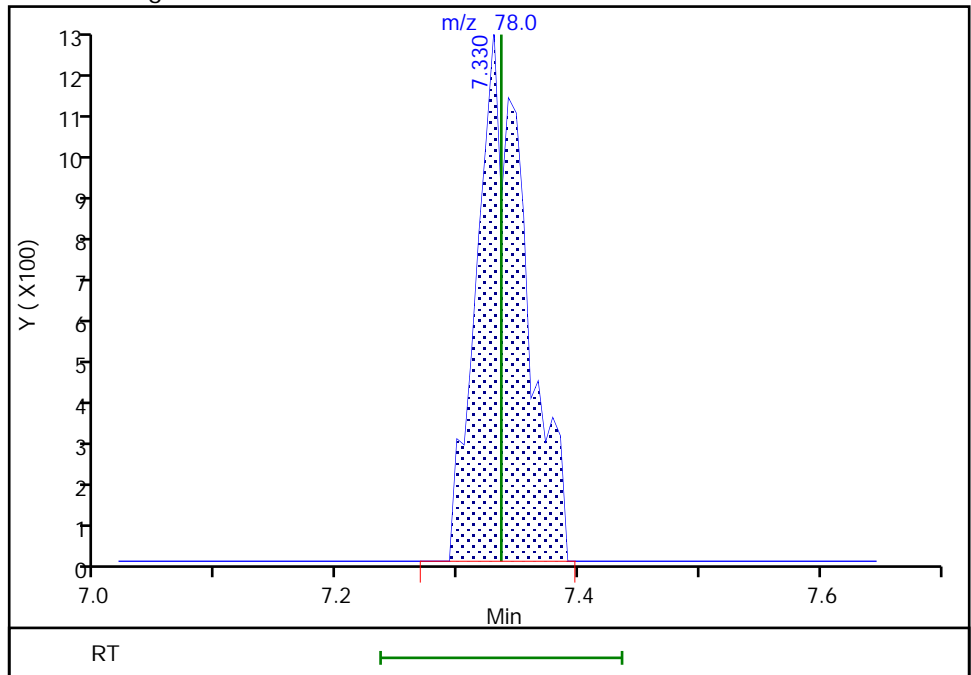
RT: 7.34  
Area: 1791  
Amount: 0.006790  
Amount Units: ug/l

Processing Integration Results



RT: 7.33  
Area: 3517  
Amount: 0.013333  
Amount Units: ug/l

Manual Integration Results



Reviewer: knouses, 04-Mar-2021 12:54:03  
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

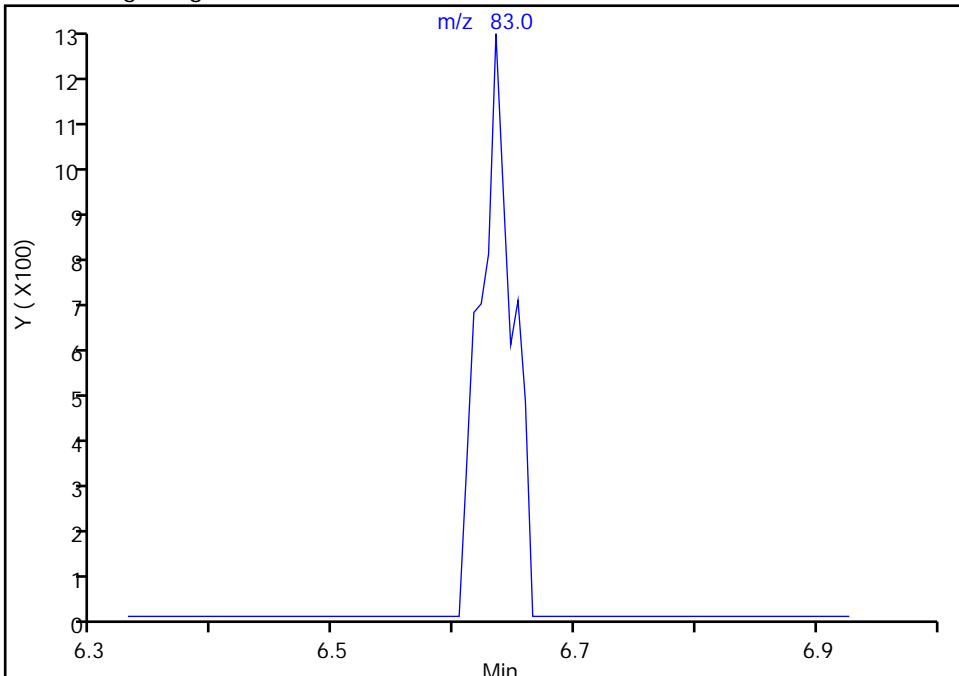
Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S48.D  
Injection Date: 04-Mar-2021 03:38:30 Instrument ID: 19930  
Lims ID: 410-30627-A-13 Lab Sample ID: 410-30627-13  
Client ID: HD-QC1-0/1-1  
Operator ID: MEC29284 ALS Bottle#: 25 Worklist Smp#: 26  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: 8260 25ml HP31 Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

45 Chloroform, CAS: 67-66-3

Signal: 1

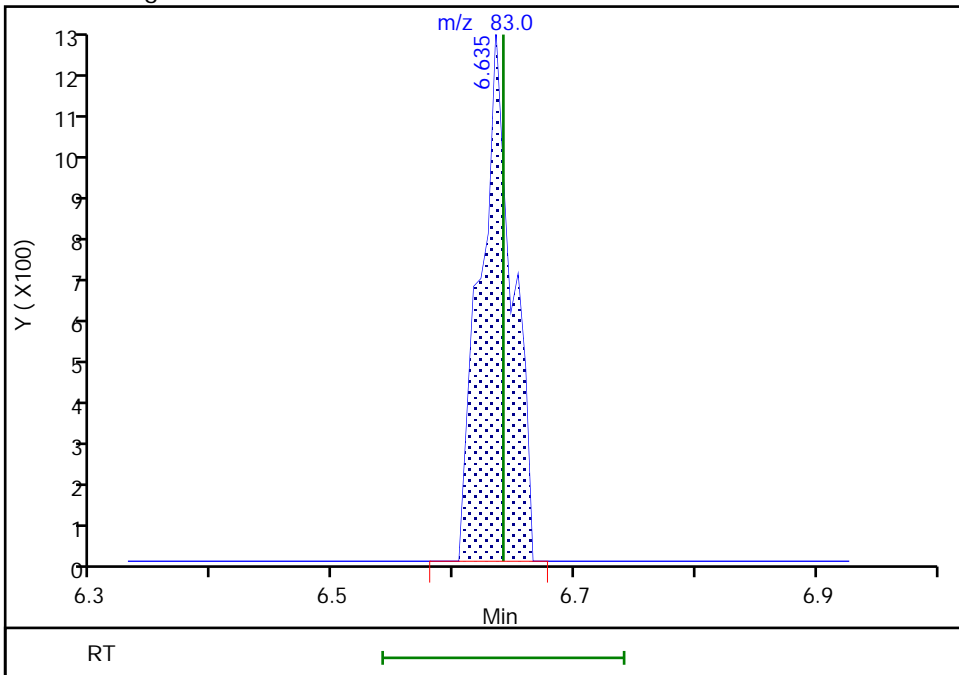
Not Detected  
Expected RT: 6.64

Processing Integration Results



Manual Integration Results

RT: 6.63  
Area: 2220  
Amount: 0.020330  
Amount Units: ug/l



Reviewer: knouses, 04-Mar-2021 12:53:45  
Audit Action: Manually Integrated

Audit Reason: Missed Peak



Eurofins Lancaster Laboratories Env, LLC

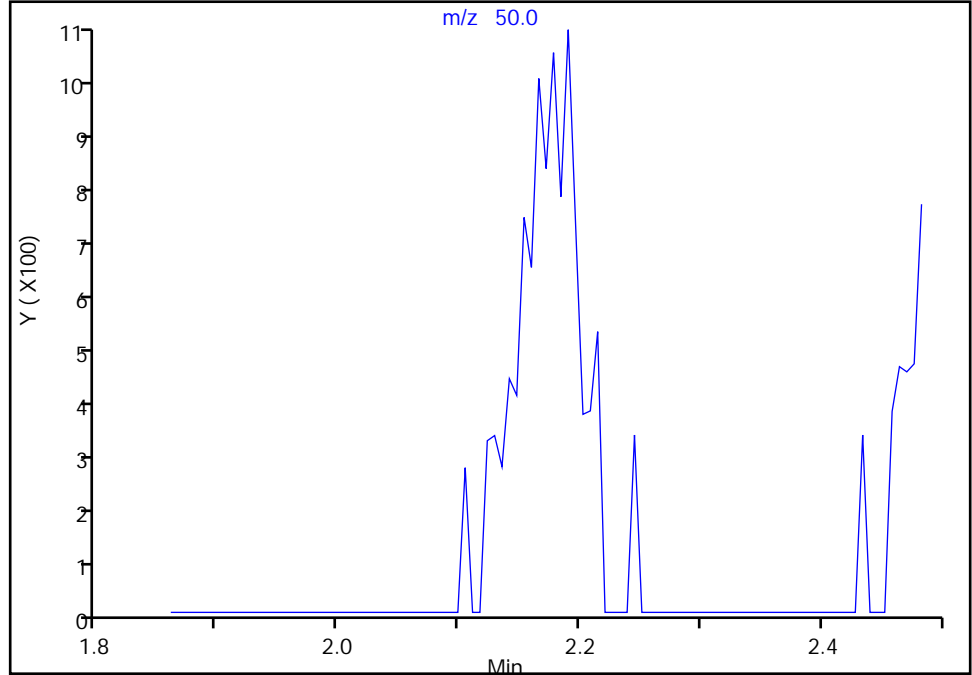
Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S48.D  
Injection Date: 04-Mar-2021 03:38:30 Instrument ID: 19930  
Lims ID: 410-30627-A-13 Lab Sample ID: 410-30627-13  
Client ID: HD-QC1-0/1-1  
Operator ID: MEC29284 ALS Bottle#: 25 Worklist Smp#: 26  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: 8260 25ml HP31 Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

**4 Chloromethane, CAS: 74-87-3**

Signal: 1

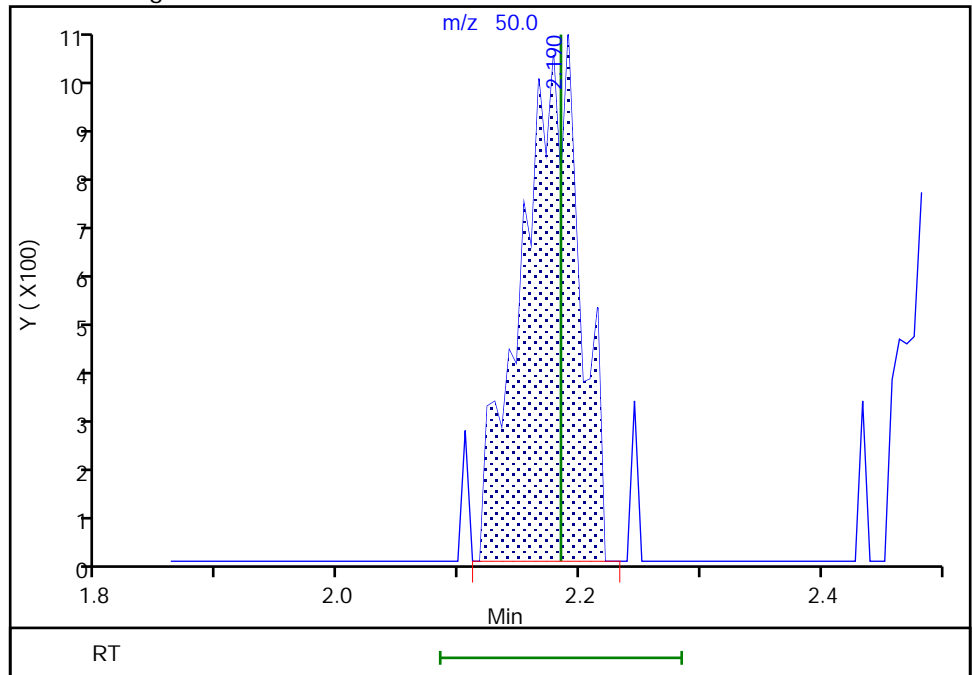
Not Detected  
Expected RT: 2.18

Processing Integration Results



Manual Integration Results

RT: 2.19  
Area: 3370  
Amount: 0.039086  
Amount Units: ug/l



Reviewer: knouses, 04-Mar-2021 12:53:29  
Audit Action: Manually Integrated

Audit Reason: Missed Peak

Eurofins Lancaster Laboratories Env, LLC

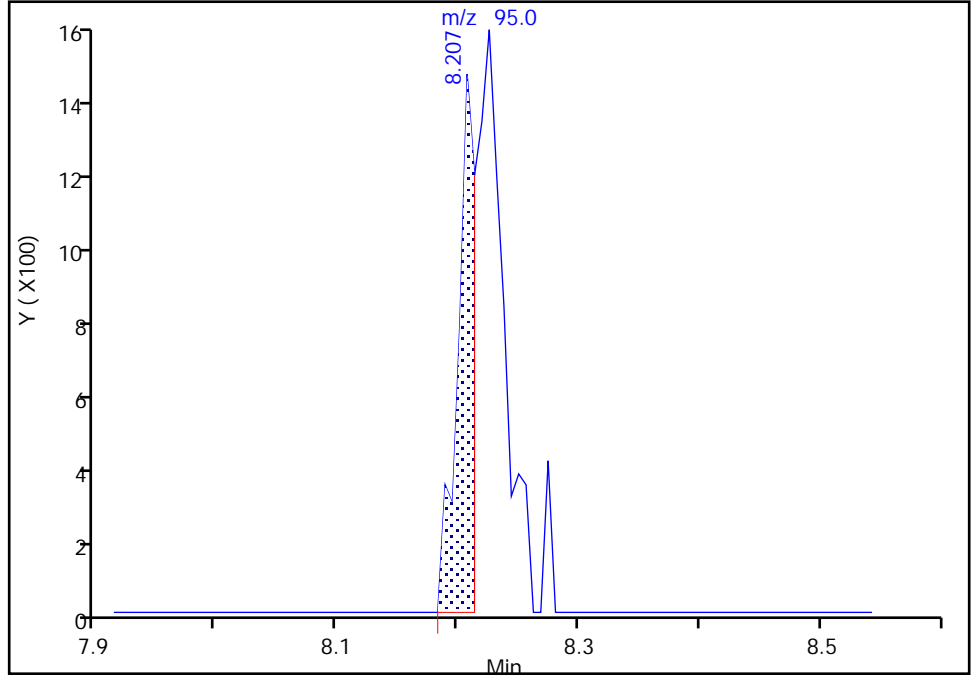
Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S48.D  
Injection Date: 04-Mar-2021 03:38:30 Instrument ID: 19930  
Lims ID: 410-30627-A-13 Lab Sample ID: 410-30627-13  
Client ID: HD-QC1-0/1-1  
Operator ID: MEC29284 ALS Bottle#: 25 Worklist Smp#: 26  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: 8260 25ml HP31 Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

61 Trichloroethene, CAS: 79-01-6

Signal: 1

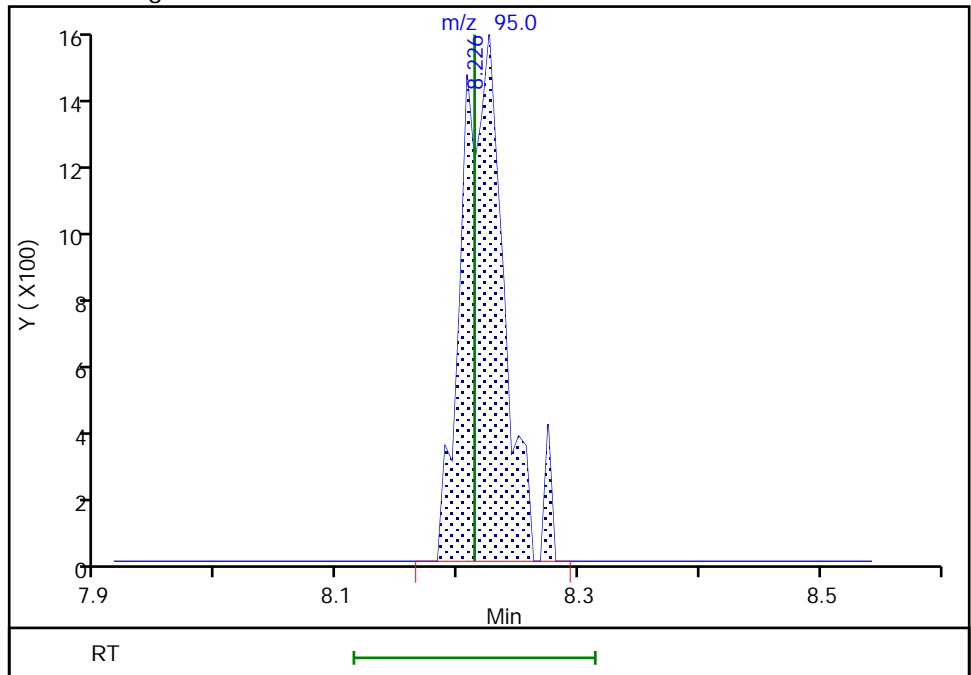
RT: 8.21  
Area: 1460  
Amount: 0.021145  
Amount Units: ug/l

Processing Integration Results



RT: 8.23  
Area: 3745  
Amount: 0.054239  
Amount Units: ug/l

Manual Integration Results



Reviewer: knouses, 04-Mar-2021 12:54:31  
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

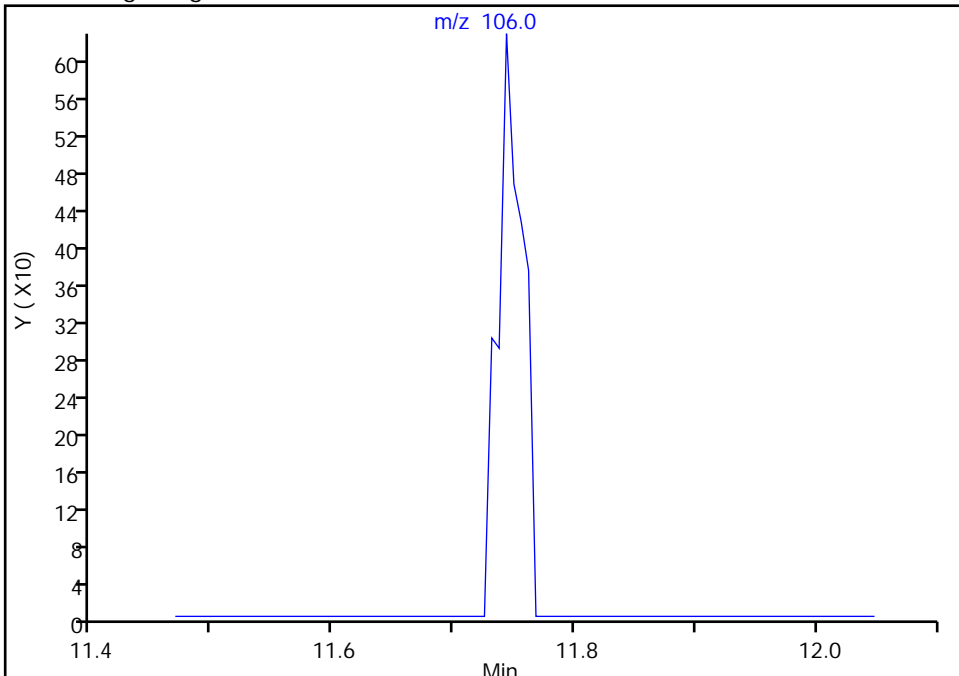
Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S48.D  
Injection Date: 04-Mar-2021 03:38:30 Instrument ID: 19930  
Lims ID: 410-30627-A-13 Lab Sample ID: 410-30627-13  
Client ID: HD-QC1-0/1-1  
Operator ID: MEC29284 ALS Bottle#: 25 Worklist Smp#: 26  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: 8260 25ml HP31 Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

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

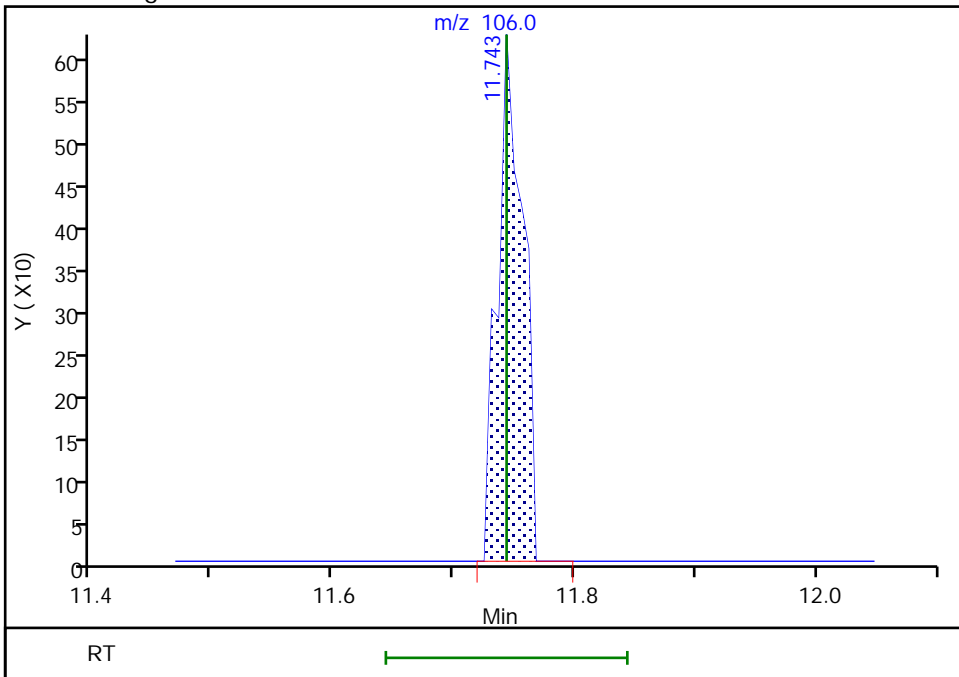
Signal: 1

Not Detected  
Expected RT: 11.74

Processing Integration Results



Manual Integration Results



RT: 11.74  
Area: 907  
Amount: 0.006940  
Amount Units: ug/l

Reviewer: knouses, 04-Mar-2021 12:55:05  
Audit Action: Manually Integrated

Audit Reason: Missed Peak

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-30627-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: HD-QC1-0/1-2 Lab Sample ID: 410-30627-14  
 Matrix: Water Lab File ID: IM03S31.D  
 Analysis Method: 8260D Date Collected: 02/25/2021 00:00  
 Sample wt/vol: 25 (mL) Date Analyzed: 03/03/2021 21:36  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: R-624SilMS 30m ID: 0.25 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 99333 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	^c	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	0.18	J	0.50	0.070
100-42-5	Styrene	ND		0.50	0.050
127-18-4	Tetrachloroethene	ND		0.50	0.060
108-88-3	Toluene	ND		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	ND		0.50	0.060

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-30627-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: HD-QC1-0/1-2 Lab Sample ID: 410-30627-14  
 Matrix: Water Lab File ID: IM03S31.D  
 Analysis Method: 8260D Date Collected: 02/25/2021 00:00  
 Sample wt/vol: 25 (mL) Date Analyzed: 03/03/2021 21:36  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: R-624SilMS 30m ID: 0.25 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 99333 Units: ug/L

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

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		80-120
460-00-4	4-Bromofluorobenzene (Surr)	97		80-120
1868-53-7	Dibromofluoromethane (Surr)	102		80-120
2037-26-5	Toluene-d8 (Surr)	98		80-120

Eurofins Lancaster Laboratories Env, LLC  
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S31.D  
 Lims ID: 410-30627-A-14  
 Client ID: HD-QC1-0/1-2  
 Sample Type: Client  
 Inject. Date: 03-Mar-2021 21:36:30 ALS Bottle#: 8 Worklist Smp#: 9  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0023228-009  
 Misc. Info.: 410-30627-A-14  
 Operator ID: MEC29284 Instrument ID: 19930  
 Method: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\8260 25ml HP31.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 04-Mar-2021 13:06:32 Calib Date: 23-Nov-2020 18:05:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23117.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1631

First Level Reviewer: knouses

Date: 04-Mar-2021 12:20:28

Compound	Sig	RT (min.)	Exp RT (min.)	Diff RT (min.)	Q	Response	OnCol Amt ug/l	Flags
4 Chloromethane	50	2.172	2.184	-0.012	97	5145	0.0570	
5 Vinyl chloride	62		2.306				ND	
7 Bromomethane	94		2.629				ND	
8 Chloroethane	64		2.709				ND	
14 1,1-Dichloroethene	96		3.574				ND	
15 Acetone	43	3.623	3.605	0.018	66	4312	0.4691	
19 Carbon disulfide	76		3.885				ND	7
23 Methylene Chloride	84	4.257	4.251	0.006	44	11407	0.1771	
* 24 t-Butyl alcohol-d10 (IS)	65	4.257	4.275	-0.018	0	168591	50.0	
27 Methyl tert-butyl ether	73		4.659				ND	
28 trans-1,2-Dichloroethene	96		4.672				ND	
31 1,1-Dichloroethane	63		5.330				ND	
36 2-Butanone (MEK)	43		6.122				ND	
37 cis-1,2-Dichloroethene	96		6.159				ND	
43 Chlorobromomethane	128		6.488				ND	
45 Chloroform	83		6.641				ND	
\$ 46 Dibromofluoromethane (Surr)	113	6.854	6.854	0.000	94	548704	10.2	
47 1,1,1-Trichloroethane	97		6.866				ND	
50 Carbon tetrachloride	117		7.080				ND	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.305	7.305	0.000	0	111927	10.3	
54 Benzene	78		7.336				ND	
56 1,2-Dichloroethane	62	7.427	7.409	0.018	1	1777	0.0264	M
* 58 Fluorobenzene (IS)	96	7.738	7.738	0.000	99	2179616	10.0	
61 Trichloroethene	95		8.214				ND	
63 1,2-Dichloropropane	63		8.549				ND	
68 Dichlorobromomethane	83		8.890				ND	
73 cis-1,3-Dichloropropene	75		9.433				ND	
74 4-Methyl-2-pentanone (MIBK)	43		9.597				ND	
\$ 75 Toluene-d8 (Surr)	98	9.744	9.738	0.006	94	2168498	9.83	
76 Toluene	92		9.817				ND	7
78 trans-1,3-Dichloropropene	75		10.067				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
80 1,1,2-Trichloroethane	97		10.274				ND	
81 Tetrachloroethene	166		10.366				ND	
83 2-Hexanone	43		10.481				ND	
85 Chlorodibromomethane	129		10.652				ND	
86 Ethylene Dibromide	107		10.762				ND	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.189	0.000	85	1688476	10.0	
90 Chlorobenzene	112		11.213				ND	
S 89 Xylenes, Total	106		11.245				ND	7
91 1,1,1,2-Tetrachloroethane	131		11.298				ND	
92 Ethylbenzene	91		11.298				ND	
93 m-Xylene & p-Xylene	106		11.414				ND	
94 o-Xylene	106		11.743				ND	
95 Styrene	104		11.756				ND	
96 Bromoform	173		11.914				ND	
\$ 100 4-Bromofluorobenzene (Surr)	95	12.182	12.182	0.000	93	790845	9.68	
101 1,1,2,2-Tetrachloroethane	83		12.286				ND	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	94	958169	10.0	

### QC Flag Legend

#### Processing Flags

7 - Failed Limit of Detection

#### Review Flags

M - Manually Integrated

### Reagents:

MSV\_31\_826ISS\_00004

Amount Added: 5.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S31.D

Injection Date: 03-Mar-2021 21:36:30

Instrument ID: 19930

Operator ID: MEC29284

Lims ID: 410-30627-A-14

Lab Sample ID: 410-30627-14

Worklist Smp#: 9

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

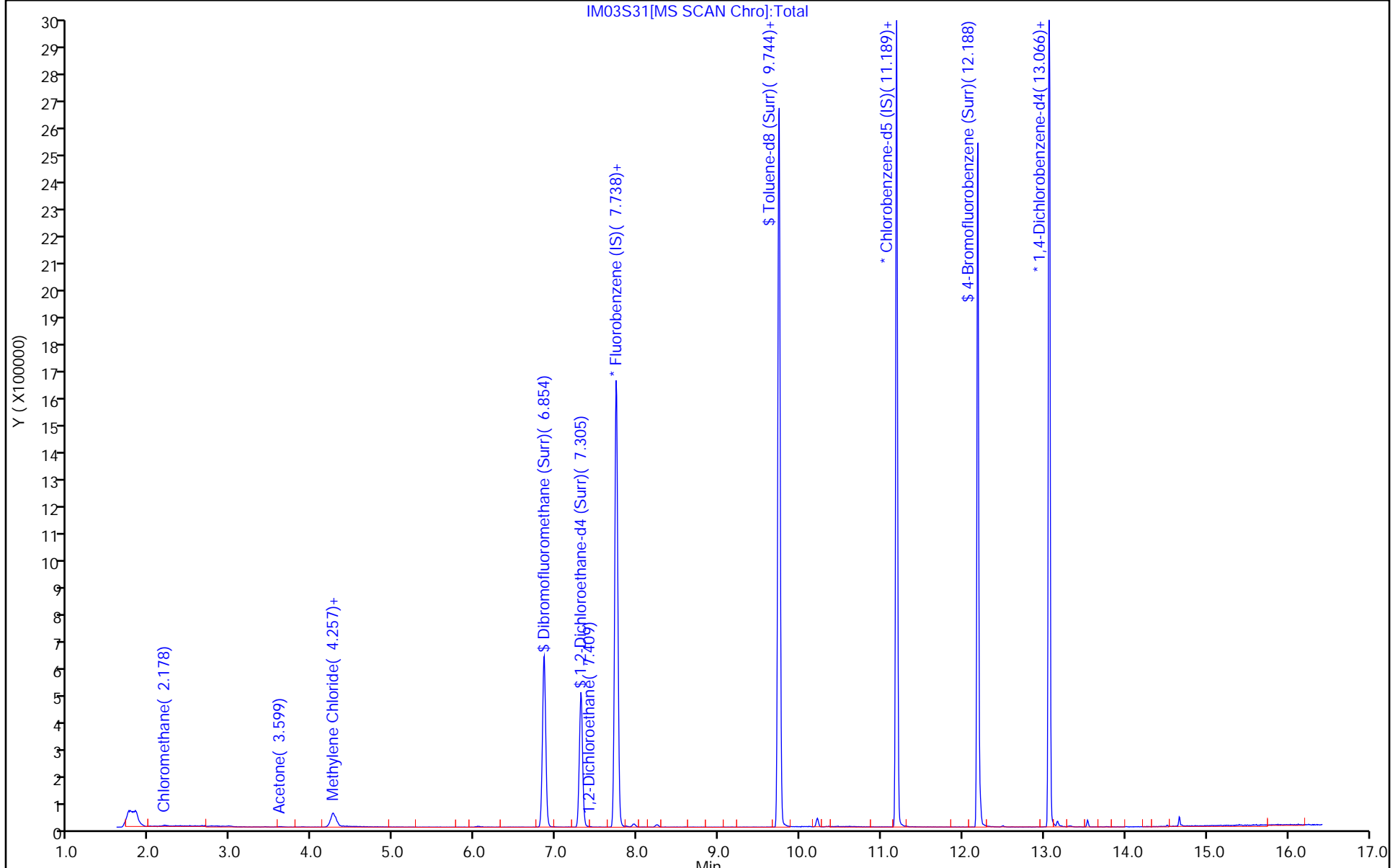
ALS Bottle#: 8

Method: 8260 25ml HP31

Limit Group: MSV - 8260C\_D

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

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





Eurofins Lancaster Laboratories Env, LLC  
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S31.D  
 Lims ID: 410-30627-A-14  
 Client ID: HD-QC1-0/1-2  
 Sample Type: Client  
 Inject. Date: 03-Mar-2021 21:36:30 ALS Bottle#: 8 Worklist Smp#: 9  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0023228-009  
 Misc. Info.: 410-30627-A-14  
 Operator ID: MEC29284 Instrument ID: 19930  
 Method: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\8260 25ml HP31.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 04-Mar-2021 13:06:32 Calib Date: 23-Nov-2020 18:05:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I17.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1631

First Level Reviewer: knouses

Date: 04-Mar-2021 12:20:28

Compound	Amount Added	Amount Recovered	% Rec.
\$ 46 Dibromofluoromethane (Surr)	10.0	10.2	101.96
\$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	10.3	103.15
\$ 75 Toluene-d8 (Surr)	10.0	9.83	98.34
\$ 100 4-Bromofluorobenzene (Surr)	10.0	9.68	96.85

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S31.D

Injection Date: 03-Mar-2021 21:36:30

Instrument ID: 19930

Lims ID: 410-30627-A-14

Lab Sample ID: 410-30627-14

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

Operator ID: MEC29284

ALS Bottle#: 8

Worklist Smp#: 9

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

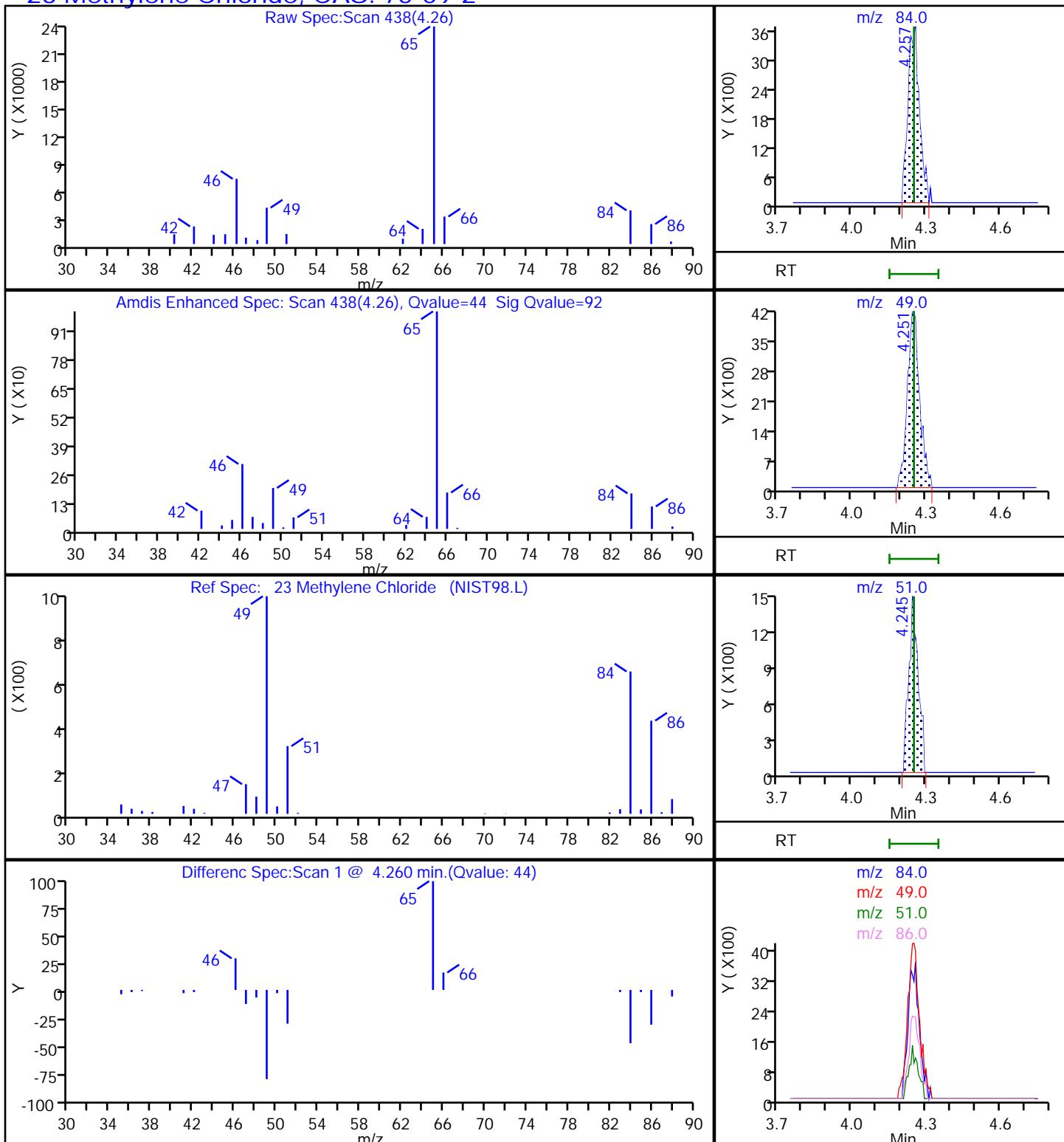
Method: 8260 25ml HP31

Limit Group: MSV - 8260C\_D

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

MS Quad

### 23 Methylene Chloride, CAS: 75-09-2



Eurofins Lancaster Laboratories Env, LLC

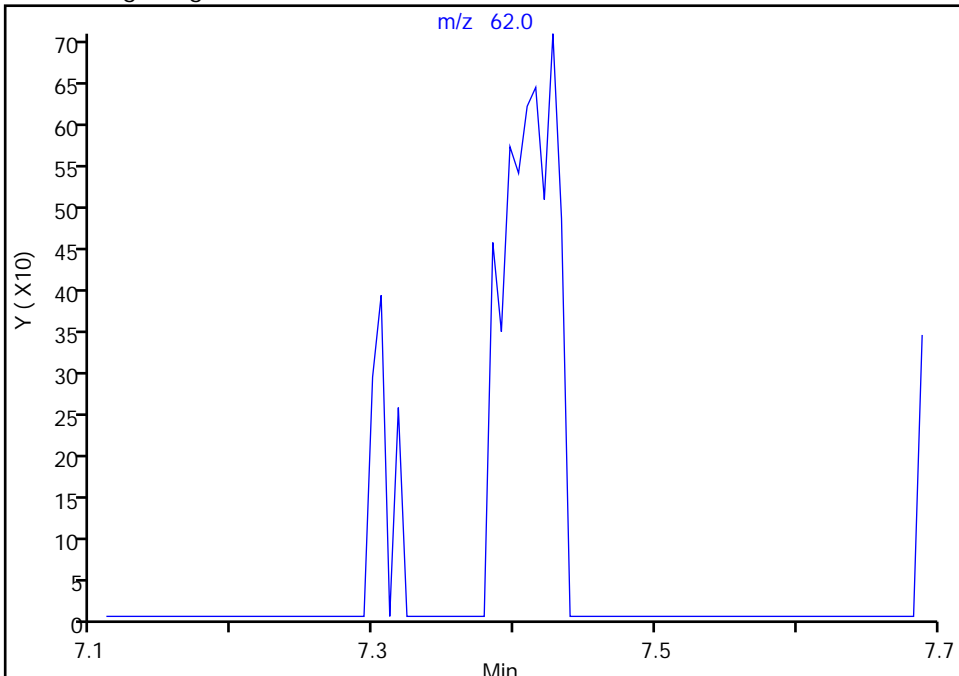
Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S31.D  
Injection Date: 03-Mar-2021 21:36:30 Instrument ID: 19930  
Lims ID: 410-30627-A-14 Lab Sample ID: 410-30627-14  
Client ID: HD-QC1-0/1-2  
Operator ID: MEC29284 ALS Bottle#: 8 Worklist Smp#: 9  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: 8260 25ml HP31 Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

56 1,2-Dichloroethane, CAS: 107-06-2

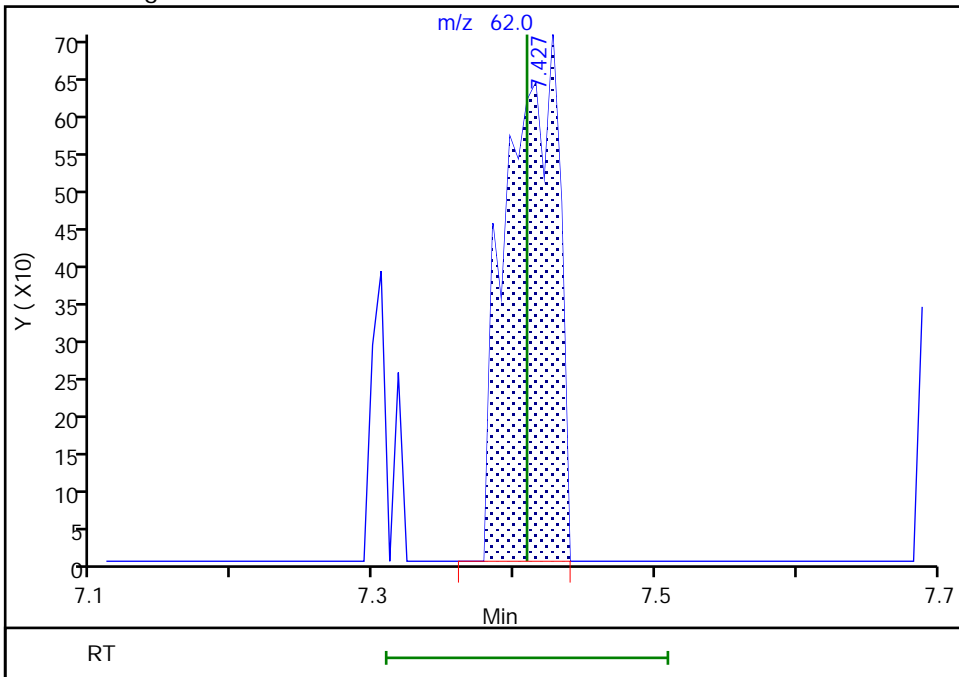
Signal: 1

Not Detected  
Expected RT: 7.41

Processing Integration Results



Manual Integration Results



RT: 7.43  
Area: 1777  
Amount: 0.026354  
Amount Units: ug/l

Reviewer: knouses, 04-Mar-2021 12:19:56  
Audit Action: Manually Integrated

Audit Reason: Missed Peak

FORM VI  
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA  
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-30627-1

Analy Batch No.: 70996

SDG No.: \_\_\_\_\_

Instrument ID: 16334

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

Heated Purge: (Y/N) N

Calibration Start Date: 11/30/2020 12:50

Calibration End Date: 11/30/2020 15:03

Calibration ID: 16331

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-70996/9	GN30I07.D
Level 2	IC 410-70996/8	GN30I06.D
Level 3	IC 410-70996/7	GN30I05.D
Level 4	IC 410-70996/6	GN30I04.D
Level 5	IC 410-70996/5	GN30I03.D
Level 6	ICIS 410-70996/4	GN30I02.D
Level 7	IC 410-70996/3	GN30I01.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R <sup>2</sup> OR COD	#	MIN R <sup>2</sup> 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.: 410-30627-1

Analy Batch No.: 70996

SDG No.: \_\_\_\_\_

Instrument ID: 16334

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

Heated Purge: (Y/N) N

Calibration Start Date: 11/30/2020 12:50

Calibration End Date: 11/30/2020 15:03

Calibration ID: 16331

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R <sup>2</sup> OR COD	#	MIN R <sup>2</sup> 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.: 410-30627-1

Analy Batch No.: 70996

SDG No.: \_\_\_\_\_

Instrument ID: 16334

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

Heated Purge: (Y/N) N

Calibration Start Date: 11/30/2020 12:50

Calibration End Date: 11/30/2020 15:03

Calibration ID: 16331

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7															
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.: 410-30627-1

Analy Batch No.: 70996

SDG No.: \_\_\_\_\_

Instrument ID: 16334

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

Heated Purge: (Y/N) N

Calibration Start Date: 11/30/2020 12:50

Calibration End Date: 11/30/2020 15:03

Calibration ID: 16331

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R <sup>2</sup> OR COD	#	MIN R <sup>2</sup> 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.: 410-30627-1

Analy Batch No.: 70996

SDG No.: \_\_\_\_\_

Instrument ID: 16334

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

Heated Purge: (Y/N) N

Calibration Start Date: 11/30/2020 12:50

Calibration End Date: 11/30/2020 15:03

Calibration ID: 16331

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7															
1,1,2,2-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.: 410-30627-1 Analy Batch No.: 70996

SDG No.: \_\_\_\_\_

Instrument ID: 16334 GC Column: R-624SilMS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/30/2020 12:50 Calibration End Date: 11/30/2020 15:03 Calibration ID: 16331

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7															
1,3,5-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.: 410-30627-1

Analy Batch No.: 70996

SDG No.: \_\_\_\_\_

Instrument ID: 16334

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

Heated Purge: (Y/N) N

Calibration Start Date: 11/30/2020 12:50

Calibration End Date: 11/30/2020 15:03

Calibration ID: 16331

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-70996/9	GN30I07.D
Level 2	IC 410-70996/8	GN30I06.D
Level 3	IC 410-70996/7	GN30I05.D
Level 4	IC 410-70996/6	GN30I04.D
Level 5	IC 410-70996/5	GN30I03.D
Level 6	ICIS 410-70996/4	GN30I02.D
Level 7	IC 410-70996/3	GN30I01.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 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	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	TBAdl 0	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	TBAdl 0	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.: 410-30627-1

Analy Batch No.: 70996

SDG No.:

Instrument ID: 16334

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

Heated Purge: (Y/N) N

Calibration Start Date: 11/30/2020 12:50

Calibration End Date: 11/30/2020 15:03

Calibration ID: 16331

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
			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	TBAdl 0	Ave	6751	12966	29330	58429	130819	0.200	0.500	1.00	2.00	5.00
Allyl chloride	FB	Ave	244232 18885 870096	690648 50604 2189679	96698	183197	443750	10.0 0.200 10.0	25.0 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	TBAdl 0	Ave	12558 646096	37272 1538645	78250	140629	325105	4.00 200	10.0 500	20.0	40.0	100
Acrylonitrile	TBAdl 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)	TBAdl 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	TBAdl 0	Ave	14908 833953	45761 2056391	97449	174294	406595	4.00 200	10.0 500	20.0	40.0	100
Methacrylonitrile	TBAdl 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.: 410-30627-1

Analy Batch No.: 70996

SDG No.:

Instrument ID: 16334

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

Heated Purge: (Y/N) N

Calibration Start Date: 11/30/2020 12:50

Calibration End Date: 11/30/2020 15:03

Calibration ID: 16331

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
			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	TBAdl 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	TBAdl 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	TBAdl 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	TBAdl 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.: 410-30627-1

Analy Batch No.: 70996

SDG No.:

Instrument ID: 16334

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

Heated Purge: (Y/N) N

Calibration Start Date: 11/30/2020 12:50

Calibration End Date: 11/30/2020 15:03

Calibration ID: 16331

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
			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	44863	96897	180791	446843	2.00	5.00	10.0	20.0	50.0
			899063	2280829				100	250			
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	222955	478190	887415	2154238	2.00	5.00	10.0	20.0	50.0
			4346527	10637772				100	250			
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	157747	334821	645054	1570233	2.00	5.00	10.0	20.0	50.0
			3134600	7771959				100	250			
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.: 410-30627-1

Analy Batch No.: 70996

SDG No.:

Instrument ID: 16334

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

Heated Purge: (Y/N) N

Calibration Start Date: 11/30/2020 12:50

Calibration End Date: 11/30/2020 15:03

Calibration ID: 16331

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Styrene	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.: 410-30627-1

Analy Batch No.: 70996

SDG No.: \_\_\_\_\_

Instrument ID: 16334

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

Heated Purge: (Y/N) N

Calibration Start Date: 11/30/2020 12:50

Calibration End Date: 11/30/2020 15:03

Calibration ID: 16331

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)					
			LVL 1	LVL 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

FORM VI  
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA  
READBACK PERCENT ERROR

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-30627-1 Analy Batch No.: 70996

SDG No.: \_\_\_\_\_

Instrument ID: 16334 GC Column: R-624SilMS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/30/2020 12:50 Calibration End Date: 11/30/2020 15:03 Calibration ID: 16331

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-70996/9	GN30I07.D
Level 2	IC 410-70996/8	GN30I06.D
Level 3	IC 410-70996/7	GN30I05.D
Level 4	IC 410-70996/6	GN30I04.D
Level 5	IC 410-70996/5	GN30I03.D
Level 6	ICIS 410-70996/4	GN30I02.D
Level 7	IC 410-70996/3	GN30I01.D

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
Dichlorodifluoromethane	-8.9						30					
Chloromethane	10.2						30					
1,3-Butadiene	20.6						30					
Vinyl chloride	5.5						30					
Bromomethane	13.8						30					
Chloroethane	11.2						30					
Dichlorofluoromethane	23.2						30					
Trichlorofluoromethane	-3.6						30					
Ethyl ether	-0.3						30					
Freon 123a	7.5						30					
Acrolein	2.5						30					
1,1-Dichloroethene	2.6						30					
Freon 113	-28.7						30					
Acetone	29.9						30					
Methyl iodide	-3.1						30					



FORM VI  
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA  
READBACK PERCENT ERROR

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-30627-1

Analy Batch No.: 70996

SDG No.: \_\_\_\_\_

Instrument ID: 16334

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

Heated Purge: (Y/N) N

Calibration Start Date: 11/30/2020 12:50

Calibration End Date: 11/30/2020 15:03

Calibration ID: 16331

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
Carbon disulfide	-2.1						30					
Methyl acetate	23.0						30					
Allyl chloride	2.8						30					
Methylene Chloride	-0.2						30					
t-Butyl alcohol	-5.5						30					
Acrylonitrile	-6.8						30					
Methyl tert-butyl ether	0.2						30					
trans-1,2-Dichloroethene	-0.9						30					
n-Hexane	-18.0						30					
1,1-Dichloroethane	-4.1						30					
di-Isopropyl ether	0.1						30					
2-Chloro-1,3-butadiene	-0.2						30					
Ethyl t-butyl ether	-0.4						30					
2-Butanone (MEK)	2.3						30					
cis-1,2-Dichloroethene	-4.8						30					
2,2-Dichloropropane	0.1						30					
Propionitrile	-10.5						30					
Methacrylonitrile	5.5						30					
Bromochloromethane	1.4						30					
Tetrahydrofuran	2.1						30					
Chloroform	-1.1						30					

FORM VI  
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA  
READBACK PERCENT ERROR

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-30627-1

Analy Batch No.: 70996

SDG No.: \_\_\_\_\_

Instrument ID: 16334

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

Heated Purge: (Y/N) N

Calibration Start Date: 11/30/2020 12:50

Calibration End Date: 11/30/2020 15:03

Calibration ID: 16331

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
1,1,1-Trichloroethane	0.2						30					
Cyclohexane	-18.9						30					
Carbon tetrachloride	-1.9						30					
1,1-Dichloropropene	-0.2						30					
Isobutyl alcohol	20.3						30					
Benzene	-1.5						30					
1,2-Dichloroethane	12.7						30					
t-Amyl methyl ether	-0.4						30					
n-Heptane	-13.9						30					
n-Butanol	9.1						30					
Trichloroethene	2.4						30					
Methylcyclohexane	-11.3						30					
1,2-Dichloropropane	1.7						30					
Methyl methacrylate	-0.6						30					
1,4-Dioxane	-41.2 *						30					
Dibromomethane	2.9						30					
Bromodichloromethane	-1.5						30					
2-Nitropropane	2.0						30					
cis-1,3-Dichloropropene	-3.3						30					
4-Methyl-2-pentanone (MIBK)	0.2						30					
Toluene	0.8						30					

FORM VI  
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA  
READBACK PERCENT ERROR

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-30627-1 Analy Batch No.: 70996

SDG No.: \_\_\_\_\_

Instrument ID: 16334 GC Column: R-624SilMS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/30/2020 12:50 Calibration End Date: 11/30/2020 15:03 Calibration ID: 16331

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
trans-1,3-Dichloropropene	-4.1						30					
Ethyl methacrylate	1.5						30					
1,1,2-Trichloroethane	-0.6						30					
Tetrachloroethene	-3.5						30					
1,3-Dichloropropane	1.8						30					
2-Hexanone	0.2						30					
Dibromochloromethane	-6.9						30					
1,2-Dibromoethane (EDB)	-0.4						30					
1-Chlorohexane	12.5						30					
Chlorobenzene	0.4						30					
1,1,1,2-Tetrachloroethane	-4.1						30					
Ethylbenzene	3.7						30					
m&p-Xylene	-2.3						30					
o-Xylene	1.9						30					
Styrene	-0.7						30					
Bromoform	-15.5						30					
Isopropylbenzene	0.7						30					
1,1,2,2-Tetrachloroethane	-6.1						30					
Bromobenzene	-0.4						30					
trans-1,4-Dichloro-2-butene	-13.4						30					
1,2,3-Trichloropropane	-8.4						30					

FORM VI  
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA  
READBACK PERCENT ERROR

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-30627-1 Analy Batch No.: 70996

SDG No.: \_\_\_\_\_

Instrument ID: 16334 GC Column: R-624SilMS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/30/2020 12:50 Calibration End Date: 11/30/2020 15:03 Calibration ID: 16331

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
N-Propylbenzene	1.2						30					
2-Chlorotoluene	0.5						30					
1,3,5-Trimethylbenzene	-3.6						30					
4-Chlorotoluene	-3.0						30					
tert-Butylbenzene	-0.2						30					
Pentachloroethane	-6.2						30					
1,2,4-Trimethylbenzene	0.3						30					
sec-Butylbenzene	0.8						30					
1,3-Dichlorobenzene	-0.1						30					
p-Isopropyltoluene	-1.6						30					
1,4-Dichlorobenzene	1.4						30					
1,2,3-Trimethylbenzene	7.1						30					
Benzyl chloride	-2.9						30					
n-Butylbenzene	-0.5						30					
1,2-Dichlorobenzene	-1.2						30					
1,2-Dibromo-3-Chloropropane	-5.4						30					
1,3,5-Trichlorobenzene	2.0						30					
1,2,4-Trichlorobenzene	-1.1						30					
Hexachlorobutadiene	3.3						30					
Naphthalene	2.4						30					
1,2,3-Trichlorobenzene	1.7						30					

FORM VI  
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA  
READBACK PERCENT ERROR

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-30627-1 Analy Batch No.: 70996

SDG No.: \_\_\_\_\_

Instrument ID: 16334 GC Column: R-624SilMS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/30/2020 12:50 Calibration End Date: 11/30/2020 15:03 Calibration ID: 16331

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
Dibromofluoromethane (Surr)	-1.4						30					
1,2-Dichloroethane-d4 (Surr)	-0.9						30					
Toluene-d8 (Surr)	0.8						30					
4-Bromofluorobenzene (Surr)	1.1						30					

Eurofins Lancaster Laboratories Env, LLC  
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I01.D  
 Lims ID: IC std7  
 Client ID:  
 Sample Type: IC Calib Level: 7  
 Inject. Date: 30-Nov-2020 12:50:30 ALS Bottle#: 2 Worklist Smp#: 3  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0016641-003  
 Misc. Info.: IC STD7  
 Operator ID: DVV10203 Instrument ID: 16334  
 Sublist: chrom-MSV\_16334\_25mL\*sub4  
 Method: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\MSV\_16334\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 01-Dec-2020 18:56:56 Calib Date: 30-Nov-2020 18:23:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I17.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1610

First Level Reviewer: virayd

Date: 01-Dec-2020 11:39:16

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.940	1.953	-0.013	99	1495396	25.0	25.6	
5 Chloromethane	50	2.142	2.148	-0.006	99	1849975	25.0	23.4	
6 Butadiene	39	2.251	2.264	-0.013	96	1847653	25.0	20.6	
7 Vinyl chloride	62	2.257	2.270	-0.013	98	1645533	25.0	24.4	
9 Bromomethane	94	2.574	2.593	-0.019	91	1090646	25.0	23.2	
10 Chloroethane	64	2.654	2.666	-0.012	100	966420	25.0	23.6	
11 Dichlorofluoromethane	67	2.891	2.904	-0.013	97	2101552	25.0	22.9	
13 Trichlorofluoromethane	101	2.965	2.977	-0.012	97	1955497	25.0	25.2	
15 Ethyl ether	59	3.196	3.208	-0.012	94	1114451	25.0	24.3	
16 1,2-Dichloro-1,1,2-trifluoroethane	67	3.288	3.300	-0.012	93	1496120	25.0	23.6	
18 Acrolein	56	3.373	3.385	-0.012	99	8876973	1250.0	1314.9	
19 1,1-Dichloroethene	96	3.507	3.519	-0.012	97	1129827	25.0	24.1	
21 112TCTFE	101	3.544	3.556	-0.012	92	1213458	25.0	26.5	
20 Acetone	43	3.544	3.562	-0.018	100	2047683	250.0	234.6	
22 Iodomethane	142	3.696	3.714	-0.018	98	2146588	25.0	24.5	
23 Isopropyl alcohol	45	3.721	3.727	-0.007	48	773552	500.0	433.4	
24 Ethyl bromide	108	3.727	3.739	-0.012	98	986182	25.0	24.2	
25 Carbon disulfide	76	3.800	3.812	-0.012	99	4255752	25.0	24.6	
26 Methyl acetate	43	3.952	3.971	-0.018	98	690648	25.0	26.1	M
27 3-Chloro-1-propene	41	3.977	3.989	-0.012	93	2189679	25.0	23.3	
28 Methylene Chloride	84	4.166	4.178	-0.012	94	1311628	25.0	24.4	
* 29 t-Butyl alcohol-d10 (IS)	65	4.196	4.202	-0.006	0	177877	50.0	50.0	
30 2-Methyl-2-propanol	59	4.318	4.336	-0.018	100	1538645	500.0	481.1	
31 Acrylonitrile	53	4.513	4.525	-0.012	98	1463905	125.0	129.7	
32 Methyl tert-butyl ether	73	4.568	4.580	-0.012	96	3592103	25.0	24.1	
33 trans-1,2-Dichloroethene	96	4.568	4.586	-0.018	98	1312619	25.0	24.3	
34 Hexane	57	4.995	5.007	-0.012	94	2081061	25.0	26.4	
36 1,1-Dichloroethane	63	5.239	5.251	-0.013	96	2486421	25.0	24.8	
37 Isopropyl ether	45	5.299	5.306	-0.007	96	4941744	25.0	24.3	
38 2-Chloro-1,3-butadiene	53	5.348	5.360	-0.012	91	2218551	25.0	24.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
39 Tert-butyl ethyl ether	59	5.836	5.836	0.000	99	4516790	25.0	24.3	
40 2-Butanone (MEK)	43	6.043	6.049	-0.006	100	4135516	250.0	255.7	
41 cis-1,2-Dichloroethene	96	6.074	6.086	-0.012	83	1486697	25.0	24.5	
42 2,2-Dichloropropane	77	6.092	6.092	0.000	88	2061512	25.0	24.5	
44 Propionitrile	54	6.147	6.147	0.000	99	2056391	500.0	512.9	
S 49 1,2-Dichloroethene, Total	100				0			48.9	
46 Methacrylonitrile	67	6.360	6.360	0.000	94	3857032	250.0	259.5	
48 Chlorobromomethane	128	6.409	6.409	0.000	96	651451	25.0	24.1	
47 Tetrahydrofuran	71	6.415	6.409	0.006	93	1074451	250.0	257.0	
50 Chloroform	83	6.561	6.561	0.000	93	2347914	25.0	24.3	
\$ 52 Dibromofluoromethane (Surr)	113	6.775	6.781	-0.006	94	543100	10.0	9.97	
51 1,1,1-Trichloroethane	97	6.781	6.787	-0.006	98	2022017	25.0	24.5	
53 Cyclohexane	56	6.872	6.878	-0.006	92	2456493	25.0	25.9	
56 Carbon tetrachloride	117	6.988	7.000	-0.012	95	1796395	25.0	25.1	
55 1,1-Dichloropropene	75	6.994	7.000	-0.006	98	1929345	25.0	24.9	
57 Isobutyl alcohol	41	7.165	7.165	0.000	95	1475056	1250.0	1159.5	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.232	7.232	0.000	0	117092	10.0	10.1	
59 Benzene	78	7.263	7.263	-0.001	97	5622443	25.0	24.6	
60 1,2-Dichloroethane	62	7.330	7.336	-0.006	97	1510198	25.0	23.6	M
62 Tert-amyl methyl ether	73	7.451	7.458	-0.007	98	3974346	25.0	24.3	
* 63 Fluorobenzene (IS)	96	7.665	7.671	-0.006	98	2249974	10.0	10.0	
64 n-Heptane	43	7.671	7.677	-0.006	94	2384149	25.0	26.9	
65 n-Butanol	56	8.043	8.049	-0.006	89	2867258	2500.0	2494.7	
67 Trichloroethene	95	8.140	8.147	-0.007	99	1428934	25.0	24.5	
68 Methylcyclohexane	83	8.445	8.451	-0.006	94	2337109	25.0	25.8	
69 1,2-Dichloropropane	63	8.476	8.482	-0.006	86	1481659	25.0	24.2	
70 2-ethoxy-2-methyl butane	87	8.488	8.488	0.000	91	2213829	25.0	24.7	
72 1,4-Dioxane	88	8.567	8.567	0.000	33	280447	1250.0	1371.5	
71 Methyl methacrylate	69	8.567	8.567	0.000	92	793834	25.0	26.2	
73 Dibromomethane	93	8.585	8.585	0.000	96	696745	25.0	24.6	
75 Dichlorobromomethane	83	8.823	8.823	0.000	100	1793553	25.0	25.3	
76 2-Nitropropane	41	9.110	9.110	0.000	97	2280829	250.0	265.7	
79 1-Bromo-2-chloroethane	63	9.213	9.219	-0.006	98	1613118	25.0	24.6	
80 cis-1,3-Dichloropropene	75	9.378	9.378	0.000	95	2324073	25.0	25.2	
81 4-Methyl-2-pentanone (MIBK)	43	9.555	9.561	-0.006	97	10637772	250.0	256.2	
\$ 82 Toluene-d8 (Surr)	98	9.689	9.689	0.000	94	2188553	10.0	9.89	
83 Toluene	92	9.762	9.762	0.000	98	3492002	25.0	24.3	
84 trans-1,3-Dichloropropene	75	10.024	10.024	0.000	93	1963134	25.0	25.3	
S 87 1,3-Dichloropropene, Total	100				0			50.5	
85 Ethyl methacrylate	69	10.085	10.085	0.000	91	1698291	25.0	24.4	
86 1,1,2-Trichloroethane	97	10.225	10.231	-0.006	90	1011153	25.0	24.1	
88 Tetrachloroethene	166	10.311	10.311	0.000	98	1545623	25.0	24.8	
89 1,3-Dichloropropane	76	10.390	10.396	-0.006	92	1831199	25.0	24.2	
91 2-Hexanone	43	10.445	10.451	-0.006	98	7771959	250.0	260.2	
93 Chlorodibromomethane	129	10.603	10.603	0.000	90	1288980	25.0	25.9	
94 Ethylene Dibromide	107	10.713	10.713	0.000	99	1013188	25.0	24.6	
* 95 Chlorobenzene-d5 (IS)	117	11.146	11.146	0.000	86	1658425	10.0	10.0	
96 1-Chlorohexane	91	11.158	11.158	0.000	98	2021466	25.0	23.4	
97 Chlorobenzene	112	11.170	11.176	-0.006	95	3902651	25.0	24.4	
S 101 Xylenes, Total	106				0			73.8	
98 1,1,1,2-Tetrachloroethane	131	11.256	11.256	0.000	96	1430192	25.0	25.1	
99 Ethylbenzene	91	11.262	11.262	0.000	99	6849934	25.0	24.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
100 m-Xylene & p-Xylene	106	11.378	11.378	0.000	98	5259805	50.0	49.1	
102 o-Xylene	106	11.707	11.707	0.000	97	2612526	25.0	24.6	
103 Styrene	104	11.719	11.719	0.000	95	4437047	25.0	24.5	
104 Bromoform	173	11.877	11.877	0.000	97	799958	25.0	27.6	
105 Isopropylbenzene	105	12.005	12.006	-0.001	96	6784295	25.0	24.4	
\$ 108 4-Bromofluorobenzene (Surr)	95	12.146	12.152	-0.006	89	833577	10.0	9.87	
109 1,1,2,2-Tetrachloroethane	83	12.255	12.255	0.000	92	1384788	25.0	24.6	
110 Bromobenzene	156	12.268	12.268	0.000	95	1663078	25.0	24.6	
111 trans-1,4-Dichloro-2-butene	53	12.280	12.280	0.000	91	3738276	250.0	290.0	
112 1,2,3-Trichloropropane	110	12.298	12.304	-0.006	79	345318	25.0	24.0	
113 N-Propylbenzene	91	12.335	12.335	0.000	99	8111815	25.0	24.0	
114 2-Chlorotoluene	126	12.414	12.414	0.000	97	1636772	25.0	24.7	
115 1,3,5-Trimethylbenzene	105	12.469	12.469	0.000	94	5889002	25.0	24.7	
116 4-Chlorotoluene	126	12.505	12.505	0.000	97	1693778	25.0	24.5	
118 tert-Butylbenzene	134	12.713	12.713	0.000	93	1265966	25.0	24.9	
120 Pentachloroethane	167	12.743	12.743	0.000	95	1117481	25.0	25.6	
119 1,2,4-Trimethylbenzene	105	12.755	12.755	0.000	97	6115025	25.0	24.6	
121 sec-Butylbenzene	105	12.877	12.877	0.000	94	7647756	25.0	24.7	
122 1,3-Dichlorobenzene	146	12.975	12.975	0.000	98	3371982	25.0	24.7	
123 4-Isopropyltoluene	119	12.981	12.981	0.000	97	6669275	25.0	24.8	
* 124 1,4-Dichlorobenzene-d4	152	13.030	13.030	0.000	93	896780	10.0	10.0	
125 1,4-Dichlorobenzene	146	13.048	13.048	0.000	94	3385890	25.0	24.4	
126 1,2,3-Trimethylbenzene	120	13.060	13.060	0.000	99	2646951	25.0	24.0	
127 Benzyl chloride	126	13.127	13.127	0.000	99	617345	25.0	25.3	
129 p-Diethylbenzene	119	13.182	13.182	0.000	92	4022632	25.0	24.6	
130 n-Butylbenzene	92	13.274	13.274	0.000	98	3504248	25.0	24.6	
131 1,2-Dichlorobenzene	146	13.310	13.310	0.000	98	3100816	25.0	24.4	
134 1,2-Dibromo-3-Chloropropane	155	13.853	13.853	0.000	94	208192	25.0	25.3	
135 1,3,5-Trichlorobenzene	180	13.975	13.975	0.000	98	2822323	25.0	24.7	
136 1,2,4-Trichlorobenzene	180	14.395	14.395	0.000	94	2570710	25.0	24.4	
137 Hexachlorobutadiene	225	14.481	14.481	0.000	96	1284715	25.0	24.8	
138 Naphthalene	128	14.578	14.578	0.000	97	4554237	25.0	23.7	
139 1,2,3-Trichlorobenzene	180	14.718	14.718	0.000	96	2227961	25.0	23.9	
140 2-Methylnaphthalene	142	15.340	15.340	0.000	92	3104331	25.0	22.6	

## QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

## Reagents:

MSV_RV1_826_00031	Amount Added: 25.00	Units: uL	
MSV_RV4GAS826_00097	Amount Added: 25.00	Units: uL	
MSV_RV4_826_00035	Amount Added: 25.00	Units: uL	
MSV_29_826ISS_00013	Amount Added: 1.00	Units: uL	Run Reagent



Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I01.D

Injection Date: 30-Nov-2020 12:50:30

Instrument ID: 16334

Operator ID: DVV10203

Lims ID: IC std7

Worklist Smp#: 3

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

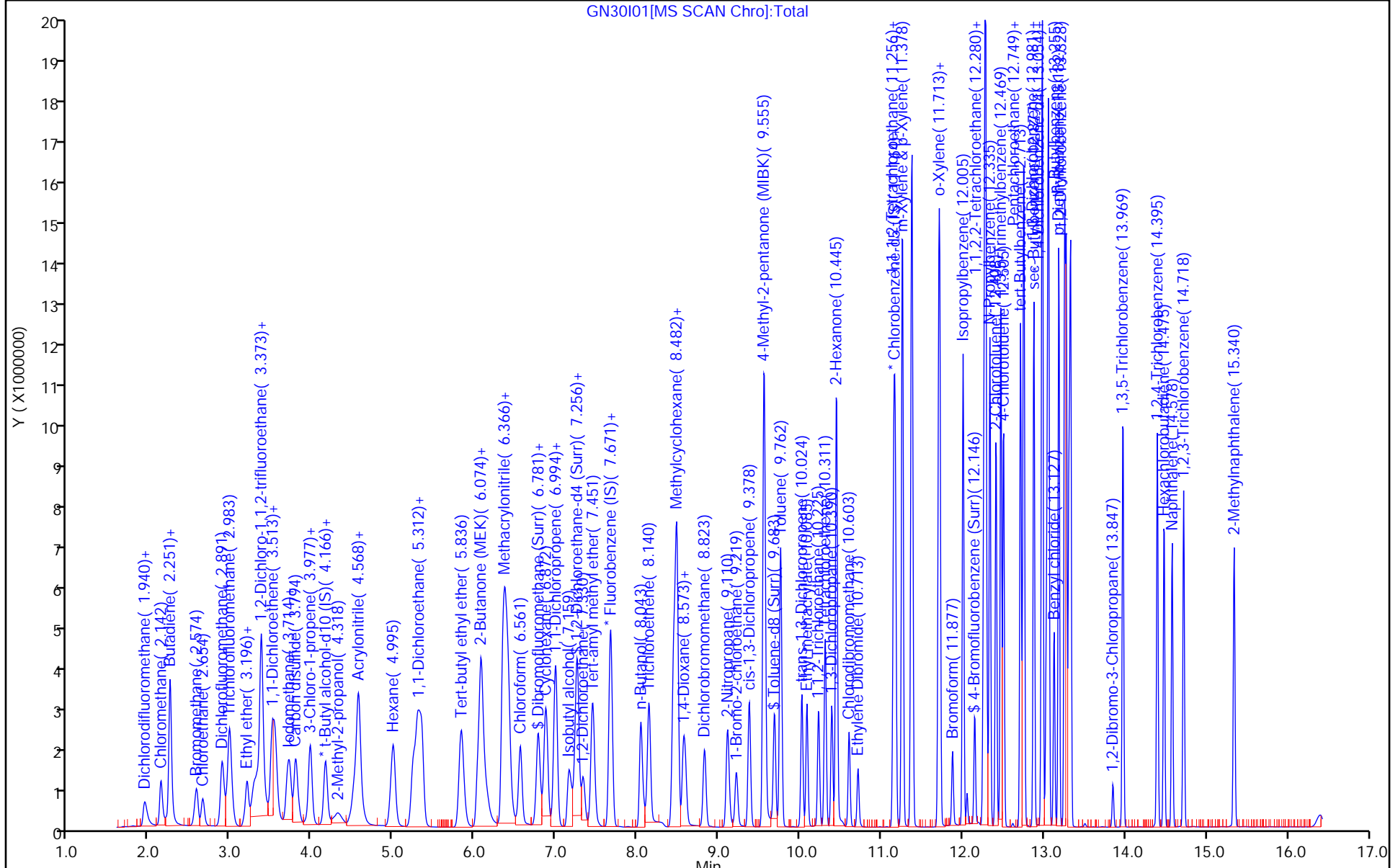
ALS Bottle#: 2

Method: MSV\_16334\_25mL

Limit Group: MSV - 8260C\_D

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

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



Eurofins Lancaster Laboratories Env, LLC

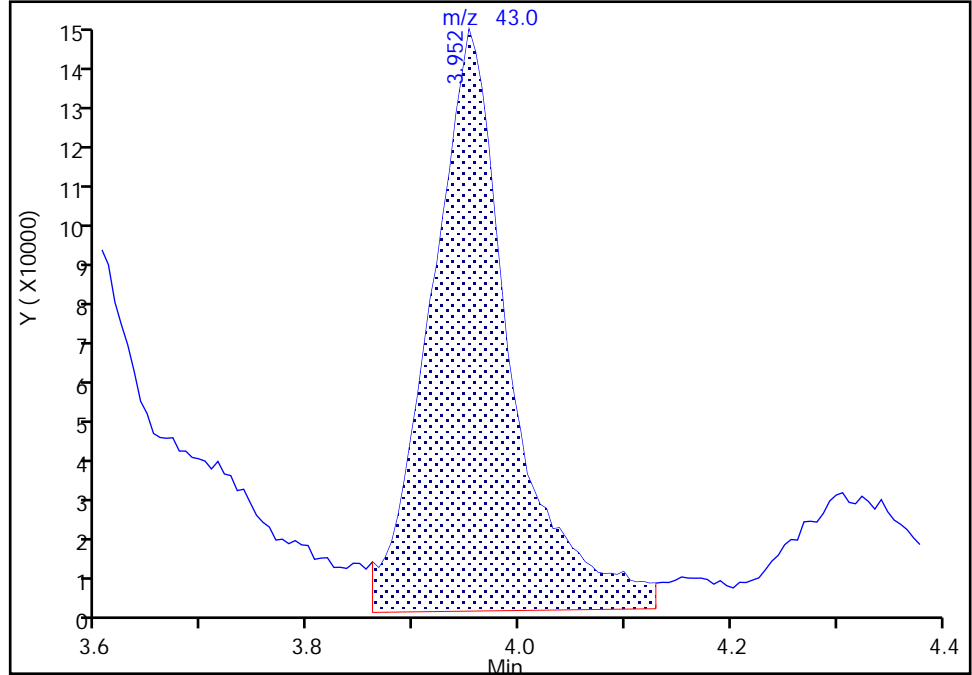
Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I01.D  
Injection Date: 30-Nov-2020 12:50:30 Instrument ID: 16334  
Lims ID: IC std7  
Client ID:  
Operator ID: DVV10203 ALS Bottle#: 2 Worklist Smp#: 3  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_16334\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

26 Methyl acetate, CAS: 79-20-9

Signal: 1

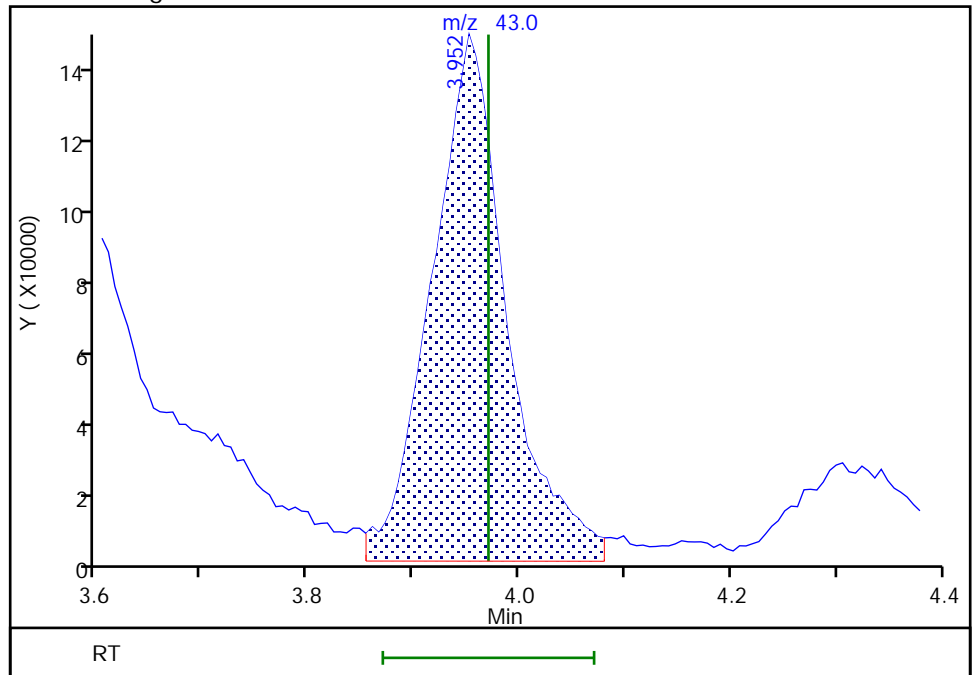
RT: 3.95  
Area: 749074  
Amount: 27.913187  
Amount Units: ug/l

Processing Integration Results



RT: 3.95  
Area: 690648  
Amount: 26.140420  
Amount Units: ug/l

Manual Integration Results



Reviewer: virayd, 01-Dec-2020 11:38:22  
Audit Action: Manually Integrated

Audit Reason: Other

Eurofins Lancaster Laboratories Env, LLC

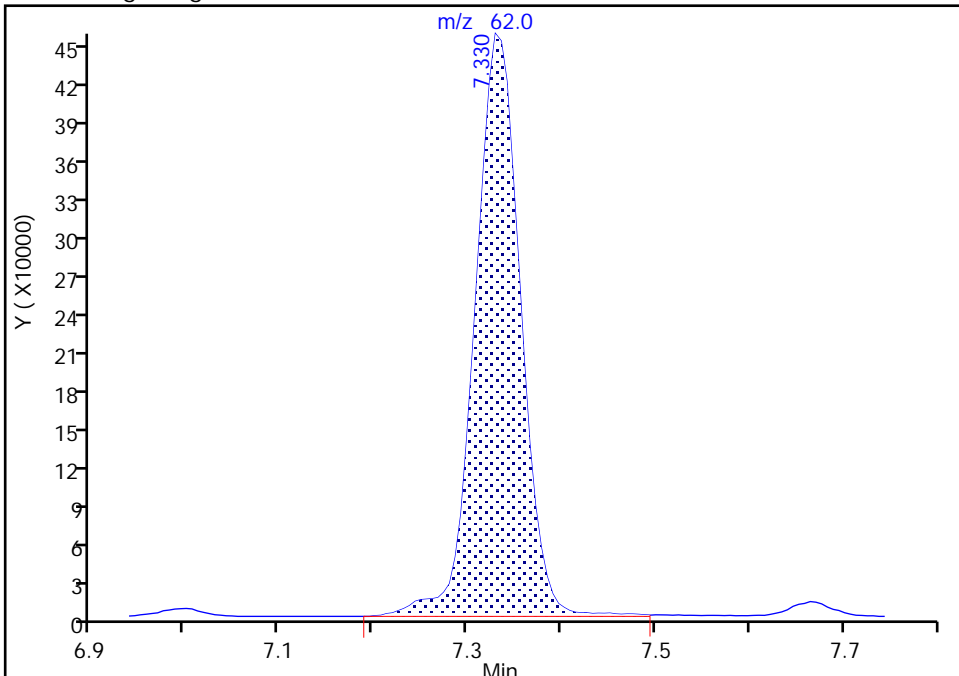
Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I01.D  
Injection Date: 30-Nov-2020 12:50:30 Instrument ID: 16334  
Lims ID: IC std7  
Client ID:  
Operator ID: DVV10203 ALS Bottle#: 2 Worklist Smp#: 3  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_16334\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

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

Signal: 1

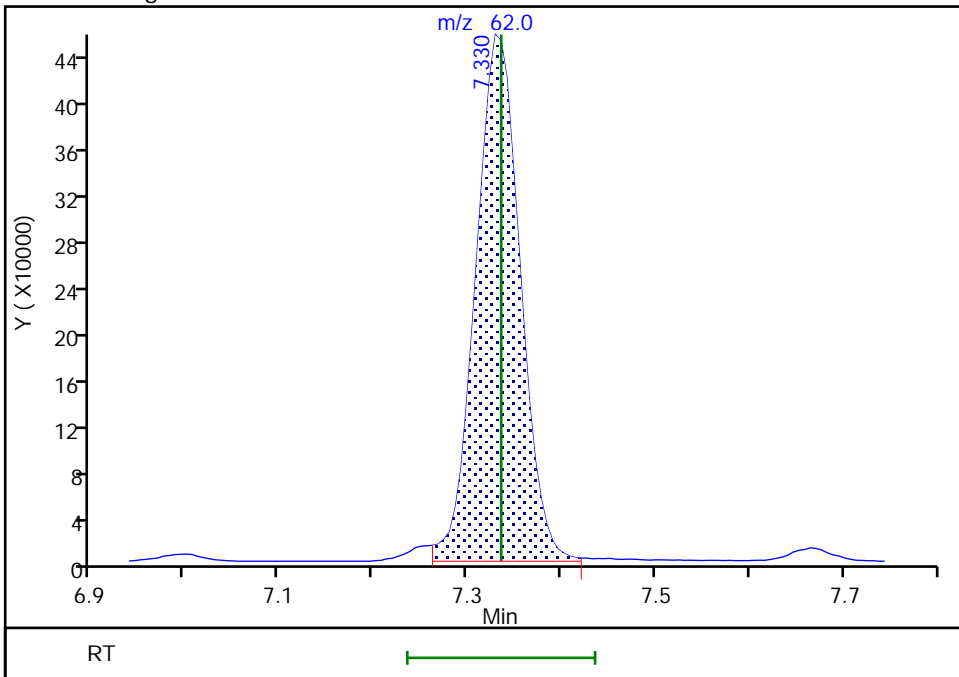
RT: 7.33  
Area: 1541889  
Amount: 23.957758  
Amount Units: ug/l

Processing Integration Results



RT: 7.33  
Area: 1510198  
Amount: 23.611228  
Amount Units: ug/l

Manual Integration Results



Reviewer: virayd, 01-Dec-2020 11:38:44  
Audit Action: Manually Integrated

Audit Reason: Other  
Page 491 of 966

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

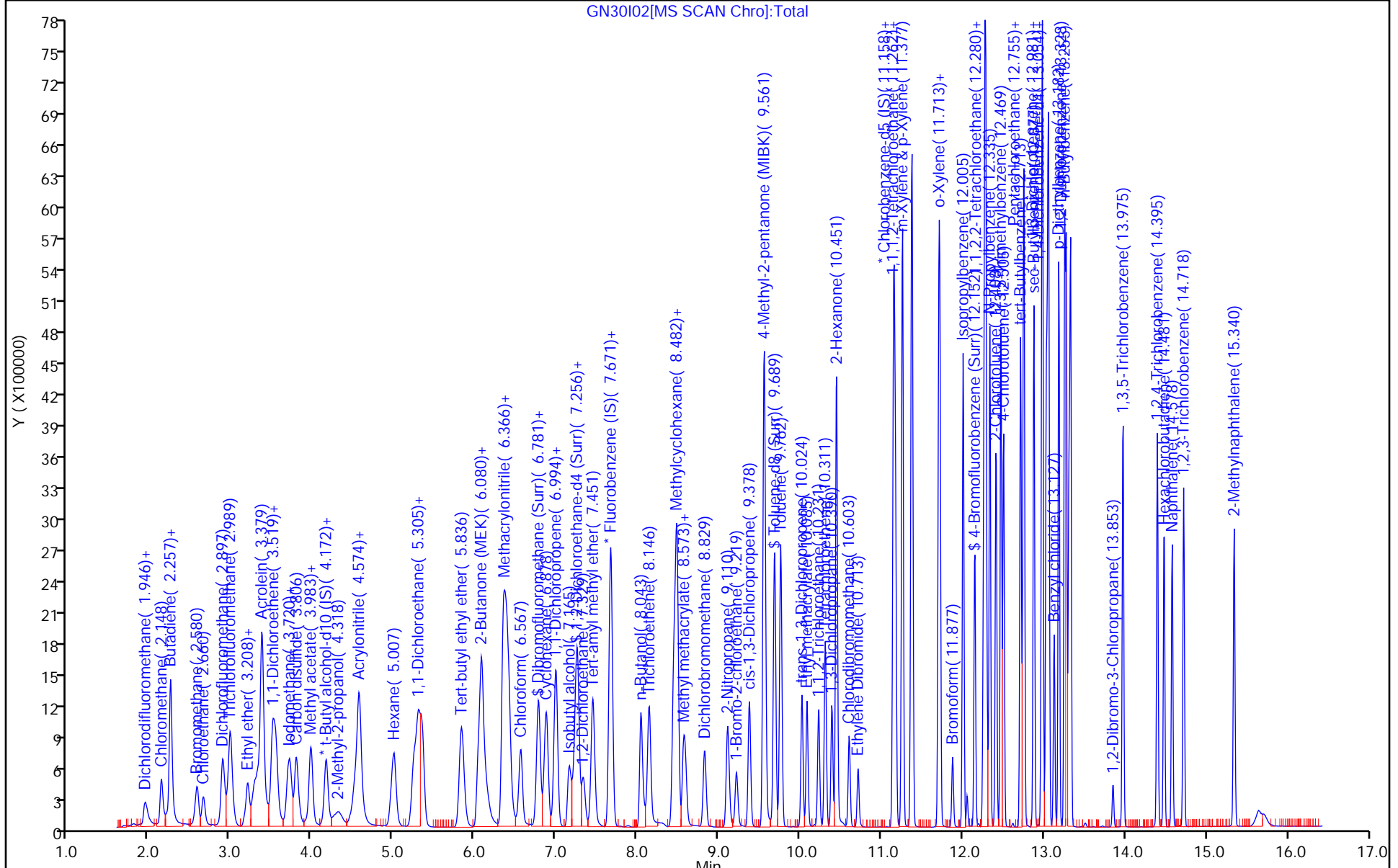
Processing Flags

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

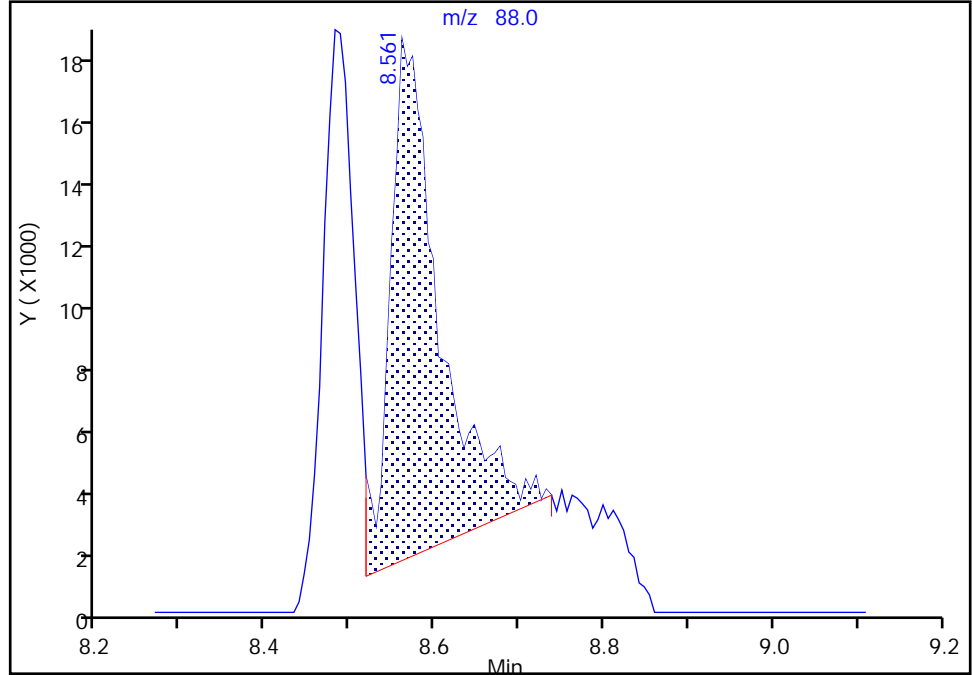
Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I02.D  
Injection Date: 30-Nov-2020 13:12:30 Instrument ID: 16334  
Lims ID: ICIS std6  
Client ID:  
Operator ID: DVV10203 ALS Bottle#: 3 Worklist Smp#: 4  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_16334\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

72 1,4-Dioxane, CAS: 123-91-1

Signal: 1

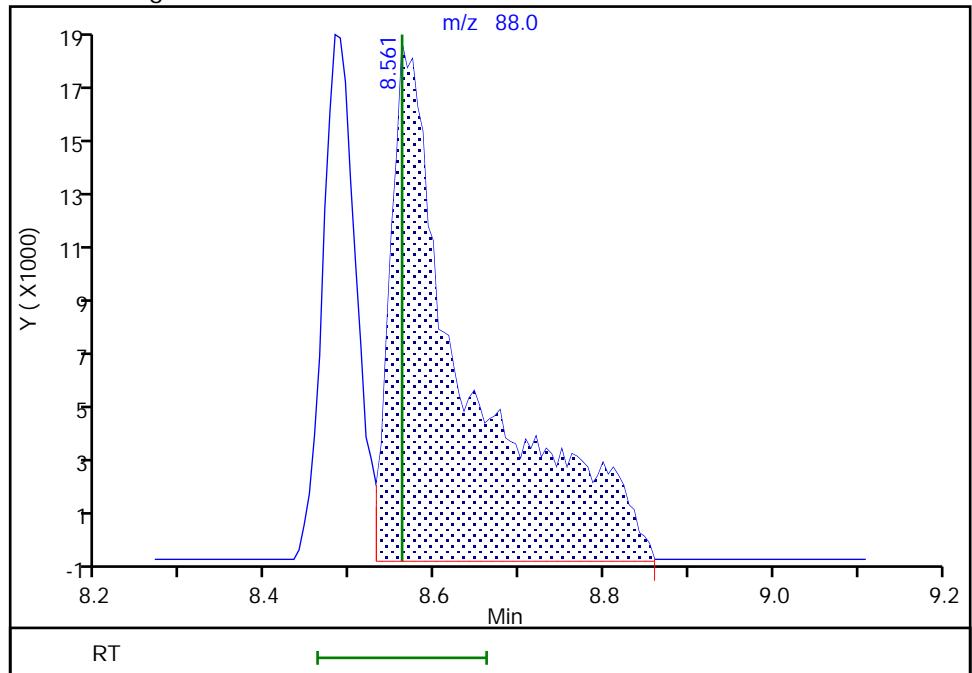
RT: 8.56  
Area: 66720  
Amount: 408.4380  
Amount Units: ug/l

Processing Integration Results



RT: 8.56  
Area: 116348  
Amount: 543.8519  
Amount Units: ug/l

Manual Integration Results



Reviewer: virayd, 01-Dec-2020 11:45:41  
Audit Action: Manually Integrated

Audit Reason: Other



Eurofins Lancaster Laboratories Env, LLC  
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I03.D  
 Lims ID: IC std5  
 Client ID:  
 Sample Type: IC Calib Level: 5  
 Inject. Date: 30-Nov-2020 13:34:30 ALS Bottle#: 4 Worklist Smp#: 5  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0016641-005  
 Misc. Info.: IC STD5  
 Operator ID: DVV10203 Instrument ID: 16334  
 Sublist: chrom-MSV\_16334\_25mL\*sub4  
 Method: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\MSV\_16334\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 01-Dec-2020 18:57:21 Calib Date: 30-Nov-2020 18:23:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I17.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1610

First Level Reviewer: virayd

Date: 01-Dec-2020 11:48:14

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.941	1.952	-0.011	99	285502	5.00	4.93	
5 Chloromethane	50	2.136	2.148	-0.012	99	368365	5.00	4.72	
6 Butadiene	39	2.245	2.257	-0.012	96	400995	5.00	4.51	
7 Vinyl chloride	62	2.251	2.257	-0.006	97	322069	5.00	4.83	
9 Bromomethane	94	2.575	2.580	-0.005	90	221448	5.00	4.77	
10 Chloroethane	64	2.654	2.660	-0.006	100	196409	5.00	4.86	
11 Dichlorofluoromethane	67	2.892	2.897	-0.005	97	427842	5.00	4.72	
13 Trichlorofluoromethane	101	2.965	2.971	-0.006	97	385200	5.00	5.02	
15 Ethyl ether	59	3.202	3.208	-0.006	95	218165	5.00	4.82	
16 1,2-Dichloro-1,1,2-trifluoroethane	67	3.294	3.294	0.000	94	302034	5.00	4.82	
18 Acrolein	56	3.373	3.379	-0.006	99	1726399	250.0	248.1	
19 1,1-Dichloroethene	96	3.507	3.513	-0.006	98	226327	5.00	4.88	
21 112TCTFE	101	3.544	3.550	-0.006	92	243555	5.00	5.37	
20 Acetone	43	3.544	3.550	-0.006	100	406309	50.0	45.2	
22 Iodomethane	142	3.696	3.702	-0.006	98	426388	5.00	4.92	
23 Isopropyl alcohol	45	3.715	3.727	-0.012	96	158997	100.0	90.1	
24 Ethyl bromide	108	3.727	3.733	-0.006	98	200380	5.00	4.96	
25 Carbon disulfide	76	3.794	3.806	-0.012	99	845631	5.00	4.95	
26 Methyl acetate	43	3.958	3.964	-0.006	98	130819	5.00	4.80	
27 3-Chloro-1-propene	41	3.977	3.989	-0.012	93	443750	5.00	4.78	
28 Methylene Chloride	84	4.166	4.172	-0.006	94	260868	5.00	4.91	
* 29 t-Butyl alcohol-d10 (IS)	65	4.178	4.208	-0.030	0	183343	50.0	50.0	
30 2-Methyl-2-propanol	59	4.306	4.318	-0.012	100	325105	100.0	98.6	M
31 Acrylonitrile	53	4.513	4.519	-0.006	98	296709	25.0	25.5	
32 Methyl tert-butyl ether	73	4.562	4.574	-0.012	95	716859	5.00	4.87	
33 trans-1,2-Dichloroethene	96	4.568	4.580	-0.012	97	258856	5.00	4.85	
34 Hexane	57	5.001	5.007	-0.006	94	411619	5.00	5.29	
36 1,1-Dichloroethane	63	5.239	5.245	-0.006	96	485770	5.00	4.90	
37 Isopropyl ether	45	5.294	5.299	-0.005	96	980101	5.00	4.86	
38 2-Chloro-1,3-butadiene	53	5.342	5.354	-0.012	91	441551	5.00	4.90	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
39 Tert-butyl ethyl ether	59	5.830	5.836	-0.006	99	903460	5.00	4.92	
40 2-Butanone (MEK)	43	6.037	6.043	-0.006	100	828352	50.0	49.7	
41 cis-1,2-Dichloroethene	96	6.080	6.080	0.000	83	293028	5.00	4.89	
42 2,2-Dichloropropane	77	6.086	6.092	-0.006	88	407651	5.00	4.91	
44 Propionitrile	54	6.147	6.147	0.000	99	406595	100.0	98.4	
S 49 1,2-Dichloroethene, Total	100				0			9.74	
46 Methacrylonitrile	67	6.348	6.354	-0.006	94	766425	50.0	50.0	
48 Chlorobromomethane	128	6.403	6.409	-0.006	69	130627	5.00	4.89	
47 Tetrahydrofuran	71	6.403	6.421	-0.018	82	215770	50.0	50.1	
50 Chloroform	83	6.556	6.561	-0.005	93	467191	5.00	4.89	
\$ 52 Dibromofluoromethane (Surr)	113	6.775	6.781	-0.006	94	540338	10.0	10.0	
51 1,1,1-Trichloroethane	97	6.781	6.787	-0.006	98	396057	5.00	4.85	
53 Cyclohexane	56	6.879	6.878	0.001	92	485144	5.00	5.17	
56 Carbon tetrachloride	117	6.988	6.988	0.000	97	346656	5.00	4.89	
55 1,1-Dichloropropene	75	6.994	7.000	-0.006	97	375317	5.00	4.89	
57 Isobutyl alcohol	41	7.153	7.159	-0.006	95	292232	250.0	232.2	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.226	7.238	-0.012	0	113626	10.0	9.91	
59 Benzene	78	7.263	7.262	0.001	97	1100869	5.00	4.87	
60 1,2-Dichloroethane	62	7.330	7.336	-0.006	97	295549	5.00	4.67	M
62 Tert-amyl methyl ether	73	7.446	7.451	-0.005	98	788786	5.00	4.87	
* 63 Fluorobenzene (IS)	96	7.665	7.671	-0.006	98	2225560	10.0	10.0	
64 n-Heptane	43	7.671	7.677	-0.006	94	463712	5.00	5.28	
65 n-Butanol	56	8.043	8.043	0.000	89	586370	500.0	495.0	
67 Trichloroethene	95	8.141	8.146	-0.005	99	278479	5.00	4.82	
68 Methylcyclohexane	83	8.445	8.451	-0.006	94	457689	5.00	5.10	
69 1,2-Dichloropropane	63	8.476	8.482	-0.006	97	292517	5.00	4.83	
70 2-ethoxy-2-methyl butane	87	8.482	8.488	-0.006	91	435122	5.00	4.92	
72 1,4-Dioxane	88	8.573	8.561	0.012	33	57308	250.0	271.9	M
71 Methyl methacrylate	69	8.567	8.567	0.000	92	157779	5.00	5.06	
73 Dibromomethane	93	8.586	8.591	-0.005	96	135590	5.00	4.83	
75 Dichlorobromomethane	83	8.823	8.829	-0.006	100	343988	5.00	4.90	
76 2-Nitropropane	41	9.110	9.110	0.000	97	446843	50.0	50.5	
79 1-Bromo-2-chloroethane	63	9.214	9.219	-0.005	98	323185	5.00	4.98	
80 cis-1,3-Dichloropropene	75	9.372	9.378	-0.006	95	449091	5.00	4.93	
81 4-Methyl-2-pentanone (MIBK)	43	9.555	9.561	-0.006	97	2154238	50.0	50.3	
\$ 82 Toluene-d8 (Surr)	98	9.683	9.689	-0.006	94	2162628	10.0	10.1	
83 Toluene	92	9.762	9.762	0.000	98	683495	5.00	4.89	
84 trans-1,3-Dichloropropene	75	10.024	10.024	0.000	94	378649	5.00	5.02	
S 87 1,3-Dichloropropene, Total	100				0			9.95	
85 Ethyl methacrylate	69	10.085	10.085	0.000	91	332561	5.00	4.91	
86 1,1,2-Trichloroethane	97	10.232	10.231	0.001	90	197601	5.00	4.85	
88 Tetrachloroethene	166	10.311	10.311	0.000	97	298979	5.00	4.93	
89 1,3-Dichloropropane	76	10.390	10.390	0.000	92	358460	5.00	4.88	
91 2-Hexanone	43	10.445	10.451	-0.006	98	1570233	50.0	51.0	
93 Chlorodibromomethane	129	10.603	10.603	0.000	91	243007	5.00	5.03	
94 Ethylene Dibromide	107	10.713	10.713	0.000	98	196846	5.00	4.92	
* 95 Chlorobenzene-d5 (IS)	117	11.146	11.146	0.000	86	1611346	10.0	10.0	
96 1-Chlorohexane	91	11.158	11.158	0.000	98	396805	5.00	4.73	
97 Chlorobenzene	112	11.170	11.176	-0.006	94	760248	5.00	4.89	
S 101 Xylenes, Total	106				0			14.8	
98 1,1,1,2-Tetrachloroethane	131	11.256	11.256	0.000	96	275804	5.00	4.99	
99 Ethylbenzene	91	11.262	11.262	0.000	99	1345750	5.00	4.88	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
100 m-Xylene & p-Xylene	106	11.372	11.377	-0.005	97	1025168	10.0	9.86	
102 o-Xylene	106	11.707	11.707	0.000	97	504969	5.00	4.90	
103 Styrene	104	11.719	11.719	0.000	94	861952	5.00	4.90	
104 Bromoform	173	11.878	11.877	0.001	97	146803	5.00	5.20	
105 Isopropylbenzene	105	12.006	12.005	0.001	96	1331001	5.00	4.93	
\$ 108 4-Bromofluorobenzene (Surr)	95	12.146	12.146	0.000	89	820021	10.0	10.0	
109 1,1,2,2-Tetrachloroethane	83	12.256	12.255	0.001	91	273837	5.00	4.96	
110 Bromobenzene	156	12.268	12.268	0.000	95	320859	5.00	4.84	
111 trans-1,4-Dichloro-2-butene	53	12.280	12.280	0.000	91	701899	50.0	52.8	
112 1,2,3-Trichloropropane	110	12.298	12.298	0.000	79	67388	5.00	4.79	
113 N-Propylbenzene	91	12.335	12.335	0.000	99	1623321	5.00	4.91	
114 2-Chlorotoluene	126	12.408	12.414	-0.006	96	316960	5.00	4.87	
115 1,3,5-Trimethylbenzene	105	12.469	12.469	0.000	94	1154535	5.00	4.95	
116 4-Chlorotoluene	126	12.506	12.505	0.001	98	329404	5.00	4.86	
118 tert-Butylbenzene	134	12.713	12.713	0.000	93	244744	5.00	4.91	
120 Pentachloroethane	167	12.743	12.743	0.000	90	213871	5.00	4.99	
119 1,2,4-Trimethylbenzene	105	12.756	12.755	0.001	97	1190575	5.00	4.89	
121 sec-Butylbenzene	105	12.877	12.877	0.000	94	1489422	5.00	4.91	
122 1,3-Dichlorobenzene	146	12.975	12.975	0.000	98	650429	5.00	4.86	
123 4-Isopropyltoluene	119	12.981	12.981	0.000	97	1294886	5.00	4.91	
* 124 1,4-Dichlorobenzene-d4	152	13.030	13.030	0.000	95	878834	10.0	10.0	
125 1,4-Dichlorobenzene	146	13.048	13.048	0.000	94	664687	5.00	4.88	
126 1,2,3-Trimethylbenzene	120	13.060	13.060	0.000	99	518339	5.00	4.80	
127 Benzyl chloride	126	13.127	13.127	0.000	98	119235	5.00	4.99	
129 p-Diethylbenzene	119	13.182	13.182	0.000	92	785877	5.00	4.91	
130 n-Butylbenzene	92	13.274	13.273	0.001	96	677396	5.00	4.85	
131 1,2-Dichlorobenzene	146	13.310	13.310	0.000	98	604314	5.00	4.84	
134 1,2-Dibromo-3-Chloropropane	155	13.853	13.853	0.000	85	38959	5.00	4.84	
135 1,3,5-Trichlorobenzene	180	13.975	13.975	0.000	98	546533	5.00	4.88	
136 1,2,4-Trichlorobenzene	180	14.395	14.395	0.000	94	499550	5.00	4.84	
137 Hexachlorobutadiene	225	14.481	14.481	0.000	97	245031	5.00	4.83	
138 Naphthalene	128	14.578	14.578	0.000	97	907383	5.00	4.83	
139 1,2,3-Trichlorobenzene	180	14.719	14.718	0.001	95	436916	5.00	4.79	
140 2-Methylnaphthalene	142	15.340	15.340	0.000	92	648031	5.00	4.82	

## QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

## Reagents:

MSV\_RV1\_826\_00031

Amount Added: 5.00

Units: uL

MSV\_RV4GAS826\_00097

Amount Added: 5.00

Units: uL

MSV\_RV4\_826\_00035

Amount Added: 5.00

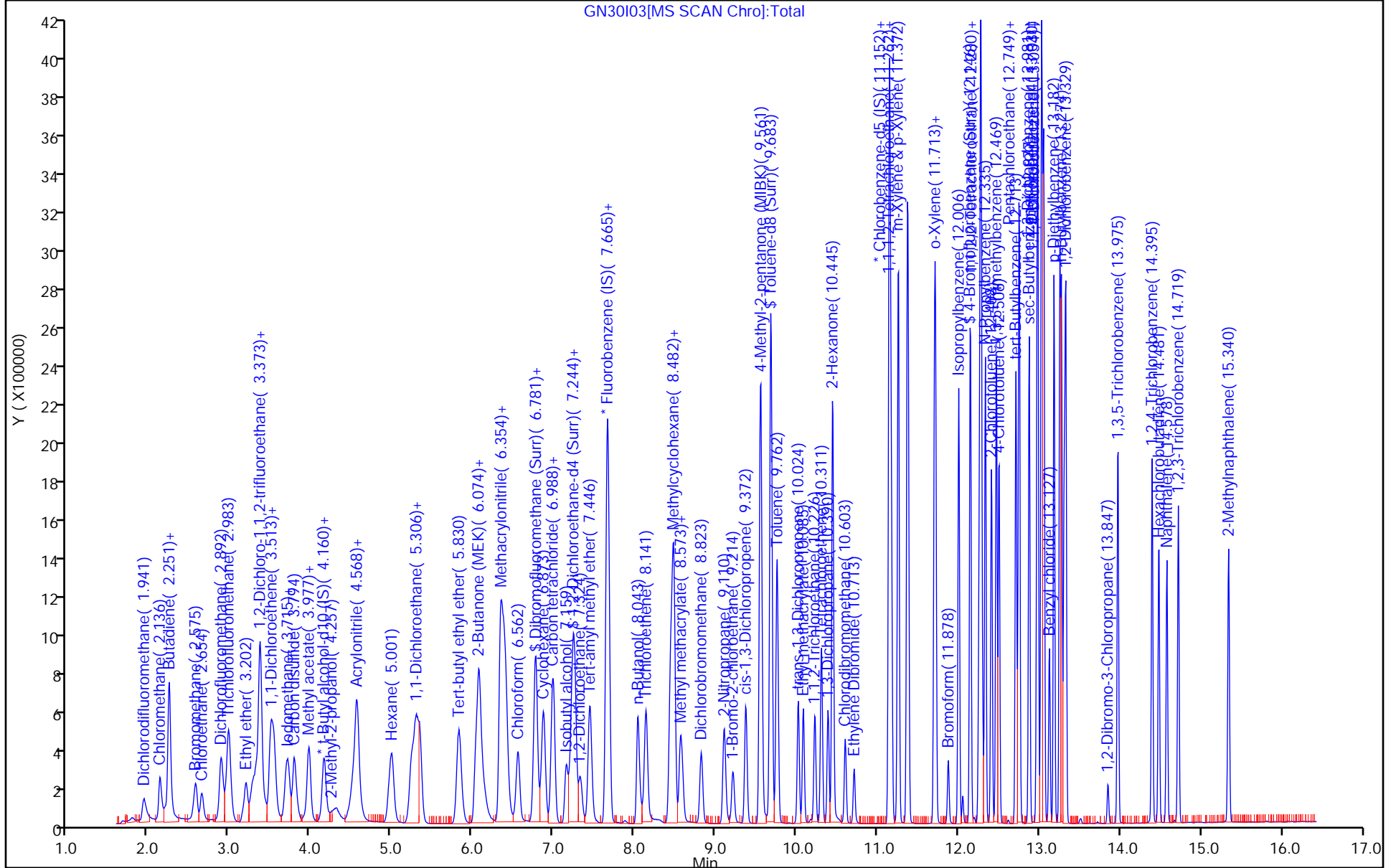
Units: uL

MSV\_29\_826ISS\_00013

Amount Added: 1.00

Units: uL

Run Reagent



GN30I03[MS SCAN Chrom]:Total

Eurofins Lancaster Laboratories Env, LLC

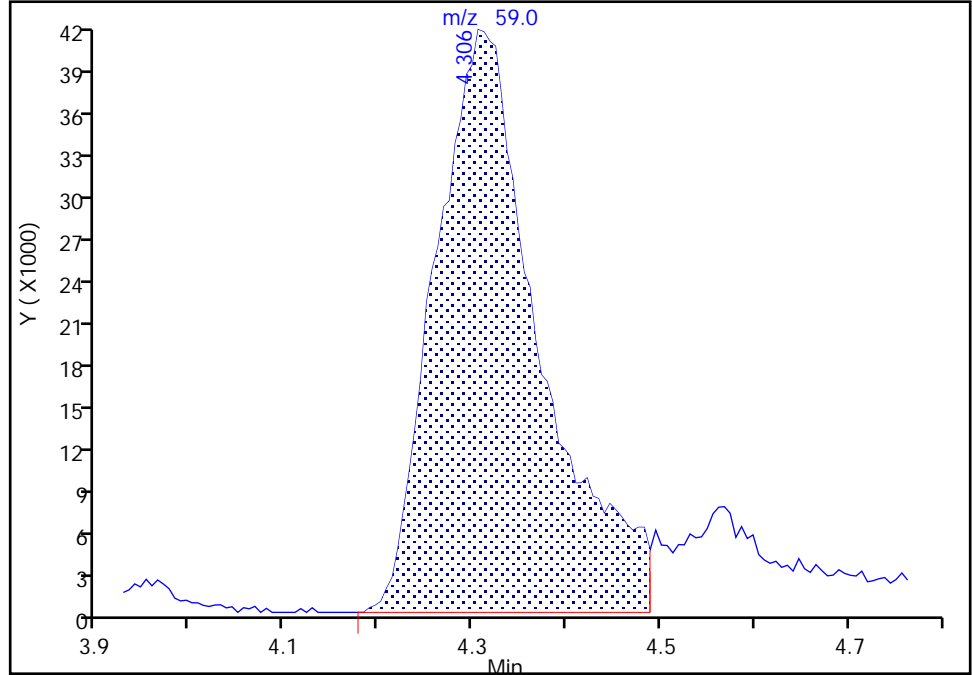
Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I03.D  
Injection Date: 30-Nov-2020 13:34:30 Instrument ID: 16334  
Lims ID: IC std5  
Client ID:  
Operator ID: DVV10203 ALS Bottle#: 4 Worklist Smp#: 5  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_16334\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25 mm ID) Detector: MS Quad

30 2-Methyl-2-propanol, CAS: 75-65-0

Signal: 1

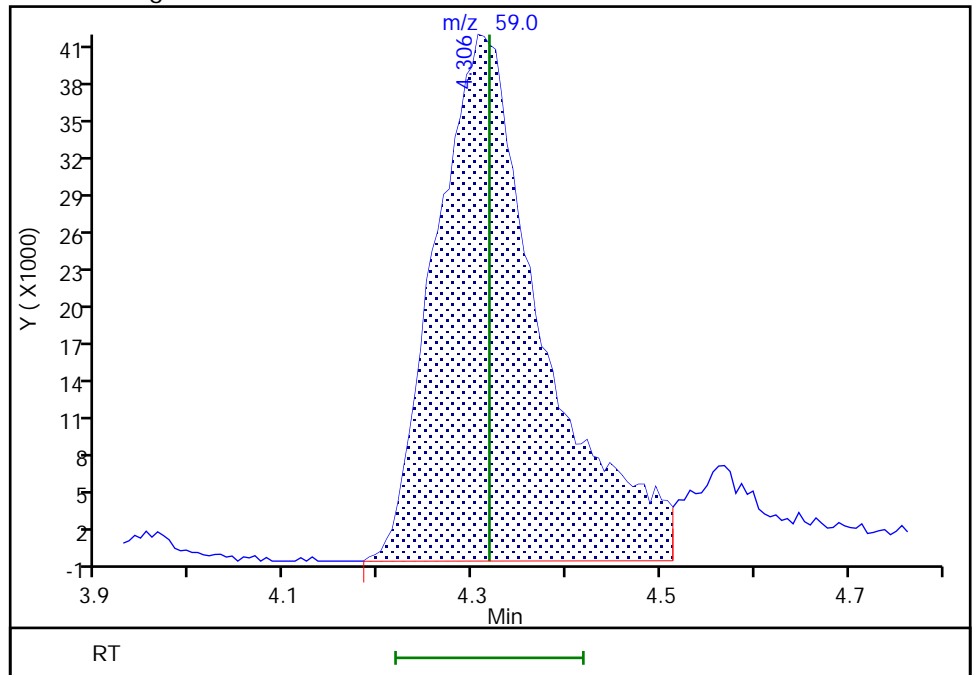
RT: 4.31  
Area: 318169  
Amount: 99.986734  
Amount Units: ug/l

Processing Integration Results



RT: 4.31  
Area: 325105  
Amount: 98.618521  
Amount Units: ug/l

Manual Integration Results



Reviewer: virayd, 01-Dec-2020 11:47:24  
Audit Action: Manually Integrated

Audit Reason: Other

Eurofins Lancaster Laboratories Env, LLC

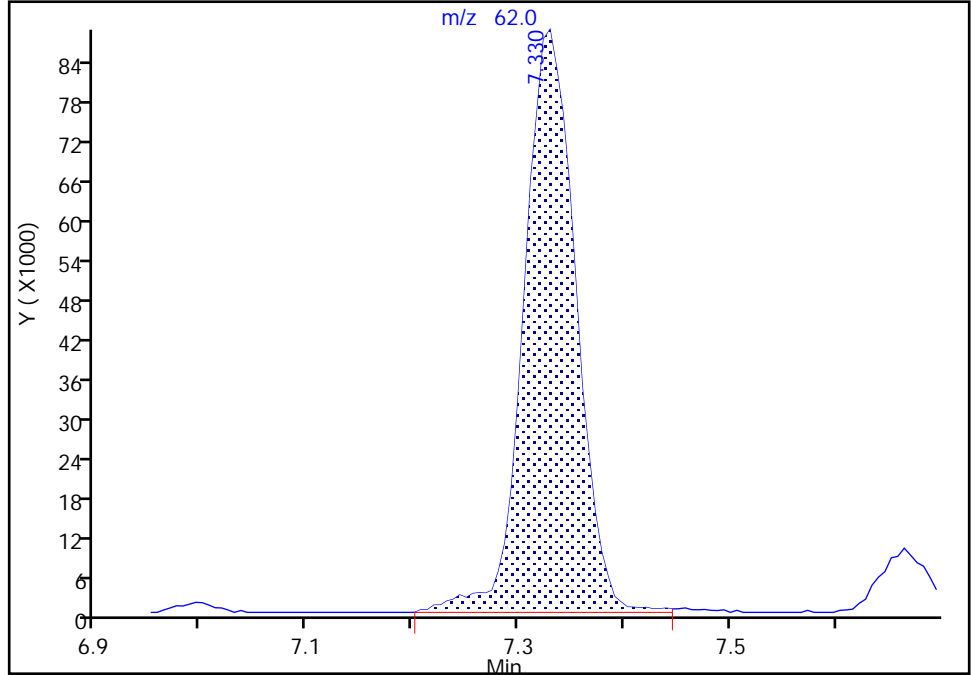
Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I03.D  
Injection Date: 30-Nov-2020 13:34:30 Instrument ID: 16334  
Lims ID: IC std5  
Client ID:  
Operator ID: DVV10203 ALS Bottle#: 4 Worklist Smp#: 5  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_16334\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

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

Signal: 1

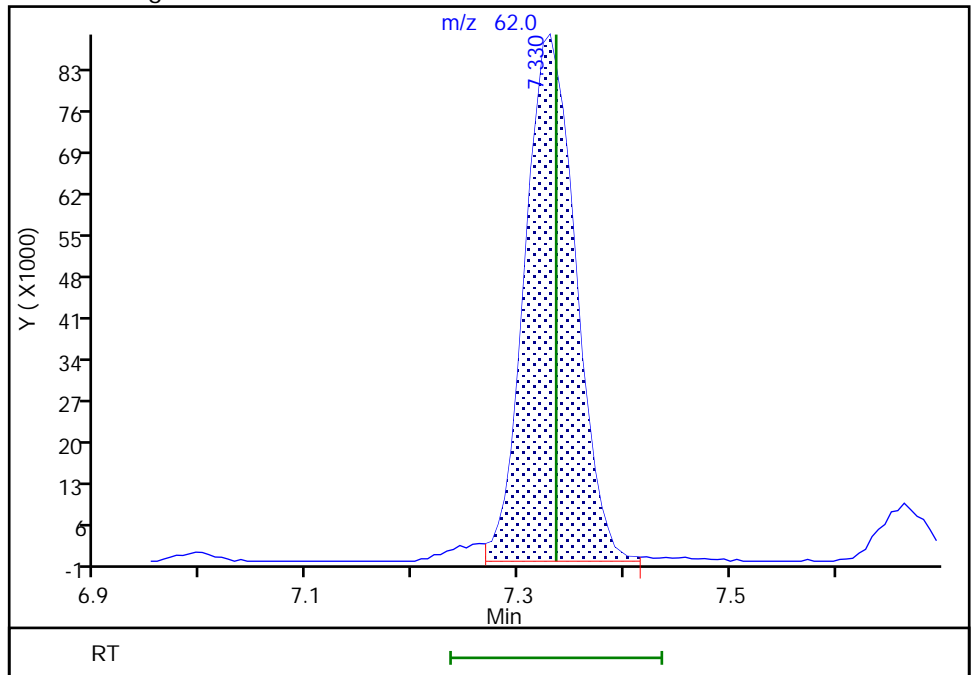
RT: 7.33  
Area: 303046  
Amount: 4.773793  
Amount Units: ug/l

Processing Integration Results



RT: 7.33  
Area: 295549  
Amount: 4.671457  
Amount Units: ug/l

Manual Integration Results



Reviewer: virayd, 01-Dec-2020 11:47:41  
Audit Action: Manually Integrated

Audit Reason: Other

Euofins Lancaster Laboratories Env, LLC

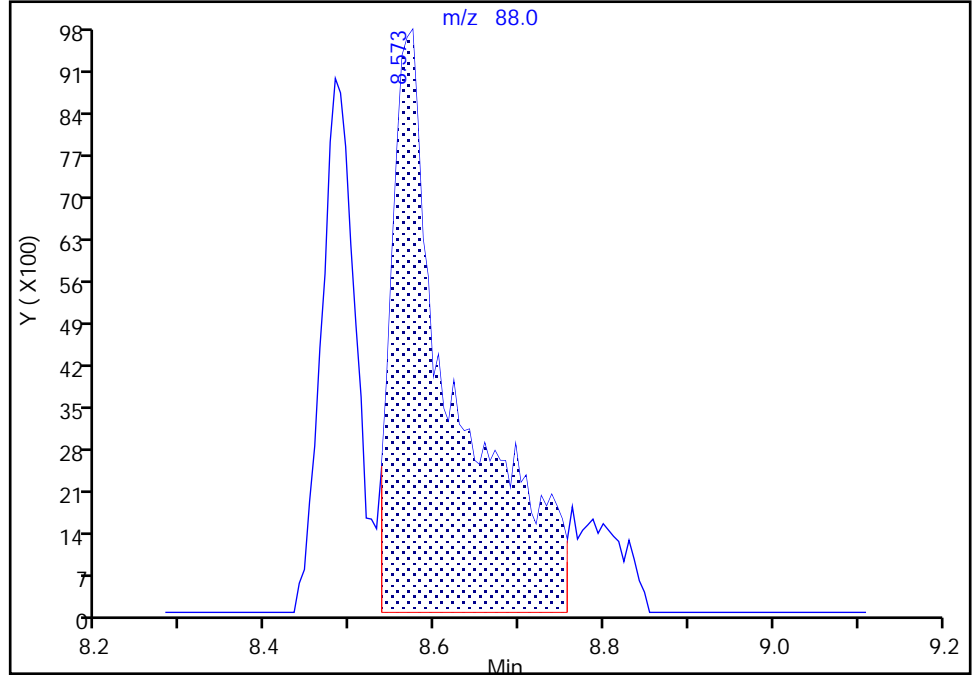
Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I03.D  
Injection Date: 30-Nov-2020 13:34:30 Instrument ID: 16334  
Lims ID: IC std5  
Client ID:  
Operator ID: DVV10203 ALS Bottle#: 4 Worklist Smp#: 5  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_16334\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

72 1,4-Dioxane, CAS: 123-91-1

Signal: 1

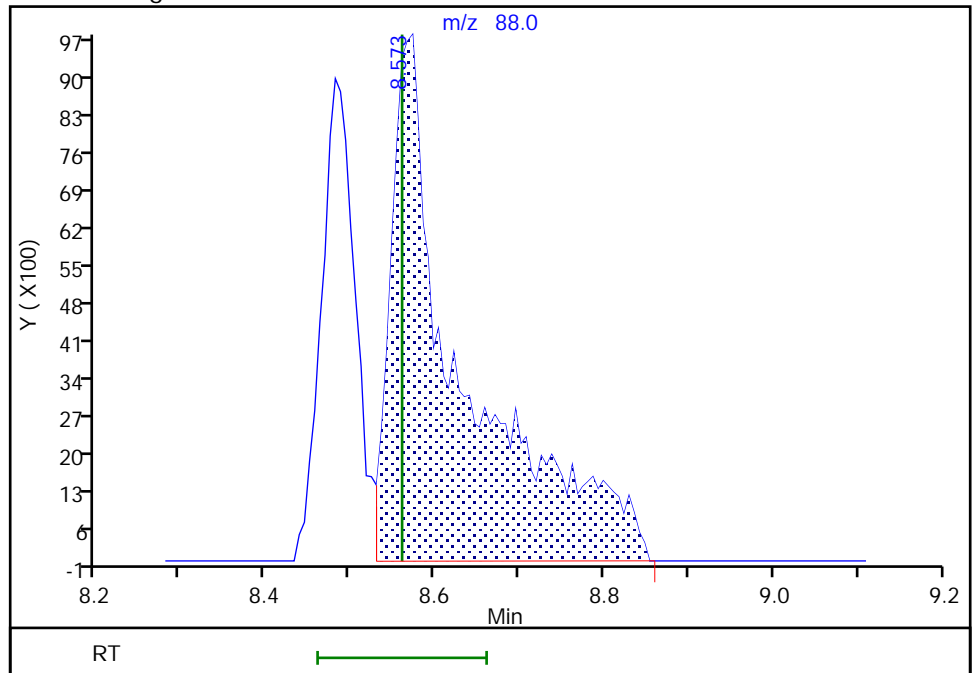
RT: 8.57  
Area: 50236  
Amount: 287.2121  
Amount Units: ug/l

Processing Integration Results



RT: 8.57  
Area: 57308  
Amount: 271.8974  
Amount Units: ug/l

Manual Integration Results



Reviewer: virayd, 01-Dec-2020 11:47:52  
Audit Action: Manually Integrated

Audit Reason: Other

Eurofins Lancaster Laboratories Env, LLC  
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I04.D  
 Lims ID: IC std4  
 Client ID:  
 Sample Type: IC Calib Level: 4  
 Inject. Date: 30-Nov-2020 13:56:30 ALS Bottle#: 5 Worklist Smp#: 6  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0016641-006  
 Misc. Info.: IC STD4  
 Operator ID: DVV10203 Instrument ID: 16334  
 Sublist: chrom-MSV\_16334\_25mL\*sub4  
 Method: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\MSV\_16334\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 01-Dec-2020 18:57:32 Calib Date: 30-Nov-2020 18:23:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I17.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1610

First Level Reviewer: virayd

Date: 01-Dec-2020 11:50:29

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.953	1.953	0.000	99	119710	2.00	2.08	
5 Chloromethane	50	2.148	2.148	0.000	99	154159	2.00	1.99	
6 Butadiene	39	2.264	2.264	0.000	95	172137	2.00	1.95	
7 Vinyl chloride	62	2.270	2.270	0.000	98	134133	2.00	2.03	
9 Bromomethane	94	2.593	2.593	0.000	90	92413	2.00	2.00	
10 Chloroethane	64	2.666	2.666	0.000	99	81099	2.00	2.02	
11 Dichlorofluoromethane	67	2.904	2.904	0.000	97	177022	2.00	1.97	
13 Trichlorofluoromethane	101	2.977	2.977	0.000	97	160183	2.00	2.10	
15 Ethyl ether	59	3.208	3.208	0.000	94	93021	2.00	2.07	
16 1,2-Dichloro-1,1,2-trifluoroethane	67	3.300	3.300	0.000	95	124813	2.00	2.00	
18 Acrolein	56	3.385	3.385	0.000	99	734398	100.0	99.1	
19 1,1-Dichloroethene	96	3.519	3.519	0.000	97	90732	2.00	1.97	
21 112TCTFE	101	3.556	3.556	0.000	92	97294	2.00	2.16	
20 Acetone	43	3.562	3.562	0.000	99	173204	20.0	18.1	
22 Iodomethane	142	3.714	3.714	0.000	98	173875	2.00	2.02	
23 Isopropyl alcohol	45	3.727	3.727	0.000	45	68119	40.0	38.9	
24 Ethyl bromide	108	3.739	3.739	0.000	98	81572	2.00	2.03	
25 Carbon disulfide	76	3.812	3.812	0.000	99	343343	2.00	2.02	
26 Methyl acetate	43	3.971	3.971	0.000	99	58429	2.00	2.01	M
27 3-Chloro-1-propene	41	3.989	3.989	0.000	93	183197	2.00	1.99	
28 Methylene Chloride	84	4.178	4.178	0.000	94	108056	2.00	2.05	
* 29 t-Butyl alcohol-d10 (IS)	65	4.214	4.214	0.000	0	195329	50.0	50.0	
30 2-Methyl-2-propanol	59	4.336	4.336	0.000	100	140629	40.0	40.0	M
31 Acrylonitrile	53	4.525	4.525	0.000	98	120047	10.0	9.68	
32 Methyl tert-butyl ether	73	4.580	4.580	0.000	96	295684	2.00	2.02	
33 trans-1,2-Dichloroethene	96	4.586	4.586	0.000	97	108056	2.00	2.04	
34 Hexane	57	5.007	5.007	0.000	94	166559	2.00	2.16	
36 1,1-Dichloroethane	63	5.251	5.251	0.000	96	198755	2.00	2.02	
37 Isopropyl ether	45	5.306	5.306	0.000	96	403335	2.00	2.02	
38 2-Chloro-1,3-butadiene	53	5.360	5.360	0.000	91	180575	2.00	2.02	



Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
39 Tert-butyl ethyl ether	59	5.836	5.836	0.000	98	363795	2.00	1.99	
40 2-Butanone (MEK)	43	6.049	6.049	0.000	100	341451	20.0	19.2	
41 cis-1,2-Dichloroethene	96	6.086	6.086	0.000	83	120745	2.00	2.03	
42 2,2-Dichloropropane	77	6.092	6.092	0.000	87	166142	2.00	2.01	
44 Propionitrile	54	6.147	6.147	0.000	99	174294	40.0	39.6	
S 49 1,2-Dichloroethene, Total	100				0			4.07	
46 Methacrylonitrile	67	6.360	6.360	0.000	94	317768	20.0	19.5	
48 Chlorobromomethane	128	6.409	6.409	0.000	68	52433	2.00	1.98	
47 Tetrahydrofuran	71	6.409	6.409	0.000	89	89573	20.0	19.5	
50 Chloroform	83	6.561	6.561	0.000	93	191526	2.00	2.02	
\$ 52 Dibromofluoromethane (Surr)	113	6.781	6.781	0.000	94	536748	10.0	10.0	
51 1,1,1-Trichloroethane	97	6.787	6.787	0.000	97	162606	2.00	2.00	
53 Cyclohexane	56	6.878	6.878	0.000	93	196628	2.00	2.11	
56 Carbon tetrachloride	117	7.000	7.000	0.000	86	141008	2.00	2.00	
55 1,1-Dichloropropene	75	7.000	7.000	0.000	95	155596	2.00	2.04	
57 Isobutyl alcohol	41	7.165	7.165	0.000	95	121267	100.0	97.0	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.232	7.232	0.000	0	114415	10.0	10.1	
59 Benzene	78	7.263	7.263	0.000	95	455295	2.00	2.03	
60 1,2-Dichloroethane	62	7.336	7.336	0.000	97	122885	2.00	1.96	
62 Tert-amyl methyl ether	73	7.458	7.458	0.000	98	324674	2.00	2.02	
* 63 Fluorobenzene (IS)	96	7.671	7.671	0.000	98	2210035	10.0	10.0	
64 n-Heptane	43	7.677	7.677	0.000	93	181073	2.00	2.08	
65 n-Butanol	56	8.049	8.049	0.000	90	248576	200.0	196.9	
67 Trichloroethene	95	8.147	8.147	0.000	99	116383	2.00	2.03	
68 Methylcyclohexane	83	8.451	8.451	0.000	93	182602	2.00	2.05	
69 1,2-Dichloropropane	63	8.482	8.482	0.000	94	119367	2.00	1.99	
70 2-ethoxy-2-methyl butane	87	8.488	8.488	0.000	89	176797	2.00	2.01	
72 1,4-Dioxane	88	8.567	8.567	0.000	33	26270	100.0	117.0	M
71 Methyl methacrylate	69	8.567	8.567	0.000	94	64887	2.00	1.95	
73 Dibromomethane	93	8.585	8.585	0.000	95	55304	2.00	1.99	
75 Dichlorobromomethane	83	8.823	8.823	0.000	100	140150	2.00	2.01	
76 2-Nitropropane	41	9.110	9.110	0.000	98	180791	20.0	19.2	
79 1-Bromo-2-chloroethane	63	9.219	9.219	0.000	99	130329	2.00	2.02	
80 cis-1,3-Dichloropropene	75	9.378	9.378	0.000	95	181945	2.00	2.01	
81 4-Methyl-2-pentanone (MIBK)	43	9.561	9.561	0.000	98	887415	20.0	19.5	
\$ 82 Toluene-d8 (Surr)	98	9.689	9.689	0.000	94	2136446	10.0	9.98	
83 Toluene	92	9.762	9.762	0.000	98	278591	2.00	2.00	
84 trans-1,3-Dichloropropene	75	10.024	10.024	0.000	94	150936	2.00	2.01	
S 87 1,3-Dichloropropene, Total	100				0			4.02	
85 Ethyl methacrylate	69	10.085	10.085	0.000	91	137503	2.00	2.04	
86 1,1,2-Trichloroethane	97	10.231	10.231	0.000	90	81260	2.00	2.00	
88 Tetrachloroethene	166	10.311	10.311	0.000	98	121696	2.00	2.02	
89 1,3-Dichloropropane	76	10.396	10.396	0.000	92	145956	2.00	1.99	
91 2-Hexanone	43	10.451	10.451	0.000	98	645054	20.0	19.7	
93 Chlorodibromomethane	129	10.603	10.603	0.000	90	97381	2.00	2.02	
94 Ethylene Dibromide	107	10.713	10.713	0.000	98	80460	2.00	2.02	
* 95 Chlorobenzene-d5 (IS)	117	11.146	11.146	0.000	87	1604620	10.0	10.0	
96 1-Chlorohexane	91	11.158	11.158	0.000	97	162251	2.00	1.94	
97 Chlorobenzene	112	11.176	11.176	0.000	95	310565	2.00	2.01	
S 101 Xylenes, Total	106				0			6.02	
98 1,1,1,2-Tetrachloroethane	131	11.256	11.256	0.000	95	111642	2.00	2.03	
99 Ethylbenzene	91	11.262	11.262	0.000	99	548965	2.00	2.00	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
100 m-Xylene & p-Xylene	106	11.378	11.378	0.000	97	418534	4.00	4.04	
102 o-Xylene	106	11.707	11.707	0.000	97	203530	2.00	1.98	
103 Styrene	104	11.719	11.719	0.000	95	354894	2.00	2.03	
104 Bromoform	173	11.877	11.877	0.000	97	57245	2.00	2.04	
105 Isopropylbenzene	105	12.006	12.006	0.000	96	542248	2.00	2.02	
\$ 108 4-Bromofluorobenzene (Surr)	95	12.152	12.152	0.000	90	818494	10.0	10.0	
109 1,1,2,2-Tetrachloroethane	83	12.255	12.255	0.000	92	111748	2.00	2.05	
110 Bromobenzene	156	12.268	12.268	0.000	96	132263	2.00	2.02	
111 trans-1,4-Dichloro-2-butene	53	12.280	12.280	0.000	92	278293	20.0	19.7	
112 1,2,3-Trichloropropane	110	12.304	12.304	0.000	83	28491	2.00	2.05	
113 N-Propylbenzene	91	12.335	12.335	0.000	99	661944	2.00	2.02	
114 2-Chlorotoluene	126	12.414	12.414	0.000	96	130139	2.00	2.02	
115 1,3,5-Trimethylbenzene	105	12.469	12.469	0.000	94	466416	2.00	2.02	
116 4-Chlorotoluene	126	12.505	12.505	0.000	98	133168	2.00	1.99	
118 tert-Butylbenzene	134	12.713	12.713	0.000	93	97199	2.00	1.97	
120 Pentachloroethane	167	12.743	12.743	0.000	92	85685	2.00	2.02	
119 1,2,4-Trimethylbenzene	105	12.755	12.755	0.000	97	482620	2.00	2.00	
121 sec-Butylbenzene	105	12.877	12.877	0.000	94	603955	2.00	2.01	
122 1,3-Dichlorobenzene	146	12.975	12.975	0.000	98	266406	2.00	2.01	
123 4-Isopropyltoluene	119	12.981	12.981	0.000	97	518846	2.00	1.99	
* 124 1,4-Dichlorobenzene-d4	152	13.030	13.030	0.000	96	869181	10.0	10.0	
125 1,4-Dichlorobenzene	146	13.048	13.048	0.000	96	271182	2.00	2.01	
126 1,2,3-Trimethylbenzene	120	13.060	13.060	0.000	99	214525	2.00	2.01	
127 Benzyl chloride	126	13.127	13.127	0.000	99	46895	2.00	1.98	
129 p-Diethylbenzene	119	13.182	13.182	0.000	92	319745	2.00	2.02	
130 n-Butylbenzene	92	13.274	13.274	0.000	97	275706	2.00	2.00	
131 1,2-Dichlorobenzene	146	13.310	13.310	0.000	98	249800	2.00	2.02	
134 1,2-Dibromo-3-Chloropropane	155	13.853	13.853	0.000	79	15596	2.00	1.96	
135 1,3,5-Trichlorobenzene	180	13.975	13.975	0.000	98	215623	2.00	1.95	
136 1,2,4-Trichlorobenzene	180	14.395	14.395	0.000	94	202142	2.00	1.98	
137 Hexachlorobutadiene	225	14.481	14.481	0.000	97	96356	2.00	1.92	
138 Naphthalene	128	14.578	14.578	0.000	97	374308	2.00	2.01	
139 1,2,3-Trichlorobenzene	180	14.718	14.718	0.000	95	178820	2.00	1.98	
140 2-Methylnaphthalene	142	15.340	15.340	0.000	92	267358	2.00	2.01	

### QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

### Reagents:

MSV\_RV1\_826\_00031

Amount Added: 2.00

Units: uL

MSV\_RV4GAS826\_00097

Amount Added: 2.00

Units: uL

MSV\_RV4\_826\_00035

Amount Added: 2.00

Units: uL

MSV\_29\_826ISS\_00013

Amount Added: 1.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I04.D

Injection Date: 30-Nov-2020 13:56:30

Instrument ID: 16334

Operator ID: DVV10203

Lims ID: IC std4

Worklist Smp#: 6

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

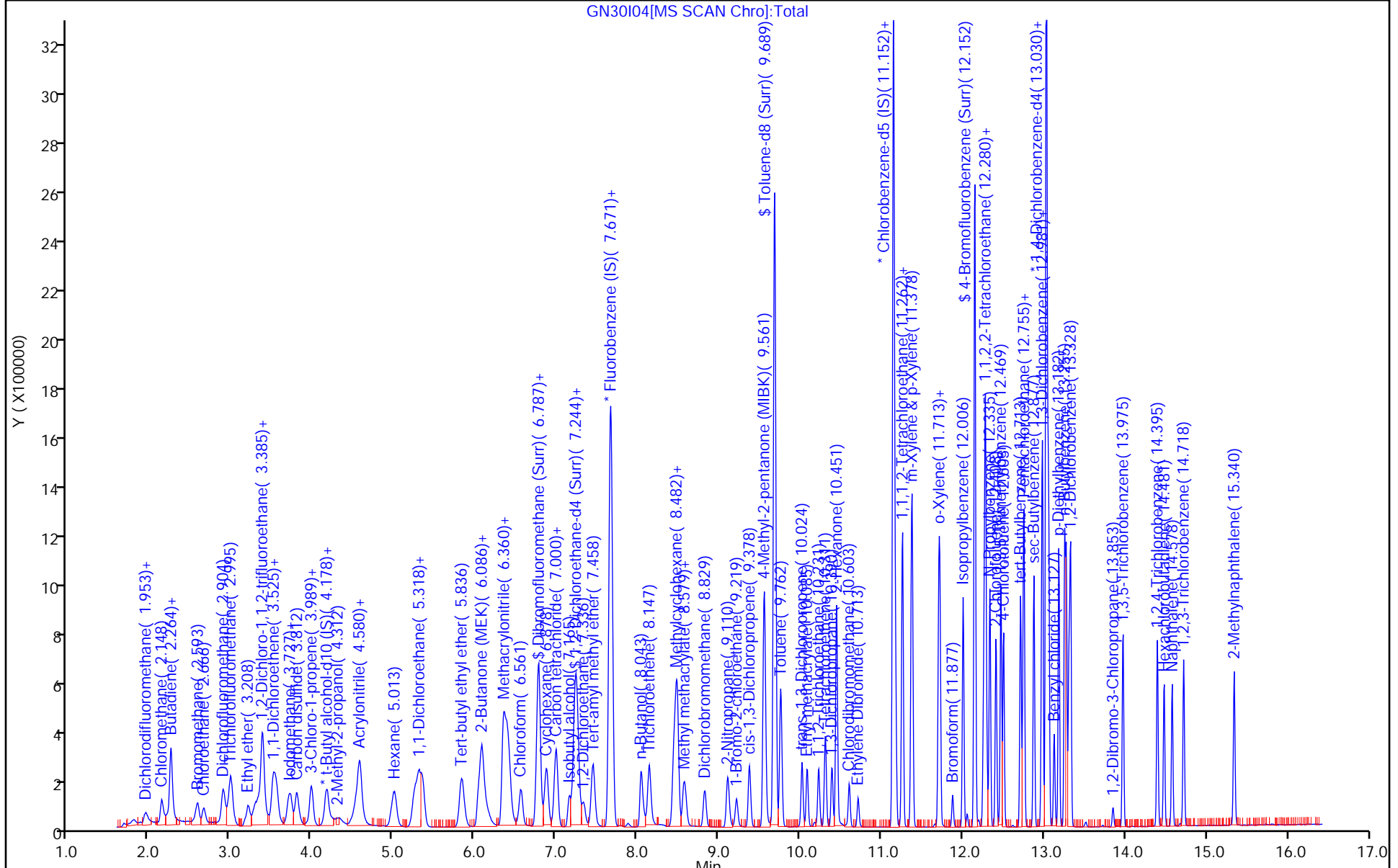
ALS Bottle#: 5

Method: MSV\_16334\_25mL

Limit Group: MSV - 8260C\_D

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

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



GN30I04[MS SCAN Chrom]:Total

Eurofins Lancaster Laboratories Env, LLC

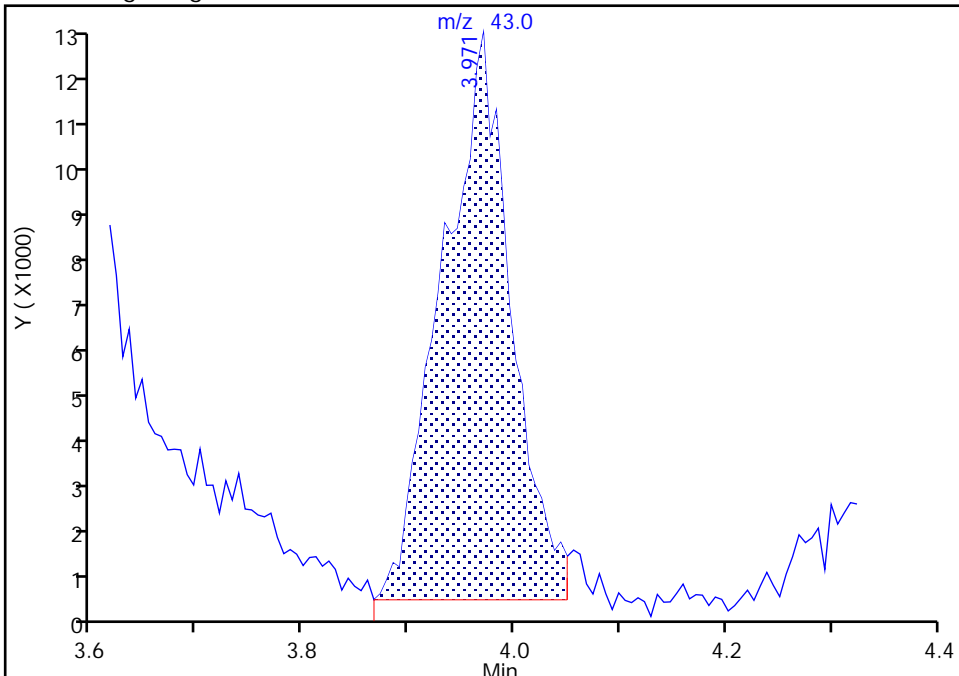
Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I04.D  
Injection Date: 30-Nov-2020 13:56:30 Instrument ID: 16334  
Lims ID: IC std4  
Client ID:  
Operator ID: DVV10203 ALS Bottle#: 5 Worklist Smp#: 6  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_16334\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

26 Methyl acetate, CAS: 79-20-9

Signal: 1

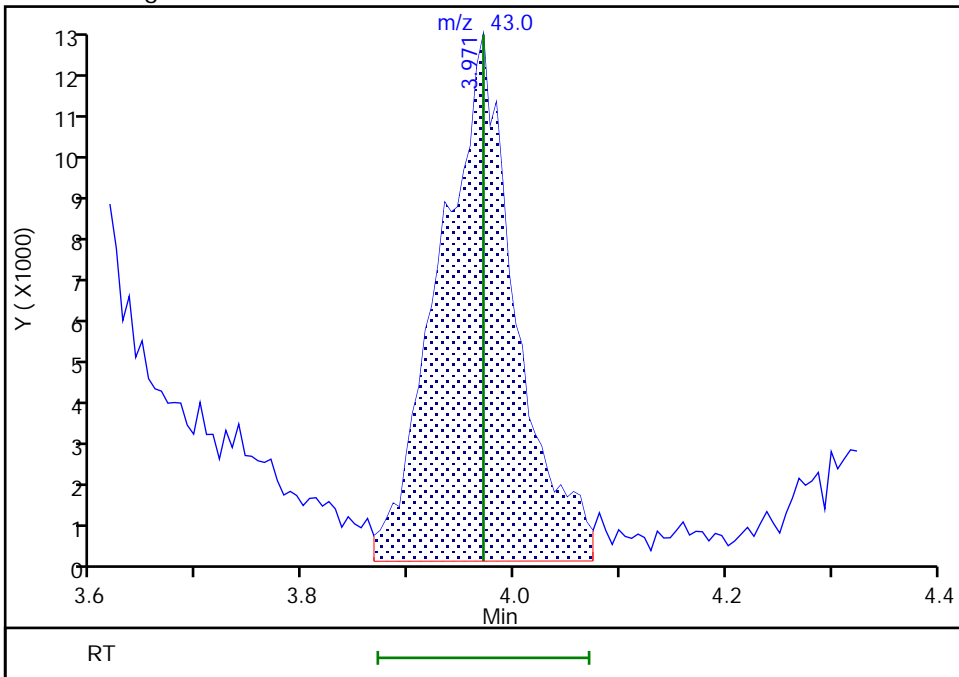
RT: 3.97  
Area: 50433  
Amount: 2.026094  
Amount Units: ug/l

Processing Integration Results



RT: 3.97  
Area: 58429  
Amount: 2.013897  
Amount Units: ug/l

Manual Integration Results



Reviewer: virayd, 01-Dec-2020 11:49:22  
Audit Action: Manually Integrated

Audit Reason: Other

Eurofins Lancaster Laboratories Env, LLC

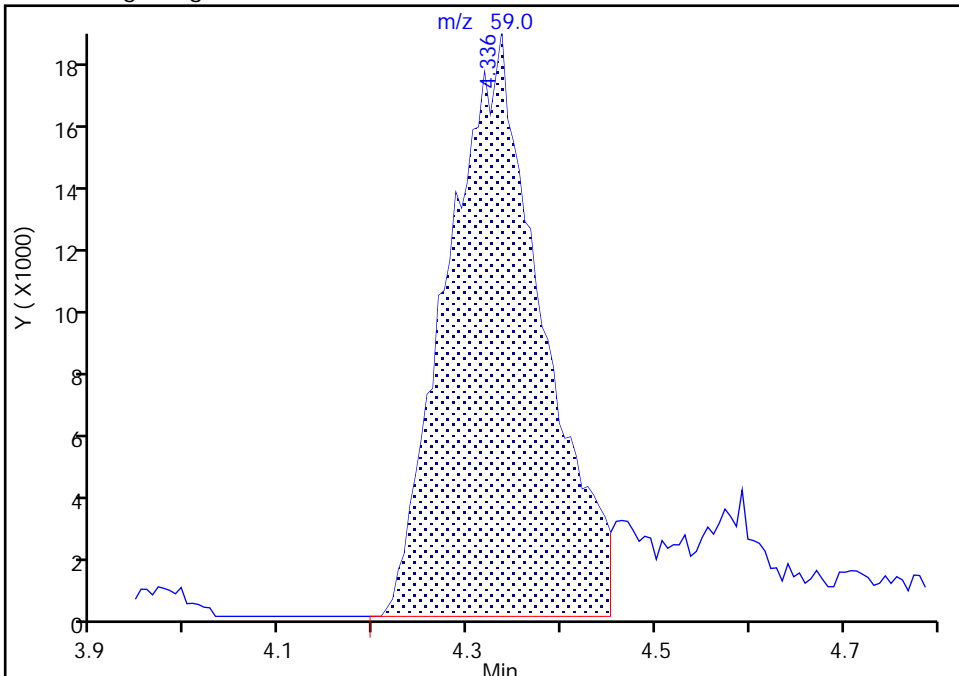
Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I04.D  
Injection Date: 30-Nov-2020 13:56:30 Instrument ID: 16334  
Lims ID: IC std4  
Client ID:  
Operator ID: DVV10203 ALS Bottle#: 5 Worklist Smp#: 6  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_16334\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

30 2-Methyl-2-propanol, CAS: 75-65-0

Signal: 1

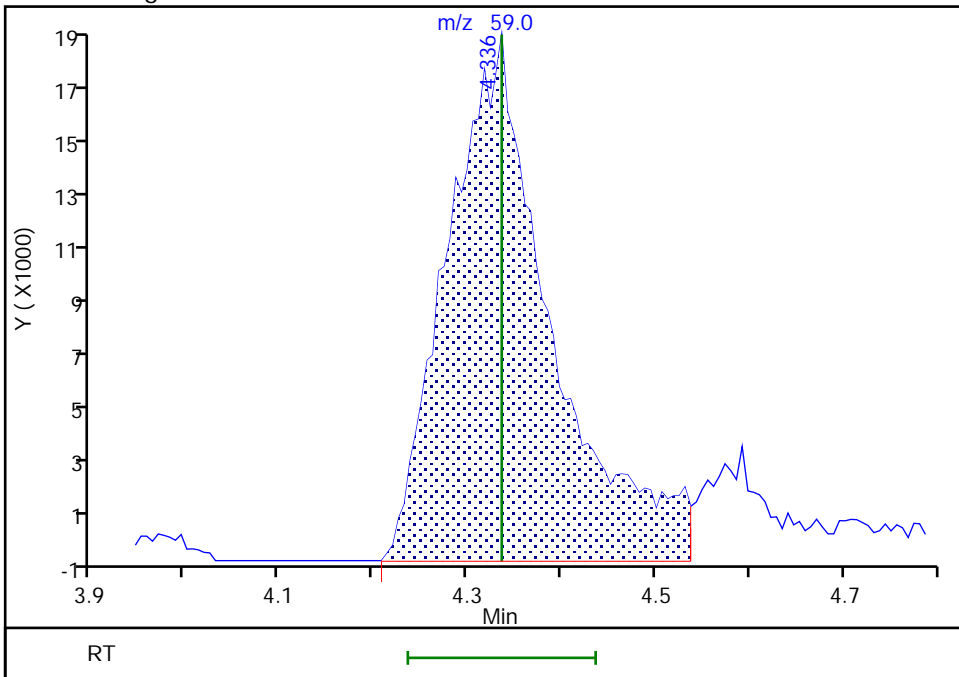
RT: 4.34  
Area: 127704  
Amount: 37.552288  
Amount Units: ug/l

Processing Integration Results



RT: 4.34  
Area: 140629  
Amount: 40.041223  
Amount Units: ug/l

Manual Integration Results



Reviewer: virayd, 01-Dec-2020 11:49:37  
Audit Action: Manually Integrated

Audit Reason: Other  
Page 509 of 966

Euofins Lancaster Laboratories Env, LLC

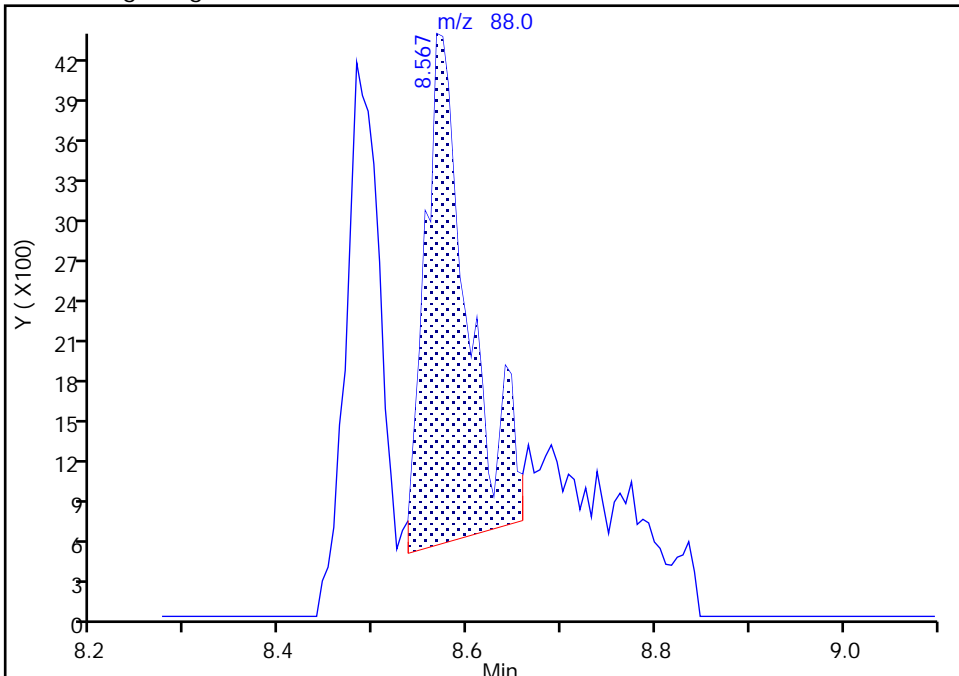
Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I04.D  
 Injection Date: 30-Nov-2020 13:56:30 Instrument ID: 16334  
 Lims ID: IC std4  
 Client ID:  
 Operator ID: DVV10203 ALS Bottle#: 5 Worklist Smp#: 6  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Method: MSV\_16334\_25mL Limit Group: MSV - 8260C\_D  
 Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

72 1,4-Dioxane, CAS: 123-91-1

Signal: 1

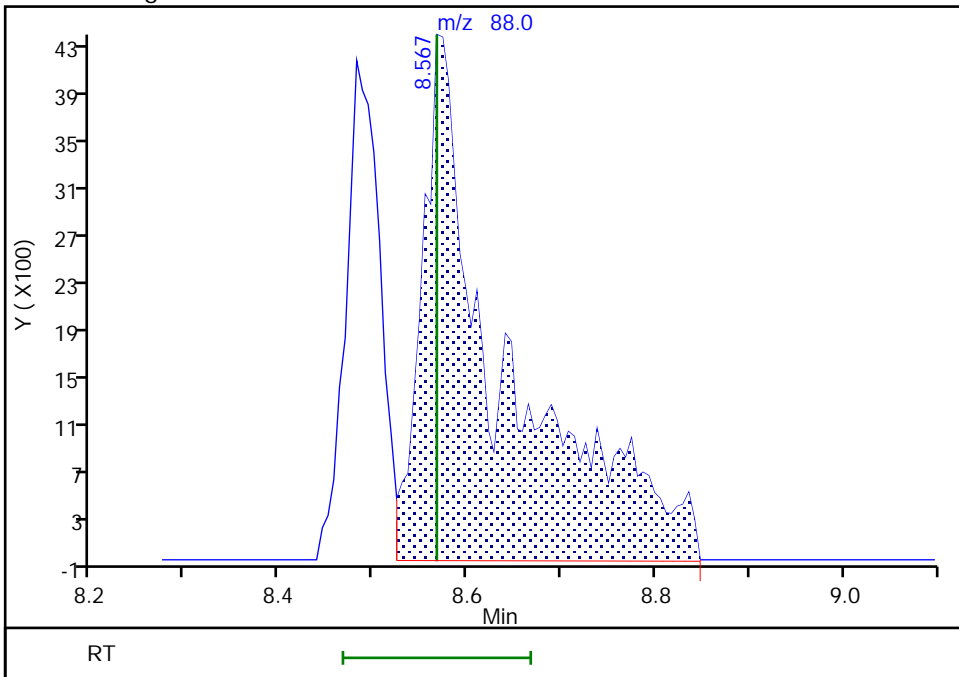
RT: 8.57  
 Area: 12148  
 Amount: 63.719188  
 Amount Units: ug/l

Processing Integration Results



RT: 8.57  
 Area: 26270  
 Amount: 116.9896  
 Amount Units: ug/l

Manual Integration Results



Reviewer: virayd, 01-Dec-2020 11:49:57  
 Audit Action: Manually Integrated

Audit Reason: Other

Eurofins Lancaster Laboratories Env, LLC  
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I05.D  
 Lims ID: IC std3  
 Client ID:  
 Sample Type: IC Calib Level: 3  
 Inject. Date: 30-Nov-2020 14:19:30 ALS Bottle#: 6 Worklist Smp#: 7  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0016641-007  
 Misc. Info.: IC STD3  
 Operator ID: DVV10203 Instrument ID: 16334  
 Sublist: chrom-MSV\_16334\_25mL\*sub4  
 Method: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\MSV\_16334\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 01-Dec-2020 18:57:44 Calib Date: 30-Nov-2020 18:23:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I17.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1610

First Level Reviewer: virayd

Date: 01-Dec-2020 11:52:37

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.953	1.953	0.000	98	59213	1.00	1.03	
5 Chloromethane	50	2.148	2.148	0.000	98	78349	1.00	1.01	
6 Butadiene	39	2.257	2.264	-0.007	96	94809	1.00	1.07	
7 Vinyl chloride	62	2.270	2.270	0.000	79	65380	1.00	0.9872	
9 Bromomethane	94	2.593	2.593	0.000	91	46006	1.00	1.00	
10 Chloroethane	64	2.672	2.666	0.006	99	38699	1.00	0.9631	
11 Dichlorofluoromethane	67	2.910	2.904	0.006	97	85751	1.00	0.9520	
13 Trichlorofluoromethane	101	2.977	2.977	0.000	95	73951	1.00	0.9702	
15 Ethyl ether	59	3.215	3.208	0.007	93	46571	1.00	1.04	
16 1,2-Dichloro-1,1,2-trifluoroethane	67	3.306	3.300	0.006	93	65601	1.00	1.05	
18 Acrolein	56	3.385	3.385	0.000	99	365629	50.0	47.9	
19 1,1-Dichloroethene	96	3.519	3.519	0.000	97	48163	1.00	1.05	
21 112TCTFE	101	3.550	3.556	-0.006	88	49604	1.00	1.10	
20 Acetone	43	3.562	3.562	0.000	99	99654	10.0	10.1	
22 Iodomethane	142	3.714	3.714	0.000	99	90654	1.00	1.05	
23 Isopropyl alcohol	45	3.727	3.727	0.000	34	39390	20.0	22.5	
24 Ethyl bromide	108	3.745	3.739	0.006	98	41519	1.00	1.03	
25 Carbon disulfide	76	3.812	3.812	0.000	99	178461	1.00	1.05	
26 Methyl acetate	43	3.971	3.971	0.001	96	29330	1.00	0.9814	M
27 3-Chloro-1-propene	41	3.989	3.989	0.000	93	96698	1.00	1.05	
28 Methylene Chloride	84	4.178	4.178	0.000	93	55096	1.00	1.04	
* 29 t-Butyl alcohol-d10 (IS)	65	4.202	4.214	-0.012	0	201206	50.0	50.0	
30 2-Methyl-2-propanol	59	4.312	4.336	-0.024	99	78250	20.0	21.6	
31 Acrylonitrile	53	4.531	4.525	0.006	97	65434	5.00	5.12	
32 Methyl tert-butyl ether	73	4.580	4.580	0.000	91	157517	1.00	1.08	
33 trans-1,2-Dichloroethene	96	4.580	4.586	-0.006	98	55706	1.00	1.05	
34 Hexane	57	5.007	5.007	0.000	95	82931	1.00	1.07	
36 1,1-Dichloroethane	63	5.245	5.251	-0.006	95	105511	1.00	1.07	
37 Isopropyl ether	45	5.300	5.306	-0.006	98	213671	1.00	1.07	
38 2-Chloro-1,3-butadiene	53	5.361	5.360	0.001	91	95428	1.00	1.07	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
39 Tert-butyl ethyl ether	59	5.836	5.836	0.000	99	193019	1.00	1.06	
40 2-Butanone (MEK)	43	6.043	6.049	-0.006	99	186432	10.0	10.2	
41 cis-1,2-Dichloroethene	96	6.086	6.086	0.000	83	63650	1.00	1.07	
42 2,2-Dichloropropane	77	6.098	6.092	0.006	86	86568	1.00	1.05	
44 Propionitrile	54	6.159	6.147	0.012	99	97449	20.0	21.5	
S 49 1,2-Dichloroethene, Total	100				0			2.12	
46 Methacrylonitrile	67	6.360	6.360	0.000	94	167335	10.0	9.95	
48 Chlorobromomethane	128	6.409	6.409	0.000	71	28011	1.00	1.06	
47 Tetrahydrofuran	71	6.415	6.409	0.006	80	48944	10.0	10.3	
50 Chloroform	83	6.568	6.561	0.007	94	100689	1.00	1.06	
\$ 52 Dibromofluoromethane (Surr)	113	6.781	6.781	0.000	94	539150	10.0	10.1	
51 1,1,1-Trichloroethane	97	6.793	6.787	0.006	98	85584	1.00	1.05	
53 Cyclohexane	56	6.879	6.878	0.000	92	101123	1.00	1.08	
56 Carbon tetrachloride	117	6.994	7.000	-0.006	87	75097	1.00	1.07	
55 1,1-Dichloropropene	75	7.000	7.000	0.000	95	79831	1.00	1.05	
57 Isobutyl alcohol	41	7.165	7.165	0.000	95	67984	50.0	54.4	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.238	7.232	0.006	0	114722	10.0	10.1	
59 Benzene	78	7.263	7.263	0.000	92	241164	1.00	1.07	
60 1,2-Dichloroethane	62	7.336	7.336	0.000	97	65819	1.00	1.05	
62 Tert-amyl methyl ether	73	7.452	7.458	-0.006	98	172887	1.00	1.07	
* 63 Fluorobenzene (IS)	96	7.671	7.671	0.000	99	2211412	10.0	10.0	
64 n-Heptane	43	7.677	7.677	0.000	72	90836	1.00	1.04	
65 n-Butanol	56	8.049	8.049	0.000	89	125899	100.0	96.8	M
67 Trichloroethene	95	8.147	8.147	0.000	98	59598	1.00	1.04	
68 Methylcyclohexane	83	8.451	8.451	0.000	92	91381	1.00	1.03	
69 1,2-Dichloropropane	63	8.482	8.482	0.000	93	64320	1.00	1.07	
70 2-ethoxy-2-methyl butane	87	8.494	8.488	0.006	92	93157	1.00	1.06	
72 1,4-Dioxane	88	8.573	8.567	0.006	35	11572	50.0	50.0	M
71 Methyl methacrylate	69	8.567	8.567	0.000	94	34214	1.00	1.00	
73 Dibromomethane	93	8.585	8.585	0.000	96	29475	1.00	1.06	
75 Dichlorobromomethane	83	8.823	8.823	0.000	99	73464	1.00	1.05	
76 2-Nitropropane	41	9.110	9.110	0.000	99	96897	10.0	9.98	
79 1-Bromo-2-chloroethane	63	9.220	9.219	0.001	98	67155	1.00	1.04	
80 cis-1,3-Dichloropropene	75	9.372	9.378	-0.006	95	95377	1.00	1.05	
81 4-Methyl-2-pentanone (MIBK)	43	9.561	9.561	0.000	97	478190	10.0	10.2	
\$ 82 Toluene-d8 (Surr)	98	9.689	9.689	0.000	94	2136211	10.0	10.0	
83 Toluene	92	9.762	9.762	0.000	98	146327	1.00	1.06	
84 trans-1,3-Dichloropropene	75	10.024	10.024	0.000	94	76563	1.00	1.02	
S 87 1,3-Dichloropropene, Total	100				0			2.08	
85 Ethyl methacrylate	69	10.091	10.085	0.006	91	70532	1.00	1.05	
86 1,1,2-Trichloroethane	97	10.232	10.231	0.001	90	43259	1.00	1.07	
88 Tetrachloroethene	166	10.311	10.311	0.000	98	62720	1.00	1.04	
89 1,3-Dichloropropane	76	10.390	10.396	-0.006	91	77242	1.00	1.06	
91 2-Hexanone	43	10.451	10.451	0.000	98	334821	10.0	9.91	
93 Chlorodibromomethane	129	10.603	10.603	0.000	90	50339	1.00	1.05	
94 Ethylene Dibromide	107	10.713	10.713	0.000	99	42028	1.00	1.06	
* 95 Chlorobenzene-d5 (IS)	117	11.146	11.146	0.000	86	1600264	10.0	10.0	
96 1-Chlorohexane	91	11.158	11.158	0.000	96	86809	1.00	1.04	
97 Chlorobenzene	112	11.176	11.176	0.000	94	161371	1.00	1.04	
S 101 Xylenes, Total	106				0			3.16	
98 1,1,1,2-Tetrachloroethane	131	11.256	11.256	0.000	95	57609	1.00	1.05	
99 Ethylbenzene	91	11.262	11.262	0.000	98	288772	1.00	1.05	



Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
100 m-Xylene & p-Xylene	106	11.378	11.378	0.000	97	219481	2.00	2.13	
102 o-Xylene	106	11.707	11.707	0.000	97	105945	1.00	1.03	
103 Styrene	104	11.719	11.719	0.000	95	183091	1.00	1.05	
104 Bromoform	173	11.878	11.877	0.001	96	28046	1.00	1.00	
105 Isopropylbenzene	105	12.006	12.006	0.000	96	280719	1.00	1.05	
\$ 108 4-Bromofluorobenzene (Surr)	95	12.152	12.152	0.000	90	818561	10.0	10.0	
109 1,1,2,2-Tetrachloroethane	83	12.256	12.255	0.001	92	56804	1.00	1.05	
110 Bromobenzene	156	12.268	12.268	0.000	96	69470	1.00	1.07	
111 trans-1,4-Dichloro-2-butene	53	12.280	12.280	0.000	92	139562	10.0	9.57	
112 1,2,3-Trichloropropane	110	12.298	12.304	-0.006	79	15377	1.00	1.12	
113 N-Propylbenzene	91	12.335	12.335	0.000	99	338497	1.00	1.05	
114 2-Chlorotoluene	126	12.408	12.414	-0.006	96	68023	1.00	1.07	
115 1,3,5-Trimethylbenzene	105	12.469	12.469	0.000	94	240788	1.00	1.05	
116 4-Chlorotoluene	126	12.505	12.505	0.000	97	71097	1.00	1.07	
118 tert-Butylbenzene	134	12.713	12.713	0.000	94	50184	1.00	1.03	
120 Pentachloroethane	167	12.743	12.743	0.000	90	43066	1.00	1.03	
119 1,2,4-Trimethylbenzene	105	12.755	12.755	0.000	97	250956	1.00	1.05	
121 sec-Butylbenzene	105	12.877	12.877	0.000	94	311759	1.00	1.05	
122 1,3-Dichlorobenzene	146	12.975	12.975	0.000	98	137230	1.00	1.05	
123 4-Isopropyltoluene	119	12.981	12.981	0.000	98	274677	1.00	1.06	
* 124 1,4-Dichlorobenzene-d4	152	13.030	13.030	0.000	95	860391	10.0	10.0	
125 1,4-Dichlorobenzene	146	13.048	13.048	0.000	94	138733	1.00	1.04	
126 1,2,3-Trimethylbenzene	120	13.060	13.060	0.000	99	109147	1.00	1.03	
127 Benzyl chloride	126	13.127	13.127	0.000	99	25065	1.00	1.07	
129 p-Diethylbenzene	119	13.182	13.182	0.000	93	165650	1.00	1.06	
130 n-Butylbenzene	92	13.274	13.274	0.000	98	144959	1.00	1.06	
131 1,2-Dichlorobenzene	146	13.310	13.310	0.000	98	130553	1.00	1.07	
134 1,2-Dibromo-3-Chloropropane	155	13.853	13.853	0.000	87	8650	1.00	1.10	
135 1,3,5-Trichlorobenzene	180	13.975	13.975	0.000	98	114581	1.00	1.04	
136 1,2,4-Trichlorobenzene	180	14.395	14.395	0.000	94	104962	1.00	1.04	
137 Hexachlorobutadiene	225	14.481	14.481	0.000	97	50715	1.00	1.02	
138 Naphthalene	128	14.578	14.578	0.000	97	196928	1.00	1.07	
139 1,2,3-Trichlorobenzene	180	14.718	14.718	0.000	95	93358	1.00	1.05	
140 2-Methylnaphthalene	142	15.340	15.340	0.000	92	137772	1.00	1.05	

## QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

## Reagents:

MSV\_RV1\_826\_00031

Amount Added: 2.00

Units: uL

MSV\_RV4GAS826\_00097

Amount Added: 2.00

Units: uL

MSV\_RV4\_826\_00035

Amount Added: 2.00

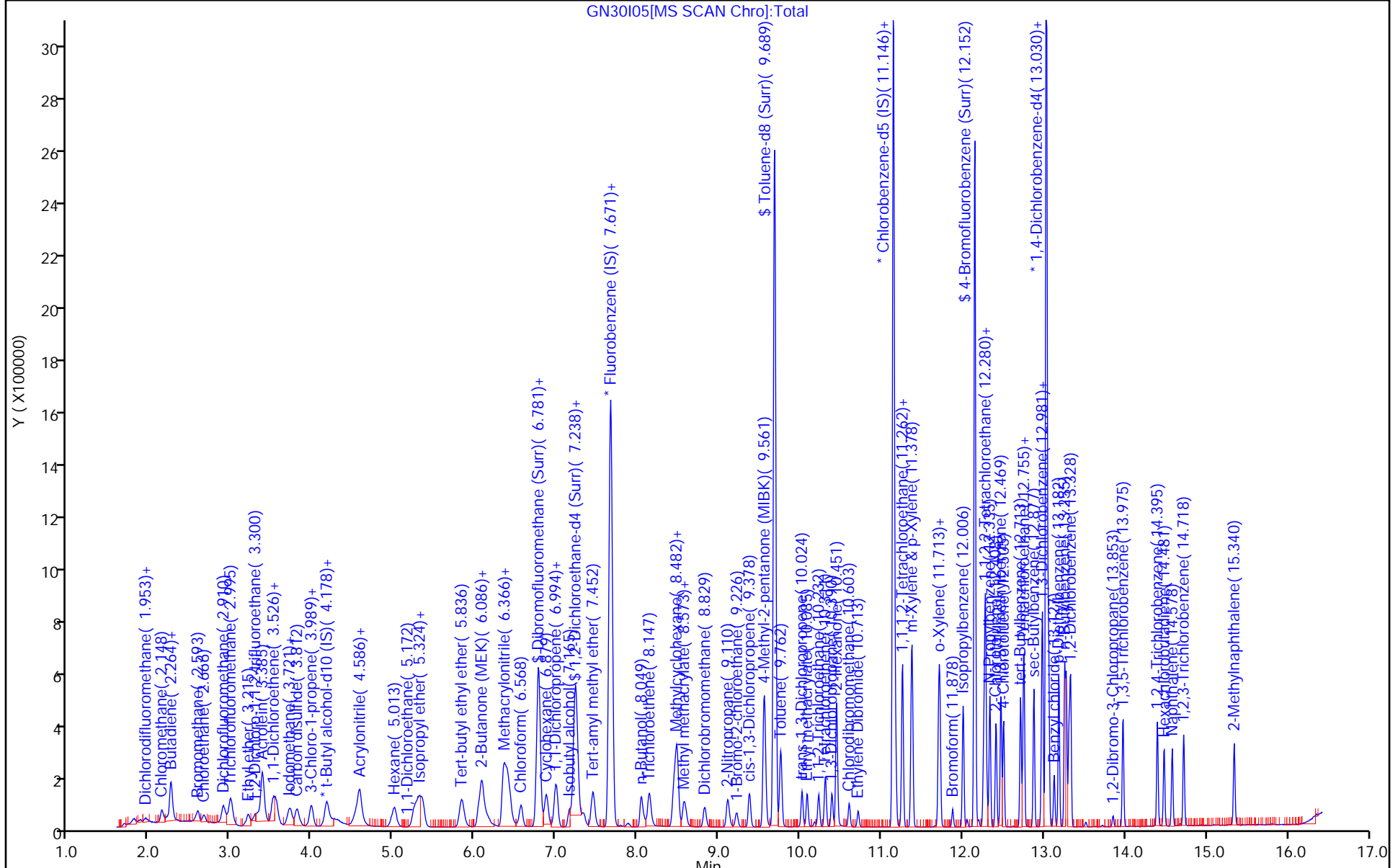
Units: uL

MSV\_29\_826ISS\_00013

Amount Added: 1.00

Units: uL

Run Reagent



Euofins Lancaster Laboratories Env, LLC

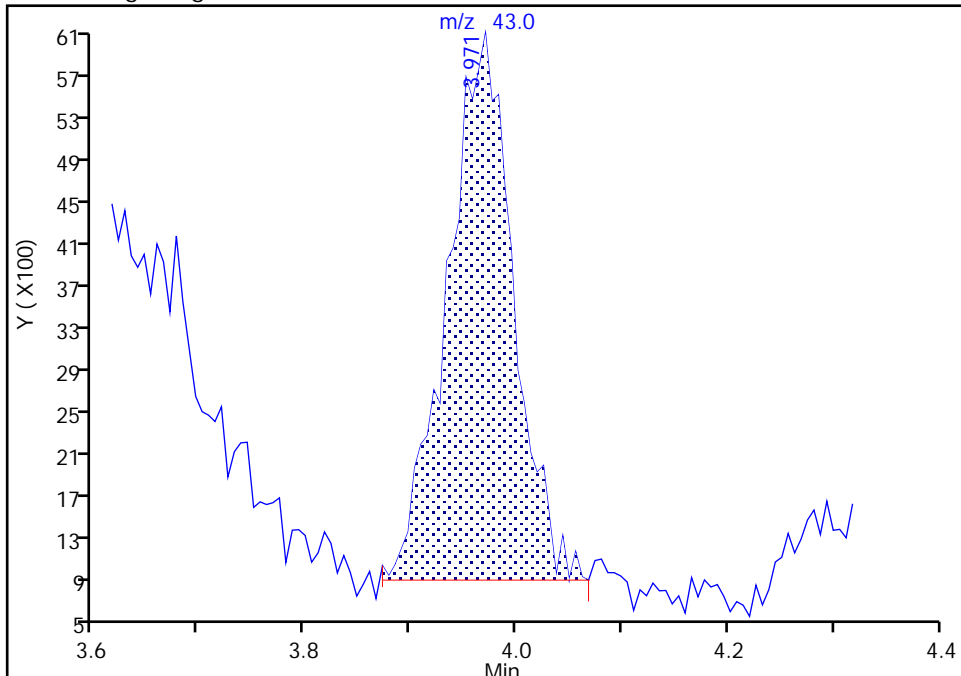
Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I05.D  
Injection Date: 30-Nov-2020 14:19:30 Instrument ID: 16334  
Lims ID: IC std3  
Client ID:  
Operator ID: DVV10203 ALS Bottle#: 6 Worklist Smp#: 7  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_16334\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

26 Methyl acetate, CAS: 79-20-9

Signal: 1

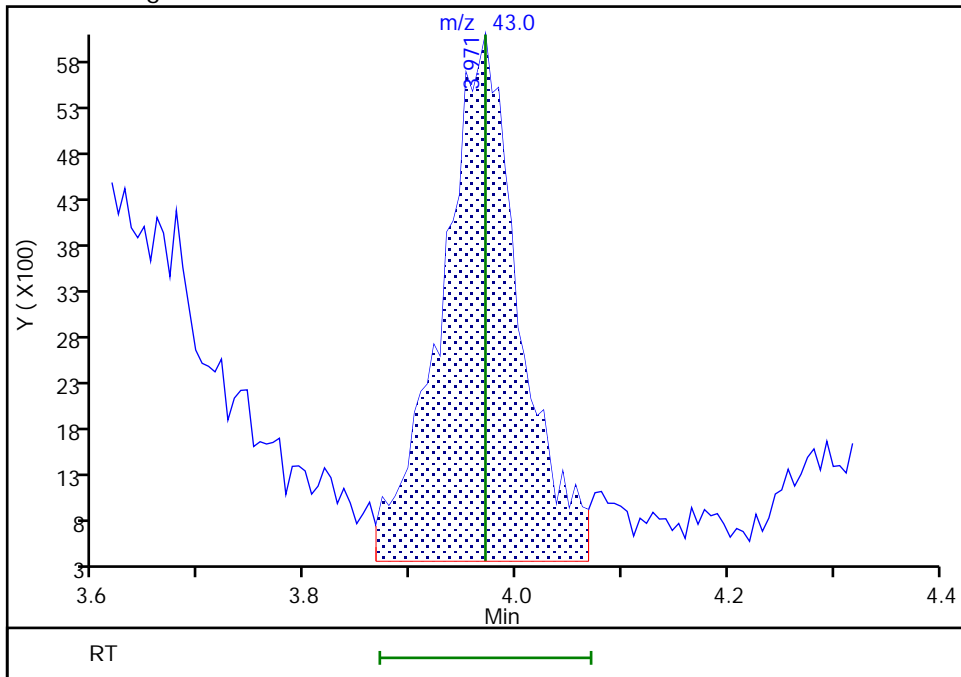
RT: 3.97  
Area: 22428  
Amount: 0.855084  
Amount Units: ug/l

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

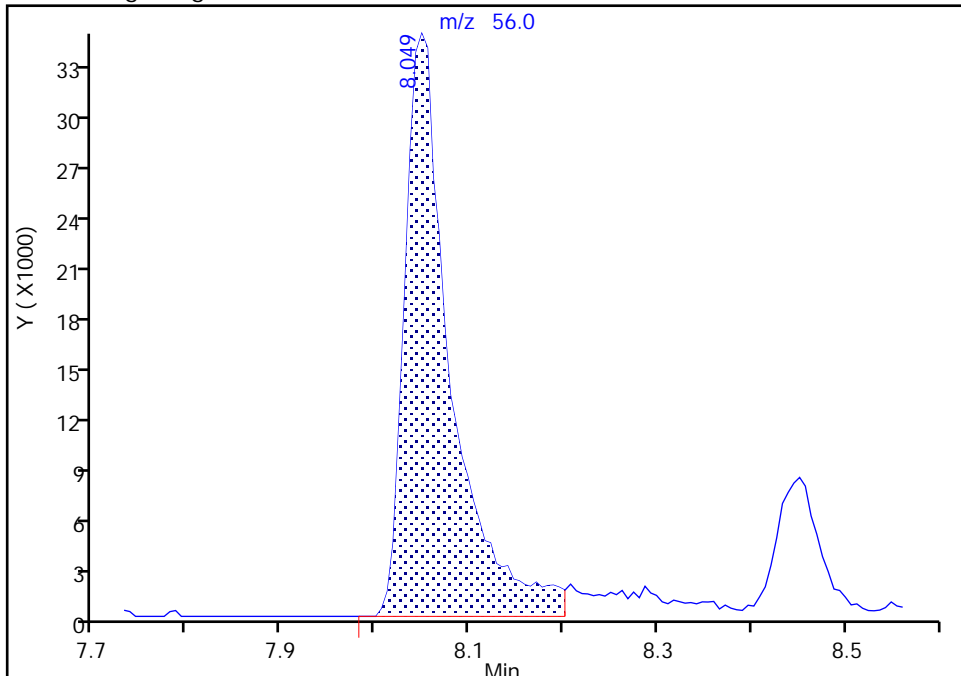
Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I05.D  
Injection Date: 30-Nov-2020 14:19:30 Instrument ID: 16334  
Lims ID: IC std3  
Client ID:  
Operator ID: DVV10203 ALS Bottle#: 6 Worklist Smp#: 7  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_16334\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

65 n-Butanol, CAS: 71-36-3

Signal: 1

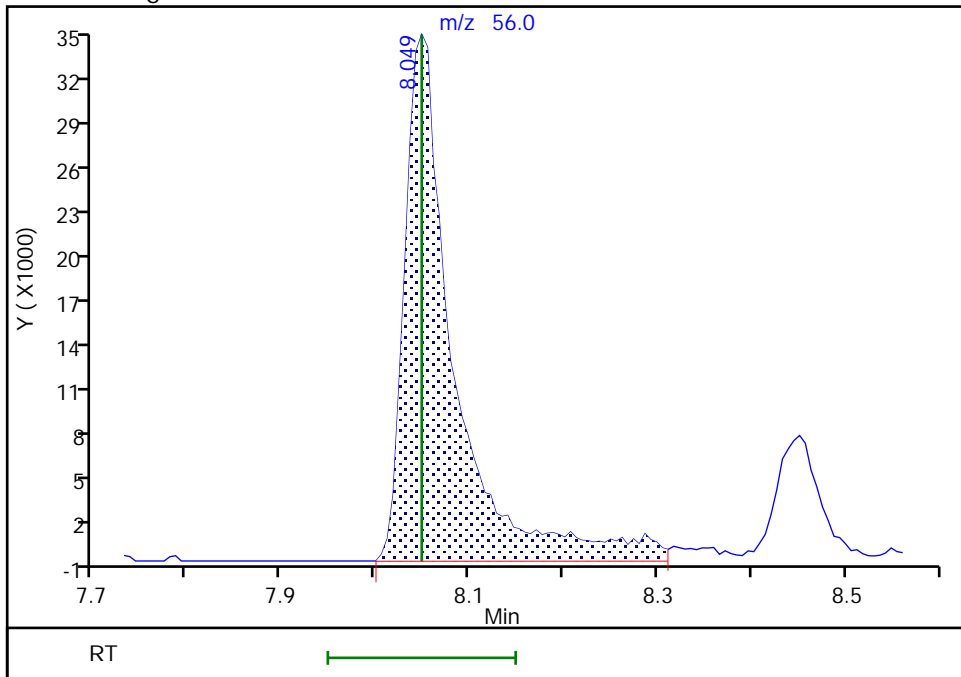
RT: 8.05  
Area: 117068  
Amount: 90.927496  
Amount Units: ug/l

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

Euofins Lancaster Laboratories Env, LLC

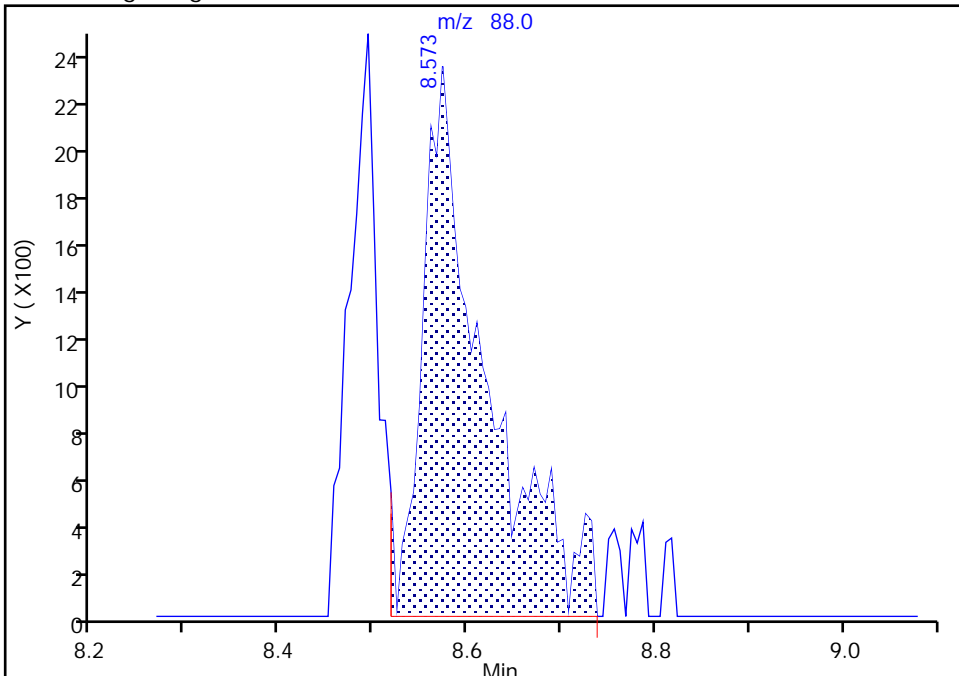
Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I05.D  
Injection Date: 30-Nov-2020 14:19:30 Instrument ID: 16334  
Lims ID: IC std3  
Client ID:  
Operator ID: DVV10203 ALS Bottle#: 6 Worklist Smp#: 7  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_16334\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

72 1,4-Dioxane, CAS: 123-91-1

Signal: 1

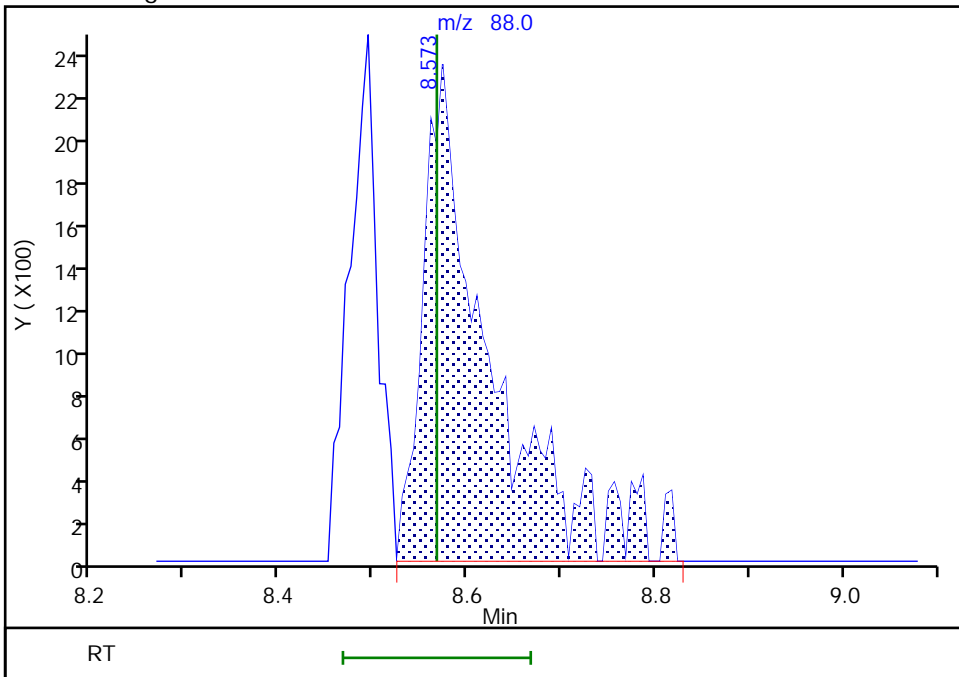
RT: 8.57  
Area: 10783  
Amount: 49.653151  
Amount Units: ug/l

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-trifluoroetha	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

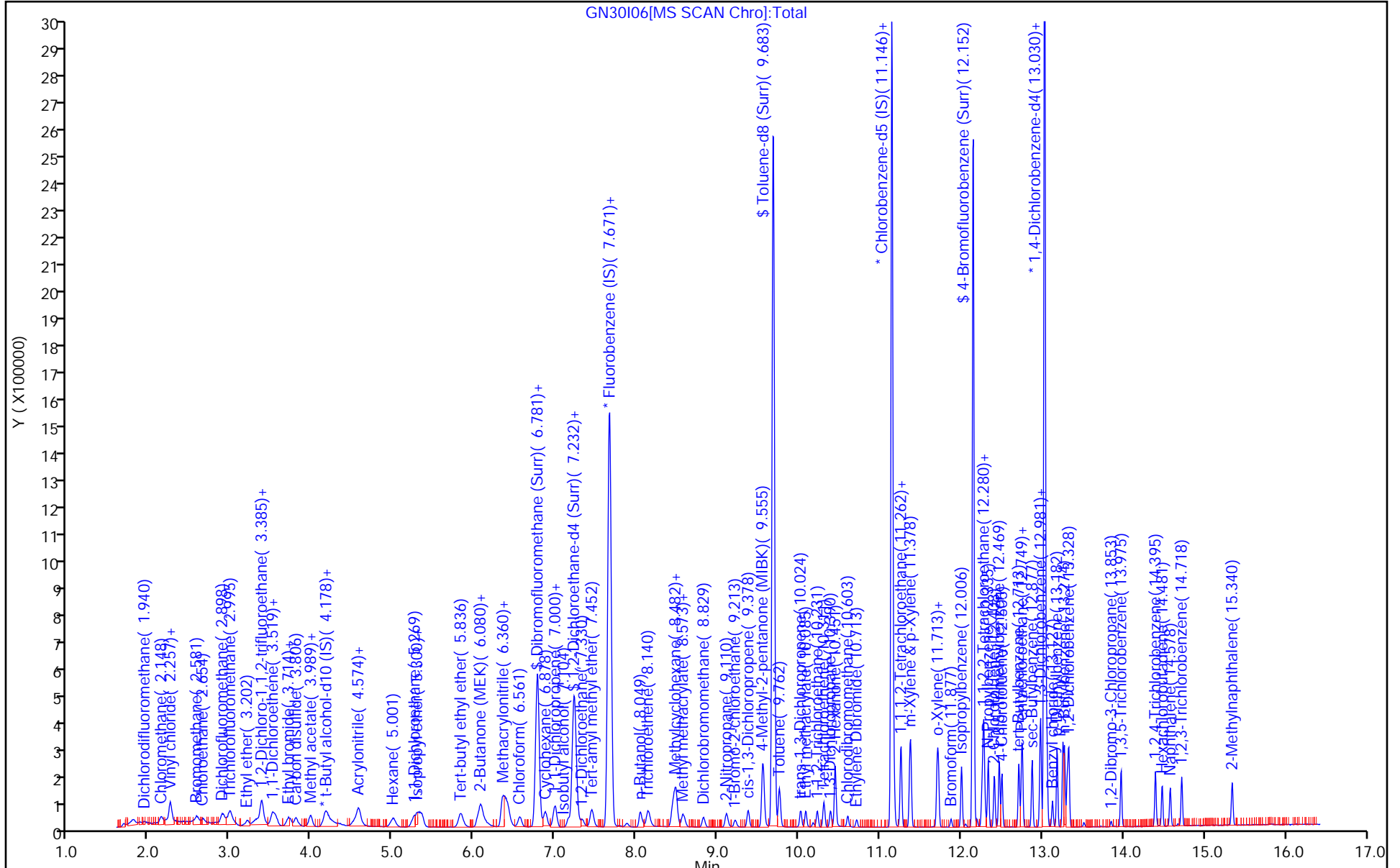
MSV\_29\_826ISS\_00013

Amount Added: 1.00

Units: uL

Run Reagent





GN30I06[MS SCAN Chrom]:Total

Eurofins Lancaster Laboratories Env, LLC

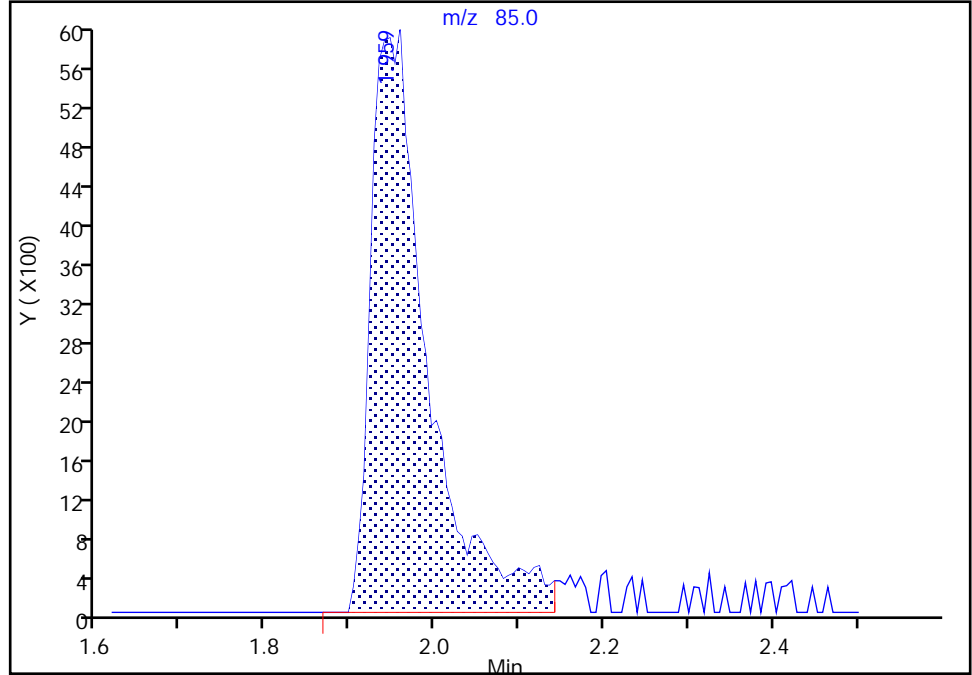
Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I06.D  
Injection Date: 30-Nov-2020 14:41:30 Instrument ID: 16334  
Lims ID: IC std2  
Client ID:  
Operator ID: DVV10203 ALS Bottle#: 7 Worklist Smp#: 8  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_16334\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

1 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

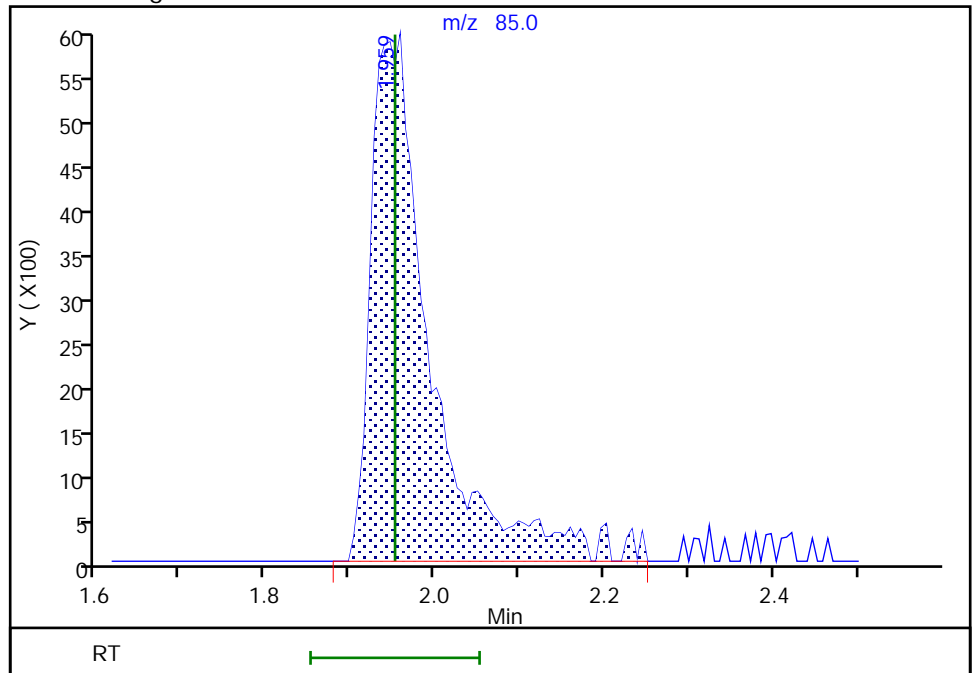
RT: 1.96  
Area: 27810  
Amount: 0.491868  
Amount Units: ug/l

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

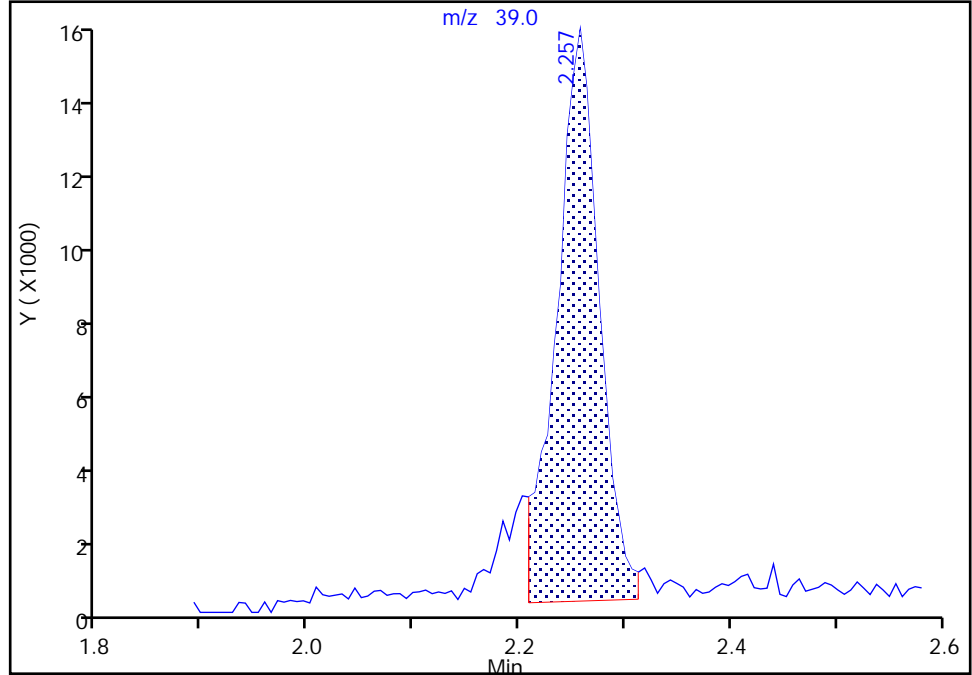
Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I06.D  
Injection Date: 30-Nov-2020 14:41:30 Instrument ID: 16334  
Lims ID: IC std2  
Client ID:  
Operator ID: DVV10203 ALS Bottle#: 7 Worklist Smp#: 8  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_16334\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

6 Butadiene, CAS: 106-99-0

Signal: 1

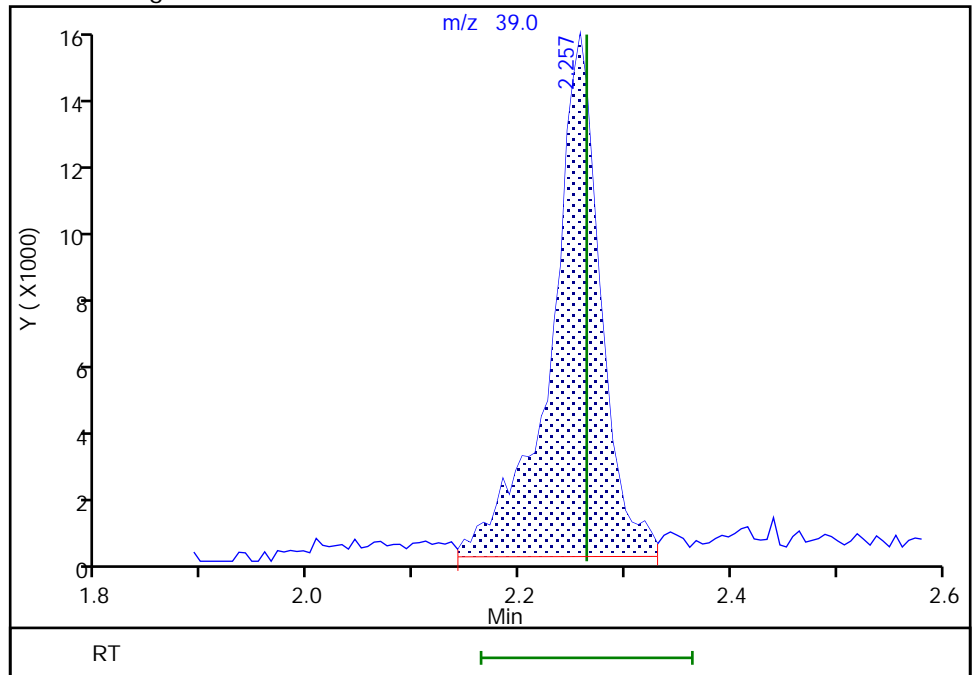
RT: 2.26  
Area: 43591  
Amount: 0.531353  
Amount Units: ug/l

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

Euofins Lancaster Laboratories Env, LLC

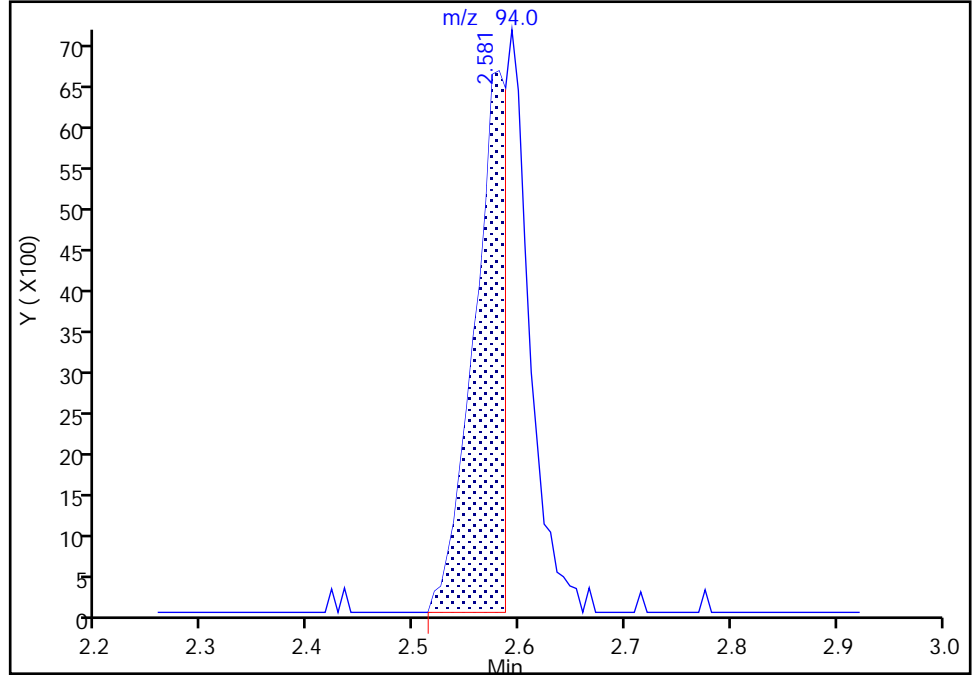
Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I06.D  
Injection Date: 30-Nov-2020 14:41:30 Instrument ID: 16334  
Lims ID: IC std2  
Client ID:  
Operator ID: DVV10203 ALS Bottle#: 7 Worklist Smp#: 8  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_16334\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

9 Bromomethane, CAS: 74-83-9

Signal: 1

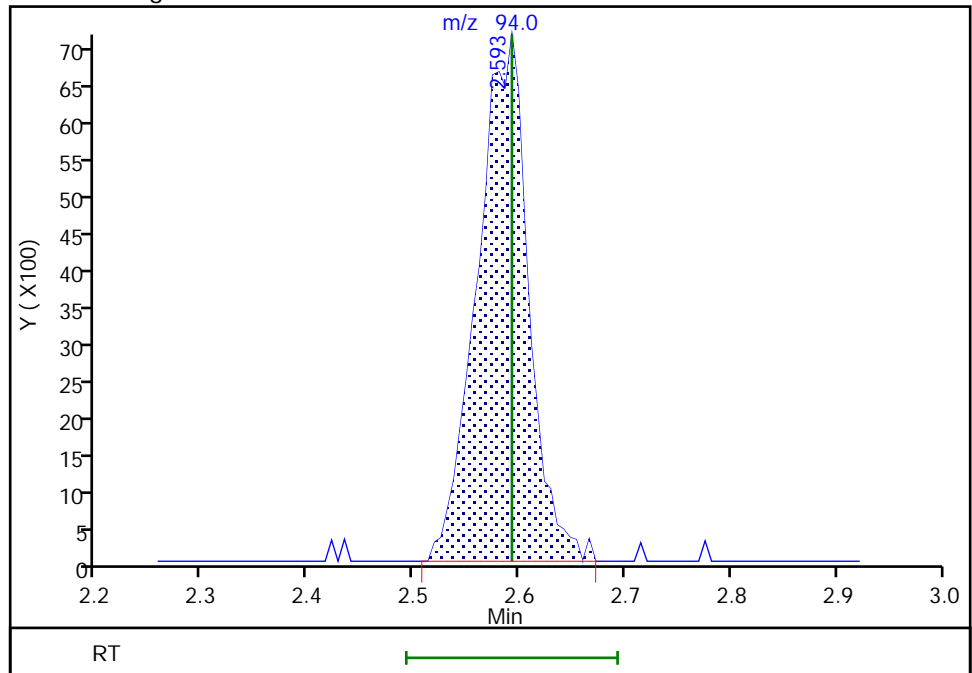
RT: 2.58  
Area: 14139  
Amount: 0.329668  
Amount Units: ug/l

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

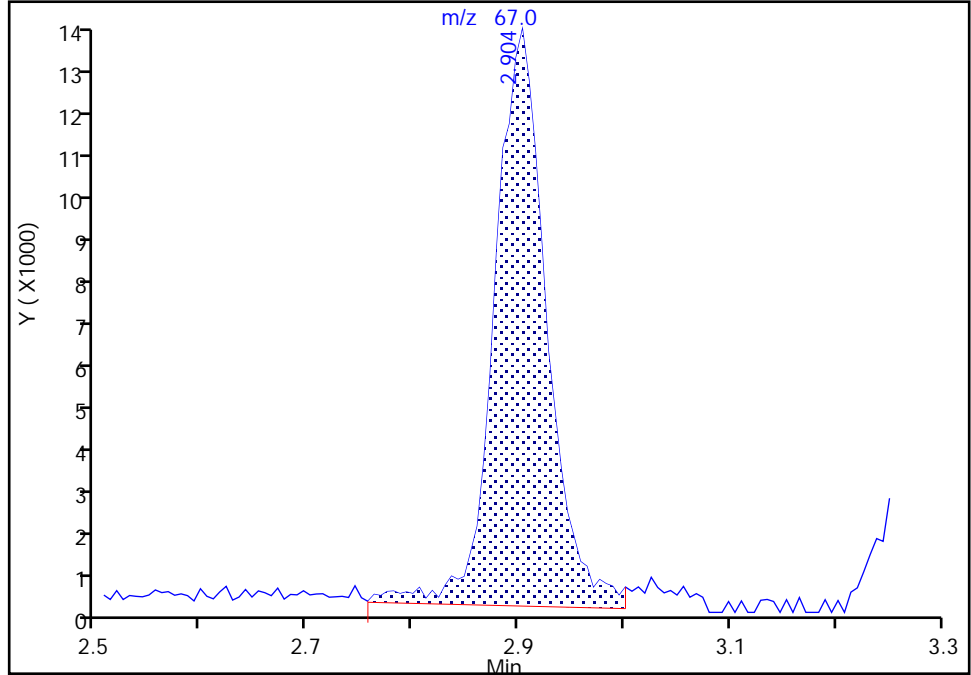
Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I06.D  
Injection Date: 30-Nov-2020 14:41:30 Instrument ID: 16334  
Lims ID: IC std2  
Client ID:  
Operator ID: DVV10203 ALS Bottle#: 7 Worklist Smp#: 8  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_16334\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

11 Dichlorofluoromethane, CAS: 75-43-4

Signal: 1

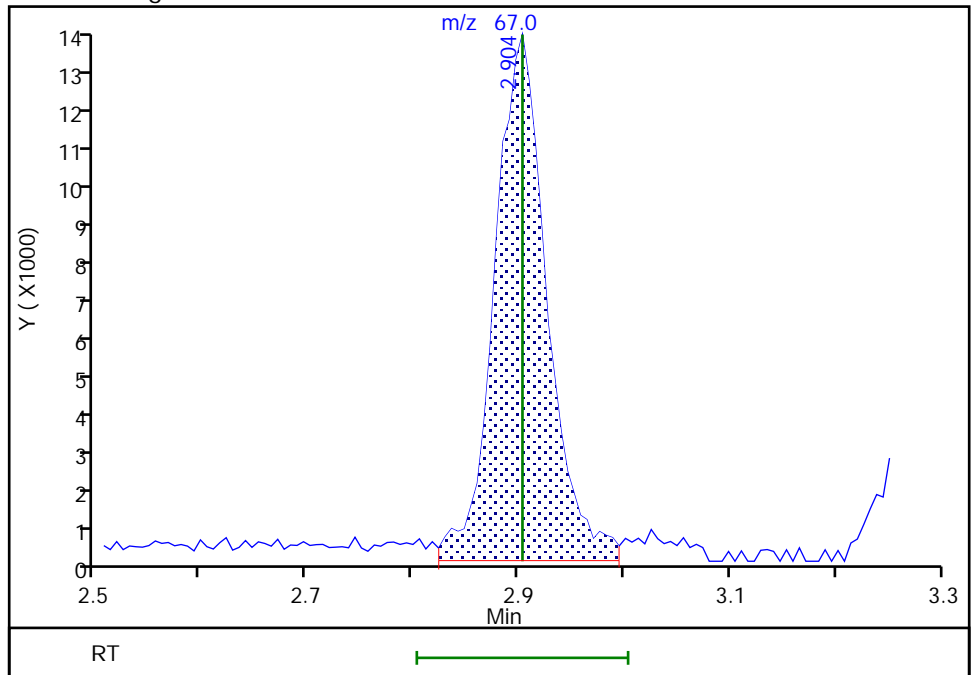
RT: 2.90  
Area: 46241  
Amount: 0.521398  
Amount Units: ug/l

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

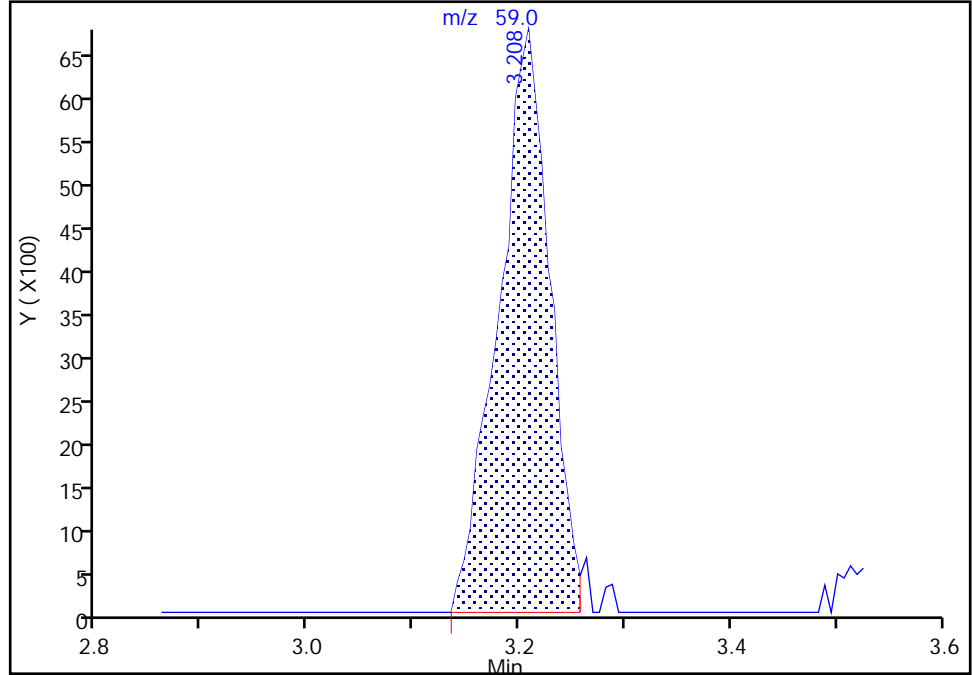
Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I06.D  
Injection Date: 30-Nov-2020 14:41:30 Instrument ID: 16334  
Lims ID: IC std2  
Client ID:  
Operator ID: DVV10203 ALS Bottle#: 7 Worklist Smp#: 8  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_16334\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

15 Ethyl ether, CAS: 60-29-7

Signal: 1

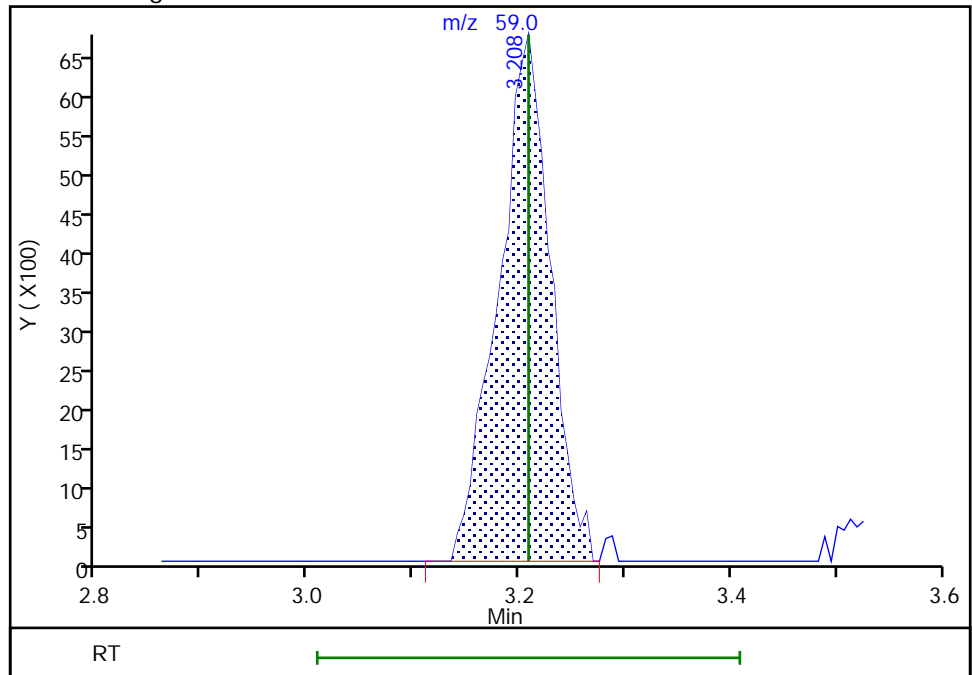
RT: 3.21  
Area: 22702  
Amount: 0.541226  
Amount Units: ug/l

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

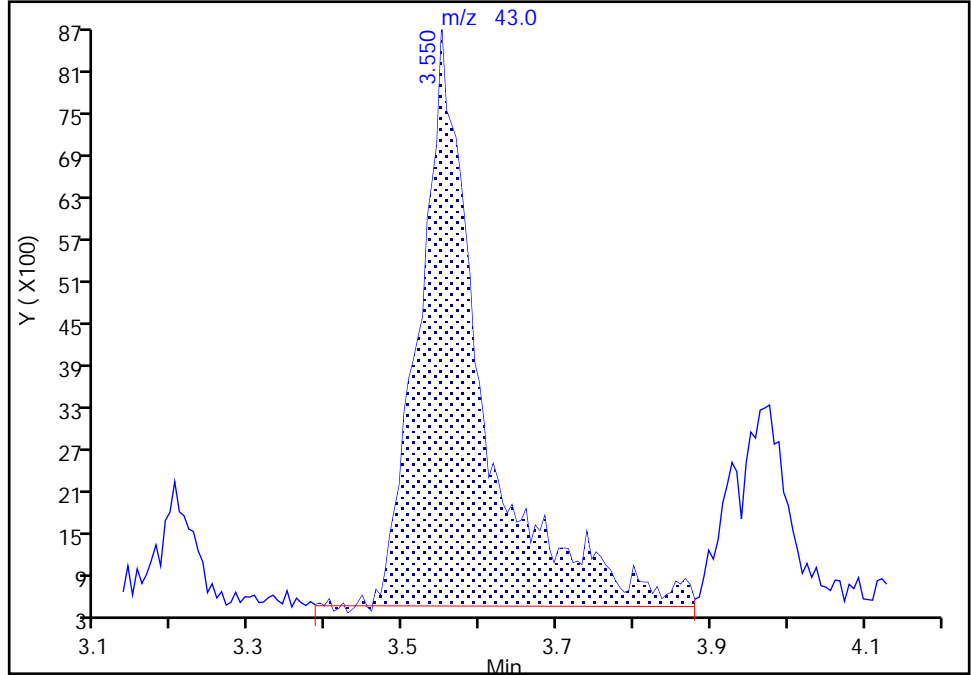
Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I06.D  
Injection Date: 30-Nov-2020 14:41:30 Instrument ID: 16334  
Lims ID: IC std2  
Client ID:  
Operator ID: DVV10203 ALS Bottle#: 7 Worklist Smp#: 8  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_16334\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

20 Acetone, CAS: 67-64-1

Signal: 1

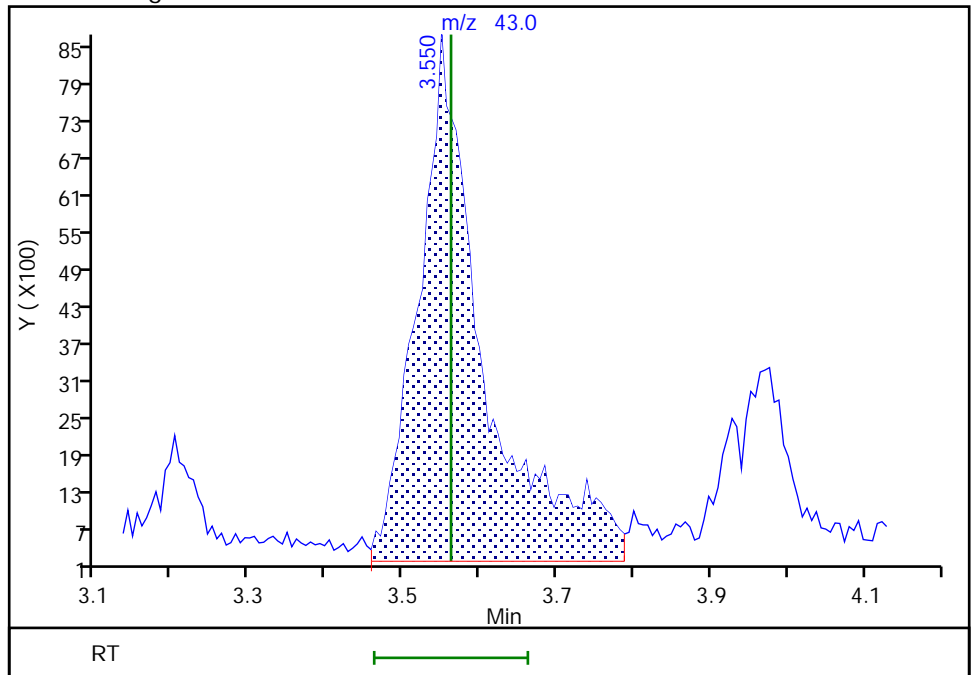
RT: 3.55  
Area: 46876  
Amount: 5.077360  
Amount Units: ug/l

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

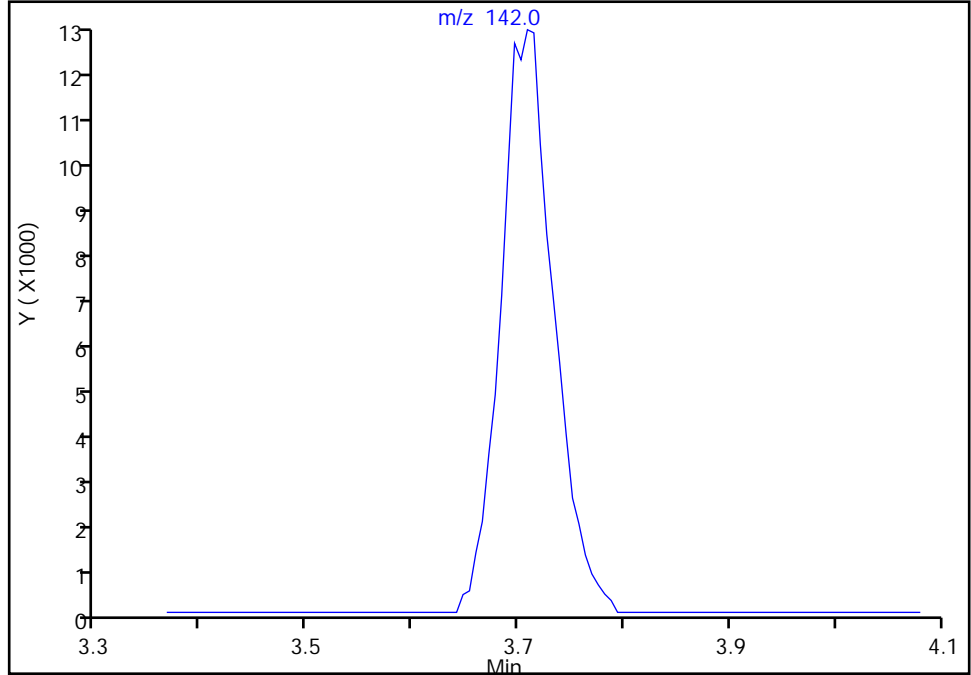
Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I06.D  
Injection Date: 30-Nov-2020 14:41:30 Instrument ID: 16334  
Lims ID: IC std2  
Client ID:  
Operator ID: DVV10203 ALS Bottle#: 7 Worklist Smp#: 8  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_16334\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

22 Iodomethane, CAS: 74-88-4

Signal: 1

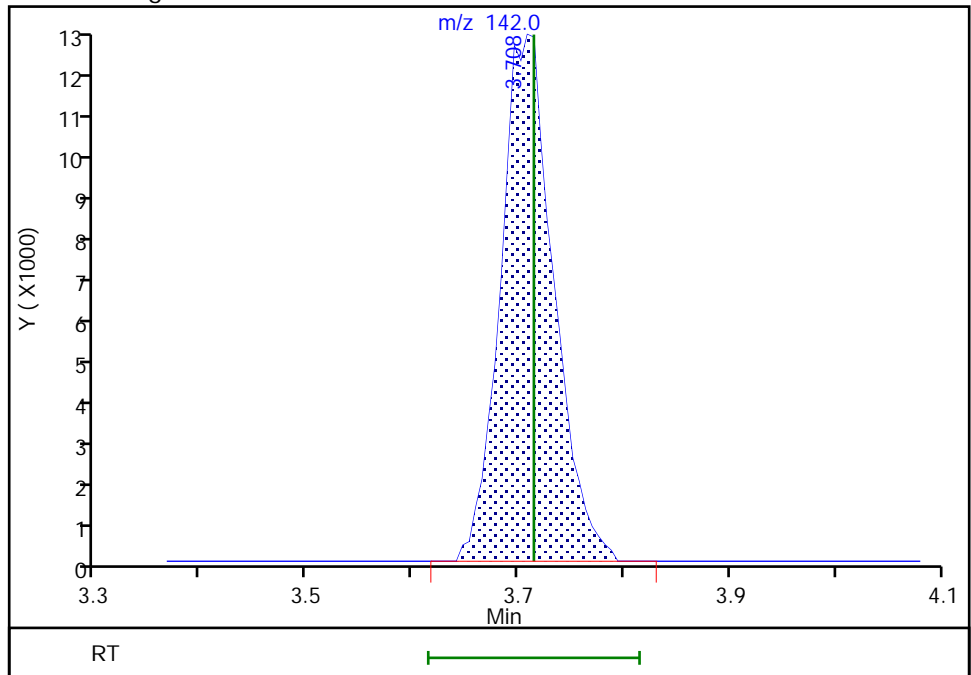
Not Detected  
Expected RT: 3.71

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

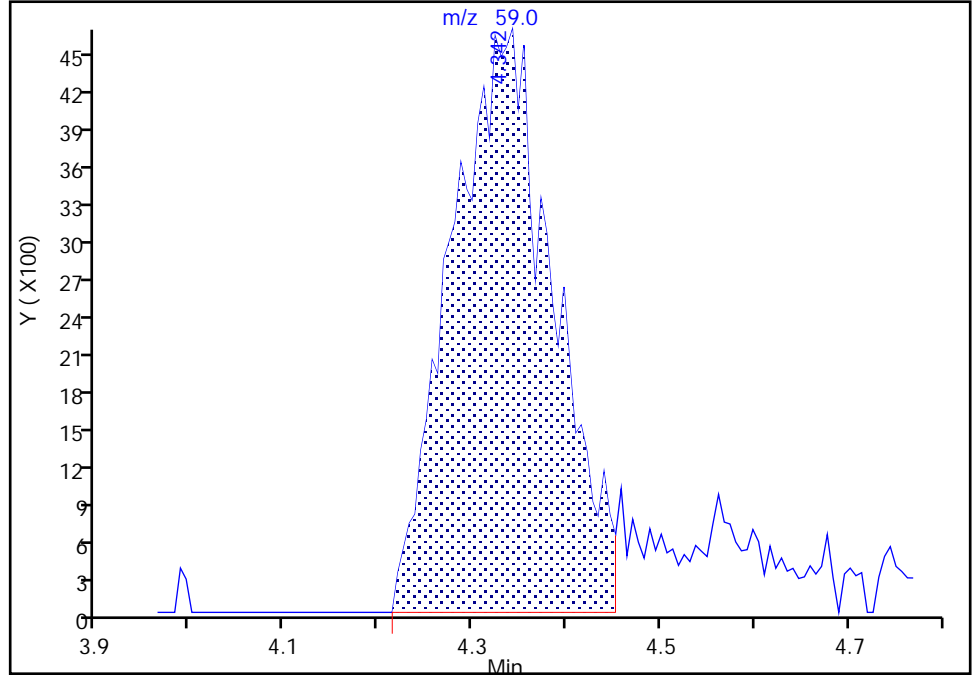
Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I06.D  
Injection Date: 30-Nov-2020 14:41:30 Instrument ID: 16334  
Lims ID: IC std2  
Client ID:  
Operator ID: DVV10203 ALS Bottle#: 7 Worklist Smp#: 8  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_16334\_25mL Limit Group: 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

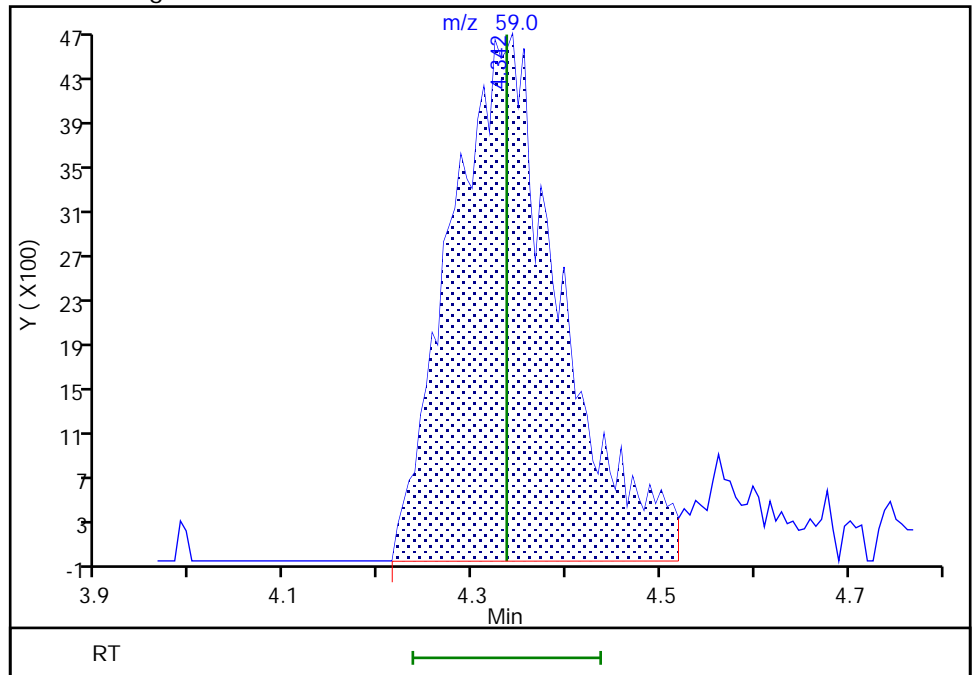
RT: 4.34  
Area: 34943  
Amount: 10.111494  
Amount Units: ug/l

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

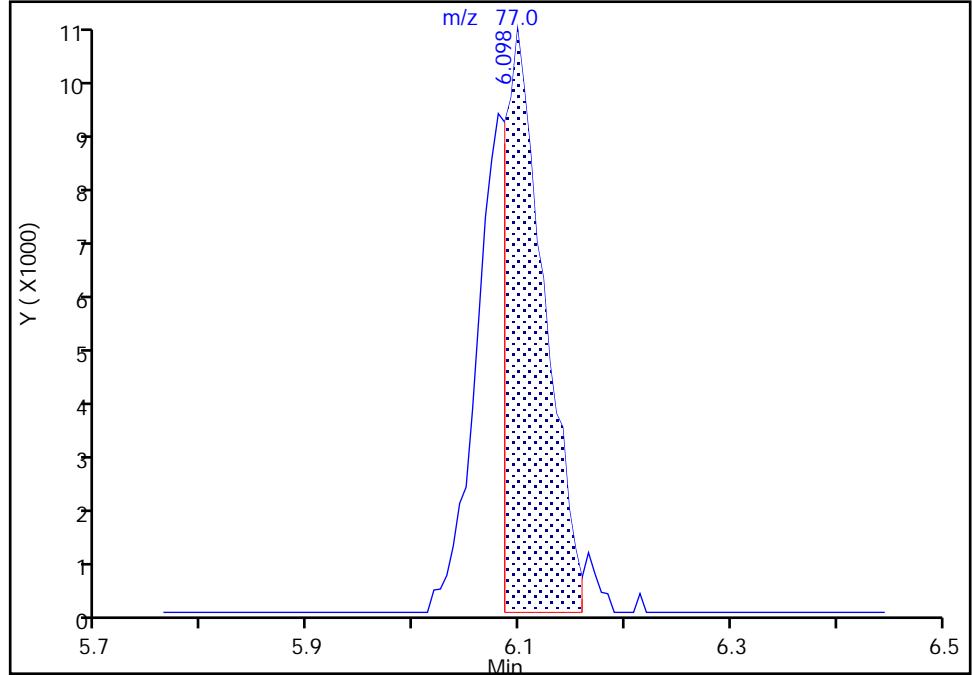
Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I06.D  
Injection Date: 30-Nov-2020 14:41:30 Instrument ID: 16334  
Lims ID: IC std2  
Client ID:  
Operator ID: DVV10203 ALS Bottle#: 7 Worklist Smp#: 8  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_16334\_25mL Limit Group: 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

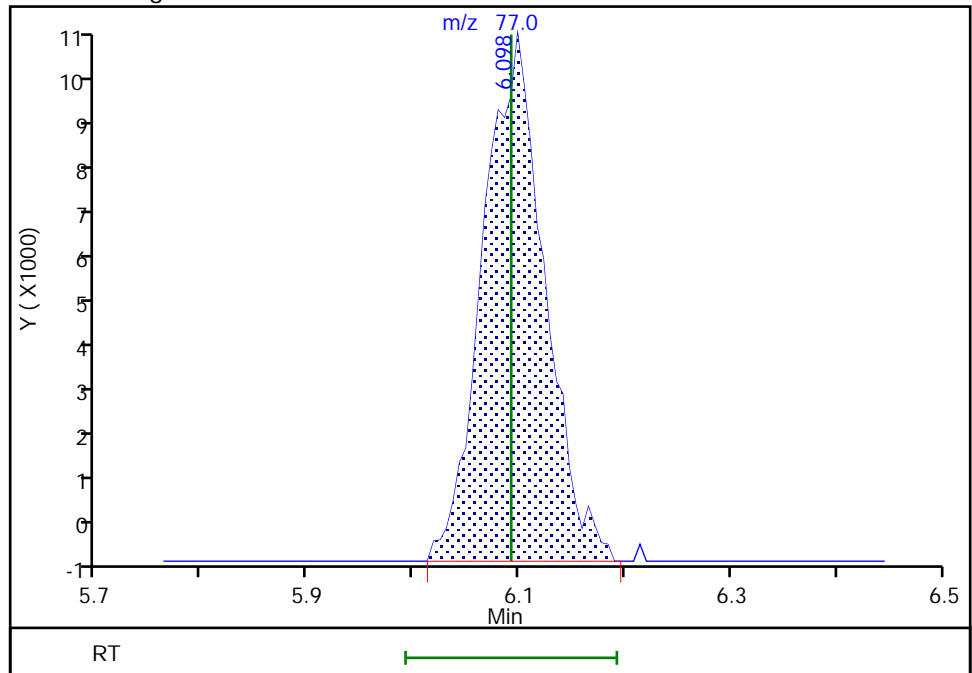
RT: 6.10  
Area: 26319  
Amount: 0.397289  
Amount Units: ug/l

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

Euofins Lancaster Laboratories Env, LLC

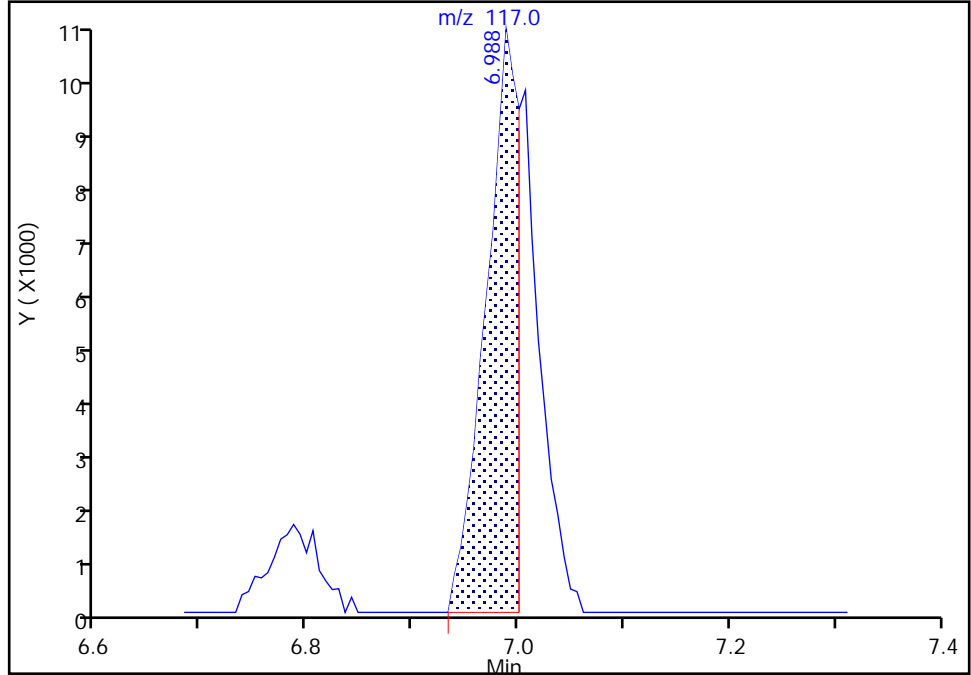
Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I06.D  
Injection Date: 30-Nov-2020 14:41:30 Instrument ID: 16334  
Lims ID: IC std2  
Client ID:  
Operator ID: DVV10203 ALS Bottle#: 7 Worklist Smp#: 8  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_16334\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

56 Carbon tetrachloride, CAS: 56-23-5

Signal: 1

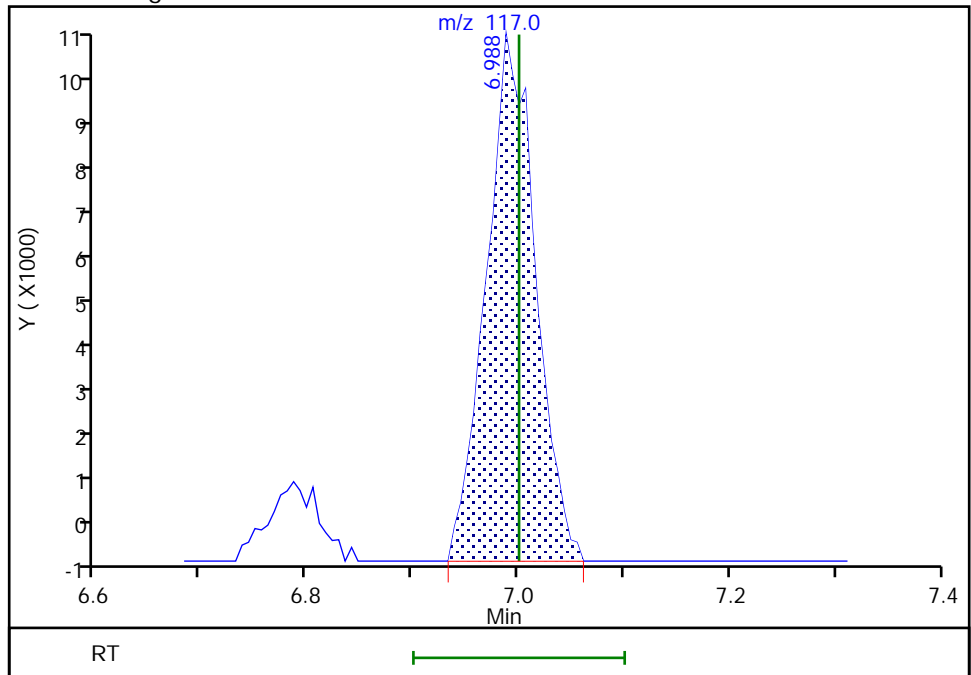
RT: 6.99  
Area: 23019  
Amount: 0.365200  
Amount Units: ug/l

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

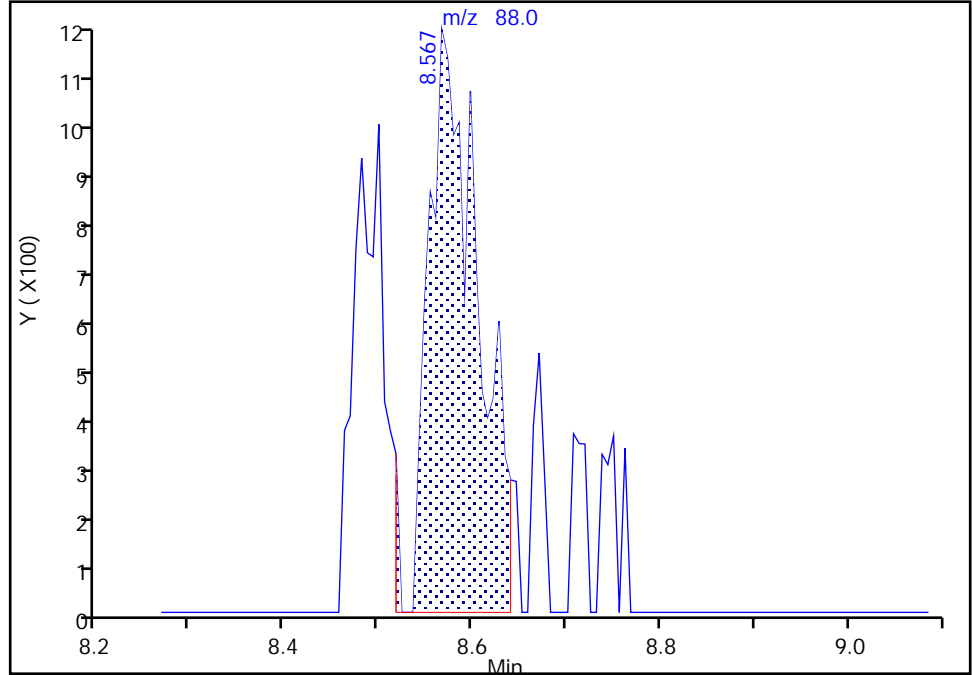
Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I06.D  
Injection Date: 30-Nov-2020 14:41:30 Instrument ID: 16334  
Lims ID: IC std2  
Client ID:  
Operator ID: DVV10203 ALS Bottle#: 7 Worklist Smp#: 8  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_16334\_25mL Limit Group: 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

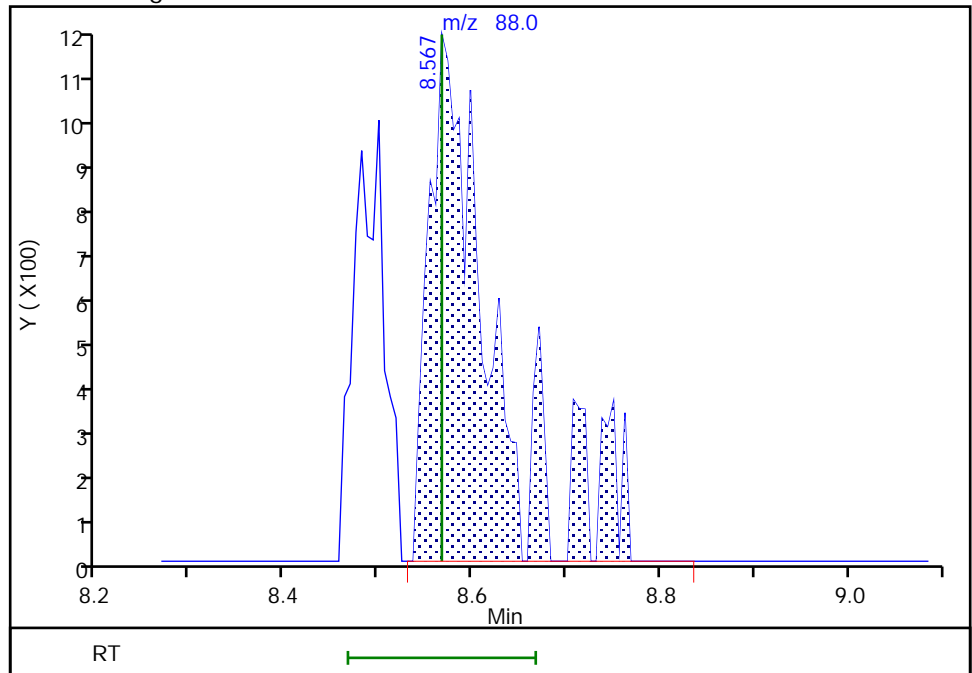
RT: 8.57  
Area: 4232  
Amount: 19.816218  
Amount Units: ug/l

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

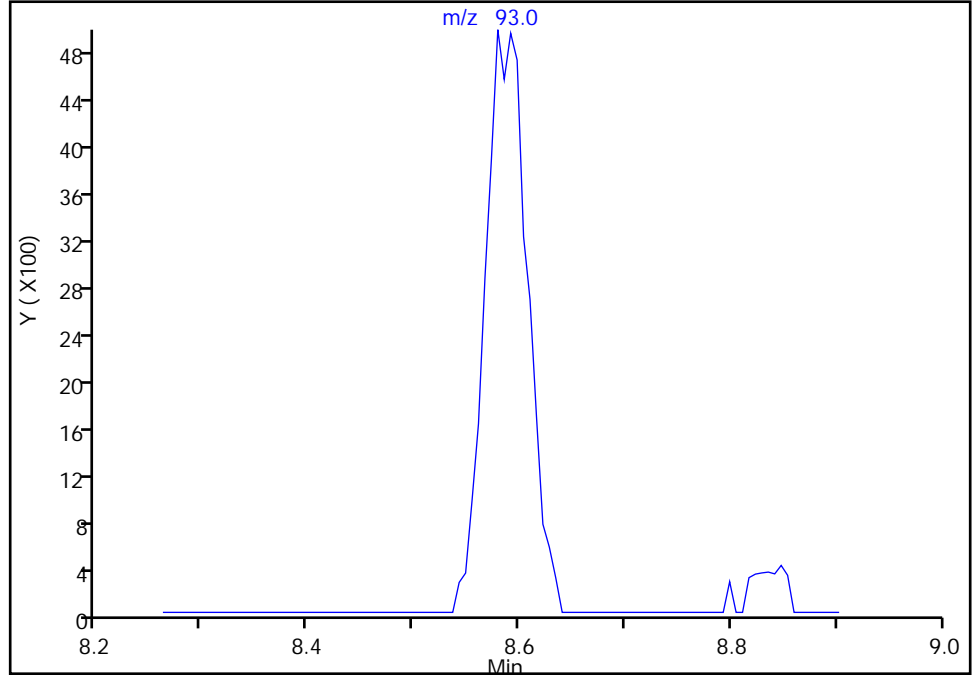
Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I06.D  
Injection Date: 30-Nov-2020 14:41:30 Instrument ID: 16334  
Lims ID: IC std2  
Client ID:  
Operator ID: DVV10203 ALS Bottle#: 7 Worklist Smp#: 8  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_16334\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

**73 Dibromomethane, CAS: 74-95-3**

Signal: 1

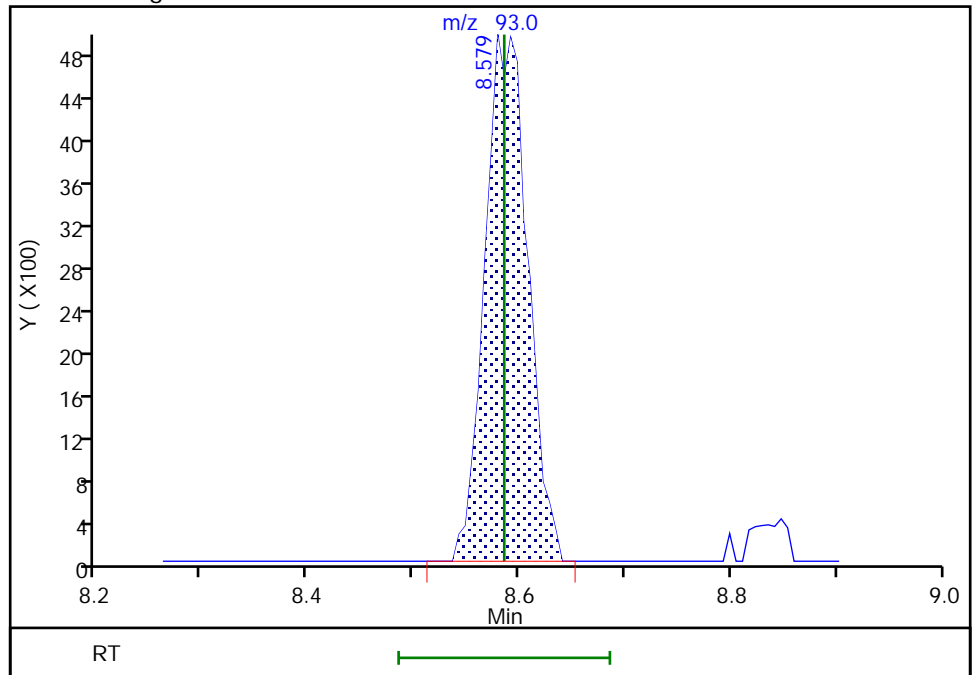
Not Detected  
Expected RT: 8.59

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\GN30I07.D

Injection Date: 30-Nov-2020 15:03:30

Instrument ID: 16334

Operator ID: DVV10203

Lims ID: IC std1

Worklist Smp#: 9

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

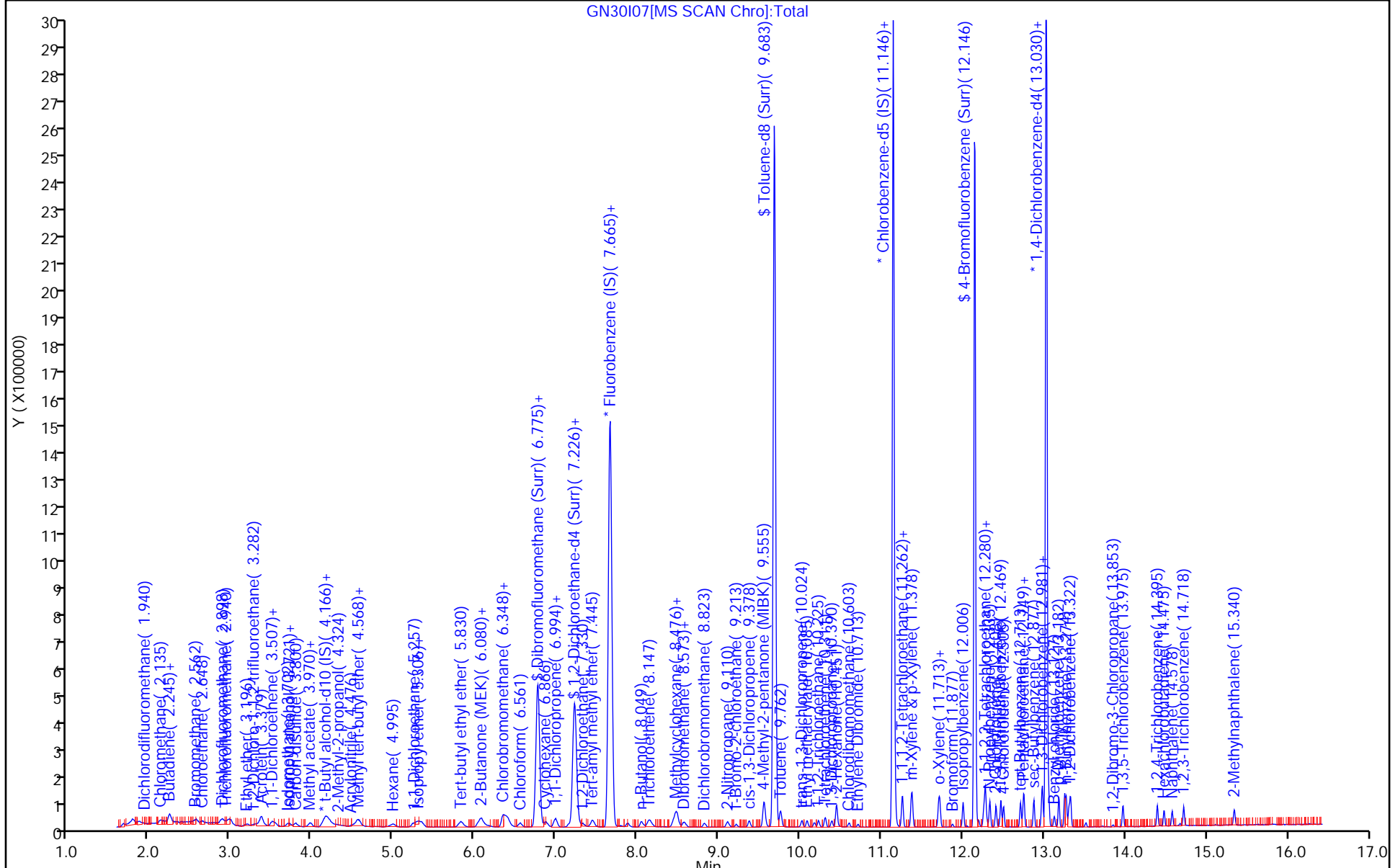
ALS Bottle#: 8

Method: MSV\_16334\_25mL

Limit Group: MSV - 8260C\_D

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

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



Eurofins Lancaster Laboratories Env, LLC

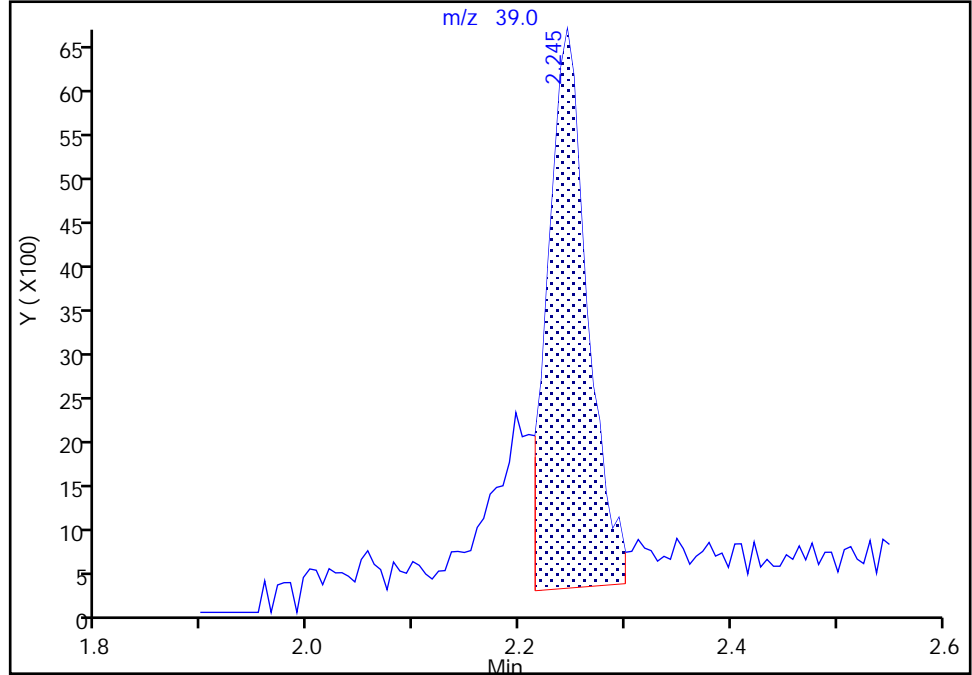
Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I07.D  
Injection Date: 30-Nov-2020 15:03:30 Instrument ID: 16334  
Lims ID: IC std1  
Client ID:  
Operator ID: DVV10203 ALS Bottle#: 8 Worklist Smp#: 9  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_16334\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

6 Butadiene, CAS: 106-99-0

Signal: 1

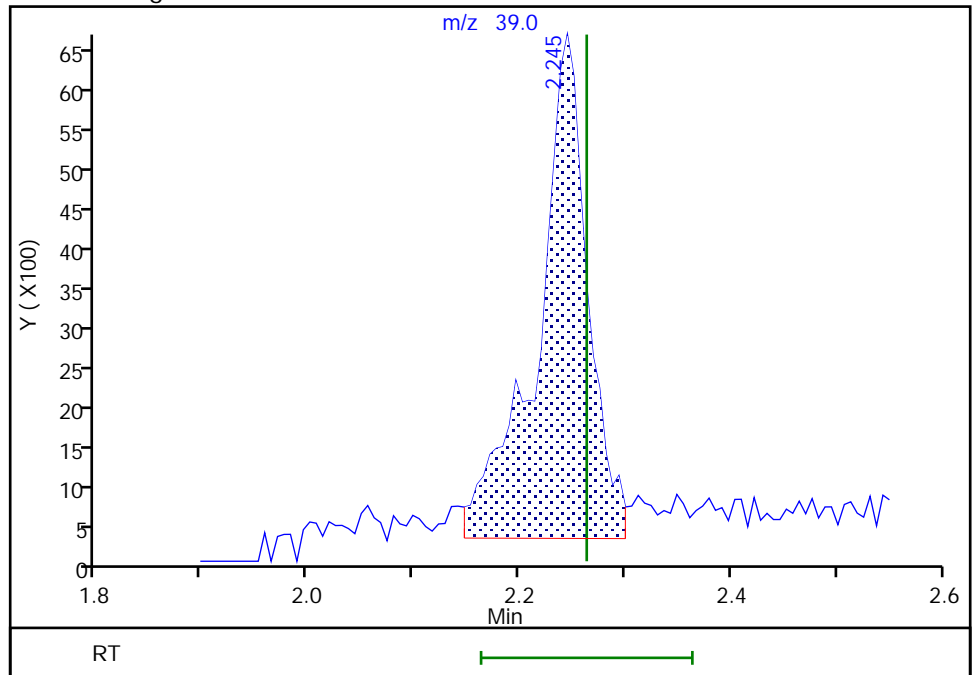
RT: 2.25  
Area: 16681  
Amount: 0.196763  
Amount Units: ug/l

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

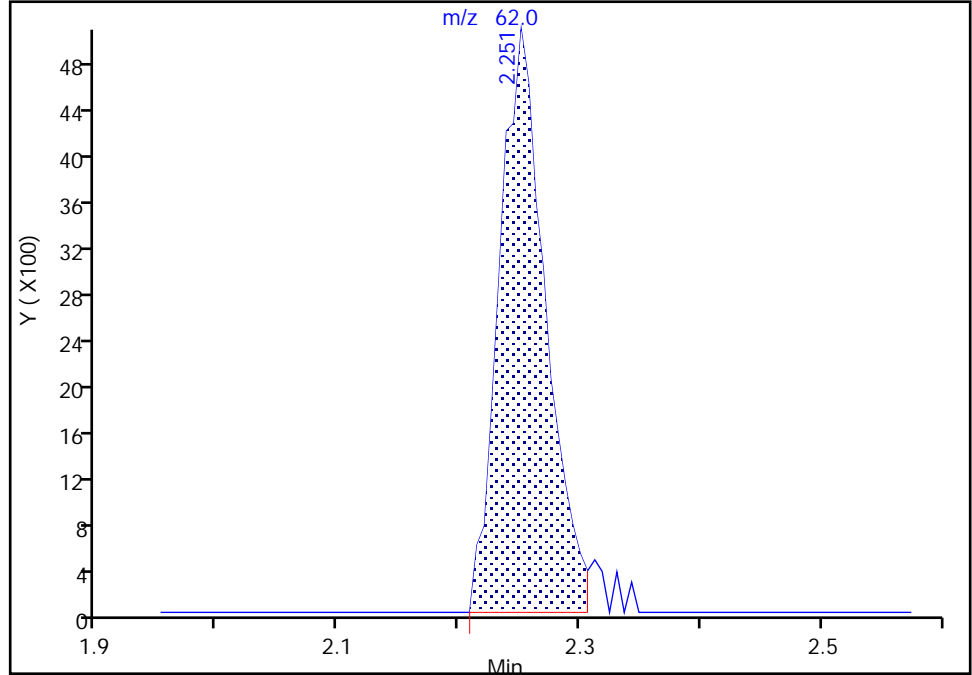
Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I07.D  
Injection Date: 30-Nov-2020 15:03:30 Instrument ID: 16334  
Lims ID: IC std1  
Client ID:  
Operator ID: DVV10203 ALS Bottle#: 8 Worklist Smp#: 9  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_16334\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

7 Vinyl chloride, CAS: 75-01-4

Signal: 1

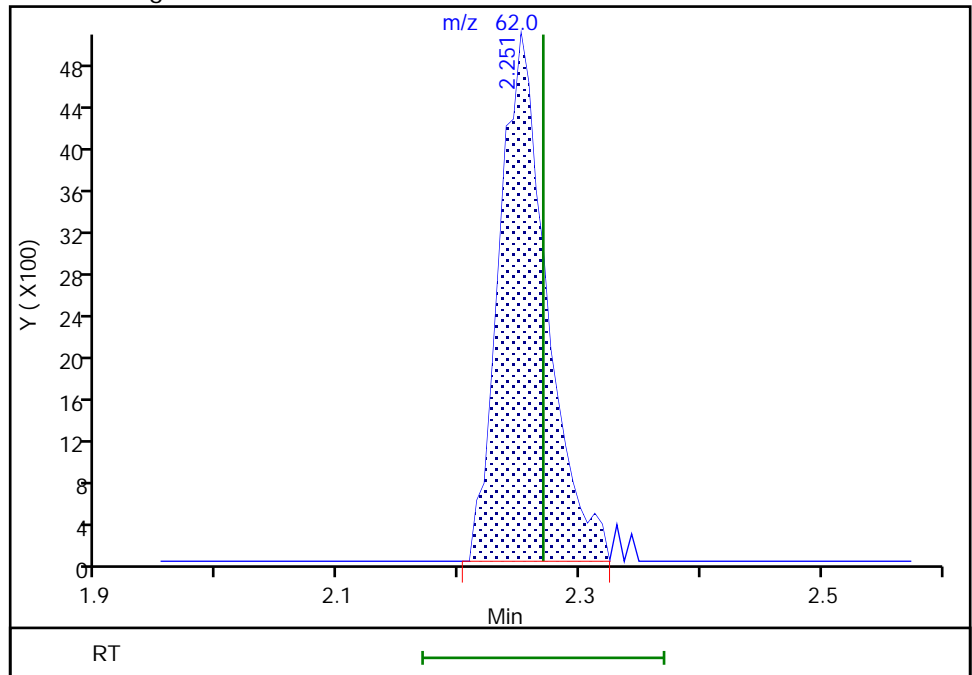
RT: 2.25  
Area: 13633  
Amount: 0.207129  
Amount Units: ug/l

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

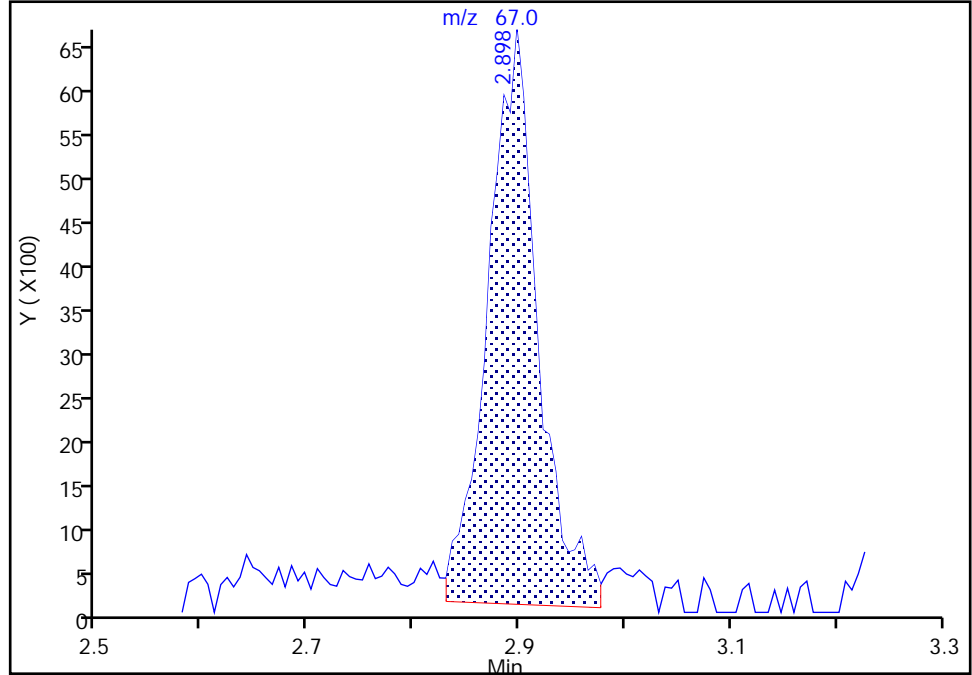
Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I07.D  
Injection Date: 30-Nov-2020 15:03:30 Instrument ID: 16334  
Lims ID: IC std1  
Client ID:  
Operator ID: DVV10203 ALS Bottle#: 8 Worklist Smp#: 9  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_16334\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

11 Dichlorofluoromethane, CAS: 75-43-4

Signal: 1

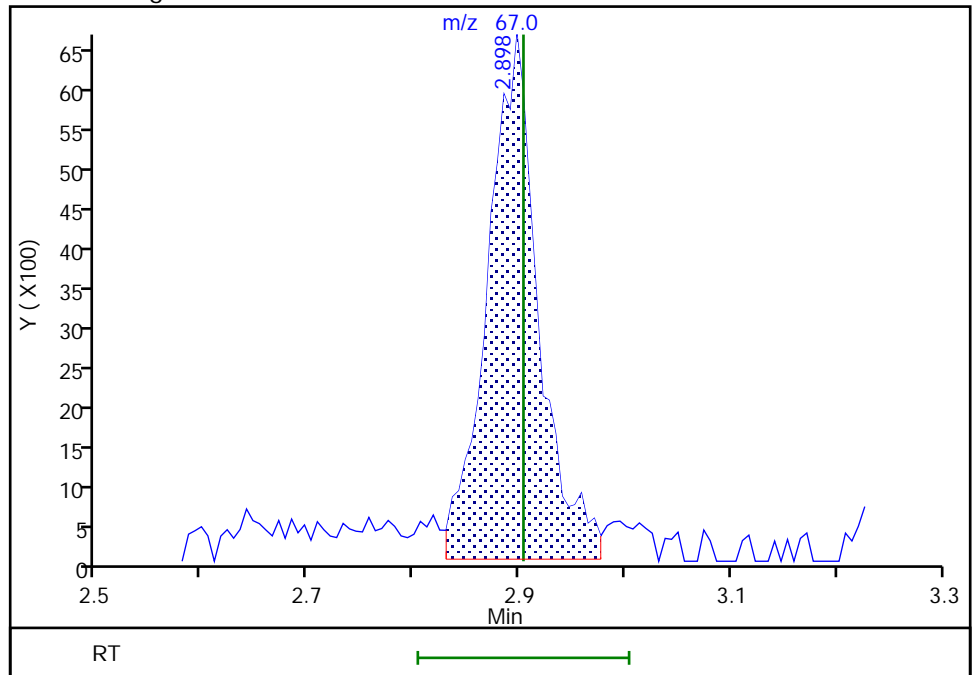
RT: 2.90  
Area: 21552  
Amount: 0.241088  
Amount Units: ug/l

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

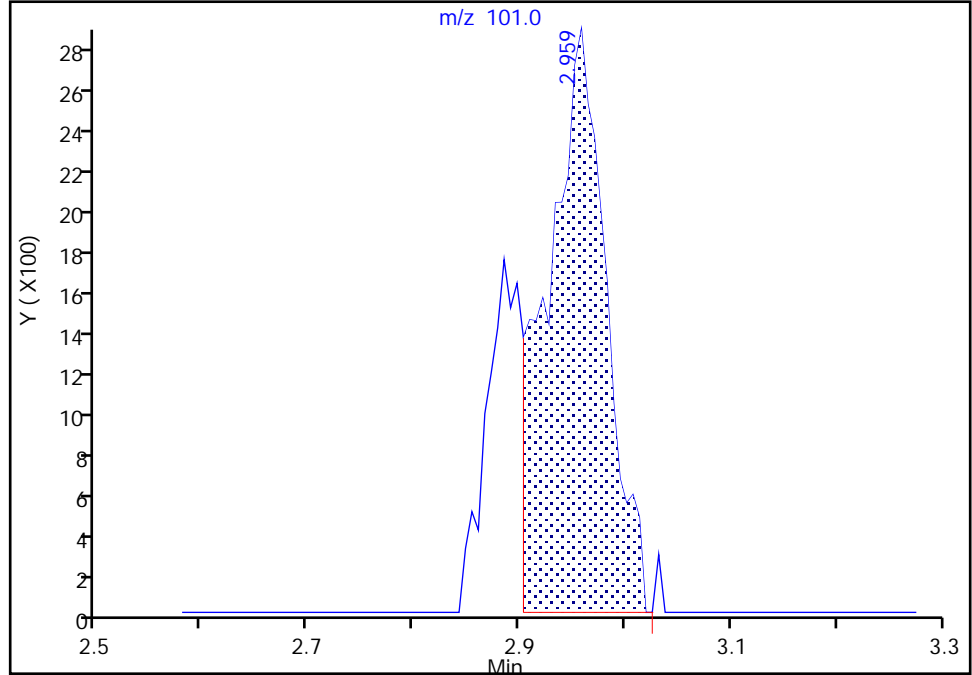
Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30107.D  
Injection Date: 30-Nov-2020 15:03:30 Instrument ID: 16334  
Lims ID: IC std1  
Client ID:  
Operator ID: DVV10203 ALS Bottle#: 8 Worklist Smp#: 9  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_16334\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

13 Trichlorofluoromethane, CAS: 75-69-4

Signal: 1

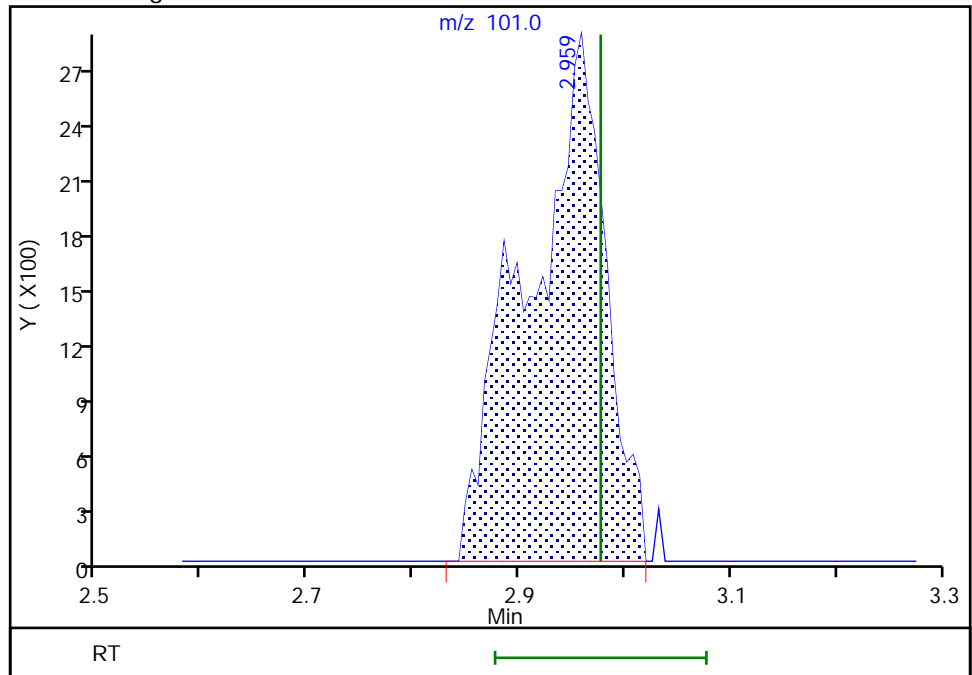
RT: 2.96  
Area: 11144  
Amount: 0.151648  
Amount Units: ug/l

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

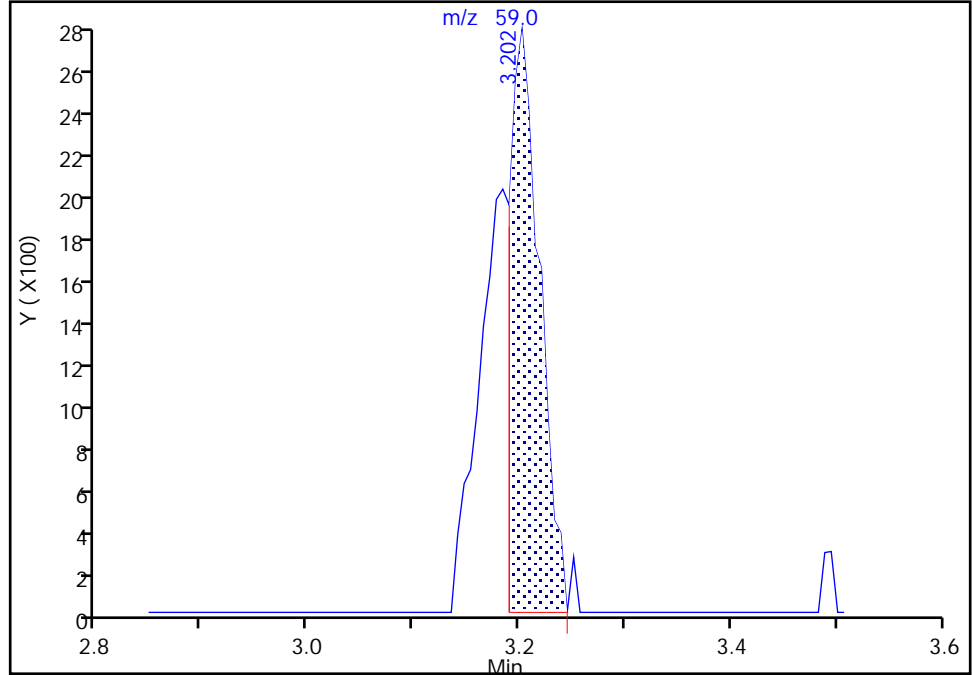
Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I07.D  
Injection Date: 30-Nov-2020 15:03:30 Instrument ID: 16334  
Lims ID: IC std1  
Client ID:  
Operator ID: DVV10203 ALS Bottle#: 8 Worklist Smp#: 9  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_16334\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

15 Ethyl ether, CAS: 60-29-7

Signal: 1

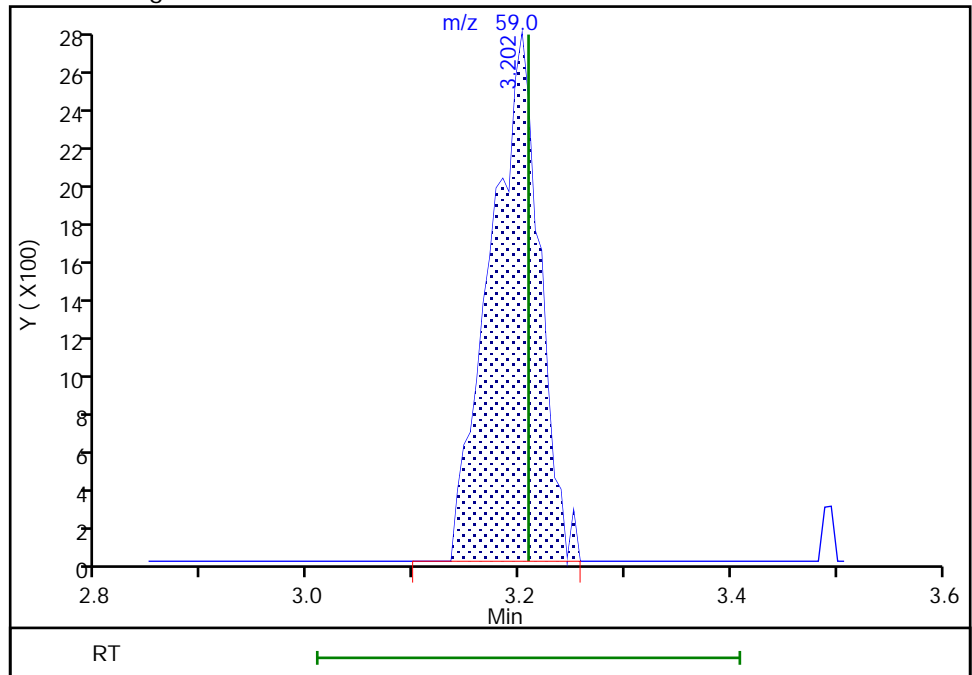
RT: 3.20  
Area: 5379  
Amount: 0.127140  
Amount Units: ug/l

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

Euofins Lancaster Laboratories Env, LLC

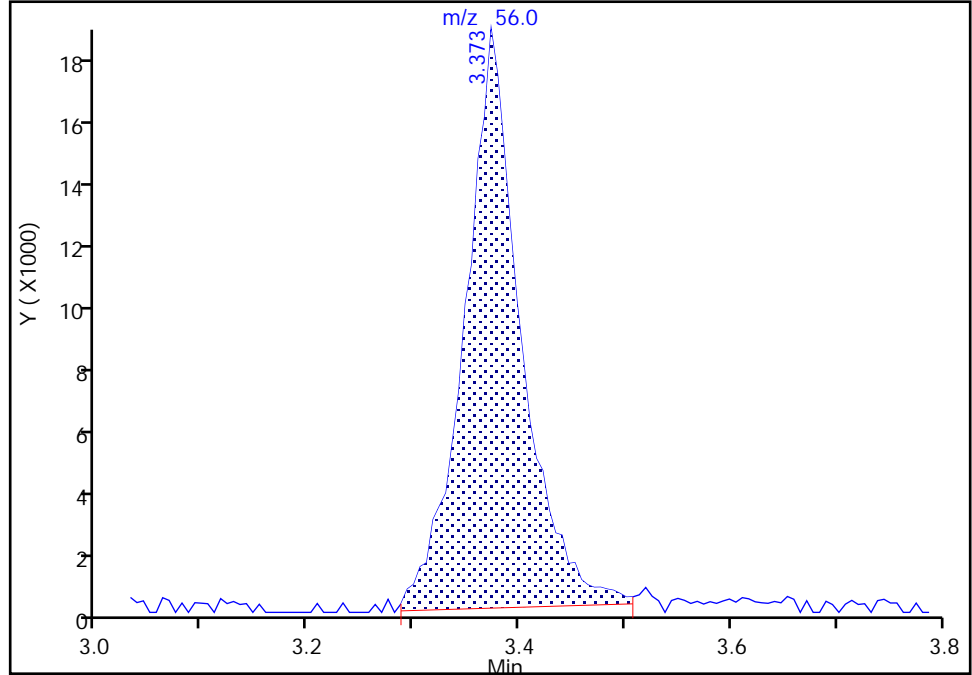
Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I07.D  
Injection Date: 30-Nov-2020 15:03:30 Instrument ID: 16334  
Lims ID: IC std1  
Client ID:  
Operator ID: DVV10203 ALS Bottle#: 8 Worklist Smp#: 9  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_16334\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

18 Acrolein, CAS: 107-02-8

Signal: 1

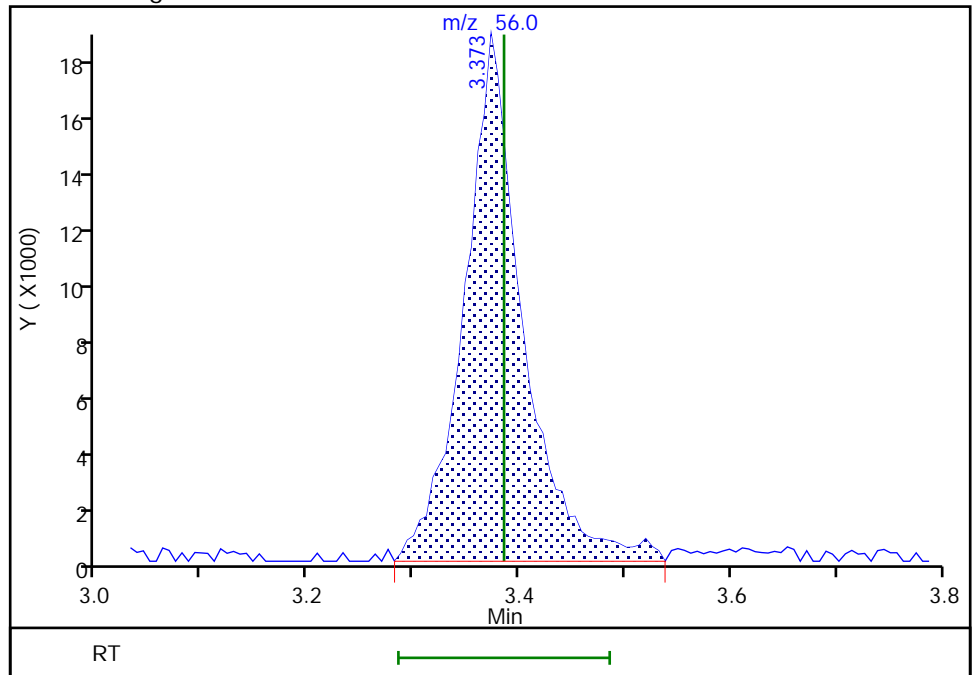
RT: 3.37  
Area: 68852  
Amount: 9.880650  
Amount Units: ug/l

Processing Integration Results



RT: 3.37  
Area: 71856  
Amount: 10.248628  
Amount Units: ug/l

Manual Integration Results



Reviewer: virayd, 01-Dec-2020 11:57:49  
Audit Action: Manually Integrated

Audit Reason: Other

Eurofins Lancaster Laboratories Env, LLC

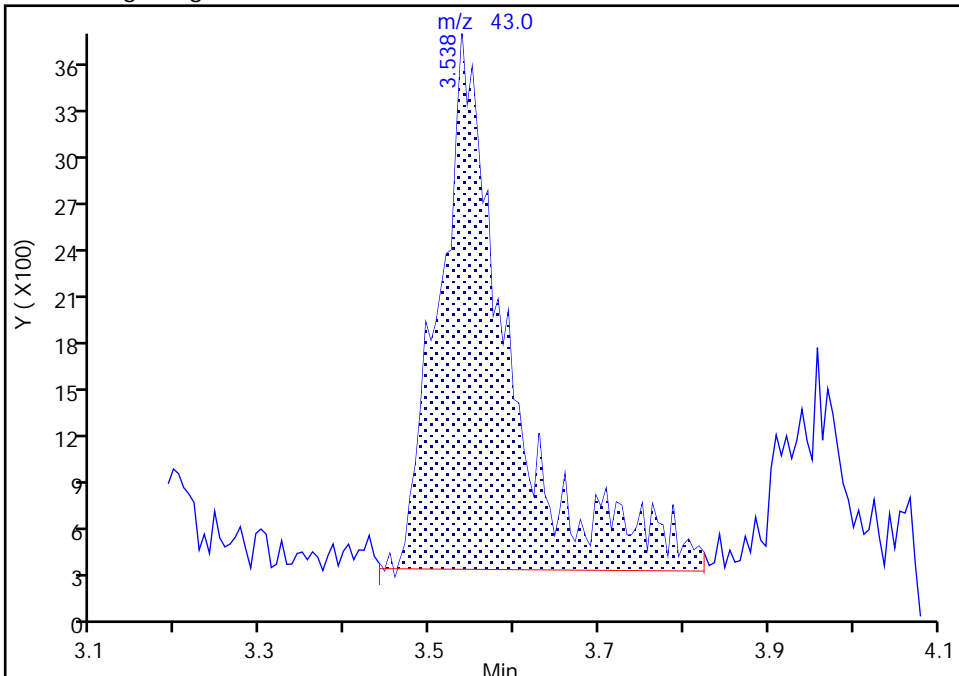
Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I07.D  
Injection Date: 30-Nov-2020 15:03:30 Instrument ID: 16334  
Lims ID: IC std1  
Client ID:  
Operator ID: DVV10203 ALS Bottle#: 8 Worklist Smp#: 9  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_16334\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

20 Acetone, CAS: 67-64-1

Signal: 1

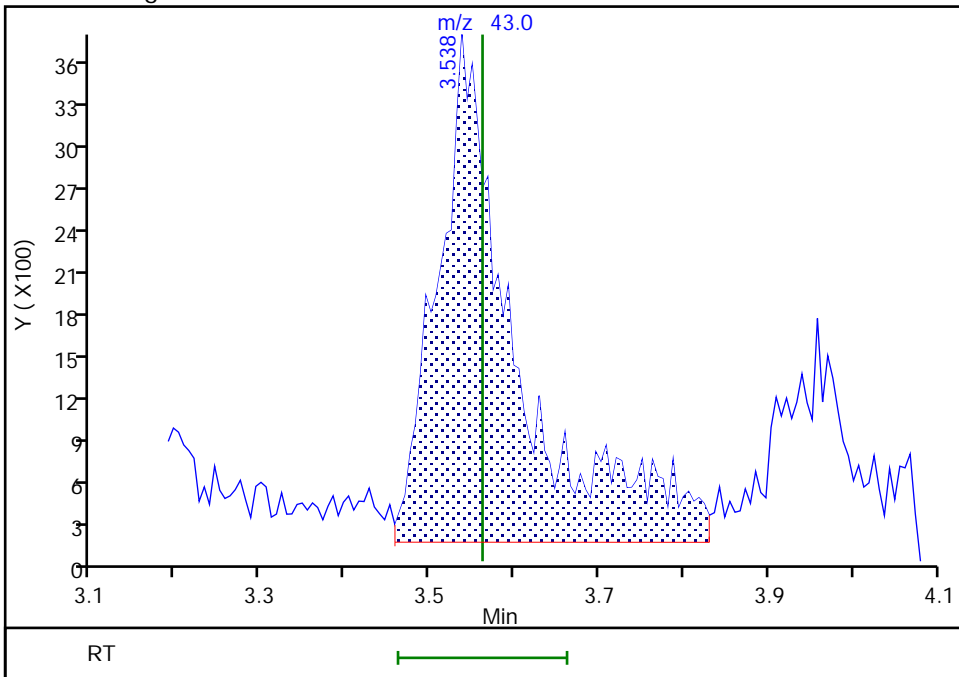
RT: 3.54  
Area: 19830  
Amount: 2.253640  
Amount Units: ug/l

Processing Integration Results



RT: 3.54  
Area: 23541  
Amount: 2.597149  
Amount Units: ug/l

Manual Integration Results



Reviewer: virayd, 01-Dec-2020 11:58:09  
Audit Action: Manually Integrated

Audit Reason: Other



Eurofins Lancaster Laboratories Env, LLC

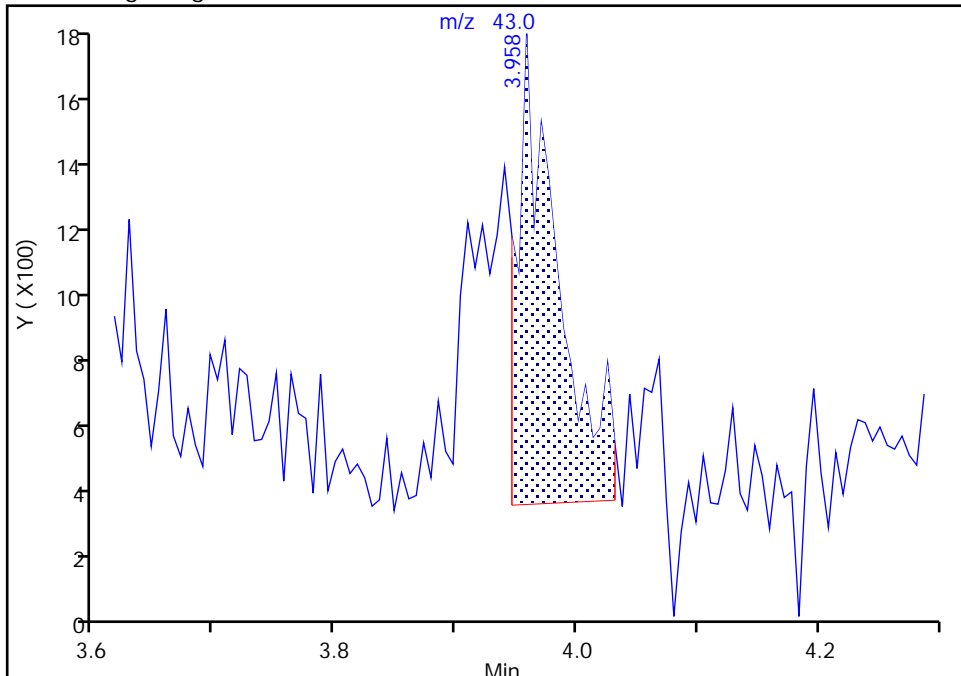
Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I07.D  
Injection Date: 30-Nov-2020 15:03:30 Instrument ID: 16334  
Lims ID: IC std1  
Client ID:  
Operator ID: DVV10203 ALS Bottle#: 8 Worklist Smp#: 9  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_16334\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

26 Methyl acetate, CAS: 79-20-9

Signal: 1

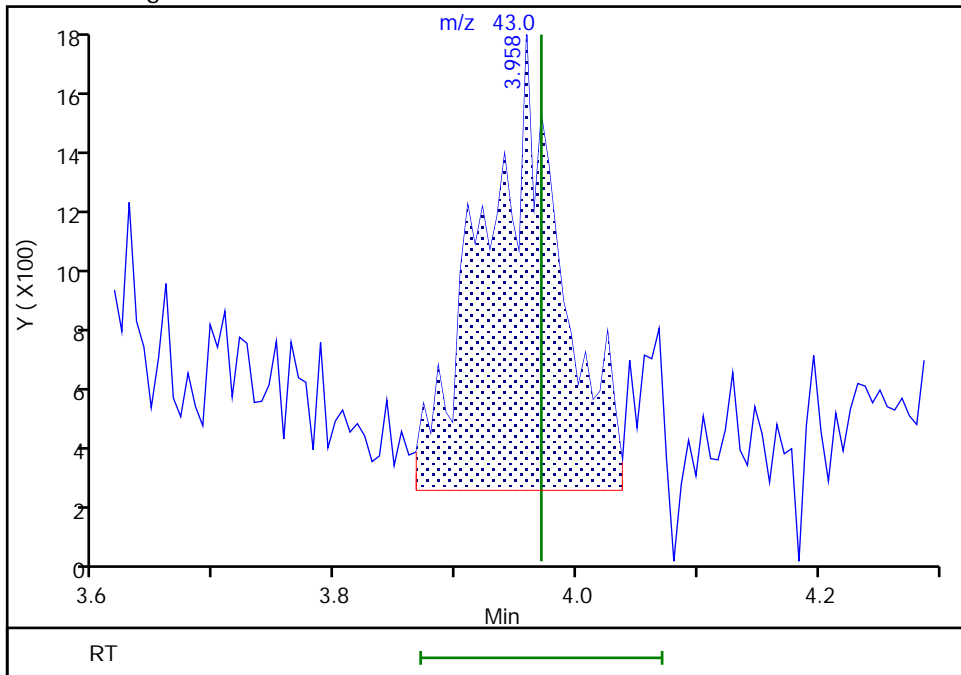
RT: 3.96  
Area: 3318  
Amount: 0.132791  
Amount Units: ug/l

Processing Integration Results



RT: 3.96  
Area: 6751  
Amount: 0.246039  
Amount Units: ug/l

Manual Integration Results



Reviewer: virayd, 01-Dec-2020 11:58:21  
Audit Action: Manually Integrated

Audit Reason: Other

Eurofins Lancaster Laboratories Env, LLC

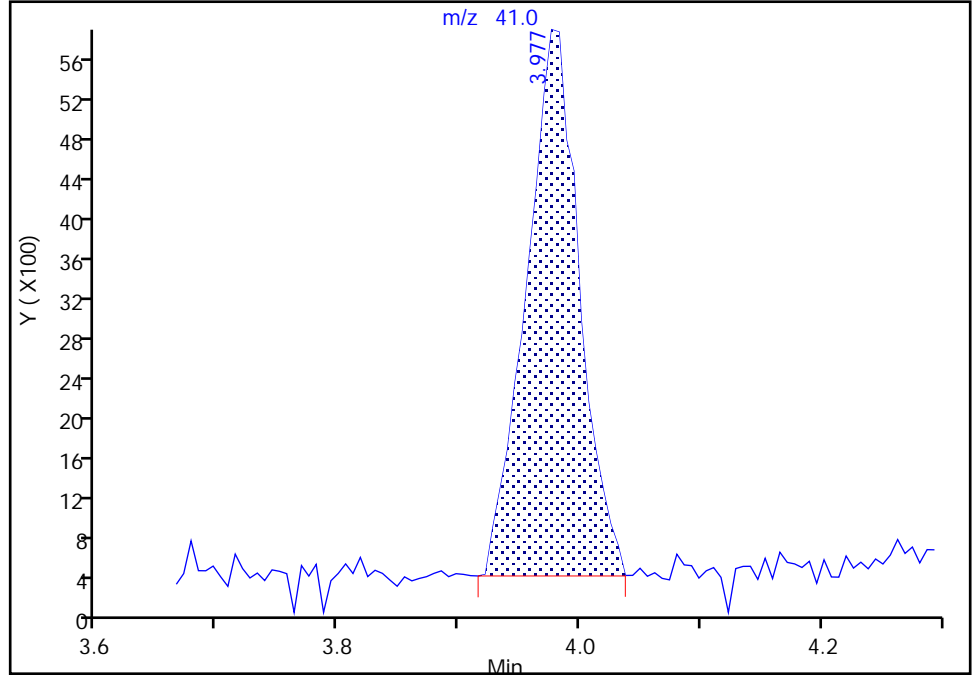
Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I07.D  
Injection Date: 30-Nov-2020 15:03:30 Instrument ID: 16334  
Lims ID: IC std1  
Client ID:  
Operator ID: DVV10203 ALS Bottle#: 8 Worklist Smp#: 9  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_16334\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

27 3-Chloro-1-propene, CAS: 107-05-1

Signal: 1

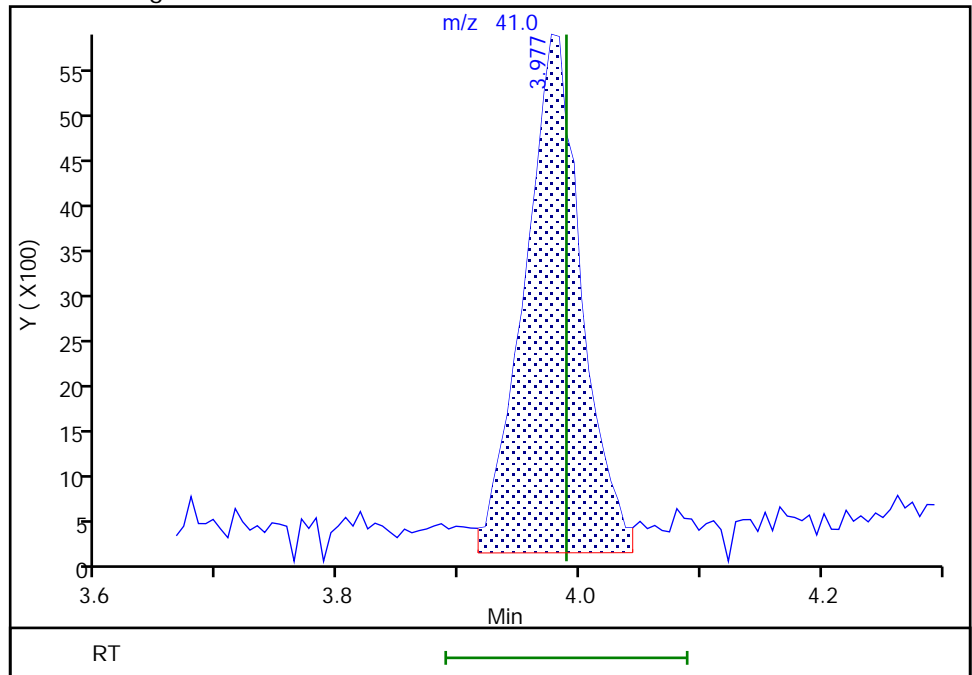
RT: 3.98  
Area: 16697  
Amount: 0.184837  
Amount Units: ug/l

Processing Integration Results



RT: 3.98  
Area: 18885  
Amount: 0.205503  
Amount Units: ug/l

Manual Integration Results



Reviewer: virayd, 01-Dec-2020 11:58:29  
Audit Action: Manually Integrated

Audit Reason: Other

Eurofins Lancaster Laboratories Env, LLC

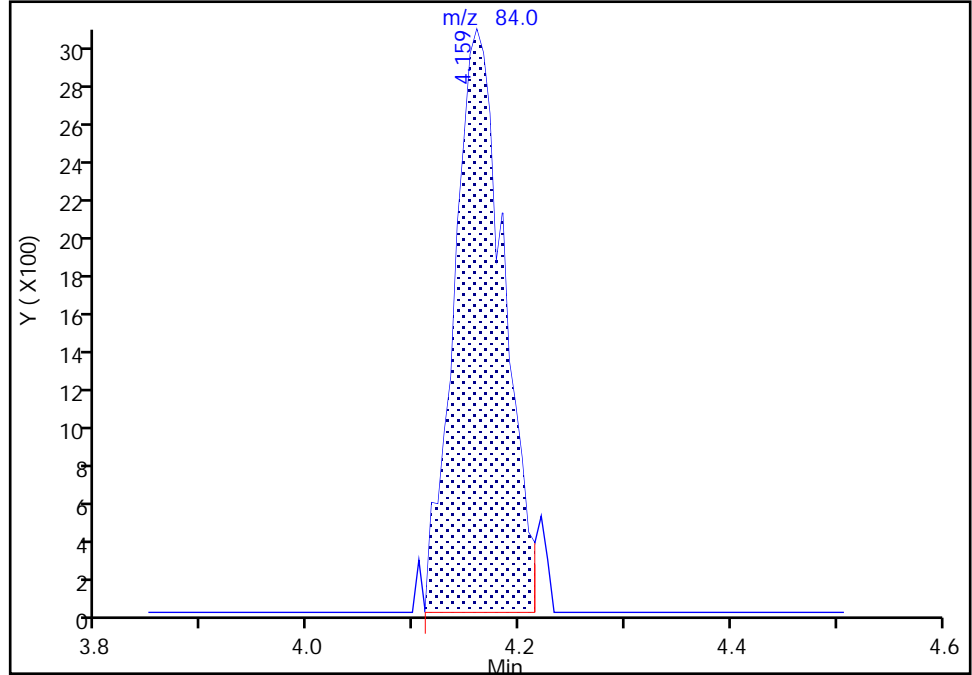
Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I07.D  
Injection Date: 30-Nov-2020 15:03:30 Instrument ID: 16334  
Lims ID: IC std1  
Client ID:  
Operator ID: DVV10203 ALS Bottle#: 8 Worklist Smp#: 9  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_16334\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

28 Methylene Chloride, CAS: 75-09-2

Signal: 1

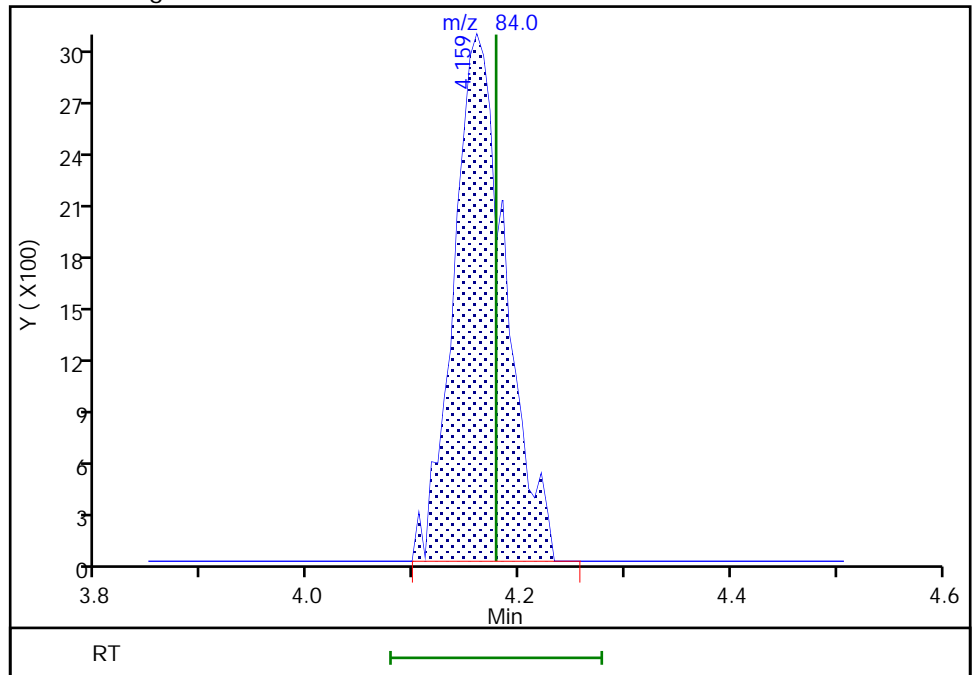
RT: 4.16  
Area: 10112  
Amount: 0.193174  
Amount Units: ug/l

Processing Integration Results



RT: 4.16  
Area: 10502  
Amount: 0.199562  
Amount Units: ug/l

Manual Integration Results



Reviewer: virayd, 01-Dec-2020 11:58:35  
Audit Action: Manually Integrated

Audit Reason: Other

Eurofins Lancaster Laboratories Env, LLC

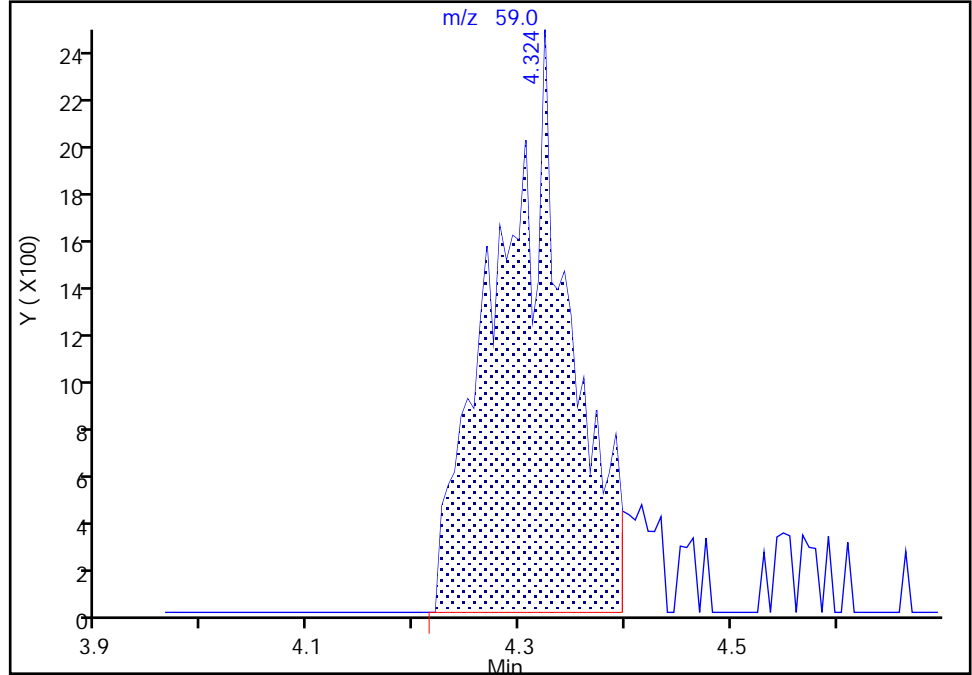
Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I07.D  
Injection Date: 30-Nov-2020 15:03:30 Instrument ID: 16334  
Lims ID: IC std1  
Client ID:  
Operator ID: DVV10203 ALS Bottle#: 8 Worklist Smp#: 9  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_16334\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

30 2-Methyl-2-propanol, CAS: 75-65-0

Signal: 1

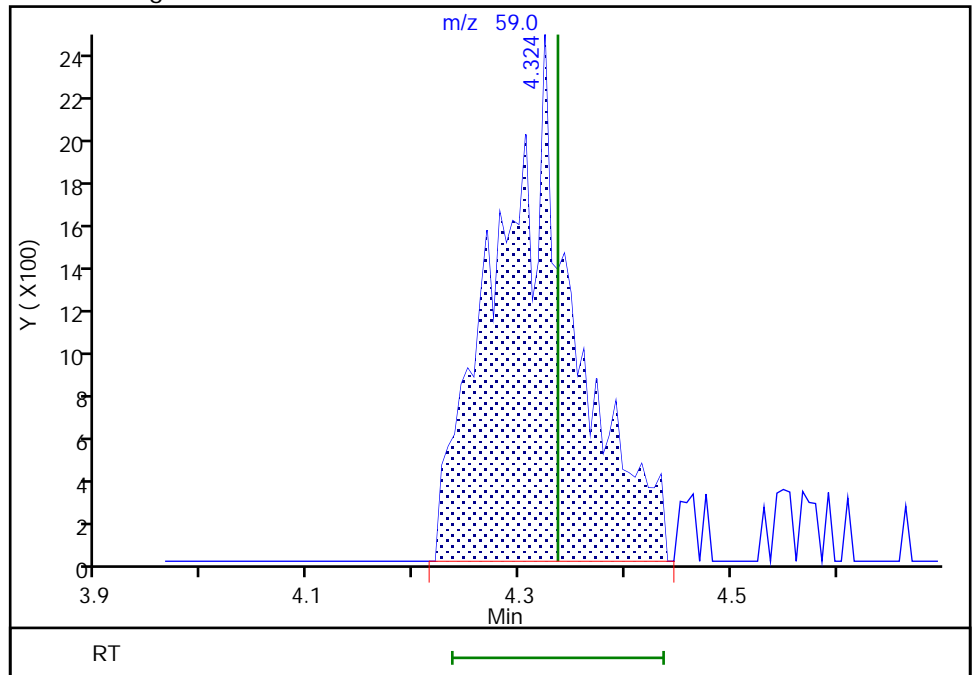
RT: 4.32  
Area: 11709  
Amount: 3.557640  
Amount Units: ug/l

Processing Integration Results



RT: 4.32  
Area: 12558  
Amount: 3.780767  
Amount Units: ug/l

Manual Integration Results



Reviewer: virayd, 01-Dec-2020 11:58:41  
Audit Action: Manually Integrated

Audit Reason: Other

Eurofins Lancaster Laboratories Env, LLC

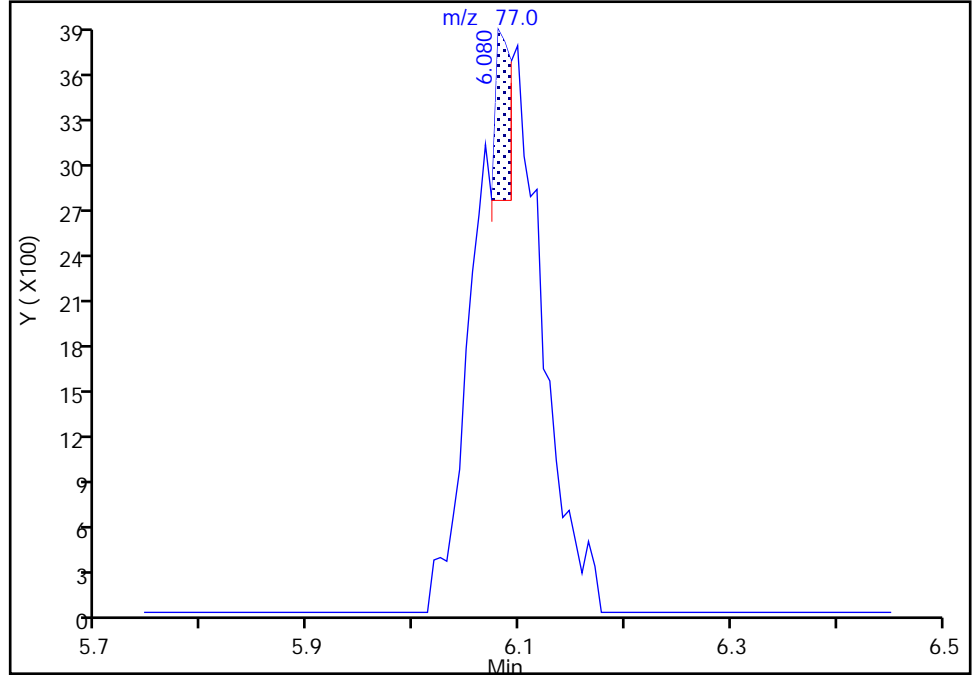
Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I07.D  
Injection Date: 30-Nov-2020 15:03:30 Instrument ID: 16334  
Lims ID: IC std1  
Client ID:  
Operator ID: DVV10203 ALS Bottle#: 8 Worklist Smp#: 9  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_16334\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

42 2,2-Dichloropropane, CAS: 594-20-7

Signal: 1

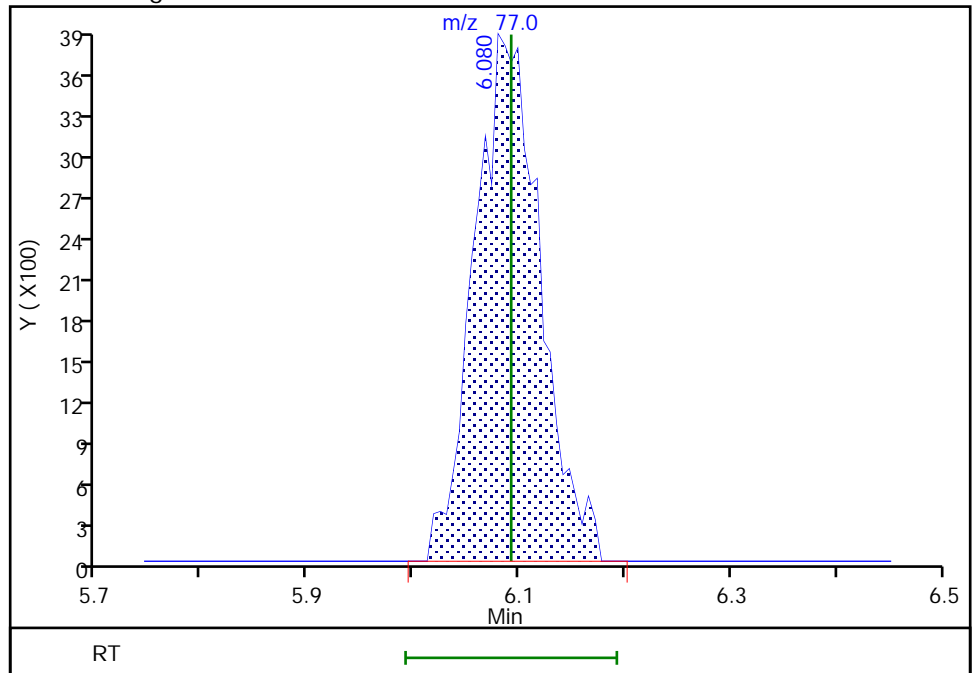
RT: 6.08  
Area: 1118  
Amount: 0.042823  
Amount Units: ug/l

Processing Integration Results



RT: 6.08  
Area: 16476  
Amount: 0.200176  
Amount Units: ug/l

Manual Integration Results



Reviewer: virayd, 01-Dec-2020 11:58:50  
Audit Action: Manually Integrated

Audit Reason: Other

Eurofins Lancaster Laboratories Env, LLC

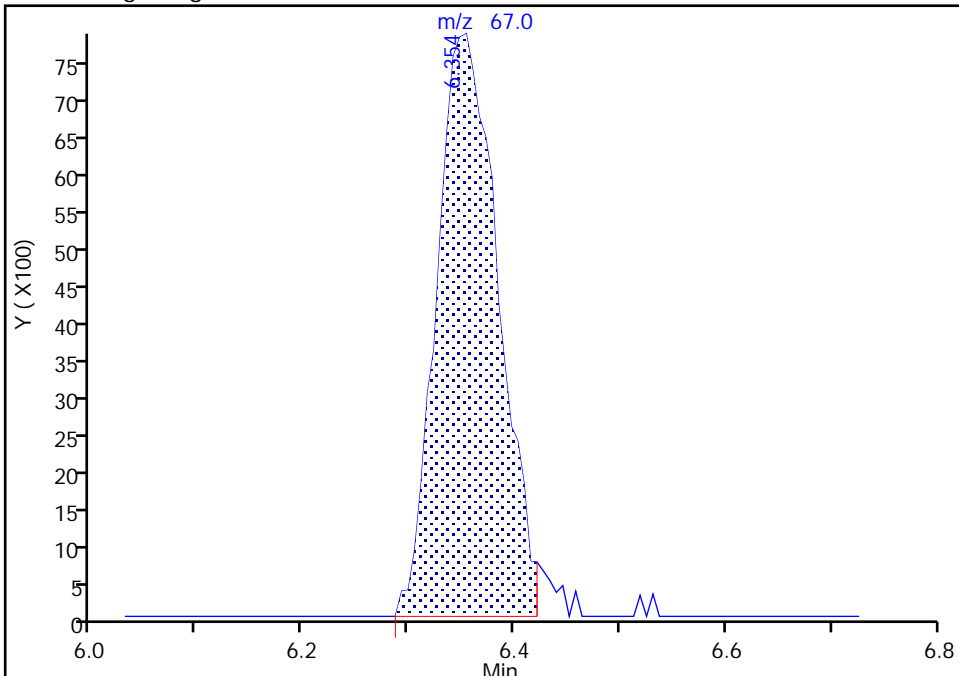
Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I07.D  
Injection Date: 30-Nov-2020 15:03:30 Instrument ID: 16334  
Lims ID: IC std1  
Client ID:  
Operator ID: DVV10203 ALS Bottle#: 8 Worklist Smp#: 9  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_16334\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

46 Methacrylonitrile, CAS: 126-98-7

Signal: 1

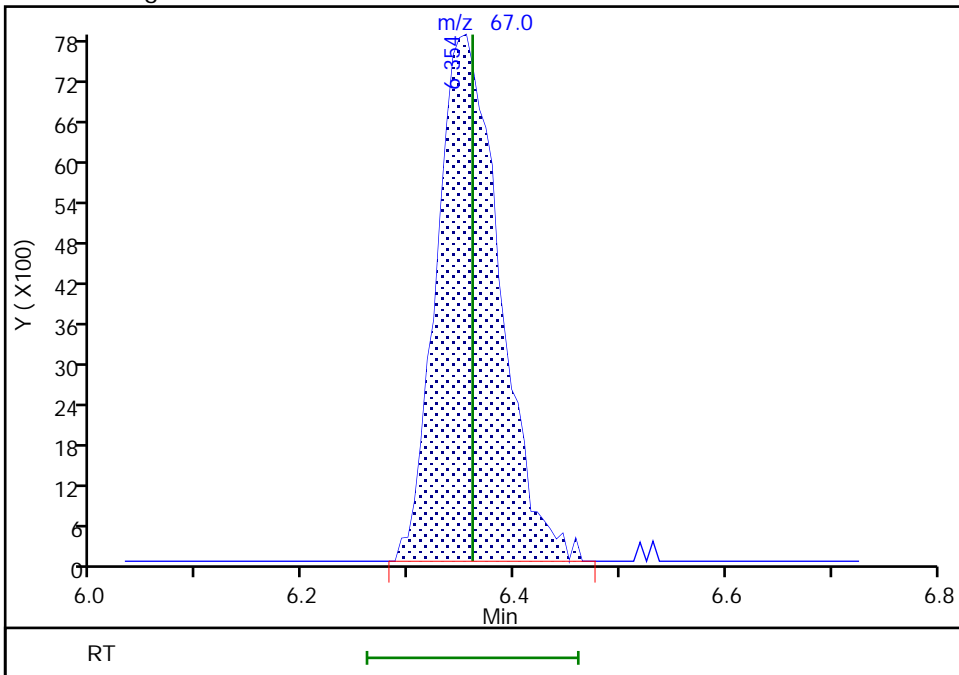
RT: 6.35  
Area: 31788  
Amount: 2.066779  
Amount Units: ug/l

Processing Integration Results



RT: 6.35  
Area: 32580  
Amount: 2.110510  
Amount Units: ug/l

Manual Integration Results



Reviewer: virayd, 01-Dec-2020 11:58:58  
Audit Action: Manually Integrated

Audit Reason: Other

Eurofins Lancaster Laboratories Env, LLC

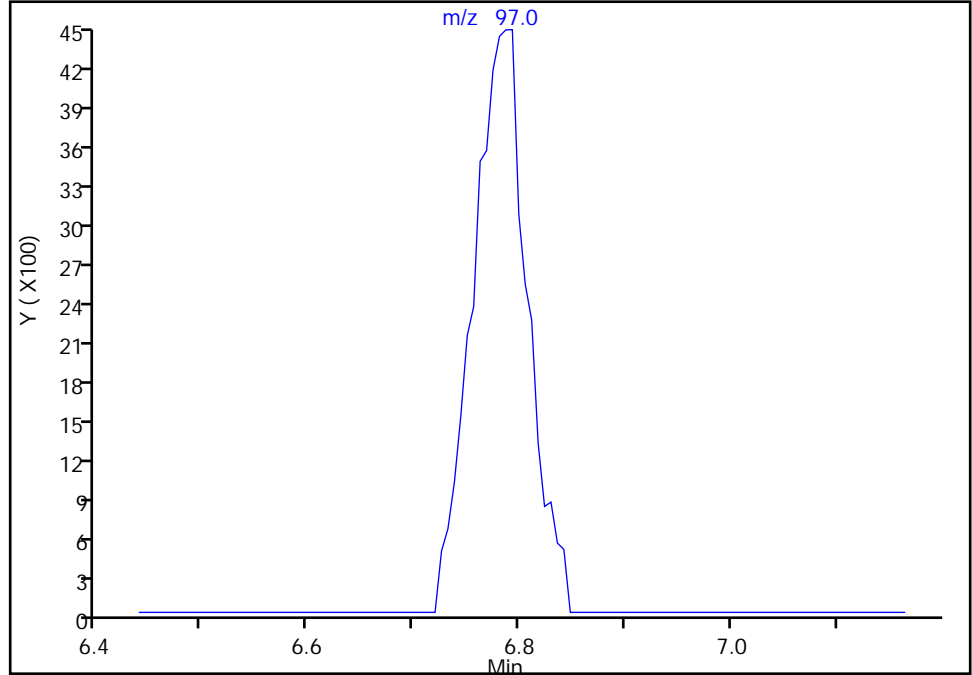
Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I07.D  
Injection Date: 30-Nov-2020 15:03:30 Instrument ID: 16334  
Lims ID: IC std1  
Client ID:  
Operator ID: DVV10203 ALS Bottle#: 8 Worklist Smp#: 9  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_16334\_25mL Limit Group: 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

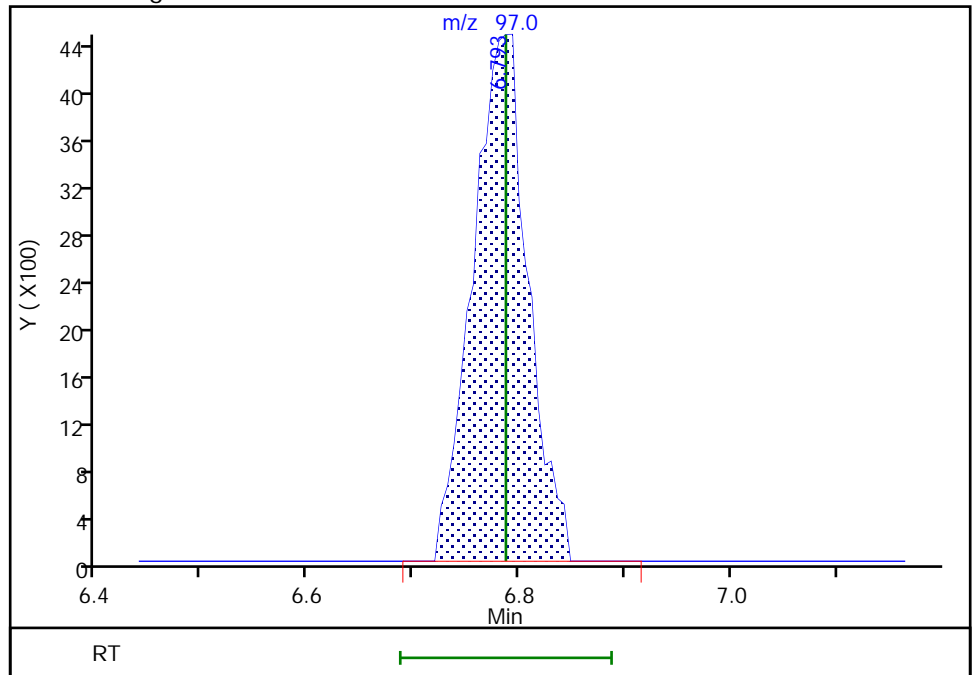
Not Detected  
Expected RT: 6.79

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

Eurofins Lancaster Laboratories Env, LLC

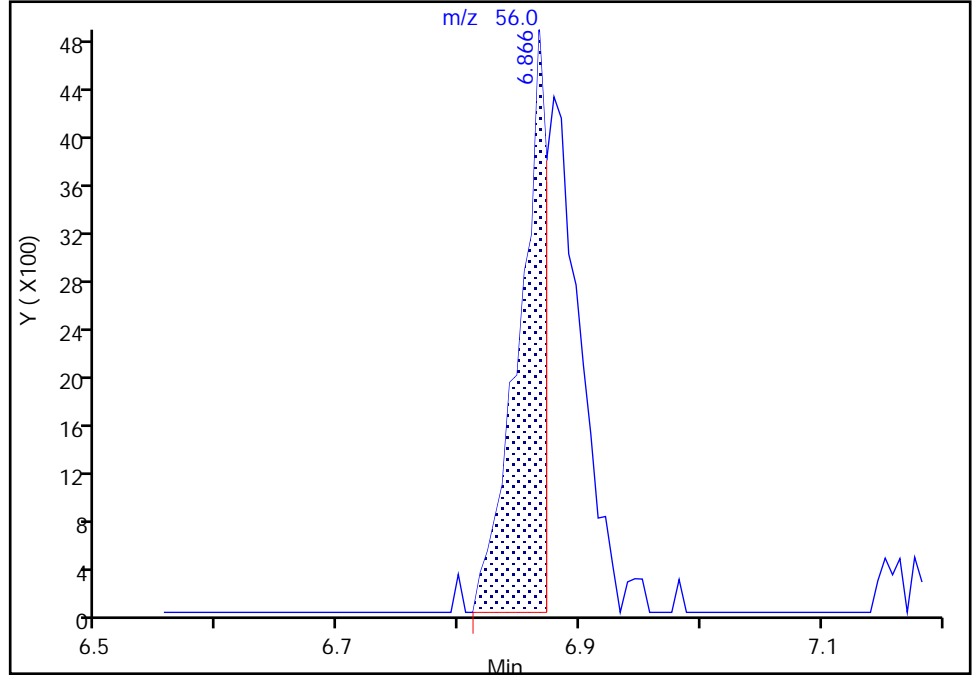
Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I07.D  
Injection Date: 30-Nov-2020 15:03:30 Instrument ID: 16334  
Lims ID: IC std1  
Client ID:  
Operator ID: DVV10203 ALS Bottle#: 8 Worklist Smp#: 9  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_16334\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

53 Cyclohexane, CAS: 110-82-7

Signal: 1

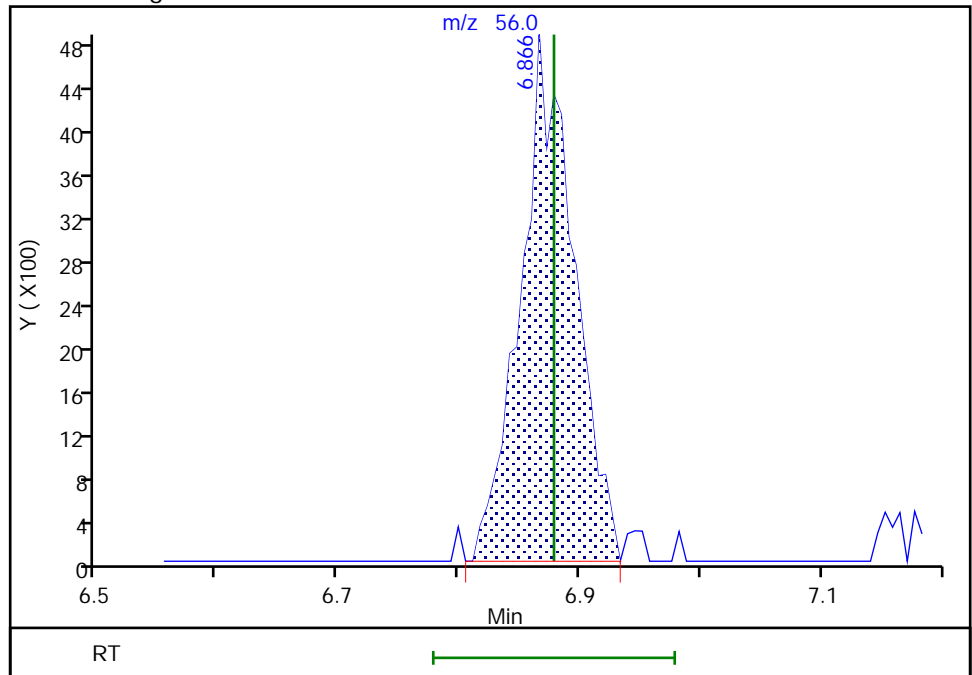
RT: 6.87  
Area: 7828  
Amount: 0.140707  
Amount Units: ug/l

Processing Integration Results



RT: 6.87  
Area: 15080  
Amount: 0.162145  
Amount Units: ug/l

Manual Integration Results



Reviewer: virayd, 01-Dec-2020 11:59:11  
Audit Action: Manually Integrated

Audit Reason: Other



Eurofins Lancaster Laboratories Env, LLC

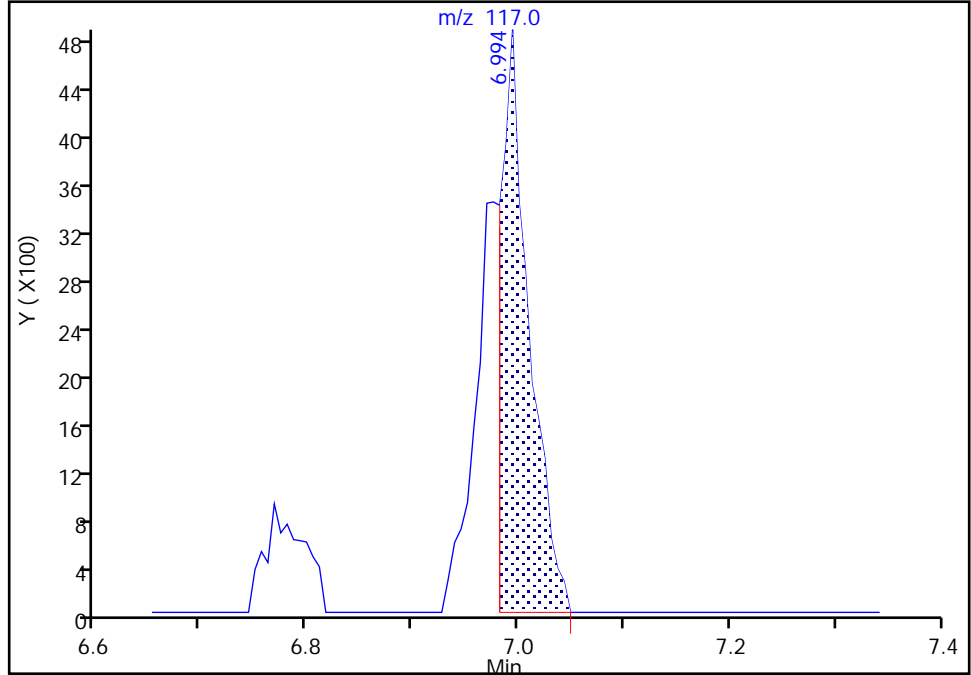
Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I07.D  
Injection Date: 30-Nov-2020 15:03:30 Instrument ID: 16334  
Lims ID: IC std1  
Client ID:  
Operator ID: DVV10203 ALS Bottle#: 8 Worklist Smp#: 9  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_16334\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

56 Carbon tetrachloride, CAS: 56-23-5

Signal: 1

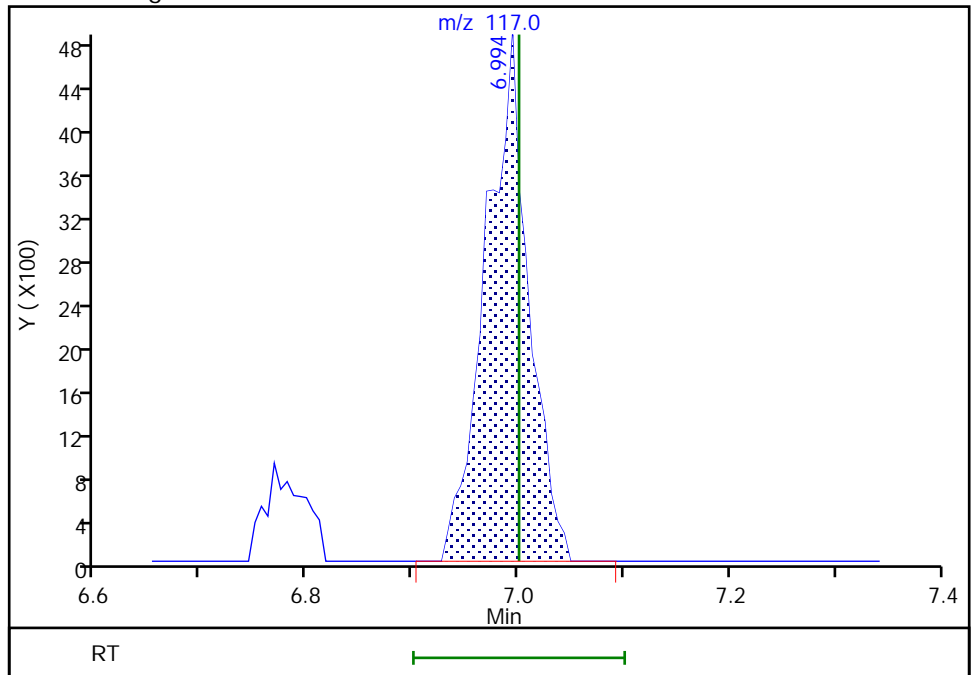
RT: 6.99  
Area: 9013  
Amount: 0.134991  
Amount Units: ug/l

Processing Integration Results



RT: 6.99  
Area: 13772  
Amount: 0.196276  
Amount Units: ug/l

Manual Integration Results



Reviewer: virayd, 01-Dec-2020 11:59:15  
Audit Action: Manually Integrated

Audit Reason: Other

Eurofins Lancaster Laboratories Env, LLC

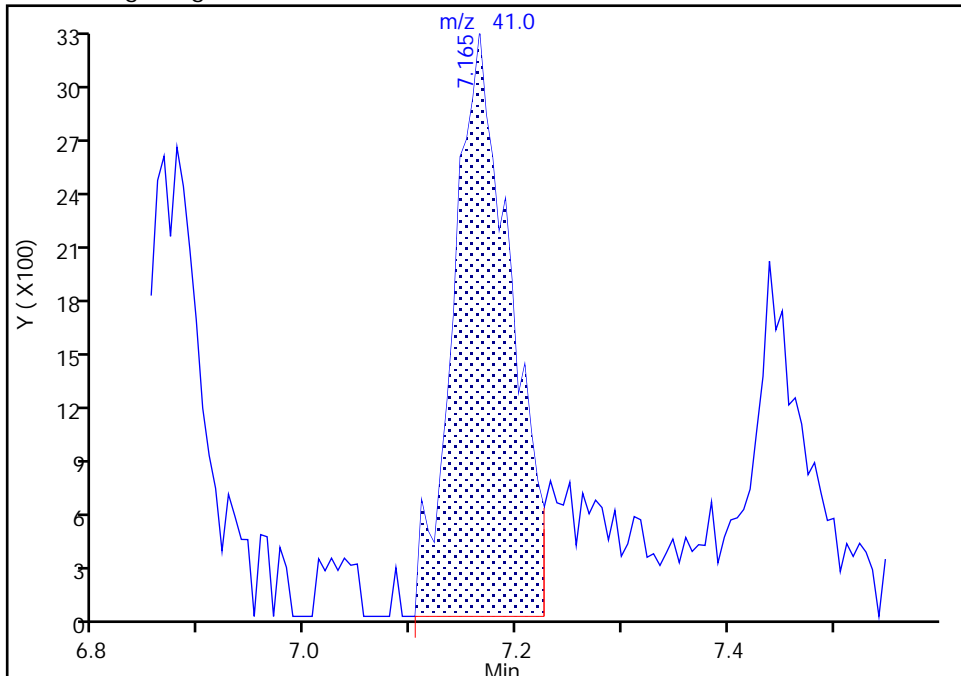
Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I07.D  
Injection Date: 30-Nov-2020 15:03:30 Instrument ID: 16334  
Lims ID: IC std1  
Client ID:  
Operator ID: DVV10203 ALS Bottle#: 8 Worklist Smp#: 9  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_16334\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

57 Isobutyl alcohol, CAS: 78-83-1

Signal: 1

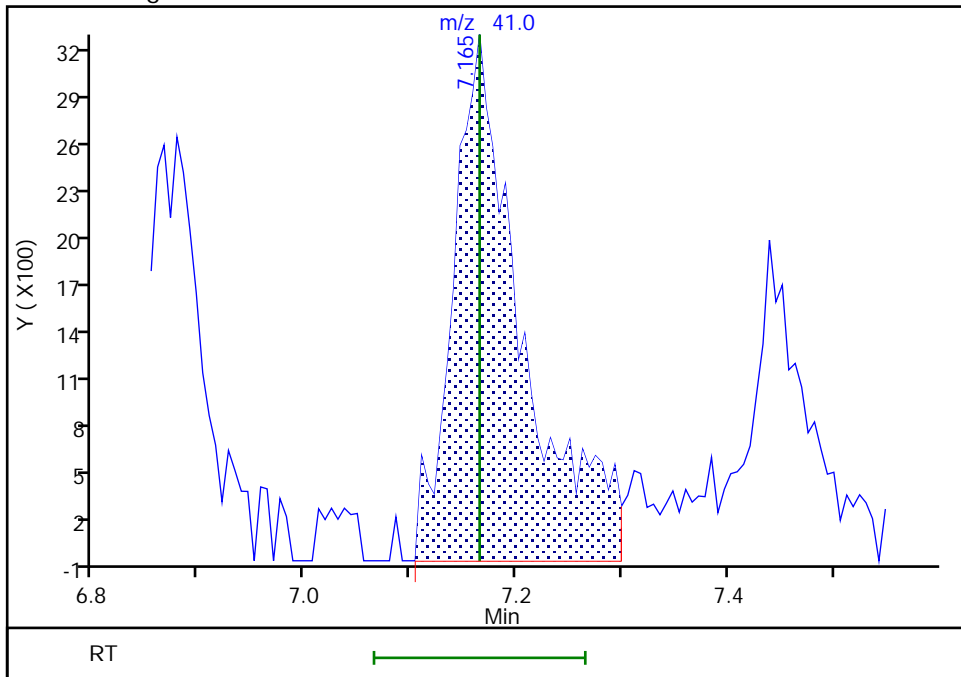
RT: 7.16  
Area: 12358  
Amount: 10.222385  
Amount Units: ug/l

Processing Integration Results



RT: 7.16  
Area: 14998  
Amount: 12.030837  
Amount Units: ug/l

Manual Integration Results



Reviewer: virayd, 01-Dec-2020 11:59:26  
Audit Action: Manually Integrated

Audit Reason: Other

Eurofins Lancaster Laboratories Env, LLC

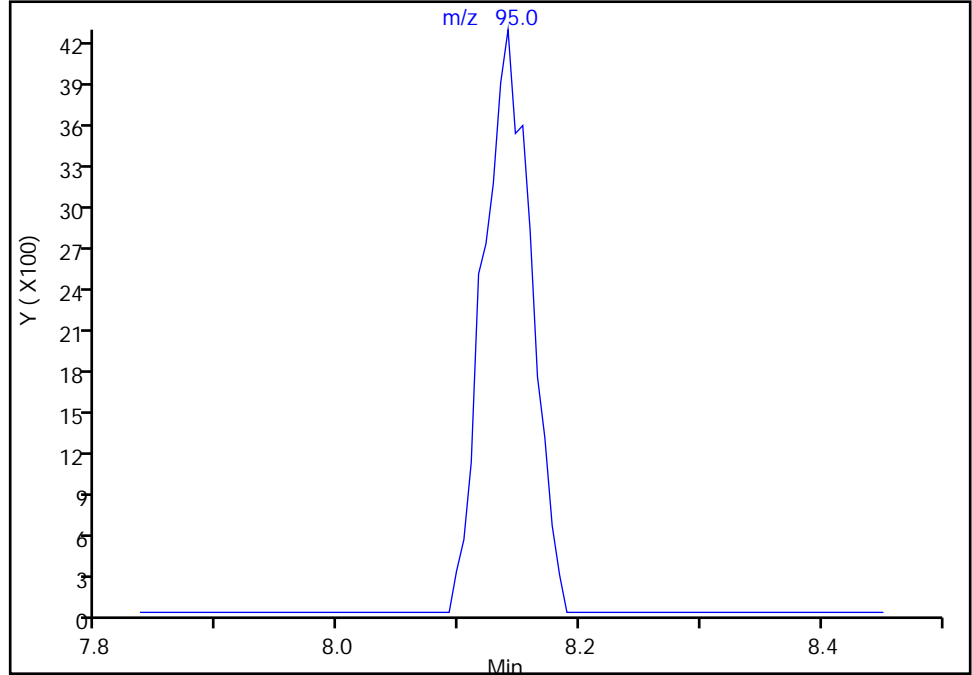
Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I07.D  
Injection Date: 30-Nov-2020 15:03:30 Instrument ID: 16334  
Lims ID: IC std1  
Client ID:  
Operator ID: DVV10203 ALS Bottle#: 8 Worklist Smp#: 9  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_16334\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

67 Trichloroethene, CAS: 79-01-6

Signal: 1

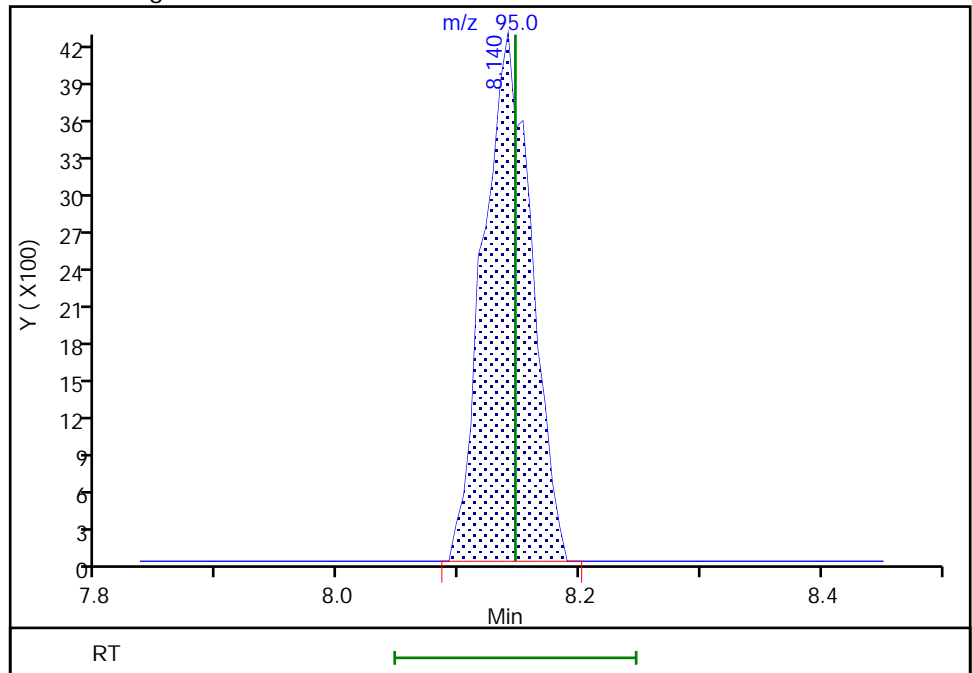
Not Detected  
Expected RT: 8.15

Processing Integration Results



RT: 8.14  
Area: 11723  
Amount: 0.204849  
Amount Units: ug/l

Manual Integration Results



Reviewer: virayd, 01-Dec-2020 11:59:36  
Audit Action: Manually Integrated

Audit Reason: Other

Eurofins Lancaster Laboratories Env, LLC

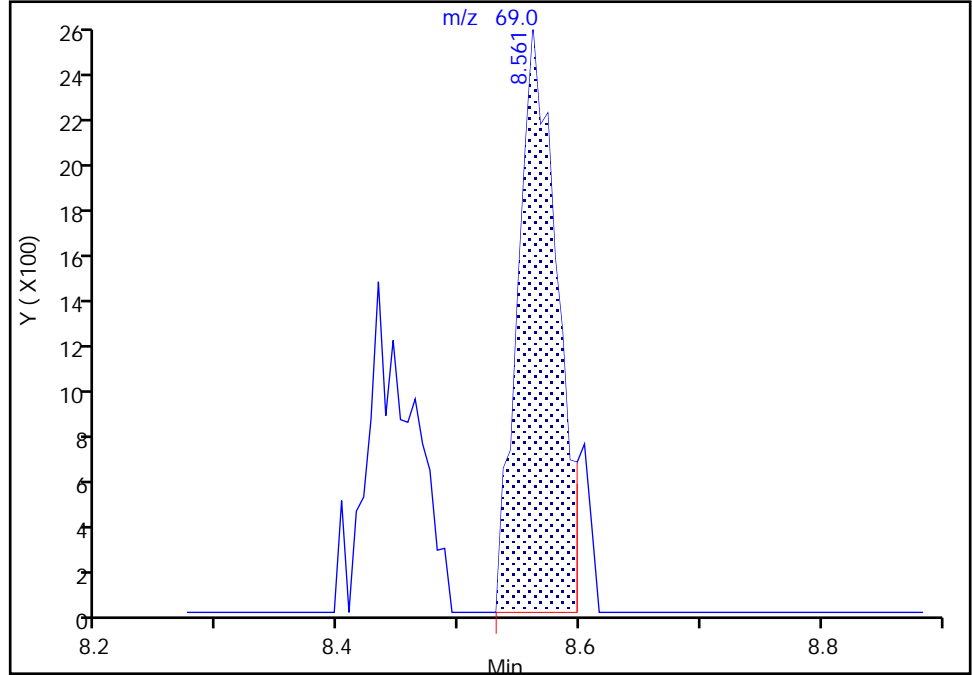
Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I07.D  
Injection Date: 30-Nov-2020 15:03:30 Instrument ID: 16334  
Lims ID: IC std1  
Client ID:  
Operator ID: DVV10203 ALS Bottle#: 8 Worklist Smp#: 9  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_16334\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

71 Methyl methacrylate, CAS: 80-62-6

Signal: 1

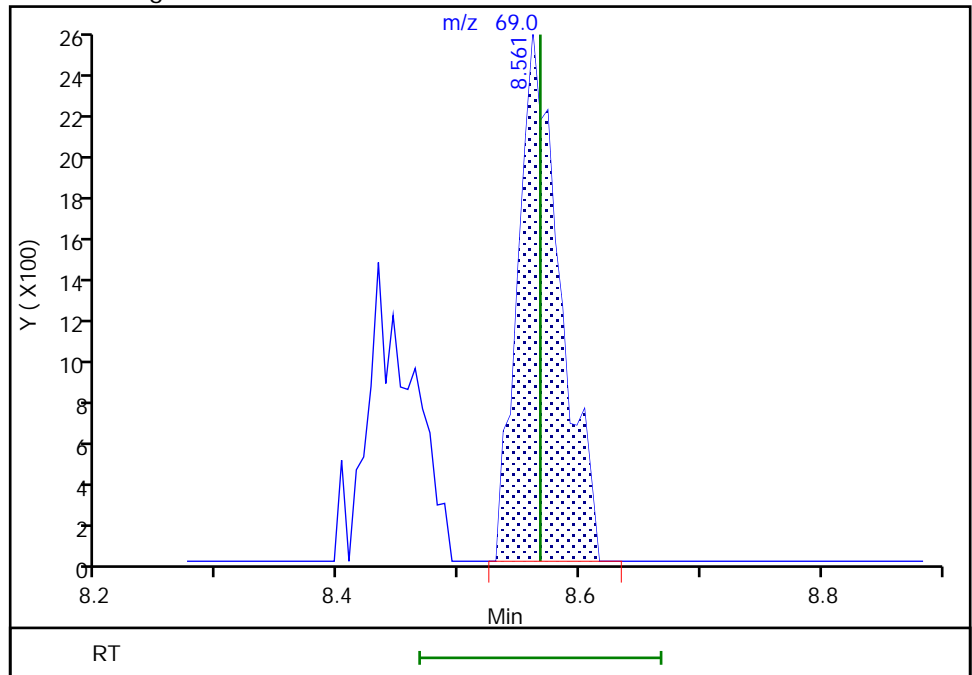
RT: 8.56  
Area: 5837  
Amount: 0.187386  
Amount Units: ug/l

Processing Integration Results



RT: 8.56  
Area: 6248  
Amount: 0.198708  
Amount Units: ug/l

Manual Integration Results



Reviewer: virayd, 01-Dec-2020 11:59:42  
Audit Action: Manually Integrated

Audit Reason: Other

Eurofins Lancaster Laboratories Env, LLC

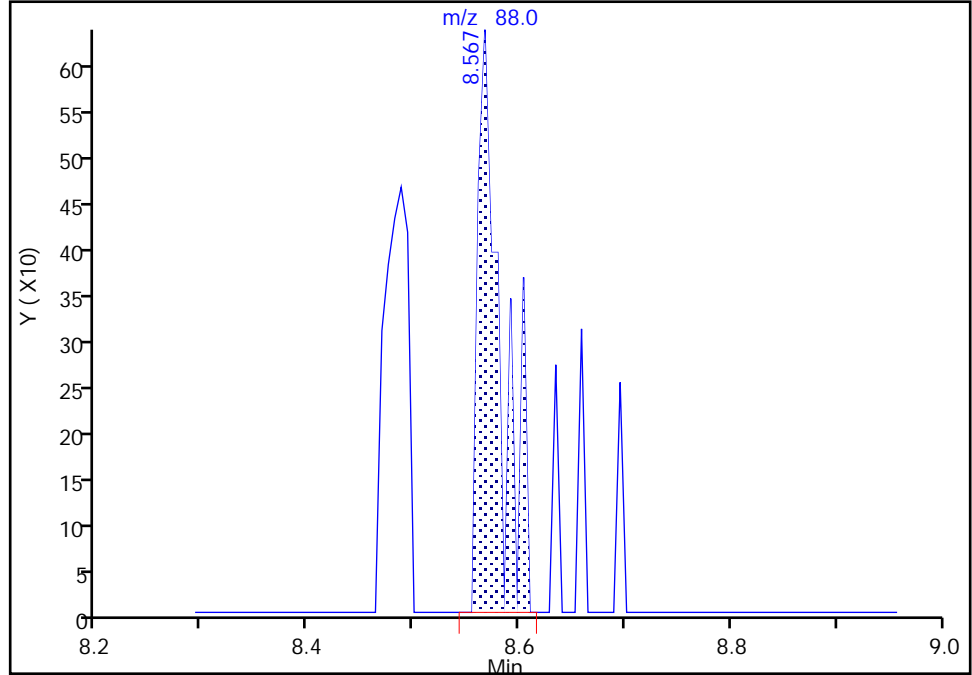
Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I07.D  
Injection Date: 30-Nov-2020 15:03:30 Instrument ID: 16334  
Lims ID: IC std1  
Client ID:  
Operator ID: DVV10203 ALS Bottle#: 8 Worklist Smp#: 9  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_16334\_25mL Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

72 1,4-Dioxane, CAS: 123-91-1

Signal: 1

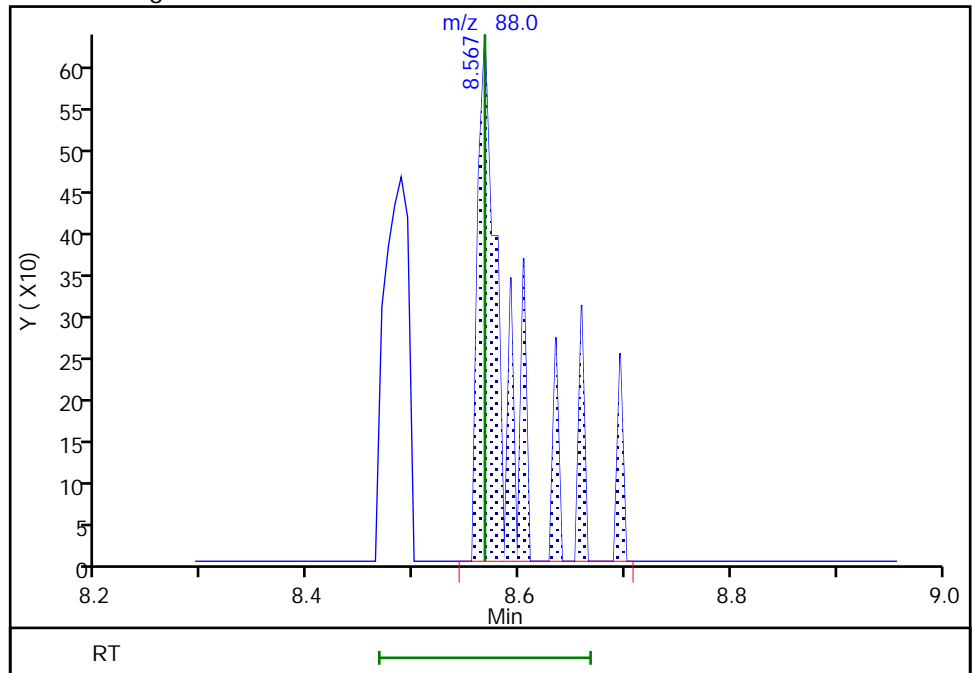
RT: 8.57  
Area: 946  
Amount: 4.546939  
Amount Units: ug/l

Processing Integration Results



RT: 8.57  
Area: 1248  
Amount: 5.876637  
Amount Units: ug/l

Manual Integration Results



Reviewer: virayd, 01-Dec-2020 11:59:46  
Audit Action: Manually Integrated

Audit Reason: Other

Calibration

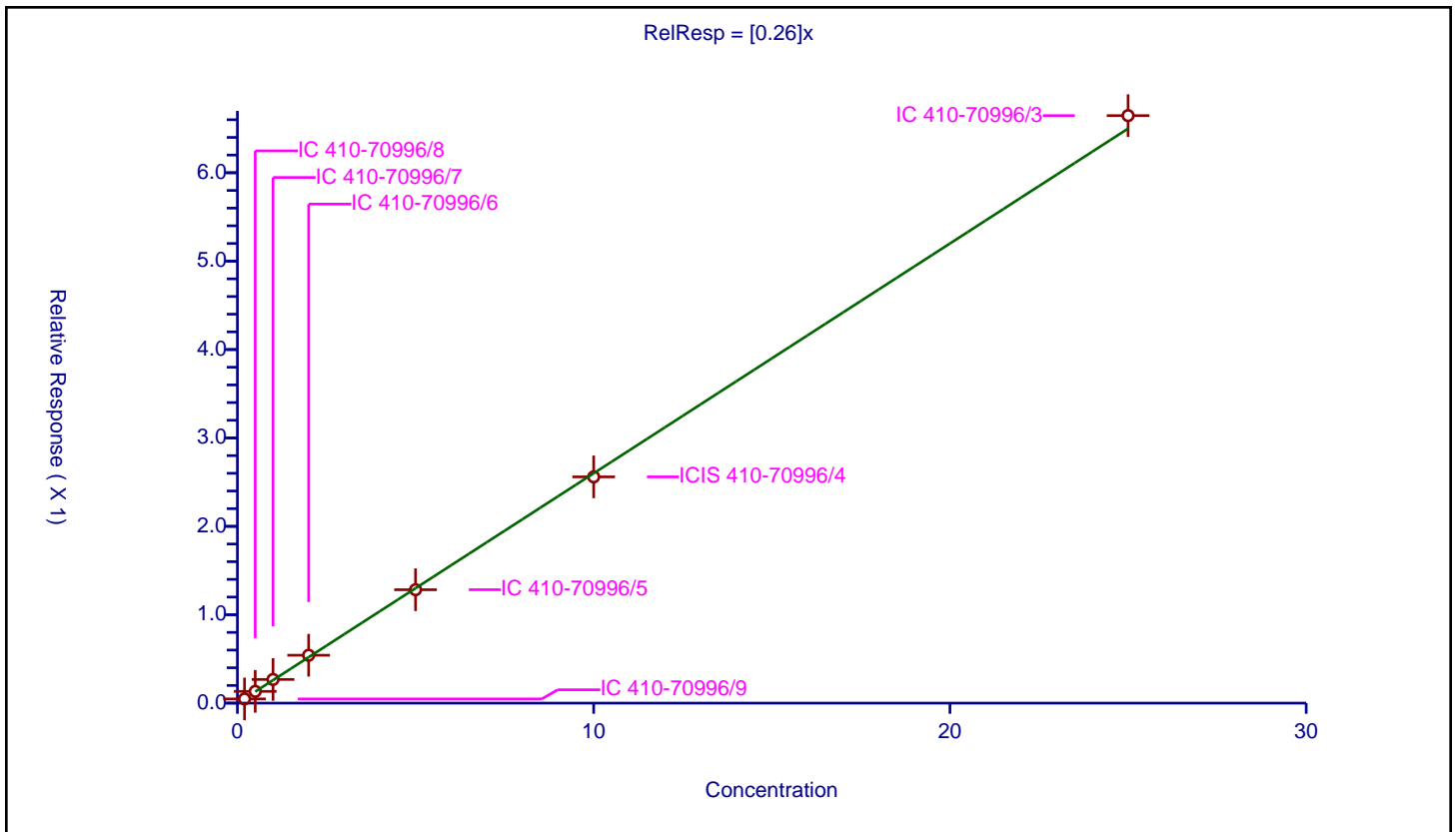
/ Dichlorodifluoromethane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.26

Error Coefficients	
Standard Error:	667000
Relative Standard Error:	4.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-70996/9	0.2	0.047352	10.0	2204755.0	0.236761	Y
2	IC 410-70996/8	0.5	0.133089	10.0	2189287.0	0.266178	Y
3	IC 410-70996/7	1.0	0.267761	10.0	2211412.0	0.267761	Y
4	IC 410-70996/6	2.0	0.541666	10.0	2210035.0	0.270833	Y
5	IC 410-70996/5	5.0	1.282832	10.0	2225560.0	0.256566	Y
6	ICIS 410-70996/4	10.0	2.559618	10.0	2246480.0	0.255962	Y
7	IC 410-70996/3	25.0	6.646281	10.0	2249974.0	0.265851	Y



**Calibration**

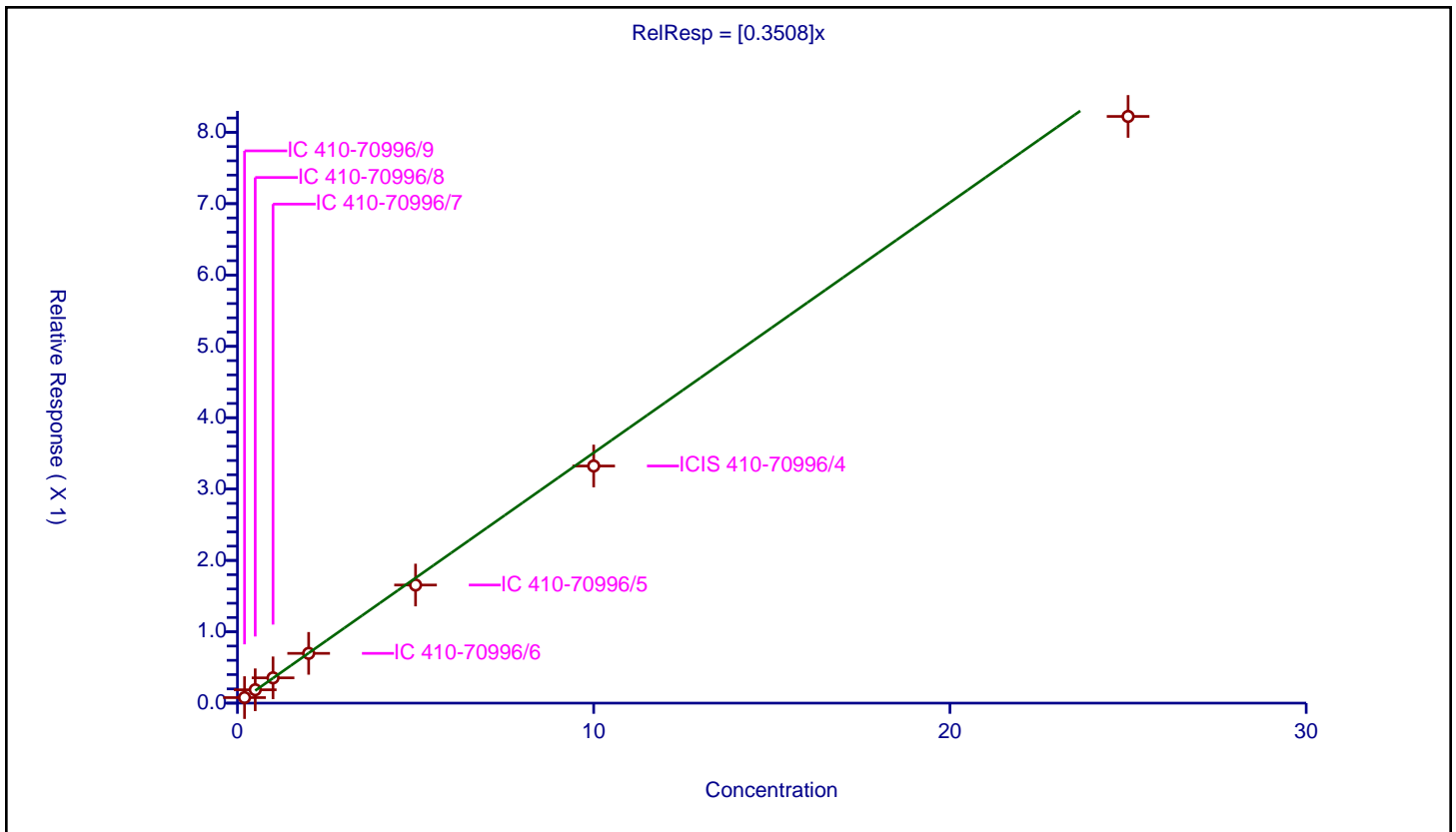
**/ Chloromethane**

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3508

Error Coefficients	
Standard Error:	831000
Relative Standard Error:	6.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-70996/9	0.2	0.077292	10.0	2204755.0	0.38646	Y
2	IC 410-70996/8	0.5	0.187015	10.0	2189287.0	0.37403	Y
3	IC 410-70996/7	1.0	0.354294	10.0	2211412.0	0.354294	Y
4	IC 410-70996/6	2.0	0.697541	10.0	2210035.0	0.34877	Y
5	IC 410-70996/5	5.0	1.655156	10.0	2225560.0	0.331031	Y
6	ICIS 410-70996/4	10.0	3.323453	10.0	2246480.0	0.332345	Y
7	IC 410-70996/3	25.0	8.222206	10.0	2249974.0	0.328888	Y



Calibration

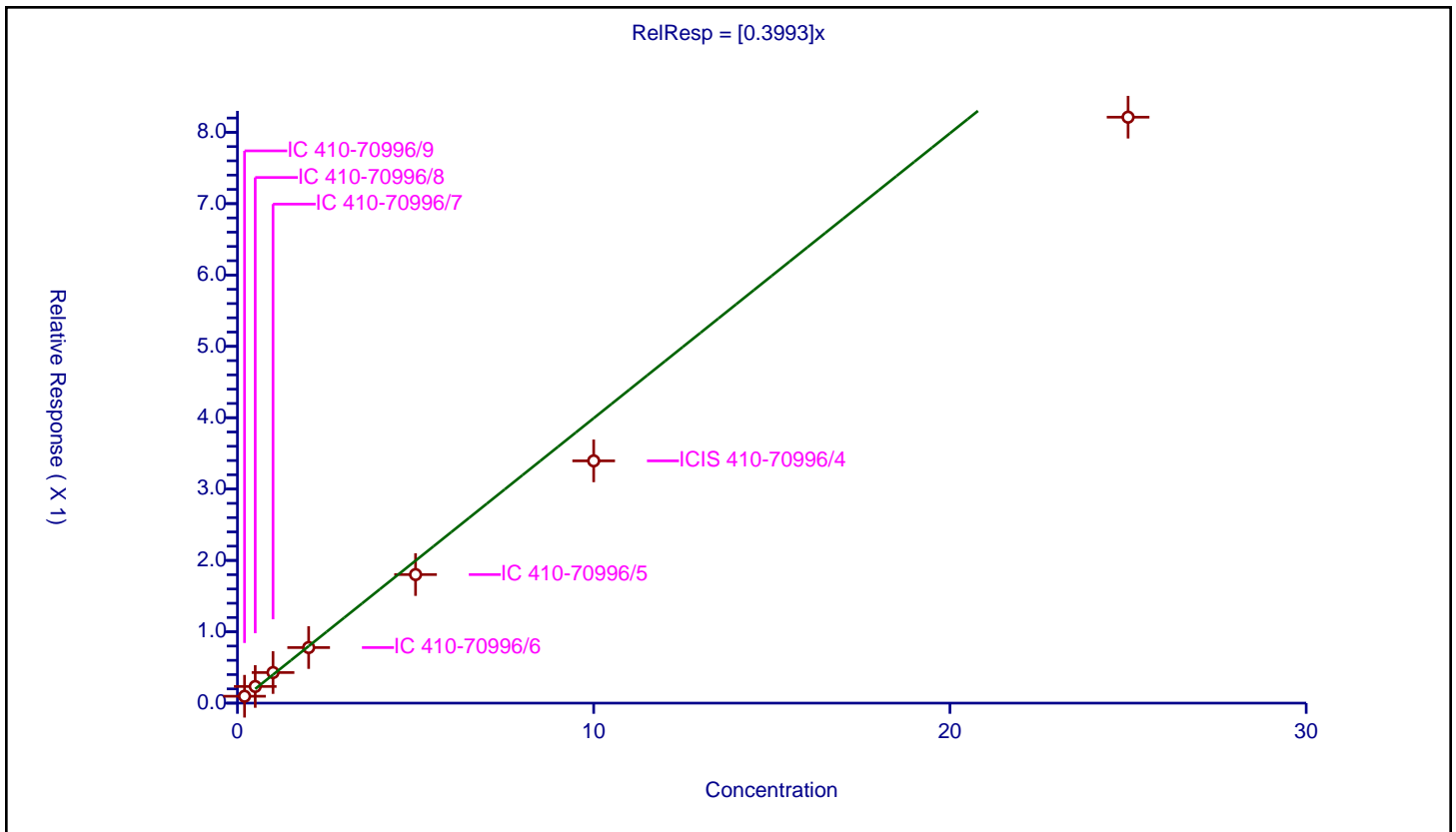
/ Butadiene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3993

Error Coefficients	
Standard Error:	836000
Relative Standard Error:	15.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.962

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-70996/9	0.2	0.096351	10.0	2204755.0	0.481754	Y
2	IC 410-70996/8	0.5	0.233396	10.0	2189287.0	0.466791	Y
3	IC 410-70996/7	1.0	0.428726	10.0	2211412.0	0.428726	Y
4	IC 410-70996/6	2.0	0.778888	10.0	2210035.0	0.389444	Y
5	IC 410-70996/5	5.0	1.801771	10.0	2225560.0	0.360354	Y
6	ICIS 410-70996/4	10.0	3.395481	10.0	2246480.0	0.339548	Y
7	IC 410-70996/3	25.0	8.211886	10.0	2249974.0	0.328475	Y





**Calibration**

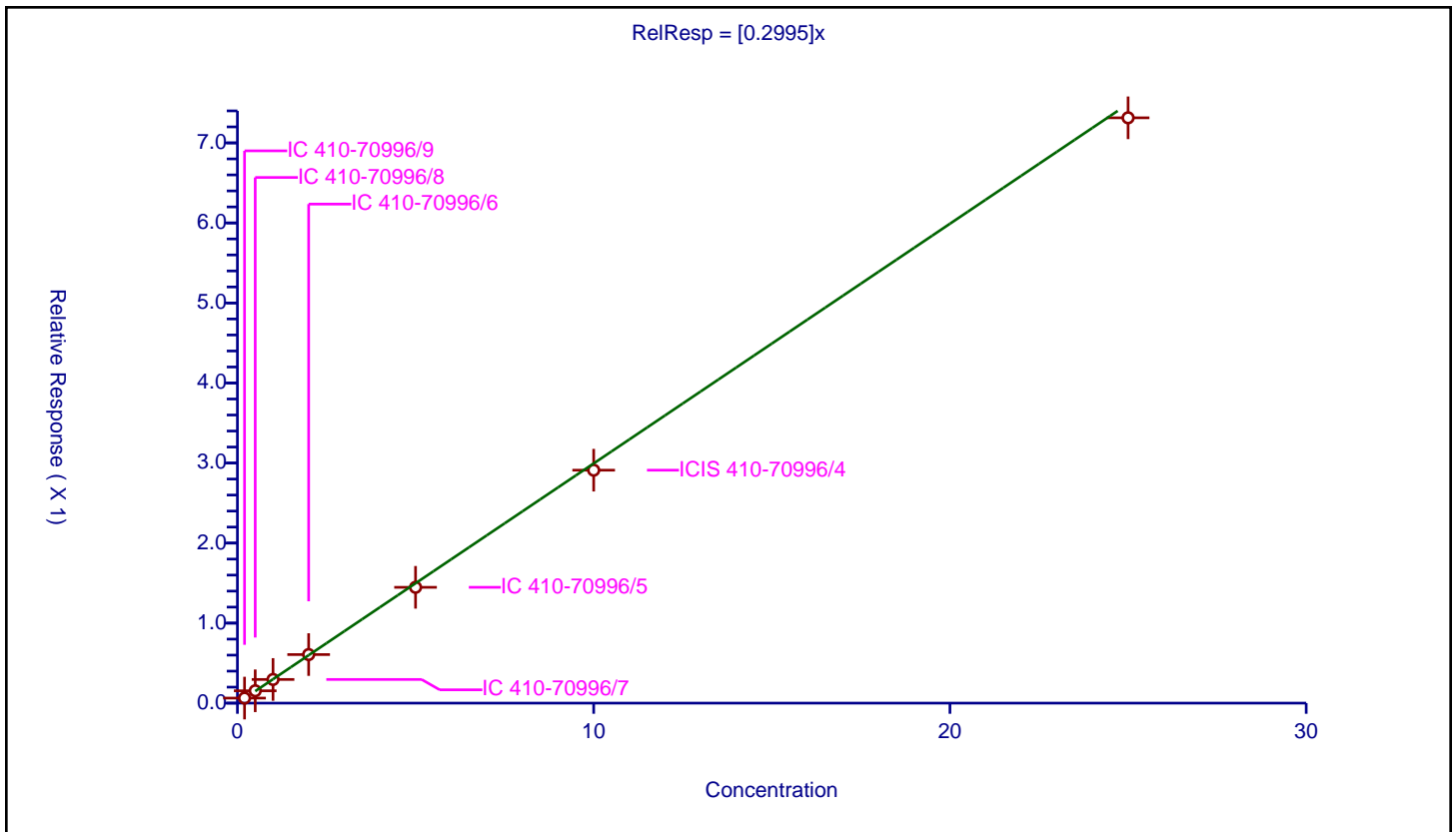
/ Vinyl chloride

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2995

Error Coefficients	
Standard Error:	737000
Relative Standard Error:	3.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-70996/9	0.2	0.063182	10.0	2204755.0	0.315908	Y
2	IC 410-70996/8	0.5	0.154196	10.0	2189287.0	0.308393	Y
3	IC 410-70996/7	1.0	0.295648	10.0	2211412.0	0.295648	Y
4	IC 410-70996/6	2.0	0.606927	10.0	2210035.0	0.303464	Y
5	IC 410-70996/5	5.0	1.447137	10.0	2225560.0	0.289427	Y
6	ICIS 410-70996/4	10.0	2.910727	10.0	2246480.0	0.291073	Y
7	IC 410-70996/3	25.0	7.313565	10.0	2249974.0	0.292543	Y



Calibration

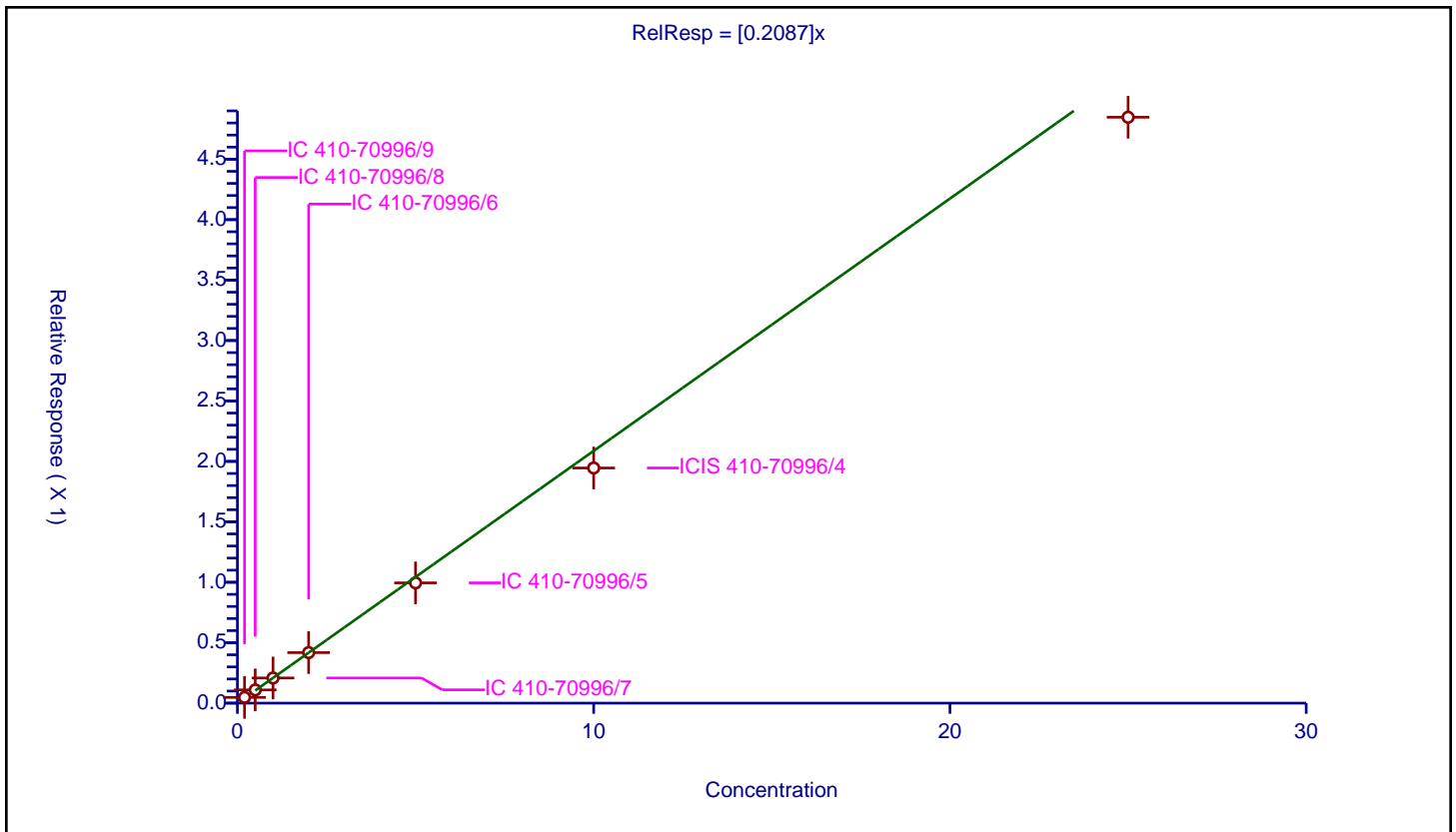
/ Bromomethane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2087

Error Coefficients	
Standard Error:	490000
Relative Standard Error:	7.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-70996/9	0.2	0.04752	10.0	2204755.0	0.2376	Y
2	IC 410-70996/8	0.5	0.109405	10.0	2189287.0	0.218811	Y
3	IC 410-70996/7	1.0	0.208039	10.0	2211412.0	0.208039	Y
4	IC 410-70996/6	2.0	0.418152	10.0	2210035.0	0.209076	Y
5	IC 410-70996/5	5.0	0.995021	10.0	2225560.0	0.199004	Y
6	ICIS 410-70996/4	10.0	1.945355	10.0	2246480.0	0.194535	Y
7	IC 410-70996/3	25.0	4.847372	10.0	2249974.0	0.193895	Y



**Calibration**

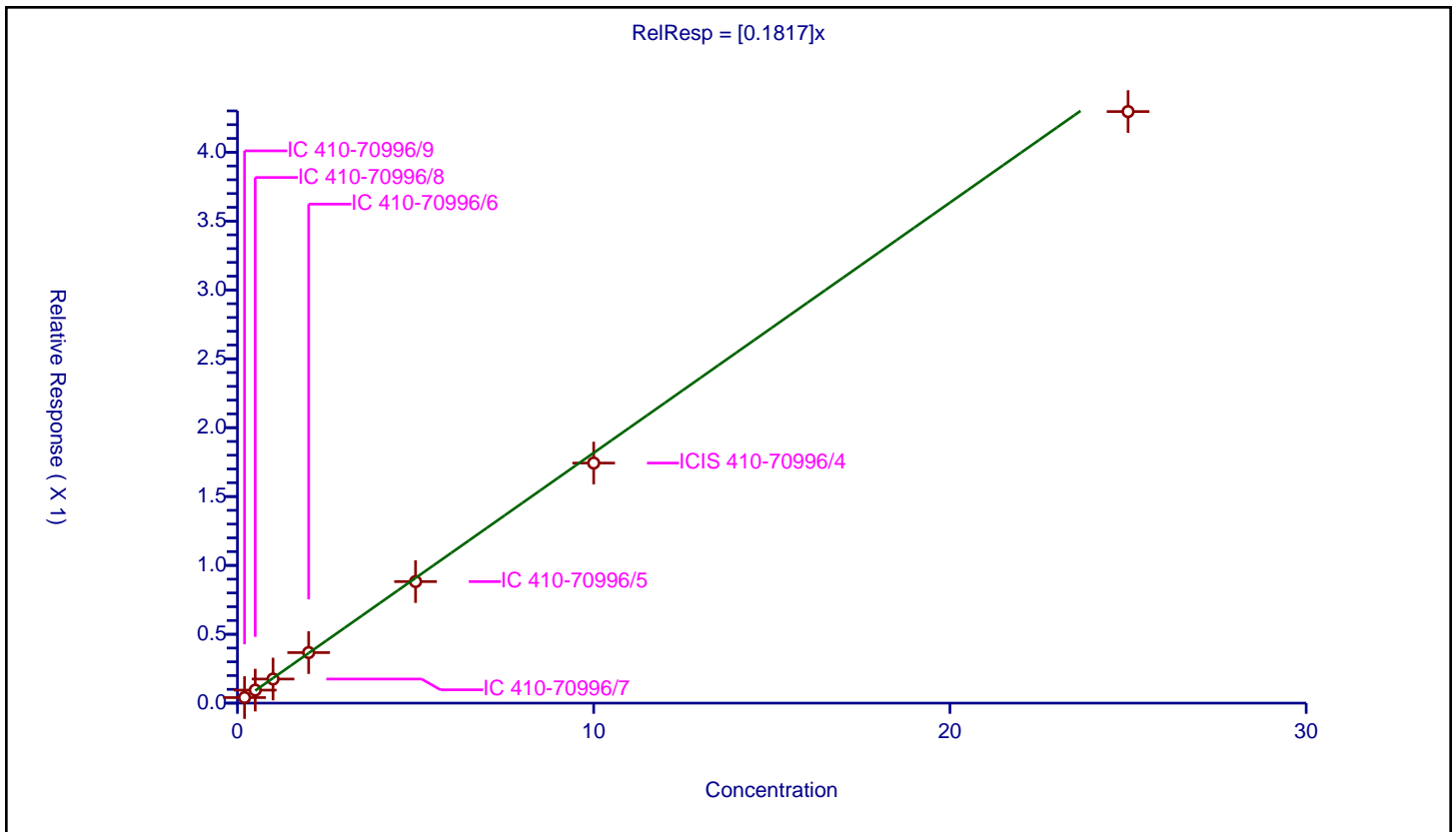
**/ Chloroethane**

**Curve Type:** Average  
**Weighting:** Conc\_Sq  
**Origin:** Force  
**Dependency:** Response  
**Calib Mode:** ISTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	0
Slope:	0.1817

Error Coefficients	
Standard Error:	435000
Relative Standard Error:	5.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-70996/9	0.2	0.040399	10.0	2204755.0	0.201995	Y
2	IC 410-70996/8	0.5	0.094423	10.0	2189287.0	0.188847	Y
3	IC 410-70996/7	1.0	0.174997	10.0	2211412.0	0.174997	Y
4	IC 410-70996/6	2.0	0.366958	10.0	2210035.0	0.183479	Y
5	IC 410-70996/5	5.0	0.882515	10.0	2225560.0	0.176503	Y
6	ICIS 410-70996/4	10.0	1.742989	10.0	2246480.0	0.174299	Y
7	IC 410-70996/3	25.0	4.29525	10.0	2249974.0	0.17181	Y



Calibration

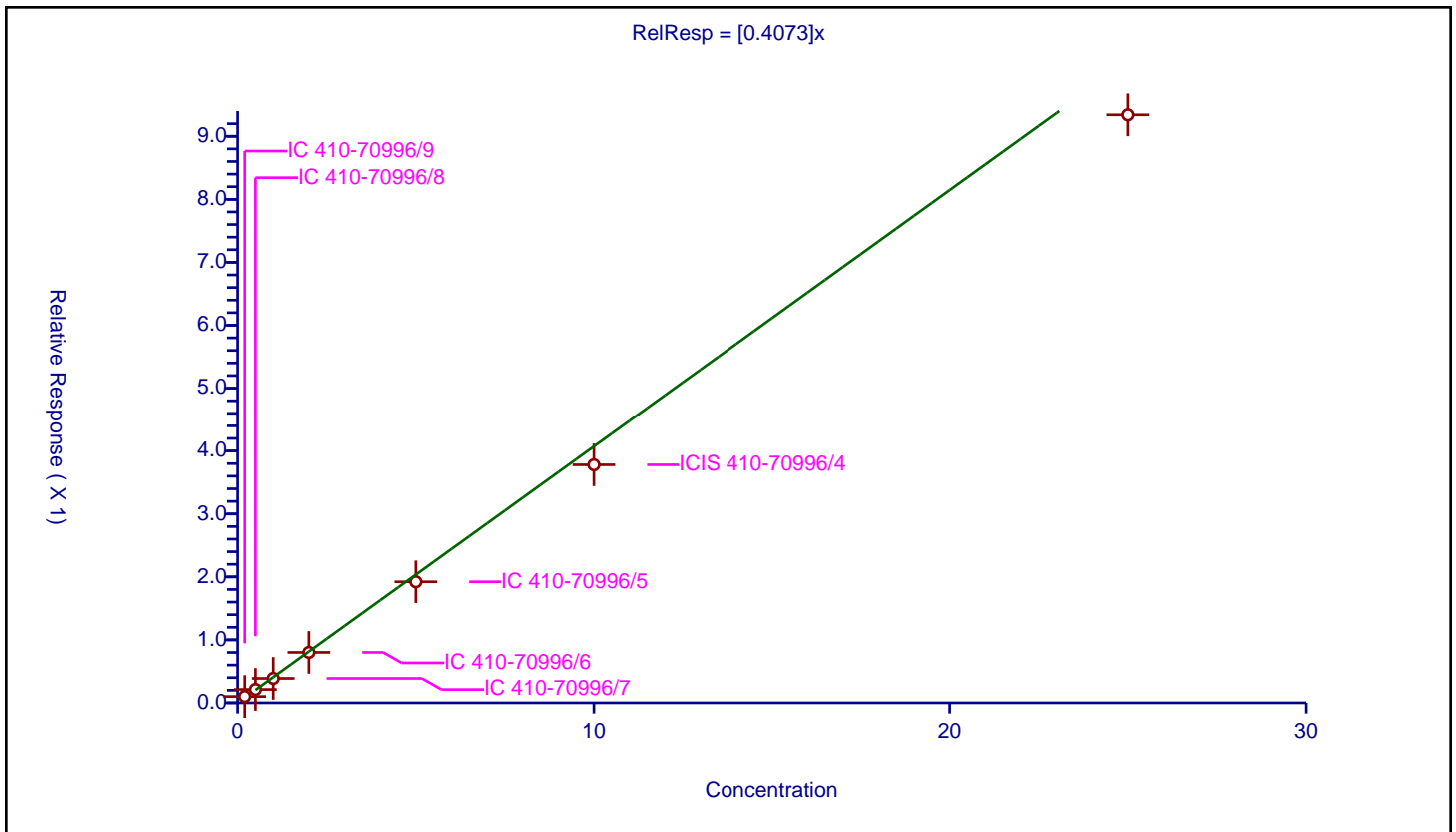
/ Dichlorofluoromethane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4073

Error Coefficients	
Standard Error:	945000
Relative Standard Error:	11.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.981

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-70996/9	0.2	0.100342	10.0	2204755.0	0.501711	Y
2	IC 410-70996/8	0.5	0.212512	10.0	2189287.0	0.425024	Y
3	IC 410-70996/7	1.0	0.387766	10.0	2211412.0	0.387766	Y
4	IC 410-70996/6	2.0	0.800992	10.0	2210035.0	0.400496	Y
5	IC 410-70996/5	5.0	1.922402	10.0	2225560.0	0.38448	Y
6	ICIS 410-70996/4	10.0	3.781062	10.0	2246480.0	0.378106	Y
7	IC 410-70996/3	25.0	9.340339	10.0	2249974.0	0.373614	Y



Calibration

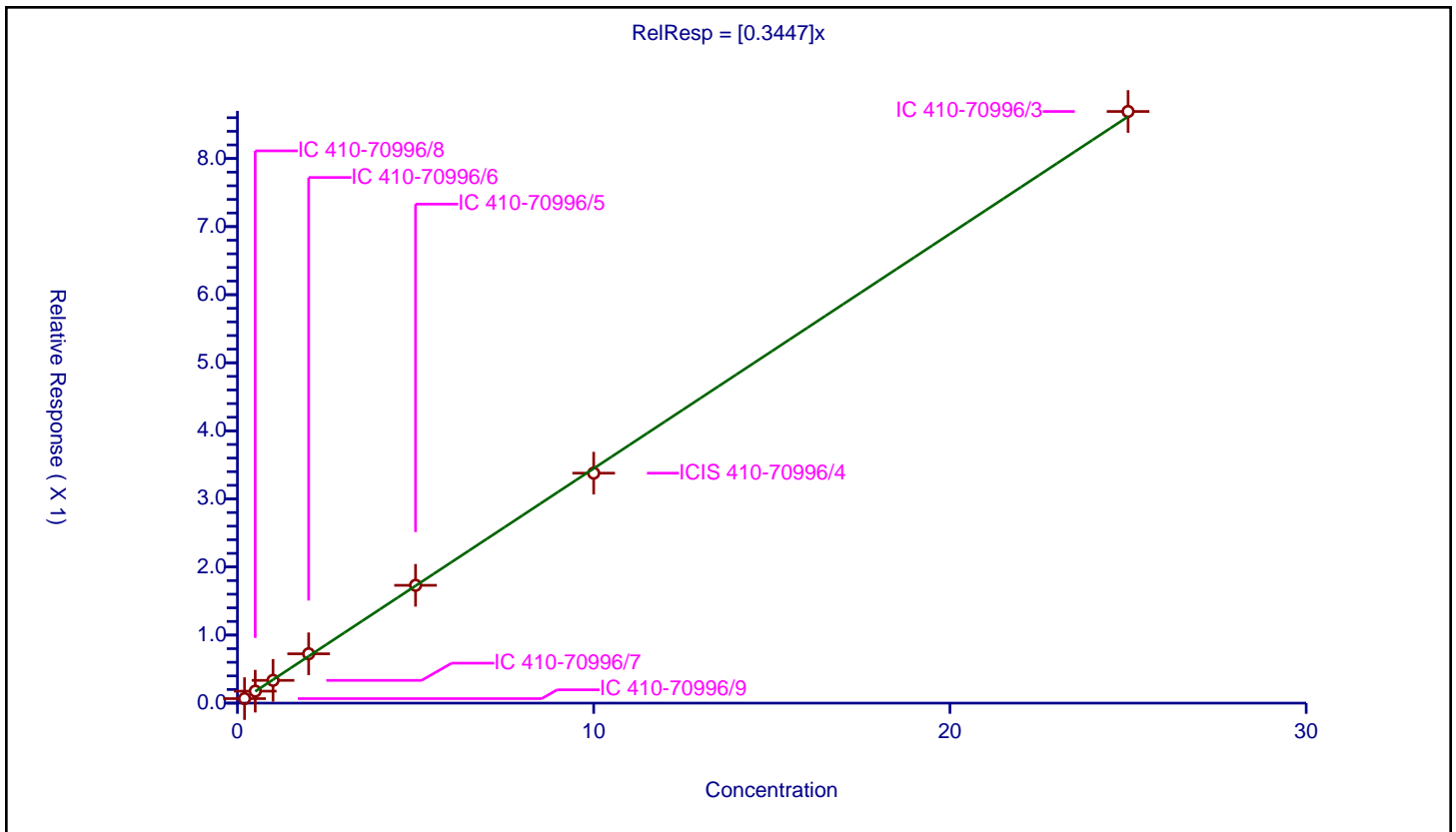
/ Trichlorofluoromethane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3447

Error Coefficients	
Standard Error:	874000
Relative Standard Error:	3.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-70996/9	0.2	0.066443	10.0	2204755.0	0.332214	Y
2	IC 410-70996/8	0.5	0.175993	10.0	2189287.0	0.351987	Y
3	IC 410-70996/7	1.0	0.334406	10.0	2211412.0	0.334406	Y
4	IC 410-70996/6	2.0	0.724798	10.0	2210035.0	0.362399	Y
5	IC 410-70996/5	5.0	1.7308	10.0	2225560.0	0.34616	Y
6	ICIS 410-70996/4	10.0	3.378227	10.0	2246480.0	0.337823	Y
7	IC 410-70996/3	25.0	8.691198	10.0	2249974.0	0.347648	Y



Calibration

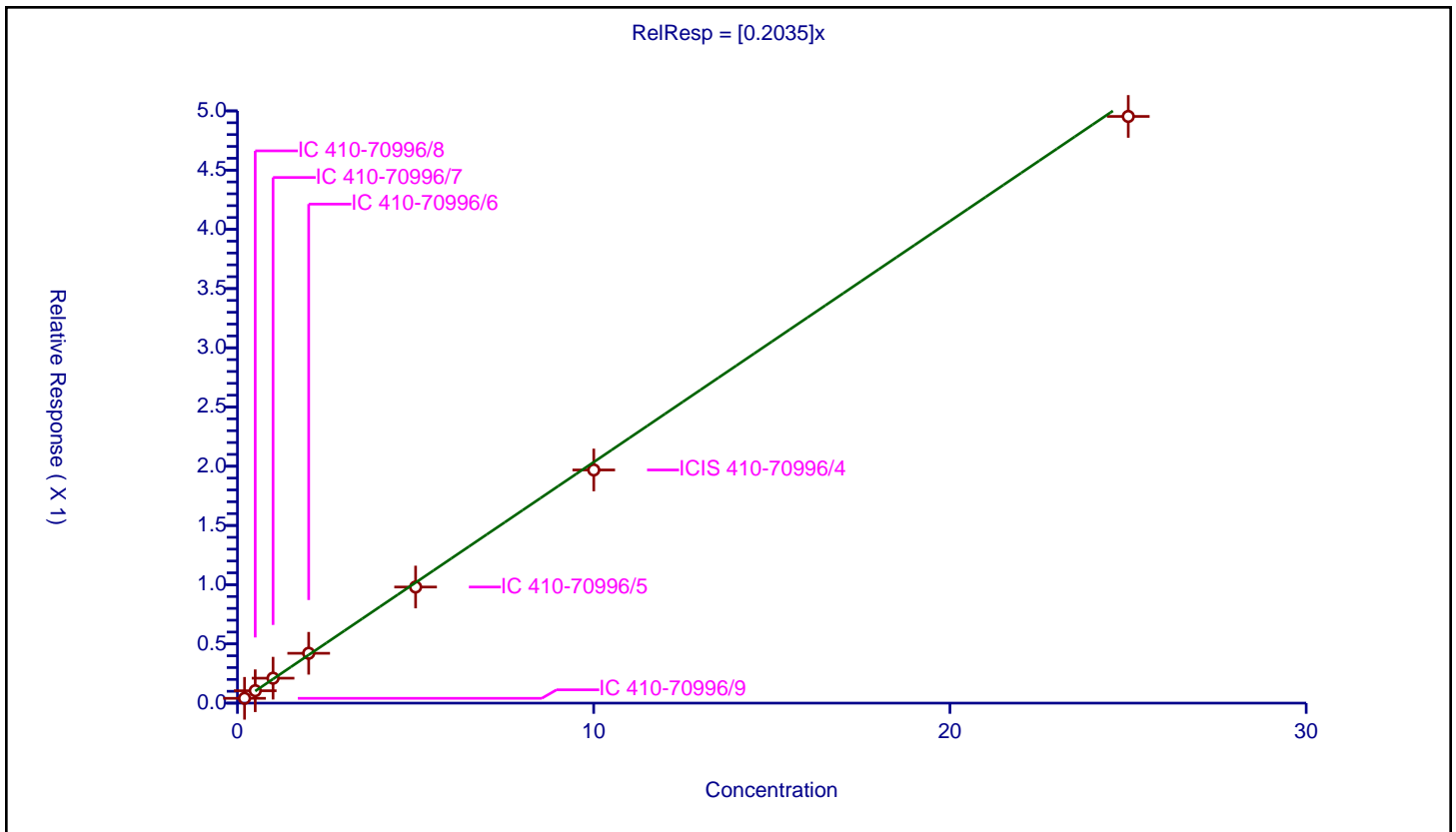
/ Ethyl ether

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2035

Error Coefficients	
Standard Error:	499000
Relative Standard Error:	3.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-70996/9	0.200043	0.040594	10.0	2204755.0	0.202927	Y
2	IC 410-70996/8	0.500108	0.104742	10.0	2189287.0	0.209439	Y
3	IC 410-70996/7	1.000215	0.210594	10.0	2211412.0	0.210549	Y
4	IC 410-70996/6	2.00043	0.420903	10.0	2210035.0	0.210406	Y
5	IC 410-70996/5	5.001075	0.98027	10.0	2225560.0	0.196012	Y
6	ICIS 410-70996/4	10.00215	1.968457	10.0	2246480.0	0.196803	Y
7	IC 410-70996/3	25.005375	4.953173	10.0	2249974.0	0.198084	Y



Calibration

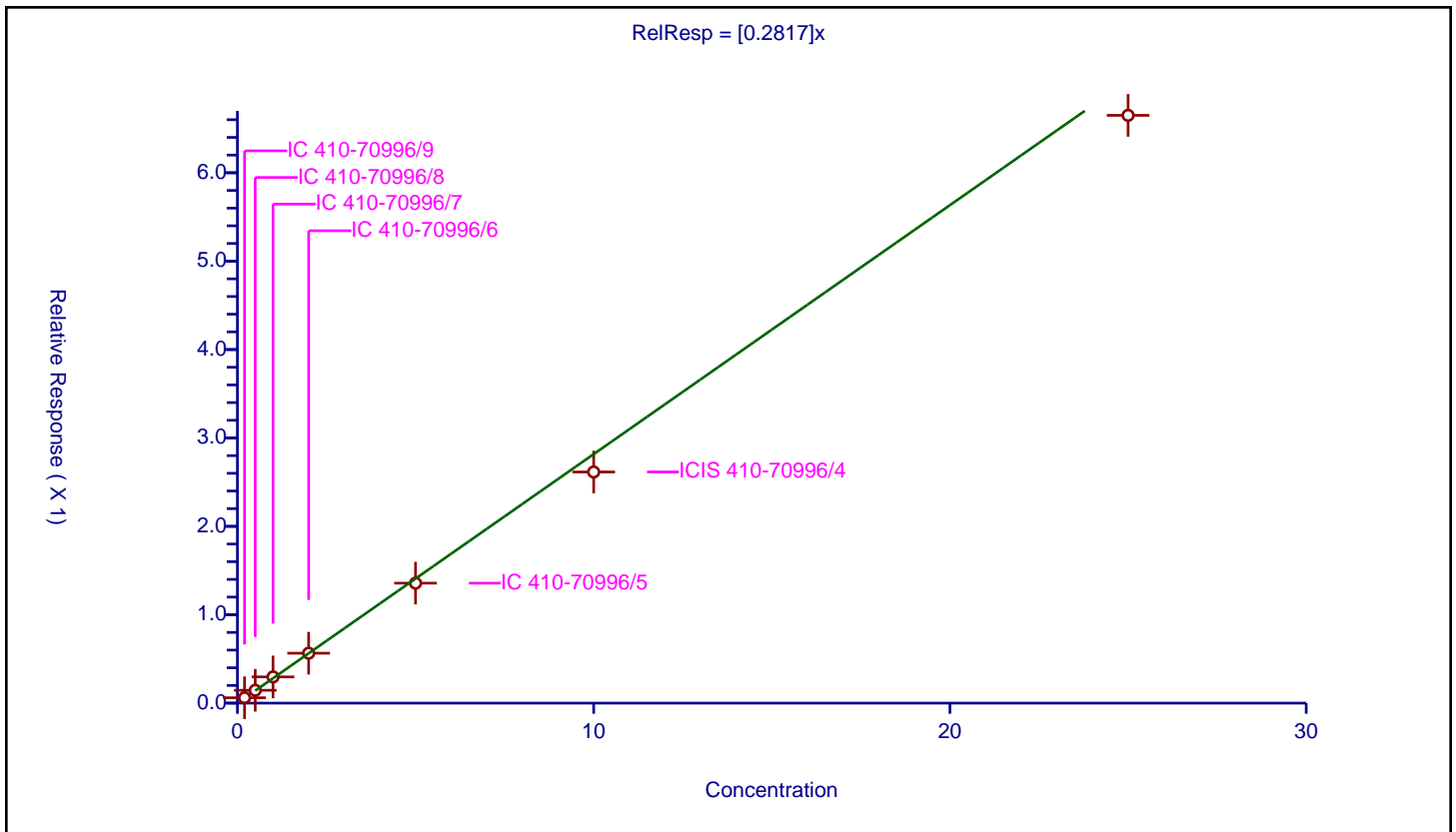
/ 1,2-Dichloro-1,1,2-trifluoroethane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2817

Error Coefficients	
Standard Error:	670000
Relative Standard Error:	5.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-70996/9	0.2	0.060574	10.0	2204755.0	0.302868	Y
2	IC 410-70996/8	0.5	0.145499	10.0	2189287.0	0.290999	Y
3	IC 410-70996/7	1.0	0.296648	10.0	2211412.0	0.296648	Y
4	IC 410-70996/6	2.0	0.564756	10.0	2210035.0	0.282378	Y
5	IC 410-70996/5	5.0	1.357115	10.0	2225560.0	0.271423	Y
6	ICIS 410-70996/4	10.0	2.614788	10.0	2246480.0	0.261479	Y
7	IC 410-70996/3	25.0	6.649499	10.0	2249974.0	0.26598	Y



Calibration

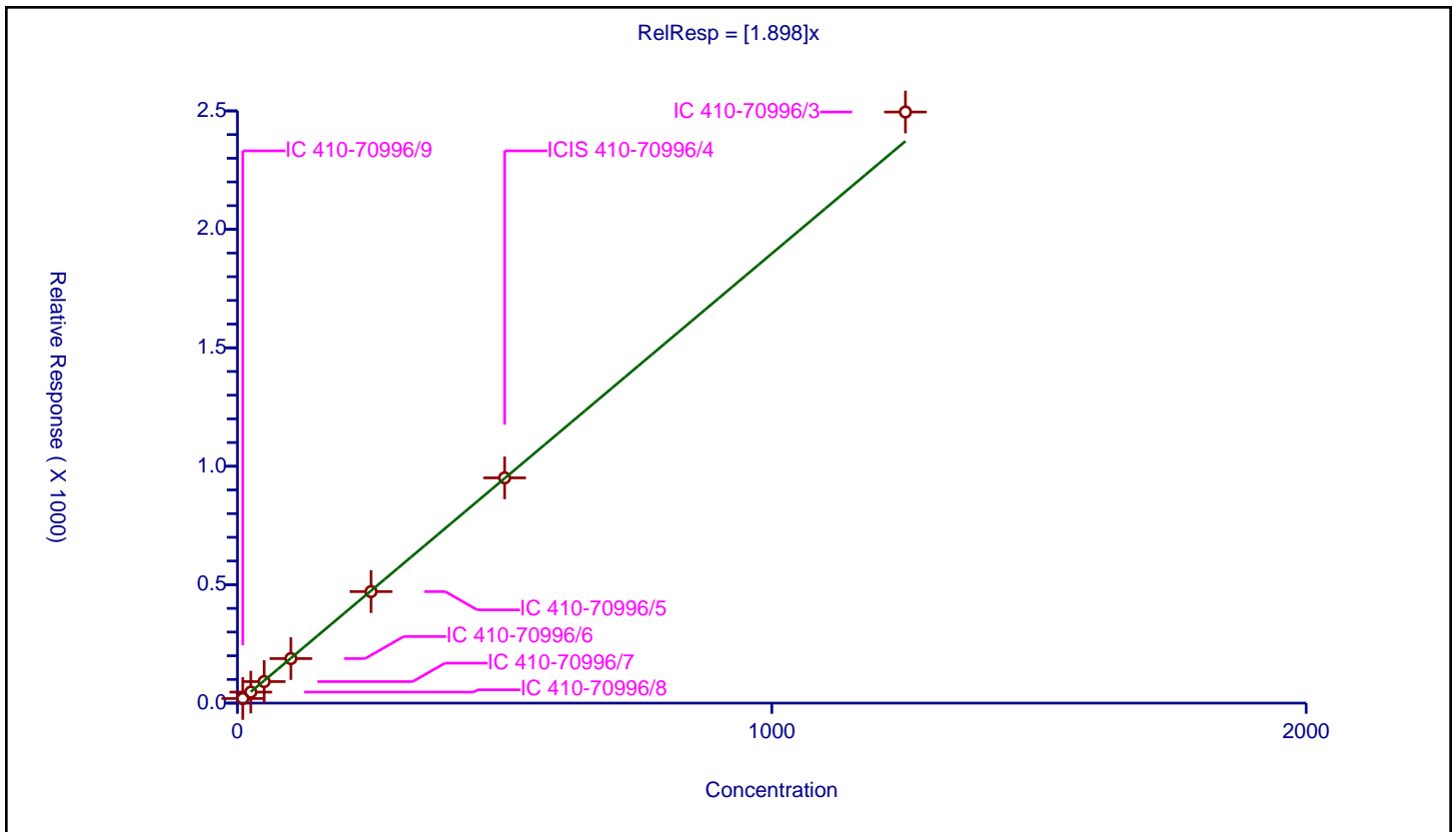
/ Acrolein

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.898

Error Coefficients	
Standard Error:	3980000
Relative Standard Error:	3.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-70996/9	10.000292	19.44882	50.0	184731.0	1.944825	Y
2	IC 410-70996/8	25.000729	46.526395	50.0	195834.0	1.861002	Y
3	IC 410-70996/7	50.001458	90.859368	50.0	201206.0	1.817134	Y
4	IC 410-70996/6	100.002917	187.990007	50.0	195329.0	1.879845	Y
5	IC 410-70996/5	250.007292	470.811266	50.0	183343.0	1.88319	Y
6	ICIS 410-70996/4	500.014585	950.905994	50.0	186094.0	1.901757	Y
7	IC 410-70996/3	1250.036462	2495.255991	50.0	177877.0	1.996147	Y





Calibration

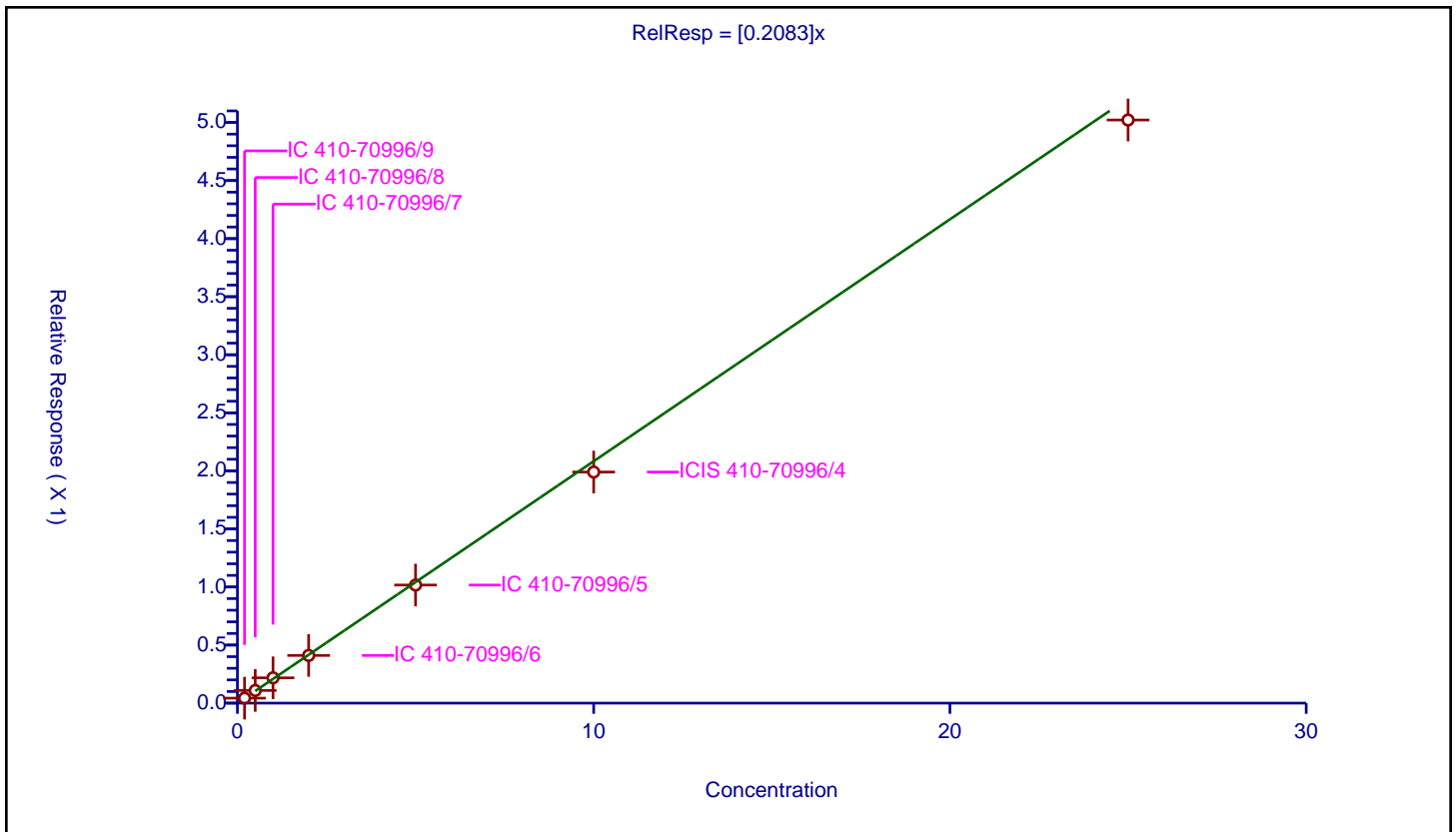
/ 1,1-Dichloroethene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2083

Error Coefficients	
Standard Error:	506000
Relative Standard Error:	3.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-70996/9	0.2	0.042762	10.0	2204755.0	0.213811	Y
2	IC 410-70996/8	0.5	0.10899	10.0	2189287.0	0.21798	Y
3	IC 410-70996/7	1.0	0.217793	10.0	2211412.0	0.217793	Y
4	IC 410-70996/6	2.0	0.410546	10.0	2210035.0	0.205273	Y
5	IC 410-70996/5	5.0	1.016944	10.0	2225560.0	0.203389	Y
6	ICIS 410-70996/4	10.0	1.989984	10.0	2246480.0	0.198998	Y
7	IC 410-70996/3	25.0	5.021511	10.0	2249974.0	0.20086	Y



Calibration

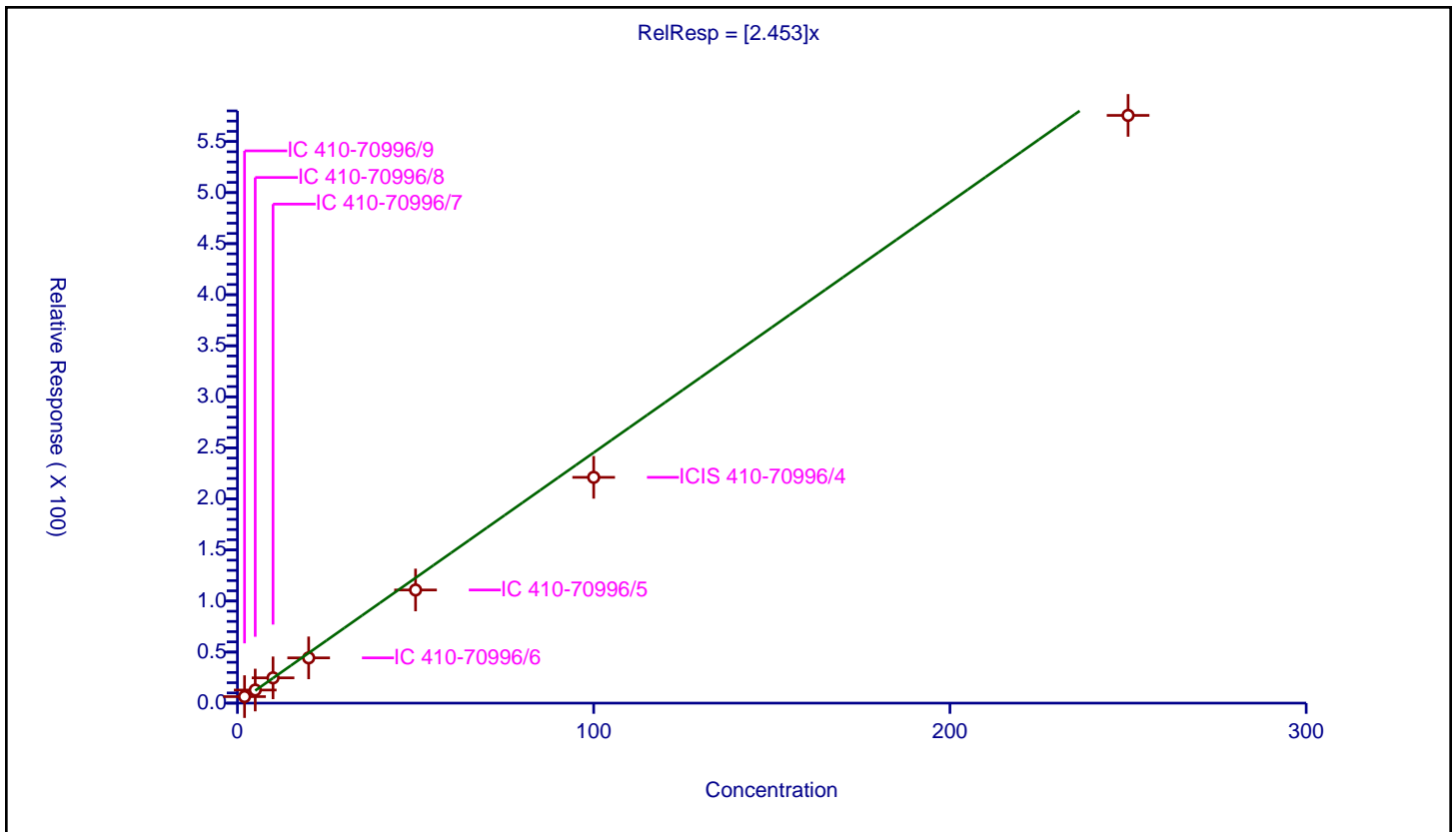
/ Acetone

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	2.453

Error Coefficients	
Standard Error:	920000
Relative Standard Error:	14.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.966

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-70996/9	2.0	6.371697	50.0	184731.0	3.185849	Y
2	IC 410-70996/8	5.0	12.822595	50.0	195834.0	2.564519	Y
3	IC 410-70996/7	10.0	24.764172	50.0	201206.0	2.476417	Y
4	IC 410-70996/6	20.0	44.336478	50.0	195329.0	2.216824	Y
5	IC 410-70996/5	50.0	110.805703	50.0	183343.0	2.216114	Y
6	ICIS 410-70996/4	100.0	221.132062	50.0	186094.0	2.211321	Y
7	IC 410-70996/3	250.0	575.589593	50.0	177877.0	2.302358	Y



**Calibration**

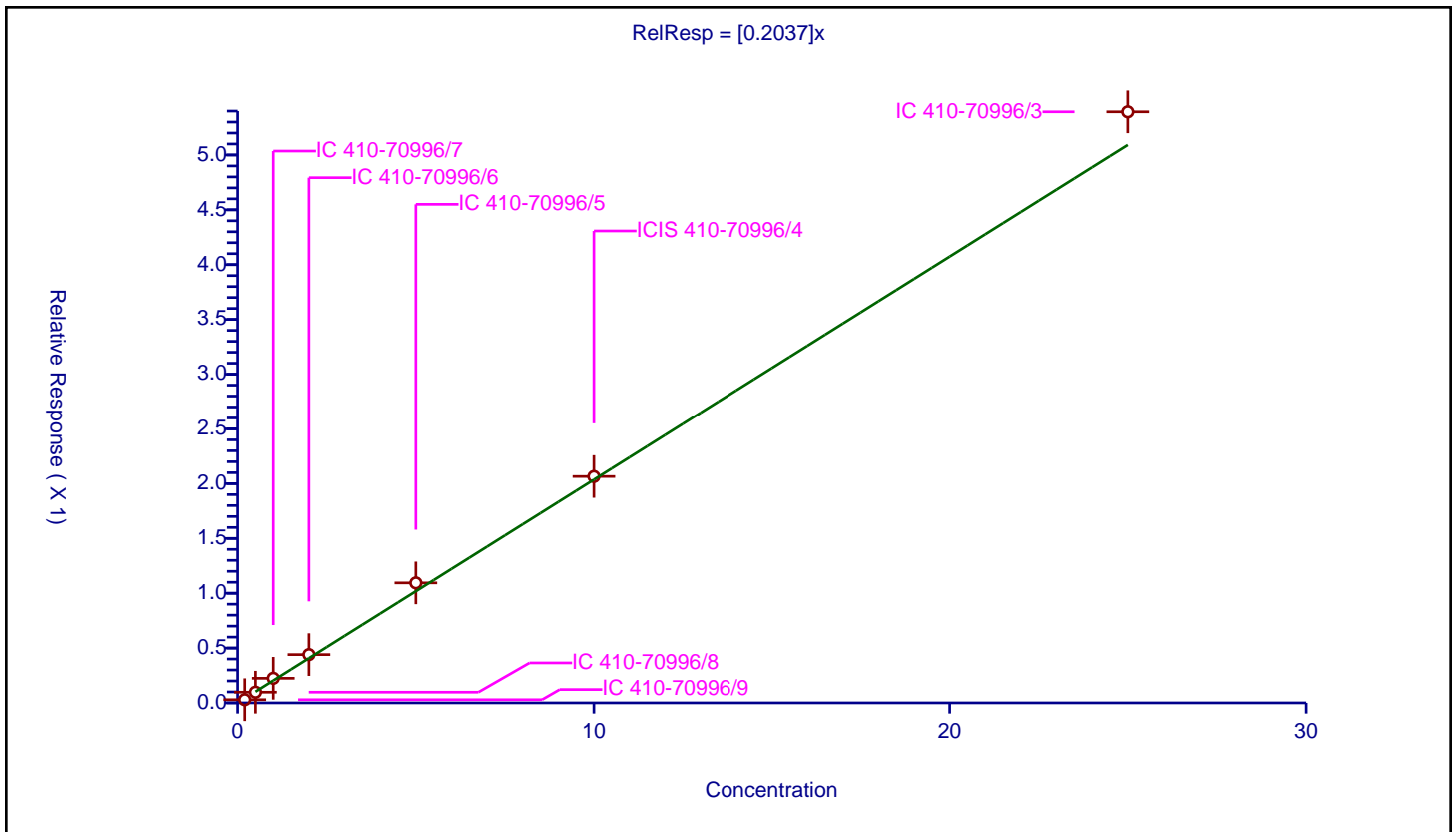
/ 1,1,2-Trichloro-1,2,2-trifluoroethane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2037

Error Coefficients	
Standard Error:	542000
Relative Standard Error:	13.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.979

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-70996/9	0.2	0.02906	10.0	2204755.0	0.1453	Y
2	IC 410-70996/8	0.5	0.097397	10.0	2189287.0	0.194794	Y
3	IC 410-70996/7	1.0	0.224309	10.0	2211412.0	0.224309	Y
4	IC 410-70996/6	2.0	0.440237	10.0	2210035.0	0.220119	Y
5	IC 410-70996/5	5.0	1.094354	10.0	2225560.0	0.218871	Y
6	ICIS 410-70996/4	10.0	2.065565	10.0	2246480.0	0.206556	Y
7	IC 410-70996/3	25.0	5.393209	10.0	2249974.0	0.215728	Y



**Calibration**

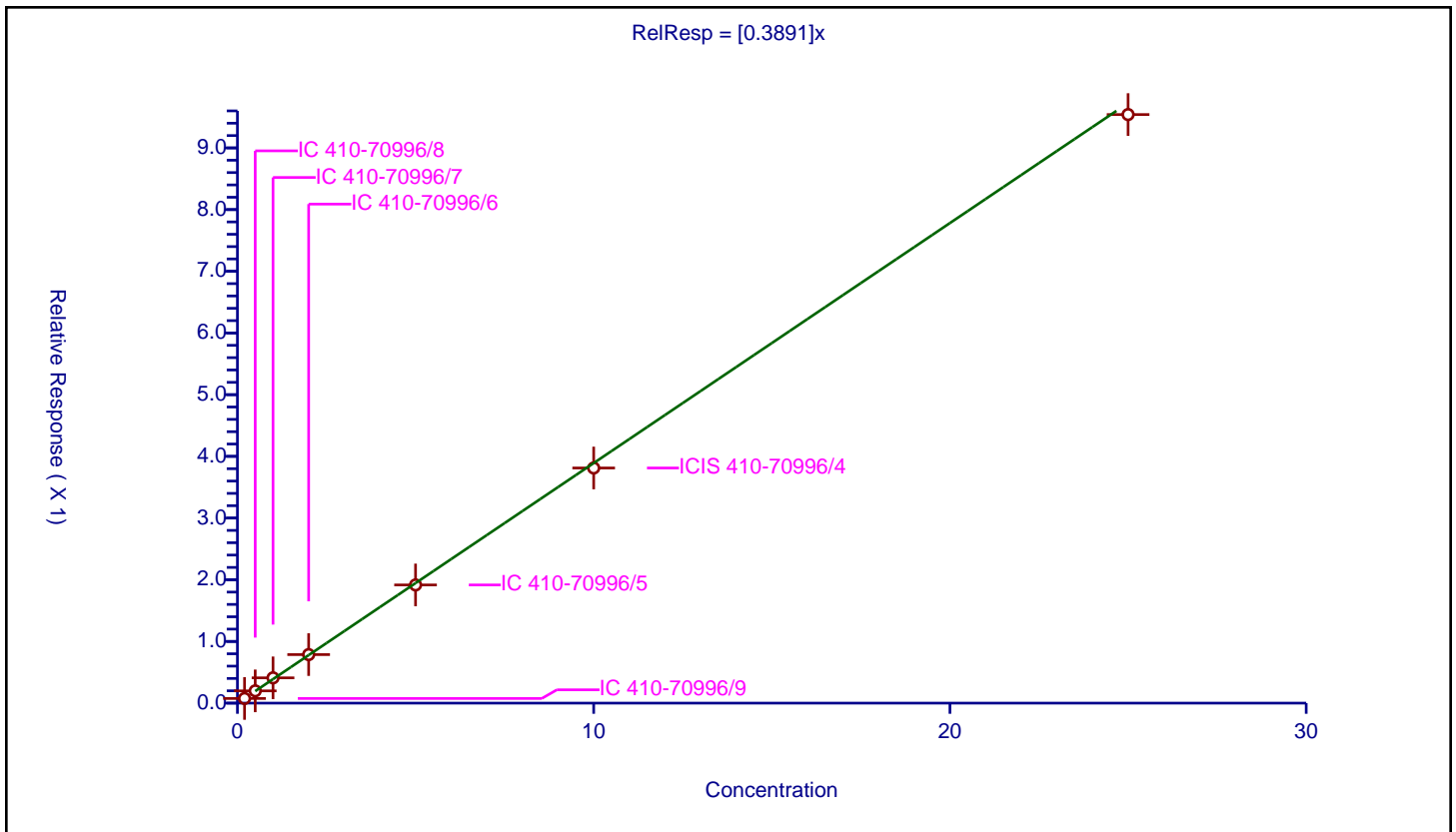
/ Iodomethane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3891

Error Coefficients	
Standard Error:	963000
Relative Standard Error:	3.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-70996/9	0.2	0.075405	10.0	2204755.0	0.377026	Y
2	IC 410-70996/8	0.5	0.198695	10.0	2189287.0	0.39739	Y
3	IC 410-70996/7	1.0	0.409937	10.0	2211412.0	0.409937	Y
4	IC 410-70996/6	2.0	0.786752	10.0	2210035.0	0.393376	Y
5	IC 410-70996/5	5.0	1.915868	10.0	2225560.0	0.383174	Y
6	ICIS 410-70996/4	10.0	3.811434	10.0	2246480.0	0.381143	Y
7	IC 410-70996/3	25.0	9.540501	10.0	2249974.0	0.38162	Y



**Calibration**

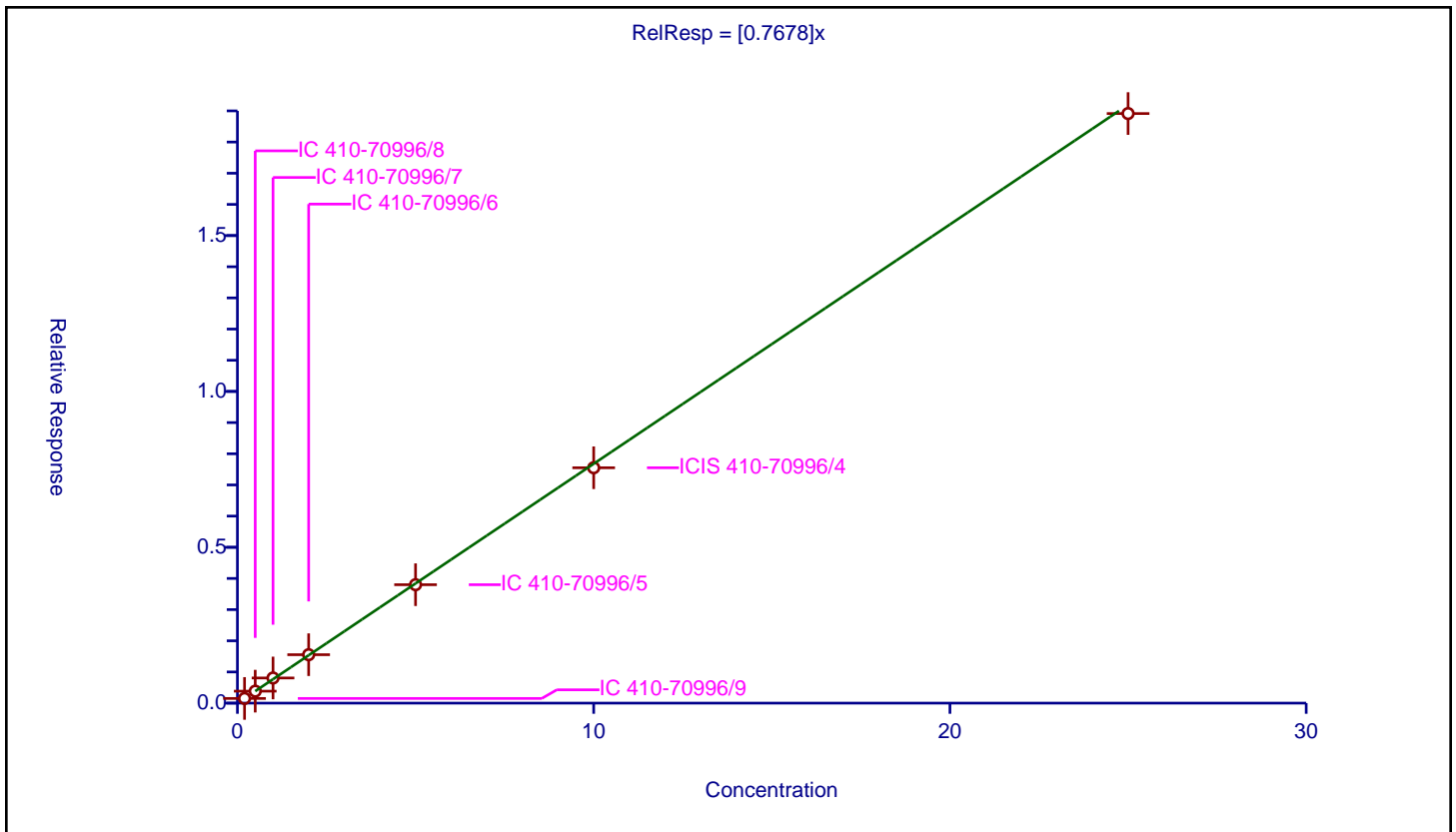
/ Carbon disulfide

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.7678

Error Coefficients	
Standard Error:	1910000
Relative Standard Error:	2.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-70996/9	0.2	0.150298	10.0	2204755.0	0.751489	Y
2	IC 410-70996/8	0.5	0.38397	10.0	2189287.0	0.76794	Y
3	IC 410-70996/7	1.0	0.807	10.0	2211412.0	0.807	Y
4	IC 410-70996/6	2.0	1.553564	10.0	2210035.0	0.776782	Y
5	IC 410-70996/5	5.0	3.799632	10.0	2225560.0	0.759926	Y
6	ICIS 410-70996/4	10.0	7.550835	10.0	2246480.0	0.755084	Y
7	IC 410-70996/3	25.0	18.914672	10.0	2249974.0	0.756587	Y



**Calibration**

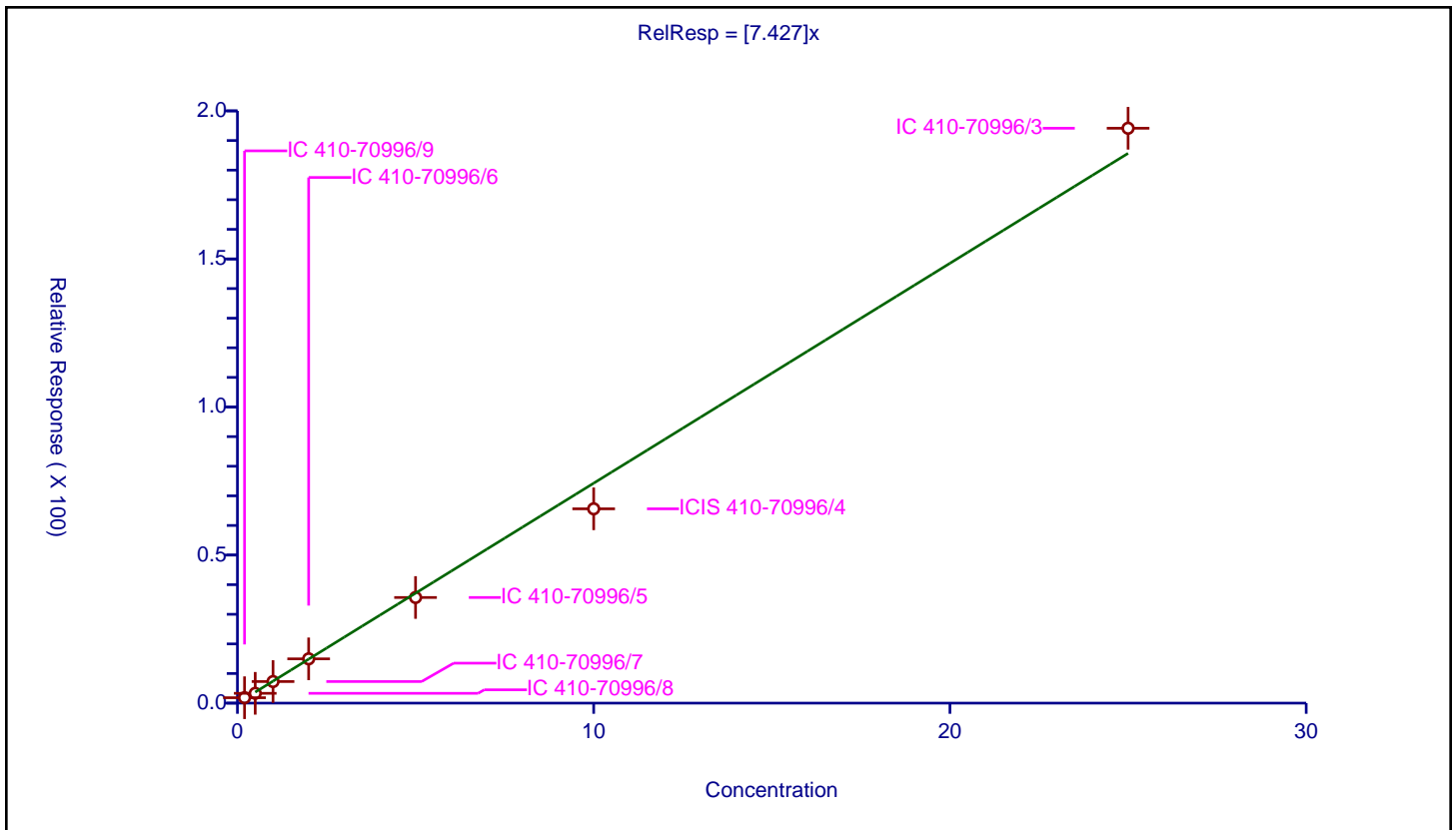
**/ Methyl acetate**

**Curve Type:** Average  
**Weighting:** Conc\_Sq  
**Origin:** Force  
**Dependency:** Response  
**Calib Mode:** ISTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	0
Slope:	7.427

Error Coefficients	
Standard Error:	305000
Relative Standard Error:	11.7
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.979

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-70996/9	0.2	1.827252	50.0	184731.0	9.136258	Y
2	IC 410-70996/8	0.5	3.310457	50.0	195834.0	6.620914	Y
3	IC 410-70996/7	1.0	7.28855	50.0	201206.0	7.28855	Y
4	IC 410-70996/6	2.0	14.95656	50.0	195329.0	7.47828	Y
5	IC 410-70996/5	5.0	35.676028	50.0	183343.0	7.135206	Y
6	ICIS 410-70996/4	10.0	65.6206	50.0	186094.0	6.56206	Y
7	IC 410-70996/3	25.0	194.136398	50.0	177877.0	7.765456	Y



Calibration

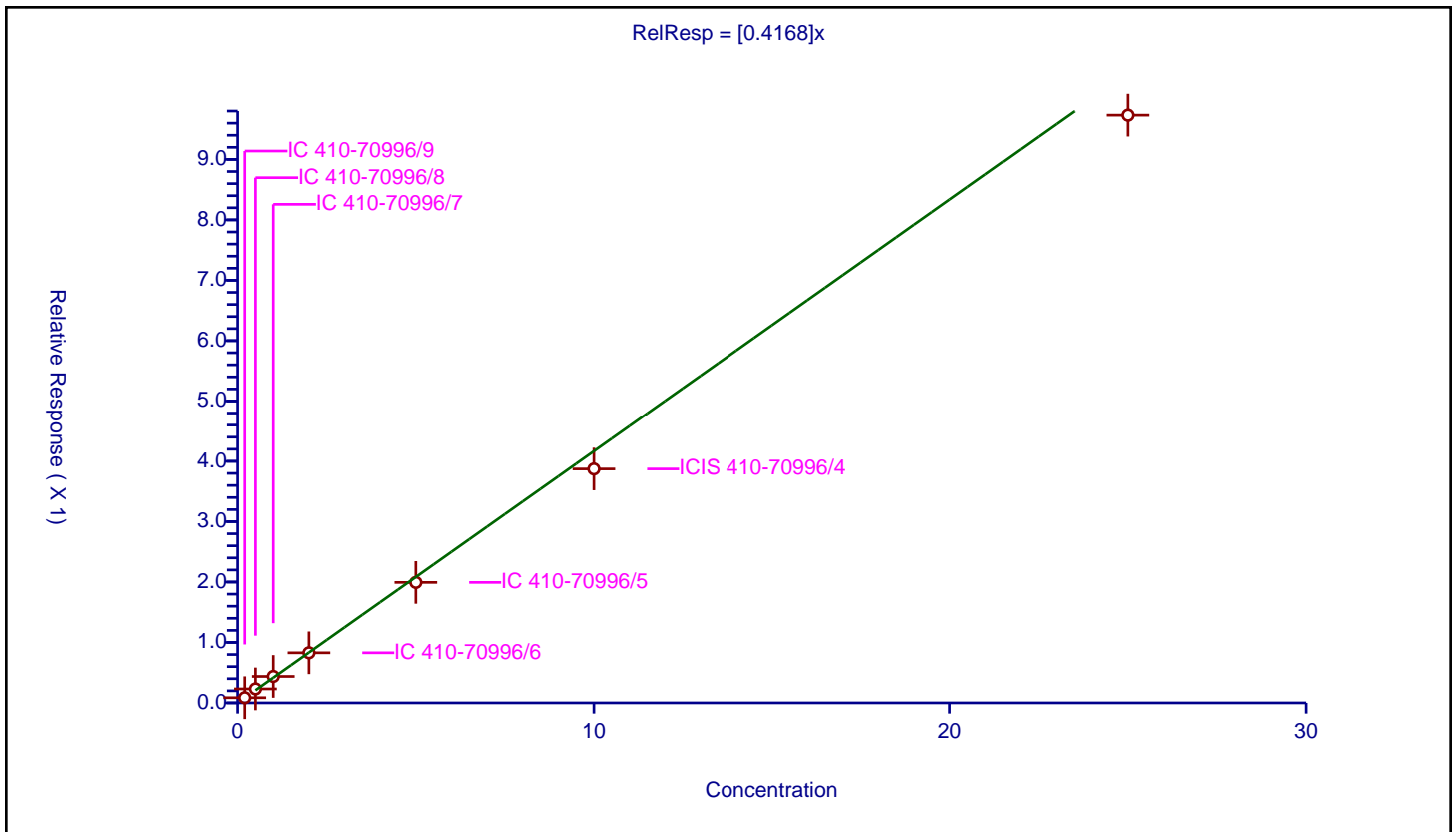
/ 3-Chloro-1-propene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4168

Error Coefficients	
Standard Error:	983000
Relative Standard Error:	6.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-70996/9	0.2	0.085656	10.0	2204755.0	0.428279	Y
2	IC 410-70996/8	0.5	0.231144	10.0	2189287.0	0.462287	Y
3	IC 410-70996/7	1.0	0.437268	10.0	2211412.0	0.437268	Y
4	IC 410-70996/6	2.0	0.828933	10.0	2210035.0	0.414466	Y
5	IC 410-70996/5	5.0	1.99388	10.0	2225560.0	0.398776	Y
6	ICIS 410-70996/4	10.0	3.873153	10.0	2246480.0	0.387315	Y
7	IC 410-70996/3	25.0	9.732019	10.0	2249974.0	0.389281	Y



**Calibration**

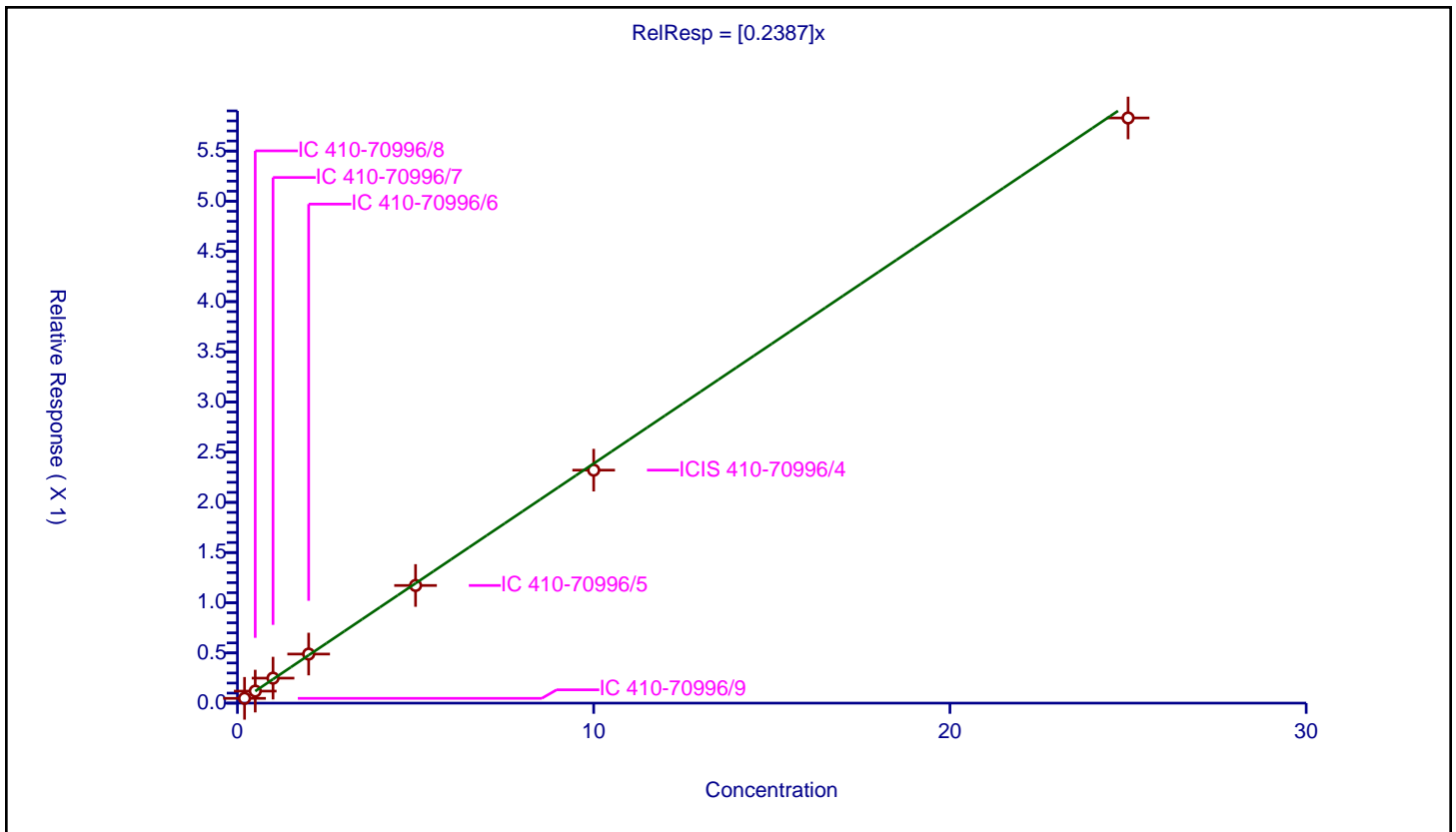
**/ Methylene Chloride**

**Curve Type:** Average  
**Weighting:** Conc\_Sq  
**Origin:** Force  
**Dependency:** Response  
**Calib Mode:** ISTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
<b>Intercept:</b>	0
<b>Slope:</b>	0.2387

Error Coefficients	
<b>Standard Error:</b>	588000
<b>Relative Standard Error:</b>	2.6
<b>Correlation Coefficient:</b>	1.000
<b>Coefficient of Determination (Adjusted):</b>	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**

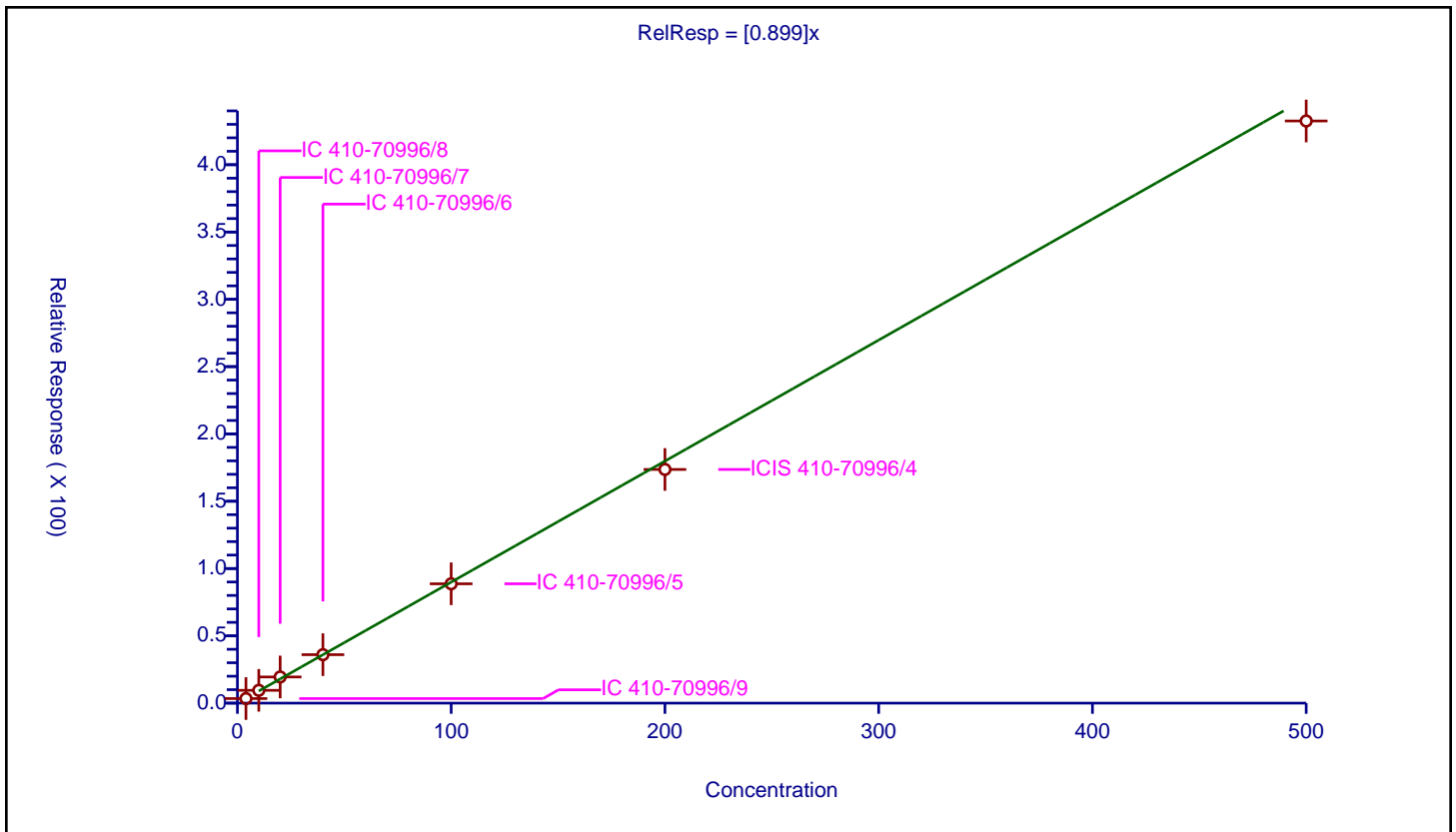
/ 2-Methyl-2-propanol

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

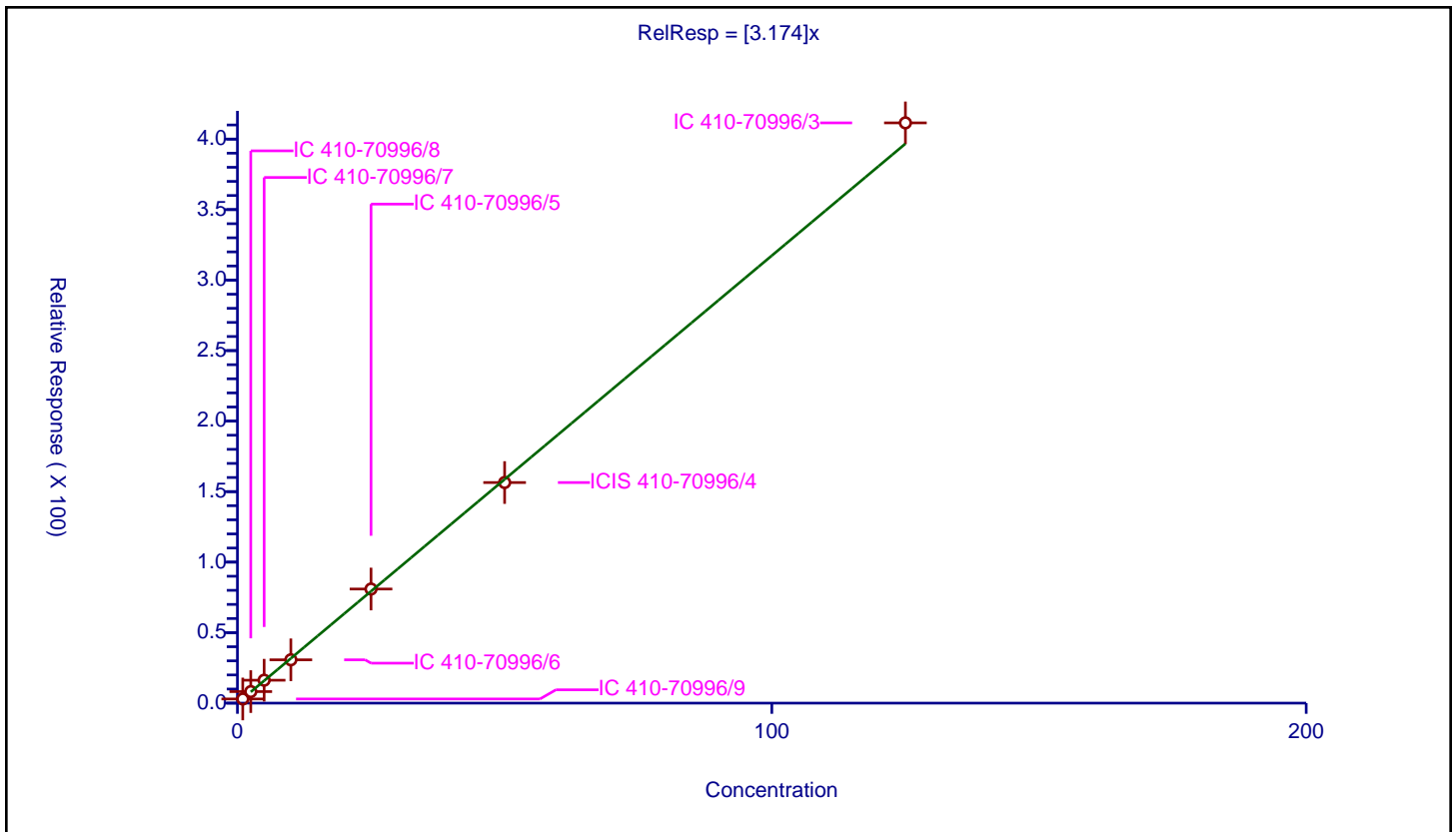
/ Acrylonitrile

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**

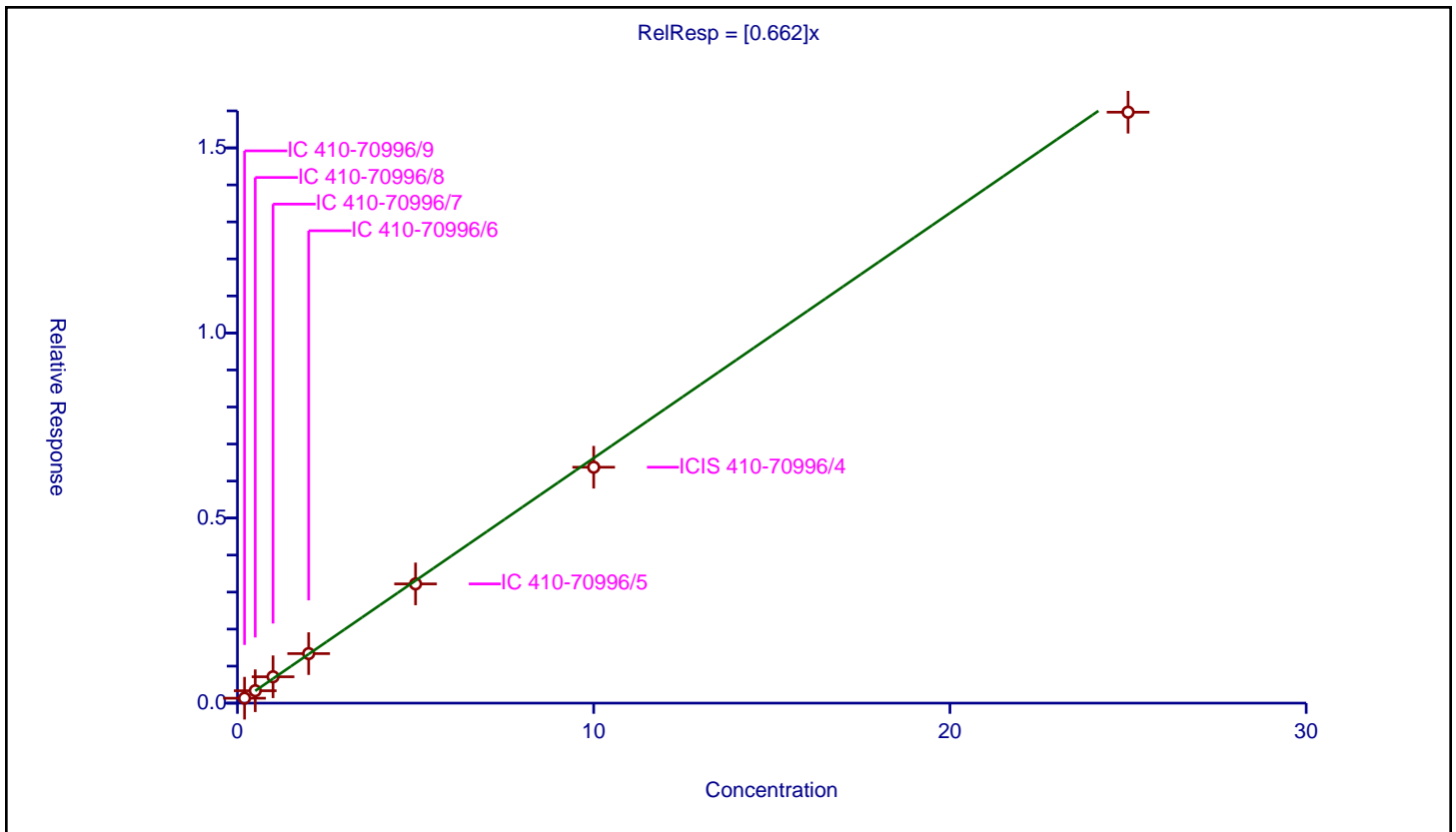
**/ Methyl tert-butyl ether**

**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

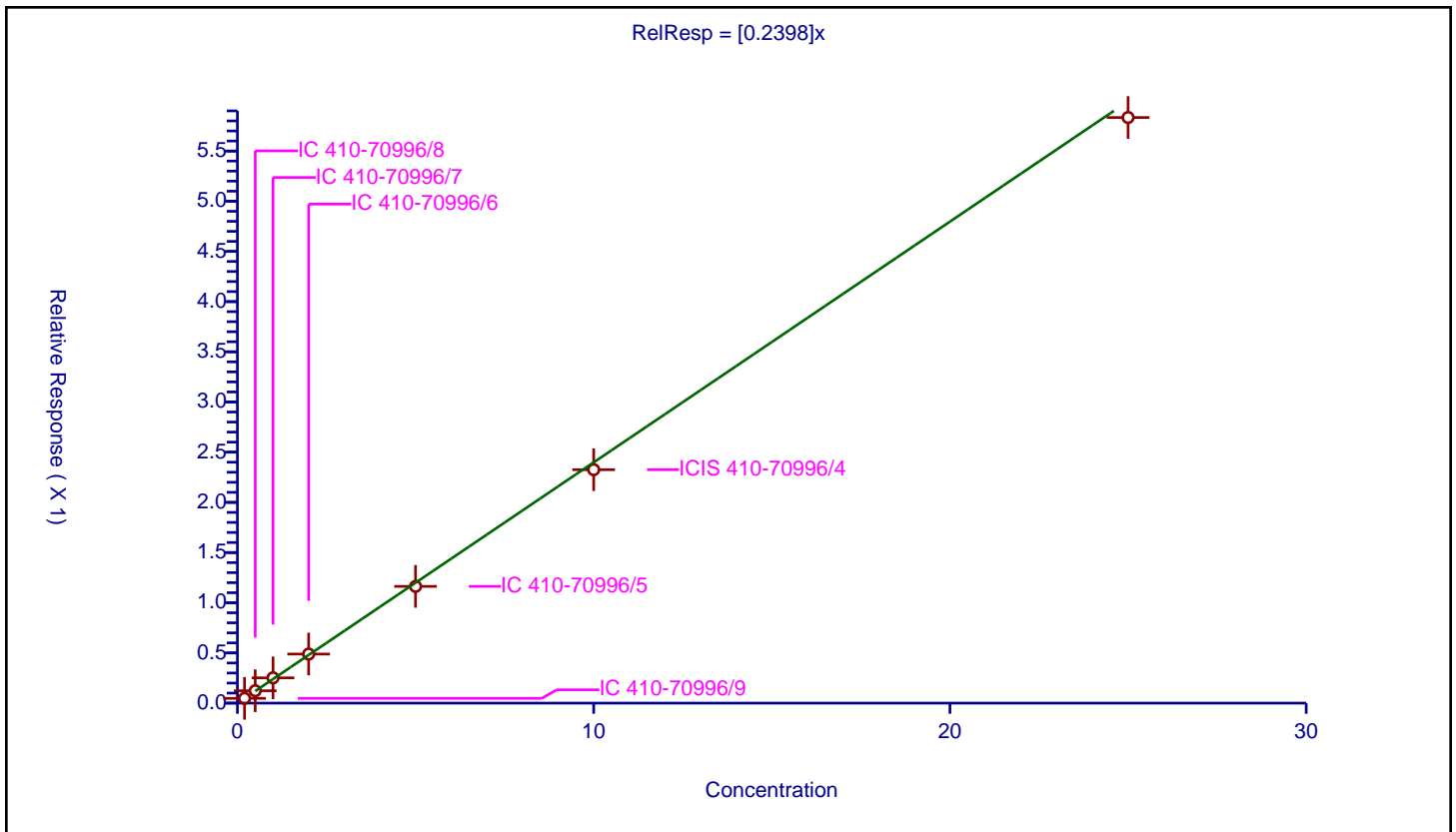
/ trans-1,2-Dichloroethene

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

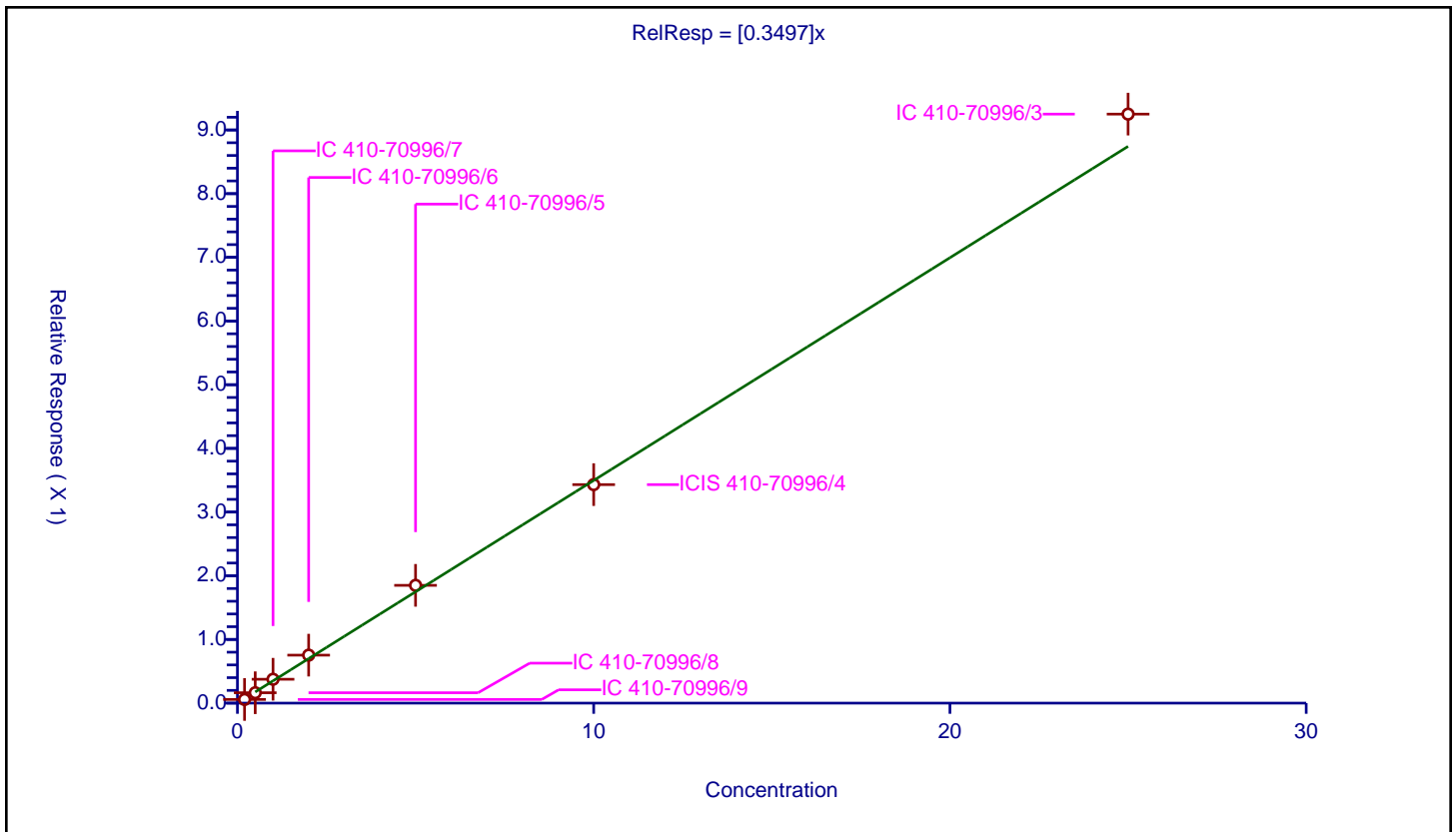
/ Hexane

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

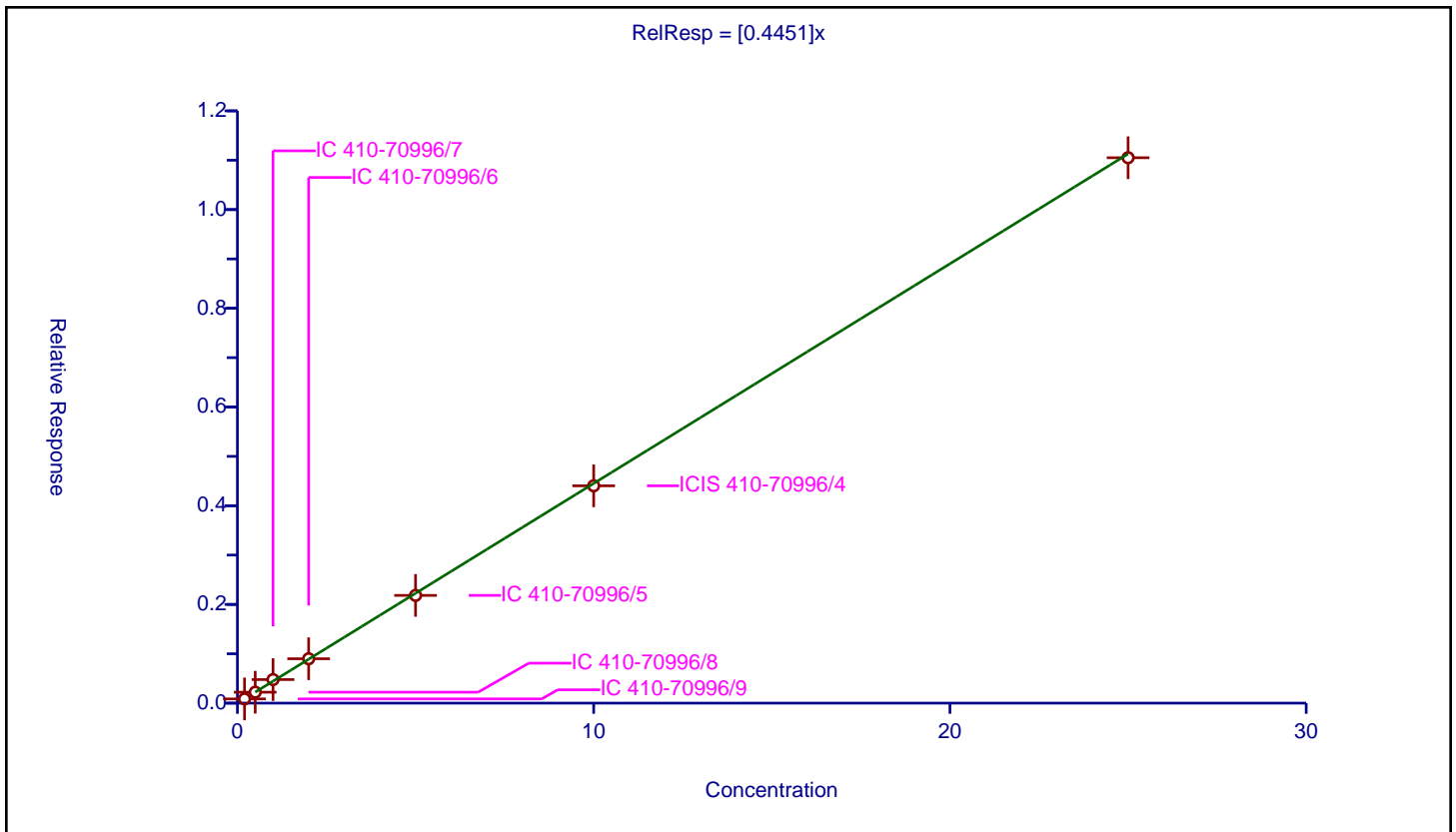
/ 1,1-Dichloroethane

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

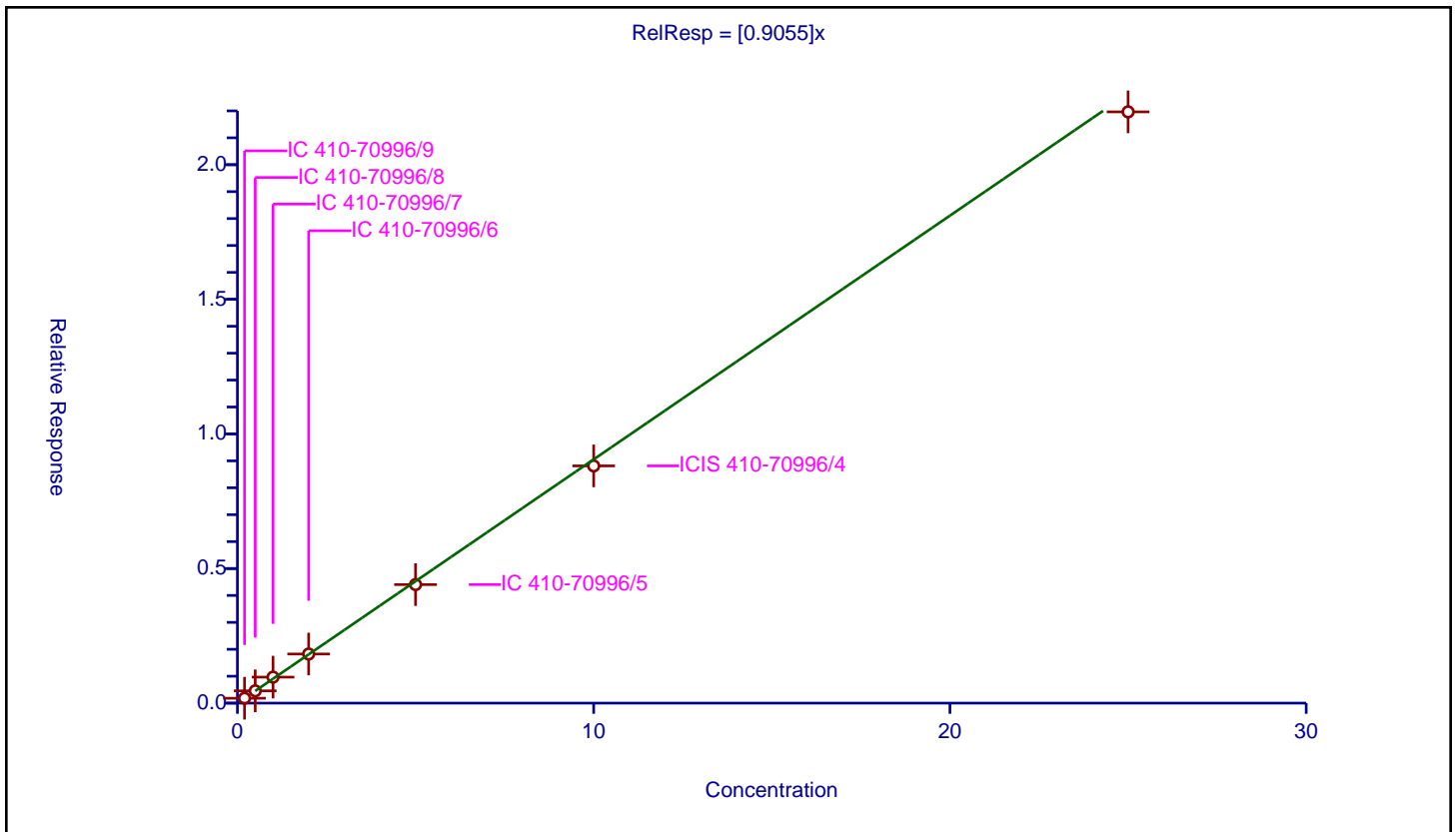
/ Isopropyl ether

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

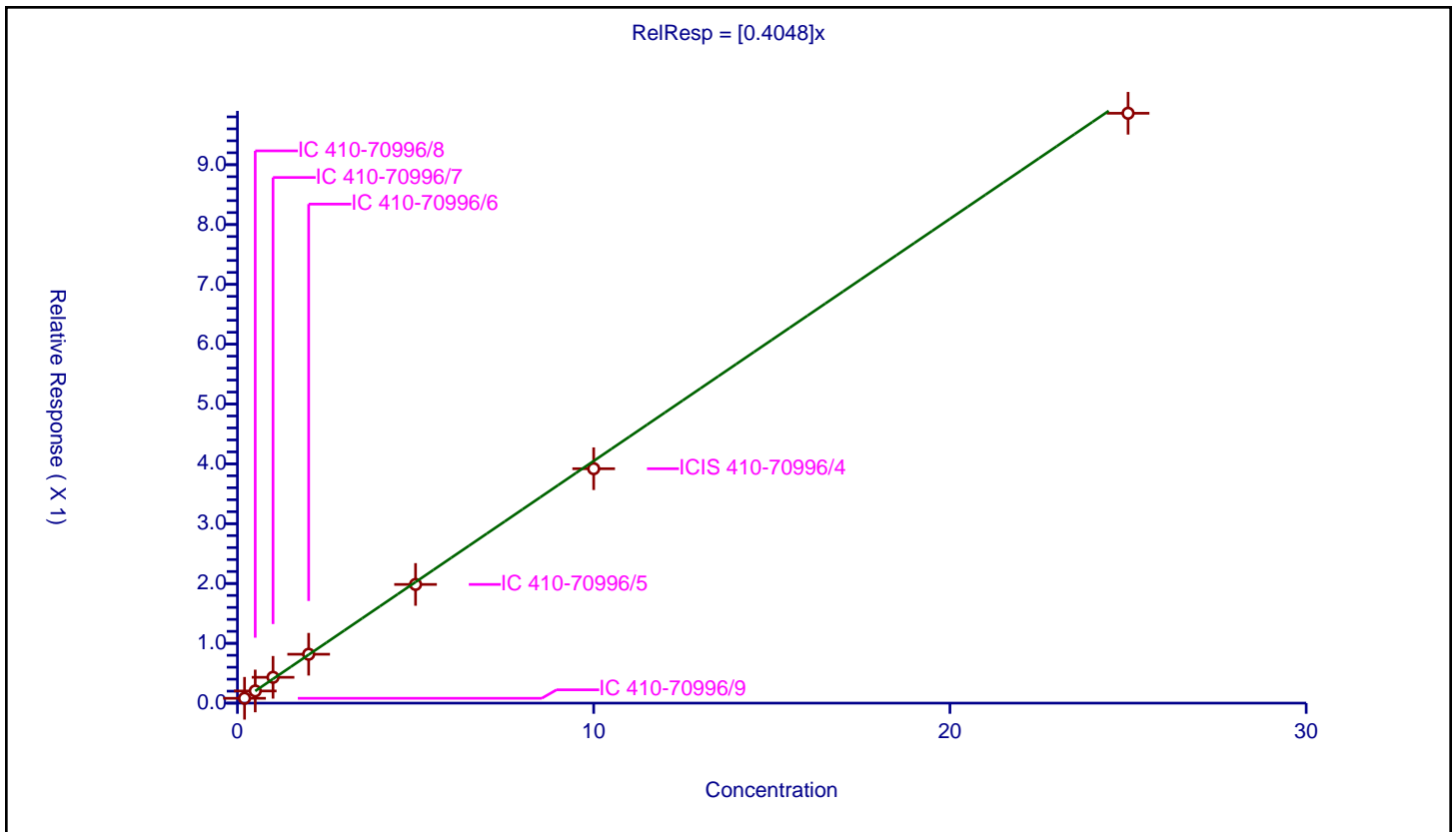
/ 2-Chloro-1,3-butadiene

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**

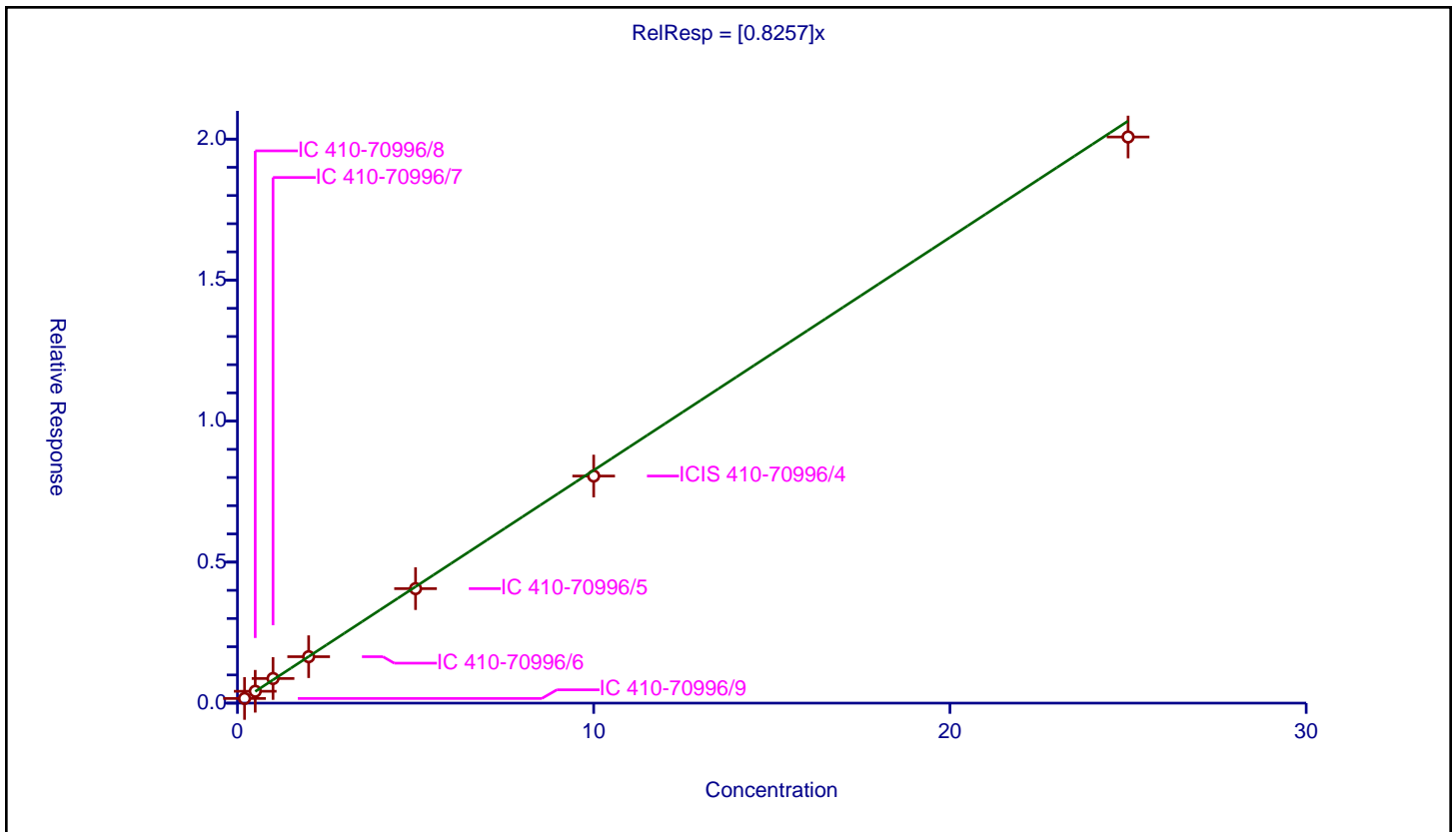
/ Tert-butyl ethyl ether

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**

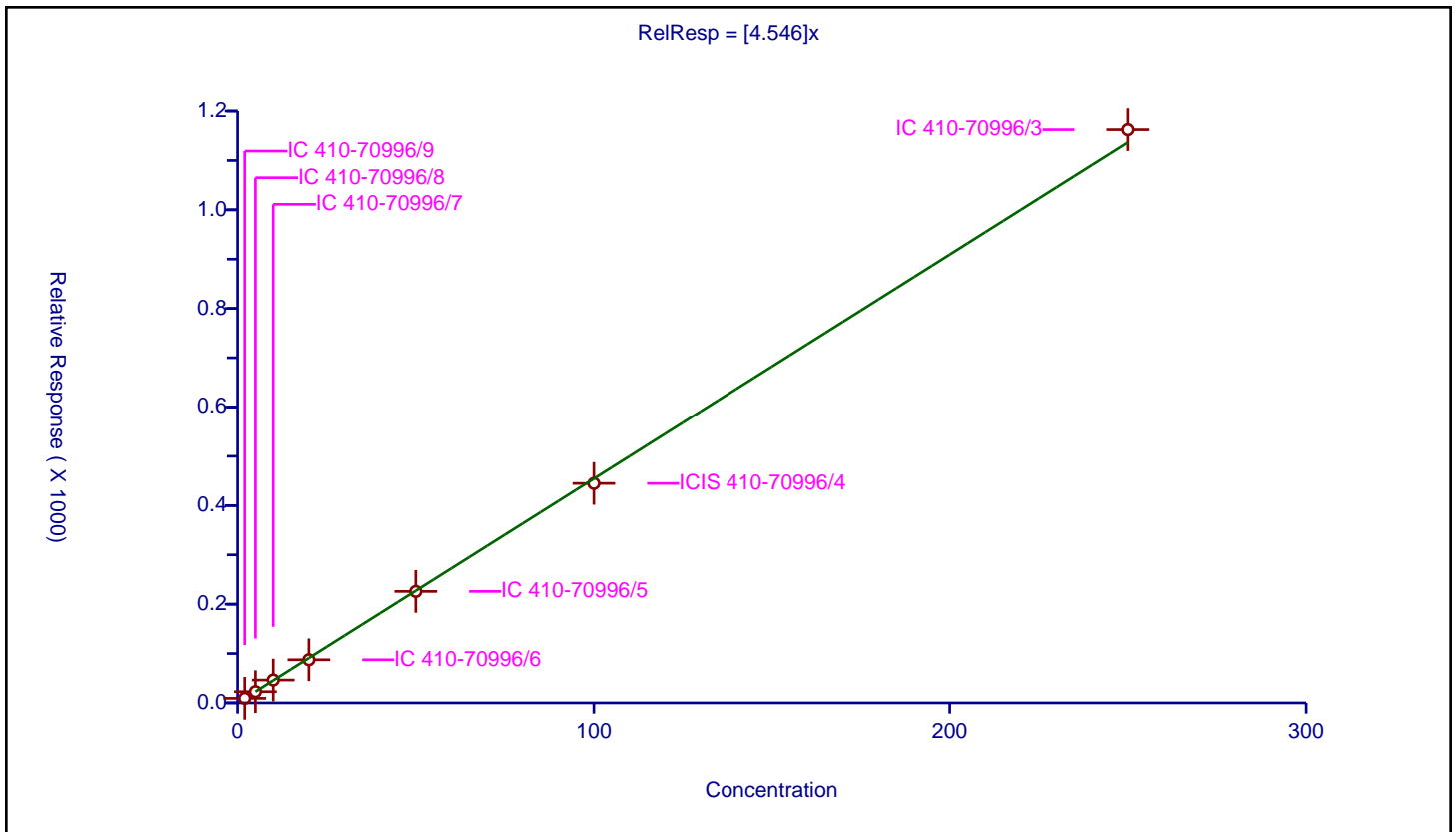
**/ 2-Butanone (MEK)**

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

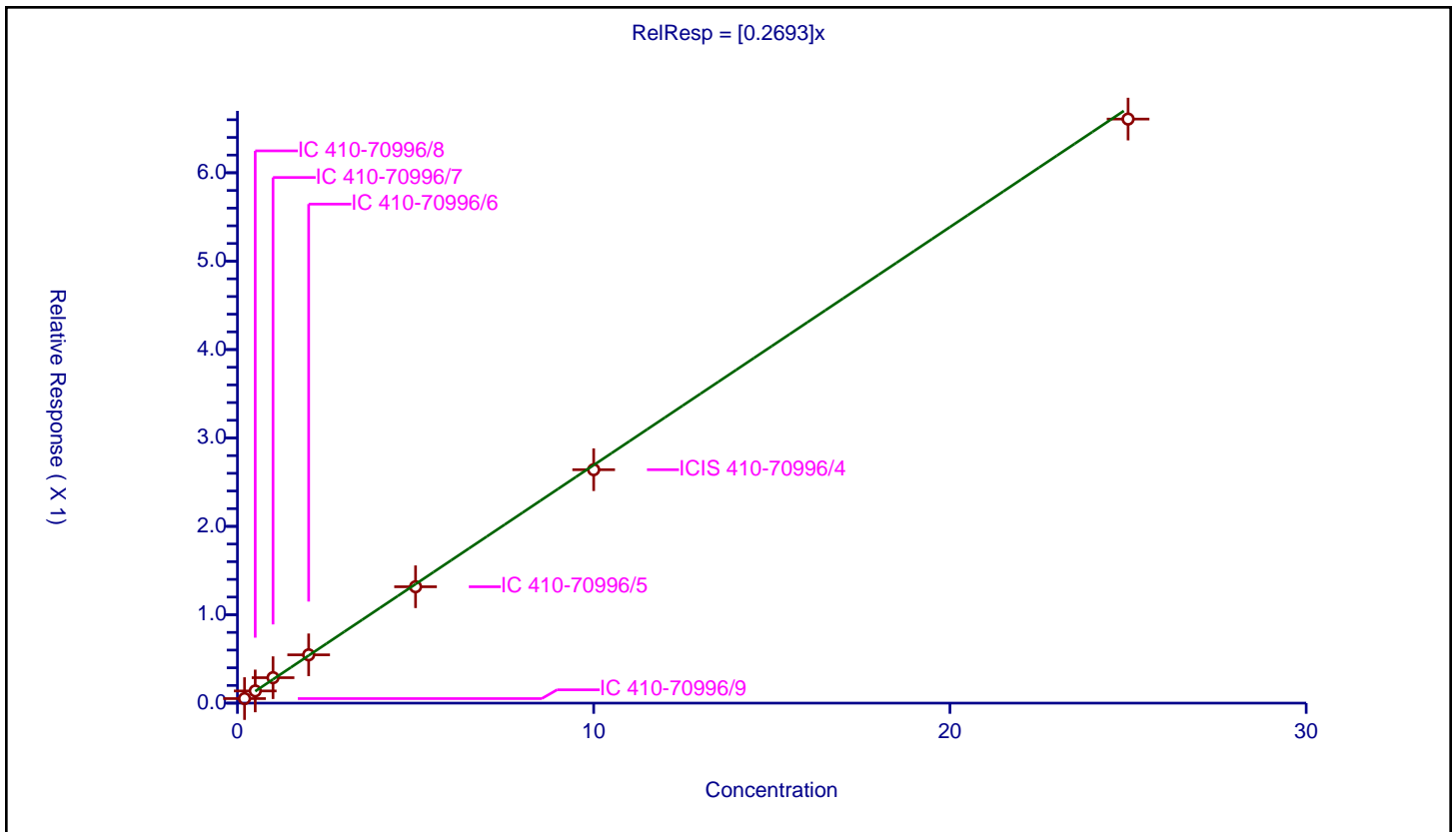
/ cis-1,2-Dichloroethene

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

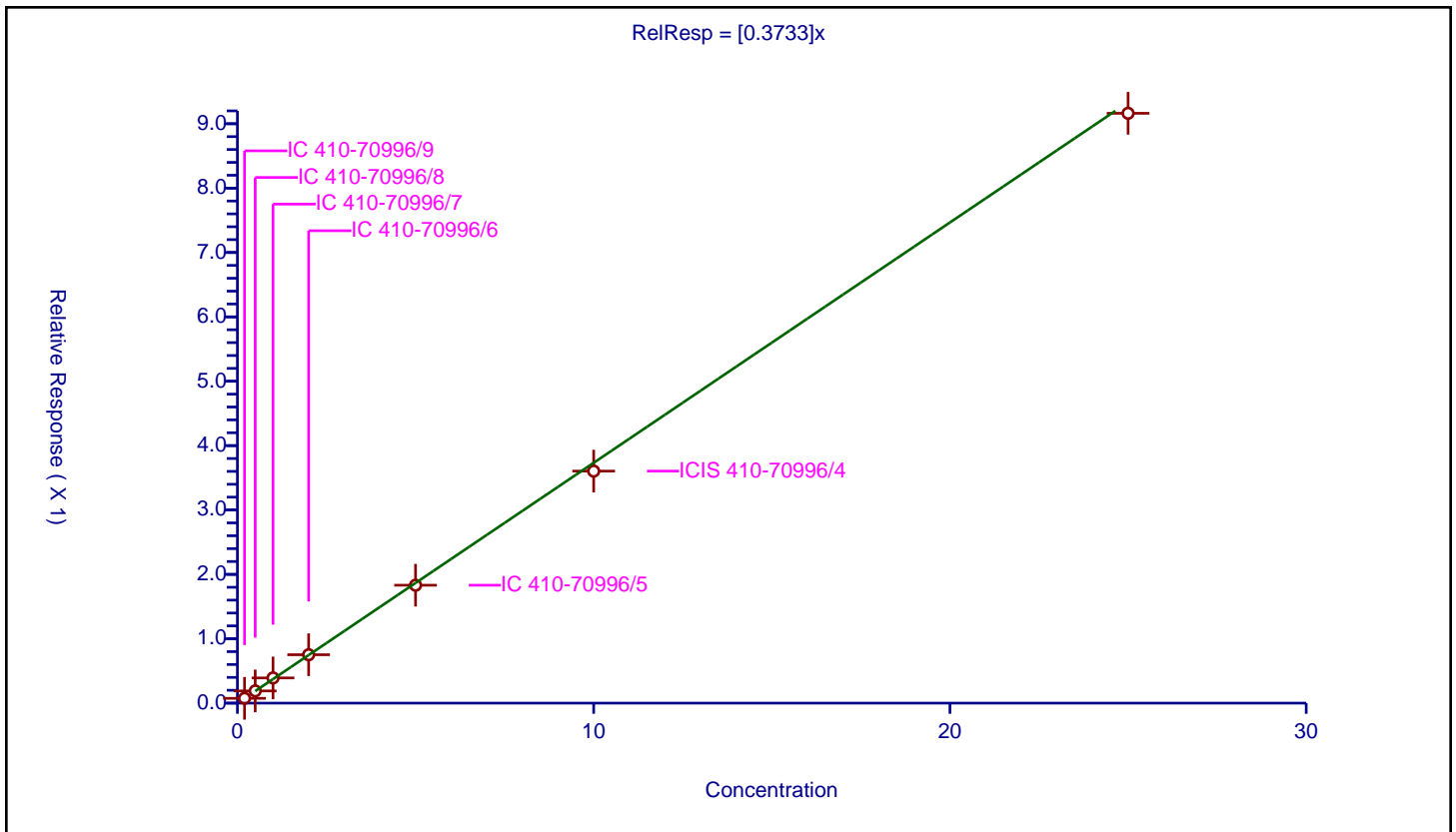
/ 2,2-Dichloropropane

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

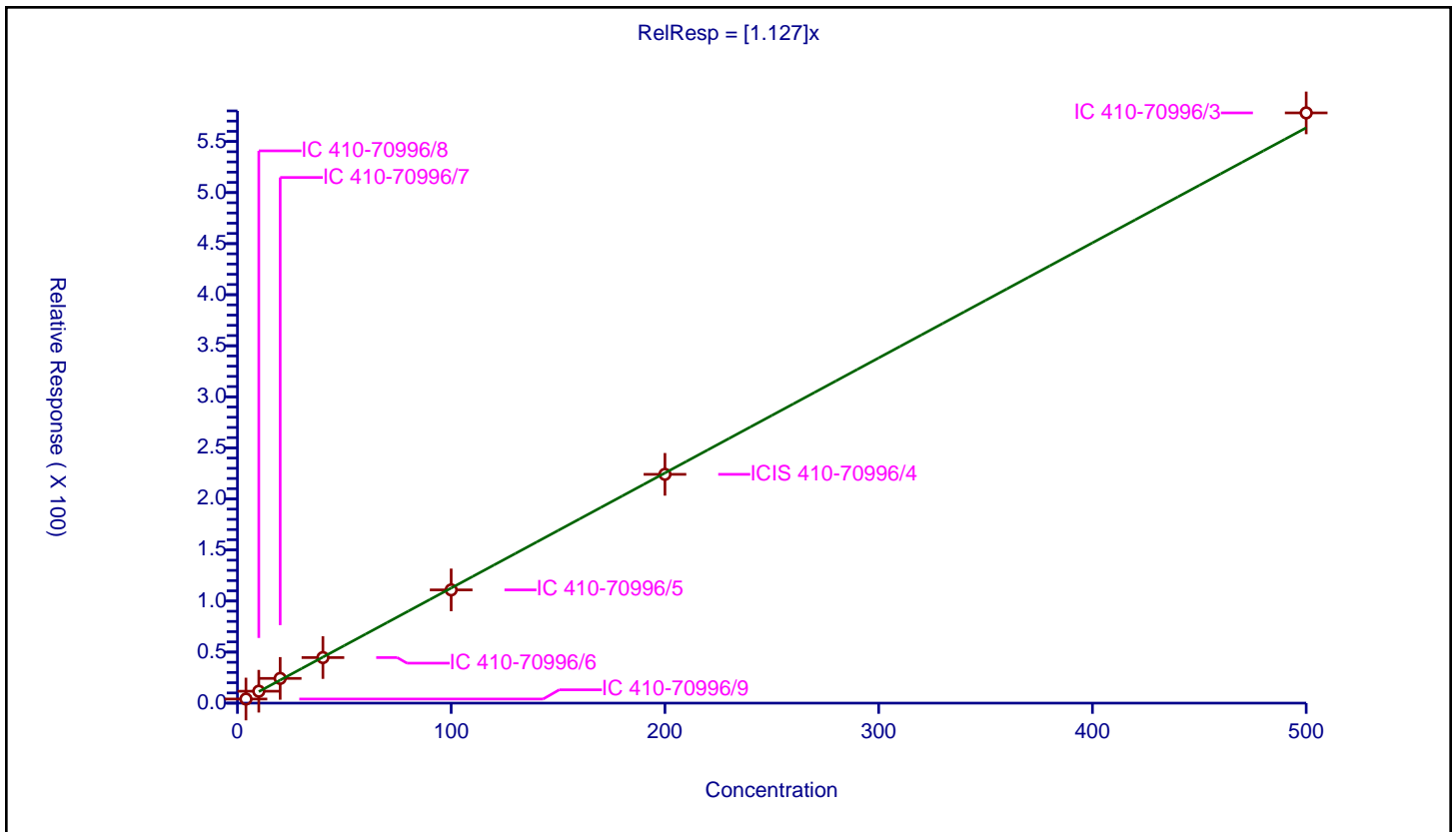
/ Propionitrile

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**

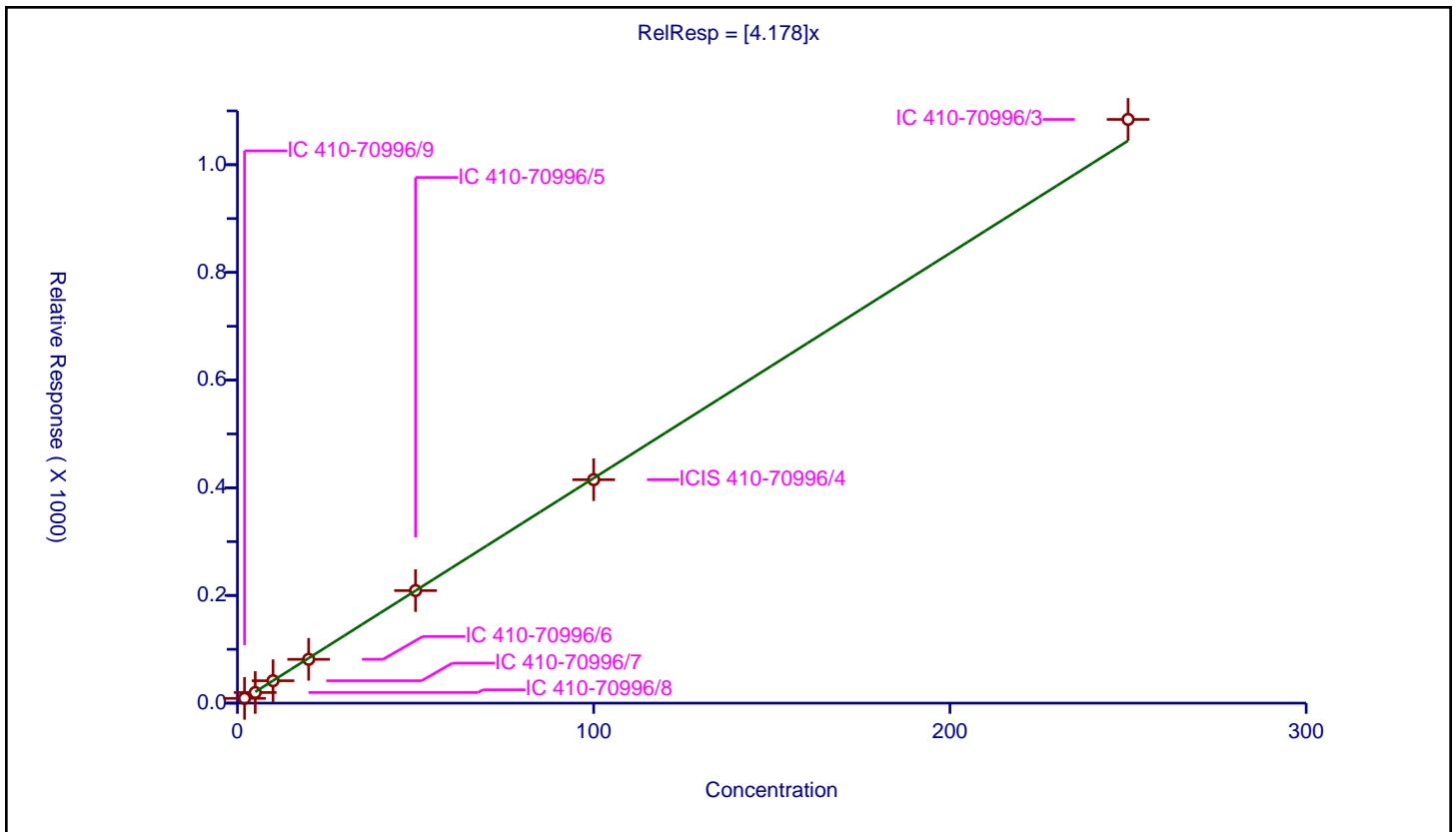
**/ Methacrylonitrile**

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**

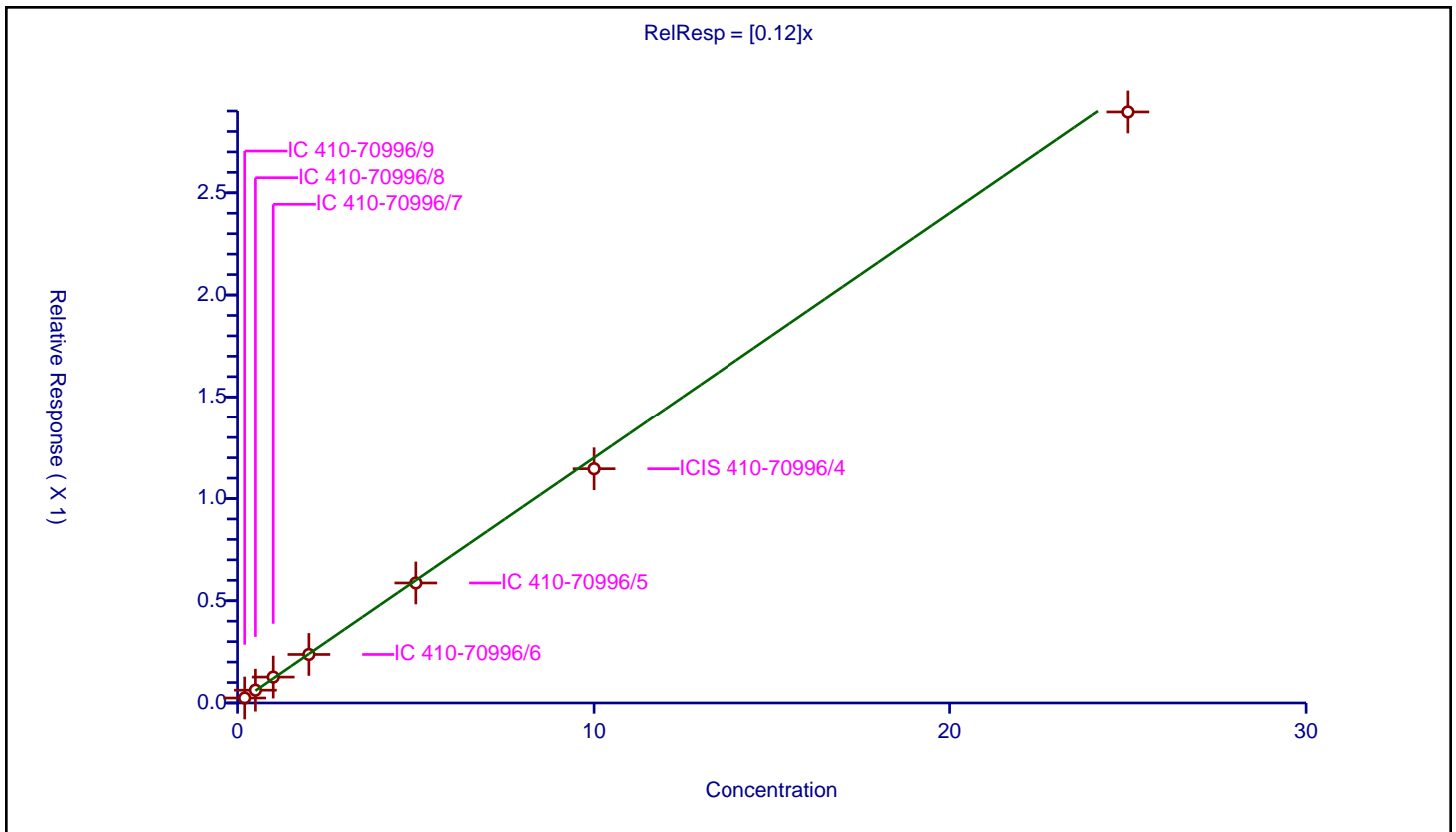
**/ Chlorobromomethane**

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**

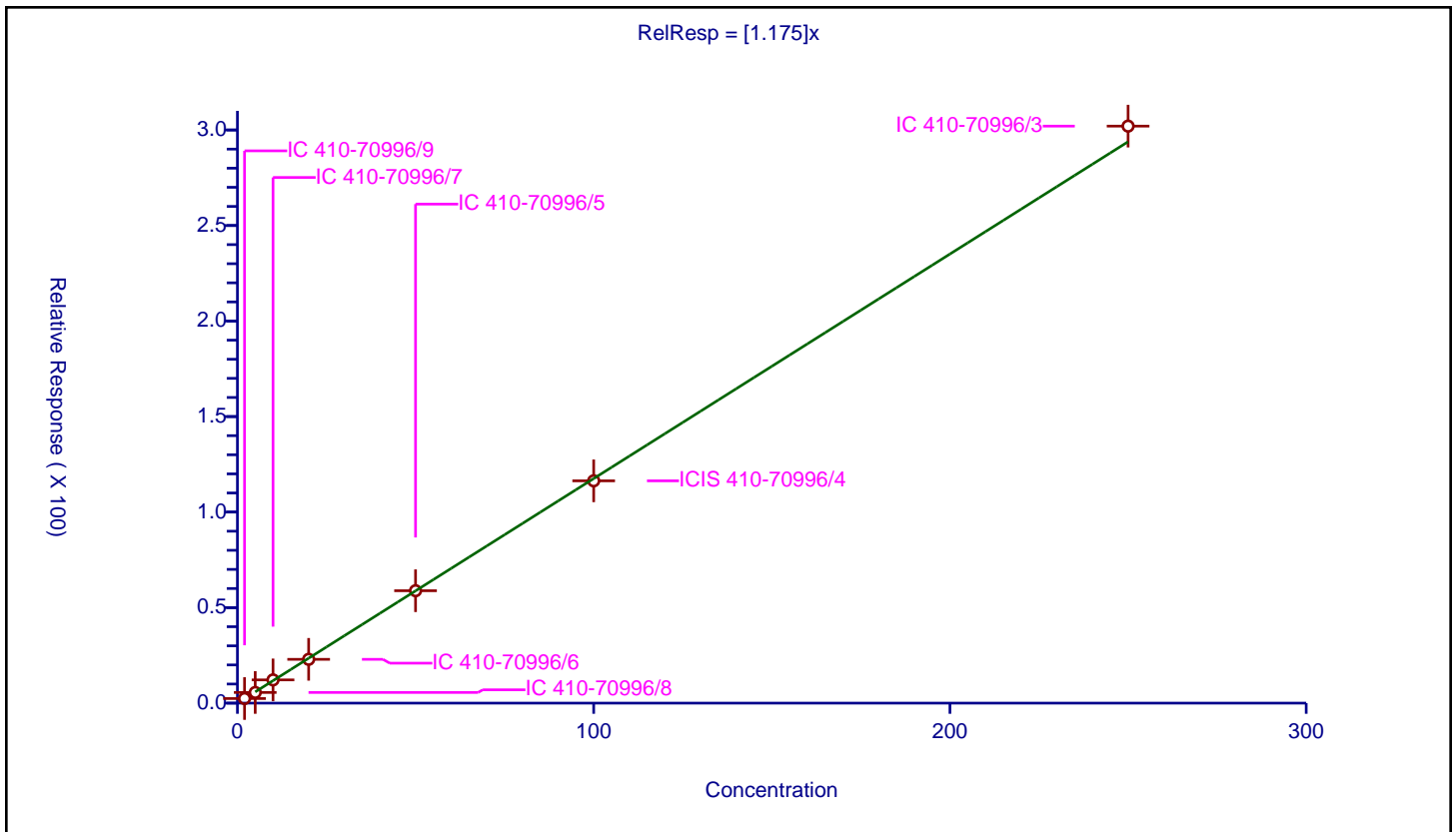
/ Tetrahydrofuran

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**

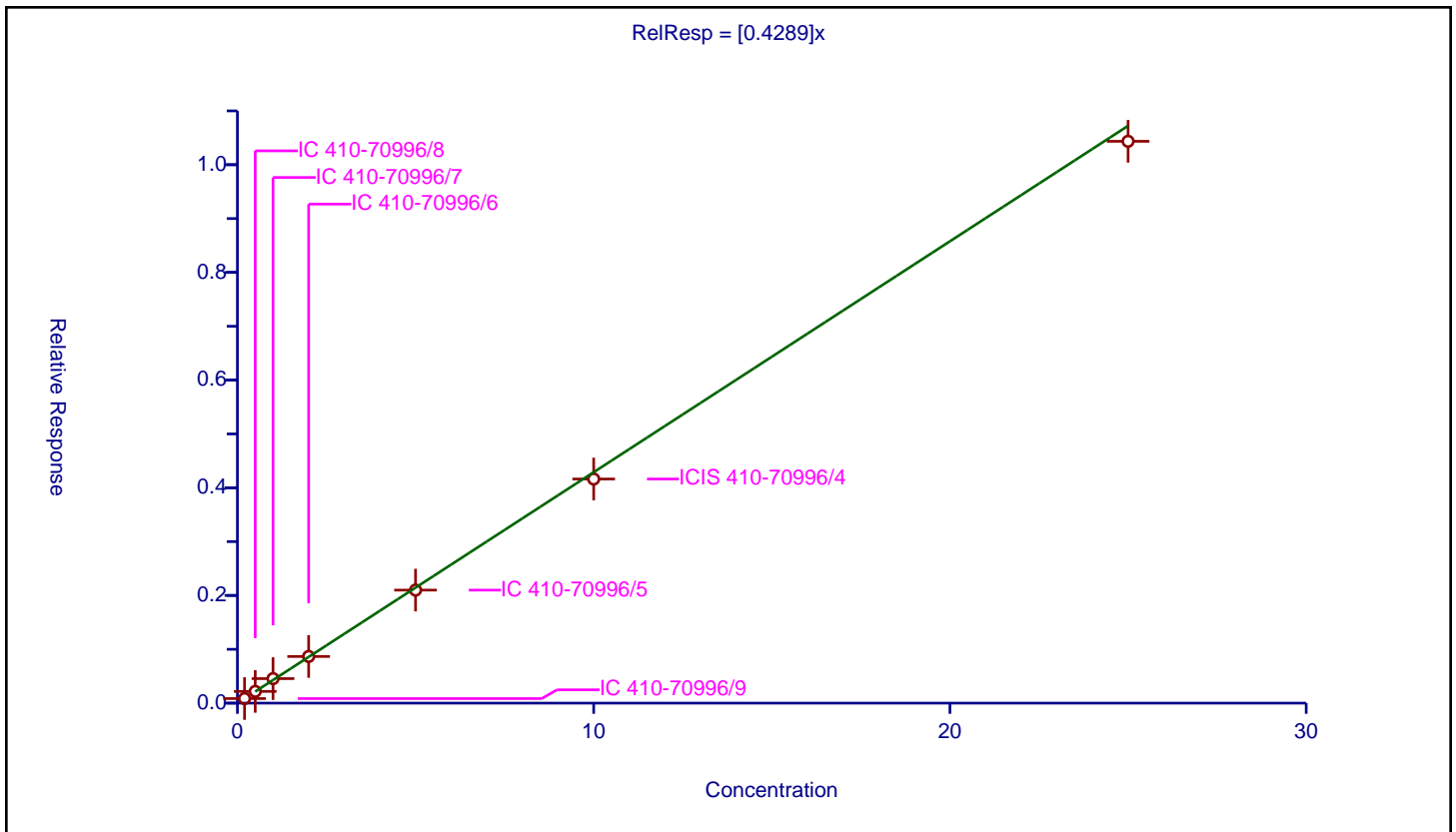
/ Chloroform

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**

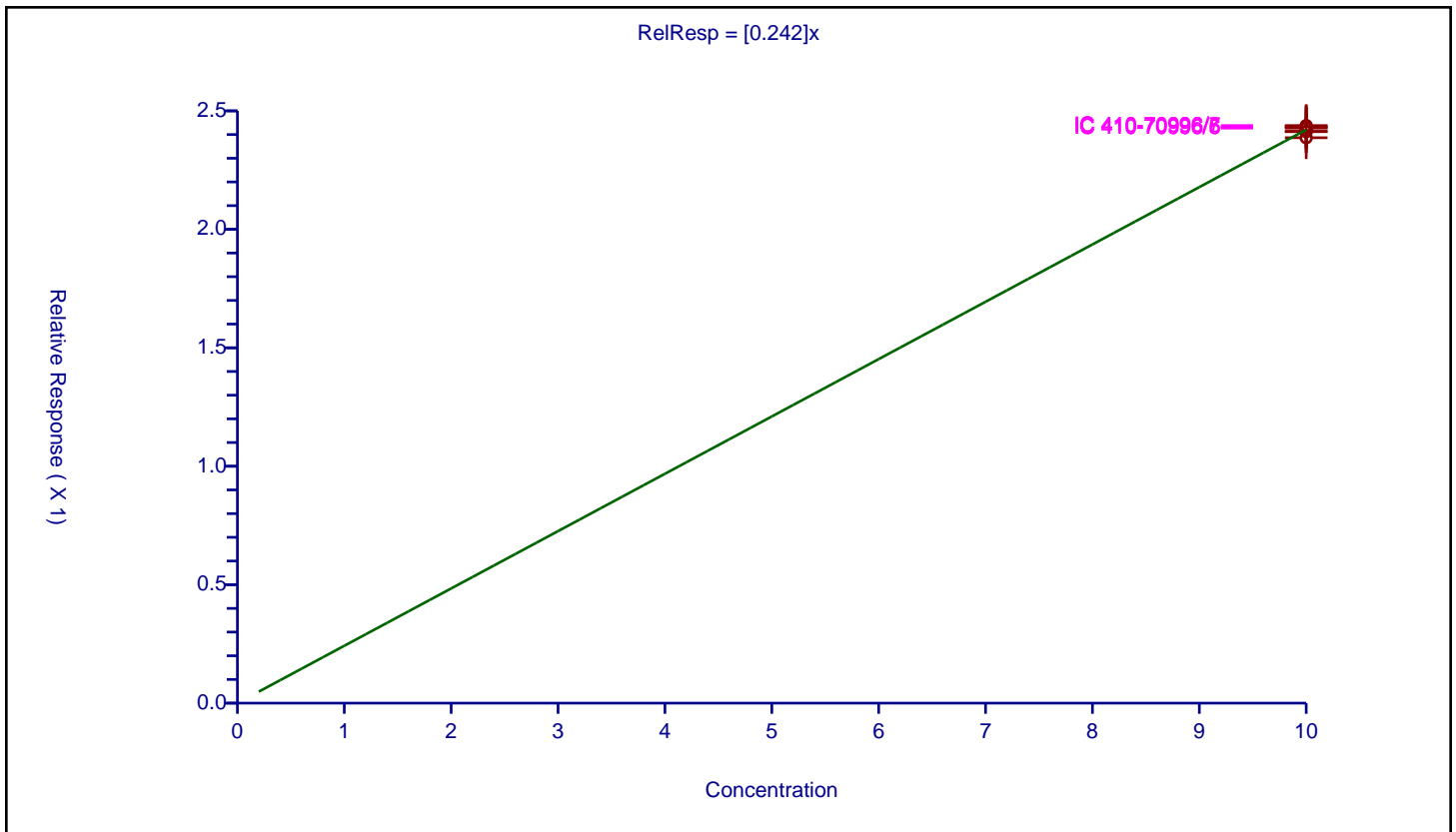
/ Dibromofluoromethane (Surr)

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**

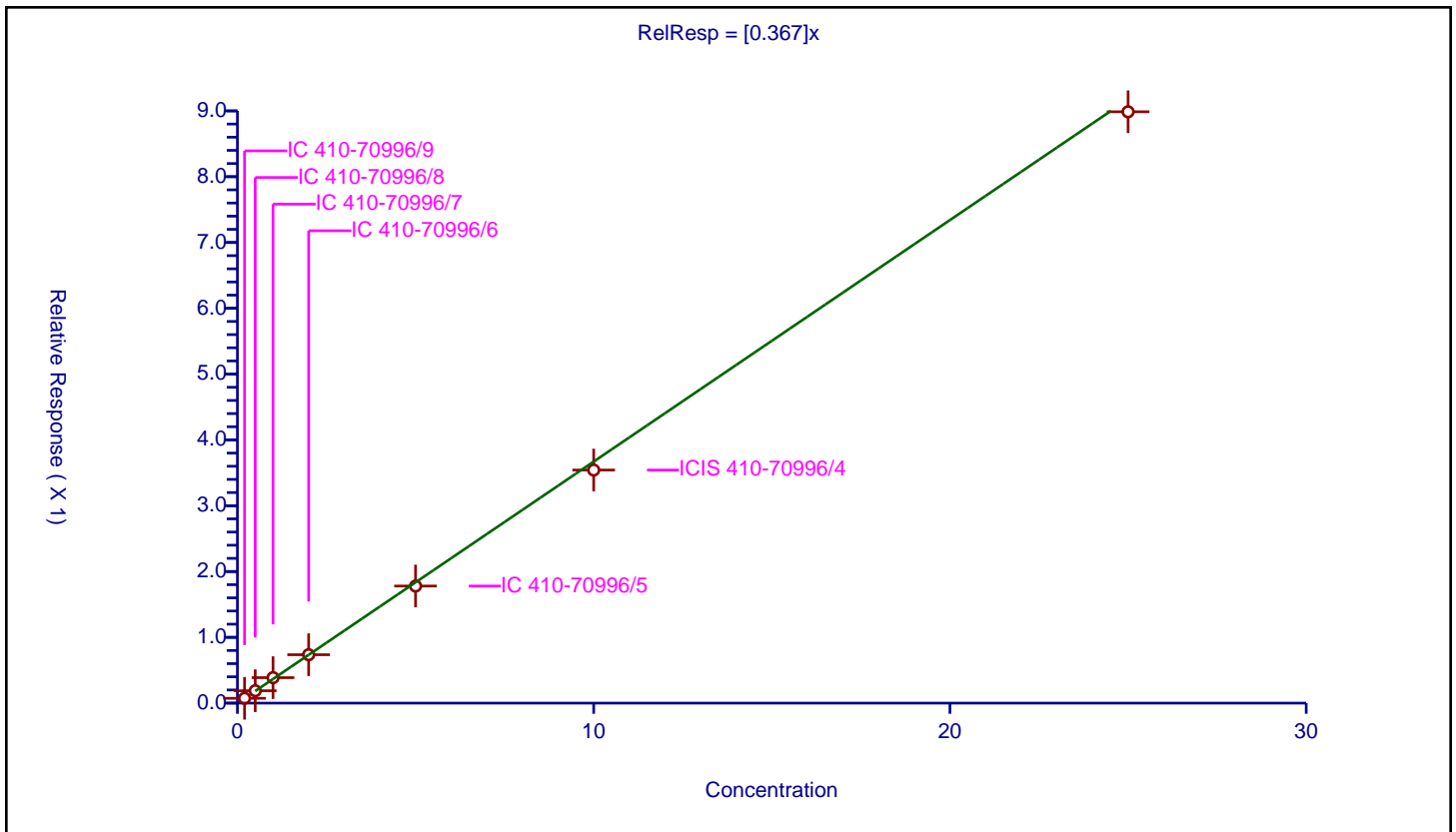
/ 1,1,1-Trichloroethane

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

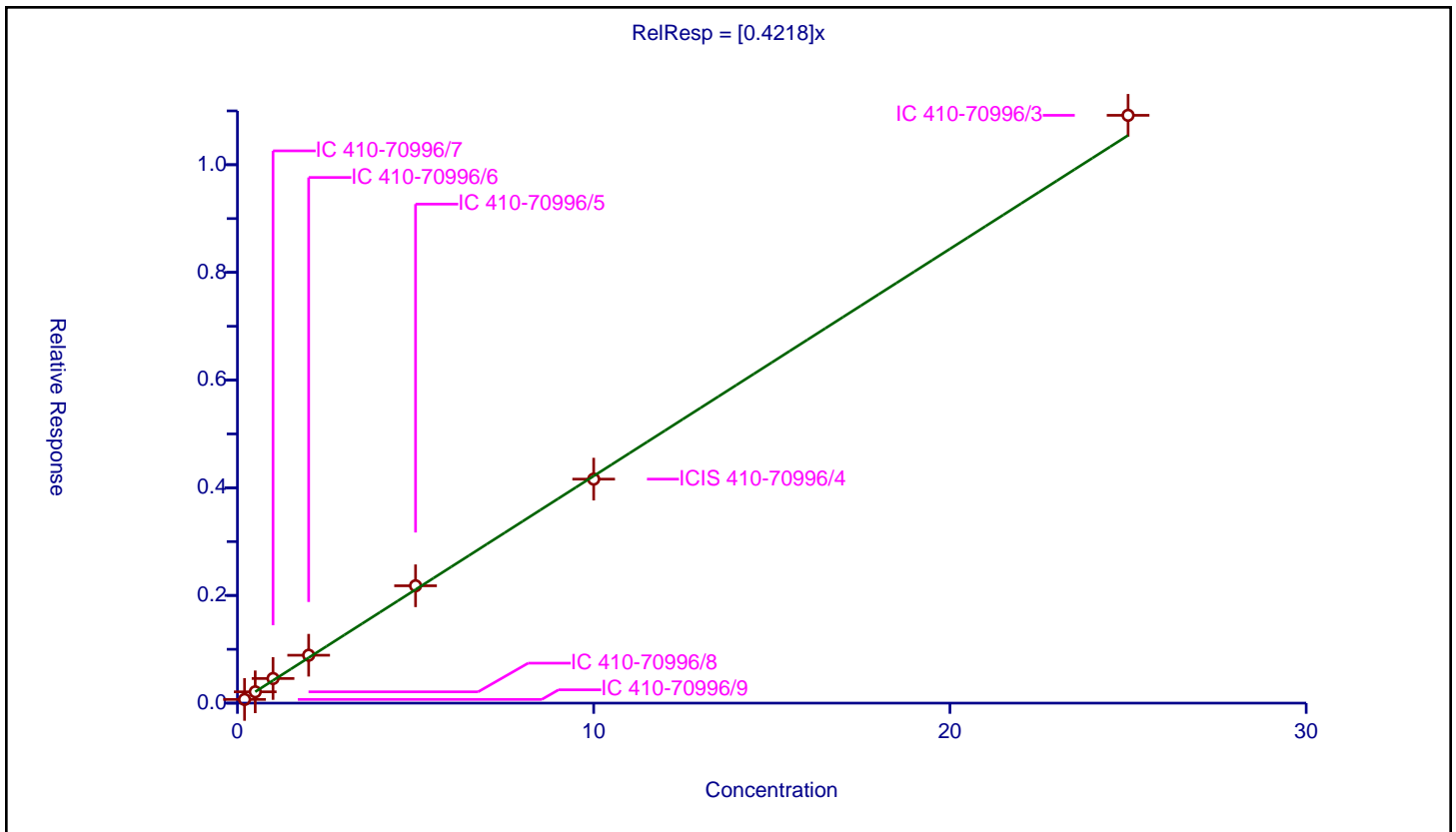
/ Cyclohexane

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**

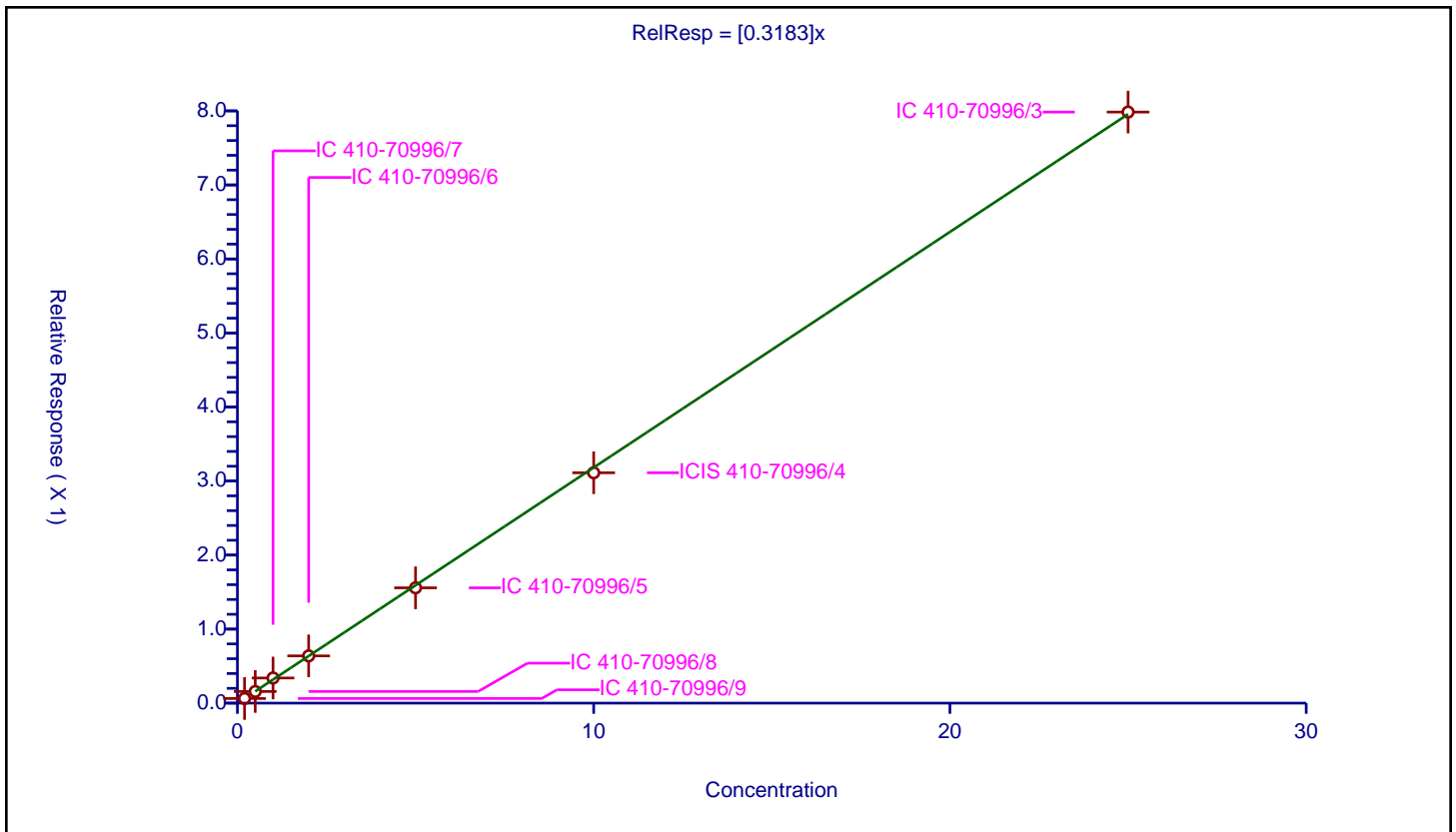
**/ Carbon tetrachloride**

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

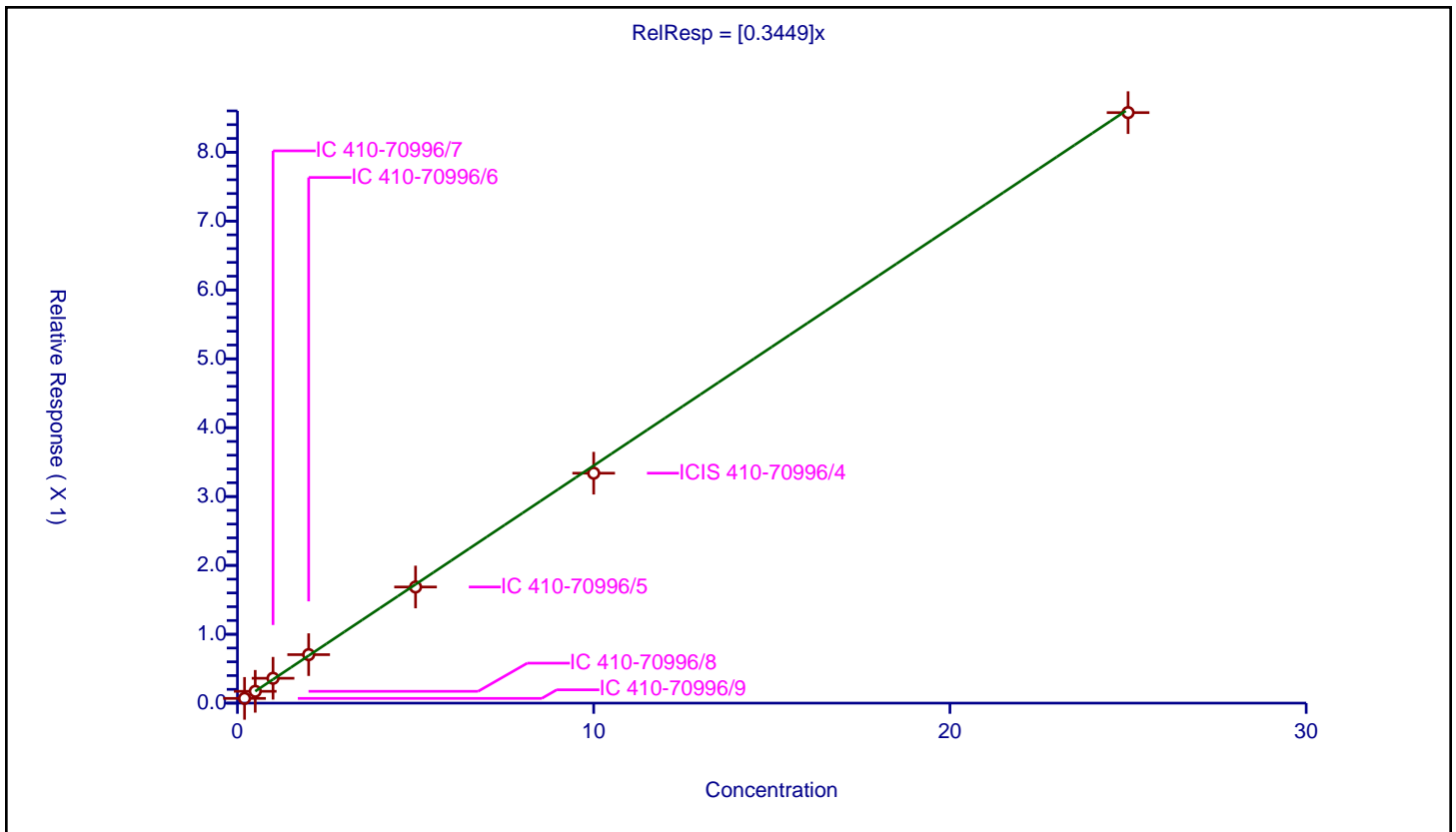
/ 1,1-Dichloropropene

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**

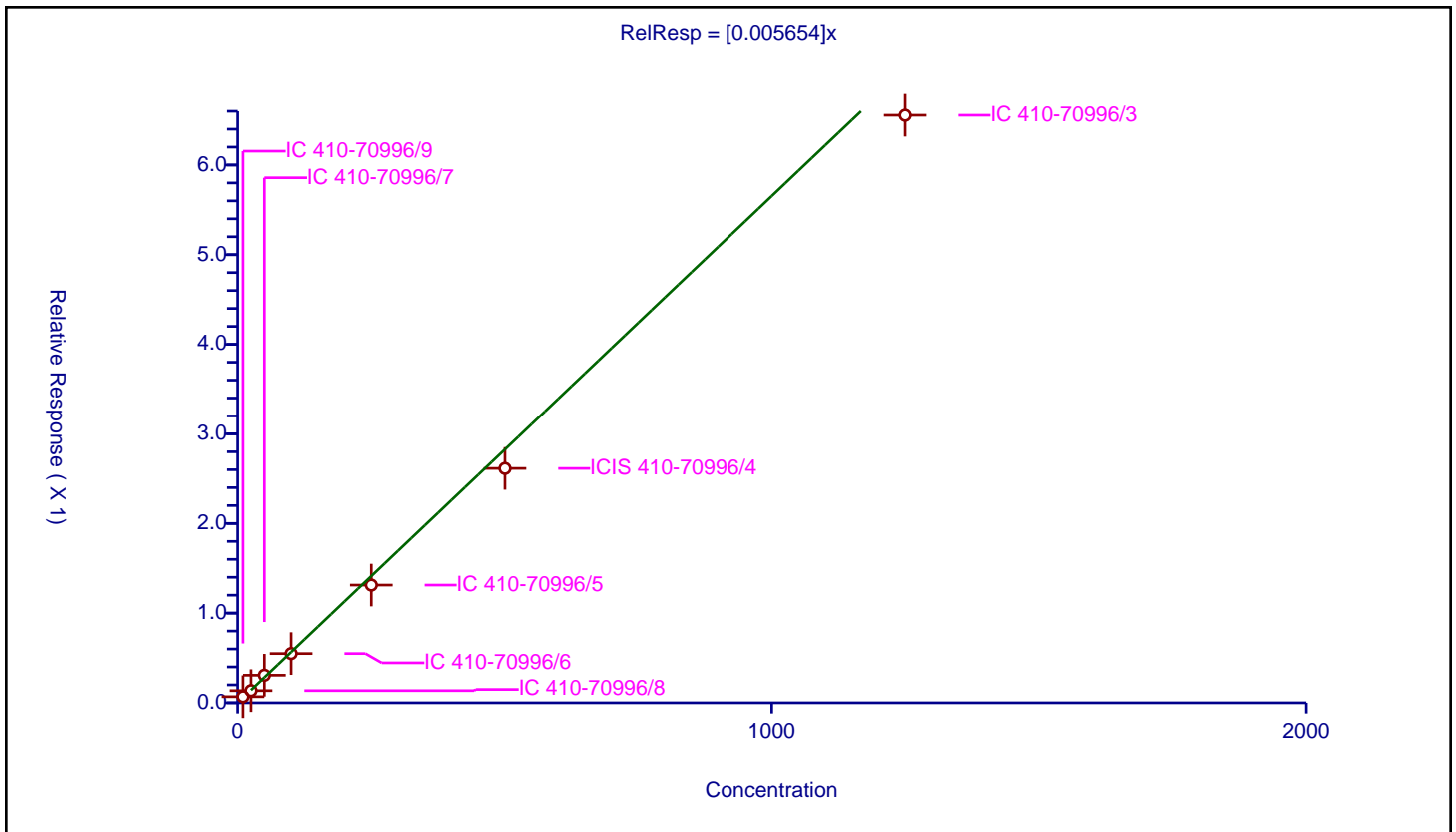
**/ Isobutyl alcohol**

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

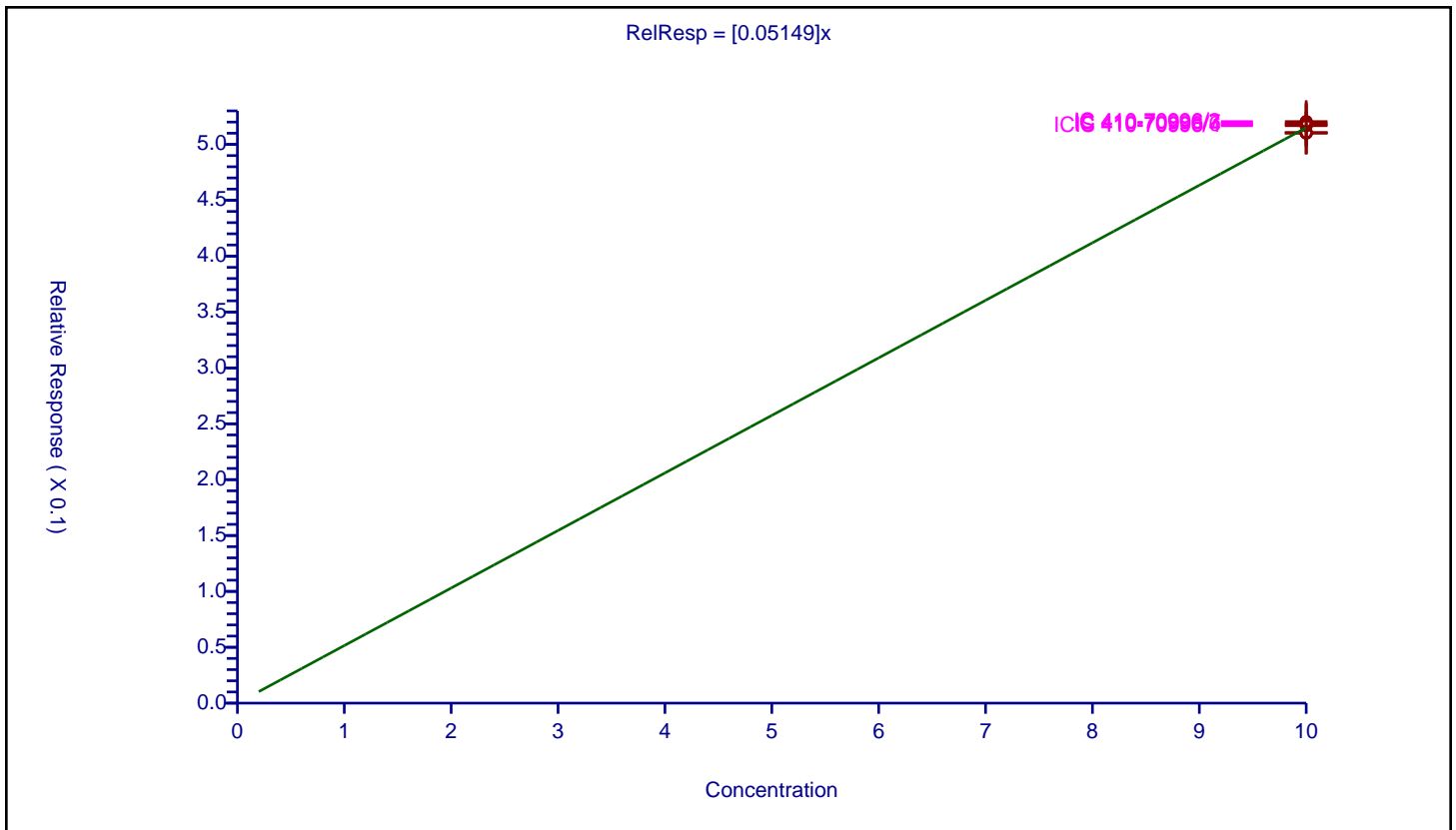
**Curve Coefficients**

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

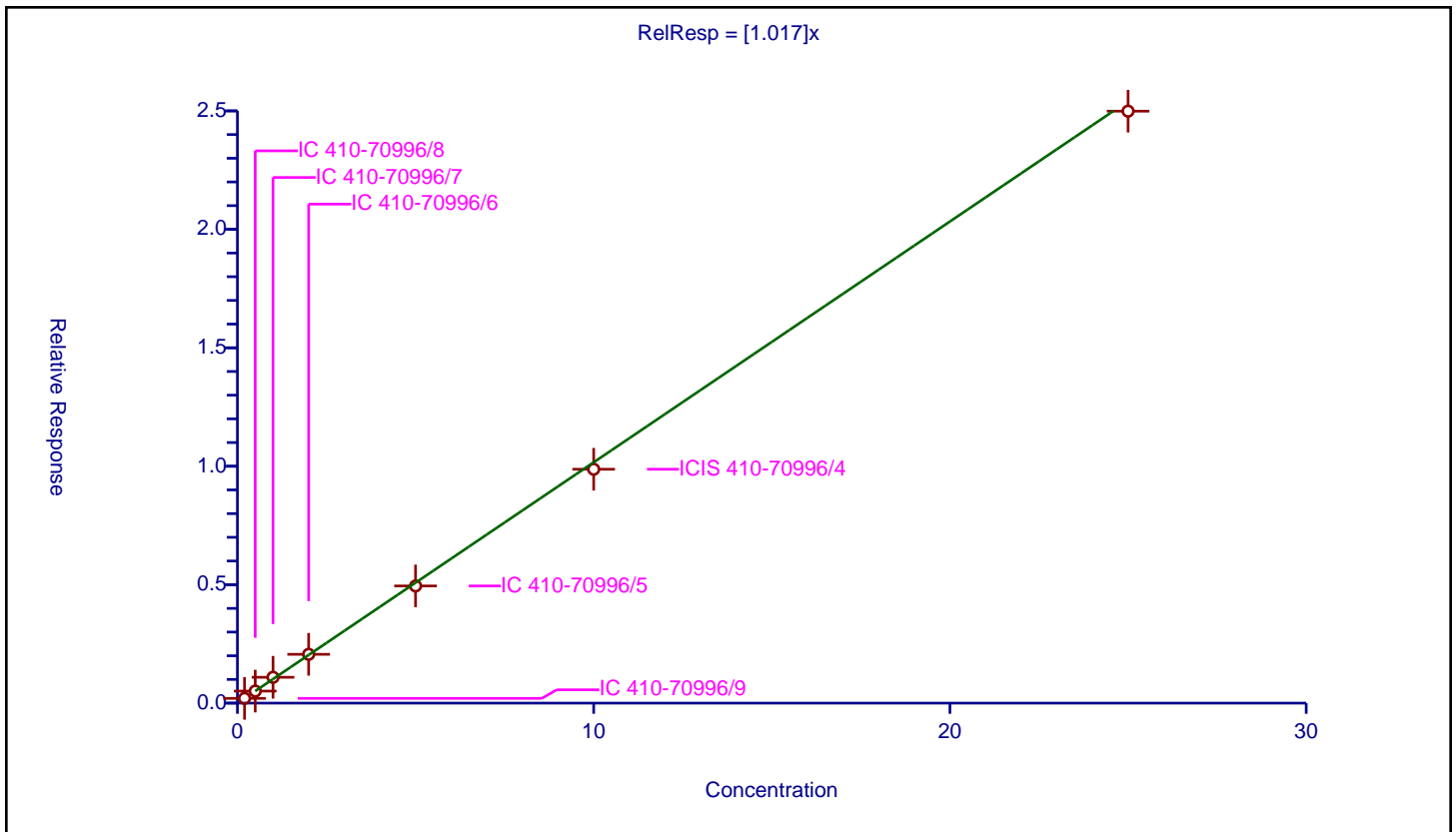
/ Benzene

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

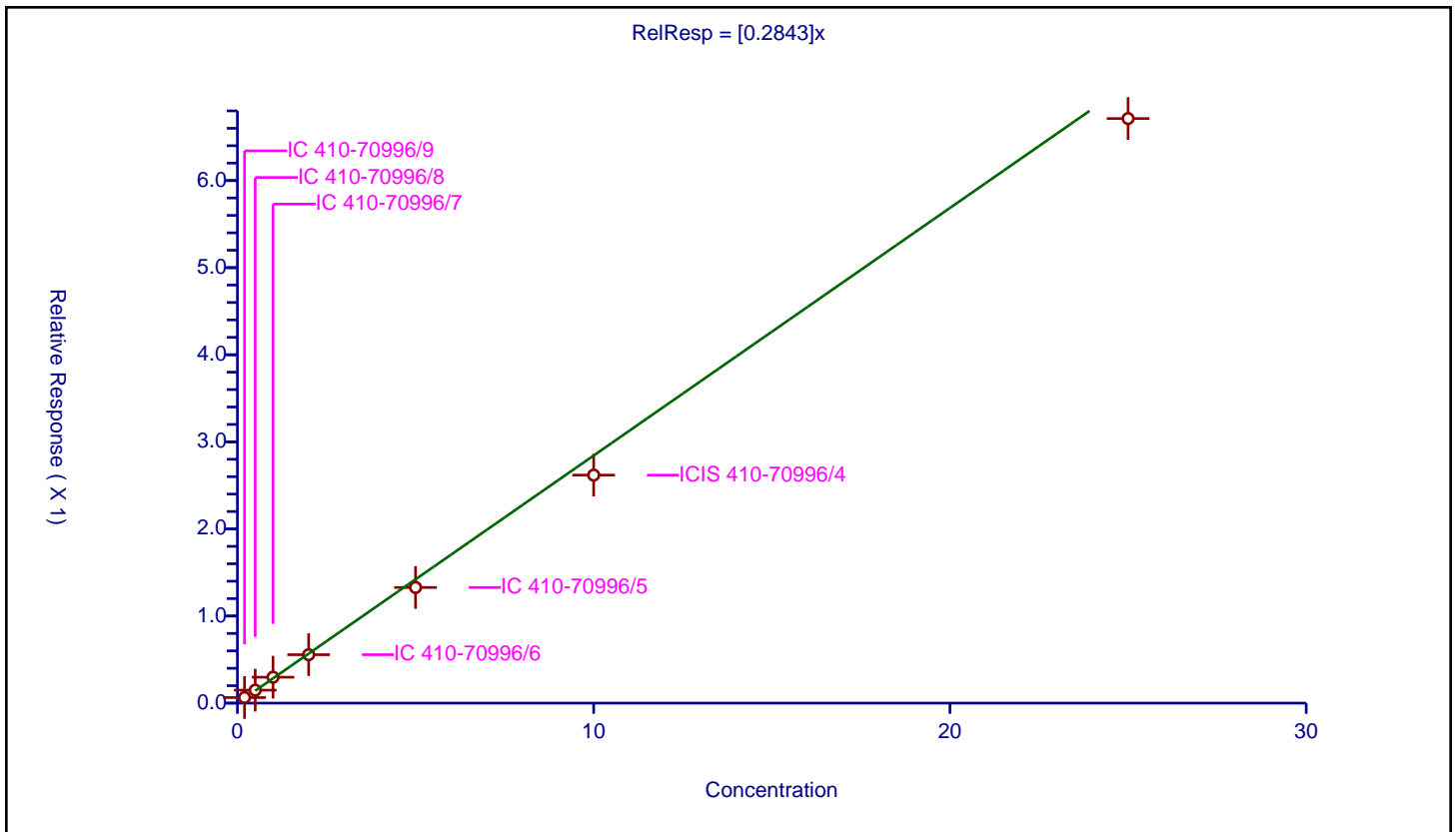
/ 1,2-Dichloroethane

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

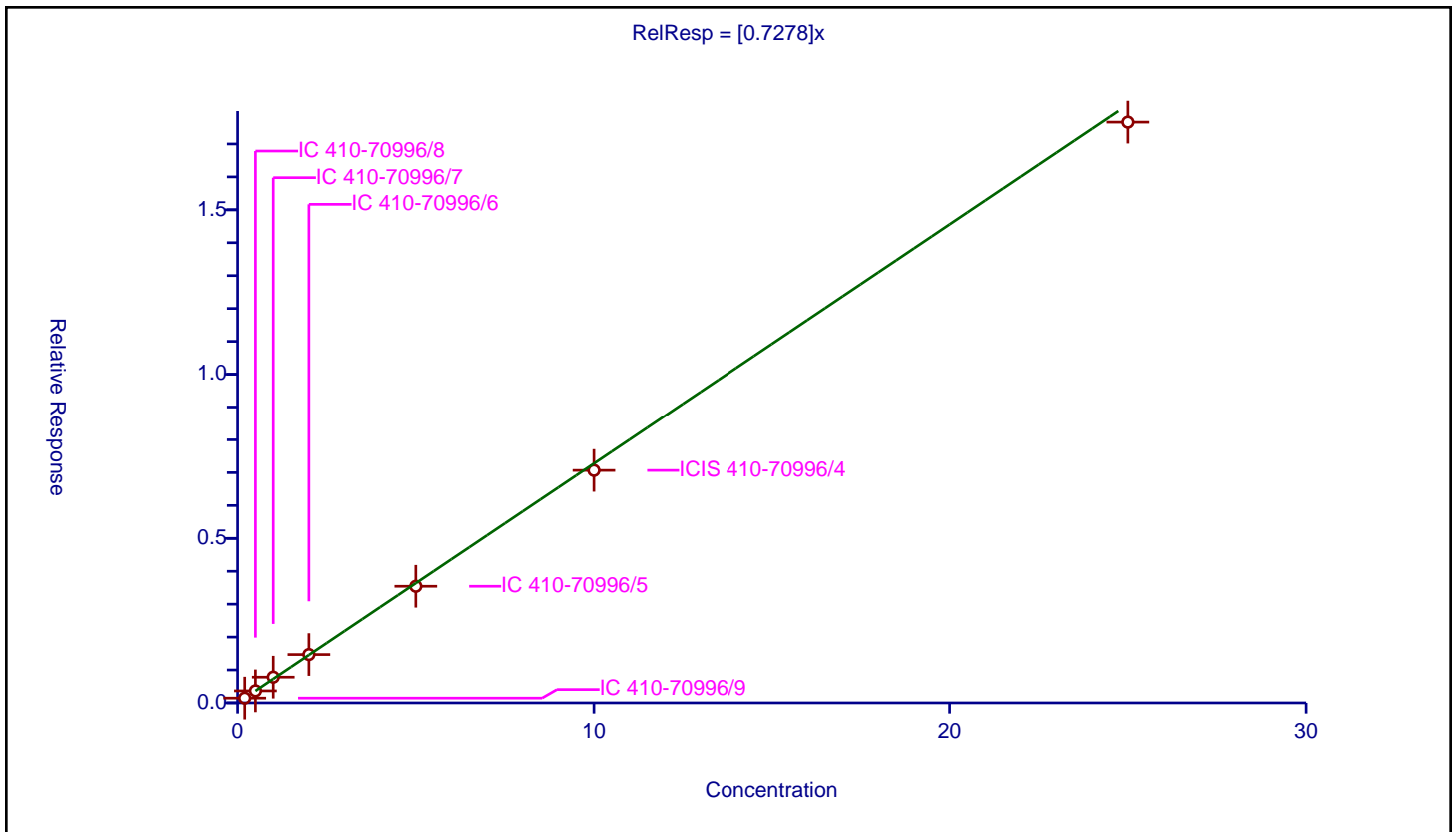
/ Tert-amyl methyl ether

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

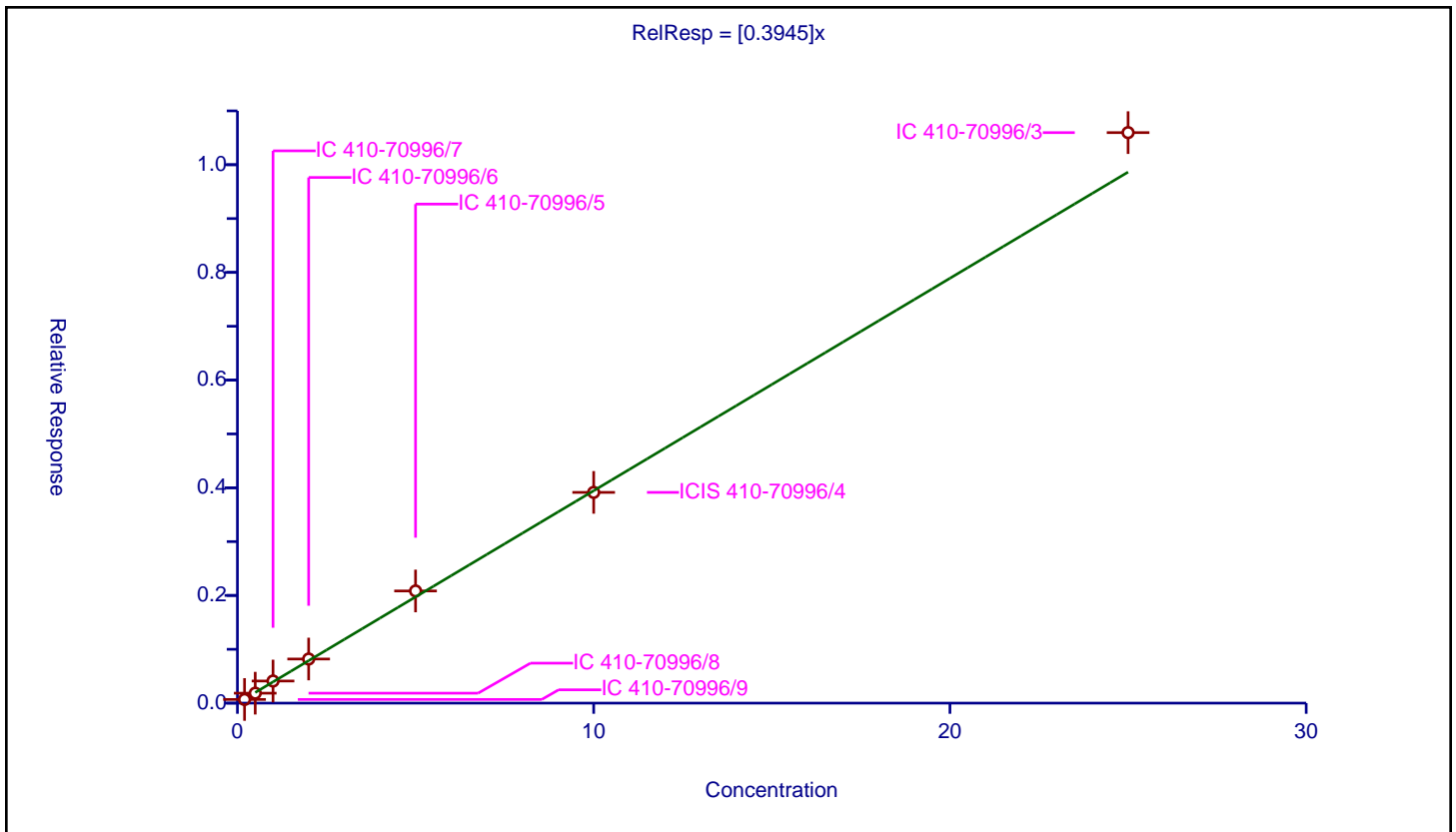
/ n-Heptane

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

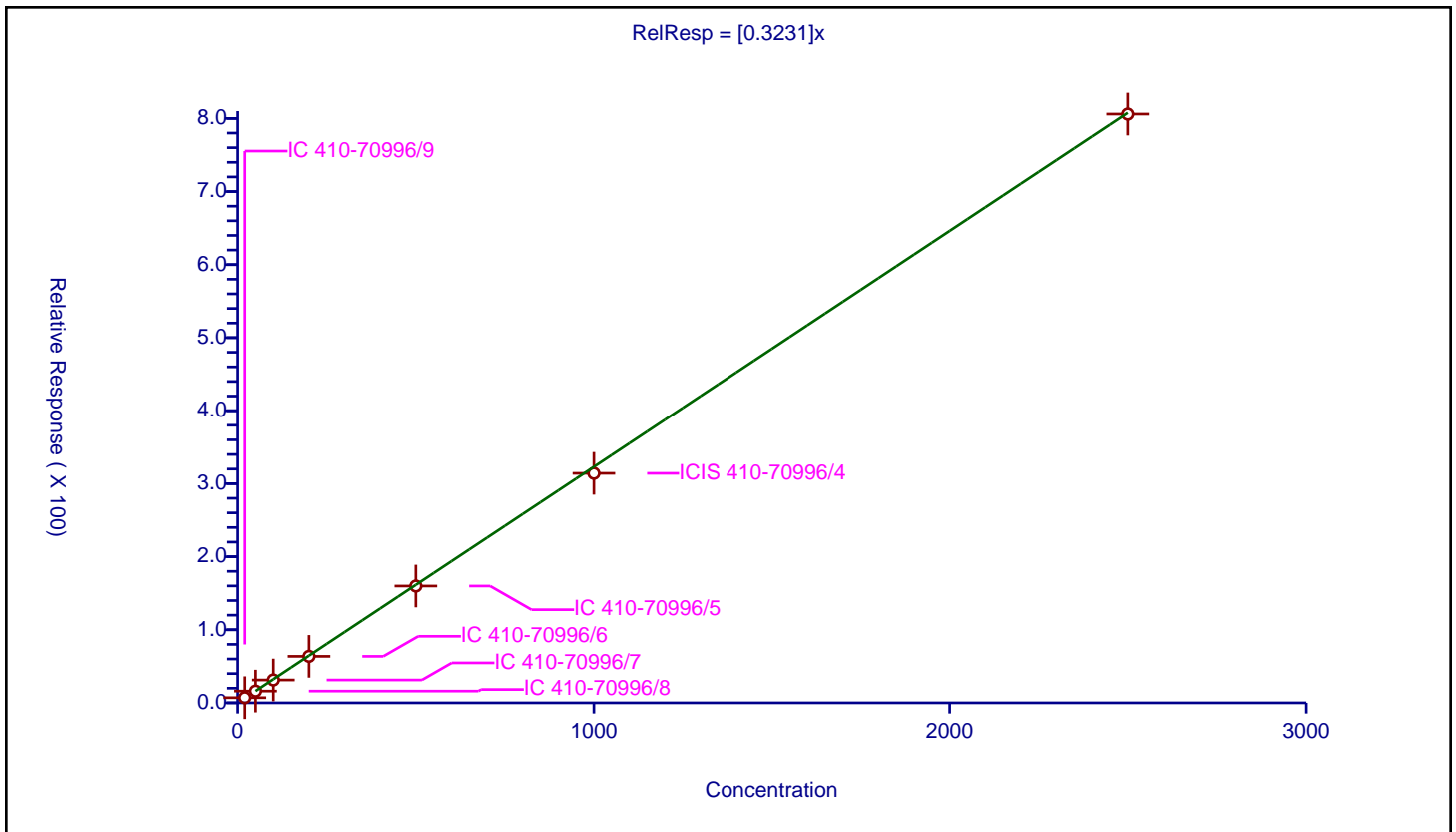
/ n-Butanol

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**

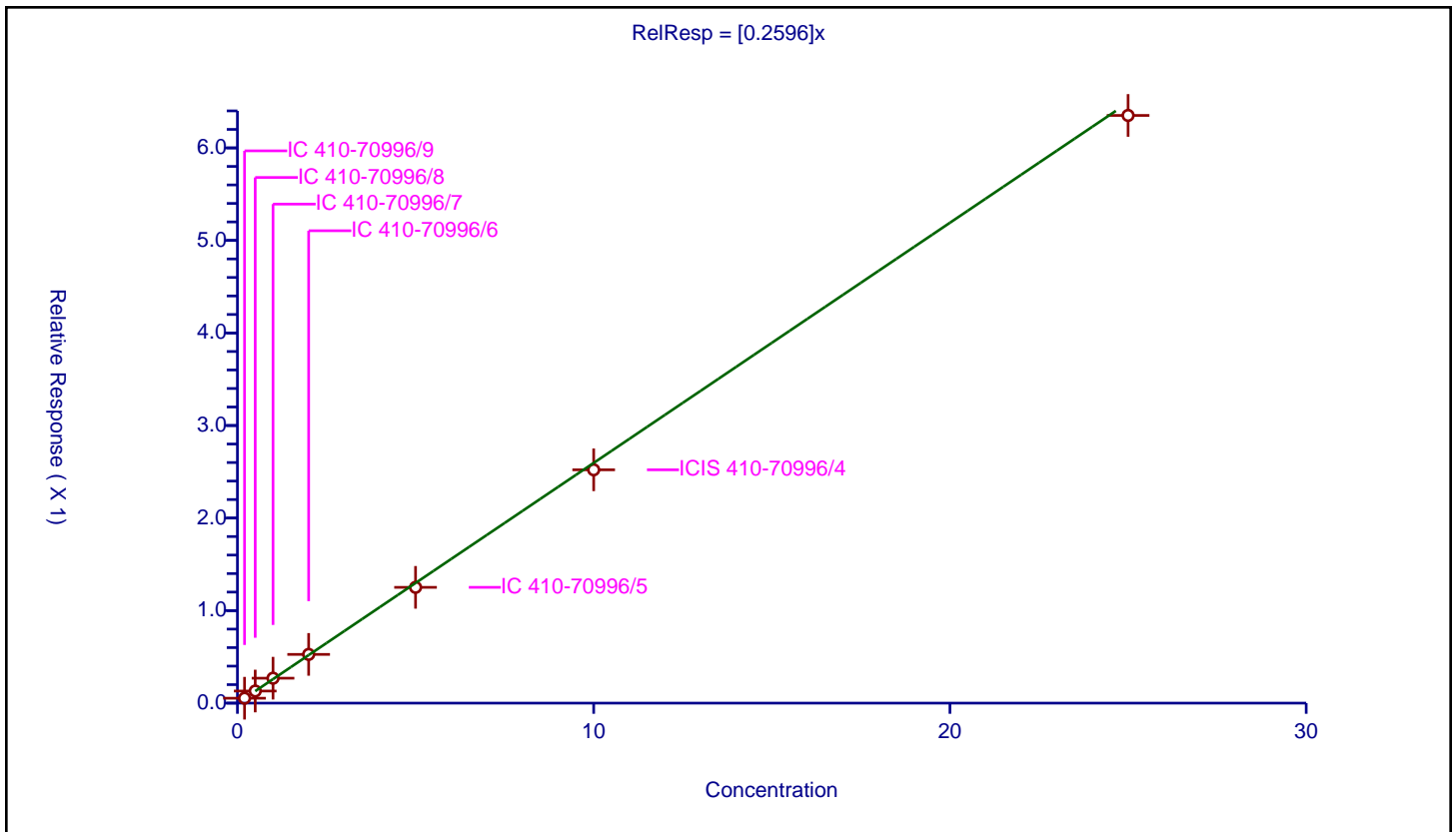
/ Trichloroethene

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

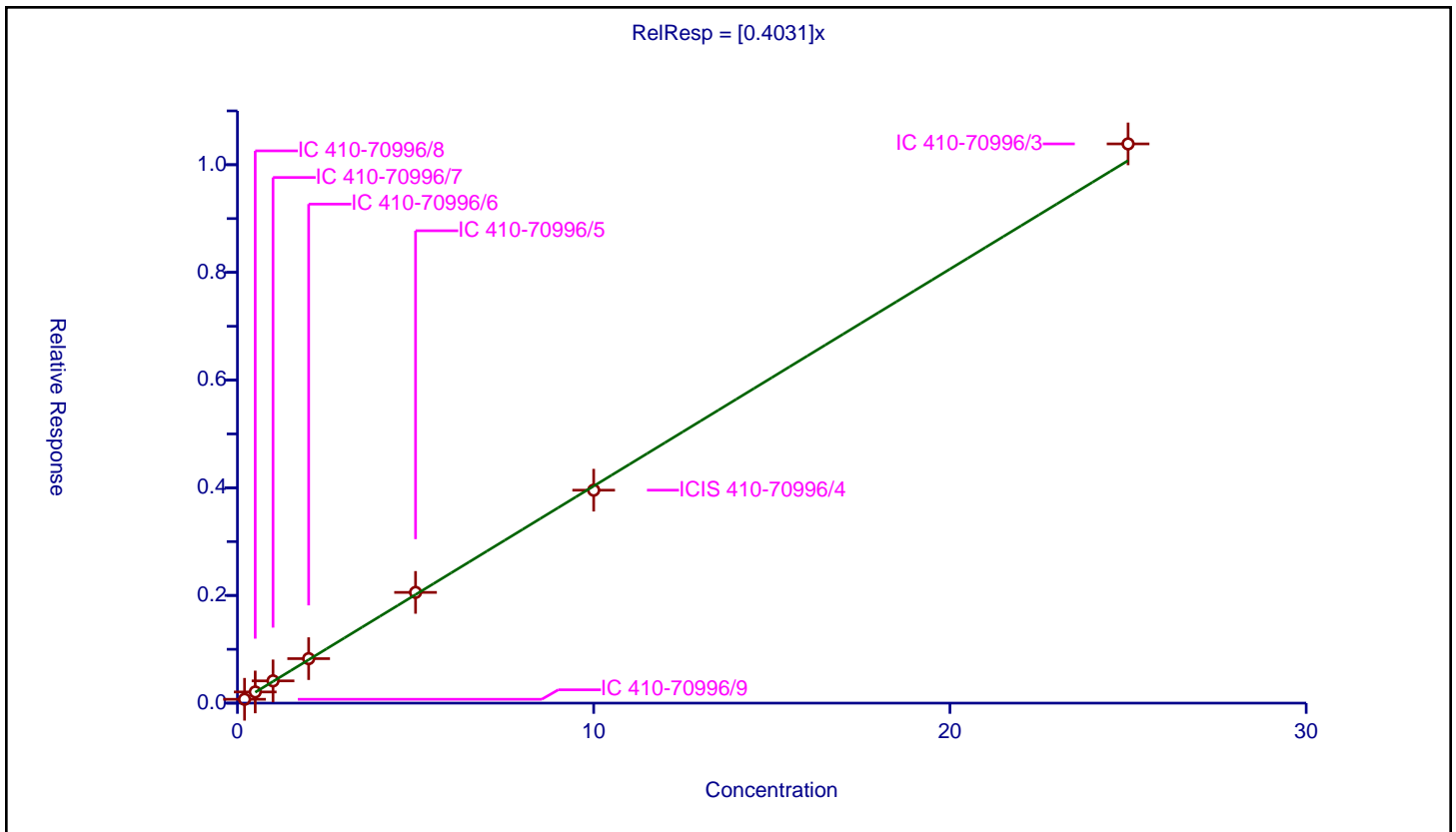
/ Methylcyclohexane

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

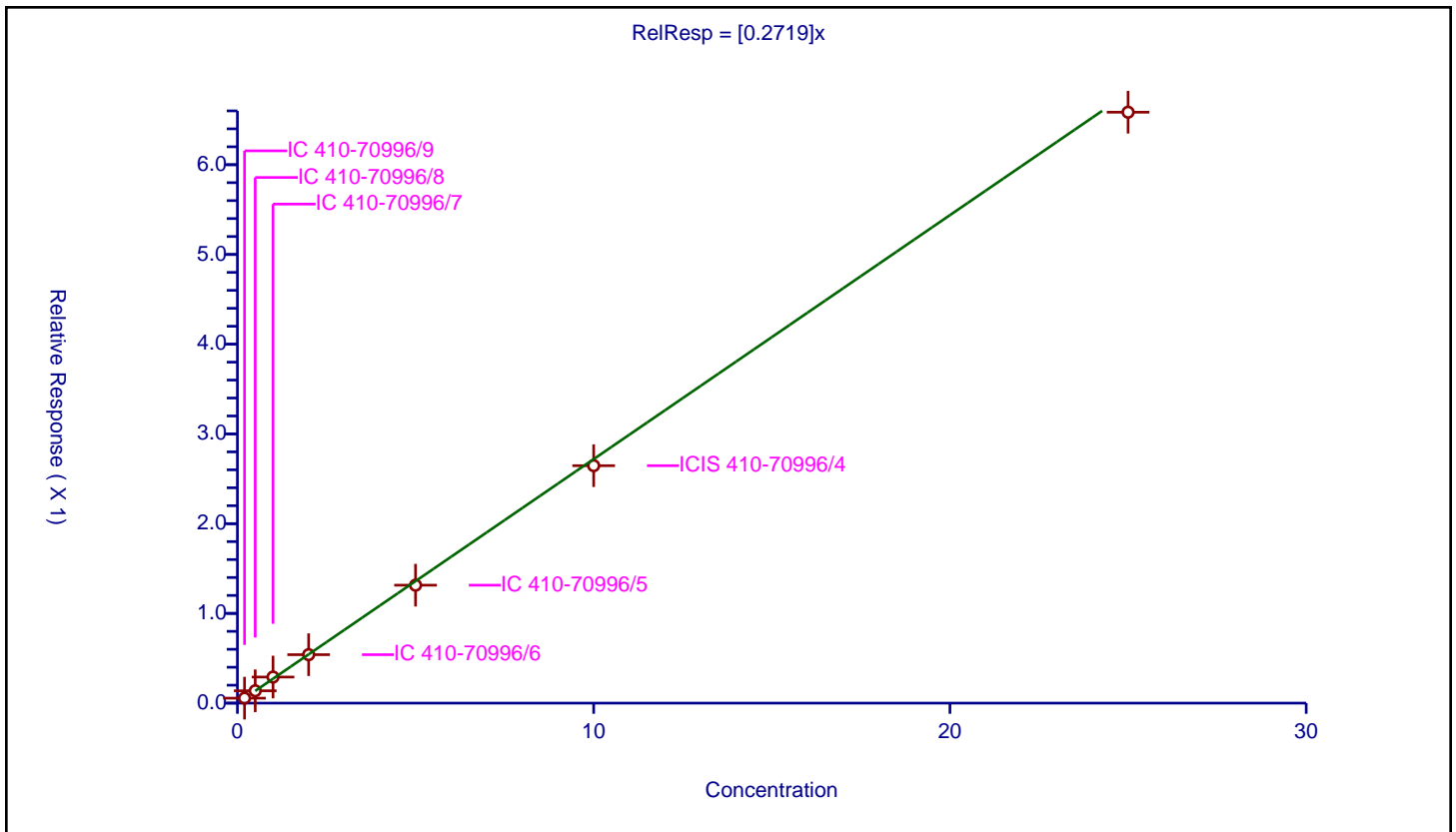
/ 1,2-Dichloropropane

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

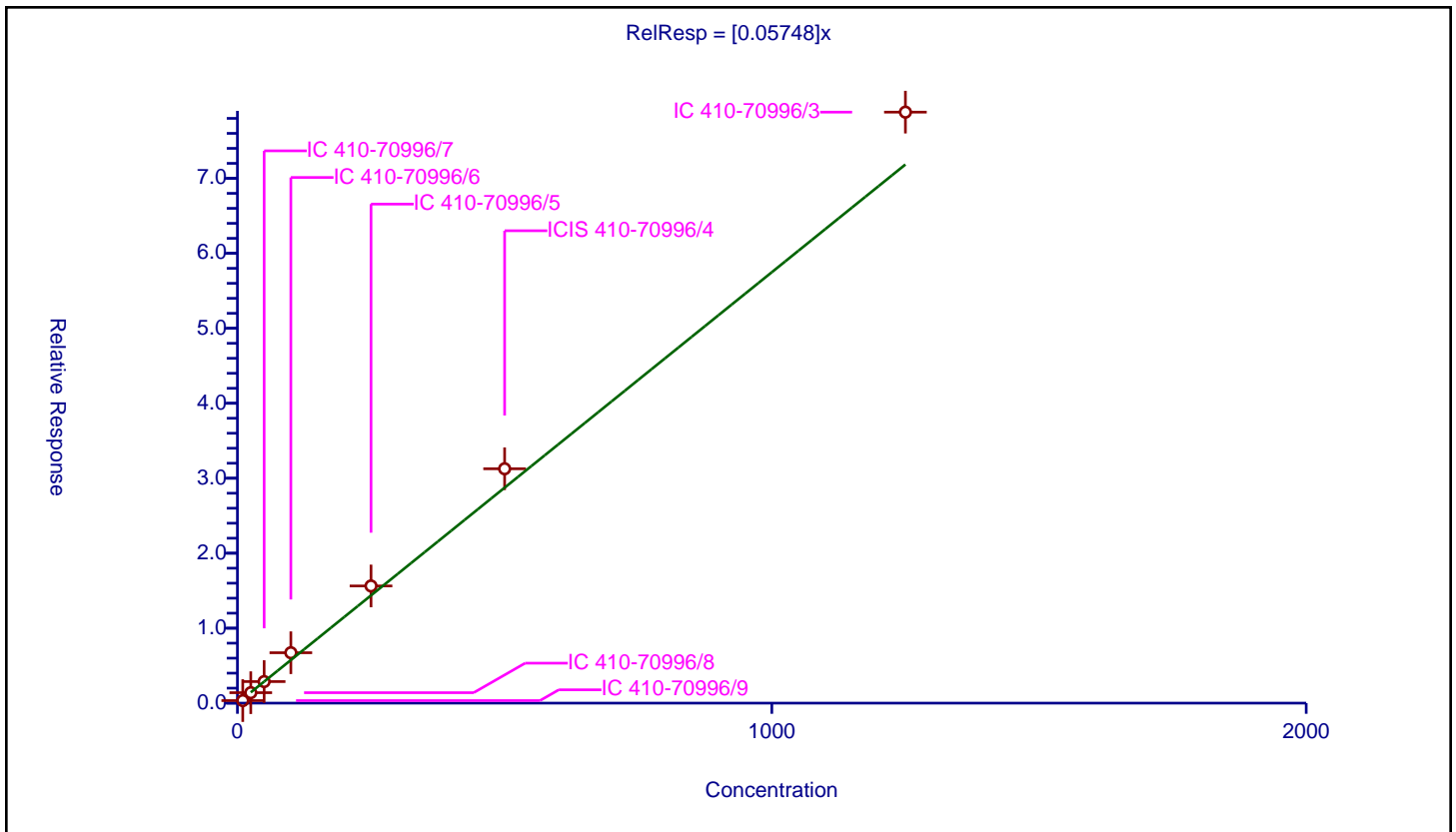
/ 1,4-Dioxane

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**

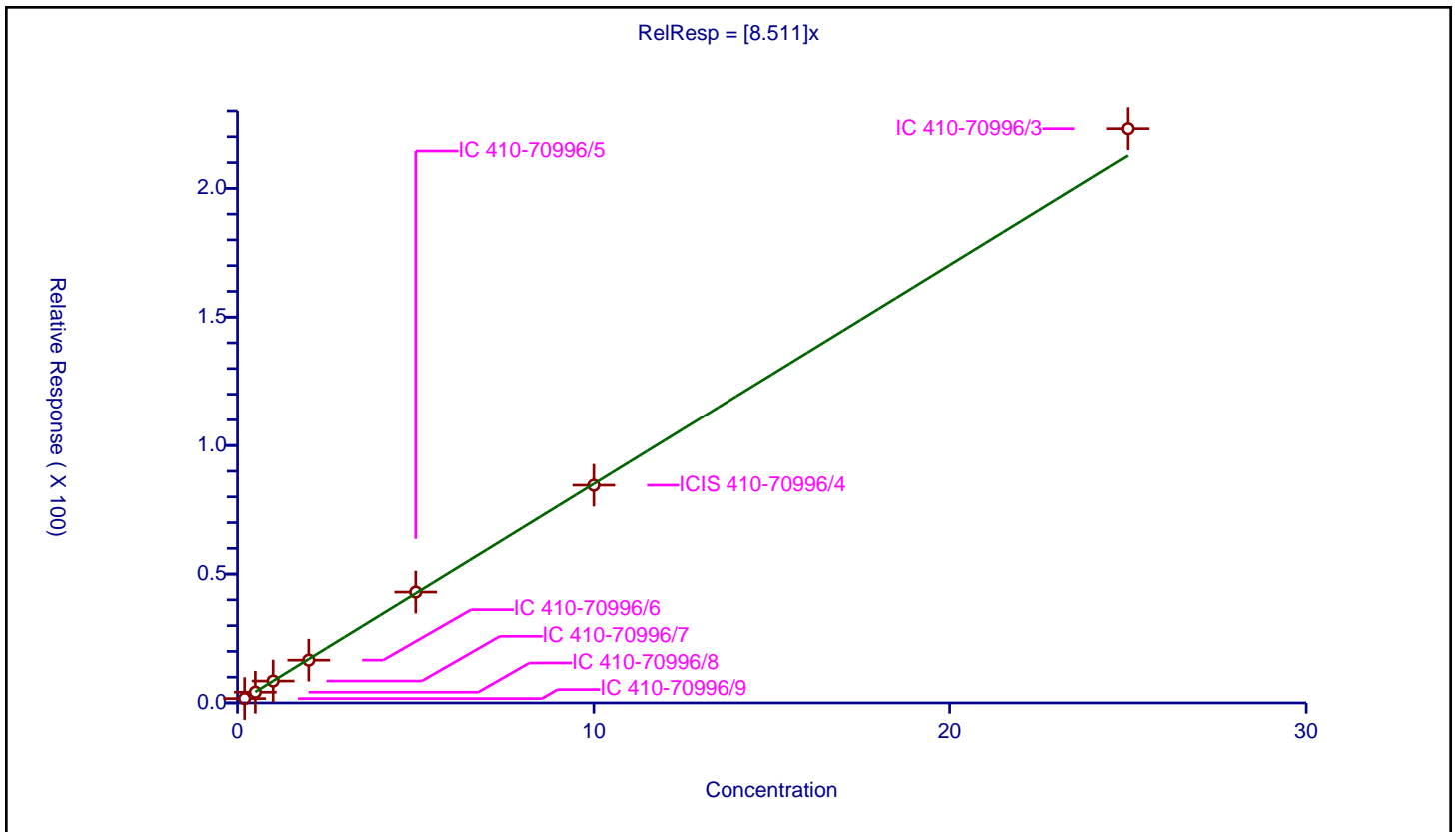
/ Methyl methacrylate

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**

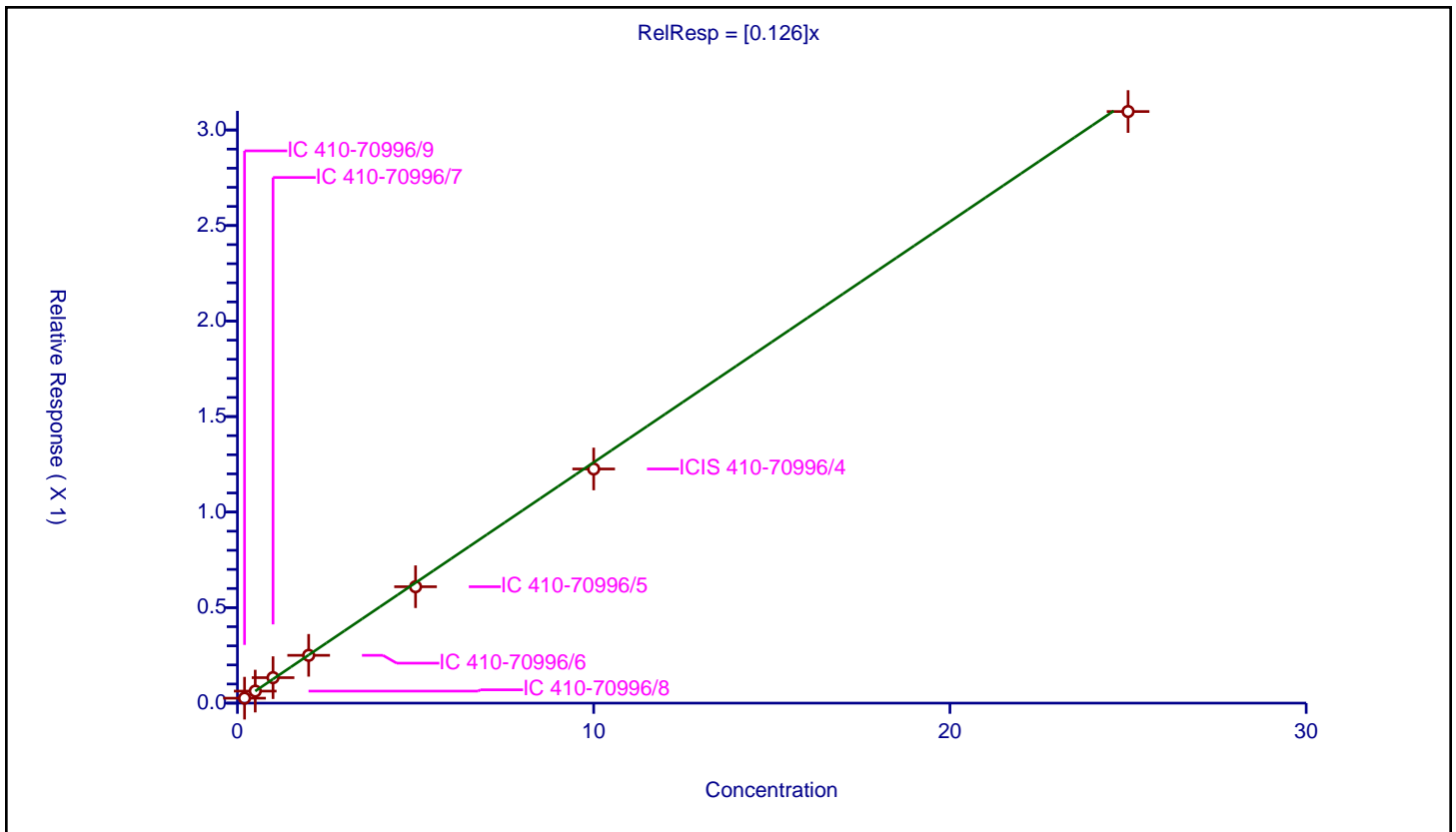
/ Dibromomethane

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**

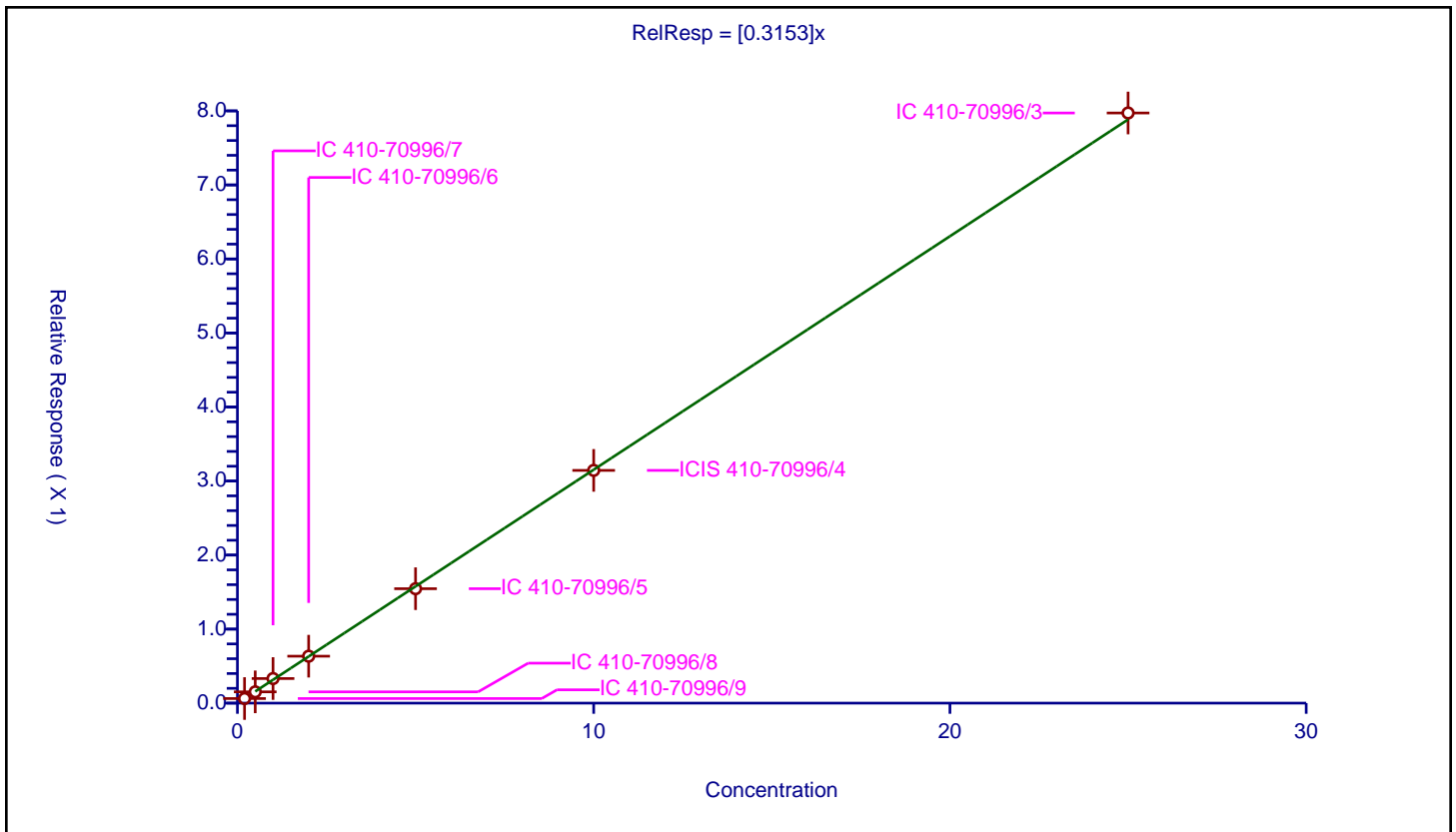
/ Dichlorobromomethane

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

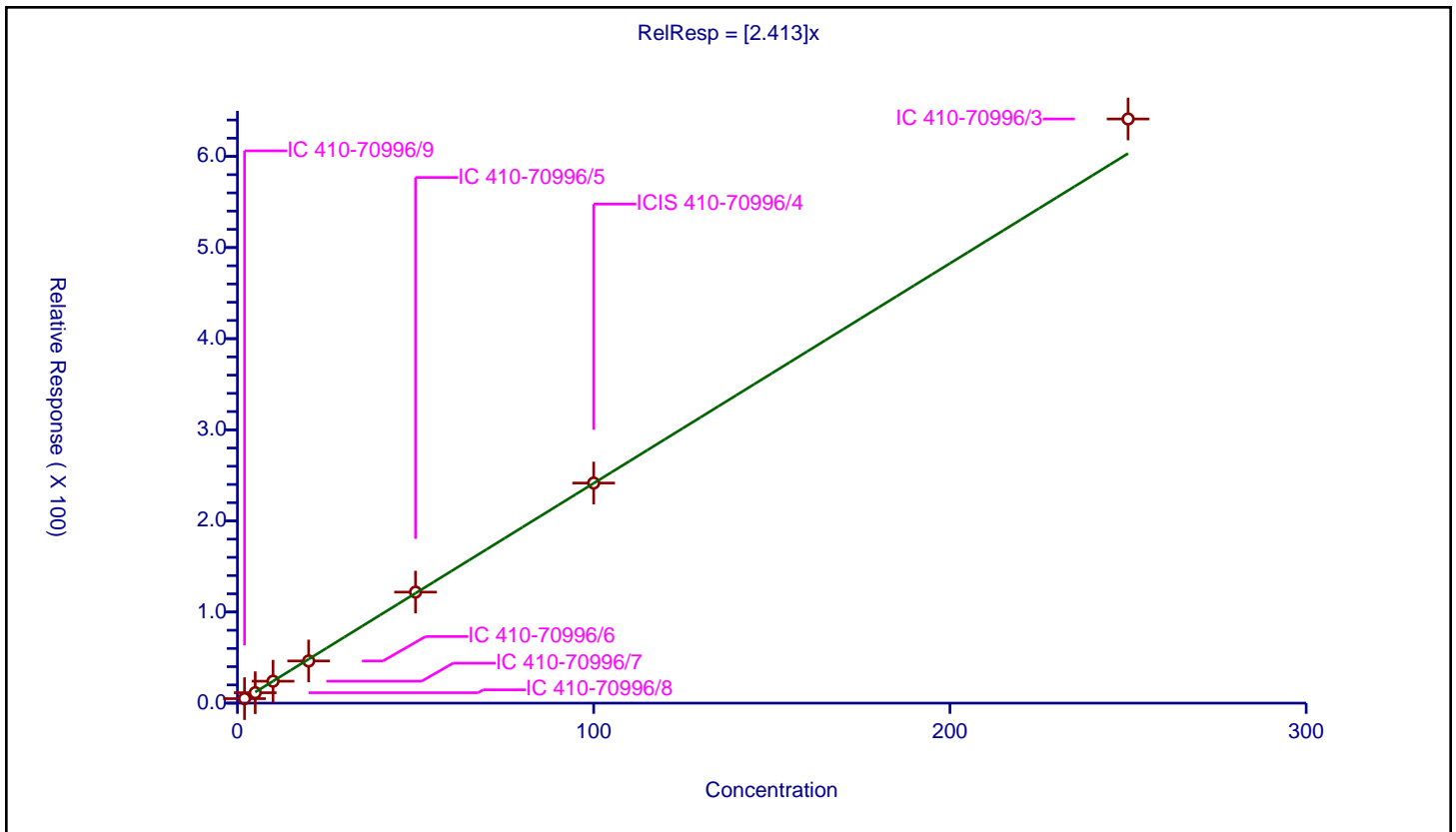
/ 2-Nitropropane

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

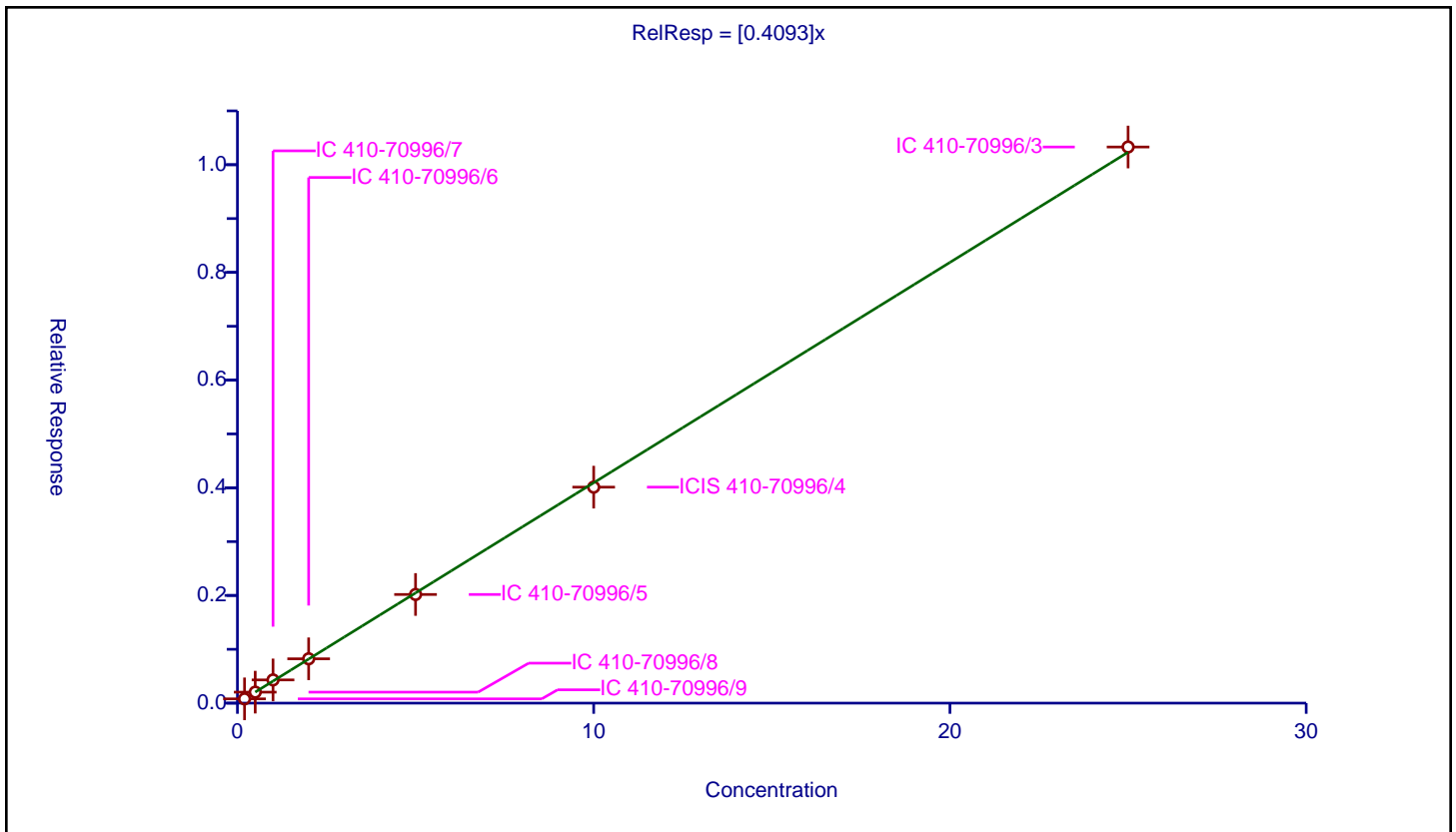
/ cis-1,3-Dichloropropene

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

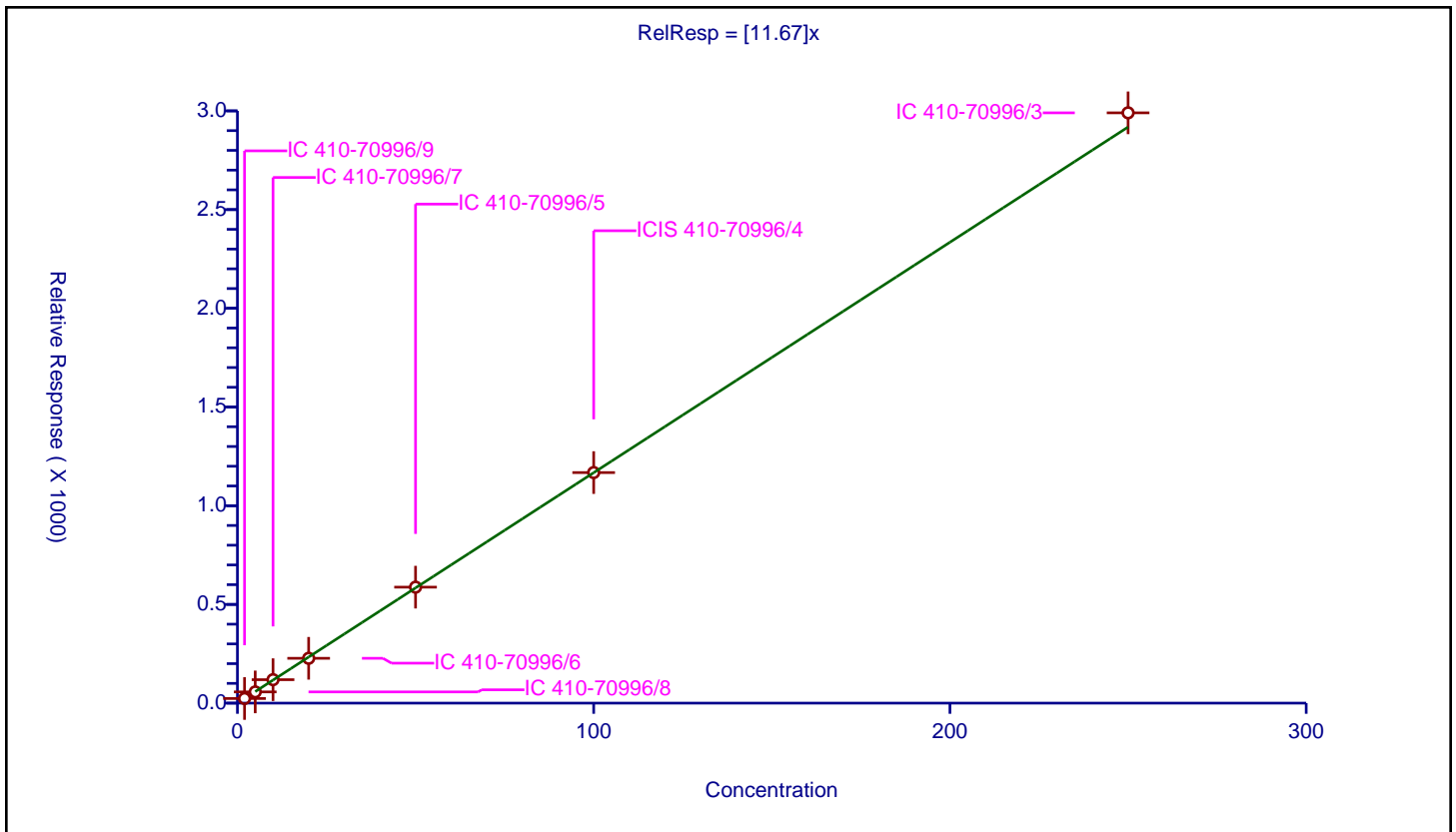
/ 4-Methyl-2-pentanone (MIBK)

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**

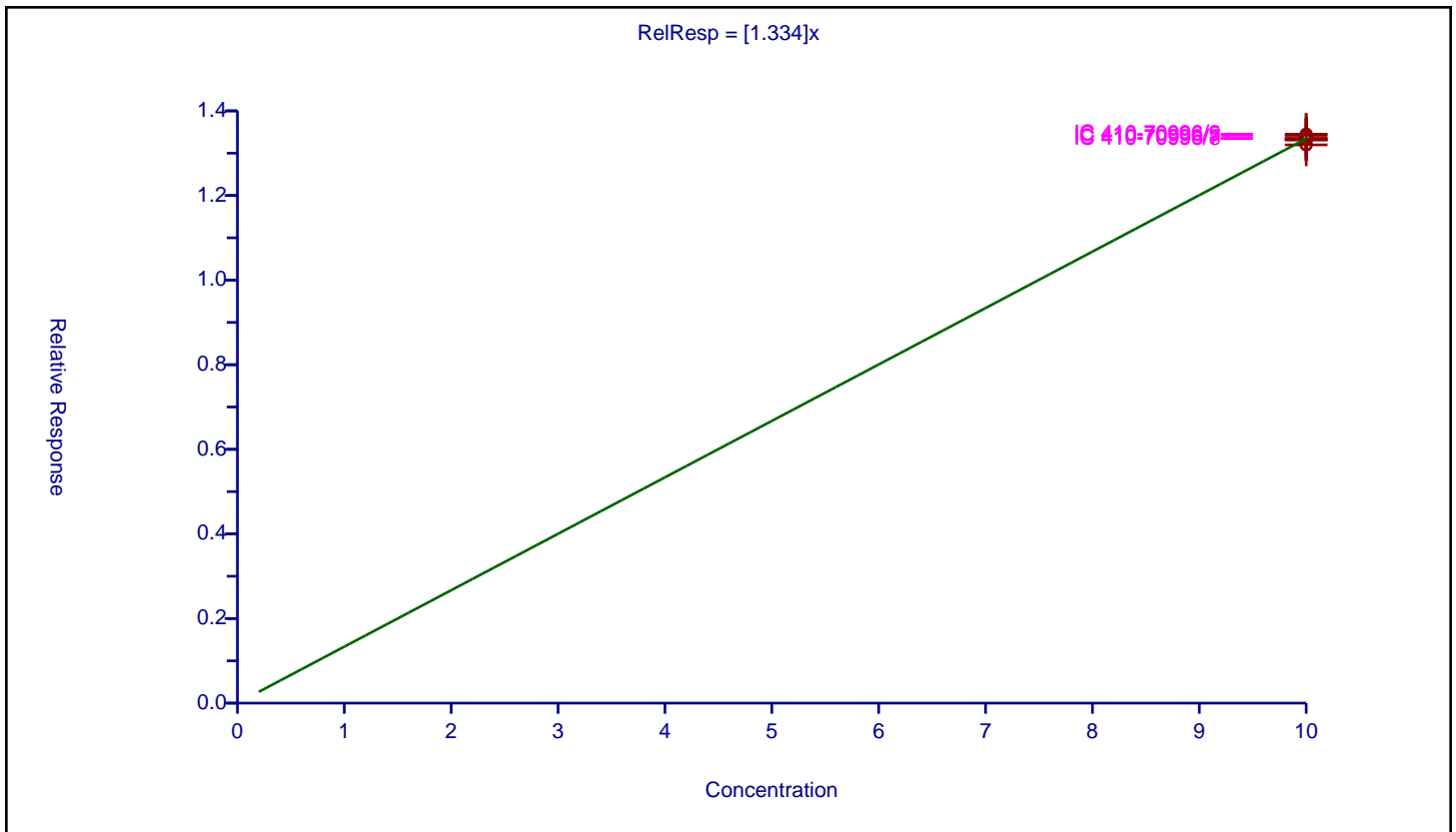
/ Toluene-d8 (Surr)

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**

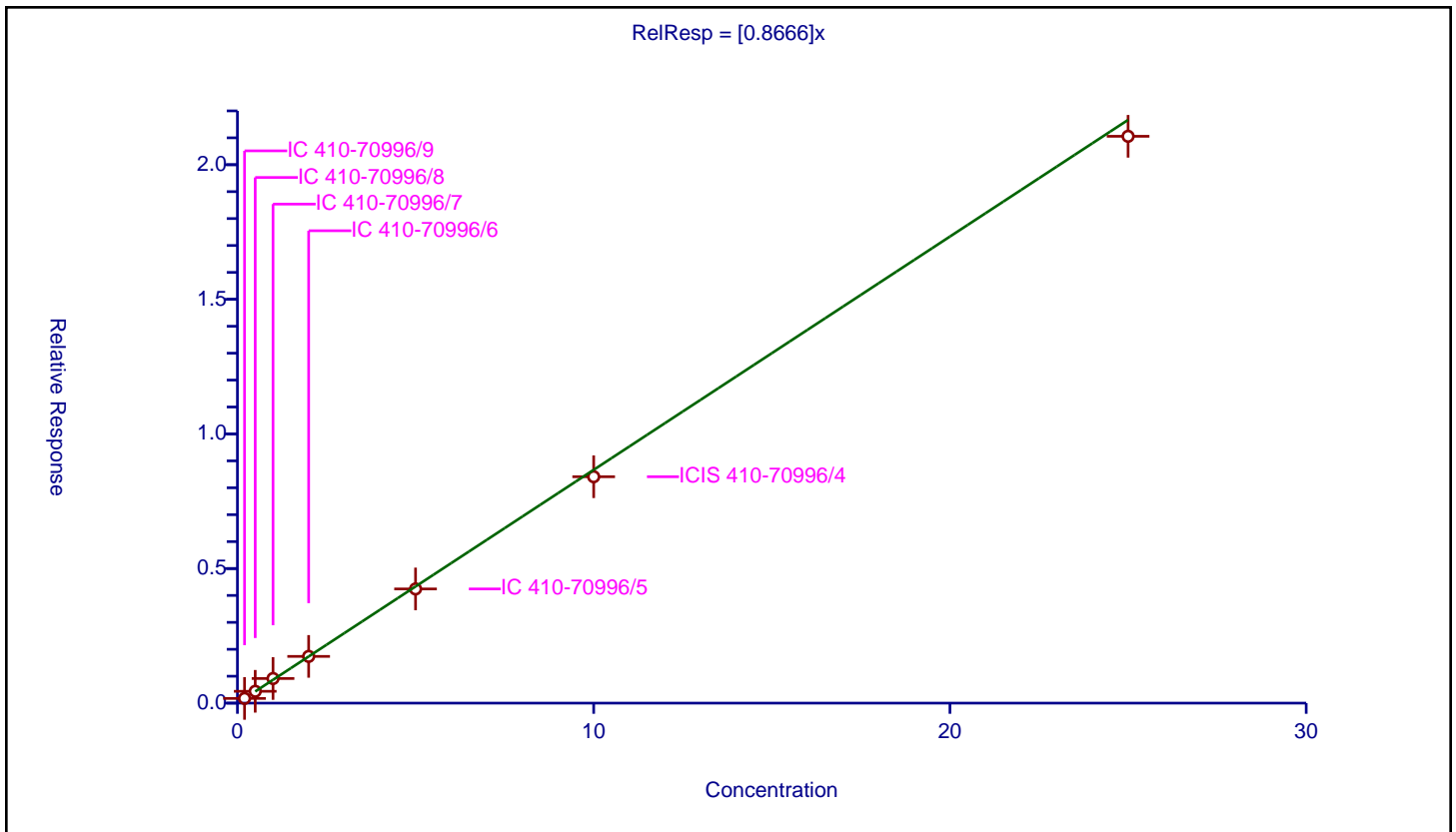
/ Toluene

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

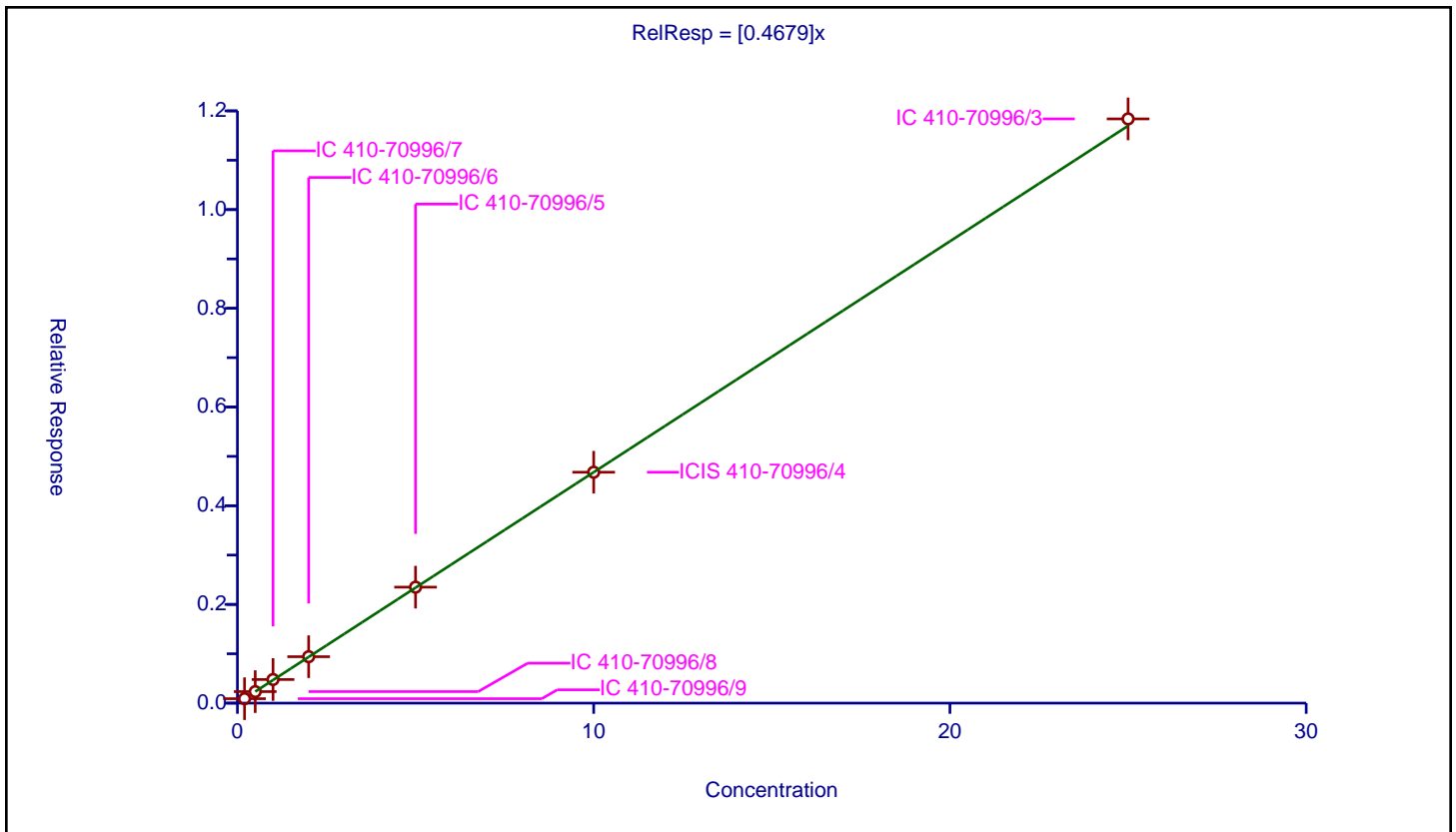
/ trans-1,3-Dichloropropene

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

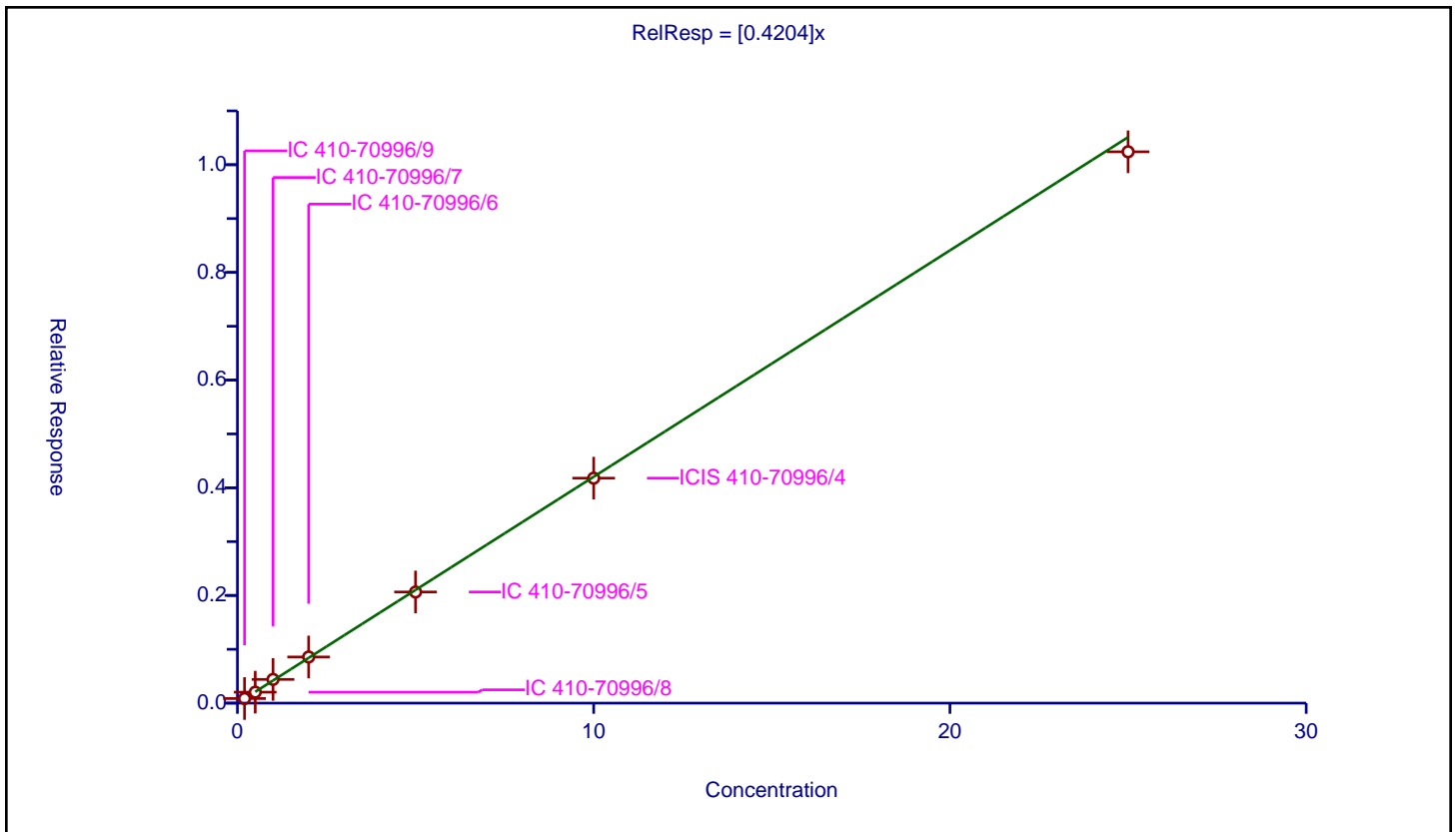
/ Ethyl methacrylate

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

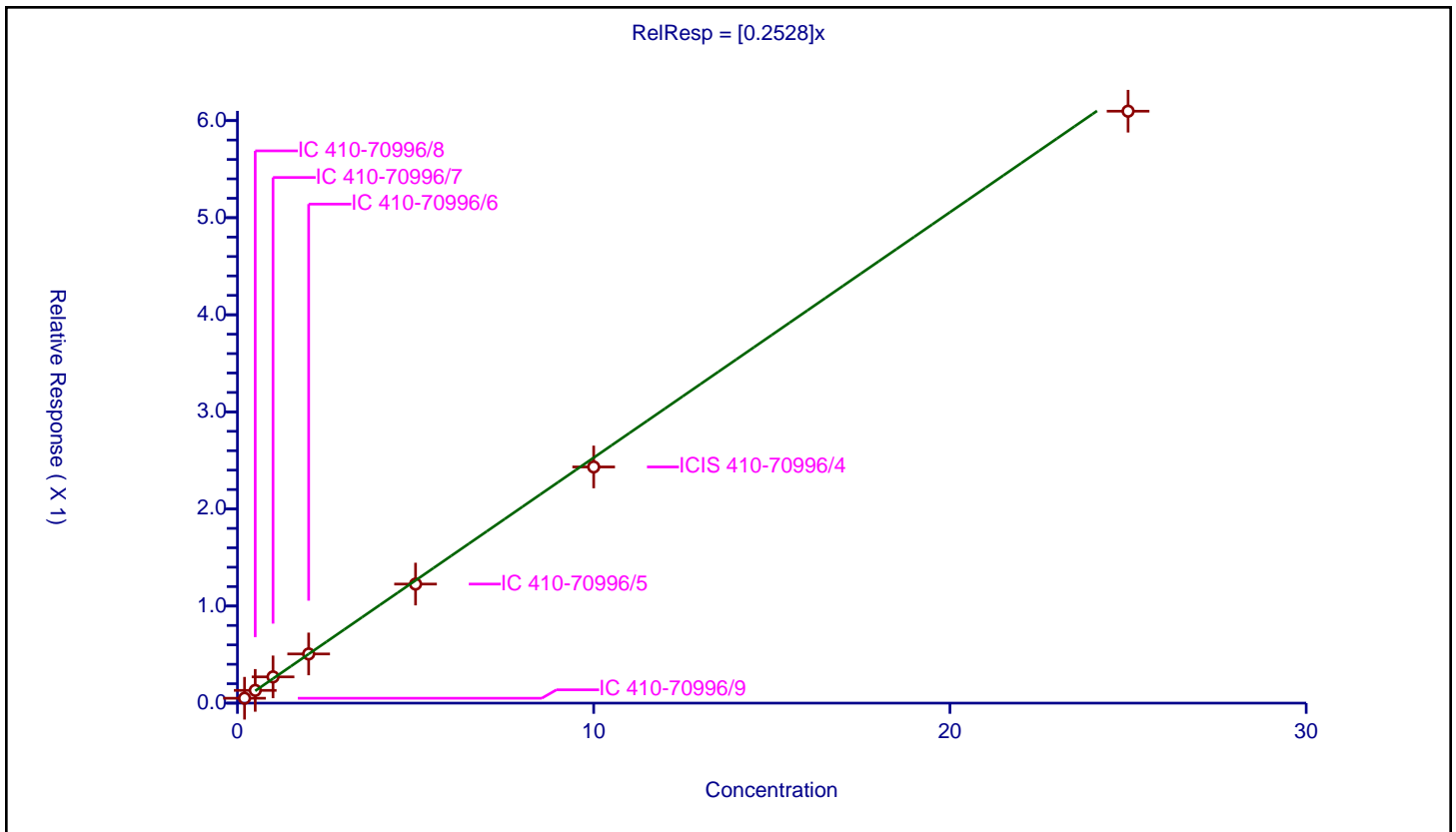
/ 1,1,2-Trichloroethane

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**

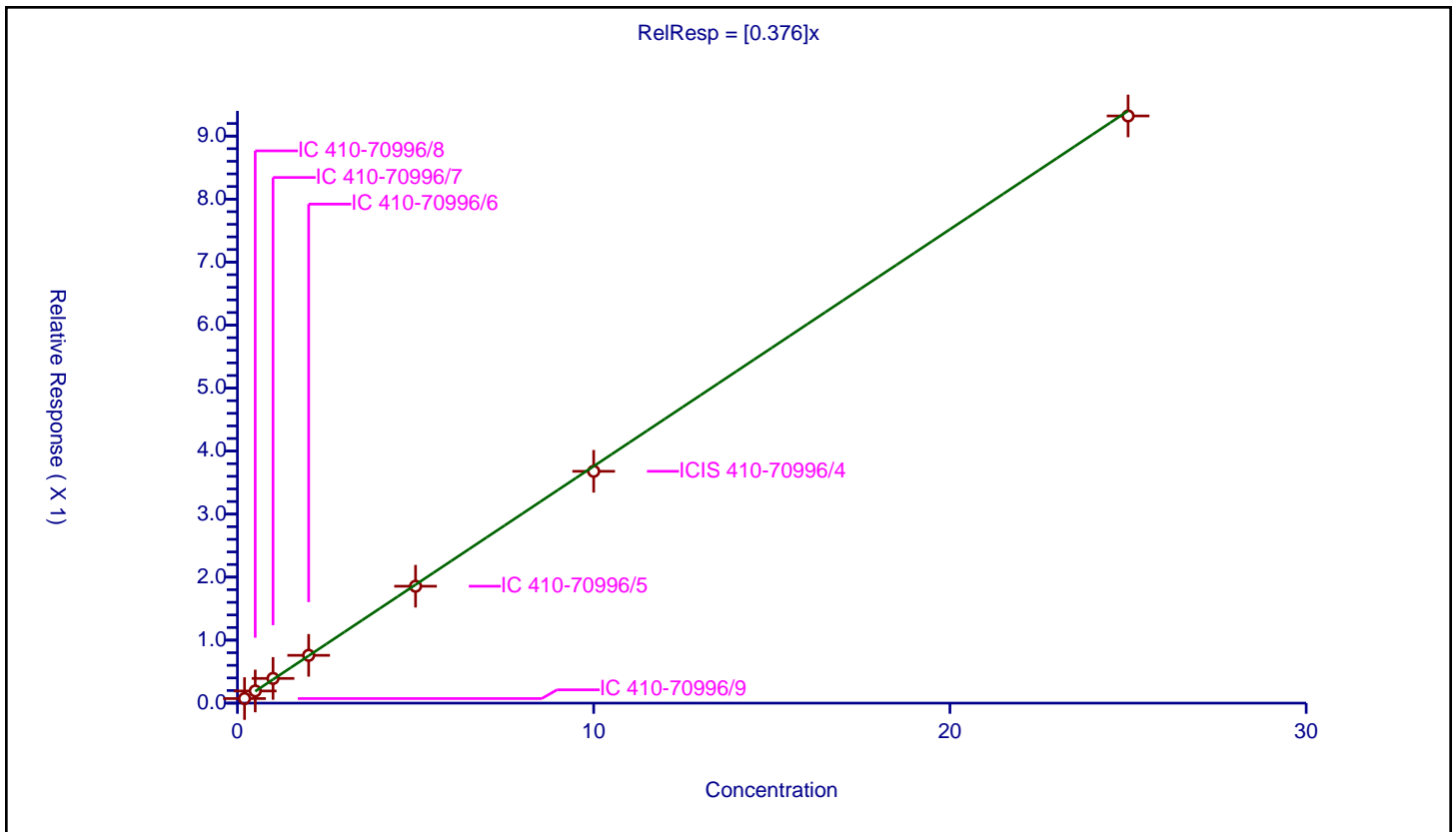
**/ Tetrachloroethene**

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

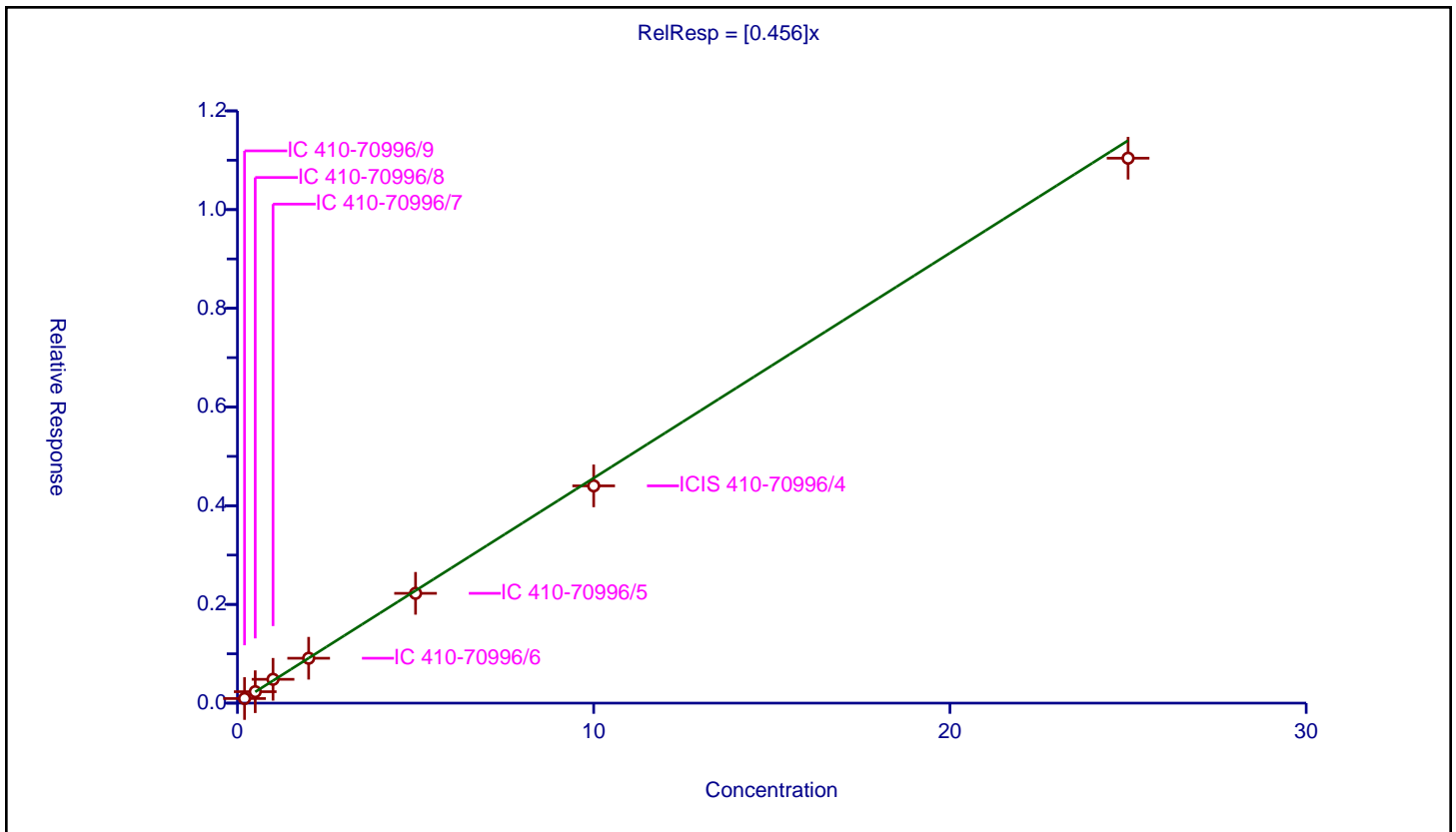
/ 1,3-Dichloropropane

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

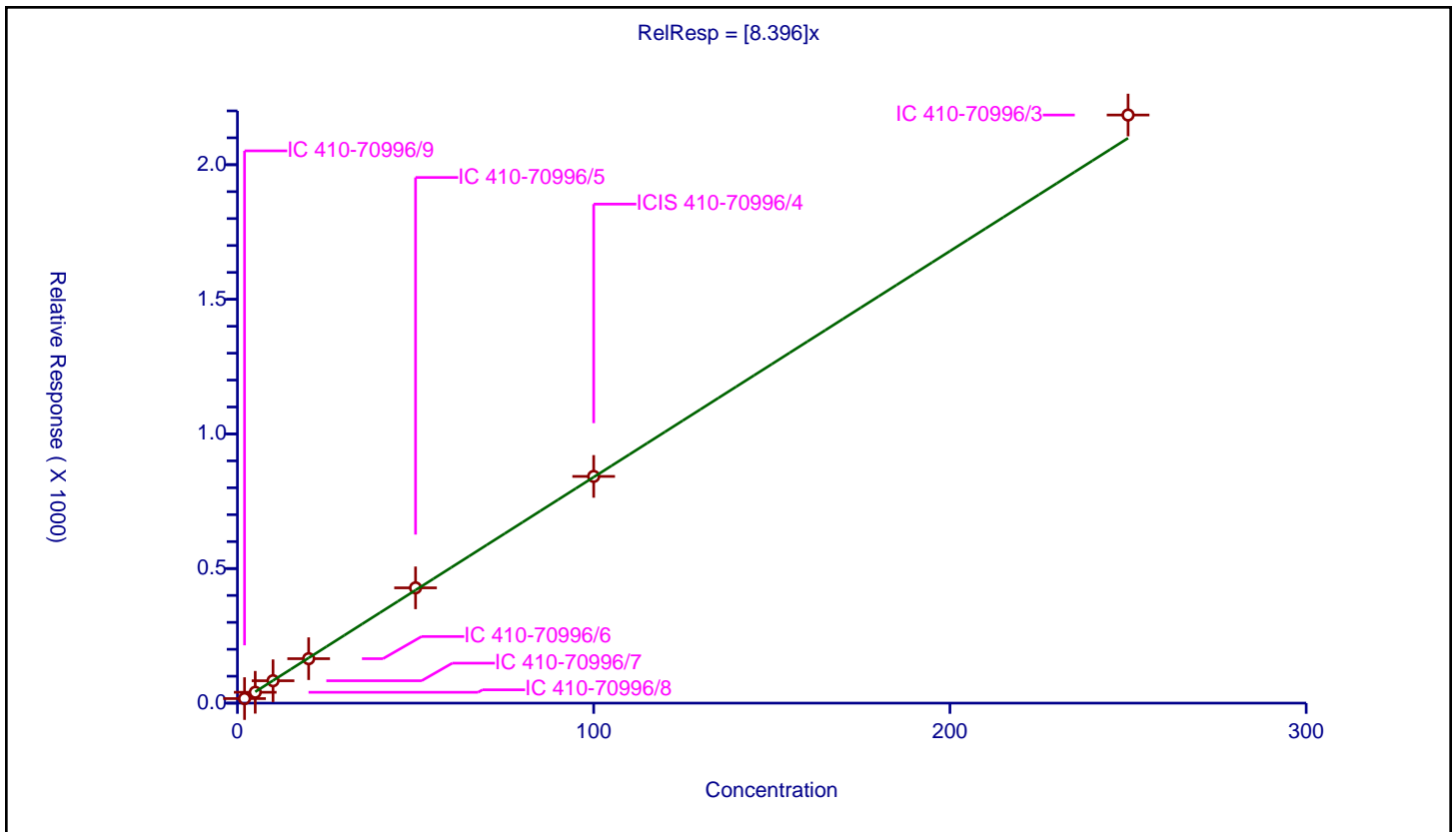
/ 2-Hexanone

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**

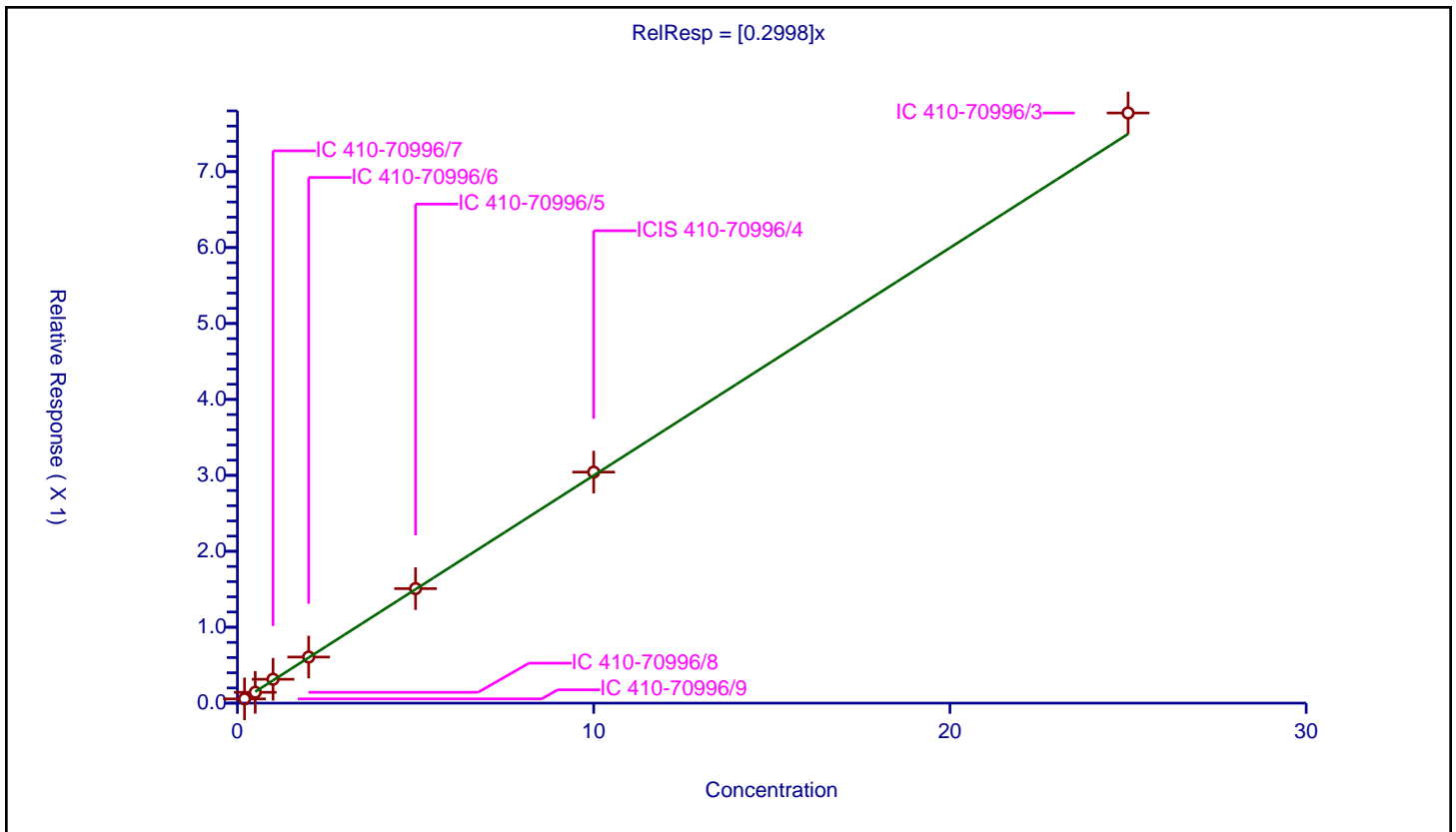
/ Chlorodibromomethane

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

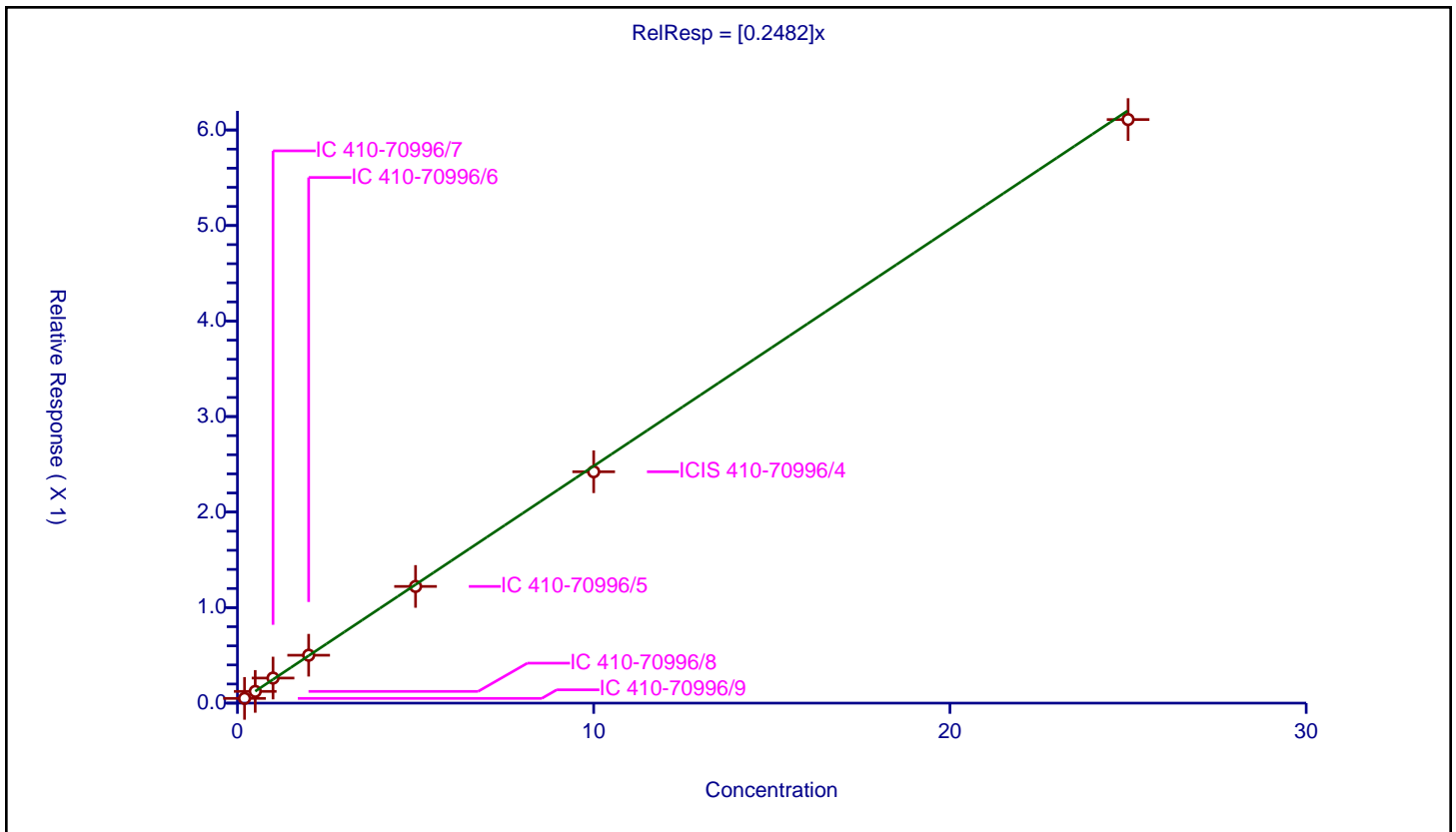
/ Ethylene Dibromide

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

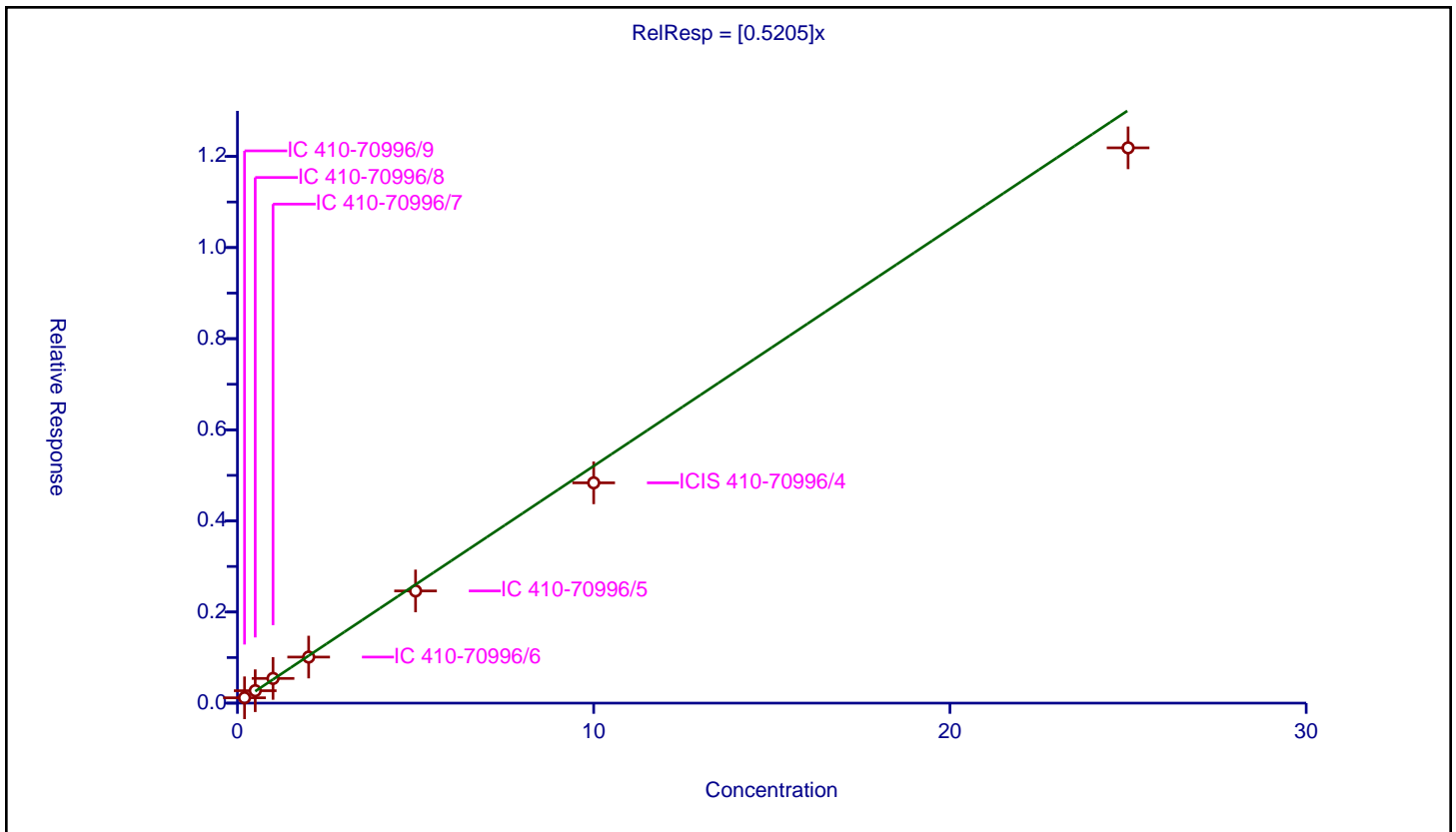
/ 1-Chlorohexane

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

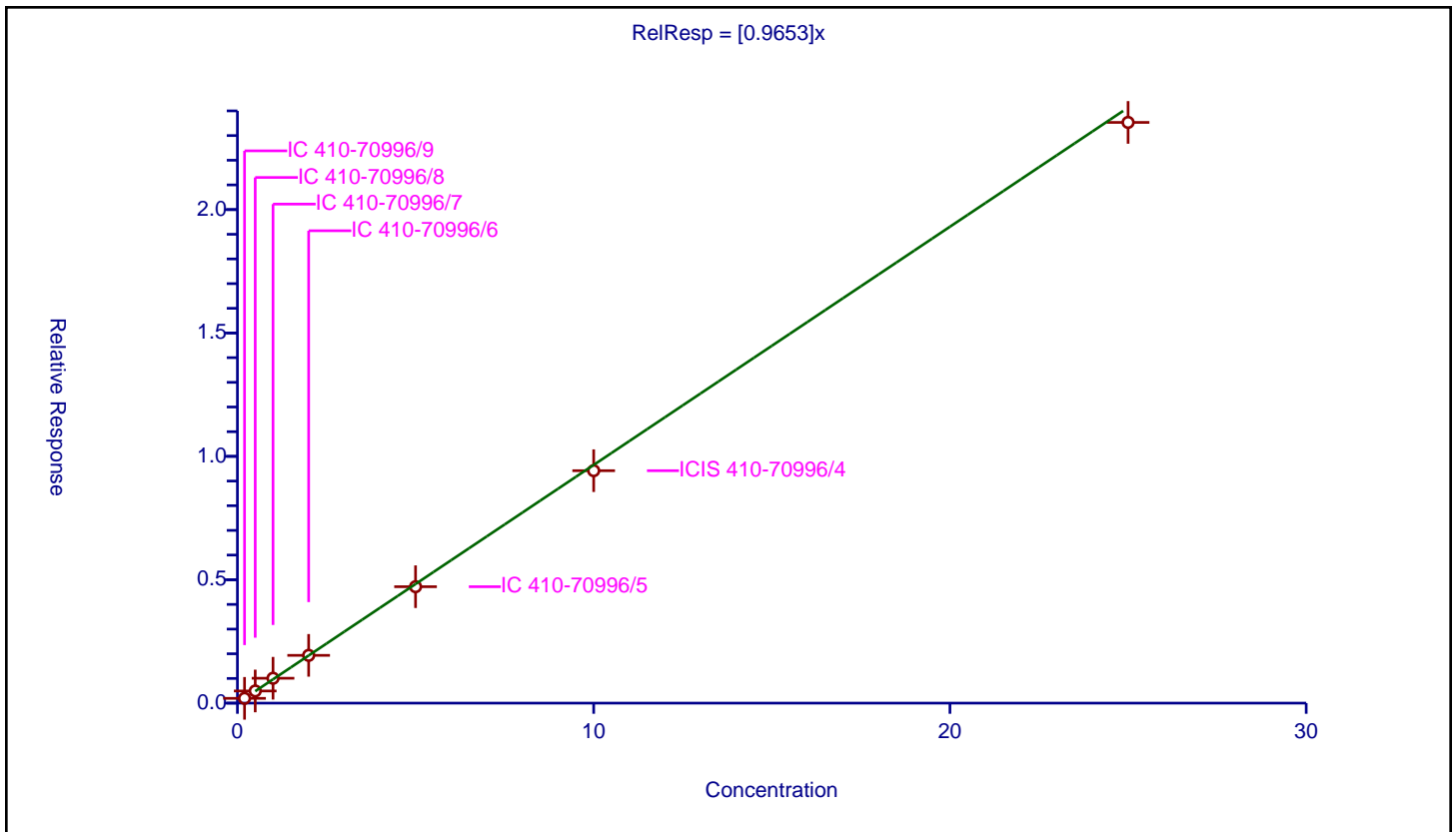
/ Chlorobenzene

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

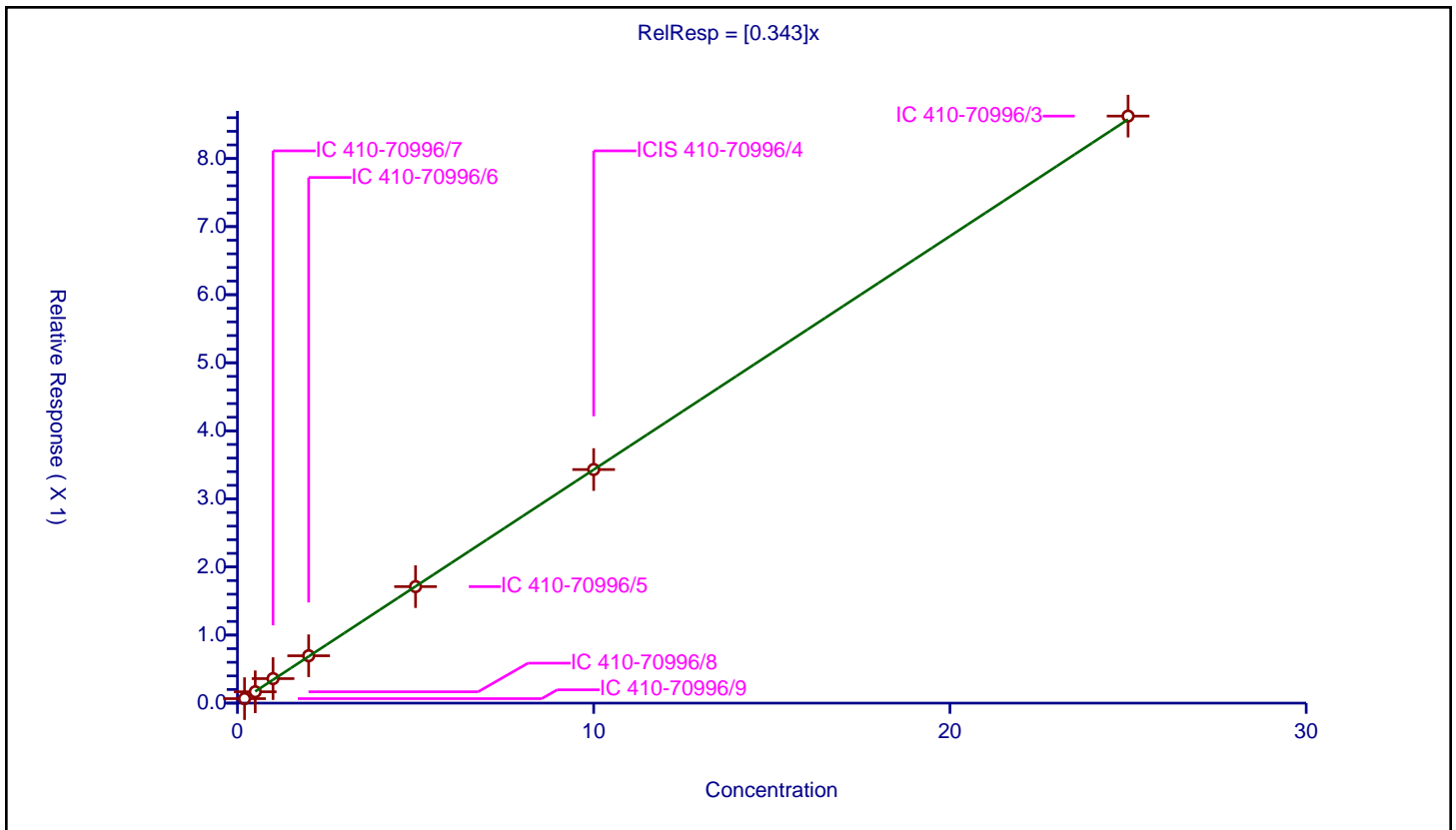
/ 1,1,1,2-Tetrachloroethane

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**

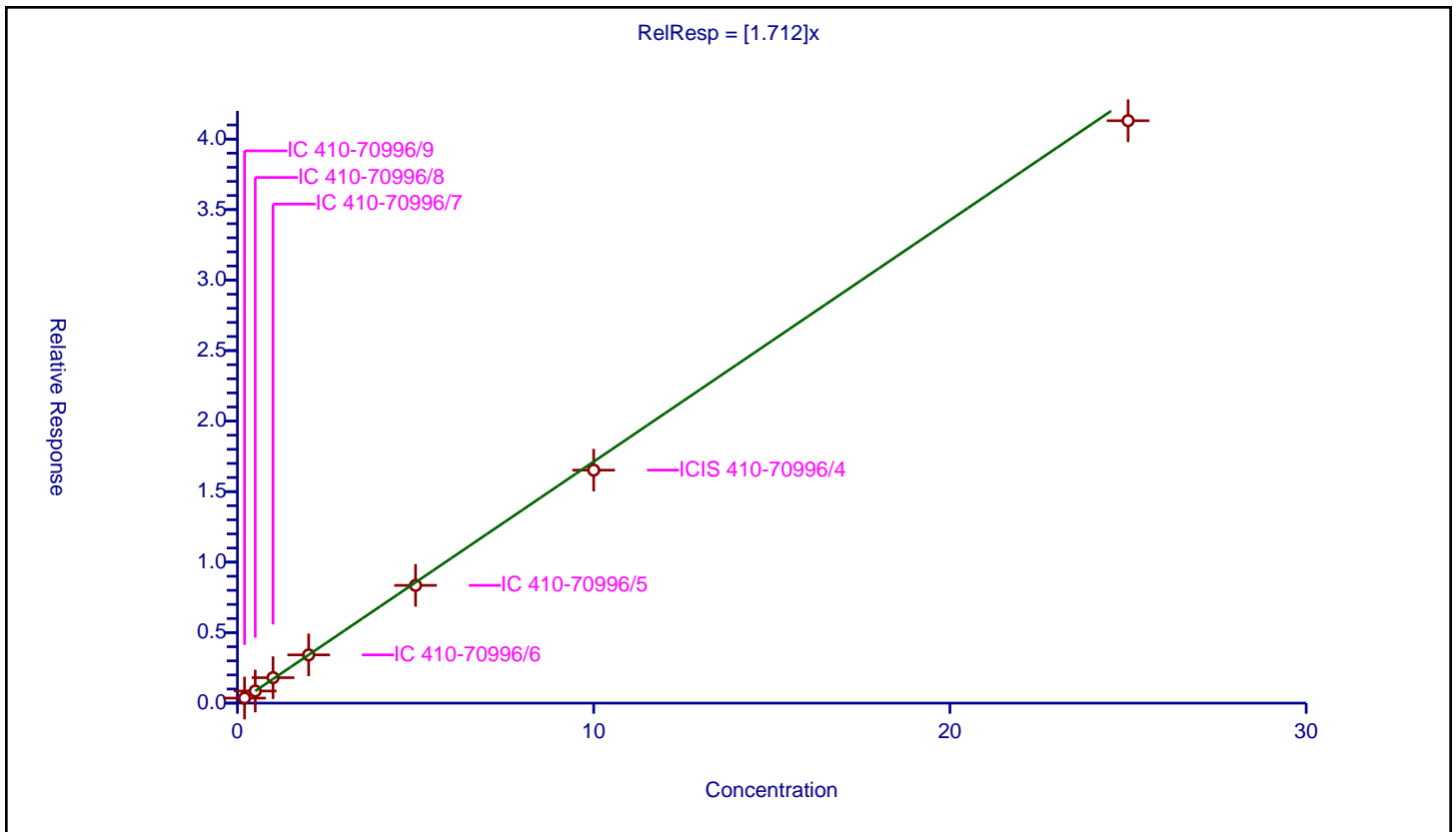
/ Ethylbenzene

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**

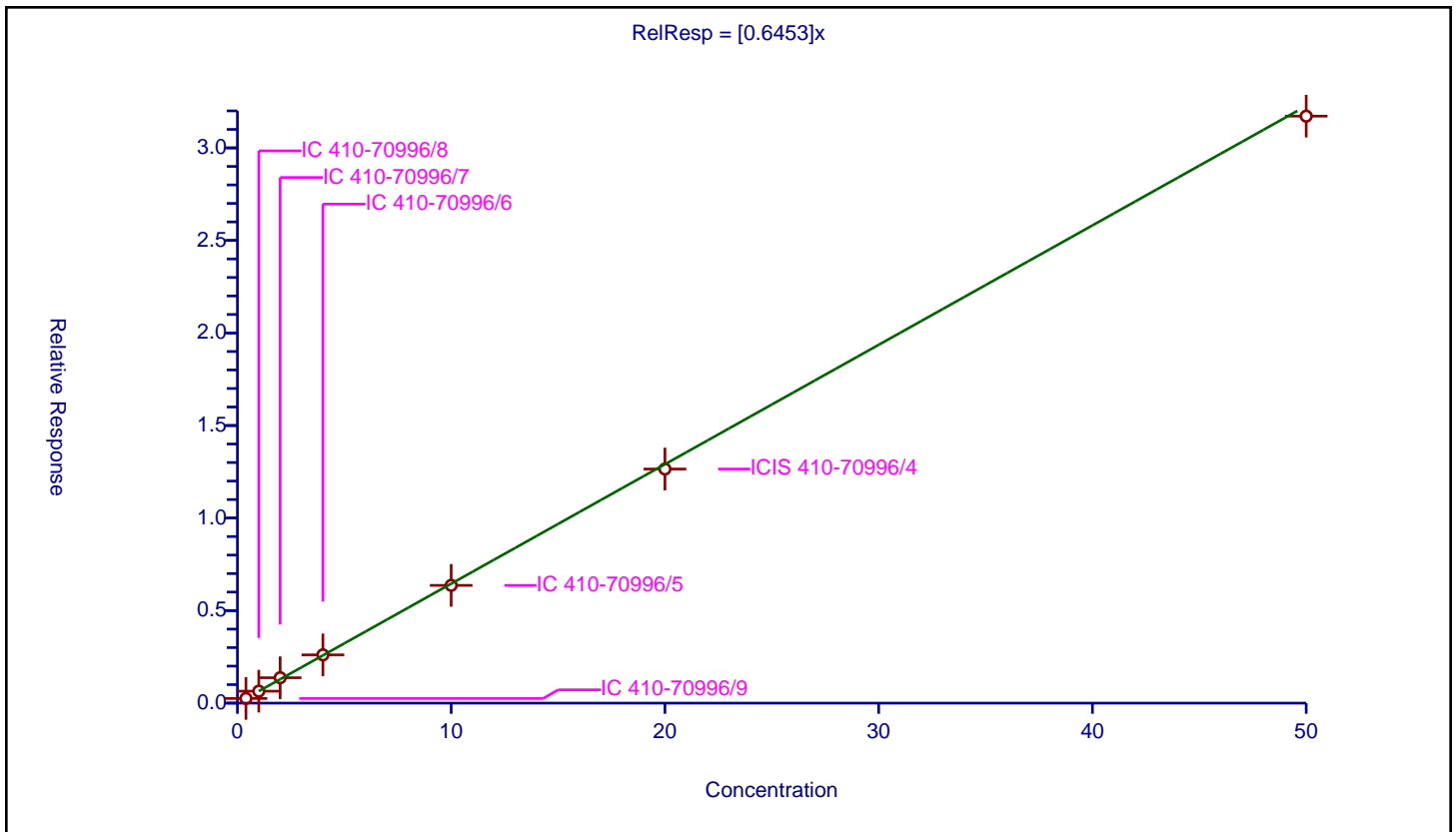
/ m-Xylene & p-Xylene

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

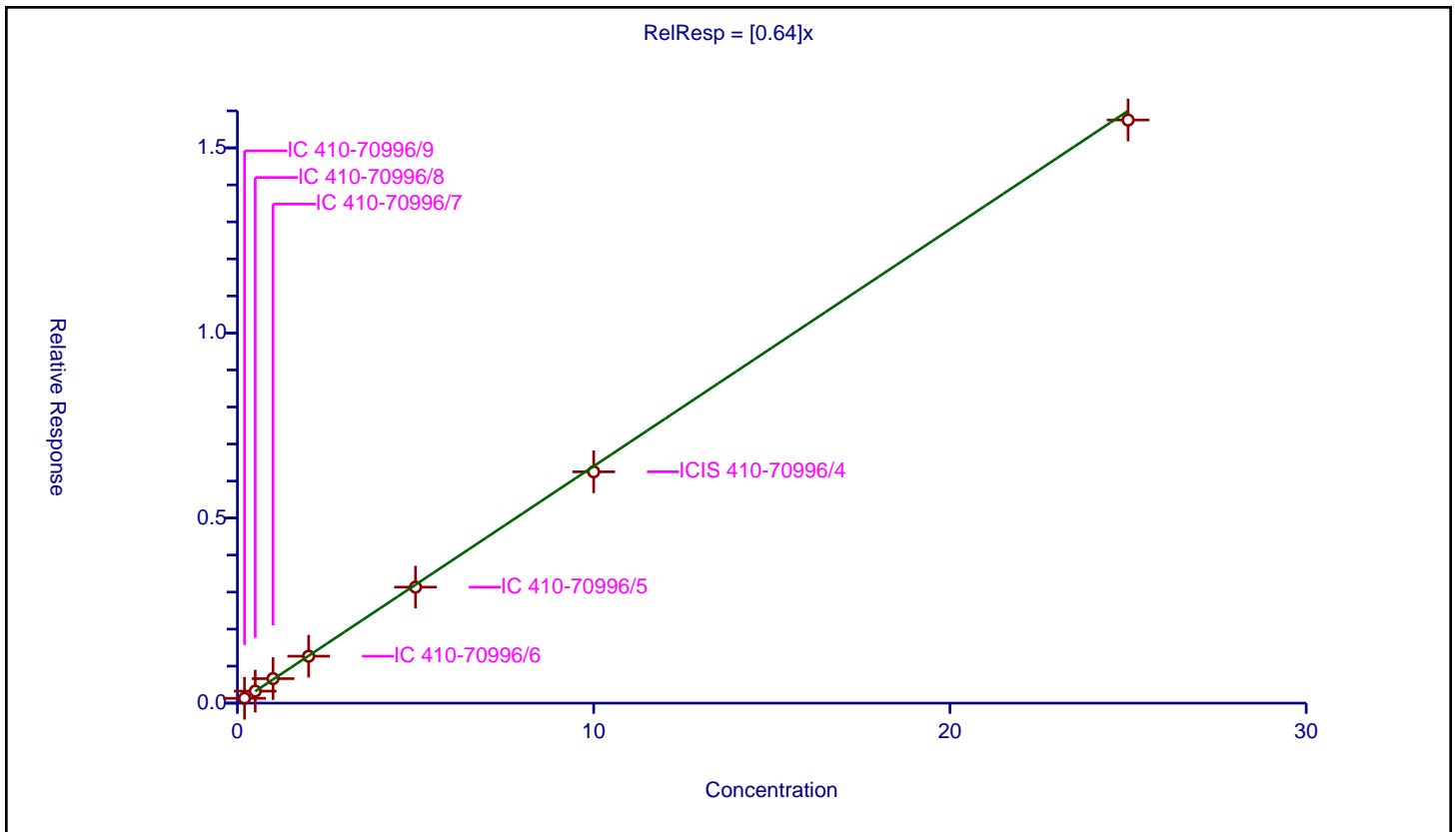
/ o-Xylene

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

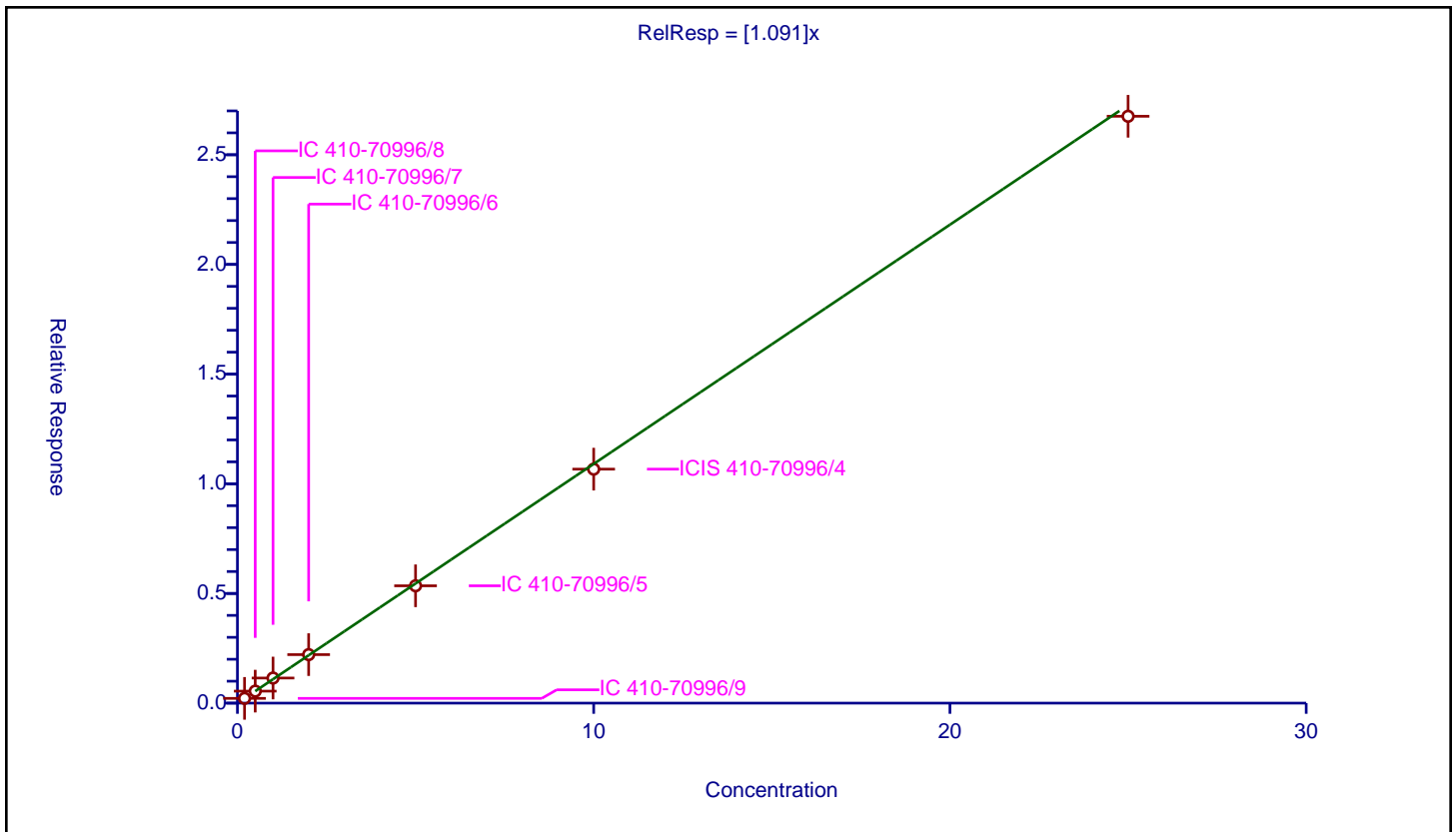
/ Styrene

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**

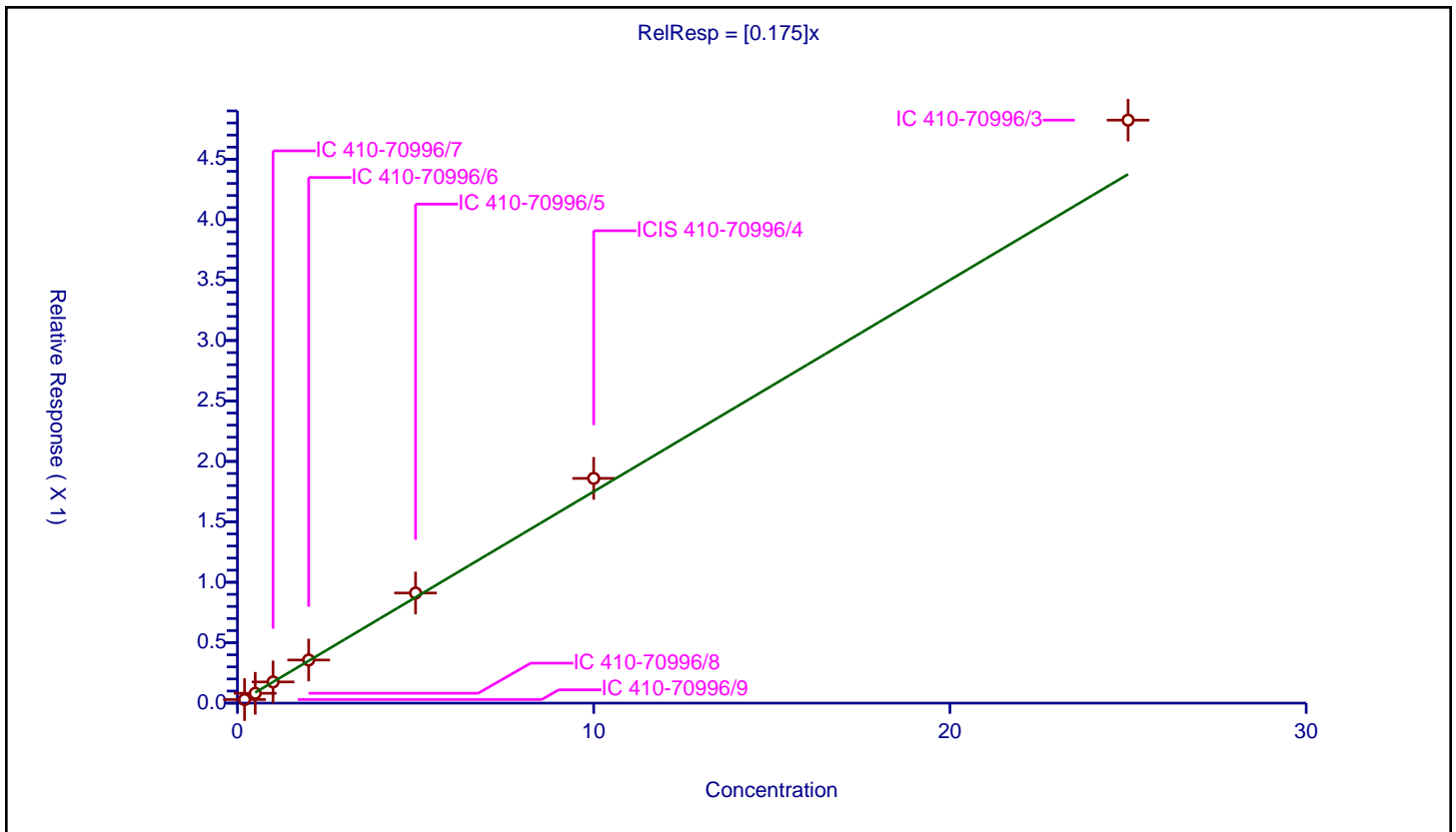
/ Bromoform

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

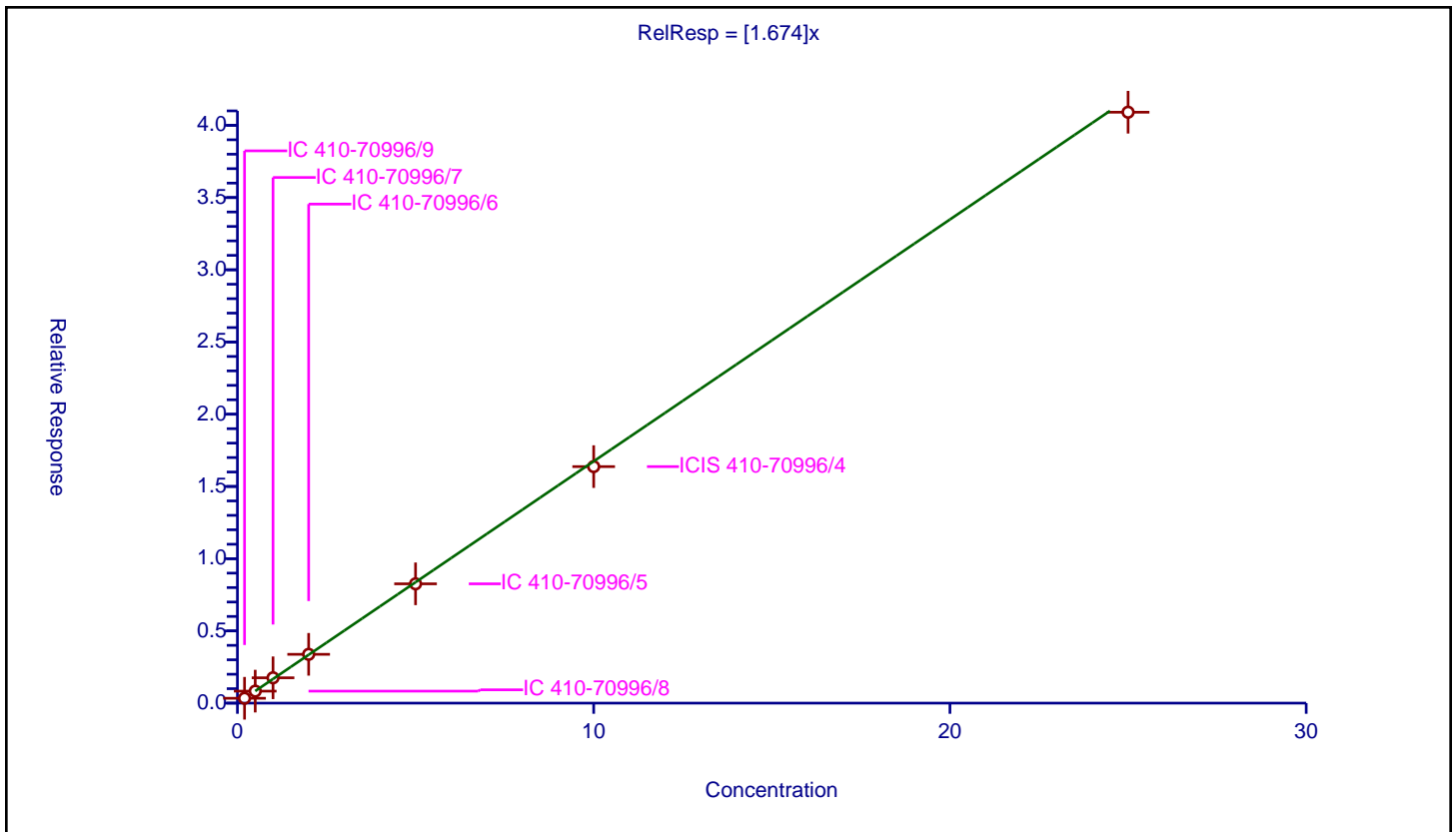
/ Isopropylbenzene

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**

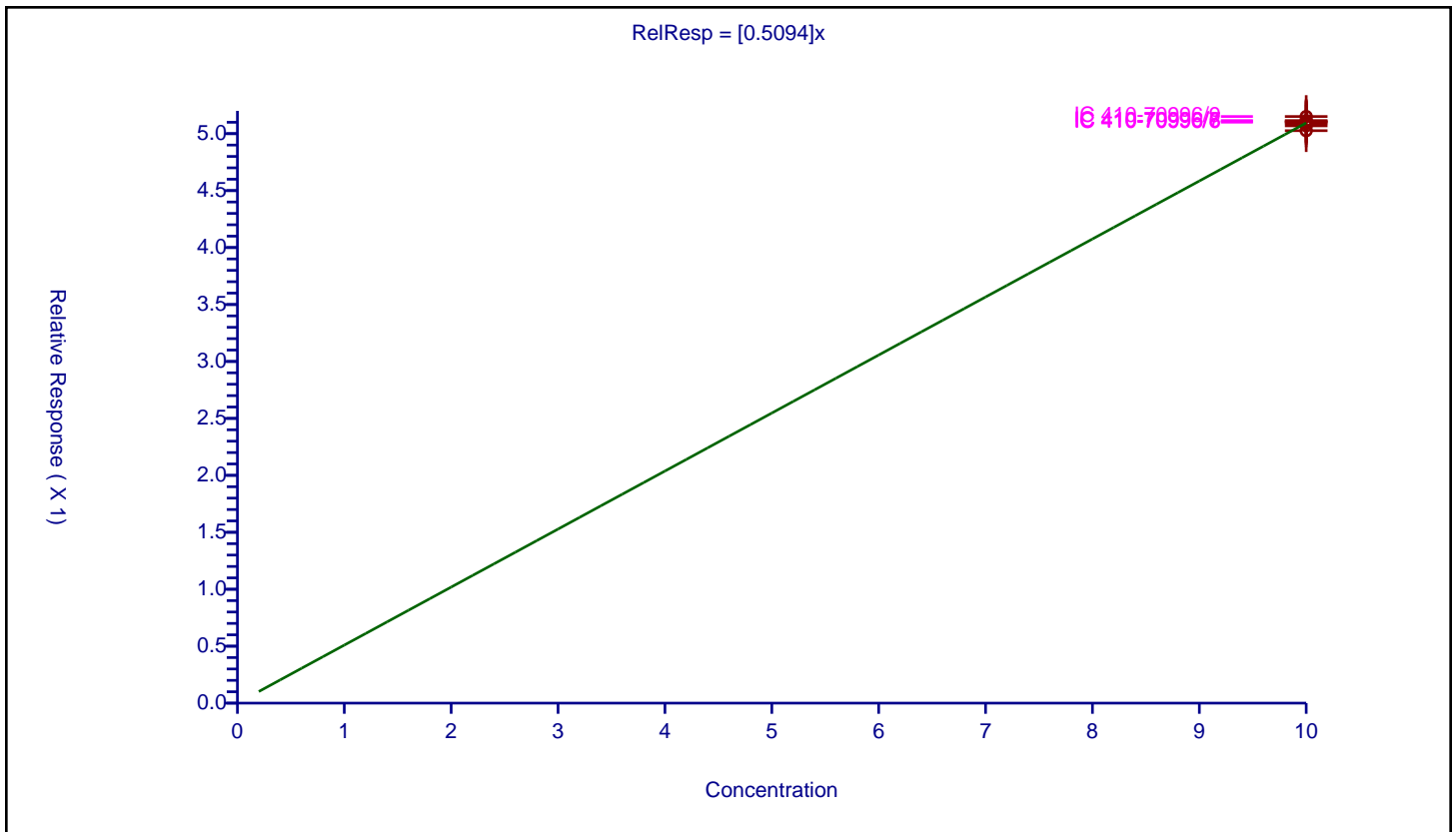
/ 4-Bromofluorobenzene (Surr)

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

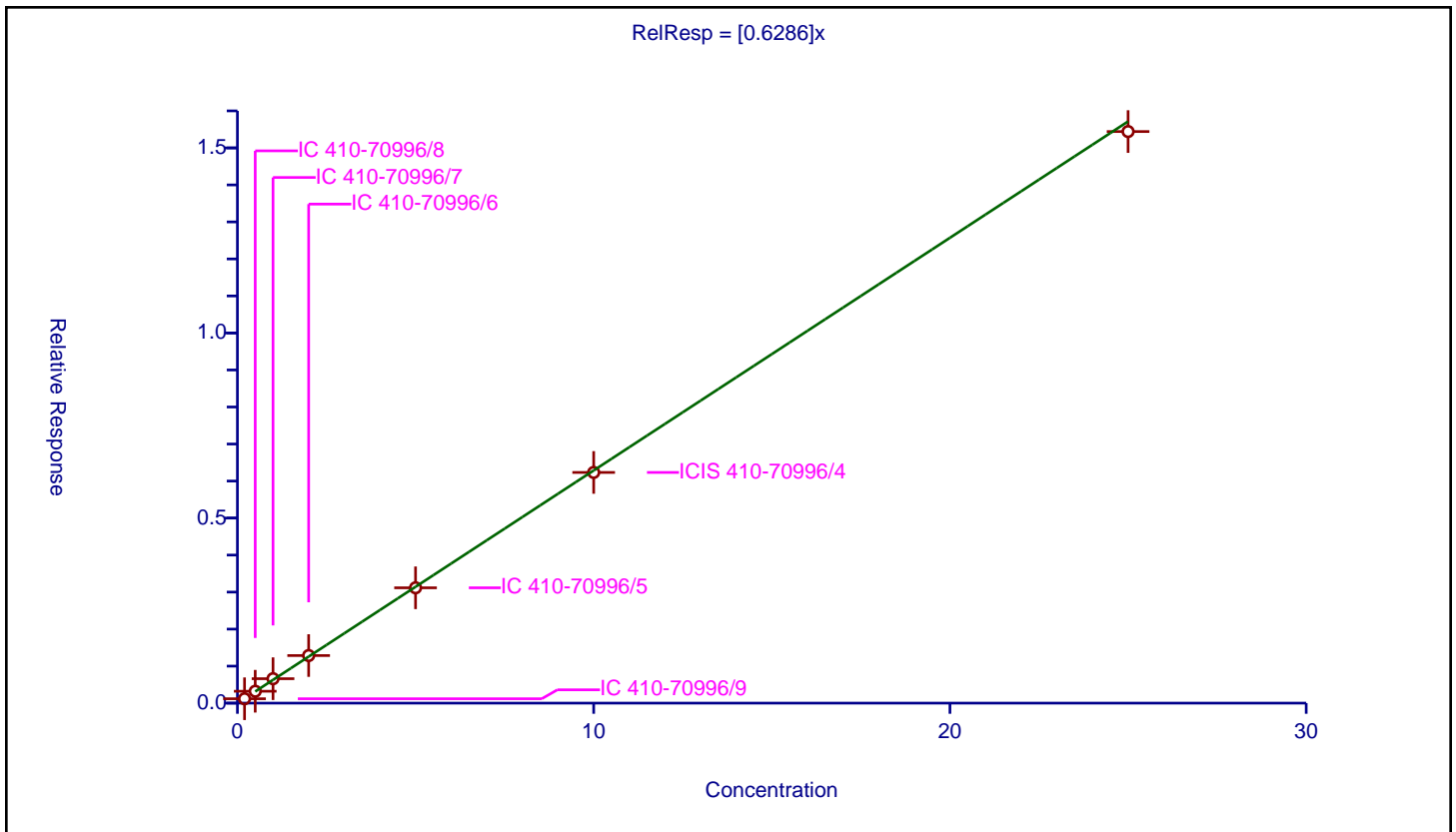
/ 1,1,2,2-Tetrachloroethane

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**

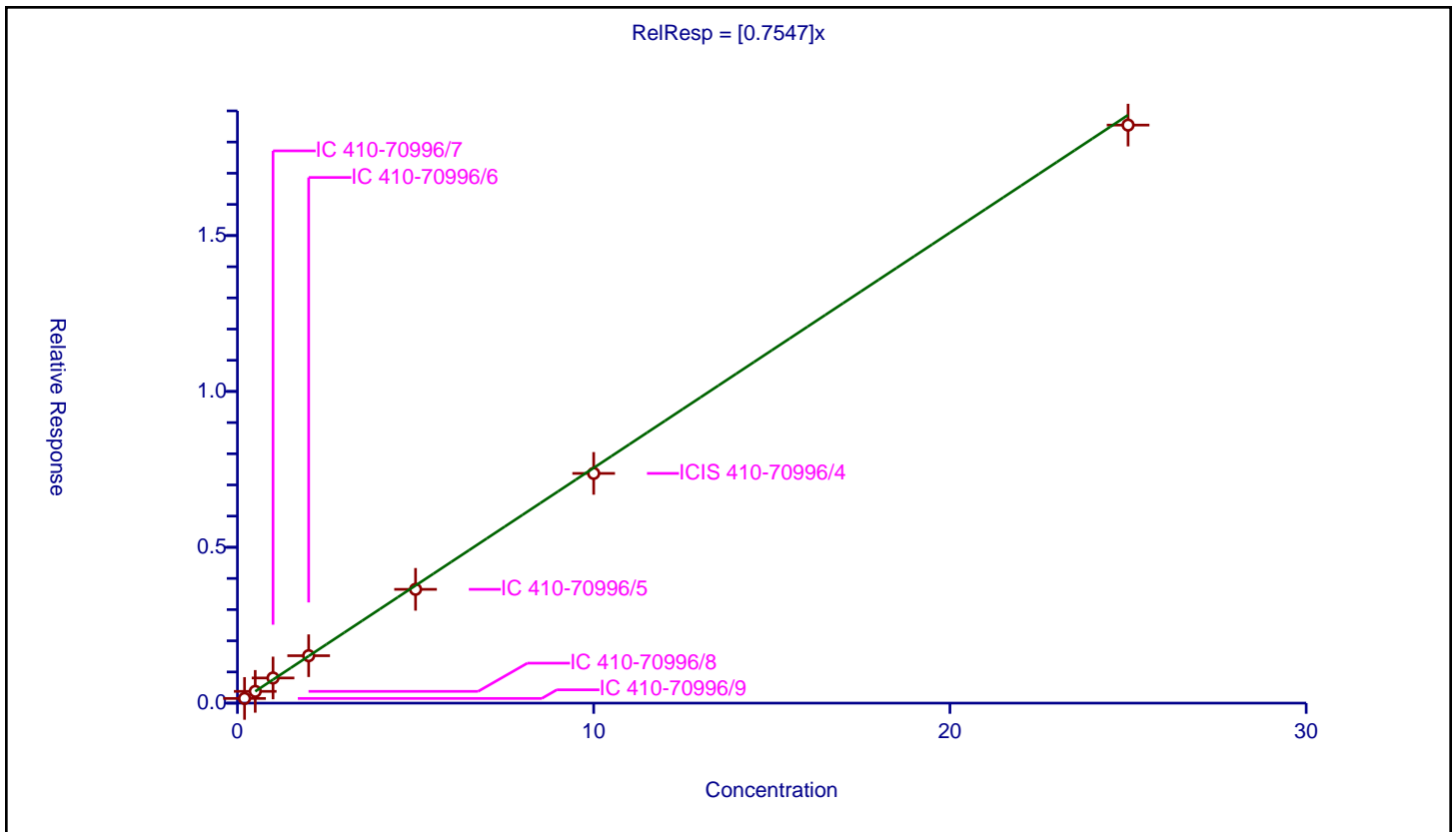
/ Bromobenzene

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

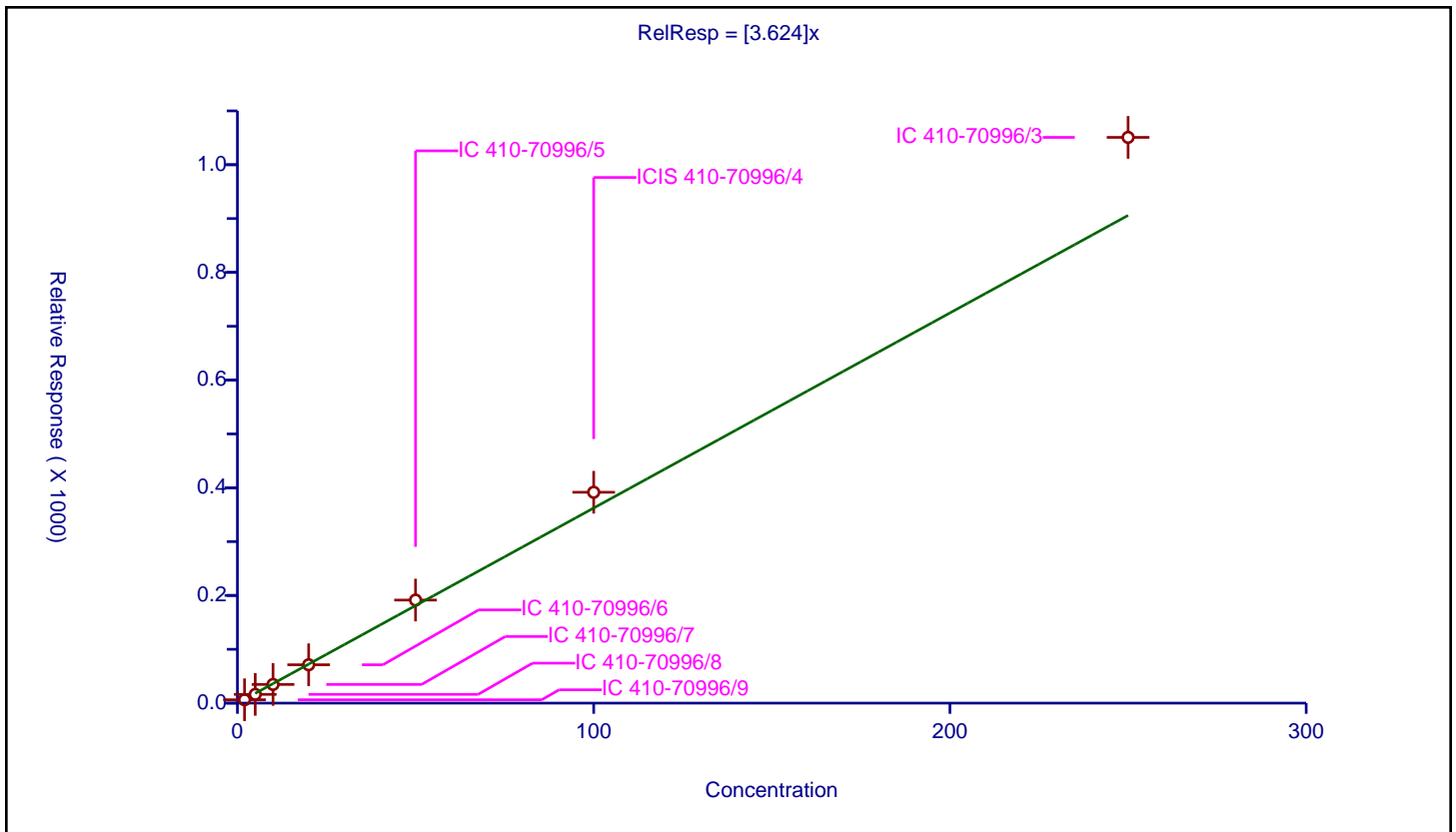
/ trans-1,4-Dichloro-2-butene

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

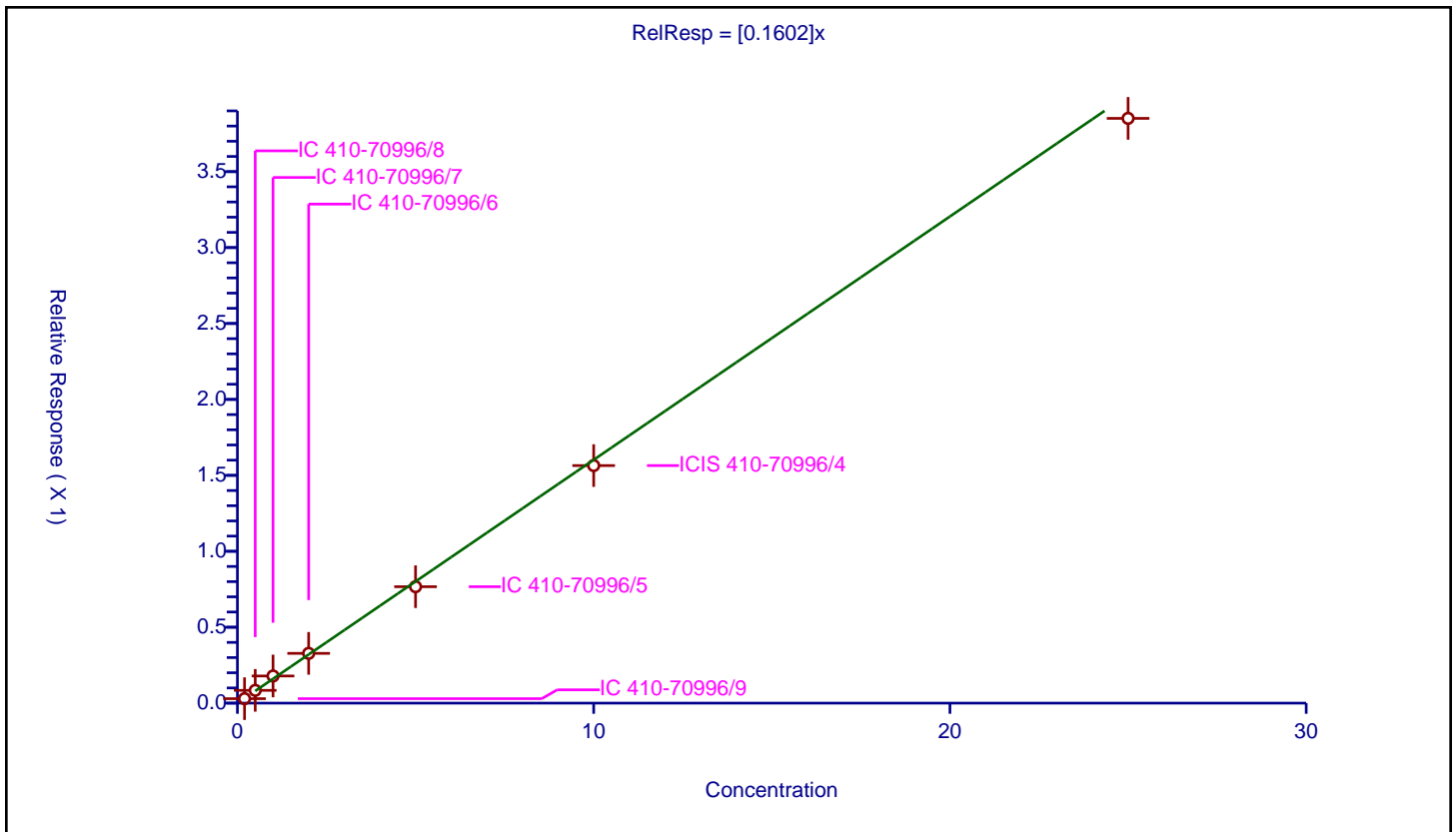
/ 1,2,3-Trichloropropane

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

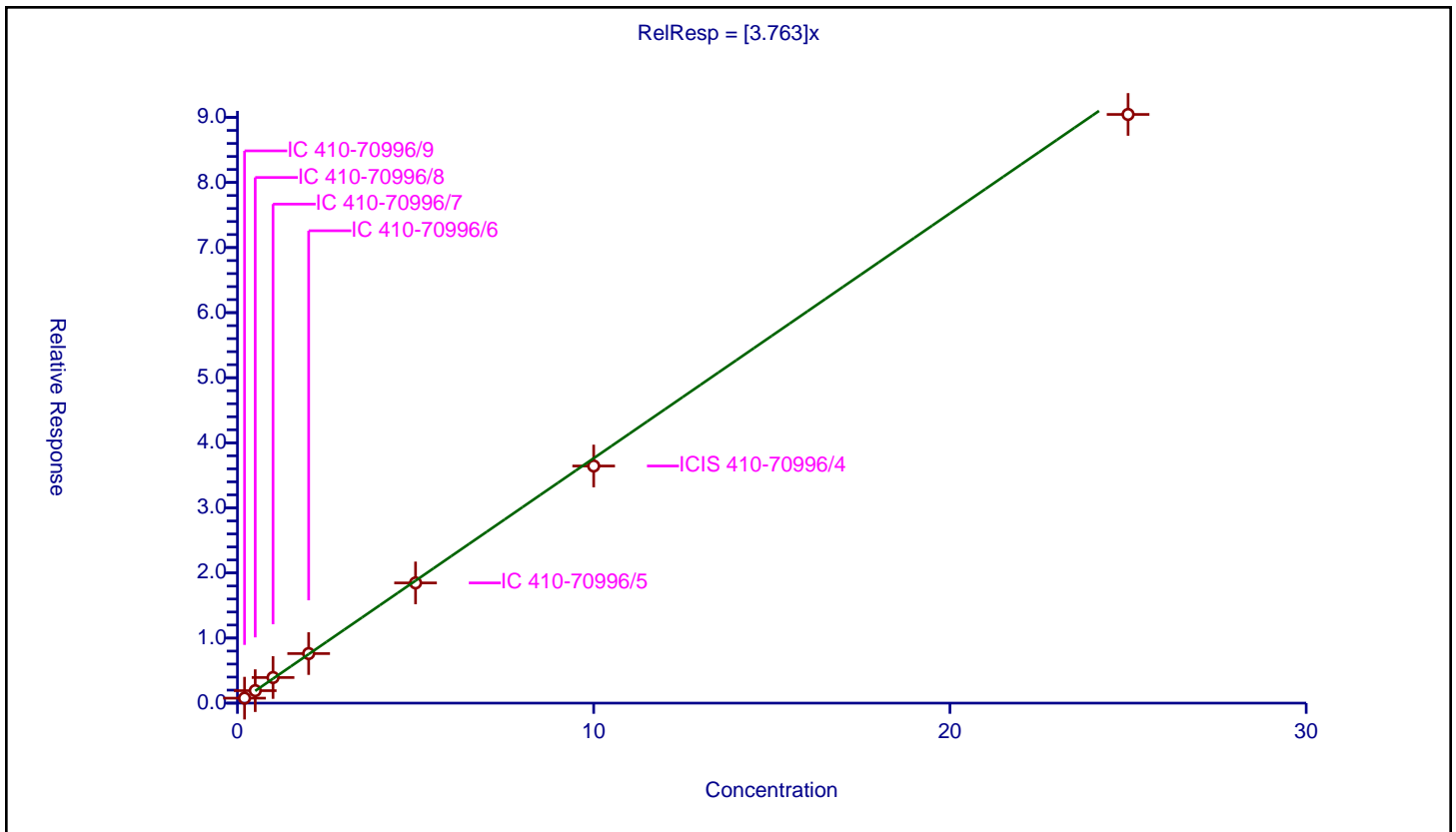
/ N-Propylbenzene

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

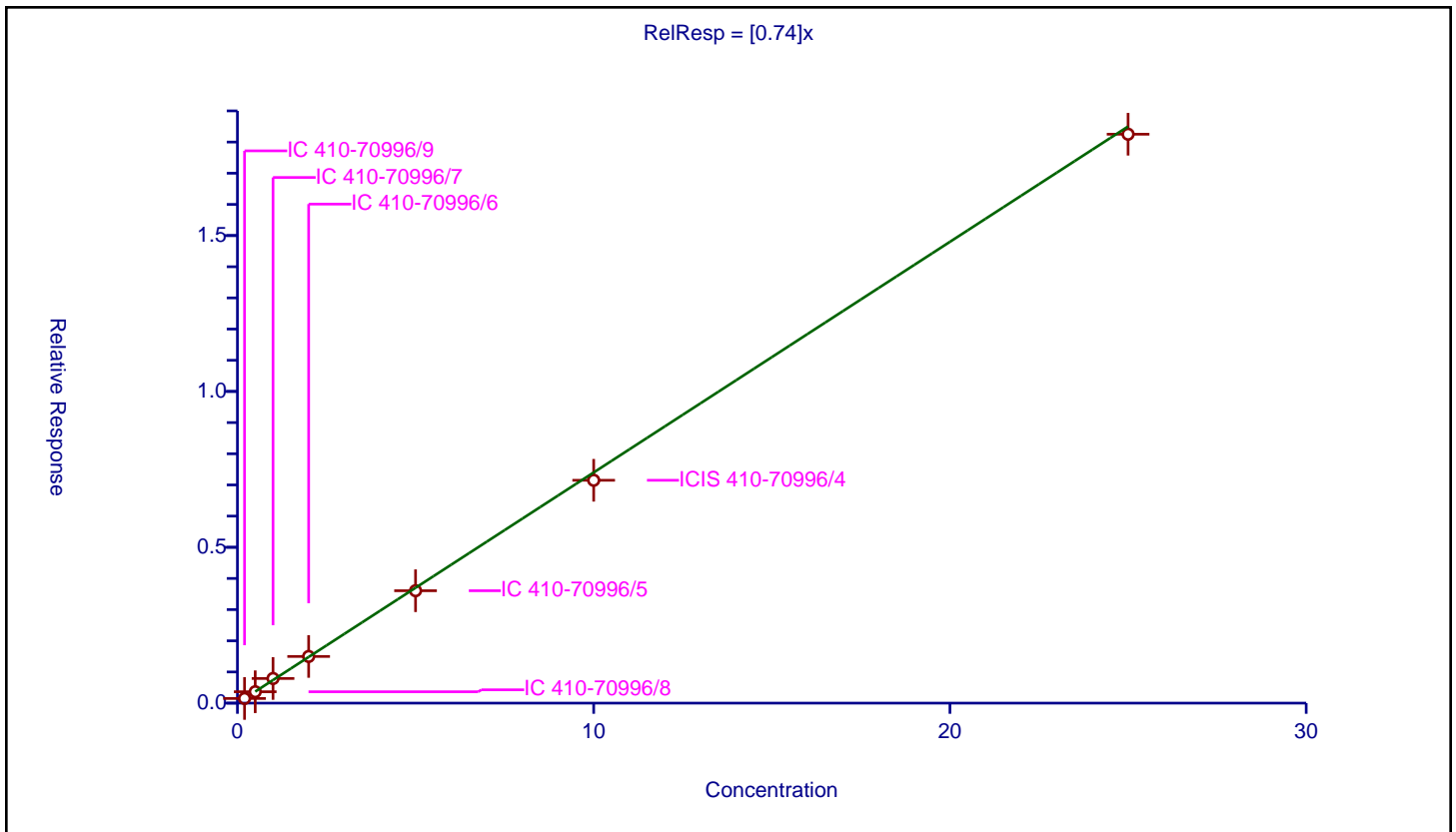
/ 2-Chlorotoluene

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

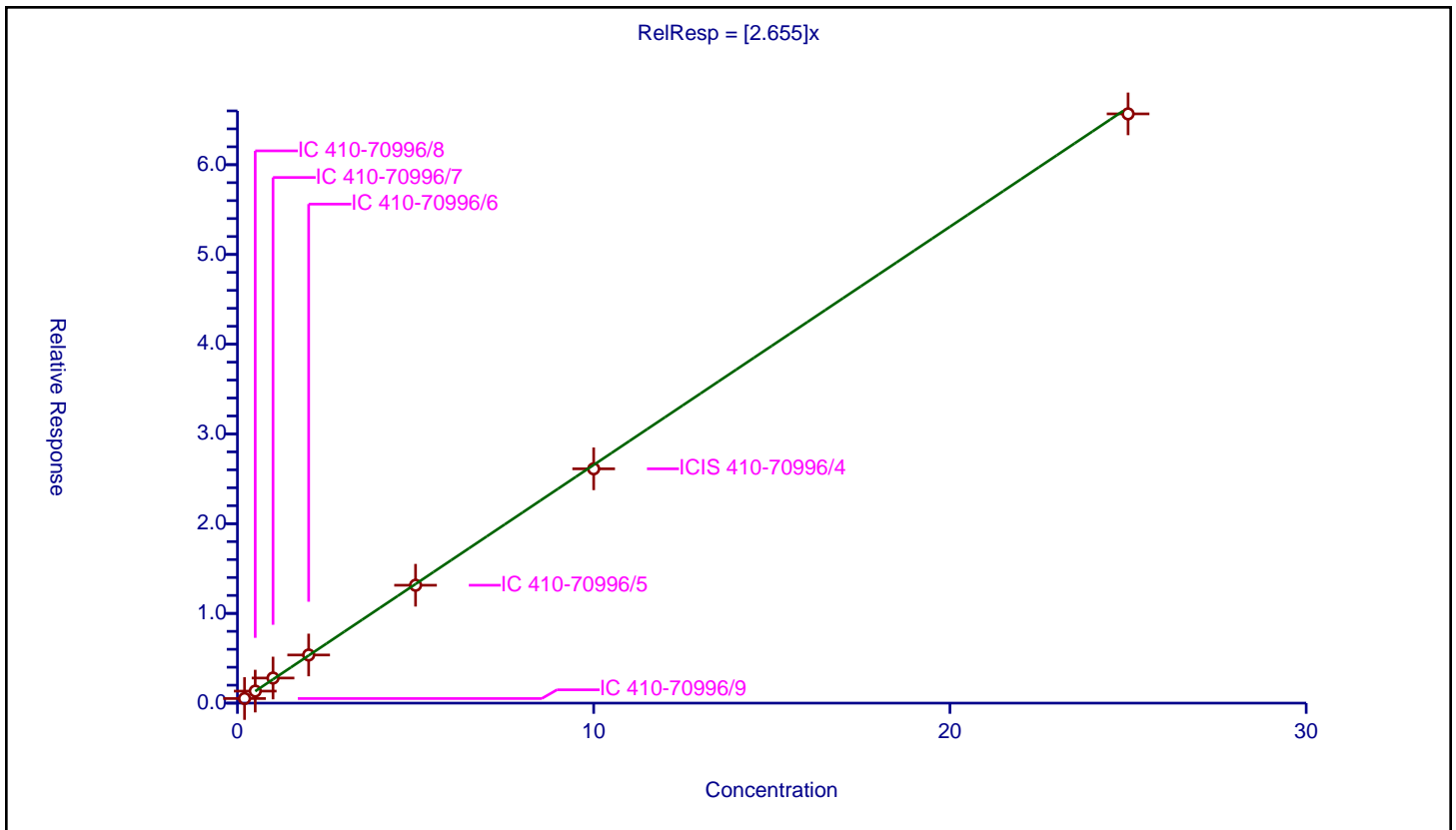
/ 1,3,5-Trimethylbenzene

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

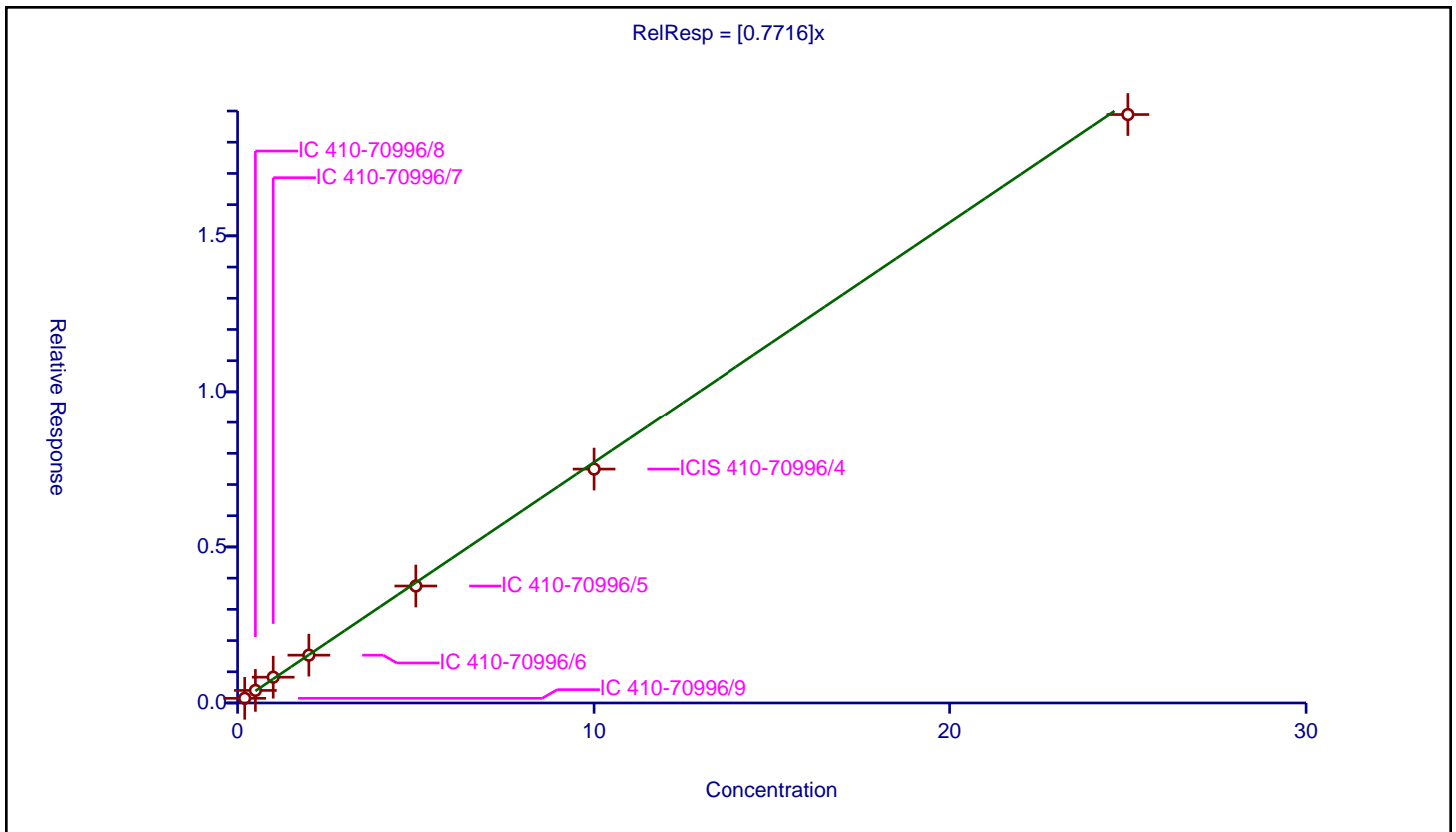
/ 4-Chlorotoluene

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

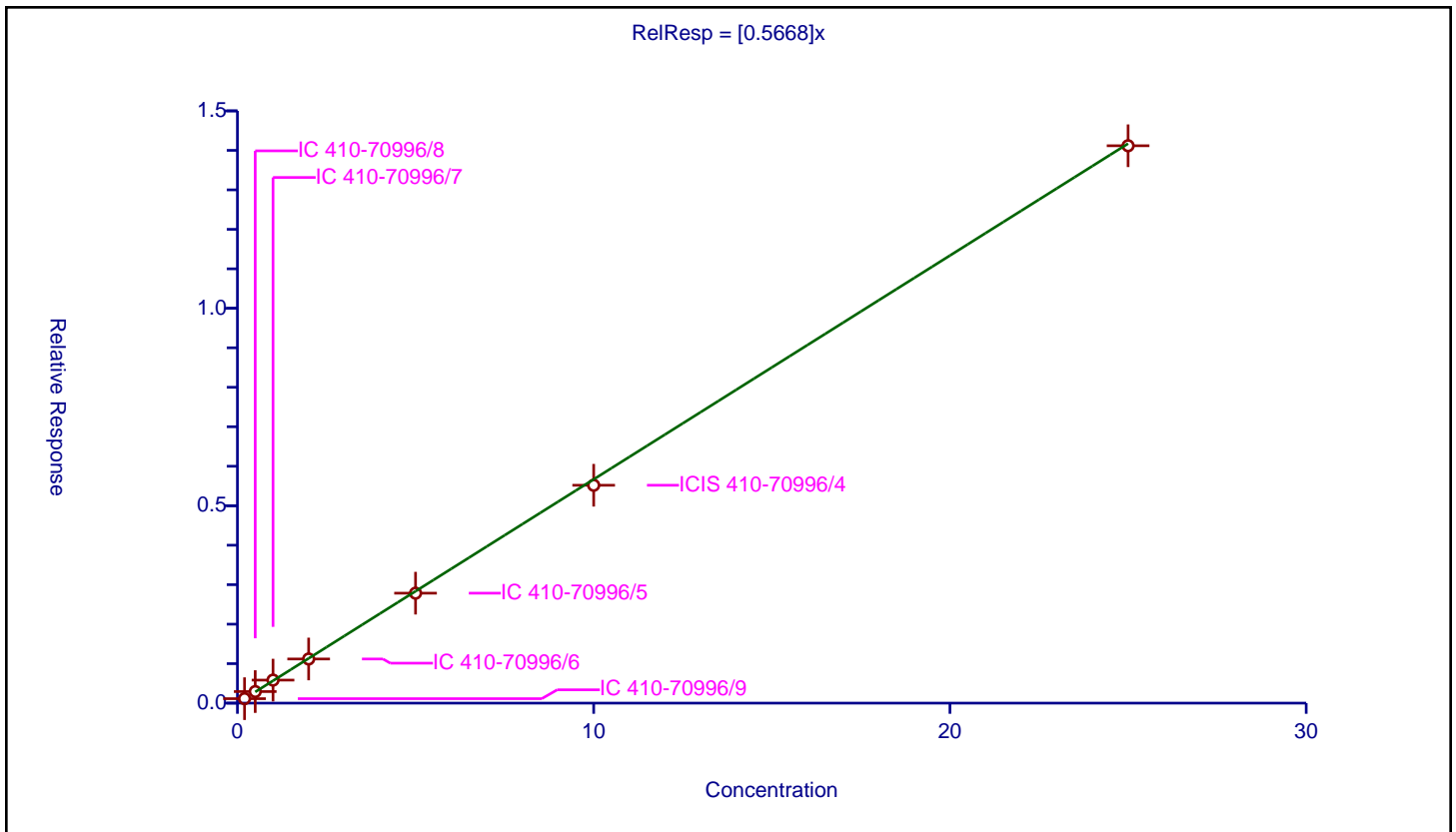
/ tert-Butylbenzene

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

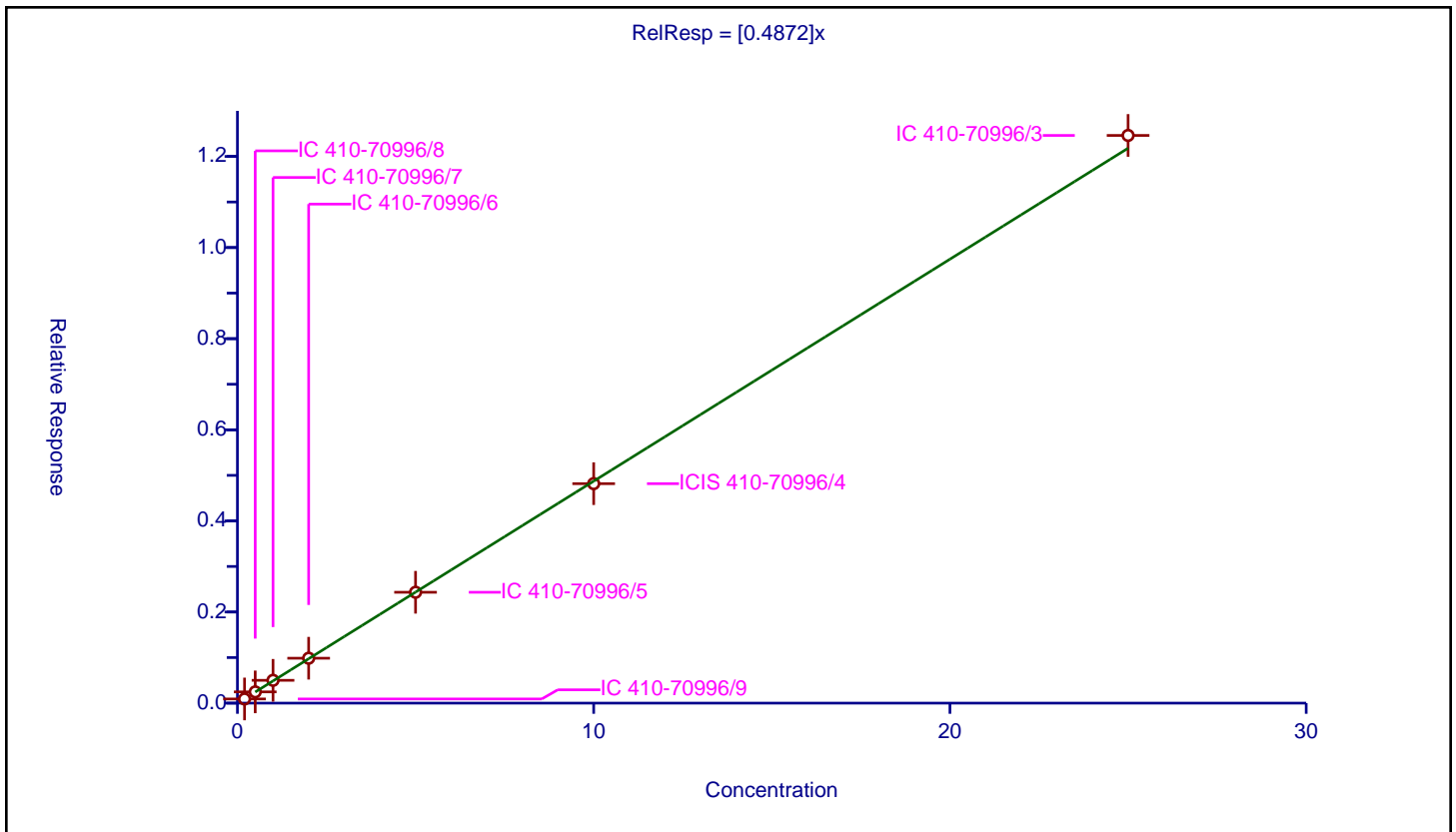
/ Pentachloroethane

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

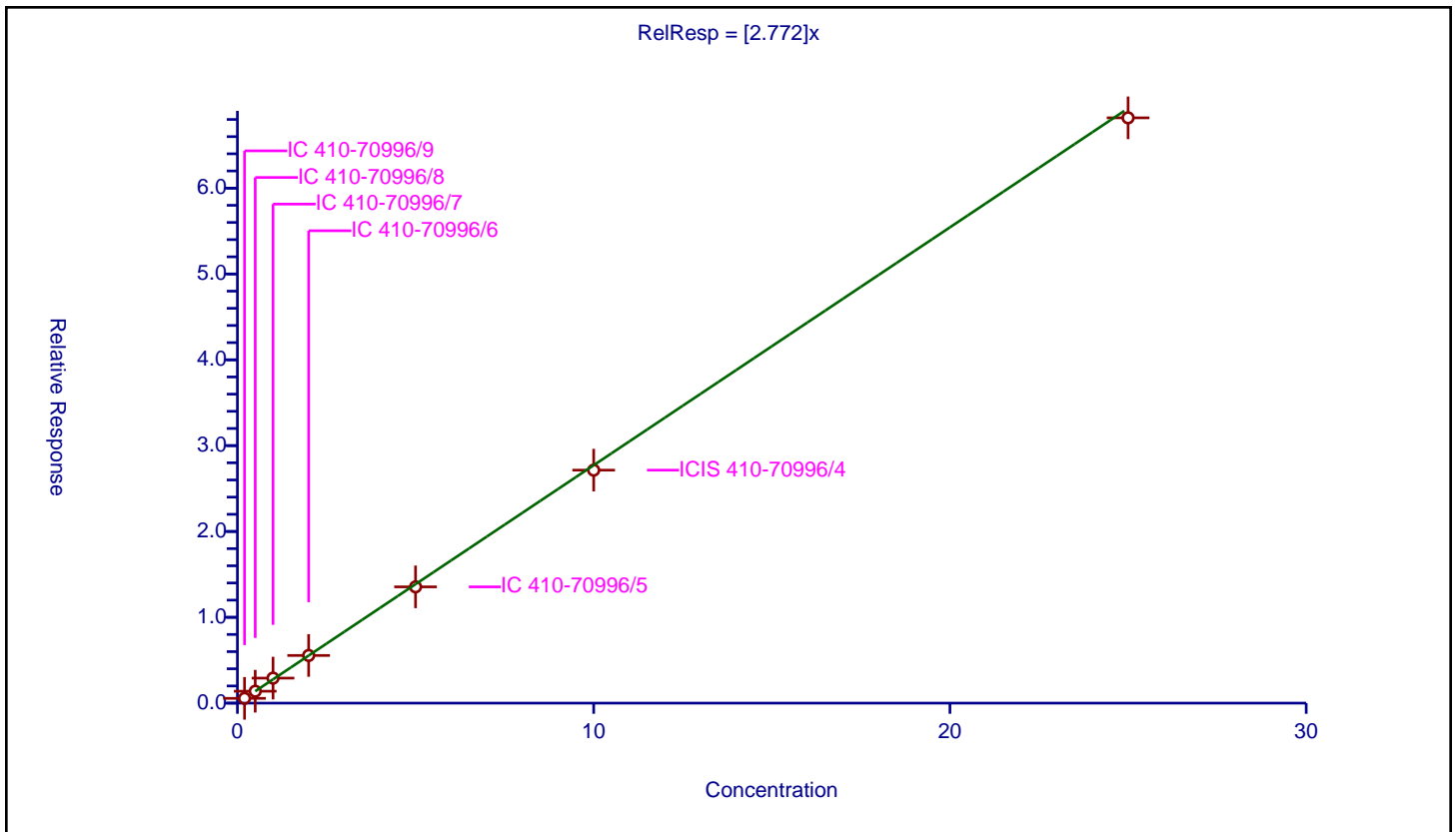
/ 1,2,4-Trimethylbenzene

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

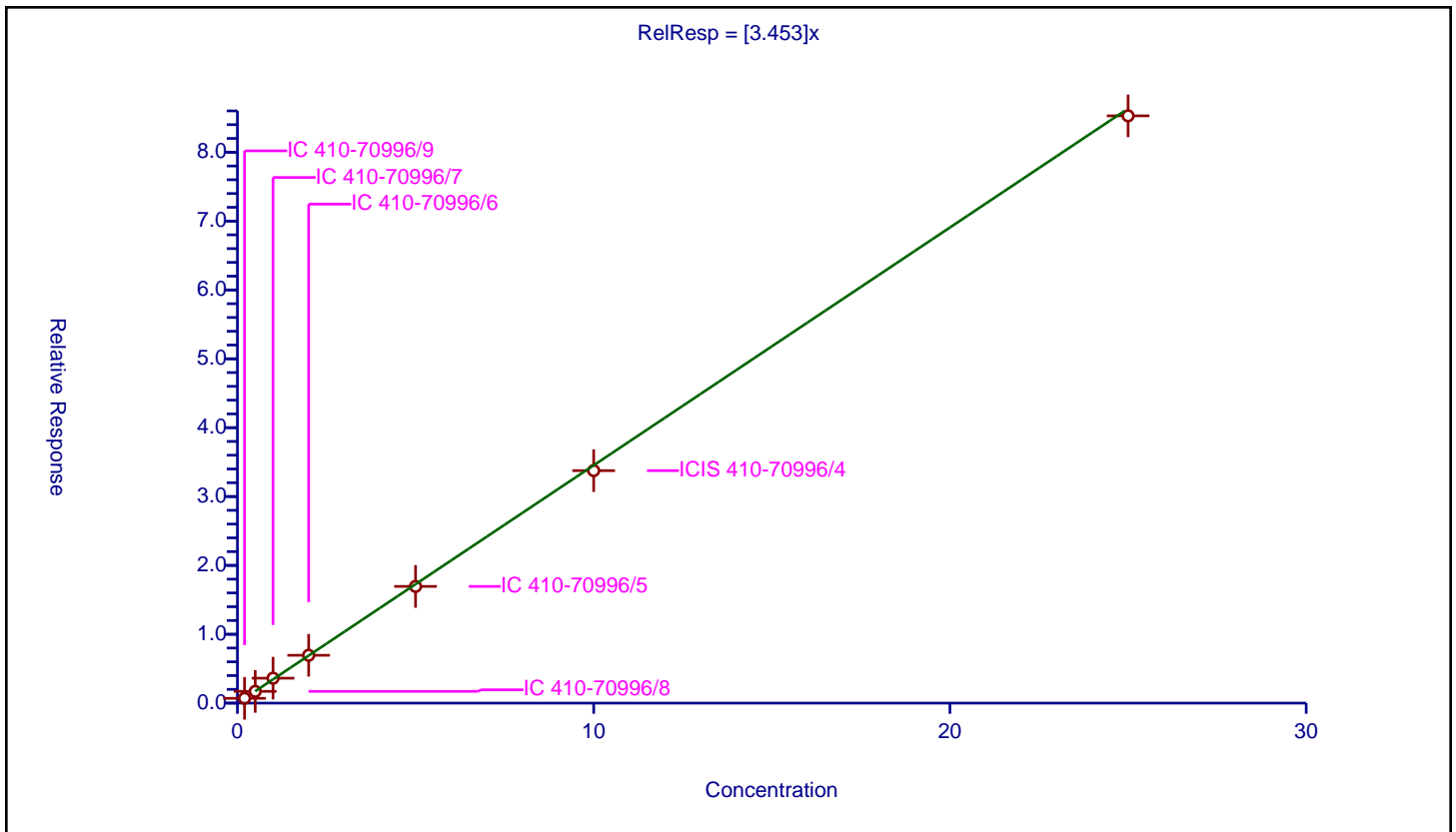
/ sec-Butylbenzene

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

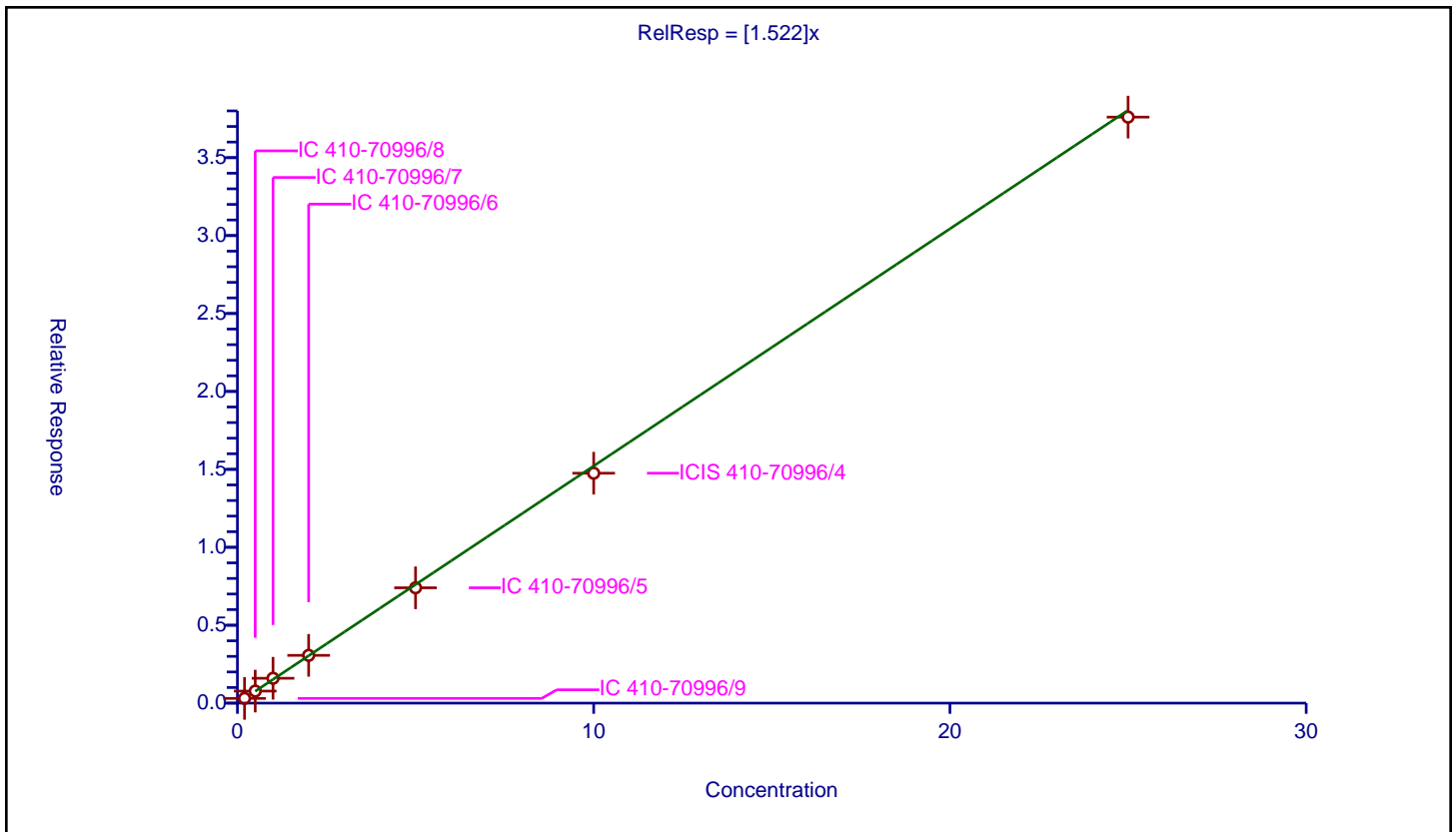
/ 1,3-Dichlorobenzene

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**

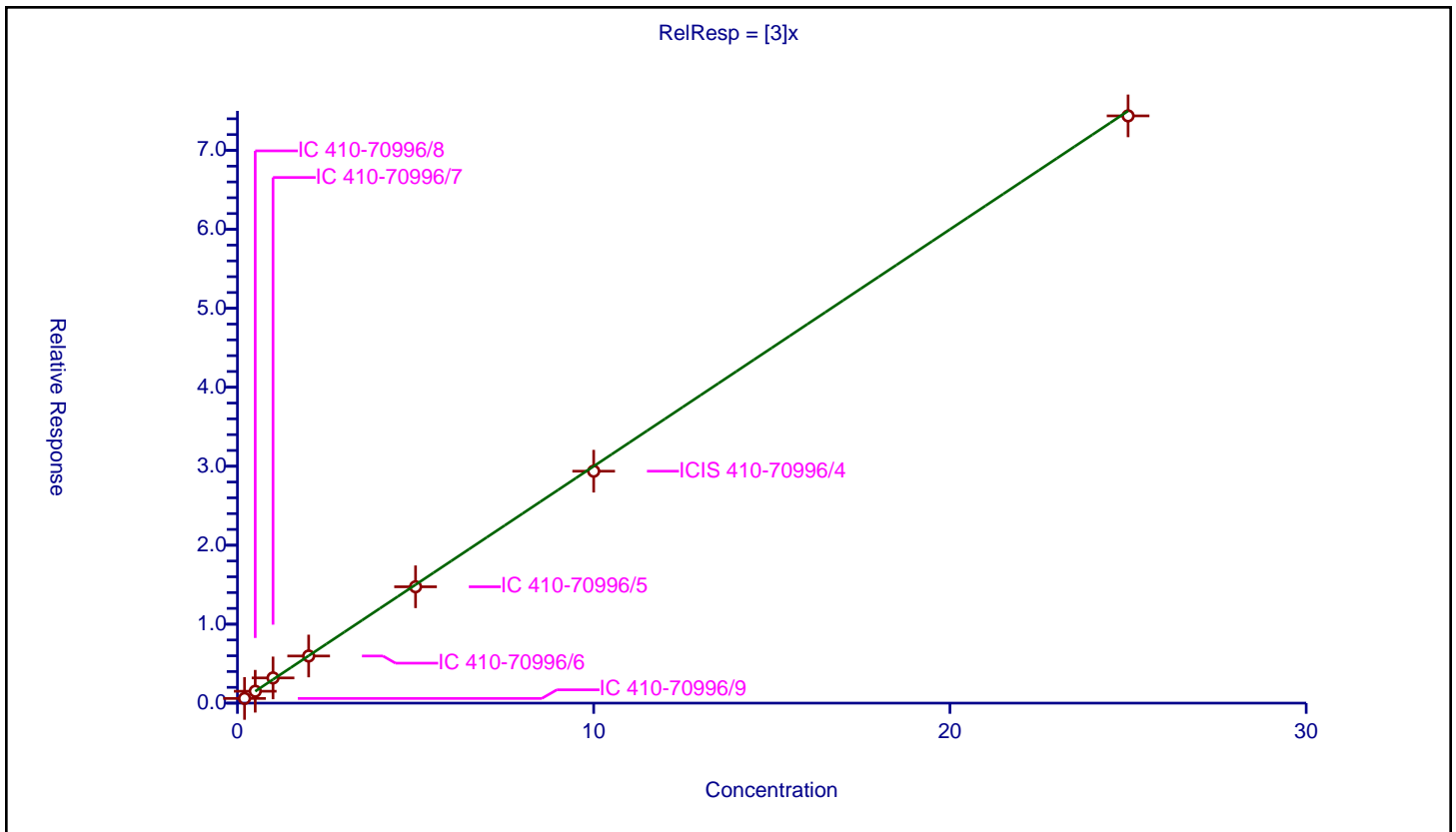
**/ 4-Isopropyltoluene**

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**

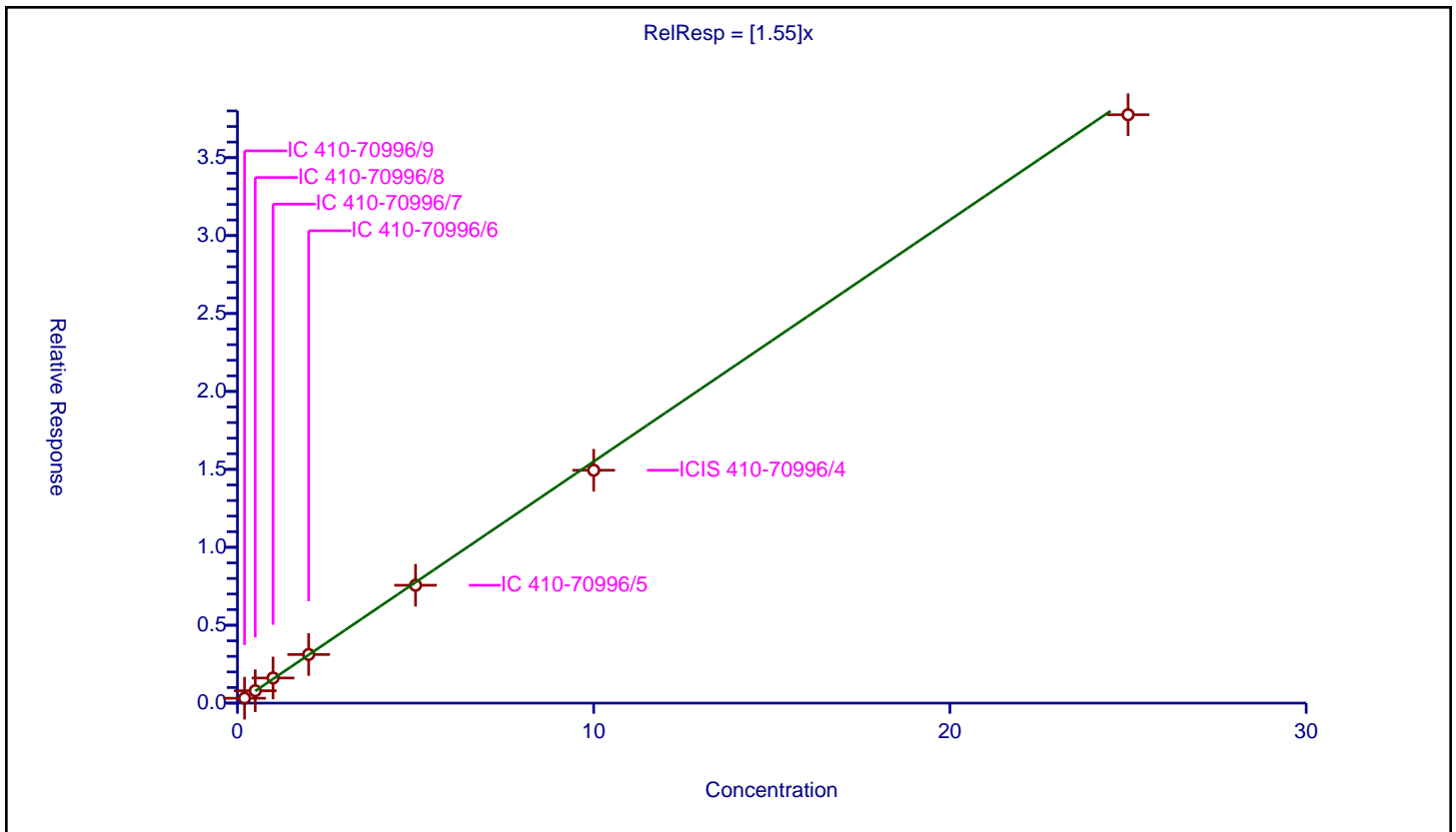
**/ 1,4-Dichlorobenzene**

**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

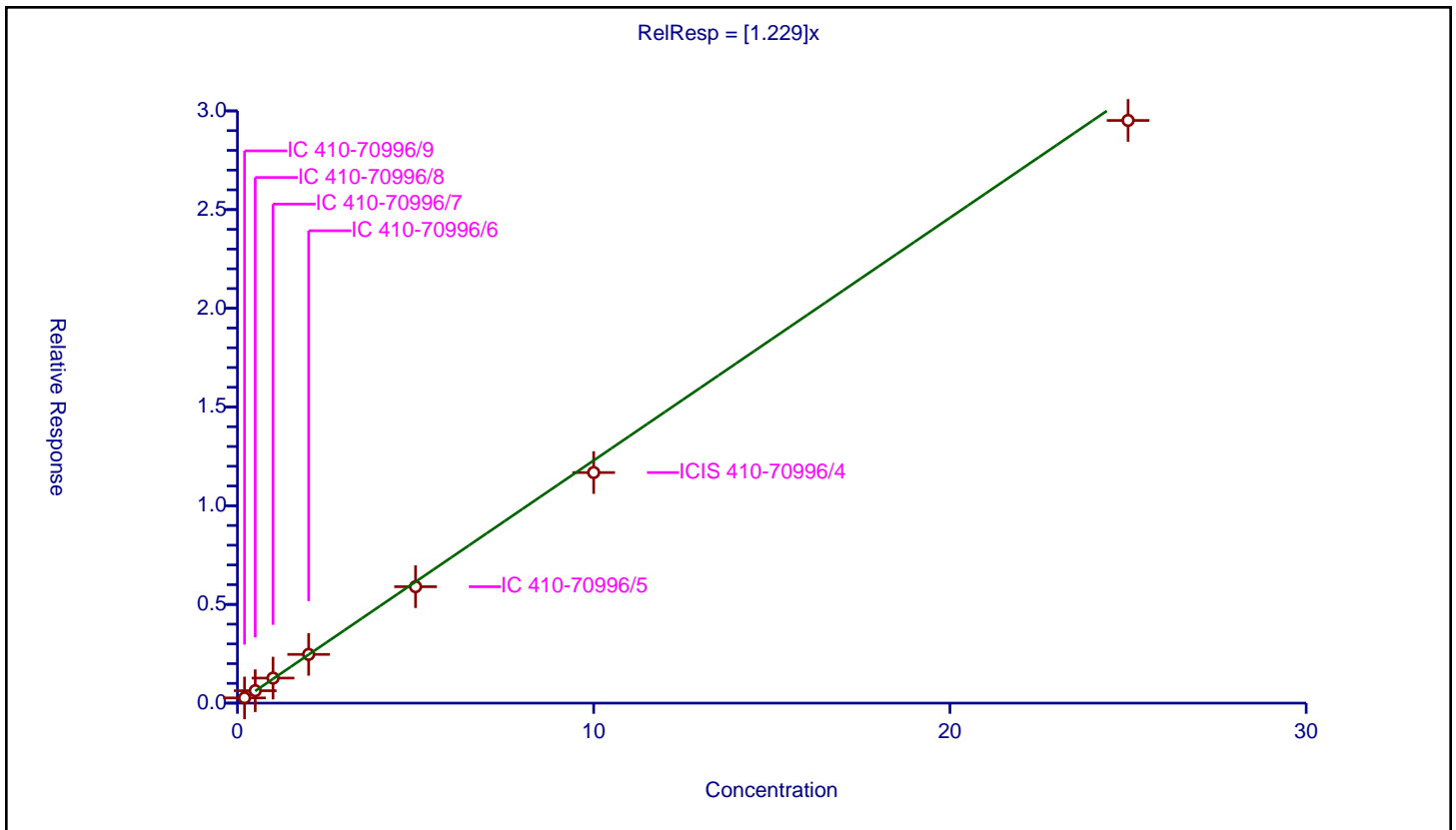
/ 1,2,3-Trimethylbenzene

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**

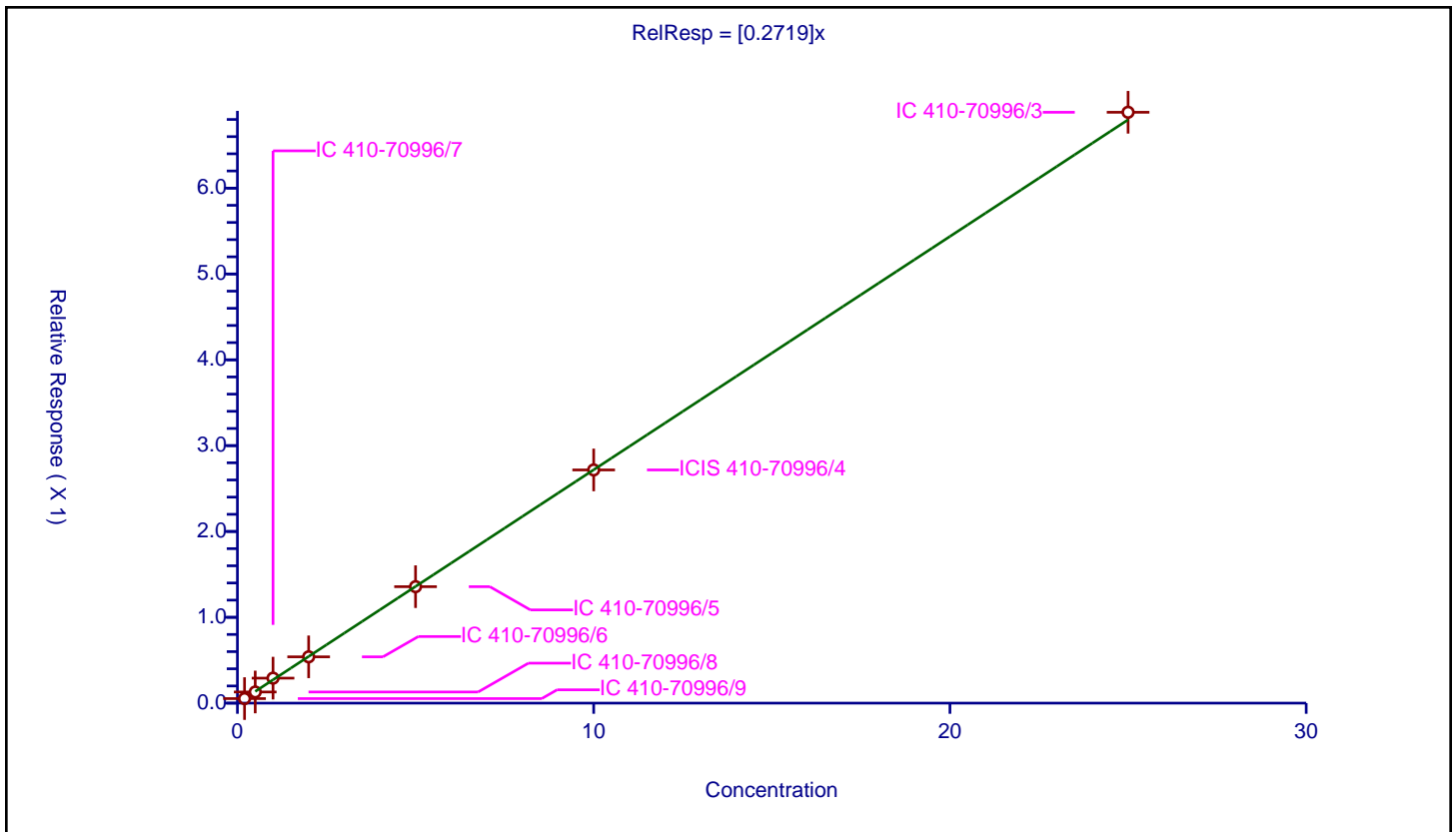
/ Benzyl chloride

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

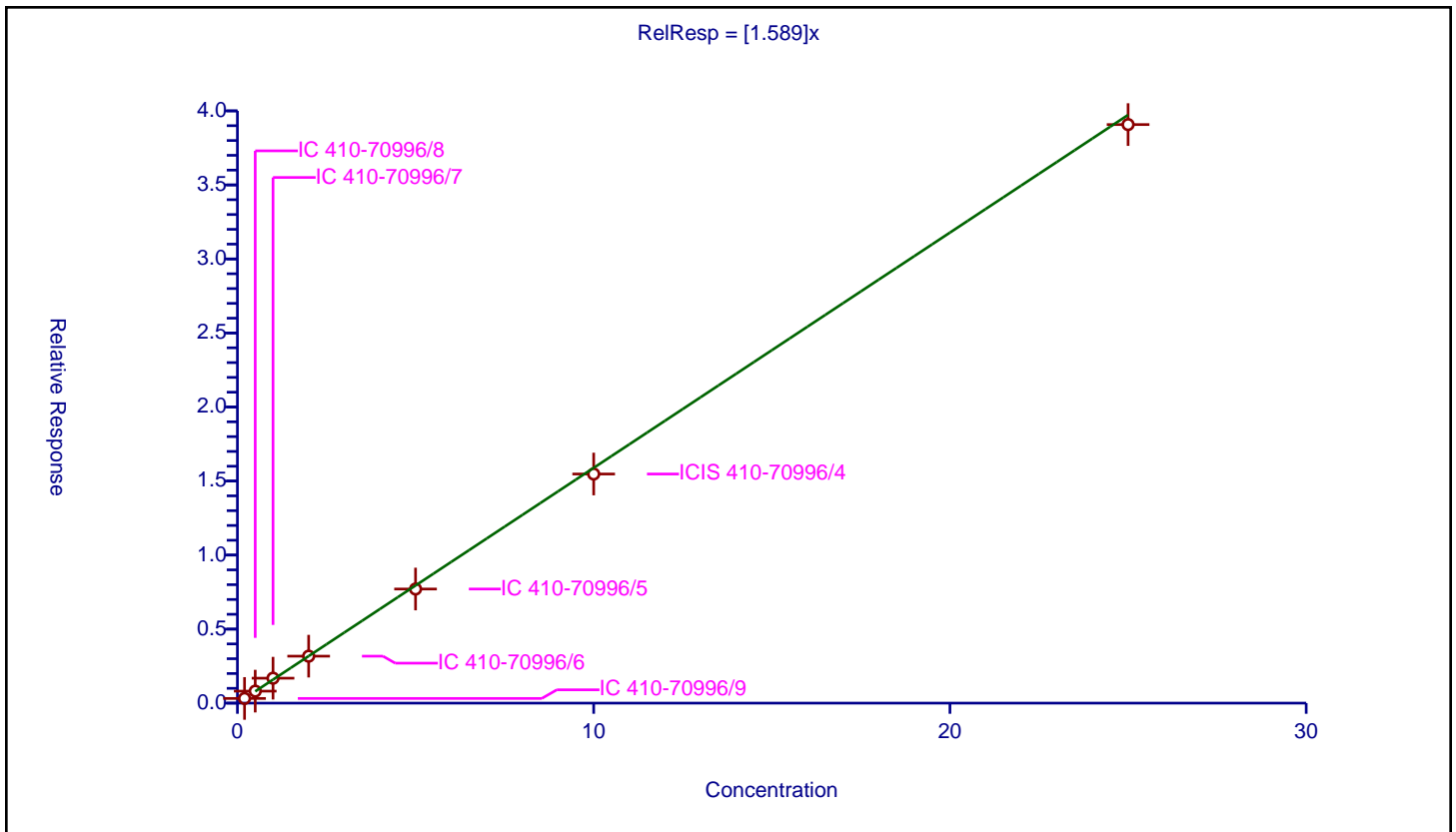
/ n-Butylbenzene

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

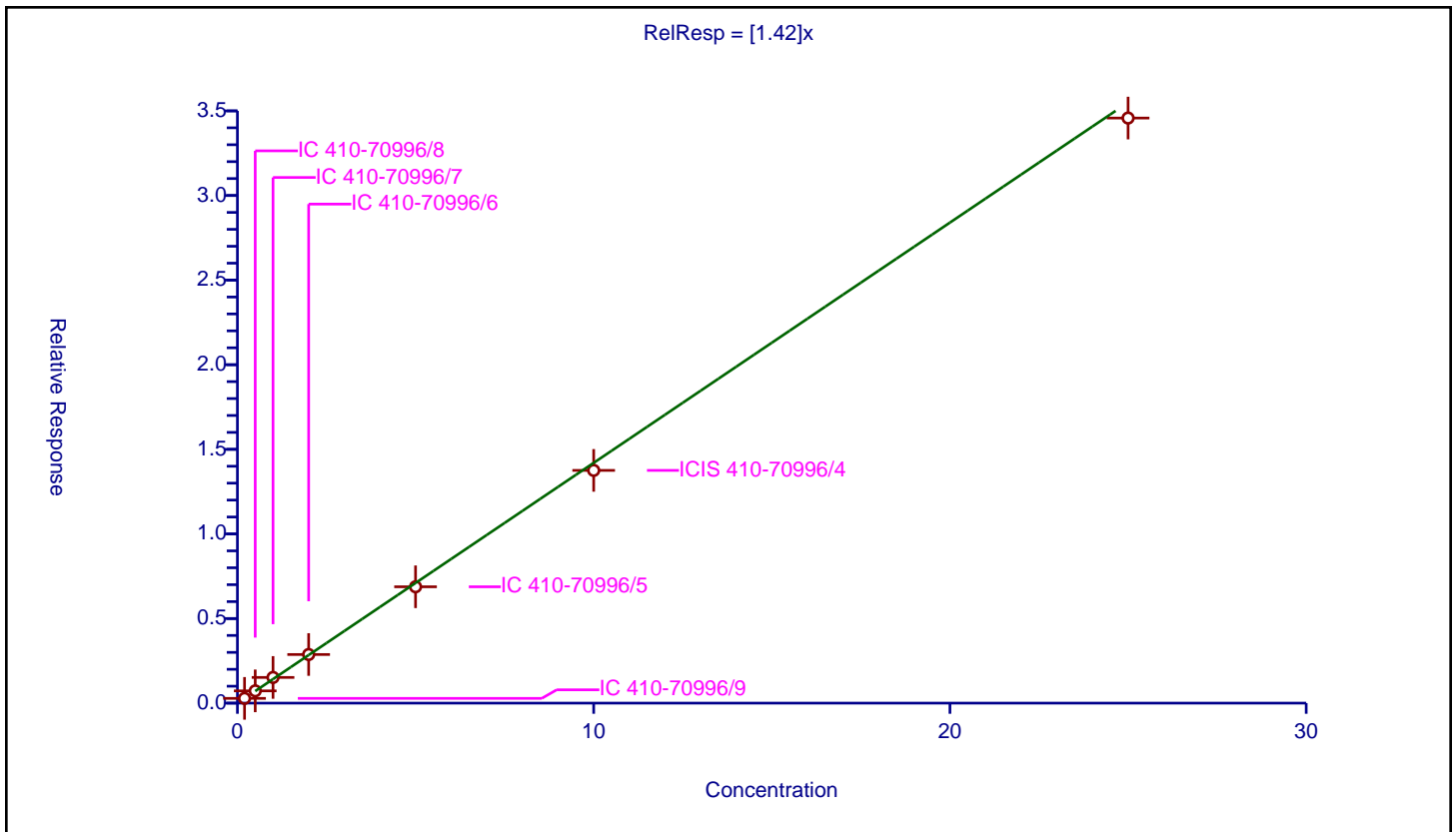
/ 1,2-Dichlorobenzene

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

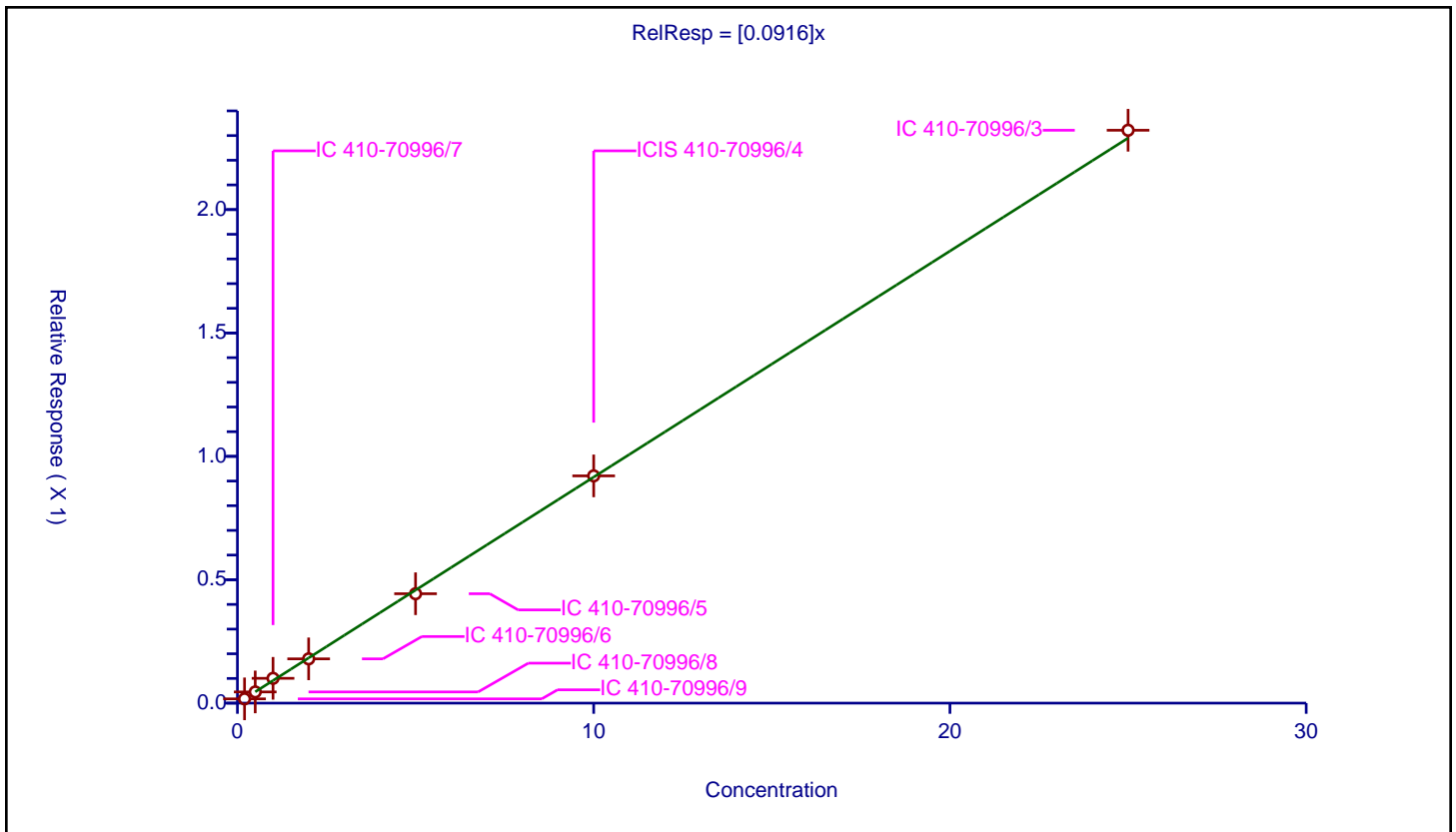
/ 1,2-Dibromo-3-Chloropropane

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

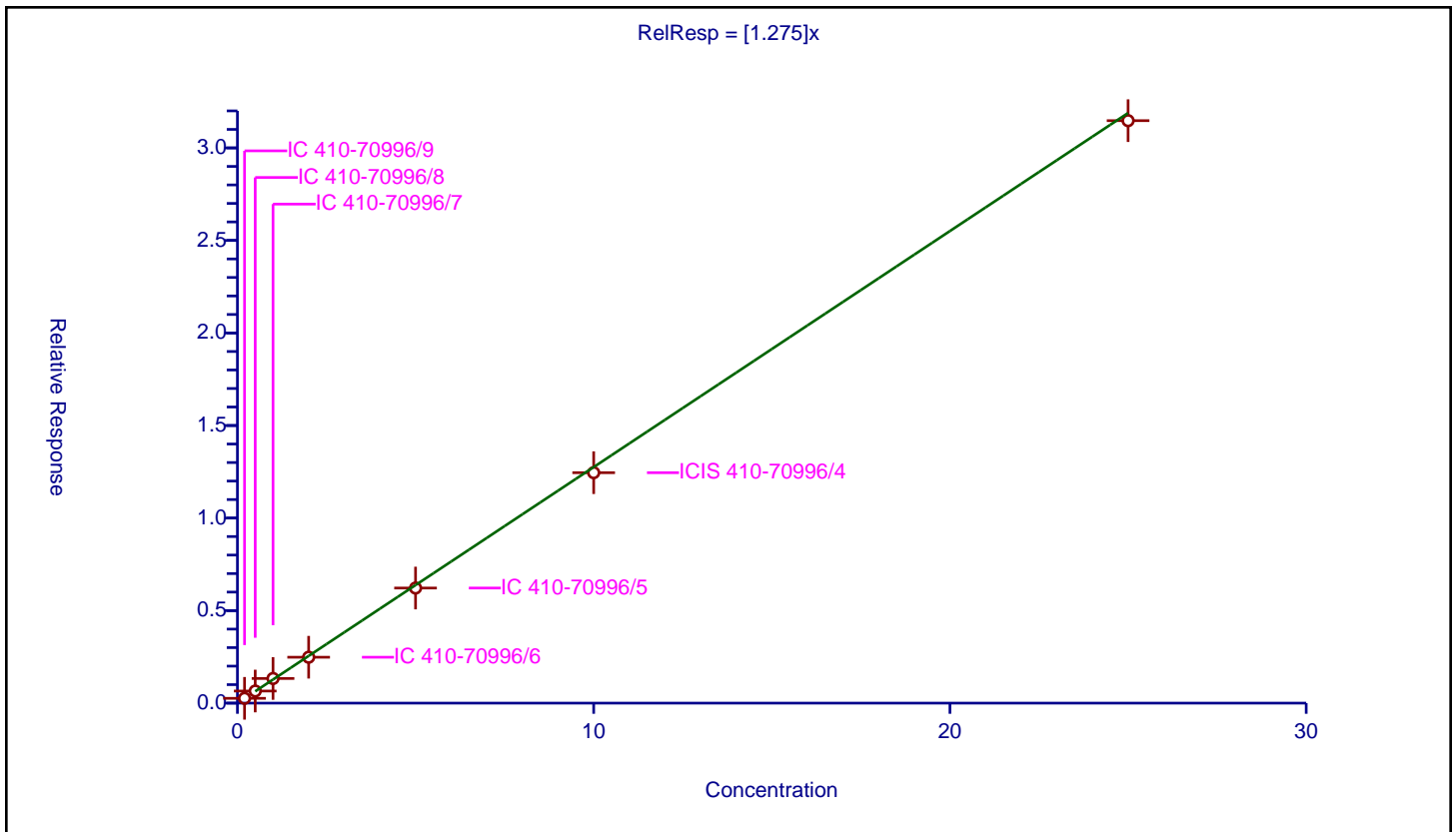
/ 1,3,5-Trichlorobenzene

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

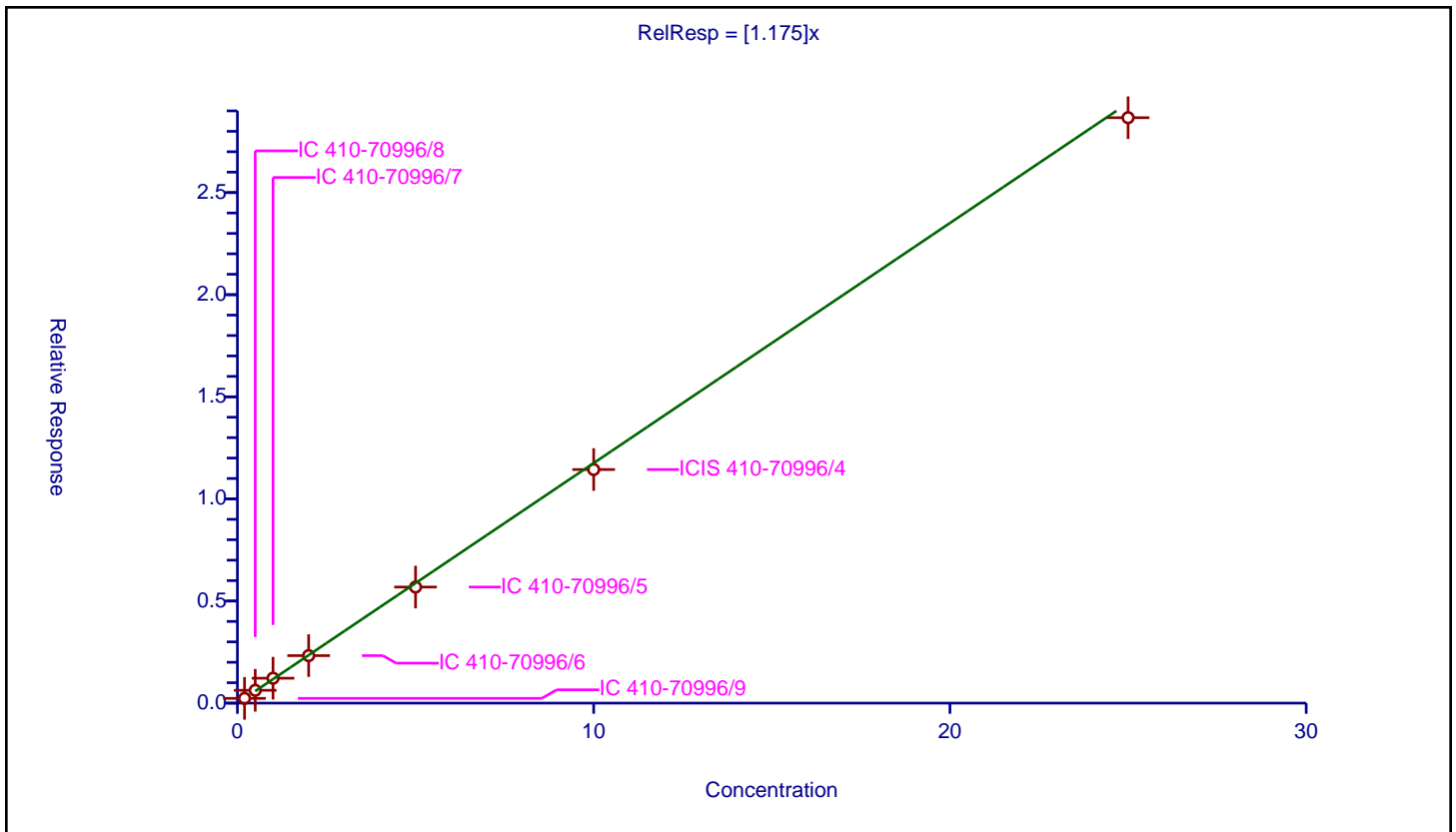
/ 1,2,4-Trichlorobenzene

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**

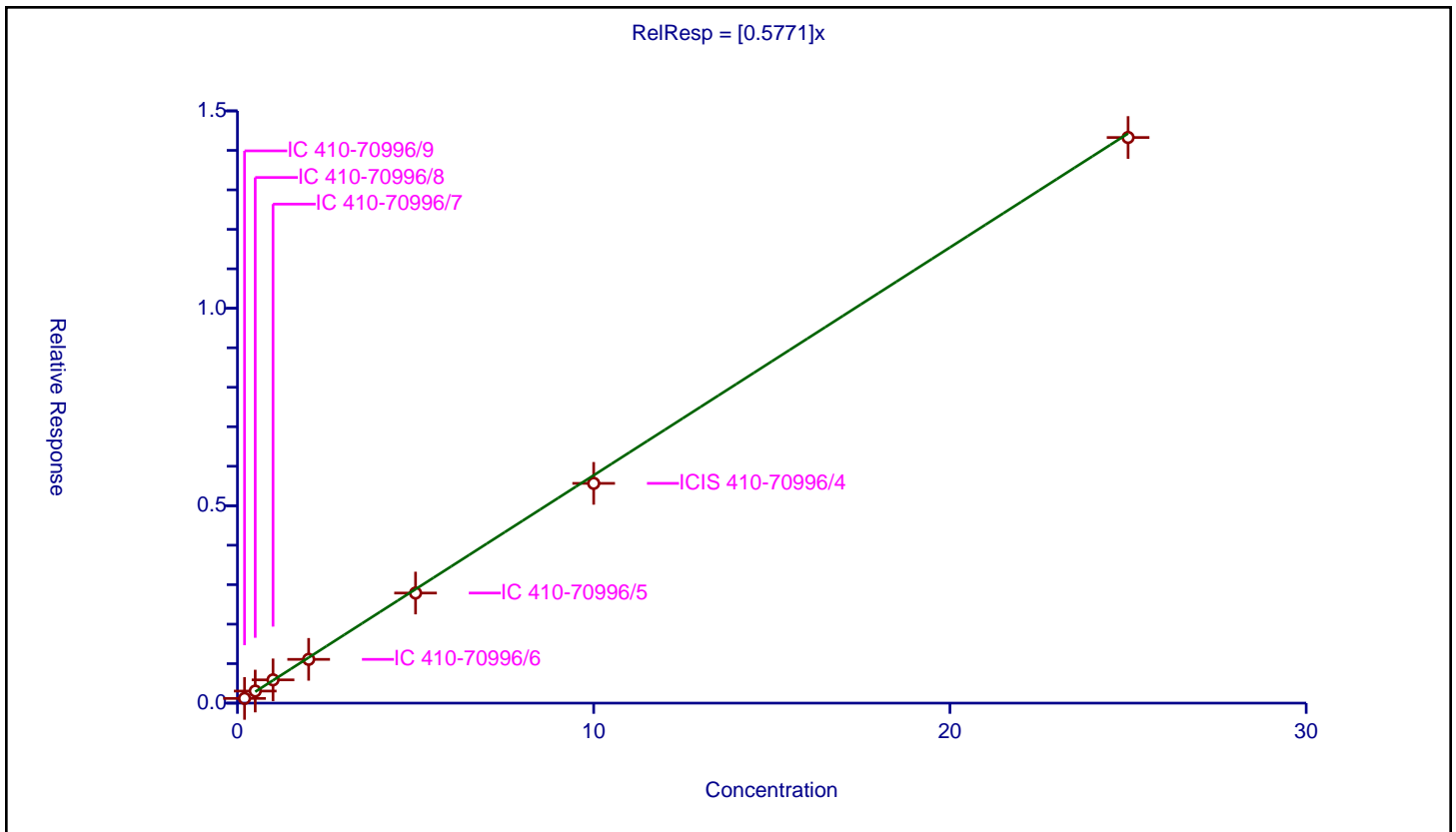
/ Hexachlorobutadiene

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

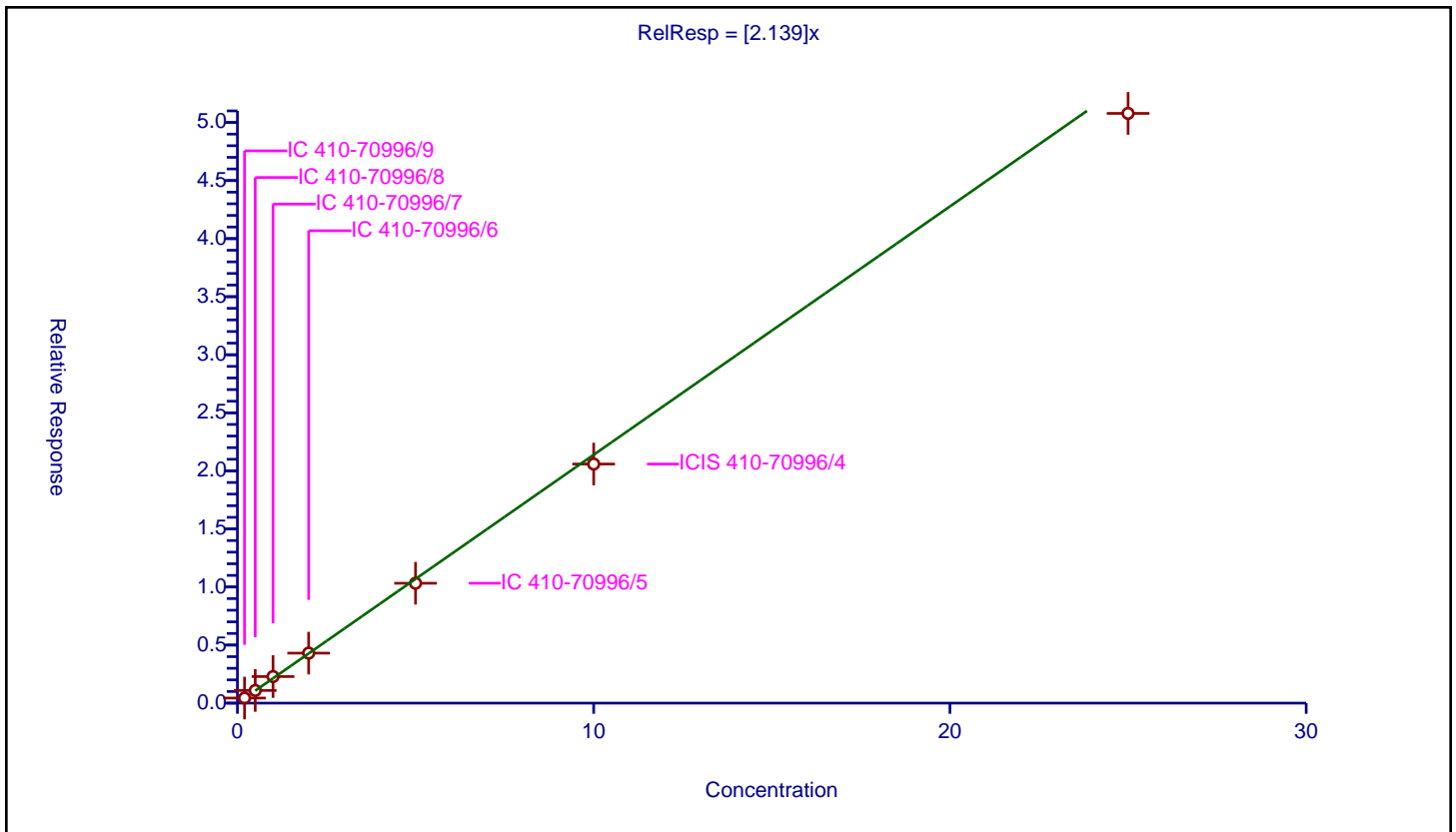
/ Naphthalene

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

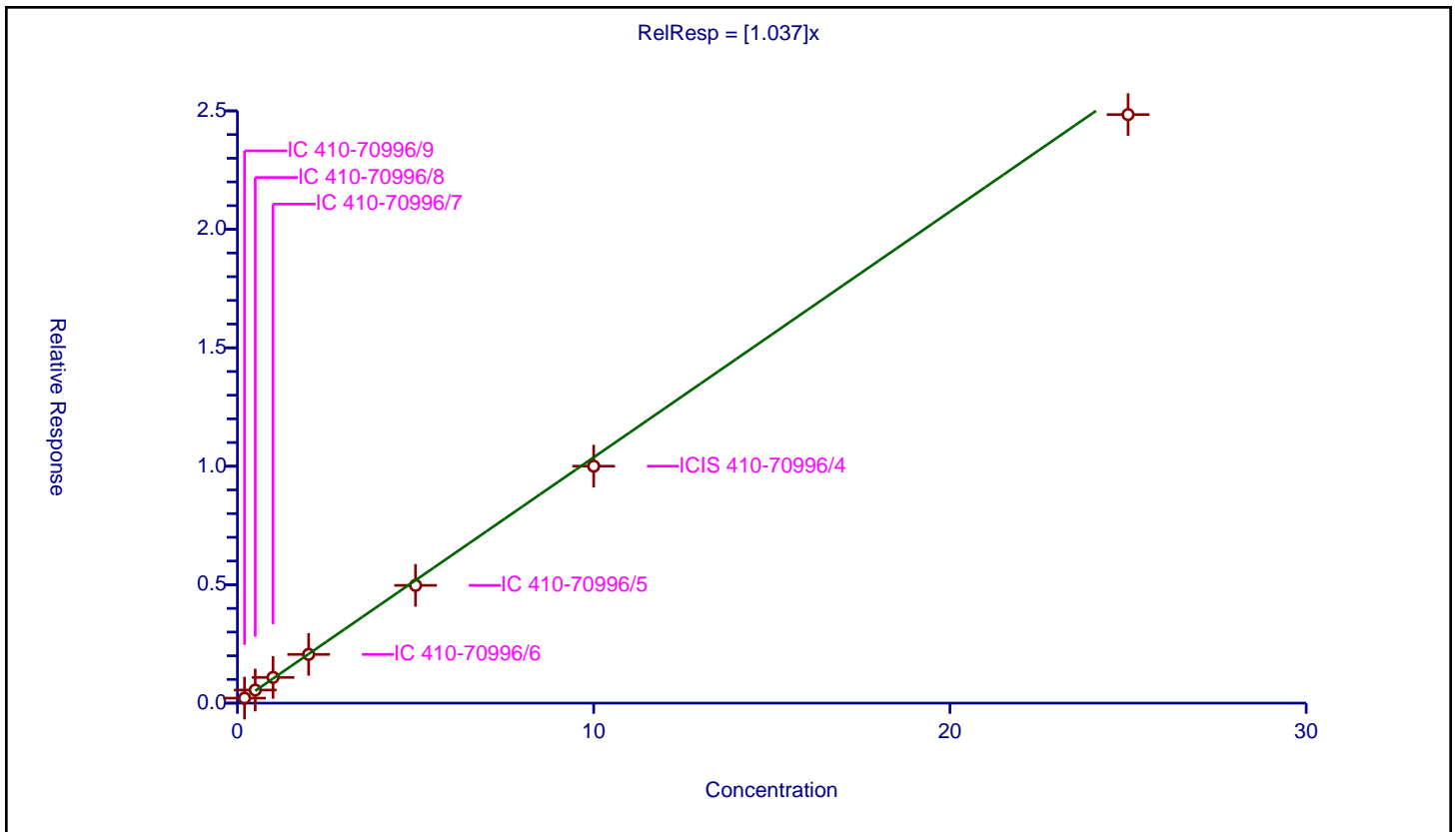
/ 1,2,3-Trichlorobenzene

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.: 410-30627-1

Analy Batch No.: 69397

SDG No.: \_\_\_\_\_

Instrument ID: 19930

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

Heated Purge: (Y/N) N

Calibration Start Date: 11/23/2020 12:45

Calibration End Date: 11/23/2020 14:53

Calibration ID: 16044

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-69397/9	IN23I07.D
Level 2	IC 410-69397/8	IN23I06.D
Level 3	IC 410-69397/7	IN23I05.D
Level 4	IC 410-69397/6	IN23I04.D
Level 5	IC 410-69397/5	IN23I03.D
Level 6	ICIS 410-69397/4	IN23I02.D
Level 7	IC 410-69397/3	IN23I01.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R <sup>2</sup> OR COD	#	MIN R <sup>2</sup> OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7															
Dichlorodifluoromethane	0.3607 0.3693	0.3443 0.3613	0.3491	0.3467	0.3668	Ave		0.3569			0.1000	2.8	20.0				
Chloromethane	0.4315 0.4102	0.4125 0.3961	0.4191	0.4222	0.4074	Ave		0.4141			0.1000	2.8	20.0				
1,3-Butadiene	0.4408 0.3172	0.3851 0.3000	0.3643	0.3276	0.3405	Ave		0.3536				13.5	20.0				
Vinyl chloride	0.3994 0.3784	0.3665 0.3697	0.3801	0.3921	0.3824	Ave		0.3812			0.1000	3.0	20.0				
Bromomethane	0.2855 0.2712	0.2809 0.2612	0.2791	0.2861	0.2711	Ave		0.2764			0.1000	3.3	20.0				
Chloroethane	0.2486 0.2305	0.2284 0.2245	0.2380	0.2383	0.2320	Ave		0.2343			0.1000	3.4	20.0				
Dichlorofluoromethane	0.5406 0.5172	0.5160 0.5011	0.5399	0.5385	0.5215	Ave		0.5249			0.1000	2.9	20.0				
Trichlorofluoromethane	0.5316 0.4851	0.4934 0.4690	0.4894	0.4922	0.4935	Ave		0.4935			0.1000	3.8	20.0				
Ethyl ether	0.2178 0.2235	0.2254 0.2169	0.2165	0.2247	0.2222	Ave		0.2210				1.7	20.0				
Freon 123a	0.3613 0.3458	0.3509 0.3341	0.3459	0.3338	0.3511	Ave		0.3461				2.8	20.0				
Acrolein	2.2212 2.1445	2.2354 2.1316	2.2940	2.1390	2.1774	Ave		2.1919				2.8	20.0				
1,1-Dichloroethene	0.2688 0.2684	0.2691 0.2596	0.2698	0.2604	0.2701	Ave		0.2666			0.1000	1.7	20.0				
Acetone	3.2304 2.4485	2.9420 2.4033	2.8790	2.6067	2.5718	Ave		2.7259			0.1000	11.0	20.0				
Freon 113	0.2816 0.2866	0.2809 0.2814	0.2835	0.2646	0.2944	Ave		0.2819			0.1000	3.2	20.0				

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI  
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA  
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-30627-1

Analy Batch No.: 69397

SDG No.: \_\_\_\_\_

Instrument ID: 19930

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

Heated Purge: (Y/N) N

Calibration Start Date: 11/23/2020 12:45

Calibration End Date: 11/23/2020 14:53

Calibration ID: 16044

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7															
Methyl iodide	0.5162 0.5263	0.5233 0.5129	0.5277	0.5126	0.5284	Ave		0.5211			1.3		20.0				
Carbon disulfide	0.8367 0.7635	0.7753 0.7493	0.7713	0.7407	0.7743	Ave		0.7730		0.1000	4.0		20.0				
Methyl acetate	6.6934 7.0637	7.8022 8.0998	7.6625	7.5562	7.1775	Ave		7.4365		0.1000	6.5		20.0				
Allyl chloride	0.4047 0.4117	0.4018 0.3988	0.4007	0.4153	0.4043	Ave		0.4053			1.5		20.0				
Methylene Chloride	0.3128 0.2909	0.3032 0.2800	0.3017	0.2877	0.2922	Ave		0.2955		0.1000	3.7		20.0				
t-Butyl alcohol	1.1481 1.0257	1.0274 0.9520	1.1531	1.0833	1.0725	Ave		1.0660			6.7		20.0				
Acrylonitrile	3.6240 3.4877	3.5908 3.5376	3.5903	3.5261	3.5511	Ave		3.5582			1.3		20.0				
Methyl tert-butyl ether	0.7214 0.7248	0.7003 0.7026	0.7096	0.7104	0.7269	Ave		0.7137		0.1000	1.5		20.0				
trans-1,2-Dichloroethene	0.2992 0.2966	0.2941 0.2867	0.2985	0.2867	0.2993	Ave		0.2944		0.1000	1.9		20.0				
n-Hexane	0.3910 0.4294	0.3750 0.4213	0.3885	0.3804	0.4346	Ave		0.4029			6.1		20.0				
1,1-Dichloroethane	0.5289 0.5373	0.5387 0.5218	0.5378	0.5223	0.5389	Ave		0.5323		0.2000	1.5		20.0				
di-Isopropyl ether	0.8780 0.8925	0.8803 0.8673	0.8822	0.8653	0.8928	Ave		0.8798			1.2		20.0				
2-Chloro-1,3-butadiene	0.4216 0.4386	0.4257 0.4264	0.4213	0.4183	0.4391	Ave		0.4273			2.0		20.0				
Ethyl t-butyl ether	0.8084 0.8567	0.8218 0.8249	0.8295	0.8237	0.8495	Ave		0.8307			2.0		20.0				
2-Butanone (MEK)	4.5524 4.4713	4.4984 4.5520	4.8543	4.4758	4.5171	Ave		4.5602		0.1000	2.9		20.0				
cis-1,2-Dichloroethene	0.3554 0.3420	0.3520 0.3305	0.3377	0.3338	0.3430	Ave		0.3420		0.1000	2.7		20.0				
2,2-Dichloropropane	0.4196 0.4410	0.4258 0.4302	0.4239	0.4170	0.4383	Ave		0.4280			2.1		20.0				
Propionitrile	1.3836 1.2371	1.3672 1.3054	1.3990	1.3009	1.3416	Ave		1.3335			4.2		20.0				
Methacrylonitrile	4.5971 4.6314	4.7705 4.6971	4.9523	4.5510	4.6706	Ave		4.6957			2.8		20.0				
Bromochloromethane	0.1466 0.1504	0.1481 0.1470	0.1535	0.1548	0.1545	Ave		0.1507			2.4		20.0				

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI  
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA  
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-30627-1

Analy Batch No.: 69397

SDG No.: \_\_\_\_\_

Instrument ID: 19930

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

Heated Purge: (Y/N) N

Calibration Start Date: 11/23/2020 12:45

Calibration End Date: 11/23/2020 14:53

Calibration ID: 16044

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7															
Tetrahydrofuran	1.3541 1.3473	1.4107 1.3762	1.4473	1.3631	1.3821	Ave		1.3830			2.5		20.0				
Chloroform	0.5335 0.5244	0.5341 0.5066	0.5299	0.5137	0.5295	Ave		0.5245		0.2000	2.0		20.0				
1,1,1-Trichloroethane	0.4728 0.4750	0.4744 0.4653	0.4720	0.4624	0.4768	Ave		0.4712		0.1000	1.1		20.0				
Cyclohexane	0.4660 0.5041	0.4771 0.4959	0.4923	0.4717	0.5119	Ave		0.4884		0.1000	3.5		20.0				
Carbon tetrachloride	0.4232 0.4294	0.4166 0.4228	0.4133	0.4122	0.4351	Ave		0.4218		0.1000	2.0		20.0				
1,1-Dichloropropene	0.4077 0.4271	0.4064 0.4203	0.4219	0.4151	0.4293	Ave		0.4182			2.1		20.0				
Isobutyl alcohol	0.3704 0.3157	0.3200 0.3294	0.3652	0.3491	0.3503	Ave		0.3429			6.3		20.0				
Benzene	1.2836 1.2710	1.2815 1.2375	1.2837	1.2402	1.2718	Ave		1.2670		0.5000	1.6		20.0				
1,2-Dichloroethane	0.3341 0.3048	0.3141 0.2979	0.3139	0.3004	0.3003	Ave		0.3094		0.1000	4.1		20.0				
t-Amyl methyl ether	0.7306 0.7880	0.7514 0.7661	0.7539	0.7486	0.7884	Ave		0.7610			2.8		20.0				
n-Heptane	0.4050 0.4228	0.3844 0.4175	0.3968	0.3865	0.4191	Ave		0.4046			3.9		20.0				
n-Butanol	0.2834 0.3525	0.3153 0.3344	0.3237	0.3223	0.3370	Ave		0.3241			6.7		20.0				
Trichloroethene	0.3350 0.3332	0.3357 0.3278	0.3352	0.3206	0.3341	Ave		0.3316		0.2000	1.7		20.0				
Methylcyclohexane	0.5073 0.5633	0.5099 0.5518	0.5427	0.5275	0.5684	Ave		0.5387		0.1000	4.6		20.0				
1,2-Dichloropropane	0.3031 0.3179	0.3146 0.3113	0.3118	0.3076	0.3136	Ave		0.3114		0.1000	1.6		20.0				
Methyl methacrylate	7.9156 9.1158	8.6260 9.2885	8.8793	8.5179	8.8590	Ave		8.7432			5.2		20.0				
1,4-Dioxane	++++ 0.0850	0.0896 0.0759	0.0919	0.0867	0.0785	Ave		0.0846		0.0050	7.4		20.0				
Dibromomethane	0.1433 0.1484	0.1510 0.1471	0.1467	0.1445	0.1495	Ave		0.1472			1.8		20.0				
Bromodichloromethane	0.3741 0.3849	0.3645 0.3799	0.3707	0.3601	0.3783	Ave		0.3732		0.2000	2.3		20.0				
2-Nitropropane	2.0575 2.2292	2.1525 2.3209	2.2556	2.1373	2.2324	Ave		2.1979			4.0		20.0				

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI  
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA  
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-30627-1

Analy Batch No.: 69397

SDG No.: \_\_\_\_\_

Instrument ID: 19930

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

Heated Purge: (Y/N) N

Calibration Start Date: 11/23/2020 12:45

Calibration End Date: 11/23/2020 14:53

Calibration ID: 16044

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7															
cis-1,3-Dichloropropene	0.4116 0.4774	0.4299 0.4721	0.4439	0.4343	0.4648	Ave		0.4477			0.2000	5.5	20.0				
4-Methyl-2-pentanone (MIBK)	10.766 11.306	11.306 11.412	11.819	11.192	11.602	Ave		11.343			0.1000	2.9	20.0				
Toluene	1.1381 1.0799	1.1173 1.0466	1.1002	1.0592	1.0913	Ave		1.0904			0.4000	2.9	20.0				
trans-1,3-Dichloropropene	0.4238 0.5046	0.4609 0.4964	0.4495	0.4654	0.4948	Ave		0.4707			0.1000	6.2	20.0				
Ethyl methacrylate	0.3392 0.4294	0.3709 0.4240	0.3809	0.3871	0.4260	Ave		0.3939				8.6	20.0				
1,1,2-Trichloroethane	0.2992 0.2946	0.2884 0.2862	0.2908	0.2832	0.2945	Ave		0.2910			0.1000	1.9	20.0				
Tetrachloroethene	0.5352 0.5301	0.5359 0.5162	0.5278	0.5096	0.5399	Ave		0.5278			0.2000	2.1	20.0				
1,3-Dichloropropane	0.4974 0.5093	0.4881 0.4889	0.4982	0.4891	0.5089	Ave		0.4971				1.8	20.0				
2-Hexanone	6.8039 8.1616	7.3765 8.0901	8.0113	7.7935	8.0511	Ave		7.7554			0.1000	6.4	20.0				
Dibromochloromethane	0.3529 0.3809	0.3471 0.3797	0.3600	0.3574	0.3809	Ave		0.3656				4.0	20.0				
1,2-Dibromoethane (EDB)	0.2742 0.2883	0.2652 0.2818	0.2825	0.2713	0.2876	Ave		0.2787			0.1000	3.1	20.0				
1-Chlorohexane	0.6943 0.6283	0.6314 0.6164	0.6209	0.6022	0.6327	Ave		0.6323				4.6	20.0				
Chlorobenzene	1.2281 1.2035	1.2296 1.1689	1.2157	1.1736	1.2184	Ave		1.2054			0.5000	2.1	20.0				
1,1,1,2-Tetrachloroethane	0.4080 0.4350	0.4012 0.4218	0.4207	0.4108	0.4324	Ave		0.4185				3.0	20.0				
Ethylbenzene	2.0768 2.1349	2.1331 2.0403	2.1324	2.0730	2.1505	Ave		2.1059			0.1000	2.0	20.0				
m&p-Xylene	0.8220 0.8424	0.8237 0.8162	0.8372	0.8273	0.8495	Ave		0.8312			0.1000	1.5	20.0				
o-Xylene	0.7726 0.8307	0.8015 0.8090	0.8137	0.7970	0.8309	Ave		0.8079			0.3000	2.5	20.0				
Styrene	1.2122 1.3553	1.2338 1.3195	1.2992	1.2811	1.3521	Ave		1.2933			0.3000	4.3	20.0				
Bromoform	0.1988 0.2394	0.2109 0.2414	0.2107	0.2155	0.2300	Ave		0.2210			0.1000	7.3	20.0				
Isopropylbenzene	2.0663 2.2066	2.1292 2.1070	2.1515	2.1354	2.2254	Ave		2.1459			0.1000	2.6	20.0				

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.



FORM VI  
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA  
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-30627-1

Analy Batch No.: 69397

SDG No.: \_\_\_\_\_

Instrument ID: 19930

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

Heated Purge: (Y/N) N

Calibration Start Date: 11/23/2020 12:45

Calibration End Date: 11/23/2020 14:53

Calibration ID: 16044

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7															
1,1,2,2-Tetrachloroethane	0.6359 0.6805	0.6321 0.6597	0.6447	0.6359	0.6820	Ave		0.6530			0.3000	3.3	20.0				
Bromobenzene	0.8840 0.9107	0.8918 0.8992	0.9136	0.8848	0.9189	Ave		0.9004				1.6	20.0				
trans-1,4-Dichloro-2-butene	3.2721 4.0130	3.5120 4.1257	3.7140	3.5871	3.8147	Ave		3.7198				7.9	20.0				
1,2,3-Trichloropropane	0.1902 0.1814	0.1703 0.1758	0.1796	0.1742	0.1827	Ave		0.1792				3.6	20.0				
N-Propylbenzene	4.3339 4.5240	4.4448 4.2406	4.4706	4.3419	4.5335	Ave		4.4128				2.5	20.0				
2-Chlorotoluene	0.8901 0.9152	0.8872 0.8914	0.9197	0.8868	0.9256	Ave		0.9023				1.9	20.0				
1,3,5-Trimethylbenzene	3.0102 3.2697	3.1536 3.1368	3.1716	3.1018	3.2493	Ave		3.1562				2.8	20.0				
4-Chlorotoluene	0.8953 0.9316	0.8948 0.9055	0.9436	0.8819	0.9256	Ave		0.9112				2.5	20.0				
tert-Butylbenzene	0.7284 0.7354	0.6826 0.7175	0.7184	0.6792	0.7288	Ave		0.7129				3.2	20.0				
Pentachloroethane	0.4880 0.6069	0.5450 0.5912	0.5569	0.5792	0.5875	Ave		0.5650				7.1	20.0				
1,2,4-Trimethylbenzene	2.9984 3.3452	3.1735 3.1936	3.2564	3.1604	3.3399	Ave		3.2096				3.7	20.0				
sec-Butylbenzene	3.9871 4.3064	4.0643 4.0853	4.1669	4.0751	4.2908	Ave		4.1394				2.9	20.0				
1,3-Dichlorobenzene	1.8457 1.8430	1.7877 1.8053	1.8138	1.7659	1.8315	Ave		1.8133			0.6000	1.6	20.0				
p-Isopropyltoluene	3.2730 3.6981	3.4737 3.5470	3.5189	3.5132	3.6826	Ave		3.5295				4.0	20.0				
1,4-Dichlorobenzene	1.8404 1.8397	1.7863 1.7954	1.8310	1.7595	1.8366	Ave		1.8127			0.5000	1.8	20.0				
1,2,3-Trimethylbenzene	1.4231 1.4415	1.3869 1.3941	1.4342	1.4454	1.4414	Ave		1.4238				1.7	20.0				
Benzyl chloride	0.1886 0.2884	0.2109 0.2925	0.2319	0.2491	0.2665	Ave		0.2469				15.8	20.0				
n-Butylbenzene	1.6444 1.8013	1.6762 1.7652	1.7140	1.6962	1.7688	Ave		1.7237				3.3	20.0				
1,2-Dichlorobenzene	1.6592 1.6859	1.6311 1.6263	1.7008	1.6003	1.6743	Ave		1.6540			0.4000	2.2	20.0				
1,2-Dibromo-3-Chloropropane	0.0884 0.1092	0.0957 0.1070	0.0988	0.0961	0.1066	Ave		0.1003			0.0500	7.6	20.0				

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI  
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA  
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-30627-1 Analy Batch No.: 69397

SDG No.: \_\_\_\_\_

Instrument ID: 19930 GC Column: R-624SilMS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/23/2020 12:45 Calibration End Date: 11/23/2020 14:53 Calibration ID: 16044

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R <sup>2</sup> OR COD	#	MIN R <sup>2</sup> OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7															
1,3,5-Trichlorobenzene	1.2569 1.3750	1.2893 1.3467	1.2786	1.2588	1.3372	Ave		1.3061			3.6		20.0				
1,2,4-Trichlorobenzene	1.0255 1.1703	1.0502 1.1316	1.0568	1.0419	1.1263	Ave		1.0861		0.2000	5.1		20.0				
Hexachlorobutadiene	0.4940 0.4716	0.4744 0.4779	0.4669	0.4527	0.4685	Ave		0.4723			2.6		20.0				
Naphthalene	1.9068 2.1982	1.9274 2.0411	1.9586	2.0221	2.1536	Ave		2.0297			5.5		20.0				
1,2,3-Trichlorobenzene	0.9020 0.9970	0.8999 0.9398	0.9266	0.9202	0.9750	Ave		0.9372			3.9		20.0				
Dibromofluoromethane (Surr)	0.2464 0.2458	0.2477 0.2445	0.2490	0.2468	0.2481	Ave		0.2469			0.6		20.0				
1,2-Dichloroethane-d4 (Surr)	0.0495 0.0501	0.0498 0.0499	0.0493	0.0497	0.0501	Ave		0.0498			0.6		20.0				
Toluene-d8 (Surr)	1.3117 1.2971	1.3204 1.2778	1.3114	1.3104	1.3126	Ave		1.3059			1.1		20.0				
4-Bromofluorobenzene (Surr)	0.4831 0.4774	0.4866 0.4818	0.4852	0.4849	0.4864	Ave		0.4836			0.7		20.0				

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI  
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA  
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-30627-1

Analy Batch No.: 69397

SDG No.:

Instrument ID: 19930

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

Heated Purge: (Y/N) N

Calibration Start Date: 11/23/2020 12:45

Calibration End Date: 11/23/2020 14:53

Calibration ID: 16044

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-69397/9	IN23I07.D
Level 2	IC 410-69397/8	IN23I06.D
Level 3	IC 410-69397/7	IN23I05.D
Level 4	IC 410-69397/6	IN23I04.D
Level 5	IC 410-69397/5	IN23I03.D
Level 6	ICIS 410-69397/4	IN23I02.D
Level 7	IC 410-69397/3	IN23I01.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1	LVL 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	14289 762848	34344 1853609	69362	137035	362905	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Chloromethane	FB	Ave	17096 847456	41148 2031747	83265	166854	403049	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,3-Butadiene	FB	Ave	17464 655274	38419 1538926	72377	129463	336874	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Vinyl chloride	FB	Ave	15824 781821	36555 1896588	75517	154985	378321	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Bromomethane	FB	Ave	11310 560203	28022 1339972	55449	113059	268205	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Chloroethane	FB	Ave	9848 476273	22787 1151471	47287	94172	229528	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Dichlorofluoromethane	FB	Ave	21416 1068389	51472 2570362	107260	212826	515898	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Trichlorofluoromethane	FB	Ave	21060 1002094	49221 2406078	97236	194532	488244	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Ethyl ether	FB	Ave	8629 461858	22487 1112739	43027	88826	219835	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Freon 123a	FB	Ave	14313 714488	35000 1713909	68727	131936	347378	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Acrolein	TBAdl 0	Ave	69971 3743531	175165 8955401	356505	701877	1828205	10.0 500	25.0 1250	50.0	100	250
1,1-Dichloroethene	FB	Ave	10648 554501	26846 1331438	53597	102917	267271	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Acetone	TBAdl 0	Ave	20352 854846	46105 2019299	89478	171065	431846	2.00 100	5.00 250	10.0	20.0	50.0
Freon 113	FB	Ave	11156 592097	28017 1443706	56328	104592	291222	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Methyl iodide	FB	Ave	20453	52202	104837	202587	522756	0.200	0.500	1.00	2.00	5.00

FORM VI  
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA  
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-30627-1

Analy Batch No.: 69397

SDG No.:

Instrument ID: 19930

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

Heated Purge: (Y/N) N

Calibration Start Date: 11/23/2020 12:45

Calibration End Date: 11/23/2020 14:53

Calibration ID: 16044

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)					
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	
			1087214	2631223					10.0	25.0			
Carbon disulfide	FB	Ave	33150 1577401	77344 3843896	153230	292763	766074	0.200 10.0	0.500 25.0	1.00	2.00	5.00	
Methyl acetate	TBAdl 0	Ave	4217	12227	23815	49588	120524	0.200	0.500	1.00	2.00	5.00	
			246609	680563				10.0	25.0				
Allyl chloride	FB	Ave	16032 850587	40080 2045690	79611	164133	400038	0.200 10.0	0.500 25.0	1.00	2.00	5.00	
Methylene Chloride	FB	Ave	12391 601040	30241 1436509	59944	113711	289040	0.200 10.0	0.500 25.0	1.00	2.00	5.00	
t-Butyl alcohol	TBAdl 0	Ave	14466	32201	71679	142185	360171	4.00	10.0	20.0	40.0	100	
			716161	1599739				200	500				
Acrylonitrile	TBAdl 0	Ave	11416	28136	55793	115701	298145	1.00	2.50	5.00	10.0	25.0	
			608812	1486195				50.0	125				
Methyl tert-butyl ether	FB	Ave	28583 1497268	69855 3604322	140981	280757	719156	0.200 10.0	0.500 25.0	1.00	2.00	5.00	
trans-1,2-Dichloroethene	FB	Ave	11853 612688	29336 1470445	59305	113298	296112	0.200 10.0	0.500 25.0	1.00	2.00	5.00	
n-Hexane	FB	Ave	15492 887151	37410 2161387	77187	150330	429931	0.200 10.0	0.500 25.0	1.00	2.00	5.00	
1,1-Dichloroethane	FB	Ave	20953 1110105	53737 2676667	106846	206444	533155	0.200 10.0	0.500 25.0	1.00	2.00	5.00	
di-Isopropyl ether	FB	Ave	34785 1843818	87812 4448853	175266	342003	883301	0.200 10.0	0.500 25.0	1.00	2.00	5.00	
2-Chloro-1,3-butadiene	FB	Ave	16705 906198	42465 2187566	83699	165305	434378	0.200 10.0	0.500 25.0	1.00	2.00	5.00	
Ethyl t-butyl ether	FB	Ave	32027 1769941	81982 4231563	164798	325561	840400	0.200 10.0	0.500 25.0	1.00	2.00	5.00	
2-Butanone (MEK)	TBAdl 0	Ave	28681	70495	150873	293727	758501	2.00	5.00	10.0	20.0	50.0	
			1561053	3824682				100	250				
cis-1,2-Dichloroethene	FB	Ave	14079 706462	35111 1695323	67080	131926	339325	0.200 10.0	0.500 25.0	1.00	2.00	5.00	
2,2-Dichloropropane	FB	Ave	16623 911060	42478 2206838	84205	164796	433655	0.200 10.0	0.500 25.0	1.00	2.00	5.00	
Propionitrile	TBAdl 0	Ave	17434	42851	86963	170750	450559	4.00	10.0	20.0	40.0	100	
			863833	2193579				200	500				
Methacrylonitrile	TBAdl 0	Ave	28963	74760	153916	298659	784279	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.: 410-30627-1

Analy Batch No.: 69397

SDG No.:

Instrument ID: 19930

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

Heated Purge: (Y/N) N

Calibration Start Date: 11/23/2020 12:45

Calibration End Date: 11/23/2020 14:53

Calibration ID: 16044

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
			1616918	3946564				100	250			
Bromochloromethane	FB	Ave	5808 310784	14772 753858	30494	61198	152825	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Tetrahydrofuran	TBAd1 0	Ave	8531	22107	44982	89453	232086	2.00	5.00	10.0	20.0	50.0
Chloroform	FB	Ave	470375 21135 1083255	1156304 53281 2598659	105267	203027	523866	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,1,1-Trichloroethane	FB	Ave	18731 981285	47326 2386922	93768	182755	471715	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Cyclohexane	FB	Ave	18461 1041428	47588 2543910	97796	186444	506440	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Carbon tetrachloride	FB	Ave	16767 887161	41561 2168824	82099	162919	430415	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,1-Dichloropropene	FB	Ave	16151 882438	40536 2155973	83811	164045	424728	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Isobutyl alcohol	TBAd1 0	Ave	11668 551150	25076 1383991	56751	114540	294140	10.0 500	25.0 1250	50.0	100	250
Benzene	FB	Ave	50855 2625721	127834 6348099	255028	490160	1258244	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2-Dichloroethane	FB	Ave	13237 629666	31335 1528196	62354	118739	297074	0.200 10.0	0.500 25.0	1.00	2.00	5.00
t-Amyl methyl ether	FB	Ave	28945 1627872	74955 3929679	149782	295847	780037	0.200 10.0	0.500 25.0	1.00	2.00	5.00
n-Heptane	FB	Ave	16047 873361	38350 2141721	78839	152765	414595	0.200 10.0	0.500 25.0	1.00	2.00	5.00
n-Butanol	TBAd1 0	Ave	17858 1230757	49414 2809489	100598	211478	565829	20.0 1000	50.0 2500	100	200	500
Trichloroethene	FB	Ave	13273 688361	33485 1681778	66585	126694	330514	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Methylcyclohexane	FB	Ave	20100 1163763	50862 2830707	107810	208498	562317	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2-Dichloropropane	FB	Ave	12009 656764	31387 1596660	61945	121570	310291	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Methyl methacrylate	TBAd1 0	Ave	4987 318254	13518 780437	27597	55899	148760	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,4-Dioxane	TBAd1 0	Ave	++++ 148345	7023 318662	14289	28458	65884	++++ 500	25.0 1250	50.0	100	250

FORM VI  
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA  
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-30627-1

Analy Batch No.: 69397

SDG No.: \_\_\_\_\_

Instrument ID: 19930

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

Heated Purge: (Y/N) N

Calibration Start Date: 11/23/2020 12:45

Calibration End Date: 11/23/2020 14:53

Calibration ID: 16044

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Dibromomethane	FB	Ave	5679 306542	15063 754336	29139	57091	147921	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Bromodichloromethane	FB	Ave	14820 795099	36362 1948970	73650	142334	374289	0.200 10.0	0.500 25.0	1.00	2.00	5.00
2-Nitropropane	TBA10	Ave	12963 778258	33733 1950037	70105	140261	374854	2.00 100	5.00 250	10.0	20.0	50.0
cis-1,3-Dichloropropene	FB	Ave	16306 986321	42882 2421802	88193	171644	459853	0.200 10.0	0.500 25.0	1.00	2.00	5.00
4-Methyl-2-pentanone (MIBK)	TBA10	Ave	67829 3947176	177180 9588763	367338	734468	1948125	2.00 100	5.00 250	10.0	20.0	50.0
Toluene	CBZd5	Ave	33538 1696057	83094 4131675	163309	313899	811376	0.200 10.0	0.500 25.0	1.00	2.00	5.00
trans-1,3-Dichloropropene	CBZd5	Ave	12488 792406	34273 1959641	66719	137933	367862	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Ethyl methacrylate	CBZd5	Ave	9995 674454	27584 1673846	56537	114724	316728	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,1,2-Trichloroethane	CBZd5	Ave	8818 462694	21447 1129761	43173	83917	218945	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Tetrachloroethene	CBZd5	Ave	15772 832486	39857 2037894	78353	151027	401439	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,3-Dichloropropane	CBZd5	Ave	14656 799899	36303 1930028	73951	144948	378398	0.200 10.0	0.500 25.0	1.00	2.00	5.00
2-Hexanone	TBA10	Ave	42866 2849426	115600 6797458	248990	511453	1351932	2.00 100	5.00 250	10.0	20.0	50.0
Dibromochloromethane	CBZd5	Ave	10400 598262	25811 1498853	53438	105930	283207	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2-Dibromoethane (EDB)	CBZd5	Ave	8081 452788	19726 1112590	41931	80415	213803	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1-Chlorohexane	CBZd5	Ave	20461 986757	46957 2433335	92173	178481	470375	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Chlorobenzene	CBZd5	Ave	36190 1890048	91441 4614383	180463	347796	905888	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,1,1,2-Tetrachloroethane	CBZd5	Ave	12023 683105	29836 1665026	62455	121733	321476	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Ethylbenzene	CBZd5	Ave	61200 3352863	158639 8054835	316536	614346	1598931	0.200 10.0	0.500 25.0	1.00	2.00	5.00
m&p-Xylene	CBZd5	Ave	48448 2646088	122512 6444517	248538	490346	1263230	0.400 20.0	1.00 50.0	2.00	4.00	10.0
o-Xylene	CBZd5	Ave	22768	59608	120780	236196	617748	0.200	0.500	1.00	2.00	5.00

FORM VI  
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA  
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-30627-1

Analy Batch No.: 69397

SDG No.:

Instrument ID: 19930

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

Heated Purge: (Y/N) N

Calibration Start Date: 11/23/2020 12:45

Calibration End Date: 11/23/2020 14:53

Calibration ID: 16044

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)					
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	
			1304564	3193696					10.0	25.0			
Styrene	CBZd5	Ave	35720 2128541	91755 5209128	192855	379665	1005274	0.200 10.0	0.500 25.0	1.00	2.00	5.00	
Bromoform	CBZd5	Ave	5858 376053	15681 952842	31282	63856	171030	0.200 10.0	0.500 25.0	1.00	2.00	5.00	
Isopropylbenzene	CBZd5	Ave	60889 3465538	158348 8318129	319375	632848	1654564	0.200 10.0	0.500 25.0	1.00	2.00	5.00	
1,1,2,2-Tetrachloroethane	DCBd4	Ave	10791 606886	27114 1482521	54415	107901	288446	0.200 10.0	0.500 25.0	1.00	2.00	5.00	
Bromobenzene	DCBd4	Ave	15002 812183	38254 2020744	77108	150137	388628	0.200 10.0	0.500 25.0	1.00	2.00	5.00	
trans-1,4-Dichloro-2-butene	TBAd1 0	Ave	20615 1401018	55037 3466483	115432	235404	640566	2.00 100	5.00 250	10.0	20.0	50.0	
1,2,3-Trichloropropane	DCBd4	Ave	3227 161724	7306 395151	15158	29565	77284	0.200 10.0	0.500 25.0	1.00	2.00	5.00	
N-Propylbenzene	DCBd4	Ave	73549 4034433	190665 9529514	377314	736780	1917309	0.200 10.0	0.500 25.0	1.00	2.00	5.00	
2-Chlorotoluene	DCBd4	Ave	15105 816131	38057 2003162	77621	150481	391437	0.200 10.0	0.500 25.0	1.00	2.00	5.00	
1,3,5-Trimethylbenzene	DCBd4	Ave	51085 2915864	135280 7049093	267681	526346	1374177	0.200 10.0	0.500 25.0	1.00	2.00	5.00	
4-Chlorotoluene	DCBd4	Ave	15194 830797	38382 2034840	79642	149649	391457	0.200 10.0	0.500 25.0	1.00	2.00	5.00	
tert-Butylbenzene	DCBd4	Ave	12362 655812	29282 1612321	60636	115253	308232	0.200 10.0	0.500 25.0	1.00	2.00	5.00	
Pentachloroethane	DCBd4	Ave	8281 541224	23377 1328610	46998	98293	248476	0.200 10.0	0.500 25.0	1.00	2.00	5.00	
1,2,4-Trimethylbenzene	DCBd4	Ave	50885 2983176	136133 7176599	274837	536289	1412501	0.200 10.0	0.500 25.0	1.00	2.00	5.00	
sec-Butylbenzene	DCBd4	Ave	67663 3840352	174344 9180439	351677	691511	1814658	0.200 10.0	0.500 25.0	1.00	2.00	5.00	
1,3-Dichlorobenzene	DCBd4	Ave	31322 1643503	76688 4056868	153078	299667	774588	0.200 10.0	0.500 25.0	1.00	2.00	5.00	
p-Isopropyltoluene	DCBd4	Ave	55545 3297888	149012 7970833	296994	596157	1557438	0.200 10.0	0.500 25.0	1.00	2.00	5.00	
1,4-Dichlorobenzene	DCBd4	Ave	31232 1640637	76626 4034569	154536	298581	776711	0.200 10.0	0.500 25.0	1.00	2.00	5.00	
1,2,3-Trimethylbenzene	DCBd4	Ave	24151 1285454	59495 3132852	121041	245278	609602	0.200 10.0	0.500 25.0	1.00	2.00	5.00	
Benzyl chloride	DCBd4	Ave	3201 257164	9048 657275	19573	42275	112713	0.200 10.0	0.500 25.0	1.00	2.00	5.00	

FORM VI  
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA  
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-30627-1

Analy Batch No.: 69397

SDG No.:

Instrument ID: 19930

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

Heated Purge: (Y/N) N

Calibration Start Date: 11/23/2020 12:45

Calibration End Date: 11/23/2020 14:53

Calibration ID: 16044

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
n-Butylbenzene	DCBd4	Ave	27906 1606360	71903 3966634	144659	287834	748043	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2-Dichlorobenzene	DCBd4	Ave	28158 1503421	69967 3654497	143545	271564	708104	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2-Dibromo-3-Chloropropane	DCBd4	Ave	1501 97400	4105 240531	8336	16302	45090	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,3,5-Trichlorobenzene	DCBd4	Ave	21330 1226210	55307 3026395	107909	213605	565506	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2,4-Trichlorobenzene	DCBd4	Ave	17403 1043686	45049 2542954	89195	176796	476320	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Hexachlorobutadiene	DCBd4	Ave	8383 420536	20349 1074015	39405	76823	198152	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Naphthalene	DCBd4	Ave	32359 1960339	82677 4586641	165305	343142	910778	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2,3-Trichlorobenzene	DCBd4	Ave	15307 889058	38602 2111946	78201	156150	412357	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Dibromofluoromethane (Surr)	FB	Ave	488089 507861	494112 501720	494666	487807	490996	10.0 10.0	10.0 10.0	10.0	10.0	10.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	98119 103491	99445 102305	97982	98235	99154	10.0 10.0	10.0 10.0	10.0	10.0	10.0
Toluene-d8 (Surr)	CBZd5	Ave	1932681 2037192	1963991 2017789	1946658	1941813	1951818	10.0 10.0	10.0 10.0	10.0	10.0	10.0
4-Bromofluorobenzene (Surr)	CBZd5	Ave	711806 749783	723803 760845	720224	718478	723239	10.0 10.0	10.0 10.0	10.0	10.0	10.0

Curve Type Legend:

Ave = Average ISTD



FORM VI  
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA  
READBACK PERCENT ERROR

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-30627-1 Analy Batch No.: 69397

SDG No.: \_\_\_\_\_

Instrument ID: 19930 GC Column: R-624SilMS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/23/2020 12:45 Calibration End Date: 11/23/2020 14:53 Calibration ID: 16044

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-69397/9	IN23I07.D
Level 2	IC 410-69397/8	IN23I06.D
Level 3	IC 410-69397/7	IN23I05.D
Level 4	IC 410-69397/6	IN23I04.D
Level 5	IC 410-69397/5	IN23I03.D
Level 6	ICIS 410-69397/4	IN23I02.D
Level 7	IC 410-69397/3	IN23I01.D

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
Dichlorodifluoromethane	1.1						30					
Chloromethane	4.2						30					
1,3-Butadiene	24.6						30					
Vinyl chloride	4.8						30					
Bromomethane	3.3						30					
Chloroethane	6.1						30					
Dichlorofluoromethane	3.0						30					
Trichlorofluoromethane	7.7						30					
Ethyl ether	-1.5						30					
Freon 123a	4.4						30					
Acrolein	1.3						30					
1,1-Dichloroethene	0.8						30					
Acetone	18.5						30					
Freon 113	-0.1						30					
Methyl iodide	-0.9						30					

FORM VI  
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA  
READBACK PERCENT ERROR

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-30627-1 Analy Batch No.: 69397

SDG No.: \_\_\_\_\_

Instrument ID: 19930 GC Column: R-624SilMS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/23/2020 12:45 Calibration End Date: 11/23/2020 14:53 Calibration ID: 16044

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
Carbon disulfide	8.2						30					
Methyl acetate	-10.0						30					
Allyl chloride	-0.2						30					
Methylene Chloride	5.8						30					
t-Butyl alcohol	7.7						30					
Acrylonitrile	1.8						30					
Methyl tert-butyl ether	1.1						30					
trans-1,2-Dichloroethene	1.6						30					
n-Hexane	-2.9						30					
1,1-Dichloroethane	-0.6						30					
di-Isopropyl ether	-0.2						30					
2-Chloro-1,3-butadiene	-1.3						30					
Ethyl t-butyl ether	-2.7						30					
2-Butanone (MEK)	-0.2						30					
cis-1,2-Dichloroethene	3.9						30					
2,2-Dichloropropane	-2.0						30					
Propionitrile	3.8						30					
Methacrylonitrile	-2.1						30					
Bromochloromethane	-2.7						30					
Tetrahydrofuran	-2.1						30					
Chloroform	1.7						30					

FORM VI  
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA  
READBACK PERCENT ERROR

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-30627-1

Analy Batch No.: 69397

SDG No.: \_\_\_\_\_

Instrument ID: 19930

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

Heated Purge: (Y/N) N

Calibration Start Date: 11/23/2020 12:45

Calibration End Date: 11/23/2020 14:53

Calibration ID: 16044

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
1,1,1-Trichloroethane	0.3						30					
Cyclohexane	-4.6						30					
Carbon tetrachloride	0.3						30					
1,1-Dichloropropene	-2.5						30					
Isobutyl alcohol	8.0						30					
Benzene	1.3						30					
1,2-Dichloroethane	8.0						30					
t-Amyl methyl ether	-4.0						30					
n-Heptane	0.1						30					
n-Butanol	-12.5						30					
Trichloroethene	1.0						30					
Methylcyclohexane	-5.8						30					
1,2-Dichloropropane	-2.7						30					
Methyl methacrylate	-9.5						30					
1,4-Dioxane	++++	5.9						30				
Dibromomethane	-2.6						30					
Bromodichloromethane	0.2						30					
2-Nitropropane	-6.4						30					
cis-1,3-Dichloropropene	-8.1						30					
4-Methyl-2-pentanone (MIBK)	-5.1						30					
Toluene	4.4						30					

FORM VI  
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA  
READBACK PERCENT ERROR

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-30627-1

Analy Batch No.: 69397

SDG No.: \_\_\_\_\_

Instrument ID: 19930

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

Heated Purge: (Y/N) N

Calibration Start Date: 11/23/2020 12:45

Calibration End Date: 11/23/2020 14:53

Calibration ID: 16044

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
trans-1,3-Dichloropropene	-10.0						30					
Ethyl methacrylate	-13.9						30					
1,1,2-Trichloroethane	2.8						30					
Tetrachloroethene	1.4						30					
1,3-Dichloropropane	0.0						30					
2-Hexanone	-12.3						30					
Dibromochloromethane	-3.5						30					
1,2-Dibromoethane (EDB)	-1.6						30					
1-Chlorohexane	9.8						30					
Chlorobenzene	1.9						30					
1,1,1,2-Tetrachloroethane	-2.5						30					
Ethylbenzene	-1.4						30					
m&p-Xylene	-1.1						30					
o-Xylene	-4.4						30					
Styrene	-6.3						30					
Bromoform	-10.0						30					
Isopropylbenzene	-3.7						30					
1,1,2,2-Tetrachloroethane	-2.6						30					
Bromobenzene	-1.8						30					
trans-1,4-Dichloro-2-butene	-12.0						30					
1,2,3-Trichloropropane	6.1						30					

FORM VI  
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA  
READBACK PERCENT ERROR

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-30627-1

Analy Batch No.: 69397

SDG No.: \_\_\_\_\_

Instrument ID: 19930

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

Heated Purge: (Y/N) N

Calibration Start Date: 11/23/2020 12:45

Calibration End Date: 11/23/2020 14:53

Calibration ID: 16044

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
N-Propylbenzene	-1.8						30					
2-Chlorotoluene	-1.4						30					
1,3,5-Trimethylbenzene	-4.6						30					
4-Chlorotoluene	-1.7						30					
tert-Butylbenzene	2.2						30					
Pentachloroethane	-13.6						30					
1,2,4-Trimethylbenzene	-6.6						30					
sec-Butylbenzene	-3.7						30					
1,3-Dichlorobenzene	1.8						30					
p-Isopropyltoluene	-7.3						30					
1,4-Dichlorobenzene	1.5						30					
1,2,3-Trimethylbenzene	0.0						30					
Benzyl chloride	-23.6						30					
n-Butylbenzene	-4.6						30					
1,2-Dichlorobenzene	0.3						30					
1,2-Dibromo-3-Chloropropane	-11.8						30					
1,3,5-Trichlorobenzene	-3.8						30					
1,2,4-Trichlorobenzene	-5.6						30					
Hexachlorobutadiene	4.6						30					
Naphthalene	-6.1						30					
1,2,3-Trichlorobenzene	-3.8						30					

FORM VI  
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA  
READBACK PERCENT ERROR

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-30627-1 Analy Batch No.: 69397

SDG No.: \_\_\_\_\_

Instrument ID: 19930 GC Column: R-624SilMS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/23/2020 12:45 Calibration End Date: 11/23/2020 14:53 Calibration ID: 16044

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
Dibromofluoromethane (Surr)	-0.2						30					
1,2-Dichloroethane-d4 (Surr)	-0.5						30					
Toluene-d8 (Surr)	0.4						30					
4-Bromofluorobenzene (Surr)	-0.1						30					

Eurofins Lancaster Laboratories Env, LLC  
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23101.D  
 Lims ID: IC std7  
 Client ID:  
 Sample Type: IC Calib Level: 7  
 Inject. Date: 23-Nov-2020 12:45:30 ALS Bottle#: 2 Worklist Smp#: 3  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0016280-003  
 Misc. Info.: IC STD7  
 Operator ID: dvv10203 Instrument ID: 19930  
 Sublist: chrom-8260 25ml HP31\*sub2

Method: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\8260 25ml HP31.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 23-Nov-2020 19:10:35 Calib Date: 23-Nov-2020 18:05:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23117.D

Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1632

First Level Reviewer: campbellme

Date: 23-Nov-2020 18:24:27

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.983	1.977	0.006	99	1853609	25.0	25.3	M
4 Chloromethane	50	2.184	2.178	0.006	99	2031747	25.0	23.9	
6 Butadiene	39	2.294	2.288	0.006	90	1538926	25.0	21.2	
5 Vinyl chloride	62	2.306	2.300	0.006	98	1896588	25.0	24.2	
7 Bromomethane	94	2.629	2.623	0.006	90	1339972	25.0	23.6	
8 Chloroethane	64	2.709	2.702	0.007	100	1151471	25.0	23.9	
9 Dichlorofluoromethane	67	2.953	2.946	0.006	97	2570362	25.0	23.9	
10 Trichlorofluoromethane	101	3.026	3.019	0.007	98	2406078	25.0	23.8	
11 Ethyl ether	59	3.270	3.263	0.007	90	1112739	25.0	24.5	
12 1,2-Dichloro-1,1,2-trifluoroethane	67	3.355	3.343	0.012	91	1713909	25.0	24.1	
13 Acrolein	56	3.440	3.434	0.006	100	8955401	1250.0	1215.7	
14 1,1-Dichloroethene	96	3.580	3.574	0.006	97	1331438	25.0	24.3	
15 Acetone	43	3.611	3.611	0.000	100	2019299	250.0	220.4	
16 112TCTFE	101	3.623	3.617	0.006	89	1443706	25.0	25.0	
17 Iodomethane	142	3.782	3.775	0.007	98	2631223	25.0	24.6	
18 Ethyl bromide	108	3.812	3.800	0.012	98	1210431	25.0	24.3	
19 Carbon disulfide	76	3.891	3.879	0.012	98	3843896	25.0	24.2	
21 Methyl acetate	43	4.044	4.038	0.006	97	680563	25.0	27.2	
22 3-Chloro-1-propene	41	4.062	4.056	0.006	93	2045690	25.0	24.6	
23 Methylene Chloride	84	4.257	4.251	0.006	90	1436509	25.0	23.7	
* 24 t-Butyl alcohol-d10 (IS)	65	4.263	4.263	0.000	0	168044	50.0	50.0	M
25 2-Methyl-2-propanol	59	4.397	4.391	0.006	100	1599739	500.0	446.5	
26 Acrylonitrile	53	4.599	4.592	0.007	98	1486195	125.0	124.3	
27 Methyl tert-butyl ether	73	4.666	4.659	0.007	94	3604322	25.0	24.6	
28 trans-1,2-Dichloroethene	96	4.678	4.672	0.006	99	1470445	25.0	24.3	
29 Hexane	57	5.098	5.098	0.000	89	2161387	25.0	26.1	
31 1,1-Dichloroethane	63	5.336	5.336	0.000	96	2676667	25.0	24.5	
32 Isopropyl ether	45	5.391	5.391	0.000	94	4448853	25.0	24.6	
33 2-Chloro-1,3-butadiene	53	5.446	5.440	0.006	89	2187566	25.0	25.0	
34 Tert-butyl ethyl ether	59	5.921	5.921	0.000	97	4231563	25.0	24.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 2-Butanone (MEK)	43	6.141	6.135	0.006	99	3824682	250.0	249.6	
S 35 1,2-Dichloroethene, Total	100				0			48.5	
37 cis-1,2-Dichloroethene	96	6.165	6.165	0.000	81	1695323	25.0	24.2	
38 2,2-Dichloropropane	77	6.184	6.177	0.007	85	2206838	25.0	25.1	
40 Propionitrile	54	6.220	6.220	0.000	99	2193579	500.0	489.4	
42 Methacrylonitrile	67	6.440	6.433	0.007	89	3946564	250.0	250.1	
43 Chlorobromomethane	128	6.494	6.494	0.000	89	753858	25.0	24.4	
44 Tetrahydrofuran	71	6.507	6.507	0.000	84	1156304	250.0	248.8	
45 Chloroform	83	6.641	6.641	0.000	92	2598659	25.0	24.1	
\$ 46 Dibromofluoromethane (Surr)	113	6.860	6.854	0.006	94	501720	10.0	9.90	
47 1,1,1-Trichloroethane	97	6.872	6.866	0.006	98	2386922	25.0	24.7	
48 Cyclohexane	56	6.970	6.970	0.000	88	2543910	25.0	25.4	
50 Carbon tetrachloride	117	7.080	7.080	0.000	96	2168824	25.0	25.1	
51 1,1-Dichloropropene	75	7.080	7.080	0.000	98	2155973	25.0	25.1	
52 Isobutyl alcohol	41	7.232	7.226	0.006	96	1383991	1250.0	1201.0	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.318	7.311	0.007	0	102305	10.0	10.0	
54 Benzene	78	7.342	7.342	0.000	95	6348099	25.0	24.4	
56 1,2-Dichloroethane	62	7.415	7.415	0.000	97	1528196	25.0	24.1	
57 Tert-amyl methyl ether	73	7.531	7.531	0.000	99	3929679	25.0	25.2	
* 58 Fluorobenzene (IS)	96	7.744	7.744	0.000	100	2051897	10.0	10.0	
59 n-Heptane	43	7.756	7.750	0.006	89	2141721	25.0	25.8	
60 n-Butanol	56	8.098	8.098	0.000	85	2809489	2500.0	2579.4	
61 Trichloroethene	95	8.220	8.220	0.000	97	1681778	25.0	24.7	
62 Methylcyclohexane	83	8.531	8.525	0.007	94	2830707	25.0	25.6	
63 1,2-Dichloropropane	63	8.555	8.549	0.006	84	1596660	25.0	25.0	
64 Methyl methacrylate	69	8.628	8.634	-0.006	88	780437	25.0	26.6	
65 1,4-Dioxane	88	8.640	8.640	0.000	70	318662	1250.0	1120.7	M
66 Dibromomethane	93	8.665	8.659	0.006	95	754336	25.0	25.0	
68 Dichlorobromomethane	83	8.896	8.896	0.000	99	1948970	25.0	25.4	
69 2-Nitropropane	41	9.165	9.159	0.006	96	1950037	250.0	264.0	
72 1-Bromo-2-chloroethane	63	9.287	9.287	0.000	98	1655992	25.0	25.2	
73 cis-1,3-Dichloropropene	75	9.439	9.439	0.000	98	2421802	25.0	26.4	
74 4-Methyl-2-pentanone (MIBK)	43	9.604	9.604	0.000	94	9588763	250.0	251.5	
\$ 75 Toluene-d8 (Surr)	98	9.744	9.744	0.000	93	2017789	10.0	9.78	
76 Toluene	92	9.817	9.817	0.000	99	4131675	25.0	24.0	
S 77 1,3-Dichloropropene, Total	100				0			52.7	
78 trans-1,3-Dichloropropene	75	10.073	10.073	0.000	90	1959641	25.0	26.4	
79 Ethyl methacrylate	69	10.128	10.134	-0.006	87	1673846	25.0	26.9	
80 1,1,2-Trichloroethane	97	10.274	10.274	0.000	89	1129761	25.0	24.6	
81 Tetrachloroethene	166	10.366	10.366	0.000	98	2037894	25.0	24.4	
82 1,3-Dichloropropane	76	10.439	10.439	0.000	87	1930028	25.0	24.6	
83 2-Hexanone	43	10.482	10.481	0.001	95	6797458	250.0	260.8	
85 Chlorodibromomethane	129	10.652	10.652	0.000	89	1498853	25.0	26.0	
86 Ethylene Dibromide	107	10.762	10.762	0.000	98	1112590	25.0	25.3	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.189	0.000	84	1579118	10.0	10.0	
88 1-Chlorohexane	91	11.195	11.195	0.000	95	2433335	25.0	24.4	
90 Chlorobenzene	112	11.219	11.213	0.006	96	4614383	25.0	24.2	
S 89 Xylenes, Total	106				0			74.1	
92 Ethylbenzene	91	11.298	11.298	0.000	98	8054835	25.0	24.2	
91 1,1,1,2-Tetrachloroethane	131	11.298	11.298	0.000	97	1665026	25.0	25.2	
93 m-Xylene & p-Xylene	106	11.414	11.414	0.000	99	6444517	50.0	49.1	
94 o-Xylene	106	11.743	11.743	0.000	95	3193696	25.0	25.0	



Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
95 Styrene	104	11.756	11.756	0.000	95	5209128	25.0	25.5	
96 Bromoform	173	11.914	11.920	-0.006	98	952842	25.0	27.3	
97 Isopropylbenzene	105	12.042	12.042	0.000	95	8318129	25.0	24.5	
\$ 100 4-Bromofluorobenzene (Surr)	95	12.189	12.188	0.000	95	760845	10.0	9.96	
101 1,1,2,2-Tetrachloroethane	83	12.286	12.286	0.000	92	1482521	25.0	25.3	
102 Bromobenzene	156	12.304	12.304	0.000	96	2020744	25.0	25.0	
103 trans-1,4-Dichloro-2-butene	53	12.310	12.310	0.000	90	3466483	250.0	277.3	
104 1,2,3-Trichloropropane	110	12.335	12.335	0.000	82	395151	25.0	24.5	
105 N-Propylbenzene	91	12.371	12.371	0.000	98	9529514	25.0	24.0	
106 2-Chlorotoluene	126	12.451	12.451	0.000	98	2003162	25.0	24.7	
107 1,3,5-Trimethylbenzene	105	12.506	12.505	0.001	94	7049093	25.0	24.8	
108 4-Chlorotoluene	126	12.542	12.542	0.000	96	2034840	25.0	24.8	
109 tert-Butylbenzene	134	12.749	12.749	0.000	93	1612321	25.0	25.2	
110 Pentachloroethane	167	12.780	12.780	0.000	93	1328610	25.0	26.2	
111 1,2,4-Trimethylbenzene	105	12.786	12.792	-0.006	96	7176599	25.0	24.9	
112 sec-Butylbenzene	105	12.914	12.914	0.000	94	9180439	25.0	24.7	
113 1,3-Dichlorobenzene	146	13.012	13.011	0.001	98	4056868	25.0	24.9	
114 4-Isopropyltoluene	119	13.018	13.018	0.000	97	7970833	25.0	25.1	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	92	898877	10.0	10.0	
116 1,4-Dichlorobenzene	146	13.085	13.085	0.000	95	4034569	25.0	24.8	
117 1,2,3-Trimethylbenzene	120	13.097	13.091	0.006	98	3132852	25.0	24.5	
118 Benzyl chloride	126	13.158	13.158	0.000	98	657275	25.0	29.6	
119 n-Butylbenzene	92	13.310	13.310	0.000	97	3966634	25.0	25.6	
120 1,2-Dichlorobenzene	146	13.341	13.341	0.000	99	3654497	25.0	24.6	
122 1,2-Dibromo-3-Chloropropane	155	13.883	13.883	0.000	91	240531	25.0	26.7	
123 1,3,5-Trichlorobenzene	180	14.011	14.011	0.000	98	3026395	25.0	25.8	
124 1,2,4-Trichlorobenzene	180	14.432	14.432	0.000	94	2542954	25.0	26.0	
125 Hexachlorobutadiene	225	14.517	14.517	0.000	96	1074015	25.0	25.3	
126 Naphthalene	128	14.615	14.615	0.000	97	4586641	25.0	25.1	
127 1,2,3-Trichlorobenzene	180	14.755	14.755	0.000	96	2111946	25.0	25.1	
134 Isopropyl alcohol	45		0.000				ND	ND	
144 2-ethoxy-2-methyl butane	1		0.000				ND	ND	
135 p-Diethylbenzene	1		0.000				ND	ND	
137 2-Methylnaphthalene	142		0.000				ND	ND	

## QC Flag Legend

### Processing Flags

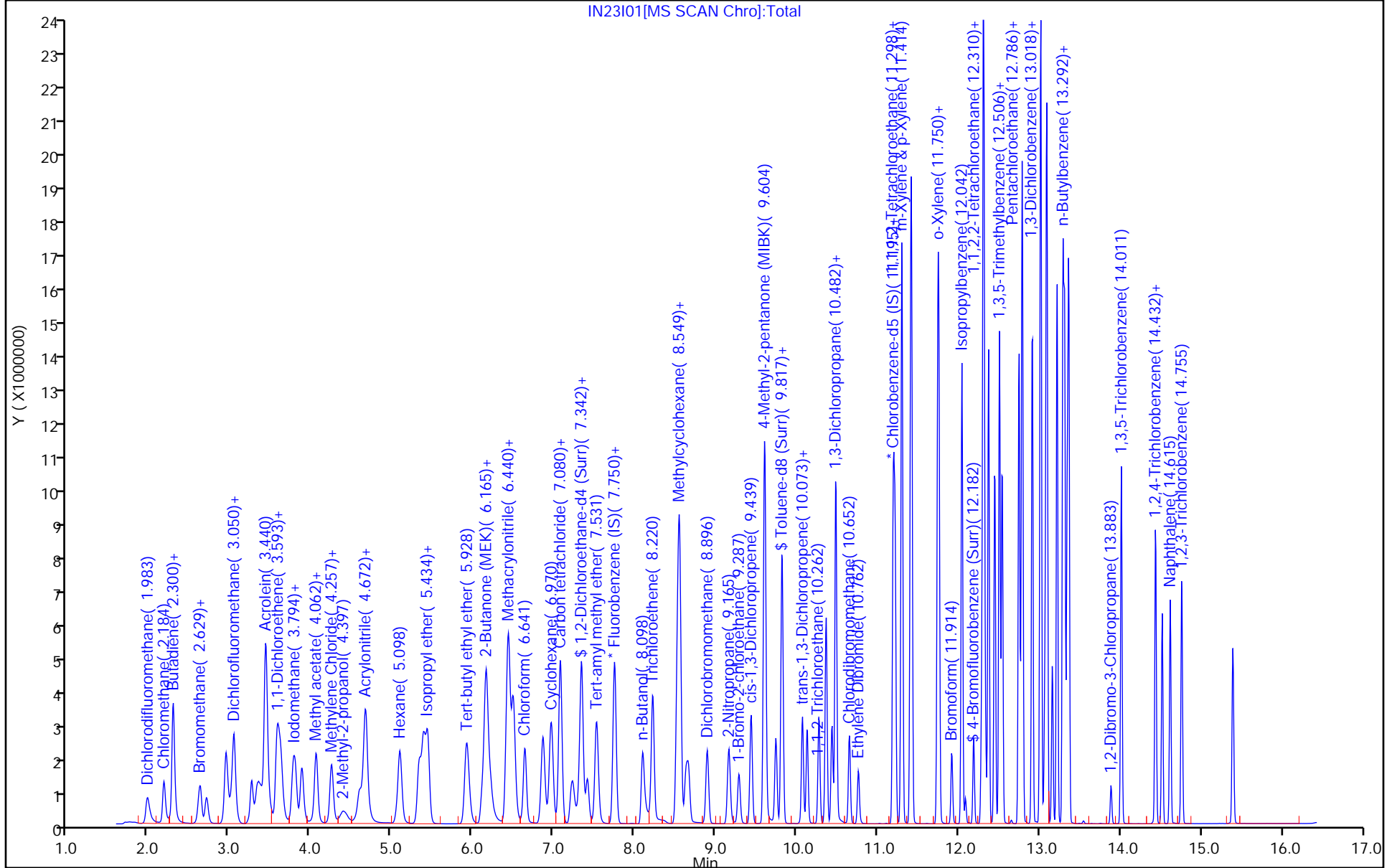
ND - Not Detected or Marked ND

### Review Flags

M - Manually Integrated

## Reagents:

MSV_RV1_826_00030	Amount Added: 25.00	Units: uL	
MSV_RV4GAS826_00096	Amount Added: 25.00	Units: uL	
MSV_RV4_826_00034	Amount Added: 25.00	Units: uL	
MSV_31_826ISS_00003	Amount Added: 5.00	Units: uL	Run Reagent



Eurofins Lancaster Laboratories Env, LLC

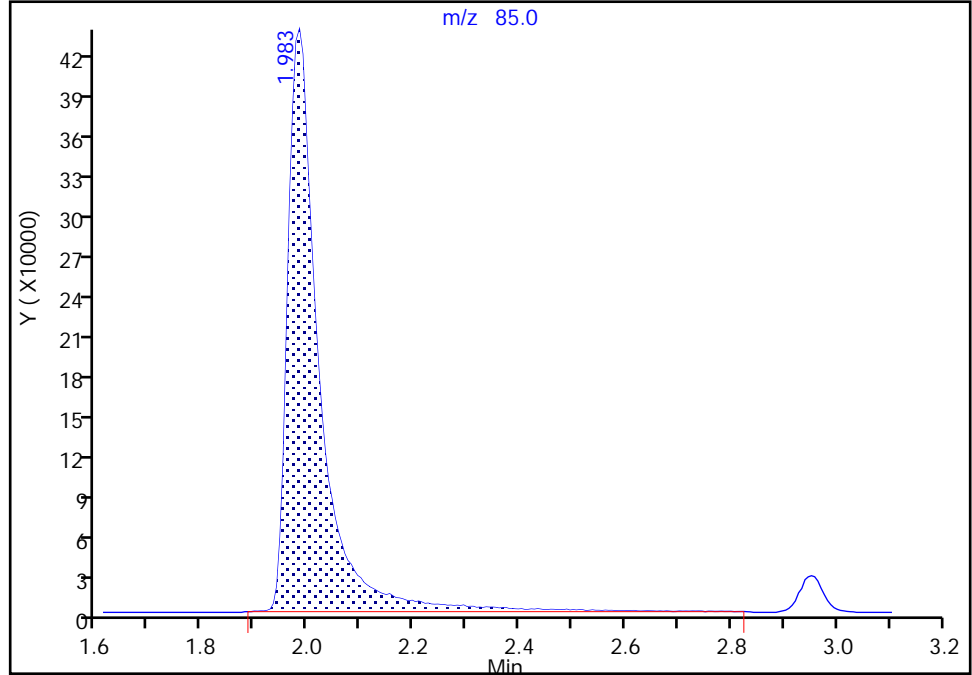
Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23101.D  
Injection Date: 23-Nov-2020 12:45:30 Instrument ID: 19930  
Lims ID: IC std7  
Client ID:  
Operator ID: dvv10203 ALS Bottle#: 2 Worklist Smp#: 3  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: 8260 25ml HP31 Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

1 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

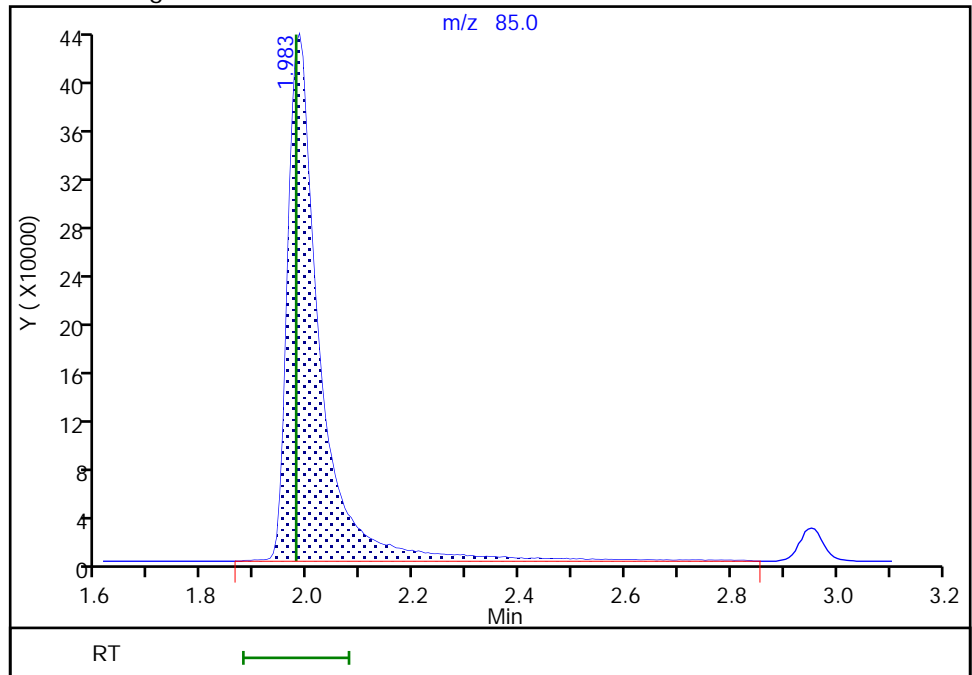
RT: 1.98  
Area: 1822259  
Amount: 24.944995  
Amount Units: ug/l

Processing Integration Results



RT: 1.98  
Area: 1853609  
Amount: 25.312074  
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 23-Nov-2020 18:24:20  
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

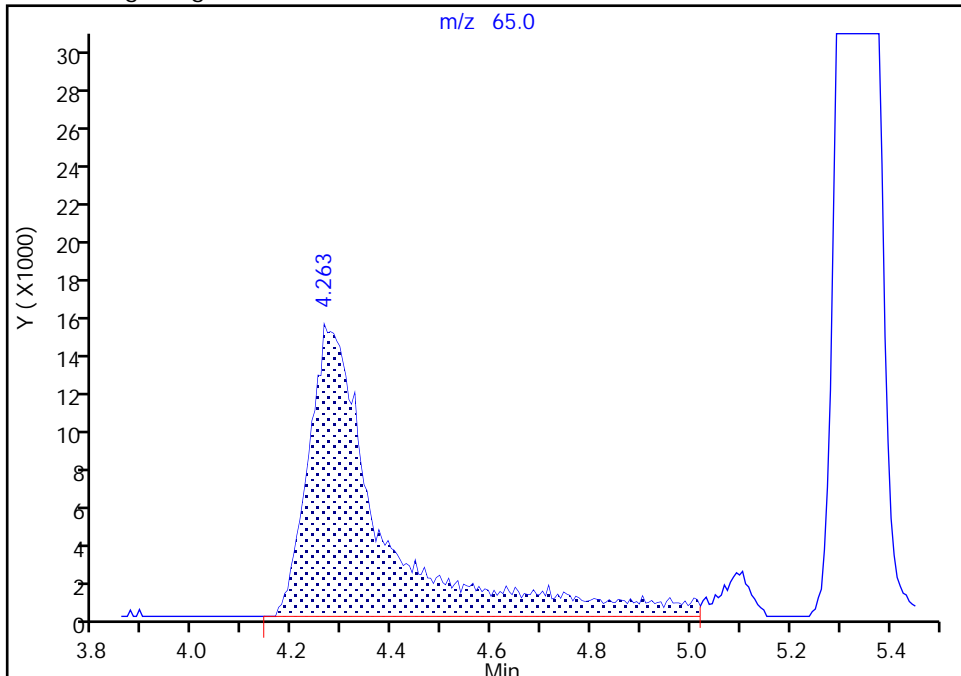
Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23101.D  
Injection Date: 23-Nov-2020 12:45:30 Instrument ID: 19930  
Lims ID: IC std7  
Client ID:  
Operator ID: dvv10203 ALS Bottle#: 2 Worklist Smp#: 3  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: 8260 25ml HP31 Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

\* 24 t-Butyl alcohol-d10 (IS), CAS: 53001-22-2

Signal: 1

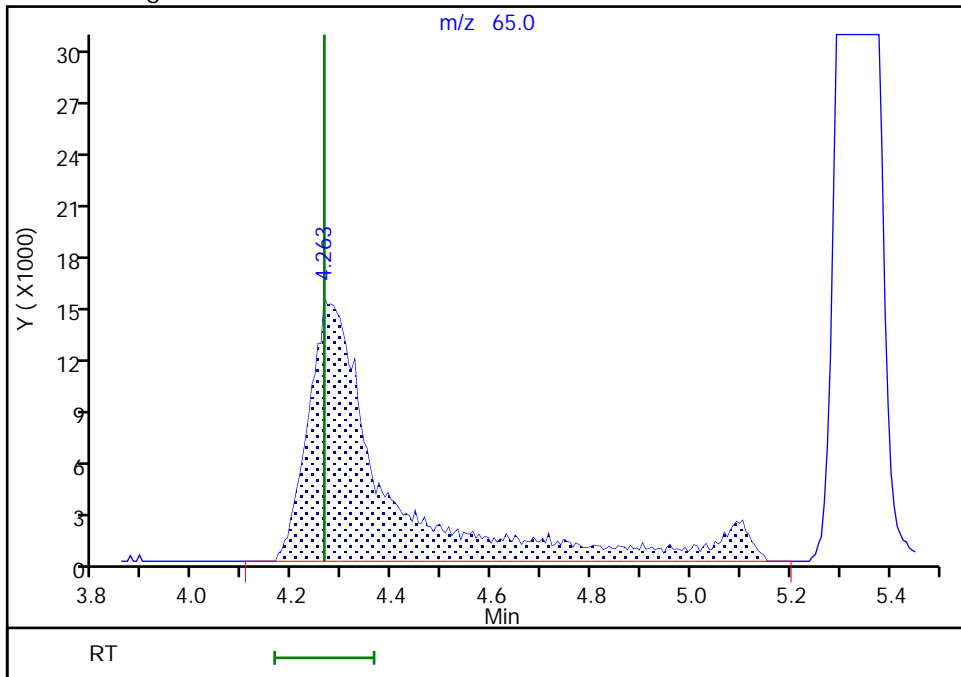
RT: 4.26  
Area: 158190  
Amount: 50.000000  
Amount Units: ug/l

Processing Integration Results



RT: 4.26  
Area: 168044  
Amount: 50.000000  
Amount Units: ug/l

Manual Integration Results



Eurofins Lancaster Laboratories Env, LLC

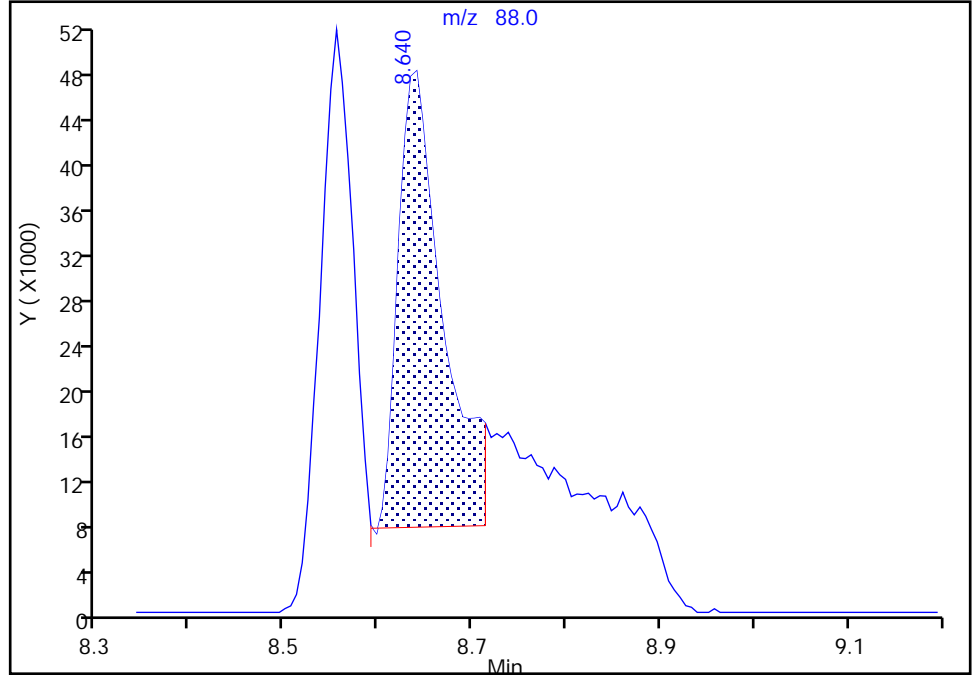
Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23101.D  
Injection Date: 23-Nov-2020 12:45:30 Instrument ID: 19930  
Lims ID: IC std7  
Client ID:  
Operator ID: dvv10203 ALS Bottle#: 2 Worklist Smp#: 3  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: 8260 25ml HP31 Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

65 1,4-Dioxane, CAS: 123-91-1

Signal: 1

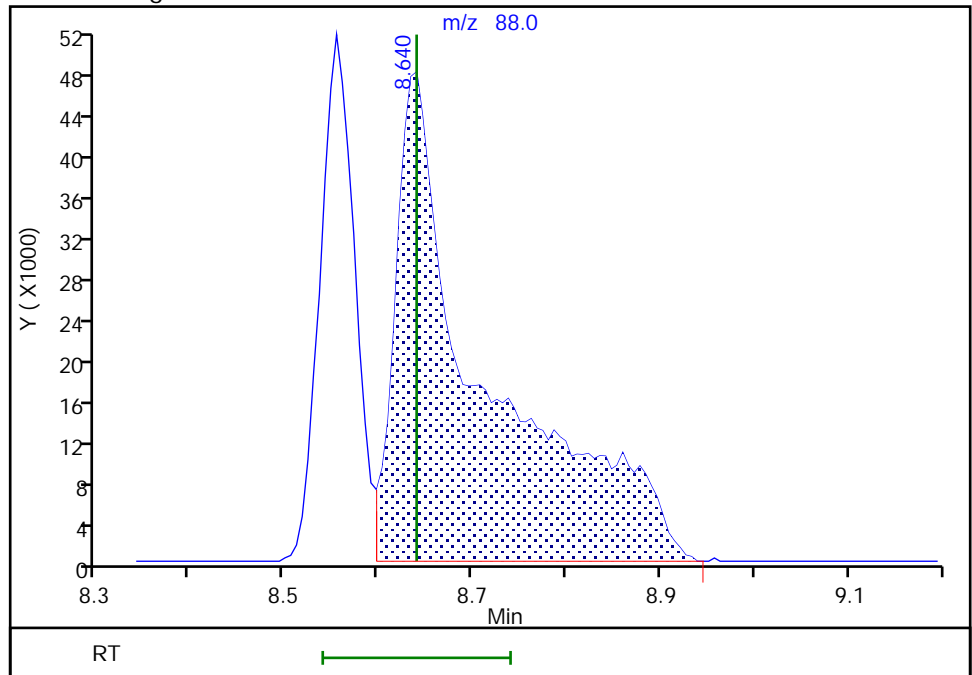
RT: 8.64  
Area: 133500  
Amount: 587.6212  
Amount Units: ug/l

Processing Integration Results



RT: 8.64  
Area: 318662  
Amount: 1120.7188  
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 23-Nov-2020 18:45:22

Audit Action: Split an Integrated Peak

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC  
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23102.D  
 Lims ID: ICIS - LG  
 Client ID:  
 Sample Type: ICIS Calib Level: 6  
 Inject. Date: 23-Nov-2020 13:06:30 ALS Bottle#: 3 Worklist Smp#: 4  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0016280-004  
 Misc. Info.: ICIS - LG  
 Operator ID: dvv10203 Instrument ID: 19930  
 Sublist: chrom-8260 25ml HP31\*sub2

Method: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\8260 25ml HP31.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 23-Nov-2020 19:10:46 Calib Date: 23-Nov-2020 18:05:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23117.D

Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1632

First Level Reviewer: campbellme

Date: 23-Nov-2020 18:29:34

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.977	1.977	0.000	99	762848	10.0	10.3	
4 Chloromethane	50	2.178	2.178	0.000	99	847456	10.0	9.91	
6 Butadiene	39	2.288	2.288	0.000	89	655274	10.0	8.97	
5 Vinyl chloride	62	2.300	2.300	0.000	98	781821	10.0	9.93	
7 Bromomethane	94	2.623	2.623	0.000	90	560203	10.0	9.81	
8 Chloroethane	64	2.702	2.702	0.000	99	476273	10.0	9.84	
9 Dichlorofluoromethane	67	2.946	2.946	0.000	97	1068389	10.0	9.85	
10 Trichlorofluoromethane	101	3.019	3.019	0.000	98	1002094	10.0	9.83	
11 Ethyl ether	59	3.263	3.263	0.000	89	461858	10.0	10.1	
12 1,2-Dichloro-1,1,2-trifluoroethane	67	3.343	3.343	0.000	93	714488	10.0	10.0	
13 Acrolein	56	3.434	3.434	0.000	100	3743531	500.0	489.2	
14 1,1-Dichloroethene	96	3.574	3.574	0.000	97	554501	10.0	10.1	
15 Acetone	43	3.611	3.611	0.000	100	854846	100.0	89.8	M
16 112TCTFE	101	3.617	3.617	0.000	90	592097	10.0	10.2	
17 Iodomethane	142	3.775	3.775	0.000	98	1087214	10.0	10.1	
18 Ethyl bromide	108	3.800	3.800	0.000	98	500672	10.0	10.0	
19 Carbon disulfide	76	3.879	3.879	0.000	99	1577401	10.0	9.88	
21 Methyl acetate	43	4.038	4.038	0.000	97	246609	10.0	9.50	M
22 3-Chloro-1-propene	41	4.056	4.056	0.000	93	850587	10.0	10.2	
23 Methylene Chloride	84	4.251	4.251	0.000	90	601040	10.0	9.85	
* 24 t-Butyl alcohol-d10 (IS)	65	4.257	4.257	0.000	0	174562	50.0	50.0	M
25 2-Methyl-2-propanol	59	4.391	4.391	0.000	100	716161	200.0	192.4	
26 Acrylonitrile	53	4.592	4.592	0.000	99	608812	50.0	49.0	
27 Methyl tert-butyl ether	73	4.659	4.659	0.000	94	1497268	10.0	10.2	
28 trans-1,2-Dichloroethene	96	4.672	4.672	0.000	99	612688	10.0	10.1	
29 Hexane	57	5.098	5.098	0.000	89	887151	10.0	10.7	
31 1,1-Dichloroethane	63	5.336	5.336	0.000	96	1110105	10.0	10.1	
32 Isopropyl ether	45	5.391	5.391	0.000	95	1843818	10.0	10.1	
33 2-Chloro-1,3-butadiene	53	5.440	5.440	0.000	89	906198	10.0	10.3	
34 Tert-butyl ethyl ether	59	5.921	5.921	0.000	97	1769941	10.0	10.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 2-Butanone (MEK)	43	6.135	6.135	0.000	99	1561053	100.0	98.1	
37 cis-1,2-Dichloroethene	96	6.165	6.165	0.000	81	706462	10.0	10.0	
38 2,2-Dichloropropane	77	6.177	6.177	0.000	86	911060	10.0	10.3	
40 Propionitrile	54	6.220	6.220	0.000	99	863833	200.0	185.5	
42 Methacrylonitrile	67	6.433	6.433	0.000	89	1616918	100.0	98.6	
43 Chlorobromomethane	128	6.494	6.494	0.000	89	310784	10.0	9.98	
44 Tetrahydrofuran	71	6.507	6.507	0.000	84	470375	100.0	97.4	
45 Chloroform	83	6.641	6.641	0.000	92	1083255	10.0	10.0	
\$ 46 Dibromofluoromethane (Surr)	113	6.854	6.854	0.000	94	507861	10.0	9.96	
47 1,1,1-Trichloroethane	97	6.866	6.866	0.000	98	981285	10.0	10.1	
48 Cyclohexane	56	6.970	6.970	0.000	88	1041428	10.0	10.3	
50 Carbon tetrachloride	117	7.080	7.080	0.000	97	887161	10.0	10.2	
51 1,1-Dichloropropene	75	7.080	7.080	0.000	98	882438	10.0	10.2	
52 Isobutyl alcohol	41	7.226	7.226	0.000	95	551150	500.0	460.4	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.311	7.311	0.000	0	103491	10.0	10.1	
54 Benzene	78	7.342	7.342	0.000	95	2625721	10.0	10.0	
56 1,2-Dichloroethane	62	7.415	7.415	0.000	97	629666	10.0	9.85	
57 Tert-amyl methyl ether	73	7.531	7.531	0.000	99	1627872	10.0	10.4	
* 58 Fluorobenzene (IS)	96	7.744	7.744	0.000	99	2065893	10.0	10.0	
59 n-Heptane	43	7.750	7.750	0.000	90	873361	10.0	10.4	
60 n-Butanol	56	8.098	8.098	0.000	84	1230757	1000.0	1087.8	M
61 Trichloroethene	95	8.220	8.220	0.000	97	688361	10.0	10.0	
62 Methylcyclohexane	83	8.525	8.525	0.000	94	1163763	10.0	10.5	
63 1,2-Dichloropropane	63	8.549	8.549	0.000	87	656764	10.0	10.2	
64 Methyl methacrylate	69	8.634	8.634	0.000	88	318254	10.0	10.4	
65 1,4-Dioxane	88	8.640	8.640	0.000	35	148345	500.0	502.2	M
66 Dibromomethane	93	8.659	8.659	0.000	94	306542	10.0	10.1	
68 Dichlorobromomethane	83	8.896	8.896	0.000	99	795099	10.0	10.3	
69 2-Nitropropane	41	9.159	9.159	0.000	96	778258	100.0	101.4	
72 1-Bromo-2-chloroethane	63	9.287	9.287	0.000	98	675088	10.0	10.2	
73 cis-1,3-Dichloropropene	75	9.439	9.439	0.000	98	986321	10.0	10.7	
74 4-Methyl-2-pentanone (MIBK)	43	9.604	9.604	0.000	95	3947176	100.0	99.7	
\$ 75 Toluene-d8 (Surr)	98	9.744	9.744	0.000	93	2037192	10.0	9.93	
76 Toluene	92	9.817	9.817	0.000	99	1696057	10.0	9.90	
78 trans-1,3-Dichloropropene	75	10.073	10.073	0.000	90	792406	10.0	10.7	
79 Ethyl methacrylate	69	10.134	10.134	0.000	87	674454	10.0	10.9	
80 1,1,2-Trichloroethane	97	10.274	10.274	0.000	90	462694	10.0	10.1	
81 Tetrachloroethene	166	10.366	10.366	0.000	97	832486	10.0	10.0	
82 1,3-Dichloropropane	76	10.439	10.439	0.000	86	799899	10.0	10.2	
83 2-Hexanone	43	10.481	10.481	0.000	95	2849426	100.0	105.2	
85 Chlorodibromomethane	129	10.652	10.652	0.000	90	598262	10.0	10.4	
86 Ethylene Dibromide	107	10.762	10.762	0.000	99	452788	10.0	10.3	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.189	0.000	84	1570516	10.0	10.0	
88 1-Chlorohexane	91	11.195	11.195	0.000	95	986757	10.0	9.94	
90 Chlorobenzene	112	11.213	11.213	0.000	96	1890048	10.0	9.98	
92 Ethylbenzene	91	11.298	11.298	0.000	98	3352863	10.0	10.1	
91 1,1,1,2-Tetrachloroethane	131	11.298	11.298	0.000	96	683105	10.0	10.4	
93 m-Xylene & p-Xylene	106	11.414	11.414	0.000	100	2646088	20.0	20.3	
94 o-Xylene	106	11.743	11.743	0.000	96	1304564	10.0	10.3	
95 Styrene	104	11.756	11.756	0.000	95	2128541	10.0	10.5	
96 Bromoform	173	11.920	11.920	0.000	99	376053	10.0	10.8	
97 Isopropylbenzene	105	12.042	12.042	0.000	95	3465538	10.0	10.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
\$ 100 4-Bromofluorobenzene (Surr)	95	12.188	12.188	0.000	94	749783	10.0	9.87	
101 1,1,2,2-Tetrachloroethane	83	12.286	12.286	0.000	92	606886	10.0	10.4	
102 Bromobenzene	156	12.304	12.304	0.000	95	812183	10.0	10.1	
103 trans-1,4-Dichloro-2-butene	53	12.310	12.310	0.000	91	1401018	100.0	107.9	
104 1,2,3-Trichloropropane	110	12.335	12.335	0.000	82	161724	10.0	10.1	
105 N-Propylbenzene	91	12.371	12.371	0.000	99	4034433	10.0	10.3	
106 2-Chlorotoluene	126	12.451	12.451	0.000	97	816131	10.0	10.1	
107 1,3,5-Trimethylbenzene	105	12.505	12.505	0.000	94	2915864	10.0	10.4	
108 4-Chlorotoluene	126	12.542	12.542	0.000	96	830797	10.0	10.2	
109 tert-Butylbenzene	134	12.749	12.749	0.000	93	655812	10.0	10.3	
110 Pentachloroethane	167	12.780	12.780	0.000	93	541224	10.0	10.7	
111 1,2,4-Trimethylbenzene	105	12.792	12.792	0.000	96	2983176	10.0	10.4	
112 sec-Butylbenzene	105	12.914	12.914	0.000	93	3840352	10.0	10.4	
113 1,3-Dichlorobenzene	146	13.011	13.011	0.000	98	1643503	10.0	10.2	
114 4-Isopropyltoluene	119	13.018	13.018	0.000	97	3297888	10.0	10.5	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	93	891775	10.0	10.0	
116 1,4-Dichlorobenzene	146	13.085	13.085	0.000	95	1640637	10.0	10.1	
117 1,2,3-Trimethylbenzene	120	13.091	13.091	0.000	98	1285454	10.0	10.1	
118 Benzyl chloride	126	13.158	13.158	0.000	98	257164	10.0	11.7	
119 n-Butylbenzene	92	13.310	13.310	0.000	97	1606360	10.0	10.5	
120 1,2-Dichlorobenzene	146	13.341	13.341	0.000	99	1503421	10.0	10.2	
122 1,2-Dibromo-3-Chloropropane	155	13.883	13.883	0.000	91	97400	10.0	10.9	
123 1,3,5-Trichlorobenzene	180	14.011	14.011	0.000	98	1226210	10.0	10.5	
124 1,2,4-Trichlorobenzene	180	14.432	14.432	0.000	94	1043686	10.0	10.8	
125 Hexachlorobutadiene	225	14.517	14.517	0.000	96	420536	10.0	9.98	
126 Naphthalene	128	14.615	14.615	0.000	97	1960339	10.0	10.8	
127 1,2,3-Trichlorobenzene	180	14.755	14.755	0.000	96	889058	10.0	10.6	
134 Isopropyl alcohol	45		0.000				ND	ND	
144 2-ethoxy-2-methyl butane	1		0.000				ND	ND	
135 p-Diethylbenzene	1		0.000				ND	ND	
137 2-Methylnaphthalene	142		0.000				ND	ND	

### QC Flag Legend

#### Processing Flags

ND - Not Detected or Marked ND

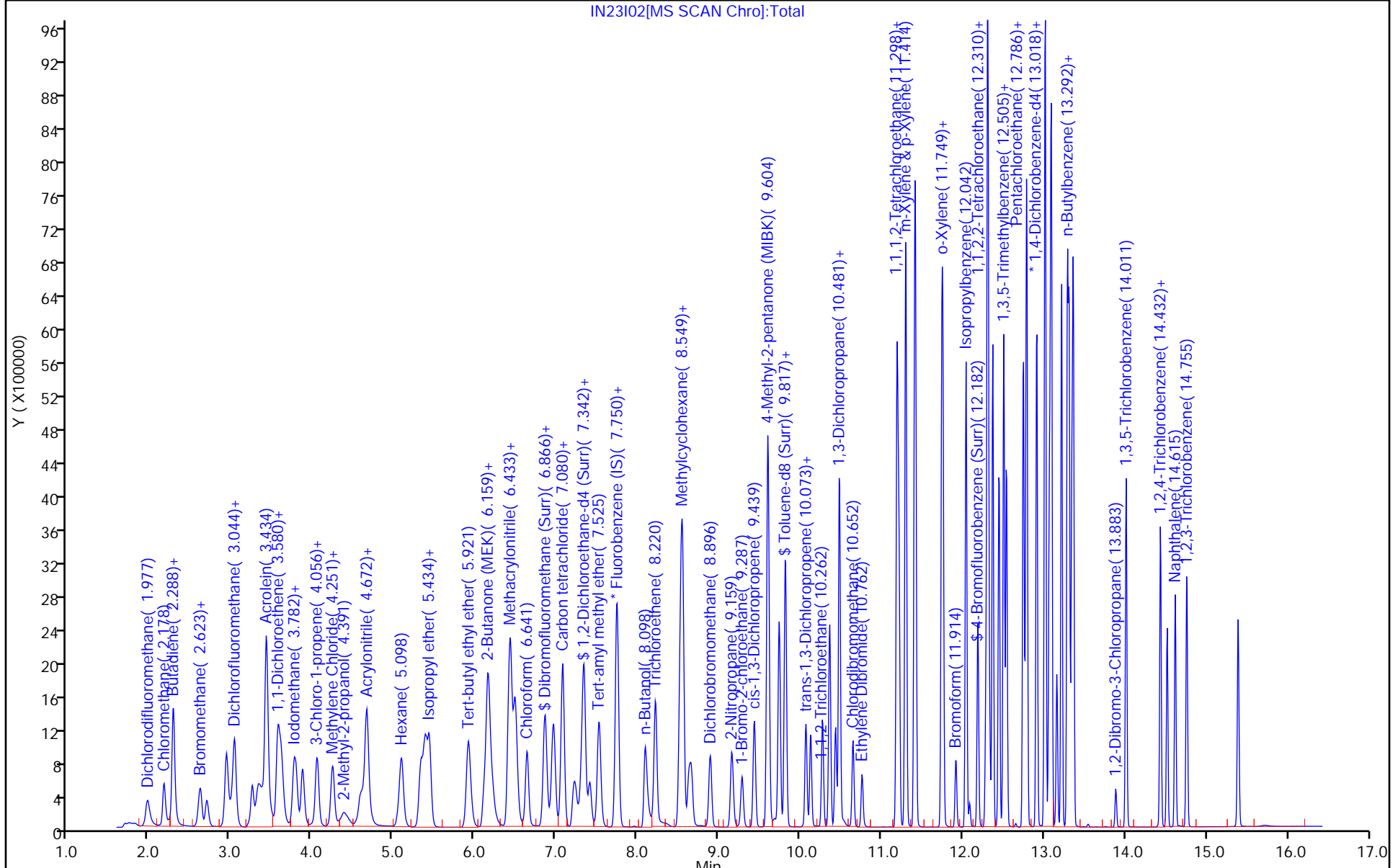
#### Review Flags

M - Manually Integrated

### Reagents:

MSV_RV1_826_00030	Amount Added: 10.00	Units: uL	
MSV_RV4GAS826_00096	Amount Added: 10.00	Units: uL	
MSV_RV4_826_00034	Amount Added: 10.00	Units: uL	
MSV_31_826ISS_00003	Amount Added: 5.00	Units: uL	Run Reagent





Eurofins Lancaster Laboratories Env, LLC

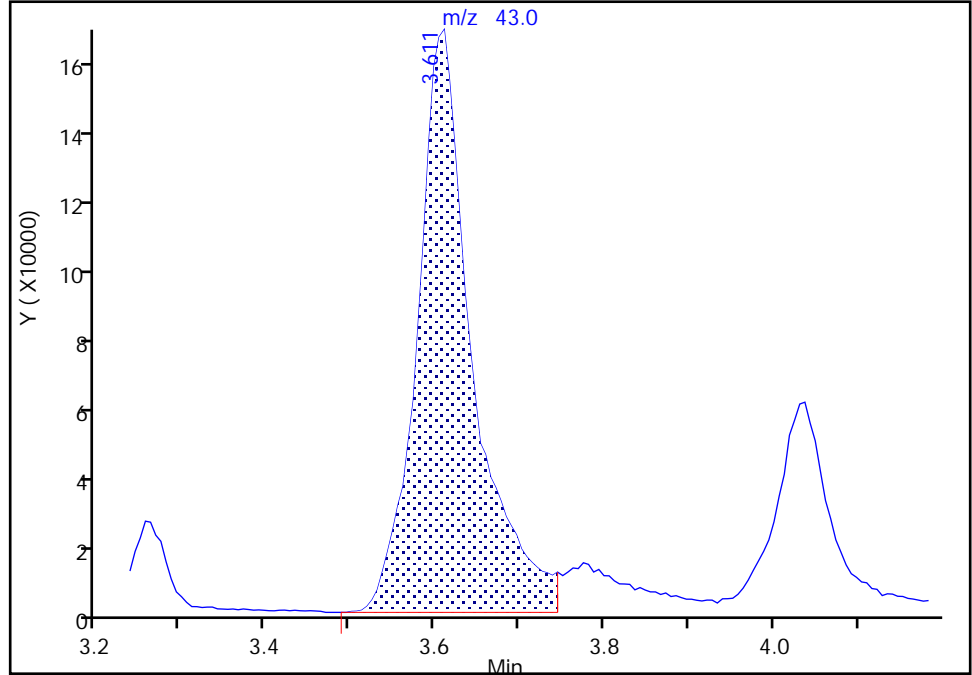
Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23102.D  
Injection Date: 23-Nov-2020 13:06:30 Instrument ID: 19930  
Lims ID: ICIS - LG  
Client ID:  
Operator ID: dvv10203 ALS Bottle#: 3 Worklist Smp#: 4  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: 8260 25ml HP31 Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

15 Acetone, CAS: 67-64-1

Signal: 1

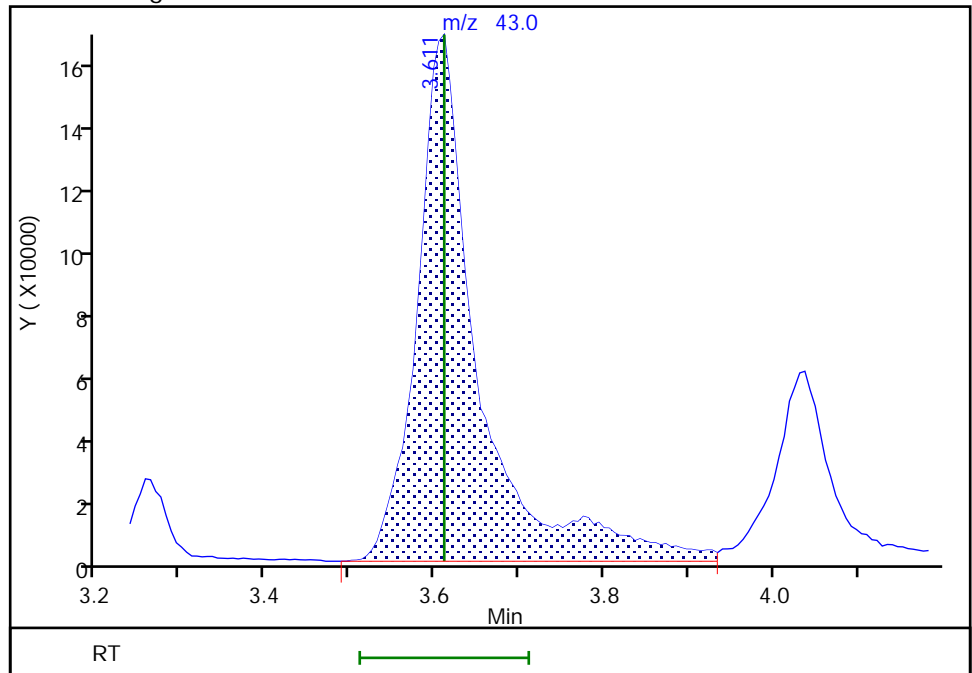
RT: 3.61  
Area: 768094  
Amount: 81.267546  
Amount Units: ug/l

Processing Integration Results



RT: 3.61  
Area: 854846  
Amount: 89.823778  
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 23-Nov-2020 18:34:10  
Audit Action: Assigned New Baseline

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

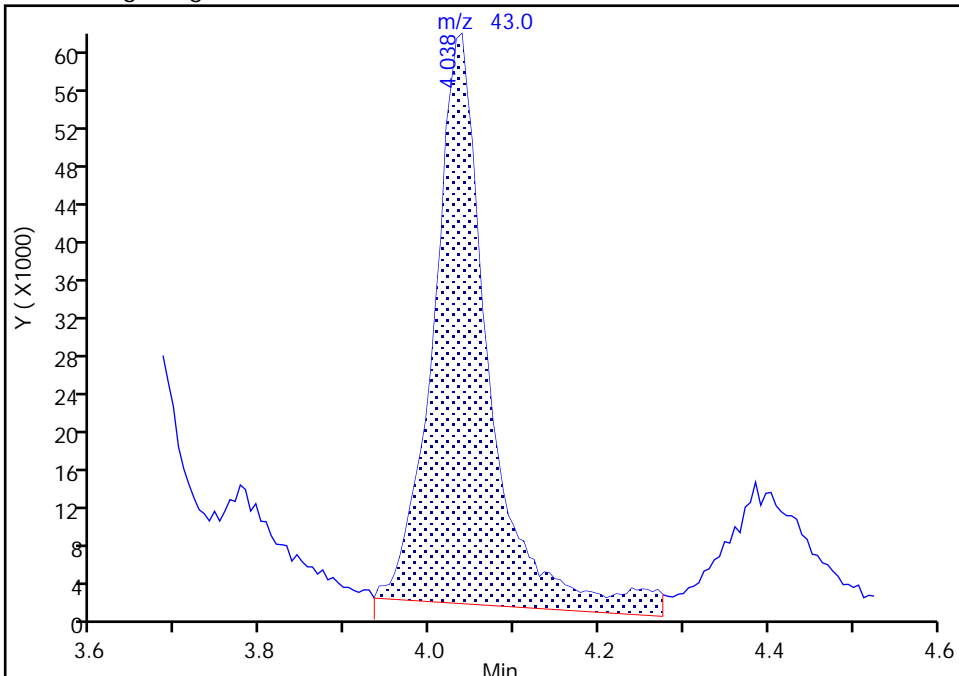
Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23102.D  
Injection Date: 23-Nov-2020 13:06:30 Instrument ID: 19930  
Lims ID: ICIS - LG  
Client ID:  
Operator ID: dvv10203 ALS Bottle#: 3 Worklist Smp#: 4  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: 8260 25ml HP31 Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

21 Methyl acetate, CAS: 79-20-9

Signal: 1

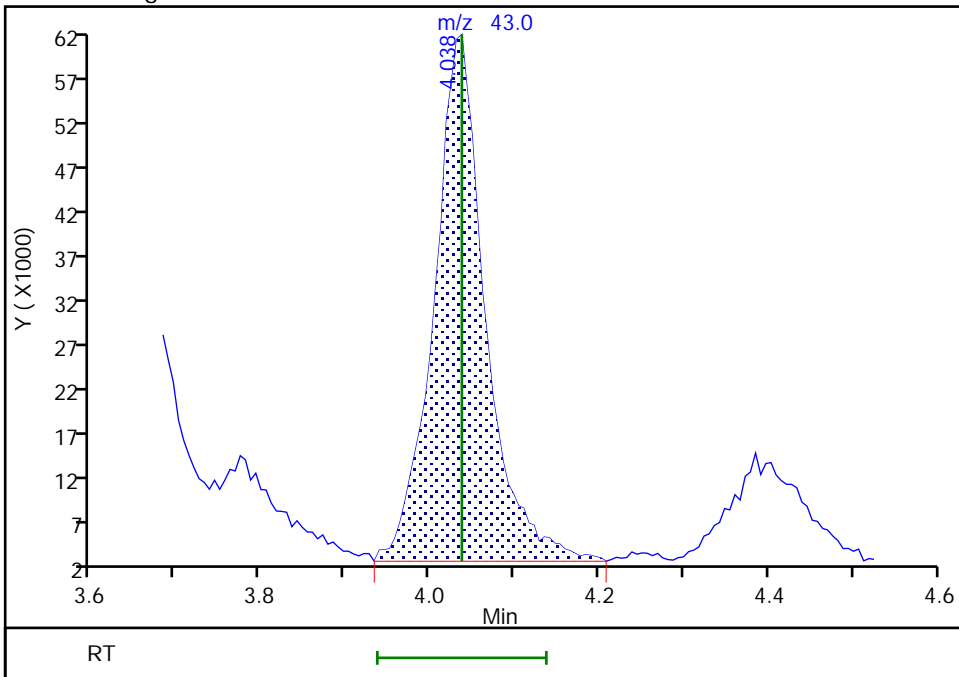
RT: 4.04  
Area: 268835  
Amount: 11.947469  
Amount Units: ug/l

Processing Integration Results



RT: 4.04  
Area: 246609  
Amount: 9.498666  
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 23-Nov-2020 18:25:41  
Audit Action: Assigned New Baseline

Audit Reason: Incomplete Integration

Euofins Lancaster Laboratories Env, LLC

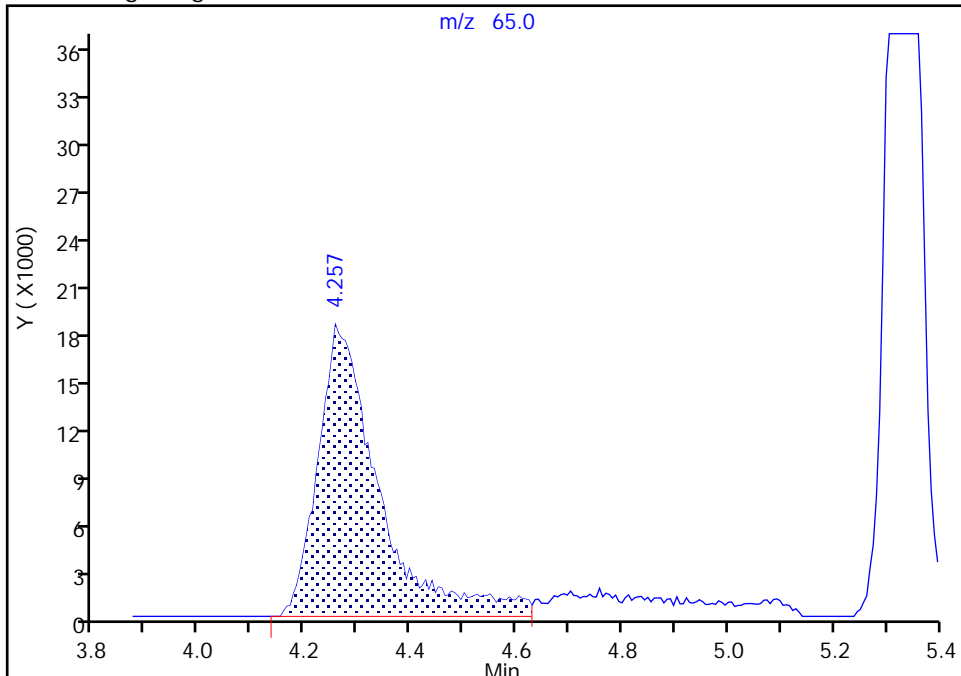
Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23102.D  
Injection Date: 23-Nov-2020 13:06:30 Instrument ID: 19930  
Lims ID: ICIS - LG  
Client ID:  
Operator ID: dvv10203 ALS Bottle#: 3 Worklist Smp#: 4  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: 8260 25ml HP31 Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

\* 24 t-Butyl alcohol-d10 (IS), CAS: 53001-22-2

Signal: 1

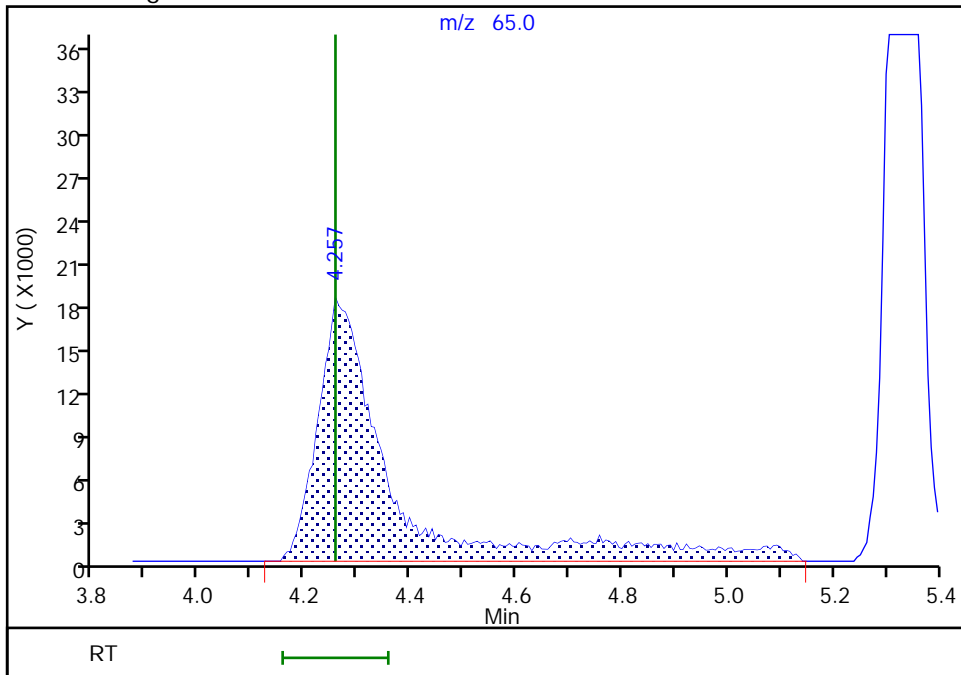
RT: 4.26  
Area: 144274  
Amount: 50.000000  
Amount Units: ug/l

Processing Integration Results



RT: 4.26  
Area: 174562  
Amount: 50.000000  
Amount Units: ug/l

Manual Integration Results



Eurofins Lancaster Laboratories Env, LLC

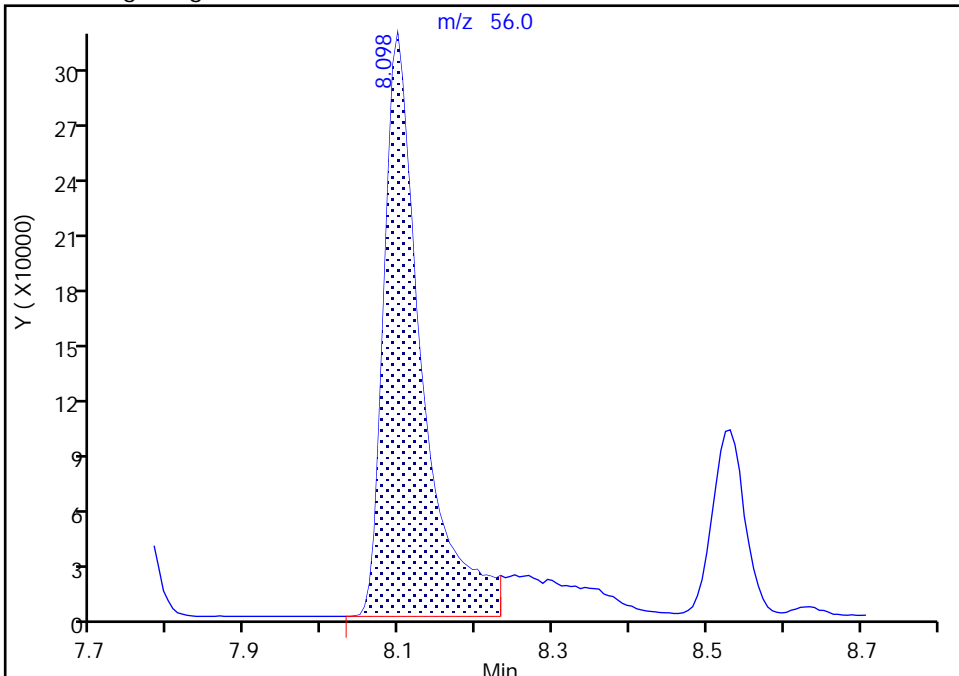
Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23102.D  
Injection Date: 23-Nov-2020 13:06:30 Instrument ID: 19930  
Lims ID: ICIS - LG  
Client ID:  
Operator ID: dvv10203 ALS Bottle#: 3 Worklist Smp#: 4  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: 8260 25ml HP31 Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

60 n-Butanol, CAS: 71-36-3

Signal: 1

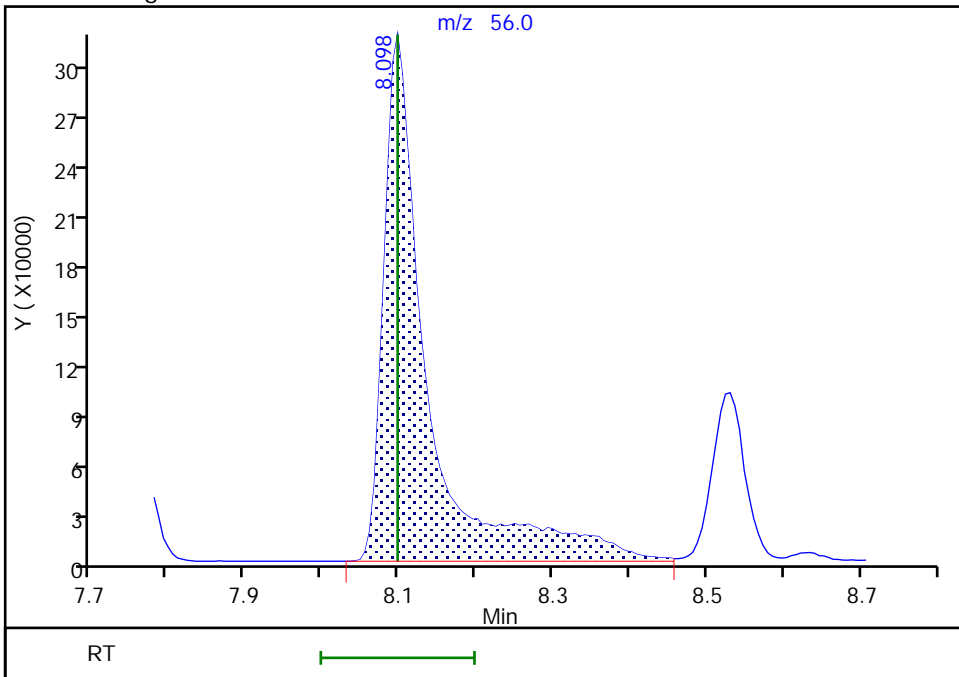
RT: 8.10  
Area: 1060901  
Amount: 1017.5840  
Amount Units: ug/l

Processing Integration Results



RT: 8.10  
Area: 1230757  
Amount: 1087.7790  
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 23-Nov-2020 18:26:30  
Audit Action: Assigned New Baseline

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

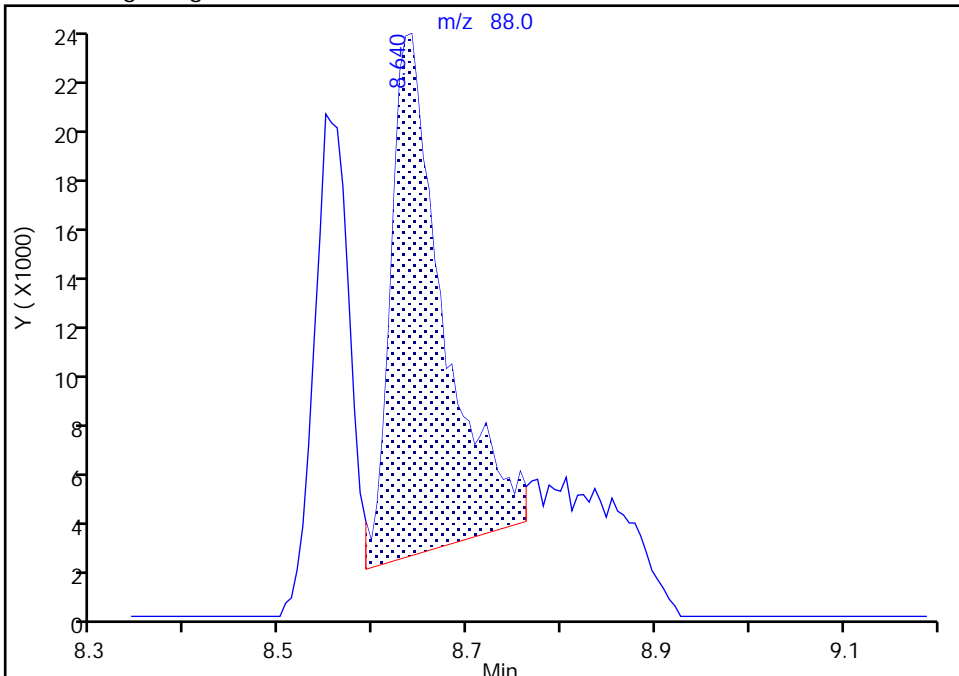
Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23102.D  
Injection Date: 23-Nov-2020 13:06:30 Instrument ID: 19930  
Lims ID: ICIS - LG  
Client ID:  
Operator ID: dvv10203 ALS Bottle#: 3 Worklist Smp#: 4  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: 8260 25ml HP31 Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

65 1,4-Dioxane, CAS: 123-91-1

Signal: 1

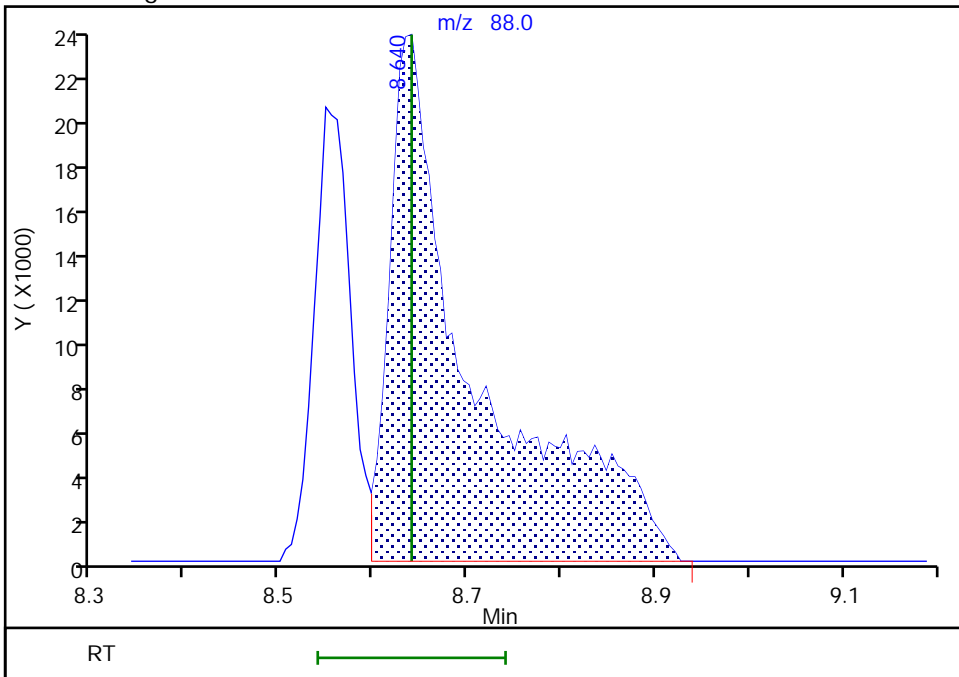
RT: 8.64  
Area: 82249  
Amount: 529.1983  
Amount Units: ug/l

Processing Integration Results



RT: 8.64  
Area: 148345  
Amount: 502.2415  
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 23-Nov-2020 18:26:46  
Audit Action: Split an Integrated Peak

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC  
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23103.D  
 Lims ID: IC std5  
 Client ID:  
 Sample Type: IC Calib Level: 5  
 Inject. Date: 23-Nov-2020 13:28:30 ALS Bottle#: 4 Worklist Smp#: 5  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0016280-005  
 Misc. Info.: IC STD5  
 Operator ID: dvv10203 Instrument ID: 19930  
 Sublist: chrom-8260 25ml HP31\*sub2

Method: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\8260 25ml HP31.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 23-Nov-2020 19:10:58 Calib Date: 23-Nov-2020 18:05:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23117.D

Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1632

First Level Reviewer: campbellme

Date: 23-Nov-2020 18:32:00

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.971	1.977	-0.006	99	362905	5.00	5.14	
4 Chloromethane	50	2.178	2.178	0.000	99	403049	5.00	4.92	
6 Butadiene	39	2.288	2.288	0.000	91	336874	5.00	4.81	
5 Vinyl chloride	62	2.300	2.300	0.000	98	378321	5.00	5.02	
7 Bromomethane	94	2.623	2.623	0.000	90	268205	5.00	4.90	M
8 Chloroethane	64	2.709	2.702	0.007	100	229528	5.00	4.95	
9 Dichlorofluoromethane	67	2.946	2.946	0.000	96	515898	5.00	4.97	
10 Trichlorofluoromethane	101	3.020	3.019	0.001	98	488244	5.00	5.00	
11 Ethyl ether	59	3.269	3.263	0.006	90	219835	5.00	5.03	
12 1,2-Dichloro-1,1,2-trifluoroethane	67	3.349	3.343	0.006	91	347378	5.00	5.07	
13 Acrolein	56	3.434	3.434	0.000	100	1828205	250.0	248.4	
14 1,1-Dichloroethene	96	3.580	3.574	0.006	97	267271	5.00	5.07	
15 Acetone	43	3.611	3.611	0.000	100	431846	50.0	47.2	
16 112TCTFE	101	3.623	3.617	0.006	89	291222	5.00	5.22	
17 Iodomethane	142	3.782	3.775	0.007	98	522756	5.00	5.07	
18 Ethyl bromide	108	3.806	3.800	0.006	98	239974	5.00	5.00	
19 Carbon disulfide	76	3.885	3.879	0.006	98	766074	5.00	5.01	
21 Methyl acetate	43	4.038	4.038	0.000	99	120524	5.00	4.83	M
22 3-Chloro-1-propene	41	4.062	4.056	0.006	92	400038	5.00	4.99	
23 Methylene Chloride	84	4.251	4.251	0.000	89	289040	5.00	4.94	
* 24 t-Butyl alcohol-d10 (IS)	65	4.263	4.257	0.006	0	167919	50.0	50.0	M
25 2-Methyl-2-propanol	59	4.391	4.391	0.000	99	360171	100.0	100.6	
26 Acrylonitrile	53	4.598	4.592	0.006	98	298145	25.0	24.9	
27 Methyl tert-butyl ether	73	4.659	4.659	0.000	94	719156	5.00	5.09	
28 trans-1,2-Dichloroethene	96	4.678	4.672	0.006	99	296112	5.00	5.08	
29 Hexane	57	5.104	5.098	0.006	89	429931	5.00	5.39	
31 1,1-Dichloroethane	63	5.330	5.336	-0.006	96	533155	5.00	5.06	
32 Isopropyl ether	45	5.391	5.391	0.000	95	883301	5.00	5.07	
33 2-Chloro-1,3-butadiene	53	5.446	5.440	0.006	89	434378	5.00	5.14	
34 Tert-butyl ethyl ether	59	5.921	5.921	0.000	97	840400	5.00	5.11	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 2-Butanone (MEK)	43	6.129	6.135	-0.006	99	758501	50.0	49.5	
S 35 1,2-Dichloroethene, Total	100				0			10.1	
37 cis-1,2-Dichloroethene	96	6.165	6.165	0.000	81	339325	5.00	5.01	
38 2,2-Dichloropropane	77	6.177	6.177	0.000	86	433655	5.00	5.12	
40 Propionitrile	54	6.220	6.220	0.000	99	450559	100.0	100.6	
42 Methacrylonitrile	67	6.433	6.433	0.000	89	784279	50.0	49.7	
43 Chlorobromomethane	128	6.494	6.494	0.000	89	152825	5.00	5.13	
44 Tetrahydrofuran	71	6.507	6.507	0.000	84	232086	50.0	50.0	
45 Chloroform	83	6.641	6.641	0.000	92	523866	5.00	5.05	
\$ 46 Dibromofluoromethane (Surr)	113	6.854	6.854	0.000	94	490996	10.0	10.0	
47 1,1,1-Trichloroethane	97	6.872	6.866	0.006	97	471715	5.00	5.06	
48 Cyclohexane	56	6.964	6.970	-0.006	88	506440	5.00	5.24	
50 Carbon tetrachloride	117	7.080	7.080	0.000	88	430415	5.00	5.16	
51 1,1-Dichloropropene	75	7.080	7.080	0.000	97	424728	5.00	5.13	
52 Isobutyl alcohol	41	7.226	7.226	0.000	95	294140	250.0	255.4	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.311	7.311	0.000	0	99154	10.0	10.1	
54 Benzene	78	7.342	7.342	0.000	96	1258244	5.00	5.02	
56 1,2-Dichloroethane	62	7.415	7.415	0.000	97	297074	5.00	4.85	
57 Tert-amyl methyl ether	73	7.531	7.531	0.000	99	780037	5.00	5.18	
* 58 Fluorobenzene (IS)	96	7.744	7.744	0.000	99	1978687	10.0	10.0	
59 n-Heptane	43	7.750	7.750	0.000	90	414595	5.00	5.18	
60 n-Butanol	56	8.098	8.098	0.000	84	565829	500.0	519.9	M
61 Trichloroethene	95	8.220	8.220	0.000	97	330514	5.00	5.04	
62 Methylcyclohexane	83	8.531	8.525	0.007	94	562317	5.00	5.28	
63 1,2-Dichloropropane	63	8.555	8.549	0.006	91	310291	5.00	5.04	
64 Methyl methacrylate	69	8.634	8.634	0.000	87	148760	5.00	5.07	
65 1,4-Dioxane	88	8.640	8.640	0.000	35	65884	250.0	231.9	M
66 Dibromomethane	93	8.665	8.659	0.006	94	147921	5.00	5.08	
68 Dichlorobromomethane	83	8.896	8.896	0.000	99	374289	5.00	5.07	
69 2-Nitropropane	41	9.165	9.159	0.006	96	374854	50.0	50.8	
72 1-Bromo-2-chloroethane	63	9.287	9.287	0.000	98	322620	5.00	5.09	
73 cis-1,3-Dichloropropene	75	9.439	9.439	0.000	98	459853	5.00	5.19	
74 4-Methyl-2-pentanone (MIBK)	43	9.604	9.604	0.000	95	1948125	50.0	51.1	
\$ 75 Toluene-d8 (Surr)	98	9.744	9.744	0.000	93	1951818	10.0	10.1	
76 Toluene	92	9.823	9.817	0.006	98	811376	5.00	5.00	
S 77 1,3-Dichloropropene, Total	100				0			10.4	
78 trans-1,3-Dichloropropene	75	10.073	10.073	0.000	90	367862	5.00	5.26	
79 Ethyl methacrylate	69	10.134	10.134	0.000	88	316728	5.00	5.41	
80 1,1,2-Trichloroethane	97	10.274	10.274	0.000	90	218945	5.00	5.06	
81 Tetrachloroethene	166	10.366	10.366	0.000	97	401439	5.00	5.11	
82 1,3-Dichloropropane	76	10.439	10.439	0.000	87	378398	5.00	5.12	
83 2-Hexanone	43	10.488	10.481	0.007	96	1351932	50.0	51.9	
85 Chlorodibromomethane	129	10.652	10.652	0.000	89	283207	5.00	5.21	
86 Ethylene Dibromide	107	10.762	10.762	0.000	98	213803	5.00	5.16	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.189	0.000	84	1486999	10.0	10.0	
88 1-Chlorohexane	91	11.195	11.195	0.000	95	470375	5.00	5.00	
90 Chlorobenzene	112	11.219	11.213	0.006	96	905888	5.00	5.05	
S 89 Xylenes, Total	106				0			15.4	
92 Ethylbenzene	91	11.304	11.298	0.006	98	1598931	5.00	5.11	
91 1,1,1,2-Tetrachloroethane	131	11.298	11.298	0.000	97	321476	5.00	5.17	
93 m-Xylene & p-Xylene	106	11.414	11.414	0.000	100	1263230	10.0	10.2	
94 o-Xylene	106	11.743	11.743	0.000	96	617748	5.00	5.14	



Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
95 Styrene	104	11.762	11.756	0.006	95	1005274	5.00	5.23	
96 Bromoform	173	11.920	11.920	0.000	98	171030	5.00	5.21	
97 Isopropylbenzene	105	12.042	12.042	0.000	95	1654564	5.00	5.19	
\$ 100 4-Bromofluorobenzene (Surr)	95	12.188	12.188	0.000	94	723239	10.0	10.1	
101 1,1,2,2-Tetrachloroethane	83	12.286	12.286	0.000	92	288446	5.00	5.22	
102 Bromobenzene	156	12.304	12.304	0.000	95	388628	5.00	5.10	
103 trans-1,4-Dichloro-2-butene	53	12.310	12.310	0.000	91	640566	50.0	51.3	
104 1,2,3-Trichloropropane	110	12.335	12.335	0.000	82	77284	5.00	5.10	
105 N-Propylbenzene	91	12.371	12.371	0.000	99	1917309	5.00	5.14	
106 2-Chlorotoluene	126	12.451	12.451	0.000	97	391437	5.00	5.13	
107 1,3,5-Trimethylbenzene	105	12.505	12.505	0.000	94	1374177	5.00	5.15	
108 4-Chlorotoluene	126	12.542	12.542	0.000	96	391457	5.00	5.08	
109 tert-Butylbenzene	134	12.749	12.749	0.000	93	308232	5.00	5.11	
110 Pentachloroethane	167	12.780	12.780	0.000	92	248476	5.00	5.20	
111 1,2,4-Trimethylbenzene	105	12.792	12.792	0.000	96	1412501	5.00	5.20	
112 sec-Butylbenzene	105	12.908	12.914	-0.006	94	1814658	5.00	5.18	
113 1,3-Dichlorobenzene	146	13.011	13.011	0.000	98	774588	5.00	5.05	
114 4-Isopropyltoluene	119	13.018	13.018	0.000	97	1557438	5.00	5.22	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	94	845833	10.0	10.0	
116 1,4-Dichlorobenzene	146	13.085	13.085	0.000	96	776711	5.00	5.07	
117 1,2,3-Trimethylbenzene	120	13.097	13.091	0.006	98	609602	5.00	5.06	
118 Benzyl chloride	126	13.158	13.158	0.000	98	112713	5.00	5.40	
119 n-Butylbenzene	92	13.310	13.310	0.000	97	748043	5.00	5.13	
120 1,2-Dichlorobenzene	146	13.341	13.341	0.000	99	708104	5.00	5.06	
122 1,2-Dibromo-3-Chloropropane	155	13.889	13.883	0.006	90	45090	5.00	5.32	
123 1,3,5-Trichlorobenzene	180	14.011	14.011	0.000	98	565506	5.00	5.12	
124 1,2,4-Trichlorobenzene	180	14.432	14.432	0.000	94	476320	5.00	5.19	
125 Hexachlorobutadiene	225	14.517	14.517	0.000	96	198152	5.00	4.96	
126 Naphthalene	128	14.615	14.615	0.000	97	910778	5.00	5.31	
127 1,2,3-Trichlorobenzene	180	14.755	14.755	0.000	96	412357	5.00	5.20	
134 Isopropyl alcohol	45		0.000				ND	ND	
135 p-Diethylbenzene	1		0.000				ND	ND	
137 2-Methylnaphthalene	142		0.000				ND	ND	
144 2-ethoxy-2-methyl butane	1		0.000				ND	ND	

## QC Flag Legend

### Processing Flags

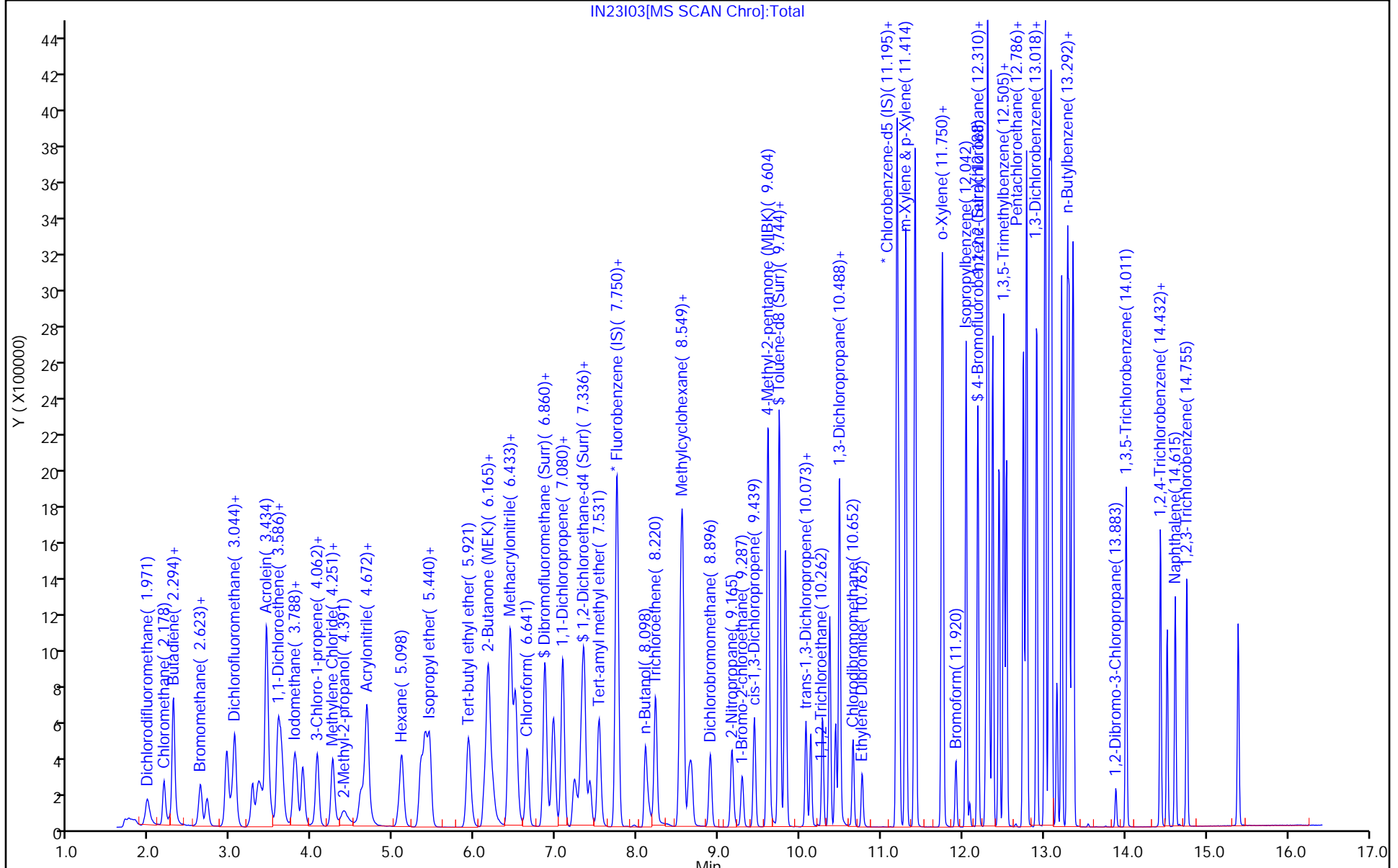
ND - Not Detected or Marked ND

### Review Flags

M - Manually Integrated

## Reagents:

MSV_RV1_826_00030	Amount Added: 5.00	Units: uL	
MSV_RV4GAS826_00096	Amount Added: 5.00	Units: uL	
MSV_RV4_826_00034	Amount Added: 5.00	Units: uL	
MSV_31_826ISS_00003	Amount Added: 5.00	Units: uL	Run Reagent



Euofins Lancaster Laboratories Env, LLC

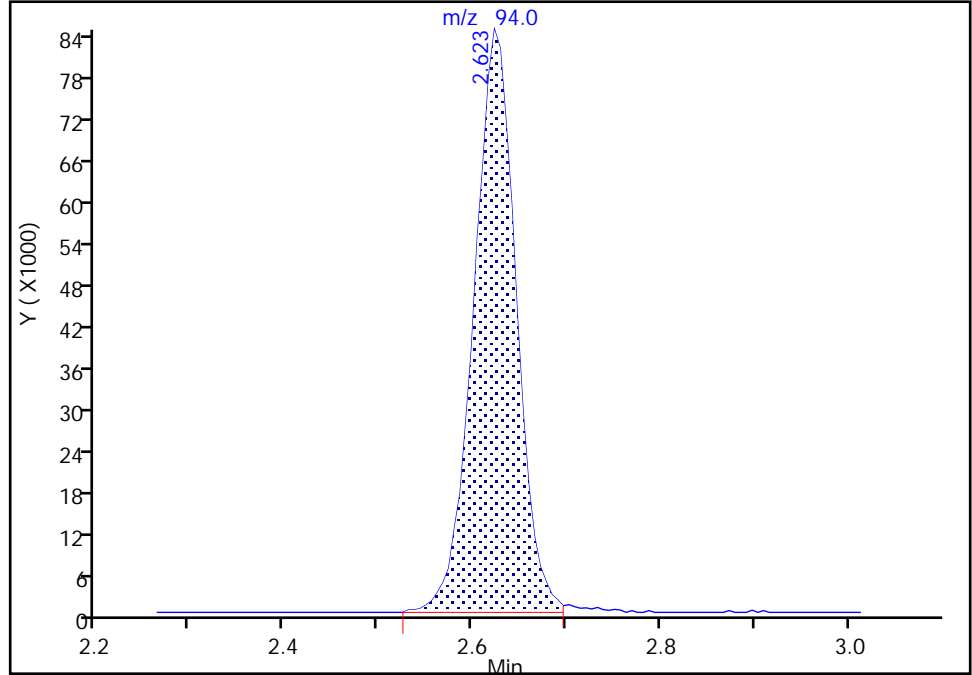
Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23103.D  
Injection Date: 23-Nov-2020 13:28:30 Instrument ID: 19930  
Lims ID: IC std5  
Client ID:  
Operator ID: dvv10203 ALS Bottle#: 4 Worklist Smp#: 5  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: 8260 25ml HP31 Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

7 Bromomethane, CAS: 74-83-9

Signal: 1

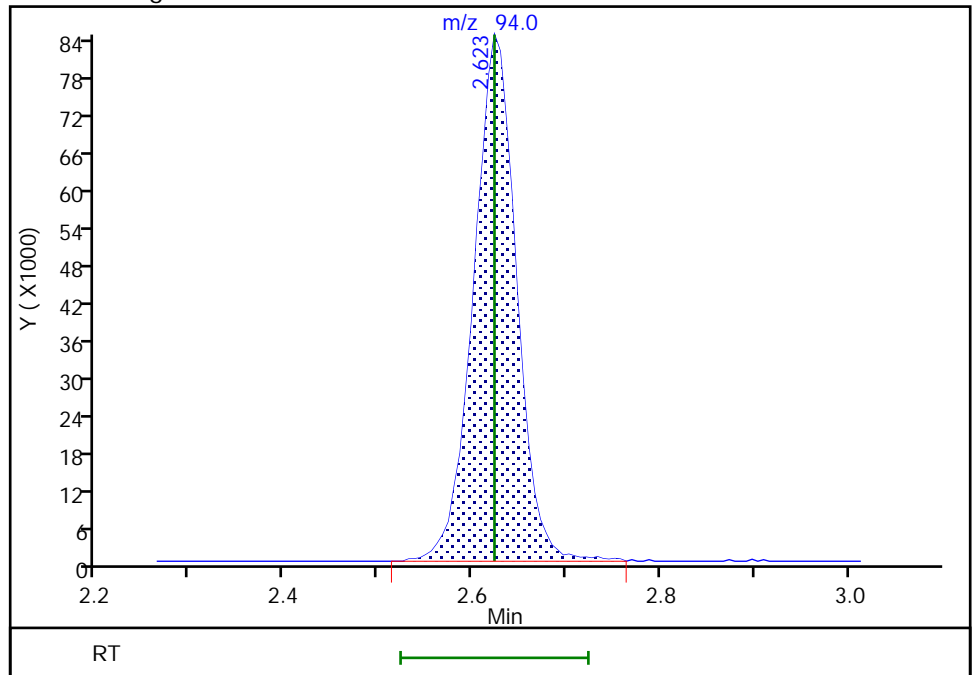
RT: 2.62  
Area: 266042  
Amount: 4.869391  
Amount Units: ug/l

Processing Integration Results



RT: 2.62  
Area: 268205  
Amount: 4.903435  
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 23-Nov-2020 18:30:20  
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration  
Page 699 of 966

Euofins Lancaster Laboratories Env, LLC

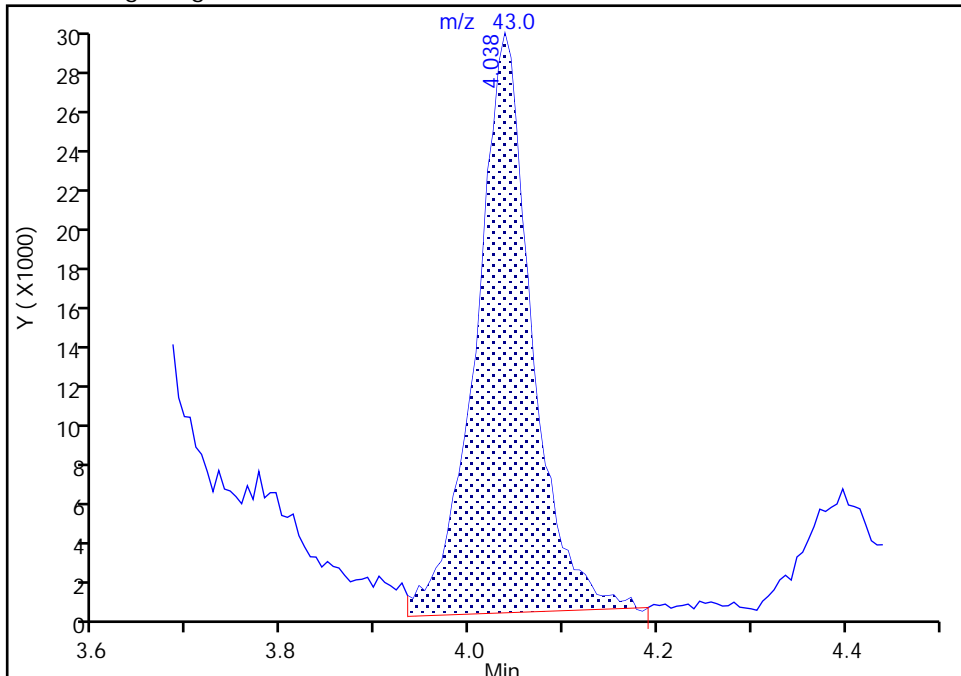
Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23103.D  
Injection Date: 23-Nov-2020 13:28:30 Instrument ID: 19930  
Lims ID: IC std5  
Client ID:  
Operator ID: dvv10203 ALS Bottle#: 4 Worklist Smp#: 5  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: 8260 25ml HP31 Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

21 Methyl acetate, CAS: 79-20-9

Signal: 1

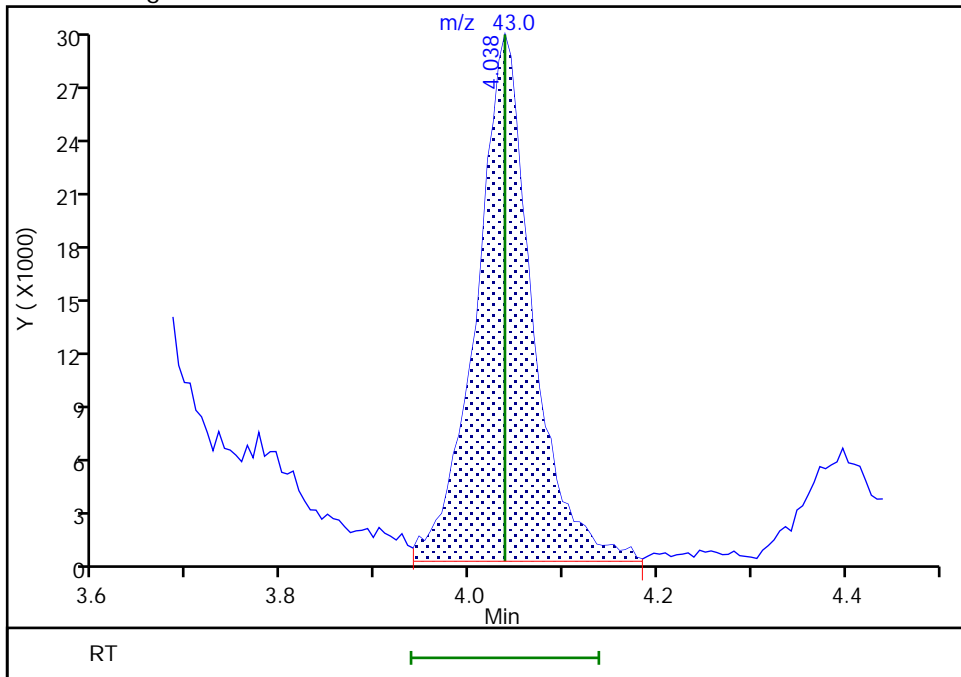
RT: 4.04  
Area: 119876  
Amount: 4.897701  
Amount Units: ug/l

Processing Integration Results



RT: 4.04  
Area: 120524  
Amount: 4.825887  
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 23-Nov-2020 18:30:53  
Audit Action: Assigned New Baseline

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

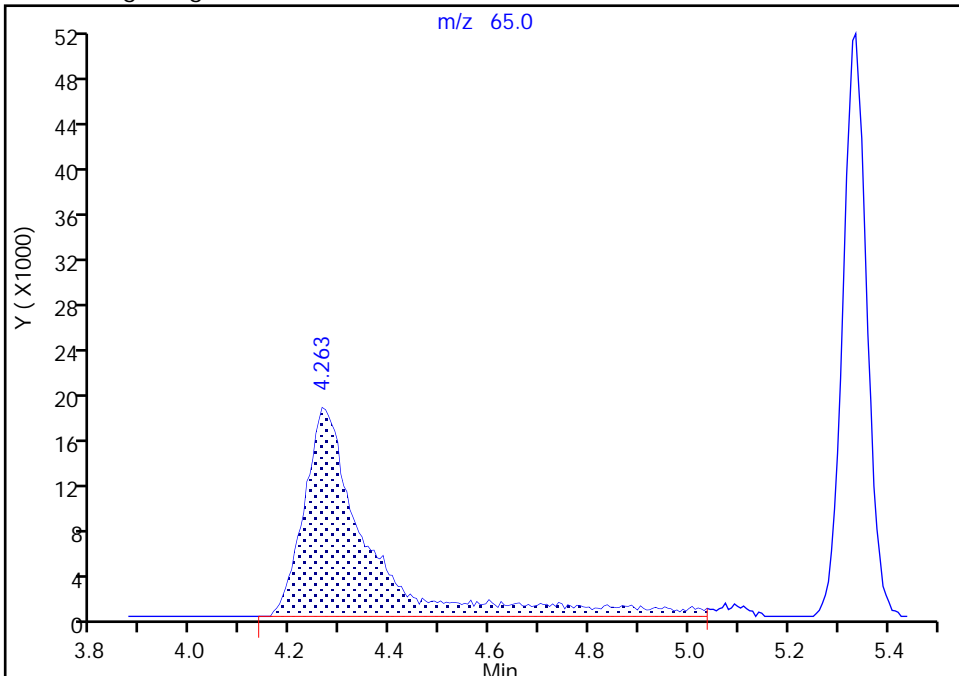
Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23103.D  
Injection Date: 23-Nov-2020 13:28:30 Instrument ID: 19930  
Lims ID: IC std5  
Client ID:  
Operator ID: dvv10203 ALS Bottle#: 4 Worklist Smp#: 5  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: 8260 25ml HP31 Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

\* 24 t-Butyl alcohol-d10 (IS), CAS: 53001-22-2

Signal: 1

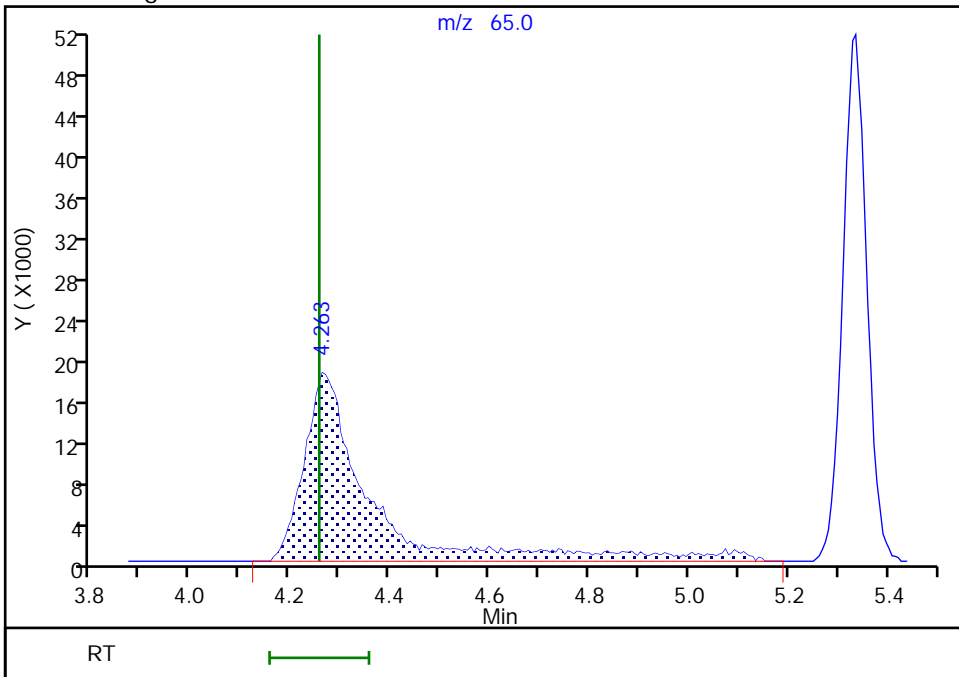
RT: 4.26  
Area: 163691  
Amount: 50.000000  
Amount Units: ug/l

Processing Integration Results



RT: 4.26  
Area: 167919  
Amount: 50.000000  
Amount Units: ug/l

Manual Integration Results



Eurofins Lancaster Laboratories Env, LLC

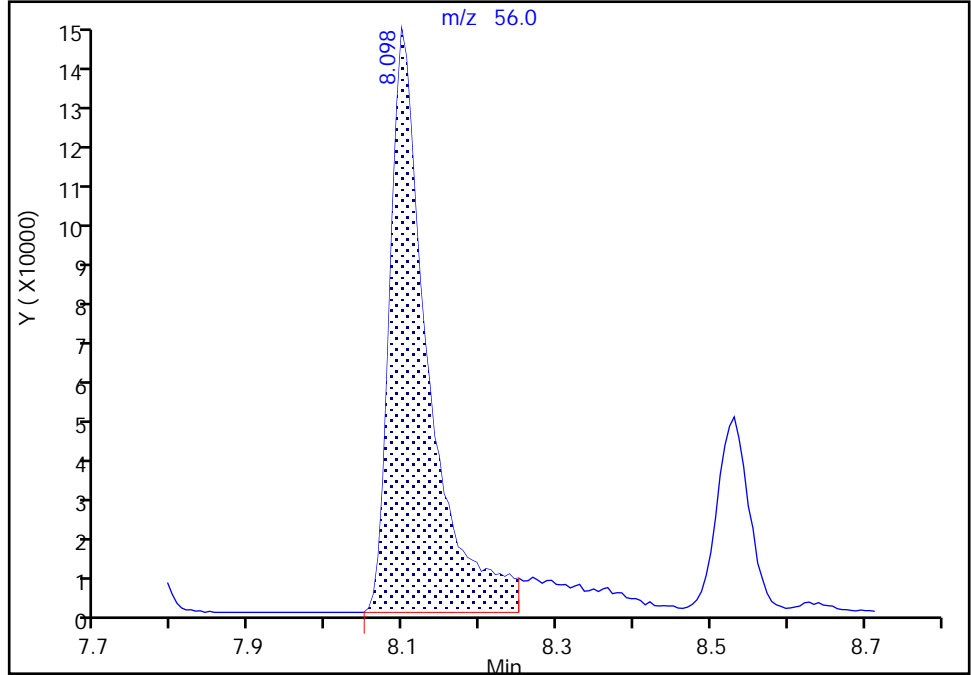
Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23103.D  
Injection Date: 23-Nov-2020 13:28:30 Instrument ID: 19930  
Lims ID: IC std5  
Client ID:  
Operator ID: dvv10203 ALS Bottle#: 4 Worklist Smp#: 5  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: 8260 25ml HP31 Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

**60 n-Butanol, CAS: 71-36-3**

Signal: 1

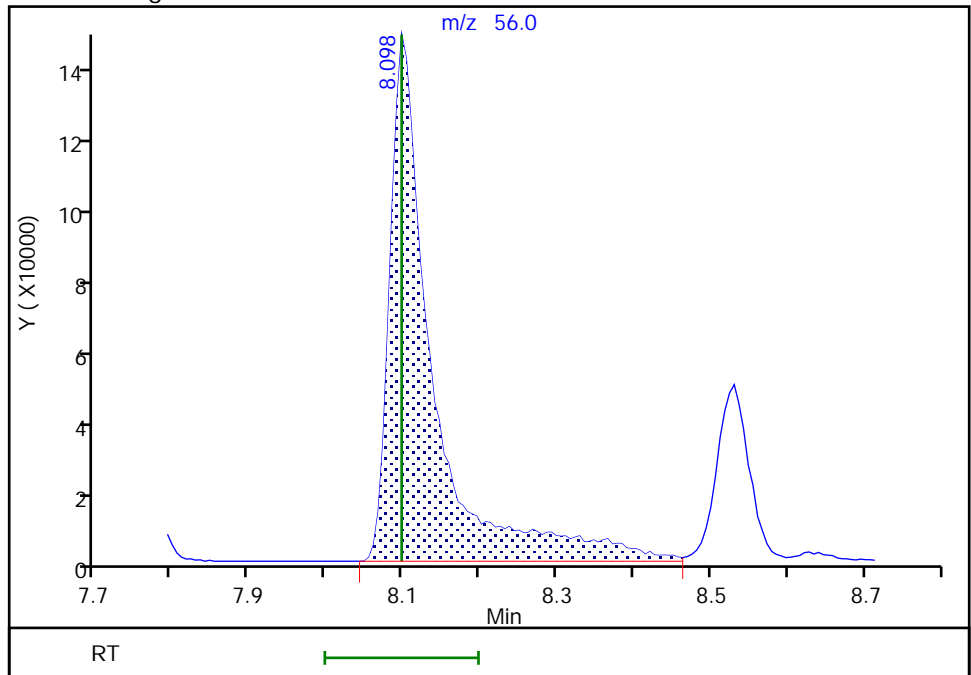
RT: 8.10  
Area: 502560  
Amount: 499.1696  
Amount Units: ug/l

Processing Integration Results



RT: 8.10  
Area: 565829  
Amount: 519.8804  
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 23-Nov-2020 18:31:22  
Audit Action: Assigned New Baseline

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

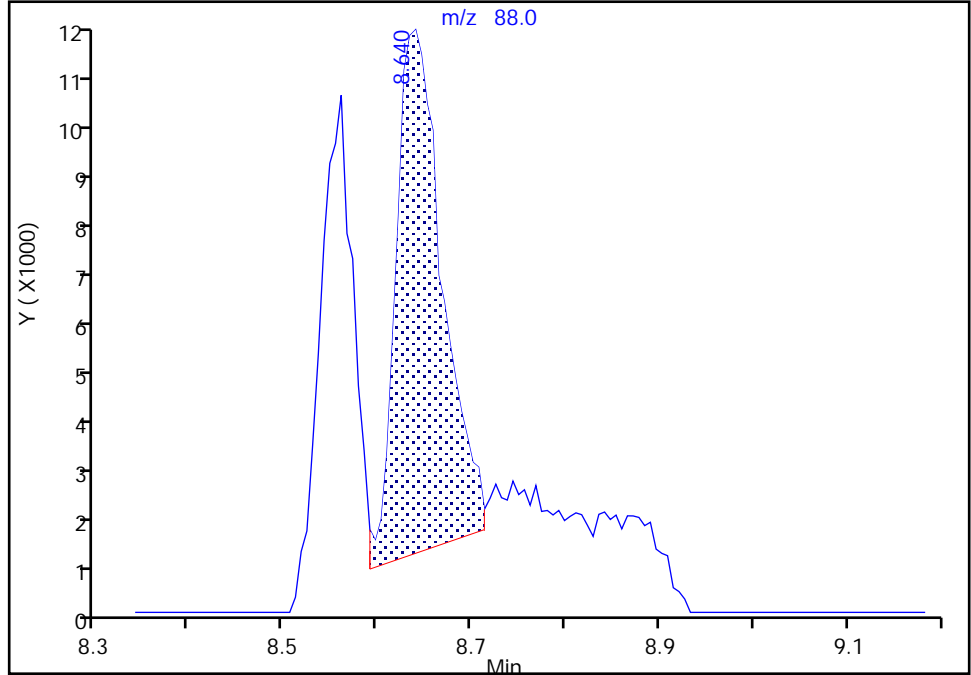
Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23103.D  
Injection Date: 23-Nov-2020 13:28:30 Instrument ID: 19930  
Lims ID: IC std5  
Client ID:  
Operator ID: dvv10203 ALS Bottle#: 4 Worklist Smp#: 5  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: 8260 25ml HP31 Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

65 1,4-Dioxane, CAS: 123-91-1

Signal: 1

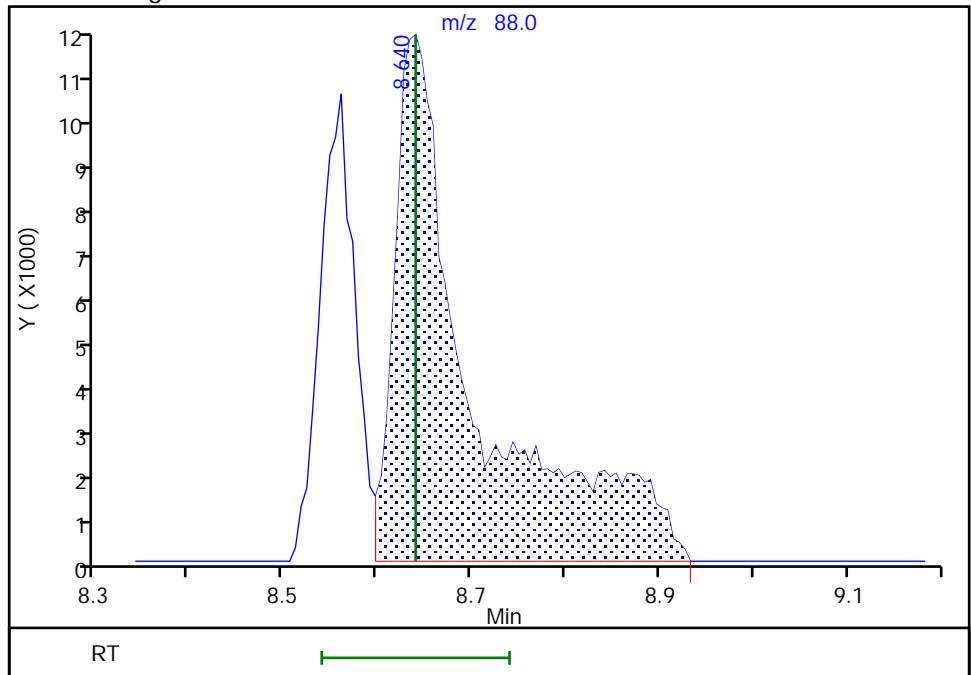
RT: 8.64  
Area: 34674  
Amount: 195.3602  
Amount Units: ug/l

Processing Integration Results



RT: 8.64  
Area: 65884  
Amount: 231.8833  
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 23-Nov-2020 18:31:40  
Audit Action: Split an Integrated Peak

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC  
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23104.D  
 Lims ID: IC std4  
 Client ID:  
 Sample Type: IC Calib Level: 4  
 Inject. Date: 23-Nov-2020 13:49:30 ALS Bottle#: 5 Worklist Smp#: 6  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0016280-006  
 Misc. Info.: IC STD4  
 Operator ID: dvv10203 Instrument ID: 19930  
 Sublist: chrom-8260 25ml HP31\*sub2

Method: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\8260 25ml HP31.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 23-Nov-2020 19:11:11 Calib Date: 23-Nov-2020 18:05:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23117.D

Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1632

First Level Reviewer: campbellme

Date: 23-Nov-2020 18:35:53

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.971	1.971	0.000	99	137035	2.00	1.94	
4 Chloromethane	50	2.172	2.172	0.000	99	166854	2.00	2.04	
6 Butadiene	39	2.288	2.288	0.000	88	129463	2.00	1.85	
5 Vinyl chloride	62	2.300	2.300	0.000	98	154985	2.00	2.06	M
7 Bromomethane	94	2.623	2.623	0.000	90	113059	2.00	2.07	
8 Chloroethane	64	2.709	2.709	0.000	99	94172	2.00	2.03	
9 Dichlorofluoromethane	67	2.940	2.940	0.000	97	212826	2.00	2.05	
10 Trichlorofluoromethane	101	3.019	3.019	0.000	98	194532	2.00	1.99	
11 Ethyl ether	59	3.269	3.269	0.000	90	88826	2.00	2.03	
12 1,2-Dichloro-1,1,2-trifluoroethane	67	3.336	3.336	0.000	91	131936	2.00	1.93	
13 Acrolein	56	3.440	3.440	0.000	100	701877	100.0	97.6	
14 1,1-Dichloroethene	96	3.580	3.580	0.000	97	102917	2.00	1.95	
15 Acetone	43	3.605	3.605	0.000	100	171065	20.0	19.1	
16 112TCTFE	101	3.617	3.617	0.000	87	104592	2.00	1.88	
17 Iodomethane	142	3.775	3.775	0.000	98	202587	2.00	1.97	
18 Ethyl bromide	108	3.806	3.806	0.000	98	98342	2.00	2.05	
19 Carbon disulfide	76	3.885	3.885	0.000	99	292763	2.00	1.92	
21 Methyl acetate	43	4.038	4.038	0.000	97	49588	2.00	2.03	M
22 3-Chloro-1-propene	41	4.062	4.062	0.000	93	164133	2.00	2.05	
23 Methylene Chloride	84	4.251	4.251	0.000	90	113711	2.00	1.95	
* 24 t-Butyl alcohol-d10 (IS)	65	4.257	4.257	0.000	0	164063	50.0	50.0	M
25 2-Methyl-2-propanol	59	4.385	4.385	0.000	98	142185	40.0	40.6	
26 Acrylonitrile	53	4.592	4.592	0.000	99	115701	10.0	9.91	
27 Methyl tert-butyl ether	73	4.659	4.659	0.000	94	280757	2.00	1.99	
28 trans-1,2-Dichloroethene	96	4.678	4.678	0.000	99	113298	2.00	1.95	
29 Hexane	57	5.104	5.104	0.000	89	150330	2.00	1.89	
31 1,1-Dichloroethane	63	5.336	5.336	0.000	96	206444	2.00	1.96	
32 Isopropyl ether	45	5.391	5.391	0.000	95	342003	2.00	1.97	
33 2-Chloro-1,3-butadiene	53	5.446	5.446	0.000	89	165305	2.00	1.96	
34 Tert-butyl ethyl ether	59	5.921	5.921	0.000	97	325561	2.00	1.98	



Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 2-Butanone (MEK)	43	6.135	6.135	0.000	99	293727	20.0	19.6	
S 35 1,2-Dichloroethene, Total	100				0			3.90	
37 cis-1,2-Dichloroethene	96	6.165	6.165	0.000	80	131926	2.00	1.95	
38 2,2-Dichloropropane	77	6.177	6.177	0.000	86	164796	2.00	1.95	
40 Propionitrile	54	6.220	6.220	0.000	99	170750	40.0	39.0	
42 Methacrylonitrile	67	6.433	6.433	0.000	90	298659	20.0	19.4	
43 Chlorobromomethane	128	6.494	6.494	0.000	89	61198	2.00	2.06	
44 Tetrahydrofuran	71	6.507	6.507	0.000	84	89453	20.0	19.7	
45 Chloroform	83	6.647	6.647	0.000	92	203027	2.00	1.96	
\$ 46 Dibromofluoromethane (Surr)	113	6.860	6.860	0.000	94	487807	10.0	10.0	
47 1,1,1-Trichloroethane	97	6.866	6.866	0.000	97	182755	2.00	1.96	
48 Cyclohexane	56	6.964	6.964	0.000	88	186444	2.00	1.93	
50 Carbon tetrachloride	117	7.080	7.080	0.000	94	162919	2.00	1.95	
51 1,1-Dichloropropene	75	7.080	7.080	0.000	97	164045	2.00	1.98	
52 Isobutyl alcohol	41	7.232	7.232	0.000	96	114540	100.0	101.8	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.311	7.311	0.000	0	98235	10.0	9.99	
54 Benzene	78	7.342	7.342	0.000	96	490160	2.00	1.96	
56 1,2-Dichloroethane	62	7.415	7.415	0.000	97	118739	2.00	1.94	
57 Tert-amyl methyl ether	73	7.531	7.531	0.000	99	295847	2.00	1.97	
* 58 Fluorobenzene (IS)	96	7.744	7.744	0.000	99	1976128	10.0	10.0	
59 n-Heptane	43	7.756	7.756	0.000	90	152765	2.00	1.91	
60 n-Butanol	56	8.104	8.104	0.000	87	211478	200.0	198.9	
61 Trichloroethene	95	8.220	8.220	0.000	97	126694	2.00	1.93	
62 Methylcyclohexane	83	8.531	8.531	0.000	92	208498	2.00	1.96	
63 1,2-Dichloropropane	63	8.555	8.555	0.000	87	121570	2.00	1.98	
64 Methyl methacrylate	69	8.634	8.634	0.000	86	55899	2.00	1.95	
65 1,4-Dioxane	88	8.640	8.640	0.000	39	28458	100.0	102.5	M
66 Dibromomethane	93	8.665	8.665	0.000	94	57091	2.00	1.96	
68 Dichlorobromomethane	83	8.896	8.896	0.000	99	142334	2.00	1.93	
69 2-Nitropropane	41	9.165	9.165	0.000	98	140261	20.0	19.4	
72 1-Bromo-2-chloroethane	63	9.287	9.287	0.000	98	129870	2.00	2.05	
73 cis-1,3-Dichloropropene	75	9.439	9.439	0.000	98	171644	2.00	1.94	
74 4-Methyl-2-pentanone (MIBK)	43	9.604	9.604	0.000	95	734468	20.0	19.7	
\$ 75 Toluene-d8 (Surr)	98	9.744	9.744	0.000	93	1941813	10.0	10.0	
76 Toluene	92	9.817	9.817	0.000	98	313899	2.00	1.94	
S 77 1,3-Dichloropropene, Total	100				0			3.92	
78 trans-1,3-Dichloropropene	75	10.073	10.073	0.000	90	137933	2.00	1.98	
79 Ethyl methacrylate	69	10.134	10.134	0.000	88	114724	2.00	1.97	
80 1,1,2-Trichloroethane	97	10.280	10.280	0.000	90	83917	2.00	1.95	
81 Tetrachloroethene	166	10.366	10.366	0.000	97	151027	2.00	1.93	
82 1,3-Dichloropropane	76	10.439	10.439	0.000	87	144948	2.00	1.97	
83 2-Hexanone	43	10.488	10.488	0.000	95	511453	20.0	20.1	
85 Chlorodibromomethane	129	10.652	10.652	0.000	89	105930	2.00	1.96	
86 Ethylene Dibromide	107	10.762	10.762	0.000	98	80415	2.00	1.95	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.189	0.000	85	1481807	10.0	10.0	
88 1-Chlorohexane	91	11.195	11.195	0.000	95	178481	2.00	1.90	
90 Chlorobenzene	112	11.219	11.219	0.000	97	347796	2.00	1.95	
S 89 Xylenes, Total	106				0			5.95	
92 Ethylbenzene	91	11.304	11.304	0.000	98	614346	2.00	1.97	
91 1,1,1,2-Tetrachloroethane	131	11.298	11.298	0.000	97	121733	2.00	1.96	
93 m-Xylene & p-Xylene	106	11.414	11.414	0.000	100	490346	4.00	3.98	
94 o-Xylene	106	11.743	11.743	0.000	96	236196	2.00	1.97	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
95 Styrene	104	11.762	11.762	0.000	94	379665	2.00	1.98	
96 Bromoform	173	11.920	11.920	0.000	98	63856	2.00	1.95	
97 Isopropylbenzene	105	12.042	12.042	0.000	95	632848	2.00	1.99	
\$ 100 4-Bromofluorobenzene (Surr)	95	12.188	12.188	0.000	94	718478	10.0	10.0	
101 1,1,2,2-Tetrachloroethane	83	12.286	12.286	0.000	93	107901	2.00	1.95	
102 Bromobenzene	156	12.304	12.304	0.000	97	150137	2.00	1.97	
103 trans-1,4-Dichloro-2-butene	53	12.310	12.310	0.000	92	235404	20.0	19.3	
104 1,2,3-Trichloropropane	110	12.335	12.335	0.000	82	29565	2.00	1.94	
105 N-Propylbenzene	91	12.371	12.371	0.000	99	736780	2.00	1.97	
106 2-Chlorotoluene	126	12.451	12.451	0.000	97	150481	2.00	1.97	
107 1,3,5-Trimethylbenzene	105	12.505	12.505	0.000	94	526346	2.00	1.97	
108 4-Chlorotoluene	126	12.542	12.542	0.000	96	149649	2.00	1.94	
109 tert-Butylbenzene	134	12.749	12.749	0.000	92	115253	2.00	1.91	
110 Pentachloroethane	167	12.780	12.780	0.000	93	98293	2.00	2.05	
111 1,2,4-Trimethylbenzene	105	12.792	12.792	0.000	96	536289	2.00	1.97	
112 sec-Butylbenzene	105	12.914	12.914	0.000	94	691511	2.00	1.97	
113 1,3-Dichlorobenzene	146	13.011	13.011	0.000	98	299667	2.00	1.95	
114 4-Isopropyltoluene	119	13.018	13.018	0.000	97	596157	2.00	1.99	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	94	848463	10.0	10.0	
116 1,4-Dichlorobenzene	146	13.085	13.085	0.000	96	298581	2.00	1.94	
117 1,2,3-Trimethylbenzene	120	13.097	13.097	0.000	98	245278	2.00	2.03	
118 Benzyl chloride	126	13.164	13.164	0.000	98	42275	2.00	2.02	
119 n-Butylbenzene	92	13.310	13.310	0.000	96	287834	2.00	1.97	
120 1,2-Dichlorobenzene	146	13.347	13.347	0.000	99	271564	2.00	1.94	
122 1,2-Dibromo-3-Chloropropane	155	13.883	13.883	0.000	88	16302	2.00	1.92	
123 1,3,5-Trichlorobenzene	180	14.011	14.011	0.000	97	213605	2.00	1.93	
124 1,2,4-Trichlorobenzene	180	14.438	14.438	0.000	94	176796	2.00	1.92	
125 Hexachlorobutadiene	225	14.517	14.517	0.000	96	76823	2.00	1.92	
126 Naphthalene	128	14.615	14.615	0.000	96	343142	2.00	1.99	
127 1,2,3-Trichlorobenzene	180	14.761	14.761	0.000	96	156150	2.00	1.96	
134 Isopropyl alcohol	45		0.000				ND	ND	
144 2-ethoxy-2-methyl butane	1		0.000				ND	ND	
135 p-Diethylbenzene	1		0.000				ND	ND	
137 2-Methylnaphthalene	142		0.000				ND	ND	

## QC Flag Legend

### Processing Flags

ND - Not Detected or Marked ND

### Review Flags

M - Manually Integrated

## Reagents:

MSV_RV1_826_00030	Amount Added: 2.00	Units: uL	
MSV_RV4GAS826_00096	Amount Added: 2.00	Units: uL	
MSV_RV4_826_00034	Amount Added: 2.00	Units: uL	
MSV_31_826ISS_00003	Amount Added: 5.00	Units: uL	Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23104.D

Injection Date: 23-Nov-2020 13:49:30

Instrument ID: 19930

Operator ID: dvv10203

Lims ID: IC std4

Worklist Smp#: 6

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

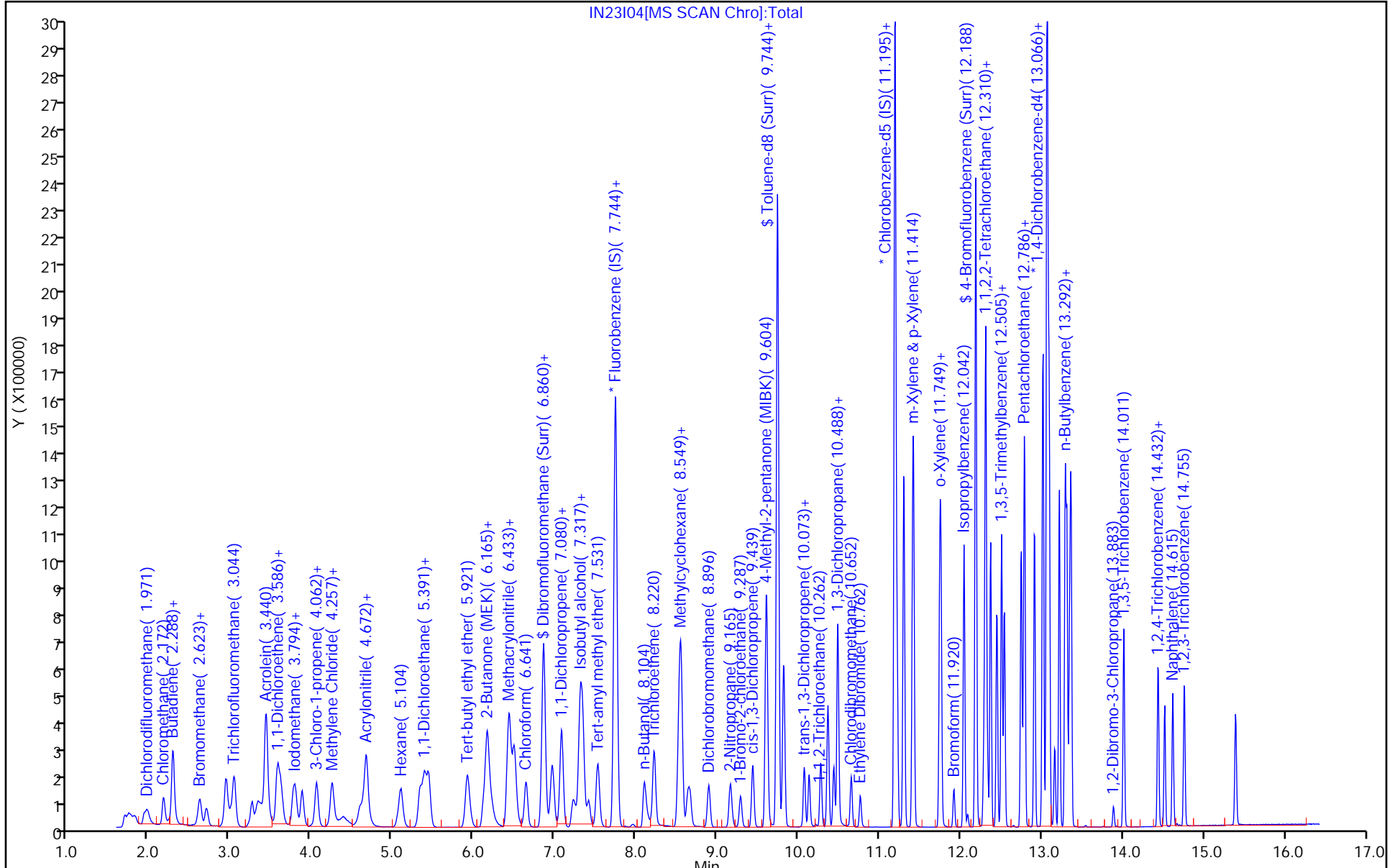
ALS Bottle#: 5

Method: 8260 25ml HP31

Limit Group: MSV - 8260C\_D

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

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



Eurofins Lancaster Laboratories Env, LLC

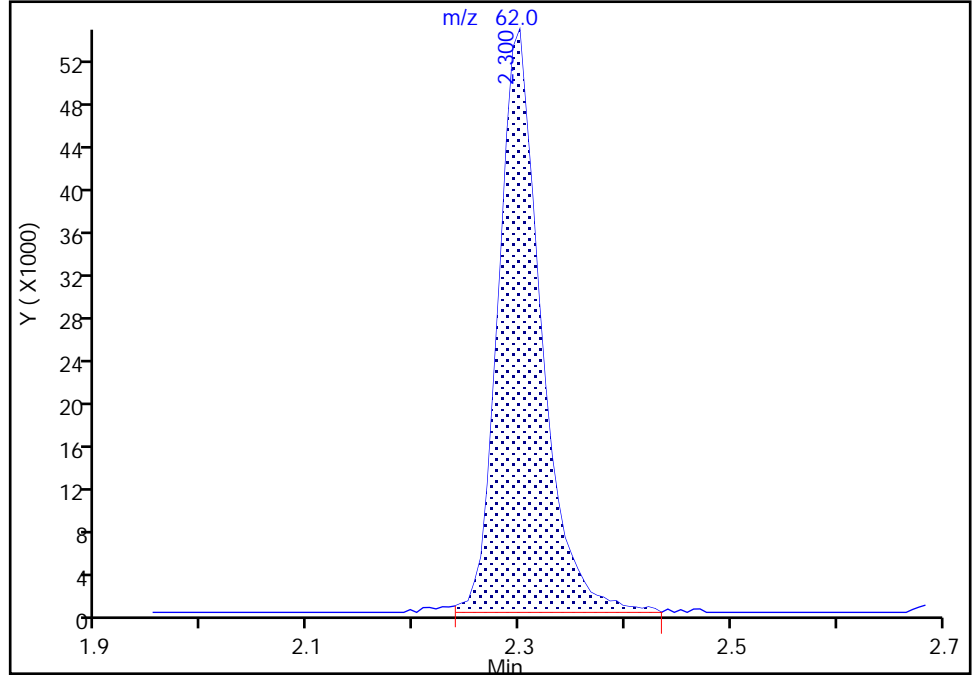
Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I04.D  
Injection Date: 23-Nov-2020 13:49:30 Instrument ID: 19930  
Lims ID: IC std4  
Client ID:  
Operator ID: dvv10203 ALS Bottle#: 5 Worklist Smp#: 6  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: 8260 25ml HP31 Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

5 Vinyl chloride, CAS: 75-01-4

Signal: 1

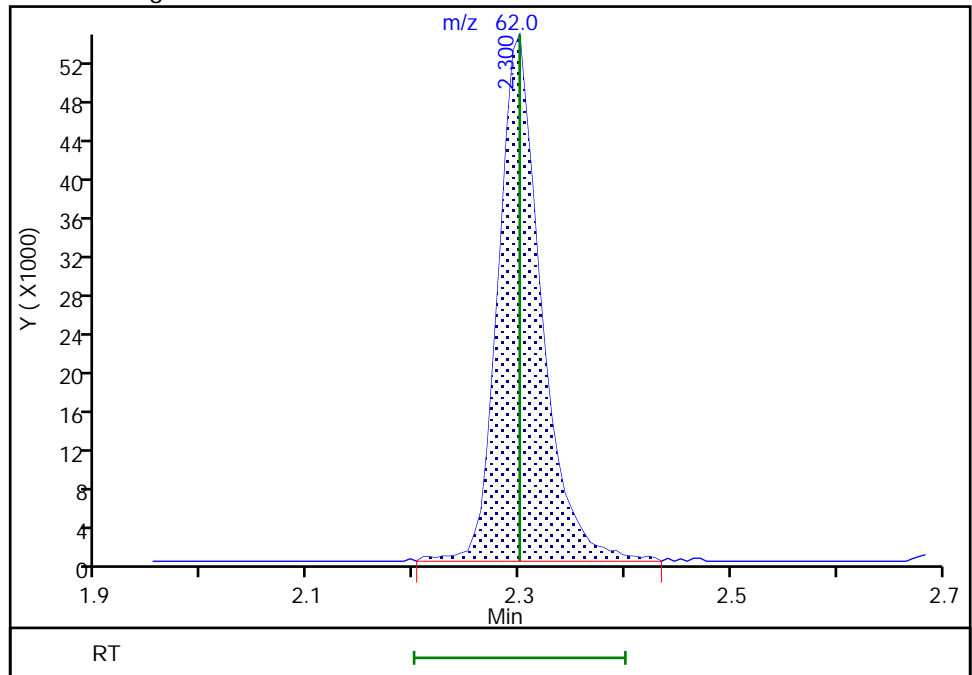
RT: 2.30  
Area: 154150  
Amount: 2.050762  
Amount Units: ug/l

Processing Integration Results



RT: 2.30  
Area: 154985  
Amount: 2.057195  
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 23-Nov-2020 18:34:45  
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

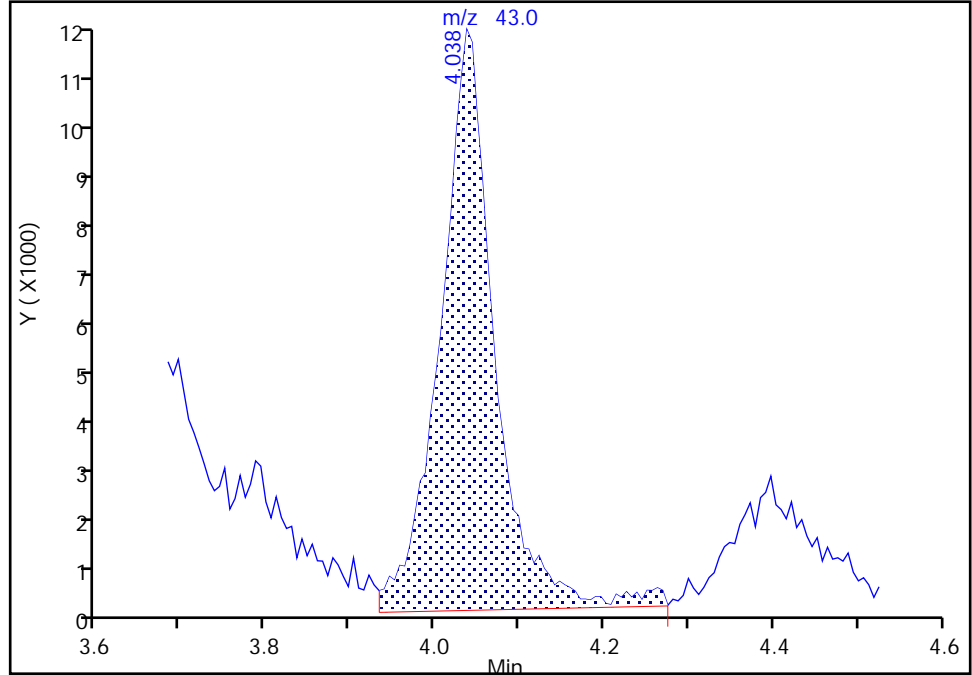
Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23104.D  
Injection Date: 23-Nov-2020 13:49:30 Instrument ID: 19930  
Lims ID: IC std4  
Client ID:  
Operator ID: dvv10203 ALS Bottle#: 5 Worklist Smp#: 6  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: 8260 25ml HP31 Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

21 Methyl acetate, CAS: 79-20-9

Signal: 1

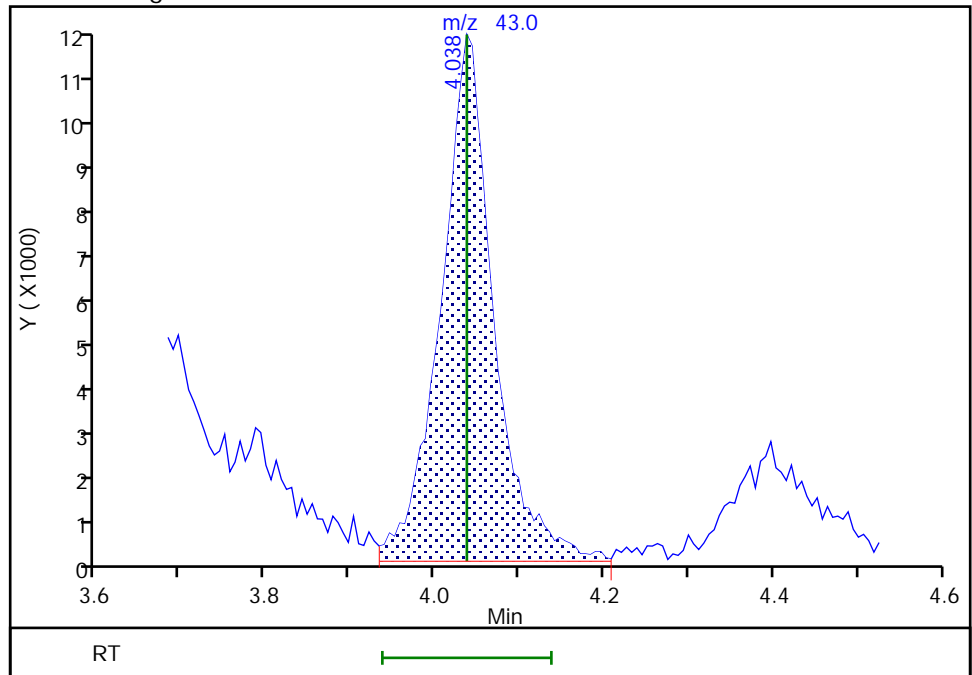
RT: 4.04  
Area: 51391  
Amount: 2.103964  
Amount Units: ug/l

Processing Integration Results



RT: 4.04  
Area: 49588  
Amount: 2.032214  
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 23-Nov-2020 18:35:10  
Audit Action: Assigned New Baseline

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

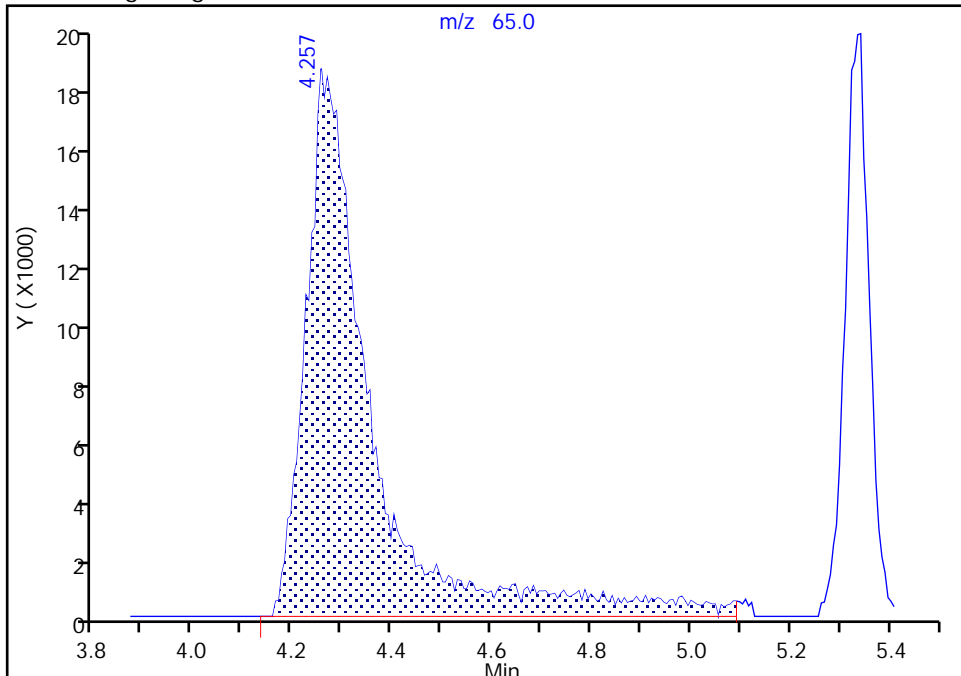
Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23104.D  
Injection Date: 23-Nov-2020 13:49:30 Instrument ID: 19930  
Lims ID: IC std4  
Client ID:  
Operator ID: dvv10203 ALS Bottle#: 5 Worklist Smp#: 6  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: 8260 25ml HP31 Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

\* 24 t-Butyl alcohol-d10 (IS), CAS: 53001-22-2

Signal: 1

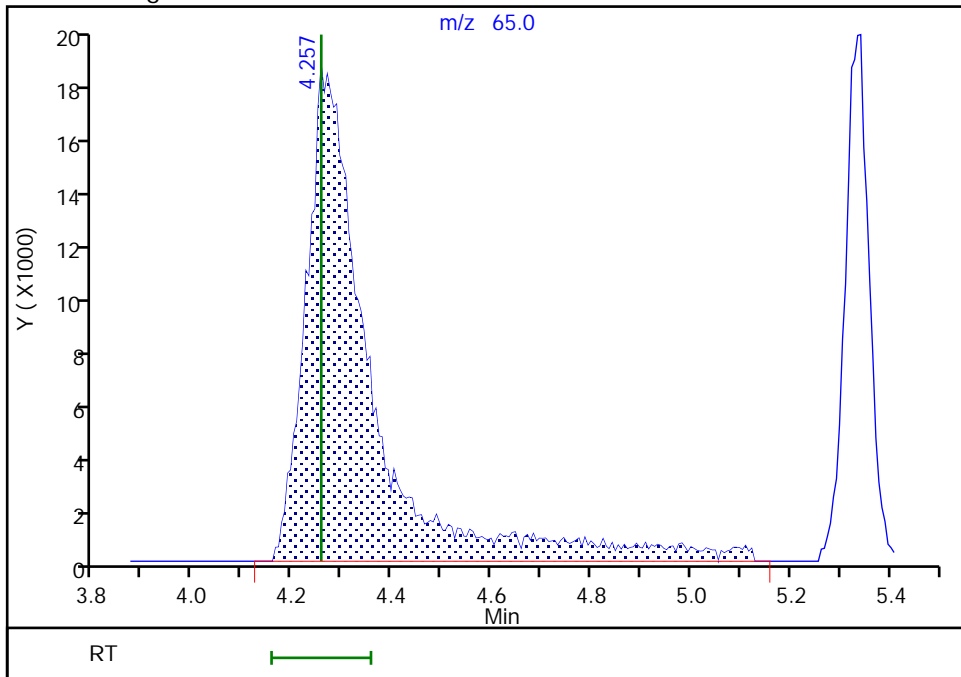
RT: 4.26  
Area: 163232  
Amount: 50.000000  
Amount Units: ug/l

Processing Integration Results



RT: 4.26  
Area: 164063  
Amount: 50.000000  
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 23-Nov-2020 18:43:52

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

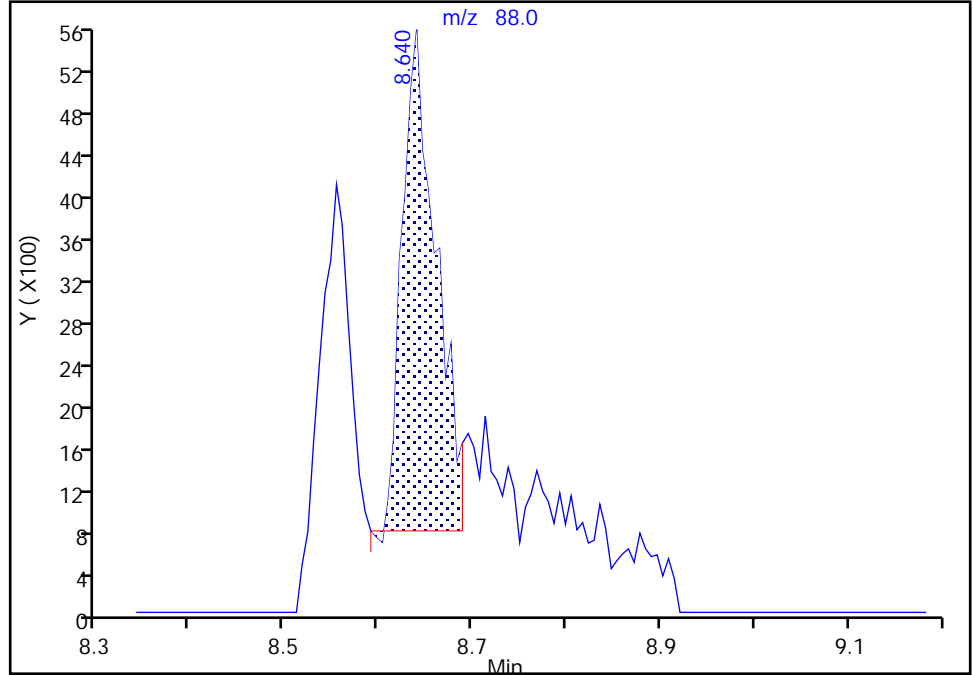
Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23104.D  
Injection Date: 23-Nov-2020 13:49:30 Instrument ID: 19930  
Lims ID: IC std4  
Client ID:  
Operator ID: dvv10203 ALS Bottle#: 5 Worklist Smp#: 6  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: 8260 25ml HP31 Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

65 1,4-Dioxane, CAS: 123-91-1

Signal: 1

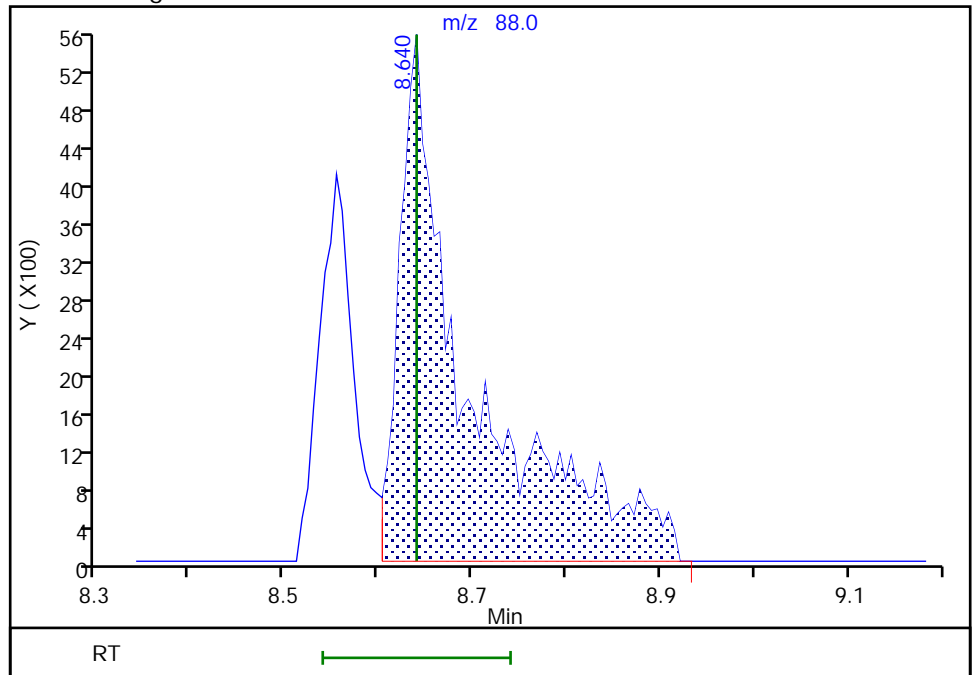
RT: 8.64  
Area: 11861  
Amount: 59.983350  
Amount Units: ug/l

Processing Integration Results



RT: 8.64  
Area: 28458  
Amount: 102.5140  
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 23-Nov-2020 18:35:36  
Audit Action: Split an Integrated Peak

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC  
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23105.D  
 Lims ID: IC std3  
 Client ID:  
 Sample Type: IC Calib Level: 3  
 Inject. Date: 23-Nov-2020 14:10:30 ALS Bottle#: 6 Worklist Smp#: 7  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0016280-007  
 Misc. Info.: IC STD3  
 Operator ID: dvv10203 Instrument ID: 19930  
 Sublist: chrom-8260 25ml HP31\*sub2

Method: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\8260 25ml HP31.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 23-Nov-2020 19:11:21 Calib Date: 23-Nov-2020 18:05:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23117.D

Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1632

First Level Reviewer: campbellme

Date: 23-Nov-2020 18:37:38

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.965	1.971	-0.006	99	69362	1.00	0.9783	
4 Chloromethane	50	2.172	2.172	0.000	99	83265	1.00	1.01	
6 Butadiene	39	2.288	2.288	0.000	88	72377	1.00	1.03	
5 Vinyl chloride	62	2.294	2.300	-0.006	83	75517	1.00	1.00	
7 Bromomethane	94	2.623	2.623	0.000	90	55449	1.00	1.01	
8 Chloroethane	64	2.709	2.709	0.000	99	47287	1.00	1.02	
9 Dichlorofluoromethane	67	2.940	2.940	0.000	97	107260	1.00	1.03	
10 Trichlorofluoromethane	101	3.026	3.019	0.007	96	97236	1.00	0.99	
11 Ethyl ether	59	3.263	3.269	-0.006	91	43027	1.00	0.9801	
12 1,2-Dichloro-1,1,2-trifluoroethane	67	3.349	3.336	0.013	92	68727	1.00	1.00	
13 Acrolein	56	3.434	3.440	-0.006	99	356505	50.0	52.3	
14 1,1-Dichloroethene	96	3.574	3.580	-0.006	97	53597	1.00	1.01	
15 Acetone	43	3.611	3.605	0.006	99	89478	10.0	10.6	
16 112TCTFE	101	3.617	3.617	0.000	87	56328	1.00	1.01	
17 Iodomethane	142	3.776	3.775	0.001	99	104837	1.00	1.01	
18 Ethyl bromide	108	3.800	3.806	-0.006	98	48514	1.00	1.01	
19 Carbon disulfide	76	3.879	3.885	-0.006	99	153230	1.00	1.00	
21 Methyl acetate	43	4.026	4.038	-0.012	96	23815	1.00	1.03	M
22 3-Chloro-1-propene	41	4.062	4.062	0.000	92	79611	1.00	0.9886	
23 Methylene Chloride	84	4.245	4.251	-0.006	92	59944	1.00	1.02	
* 24 t-Butyl alcohol-d10 (IS)	65	4.269	4.257	0.012	0	155400	50.0	50.0	M
25 2-Methyl-2-propanol	59	4.397	4.385	0.012	99	71679	20.0	21.6	
26 Acrylonitrile	53	4.605	4.592	0.013	99	55793	5.00	5.05	
27 Methyl tert-butyl ether	73	4.660	4.659	0.001	93	140981	1.00	0.99	
28 trans-1,2-Dichloroethene	96	4.672	4.678	-0.006	99	59305	1.00	1.01	
29 Hexane	57	5.098	5.104	-0.006	91	77187	1.00	0.9643	
31 1,1-Dichloroethane	63	5.336	5.336	0.000	96	106846	1.00	1.01	
32 Isopropyl ether	45	5.385	5.391	-0.006	94	175266	1.00	1.00	
33 2-Chloro-1,3-butadiene	53	5.446	5.446	0.000	89	83699	1.00	0.9860	
34 Tert-butyl ethyl ether	59	5.921	5.921	0.000	97	164798	1.00	1.00	



Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 2-Butanone (MEK)	43	6.129	6.135	-0.006	99	150873	10.0	10.6	
S 35 1,2-Dichloroethene, Total	100				0			2.00	
37 cis-1,2-Dichloroethene	96	6.165	6.165	0.000	82	67080	1.00	0.9872	
38 2,2-Dichloropropane	77	6.171	6.177	-0.006	85	84205	1.00	0.99	
40 Propionitrile	54	6.232	6.220	0.012	99	86963	20.0	21.0	
42 Methacrylonitrile	67	6.434	6.433	0.001	90	153916	10.0	10.5	
43 Chlorobromomethane	128	6.495	6.494	0.001	90	30494	1.00	1.02	
44 Tetrahydrofuran	71	6.507	6.507	0.000	81	44982	10.0	10.5	
45 Chloroform	83	6.641	6.647	-0.006	93	105267	1.00	1.01	
\$ 46 Dibromofluoromethane (Surr)	113	6.854	6.860	-0.006	94	494666	10.0	10.1	
47 1,1,1-Trichloroethane	97	6.866	6.866	0.000	98	93768	1.00	1.00	
48 Cyclohexane	56	6.964	6.964	0.000	88	97796	1.00	1.01	
50 Carbon tetrachloride	117	7.080	7.080	0.000	89	82099	1.00	0.9797	
51 1,1-Dichloropropene	75	7.080	7.080	0.000	97	83811	1.00	1.01	
52 Isobutyl alcohol	41	7.238	7.232	0.006	96	56751	50.0	53.3	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.311	7.311	0.000	0	97982	10.0	9.91	
54 Benzene	78	7.342	7.342	0.000	95	255028	1.00	1.01	
56 1,2-Dichloroethane	62	7.415	7.415	0.000	97	62354	1.00	1.01	
57 Tert-amyl methyl ether	73	7.531	7.531	0.000	99	149782	1.00	0.99	
* 58 Fluorobenzene (IS)	96	7.744	7.744	0.000	99	1986644	10.0	10.0	
59 n-Heptane	43	7.756	7.756	0.000	89	78839	1.00	0.9808	
60 n-Butanol	56	8.104	8.104	0.000	86	100598	100.0	99.9	M
61 Trichloroethene	95	8.220	8.220	0.000	97	66585	1.00	1.01	
62 Methylcyclohexane	83	8.531	8.531	0.000	94	107810	1.00	1.01	
63 1,2-Dichloropropane	63	8.555	8.555	0.000	74	61945	1.00	1.00	
64 Methyl methacrylate	69	8.640	8.634	0.006	88	27597	1.00	1.02	
65 1,4-Dioxane	88	8.665	8.640	0.025	38	14289	50.0	54.3	M
66 Dibromomethane	93	8.665	8.665	0.000	93	29139	1.00	1.00	
68 Dichlorobromomethane	83	8.897	8.896	0.000	99	73650	1.00	0.99	
69 2-Nitropropane	41	9.165	9.165	0.000	98	70105	10.0	10.3	
72 1-Bromo-2-chloroethane	63	9.287	9.287	0.000	98	61799	1.00	0.9706	
73 cis-1,3-Dichloropropene	75	9.439	9.439	0.000	98	88193	1.00	0.99	
74 4-Methyl-2-pentanone (MIBK)	43	9.604	9.604	0.000	95	367338	10.0	10.4	
\$ 75 Toluene-d8 (Surr)	98	9.744	9.744	0.000	93	1946658	10.0	10.0	
76 Toluene	92	9.817	9.817	0.000	98	163309	1.00	1.01	
S 77 1,3-Dichloropropene, Total	100				0			1.95	
78 trans-1,3-Dichloropropene	75	10.073	10.073	0.000	91	66719	1.00	0.9548	
79 Ethyl methacrylate	69	10.134	10.134	0.000	87	56537	1.00	0.9669	
80 1,1,2-Trichloroethane	97	10.274	10.280	-0.006	90	43173	1.00	1.00	
81 Tetrachloroethene	166	10.366	10.366	0.000	97	78353	1.00	1.00	
82 1,3-Dichloropropane	76	10.439	10.439	0.000	88	73951	1.00	1.00	
83 2-Hexanone	43	10.488	10.488	0.000	96	248990	10.0	10.3	
85 Chlorodibromomethane	129	10.652	10.652	0.000	89	53438	1.00	0.9848	
86 Ethylene Dibromide	107	10.762	10.762	0.000	99	41931	1.00	1.01	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.189	0.000	86	1484400	10.0	10.0	
88 1-Chlorohexane	91	11.195	11.195	0.000	94	92173	1.00	0.9820	
90 Chlorobenzene	112	11.219	11.219	0.000	96	180463	1.00	1.01	
S 89 Xylenes, Total	106				0			3.02	
91 1,1,1,2-Tetrachloroethane	131	11.298	11.298	0.000	94	62455	1.00	1.01	
92 Ethylbenzene	91	11.305	11.304	0.001	98	316536	1.00	1.01	
93 m-Xylene & p-Xylene	106	11.414	11.414	0.000	100	248538	2.00	2.01	
94 o-Xylene	106	11.744	11.743	0.001	96	120780	1.00	1.01	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
95 Styrene	104	11.762	11.762	0.000	94	192855	1.00	1.00	
96 Bromoform	173	11.920	11.920	0.000	96	31282	1.00	0.9538	
97 Isopropylbenzene	105	12.042	12.042	0.000	95	319375	1.00	1.00	
\$ 100 4-Bromofluorobenzene (Surr)	95	12.189	12.188	0.001	94	720224	10.0	10.0	
101 1,1,2,2-Tetrachloroethane	83	12.286	12.286	0.000	93	54415	1.00	0.9874	
102 Bromobenzene	156	12.304	12.304	0.000	96	77108	1.00	1.01	
103 trans-1,4-Dichloro-2-butene	53	12.310	12.310	0.000	92	115432	10.0	9.98	
104 1,2,3-Trichloropropane	110	12.335	12.335	0.000	82	15158	1.00	1.00	
105 N-Propylbenzene	91	12.371	12.371	0.000	99	377314	1.00	1.01	
106 2-Chlorotoluene	126	12.445	12.451	-0.006	97	77621	1.00	1.02	
107 1,3,5-Trimethylbenzene	105	12.506	12.505	0.001	94	267681	1.00	1.00	
108 4-Chlorotoluene	126	12.542	12.542	0.000	96	79642	1.00	1.04	
109 tert-Butylbenzene	134	12.749	12.749	0.000	93	60636	1.00	1.01	
110 Pentachloroethane	167	12.780	12.780	0.000	92	46998	1.00	0.9857	
111 1,2,4-Trimethylbenzene	105	12.792	12.792	0.000	97	274837	1.00	1.01	
112 sec-Butylbenzene	105	12.914	12.914	0.000	94	351677	1.00	1.01	
113 1,3-Dichlorobenzene	146	13.012	13.011	0.001	98	153078	1.00	1.00	
114 4-Isopropyltoluene	119	13.018	13.018	0.000	97	296994	1.00	1.00	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	94	843985	10.0	10.0	
116 1,4-Dichlorobenzene	146	13.085	13.085	0.000	95	154536	1.00	1.01	
117 1,2,3-Trimethylbenzene	120	13.091	13.097	-0.006	98	121041	1.00	1.01	
118 Benzyl chloride	126	13.158	13.164	-0.006	98	19573	1.00	0.9395	
119 n-Butylbenzene	92	13.310	13.310	0.000	97	144659	1.00	0.99	
120 1,2-Dichlorobenzene	146	13.347	13.347	0.000	99	143545	1.00	1.03	
122 1,2-Dibromo-3-Chloropropane	155	13.883	13.883	0.000	90	8336	1.00	0.9851	
123 1,3,5-Trichlorobenzene	180	14.011	14.011	0.000	98	107909	1.00	0.9789	
124 1,2,4-Trichlorobenzene	180	14.432	14.438	-0.006	94	89195	1.00	0.9731	
125 Hexachlorobutadiene	225	14.517	14.517	0.000	96	39405	1.00	0.9886	
126 Naphthalene	128	14.615	14.615	0.000	96	165305	1.00	0.9650	
127 1,2,3-Trichlorobenzene	180	14.755	14.761	-0.006	96	78201	1.00	0.9887	
134 Isopropyl alcohol	45		0.000				ND	ND	
144 2-ethoxy-2-methyl butane	1		0.000				ND	ND	
135 p-Diethylbenzene	1		0.000				ND	ND	
137 2-Methylnaphthalene	142		0.000				ND	ND	

## QC Flag Legend

### Processing Flags

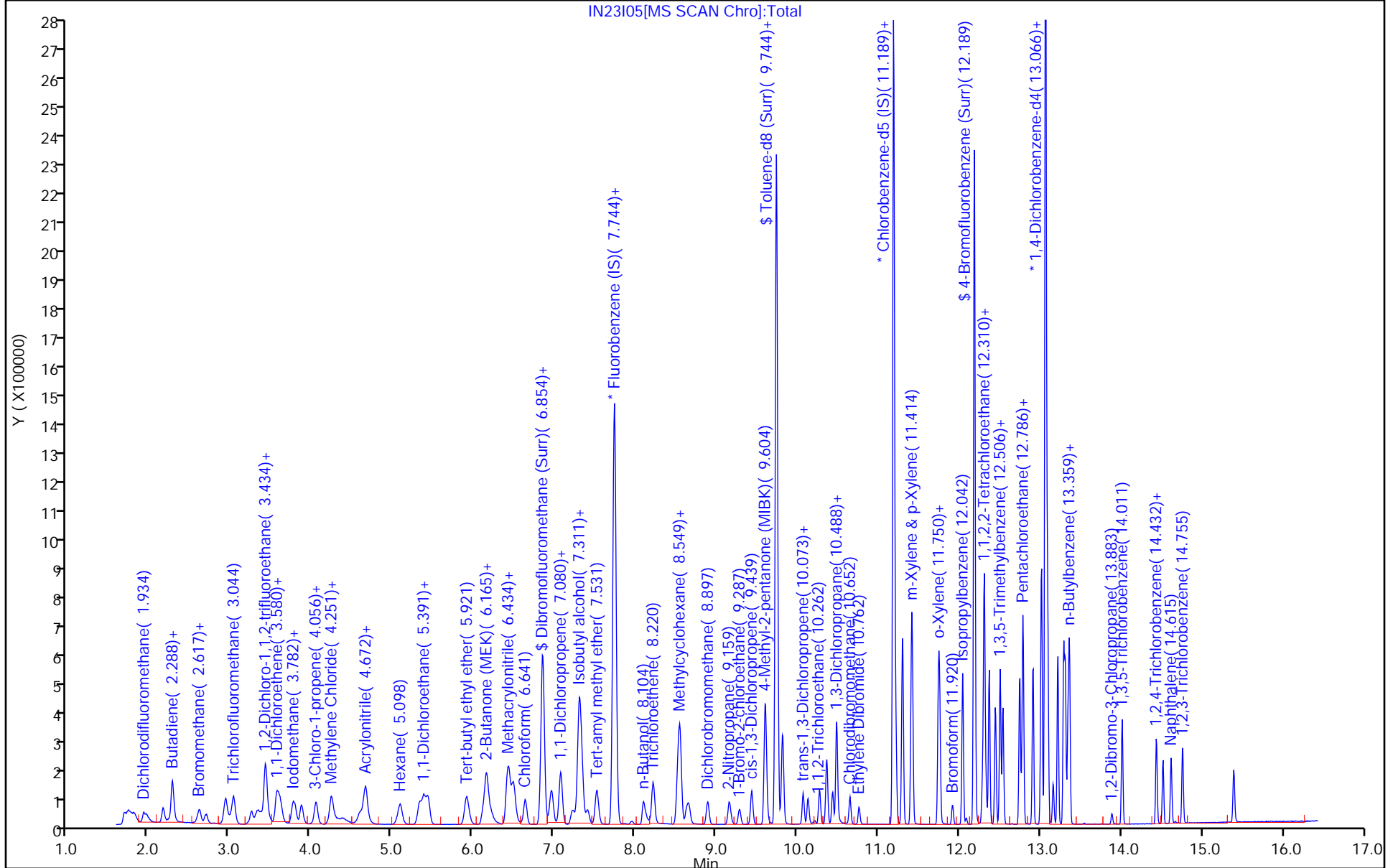
ND - Not Detected or Marked ND

### Review Flags

M - Manually Integrated

## Reagents:

MSV_RV1_826_00030	Amount Added: 2.00	Units: uL	
MSV_RV4GAS826_00096	Amount Added: 2.00	Units: uL	
MSV_RV4_826_00034	Amount Added: 2.00	Units: uL	
MSV_31_826ISS_00003	Amount Added: 5.00	Units: uL	Run Reagent



Euofins Lancaster Laboratories Env, LLC

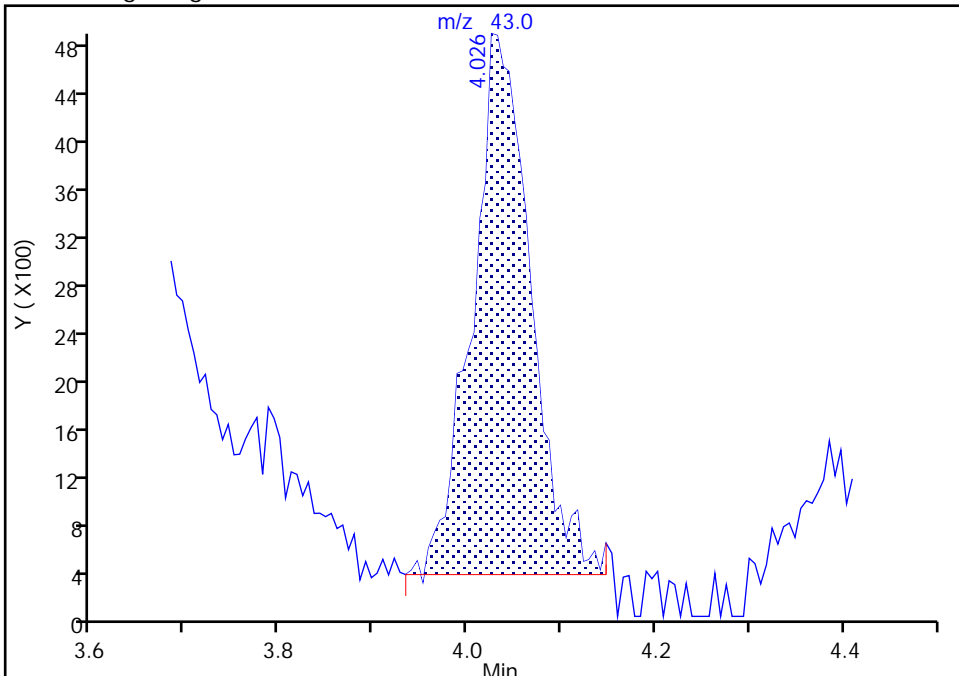
Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23105.D  
Injection Date: 23-Nov-2020 14:10:30 Instrument ID: 19930  
Lims ID: IC std3  
Client ID:  
Operator ID: dvv10203 ALS Bottle#: 6 Worklist Smp#: 7  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: 8260 25ml HP31 Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

21 Methyl acetate, CAS: 79-20-9

Signal: 1

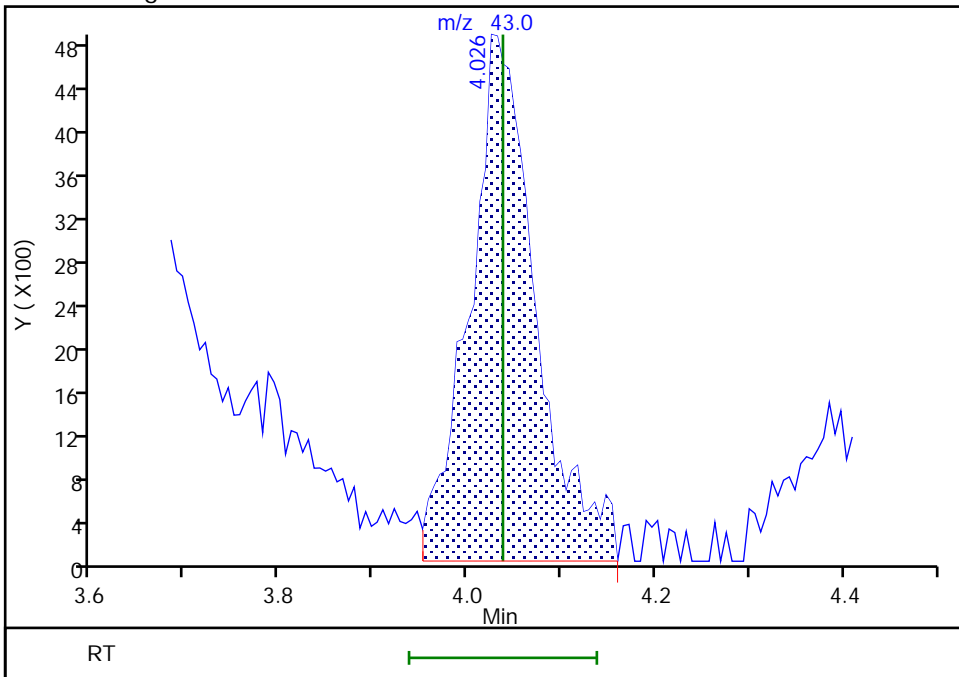
RT: 4.03  
Area: 19487  
Amount: 0.861588  
Amount Units: ug/l

Processing Integration Results



RT: 4.03  
Area: 23815  
Amount: 1.030393  
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 23-Nov-2020 18:36:34  
Audit Action: Assigned New Baseline

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

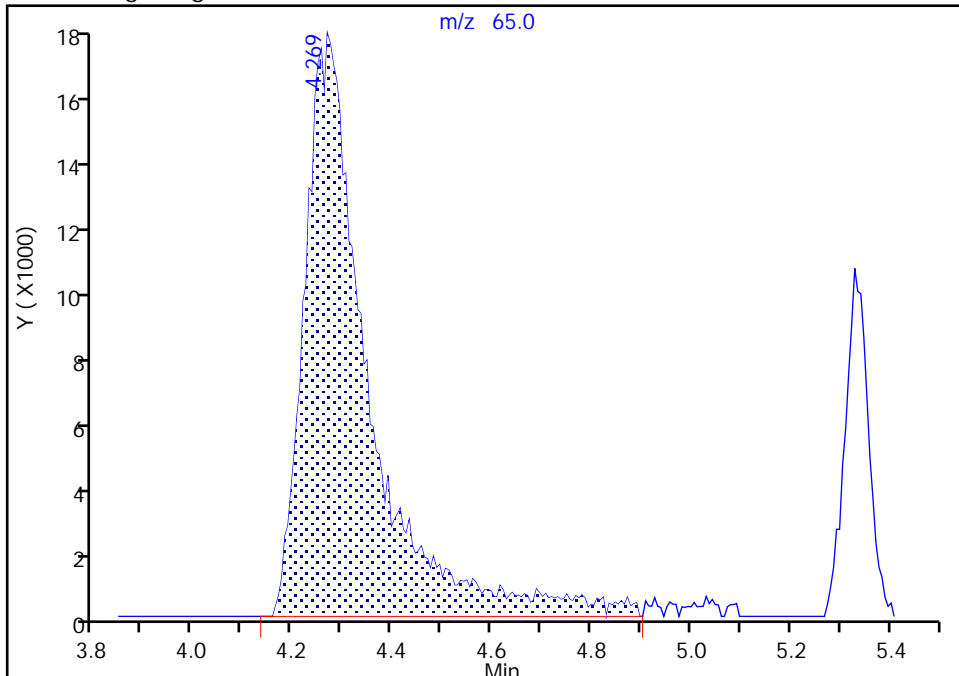
Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23105.D  
Injection Date: 23-Nov-2020 14:10:30 Instrument ID: 19930  
Lims ID: IC std3  
Client ID:  
Operator ID: dvv10203 ALS Bottle#: 6 Worklist Smp#: 7  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: 8260 25ml HP31 Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

\* 24 t-Butyl alcohol-d10 (IS), CAS: 53001-22-2

Signal: 1

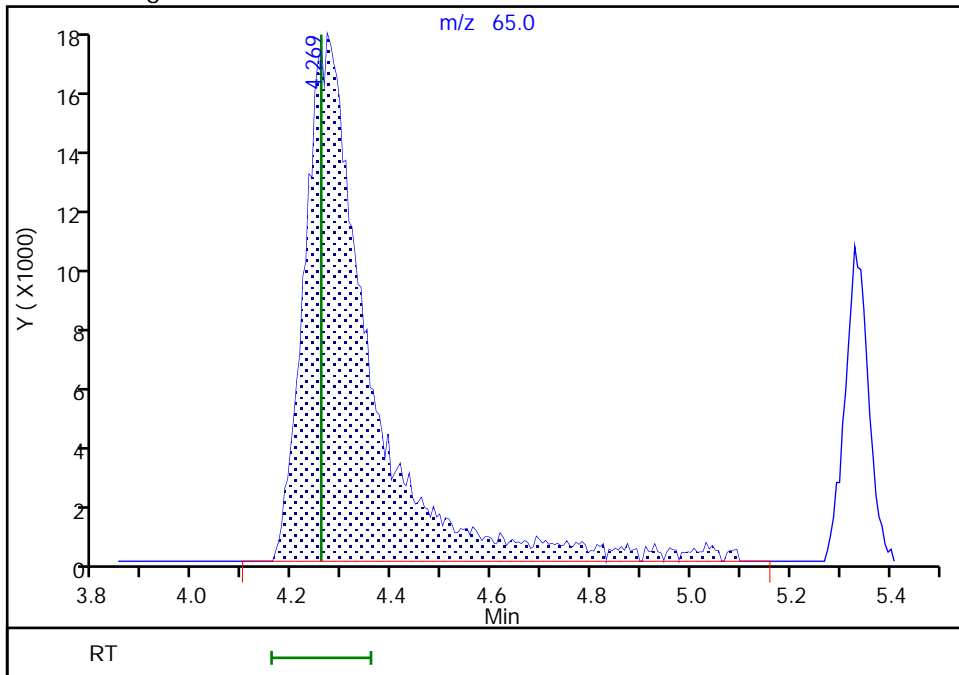
RT: 4.27  
Area: 151949  
Amount: 50.000000  
Amount Units: ug/l

Processing Integration Results



RT: 4.27  
Area: 155400  
Amount: 50.000000  
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 23-Nov-2020 18:43:30  
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Euofins Lancaster Laboratories Env, LLC

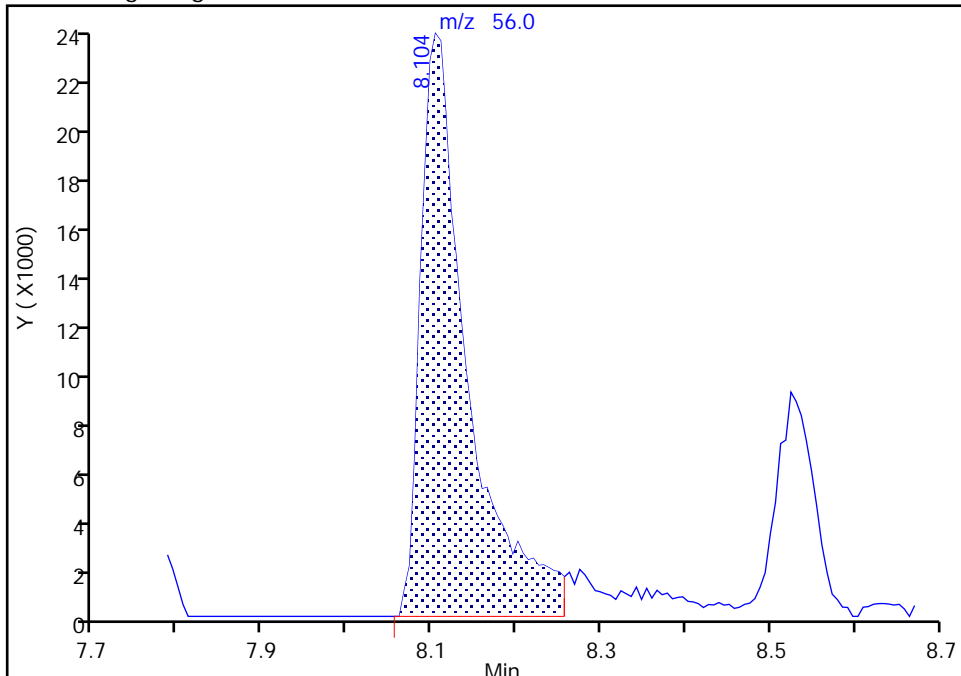
Data File:	\\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23105.D		
Injection Date:	23-Nov-2020 14:10:30	Instrument ID:	19930
Lims ID:	IC std3		
Client ID:			
Operator ID:	dvv10203	ALS Bottle#:	6
Purge Vol:	25.000 mL	Dil. Factor:	1.0000
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D
Column:	Rxi-624Sil MS Capillary Column (0.25mm ID)	Detector:	MS Quad
		Worklist Smp#:	7

60 n-Butanol, CAS: 71-36-3

Signal: 1

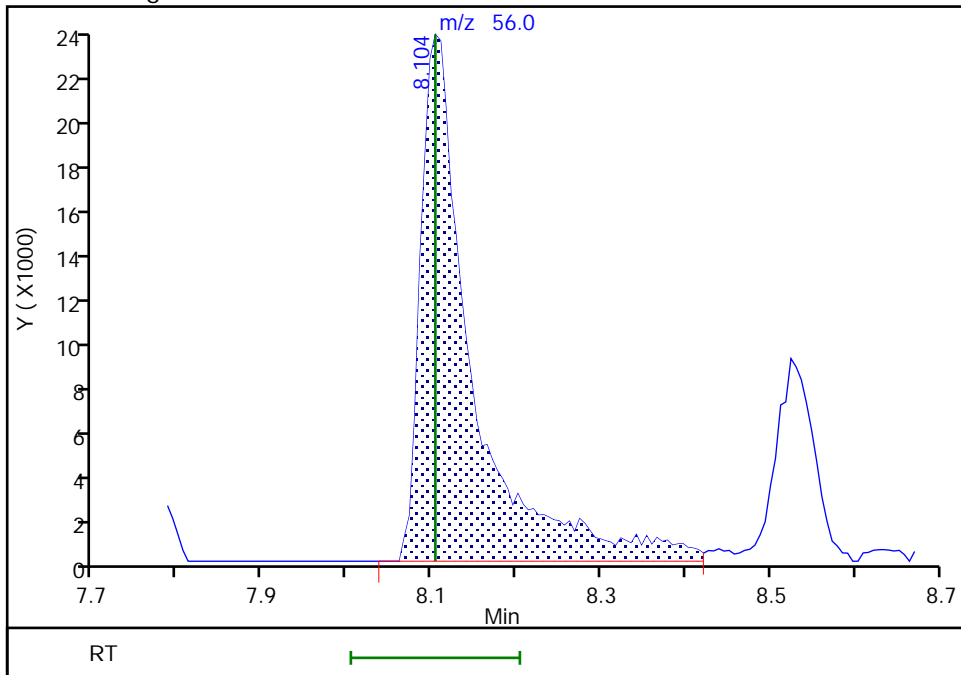
RT: 8.10  
 Area: 91048  
 Amount: 95.703762  
 Amount Units: ug/l

Processing Integration Results



RT: 8.10  
 Area: 100598  
 Amount: 99.874913  
 Amount Units: ug/l

Manual Integration Results



Eurofins Lancaster Laboratories Env, LLC

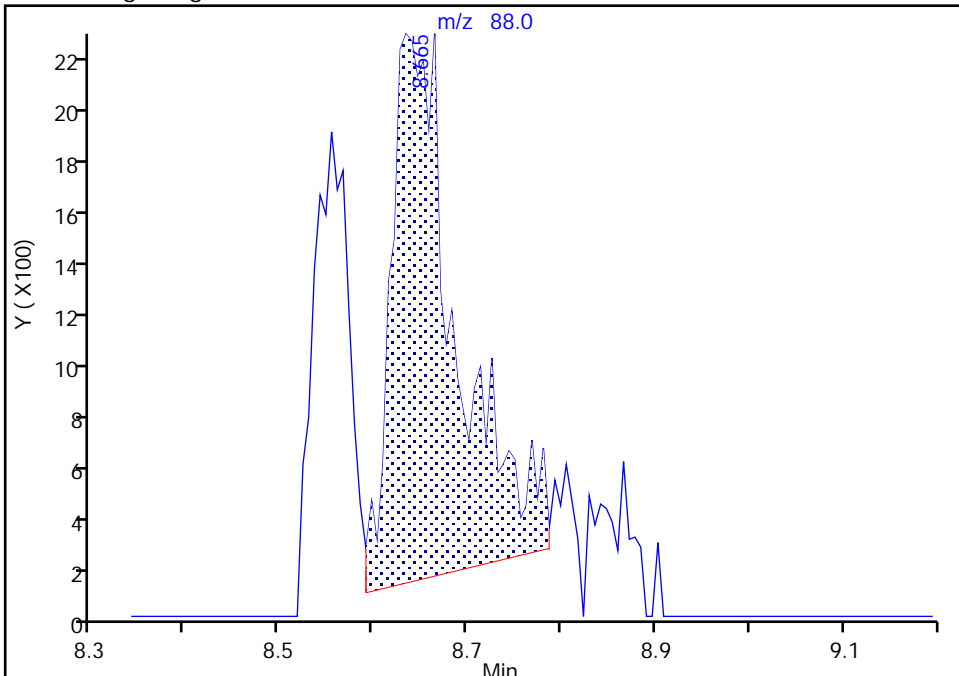
Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23105.D  
Injection Date: 23-Nov-2020 14:10:30 Instrument ID: 19930  
Lims ID: IC std3  
Client ID:  
Operator ID: dvv10203 ALS Bottle#: 6 Worklist Smp#: 7  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: 8260 25ml HP31 Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

65 1,4-Dioxane, CAS: 123-91-1

Signal: 1

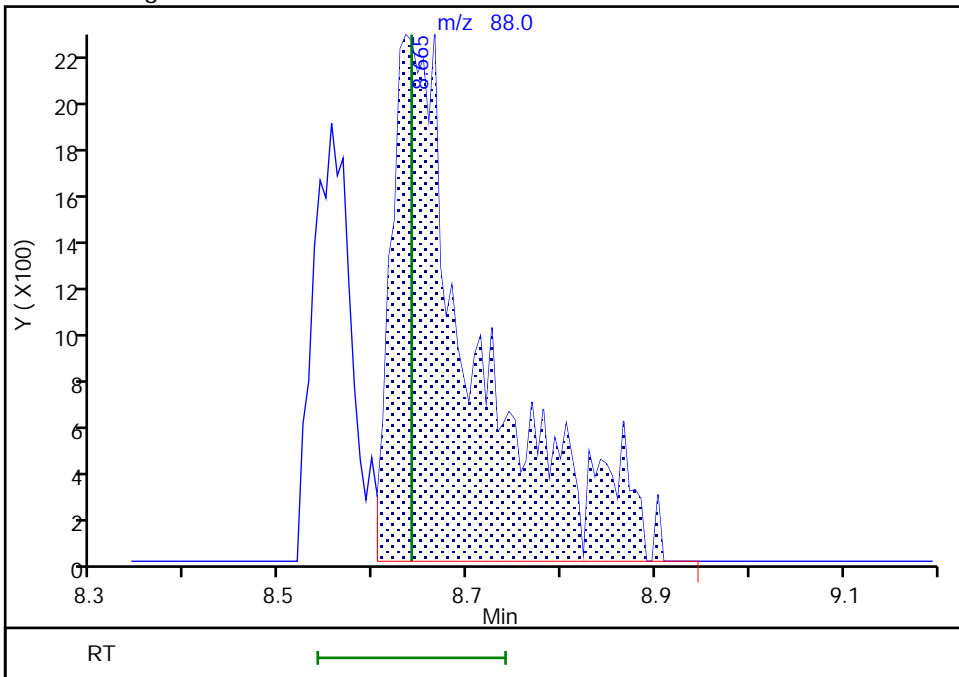
RT: 8.66  
Area: 10152  
Amount: 48.384404  
Amount Units: ug/l

Processing Integration Results



RT: 8.66  
Area: 14289  
Amount: 54.342576  
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 23-Nov-2020 18:37:22  
Audit Action: Split an Integrated Peak

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC  
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23106.D  
 Lims ID: IC std2  
 Client ID:  
 Sample Type: IC Calib Level: 2  
 Inject. Date: 23-Nov-2020 14:31:30 ALS Bottle#: 7 Worklist Smp#: 8  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0016280-008  
 Misc. Info.: IC STD2  
 Operator ID: dvv10203 Instrument ID: 19930  
 Sublist: chrom-8260 25ml HP31\*sub2

Method: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\8260 25ml HP31.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 23-Nov-2020 19:11:31 Calib Date: 23-Nov-2020 18:05:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23117.D

Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1632

First Level Reviewer: campbellme

Date: 23-Nov-2020 18:39:05

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.977	1.971	0.006	98	34344	0.5000	0.4823	
4 Chloromethane	50	2.172	2.172	0.000	99	41148	0.5000	0.4980	
6 Butadiene	39	2.288	2.288	0.000	89	38419	0.5000	0.5445	
5 Vinyl chloride	62	2.294	2.300	-0.006	87	36555	0.5000	0.4806	M
7 Bromomethane	94	2.617	2.623	-0.006	90	28022	0.5000	0.5081	
8 Chloroethane	64	2.703	2.709	-0.006	99	22787	0.5000	0.4874	
9 Dichlorofluoromethane	67	2.946	2.940	0.006	97	51472	0.5000	0.4915	
10 Trichlorofluoromethane	101	3.007	3.019	-0.012	96	49221	0.5000	0.5000	
11 Ethyl ether	59	3.263	3.269	-0.006	89	22487	0.5001	0.5100	
12 1,2-Dichloro-1,1,2-trifluoroetha	67	3.349	3.336	0.013	94	35000	0.5000	0.5068	
13 Acrolein	56	3.434	3.440	-0.006	100	175165	25.0	25.5	
14 1,1-Dichloroethene	96	3.580	3.580	0.000	96	26846	0.5000	0.5047	
15 Acetone	43	3.611	3.605	0.006	99	46105	5.00	5.40	M
16 112TCTFE	101	3.611	3.617	-0.006	88	28017	0.5000	0.4982	
17 Iodomethane	142	3.776	3.775	0.001	98	52202	0.5000	0.5022	
18 Ethyl bromide	108	3.806	3.806	0.000	91	24475	0.5000	0.5060	
19 Carbon disulfide	76	3.885	3.885	0.000	98	77344	0.5000	0.5015	
21 Methyl acetate	43	4.038	4.038	0.000	99	12227	0.5000	0.5246	M
22 3-Chloro-1-propene	41	4.062	4.062	0.000	92	40080	0.5000	0.4956	
23 Methylene Chloride	84	4.251	4.251	0.000	92	30241	0.5000	0.5130	
* 24 t-Butyl alcohol-d10 (IS)	65	4.251	4.257	-0.006	0	156713	50.0	50.0	M
25 2-Methyl-2-propanol	59	4.397	4.385	0.012	97	32201	10.0	9.64	
26 Acrylonitrile	53	4.605	4.592	0.013	98	28136	2.50	2.52	
27 Methyl tert-butyl ether	73	4.666	4.659	0.007	95	69855	0.5000	0.4906	
28 trans-1,2-Dichloroethene	96	4.678	4.678	0.000	98	29336	0.5000	0.4994	
29 Hexane	57	5.098	5.104	-0.006	90	37410	0.5000	0.4654	
31 1,1-Dichloroethane	63	5.330	5.336	-0.006	96	53737	0.5000	0.5061	
32 Isopropyl ether	45	5.397	5.391	0.006	93	87812	0.5000	0.5003	
33 2-Chloro-1,3-butadiene	53	5.446	5.446	0.000	89	42465	0.5000	0.4981	
34 Tert-butyl ethyl ether	59	5.921	5.921	0.000	97	81982	0.5000	0.4947	



Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 2-Butanone (MEK)	43	6.129	6.135	-0.006	99	70495	5.00	4.93	
S 35 1,2-Dichloroethene, Total	100				0			1.01	
37 cis-1,2-Dichloroethene	96	6.159	6.165	-0.006	79	35111	0.5000	0.5145	
38 2,2-Dichloropropane	77	6.190	6.177	0.013	84	42478	0.5000	0.4975	
40 Propionitrile	54	6.226	6.220	0.006	99	42851	10.0	10.3	
42 Methacrylonitrile	67	6.434	6.433	0.001	90	74760	5.00	5.08	
43 Chlorobromomethane	128	6.494	6.494	0.000	78	14772	0.5000	0.4913	
44 Tetrahydrofuran	71	6.501	6.507	-0.006	87	22107	5.00	5.10	a
45 Chloroform	83	6.641	6.647	-0.006	93	53281	0.5000	0.5092	
\$ 46 Dibromofluoromethane (Surr)	113	6.854	6.860	-0.006	94	494112	10.0	10.0	
47 1,1,1-Trichloroethane	97	6.872	6.866	0.006	96	47326	0.5000	0.5034	
48 Cyclohexane	56	6.964	6.964	0.000	89	47588	0.5000	0.4884	
50 Carbon tetrachloride	117	7.080	7.080	0.000	93	41561	0.5000	0.4939	
51 1,1-Dichloropropene	75	7.086	7.080	0.006	95	40536	0.5000	0.4858	
52 Isobutyl alcohol	41	7.226	7.232	-0.006	95	25076	25.0	23.3	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.311	7.311	0.000	0	99445	10.0	10.0	
54 Benzene	78	7.342	7.342	0.000	92	127834	0.5000	0.5057	
56 1,2-Dichloroethane	62	7.415	7.415	0.000	97	31335	0.5000	0.5077	
57 Tert-amyl methyl ether	73	7.525	7.531	-0.006	99	74955	0.5000	0.4937	
* 58 Fluorobenzene (IS)	96	7.744	7.744	0.000	99	1995085	10.0	10.0	
59 n-Heptane	43	7.750	7.756	-0.006	66	38350	0.5000	0.4751	
60 n-Butanol	56	8.110	8.104	0.006	88	49414	50.0	48.6	M
61 Trichloroethene	95	8.220	8.220	0.000	96	33485	0.5000	0.5061	
62 Methylcyclohexane	83	8.525	8.531	-0.006	89	50862	0.5000	0.4732	
63 1,2-Dichloropropane	63	8.549	8.555	-0.006	75	31387	0.5000	0.5052	
64 Methyl methacrylate	69	8.634	8.634	0.000	89	13518	0.5000	0.4933	
65 1,4-Dioxane	88	8.634	8.640	-0.006	39	7023	25.0	26.5	M
66 Dibromomethane	93	8.653	8.665	-0.012	95	15063	0.5000	0.5129	
68 Dichlorobromomethane	83	8.896	8.896	0.000	99	36362	0.5000	0.4883	
69 2-Nitropropane	41	9.159	9.165	-0.006	100	33733	5.00	4.90	
72 1-Bromo-2-chloroethane	63	9.287	9.287	0.000	98	31186	0.5000	0.4877	
73 cis-1,3-Dichloropropene	75	9.445	9.439	0.006	98	42882	0.5000	0.4801	
74 4-Methyl-2-pentanone (MIBK)	43	9.610	9.604	0.006	95	177180	5.00	4.98	
\$ 75 Toluene-d8 (Surr)	98	9.744	9.744	0.000	93	1963991	10.0	10.1	
76 Toluene	92	9.823	9.817	0.006	99	83094	0.5000	0.5124	
S 77 1,3-Dichloropropene, Total	100				0			0.9696	
78 trans-1,3-Dichloropropene	75	10.073	10.073	0.000	90	34273	0.5000	0.4895	
79 Ethyl methacrylate	69	10.134	10.134	0.000	86	27584	0.5000	0.4708	
80 1,1,2-Trichloroethane	97	10.280	10.280	0.000	90	21447	0.5000	0.4955	
81 Tetrachloroethene	166	10.366	10.366	0.000	97	39857	0.5000	0.5077	
82 1,3-Dichloropropane	76	10.439	10.439	0.000	86	36303	0.5000	0.4910	
83 2-Hexanone	43	10.488	10.488	0.000	95	115600	5.00	4.76	
85 Chlorodibromomethane	129	10.652	10.652	0.000	90	25811	0.5000	0.4747	
86 Ethylene Dibromide	107	10.762	10.762	0.000	98	19726	0.5000	0.4758	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.189	0.000	85	1487373	10.0	10.0	
88 1-Chlorohexane	91	11.195	11.195	0.000	94	46957	0.5000	0.4993	
90 Chlorobenzene	112	11.219	11.219	0.000	96	91441	0.5000	0.5100	
S 89 Xylenes, Total	106				0			1.49	
91 1,1,1,2-Tetrachloroethane	131	11.298	11.298	0.000	96	29836	0.5000	0.4793	
92 Ethylbenzene	91	11.305	11.304	0.001	98	158639	0.5000	0.5065	
93 m-Xylene & p-Xylene	106	11.420	11.414	0.006	100	122512	1.00	0.99	
94 o-Xylene	106	11.743	11.743	0.000	96	59608	0.5000	0.4961	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
95 Styrene	104	11.762	11.762	0.000	94	91755	0.5000	0.4770	
96 Bromoform	173	11.920	11.920	0.000	97	15681	0.5000	0.4771	
97 Isopropylbenzene	105	12.042	12.042	0.000	95	158348	0.5000	0.4961	
\$ 100 4-Bromofluorobenzene (Surr)	95	12.189	12.188	0.000	94	723803	10.0	10.1	
101 1,1,2,2-Tetrachloroethane	83	12.286	12.286	0.000	94	27114	0.5000	0.4840	
102 Bromobenzene	156	12.304	12.304	0.000	97	38254	0.5000	0.4952	
103 trans-1,4-Dichloro-2-butene	53	12.310	12.310	0.000	94	55037	5.00	4.72	
104 1,2,3-Trichloropropane	110	12.335	12.335	0.000	79	7306	0.5000	0.4753	
105 N-Propylbenzene	91	12.371	12.371	0.000	98	190665	0.5000	0.5036	
106 2-Chlorotoluene	126	12.445	12.451	-0.006	97	38057	0.5000	0.4916	
107 1,3,5-Trimethylbenzene	105	12.506	12.505	0.001	93	135280	0.5000	0.4996	
108 4-Chlorotoluene	126	12.542	12.542	0.000	96	38382	0.5000	0.4910	
109 tert-Butylbenzene	134	12.749	12.749	0.000	93	29282	0.5000	0.4788	
110 Pentachloroethane	167	12.780	12.780	0.000	79	23377	0.5000	0.4823	
111 1,2,4-Trimethylbenzene	105	12.792	12.792	0.000	97	136133	0.5000	0.4944	
112 sec-Butylbenzene	105	12.908	12.914	-0.006	93	174344	0.5000	0.4909	
113 1,3-Dichlorobenzene	146	13.012	13.011	0.001	98	76688	0.5000	0.4930	
114 4-Isopropyltoluene	119	13.018	13.018	0.000	97	149012	0.5000	0.4921	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	94	857933	10.0	10.0	
116 1,4-Dichlorobenzene	146	13.085	13.085	0.000	93	76626	0.5000	0.4927	
117 1,2,3-Trimethylbenzene	120	13.097	13.097	0.000	97	59495	0.5000	0.4871	
118 Benzyl chloride	126	13.164	13.164	0.000	98	9048	0.5000	0.4272	
119 n-Butylbenzene	92	13.310	13.310	0.000	97	71903	0.5000	0.4862	
120 1,2-Dichlorobenzene	146	13.347	13.347	0.000	98	69967	0.5000	0.4931	
122 1,2-Dibromo-3-Chloropropane	155	13.889	13.883	0.006	89	4105	0.5000	0.4772	
123 1,3,5-Trichlorobenzene	180	14.011	14.011	0.000	97	55307	0.5000	0.4936	
124 1,2,4-Trichlorobenzene	180	14.432	14.438	-0.006	94	45049	0.5000	0.4835	
125 Hexachlorobutadiene	225	14.517	14.517	0.000	96	20349	0.5000	0.5022	
126 Naphthalene	128	14.615	14.615	0.000	97	82677	0.5000	0.4748	
127 1,2,3-Trichlorobenzene	180	14.755	14.761	-0.006	95	38602	0.5000	0.4801	
134 Isopropyl alcohol	45		0.000				ND	ND	
144 2-ethoxy-2-methyl butane	1		0.000				ND	ND	
135 p-Diethylbenzene	1		0.000				ND	ND	
137 2-Methylnaphthalene	142		0.000				ND	ND	

## QC Flag Legend

### Processing Flags

ND - Not Detected or Marked ND

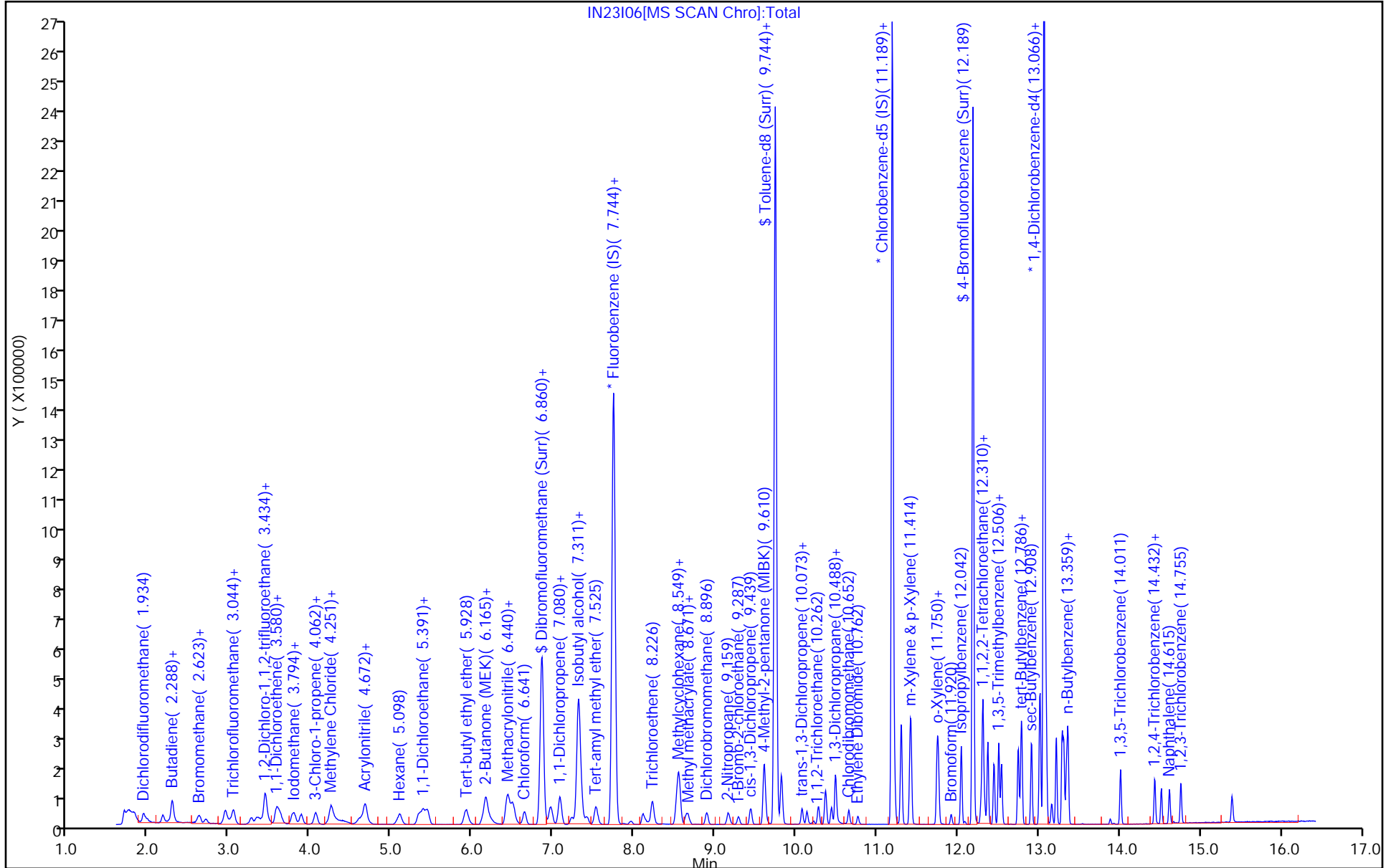
### Review Flags

M - Manually Integrated

a - User Assigned ID

## Reagents:

MSV_RV1_826_00030	Amount Added: 2.00	Units: uL	
MSV_RV4GAS826_00096	Amount Added: 2.00	Units: uL	
MSV_RV4_826_00034	Amount Added: 2.00	Units: uL	
MSV_31_826ISS_00003	Amount Added: 5.00	Units: uL	Run Reagent



Euofins Lancaster Laboratories Env, LLC

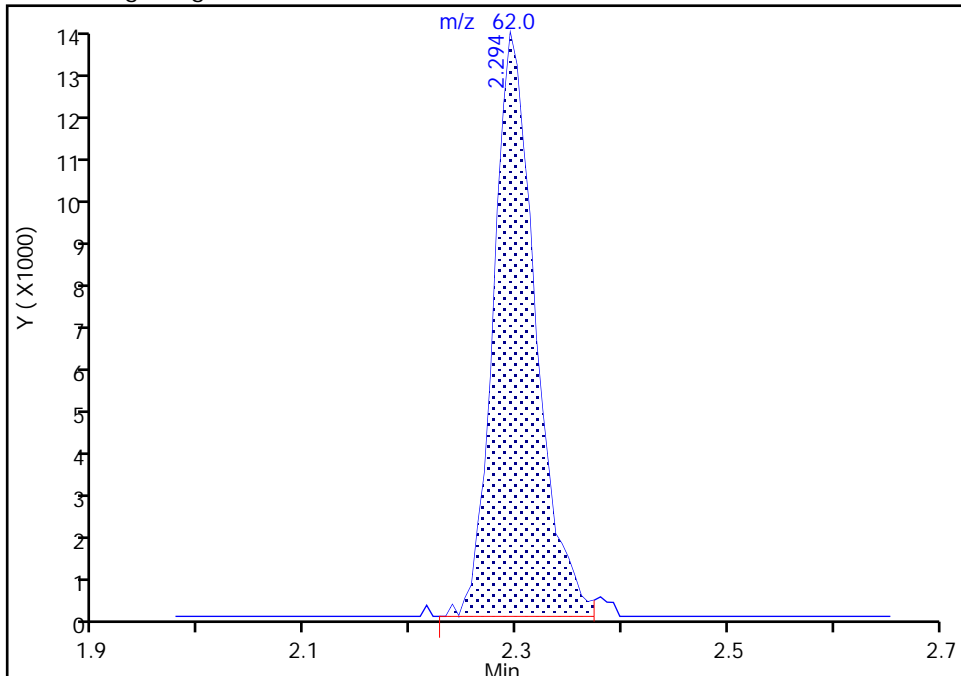
Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I06.D  
Injection Date: 23-Nov-2020 14:31:30 Instrument ID: 19930  
Lims ID: IC std2  
Client ID:  
Operator ID: dvv10203 ALS Bottle#: 7 Worklist Smp#: 8  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: 8260 25ml HP31 Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

5 Vinyl chloride, CAS: 75-01-4

Signal: 1

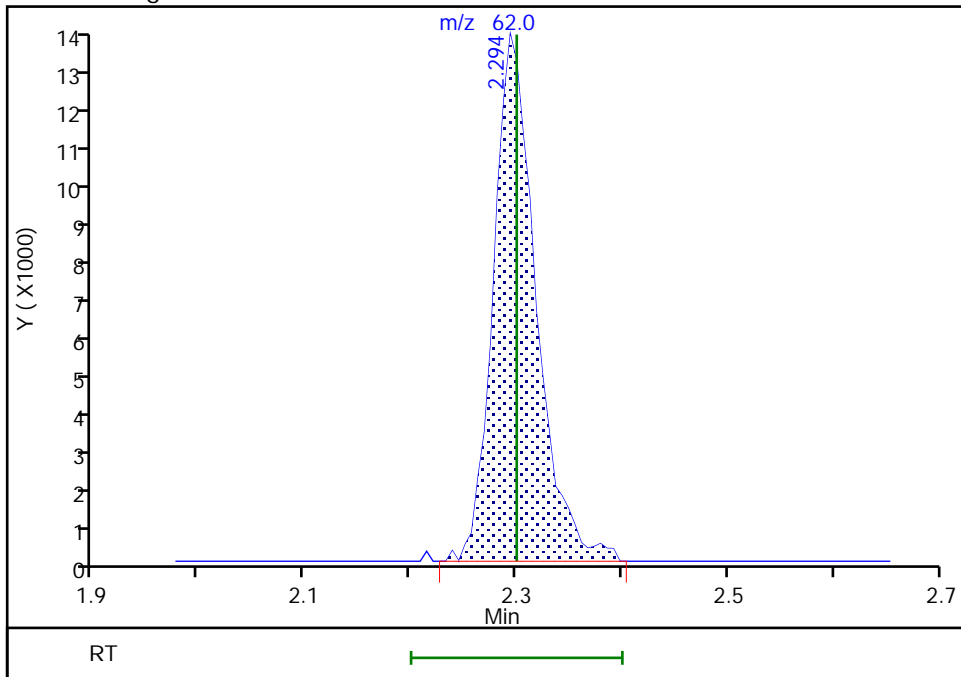
RT: 2.29  
Area: 36162  
Amount: 0.476139  
Amount Units: ug/l

Processing Integration Results



RT: 2.29  
Area: 36555  
Amount: 0.480603  
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 23-Nov-2020 18:38:03  
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

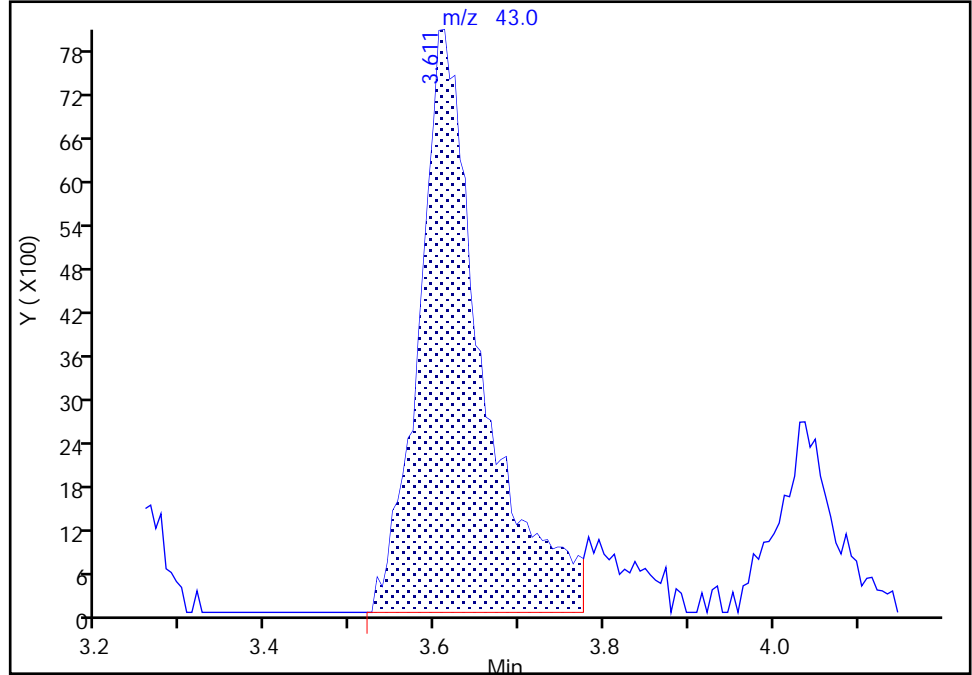
Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23106.D  
Injection Date: 23-Nov-2020 14:31:30 Instrument ID: 19930  
Lims ID: IC std2  
Client ID:  
Operator ID: dvv10203 ALS Bottle#: 7 Worklist Smp#: 8  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: 8260 25ml HP31 Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

15 Acetone, CAS: 67-64-1

Signal: 1

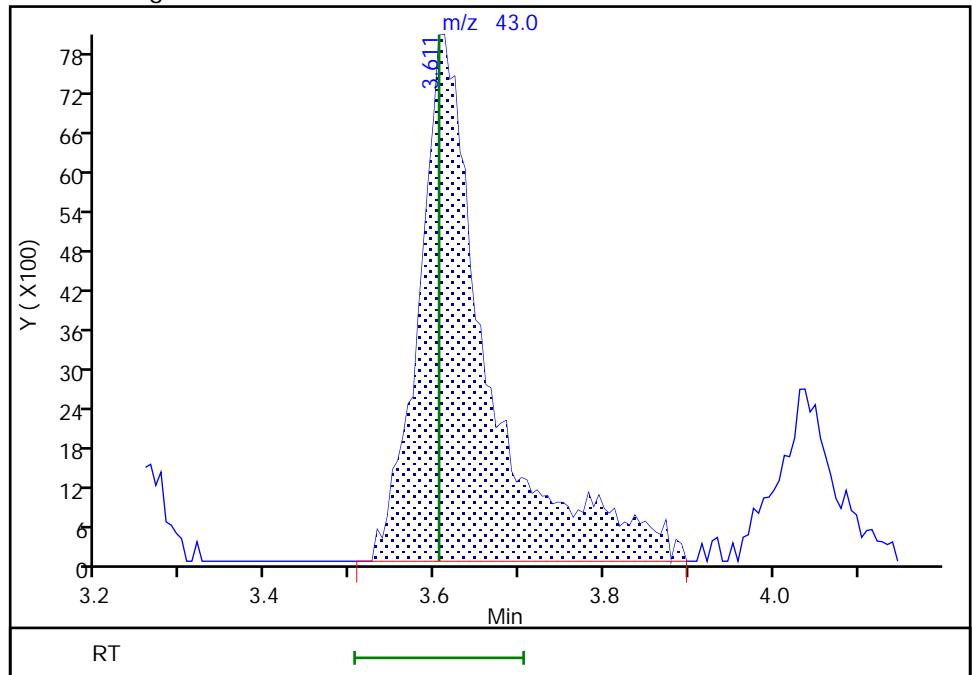
RT: 3.61  
Area: 41942  
Amount: 4.939769  
Amount Units: ug/l

Processing Integration Results



RT: 3.61  
Area: 46105  
Amount: 5.396301  
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 23-Nov-2020 18:38:11  
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

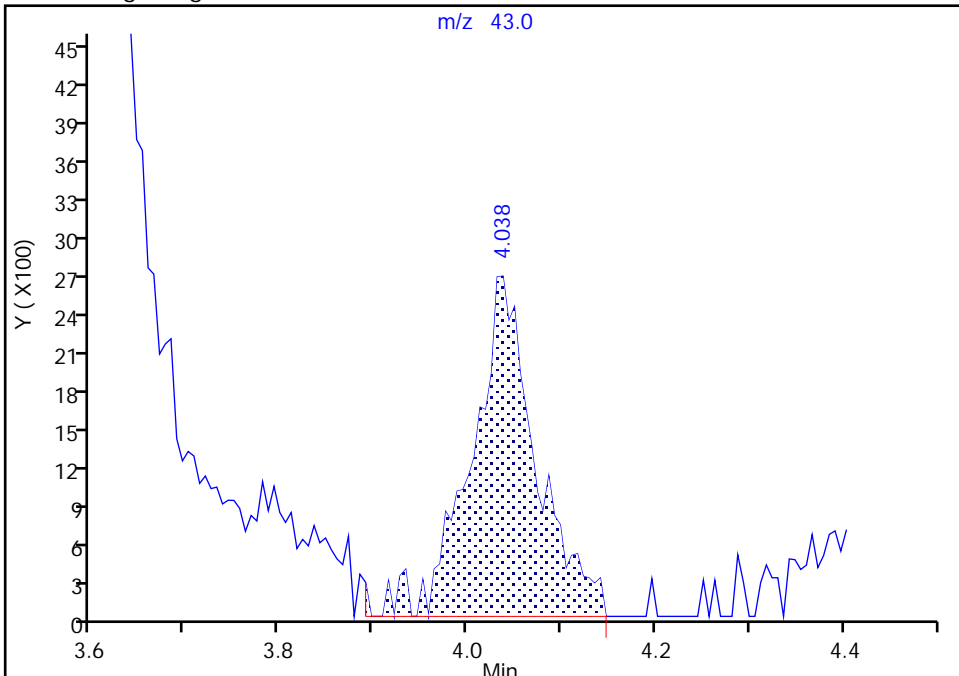
Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23106.D  
Injection Date: 23-Nov-2020 14:31:30 Instrument ID: 19930  
Lims ID: IC std2  
Client ID:  
Operator ID: dvv10203 ALS Bottle#: 7 Worklist Smp#: 8  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: 8260 25ml HP31 Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

21 Methyl acetate, CAS: 79-20-9

Signal: 1

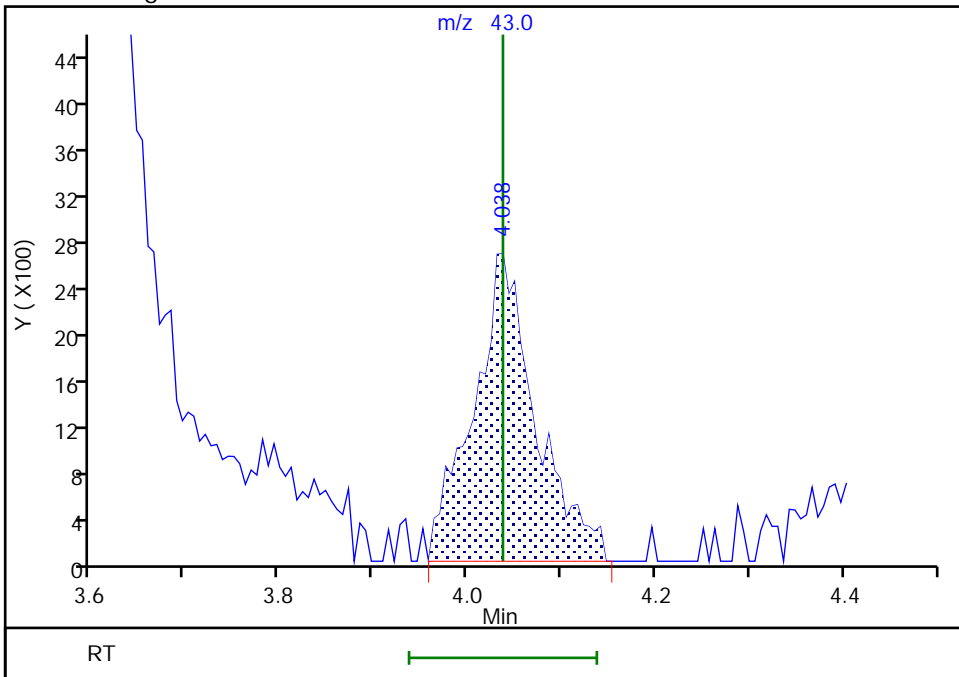
RT: 4.04  
Area: 12774  
Amount: 0.539671  
Amount Units: ug/l

Processing Integration Results



RT: 4.04  
Area: 12227  
Amount: 0.524588  
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 23-Nov-2020 18:38:19

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

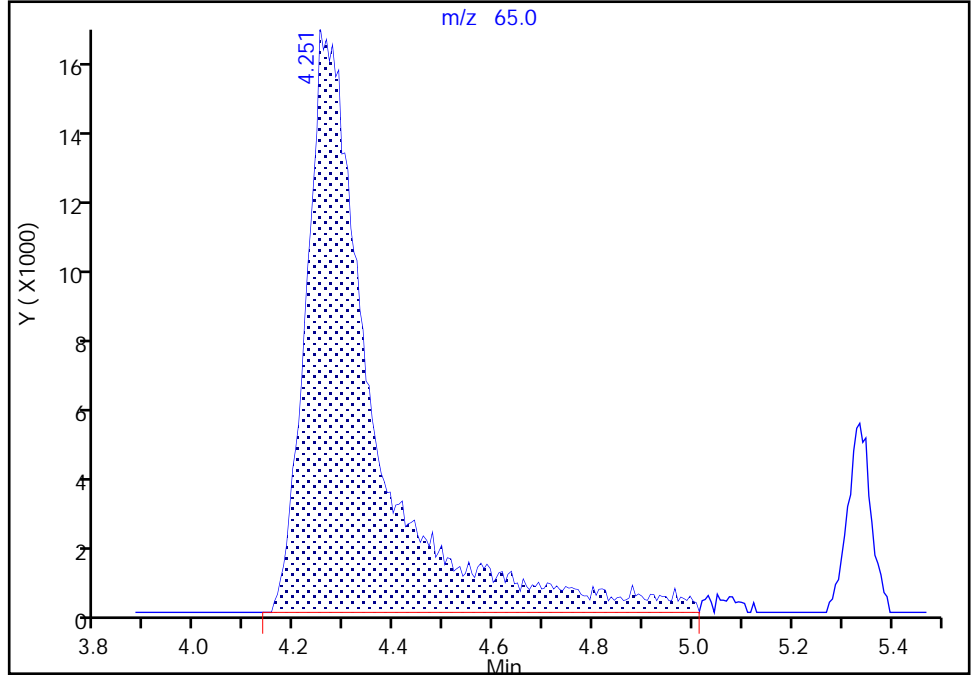
Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23106.D  
Injection Date: 23-Nov-2020 14:31:30 Instrument ID: 19930  
Lims ID: IC std2  
Client ID:  
Operator ID: dvv10203 ALS Bottle#: 7 Worklist Smp#: 8  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: 8260 25ml HP31 Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

\* 24 t-Butyl alcohol-d10 (IS), CAS: 53001-22-2  
Signal: 1

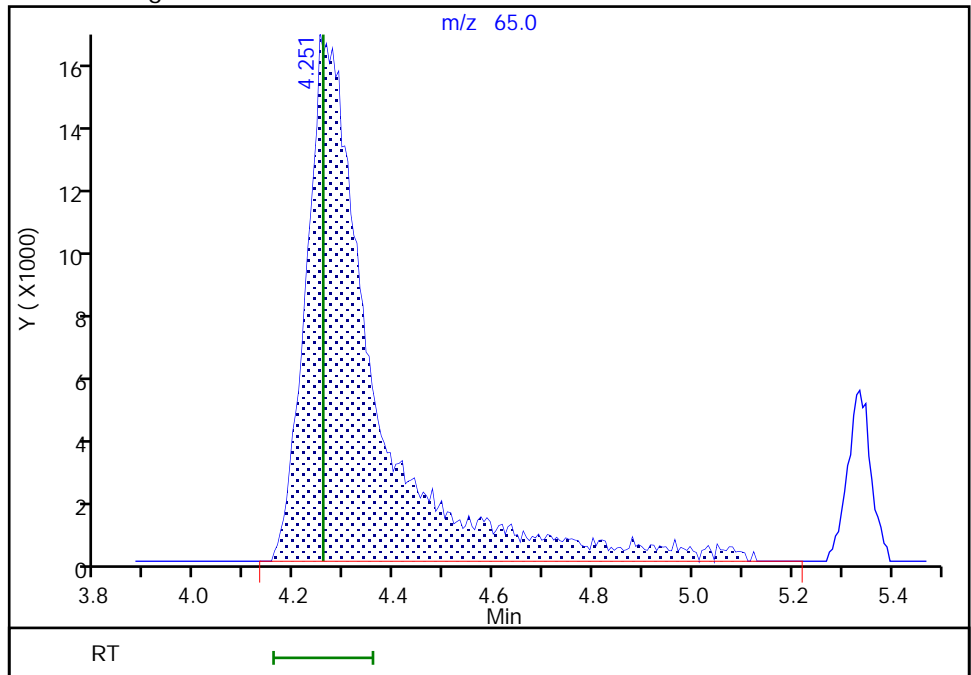
RT: 4.25  
Area: 154788  
Amount: 50.000000  
Amount Units: ug/l

Processing Integration Results



RT: 4.25  
Area: 156713  
Amount: 50.000000  
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 23-Nov-2020 18:43:04  
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

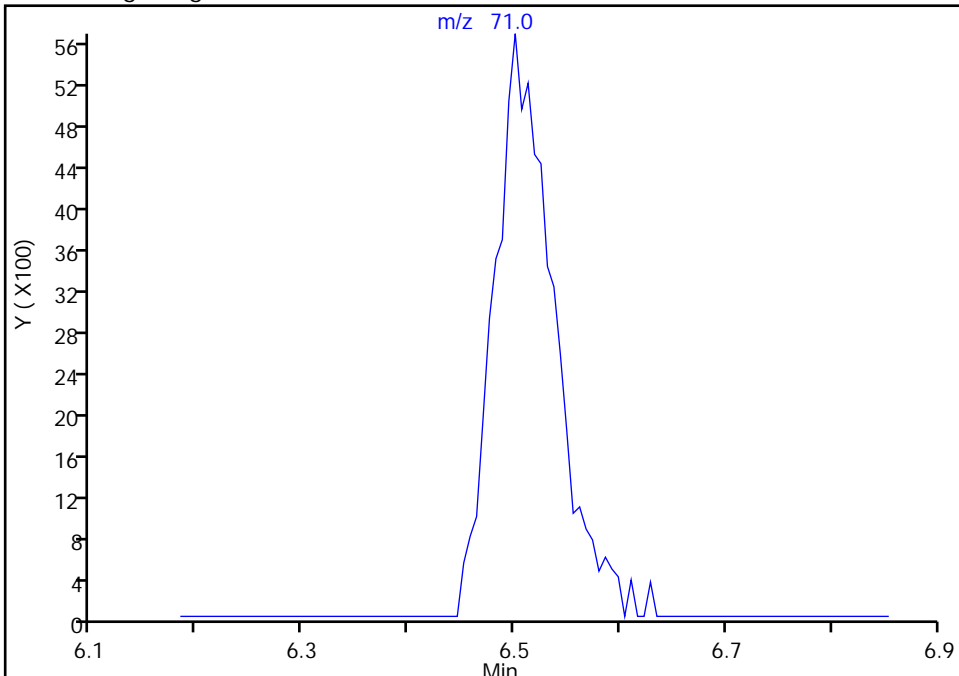
Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23106.D  
Injection Date: 23-Nov-2020 14:31:30 Instrument ID: 19930  
Lims ID: IC std2  
Client ID:  
Operator ID: dvv10203 ALS Bottle#: 7 Worklist Smp#: 8  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: 8260 25ml HP31 Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

44 Tetrahydrofuran, CAS: 109-99-9

Signal: 1

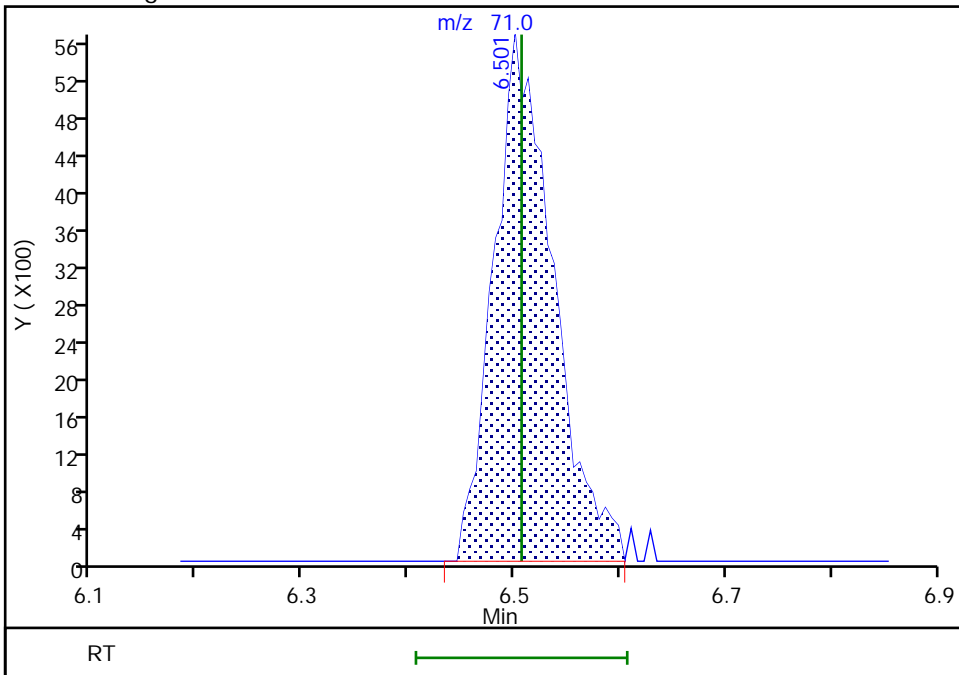
Not Detected  
Expected RT: 6.51

Processing Integration Results



Manual Integration Results

RT: 6.50  
Area: 22107  
Amount: 5.100159  
Amount Units: ug/l



Reviewer: campbellme, 23-Nov-2020 18:38:29  
Audit Action: Assigned Compound ID

Audit Reason: Incomplete Integration



Eurofins Lancaster Laboratories Env, LLC

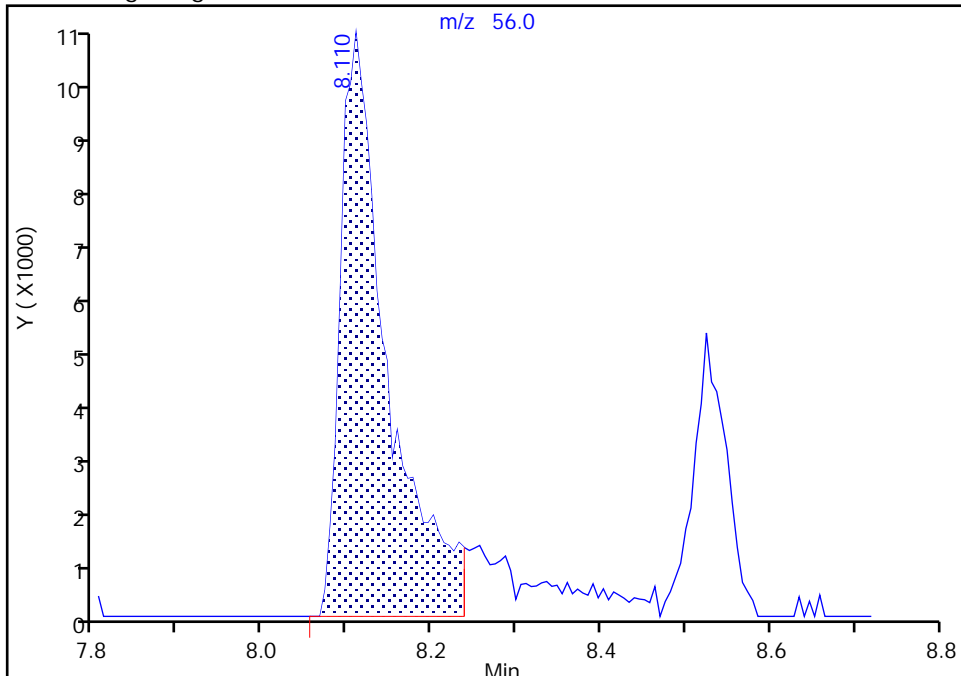
Data File:	\\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23106.D		
Injection Date:	23-Nov-2020 14:31:30	Instrument ID:	19930
Lims ID:	IC std2		
Client ID:			
Operator ID:	dvv10203	ALS Bottle#:	7
Purge Vol:	25.000 mL	Dil. Factor:	1.0000
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D
Column:	Rxi-624Sil MS Capillary Column (0.25mm ID)	Detector:	MS Quad
		Worklist Smp#:	8

60 n-Butanol, CAS: 71-36-3

Signal: 1

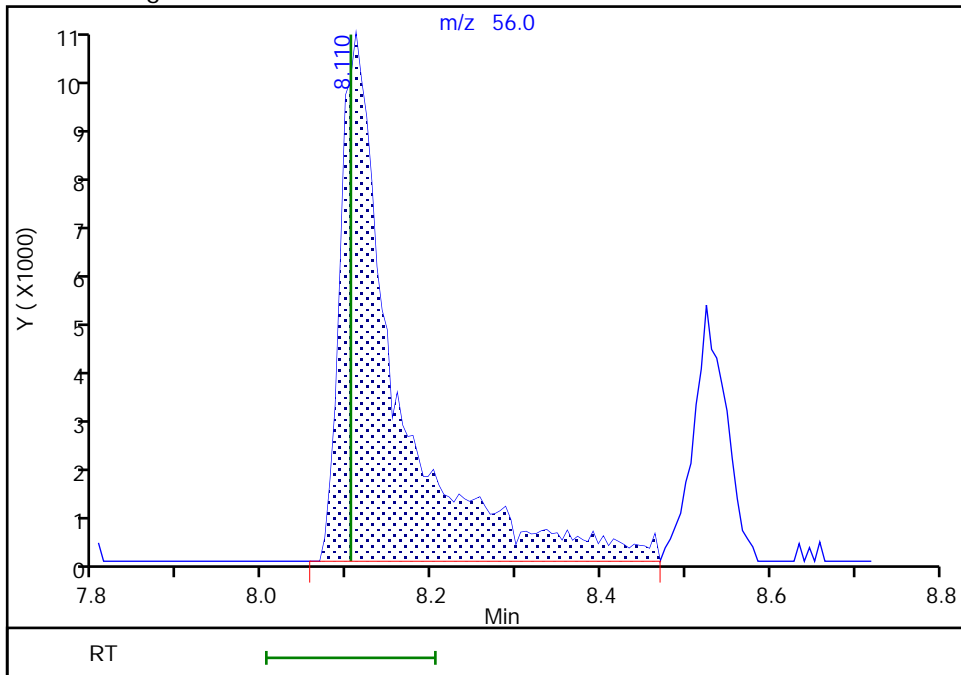
RT: 8.11  
 Area: 41235  
 Amount: 41.947047  
 Amount Units: ug/l

Processing Integration Results



RT: 8.11  
 Area: 49414  
 Amount: 48.647785  
 Amount Units: ug/l

Manual Integration Results



Eurofins Lancaster Laboratories Env, LLC

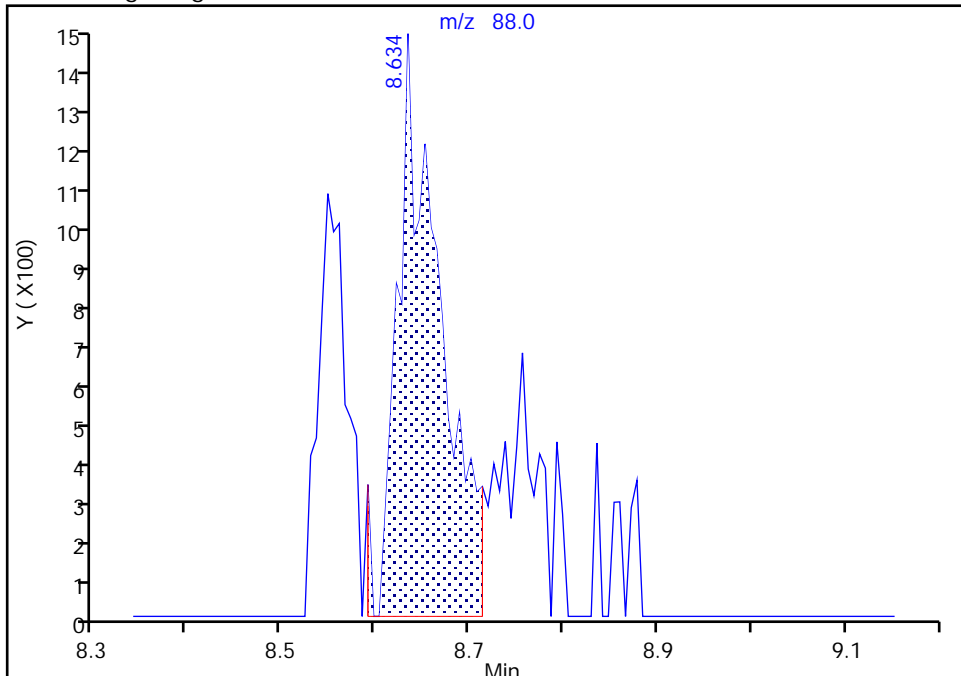
Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23106.D  
Injection Date: 23-Nov-2020 14:31:30 Instrument ID: 19930  
Lims ID: IC std2  
Client ID:  
Operator ID: dvv10203 ALS Bottle#: 7 Worklist Smp#: 8  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: 8260 25ml HP31 Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

65 1,4-Dioxane, CAS: 123-91-1

Signal: 1

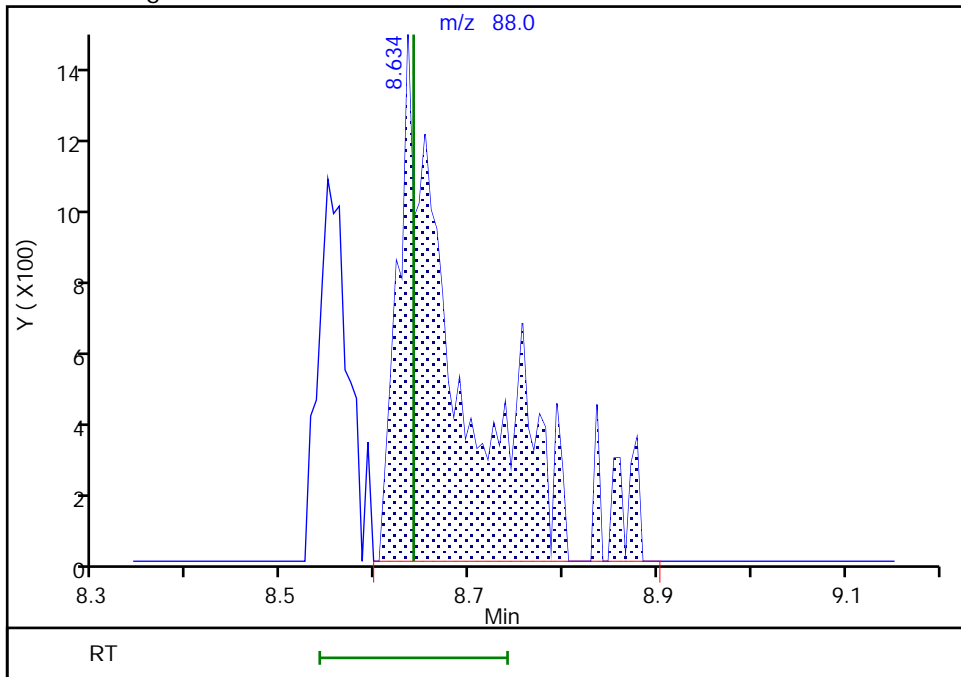
RT: 8.63  
Area: 4724  
Amount: 20.738620  
Amount Units: ug/l

Processing Integration Results



RT: 8.63  
Area: 7023  
Amount: 26.485431  
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 23-Nov-2020 18:38:50  
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC  
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23107.D  
 Lims ID: IC std1  
 Client ID:  
 Sample Type: IC Calib Level: 1  
 Inject. Date: 23-Nov-2020 14:53:30 ALS Bottle#: 8 Worklist Smp#: 9  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0016280-009  
 Misc. Info.: IC STD1  
 Operator ID: dvv10203 Instrument ID: 19930  
 Sublist: chrom-8260 25ml HP31\*sub2  
 Method: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\8260 25ml HP31.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 23-Nov-2020 19:11:42 Calib Date: 23-Nov-2020 18:05:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23117.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1632

First Level Reviewer: campbellme Date: 23-Nov-2020 18:42:29

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.971	1.971	0.000	97	14289	0.2000	0.2021	
4 Chloromethane	50	2.172	2.172	0.000	97	17096	0.2000	0.2084	
6 Butadiene	39	2.282	2.288	-0.006	91	17464	0.2000	0.2493	M
5 Vinyl chloride	62	2.294	2.300	-0.006	94	15824	0.2000	0.2095	
7 Bromomethane	94	2.629	2.623	0.006	90	11310	0.2000	0.2065	
8 Chloroethane	64	2.702	2.709	-0.007	98	9848	0.2000	0.2122	
9 Dichlorofluoromethane	67	2.952	2.940	0.012	96	21416	0.2000	0.2059	
10 Trichlorofluoromethane	101	3.019	3.019	0.000	94	21060	0.2000	0.2154	
11 Ethyl ether	59	3.263	3.269	-0.006	91	8629	0.2000	0.1971	
12 1,2-Dichloro-1,1,2-trifluoroetha	67	3.349	3.336	0.013	90	14313	0.2000	0.2087	
13 Acrolein	56	3.440	3.440	0.000	98	69971	10.0	10.1	
14 1,1-Dichloroethene	96	3.574	3.580	-0.006	97	10648	0.2000	0.2016	
15 Acetone	43	3.611	3.605	0.006	99	20352	2.00	2.37	
16 112TCTFE	101	3.611	3.617	-0.006	85	11156	0.2000	0.1998	
17 Iodomethane	142	3.775	3.775	0.000	97	20453	0.2000	0.1982	
18 Ethyl bromide	108	3.806	3.806	0.000	90	9416	0.2000	0.1961	
19 Carbon disulfide	76	3.879	3.885	-0.006	98	33150	0.2000	0.2165	
21 Methyl acetate	43	4.044	4.038	0.006	24	4217	0.2000	0.1800	
22 3-Chloro-1-propene	41	4.062	4.062	0.000	94	16032	0.2000	0.1997	
23 Methylene Chloride	84	4.239	4.251	-0.012	58	12391	0.2000	0.2117	
* 24 t-Butyl alcohol-d10 (IS)	65	4.269	4.257	0.012	0	157506	50.0	50.0	M
25 2-Methyl-2-propanol	59	4.397	4.385	0.012	94	14466	4.00	4.31	
26 Acrylonitrile	53	4.611	4.592	0.019	72	11416	1.00	1.02	a
27 Methyl tert-butyl ether	73	4.659	4.659	0.000	95	28583	0.2000	0.2022	
28 trans-1,2-Dichloroethene	96	4.665	4.678	-0.013	98	11853	0.2000	0.2032	M
29 Hexane	57	5.092	5.104	-0.012	87	15492	0.2000	0.1941	
31 1,1-Dichloroethane	63	5.330	5.336	-0.006	93	20953	0.2000	0.1987	
32 Isopropyl ether	45	5.391	5.391	0.000	95	34785	0.2000	0.1996	
33 2-Chloro-1,3-butadiene	53	5.452	5.446	0.006	88	16705	0.2000	0.1974	
34 Tert-butyl ethyl ether	59	5.934	5.921	0.013	98	32027	0.2000	0.1946	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 2-Butanone (MEK)	43	6.147	6.135	0.012	97	28681	2.00	2.00	
S 35 1,2-Dichloroethene, Total	100				0			0.4110	
37 cis-1,2-Dichloroethene	96	6.165	6.165	0.000	79	14079	0.2000	0.2078	
38 2,2-Dichloropropane	77	6.171	6.177	-0.006	63	16623	0.2000	0.1961	
40 Propionitrile	54	6.232	6.220	0.012	97	17434	4.00	4.15	M
42 Methacrylonitrile	67	6.440	6.433	0.007	89	28963	2.00	1.96	
43 Chlorobromomethane	128	6.494	6.494	0.000	79	5808	0.2000	0.1946	
44 Tetrahydrofuran	71	6.500	6.507	-0.007	83	8531	2.00	1.96	
45 Chloroform	83	6.647	6.647	0.000	93	21135	0.2000	0.2034	
\$ 46 Dibromofluoromethane (Surr)	113	6.860	6.860	0.000	94	488089	10.0	9.98	
47 1,1,1-Trichloroethane	97	6.878	6.866	0.012	97	18731	0.2000	0.2007	
48 Cyclohexane	56	6.958	6.964	-0.006	86	18461	0.2000	0.1908	
50 Carbon tetrachloride	117	7.080	7.080	0.000	93	16767	0.2000	0.2007	
51 1,1-Dichloropropene	75	7.092	7.080	0.012	94	16151	0.2000	0.1949	
52 Isobutyl alcohol	41	7.232	7.232	0.000	92	11668	10.0	10.8	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.311	7.311	0.000	0	98119	10.0	9.95	
54 Benzene	78	7.348	7.342	0.006	92	50855	0.2000	0.2026	
56 1,2-Dichloroethane	62	7.409	7.415	-0.006	97	13237	0.2000	0.2160	
57 Tert-amyl methyl ether	73	7.525	7.531	-0.006	98	28945	0.2000	0.1920	
* 58 Fluorobenzene (IS)	96	7.744	7.744	0.000	99	1980944	10.0	10.0	
59 n-Heptane	43	7.756	7.756	0.000	36	16047	0.2000	0.2002	
60 n-Butanol	56	8.116	8.104	0.012	87	17858	20.0	17.5	M
61 Trichloroethene	95	8.226	8.220	0.006	95	13273	0.2000	0.2020	
62 Methylcyclohexane	83	8.531	8.531	0.000	93	20100	0.2000	0.1884	
63 1,2-Dichloropropane	63	8.561	8.555	0.006	73	12009	0.2000	0.1947	
64 Methyl methacrylate	69	8.634	8.634	0.000	78	4987	0.2000	0.1811	
65 1,4-Dioxane	88	8.646	8.640	0.006	0	1170	10.0	4.39	M
66 Dibromomethane	93	8.659	8.665	-0.006	93	5679	0.2000	0.1948	M
68 Dichlorobromomethane	83	8.896	8.896	0.000	98	14820	0.2000	0.2005	
69 2-Nitropropane	41	9.165	9.165	0.000	97	12963	2.00	1.87	
72 1-Bromo-2-chloroethane	63	9.287	9.287	0.000	95	12498	0.2000	0.1969	
73 cis-1,3-Dichloropropene	75	9.445	9.439	0.006	96	16306	0.2000	0.1839	
74 4-Methyl-2-pentanone (MIBK)	43	9.610	9.604	0.006	94	67829	2.00	1.90	
\$ 75 Toluene-d8 (Surr)	98	9.744	9.744	0.000	93	1932681	10.0	10.0	
76 Toluene	92	9.823	9.817	0.006	99	33538	0.2000	0.2088	
S 77 1,3-Dichloropropene, Total	100				0			0.3639	
78 trans-1,3-Dichloropropene	75	10.079	10.073	0.006	90	12488	0.2000	0.1800	
79 Ethyl methacrylate	69	10.140	10.134	0.006	85	9995	0.2000	0.1722	
80 1,1,2-Trichloroethane	97	10.280	10.280	0.000	85	8818	0.2000	0.2057	
81 Tetrachloroethene	166	10.366	10.366	0.000	96	15772	0.2000	0.2028	
82 1,3-Dichloropropane	76	10.439	10.439	0.000	87	14656	0.2000	0.2001	
83 2-Hexanone	43	10.494	10.488	0.006	95	42866	2.00	1.75	
85 Chlorodibromomethane	129	10.658	10.652	0.006	87	10400	0.2000	0.1931	
86 Ethylene Dibromide	107	10.768	10.762	0.006	94	8081	0.2000	0.1968	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.189	0.000	85	1473403	10.0	10.0	
88 1-Chlorohexane	91	11.201	11.195	0.006	62	20461	0.2000	0.2196	
90 Chlorobenzene	112	11.219	11.219	0.000	98	36190	0.2000	0.2038	
S 89 Xylenes, Total	106				0			0.5869	
91 1,1,1,2-Tetrachloroethane	131	11.298	11.298	0.000	92	12023	0.2000	0.1950	
92 Ethylbenzene	91	11.304	11.304	0.000	98	61200	0.2000	0.1972	
93 m-Xylene & p-Xylene	106	11.420	11.414	0.006	100	48448	0.4000	0.3956	
94 o-Xylene	106	11.743	11.743	0.000	96	22768	0.2000	0.1913	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
95 Styrene	104	11.762	11.762	0.000	95	35720	0.2000	0.1875	
96 Bromoform	173	11.920	11.920	0.000	97	5858	0.2000	0.1799	
97 Isopropylbenzene	105	12.042	12.042	0.000	95	60889	0.2000	0.1926	
\$ 100 4-Bromofluorobenzene (Surr)	95	12.188	12.188	0.000	94	711806	10.0	9.99	
101 1,1,2,2-Tetrachloroethane	83	12.286	12.286	0.000	93	10791	0.2000	0.1948	
102 Bromobenzene	156	12.304	12.304	0.000	92	15002	0.2000	0.1963	
103 trans-1,4-Dichloro-2-butene	53	12.310	12.310	0.000	95	20615	2.00	1.76	
104 1,2,3-Trichloropropane	110	12.335	12.335	0.000	63	3227	0.2000	0.2123	
105 N-Propylbenzene	91	12.371	12.371	0.000	99	73549	0.2000	0.1964	
106 2-Chlorotoluene	126	12.451	12.451	0.000	97	15105	0.2000	0.1973	
107 1,3,5-Trimethylbenzene	105	12.505	12.505	0.000	94	51085	0.2000	0.1908	
108 4-Chlorotoluene	126	12.542	12.542	0.000	96	15194	0.2000	0.1965	
109 tert-Butylbenzene	134	12.749	12.749	0.000	92	12362	0.2000	0.2044	
110 Pentachloroethane	167	12.780	12.780	0.000	79	8281	0.2000	0.1727	
111 1,2,4-Trimethylbenzene	105	12.792	12.792	0.000	96	50885	0.2000	0.1868	
112 sec-Butylbenzene	105	12.914	12.914	0.000	94	67663	0.2000	0.1926	
113 1,3-Dichlorobenzene	146	13.011	13.011	0.000	97	31322	0.2000	0.2036	
114 4-Isopropyltoluene	119	13.017	13.018	-0.001	97	55545	0.2000	0.1855	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	94	848529	10.0	10.0	
116 1,4-Dichlorobenzene	146	13.085	13.085	0.000	93	31232	0.2000	0.2031	
117 1,2,3-Trimethylbenzene	120	13.091	13.097	-0.006	96	24151	0.2000	0.1999	
118 Benzyl chloride	126	13.164	13.164	0.000	98	3201	0.2000	0.1528	
119 n-Butylbenzene	92	13.310	13.310	0.000	97	27906	0.2000	0.1908	
120 1,2-Dichlorobenzene	146	13.341	13.347	-0.006	98	28158	0.2000	0.2006	
122 1,2-Dibromo-3-Chloropropane	155	13.889	13.883	0.006	80	1501	0.2000	0.1764	
123 1,3,5-Trichlorobenzene	180	14.011	14.011	0.000	97	21330	0.2000	0.1925	
124 1,2,4-Trichlorobenzene	180	14.438	14.438	0.000	92	17403	0.2000	0.1888	
125 Hexachlorobutadiene	225	14.517	14.517	0.000	96	8383	0.2000	0.2092	
126 Naphthalene	128	14.615	14.615	0.000	97	32359	0.2000	0.1879	
127 1,2,3-Trichlorobenzene	180	14.761	14.761	0.000	96	15307	0.2000	0.1925	
134 Isopropyl alcohol	45		0.000				ND	ND	
135 p-Diethylbenzene	1		0.000				ND	ND	
137 2-Methylnaphthalene	142		0.000				ND	ND	
144 2-ethoxy-2-methyl butane	1		0.000				ND	ND	

## QC Flag Legend

### Processing Flags

ND - Not Detected or Marked ND

### Review Flags

M - Manually Integrated

a - User Assigned ID

## Reagents:

MSV_RV1_826_00030	Amount Added: 2.00	Units: uL	
MSV_RV4GAS826_00096	Amount Added: 2.00	Units: uL	
MSV_RV4_826_00034	Amount Added: 2.00	Units: uL	
MSV_31_826ISS_00003	Amount Added: 5.00	Units: uL	Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23107.D

Injection Date: 23-Nov-2020 14:53:30

Instrument ID: 19930

Operator ID: dvv10203

Lims ID: IC std1

Worklist Smp#: 9

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

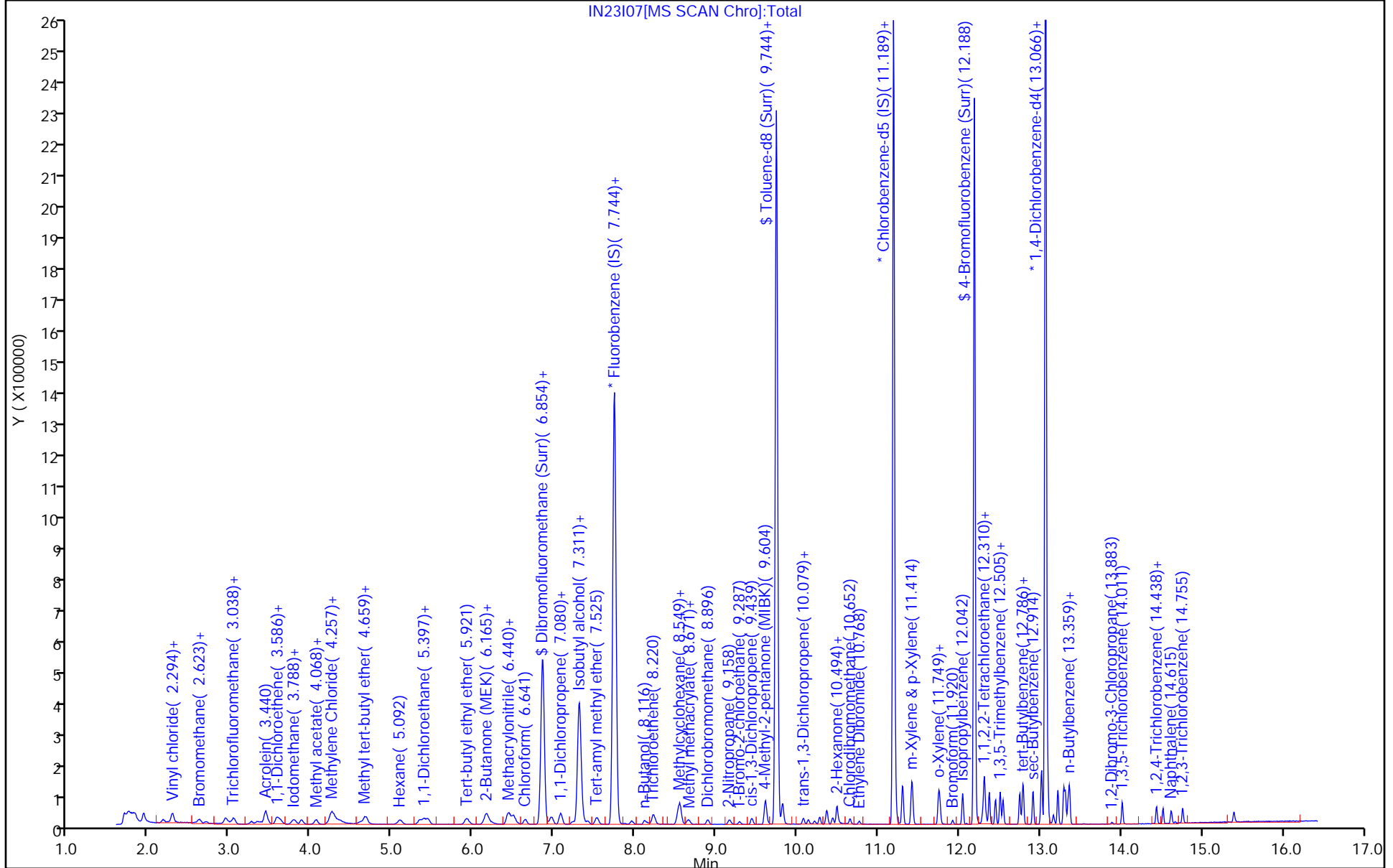
ALS Bottle#: 8

Method: 8260 25ml HP31

Limit Group: MSV - 8260C\_D

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

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



Eurofins Lancaster Laboratories Env, LLC

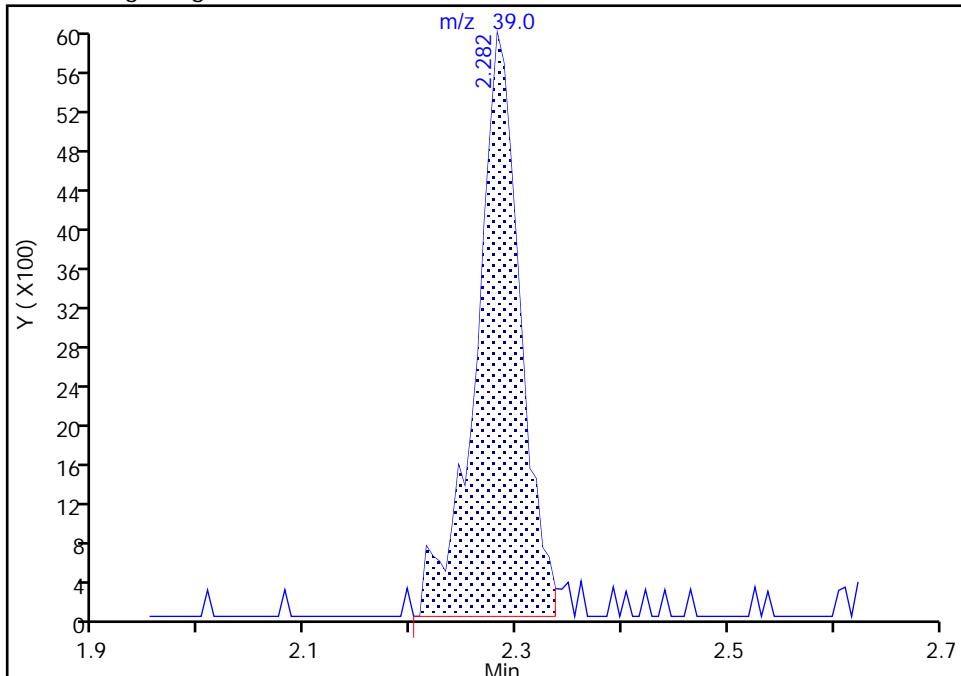
Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23107.D  
Injection Date: 23-Nov-2020 14:53:30 Instrument ID: 19930  
Lims ID: IC std1  
Client ID:  
Operator ID: dvv10203 ALS Bottle#: 8 Worklist Smp#: 9  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: 8260 25ml HP31 Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

6 Butadiene, CAS: 106-99-0

Signal: 1

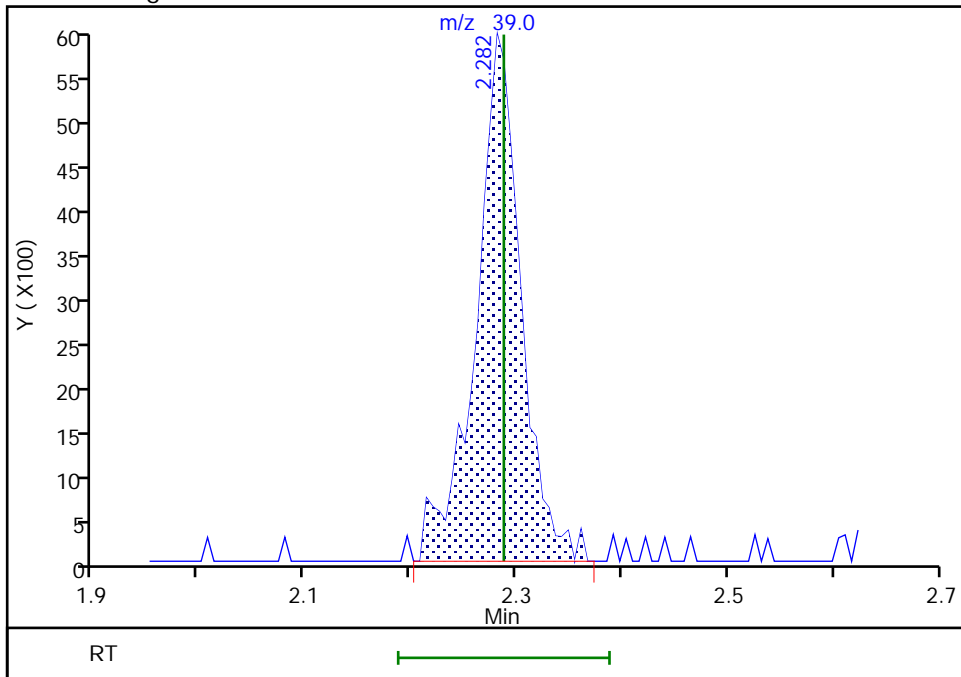
RT: 2.28  
Area: 17108  
Amount: 0.245098  
Amount Units: ug/l

Processing Integration Results



RT: 2.28  
Area: 17464  
Amount: 0.249290  
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 23-Nov-2020 18:39:30  
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

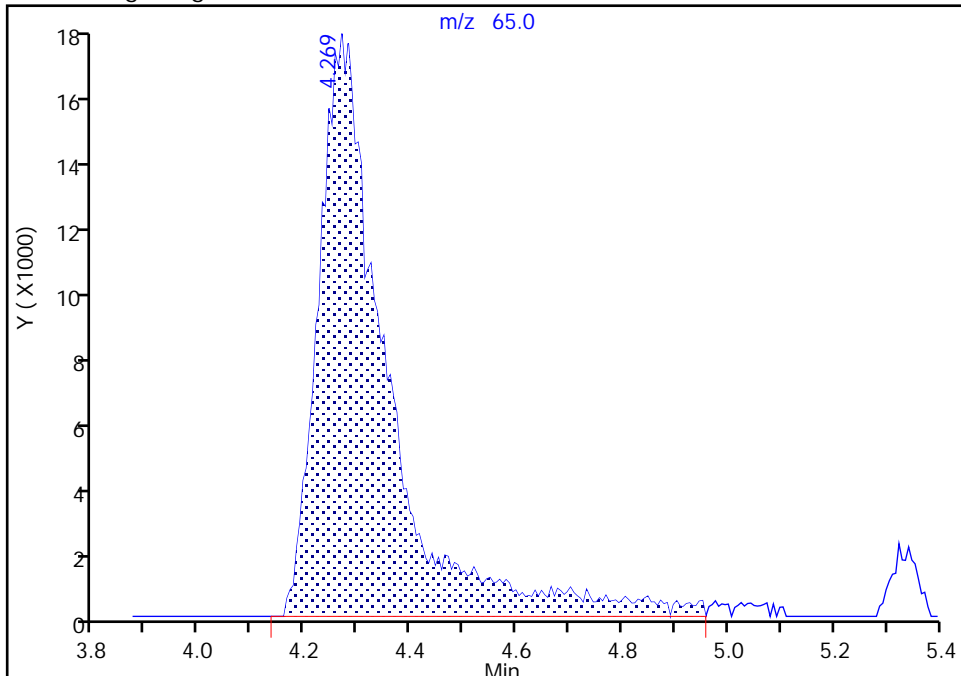
Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23107.D  
Injection Date: 23-Nov-2020 14:53:30 Instrument ID: 19930  
Lims ID: IC std1  
Client ID:  
Operator ID: dvv10203 ALS Bottle#: 8 Worklist Smp#: 9  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: 8260 25ml HP31 Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

\* 24 t-Butyl alcohol-d10 (IS), CAS: 53001-22-2

Signal: 1

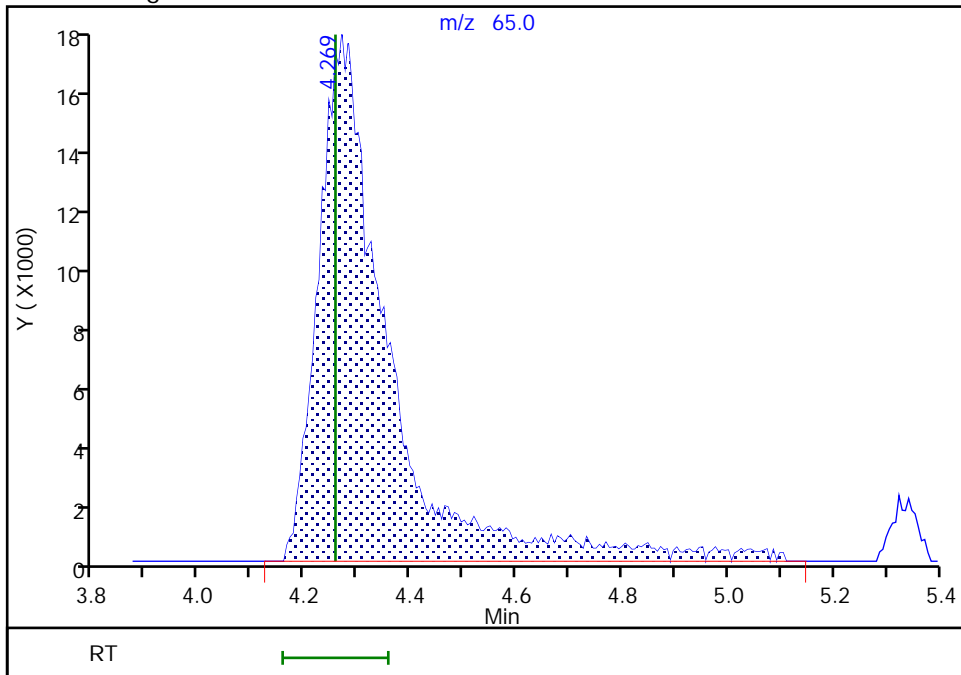
RT: 4.27  
Area: 154882  
Amount: 50.000000  
Amount Units: ug/l

Processing Integration Results



RT: 4.27  
Area: 157506  
Amount: 50.000000  
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 23-Nov-2020 18:42:23  
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration



Euofins Lancaster Laboratories Env, LLC

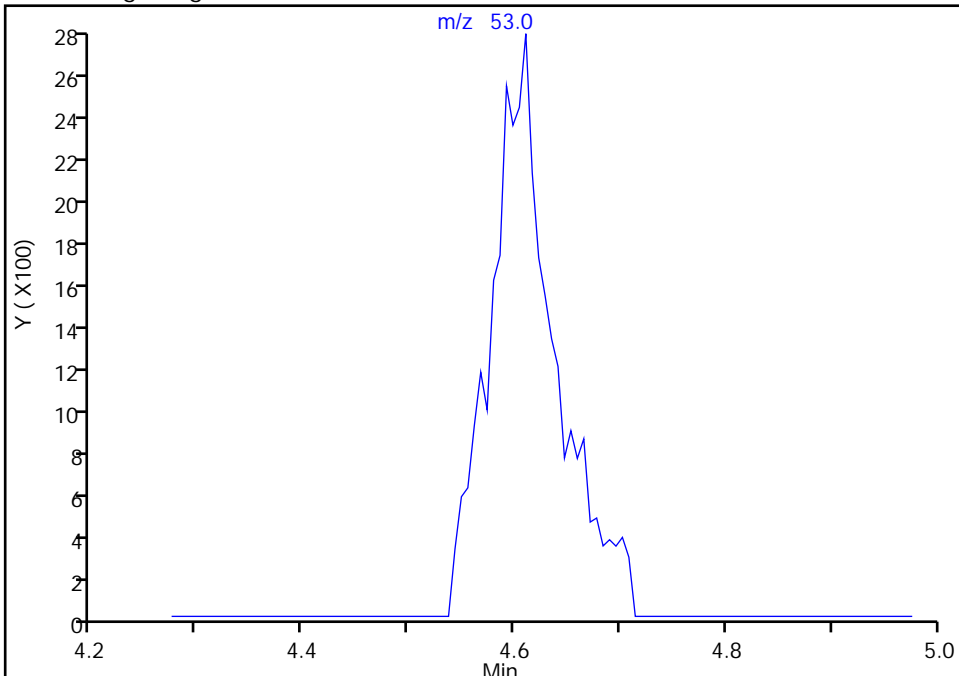
Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23107.D  
Injection Date: 23-Nov-2020 14:53:30 Instrument ID: 19930  
Lims ID: IC std1  
Client ID:  
Operator ID: dvv10203 ALS Bottle#: 8 Worklist Smp#: 9  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: 8260 25ml HP31 Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

26 Acrylonitrile, CAS: 107-13-1

Signal: 1

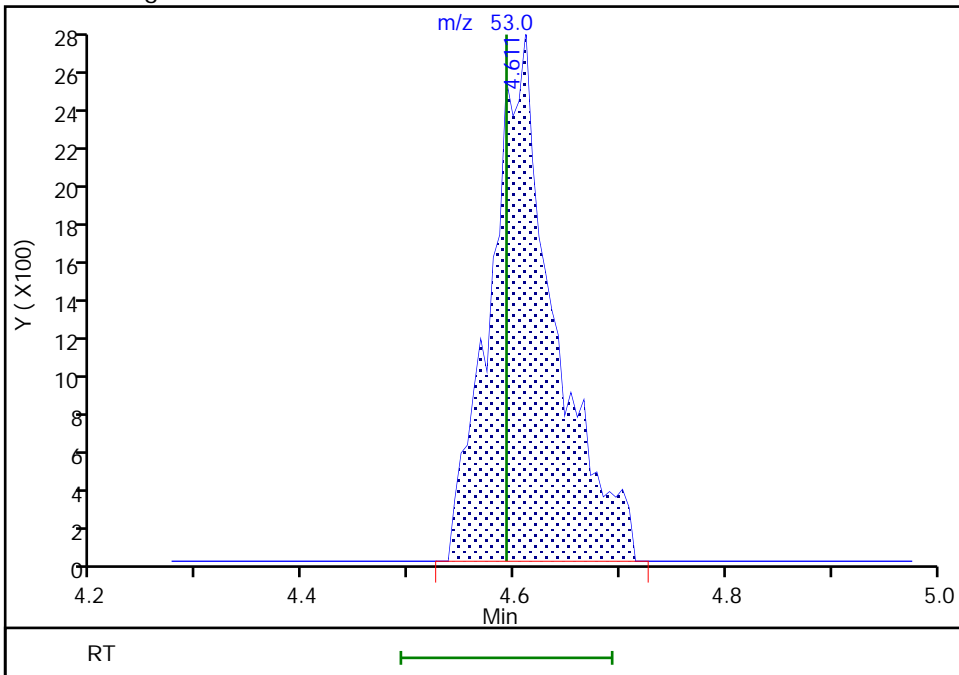
Not Detected  
Expected RT: 4.59

Processing Integration Results



Manual Integration Results

RT: 4.61  
Area: 11416  
Amount: 1.018485  
Amount Units: ug/l



Reviewer: campbellme, 23-Nov-2020 18:39:42  
Audit Action: Assigned Compound ID

Audit Reason: Incomplete Integration

Euofins Lancaster Laboratories Env, LLC

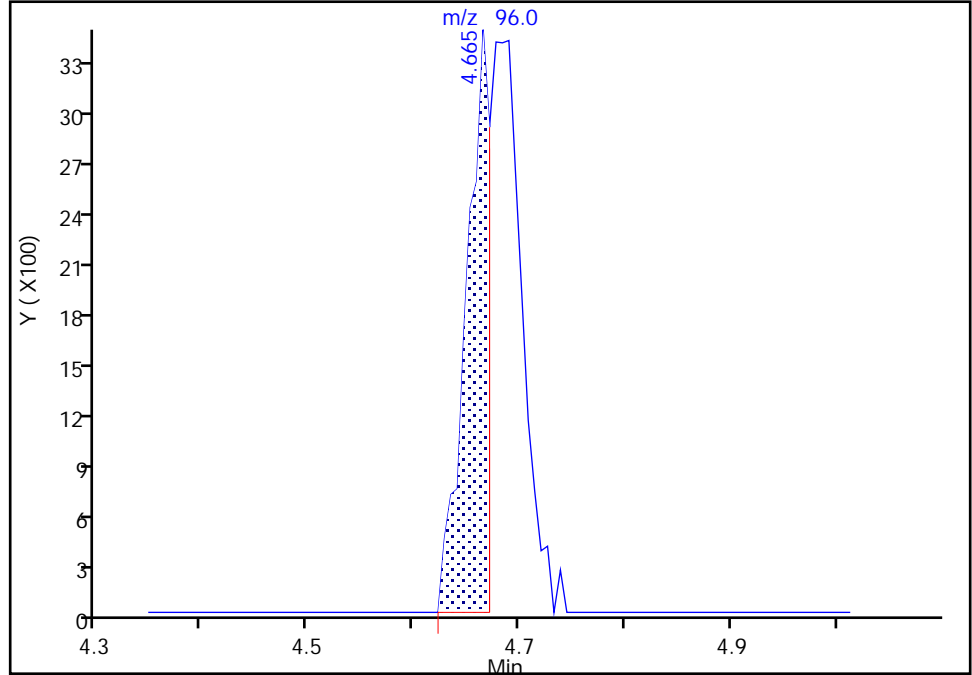
Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23107.D  
Injection Date: 23-Nov-2020 14:53:30 Instrument ID: 19930  
Lims ID: IC std1  
Client ID:  
Operator ID: dvv10203 ALS Bottle#: 8 Worklist Smp#: 9  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: 8260 25ml HP31 Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

**28 trans-1,2-Dichloroethene, CAS: 156-60-5**

Signal: 1

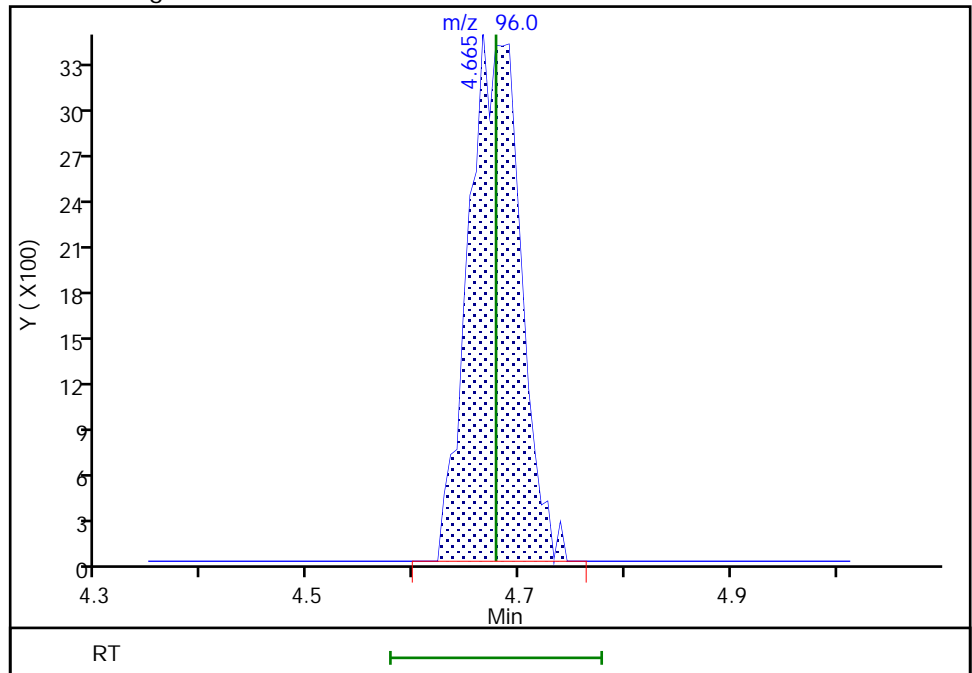
RT: 4.67  
Area: 5427  
Amount: 0.039292  
Amount Units: ug/l

Processing Integration Results



RT: 4.67  
Area: 11853  
Amount: 0.203228  
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 23-Nov-2020 18:39:47  
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

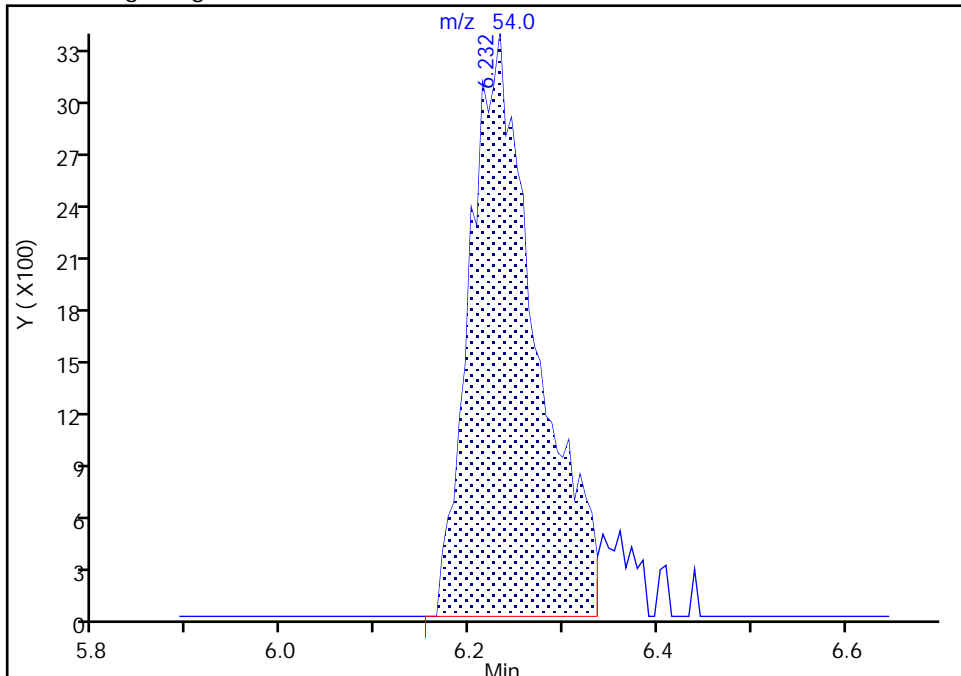
Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23107.D  
Injection Date: 23-Nov-2020 14:53:30 Instrument ID: 19930  
Lims ID: IC std1  
Client ID:  
Operator ID: dvv10203 ALS Bottle#: 8 Worklist Smp#: 9  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: 8260 25ml HP31 Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

40 Propionitrile, CAS: 107-12-0

Signal: 1

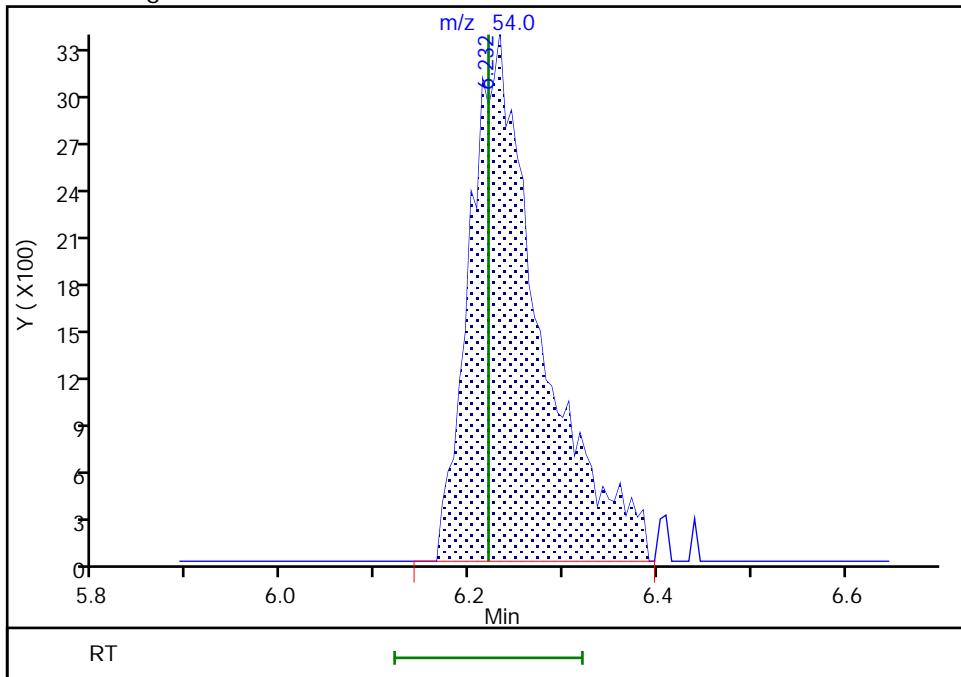
RT: 6.23  
Area: 16336  
Amount: 3.910148  
Amount Units: ug/l

Processing Integration Results



RT: 6.23  
Area: 17434  
Amount: 4.150122  
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 23-Nov-2020 18:39:55  
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Euofins Lancaster Laboratories Env, LLC

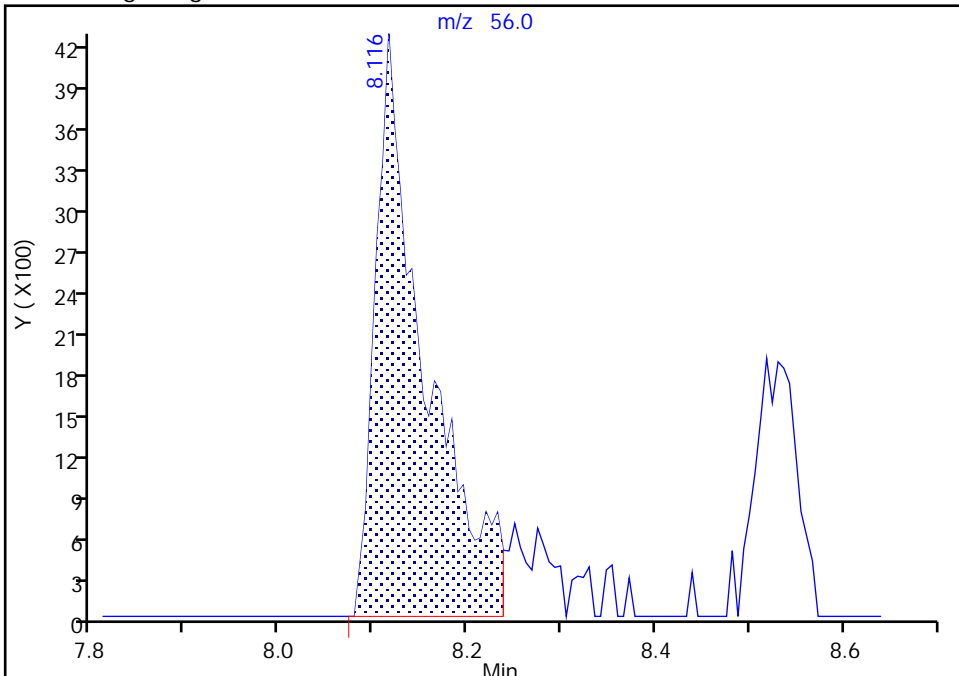
Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23107.D  
Injection Date: 23-Nov-2020 14:53:30 Instrument ID: 19930  
Lims ID: IC std1  
Client ID:  
Operator ID: dvv10203 ALS Bottle#: 8 Worklist Smp#: 9  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: 8260 25ml HP31 Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

60 n-Butanol, CAS: 71-36-3

Signal: 1

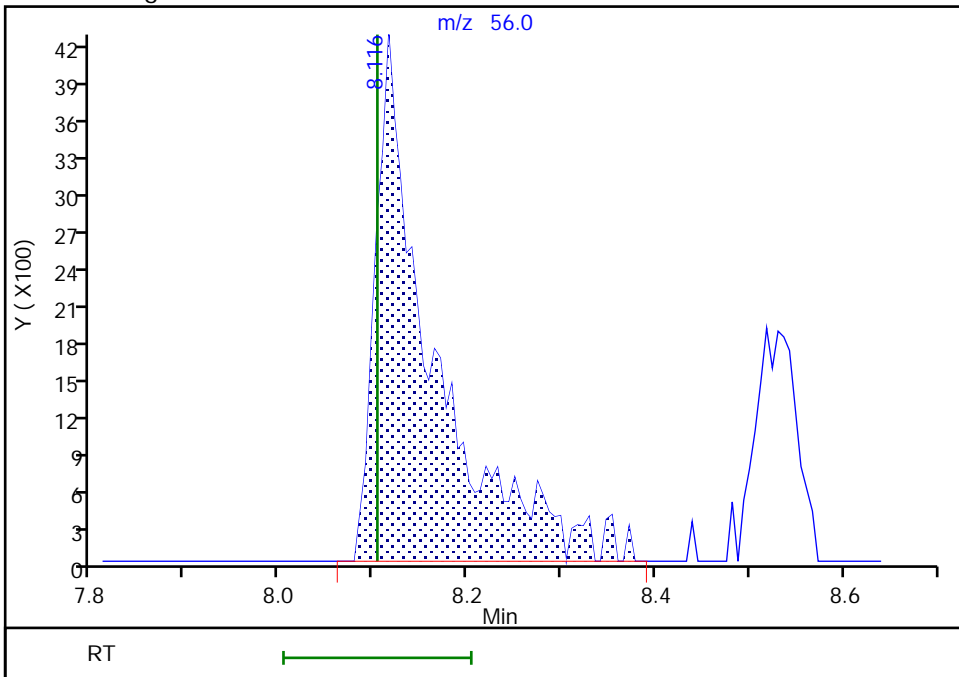
RT: 8.12  
Area: 15368  
Amount: 15.261099  
Amount Units: ug/l

Processing Integration Results



RT: 8.12  
Area: 17858  
Amount: 17.492577  
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 23-Nov-2020 18:40:07  
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

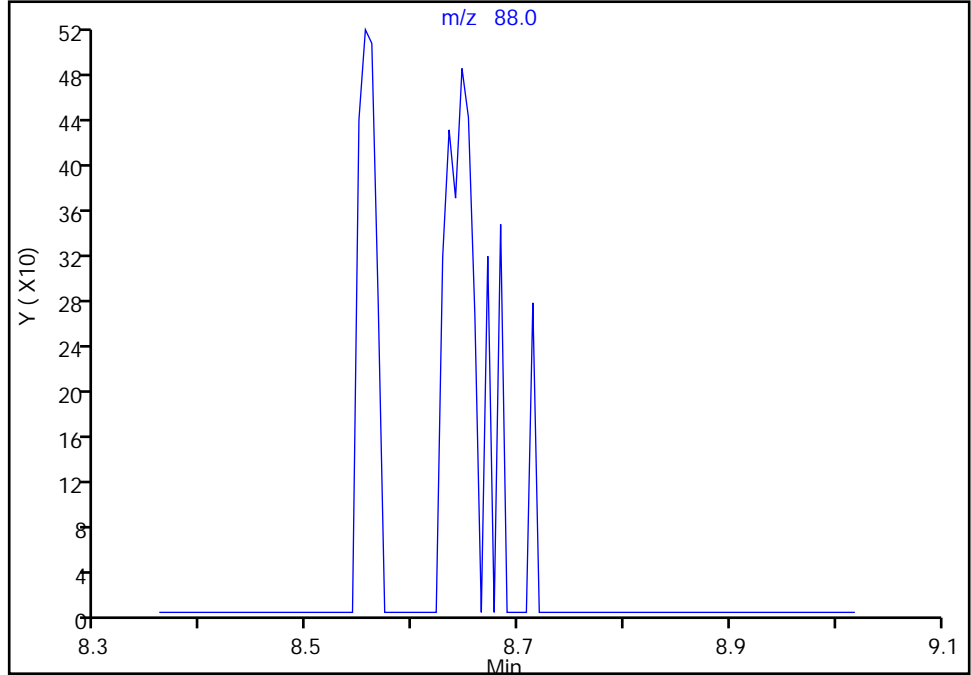
Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23107.D  
Injection Date: 23-Nov-2020 14:53:30 Instrument ID: 19930  
Lims ID: IC std1  
Client ID:  
Operator ID: dvv10203 ALS Bottle#: 8 Worklist Smp#: 9  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: 8260 25ml HP31 Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

65 1,4-Dioxane, CAS: 123-91-1

Signal: 1

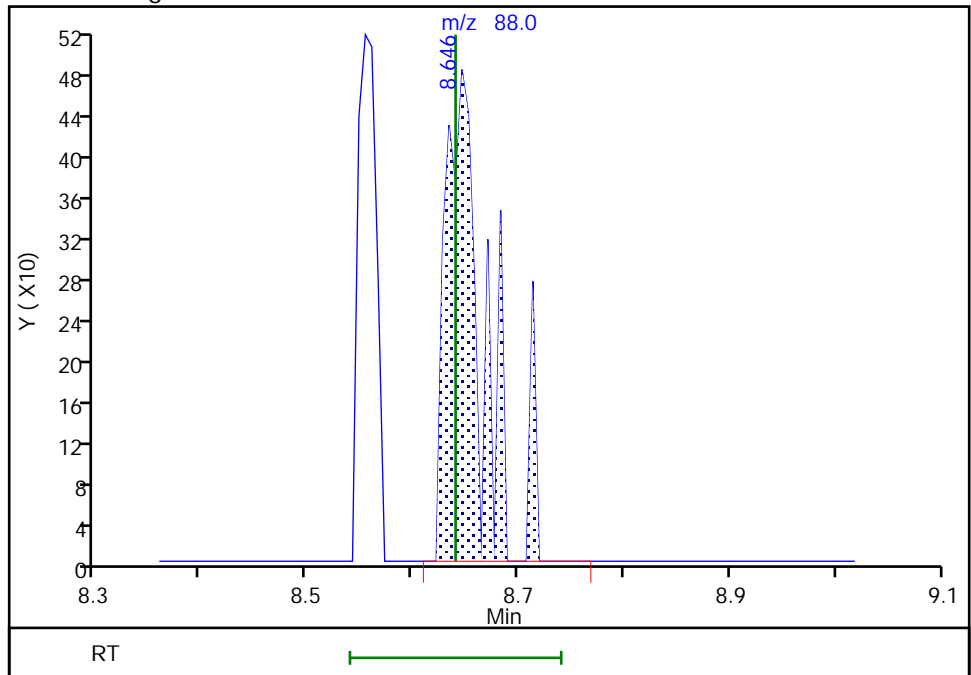
Not Detected  
Expected RT: 8.64

Processing Integration Results



Manual Integration Results

RT: 8.65  
Area: 1170  
Amount: 4.390138  
Amount Units: ug/l



Reviewer: campbellme, 23-Nov-2020 18:40:12  
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

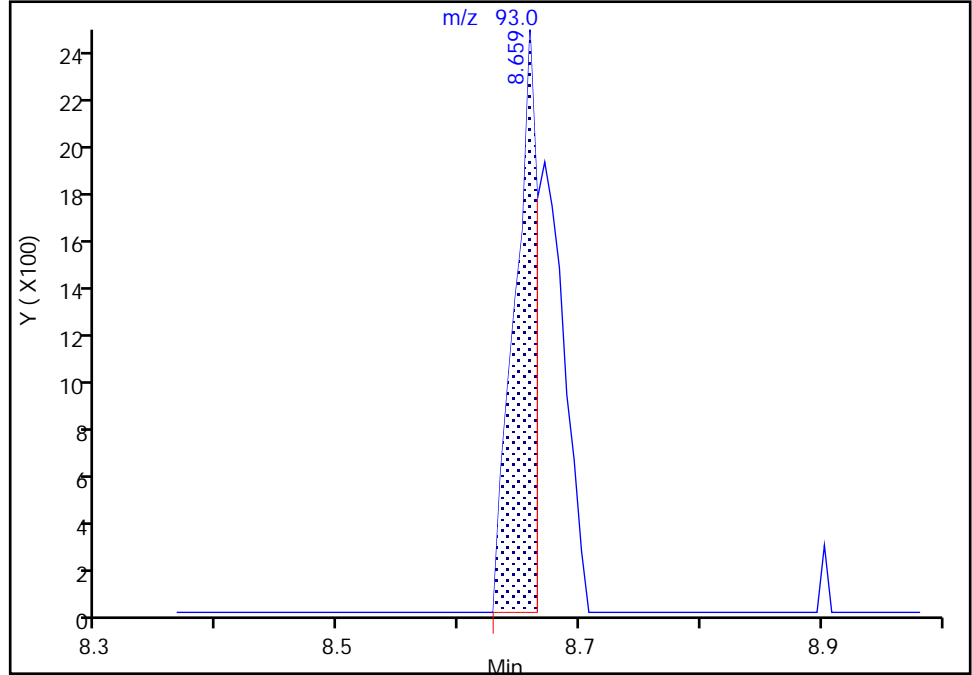
Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23107.D  
Injection Date: 23-Nov-2020 14:53:30 Instrument ID: 19930  
Lims ID: IC std1  
Client ID:  
Operator ID: dvv10203 ALS Bottle#: 8 Worklist Smp#: 9  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: 8260 25ml HP31 Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

66 Dibromomethane, CAS: 74-95-3

Signal: 1

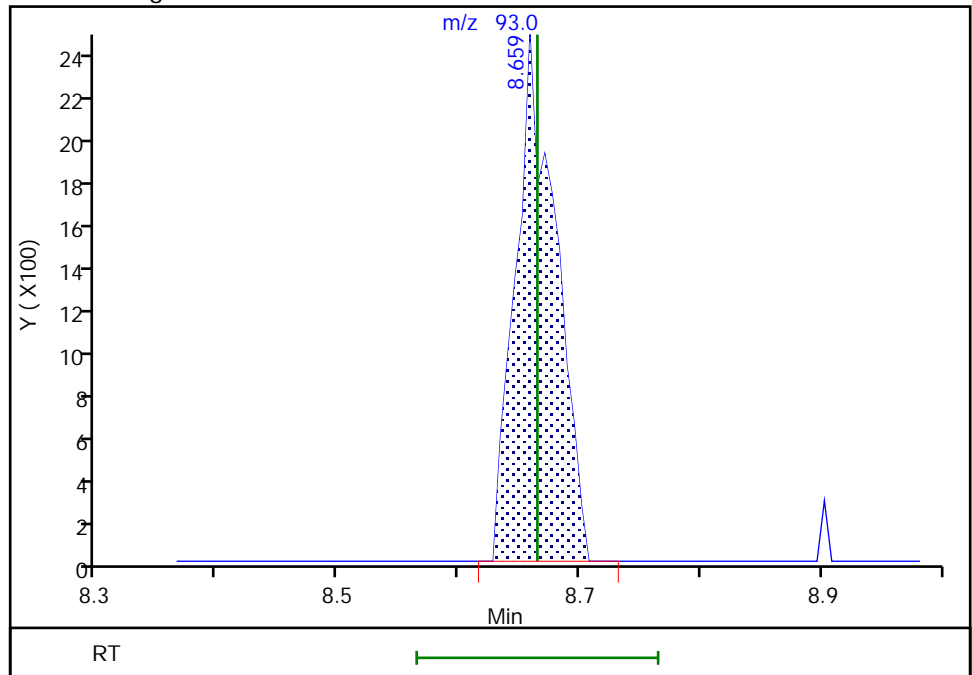
RT: 8.66  
Area: 3169  
Amount: 0.115796  
Amount Units: ug/l

Processing Integration Results



RT: 8.66  
Area: 5679  
Amount: 0.194753  
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 23-Nov-2020 18:40:17

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

**Calibration**

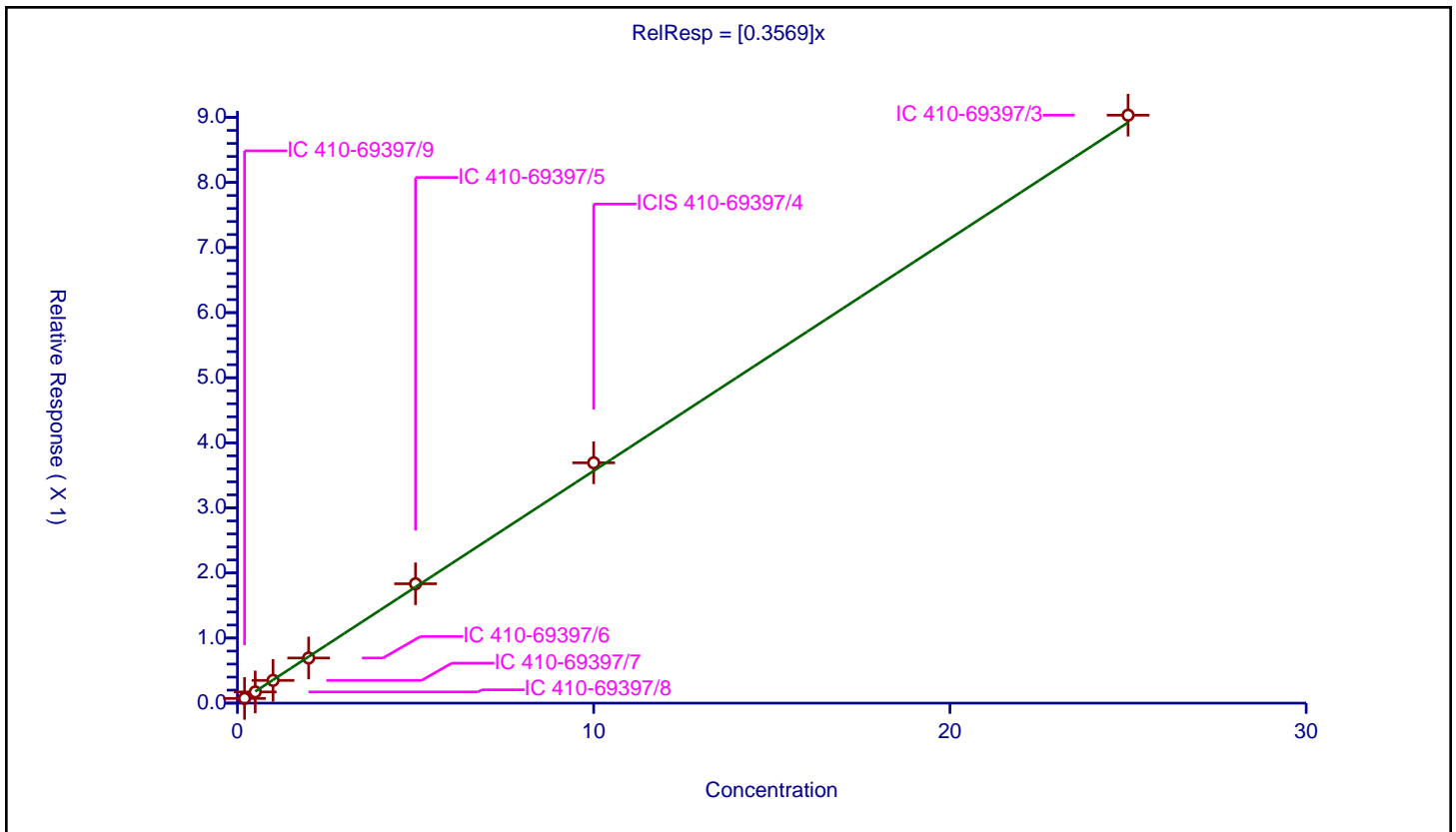
/ Dichlorodifluoromethane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3569

Error Coefficients	
Standard Error:	834000
Relative Standard Error:	2.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.072132	10.0	1980944.0	0.360661	Y
2	IC 410-69397/8	0.5	0.172143	10.0	1995085.0	0.344286	Y
3	IC 410-69397/7	1.0	0.349142	10.0	1986644.0	0.349142	Y
4	IC 410-69397/6	2.0	0.693452	10.0	1976128.0	0.346726	Y
5	IC 410-69397/5	5.0	1.83407	10.0	1978687.0	0.366814	Y
6	ICIS 410-69397/4	10.0	3.692582	10.0	2065893.0	0.369258	Y
7	IC 410-69397/3	25.0	9.033636	10.0	2051897.0	0.361345	Y



Calibration

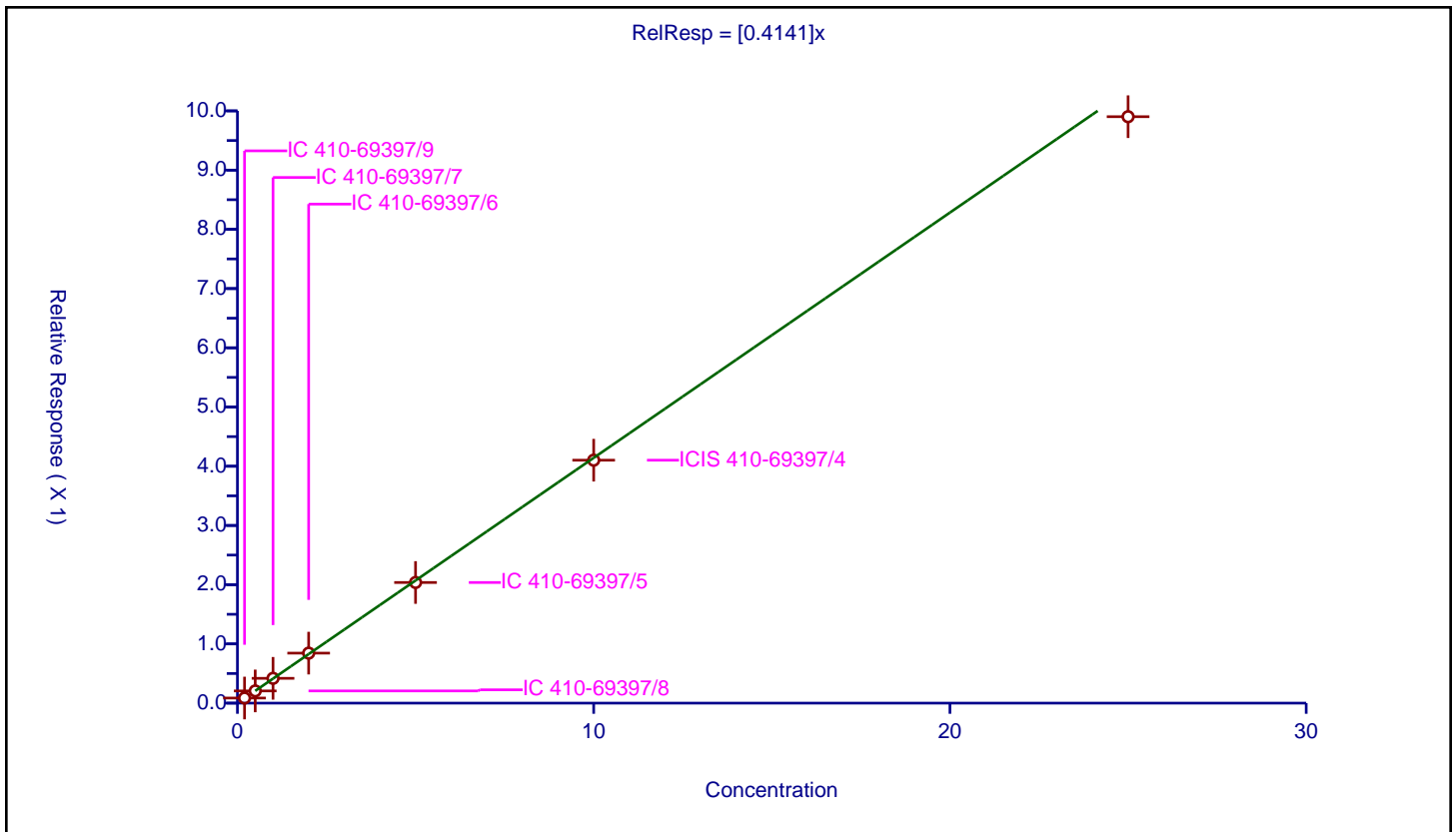
/ Chloromethane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4141

Error Coefficients	
Standard Error:	917000
Relative Standard Error:	2.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.086302	10.0	1980944.0	0.431511	Y
2	IC 410-69397/8	0.5	0.206247	10.0	1995085.0	0.412494	Y
3	IC 410-69397/7	1.0	0.419124	10.0	1986644.0	0.419124	Y
4	IC 410-69397/6	2.0	0.844348	10.0	1976128.0	0.422174	Y
5	IC 410-69397/5	5.0	2.036952	10.0	1978687.0	0.40739	Y
6	ICIS 410-69397/4	10.0	4.102129	10.0	2065893.0	0.410213	Y
7	IC 410-69397/3	25.0	9.901798	10.0	2051897.0	0.396072	Y





Calibration

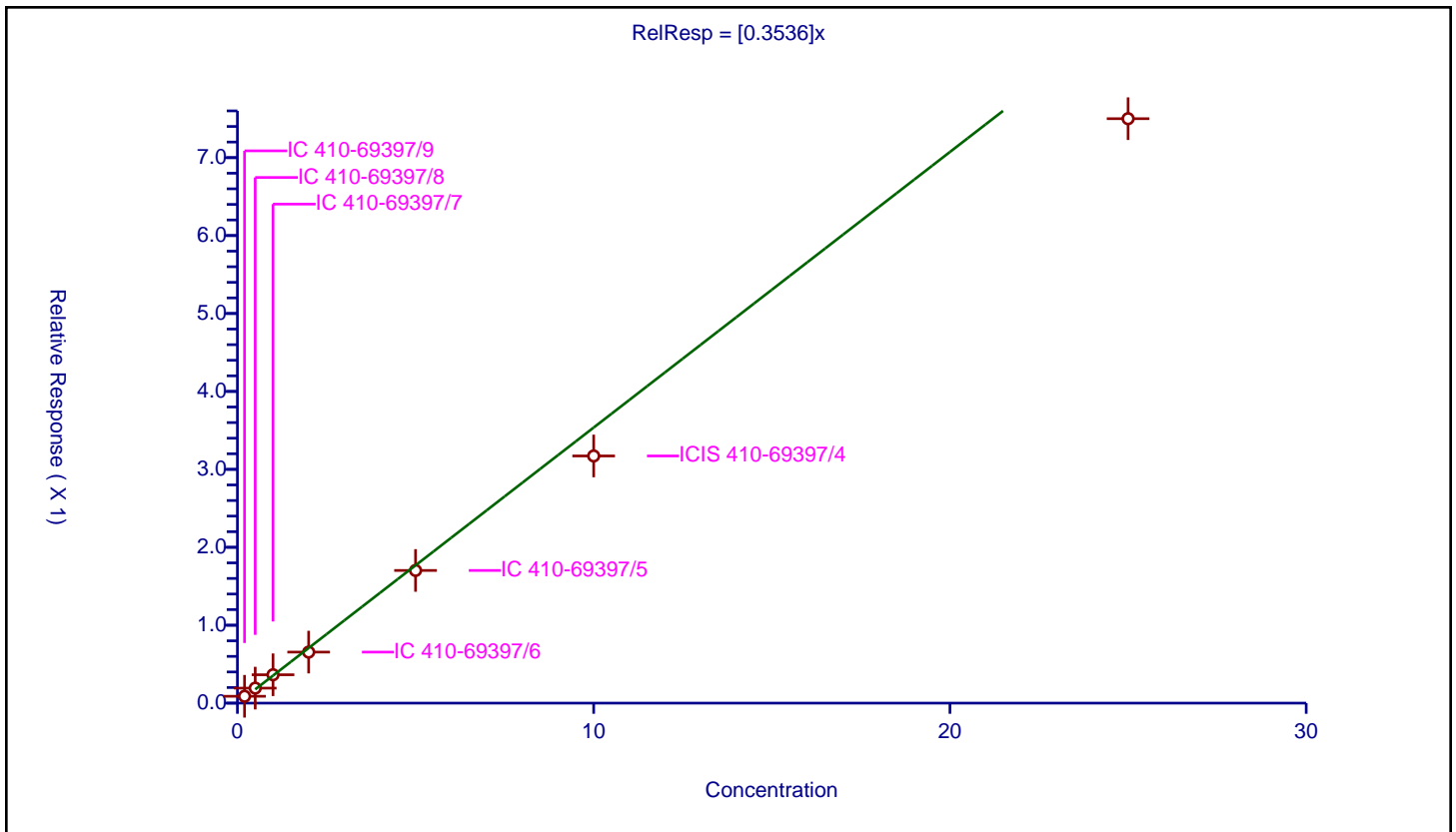
/ Butadiene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3536

Error Coefficients	
Standard Error:	699000
Relative Standard Error:	13.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.970

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.08816	10.0	1980944.0	0.4408	Y
2	IC 410-69397/8	0.5	0.192568	10.0	1995085.0	0.385136	Y
3	IC 410-69397/7	1.0	0.364318	10.0	1986644.0	0.364318	Y
4	IC 410-69397/6	2.0	0.655135	10.0	1976128.0	0.327567	Y
5	IC 410-69397/5	5.0	1.702513	10.0	1978687.0	0.340503	Y
6	ICIS 410-69397/4	10.0	3.171868	10.0	2065893.0	0.317187	Y
7	IC 410-69397/3	25.0	7.500016	10.0	2051897.0	0.300001	Y



**Calibration**

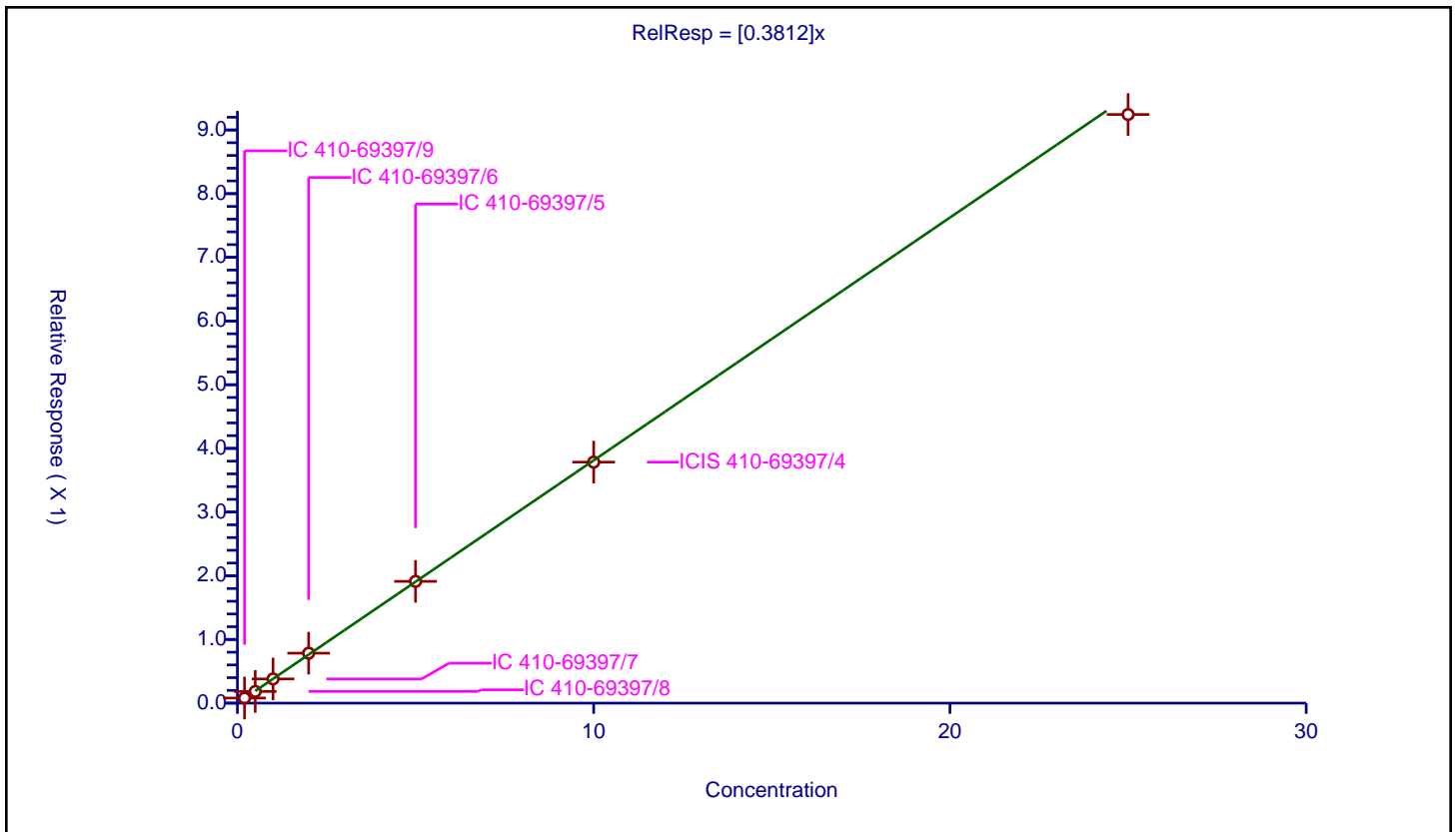
/ Vinyl chloride

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3812

Error Coefficients	
Standard Error:	855000
Relative Standard Error:	3.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.079881	10.0	1980944.0	0.399406	Y
2	IC 410-69397/8	0.5	0.183225	10.0	1995085.0	0.366451	Y
3	IC 410-69397/7	1.0	0.380123	10.0	1986644.0	0.380123	Y
4	IC 410-69397/6	2.0	0.784286	10.0	1976128.0	0.392143	Y
5	IC 410-69397/5	5.0	1.91198	10.0	1978687.0	0.382396	Y
6	ICIS 410-69397/4	10.0	3.784422	10.0	2065893.0	0.378442	Y
7	IC 410-69397/3	25.0	9.243096	10.0	2051897.0	0.369724	Y



**Calibration**

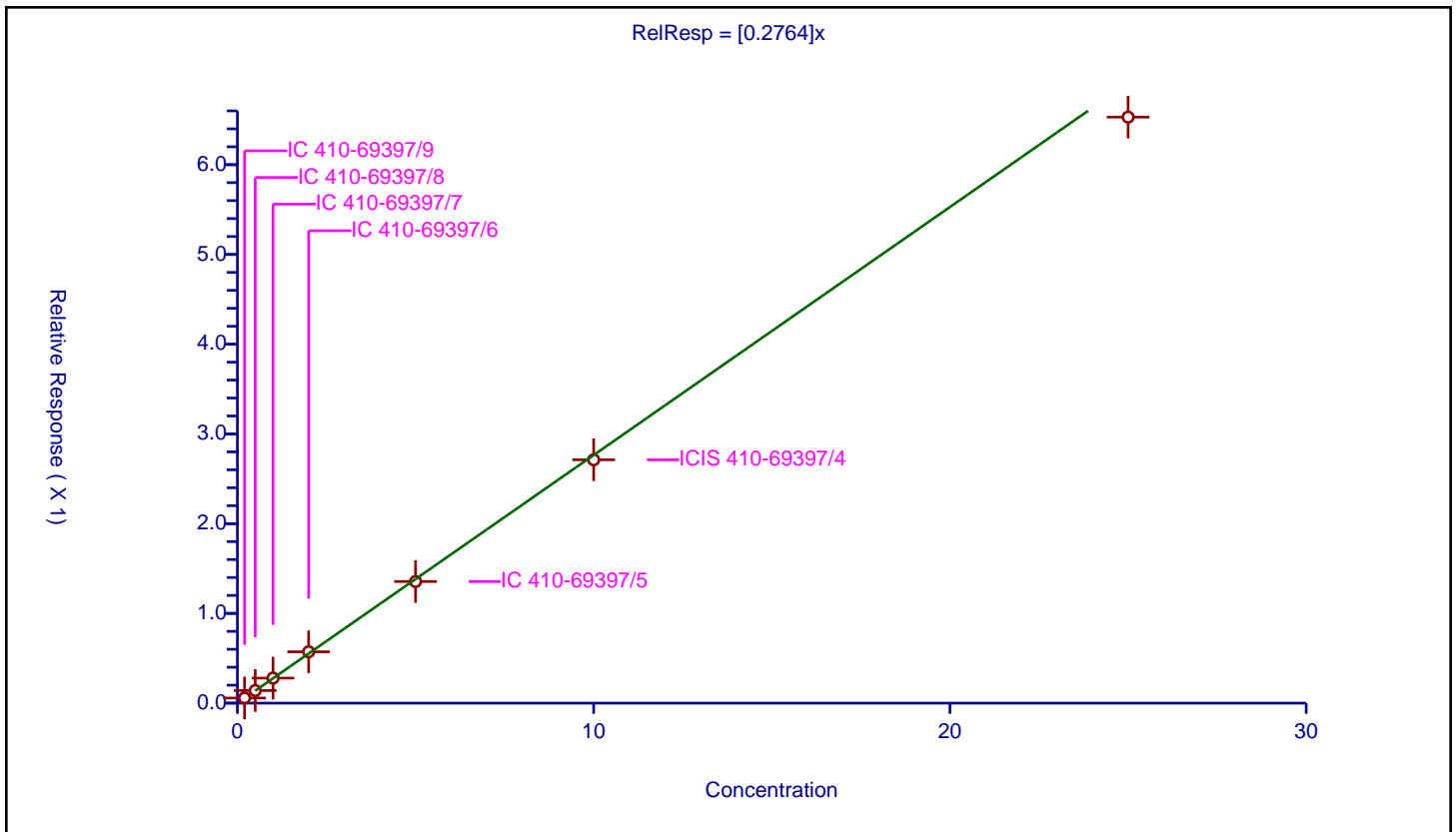
**/ Bromomethane**

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2764

Error Coefficients	
Standard Error:	605000
Relative Standard Error:	3.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.057094	10.0	1980944.0	0.28547	Y
2	IC 410-69397/8	0.5	0.140455	10.0	1995085.0	0.28091	Y
3	IC 410-69397/7	1.0	0.279109	10.0	1986644.0	0.279109	Y
4	IC 410-69397/6	2.0	0.572124	10.0	1976128.0	0.286062	Y
5	IC 410-69397/5	5.0	1.35547	10.0	1978687.0	0.271094	Y
6	ICIS 410-69397/4	10.0	2.711675	10.0	2065893.0	0.271167	Y
7	IC 410-69397/3	25.0	6.530406	10.0	2051897.0	0.261216	Y



Calibration

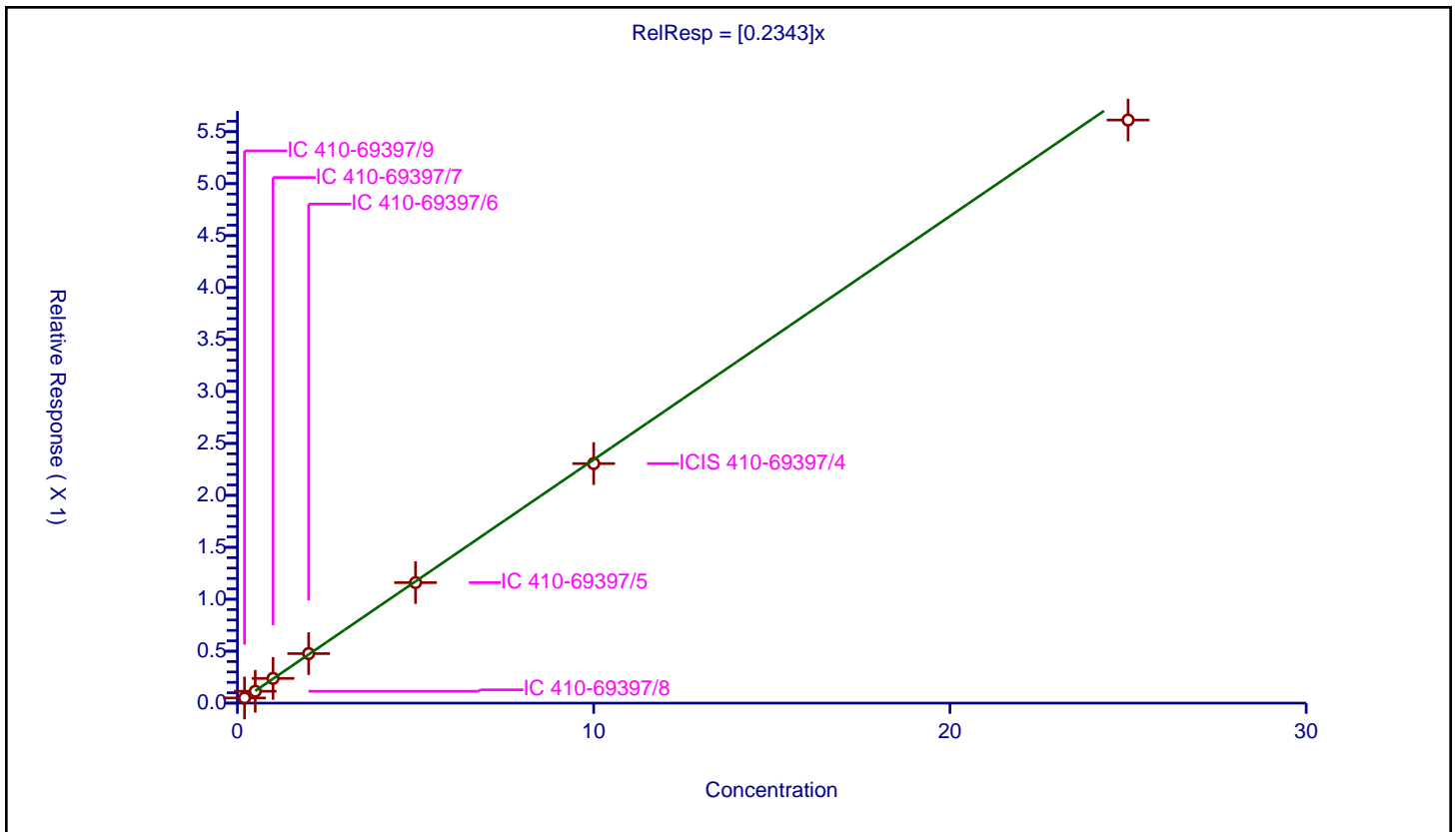
/ Chloroethane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2343

Error Coefficients	
Standard Error:	519000
Relative Standard Error:	3.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.049714	10.0	1980944.0	0.248568	Y
2	IC 410-69397/8	0.5	0.114216	10.0	1995085.0	0.228431	Y
3	IC 410-69397/7	1.0	0.238025	10.0	1986644.0	0.238025	Y
4	IC 410-69397/6	2.0	0.476548	10.0	1976128.0	0.238274	Y
5	IC 410-69397/5	5.0	1.160002	10.0	1978687.0	0.232	Y
6	ICIS 410-69397/4	10.0	2.30541	10.0	2065893.0	0.230541	Y
7	IC 410-69397/3	25.0	5.611739	10.0	2051897.0	0.22447	Y



Calibration

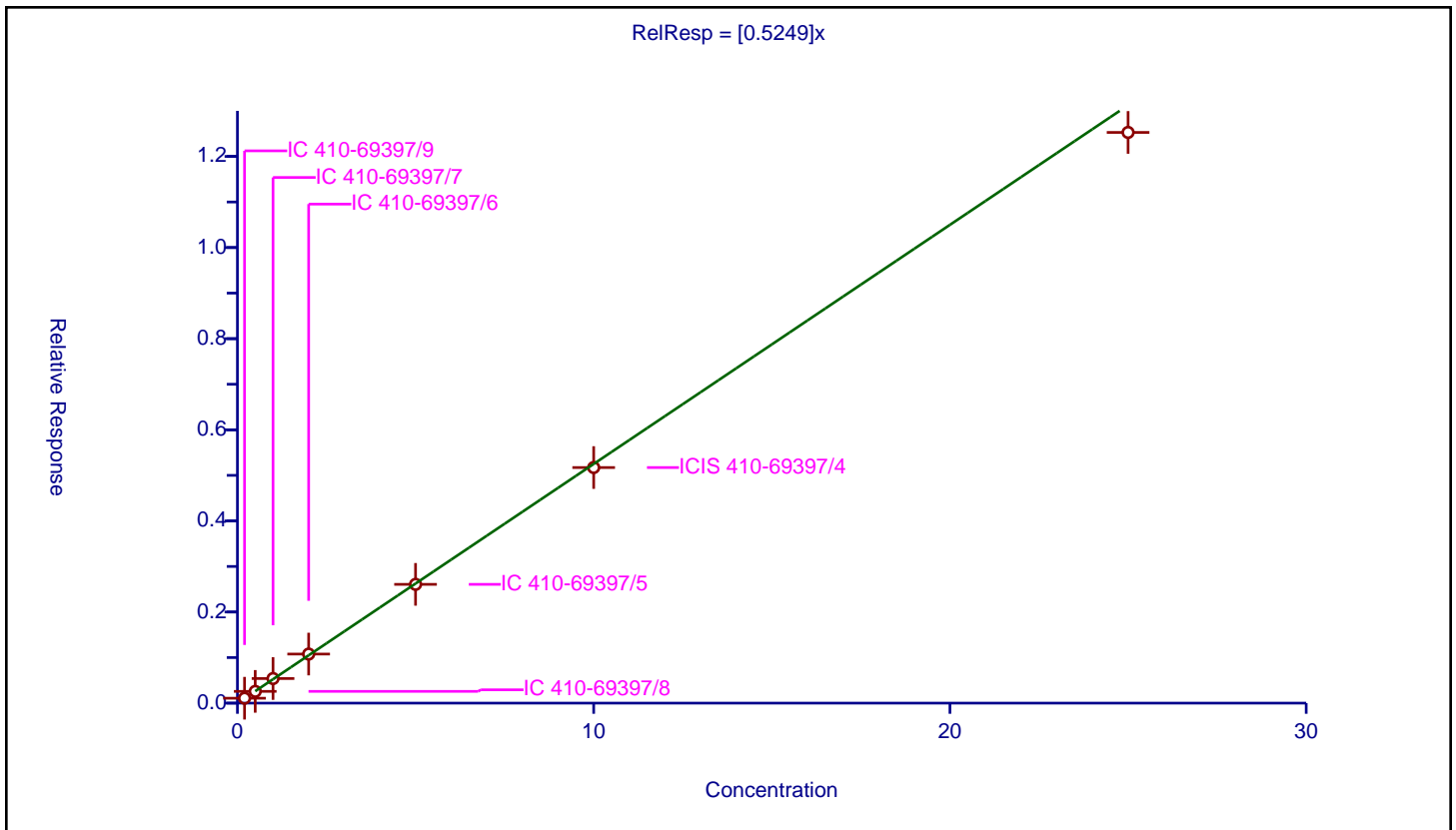
/ Dichlorofluoromethane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.5249

Error Coefficients	
Standard Error:	1160000
Relative Standard Error:	2.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.10811	10.0	1980944.0	0.54055	Y
2	IC 410-69397/8	0.5	0.257994	10.0	1995085.0	0.515988	Y
3	IC 410-69397/7	1.0	0.539905	10.0	1986644.0	0.539905	Y
4	IC 410-69397/6	2.0	1.076985	10.0	1976128.0	0.538492	Y
5	IC 410-69397/5	5.0	2.607274	10.0	1978687.0	0.521455	Y
6	ICIS 410-69397/4	10.0	5.17156	10.0	2065893.0	0.517156	Y
7	IC 410-69397/3	25.0	12.526759	10.0	2051897.0	0.50107	Y



**Calibration**

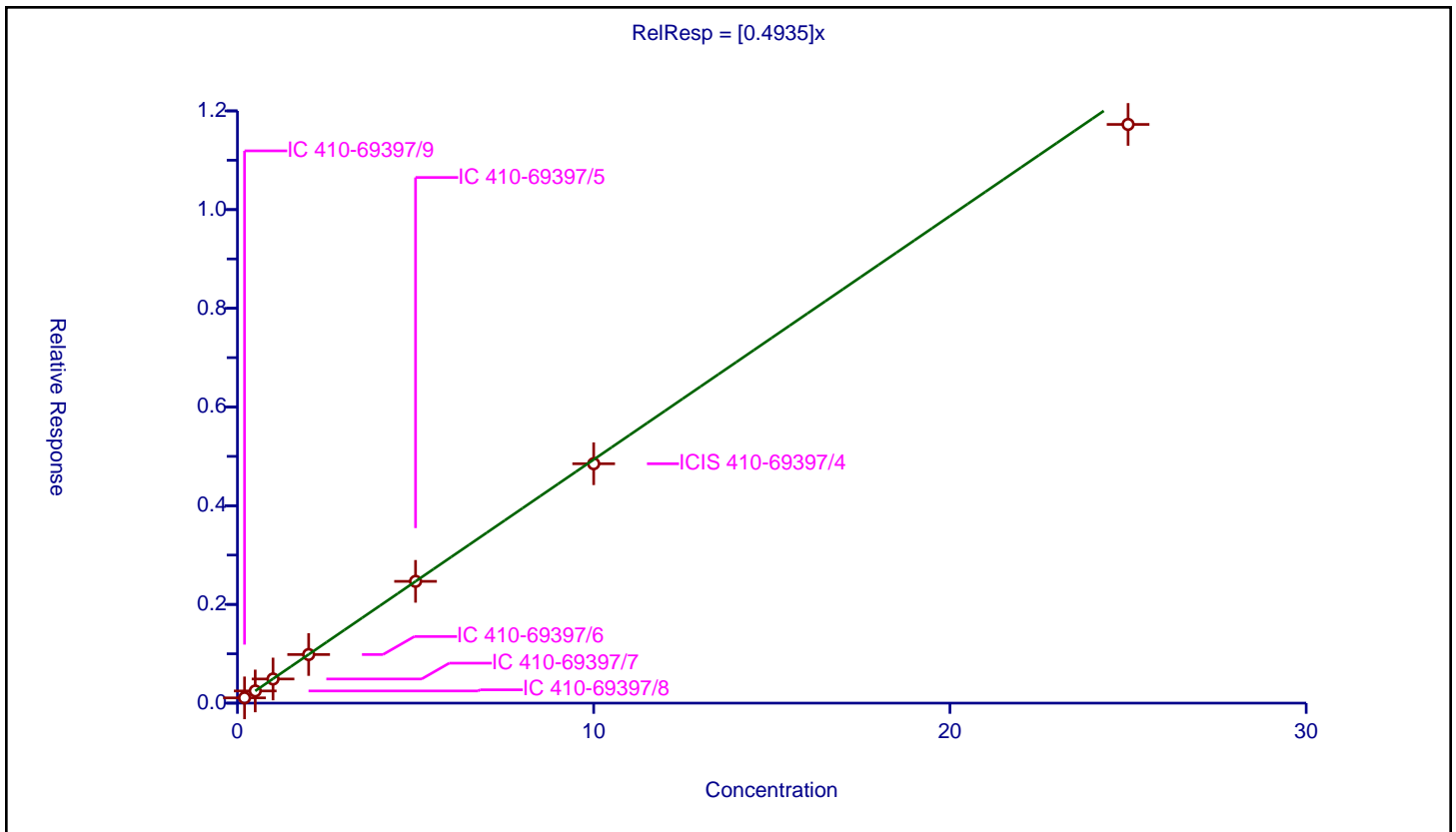
/ Trichlorofluoromethane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4935

Error Coefficients	
Standard Error:	1090000
Relative Standard Error:	3.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.106313	10.0	1980944.0	0.531565	Y
2	IC 410-69397/8	0.5	0.246711	10.0	1995085.0	0.493423	Y
3	IC 410-69397/7	1.0	0.489449	10.0	1986644.0	0.489449	Y
4	IC 410-69397/6	2.0	0.98441	10.0	1976128.0	0.492205	Y
5	IC 410-69397/5	5.0	2.467515	10.0	1978687.0	0.493503	Y
6	ICIS 410-69397/4	10.0	4.850658	10.0	2065893.0	0.485066	Y
7	IC 410-69397/3	25.0	11.726115	10.0	2051897.0	0.469045	Y



**Calibration**

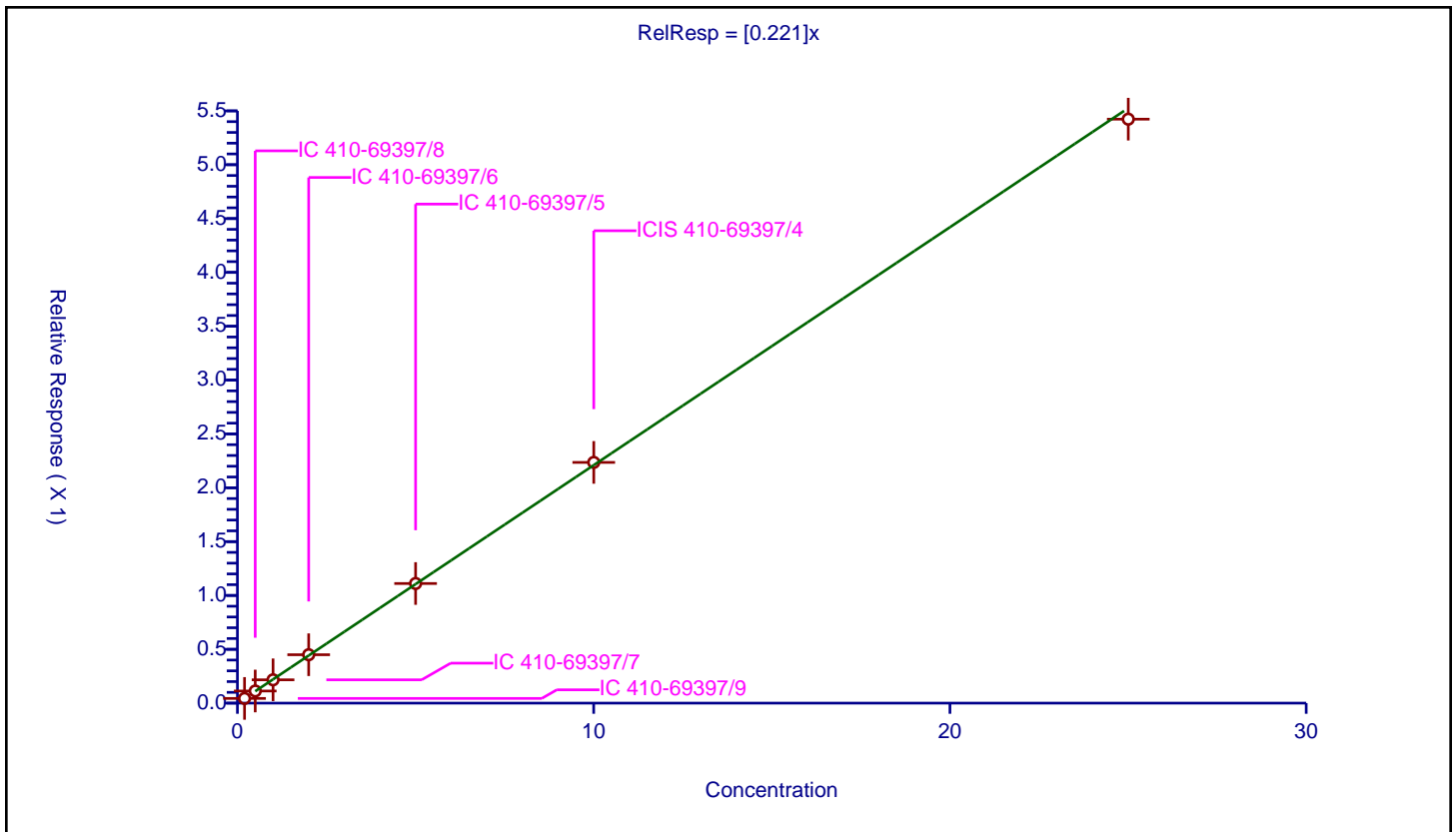
/ Ethyl ether

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.221

Error Coefficients	
Standard Error:	502000
Relative Standard Error:	1.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.200043	0.04356	10.0	1980944.0	0.217753	Y
2	IC 410-69397/8	0.500108	0.112712	10.0	1995085.0	0.225376	Y
3	IC 410-69397/7	1.000215	0.216581	10.0	1986644.0	0.216535	Y
4	IC 410-69397/6	2.00043	0.449495	10.0	1976128.0	0.224699	Y
5	IC 410-69397/5	5.001075	1.111015	10.0	1978687.0	0.222155	Y
6	ICIS 410-69397/4	10.00215	2.235634	10.0	2065893.0	0.223515	Y
7	IC 410-69397/3	25.005375	5.422977	10.0	2051897.0	0.216872	Y



Calibration

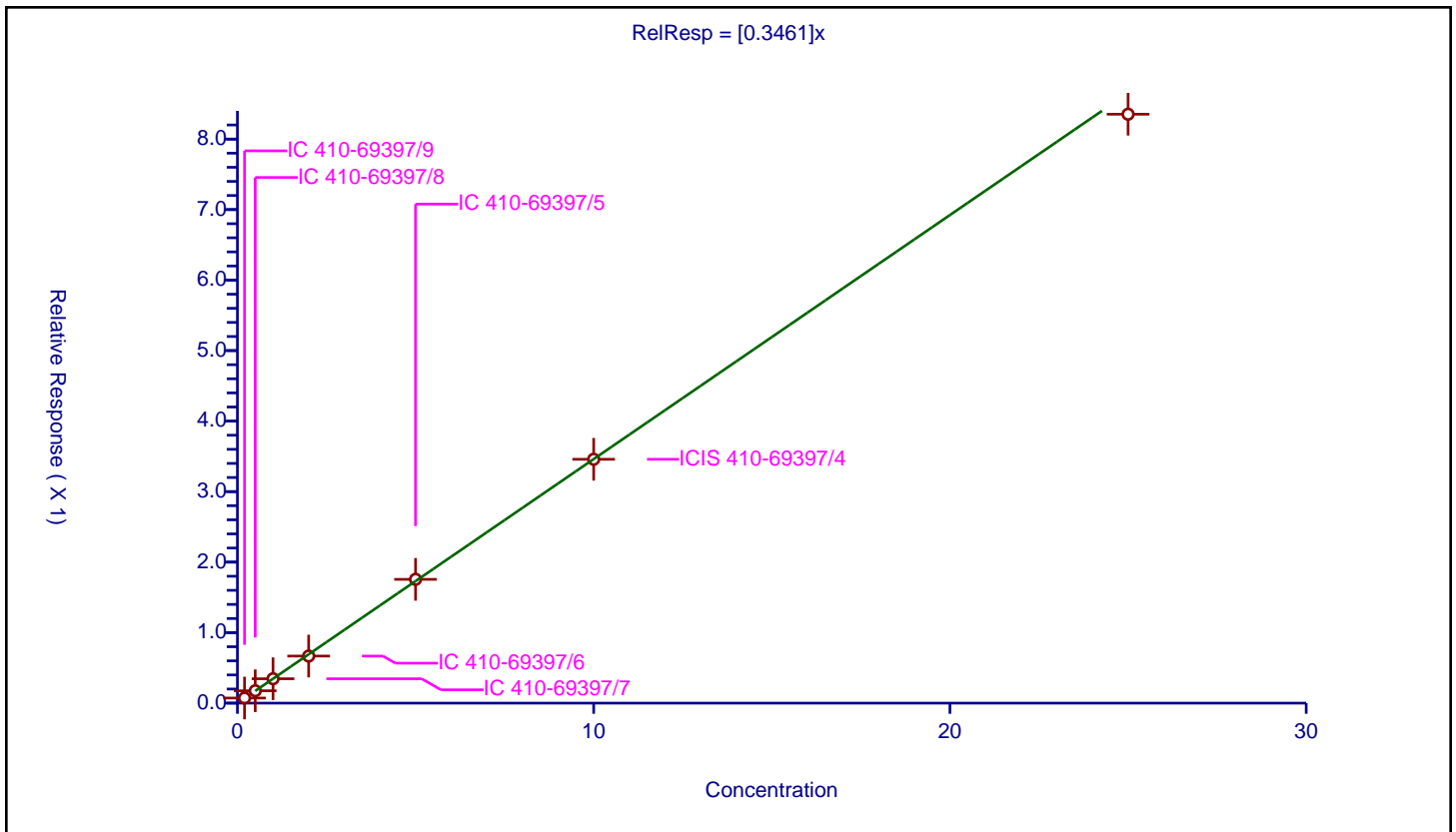
/ 1,2-Dichloro-1,1,2-trifluoroethane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3461

Error Coefficients	
Standard Error:	774000
Relative Standard Error:	2.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.072253	10.0	1980944.0	0.361267	Y
2	IC 410-69397/8	0.5	0.175431	10.0	1995085.0	0.350862	Y
3	IC 410-69397/7	1.0	0.345945	10.0	1986644.0	0.345945	Y
4	IC 410-69397/6	2.0	0.667649	10.0	1976128.0	0.333825	Y
5	IC 410-69397/5	5.0	1.755599	10.0	1978687.0	0.35112	Y
6	ICIS 410-69397/4	10.0	3.458495	10.0	2065893.0	0.345849	Y
7	IC 410-69397/3	25.0	8.352802	10.0	2051897.0	0.334112	Y





Calibration

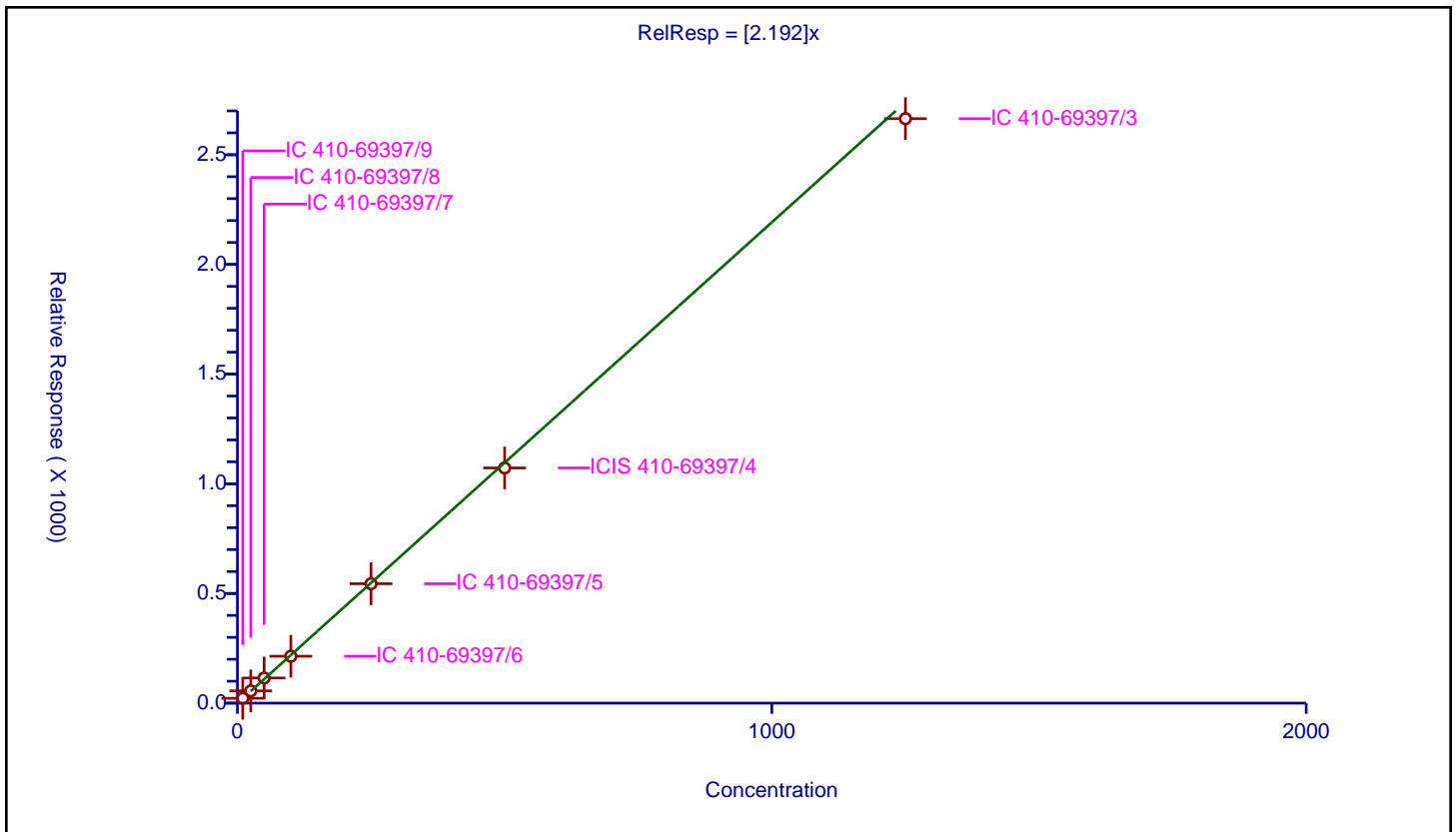
/ Acrolein

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	2.192

Error Coefficients	
Standard Error:	4040000
Relative Standard Error:	2.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	10.000292	22.21217	50.0	157506.0	2.221152	Y
2	IC 410-69397/8	25.000729	55.887195	50.0	156713.0	2.235423	Y
3	IC 410-69397/7	50.001458	114.705598	50.0	155400.0	2.294045	Y
4	IC 410-69397/6	100.002917	213.90472	50.0	164063.0	2.138985	Y
5	IC 410-69397/5	250.007292	544.371096	50.0	167919.0	2.177421	Y
6	ICIS 410-69397/4	500.014585	1072.264009	50.0	174562.0	2.144465	Y
7	IC 410-69397/3	1250.036462	2664.600045	50.0	168044.0	2.131618	Y



**Calibration**

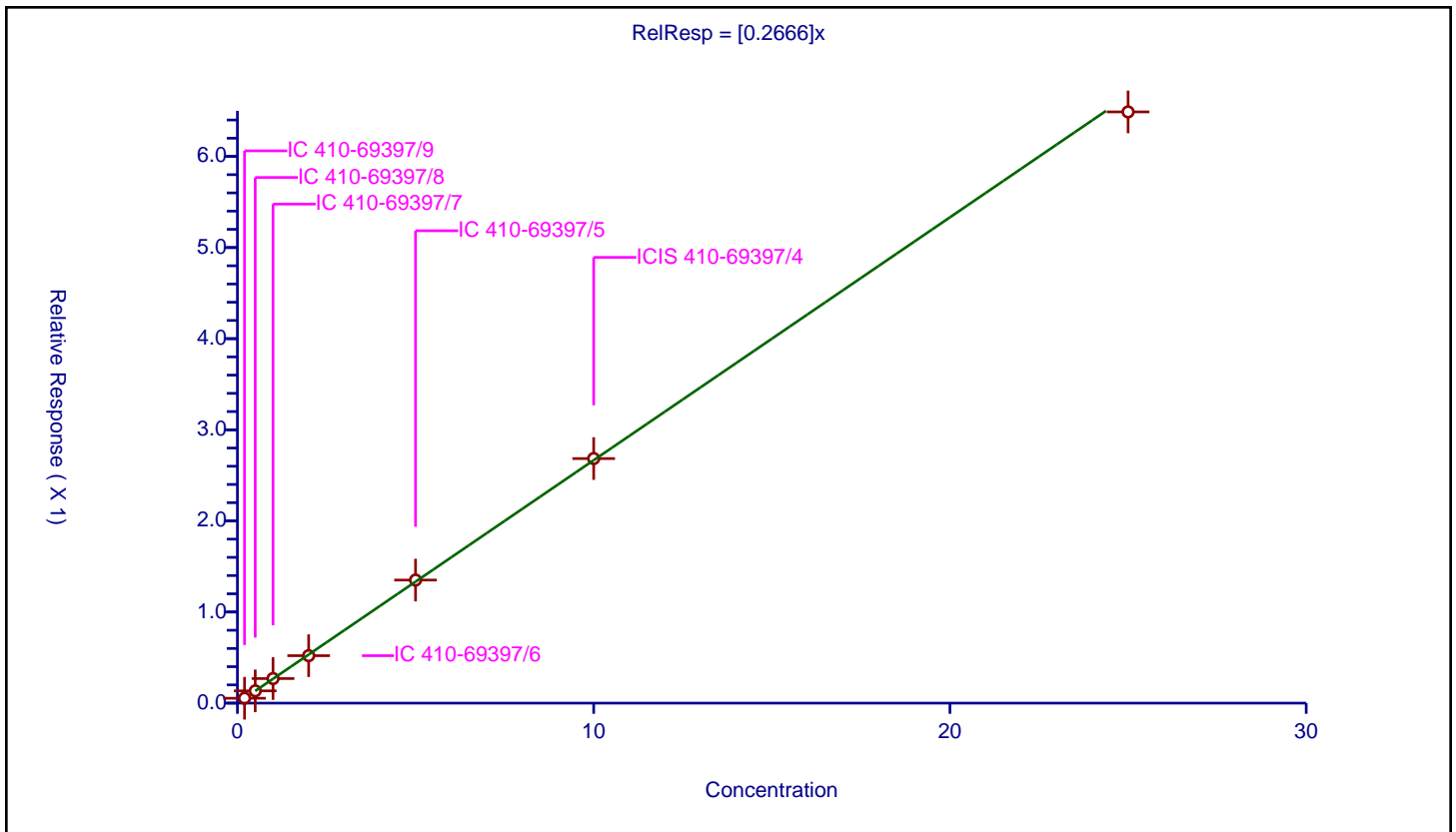
**/ 1,1-Dichloroethene**

**Curve Type:** Average  
**Weighting:** Conc\_Sq  
**Origin:** Force  
**Dependency:** Response  
**Calib Mode:** ISTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	0
Slope:	0.2666

Error Coefficients	
Standard Error:	601000
Relative Standard Error:	1.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.053752	10.0	1980944.0	0.268761	Y
2	IC 410-69397/8	0.5	0.134561	10.0	1995085.0	0.269121	Y
3	IC 410-69397/7	1.0	0.269787	10.0	1986644.0	0.269787	Y
4	IC 410-69397/6	2.0	0.520801	10.0	1976128.0	0.260401	Y
5	IC 410-69397/5	5.0	1.350749	10.0	1978687.0	0.27015	Y
6	ICIS 410-69397/4	10.0	2.684074	10.0	2065893.0	0.268407	Y
7	IC 410-69397/3	25.0	6.488815	10.0	2051897.0	0.259553	Y



**Calibration**

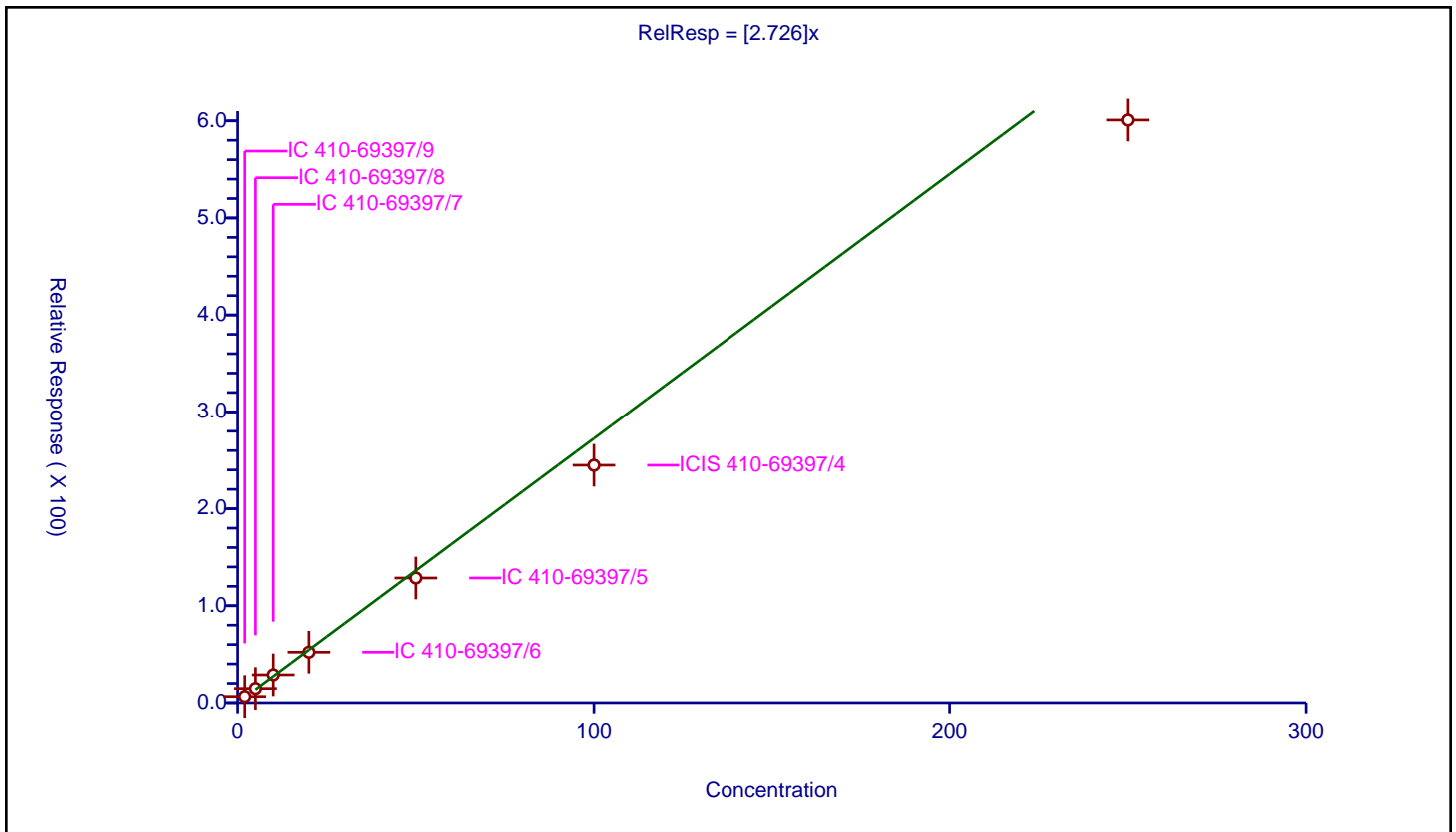
/ Acetone

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	2.726

Error Coefficients	
Standard Error:	916000
Relative Standard Error:	11.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.981

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	2.0	6.460706	50.0	157506.0	3.230353	Y
2	IC 410-69397/8	5.0	14.710011	50.0	156713.0	2.942002	Y
3	IC 410-69397/7	10.0	28.789575	50.0	155400.0	2.878958	Y
4	IC 410-69397/6	20.0	52.133936	50.0	164063.0	2.606697	Y
5	IC 410-69397/5	50.0	128.587593	50.0	167919.0	2.571752	Y
6	ICIS 410-69397/4	100.0	244.85455	50.0	174562.0	2.448546	Y
7	IC 410-69397/3	250.0	600.824486	50.0	168044.0	2.403298	Y



**Calibration**

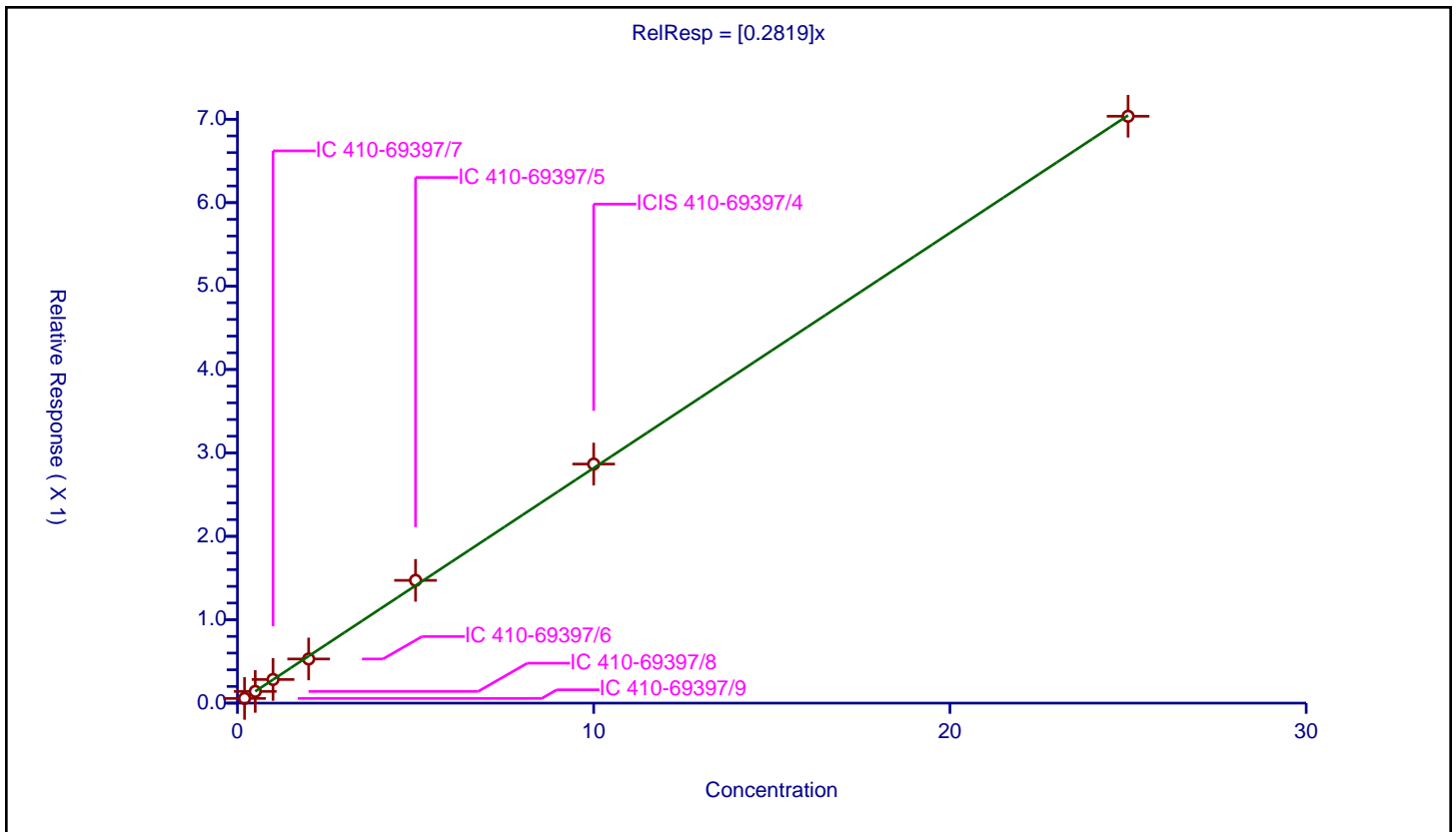
/ 1,1,2-Trichloro-1,2,2-trifluoroethane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2819

Error Coefficients	
Standard Error:	650000
Relative Standard Error:	3.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.056317	10.0	1980944.0	0.281583	Y
2	IC 410-69397/8	0.5	0.14043	10.0	1995085.0	0.28086	Y
3	IC 410-69397/7	1.0	0.283533	10.0	1986644.0	0.283533	Y
4	IC 410-69397/6	2.0	0.529277	10.0	1976128.0	0.264639	Y
5	IC 410-69397/5	5.0	1.471794	10.0	1978687.0	0.294359	Y
6	ICIS 410-69397/4	10.0	2.866058	10.0	2065893.0	0.286606	Y
7	IC 410-69397/3	25.0	7.035957	10.0	2051897.0	0.281438	Y



**Calibration**

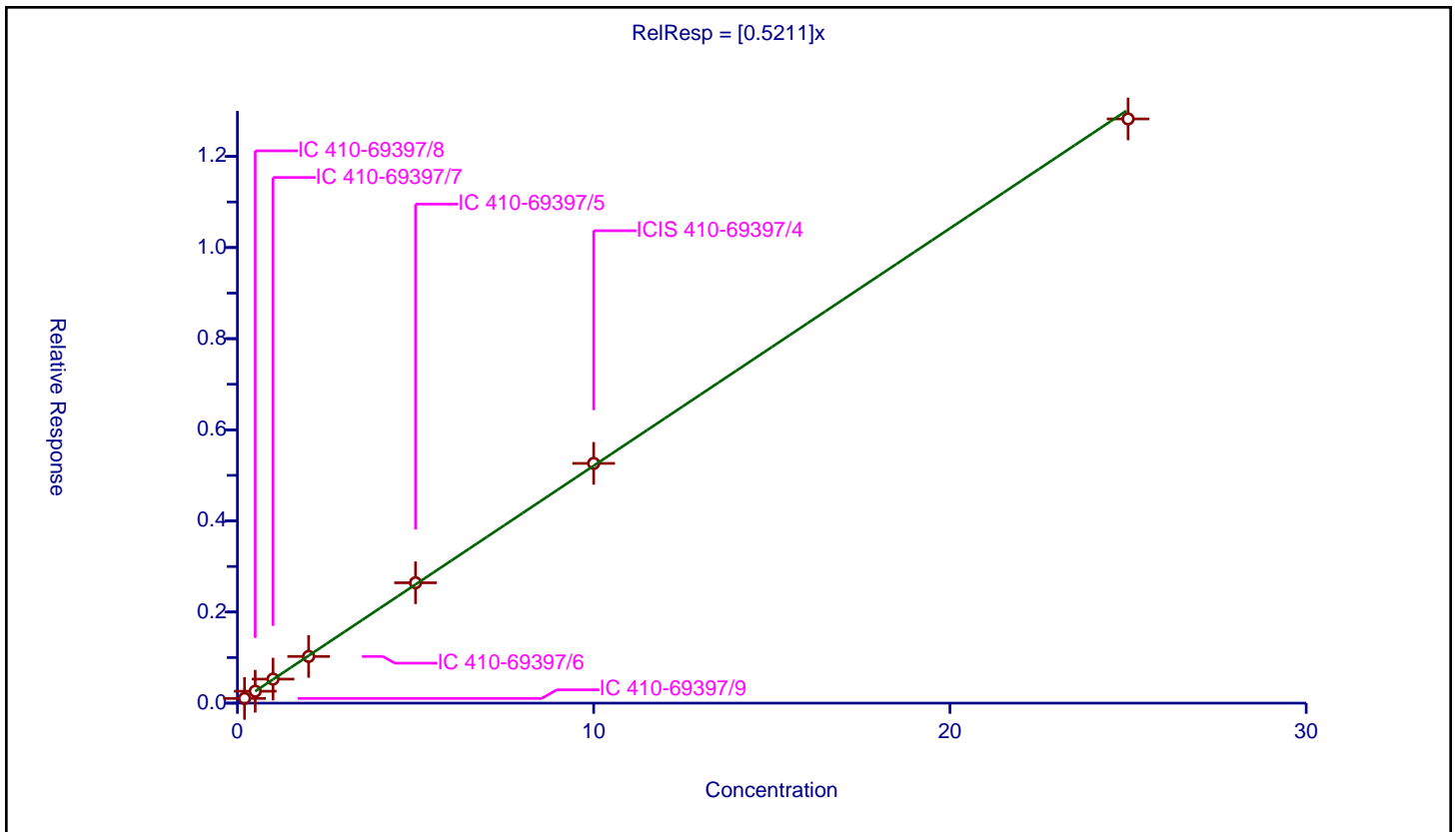
/ Iodomethane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.5211

Error Coefficients	
Standard Error:	1190000
Relative Standard Error:	1.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.103249	10.0	1980944.0	0.516244	Y
2	IC 410-69397/8	0.5	0.261653	10.0	1995085.0	0.523306	Y
3	IC 410-69397/7	1.0	0.527709	10.0	1986644.0	0.527709	Y
4	IC 410-69397/6	2.0	1.025171	10.0	1976128.0	0.512586	Y
5	IC 410-69397/5	5.0	2.641934	10.0	1978687.0	0.528387	Y
6	ICIS 410-69397/4	10.0	5.262683	10.0	2065893.0	0.526268	Y
7	IC 410-69397/3	25.0	12.823368	10.0	2051897.0	0.512935	Y



**Calibration**

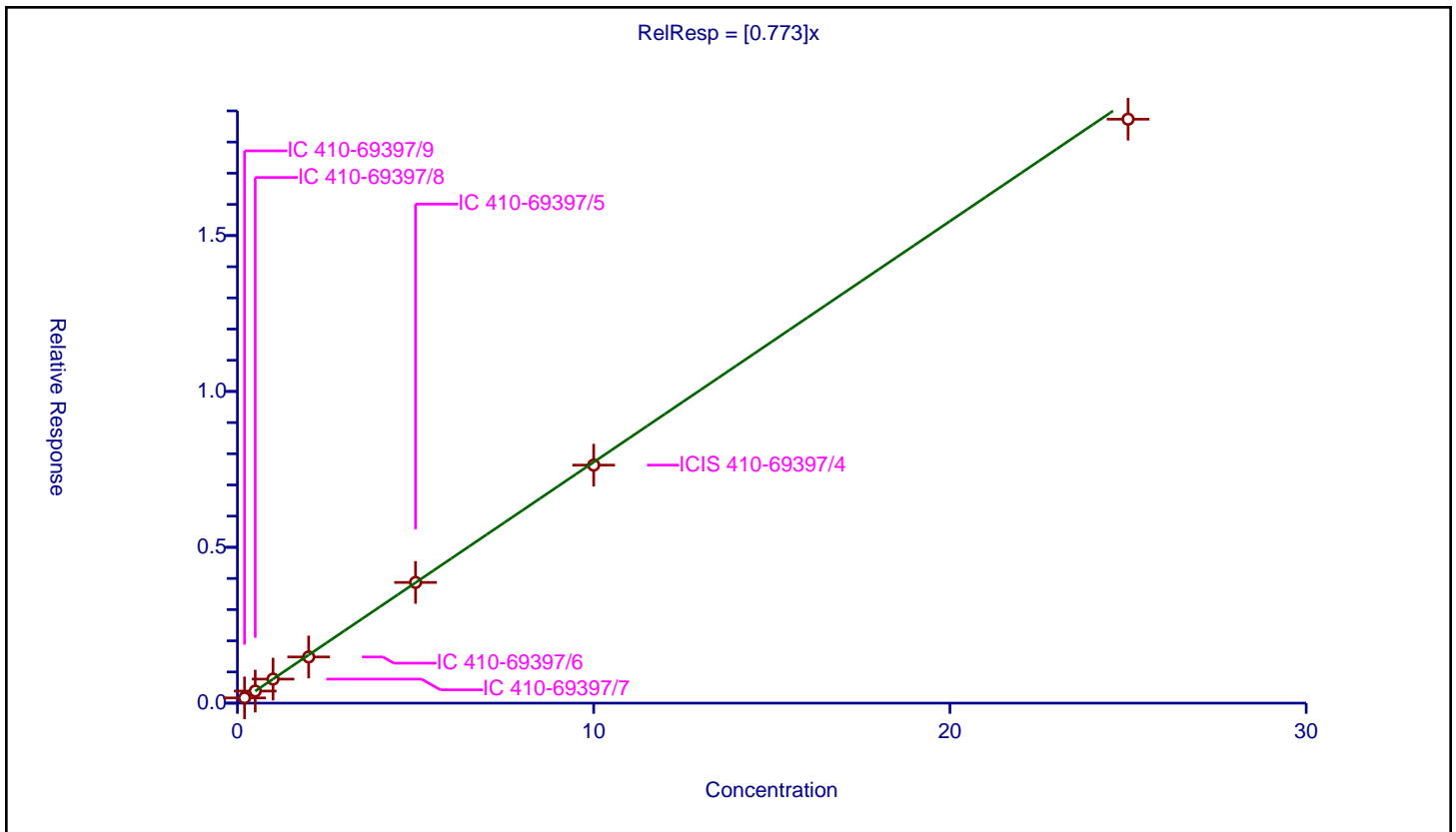
/ Carbon disulfide

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.773

Error Coefficients	
Standard Error:	1730000
Relative Standard Error:	4.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.167344	10.0	1980944.0	0.836722	Y
2	IC 410-69397/8	0.5	0.387673	10.0	1995085.0	0.775345	Y
3	IC 410-69397/7	1.0	0.771301	10.0	1986644.0	0.771301	Y
4	IC 410-69397/6	2.0	1.481498	10.0	1976128.0	0.740749	Y
5	IC 410-69397/5	5.0	3.871628	10.0	1978687.0	0.774326	Y
6	ICIS 410-69397/4	10.0	7.635444	10.0	2065893.0	0.763544	Y
7	IC 410-69397/3	25.0	18.733377	10.0	2051897.0	0.749335	Y



**Calibration**

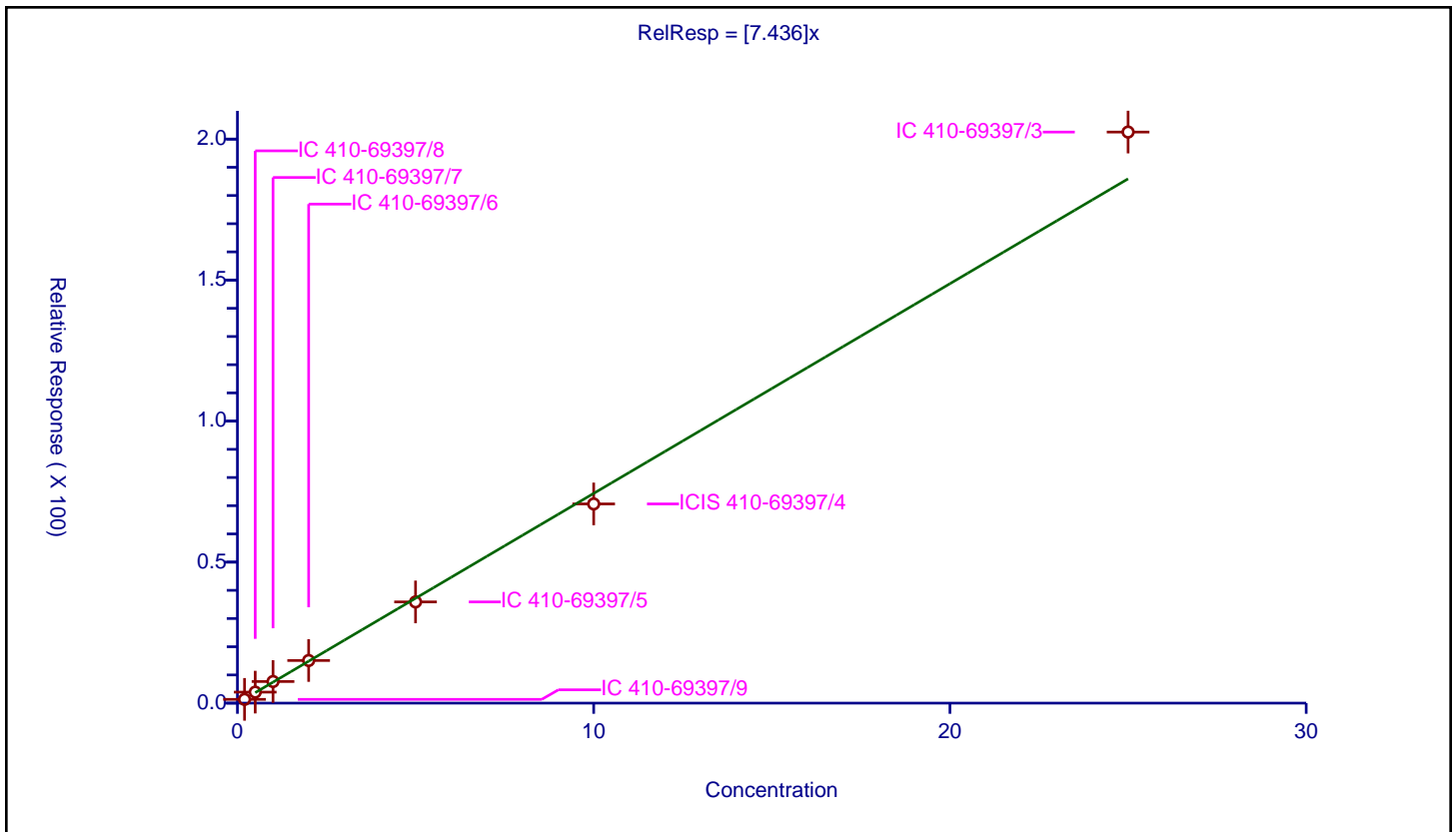
**/ Methyl acetate**

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	7.436

Error Coefficients	
Standard Error:	300000
Relative Standard Error:	6.5
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	1.338679	50.0	157506.0	6.693396	Y
2	IC 410-69397/8	0.5	3.90108	50.0	156713.0	7.802161	Y
3	IC 410-69397/7	1.0	7.662484	50.0	155400.0	7.662484	Y
4	IC 410-69397/6	2.0	15.112487	50.0	164063.0	7.556244	Y
5	IC 410-69397/5	5.0	35.887541	50.0	167919.0	7.177508	Y
6	ICIS 410-69397/4	10.0	70.636507	50.0	174562.0	7.063651	Y
7	IC 410-69397/3	25.0	202.495477	50.0	168044.0	8.099819	Y



Calibration

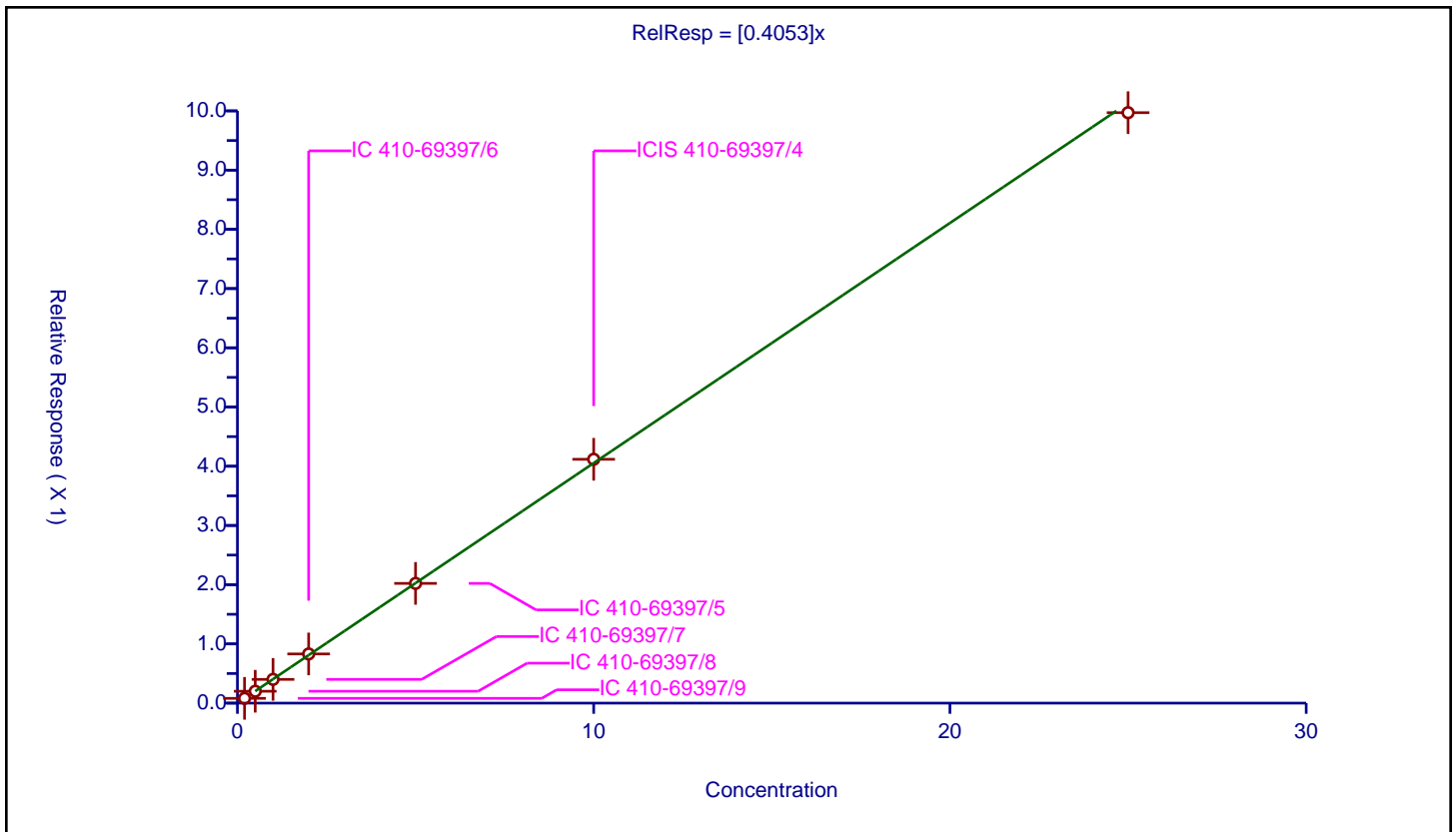
/ 3-Chloro-1-propene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4053

Error Coefficients	
Standard Error:	922000
Relative Standard Error:	1.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.080931	10.0	1980944.0	0.404656	Y
2	IC 410-69397/8	0.5	0.200894	10.0	1995085.0	0.401787	Y
3	IC 410-69397/7	1.0	0.400731	10.0	1986644.0	0.400731	Y
4	IC 410-69397/6	2.0	0.830579	10.0	1976128.0	0.415289	Y
5	IC 410-69397/5	5.0	2.021735	10.0	1978687.0	0.404347	Y
6	ICIS 410-69397/4	10.0	4.117285	10.0	2065893.0	0.411728	Y
7	IC 410-69397/3	25.0	9.96975	10.0	2051897.0	0.39879	Y





Calibration

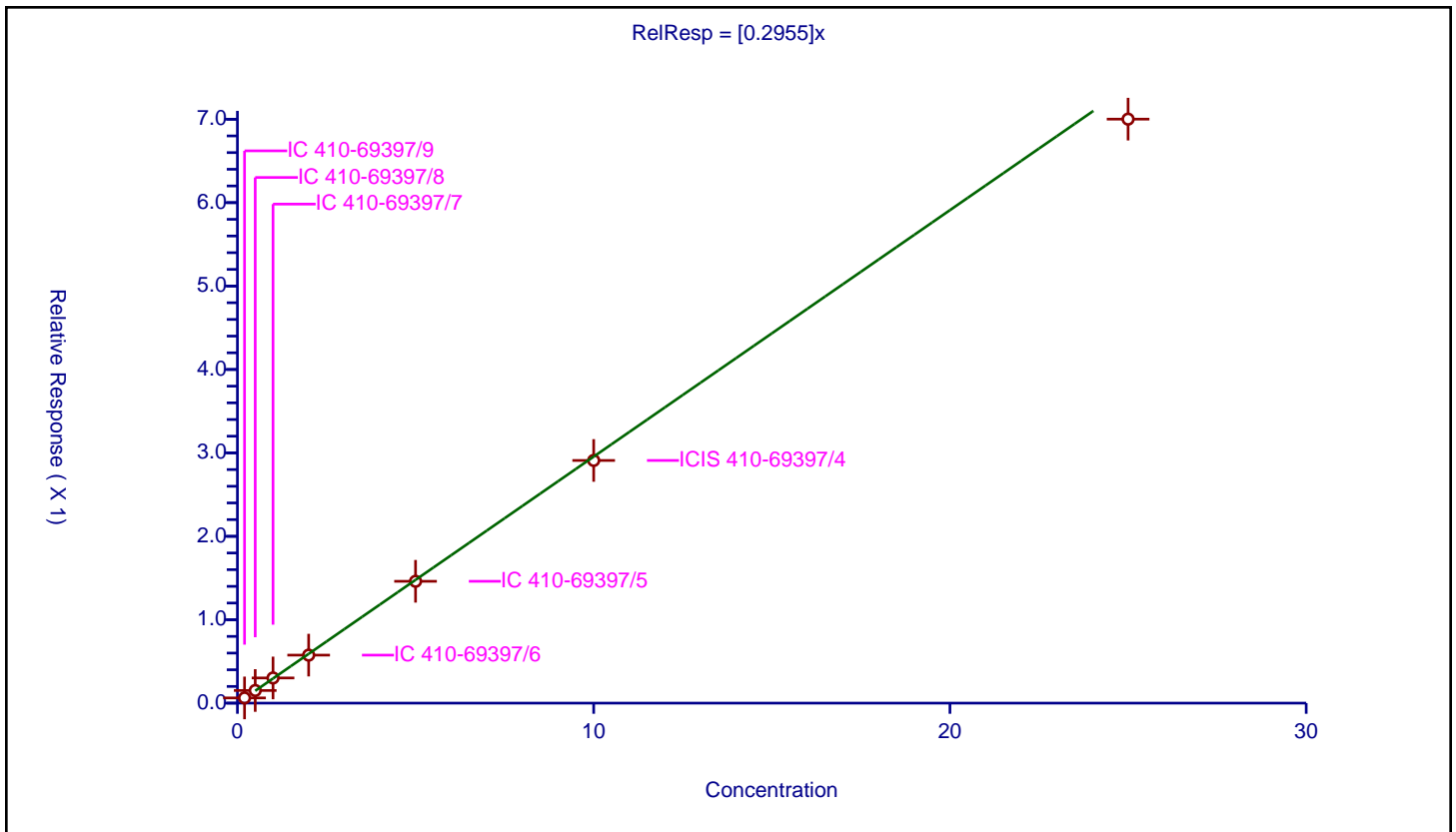
/ Methylene Chloride

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2955

Error Coefficients	
Standard Error:	649000
Relative Standard Error:	3.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.062551	10.0	1980944.0	0.312755	Y
2	IC 410-69397/8	0.5	0.151578	10.0	1995085.0	0.303155	Y
3	IC 410-69397/7	1.0	0.301735	10.0	1986644.0	0.301735	Y
4	IC 410-69397/6	2.0	0.575423	10.0	1976128.0	0.287712	Y
5	IC 410-69397/5	5.0	1.460767	10.0	1978687.0	0.292153	Y
6	ICIS 410-69397/4	10.0	2.909347	10.0	2065893.0	0.290935	Y
7	IC 410-69397/3	25.0	7.000883	10.0	2051897.0	0.280035	Y



**Calibration**

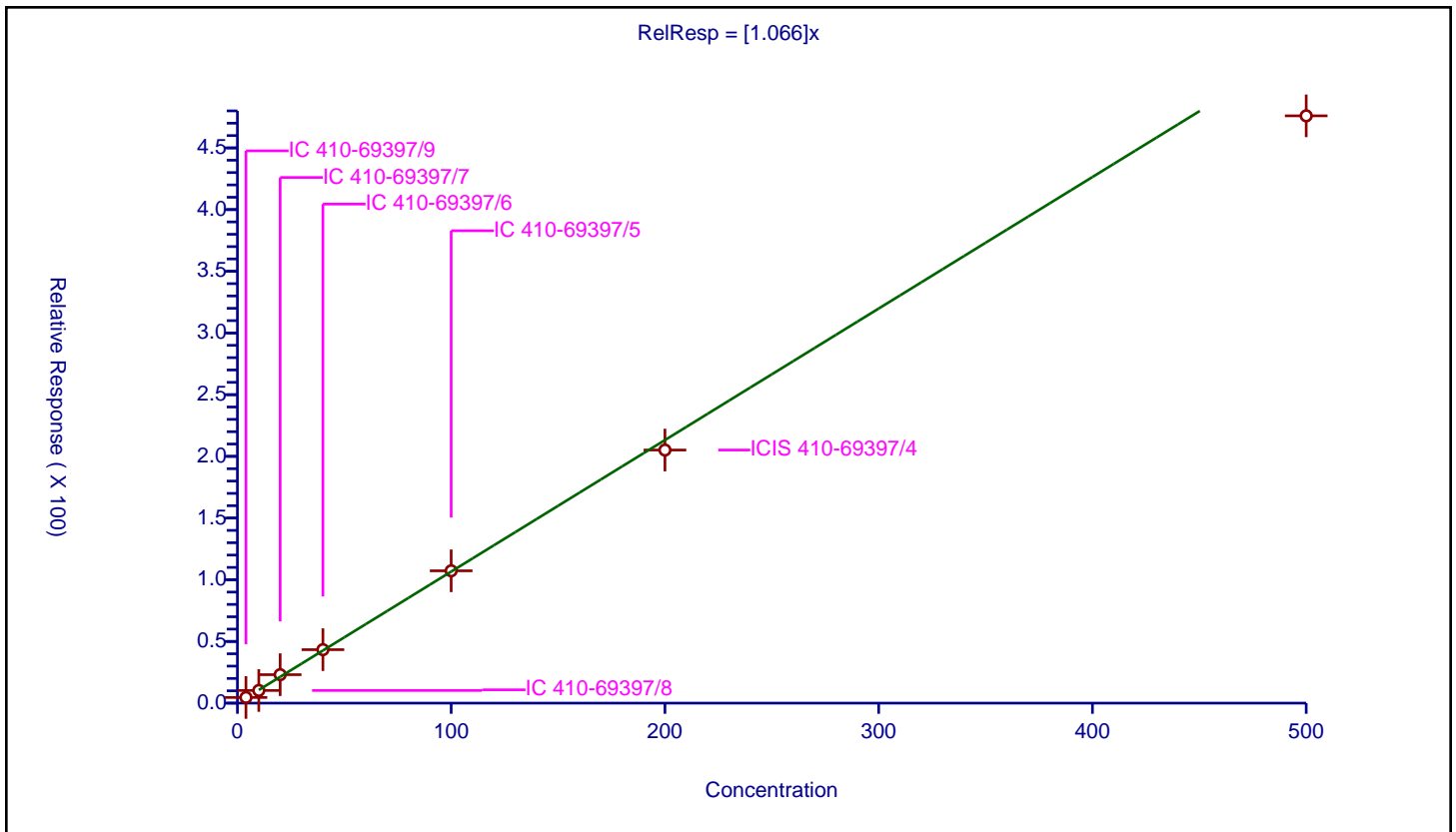
/ 2-Methyl-2-propanol

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.066

Error Coefficients	
Standard Error:	733000
Relative Standard Error:	6.7
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	4.0	4.592206	50.0	157506.0	1.148052	Y
2	IC 410-69397/8	10.0	10.273876	50.0	156713.0	1.027388	Y
3	IC 410-69397/7	20.0	23.062741	50.0	155400.0	1.153137	Y
4	IC 410-69397/6	40.0	43.332439	50.0	164063.0	1.083311	Y
5	IC 410-69397/5	100.0	107.245458	50.0	167919.0	1.072455	Y
6	ICIS 410-69397/4	200.0	205.130842	50.0	174562.0	1.025654	Y
7	IC 410-69397/3	500.0	475.988134	50.0	168044.0	0.951976	Y



**Calibration**

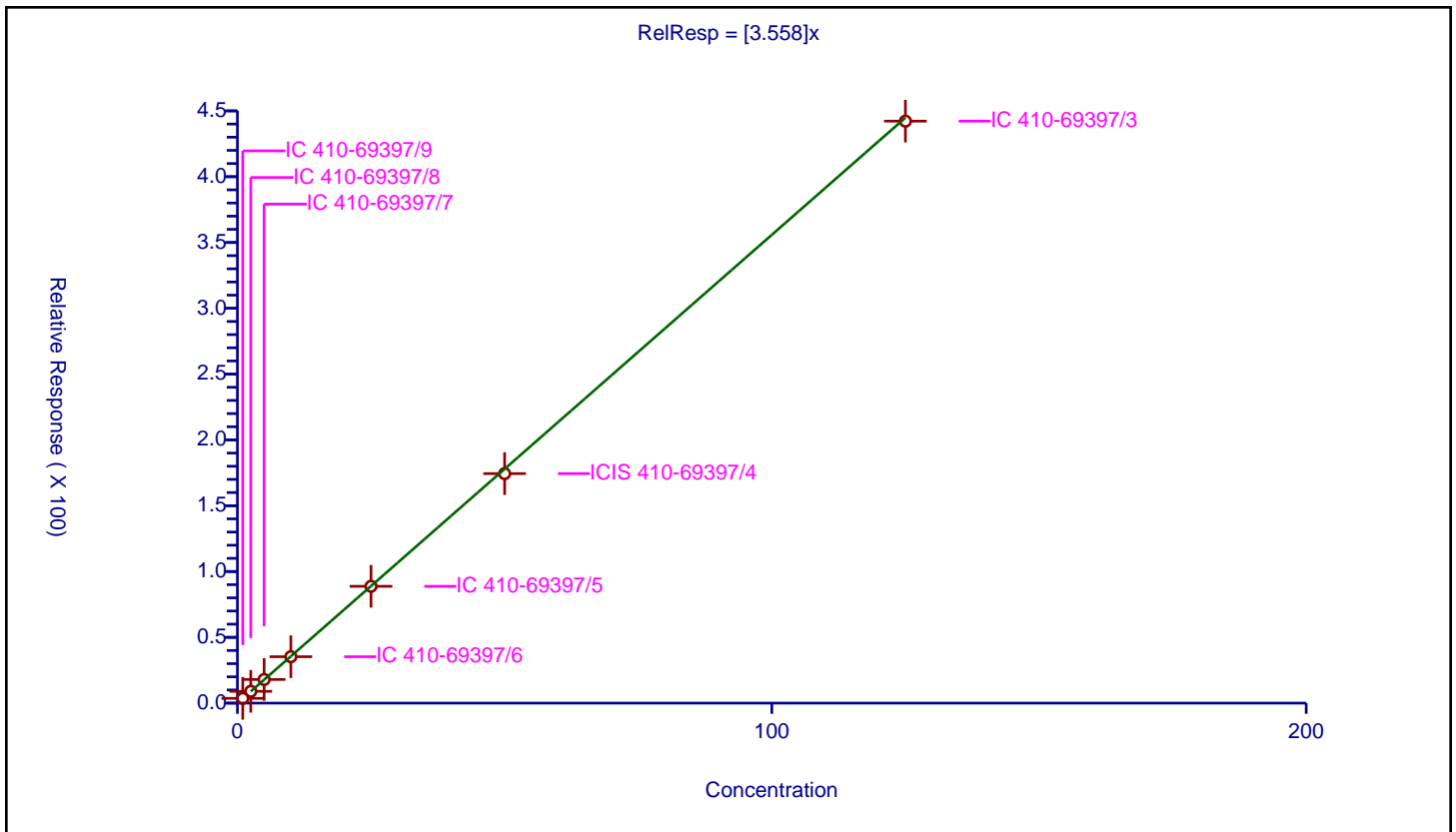
/ Acrylonitrile

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	3.558

Error Coefficients	
Standard Error:	669000
Relative Standard Error:	1.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	1.0	3.623989	50.0	157506.0	3.623989	Y
2	IC 410-69397/8	2.5	8.97692	50.0	156713.0	3.590768	Y
3	IC 410-69397/7	5.0	17.951416	50.0	155400.0	3.590283	Y
4	IC 410-69397/6	10.0	35.26115	50.0	164063.0	3.526115	Y
5	IC 410-69397/5	25.0	88.776434	50.0	167919.0	3.551057	Y
6	ICIS 410-69397/4	50.0	174.382741	50.0	174562.0	3.487655	Y
7	IC 410-69397/3	125.0	442.204125	50.0	168044.0	3.537633	Y



Calibration

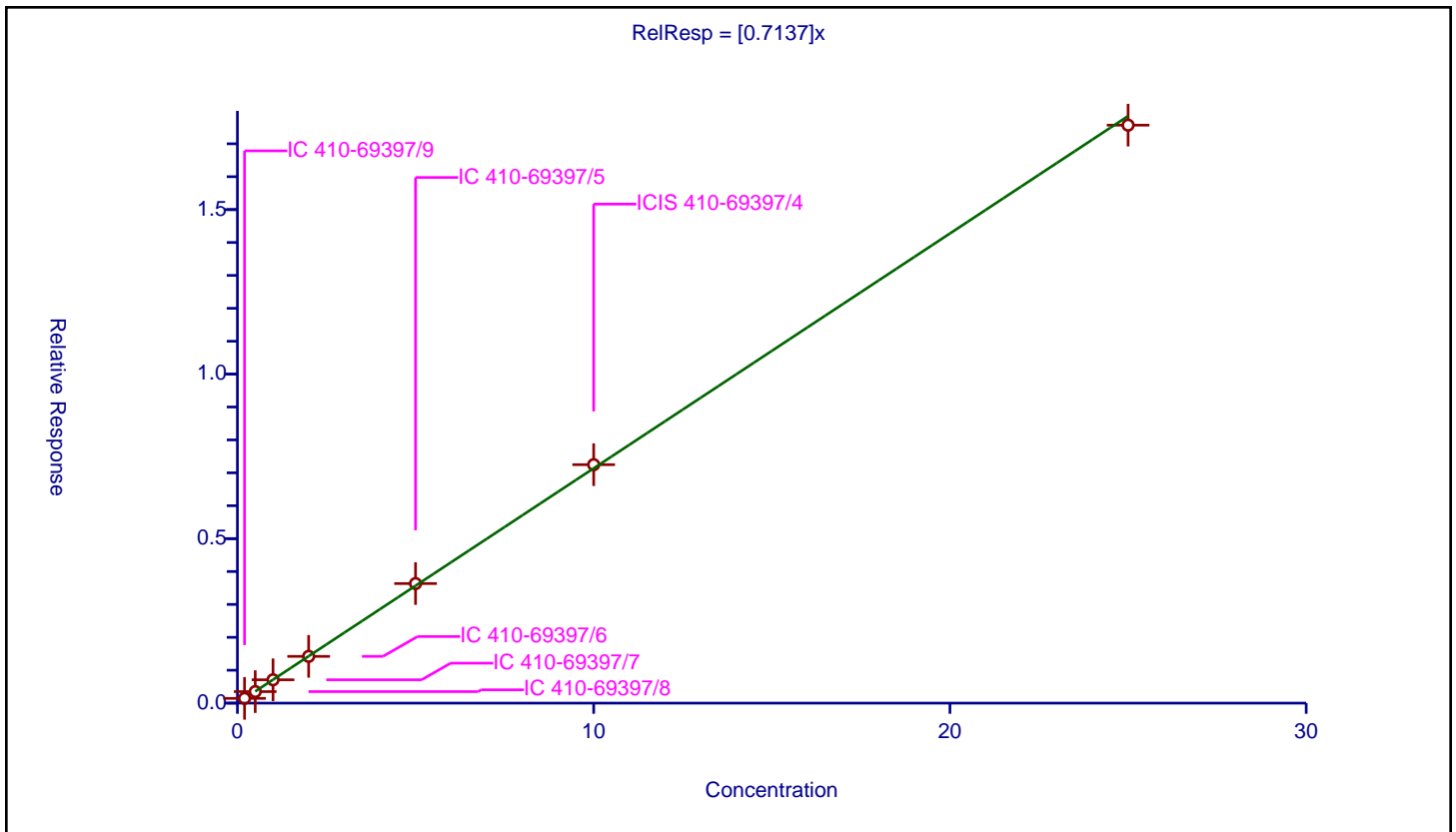
/ Methyl tert-butyl ether

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.7137

Error Coefficients	
Standard Error:	1630000
Relative Standard Error:	1.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.14429	10.0	1980944.0	0.721449	Y
2	IC 410-69397/8	0.5	0.350135	10.0	1995085.0	0.700271	Y
3	IC 410-69397/7	1.0	0.709644	10.0	1986644.0	0.709644	Y
4	IC 410-69397/6	2.0	1.420743	10.0	1976128.0	0.710371	Y
5	IC 410-69397/5	5.0	3.634511	10.0	1978687.0	0.726902	Y
6	ICIS 410-69397/4	10.0	7.247558	10.0	2065893.0	0.724756	Y
7	IC 410-69397/3	25.0	17.565804	10.0	2051897.0	0.702632	Y



Calibration

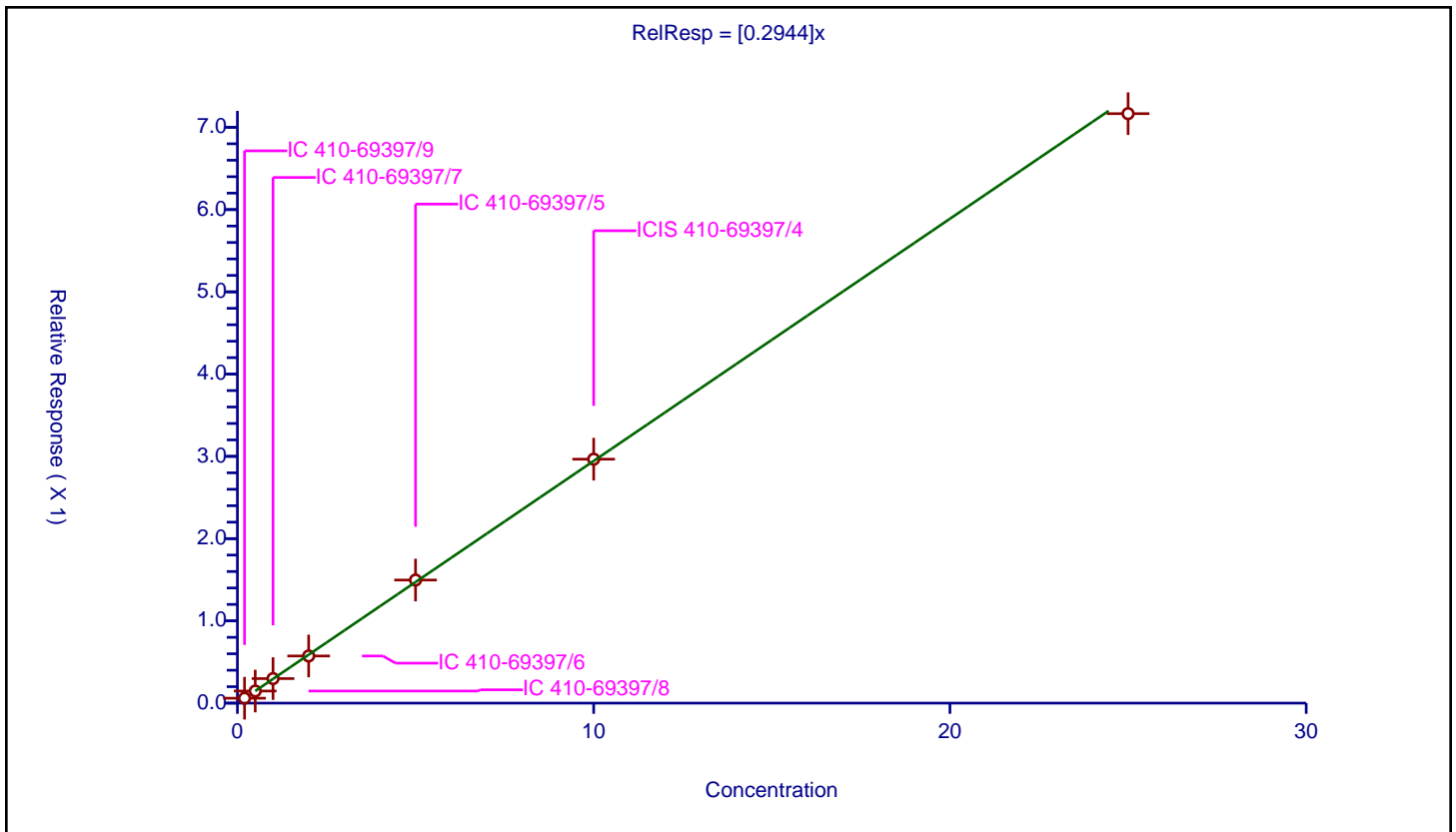
/ trans-1,2-Dichloroethene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2944

Error Coefficients	
Standard Error:	664000
Relative Standard Error:	1.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.059835	10.0	1980944.0	0.299176	Y
2	IC 410-69397/8	0.5	0.147041	10.0	1995085.0	0.294083	Y
3	IC 410-69397/7	1.0	0.298519	10.0	1986644.0	0.298519	Y
4	IC 410-69397/6	2.0	0.573333	10.0	1976128.0	0.286667	Y
5	IC 410-69397/5	5.0	1.496508	10.0	1978687.0	0.299302	Y
6	ICIS 410-69397/4	10.0	2.96573	10.0	2065893.0	0.296573	Y
7	IC 410-69397/3	25.0	7.166271	10.0	2051897.0	0.286651	Y



Calibration

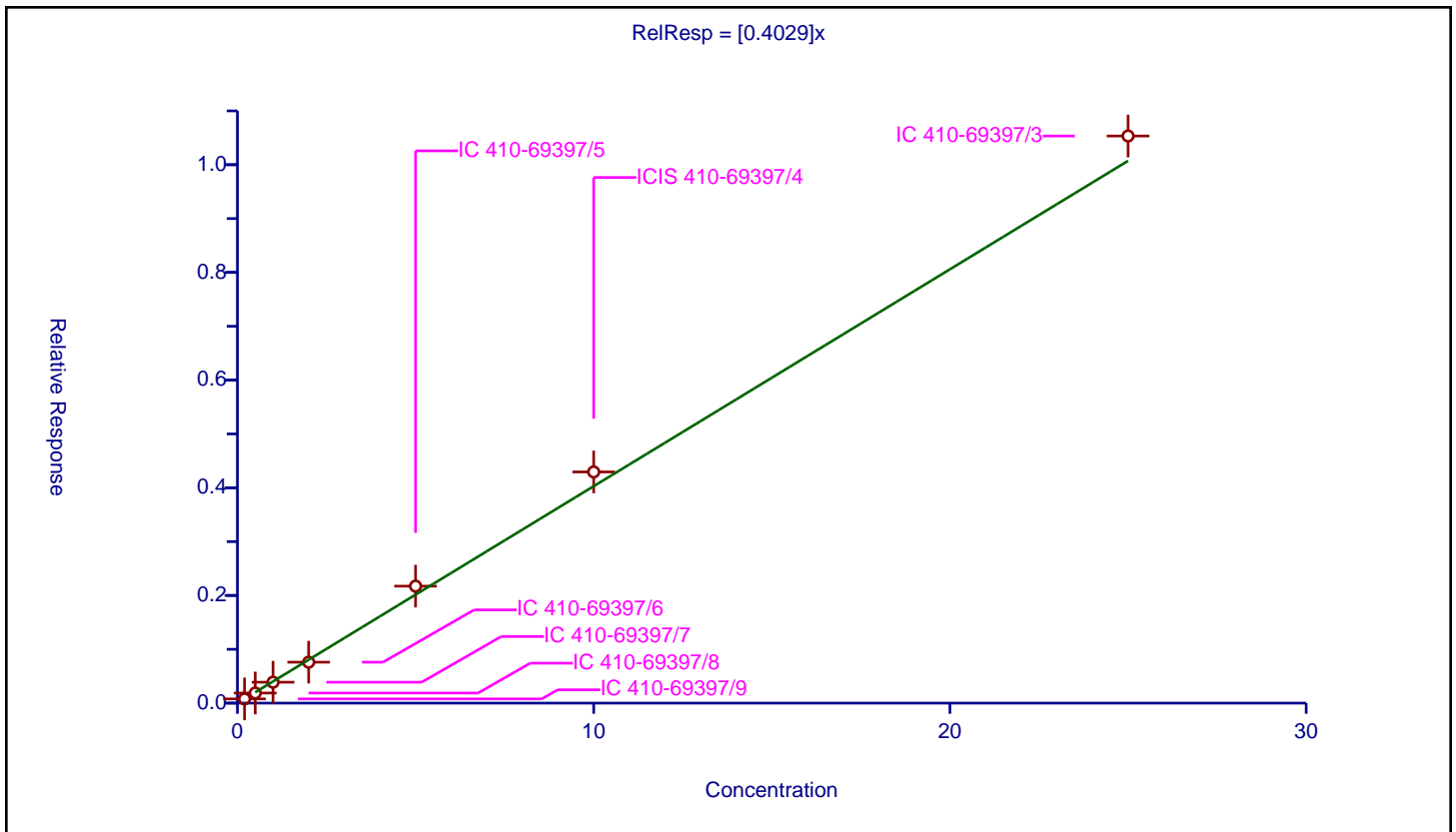
/ Hexane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4029

Error Coefficients	
Standard Error:	972000
Relative Standard Error:	6.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.078205	10.0	1980944.0	0.391026	Y
2	IC 410-69397/8	0.5	0.187511	10.0	1995085.0	0.375022	Y
3	IC 410-69397/7	1.0	0.38853	10.0	1986644.0	0.38853	Y
4	IC 410-69397/6	2.0	0.76073	10.0	1976128.0	0.380365	Y
5	IC 410-69397/5	5.0	2.17281	10.0	1978687.0	0.434562	Y
6	ICIS 410-69397/4	10.0	4.294274	10.0	2065893.0	0.429427	Y
7	IC 410-69397/3	25.0	10.533604	10.0	2051897.0	0.421344	Y



Calibration

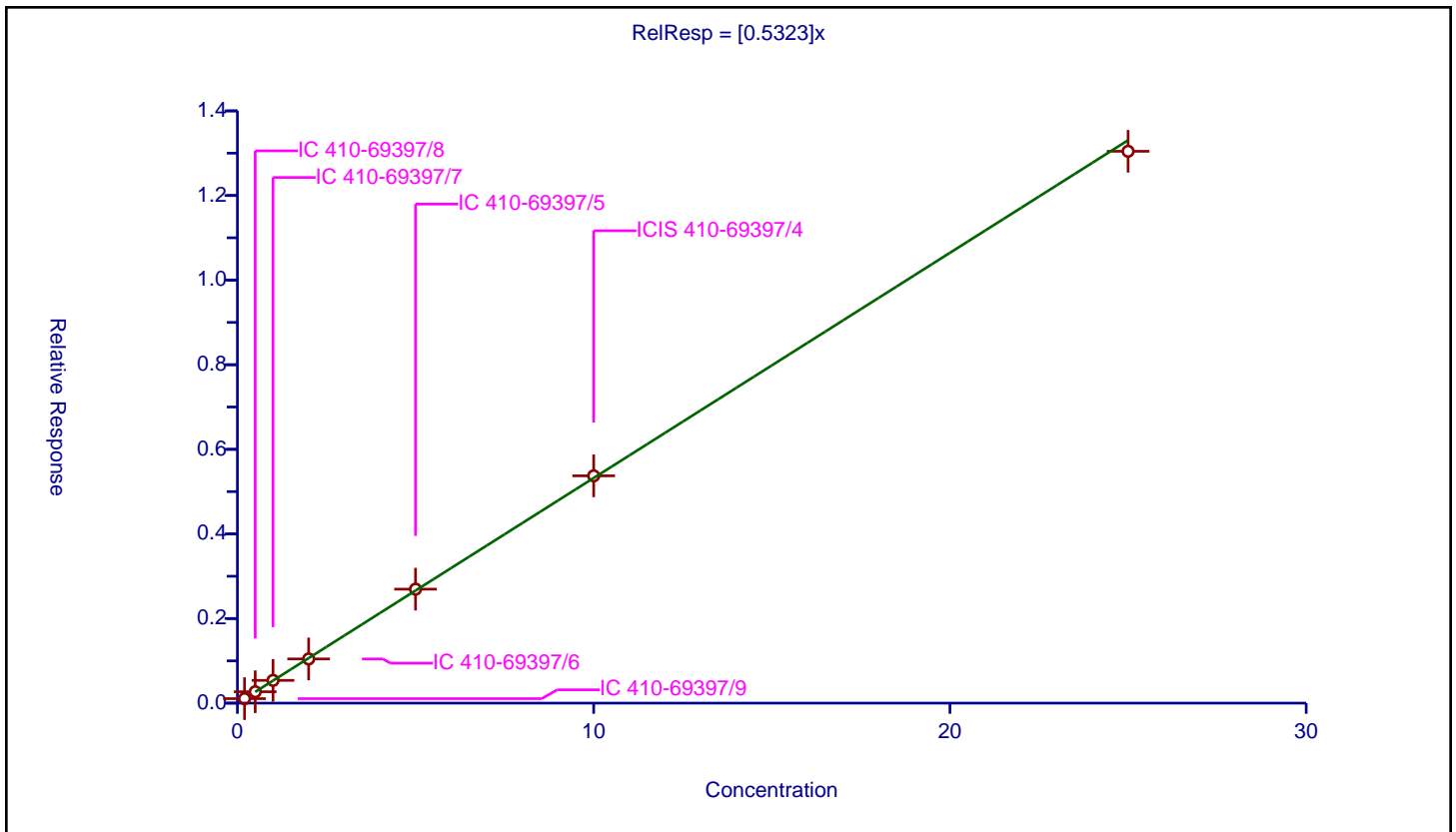
/ 1,1-Dichloroethane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.5323

Error Coefficients	
Standard Error:	1210000
Relative Standard Error:	1.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.105773	10.0	1980944.0	0.528864	Y
2	IC 410-69397/8	0.5	0.269347	10.0	1995085.0	0.538694	Y
3	IC 410-69397/7	1.0	0.537822	10.0	1986644.0	0.537822	Y
4	IC 410-69397/6	2.0	1.044689	10.0	1976128.0	0.522345	Y
5	IC 410-69397/5	5.0	2.694489	10.0	1978687.0	0.538898	Y
6	ICIS 410-69397/4	10.0	5.373487	10.0	2065893.0	0.537349	Y
7	IC 410-69397/3	25.0	13.044841	10.0	2051897.0	0.521794	Y



Calibration

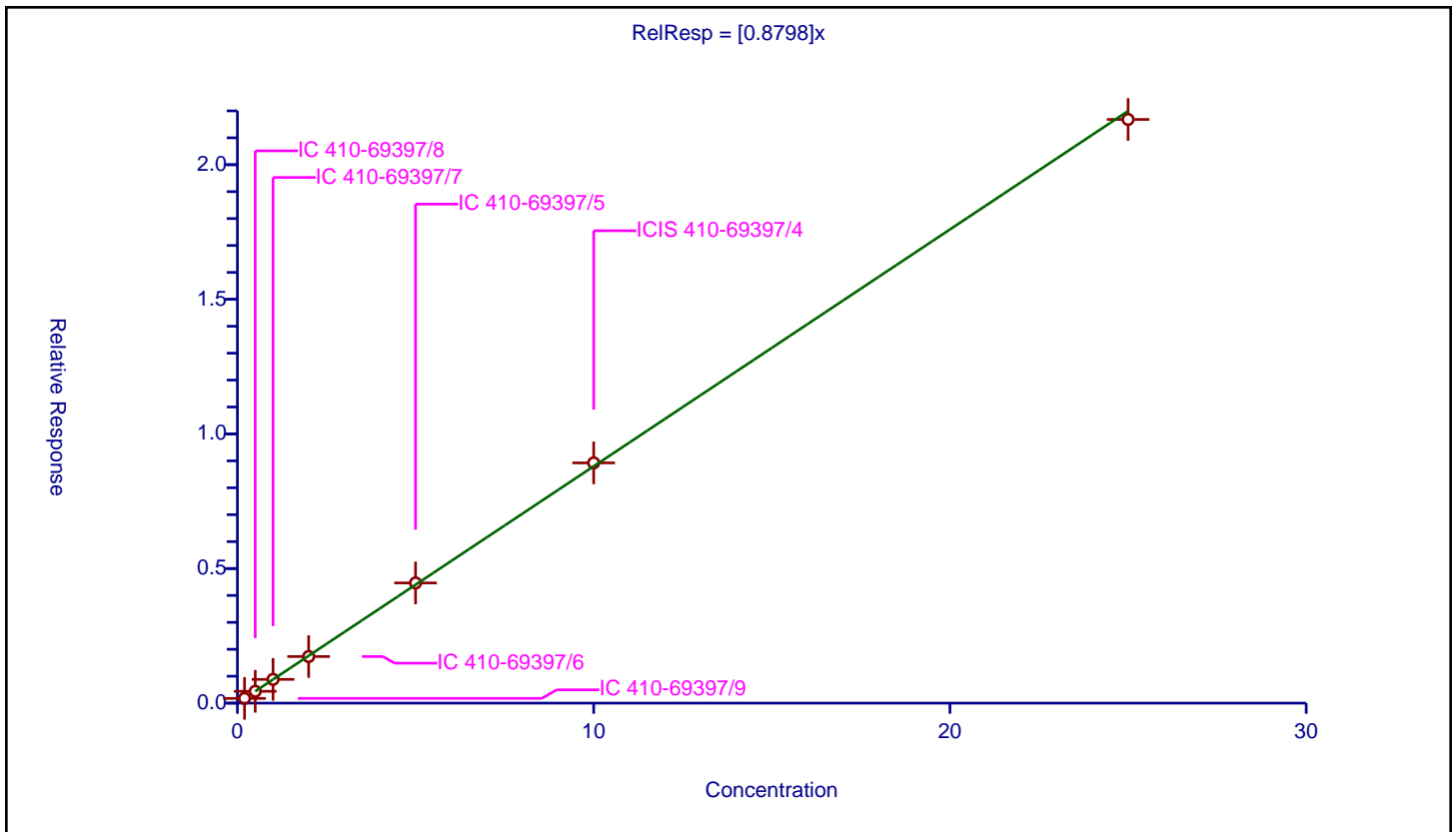
/ Isopropyl ether

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.8798

Error Coefficients	
Standard Error:	2010000
Relative Standard Error:	1.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.175598	10.0	1980944.0	0.87799	Y
2	IC 410-69397/8	0.5	0.440142	10.0	1995085.0	0.880283	Y
3	IC 410-69397/7	1.0	0.882221	10.0	1986644.0	0.882221	Y
4	IC 410-69397/6	2.0	1.730672	10.0	1976128.0	0.865336	Y
5	IC 410-69397/5	5.0	4.464076	10.0	1978687.0	0.892815	Y
6	ICIS 410-69397/4	10.0	8.925041	10.0	2065893.0	0.892504	Y
7	IC 410-69397/3	25.0	21.681658	10.0	2051897.0	0.867266	Y





Calibration

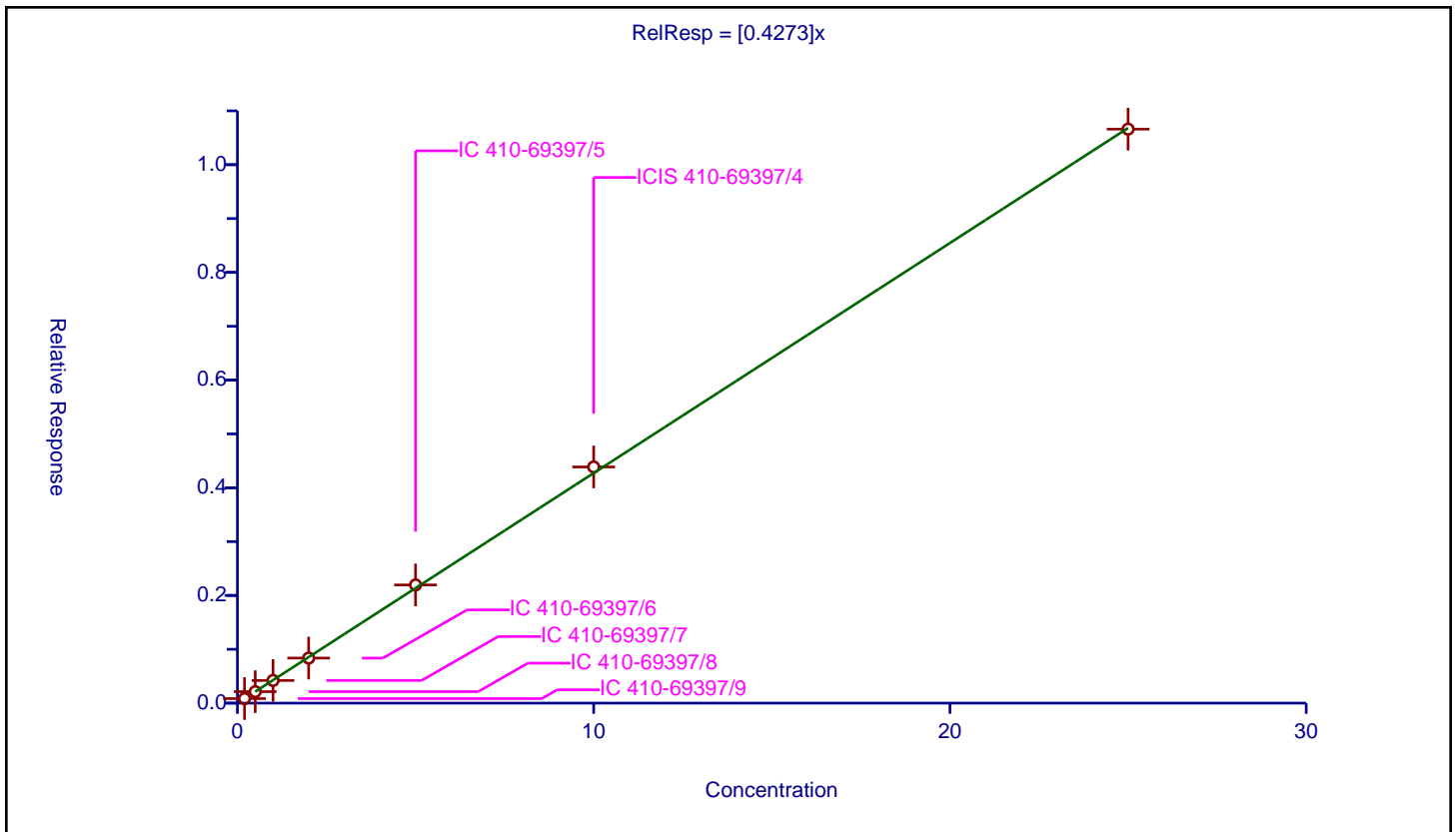
/ 2-Chloro-1,3-butadiene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4273

Error Coefficients	
Standard Error:	986000
Relative Standard Error:	2.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.084328	10.0	1980944.0	0.421642	Y
2	IC 410-69397/8	0.5	0.212848	10.0	1995085.0	0.425696	Y
3	IC 410-69397/7	1.0	0.421308	10.0	1986644.0	0.421308	Y
4	IC 410-69397/6	2.0	0.83651	10.0	1976128.0	0.418255	Y
5	IC 410-69397/5	5.0	2.195284	10.0	1978687.0	0.439057	Y
6	ICIS 410-69397/4	10.0	4.386471	10.0	2065893.0	0.438647	Y
7	IC 410-69397/3	25.0	10.661188	10.0	2051897.0	0.426448	Y



**Calibration**

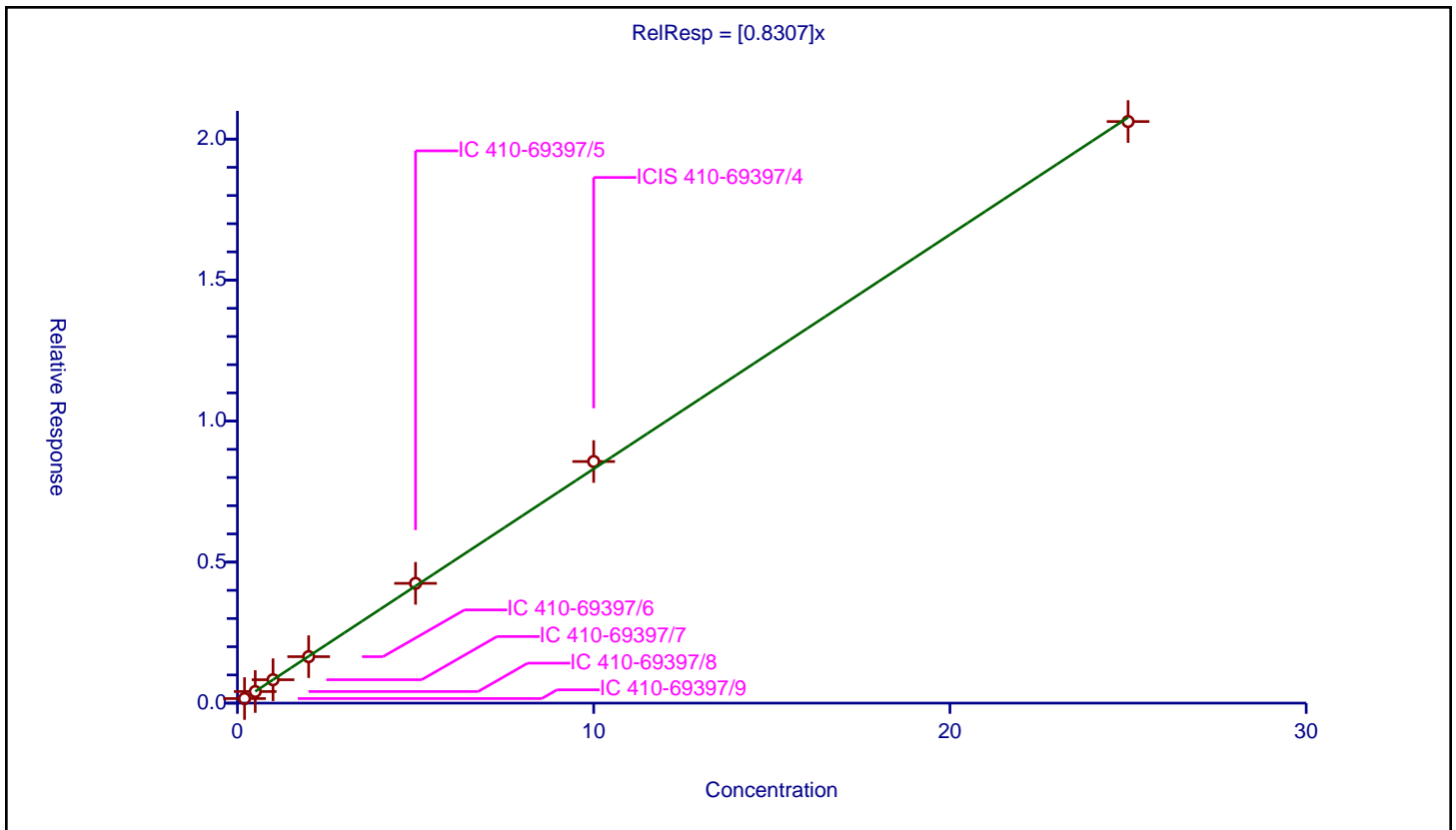
/ Tert-butyl ethyl ether

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.8307

Error Coefficients	
Standard Error:	1910000
Relative Standard Error:	2.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.161675	10.0	1980944.0	0.808377	Y
2	IC 410-69397/8	0.5	0.41092	10.0	1995085.0	0.82184	Y
3	IC 410-69397/7	1.0	0.82953	10.0	1986644.0	0.82953	Y
4	IC 410-69397/6	2.0	1.647469	10.0	1976128.0	0.823735	Y
5	IC 410-69397/5	5.0	4.247261	10.0	1978687.0	0.849452	Y
6	ICIS 410-69397/4	10.0	8.567438	10.0	2065893.0	0.856744	Y
7	IC 410-69397/3	25.0	20.622687	10.0	2051897.0	0.824907	Y



**Calibration**

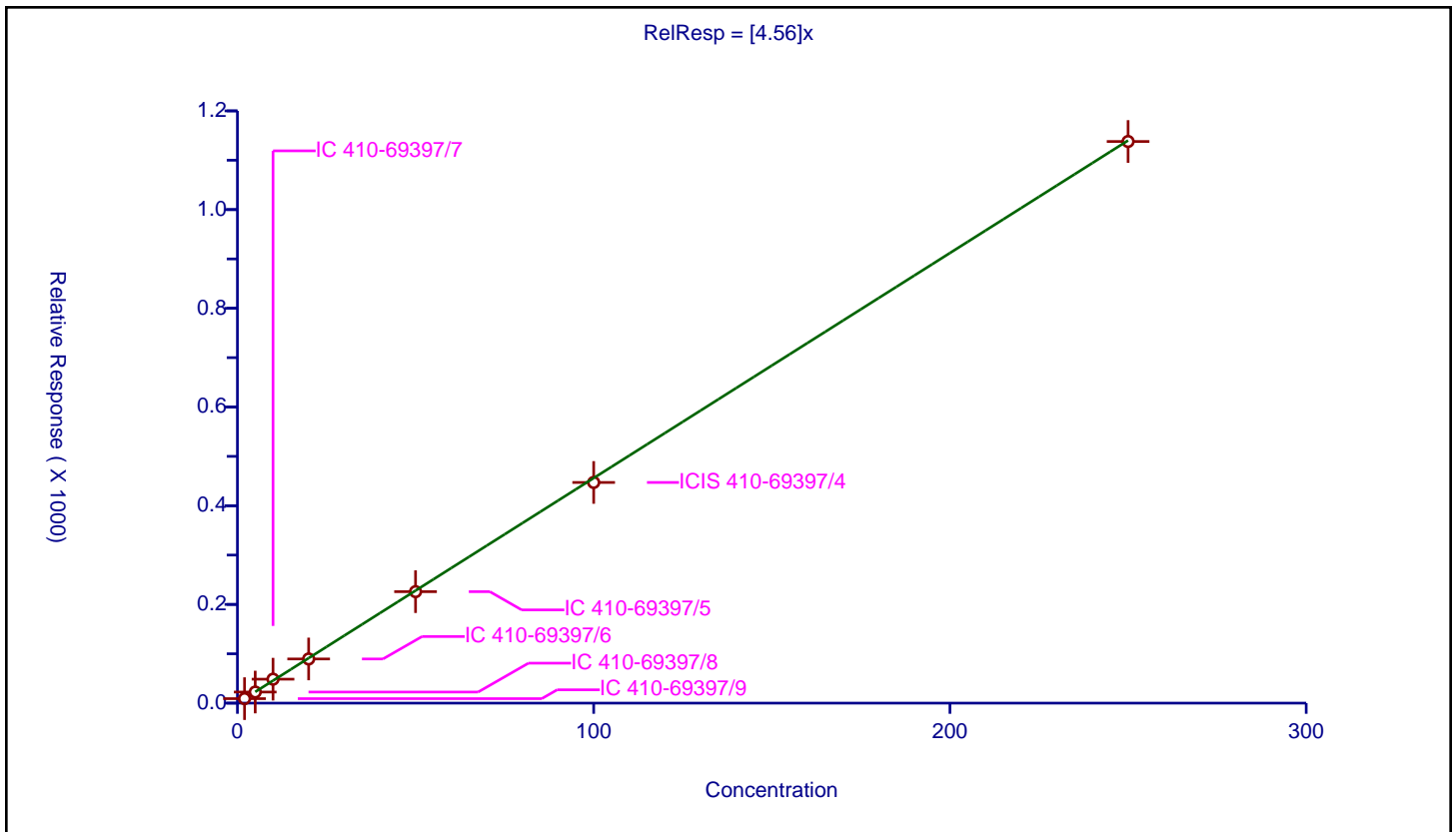
**/ 2-Butanone (MEK)**

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	4.56

Error Coefficients	
Standard Error:	1720000
Relative Standard Error:	2.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	2.0	9.104733	50.0	157506.0	4.552366	Y
2	IC 410-69397/8	5.0	22.491752	50.0	156713.0	4.49835	Y
3	IC 410-69397/7	10.0	48.543436	50.0	155400.0	4.854344	Y
4	IC 410-69397/6	20.0	89.516527	50.0	164063.0	4.475826	Y
5	IC 410-69397/5	50.0	225.853239	50.0	167919.0	4.517065	Y
6	ICIS 410-69397/4	100.0	447.134256	50.0	174562.0	4.471343	Y
7	IC 410-69397/3	250.0	1138.000167	50.0	168044.0	4.552001	Y



Calibration

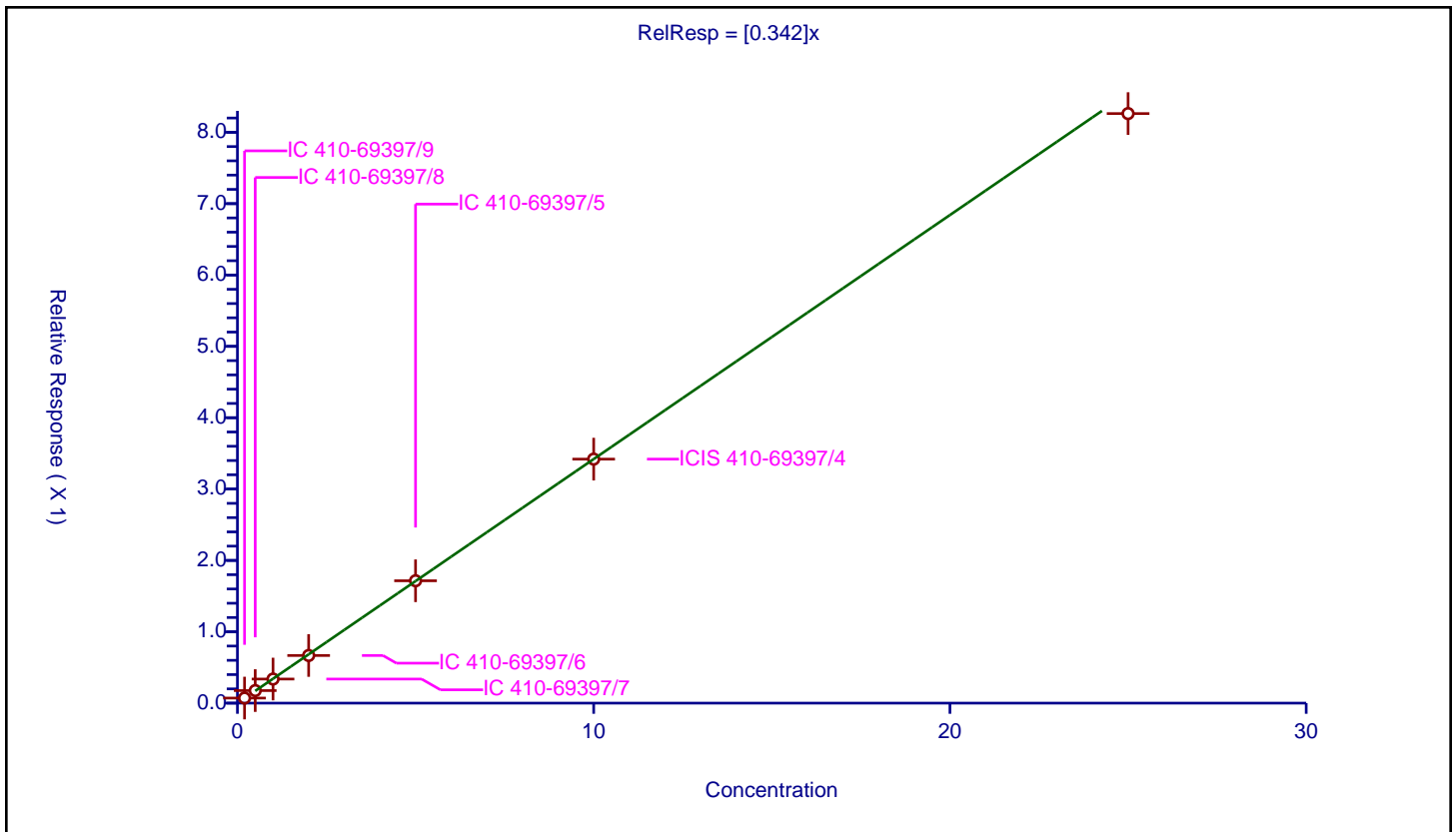
/ cis-1,2-Dichloroethene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.342

Error Coefficients	
Standard Error:	765000
Relative Standard Error:	2.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.071072	10.0	1980944.0	0.355361	Y
2	IC 410-69397/8	0.5	0.175987	10.0	1995085.0	0.351975	Y
3	IC 410-69397/7	1.0	0.337655	10.0	1986644.0	0.337655	Y
4	IC 410-69397/6	2.0	0.667598	10.0	1976128.0	0.333799	Y
5	IC 410-69397/5	5.0	1.7149	10.0	1978687.0	0.34298	Y
6	ICIS 410-69397/4	10.0	3.419645	10.0	2065893.0	0.341964	Y
7	IC 410-69397/3	25.0	8.262223	10.0	2051897.0	0.330489	Y



Calibration

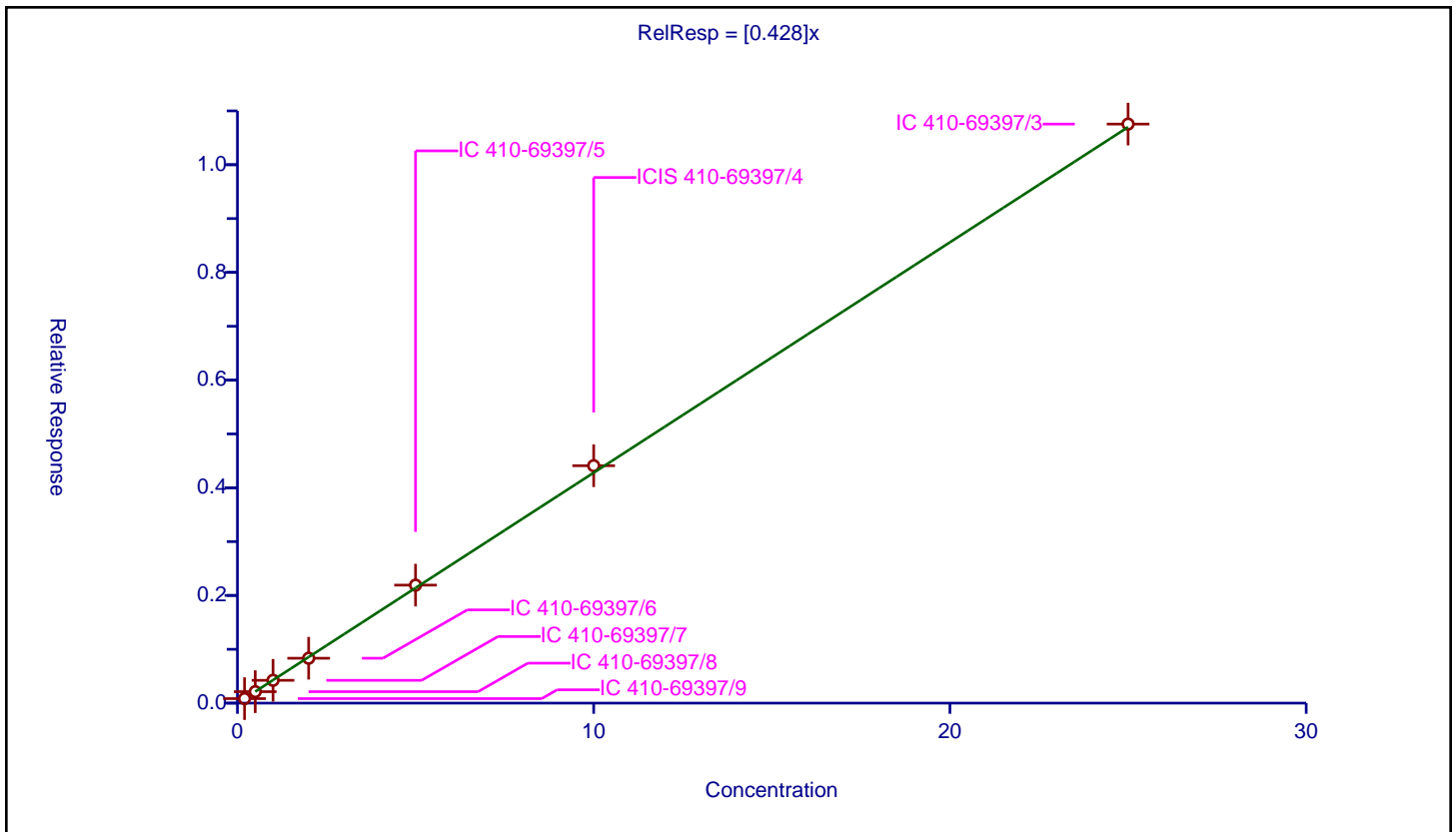
/ 2,2-Dichloropropane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.428

Error Coefficients	
Standard Error:	994000
Relative Standard Error:	2.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.083915	10.0	1980944.0	0.419573	Y
2	IC 410-69397/8	0.5	0.212913	10.0	1995085.0	0.425826	Y
3	IC 410-69397/7	1.0	0.423856	10.0	1986644.0	0.423856	Y
4	IC 410-69397/6	2.0	0.833934	10.0	1976128.0	0.416967	Y
5	IC 410-69397/5	5.0	2.19163	10.0	1978687.0	0.438326	Y
6	ICIS 410-69397/4	10.0	4.410006	10.0	2065893.0	0.441001	Y
7	IC 410-69397/3	25.0	10.755111	10.0	2051897.0	0.430204	Y



Calibration

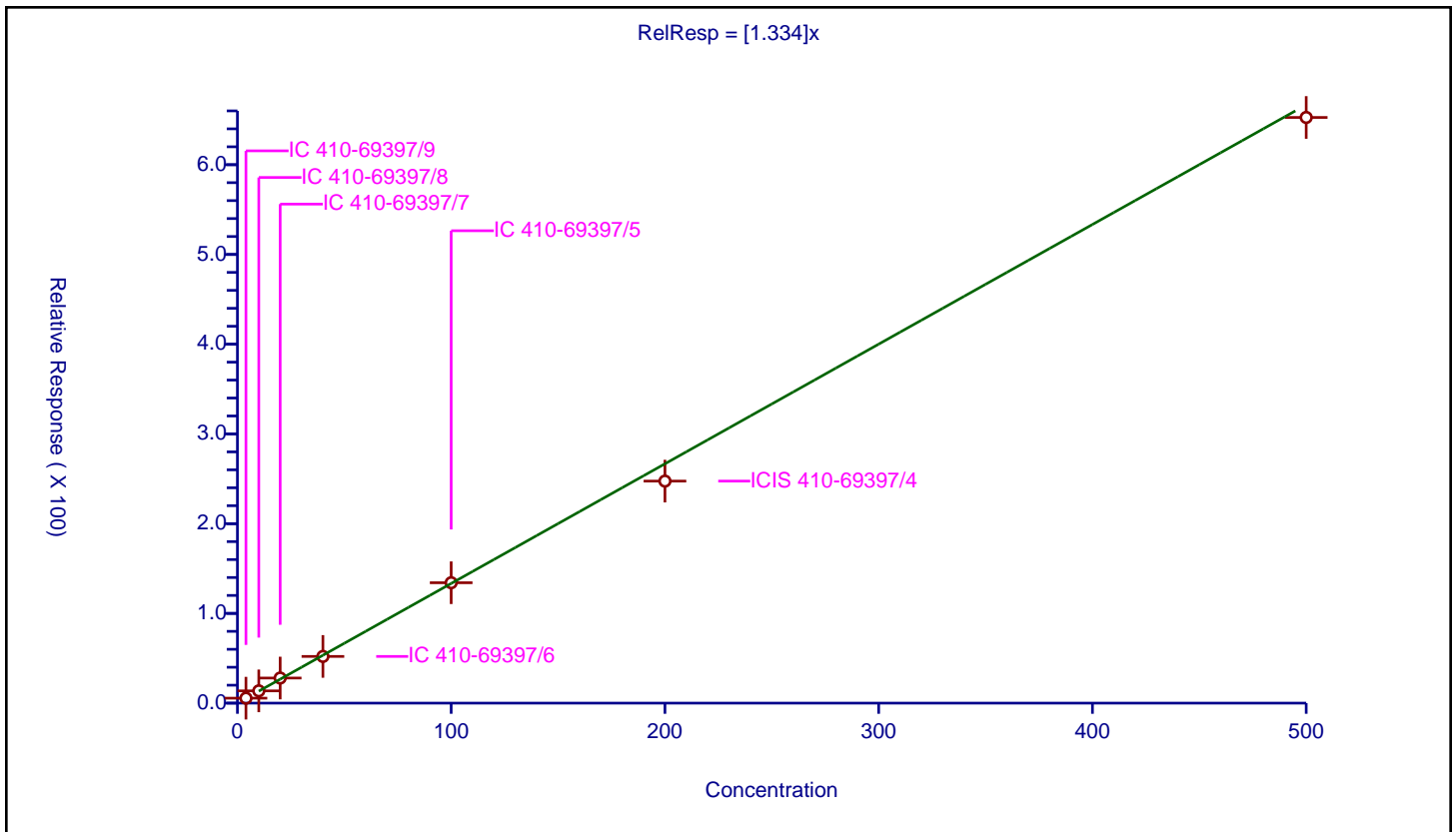
/ Propionitrile

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.334

Error Coefficients	
Standard Error:	983000
Relative Standard Error:	4.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	4.0	5.534392	50.0	157506.0	1.383598	Y
2	IC 410-69397/8	10.0	13.671808	50.0	156713.0	1.367181	Y
3	IC 410-69397/7	20.0	27.980373	50.0	155400.0	1.399019	Y
4	IC 410-69397/6	40.0	52.037937	50.0	164063.0	1.300948	Y
5	IC 410-69397/5	100.0	134.159625	50.0	167919.0	1.341596	Y
6	ICIS 410-69397/4	200.0	247.428707	50.0	174562.0	1.237144	Y
7	IC 410-69397/3	500.0	652.679953	50.0	168044.0	1.30536	Y



**Calibration**

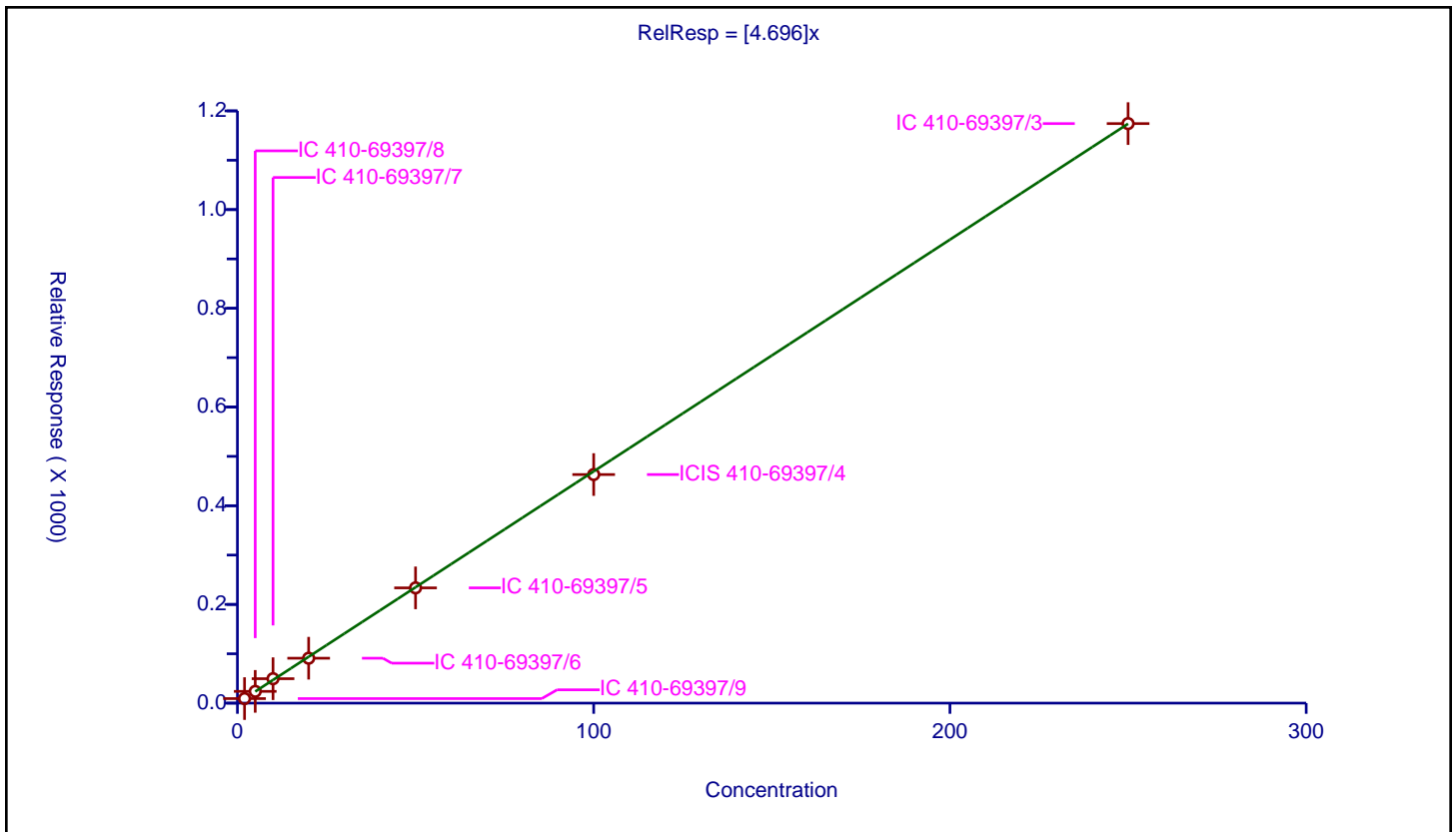
**/ Methacrylonitrile**

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	4.696

Error Coefficients	
Standard Error:	1780000
Relative Standard Error:	2.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	2.0	9.194253	50.0	157506.0	4.597126	Y
2	IC 410-69397/8	5.0	23.85252	50.0	156713.0	4.770504	Y
3	IC 410-69397/7	10.0	49.522523	50.0	155400.0	4.952252	Y
4	IC 410-69397/6	20.0	91.019608	50.0	164063.0	4.55098	Y
5	IC 410-69397/5	50.0	233.528963	50.0	167919.0	4.670579	Y
6	ICIS 410-69397/4	100.0	463.135734	50.0	174562.0	4.631357	Y
7	IC 410-69397/3	250.0	1174.265073	50.0	168044.0	4.69706	Y



Calibration

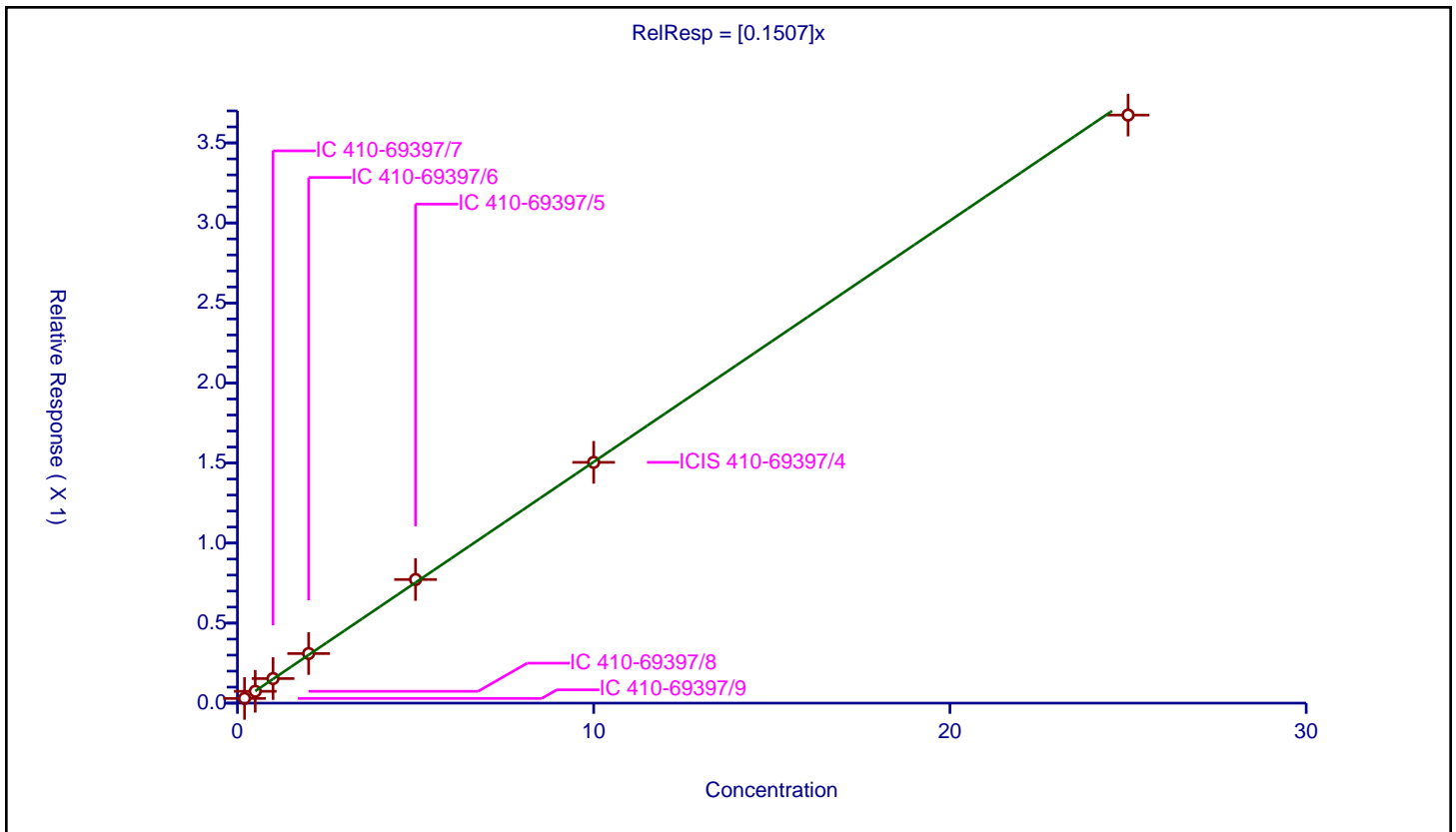
/ Chlorobromomethane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.1507

Error Coefficients	
Standard Error:	340000
Relative Standard Error:	2.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.029319	10.0	1980944.0	0.146597	Y
2	IC 410-69397/8	0.5	0.074042	10.0	1995085.0	0.148084	Y
3	IC 410-69397/7	1.0	0.153495	10.0	1986644.0	0.153495	Y
4	IC 410-69397/6	2.0	0.309686	10.0	1976128.0	0.154843	Y
5	IC 410-69397/5	5.0	0.772356	10.0	1978687.0	0.154471	Y
6	ICIS 410-69397/4	10.0	1.504357	10.0	2065893.0	0.150436	Y
7	IC 410-69397/3	25.0	3.673956	10.0	2051897.0	0.146958	Y





**Calibration**

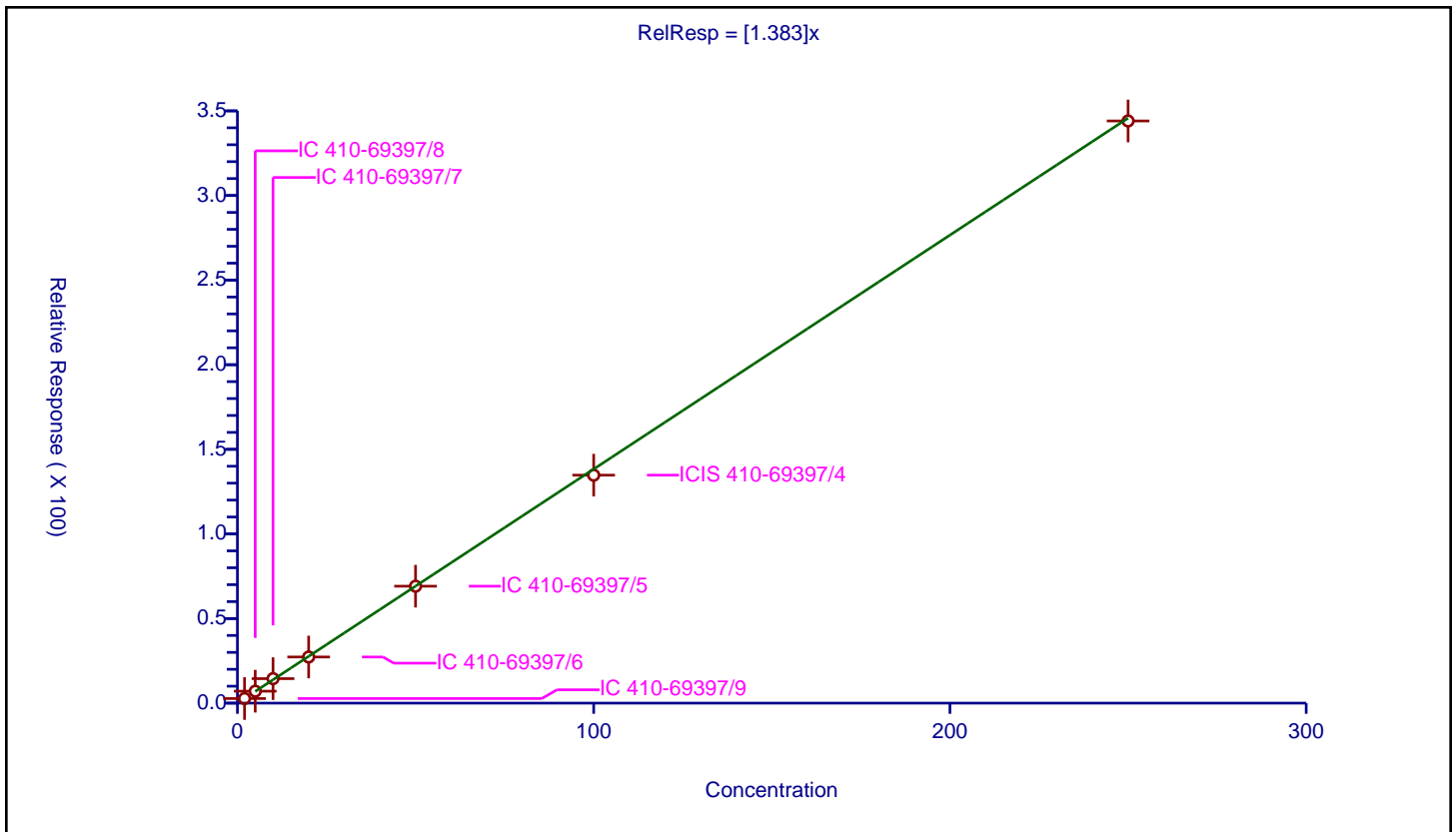
/ Tetrahydrofuran

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.383

Error Coefficients	
Standard Error:	520000
Relative Standard Error:	2.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	2.0	2.708151	50.0	157506.0	1.354075	Y
2	IC 410-69397/8	5.0	7.05334	50.0	156713.0	1.410668	Y
3	IC 410-69397/7	10.0	14.472973	50.0	155400.0	1.447297	Y
4	IC 410-69397/6	20.0	27.261784	50.0	164063.0	1.363089	Y
5	IC 410-69397/5	50.0	69.106534	50.0	167919.0	1.382131	Y
6	ICIS 410-69397/4	100.0	134.730067	50.0	174562.0	1.347301	Y
7	IC 410-69397/3	250.0	344.047987	50.0	168044.0	1.376192	Y



**Calibration**

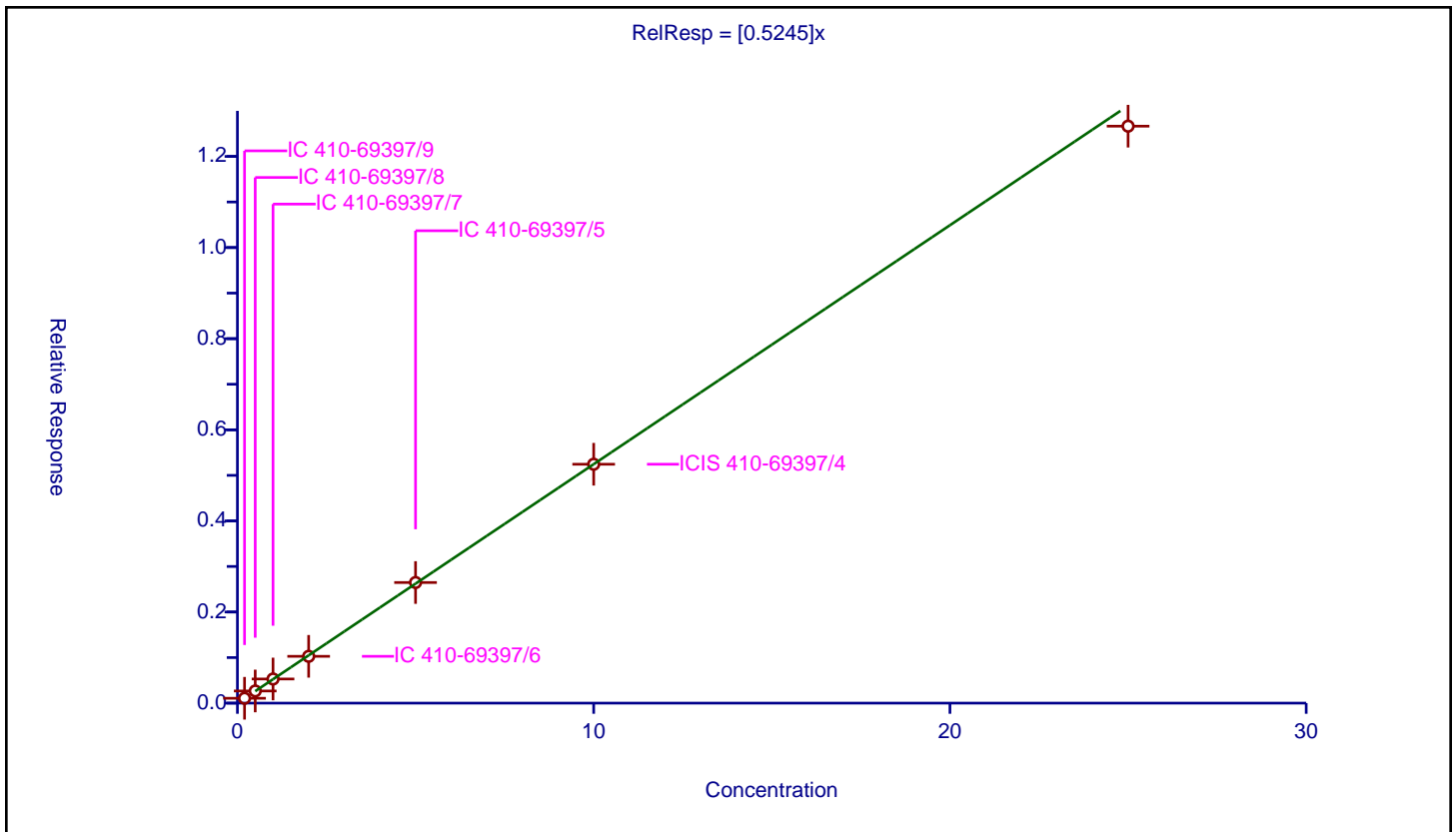
/ Chloroform

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.5245

Error Coefficients	
Standard Error:	1170000
Relative Standard Error:	2.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.106692	10.0	1980944.0	0.533458	Y
2	IC 410-69397/8	0.5	0.267061	10.0	1995085.0	0.534123	Y
3	IC 410-69397/7	1.0	0.529873	10.0	1986644.0	0.529873	Y
4	IC 410-69397/6	2.0	1.027398	10.0	1976128.0	0.513699	Y
5	IC 410-69397/5	5.0	2.647544	10.0	1978687.0	0.529509	Y
6	ICIS 410-69397/4	10.0	5.243519	10.0	2065893.0	0.524352	Y
7	IC 410-69397/3	25.0	12.664666	10.0	2051897.0	0.506587	Y



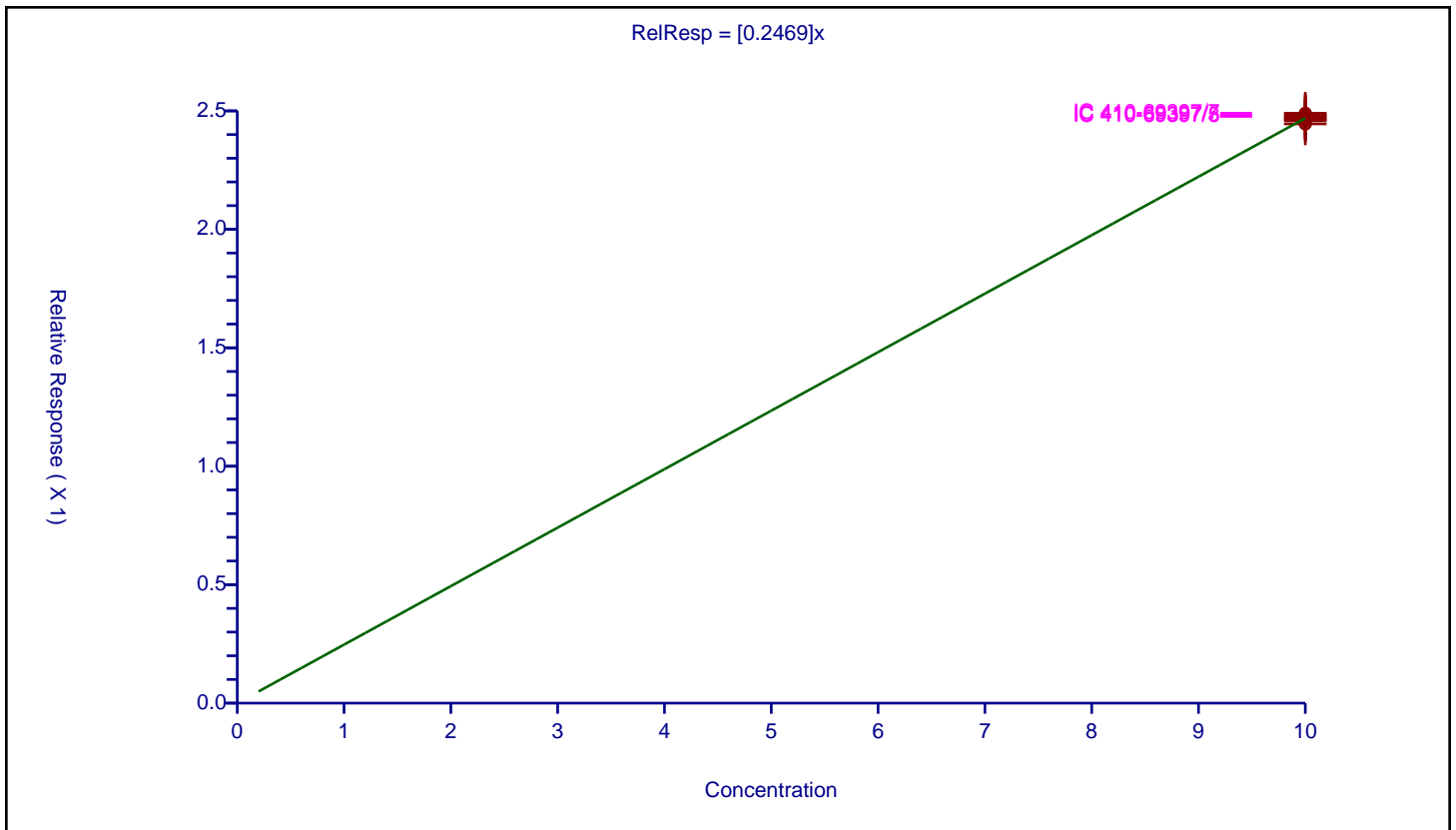
**Calibration**

/ Dibromofluoromethane (Surr)

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2469
Error Coefficients	
Standard Error:	535000
Relative Standard Error:	0.6
Correlation Coefficient:	NA
Coefficient of Determination (Adjusted):	0.000000000000000111

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/3	10.0	2.445152	10.0	2051897.0	0.244515	Y
2	ICIS 410-69397/4	10.0	2.458312	10.0	2065893.0	0.245831	Y
3	IC 410-69397/5	10.0	2.481423	10.0	1978687.0	0.248142	Y
4	IC 410-69397/6	10.0	2.468499	10.0	1976128.0	0.24685	Y
5	IC 410-69397/7	10.0	2.489958	10.0	1986644.0	0.248996	Y
6	IC 410-69397/8	10.0	2.476646	10.0	1995085.0	0.247665	Y
7	IC 410-69397/9	10.0	2.463921	10.0	1980944.0	0.246392	Y



Calibration

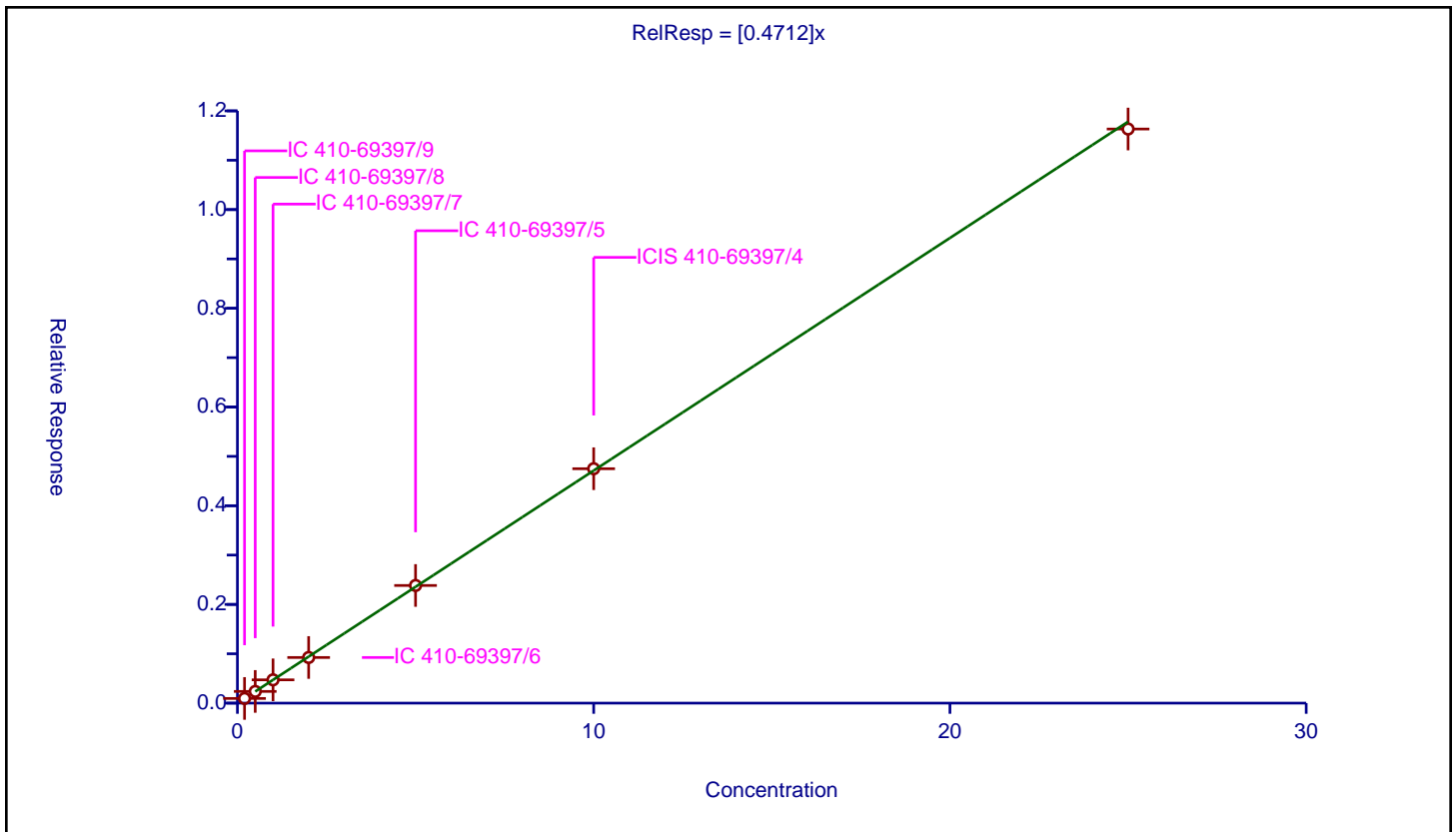
/ 1,1,1-Trichloroethane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4712

Error Coefficients	
Standard Error:	1070000
Relative Standard Error:	1.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.094556	10.0	1980944.0	0.47278	Y
2	IC 410-69397/8	0.5	0.237213	10.0	1995085.0	0.474426	Y
3	IC 410-69397/7	1.0	0.471992	10.0	1986644.0	0.471992	Y
4	IC 410-69397/6	2.0	0.924814	10.0	1976128.0	0.462407	Y
5	IC 410-69397/5	5.0	2.38398	10.0	1978687.0	0.476796	Y
6	ICIS 410-69397/4	10.0	4.749931	10.0	2065893.0	0.474993	Y
7	IC 410-69397/3	25.0	11.632757	10.0	2051897.0	0.46531	Y



Calibration

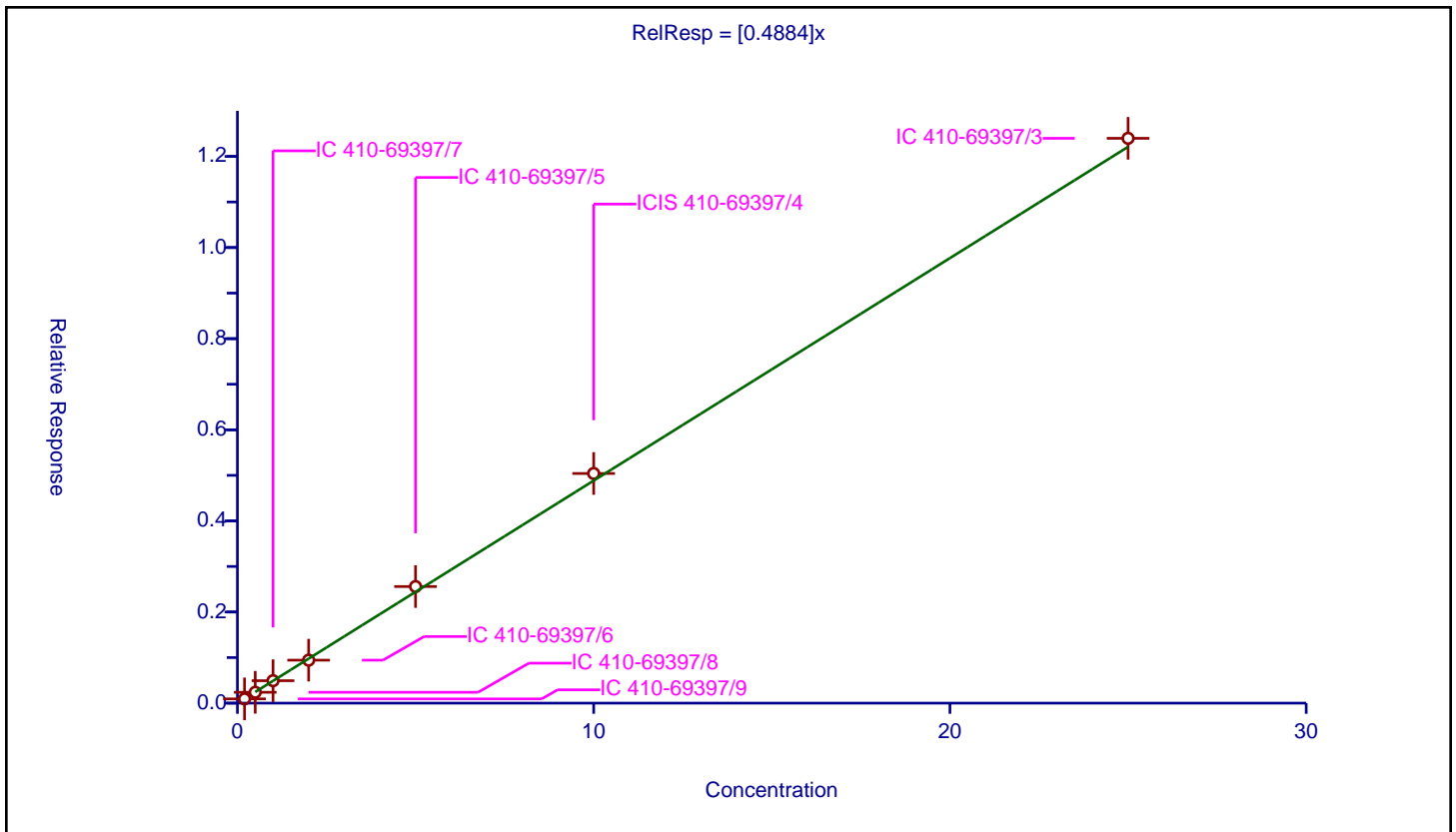
/ Cyclohexane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4884

Error Coefficients	
Standard Error:	1140000
Relative Standard Error:	3.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.093193	10.0	1980944.0	0.465965	Y
2	IC 410-69397/8	0.5	0.238526	10.0	1995085.0	0.477052	Y
3	IC 410-69397/7	1.0	0.492267	10.0	1986644.0	0.492267	Y
4	IC 410-69397/6	2.0	0.943481	10.0	1976128.0	0.471741	Y
5	IC 410-69397/5	5.0	2.559475	10.0	1978687.0	0.511895	Y
6	ICIS 410-69397/4	10.0	5.041055	10.0	2065893.0	0.504105	Y
7	IC 410-69397/3	25.0	12.397845	10.0	2051897.0	0.495914	Y



Calibration

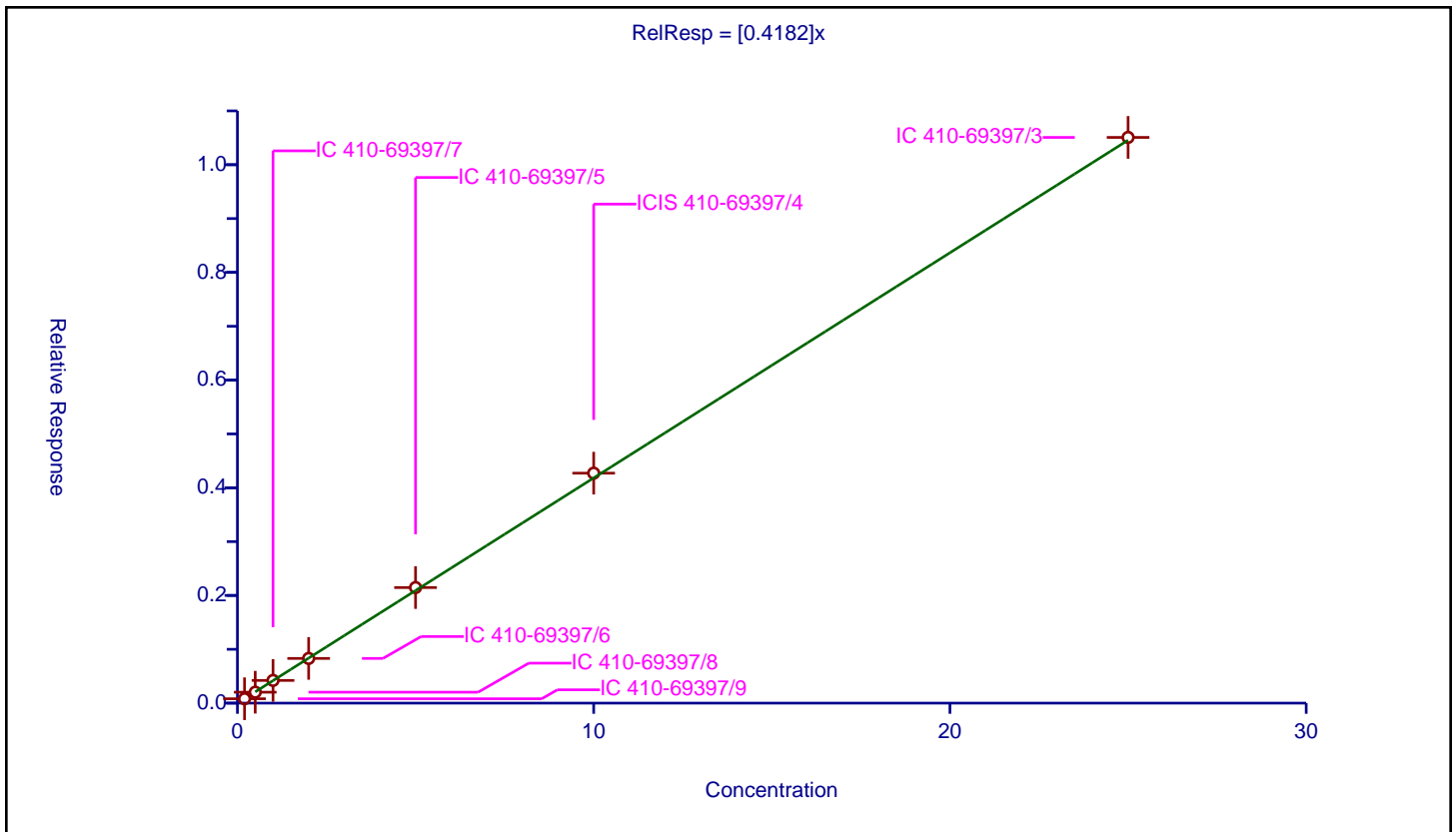
/ 1,1-Dichloropropene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4182

Error Coefficients	
Standard Error:	970000
Relative Standard Error:	2.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.081532	10.0	1980944.0	0.407659	Y
2	IC 410-69397/8	0.5	0.203179	10.0	1995085.0	0.406359	Y
3	IC 410-69397/7	1.0	0.421872	10.0	1986644.0	0.421872	Y
4	IC 410-69397/6	2.0	0.830133	10.0	1976128.0	0.415067	Y
5	IC 410-69397/5	5.0	2.146514	10.0	1978687.0	0.429303	Y
6	ICIS 410-69397/4	10.0	4.27146	10.0	2065893.0	0.427146	Y
7	IC 410-69397/3	25.0	10.507218	10.0	2051897.0	0.420289	Y



**Calibration**

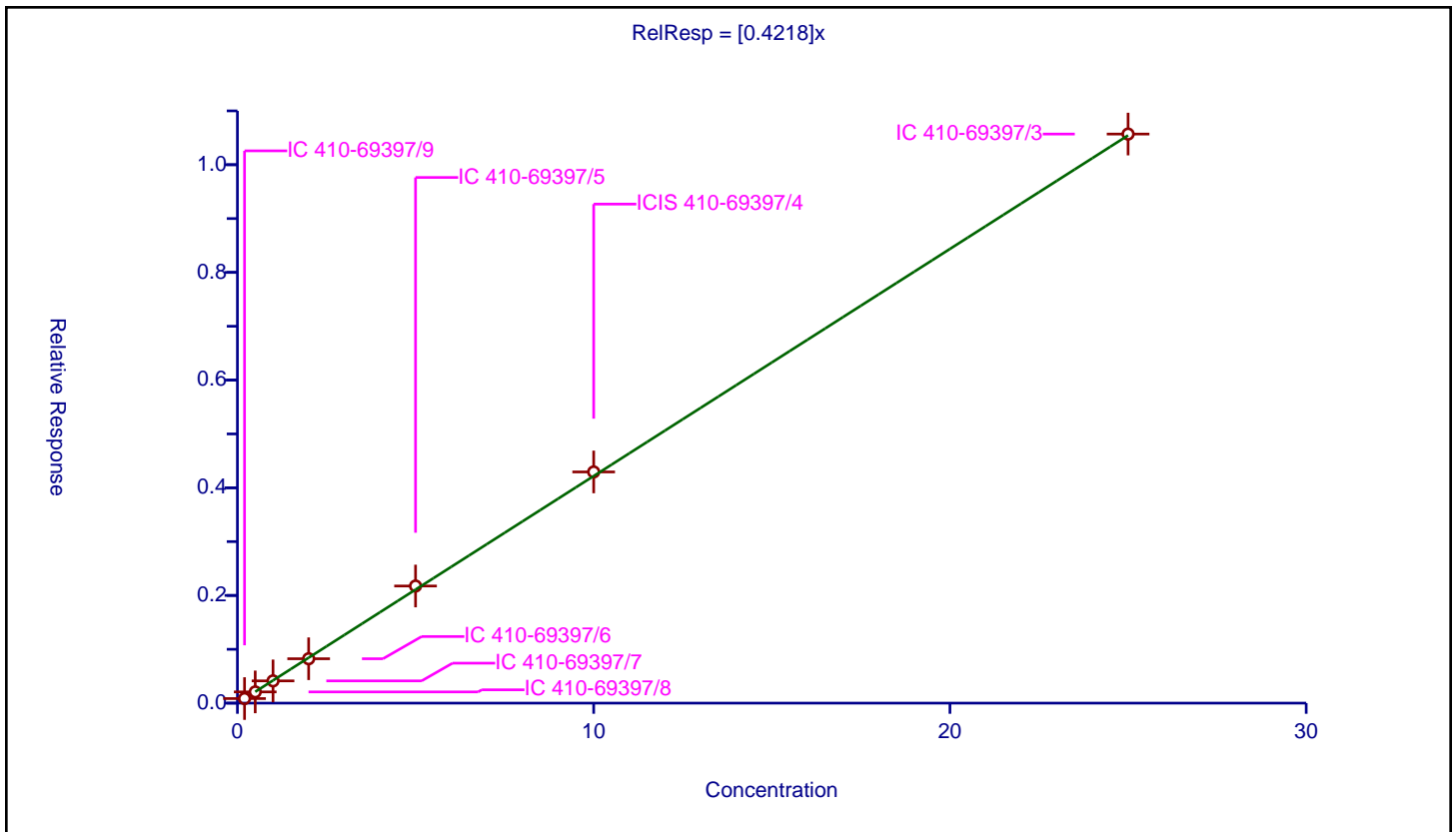
**/ Carbon tetrachloride**

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4218

Error Coefficients	
Standard Error:	976000
Relative Standard Error:	2.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.084641	10.0	1980944.0	0.423207	Y
2	IC 410-69397/8	0.5	0.208317	10.0	1995085.0	0.416634	Y
3	IC 410-69397/7	1.0	0.413255	10.0	1986644.0	0.413255	Y
4	IC 410-69397/6	2.0	0.824435	10.0	1976128.0	0.412218	Y
5	IC 410-69397/5	5.0	2.175256	10.0	1978687.0	0.435051	Y
6	ICIS 410-69397/4	10.0	4.294322	10.0	2065893.0	0.429432	Y
7	IC 410-69397/3	25.0	10.569848	10.0	2051897.0	0.422794	Y



**Calibration**

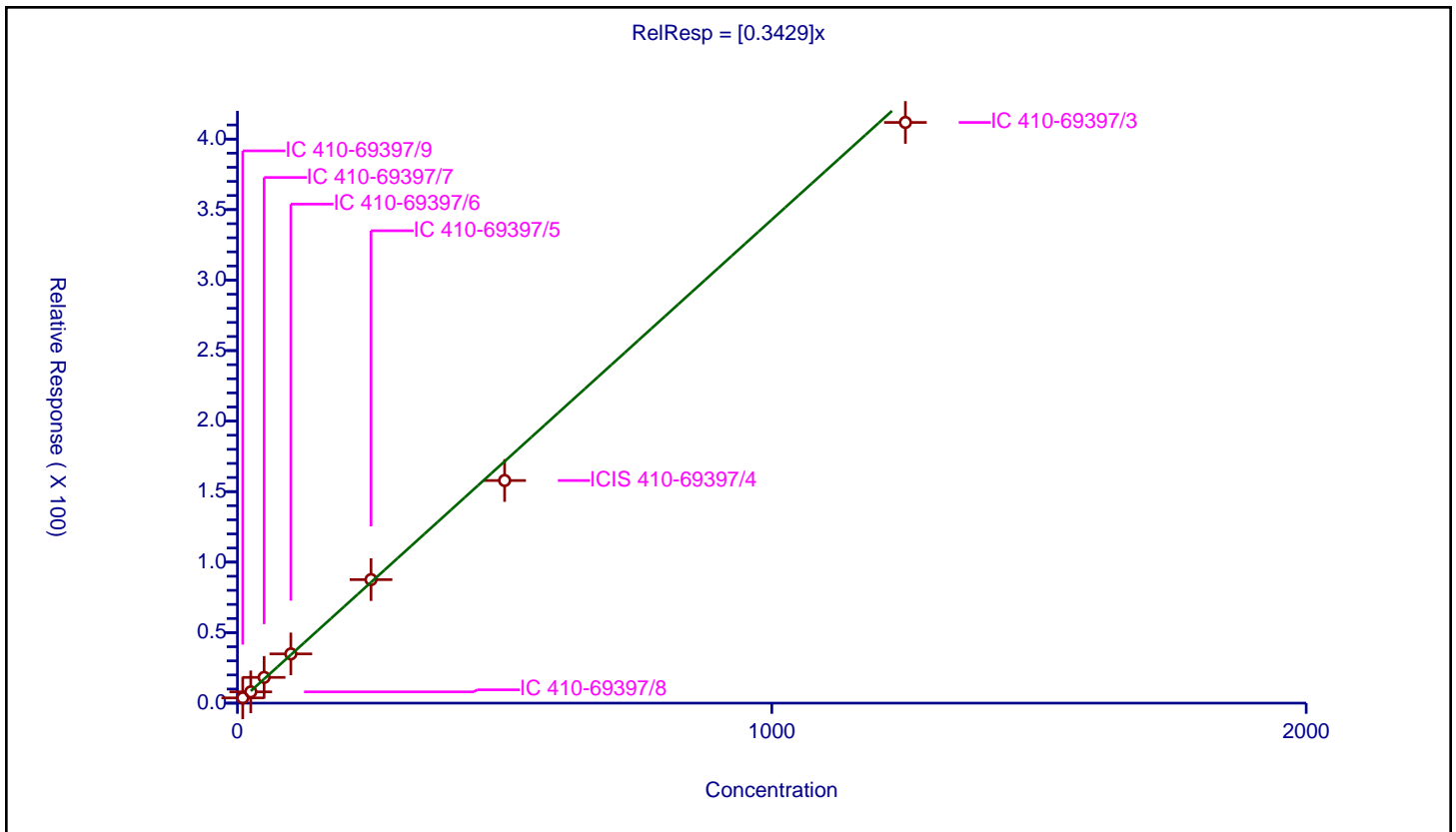
/ Isobutyl alcohol

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3429

Error Coefficients	
Standard Error:	622000
Relative Standard Error:	6.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	10.0	3.703986	50.0	157506.0	0.370399	Y
2	IC 410-69397/8	25.0	8.000613	50.0	156713.0	0.320025	Y
3	IC 410-69397/7	50.0	18.259653	50.0	155400.0	0.365193	Y
4	IC 410-69397/6	100.0	34.907322	50.0	164063.0	0.349073	Y
5	IC 410-69397/5	250.0	87.583895	50.0	167919.0	0.350336	Y
6	ICIS 410-69397/4	500.0	157.866546	50.0	174562.0	0.315733	Y
7	IC 410-69397/3	1250.0	411.794232	50.0	168044.0	0.329435	Y





**Calibration**

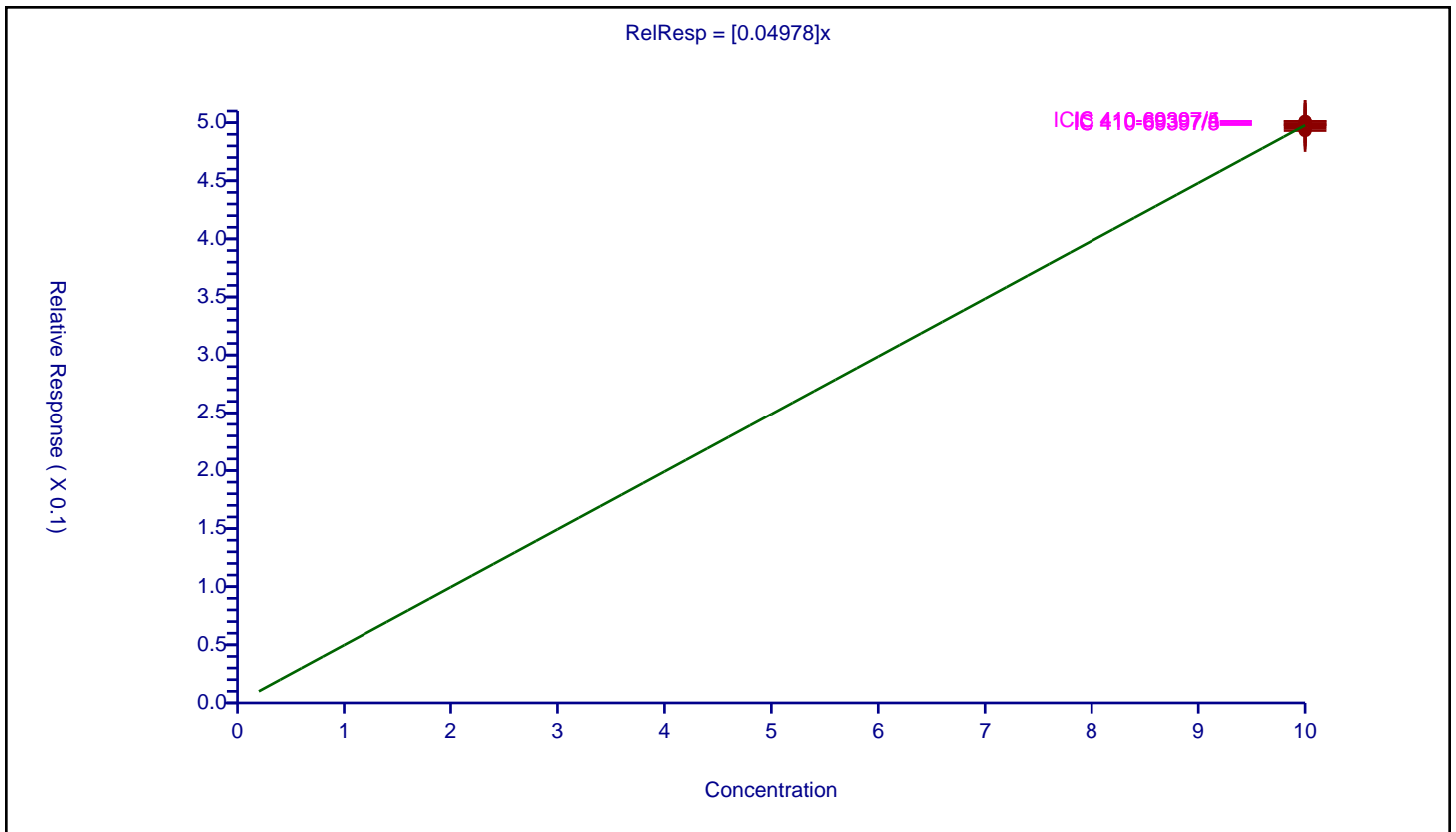
/ 1,2-Dichloroethane-d4 (Surr)

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.04978

Error Coefficients	
Standard Error:	108000
Relative Standard Error:	0.6
Correlation Coefficient:	0.00000000000000000000
Coefficient of Determination (Adjusted):	0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/3	10.0	0.498587	10.0	2051897.0	0.049859	Y
2	ICIS 410-69397/4	10.0	0.50095	10.0	2065893.0	0.050095	Y
3	IC 410-69397/5	10.0	0.50111	10.0	1978687.0	0.050111	Y
4	IC 410-69397/6	10.0	0.497108	10.0	1976128.0	0.049711	Y
5	IC 410-69397/7	10.0	0.493204	10.0	1986644.0	0.04932	Y
6	IC 410-69397/8	10.0	0.49845	10.0	1995085.0	0.049845	Y
7	IC 410-69397/9	10.0	0.495314	10.0	1980944.0	0.049531	Y



Calibration

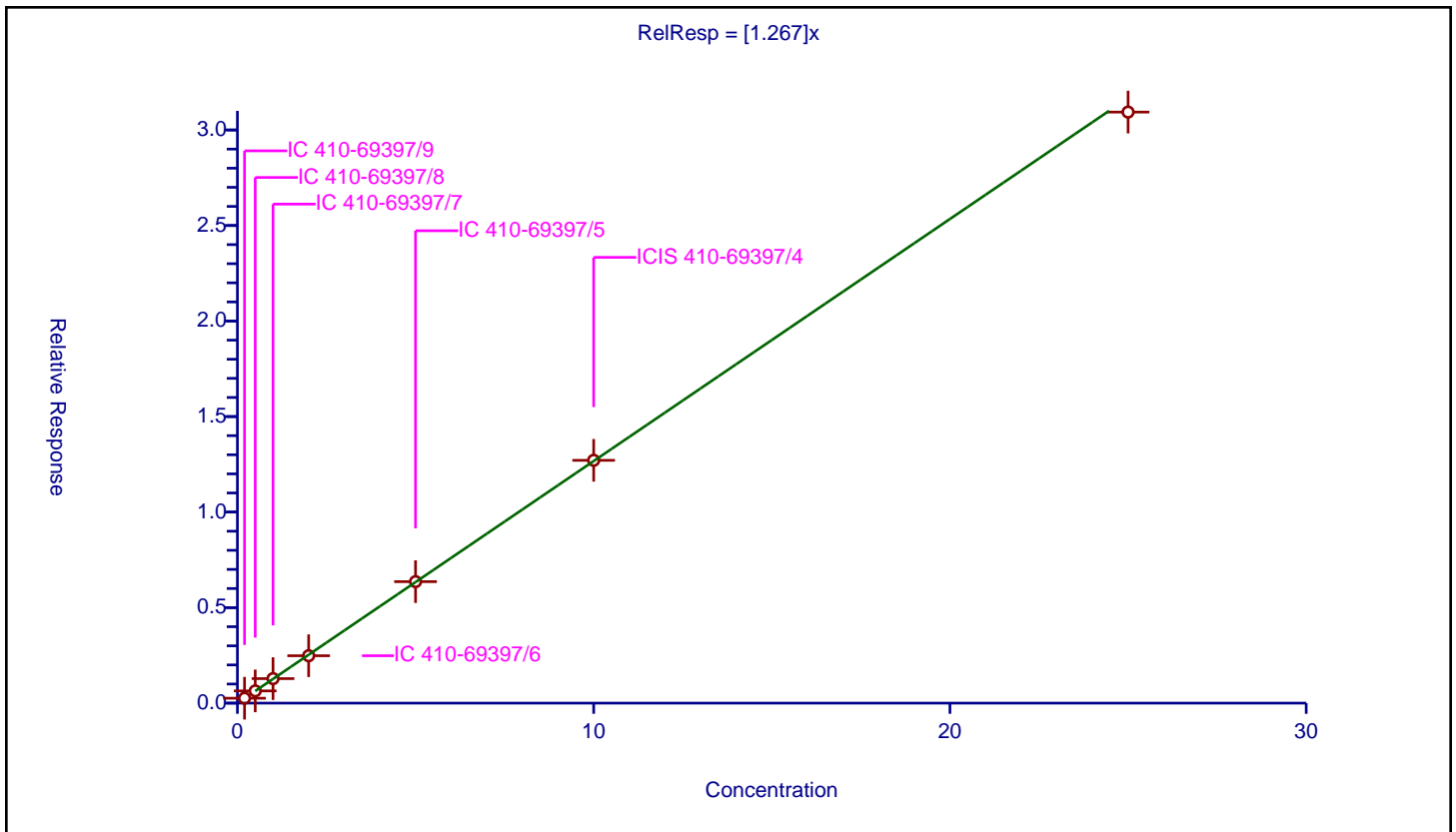
/ Benzene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.267

Error Coefficients	
Standard Error:	2860000
Relative Standard Error:	1.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.256721	10.0	1980944.0	1.283605	Y
2	IC 410-69397/8	0.5	0.640745	10.0	1995085.0	1.281489	Y
3	IC 410-69397/7	1.0	1.283713	10.0	1986644.0	1.283713	Y
4	IC 410-69397/6	2.0	2.480406	10.0	1976128.0	1.240203	Y
5	IC 410-69397/5	5.0	6.358985	10.0	1978687.0	1.271797	Y
6	ICIS 410-69397/4	10.0	12.70986	10.0	2065893.0	1.270986	Y
7	IC 410-69397/3	25.0	30.937708	10.0	2051897.0	1.237508	Y



Calibration

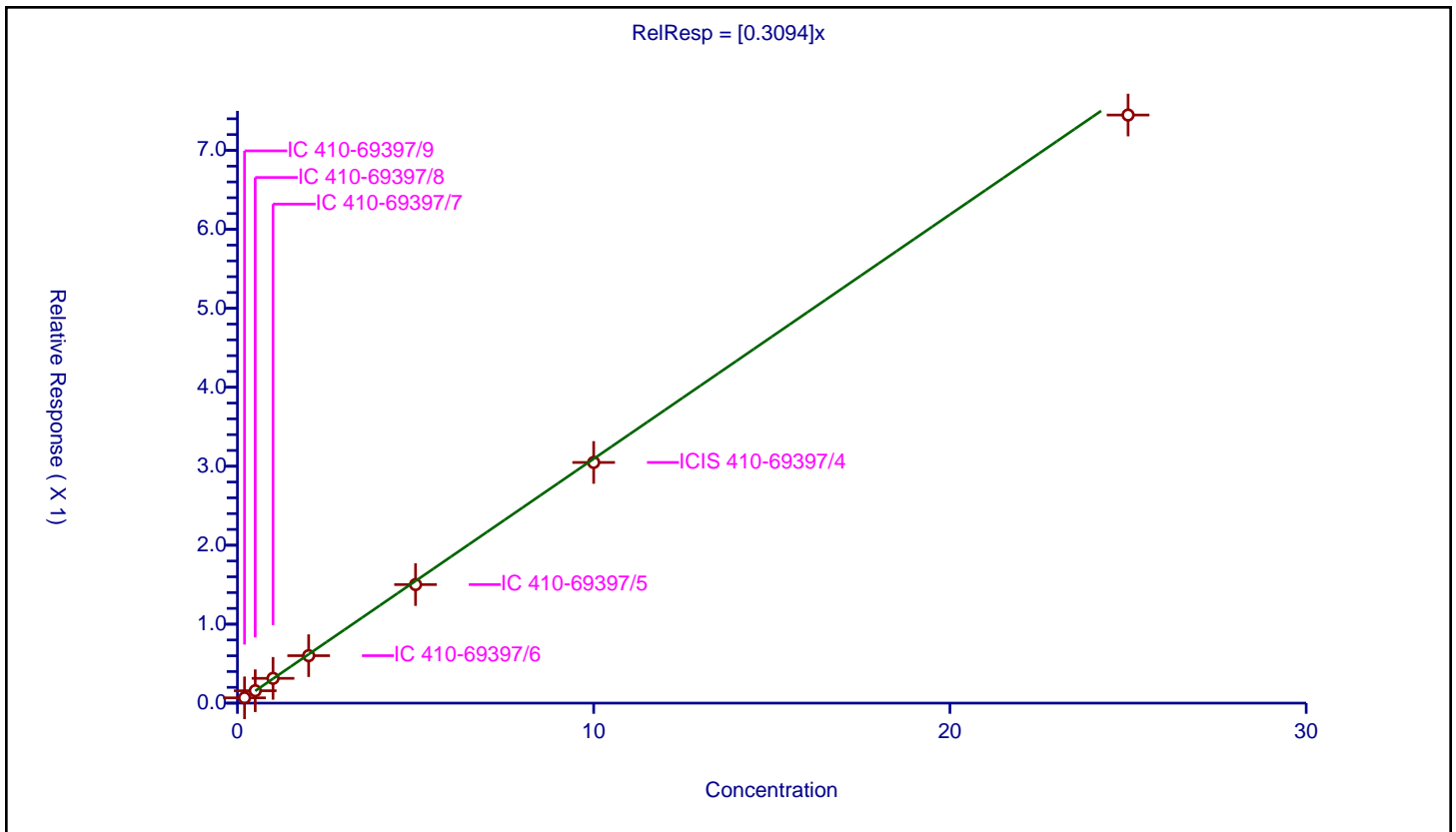
/ 1,2-Dichloroethane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3094

Error Coefficients	
Standard Error:	688000
Relative Standard Error:	4.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.066822	10.0	1980944.0	0.334108	Y
2	IC 410-69397/8	0.5	0.157061	10.0	1995085.0	0.314122	Y
3	IC 410-69397/7	1.0	0.313866	10.0	1986644.0	0.313866	Y
4	IC 410-69397/6	2.0	0.600867	10.0	1976128.0	0.300433	Y
5	IC 410-69397/5	5.0	1.501369	10.0	1978687.0	0.300274	Y
6	ICIS 410-69397/4	10.0	3.047912	10.0	2065893.0	0.304791	Y
7	IC 410-69397/3	25.0	7.447723	10.0	2051897.0	0.297909	Y



**Calibration**

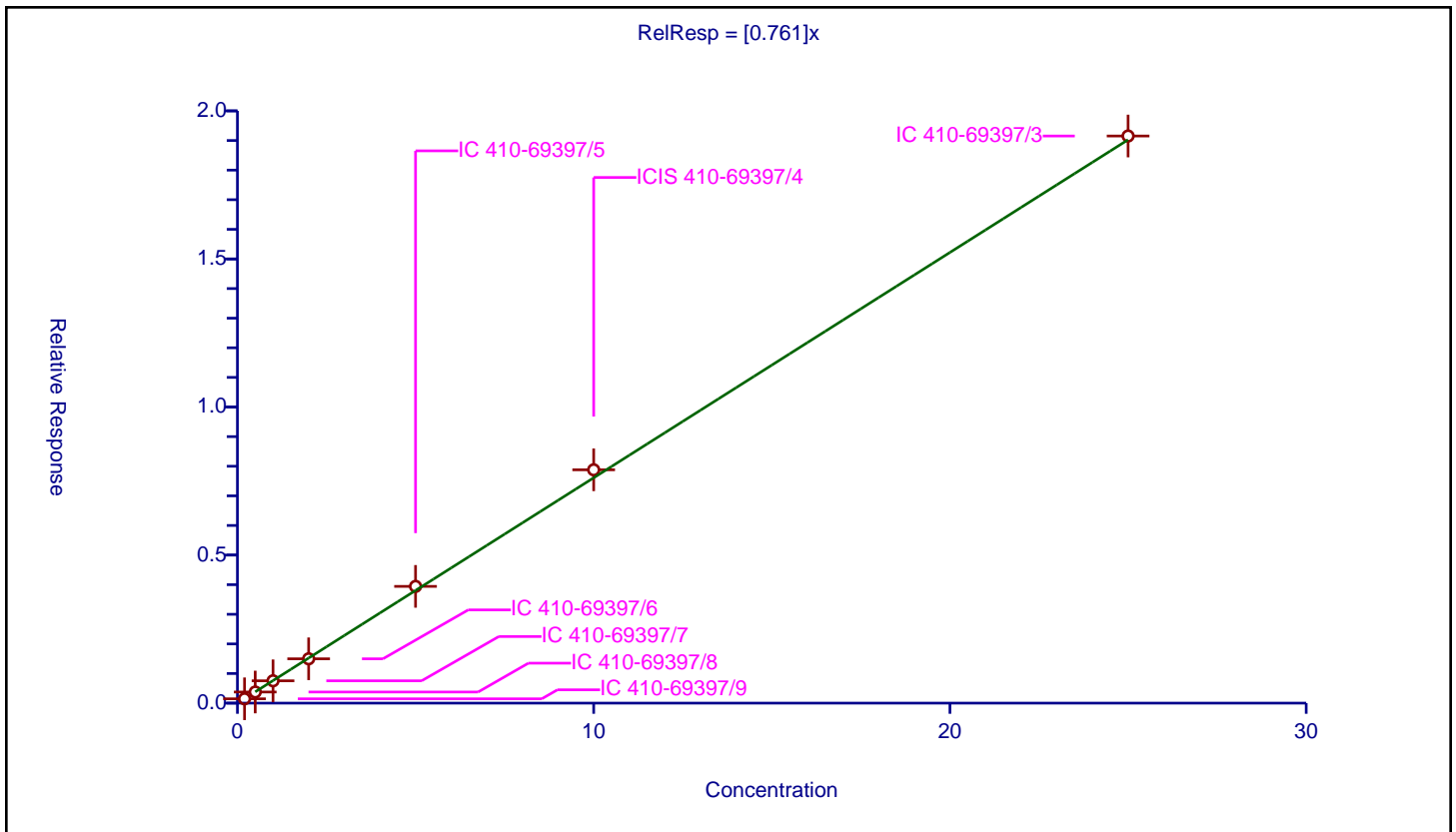
/ Tert-amyl methyl ether

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.761

Error Coefficients	
Standard Error:	1770000
Relative Standard Error:	2.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.146117	10.0	1980944.0	0.730586	Y
2	IC 410-69397/8	0.5	0.375698	10.0	1995085.0	0.751397	Y
3	IC 410-69397/7	1.0	0.753945	10.0	1986644.0	0.753945	Y
4	IC 410-69397/6	2.0	1.497104	10.0	1976128.0	0.748552	Y
5	IC 410-69397/5	5.0	3.942195	10.0	1978687.0	0.788439	Y
6	ICIS 410-69397/4	10.0	7.87975	10.0	2065893.0	0.787975	Y
7	IC 410-69397/3	25.0	19.151444	10.0	2051897.0	0.766058	Y



Calibration

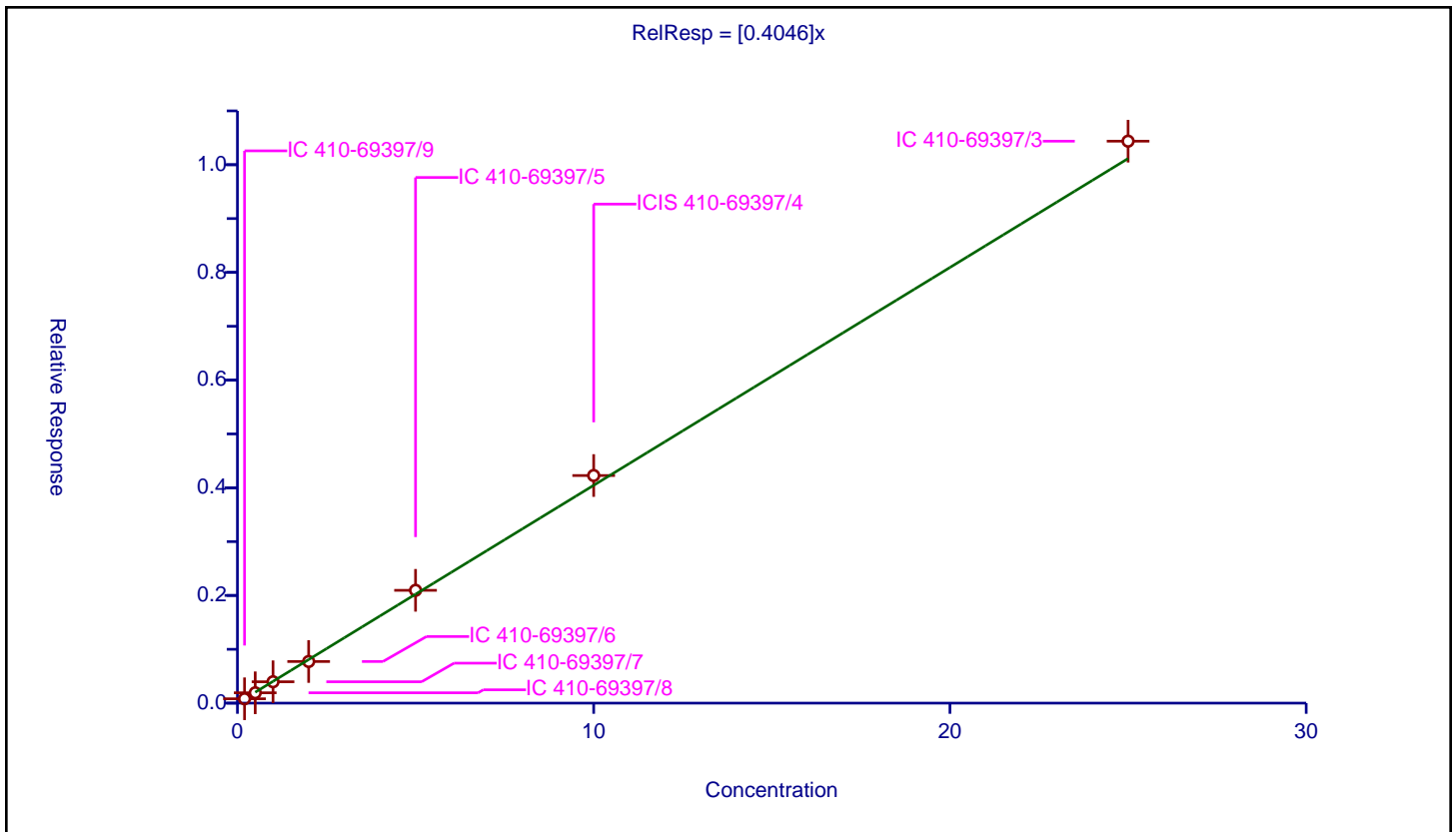
/ n-Heptane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4046

Error Coefficients	
Standard Error:	962000
Relative Standard Error:	3.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.081007	10.0	1980944.0	0.405034	Y
2	IC 410-69397/8	0.5	0.192222	10.0	1995085.0	0.384445	Y
3	IC 410-69397/7	1.0	0.396845	10.0	1986644.0	0.396845	Y
4	IC 410-69397/6	2.0	0.773052	10.0	1976128.0	0.386526	Y
5	IC 410-69397/5	5.0	2.095304	10.0	1978687.0	0.419061	Y
6	ICIS 410-69397/4	10.0	4.227523	10.0	2065893.0	0.422752	Y
7	IC 410-69397/3	25.0	10.437761	10.0	2051897.0	0.41751	Y



Calibration

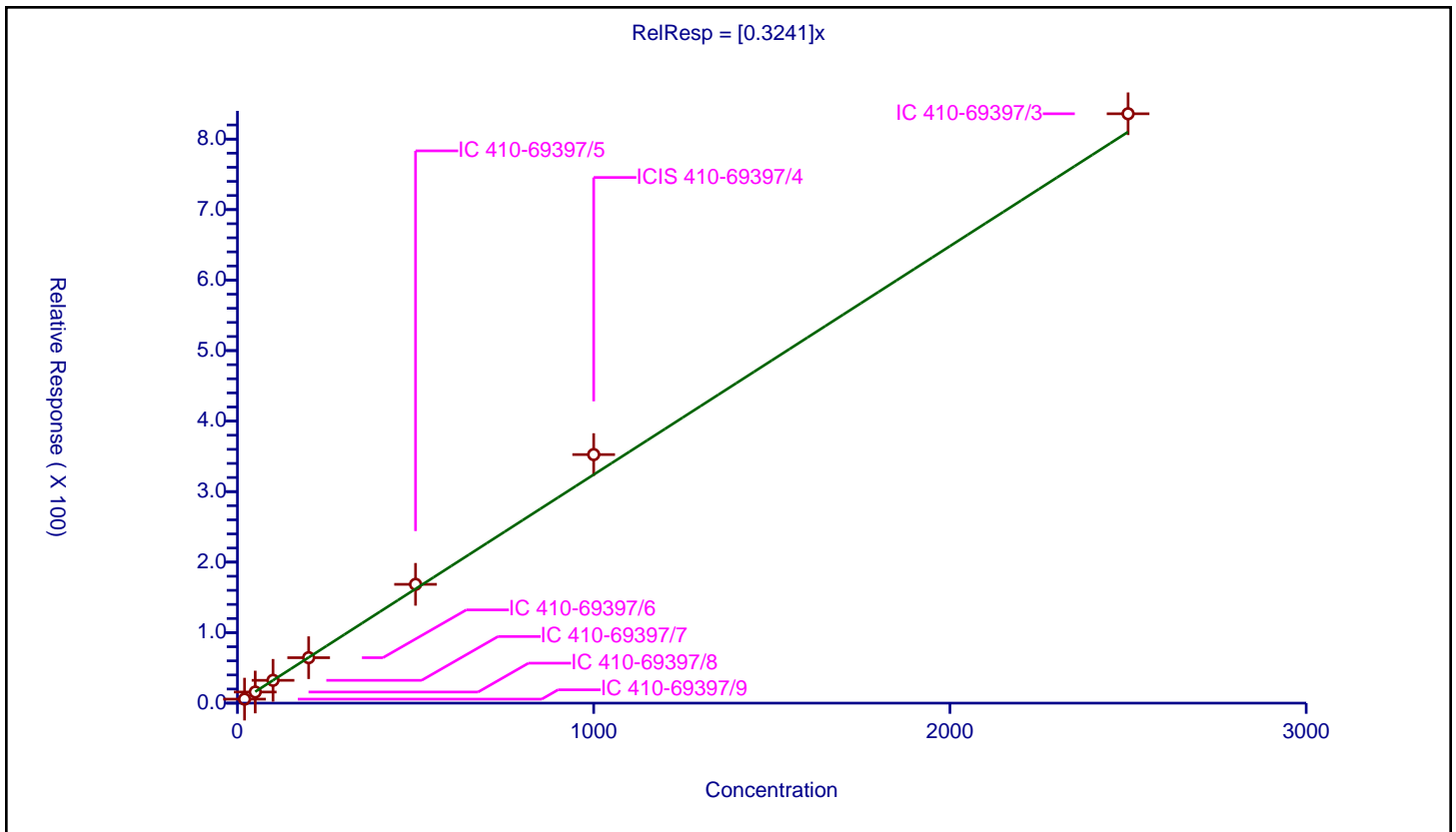
/ n-Butanol

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3241

Error Coefficients	
Standard Error:	1280000
Relative Standard Error:	6.7
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	20.0	5.66899	50.0	157506.0	0.28345	Y
2	IC 410-69397/8	50.0	15.765763	50.0	156713.0	0.315315	Y
3	IC 410-69397/7	100.0	32.367439	50.0	155400.0	0.323674	Y
4	IC 410-69397/6	200.0	64.450242	50.0	164063.0	0.322251	Y
5	IC 410-69397/5	500.0	168.482721	50.0	167919.0	0.336965	Y
6	ICIS 410-69397/4	1000.0	352.527182	50.0	174562.0	0.352527	Y
7	IC 410-69397/3	2500.0	835.938504	50.0	168044.0	0.334375	Y



Calibration

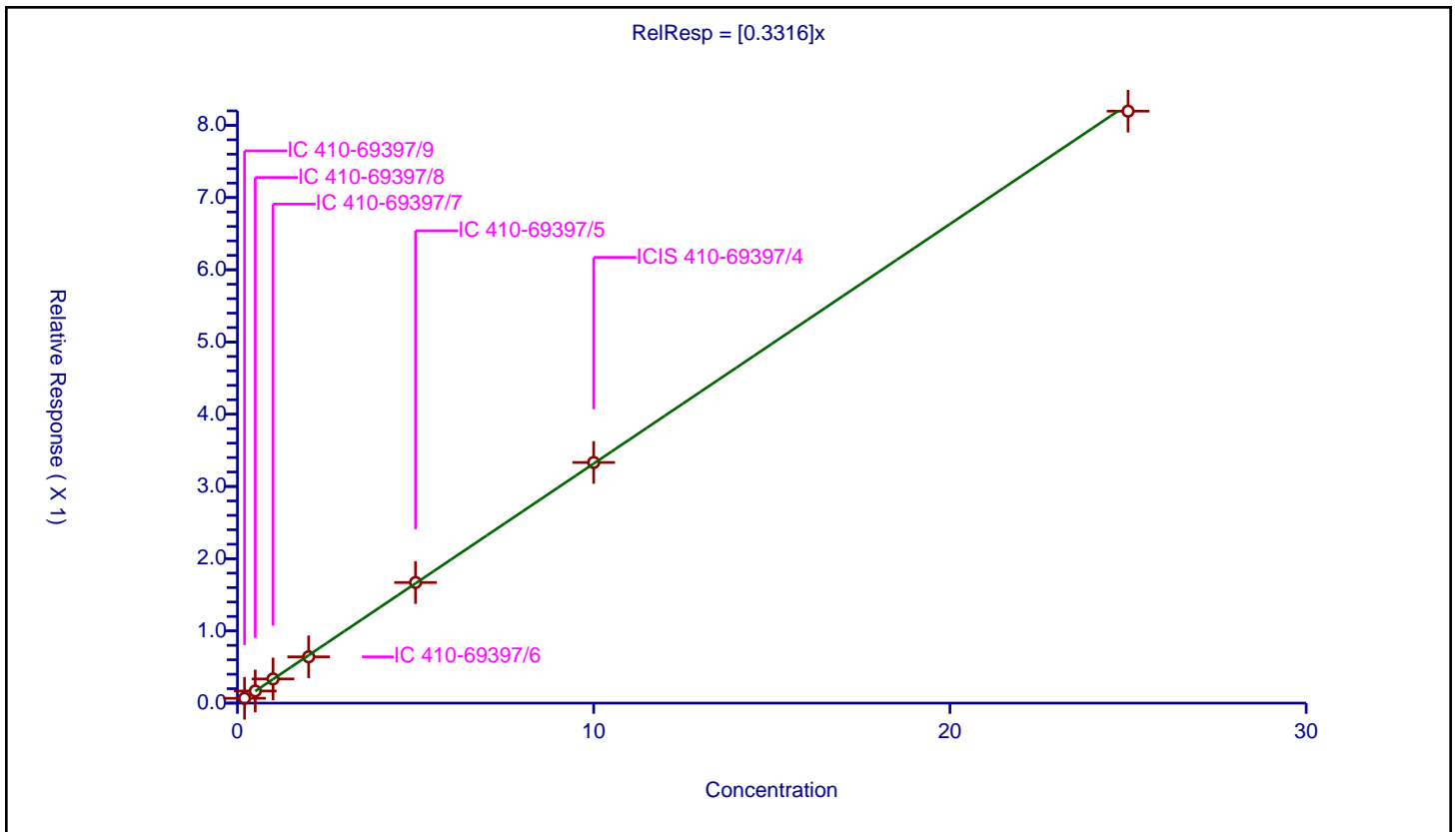
/ Trichloroethene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3316

Error Coefficients	
Standard Error:	756000
Relative Standard Error:	1.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.067003	10.0	1980944.0	0.335017	Y
2	IC 410-69397/8	0.5	0.167837	10.0	1995085.0	0.335675	Y
3	IC 410-69397/7	1.0	0.335163	10.0	1986644.0	0.335163	Y
4	IC 410-69397/6	2.0	0.641122	10.0	1976128.0	0.320561	Y
5	IC 410-69397/5	5.0	1.67037	10.0	1978687.0	0.334074	Y
6	ICIS 410-69397/4	10.0	3.332026	10.0	2065893.0	0.333203	Y
7	IC 410-69397/3	25.0	8.196211	10.0	2051897.0	0.327848	Y



Calibration

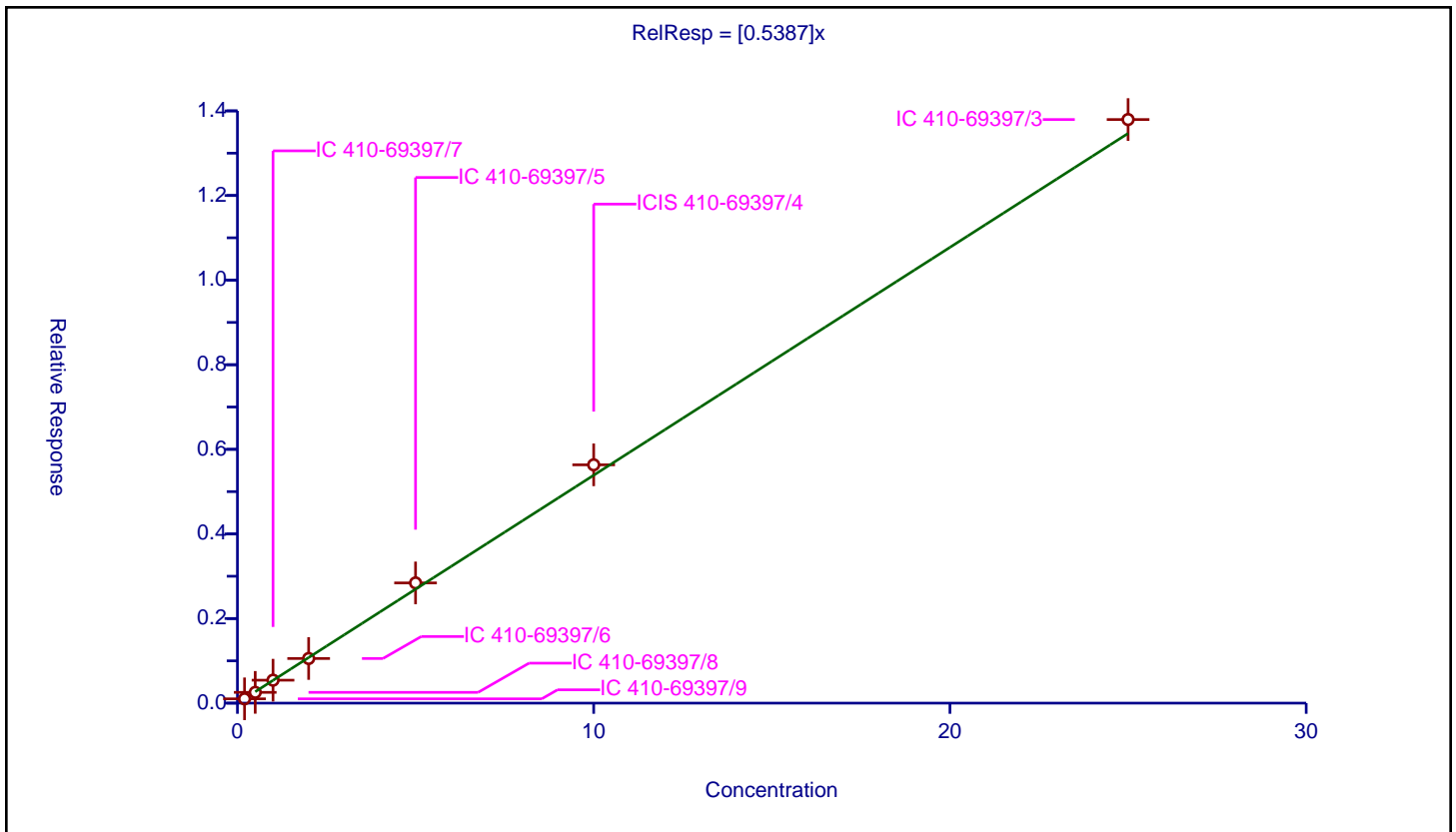
/ Methylcyclohexane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.5387

Error Coefficients	
Standard Error:	1270000
Relative Standard Error:	4.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.101467	10.0	1980944.0	0.507334	Y
2	IC 410-69397/8	0.5	0.254937	10.0	1995085.0	0.509873	Y
3	IC 410-69397/7	1.0	0.542674	10.0	1986644.0	0.542674	Y
4	IC 410-69397/6	2.0	1.055083	10.0	1976128.0	0.527542	Y
5	IC 410-69397/5	5.0	2.841869	10.0	1978687.0	0.568374	Y
6	ICIS 410-69397/4	10.0	5.63322	10.0	2065893.0	0.563322	Y
7	IC 410-69397/3	25.0	13.795561	10.0	2051897.0	0.551822	Y





Calibration

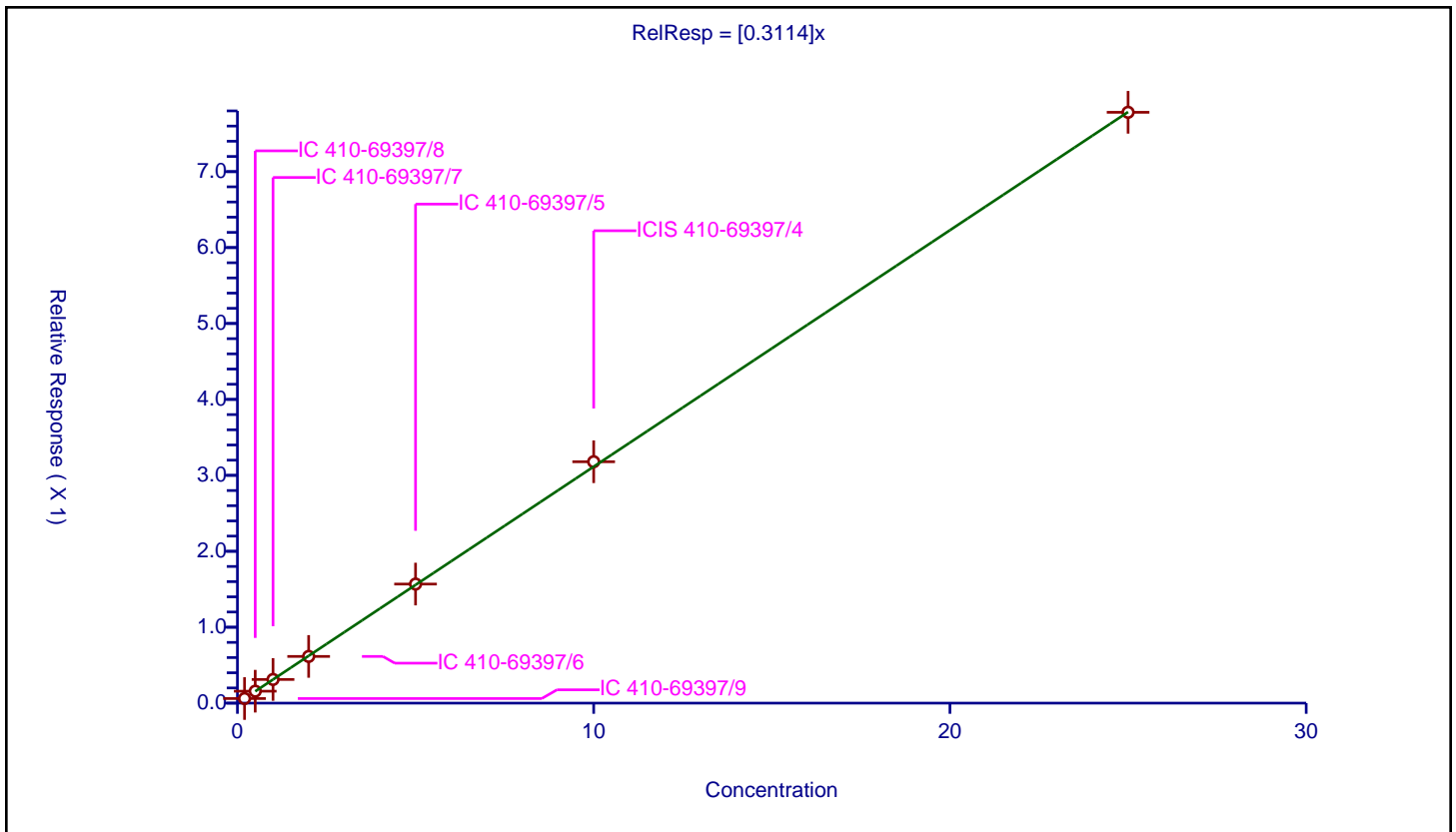
/ 1,2-Dichloropropane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3114

Error Coefficients	
Standard Error:	718000
Relative Standard Error:	1.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.060623	10.0	1980944.0	0.303113	Y
2	IC 410-69397/8	0.5	0.157322	10.0	1995085.0	0.314643	Y
3	IC 410-69397/7	1.0	0.311807	10.0	1986644.0	0.311807	Y
4	IC 410-69397/6	2.0	0.615193	10.0	1976128.0	0.307596	Y
5	IC 410-69397/5	5.0	1.568166	10.0	1978687.0	0.313633	Y
6	ICIS 410-69397/4	10.0	3.17908	10.0	2065893.0	0.317908	Y
7	IC 410-69397/3	25.0	7.781385	10.0	2051897.0	0.311255	Y



**Calibration**

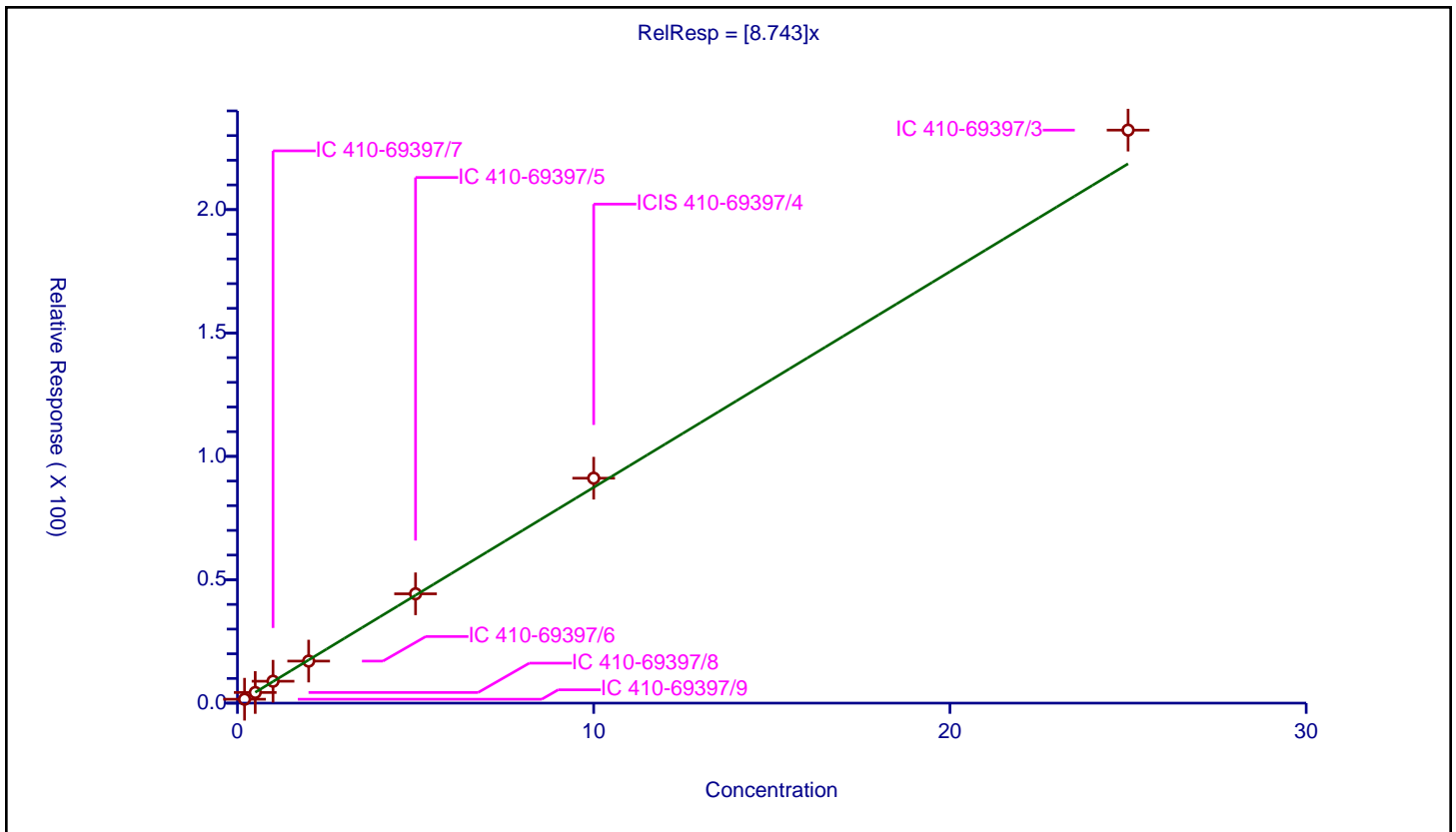
/ Methyl methacrylate

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	8.743

Error Coefficients	
Standard Error:	350000
Relative Standard Error:	5.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	1.583114	50.0	157506.0	7.915571	Y
2	IC 410-69397/8	0.5	4.31298	50.0	156713.0	8.62596	Y
3	IC 410-69397/7	1.0	8.879344	50.0	155400.0	8.879344	Y
4	IC 410-69397/6	2.0	17.035834	50.0	164063.0	8.517917	Y
5	IC 410-69397/5	5.0	44.295166	50.0	167919.0	8.859033	Y
6	ICIS 410-69397/4	10.0	91.157869	50.0	174562.0	9.115787	Y
7	IC 410-69397/3	25.0	232.212099	50.0	168044.0	9.288484	Y



Calibration

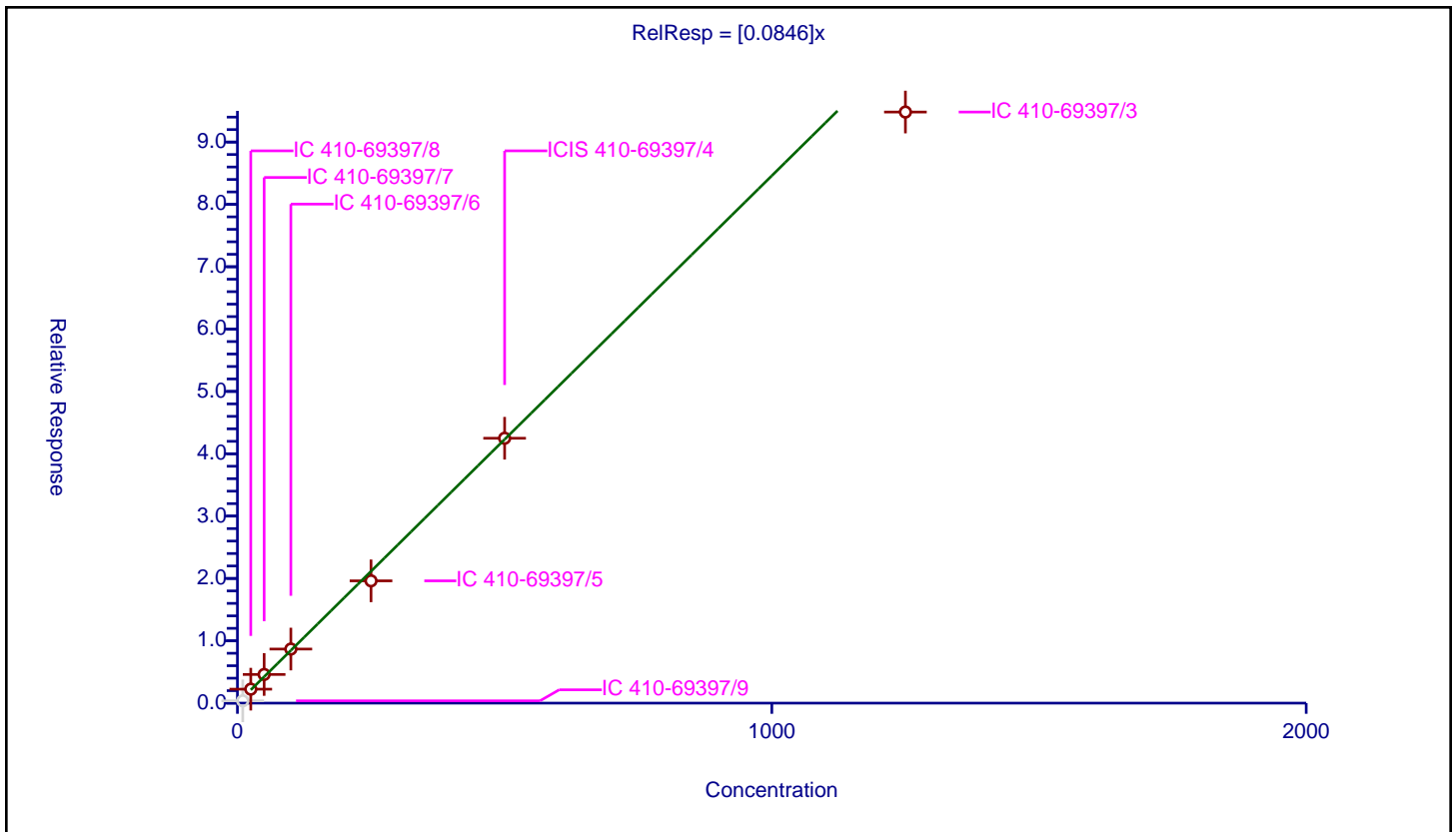
/ 1,4-Dioxane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.0846

Error Coefficients	
Standard Error:	161000
Relative Standard Error:	7.4
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	10.0	0.371414	50.0	157506.0	0.037141	N
2	IC 410-69397/8	25.0	2.24072	50.0	156713.0	0.089629	Y
3	IC 410-69397/7	50.0	4.59749	50.0	155400.0	0.09195	Y
4	IC 410-69397/6	100.0	8.672888	50.0	164063.0	0.086729	Y
5	IC 410-69397/5	250.0	19.617792	50.0	167919.0	0.078471	Y
6	ICIS 410-69397/4	500.0	42.490634	50.0	174562.0	0.084981	Y
7	IC 410-69397/3	1250.0	94.815048	50.0	168044.0	0.075852	Y



**Calibration**

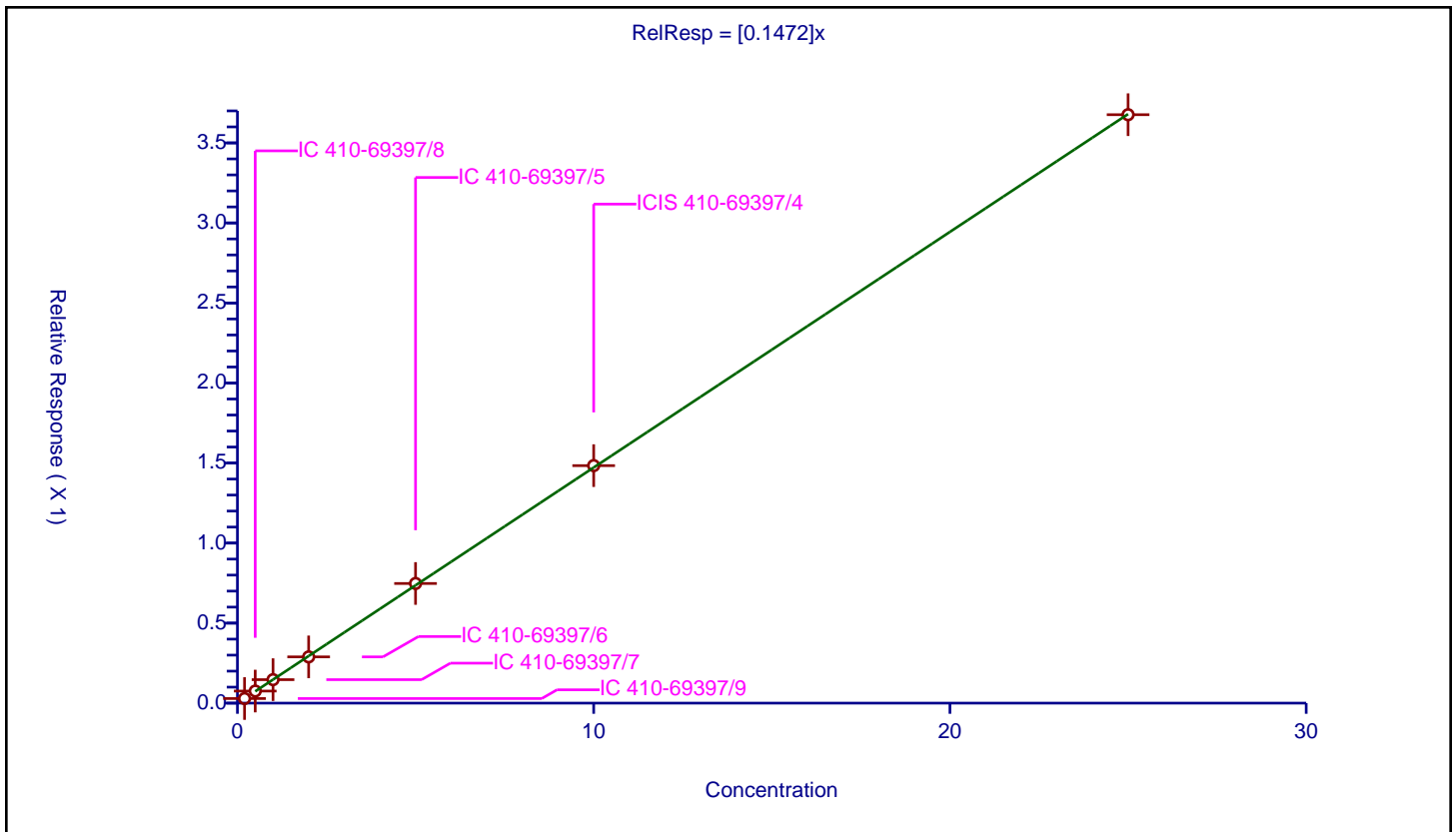
/ Dibromomethane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.1472

Error Coefficients	
Standard Error:	339000
Relative Standard Error:	1.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.028668	10.0	1980944.0	0.143341	Y
2	IC 410-69397/8	0.5	0.075501	10.0	1995085.0	0.151001	Y
3	IC 410-69397/7	1.0	0.146674	10.0	1986644.0	0.146674	Y
4	IC 410-69397/6	2.0	0.288903	10.0	1976128.0	0.144452	Y
5	IC 410-69397/5	5.0	0.747571	10.0	1978687.0	0.149514	Y
6	ICIS 410-69397/4	10.0	1.483823	10.0	2065893.0	0.148382	Y
7	IC 410-69397/3	25.0	3.676286	10.0	2051897.0	0.147051	Y



Calibration

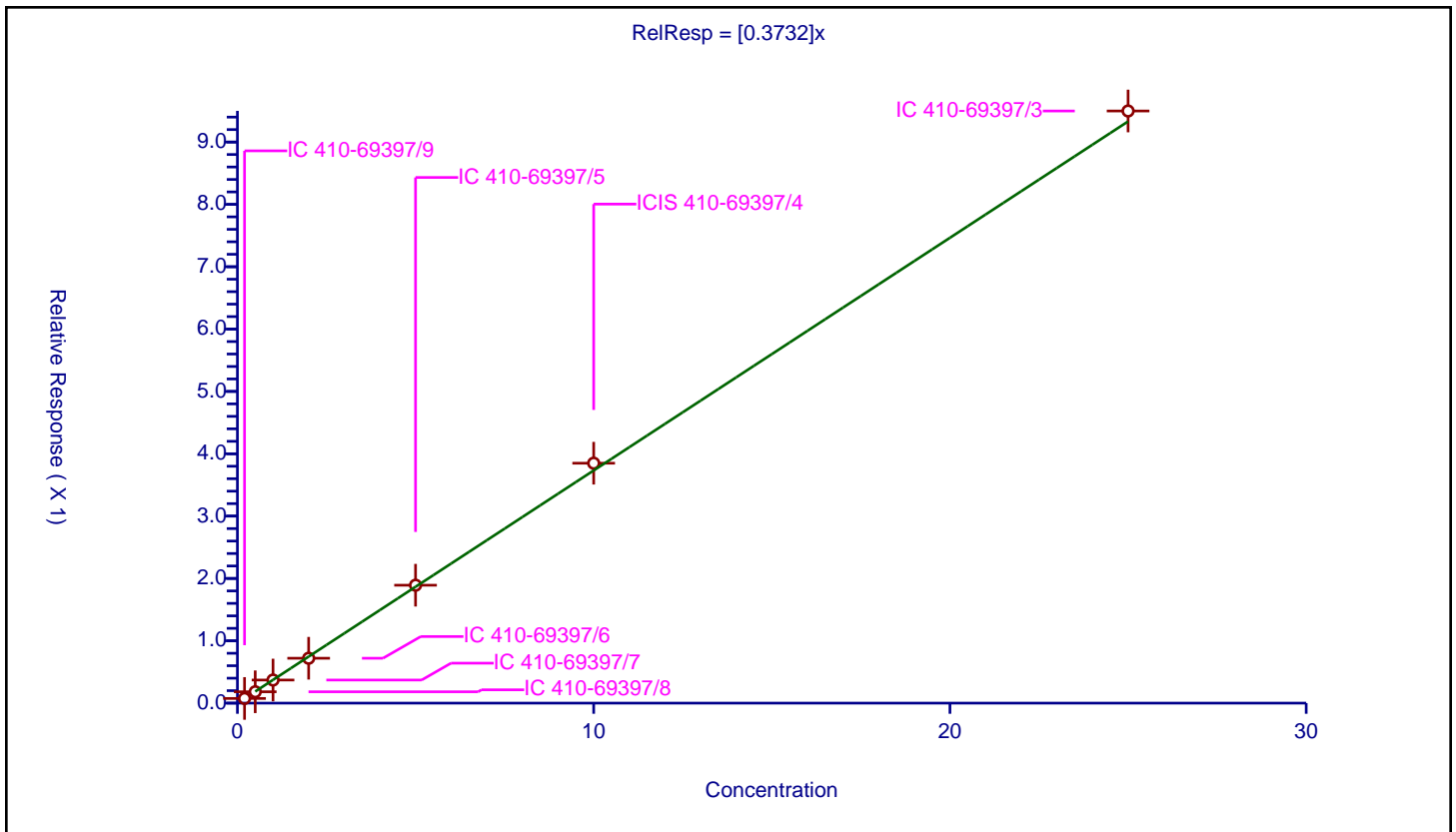
/ Dichlorobromomethane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3732

Error Coefficients	
Standard Error:	875000
Relative Standard Error:	2.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.074813	10.0	1980944.0	0.374064	Y
2	IC 410-69397/8	0.5	0.182258	10.0	1995085.0	0.364516	Y
3	IC 410-69397/7	1.0	0.370726	10.0	1986644.0	0.370726	Y
4	IC 410-69397/6	2.0	0.720267	10.0	1976128.0	0.360134	Y
5	IC 410-69397/5	5.0	1.891603	10.0	1978687.0	0.378321	Y
6	ICIS 410-69397/4	10.0	3.848694	10.0	2065893.0	0.384869	Y
7	IC 410-69397/3	25.0	9.498381	10.0	2051897.0	0.379935	Y



Calibration

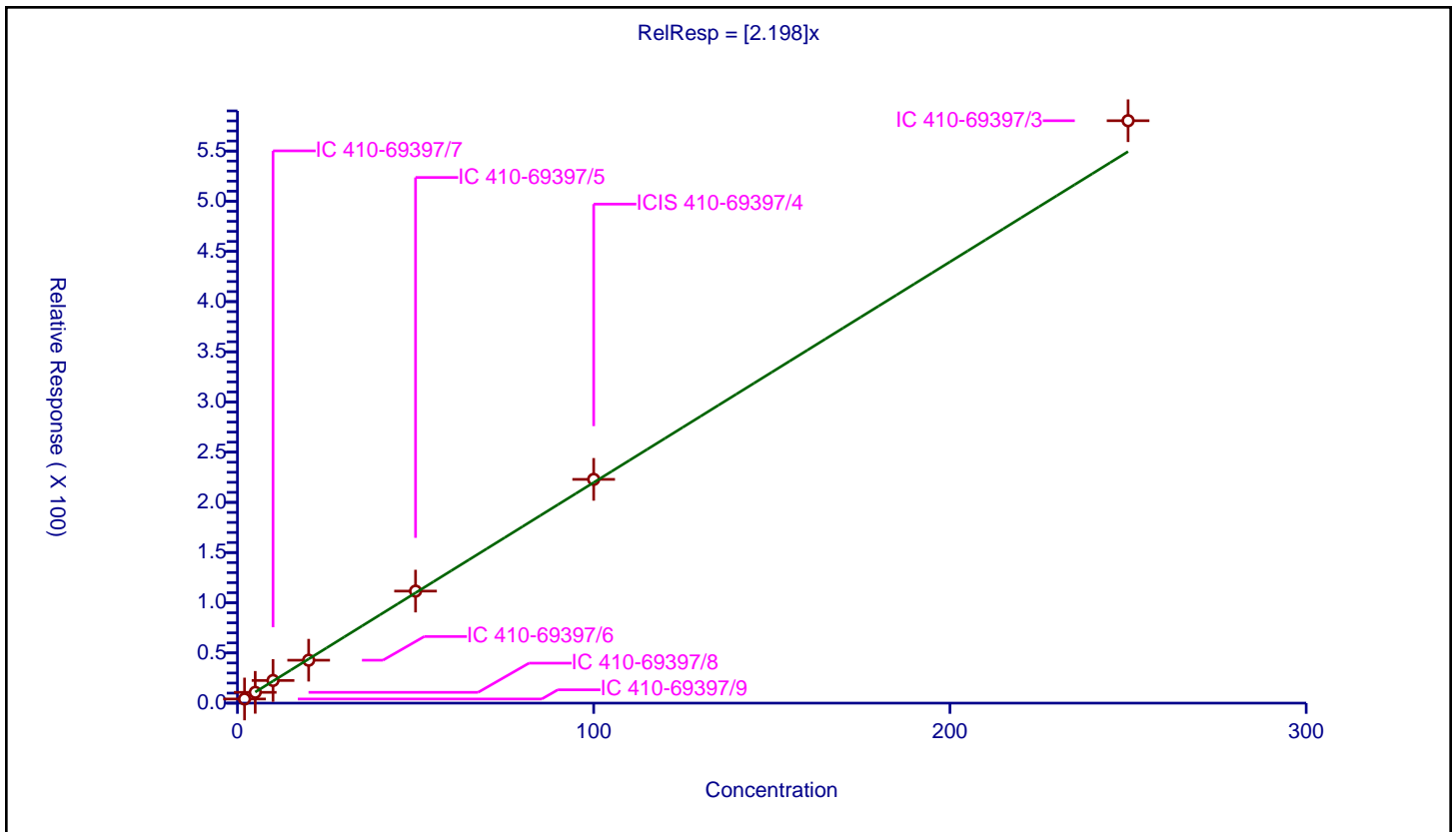
/ 2-Nitropropane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	2.198

Error Coefficients	
Standard Error:	873000
Relative Standard Error:	4.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	2.0	4.115081	50.0	157506.0	2.057541	Y
2	IC 410-69397/8	5.0	10.762668	50.0	156713.0	2.152534	Y
3	IC 410-69397/7	10.0	22.556306	50.0	155400.0	2.255631	Y
4	IC 410-69397/6	20.0	42.746079	50.0	164063.0	2.137304	Y
5	IC 410-69397/5	50.0	111.617506	50.0	167919.0	2.23235	Y
6	ICIS 410-69397/4	100.0	222.917359	50.0	174562.0	2.229174	Y
7	IC 410-69397/3	250.0	580.216193	50.0	168044.0	2.320865	Y



Calibration

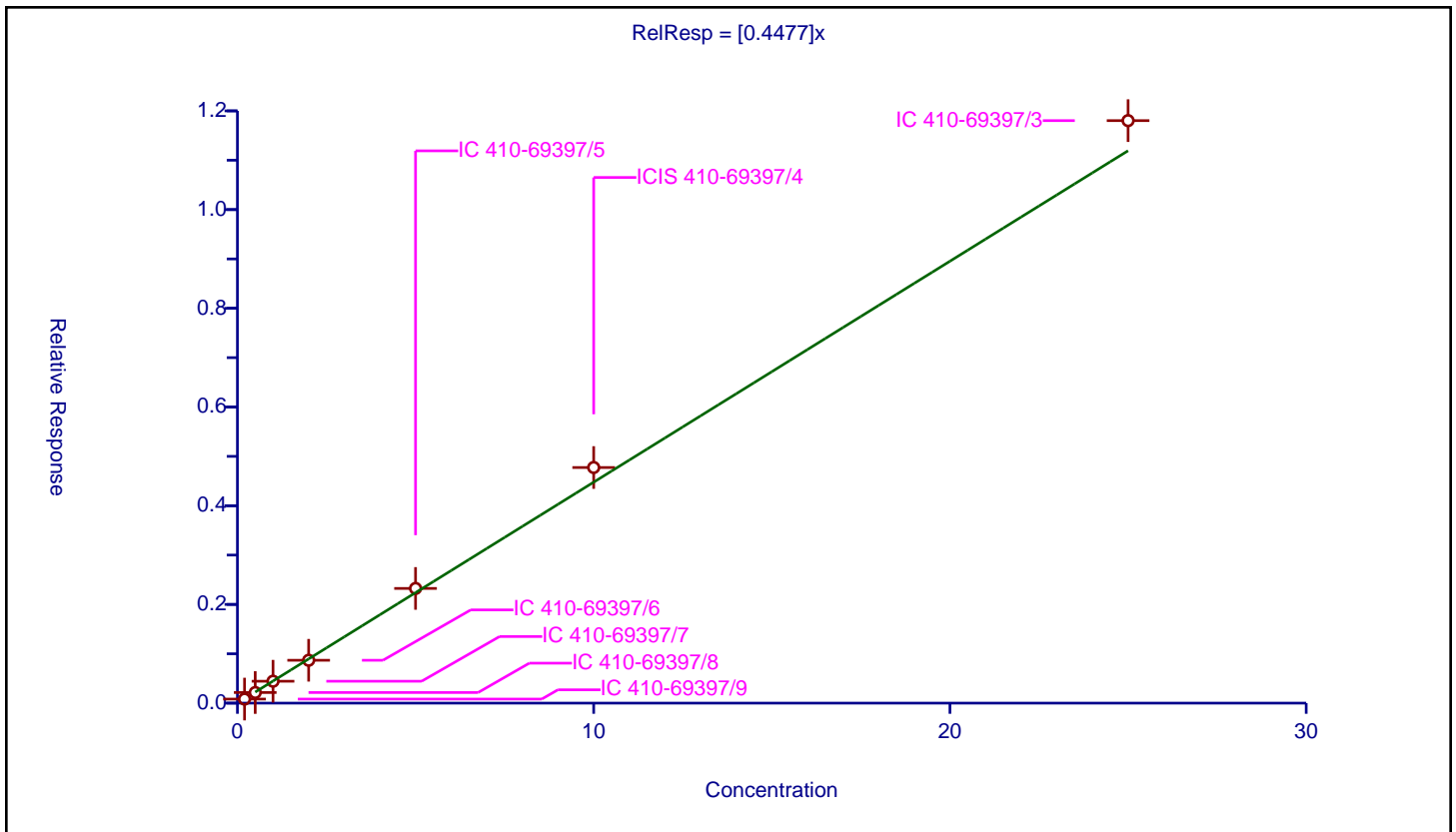
/ cis-1,3-Dichloropropene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4477

Error Coefficients	
Standard Error:	1090000
Relative Standard Error:	5.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.082314	10.0	1980944.0	0.411571	Y
2	IC 410-69397/8	0.5	0.214938	10.0	1995085.0	0.429876	Y
3	IC 410-69397/7	1.0	0.44393	10.0	1986644.0	0.44393	Y
4	IC 410-69397/6	2.0	0.868587	10.0	1976128.0	0.434294	Y
5	IC 410-69397/5	5.0	2.324031	10.0	1978687.0	0.464806	Y
6	ICIS 410-69397/4	10.0	4.774308	10.0	2065893.0	0.477431	Y
7	IC 410-69397/3	25.0	11.802746	10.0	2051897.0	0.47211	Y



**Calibration**

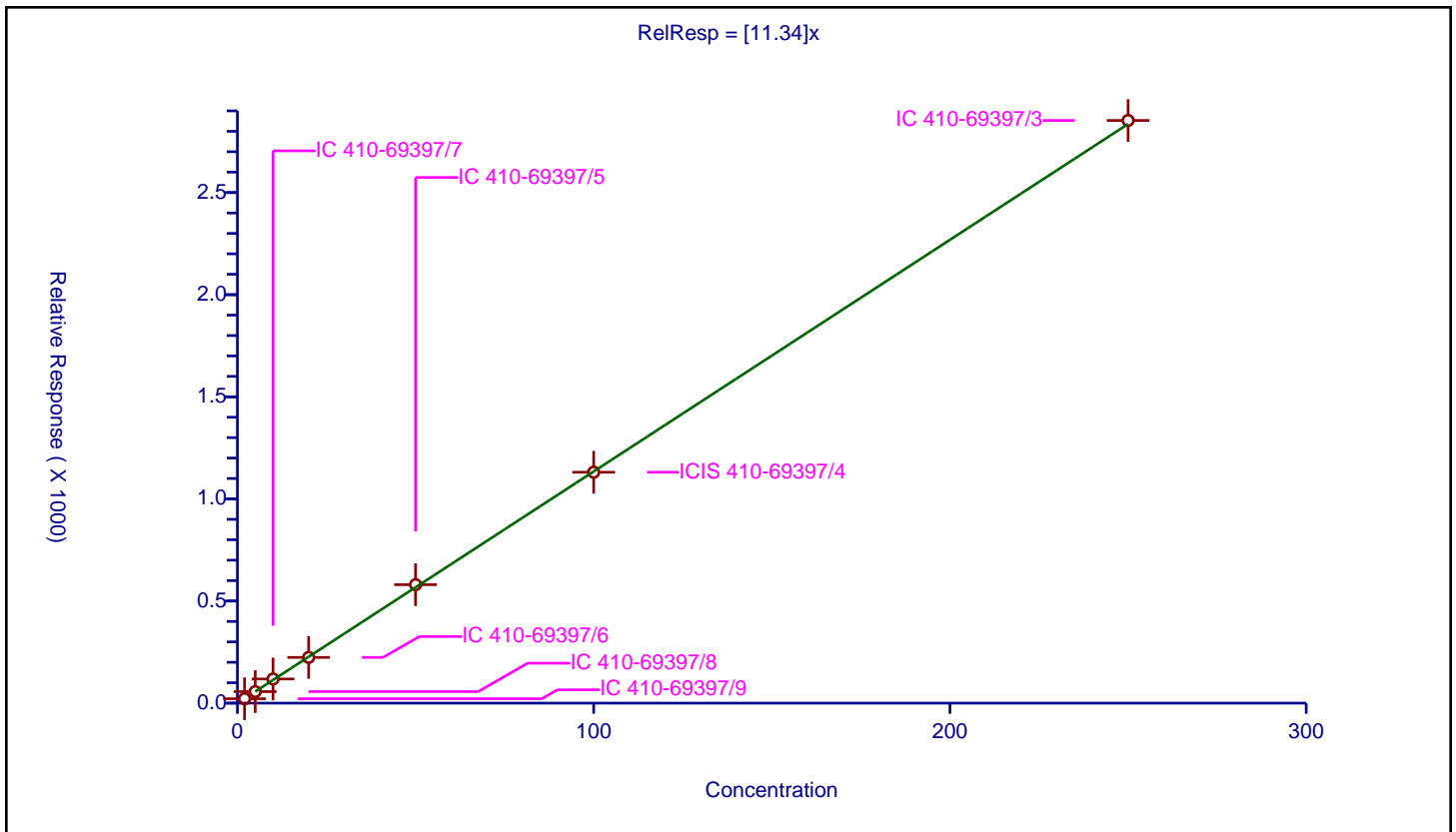
**/ 4-Methyl-2-pentanone (MIBK)**

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	11.34

Error Coefficients	
Standard Error:	4320000
Relative Standard Error:	2.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	2.0	21.532196	50.0	157506.0	10.766098	Y
2	IC 410-69397/8	5.0	56.53009	50.0	156713.0	11.306018	Y
3	IC 410-69397/7	10.0	118.19112	50.0	155400.0	11.819112	Y
4	IC 410-69397/6	20.0	223.837184	50.0	164063.0	11.191859	Y
5	IC 410-69397/5	50.0	580.078788	50.0	167919.0	11.601576	Y
6	ICIS 410-69397/4	100.0	1130.594287	50.0	174562.0	11.305943	Y
7	IC 410-69397/3	250.0	2853.051284	50.0	168044.0	11.412205	Y





**Calibration**

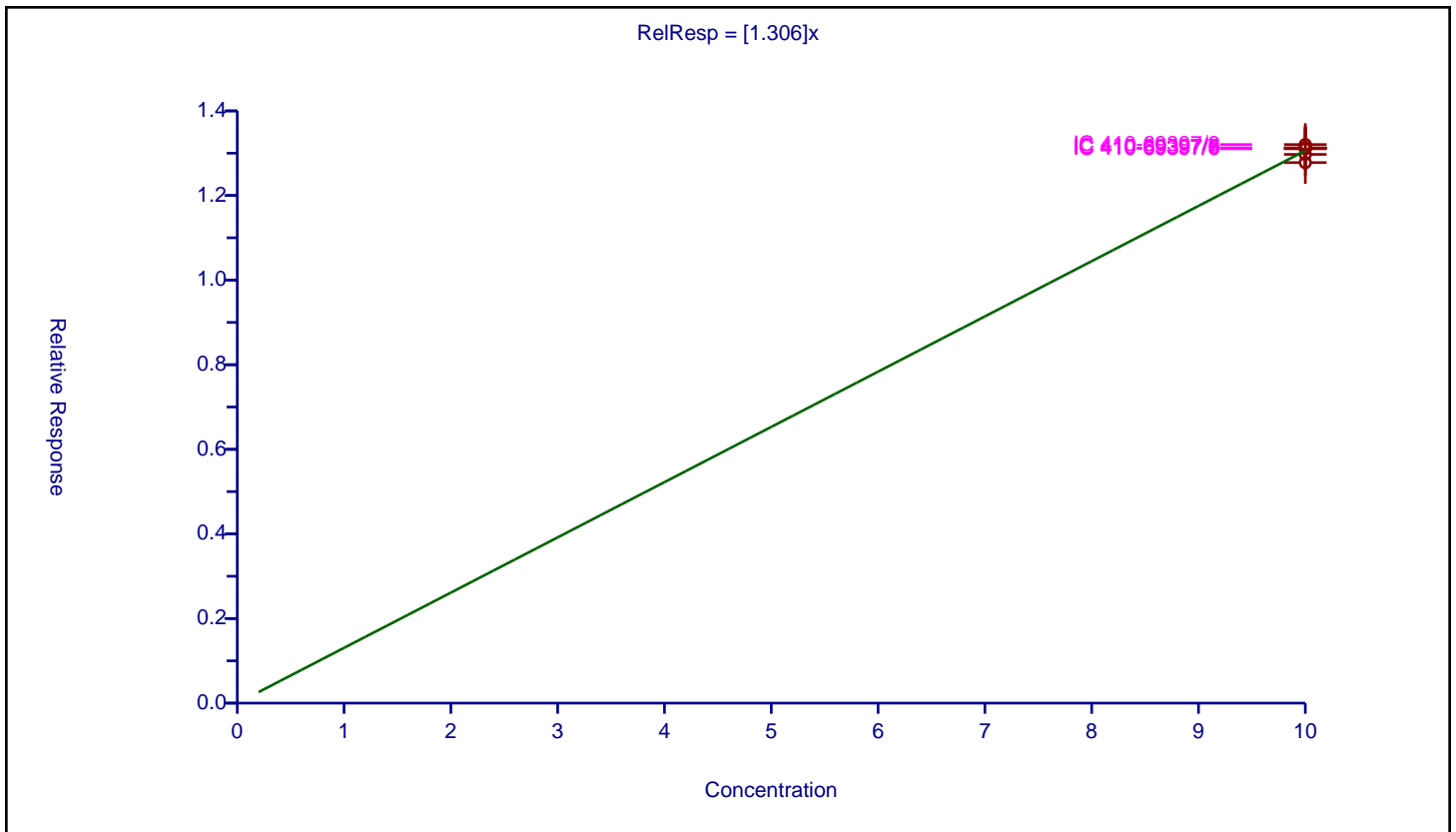
/ Toluene-d8 (Surr)

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.306

Error Coefficients	
Standard Error:	2130000
Relative Standard Error:	1.1
Correlation Coefficient:	0.00000000000000000000
Coefficient of Determination (Adjusted):	0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/3	10.0	12.777949	10.0	1579118.0	1.277795	Y
2	ICIS 410-69397/4	10.0	12.971482	10.0	1570516.0	1.297148	Y
3	IC 410-69397/5	10.0	13.125886	10.0	1486999.0	1.312589	Y
4	IC 410-69397/6	10.0	13.104358	10.0	1481807.0	1.310436	Y
5	IC 410-69397/7	10.0	13.114107	10.0	1484400.0	1.311411	Y
6	IC 410-69397/8	10.0	13.204428	10.0	1487373.0	1.320443	Y
7	IC 410-69397/9	10.0	13.117124	10.0	1473403.0	1.311712	Y



Calibration

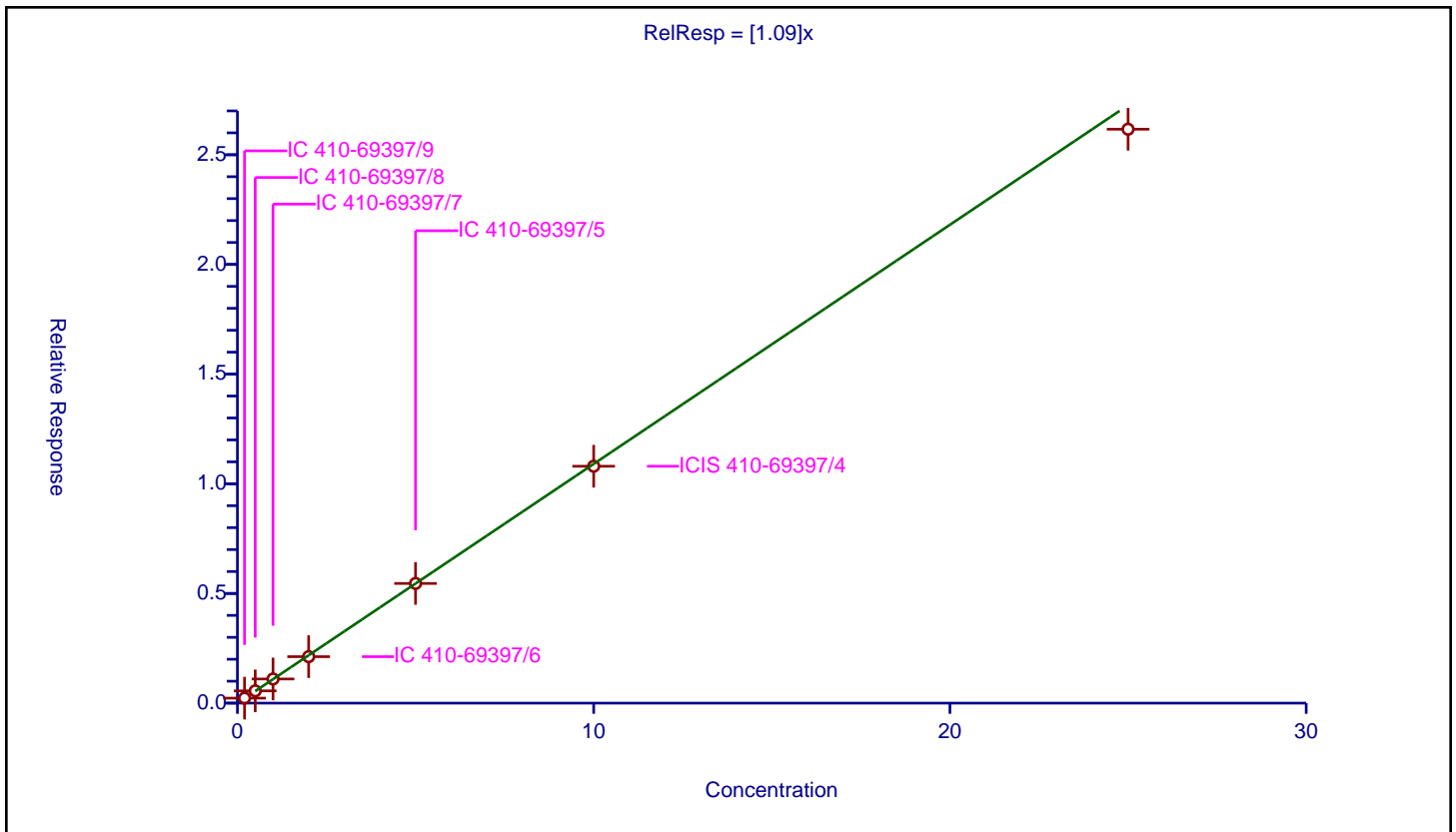
/ Toluene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.09

Error Coefficients	
Standard Error:	1860000
Relative Standard Error:	2.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.227623	10.0	1473403.0	1.138114	Y
2	IC 410-69397/8	0.5	0.558663	10.0	1487373.0	1.117326	Y
3	IC 410-69397/7	1.0	1.100168	10.0	1484400.0	1.100168	Y
4	IC 410-69397/6	2.0	2.118353	10.0	1481807.0	1.059176	Y
5	IC 410-69397/5	5.0	5.456466	10.0	1486999.0	1.091293	Y
6	ICIS 410-69397/4	10.0	10.799361	10.0	1570516.0	1.079936	Y
7	IC 410-69397/3	25.0	26.164447	10.0	1579118.0	1.046578	Y



**Calibration**

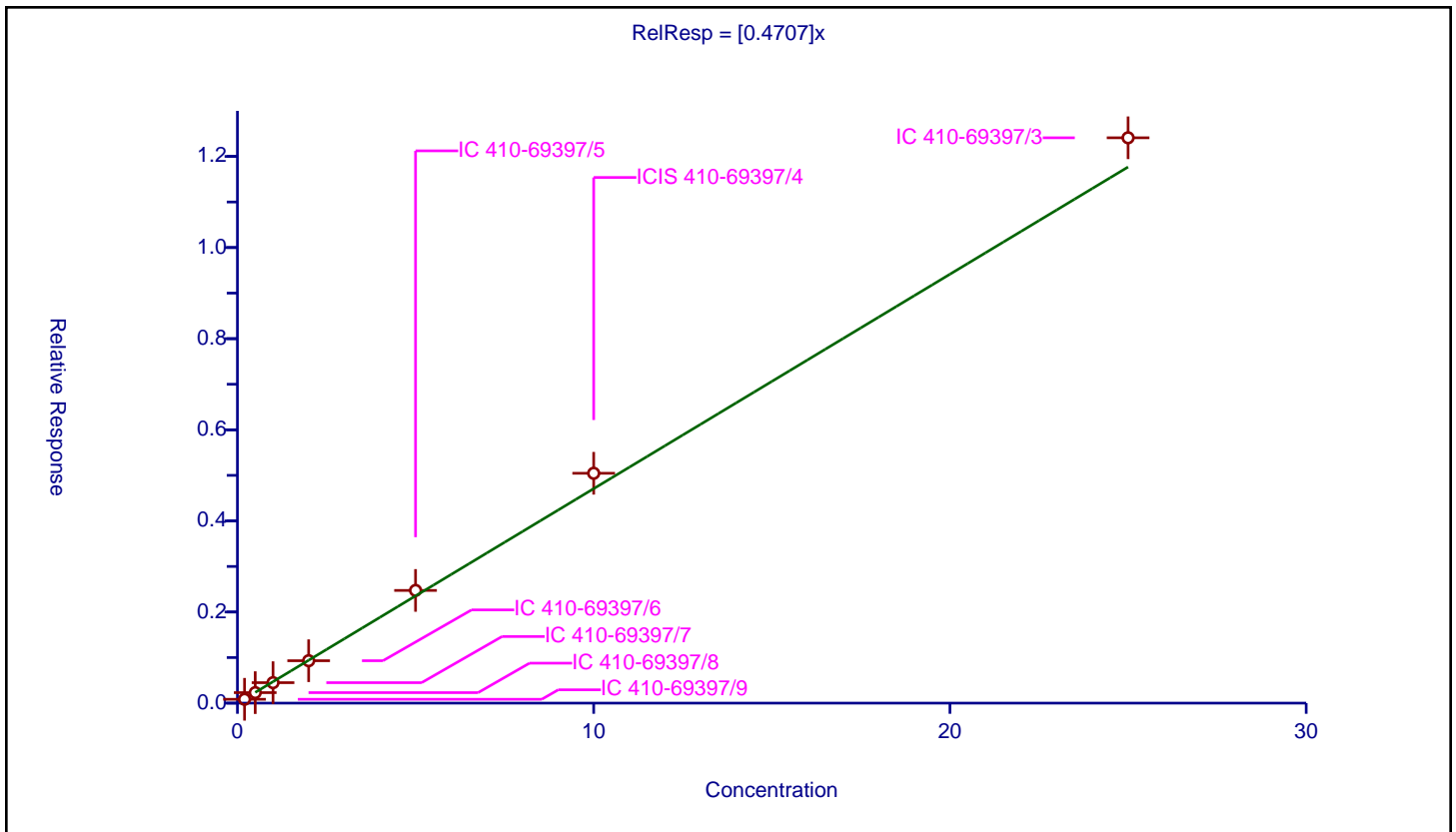
/ trans-1,3-Dichloropropene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4707

Error Coefficients	
Standard Error:	878000
Relative Standard Error:	6.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.084756	10.0	1473403.0	0.423781	Y
2	IC 410-69397/8	0.5	0.230426	10.0	1487373.0	0.460853	Y
3	IC 410-69397/7	1.0	0.449468	10.0	1484400.0	0.449468	Y
4	IC 410-69397/6	2.0	0.930843	10.0	1481807.0	0.465422	Y
5	IC 410-69397/5	5.0	2.473855	10.0	1486999.0	0.494771	Y
6	ICIS 410-69397/4	10.0	5.045514	10.0	1570516.0	0.504551	Y
7	IC 410-69397/3	25.0	12.409719	10.0	1579118.0	0.496389	Y



Calibration

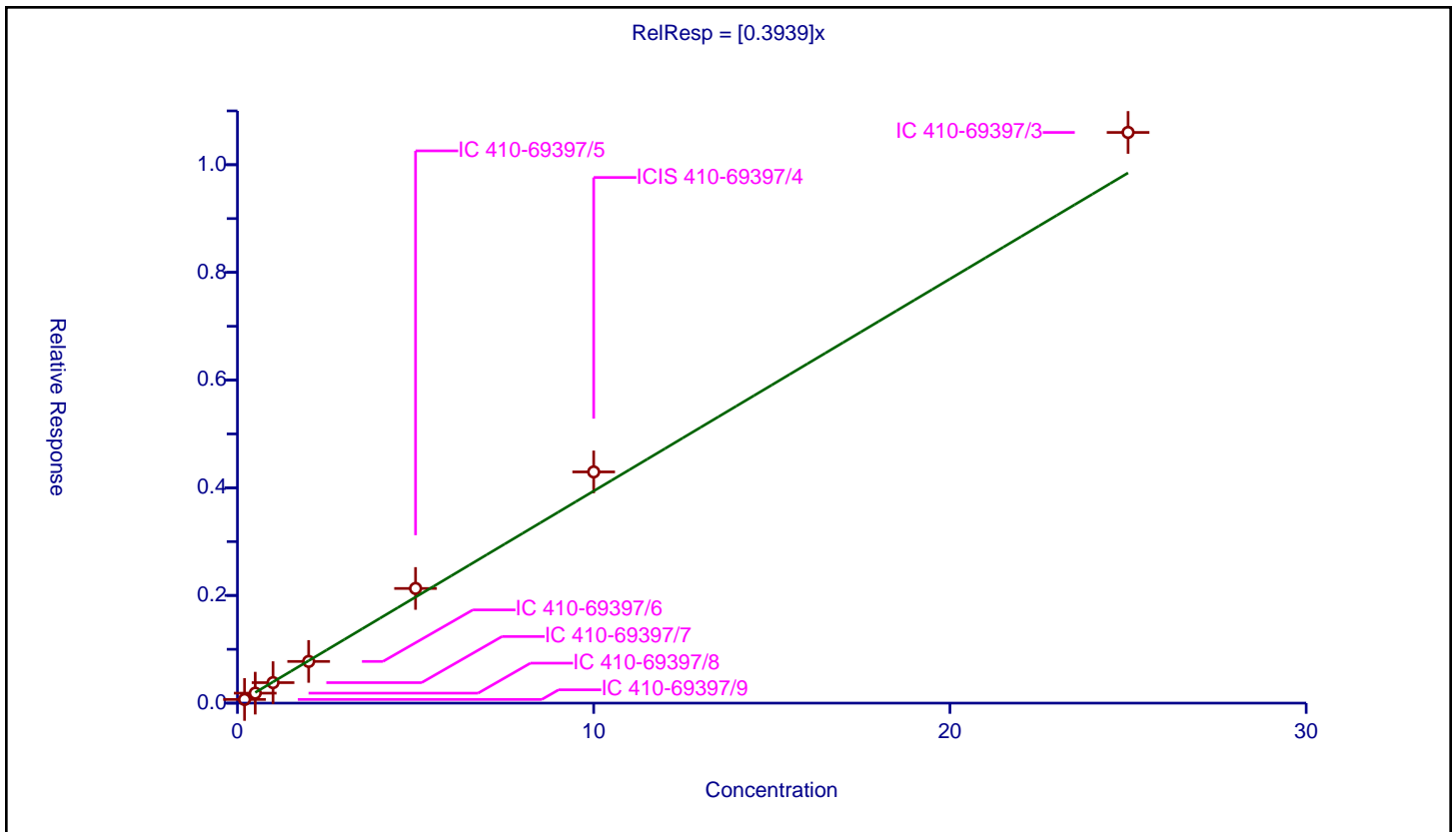
/ Ethyl methacrylate

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3939

Error Coefficients	
Standard Error:	750000
Relative Standard Error:	8.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.067836	10.0	1473403.0	0.339181	Y
2	IC 410-69397/8	0.5	0.185454	10.0	1487373.0	0.370909	Y
3	IC 410-69397/7	1.0	0.380874	10.0	1484400.0	0.380874	Y
4	IC 410-69397/6	2.0	0.774217	10.0	1481807.0	0.387108	Y
5	IC 410-69397/5	5.0	2.129981	10.0	1486999.0	0.425996	Y
6	ICIS 410-69397/4	10.0	4.294474	10.0	1570516.0	0.429447	Y
7	IC 410-69397/3	25.0	10.599879	10.0	1579118.0	0.423995	Y



**Calibration**

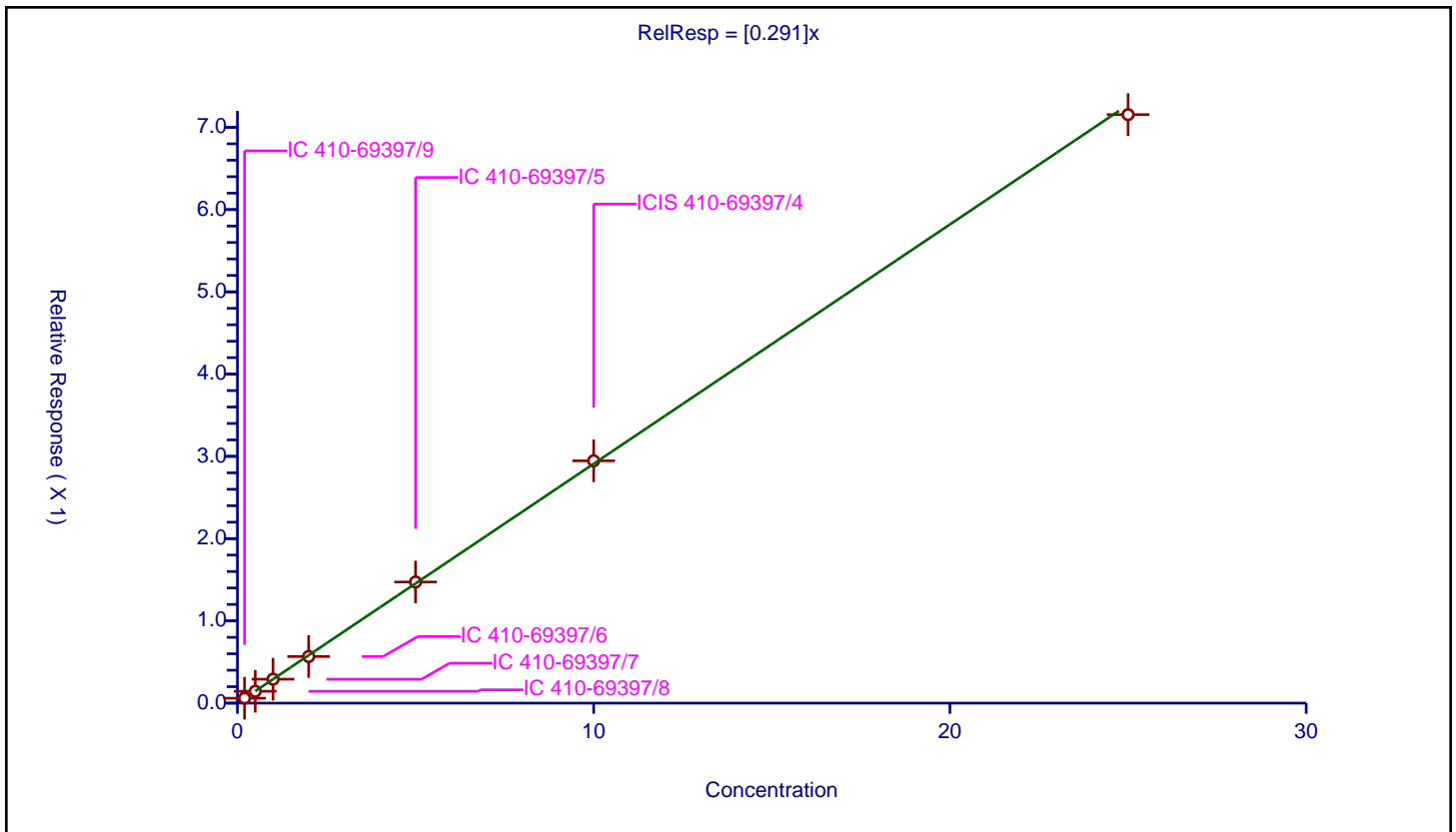
/ 1,1,2-Trichloroethane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.291

Error Coefficients	
Standard Error:	508000
Relative Standard Error:	1.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.059848	10.0	1473403.0	0.299239	Y
2	IC 410-69397/8	0.5	0.144194	10.0	1487373.0	0.288388	Y
3	IC 410-69397/7	1.0	0.290845	10.0	1484400.0	0.290845	Y
4	IC 410-69397/6	2.0	0.566315	10.0	1481807.0	0.283158	Y
5	IC 410-69397/5	5.0	1.472395	10.0	1486999.0	0.294479	Y
6	ICIS 410-69397/4	10.0	2.946127	10.0	1570516.0	0.294613	Y
7	IC 410-69397/3	25.0	7.15438	10.0	1579118.0	0.286175	Y



Calibration

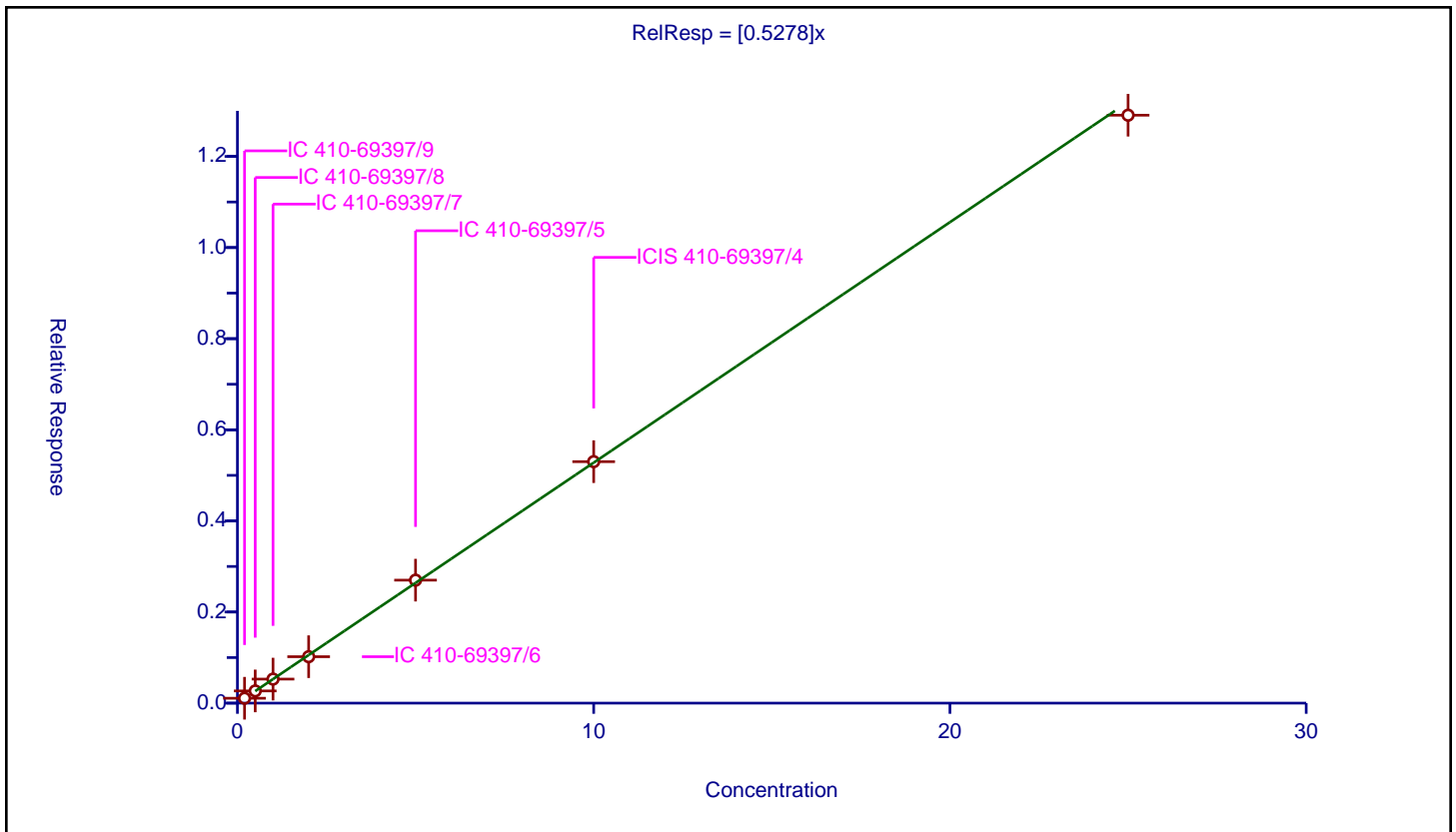
/ Tetrachloroethene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.5278

Error Coefficients	
Standard Error:	916000
Relative Standard Error:	2.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.107045	10.0	1473403.0	0.535224	Y
2	IC 410-69397/8	0.5	0.267969	10.0	1487373.0	0.535938	Y
3	IC 410-69397/7	1.0	0.527843	10.0	1484400.0	0.527843	Y
4	IC 410-69397/6	2.0	1.019208	10.0	1481807.0	0.509604	Y
5	IC 410-69397/5	5.0	2.699659	10.0	1486999.0	0.539932	Y
6	ICIS 410-69397/4	10.0	5.300716	10.0	1570516.0	0.530072	Y
7	IC 410-69397/3	25.0	12.905267	10.0	1579118.0	0.516211	Y



Calibration

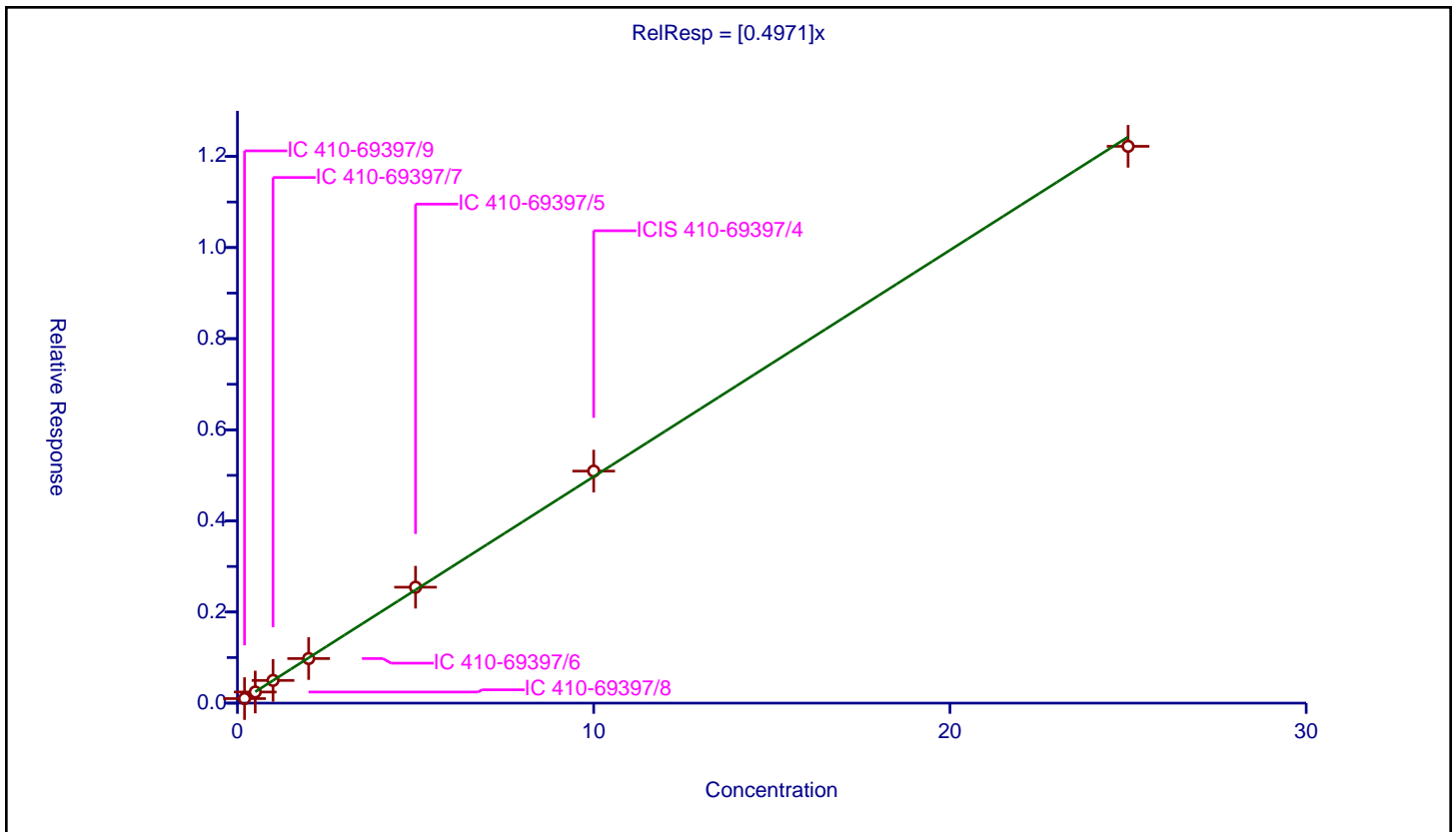
/ 1,3-Dichloropropane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4971

Error Coefficients	
Standard Error:	869000
Relative Standard Error:	1.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.09947	10.0	1473403.0	0.497352	Y
2	IC 410-69397/8	0.5	0.244075	10.0	1487373.0	0.488149	Y
3	IC 410-69397/7	1.0	0.498188	10.0	1484400.0	0.498188	Y
4	IC 410-69397/6	2.0	0.978184	10.0	1481807.0	0.489092	Y
5	IC 410-69397/5	5.0	2.544709	10.0	1486999.0	0.508942	Y
6	ICIS 410-69397/4	10.0	5.093224	10.0	1570516.0	0.509322	Y
7	IC 410-69397/3	25.0	12.22219	10.0	1579118.0	0.488888	Y



Calibration

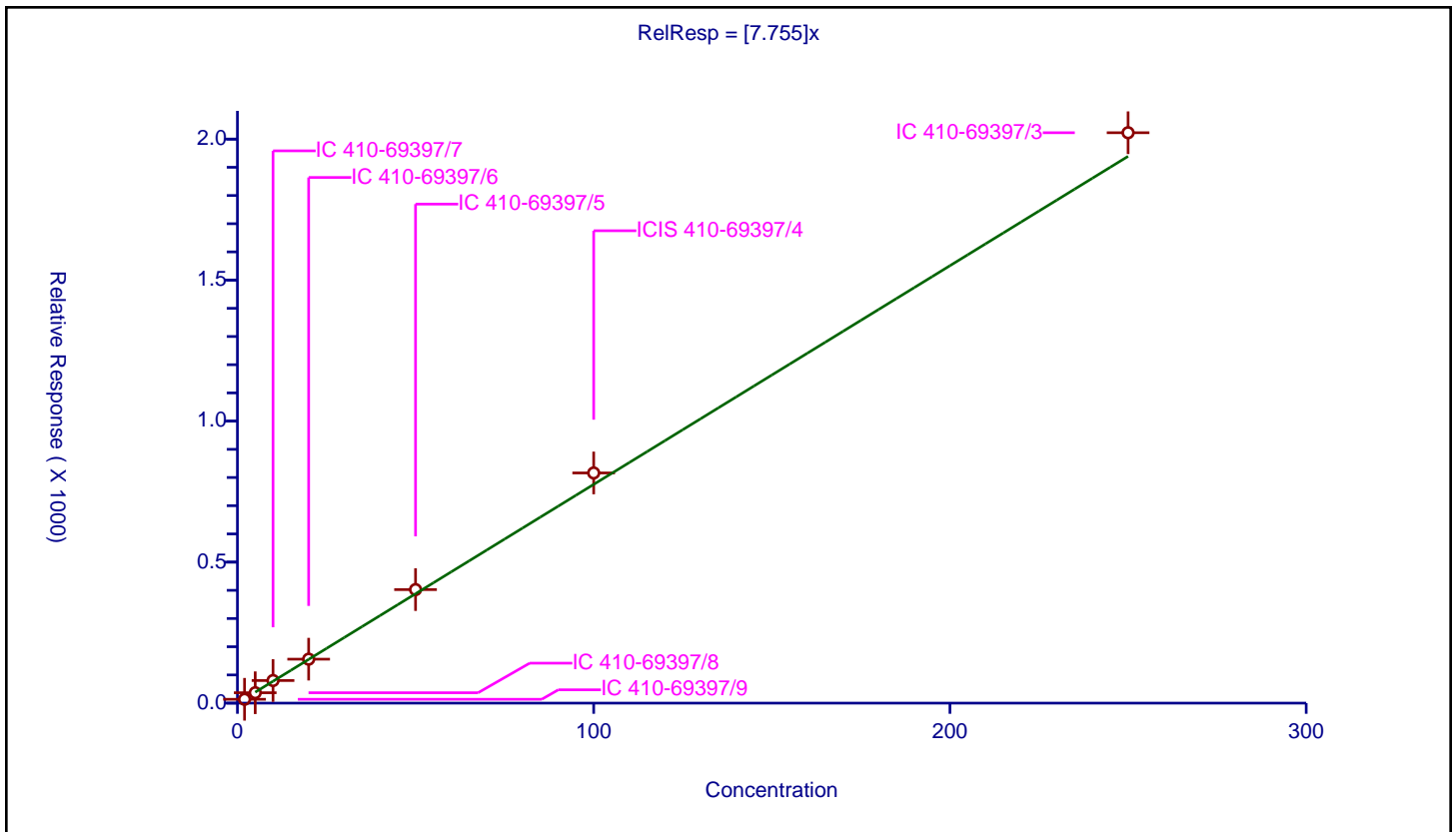
/ 2-Hexanone

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	7.755

Error Coefficients	
Standard Error:	3070000
Relative Standard Error:	6.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	2.0	13.607736	50.0	157506.0	6.803868	Y
2	IC 410-69397/8	5.0	36.882709	50.0	156713.0	7.376542	Y
3	IC 410-69397/7	10.0	80.112613	50.0	155400.0	8.011261	Y
4	IC 410-69397/6	20.0	155.870915	50.0	164063.0	7.793546	Y
5	IC 410-69397/5	50.0	402.554803	50.0	167919.0	8.051096	Y
6	ICIS 410-69397/4	100.0	816.164457	50.0	174562.0	8.161645	Y
7	IC 410-69397/3	250.0	2022.523268	50.0	168044.0	8.090093	Y





Calibration

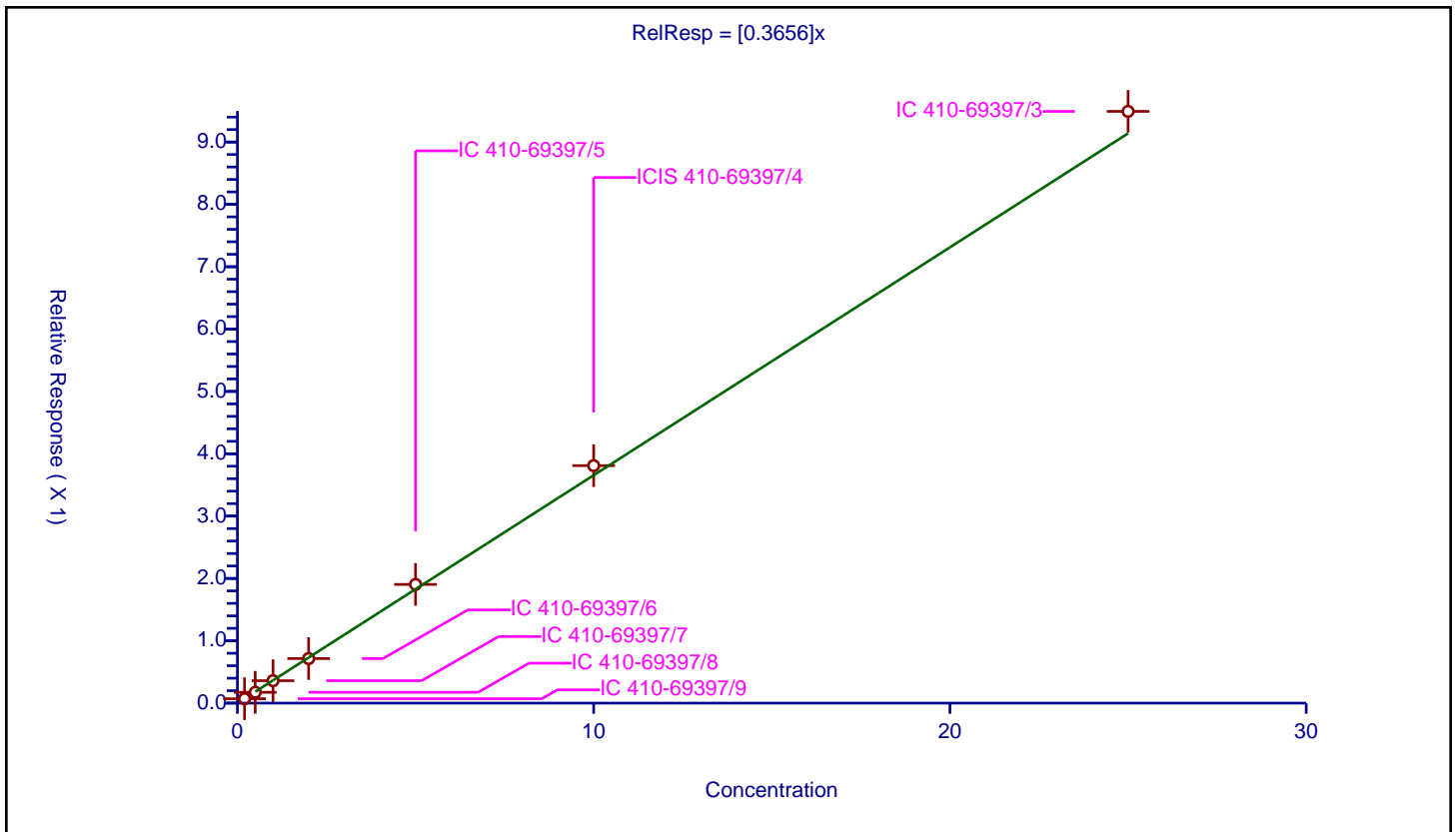
/ Chlorodibromomethane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3656

Error Coefficients	
Standard Error:	671000
Relative Standard Error:	4.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.070585	10.0	1473403.0	0.352924	Y
2	IC 410-69397/8	0.5	0.173534	10.0	1487373.0	0.347068	Y
3	IC 410-69397/7	1.0	0.359997	10.0	1484400.0	0.359997	Y
4	IC 410-69397/6	2.0	0.71487	10.0	1481807.0	0.357435	Y
5	IC 410-69397/5	5.0	1.904554	10.0	1486999.0	0.380911	Y
6	ICIS 410-69397/4	10.0	3.809334	10.0	1570516.0	0.380933	Y
7	IC 410-69397/3	25.0	9.49171	10.0	1579118.0	0.379668	Y



Calibration

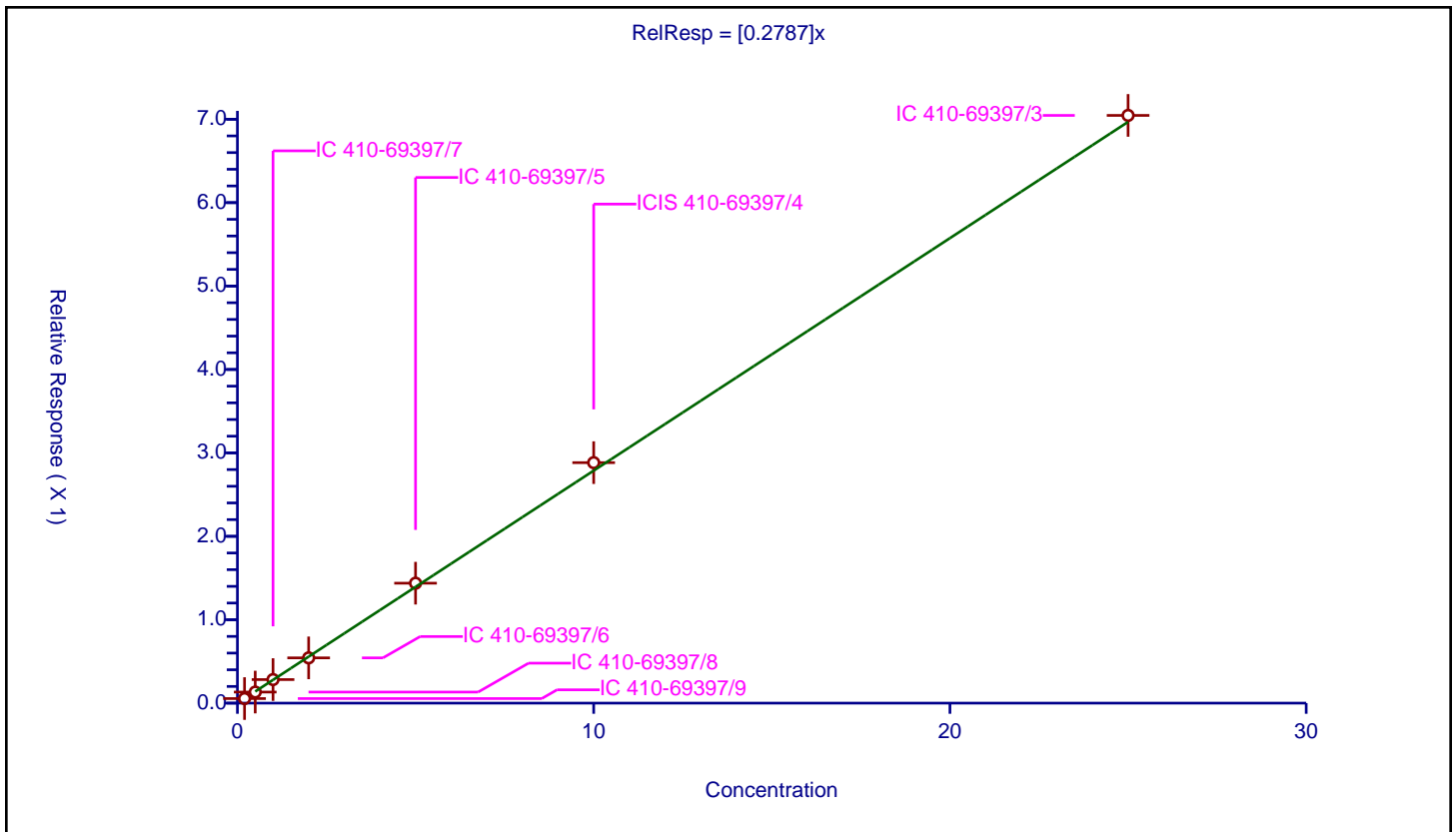
/ Ethylene Dibromide

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2787

Error Coefficients	
Standard Error:	500000
Relative Standard Error:	3.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.054846	10.0	1473403.0	0.274229	Y
2	IC 410-69397/8	0.5	0.132623	10.0	1487373.0	0.265246	Y
3	IC 410-69397/7	1.0	0.282478	10.0	1484400.0	0.282478	Y
4	IC 410-69397/6	2.0	0.542682	10.0	1481807.0	0.271341	Y
5	IC 410-69397/5	5.0	1.437815	10.0	1486999.0	0.287563	Y
6	ICIS 410-69397/4	10.0	2.883052	10.0	1570516.0	0.288305	Y
7	IC 410-69397/3	25.0	7.045642	10.0	1579118.0	0.281826	Y



Calibration

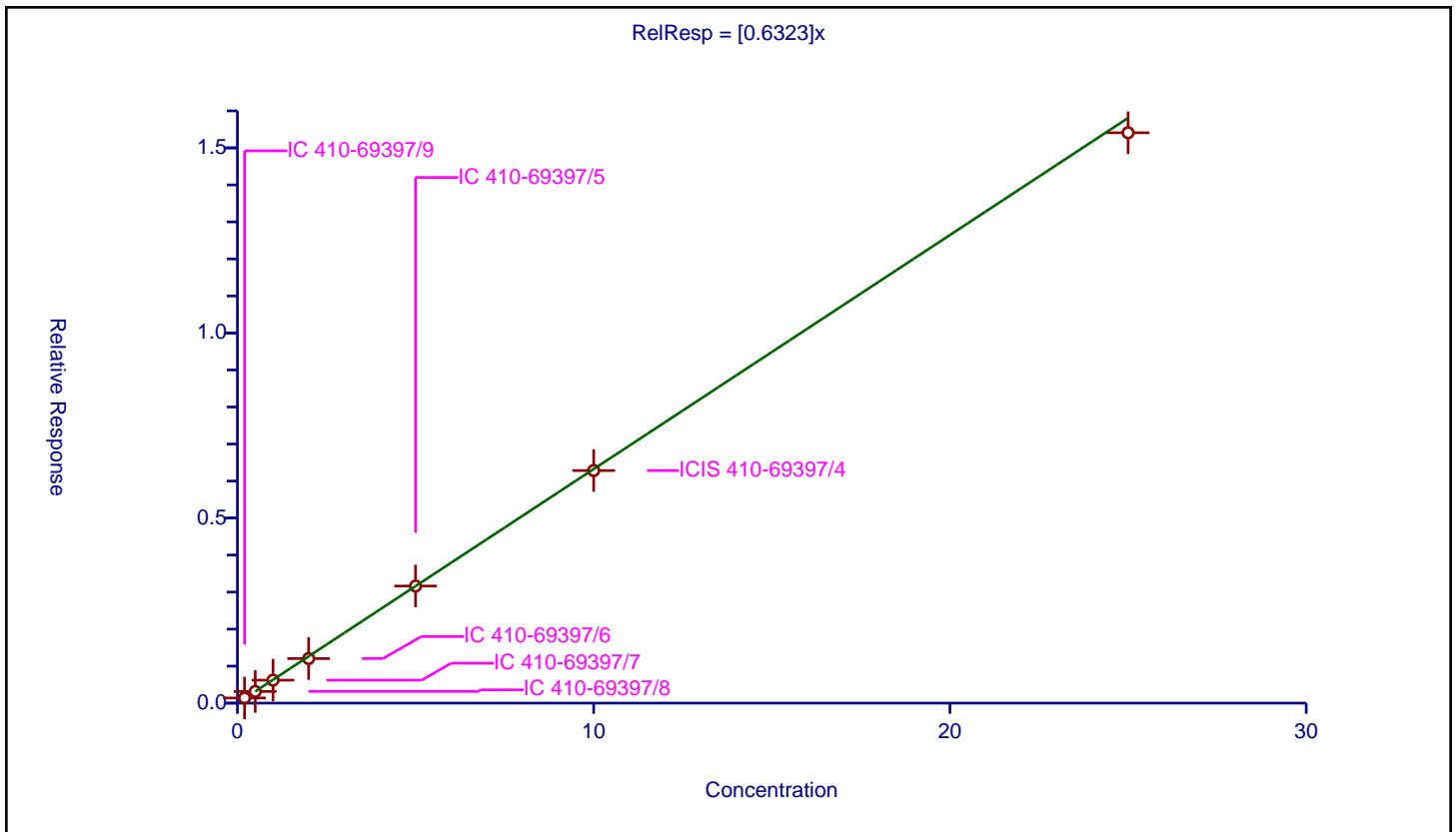
/ 1-Chlorohexane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.6323

Error Coefficients	
Standard Error:	1090000
Relative Standard Error:	4.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.138869	10.0	1473403.0	0.694345	Y
2	IC 410-69397/8	0.5	0.315704	10.0	1487373.0	0.631409	Y
3	IC 410-69397/7	1.0	0.620944	10.0	1484400.0	0.620944	Y
4	IC 410-69397/6	2.0	1.204482	10.0	1481807.0	0.602241	Y
5	IC 410-69397/5	5.0	3.16325	10.0	1486999.0	0.63265	Y
6	ICIS 410-69397/4	10.0	6.283011	10.0	1570516.0	0.628301	Y
7	IC 410-69397/3	25.0	15.409456	10.0	1579118.0	0.616378	Y



**Calibration**

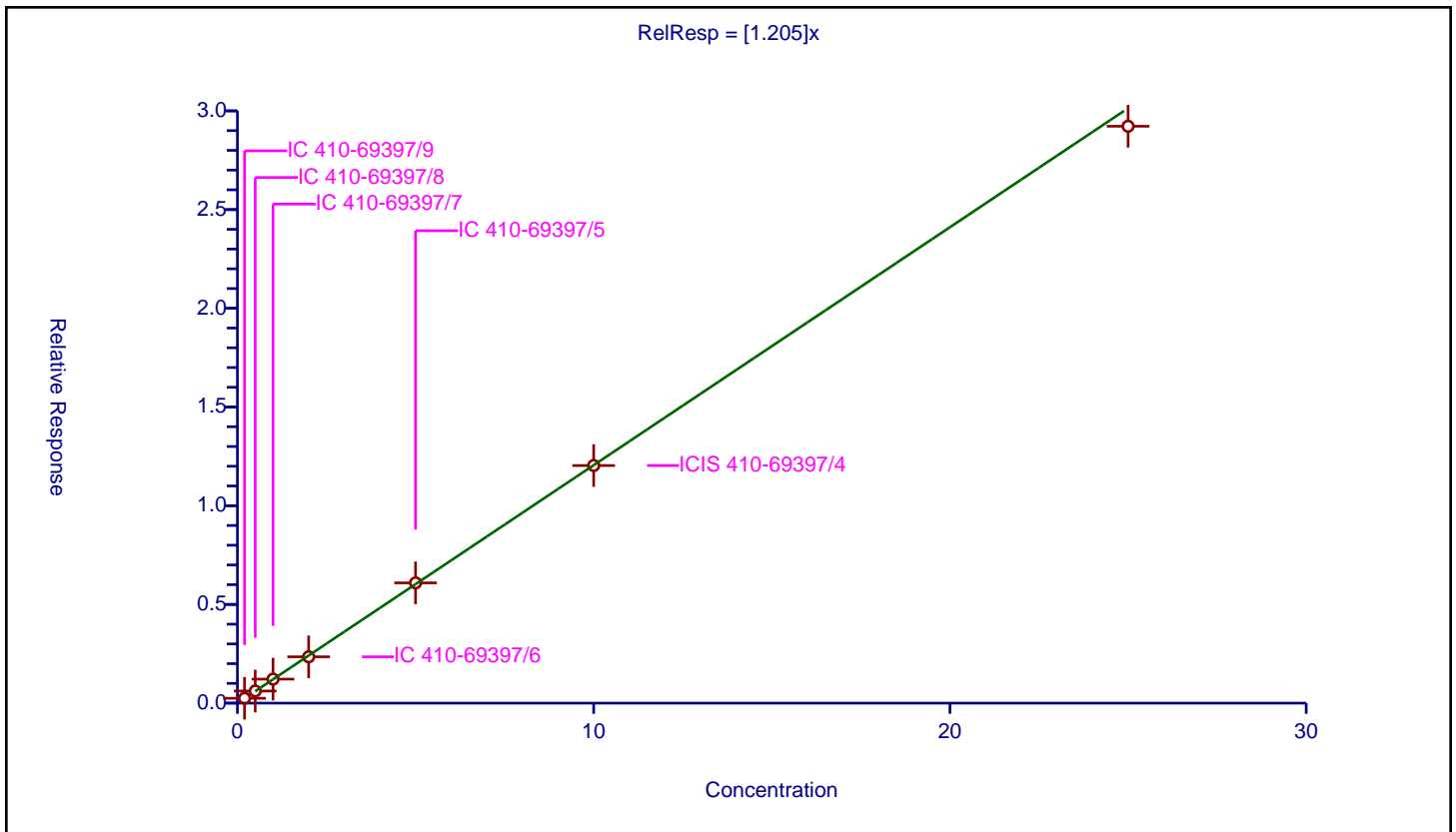
/ Chlorobenzene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.205

Error Coefficients	
Standard Error:	2080000
Relative Standard Error:	2.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.245622	10.0	1473403.0	1.228109	Y
2	IC 410-69397/8	0.5	0.614782	10.0	1487373.0	1.229564	Y
3	IC 410-69397/7	1.0	1.21573	10.0	1484400.0	1.21573	Y
4	IC 410-69397/6	2.0	2.347107	10.0	1481807.0	1.173554	Y
5	IC 410-69397/5	5.0	6.092055	10.0	1486999.0	1.218411	Y
6	ICIS 410-69397/4	10.0	12.034567	10.0	1570516.0	1.203457	Y
7	IC 410-69397/3	25.0	29.221268	10.0	1579118.0	1.168851	Y



Calibration

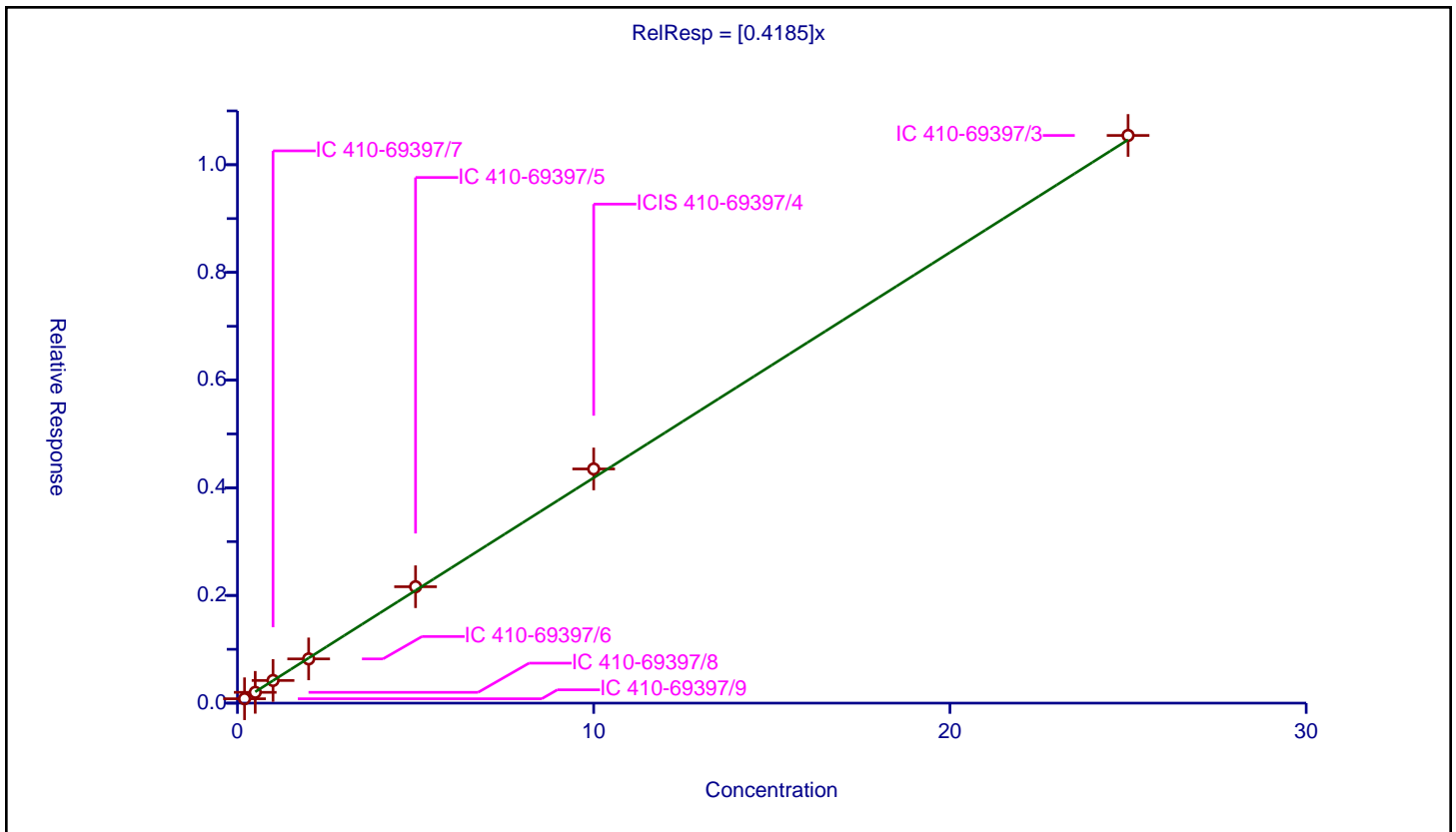
/ 1,1,1,2-Tetrachloroethane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4185

Error Coefficients	
Standard Error:	749000
Relative Standard Error:	3.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.0816	10.0	1473403.0	0.408001	Y
2	IC 410-69397/8	0.5	0.200595	10.0	1487373.0	0.401191	Y
3	IC 410-69397/7	1.0	0.420742	10.0	1484400.0	0.420742	Y
4	IC 410-69397/6	2.0	0.821517	10.0	1481807.0	0.410759	Y
5	IC 410-69397/5	5.0	2.161911	10.0	1486999.0	0.432382	Y
6	ICIS 410-69397/4	10.0	4.349558	10.0	1570516.0	0.434956	Y
7	IC 410-69397/3	25.0	10.544025	10.0	1579118.0	0.421761	Y



Calibration

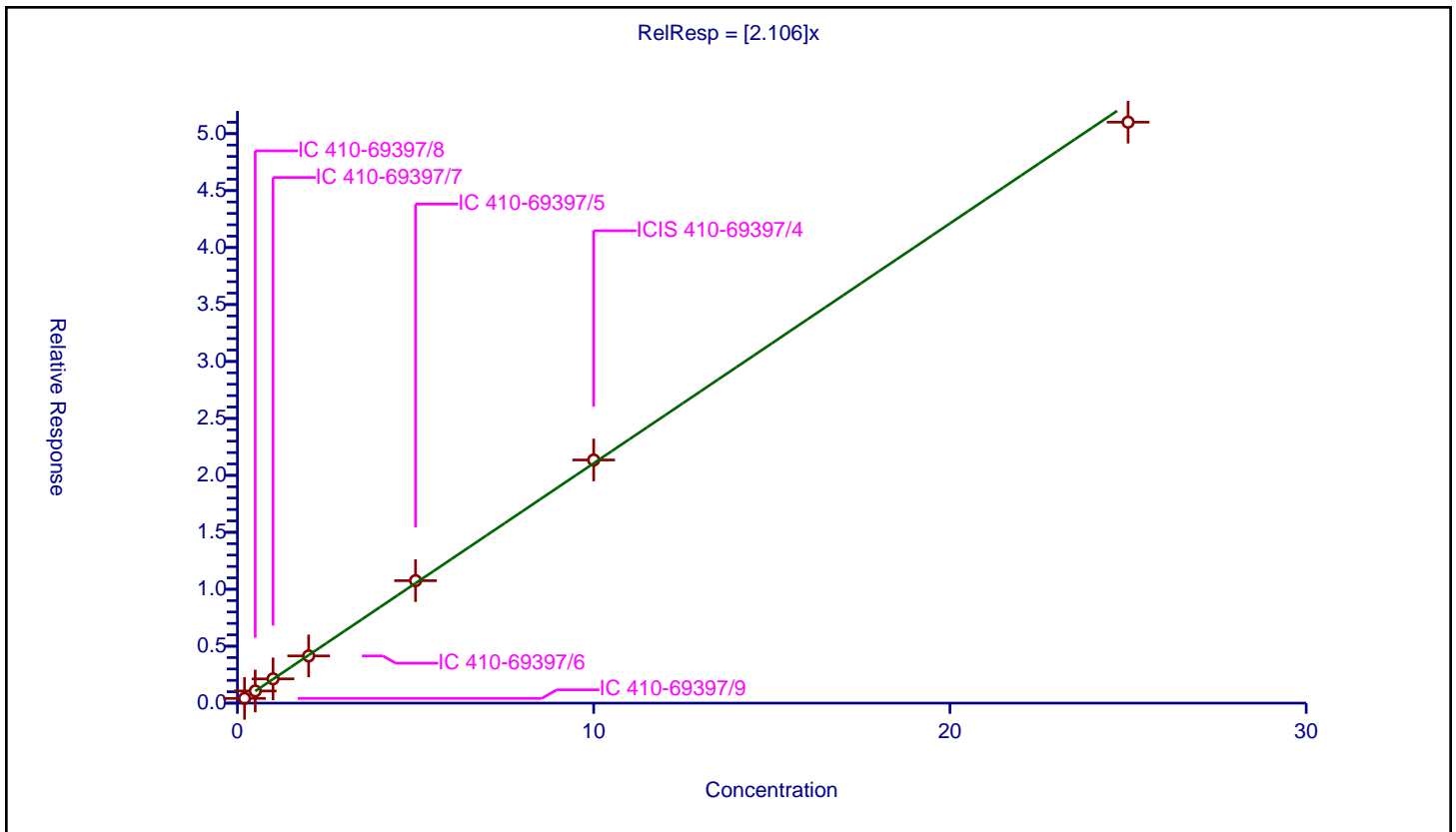
/ Ethylbenzene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	2.106

Error Coefficients	
Standard Error:	3630000
Relative Standard Error:	2.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.415365	10.0	1473403.0	2.076825	Y
2	IC 410-69397/8	0.5	1.066572	10.0	1487373.0	2.133143	Y
3	IC 410-69397/7	1.0	2.132417	10.0	1484400.0	2.132417	Y
4	IC 410-69397/6	2.0	4.145925	10.0	1481807.0	2.072962	Y
5	IC 410-69397/5	5.0	10.752738	10.0	1486999.0	2.150548	Y
6	ICIS 410-69397/4	10.0	21.348799	10.0	1570516.0	2.13488	Y
7	IC 410-69397/3	25.0	51.008443	10.0	1579118.0	2.040338	Y



**Calibration**

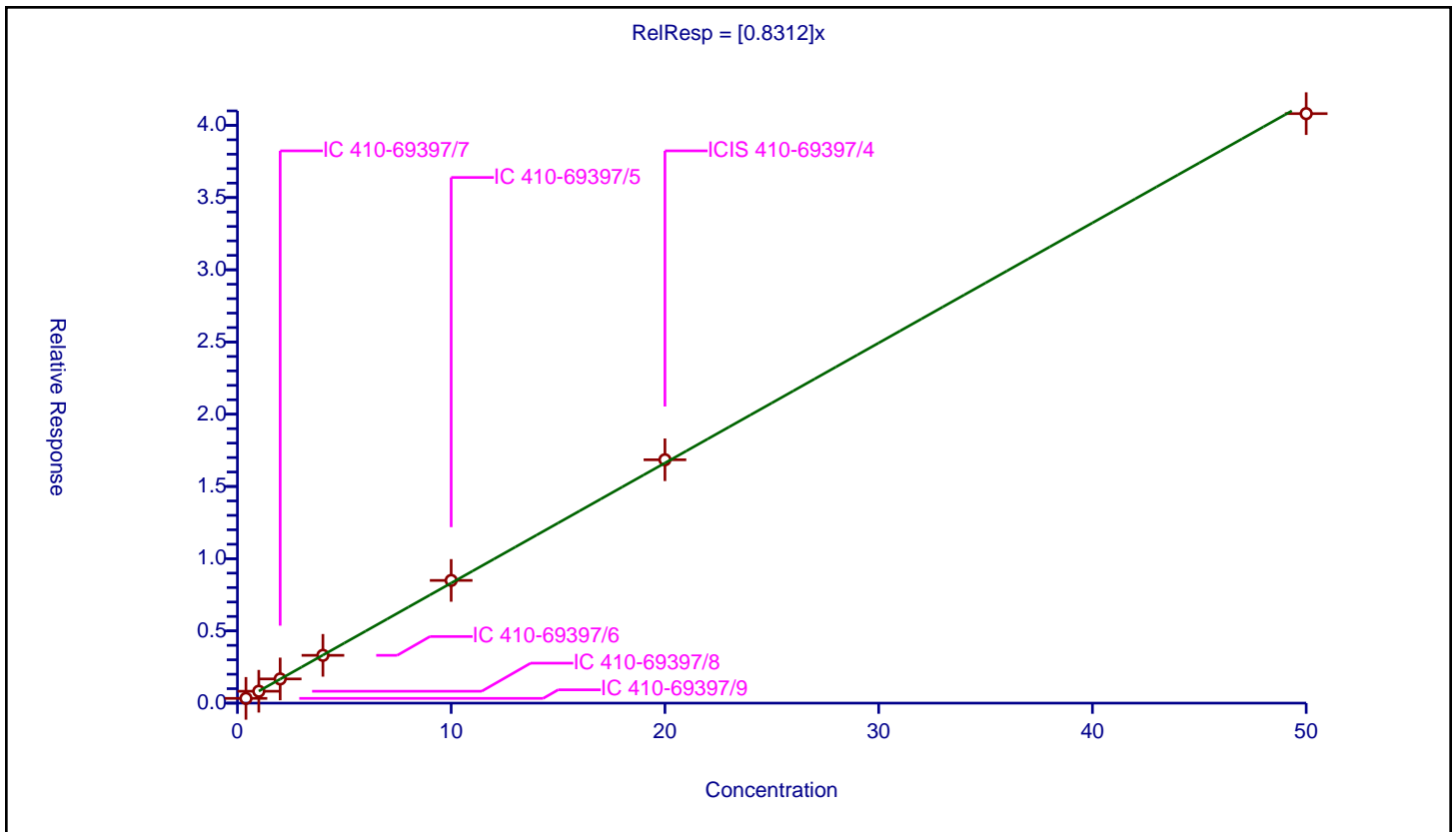
/ m-Xylene & p-Xylene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.8312

Error Coefficients	
Standard Error:	2900000
Relative Standard Error:	1.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.4	0.328817	10.0	1473403.0	0.822043	Y
2	IC 410-69397/8	1.0	0.82368	10.0	1487373.0	0.82368	Y
3	IC 410-69397/7	2.0	1.674333	10.0	1484400.0	0.837167	Y
4	IC 410-69397/6	4.0	3.309108	10.0	1481807.0	0.827277	Y
5	IC 410-69397/5	10.0	8.495164	10.0	1486999.0	0.849516	Y
6	ICIS 410-69397/4	20.0	16.848526	10.0	1570516.0	0.842426	Y
7	IC 410-69397/3	50.0	40.810864	10.0	1579118.0	0.816217	Y



Calibration

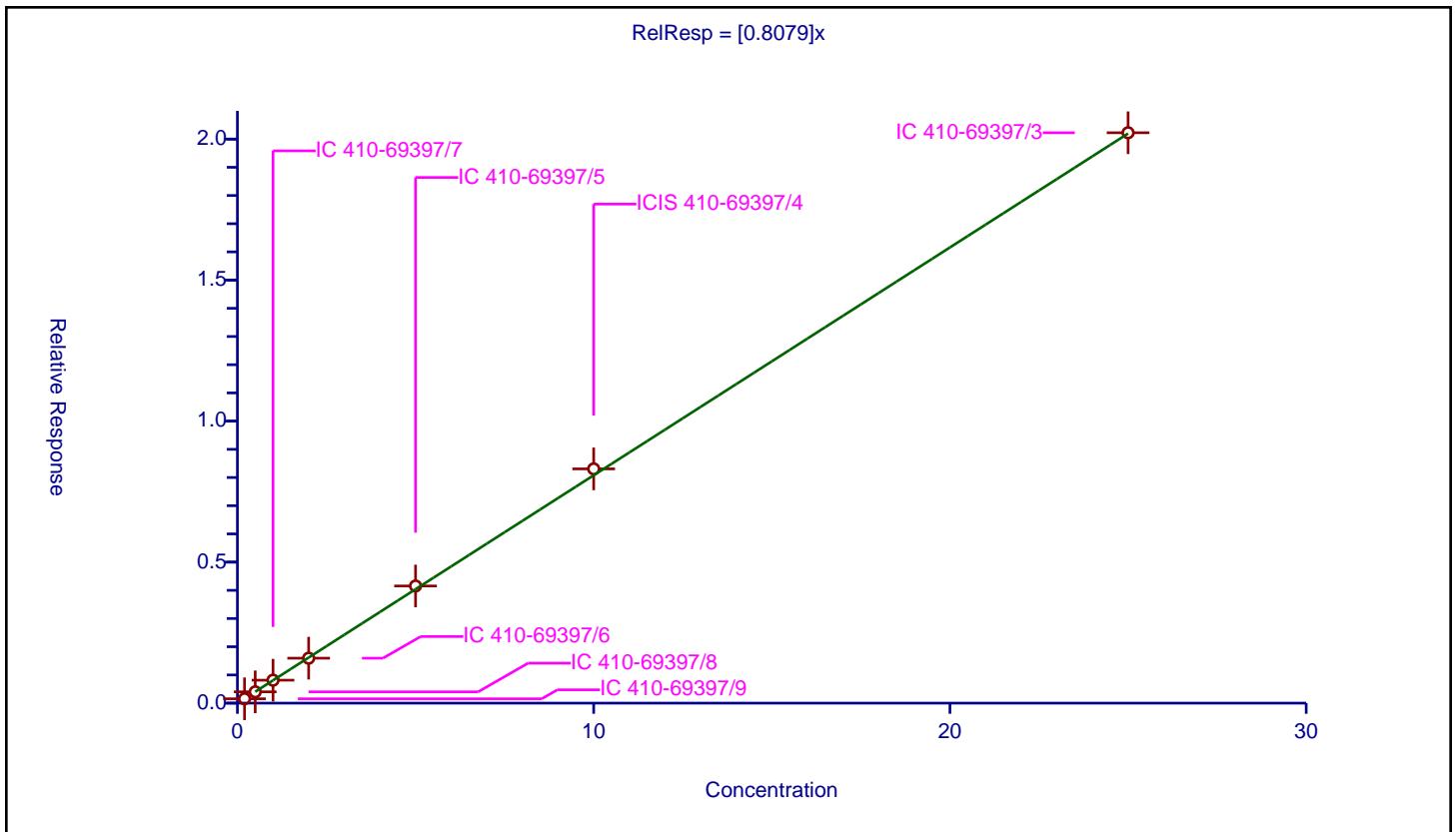
/ o-Xylene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.8079

Error Coefficients	
Standard Error:	1440000
Relative Standard Error:	2.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.154527	10.0	1473403.0	0.772633	Y
2	IC 410-69397/8	0.5	0.40076	10.0	1487373.0	0.801521	Y
3	IC 410-69397/7	1.0	0.813662	10.0	1484400.0	0.813662	Y
4	IC 410-69397/6	2.0	1.593973	10.0	1481807.0	0.796986	Y
5	IC 410-69397/5	5.0	4.154327	10.0	1486999.0	0.830865	Y
6	ICIS 410-69397/4	10.0	8.306595	10.0	1570516.0	0.830659	Y
7	IC 410-69397/3	25.0	20.224556	10.0	1579118.0	0.808982	Y





Calibration

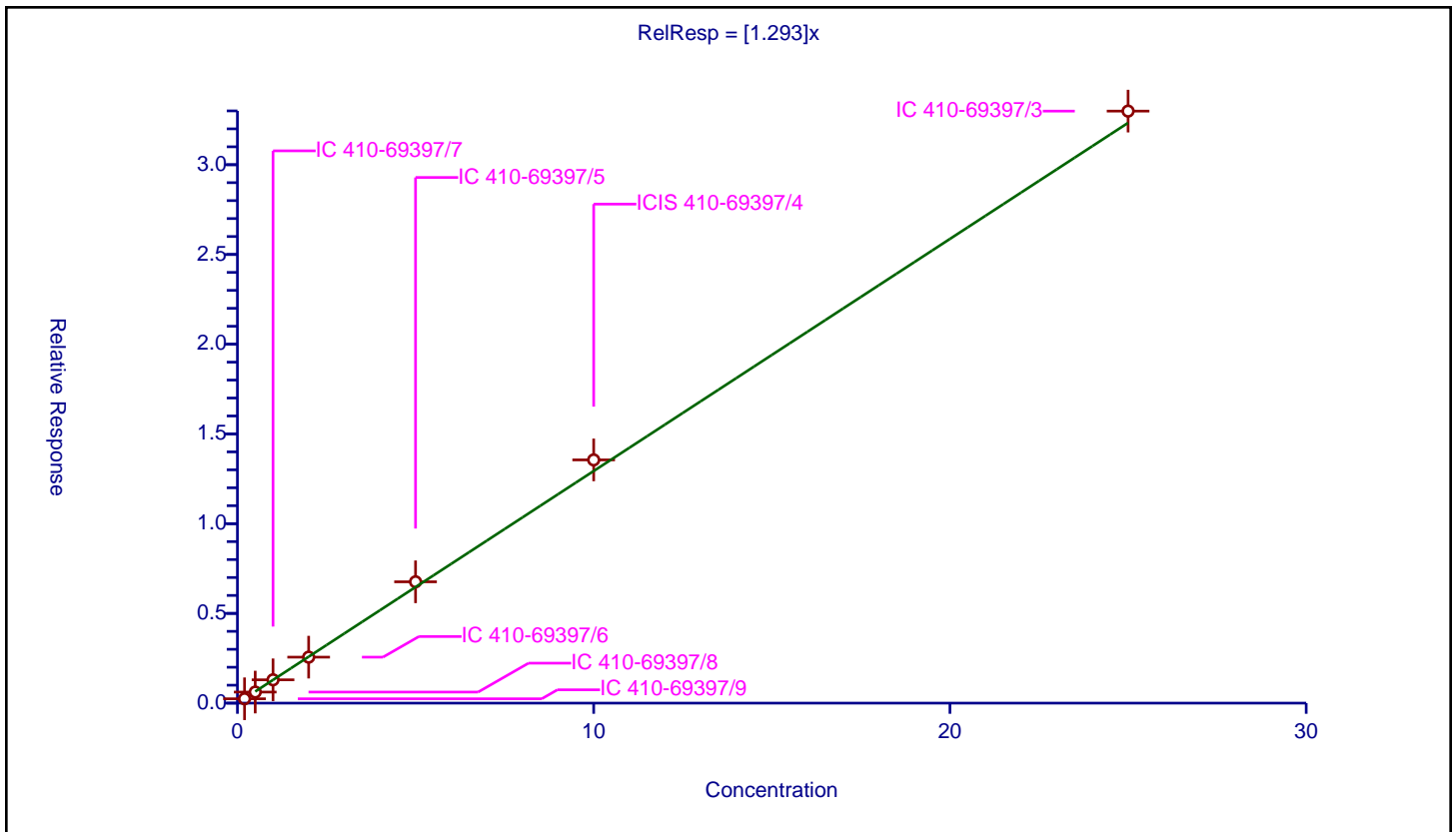
/ Styrene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.293

Error Coefficients	
Standard Error:	2340000
Relative Standard Error:	4.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.242432	10.0	1473403.0	1.21216	Y
2	IC 410-69397/8	0.5	0.616893	10.0	1487373.0	1.233786	Y
3	IC 410-69397/7	1.0	1.299212	10.0	1484400.0	1.299212	Y
4	IC 410-69397/6	2.0	2.562176	10.0	1481807.0	1.281088	Y
5	IC 410-69397/5	5.0	6.760421	10.0	1486999.0	1.352084	Y
6	ICIS 410-69397/4	10.0	13.553132	10.0	1570516.0	1.355313	Y
7	IC 410-69397/3	25.0	32.987579	10.0	1579118.0	1.319503	Y



**Calibration**

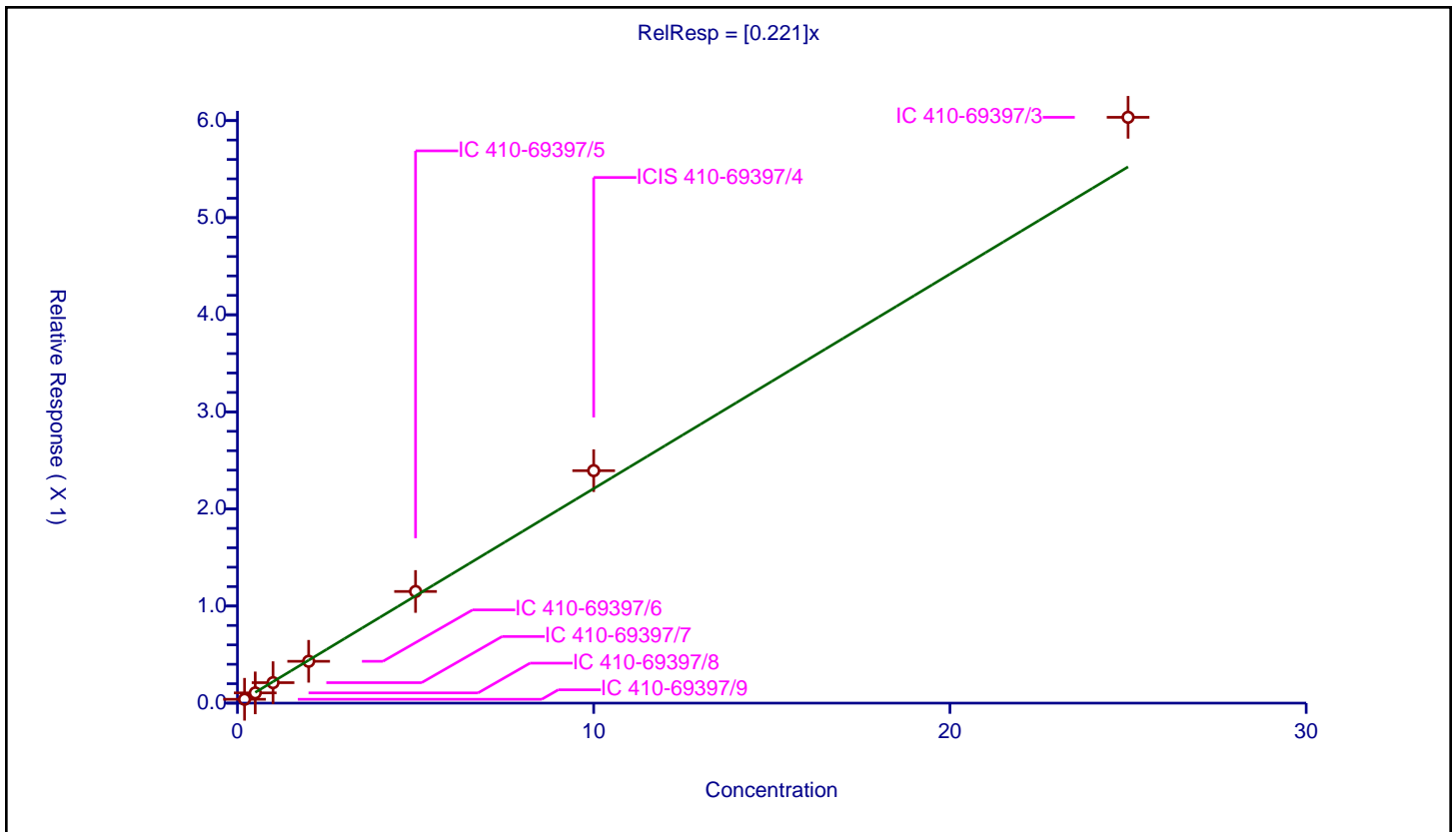
/ Bromoform

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.221

Error Coefficients	
Standard Error:	425000
Relative Standard Error:	7.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.039758	10.0	1473403.0	0.198792	Y
2	IC 410-69397/8	0.5	0.105427	10.0	1487373.0	0.210855	Y
3	IC 410-69397/7	1.0	0.210738	10.0	1484400.0	0.210738	Y
4	IC 410-69397/6	2.0	0.430933	10.0	1481807.0	0.215467	Y
5	IC 410-69397/5	5.0	1.150169	10.0	1486999.0	0.230034	Y
6	ICIS 410-69397/4	10.0	2.394455	10.0	1570516.0	0.239446	Y
7	IC 410-69397/3	25.0	6.034014	10.0	1579118.0	0.241361	Y



Calibration

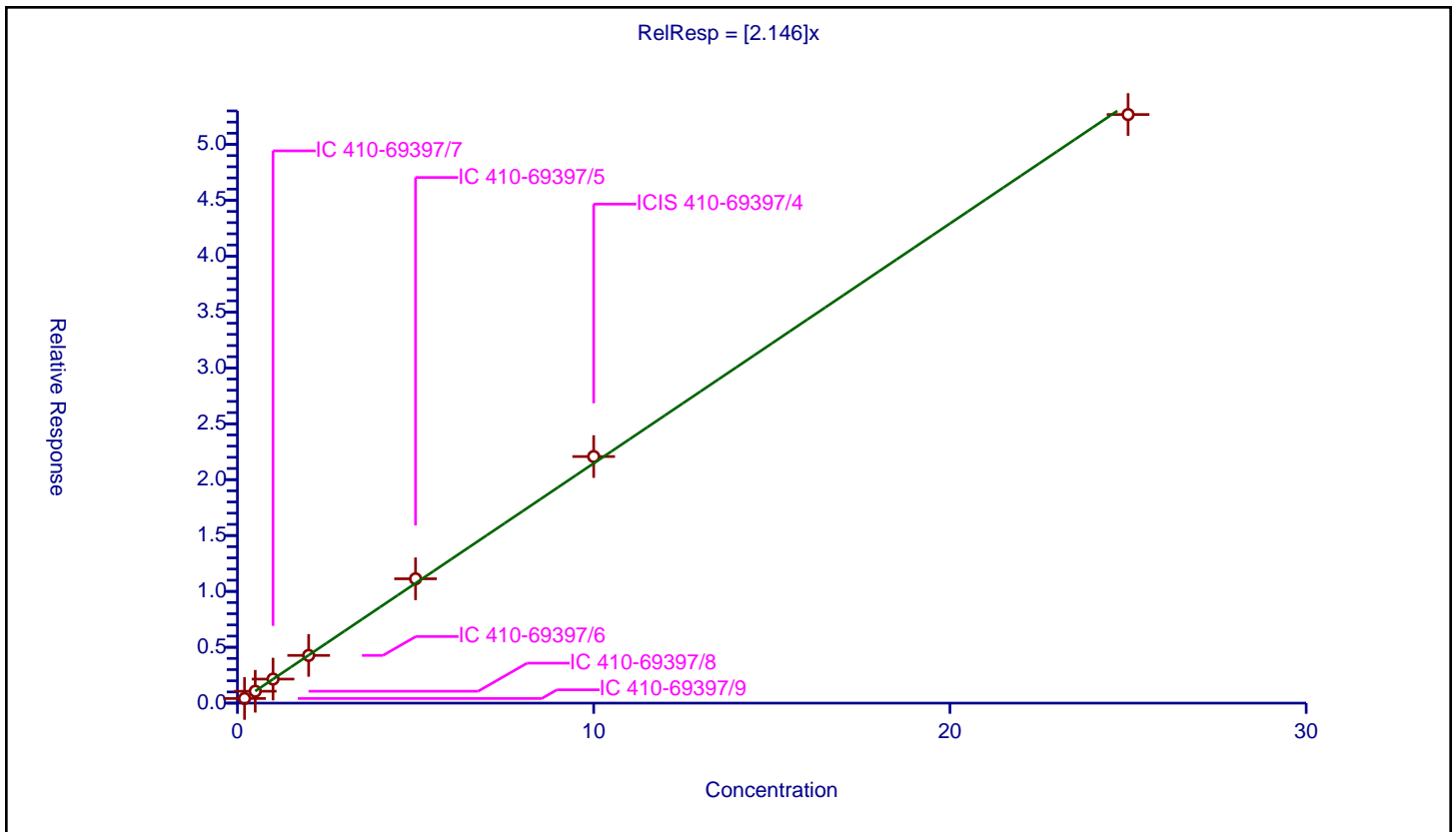
/ Isopropylbenzene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	2.146

Error Coefficients	
Standard Error:	3750000
Relative Standard Error:	2.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.413254	10.0	1473403.0	2.066271	Y
2	IC 410-69397/8	0.5	1.064615	10.0	1487373.0	2.129231	Y
3	IC 410-69397/7	1.0	2.151543	10.0	1484400.0	2.151543	Y
4	IC 410-69397/6	2.0	4.270786	10.0	1481807.0	2.135393	Y
5	IC 410-69397/5	5.0	11.126867	10.0	1486999.0	2.225373	Y
6	ICIS 410-69397/4	10.0	22.066238	10.0	1570516.0	2.206624	Y
7	IC 410-69397/3	25.0	52.675791	10.0	1579118.0	2.107032	Y



**Calibration**

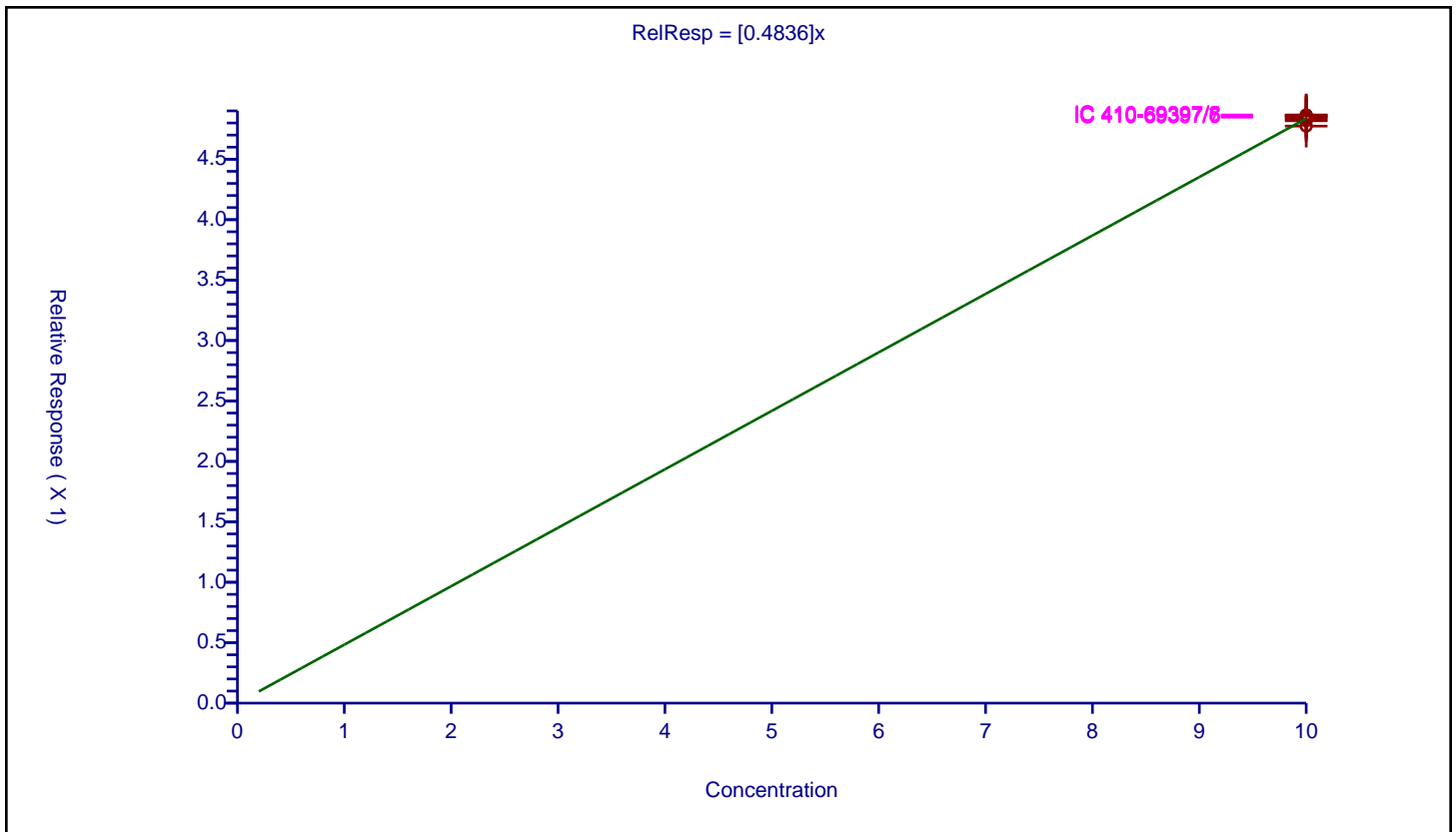
**/ 4-Bromofluorobenzene (Surr)**

**Curve Type:** Average  
**Weighting:** Conc\_Sq  
**Origin:** Force  
**Dependency:** Response  
**Calib Mode:** ISTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	0
Slope:	0.4836

Error Coefficients	
Standard Error:	788000
Relative Standard Error:	0.7
Correlation Coefficient:	0.00000000000000000000
Coefficient of Determination (Adjusted):	0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/3	10.0	4.818164	10.0	1579118.0	0.481816	Y
2	ICIS 410-69397/4	10.0	4.774119	10.0	1570516.0	0.477412	Y
3	IC 410-69397/5	10.0	4.863749	10.0	1486999.0	0.486375	Y
4	IC 410-69397/6	10.0	4.848661	10.0	1481807.0	0.484866	Y
5	IC 410-69397/7	10.0	4.851954	10.0	1484400.0	0.485195	Y
6	IC 410-69397/8	10.0	4.866318	10.0	1487373.0	0.486632	Y
7	IC 410-69397/9	10.0	4.831034	10.0	1473403.0	0.483103	Y



Calibration

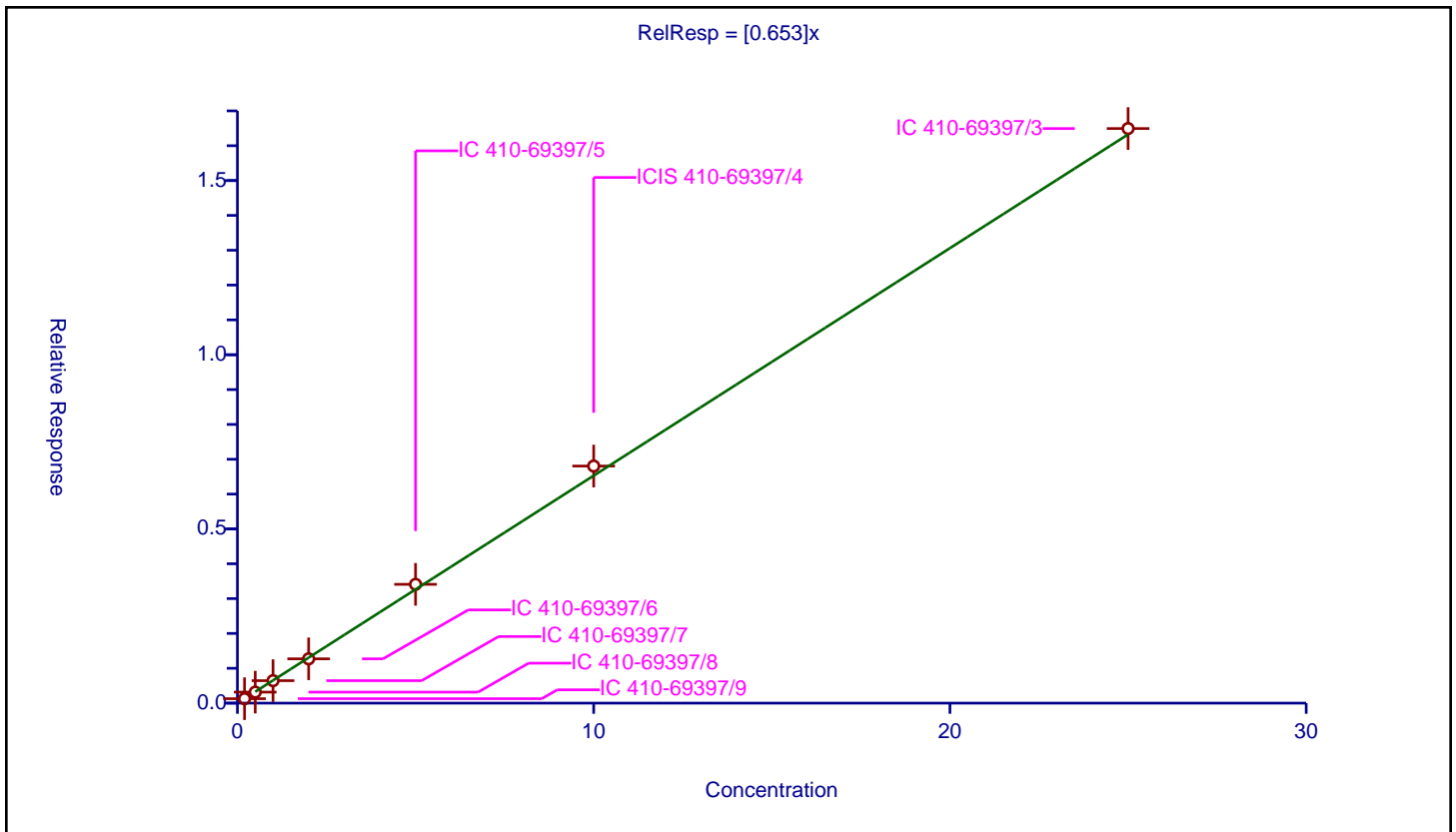
/ 1,1,2,2-Tetrachloroethane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.653

Error Coefficients	
Standard Error:	666000
Relative Standard Error:	3.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.127173	10.0	848529.0	0.635865	Y
2	IC 410-69397/8	0.5	0.316039	10.0	857933.0	0.632077	Y
3	IC 410-69397/7	1.0	0.644739	10.0	843985.0	0.644739	Y
4	IC 410-69397/6	2.0	1.271723	10.0	848463.0	0.635862	Y
5	IC 410-69397/5	5.0	3.4102	10.0	845833.0	0.68204	Y
6	ICIS 410-69397/4	10.0	6.805371	10.0	891775.0	0.680537	Y
7	IC 410-69397/3	25.0	16.493035	10.0	898877.0	0.659721	Y



**Calibration**

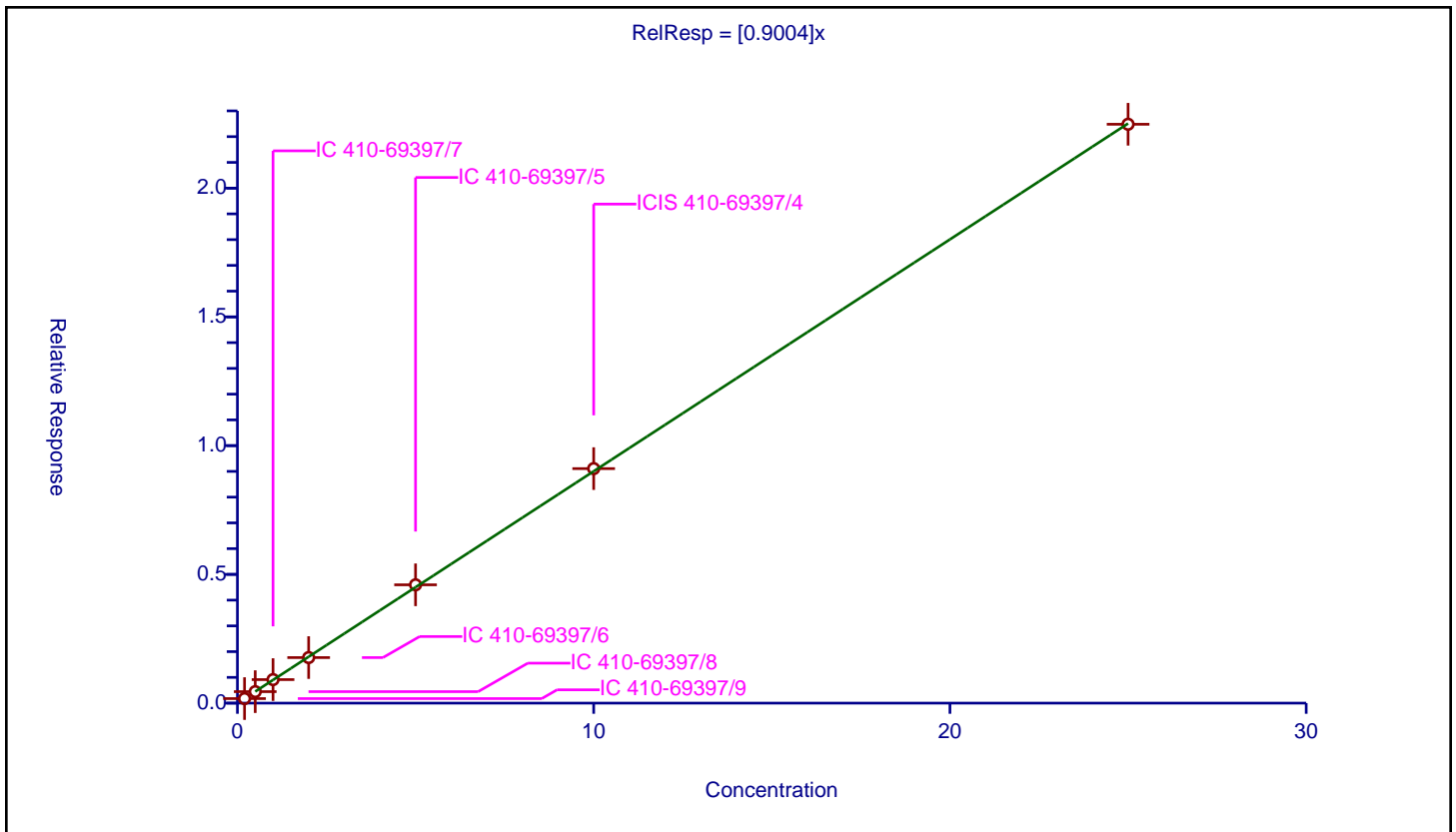
**/ Bromobenzene**

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.9004

Error Coefficients	
Standard Error:	906000
Relative Standard Error:	1.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.1768	10.0	848529.0	0.884	Y
2	IC 410-69397/8	0.5	0.445886	10.0	857933.0	0.891771	Y
3	IC 410-69397/7	1.0	0.913618	10.0	843985.0	0.913618	Y
4	IC 410-69397/6	2.0	1.769517	10.0	848463.0	0.884759	Y
5	IC 410-69397/5	5.0	4.594619	10.0	845833.0	0.918924	Y
6	ICIS 410-69397/4	10.0	9.107488	10.0	891775.0	0.910749	Y
7	IC 410-69397/3	25.0	22.480762	10.0	898877.0	0.89923	Y



Calibration

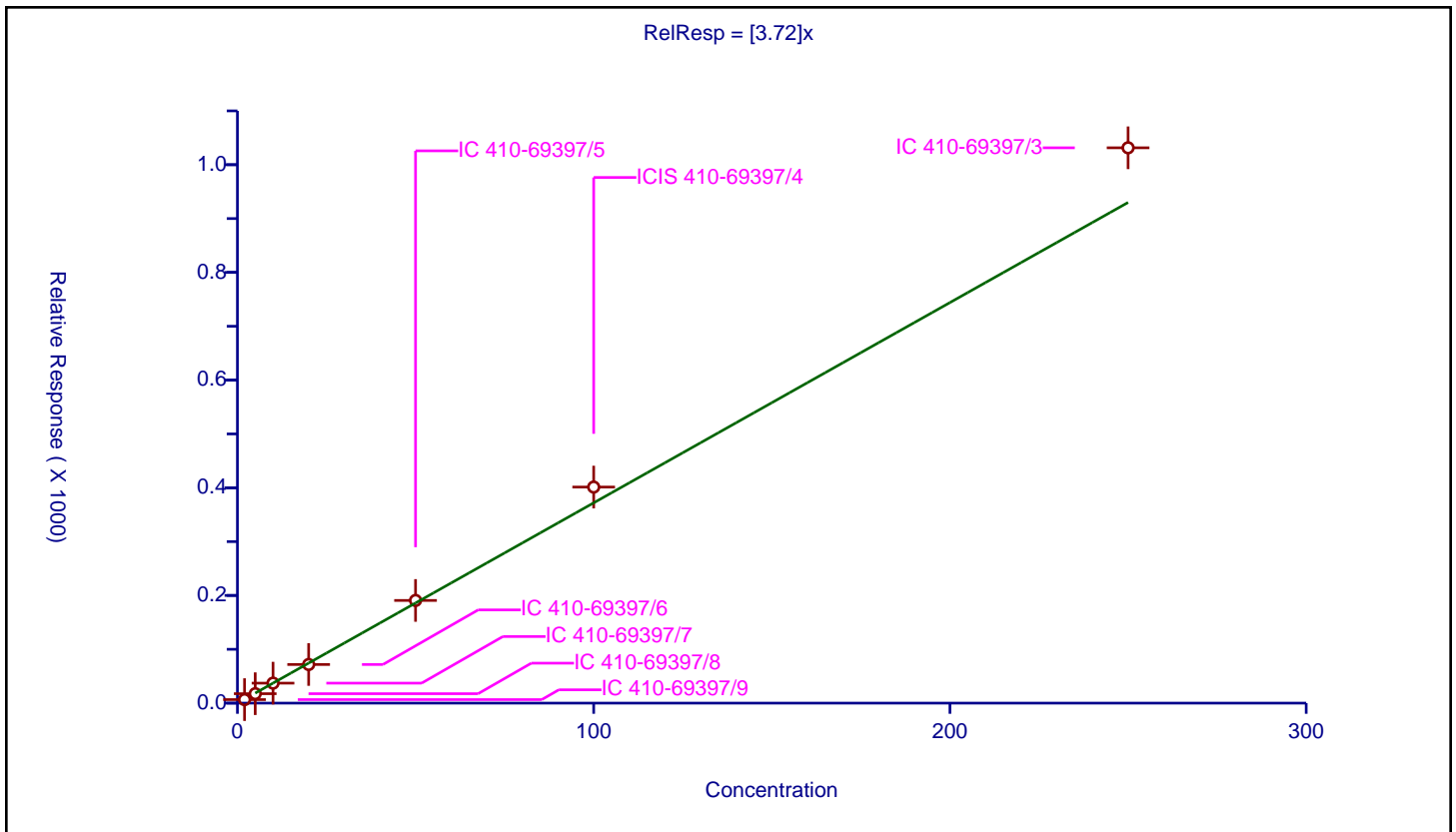
/ trans-1,4-Dichloro-2-butene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	3.72

Error Coefficients	
Standard Error:	1550000
Relative Standard Error:	7.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	2.0	6.544195	50.0	157506.0	3.272098	Y
2	IC 410-69397/8	5.0	17.559807	50.0	156713.0	3.511961	Y
3	IC 410-69397/7	10.0	37.140283	50.0	155400.0	3.714028	Y
4	IC 410-69397/6	20.0	71.741953	50.0	164063.0	3.587098	Y
5	IC 410-69397/5	50.0	190.736605	50.0	167919.0	3.814732	Y
6	ICIS 410-69397/4	100.0	401.295242	50.0	174562.0	4.012952	Y
7	IC 410-69397/3	250.0	1031.421235	50.0	168044.0	4.125685	Y



Calibration

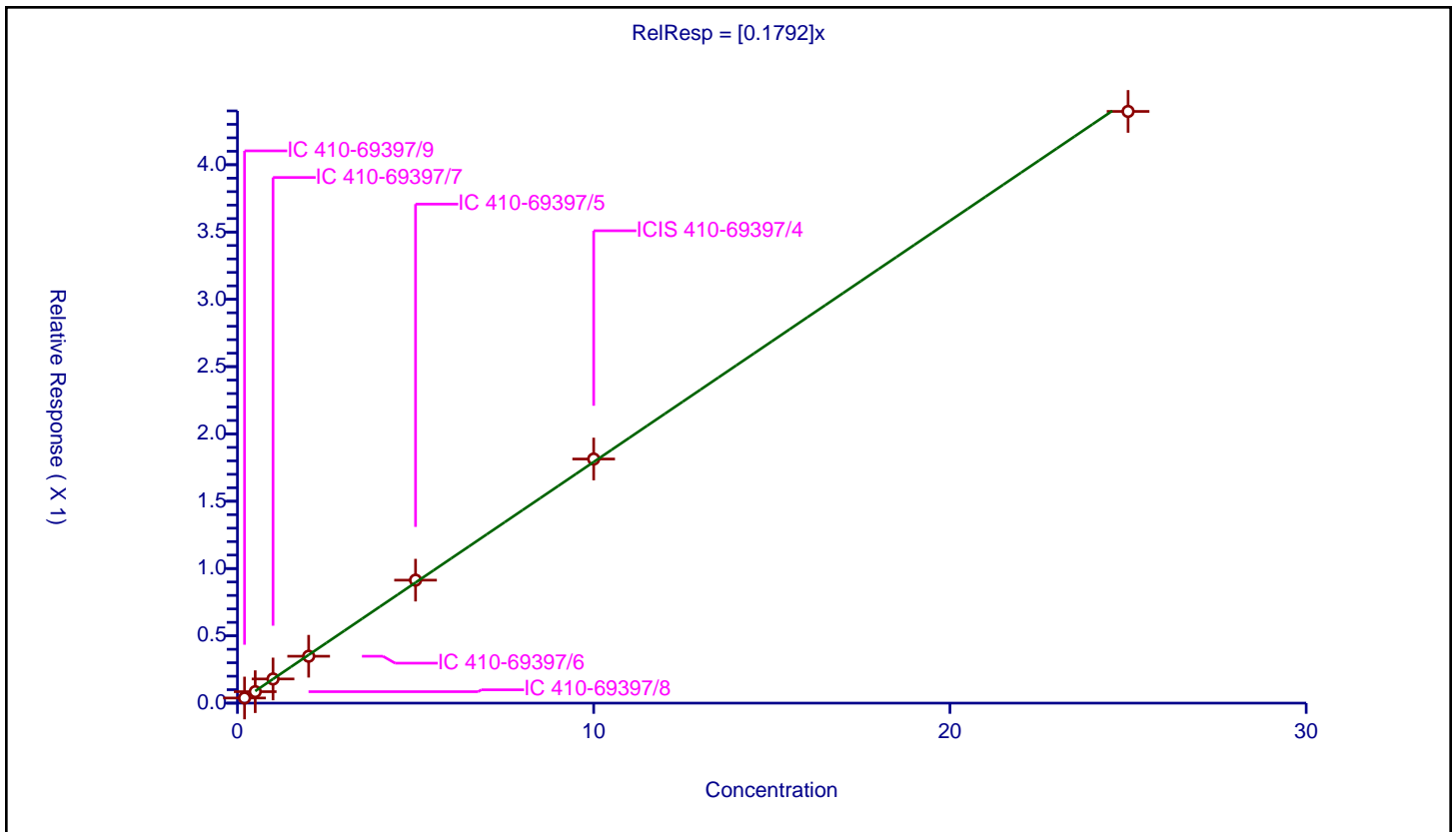
/ 1,2,3-Trichloropropane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.1792

Error Coefficients	
Standard Error:	178000
Relative Standard Error:	3.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.038031	10.0	848529.0	0.190153	Y
2	IC 410-69397/8	0.5	0.085158	10.0	857933.0	0.170316	Y
3	IC 410-69397/7	1.0	0.1796	10.0	843985.0	0.1796	Y
4	IC 410-69397/6	2.0	0.348454	10.0	848463.0	0.174227	Y
5	IC 410-69397/5	5.0	0.913703	10.0	845833.0	0.182741	Y
6	ICIS 410-69397/4	10.0	1.813507	10.0	891775.0	0.181351	Y
7	IC 410-69397/3	25.0	4.396052	10.0	898877.0	0.175842	Y





**Calibration**

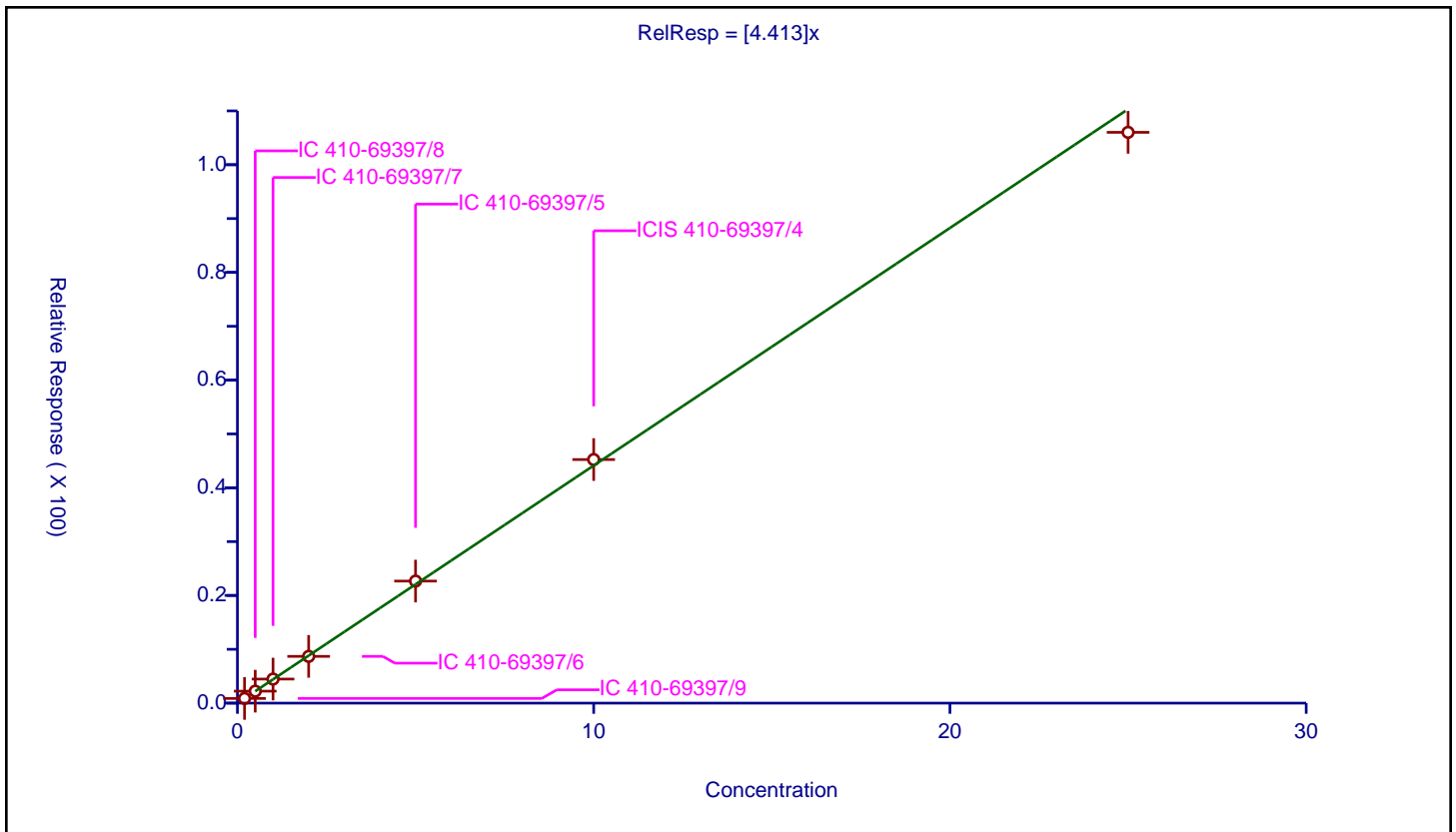
**/ N-Propylbenzene**

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	4.413

Error Coefficients	
Standard Error:	4310000
Relative Standard Error:	2.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.866782	10.0	848529.0	4.333912	Y
2	IC 410-69397/8	0.5	2.222376	10.0	857933.0	4.444753	Y
3	IC 410-69397/7	1.0	4.470624	10.0	843985.0	4.470624	Y
4	IC 410-69397/6	2.0	8.683702	10.0	848463.0	4.341851	Y
5	IC 410-69397/5	5.0	22.667702	10.0	845833.0	4.53354	Y
6	ICIS 410-69397/4	10.0	45.240481	10.0	891775.0	4.524048	Y
7	IC 410-69397/3	25.0	106.015773	10.0	898877.0	4.240631	Y



Calibration

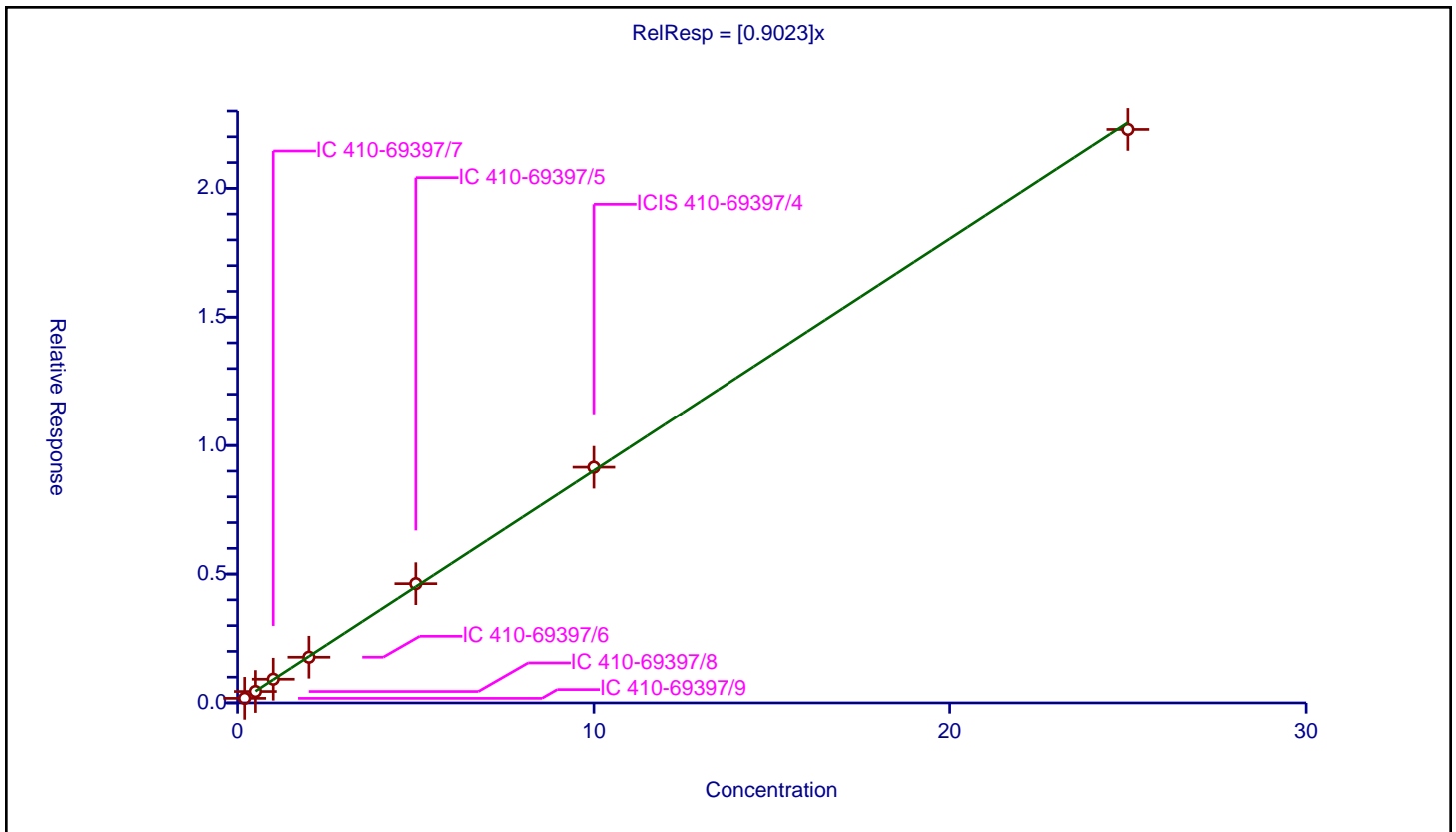
/ 2-Chlorotoluene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.9023

Error Coefficients	
Standard Error:	900000
Relative Standard Error:	1.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.178014	10.0	848529.0	0.89007	Y
2	IC 410-69397/8	0.5	0.443589	10.0	857933.0	0.887179	Y
3	IC 410-69397/7	1.0	0.919696	10.0	843985.0	0.919696	Y
4	IC 410-69397/6	2.0	1.773572	10.0	848463.0	0.886786	Y
5	IC 410-69397/5	5.0	4.627828	10.0	845833.0	0.925566	Y
6	ICIS 410-69397/4	10.0	9.151759	10.0	891775.0	0.915176	Y
7	IC 410-69397/3	25.0	22.285162	10.0	898877.0	0.891406	Y



Calibration

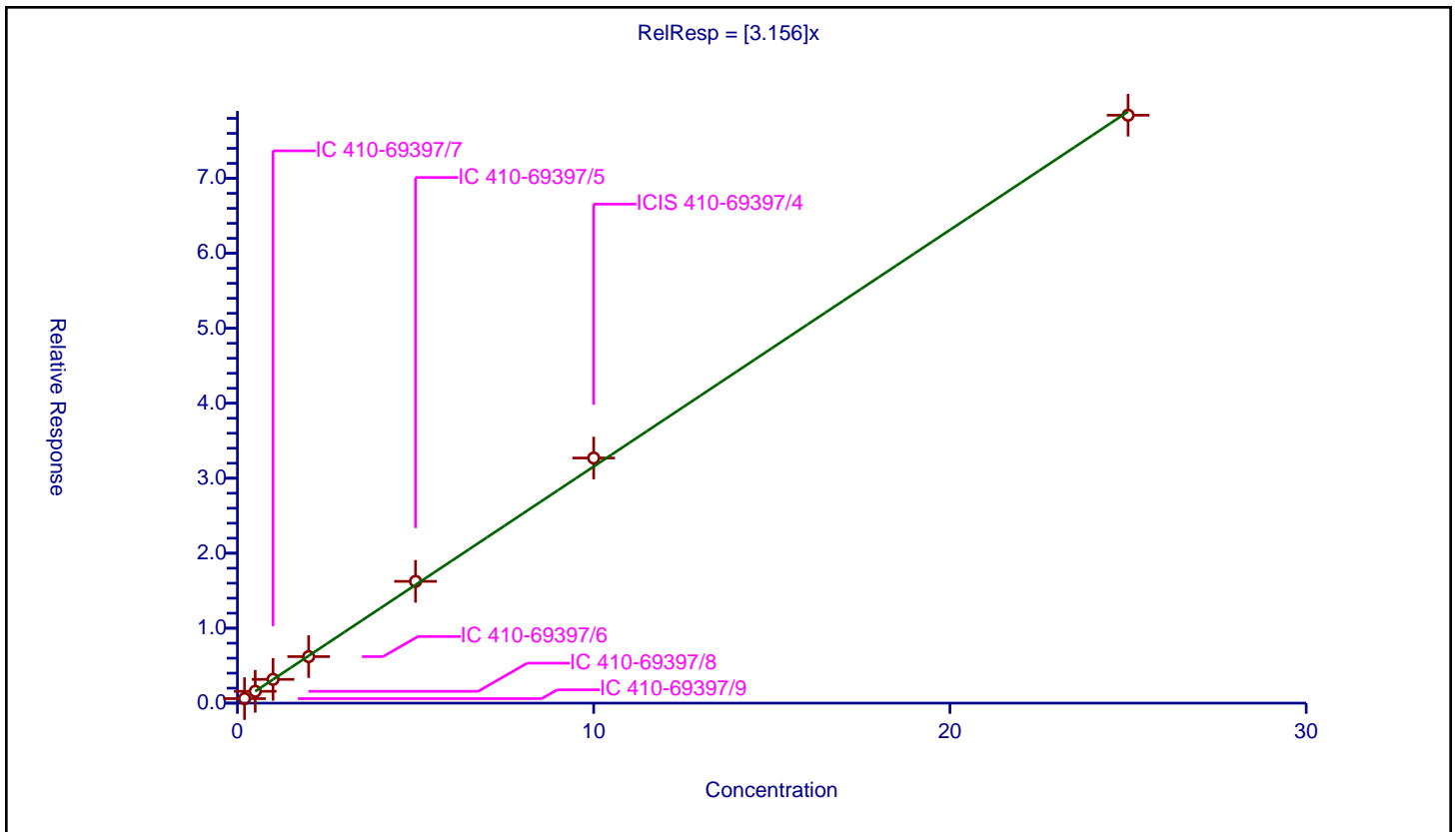
/ 1,3,5-Trimethylbenzene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	3.156

Error Coefficients	
Standard Error:	3170000
Relative Standard Error:	2.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.602042	10.0	848529.0	3.010209	Y
2	IC 410-69397/8	0.5	1.576813	10.0	857933.0	3.153626	Y
3	IC 410-69397/7	1.0	3.171632	10.0	843985.0	3.171632	Y
4	IC 410-69397/6	2.0	6.203523	10.0	848463.0	3.101762	Y
5	IC 410-69397/5	5.0	16.246434	10.0	845833.0	3.249287	Y
6	ICIS 410-69397/4	10.0	32.697306	10.0	891775.0	3.269731	Y
7	IC 410-69397/3	25.0	78.421108	10.0	898877.0	3.136844	Y



Calibration

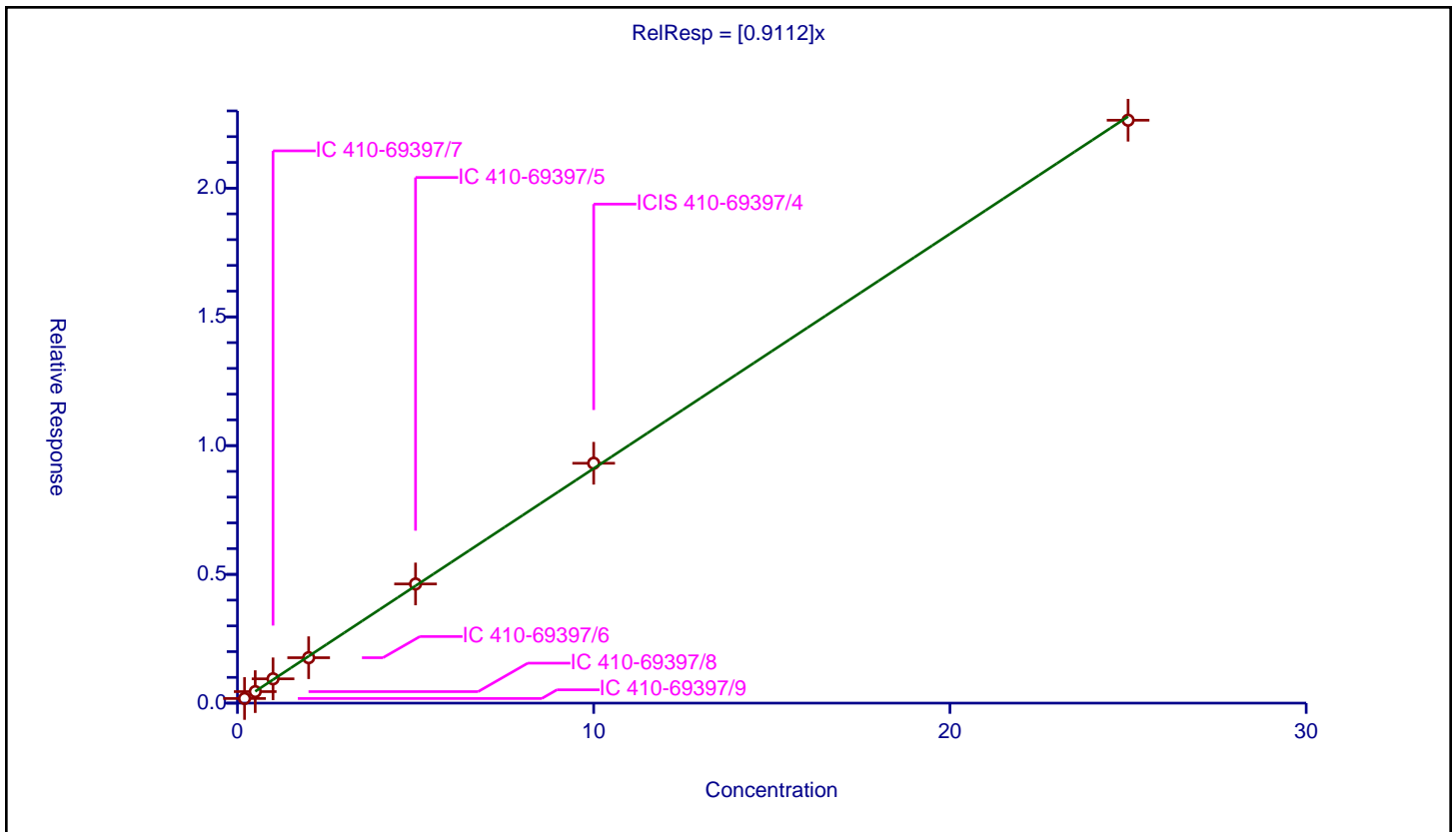
/ 4-Chlorotoluene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.9112

Error Coefficients	
Standard Error:	914000
Relative Standard Error:	2.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.179063	10.0	848529.0	0.895314	Y
2	IC 410-69397/8	0.5	0.447378	10.0	857933.0	0.894755	Y
3	IC 410-69397/7	1.0	0.943642	10.0	843985.0	0.943642	Y
4	IC 410-69397/6	2.0	1.763766	10.0	848463.0	0.881883	Y
5	IC 410-69397/5	5.0	4.628065	10.0	845833.0	0.925613	Y
6	ICIS 410-69397/4	10.0	9.316218	10.0	891775.0	0.931622	Y
7	IC 410-69397/3	25.0	22.63758	10.0	898877.0	0.905503	Y



Calibration

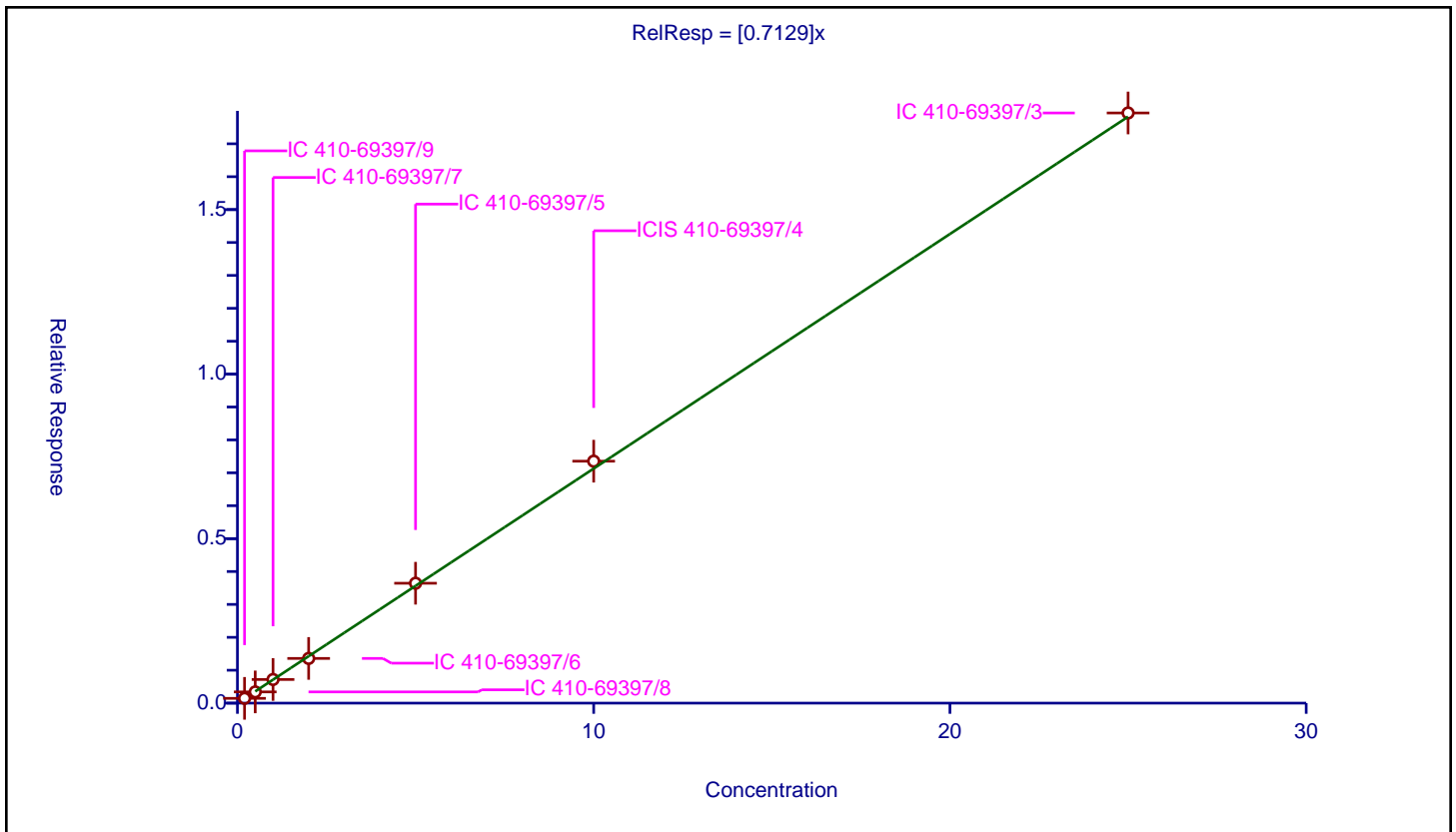
/ tert-Butylbenzene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.7129

Error Coefficients	
Standard Error:	724000
Relative Standard Error:	3.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.145687	10.0	848529.0	0.728437	Y
2	IC 410-69397/8	0.5	0.341309	10.0	857933.0	0.682617	Y
3	IC 410-69397/7	1.0	0.718449	10.0	843985.0	0.718449	Y
4	IC 410-69397/6	2.0	1.358374	10.0	848463.0	0.679187	Y
5	IC 410-69397/5	5.0	3.644124	10.0	845833.0	0.728825	Y
6	ICIS 410-69397/4	10.0	7.354007	10.0	891775.0	0.735401	Y
7	IC 410-69397/3	25.0	17.937059	10.0	898877.0	0.717482	Y



Calibration

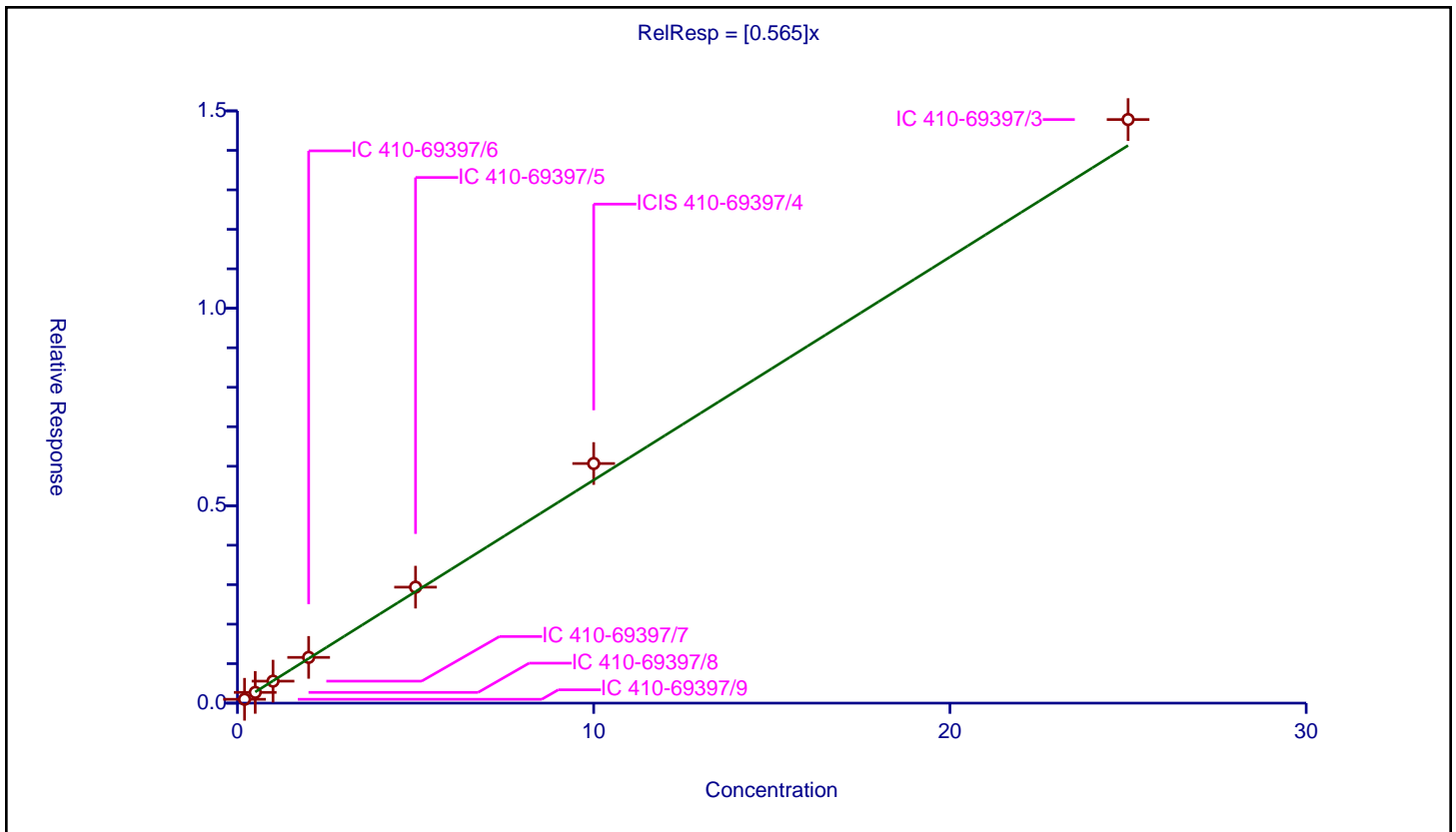
/ Pentachloroethane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.565

Error Coefficients	
Standard Error:	596000
Relative Standard Error:	7.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.097592	10.0	848529.0	0.487962	Y
2	IC 410-69397/8	0.5	0.27248	10.0	857933.0	0.544961	Y
3	IC 410-69397/7	1.0	0.556858	10.0	843985.0	0.556858	Y
4	IC 410-69397/6	2.0	1.158483	10.0	848463.0	0.579242	Y
5	IC 410-69397/5	5.0	2.937648	10.0	845833.0	0.58753	Y
6	ICIS 410-69397/4	10.0	6.069065	10.0	891775.0	0.606906	Y
7	IC 410-69397/3	25.0	14.780776	10.0	898877.0	0.591231	Y



Calibration

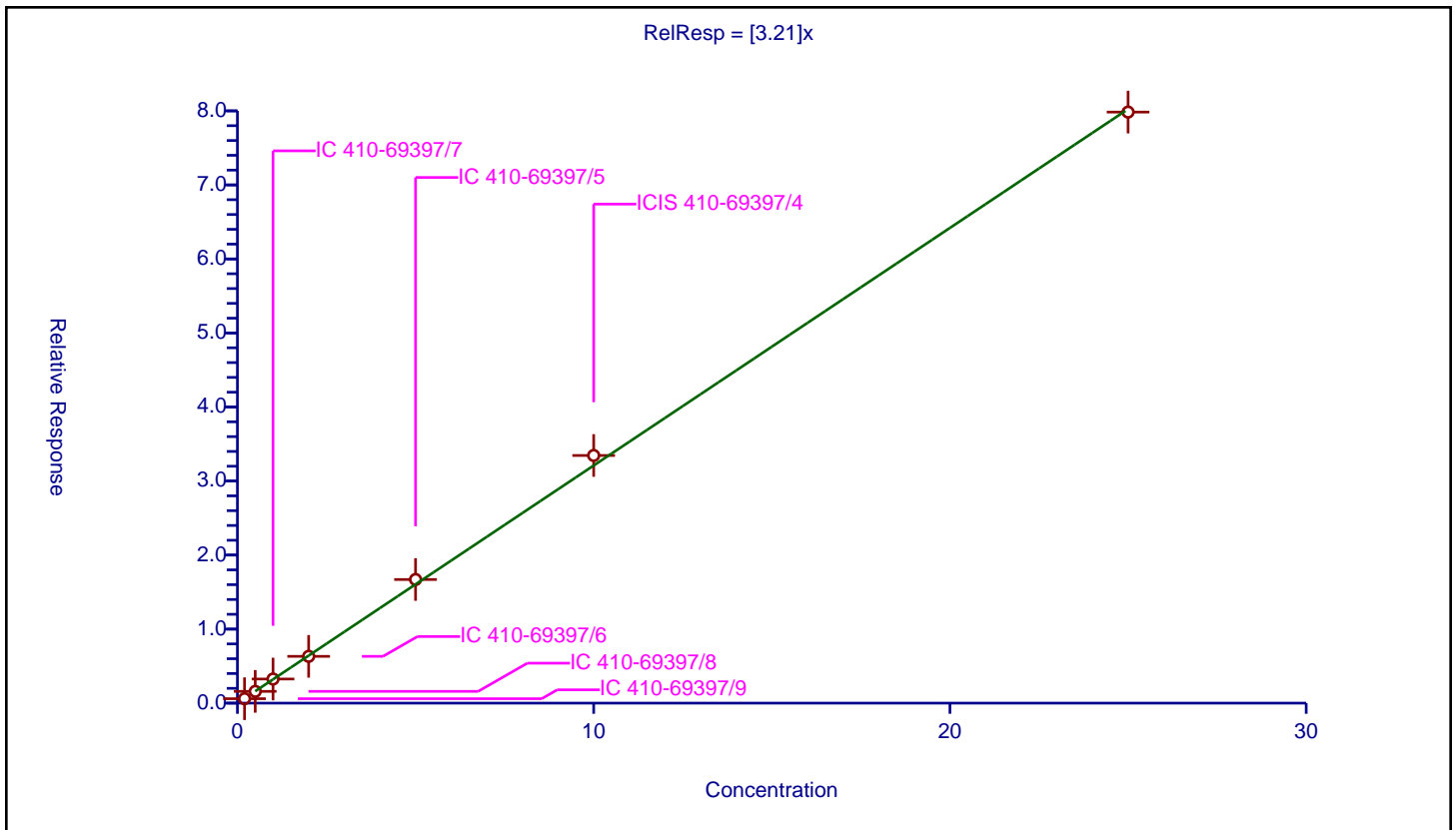
/ 1,2,4-Trimethylbenzene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	3.21

Error Coefficients	
Standard Error:	3230000
Relative Standard Error:	3.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.599685	10.0	848529.0	2.998424	Y
2	IC 410-69397/8	0.5	1.586756	10.0	857933.0	3.173511	Y
3	IC 410-69397/7	1.0	3.25642	10.0	843985.0	3.25642	Y
4	IC 410-69397/6	2.0	6.320712	10.0	848463.0	3.160356	Y
5	IC 410-69397/5	5.0	16.699526	10.0	845833.0	3.339905	Y
6	ICIS 410-69397/4	10.0	33.452115	10.0	891775.0	3.345212	Y
7	IC 410-69397/3	25.0	79.839611	10.0	898877.0	3.193584	Y



Calibration

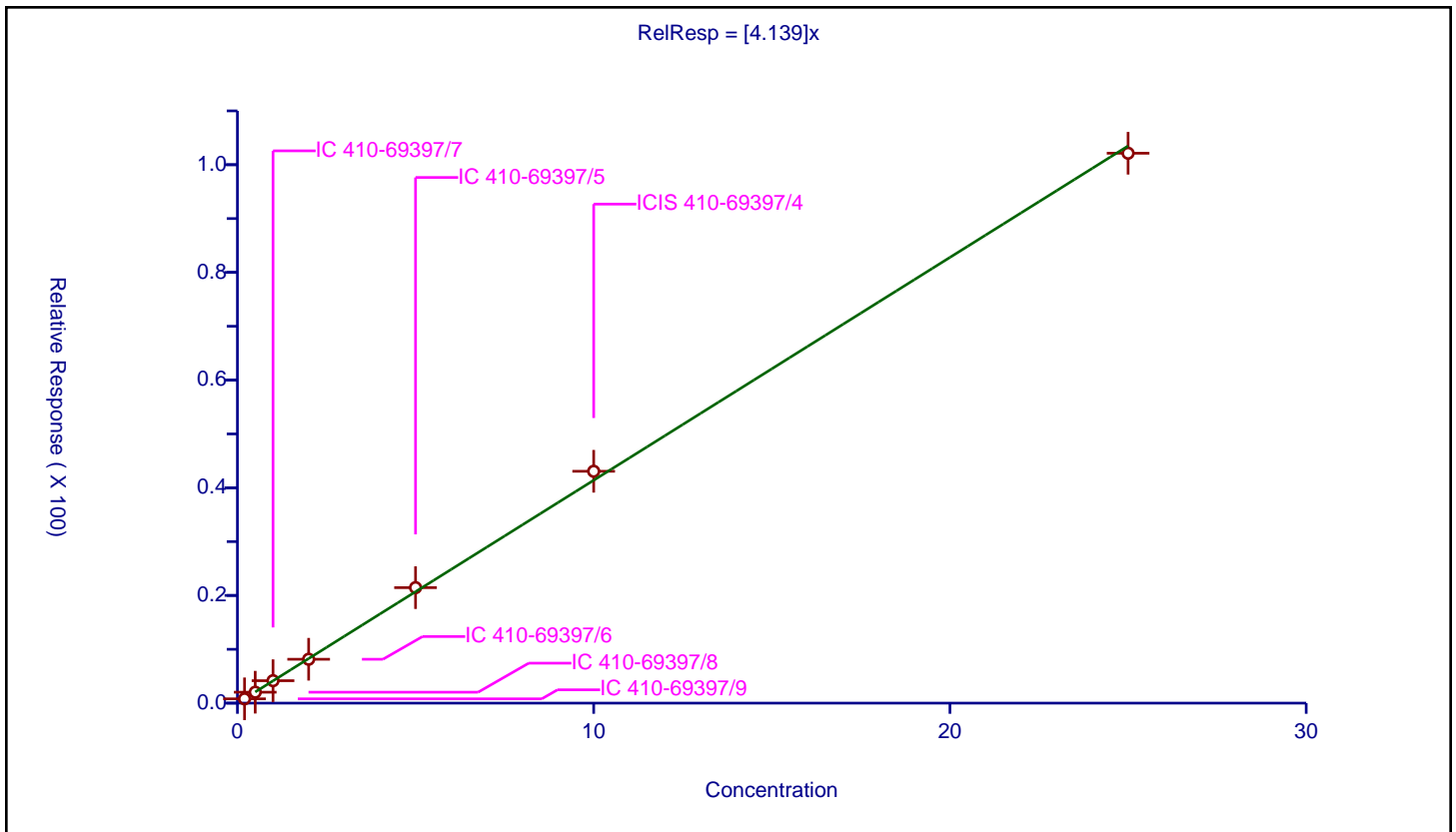
/ sec-Butylbenzene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	4.139

Error Coefficients	
Standard Error:	4140000
Relative Standard Error:	2.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.797415	10.0	848529.0	3.987076	Y
2	IC 410-69397/8	0.5	2.03214	10.0	857933.0	4.06428	Y
3	IC 410-69397/7	1.0	4.166863	10.0	843985.0	4.166863	Y
4	IC 410-69397/6	2.0	8.150161	10.0	848463.0	4.07508	Y
5	IC 410-69397/5	5.0	21.454093	10.0	845833.0	4.290819	Y
6	ICIS 410-69397/4	10.0	43.064136	10.0	891775.0	4.306414	Y
7	IC 410-69397/3	25.0	102.132316	10.0	898877.0	4.085293	Y





Calibration

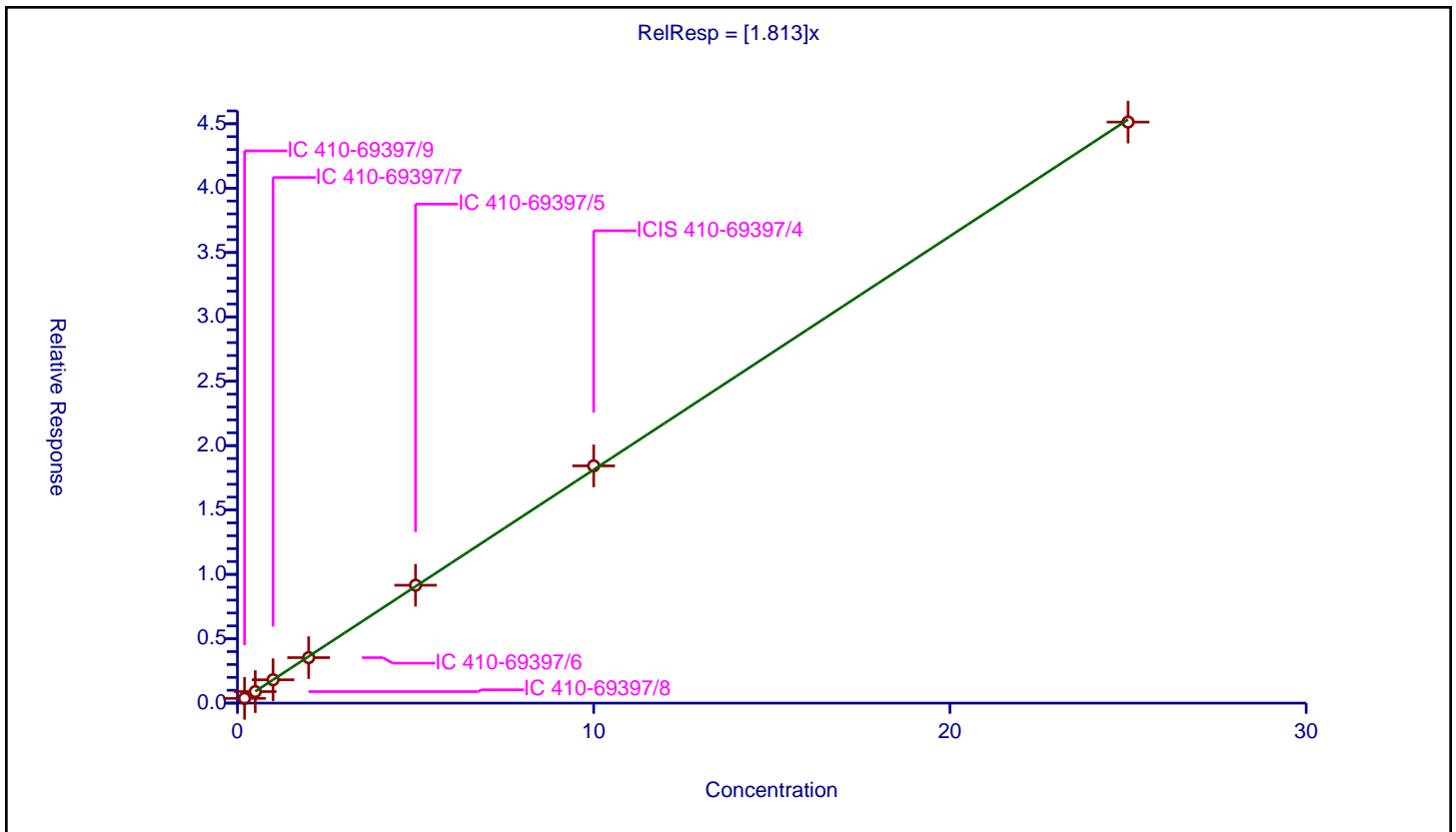
/ 1,3-Dichlorobenzene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.813

Error Coefficients	
Standard Error:	1820000
Relative Standard Error:	1.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.369133	10.0	848529.0	1.845665	Y
2	IC 410-69397/8	0.5	0.893869	10.0	857933.0	1.787739	Y
3	IC 410-69397/7	1.0	1.813753	10.0	843985.0	1.813753	Y
4	IC 410-69397/6	2.0	3.531881	10.0	848463.0	1.76594	Y
5	IC 410-69397/5	5.0	9.157694	10.0	845833.0	1.831539	Y
6	ICIS 410-69397/4	10.0	18.42957	10.0	891775.0	1.842957	Y
7	IC 410-69397/3	25.0	45.132627	10.0	898877.0	1.805305	Y



Calibration

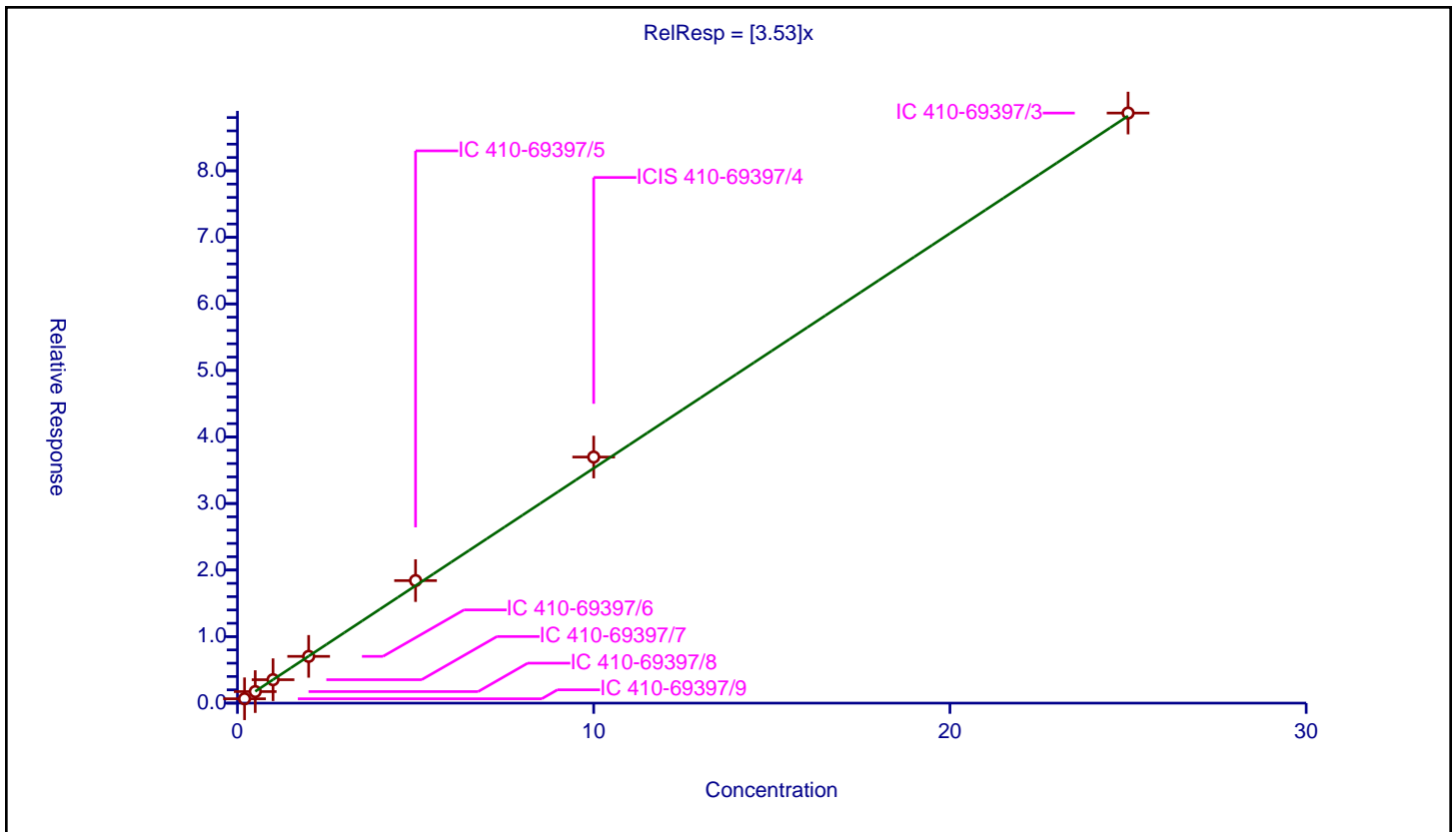
/ 4-Isopropyltoluene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	3.53

Error Coefficients	
Standard Error:	3590000
Relative Standard Error:	4.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.654603	10.0	848529.0	3.273017	Y
2	IC 410-69397/8	0.5	1.736872	10.0	857933.0	3.473744	Y
3	IC 410-69397/7	1.0	3.518949	10.0	843985.0	3.518949	Y
4	IC 410-69397/6	2.0	7.026317	10.0	848463.0	3.513158	Y
5	IC 410-69397/5	5.0	18.413067	10.0	845833.0	3.682613	Y
6	ICIS 410-69397/4	10.0	36.981167	10.0	891775.0	3.698117	Y
7	IC 410-69397/3	25.0	88.675458	10.0	898877.0	3.547018	Y



Calibration

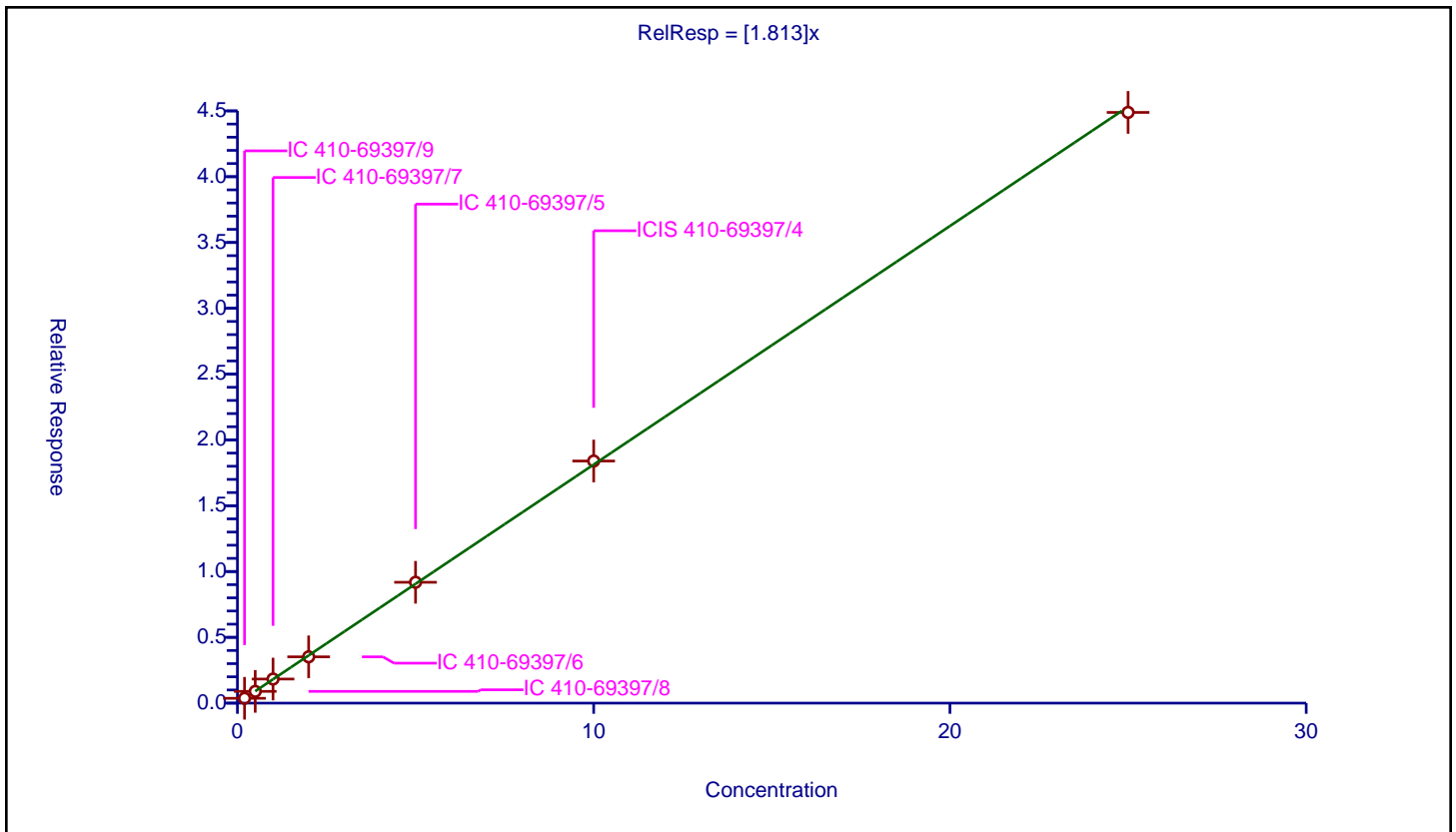
/ 1,4-Dichlorobenzene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.813

Error Coefficients	
Standard Error:	1810000
Relative Standard Error:	1.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.368072	10.0	848529.0	1.840361	Y
2	IC 410-69397/8	0.5	0.893147	10.0	857933.0	1.786293	Y
3	IC 410-69397/7	1.0	1.831028	10.0	843985.0	1.831028	Y
4	IC 410-69397/6	2.0	3.519081	10.0	848463.0	1.75954	Y
5	IC 410-69397/5	5.0	9.182794	10.0	845833.0	1.836559	Y
6	ICIS 410-69397/4	10.0	18.397432	10.0	891775.0	1.839743	Y
7	IC 410-69397/3	25.0	44.88455	10.0	898877.0	1.795382	Y



Calibration

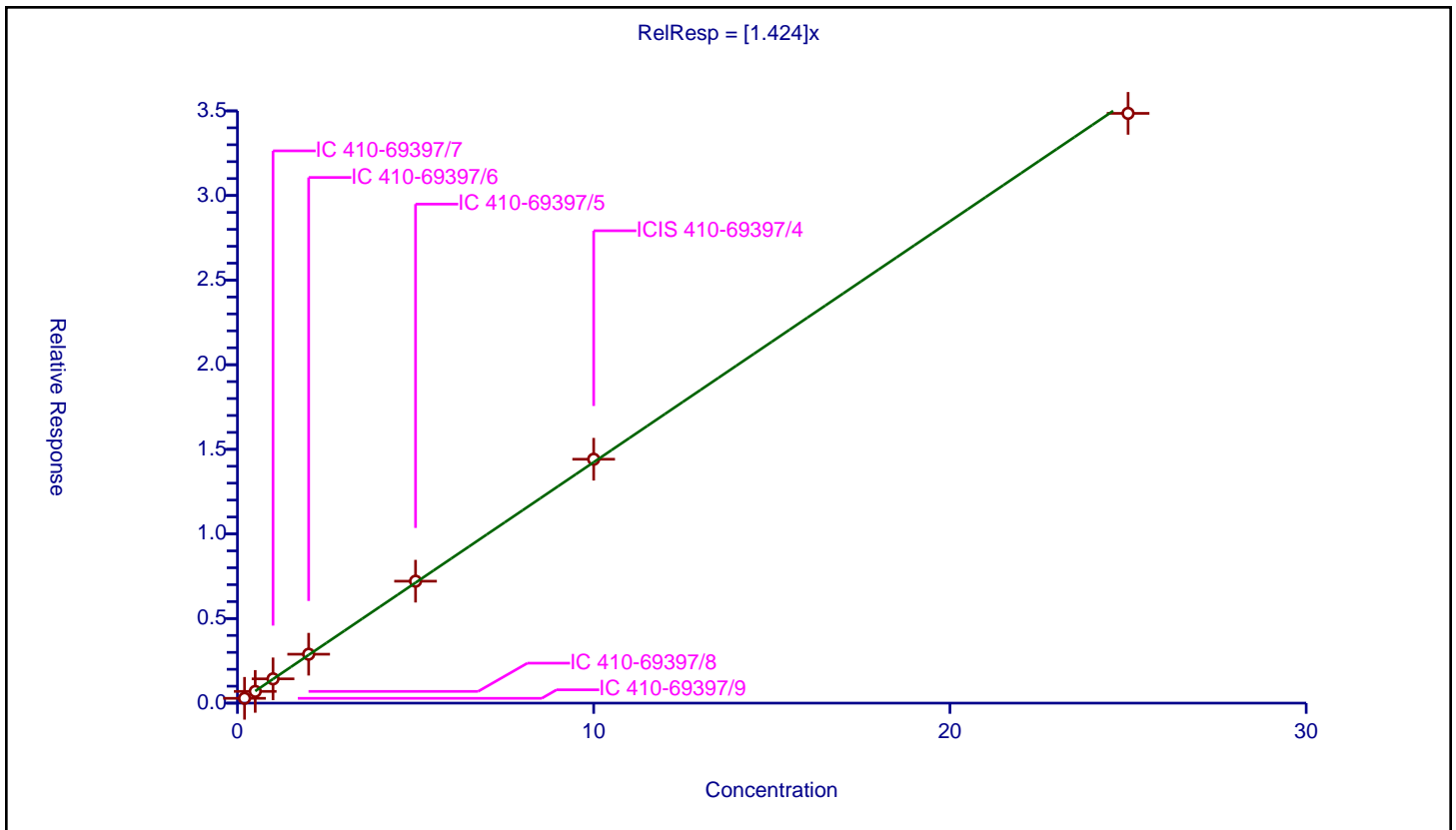
/ 1,2,3-Trimethylbenzene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.424

Error Coefficients	
Standard Error:	1410000
Relative Standard Error:	1.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.284622	10.0	848529.0	1.42311	Y
2	IC 410-69397/8	0.5	0.693469	10.0	857933.0	1.386938	Y
3	IC 410-69397/7	1.0	1.434161	10.0	843985.0	1.434161	Y
4	IC 410-69397/6	2.0	2.890851	10.0	848463.0	1.445425	Y
5	IC 410-69397/5	5.0	7.20712	10.0	845833.0	1.441424	Y
6	ICIS 410-69397/4	10.0	14.414555	10.0	891775.0	1.441456	Y
7	IC 410-69397/3	25.0	34.852955	10.0	898877.0	1.394118	Y



Calibration

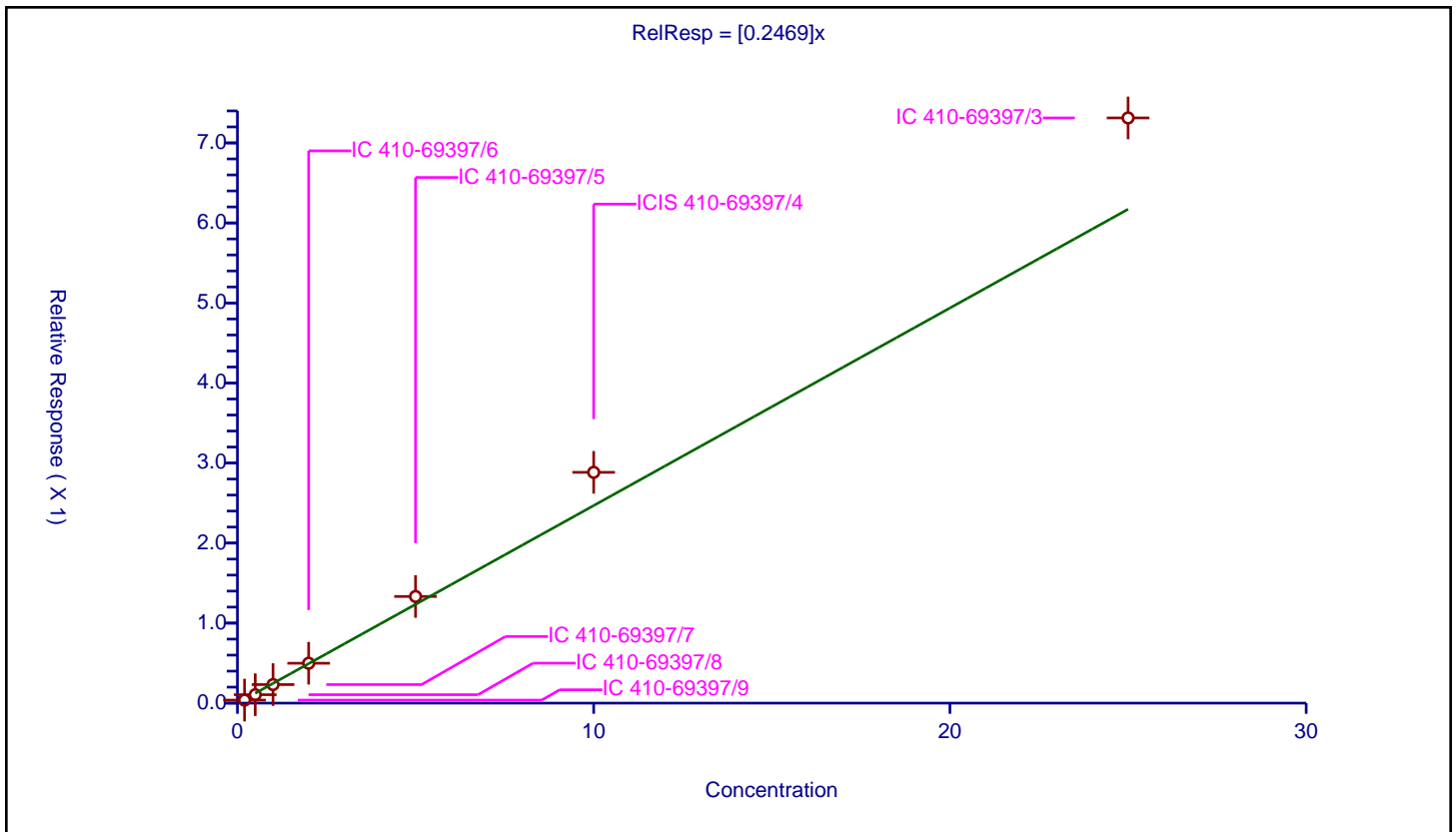
/ Benzyl chloride

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2469

Error Coefficients	
Standard Error:	292000
Relative Standard Error:	15.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.972

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.037724	10.0	848529.0	0.188621	Y
2	IC 410-69397/8	0.5	0.105463	10.0	857933.0	0.210926	Y
3	IC 410-69397/7	1.0	0.231912	10.0	843985.0	0.231912	Y
4	IC 410-69397/6	2.0	0.498254	10.0	848463.0	0.249127	Y
5	IC 410-69397/5	5.0	1.332568	10.0	845833.0	0.266514	Y
6	ICIS 410-69397/4	10.0	2.883732	10.0	891775.0	0.288373	Y
7	IC 410-69397/3	25.0	7.31218	10.0	898877.0	0.292487	Y



**Calibration**

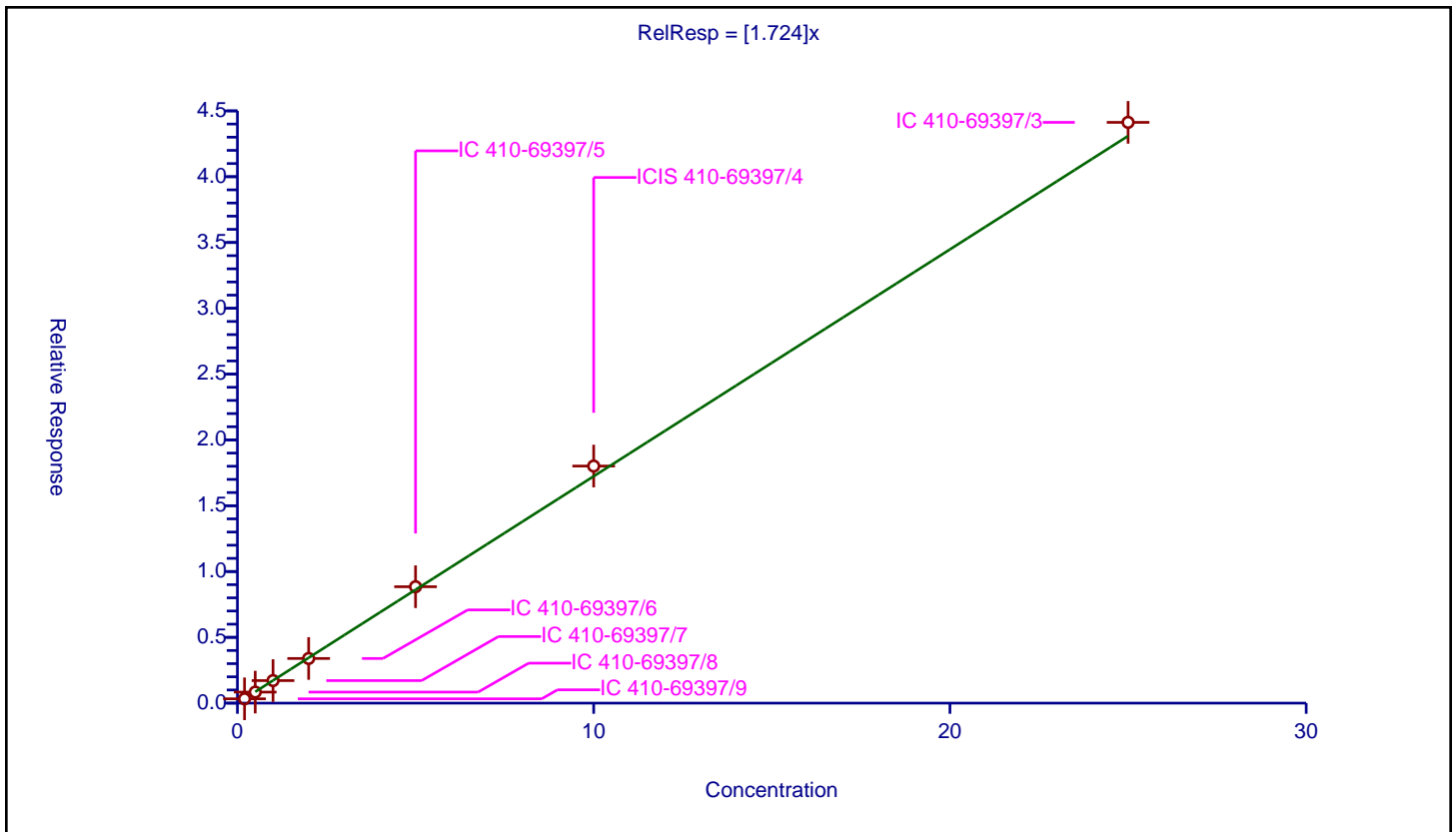
**/ n-Butylbenzene**

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.724

Error Coefficients	
Standard Error:	1780000
Relative Standard Error:	3.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.328875	10.0	848529.0	1.644375	Y
2	IC 410-69397/8	0.5	0.838096	10.0	857933.0	1.676191	Y
3	IC 410-69397/7	1.0	1.714	10.0	843985.0	1.714	Y
4	IC 410-69397/6	2.0	3.392417	10.0	848463.0	1.696208	Y
5	IC 410-69397/5	5.0	8.843862	10.0	845833.0	1.768772	Y
6	ICIS 410-69397/4	10.0	18.013064	10.0	891775.0	1.801306	Y
7	IC 410-69397/3	25.0	44.128774	10.0	898877.0	1.765151	Y



Calibration

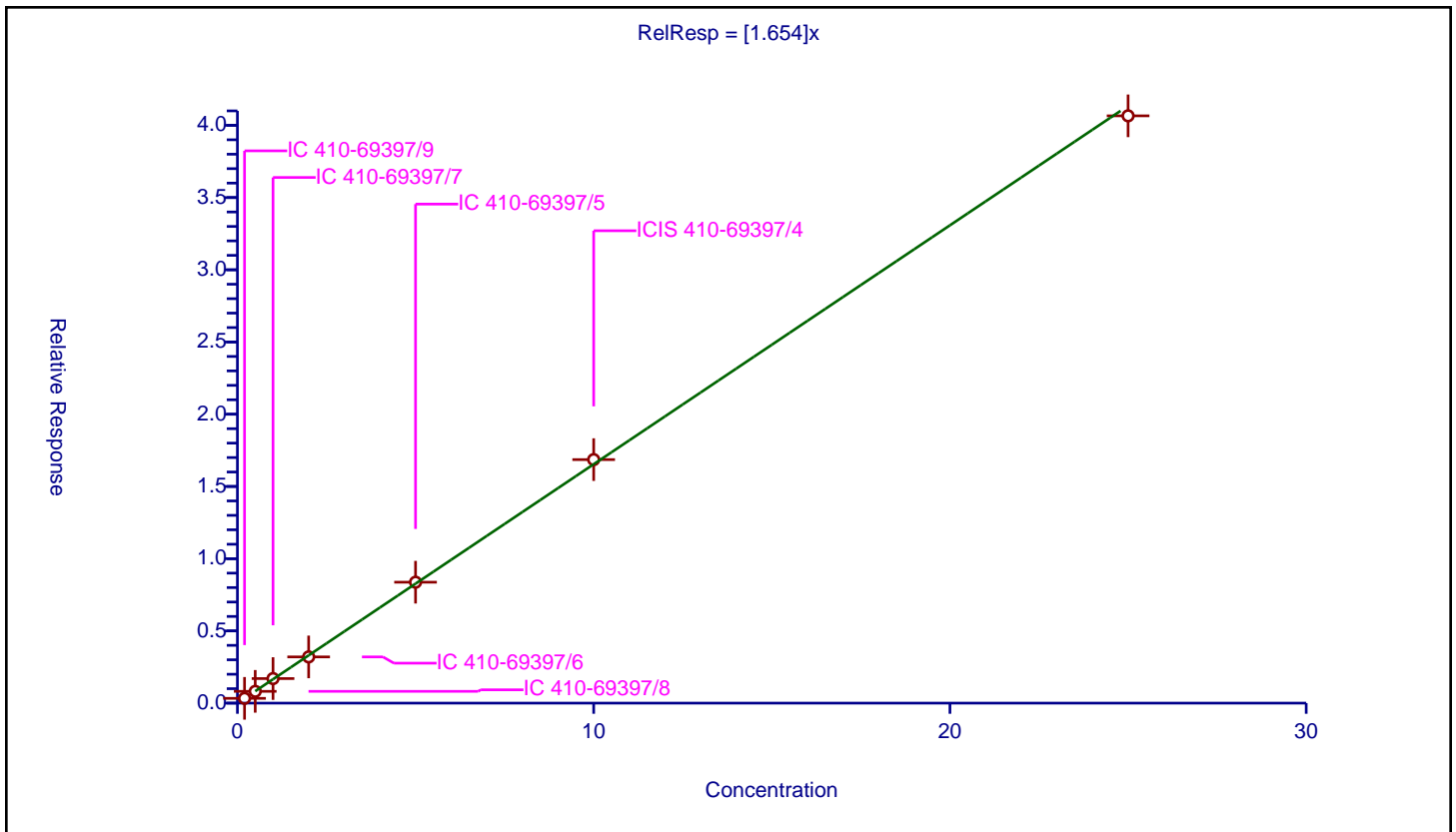
/ 1,2-Dichlorobenzene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.654

Error Coefficients	
Standard Error:	1640000
Relative Standard Error:	2.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.331845	10.0	848529.0	1.659224	Y
2	IC 410-69397/8	0.5	0.81553	10.0	857933.0	1.63106	Y
3	IC 410-69397/7	1.0	1.7008	10.0	843985.0	1.7008	Y
4	IC 410-69397/6	2.0	3.200658	10.0	848463.0	1.600329	Y
5	IC 410-69397/5	5.0	8.371676	10.0	845833.0	1.674335	Y
6	ICIS 410-69397/4	10.0	16.858748	10.0	891775.0	1.685875	Y
7	IC 410-69397/3	25.0	40.656252	10.0	898877.0	1.62625	Y



Calibration

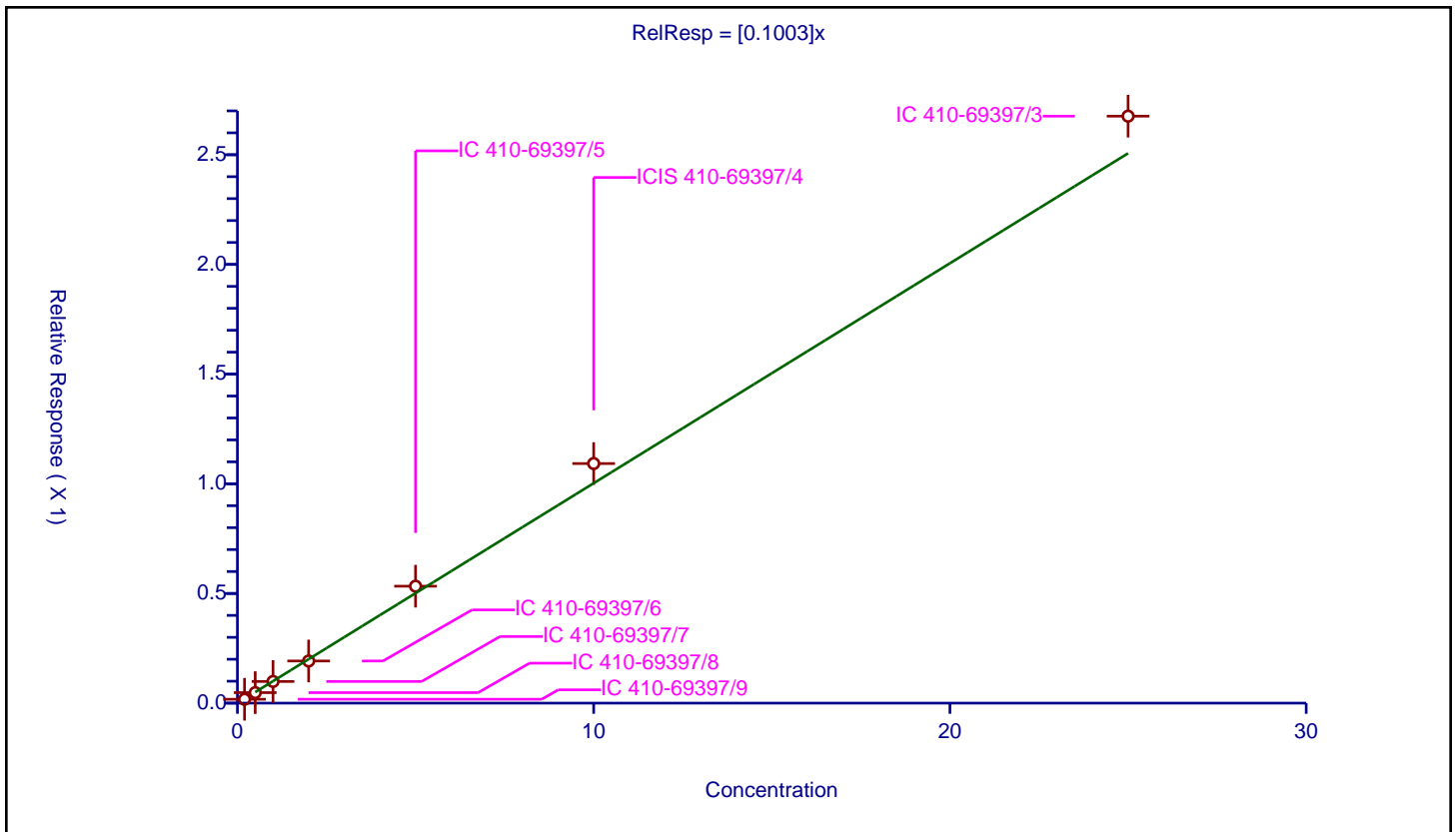
/ 1,2-Dibromo-3-Chloropropane

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.1003

Error Coefficients	
Standard Error:	108000
Relative Standard Error:	7.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.017689	10.0	848529.0	0.088447	Y
2	IC 410-69397/8	0.5	0.047848	10.0	857933.0	0.095695	Y
3	IC 410-69397/7	1.0	0.09877	10.0	843985.0	0.09877	Y
4	IC 410-69397/6	2.0	0.192136	10.0	848463.0	0.096068	Y
5	IC 410-69397/5	5.0	0.533084	10.0	845833.0	0.106617	Y
6	ICIS 410-69397/4	10.0	1.092204	10.0	891775.0	0.10922	Y
7	IC 410-69397/3	25.0	2.675906	10.0	898877.0	0.107036	Y





Calibration

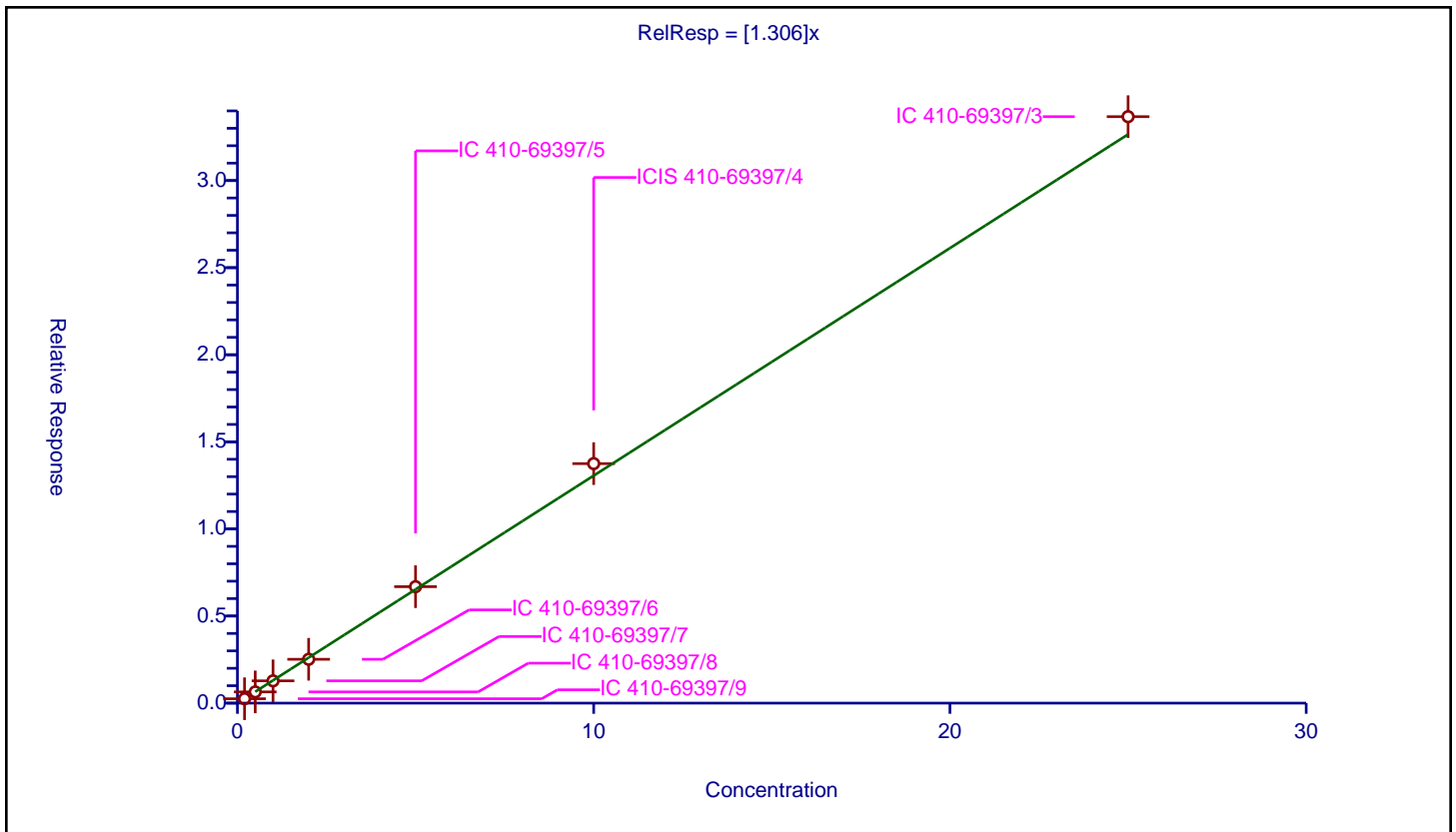
/ 1,3,5-Trichlorobenzene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.306

Error Coefficients	
Standard Error:	1360000
Relative Standard Error:	3.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.251376	10.0	848529.0	1.256881	Y
2	IC 410-69397/8	0.5	0.644654	10.0	857933.0	1.289308	Y
3	IC 410-69397/7	1.0	1.278565	10.0	843985.0	1.278565	Y
4	IC 410-69397/6	2.0	2.517552	10.0	848463.0	1.258776	Y
5	IC 410-69397/5	5.0	6.685788	10.0	845833.0	1.337158	Y
6	ICIS 410-69397/4	10.0	13.750217	10.0	891775.0	1.375022	Y
7	IC 410-69397/3	25.0	33.668622	10.0	898877.0	1.346745	Y



Calibration

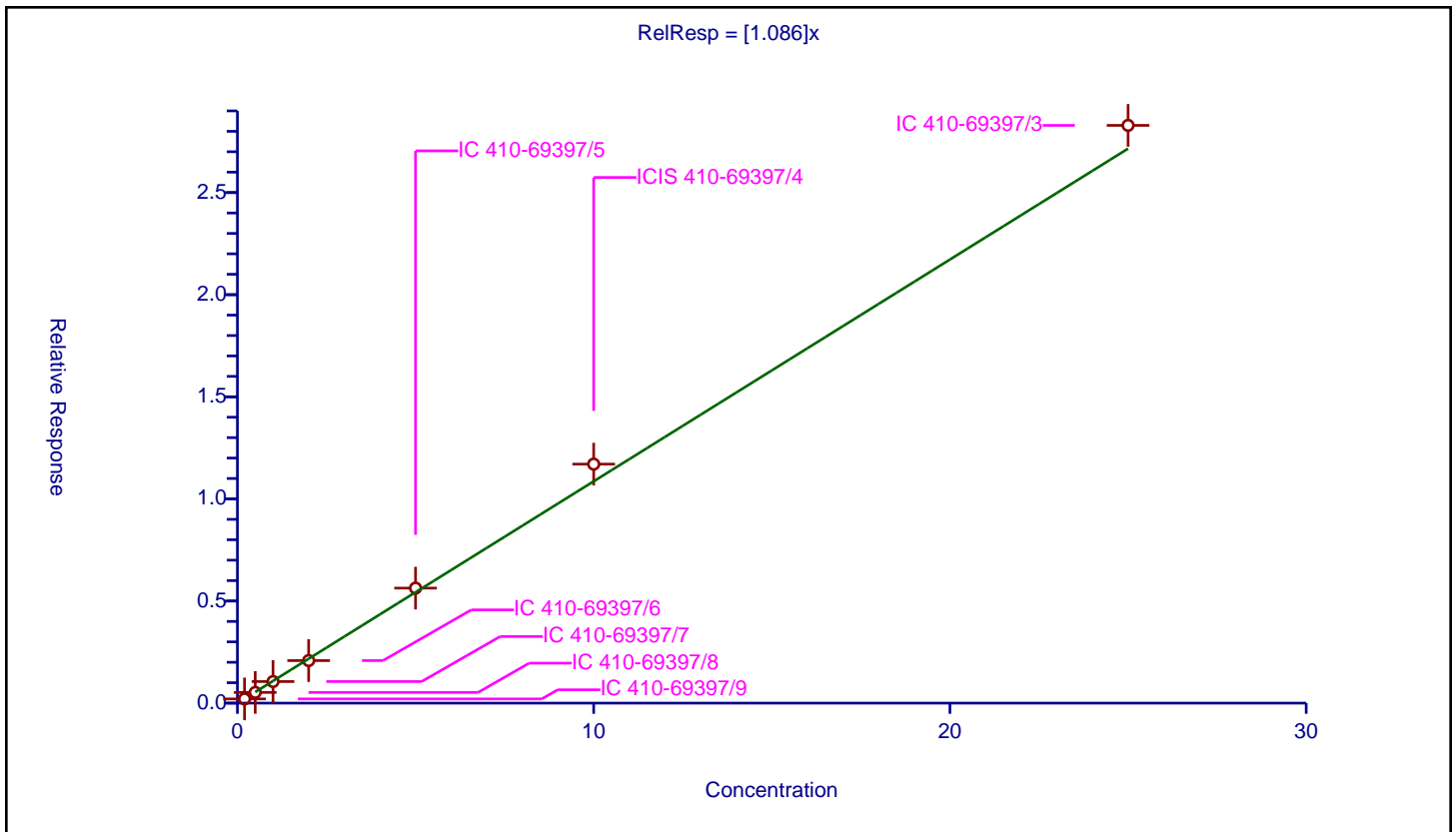
/ 1,2,4-Trichlorobenzene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.086

Error Coefficients	
Standard Error:	1140000
Relative Standard Error:	5.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.205096	10.0	848529.0	1.025481	Y
2	IC 410-69397/8	0.5	0.525088	10.0	857933.0	1.050175	Y
3	IC 410-69397/7	1.0	1.056832	10.0	843985.0	1.056832	Y
4	IC 410-69397/6	2.0	2.083721	10.0	848463.0	1.04186	Y
5	IC 410-69397/5	5.0	5.631372	10.0	845833.0	1.126274	Y
6	ICIS 410-69397/4	10.0	11.703468	10.0	891775.0	1.170347	Y
7	IC 410-69397/3	25.0	28.290345	10.0	898877.0	1.131614	Y



**Calibration**

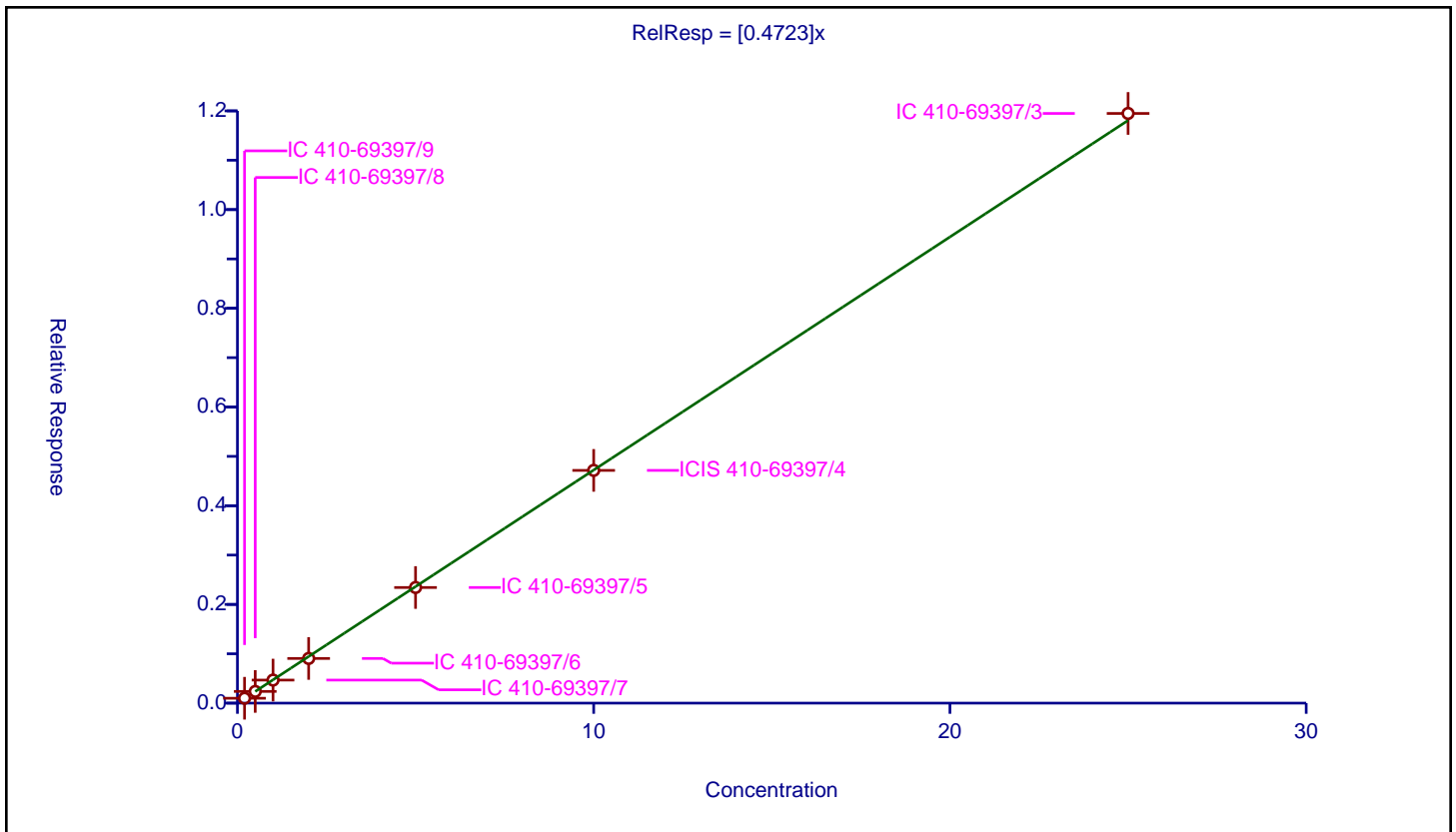
/ Hexachlorobutadiene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4723

Error Coefficients	
Standard Error:	479000
Relative Standard Error:	2.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.098795	10.0	848529.0	0.493973	Y
2	IC 410-69397/8	0.5	0.237186	10.0	857933.0	0.474373	Y
3	IC 410-69397/7	1.0	0.466892	10.0	843985.0	0.466892	Y
4	IC 410-69397/6	2.0	0.905437	10.0	848463.0	0.452719	Y
5	IC 410-69397/5	5.0	2.342685	10.0	845833.0	0.468537	Y
6	ICIS 410-69397/4	10.0	4.715719	10.0	891775.0	0.471572	Y
7	IC 410-69397/3	25.0	11.948409	10.0	898877.0	0.477936	Y



Calibration

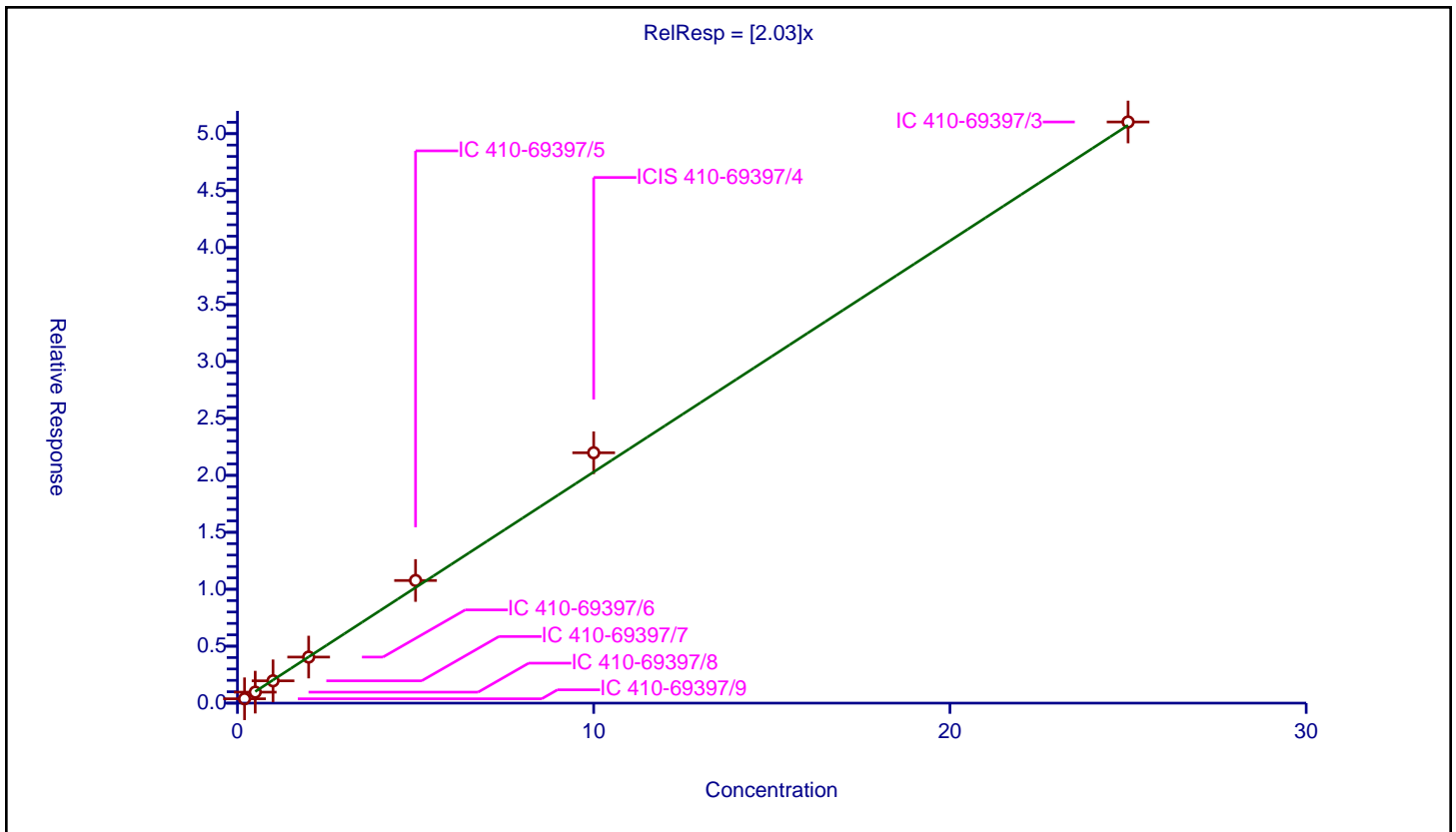
/ Naphthalene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	2.03

Error Coefficients	
Standard Error:	2080000
Relative Standard Error:	5.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.381354	10.0	848529.0	1.90677	Y
2	IC 410-69397/8	0.5	0.963677	10.0	857933.0	1.927353	Y
3	IC 410-69397/7	1.0	1.958625	10.0	843985.0	1.958625	Y
4	IC 410-69397/6	2.0	4.044278	10.0	848463.0	2.022139	Y
5	IC 410-69397/5	5.0	10.767823	10.0	845833.0	2.153565	Y
6	ICIS 410-69397/4	10.0	21.98244	10.0	891775.0	2.198244	Y
7	IC 410-69397/3	25.0	51.026347	10.0	898877.0	2.041054	Y



Calibration

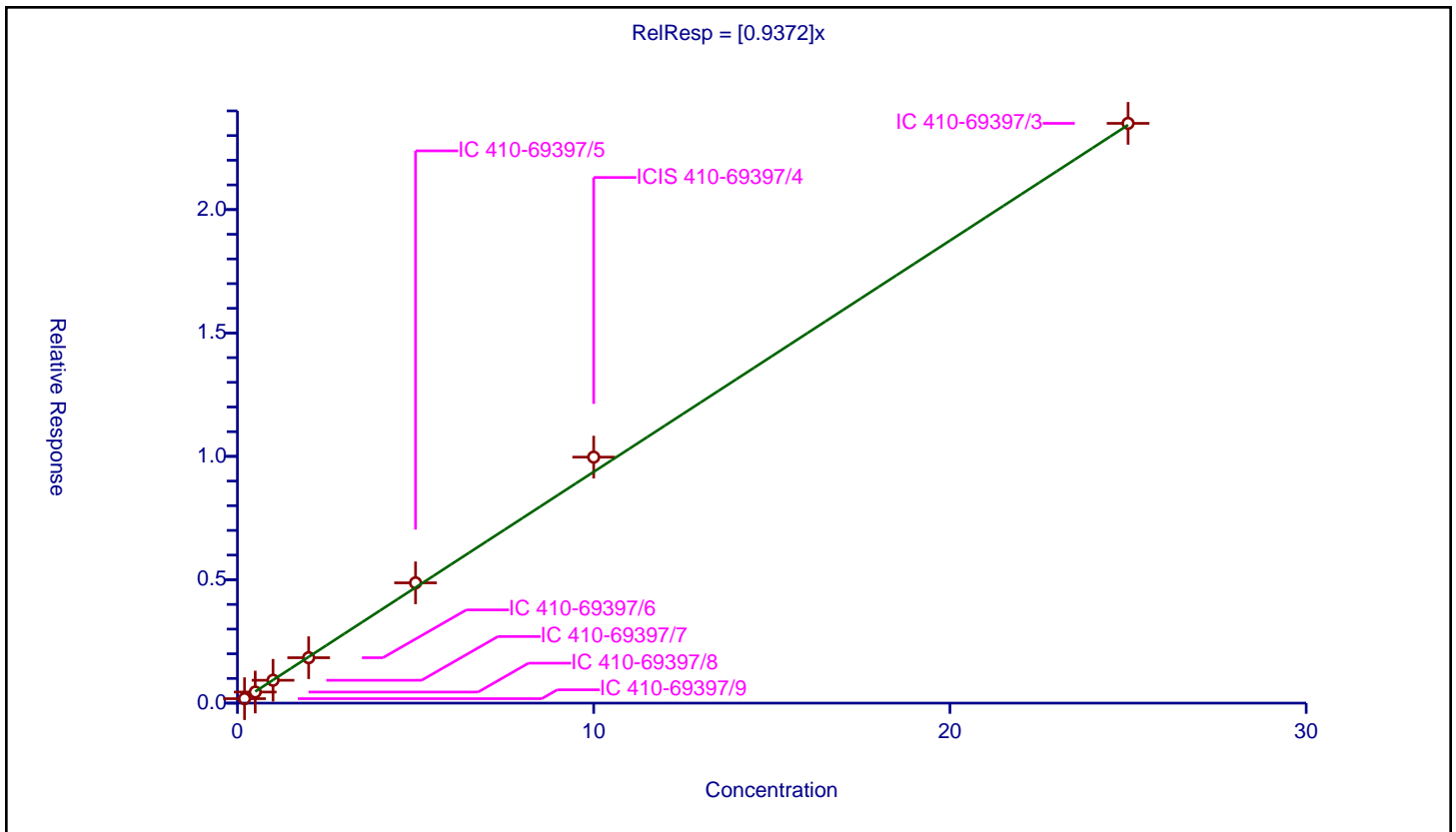
/ 1,2,3-Trichlorobenzene

Curve Type: Average  
 Weighting: Conc\_Sq  
 Origin: Force  
 Dependency: Response  
 Calib Mode: ISTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.9372

Error Coefficients	
Standard Error:	953000
Relative Standard Error:	3.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-69397/9	0.2	0.180395	10.0	848529.0	0.901973	Y
2	IC 410-69397/8	0.5	0.449942	10.0	857933.0	0.899884	Y
3	IC 410-69397/7	1.0	0.926569	10.0	843985.0	0.926569	Y
4	IC 410-69397/6	2.0	1.840387	10.0	848463.0	0.920193	Y
5	IC 410-69397/5	5.0	4.875159	10.0	845833.0	0.975032	Y
6	ICIS 410-69397/4	10.0	9.969533	10.0	891775.0	0.996953	Y
7	IC 410-69397/3	25.0	23.495384	10.0	898877.0	0.939815	Y



FORM VII  
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-30627-1

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.: 410-30627-1

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.: 410-30627-1  
 SDG No.: \_\_\_\_\_  
 Lab Sample ID: ICV 410-70996/10 Calibration Date: 11/30/2020 15:26  
 Instrument ID: 16334 Calib Start Date: 11/30/2020 12:50  
 GC Column: R-624SilMS 30m ID: 0.25 (mm) Calib End Date: 11/30/2020 15:03  
 Lab File ID: GN30V01.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,3,5-Trimethylbenzene	Ave	2.655	2.531		4.77	5.00	-4.6	30.0
4-Chlorotoluene	Ave	0.7716	0.7340		4.76	5.00	-4.9	30.0
tert-Butylbenzene	Ave	0.5668	0.5305		4.68	5.00	-6.4	30.0
Pentachloroethane	Ave	0.4872	0.4720		4.84	5.00	-3.1	30.0
1,2,4-Trimethylbenzene	Ave	2.772	2.598		4.69	5.00	-6.3	30.0
sec-Butylbenzene	Ave	3.453	3.272		4.74	5.00	-5.2	30.0
1,3-Dichlorobenzene	Ave	1.522	1.436	0.6000	4.72	5.00	-5.7	30.0
p-Isopropyltoluene	Ave	3.000	2.846		4.74	5.00	-5.1	30.0
1,4-Dichlorobenzene	Ave	1.550	1.456	0.5000	4.70	5.00	-6.1	30.0
1,2,3-Trimethylbenzene	Ave	1.229	1.217		4.95	5.00	-1.0	30.0
Benzyl chloride	Ave	0.2719	0.2597		4.78	5.00	-4.5	30.0
n-Butylbenzene	Ave	1.589	1.470		4.63	5.00	-7.5	30.0
1,2-Dichlorobenzene	Ave	1.420	1.344	0.4000	4.73	5.00	-5.3	30.0
1,2-Dibromo-3-Chloropropane	Ave	0.0916	0.0871	0.0500	4.75	5.00	-4.9	30.0
1,3,5-Trichlorobenzene	Ave	1.275	1.183		4.64	5.00	-7.2	30.0
1,2,4-Trichlorobenzene	Ave	1.175	1.105	0.2000	4.70	5.00	-6.0	30.0
Hexachlorobutadiene	Ave	0.5771	0.5485		4.75	5.00	-5.0	30.0
Naphthalene	Ave	2.139	1.949		4.56	5.00	-8.9	30.0
1,2,3-Trichlorobenzene	Ave	1.037	0.9616		4.63	5.00	-7.3	30.0
Dibromofluoromethane (Surr)	Ave	0.2420	0.2421		10.0	10.0	0.0	30.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.0515	0.0508		9.86	10.0	-1.4	30.0
Toluene-d8 (Surr)	Ave	1.334	1.336		10.0	10.0	0.2	30.0
4-Bromofluorobenzene (Surr)	Ave	0.5094	0.5081		9.97	10.0	-0.3	30.0



Eurofins Lancaster Laboratories Env, LLC  
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30V01.D  
 Lims ID: ICV  
 Client ID:  
 Sample Type: ICV  
 Inject. Date: 30-Nov-2020 15:26:30 ALS Bottle#: 9 Worklist Smp#: 10  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0016641-010  
 Misc. Info.: ICV  
 Operator ID: DVV10203 Instrument ID: 16334  
 Sublist:  
 Method: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\MSV\_16334\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 01-Dec-2020 19:03:51 Calib Date: 30-Nov-2020 18:23:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I17.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1610

First Level Reviewer: virayd

Date: 01-Dec-2020 12:04:00

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.953	1.953	0.000	99	267093	5.00	4.65	
5 Chloromethane	50	2.148	2.148	0.000	99	355206	5.00	4.58	
6 Butadiene	39	2.264	2.264	0.000	93	345587	5.00	3.91	
7 Vinyl chloride	62	2.264	2.270	-0.006	97	330590	5.00	4.99	
9 Bromomethane	94	2.593	2.593	0.000	90	220846	5.00	4.79	
10 Chloroethane	64	2.666	2.666	0.000	100	190525	5.00	4.74	
11 Dichlorofluoromethane	67	2.904	2.904	0.000	97	416165	5.00	4.62	
13 Trichlorofluoromethane	101	2.971	2.977	-0.006	98	371721	5.00	4.88	
15 Ethyl ether	59	3.208	3.208	0.000	95	245940	5.00	5.47	
16 1,2-Dichloro-1,1,2-trifluoroethane	67	3.300	3.300	0.000	93	287040	5.00	4.61	
18 Acrolein	56	3.385	3.385	0.000	99	245936	37.5	36.1	
19 1,1-Dichloroethene	96	3.519	3.519	0.000	98	215348	5.00	4.68	
21 112TCTFE	101	3.550	3.556	-0.006	92	207005	5.00	4.60	
20 Acetone	43	3.556	3.562	-0.006	99	297377	37.5	33.8	
22 Iodomethane	142	3.708	3.714	-0.006	98	385894	5.00	4.48	
23 Isopropyl alcohol	45	3.733	3.727	0.006	35	60908	37.5	34.7	
24 Ethyl bromide	108	3.739	3.739	0.000	98	192753	5.01	4.80	
25 Carbon disulfide	76	3.812	3.812	0.000	99	781041	5.00	4.60	
26 Methyl acetate	43	3.964	3.971	-0.006	99	123806	5.00	4.65	
27 3-Chloro-1-propene	41	3.989	3.989	0.000	92	429201	5.00	4.66	
28 Methylene Chloride	84	4.178	4.178	0.000	95	254001	5.00	4.81	
* 29 t-Butyl alcohol-d10 (IS)	65	4.208	4.202	0.006	0	179392	50.0	50.0	
30 2-Methyl-2-propanol	59	4.324	4.336	-0.012	99	155815	50.0	48.3	
31 Acrylonitrile	53	4.519	4.525	-0.006	99	297117	25.0	26.1	
32 Methyl tert-butyl ether	73	4.580	4.580	0.000	96	659564	5.00	4.51	
33 trans-1,2-Dichloroethene	96	4.580	4.586	-0.006	98	251292	5.00	4.74	
34 Hexane	57	5.007	5.007	0.000	94	343809	5.00	4.45	
36 1,1-Dichloroethane	63	5.251	5.251	0.000	96	471094	5.00	4.79	
37 Isopropyl ether	45	5.306	5.306	0.000	96	927579	5.00	4.63	
38 2-Chloro-1,3-butadiene	53	5.360	5.360	0.000	91	409377	5.00	4.57	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
39 Tert-butyl ethyl ether	59	5.836	5.836	0.000	99	845008	5.00	4.63	
40 2-Butanone (MEK)	43	6.043	6.049	-0.006	100	619774	37.5	38.0	
41 cis-1,2-Dichloroethene	96	6.086	6.086	0.000	83	297814	5.00	5.00	
42 2,2-Dichloropropane	77	6.092	6.092	0.000	86	388867	5.00	4.71	
44 Propionitrile	54	6.153	6.147	0.006	98	140400	37.5	34.7	
46 Methacrylonitrile	67	6.360	6.360	0.000	94	557295	37.5	37.2	
48 Chlorobromomethane	128	6.409	6.409	0.000	95	123040	5.00	4.64	
47 Tetrahydrofuran	71	6.421	6.409	0.012	78	110891	25.0	26.3	
50 Chloroform	83	6.561	6.561	0.000	93	446942	5.00	4.71	
\$ 52 Dibromofluoromethane (Surr)	113	6.781	6.781	0.000	94	535394	10.0	10.0	
51 1,1,1-Trichloroethane	97	6.787	6.787	0.000	98	376570	5.00	4.64	
53 Cyclohexane	56	6.878	6.878	0.000	92	433837	5.00	4.65	
56 Carbon tetrachloride	117	6.994	7.000	-0.006	94	329779	5.00	4.69	
55 1,1-Dichloropropene	75	7.000	7.000	0.000	96	354186	5.00	4.64	
57 Isobutyl alcohol	41	7.165	7.165	0.000	94	138400	125.0	110.7	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.232	7.232	0.000	0	112249	10.0	9.86	
59 Benzene	78	7.263	7.263	0.000	97	1050827	5.00	4.67	
60 1,2-Dichloroethane	62	7.336	7.336	0.000	97	290495	5.00	4.62	M
62 Tert-amyl methyl ether	73	7.452	7.458	-0.006	98	756827	5.00	4.70	
* 63 Fluorobenzene (IS)	96	7.671	7.671	0.000	98	2211317	10.0	10.0	
64 n-Heptane	43	7.677	7.677	0.000	94	398665	5.00	4.57	
65 n-Butanol	56	8.049	8.049	0.000	90	262496	250.0	226.5	
67 Trichloroethene	95	8.147	8.147	0.000	99	267510	5.00	4.66	
68 Methylcyclohexane	83	8.451	8.451	0.000	95	420203	5.00	4.71	
69 1,2-Dichloropropane	63	8.482	8.482	0.000	85	283073	5.00	4.71	
70 2-ethoxy-2-methyl butane	87	8.488	8.488	0.000	91	420551	5.00	4.78	
72 1,4-Dioxane	88	8.567	8.567	0.000	30	29971	125.0	145.3	M
71 Methyl methacrylate	69	8.567	8.567	0.000	93	153384	5.00	5.02	
73 Dibromomethane	93	8.592	8.585	0.007	96	130736	5.00	4.69	
75 Dichlorobromomethane	83	8.823	8.823	0.000	100	334899	5.00	4.80	
76 2-Nitropropane	41	9.110	9.110	0.000	98	43035	5.00	4.97	
78 2-Chloroethyl vinyl ether	63		9.195				ND	ND	
79 1-Bromo-2-chloroethane	63	9.219	9.219	0.000	98	307205	5.00	4.77	
80 cis-1,3-Dichloropropene	75	9.378	9.378	0.000	95	425919	5.00	4.71	
81 4-Methyl-2-pentanone (MIBK)	43	9.561	9.561	0.000	98	1053892	25.0	25.2	
\$ 82 Toluene-d8 (Surr)	98	9.689	9.689	0.000	94	2139566	10.0	10.0	
83 Toluene	92	9.762	9.762	0.000	99	639770	5.00	4.61	
84 trans-1,3-Dichloropropene	75	10.024	10.024	0.000	94	355211	5.00	4.74	
85 Ethyl methacrylate	69	10.085	10.085	0.000	91	319181	5.00	4.74	
86 1,1,2-Trichloroethane	97	10.231	10.231	0.000	91	196724	5.00	4.86	
88 Tetrachloroethene	166	10.311	10.311	0.000	97	284108	5.00	4.72	
89 1,3-Dichloropropane	76	10.390	10.396	-0.006	92	340186	5.00	4.66	
91 2-Hexanone	43	10.451	10.451	0.000	98	769685	25.0	25.6	
93 Chlorodibromomethane	129	10.603	10.603	0.000	90	232451	5.00	4.84	
94 Ethylene Dibromide	107	10.713	10.713	0.000	98	187535	5.00	4.72	
* 95 Chlorobenzene-d5 (IS)	117	11.146	11.146	0.000	86	1601223	10.0	10.0	
96 1-Chlorohexane	91	11.158	11.158	0.000	97	362277	5.00	4.35	
97 Chlorobenzene	112	11.176	11.176	0.000	94	726467	5.00	4.70	
98 1,1,1,2-Tetrachloroethane	131	11.256	11.256	0.000	96	261798	5.00	4.77	
99 Ethylbenzene	91	11.262	11.262	0.000	99	1279967	5.00	4.67	
100 m-Xylene & p-Xylene	106	11.378	11.378	0.000	97	972480	10.0	9.41	
102 o-Xylene	106	11.707	11.707	0.000	97	484319	5.00	4.73	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
103 Styrene	104	11.719	11.719	0.000	94	822532	5.00	4.71	
104 Bromoform	173	11.878	11.877	0.001	97	132838	5.00	4.74	
105 Isopropylbenzene	105	12.006	12.006	0.000	96	1261145	5.00	4.70	
\$ 108 4-Bromofluorobenzene (Surr)	95	12.152	12.152	0.000	91	813558	10.0	9.97	
109 1,1,2,2-Tetrachloroethane	83	12.255	12.255	0.000	93	258348	5.00	4.77	
110 Bromobenzene	156	12.268	12.268	0.000	96	307662	5.00	4.73	
111 trans-1,4-Dichloro-2-butene	53	12.280	12.280	0.000	93	325926	25.0	25.1	
112 1,2,3-Trichloropropane	110	12.298	12.304	-0.006	82	66839	5.00	4.84	
113 N-Propylbenzene	91	12.335	12.335	0.000	99	1550266	5.00	4.78	
114 2-Chlorotoluene	126	12.414	12.414	0.000	96	302371	5.00	4.74	
115 1,3,5-Trimethylbenzene	105	12.469	12.469	0.000	94	1091590	5.00	4.77	
116 4-Chlorotoluene	126	12.505	12.505	0.000	98	316533	5.00	4.76	
118 tert-Butylbenzene	134	12.713	12.713	0.000	94	228776	5.00	4.68	
120 Pentachloroethane	167	12.743	12.743	0.000	91	203574	5.00	4.84	
119 1,2,4-Trimethylbenzene	105	12.755	12.755	0.000	97	1120562	5.00	4.69	
121 sec-Butylbenzene	105	12.877	12.877	0.000	94	1411165	5.00	4.74	
122 1,3-Dichlorobenzene	146	12.975	12.975	0.000	98	619173	5.00	4.72	
123 4-Isopropyltoluene	119	12.981	12.981	0.000	97	1227233	5.00	4.74	
* 124 1,4-Dichlorobenzene-d4	152	13.030	13.030	0.000	95	862512	10.0	10.0	
125 1,4-Dichlorobenzene	146	13.048	13.048	0.000	94	628073	5.00	4.70	
126 1,2,3-Trimethylbenzene	120	13.060	13.060	0.000	99	524945	5.00	4.95	
127 Benzyl chloride	126	13.127	13.127	0.000	99	111979	5.00	4.78	
129 p-Diethylbenzene	119	13.182	13.182	0.000	92	749547	5.00	4.77	
130 n-Butylbenzene	92	13.274	13.274	0.000	98	633928	5.00	4.63	
131 1,2-Dichlorobenzene	146	13.310	13.310	0.000	99	579605	5.00	4.73	
134 1,2-Dibromo-3-Chloropropane	155	13.853	13.853	0.000	85	37558	5.00	4.75	
135 1,3,5-Trichlorobenzene	180	13.975	13.975	0.000	98	510248	5.00	4.64	
136 1,2,4-Trichlorobenzene	180	14.395	14.395	0.000	94	476558	5.00	4.70	
137 Hexachlorobutadiene	225	14.481	14.481	0.000	96	236549	5.00	4.75	
138 Naphthalene	128	14.578	14.578	0.000	97	840564	5.00	4.56	
139 1,2,3-Trichlorobenzene	180	14.718	14.718	0.000	95	414693	5.00	4.63	
140 2-Methylnaphthalene	142	15.340	15.340	0.000	93	560337	5.00	4.25	

## QC Flag Legend

### Processing Flags

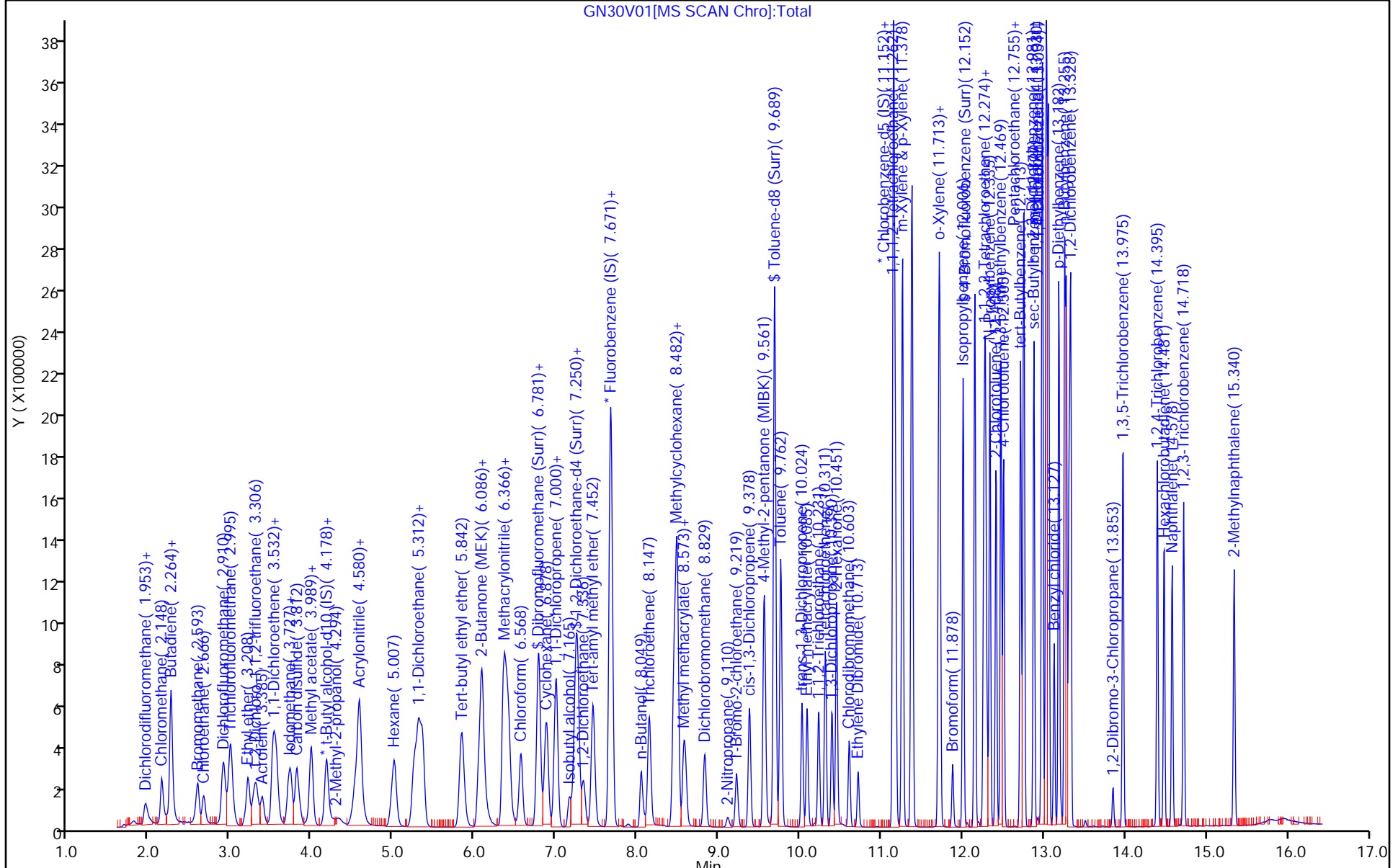
ND - Not Detected or Marked ND

### Review Flags

M - Manually Integrated

## Reagents:

MSV_Q_QARC_00056	Amount Added: 12.50	Units: uL	
MSV_Q_QVOA6_00054	Amount Added: 12.50	Units: uL	
MSV_Q_QVOA1_00057	Amount Added: 12.50	Units: uL	
MSV_Q_EE_00003	Amount Added: 12.50	Units: uL	
MSV_Q_ETBR_00005	Amount Added: 12.50	Units: uL	
MSV_QGAS_826_00093	Amount Added: 12.50	Units: uL	
MSV_29_826ISS_00013	Amount Added: 1.00	Units: uL	Run Reagent



Eurofins Lancaster Laboratories Env, LLC

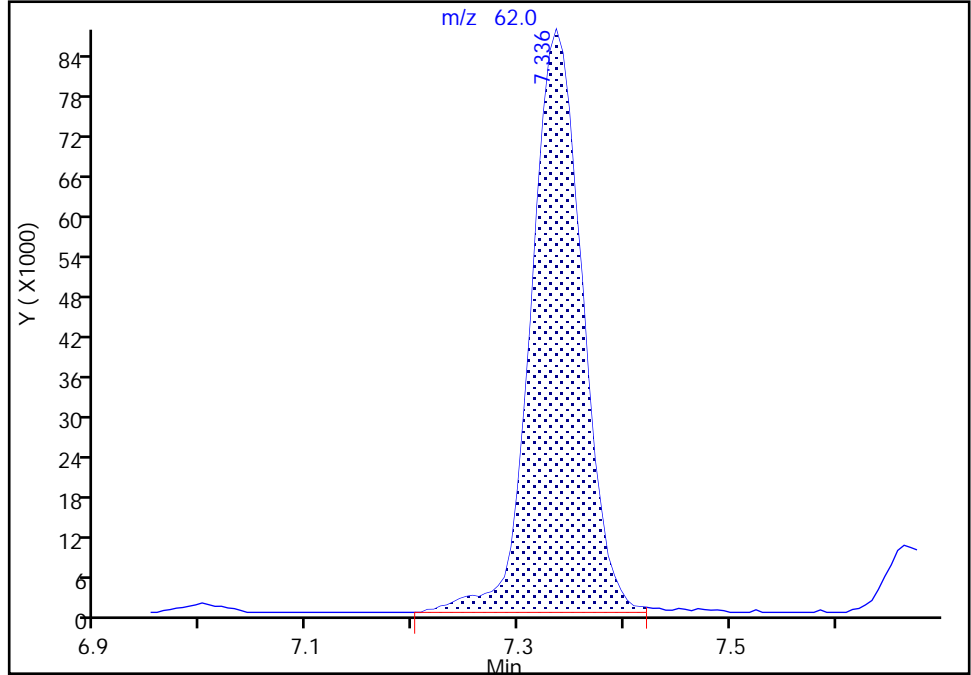
Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30V01.D  
Injection Date: 30-Nov-2020 15:26:30 Instrument ID: 16334  
Lims ID: ICV  
Client ID:  
Operator ID: DVV10203 ALS Bottle#: 9 Worklist Smp#: 10  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_16334\_25mL Limit Group: 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

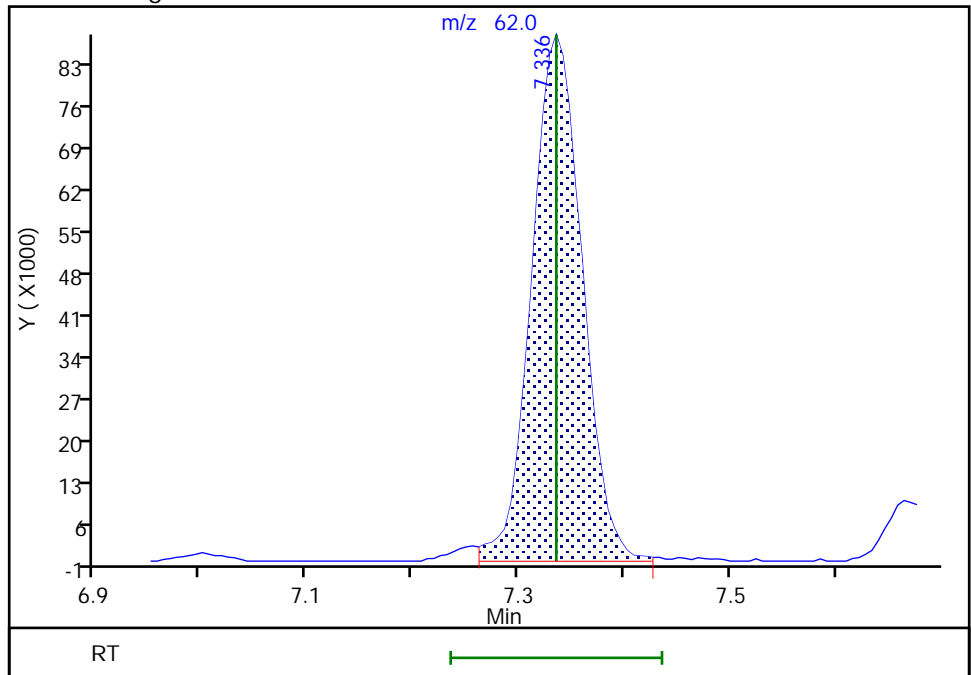
RT: 7.34  
Area: 294206  
Amount: 4.680182  
Amount Units: ug/l

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)

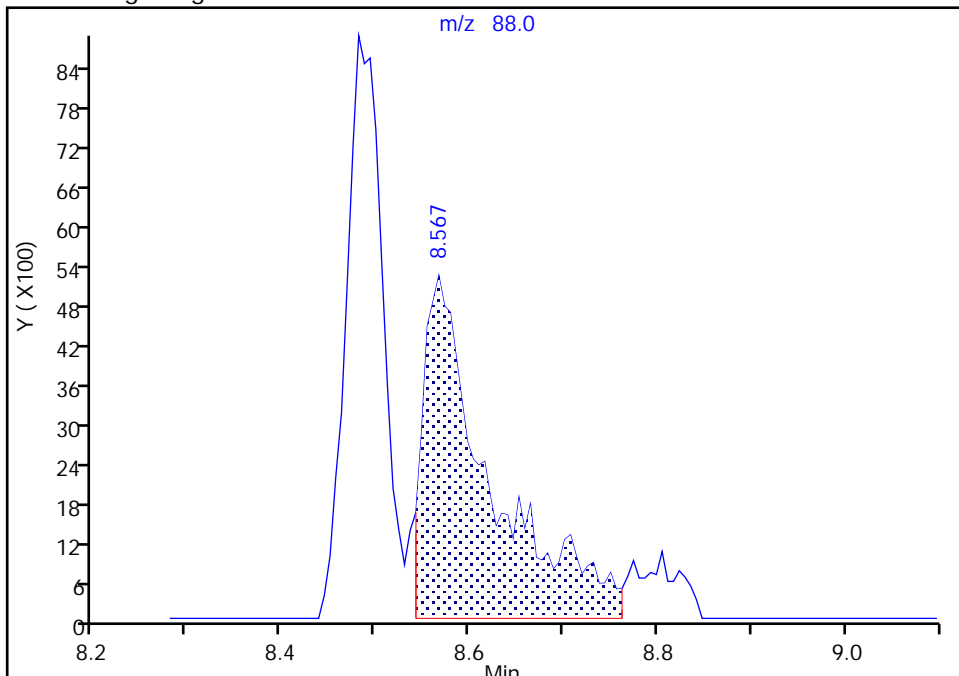
MS Quad

72 1,4-Dioxane, CAS: 123-91-1

Signal: 1

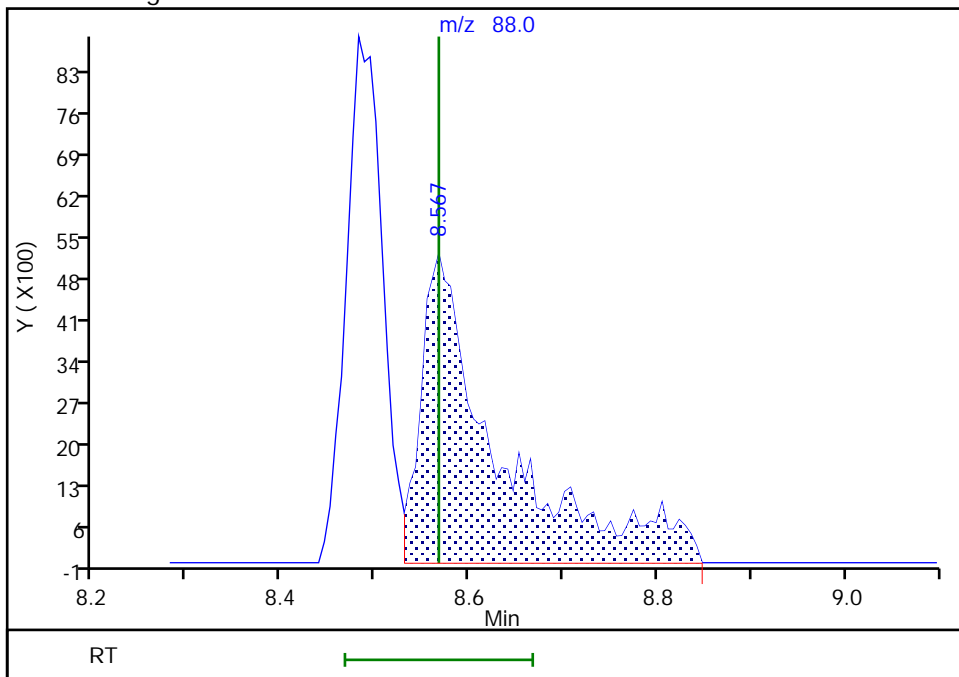
RT: 8.57  
Area: 25930  
Amount: 125.7342  
Amount Units: ug/l

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.: 410-30627-1

SDG No.: \_\_\_\_\_

Lab Sample ID: CCVIS 410-99025/3 Calibration Date: 03/03/2021 09:17

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: GM03X03.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	0.2468	0.1000	9.49	10.0	-5.1	20.0
Chloromethane	Ave	0.3508	0.2749	0.1000	7.84	10.0	-21.6*	20.0
1,3-Butadiene	Ave	0.3993	0.4844		12.1	10.0	21.3*	20.0
Vinyl chloride	Ave	0.2995	0.2528	0.1000	8.44	10.0	-15.6	20.0
Bromomethane	Ave	0.2087	0.1802	0.1000	8.63	10.0	-13.7	20.0
Chloroethane	Ave	0.1817	0.1582	0.1000	8.71	10.0	-12.9	20.0
Dichlorofluoromethane	Ave	0.4073	0.2819		6.92	10.0	-30.8*	20.0
Trichlorofluoromethane	Ave	0.3447	0.3388	0.1000	9.83	10.0	-1.7	20.0
Ethyl ether	Ave	0.2035	0.1750		8.60	10.0	-14.0	20.0
Freon 123a	Ave	0.2817	0.2362		8.39	10.0	-16.1	20.0
Acrolein	Ave	1.898	1.656		436	500	-12.8	20.0
1,1-Dichloroethene	Ave	0.2083	0.1806	0.1000	8.67	10.0	-13.3	20.0
Acetone	Ave	2.453	2.135	0.1000	87.0	100	-13.0	20.0
Freon 113	Ave	0.2037	0.1996	0.1000	9.80	10.0	-2.0	20.0
Methyl iodide	Ave	0.3891	0.3403		8.75	10.0	-12.5	20.0
Ethyl bromide	Ave	0.1814	0.1647		9.08	10.0	-9.2	20.0
Carbon disulfide	Ave	0.7678	0.6213	0.1000	8.09	10.0	-19.1	20.0
Methyl acetate	Ave	7.427	6.272	0.1000	8.45	10.0	-15.5	20.0
Allyl chloride	Ave	0.4168	0.3175		7.62	10.0	-23.8*	20.0
Methylene Chloride	Ave	0.2387	0.2096	0.1000	8.78	10.0	-12.2	20.0
t-Butyl alcohol	Ave	0.8990	0.8896		198	200	-1.0	20.0
Acrylonitrile	Ave	3.174	3.056		48.1	50.0	-3.7	20.0
Methyl tert-butyl ether	Ave	0.6620	0.5436	0.1000	8.21	10.0	-17.9	20.0
trans-1,2-Dichloroethene	Ave	0.2398	0.2102	0.1000	8.76	10.0	-12.4	20.0
n-Hexane	Ave	0.3497	0.3172		9.07	10.0	-9.3	20.0
1,1-Dichloroethane	Ave	0.4451	0.3830	0.2000	8.60	10.0	-14.0	20.0
di-Isopropyl ether	Ave	0.9055	0.6948		7.67	10.0	-23.3*	20.0
2-Chloro-1,3-butadiene	Ave	0.4048	0.3191		7.88	10.0	-21.2*	20.0
Ethyl t-butyl ether	Ave	0.8257	0.6562		7.95	10.0	-20.5*	20.0
2-Butanone (MEK)	Ave	4.546	4.033	0.1000	88.7	100	-11.3	20.0
cis-1,2-Dichloroethene	Ave	0.2693	0.2411	0.1000	8.95	10.0	-10.5	20.0
2,2-Dichloropropane	Ave	0.3733	0.3141		8.41	10.0	-15.9	20.0
Propionitrile	Ave	1.127	1.067		189	200	-5.4	20.0
Methacrylonitrile	Ave	4.178	3.838		91.9	100	-8.1	20.0
Bromochloromethane	Ave	0.1200	0.1156		9.63	10.0	-3.7	20.0
Tetrahydrofuran	Ave	1.175	1.127		95.9	100	-4.1	20.0
Chloroform	Ave	0.4289	0.3740	0.2000	8.72	10.0	-12.8	20.0
1,1,1-Trichloroethane	Ave	0.3670	0.3233	0.1000	8.81	10.0	-11.9	20.0
Cyclohexane	Ave	0.4218	0.3702	0.1000	8.78	10.0	-12.2	20.0
Carbon tetrachloride	Ave	0.3183	0.2877	0.1000	9.04	10.0	-9.6	20.0
1,1-Dichloropropene	Ave	0.3449	0.3077		8.92	10.0	-10.8	20.0

FORM VII  
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-30627-1

SDG No.: \_\_\_\_\_

Lab Sample ID: CCVIS 410-99025/3 Calibration Date: 03/03/2021 09:17

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: GM03X03.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	0.0047		417	500	-16.6	20.0
Benzene	Ave	1.017	0.8870	0.5000	8.73	10.0	-12.7	20.0
1,2-Dichloroethane	Ave	0.2843	0.2383	0.1000	8.38	10.0	-16.2	20.0
t-Amyl methyl ether	Ave	0.7278	0.5955		8.18	10.0	-18.2	20.0
n-Heptane	Ave	0.3945	0.3378		8.56	10.0	-14.4	20.0
n-Butanol	Ave	0.3231	0.2826		875	1000	-12.5	20.0
Trichloroethene	Ave	0.2596	0.2319	0.2000	8.93	10.0	-10.7	20.0
Methylcyclohexane	Ave	0.4031	0.4129	0.1000	10.2	10.0	2.4	20.0
1,2-Dichloropropane	Ave	0.2719	0.2360	0.1000	8.68	10.0	-13.2	20.0
1,4-Dioxane	Ave	0.0575	0.0618	0.0050	537	500	7.5	20.0
Methyl methacrylate	Ave	8.511	7.198		8.46	10.0	-15.4	20.0
Dibromomethane	Ave	0.1260	0.1127		8.94	10.0	-10.6	20.0
Bromodichloromethane	Ave	0.3153	0.2757	0.2000	8.74	10.0	-12.6	20.0
2-Nitropropane	Ave	2.413	1.993		82.6	100	-17.4	20.0
1-Bromo-2-chloroethane	Ave	0.2915	0.2440		8.37	10.0	-16.3	20.0
cis-1,3-Dichloropropene	Ave	0.4093	0.3443	0.2000	8.41	10.0	-15.9	20.0
4-Methyl-2-pentanone (MIBK)	Ave	11.67	10.25	0.1000	87.8	100	-12.2	20.0
Toluene	Ave	0.8666	0.7753	0.4000	8.95	10.0	-10.5	20.0
trans-1,3-Dichloropropene	Ave	0.4679	0.4007	0.1000	8.56	10.0	-14.4	20.0
Ethyl methacrylate	Ave	0.4204	0.3504		8.33	10.0	-16.7	20.0
1,1,2-Trichloroethane	Ave	0.2528	0.2318	0.1000	9.17	10.0	-8.3	20.0
Tetrachloroethene	Ave	0.3760	0.3592	0.2000	9.55	10.0	-4.5	20.0
1,3-Dichloropropane	Ave	0.4560	0.4043		8.87	10.0	-11.3	20.0
2-Hexanone	Ave	8.396	7.265	0.1000	86.5	100	-13.5	20.0
Dibromochloromethane	Ave	0.2998	0.2754		9.19	10.0	-8.1	20.0
1,2-Dibromoethane (EDB)	Ave	0.2482	0.2266	0.1000	9.13	10.0	-8.7	20.0
1-Chlorohexane	Ave	0.5205	0.4548		8.74	10.0	-12.6	20.0
Chlorobenzene	Ave	0.9653	0.8848	0.5000	9.17	10.0	-8.3	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3430	0.3186		9.29	10.0	-7.1	20.0
Ethylbenzene	Ave	1.712	1.517	0.1000	8.86	10.0	-11.4	20.0
m&p-Xylene	Ave	0.6453	0.5960	0.1000	18.5	20.0	-7.7	20.0
o-Xylene	Ave	0.6400	0.5975	0.3000	9.34	10.0	-6.6	20.0
Styrene	Ave	1.091	1.005	0.3000	9.21	10.0	-7.9	20.0
Bromoform	Ave	0.1750	0.1676	0.1000	9.58	10.0	-4.2	20.0
Isopropylbenzene	Ave	1.674	1.546	0.1000	9.24	10.0	-7.6	20.0
1,1,2,2-Tetrachloroethane	Ave	0.6286	0.5454	0.3000	8.68	10.0	-13.2	20.0
Bromobenzene	Ave	0.7547	0.6986		9.26	10.0	-7.4	20.0
trans-1,4-Dichloro-2-butene	Ave	3.624	2.229		61.5	100	-38.5*	20.0
1,2,3-Trichloropropane	Ave	0.1602	0.1475		9.21	10.0	-7.9	20.0
N-Propylbenzene	Ave	3.763	3.277		8.71	10.0	-12.9	20.0
2-Chlorotoluene	Ave	0.7400	0.6635		8.97	10.0	-10.3	20.0



FORM VII  
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-30627-1

SDG No.: \_\_\_\_\_

Lab Sample ID: CCVIS 410-99025/3 Calibration Date: 03/03/2021 09:17

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: GM03X03.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	2.394		9.02	10.0	-9.8	20.0
4-Chlorotoluene	Ave	0.7716	0.6931		8.98	10.0	-10.2	20.0
tert-Butylbenzene	Ave	0.5668	0.5242		9.25	10.0	-7.5	20.0
Pentachloroethane	Ave	0.4872	0.4648		9.54	10.0	-4.6	20.0
1,2,4-Trimethylbenzene	Ave	2.772	2.484		8.96	10.0	-10.4	20.0
sec-Butylbenzene	Ave	3.453	3.143		9.10	10.0	-9.0	20.0
1,3-Dichlorobenzene	Ave	1.522	1.394	0.6000	9.16	10.0	-8.4	20.0
p-Isopropyltoluene	Ave	3.000	2.712		9.04	10.0	-9.6	20.0
1,4-Dichlorobenzene	Ave	1.550	1.417	0.5000	9.14	10.0	-8.6	20.0
1,2,3-Trimethylbenzene	Ave	1.229	1.140		9.28	10.0	-7.2	20.0
Benzyl chloride	Ave	0.2719	0.2275		8.37	10.0	-16.3	20.0
n-Butylbenzene	Ave	1.589	1.408		8.86	10.0	-11.4	20.0
1,2-Dichlorobenzene	Ave	1.420	1.305	0.4000	9.19	10.0	-8.1	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.0916	0.0864	0.0500	9.43	10.0	-5.7	20.0
1,3,5-Trichlorobenzene	Ave	1.275	1.165		9.13	10.0	-8.7	20.0
1,2,4-Trichlorobenzene	Ave	1.175	1.072	0.2000	9.12	10.0	-8.8	20.0
Hexachlorobutadiene	Ave	0.5771	0.5413		9.38	10.0	-6.2	20.0
Naphthalene	Ave	2.139	1.936		9.05	10.0	-9.5	20.0
1,2,3-Trichlorobenzene	Ave	1.037	0.9445		9.10	10.0	-9.0	20.0
Dibromofluoromethane (Surr)	Ave	0.2420	0.2461		10.2	10.0	1.7	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.0515	0.0523		10.2	10.0	1.6	20.0
Toluene-d8 (Surr)	Ave	1.334	1.358		10.2	10.0	1.8	20.0
4-Bromofluorobenzene (Surr)	Ave	0.5094	0.4976		9.77	10.0	-2.3	20.0

Eurofins Lancaster Laboratories Env, LLC  
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20210303-23166.b\GM03X03.D  
 Lims ID: CCVIS VSTD10  
 Client ID:  
 Sample Type: CCVIS  
 Inject. Date: 03-Mar-2021 09:17:30 ALS Bottle#: 3 Worklist Smp#: 3  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0023166-003  
 Misc. Info.: CCVIS VSTD10  
 Operator ID: SRK36897 Instrument ID: 16334  
 Sublist: chrom-MSV\_16334\_25mL\*sub4  
 Method: \\chromfs\Lancaster\ChromData\16334\20210303-23166.b\MSV\_16334\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 03-Mar-2021 14:02:48 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: CTX1663

First Level Reviewer: knouses

Date: 03-Mar-2021 10:05:14

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	1.940	0.000	99	490959	10.0	9.49	
5 Chloromethane	50	2.136	2.136	0.000	98	546760	10.0	7.84	
7 Butadiene	39	2.245	2.245	0.000	90	963550	10.0	12.1	
8 Vinyl chloride	62	2.251	2.251	0.000	68	502902	10.0	8.44	
9 Bromomethane	94	2.568	2.568	0.000	90	358351	10.0	8.63	
10 Chloroethane	64	2.660	2.660	0.000	100	314672	10.0	8.71	
12 Dichlorofluoromethane	67	2.892	2.892	0.000	97	560631	10.0	6.92	
13 Trichlorofluoromethane	101	2.952	2.952	0.000	97	673911	10.0	9.83	
15 Ethyl ether	59	3.202	3.202	0.000	91	348233	10.0	8.60	
17 1,2-Dichloro-1,1,2-trifluoroethane	67	3.282	3.282	0.000	93	469867	10.0	8.39	
18 Acrolein	56	3.373	3.373	0.000	100	2772054	500.0	436.2	
19 1,1-Dichloroethene	96	3.507	3.507	0.000	98	359314	10.0	8.67	
20 112TCTFE	101	3.544	3.544	0.000	85	396927	10.0	9.80	
21 Acetone	43	3.544	3.544	0.000	100	715004	100.0	87.0	
23 Iodomethane	142	3.696	3.696	0.000	98	676976	10.0	8.75	
22 Isopropyl alcohol	45	3.721	3.721	0.000	53	291211	200.0	184.6	
24 Ethyl bromide	108	3.727	3.727	0.000	98	327765	10.0	9.08	
25 Carbon disulfide	76	3.794	3.794	0.000	99	1235712	10.0	8.09	
27 Methyl acetate	43	3.952	3.952	0.000	98	210052	10.0	8.45	
28 3-Chloro-1-propene	41	3.977	3.977	0.000	94	631453	10.0	7.62	
29 Methylene Chloride	84	4.166	4.166	0.000	93	416964	10.0	8.78	
* 30 t-Butyl alcohol-d10 (IS)	65	4.178	4.178	0.000	0	167452	50.0	50.0	
31 2-Methyl-2-propanol	59	4.306	4.306	0.000	100	595881	200.0	197.9	
32 Acrylonitrile	53	4.507	4.507	0.000	100	511751	50.0	48.1	
33 Methyl tert-butyl ether	73	4.568	4.568	0.000	95	1081311	10.0	8.21	
34 trans-1,2-Dichloroethene	96	4.568	4.568	0.000	100	418079	10.0	8.76	
35 Hexane	57	4.995	4.995	0.000	92	630852	10.0	9.07	
37 1,1-Dichloroethane	63	5.239	5.239	0.000	96	761769	10.0	8.60	
38 Isopropyl ether	45	5.300	5.300	0.000	95	1381932	10.0	7.67	
39 2-Chloro-1,3-butadiene	53	5.342	5.342	0.000	90	634739	10.0	7.88	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
40 Tert-butyl ethyl ether	59	5.830	5.830	0.000	98	1305300	10.0	7.95	
41 2-Butanone (MEK)	43	6.049	6.049	0.000	100	1350796	100.0	88.7	
42 cis-1,2-Dichloroethene	96	6.080	6.080	0.000	82	479497	10.0	8.95	
43 2,2-Dichloropropane	77	6.086	6.086	0.000	85	624777	10.0	8.41	
45 Propionitrile	54	6.147	6.147	0.000	99	714413	200.0	189.3	
48 Methacrylonitrile	67	6.360	6.360	0.000	92	1285351	100.0	91.9	
49 Chlorobromomethane	128	6.403	6.403	0.000	97	229929	10.0	9.63	
50 Tetrahydrofuran	71	6.409	6.409	0.000	87	377404	100.0	95.9	
51 Chloroform	83	6.562	6.562	0.000	93	743874	10.0	8.72	
\$ 52 Dibromofluoromethane (Surr)	113	6.775	6.775	0.000	94	489602	10.0	10.2	
53 1,1,1-Trichloroethane	97	6.787	6.787	0.000	98	643117	10.0	8.81	
54 Cyclohexane	56	6.872	6.872	0.000	90	736394	10.0	8.78	
56 Carbon tetrachloride	117	6.988	6.988	0.000	96	572164	10.0	9.04	
57 1,1-Dichloropropene	75	7.000	7.000	0.000	99	612128	10.0	8.92	
58 Isobutyl alcohol	41	7.165	7.165	0.000	95	469003	500.0	417.0	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.232	7.232	0.000	0	104084	10.0	10.2	
60 Benzene	78	7.263	7.263	0.000	97	1764275	10.0	8.73	
61 1,2-Dichloroethane	62	7.336	7.336	0.000	97	474090	10.0	8.38	
63 Tert-amyl methyl ether	73	7.452	7.452	0.000	99	1184408	10.0	8.18	
* 64 Fluorobenzene (IS)	96	7.665	7.665	0.000	99	1989071	10.0	10.0	
65 n-Heptane	43	7.671	7.671	0.000	90	671996	10.0	8.56	
67 n-Butanol	56	8.043	8.043	0.000	88	946485	1000.0	874.8	
68 Trichloroethene	95	8.140	8.140	0.000	98	461192	10.0	8.93	
69 Methylcyclohexane	83	8.445	8.445	0.000	91	821355	10.0	10.2	
70 1,2-Dichloropropane	63	8.482	8.482	0.000	89	469452	10.0	8.68	
71 2-ethoxy-2-methyl butane	87	8.488	8.488	0.000	93	684348	10.0	8.65	
72 Methyl methacrylate	69	8.567	8.567	0.000	90	241078	10.0	8.46	
73 1,4-Dioxane	88	8.567	8.567	0.000	35	103441	500.0	537.3	M
74 Dibromomethane	93	8.586	8.586	0.000	94	224219	10.0	8.94	
76 Dichlorobromomethane	83	8.823	8.823	0.000	100	548304	10.0	8.74	
77 2-Nitropropane	41	9.110	9.110	0.000	98	667500	100.0	82.6	
80 1-Bromo-2-chloroethane	63	9.213	9.213	0.000	98	485411	10.0	8.37	
81 cis-1,3-Dichloropropene	75	9.372	9.372	0.000	97	684845	10.0	8.41	
82 4-Methyl-2-pentanone (MIBK)	43	9.555	9.555	0.000	96	3433830	100.0	87.8	
\$ 83 Toluene-d8 (Surr)	98	9.683	9.683	0.000	93	1949770	10.0	10.2	
84 Toluene	92	9.762	9.762	0.000	98	1112900	10.0	8.95	
96 trans-1,3-Dichloropropene	75	10.018	10.018	0.000	91	575153	10.0	8.56	
98 Ethyl methacrylate	69	10.079	10.079	0.000	89	502968	10.0	8.33	
99 1,1,2-Trichloroethane	97	10.225	10.225	0.000	89	332811	10.0	9.17	
100 Tetrachloroethene	166	10.311	10.311	0.000	98	515678	10.0	9.55	
101 1,3-Dichloropropane	76	10.390	10.390	0.000	88	580377	10.0	8.87	
102 2-Hexanone	43	10.445	10.445	0.000	96	2433044	100.0	86.5	
104 Chlorodibromomethane	129	10.603	10.603	0.000	90	395344	10.0	9.19	
105 Ethylene Dibromide	107	10.707	10.707	0.000	99	325290	10.0	9.13	
* 106 Chlorobenzene-d5 (IS)	117	11.146	11.146	0.000	85	1435532	10.0	10.0	
107 1-Chlorohexane	91	11.152	11.152	0.000	97	652949	10.0	8.74	
108 Chlorobenzene	112	11.170	11.170	0.000	95	1270135	10.0	9.17	
110 1,1,1,2-Tetrachloroethane	131	11.250	11.250	0.000	96	457307	10.0	9.29	
111 Ethylbenzene	91	11.256	11.256	0.000	98	2177413	10.0	8.86	
112 m-Xylene & p-Xylene	106	11.372	11.372	0.000	97	1711084	20.0	18.5	
113 o-Xylene	106	11.701	11.701	0.000	94	857788	10.0	9.34	
114 Styrene	104	11.713	11.713	0.000	94	1442383	10.0	9.21	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
115 Bromoform	173	11.871	11.871	0.000	98	240619	10.0	9.58	
116 Isopropylbenzene	105	11.999	11.999	0.000	95	2219463	10.0	9.24	
\$ 119 4-Bromofluorobenzene (Surr)	95	12.140	12.140	0.000	91	714259	10.0	9.77	
120 1,1,2,2-Tetrachloroethane	83	12.249	12.249	0.000	93	433716	10.0	8.68	
121 Bromobenzene	156	12.256	12.256	0.000	96	555559	10.0	9.26	
122 trans-1,4-Dichloro-2-butene	53	12.274	12.274	0.000	89	746401	100.0	61.5	
123 1,2,3-Trichloropropane	110	12.292	12.292	0.000	82	117310	10.0	9.21	
124 N-Propylbenzene	91	12.329	12.329	0.000	99	2605880	10.0	8.71	
125 2-Chlorotoluene	126	12.402	12.402	0.000	97	527636	10.0	8.97	
126 1,3,5-Trimethylbenzene	105	12.463	12.463	0.000	94	1903982	10.0	9.02	
127 4-Chlorotoluene	126	12.493	12.493	0.000	97	551172	10.0	8.98	
128 tert-Butylbenzene	134	12.707	12.707	0.000	93	416814	10.0	9.25	
129 Pentachloroethane	167	12.737	12.737	0.000	95	369614	10.0	9.54	
130 1,2,4-Trimethylbenzene	105	12.743	12.743	0.000	97	1975207	10.0	8.96	
131 sec-Butylbenzene	105	12.865	12.865	0.000	94	2499169	10.0	9.10	
132 1,3-Dichlorobenzene	146	12.963	12.963	0.000	98	1108473	10.0	9.16	
133 4-Isopropyltoluene	119	12.975	12.975	0.000	97	2156875	10.0	9.04	
* 134 1,4-Dichlorobenzene-d4	152	13.018	13.018	0.000	94	795212	10.0	10.0	
135 1,4-Dichlorobenzene	146	13.036	13.036	0.000	95	1126632	10.0	9.14	
136 1,2,3-Trimethylbenzene	120	13.048	13.048	0.000	98	906876	10.0	9.28	
137 Benzyl chloride	126	13.115	13.115	0.000	98	180871	10.0	8.37	
138 p-Diethylbenzene	119	13.170	13.170	0.000	91	1361992	10.0	9.40	
139 n-Butylbenzene	92	13.261	13.261	0.000	98	1119447	10.0	8.86	
140 1,2-Dichlorobenzene	146	13.298	13.298	0.000	99	1037780	10.0	9.19	
142 1,2-Dibromo-3-Chloropropane	155	13.835	13.835	0.000	88	68679	10.0	9.43	
143 1,3,5-Trichlorobenzene	180	13.956	13.956	0.000	98	926140	10.0	9.13	
144 1,2,4-Trichlorobenzene	180	14.377	14.377	0.000	94	852793	10.0	9.12	
145 Hexachlorobutadiene	225	14.462	14.462	0.000	96	430469	10.0	9.38	
146 Naphthalene	128	14.560	14.560	0.000	97	1539462	10.0	9.05	
147 1,2,3-Trichlorobenzene	180	14.700	14.700	0.000	96	751067	10.0	9.10	
148 2-Methylnaphthalene	142	15.316	15.316	0.000	92	1116489	10.0	9.18	
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\_00040

Amount Added: 10.00

Units: uL

MSV\_RV4\_826\_00045

Amount Added: 10.00

Units: uL

MSV\_RV4GAS826\_00115

Amount Added: 10.00

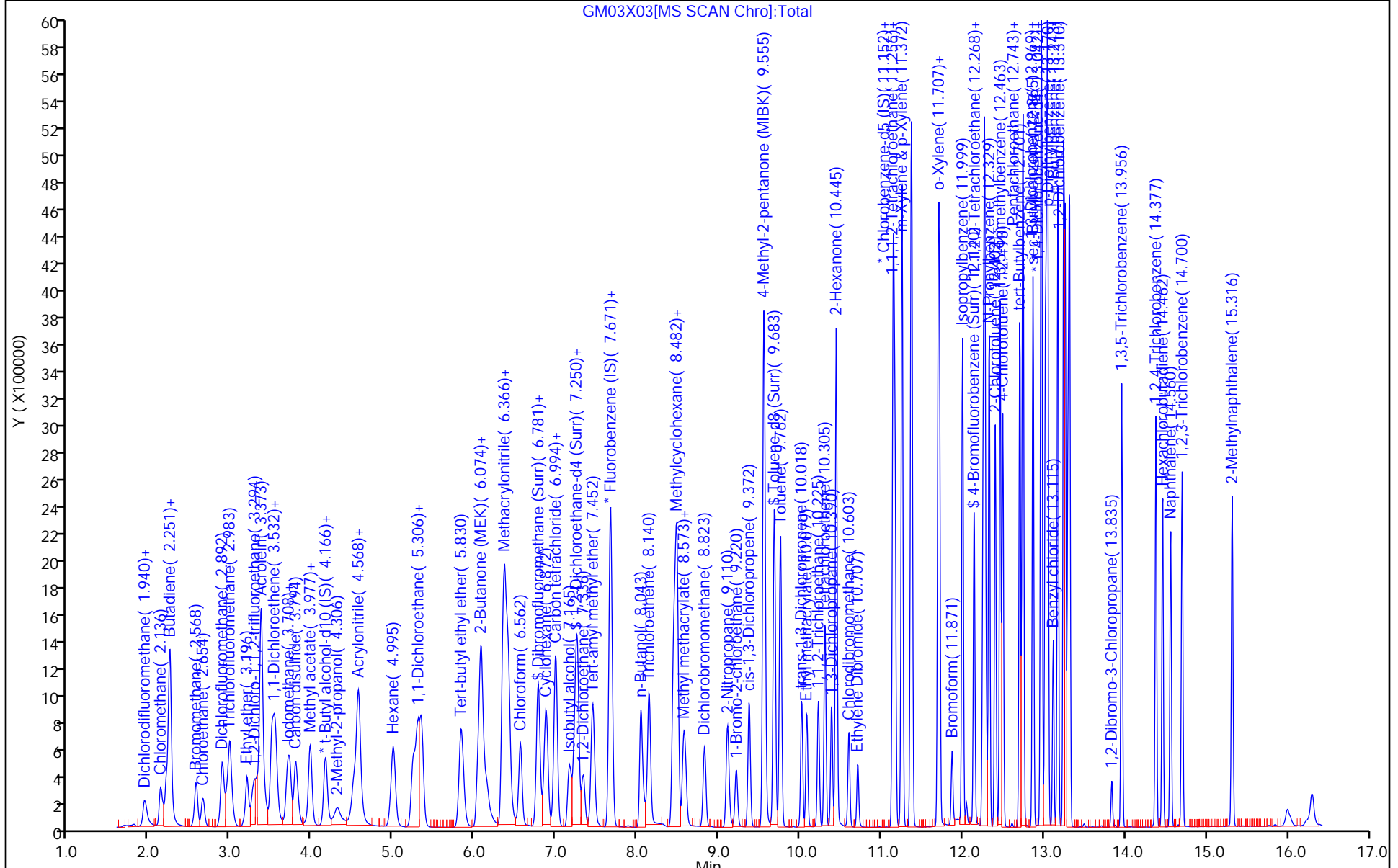
Units: uL

MSV\_29\_826ISS\_00015

Amount Added: 1.00

Units: uL

Run Reagent



Eurofins Lancaster Laboratories Env, LLC

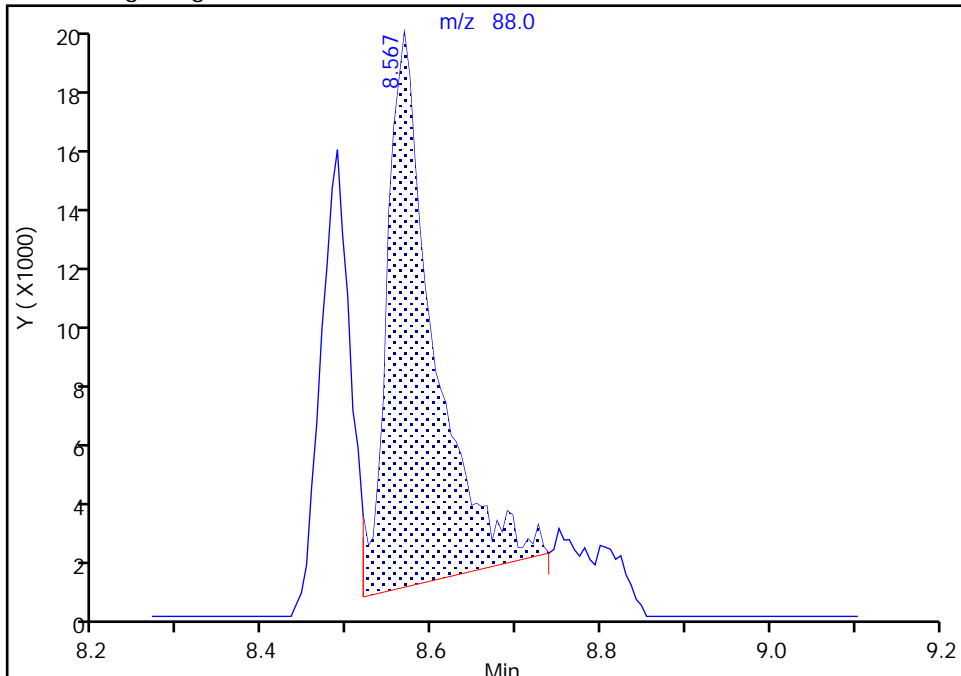
Data File: \\chromfs\Lancaster\ChromData\16334\20210303-23166.b\GM03X03.D  
Injection Date: 03-Mar-2021 09:17:30 Instrument ID: 16334  
Lims ID: CCVIS VSTD10  
Client ID:  
Operator ID: SRK36897 ALS Bottle#: 3 Worklist Smp#: 3  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: MSV\_16334\_25mL Limit 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

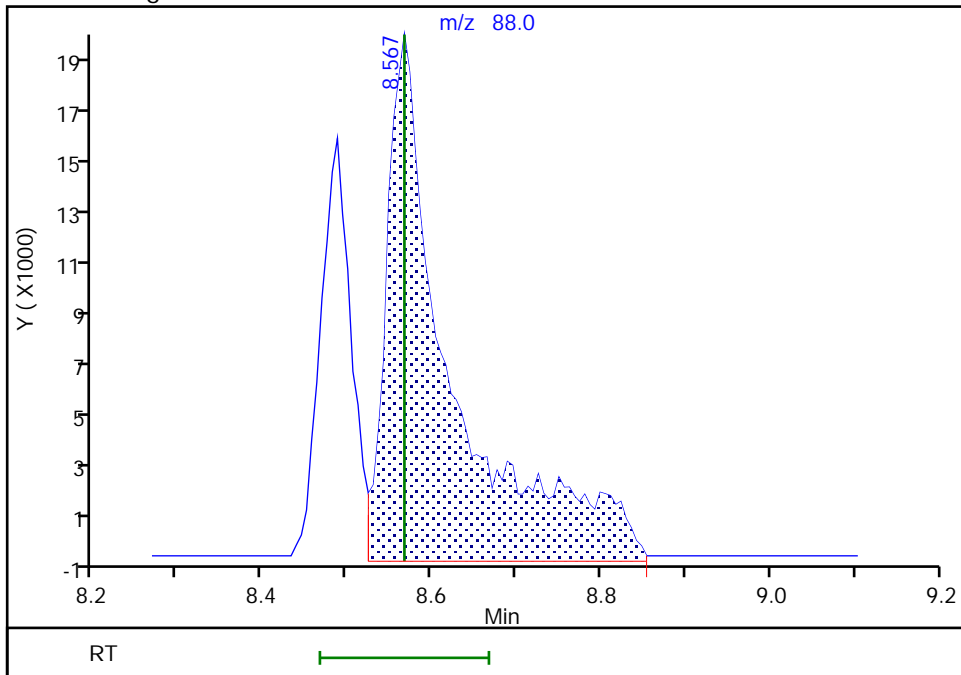
RT: 8.57  
Area: 69970  
Amount: 363.4759  
Amount Units: ug/l

Processing Integration Results



RT: 8.57  
Area: 103441  
Amount: 537.3490  
Amount Units: ug/l

Manual Integration Results



Reviewer: knouses, 03-Mar-2021 09:59:08  
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

FORM VII  
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-30627-1

SDG No.: \_\_\_\_\_

Lab Sample ID: ICV 410-69397/10 Calibration Date: 11/23/2020 15:14

Instrument ID: 19930 Calib Start Date: 11/23/2020 12:45

GC Column: R-624SilMS 30m ID: 0.25 (mm) Calib End Date: 11/23/2020 14:53

Lab File ID: IN23V01.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3569	0.2943	0.1000	4.12	5.00	-17.5	30.0
Chloromethane	Ave	0.4141	0.3823	0.1000	4.62	5.00	-7.7	30.0
1,3-Butadiene	Ave	0.3536	0.3121		4.41	5.00	-11.8	30.0
Vinyl chloride	Ave	0.3812	0.3783	0.1000	4.96	5.00	-0.8	30.0
Bromomethane	Ave	0.2764	0.2693	0.1000	4.87	5.00	-2.6	30.0
Chloroethane	Ave	0.2343	0.2223	0.1000	4.74	5.00	-5.1	30.0
Dichlorofluoromethane	Ave	0.5249	0.5136		4.89	5.00	-2.2	30.0
Trichlorofluoromethane	Ave	0.4935	0.4599	0.1000	4.66	5.00	-6.8	30.0
Ethyl ether	Ave	0.2210	0.2357		5.33	5.00	6.7	30.0
Freon 123a	Ave	0.3461	0.3375		4.88	5.00	-2.5	30.0
Acrolein	Ave	2.192	2.048		35.0	37.5	-6.6	30.0
1,1-Dichloroethene	Ave	0.2666	0.2658	0.1000	4.98	5.00	-0.3	30.0
Acetone	Ave	2.726	2.486	0.1000	34.2	37.5	-8.8	30.0
Freon 113	Ave	0.2819	0.2556	0.1000	4.53	5.00	-9.3	30.0
Methyl iodide	Ave	0.5211	0.4961		4.76	5.00	-4.8	30.0
Ethyl bromide	Ave	0.2424	0.2277		4.71	5.01	-6.1	30.0
Carbon disulfide	Ave	0.7730	0.7318	0.1000	4.73	5.00	-5.3	30.0
Methyl acetate	Ave	7.436	6.809	0.1000	4.58	5.00	-8.4	30.0
Allyl chloride	Ave	0.4053	0.3854		4.75	5.00	-4.9	30.0
Methylene Chloride	Ave	0.2955	0.2867	0.1000	4.85	5.00	-3.0	30.0
t-Butyl alcohol	Ave	1.066	1.066		50.0	50.0	-0.0	30.0
Acrylonitrile	Ave	3.558	3.539		24.9	25.0	-0.5	30.0
Methyl tert-butyl ether	Ave	0.7137	0.6713	0.1000	4.70	5.00	-5.9	30.0
trans-1,2-Dichloroethene	Ave	0.2944	0.2872	0.1000	4.88	5.00	-2.5	30.0
n-Hexane	Ave	0.4029	0.3867		4.80	5.00	-4.0	30.0
1,1-Dichloroethane	Ave	0.5323	0.5231	0.2000	4.91	5.00	-1.7	30.0
di-Isopropyl ether	Ave	0.8798	0.8496		4.83	5.00	-3.4	30.0
2-Chloro-1,3-butadiene	Ave	0.4273	0.4204		4.92	5.00	-1.6	30.0
Ethyl t-butyl ether	Ave	0.8307	0.8078		4.86	5.00	-2.7	30.0
2-Butanone (MEK)	Ave	4.560	4.401	0.1000	36.2	37.5	-3.5	30.0
cis-1,2-Dichloroethene	Ave	0.3420	0.3466	0.1000	5.07	5.00	1.3	30.0
2,2-Dichloropropane	Ave	0.4280	0.4315		5.04	5.00	0.8	30.0
Propionitrile	Ave	1.334	1.364		38.4	37.5	2.3	30.0
Methacrylonitrile	Ave	4.696	4.600		36.7	37.5	-2.0	30.0
Bromochloromethane	Ave	0.1507	0.1407		4.67	5.00	-6.6	30.0
Tetrahydrofuran	Ave	1.383	1.401		25.3	25.0	1.3	30.0
Chloroform	Ave	0.5245	0.5161	0.2000	4.92	5.00	-1.6	30.0
1,1,1-Trichloroethane	Ave	0.4712	0.4575	0.1000	4.85	5.00	-2.9	30.0
Cyclohexane	Ave	0.4884	0.4708	0.1000	4.82	5.00	-3.6	30.0
1,1-Dichloropropene	Ave	0.4182	0.4127		4.93	5.00	-1.3	30.0
Carbon tetrachloride	Ave	0.4218	0.4101	0.1000	4.86	5.00	-2.8	30.0

FORM VII  
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-30627-1

SDG No.: \_\_\_\_\_

Lab Sample ID: ICV 410-69397/10 Calibration Date: 11/23/2020 15:14

Instrument ID: 19930 Calib Start Date: 11/23/2020 12:45

GC Column: R-624SilMS 30m ID: 0.25 (mm) Calib End Date: 11/23/2020 14:53

Lab File ID: IN23V01.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Isobutyl alcohol	Ave	0.3429	0.3263		119	125	-4.8	30.0
Benzene	Ave	1.267	1.218	0.5000	4.81	5.00	-3.8	30.0
1,2-Dichloroethane	Ave	0.3094	0.2997	0.1000	4.84	5.00	-3.1	30.0
t-Amyl methyl ether	Ave	0.7610	0.7447		4.89	5.00	-2.1	30.0
n-Heptane	Ave	0.4046	0.3828		4.73	5.00	-5.4	30.0
n-Butanol	Ave	0.3241	0.3115		240	250	-3.9	30.0
Trichloroethene	Ave	0.3316	0.3187	0.2000	4.80	5.00	-3.9	30.0
Methylcyclohexane	Ave	0.5387	0.5102	0.1000	4.74	5.00	-5.3	30.0
1,2-Dichloropropane	Ave	0.3114	0.3105	0.1000	4.99	5.00	-0.3	30.0
Methyl methacrylate	Ave	8.743	8.609		4.92	5.00	-1.5	30.0
1,4-Dioxane	Ave	0.0846	0.0778	0.0050	115	125	-8.0	30.0
Dibromomethane	Ave	0.1472	0.1406		4.78	5.00	-4.5	30.0
Bromodichloromethane	Ave	0.3732	0.3644	0.2000	4.88	5.00	-2.4	30.0
2-Nitropropane	Ave	2.198	2.103		4.78	5.00	-4.3	30.0
1-Bromo-2-chloroethane	Ave	0.3205	0.3144		4.91	5.00	-1.9	30.0
cis-1,3-Dichloropropene	Ave	0.4477	0.4341	0.2000	4.85	5.00	-3.0	30.0
4-Methyl-2-pentanone (MIBK)	Ave	11.34	11.28	0.1000	24.9	25.0	-0.5	30.0
Toluene	Ave	1.090	1.041	0.4000	4.77	5.00	-4.5	30.0
trans-1,3-Dichloropropene	Ave	0.4707	0.4601	0.1000	4.89	5.00	-2.3	30.0
Ethyl methacrylate	Ave	0.3939	0.4006		5.09	5.00	1.7	30.0
1,1,2-Trichloroethane	Ave	0.2910	0.2915	0.1000	5.01	5.00	0.2	30.0
Tetrachloroethene	Ave	0.5278	0.5107	0.2000	4.84	5.00	-3.2	30.0
1,3-Dichloropropane	Ave	0.4971	0.4800		4.83	5.00	-3.4	30.0
2-Hexanone	Ave	7.755	7.908	0.1000	25.5	25.0	2.0	30.0
Dibromochloromethane	Ave	0.3656	0.3629		4.96	5.00	-0.7	30.0
1,2-Dibromoethane (EDB)	Ave	0.2787	0.2652	0.1000	4.76	5.00	-4.8	30.0
1-Chlorohexane	Ave	0.6323	0.5824		4.61	5.00	-7.9	30.0
Chlorobenzene	Ave	1.205	1.182	0.5000	4.90	5.00	-1.9	30.0
1,1,1,2-Tetrachloroethane	Ave	0.4185	0.4104		4.90	5.00	-2.0	30.0
Ethylbenzene	Ave	2.106	2.045	0.1000	4.86	5.00	-2.9	30.0
m&p-Xylene	Ave	0.8312	0.8083	0.1000	9.72	10.0	-2.8	30.0
o-Xylene	Ave	0.8079	0.7959	0.3000	4.93	5.00	-1.5	30.0
Styrene	Ave	1.293	1.278	0.3000	4.94	5.00	-1.2	30.0
Bromoform	Ave	0.2210	0.2148	0.1000	4.86	5.00	-2.8	30.0
Isopropylbenzene	Ave	2.146	2.116	0.1000	4.93	5.00	-1.4	30.0
1,1,2,2-Tetrachloroethane	Ave	0.6530	0.6302	0.3000	4.83	5.00	-3.5	30.0
Bromobenzene	Ave	0.9004	0.8772		4.87	5.00	-2.6	30.0
trans-1,4-Dichloro-2-butene	Ave	3.720	3.643		24.5	25.0	-2.1	30.0
1,2,3-Trichloropropane	Ave	0.1792	0.1752		4.89	5.00	-2.2	30.0
N-Propylbenzene	Ave	4.413	4.339		4.92	5.00	-1.7	30.0
2-Chlorotoluene	Ave	0.9023	0.8811		4.88	5.00	-2.3	30.0



FORM VII  
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-30627-1  
 SDG No.: \_\_\_\_\_  
 Lab Sample ID: ICV 410-69397/10 Calibration Date: 11/23/2020 15:14  
 Instrument ID: 19930 Calib Start Date: 11/23/2020 12:45  
 GC Column: R-624SilMS 30m ID: 0.25 (mm) Calib End Date: 11/23/2020 14:53  
 Lab File ID: IN23V01.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,3,5-Trimethylbenzene	Ave	3.156	3.109		4.93	5.00	-1.5	30.0
4-Chlorotoluene	Ave	0.9112	0.8807		4.83	5.00	-3.3	30.0
tert-Butylbenzene	Ave	0.7129	0.6882		4.83	5.00	-3.5	30.0
Pentachloroethane	Ave	0.5650	0.5554		4.92	5.00	-1.7	30.0
1,2,4-Trimethylbenzene	Ave	3.210	3.163		4.93	5.00	-1.4	30.0
sec-Butylbenzene	Ave	4.139	4.082		4.93	5.00	-1.4	30.0
1,3-Dichlorobenzene	Ave	1.813	1.742	0.6000	4.80	5.00	-3.9	30.0
p-Isopropyltoluene	Ave	3.530	3.549		5.03	5.00	0.6	30.0
1,4-Dichlorobenzene	Ave	1.813	1.753	0.5000	4.84	5.00	-3.3	30.0
1,2,3-Trimethylbenzene	Ave	1.424	1.438		5.05	5.00	1.0	30.0
Benzyl chloride	Ave	0.2469	0.2647		5.36	5.00	7.2	30.0
n-Butylbenzene	Ave	1.724	1.687		4.89	5.00	-2.2	30.0
1,2-Dichlorobenzene	Ave	1.654	1.613	0.4000	4.88	5.00	-2.4	30.0
1,2-Dibromo-3-Chloropropane	Ave	0.1003	0.1017	0.0500	5.07	5.00	1.4	30.0
1,3,5-Trichlorobenzene	Ave	1.306	1.267		4.85	5.00	-3.0	30.0
1,2,4-Trichlorobenzene	Ave	1.086	1.066	0.2000	4.91	5.00	-1.9	30.0
Hexachlorobutadiene	Ave	0.4723	0.4467		4.73	5.00	-5.4	30.0
Naphthalene	Ave	2.030	1.940		4.78	5.00	-4.4	30.0
1,2,3-Trichlorobenzene	Ave	0.9372	0.8996		4.80	5.00	-4.0	30.0
Dibromofluoromethane (Surr)	Ave	0.2469	0.2460		9.96	10.0	-0.4	30.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.0498	0.0489		9.82	10.0	-1.8	30.0
Toluene-d8 (Surr)	Ave	1.306	1.301		9.96	10.0	-0.4	30.0
4-Bromofluorobenzene (Surr)	Ave	0.4836	0.4836		10.0	10.0	-0.0	30.0

Eurofins Lancaster Laboratories Env, LLC  
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23V01.D  
 Lims ID: ICV LG  
 Client ID:  
 Sample Type: ICV  
 Inject. Date: 23-Nov-2020 15:14:30 ALS Bottle#: 9 Worklist Smp#: 10  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0016280-010  
 Misc. Info.: ICV LG  
 Operator ID: dvv10203 Instrument ID: 19930  
 Sublist:

Method: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\8260 25ml HP31.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 23-Nov-2020 19:12:23 Calib Date: 23-Nov-2020 18:05:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I17.D

Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1632

First Level Reviewer: campbellme Date: 23-Nov-2020 18:58:48

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.971	1.971	0.000	99	290999	5.00	4.12	
4 Chloromethane	50	2.172	2.172	0.000	99	378017	5.00	4.62	
6 Butadiene	39	2.288	2.288	0.000	89	308587	5.00	4.41	
5 Vinyl chloride	62	2.294	2.300	-0.006	98	374046	5.00	4.96	
7 Bromomethane	94	2.617	2.623	-0.006	90	266255	5.00	4.87	
8 Chloroethane	64	2.702	2.709	-0.007	100	219813	5.00	4.74	
9 Dichlorofluoromethane	67	2.940	2.940	0.000	97	507901	5.00	4.89	
10 Trichlorofluoromethane	101	3.013	3.019	-0.006	98	454773	5.00	4.66	
11 Ethyl ether	59	3.263	3.269	-0.006	90	233101	5.00	5.33	
12 1,2-Dichloro-1,1,2-trifluoroethane	67	3.337	3.336	0.000	95	333750	5.00	4.88	
13 Acrolein	56	3.440	3.440	0.000	99	248745	37.5	35.0	
14 1,1-Dichloroethene	96	3.574	3.580	-0.006	98	262792	5.00	4.98	
15 Acetone	43	3.605	3.605	0.000	100	302015	37.5	34.2	
16 112TCTFE	101	3.617	3.617	0.000	90	252796	5.00	4.53	
17 Iodomethane	142	3.769	3.775	-0.006	98	490572	5.00	4.76	
18 Ethyl bromide	108	3.806	3.806	0.000	98	225652	5.01	4.71	
19 Carbon disulfide	76	3.879	3.885	-0.006	99	723688	5.00	4.73	
21 Methyl acetate	43	4.031	4.038	-0.007	98	110295	5.00	4.58	M
22 3-Chloro-1-propene	41	4.056	4.062	-0.006	93	381111	5.00	4.75	
23 Methylene Chloride	84	4.251	4.251	0.000	90	283503	5.00	4.85	
* 24 t-Butyl alcohol-d10 (IS)	65	4.269	4.263	0.006	0	161987	50.0	50.0	M
25 2-Methyl-2-propanol	59	4.397	4.385	0.012	99	172665	50.0	50.0	
26 Acrylonitrile	53	4.586	4.592	-0.006	99	286671	25.0	24.9	
27 Methyl tert-butyl ether	73	4.653	4.659	-0.006	94	663864	5.00	4.70	
28 trans-1,2-Dichloroethene	96	4.678	4.678	0.000	99	283953	5.00	4.88	
29 Hexane	57	5.098	5.104	-0.006	90	382368	5.00	4.80	
31 1,1-Dichloroethane	63	5.330	5.336	-0.006	96	517268	5.00	4.91	
32 Isopropyl ether	45	5.391	5.391	0.000	95	840092	5.00	4.83	
33 2-Chloro-1,3-butadiene	53	5.440	5.446	-0.006	89	415706	5.00	4.92	
34 Tert-butyl ethyl ether	59	5.921	5.921	0.000	97	798827	5.00	4.86	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 2-Butanone (MEK)	43	6.129	6.135	-0.006	99	534646	37.5	36.2	
37 cis-1,2-Dichloroethene	96	6.159	6.165	-0.006	81	342704	5.00	5.07	
38 2,2-Dichloropropane	77	6.177	6.177	0.000	88	426724	5.00	5.04	
40 Propionitrile	54	6.220	6.220	0.000	98	165712	37.5	38.4	
42 Methacrylonitrile	67	6.427	6.433	-0.006	89	558808	37.5	36.7	
43 Chlorobromomethane	128	6.494	6.494	0.000	91	139169	5.00	4.67	
44 Tetrahydrofuran	71	6.501	6.507	-0.006	77	113499	25.0	25.3	
45 Chloroform	83	6.647	6.647	0.000	93	510311	5.00	4.92	
\$ 46 Dibromofluoromethane (Surr)	113	6.854	6.860	-0.006	94	486520	10.0	9.96	
47 1,1,1-Trichloroethane	97	6.866	6.866	0.000	98	452418	5.00	4.85	
48 Cyclohexane	56	6.970	6.964	0.006	88	465588	5.00	4.82	
50 Carbon tetrachloride	117	7.080	7.080	0.000	95	405577	5.00	4.86	
51 1,1-Dichloropropene	75	7.080	7.080	0.000	98	408111	5.00	4.93	
52 Isobutyl alcohol	41	7.226	7.232	-0.006	95	132145	125.0	119.0	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.317	7.311	0.006	0	96656	10.0	9.82	
54 Benzene	78	7.342	7.342	0.000	96	1204860	5.00	4.81	
56 1,2-Dichloroethane	62	7.409	7.415	-0.006	98	296399	5.00	4.84	
57 Tert-amyl methyl ether	73	7.525	7.531	-0.006	100	736358	5.00	4.89	
* 58 Fluorobenzene (IS)	96	7.744	7.744	0.000	99	1977703	10.0	10.0	
59 n-Heptane	43	7.750	7.756	-0.006	90	378491	5.00	4.73	
60 n-Butanol	56	8.104	8.104	0.000	85	252286	250.0	240.3	M
61 Trichloroethene	95	8.220	8.220	0.000	97	315102	5.00	4.80	
62 Methylcyclohexane	83	8.531	8.531	0.000	94	504512	5.00	4.74	
63 1,2-Dichloropropane	63	8.549	8.555	-0.006	90	307071	5.00	4.99	
64 Methyl methacrylate	69	8.634	8.634	0.000	87	139459	5.00	4.92	
65 1,4-Dioxane	88	8.640	8.640	0.000	30	31516	125.0	115.0	M
66 Dibromomethane	93	8.665	8.665	0.000	94	139012	5.00	4.78	
68 Dichlorobromomethane	83	8.896	8.896	0.000	99	360307	5.00	4.88	
69 2-Nitropropane	41	9.159	9.165	-0.006	98	34061	5.00	4.78	
71 2-Chloroethyl vinyl ether	63		9.250				ND	ND	
72 1-Bromo-2-chloroethane	63	9.287	9.287	0.000	98	310914	5.00	4.91	
73 cis-1,3-Dichloropropene	75	9.439	9.439	0.000	98	429301	5.00	4.85	
74 4-Methyl-2-pentanone (MIBK)	43	9.604	9.604	0.000	95	913922	25.0	24.9	
\$ 75 Toluene-d8 (Surr)	98	9.744	9.744	0.000	93	1947874	10.0	9.96	
76 Toluene	92	9.817	9.817	0.000	98	779388	5.00	4.77	
78 trans-1,3-Dichloropropene	75	10.073	10.073	0.000	90	344464	5.00	4.89	
79 Ethyl methacrylate	69	10.134	10.134	0.000	87	299917	5.00	5.09	
80 1,1,2-Trichloroethane	97	10.274	10.280	-0.006	89	218208	5.00	5.01	
81 Tetrachloroethene	166	10.366	10.366	0.000	97	382345	5.00	4.84	
82 1,3-Dichloropropane	76	10.439	10.439	0.000	86	359323	5.00	4.83	
83 2-Hexanone	43	10.488	10.488	0.000	95	640458	25.0	25.5	
85 Chlorodibromomethane	129	10.652	10.652	0.000	90	271651	5.00	4.96	
86 Ethylene Dibromide	107	10.762	10.762	0.000	99	198542	5.00	4.76	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.189	0.000	85	1497197	10.0	10.0	
88 1-Chlorohexane	91	11.195	11.195	0.000	95	435966	5.00	4.61	
90 Chlorobenzene	112	11.219	11.219	0.000	96	884797	5.00	4.90	
91 1,1,1,2-Tetrachloroethane	131	11.298	11.298	0.000	96	307198	5.00	4.90	
92 Ethylbenzene	91	11.298	11.304	-0.006	98	1530870	5.00	4.86	
93 m-Xylene & p-Xylene	106	11.414	11.414	0.000	100	1210183	10.0	9.72	
94 o-Xylene	106	11.743	11.743	0.000	96	595836	5.00	4.93	
95 Styrene	104	11.762	11.762	0.000	95	956882	5.00	4.94	
96 Bromoform	173	11.920	11.920	0.000	98	160812	5.00	4.86	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
97 Isopropylbenzene	105	12.042	12.042	0.000	95	1583732	5.00	4.93	
\$ 100 4-Bromofluorobenzene (Surr)	95	12.188	12.188	0.000	93	723999	10.0	10.0	
101 1,1,2,2-Tetrachloroethane	83	12.286	12.286	0.000	93	268576	5.00	4.83	
102 Bromobenzene	156	12.304	12.304	0.000	94	373871	5.00	4.87	
103 trans-1,4-Dichloro-2-butene	53	12.310	12.310	0.000	91	295070	25.0	24.5	
104 1,2,3-Trichloropropane	110	12.335	12.335	0.000	83	74668	5.00	4.89	
105 N-Propylbenzene	91	12.371	12.371	0.000	99	1849241	5.00	4.92	
106 2-Chlorotoluene	126	12.451	12.451	0.000	97	375532	5.00	4.88	
107 1,3,5-Trimethylbenzene	105	12.505	12.505	0.000	94	1325215	5.00	4.93	
108 4-Chlorotoluene	126	12.542	12.542	0.000	96	375339	5.00	4.83	
109 tert-Butylbenzene	134	12.749	12.749	0.000	92	293304	5.00	4.83	
110 Pentachloroethane	167	12.780	12.780	0.000	93	236718	5.00	4.92	
111 1,2,4-Trimethylbenzene	105	12.792	12.792	0.000	96	1348219	5.00	4.93	
112 sec-Butylbenzene	105	12.908	12.914	-0.006	94	1739936	5.00	4.93	
113 1,3-Dichlorobenzene	146	13.011	13.011	0.000	98	742550	5.00	4.80	
114 4-Isopropyltoluene	119	13.018	13.018	0.000	97	1512773	5.00	5.03	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	93	852390	10.0	10.0	
116 1,4-Dichlorobenzene	146	13.085	13.085	0.000	96	747293	5.00	4.84	
117 1,2,3-Trimethylbenzene	120	13.091	13.097	-0.006	98	613024	5.00	5.05	
118 Benzyl chloride	126	13.158	13.164	-0.006	98	112793	5.00	5.36	
119 n-Butylbenzene	92	13.310	13.310	0.000	98	718835	5.00	4.89	
120 1,2-Dichlorobenzene	146	13.341	13.347	-0.006	99	687650	5.00	4.88	
122 1,2-Dibromo-3-Chloropropane	155	13.889	13.883	0.006	90	43334	5.00	5.07	
123 1,3,5-Trichlorobenzene	180	14.011	14.011	0.000	98	539931	5.00	4.85	
124 1,2,4-Trichlorobenzene	180	14.432	14.438	-0.006	94	454274	5.00	4.91	
125 Hexachlorobutadiene	225	14.517	14.517	0.000	96	190387	5.00	4.73	
126 Naphthalene	128	14.615	14.615	0.000	97	826853	5.00	4.78	
127 1,2,3-Trichlorobenzene	180	14.755	14.761	-0.006	96	383391	5.00	4.80	
134 Isopropyl alcohol	45		0.000				ND	ND	
144 2-ethoxy-2-methyl butane	1		0.000				ND	ND	
135 p-Diethylbenzene	1		0.000				ND	ND	
137 2-Methylnaphthalene	142		0.000				ND	ND	

### QC Flag Legend

Processing Flags

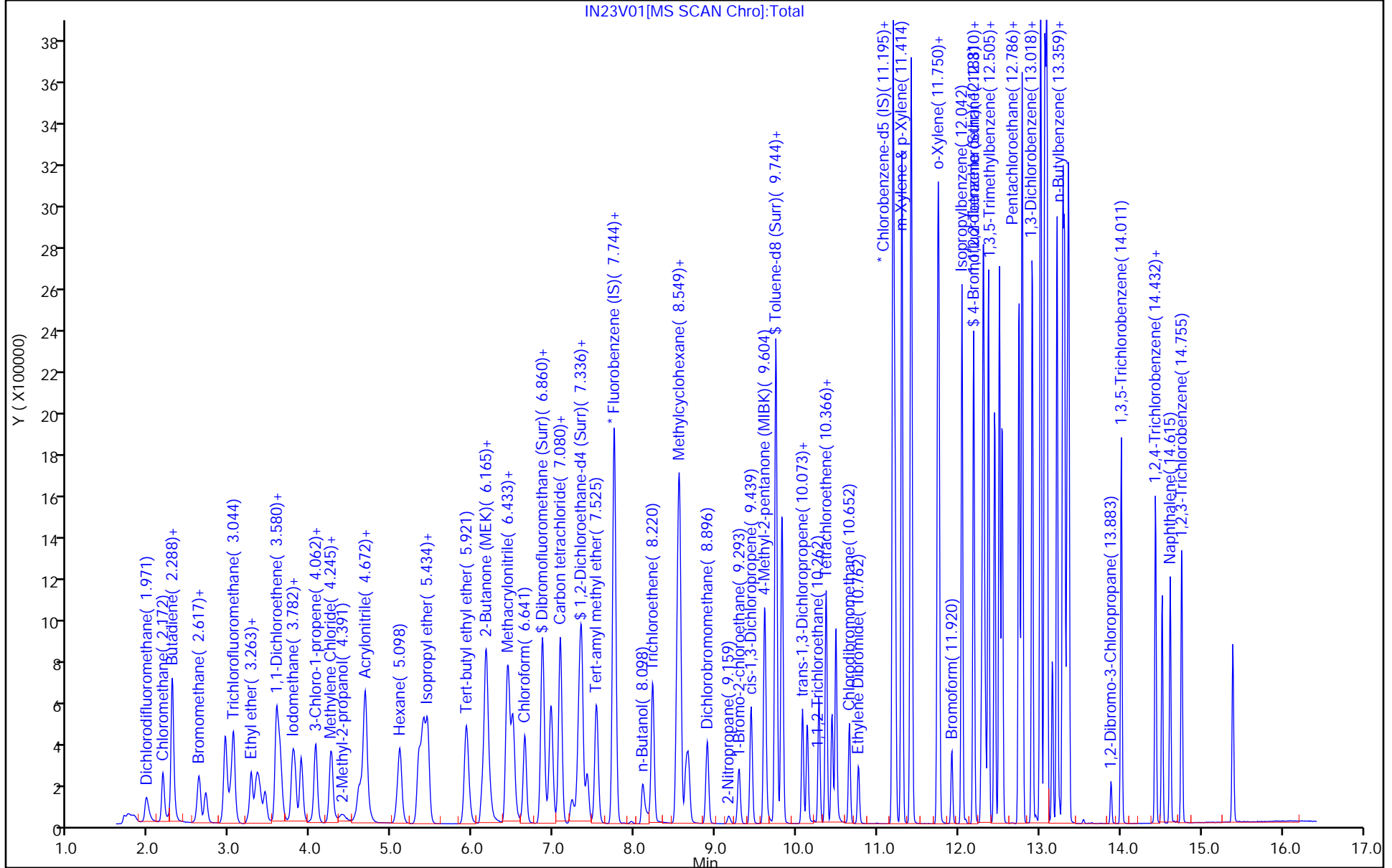
ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

### Reagents:

MSV_Q_EE_00003	Amount Added: 12.50	Units: uL	
MSV_Q_QVOA1_00056	Amount Added: 12.50	Units: uL	
MSV_Q_QARC_00055	Amount Added: 12.50	Units: uL	
MSV_Q_QVOA6_00053	Amount Added: 12.50	Units: uL	
MSV_QGAS_826_00092	Amount Added: 12.50	Units: uL	
MSV_Q_ETBR_00005	Amount Added: 12.50	Units: uL	
MSV_31_826ISS_00003	Amount Added: 5.00	Units: uL	Run Reagent



Eurofins Lancaster Laboratories Env, LLC

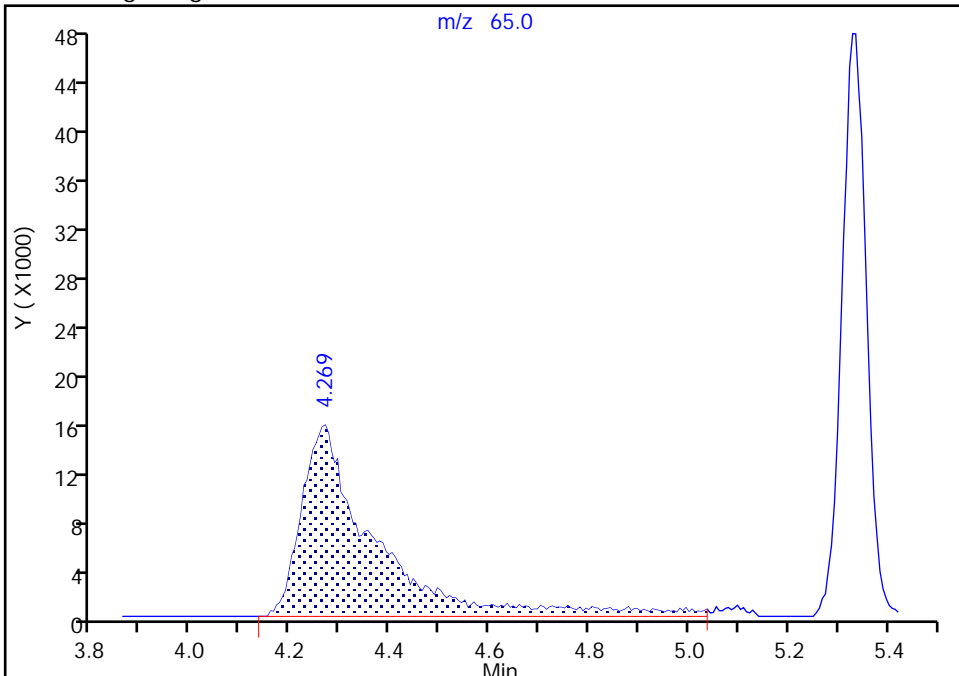
Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23V01.D  
Injection Date: 23-Nov-2020 15:14:30 Instrument ID: 19930  
Lims ID: ICV LG  
Client ID:  
Operator ID: dvv10203 ALS Bottle#: 9 Worklist Smp#: 10  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: 8260 25ml HP31 Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

\* 24 t-Butyl alcohol-d10 (IS), CAS: 53001-22-2

Signal: 1

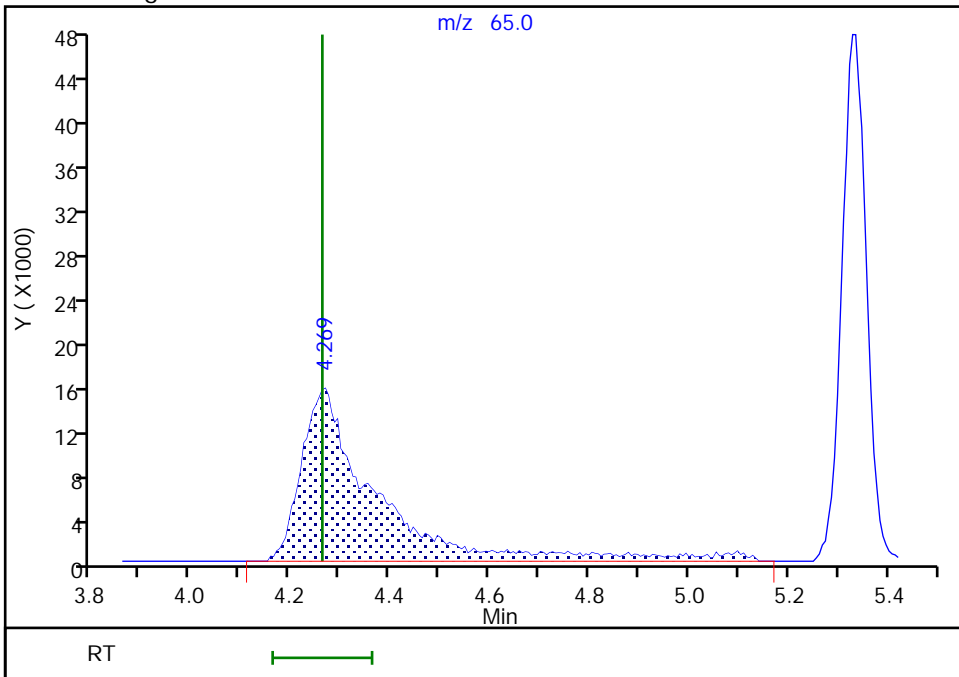
RT: 4.27  
Area: 158853  
Amount: 50.000000  
Amount Units: ug/l

Processing Integration Results



RT: 4.27  
Area: 161987  
Amount: 50.000000  
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 23-Nov-2020 18:56:25  
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Euofins Lancaster Laboratories Env, LLC

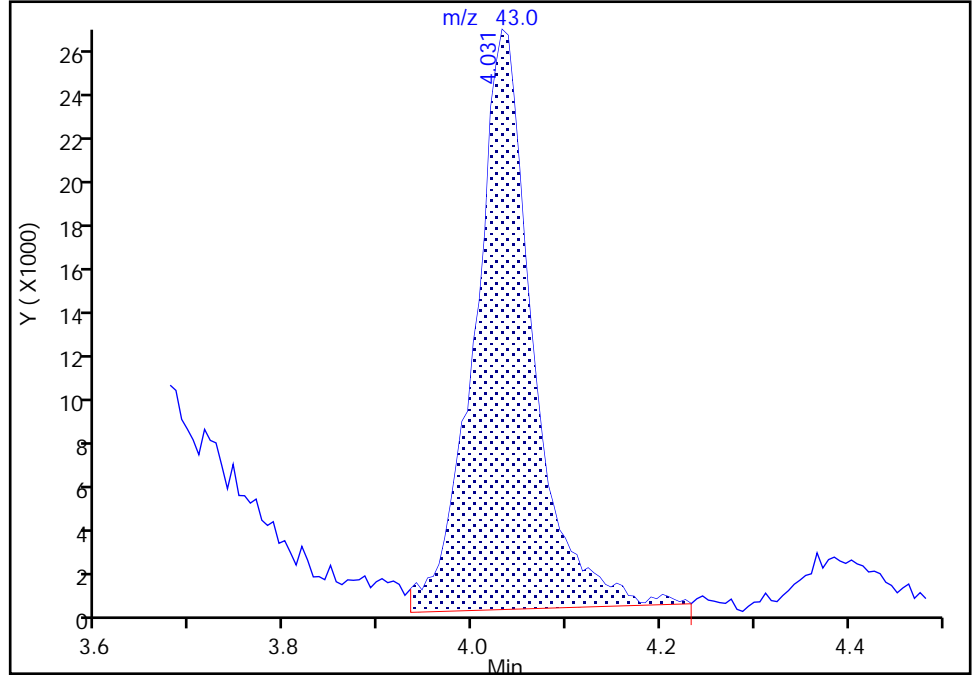
Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23V01.D  
Injection Date: 23-Nov-2020 15:14:30 Instrument ID: 19930  
Lims ID: ICV LG  
Client ID:  
Operator ID: dvv10203 ALS Bottle#: 9 Worklist Smp#: 10  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: 8260 25ml HP31 Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

21 Methyl acetate, CAS: 79-20-9

Signal: 1

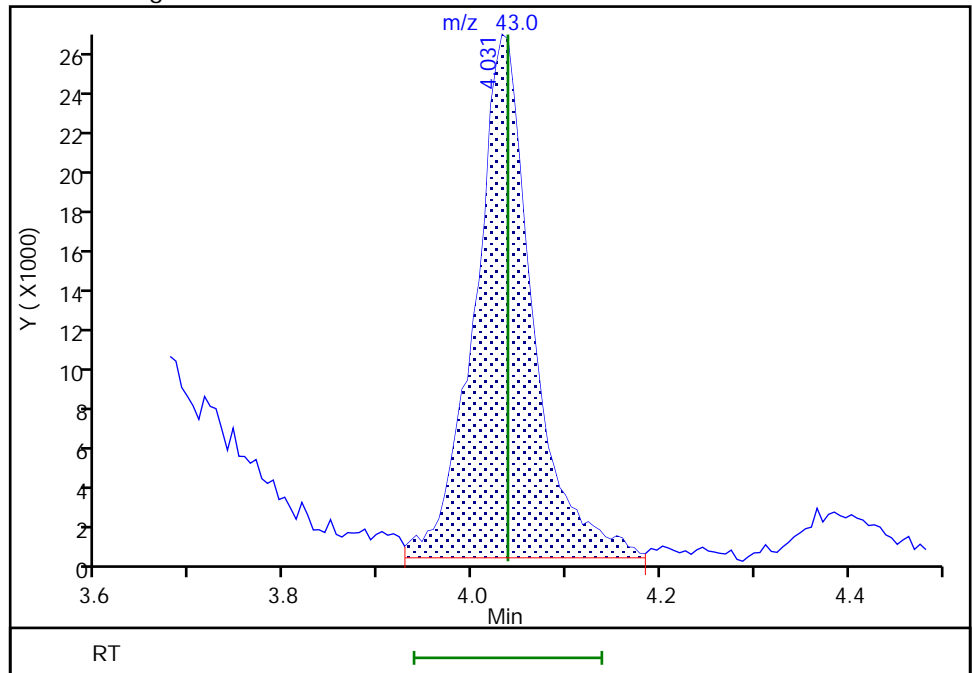
RT: 4.03  
Area: 111558  
Amount: 4.721812  
Amount Units: ug/l

Processing Integration Results



RT: 4.03  
Area: 110295  
Amount: 4.578035  
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 23-Nov-2020 18:56:15  
Audit Action: Assigned New Baseline

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

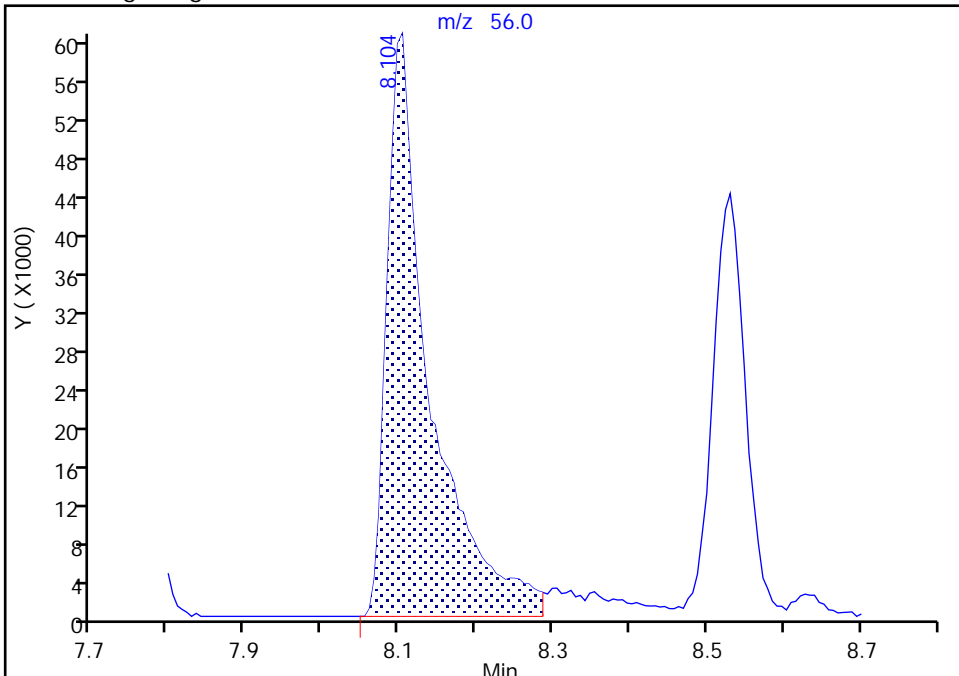
Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23V01.D  
Injection Date: 23-Nov-2020 15:14:30 Instrument ID: 19930  
Lims ID: ICV LG  
Client ID:  
Operator ID: dvv10203 ALS Bottle#: 9 Worklist Smp#: 10  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: 8260 25ml HP31 Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

60 n-Butanol, CAS: 71-36-3

Signal: 1

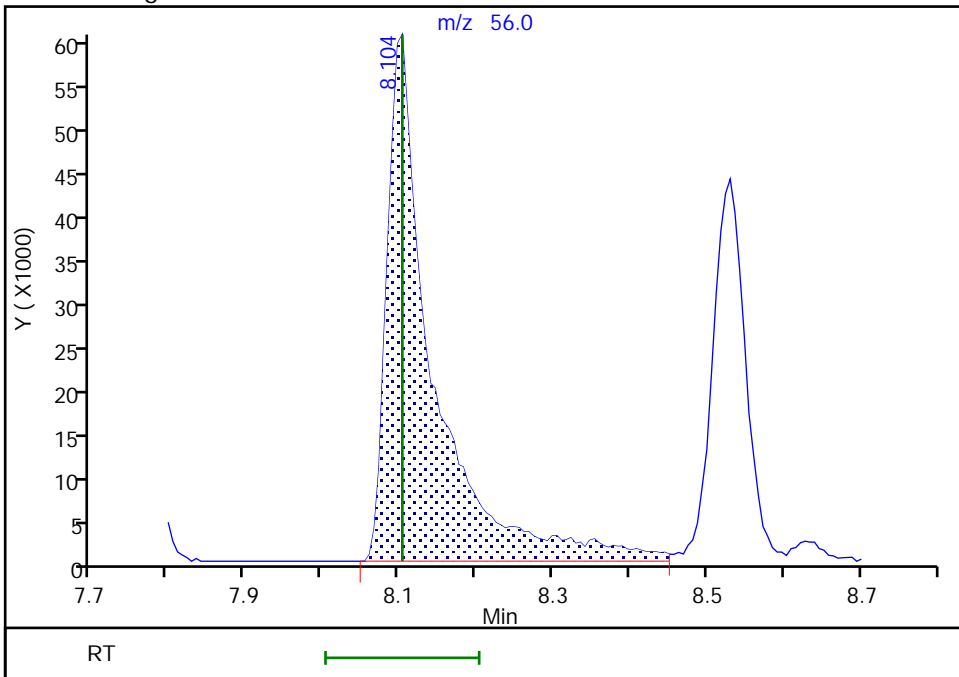
RT: 8.10  
Area: 234717  
Amount: 223.5540  
Amount Units: ug/l

Processing Integration Results



RT: 8.10  
Area: 252286  
Amount: 240.2874  
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 23-Nov-2020 18:56:56  
Audit Action: Assigned New Baseline

Audit Reason: Incomplete Integration



Euofins Lancaster Laboratories Env, LLC

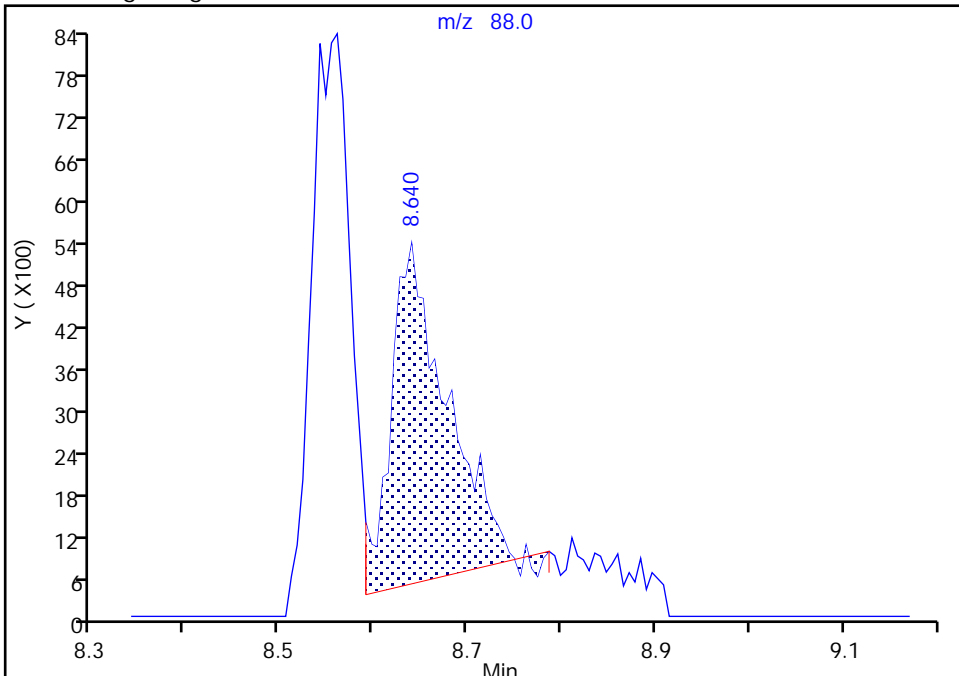
Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23V01.D  
Injection Date: 23-Nov-2020 15:14:30 Instrument ID: 19930  
Lims ID: ICV LG  
Client ID:  
Operator ID: dvv10203 ALS Bottle#: 9 Worklist Smp#: 10  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: 8260 25ml HP31 Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

65 1,4-Dioxane, CAS: 123-91-1

Signal: 1

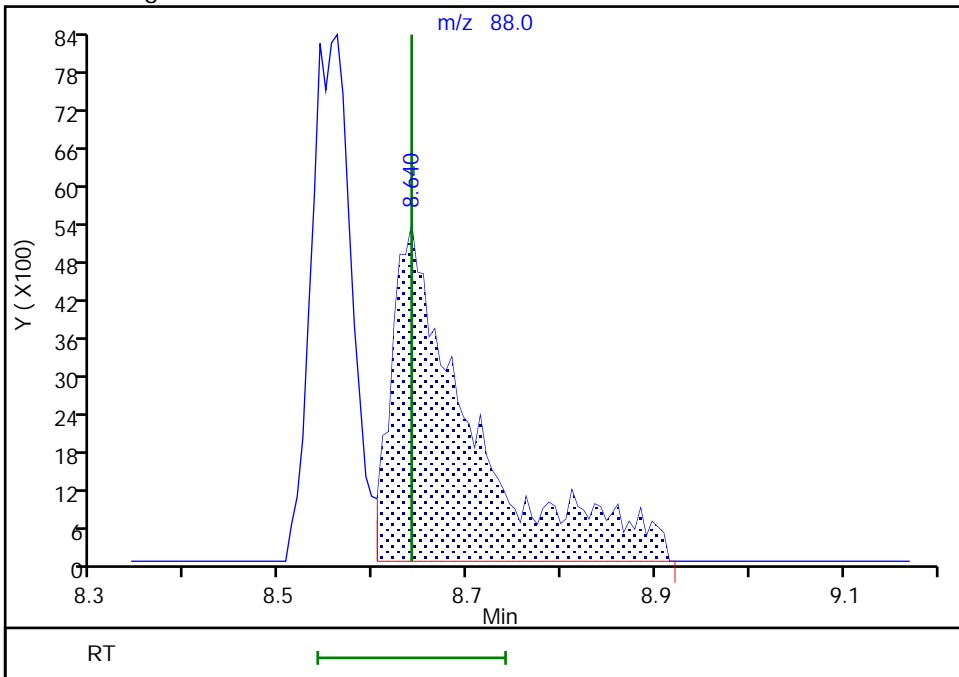
RT: 8.64  
Area: 19819  
Amount: 72.308770  
Amount Units: ug/l

Processing Integration Results



RT: 8.64  
Area: 31516  
Amount: 114.9848  
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 23-Nov-2020 18:57:13  
Audit Action: Split an Integrated Peak

Audit Reason: Incomplete Integration

FORM VII  
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-30627-1

SDG No.: \_\_\_\_\_

Lab Sample ID: CCVIS 410-99333/3 Calibration Date: 03/03/2021 19:28

Instrument ID: 19930 Calib Start Date: 11/23/2020 12:45

GC Column: R-624SilMS 30m ID: 0.25 (mm) Calib End Date: 11/23/2020 14:53

Lab File ID: IM03C31.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3569	0.3572	0.1000	12.5	12.5	0.0	20.0
Chloromethane	Ave	0.4141	0.4139	0.1000	12.5	12.5	-0.0	20.0
1,3-Butadiene	Ave	0.3536	0.4297		15.2	12.5	21.5*	20.0
Vinyl chloride	Ave	0.3812	0.3660	0.1000	12.0	12.5	-4.0	20.0
Bromomethane	Ave	0.2764	0.2701	0.1000	12.2	12.5	-2.3	20.0
Chloroethane	Ave	0.2343	0.2311	0.1000	12.3	12.5	-1.4	20.0
Dichlorofluoromethane	Ave	0.5249	0.4246		10.1	12.5	-19.1	20.0
Trichlorofluoromethane	Ave	0.4935	0.4895	0.1000	12.4	12.5	-0.8	20.0
Ethyl ether	Ave	0.2210	0.2121		12.0	12.5	-4.0	20.0
Freon 123a	Ave	0.3461	0.3135		11.3	12.5	-9.4	20.0
Acrolein	Ave	2.192	1.532		437	625	-30.1*	20.0
1,1-Dichloroethene	Ave	0.2666	0.2368	0.1000	11.1	12.5	-11.2	20.0
Acetone	Ave	2.726	2.518	0.1000	115	125	-7.6	20.0
Freon 113	Ave	0.2819	0.2694	0.1000	11.9	12.5	-4.4	20.0
Methyl iodide	Ave	0.5211	0.4650		11.2	12.5	-10.8	20.0
Ethyl bromide	Ave	0.2424	0.2154		11.1	12.5	-11.1	20.0
Carbon disulfide	Ave	0.7730	0.6641	0.1000	10.7	12.5	-14.1	20.0
Methyl acetate	Ave	7.436	8.033	0.1000	13.5	12.5	8.0	20.0
Allyl chloride	Ave	0.4053	0.3953		12.2	12.5	-2.5	20.0
Methylene Chloride	Ave	0.2955	0.2616	0.1000	11.1	12.5	-11.5	20.0
t-Butyl alcohol	Ave	1.066	0.9877		232	250	-7.3	20.0
Acrylonitrile	Ave	3.558	3.924		68.9	62.5	10.3	20.0
Methyl tert-butyl ether	Ave	0.7137	0.6567	0.1000	11.5	12.5	-8.0	20.0
trans-1,2-Dichloroethene	Ave	0.2944	0.2649	0.1000	11.2	12.5	-10.0	20.0
n-Hexane	Ave	0.4029	0.3945		12.2	12.5	-2.1	20.0
1,1-Dichloroethane	Ave	0.5323	0.4956	0.2000	11.6	12.5	-6.9	20.0
di-Isopropyl ether	Ave	0.8798	0.8334		11.8	12.5	-5.3	20.0
2-Chloro-1,3-butadiene	Ave	0.4273	0.4022		11.8	12.5	-5.9	20.0
Ethyl t-butyl ether	Ave	0.8307	0.7776		11.7	12.5	-6.4	20.0
2-Butanone (MEK)	Ave	4.560	5.209	0.1000	143	125	14.2	20.0
cis-1,2-Dichloroethene	Ave	0.3420	0.3138	0.1000	11.5	12.5	-8.3	20.0
2,2-Dichloropropane	Ave	0.4280	0.4235		12.4	12.5	-1.1	20.0
Propionitrile	Ave	1.334	1.445		271	250	8.3	20.0
Methacrylonitrile	Ave	4.696	5.056		135	125	7.7	20.0
Bromochloromethane	Ave	0.1507	0.1439		11.9	12.5	-4.5	20.0
Tetrahydrofuran	Ave	1.383	1.494		135	125	8.0	20.0
Chloroform	Ave	0.5245	0.4898	0.2000	11.7	12.5	-6.6	20.0
1,1,1-Trichloroethane	Ave	0.4712	0.4437	0.1000	11.8	12.5	-5.9	20.0
Cyclohexane	Ave	0.4884	0.4760	0.1000	12.2	12.5	-2.6	20.0
1,1-Dichloropropene	Ave	0.4182	0.3937		11.8	12.5	-5.9	20.0
Carbon tetrachloride	Ave	0.4218	0.4014	0.1000	11.9	12.5	-4.8	20.0

FORM VII  
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-30627-1

SDG No.: \_\_\_\_\_

Lab Sample ID: CCVIS 410-99333/3 Calibration Date: 03/03/2021 19:28

Instrument ID: 19930 Calib Start Date: 11/23/2020 12:45

GC Column: R-624SilMS 30m ID: 0.25 (mm) Calib End Date: 11/23/2020 14:53

Lab File ID: IM03C31.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Isobutyl alcohol	Ave	0.3429	0.3414		622	625	-0.4	20.0
Benzene	Ave	1.267	1.174	0.5000	11.6	12.5	-7.3	20.0
1,2-Dichloroethane	Ave	0.3094	0.2987	0.1000	12.1	12.5	-3.4	20.0
t-Amyl methyl ether	Ave	0.7610	0.7192		11.8	12.5	-5.5	20.0
n-Heptane	Ave	0.4046	0.4139		12.8	12.5	2.3	20.0
n-Butanol	Ave	0.3241	0.3180		1230	1250	-1.9	20.0
Trichloroethene	Ave	0.3316	0.3081	0.2000	11.6	12.5	-7.1	20.0
Methylcyclohexane	Ave	0.5387	0.5494	0.1000	12.7	12.5	2.0	20.0
1,2-Dichloropropane	Ave	0.3114	0.2995	0.1000	12.0	12.5	-3.8	20.0
1,4-Dioxane	Ave	0.0846	0.0591	0.0050	436	625	-30.2*	20.0
Methyl methacrylate	Ave	8.743	9.777		14.0	12.5	11.8	20.0
Dibromomethane	Ave	0.1472	0.1394		11.8	12.5	-5.3	20.0
Bromodichloromethane	Ave	0.3732	0.3651	0.2000	12.2	12.5	-2.2	20.0
2-Nitropropane	Ave	2.198	2.743		156	125	24.8*	20.0
1-Bromo-2-chloroethane	Ave	0.3205	0.2929		11.4	12.5	-8.6	20.0
cis-1,3-Dichloropropene	Ave	0.4477	0.4488	0.2000	12.5	12.5	0.2	20.0
4-Methyl-2-pentanone (MIBK)	Ave	11.34	13.53	0.1000	149	125	19.3	20.0
Toluene	Ave	1.090	0.9672	0.4000	11.1	12.5	-11.3	20.0
trans-1,3-Dichloropropene	Ave	0.4707	0.4657	0.1000	12.4	12.5	-1.1	20.0
Ethyl methacrylate	Ave	0.3939	0.3840		12.2	12.5	-2.5	20.0
1,1,2-Trichloroethane	Ave	0.2910	0.2680	0.1000	11.5	12.5	-7.9	20.0
Tetrachloroethene	Ave	0.5278	0.4738	0.2000	11.2	12.5	-10.2	20.0
1,3-Dichloropropane	Ave	0.4971	0.4643		11.7	12.5	-6.6	20.0
2-Hexanone	Ave	7.755	9.549	0.1000	154	125	23.1*	20.0
Dibromochloromethane	Ave	0.3656	0.3500		12.0	12.5	-4.3	20.0
1,2-Dibromoethane (EDB)	Ave	0.2787	0.2590	0.1000	11.6	12.5	-7.1	20.0
1-Chlorohexane	Ave	0.6323	0.5701		11.3	12.5	-9.8	20.0
Chlorobenzene	Ave	1.205	1.103	0.5000	11.4	12.5	-8.5	20.0
1,1,1,2-Tetrachloroethane	Ave	0.4185	0.4047		12.1	12.5	-3.3	20.0
Ethylbenzene	Ave	2.106	1.920	0.1000	11.4	12.5	-8.8	20.0
m&p-Xylene	Ave	0.8312	0.7568	0.1000	22.8	25.0	-9.0	20.0
o-Xylene	Ave	0.8079	0.7486	0.3000	11.6	12.5	-7.3	20.0
Styrene	Ave	1.293	1.230	0.3000	11.9	12.5	-4.9	20.0
Bromoform	Ave	0.2210	0.2174	0.1000	12.3	12.5	-1.6	20.0
Isopropylbenzene	Ave	2.146	1.995	0.1000	11.6	12.5	-7.1	20.0
1,1,2,2-Tetrachloroethane	Ave	0.6530	0.5927	0.3000	11.3	12.5	-9.2	20.0
Bromobenzene	Ave	0.9004	0.8346		11.6	12.5	-7.3	20.0
trans-1,4-Dichloro-2-butene	Ave	3.720	3.699		124	125	-0.6	20.0
1,2,3-Trichloropropane	Ave	0.1792	0.1638		11.4	12.5	-8.6	20.0
N-Propylbenzene	Ave	4.413	4.031		11.4	12.5	-8.7	20.0
2-Chlorotoluene	Ave	0.9023	0.8359		11.6	12.5	-7.4	20.0

FORM VII  
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-30627-1  
 SDG No.: \_\_\_\_\_  
 Lab Sample ID: CCVIS 410-99333/3 Calibration Date: 03/03/2021 19:28  
 Instrument ID: 19930 Calib Start Date: 11/23/2020 12:45  
 GC Column: R-624SilMS 30m ID: 0.25 (mm) Calib End Date: 11/23/2020 14:53  
 Lab File ID: IM03C31.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,3,5-Trimethylbenzene	Ave	3.156	2.926		11.6	12.5	-7.3	20.0
4-Chlorotoluene	Ave	0.9112	0.8518		11.7	12.5	-6.5	20.0
tert-Butylbenzene	Ave	0.7129	0.6621		11.6	12.5	-7.1	20.0
Pentachloroethane	Ave	0.5650	0.5804		12.8	12.5	2.7	20.0
1,2,4-Trimethylbenzene	Ave	3.210	3.002		11.7	12.5	-6.5	20.0
sec-Butylbenzene	Ave	4.139	3.847		11.6	12.5	-7.1	20.0
1,3-Dichlorobenzene	Ave	1.813	1.672	0.6000	11.5	12.5	-7.8	20.0
p-Isopropyltoluene	Ave	3.530	3.313		11.7	12.5	-6.1	20.0
1,4-Dichlorobenzene	Ave	1.813	1.646	0.5000	11.4	12.5	-9.2	20.0
1,2,3-Trimethylbenzene	Ave	1.424	1.360		11.9	12.5	-4.5	20.0
Benzyl chloride	Ave	0.2469	0.2608		13.2	12.5	5.6	20.0
n-Butylbenzene	Ave	1.724	1.631		11.8	12.5	-5.4	20.0
1,2-Dichlorobenzene	Ave	1.654	1.512	0.4000	11.4	12.5	-8.6	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.1003	0.0947	0.0500	11.8	12.5	-5.6	20.0
1,3,5-Trichlorobenzene	Ave	1.306	1.201		11.5	12.5	-8.0	20.0
1,2,4-Trichlorobenzene	Ave	1.086	0.9631	0.2000	11.1	12.5	-11.3	20.0
Hexachlorobutadiene	Ave	0.4723	0.4172		11.0	12.5	-11.7	20.0
Naphthalene	Ave	2.030	1.627		10.0	12.5	-19.8	20.0
1,2,3-Trichlorobenzene	Ave	0.9372	0.7464		9.95	12.5	-20.4*	20.0
Dibromofluoromethane (Surr)	Ave	0.2469	0.2501		10.1	10.0	1.3	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.0498	0.0507		10.2	10.0	1.8	20.0
Toluene-d8 (Surr)	Ave	1.306	1.286		9.84	10.0	-1.6	20.0
4-Bromofluorobenzene (Surr)	Ave	0.4836	0.4835		10.0	10.0	-0.0	20.0

Eurofins Lancaster Laboratories Env, LLC  
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03C31.D  
 Lims ID: CCVIS VSTD12.5  
 Client ID:  
 Sample Type: CCVIS  
 Inject. Date: 03-Mar-2021 19:28:30 ALS Bottle#: 2 Worklist Smp#: 3  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0023228-003  
 Misc. Info.: CCVIS VSTD12.5  
 Operator ID: MEC29284 Instrument ID: 19930  
 Sublist: chrom-8260 25ml HP31\*sub2  
 Method: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\8260 25ml HP31.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 04-Mar-2021 11:42:12 Calib Date: 23-Nov-2020 18:05:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23117.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1625

First Level Reviewer: longj

Date: 04-Mar-2021 11:42:12

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.983	1.983	0.000	99	1073887	12.5	12.5	M
4 Chloromethane	50	2.184	2.184	0.000	99	1244524	12.5	12.5	
6 Butadiene	39	2.294	2.294	0.000	92	1291984	12.5	15.2	
5 Vinyl chloride	62	2.306	2.306	0.000	98	1100568	12.5	12.0	
7 Bromomethane	94	2.629	2.629	0.000	90	812249	12.5	12.2	
8 Chloroethane	64	2.709	2.709	0.000	100	694744	12.5	12.3	
9 Dichlorofluoromethane	67	2.952	2.952	0.000	97	1276555	12.5	10.1	
10 Trichlorofluoromethane	101	3.019	3.019	0.000	98	1471683	12.5	12.4	
11 Ethyl ether	59	3.263	3.263	0.000	91	637841	12.5	12.0	
12 1,2-Dichloro-1,1,2-trifluoroethane	67	3.343	3.343	0.000	91	942730	12.5	11.3	
13 Acrolein	56	3.434	3.434	0.000	100	3397724	625.0	436.8	
14 1,1-Dichloroethene	96	3.574	3.574	0.000	98	711923	12.5	11.1	
15 Acetone	43	3.605	3.605	0.000	100	1116889	125.0	115.5	
16 112TCTFE	101	3.623	3.623	0.000	90	810085	12.5	11.9	
17 Iodomethane	142	3.775	3.775	0.000	98	1398249	12.5	11.2	
18 Ethyl bromide	108	3.806	3.806	0.000	98	648043	12.5	11.1	
19 Carbon disulfide	76	3.885	3.885	0.000	99	1996851	12.5	10.7	
21 Methyl acetate	43	4.025	4.025	0.000	98	356317	12.5	13.5	
22 3-Chloro-1-propene	41	4.062	4.062	0.000	94	1188716	12.5	12.2	
23 Methylene Chloride	84	4.251	4.251	0.000	92	786567	12.5	11.1	
* 24 t-Butyl alcohol-d10 (IS)	65	4.275	4.275	0.000	0	177432	50.0	50.0	
25 2-Methyl-2-propanol	59	4.397	4.397	0.000	99	876246	250.0	231.6	
26 Acrylonitrile	53	4.586	4.586	0.000	99	870210	62.5	68.9	
27 Methyl tert-butyl ether	73	4.659	4.659	0.000	95	1974502	12.5	11.5	
28 trans-1,2-Dichloroethene	96	4.672	4.672	0.000	100	796418	12.5	11.2	
29 Hexane	57	5.098	5.098	0.000	91	1186202	12.5	12.2	
31 1,1-Dichloroethane	63	5.330	5.330	0.000	96	1490085	12.5	11.6	
32 Isopropyl ether	45	5.385	5.385	0.000	95	2505881	12.5	11.8	
33 2-Chloro-1,3-butadiene	53	5.440	5.440	0.000	90	1209282	12.5	11.8	
34 Tert-butyl ethyl ether	59	5.921	5.921	0.000	97	2338002	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
36 2-Butanone (MEK)	43	6.122	6.122	0.000	99	2310575	125.0	142.8	
37 cis-1,2-Dichloroethene	96	6.159	6.159	0.000	80	943476	12.5	11.5	
38 2,2-Dichloropropane	77	6.177	6.177	0.000	86	1273231	12.5	12.4	
40 Propionitrile	54	6.214	6.214	0.000	99	1281735	250.0	270.8	
42 Methacrylonitrile	67	6.433	6.433	0.000	91	2242552	125.0	134.6	
43 Chlorobromomethane	128	6.488	6.488	0.000	82	432571	12.5	11.9	
44 Tetrahydrofuran	71	6.494	6.494	0.000	89	662783	125.0	135.1	
45 Chloroform	83	6.641	6.641	0.000	93	1472707	12.5	11.7	
\$ 46 Dibromofluoromethane (Surr)	113	6.854	6.854	0.000	94	601521	10.0	10.1	
47 1,1,1-Trichloroethane	97	6.866	6.866	0.000	98	1333965	12.5	11.8	
48 Cyclohexane	56	6.964	6.964	0.000	90	1431102	12.5	12.2	
51 1,1-Dichloropropene	75	7.074	7.074	0.000	96	1183782	12.5	11.8	
50 Carbon tetrachloride	117	7.080	7.080	0.000	84	1206805	12.5	11.9	
52 Isobutyl alcohol	41	7.226	7.226	0.000	95	757117	625.0	622.2	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.305	7.305	0.000	0	121905	10.0	10.2	
54 Benzene	78	7.336	7.336	0.000	96	3531169	12.5	11.6	
56 1,2-Dichloroethane	62	7.409	7.409	0.000	97	898145	12.5	12.1	
57 Tert-amyl methyl ether	73	7.525	7.525	0.000	99	2162480	12.5	11.8	
* 58 Fluorobenzene (IS)	96	7.738	7.738	0.000	99	2405431	10.0	10.0	
59 n-Heptane	43	7.750	7.750	0.000	91	1244364	12.5	12.8	
60 n-Butanol	56	8.092	8.092	0.000	87	1410756	1250.0	1226.7	
61 Trichloroethene	95	8.214	8.214	0.000	97	926249	12.5	11.6	
62 Methylcyclohexane	83	8.524	8.524	0.000	94	1652059	12.5	12.7	
63 1,2-Dichloropropane	63	8.549	8.549	0.000	82	900521	12.5	12.0	
64 Methyl methacrylate	69	8.628	8.628	0.000	90	433701	12.5	14.0	
65 1,4-Dioxane	88	8.628	8.628	0.000	34	131014	625.0	436.4	M
66 Dibromomethane	93	8.659	8.659	0.000	93	419146	12.5	11.8	
68 Dichlorobromomethane	83	8.890	8.890	0.000	100	1097905	12.5	12.2	
69 2-Nitropropane	41	9.158	9.158	0.000	96	1216650	125.0	156.0	
72 1-Bromo-2-chloroethane	63	9.280	9.280	0.000	98	880820	12.5	11.4	
73 cis-1,3-Dichloropropene	75	9.433	9.433	0.000	97	1349355	12.5	12.5	
74 4-Methyl-2-pentanone (MIBK)	43	9.597	9.597	0.000	96	6002541	125.0	149.1	
\$ 75 Toluene-d8 (Surr)	98	9.738	9.738	0.000	93	2438667	10.0	9.84	
76 Toluene	92	9.817	9.817	0.000	98	2293315	12.5	11.1	
78 trans-1,3-Dichloropropene	75	10.067	10.067	0.000	91	1104322	12.5	12.4	
79 Ethyl methacrylate	69	10.128	10.128	0.000	88	910595	12.5	12.2	
80 1,1,2-Trichloroethane	97	10.274	10.274	0.000	90	635405	12.5	11.5	
81 Tetrachloroethene	166	10.366	10.366	0.000	97	1123547	12.5	11.2	
82 1,3-Dichloropropane	76	10.433	10.433	0.000	88	1100869	12.5	11.7	
83 2-Hexanone	43	10.481	10.481	0.000	96	4235571	125.0	153.9	
85 Chlorodibromomethane	129	10.652	10.652	0.000	89	829876	12.5	12.0	
86 Ethylene Dibromide	107	10.762	10.762	0.000	100	614092	12.5	11.6	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.189	0.000	85	1896963	10.0	10.0	
88 1-Chlorohexane	91	11.195	11.195	0.000	96	1351828	12.5	11.3	
90 Chlorobenzene	112	11.213	11.213	0.000	96	2615508	12.5	11.4	
91 1,1,1,2-Tetrachloroethane	131	11.298	11.298	0.000	95	959631	12.5	12.1	
92 Ethylbenzene	91	11.298	11.298	0.000	98	4552868	12.5	11.4	
93 m-Xylene & p-Xylene	106	11.414	11.414	0.000	100	3589025	25.0	22.8	
94 o-Xylene	106	11.743	11.743	0.000	96	1775121	12.5	11.6	
95 Styrene	104	11.756	11.756	0.000	95	2916306	12.5	11.9	
96 Bromoform	173	11.914	11.914	0.000	98	515611	12.5	12.3	
97 Isopropylbenzene	105	12.042	12.042	0.000	95	4729522	12.5	11.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
\$ 100 4-Bromofluorobenzene (Surr)	95	12.182	12.182	0.000	93	917155	10.0	10.0	
101 1,1,2,2-Tetrachloroethane	83	12.286	12.286	0.000	93	812277	12.5	11.3	
102 Bromobenzene	156	12.304	12.304	0.000	97	1143700	12.5	11.6	
103 trans-1,4-Dichloro-2-butene	53	12.310	12.310	0.000	91	1640662	125.0	124.3	
104 1,2,3-Trichloropropane	110	12.329	12.329	0.000	81	224474	12.5	11.4	
105 N-Propylbenzene	91	12.371	12.371	0.000	99	5523458	12.5	11.4	
106 2-Chlorotoluene	126	12.444	12.444	0.000	97	1145474	12.5	11.6	
107 1,3,5-Trimethylbenzene	105	12.505	12.505	0.000	94	4009776	12.5	11.6	
108 4-Chlorotoluene	126	12.536	12.536	0.000	97	1167342	12.5	11.7	
109 tert-Butylbenzene	134	12.743	12.743	0.000	93	907329	12.5	11.6	
110 Pentachloroethane	167	12.780	12.780	0.000	95	795455	12.5	12.8	
111 1,2,4-Trimethylbenzene	105	12.786	12.786	0.000	96	4114255	12.5	11.7	
112 sec-Butylbenzene	105	12.908	12.908	0.000	94	5271384	12.5	11.6	
113 1,3-Dichlorobenzene	146	13.011	13.011	0.000	98	2291329	12.5	11.5	
114 4-Isopropyltoluene	119	13.017	13.017	0.000	97	4539660	12.5	11.7	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	93	1096331	10.0	10.0	
116 1,4-Dichlorobenzene	146	13.085	13.085	0.000	95	2255813	12.5	11.4	
117 1,2,3-Trimethylbenzene	120	13.091	13.091	0.000	98	1864198	12.5	11.9	
118 Benzyl chloride	126	13.158	13.158	0.000	98	357389	12.5	13.2	
119 n-Butylbenzene	92	13.310	13.310	0.000	97	2235151	12.5	11.8	
120 1,2-Dichlorobenzene	146	13.341	13.341	0.000	99	2071487	12.5	11.4	
122 1,2-Dibromo-3-Chloropropane	155	13.883	13.883	0.000	90	129748	12.5	11.8	
123 1,3,5-Trichlorobenzene	180	14.011	14.011	0.000	98	1646008	12.5	11.5	
124 1,2,4-Trichlorobenzene	180	14.432	14.432	0.000	94	1319794	12.5	11.1	
125 Hexachlorobutadiene	225	14.517	14.517	0.000	96	571682	12.5	11.0	
126 Naphthalene	128	14.615	14.615	0.000	97	2230209	12.5	10.0	
127 1,2,3-Trichlorobenzene	180	14.755	14.755	0.000	96	1022858	12.5	9.95	
134 Isopropyl alcohol	45		0.000				ND	ND	
144 2-ethoxy-2-methyl butane	1		0.000				ND	ND	
135 p-Diethylbenzene	1		0.000				ND	ND	
137 2-Methylnaphthalene	142		0.000				ND	ND	
204 Pentane	43		0.000				ND	ND	

### QC Flag Legend

#### Processing Flags

ND - Not Detected or Marked ND

#### Review Flags

M - Manually Integrated

### Reagents:

MSV\_RV1\_826\_00040

Amount Added: 25.00

Units: uL

MSV\_RV4\_826\_00045

Amount Added: 25.00

Units: uL

MSV\_RV4GAS826\_00115

Amount Added: 25.00

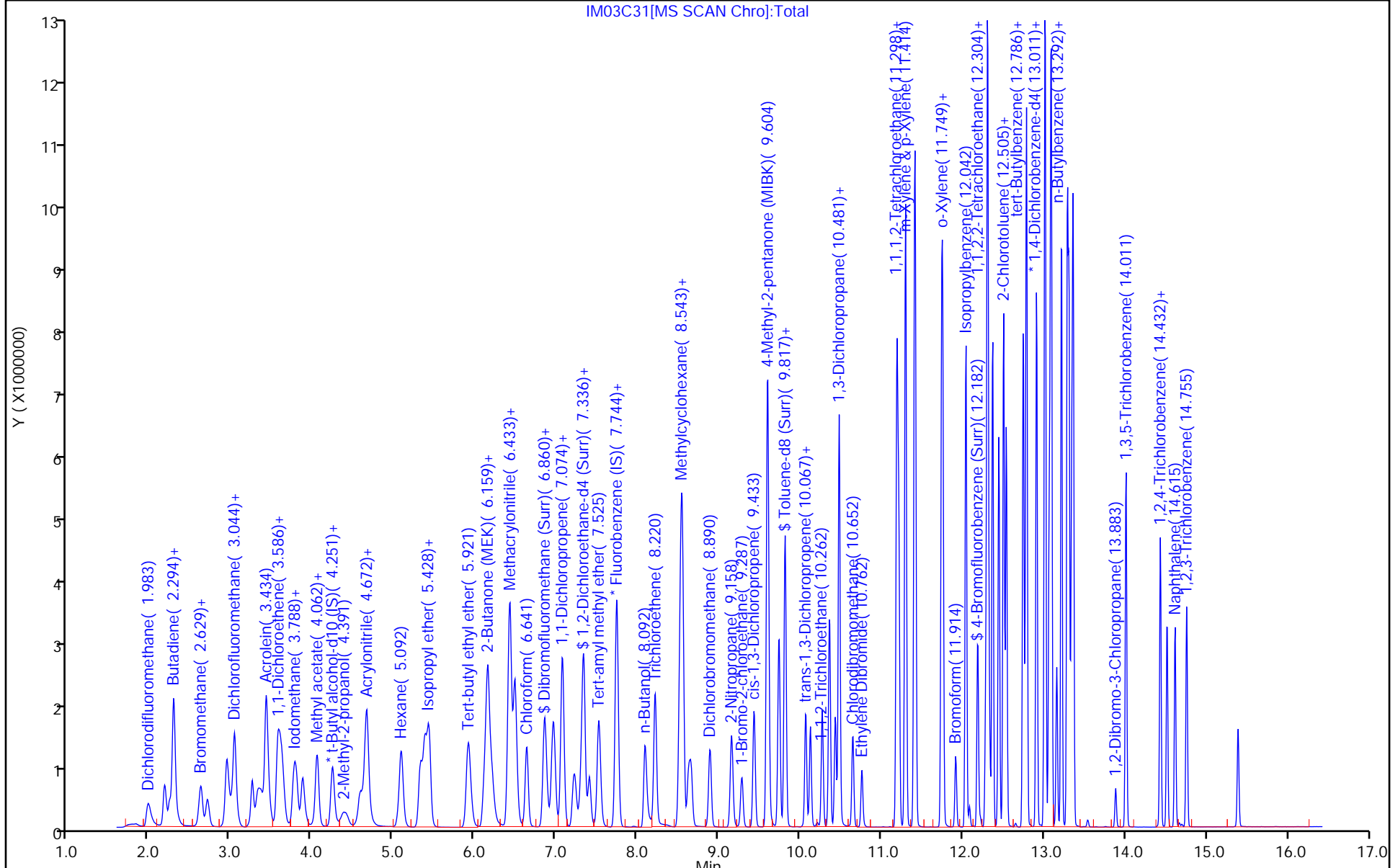
Units: uL

MSV\_31\_826ISS\_00004

Amount Added: 5.00

Units: uL

Run Reagent





Eurofins Lancaster Laboratories Env, LLC

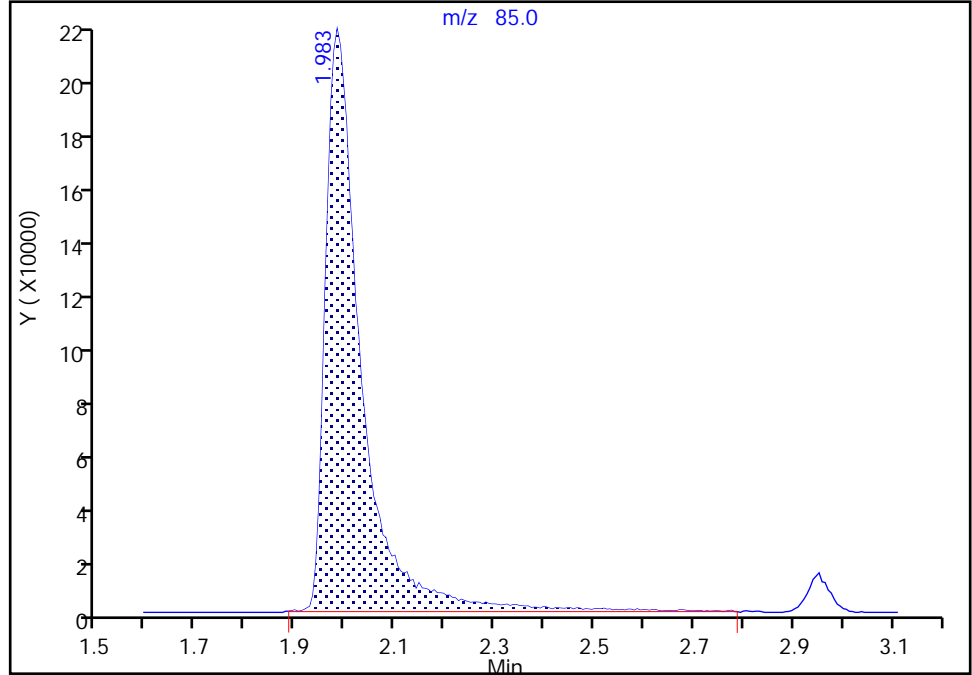
Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03C31.D  
Injection Date: 03-Mar-2021 19:28:30 Instrument ID: 19930  
Lims ID: CCVIS VSTD12.5  
Client ID:  
Operator ID: MEC29284 ALS Bottle#: 2 Worklist Smp#: 3  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: 8260 25ml HP31 Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

1 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

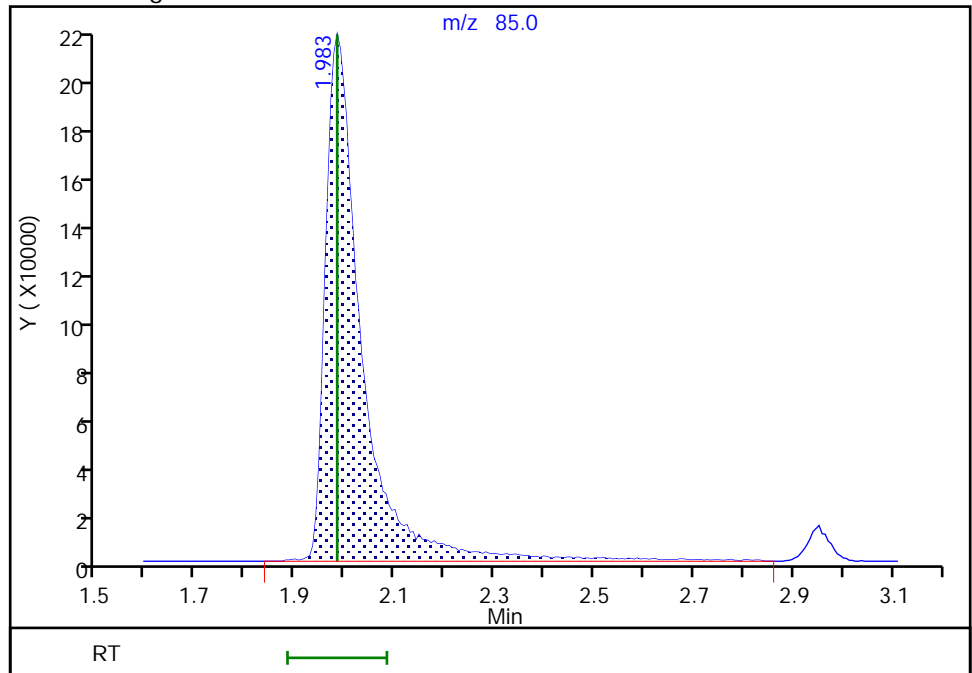
RT: 1.98  
Area: 1057222  
Amount: 12.315114  
Amount Units: ug/l

Processing Integration Results



RT: 1.98  
Area: 1073887  
Amount: 12.509238  
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 03-Mar-2021 20:11:49  
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

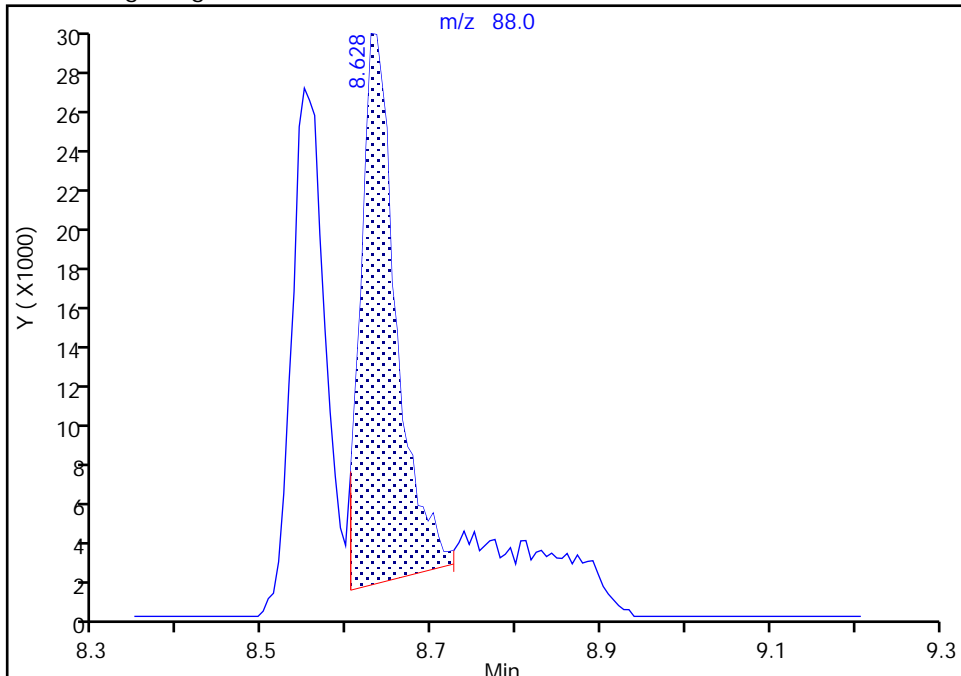
Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03C31.D  
Injection Date: 03-Mar-2021 19:28:30 Instrument ID: 19930  
Lims ID: CCVIS VSTD12.5  
Client ID:  
Operator ID: MEC29284 ALS Bottle#: 2 Worklist Smp#: 3  
Purge Vol: 25.000 mL Dil. Factor: 1.0000  
Method: 8260 25ml HP31 Limit Group: MSV - 8260C\_D  
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

65 1,4-Dioxane, CAS: 123-91-1

Signal: 1

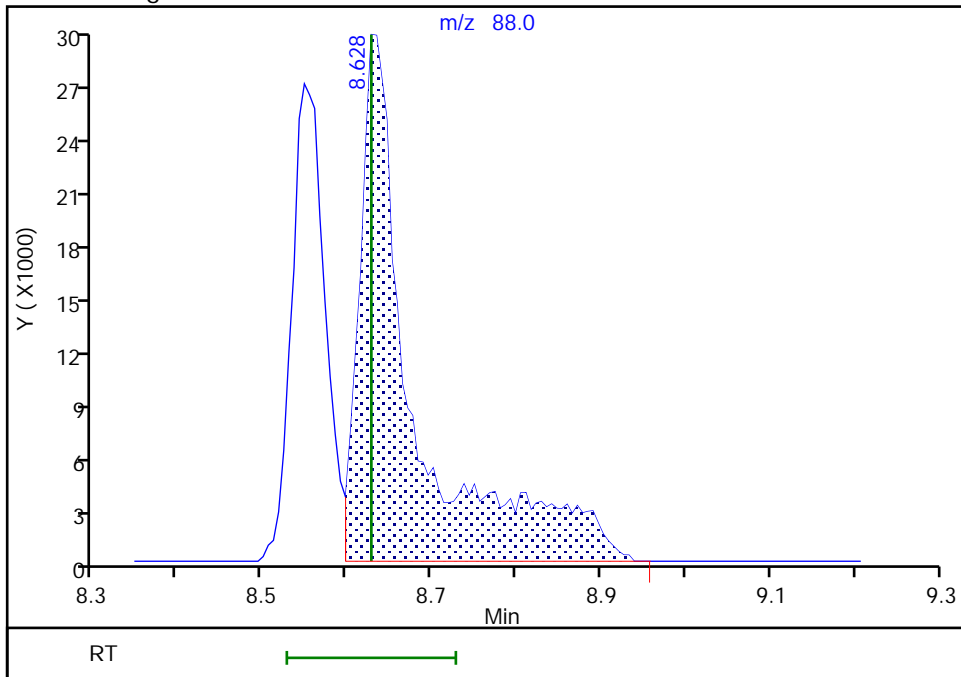
RT: 8.63  
Area: 79916  
Amount: 266.1897  
Amount Units: ug/l

Processing Integration Results



RT: 8.63  
Area: 131014  
Amount: 436.3904  
Amount Units: ug/l

Manual Integration Results



Reviewer: campbellme, 03-Mar-2021 20:12:23  
Audit Action: Split an Integrated Peak

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC  
 Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30T01.D  
 Lims ID: bfb  
 Client ID:  
 Sample Type: BFB  
 Inject. Date: 30-Nov-2020 11:46:30 ALS Bottle#: 1 Worklist Smp#: 1  
 Injection Vol: 1.0 uL Dil. Factor: 1.0000  
 Sample Info: 410-0016641-001  
 Misc. Info.: BFB  
 Operator ID: DVV10203 Instrument ID: 16334  
 Method: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\MSV\_16334\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 01-Dec-2020 19:03:51 Calib Date: 30-Nov-2020 18:23:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I17.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1610

First Level Reviewer: virayd Date: 30-Nov-2020 12:10:04

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
----------	-----	-----------	---------------	---------------	---	----------	--------------	----------------	-------

\$ 165 BFB	95	5.188	5.188	0.000	87	489350	NR	NR	
------------	----	-------	-------	-------	----	--------	----	----	--

**QC Flag Legend**

Processing Flags

NR - Missing Quant Standard

**Reagents:**

MSV\_V\_BFB\_00003

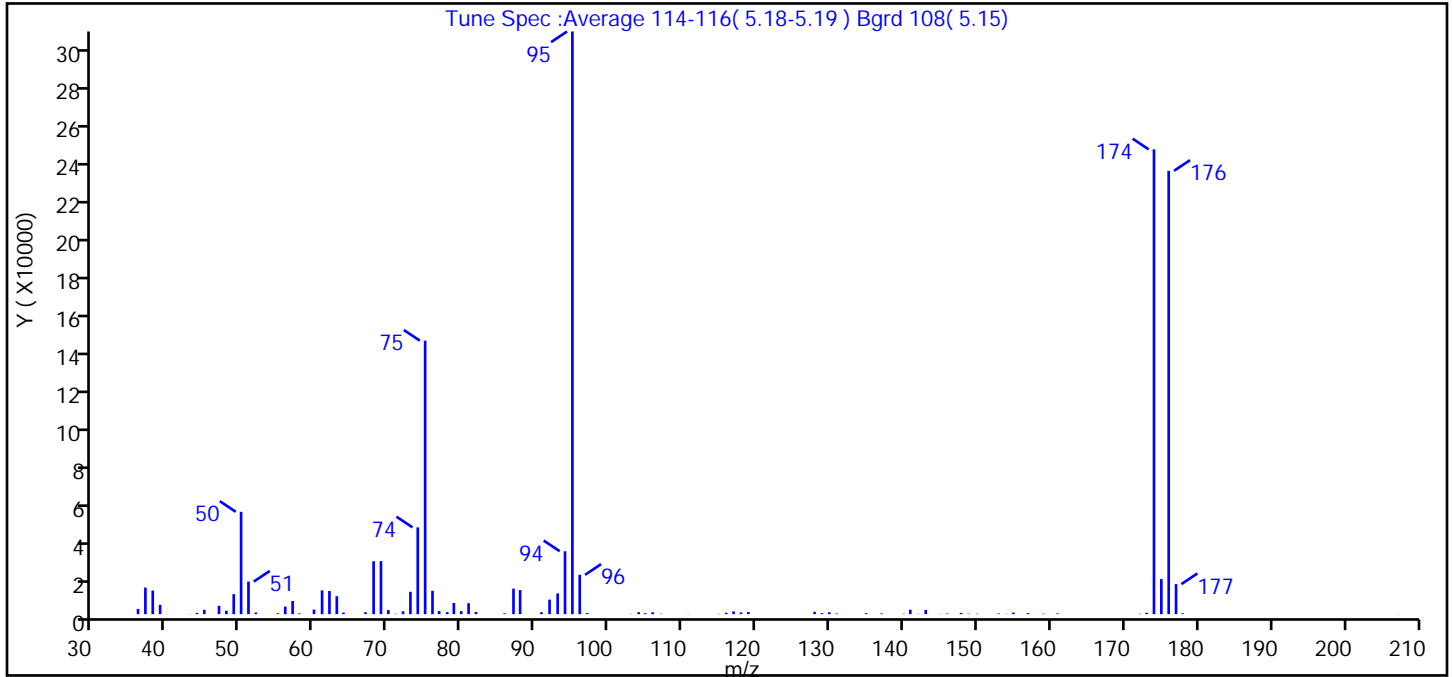
Amount Added: 1.00

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

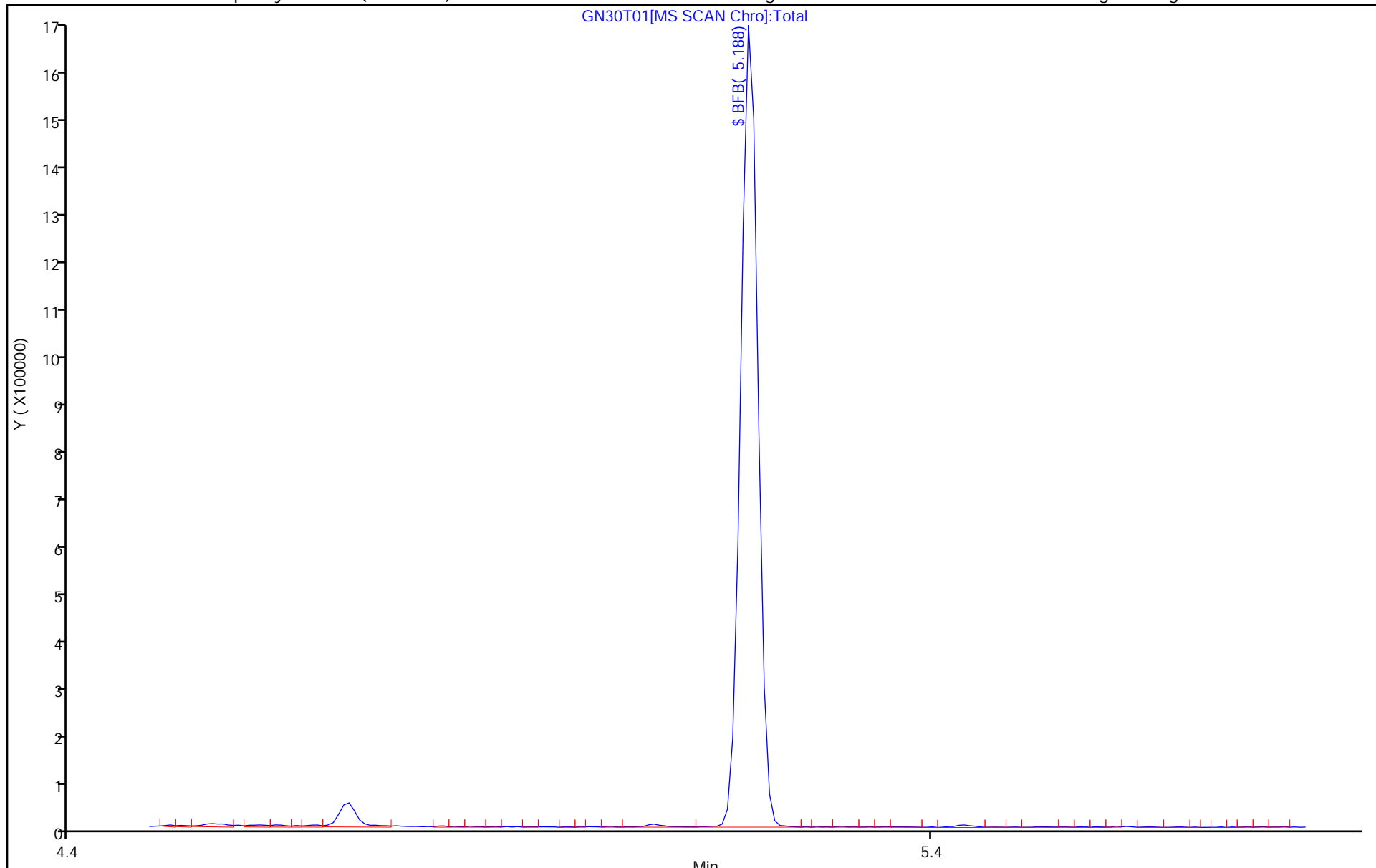
ALS Bottle#: 1

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\20210303-23166.b\GM03T02.D  
 Lims ID: BFB  
 Client ID:  
 Sample Type: BFB  
 Inject. Date: 03-Mar-2021 08:28:30 ALS Bottle#: 1 Worklist Smp#: 1  
 Injection Vol: 1.0 uL Dil. Factor: 1.0000  
 Sample Info: 410-0023166-001  
 Misc. Info.: BFB  
 Operator ID: SRK36897 Instrument ID: 16334  
 Method: \\chromfs\Lancaster\ChromData\16334\20210303-23166.b\MSV\_16334\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 03-Mar-2021 14:02:43 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: CTX1663

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
\$ 163 BFB	95	5.182	5.182	0.000	90	165778	NR	NR	

**QC Flag Legend**

Processing Flags  
 NR - Missing Quant Standard

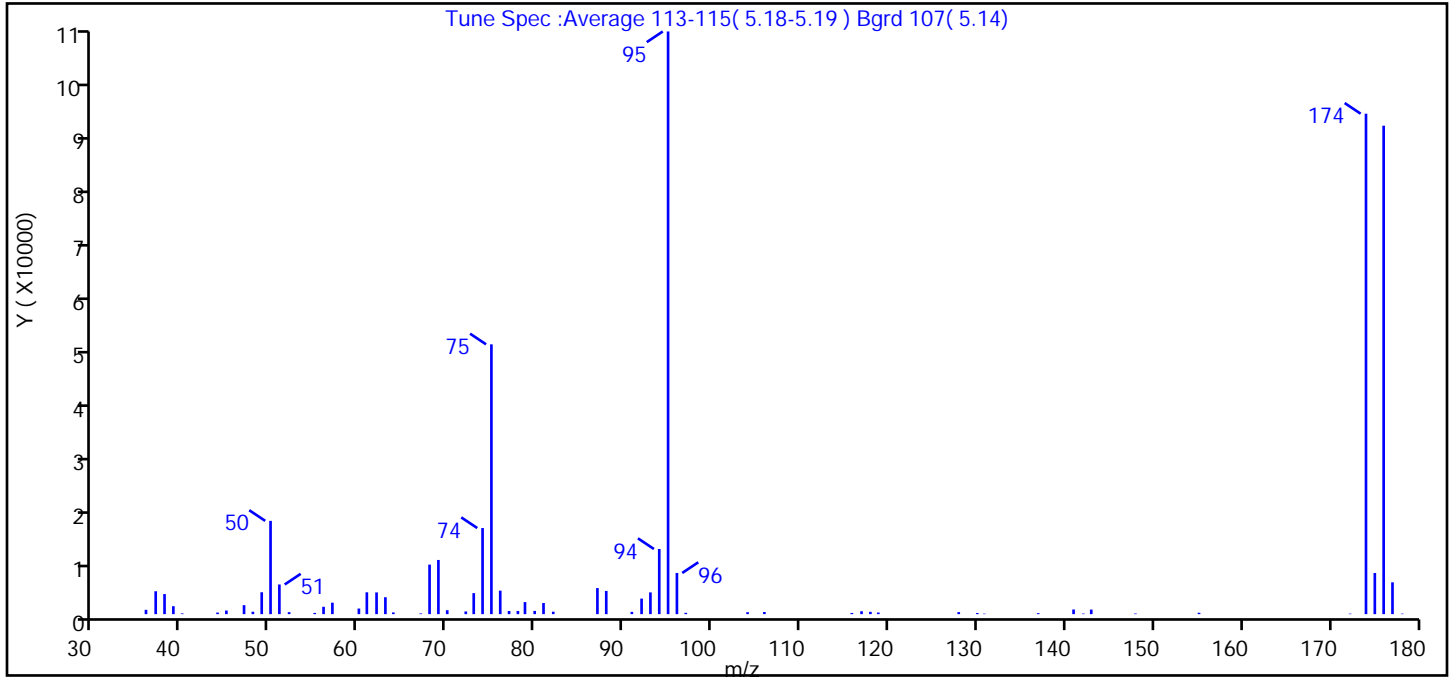
**Reagents:**

MSV\_V\_BFB\_00004 Amount Added: 1.00 Units: uL

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20210303-23166.b\GM03T02.D  
 Injection Date: 03-Mar-2021 08:28:30 Instrument ID: 16334  
 Lims ID: BFB  
 Client ID:  
 Operator ID: SRK36897 ALS Bottle#: 1 Worklist Smp#: 1  
 Injection Vol: 1.0 uL Dil. Factor: 1.0000  
 Method: MSV\_16334\_25mL Limit Group: MSV - 8260C\_D  
 Tune Method: BFB Method 8260

\$ 163 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	16.0
75	30 to 60% of m/z 95	46.3
96	5 to 9% of m/z 95	7.1
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	85.9
175	5 to 9% of m/z 174	7.1 (8.2)
176	Greater than 95% but less than 101% of m/z 174	83.8 (97.6)
177	5 to 9% of m/z 176	5.5 (6.5)



Data File: \\chromfs\Lancaster\ChromData\16334\20210303-23166.b\GM03T02.D\MSV\_16334\_25mL.rslt\spectra.d  
 Injection Date: 03-Mar-2021 08:28:30  
 Spectrum: Tune Spec :Average 113-115( 5.18-5.19 ) Bgrd 107( 5.14)  
 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	774	61.00	3908	81.00	1988	128.00	363
37.00	4096	62.00	3885	82.00	444	130.00	202
38.00	3592	63.00	3029	87.00	4667	131.00	84
39.00	1422	64.00	307	88.00	4154	137.00	177
40.00	128	67.00	125	91.00	408	141.00	835
44.00	283	68.00	8863	92.00	2781	142.00	103
45.00	647	69.00	9696	93.00	3891	143.00	819
47.00	1609	70.00	700	94.00	11655	148.00	111
48.00	436	72.00	482	95.00	104248	155.00	247
49.00	3917	73.00	3761	96.00	7367	172.00	93
50.00	16688	74.00	15405	97.00	240	174.00	89536
51.00	5306	75.00	48272	104.00	350	175.00	7355
52.00	359	76.00	4201	106.00	380	176.00	87392
55.00	220	77.00	563	116.00	216	177.00	5695
56.00	1315	78.00	568	117.00	516	178.00	91
57.00	2048	79.00	2155	118.00	414		
60.00	1004	80.00	577	119.00	289		

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20210303-23166.b\GM03T02.D

Injection Date: 03-Mar-2021 08:28:30

Instrument ID: 16334

Operator ID: SRK36897

Lims ID: BFB

Worklist Smp#: 1

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

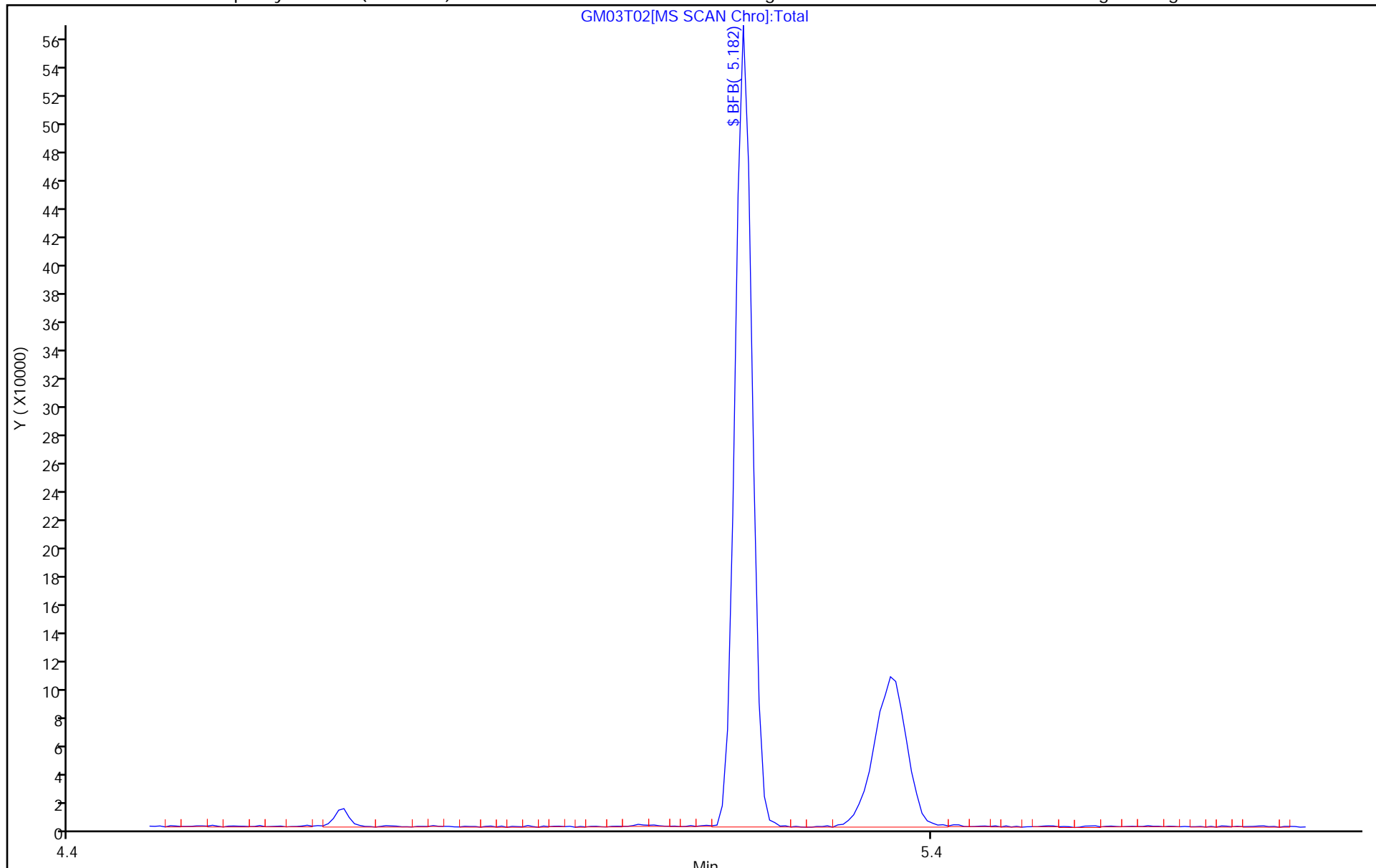
ALS Bottle#: 1

Method: MSV\_16334\_25mL

Limit Group: MSV - 8260C\_D

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

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



Eurofins Lancaster Laboratories Env, LLC  
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23T01.D  
 Lims ID: bfb  
 Client ID:  
 Sample Type: BFB  
 Inject. Date: 23-Nov-2020 11:57:30 ALS Bottle#: 1 Worklist Smp#: 1  
 Injection Vol: 1.0 uL Dil. Factor: 1.0000  
 Sample Info: 410-0016280-001  
 Misc. Info.: BFB  
 Operator ID: dvv10203 Instrument ID: 19930  
 Method: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\8260 25ml HP31.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 23-Nov-2020 19:12:23 Calib Date: 23-Nov-2020 18:05:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I17.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1632

First Level Reviewer: virayd Date: 23-Nov-2020 12:07:57

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
----------	-----	-----------	---------------	---------------	---	----------	--------------	----------------	-------

\$ 145 BFB	95	5.190	5.190	0.000	0	250527	NR	NR	
------------	----	-------	-------	-------	---	--------	----	----	--

**QC Flag Legend**

Processing Flags

NR - Missing Quant Standard

**Reagents:**

MSV\_V\_BFB\_00003

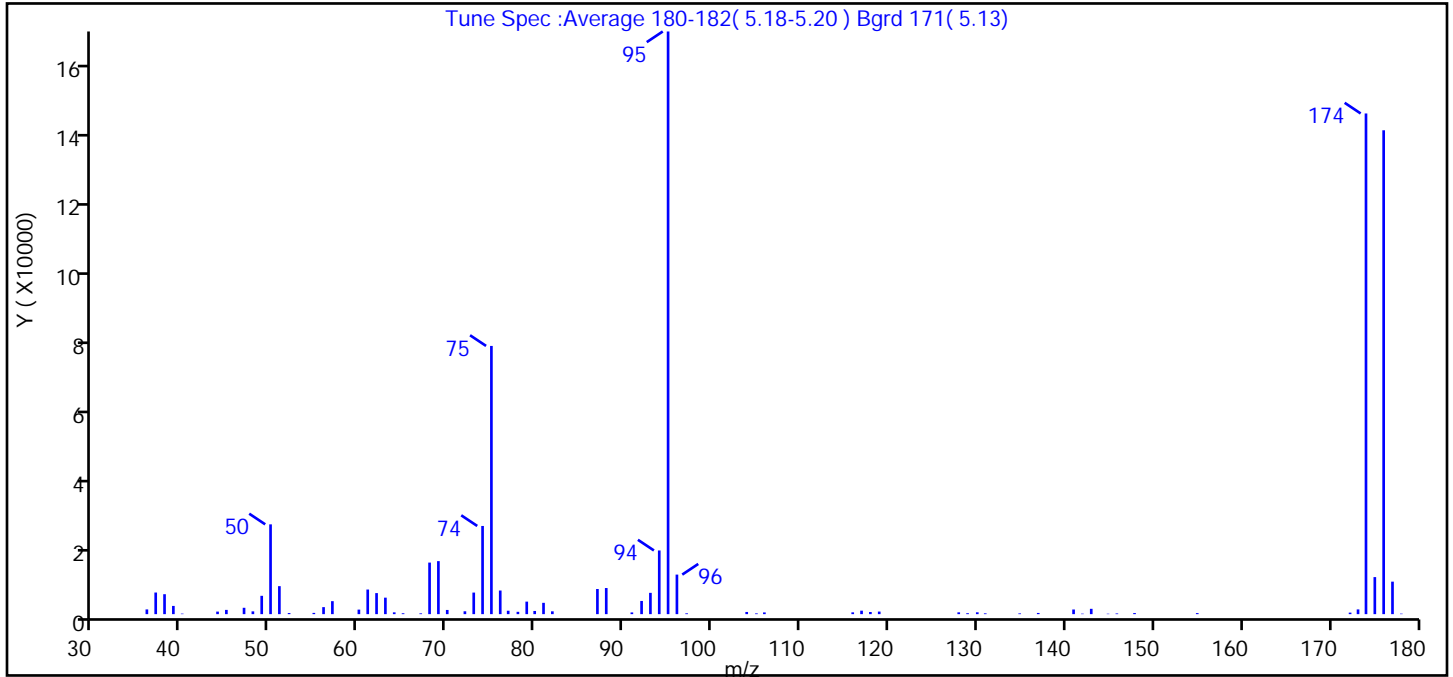
Amount Added: 1.00

Units: uL

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23T01.D  
 Injection Date: 23-Nov-2020 11:57:30 Instrument ID: 19930  
 Lims ID: bfb  
 Client ID:  
 Operator ID: dvv10203 ALS Bottle#: 1 Worklist Smp#: 1  
 Injection Vol: 1.0 uL Dil. Factor: 1.0000  
 Method: 8260 25ml HP31 Limit Group: MSV - 8260C\_D  
 Tune Method: BFB Method 8260

\$ 145 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	15.4
75	30 to 60% of m/z 95	46.0
96	5 to 9% of m/z 95	6.8
173	Less than 2% of m/z 174	0.8 (0.9)
174	50 to 120% of m/z 95	85.9
175	5 to 9% of m/z 174	6.4 (7.4)
176	Greater than 95% but less than 101% of m/z 174	83.0 (96.6)
177	5 to 9% of m/z 176	5.6 (6.7)

Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23T01.D\8260 25ml HP31.rsl\spectra.d  
Injection Date: 23-Nov-2020 11:57:30  
Spectrum: Tune Spec :Average 180-182( 5.18-5.20 ) Bgrd 171( 5.13)  
Base Peak: 95.00  
Minimum % Base Peak: 0  
Number of Points: 73

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1313	63.00	4581	88.00	7255	135.00	208
37.00	6006	64.00	499	91.00	477	137.00	331
38.00	5541	65.00	245	92.00	3667	141.00	1291
39.00	2285	67.00	217	93.00	5918	142.00	135
40.00	143	68.00	14328	94.00	17696	143.00	1478
44.00	706	69.00	14730	95.00	161920	145.00	118
45.00	1180	70.00	1164	96.00	10989	146.00	193
47.00	1767	72.00	795	97.00	225	148.00	300
48.00	774	73.00	5993	104.00	608	155.00	291
49.00	5093	74.00	24504	105.00	210	172.00	424
50.00	24952	75.00	74536	106.00	478	173.00	1314
51.00	7780	76.00	6564	116.00	501	174.00	139136
52.00	307	77.00	946	117.00	962	175.00	10294
55.00	348	78.00	648	118.00	596	176.00	134464
56.00	1950	79.00	3480	119.00	713	177.00	9030
57.00	3607	80.00	882	128.00	503	178.00	135
60.00	1259	81.00	3145	129.00	259		
61.00	6839	82.00	786	130.00	514		
62.00	5847	87.00	6985	131.00	222		

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23T01.D

Injection Date: 23-Nov-2020 11:57:30

Instrument ID: 19930

Operator ID: dvv10203

Lims ID: bfb

Worklist Smp#: 1

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

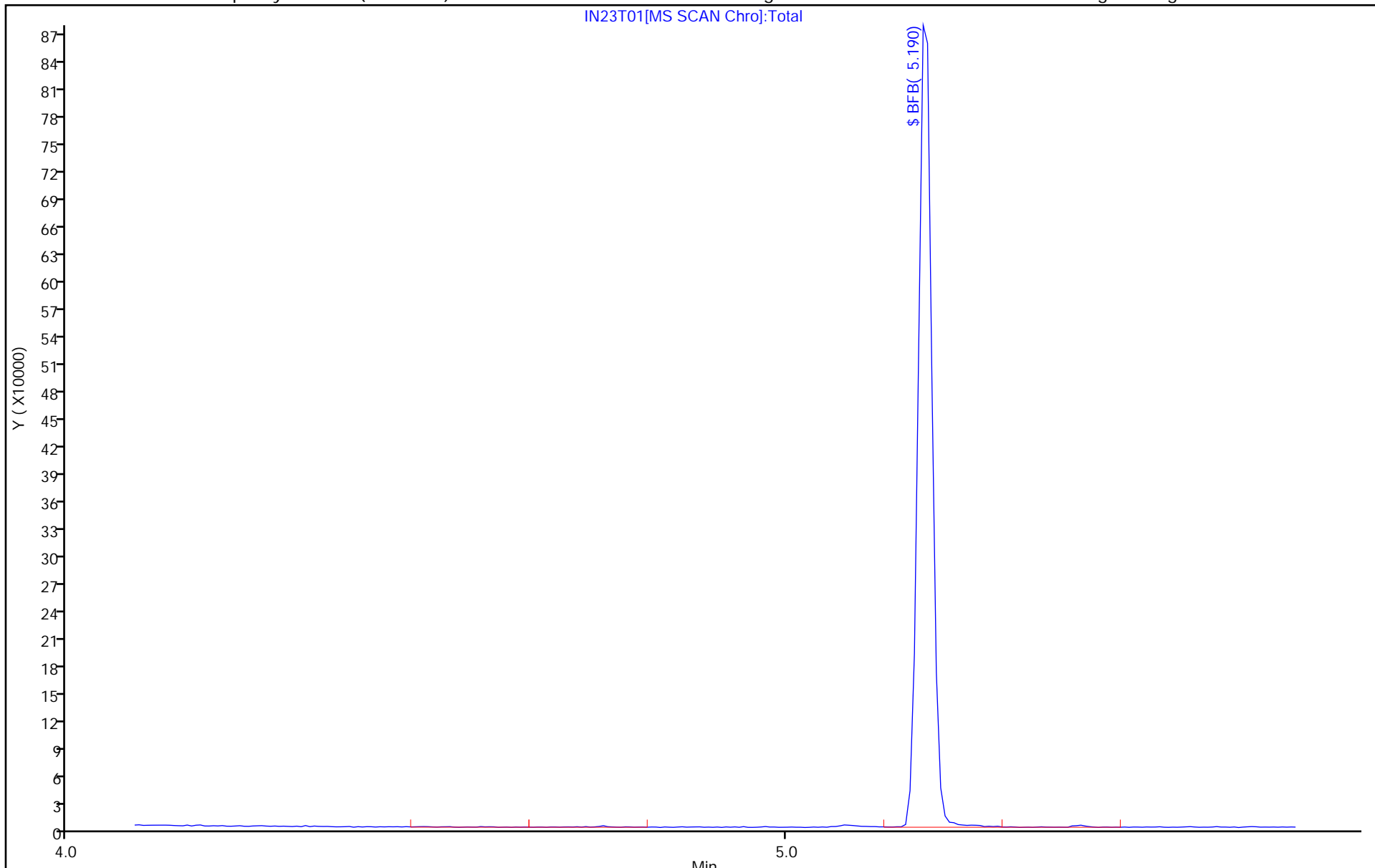
ALS Bottle#: 1

Method: 8260 25ml HP31

Limit Group: MSV - 8260C\_D

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

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



Eurofins Lancaster Laboratories Env, LLC  
 Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03T31.D  
 Lims ID: bfb  
 Client ID:  
 Sample Type: BFB  
 Inject. Date: 03-Mar-2021 18:52:30 ALS Bottle#: 1 Worklist Smp#: 1  
 Injection Vol: 1.0 uL Dil. Factor: 1.0000  
 Sample Info:  
 Misc. Info.: BFB  
 Operator ID: MEC29284 Instrument ID: 19930  
 Method: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\8260 25ml HP31.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 03-Mar-2021 21:09:34 Calib Date: 23-Nov-2020 18:05:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I17.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1646

First Level Reviewer: campbellme Date: 03-Mar-2021 19:04:47

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
----------	-----	-----------	---------------	---------------	---	----------	--------------	----------------	-------

\$ 145 BFB	95	5.190	5.190	0.000	0	216334	NR	NR	
------------	----	-------	-------	-------	---	--------	----	----	--

**QC Flag Legend**

Processing Flags

NR - Missing Quant Standard

**Reagents:**

MSV\_V\_BFB\_00004

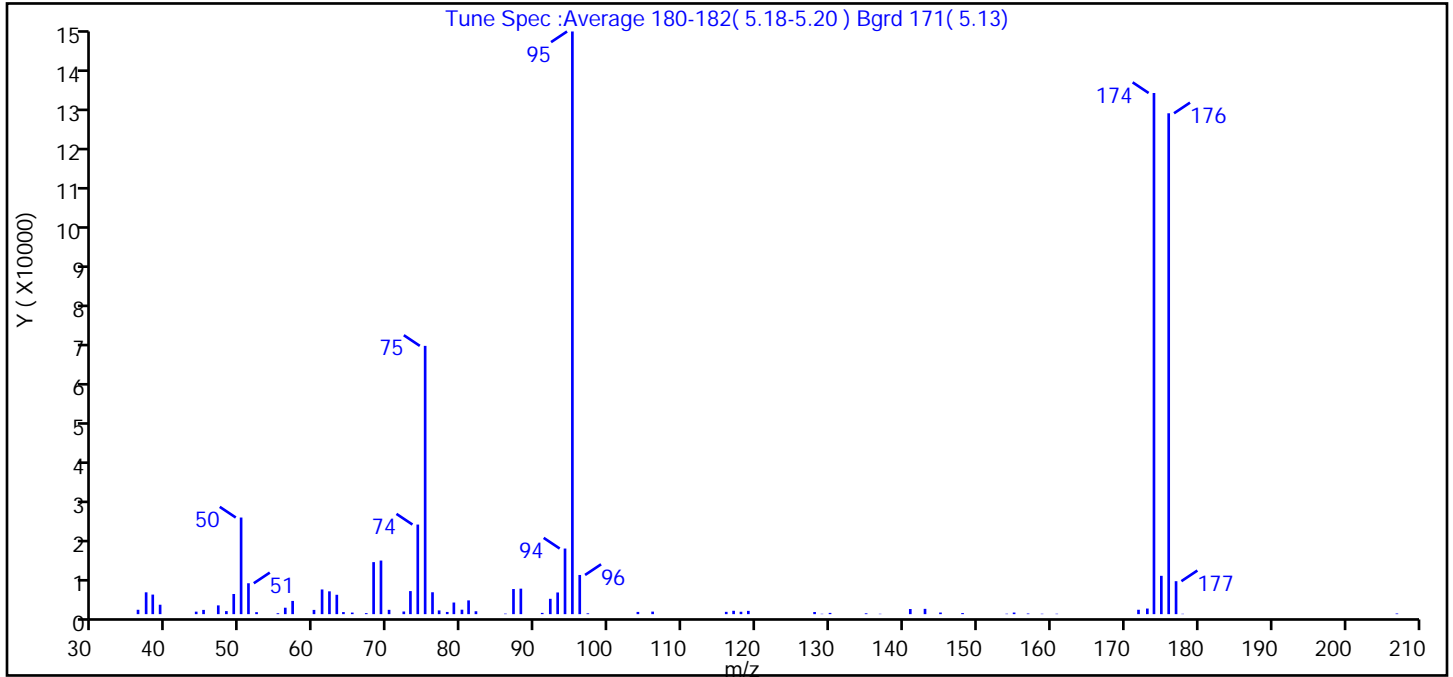
Amount Added: 1.00

Units: uL

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03T31.D  
 Injection Date: 03-Mar-2021 18:52:30 Instrument ID: 19930  
 Lims ID: bfb  
 Client ID:  
 Operator ID: MEC29284 ALS Bottle#: 1 Worklist Smp#: 1  
 Injection Vol: 1.0 uL Dil. Factor: 1.0000  
 Method: 8260 25ml HP31 Limit Group: MSV - 8260C\_D  
 Tune Method: BFB Method 8260

\$ 145 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	16.6
75	30 to 60% of m/z 95	46.0
96	5 to 9% of m/z 95	6.7
173	Less than 2% of m/z 174	1.0 (1.1)
174	50 to 120% of m/z 95	89.4
175	5 to 9% of m/z 174	6.6 (7.4)
176	Greater than 95% but less than 101% of m/z 174	86.0 (96.1)
177	5 to 9% of m/z 176	5.7 (6.6)



Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03T31.D\8260 25ml HP31.rsl\spectra.d  
Injection Date: 03-Mar-2021 18:52:30  
Spectrum: Tune Spec :Average 180-182( 5.18-5.20 ) Bgrd 171( 5.13)  
Base Peak: 95.00  
Minimum % Base Peak: 0  
Number of Points: 74

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1064	64.00	505	88.00	6206	141.00	1248
37.00	5317	65.00	384	91.00	306	143.00	1292
38.00	4763	67.00	245	92.00	3734	145.00	393
39.00	2294	68.00	12666	93.00	5279	148.00	259
44.00	608	69.00	13050	94.00	15974	154.00	104
45.00	1033	70.00	1050	95.00	141888	155.00	390
47.00	2132	72.00	642	96.00	9540	157.00	158
48.00	740	73.00	5614	97.00	200	159.00	97
49.00	4908	74.00	21816	104.00	544	161.00	97
50.00	23528	75.00	65328	106.00	617	172.00	1069
51.00	7521	76.00	5329	116.00	560	173.00	1363
52.00	482	77.00	910	117.00	820	174.00	126904
55.00	226	78.00	536	118.00	582	175.00	9332
56.00	1566	79.00	2828	119.00	794	176.00	121968
57.00	3217	80.00	1083	128.00	523	177.00	8025
60.00	1034	81.00	3350	129.00	86	178.00	85
61.00	6008	82.00	704	130.00	304	207.00	160
62.00	5553	86.00	125	135.00	203		
63.00	4716	87.00	6117	137.00	85		

Euofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03T31.D

Injection Date: 03-Mar-2021 18:52:30

Instrument ID: 19930

Operator ID: MEC29284

Lims ID: bfb

Worklist Smp#: 1

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

ALS Bottle#: 1

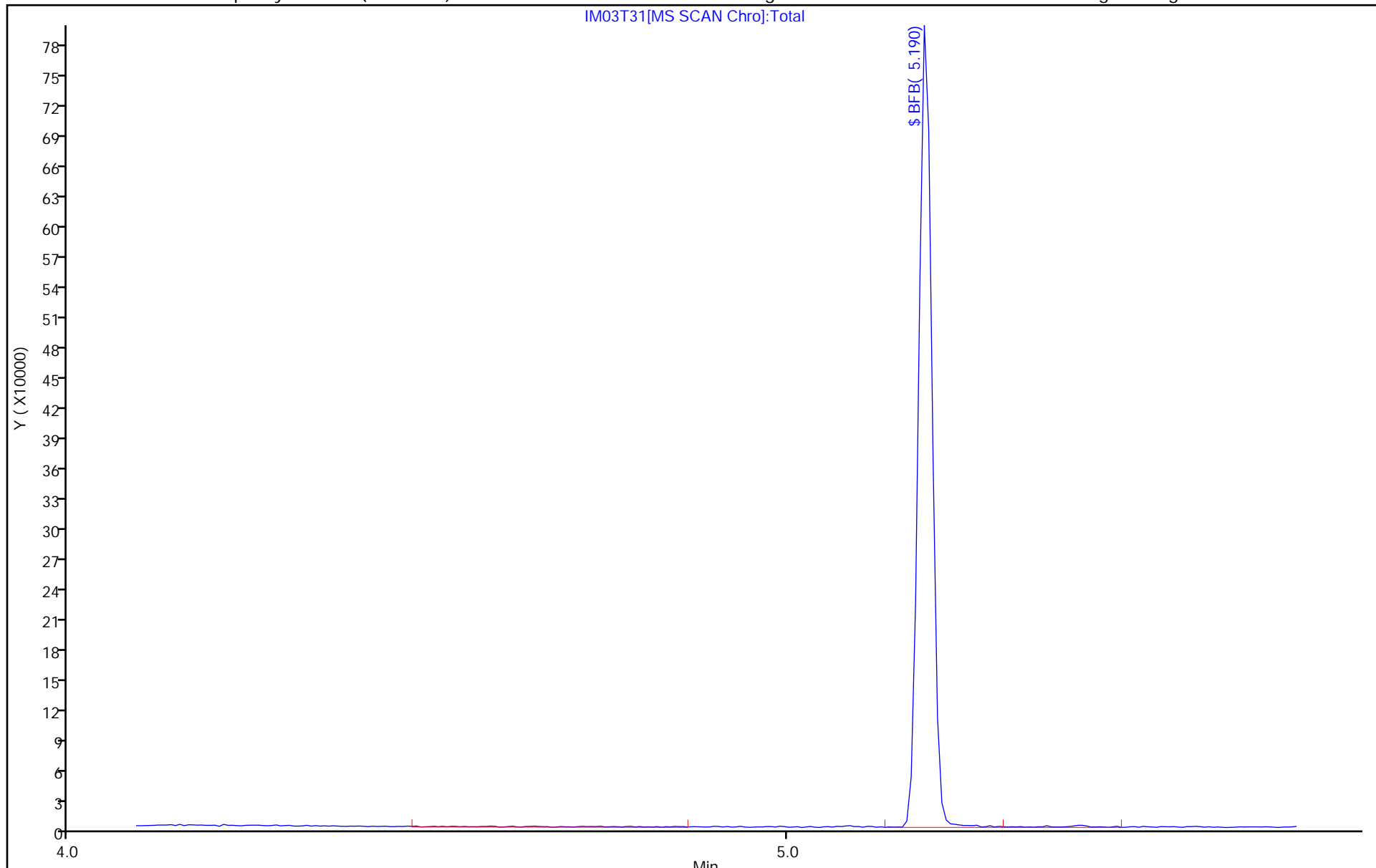
Method: 8260 25ml HP31

Limit Group: MSV - 8260C\_D

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

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

IM03T31[MS SCAN Chroj:Total



FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-30627-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: \_\_\_\_\_ Lab Sample ID: MB 410-99025/10  
 Matrix: Water Lab File ID: GM03X10.D  
 Analysis Method: 8260D Date Collected: \_\_\_\_\_  
 Sample wt/vol: 25 (mL) Date Analyzed: 03/03/2021 11:51  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: R-624SilMS 30m ID: 0.25 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 99025 Units: ug/L

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

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-30627-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: \_\_\_\_\_ Lab Sample ID: MB 410-99025/10  
 Matrix: Water Lab File ID: GM03X10.D  
 Analysis Method: 8260D Date Collected: \_\_\_\_\_  
 Sample wt/vol: 25 (mL) Date Analyzed: 03/03/2021 11:51  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: R-624SilMS 30m ID: 0.25 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 99025 Units: ug/L

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

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		80-120
460-00-4	4-Bromofluorobenzene (Surr)	96		80-120
1868-53-7	Dibromofluoromethane (Surr)	100		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\20210303-23166.b\GM03X10.D  
 Lims ID: MB  
 Client ID:  
 Sample Type: MB  
 Inject. Date: 03-Mar-2021 11:51:30 ALS Bottle#: 10 Worklist Smp#: 10  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0023166-010  
 Misc. Info.: MB  
 Operator ID: SRK36897 Instrument ID: 16334  
 Method: \\chromfs\Lancaster\ChromData\16334\20210303-23166.b\MSV\_16334\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 03-Mar-2021 12:03:33 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: CTX1663

First Level Reviewer: knouses Date: 03-Mar-2021 12:49:35

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		1.940					ND	
3 Chlorodifluoromethane	51		1.959					ND	
4 Dimethyl ether	45		2.032					ND	
5 Chloromethane	50		2.136					ND	
6 2-Chloro-1,1,1-Trifluoroethane	118		2.233					ND	
7 Butadiene	39		2.245					ND	7
8 Vinyl chloride	62		2.251					ND	
9 Bromomethane	94		2.568					ND	
10 Chloroethane	64		2.660					ND	
12 Dichlorofluoromethane	67		2.892					ND	
13 Trichlorofluoromethane	101		2.952					ND	
14 Ethanol	45		3.111					ND	
15 Ethyl ether	59		3.202					ND	
17 1,2-Dichloro-1,1,2-trifluoroethane	67		3.282					ND	
18 Acrolein	56		3.373					ND	
19 1,1-Dichloroethene	96		3.507					ND	
20 112TCTFE	101		3.544					ND	
21 Acetone	43		3.544					ND	
23 Iodomethane	142		3.696					ND	
22 Isopropyl alcohol	45		3.721					ND	
24 Ethyl bromide	108		3.727					ND	
25 Carbon disulfide	76		3.794					ND	
26 Acetonitrile	41		3.940					ND	
27 Methyl acetate	43		3.952					ND	
28 3-Chloro-1-propene	41		3.977					ND	
29 Methylene Chloride	84		4.166					ND	
* 30 t-Butyl alcohol-d10 (IS)	65	4.196	4.178	0.018	0	171790	50.0	50.0	
31 2-Methyl-2-propanol	59		4.306					ND	
32 Acrylonitrile	53		4.507					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		4.568					ND	
35 Hexane	57		4.995					ND	
36 Vinyl acetate	43		5.233					ND	
37 1,1-Dichloroethane	63		5.239					ND	
38 Isopropyl ether	45		5.300					ND	
39 2-Chloro-1,3-butadiene	53		5.342					ND	
40 Tert-butyl ethyl ether	59		5.830					ND	
41 2-Butanone (MEK)	43		6.049					ND	
42 cis-1,2-Dichloroethene	96		6.080					ND	
43 2,2-Dichloropropane	77		6.086					ND	
44 Ethyl acetate	43		6.104					ND	
45 Propionitrile	54		6.147					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		6.403					ND	
50 Tetrahydrofuran	71		6.409					ND	
51 Chloroform	83		6.562					ND	
\$ 52 Dibromofluoromethane (Surr)	113	6.781	6.775	0.006	94	465494	10.0	10.0	
53 1,1,1-Trichloroethane	97		6.787					ND	
54 Cyclohexane	56		6.872					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		7.165					ND	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.226	7.232	-0.006	0	100605	10.0	10.2	
60 Benzene	78		7.263					ND	
61 1,2-Dichloroethane	62		7.336					ND	
62 Isopropyl acetate	43		7.348					ND	
63 Tert-amyl methyl ether	73		7.452					ND	
* 64 Fluorobenzene (IS)	96	7.671	7.665	0.006	99	1917321	10.0	10.0	
65 n-Heptane	43		7.671					ND	
66 t-Amyl alcohol	73		7.842					ND	
67 n-Butanol	56		8.043					ND	
68 Trichloroethene	95		8.140					ND	
69 Methylcyclohexane	83		8.445					ND	
70 1,2-Dichloropropane	63		8.482					ND	
71 2-ethoxy-2-methyl butane	87		8.488					ND	
72 Methyl methacrylate	69		8.567					ND	
73 1,4-Dioxane	88		8.567					ND	
74 Dibromomethane	93		8.586					ND	
75 n-Propyl acetate	61		8.646					ND	
76 Dichlorobromomethane	83		8.823					ND	
77 2-Nitropropane	41		9.110					ND	
78 Chloroacetonitrile	75		9.189					ND	
79 2-Chloroethyl vinyl ether	63		9.195					ND	
80 1-Bromo-2-chloroethane	63		9.213					ND	
81 cis-1,3-Dichloropropene	75		9.372					ND	
82 4-Methyl-2-pentanone (MIBK)	43		9.555					ND	
\$ 83 Toluene-d8 (Surr)	98	9.683	9.683	0.000	93	1864374	10.0	10.1	
84 Toluene	92		9.762					ND	7
96 trans-1,3-Dichloropropene	75		10.018					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
S 97 1,3-Dichloropropene, Total	100		10.060					ND	7
98 Ethyl methacrylate	69		10.079					ND	
99 1,1,2-Trichloroethane	97		10.225					ND	
100 Tetrachloroethene	166		10.311					ND	
101 1,3-Dichloropropane	76		10.390					ND	
102 2-Hexanone	43		10.445					ND	
103 n-Butyl acetate	43		10.567					ND	
104 Chlorodibromomethane	129		10.603					ND	
105 Ethylene Dibromide	107		10.707					ND	
* 106 Chlorobenzene-d5 (IS)	117	11.146	11.146	0.000	86	1388571	10.0	10.0	
107 1-Chlorohexane	91		11.152					ND	7
108 Chlorobenzene	112		11.170					ND	
S 109 Xylenes, Total	106		11.245					ND	7
110 1,1,1,2-Tetrachloroethane	131		11.250					ND	
111 Ethylbenzene	91		11.256					ND	
112 m-Xylene & p-Xylene	106		11.372					ND	
113 o-Xylene	106		11.701					ND	
114 Styrene	104		11.713					ND	
115 Bromoform	173		11.871					ND	
116 Isopropylbenzene	105		11.999					ND	
117 cis-1,4-Dichloro-2-butene	88		12.054					ND	U
118 Cyclohexanone	55		12.085					ND	U
\$ 119 4-Bromofluorobenzene (Surr)	95	12.140	12.140	0.000	92	681349	10.0	9.63	
120 1,1,2,2-Tetrachloroethane	83		12.249					ND	
121 Bromobenzene	156		12.256					ND	
122 trans-1,4-Dichloro-2-butene	53		12.274					ND	
123 1,2,3-Trichloropropane	110		12.292					ND	
124 N-Propylbenzene	91		12.329					ND	
125 2-Chlorotoluene	126		12.402					ND	
126 1,3,5-Trimethylbenzene	105		12.463					ND	
127 4-Chlorotoluene	126		12.493					ND	
128 tert-Butylbenzene	134		12.707					ND	
129 Pentachloroethane	167		12.737					ND	
130 1,2,4-Trimethylbenzene	105		12.743					ND	
131 sec-Butylbenzene	105		12.865					ND	
132 1,3-Dichlorobenzene	146		12.963					ND	7
133 4-Isopropyltoluene	119		12.975					ND	
* 134 1,4-Dichlorobenzene-d4	152	13.018	13.018	0.000	95	774763	10.0	10.0	
135 1,4-Dichlorobenzene	146		13.036					ND	7
136 1,2,3-Trimethylbenzene	120		13.048					ND	7
137 Benzyl chloride	126		13.115					ND	7
138 p-Diethylbenzene	119		13.170					ND	
139 n-Butylbenzene	92		13.261					ND	
140 1,2-Dichlorobenzene	146		13.298					ND	
141 Hexachloroethane	201		13.505					ND	
142 1,2-Dibromo-3-Chloropropane	155		13.835					ND	
143 1,3,5-Trichlorobenzene	180		13.956					ND	
144 1,2,4-Trichlorobenzene	180		14.377					ND	
145 Hexachlorobutadiene	225		14.462					ND	
146 Naphthalene	128		14.560					ND	7
147 1,2,3-Trichlorobenzene	180		14.700					ND	
148 2-Methylnaphthalene	142	15.316	15.316	0.000	1	1228		0.0104	

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\_00015

Amount Added: 1.00

Units: uL

Run Reagent



Data File: \\chromfs\Lancaster\ChromData\16334\20210303-23166.b\GM03X10.D

Injection Date: 03-Mar-2021 11:51:30

Instrument ID: 16334

Operator ID: SRK36897

Lims ID: MB

Worklist Smp#: 10

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

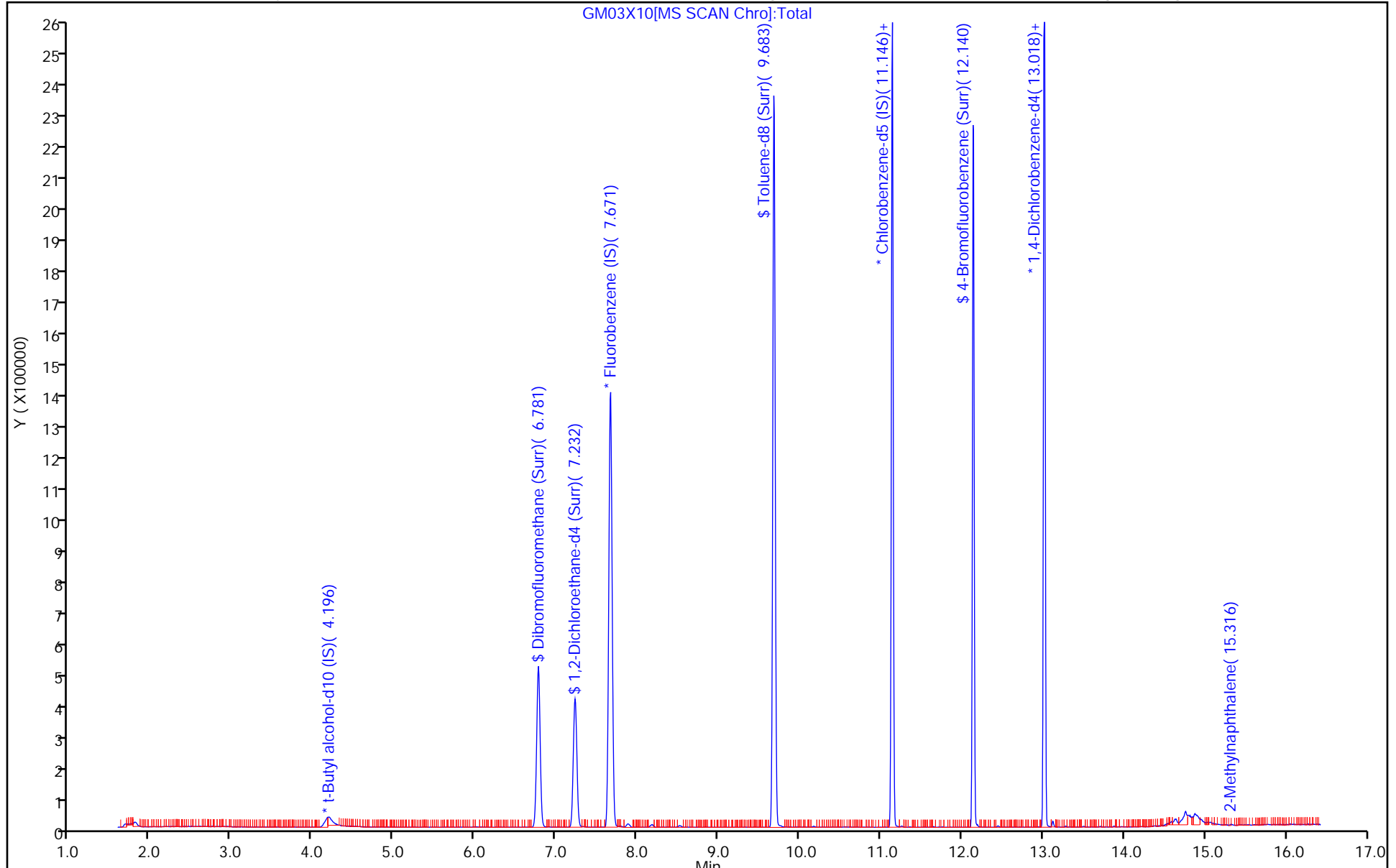
ALS Bottle#: 10

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\20210303-23166.b\GM03X10.D  
 Lims ID: MB  
 Client ID:  
 Sample Type: MB  
 Inject. Date: 03-Mar-2021 11:51:30 ALS Bottle#: 10 Worklist Smp#: 10  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0023166-010  
 Misc. Info.: MB  
 Operator ID: SRK36897 Instrument ID: 16334  
 Method: \\chromfs\Lancaster\ChromData\16334\20210303-23166.b\MSV\_16334\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 03-Mar-2021 12:03:33 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: CTX1663

First Level Reviewer: knouses

Date: 03-Mar-2021 12:49:35

Compound	Amount Added	Amount Recovered	% Rec.
\$ 52 Dibromofluoromethane (Surr)	10.0	10.0	100.31
\$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	10.2	101.90
\$ 83 Toluene-d8 (Surr)	10.0	10.1	100.64
\$ 119 4-Bromofluorobenzene (Surr)	10.0	9.63	96.33

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-30627-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: \_\_\_\_\_ Lab Sample ID: MB 410-99333/8  
 Matrix: Water Lab File ID: IM03B31.D  
 Analysis Method: 8260D Date Collected: \_\_\_\_\_  
 Sample wt/vol: 25 (mL) Date Analyzed: 03/03/2021 21:15  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: R-624SilMS 30m ID: 0.25 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 99333 Units: ug/L

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

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-30627-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: \_\_\_\_\_ Lab Sample ID: MB 410-99333/8  
 Matrix: Water Lab File ID: IM03B31.D  
 Analysis Method: 8260D Date Collected: \_\_\_\_\_  
 Sample wt/vol: 25 (mL) Date Analyzed: 03/03/2021 21:15  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: R-624SilMS 30m ID: 0.25 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 99333 Units: ug/L

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

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		80-120
460-00-4	4-Bromofluorobenzene (Surr)	97		80-120
1868-53-7	Dibromofluoromethane (Surr)	102		80-120
2037-26-5	Toluene-d8 (Surr)	98		80-120

Eurofins Lancaster Laboratories Env, LLC  
 Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03B31.D  
 Lims ID: MB  
 Client ID:  
 Sample Type: MB  
 Inject. Date: 03-Mar-2021 21:15:30 ALS Bottle#: 7 Worklist Smp#: 8  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0023228-008  
 Misc. Info.: MB  
 Operator ID: MEC29284 Instrument ID: 19930  
 Method: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\8260 25ml HP31.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 03-Mar-2021 21:49:42 Calib Date: 23-Nov-2020 18:05:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23117.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1646

First Level Reviewer: campbellme Date: 03-Mar-2021 21:49:42

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85		1.983					ND	
2 Chlorodifluoromethane	51		1.983					ND	
3 Dimethyl ether	45		2.050					ND	
4 Chloromethane	50		2.184					ND	
6 Butadiene	39		2.294					ND	7
5 Vinyl chloride	62		2.306					ND	
7 Bromomethane	94		2.629					ND	
8 Chloroethane	64		2.709					ND	
9 Dichlorofluoromethane	67		2.952					ND	
10 Trichlorofluoromethane	101		3.019					ND	
11 Ethyl ether	59		3.263					ND	
12 1,2-Dichloro-1,1,2-trifluoroethane	67		3.343					ND	
13 Acrolein	56		3.434					ND	7
14 1,1-Dichloroethene	96		3.574					ND	
15 Acetone	43		3.605					ND	7
16 112TCTFE	101		3.623					ND	
17 Iodomethane	142		3.775					ND	
18 Ethyl bromide	108		3.806					ND	
19 Carbon disulfide	76		3.885					ND	7
20 Acetonitrile	41		3.989					ND	
21 Methyl acetate	43		4.025					ND	
22 3-Chloro-1-propene	41		4.062					ND	
23 Methylene Chloride	84		4.251					ND	
* 24 t-Butyl alcohol-d10 (IS)	65	4.257	4.275	-0.018	0	179232	50.0	50.0	
25 2-Methyl-2-propanol	59		4.397					ND	
26 Acrylonitrile	53		4.586					ND	
27 Methyl tert-butyl ether	73		4.659					ND	
28 trans-1,2-Dichloroethene	96		4.672					ND	
29 Hexane	57		5.098					ND	
31 1,1-Dichloroethane	63		5.330					ND	
30 Vinyl acetate	43		5.336					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
32 Isopropyl ether	45		5.385					ND	
33 2-Chloro-1,3-butadiene	53		5.440					ND	
34 Tert-butyl ethyl ether	59		5.921					ND	
36 2-Butanone (MEK)	43		6.122					ND	
S 35 1,2-Dichloroethene, Total	100		6.155					ND	7
37 cis-1,2-Dichloroethene	96		6.159					ND	
38 2,2-Dichloropropane	77		6.177					ND	
39 Ethyl acetate	43		6.196					ND	
40 Propionitrile	54		6.214					ND	
41 Methyl acrylate	55		6.263					ND	
42 Methacrylonitrile	67		6.433					ND	
43 Chlorobromomethane	128		6.488					ND	
44 Tetrahydrofuran	71		6.494					ND	
45 Chloroform	83		6.641					ND	
\$ 46 Dibromofluoromethane (Surr)	113	6.848	6.854	-0.006	94	552904	10.0	10.2	
47 1,1,1-Trichloroethane	97		6.866					ND	
48 Cyclohexane	56		6.964					ND	
49 1-Chlorobutane	56		7.025					ND	
51 1,1-Dichloropropene	75		7.074					ND	
50 Carbon tetrachloride	117		7.080					ND	
52 Isobutyl alcohol	41		7.226					ND	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.305	7.305	0.000	0	112026	10.0	10.2	
54 Benzene	78		7.336					ND	
56 1,2-Dichloroethane	62		7.409					ND	
55 Isopropyl acetate	43		7.421					ND	
57 Tert-amyl methyl ether	73		7.525					ND	
* 58 Fluorobenzene (IS)	96	7.738	7.738	0.000	99	2203806	10.0	10.0	
59 n-Heptane	43		7.750					ND	7
60 n-Butanol	56		8.092					ND	
61 Trichloroethene	95		8.214					ND	
62 Methylcyclohexane	83		8.524					ND	
63 1,2-Dichloropropane	63		8.549					ND	
64 Methyl methacrylate	69		8.628					ND	
65 1,4-Dioxane	88		8.628					ND	
66 Dibromomethane	93		8.659					ND	
67 n-Propyl acetate	43		8.714					ND	
68 Dichlorobromomethane	83		8.890					ND	
69 2-Nitropropane	41		9.158					ND	7
70 Chloroacetonitrile	75		9.232					ND	
71 2-Chloroethyl vinyl ether	63		9.250					ND	
72 1-Bromo-2-chloroethane	63		9.280					ND	
73 cis-1,3-Dichloropropene	75		9.433					ND	
74 4-Methyl-2-pentanone (MIBK)	43		9.597					ND	7
\$ 75 Toluene-d8 (Surr)	98	9.738	9.738	0.000	93	2177414	10.0	9.82	
76 Toluene	92		9.817					ND	7
S 77 1,3-Dichloropropene, Total	100		10.060					ND	7
78 trans-1,3-Dichloropropene	75		10.067					ND	
79 Ethyl methacrylate	69		10.128					ND	
80 1,1,2-Trichloroethane	97		10.274					ND	
81 Tetrachloroethene	166		10.366					ND	
82 1,3-Dichloropropane	76		10.433					ND	
83 2-Hexanone	43		10.481					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
84 n-Butyl acetate	43		10.610					ND	
85 Chlorodibromomethane	129		10.652					ND	
86 Ethylene Dibromide	107		10.762					ND	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.189	0.000	85	1698029	10.0	10.0	
88 1-Chlorohexane	91		11.195					ND	7
90 Chlorobenzene	112		11.213					ND	
S 89 Xylenes, Total	106		11.245					ND	7
91 1,1,1,2-Tetrachloroethane	131		11.298					ND	
92 Ethylbenzene	91		11.298					ND	
93 m-Xylene & p-Xylene	106		11.414					ND	
94 o-Xylene	106		11.743					ND	
95 Styrene	104		11.756					ND	
96 Bromoform	173		11.914					ND	
97 Isopropylbenzene	105		12.042					ND	
98 cis-1,4-Dichloro-2-butene	88		12.085					ND	U
99 Cyclohexanone	55		12.121					ND	
\$ 100 4-Bromofluorobenzene (Surr)	95	12.188	12.182	0.006	95	800519	10.0	9.75	
101 1,1,2,2-Tetrachloroethane	83		12.286					ND	
102 Bromobenzene	156		12.304					ND	
103 trans-1,4-Dichloro-2-butene	53		12.310					ND	
104 1,2,3-Trichloropropane	110		12.329					ND	
105 N-Propylbenzene	91		12.371					ND	
106 2-Chlorotoluene	126		12.444					ND	
107 1,3,5-Trimethylbenzene	105		12.505					ND	
108 4-Chlorotoluene	126		12.536					ND	
109 tert-Butylbenzene	134		12.743					ND	
110 Pentachloroethane	167		12.780					ND	
111 1,2,4-Trimethylbenzene	105		12.786					ND	
112 sec-Butylbenzene	105	12.908	12.908	0.000	89	1787		0.004480	a
113 1,3-Dichlorobenzene	146		13.011					ND	
114 4-Isopropyltoluene	119	13.017	13.017	0.000	93	1529		0.004495	7a
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	94	963700	10.0	10.0	
116 1,4-Dichlorobenzene	146		13.085					ND	7
117 1,2,3-Trimethylbenzene	120		13.091					ND	7
118 Benzyl chloride	126		13.158					ND	
119 n-Butylbenzene	92		13.310					ND	7
120 1,2-Dichlorobenzene	146		13.341					ND	
121 Hexachloroethane	117		13.542					ND	
122 1,2-Dibromo-3-Chloropropane	155		13.883					ND	
123 1,3,5-Trichlorobenzene	180		14.011					ND	7
124 1,2,4-Trichlorobenzene	180		14.432					ND	7
125 Hexachlorobutadiene	225	14.517	14.517	0.000	87	1654		0.0363	
126 Naphthalene	128		14.615					ND	7
127 1,2,3-Trichlorobenzene	180		14.755					ND	7
128 Dodecane	57		0.000					ND	
206 Pentachloroethane TIC	1		0.000					ND	
142 2-Bromo-1-chloropropane	1		0.000					ND	
131 tert-Butyl Formate	1		0.000					ND	
132 Methylal	1		0.000					ND	
133 t-Amyl alcohol	1		0.000					ND	
134 Isopropyl alcohol	45		0.000					ND	
141 1-Chloropropane	1		0.000					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
129 Propene oxide	1		0.000					ND	
130 Chlorotrifluoroethene	1		0.000					ND	
139 1-Bromo-3-Chloropropane	1		0.000					ND	
143 n-Decane	57		0.000					ND	
205 1,1-Dichloroacetone	1		0.000					ND	
144 2-ethoxy-2-methyl butane	1		0.000					ND	
136 2-Chloro-1,1,1-Trifluoroethane	1		0.000					ND	
135 p-Diethylbenzene	1		0.000					ND	
137 2-Methylnaphthalene	142		0.000					ND	
138 1,1-Dichloro-1-fluoroethane	1		0.000					ND	
202 1,3-Dichloro-2-propanol TIC	1		0.000					ND	
203 Propargyl alcohol TIC	1		0.000					ND	
204 Pentane	43		0.000					ND	
140 Ethanol	45		3.288					ND	

### QC Flag Legend

#### Processing Flags

7 - Failed Limit of Detection

#### Review Flags

U - Marked Undetected

a - User Assigned ID

### Reagents:

MSV\_31\_826ISS\_00004

Amount Added: 5.00

Units: uL

Run Reagent



Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03B31.D

Injection Date: 03-Mar-2021 21:15:30

Instrument ID: 19930

Operator ID: MEC29284

Lims ID: MB

Worklist Smp#: 8

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

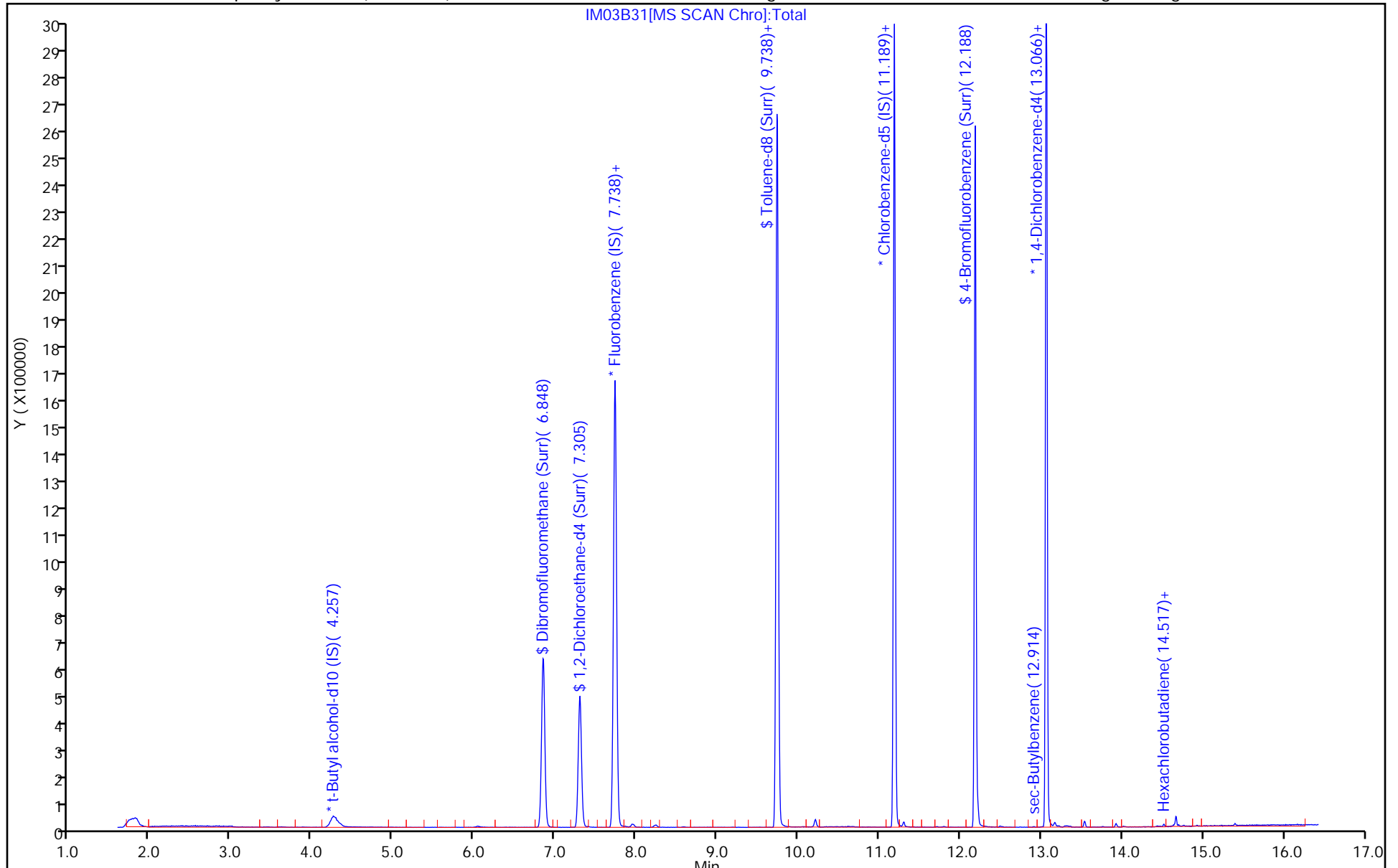
ALS Bottle#: 7

Method: 8260 25ml HP31

Limit Group: MSV - 8260C\_D

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

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



Eurofins Lancaster Laboratories Env, LLC  
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03B31.D  
 Lims ID: MB  
 Client ID:  
 Sample Type: MB  
 Inject. Date: 03-Mar-2021 21:15:30 ALS Bottle#: 7 Worklist Smp#: 8  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0023228-008  
 Misc. Info.: MB  
 Operator ID: MEC29284 Instrument ID: 19930  
 Method: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\8260 25ml HP31.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 03-Mar-2021 21:49:42 Calib Date: 23-Nov-2020 18:05:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I17.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1646

First Level Reviewer: campbellme

Date: 03-Mar-2021 21:49:42

Compound	Amount Added	Amount Recovered	% Rec.
\$ 46 Dibromofluoromethane (Surr)	10.0	10.2	101.61
\$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	10.2	102.11
\$ 75 Toluene-d8 (Surr)	10.0	9.82	98.19
\$ 100 4-Bromofluorobenzene (Surr)	10.0	9.75	97.48

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-30627-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: \_\_\_\_\_ Lab Sample ID: LCS 410-99025/5  
 Matrix: Water Lab File ID: GM03X05.D  
 Analysis Method: 8260D Date Collected: \_\_\_\_\_  
 Sample wt/vol: 25 (mL) Date Analyzed: 03/03/2021 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.: 99025 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	4.79		0.50	0.070
71-55-6	1,1,1-Trichloroethane	4.67		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	4.67		0.50	0.070
79-00-5	1,1,2-Trichloroethane	4.78		0.50	0.060
75-34-3	1,1-Dichloroethane	4.48		0.50	0.070
75-35-4	1,1-Dichloroethene	4.75		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	4.75		0.50	0.060
107-06-2	1,2-Dichloroethane	4.35		0.50	0.050
78-87-5	1,2-Dichloropropane	4.61		0.50	0.060
78-93-3	2-Butanone (MEK)	35.9		5.0	0.60
591-78-6	2-Hexanone	23.2		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	23.3		5.0	0.70
67-64-1	Acetone	33.3		5.0	0.90
71-43-2	Benzene	4.55		0.50	0.050
74-97-5	Bromochloromethane	4.80		0.50	0.050
75-27-4	Bromodichloromethane	4.64		0.50	0.050
75-25-2	Bromoform	4.87		1.0	0.30
74-83-9	Bromomethane	4.41		0.50	0.070
75-15-0	Carbon disulfide	4.55		1.0	0.060
56-23-5	Carbon tetrachloride	4.80		0.50	0.070
108-90-7	Chlorobenzene	4.86		0.50	0.060
75-00-3	Chloroethane	4.28		0.50	0.070
67-66-3	Chloroform	4.65		0.50	0.090
74-87-3	Chloromethane	4.02		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	4.76		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	4.42		0.50	0.050
124-48-1	Dibromochloromethane	4.79		0.50	0.070
100-41-4	Ethylbenzene	4.66		0.50	0.060
1634-04-4	Methyl tert-butyl ether	4.32		0.50	0.050
75-09-2	Methylene Chloride	4.77		0.50	0.070
100-42-5	Styrene	4.77		0.50	0.050
127-18-4	Tetrachloroethene	4.97		0.50	0.060
108-88-3	Toluene	4.69		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	4.74		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	4.61		0.50	0.060
79-01-6	Trichloroethene	4.66		0.50	0.060

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-30627-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: \_\_\_\_\_ Lab Sample ID: LCS 410-99025/5  
 Matrix: Water Lab File ID: GM03X05.D  
 Analysis Method: 8260D Date Collected: \_\_\_\_\_  
 Sample wt/vol: 25 (mL) Date Analyzed: 03/03/2021 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.: 99025 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-01-4	Vinyl chloride	4.47		0.50	0.10
1330-20-7	Xylenes, Total	14.5		1.0	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		80-120
460-00-4	4-Bromofluorobenzene (Surr)	97		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\16334\20210303-23166.b\GM03X05.D  
 Lims ID: LCS  
 Client ID:  
 Sample Type: LCS  
 Inject. Date: 03-Mar-2021 10:01:30 ALS Bottle#: 5 Worklist Smp#: 5  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0023166-005  
 Misc. Info.: LCS  
 Operator ID: SRK36897 Instrument ID: 16334  
 Method: \\chromfs\Lancaster\ChromData\16334\20210303-23166.b\MSV\_16334\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 03-Mar-2021 14:02:58 Calib Date: 30-Nov-2020 18:23:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I17.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1663

First Level Reviewer: knouses

Date: 03-Mar-2021 10:49:36

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	1.940	0.000	99	214295	5.00	4.23	
5 Chloromethane	50	2.135	2.136	-0.001	99	274880	5.00	4.02	
7 Butadiene	39	2.251	2.245	0.006	90	366882	5.00	4.72	
8 Vinyl chloride	62	2.251	2.251	0.000	77	260836	5.00	4.47	
9 Bromomethane	94	2.568	2.568	0.000	91	179412	5.00	4.41	
10 Chloroethane	64	2.654	2.660	-0.006	100	151717	5.00	4.28	
12 Dichlorofluoromethane	67	2.891	2.892	-0.001	97	270649	5.00	3.41	
13 Trichlorofluoromethane	101	2.952	2.952	0.000	96	325767	5.00	4.85	
15 Ethyl ether	59	3.196	3.202	-0.006	91	184662	5.00	4.66	
17 1,2-Dichloro-1,1,2-trifluoroetha	67	3.288	3.282	0.006	92	251187	5.00	4.58	
18 Acrolein	56	3.373	3.373	0.000	100	199099	37.5	33.5	
19 1,1-Dichloroethene	96	3.507	3.507	0.000	98	192669	5.00	4.75	
20 112TCTFE	101	3.544	3.544	0.000	93	193746	5.00	4.88	
21 Acetone	43	3.550	3.544	0.006	99	256095	37.5	33.3	
23 Iodomethane	142	3.696	3.696	0.000	98	350885	5.00	4.63	
22 Isopropyl alcohol	45	3.727	3.721	0.006	95	47733	37.5	30.9	
24 Ethyl bromide	108	3.727	3.727	0.000	97	156124	5.03	4.42	
25 Carbon disulfide	76	3.800	3.794	0.006	99	680630	5.00	4.55	
27 Methyl acetate	43	3.958	3.952	0.006	98	97245	5.00	4.18	
28 3-Chloro-1-propene	41	3.983	3.977	0.006	94	327939	5.00	4.04	
29 Methylene Chloride	84	4.166	4.166	0.000	92	221670	5.00	4.77	
* 30 t-Butyl alcohol-d10 (IS)	65	4.190	4.178	0.012	0	156614	50.0	50.0	
31 2-Methyl-2-propanol	59	4.312	4.306	0.006	100	134881	50.0	47.9	
32 Acrylonitrile	53	4.513	4.507	0.006	99	253808	25.0	25.5	
33 Methyl tert-butyl ether	73	4.568	4.568	0.000	96	556986	5.00	4.32	
34 trans-1,2-Dichloroethene	96	4.568	4.568	0.000	99	221683	5.00	4.74	
35 Hexane	57	4.995	4.995	0.000	92	323788	5.00	4.75	
37 1,1-Dichloroethane	63	5.239	5.239	0.000	96	388439	5.00	4.48	
38 Isopropyl ether	45	5.293	5.300	-0.007	95	725608	5.00	4.11	
39 2-Chloro-1,3-butadiene	53	5.348	5.342	0.006	90	329271	5.00	4.17	
40 Tert-butyl ethyl ether	59	5.836	5.830	0.006	98	695309	5.00	4.32	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
41 2-Butanone (MEK)	43	6.043	6.049	-0.006	100	511201	37.5	35.9	
42 cis-1,2-Dichloroethene	96	6.080	6.080	0.000	81	249731	5.00	4.76	
43 2,2-Dichloropropane	77	6.086	6.086	0.000	64	320175	5.00	4.40	
45 Propionitrile	54	6.147	6.147	0.000	98	128144	37.5	36.3	
48 Methacrylonitrile	67	6.360	6.360	0.000	93	481790	37.5	36.8	
49 Chlorobromomethane	128	6.409	6.403	0.006	95	112325	5.00	4.80	
50 Tetrahydrofuran	71	6.415	6.409	0.006	85	96002	25.0	26.1	
51 Chloroform	83	6.561	6.562	-0.001	93	388620	5.00	4.65	
\$ 52 Dibromofluoromethane (Surr)	113	6.781	6.775	0.006	94	477979	10.0	10.1	
53 1,1,1-Trichloroethane	97	6.781	6.787	-0.006	68	334217	5.00	4.67	
54 Cyclohexane	56	6.878	6.872	0.006	89	382749	5.00	4.66	
56 Carbon tetrachloride	117	6.994	6.988	0.006	95	297696	5.00	4.80	
57 1,1-Dichloropropene	75	7.000	7.000	0.000	98	304399	5.00	4.53	
58 Isobutyl alcohol	41	7.165	7.165	0.000	95	115120	125.0	104.5	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.232	7.232	0.000	0	103764	10.0	10.3	
60 Benzene	78	7.263	7.263	0.000	97	901144	5.00	4.55	
61 1,2-Dichloroethane	62	7.336	7.336	0.000	97	241140	5.00	4.35	
63 Tert-amyl methyl ether	73	7.452	7.452	0.000	99	642352	5.00	4.53	
* 64 Fluorobenzene (IS)	96	7.665	7.665	0.000	99	1948700	10.0	10.0	
65 n-Heptane	43	7.671	7.671	0.000	90	344274	5.00	4.48	
67 n-Butanol	56	8.049	8.043	0.006	87	216625	250.0	214.1	
68 Trichloroethene	95	8.140	8.140	0.000	98	235674	5.00	4.66	
69 Methylcyclohexane	83	8.445	8.445	0.000	92	415940	5.00	5.30	
70 1,2-Dichloropropane	63	8.482	8.482	0.000	88	244198	5.00	4.61	
71 2-ethoxy-2-methyl butane	87	8.488	8.488	0.000	92	367207	5.00	4.74	
72 Methyl methacrylate	69	8.567	8.567	0.000	91	126264	5.00	4.74	
73 1,4-Dioxane	88	8.579	8.567	0.012	30	26120	125.0	145.1	M
74 Dibromomethane	93	8.585	8.586	-0.001	94	117286	5.00	4.78	
76 Dichlorobromomethane	83	8.829	8.823	0.006	99	284940	5.00	4.64	
77 2-Nitropropane	41	9.110	9.110	0.000	96	35354	5.00	4.68	
79 2-Chloroethyl vinyl ether	63		9.195				ND	ND	
80 1-Bromo-2-chloroethane	63	9.219	9.213	0.006	98	240018	5.00	4.23	
81 cis-1,3-Dichloropropene	75	9.378	9.372	0.006	96	352852	5.00	4.42	
82 4-Methyl-2-pentanone (MIBK)	43	9.561	9.555	0.006	96	851943	25.0	23.3	
\$ 83 Toluene-d8 (Surr)	98	9.683	9.683	0.000	93	1904124	10.0	10.1	
84 Toluene	92	9.762	9.762	0.000	98	572963	5.00	4.69	
96 trans-1,3-Dichloropropene	75	10.024	10.018	0.006	91	304653	5.00	4.61	
98 Ethyl methacrylate	69	10.085	10.079	0.006	89	264948	5.00	4.47	
99 1,1,2-Trichloroethane	97	10.225	10.225	0.000	90	170688	5.00	4.78	
100 Tetrachloroethene	166	10.311	10.311	0.000	97	263696	5.00	4.97	
101 1,3-Dichloropropane	76	10.390	10.390	0.000	89	299675	5.00	4.66	
102 2-Hexanone	43	10.445	10.445	0.000	97	610694	25.0	23.2	
104 Chlorodibromomethane	129	10.603	10.603	0.000	90	202769	5.00	4.79	
105 Ethylene Dibromide	107	10.713	10.707	0.006	98	166288	5.00	4.75	
* 106 Chlorobenzene-d5 (IS)	117	11.146	11.146	0.000	86	1411163	10.0	10.0	
107 1-Chlorohexane	91	11.152	11.152	0.000	97	327910	5.00	4.46	
108 Chlorobenzene	112	11.170	11.170	0.000	95	661382	5.00	4.86	
110 1,1,1,2-Tetrachloroethane	131	11.256	11.250	0.006	96	231821	5.00	4.79	
111 Ethylbenzene	91	11.256	11.256	0.000	98	1126330	5.00	4.66	
112 m-Xylene & p-Xylene	106	11.371	11.372	-0.001	97	880328	10.0	9.67	
113 o-Xylene	106	11.701	11.701	0.000	96	436488	5.00	4.83	
114 Styrene	104	11.719	11.713	0.006	95	733471	5.00	4.77	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
115 Bromoform	173	11.871	11.871	0.000	97	120178	5.00	4.87	
116 Isopropylbenzene	105	11.999	11.999	0.000	95	1116892	5.00	4.73	
\$ 119 4-Bromofluorobenzene (Surr)	95	12.140	12.140	0.000	92	700299	10.0	9.74	
120 1,1,2,2-Tetrachloroethane	83	12.249	12.249	0.000	93	226941	5.00	4.67	
121 Bromobenzene	156	12.262	12.256	0.006	95	289156	5.00	4.95	
122 trans-1,4-Dichloro-2-butene	53	12.274	12.274	0.000	92	161563	25.0	14.2	
123 1,2,3-Trichloropropane	110	12.292	12.292	0.000	83	57873	5.00	4.67	
124 N-Propylbenzene	91	12.329	12.329	0.000	99	1347873	5.00	4.63	
125 2-Chlorotoluene	126	12.402	12.402	0.000	97	277191	5.00	4.84	
126 1,3,5-Trimethylbenzene	105	12.463	12.463	0.000	95	977644	5.00	4.76	
127 4-Chlorotoluene	126	12.493	12.493	0.000	97	291429	5.00	4.88	
128 tert-Butylbenzene	134	12.707	12.707	0.000	93	211568	5.00	4.83	
129 Pentachloroethane	167	12.737	12.737	0.000	92	174686	5.00	4.64	
130 1,2,4-Trimethylbenzene	105	12.743	12.743	0.000	97	1018420	5.00	4.75	
131 sec-Butylbenzene	105	12.865	12.865	0.000	94	1282670	5.00	4.80	
132 1,3-Dichlorobenzene	146	12.963	12.963	0.000	98	580492	5.00	4.93	
133 4-Isopropyltoluene	119	12.975	12.975	0.000	97	1124968	5.00	4.85	
* 134 1,4-Dichlorobenzene-d4	152	13.018	13.018	0.000	94	773424	10.0	10.0	
135 1,4-Dichlorobenzene	146	13.036	13.036	0.000	95	582822	5.00	4.86	
136 1,2,3-Trimethylbenzene	120	13.048	13.048	0.000	99	460478	5.00	4.84	
137 Benzyl chloride	126	13.115	13.115	0.000	98	92312	5.00	4.39	
138 p-Diethylbenzene	119	13.170	13.170	0.000	92	667074	5.00	4.73	
139 n-Butylbenzene	92	13.261	13.261	0.000	97	566544	5.00	4.61	
140 1,2-Dichlorobenzene	146	13.298	13.298	0.000	99	542877	5.00	4.94	
142 1,2-Dibromo-3-Chloropropane	155	13.834	13.835	0.000	87	32707	5.00	4.62	
143 1,3,5-Trichlorobenzene	180	13.956	13.956	0.000	97	484432	5.00	4.91	
144 1,2,4-Trichlorobenzene	180	14.377	14.377	0.000	94	445847	5.00	4.90	
145 Hexachlorobutadiene	225	14.462	14.462	0.000	95	227099	5.00	5.09	
146 Naphthalene	128	14.560	14.560	0.000	97	796421	5.00	4.81	
147 1,2,3-Trichlorobenzene	180	14.700	14.700	0.000	96	399291	5.00	4.98	
148 2-Methylnaphthalene	142	15.316	15.316	0.000	92	518153	5.00	4.38	
160 Pentane	43		0.000				ND	ND	

## QC Flag Legend

### Processing Flags

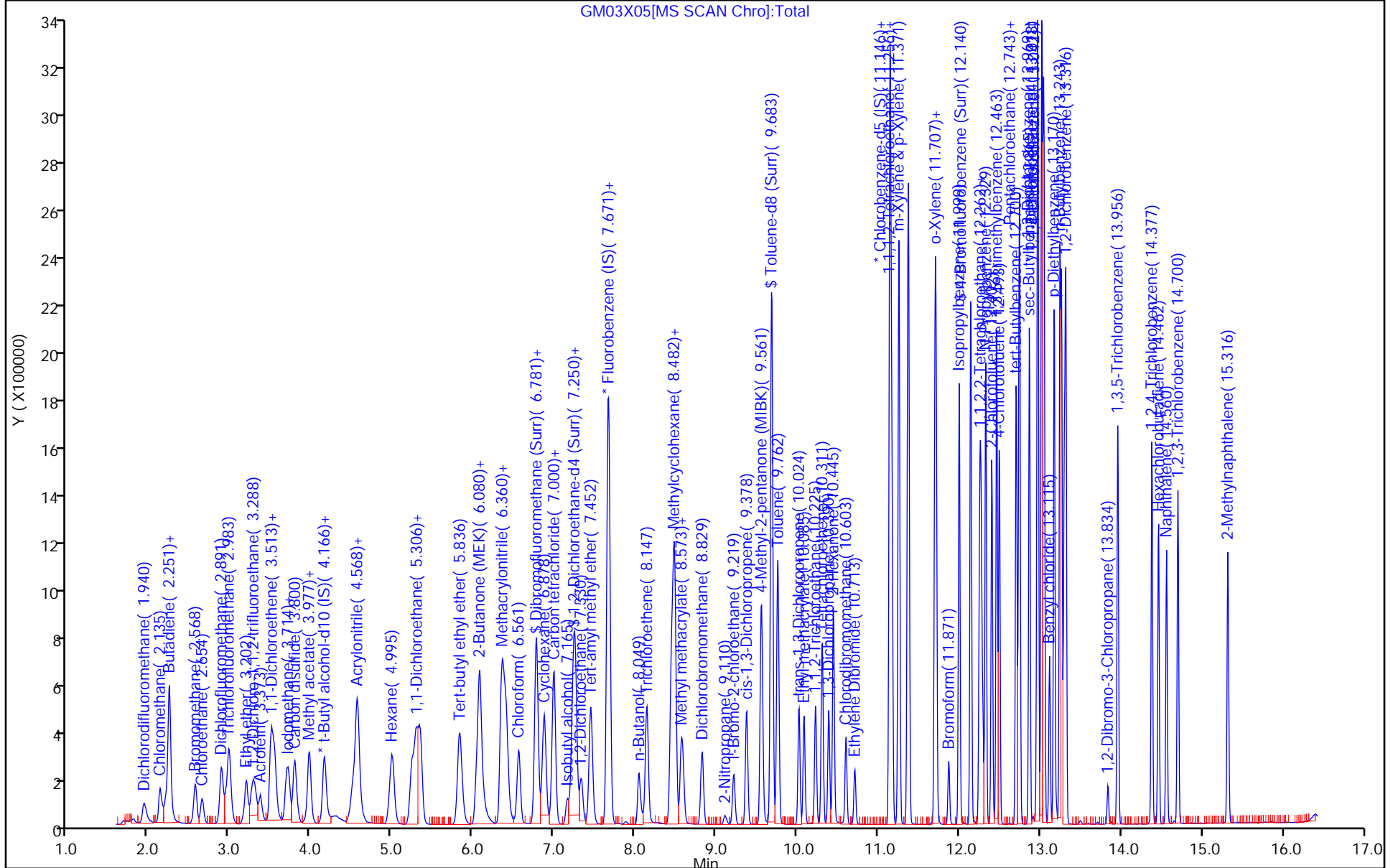
ND - Not Detected or Marked ND

### Review Flags

M - Manually Integrated

## Reagents:

MSV_Q_QVOA1_00070	Amount Added: 12.50	Units: uL	
MSV_Q_QARC_00070	Amount Added: 12.50	Units: uL	
MSV_Q_QVOA6_00068	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_00112	Amount Added: 12.50	Units: uL	
MSV_29_826ISS_00015	Amount Added: 1.00	Units: uL	Run Reagent



GM03X05[MS SCAN Chrom]:Total



Eurofins Lancaster Laboratories Env, LLC  
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\16334\20210303-23166.b\GM03X05.D  
 Lims ID: LCS  
 Client ID:  
 Sample Type: LCS  
 Inject. Date: 03-Mar-2021 10:01:30 ALS Bottle#: 5 Worklist Smp#: 5  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0023166-005  
 Misc. Info.: LCS  
 Operator ID: SRK36897 Instrument ID: 16334  
 Method: \\chromfs\Lancaster\ChromData\16334\20210303-23166.b\MSV\_16334\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 03-Mar-2021 14:02:58 Calib Date: 30-Nov-2020 18:23:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I17.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1663

First Level Reviewer: knouses

Date: 03-Mar-2021 10:49:36

Compound	Amount Added	Amount Recovered	% Rec.
\$ 52 Dibromofluoromethane (Surr)	10.0	10.1	101.35
\$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	10.3	103.40
\$ 83 Toluene-d8 (Surr)	10.0	10.1	101.14
\$ 119 4-Bromofluorobenzene (Surr)	10.0	9.74	97.42

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-30627-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: \_\_\_\_\_ Lab Sample ID: LCS 410-99333/5  
 Matrix: Water Lab File ID: IM03L31.D  
 Analysis Method: 8260D Date Collected: \_\_\_\_\_  
 Sample wt/vol: 25 (mL) Date Analyzed: 03/03/2021 20:11  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: R-624SilMS 30m ID: 0.25 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 99333 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	4.79		0.50	0.070
71-55-6	1,1,1-Trichloroethane	4.90		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	4.77		0.50	0.070
79-00-5	1,1,2-Trichloroethane	4.81		0.50	0.060
75-34-3	1,1-Dichloroethane	4.81		0.50	0.070
75-35-4	1,1-Dichloroethene	4.84		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	4.75		0.50	0.060
107-06-2	1,2-Dichloroethane	4.88		0.50	0.050
78-87-5	1,2-Dichloropropane	5.00		0.50	0.060
78-93-3	2-Butanone (MEK)	44.4		5.0	0.60
591-78-6	2-Hexanone	30.7		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	30.5		5.0	0.70
67-64-1	Acetone	36.9		5.0	0.90
71-43-2	Benzene	4.80		0.50	0.050
74-97-5	Bromochloromethane	4.73		0.50	0.050
75-27-4	Bromodichloromethane	4.96		0.50	0.050
75-25-2	Bromoform	4.75		1.0	0.30
74-83-9	Bromomethane	4.96		0.50	0.070
75-15-0	Carbon disulfide	4.71		1.0	0.060
56-23-5	Carbon tetrachloride	4.95		0.50	0.070
108-90-7	Chlorobenzene	4.71		0.50	0.060
75-00-3	Chloroethane	4.86		0.50	0.070
67-66-3	Chloroform	4.87		0.50	0.090
74-87-3	Chloromethane	4.84		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	4.77		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	4.97		0.50	0.050
124-48-1	Dibromochloromethane	4.74		0.50	0.070
100-41-4	Ethylbenzene	4.64		0.50	0.060
1634-04-4	Methyl tert-butyl ether	4.71		0.50	0.050
75-09-2	Methylene Chloride	4.76		0.50	0.070
100-42-5	Styrene	4.73		0.50	0.050
127-18-4	Tetrachloroethene	4.60		0.50	0.060
108-88-3	Toluene	4.58		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	4.76		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	5.13		0.50	0.060
79-01-6	Trichloroethene	4.76		0.50	0.060

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-30627-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: \_\_\_\_\_ Lab Sample ID: LCS 410-99333/5  
 Matrix: Water Lab File ID: IM03L31.D  
 Analysis Method: 8260D Date Collected: \_\_\_\_\_  
 Sample wt/vol: 25 (mL) Date Analyzed: 03/03/2021 20:11  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: R-624SilMS 30m ID: 0.25 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 99333 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-01-4	Vinyl chloride	5.05		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)	102		80-120
460-00-4	4-Bromofluorobenzene (Surr)	99		80-120
1868-53-7	Dibromofluoromethane (Surr)	100		80-120
2037-26-5	Toluene-d8 (Surr)	98		80-120

Eurofins Lancaster Laboratories Env, LLC  
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03L31.D  
 Lims ID: LCS  
 Client ID:  
 Sample Type: LCS  
 Inject. Date: 03-Mar-2021 20:11:30 ALS Bottle#: 4 Worklist Smp#: 5  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0023228-005  
 Misc. Info.: LCS  
 Operator ID: MEC29284 Instrument ID: 19930  
 Method: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\8260 25ml HP31.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 03-Mar-2021 21:09:22 Calib Date: 23-Nov-2020 18:05:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23117.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1646

First Level Reviewer: campbellme

Date: 03-Mar-2021 20:39:22

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.977	1.983	-0.006	99	366070	5.00	4.57	
4 Chloromethane	50	2.178	2.184	-0.006	99	449718	5.00	4.84	
6 Butadiene	39	2.288	2.294	-0.006	90	442772	5.00	5.57	
5 Vinyl chloride	62	2.294	2.306	-0.012	70	431982	5.00	5.05	
7 Bromomethane	94	2.623	2.629	-0.006	91	307881	5.00	4.96	
8 Chloroethane	64	2.709	2.709	0.000	100	255893	5.00	4.86	
9 Dichlorofluoromethane	67	2.946	2.952	-0.006	97	468915	5.00	3.98	
10 Trichlorofluoromethane	101	3.019	3.019	0.000	97	554195	5.00	5.00	
11 Ethyl ether	59	3.263	3.263	0.000	91	264887	5.00	5.34	
12 1,2-Dichloro-1,1,2-trifluoroethane	67	3.349	3.343	0.006	93	387759	5.00	4.99	
13 Acrolein	56	3.434	3.434	0.000	99	189864	37.5	26.9	
14 1,1-Dichloroethene	96	3.574	3.574	0.000	98	289487	5.00	4.84	
15 Acetone	43	3.605	3.605	0.000	100	324795	37.5	36.9	
16 112TCTFE	101	3.623	3.623	0.000	90	303256	5.00	4.79	
17 Iodomethane	142	3.775	3.775	0.000	98	542294	5.00	4.63	
18 Ethyl bromide	108	3.806	3.806	0.000	98	236643	5.03	4.35	
19 Carbon disulfide	76	3.879	3.885	-0.006	98	817090	5.00	4.71	
21 Methyl acetate	43	4.031	4.025	0.006	97	130612	5.00	5.45	
22 3-Chloro-1-propene	41	4.056	4.062	-0.006	93	466891	5.00	5.13	
23 Methylene Chloride	84	4.245	4.251	-0.006	92	316019	5.00	4.76	
* 24 t-Butyl alcohol-d10 (IS)	65	4.257	4.275	-0.018	0	161249	50.0	50.0	
25 2-Methyl-2-propanol	59	4.385	4.397	-0.012	99	172785	50.0	50.3	
26 Acrylonitrile	53	4.580	4.586	-0.006	99	327258	25.0	28.5	
27 Methyl tert-butyl ether	73	4.659	4.659	0.000	89	755211	5.00	4.71	
28 trans-1,2-Dichloroethene	96	4.665	4.672	-0.007	99	314912	5.00	4.76	
29 Hexane	57	5.092	5.098	-0.006	91	465265	5.00	5.14	
31 1,1-Dichloroethane	63	5.330	5.330	0.000	96	574537	5.00	4.81	
32 Isopropyl ether	45	5.391	5.385	0.006	95	982965	5.00	4.98	
33 2-Chloro-1,3-butadiene	53	5.434	5.440	-0.006	90	476845	5.00	4.97	
34 Tert-butyl ethyl ether	59	5.915	5.921	-0.006	97	912437	5.00	4.89	
36 2-Butanone (MEK)	43	6.129	6.122	0.007	99	653409	37.5	44.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
37 cis-1,2-Dichloroethene	96	6.159	6.159	0.000	81	366539	5.00	4.77	
38 2,2-Dichloropropane	77	6.171	6.177	-0.006	86	482377	5.00	5.02	
40 Propionitrile	54	6.214	6.214	0.000	98	165710	37.5	38.5	
42 Methacrylonitrile	67	6.427	6.433	-0.006	91	648077	37.5	42.8	
43 Chlorobromomethane	128	6.488	6.488	0.000	92	160045	5.00	4.73	
44 Tetrahydrofuran	71	6.494	6.494	0.000	84	127832	25.0	28.7	
45 Chloroform	83	6.635	6.641	-0.006	93	573687	5.00	4.87	
\$ 46 Dibromofluoromethane (Surr)	113	6.854	6.854	0.000	94	553917	10.0	9.99	
47 1,1,1-Trichloroethane	97	6.860	6.866	-0.006	98	518557	5.00	4.90	
48 Cyclohexane	56	6.964	6.964	0.000	89	564988	5.00	5.15	
51 1,1-Dichloropropene	75	7.074	7.074	0.000	96	449007	5.00	4.78	
50 Carbon tetrachloride	117	7.074	7.080	-0.006	97	468978	5.00	4.95	
52 Isobutyl alcohol	41	7.226	7.226	0.000	94	143262	125.0	129.6	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.305	7.305	0.000	0	114273	10.0	10.2	
54 Benzene	78	7.336	7.336	0.000	96	1365171	5.00	4.80	
56 1,2-Dichloroethane	62	7.409	7.409	0.000	97	339331	5.00	4.88	
57 Tert-amyl methyl ether	73	7.525	7.525	0.000	99	844590	5.00	4.94	
* 58 Fluorobenzene (IS)	96	7.738	7.738	0.000	99	2245786	10.0	10.0	
59 n-Heptane	43	7.750	7.750	0.000	92	491331	5.00	5.41	
60 n-Butanol	56	8.098	8.092	0.006	88	196401	250.0	187.9	
61 Trichloroethene	95	8.220	8.214	0.006	97	354217	5.00	4.76	
62 Methylcyclohexane	83	8.524	8.524	0.000	92	612269	5.00	5.06	
63 1,2-Dichloropropane	63	8.549	8.549	0.000	88	349801	5.00	5.00	
64 Methyl methacrylate	69	8.628	8.628	0.000	91	166397	5.00	5.90	
65 1,4-Dioxane	88	8.634	8.628	0.006	30	22895	125.0	83.9	M
66 Dibromomethane	93	8.659	8.659	0.000	94	162709	5.00	4.92	
68 Dichlorobromomethane	83	8.890	8.890	0.000	99	415940	5.00	4.96	
69 2-Nitropropane	41	9.158	9.158	0.000	98	46648	5.00	6.58	
71 2-Chloroethyl vinyl ether	63		9.250				ND	ND	
72 1-Bromo-2-chloroethane	63	9.287	9.280	0.006	98	331473	5.00	4.61	
73 cis-1,3-Dichloropropene	75	9.433	9.433	0.000	97	499259	5.00	4.97	
74 4-Methyl-2-pentanone (MIBK)	43	9.604	9.597	0.007	96	1115632	25.0	30.5	
\$ 75 Toluene-d8 (Surr)	98	9.744	9.738	0.006	93	2241857	10.0	9.79	
76 Toluene	92	9.817	9.817	0.000	98	875021	5.00	4.58	
78 trans-1,3-Dichloropropene	75	10.073	10.067	0.006	91	423437	5.00	5.13	
79 Ethyl methacrylate	69	10.128	10.128	0.000	89	344383	5.00	4.99	
80 1,1,2-Trichloroethane	97	10.274	10.274	0.000	90	245669	5.00	4.81	
81 Tetrachloroethene	166	10.366	10.366	0.000	97	425636	5.00	4.60	
82 1,3-Dichloropropane	76	10.433	10.433	0.000	89	412396	5.00	4.73	
83 2-Hexanone	43	10.481	10.481	0.000	96	769087	25.0	30.7	
85 Chlorodibromomethane	129	10.652	10.652	0.000	90	304147	5.00	4.74	
86 Ethylene Dibromide	107	10.762	10.762	0.000	99	232110	5.00	4.75	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.189	0.000	85	1753429	10.0	10.0	
88 1-Chlorohexane	91	11.195	11.195	0.000	96	496011	5.00	4.47	
90 Chlorobenzene	112	11.213	11.213	0.000	96	994560	5.00	4.71	
91 1,1,1,2-Tetrachloroethane	131	11.298	11.298	0.000	96	351290	5.00	4.79	
92 Ethylbenzene	91	11.298	11.298	0.000	98	1711544	5.00	4.64	
93 m-Xylene & p-Xylene	106	11.414	11.414	0.000	100	1350850	10.0	9.27	
94 o-Xylene	106	11.743	11.743	0.000	96	657829	5.00	4.64	
95 Styrene	104	11.756	11.756	0.000	94	1073512	5.00	4.73	
96 Bromoform	173	11.914	11.914	0.000	98	183921	5.00	4.75	
97 Isopropylbenzene	105	12.042	12.042	0.000	95	1708979	5.00	4.54	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
\$ 100 4-Bromofluorobenzene (Surr)	95	12.182	12.182	0.000	94	838376	10.0	9.89	
101 1,1,2,2-Tetrachloroethane	83	12.286	12.286	0.000	94	308144	5.00	4.77	
102 Bromobenzene	156	12.304	12.304	0.000	94	419547	5.00	4.71	
103 trans-1,4-Dichloro-2-butene	53	12.310	12.310	0.000	90	283859	25.0	23.7	
104 1,2,3-Trichloropropane	110	12.329	12.329	0.000	82	81917	5.00	4.62	
105 N-Propylbenzene	91	12.371	12.371	0.000	99	2046298	5.00	4.69	
106 2-Chlorotoluene	126	12.444	12.444	0.000	97	418719	5.00	4.69	
107 1,3,5-Trimethylbenzene	105	12.505	12.505	0.000	94	1462908	5.00	4.69	
108 4-Chlorotoluene	126	12.536	12.536	0.000	97	425921	5.00	4.73	
109 tert-Butylbenzene	134	12.749	12.743	0.006	93	326738	5.00	4.63	
110 Pentachloroethane	167	12.780	12.780	0.000	94	273987	5.00	4.90	
111 1,2,4-Trimethylbenzene	105	12.786	12.786	0.000	97	1485421	5.00	4.68	
112 sec-Butylbenzene	105	12.908	12.908	0.000	94	1911391	5.00	4.67	
113 1,3-Dichlorobenzene	146	13.011	13.011	0.000	98	827420	5.00	4.61	
114 4-Isopropyltoluene	119	13.017	13.017	0.000	97	1668508	5.00	4.78	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	93	988861	10.0	10.0	
116 1,4-Dichlorobenzene	146	13.085	13.085	0.000	96	835450	5.00	4.66	
117 1,2,3-Trimethylbenzene	120	13.091	13.091	0.000	98	686309	5.00	4.87	
118 Benzyl chloride	126	13.158	13.158	0.000	98	127014	5.00	5.20	
119 n-Butylbenzene	92	13.310	13.310	0.000	97	794660	5.00	4.66	
120 1,2-Dichlorobenzene	146	13.341	13.341	0.000	99	763006	5.00	4.67	
122 1,2-Dibromo-3-Chloropropane	155	13.883	13.883	0.000	90	44634	5.00	4.50	
123 1,3,5-Trichlorobenzene	180	14.011	14.011	0.000	98	599811	5.00	4.64	
124 1,2,4-Trichlorobenzene	180	14.432	14.432	0.000	94	468174	5.00	4.36	
125 Hexachlorobutadiene	225	14.517	14.517	0.000	96	212405	5.00	4.55	
126 Naphthalene	128	14.615	14.615	0.000	97	800473	5.00	3.99	
127 1,2,3-Trichlorobenzene	180	14.755	14.755	0.000	96	376326	5.00	4.06	
134 Isopropyl alcohol	45		0.000				ND	ND	
144 2-ethoxy-2-methyl butane	1		0.000				ND	ND	
135 p-Diethylbenzene	1		0.000				ND	ND	
137 2-Methylnaphthalene	142		0.000				ND	ND	
204 Pentane	43		0.000				ND	ND	

## QC Flag Legend

### Processing Flags

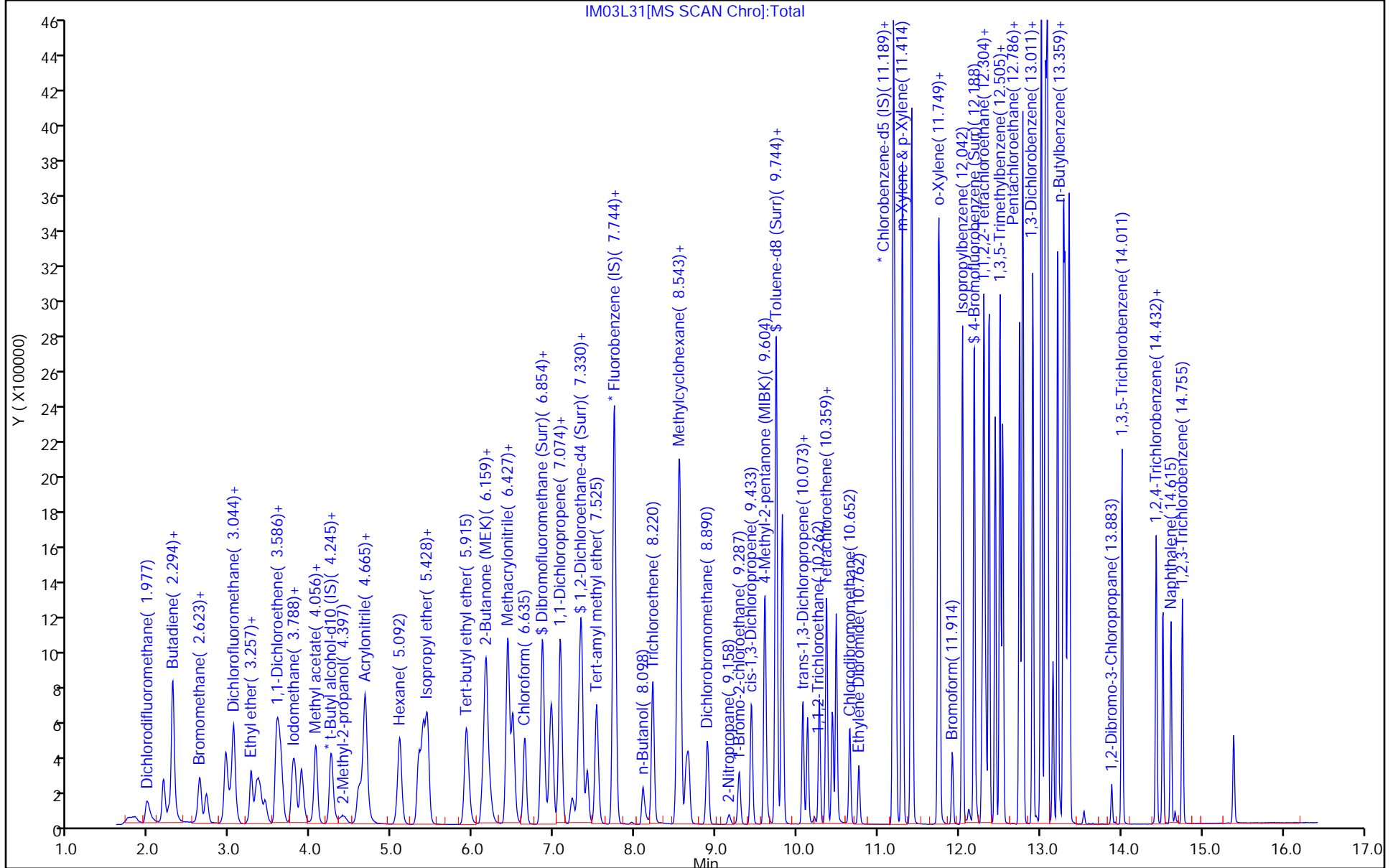
ND - Not Detected or Marked ND

### Review Flags

M - Manually Integrated

## Reagents:

MSV_Q_QVOA1_00070	Amount Added: 12.50	Units: uL	
MSV_Q_QARC_00070	Amount Added: 12.50	Units: uL	
MSV_Q_QVOA6_00068	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_00112	Amount Added: 12.50	Units: uL	
MSV_31_826ISS_00004	Amount Added: 5.00	Units: uL	Run Reagent



Eurofins Lancaster Laboratories Env, LLC  
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03L31.D  
 Lims ID: LCS  
 Client ID:  
 Sample Type: LCS  
 Inject. Date: 03-Mar-2021 20:11:30 ALS Bottle#: 4 Worklist Smp#: 5  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0023228-005  
 Misc. Info.: LCS  
 Operator ID: MEC29284 Instrument ID: 19930  
 Method: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\8260 25ml HP31.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 03-Mar-2021 21:09:22 Calib Date: 23-Nov-2020 18:05:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I17.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1646

First Level Reviewer: campbellme Date: 03-Mar-2021 20:39:22

Compound	Amount Added	Amount Recovered	% Rec.
\$ 46 Dibromofluoromethane (Surr)	10.0	9.99	99.89
\$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	10.2	102.21
\$ 75 Toluene-d8 (Surr)	10.0	9.79	97.90
\$ 100 4-Bromofluorobenzene (Surr)	10.0	9.89	98.86



FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-30627-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: \_\_\_\_\_ Lab Sample ID: LCSD 410-99025/6  
 Matrix: Water Lab File ID: GM03X06.D  
 Analysis Method: 8260D Date Collected: \_\_\_\_\_  
 Sample wt/vol: 25 (mL) Date Analyzed: 03/03/2021 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.: 99025 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	4.76		0.50	0.070
71-55-6	1,1,1-Trichloroethane	4.69		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	4.67		0.50	0.070
79-00-5	1,1,2-Trichloroethane	4.88		0.50	0.060
75-34-3	1,1-Dichloroethane	4.45		0.50	0.070
75-35-4	1,1-Dichloroethene	4.69		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	4.65		0.50	0.060
107-06-2	1,2-Dichloroethane	4.33		0.50	0.050
78-87-5	1,2-Dichloropropane	4.58		0.50	0.060
78-93-3	2-Butanone (MEK)	36.7		5.0	0.60
591-78-6	2-Hexanone	24.5		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	24.3		5.0	0.70
67-64-1	Acetone	34.8		5.0	0.90
71-43-2	Benzene	4.53		0.50	0.050
74-97-5	Bromochloromethane	4.76		0.50	0.050
75-27-4	Bromodichloromethane	4.60		0.50	0.050
75-25-2	Bromoform	4.76		1.0	0.30
74-83-9	Bromomethane	4.36		0.50	0.070
75-15-0	Carbon disulfide	4.47		1.0	0.060
56-23-5	Carbon tetrachloride	4.72		0.50	0.070
108-90-7	Chlorobenzene	4.83		0.50	0.060
75-00-3	Chloroethane	4.26		0.50	0.070
67-66-3	Chloroform	4.60		0.50	0.090
74-87-3	Chloromethane	4.01		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	4.73		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	4.33		0.50	0.050
124-48-1	Dibromochloromethane	4.64		0.50	0.070
100-41-4	Ethylbenzene	4.62		0.50	0.060
1634-04-4	Methyl tert-butyl ether	4.31		0.50	0.050
75-09-2	Methylene Chloride	4.72		0.50	0.070
100-42-5	Styrene	4.76		0.50	0.050
127-18-4	Tetrachloroethene	4.98		0.50	0.060
108-88-3	Toluene	4.62		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	4.64		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	4.46		0.50	0.060
79-01-6	Trichloroethene	4.72		0.50	0.060

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-30627-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: \_\_\_\_\_ Lab Sample ID: LCSD 410-99025/6  
 Matrix: Water Lab File ID: GM03X06.D  
 Analysis Method: 8260D Date Collected: \_\_\_\_\_  
 Sample wt/vol: 25 (mL) Date Analyzed: 03/03/2021 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.: 99025 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-01-4	Vinyl chloride	4.22		0.50	0.10
1330-20-7	Xylenes, Total	14.4		1.0	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		80-120
460-00-4	4-Bromofluorobenzene (Surr)	97		80-120
1868-53-7	Dibromofluoromethane (Surr)	102		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\20210303-23166.b\GM03X06.D  
 Lims ID: LCSD  
 Client ID:  
 Sample Type: LCSD  
 Inject. Date: 03-Mar-2021 10:23:30 ALS Bottle#: 6 Worklist Smp#: 6  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0023166-006  
 Misc. Info.: LCSD  
 Operator ID: SRK36897 Instrument ID: 16334  
 Method: \\chromfs\Lancaster\ChromData\16334\20210303-23166.b\MSV\_16334\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 03-Mar-2021 14:02:58 Calib Date: 30-Nov-2020 18:23:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I17.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1663

First Level Reviewer: knouses

Date: 03-Mar-2021 10:50:55

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	1.940	0.000	99	221198	5.00	4.37	
5 Chloromethane	50	2.135	2.136	-0.001	99	273962	5.00	4.01	
7 Butadiene	39	2.245	2.245	0.000	91	378167	5.00	4.86	
8 Vinyl chloride	62	2.251	2.251	0.000	76	246254	5.00	4.22	
9 Bromomethane	94	2.568	2.568	0.000	91	177221	5.00	4.36	
10 Chloroethane	64	2.648	2.660	-0.012	100	150566	5.00	4.26	
12 Dichlorofluoromethane	67	2.891	2.892	-0.001	97	274151	5.00	3.46	
13 Trichlorofluoromethane	101	2.952	2.952	0.000	95	320271	5.00	4.77	
15 Ethyl ether	59	3.196	3.202	-0.006	91	185309	5.00	4.68	
17 1,2-Dichloro-1,1,2-trifluoroethane	67	3.294	3.282	0.012	92	247723	5.00	4.52	
18 Acrolein	56	3.373	3.373	0.000	99	200124	37.5	35.4	
19 1,1-Dichloroethene	96	3.507	3.507	0.000	98	190168	5.00	4.69	
20 112TCTFE	101	3.544	3.544	0.000	91	194232	5.00	4.90	
21 Acetone	43	3.544	3.544	0.000	100	253809	37.5	34.8	
23 Iodomethane	142	3.696	3.696	0.000	99	343650	5.00	4.54	
22 Isopropyl alcohol	45	3.721	3.721	0.000	29	47259	37.5	30.6	
24 Ethyl bromide	108	3.727	3.727	0.000	98	154219	5.03	4.36	
25 Carbon disulfide	76	3.800	3.794	0.006	99	669087	5.00	4.47	
27 Methyl acetate	43	3.946	3.952	-0.006	98	94828	5.00	4.29	
28 3-Chloro-1-propene	41	3.977	3.977	0.000	96	327188	5.00	4.03	
29 Methylene Chloride	84	4.159	4.166	-0.007	95	219327	5.00	4.72	
* 30 t-Butyl alcohol-d10 (IS)	65	4.178	4.178	0.000	0	148787	50.0	50.0	
31 2-Methyl-2-propanol	59	4.324	4.306	0.018	100	140197	50.0	52.4	
32 Acrylonitrile	53	4.513	4.507	0.006	99	248607	25.0	26.3	
33 Methyl tert-butyl ether	73	4.568	4.568	0.000	94	556207	5.00	4.31	
34 trans-1,2-Dichloroethene	96	4.574	4.568	0.006	99	216888	5.00	4.64	
35 Hexane	57	5.001	4.995	0.006	92	318408	5.00	4.68	
37 1,1-Dichloroethane	63	5.239	5.239	0.000	96	385320	5.00	4.45	
38 Isopropyl ether	45	5.300	5.300	0.000	95	724340	5.00	4.11	
39 2-Chloro-1,3-butadiene	53	5.348	5.342	0.006	90	330269	5.00	4.19	
40 Tert-butyl ethyl ether	59	5.836	5.830	0.006	97	688567	5.00	4.28	

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	6.049	-0.006	100	496313	37.5	36.7	
42 cis-1,2-Dichloroethene	96	6.080	6.080	0.000	82	248032	5.00	4.73	
43 2,2-Dichloropropane	77	6.092	6.086	0.006	86	314044	5.00	4.32	
45 Propionitrile	54	6.147	6.147	0.000	98	131925	37.5	39.3	
48 Methacrylonitrile	67	6.354	6.360	-0.006	92	477562	37.5	38.4	
49 Chlorobromomethane	128	6.409	6.403	0.006	94	111342	5.00	4.76	
50 Tetrahydrofuran	71	6.415	6.409	0.006	75	92476	25.0	26.4	
51 Chloroform	83	6.561	6.562	-0.001	92	384179	5.00	4.60	
\$ 52 Dibromofluoromethane (Surr)	113	6.775	6.775	0.000	94	478602	10.0	10.2	
53 1,1,1-Trichloroethane	97	6.787	6.787	0.000	97	334932	5.00	4.69	
54 Cyclohexane	56	6.878	6.872	0.006	89	379525	5.00	4.62	
56 Carbon tetrachloride	117	6.988	6.988	0.000	96	292234	5.00	4.72	
57 1,1-Dichloropropene	75	7.000	7.000	0.000	99	307661	5.00	4.58	
58 Isobutyl alcohol	41	7.165	7.165	0.000	96	108209	125.0	98.3	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.232	7.232	0.000	0	99821	10.0	9.95	
60 Benzene	78	7.263	7.263	0.000	97	897137	5.00	4.53	
61 1,2-Dichloroethane	62	7.336	7.336	0.000	97	239689	5.00	4.33	
63 Tert-amyl methyl ether	73	7.452	7.452	0.000	99	636662	5.00	4.49	
* 64 Fluorobenzene (IS)	96	7.671	7.665	0.006	99	1947371	10.0	10.0	
65 n-Heptane	43	7.671	7.671	0.000	89	341681	5.00	4.45	
67 n-Butanol	56	8.049	8.043	0.006	88	223066	250.0	232.0	
68 Trichloroethene	95	8.147	8.140	0.006	98	238728	5.00	4.72	
69 Methylcyclohexane	83	8.445	8.445	0.000	89	413634	5.00	5.27	
70 1,2-Dichloropropane	63	8.476	8.482	-0.006	97	242620	5.00	4.58	
71 2-ethoxy-2-methyl butane	87	8.488	8.488	0.000	95	366840	5.00	4.74	
72 Methyl methacrylate	69	8.567	8.567	0.000	90	121386	5.00	4.79	
73 1,4-Dioxane	88	8.567	8.567	0.000	30	24771	125.0	144.8	M
74 Dibromomethane	93	8.585	8.586	-0.001	95	116562	5.00	4.75	
76 Dichlorobromomethane	83	8.823	8.823	0.000	100	282290	5.00	4.60	
77 2-Nitropropane	41	9.110	9.110	0.000	97	30687	5.00	4.27	
79 2-Chloroethyl vinyl ether	63		9.195				ND	ND	
80 1-Bromo-2-chloroethane	63	9.213	9.213	0.000	98	237952	5.00	4.19	
81 cis-1,3-Dichloropropene	75	9.378	9.372	0.006	97	345348	5.00	4.33	
82 4-Methyl-2-pentanone (MIBK)	43	9.555	9.555	0.000	96	843609	25.0	24.3	
\$ 83 Toluene-d8 (Surr)	98	9.683	9.683	0.000	93	1904590	10.0	10.1	
84 Toluene	92	9.762	9.762	0.000	98	566271	5.00	4.62	
96 trans-1,3-Dichloropropene	75	10.018	10.018	0.000	92	295160	5.00	4.46	
98 Ethyl methacrylate	69	10.085	10.079	0.006	89	258873	5.00	4.35	
99 1,1,2-Trichloroethane	97	10.225	10.225	0.000	90	174457	5.00	4.88	
100 Tetrachloroethene	166	10.311	10.311	0.000	97	264608	5.00	4.98	
101 1,3-Dichloropropane	76	10.390	10.390	0.000	89	297317	5.00	4.61	
102 2-Hexanone	43	10.445	10.445	0.000	97	611185	25.0	24.5	
104 Chlorodibromomethane	129	10.603	10.603	0.000	90	196561	5.00	4.64	
105 Ethylene Dibromide	107	10.713	10.707	0.006	100	163012	5.00	4.65	
* 106 Chlorobenzene-d5 (IS)	117	11.146	11.146	0.000	86	1413917	10.0	10.0	
107 1-Chlorohexane	91	11.152	11.152	0.000	97	326369	5.00	4.44	
108 Chlorobenzene	112	11.170	11.170	0.000	95	659304	5.00	4.83	
110 1,1,1,2-Tetrachloroethane	131	11.256	11.250	0.006	97	230854	5.00	4.76	
111 Ethylbenzene	91	11.256	11.256	0.000	98	1117660	5.00	4.62	
112 m-Xylene & p-Xylene	106	11.371	11.372	-0.001	97	878142	10.0	9.62	
113 o-Xylene	106	11.701	11.701	0.000	96	429956	5.00	4.75	
114 Styrene	104	11.719	11.713	0.006	95	733237	5.00	4.76	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
115 Bromoform	173	11.871	11.871	0.000	98	117825	5.00	4.76	
116 Isopropylbenzene	105	11.999	11.999	0.000	96	1104843	5.00	4.67	
\$ 119 4-Bromofluorobenzene (Surr)	95	12.140	12.140	0.000	91	700106	10.0	9.72	
120 1,1,2,2-Tetrachloroethane	83	12.249	12.249	0.000	93	227396	5.00	4.67	
121 Bromobenzene	156	12.262	12.256	0.006	93	286667	5.00	4.91	
122 trans-1,4-Dichloro-2-butene	53	12.274	12.274	0.000	86	148735	25.0	13.8	
123 1,2,3-Trichloropropane	110	12.292	12.292	0.000	83	58461	5.00	4.71	
124 N-Propylbenzene	91	12.329	12.329	0.000	99	1369939	5.00	4.70	
125 2-Chlorotoluene	126	12.402	12.402	0.000	97	273128	5.00	4.77	
126 1,3,5-Trimethylbenzene	105	12.463	12.463	0.000	95	974632	5.00	4.74	
127 4-Chlorotoluene	126	12.493	12.493	0.000	97	285071	5.00	4.77	
128 tert-Butylbenzene	134	12.707	12.707	0.000	93	209956	5.00	4.79	
129 Pentachloroethane	167	12.737	12.737	0.000	92	176098	5.00	4.67	
130 1,2,4-Trimethylbenzene	105	12.743	12.743	0.000	97	1006756	5.00	4.69	
131 sec-Butylbenzene	105	12.865	12.865	0.000	94	1271406	5.00	4.76	
132 1,3-Dichlorobenzene	146	12.963	12.963	0.000	98	578935	5.00	4.92	
133 4-Isopropyltoluene	119	12.975	12.975	0.000	97	1118924	5.00	4.82	
* 134 1,4-Dichlorobenzene-d4	152	13.018	13.018	0.000	96	773988	10.0	10.0	
135 1,4-Dichlorobenzene	146	13.036	13.036	0.000	95	591875	5.00	4.93	
136 1,2,3-Trimethylbenzene	120	13.048	13.048	0.000	99	463462	5.00	4.87	
137 Benzyl chloride	126	13.115	13.115	0.000	98	92907	5.00	4.42	
138 p-Diethylbenzene	119	13.170	13.170	0.000	92	665562	5.00	4.72	
139 n-Butylbenzene	92	13.261	13.261	0.000	98	570865	5.00	4.64	
140 1,2-Dichlorobenzene	146	13.298	13.298	0.000	99	542216	5.00	4.93	
142 1,2-Dibromo-3-Chloropropane	155	13.834	13.835	0.000	86	32507	5.00	4.59	
143 1,3,5-Trichlorobenzene	180	13.956	13.956	0.000	98	496060	5.00	5.03	
144 1,2,4-Trichlorobenzene	180	14.377	14.377	0.000	94	447952	5.00	4.92	
145 Hexachlorobutadiene	225	14.462	14.462	0.000	96	227437	5.00	5.09	
146 Naphthalene	128	14.560	14.560	0.000	97	799112	5.00	4.83	
147 1,2,3-Trichlorobenzene	180	14.700	14.700	0.000	96	404071	5.00	5.03	
148 2-Methylnaphthalene	142	15.316	15.316	0.000	94	529976	5.00	4.48	
160 Pentane	43		0.000				ND	ND	

## QC Flag Legend

### Processing Flags

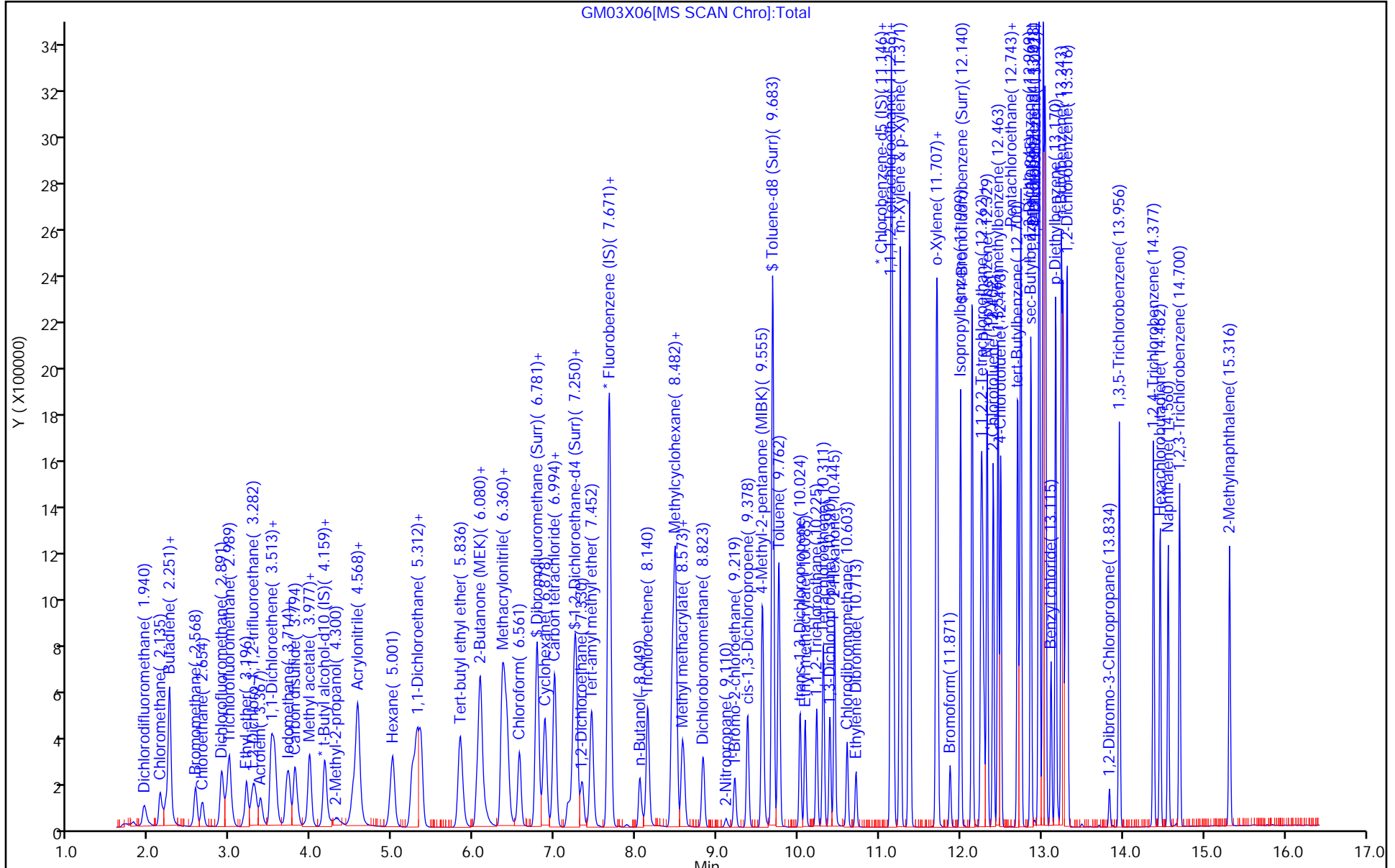
ND - Not Detected or Marked ND

### Review Flags

M - Manually Integrated

## Reagents:

MSV_Q_QVOA1_00070	Amount Added: 12.50	Units: uL	
MSV_Q_QARC_00070	Amount Added: 12.50	Units: uL	
MSV_Q_QVOA6_00068	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_00112	Amount Added: 12.50	Units: uL	
MSV_29_826ISS_00015	Amount Added: 1.00	Units: uL	Run Reagent



GM03X06[MS SCAN Chrom]:Total

Eurofins Lancaster Laboratories Env, LLC  
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\16334\20210303-23166.b\GM03X06.D  
 Lims ID: LCSD  
 Client ID:  
 Sample Type: LCSD  
 Inject. Date: 03-Mar-2021 10:23:30 ALS Bottle#: 6 Worklist Smp#: 6  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0023166-006  
 Misc. Info.: LCSD  
 Operator ID: SRK36897 Instrument ID: 16334  
 Method: \\chromfs\Lancaster\ChromData\16334\20210303-23166.b\MSV\_16334\_25mL.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 03-Mar-2021 14:02:58 Calib Date: 30-Nov-2020 18:23:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\16334\20201130-16641.b\GN30I17.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1663

First Level Reviewer: knouses Date: 03-Mar-2021 10:50:55

Compound	Amount Added	Amount Recovered	% Rec.
\$ 52 Dibromofluoromethane (Surr)	10.0	10.2	101.55
\$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	9.95	99.54
\$ 83 Toluene-d8 (Surr)	10.0	10.1	100.96
\$ 119 4-Bromofluorobenzene (Surr)	10.0	9.72	97.20

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-30627-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: HD-COD-SW-15-0/1-0 MS Lab Sample ID: 410-30627-6 MS  
 Matrix: Water Lab File ID: IM03S38.D  
 Analysis Method: 8260D Date Collected: 02/25/2021 12:10  
 Sample wt/vol: 25 (mL) Date Analyzed: 03/04/2021 00:05  
 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.: 99333 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	4.93		0.50	0.070
71-55-6	1,1,1-Trichloroethane	5.21		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	4.82		0.50	0.070
79-00-5	1,1,2-Trichloroethane	4.92		0.50	0.060
75-34-3	1,1-Dichloroethane	4.91		0.50	0.070
75-35-4	1,1-Dichloroethene	5.16		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	4.72		0.50	0.060
107-06-2	1,2-Dichloroethane	4.85		0.50	0.050
78-87-5	1,2-Dichloropropane	5.00		0.50	0.060
78-93-3	2-Butanone (MEK)	34.9		5.0	0.60
591-78-6	2-Hexanone	24.4		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	23.2		5.0	0.70
67-64-1	Acetone	31.4		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	4.97		0.50	0.050
75-25-2	Bromoform	4.80		1.0	0.30
74-83-9	Bromomethane	4.92		0.50	0.070
75-15-0	Carbon disulfide	4.75		1.0	0.060
56-23-5	Carbon tetrachloride	5.19		0.50	0.070
108-90-7	Chlorobenzene	4.88		0.50	0.060
75-00-3	Chloroethane	4.96		0.50	0.070
67-66-3	Chloroform	5.13		0.50	0.090
74-87-3	Chloromethane	4.96		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	5.21		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	4.90		0.50	0.050
124-48-1	Dibromochloromethane	4.89		0.50	0.070
100-41-4	Ethylbenzene	4.88		0.50	0.060
1634-04-4	Methyl tert-butyl ether	4.59		0.50	0.050
75-09-2	Methylene Chloride	4.78		0.50	0.070
100-42-5	Styrene	4.92		0.50	0.050
127-18-4	Tetrachloroethene	6.46		0.50	0.060
108-88-3	Toluene	4.81		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	4.83		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	4.99		0.50	0.060
79-01-6	Trichloroethene	5.53		0.50	0.060



FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-30627-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: HD-COD-SW-15-0/1-0 MS Lab Sample ID: 410-30627-6 MS  
 Matrix: Water Lab File ID: IM03S38.D  
 Analysis Method: 8260D Date Collected: 02/25/2021 12:10  
 Sample wt/vol: 25 (mL) Date Analyzed: 03/04/2021 00:05  
 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.: 99333 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-01-4	Vinyl chloride	5.21		0.50	0.10
1330-20-7	Xylenes, Total	14.7		1.0	0.15

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

Eurofins Lancaster Laboratories Env, LLC  
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S38.D  
 Lims ID: 410-30627-A-6 MS  
 Client ID: HD-COD-SW-15-0/1-0  
 Sample Type: MS  
 Inject. Date: 04-Mar-2021 00:05:30 ALS Bottle#: 15 Worklist Smp#: 16  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0023228-016  
 Misc. Info.: 410-30627-A-6 MS  
 Operator ID: MEC29284 Instrument ID: 19930  
 Method: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\8260 25ml HP31.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 04-Mar-2021 13:06:32 Calib Date: 23-Nov-2020 18:05:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23117.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1631

First Level Reviewer: knouses

Date: 04-Mar-2021 12:42:37

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.983	1.983	0.000	99	374172	5.00	4.86	
4 Chloromethane	50	2.178	2.184	-0.006	99	443029	5.00	4.96	
6 Butadiene	39	2.294	2.294	0.000	90	422372	5.00	5.54	
5 Vinyl chloride	62	2.300	2.306	-0.006	81	428089	5.00	5.21	
7 Bromomethane	94	2.629	2.629	0.000	90	292986	5.00	4.92	
8 Chloroethane	64	2.715	2.709	0.006	100	250679	5.00	4.96	
9 Dichlorofluoromethane	67	2.952	2.952	0.000	96	464518	5.00	4.10	
10 Trichlorofluoromethane	101	3.020	3.019	0.001	98	576188	5.00	5.41	
11 Ethyl ether	59	3.269	3.263	0.006	91	240595	5.01	5.05	
12 1,2-Dichloro-1,1,2-trifluoroethane	67	3.343	3.343	0.000	92	399480	5.00	5.35	
13 Acrolein	56	3.440	3.434	0.006	99	161079	37.5	19.0	
14 1,1-Dichloroethene	96	3.580	3.574	0.006	98	296642	5.00	5.16	
15 Acetone	43	3.611	3.605	0.006	100	330990	37.5	31.4	
16 112TCTFE	101	3.623	3.623	0.000	89	311715	5.00	5.13	
17 Iodomethane	142	3.782	3.775	0.007	98	521437	5.00	4.64	
18 Ethyl bromide	108	3.812	3.806	0.006	98	241640	5.04	4.62	
19 Carbon disulfide	76	3.885	3.885	0.000	99	791026	5.00	4.75	
21 Methyl acetate	43	4.032	4.025	0.007	97	125397	5.00	4.36	
22 3-Chloro-1-propene	41	4.068	4.062	0.006	94	434850	5.00	4.98	
23 Methylene Chloride	84	4.251	4.251	0.000	95	304690	5.00	4.78	
* 24 t-Butyl alcohol-d10 (IS)	65	4.288	4.275	0.013	0	193518	50.0	50.0	
25 2-Methyl-2-propanol	59	4.410	4.397	0.013	99	197761	50.0	47.9	
26 Acrylonitrile	53	4.592	4.586	0.006	98	307795	25.0	22.4	
27 Methyl tert-butyl ether	73	4.659	4.659	0.000	94	706246	5.00	4.59	
28 trans-1,2-Dichloroethene	96	4.678	4.672	0.006	99	306729	5.00	4.83	
29 Hexane	57	5.098	5.098	0.000	93	463759	5.00	5.34	
31 1,1-Dichloroethane	63	5.330	5.330	0.000	96	563764	5.00	4.91	
32 Isopropyl ether	45	5.391	5.385	0.006	94	929188	5.00	4.90	
33 2-Chloro-1,3-butadiene	53	5.446	5.440	0.006	89	472131	5.00	5.12	
34 Tert-butyl ethyl ether	59	5.921	5.921	0.000	97	856544	5.00	4.78	
36 2-Butanone (MEK)	43	6.129	6.122	0.007	99	616121	37.5	34.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
37 cis-1,2-Dichloroethene	96	6.159	6.159	0.000	81	383935	5.00	5.21	
38 2,2-Dichloropropane	77	6.177	6.177	0.000	85	480890	5.00	5.21	
40 Propionitrile	54	6.226	6.214	0.012	98	176493	37.5	34.2	
42 Methacrylonitrile	67	6.433	6.433	0.000	90	611407	37.5	33.6	
43 Chlorobromomethane	128	6.488	6.488	0.000	92	150955	5.00	4.65	
44 Tetrahydrofuran	71	6.501	6.494	0.007	86	122015	25.0	22.8	
45 Chloroform	83	6.641	6.641	0.000	93	580574	5.00	5.13	
\$ 46 Dibromofluoromethane (Surr)	113	6.854	6.854	0.000	94	535633	10.0	10.1	
47 1,1,1-Trichloroethane	97	6.872	6.866	0.006	98	528996	5.00	5.21	
48 Cyclohexane	56	6.970	6.964	0.006	89	579120	5.00	5.50	
51 1,1-Dichloropropene	75	7.080	7.074	0.006	97	457091	5.00	5.07	
50 Carbon tetrachloride	117	7.080	7.080	0.000	86	471755	5.00	5.19	
52 Isobutyl alcohol	41	7.232	7.226	0.006	94	155471	125.1	117.2	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.311	7.305	0.006	0	105624	10.0	9.84	
54 Benzene	78	7.342	7.336	0.006	97	1327877	5.00	4.86	
56 1,2-Dichloroethane	62	7.409	7.409	0.000	97	323334	5.00	4.85	
57 Tert-amyl methyl ether	73	7.531	7.525	0.006	99	799728	5.00	4.87	
* 58 Fluorobenzene (IS)	96	7.744	7.738	0.006	99	2156375	10.0	10.0	
59 n-Heptane	43	7.756	7.750	0.006	90	484334	5.00	5.55	
60 n-Butanol	56	8.104	8.092	0.012	87	248546	250.2	198.2	
61 Trichloroethene	95	8.220	8.214	0.006	97	395475	5.00	5.53	
62 Methylcyclohexane	83	8.525	8.524	0.001	94	626047	5.00	5.39	
63 1,2-Dichloropropane	63	8.549	8.549	0.000	81	336062	5.00	5.00	
64 Methyl methacrylate	69	8.628	8.628	0.000	89	157590	5.00	4.66	
65 1,4-Dioxane	88	8.640	8.628	0.012	34	28374	125.1	86.7	
66 Dibromomethane	93	8.659	8.659	0.000	94	157771	5.00	4.97	
68 Dichlorobromomethane	83	8.896	8.890	0.006	99	399607	5.00	4.97	
69 2-Nitropropane	41	9.165	9.158	0.007	98	38604	5.00	4.54	
71 2-Chloroethyl vinyl ether	63		9.250				ND	ND	
72 1-Bromo-2-chloroethane	63	9.287	9.280	0.007	98	300541	5.00	4.35	
73 cis-1,3-Dichloropropene	75	9.439	9.433	0.006	97	472945	5.00	4.90	
74 4-Methyl-2-pentanone (MIBK)	43	9.604	9.597	0.007	96	1019491	25.0	23.2	
\$ 75 Toluene-d8 (Surr)	98	9.744	9.738	0.006	93	2144094	10.0	9.88	
76 Toluene	92	9.817	9.817	0.000	98	871884	5.00	4.81	
78 trans-1,3-Dichloropropene	75	10.073	10.067	0.006	91	390037	5.00	4.99	
79 Ethyl methacrylate	69	10.128	10.128	0.000	88	325099	5.00	4.97	
80 1,1,2-Trichloroethane	97	10.274	10.274	0.000	90	237610	5.00	4.92	
81 Tetrachloroethene	166	10.366	10.366	0.000	98	566929	5.00	6.46	
82 1,3-Dichloropropane	76	10.433	10.433	0.000	88	396295	5.00	4.80	
83 2-Hexanone	43	10.481	10.481	0.000	97	731549	25.0	24.4	
85 Chlorodibromomethane	129	10.652	10.652	0.000	90	296852	5.00	4.89	
86 Ethylene Dibromide	107	10.762	10.762	0.000	100	218637	5.00	4.72	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.189	0.000	85	1661378	10.0	10.0	
88 1-Chlorohexane	91	11.195	11.195	0.000	97	500689	5.00	4.77	
90 Chlorobenzene	112	11.213	11.213	0.000	96	976544	5.00	4.88	
91 1,1,1,2-Tetrachloroethane	131	11.298	11.298	0.000	97	342953	5.00	4.93	
92 Ethylbenzene	91	11.298	11.298	0.000	98	1708791	5.00	4.88	
93 m-Xylene & p-Xylene	106	11.414	11.414	0.000	100	1349224	10.0	9.77	
94 o-Xylene	106	11.743	11.743	0.000	96	655534	5.00	4.88	
95 Styrene	104	11.756	11.756	0.000	95	1056605	5.00	4.92	
96 Bromoform	173	11.914	11.914	0.000	98	176026	5.00	4.80	
97 Isopropylbenzene	105	12.042	12.042	0.000	95	1721763	5.00	4.83	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
\$ 100 4-Bromofluorobenzene (Surr)	95	12.182	12.182	0.000	93	798782	10.0	9.94	
101 1,1,2,2-Tetrachloroethane	83	12.286	12.286	0.000	94	302936	5.00	4.82	
102 Bromobenzene	156	12.304	12.304	0.000	94	415582	5.00	4.79	
103 trans-1,4-Dichloro-2-butene	53	12.310	12.310	0.000	87	272967	25.0	19.0	
104 1,2,3-Trichloropropane	110	12.329	12.329	0.000	82	79241	5.00	4.59	
105 N-Propylbenzene	91	12.371	12.371	0.000	99	2092402	5.00	4.93	
106 2-Chlorotoluene	126	12.445	12.444	0.001	97	420497	5.00	4.84	
107 1,3,5-Trimethylbenzene	105	12.505	12.505	0.000	94	1454160	5.00	4.79	
108 4-Chlorotoluene	126	12.536	12.536	0.000	97	423751	5.00	4.83	
109 tert-Butylbenzene	134	12.749	12.743	0.006	92	330891	5.00	4.82	
110 Pentachloroethane	167	12.780	12.780	0.000	93	257560	5.00	4.74	
111 1,2,4-Trimethylbenzene	105	12.786	12.786	0.000	96	1497907	5.00	4.85	
112 sec-Butylbenzene	105	12.908	12.908	0.000	94	1961755	5.00	4.92	
113 1,3-Dichlorobenzene	146	13.011	13.011	0.000	99	827911	5.00	4.74	
114 4-Isopropyltoluene	119	13.018	13.017	0.001	97	1691538	5.00	4.98	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	95	962745	10.0	10.0	
116 1,4-Dichlorobenzene	146	13.085	13.085	0.000	95	826794	5.00	4.74	
117 1,2,3-Trimethylbenzene	120	13.091	13.091	0.000	98	646431	5.00	4.72	
118 Benzyl chloride	126	13.158	13.158	0.000	98	125883	5.00	5.30	
119 n-Butylbenzene	92	13.310	13.310	0.000	97	813700	5.00	4.90	
120 1,2-Dichlorobenzene	146	13.341	13.341	0.000	99	762025	5.00	4.79	
122 1,2-Dibromo-3-Chloropropane	155	13.883	13.883	0.000	89	45166	5.00	4.68	
123 1,3,5-Trichlorobenzene	180	14.011	14.011	0.000	98	596805	5.00	4.75	
124 1,2,4-Trichlorobenzene	180	14.432	14.432	0.000	94	469460	5.00	4.49	
125 Hexachlorobutadiene	225	14.517	14.517	0.000	96	220734	5.00	4.85	
126 Naphthalene	128	14.615	14.615	0.000	97	784446	5.00	4.01	
127 1,2,3-Trichlorobenzene	180	14.755	14.755	0.000	96	376856	5.00	4.18	
134 Isopropyl alcohol	45		0.000				ND	ND	
144 2-ethoxy-2-methyl butane	1		0.000				ND	ND	
135 p-Diethylbenzene	1		0.000				ND	ND	
137 2-Methylnaphthalene	142		0.000				ND	ND	
204 Pentane	43		0.000				ND	ND	

## QC Flag Legend

### Processing Flags

ND - Not Detected or Marked ND

### Reagents:

MSV_Q_QVOA1_00070	Amount Added: 5.38	Units: uL	
MSV_Q_QARC_00070	Amount Added: 5.38	Units: uL	
MSV_Q_QVOA6_00068	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_00112	Amount Added: 5.38	Units: uL	
MSV_31_826ISS_00004	Amount Added: 5.00	Units: uL	Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S38.D

Injection Date: 04-Mar-2021 00:05:30

Instrument ID: 19930

Operator ID: MEC29284

Lims ID: 410-30627-A-6 MS

Worklist Smp#: 16

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

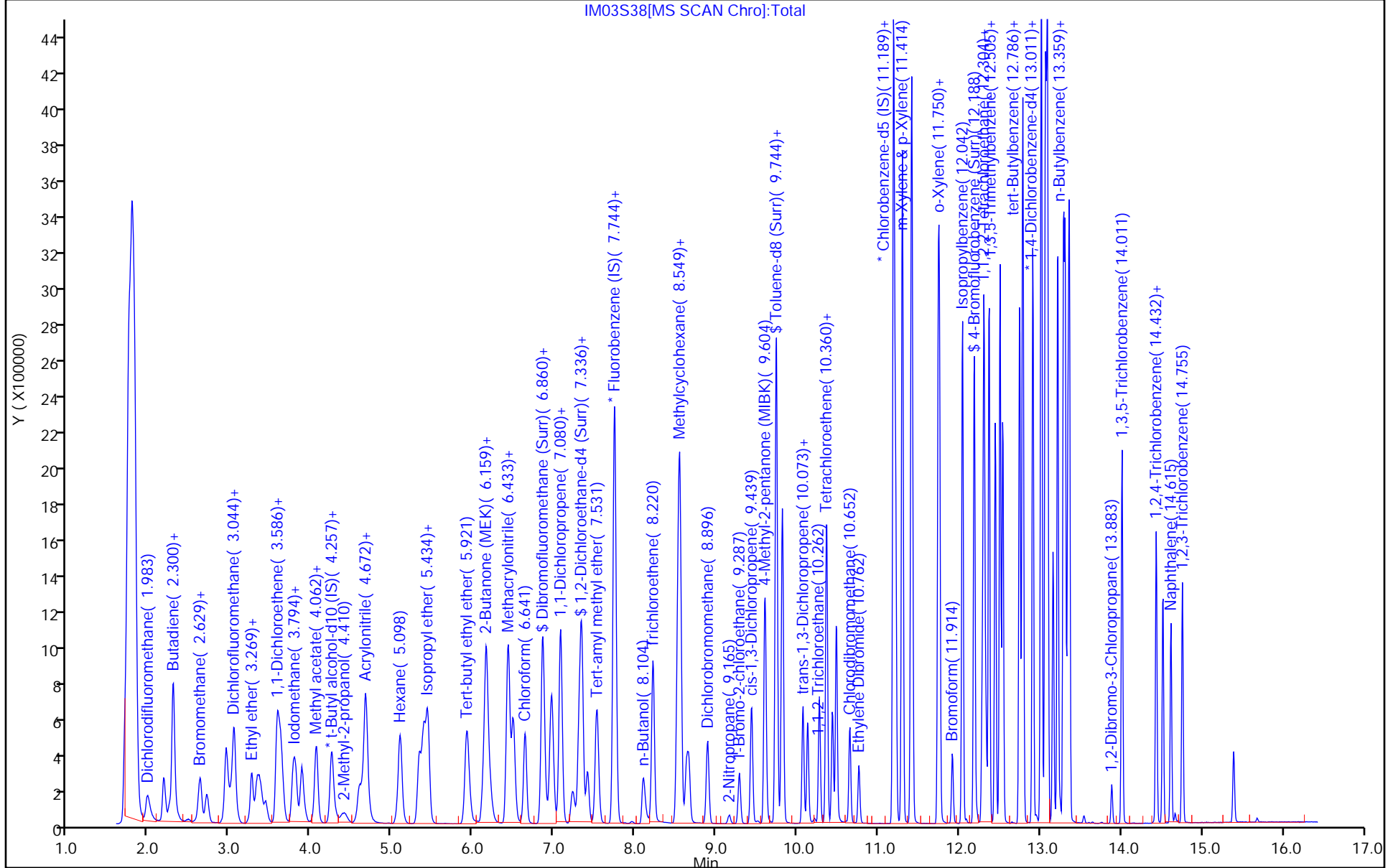
ALS Bottle#: 15

Method: 8260 25ml HP31

Limit Group: MSV - 8260C\_D

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

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



Eurofins Lancaster Laboratories Env, LLC  
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S38.D  
 Lims ID: 410-30627-A-6 MS  
 Client ID: HD-COD-SW-15-0/1-0  
 Sample Type: MS  
 Inject. Date: 04-Mar-2021 00:05:30 ALS Bottle#: 15 Worklist Smp#: 16  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0023228-016  
 Misc. Info.: 410-30627-A-6 MS  
 Operator ID: MEC29284 Instrument ID: 19930  
 Method: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\8260 25ml HP31.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 04-Mar-2021 13:06:32 Calib Date: 23-Nov-2020 18:05:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I17.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1631

First Level Reviewer: knouses

Date: 04-Mar-2021 12:42:37

Compound	Amount Added	Amount Recovered	% Rec.
\$ 46 Dibromofluoromethane (Surr)	10.0	10.1	100.60
\$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	9.84	98.39
\$ 75 Toluene-d8 (Surr)	10.0	9.88	98.82
\$ 100 4-Bromofluorobenzene (Surr)	10.0	9.94	99.41

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-30627-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: HD-COD-SW-15-0/1-0 MSD Lab Sample ID: 410-30627-6 MSD  
 Matrix: Water Lab File ID: IM03S39.D  
 Analysis Method: 8260D Date Collected: 02/25/2021 12:10  
 Sample wt/vol: 25 (mL) Date Analyzed: 03/04/2021 00:27  
 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.: 99333 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	5.00		0.50	0.070
71-55-6	1,1,1-Trichloroethane	5.24		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	4.81		0.50	0.070
79-00-5	1,1,2-Trichloroethane	4.91		0.50	0.060
75-34-3	1,1-Dichloroethane	4.93		0.50	0.070
75-35-4	1,1-Dichloroethene	5.09		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	4.77		0.50	0.060
107-06-2	1,2-Dichloroethane	4.82		0.50	0.050
78-87-5	1,2-Dichloropropane	5.06		0.50	0.060
78-93-3	2-Butanone (MEK)	34.9		5.0	0.60
591-78-6	2-Hexanone	24.3		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	23.5		5.0	0.70
67-64-1	Acetone	31.3		5.0	0.90
71-43-2	Benzene	4.89		0.50	0.050
74-97-5	Bromochloromethane	4.72		0.50	0.050
75-27-4	Bromodichloromethane	4.98		0.50	0.050
75-25-2	Bromoform	4.86		1.0	0.30
74-83-9	Bromomethane	5.07		0.50	0.070
75-15-0	Carbon disulfide	4.72		1.0	0.060
56-23-5	Carbon tetrachloride	5.24		0.50	0.070
108-90-7	Chlorobenzene	4.89		0.50	0.060
75-00-3	Chloroethane	4.97		0.50	0.070
67-66-3	Chloroform	5.11		0.50	0.090
74-87-3	Chloromethane	5.07		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	5.27		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	4.99		0.50	0.050
124-48-1	Dibromochloromethane	4.84		0.50	0.070
100-41-4	Ethylbenzene	4.91		0.50	0.060
1634-04-4	Methyl tert-butyl ether	4.67		0.50	0.050
75-09-2	Methylene Chloride	4.75		0.50	0.070
100-42-5	Styrene	4.88		0.50	0.050
127-18-4	Tetrachloroethene	6.56		0.50	0.060
108-88-3	Toluene	4.82		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	4.91		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	5.17		0.50	0.060
79-01-6	Trichloroethene	5.50		0.50	0.060

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-30627-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: HD-COD-SW-15-0/1-0 MSD Lab Sample ID: 410-30627-6 MSD  
 Matrix: Water Lab File ID: IM03S39.D  
 Analysis Method: 8260D Date Collected: 02/25/2021 12:10  
 Sample wt/vol: 25 (mL) Date Analyzed: 03/04/2021 00:27  
 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.: 99333 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-01-4	Vinyl chloride	5.34		0.50	0.10
1330-20-7	Xylenes, Total	14.6		1.0	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		80-120
460-00-4	4-Bromofluorobenzene (Surr)	99		80-120
1868-53-7	Dibromofluoromethane (Surr)	100		80-120
2037-26-5	Toluene-d8 (Surr)	98		80-120



Eurofins Lancaster Laboratories Env, LLC  
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S39.D  
 Lims ID: 410-30627-A-6 MSD  
 Client ID: HD-COD-SW-15-0/1-0  
 Sample Type: MSD  
 Inject. Date: 04-Mar-2021 00:27:30 ALS Bottle#: 16 Worklist Smp#: 17  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0023228-017  
 Misc. Info.: 410-30627-A-6 MSD  
 Operator ID: MEC29284 Instrument ID: 19930  
 Method: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\8260 25ml HP31.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 04-Mar-2021 13:06:32 Calib Date: 23-Nov-2020 18:05:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23117.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1631

First Level Reviewer: knouses

Date: 04-Mar-2021 12:43:15

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.977	1.983	-0.006	99	374199	5.00	4.92	
4 Chloromethane	50	2.172	2.184	-0.012	99	447409	5.00	5.07	
6 Butadiene	39	2.288	2.294	-0.006	90	415444	5.00	5.51	
5 Vinyl chloride	62	2.294	2.306	-0.012	98	434086	5.00	5.34	
7 Bromomethane	94	2.623	2.629	-0.006	90	298628	5.00	5.07	
8 Chloroethane	64	2.708	2.709	-0.001	100	248020	5.00	4.97	
9 Dichlorofluoromethane	67	2.946	2.952	-0.006	96	466439	5.00	4.17	
10 Trichlorofluoromethane	101	3.013	3.019	-0.006	98	574701	5.00	5.46	
11 Ethyl ether	59	3.257	3.263	-0.006	91	236885	5.01	5.03	
12 1,2-Dichloro-1,1,2-trifluoroethane	67	3.349	3.343	0.006	93	395712	5.00	5.36	
13 Acrolein	56	3.440	3.434	0.006	99	168740	37.5	19.8	
14 1,1-Dichloroethene	96	3.574	3.574	0.000	98	289526	5.00	5.09	
15 Acetone	43	3.605	3.605	0.000	100	331794	37.5	31.3	
16 112TCTFE	101	3.617	3.623	-0.006	90	308246	5.00	5.13	
17 Iodomethane	142	3.769	3.775	-0.006	99	513643	5.00	4.62	
18 Ethyl bromide	108	3.800	3.806	-0.006	98	236586	5.04	4.58	
19 Carbon disulfide	76	3.885	3.885	0.000	99	777935	5.00	4.72	
21 Methyl acetate	43	4.025	4.025	0.000	97	127561	5.00	4.41	
22 3-Chloro-1-propene	41	4.056	4.062	-0.006	94	445862	5.00	5.16	
23 Methylene Chloride	84	4.245	4.251	-0.006	91	299528	5.00	4.75	
* 24 t-Butyl alcohol-d10 (IS)	65	4.275	4.275	0.000	0	194375	50.0	50.0	
25 2-Methyl-2-propanol	59	4.397	4.397	0.000	99	193938	50.0	46.8	
26 Acrylonitrile	53	4.592	4.586	0.006	99	307824	25.0	22.3	
27 Methyl tert-butyl ether	73	4.653	4.659	-0.006	94	710728	5.00	4.67	
28 trans-1,2-Dichloroethene	96	4.672	4.672	0.000	100	307952	5.00	4.91	
29 Hexane	57	5.092	5.098	-0.006	92	468369	5.00	5.45	
31 1,1-Dichloroethane	63	5.330	5.330	0.000	96	559694	5.00	4.93	
32 Isopropyl ether	45	5.385	5.385	0.000	94	917721	5.00	4.89	
33 2-Chloro-1,3-butadiene	53	5.440	5.440	0.000	91	475748	5.00	5.22	
34 Tert-butyl ethyl ether	59	5.921	5.921	0.000	97	844333	5.00	4.77	
36 2-Butanone (MEK)	43	6.129	6.122	0.007	99	618783	37.5	34.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
37 cis-1,2-Dichloroethene	96	6.159	6.159	0.000	81	384127	5.00	5.27	
38 2,2-Dichloropropane	77	6.171	6.177	-0.006	85	476095	5.00	5.22	
40 Propionitrile	54	6.220	6.214	0.006	98	176591	37.5	34.1	
42 Methacrylonitrile	67	6.427	6.433	-0.006	91	601210	37.5	32.9	
43 Chlorobromomethane	128	6.488	6.488	0.000	92	151478	5.00	4.72	
44 Tetrahydrofuran	71	6.500	6.494	0.006	87	118649	25.0	22.1	
45 Chloroform	83	6.641	6.641	0.000	93	571232	5.00	5.11	
\$ 46 Dibromofluoromethane (Surr)	113	6.854	6.854	0.000	94	526134	10.0	10.0	
47 1,1,1-Trichloroethane	97	6.866	6.866	0.000	98	526216	5.00	5.24	
48 Cyclohexane	56	6.964	6.964	0.000	90	578937	5.00	5.56	
51 1,1-Dichloropropene	75	7.073	7.074	-0.001	97	451491	5.00	5.06	
50 Carbon tetrachloride	117	7.073	7.080	-0.007	84	471276	5.00	5.24	
52 Isobutyl alcohol	41	7.232	7.226	0.006	95	154540	125.1	115.9	
\$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.305	7.305	0.000	0	106169	10.0	10.0	
54 Benzene	78	7.336	7.336	0.000	96	1320950	5.00	4.89	
56 1,2-Dichloroethane	62	7.409	7.409	0.000	97	318133	5.00	4.82	
57 Tert-amyl methyl ether	73	7.525	7.525	0.000	99	798046	5.00	4.92	
* 58 Fluorobenzene (IS)	96	7.738	7.738	0.000	99	2131764	10.0	10.0	
59 n-Heptane	43	7.750	7.750	0.000	90	491606	5.00	5.70	
60 n-Butanol	56	8.098	8.092	0.006	87	275279	250.2	218.5	
61 Trichloroethene	95	8.220	8.214	0.006	97	388937	5.00	5.50	
62 Methylcyclohexane	83	8.524	8.524	0.000	94	641360	5.00	5.58	
63 1,2-Dichloropropane	63	8.549	8.549	0.000	94	335721	5.00	5.06	
64 Methyl methacrylate	69	8.628	8.628	0.000	91	157111	5.00	4.62	
65 1,4-Dioxane	88	8.640	8.628	0.012	35	23998	125.1	73.0	
66 Dibromomethane	93	8.659	8.659	0.000	94	154467	5.00	4.92	
68 Dichlorobromomethane	83	8.896	8.890	0.006	99	396357	5.00	4.98	
69 2-Nitropropane	41	9.158	9.158	0.000	99	38626	5.00	4.52	
71 2-Chloroethyl vinyl ether	63		9.250				ND	ND	
72 1-Bromo-2-chloroethane	63	9.286	9.280	0.006	98	308967	5.00	4.52	
73 cis-1,3-Dichloropropene	75	9.433	9.433	0.000	97	476448	5.00	4.99	
74 4-Methyl-2-pentanone (MIBK)	43	9.603	9.597	0.006	96	1034782	25.0	23.5	
\$ 75 Toluene-d8 (Surr)	98	9.738	9.738	0.000	93	2117150	10.0	9.82	
76 Toluene	92	9.817	9.817	0.000	98	868073	5.00	4.82	
78 trans-1,3-Dichloropropene	75	10.073	10.067	0.006	91	401396	5.00	5.17	
79 Ethyl methacrylate	69	10.128	10.128	0.000	88	329194	5.00	5.06	
80 1,1,2-Trichloroethane	97	10.274	10.274	0.000	90	235782	5.00	4.91	
81 Tetrachloroethene	166	10.359	10.366	-0.007	98	571065	5.00	6.56	
82 1,3-Dichloropropane	76	10.433	10.433	0.000	89	389352	5.00	4.75	
83 2-Hexanone	43	10.481	10.481	0.000	97	734121	25.0	24.3	
85 Chlorodibromomethane	129	10.652	10.652	0.000	90	291781	5.00	4.84	
86 Ethylene Dibromide	107	10.762	10.762	0.000	98	219177	5.00	4.77	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.189	0.000	84	1650321	10.0	10.0	
88 1-Chlorohexane	91	11.195	11.195	0.000	96	502386	5.00	4.81	
90 Chlorobenzene	112	11.213	11.213	0.000	96	972920	5.00	4.89	
91 1,1,1,2-Tetrachloroethane	131	11.298	11.298	0.000	95	345026	5.00	5.00	
92 Ethylbenzene	91	11.298	11.298	0.000	98	1704738	5.00	4.91	
93 m-Xylene & p-Xylene	106	11.414	11.414	0.000	100	1340089	10.0	9.77	
94 o-Xylene	106	11.743	11.743	0.000	96	646782	5.00	4.85	
95 Styrene	104	11.755	11.756	-0.001	95	1040517	5.00	4.88	
96 Bromoform	173	11.914	11.914	0.000	98	177089	5.00	4.86	
97 Isopropylbenzene	105	12.042	12.042	0.000	95	1708960	5.00	4.83	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
\$ 100 4-Bromofluorobenzene (Surr)	95	12.182	12.182	0.000	94	791429	10.0	9.92	
101 1,1,2,2-Tetrachloroethane	83	12.286	12.286	0.000	94	297403	5.00	4.81	
102 Bromobenzene	156	12.304	12.304	0.000	94	413954	5.00	4.86	
103 trans-1,4-Dichloro-2-butene	53	12.310	12.310	0.000	90	273495	25.0	18.9	
104 1,2,3-Trichloropropane	110	12.335	12.329	0.006	83	79308	5.00	4.68	
105 N-Propylbenzene	91	12.371	12.371	0.000	99	2080188	5.00	4.98	
106 2-Chlorotoluene	126	12.444	12.444	0.000	97	413935	5.00	4.85	
107 1,3,5-Trimethylbenzene	105	12.505	12.505	0.000	94	1452159	5.00	4.86	
108 4-Chlorotoluene	126	12.536	12.536	0.000	97	422861	5.00	4.91	
109 tert-Butylbenzene	134	12.743	12.743	0.000	93	330665	5.00	4.90	
110 Pentachloroethane	167	12.780	12.780	0.000	94	261596	5.00	4.89	
111 1,2,4-Trimethylbenzene	105	12.786	12.786	0.000	97	1475150	5.00	4.86	
112 sec-Butylbenzene	105	12.908	12.908	0.000	94	1953362	5.00	4.99	
113 1,3-Dichlorobenzene	146	13.011	13.011	0.000	98	814782	5.00	4.75	
114 4-Isopropyltoluene	119	13.017	13.017	0.000	97	1703282	5.00	5.10	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	96	945965	10.0	10.0	
116 1,4-Dichlorobenzene	146	13.085	13.085	-0.001	95	828215	5.00	4.83	
117 1,2,3-Trimethylbenzene	120	13.091	13.091	0.000	98	668241	5.00	4.96	
118 Benzyl chloride	126	13.158	13.158	0.000	98	121068	5.00	5.18	
119 n-Butylbenzene	92	13.310	13.310	0.000	97	810960	5.00	4.97	
120 1,2-Dichlorobenzene	146	13.341	13.341	0.000	99	750899	5.00	4.80	
122 1,2-Dibromo-3-Chloropropane	155	13.883	13.883	0.000	89	42970	5.00	4.53	
123 1,3,5-Trichlorobenzene	180	14.011	14.011	0.000	98	597991	5.00	4.84	
124 1,2,4-Trichlorobenzene	180	14.432	14.432	0.000	94	472760	5.00	4.60	
125 Hexachlorobutadiene	225	14.517	14.517	0.000	96	218646	5.00	4.89	
126 Naphthalene	128	14.615	14.615	0.000	97	807584	5.00	4.21	
127 1,2,3-Trichlorobenzene	180	14.755	14.755	0.000	96	388125	5.00	4.38	
134 Isopropyl alcohol	45		0.000				ND	ND	
144 2-ethoxy-2-methyl butane	1		0.000				ND	ND	
135 p-Diethylbenzene	1		0.000				ND	ND	
137 2-Methylnaphthalene	142		0.000				ND	ND	
204 Pentane	43		0.000				ND	ND	

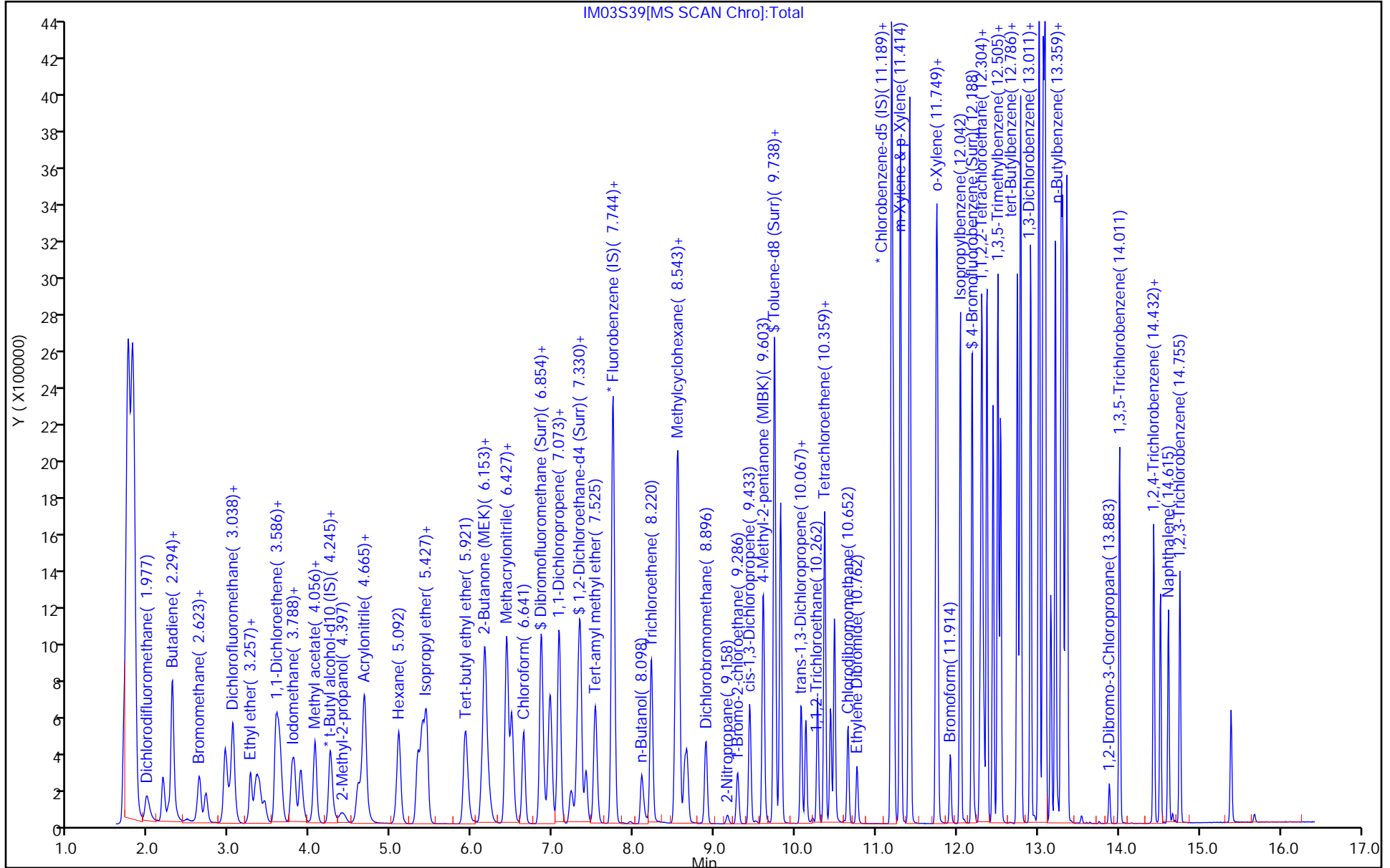
## QC Flag Legend

### Processing Flags

ND - Not Detected or Marked ND

### Reagents:

MSV_Q_QVOA1_00070	Amount Added: 5.38	Units: uL	
MSV_Q_QARC_00070	Amount Added: 5.38	Units: uL	
MSV_Q_QVOA6_00068	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_00112	Amount Added: 5.38	Units: uL	
MSV_31_826ISS_00004	Amount Added: 5.00	Units: uL	Run Reagent



Eurofins Lancaster Laboratories Env, LLC  
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\IM03S39.D  
 Lims ID: 410-30627-A-6 MSD  
 Client ID: HD-COD-SW-15-0/1-0  
 Sample Type: MSD  
 Inject. Date: 04-Mar-2021 00:27:30 ALS Bottle#: 16 Worklist Smp#: 17  
 Purge Vol: 25.000 mL Dil. Factor: 1.0000  
 Sample Info: 410-0023228-017  
 Misc. Info.: 410-30627-A-6 MSD  
 Operator ID: MEC29284 Instrument ID: 19930  
 Method: \\chromfs\Lancaster\ChromData\19930\20210303-23228.b\8260 25ml HP31.m  
 Limit Group: MSV - 8260C\_D  
 Last Update: 04-Mar-2021 13:06:32 Calib Date: 23-Nov-2020 18:05:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Lancaster\ChromData\19930\20201123-16280.b\IN23I17.D  
 Column 1 : Rxi-624Sil MS Capillary Column ( 0.25 mm) Det: MS Quad  
 Process Host: CTX1631

First Level Reviewer: knouses Date: 04-Mar-2021 12:43:15

Compound	Amount Added	Amount Recovered	% Rec.
\$ 46 Dibromofluoromethane (Surr)	10.0	10.0	99.96
\$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	10.0	100.04
\$ 75 Toluene-d8 (Surr)	10.0	9.82	98.23
\$ 100 4-Bromofluorobenzene (Surr)	10.0	9.92	99.16

## GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-30627-1

SDG No.: \_\_\_\_\_

Instrument ID: 19930 Start Date: 11/23/2020 11:57Analysis Batch Number: 69397 End Date: 11/23/2020 18:26

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 410-69397/1		11/23/2020 11:57	1	IN23T01.D	R-624SilMS 30m 0.25 (mm)
IC 410-69397/3		11/23/2020 12:45	1	IN23I01.D	R-624SilMS 30m 0.25 (mm)
ICIS 410-69397/4		11/23/2020 13:06	1	IN23I02.D	R-624SilMS 30m 0.25 (mm)
IC 410-69397/5		11/23/2020 13:28	1	IN23I03.D	R-624SilMS 30m 0.25 (mm)
IC 410-69397/6		11/23/2020 13:49	1	IN23I04.D	R-624SilMS 30m 0.25 (mm)
IC 410-69397/7		11/23/2020 14:10	1	IN23I05.D	R-624SilMS 30m 0.25 (mm)
IC 410-69397/8		11/23/2020 14:31	1	IN23I06.D	R-624SilMS 30m 0.25 (mm)
IC 410-69397/9		11/23/2020 14:53	1	IN23I07.D	R-624SilMS 30m 0.25 (mm)
ICV 410-69397/10		11/23/2020 15:14	1	IN23V01.D	R-624SilMS 30m 0.25 (mm)
IC 410-69397/12		11/23/2020 15:56	1		R-624SilMS 30m 0.25 (mm)
IC 410-69397/13		11/23/2020 16:17	1		R-624SilMS 30m 0.25 (mm)
IC 410-69397/14		11/23/2020 16:39	1		R-624SilMS 30m 0.25 (mm)
IC 410-69397/15		11/23/2020 17:01	1		R-624SilMS 30m 0.25 (mm)
IC 410-69397/16		11/23/2020 17:22	1		R-624SilMS 30m 0.25 (mm)
IC 410-69397/17		11/23/2020 17:43	1		R-624SilMS 30m 0.25 (mm)
IC 410-69397/18		11/23/2020 18:05	1		R-624SilMS 30m 0.25 (mm)
ICV 410-69397/19		11/23/2020 18:26	1		R-624SilMS 30m 0.25 (mm)

## GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-30627-1

SDG No.: \_\_\_\_\_

Instrument ID: 16334Start Date: 11/30/2020 11:46Analysis Batch Number: 70996End Date: 11/30/2020 18:45

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 410-70996/1		11/30/2020 11:46	1	GN30T01.D	R-624SilMS 30m 0.25 (mm)
IC 410-70996/3		11/30/2020 12:50	1	GN30I01.D	R-624SilMS 30m 0.25 (mm)
ICIS 410-70996/4		11/30/2020 13:12	1	GN30I02.D	R-624SilMS 30m 0.25 (mm)
IC 410-70996/5		11/30/2020 13:34	1	GN30I03.D	R-624SilMS 30m 0.25 (mm)
IC 410-70996/6		11/30/2020 13:56	1	GN30I04.D	R-624SilMS 30m 0.25 (mm)
IC 410-70996/7		11/30/2020 14:19	1	GN30I05.D	R-624SilMS 30m 0.25 (mm)
IC 410-70996/8		11/30/2020 14:41	1	GN30I06.D	R-624SilMS 30m 0.25 (mm)
IC 410-70996/9		11/30/2020 15:03	1	GN30I07.D	R-624SilMS 30m 0.25 (mm)
ICV 410-70996/10		11/30/2020 15:26	1	GN30V01.D	R-624SilMS 30m 0.25 (mm)
IC 410-70996/12		11/30/2020 16:10	1		R-624SilMS 30m 0.25 (mm)
IC 410-70996/13		11/30/2020 16:32	1		R-624SilMS 30m 0.25 (mm)
IC 410-70996/14		11/30/2020 16:54	1		R-624SilMS 30m 0.25 (mm)
IC 410-70996/15		11/30/2020 17:16	1		R-624SilMS 30m 0.25 (mm)
IC 410-70996/16		11/30/2020 17:39	1		R-624SilMS 30m 0.25 (mm)
IC 410-70996/17		11/30/2020 18:01	1		R-624SilMS 30m 0.25 (mm)
IC 410-70996/18		11/30/2020 18:23	1		R-624SilMS 30m 0.25 (mm)
ICV 410-70996/19		11/30/2020 18:45	1		R-624SilMS 30m 0.25 (mm)

## GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-30627-1

SDG No.: \_\_\_\_\_

Instrument ID: 16334Start Date: 03/03/2021 08:28Analysis Batch Number: 99025End Date: 03/03/2021 19:34

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 410-99025/1		03/03/2021 08:28	1	GM03T02.D	R-624SilMS 30m 0.25 (mm)
CCVIS 410-99025/3		03/03/2021 09:17	1	GM03X03.D	R-624SilMS 30m 0.25 (mm)
CCV 410-99025/4		03/03/2021 09:39	1		R-624SilMS 30m 0.25 (mm)
LCS 410-99025/5		03/03/2021 10:01	1	GM03X05.D	R-624SilMS 30m 0.25 (mm)
LCSD 410-99025/6		03/03/2021 10:23	1	GM03X06.D	R-624SilMS 30m 0.25 (mm)
ZZZZZ		03/03/2021 10:45	1		R-624SilMS 30m 0.25 (mm)
ZZZZZ		03/03/2021 11:07	1		R-624SilMS 30m 0.25 (mm)
ZZZZZ		03/03/2021 11:29	1		R-624SilMS 30m 0.25 (mm)
MB 410-99025/10		03/03/2021 11:51	1	GM03X10.D	R-624SilMS 30m 0.25 (mm)
ZZZZZ		03/03/2021 12:13	1		R-624SilMS 30m 0.25 (mm)
ZZZZZ		03/03/2021 12:34	1		R-624SilMS 30m 0.25 (mm)
ZZZZZ		03/03/2021 12:56	1		R-624SilMS 30m 0.25 (mm)
ZZZZZ		03/03/2021 13:18	1		R-624SilMS 30m 0.25 (mm)
ZZZZZ		03/03/2021 13:40	1		R-624SilMS 30m 0.25 (mm)
ZZZZZ		03/03/2021 14:24	10		R-624SilMS 30m 0.25 (mm)
ZZZZZ		03/03/2021 14:46	100		R-624SilMS 30m 0.25 (mm)
ZZZZZ		03/03/2021 15:08	1		R-624SilMS 30m 0.25 (mm)
410-30627-1	HD-COD-SW-6-0/1-0	03/03/2021 15:30	1	GM03X20.D	R-624SilMS 30m 0.25 (mm)
410-30627-2	HD-COD-SW-7-0/1-0	03/03/2021 15:52	1	GM03X21.D	R-624SilMS 30m 0.25 (mm)
410-30627-3	HD-COD-SW-8-0/1-0	03/03/2021 16:14	1	GM03X22.D	R-624SilMS 30m 0.25 (mm)
ZZZZZ		03/03/2021 17:00	1		R-624SilMS 30m 0.25 (mm)
ZZZZZ		03/03/2021 17:22	1		R-624SilMS 30m 0.25 (mm)
ZZZZZ		03/03/2021 17:44	200		R-624SilMS 30m 0.25 (mm)
ZZZZZ		03/03/2021 18:06	2000		R-624SilMS 30m 0.25 (mm)
ZZZZZ		03/03/2021 18:28	20		R-624SilMS 30m 0.25 (mm)
ZZZZZ		03/03/2021 18:50	200		R-624SilMS 30m 0.25 (mm)
ZZZZZ		03/03/2021 19:12	20		R-624SilMS 30m 0.25 (mm)
ZZZZZ		03/03/2021 19:34	200		R-624SilMS 30m 0.25 (mm)



GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-30627-1

SDG No.: \_\_\_\_\_

Instrument ID: 19930 Start Date: 03/03/2021 18:52

Analysis Batch Number: 99333 End Date: 03/04/2021 06:08

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 410-99333/1		03/03/2021 18:52	1	IM03T31.D	R-624SilMS 30m 0.25 (mm)
CCVIS 410-99333/3		03/03/2021 19:28	1	IM03C31.D	R-624SilMS 30m 0.25 (mm)
CCV 410-99333/4		03/03/2021 19:49	1		R-624SilMS 30m 0.25 (mm)
LCS 410-99333/5		03/03/2021 20:11	1	IM03L31.D	R-624SilMS 30m 0.25 (mm)
ZZZZZ		03/03/2021 20:32	1		R-624SilMS 30m 0.25 (mm)
ZZZZZ		03/03/2021 20:53	1		R-624SilMS 30m 0.25 (mm)
MB 410-99333/8		03/03/2021 21:15	1	IM03B31.D	R-624SilMS 30m 0.25 (mm)
410-30627-14	HD-QC1-0/1-2	03/03/2021 21:36	1	IM03S31.D	R-624SilMS 30m 0.25 (mm)
ZZZZZ		03/03/2021 21:57	1		R-624SilMS 30m 0.25 (mm)
ZZZZZ		03/03/2021 22:19	1		R-624SilMS 30m 0.25 (mm)
ZZZZZ		03/03/2021 22:40	10		R-624SilMS 30m 0.25 (mm)
410-30627-4	HD-COD-SW-9-0/1-0	03/03/2021 23:02	1	IM03S35.D	R-624SilMS 30m 0.25 (mm)
410-30627-5	HD-COD-SW-13-0/1-0	03/03/2021 23:23	1	IM03S36.D	R-624SilMS 30m 0.25 (mm)
410-30627-6	HD-COD-SW-15-0/1-0	03/03/2021 23:44	1	IM03S37.D	R-624SilMS 30m 0.25 (mm)
410-30627-6 MS	HD-COD-SW-15-0/1-0 MS	03/04/2021 00:05	1	IM03S38.D	R-624SilMS 30m 0.25 (mm)
410-30627-6 MSD	HD-COD-SW-15-0/1-0 MSD	03/04/2021 00:27	1	IM03S39.D	R-624SilMS 30m 0.25 (mm)
ZZZZZ		03/04/2021 00:48	1		R-624SilMS 30m 0.25 (mm)
ZZZZZ		03/04/2021 01:10	1		R-624SilMS 30m 0.25 (mm)
410-30627-7	HD-COD-SW-16-0/1-0	03/04/2021 01:31	1	IM03S42.D	R-624SilMS 30m 0.25 (mm)
410-30627-8	HD-COD-SW-17-0/1-0	03/04/2021 01:52	1	IM03S43.D	R-624SilMS 30m 0.25 (mm)
410-30627-9	HD-COD-SW-26-0/1-0	03/04/2021 02:13	1	IM03S44.D	R-624SilMS 30m 0.25 (mm)
410-30627-10	HD-COD-SW-27-0/1-0	03/04/2021 02:35	1	IM03S45.D	R-624SilMS 30m 0.25 (mm)
410-30627-11	HD-COD-SW-28-0/1-0	03/04/2021 02:56	1	IM03S46.D	R-624SilMS 30m 0.25 (mm)
410-30627-12	HD-COD-SW-29-0/1-0	03/04/2021 03:17	1	IM03S47.D	R-624SilMS 30m 0.25 (mm)
410-30627-13	HD-QC1-0/1-1	03/04/2021 03:38	1	IM03S48.D	R-624SilMS 30m 0.25 (mm)
ZZZZZ		03/04/2021 04:00	10		R-624SilMS 30m 0.25 (mm)
ZZZZZ		03/04/2021 04:21	100		R-624SilMS 30m 0.25 (mm)
ZZZZZ		03/04/2021 04:42	100		R-624SilMS 30m 0.25 (mm)
ZZZZZ		03/04/2021 05:04	1000		R-624SilMS 30m 0.25 (mm)
ZZZZZ		03/04/2021 05:26	1		R-624SilMS 30m 0.25 (mm)
ZZZZZ		03/04/2021 06:08	10		R-624SilMS 30m 0.25 (mm)

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-30627-1

SDG No.: \_\_\_\_\_

Batch Number: 69397 Batch Start Date: 11/23/20 11:57 Batch Analyst: Campbell, Miranda E

Batch Method: 8260D Batch End Date: \_\_\_\_\_

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MSV_31_826ISS 00003	MSV_Q_EE 00003	MSV_Q_ETBR 00005	MSV_Q_QARC 00055
BFB 410-69397/1		8260D		1 uL	1 uL				
IC 410-69397/3		8260D		25 mL	25 mL	5 uL			
ICIS 410-69397/4		8260D		25 mL	25 mL	5 uL			
IC 410-69397/5		8260D		25 mL	25 mL	5 uL			
IC 410-69397/6		8260D		25 mL	25 mL	5 uL			
IC 410-69397/7		8260D		25 mL	25 mL	5 uL			
IC 410-69397/8		8260D		25 mL	25 mL	5 uL			
IC 410-69397/9		8260D		25 mL	25 mL	5 uL			
ICV 410-69397/10		8260D		25 mL	25 mL	5 uL	12.5 uL	12.5 uL	12.5 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_Q_QVOA1 00056	MSV_Q_QVOA6 00053	MSV_QGAS_826 00092	MSV_RV1_826 00030	MSV_RV4_826 00034	MSV_RV4GAS826 00096
BFB 410-69397/1		8260D							
IC 410-69397/3		8260D					25 uL	25 uL	25 uL
ICIS 410-69397/4		8260D					10 uL	10 uL	10 uL
IC 410-69397/5		8260D					5 uL	5 uL	5 uL
IC 410-69397/6		8260D					2 uL	2 uL	2 uL
IC 410-69397/7		8260D					2 uL	2 uL	2 uL
IC 410-69397/8		8260D					2 uL	2 uL	2 uL
IC 410-69397/9		8260D					2 uL	2 uL	2 uL
ICV 410-69397/10		8260D		12.5 uL	12.5 uL	12.5 uL			

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_V_BFB 00003					
BFB 410-69397/1		8260D		1 uL					
IC 410-69397/3		8260D							
ICIS 410-69397/4		8260D							
IC 410-69397/5		8260D							
IC 410-69397/6		8260D							

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-30627-1

SDG No.: \_\_\_\_\_

Batch Number: 69397 Batch Start Date: 11/23/20 11:57 Batch Analyst: Campbell, Miranda E

Batch Method: 8260D Batch End Date: \_\_\_\_\_

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_V_BFB 00003					
IC 410-69397/7		8260D							
IC 410-69397/8		8260D							
IC 410-69397/9		8260D							
ICV 410-69397/10		8260D							

Batch Notes	

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-30627-1

SDG No.: \_\_\_\_\_

Batch Number: 70996 Batch Start Date: 11/30/20 11:46 Batch Analyst: Viray, Don V

Batch Method: 8260D Batch End Date: \_\_\_\_\_

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MSV_29 826ISS 00013	MSV_Q_EE 00003	MSV_Q_ETBR 00005	MSV_Q_QARC 00056
BFB 410-70996/1		8260D		1 uL	1 uL				
IC 410-70996/3		8260D		25 mL	25 mL	1 uL			
ICIS 410-70996/4		8260D		25 mL	25 mL	1 uL			
IC 410-70996/5		8260D		25 mL	25 mL	1 uL			
IC 410-70996/6		8260D		25 mL	25 mL	1 uL			
IC 410-70996/7		8260D		25 mL	25 mL	1 uL			
IC 410-70996/8		8260D		25 mL	25 mL	1 uL			
IC 410-70996/9		8260D		25 mL	25 mL	1 uL			
ICV 410-70996/10		8260D		25 mL	25 mL	1 uL	12.5 uL	12.5 uL	12.5 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_Q_QVOA1 00057	MSV_Q_QVOA6 00054	MSV_QGAS 826 00093	MSV_RV1 826 00031	MSV_RV4 826 00035	MSV_RV4GAS826 00097
BFB 410-70996/1		8260D							
IC 410-70996/3		8260D					25 uL	25 uL	25 uL
ICIS 410-70996/4		8260D					10 uL	10 uL	10 uL
IC 410-70996/5		8260D					5 uL	5 uL	5 uL
IC 410-70996/6		8260D					2 uL	2 uL	2 uL
IC 410-70996/7		8260D					2 uL	2 uL	2 uL
IC 410-70996/8		8260D					2 uL	2 uL	2 uL
IC 410-70996/9		8260D					2 uL	2 uL	2 uL
ICV 410-70996/10		8260D		12.5 uL	12.5 uL	12.5 uL			

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_V_BFB 00003					
BFB 410-70996/1		8260D		1 uL					
IC 410-70996/3		8260D							
ICIS 410-70996/4		8260D							
IC 410-70996/5		8260D							
IC 410-70996/6		8260D							

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-30627-1

SDG No.: \_\_\_\_\_

Batch Number: 70996 Batch Start Date: 11/30/20 11:46 Batch Analyst: Viray, Don V

Batch Method: 8260D Batch End Date: \_\_\_\_\_

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_V_BFB 00003					
IC 410-70996/7		8260D							
IC 410-70996/8		8260D							
IC 410-70996/9		8260D							
ICV 410-70996/10		8260D							

Batch Notes	

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-30627-1

SDG No.: \_\_\_\_\_

Batch Number: 99025 Batch Start Date: 03/03/21 08:28 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 410-99025/1		8260D		1 uL	1 uL				
CCVIS 410-99025/3		8260D		25 mL	25 mL				0126201F
LCS 410-99025/5		8260D		25 mL	25 mL				0126201F
LCSD 410-99025/6		8260D		25 mL	25 mL				0126201F
MB 410-99025/10		8260D		25 mL	25 mL				0126201F
410-30627-A-1	HD-COD-SW-6-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-30627-A-2	HD-COD-SW-7-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-30627-A-3	HD-COD-SW-8-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_29_826ISS 00015	MSV_Q_EE 00003	MSV_Q_ETBR 00006	MSV_Q_QARC 00070	MSV_Q_QVOA1 00070	MSV_Q_QVOA6 00068
BFB 410-99025/1		8260D							
CCVIS 410-99025/3		8260D		1 uL					
LCS 410-99025/5		8260D		1 uL	12.5 uL	12.5 uL	12.5 uL	12.5 uL	12.5 uL
LCSD 410-99025/6		8260D		1 uL	12.5 uL	12.5 uL	12.5 uL	12.5 uL	12.5 uL
MB 410-99025/10		8260D		1 uL					
410-30627-A-1	HD-COD-SW-6-0/1-0	8260D	T	1 uL					
410-30627-A-2	HD-COD-SW-7-0/1-0	8260D	T	1 uL					
410-30627-A-3	HD-COD-SW-8-0/1-0	8260D	T	1 uL					

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_QGAS 826 00112	MSV_RV1 826 00040	MSV_RV4 826 00045	MSV_RV4GAS826 00115	MSV_V_BFB 00004
BFB 410-99025/1		8260D						1 uL
CCVIS 410-99025/3		8260D			10 uL	10 uL	10 uL	
LCS 410-99025/5		8260D		12.5 uL				
LCSD 410-99025/6		8260D		12.5 uL				

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-30627-1

SDG No.: \_\_\_\_\_

Batch Number: 99025 Batch Start Date: 03/03/21 08:28 Batch Analyst: Campbell, Miranda E

Batch Method: 8260D Batch End Date: \_\_\_\_\_

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_QGAS 826 00112	MSV_RV1 826 00040	MSV_RV4 826 00045	MSV_RV4GAS826 00115	MSV_V_BFB 00004	
MB 410-99025/10		8260D							
410-30627-A-1	HD-COD-SW-6-0/1-0	8260D	T						
410-30627-A-2	HD-COD-SW-7-0/1-0	8260D	T						
410-30627-A-3	HD-COD-SW-8-0/1-0	8260D	T						

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-30627-1

SDG No.: \_\_\_\_\_

Batch Number: 99333 Batch Start Date: 03/03/21 18:52 Batch Analyst: Knouse, Shian

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 410-99333/1		8260D		1 uL	1 uL				
CCVIS 410-99333/3		8260D		25 mL	25 mL				0126201F
LCS 410-99333/5		8260D		25 mL	25 mL				0126201F
MB 410-99333/8		8260D		25 mL	25 mL				0126201F
410-30627-A-14	HD-QC1-0/1-2	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-30627-A-4	HD-COD-SW-9-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-30627-A-5	HD-COD-SW-13-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-30627-A-6	HD-COD-SW-15-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-30627-A-6 MS	HD-COD-SW-15-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-30627-A-6 MSD	HD-COD-SW-15-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-30627-A-7	HD-COD-SW-16-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-30627-A-8	HD-COD-SW-17-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-30627-A-9	HD-COD-SW-26-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-30627-A-10	HD-COD-SW-27-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-30627-A-11	HD-COD-SW-28-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-30627-A-12	HD-COD-SW-29-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-30627-A-13	HD-QC1-0/1-1	8260D	T	25 mL	25 mL	<2 SU	N	N	

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_31_826ISS 00004	MSV_Q_EE 00003	MSV_Q_ETBR 00006	MSV_Q_QARC 00070	MSV_Q_QVOA1 00070	MSV_Q_QVOA6 00068
BFB 410-99333/1		8260D							
CCVIS 410-99333/3		8260D		5 uL					
LCS 410-99333/5		8260D		5 uL	12.5 uL	12.5 uL	12.5 uL	12.5 uL	12.5 uL
MB 410-99333/8		8260D		5 uL					
410-30627-A-14	HD-QC1-0/1-2	8260D	T	5 uL					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.



GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-30627-1

SDG No.: \_\_\_\_\_

Batch Number: 99333 Batch Start Date: 03/03/21 18:52 Batch Analyst: Knouse, Shian

Batch Method: 8260D Batch End Date: \_\_\_\_\_

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_31_826ISS 00004	MSV_Q_EE 00003	MSV_Q_ETBR 00006	MSV_Q_QARC 00070	MSV_Q_QVOA1 00070	MSV_Q_QVOA6 00068
410-30627-A-4	HD-COD-SW-9-0/1-0	8260D	T	5 uL					
410-30627-A-5	HD-COD-SW-13-0/1-0	8260D	T	5 uL					
410-30627-A-6	HD-COD-SW-15-0/1-0	8260D	T	5 uL					
410-30627-A-6 MS	HD-COD-SW-15-0/1-0	8260D	T	5 uL	5.38 uL	5.38 uL	5.38 uL	5.38 uL	5.38 uL
410-30627-A-6 MSD	HD-COD-SW-15-0/1-0	8260D	T	5 uL	5.38 uL	5.38 uL	5.38 uL	5.38 uL	5.38 uL
410-30627-A-7	HD-COD-SW-16-0/1-0	8260D	T	5 uL					
410-30627-A-8	HD-COD-SW-17-0/1-0	8260D	T	5 uL					
410-30627-A-9	HD-COD-SW-26-0/1-0	8260D	T	5 uL					
410-30627-A-10	HD-COD-SW-27-0/1-0	8260D	T	5 uL					
410-30627-A-11	HD-COD-SW-28-0/1-0	8260D	T	5 uL					
410-30627-A-12	HD-COD-SW-29-0/1-0	8260D	T	5 uL					
410-30627-A-13	HD-QC1-0/1-1	8260D	T	5 uL					

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_QGAS_826 00112	MSV_RV1_826 00040	MSV_RV4_826 00045	MSV_RV4GAS826 00115	MSV_V_BFB 00004
BFB 410-99333/1		8260D						1 uL
CCVIS 410-99333/3		8260D			25 uL	25 uL	25 uL	
LCS 410-99333/5		8260D		12.5 uL				
MB 410-99333/8		8260D						
410-30627-A-14	HD-QC1-0/1-2	8260D	T					
410-30627-A-4	HD-COD-SW-9-0/1-0	8260D	T					
410-30627-A-5	HD-COD-SW-13-0/1-0	8260D	T					
410-30627-A-6	HD-COD-SW-15-0/1-0	8260D	T					
410-30627-A-6 MS	HD-COD-SW-15-0/1-0	8260D	T	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 Laboratorie Job No.: 410-30627-1

SDG No.: \_\_\_\_\_

Batch Number: 99333 Batch Start Date: 03/03/21 18:52 Batch Analyst: Knouse, Shian

Batch Method: 8260D Batch End Date: \_\_\_\_\_

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_QGAS 826 00112	MSV_RV1 826 00040	MSV_RV4 826 00045	MSV_RV4GAS826 00115	MSV_V_BFB 00004	
410-30627-A-6 MSD	HD-COD-SW-15-0/1 -0	8260D	T	5.38 uL					
410-30627-A-7	HD-COD-SW-16-0/1 -0	8260D	T						
410-30627-A-8	HD-COD-SW-17-0/1 -0	8260D	T						
410-30627-A-9	HD-COD-SW-26-0/1 -0	8260D	T						
410-30627-A-10	HD-COD-SW-27-0/1 -0	8260D	T						
410-30627-A-11	HD-COD-SW-28-0/1 -0	8260D	T						
410-30627-A-12	HD-COD-SW-29-0/1 -0	8260D	T						
410-30627-A-13	HD-QC1-0/1-1	8260D	T						

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

# Shipping and Receiving Documents



Lancaster Laboratories  
Environmental

# Environmental Analysis Request



410-30627 Chain of Custody

ly

Acct. # \_\_\_\_\_ Group # \_\_\_\_\_ Sample # \_\_\_\_\_

Client: <b>Groundwater Sciences Corporation</b>				<b>Matrix</b>			<b>Analyses Requested</b>						<b>For Lab Use Only</b>	
Project Name/#: FYNOP Monthly Surface Water		Site ID #: FYNOP, York PA		<input type="checkbox"/> Tissue	<input type="checkbox"/> Ground	<input checked="" type="checkbox"/> Surface	<b>Preservation Codes</b>						SF #: _____	
Project Manager: Chris O'Neil		P.O. #: 10012.42		<input type="checkbox"/> Potable	<input type="checkbox"/> NPDES	<input type="checkbox"/> Water							SCR #: _____	
Sampler: Casey Littlefield / Erin Peeling		PWSID #: N/A		<input type="checkbox"/> Sediment	<input type="checkbox"/> Other:	<b>Total # of Containers</b> Aqueous VOCs via 8260D (low level - 25 ml purge)							State where samples were collected: York, PA	
Phone #: (717) 901-8176 / (717) 756-1246		Quote #:		<b>Collection</b>			<b>Sample Identification</b>				<b>Remarks</b>			
				Date	Time		Grab	Composite						
HD-COD-SW-6-0/1-0		2/25/21		1105	X				X	X				
HD-COD-SW-7-0/1-0				1145	X				X	X				
HD-COD-SW-8-0/1-0				0940	X				X	X				
HD-COD-SW-9-0/1-0				1245	X				X	X				
HD-COD-SW-13-0/1-0				1000	X				X	X				
HD-COD-SW-15-0/1-0				1210	X				X	X				
HD-COD-SW-15-0/1-0 MS				1210	X				X	X				
HD-COD-SW-15-0/1-0 MSD				1210	X			X	X					
HD-COD-SW-16-0/1-0				1225	X			X	X					
HD-COD-SW-17-0/1-0				1040	X			X	X					
<b>Turnaround Time Requested (TAT)</b> (please check): Standard <input checked="" type="checkbox"/> Rush <input type="checkbox"/> (Rush TAT is subject to laboratory approval and surcharges.)				Relinquished by: <i>[Signature]</i>		Date	Time	Received by: <i>[Signature]</i>		Date	Time			
Date results are needed:				Relinquished by: <i>[Signature]</i>		2/26/21	1433	Received by: <i>[Signature]</i>		2/26/21	1433			
Rush results requested by (please check): E-Mail <input type="checkbox"/> Phone <input type="checkbox"/>				Relinquished by: <i>[Signature]</i>		2-26-21	1630	Received by: <i>[Signature]</i>						
E-mail Address:				Relinquished by:		Date	Time	Received by:		Date	Time			
Phone:				Relinquished by:		Date	Time	Received by:		Date	Time			
<b>Data Package Options</b> (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:		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 _____				Temperature upon receipt: 0.5 °C						

# Environmental Analysis Request/Chain of Custody



**Lancaster Laboratories  
Environmental**

Acct. # \_\_\_\_\_ Group # \_\_\_\_\_ Sample # \_\_\_\_\_

Client: <b>Groundwater Sciences Corporation</b>				<b>Matrix</b>			<b>Analyses Requested</b>						<b>For Lab Use Only</b>																																																															
Project Name/#: FYNOP Monthly Surface Water		Site ID #: FYNOP, York PA		<input type="checkbox"/> Tissue	<input type="checkbox"/> Ground	<input checked="" type="checkbox"/> Surface	<b>Preservation Codes</b>						SF #: _____																																																															
Project Manager: Chris O'Neil		P.O. #: 10012.42		<input type="checkbox"/> Potable	<input type="checkbox"/> NPDES	<input type="checkbox"/> Other: Trip Blank	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 5%;">H</td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> </tr> <tr> <td colspan="14" style="font-size: small;">Aqueous VOCs via 8260D (low level - 25 ml purge)</td> </tr> </table>						H															Aqueous VOCs via 8260D (low level - 25 ml purge)														SCR #: _____																																		
H																																																																												
Aqueous VOCs via 8260D (low level - 25 ml purge)																																																																												
Sampler: Casey Littlefield / Erin Peeling		PWSID #: N/A		<input type="checkbox"/> Soil	<input type="checkbox"/> Water		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="14" style="font-size: small;">Total # of Containers</td> </tr> <tr> <td colspan="14" style="font-size: small;">Soil Sediment</td> </tr> </table>						Total # of Containers														Soil Sediment														<b>Preservation Codes</b> H = HCl      T = Thiosulfate N = HNO <sub>3</sub> B = NaOH S = H <sub>2</sub> SO <sub>4</sub> P = H <sub>3</sub> PO <sub>4</sub> O = Other																																			
Total # of Containers																																																																												
Soil Sediment																																																																												
Phone #: (717) 901-8176 / (717) 756-1246		Quote #:		<input type="checkbox"/> Composite			<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="14" style="font-size: small;">Remarks</td> </tr> <tr> <td colspan="14" style="height: 100px;"> </td> </tr> </table>						Remarks																																																															
Remarks																																																																												
State where samples were collected: York, PA		For Compliance: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		<b>Collection</b>			<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> </tr> <tr> <td style="font-size: small;">Date</td> <td style="font-size: small;">Time</td> <td style="font-size: small;">Grab</td> <td style="font-size: small;">Composite</td> <td style="font-size: small;">Soil</td> <td style="font-size: small;">Water</td> <td style="font-size: small;">Other</td> <td style="font-size: small;">Total # of Containers</td> <td style="font-size: small;">Aqueous VOCs via 8260D (low level - 25 ml purge)</td> <td style="font-size: small;">H</td> <td style="font-size: small;"></td> <td style="font-size: small;"></td> <td style="font-size: small;"></td> <td style="font-size: small;"></td> <td style="font-size: small;"></td> <td style="font-size: small;"></td> </tr> </table>																					Date	Time	Grab	Composite	Soil	Water	Other	Total # of Containers	Aqueous VOCs via 8260D (low level - 25 ml purge)	H							<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> </tr> <tr> <td style="font-size: small;">Date</td> <td style="font-size: small;">Time</td> <td style="font-size: small;">Grab</td> <td style="font-size: small;">Composite</td> <td style="font-size: small;">Soil</td> <td style="font-size: small;">Water</td> <td style="font-size: small;">Other</td> <td style="font-size: small;">Total # of Containers</td> <td style="font-size: small;">Aqueous VOCs via 8260D (low level - 25 ml purge)</td> <td style="font-size: small;">H</td> <td style="font-size: small;"></td> <td style="font-size: small;"></td> <td style="font-size: small;"></td> <td style="font-size: small;"></td> <td style="font-size: small;"></td> <td style="font-size: small;"></td> </tr> </table>																	Date	Time	Grab	Composite	Soil	Water	Other	Total # of Containers	Aqueous VOCs via 8260D (low level - 25 ml purge)	H						
Date	Time	Grab	Composite	Soil	Water	Other	Total # of Containers	Aqueous VOCs via 8260D (low level - 25 ml purge)	H																																																																			
Date	Time	Grab	Composite	Soil	Water	Other	Total # of Containers	Aqueous VOCs via 8260D (low level - 25 ml purge)	H																																																																			
Sample Identification		Date		Time		Grab		Composite		Soil		Water		Other		Total # of Containers		Aqueous VOCs via 8260D (low level - 25 ml purge)		H																																																								
HD-COD-SW-26-0/1-0		2/25/21		1125		X						X				3		X																																																										
HD-COD-SW-27-0/1-0		↓		1205		X						X				3		X																																																										
HD-COD-SW-28-0/1-0		↓		1255		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:		Date		Time		Received by:		Date		Time																																																												
(Rush TAT is subject to laboratory approval and surcharges.)						<i>Chris O'Neil</i>		2/26/21		1433		<i>Erin Peeling</i>		2/26/21		1433																																																												
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"/>		<i>Chris O'Neil</i>		2-26-21		1630																																																																		
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:		Date		Time		Received by:		Date		Time																																																														
EDD Required? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>				CLP Like Deliverables, Project Specific Analyte List		Relinquished by Commercial Carrier:		Date		Time		Received by:		Date		Time																																																												
If yes, format: _____				UPS _____ FedEx _____ Other _____								<i>Erin Peeling</i>		2-26-21		1702																																																												
				Temperature upon receipt		05		°C																																																																				

# Login Sample Receipt Checklist

Client: Groundwater Sciences Corporation

Job Number: 410-30627-1

**Login Number: 30627**  
**List Number: 1**  
**Creator: Jeremiah, Cory T**

**List Source: Eurofins Lancaster Laboratories Env**

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	N/A	
The cooler's custody seal is intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable (</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV: Container Temperature is acceptable (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	False	Refer to Job Narrative for details.
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	