

## ANALYTICAL REPORT

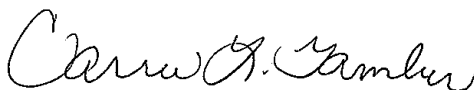
Job Number: 180-105108-1

Job Description: fYNOP

For:

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

Attention: Christopher O'Neil



Approved for release.  
Carrie L. Gamber  
Senior Project Manager  
5/11/2020 12:22 PM

---

Carrie L Gamber, Senior Project Manager  
301 Alpha Drive, Pittsburgh, PA, 15238  
(412)963-2428  
carrie.gamber@testamericainc.com  
05/11/2020

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.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins TestAmerica Project Manager.

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.

**Eurofins TestAmerica, Pittsburgh**

301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238  
Tel (412) 963-7058 Fax (412) 963-2468 [www.testamericainc.com](http://www.testamericainc.com)



# Table of Contents

Cover Title Page . . . . .	1
Data Summaries . . . . .	4
Definitions . . . . .	4
Case Narrative . . . . .	5
Detection Summary . . . . .	7
Client Sample Results . . . . .	9
Default Detection Limits . . . . .	24
Surrogate Summary . . . . .	25
QC Sample Results . . . . .	26
QC Association . . . . .	34
Chronicle . . . . .	35
Certification Summary . . . . .	38
Method Summary . . . . .	39
Sample Summary . . . . .	40
Manual Integration Summary . . . . .	41
Reagent Traceability . . . . .	75
COAs . . . . .	84
Organic Sample Data . . . . .	142
GC/MS VOA . . . . .	142
Method 8260C Low Level . . . . .	142
Method 8260C Low Level QC Summary . . . . .	143
Method 8260C Low Level Sample Data . . . . .	159
Standards Data . . . . .	778
Method 8260C Low Level ICAL Data . . . . .	778
Method 8260C Low Level CCAL Data . . . . .	824
Raw QC Data . . . . .	868

# Table of Contents

Method 8260C Low Level Tune Data .....	868
Method 8260C Low Level Blank Data .....	883
Method 8260C Low Level LCS/LCSD Data .....	936
Method 8260C Low Level MS/MSD Data .....	950
Method 8260C Low Level Run Logs .....	978
Method 8260C Low Level Prep Data .....	981
Shipping and Receiving Documents .....	985
Client Chain of Custody .....	986
Sample Receipt Checklist .....	989

# Definitions/Glossary

Client: Groundwater Sciences Corporation  
Project/Site: FYNOP

Job ID: 180-105108-1

## Qualifiers

### GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
^c	CCV Recovery is outside acceptance limits.
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate recovery exceeds control limits

## 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
CFL	Contains Free Liquid
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)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
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)

## CASE NARRATIVE

**Client: Groundwater Sciences Corporation**

**Project: fYNOP**

**Report Number: 180-105108-1**

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

### RECEIPT

The samples were received on 04/29/2020; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 2.3 C.

The container label for the following sample did not match the information listed on the Chain-of-Custody (COC): HD-COD-SW-7-0/1-0 (180-105108-2). The container labels list a sample collection time of 12:20, while the COC lists 11:20. The time on the COC was used.

The container label for the following sample did not match the information listed on the Chain-of-Custody (COC): HD-COD-SW-27-0/1-0 (180-105108-10). The container labels list a sample collection time of 12:35, while the COC lists 11:35. The time on the COC was used.

### VOLATILES

Surrogate recovery for the following sample was outside control limits: HD-COD-SW-26-0/1-0 (180-105108-9). Re-analysis was performed and surrogate recovery was again outside control limits. Both sets of data have been reported.

The laboratory control sample (LCS) for batch 314382 recovered outside control limits for the following analyte: Bromomethane. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

The laboratory control sample (LCS) for batch 180-314475 recovered outside control limits for the following analyte: Bromomethane. The analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

Chloroform and cis-1,3-Dichloropropene failed the recovery criteria low for the MS of sample HD-COD-SW-17-0/1-0 (180-105108-8) in batch 180-314475. Chloroform failed the recovery criteria low for the MSD of sample HD-COD-SW-17-0/1-0 (180-105108-8) in batch 180-314475.

Acetone, Chloroform and cis-1,3-Dichloropropene failed the recovery criteria low for the MS of sample HD-COD-SW-26-0/1-0 (180-105108-9) in batch 180-314382. Bromomethane failed the recovery criteria high. Several analytes failed the recovery criteria low for the MSD of sample HD-COD-SW-26-0/1-0 (180-105108-9) in batch 180-314382. Bromomethane failed the recovery criteria high.

The continuing calibration verification (CCV) analyzed in batch 180-314382 was outside the method criteria for the following surrogate: Dibromofluoromethane (Surrogate), low. All samples recovered within QC criteria.

The continuing calibration verification (CCV) analyzed in batch 180-314475 was outside the method criteria for the following analytes: 1,1,2,2-Tetrachloroethane, Bromoform and Bromomethane, high. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analytes is considered estimated.

The continuing calibration verification (CCV) analyzed in batch 180-314475 was outside the method criteria for the following analytes: Dichloro-difluoromethane, Chloromethane and 2-Butanone, low. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analytes is considered estimated.

The continuing calibration verification (CCV) analyzed in batch 180-314382 was outside the method criteria for the following analytes: 1,1,2,2-Tetrachloroethane, Bromoform and Bromomethane, high. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analytes is considered estimated.

The continuing calibration verification (CCV) analyzed in batch 314382 was outside the method criteria for the following analytes: Vinyl chloride, Cyclohexane, Dichloro-difluoromethane, Carbon disulfide and Chloromethane, low. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis

may proceed; however, any detection for the affected analytes is considered estimated.

# Detection Summary

Client: Groundwater Sciences Corporation  
Project/Site: fYNOP

Job ID: 180-105108-1

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

Lab Sample ID: 180-105108-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	3.9	J	5.0	3.4	ug/L	1		EPA 8260C	Total/NA

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

Lab Sample ID: 180-105108-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	3.8	J	5.0	3.4	ug/L	1		EPA 8260C	Total/NA

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

Lab Sample ID: 180-105108-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	9.6		5.0	3.4	ug/L	1		EPA 8260C	Total/NA

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

Lab Sample ID: 180-105108-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	4.9	J	5.0	3.4	ug/L	1		EPA 8260C	Total/NA

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

Lab Sample ID: 180-105108-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	4.3	J	5.0	3.4	ug/L	1		EPA 8260C	Total/NA

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

Lab Sample ID: 180-105108-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	8.9		5.0	3.4	ug/L	1		EPA 8260C	Total/NA
cis-1,2-Dichloroethene	1.2		1.0	0.71	ug/L	1		EPA 8260C	Total/NA
Trichloroethene	1.5		1.0	0.69	ug/L	1		EPA 8260C	Total/NA
Tetrachloroethene	2.8		1.0	0.47	ug/L	1		EPA 8260C	Total/NA

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

Lab Sample ID: 180-105108-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	9.4		5.0	3.4	ug/L	1		EPA 8260C	Total/NA

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

Lab Sample ID: 180-105108-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	1.2		1.0	0.47	ug/L	1		EPA 8260C	Total/NA

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

Lab Sample ID: 180-105108-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	6.5	F1	5.0	3.4	ug/L	1		EPA 8260C	Total/NA
Tetrachloroethene	1.6		1.0	0.47	ug/L	1		EPA 8260C	Total/NA
Acetone - RA	6.2		5.0	3.4	ug/L	1		EPA 8260C	Total/NA
Tetrachloroethene - RA	2.0		1.0	0.47	ug/L	1		EPA 8260C	Total/NA

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

Lab Sample ID: 180-105108-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	5.1		5.0	3.4	ug/L	1		EPA 8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Euromins TestAmerica, Pittsburgh

# Detection Summary

Client: Groundwater Sciences Corporation  
Project/Site: fYNOP

Job ID: 180-105108-1

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

## Lab Sample ID: 180-105108-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	5.7		5.0	3.4	ug/L	1		EPA 8260C	Total/NA

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

## Lab Sample ID: 180-105108-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	5.1		5.0	3.4	ug/L	1		EPA 8260C	Total/NA

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

## Lab Sample ID: 180-105108-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	4.7	J	5.0	3.4	ug/L	1		EPA 8260C	Total/NA
cis-1,2-Dichloroethene	0.74	J	1.0	0.71	ug/L	1		EPA 8260C	Total/NA
Trichloroethene	0.69	J	1.0	0.69	ug/L	1		EPA 8260C	Total/NA
Tetrachloroethene	1.4		1.0	0.47	ug/L	1		EPA 8260C	Total/NA

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

## Lab Sample ID: 180-105108-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	7.2		5.0	3.4	ug/L	1		EPA 8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Pittsburgh



# Client Sample Results

Client: Groundwater Sciences Corporation  
 Project/Site: fYNOP

Job ID: 180-105108-1

## Method: EPA 8260C - Volatile Organic Compounds (GC/MS)

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

**Date Collected: 04/28/20 11:35**

**Date Received: 04/29/20 08:45**

**Lab Sample ID: 180-105108-1**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND	^c	1.0	0.90	ug/L			05/04/20 13:06	1
Vinyl chloride	ND		1.0	0.40	ug/L			05/04/20 13:06	1
Bromomethane	ND	^c *	1.0	0.89	ug/L			05/04/20 13:06	1
Chloroethane	ND		1.0	0.90	ug/L			05/04/20 13:06	1
1,1-Dichloroethene	ND		1.0	0.55	ug/L			05/04/20 13:06	1
<b>Acetone</b>	<b>3.9</b>	<b>J</b>	5.0	3.4	ug/L			05/04/20 13:06	1
Carbon disulfide	ND		1.0	0.88	ug/L			05/04/20 13:06	1
Methylene Chloride	ND		1.0	0.89	ug/L			05/04/20 13:06	1
trans-1,2-Dichloroethene	ND		1.0	0.67	ug/L			05/04/20 13:06	1
Methyl tert-butyl ether	ND		1.0	0.59	ug/L			05/04/20 13:06	1
1,1-Dichloroethane	ND		1.0	0.31	ug/L			05/04/20 13:06	1
cis-1,2-Dichloroethene	ND		1.0	0.71	ug/L			05/04/20 13:06	1
Bromochloromethane	ND		1.0	0.63	ug/L			05/04/20 13:06	1
2-Butanone (MEK)	ND	^c	5.0	2.6	ug/L			05/04/20 13:06	1
Chloroform	ND		1.0	0.60	ug/L			05/04/20 13:06	1
1,1,1-Trichloroethane	ND		1.0	0.60	ug/L			05/04/20 13:06	1
Carbon tetrachloride	ND		1.0	0.88	ug/L			05/04/20 13:06	1
Benzene	ND		1.0	0.60	ug/L			05/04/20 13:06	1
1,2-Dichloroethane	ND		1.0	0.57	ug/L			05/04/20 13:06	1
Trichloroethene	ND		1.0	0.69	ug/L			05/04/20 13:06	1
1,2-Dichloropropane	ND		1.0	0.66	ug/L			05/04/20 13:06	1
Bromodichloromethane	ND		1.0	0.64	ug/L			05/04/20 13:06	1
cis-1,3-Dichloropropene	ND		1.0	0.59	ug/L			05/04/20 13:06	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	3.1	ug/L			05/04/20 13:06	1
Toluene	ND		1.0	0.46	ug/L			05/04/20 13:06	1
trans-1,3-Dichloropropene	ND		1.0	0.58	ug/L			05/04/20 13:06	1
1,1,2-Trichloroethane	ND		1.0	0.45	ug/L			05/04/20 13:06	1
Tetrachloroethene	ND		1.0	0.47	ug/L			05/04/20 13:06	1
2-Hexanone	ND		5.0	3.3	ug/L			05/04/20 13:06	1
Dibromochloromethane	ND		1.0	0.84	ug/L			05/04/20 13:06	1
1,2-Dibromoethane (EDB)	ND		1.0	0.50	ug/L			05/04/20 13:06	1
Chlorobenzene	ND		1.0	0.50	ug/L			05/04/20 13:06	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.57	ug/L			05/04/20 13:06	1
Ethylbenzene	ND		1.0	0.51	ug/L			05/04/20 13:06	1
Xylenes, Total	ND		2.0	0.89	ug/L			05/04/20 13:06	1
Styrene	ND		1.0	0.47	ug/L			05/04/20 13:06	1
Bromoform	ND	^c	1.0	0.98	ug/L			05/04/20 13:06	1
1,1,2,2-Tetrachloroethane	ND	^c	1.0	0.60	ug/L			05/04/20 13:06	1
Acrylonitrile	ND		20	7.8	ug/L			05/04/20 13:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	83		62 - 146		05/04/20 13:06	1
Toluene-d8 (Surr)	92		75 - 120		05/04/20 13:06	1
4-Bromofluorobenzene (Surr)	85		64 - 120		05/04/20 13:06	1
Dibromofluoromethane (Surr)	90		71 - 132		05/04/20 13:06	1

# Client Sample Results

Client: Groundwater Sciences Corporation  
 Project/Site: fYNOP

Job ID: 180-105108-1

## Method: EPA 8260C - Volatile Organic Compounds (GC/MS)

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

**Date Collected: 04/28/20 11:20**

**Date Received: 04/29/20 08:45**

**Lab Sample ID: 180-105108-2**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND	^c	1.0	0.90	ug/L			05/04/20 13:30	1
Vinyl chloride	ND		1.0	0.40	ug/L			05/04/20 13:30	1
Bromomethane	ND	^c *	1.0	0.89	ug/L			05/04/20 13:30	1
Chloroethane	ND		1.0	0.90	ug/L			05/04/20 13:30	1
1,1-Dichloroethene	ND		1.0	0.55	ug/L			05/04/20 13:30	1
<b>Acetone</b>	<b>3.8</b>	<b>J</b>	5.0	3.4	ug/L			05/04/20 13:30	1
Carbon disulfide	ND		1.0	0.88	ug/L			05/04/20 13:30	1
Methylene Chloride	ND		1.0	0.89	ug/L			05/04/20 13:30	1
trans-1,2-Dichloroethene	ND		1.0	0.67	ug/L			05/04/20 13:30	1
Methyl tert-butyl ether	ND		1.0	0.59	ug/L			05/04/20 13:30	1
1,1-Dichloroethane	ND		1.0	0.31	ug/L			05/04/20 13:30	1
cis-1,2-Dichloroethene	ND		1.0	0.71	ug/L			05/04/20 13:30	1
Bromochloromethane	ND		1.0	0.63	ug/L			05/04/20 13:30	1
2-Butanone (MEK)	ND	^c	5.0	2.6	ug/L			05/04/20 13:30	1
Chloroform	ND		1.0	0.60	ug/L			05/04/20 13:30	1
1,1,1-Trichloroethane	ND		1.0	0.60	ug/L			05/04/20 13:30	1
Carbon tetrachloride	ND		1.0	0.88	ug/L			05/04/20 13:30	1
Benzene	ND		1.0	0.60	ug/L			05/04/20 13:30	1
1,2-Dichloroethane	ND		1.0	0.57	ug/L			05/04/20 13:30	1
Trichloroethene	ND		1.0	0.69	ug/L			05/04/20 13:30	1
1,2-Dichloropropane	ND		1.0	0.66	ug/L			05/04/20 13:30	1
Bromodichloromethane	ND		1.0	0.64	ug/L			05/04/20 13:30	1
cis-1,3-Dichloropropene	ND		1.0	0.59	ug/L			05/04/20 13:30	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	3.1	ug/L			05/04/20 13:30	1
Toluene	ND		1.0	0.46	ug/L			05/04/20 13:30	1
trans-1,3-Dichloropropene	ND		1.0	0.58	ug/L			05/04/20 13:30	1
1,1,2-Trichloroethane	ND		1.0	0.45	ug/L			05/04/20 13:30	1
Tetrachloroethene	ND		1.0	0.47	ug/L			05/04/20 13:30	1
2-Hexanone	ND		5.0	3.3	ug/L			05/04/20 13:30	1
Dibromochloromethane	ND		1.0	0.84	ug/L			05/04/20 13:30	1
1,2-Dibromoethane (EDB)	ND		1.0	0.50	ug/L			05/04/20 13:30	1
Chlorobenzene	ND		1.0	0.50	ug/L			05/04/20 13:30	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.57	ug/L			05/04/20 13:30	1
Ethylbenzene	ND		1.0	0.51	ug/L			05/04/20 13:30	1
Xylenes, Total	ND		2.0	0.89	ug/L			05/04/20 13:30	1
Styrene	ND		1.0	0.47	ug/L			05/04/20 13:30	1
Bromoform	ND	^c	1.0	0.98	ug/L			05/04/20 13:30	1
1,1,2,2-Tetrachloroethane	ND	^c	1.0	0.60	ug/L			05/04/20 13:30	1
Acrylonitrile	ND		20	7.8	ug/L			05/04/20 13:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	89		62 - 146		05/04/20 13:30	1
Toluene-d8 (Surr)	90		75 - 120		05/04/20 13:30	1
4-Bromofluorobenzene (Surr)	80		64 - 120		05/04/20 13:30	1
Dibromofluoromethane (Surr)	92		71 - 132		05/04/20 13:30	1

# Client Sample Results

Client: Groundwater Sciences Corporation  
 Project/Site: fYNOP

Job ID: 180-105108-1

## Method: EPA 8260C - Volatile Organic Compounds (GC/MS)

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

**Date Collected: 04/28/20 10:20**

**Date Received: 04/29/20 08:45**

**Lab Sample ID: 180-105108-3**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND	^c	1.0	0.90	ug/L			05/01/20 22:37	1
Vinyl chloride	ND	^c	1.0	0.40	ug/L			05/01/20 22:37	1
Bromomethane	ND	^c *	1.0	0.89	ug/L			05/01/20 22:37	1
Chloroethane	ND		1.0	0.90	ug/L			05/01/20 22:37	1
1,1-Dichloroethene	ND		1.0	0.55	ug/L			05/01/20 22:37	1
<b>Acetone</b>	<b>9.6</b>		5.0	3.4	ug/L			05/01/20 22:37	1
Carbon disulfide	ND	^c	1.0	0.88	ug/L			05/01/20 22:37	1
Methylene Chloride	ND		1.0	0.89	ug/L			05/01/20 22:37	1
trans-1,2-Dichloroethene	ND		1.0	0.67	ug/L			05/01/20 22:37	1
Methyl tert-butyl ether	ND		1.0	0.59	ug/L			05/01/20 22:37	1
1,1-Dichloroethane	ND		1.0	0.31	ug/L			05/01/20 22:37	1
cis-1,2-Dichloroethene	ND		1.0	0.71	ug/L			05/01/20 22:37	1
Bromochloromethane	ND		1.0	0.63	ug/L			05/01/20 22:37	1
2-Butanone (MEK)	ND		5.0	2.6	ug/L			05/01/20 22:37	1
Chloroform	ND		1.0	0.60	ug/L			05/01/20 22:37	1
1,1,1-Trichloroethane	ND		1.0	0.60	ug/L			05/01/20 22:37	1
Carbon tetrachloride	ND		1.0	0.88	ug/L			05/01/20 22:37	1
Benzene	ND		1.0	0.60	ug/L			05/01/20 22:37	1
1,2-Dichloroethane	ND		1.0	0.57	ug/L			05/01/20 22:37	1
Trichloroethene	ND		1.0	0.69	ug/L			05/01/20 22:37	1
1,2-Dichloropropane	ND		1.0	0.66	ug/L			05/01/20 22:37	1
Bromodichloromethane	ND		1.0	0.64	ug/L			05/01/20 22:37	1
cis-1,3-Dichloropropene	ND		1.0	0.59	ug/L			05/01/20 22:37	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	3.1	ug/L			05/01/20 22:37	1
Toluene	ND		1.0	0.46	ug/L			05/01/20 22:37	1
trans-1,3-Dichloropropene	ND		1.0	0.58	ug/L			05/01/20 22:37	1
1,1,2-Trichloroethane	ND		1.0	0.45	ug/L			05/01/20 22:37	1
Tetrachloroethene	ND		1.0	0.47	ug/L			05/01/20 22:37	1
2-Hexanone	ND		5.0	3.3	ug/L			05/01/20 22:37	1
Dibromochloromethane	ND		1.0	0.84	ug/L			05/01/20 22:37	1
1,2-Dibromoethane (EDB)	ND		1.0	0.50	ug/L			05/01/20 22:37	1
Chlorobenzene	ND		1.0	0.50	ug/L			05/01/20 22:37	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.57	ug/L			05/01/20 22:37	1
Ethylbenzene	ND		1.0	0.51	ug/L			05/01/20 22:37	1
Xylenes, Total	ND		2.0	0.89	ug/L			05/01/20 22:37	1
Styrene	ND		1.0	0.47	ug/L			05/01/20 22:37	1
Bromoform	ND	^c	1.0	0.98	ug/L			05/01/20 22:37	1
1,1,2,2-Tetrachloroethane	ND	^c	1.0	0.60	ug/L			05/01/20 22:37	1
Acrylonitrile	ND		20	7.8	ug/L			05/01/20 22:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	86		62 - 146		05/01/20 22:37	1
Toluene-d8 (Surr)	76		75 - 120		05/01/20 22:37	1
4-Bromofluorobenzene (Surr)	95		64 - 120		05/01/20 22:37	1
Dibromofluoromethane (Surr)	102	^c	71 - 132		05/01/20 22:37	1

# Client Sample Results

Client: Groundwater Sciences Corporation  
 Project/Site: fYNOP

Job ID: 180-105108-1

## Method: EPA 8260C - Volatile Organic Compounds (GC/MS)

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

**Date Collected: 04/28/20 13:25**

**Date Received: 04/29/20 08:45**

**Lab Sample ID: 180-105108-4**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND	^c	1.0	0.90	ug/L			05/04/20 13:55	1
Vinyl chloride	ND		1.0	0.40	ug/L			05/04/20 13:55	1
Bromomethane	ND	^c *	1.0	0.89	ug/L			05/04/20 13:55	1
Chloroethane	ND		1.0	0.90	ug/L			05/04/20 13:55	1
1,1-Dichloroethene	ND		1.0	0.55	ug/L			05/04/20 13:55	1
<b>Acetone</b>	<b>4.9</b>	<b>J</b>	5.0	3.4	ug/L			05/04/20 13:55	1
Carbon disulfide	ND		1.0	0.88	ug/L			05/04/20 13:55	1
Methylene Chloride	ND		1.0	0.89	ug/L			05/04/20 13:55	1
trans-1,2-Dichloroethene	ND		1.0	0.67	ug/L			05/04/20 13:55	1
Methyl tert-butyl ether	ND		1.0	0.59	ug/L			05/04/20 13:55	1
1,1-Dichloroethane	ND		1.0	0.31	ug/L			05/04/20 13:55	1
cis-1,2-Dichloroethene	ND		1.0	0.71	ug/L			05/04/20 13:55	1
Bromochloromethane	ND		1.0	0.63	ug/L			05/04/20 13:55	1
2-Butanone (MEK)	ND	^c	5.0	2.6	ug/L			05/04/20 13:55	1
Chloroform	ND		1.0	0.60	ug/L			05/04/20 13:55	1
1,1,1-Trichloroethane	ND		1.0	0.60	ug/L			05/04/20 13:55	1
Carbon tetrachloride	ND		1.0	0.88	ug/L			05/04/20 13:55	1
Benzene	ND		1.0	0.60	ug/L			05/04/20 13:55	1
1,2-Dichloroethane	ND		1.0	0.57	ug/L			05/04/20 13:55	1
Trichloroethene	ND		1.0	0.69	ug/L			05/04/20 13:55	1
1,2-Dichloropropane	ND		1.0	0.66	ug/L			05/04/20 13:55	1
Bromodichloromethane	ND		1.0	0.64	ug/L			05/04/20 13:55	1
cis-1,3-Dichloropropene	ND		1.0	0.59	ug/L			05/04/20 13:55	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	3.1	ug/L			05/04/20 13:55	1
Toluene	ND		1.0	0.46	ug/L			05/04/20 13:55	1
trans-1,3-Dichloropropene	ND		1.0	0.58	ug/L			05/04/20 13:55	1
1,1,2-Trichloroethane	ND		1.0	0.45	ug/L			05/04/20 13:55	1
Tetrachloroethene	ND		1.0	0.47	ug/L			05/04/20 13:55	1
2-Hexanone	ND		5.0	3.3	ug/L			05/04/20 13:55	1
Dibromochloromethane	ND		1.0	0.84	ug/L			05/04/20 13:55	1
1,2-Dibromoethane (EDB)	ND		1.0	0.50	ug/L			05/04/20 13:55	1
Chlorobenzene	ND		1.0	0.50	ug/L			05/04/20 13:55	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.57	ug/L			05/04/20 13:55	1
Ethylbenzene	ND		1.0	0.51	ug/L			05/04/20 13:55	1
Xylenes, Total	ND		2.0	0.89	ug/L			05/04/20 13:55	1
Styrene	ND		1.0	0.47	ug/L			05/04/20 13:55	1
Bromoform	ND	^c	1.0	0.98	ug/L			05/04/20 13:55	1
1,1,2,2-Tetrachloroethane	ND	^c	1.0	0.60	ug/L			05/04/20 13:55	1
Acrylonitrile	ND		20	7.8	ug/L			05/04/20 13:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		62 - 146		05/04/20 13:55	1
Toluene-d8 (Surr)	96		75 - 120		05/04/20 13:55	1
4-Bromofluorobenzene (Surr)	79		64 - 120		05/04/20 13:55	1
Dibromofluoromethane (Surr)	99		71 - 132		05/04/20 13:55	1

# Client Sample Results

Client: Groundwater Sciences Corporation  
 Project/Site: fYNOP

Job ID: 180-105108-1

## Method: EPA 8260C - Volatile Organic Compounds (GC/MS)

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

**Date Collected: 04/28/20 10:40**

**Date Received: 04/29/20 08:45**

**Lab Sample ID: 180-105108-5**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND	^c	1.0	0.90	ug/L			05/04/20 14:20	1
Vinyl chloride	ND		1.0	0.40	ug/L			05/04/20 14:20	1
Bromomethane	ND	^c *	1.0	0.89	ug/L			05/04/20 14:20	1
Chloroethane	ND		1.0	0.90	ug/L			05/04/20 14:20	1
1,1-Dichloroethene	ND		1.0	0.55	ug/L			05/04/20 14:20	1
<b>Acetone</b>	<b>4.3</b>	<b>J</b>	5.0	3.4	ug/L			05/04/20 14:20	1
Carbon disulfide	ND		1.0	0.88	ug/L			05/04/20 14:20	1
Methylene Chloride	ND		1.0	0.89	ug/L			05/04/20 14:20	1
trans-1,2-Dichloroethene	ND		1.0	0.67	ug/L			05/04/20 14:20	1
Methyl tert-butyl ether	ND		1.0	0.59	ug/L			05/04/20 14:20	1
1,1-Dichloroethane	ND		1.0	0.31	ug/L			05/04/20 14:20	1
cis-1,2-Dichloroethene	ND		1.0	0.71	ug/L			05/04/20 14:20	1
Bromochloromethane	ND		1.0	0.63	ug/L			05/04/20 14:20	1
2-Butanone (MEK)	ND	^c	5.0	2.6	ug/L			05/04/20 14:20	1
Chloroform	ND		1.0	0.60	ug/L			05/04/20 14:20	1
1,1,1-Trichloroethane	ND		1.0	0.60	ug/L			05/04/20 14:20	1
Carbon tetrachloride	ND		1.0	0.88	ug/L			05/04/20 14:20	1
Benzene	ND		1.0	0.60	ug/L			05/04/20 14:20	1
1,2-Dichloroethane	ND		1.0	0.57	ug/L			05/04/20 14:20	1
Trichloroethene	ND		1.0	0.69	ug/L			05/04/20 14:20	1
1,2-Dichloropropane	ND		1.0	0.66	ug/L			05/04/20 14:20	1
Bromodichloromethane	ND		1.0	0.64	ug/L			05/04/20 14:20	1
cis-1,3-Dichloropropene	ND		1.0	0.59	ug/L			05/04/20 14:20	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	3.1	ug/L			05/04/20 14:20	1
Toluene	ND		1.0	0.46	ug/L			05/04/20 14:20	1
trans-1,3-Dichloropropene	ND		1.0	0.58	ug/L			05/04/20 14:20	1
1,1,2-Trichloroethane	ND		1.0	0.45	ug/L			05/04/20 14:20	1
Tetrachloroethene	ND		1.0	0.47	ug/L			05/04/20 14:20	1
2-Hexanone	ND		5.0	3.3	ug/L			05/04/20 14:20	1
Dibromochloromethane	ND		1.0	0.84	ug/L			05/04/20 14:20	1
1,2-Dibromoethane (EDB)	ND		1.0	0.50	ug/L			05/04/20 14:20	1
Chlorobenzene	ND		1.0	0.50	ug/L			05/04/20 14:20	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.57	ug/L			05/04/20 14:20	1
Ethylbenzene	ND		1.0	0.51	ug/L			05/04/20 14:20	1
Xylenes, Total	ND		2.0	0.89	ug/L			05/04/20 14:20	1
Styrene	ND		1.0	0.47	ug/L			05/04/20 14:20	1
Bromoform	ND	^c	1.0	0.98	ug/L			05/04/20 14:20	1
1,1,2,2-Tetrachloroethane	ND	^c	1.0	0.60	ug/L			05/04/20 14:20	1
Acrylonitrile	ND		20	7.8	ug/L			05/04/20 14:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	87		62 - 146		05/04/20 14:20	1
Toluene-d8 (Surr)	95		75 - 120		05/04/20 14:20	1
4-Bromofluorobenzene (Surr)	81		64 - 120		05/04/20 14:20	1
Dibromofluoromethane (Surr)	95		71 - 132		05/04/20 14:20	1

# Client Sample Results

Client: Groundwater Sciences Corporation  
 Project/Site: fYNOP

Job ID: 180-105108-1

## Method: EPA 8260C - Volatile Organic Compounds (GC/MS)

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

**Date Collected: 04/28/20 12:45**

**Date Received: 04/29/20 08:45**

**Lab Sample ID: 180-105108-6**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND	^c	1.0	0.90	ug/L			05/01/20 23:51	1
Vinyl chloride	ND	^c	1.0	0.40	ug/L			05/01/20 23:51	1
Bromomethane	ND	^c *	1.0	0.89	ug/L			05/01/20 23:51	1
Chloroethane	ND		1.0	0.90	ug/L			05/01/20 23:51	1
1,1-Dichloroethene	ND		1.0	0.55	ug/L			05/01/20 23:51	1
<b>Acetone</b>	<b>8.9</b>		5.0	3.4	ug/L			05/01/20 23:51	1
Carbon disulfide	ND	^c	1.0	0.88	ug/L			05/01/20 23:51	1
Methylene Chloride	ND		1.0	0.89	ug/L			05/01/20 23:51	1
trans-1,2-Dichloroethene	ND		1.0	0.67	ug/L			05/01/20 23:51	1
Methyl tert-butyl ether	ND		1.0	0.59	ug/L			05/01/20 23:51	1
1,1-Dichloroethane	ND		1.0	0.31	ug/L			05/01/20 23:51	1
<b>cis-1,2-Dichloroethene</b>	<b>1.2</b>		1.0	0.71	ug/L			05/01/20 23:51	1
Bromochloromethane	ND		1.0	0.63	ug/L			05/01/20 23:51	1
2-Butanone (MEK)	ND		5.0	2.6	ug/L			05/01/20 23:51	1
Chloroform	ND		1.0	0.60	ug/L			05/01/20 23:51	1
1,1,1-Trichloroethane	ND		1.0	0.60	ug/L			05/01/20 23:51	1
Carbon tetrachloride	ND		1.0	0.88	ug/L			05/01/20 23:51	1
Benzene	ND		1.0	0.60	ug/L			05/01/20 23:51	1
1,2-Dichloroethane	ND		1.0	0.57	ug/L			05/01/20 23:51	1
<b>Trichloroethene</b>	<b>1.5</b>		1.0	0.69	ug/L			05/01/20 23:51	1
1,2-Dichloropropane	ND		1.0	0.66	ug/L			05/01/20 23:51	1
Bromodichloromethane	ND		1.0	0.64	ug/L			05/01/20 23:51	1
cis-1,3-Dichloropropene	ND		1.0	0.59	ug/L			05/01/20 23:51	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	3.1	ug/L			05/01/20 23:51	1
Toluene	ND		1.0	0.46	ug/L			05/01/20 23:51	1
trans-1,3-Dichloropropene	ND		1.0	0.58	ug/L			05/01/20 23:51	1
1,1,2-Trichloroethane	ND		1.0	0.45	ug/L			05/01/20 23:51	1
<b>Tetrachloroethene</b>	<b>2.8</b>		1.0	0.47	ug/L			05/01/20 23:51	1
2-Hexanone	ND		5.0	3.3	ug/L			05/01/20 23:51	1
Dibromochloromethane	ND		1.0	0.84	ug/L			05/01/20 23:51	1
1,2-Dibromoethane (EDB)	ND		1.0	0.50	ug/L			05/01/20 23:51	1
Chlorobenzene	ND		1.0	0.50	ug/L			05/01/20 23:51	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.57	ug/L			05/01/20 23:51	1
Ethylbenzene	ND		1.0	0.51	ug/L			05/01/20 23:51	1
Xylenes, Total	ND		2.0	0.89	ug/L			05/01/20 23:51	1
Styrene	ND		1.0	0.47	ug/L			05/01/20 23:51	1
Bromoform	ND	^c	1.0	0.98	ug/L			05/01/20 23:51	1
1,1,2,2-Tetrachloroethane	ND	^c	1.0	0.60	ug/L			05/01/20 23:51	1
Acrylonitrile	ND		20	7.8	ug/L			05/01/20 23:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>1,2-Dichloroethane-d4 (Surr)</i>	87		62 - 146		05/01/20 23:51	1
<i>Toluene-d8 (Surr)</i>	75		75 - 120		05/01/20 23:51	1
<i>4-Bromofluorobenzene (Surr)</i>	92		64 - 120		05/01/20 23:51	1
<i>Dibromofluoromethane (Surr)</i>	100	^c	71 - 132		05/01/20 23:51	1

# Client Sample Results

Client: Groundwater Sciences Corporation  
 Project/Site: fYNOP

Job ID: 180-105108-1

## Method: EPA 8260C - Volatile Organic Compounds (GC/MS)

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

**Date Collected: 04/28/20 10:55**

**Date Received: 04/29/20 08:45**

**Lab Sample ID: 180-105108-7**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND	^c	1.0	0.90	ug/L			05/02/20 00:15	1
Vinyl chloride	ND	^c	1.0	0.40	ug/L			05/02/20 00:15	1
Bromomethane	ND	^c *	1.0	0.89	ug/L			05/02/20 00:15	1
Chloroethane	ND		1.0	0.90	ug/L			05/02/20 00:15	1
1,1-Dichloroethene	ND		1.0	0.55	ug/L			05/02/20 00:15	1
<b>Acetone</b>	<b>9.4</b>		5.0	3.4	ug/L			05/02/20 00:15	1
Carbon disulfide	ND	^c	1.0	0.88	ug/L			05/02/20 00:15	1
Methylene Chloride	ND		1.0	0.89	ug/L			05/02/20 00:15	1
trans-1,2-Dichloroethene	ND		1.0	0.67	ug/L			05/02/20 00:15	1
Methyl tert-butyl ether	ND		1.0	0.59	ug/L			05/02/20 00:15	1
1,1-Dichloroethane	ND		1.0	0.31	ug/L			05/02/20 00:15	1
cis-1,2-Dichloroethene	ND		1.0	0.71	ug/L			05/02/20 00:15	1
Bromochloromethane	ND		1.0	0.63	ug/L			05/02/20 00:15	1
2-Butanone (MEK)	ND		5.0	2.6	ug/L			05/02/20 00:15	1
Chloroform	ND		1.0	0.60	ug/L			05/02/20 00:15	1
1,1,1-Trichloroethane	ND		1.0	0.60	ug/L			05/02/20 00:15	1
Carbon tetrachloride	ND		1.0	0.88	ug/L			05/02/20 00:15	1
Benzene	ND		1.0	0.60	ug/L			05/02/20 00:15	1
1,2-Dichloroethane	ND		1.0	0.57	ug/L			05/02/20 00:15	1
Trichloroethene	ND		1.0	0.69	ug/L			05/02/20 00:15	1
1,2-Dichloropropane	ND		1.0	0.66	ug/L			05/02/20 00:15	1
Bromodichloromethane	ND		1.0	0.64	ug/L			05/02/20 00:15	1
cis-1,3-Dichloropropene	ND		1.0	0.59	ug/L			05/02/20 00:15	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	3.1	ug/L			05/02/20 00:15	1
Toluene	ND		1.0	0.46	ug/L			05/02/20 00:15	1
trans-1,3-Dichloropropene	ND		1.0	0.58	ug/L			05/02/20 00:15	1
1,1,2-Trichloroethane	ND		1.0	0.45	ug/L			05/02/20 00:15	1
Tetrachloroethene	ND		1.0	0.47	ug/L			05/02/20 00:15	1
2-Hexanone	ND		5.0	3.3	ug/L			05/02/20 00:15	1
Dibromochloromethane	ND		1.0	0.84	ug/L			05/02/20 00:15	1
1,2-Dibromoethane (EDB)	ND		1.0	0.50	ug/L			05/02/20 00:15	1
Chlorobenzene	ND		1.0	0.50	ug/L			05/02/20 00:15	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.57	ug/L			05/02/20 00:15	1
Ethylbenzene	ND		1.0	0.51	ug/L			05/02/20 00:15	1
Xylenes, Total	ND		2.0	0.89	ug/L			05/02/20 00:15	1
Styrene	ND		1.0	0.47	ug/L			05/02/20 00:15	1
Bromoform	ND	^c	1.0	0.98	ug/L			05/02/20 00:15	1
1,1,2,2-Tetrachloroethane	ND	^c	1.0	0.60	ug/L			05/02/20 00:15	1
Acrylonitrile	ND		20	7.8	ug/L			05/02/20 00:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	86		62 - 146		05/02/20 00:15	1
Toluene-d8 (Surr)	75		75 - 120		05/02/20 00:15	1
4-Bromofluorobenzene (Surr)	92		64 - 120		05/02/20 00:15	1
Dibromofluoromethane (Surr)	102	^c	71 - 132		05/02/20 00:15	1

# Client Sample Results

Client: Groundwater Sciences Corporation  
 Project/Site: fYNOP

Job ID: 180-105108-1

## Method: EPA 8260C - Volatile Organic Compounds (GC/MS)

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

**Date Collected: 04/28/20 11:10**

**Date Received: 04/29/20 08:45**

**Lab Sample ID: 180-105108-8**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND	^c	1.0	0.90	ug/L			05/04/20 11:04	1
Vinyl chloride	ND		1.0	0.40	ug/L			05/04/20 11:04	1
Bromomethane	ND	^c *	1.0	0.89	ug/L			05/04/20 11:04	1
Chloroethane	ND		1.0	0.90	ug/L			05/04/20 11:04	1
1,1-Dichloroethene	ND		1.0	0.55	ug/L			05/04/20 11:04	1
Acetone	ND		5.0	3.4	ug/L			05/04/20 11:04	1
Carbon disulfide	ND		1.0	0.88	ug/L			05/04/20 11:04	1
Methylene Chloride	ND		1.0	0.89	ug/L			05/04/20 11:04	1
trans-1,2-Dichloroethene	ND		1.0	0.67	ug/L			05/04/20 11:04	1
Methyl tert-butyl ether	ND		1.0	0.59	ug/L			05/04/20 11:04	1
1,1-Dichloroethane	ND		1.0	0.31	ug/L			05/04/20 11:04	1
cis-1,2-Dichloroethene	ND		1.0	0.71	ug/L			05/04/20 11:04	1
Bromochloromethane	ND		1.0	0.63	ug/L			05/04/20 11:04	1
2-Butanone (MEK)	ND	^c	5.0	2.6	ug/L			05/04/20 11:04	1
Chloroform	ND	F1	1.0	0.60	ug/L			05/04/20 11:04	1
1,1,1-Trichloroethane	ND		1.0	0.60	ug/L			05/04/20 11:04	1
Carbon tetrachloride	ND		1.0	0.88	ug/L			05/04/20 11:04	1
Benzene	ND		1.0	0.60	ug/L			05/04/20 11:04	1
1,2-Dichloroethane	ND		1.0	0.57	ug/L			05/04/20 11:04	1
Trichloroethene	ND		1.0	0.69	ug/L			05/04/20 11:04	1
1,2-Dichloropropane	ND		1.0	0.66	ug/L			05/04/20 11:04	1
Bromodichloromethane	ND		1.0	0.64	ug/L			05/04/20 11:04	1
cis-1,3-Dichloropropene	ND	F1	1.0	0.59	ug/L			05/04/20 11:04	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	3.1	ug/L			05/04/20 11:04	1
Toluene	ND		1.0	0.46	ug/L			05/04/20 11:04	1
trans-1,3-Dichloropropene	ND		1.0	0.58	ug/L			05/04/20 11:04	1
1,1,2-Trichloroethane	ND		1.0	0.45	ug/L			05/04/20 11:04	1
<b>Tetrachloroethene</b>	<b>1.2</b>		1.0	0.47	ug/L			05/04/20 11:04	1
2-Hexanone	ND		5.0	3.3	ug/L			05/04/20 11:04	1
Dibromochloromethane	ND		1.0	0.84	ug/L			05/04/20 11:04	1
1,2-Dibromoethane (EDB)	ND		1.0	0.50	ug/L			05/04/20 11:04	1
Chlorobenzene	ND		1.0	0.50	ug/L			05/04/20 11:04	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.57	ug/L			05/04/20 11:04	1
Ethylbenzene	ND		1.0	0.51	ug/L			05/04/20 11:04	1
Xylenes, Total	ND		2.0	0.89	ug/L			05/04/20 11:04	1
Styrene	ND		1.0	0.47	ug/L			05/04/20 11:04	1
Bromoform	ND	^c	1.0	0.98	ug/L			05/04/20 11:04	1
1,1,2,2-Tetrachloroethane	ND	^c	1.0	0.60	ug/L			05/04/20 11:04	1
Acrylonitrile	ND		20	7.8	ug/L			05/04/20 11:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	79		62 - 146		05/04/20 11:04	1
Toluene-d8 (Surr)	103		75 - 120		05/04/20 11:04	1
4-Bromofluorobenzene (Surr)	79		64 - 120		05/04/20 11:04	1
Dibromofluoromethane (Surr)	89		71 - 132		05/04/20 11:04	1



# Client Sample Results

Client: Groundwater Sciences Corporation  
 Project/Site: fYNOP

Job ID: 180-105108-1

## Method: EPA 8260C - Volatile Organic Compounds (GC/MS)

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

**Date Collected: 04/28/20 11:55**

**Date Received: 04/29/20 08:45**

**Lab Sample ID: 180-105108-9**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND	^c	1.0	0.90	ug/L			05/01/20 17:43	1
Vinyl chloride	ND	^c	1.0	0.40	ug/L			05/01/20 17:43	1
Bromomethane	ND	^c * F1	1.0	0.89	ug/L			05/01/20 17:43	1
Chloroethane	ND		1.0	0.90	ug/L			05/01/20 17:43	1
1,1-Dichloroethene	ND	F1	1.0	0.55	ug/L			05/01/20 17:43	1
<b>Acetone</b>	<b>6.5</b>	<b>F1</b>	5.0	3.4	ug/L			05/01/20 17:43	1
Carbon disulfide	ND	^c F1	1.0	0.88	ug/L			05/01/20 17:43	1
Methylene Chloride	ND		1.0	0.89	ug/L			05/01/20 17:43	1
trans-1,2-Dichloroethene	ND	F1	1.0	0.67	ug/L			05/01/20 17:43	1
Methyl tert-butyl ether	ND		1.0	0.59	ug/L			05/01/20 17:43	1
1,1-Dichloroethane	ND		1.0	0.31	ug/L			05/01/20 17:43	1
cis-1,2-Dichloroethene	ND		1.0	0.71	ug/L			05/01/20 17:43	1
Bromochloromethane	ND		1.0	0.63	ug/L			05/01/20 17:43	1
2-Butanone (MEK)	ND		5.0	2.6	ug/L			05/01/20 17:43	1
Chloroform	ND	F1	1.0	0.60	ug/L			05/01/20 17:43	1
1,1,1-Trichloroethane	ND		1.0	0.60	ug/L			05/01/20 17:43	1
Carbon tetrachloride	ND		1.0	0.88	ug/L			05/01/20 17:43	1
Benzene	ND		1.0	0.60	ug/L			05/01/20 17:43	1
1,2-Dichloroethane	ND		1.0	0.57	ug/L			05/01/20 17:43	1
Trichloroethene	ND	F1	1.0	0.69	ug/L			05/01/20 17:43	1
1,2-Dichloropropane	ND		1.0	0.66	ug/L			05/01/20 17:43	1
Bromodichloromethane	ND		1.0	0.64	ug/L			05/01/20 17:43	1
cis-1,3-Dichloropropene	ND	F1	1.0	0.59	ug/L			05/01/20 17:43	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	3.1	ug/L			05/01/20 17:43	1
Toluene	ND		1.0	0.46	ug/L			05/01/20 17:43	1
trans-1,3-Dichloropropene	ND		1.0	0.58	ug/L			05/01/20 17:43	1
1,1,2-Trichloroethane	ND		1.0	0.45	ug/L			05/01/20 17:43	1
<b>Tetrachloroethene</b>	<b>1.6</b>		1.0	0.47	ug/L			05/01/20 17:43	1
2-Hexanone	ND		5.0	3.3	ug/L			05/01/20 17:43	1
Dibromochloromethane	ND		1.0	0.84	ug/L			05/01/20 17:43	1
1,2-Dibromoethane (EDB)	ND		1.0	0.50	ug/L			05/01/20 17:43	1
Chlorobenzene	ND		1.0	0.50	ug/L			05/01/20 17:43	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.57	ug/L			05/01/20 17:43	1
Ethylbenzene	ND		1.0	0.51	ug/L			05/01/20 17:43	1
Xylenes, Total	ND		2.0	0.89	ug/L			05/01/20 17:43	1
Styrene	ND		1.0	0.47	ug/L			05/01/20 17:43	1
Bromoform	ND	^c	1.0	0.98	ug/L			05/01/20 17:43	1
1,1,2,2-Tetrachloroethane	ND	^c	1.0	0.60	ug/L			05/01/20 17:43	1
Acrylonitrile	ND		20	7.8	ug/L			05/01/20 17:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	83		62 - 146		05/01/20 17:43	1
Toluene-d8 (Surr)	71	X	75 - 120		05/01/20 17:43	1
4-Bromofluorobenzene (Surr)	88		64 - 120		05/01/20 17:43	1
Dibromofluoromethane (Surr)	99	^c	71 - 132		05/01/20 17:43	1

# Client Sample Results

Client: Groundwater Sciences Corporation  
 Project/Site: fYNOP

Job ID: 180-105108-1

## Method: EPA 8260C - Volatile Organic Compounds (GC/MS)

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

**Date Collected: 04/28/20 11:35**

**Date Received: 04/29/20 08:45**

**Lab Sample ID: 180-105108-10**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND	^c	1.0	0.90	ug/L			05/04/20 14:45	1
Vinyl chloride	ND		1.0	0.40	ug/L			05/04/20 14:45	1
Bromomethane	ND	^c *	1.0	0.89	ug/L			05/04/20 14:45	1
Chloroethane	ND		1.0	0.90	ug/L			05/04/20 14:45	1
1,1-Dichloroethene	ND		1.0	0.55	ug/L			05/04/20 14:45	1
<b>Acetone</b>	<b>5.1</b>		5.0	3.4	ug/L			05/04/20 14:45	1
Carbon disulfide	ND		1.0	0.88	ug/L			05/04/20 14:45	1
Methylene Chloride	ND		1.0	0.89	ug/L			05/04/20 14:45	1
trans-1,2-Dichloroethene	ND		1.0	0.67	ug/L			05/04/20 14:45	1
Methyl tert-butyl ether	ND		1.0	0.59	ug/L			05/04/20 14:45	1
1,1-Dichloroethane	ND		1.0	0.31	ug/L			05/04/20 14:45	1
cis-1,2-Dichloroethene	ND		1.0	0.71	ug/L			05/04/20 14:45	1
Bromochloromethane	ND		1.0	0.63	ug/L			05/04/20 14:45	1
2-Butanone (MEK)	ND	^c	5.0	2.6	ug/L			05/04/20 14:45	1
Chloroform	ND		1.0	0.60	ug/L			05/04/20 14:45	1
1,1,1-Trichloroethane	ND		1.0	0.60	ug/L			05/04/20 14:45	1
Carbon tetrachloride	ND		1.0	0.88	ug/L			05/04/20 14:45	1
Benzene	ND		1.0	0.60	ug/L			05/04/20 14:45	1
1,2-Dichloroethane	ND		1.0	0.57	ug/L			05/04/20 14:45	1
Trichloroethene	ND		1.0	0.69	ug/L			05/04/20 14:45	1
1,2-Dichloropropane	ND		1.0	0.66	ug/L			05/04/20 14:45	1
Bromodichloromethane	ND		1.0	0.64	ug/L			05/04/20 14:45	1
cis-1,3-Dichloropropene	ND		1.0	0.59	ug/L			05/04/20 14:45	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	3.1	ug/L			05/04/20 14:45	1
Toluene	ND		1.0	0.46	ug/L			05/04/20 14:45	1
trans-1,3-Dichloropropene	ND		1.0	0.58	ug/L			05/04/20 14:45	1
1,1,2-Trichloroethane	ND		1.0	0.45	ug/L			05/04/20 14:45	1
Tetrachloroethene	ND		1.0	0.47	ug/L			05/04/20 14:45	1
2-Hexanone	ND		5.0	3.3	ug/L			05/04/20 14:45	1
Dibromochloromethane	ND		1.0	0.84	ug/L			05/04/20 14:45	1
1,2-Dibromoethane (EDB)	ND		1.0	0.50	ug/L			05/04/20 14:45	1
Chlorobenzene	ND		1.0	0.50	ug/L			05/04/20 14:45	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.57	ug/L			05/04/20 14:45	1
Ethylbenzene	ND		1.0	0.51	ug/L			05/04/20 14:45	1
Xylenes, Total	ND		2.0	0.89	ug/L			05/04/20 14:45	1
Styrene	ND		1.0	0.47	ug/L			05/04/20 14:45	1
Bromoform	ND	^c	1.0	0.98	ug/L			05/04/20 14:45	1
1,1,2,2-Tetrachloroethane	ND	^c	1.0	0.60	ug/L			05/04/20 14:45	1
Acrylonitrile	ND		20	7.8	ug/L			05/04/20 14:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		62 - 146		05/04/20 14:45	1
Toluene-d8 (Surr)	98		75 - 120		05/04/20 14:45	1
4-Bromofluorobenzene (Surr)	83		64 - 120		05/04/20 14:45	1
Dibromofluoromethane (Surr)	104		71 - 132		05/04/20 14:45	1

# Client Sample Results

Client: Groundwater Sciences Corporation  
 Project/Site: fYNOP

Job ID: 180-105108-1

## Method: EPA 8260C - Volatile Organic Compounds (GC/MS)

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

**Date Collected: 04/28/20 13:35**

**Date Received: 04/29/20 08:45**

**Lab Sample ID: 180-105108-11**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND	^c	1.0	0.90	ug/L			05/04/20 15:09	1
Vinyl chloride	ND		1.0	0.40	ug/L			05/04/20 15:09	1
Bromomethane	ND	^c *	1.0	0.89	ug/L			05/04/20 15:09	1
Chloroethane	ND		1.0	0.90	ug/L			05/04/20 15:09	1
1,1-Dichloroethene	ND		1.0	0.55	ug/L			05/04/20 15:09	1
<b>Acetone</b>	<b>5.7</b>		5.0	3.4	ug/L			05/04/20 15:09	1
Carbon disulfide	ND		1.0	0.88	ug/L			05/04/20 15:09	1
Methylene Chloride	ND		1.0	0.89	ug/L			05/04/20 15:09	1
trans-1,2-Dichloroethene	ND		1.0	0.67	ug/L			05/04/20 15:09	1
Methyl tert-butyl ether	ND		1.0	0.59	ug/L			05/04/20 15:09	1
1,1-Dichloroethane	ND		1.0	0.31	ug/L			05/04/20 15:09	1
cis-1,2-Dichloroethene	ND		1.0	0.71	ug/L			05/04/20 15:09	1
Bromochloromethane	ND		1.0	0.63	ug/L			05/04/20 15:09	1
2-Butanone (MEK)	ND	^c	5.0	2.6	ug/L			05/04/20 15:09	1
Chloroform	ND		1.0	0.60	ug/L			05/04/20 15:09	1
1,1,1-Trichloroethane	ND		1.0	0.60	ug/L			05/04/20 15:09	1
Carbon tetrachloride	ND		1.0	0.88	ug/L			05/04/20 15:09	1
Benzene	ND		1.0	0.60	ug/L			05/04/20 15:09	1
1,2-Dichloroethane	ND		1.0	0.57	ug/L			05/04/20 15:09	1
Trichloroethene	ND		1.0	0.69	ug/L			05/04/20 15:09	1
1,2-Dichloropropane	ND		1.0	0.66	ug/L			05/04/20 15:09	1
Bromodichloromethane	ND		1.0	0.64	ug/L			05/04/20 15:09	1
cis-1,3-Dichloropropene	ND		1.0	0.59	ug/L			05/04/20 15:09	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	3.1	ug/L			05/04/20 15:09	1
Toluene	ND		1.0	0.46	ug/L			05/04/20 15:09	1
trans-1,3-Dichloropropene	ND		1.0	0.58	ug/L			05/04/20 15:09	1
1,1,2-Trichloroethane	ND		1.0	0.45	ug/L			05/04/20 15:09	1
Tetrachloroethene	ND		1.0	0.47	ug/L			05/04/20 15:09	1
2-Hexanone	ND		5.0	3.3	ug/L			05/04/20 15:09	1
Dibromochloromethane	ND		1.0	0.84	ug/L			05/04/20 15:09	1
1,2-Dibromoethane (EDB)	ND		1.0	0.50	ug/L			05/04/20 15:09	1
Chlorobenzene	ND		1.0	0.50	ug/L			05/04/20 15:09	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.57	ug/L			05/04/20 15:09	1
Ethylbenzene	ND		1.0	0.51	ug/L			05/04/20 15:09	1
Xylenes, Total	ND		2.0	0.89	ug/L			05/04/20 15:09	1
Styrene	ND		1.0	0.47	ug/L			05/04/20 15:09	1
Bromoform	ND	^c	1.0	0.98	ug/L			05/04/20 15:09	1
1,1,2,2-Tetrachloroethane	ND	^c	1.0	0.60	ug/L			05/04/20 15:09	1
Acrylonitrile	ND		20	7.8	ug/L			05/04/20 15:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		62 - 146		05/04/20 15:09	1
Toluene-d8 (Surr)	99		75 - 120		05/04/20 15:09	1
4-Bromofluorobenzene (Surr)	83		64 - 120		05/04/20 15:09	1
Dibromofluoromethane (Surr)	99		71 - 132		05/04/20 15:09	1

# Client Sample Results

Client: Groundwater Sciences Corporation  
 Project/Site: fYNOP

Job ID: 180-105108-1

## Method: EPA 8260C - Volatile Organic Compounds (GC/MS)

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

**Date Collected: 04/28/20 10:05**

**Date Received: 04/29/20 08:45**

**Lab Sample ID: 180-105108-12**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND	^c	1.0	0.90	ug/L			05/04/20 15:33	1
Vinyl chloride	ND		1.0	0.40	ug/L			05/04/20 15:33	1
Bromomethane	ND	^c *	1.0	0.89	ug/L			05/04/20 15:33	1
Chloroethane	ND		1.0	0.90	ug/L			05/04/20 15:33	1
1,1-Dichloroethene	ND		1.0	0.55	ug/L			05/04/20 15:33	1
<b>Acetone</b>	<b>5.1</b>		5.0	3.4	ug/L			05/04/20 15:33	1
Carbon disulfide	ND		1.0	0.88	ug/L			05/04/20 15:33	1
Methylene Chloride	ND		1.0	0.89	ug/L			05/04/20 15:33	1
trans-1,2-Dichloroethene	ND		1.0	0.67	ug/L			05/04/20 15:33	1
Methyl tert-butyl ether	ND		1.0	0.59	ug/L			05/04/20 15:33	1
1,1-Dichloroethane	ND		1.0	0.31	ug/L			05/04/20 15:33	1
cis-1,2-Dichloroethene	ND		1.0	0.71	ug/L			05/04/20 15:33	1
Bromochloromethane	ND		1.0	0.63	ug/L			05/04/20 15:33	1
2-Butanone (MEK)	ND	^c	5.0	2.6	ug/L			05/04/20 15:33	1
Chloroform	ND		1.0	0.60	ug/L			05/04/20 15:33	1
1,1,1-Trichloroethane	ND		1.0	0.60	ug/L			05/04/20 15:33	1
Carbon tetrachloride	ND		1.0	0.88	ug/L			05/04/20 15:33	1
Benzene	ND		1.0	0.60	ug/L			05/04/20 15:33	1
1,2-Dichloroethane	ND		1.0	0.57	ug/L			05/04/20 15:33	1
Trichloroethene	ND		1.0	0.69	ug/L			05/04/20 15:33	1
1,2-Dichloropropane	ND		1.0	0.66	ug/L			05/04/20 15:33	1
Bromodichloromethane	ND		1.0	0.64	ug/L			05/04/20 15:33	1
cis-1,3-Dichloropropene	ND		1.0	0.59	ug/L			05/04/20 15:33	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	3.1	ug/L			05/04/20 15:33	1
Toluene	ND		1.0	0.46	ug/L			05/04/20 15:33	1
trans-1,3-Dichloropropene	ND		1.0	0.58	ug/L			05/04/20 15:33	1
1,1,2-Trichloroethane	ND		1.0	0.45	ug/L			05/04/20 15:33	1
Tetrachloroethene	ND		1.0	0.47	ug/L			05/04/20 15:33	1
2-Hexanone	ND		5.0	3.3	ug/L			05/04/20 15:33	1
Dibromochloromethane	ND		1.0	0.84	ug/L			05/04/20 15:33	1
1,2-Dibromoethane (EDB)	ND		1.0	0.50	ug/L			05/04/20 15:33	1
Chlorobenzene	ND		1.0	0.50	ug/L			05/04/20 15:33	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.57	ug/L			05/04/20 15:33	1
Ethylbenzene	ND		1.0	0.51	ug/L			05/04/20 15:33	1
Xylenes, Total	ND		2.0	0.89	ug/L			05/04/20 15:33	1
Styrene	ND		1.0	0.47	ug/L			05/04/20 15:33	1
Bromoform	ND	^c	1.0	0.98	ug/L			05/04/20 15:33	1
1,1,2,2-Tetrachloroethane	ND	^c	1.0	0.60	ug/L			05/04/20 15:33	1
Acrylonitrile	ND		20	7.8	ug/L			05/04/20 15:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		62 - 146		05/04/20 15:33	1
Toluene-d8 (Surr)	99		75 - 120		05/04/20 15:33	1
4-Bromofluorobenzene (Surr)	90		64 - 120		05/04/20 15:33	1
Dibromofluoromethane (Surr)	100		71 - 132		05/04/20 15:33	1

# Client Sample Results

Client: Groundwater Sciences Corporation  
 Project/Site: fYNOP

Job ID: 180-105108-1

## Method: EPA 8260C - Volatile Organic Compounds (GC/MS)

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

**Date Collected: 04/28/20 12:00**

**Date Received: 04/29/20 08:45**

**Lab Sample ID: 180-105108-13**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND	^c	1.0	0.90	ug/L			05/04/20 15:58	1
Vinyl chloride	ND		1.0	0.40	ug/L			05/04/20 15:58	1
Bromomethane	ND	^c *	1.0	0.89	ug/L			05/04/20 15:58	1
Chloroethane	ND		1.0	0.90	ug/L			05/04/20 15:58	1
1,1-Dichloroethene	ND		1.0	0.55	ug/L			05/04/20 15:58	1
<b>Acetone</b>	<b>4.7</b>	<b>J</b>	5.0	3.4	ug/L			05/04/20 15:58	1
Carbon disulfide	ND		1.0	0.88	ug/L			05/04/20 15:58	1
Methylene Chloride	ND		1.0	0.89	ug/L			05/04/20 15:58	1
trans-1,2-Dichloroethene	ND		1.0	0.67	ug/L			05/04/20 15:58	1
Methyl tert-butyl ether	ND		1.0	0.59	ug/L			05/04/20 15:58	1
1,1-Dichloroethane	ND		1.0	0.31	ug/L			05/04/20 15:58	1
<b>cis-1,2-Dichloroethene</b>	<b>0.74</b>	<b>J</b>	1.0	0.71	ug/L			05/04/20 15:58	1
Bromochloromethane	ND		1.0	0.63	ug/L			05/04/20 15:58	1
2-Butanone (MEK)	ND	^c	5.0	2.6	ug/L			05/04/20 15:58	1
Chloroform	ND		1.0	0.60	ug/L			05/04/20 15:58	1
1,1,1-Trichloroethane	ND		1.0	0.60	ug/L			05/04/20 15:58	1
Carbon tetrachloride	ND		1.0	0.88	ug/L			05/04/20 15:58	1
Benzene	ND		1.0	0.60	ug/L			05/04/20 15:58	1
1,2-Dichloroethane	ND		1.0	0.57	ug/L			05/04/20 15:58	1
<b>Trichloroethene</b>	<b>0.69</b>	<b>J</b>	1.0	0.69	ug/L			05/04/20 15:58	1
1,2-Dichloropropane	ND		1.0	0.66	ug/L			05/04/20 15:58	1
Bromodichloromethane	ND		1.0	0.64	ug/L			05/04/20 15:58	1
cis-1,3-Dichloropropene	ND		1.0	0.59	ug/L			05/04/20 15:58	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	3.1	ug/L			05/04/20 15:58	1
Toluene	ND		1.0	0.46	ug/L			05/04/20 15:58	1
trans-1,3-Dichloropropene	ND		1.0	0.58	ug/L			05/04/20 15:58	1
1,1,2-Trichloroethane	ND		1.0	0.45	ug/L			05/04/20 15:58	1
<b>Tetrachloroethene</b>	<b>1.4</b>		1.0	0.47	ug/L			05/04/20 15:58	1
2-Hexanone	ND		5.0	3.3	ug/L			05/04/20 15:58	1
Dibromochloromethane	ND		1.0	0.84	ug/L			05/04/20 15:58	1
1,2-Dibromoethane (EDB)	ND		1.0	0.50	ug/L			05/04/20 15:58	1
Chlorobenzene	ND		1.0	0.50	ug/L			05/04/20 15:58	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.57	ug/L			05/04/20 15:58	1
Ethylbenzene	ND		1.0	0.51	ug/L			05/04/20 15:58	1
Xylenes, Total	ND		2.0	0.89	ug/L			05/04/20 15:58	1
Styrene	ND		1.0	0.47	ug/L			05/04/20 15:58	1
Bromoform	ND	^c	1.0	0.98	ug/L			05/04/20 15:58	1
1,1,2,2-Tetrachloroethane	ND	^c	1.0	0.60	ug/L			05/04/20 15:58	1
Acrylonitrile	ND		20	7.8	ug/L			05/04/20 15:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>1,2-Dichloroethane-d4 (Surr)</i>	91		62 - 146		05/04/20 15:58	1
<i>Toluene-d8 (Surr)</i>	88		75 - 120		05/04/20 15:58	1
<i>4-Bromofluorobenzene (Surr)</i>	75		64 - 120		05/04/20 15:58	1
<i>Dibromofluoromethane (Surr)</i>	94		71 - 132		05/04/20 15:58	1

# Client Sample Results

Client: Groundwater Sciences Corporation  
 Project/Site: fYNOP

Job ID: 180-105108-1

## Method: EPA 8260C - Volatile Organic Compounds (GC/MS)

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

**Date Collected: 04/28/20 00:00**

**Date Received: 04/29/20 08:45**

**Lab Sample ID: 180-105108-14**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND	^c	1.0	0.90	ug/L			05/01/20 18:07	1
Vinyl chloride	ND	^c	1.0	0.40	ug/L			05/01/20 18:07	1
Bromomethane	ND	^c *	1.0	0.89	ug/L			05/01/20 18:07	1
Chloroethane	ND		1.0	0.90	ug/L			05/01/20 18:07	1
1,1-Dichloroethene	ND		1.0	0.55	ug/L			05/01/20 18:07	1
<b>Acetone</b>	<b>7.2</b>		5.0	3.4	ug/L			05/01/20 18:07	1
Carbon disulfide	ND	^c	1.0	0.88	ug/L			05/01/20 18:07	1
Methylene Chloride	ND		1.0	0.89	ug/L			05/01/20 18:07	1
trans-1,2-Dichloroethene	ND		1.0	0.67	ug/L			05/01/20 18:07	1
Methyl tert-butyl ether	ND		1.0	0.59	ug/L			05/01/20 18:07	1
1,1-Dichloroethane	ND		1.0	0.31	ug/L			05/01/20 18:07	1
cis-1,2-Dichloroethene	ND		1.0	0.71	ug/L			05/01/20 18:07	1
Bromochloromethane	ND		1.0	0.63	ug/L			05/01/20 18:07	1
2-Butanone (MEK)	ND		5.0	2.6	ug/L			05/01/20 18:07	1
Chloroform	ND		1.0	0.60	ug/L			05/01/20 18:07	1
1,1,1-Trichloroethane	ND		1.0	0.60	ug/L			05/01/20 18:07	1
Carbon tetrachloride	ND		1.0	0.88	ug/L			05/01/20 18:07	1
Benzene	ND		1.0	0.60	ug/L			05/01/20 18:07	1
1,2-Dichloroethane	ND		1.0	0.57	ug/L			05/01/20 18:07	1
Trichloroethene	ND		1.0	0.69	ug/L			05/01/20 18:07	1
1,2-Dichloropropane	ND		1.0	0.66	ug/L			05/01/20 18:07	1
Bromodichloromethane	ND		1.0	0.64	ug/L			05/01/20 18:07	1
cis-1,3-Dichloropropene	ND		1.0	0.59	ug/L			05/01/20 18:07	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	3.1	ug/L			05/01/20 18:07	1
Toluene	ND		1.0	0.46	ug/L			05/01/20 18:07	1
trans-1,3-Dichloropropene	ND		1.0	0.58	ug/L			05/01/20 18:07	1
1,1,2-Trichloroethane	ND		1.0	0.45	ug/L			05/01/20 18:07	1
Tetrachloroethene	ND		1.0	0.47	ug/L			05/01/20 18:07	1
2-Hexanone	ND		5.0	3.3	ug/L			05/01/20 18:07	1
Dibromochloromethane	ND		1.0	0.84	ug/L			05/01/20 18:07	1
1,2-Dibromoethane (EDB)	ND		1.0	0.50	ug/L			05/01/20 18:07	1
Chlorobenzene	ND		1.0	0.50	ug/L			05/01/20 18:07	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.57	ug/L			05/01/20 18:07	1
Ethylbenzene	ND		1.0	0.51	ug/L			05/01/20 18:07	1
Xylenes, Total	ND		2.0	0.89	ug/L			05/01/20 18:07	1
Styrene	ND		1.0	0.47	ug/L			05/01/20 18:07	1
Bromoform	ND	^c	1.0	0.98	ug/L			05/01/20 18:07	1
1,1,2,2-Tetrachloroethane	ND	^c	1.0	0.60	ug/L			05/01/20 18:07	1
Acrylonitrile	ND		20	7.8	ug/L			05/01/20 18:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	83		62 - 146		05/01/20 18:07	1
Toluene-d8 (Surr)	75		75 - 120		05/01/20 18:07	1
4-Bromofluorobenzene (Surr)	91		64 - 120		05/01/20 18:07	1
Dibromofluoromethane (Surr)	98	^c	71 - 132		05/01/20 18:07	1

# Client Sample Results

Client: Groundwater Sciences Corporation  
 Project/Site: fYNOP

Job ID: 180-105108-1

## Method: EPA 8260C - Volatile Organic Compounds (GC/MS) - RA

**Client Sample ID: HD-COD-SW-26-0/1-0**  
**Date Collected: 04/28/20 11:55**  
**Date Received: 04/29/20 08:45**

**Lab Sample ID: 180-105108-9**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND	^c	1.0	0.90	ug/L			05/04/20 11:29	1
Vinyl chloride	ND		1.0	0.40	ug/L			05/04/20 11:29	1
Bromomethane	ND	^c *	1.0	0.89	ug/L			05/04/20 11:29	1
Chloroethane	ND		1.0	0.90	ug/L			05/04/20 11:29	1
1,1-Dichloroethene	ND		1.0	0.55	ug/L			05/04/20 11:29	1
<b>Acetone</b>	<b>6.2</b>		5.0	3.4	ug/L			05/04/20 11:29	1
Carbon disulfide	ND		1.0	0.88	ug/L			05/04/20 11:29	1
Methylene Chloride	ND		1.0	0.89	ug/L			05/04/20 11:29	1
trans-1,2-Dichloroethene	ND		1.0	0.67	ug/L			05/04/20 11:29	1
Methyl tert-butyl ether	ND		1.0	0.59	ug/L			05/04/20 11:29	1
1,1-Dichloroethane	ND		1.0	0.31	ug/L			05/04/20 11:29	1
cis-1,2-Dichloroethene	ND		1.0	0.71	ug/L			05/04/20 11:29	1
Bromochloromethane	ND		1.0	0.63	ug/L			05/04/20 11:29	1
2-Butanone (MEK)	ND	^c	5.0	2.6	ug/L			05/04/20 11:29	1
Chloroform	ND		1.0	0.60	ug/L			05/04/20 11:29	1
1,1,1-Trichloroethane	ND		1.0	0.60	ug/L			05/04/20 11:29	1
Carbon tetrachloride	ND		1.0	0.88	ug/L			05/04/20 11:29	1
Benzene	ND		1.0	0.60	ug/L			05/04/20 11:29	1
1,2-Dichloroethane	ND		1.0	0.57	ug/L			05/04/20 11:29	1
Trichloroethene	ND		1.0	0.69	ug/L			05/04/20 11:29	1
1,2-Dichloropropane	ND		1.0	0.66	ug/L			05/04/20 11:29	1
Bromodichloromethane	ND		1.0	0.64	ug/L			05/04/20 11:29	1
cis-1,3-Dichloropropene	ND		1.0	0.59	ug/L			05/04/20 11:29	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	3.1	ug/L			05/04/20 11:29	1
Toluene	ND		1.0	0.46	ug/L			05/04/20 11:29	1
trans-1,3-Dichloropropene	ND		1.0	0.58	ug/L			05/04/20 11:29	1
1,1,2-Trichloroethane	ND		1.0	0.45	ug/L			05/04/20 11:29	1
<b>Tetrachloroethene</b>	<b>2.0</b>		1.0	0.47	ug/L			05/04/20 11:29	1
2-Hexanone	ND		5.0	3.3	ug/L			05/04/20 11:29	1
Dibromochloromethane	ND		1.0	0.84	ug/L			05/04/20 11:29	1
1,2-Dibromoethane (EDB)	ND		1.0	0.50	ug/L			05/04/20 11:29	1
Chlorobenzene	ND		1.0	0.50	ug/L			05/04/20 11:29	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.57	ug/L			05/04/20 11:29	1
Ethylbenzene	ND		1.0	0.51	ug/L			05/04/20 11:29	1
Xylenes, Total	ND		2.0	0.89	ug/L			05/04/20 11:29	1
Styrene	ND		1.0	0.47	ug/L			05/04/20 11:29	1
Bromoform	ND	^c	1.0	0.98	ug/L			05/04/20 11:29	1
1,1,2,2-Tetrachloroethane	ND	^c	1.0	0.60	ug/L			05/04/20 11:29	1
Acrylonitrile	ND		20	7.8	ug/L			05/04/20 11:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	79		62 - 146		05/04/20 11:29	1
Toluene-d8 (Surr)	71	X	75 - 120		05/04/20 11:29	1
4-Bromofluorobenzene (Surr)	96		64 - 120		05/04/20 11:29	1
Dibromofluoromethane (Surr)	99		71 - 132		05/04/20 11:29	1

# Default Detection Limits

Client: Groundwater Sciences Corporation  
Project/Site: fYNOP

Job ID: 180-105108-1

## Method: EPA 8260C - Volatile Organic Compounds (GC/MS)

Analyte	RL	MDL	Units
1,1,1,2-Tetrachloroethane	1.0	0.57	ug/L
1,1,1-Trichloroethane	1.0	0.60	ug/L
1,1,2,2-Tetrachloroethane	1.0	0.60	ug/L
1,1,2-Trichloroethane	1.0	0.45	ug/L
1,1-Dichloroethane	1.0	0.31	ug/L
1,1-Dichloroethene	1.0	0.55	ug/L
1,2-Dibromoethane (EDB)	1.0	0.50	ug/L
1,2-Dichloroethane	1.0	0.57	ug/L
1,2-Dichloropropane	1.0	0.66	ug/L
2-Butanone (MEK)	5.0	2.6	ug/L
2-Hexanone	5.0	3.3	ug/L
4-Methyl-2-pentanone (MIBK)	5.0	3.1	ug/L
Acetone	5.0	3.4	ug/L
Acrylonitrile	20	7.8	ug/L
Benzene	1.0	0.60	ug/L
Bromochloromethane	1.0	0.63	ug/L
Bromodichloromethane	1.0	0.64	ug/L
Bromoform	1.0	0.98	ug/L
Bromomethane	1.0	0.89	ug/L
Carbon disulfide	1.0	0.88	ug/L
Carbon tetrachloride	1.0	0.88	ug/L
Chlorobenzene	1.0	0.50	ug/L
Chloroethane	1.0	0.90	ug/L
Chloroform	1.0	0.60	ug/L
Chloromethane	1.0	0.90	ug/L
cis-1,2-Dichloroethene	1.0	0.71	ug/L
cis-1,3-Dichloropropene	1.0	0.59	ug/L
Dibromochloromethane	1.0	0.84	ug/L
Ethylbenzene	1.0	0.51	ug/L
Methyl tert-butyl ether	1.0	0.59	ug/L
Methylene Chloride	1.0	0.89	ug/L
Styrene	1.0	0.47	ug/L
Tetrachloroethene	1.0	0.47	ug/L
Toluene	1.0	0.46	ug/L
trans-1,2-Dichloroethene	1.0	0.67	ug/L
trans-1,3-Dichloropropene	1.0	0.58	ug/L
Trichloroethene	1.0	0.69	ug/L
Vinyl chloride	1.0	0.40	ug/L
Xylenes, Total	2.0	0.89	ug/L



# Surrogate Summary

Client: Groundwater Sciences Corporation  
 Project/Site: fYNOP

Job ID: 180-105108-1

## Method: EPA 8260C - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (62-146)	TOL (75-120)	BFB (64-120)	DBFM (71-132)
180-105108-1	HD-COD-SW-6-0/1-0	83	92	85	90
180-105108-2	HD-COD-SW-7-0/1-0	89	90	80	92
180-105108-3	HD-COD-SW-8-0/1-0	86	76	95	102 ^c
180-105108-4	HD-COD-SW-9-0/1-0	94	96	79	99
180-105108-5	HD-COD-SW-13-0/1-0	87	95	81	95
180-105108-6	HD-COD-SW-15-0/1-0	87	75	92	100 ^c
180-105108-7	HD-COD-SW-16-0/1-0	86	75	92	102 ^c
180-105108-8	HD-COD-SW-17-0/1-0	79	103	79	89
180-105108-8 MS	HD-COD-SW-17-0/1-0	72	98	93	84
180-105108-8 MSD	HD-COD-SW-17-0/1-0	72	91	89	80
180-105108-9	HD-COD-SW-26-0/1-0	83	71 X	88	99 ^c
180-105108-9 - RA	HD-COD-SW-26-0/1-0	79	71 X	96	99
180-105108-9 MS	HD-COD-SW-26-0/1-0	72	92	85	77
180-105108-9 MSD	HD-COD-SW-26-0/1-0	80	97	93	83
180-105108-10	HD-COD-SW-27-0/1-0	96	98	83	104
180-105108-11	HD-COD-SW-28-0/1-0	97	99	83	99
180-105108-12	HD-COD-SW-29-0/1-0	97	99	90	100
180-105108-13	HD-QC1-0/1-1	91	88	75	94
180-105108-14	HD-QC1-0/1-2	83	75	91	98 ^c
LCS 180-314382/11	Lab Control Sample	75	88	88	76
LCS 180-314475/3	Lab Control Sample	73	104	96	80
MB 180-314382/6	Method Blank	79	99	83	83
MB 180-314475/5	Method Blank	82	102	90	89

### Surrogate Legend

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

# QC Sample Results

Client: Groundwater Sciences Corporation  
 Project/Site: fYNOP

Job ID: 180-105108-1

## Method: EPA 8260C - Volatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 180-314382/6**  
**Matrix: Water**  
**Analysis Batch: 314382**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1.0	0.90	ug/L			05/01/20 17:18	1
Vinyl chloride	ND		1.0	0.40	ug/L			05/01/20 17:18	1
Bromomethane	ND		1.0	0.89	ug/L			05/01/20 17:18	1
Chloroethane	ND		1.0	0.90	ug/L			05/01/20 17:18	1
1,1-Dichloroethene	ND		1.0	0.55	ug/L			05/01/20 17:18	1
Acetone	ND		5.0	3.4	ug/L			05/01/20 17:18	1
Carbon disulfide	ND		1.0	0.88	ug/L			05/01/20 17:18	1
Methylene Chloride	ND		1.0	0.89	ug/L			05/01/20 17:18	1
trans-1,2-Dichloroethene	ND		1.0	0.67	ug/L			05/01/20 17:18	1
Methyl tert-butyl ether	ND		1.0	0.59	ug/L			05/01/20 17:18	1
1,1-Dichloroethane	ND		1.0	0.31	ug/L			05/01/20 17:18	1
cis-1,2-Dichloroethene	ND		1.0	0.71	ug/L			05/01/20 17:18	1
Bromochloromethane	ND		1.0	0.63	ug/L			05/01/20 17:18	1
2-Butanone (MEK)	ND		5.0	2.6	ug/L			05/01/20 17:18	1
Chloroform	ND		1.0	0.60	ug/L			05/01/20 17:18	1
1,1,1-Trichloroethane	ND		1.0	0.60	ug/L			05/01/20 17:18	1
Carbon tetrachloride	ND		1.0	0.88	ug/L			05/01/20 17:18	1
Benzene	ND		1.0	0.60	ug/L			05/01/20 17:18	1
1,2-Dichloroethane	ND		1.0	0.57	ug/L			05/01/20 17:18	1
Trichloroethene	ND		1.0	0.69	ug/L			05/01/20 17:18	1
1,2-Dichloropropane	ND		1.0	0.66	ug/L			05/01/20 17:18	1
Bromodichloromethane	ND		1.0	0.64	ug/L			05/01/20 17:18	1
cis-1,3-Dichloropropene	ND		1.0	0.59	ug/L			05/01/20 17:18	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	3.1	ug/L			05/01/20 17:18	1
Toluene	ND		1.0	0.46	ug/L			05/01/20 17:18	1
trans-1,3-Dichloropropene	ND		1.0	0.58	ug/L			05/01/20 17:18	1
1,1,2-Trichloroethane	ND		1.0	0.45	ug/L			05/01/20 17:18	1
Tetrachloroethene	ND		1.0	0.47	ug/L			05/01/20 17:18	1
2-Hexanone	ND		5.0	3.3	ug/L			05/01/20 17:18	1
Dibromochloromethane	ND		1.0	0.84	ug/L			05/01/20 17:18	1
1,2-Dibromoethane (EDB)	ND		1.0	0.50	ug/L			05/01/20 17:18	1
Chlorobenzene	ND		1.0	0.50	ug/L			05/01/20 17:18	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.57	ug/L			05/01/20 17:18	1
Ethylbenzene	ND		1.0	0.51	ug/L			05/01/20 17:18	1
Xylenes, Total	ND		2.0	0.89	ug/L			05/01/20 17:18	1
Styrene	ND		1.0	0.47	ug/L			05/01/20 17:18	1
Bromoform	ND		1.0	0.98	ug/L			05/01/20 17:18	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.60	ug/L			05/01/20 17:18	1
Acrylonitrile	ND		20	7.8	ug/L			05/01/20 17:18	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	79		62 - 146		05/01/20 17:18	1
Toluene-d8 (Surr)	99		75 - 120		05/01/20 17:18	1
4-Bromofluorobenzene (Surr)	83		64 - 120		05/01/20 17:18	1
Dibromofluoromethane (Surr)	83		71 - 132		05/01/20 17:18	1

# QC Sample Results

Client: Groundwater Sciences Corporation  
 Project/Site: fYNOP

Job ID: 180-105108-1

## Method: EPA 8260C - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 180-314382/11**  
**Matrix: Water**  
**Analysis Batch: 314382**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloromethane	10.0	6.03		ug/L		60	37 - 150
Vinyl chloride	10.0	7.69		ug/L		77	50 - 150
Bromomethane	10.0	24.5	*	ug/L		245	35 - 150
Chloroethane	10.0	12.8		ug/L		128	52 - 150
1,1-Dichloroethene	10.0	8.63		ug/L		86	79 - 132
Acetone	20.0	11.6		ug/L		58	37 - 150
Carbon disulfide	10.0	7.56		ug/L		76	66 - 134
Methylene Chloride	10.0	9.00		ug/L		90	72 - 131
trans-1,2-Dichloroethene	10.0	8.94		ug/L		89	81 - 126
Methyl tert-butyl ether	10.0	7.72		ug/L		77	65 - 125
1,1-Dichloroethane	10.0	7.98		ug/L		80	70 - 127
cis-1,2-Dichloroethene	10.0	8.82		ug/L		88	79 - 119
Bromochloromethane	10.0	8.53		ug/L		85	74 - 124
2-Butanone (MEK)	20.0	12.2		ug/L		61	35 - 150
Chloroform	10.0	8.16		ug/L		82	75 - 126
1,1,1-Trichloroethane	10.0	7.71		ug/L		77	63 - 142
Carbon tetrachloride	10.0	8.40		ug/L		84	55 - 150
Benzene	10.0	8.96		ug/L		90	72 - 127
1,2-Dichloroethane	10.0	8.06		ug/L		81	60 - 138
Trichloroethene	10.0	8.79		ug/L		88	81 - 121
1,2-Dichloropropane	10.0	7.81		ug/L		78	67 - 124
Bromodichloromethane	10.0	7.55		ug/L		75	67 - 131
cis-1,3-Dichloropropene	10.0	7.45		ug/L		75	69 - 122
4-Methyl-2-pentanone (MIBK)	20.0	15.5		ug/L		78	19 - 150
Toluene	10.0	9.84		ug/L		98	73 - 123
trans-1,3-Dichloropropene	10.0	8.39		ug/L		84	61 - 122
1,1,2-Trichloroethane	10.0	9.11		ug/L		91	72 - 120
Tetrachloroethene	10.0	9.62		ug/L		96	69 - 134
2-Hexanone	20.0	14.0		ug/L		70	24 - 150
Dibromochloromethane	10.0	8.85		ug/L		89	59 - 134
1,2-Dibromoethane (EDB)	10.0	9.45		ug/L		95	65 - 129
Chlorobenzene	10.0	10.8		ug/L		108	76 - 119
1,1,1,2-Tetrachloroethane	10.0	10.1		ug/L		101	65 - 132
Ethylbenzene	10.0	10.7		ug/L		107	76 - 118
Xylenes, Total	20.0	20.8		ug/L		104	76 - 116
Styrene	10.0	10.7		ug/L		107	74 - 118
Bromoform	10.0	10.4		ug/L		104	50 - 146
1,1,2,2-Tetrachloroethane	10.0	11.2		ug/L		112	57 - 135
Acrylonitrile	100	78.7		ug/L		79	43 - 149

Surrogate	LCS %Recovery	LCS Qualifier	Limits
<i>1,2-Dichloroethane-d4 (Surr)</i>	75		62 - 146
<i>Toluene-d8 (Surr)</i>	88		75 - 120
<i>4-Bromofluorobenzene (Surr)</i>	88		64 - 120
<i>Dibromofluoromethane (Surr)</i>	76		71 - 132

# QC Sample Results

Client: Groundwater Sciences Corporation  
Project/Site: fYNOP

Job ID: 180-105108-1

## Method: EPA 8260C - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 180-105108-9 MS**

**Matrix: Water**

**Analysis Batch: 314382**

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

**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.	Limits
	Result	Qualifier	Added	Result	Qualifier					
Chloromethane	ND	^c	10.0	4.83		ug/L		48		37 - 150
Vinyl chloride	ND	^c	10.0	6.60		ug/L		66		50 - 150
Bromomethane	ND	^c * F1	10.0	18.5	F1	ug/L		185		35 - 150
Chloroethane	ND		10.0	8.60		ug/L		86		52 - 150
1,1-Dichloroethene	ND	F1	10.0	8.35		ug/L		84		79 - 132
Acetone	6.5	F1	20.0	12.8	F1	ug/L		32		37 - 150
Carbon disulfide	ND	^c F1	10.0	7.15		ug/L		71		66 - 134
Methylene Chloride	ND		10.0	7.75		ug/L		78		72 - 131
trans-1,2-Dichloroethene	ND	F1	10.0	8.43		ug/L		84		81 - 126
Methyl tert-butyl ether	ND		10.0	6.59		ug/L		66		65 - 125
1,1-Dichloroethane	ND		10.0	7.41		ug/L		74		70 - 127
cis-1,2-Dichloroethene	ND		10.0	7.96		ug/L		80		79 - 119
Bromochloromethane	ND		10.0	8.26		ug/L		83		74 - 124
2-Butanone (MEK)	ND		20.0	10.9		ug/L		54		35 - 150
Chloroform	ND	F1	10.0	7.42	F1	ug/L		74		75 - 126
1,1,1-Trichloroethane	ND		10.0	7.59		ug/L		76		63 - 142
Carbon tetrachloride	ND		10.0	8.29		ug/L		83		55 - 150
Benzene	ND		10.0	8.23		ug/L		82		72 - 127
1,2-Dichloroethane	ND		10.0	7.49		ug/L		75		60 - 138
Trichloroethene	ND	F1	10.0	8.84		ug/L		88		81 - 121
1,2-Dichloropropane	ND		10.0	7.14		ug/L		71		67 - 124
Bromodichloromethane	ND		10.0	6.88		ug/L		69		67 - 131
cis-1,3-Dichloropropene	ND	F1	10.0	6.30	F1	ug/L		63		69 - 122
4-Methyl-2-pentanone (MIBK)	ND		20.0	14.8		ug/L		74		19 - 150
Toluene	ND		10.0	9.44		ug/L		94		73 - 123
trans-1,3-Dichloropropene	ND		10.0	7.87		ug/L		79		61 - 122
1,1,2-Trichloroethane	ND		10.0	8.56		ug/L		86		72 - 120
Tetrachloroethene	1.6		10.0	11.6		ug/L		100		69 - 134
2-Hexanone	ND		20.0	13.8		ug/L		69		24 - 150
Dibromochloromethane	ND		10.0	8.18		ug/L		82		59 - 134
1,2-Dibromoethane (EDB)	ND		10.0	8.44		ug/L		84		65 - 129
Chlorobenzene	ND		10.0	9.77		ug/L		98		76 - 119
1,1,1,2-Tetrachloroethane	ND		10.0	9.38		ug/L		94		65 - 132
Ethylbenzene	ND		10.0	9.66		ug/L		97		76 - 118
Xylenes, Total	ND		20.0	19.8		ug/L		99		76 - 116
Styrene	ND		10.0	9.99		ug/L		100		74 - 118
Bromoform	ND	^c	10.0	9.78		ug/L		98		50 - 146
1,1,2,2-Tetrachloroethane	ND	^c	10.0	10.6		ug/L		106		57 - 135
Acrylonitrile	ND		100	69.1		ug/L		69		43 - 149

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	72		62 - 146
Toluene-d8 (Surr)	92		75 - 120
4-Bromofluorobenzene (Surr)	85		64 - 120
Dibromofluoromethane (Surr)	77		71 - 132

# QC Sample Results

Client: Groundwater Sciences Corporation  
 Project/Site: fYNOP

Job ID: 180-105108-1

## Method: EPA 8260C - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 180-105108-9 MSD**

**Matrix: Water**

**Analysis Batch: 314382**

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

**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier				Limits		
Chloromethane	ND	^c	10.0	4.22		ug/L		42	37 - 150	14	35
Vinyl chloride	ND	^c	10.0	5.43		ug/L		54	50 - 150	20	31
Bromomethane	ND	^c * F1	10.0	18.5	F1	ug/L		185	35 - 150	0	35
Chloroethane	ND		10.0	9.65		ug/L		96	52 - 150	12	31
1,1-Dichloroethene	ND	F1	10.0	7.05	F1	ug/L		71	79 - 132	17	29
Acetone	6.5	F1	20.0	12.0	F1	ug/L		27	37 - 150	7	35
Carbon disulfide	ND	^c F1	10.0	6.01	F1	ug/L		60	66 - 134	17	31
Methylene Chloride	ND		10.0	8.09		ug/L		81	72 - 131	4	29
trans-1,2-Dichloroethene	ND	F1	10.0	7.90	F1	ug/L		79	81 - 126	6	27
Methyl tert-butyl ether	ND		10.0	7.97		ug/L		80	65 - 125	19	28
1,1-Dichloroethane	ND		10.0	7.09		ug/L		71	70 - 127	4	27
cis-1,2-Dichloroethene	ND		10.0	8.14		ug/L		81	79 - 119	2	28
Bromochloromethane	ND		10.0	8.85		ug/L		89	74 - 124	7	27
2-Butanone (MEK)	ND		20.0	11.8		ug/L		59	35 - 150	8	34
Chloroform	ND	F1	10.0	7.28	F1	ug/L		73	75 - 126	2	26
1,1,1-Trichloroethane	ND		10.0	6.39		ug/L		64	63 - 142	17	28
Carbon tetrachloride	ND		10.0	6.84		ug/L		68	55 - 150	19	29
Benzene	ND		10.0	7.90		ug/L		79	72 - 127	4	27
1,2-Dichloroethane	ND		10.0	8.22		ug/L		82	60 - 138	9	26
Trichloroethene	ND	F1	10.0	7.74	F1	ug/L		77	81 - 121	13	28
1,2-Dichloropropane	ND		10.0	7.43		ug/L		74	67 - 124	4	27
Bromodichloromethane	ND		10.0	7.43		ug/L		74	67 - 131	8	28
cis-1,3-Dichloropropene	ND	F1	10.0	7.06		ug/L		71	69 - 122	11	29
4-Methyl-2-pentanone (MIBK)	ND		20.0	17.1		ug/L		85	19 - 150	15	33
Toluene	ND		10.0	8.70		ug/L		87	73 - 123	8	31
trans-1,3-Dichloropropene	ND		10.0	8.34		ug/L		83	61 - 122	6	30
1,1,2-Trichloroethane	ND		10.0	9.77		ug/L		98	72 - 120	13	27
Tetrachloroethene	1.6		10.0	10.5		ug/L		89	69 - 134	9	27
2-Hexanone	ND		20.0	15.7		ug/L		78	24 - 150	13	32
Dibromochloromethane	ND		10.0	8.88		ug/L		89	59 - 134	8	28
1,2-Dibromoethane (EDB)	ND		10.0	9.60		ug/L		96	65 - 129	13	27
Chlorobenzene	ND		10.0	9.73		ug/L		97	76 - 119	0	25
1,1,1,2-Tetrachloroethane	ND		10.0	9.54		ug/L		95	65 - 132	2	28
Ethylbenzene	ND		10.0	9.02		ug/L		90	76 - 118	7	27
Xylenes, Total	ND		20.0	18.8		ug/L		94	76 - 116	5	27
Styrene	ND		10.0	9.86		ug/L		99	74 - 118	1	27
Bromoform	ND	^c	10.0	11.2		ug/L		112	50 - 146	14	30
1,1,2,2-Tetrachloroethane	ND	^c	10.0	12.5		ug/L		125	57 - 135	16	29
Acrylonitrile	ND		100	86.6		ug/L		87	43 - 149	22	34

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	80		62 - 146
Toluene-d8 (Surr)	97		75 - 120
4-Bromofluorobenzene (Surr)	93		64 - 120
Dibromofluoromethane (Surr)	83		71 - 132

# QC Sample Results

Client: Groundwater Sciences Corporation  
 Project/Site: fYNOP

Job ID: 180-105108-1

## Method: EPA 8260C - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 180-314475/5**  
**Matrix: Water**  
**Analysis Batch: 314475**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1.0	0.90	ug/L			05/04/20 09:39	1
Vinyl chloride	ND		1.0	0.40	ug/L			05/04/20 09:39	1
Bromomethane	ND		1.0	0.89	ug/L			05/04/20 09:39	1
Chloroethane	ND		1.0	0.90	ug/L			05/04/20 09:39	1
1,1-Dichloroethene	ND		1.0	0.55	ug/L			05/04/20 09:39	1
Acetone	ND		5.0	3.4	ug/L			05/04/20 09:39	1
Carbon disulfide	ND		1.0	0.88	ug/L			05/04/20 09:39	1
Methylene Chloride	ND		1.0	0.89	ug/L			05/04/20 09:39	1
trans-1,2-Dichloroethene	ND		1.0	0.67	ug/L			05/04/20 09:39	1
Methyl tert-butyl ether	ND		1.0	0.59	ug/L			05/04/20 09:39	1
1,1-Dichloroethane	ND		1.0	0.31	ug/L			05/04/20 09:39	1
cis-1,2-Dichloroethene	ND		1.0	0.71	ug/L			05/04/20 09:39	1
Bromochloromethane	ND		1.0	0.63	ug/L			05/04/20 09:39	1
2-Butanone (MEK)	ND		5.0	2.6	ug/L			05/04/20 09:39	1
Chloroform	ND		1.0	0.60	ug/L			05/04/20 09:39	1
1,1,1-Trichloroethane	ND		1.0	0.60	ug/L			05/04/20 09:39	1
Carbon tetrachloride	ND		1.0	0.88	ug/L			05/04/20 09:39	1
Benzene	ND		1.0	0.60	ug/L			05/04/20 09:39	1
1,2-Dichloroethane	ND		1.0	0.57	ug/L			05/04/20 09:39	1
Trichloroethene	ND		1.0	0.69	ug/L			05/04/20 09:39	1
1,2-Dichloropropane	ND		1.0	0.66	ug/L			05/04/20 09:39	1
Bromodichloromethane	ND		1.0	0.64	ug/L			05/04/20 09:39	1
cis-1,3-Dichloropropene	ND		1.0	0.59	ug/L			05/04/20 09:39	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	3.1	ug/L			05/04/20 09:39	1
Toluene	ND		1.0	0.46	ug/L			05/04/20 09:39	1
trans-1,3-Dichloropropene	ND		1.0	0.58	ug/L			05/04/20 09:39	1
1,1,2-Trichloroethane	ND		1.0	0.45	ug/L			05/04/20 09:39	1
Tetrachloroethene	ND		1.0	0.47	ug/L			05/04/20 09:39	1
2-Hexanone	ND		5.0	3.3	ug/L			05/04/20 09:39	1
Dibromochloromethane	ND		1.0	0.84	ug/L			05/04/20 09:39	1
1,2-Dibromoethane (EDB)	ND		1.0	0.50	ug/L			05/04/20 09:39	1
Chlorobenzene	ND		1.0	0.50	ug/L			05/04/20 09:39	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.57	ug/L			05/04/20 09:39	1
Ethylbenzene	ND		1.0	0.51	ug/L			05/04/20 09:39	1
Xylenes, Total	ND		2.0	0.89	ug/L			05/04/20 09:39	1
Styrene	ND		1.0	0.47	ug/L			05/04/20 09:39	1
Bromoform	ND		1.0	0.98	ug/L			05/04/20 09:39	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.60	ug/L			05/04/20 09:39	1
Acrylonitrile	ND		20	7.8	ug/L			05/04/20 09:39	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	82		62 - 146		05/04/20 09:39	1
Toluene-d8 (Surr)	102		75 - 120		05/04/20 09:39	1
4-Bromofluorobenzene (Surr)	90		64 - 120		05/04/20 09:39	1
Dibromofluoromethane (Surr)	89		71 - 132		05/04/20 09:39	1

# QC Sample Results

Client: Groundwater Sciences Corporation  
Project/Site: fYNOP

Job ID: 180-105108-1

## Method: EPA 8260C - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 180-314475/3**

**Matrix: Water**

**Analysis Batch: 314475**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloromethane	10.0	5.25		ug/L		53	37 - 150
Vinyl chloride	10.0	6.91		ug/L		69	50 - 150
Bromomethane	10.0	15.1	*	ug/L		151	35 - 150
Chloroethane	10.0	8.17		ug/L		82	52 - 150
1,1-Dichloroethene	10.0	9.01		ug/L		90	79 - 132
Acetone	20.0	15.9		ug/L		79	37 - 150
Carbon disulfide	10.0	8.19		ug/L		82	66 - 134
Methylene Chloride	10.0	8.43		ug/L		84	72 - 131
trans-1,2-Dichloroethene	10.0	9.11		ug/L		91	81 - 126
Methyl tert-butyl ether	10.0	7.34		ug/L		73	65 - 125
1,1-Dichloroethane	10.0	7.57		ug/L		76	70 - 127
cis-1,2-Dichloroethene	10.0	8.45		ug/L		85	79 - 119
Bromochloromethane	10.0	8.19		ug/L		82	74 - 124
2-Butanone (MEK)	20.0	15.3		ug/L		77	35 - 150
Chloroform	10.0	7.62		ug/L		76	75 - 126
1,1,1-Trichloroethane	10.0	8.37		ug/L		84	63 - 142
Carbon tetrachloride	10.0	9.01		ug/L		90	55 - 150
Benzene	10.0	8.28		ug/L		83	72 - 127
1,2-Dichloroethane	10.0	7.32		ug/L		73	60 - 138
Trichloroethene	10.0	9.21		ug/L		92	81 - 121
1,2-Dichloropropane	10.0	7.17		ug/L		72	67 - 124
Bromodichloromethane	10.0	7.47		ug/L		75	67 - 131
cis-1,3-Dichloropropene	10.0	7.36		ug/L		74	69 - 122
4-Methyl-2-pentanone (MIBK)	20.0	16.4		ug/L		82	19 - 150
Toluene	10.0	10.1		ug/L		101	73 - 123
trans-1,3-Dichloropropene	10.0	8.65		ug/L		86	61 - 122
1,1,2-Trichloroethane	10.0	9.64		ug/L		96	72 - 120
Tetrachloroethene	10.0	10.7		ug/L		107	69 - 134
2-Hexanone	20.0	15.9		ug/L		80	24 - 150
Dibromochloromethane	10.0	9.80		ug/L		98	59 - 134
1,2-Dibromoethane (EDB)	10.0	9.72		ug/L		97	65 - 129
Chlorobenzene	10.0	10.8		ug/L		108	76 - 119
1,1,1,2-Tetrachloroethane	10.0	11.0		ug/L		110	65 - 132
Ethylbenzene	10.0	10.9		ug/L		109	76 - 118
Xylenes, Total	20.0	22.7		ug/L		114	76 - 116
Styrene	10.0	11.2		ug/L		112	74 - 118
Bromoform	10.0	12.2		ug/L		122	50 - 146
1,1,2,2-Tetrachloroethane	10.0	11.8		ug/L		118	57 - 135
Acrylonitrile	100	68.2		ug/L		68	43 - 149

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	73		62 - 146
Toluene-d8 (Surr)	104		75 - 120
4-Bromofluorobenzene (Surr)	96		64 - 120
Dibromofluoromethane (Surr)	80		71 - 132

# QC Sample Results

Client: Groundwater Sciences Corporation  
 Project/Site: fYNOP

Job ID: 180-105108-1

## Method: EPA 8260C - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 180-105108-8 MS**

**Matrix: Water**

**Analysis Batch: 314475**

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

**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.	Limits
	Result	Qualifier	Added	Result	Qualifier					
Chloromethane	ND	^c	10.0	5.60		ug/L		56		37 - 150
Vinyl chloride	ND		10.0	6.91		ug/L		69		50 - 150
Bromomethane	ND	^c *	10.0	12.7		ug/L		127		35 - 150
Chloroethane	ND		10.0	8.58		ug/L		86		52 - 150
1,1-Dichloroethene	ND		10.0	8.53		ug/L		85		79 - 132
Acetone	ND		20.0	9.56		ug/L		48		37 - 150
Carbon disulfide	ND		10.0	8.30		ug/L		83		66 - 134
Methylene Chloride	ND		10.0	7.96		ug/L		80		72 - 131
trans-1,2-Dichloroethene	ND		10.0	8.58		ug/L		86		81 - 126
Methyl tert-butyl ether	ND		10.0	6.51		ug/L		65		65 - 125
1,1-Dichloroethane	ND		10.0	7.33		ug/L		73		70 - 127
cis-1,2-Dichloroethene	ND		10.0	8.45		ug/L		85		79 - 119
Bromochloromethane	ND		10.0	8.09		ug/L		81		74 - 124
2-Butanone (MEK)	ND	^c	20.0	10.0		ug/L		50		35 - 150
Chloroform	ND	F1	10.0	7.04	F1	ug/L		70		75 - 126
1,1,1-Trichloroethane	ND		10.0	7.39		ug/L		74		63 - 142
Carbon tetrachloride	ND		10.0	8.76		ug/L		88		55 - 150
Benzene	ND		10.0	8.13		ug/L		81		72 - 127
1,2-Dichloroethane	ND		10.0	6.85		ug/L		69		60 - 138
Trichloroethene	ND		10.0	9.03		ug/L		90		81 - 121
1,2-Dichloropropane	ND		10.0	6.87		ug/L		69		67 - 124
Bromodichloromethane	ND		10.0	7.25		ug/L		73		67 - 131
cis-1,3-Dichloropropene	ND	F1	10.0	6.40	F1	ug/L		64		69 - 122
4-Methyl-2-pentanone (MIBK)	ND		20.0	14.4		ug/L		72		19 - 150
Toluene	ND		10.0	9.18		ug/L		92		73 - 123
trans-1,3-Dichloropropene	ND		10.0	7.69		ug/L		77		61 - 122
1,1,2-Trichloroethane	ND		10.0	8.30		ug/L		83		72 - 120
Tetrachloroethene		1.2	10.0	10.6		ug/L		94		69 - 134
2-Hexanone	ND		20.0	14.1		ug/L		71		24 - 150
Dibromochloromethane	ND		10.0	8.54		ug/L		85		59 - 134
1,2-Dibromoethane (EDB)	ND		10.0	8.58		ug/L		86		65 - 129
Chlorobenzene	ND		10.0	9.82		ug/L		98		76 - 119
1,1,1,2-Tetrachloroethane	ND		10.0	9.60		ug/L		96		65 - 132
Ethylbenzene	ND		10.0	9.95		ug/L		100		76 - 118
Xylenes, Total	ND		20.0	19.8		ug/L		99		76 - 116
Styrene	ND		10.0	9.99		ug/L		100		74 - 118
Bromoform	ND	^c	10.0	10.4		ug/L		104		50 - 146
1,1,2,2-Tetrachloroethane	ND	^c	10.0	9.86		ug/L		99		57 - 135
Acrylonitrile	ND		100	58.0		ug/L		58		43 - 149
		<b>MS MS</b>								
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>							
1,2-Dichloroethane-d4 (Surr)	72		62 - 146							
Toluene-d8 (Surr)	98		75 - 120							
4-Bromofluorobenzene (Surr)	93		64 - 120							
Dibromofluoromethane (Surr)	84		71 - 132							



# QC Sample Results

Client: Groundwater Sciences Corporation  
Project/Site: fYNOP

Job ID: 180-105108-1

## Method: EPA 8260C - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 180-105108-8 MSD**

**Matrix: Water**

**Analysis Batch: 314475**

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

**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier				Limits		
Chloromethane	ND	^c	10.0	5.55		ug/L		55	37 - 150	1	35
Vinyl chloride	ND		10.0	7.17		ug/L		72	50 - 150	4	31
Bromomethane	ND	^c *	10.0	14.5		ug/L		145	35 - 150	13	35
Chloroethane	ND		10.0	8.89		ug/L		89	52 - 150	4	31
1,1-Dichloroethene	ND		10.0	8.78		ug/L		88	79 - 132	3	29
Acetone	ND		20.0	10.6		ug/L		53	37 - 150	10	35
Carbon disulfide	ND		10.0	8.34		ug/L		83	66 - 134	0	31
Methylene Chloride	ND		10.0	8.62		ug/L		86	72 - 131	8	29
trans-1,2-Dichloroethene	ND		10.0	9.08		ug/L		91	81 - 126	6	27
Methyl tert-butyl ether	ND		10.0	7.09		ug/L		71	65 - 125	8	28
1,1-Dichloroethane	ND		10.0	7.45		ug/L		75	70 - 127	2	27
cis-1,2-Dichloroethene	ND		10.0	8.72		ug/L		87	79 - 119	3	28
Bromochloromethane	ND		10.0	8.46		ug/L		85	74 - 124	4	27
2-Butanone (MEK)	ND	^c	20.0	11.9		ug/L		59	35 - 150	17	34
Chloroform	ND	F1	10.0	7.35	F1	ug/L		73	75 - 126	4	26
1,1,1-Trichloroethane	ND		10.0	8.09		ug/L		81	63 - 142	9	28
Carbon tetrachloride	ND		10.0	8.86		ug/L		89	55 - 150	1	29
Benzene	ND		10.0	8.39		ug/L		84	72 - 127	3	27
1,2-Dichloroethane	ND		10.0	7.35		ug/L		73	60 - 138	7	26
Trichloroethene	ND		10.0	8.95		ug/L		90	81 - 121	1	28
1,2-Dichloropropane	ND		10.0	7.29		ug/L		73	67 - 124	6	27
Bromodichloromethane	ND		10.0	7.40		ug/L		74	67 - 131	2	28
cis-1,3-Dichloropropene	ND	F1	10.0	7.03		ug/L		70	69 - 122	9	29
4-Methyl-2-pentanone (MIBK)	ND		20.0	15.5		ug/L		77	19 - 150	7	33
Toluene	ND		10.0	9.62		ug/L		96	73 - 123	5	31
trans-1,3-Dichloropropene	ND		10.0	8.13		ug/L		81	61 - 122	6	30
1,1,2-Trichloroethane	ND		10.0	9.03		ug/L		90	72 - 120	8	27
Tetrachloroethene	1.2		10.0	10.2		ug/L		90	69 - 134	4	27
2-Hexanone	ND		20.0	14.3		ug/L		71	24 - 150	1	32
Dibromochloromethane	ND		10.0	8.96		ug/L		90	59 - 134	5	28
1,2-Dibromoethane (EDB)	ND		10.0	9.07		ug/L		91	65 - 129	6	27
Chlorobenzene	ND		10.0	10.5		ug/L		105	76 - 119	7	25
1,1,1,2-Tetrachloroethane	ND		10.0	10.1		ug/L		101	65 - 132	5	28
Ethylbenzene	ND		10.0	10.6		ug/L		106	76 - 118	6	27
Xylenes, Total	ND		20.0	21.2		ug/L		106	76 - 116	7	27
Styrene	ND		10.0	10.6		ug/L		106	74 - 118	6	27
Bromoform	ND	^c	10.0	11.6		ug/L		116	50 - 146	11	30
1,1,2,2-Tetrachloroethane	ND	^c	10.0	11.2		ug/L		112	57 - 135	13	29
Acrylonitrile	ND		100	65.4		ug/L		65	43 - 149	12	34

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	72		62 - 146
Toluene-d8 (Surr)	91		75 - 120
4-Bromofluorobenzene (Surr)	89		64 - 120
Dibromofluoromethane (Surr)	80		71 - 132

# QC Association Summary

Client: Groundwater Sciences Corporation  
Project/Site: FYNOP

Job ID: 180-105108-1

## GC/MS VOA

### Analysis Batch: 314382

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-105108-3	HD-COD-SW-8-0/1-0	Total/NA	Water	EPA 8260C	
180-105108-6	HD-COD-SW-15-0/1-0	Total/NA	Water	EPA 8260C	
180-105108-7	HD-COD-SW-16-0/1-0	Total/NA	Water	EPA 8260C	
180-105108-9	HD-COD-SW-26-0/1-0	Total/NA	Water	EPA 8260C	
180-105108-14	HD-QC1-0/1-2	Total/NA	Water	EPA 8260C	
MB 180-314382/6	Method Blank	Total/NA	Water	EPA 8260C	
LCS 180-314382/11	Lab Control Sample	Total/NA	Water	EPA 8260C	
180-105108-9 MS	HD-COD-SW-26-0/1-0	Total/NA	Water	EPA 8260C	
180-105108-9 MSD	HD-COD-SW-26-0/1-0	Total/NA	Water	EPA 8260C	

### Analysis Batch: 314475

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-105108-1	HD-COD-SW-6-0/1-0	Total/NA	Water	EPA 8260C	
180-105108-2	HD-COD-SW-7-0/1-0	Total/NA	Water	EPA 8260C	
180-105108-4	HD-COD-SW-9-0/1-0	Total/NA	Water	EPA 8260C	
180-105108-5	HD-COD-SW-13-0/1-0	Total/NA	Water	EPA 8260C	
180-105108-8	HD-COD-SW-17-0/1-0	Total/NA	Water	EPA 8260C	
180-105108-9 - RA	HD-COD-SW-26-0/1-0	Total/NA	Water	EPA 8260C	
180-105108-10	HD-COD-SW-27-0/1-0	Total/NA	Water	EPA 8260C	
180-105108-11	HD-COD-SW-28-0/1-0	Total/NA	Water	EPA 8260C	
180-105108-12	HD-COD-SW-29-0/1-0	Total/NA	Water	EPA 8260C	
180-105108-13	HD-QC1-0/1-1	Total/NA	Water	EPA 8260C	
MB 180-314475/5	Method Blank	Total/NA	Water	EPA 8260C	
LCS 180-314475/3	Lab Control Sample	Total/NA	Water	EPA 8260C	
180-105108-8 MS	HD-COD-SW-17-0/1-0	Total/NA	Water	EPA 8260C	
180-105108-8 MSD	HD-COD-SW-17-0/1-0	Total/NA	Water	EPA 8260C	

# Lab Chronicle

Client: Groundwater Sciences Corporation  
Project/Site: FYNOP

Job ID: 180-105108-1

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

**Lab Sample ID: 180-105108-1**

Date Collected: 04/28/20 11:35

Matrix: Water

Date Received: 04/29/20 08:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	314475	05/04/20 13:06	PJJ	TAL PIT
Instrument ID: CHHP5										

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

**Lab Sample ID: 180-105108-2**

Date Collected: 04/28/20 11:20

Matrix: Water

Date Received: 04/29/20 08:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	314475	05/04/20 13:30	PJJ	TAL PIT
Instrument ID: CHHP5										

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

**Lab Sample ID: 180-105108-3**

Date Collected: 04/28/20 10:20

Matrix: Water

Date Received: 04/29/20 08:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	314382	05/01/20 22:37	PJJ	TAL PIT
Instrument ID: CHHP5										

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

**Lab Sample ID: 180-105108-4**

Date Collected: 04/28/20 13:25

Matrix: Water

Date Received: 04/29/20 08:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	314475	05/04/20 13:55	PJJ	TAL PIT
Instrument ID: CHHP5										

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

**Lab Sample ID: 180-105108-5**

Date Collected: 04/28/20 10:40

Matrix: Water

Date Received: 04/29/20 08:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	314475	05/04/20 14:20	PJJ	TAL PIT
Instrument ID: CHHP5										

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

**Lab Sample ID: 180-105108-6**

Date Collected: 04/28/20 12:45

Matrix: Water

Date Received: 04/29/20 08:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	314382	05/01/20 23:51	PJJ	TAL PIT
Instrument ID: CHHP5										

# Lab Chronicle

Client: Groundwater Sciences Corporation  
Project/Site: FYNOP

Job ID: 180-105108-1

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

**Lab Sample ID: 180-105108-7**

Date Collected: 04/28/20 10:55

Matrix: Water

Date Received: 04/29/20 08:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	314382	05/02/20 00:15	PJJ	TAL PIT
Instrument ID: CHHP5										

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

**Lab Sample ID: 180-105108-8**

Date Collected: 04/28/20 11:10

Matrix: Water

Date Received: 04/29/20 08:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	314475	05/04/20 11:04	PJJ	TAL PIT
Instrument ID: CHHP5										

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

**Lab Sample ID: 180-105108-9**

Date Collected: 04/28/20 11:55

Matrix: Water

Date Received: 04/29/20 08:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	314382	05/01/20 17:43	PJJ	TAL PIT
Instrument ID: CHHP5										
Total/NA	Analysis	EPA 8260C	RA	1	5 mL	5 mL	314475	05/04/20 11:29	PJJ	TAL PIT
Instrument ID: CHHP5										

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

**Lab Sample ID: 180-105108-10**

Date Collected: 04/28/20 11:35

Matrix: Water

Date Received: 04/29/20 08:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	314475	05/04/20 14:45	PJJ	TAL PIT
Instrument ID: CHHP5										

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

**Lab Sample ID: 180-105108-11**

Date Collected: 04/28/20 13:35

Matrix: Water

Date Received: 04/29/20 08:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	314475	05/04/20 15:09	PJJ	TAL PIT
Instrument ID: CHHP5										

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

**Lab Sample ID: 180-105108-12**

Date Collected: 04/28/20 10:05

Matrix: Water

Date Received: 04/29/20 08:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	314475	05/04/20 15:33	PJJ	TAL PIT
Instrument ID: CHHP5										

# Lab Chronicle

Client: Groundwater Sciences Corporation  
Project/Site: fYNOP

Job ID: 180-105108-1

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

**Lab Sample ID: 180-105108-13**

**Date Collected: 04/28/20 12:00**

**Matrix: Water**

**Date Received: 04/29/20 08:45**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	314475	05/04/20 15:58	PJJ	TAL PIT
Instrument ID: CHHP5										

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

**Lab Sample ID: 180-105108-14**

**Date Collected: 04/28/20 00:00**

**Matrix: Water**

**Date Received: 04/29/20 08:45**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	314382	05/01/20 18:07	PJJ	TAL PIT
Instrument ID: CHHP5										

**Laboratory References:**

TAL PIT = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

**Analyst References:**

Lab: TAL PIT

Batch Type: Analysis

PJJ = Patrick Journet

# Accreditation/Certification Summary

Client: Groundwater Sciences Corporation  
Project/Site: fYNOP

Job ID: 180-105108-1

---

## Laboratory: Eurofins TestAmerica, Pittsburgh

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

---

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	02-00416	04-30-21

# Method Summary

Client: Groundwater Sciences Corporation  
Project/Site: fYNOP

Job ID: 180-105108-1

---

---

<b>Method</b>	<b>Method Description</b>	<b>Protocol</b>	<b>Laboratory</b>
EPA 8260C	Volatile Organic Compounds (GC/MS)	SW846	TAL PIT
5030C	Purge and Trap	SW846	TAL PIT

**Protocol References:**

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

**Laboratory References:**

TAL PIT = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

# Sample Summary

Client: Groundwater Sciences Corporation  
Project/Site: FYNOP

Job ID: 180-105108-1

---

---

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
180-105108-1	HD-COD-SW-6-0/1-0	Water	04/28/20 11:35	04/29/20 08:45	
180-105108-2	HD-COD-SW-7-0/1-0	Water	04/28/20 11:20	04/29/20 08:45	
180-105108-3	HD-COD-SW-8-0/1-0	Water	04/28/20 10:20	04/29/20 08:45	
180-105108-4	HD-COD-SW-9-0/1-0	Water	04/28/20 13:25	04/29/20 08:45	
180-105108-5	HD-COD-SW-13-0/1-0	Water	04/28/20 10:40	04/29/20 08:45	
180-105108-6	HD-COD-SW-15-0/1-0	Water	04/28/20 12:45	04/29/20 08:45	
180-105108-7	HD-COD-SW-16-0/1-0	Water	04/28/20 10:55	04/29/20 08:45	
180-105108-8	HD-COD-SW-17-0/1-0	Water	04/28/20 11:10	04/29/20 08:45	
180-105108-9	HD-COD-SW-26-0/1-0	Water	04/28/20 11:55	04/29/20 08:45	
180-105108-10	HD-COD-SW-27-0/1-0	Water	04/28/20 11:35	04/29/20 08:45	
180-105108-11	HD-COD-SW-28-0/1-0	Water	04/28/20 13:35	04/29/20 08:45	
180-105108-12	HD-COD-SW-29-0/1-0	Water	04/28/20 10:05	04/29/20 08:45	
180-105108-13	HD-QC1-0/1-1	Water	04/28/20 12:00	04/29/20 08:45	
180-105108-14	HD-QC1-0/1-2	Water	04/28/20 00:00	04/29/20 08:45	



## GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Pittsb Job No.: 180-105108-1

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

Instrument ID: CHHP5 Analysis Batch Number: 310901Lab Sample ID: IC 180-310901/13 Client Sample ID: \_\_\_\_\_Date Analyzed: 03/24/20 03:13 Lab File ID: 5032306p.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4-Chlorotoluene	12.09	Peak assignment corrected	journetp	03/25/20 16:24

Lab Sample ID: IC 180-310901/16 Client Sample ID: \_\_\_\_\_Date Analyzed: 03/24/20 04:26 Lab File ID: 5032309P.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Allyl chloride	4.03	Peak assignment corrected	journetp	03/25/20 16:11
4-Chlorotoluene	12.09	Peak assignment corrected	journetp	03/25/20 16:12

## GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Pittsb Job No.: 180-105108-1

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

Instrument ID: CHHP5 Analysis Batch Number: 314382Lab Sample ID: MB 180-314382/6 Client Sample ID: \_\_\_\_\_Date Analyzed: 05/01/20 17:18 Lab File ID: 5050106.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,1,1,2-Tetrachloroethane		Invalid Compound ID	journetp	05/01/20 17:52
1,1,1-Trichloroethane		Invalid Compound ID	journetp	05/01/20 17:52
1,1,2,2-Tetrachloroethane		Invalid Compound ID	journetp	05/01/20 17:52
1,1,2-Trichloroethane		Invalid Compound ID	journetp	05/01/20 17:52
1,1-Dichloroethane		Invalid Compound ID	journetp	05/01/20 17:52
1,2-Dibromoethane (EDB)		Invalid Compound ID	journetp	05/01/20 17:52
1,2-Dichloroethane		Invalid Compound ID	journetp	05/01/20 17:52
1,2-Dichloropropane		Invalid Compound ID	journetp	05/01/20 17:52
2-Butanone (MEK)		Invalid Compound ID	journetp	05/01/20 17:52
2-Hexanone		Invalid Compound ID	journetp	05/01/20 17:52
4-Methyl-2-pentanone (MIBK)		Invalid Compound ID	journetp	05/01/20 17:52
Acrylonitrile		Invalid Compound ID	journetp	05/01/20 17:52
Benzene		Invalid Compound ID	journetp	05/01/20 17:52
Bromochloromethane		Invalid Compound ID	journetp	05/01/20 17:52
Bromodichloromethane		Invalid Compound ID	journetp	05/01/20 17:52
Bromoform		Invalid Compound ID	journetp	05/01/20 17:52
Bromomethane		Invalid Compound ID	journetp	05/01/20 17:51
Carbon disulfide		Invalid Compound ID	journetp	05/01/20 17:52
Carbon tetrachloride		Invalid Compound ID	journetp	05/01/20 17:52
Chlorobenzene		Invalid Compound ID	journetp	05/01/20 17:52
Chloroform		Invalid Compound ID	journetp	05/01/20 17:52
cis-1,2-Dichloroethene		Invalid Compound ID	journetp	05/01/20 17:52
cis-1,3-Dichloropropene		Invalid Compound ID	journetp	05/01/20 17:52
Dibromochloromethane		Invalid Compound ID	journetp	05/01/20 17:52
Ethylbenzene		Invalid Compound ID	journetp	05/01/20 17:52
Methyl tert-butyl ether		Invalid Compound ID	journetp	05/01/20 17:52
Methylene Chloride		Invalid Compound ID	journetp	05/01/20 17:52
m-Xylene & p-Xylene		Invalid Compound ID	journetp	05/01/20 17:52
o-Xylene		Invalid Compound ID	journetp	05/01/20 17:52
Styrene		Invalid Compound ID	journetp	05/01/20 17:52

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Pittsb Job No.: 180-105108-1

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

Instrument ID: CHHP5 Analysis Batch Number: 314382

Lab Sample ID: MB 180-314382/6 Client Sample ID: \_\_\_\_\_

Date Analyzed: 05/01/20 17:18 Lab File ID: 5050106.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Tetrachloroethene		Invalid Compound ID	journetp	05/01/20 17:52
Toluene		Invalid Compound ID	journetp	05/01/20 17:52
trans-1,2-Dichloroethene		Invalid Compound ID	journetp	05/01/20 17:52
trans-1,3-Dichloropropene		Invalid Compound ID	journetp	05/01/20 17:52
Trichloroethene		Invalid Compound ID	journetp	05/01/20 17:52
Vinyl chloride		Invalid Compound ID	journetp	05/01/20 17:51

## GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Pittsb Job No.: 180-105108-1

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

Instrument ID: CHHP5 Analysis Batch Number: 314382Lab Sample ID: 180-105108-9 Client Sample ID: HD-COD-SW-26-0/1-0Date Analyzed: 05/01/20 17:43 Lab File ID: 5050107.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Butanone (MEK)	6.03	Invalid Compound ID	journetp	05/02/20 18:40
Trichloroethene	7.72	Invalid Compound ID	journetp	05/02/20 18:41
Toluene-d8 (Surr)	8.99	Poor chromatography	journetp	05/03/20 16:26
1,1,1,2-Tetrachloroethane		Invalid Compound ID	journetp	05/02/20 18:41
1,1,1-Trichloroethane		Invalid Compound ID	journetp	05/02/20 18:41
1,1,2,2-Tetrachloroethane		Invalid Compound ID	journetp	05/02/20 18:41
1,1,2-Trichloroethane		Invalid Compound ID	journetp	05/02/20 18:41
1,1-Dichloroethane		Invalid Compound ID	journetp	05/02/20 18:40
1,2-Dibromoethane (EDB)		Invalid Compound ID	journetp	05/02/20 18:41
1,2-Dichloroethane		Invalid Compound ID	journetp	05/02/20 18:41
1,2-Dichloropropane		Invalid Compound ID	journetp	05/02/20 18:41
2-Hexanone		Invalid Compound ID	journetp	05/02/20 18:41
4-Methyl-2-pentanone (MIBK)		Invalid Compound ID	journetp	05/02/20 18:41
Acrylonitrile		Invalid Compound ID	journetp	05/02/20 18:40
Benzene		Invalid Compound ID	journetp	05/02/20 18:41
Bromochloromethane		Invalid Compound ID	journetp	05/02/20 18:41
Bromodichloromethane		Invalid Compound ID	journetp	05/02/20 18:41
Bromoform		Invalid Compound ID	journetp	05/02/20 18:41
Bromomethane		Invalid Compound ID	journetp	05/02/20 18:40
Carbon disulfide		Invalid Compound ID	journetp	05/02/20 18:40
Carbon tetrachloride		Invalid Compound ID	journetp	05/02/20 18:41
Chlorobenzene		Invalid Compound ID	journetp	05/02/20 18:41
Chloroethane		Invalid Compound ID	journetp	05/02/20 18:40
Chloroform		Invalid Compound ID	journetp	05/02/20 18:41
Chloromethane		Invalid Compound ID	journetp	05/02/20 18:40
cis-1,2-Dichloroethene		Invalid Compound ID	journetp	05/02/20 18:40
cis-1,3-Dichloropropene		Invalid Compound ID	journetp	05/02/20 18:41
Dibromochloromethane		Invalid Compound ID	journetp	05/02/20 18:41
Ethylbenzene		Invalid Compound ID	journetp	05/02/20 18:41
Methyl tert-butyl ether		Invalid Compound ID	journetp	05/02/20 18:40

## GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Pittsb Job No.: 180-105108-1

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

Instrument ID: CHHP5 Analysis Batch Number: 314382Lab Sample ID: 180-105108-9 Client Sample ID: HD-COD-SW-26-0/1-0Date Analyzed: 05/01/20 17:43 Lab File ID: 5050107.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methylene Chloride		Invalid Compound ID	journetp	05/02/20 18:40
m-Xylene & p-Xylene		Invalid Compound ID	journetp	05/02/20 18:41
o-Xylene		Invalid Compound ID	journetp	05/02/20 18:41
Styrene		Invalid Compound ID	journetp	05/02/20 18:41
Toluene		Invalid Compound ID	journetp	05/02/20 18:41
trans-1,2-Dichloroethene		Invalid Compound ID	journetp	05/02/20 18:40
trans-1,3-Dichloropropene		Invalid Compound ID	journetp	05/02/20 18:41
Vinyl chloride		Invalid Compound ID	journetp	05/02/20 18:40

## GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Pittsb Job No.: 180-105108-1

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

Instrument ID: CHHP5 Analysis Batch Number: 314382Lab Sample ID: 180-105108-14 Client Sample ID: HD-QC1-0/1-2Date Analyzed: 05/01/20 18:07 Lab File ID: 5050108.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,1,1,2-Tetrachloroethane		Invalid Compound ID	journetp	05/01/20 18:45
1,1,1-Trichloroethane		Invalid Compound ID	journetp	05/01/20 18:45
1,1,2,2-Tetrachloroethane		Invalid Compound ID	journetp	05/01/20 18:45
1,1,2-Trichloroethane		Invalid Compound ID	journetp	05/01/20 18:45
1,1-Dichloroethane		Invalid Compound ID	journetp	05/01/20 18:45
1,1-Dichloroethene		Invalid Compound ID	journetp	05/01/20 18:45
1,2-Dibromoethane (EDB)		Invalid Compound ID	journetp	05/01/20 18:45
1,2-Dichloroethane		Invalid Compound ID	journetp	05/01/20 18:45
1,2-Dichloropropane		Invalid Compound ID	journetp	05/01/20 18:45
2-Butanone (MEK)		Invalid Compound ID	journetp	05/01/20 18:45
2-Hexanone		Invalid Compound ID	journetp	05/01/20 18:45
4-Methyl-2-pentanone (MIBK)		Invalid Compound ID	journetp	05/01/20 18:45
Acrylonitrile		Invalid Compound ID	journetp	05/01/20 18:45
Benzene		Invalid Compound ID	journetp	05/01/20 18:45
Bromochloromethane		Invalid Compound ID	journetp	05/01/20 18:45
Bromodichloromethane		Invalid Compound ID	journetp	05/01/20 18:45
Bromoform		Invalid Compound ID	journetp	05/01/20 18:45
Bromomethane		Invalid Compound ID	journetp	05/01/20 18:45
Carbon disulfide		Invalid Compound ID	journetp	05/01/20 18:45
Carbon tetrachloride		Invalid Compound ID	journetp	05/01/20 18:45
Chlorobenzene		Invalid Compound ID	journetp	05/01/20 18:45
Chloroethane		Invalid Compound ID	journetp	05/01/20 18:45
Chloroform		Invalid Compound ID	journetp	05/01/20 18:45
Chloromethane		Invalid Compound ID	journetp	05/01/20 18:45
cis-1,2-Dichloroethene		Invalid Compound ID	journetp	05/01/20 18:45
cis-1,3-Dichloropropene		Invalid Compound ID	journetp	05/01/20 18:45
Dibromochloromethane		Invalid Compound ID	journetp	05/01/20 18:45
Ethylbenzene		Invalid Compound ID	journetp	05/01/20 18:45
Methyl tert-butyl ether		Invalid Compound ID	journetp	05/01/20 18:45
Methylene Chloride		Invalid Compound ID	journetp	05/01/20 18:45

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Pittsb Job No.: 180-105108-1

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

Instrument ID: CHHP5 Analysis Batch Number: 314382

Lab Sample ID: 180-105108-14 Client Sample ID: HD-QC1-0/1-2

Date Analyzed: 05/01/20 18:07 Lab File ID: 5050108.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
m-Xylene & p-Xylene		Invalid Compound ID	journetp	05/01/20 18:45
o-Xylene		Invalid Compound ID	journetp	05/01/20 18:45
Styrene		Invalid Compound ID	journetp	05/01/20 18:45
Tetrachloroethene		Invalid Compound ID	journetp	05/01/20 18:45
Toluene		Invalid Compound ID	journetp	05/01/20 18:45
trans-1,2-Dichloroethene		Invalid Compound ID	journetp	05/01/20 18:45
trans-1,3-Dichloropropene		Invalid Compound ID	journetp	05/01/20 18:45
Trichloroethene		Invalid Compound ID	journetp	05/01/20 18:45
Vinyl chloride		Invalid Compound ID	journetp	05/01/20 18:45

## GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Pittsb Job No.: 180-105108-1

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

Instrument ID: CHHP5 Analysis Batch Number: 314382Lab Sample ID: 180-105108-3 Client Sample ID: HD-COD-SW-8-0/1-0Date Analyzed: 05/01/20 22:37 Lab File ID: 5050119.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,1,1,2-Tetrachloroethane		Invalid Compound ID	journetp	05/02/20 18:46
1,1,1-Trichloroethane		Invalid Compound ID	journetp	05/02/20 18:46
1,1,2,2-Tetrachloroethane		Invalid Compound ID	journetp	05/02/20 18:46
1,1,2-Trichloroethane		Invalid Compound ID	journetp	05/02/20 18:46
1,1-Dichloroethane		Invalid Compound ID	journetp	05/02/20 18:46
1,1-Dichloroethene		Invalid Compound ID	journetp	05/02/20 18:47
1,2-Dibromoethane (EDB)		Invalid Compound ID	journetp	05/02/20 18:46
1,2-Dichloroethane		Invalid Compound ID	journetp	05/02/20 18:46
1,2-Dichloropropane		Invalid Compound ID	journetp	05/02/20 18:46
2-Butanone (MEK)		Invalid Compound ID	journetp	05/02/20 18:46
2-Hexanone		Invalid Compound ID	journetp	05/02/20 18:46
4-Methyl-2-pentanone (MIBK)		Invalid Compound ID	journetp	05/02/20 18:46
Acrylonitrile		Invalid Compound ID	journetp	05/02/20 18:46
Benzene		Invalid Compound ID	journetp	05/02/20 18:46
Bromochloromethane		Invalid Compound ID	journetp	05/02/20 18:46
Bromodichloromethane		Invalid Compound ID	journetp	05/02/20 18:46
Bromoform		Invalid Compound ID	journetp	05/02/20 18:46
Bromomethane		Invalid Compound ID	journetp	05/02/20 18:47
Carbon disulfide		Invalid Compound ID	journetp	05/02/20 18:46
Carbon tetrachloride		Invalid Compound ID	journetp	05/02/20 18:46
Chlorobenzene		Invalid Compound ID	journetp	05/02/20 18:46
Chloroethane		Invalid Compound ID	journetp	05/02/20 18:47
Chloroform		Invalid Compound ID	journetp	05/02/20 18:46
Chloromethane		Invalid Compound ID	journetp	05/02/20 18:47
cis-1,2-Dichloroethene		Invalid Compound ID	journetp	05/02/20 18:46
cis-1,3-Dichloropropene		Invalid Compound ID	journetp	05/02/20 18:46
Dibromochloromethane		Invalid Compound ID	journetp	05/02/20 18:46
Ethylbenzene		Invalid Compound ID	journetp	05/02/20 18:46
Methyl tert-butyl ether		Invalid Compound ID	journetp	05/02/20 18:46
Methylene Chloride		Invalid Compound ID	journetp	05/02/20 18:46



GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Pittsb Job No.: 180-105108-1

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

Instrument ID: CHHP5 Analysis Batch Number: 314382

Lab Sample ID: 180-105108-3 Client Sample ID: HD-COD-SW-8-0/1-0

Date Analyzed: 05/01/20 22:37 Lab File ID: 5050119.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
m-Xylene & p-Xylene		Invalid Compound ID	journetp	05/02/20 18:46
o-Xylene		Invalid Compound ID	journetp	05/02/20 18:46
Styrene		Invalid Compound ID	journetp	05/02/20 18:46
Tetrachloroethene		Invalid Compound ID	journetp	05/02/20 18:46
Toluene		Invalid Compound ID	journetp	05/02/20 18:46
trans-1,2-Dichloroethene		Invalid Compound ID	journetp	05/02/20 18:46
trans-1,3-Dichloropropene		Invalid Compound ID	journetp	05/02/20 18:46
Trichloroethene		Invalid Compound ID	journetp	05/02/20 18:46
Vinyl chloride		Invalid Compound ID	journetp	05/02/20 18:47

## GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Pittsb Job No.: 180-105108-1

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

Instrument ID: CHHP5 Analysis Batch Number: 314382Lab Sample ID: 180-105108-6 Client Sample ID: HD-COD-SW-15-0/1-0Date Analyzed: 05/01/20 23:51 Lab File ID: 5050122.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,1,1,2-Tetrachloroethane		Invalid Compound ID	journetp	05/02/20 18:48
1,1,2,2-Tetrachloroethane		Invalid Compound ID	journetp	05/02/20 18:48
1,1,2-Trichloroethane		Invalid Compound ID	journetp	05/02/20 18:48
1,1-Dichloroethane		Invalid Compound ID	journetp	05/02/20 18:48
1,1-Dichloroethene		Invalid Compound ID	journetp	05/02/20 18:52
1,2-Dibromoethane (EDB)		Invalid Compound ID	journetp	05/02/20 18:48
1,2-Dichloroethane		Invalid Compound ID	journetp	05/02/20 18:48
1,2-Dichloropropane		Invalid Compound ID	journetp	05/02/20 18:48
2-Butanone (MEK)		Invalid Compound ID	journetp	05/02/20 18:48
2-Hexanone		Invalid Compound ID	journetp	05/02/20 18:48
4-Methyl-2-pentanone (MIBK)		Invalid Compound ID	journetp	05/02/20 18:48
Acrylonitrile		Invalid Compound ID	journetp	05/02/20 18:48
Benzene		Invalid Compound ID	journetp	05/02/20 18:48
Bromochloromethane		Invalid Compound ID	journetp	05/02/20 18:48
Bromodichloromethane		Invalid Compound ID	journetp	05/02/20 18:48
Bromoform		Invalid Compound ID	journetp	05/02/20 18:48
Bromomethane		Invalid Compound ID	journetp	05/02/20 18:52
Carbon disulfide		Invalid Compound ID	journetp	05/02/20 18:48
Carbon tetrachloride		Invalid Compound ID	journetp	05/02/20 18:48
Chlorobenzene		Invalid Compound ID	journetp	05/02/20 18:48
Chloroethane		Invalid Compound ID	journetp	05/02/20 18:52
Chloroform		Invalid Compound ID	journetp	05/02/20 18:48
Chloromethane		Invalid Compound ID	journetp	05/02/20 18:52
cis-1,3-Dichloropropene		Invalid Compound ID	journetp	05/02/20 18:48
Dibromochloromethane		Invalid Compound ID	journetp	05/02/20 18:48
Ethylbenzene		Invalid Compound ID	journetp	05/02/20 18:48
Methyl tert-butyl ether		Invalid Compound ID	journetp	05/02/20 18:48
Methylene Chloride		Invalid Compound ID	journetp	05/02/20 18:48
m-Xylene & p-Xylene		Invalid Compound ID	journetp	05/02/20 18:48
o-Xylene		Invalid Compound ID	journetp	05/02/20 18:48

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Pittsb Job No.: 180-105108-1

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

Instrument ID: CHHP5 Analysis Batch Number: 314382

Lab Sample ID: 180-105108-6 Client Sample ID: HD-COD-SW-15-0/1-0

Date Analyzed: 05/01/20 23:51 Lab File ID: 5050122.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Styrene		Invalid Compound ID	journetp	05/02/20 18:48
Toluene		Invalid Compound ID	journetp	05/02/20 18:48
trans-1,2-Dichloroethene		Invalid Compound ID	journetp	05/02/20 18:48
trans-1,3-Dichloropropene		Invalid Compound ID	journetp	05/02/20 18:48
Vinyl chloride		Invalid Compound ID	journetp	05/02/20 18:52

## GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Pittsb Job No.: 180-105108-1

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

Instrument ID: CHHP5 Analysis Batch Number: 314382Lab Sample ID: 180-105108-7 Client Sample ID: HD-COD-SW-16-0/1-0Date Analyzed: 05/02/20 00:15 Lab File ID: 5050123.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,1,1,2-Tetrachloroethane		Invalid Compound ID	journetp	05/02/20 18:52
1,1,1-Trichloroethane		Invalid Compound ID	journetp	05/02/20 18:52
1,1,2,2-Tetrachloroethane		Invalid Compound ID	journetp	05/02/20 18:52
1,1,2-Trichloroethane		Invalid Compound ID	journetp	05/02/20 18:52
1,1-Dichloroethane		Invalid Compound ID	journetp	05/02/20 18:52
1,1-Dichloroethene		Invalid Compound ID	journetp	05/02/20 18:52
1,2-Dibromoethane (EDB)		Invalid Compound ID	journetp	05/02/20 18:52
1,2-Dichloroethane		Invalid Compound ID	journetp	05/02/20 18:52
1,2-Dichloropropane		Invalid Compound ID	journetp	05/02/20 18:52
2-Butanone (MEK)		Invalid Compound ID	journetp	05/02/20 18:52
2-Hexanone		Invalid Compound ID	journetp	05/02/20 18:52
4-Methyl-2-pentanone (MIBK)		Invalid Compound ID	journetp	05/02/20 18:52
Acrylonitrile		Invalid Compound ID	journetp	05/02/20 18:52
Benzene		Invalid Compound ID	journetp	05/02/20 18:52
Bromochloromethane		Invalid Compound ID	journetp	05/02/20 18:52
Bromodichloromethane		Invalid Compound ID	journetp	05/02/20 18:52
Bromoform		Invalid Compound ID	journetp	05/02/20 18:52
Bromomethane		Invalid Compound ID	journetp	05/02/20 18:52
Carbon tetrachloride		Invalid Compound ID	journetp	05/02/20 18:52
Chlorobenzene		Invalid Compound ID	journetp	05/02/20 18:52
Chloroethane		Invalid Compound ID	journetp	05/02/20 18:52
Chloroform		Invalid Compound ID	journetp	05/02/20 18:52
Chloromethane		Invalid Compound ID	journetp	05/02/20 18:52
cis-1,2-Dichloroethene		Invalid Compound ID	journetp	05/02/20 18:52
cis-1,3-Dichloropropene		Invalid Compound ID	journetp	05/02/20 18:52
Dibromochloromethane		Invalid Compound ID	journetp	05/02/20 18:52
Ethylbenzene		Invalid Compound ID	journetp	05/02/20 18:52
Methyl tert-butyl ether		Invalid Compound ID	journetp	05/02/20 18:52
Methylene Chloride		Invalid Compound ID	journetp	05/02/20 18:52
m-Xylene & p-Xylene		Invalid Compound ID	journetp	05/02/20 18:52

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Pittsb Job No.: 180-105108-1

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

Instrument ID: CHHP5 Analysis Batch Number: 314382

Lab Sample ID: 180-105108-7 Client Sample ID: HD-COD-SW-16-0/1-0

Date Analyzed: 05/02/20 00:15 Lab File ID: 5050123.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
o-Xylene		Invalid Compound ID	journetp	05/02/20 18:52
Styrene		Invalid Compound ID	journetp	05/02/20 18:52
Tetrachloroethene		Invalid Compound ID	journetp	05/02/20 18:52
Toluene		Invalid Compound ID	journetp	05/02/20 18:52
trans-1,2-Dichloroethene		Invalid Compound ID	journetp	05/02/20 18:52
trans-1,3-Dichloropropene		Invalid Compound ID	journetp	05/02/20 18:52
Trichloroethene		Invalid Compound ID	journetp	05/02/20 18:52
Vinyl chloride		Invalid Compound ID	journetp	05/02/20 18:52

## GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Pittsb Job No.: 180-105108-1

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

Instrument ID: CHHP5 Analysis Batch Number: 314475Lab Sample ID: MB 180-314475/5 Client Sample ID: \_\_\_\_\_Date Analyzed: 05/04/20 09:39 Lab File ID: 5050405.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,1,1,2-Tetrachloroethane		Invalid Compound ID	journetp	05/04/20 10:27
1,1,2,2-Tetrachloroethane		Invalid Compound ID	journetp	05/04/20 10:27
1,1,2-Trichloroethane		Invalid Compound ID	journetp	05/04/20 10:27
1,2-Dibromoethane (EDB)		Invalid Compound ID	journetp	05/04/20 10:27
1,2-Dichloroethane		Invalid Compound ID	journetp	05/04/20 10:27
1,2-Dichloropropane		Invalid Compound ID	journetp	05/04/20 10:27
2-Butanone (MEK)		Invalid Compound ID	journetp	05/04/20 10:27
2-Hexanone		Invalid Compound ID	journetp	05/04/20 10:27
4-Methyl-2-pentanone (MIBK)		Invalid Compound ID	journetp	05/04/20 10:27
Acrylonitrile		Invalid Compound ID	journetp	05/04/20 10:27
Benzene		Invalid Compound ID	journetp	05/04/20 10:27
Bromochloromethane		Invalid Compound ID	journetp	05/04/20 10:27
Bromoform		Invalid Compound ID	journetp	05/04/20 10:27
Bromomethane		Invalid Compound ID	journetp	05/04/20 10:26
Carbon disulfide		Invalid Compound ID	journetp	05/04/20 10:26
Chlorobenzene		Invalid Compound ID	journetp	05/04/20 10:27
Chloroethane		Invalid Compound ID	journetp	05/04/20 10:26
Chloroform		Invalid Compound ID	journetp	05/04/20 10:27
cis-1,2-Dichloroethene		Invalid Compound ID	journetp	05/04/20 10:27
cis-1,3-Dichloropropene		Invalid Compound ID	journetp	05/04/20 10:27
Dibromochloromethane		Invalid Compound ID	journetp	05/04/20 10:27
Ethylbenzene		Invalid Compound ID	journetp	05/04/20 10:27
Methylene Chloride		Invalid Compound ID	journetp	05/04/20 10:27
m-Xylene & p-Xylene		Invalid Compound ID	journetp	05/04/20 10:27
o-Xylene		Invalid Compound ID	journetp	05/04/20 10:27
Styrene		Invalid Compound ID	journetp	05/04/20 10:27
Tetrachloroethene		Invalid Compound ID	journetp	05/04/20 10:27
Toluene		Invalid Compound ID	journetp	05/04/20 10:27
trans-1,3-Dichloropropene		Invalid Compound ID	journetp	05/04/20 10:27
Vinyl chloride		Invalid Compound ID	journetp	05/04/20 10:26

## GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Pittsb Job No.: 180-105108-1

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

Instrument ID: CHHP5 Analysis Batch Number: 314475Lab Sample ID: 180-105108-8 Client Sample ID: HD-COD-SW-17-0/1-0Date Analyzed: 05/04/20 11:04 Lab File ID: 5050408.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
cis-1,2-Dichloroethene	6.03	Invalid Compound ID	journetp	05/04/20 13:19
1,1,1,2-Tetrachloroethane		Invalid Compound ID	journetp	05/04/20 13:20
1,1,1-Trichloroethane		Invalid Compound ID	journetp	05/04/20 13:20
1,1,2,2-Tetrachloroethane		Invalid Compound ID	journetp	05/04/20 13:20
1,1,2-Trichloroethane		Invalid Compound ID	journetp	05/04/20 13:20
1,1-Dichloroethene		Invalid Compound ID	journetp	05/04/20 13:19
1,2-Dibromoethane (EDB)		Invalid Compound ID	journetp	05/04/20 13:20
1,2-Dichloroethane		Invalid Compound ID	journetp	05/04/20 13:20
1,2-Dichloropropane		Invalid Compound ID	journetp	05/04/20 13:20
2-Butanone (MEK)		Invalid Compound ID	journetp	05/04/20 13:19
2-Hexanone		Invalid Compound ID	journetp	05/04/20 13:20
4-Methyl-2-pentanone (MIBK)		Invalid Compound ID	journetp	05/04/20 13:20
Acrylonitrile		Invalid Compound ID	journetp	05/04/20 13:19
Benzene		Invalid Compound ID	journetp	05/04/20 13:20
Bromochloromethane		Invalid Compound ID	journetp	05/04/20 13:19
Bromodichloromethane		Invalid Compound ID	journetp	05/04/20 13:20
Bromoform		Invalid Compound ID	journetp	05/04/20 13:20
Bromomethane		Invalid Compound ID	journetp	05/04/20 13:19
Carbon disulfide		Invalid Compound ID	journetp	05/04/20 13:19
Carbon tetrachloride		Invalid Compound ID	journetp	05/04/20 13:20
Chlorobenzene		Invalid Compound ID	journetp	05/04/20 13:20
Chloroethane		Invalid Compound ID	journetp	05/04/20 13:19
Chloroform		Invalid Compound ID	journetp	05/04/20 13:20
Chloromethane		Invalid Compound ID	journetp	05/04/20 13:19
cis-1,3-Dichloropropene		Invalid Compound ID	journetp	05/04/20 13:20
Dibromochloromethane		Invalid Compound ID	journetp	05/04/20 13:20
Ethylbenzene		Invalid Compound ID	journetp	05/04/20 13:20
Methyl tert-butyl ether		Invalid Compound ID	journetp	05/04/20 13:19
Methylene Chloride		Invalid Compound ID	journetp	05/04/20 13:19
m-Xylene & p-Xylene		Invalid Compound ID	journetp	05/04/20 13:20

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Pittsb Job No.: 180-105108-1

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

Instrument ID: CHHP5 Analysis Batch Number: 314475

Lab Sample ID: 180-105108-8 Client Sample ID: HD-COD-SW-17-0/1-0

Date Analyzed: 05/04/20 11:04 Lab File ID: 5050408.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
o-Xylene		Invalid Compound ID	journetp	05/04/20 13:20
Styrene		Invalid Compound ID	journetp	05/04/20 13:20
Toluene		Invalid Compound ID	journetp	05/04/20 13:20
trans-1,2-Dichloroethene		Invalid Compound ID	journetp	05/04/20 13:19
trans-1,3-Dichloropropene		Invalid Compound ID	journetp	05/04/20 13:20
Vinyl chloride		Invalid Compound ID	journetp	05/04/20 13:19



## GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Pittsb Job No.: 180-105108-1

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

Instrument ID: CHHP5 Analysis Batch Number: 314475Lab Sample ID: 180-105108-9 RA Client Sample ID: HD-COD-SW-26-0/1-0 RADate Analyzed: 05/04/20 11:29 Lab File ID: 5050409.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetone	3.52	Invalid Compound ID	journetp	05/04/20 13:20
Trichloroethene	7.74	Poor chromatography	journetp	05/04/20 13:21
1,1,1,2-Tetrachloroethane		Invalid Compound ID	journetp	05/04/20 13:21
1,1,1-Trichloroethane		Invalid Compound ID	journetp	05/04/20 13:20
1,1,2,2-Tetrachloroethane		Invalid Compound ID	journetp	05/04/20 13:21
1,1,2-Trichloroethane		Invalid Compound ID	journetp	05/04/20 13:21
1,1-Dichloroethene		Invalid Compound ID	journetp	05/04/20 13:20
1,2-Dibromoethane (EDB)		Invalid Compound ID	journetp	05/04/20 13:21
1,2-Dichloroethane		Invalid Compound ID	journetp	05/04/20 13:20
1,2-Dichloropropane		Invalid Compound ID	journetp	05/04/20 13:20
2-Butanone (MEK)		Invalid Compound ID	journetp	05/04/20 13:20
2-Hexanone		Invalid Compound ID	journetp	05/04/20 13:21
4-Methyl-2-pentanone (MIBK)		Invalid Compound ID	journetp	05/04/20 13:20
Acrylonitrile		Invalid Compound ID	journetp	05/04/20 13:20
Benzene		Invalid Compound ID	journetp	05/04/20 13:20
Bromochloromethane		Invalid Compound ID	journetp	05/04/20 13:20
Bromodichloromethane		Invalid Compound ID	journetp	05/04/20 13:20
Bromoform		Invalid Compound ID	journetp	05/04/20 13:21
Bromomethane		Invalid Compound ID	journetp	05/04/20 13:20
Carbon disulfide		Invalid Compound ID	journetp	05/04/20 13:20
Carbon tetrachloride		Invalid Compound ID	journetp	05/04/20 13:20
Chlorobenzene		Invalid Compound ID	journetp	05/04/20 13:21
Chloroethane		Invalid Compound ID	journetp	05/04/20 13:20
Chloroform		Invalid Compound ID	journetp	05/04/20 13:20
Chloromethane		Invalid Compound ID	journetp	05/04/20 13:20
cis-1,2-Dichloroethene		Invalid Compound ID	journetp	05/04/20 13:20
cis-1,3-Dichloropropene		Invalid Compound ID	journetp	05/04/20 13:20
Dibromochloromethane		Invalid Compound ID	journetp	05/04/20 13:21
Ethylbenzene		Invalid Compound ID	journetp	05/04/20 13:21
Methyl tert-butyl ether		Invalid Compound ID	journetp	05/04/20 13:20

## GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Pittsb Job No.: 180-105108-1

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

Instrument ID: CHHP5 Analysis Batch Number: 314475Lab Sample ID: 180-105108-9 RA Client Sample ID: HD-COD-SW-26-0/1-0 RADate Analyzed: 05/04/20 11:29 Lab File ID: 5050409.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methylene Chloride		Invalid Compound ID	journetp	05/04/20 13:20
m-Xylene & p-Xylene		Invalid Compound ID	journetp	05/04/20 13:21
o-Xylene		Invalid Compound ID	journetp	05/04/20 13:21
Styrene		Invalid Compound ID	journetp	05/04/20 13:21
Toluene		Invalid Compound ID	journetp	05/04/20 13:20
trans-1,2-Dichloroethene		Invalid Compound ID	journetp	05/04/20 13:20
trans-1,3-Dichloropropene		Invalid Compound ID	journetp	05/04/20 13:21
Vinyl chloride		Invalid Compound ID	journetp	05/04/20 13:20

## GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Pittsb Job No.: 180-105108-1

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

Instrument ID: CHHP5 Analysis Batch Number: 314475Lab Sample ID: 180-105108-1 Client Sample ID: HD-COD-SW-6-0/1-0Date Analyzed: 05/04/20 13:06 Lab File ID: 5050413.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,1,1,2-Tetrachloroethane		Invalid Compound ID	journetp	05/04/20 15:11
1,1,1-Trichloroethane		Invalid Compound ID	journetp	05/04/20 15:11
1,1,2,2-Tetrachloroethane		Invalid Compound ID	journetp	05/04/20 15:11
1,1,2-Trichloroethane		Invalid Compound ID	journetp	05/04/20 15:11
1,2-Dibromoethane (EDB)		Invalid Compound ID	journetp	05/04/20 15:11
1,2-Dichloroethane		Invalid Compound ID	journetp	05/04/20 15:11
1,2-Dichloropropane		Invalid Compound ID	journetp	05/04/20 15:11
2-Butanone (MEK)		Invalid Compound ID	journetp	05/04/20 15:11
2-Hexanone		Invalid Compound ID	journetp	05/04/20 15:11
4-Methyl-2-pentanone (MIBK)		Invalid Compound ID	journetp	05/04/20 15:11
Benzene		Invalid Compound ID	journetp	05/04/20 15:11
Bromodichloromethane		Invalid Compound ID	journetp	05/04/20 15:11
Bromoform		Invalid Compound ID	journetp	05/04/20 15:11
Bromomethane		Invalid Compound ID	journetp	05/04/20 15:11
Carbon disulfide		Invalid Compound ID	journetp	05/04/20 15:11
Carbon tetrachloride		Invalid Compound ID	journetp	05/04/20 15:11
Chlorobenzene		Invalid Compound ID	journetp	05/04/20 15:11
Chloroethane		Invalid Compound ID	journetp	05/04/20 15:11
Chloroform		Invalid Compound ID	journetp	05/04/20 15:11
Chloromethane		Invalid Compound ID	journetp	05/04/20 15:11
cis-1,2-Dichloroethene		Invalid Compound ID	journetp	05/04/20 15:11
cis-1,3-Dichloropropene		Invalid Compound ID	journetp	05/04/20 15:11
Dibromochloromethane		Invalid Compound ID	journetp	05/04/20 15:11
Ethylbenzene		Invalid Compound ID	journetp	05/04/20 15:11
Methyl tert-butyl ether		Invalid Compound ID	journetp	05/04/20 15:11
Methylene Chloride		Invalid Compound ID	journetp	05/04/20 15:11
m-Xylene & p-Xylene		Invalid Compound ID	journetp	05/04/20 15:11
o-Xylene		Invalid Compound ID	journetp	05/04/20 15:11
Styrene		Invalid Compound ID	journetp	05/04/20 15:11
Tetrachloroethene		Invalid Compound ID	journetp	05/04/20 15:11

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Pittsb Job No.: 180-105108-1

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

Instrument ID: CHHP5 Analysis Batch Number: 314475

Lab Sample ID: 180-105108-1 Client Sample ID: HD-COD-SW-6-0/1-0

Date Analyzed: 05/04/20 13:06 Lab File ID: 5050413.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toluene		Invalid Compound ID	journetp	05/04/20 15:11
trans-1,3-Dichloropropene		Invalid Compound ID	journetp	05/04/20 15:11
Trichloroethene		Invalid Compound ID	journetp	05/04/20 15:11
Vinyl chloride		Invalid Compound ID	journetp	05/04/20 15:11

## GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Pittsb Job No.: 180-105108-1

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

Instrument ID: CHHP5 Analysis Batch Number: 314475Lab Sample ID: 180-105108-2 Client Sample ID: HD-COD-SW-7-0/1-0Date Analyzed: 05/04/20 13:30 Lab File ID: 5050414.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,1,1,2-Tetrachloroethane		Invalid Compound ID	journetp	05/04/20 15:12
1,1,1-Trichloroethane		Invalid Compound ID	journetp	05/04/20 15:12
1,1,2,2-Tetrachloroethane		Invalid Compound ID	journetp	05/04/20 15:12
1,1,2-Trichloroethane		Invalid Compound ID	journetp	05/04/20 15:12
1,1-Dichloroethane		Invalid Compound ID	journetp	05/04/20 15:12
1,1-Dichloroethene		Invalid Compound ID	journetp	05/04/20 15:12
1,2-Dibromoethane (EDB)		Invalid Compound ID	journetp	05/04/20 15:12
1,2-Dichloroethane		Invalid Compound ID	journetp	05/04/20 15:12
1,2-Dichloropropane		Invalid Compound ID	journetp	05/04/20 15:12
2-Butanone (MEK)		Invalid Compound ID	journetp	05/04/20 15:12
2-Hexanone		Invalid Compound ID	journetp	05/04/20 15:12
4-Methyl-2-pentanone (MIBK)		Invalid Compound ID	journetp	05/04/20 15:12
Acrylonitrile		Invalid Compound ID	journetp	05/04/20 15:12
Benzene		Invalid Compound ID	journetp	05/04/20 15:12
Bromochloromethane		Invalid Compound ID	journetp	05/04/20 15:12
Bromodichloromethane		Invalid Compound ID	journetp	05/04/20 15:12
Bromoform		Invalid Compound ID	journetp	05/04/20 15:12
Bromomethane		Invalid Compound ID	journetp	05/04/20 15:12
Carbon disulfide		Invalid Compound ID	journetp	05/04/20 15:12
Carbon tetrachloride		Invalid Compound ID	journetp	05/04/20 15:12
Chlorobenzene		Invalid Compound ID	journetp	05/04/20 15:12
Chloroethane		Invalid Compound ID	journetp	05/04/20 15:12
Chloroform		Invalid Compound ID	journetp	05/04/20 15:12
Chloromethane		Invalid Compound ID	journetp	05/04/20 15:12
cis-1,2-Dichloroethene		Invalid Compound ID	journetp	05/04/20 15:12
cis-1,3-Dichloropropene		Invalid Compound ID	journetp	05/04/20 15:12
Dibromochloromethane		Invalid Compound ID	journetp	05/04/20 15:12
Ethylbenzene		Invalid Compound ID	journetp	05/04/20 15:12
Methyl tert-butyl ether		Invalid Compound ID	journetp	05/04/20 15:12
Methylene Chloride		Invalid Compound ID	journetp	05/04/20 15:12

## GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Pittsb Job No.: 180-105108-1

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

Instrument ID: CHHP5 Analysis Batch Number: 314475Lab Sample ID: 180-105108-2 Client Sample ID: HD-COD-SW-7-0/1-0Date Analyzed: 05/04/20 13:30 Lab File ID: 5050414.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
m-Xylene & p-Xylene		Invalid Compound ID	journetp	05/04/20 15:12
o-Xylene		Invalid Compound ID	journetp	05/04/20 15:12
Styrene		Invalid Compound ID	journetp	05/04/20 15:12
Tetrachloroethene		Invalid Compound ID	journetp	05/04/20 15:12
Toluene		Invalid Compound ID	journetp	05/04/20 15:12
trans-1,2-Dichloroethene		Invalid Compound ID	journetp	05/04/20 15:12
trans-1,3-Dichloropropene		Invalid Compound ID	journetp	05/04/20 15:12
Trichloroethene		Invalid Compound ID	journetp	05/04/20 15:12
Vinyl chloride		Invalid Compound ID	journetp	05/04/20 15:12

## GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Pittsb Job No.: 180-105108-1

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

Instrument ID: CHHP5 Analysis Batch Number: 314475Lab Sample ID: 180-105108-4 Client Sample ID: HD-COD-SW-9-0/1-0Date Analyzed: 05/04/20 13:55 Lab File ID: 5050415.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,1,1,2-Tetrachloroethane		Invalid Compound ID	journetp	05/04/20 15:12
1,1,1-Trichloroethane		Invalid Compound ID	journetp	05/04/20 15:12
1,1,2,2-Tetrachloroethane		Invalid Compound ID	journetp	05/04/20 15:12
1,1,2-Trichloroethane		Invalid Compound ID	journetp	05/04/20 15:12
1,1-Dichloroethane		Invalid Compound ID	journetp	05/04/20 15:12
1,1-Dichloroethene		Invalid Compound ID	journetp	05/04/20 15:12
1,2-Dibromoethane (EDB)		Invalid Compound ID	journetp	05/04/20 15:12
1,2-Dichloroethane		Invalid Compound ID	journetp	05/04/20 15:12
1,2-Dichloropropane		Invalid Compound ID	journetp	05/04/20 15:12
2-Butanone (MEK)		Invalid Compound ID	journetp	05/04/20 15:12
2-Hexanone		Invalid Compound ID	journetp	05/04/20 15:12
4-Methyl-2-pentanone (MIBK)		Invalid Compound ID	journetp	05/04/20 15:12
Acrylonitrile		Invalid Compound ID	journetp	05/04/20 15:12
Benzene		Invalid Compound ID	journetp	05/04/20 15:12
Bromochloromethane		Invalid Compound ID	journetp	05/04/20 15:12
Bromodichloromethane		Invalid Compound ID	journetp	05/04/20 15:12
Bromoform		Invalid Compound ID	journetp	05/04/20 15:12
Bromomethane		Invalid Compound ID	journetp	05/04/20 15:12
Carbon disulfide		Invalid Compound ID	journetp	05/04/20 15:12
Carbon tetrachloride		Invalid Compound ID	journetp	05/04/20 15:12
Chlorobenzene		Invalid Compound ID	journetp	05/04/20 15:12
Chloroethane		Invalid Compound ID	journetp	05/04/20 15:12
Chloroform		Invalid Compound ID	journetp	05/04/20 15:12
Chloromethane		Invalid Compound ID	journetp	05/04/20 15:12
cis-1,2-Dichloroethene		Invalid Compound ID	journetp	05/04/20 15:12
cis-1,3-Dichloropropene		Invalid Compound ID	journetp	05/04/20 15:12
Dibromochloromethane		Invalid Compound ID	journetp	05/04/20 15:12
Ethylbenzene		Invalid Compound ID	journetp	05/04/20 15:12
Methyl tert-butyl ether		Invalid Compound ID	journetp	05/04/20 15:12
Methylene Chloride		Invalid Compound ID	journetp	05/04/20 15:12

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Pittsb Job No.: 180-105108-1

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

Instrument ID: CHHP5 Analysis Batch Number: 314475

Lab Sample ID: 180-105108-4 Client Sample ID: HD-COD-SW-9-0/1-0

Date Analyzed: 05/04/20 13:55 Lab File ID: 5050415.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
m-Xylene & p-Xylene		Invalid Compound ID	journetp	05/04/20 15:12
o-Xylene		Invalid Compound ID	journetp	05/04/20 15:12
Styrene		Invalid Compound ID	journetp	05/04/20 15:12
Tetrachloroethene		Invalid Compound ID	journetp	05/04/20 15:12
Toluene		Invalid Compound ID	journetp	05/04/20 15:12
trans-1,2-Dichloroethene		Invalid Compound ID	journetp	05/04/20 15:12
trans-1,3-Dichloropropene		Invalid Compound ID	journetp	05/04/20 15:12
Trichloroethene		Invalid Compound ID	journetp	05/04/20 15:12
Vinyl chloride		Invalid Compound ID	journetp	05/04/20 15:12



## GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Pittsb Job No.: 180-105108-1

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

Instrument ID: CHHP5 Analysis Batch Number: 314475Lab Sample ID: 180-105108-5 Client Sample ID: HD-COD-SW-13-0/1-0Date Analyzed: 05/04/20 14:20 Lab File ID: 5050416.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,1,1,2-Tetrachloroethane		Invalid Compound ID	journetp	05/04/20 15:13
1,1,1-Trichloroethane		Invalid Compound ID	journetp	05/04/20 15:13
1,1,2,2-Tetrachloroethane		Invalid Compound ID	journetp	05/04/20 15:13
1,1,2-Trichloroethane		Invalid Compound ID	journetp	05/04/20 15:13
1,1-Dichloroethane		Invalid Compound ID	journetp	05/04/20 15:13
1,1-Dichloroethene		Invalid Compound ID	journetp	05/04/20 15:13
1,2-Dibromoethane (EDB)		Invalid Compound ID	journetp	05/04/20 15:13
1,2-Dichloroethane		Invalid Compound ID	journetp	05/04/20 15:13
1,2-Dichloropropane		Invalid Compound ID	journetp	05/04/20 15:13
2-Butanone (MEK)		Invalid Compound ID	journetp	05/04/20 15:13
2-Hexanone		Invalid Compound ID	journetp	05/04/20 15:13
4-Methyl-2-pentanone (MIBK)		Invalid Compound ID	journetp	05/04/20 15:13
Acrylonitrile		Invalid Compound ID	journetp	05/04/20 15:13
Benzene		Invalid Compound ID	journetp	05/04/20 15:13
Bromochloromethane		Invalid Compound ID	journetp	05/04/20 15:13
Bromodichloromethane		Invalid Compound ID	journetp	05/04/20 15:13
Bromoform		Invalid Compound ID	journetp	05/04/20 15:13
Bromomethane		Invalid Compound ID	journetp	05/04/20 15:13
Carbon disulfide		Invalid Compound ID	journetp	05/04/20 15:13
Carbon tetrachloride		Invalid Compound ID	journetp	05/04/20 15:13
Chlorobenzene		Invalid Compound ID	journetp	05/04/20 15:13
Chloroethane		Invalid Compound ID	journetp	05/04/20 15:13
Chloroform		Invalid Compound ID	journetp	05/04/20 15:13
Chloromethane		Invalid Compound ID	journetp	05/04/20 15:13
cis-1,2-Dichloroethene		Invalid Compound ID	journetp	05/04/20 15:13
cis-1,3-Dichloropropene		Invalid Compound ID	journetp	05/04/20 15:13
Dibromochloromethane		Invalid Compound ID	journetp	05/04/20 15:13
Ethylbenzene		Invalid Compound ID	journetp	05/04/20 15:13
Methyl tert-butyl ether		Invalid Compound ID	journetp	05/04/20 15:13
Methylene Chloride		Invalid Compound ID	journetp	05/04/20 15:13

## GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Pittsb Job No.: 180-105108-1

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

Instrument ID: CHHP5 Analysis Batch Number: 314475Lab Sample ID: 180-105108-5 Client Sample ID: HD-COD-SW-13-0/1-0Date Analyzed: 05/04/20 14:20 Lab File ID: 5050416.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
m-Xylene & p-Xylene		Invalid Compound ID	journetp	05/04/20 15:13
o-Xylene		Invalid Compound ID	journetp	05/04/20 15:13
Styrene		Invalid Compound ID	journetp	05/04/20 15:13
Tetrachloroethene		Invalid Compound ID	journetp	05/04/20 15:13
Toluene		Invalid Compound ID	journetp	05/04/20 15:13
trans-1,2-Dichloroethene		Invalid Compound ID	journetp	05/04/20 15:13
trans-1,3-Dichloropropene		Invalid Compound ID	journetp	05/04/20 15:13
Trichloroethene		Invalid Compound ID	journetp	05/04/20 15:13
Vinyl chloride		Invalid Compound ID	journetp	05/04/20 15:13

## GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Pittsb Job No.: 180-105108-1

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

Instrument ID: CHHP5 Analysis Batch Number: 314475Lab Sample ID: 180-105108-10 Client Sample ID: HD-COD-SW-27-0/1-0Date Analyzed: 05/04/20 14:45 Lab File ID: 5050417.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,1,1,2-Tetrachloroethane		Invalid Compound ID	journetp	05/04/20 15:14
1,1,1-Trichloroethane		Invalid Compound ID	journetp	05/04/20 15:14
1,1,2,2-Tetrachloroethane		Invalid Compound ID	journetp	05/04/20 15:14
1,1,2-Trichloroethane		Invalid Compound ID	journetp	05/04/20 15:14
1,1-Dichloroethane		Invalid Compound ID	journetp	05/04/20 15:14
1,2-Dibromoethane (EDB)		Invalid Compound ID	journetp	05/04/20 15:14
1,2-Dichloroethane		Invalid Compound ID	journetp	05/04/20 15:14
1,2-Dichloropropane		Invalid Compound ID	journetp	05/04/20 15:14
2-Butanone (MEK)		Invalid Compound ID	journetp	05/04/20 15:14
2-Hexanone		Invalid Compound ID	journetp	05/04/20 15:14
4-Methyl-2-pentanone (MIBK)		Invalid Compound ID	journetp	05/04/20 15:14
Acrylonitrile		Invalid Compound ID	journetp	05/04/20 15:14
Benzene		Invalid Compound ID	journetp	05/04/20 15:14
Bromochloromethane		Invalid Compound ID	journetp	05/04/20 15:14
Bromodichloromethane		Invalid Compound ID	journetp	05/04/20 15:14
Bromoform		Invalid Compound ID	journetp	05/04/20 15:14
Bromomethane		Invalid Compound ID	journetp	05/04/20 15:14
Carbon disulfide		Invalid Compound ID	journetp	05/04/20 15:14
Carbon tetrachloride		Invalid Compound ID	journetp	05/04/20 15:14
Chlorobenzene		Invalid Compound ID	journetp	05/04/20 15:14
Chloroethane		Invalid Compound ID	journetp	05/04/20 15:14
Chloroform		Invalid Compound ID	journetp	05/04/20 15:14
Chloromethane		Invalid Compound ID	journetp	05/04/20 15:14
cis-1,2-Dichloroethene		Invalid Compound ID	journetp	05/04/20 15:14
cis-1,3-Dichloropropene		Invalid Compound ID	journetp	05/04/20 15:14
Dibromochloromethane		Invalid Compound ID	journetp	05/04/20 15:14
Ethylbenzene		Invalid Compound ID	journetp	05/04/20 15:14
Methyl tert-butyl ether		Invalid Compound ID	journetp	05/04/20 15:14
Methylene Chloride		Invalid Compound ID	journetp	05/04/20 15:14
m-Xylene & p-Xylene		Invalid Compound ID	journetp	05/04/20 15:14

## GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Pittsb Job No.: 180-105108-1

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

Instrument ID: CHHP5 Analysis Batch Number: 314475Lab Sample ID: 180-105108-10 Client Sample ID: HD-COD-SW-27-0/1-0Date Analyzed: 05/04/20 14:45 Lab File ID: 5050417.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
o-Xylene		Invalid Compound ID	journetp	05/04/20 15:14
Styrene		Invalid Compound ID	journetp	05/04/20 15:14
Tetrachloroethene		Invalid Compound ID	journetp	05/04/20 15:14
Toluene		Invalid Compound ID	journetp	05/04/20 15:14
trans-1,2-Dichloroethene		Invalid Compound ID	journetp	05/04/20 15:14
trans-1,3-Dichloropropene		Invalid Compound ID	journetp	05/04/20 15:14
Trichloroethene		Invalid Compound ID	journetp	05/04/20 15:14
Vinyl chloride		Invalid Compound ID	journetp	05/04/20 15:14

## GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Pittsb Job No.: 180-105108-1

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

Instrument ID: CHHP5 Analysis Batch Number: 314475Lab Sample ID: 180-105108-11 Client Sample ID: HD-COD-SW-28-0/1-0Date Analyzed: 05/04/20 15:09 Lab File ID: 5050418.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,1,1,2-Tetrachloroethane		Invalid Compound ID	journetp	05/04/20 15:42
1,1,1-Trichloroethane		Invalid Compound ID	journetp	05/04/20 15:42
1,1,2,2-Tetrachloroethane		Invalid Compound ID	journetp	05/04/20 15:42
1,1,2-Trichloroethane		Invalid Compound ID	journetp	05/04/20 15:42
1,1-Dichloroethane		Invalid Compound ID	journetp	05/04/20 15:42
1,1-Dichloroethene		Invalid Compound ID	journetp	05/04/20 15:42
1,2-Dibromoethane (EDB)		Invalid Compound ID	journetp	05/04/20 15:42
1,2-Dichloroethane		Invalid Compound ID	journetp	05/04/20 15:42
1,2-Dichloropropane		Invalid Compound ID	journetp	05/04/20 15:42
2-Butanone (MEK)		Invalid Compound ID	journetp	05/04/20 15:42
2-Hexanone		Invalid Compound ID	journetp	05/04/20 15:42
4-Methyl-2-pentanone (MIBK)		Invalid Compound ID	journetp	05/04/20 15:42
Acrylonitrile		Invalid Compound ID	journetp	05/04/20 15:42
Benzene		Invalid Compound ID	journetp	05/04/20 15:42
Bromochloromethane		Invalid Compound ID	journetp	05/04/20 15:42
Bromodichloromethane		Invalid Compound ID	journetp	05/04/20 15:42
Bromoform		Invalid Compound ID	journetp	05/04/20 15:42
Bromomethane		Invalid Compound ID	journetp	05/04/20 15:42
Carbon disulfide		Invalid Compound ID	journetp	05/04/20 15:42
Carbon tetrachloride		Invalid Compound ID	journetp	05/04/20 15:42
Chlorobenzene		Invalid Compound ID	journetp	05/04/20 15:42
Chloroethane		Invalid Compound ID	journetp	05/04/20 15:42
Chloroform		Invalid Compound ID	journetp	05/04/20 15:42
Chloromethane		Invalid Compound ID	journetp	05/04/20 15:42
cis-1,2-Dichloroethene		Invalid Compound ID	journetp	05/04/20 15:42
cis-1,3-Dichloropropene		Invalid Compound ID	journetp	05/04/20 15:42
Dibromochloromethane		Invalid Compound ID	journetp	05/04/20 15:42
Ethylbenzene		Invalid Compound ID	journetp	05/04/20 15:42
Methyl tert-butyl ether		Invalid Compound ID	journetp	05/04/20 15:42
Methylene Chloride		Invalid Compound ID	journetp	05/04/20 15:42

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Pittsb Job No.: 180-105108-1

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

Instrument ID: CHHP5 Analysis Batch Number: 314475

Lab Sample ID: 180-105108-11 Client Sample ID: HD-COD-SW-28-0/1-0

Date Analyzed: 05/04/20 15:09 Lab File ID: 5050418.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
m-Xylene & p-Xylene		Invalid Compound ID	journetp	05/04/20 15:42
o-Xylene		Invalid Compound ID	journetp	05/04/20 15:42
Styrene		Invalid Compound ID	journetp	05/04/20 15:42
Tetrachloroethene		Invalid Compound ID	journetp	05/04/20 15:42
Toluene		Invalid Compound ID	journetp	05/04/20 15:42
trans-1,2-Dichloroethene		Invalid Compound ID	journetp	05/04/20 15:42
trans-1,3-Dichloropropene		Invalid Compound ID	journetp	05/04/20 15:42
Trichloroethene		Invalid Compound ID	journetp	05/04/20 15:42
Vinyl chloride		Invalid Compound ID	journetp	05/04/20 15:42

## GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Pittsb Job No.: 180-105108-1

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

Instrument ID: CHHP5 Analysis Batch Number: 314475Lab Sample ID: 180-105108-12 Client Sample ID: HD-COD-SW-29-0/1-0Date Analyzed: 05/04/20 15:33 Lab File ID: 5050419.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,1,1,2-Tetrachloroethane		Invalid Compound ID	journetp	05/08/20 10:23
1,1,1-Trichloroethane		Invalid Compound ID	journetp	05/08/20 10:18
1,1,2,2-Tetrachloroethane		Invalid Compound ID	journetp	05/08/20 10:23
1,1,2-Trichloroethane		Invalid Compound ID	journetp	05/08/20 10:23
1,1-Dichloroethane		Invalid Compound ID	journetp	05/08/20 10:18
1,1-Dichloroethene		Invalid Compound ID	journetp	05/08/20 10:18
1,2-Dibromoethane (EDB)		Invalid Compound ID	journetp	05/08/20 10:23
1,2-Dichloroethane		Invalid Compound ID	journetp	05/08/20 10:18
1,2-Dichloropropane		Invalid Compound ID	journetp	05/08/20 10:18
2-Butanone (MEK)		Invalid Compound ID	journetp	05/08/20 10:23
2-Hexanone		Invalid Compound ID	journetp	05/08/20 10:23
4-Methyl-2-pentanone (MIBK)		Invalid Compound ID	journetp	05/08/20 10:23
Acrylonitrile		Invalid Compound ID	journetp	05/08/20 10:18
Benzene		Invalid Compound ID	journetp	05/08/20 10:18
Bromochloromethane		Invalid Compound ID	journetp	05/08/20 10:18
Bromodichloromethane		Invalid Compound ID	journetp	05/08/20 10:18
Bromoform		Invalid Compound ID	journetp	05/08/20 10:23
Bromomethane		Invalid Compound ID	journetp	05/08/20 10:23
Carbon tetrachloride		Invalid Compound ID	journetp	05/08/20 10:18
Chlorobenzene		Invalid Compound ID	journetp	05/08/20 10:23
Chloroethane		Invalid Compound ID	journetp	05/08/20 10:18
Chloroform		Invalid Compound ID	journetp	05/08/20 10:18
Chloromethane		Invalid Compound ID	journetp	05/08/20 10:23
cis-1,2-Dichloroethene		Invalid Compound ID	journetp	05/08/20 10:18
cis-1,3-Dichloropropene		Invalid Compound ID	journetp	05/08/20 10:18
Dibromochloromethane		Invalid Compound ID	journetp	05/08/20 10:23
Ethylbenzene		Invalid Compound ID	journetp	05/08/20 10:23
Methyl tert-butyl ether		Invalid Compound ID	journetp	05/08/20 10:18
m-Xylene & p-Xylene		Invalid Compound ID	journetp	05/08/20 10:23
o-Xylene		Invalid Compound ID	journetp	05/08/20 10:23

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Pittsb Job No.: 180-105108-1

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

Instrument ID: CHHP5 Analysis Batch Number: 314475

Lab Sample ID: 180-105108-12 Client Sample ID: HD-COD-SW-29-0/1-0

Date Analyzed: 05/04/20 15:33 Lab File ID: 5050419.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Styrene		Invalid Compound ID	journetp	05/08/20 10:23
Tetrachloroethene		Invalid Compound ID	journetp	05/08/20 10:23
Toluene		Invalid Compound ID	journetp	05/08/20 10:23
trans-1,2-Dichloroethene		Invalid Compound ID	journetp	05/08/20 10:18
trans-1,3-Dichloropropene		Invalid Compound ID	journetp	05/08/20 10:23
Trichloroethene		Invalid Compound ID	journetp	05/08/20 10:18
Vinyl chloride		Invalid Compound ID	journetp	05/08/20 10:18



## GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Pittsb Job No.: 180-105108-1

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

Instrument ID: CHHP5 Analysis Batch Number: 314475Lab Sample ID: 180-105108-13 Client Sample ID: HD-QC1-0/1-1Date Analyzed: 05/04/20 15:58 Lab File ID: 5050420.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,1,1,2-Tetrachloroethane		Invalid Compound ID	journetp	05/08/20 10:24
1,1,1-Trichloroethane		Invalid Compound ID	journetp	05/08/20 10:24
1,1,2,2-Tetrachloroethane		Invalid Compound ID	journetp	05/08/20 10:24
1,1,2-Trichloroethane		Invalid Compound ID	journetp	05/08/20 10:24
1,2-Dibromoethane (EDB)		Invalid Compound ID	journetp	05/08/20 10:24
1,2-Dichloroethane		Invalid Compound ID	journetp	05/08/20 10:24
1,2-Dichloropropane		Invalid Compound ID	journetp	05/08/20 10:24
2-Hexanone		Invalid Compound ID	journetp	05/08/20 10:24
4-Methyl-2-pentanone (MIBK)		Invalid Compound ID	journetp	05/08/20 10:24
Acrylonitrile		Invalid Compound ID	journetp	05/08/20 10:24
Benzene		Invalid Compound ID	journetp	05/08/20 10:24
Bromochloromethane		Invalid Compound ID	journetp	05/08/20 10:24
Bromodichloromethane		Invalid Compound ID	journetp	05/08/20 10:24
Bromoform		Invalid Compound ID	journetp	05/08/20 10:24
Bromomethane		Invalid Compound ID	journetp	05/08/20 10:24
Carbon disulfide		Invalid Compound ID	journetp	05/08/20 10:24
Carbon tetrachloride		Invalid Compound ID	journetp	05/08/20 10:24
Chlorobenzene		Invalid Compound ID	journetp	05/08/20 10:24
Chloroethane		Invalid Compound ID	journetp	05/08/20 10:24
Chloroform		Invalid Compound ID	journetp	05/08/20 10:24
Chloromethane		Invalid Compound ID	journetp	05/08/20 10:24
cis-1,3-Dichloropropene		Invalid Compound ID	journetp	05/08/20 10:24
Dibromochloromethane		Invalid Compound ID	journetp	05/08/20 10:24
Ethylbenzene		Invalid Compound ID	journetp	05/08/20 10:24
Methyl tert-butyl ether		Invalid Compound ID	journetp	05/08/20 10:24
Methylene Chloride		Invalid Compound ID	journetp	05/08/20 10:24
m-Xylene & p-Xylene		Invalid Compound ID	journetp	05/08/20 10:24
o-Xylene		Invalid Compound ID	journetp	05/08/20 10:24
Styrene		Invalid Compound ID	journetp	05/08/20 10:24
Toluene		Invalid Compound ID	journetp	05/08/20 10:24

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Pittsb Job No.: 180-105108-1

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

Instrument ID: CHHP5 Analysis Batch Number: 314475

Lab Sample ID: 180-105108-13 Client Sample ID: HD-QC1-0/1-1

Date Analyzed: 05/04/20 15:58 Lab File ID: 5050420.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
trans-1,2-Dichloroethene		Invalid Compound ID	journetp	05/08/20 10:24
trans-1,3-Dichloropropene		Invalid Compound ID	journetp	05/08/20 10:24
Vinyl chloride		Invalid Compound ID	journetp	05/08/20 10:24

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1

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

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration		
					Reagent ID	Volume Added				
VOA8260INT_00105	04/06/20	03/06/20	Methanol, Lot 3167189	10 mL	VOA8260INTRES_00159	1 mL	1,4-Dichlorobenzene-d4	25 ug/mL		
							Chlorobenzene-d5	25 ug/mL		
							Fluorobenzene (IS)	25 ug/mL		
							TBA-d9 (IS)	500 ug/mL		
.VOA8260INTRES_00159	01/31/24		Restek, Lot A0145169		(Purchased Reagent)		1,4-Dichlorobenzene-d4	250 ug/mL		
							Chlorobenzene-d5	250 ug/mL		
							Fluorobenzene (IS)	250 ug/mL		
							TBA-d9 (IS)	5000 ug/mL		
VOA8260SURR_00105	03/06/21	03/06/20	Methanol, Lot 3167189	100 mL	VOA8260SURRES_00154	1 mL	1,2-Dichloroethane-d4 (Surr)	25 ug/mL		
							4-Bromofluorobenzene (Surr)	25 ug/mL		
							Dibromofluoromethane (Surr)	25 ug/mL		
							Toluene-d8 (Surr)	25 ug/mL		
.VOA8260SURRES_00154	11/30/23		Restek, Lot A0143613		(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		
VOA8260VOAPRI_00396	03/30/20	03/23/20	Methanol, Lot 3167189	10 mL	VOA8260GAS1ST_00296	0.1 mL	Bromomethane	25 ug/mL		
							Butadiene	25 ug/mL		
							Chloroethane	25 ug/mL		
							Chloromethane	25 ug/mL		
							Dichlorodifluoromethane	25 ug/mL		
							Dichlorofluoromethane	25 ug/mL		
							Trichlorofluoromethane	25 ug/mL		
							Vinyl chloride	25 ug/mL		
							VOA8260VOAPRI_00393	1 mL	2-Butanone (MEK)	25 ug/mL
									2-Hexanone	25 ug/mL
									4-Methyl-2-pentanone (MIBK)	25 ug/mL
									Acetone	25 ug/mL
									1,1,1,2-Tetrachloroethane	25 ug/mL
									1,1,1-Trichloroethane	25 ug/mL
					1,1,2,2-Tetrachloroethane	25 ug/mL				
					1,1,2-Trichloro-1,2,2-trifluoroethane	25 ug/mL				
					1,1,2-Trichloroethane	25 ug/mL				
					1,1-Dichloroethane	25 ug/mL				
					1,1-Dichloroethene	25 ug/mL				
					1,1-Dichloropropene	25 ug/mL				
					1,2,3-Trichlorobenzene	25 ug/mL				
					1,2,3-Trichloropropane	25 ug/mL				
					1,2,4-Trichlorobenzene	25 ug/mL				
					1,2,4-Trimethylbenzene	25 ug/mL				
					1,2-Dibromo-3-Chloropropane	25 ug/mL				
					1,2-Dibromoethane (EDB)	25 ug/mL				
					1,2-Dichlorobenzene	25 ug/mL				
					1,2-Dichloroethane	25 ug/mL				
1,2-Dichloropropane	25 ug/mL									
1,3,5-Trimethylbenzene	25 ug/mL									

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1

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

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,3-Dichlorobenzene	25 ug/mL
							1,3-Dichloropropane	25 ug/mL
							1,4-Dichlorobenzene	25 ug/mL
							1,4-Dioxane	500 ug/mL
							2,2-Dichloropropane	25 ug/mL
							2-Chlorotoluene	25 ug/mL
							2-Methyl-2-propanol	250 ug/mL
							3-Chloro-1-propene	25 ug/mL
							4-Chlorotoluene	25 ug/mL
							4-Isopropyltoluene	25 ug/mL
							Acrylonitrile	250 ug/mL
							Benzene	25 ug/mL
							Bromobenzene	25 ug/mL
							Bromochloromethane	25 ug/mL
							Bromodichloromethane	25 ug/mL
							Bromoform	25 ug/mL
							Carbon disulfide	25 ug/mL
							Carbon tetrachloride	25 ug/mL
							Chlorobenzene	25 ug/mL
							Chloroform	25 ug/mL
							cis-1,2-Dichloroethene	25 ug/mL
							cis-1,3-Dichloropropene	25 ug/mL
							Cyclohexane	25 ug/mL
							Dibromochloromethane	25 ug/mL
							Dibromomethane	25 ug/mL
							Ethyl ether	25 ug/mL
							Ethyl methacrylate	25 ug/mL
							Ethylbenzene	25 ug/mL
							Hexachlorobutadiene	25 ug/mL
							Hexane	25 ug/mL
							Iodomethane	25 ug/mL
							Isobutyl alcohol	625 ug/mL
							Isopropylbenzene	25 ug/mL
							m-Xylene & p-Xylene	25 ug/mL
							Methyl acetate	50 ug/mL
							Methyl tert-butyl ether	25 ug/mL
							Methylcyclohexane	25 ug/mL
							Methylene Chloride	25 ug/mL
							n-Butylbenzene	25 ug/mL
							n-Heptane	25 ug/mL
							N-Propylbenzene	25 ug/mL
							Naphthalene	25 ug/mL
							o-Xylene	25 ug/mL
							sec-Butylbenzene	25 ug/mL
							Styrene	25 ug/mL
							tert-Butylbenzene	25 ug/mL
							Tetrachloroethene	25 ug/mL
							Tetrahydrofuran	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Toluene	25 ug/mL
							trans-1,2-Dichloroethene	25 ug/mL
							trans-1,3-Dichloropropene	25 ug/mL
							trans-1,4-Dichloro-2-butene	25 ug/mL
							Trichloroethene	25 ug/mL
.VOA8260GAS1ST_00296	11/30/22		Restek, Lot A0154679			(Purchased Reagent)	Bromomethane	2500 ug/mL
							Butadiene	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Dichlorofluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
.VOA8260VOAPRI_00393	04/04/20	03/04/20	Methanol, Lot 3167189	10 mL	VOA8260KET1ST_00136	0.2 mL	2-Butanone (MEK)	250 ug/mL
							2-Hexanone	250 ug/mL
							4-Methyl-2-pentanone (MIBK)	250 ug/mL
							Acetone	250 ug/mL
					VOA8260MEGA1_00096	1 mL	1,1,1,2-Tetrachloroethane	250 ug/mL
							1,1,1-Trichloroethane	250 ug/mL
							1,1,2,2-Tetrachloroethane	250 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	250 ug/mL
							1,1,2-Trichloroethane	250 ug/mL
							1,1-Dichloroethane	250 ug/mL
							1,1-Dichloroethene	250 ug/mL
							1,1-Dichloropropene	250 ug/mL
							1,2,3-Trichlorobenzene	250 ug/mL
							1,2,3-Trichloropropane	250 ug/mL
							1,2,4-Trichlorobenzene	250 ug/mL
							1,2,4-Trimethylbenzene	250 ug/mL
							1,2-Dibromo-3-Chloropropane	250 ug/mL
							1,2-Dibromoethane (EDB)	250 ug/mL
							1,2-Dichlorobenzene	250 ug/mL
							1,2-Dichloroethane	250 ug/mL
							1,2-Dichloropropane	250 ug/mL
							1,3,5-Trimethylbenzene	250 ug/mL
							1,3-Dichlorobenzene	250 ug/mL
							1,3-Dichloropropane	250 ug/mL
							1,4-Dichlorobenzene	250 ug/mL
							1,4-Dioxane	5000 ug/mL
							2,2-Dichloropropane	250 ug/mL
							2-Chlorotoluene	250 ug/mL
							2-Methyl-2-propanol	2500 ug/mL
							3-Chloro-1-propene	250 ug/mL
							4-Chlorotoluene	250 ug/mL
							4-Isopropyltoluene	250 ug/mL
							Acrylonitrile	2500 ug/mL
							Benzene	250 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1

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

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Bromobenzene	250 ug/mL
							Bromochloromethane	250 ug/mL
							Bromodichloromethane	250 ug/mL
							Bromoform	250 ug/mL
							Carbon disulfide	250 ug/mL
							Carbon tetrachloride	250 ug/mL
							Chlorobenzene	250 ug/mL
							Chloroform	250 ug/mL
							cis-1,2-Dichloroethene	250 ug/mL
							cis-1,3-Dichloropropene	250 ug/mL
							Cyclohexane	250 ug/mL
							Dibromochloromethane	250 ug/mL
							Dibromomethane	250 ug/mL
							Ethyl ether	250 ug/mL
							Ethyl methacrylate	250 ug/mL
							Ethylbenzene	250 ug/mL
							Hexachlorobutadiene	250 ug/mL
							Hexane	250 ug/mL
							Iodomethane	250 ug/mL
							Isobutyl alcohol	6250 ug/mL
							Isopropylbenzene	250 ug/mL
							m-Xylene & p-Xylene	250 ug/mL
							Methyl acetate	500 ug/mL
							Methyl tert-butyl ether	250 ug/mL
							Methylcyclohexane	250 ug/mL
							Methylene Chloride	250 ug/mL
							n-Butylbenzene	250 ug/mL
							n-Heptane	250 ug/mL
							N-Propylbenzene	250 ug/mL
							Naphthalene	250 ug/mL
							o-Xylene	250 ug/mL
							sec-Butylbenzene	250 ug/mL
							Styrene	250 ug/mL
							tert-Butylbenzene	250 ug/mL
							Tetrachloroethene	250 ug/mL
							Tetrahydrofuran	500 ug/mL
							Toluene	250 ug/mL
							trans-1,2-Dichloroethene	250 ug/mL
							trans-1,3-Dichloropropene	250 ug/mL
							trans-1,4-Dichloro-2-butene	250 ug/mL
							Trichloroethene	250 ug/mL
..VOA8260KET1ST_00136	12/31/21		Restek, Lot A0143988			(Purchased Reagent)	2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
..VOA8260MEGA1_00096	06/30/21		Restek, Lot A0143774			(Purchased Reagent)	1,1,1,2-Tetrachloroethane	2500 ug/mL
							1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1,2-Trichloro-1,2,2-trifluoroethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,1-Dichloropropene	2500 ug/mL
							1,2,3-Trichlorobenzene	2500 ug/mL
							1,2,3-Trichloropropane	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2,4-Trimethylbenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-Dibromoethane (EDB)	2500 ug/mL
							1,2-Dichlorobenzene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							1,3,5-Trimethylbenzene	2500 ug/mL
							1,3-Dichlorobenzene	2500 ug/mL
							1,3-Dichloropropane	2500 ug/mL
							1,4-Dichlorobenzene	2500 ug/mL
							1,4-Dioxane	50000 ug/mL
							2,2-Dichloropropane	2500 ug/mL
							2-Chlorotoluene	2500 ug/mL
							2-Methyl-2-propanol	25000 ug/mL
							3-Chloro-1-propene	2500 ug/mL
							4-Chlorotoluene	2500 ug/mL
							4-Isopropyltoluene	2500 ug/mL
							Acrylonitrile	25000 ug/mL
							Benzene	2500 ug/mL
							Bromobenzene	2500 ug/mL
							Bromochloromethane	2500 ug/mL
							Bromodichloromethane	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Cyclohexane	2500 ug/mL
							Dibromochloromethane	2500 ug/mL
							Dibromomethane	2500 ug/mL
							Ethyl ether	2500 ug/mL
							Ethyl methacrylate	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Hexachlorobutadiene	2500 ug/mL
							Hexane	2500 ug/mL
							Iodomethane	2500 ug/mL
							Isobutyl alcohol	62500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Isopropylbenzene	2500 ug/mL
							m-Xylene & p-Xylene	2500 ug/mL
							Methyl acetate	5000 ug/mL
							Methyl tert-butyl ether	2500 ug/mL
							Methylcyclohexane	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							n-Butylbenzene	2500 ug/mL
							n-Heptane	2500 ug/mL
							N-Propylbenzene	2500 ug/mL
							Naphthalene	2500 ug/mL
							o-Xylene	2500 ug/mL
							sec-Butylbenzene	2500 ug/mL
							Styrene	2500 ug/mL
							tert-Butylbenzene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Tetrahydrofuran	5000 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							trans-1,4-Dichloro-2-butene	2500 ug/mL
							Trichloroethene	2500 ug/mL
VOA8260VOAPRI_00403	05/04/20	04/30/20	Methanol, Lot 3167189	10 mL	VOA8260GAS1ST_00302	100 uL	Bromomethane	25 ug/mL
							Chloroethane	25 ug/mL
							Chloromethane	25 ug/mL
							Vinyl chloride	25 ug/mL
					VOA8260VOAPRI_00398	1 mL	1,1,1,2-Tetrachloroethane	25 ug/mL
							1,1,1-Trichloroethane	25 ug/mL
							1,1,2,2-Tetrachloroethane	25 ug/mL
							1,1,2-Trichloroethane	25 ug/mL
							1,1-Dichloroethane	25 ug/mL
							1,1-Dichloroethene	25 ug/mL
							1,2-Dibromoethane (EDB)	25 ug/mL
							1,2-Dichloroethane	25 ug/mL
							1,2-Dichloropropane	25 ug/mL
							Acrylonitrile	250 ug/mL
							Benzene	25 ug/mL
							Bromochloromethane	25 ug/mL
							Bromodichloromethane	25 ug/mL
							Bromoform	25 ug/mL
							Carbon disulfide	25 ug/mL
							Carbon tetrachloride	25 ug/mL
							Chlorobenzene	25 ug/mL
							Chloroform	25 ug/mL
							cis-1,2-Dichloroethene	25 ug/mL
							cis-1,3-Dichloropropene	25 ug/mL
							Dibromochloromethane	25 ug/mL
							Ethylbenzene	25 ug/mL



REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1

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

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methyl tert-butyl ether	25 ug/mL
							Methylene Chloride	25 ug/mL
							Styrene	25 ug/mL
							Tetrachloroethene	25 ug/mL
							Toluene	25 ug/mL
							trans-1,2-Dichloroethene	25 ug/mL
							trans-1,3-Dichloropropene	25 ug/mL
							Trichloroethene	25 ug/mL
							Xylenes, Total	50 ug/mL
.VOA8260GAS1ST_00302	11/30/22		Restek, Lot A0154679			(Purchased Reagent)	Bromomethane	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
.VOA8260VOAPRI_00398	05/04/20	04/04/20	Methanol, Lot 3167189	10 mL	VOA8260MEGA1_00100	1 mL	1,1,1,2-Tetrachloroethane	250 ug/mL
							1,1,1-Trichloroethane	250 ug/mL
							1,1,2,2-Tetrachloroethane	250 ug/mL
							1,1,2-Trichloroethane	250 ug/mL
							1,1-Dichloroethane	250 ug/mL
							1,1-Dichloroethene	250 ug/mL
							1,2-Dibromoethane (EDB)	250 ug/mL
							1,2-Dichloroethane	250 ug/mL
							1,2-Dichloropropane	250 ug/mL
							Acrylonitrile	2500 ug/mL
							Benzene	250 ug/mL
							Bromochloromethane	250 ug/mL
							Bromodichloromethane	250 ug/mL
							Bromoform	250 ug/mL
							Carbon disulfide	250 ug/mL
							Carbon tetrachloride	250 ug/mL
							Chlorobenzene	250 ug/mL
							Chloroform	250 ug/mL
							cis-1,2-Dichloroethene	250 ug/mL
							cis-1,3-Dichloropropene	250 ug/mL
							Dibromochloromethane	250 ug/mL
							Ethylbenzene	250 ug/mL
							Methyl tert-butyl ether	250 ug/mL
							Methylene Chloride	250 ug/mL
							Styrene	250 ug/mL
							Tetrachloroethene	250 ug/mL
							Toluene	250 ug/mL
							trans-1,2-Dichloroethene	250 ug/mL
							trans-1,3-Dichloropropene	250 ug/mL
							Trichloroethene	250 ug/mL
							Xylenes, Total	500 ug/mL
..VOA8260MEGA1_00100	06/30/21		Restek, Lot A0143774			(Purchased Reagent)	1,1,1,2-Tetrachloroethane	2500 ug/mL
							1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,2-Dibromoethane (EDB)	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							Acrylonitrile	25000 ug/mL
							Benzene	2500 ug/mL
							Bromochloromethane	2500 ug/mL
							Bromodichloromethane	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Dibromochloromethane	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Methyl tert-butyl ether	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							Styrene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							Trichloroethene	2500 ug/mL
							Xylenes, Total	5000 ug/mL
<b>VOABFB25_00121</b>							1,2-Dichloroethene, Total	
							1,3-Dichloropropene, Total	
							Tentatively Identified Compound	
							Total BTEX	
							Xylenes, Total	
					VOABFB50_00125	5 mL	BFB	25 ug/mL
.VOABFB50_00125	04/18/20	03/18/20	Methanol, Lot 3167189	50 mL	VOABFBRES_00093	1 mL	BFB	50 ug/mL
..VOABFBRES_00093	04/30/24		Restek, Lot A0147670		(Purchased Reagent)		BFB	2500 ug/mL
<b>VOABFB25_00122</b>							1,2-Dichloroethene, Total	
							1,3-Dichloropropene, Total	
							Tentatively Identified Compound	
							Total BTEX	
							Xylenes, Total	
					VOABFB50_00126	5 mL	BFB	25 ug/mL
.VOABFB50_00126	05/20/20	04/20/20	Methanol, Lot 3167189	50 mL	VOABFBRES_00089	1 mL	BFB	50 ug/mL
..VOABFBRES_00089	04/30/24		Restek, Lot A0147670		(Purchased Reagent)		BFB	2500 ug/mL
<b>VOAKetPRI_00001</b>	05/01/20	04/01/20	Methanol, Lot 3167189	50 mL	VOA8260KET1ST_00136	0.1 mL	2-Butanone (MEK)	25 ug/mL
							2-Hexanone	25 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Methyl-2-pentanone (MIBK)	25 ug/mL
							Acetone	25 ug/mL
.VOA8260KET1ST_00136	12/31/21		Restek, Lot A0143988		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
voaWI/SHP5_00016	05/06/20	04/06/20	Methanol, Lot 3167194	25 mL	VOA8260INTSUR_00028	1 mL	1,4-Dichlorobenzene-d4	10 ug/mL
							Chlorobenzene-d5	10 ug/mL
							Fluorobenzene (IS)	10 ug/mL
							TBA-d9 (IS)	200 ug/mL
.VOA8260INTSUR_00028	11/30/23		Restek, Lot A0143593		(Purchased Reagent)		1,4-Dichlorobenzene-d4	250 ug/mL
							Chlorobenzene-d5	250 ug/mL
							Fluorobenzene (IS)	250 ug/mL
							TBA-d9 (IS)	5000 ug/mL
voaWI/SHP5_00016	05/06/20	04/06/20	Methanol, Lot 3167194	25 mL	VOA8260INTSUR_00028	1 mL	1,2-Dichloroethane-d4 (Surr)	10 ug/mL
							4-Bromofluorobenzene (Surr)	10 ug/mL
							Dibromofluoromethane (Surr)	10 ug/mL
							Toluene-d8 (Surr)	10 ug/mL
.VOA8260INTSUR_00028	11/30/23		Restek, Lot A0143593		(Purchased Reagent)		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
voaWKet2ndRes_00050	05/14/20	04/14/20	Methanol, Lot 3167192	50 mL	VOA8260KET2ND_00132	0.1 mL	2-Butanone (MEK)	25 ug/mL
							2-Hexanone	25 ug/mL
							4-Methyl-2-pentanone (MIBK)	25 ug/mL
							Acetone	25 ug/mL
.VOA8260KET2ND_00132	11/30/21		Restek, Lot A0143456		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
voaWKetmix1st_00024	04/04/20	03/04/20	Methanol, Lot 3167192	50 mL	VOA8260KET1ST_00142	0.1 mL	2-Butanone (MEK)	25 ug/mL
							2-Hexanone	25 ug/mL
							4-Methyl-2-pentanone (MIBK)	25 ug/mL
							Acetone	25 ug/mL
.VOA8260KET1ST_00142	12/31/21		Restek, Lot A0143988		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL

Reagent

---

**VOA8260GAS1ST\_00296**



# 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. : 569722 Lot No.: A0154679

Description : 8260 List 1 / Std #3 Gases (2015)  
8260 List 1 / Std #3 Gases (2015) 2,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL Pkg Amt: > 1 mL

Expiration Date : November 30, 2022 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)	2,502.7 µg/mL	+/-	18.2705	µg/mL	Gravimetric
	CAS # 75-71-8 (Lot 00012554)		+/-	140.7566	µg/mL	Unstressed
	Purity 99%		+/-	144.0300	µg/mL	Stressed
2	Chloromethane (methyl chloride)	2,500.3 µg/mL	+/-	18.7547	µg/mL	Gravimetric
	CAS # 74-87-3 (Lot SHBK6571)		+/-	140.6865	µg/mL	Unstressed
	Purity 99%		+/-	143.9553	µg/mL	Stressed
3	Vinyl chloride	2,501.1 µg/mL	+/-	18.5858	µg/mL	Gravimetric
	CAS # 75-01-4 (Lot 00015559)		+/-	140.7083	µg/mL	Unstressed
	Purity 99%		+/-	143.9787	µg/mL	Stressed
4	1,3-Butadiene	2,497.1 µg/mL	+/-	17.5808	µg/mL	Gravimetric
	CAS # 106-99-0 (Lot SHBK2299)		+/-	140.3628	µg/mL	Unstressed
	Purity 99%		+/-	143.6309	µg/mL	Stressed
5	Bromomethane (methyl bromide)	2,500.8 µg/mL	+/-	23.3138	µg/mL	Gravimetric
	CAS # 74-83-9 (Lot 101604)		+/-	141.3956	µg/mL	Unstressed
	Purity 99%		+/-	144.6498	µg/mL	Stressed
6	Chloroethane (ethyl chloride)	2,499.0 µg/mL	+/-	21.4252	µg/mL	Gravimetric
	CAS # 75-00-3 (Lot 107-401039114-1)		+/-	140.9973	µg/mL	Unstressed
	Purity 99%		+/-	144.2558	µg/mL	Stressed
7	Dichlorofluoromethane (CFC-21)	2,500.0 µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 75-43-4 (Lot 4938100)		+/-	140.1725	µg/mL	Unstressed
	Purity 99%		+/-	143.4524	µg/mL	Stressed

8	Trichlorofluoromethane (CFC-11)	2,499.6 µg/mL	+/- 21.2368	µg/mL	Gravimetric
	CAS # 75-69-4 (Lot 25931)		+/- 141.0019	µg/mL	Unstressed
	Purity 99%		+/- 144.2618	µg/mL	Stressed

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

**Tech Tips:**

Raw material may contain trace amounts of tert-Butanol.

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

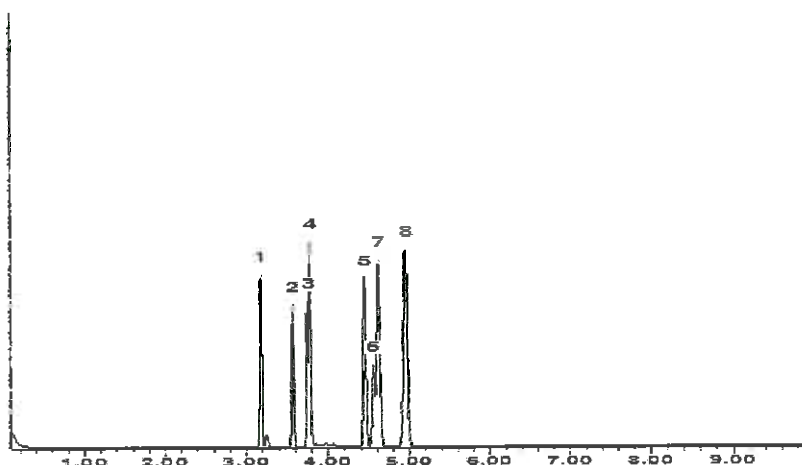
**Carrier Gas:**  
helium-constant pressure 30 psi

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

**Inj. Temp:**  
230°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.

*[Signature]*  
Tom Suckar - Mix Technician

Date Mixed: 04-Nov-2019 Balance: B707717271



Date Passed: 10-Nov-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

---

**VOA8260GAS1ST\_00302**



# 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. :** 569722 **Lot No.:** A0154679

**Description :** 8260 List 1 / Std #3 Gases (2015)  
8260 List 1 / Std #3 Gases (2015) 2,500µg/mL, P&T Methanol, 1mL/ampul

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

**Expiration Date :** November 30, 2022 **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)	2,502.7 µg/mL	+/-	18.2705	µg/mL	Gravimetric
	CAS # 75-71-8 (Lot 00012554)		+/-	140.7566	µg/mL	Unstressed
	Purity 99%		+/-	144.0300	µg/mL	Stressed
2	Chloromethane (methyl chloride)	2,500.3 µg/mL	+/-	18.7547	µg/mL	Gravimetric
	CAS # 74-87-3 (Lot SHBK6571)		+/-	140.6865	µg/mL	Unstressed
	Purity 99%		+/-	143.9553	µg/mL	Stressed
3	Vinyl chloride	2,501.1 µg/mL	+/-	18.5858	µg/mL	Gravimetric
	CAS # 75-01-4 (Lot 00015559)		+/-	140.7083	µg/mL	Unstressed
	Purity 99%		+/-	143.9787	µg/mL	Stressed
4	1,3-Butadiene	2,497.1 µg/mL	+/-	17.5808	µg/mL	Gravimetric
	CAS # 106-99-0 (Lot SHBK2299)		+/-	140.3628	µg/mL	Unstressed
	Purity 99%		+/-	143.6309	µg/mL	Stressed
5	Bromomethane (methyl bromide)	2,500.8 µg/mL	+/-	23.3138	µg/mL	Gravimetric
	CAS # 74-83-9 (Lot 101604)		+/-	141.3956	µg/mL	Unstressed
	Purity 99%		+/-	144.6498	µg/mL	Stressed
6	Chloroethane (ethyl chloride)	2,499.0 µg/mL	+/-	21.4252	µg/mL	Gravimetric
	CAS # 75-00-3 (Lot 107-401039114-1)		+/-	140.9973	µg/mL	Unstressed
	Purity 99%		+/-	144.2558	µg/mL	Stressed
7	Dichlorofluoromethane (CFC-21)	2,500.0 µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 75-43-4 (Lot 4938100)		+/-	140.1725	µg/mL	Unstressed
	Purity 99%		+/-	143.4524	µg/mL	Stressed

8	Trichlorofluoromethane (CFC-11)	2,499.6 µg/mL	+/- 21.2368	µg/mL	Gravimetric
	CAS # 75-69-4 (Lot 25931)		+/- 141.0019	µg/mL	Unstressed
	Purity 99%		+/- 144.2618	µg/mL	Stressed

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

**Tech Tips:**

Raw material may contain trace amounts of tert-Butanol.

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

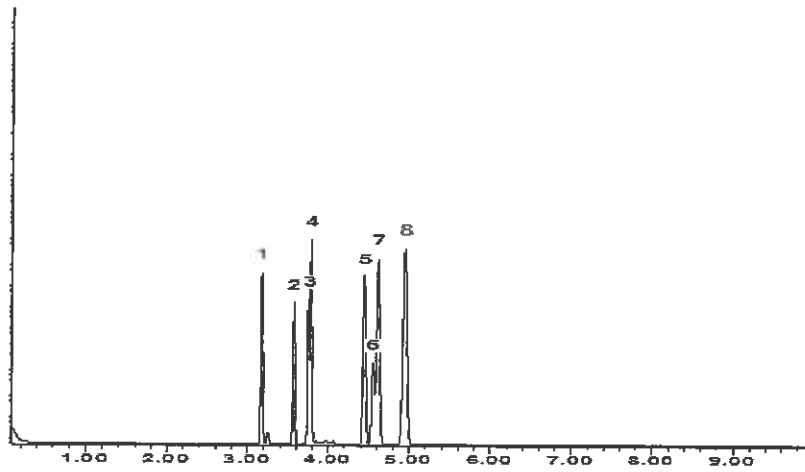
**Carrier Gas:**  
helium-constant pressure 30 psi

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

**Inj. Temp:**  
200°C

**Det. Temp:**  
250°C

**Det. Type:**  
MSD



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

*[Signature]*  
**Tom Suckal - Mix Technician**

**Date Mixed:** 04-Nov-2019    **Balance:** B707717271

*[Signature]*  
**Paig-Yan Lu - QC Analyst**

**Date Passed:** 10-Nov-2019

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

Reagent

---

**VOA8260INTRES\_00159**



# 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. :** 568718 **Lot No.:** A0145169  
**Description :** 8260 Internal Standard 2014  
8260 Internal Standard 2014 250-5,000µg/mL, P&T Methanol/Water (90:10), 5mL/ampul  
**Container Size :** 5 mL **Pkg Amt:** > 5 mL  
**Expiration Date :** January 31, 2024 **Storage:** 0°C or colder

### CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
			+/-	µg/mL	µg/mL	Gravimetric
1	tert-Butyl-d9-alcohol CAS # 25725-11-5 Purity 98% (Lot CD-107)	5,044.0 µg/mL	+/-	29.3246	µg/mL	Gravimetric
			+/-	107.9918	µg/mL	Unstressed
			+/-	111.1314	µg/mL	Stressed
2	2-Butanone-d5 CAS # 24313-50-6 Purity 99% (Lot M-276)	1,254.2 µg/mL	+/-	7.2922	µg/mL	Gravimetric
			+/-	26.8533	µg/mL	Unstressed
			+/-	27.6340	µg/mL	Stressed
3	Fluorobenzene CAS # 462-06-6 Purity 99% (Lot BCBK8171V)	252.1 µg/mL	+/-	1.4689	µg/mL	Gravimetric
			+/-	5.3977	µg/mL	Unstressed
			+/-	5.5545	µg/mL	Stressed
4	1,4-Dioxane-d8 CAS # 17647-74-4 Purity 99% (Lot I-19942)	5,027.8 µg/mL	+/-	29.2304	µg/mL	Gravimetric
			+/-	107.6448	µg/mL	Unstressed
			+/-	110.7743	µg/mL	Stressed
5	Chlorobenzene-d5 CAS # 3114-55-4 Purity 99% (Lot PR-23926)	250.6 µg/mL	+/-	1.4603	µg/mL	Gravimetric
			+/-	5.3661	µg/mL	Unstressed
			+/-	5.5220	µg/mL	Stressed
6	1,4-Dichlorobenzene-d4 CAS # 3855-82-1 Purity 99% (Lot PR-18488)	251.6 µg/mL	+/-	1.4660	µg/mL	Gravimetric
			+/-	5.3871	µg/mL	Unstressed
			+/-	5.5436	µg/mL	Stressed

Reagent

---

**VOA8260INTSUR\_00028**

# RESTEK® 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. :** 570812 **Lot No.:** A0143593  
**Description :** 8260 IS/Surrogate Mix (2016)  
8260 IS/Surrogate Mix (2016) 250-5,000µg/mL, P&T Methanol, 5mL/ampul  
**Container Size :** 5 mL **Pkg Amt:** > 5 mL  
**Expiration Date :** November 30, 2023 **Storage:** 0°C or colder

### CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	tert-Butyl-d9-alcohol	5,000.1 µg/mL (Lot CD-107)	+/-	29.0694	µg/mL	Gravimetric
	CAS # 25725-11-5		+/-	107.0521	µg/mL	Unstressed
	Purity 98%		+/-	110.1643	µg/mL	Stressed
2	Dibromofluoromethane	250.2 µg/mL (Lot 0012017)	+/-	1.4580	µg/mL	Gravimetric
	CAS # 1868-53-7		+/-	5.3577	µg/mL	Unstressed
	Purity 99%		+/-	5.5134	µg/mL	Stressed
3	1,2-Dichloroethane-d4	250.3 µg/mL (Lot PR-29377)	+/-	1.4584	µg/mL	Gravimetric
	CAS # 17060-07-0		+/-	5.3592	µg/mL	Unstressed
	Purity 99%		+/-	5.5149	µg/mL	Stressed
4	1,4-Dioxane-d8	5,000.5 µg/mL (Lot I-19942)	+/-	29.0716	µg/mL	Gravimetric
	CAS # 17647-74-4		+/-	107.0602	µg/mL	Unstressed
	Purity 99%		+/-	110.1726	µg/mL	Stressed
5	Fluorobenzene	250.1 µg/mL (Lot BCBK8171V)	+/-	1.4573	µg/mL	Gravimetric
	CAS # 462-06-6		+/-	5.3549	µg/mL	Unstressed
	Purity 99%		+/-	5.5105	µg/mL	Stressed
6	Toluene-d8	250.1 µg/mL (Lot PR-27311)	+/-	1.4575	µg/mL	Gravimetric
	CAS # 2037-26-5		+/-	5.3556	µg/mL	Unstressed
	Purity 99%		+/-	5.5112	µg/mL	Stressed
7	Chlorobenzene-d5	250.5 µg/mL (Lot PR-23926)	+/-	1.4600	µg/mL	Gravimetric
	CAS # 3114-55-4		+/-	5.3649	µg/mL	Unstressed
	Purity 99%		+/-	5.5208	µg/mL	Stressed

8	1-Bromo-4-fluorobenzene (BFB) CAS # 460-00-4 Purity 99%	(Lot 20401KO)	250.1 µg/mL	+/- 1.4575 +/- 5.3556 +/- 5.5112	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	1,4-Dichlorobenzene-d4 CAS # 3855-82-1 Purity 99%	(Lot PR-18488)	250.2 µg/mL	+/- 1.4580 +/- 5.3577 +/- 5.5134	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)

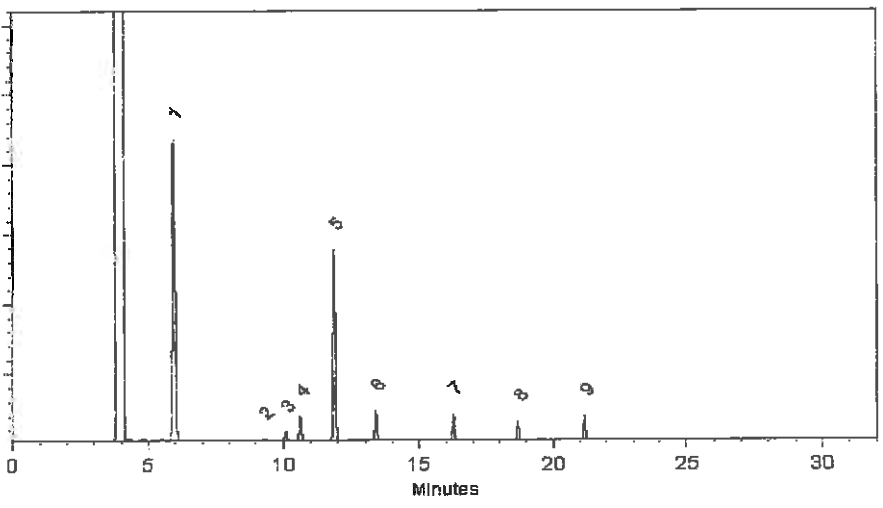
**Carrier Gas:**  
hydrogen-constant pressure 11.0 psi.

**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.

*F. Joseph Tallon*  
F. Joseph Tallon - Mix Technician

Date Mixed: 29-Nov-2018      Balance: B251644995

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

Date Passed: 18-Dec-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

---

**VOA8260KET1ST\_00136**



# CERTIFIED REFERENCE MATERIAL

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

www.restek.com

## Certificate of Analysis



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

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

Catalog No. : 569721 Lot No.: A0143988

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

Container Size : 2 mL Pkg Amt: > 1 mL

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

### CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Acetone	12,500.5 µg/mL	+/-	72.6790	µg/mL	Gravimetric
	CAS # 67-64-1 (Lot SHBJ7699)		+/-	754.2106	µg/mL	Unstressed
	Purity 99%		+/-	756.0012	µg/mL	Stressed
2	2-Butanone (MEK)	12,501.0 µg/mL	+/-	72.6819	µg/mL	Gravimetric
	CAS # 78-93-3 (Lot SHBF2461V)		+/-	754.2407	µg/mL	Unstressed
	Purity 99%		+/-	756.0314	µg/mL	Stressed
3	4-Methyl-2-pentanone (MIBK)	12,501.5 µg/mL	+/-	72.6848	µg/mL	Gravimetric
	CAS # 108-10-1 (Lot SHBH8930)		+/-	754.2709	µg/mL	Unstressed
	Purity 99%		+/-	756.0617	µg/mL	Stressed
4	2-Hexanone	12,501.8 µg/mL	+/-	72.6863	µg/mL	Gravimetric
	CAS # 591-78-6 (Lot MKCD9048)		+/-	754.2860	µg/mL	Unstressed
	Purity 99%		+/-	756.0768	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)

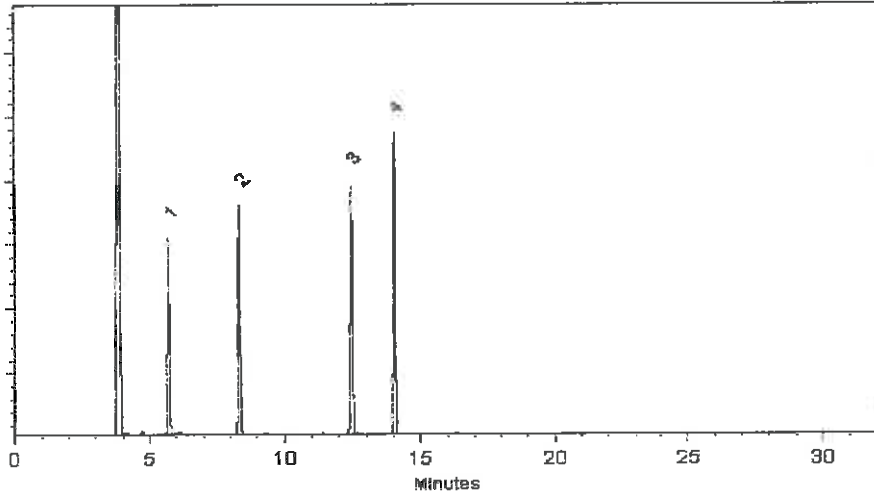
**Carrier Gas:**  
hydrogen-constant pressure 11.0 psi.

**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.

*F. Joseph Tallon*  
F. Joseph Tallon - Mix. Technician

**Date Mixed:** 11-Dec-2018      **Balance:** B251644995

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

**Date Passed:** 14-Dec-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

---

**VOA8260KET1ST\_00142**





# 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. : 569721 Lot No.: A0143988

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

Container Size : 2 mL Pkg Amt: > 1 mL

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

### CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Acetone	12,500.5 µg/mL	+/-	72.6790	µg/mL	Gravimetric
	CAS # 67-64-1 (Lot SHBJ7699)		+/-	754.2106	µg/mL	Unstressed
	Purity 99%		+/-	756.0012	µg/mL	Stressed
2	2-Butanone (MEK)	12,501.0 µg/mL	+/-	72.6819	µg/mL	Gravimetric
	CAS # 78-93-3 (Lot SHBF2461V)		+/-	754.2407	µg/mL	Unstressed
	Purity 99%		+/-	756.0314	µg/mL	Stressed
3	4-Methyl-2-pentanone (MIBK)	12,501.5 µg/mL	+/-	72.6848	µg/mL	Gravimetric
	CAS # 108-10-1 (Lot SHBH8930)		+/-	754.2709	µg/mL	Unstressed
	Purity 99%		+/-	756.0617	µg/mL	Stressed
4	2-Hexanone	12,501.8 µg/mL	+/-	72.6863	µg/mL	Gravimetric
	CAS # 591-78-6 (Lot MKCD9048)		+/-	754.2860	µg/mL	Unstressed
	Purity 99%		+/-	756.0768	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)

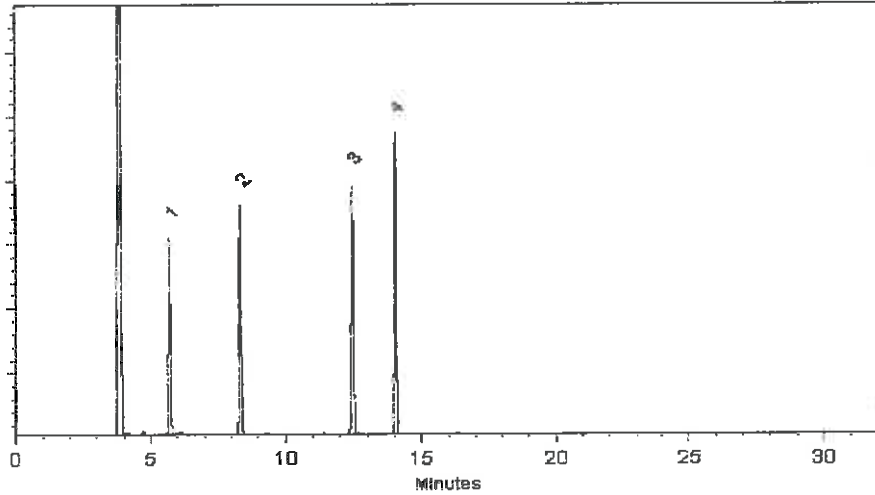
**Carrier Gas:**  
hydrogen-constant pressure 11.0 psi.

**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.

  
F. Joseph Tallon - Mix. Technician

**Date Mixed:** 11-Dec-2018      **Balance:** B251644995

  
Jennifer Pollino - Operations Tech-ARM QC

**Date Passed:** 14-Dec-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

---

**VOA8260KET2ND\_00132**



# CERTIFIED REFERENCE MATERIAL

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. :** 569721.SEC **Lot No.:** A0143456

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

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

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

### CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Acetone	12,524.5 µg/mL (Lot U13B039)	+/-	72.8185	µg/mL	Gravimetric
	CAS # 67-64-1.SEC		+/-	755.6586	µg/mL	Unstressed
	Purity 99%		+/-	757.4526	µg/mL	Stressed
2	2-Butanone (MEK)	12,527.8 µg/mL (Lot RGZ2A)	+/-	72.8374	µg/mL	Gravimetric
	CAS # 78-93-3.SEC		+/-	755.8547	µg/mL	Unstressed
	Purity 99%		+/-	757.6492	µg/mL	Stressed
3	4-Methyl-2-pentanone (MIBK)	12,515.3 µg/mL (Lot E29T040)	+/-	72.7647	µg/mL	Gravimetric
	CAS # 108-10-1.SEC		+/-	755.1005	µg/mL	Unstressed
	Purity 99%		+/-	756.8932	µg/mL	Stressed
4	2-Hexanone	12,516.8 µg/mL (Lot Y3TUO)	+/-	72.7738	µg/mL	Gravimetric
	CAS # 591-78-6.SEC		+/-	755.1943	µg/mL	Unstressed
	Purity 98%		+/-	756.9873	µg/mL	Stressed

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

**Column:**  
135m x 0.53mm x 3.0µm  
Rtx-502.2 (cat.#10910)

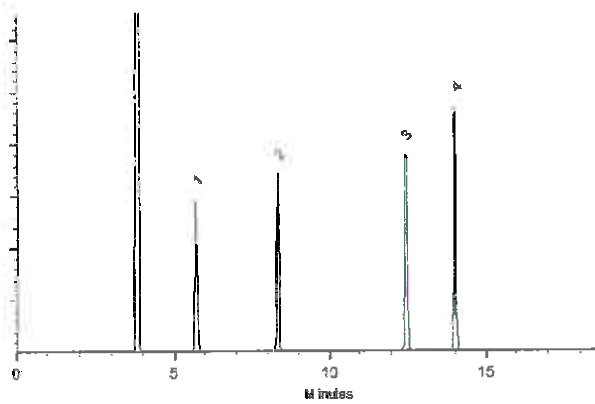
**Carrier Gas:**  
hydrogen-constant pressure 11.0 psi.

**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.

*Dustin J. Lidgett*  
Dustin Lidgett - Mix Technician

Date Mixed: 20-Nov-2018 Balance: 1127510105

*Justin Albertson*  
Justin Albertson - Operations Tech-ARM QC

Date Passed: 29-Nov-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

---

**VOA8260MEGA1\_00096**



# 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. :** 571992 **Lot No.:** A0143774  
**Description :** 8260 List 1 / Std #1 MegaMix (2017)  
8260 List 1 / Std #1 MegaMix (2017) 1,250-62,500µg/mL, P&T Methanol, 1mL/ampul  
**Container Size :** 2 mL **Pkg Amt:** > 1 mL  
**Expiration Date :** June 30, 2021 **Storage:** 0°C or colder

### CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Diethyl ether (ethyl ether)	2,500.6 µg/mL	+/-	14.5388	µg/mL	Gravimetric
	CAS # 60-29-7 (Lot SHBI5713)		+/-	150.8738	µg/mL	Unstressed
	Purity 99%		+/-	151.2320	µg/mL	Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113)	2,501.6 µg/mL	+/-	14.5447	µg/mL	Gravimetric
	CAS # 76-13-1 (Lot 00009482)		+/-	150.9341	µg/mL	Unstressed
	Purity 99%		+/-	151.2925	µg/mL	Stressed
3	1,1-dichloroethene	2,501.9 µg/mL	+/-	14.5461	µg/mL	Gravimetric
	CAS # 75-35-4 (Lot SHBG8609V)		+/-	150.9492	µg/mL	Unstressed
	Purity 99%		+/-	151.3076	µg/mL	Stressed
4	tert-Butanol (TBA)	25,008.1 µg/mL	+/-	145.3918	µg/mL	Gravimetric
	CAS # 75-65-0 (Lot SHBJ9404)		+/-	1,508.8503	µg/mL	Unstressed
	Purity 99%		+/-	1,512.4325	µg/mL	Stressed
5	Methyl acetate	5,000.8 µg/mL	+/-	29.0748	µg/mL	Gravimetric
	CAS # 79-20-9 (Lot SHBG4345V)		+/-	301.7174	µg/mL	Unstressed
	Purity 99%		+/-	302.4337	µg/mL	Stressed
6	Iodomethane (methyl iodide)	2,500.6 µg/mL	+/-	14.5388	µg/mL	Gravimetric
	CAS # 74-88-4 (Lot SHBH4362V)		+/-	150.8738	µg/mL	Unstressed
	Purity 99%		+/-	151.2320	µg/mL	Stressed
7	Allyl chloride (3-chloropropene)	2,502.0 µg/mL	+/-	14.5468	µg/mL	Gravimetric
	CAS # 107-05-1 (Lot WXBB7852V)		+/-	150.9567	µg/mL	Unstressed
	Purity 99%		+/-	151.3151	µg/mL	Stressed

8	Methylene chloride (dichloromethane)		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	<b>CAS #</b> 75-09-2	(Lot SHBK5095)			+/-	150.8813	µg/mL	Unstressed
	<b>Purity</b> 99%				+/-	151.2395	µg/mL	Stressed
9	Carbon disulfide		2,501.1	µg/mL	+/-	14.5418	µg/mL	Gravimetric
	<b>CAS #</b> 75-15-0	(Lot U22D706)			+/-	150.9040	µg/mL	Unstressed
	<b>Purity</b> 99%				+/-	151.2622	µg/mL	Stressed
10	Acrylonitrile		25,010.4	µg/mL	+/-	145.4049	µg/mL	Gravimetric
	<b>CAS #</b> 107-13-1	(Lot R15D047)			+/-	1,508.9360	µg/mL	Unstressed
	<b>Purity</b> 99%				+/-	1,512.5686	µg/mL	Stressed
11	Methyl-tert-butyl ether ( MTBE )		2,500.3	µg/mL	+/-	14.5367	µg/mL	Gravimetric
	<b>CAS #</b> 1634-04-4	(Lot SHBH9526)			+/-	150.8512	µg/mL	Unstressed
	<b>Purity</b> 99%				+/-	151.2093	µg/mL	Stressed
12	cis-1,2-Dichloroethene		2,501.3	µg/mL	+/-	14.5425	µg/mL	Gravimetric
	<b>CAS #</b> 156-59-2	(Lot MKBX5945V)			+/-	150.9115	µg/mL	Unstressed
	<b>Purity</b> 99%				+/-	151.2698	µg/mL	Stressed
13	n-Hexane (C6)		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	<b>CAS #</b> 110-54-3	(Lot SHBH8106)			+/-	150.8813	µg/mL	Unstressed
	<b>Purity</b> 99%				+/-	151.2395	µg/mL	Stressed
14	1,1-Dichloroethane		2,500.4	µg/mL	+/-	14.5374	µg/mL	Gravimetric
	<b>CAS #</b> 75-34-3	(Lot 462600)			+/-	150.8587	µg/mL	Unstressed
	<b>Purity</b> 99%				+/-	151.2169	µg/mL	Stressed
15	2,2-Dichloropropane		2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric
	<b>CAS #</b> 594-20-7	(Lot BCBT5124)			+/-	150.8889	µg/mL	Unstressed
	<b>Purity</b> 99%				+/-	151.2471	µg/mL	Stressed
16	trans-1,2-Dichloroethene		2,500.3	µg/mL	+/-	14.5367	µg/mL	Gravimetric
	<b>CAS #</b> 156-60-5	(Lot MKBH9850V)			+/-	150.8512	µg/mL	Unstressed
	<b>Purity</b> 99%				+/-	151.2093	µg/mL	Stressed
17	Isobutanol (2-Methyl-1-propanol)		62,500.9	µg/mL	+/-	363.3665	µg/mL	Gravimetric
	<b>CAS #</b> 78-83-1	(Lot SHBK0551)			+/-	3,770.9529	µg/mL	Unstressed
	<b>Purity</b> 99%				+/-	3,779.9058	µg/mL	Stressed
18	chloroform		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	<b>CAS #</b> 67-66-3	(Lot SHBJ9076)			+/-	150.8662	µg/mL	Unstressed
	<b>Purity</b> 99%				+/-	151.2244	µg/mL	Stressed
19	Bromochloromethane		2,500.6	µg/mL	+/-	14.5387	µg/mL	Gravimetric
	<b>CAS #</b> 74-97-5	(Lot 00008541)			+/-	150.8718	µg/mL	Unstressed
	<b>Purity</b> 98%				+/-	151.2300	µg/mL	Stressed
20	Tetrahydrofuran		5,000.6	µg/mL	+/-	29.0741	µg/mL	Gravimetric
	<b>CAS #</b> 109-99-9	(Lot SHBJ6179)			+/-	301.7099	µg/mL	Unstressed
	<b>Purity</b> 99%				+/-	302.4262	µg/mL	Stressed
21	1,1,1-trichloroethane		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	<b>CAS #</b> 71-55-6	(Lot B15W12061)			+/-	150.8813	µg/mL	Unstressed
	<b>Purity</b> 99%				+/-	151.2395	µg/mL	Stressed
22	Cyclohexane		2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric
	<b>CAS #</b> 110-82-7	(Lot MKCC9660)			+/-	150.8889	µg/mL	Unstressed
	<b>Purity</b> 99%				+/-	151.2471	µg/mL	Stressed
23	1,1-Dichloropropene		2,500.6	µg/mL	+/-	14.5388	µg/mL	Gravimetric
	<b>CAS #</b> 563-58-6	(Lot 180531JLM)			+/-	150.8738	µg/mL	Unstressed
	<b>Purity</b> 99%				+/-	151.2320	µg/mL	Stressed

24	carbon tetrachloride CAS # 56-23-5 Purity 99%	(Lot SHBJ2110)	2,501.1 µg/mL	+/-	14.5418	µg/mL	Gravimetric
				+/-	150.9040	µg/mL	Unstressed
				+/-	151.2622	µg/mL	Stressed
25	n-Heptane (C7) CAS # 142-82-5 Purity 99%	(Lot SHBJ2424)	2,501.6 µg/mL	+/-	14.5447	µg/mL	Gravimetric
				+/-	150.9341	µg/mL	Unstressed
				+/-	151.2925	µg/mL	Stressed
26	1,2-Dichloroethane CAS # 107-06-2 Purity 99%	(Lot SHBJ0707)	2,501.3 µg/mL	+/-	14.5425	µg/mL	Gravimetric
				+/-	150.9115	µg/mL	Unstressed
				+/-	151.2698	µg/mL	Stressed
27	Benzene CAS # 71-43-2 Purity 99%	(Lot SHBJ5344)	2,500.9 µg/mL	+/-	14.5403	µg/mL	Gravimetric
				+/-	150.8889	µg/mL	Unstressed
				+/-	151.2471	µg/mL	Stressed
28	Trichloroethene CAS # 79-01-6 Purity 99%	(Lot SHBH1955V)	2,500.5 µg/mL	+/-	14.5381	µg/mL	Gravimetric
				+/-	150.8662	µg/mL	Unstressed
				+/-	151.2244	µg/mL	Stressed
29	Methylcyclohexane CAS # 108-87-2 Purity 99%	(Lot SHBJ0457)	2,501.6 µg/mL	+/-	14.5447	µg/mL	Gravimetric
				+/-	150.9341	µg/mL	Unstressed
				+/-	151.2925	µg/mL	Stressed
30	1,2-Dichloropropane CAS # 78-87-5 Purity 99%	(Lot BCBR0882V)	2,500.5 µg/mL	+/-	14.5381	µg/mL	Gravimetric
				+/-	150.8662	µg/mL	Unstressed
				+/-	151.2244	µg/mL	Stressed
31	1,4-Dioxane CAS # 123-91-1 Purity 99%	(Lot SHBJ7415)	50,001.1 µg/mL	+/-	290.6957	µg/mL	Gravimetric
				+/-	3,016.7880	µg/mL	Unstressed
				+/-	3,023.9503	µg/mL	Stressed
32	Dibromomethane CAS # 74-95-3 Purity 99%	(Lot 10201030)	2,502.0 µg/mL	+/-	14.5468	µg/mL	Gravimetric
				+/-	150.9567	µg/mL	Unstressed
				+/-	151.3151	µg/mL	Stressed
33	cis-1,3-Dichloropropene CAS # 10061-01-5 Purity 99%	(Lot 25076)	2,501.4 µg/mL	+/-	14.5432	µg/mL	Gravimetric
				+/-	150.9190	µg/mL	Unstressed
				+/-	151.2773	µg/mL	Stressed
34	Toluene CAS # 108-88-3 Purity 99%	(Lot SHBJ5659)	2,500.1 µg/mL	+/-	14.5359	µg/mL	Gravimetric
				+/-	150.8436	µg/mL	Unstressed
				+/-	151.2017	µg/mL	Stressed
35	Ethyl methacrylate CAS # 97-63-2 Purity 99%	(Lot 69796APV)	2,502.8 µg/mL	+/-	14.5512	µg/mL	Gravimetric
				+/-	151.0020	µg/mL	Unstressed
				+/-	151.3605	µg/mL	Stressed
36	trans-1,3-Dichloropropene CAS # 10061-02-6 Purity 98%	(Lot C797620)	2,500.6 µg/mL	+/-	14.5387	µg/mL	Gravimetric
				+/-	150.8718	µg/mL	Unstressed
				+/-	151.2300	µg/mL	Stressed
37	1,1,2-Trichloroethane CAS # 79-00-5 Purity 99%	(Lot FGB01)	2,500.4 µg/mL	+/-	14.5374	µg/mL	Gravimetric
				+/-	150.8587	µg/mL	Unstressed
				+/-	151.2169	µg/mL	Stressed
38	1,3-Dichloropropane CAS # 142-28-9 Purity 99%	(Lot BCBG2162V)	2,500.9 µg/mL	+/-	14.5403	µg/mL	Gravimetric
				+/-	150.8889	µg/mL	Unstressed
				+/-	151.2471	µg/mL	Stressed
39	Tetrachloroethene CAS # 127-18-4 Purity 99%	(Lot SHBH9691)	2,501.0 µg/mL	+/-	14.5410	µg/mL	Gravimetric
				+/-	150.8964	µg/mL	Unstressed
				+/-	151.2547	µg/mL	Stressed

40	dibromochloromethane CAS # 124-48-1 Purity 98%	(Lot MKCC0877)	2,502.4 µg/mL	+/-	14.5493 150.9827 151.3411	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
41	1,2-Dibromoethane (EDB) CAS # 106-93-4 Purity 99%	(Lot BCBH3877V)	2,500.4 µg/mL	+/-	14.5374 150.8587 151.2169	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
42	Chlorobenzene CAS # 108-90-7 Purity 99%	(Lot SHBH4459V)	2,501.1 µg/mL	+/-	14.5418 150.9040 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
43	m-Xylene CAS # 108-38-3 Purity 99%	(Lot SHBJ2338)	1,251.5 µg/mL	+/-	7.2763 75.5085 75.6878	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
44	p-Xylene CAS # 106-42-3 Purity 99%	(Lot SHBJ0052)	1,250.1 µg/mL	+/-	7.2683 75.4256 75.6047	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
45	Ethylbenzene CAS # 100-41-4 Purity 99%	(Lot SHBJ3183)	2,500.0 µg/mL	+/-	14.5352 150.8361 151.1942	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
46	1,1,1,2-Tetrachloroethane CAS # 630-20-6 Purity 99%	(Lot MKBS3769V)	2,500.0 µg/mL	+/-	14.5352 150.8361 151.1942	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
47	o-Xylene CAS # 95-47-6 Purity 99%	(Lot SHBH7231)	2,500.8 µg/mL	+/-	14.5396 150.8813 151.2395	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
48	Styrene CAS # 100-42-5 Purity 99%	(Lot MKCC9766)	2,500.0 µg/mL	+/-	14.5352 150.8361 151.1942	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
49	Isopropylbenzene (cumene) CAS # 98-82-8 Purity 99%	(Lot 10185056)	2,500.1 µg/mL	+/-	14.5359 150.8436 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
50	bromoform CAS # 75-25-2 Purity 99%	(Lot SHBG3138V)	2,501.0 µg/mL	+/-	14.5410 150.8964 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
51	bromodichloromethane CAS # 75-27-4 Purity 99%	(Lot MKCF8470)	2,501.6 µg/mL	+/-	14.5447 150.9341 151.2925	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
52	1,1,1,2-Tetrachloroethane CAS # 79-34-5 Purity 99%	(Lot CFA4D)	2,500.5 µg/mL	+/-	14.5381 150.8662 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
53	1,2,3-Trichloropropane CAS # 96-18-4 Purity 99%	(Lot BCBH8722V)	2,501.3 µg/mL	+/-	14.5425 150.9115 151.2698	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
54	trans-1,4-dichloro-2-butene CAS # 110-57-6 Purity 94%	(Lot MKBX7788V)	2,500.0 µg/mL	+/-	14.5355 150.8389 151.1971	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
55	n-Propylbenzene CAS # 103-65-1 Purity 99%	(Lot WXBC3346V)	2,500.0 µg/mL	+/-	14.5352 150.8361 151.1942	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

56	Bromobenzene CAS # 108-86-1 Purity 99%	(Lot WXBC5147V)	2,500.1 µg/mL	+/-	14.5359	µg/mL	Gravimetric
				+/-	150.8436	µg/mL	Unstressed
				+/-	151.2017	µg/mL	Stressed
57	1,3,5-Trimethylbenzene CAS # 108-67-8 Purity 99%	(Lot BCBS7648V)	2,500.5 µg/mL	+/-	14.5381	µg/mL	Gravimetric
				+/-	150.8662	µg/mL	Unstressed
				+/-	151.2244	µg/mL	Stressed
58	2-Chlorotoluene CAS # 95-49-8 Purity 99%	(Lot MKBW5554V)	2,500.1 µg/mL	+/-	14.5359	µg/mL	Gravimetric
				+/-	150.8436	µg/mL	Unstressed
				+/-	151.2017	µg/mL	Stressed
59	4-Chlorotoluene CAS # 106-43-4 Purity 99%	(Lot MKBL7753V)	2,500.9 µg/mL	+/-	14.5403	µg/mL	Gravimetric
				+/-	150.8889	µg/mL	Unstressed
				+/-	151.2471	µg/mL	Stressed
60	tert-Butylbenzene CAS # 98-06-6 Purity 99%	(Lot STBD6954V)	2,500.1 µg/mL	+/-	14.5359	µg/mL	Gravimetric
				+/-	150.8436	µg/mL	Unstressed
				+/-	151.2017	µg/mL	Stressed
61	1,2,4-Trimethylbenzene CAS # 95-63-6 Purity 97%	(Lot MKBH5027V)	2,499.9 µg/mL	+/-	14.5348	µg/mL	Gravimetric
				+/-	150.8320	µg/mL	Unstressed
				+/-	151.1901	µg/mL	Stressed
62	sec-Butylbenzene CAS # 135-98-8 Purity 99%	(Lot MKBR9260V)	2,501.1 µg/mL	+/-	14.5418	µg/mL	Gravimetric
				+/-	150.9040	µg/mL	Unstressed
				+/-	151.2622	µg/mL	Stressed
63	p-Isopropyltoluene (p-Cymene) CAS # 99-87-6 Purity 99%	(Lot MKBV3556V)	2,501.1 µg/mL	+/-	14.5418	µg/mL	Gravimetric
				+/-	150.9040	µg/mL	Unstressed
				+/-	151.2622	µg/mL	Stressed
64	1,3-Dichlorobenzene CAS # 541-73-1 Purity 99%	(Lot BCBQ7100V)	2,501.4 µg/mL	+/-	14.5432	µg/mL	Gravimetric
				+/-	150.9190	µg/mL	Unstressed
				+/-	151.2773	µg/mL	Stressed
65	1,4-Dichlorobenzene CAS # 106-46-7 Purity 99%	(Lot MKBS4401V)	2,501.5 µg/mL	+/-	14.5439	µg/mL	Gravimetric
				+/-	150.9266	µg/mL	Unstressed
				+/-	151.2849	µg/mL	Stressed
66	n-Butylbenzene CAS # 104-51-8 Purity 99%	(Lot 09804AE)	2,501.0 µg/mL	+/-	14.5410	µg/mL	Gravimetric
				+/-	150.8964	µg/mL	Unstressed
				+/-	151.2547	µg/mL	Stressed
67	1,2-Dichlorobenzene CAS # 95-50-1 Purity 99%	(Lot SHBG3111V)	2,502.9 µg/mL	+/-	14.5519	µg/mL	Gravimetric
				+/-	151.0095	µg/mL	Unstressed
				+/-	151.3681	µg/mL	Stressed
68	1,2-Dibromo-3-chloropropane CAS # 96-12-8 Purity 99%	(Lot FBL01)	2,502.0 µg/mL	+/-	14.5468	µg/mL	Gravimetric
				+/-	150.9567	µg/mL	Unstressed
				+/-	151.3151	µg/mL	Stressed
69	1,2,4-Trichlorobenzene CAS # 120-82-1 Purity 99%	(Lot SHBJ9215)	2,502.1 µg/mL	+/-	14.5476	µg/mL	Gravimetric
				+/-	150.9643	µg/mL	Unstressed
				+/-	151.3227	µg/mL	Stressed
70	Hexachlorobutadiene CAS # 87-68-3 Purity 99%	(Lot J31X013)	2,501.5 µg/mL	+/-	14.5439	µg/mL	Gravimetric
				+/-	150.9266	µg/mL	Unstressed
				+/-	151.2849	µg/mL	Stressed
71	Naphthalene CAS # 91-20-3 Purity 99%	(Lot MKBZ8680V)	2,502.8 µg/mL	+/-	14.5512	µg/mL	Gravimetric
				+/-	151.0020	µg/mL	Unstressed
				+/-	151.3605	µg/mL	Stressed

72	1,2,3-Trichlorobenzene		2,502.5 µg/mL	+/-	14.5498	µg/mL	Gravimetric
	CAS # 87-61-6	(Lot MKBX7627V)		+/-	150.9869	µg/mL	Unstressed
	Purity 99%			+/-	151.3454	µg/mL	Stressed

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

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

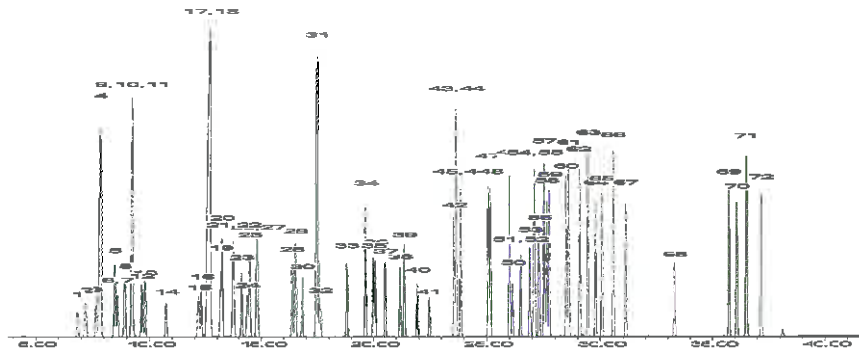
**Carrier Gas:**  
helium-constant pressure 30 psi

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

*F. Joseph Yallon*  
F. Joseph Yallon - Mix Technician

**Date Mixed:** 05-Dec-2018      **Balance:** B251644995

*Diane Shaffer*  
Diane Shaffer - Operations Tech-ARM QC

**Date Passed:** 21-Dec-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

---

**VOA8260MEGA1\_00100**



# 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. :** 571992 **Lot No.:** A0143774  
**Description :** 8260 List 1 / Std #1 MegaMix (2017)  
8260 List 1 / Std #1 MegaMix (2017) 1,250-62,500µg/mL, P&T Methanol, 1mL/ampul  
**Container Size :** 2 mL **Pkg Amt:** > 1 mL  
**Expiration Date :** June 30, 2021 **Storage:** 0°C or colder

### CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Diethyl ether (ethyl ether)	2,500.6 µg/mL	+/-	14.5388	µg/mL	Gravimetric
	CAS # 60-29-7 (Lot SHBJ5713)		+/-	150.8738	µg/mL	Unstressed
	Purity 99%		+/-	151.2320	µg/mL	Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113)	2,501.6 µg/mL	+/-	14.5447	µg/mL	Gravimetric
	CAS # 76-13-1 (Lot 00009482)		+/-	150.9341	µg/mL	Unstressed
	Purity 99%		+/-	151.2925	µg/mL	Stressed
3	1,1-dichloroethene	2,501.9 µg/mL	+/-	14.5461	µg/mL	Gravimetric
	CAS # 75-35-4 (Lot SHBG8609V)		+/-	150.9492	µg/mL	Unstressed
	Purity 99%		+/-	151.3076	µg/mL	Stressed
4	tert-Butanol (TBA)	25,008.1 µg/mL	+/-	145.3918	µg/mL	Gravimetric
	CAS # 75-65-0 (Lot SHBJ9404)		+/-	1,508.8503	µg/mL	Unstressed
	Purity 99%		+/-	1,512.4325	µg/mL	Stressed
5	Methyl acetate	5,000.8 µg/mL	+/-	29.0748	µg/mL	Gravimetric
	CAS # 79-20-9 (Lot SHBG4345V)		+/-	301.7174	µg/mL	Unstressed
	Purity 99%		+/-	302.4337	µg/mL	Stressed
6	Iodomethane (methyl iodide)	2,500.6 µg/mL	+/-	14.5388	µg/mL	Gravimetric
	CAS # 74-88-4 (Lot SHBH4362V)		+/-	150.8738	µg/mL	Unstressed
	Purity 99%		+/-	151.2320	µg/mL	Stressed
7	Allyl chloride ( 3-chloropropene )	2,502.0 µg/mL	+/-	14.5468	µg/mL	Gravimetric
	CAS # 107-05-1 (Lot WXBB7852V)		+/-	150.9567	µg/mL	Unstressed
	Purity 99%		+/-	151.3151	µg/mL	Stressed

8	Methylene chloride (dichloromethane) CAS # 75-09-2 Purity 99%	(Lot SHBK5095)	2,500.8	µg/mL	+/- 14.5396 +/- 150.8813 +/- 151.2395	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	Carbon disulfide CAS # 75-15-0 Purity 99%	(Lot U22D706)	2,501.1	µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	Acrylonitrile CAS # 107-13-1 Purity 99%	(Lot R15D047)	25,010.4	µg/mL	+/- 145.4049 +/- 1,508.9860 +/- 1,512.5686	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	Methyl-tert-butyl ether ( MTBE ) CAS # 1634-04-4 Purity 99%	(Lot SHBH9526)	2,500.3	µg/mL	+/- 14.5367 +/- 150.8512 +/- 151.2093	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	cis-1,2-Dichloroethene CAS # 156-59-2 Purity 99%	(Lot MKBX5945V)	2,501.3	µg/mL	+/- 14.5425 +/- 150.9115 +/- 151.2698	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	n-Hexane (C6) CAS # 110-54-3 Purity 99%	(Lot SHBH8106)	2,500.8	µg/mL	+/- 14.5396 +/- 150.8813 +/- 151.2395	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	1,1-Dichloroethane CAS # 75-34-3 Purity 99%	(Lot 462600)	2,500.4	µg/mL	+/- 14.5374 +/- 150.8587 +/- 151.2169	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	2,2-Dichloropropane CAS # 594-20-7 Purity 99%	(Lot BCBT5124)	2,500.9	µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	trans-1,2-Dichloroethene CAS # 156-60-5 Purity 99%	(Lot MKBH9850V)	2,500.3	µg/mL	+/- 14.5367 +/- 150.8512 +/- 151.2093	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	Isobutanol (2-Methyl-1-propanol) CAS # 78-83-1 Purity 99%	(Lot SHBK0551)	62,500.9	µg/mL	+/- 363.3665 +/- 3,770.9529 +/- 3,779.9058	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
18	chloroform CAS # 67-66-3 Purity 99%	(Lot SHBJ9076)	2,500.5	µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
19	Bromochloromethane CAS # 74-97-5 Purity 98%	(Lot 00008541)	2,500.6	µg/mL	+/- 14.5387 +/- 150.8718 +/- 151.2300	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
20	Tetrahydrofuran CAS # 109-99-9 Purity 99%	(Lot SHBJ6179)	5,000.6	µg/mL	+/- 29.0741 +/- 301.7099 +/- 302.4262	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
21	1,1,1-trichloroethane CAS # 71-55-6 Purity 99%	(Lot B15W12061)	2,500.8	µg/mL	+/- 14.5396 +/- 150.8813 +/- 151.2395	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
22	Cyclohexane CAS # 110-82-7 Purity 99%	(Lot MKCC9660)	2,500.9	µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
23	1,1-Dichloropropene CAS # 563-58-6 Purity 99%	(Lot 180531JLM)	2,500.6	µg/mL	+/- 14.5388 +/- 150.8738 +/- 151.2320	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

24	carbon tetrachloride CAS # 56-23-5 Purity 99%	(Lot SHBJ2110)	2,501.1 µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	n-Heptane (C7) CAS # 142-82-5 Purity 99%	(Lot SHBJ2424)	2,501.6 µg/mL	+/- 14.5447 +/- 150.9341 +/- 151.2925	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	1,2-Dichloroethane CAS # 107-06-2 Purity 99%	(Lot SHBJ0707)	2,501.3 µg/mL	+/- 14.5425 +/- 150.9115 +/- 151.2698	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	Benzene CAS # 71-43-2 Purity 99%	(Lot SHBJ5344)	2,500.9 µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Trichloroethene CAS # 79-01-6 Purity 99%	(Lot SHBH1955V)	2,500.5 µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	Methylcyclohexane CAS # 108-87-2 Purity 99%	(Lot SHBJ0457)	2,501.6 µg/mL	+/- 14.5447 +/- 150.9341 +/- 151.2925	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	1,2-Dichloropropane CAS # 78-87-5 Purity 99%	(Lot BCBR0882V)	2,500.5 µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	1,4-Dioxane CAS # 123-91-1 Purity 99%	(Lot SHBJ7415)	50,001.1 µg/mL	+/- 290.6957 +/- 3,016.7880 +/- 3,023.9503	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	Dibromomethane CAS # 74-95-3 Purity 99%	(Lot 10201030)	2,502.0 µg/mL	+/- 14.5468 +/- 150.9567 +/- 151.3151	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	cis-1,3-Dichloropropene CAS # 10061-01-5 Purity 99%	(Lot 25076)	2,501.4 µg/mL	+/- 14.5432 +/- 150.9190 +/- 151.2773	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	Toluene CAS # 108-88-3 Purity 99%	(Lot SHBJ5659)	2,500.1 µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	Ethyl methacrylate CAS # 97-63-2 Purity 99%	(Lot 69796APV)	2,502.8 µg/mL	+/- 14.5512 +/- 151.0020 +/- 151.3605	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	trans-1,3-Dichloropropene CAS # 10061-02-6 Purity 98%	(Lot C797620)	2,500.6 µg/mL	+/- 14.5387 +/- 150.8718 +/- 151.2300	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	1,1,2-Trichloroethane CAS # 79-00-5 Purity 99%	(Lot FGB01)	2,500.4 µg/mL	+/- 14.5374 +/- 150.8587 +/- 151.2169	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	1,3-Dichloropropane CAS # 142-28-9 Purity 99%	(Lot BCBG2162V)	2,500.9 µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	Tetrachloroethene CAS # 127-18-4 Purity 99%	(Lot SHBH9691)	2,501.0 µg/mL	+/- 14.5410 +/- 150.8964 +/- 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

40	dibromochloromethane CAS # 124-48-1 Purity 98%	(Lot MKCC0877)	2,502.4 µg/mL	+/-	14.5493 150.9827 151.3411	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
41	1,2-Dibromoethane (EDB) CAS # 106-93-4 Purity 99%	(Lot BCBH3877V)	2,500.4 µg/mL	+/-	14.5374 150.8587 151.2169	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
42	Chlorobenzene CAS # 108-90-7 Purity 99%	(Lot SHBH4459V)	2,501.1 µg/mL	+/-	14.5418 150.9040 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
43	m-Xylene CAS # 108-38-3 Purity 99%	(Lot SHBJ2338)	1,251.5 µg/mL	+/-	7.2763 75.5085 75.6878	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
44	p-Xylene CAS # 106-42-3 Purity 99%	(Lot SHBJ0052)	1,250.1 µg/mL	+/-	7.2683 75.4256 75.6047	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
45	Ethylbenzene CAS # 100-41-4 Purity 99%	(Lot SHBJ3183)	2,500.0 µg/mL	+/-	14.5352 150.8361 151.1942	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
46	1,1,1,2-Tetrachloroethane CAS # 630-20-6 Purity 99%	(Lot MKBS3769V)	2,500.0 µg/mL	+/-	14.5352 150.8361 151.1942	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
47	o-Xylene CAS # 95-47-6 Purity 99%	(Lot SHBH7231)	2,500.8 µg/mL	+/-	14.5396 150.8813 151.2395	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
48	Styrene CAS # 100-42-5 Purity 99%	(Lot MKCC9766)	2,500.0 µg/mL	+/-	14.5352 150.8361 151.1942	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
49	Isopropylbenzene (cumene) CAS # 98-82-8 Purity 99%	(Lot 10185056)	2,500.1 µg/mL	+/-	14.5359 150.8436 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
50	bromoform CAS # 75-25-2 Purity 99%	(Lot SHBG3138V)	2,501.0 µg/mL	+/-	14.5410 150.8964 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
51	bromodichloromethane CAS # 75-27-4 Purity 99%	(Lot MKCF8470)	2,501.6 µg/mL	+/-	14.5447 150.9341 151.2925	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
52	1,1,2,2-Tetrachloroethane CAS # 79-34-5 Purity 99%	(Lot CFA4D)	2,500.5 µg/mL	+/-	14.5381 150.8662 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
53	1,2,3-Trichloropropane CAS # 96-18-4 Purity 99%	(Lot BCBH8722V)	2,501.3 µg/mL	+/-	14.5425 150.9115 151.2698	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
54	trans-1,4-dichloro-2-butene CAS # 110-57-6 Purity 94%	(Lot MKBX7788V)	2,500.0 µg/mL	+/-	14.5355 150.8389 151.1971	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
55	n-Propylbenzene CAS # 103-65-1 Purity 99%	(Lot WXBC3346V)	2,500.0 µg/mL	+/-	14.5352 150.8361 151.1942	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

56	Bromobenzene		2,500.1	µg/mL	+/-	14.5359	µg/mL	Gravimetric
	CAS #	108-86-1	(Lot WXBC5147V)		+/-	150.8436	µg/mL	Unstressed
	Purity	99%			+/-	151.2017	µg/mL	Stressed
57	1,3,5-Trimethylbenzene		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS #	108-67-8	(Lot BCBS7648V)		+/-	150.8662	µg/mL	Unstressed
	Purity	99%			+/-	151.2244	µg/mL	Stressed
58	2-Chlorotoluene		2,500.1	µg/mL	+/-	14.5359	µg/mL	Gravimetric
	CAS #	95-49-8	(Lot MKBW5554V)		+/-	150.8436	µg/mL	Unstressed
	Purity	99%			+/-	151.2017	µg/mL	Stressed
59	4-Chlorotoluene		2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric
	CAS #	106-43-4	(Lot MKBL7753V)		+/-	150.8889	µg/mL	Unstressed
	Purity	99%			+/-	151.2471	µg/mL	Stressed
60	tert-Butylbenzene		2,500.1	µg/mL	+/-	14.5359	µg/mL	Gravimetric
	CAS #	98-06-6	(Lot STBD6954V)		+/-	150.8436	µg/mL	Unstressed
	Purity	99%			+/-	151.2017	µg/mL	Stressed
61	1,2,4-Trimethylbenzene		2,499.9	µg/mL	+/-	14.5348	µg/mL	Gravimetric
	CAS #	95-63-6	(Lot MKBH5027V)		+/-	150.8320	µg/mL	Unstressed
	Purity	97%			+/-	151.1901	µg/mL	Stressed
62	sec-Butylbenzene		2,501.1	µg/mL	+/-	14.5418	µg/mL	Gravimetric
	CAS #	135-98-8	(Lot MKBR9260V)		+/-	150.9040	µg/mL	Unstressed
	Purity	99%			+/-	151.2622	µg/mL	Stressed
63	p-Isopropyltoluene (p-Cymene)		2,501.1	µg/mL	+/-	14.5418	µg/mL	Gravimetric
	CAS #	99-87-6	(Lot MKBV3556V)		+/-	150.9040	µg/mL	Unstressed
	Purity	99%			+/-	151.2622	µg/mL	Stressed
64	1,3-Dichlorobenzene		2,501.4	µg/mL	+/-	14.5432	µg/mL	Gravimetric
	CAS #	541-73-1	(Lot BCBQ7100V)		+/-	150.9190	µg/mL	Unstressed
	Purity	99%			+/-	151.2773	µg/mL	Stressed
65	1,4-Dichlorobenzene		2,501.5	µg/mL	+/-	14.5439	µg/mL	Gravimetric
	CAS #	106-46-7	(Lot MKBS4401V)		+/-	150.9266	µg/mL	Unstressed
	Purity	99%			+/-	151.2849	µg/mL	Stressed
66	n-Butylbenzene		2,501.0	µg/mL	+/-	14.5410	µg/mL	Gravimetric
	CAS #	104-51-8	(Lot 09804AE)		+/-	150.8964	µg/mL	Unstressed
	Purity	99%			+/-	151.2547	µg/mL	Stressed
67	1,2-Dichlorobenzene		2,502.9	µg/mL	+/-	14.5519	µg/mL	Gravimetric
	CAS #	95-50-1	(Lot SHBG3111V)		+/-	151.0095	µg/mL	Unstressed
	Purity	99%			+/-	151.3681	µg/mL	Stressed
68	1,2-Dibromo-3-chloropropane		2,502.0	µg/mL	+/-	14.5468	µg/mL	Gravimetric
	CAS #	96-12-8	(Lot FBL01)		+/-	150.9567	µg/mL	Unstressed
	Purity	99%			+/-	151.3151	µg/mL	Stressed
69	1,2,4-Trichlorobenzene		2,502.1	µg/mL	+/-	14.5476	µg/mL	Gravimetric
	CAS #	120-82-1	(Lot SHBJ9215)		+/-	150.9643	µg/mL	Unstressed
	Purity	99%			+/-	151.3227	µg/mL	Stressed
70	Hexachlorobutadiene		2,501.5	µg/mL	+/-	14.5439	µg/mL	Gravimetric
	CAS #	87-68-3	(Lot J31X013)		+/-	150.9266	µg/mL	Unstressed
	Purity	99%			+/-	151.2849	µg/mL	Stressed
71	Naphthalene		2,502.8	µg/mL	+/-	14.5512	µg/mL	Gravimetric
	CAS #	91-20-3	(Lot MKBZ8680V)		+/-	151.0020	µg/mL	Unstressed
	Purity	99%			+/-	151.3605	µg/mL	Stressed



72	1,2,3-Trichlorobenzene		2,502.5 µg/mL	+/- 14.5498	µg/mL	Gravimetric
	CAS # 87-61-6	(Lot MKBX7627V)		+/- 150.9869	µg/mL	Unstressed
	Purity 99%			+/- 151.3454	µg/mL	Stressed

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

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

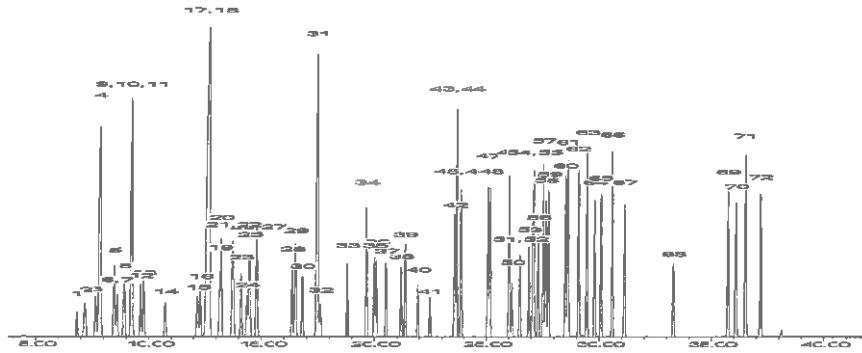
**Carrier Gas:**  
helium-constant pressure 30 psi

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

*F. Joseph Tallon*  
F. Joseph Tallon - Mix Technician

Date Mixed: 05-Dec-2018 Balance: B251644995

*Diane Shaffer*  
Diane Shaffer - Operations Tech-ARM QC

Date Passed: 21-Dec-2018

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

Reagent

---

**VOA8260SURRES\_00154**



# 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. :** 567650 **Lot No.:** A0143613

**Description :** 8260 Surrogate Standard  
8260 Surrogate Standard 2,500µg/mL, P&T Methanol, 5mL/ampul

**Container Size :** 5 mL **Pkg Amt:** > 5 mL

**Expiration Date :** November 30, 2023 **Storage:** 0°C or colder

### CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Dibromofluoromethane	2,506.4 µg/mL	+/-	14.5724	µg/mL	Gravimetric
	CAS # 1868-53-7 (Lot 0012017)		+/-	140.5314	µg/mL	Unstressed
	Purity 99%		+/-	143.8196	µg/mL	Stressed
2	1,2-Dichloroethane-d4	2,503.8 µg/mL	+/-	14.5570	µg/mL	Gravimetric
	CAS # 17060-07-0 (Lot PR-29377)		+/-	140.3828	µg/mL	Unstressed
	Purity 99%		+/-	143.6676	µg/mL	Stressed
3	Toluene-d8	2,512.2 µg/mL	+/-	14.6059	µg/mL	Gravimetric
	CAS # 2037-26-5 (Lot PR-27311)		+/-	140.8538	µg/mL	Unstressed
	Purity 99%		+/-	144.1496	µg/mL	Stressed
4	1-Bromo-4-fluorobenzene (BFB)	2,501.8 µg/mL	+/-	14.5457	µg/mL	Gravimetric
	CAS # 460-00-4 (Lot 20401.KO)		+/-	140.2734	µg/mL	Unstressed
	Purity 99%		+/-	143.5557	µg/mL	Stressed

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

Reagent

---

**VOABFBRES\_00089**



# 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. :** 30067 **Lot No.:** A0147670

**Description :** 4-Bromofluorobenzene Standard

4-Bromofluorobenzene Standard 2,500µg/mL, P&T Methanol, 1mL/ampul

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

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

### CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	1-Bromo-4-fluorobenzene (BFB) CAS # 460-00-4 (Lot 20401KO) Purity 99%	2,511.0 µg/mL	+/- 14.7360	µg/mL	Gravimetric	
			+/- 140.8035	µg/mL	Unstressed	
			+/- 144.0975	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)

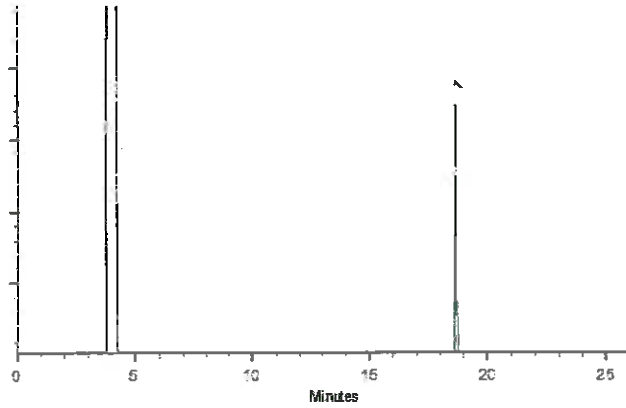
**Carrier Gas:**  
hydrogen-constant pressure 11.0 psi.

**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.

*Dustin J Lidgett*  
Dustin Lidgett - Mix Technician

Date Mixed: 01-Apr-2019      Balance: 1127510105

*Justin Albertson*  
Justin Albertson - Operations Tech-ARM GC

Date Passed: 04-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:

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

$k$  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

---

**VOABFBRES\_00093**



# 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. :** 30067 **Lot No.:** A0147670

**Description :** 4-Bromofluorobenzene Standard

4-Bromofluorobenzene Standard 2,500µg/mL, P&T Methanol, 1mL/ampul

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

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

### CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	1-Bromo-4-fluorobenzene (BFB) CAS # 460-00-4 (Lot 20401KO) Purity 99%	2,511.0 µg/mL	+/- 14.7360	µg/mL	Gravimetric	
			+/- 140.8035	µg/mL	Unstressed	
			+/- 144.0975	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)

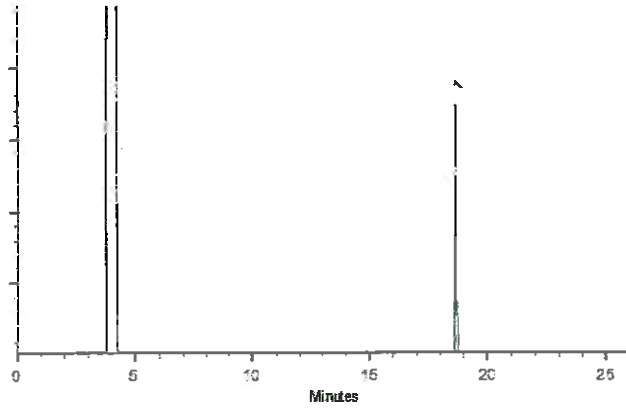
**Carrier Gas:**  
hydrogen-constant pressure 11.0 psi.

**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.

*Dustin J. Lidgett*  
Dustin Lidgett - Mix Technician

Date Mixed: 01-Apr-2019      Balance: 1127510105

*Justin Albertson*  
Justin Albertson - Operations Tech-ARM GC

Date Passed: 04-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:

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

$k$  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 8260C Low Level

---

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

FORM II  
GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1

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

Matrix: Water Level: Low

GC Column (1): DB-624 ID: 0.18 (mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
HD-COD-SW-6-0/1-0	180-105108-1	90	83	92	85
HD-COD-SW-7-0/1-0	180-105108-2	92	89	90	80
HD-COD-SW-8-0/1-0	180-105108-3	102 ^c	86	76	95
HD-COD-SW-9-0/1-0	180-105108-4	99	94	96	79
HD-COD-SW-13-0/1-0	180-105108-5	95	87	95	81
HD-COD-SW-15-0/1-0	180-105108-6	100 ^c	87	75	92
HD-COD-SW-16-0/1-0	180-105108-7	102 ^c	86	75	92
HD-COD-SW-17-0/1-0	180-105108-8	89	79	103	79
HD-COD-SW-26-0/1-0	180-105108-9	99 ^c	83	71 x	88
HD-COD-SW-26-0/1-0 RA	180-105108-9 RA	99	79	71 x	96
HD-COD-SW-27-0/1-0	180-105108-10	104	96	98	83
HD-COD-SW-28-0/1-0	180-105108-11	99	97	99	83
HD-COD-SW-29-0/1-0	180-105108-12	100	97	99	90
HD-QC1-0/1-1	180-105108-13	94	91	88	75
HD-QC1-0/1-2	180-105108-14	98 ^c	83	75	91
	MB 180-314382/6	83	79	99	83
	MB 180-314475/5	89	82	102	90
	LCS 180-314382/11	76	75	88	88
	LCS 180-314475/3	80	73	104	96
HD-COD-SW-17-0/1-0 MS	180-105108-8 MS	84	72	98	93
HD-COD-SW-26-0/1-0 MS	180-105108-9 MS	77	72	92	85
HD-COD-SW-17-0/1-0 MSD	180-105108-8 MSD	80	72	91	89
HD-COD-SW-26-0/1-0 MSD	180-105108-9 MSD	83	80	97	93

DBFM = Dibromofluoromethane (Surr)	<u>QC LIMITS</u>
DCA = 1,2-Dichloroethane-d4 (Surr)	71-132
TOL = Toluene-d8 (Surr)	62-146
BFB = 4-Bromofluorobenzene (Surr)	75-120
	64-120

# Column to be used to flag recovery values

FORM III  
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1

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

Matrix: Water Level: Low Lab File ID: 5050111.D

Lab ID: LCS 180-314382/11 Client ID: \_\_\_\_\_

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Chloromethane	10.0	6.03	60	37-150	
Vinyl chloride	10.0	7.69	77	50-150	
Bromomethane	10.0	24.5	245	35-150	*
Chloroethane	10.0	12.8	128	52-150	
1,1-Dichloroethene	10.0	8.63	86	79-132	
Acetone	20.0	11.6	58	37-150	
Carbon disulfide	10.0	7.56	76	66-134	
Methylene Chloride	10.0	9.00	90	72-131	
trans-1,2-Dichloroethene	10.0	8.94	89	81-126	
Methyl tert-butyl ether	10.0	7.72	77	65-125	
1,1-Dichloroethane	10.0	7.98	80	70-127	
cis-1,2-Dichloroethene	10.0	8.82	88	79-119	
Bromochloromethane	10.0	8.53	85	74-124	
2-Butanone (MEK)	20.0	12.2	61	35-150	
Chloroform	10.0	8.16	82	75-126	
1,1,1-Trichloroethane	10.0	7.71	77	63-142	
Carbon tetrachloride	10.0	8.40	84	55-150	
Benzene	10.0	8.96	90	72-127	
1,2-Dichloroethane	10.0	8.06	81	60-138	
Trichloroethene	10.0	8.79	88	81-121	
1,2-Dichloropropane	10.0	7.81	78	67-124	
Bromodichloromethane	10.0	7.55	75	67-131	
cis-1,3-Dichloropropene	10.0	7.45	75	69-122	
4-Methyl-2-pentanone (MIBK)	20.0	15.5	78	19-150	
Toluene	10.0	9.84	98	73-123	
trans-1,3-Dichloropropene	10.0	8.39	84	61-122	
1,1,2-Trichloroethane	10.0	9.11	91	72-120	
Tetrachloroethene	10.0	9.62	96	69-134	
2-Hexanone	20.0	14.0	70	24-150	
Dibromochloromethane	10.0	8.85	89	59-134	
1,2-Dibromoethane (EDB)	10.0	9.45	95	65-129	
Chlorobenzene	10.0	10.8	108	76-119	
1,1,1,2-Tetrachloroethane	10.0	10.1	101	65-132	
Ethylbenzene	10.0	10.7	107	76-118	
Xylenes, Total	20.0	20.8	104	76-116	
Styrene	10.0	10.7	107	74-118	
Bromoform	10.0	10.4	104	50-146	
1,1,2,2-Tetrachloroethane	10.0	11.2	112	57-135	
Acrylonitrile	100	78.7	79	43-149	

# Column to be used to flag recovery and RPD values



FORM III  
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1

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

Matrix: Water Level: Low Lab File ID: 5050403.D

Lab ID: LCS 180-314475/3 Client ID: \_\_\_\_\_

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Chloromethane	10.0	5.25	53	37-150	
Vinyl chloride	10.0	6.91	69	50-150	
Bromomethane	10.0	15.1	151	35-150	*
Chloroethane	10.0	8.17	82	52-150	
1,1-Dichloroethene	10.0	9.01	90	79-132	
Acetone	20.0	15.9	79	37-150	
Carbon disulfide	10.0	8.19	82	66-134	
Methylene Chloride	10.0	8.43	84	72-131	
trans-1,2-Dichloroethene	10.0	9.11	91	81-126	
Methyl tert-butyl ether	10.0	7.34	73	65-125	
1,1-Dichloroethane	10.0	7.57	76	70-127	
cis-1,2-Dichloroethene	10.0	8.45	85	79-119	
Bromochloromethane	10.0	8.19	82	74-124	
2-Butanone (MEK)	20.0	15.3	77	35-150	
Chloroform	10.0	7.62	76	75-126	
1,1,1-Trichloroethane	10.0	8.37	84	63-142	
Carbon tetrachloride	10.0	9.01	90	55-150	
Benzene	10.0	8.28	83	72-127	
1,2-Dichloroethane	10.0	7.32	73	60-138	
Trichloroethene	10.0	9.21	92	81-121	
1,2-Dichloropropane	10.0	7.17	72	67-124	
Bromodichloromethane	10.0	7.47	75	67-131	
cis-1,3-Dichloropropene	10.0	7.36	74	69-122	
4-Methyl-2-pentanone (MIBK)	20.0	16.4	82	19-150	
Toluene	10.0	10.1	101	73-123	
trans-1,3-Dichloropropene	10.0	8.65	86	61-122	
1,1,2-Trichloroethane	10.0	9.64	96	72-120	
Tetrachloroethene	10.0	10.7	107	69-134	
2-Hexanone	20.0	15.9	80	24-150	
Dibromochloromethane	10.0	9.80	98	59-134	
1,2-Dibromoethane (EDB)	10.0	9.72	97	65-129	
Chlorobenzene	10.0	10.8	108	76-119	
1,1,1,2-Tetrachloroethane	10.0	11.0	110	65-132	
Ethylbenzene	10.0	10.9	109	76-118	
Xylenes, Total	20.0	22.7	114	76-116	
Styrene	10.0	11.2	112	74-118	
Bromoform	10.0	12.2	122	50-146	
1,1,2,2-Tetrachloroethane	10.0	11.8	118	57-135	
Acrylonitrile	100	68.2	68	43-149	

# Column to be used to flag recovery and RPD values

FORM III  
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Pittsburgh      Job No.: 180-105108-1  
 SDG No.: \_\_\_\_\_  
 Matrix: Water      Level: Low      Lab File ID: 5050411.D  
 Lab ID: 180-105108-8 MS      Client ID: HD-COD-SW-17-0/1-0 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Chloromethane	10.0	ND	5.60	56	37-150	
Vinyl chloride	10.0	ND	6.91	69	50-150	
Bromomethane	10.0	ND	12.7	127	35-150	
Chloroethane	10.0	ND	8.58	86	52-150	
1,1-Dichloroethene	10.0	ND	8.53	85	79-132	
Acetone	20.0	ND	9.56	48	37-150	
Carbon disulfide	10.0	ND	8.30	83	66-134	
Methylene Chloride	10.0	ND	7.96	80	72-131	
trans-1,2-Dichloroethene	10.0	ND	8.58	86	81-126	
Methyl tert-butyl ether	10.0	ND	6.51	65	65-125	
1,1-Dichloroethane	10.0	ND	7.33	73	70-127	
cis-1,2-Dichloroethene	10.0	ND	8.45	85	79-119	
Bromochloromethane	10.0	ND	8.09	81	74-124	
2-Butanone (MEK)	20.0	ND	10.0	50	35-150	
Chloroform	10.0	ND	7.04	70	75-126	F1
1,1,1-Trichloroethane	10.0	ND	7.39	74	63-142	
Carbon tetrachloride	10.0	ND	8.76	88	55-150	
Benzene	10.0	ND	8.13	81	72-127	
1,2-Dichloroethane	10.0	ND	6.85	69	60-138	
Trichloroethene	10.0	ND	9.03	90	81-121	
1,2-Dichloropropane	10.0	ND	6.87	69	67-124	
Bromodichloromethane	10.0	ND	7.25	73	67-131	
cis-1,3-Dichloropropene	10.0	ND	6.40	64	69-122	F1
4-Methyl-2-pentanone (MIBK)	20.0	ND	14.4	72	19-150	
Toluene	10.0	ND	9.18	92	73-123	
trans-1,3-Dichloropropene	10.0	ND	7.69	77	61-122	
1,1,2-Trichloroethane	10.0	ND	8.30	83	72-120	
Tetrachloroethene	10.0	1.2	10.6	94	69-134	
2-Hexanone	20.0	ND	14.1	71	24-150	
Dibromochloromethane	10.0	ND	8.54	85	59-134	
1,2-Dibromoethane (EDB)	10.0	ND	8.58	86	65-129	
Chlorobenzene	10.0	ND	9.82	98	76-119	
1,1,1,2-Tetrachloroethane	10.0	ND	9.60	96	65-132	
Ethylbenzene	10.0	ND	9.95	100	76-118	
Xylenes, Total	20.0	ND	19.8	99	76-116	
Styrene	10.0	ND	9.99	100	74-118	
Bromoform	10.0	ND	10.4	104	50-146	
1,1,2,2-Tetrachloroethane	10.0	ND	9.86	99	57-135	
Acrylonitrile	100	ND	58.0	58	43-149	

# Column to be used to flag recovery and RPD values

FORM III  
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1  
 SDG No.: \_\_\_\_\_  
 Matrix: Water Level: Low Lab File ID: 5050109.D  
 Lab ID: 180-105108-9 MS Client ID: HD-COD-SW-26-0/1-0 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Chloromethane	10.0	ND	4.83	48	37-150	
Vinyl chloride	10.0	ND	6.60	66	50-150	
Bromomethane	10.0	ND	18.5	185	35-150	F1
Chloroethane	10.0	ND	8.60	86	52-150	
1,1-Dichloroethene	10.0	ND	8.35	84	79-132	
Acetone	20.0	6.5	12.8	32	37-150	F1
Carbon disulfide	10.0	ND	7.15	71	66-134	
Methylene Chloride	10.0	ND	7.75	78	72-131	
trans-1,2-Dichloroethene	10.0	ND	8.43	84	81-126	
Methyl tert-butyl ether	10.0	ND	6.59	66	65-125	
1,1-Dichloroethane	10.0	ND	7.41	74	70-127	
cis-1,2-Dichloroethene	10.0	ND	7.96	80	79-119	
Bromochloromethane	10.0	ND	8.26	83	74-124	
2-Butanone (MEK)	20.0	ND	10.9	54	35-150	
Chloroform	10.0	ND	7.42	74	75-126	F1
1,1,1-Trichloroethane	10.0	ND	7.59	76	63-142	
Carbon tetrachloride	10.0	ND	8.29	83	55-150	
Benzene	10.0	ND	8.23	82	72-127	
1,2-Dichloroethane	10.0	ND	7.49	75	60-138	
Trichloroethene	10.0	ND	8.84	88	81-121	
1,2-Dichloropropane	10.0	ND	7.14	71	67-124	
Bromodichloromethane	10.0	ND	6.88	69	67-131	
cis-1,3-Dichloropropene	10.0	ND	6.30	63	69-122	F1
4-Methyl-2-pentanone (MIBK)	20.0	ND	14.8	74	19-150	
Toluene	10.0	ND	9.44	94	73-123	
trans-1,3-Dichloropropene	10.0	ND	7.87	79	61-122	
1,1,2-Trichloroethane	10.0	ND	8.56	86	72-120	
Tetrachloroethene	10.0	1.6	11.6	100	69-134	
2-Hexanone	20.0	ND	13.8	69	24-150	
Dibromochloromethane	10.0	ND	8.18	82	59-134	
1,2-Dibromoethane (EDB)	10.0	ND	8.44	84	65-129	
Chlorobenzene	10.0	ND	9.77	98	76-119	
1,1,1,2-Tetrachloroethane	10.0	ND	9.38	94	65-132	
Ethylbenzene	10.0	ND	9.66	97	76-118	
Xylenes, Total	20.0	ND	19.8	99	76-116	
Styrene	10.0	ND	9.99	100	74-118	
Bromoform	10.0	ND	9.78	98	50-146	
1,1,2,2-Tetrachloroethane	10.0	ND	10.6	106	57-135	
Acrylonitrile	100	ND	69.1	69	43-149	

# Column to be used to flag recovery and RPD values

FORM III  
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1  
 SDG No.: \_\_\_\_\_  
 Matrix: Water Level: Low Lab File ID: 5050412.D  
 Lab ID: 180-105108-8 MSD Client ID: HD-COD-SW-17-0/1-0 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Chloromethane	10.0	5.55	55	1	35	37-150	
Vinyl chloride	10.0	7.17	72	4	31	50-150	
Bromomethane	10.0	14.5	145	13	35	35-150	
Chloroethane	10.0	8.89	89	4	31	52-150	
1,1-Dichloroethene	10.0	8.78	88	3	29	79-132	
Acetone	20.0	10.6	53	10	35	37-150	
Carbon disulfide	10.0	8.34	83	0	31	66-134	
Methylene Chloride	10.0	8.62	86	8	29	72-131	
trans-1,2-Dichloroethene	10.0	9.08	91	6	27	81-126	
Methyl tert-butyl ether	10.0	7.09	71	8	28	65-125	
1,1-Dichloroethane	10.0	7.45	75	2	27	70-127	
cis-1,2-Dichloroethene	10.0	8.72	87	3	28	79-119	
Bromochloromethane	10.0	8.46	85	4	27	74-124	
2-Butanone (MEK)	20.0	11.9	59	17	34	35-150	
Chloroform	10.0	7.35	73	4	26	75-126	F1
1,1,1-Trichloroethane	10.0	8.09	81	9	28	63-142	
Carbon tetrachloride	10.0	8.86	89	1	29	55-150	
Benzene	10.0	8.39	84	3	27	72-127	
1,2-Dichloroethane	10.0	7.35	73	7	26	60-138	
Trichloroethene	10.0	8.95	90	1	28	81-121	
1,2-Dichloropropane	10.0	7.29	73	6	27	67-124	
Bromodichloromethane	10.0	7.40	74	2	28	67-131	
cis-1,3-Dichloropropene	10.0	7.03	70	9	29	69-122	
4-Methyl-2-pentanone (MIBK)	20.0	15.5	77	7	33	19-150	
Toluene	10.0	9.62	96	5	31	73-123	
trans-1,3-Dichloropropene	10.0	8.13	81	6	30	61-122	
1,1,2-Trichloroethane	10.0	9.03	90	8	27	72-120	
Tetrachloroethene	10.0	10.2	90	4	27	69-134	
2-Hexanone	20.0	14.3	71	1	32	24-150	
Dibromochloromethane	10.0	8.96	90	5	28	59-134	
1,2-Dibromoethane (EDB)	10.0	9.07	91	6	27	65-129	
Chlorobenzene	10.0	10.5	105	7	25	76-119	
1,1,1,2-Tetrachloroethane	10.0	10.1	101	5	28	65-132	
Ethylbenzene	10.0	10.6	106	6	27	76-118	
Xylenes, Total	20.0	21.2	106	7	27	76-116	
Styrene	10.0	10.6	106	6	27	74-118	
Bromoform	10.0	11.6	116	11	30	50-146	
1,1,2,2-Tetrachloroethane	10.0	11.2	112	13	29	57-135	
Acrylonitrile	100	65.4	65	12	34	43-149	

# Column to be used to flag recovery and RPD values

FORM III  
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1

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

Matrix: Water Level: Low Lab File ID: 5050110.D

Lab ID: 180-105108-9 MSD Client ID: HD-COD-SW-26-0/1-0 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Chloromethane	10.0	4.22	42	14	35	37-150	
Vinyl chloride	10.0	5.43	54	20	31	50-150	
Bromomethane	10.0	18.5	185	0	35	35-150	F1
Chloroethane	10.0	9.65	96	12	31	52-150	
1,1-Dichloroethene	10.0	7.05	71	17	29	79-132	F1
Acetone	20.0	12.0	27	7	35	37-150	F1
Carbon disulfide	10.0	6.01	60	17	31	66-134	F1
Methylene Chloride	10.0	8.09	81	4	29	72-131	
trans-1,2-Dichloroethene	10.0	7.90	79	6	27	81-126	F1
Methyl tert-butyl ether	10.0	7.97	80	19	28	65-125	
1,1-Dichloroethane	10.0	7.09	71	4	27	70-127	
cis-1,2-Dichloroethene	10.0	8.14	81	2	28	79-119	
Bromochloromethane	10.0	8.85	89	7	27	74-124	
2-Butanone (MEK)	20.0	11.8	59	8	34	35-150	
Chloroform	10.0	7.28	73	2	26	75-126	F1
1,1,1-Trichloroethane	10.0	6.39	64	17	28	63-142	
Carbon tetrachloride	10.0	6.84	68	19	29	55-150	
Benzene	10.0	7.90	79	4	27	72-127	
1,2-Dichloroethane	10.0	8.22	82	9	26	60-138	
Trichloroethene	10.0	7.74	77	13	28	81-121	F1
1,2-Dichloropropane	10.0	7.43	74	4	27	67-124	
Bromodichloromethane	10.0	7.43	74	8	28	67-131	
cis-1,3-Dichloropropene	10.0	7.06	71	11	29	69-122	
4-Methyl-2-pentanone (MIBK)	20.0	17.1	85	15	33	19-150	
Toluene	10.0	8.70	87	8	31	73-123	
trans-1,3-Dichloropropene	10.0	8.34	83	6	30	61-122	
1,1,2-Trichloroethane	10.0	9.77	98	13	27	72-120	
Tetrachloroethene	10.0	10.5	89	9	27	69-134	
2-Hexanone	20.0	15.7	78	13	32	24-150	
Dibromochloromethane	10.0	8.88	89	8	28	59-134	
1,2-Dibromoethane (EDB)	10.0	9.60	96	13	27	65-129	
Chlorobenzene	10.0	9.73	97	0	25	76-119	
1,1,1,2-Tetrachloroethane	10.0	9.54	95	2	28	65-132	
Ethylbenzene	10.0	9.02	90	7	27	76-118	
Xylenes, Total	20.0	18.8	94	5	27	76-116	
Styrene	10.0	9.86	99	1	27	74-118	
Bromoform	10.0	11.2	112	14	30	50-146	
1,1,2,2-Tetrachloroethane	10.0	12.5	125	16	29	57-135	
Acrylonitrile	100	86.6	87	22	34	43-149	

# Column to be used to flag recovery and RPD values

FORM IV  
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1  
 SDG No.: \_\_\_\_\_  
 Lab File ID: 5050106.D Lab Sample ID: MB 180-314382/6  
 Matrix: Water Heated Purge: (Y/N) N  
 Instrument ID: CHHP5 Date Analyzed: 05/01/2020 17:18  
 GC Column: DB-624 ID: 0.18 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
HD-COD-SW-26-0/1-0	180-105108-9	5050107.D	05/01/2020 17:43
HD-QC1-0/1-2	180-105108-14	5050108.D	05/01/2020 18:07
HD-COD-SW-26-0/1-0 MS	180-105108-9 MS	5050109.D	05/01/2020 18:32
HD-COD-SW-26-0/1-0 MSD	180-105108-9 MSD	5050110.D	05/01/2020 18:57
	LCS 180-314382/11	5050111.D	05/01/2020 19:21
HD-COD-SW-8-0/1-0	180-105108-3	5050119.D	05/01/2020 22:37
HD-COD-SW-15-0/1-0	180-105108-6	5050122.D	05/01/2020 23:51
HD-COD-SW-16-0/1-0	180-105108-7	5050123.D	05/02/2020 00:15

FORM IV  
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1  
 SDG No.: \_\_\_\_\_  
 Lab File ID: 5050405.D Lab Sample ID: MB 180-314475/5  
 Matrix: Water Heated Purge: (Y/N) N  
 Instrument ID: CHHP5 Date Analyzed: 05/04/2020 09:39  
 GC Column: DB-624 ID: 0.18 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 180-314475/3	5050403.D	05/04/2020 08:50
HD-COD-SW-17-0/1-0	180-105108-8	5050408.D	05/04/2020 11:04
HD-COD-SW-26-0/1-0 RA	180-105108-9 RA	5050409.D	05/04/2020 11:29
HD-COD-SW-17-0/1-0 MS	180-105108-8 MS	5050411.D	05/04/2020 12:18
HD-COD-SW-17-0/1-0 MSD	180-105108-8 MSD	5050412.D	05/04/2020 12:42
HD-COD-SW-6-0/1-0	180-105108-1	5050413.D	05/04/2020 13:06
HD-COD-SW-7-0/1-0	180-105108-2	5050414.D	05/04/2020 13:30
HD-COD-SW-9-0/1-0	180-105108-4	5050415.D	05/04/2020 13:55
HD-COD-SW-13-0/1-0	180-105108-5	5050416.D	05/04/2020 14:20
HD-COD-SW-27-0/1-0	180-105108-10	5050417.D	05/04/2020 14:45
HD-COD-SW-28-0/1-0	180-105108-11	5050418.D	05/04/2020 15:09
HD-COD-SW-29-0/1-0	180-105108-12	5050419.D	05/04/2020 15:33
HD-QC1-0/1-1	180-105108-13	5050420.D	05/04/2020 15:58

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

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1

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

Lab File ID: 5032401.D BFB Injection Date: 03/24/2020

Instrument ID: CHHP5 BFB Injection Time: 01:11

Analysis Batch No.: 310901

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	19.5
75	30.0 - 60.0 % of mass 95	49.7
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	6.6
173	Less than 2.0 % of mass 174	0.0 (0.0) 1
174	50.0 - 120.00 % of mass 95	73.1
175	5.0 - 9.0 % of mass 174	6.0 (8.2) 1
176	95.0 - 101.0 % of mass 174	72.4 (99.0) 1
177	5.0 - 9.0 % of mass 176	4.9 (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 180-310901/10	5032303.D	03/24/2020	2:01
	IC 180-310901/11	5032304.D	03/24/2020	2:25
	ICIS 180-310901/12	5032305.D	03/24/2020	2:49
	IC 180-310901/13	5032306p.D	03/24/2020	3:13
	IC 180-310901/15	5032308.D	03/24/2020	4:02
	IC 180-310901/16	5032309P.D	03/24/2020	4:26
	IC 180-310901/17	5032310.D	03/24/2020	4:51



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

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1

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

Lab File ID: 5050102.D BFB Injection Date: 05/01/2020

Instrument ID: CHHP5 BFB Injection Time: 15:18

Analysis Batch No.: 314382

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	16.8
75	30.0 - 60.0 % of mass 95	52.6
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	6.9
173	Less than 2.0 % of mass 174	0.0 (0.0) 1
174	50.0 - 120.00 % of mass 95	80.4
175	5.0 - 9.0 % of mass 174	6.1 (7.6) 1
176	95.0 - 101.0 % of mass 174	77.4 (96.2) 1
177	5.0 - 9.0 % of mass 176	4.3 (5.6) 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 180-314382/4	5050104.D	05/01/2020	16:29
	MB 180-314382/6	5050106.D	05/01/2020	17:18
HD-COD-SW-26-0/1-0	180-105108-9	5050107.D	05/01/2020	17:43
HD-QC1-0/1-2	180-105108-14	5050108.D	05/01/2020	18:07
HD-COD-SW-26-0/1-0 MS	180-105108-9 MS	5050109.D	05/01/2020	18:32
HD-COD-SW-26-0/1-0 MSD	180-105108-9 MSD	5050110.D	05/01/2020	18:57
	LCS 180-314382/11	5050111.D	05/01/2020	19:21
HD-COD-SW-8-0/1-0	180-105108-3	5050119.D	05/01/2020	22:37
HD-COD-SW-15-0/1-0	180-105108-6	5050122.D	05/01/2020	23:51
HD-COD-SW-16-0/1-0	180-105108-7	5050123.D	05/02/2020	0:15

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

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1

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

Lab File ID: 5050401.D BFB Injection Date: 05/04/2020

Instrument ID: CHHP5 BFB Injection Time: 07:47

Analysis Batch No.: 314475

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	17.4
75	30.0 - 60.0 % of mass 95	50.6
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	6.0
173	Less than 2.0 % of mass 174	0.4 (0.4) 1
174	50.0 - 120.00 % of mass 95	87.0
175	5.0 - 9.0 % of mass 174	5.0 (5.7) 1
176	95.0 - 101.0 % of mass 174	87.0 (100.0) 1
177	5.0 - 9.0 % of mass 176	5.8 (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 180-314475/2	5050402.D	05/04/2020	8:26
	LCS 180-314475/3	5050403.D	05/04/2020	8:50
	MB 180-314475/5	5050405.D	05/04/2020	9:39
HD-COD-SW-17-0/1-0	180-105108-8	5050408.D	05/04/2020	11:04
HD-COD-SW-26-0/1-0 RA	180-105108-9 RA	5050409.D	05/04/2020	11:29
HD-COD-SW-17-0/1-0 MS	180-105108-8 MS	5050411.D	05/04/2020	12:18
HD-COD-SW-17-0/1-0 MSD	180-105108-8 MSD	5050412.D	05/04/2020	12:42
HD-COD-SW-6-0/1-0	180-105108-1	5050413.D	05/04/2020	13:06
HD-COD-SW-7-0/1-0	180-105108-2	5050414.D	05/04/2020	13:30
HD-COD-SW-9-0/1-0	180-105108-4	5050415.D	05/04/2020	13:55
HD-COD-SW-13-0/1-0	180-105108-5	5050416.D	05/04/2020	14:20
HD-COD-SW-27-0/1-0	180-105108-10	5050417.D	05/04/2020	14:45
HD-COD-SW-28-0/1-0	180-105108-11	5050418.D	05/04/2020	15:09
HD-COD-SW-29-0/1-0	180-105108-12	5050419.D	05/04/2020	15:33
HD-QC1-0/1-1	180-105108-13	5050420.D	05/04/2020	15:58

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

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1  
 SDG No.: \_\_\_\_\_  
 Sample No.: CCVIS 180-314382/4 Date Analyzed: 05/01/2020 16:29  
 Instrument ID: CHHP5 GC Column: DB-624 ID: 0.18 (mm)  
 Lab File ID (Standard): 5050104.D Heated Purge: (Y/N) N  
 Calibration ID: 43174

	TBA <sub>d9</sub>		FB		CBN <sub>Zd5</sub>		
	AREA #	RT #	AREA #	RT #	AREA #	RT #	
12/24 HOUR STD	251469	4.36	569153	7.35	142051	10.44	
UPPER LIMIT	502938	4.86	1138306	7.85	284102	10.94	
LOWER LIMIT	125735	3.86	284577	6.85	71026	9.94	
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 180-314382/6		285554	4.36	804482	7.34	195593	10.44
180-105108-9	HD-COD-SW-26-0/1-0	360396	4.37	391373	7.35	162701	10.44
180-105108-14	HD-QC1-0/1-2	369104	4.36	377811	7.35	149981	10.44
180-105108-9 MS	HD-COD-SW-26-0/1-0 MS	243871	4.37	672550	7.34	168321	10.43
180-105108-9 MSD	HD-COD-SW-26-0/1-0 MSD	268669	4.38	669795	7.35	171563	10.44
LCS 180-314382/11		249688	4.37	643170	7.34	164351	10.43
180-105108-3	HD-COD-SW-8-0/1-0	303759	4.36	372877	7.34	151466	10.44
180-105108-6	HD-COD-SW-15-0/1-0	333344	4.37	366883	7.35	149102	10.44
180-105108-7	HD-COD-SW-16-0/1-0	332503	4.36	361085	7.34	148282	10.43

TBA<sub>d9</sub> = TBA-d9 (IS)  
 FB = Fluorobenzene (IS)  
 CBN<sub>Zd5</sub> = Chlorobenzene-d5

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 TestAmerica, Pittsburgh Job No.: 180-105108-1  
 SDG No.: \_\_\_\_\_  
 Sample No.: CCVIS 180-314382/4 Date Analyzed: 05/01/2020 16:29  
 Instrument ID: CHHP5 GC Column: DB-624 ID: 0.18 (mm)  
 Lab File ID (Standard): 5050104.D Heated Purge: (Y/N) N  
 Calibration ID: 43174

		DCBd4					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		264858	12.77				
UPPER LIMIT		529716	13.27				
LOWER LIMIT		132429	12.27				
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 180-314382/6		283131	12.78				
180-105108-9	HD-COD-SW-26-0/1-0	256471	12.77				
180-105108-14	HD-QC1-0/1-2	248305	12.78				
180-105108-9 MS	HD-COD-SW-26-0/1-0 MS	291190	12.78				
180-105108-9 MSD	HD-COD-SW-26-0/1-0 MSD	306359	12.77				
LCS 180-314382/11		282466	12.77				
180-105108-3	HD-COD-SW-8-0/1-0	254482	12.77				
180-105108-6	HD-COD-SW-15-0/1-0	245748	12.77				
180-105108-7	HD-COD-SW-16-0/1-0	244139	12.78				

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 TestAmerica, Pittsburgh Job No.: 180-105108-1  
 SDG No.: \_\_\_\_\_  
 Sample No.: CCVIS 180-314475/2 Date Analyzed: 05/04/2020 08:26  
 Instrument ID: CHHP5 GC Column: DB-624 ID: 0.18 (mm)  
 Lab File ID (Standard): 5050402.D Heated Purge: (Y/N) N  
 Calibration ID: 43174

	TBA <sub>d</sub> 9		FB		CBN <sub>Zd</sub> 5		
	AREA #	RT #	AREA #	RT #	AREA #	RT #	
12/24 HOUR STD	272445	4.36	695213	7.34	176716	10.43	
UPPER LIMIT	544890	4.86	1390426	7.84	353432	10.93	
LOWER LIMIT	136223	3.86	347607	6.84	88358	9.93	
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 180-314475/3		298482	4.37	808460	7.35	195256	10.44
MB 180-314475/5		376101	4.37	971137	7.35	249306	10.44
180-105108-8	HD-COD-SW-17-0/1-0	282198	4.36	765424	7.35	186369	10.44
180-105108-9 RA	HD-COD-SW-26-0/1-0 RA	392122	4.37	409550	7.35	172572	10.44
180-105108-8 MS	HD-COD-SW-17-0/1-0 MS	206067	4.37	773903	7.34	195039	10.43
180-105108-8 MSD	HD-COD-SW-17-0/1-0 MSD	270623	4.37	820381	7.35	210137	10.44
180-105108-1	HD-COD-SW-6-0/1-0	271920	4.37	704336	7.35	178249	10.44
180-105108-2	HD-COD-SW-7-0/1-0	267830	4.37	676680	7.34	180739	10.44
180-105108-4	HD-COD-SW-9-0/1-0	262370	4.36	629416	7.35	168766	10.44
180-105108-5	HD-COD-SW-13-0/1-0	251635	4.36	610258	7.35	150990	10.44
180-105108-10	HD-COD-SW-27-0/1-0	239923	4.36	563131	7.34	146642	10.44
180-105108-11	HD-COD-SW-28-0/1-0	226393	4.37	539588	7.35	134962	10.44
180-105108-12	HD-COD-SW-29-0/1-0	232811	4.37	541764	7.35	136109	10.43
180-105108-13	HD-QC1-0/1-1	236433	4.37	541591	7.34	140359	10.44

TBA<sub>d</sub>9 = TBA-d<sub>9</sub> (IS)

FB = Fluorobenzene (IS)

CBN<sub>Zd</sub>5 = Chlorobenzene-d<sub>5</sub>

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 TestAmerica, Pittsburgh Job No.: 180-105108-1  
 SDG No.: \_\_\_\_\_  
 Sample No.: CCVIS 180-314475/2 Date Analyzed: 05/04/2020 08:26  
 Instrument ID: CHHP5 GC Column: DB-624 ID: 0.18 (mm)  
 Lab File ID (Standard): 5050402.D Heated Purge: (Y/N) N  
 Calibration ID: 43174

		DCBd4					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		323991	12.78				
UPPER LIMIT		647982	13.28				
LOWER LIMIT		161996	12.28				
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 180-314475/3		357568	12.78				
MB 180-314475/5		377745	12.77				
180-105108-8	HD-COD-SW-17-0/1-0	261014	12.77				
180-105108-9 RA	HD-COD-SW-26-0/1-0 RA	317110	12.77				
180-105108-8 MS	HD-COD-SW-17-0/1-0 MS	310298	12.77				
180-105108-8 MSD	HD-COD-SW-17-0/1-0 MSD	363150	12.77				
180-105108-1	HD-COD-SW-6-0/1-0	267781	12.78				
180-105108-2	HD-COD-SW-7-0/1-0	253238	12.77				
180-105108-4	HD-COD-SW-9-0/1-0	234124	12.78				
180-105108-5	HD-COD-SW-13-0/1-0	220247	12.78				
180-105108-10	HD-COD-SW-27-0/1-0	206895	12.78				
180-105108-11	HD-COD-SW-28-0/1-0	208703	12.77				
180-105108-12	HD-COD-SW-29-0/1-0	207303	12.77				
180-105108-13	HD-QC1-0/1-1	203133	12.78				

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 TestAmerica, Pittsburgh Job No.: 180-105108-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: HD-COD-SW-6-0/1-0 Lab Sample ID: 180-105108-1  
 Matrix: Water Lab File ID: 5050413.D  
 Analysis Method: EPA 8260C Date Collected: 04/28/2020 11:35  
 Sample wt/vol: 5 (mL) Date Analyzed: 05/04/2020 13:06  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-624 ID: 0.18 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 314475 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	ND	^c	1.0	0.90
75-01-4	Vinyl chloride	ND		1.0	0.40
74-83-9	Bromomethane	ND	^c *	1.0	0.89
75-00-3	Chloroethane	ND		1.0	0.90
75-35-4	1,1-Dichloroethene	ND		1.0	0.55
67-64-1	Acetone	3.9	J	5.0	3.4
75-15-0	Carbon disulfide	ND		1.0	0.88
75-09-2	Methylene Chloride	ND		1.0	0.89
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.67
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.59
75-34-3	1,1-Dichloroethane	ND		1.0	0.31
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.71
74-97-5	Bromochloromethane	ND		1.0	0.63
78-93-3	2-Butanone (MEK)	ND	^c	5.0	2.6
67-66-3	Chloroform	ND		1.0	0.60
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.60
56-23-5	Carbon tetrachloride	ND		1.0	0.88
71-43-2	Benzene	ND		1.0	0.60
107-06-2	1,2-Dichloroethane	ND		1.0	0.57
79-01-6	Trichloroethene	ND		1.0	0.69
78-87-5	1,2-Dichloropropane	ND		1.0	0.66
75-27-4	Bromodichloromethane	ND		1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	3.1
108-88-3	Toluene	ND		1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.58
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.45
127-18-4	Tetrachloroethene	ND		1.0	0.47
591-78-6	2-Hexanone	ND		5.0	3.3
124-48-1	Dibromochloromethane	ND		1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	ND		1.0	0.50
108-90-7	Chlorobenzene	ND		1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.57
100-41-4	Ethylbenzene	ND		1.0	0.51
1330-20-7	Xylenes, Total	ND		2.0	0.89
100-42-5	Styrene	ND		1.0	0.47

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: HD-COD-SW-6-0/1-0 Lab Sample ID: 180-105108-1  
 Matrix: Water Lab File ID: 5050413.D  
 Analysis Method: EPA 8260C Date Collected: 04/28/2020 11:35  
 Sample wt/vol: 5 (mL) Date Analyzed: 05/04/2020 13:06  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-624 ID: 0.18 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 314475 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	ND	^c	1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	ND	^c	1.0	0.60
107-13-1	Acrylonitrile	ND		20	7.8

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	83		62-146
2037-26-5	Toluene-d8 (Surr)	92		75-120
460-00-4	4-Bromofluorobenzene (Surr)	85		64-120
1868-53-7	Dibromofluoromethane (Surr)	90		71-132



Eurofins TestAmerica, Pittsburgh  
Target Compound Quantitation Report

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050413.D  
 Lims ID: 180-105108-B-1  
 Client ID: HD-COD-SW-6-0/1-0  
 Sample Type: Client  
 Inject. Date: 04-May-2020 13:06:30 ALS Bottle#: 13 Worklist Smp#: 13  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: 180-0031789-013  
 Operator ID: 034635 Instrument ID: CHHP5  
 Method: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\MMSVOA\_LL\_CHHP5.m  
 Limit Group: VOA 8260C\_D ICAL  
 Last Update: 04-May-2020 13:53:44 Calib Date: 03-Apr-2020 19:09:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICAL File: \\chromna\Pittsburgh\ChromData\CHHP5\20200403-31442.b\5040310.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: CTX0327

First Level Reviewer: journetp Date: 04-May-2020 15:11:56

Compound	Sig	RT (min.)	Exp RT (min.)	Diff RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.374	4.363	0.011	0	271920	1000.0	
* 2 Fluorobenzene (IS)	96	7.349	7.344	0.005	99	704336	50.0	
* 3 Chlorobenzene-d5	119	10.439	10.434	0.005	84	178249	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.775	12.776	-0.001	95	267781	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.631	6.626	0.005	93	181563	45.2	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.996	6.991	0.005	0	237086	41.6	
\$ 7 Toluene-d8 (Surr)	98	8.985	8.986	-0.001	93	663788	46.0	
\$ 8 4-Bromofluorobenzene (Surr	95	11.619	11.614	0.005	88	231114	42.4	
12 Chloromethane	50		1.844				ND	U
13 Vinyl chloride	62		1.966				ND	U
15 Bromomethane	94		2.288				ND	U
16 Chloroethane	64		2.416				ND	U
22 1,1-Dichloroethene	96		3.414				ND	
24 Acetone	43	3.516	3.511	0.005	98	47591	19.6	
26 Carbon disulfide	76		3.706				ND	U
31 Methylene Chloride	84		4.217				ND	U
33 Acrylonitrile	53	4.635	4.612	0.023	55	4260	2.34	
34 trans-1,2-Dichloroethene	96		4.631				ND	
35 Methyl tert-butyl ether	73		4.655				ND	U
37 1,1-Dichloroethane	63		5.263				ND	
45 cis-1,2-Dichloroethene	96		6.018				ND	U
46 2-Butanone (MEK)	43		6.036				ND	U
49 Chlorobromomethane	128		6.297				ND	
52 Chloroform	83		6.443				ND	U
53 1,1,1-Trichloroethane	97		6.602				ND	U
56 Carbon tetrachloride	117		6.766				ND	U
58 Benzene	78		7.003				ND	U
59 1,2-Dichloroethane	62		7.076				ND	U
64 Trichloroethene	130		7.727				ND	U
67 1,2-Dichloropropane	63		8.001				ND	U
71 Dichlorobromomethane	83		8.287				ND	U
74 cis-1,3-Dichloropropene	75		8.731				ND	U

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
75 4-Methyl-2-pentanone (MIBK	43		8.889				ND	U
76 Toluene	91		9.053				ND	U
77 trans-1,3-Dichloropropene	75		9.303				ND	U
79 1,1,2-Trichloroethane	97		9.497				ND	U
80 Tetrachloroethene	164		9.564				ND	U
82 2-Hexanone	43		9.716				ND	U
84 Chlorodibromomethane	129		9.868				ND	U
85 Ethylene Dibromide	107		9.978				ND	U
87 Chlorobenzene	112		10.465				ND	U
89 1,1,1,2-Tetrachloroethane	131		10.562				ND	U
90 Ethylbenzene	106		10.562				ND	U
91 m-Xylene & p-Xylene	106		10.696				ND	U
92 o-Xylene	106		11.079				ND	U
93 Styrene	104		11.097				ND	U
94 Bromoform	173		11.280				ND	U
99 1,1,2,2-Tetrachloroethane	83		11.760				ND	U
S 133 Xylenes, Total	106		1.000				ND	

**QC Flag Legend**

Review Flags

U - Marked Undetected

**Reagents:**

voaWI/SHP5\_00016

Amount Added: 5.00

Units: uL

Run Reagent

Euofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050413.D

Injection Date: 04-May-2020 13:06:30

Instrument ID: CHHP5

Operator ID: 034635

Lims ID: 180-105108-B-1

Lab Sample ID: 180-105108-1

Worklist Smp#: 13

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

Purge Vol: 5.000 mL

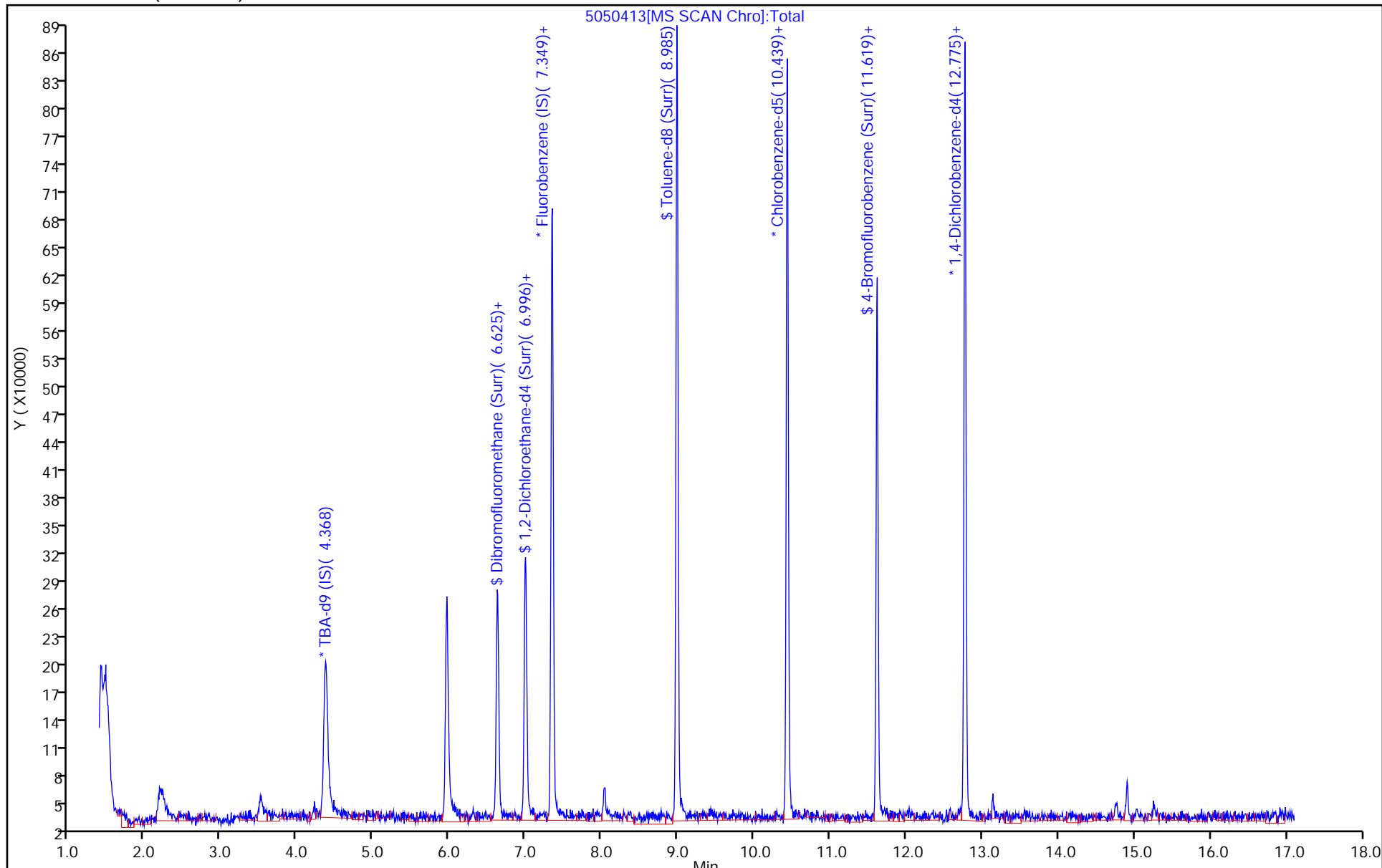
Dil. Factor: 1.0000

ALS Bottle#: 13

Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Pittsburgh  
Recovery Report

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050413.D  
 Lims ID: 180-105108-B-1  
 Client ID: HD-COD-SW-6-0/1-0  
 Sample Type: Client  
 Inject. Date: 04-May-2020 13:06:30 ALS Bottle#: 13 Worklist Smp#: 13  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: 180-0031789-013  
 Operator ID: 034635 Instrument ID: CHHP5  
 Method: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\MMSVOA\_LL\_CHHP5.m  
 Limit Group: VOA 8260C\_D ICAL  
 Last Update: 04-May-2020 13:53:44 Calib Date: 03-Apr-2020 19:09:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP5\20200403-31442.b\5040310.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: CTX0327

First Level Reviewer: journetp

Date: 04-May-2020 15:11:56

Compound	Amount Added	Amount Recovered	% Rec.
\$ 5 Dibromofluoromethane (Surr)	50.0	45.2	90.36
\$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	41.6	83.15
\$ 7 Toluene-d8 (Surr)	50.0	46.0	92.01
\$ 8 4-Bromofluorobenzene (Surr)	50.0	42.4	84.76

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050413.D

Injection Date: 04-May-2020 13:06:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-1

Lab Sample ID: 180-105108-1

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

Operator ID: 034635

ALS Bottle#: 13

Worklist Smp#: 13

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

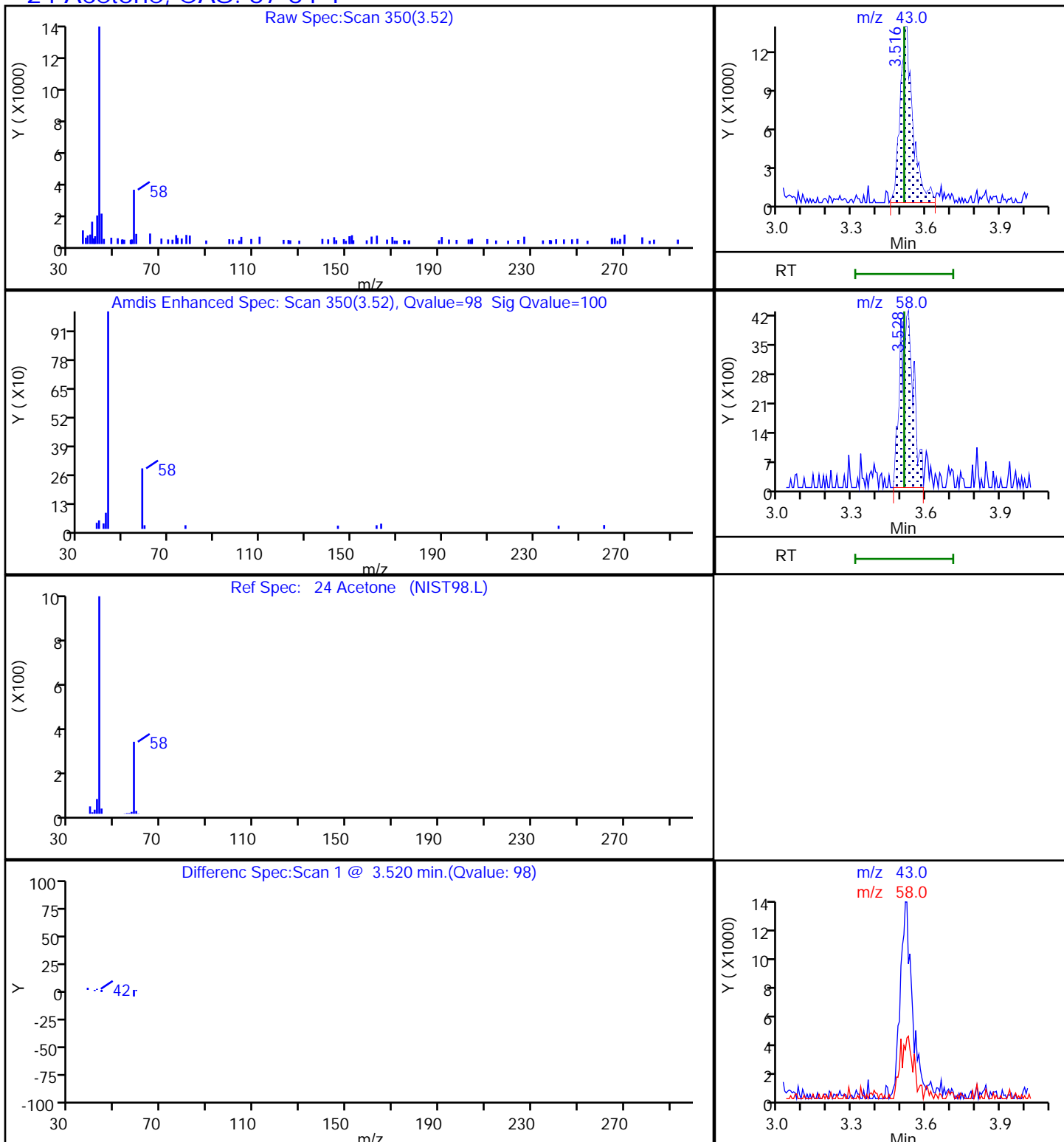
Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

24 Acetone, CAS: 67-64-1



Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050413.D

Injection Date: 04-May-2020 13:06:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-1

Lab Sample ID: 180-105108-1

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

Operator ID: 034635

ALS Bottle#: 13 Worklist Smp#: 13

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

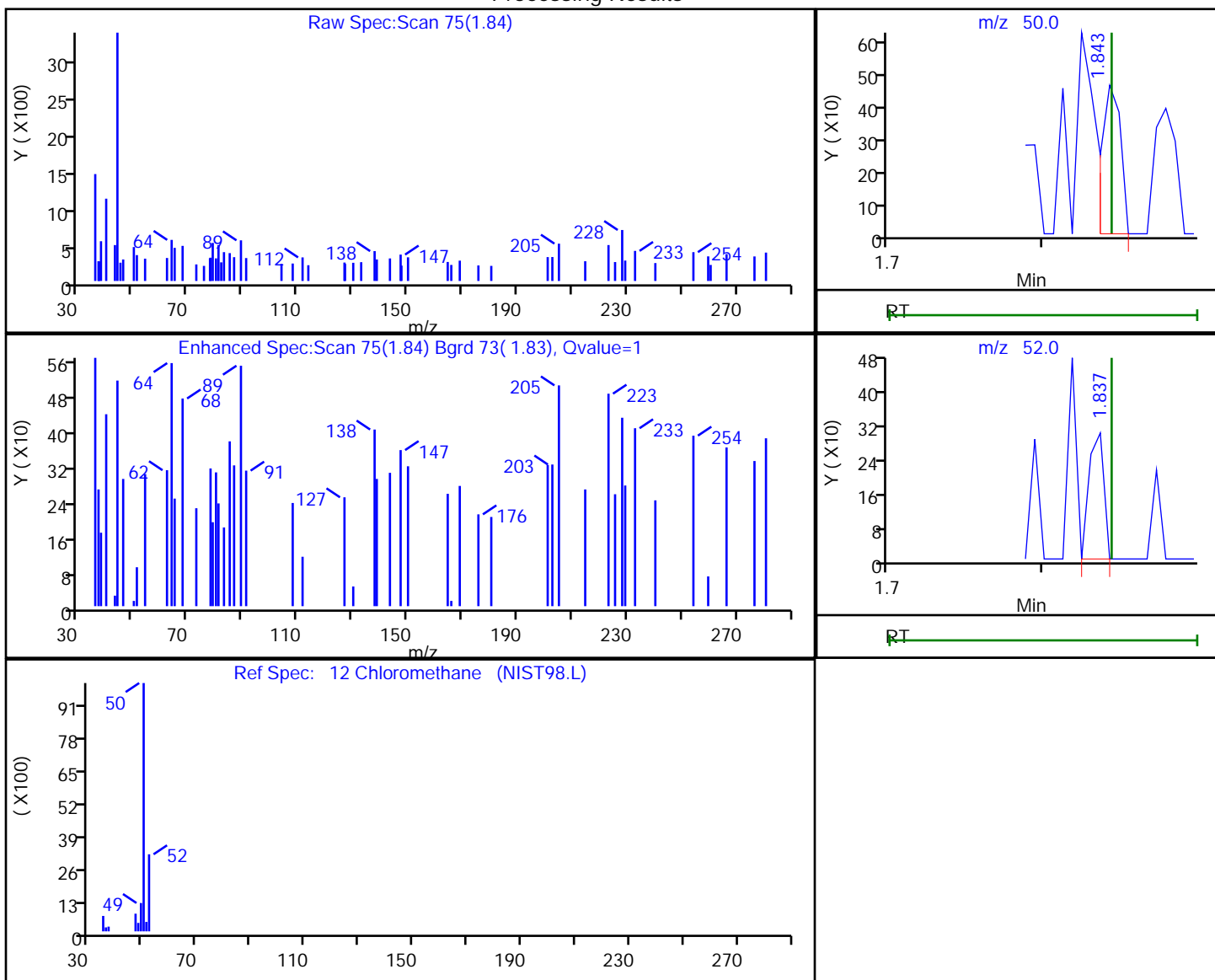
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

12 Chloromethane, CAS: 74-87-3

Processing Results



RT	Mass	Response	Amount
1.84	50.00	394	0.057343
1.84	52.00	200	

Reviewer: journetp, 04-May-2020 15:11:34

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050413.D

Injection Date: 04-May-2020 13:06:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-1

Lab Sample ID: 180-105108-1

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

Operator ID: 034635

ALS Bottle#: 13 Worklist Smp#: 13

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

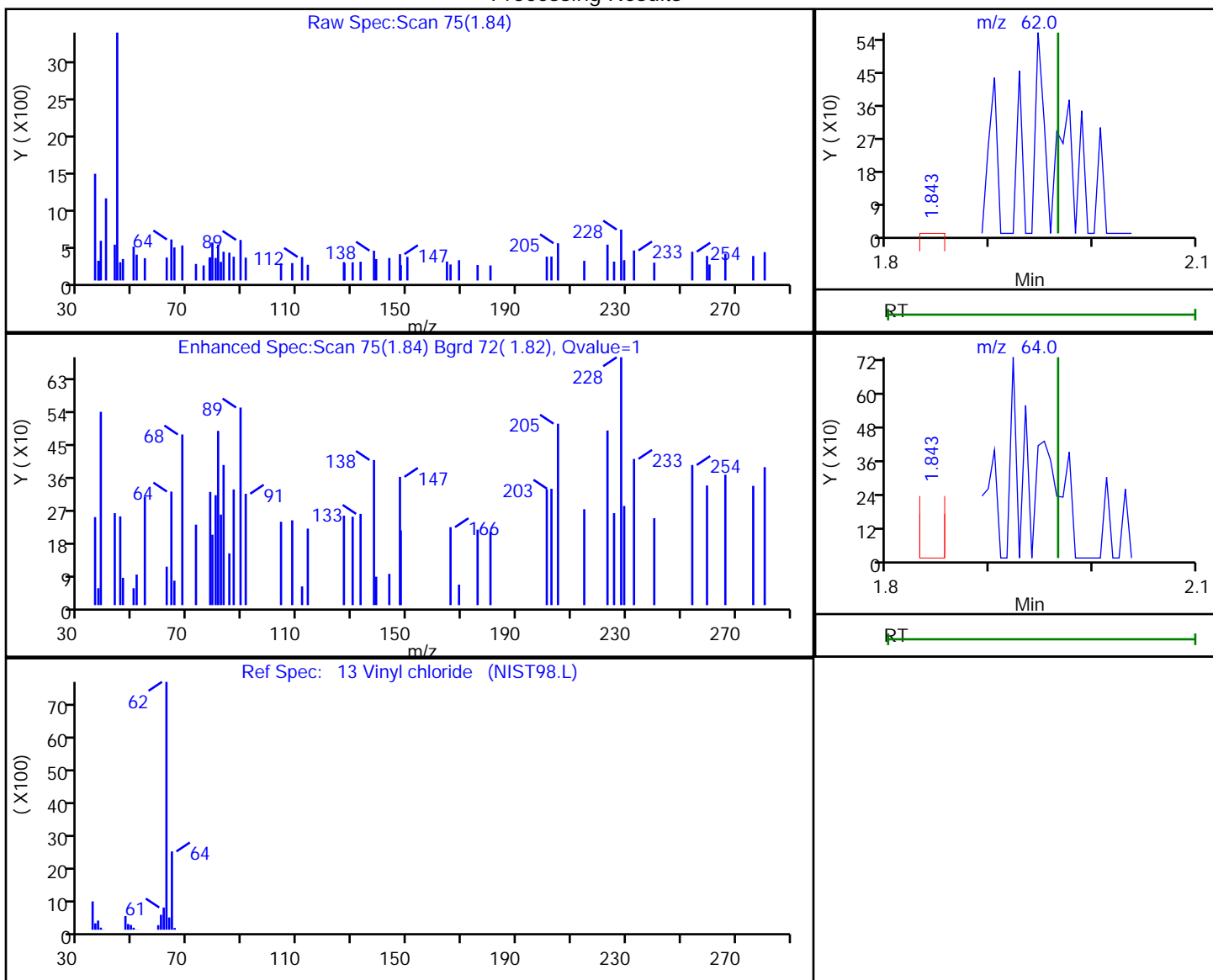
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

13 Vinyl chloride, CAS: 75-01-4

Processing Results



RT	Mass	Response	Amount
1.84	62.00	114	0.018631
1.84	64.00	286	

Reviewer: journetp, 04-May-2020 15:11:34

Audit Action: Marked Compound Undetected

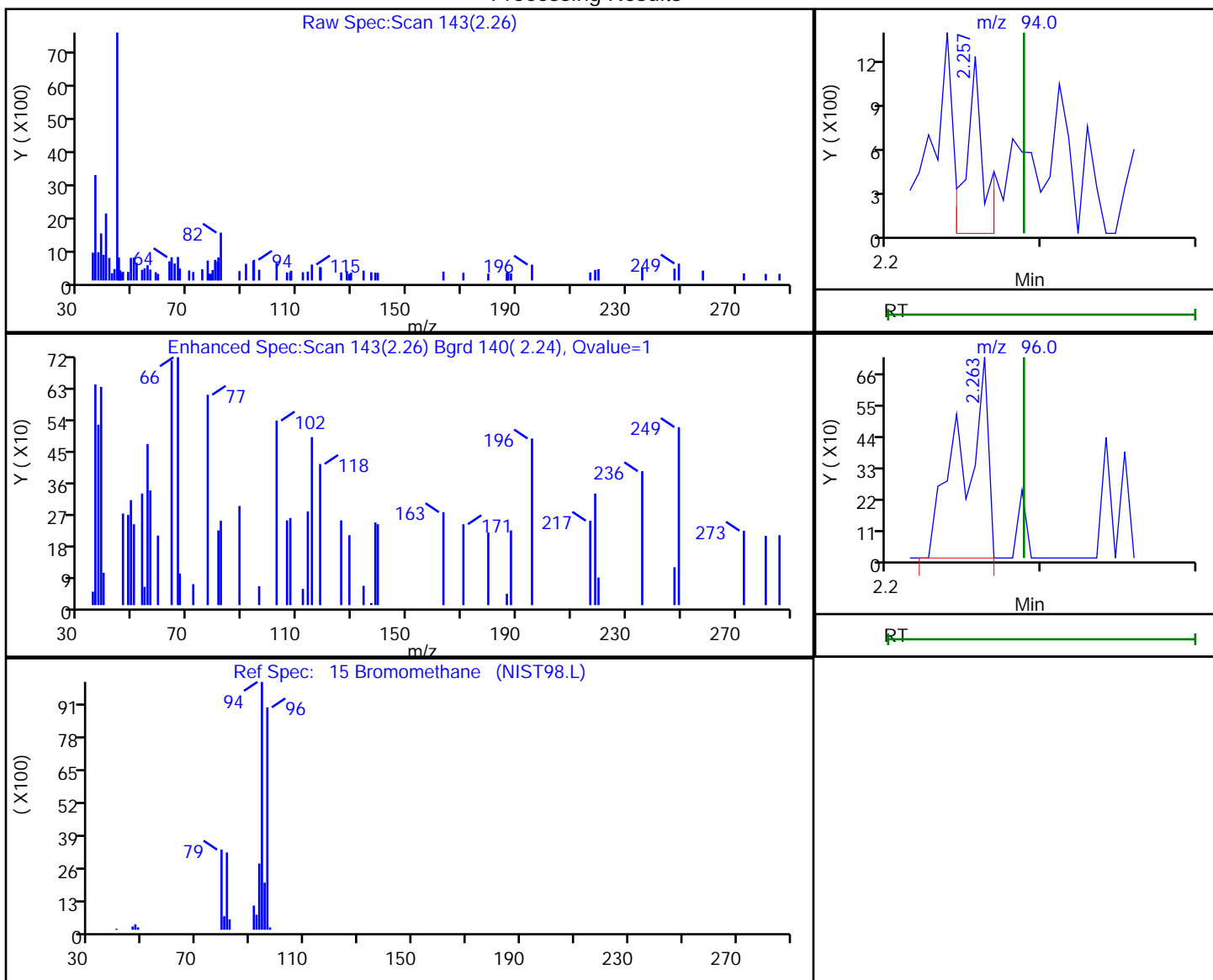
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050413.D  
 Injection Date: 04-May-2020 13:06:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-1 Lab Sample ID: 180-105108-1  
 Client ID: HD-COD-SW-6-0/1-0  
 Operator ID: 034635 ALS Bottle#: 13 Worklist Smp#: 13  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

15 Bromomethane, CAS: 74-83-9

Processing Results



RT	Mass	Response	Amount
2.26	94.00	927	0.264597
2.26	96.00	835	

Reviewer: journtp, 04-May-2020 15:11:34

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

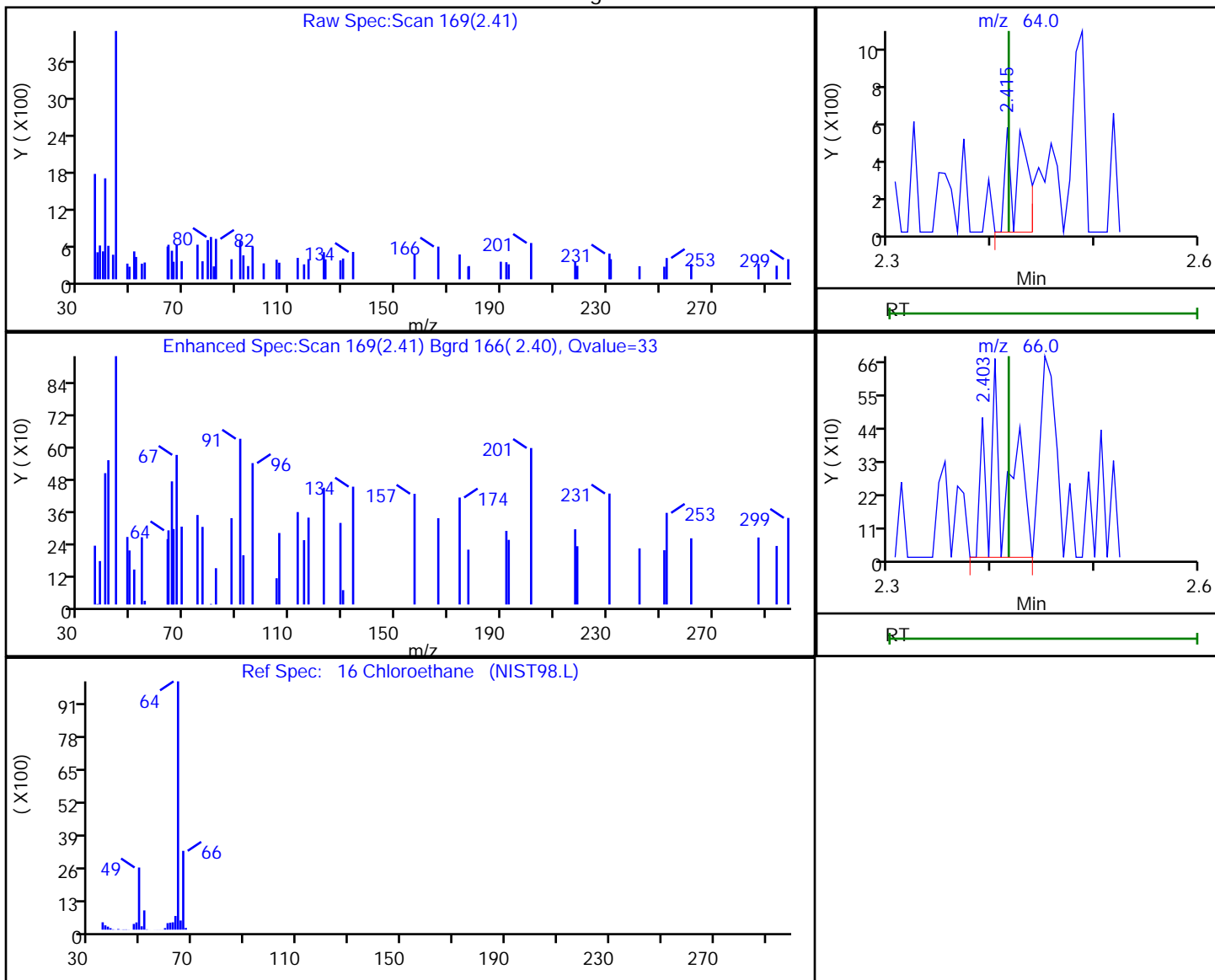


Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050413.D  
 Injection Date: 04-May-2020 13:06:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-1 Lab Sample ID: 180-105108-1  
 Client ID: HD-COD-SW-6-0/1-0  
 Operator ID: 034635 ALS Bottle#: 13 Worklist Smp#: 13  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

16 Chloroethane, CAS: 75-00-3

Processing Results



RT	Mass	Response	Amount
2.41	64.00	640	0.154173
2.40	66.00	849	

Reviewer: journtp, 04-May-2020 15:11:34

Audit Action: Marked Compound Undetected

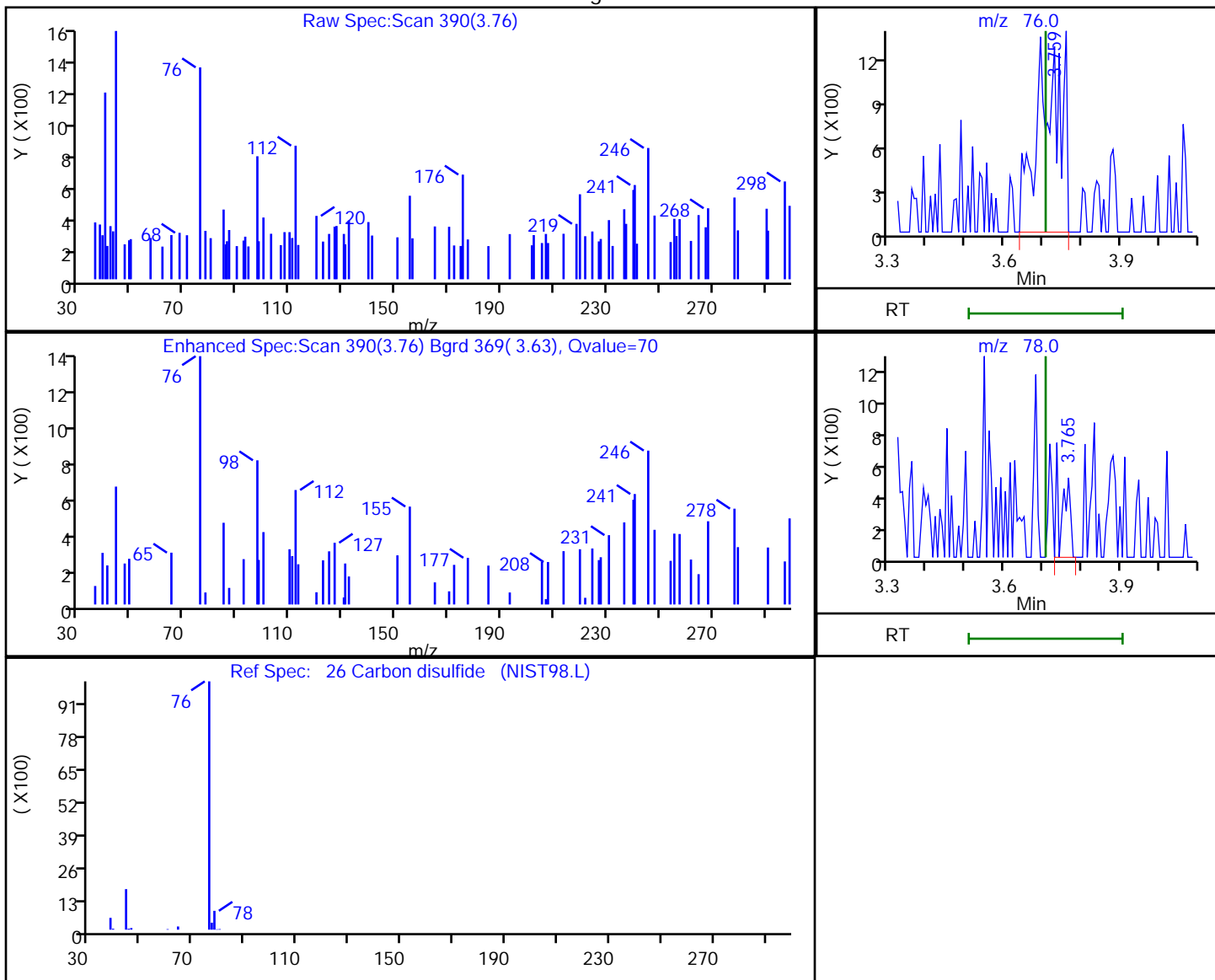
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050413.D  
Injection Date: 04-May-2020 13:06:30 Instrument ID: CHHP5  
Lims ID: 180-105108-B-1 Lab Sample ID: 180-105108-1  
Client ID: HD-COD-SW-6-0/1-0  
Operator ID: 034635 ALS Bottle#: 13 Worklist Smp#: 13  
Purge Vol: 5.000 mL Dil. Factor: 1.0000  
Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
Column: DB-624 (0.18 mm) Detector: MS SCAN

26 Carbon disulfide, CAS: 75-15-0

Processing Results



RT	Mass	Response	Amount
3.76	76.00	5184	0.654791
3.77	78.00	917	

Reviewer: journetp, 04-May-2020 15:11:35  
Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050413.D

Injection Date: 04-May-2020 13:06:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-1

Lab Sample ID: 180-105108-1

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

Operator ID: 034635

ALS Bottle#: 13 Worklist Smp#: 13

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

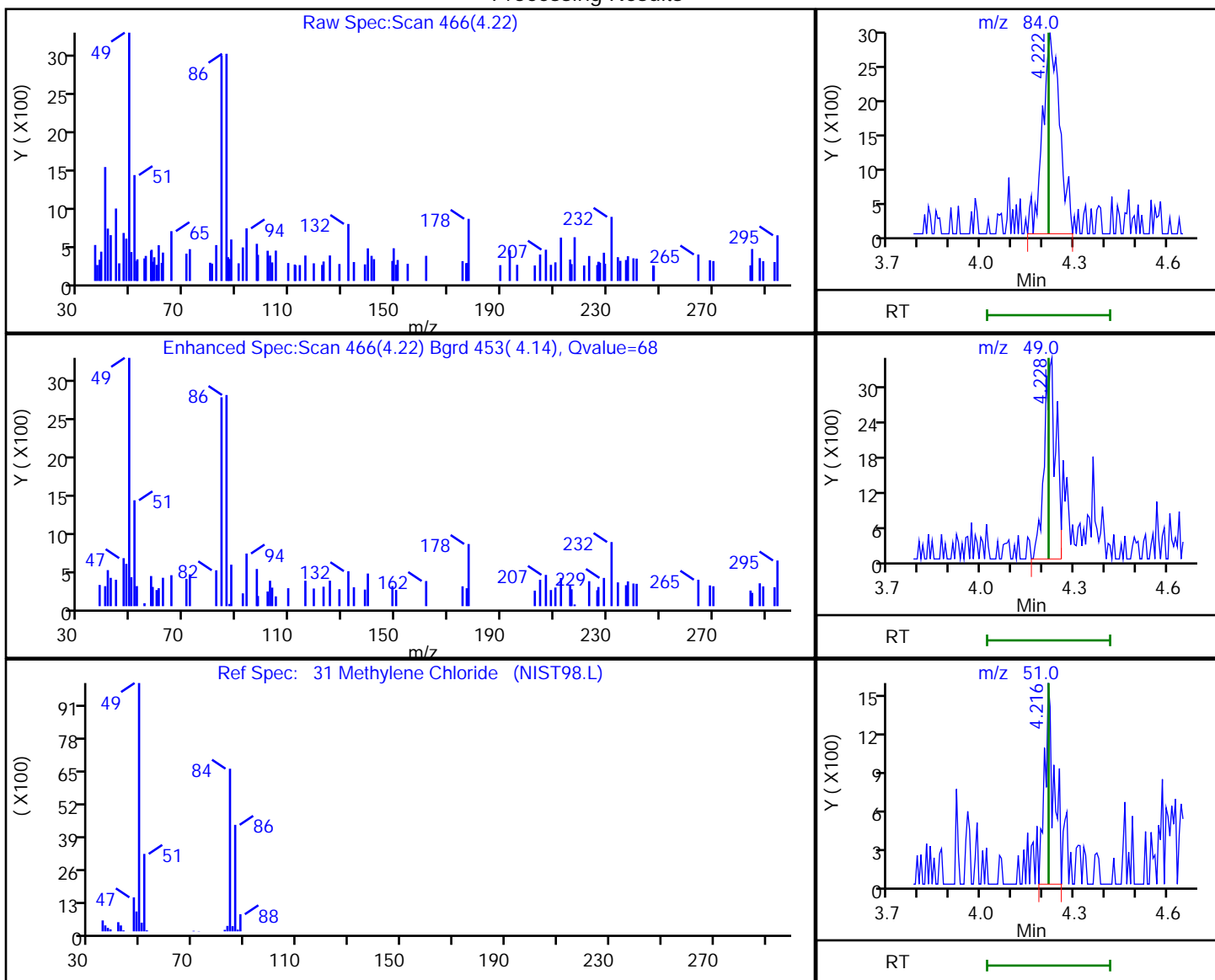
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

31 Methylene Chloride, CAS: 75-09-2

Processing Results



RT	Mass	Response	Amount
4.22	84.00	11487	0.833003
4.23	49.00	9092	
4.22	51.00	3302	

Reviewer: journept, 04-May-2020 15:11:37

Audit Action: Marked Compound Undetected

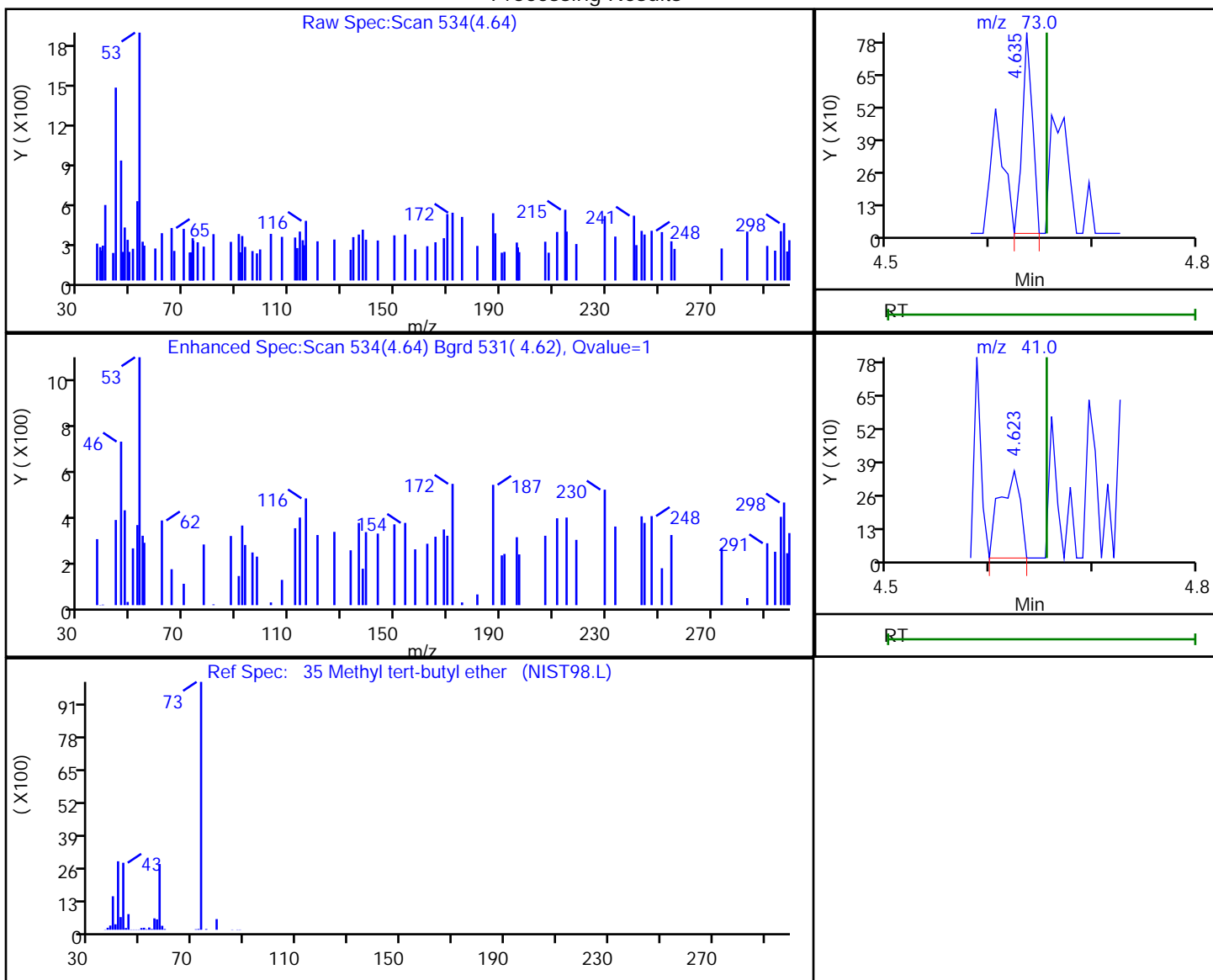
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050413.D  
 Injection Date: 04-May-2020 13:06:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-1 Lab Sample ID: 180-105108-1  
 Client ID: HD-COD-SW-6-0/1-0  
 Operator ID: 034635 ALS Bottle#: 13 Worklist Smp#: 13  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

35 Methyl tert-butyl ether, CAS: 1634-04-4

Processing Results



RT	Mass	Response	Amount
4.64	73.00	553	0.051179
4.62	41.00	473	

Reviewer: journetp, 04-May-2020 15:11:42  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050413.D

Injection Date: 04-May-2020 13:06:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-1

Lab Sample ID: 180-105108-1

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

Operator ID: 034635

ALS Bottle#: 13

Worklist Smp#: 13

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

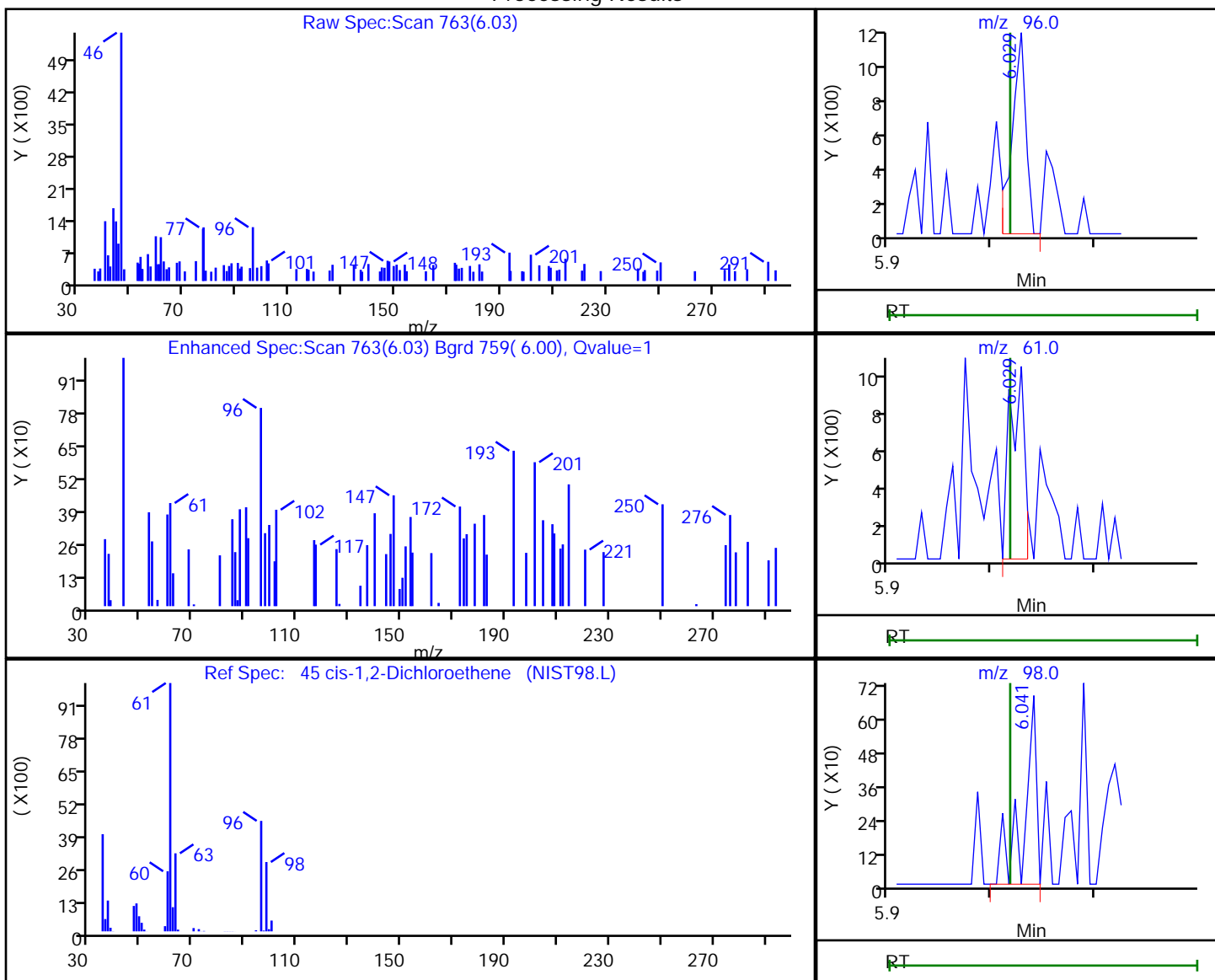
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

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

Processing Results



RT	Mass	Response	Amount
6.03	96.00	1107	0.241636
6.03	61.00	947	
6.04	98.00	569	

Reviewer: journeyp, 04-May-2020 15:11:44

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050413.D

Injection Date: 04-May-2020 13:06:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-1

Lab Sample ID: 180-105108-1

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

Operator ID: 034635

ALS Bottle#: 13 Worklist Smp#: 13

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

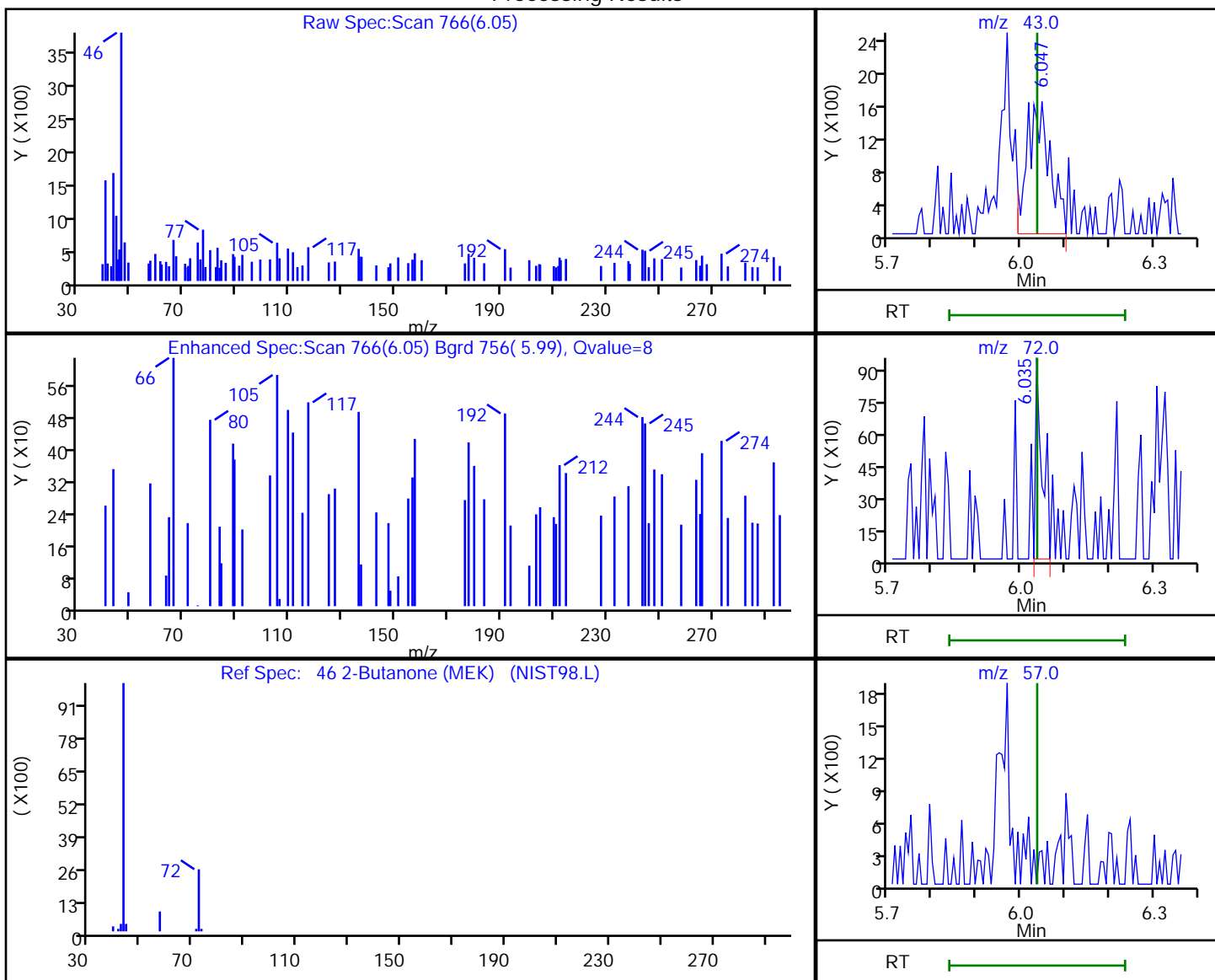
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

46 2-Butanone (MEK), CAS: 78-93-3

Processing Results



RT	Mass	Response	Amount
6.05	43.00	5875	2.271228
6.03	72.00	1020	
6.04	57.00	0	

Reviewer: journeyp, 04-May-2020 15:11:46

Audit Action: Marked Compound Undetected

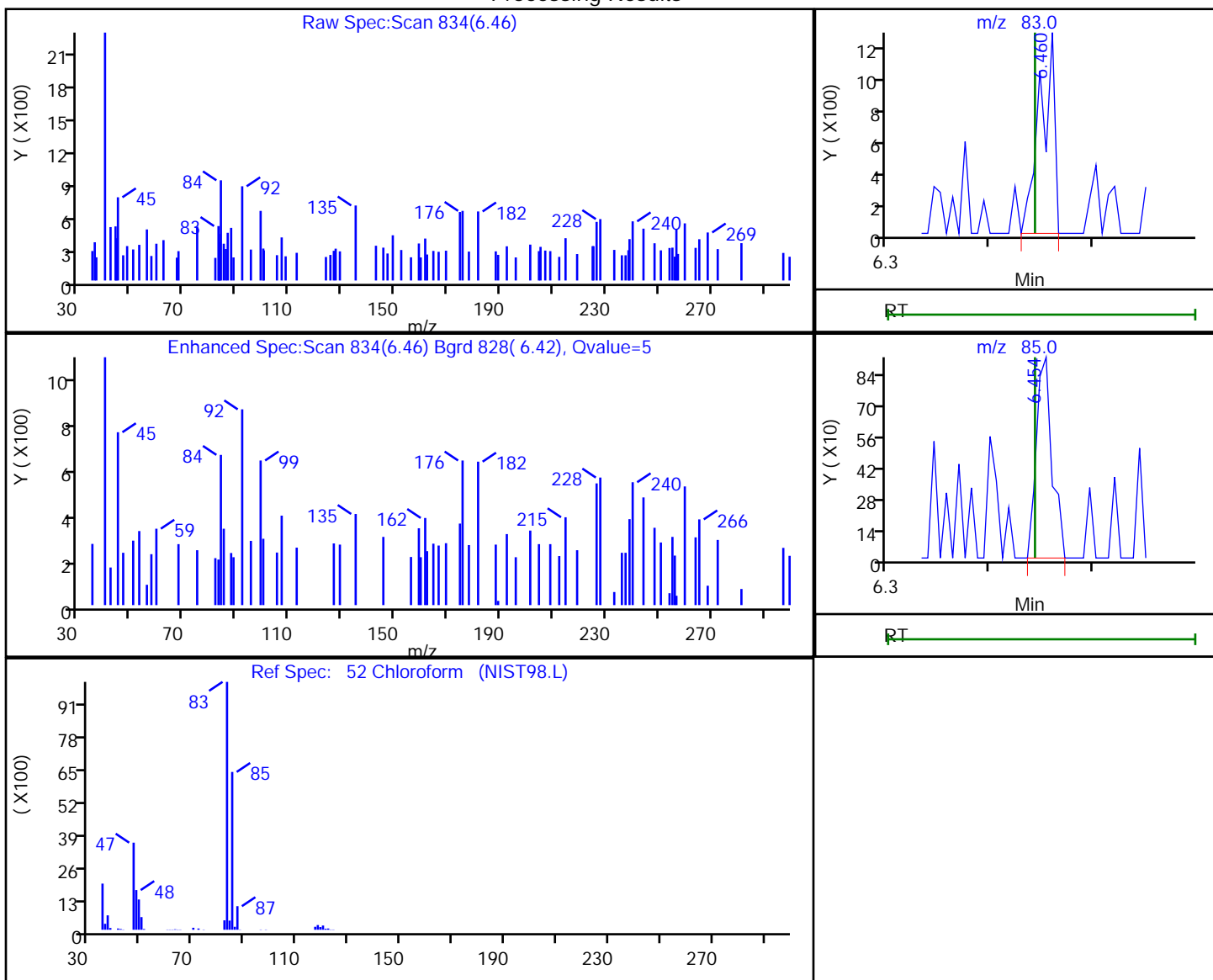
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050413.D  
 Injection Date: 04-May-2020 13:06:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-1 Lab Sample ID: 180-105108-1  
 Client ID: HD-COD-SW-6-0/1-0  
 Operator ID: 034635 ALS Bottle#: 13 Worklist Smp#: 13  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

52 Chloroform, CAS: 67-66-3

Processing Results



RT	Mass	Response	Amount
6.46	83.00	1217	-1.584040
6.45	85.00	973	

Reviewer: journtp, 04-May-2020 15:11:52  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050413.D

Injection Date: 04-May-2020 13:06:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-1

Lab Sample ID: 180-105108-1

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

Operator ID: 034635

ALS Bottle#: 13 Worklist Smp#: 13

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

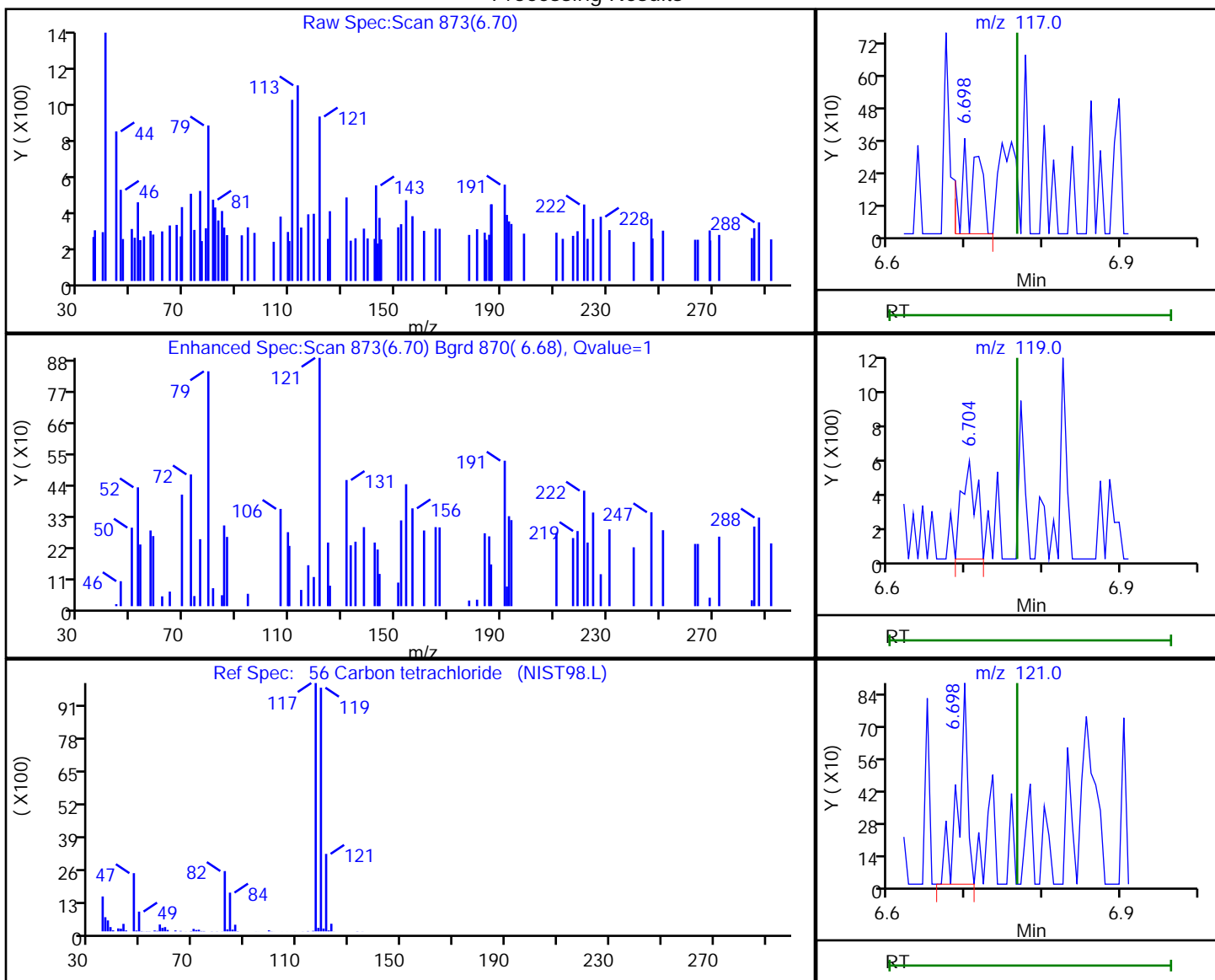
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

56 Carbon tetrachloride, CAS: 56-23-5

Processing Results



RT	Mass	Response	Amount
6.70	117.00	496	0.104068
6.70	119.00	723	
6.70	121.00	734	

Reviewer: journetp, 04-May-2020 15:11:52

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID



Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050413.D

Injection Date: 04-May-2020 13:06:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-1

Lab Sample ID: 180-105108-1

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

Operator ID: 034635

ALS Bottle#: 13 Worklist Smp#: 13

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

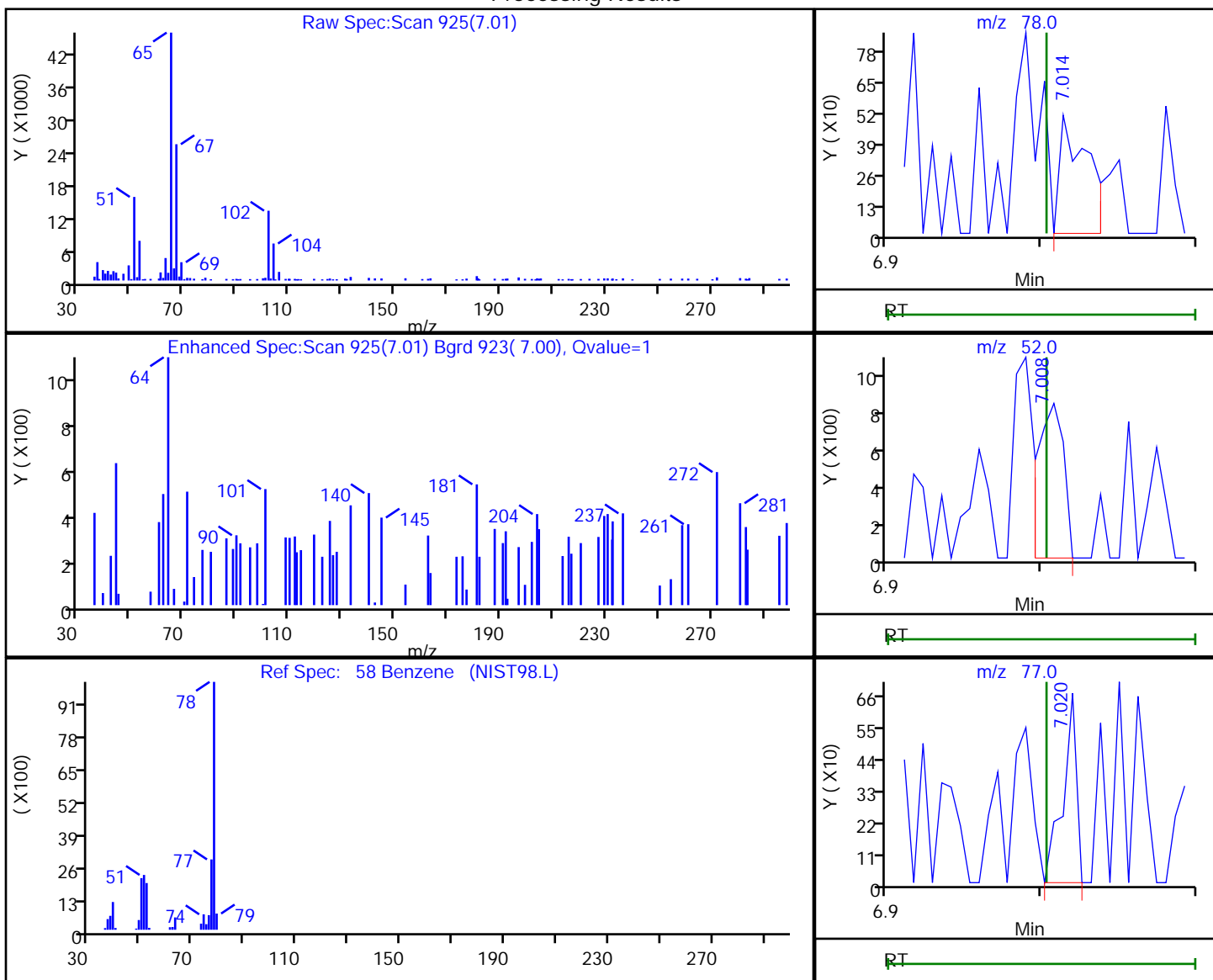
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

58 Benzene, CAS: 71-43-2

Processing Results



RT	Mass	Response	Amount
7.01	78.00	630	0.036341
7.01	52.00	949	
7.02	77.00	408	

Reviewer: journeyp, 04-May-2020 15:11:53

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050413.D

Injection Date: 04-May-2020 13:06:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-1

Lab Sample ID: 180-105108-1

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

Operator ID: 034635

ALS Bottle#: 13 Worklist Smp#: 13

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

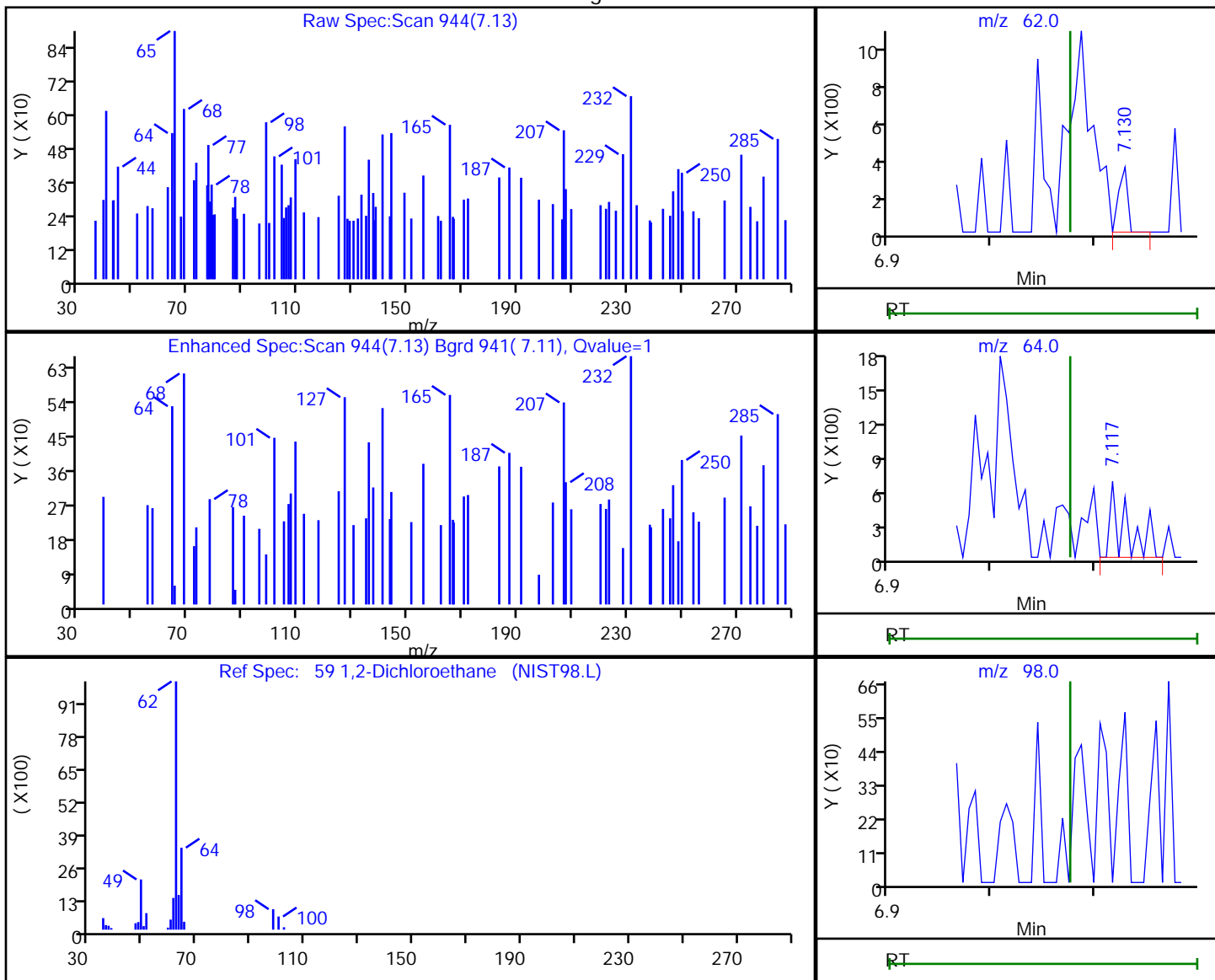
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

59 1,2-Dichloroethane, CAS: 107-06-2

Processing Results



RT	Mass	Response	Amount
7.13	62.00	199	0.030190
7.12	64.00	684	
7.08	98.00	0	

Reviewer: journeyp, 04-May-2020 15:11:53

Audit Action: Marked Compound Undetected

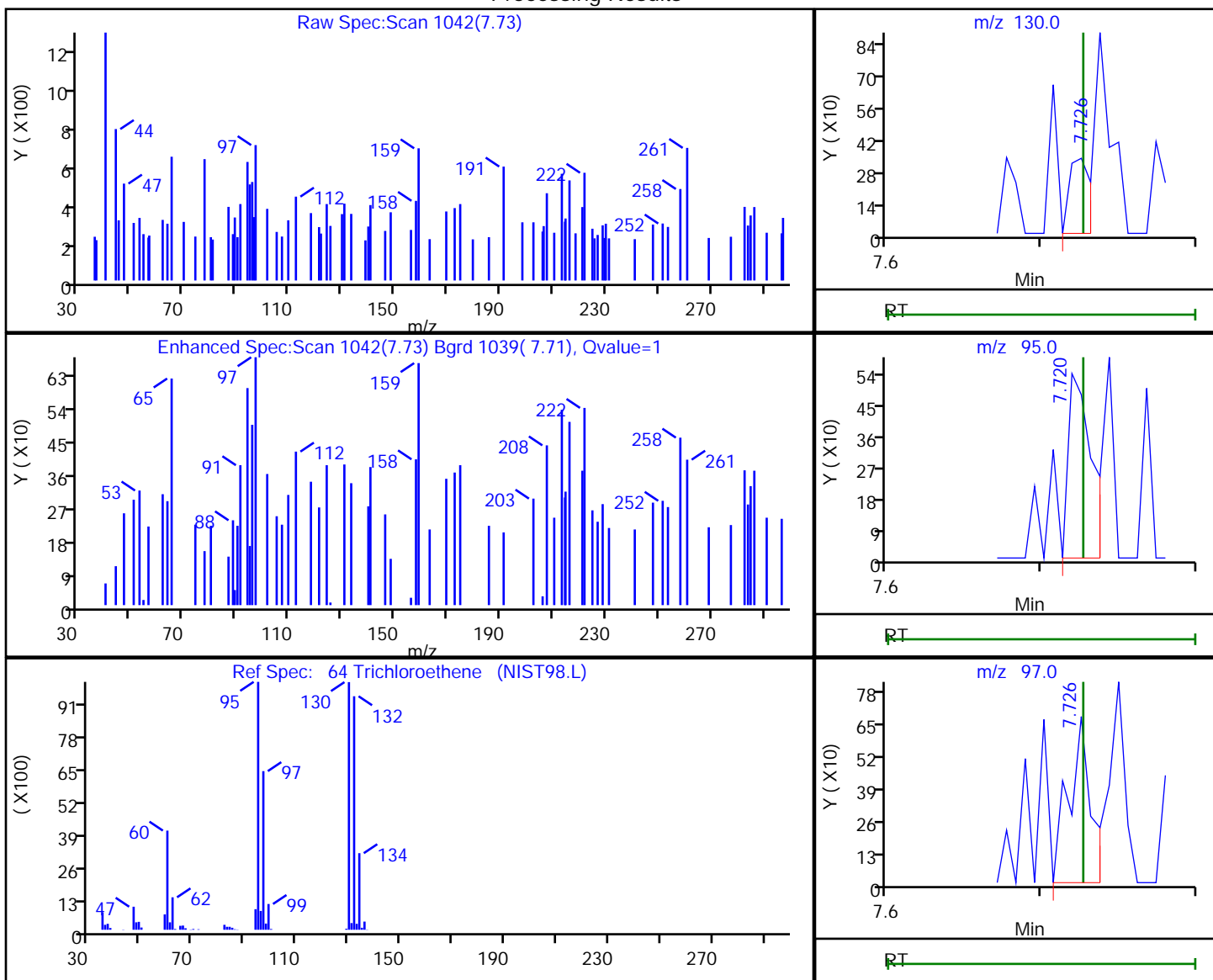
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050413.D  
 Injection Date: 04-May-2020 13:06:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-1 Lab Sample ID: 180-105108-1  
 Client ID: HD-COD-SW-6-0/1-0  
 Operator ID: 034635 ALS Bottle#: 13 Worklist Smp#: 13  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

64 Trichloroethene, CAS: 79-01-6

Processing Results



RT	Mass	Response	Amount
7.73	130.00	316	0.073194
7.72	95.00	566	
7.73	97.00	678	

Reviewer: journetp, 04-May-2020 15:11:53  
 Audit Action: Marked Compound Undetected

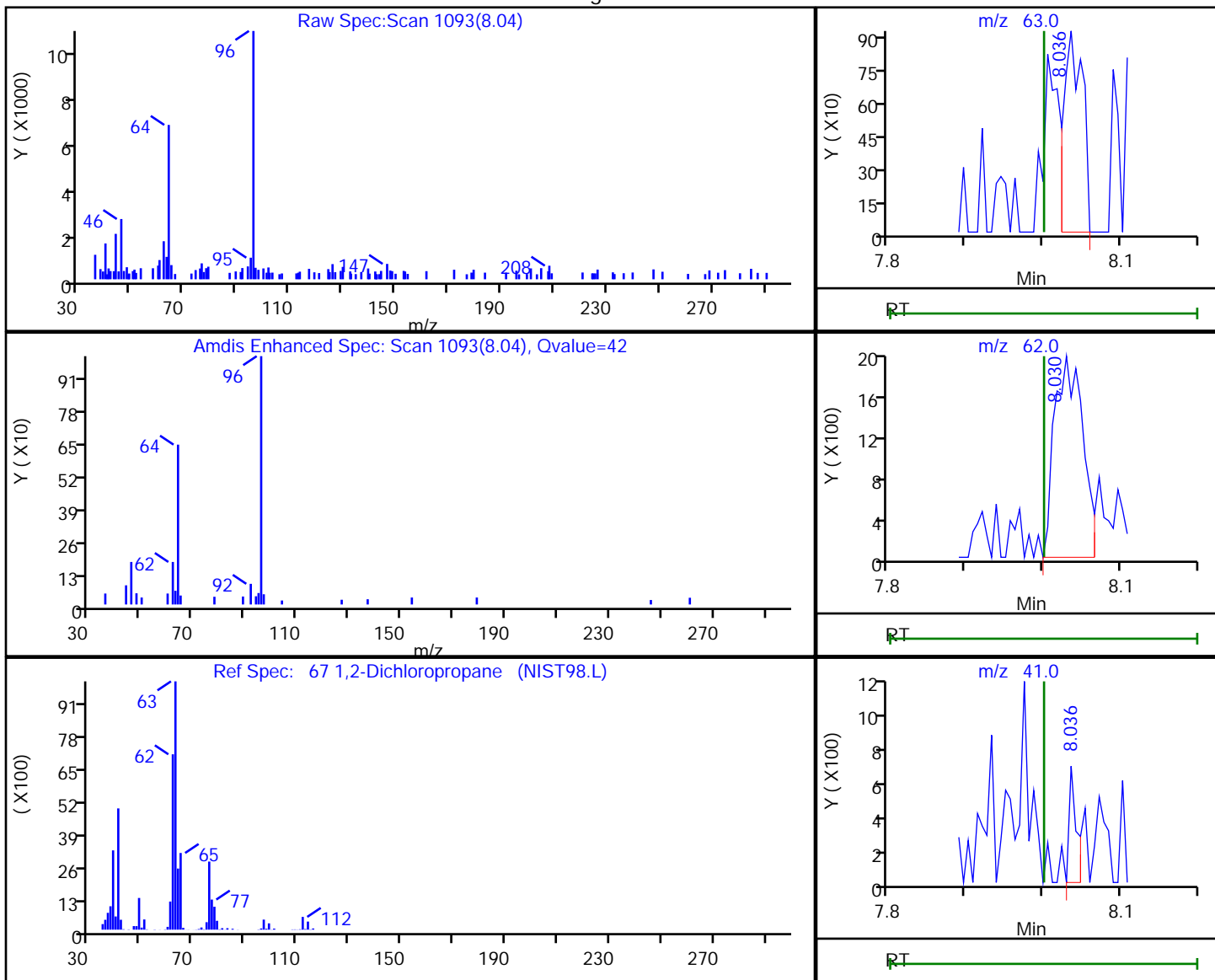
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050413.D  
 Injection Date: 04-May-2020 13:06:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-1 Lab Sample ID: 180-105108-1  
 Client ID: HD-COD-SW-6-0/1-0  
 Operator ID: 034635 ALS Bottle#: 13 Worklist Smp#: 13  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

67 1,2-Dichloropropane, CAS: 78-87-5

Processing Results



RT	Mass	Response	Amount
8.04	63.00	1552	0.335403
8.03	62.00	5045	
8.04	41.00	437	

Reviewer: journept, 04-May-2020 15:11:53  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050413.D

Injection Date: 04-May-2020 13:06:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-1

Lab Sample ID: 180-105108-1

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

Operator ID: 034635

ALS Bottle#: 13 Worklist Smp#: 13

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

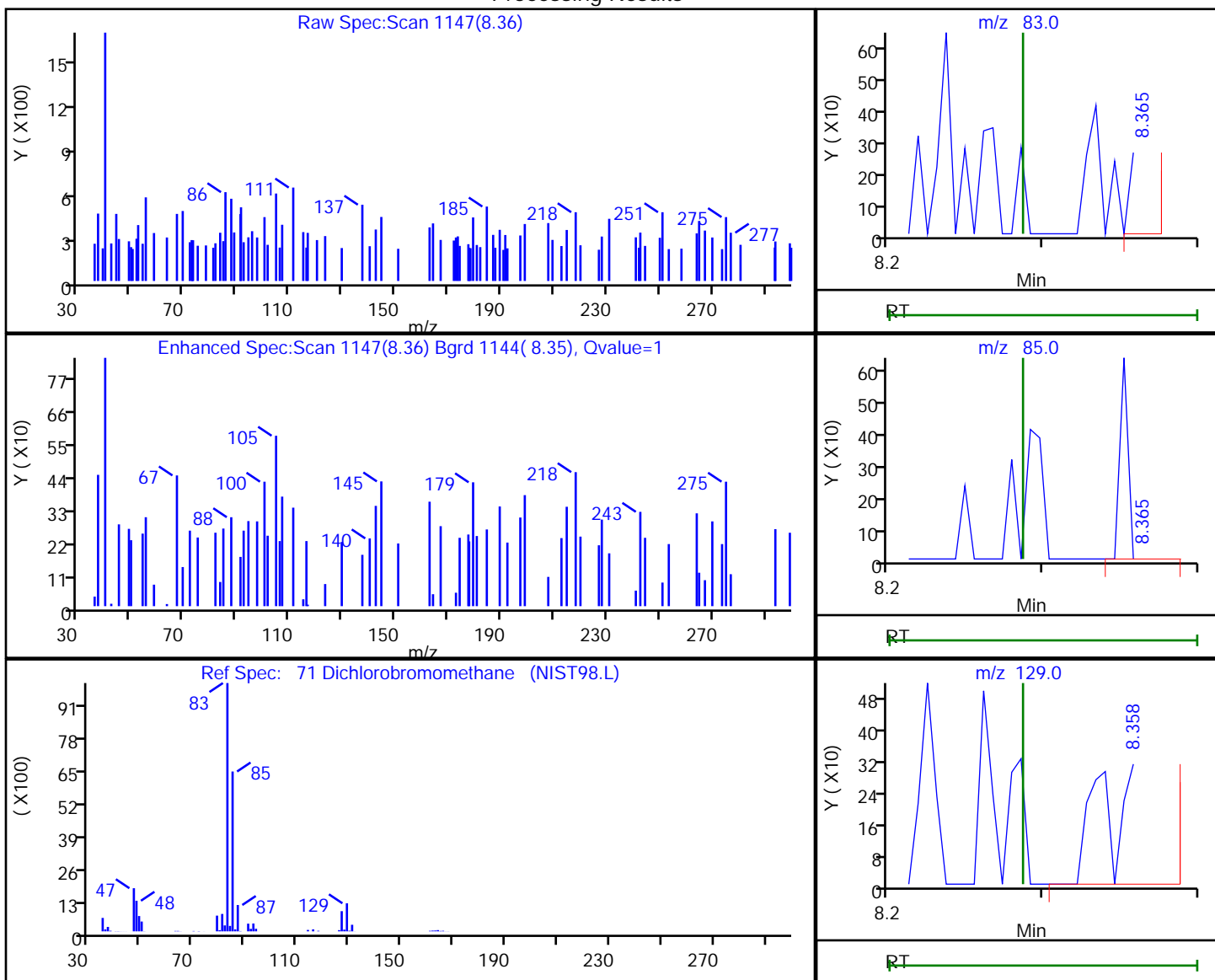
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

71 Dichlorobromomethane, CAS: 75-27-4

Processing Results



RT	Mass	Response	Amount
8.36	83.00	315	0.058016
8.36	85.00	912	
8.36	129.00	549	

Reviewer: journeyp, 04-May-2020 15:11:53

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050413.D

Injection Date: 04-May-2020 13:06:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-1

Lab Sample ID: 180-105108-1

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

Operator ID: 034635

ALS Bottle#: 13 Worklist Smp#: 13

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

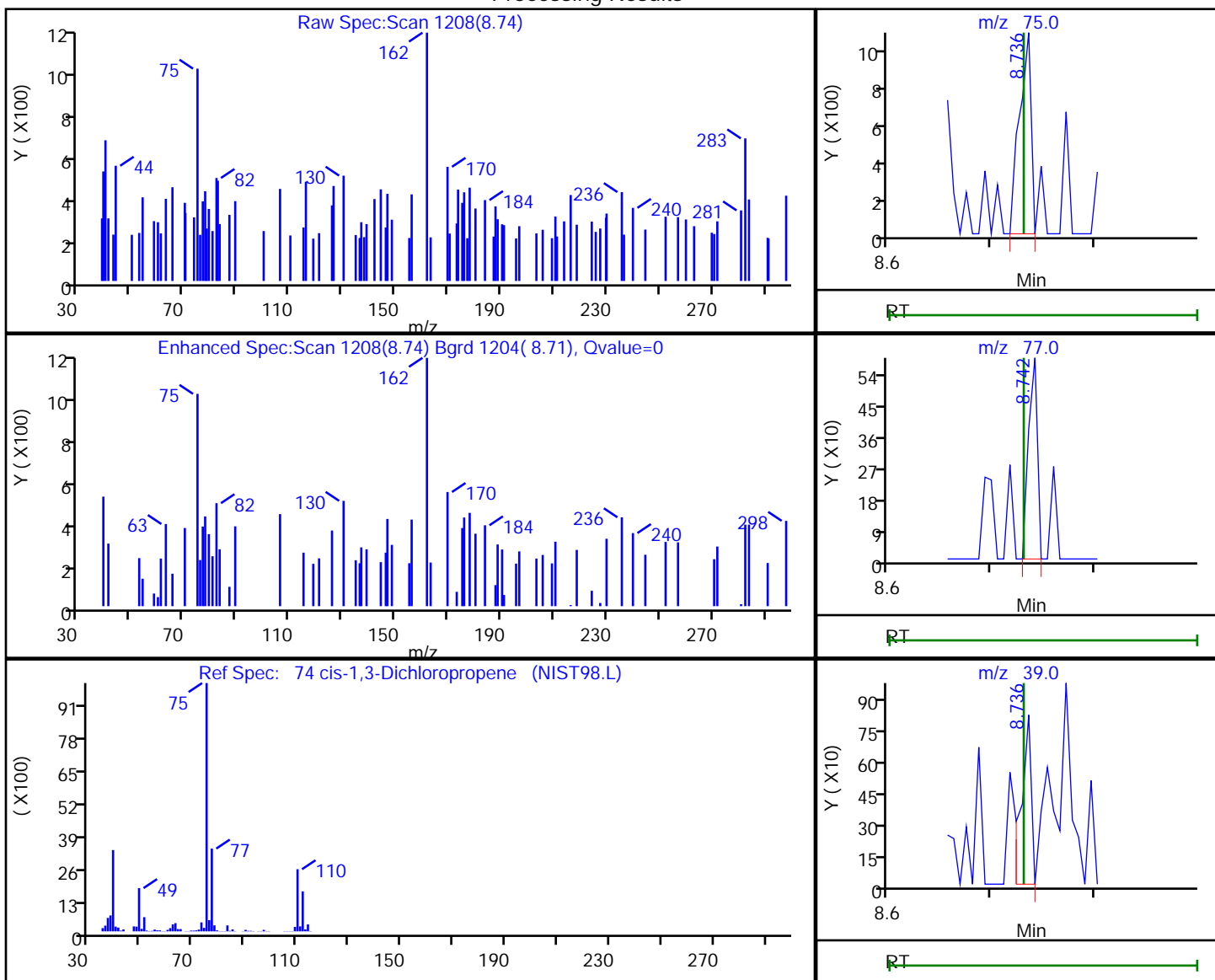
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

74 cis-1,3-Dichloropropene, CAS: 10061-01-5

Processing Results



RT	Mass	Response	Amount
8.74	75.00	798	0.116732
8.74	77.00	352	
8.74	39.00	551	

Reviewer: journeyp, 04-May-2020 15:11:53

Audit Action: Marked Compound Undetected

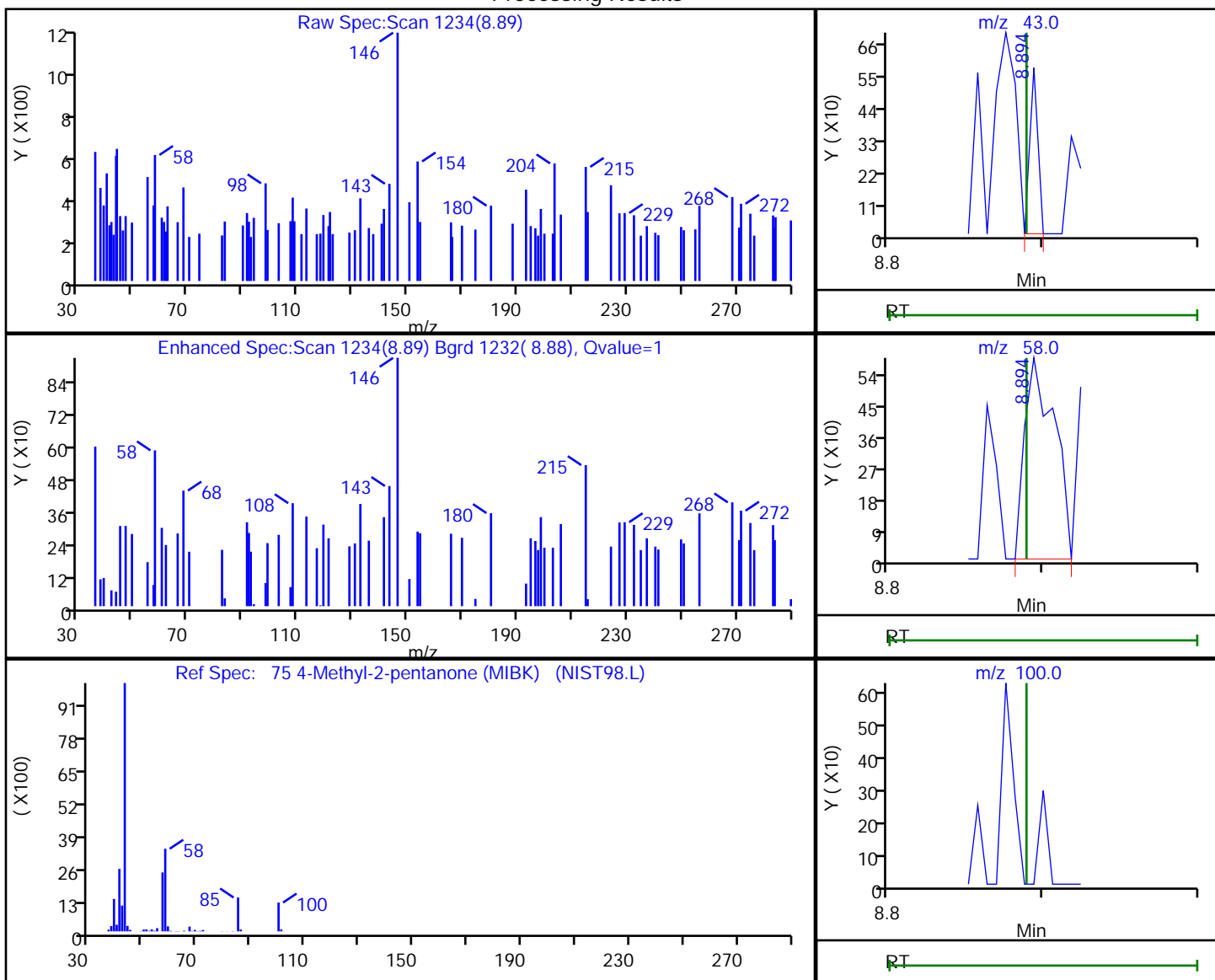
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050413.D  
 Injection Date: 04-May-2020 13:06:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-1 Lab Sample ID: 180-105108-1  
 Client ID: HD-COD-SW-6-0/1-0  
 Operator ID: 034635 ALS Bottle#: 13 Worklist Smp#: 13  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

75 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Processing Results



RT	Mass	Response	Amount
8.89	43.00	211	15.520975
8.89	58.00	778	
8.89	100.00	0	

Reviewer: journeyp, 04-May-2020 15:11:53  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050413.D

Injection Date: 04-May-2020 13:06:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-1

Lab Sample ID: 180-105108-1

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

Operator ID: 034635

ALS Bottle#: 13 Worklist Smp#: 13

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

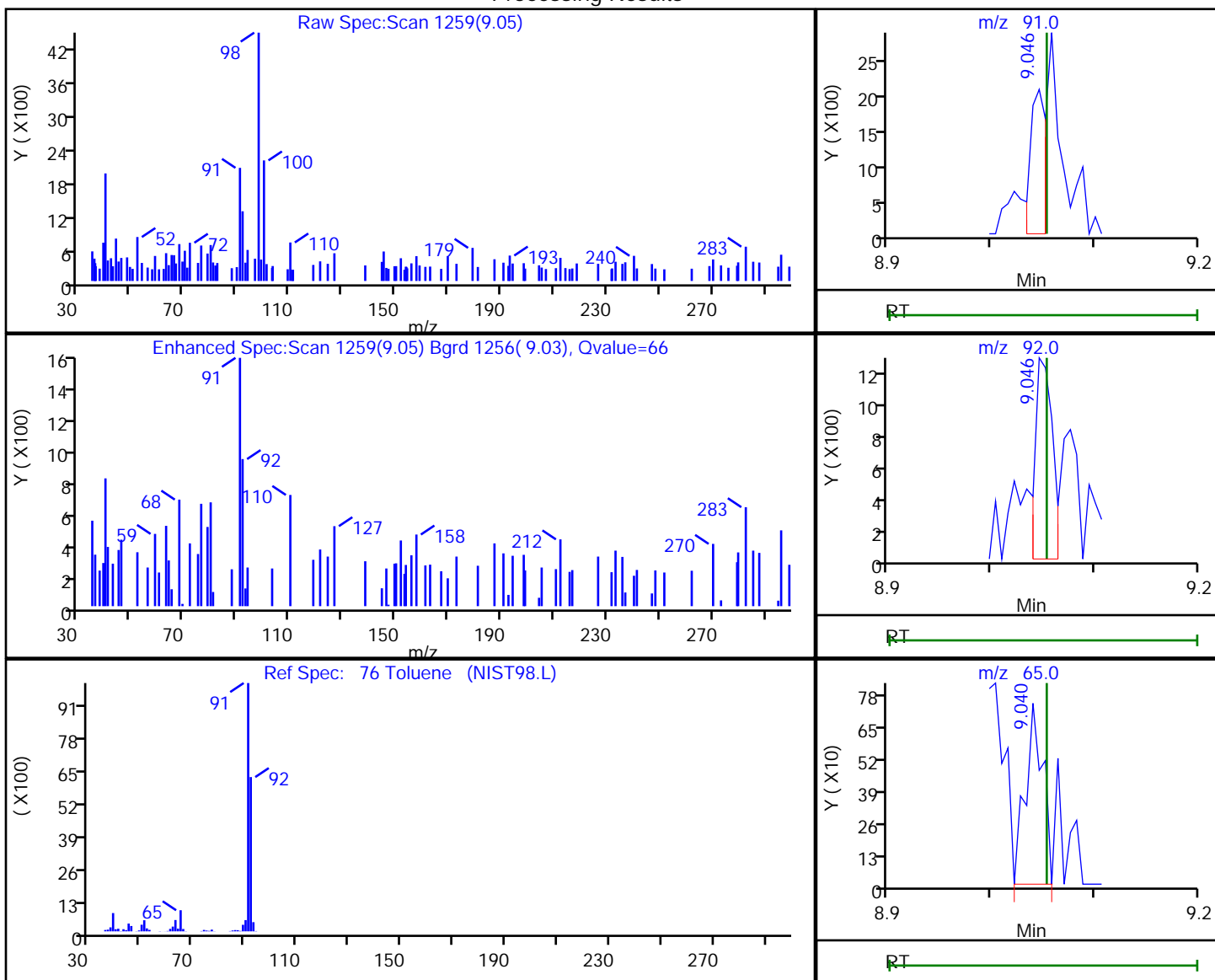
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

76 Toluene, CAS: 108-88-3

Processing Results



RT	Mass	Response	Amount
9.05	91.00	2154	0.127792
9.05	92.00	1473	
9.04	65.00	874	

Reviewer: journeyp, 04-May-2020 15:11:53

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID



Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050413.D

Injection Date: 04-May-2020 13:06:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-1

Lab Sample ID: 180-105108-1

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

Operator ID: 034635

ALS Bottle#: 13 Worklist Smp#: 13

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

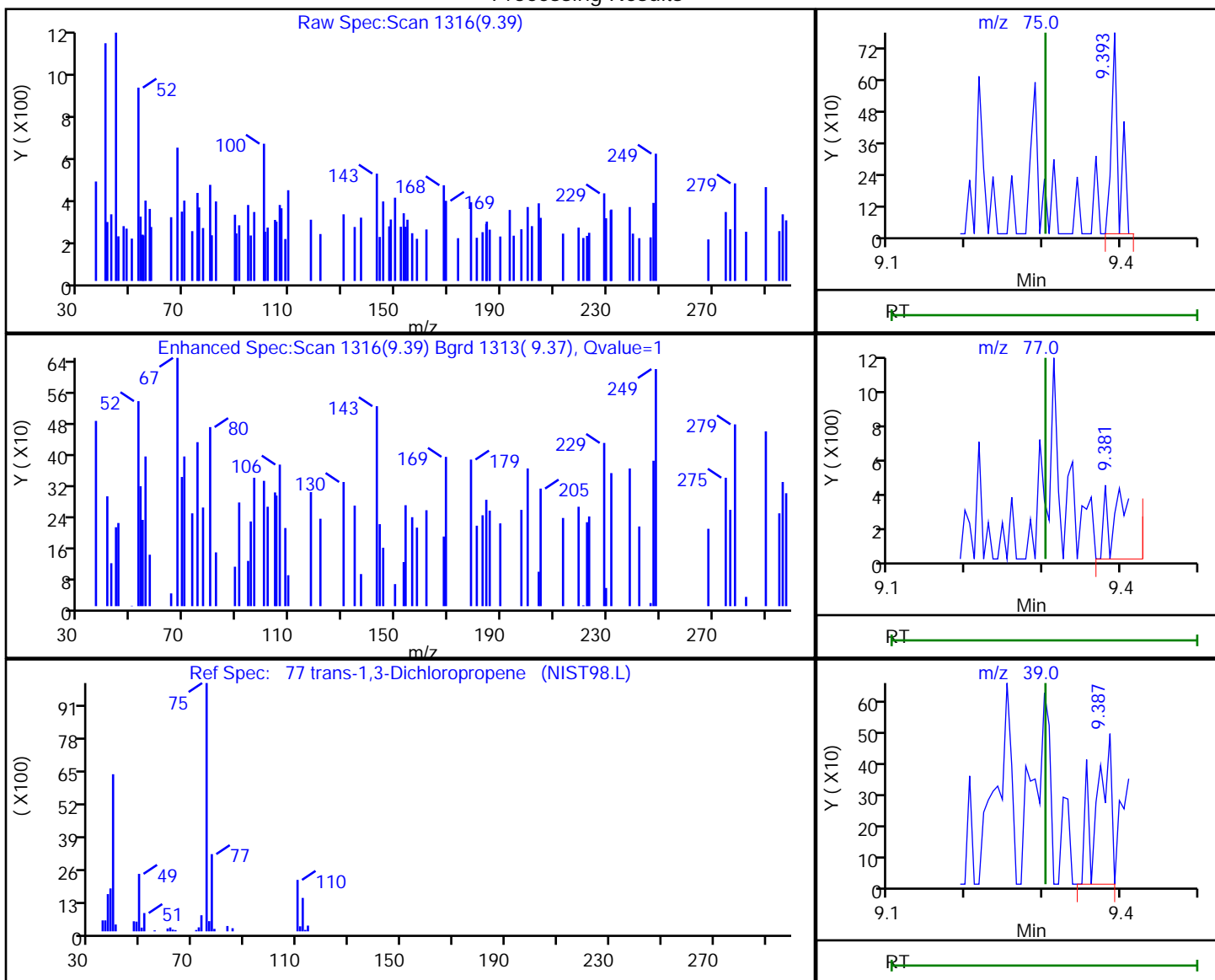
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

77 trans-1,3-Dichloropropene, CAS: 10061-02-6

Processing Results



RT	Mass	Response	Amount
9.39	75.00	523	0.094385
9.38	77.00	699	
9.39	39.00	659	

Reviewer: journept, 04-May-2020 15:11:53

Audit Action: Marked Compound Undetected

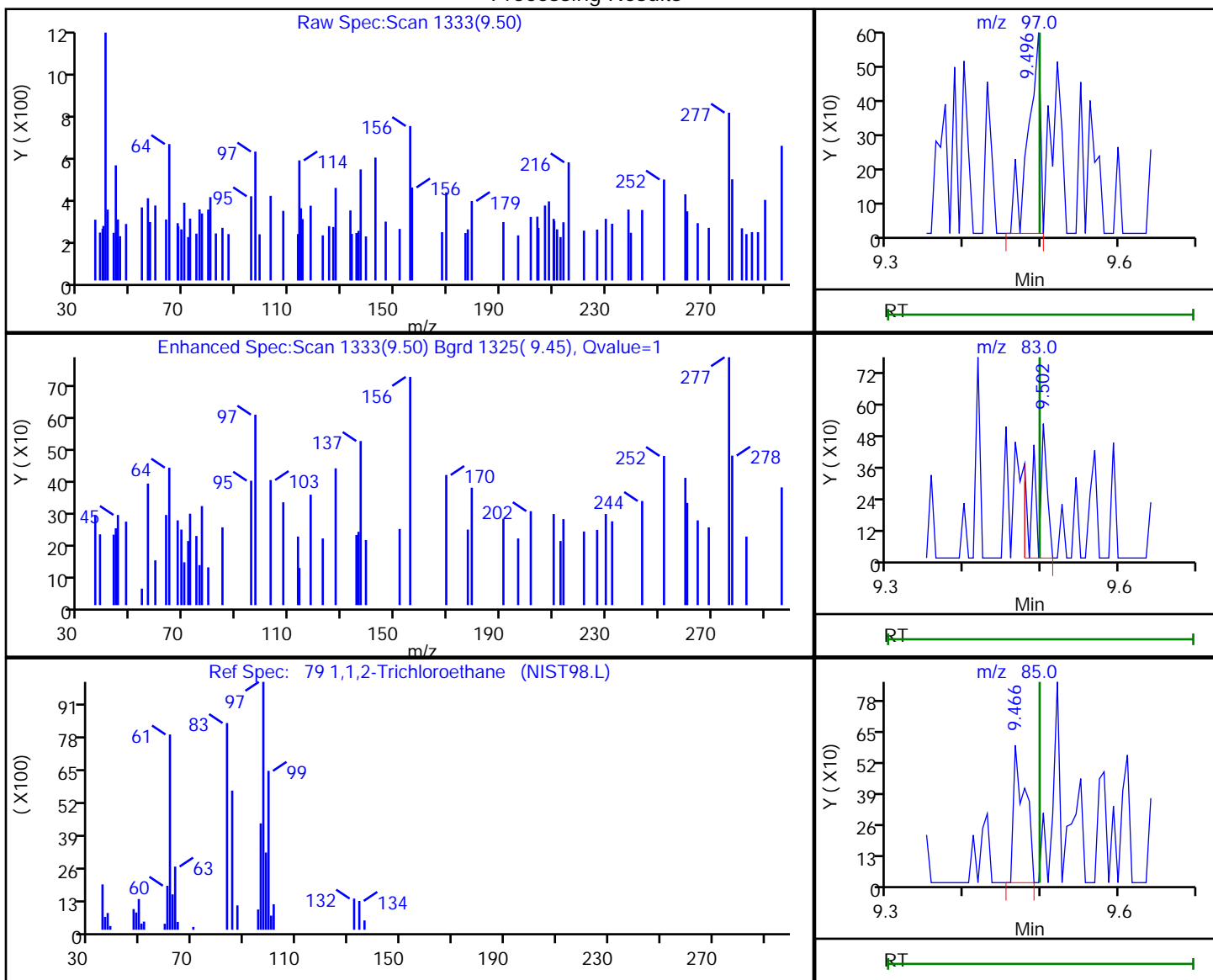
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050413.D  
 Injection Date: 04-May-2020 13:06:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-1 Lab Sample ID: 180-105108-1  
 Client ID: HD-COD-SW-6-0/1-0  
 Operator ID: 034635 ALS Bottle#: 13 Worklist Smp#: 13  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

79 1,1,2-Trichloroethane, CAS: 79-00-5

Processing Results



RT	Mass	Response	Amount
9.50	97.00	655	0.167182
9.50	83.00	565	
9.47	85.00	607	

Reviewer: journeyp, 04-May-2020 15:11:53  
 Audit Action: Marked Compound Undetected

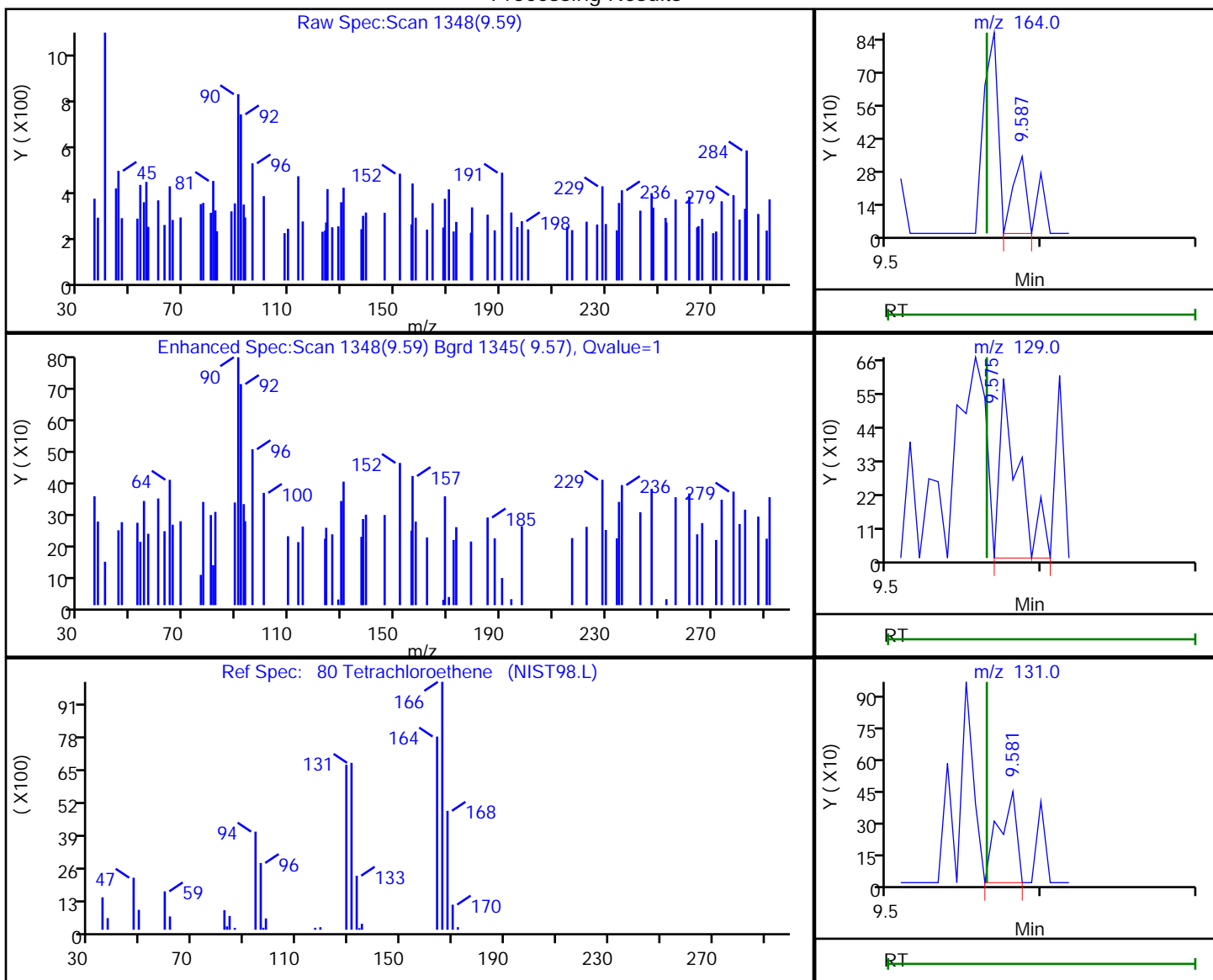
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050413.D  
 Injection Date: 04-May-2020 13:06:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-1 Lab Sample ID: 180-105108-1  
 Client ID: HD-COD-SW-6-0/1-0  
 Operator ID: 034635 ALS Bottle#: 13 Worklist Smp#: 13  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

80 Tetrachloroethene, CAS: 127-18-4

Processing Results



RT	Mass	Response	Amount
9.59	164.00	194	0.057828
9.58	129.00	507	
9.58	131.00	352	

Reviewer: journeyp, 04-May-2020 15:11:53  
 Audit Action: Marked Compound Undetected

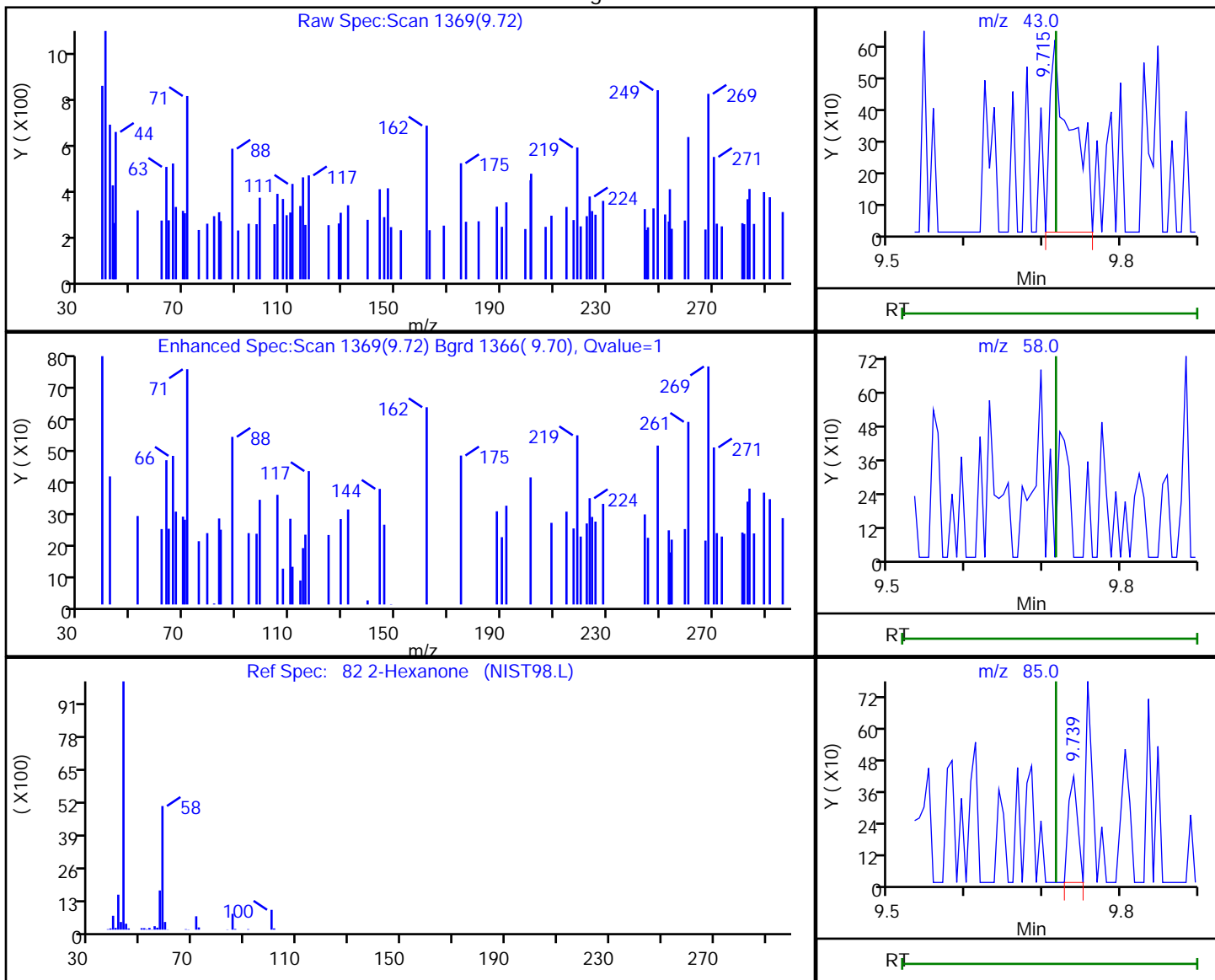
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050413.D  
Injection Date: 04-May-2020 13:06:30 Instrument ID: CHHP5  
Lims ID: 180-105108-B-1 Lab Sample ID: 180-105108-1  
Client ID: HD-COD-SW-6-0/1-0  
Operator ID: 034635 ALS Bottle#: 13 Worklist Smp#: 13  
Purge Vol: 5.000 mL Dil. Factor: 1.0000  
Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
Column: DB-624 (0.18 mm) Detector: MS SCAN

82 2-Hexanone, CAS: 591-78-6

Processing Results



RT	Mass	Response	Amount
9.72	43.00	1226	14.345550
9.74	85.00	339	
9.72	58.00	0	

Reviewer: journept, 04-May-2020 15:11:53  
Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050413.D

Injection Date: 04-May-2020 13:06:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-1

Lab Sample ID: 180-105108-1

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

Operator ID: 034635

ALS Bottle#: 13

Worklist Smp#: 13

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

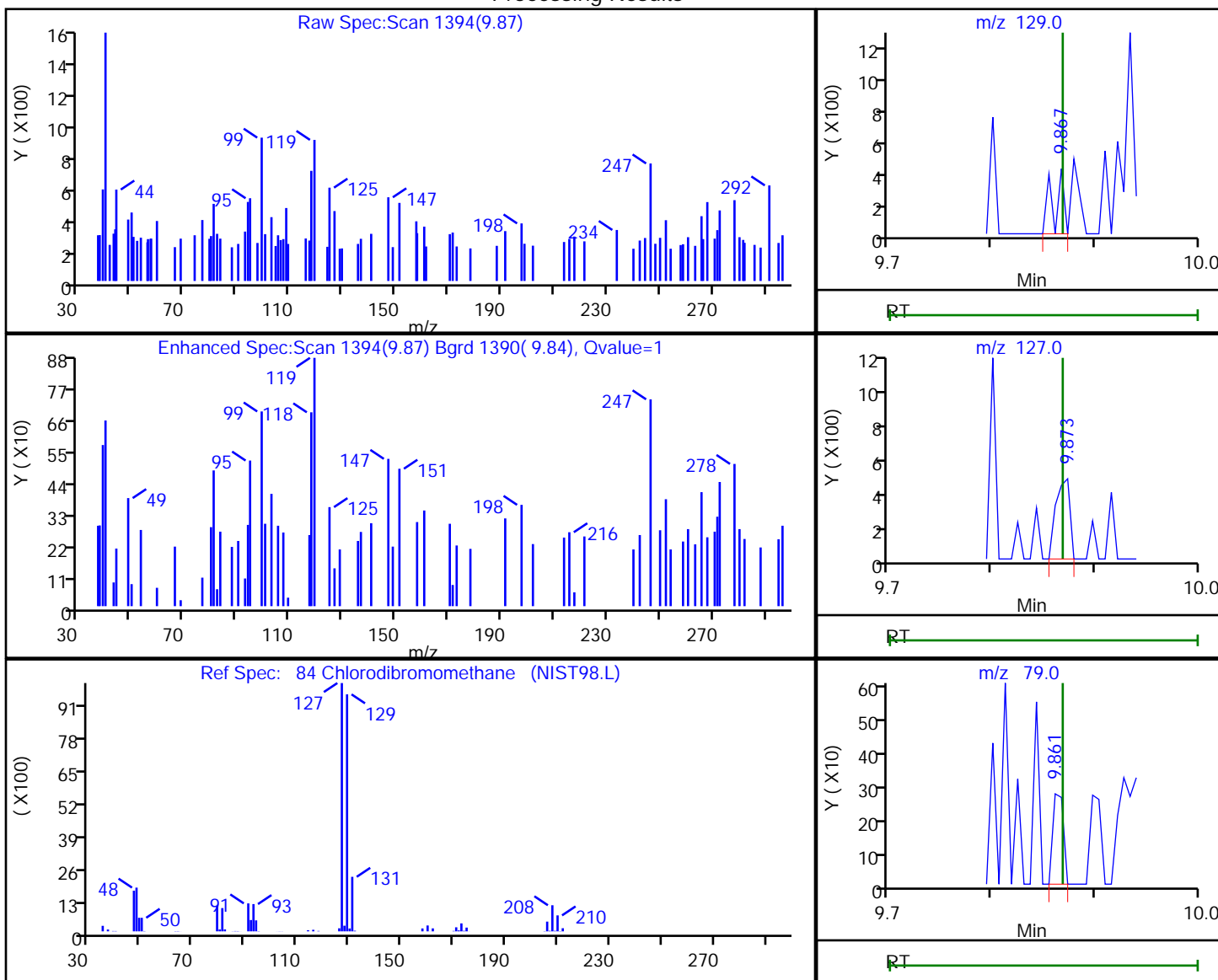
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

84 Chlorodibromomethane, CAS: 124-48-1

Processing Results



RT	Mass	Response	Amount
9.87	129.00	283	0.085332
9.87	127.00	448	
9.86	79.00	196	

Reviewer: journeyp, 04-May-2020 15:11:53

Audit Action: Marked Compound Undetected

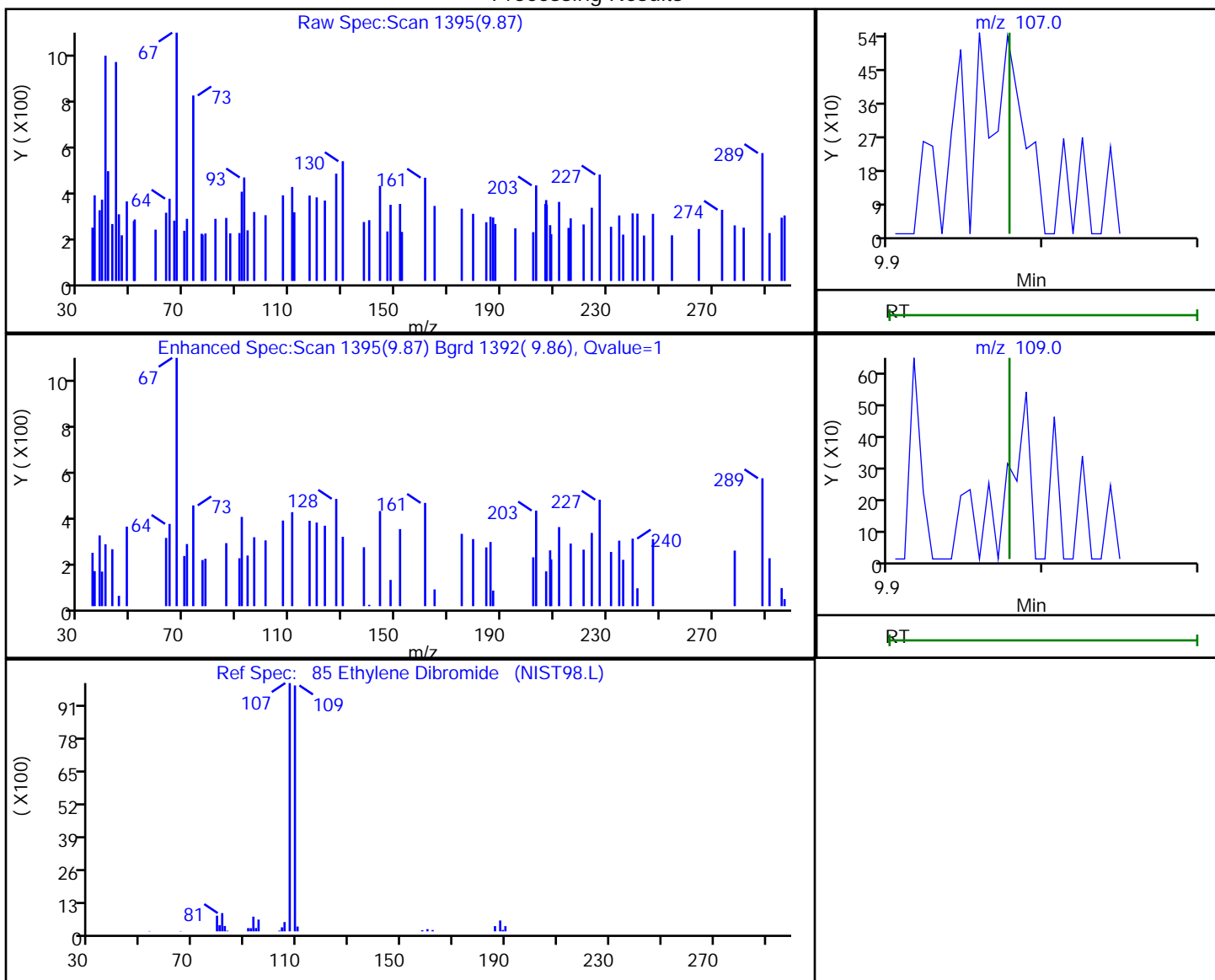
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050413.D  
 Injection Date: 04-May-2020 13:06:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-1 Lab Sample ID: 180-105108-1  
 Client ID: HD-COD-SW-6-0/1-0  
 Operator ID: 034635 ALS Bottle#: 13 Worklist Smp#: 13  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

85 Ethylene Dibromide, CAS: 106-93-4

Processing Results



RT	Mass	Response	Amount
9.87	107.00	234	0.063844
9.89	109.00	291	

Reviewer: journetp, 04-May-2020 15:11:53  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050413.D

Injection Date: 04-May-2020 13:06:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-1

Lab Sample ID: 180-105108-1

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

Operator ID: 034635

ALS Bottle#: 13 Worklist Smp#: 13

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

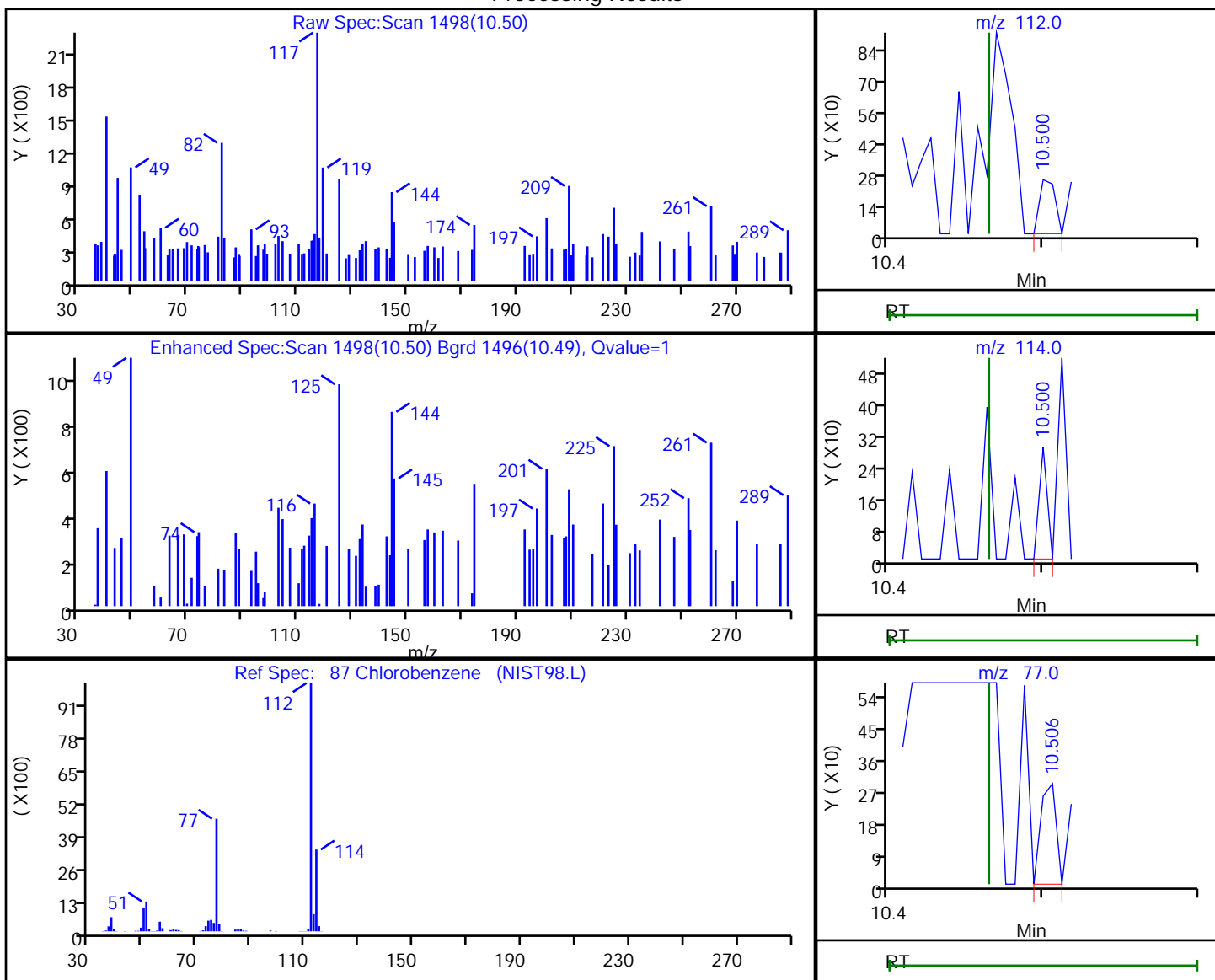
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

87 Chlorobenzene, CAS: 108-90-7

Processing Results



RT	Mass	Response	Amount
10.50	112.00	172	0.015867
10.50	114.00	104	
10.51	77.00	199	

Reviewer: journeyp, 04-May-2020 15:11:53

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050413.D

Injection Date: 04-May-2020 13:06:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-1

Lab Sample ID: 180-105108-1

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

Operator ID: 034635

ALS Bottle#: 13 Worklist Smp#: 13

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

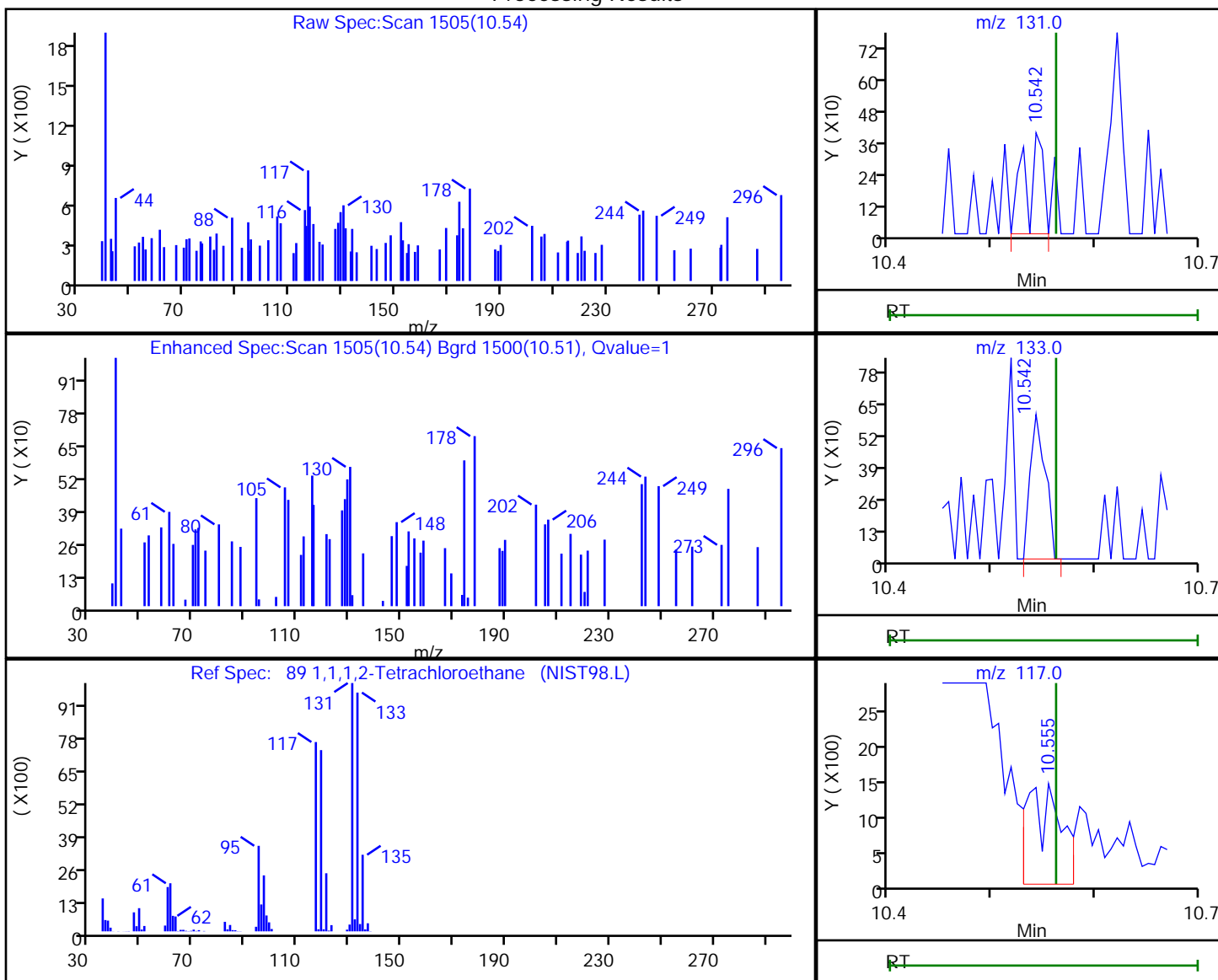
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

89 1,1,1,2-Tetrachloroethane, CAS: 630-20-6

Processing Results



RT	Mass	Response	Amount
10.54	131.00	465	0.132098
10.54	133.00	614	
10.55	117.00	3235	

Reviewer: journeyp, 04-May-2020 15:11:53

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID



Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050413.D

Injection Date: 04-May-2020 13:06:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-1

Lab Sample ID: 180-105108-1

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

Operator ID: 034635

ALS Bottle#: 13 Worklist Smp#: 13

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

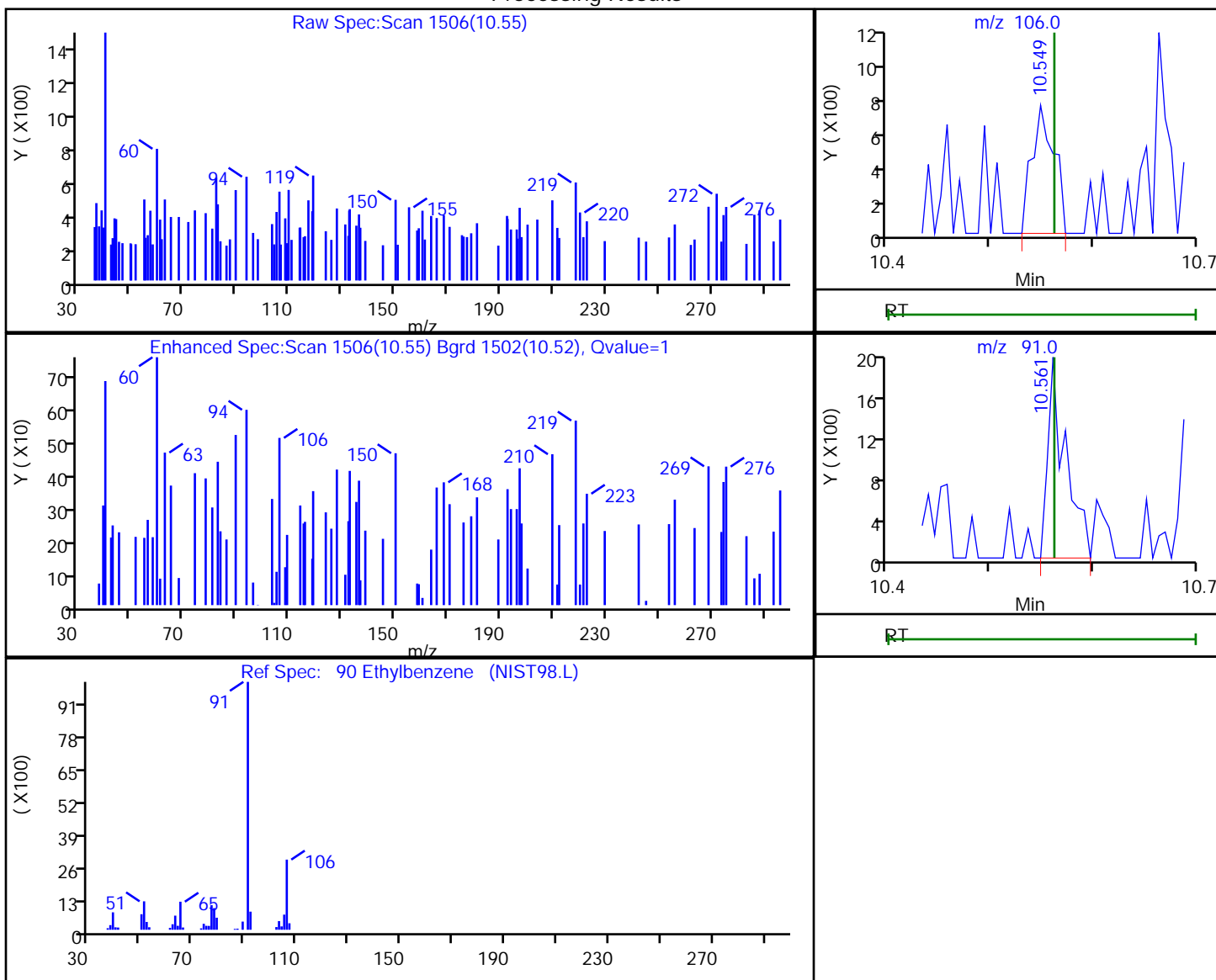
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

90 Ethylbenzene, CAS: 100-41-4

Processing Results



RT	Mass	Response	Amount
10.55	106.00	1082	0.192835
10.56	91.00	2346	

Reviewer: journtp, 04-May-2020 15:11:53

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050413.D

Injection Date: 04-May-2020 13:06:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-1

Lab Sample ID: 180-105108-1

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

Operator ID: 034635

ALS Bottle#: 13 Worklist Smp#: 13

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

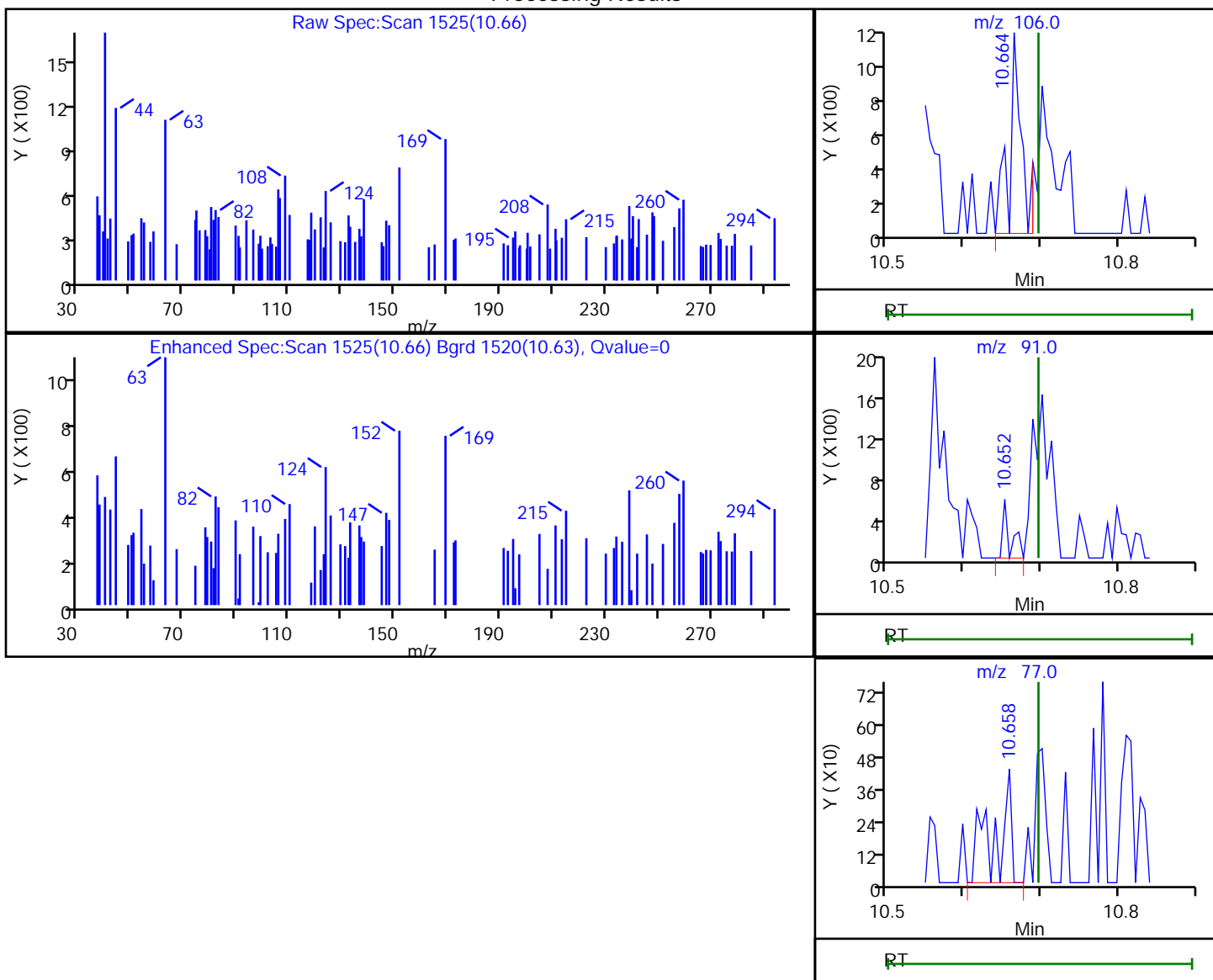
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

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

Processing Results



RT	Mass	Response	Amount
10.66	106.00	1276	0.182413
10.65	91.00	378	
10.66	77.00	603	

Reviewer: journept, 04-May-2020 15:11:53

Audit Action: Marked Compound Undetected

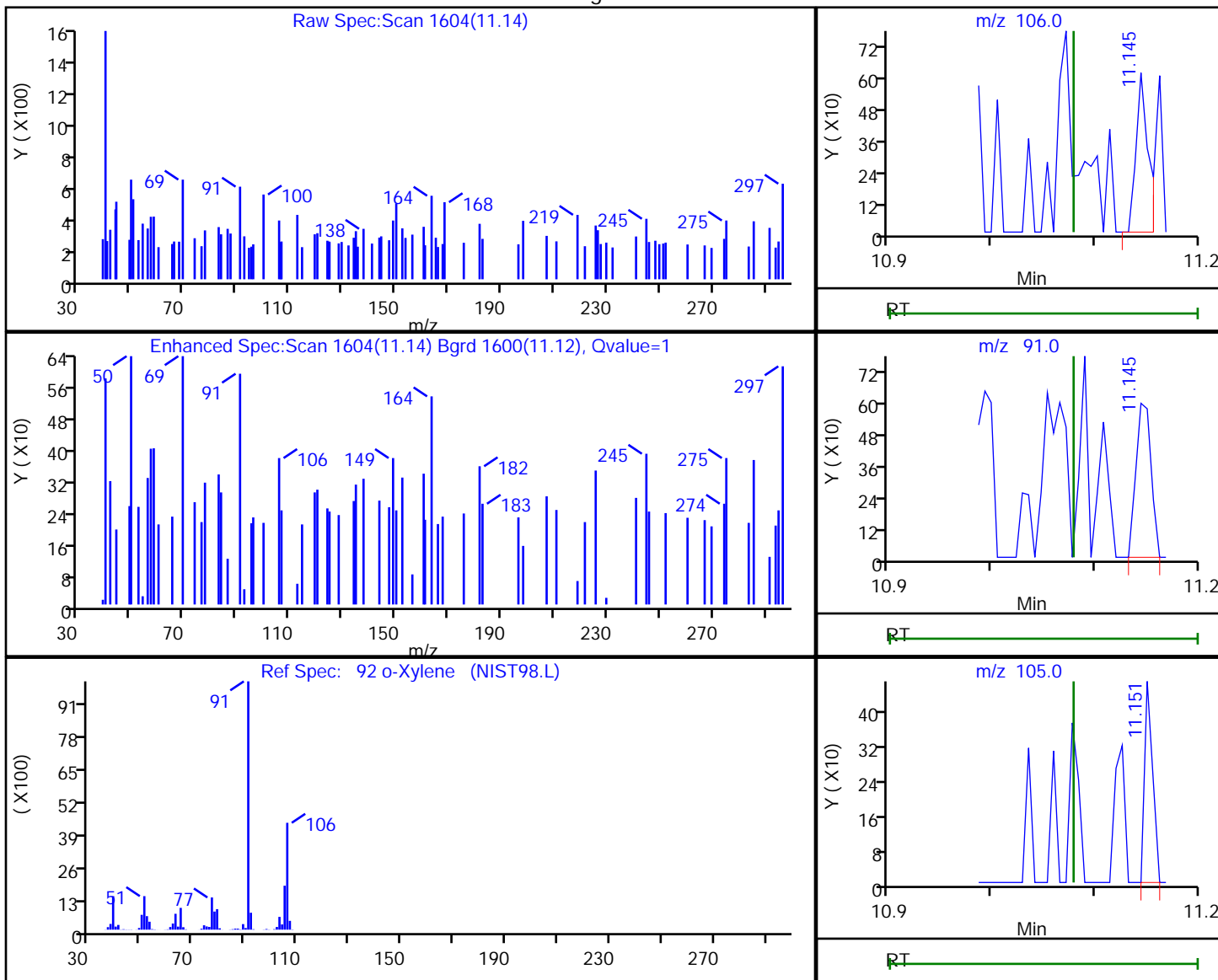
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050413.D  
 Injection Date: 04-May-2020 13:06:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-1 Lab Sample ID: 180-105108-1  
 Client ID: HD-COD-SW-6-0/1-0  
 Operator ID: 034635 ALS Bottle#: 13 Worklist Smp#: 13  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

92 o-Xylene, CAS: 95-47-6

Processing Results



RT	Mass	Response	Amount
11.14	106.00	509	0.077956
11.14	91.00	606	
11.15	105.00	253	

Reviewer: journeyp, 04-May-2020 15:11:53  
 Audit Action: Marked Compound Undetected

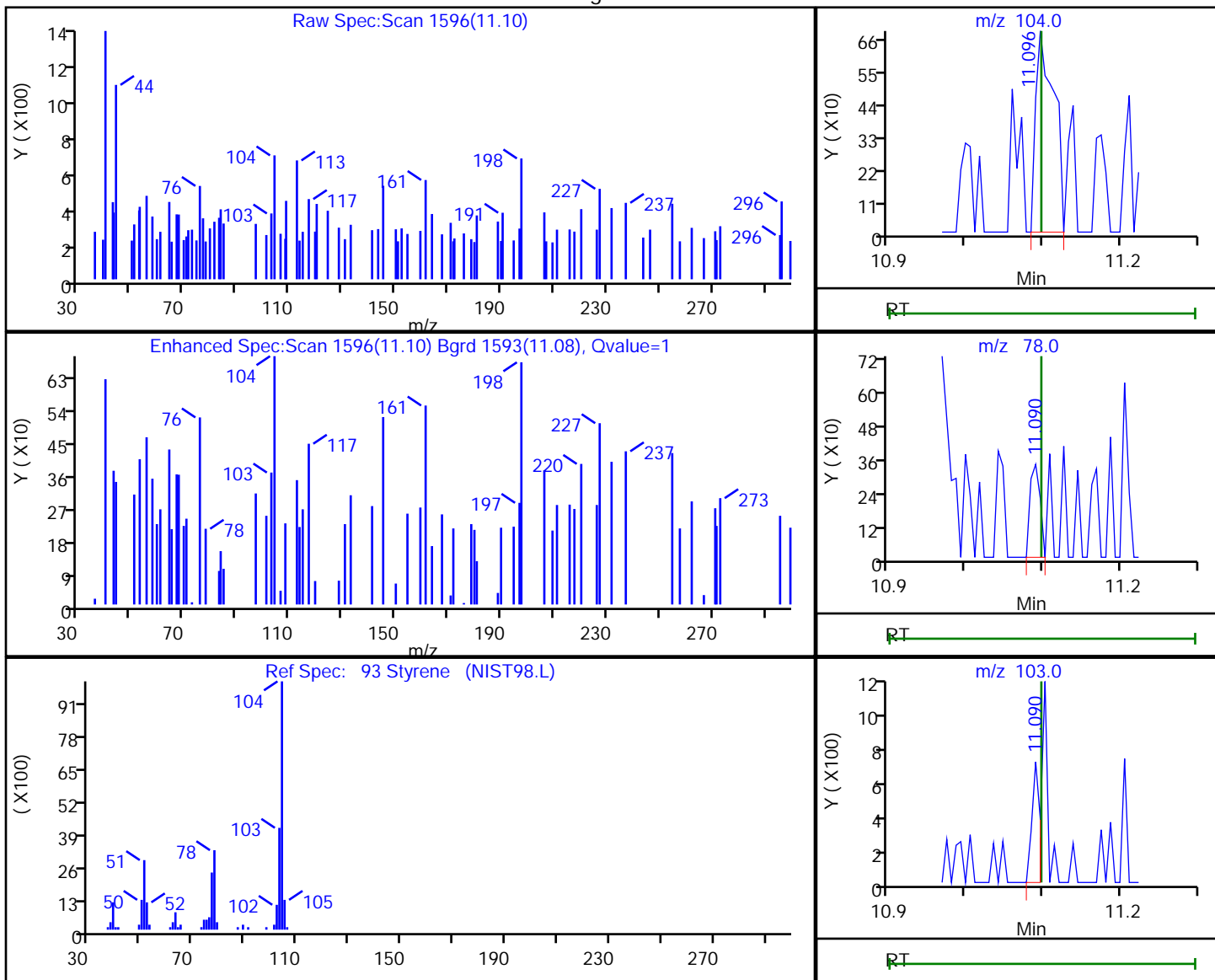
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050413.D  
 Injection Date: 04-May-2020 13:06:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-1 Lab Sample ID: 180-105108-1  
 Client ID: HD-COD-SW-6-0/1-0  
 Operator ID: 034635 ALS Bottle#: 13 Worklist Smp#: 13  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

93 Styrene, CAS: 100-42-5

Processing Results



RT	Mass	Response	Amount
11.10	104.00	1138	0.101646
11.09	78.00	301	
11.09	103.00	497	

Reviewer: journeyp, 04-May-2020 15:11:53  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050413.D

Injection Date: 04-May-2020 13:06:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-1

Lab Sample ID: 180-105108-1

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

Operator ID: 034635

ALS Bottle#: 13 Worklist Smp#: 13

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

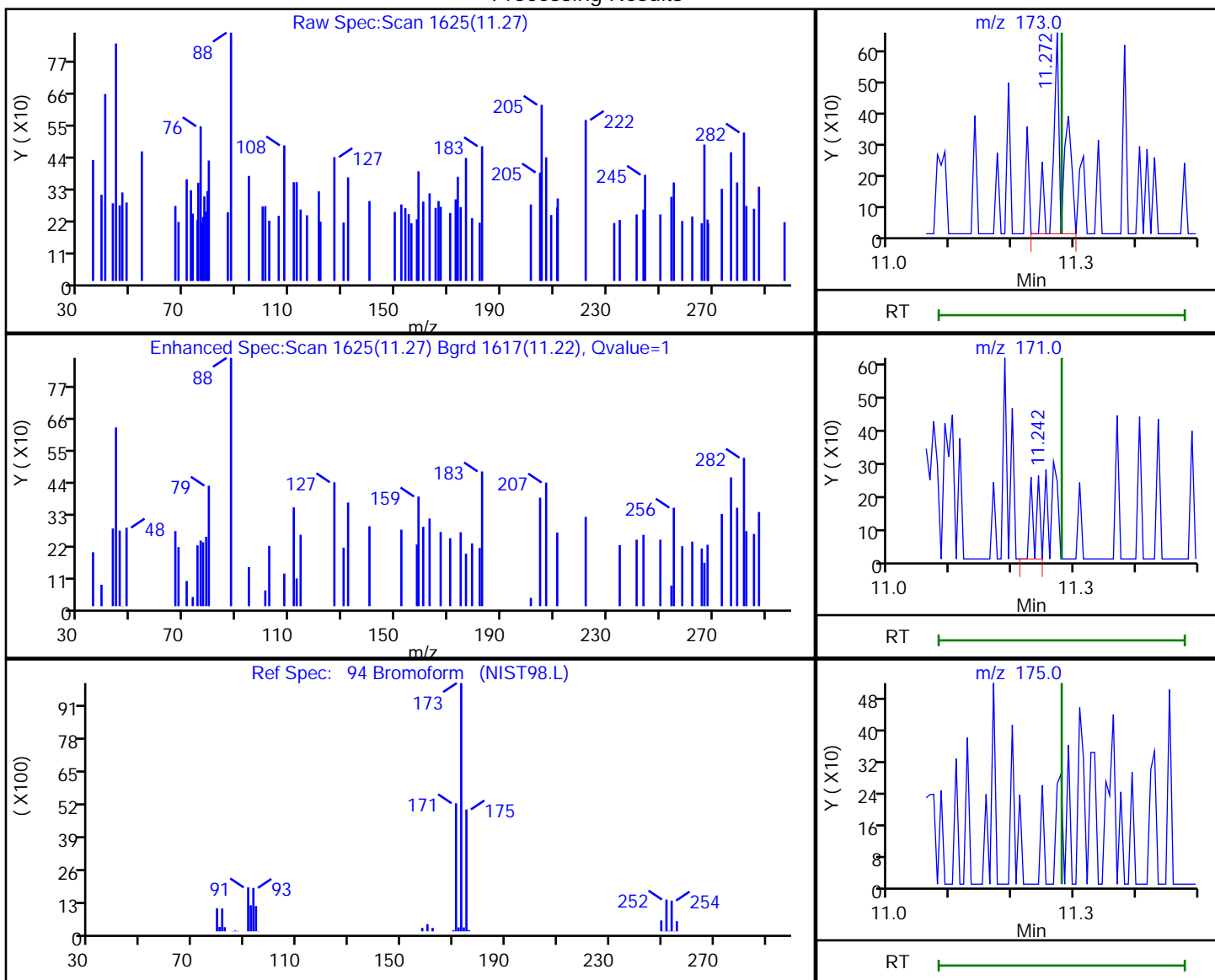
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

94 Bromoform, CAS: 75-25-2

Processing Results



RT	Mass	Response	Amount
11.27	173.00	731	0.466248
11.24	171.00	185	
11.28	175.00	0	

Reviewer: journeyp, 04-May-2020 15:11:53

Audit Action: Marked Compound Undetected

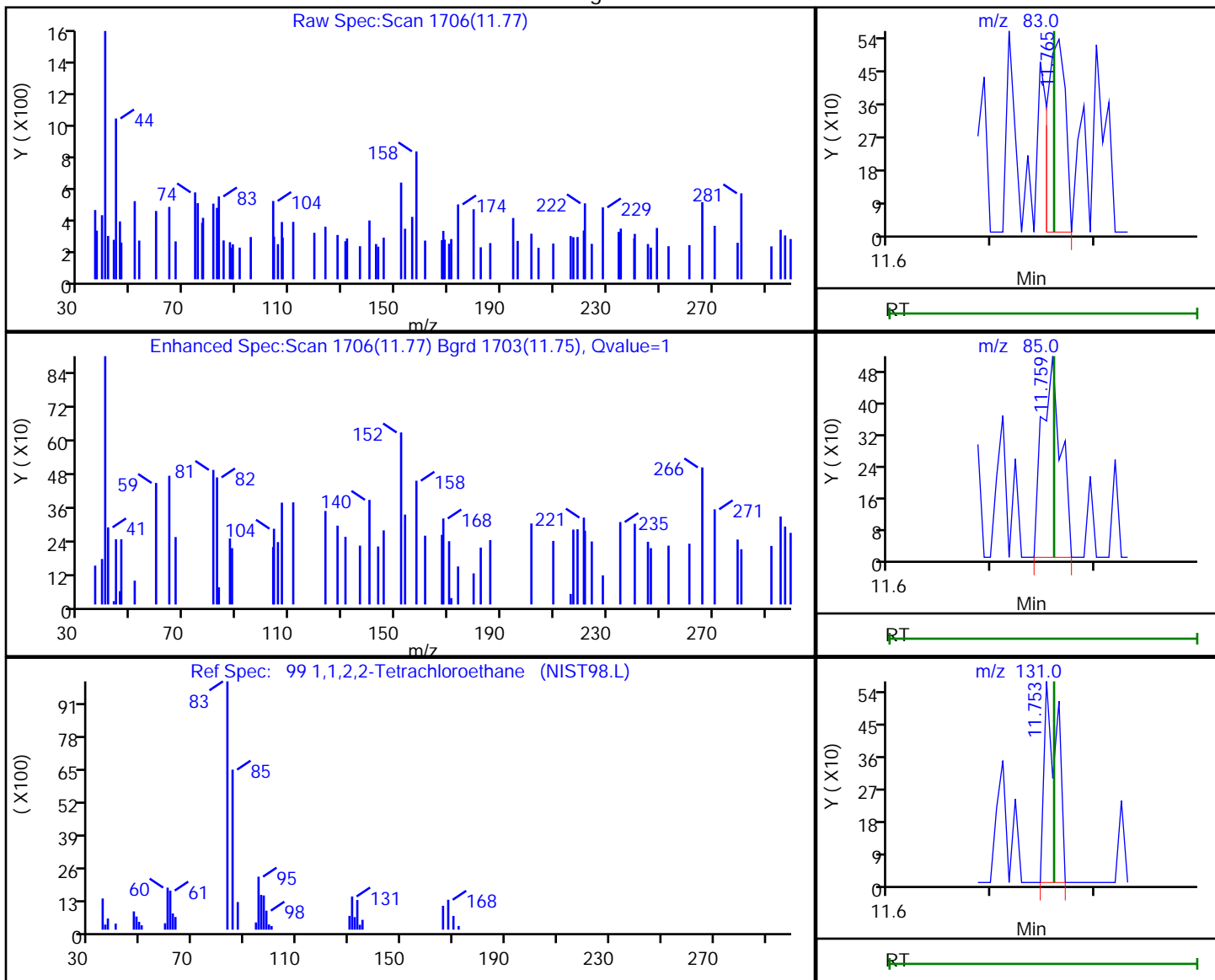
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050413.D  
 Injection Date: 04-May-2020 13:06:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-1 Lab Sample ID: 180-105108-1  
 Client ID: HD-COD-SW-6-0/1-0  
 Operator ID: 034635 ALS Bottle#: 13 Worklist Smp#: 13  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

99 1,1,2,2-Tetrachloroethane, CAS: 79-34-5

Processing Results



RT	Mass	Response	Amount
11.77	83.00	643	0.158964
11.76	85.00	646	
11.75	131.00	496	

Reviewer: journetp, 04-May-2020 15:11:53  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: HD-COD-SW-7-0/1-0 Lab Sample ID: 180-105108-2  
 Matrix: Water Lab File ID: 5050414.D  
 Analysis Method: EPA 8260C Date Collected: 04/28/2020 11:20  
 Sample wt/vol: 5 (mL) Date Analyzed: 05/04/2020 13:30  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-624 ID: 0.18 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 314475 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	ND	^c	1.0	0.90
75-01-4	Vinyl chloride	ND		1.0	0.40
74-83-9	Bromomethane	ND	^c *	1.0	0.89
75-00-3	Chloroethane	ND		1.0	0.90
75-35-4	1,1-Dichloroethene	ND		1.0	0.55
67-64-1	Acetone	3.8	J	5.0	3.4
75-15-0	Carbon disulfide	ND		1.0	0.88
75-09-2	Methylene Chloride	ND		1.0	0.89
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.67
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.59
75-34-3	1,1-Dichloroethane	ND		1.0	0.31
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.71
74-97-5	Bromochloromethane	ND		1.0	0.63
78-93-3	2-Butanone (MEK)	ND	^c	5.0	2.6
67-66-3	Chloroform	ND		1.0	0.60
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.60
56-23-5	Carbon tetrachloride	ND		1.0	0.88
71-43-2	Benzene	ND		1.0	0.60
107-06-2	1,2-Dichloroethane	ND		1.0	0.57
79-01-6	Trichloroethene	ND		1.0	0.69
78-87-5	1,2-Dichloropropane	ND		1.0	0.66
75-27-4	Bromodichloromethane	ND		1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	3.1
108-88-3	Toluene	ND		1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.58
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.45
127-18-4	Tetrachloroethene	ND		1.0	0.47
591-78-6	2-Hexanone	ND		5.0	3.3
124-48-1	Dibromochloromethane	ND		1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	ND		1.0	0.50
108-90-7	Chlorobenzene	ND		1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.57
100-41-4	Ethylbenzene	ND		1.0	0.51
1330-20-7	Xylenes, Total	ND		2.0	0.89
100-42-5	Styrene	ND		1.0	0.47

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: HD-COD-SW-7-0/1-0 Lab Sample ID: 180-105108-2  
 Matrix: Water Lab File ID: 5050414.D  
 Analysis Method: EPA 8260C Date Collected: 04/28/2020 11:20  
 Sample wt/vol: 5 (mL) Date Analyzed: 05/04/2020 13:30  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-624 ID: 0.18 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 314475 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	ND	^c	1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	ND	^c	1.0	0.60
107-13-1	Acrylonitrile	ND		20	7.8

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	89		62-146
2037-26-5	Toluene-d8 (Surr)	90		75-120
460-00-4	4-Bromofluorobenzene (Surr)	80		64-120
1868-53-7	Dibromofluoromethane (Surr)	92		71-132



Eurofins TestAmerica, Pittsburgh  
Target Compound Quantitation Report

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050414.D  
 Lims ID: 180-105108-C-2  
 Client ID: HD-COD-SW-7-0/1-0  
 Sample Type: Client  
 Inject. Date: 04-May-2020 13:30:30 ALS Bottle#: 14 Worklist Smp#: 14  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: 180-0031789-014  
 Operator ID: 034635 Instrument ID: CHHP5  
 Method: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\MMSVOA\_LL\_CHHP5.m  
 Limit Group: VOA 8260C\_D ICAL  
 Last Update: 04-May-2020 13:53:44 Calib Date: 03-Apr-2020 19:09:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICAL File: \\chromna\Pittsburgh\ChromData\CHHP5\20200403-31442.b\5040310.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: CTX0327

First Level Reviewer: journetp

Date: 04-May-2020 15:12:23

Compound	Sig	RT (min.)	Exp RT (min.)	Diff RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.369	4.363	0.006	0	267830	1000.0	
* 2 Fluorobenzene (IS)	96	7.343	7.344	-0.001	99	676680	50.0	
* 3 Chlorobenzene-d5	119	10.440	10.434	0.006	84	180739	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.770	12.776	-0.006	95	253238	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.632	6.626	0.006	93	178327	46.2	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.997	6.991	0.006	0	243285	44.4	
\$ 7 Toluene-d8 (Surr)	98	8.986	8.986	0.000	93	659512	45.1	
\$ 8 4-Bromofluorobenzene (Surr	95	11.620	11.614	0.006	89	222263	40.2	
12 Chloromethane	50		1.844				ND	U
13 Vinyl chloride	62		1.966				ND	U
15 Bromomethane	94		2.288				ND	U
16 Chloroethane	64		2.416				ND	U
22 1,1-Dichloroethene	96		3.414				ND	U
24 Acetone	43	3.523	3.511	0.012	99	44043	18.8	
26 Carbon disulfide	76		3.706				ND	U
31 Methylene Chloride	84		4.217				ND	U
33 Acrylonitrile	53		4.612				ND	U
34 trans-1,2-Dichloroethene	96		4.631				ND	U
35 Methyl tert-butyl ether	73		4.655				ND	U
37 1,1-Dichloroethane	63		5.263				ND	U
45 cis-1,2-Dichloroethene	96		6.018				ND	U
46 2-Butanone (MEK)	43		6.036				ND	U
49 Chlorobromomethane	128		6.297				ND	U
52 Chloroform	83		6.443				ND	U
53 1,1,1-Trichloroethane	97		6.602				ND	U
56 Carbon tetrachloride	117		6.766				ND	U
58 Benzene	78		7.003				ND	U
59 1,2-Dichloroethane	62		7.076				ND	U
64 Trichloroethene	130		7.727				ND	U
67 1,2-Dichloropropane	63		8.001				ND	U
71 Dichlorobromomethane	83		8.287				ND	U
74 cis-1,3-Dichloropropene	75		8.731				ND	U

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
75 4-Methyl-2-pentanone (MIBK	43		8.889				ND	U
76 Toluene	91		9.053				ND	U
77 trans-1,3-Dichloropropene	75		9.303				ND	U
79 1,1,2-Trichloroethane	97		9.497				ND	U
80 Tetrachloroethene	164		9.564				ND	U
82 2-Hexanone	43		9.716				ND	U
84 Chlorodibromomethane	129		9.868				ND	U
85 Ethylene Dibromide	107		9.978				ND	U
87 Chlorobenzene	112		10.465				ND	U
89 1,1,1,2-Tetrachloroethane	131		10.562				ND	U
90 Ethylbenzene	106		10.562				ND	U
91 m-Xylene & p-Xylene	106		10.696				ND	U
92 o-Xylene	106		11.079				ND	U
93 Styrene	104		11.097				ND	U
94 Bromoform	173		11.280				ND	U
99 1,1,2,2-Tetrachloroethane	83		11.760				ND	U
S 133 Xylenes, Total	106		1.000				ND	

**QC Flag Legend**

Review Flags

U - Marked Undetected

**Reagents:**

voaWI/SHP5\_00016

Amount Added: 5.00

Units: uL

Run Reagent

Euofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050414.D

Injection Date: 04-May-2020 13:30:30

Instrument ID: CHHP5

Operator ID: 034635

Lims ID: 180-105108-C-2

Lab Sample ID: 180-105108-2

Worklist Smp#: 14

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

Purge Vol: 5.000 mL

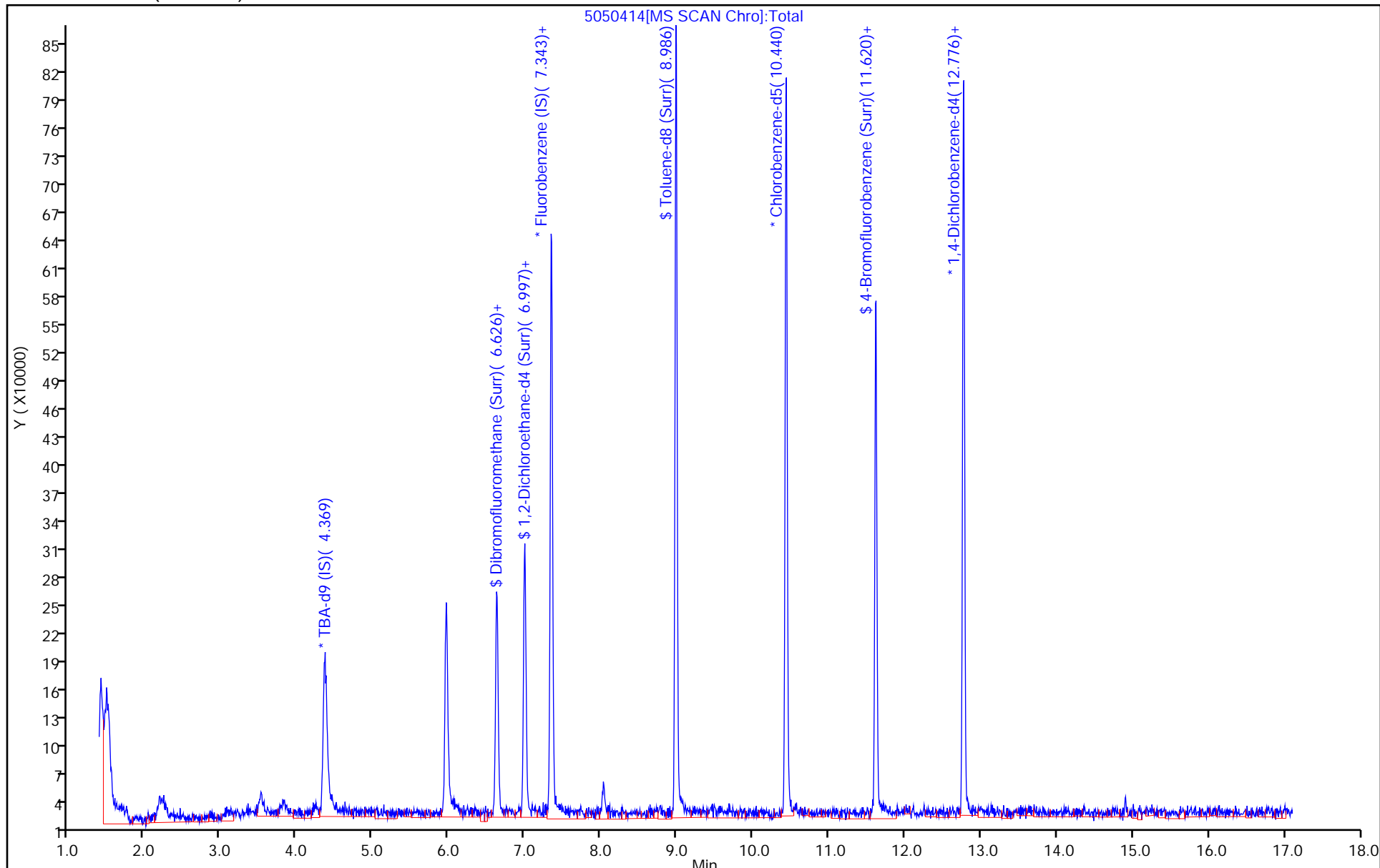
Dil. Factor: 1.0000

ALS Bottle#: 14

Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Pittsburgh  
Recovery Report

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050414.D  
 Lims ID: 180-105108-C-2  
 Client ID: HD-COD-SW-7-0/1-0  
 Sample Type: Client  
 Inject. Date: 04-May-2020 13:30:30 ALS Bottle#: 14 Worklist Smp#: 14  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: 180-0031789-014  
 Operator ID: 034635 Instrument ID: CHHP5  
 Method: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\MMSVOA\_LL\_CHHP5.m  
 Limit Group: VOA 8260C\_D ICAL  
 Last Update: 04-May-2020 13:53:44 Calib Date: 03-Apr-2020 19:09:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP5\20200403-31442.b\5040310.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: CTX0327

First Level Reviewer: journetp

Date: 04-May-2020 15:12:23

Compound	Amount Added	Amount Recovered	% Rec.
\$ 5 Dibromofluoromethane (Surr)	50.0	46.2	92.38
\$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	44.4	88.81
\$ 7 Toluene-d8 (Surr)	50.0	45.1	90.15
\$ 8 4-Bromofluorobenzene (Surr)	50.0	40.2	80.39

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050414.D

Injection Date: 04-May-2020 13:30:30

Instrument ID: CHHP5

Lims ID: 180-105108-C-2

Lab Sample ID: 180-105108-2

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

Operator ID: 034635

ALS Bottle#: 14

Worklist Smp#: 14

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

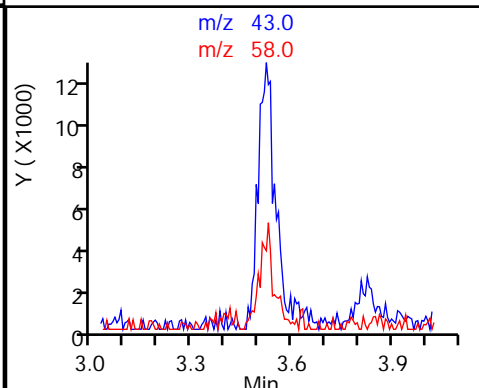
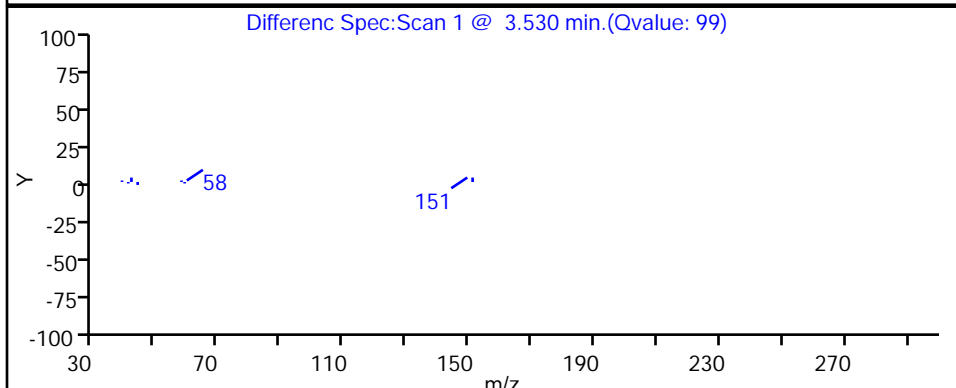
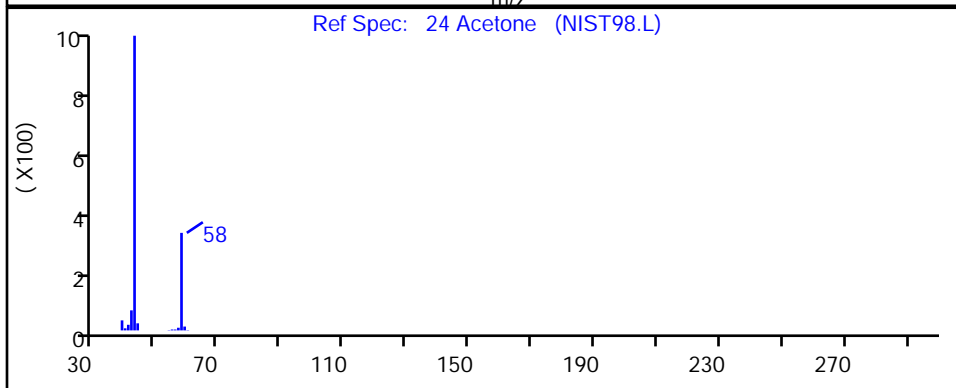
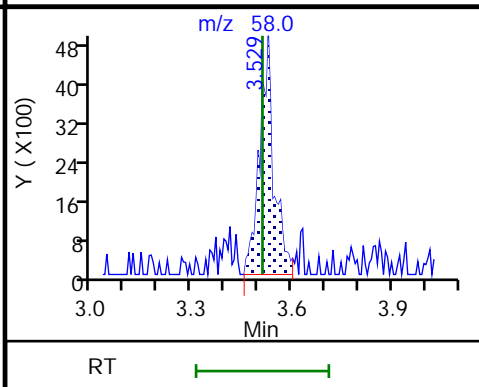
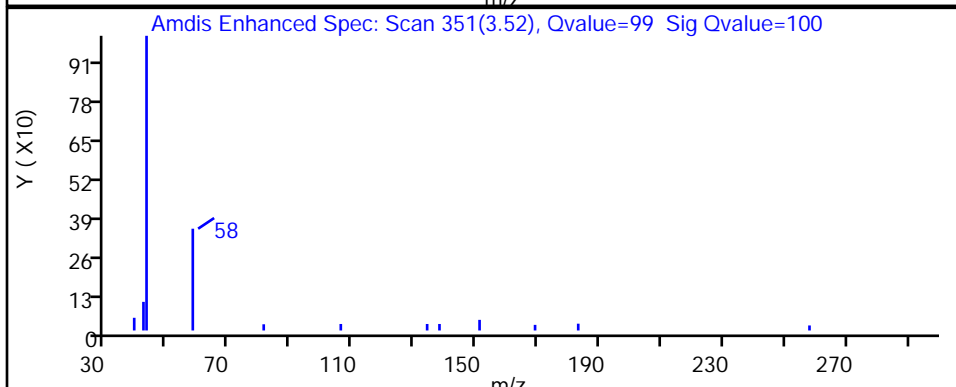
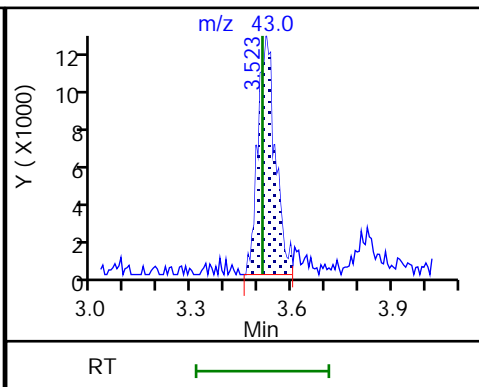
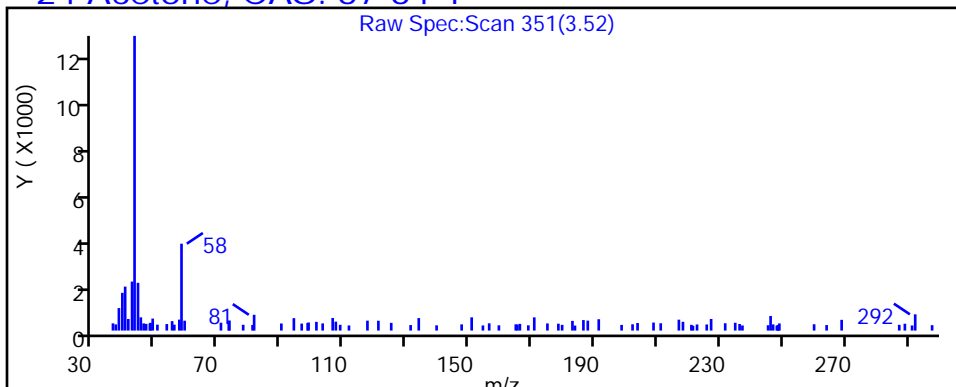
Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

24 Acetone, CAS: 67-64-1



Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050414.D

Injection Date: 04-May-2020 13:30:30

Instrument ID: CHHP5

Lims ID: 180-105108-C-2

Lab Sample ID: 180-105108-2

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

Operator ID: 034635

ALS Bottle#: 14 Worklist Smp#: 14

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

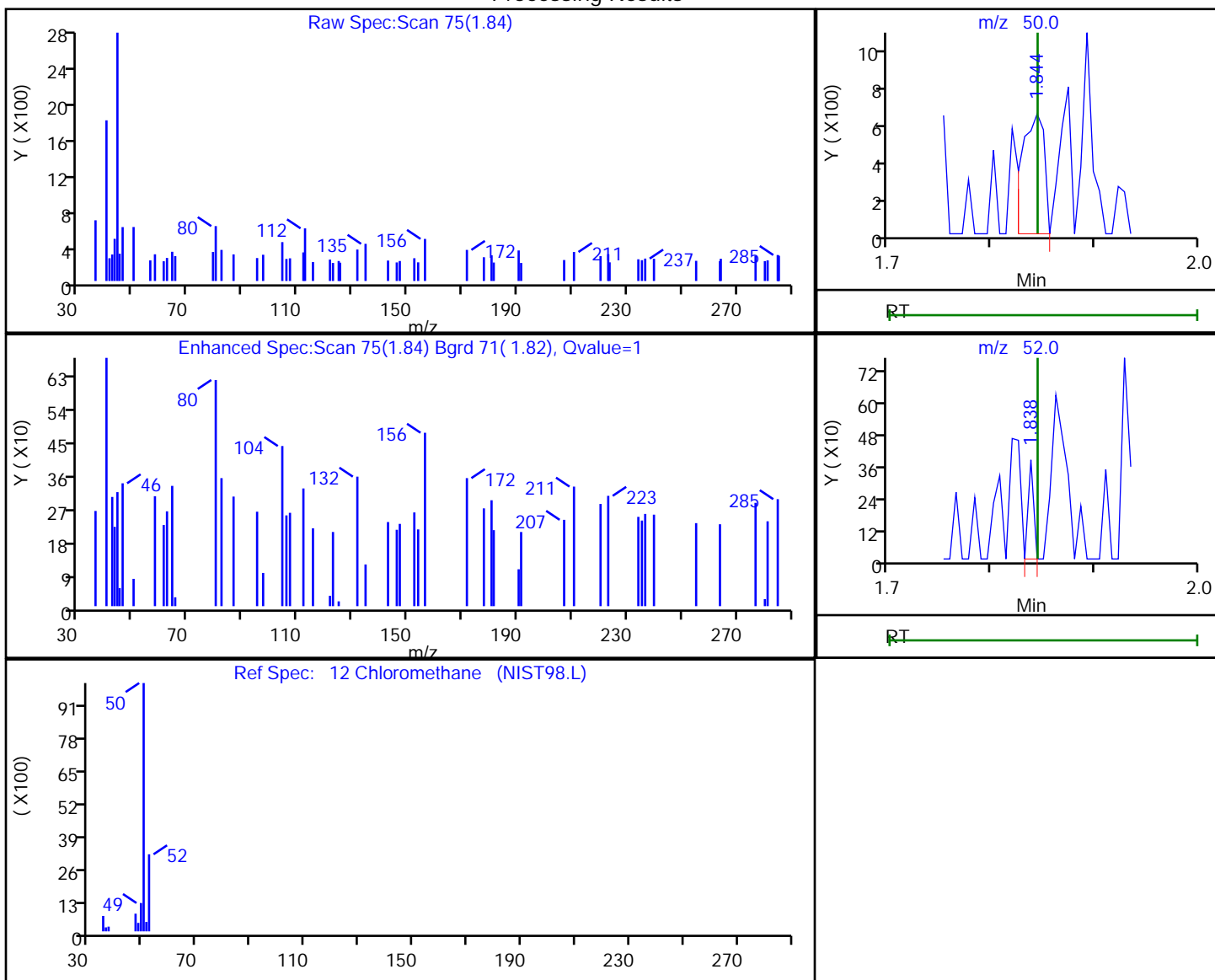
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

12 Chloromethane, CAS: 74-87-3

Processing Results



RT	Mass	Response	Amount
1.84	50.00	894	0.135431
1.84	52.00	137	

Reviewer: journtp, 04-May-2020 15:12:05  
 Audit Action: Marked Compound Undetected

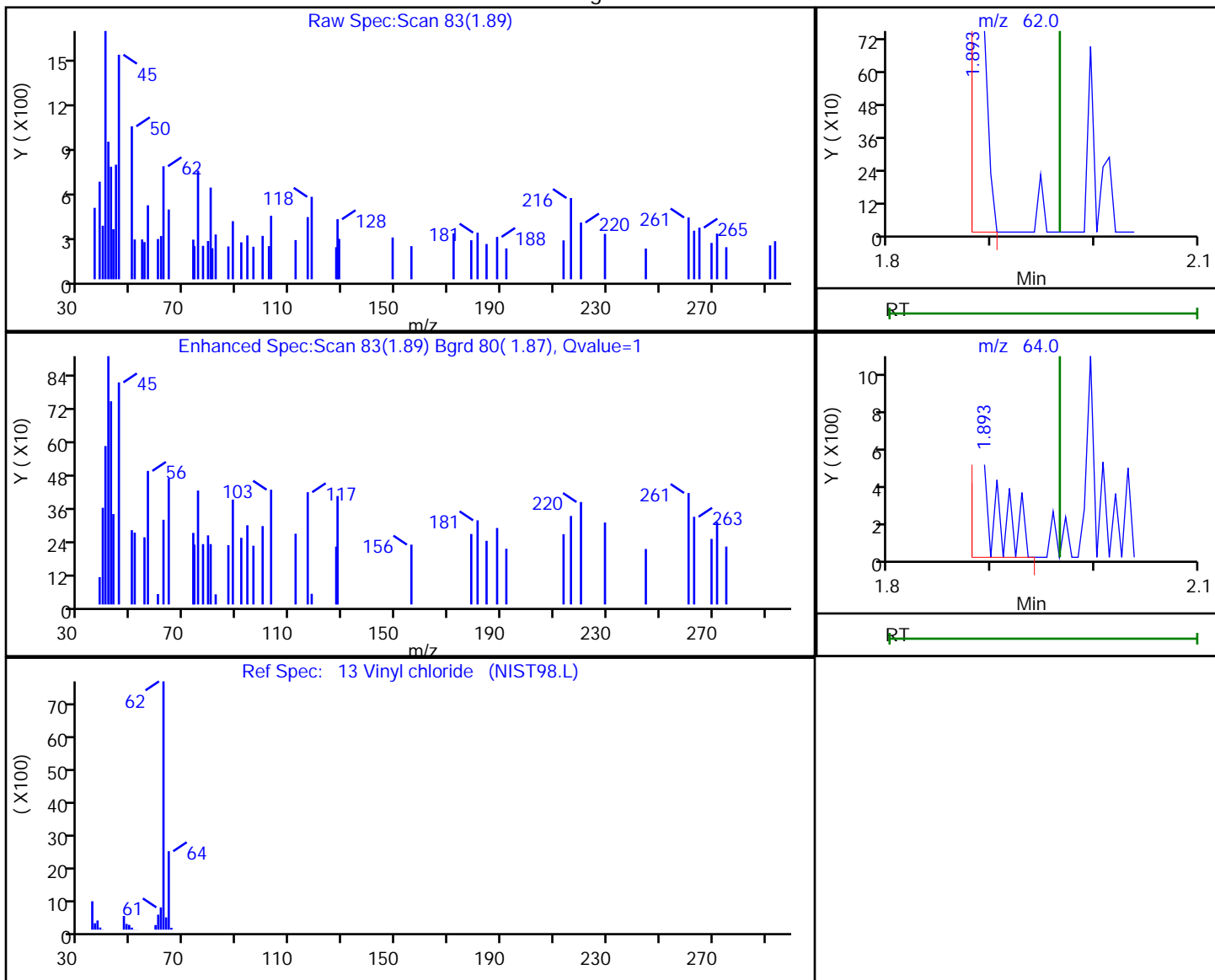
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050414.D  
 Injection Date: 04-May-2020 13:30:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-C-2 Lab Sample ID: 180-105108-2  
 Client ID: HD-COD-SW-7-0/1-0  
 Operator ID: 034635 ALS Bottle#: 14 Worklist Smp#: 14  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

13 Vinyl chloride, CAS: 75-01-4

Processing Results



RT	Mass	Response	Amount
1.89	62.00	352	0.059878
1.89	64.00	820	

Reviewer: journetp, 04-May-2020 15:12:06  
 Audit Action: Marked Compound Undetected

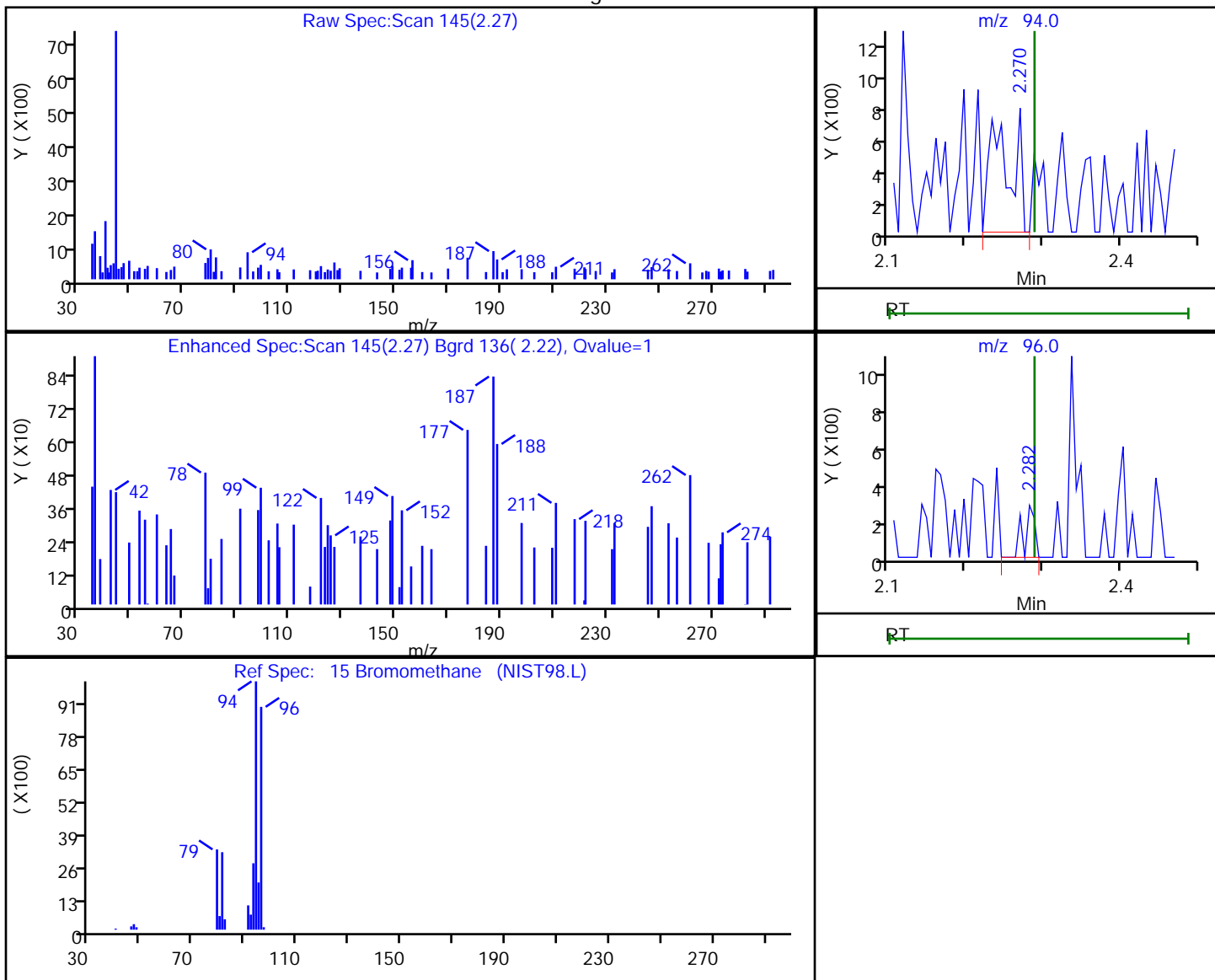
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050414.D  
Injection Date: 04-May-2020 13:30:30 Instrument ID: CHHP5  
Lims ID: 180-105108-C-2 Lab Sample ID: 180-105108-2  
Client ID: HD-COD-SW-7-0/1-0  
Operator ID: 034635 ALS Bottle#: 14 Worklist Smp#: 14  
Purge Vol: 5.000 mL Dil. Factor: 1.0000  
Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
Column: DB-624 (0.18 mm) Detector: MS SCAN

15 Bromomethane, CAS: 74-83-9

Processing Results



RT	Mass	Response	Amount
2.27	94.00	1451	0.431090
2.28	96.00	266	

Reviewer: journtp, 04-May-2020 15:12:06  
Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

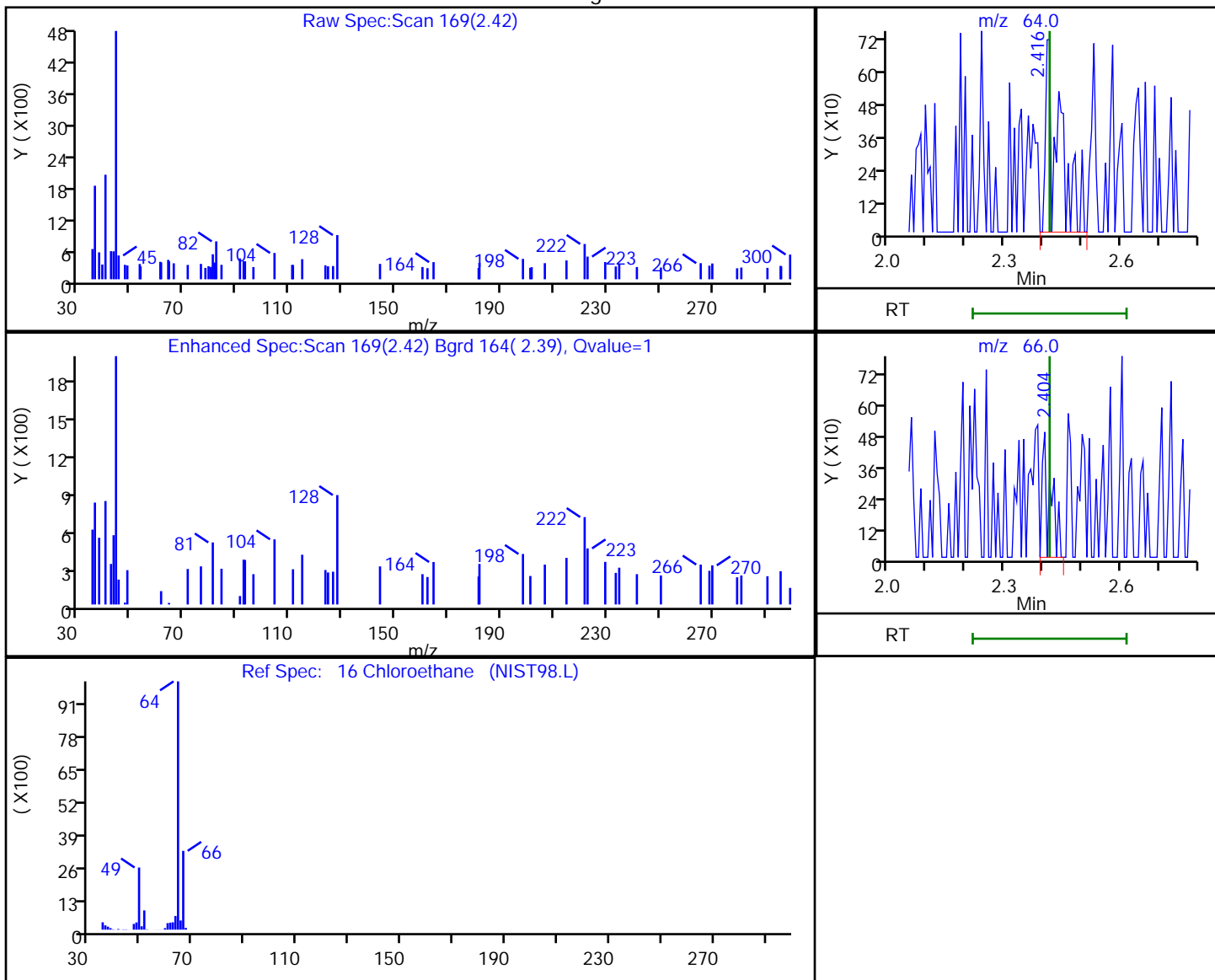


Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050414.D  
 Injection Date: 04-May-2020 13:30:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-C-2 Lab Sample ID: 180-105108-2  
 Client ID: HD-COD-SW-7-0/1-0  
 Operator ID: 034635 ALS Bottle#: 14 Worklist Smp#: 14  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

16 Chloroethane, CAS: 75-00-3

Processing Results



RT	Mass	Response	Amount
2.42	64.00	1746	0.437793
2.40	66.00	694	

Reviewer: journetp, 04-May-2020 15:12:06  
 Audit Action: Marked Compound Undetected

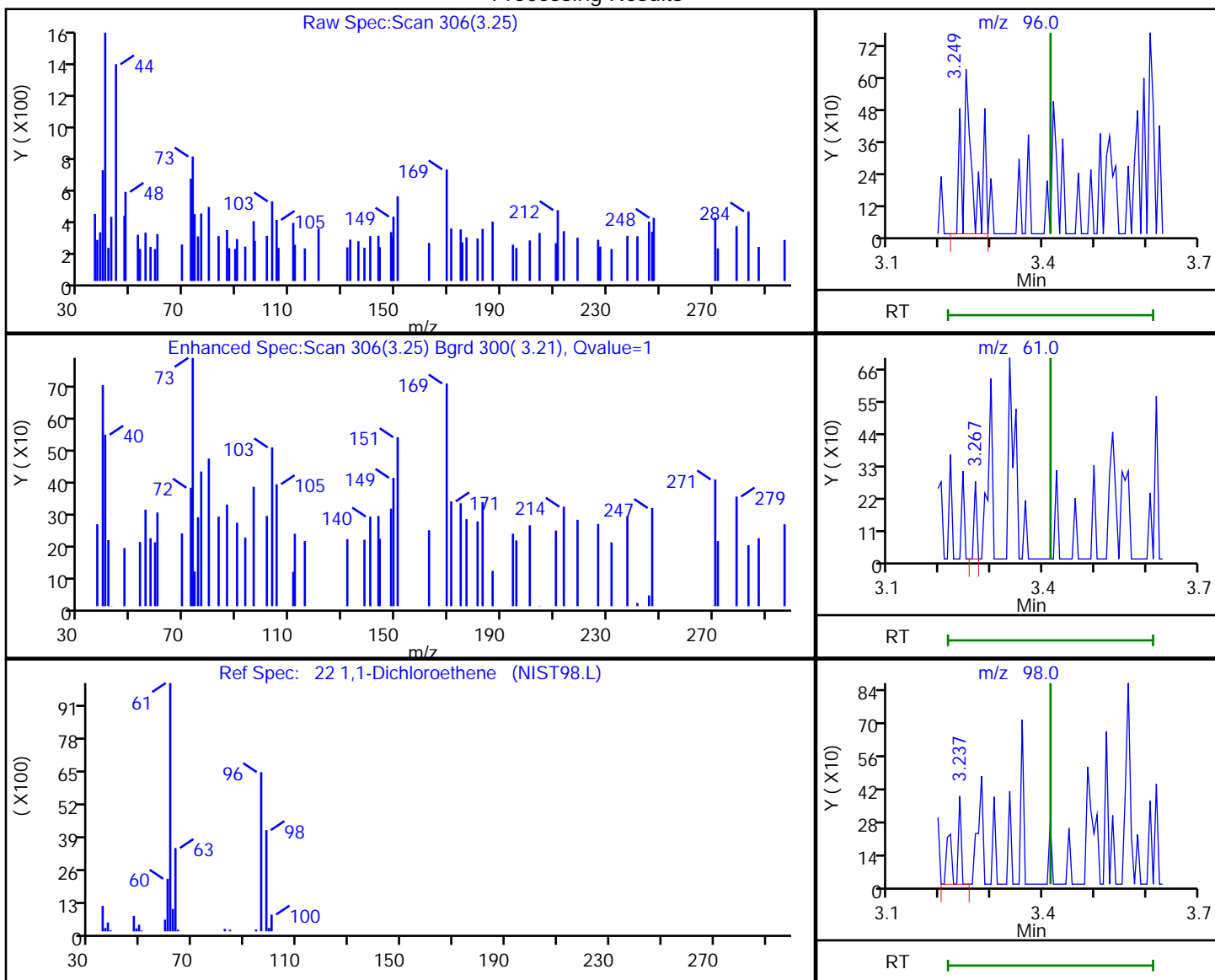
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050414.D  
 Injection Date: 04-May-2020 13:30:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-C-2 Lab Sample ID: 180-105108-2  
 Client ID: HD-COD-SW-7-0/1-0  
 Operator ID: 034635 ALS Bottle#: 14 Worklist Smp#: 14  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

22 1,1-Dichloroethene, CAS: 75-35-4

Processing Results



RT	Mass	Response	Amount
3.25	96.00	885	-1.707937
3.27	61.00	98	
3.24	98.00	290	

Reviewer: journept, 04-May-2020 15:12:06  
 Audit Action: Marked Compound Undetected

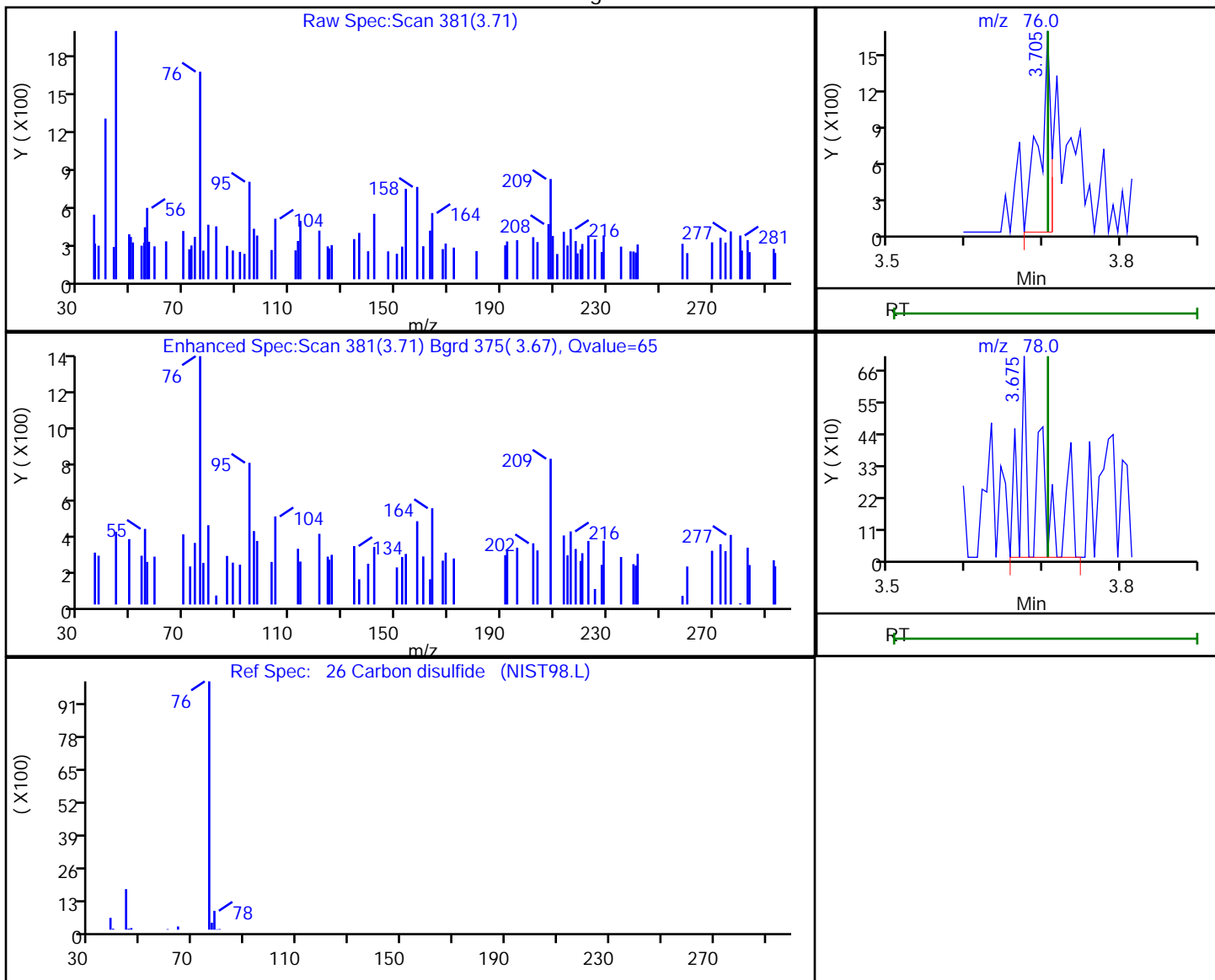
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050414.D  
Injection Date: 04-May-2020 13:30:30 Instrument ID: CHHP5  
Lims ID: 180-105108-C-2 Lab Sample ID: 180-105108-2  
Client ID: HD-COD-SW-7-0/1-0  
Operator ID: 034635 ALS Bottle#: 14 Worklist Smp#: 14  
Purge Vol: 5.000 mL Dil. Factor: 1.0000  
Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
Column: DB-624 (0.18 mm) Detector: MS SCAN

26 Carbon disulfide, CAS: 75-15-0

Processing Results



RT	Mass	Response	Amount
3.71	76.00	1694	0.222714
3.68	78.00	1071	

Reviewer: journtp, 04-May-2020 15:12:13  
Audit Action: Marked Compound Undetected

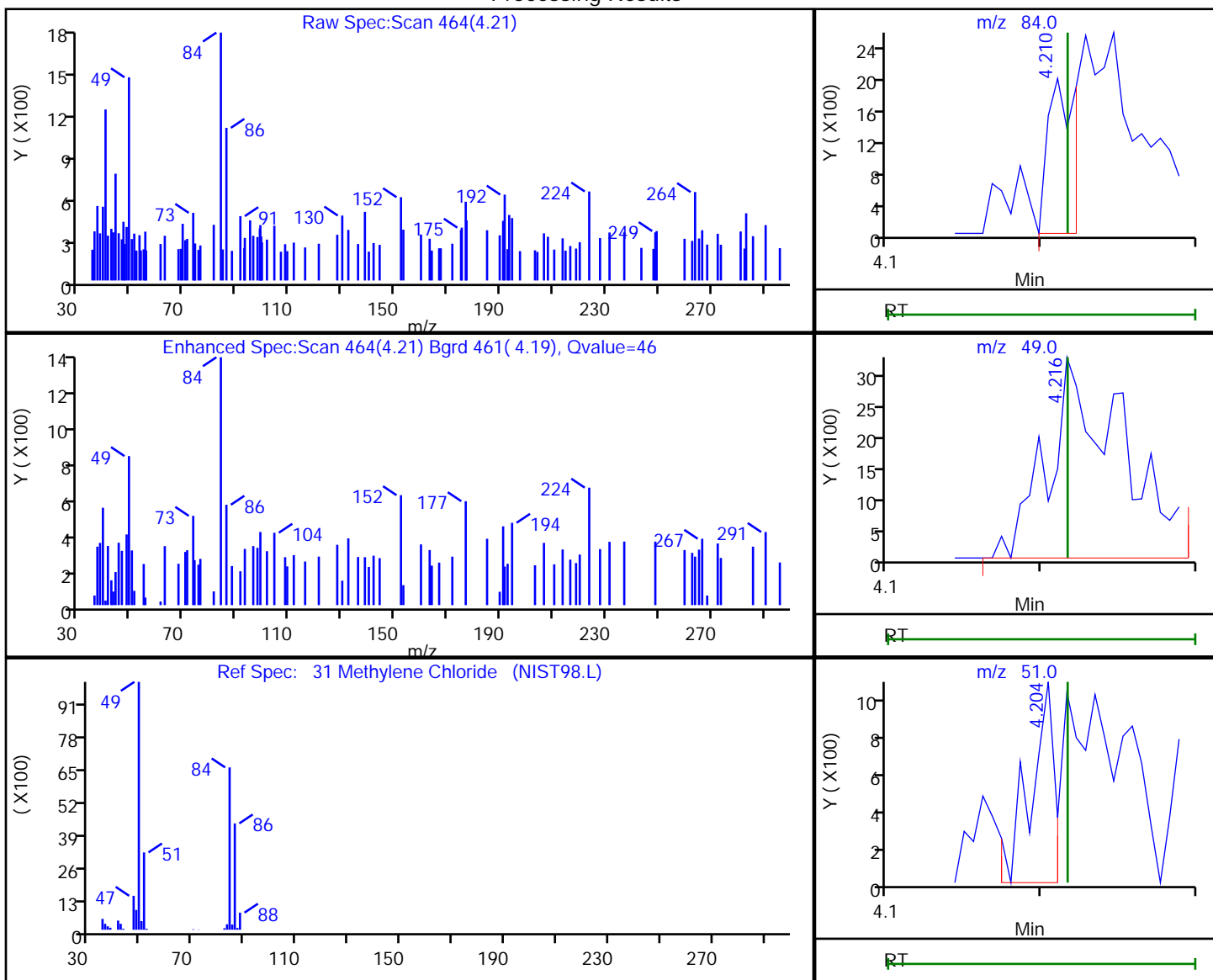
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050414.D  
 Injection Date: 04-May-2020 13:30:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-C-2 Lab Sample ID: 180-105108-2  
 Client ID: HD-COD-SW-7-0/1-0  
 Operator ID: 034635 ALS Bottle#: 14 Worklist Smp#: 14  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

31 Methylene Chloride, CAS: 75-09-2

Processing Results



RT	Mass	Response	Amount
4.21	84.00	2420	-1.150777
4.22	49.00	10779	
4.20	51.00	1127	

Reviewer: journept, 04-May-2020 15:12:14  
 Audit Action: Marked Compound Undetected

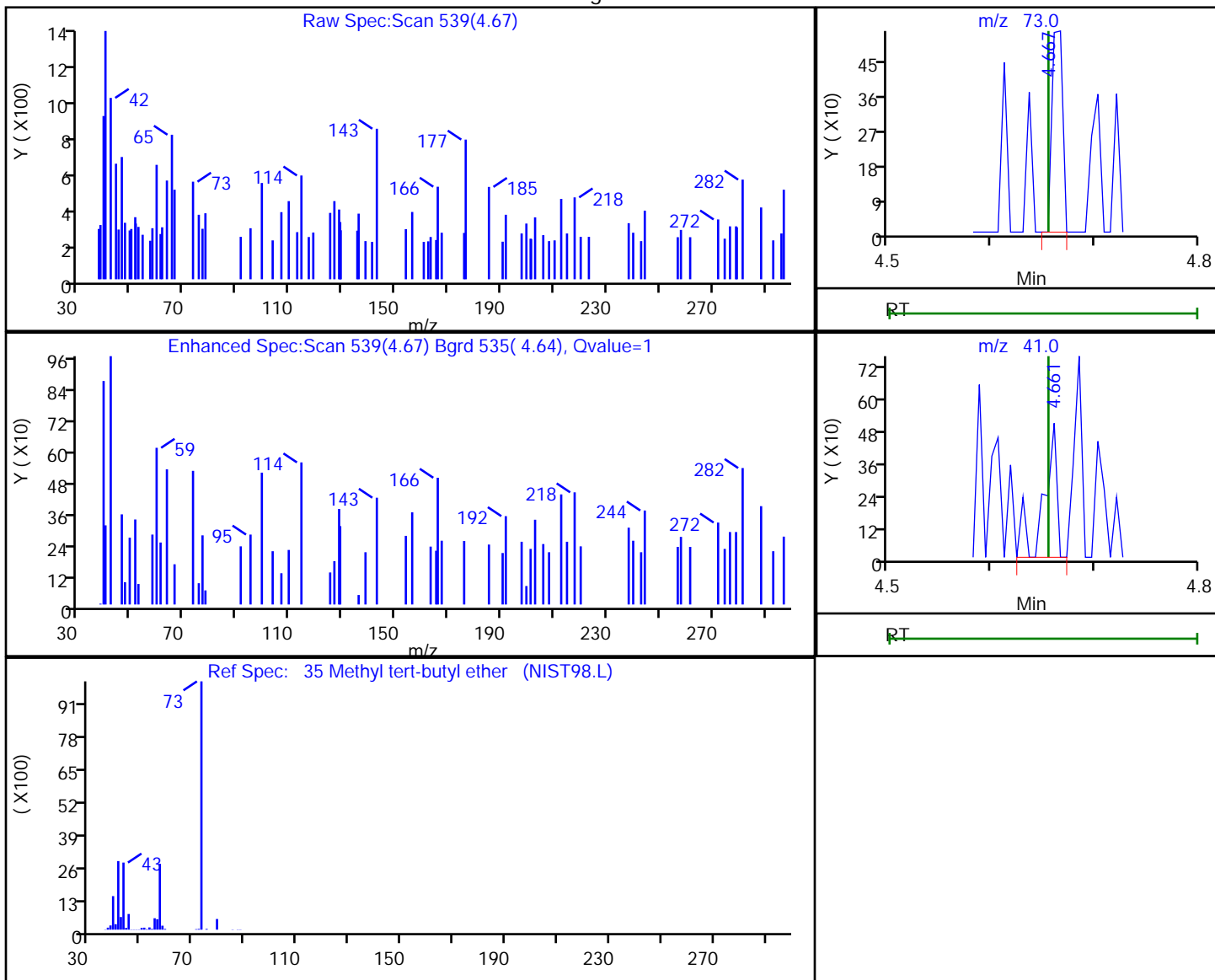
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050414.D  
Injection Date: 04-May-2020 13:30:30 Instrument ID: CHHP5  
Lims ID: 180-105108-C-2 Lab Sample ID: 180-105108-2  
Client ID: HD-COD-SW-7-0/1-0  
Operator ID: 034635 ALS Bottle#: 14 Worklist Smp#: 14  
Purge Vol: 5.000 mL Dil. Factor: 1.0000  
Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
Column: DB-624 (0.18 mm) Detector: MS SCAN

35 Methyl tert-butyl ether, CAS: 1634-04-4

Processing Results



RT	Mass	Response	Amount
4.67	73.00	380	0.036606
4.66	41.00	438	

Reviewer: journetp, 04-May-2020 15:12:14  
Audit Action: Marked Compound Undetected

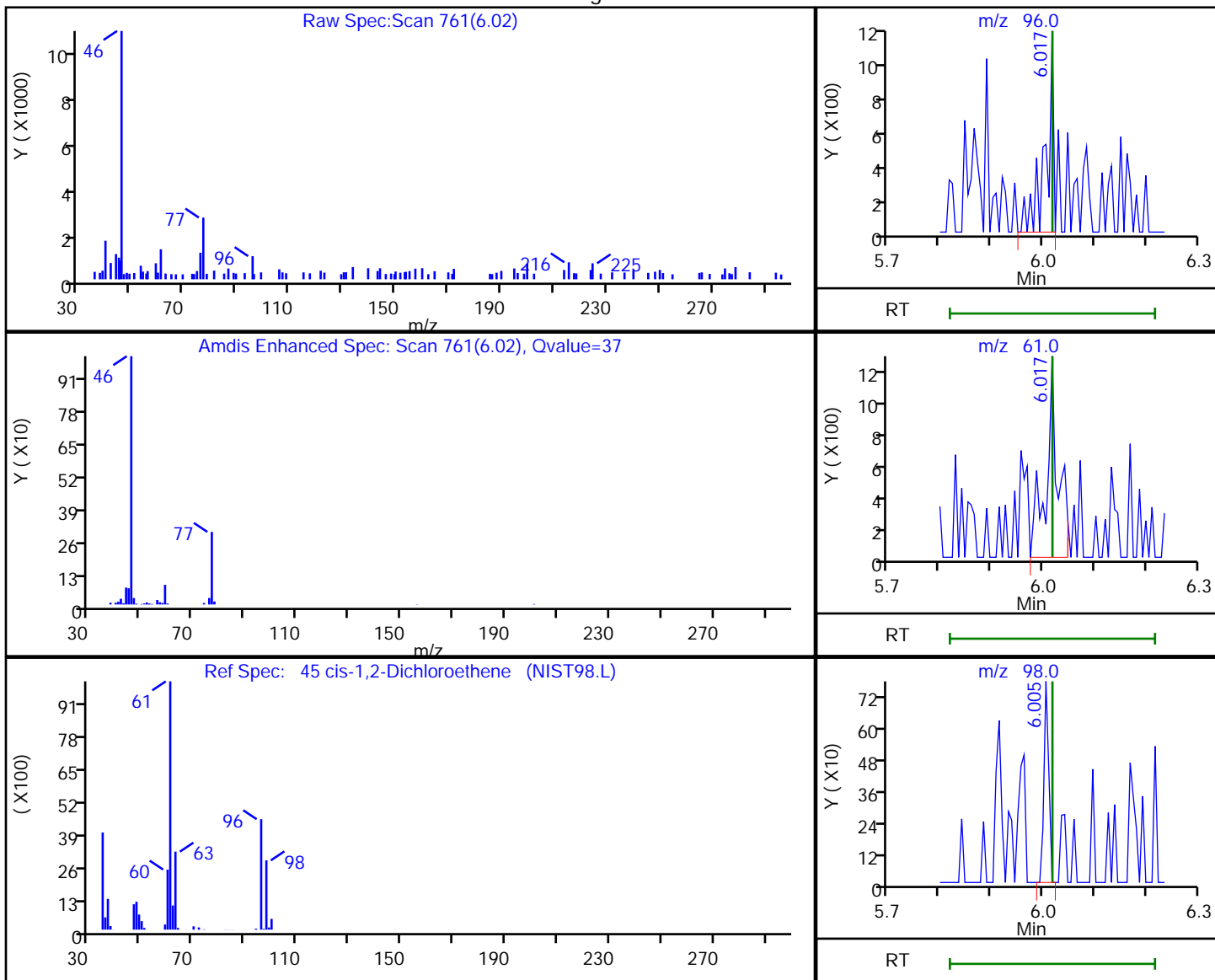
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050414.D  
 Injection Date: 04-May-2020 13:30:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-C-2 Lab Sample ID: 180-105108-2  
 Client ID: HD-COD-SW-7-0/1-0  
 Operator ID: 034635 ALS Bottle#: 14 Worklist Smp#: 14  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

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

Processing Results



RT	Mass	Response	Amount
6.02	96.00	1196	0.271732
6.02	61.00	2018	
6.01	98.00	500	

Reviewer: journept, 04-May-2020 15:12:14  
 Audit Action: Marked Compound Undetected

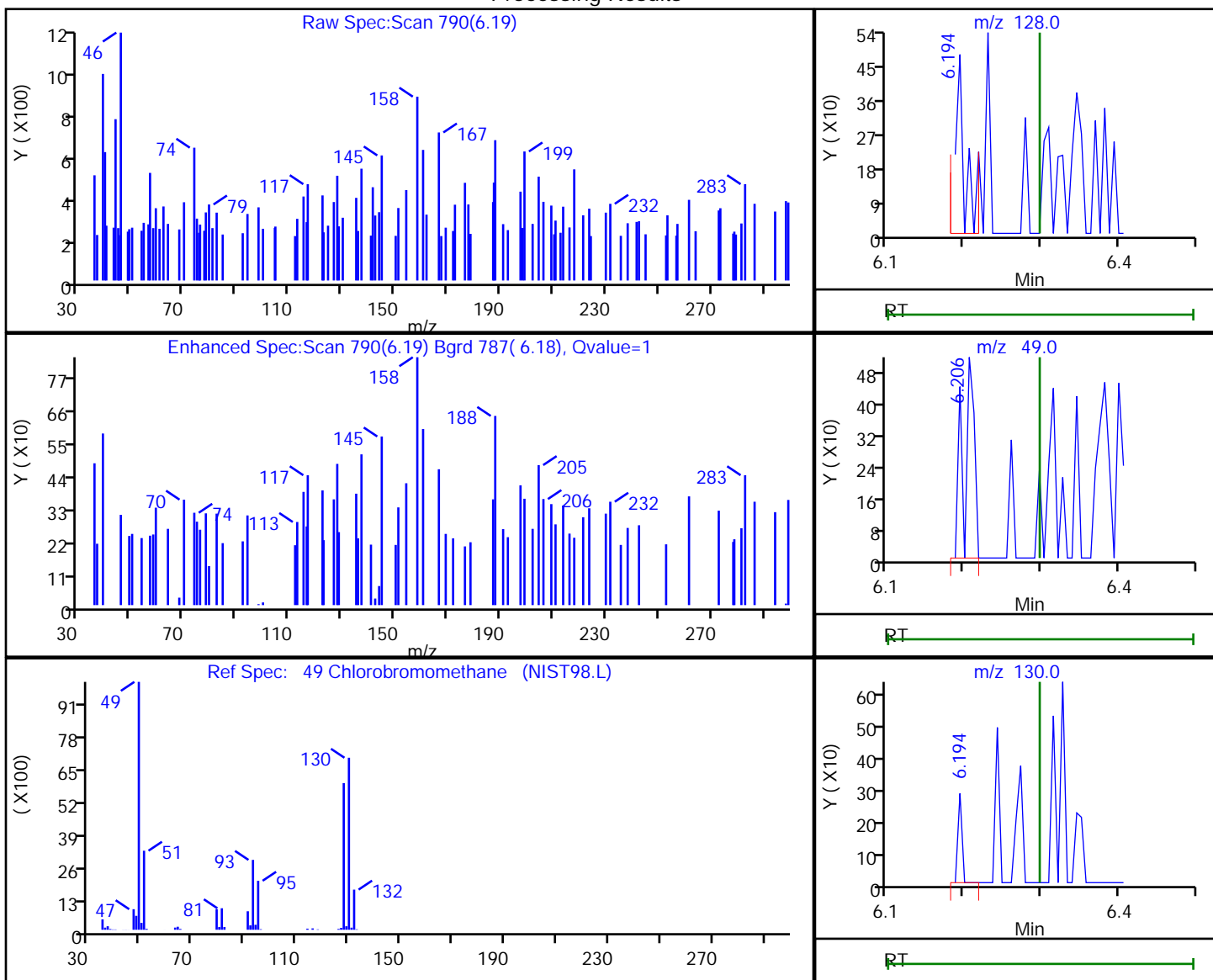
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050414.D  
 Injection Date: 04-May-2020 13:30:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-C-2 Lab Sample ID: 180-105108-2  
 Client ID: HD-COD-SW-7-0/1-0  
 Operator ID: 034635 ALS Bottle#: 14 Worklist Smp#: 14  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

49 Chlorobromomethane, CAS: 74-97-5

Processing Results



RT	Mass	Response	Amount
6.19	128.00	411	0.175207
6.21	49.00	489	
6.19	130.00	104	

Reviewer: journept, 04-May-2020 15:12:14  
 Audit Action: Marked Compound Undetected

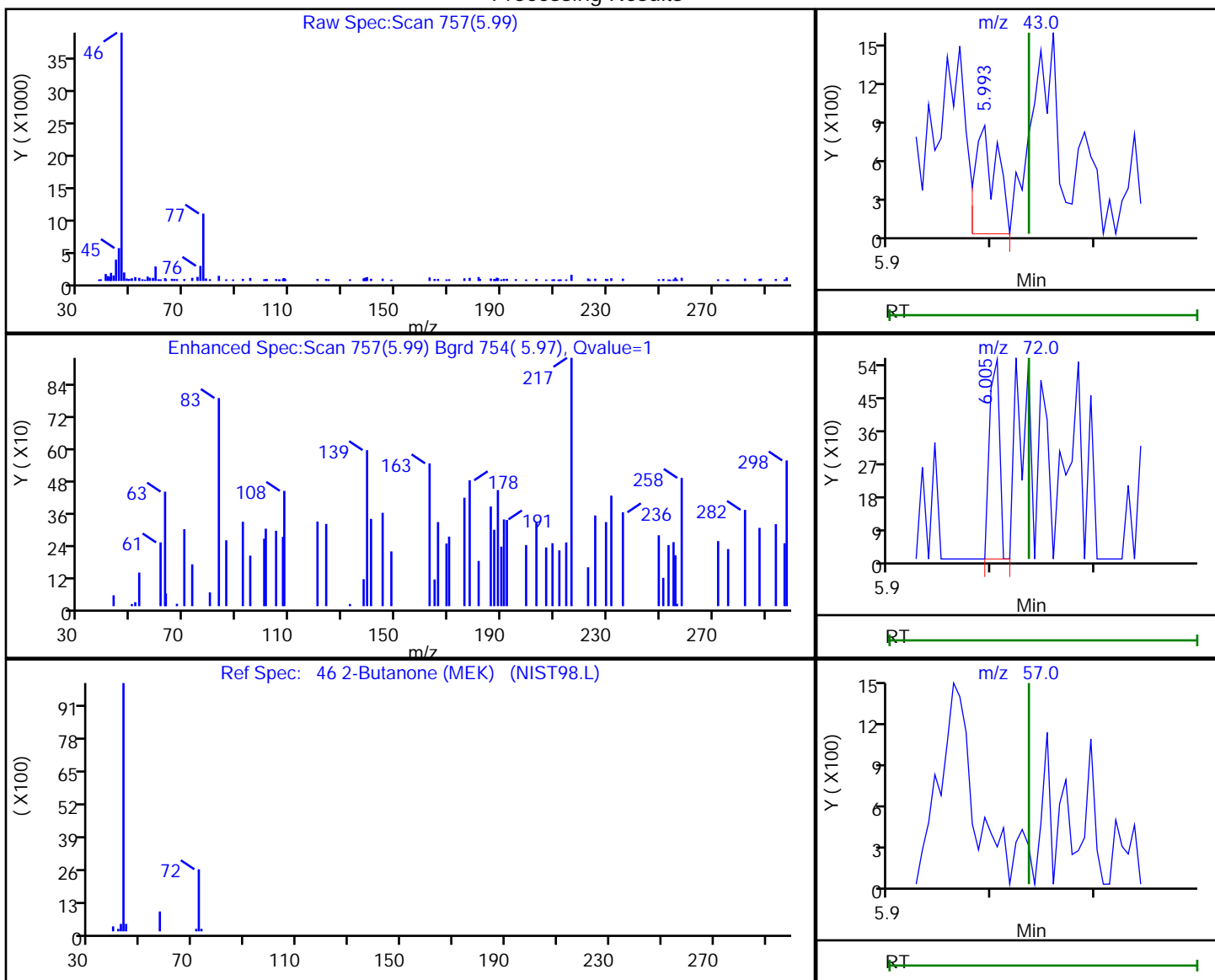
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050414.D  
 Injection Date: 04-May-2020 13:30:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-C-2 Lab Sample ID: 180-105108-2  
 Client ID: HD-COD-SW-7-0/1-0  
 Operator ID: 034635 ALS Bottle#: 14 Worklist Smp#: 14  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

46 2-Butanone (MEK), CAS: 78-93-3

Processing Results



RT	Mass	Response	Amount
5.99	43.00	1223	0.492126
6.01	72.00	372	
6.04	57.00	0	

Reviewer: journept, 04-May-2020 15:12:14  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

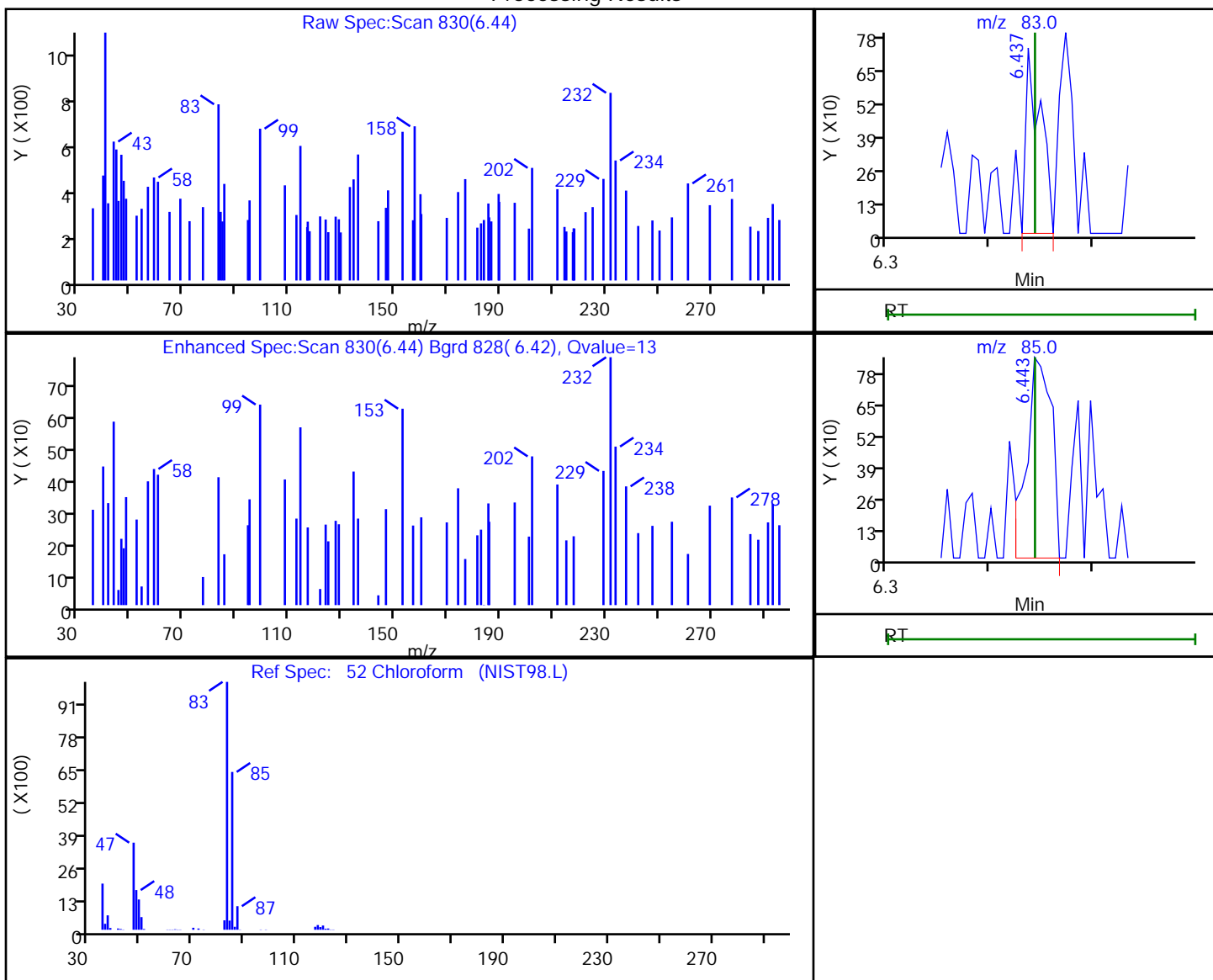


Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050414.D  
 Injection Date: 04-May-2020 13:30:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-C-2 Lab Sample ID: 180-105108-2  
 Client ID: HD-COD-SW-7-0/1-0  
 Operator ID: 034635 ALS Bottle#: 14 Worklist Smp#: 14  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

52 Chloroform, CAS: 67-66-3

Processing Results



RT	Mass	Response	Amount
6.44	83.00	738	-1.642410
6.44	85.00	1441	

Reviewer: journtp, 04-May-2020 15:12:14  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050414.D

Injection Date: 04-May-2020 13:30:30

Instrument ID: CHHP5

Lims ID: 180-105108-C-2

Lab Sample ID: 180-105108-2

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

Operator ID: 034635

ALS Bottle#: 14 Worklist Smp#: 14

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

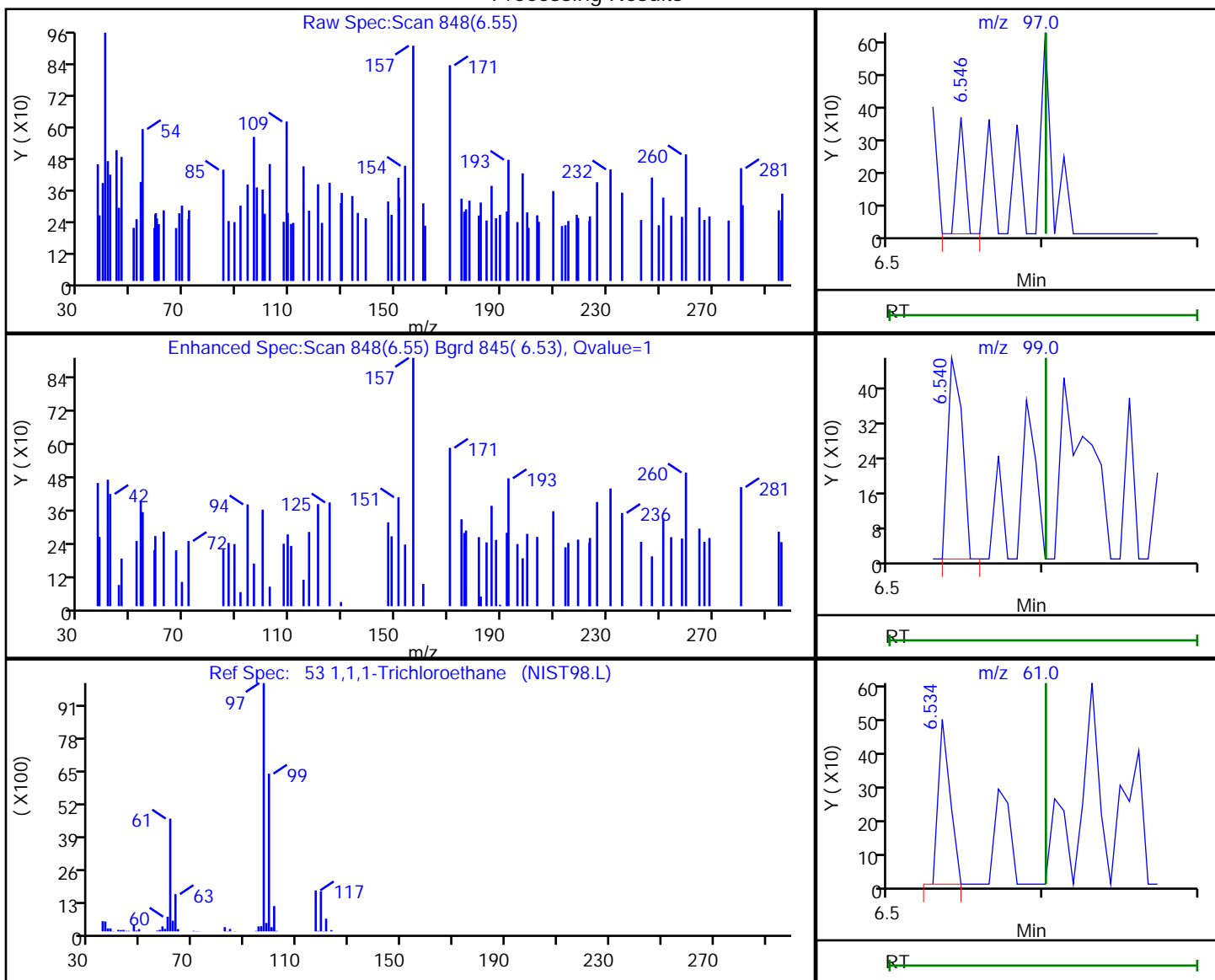
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

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

Processing Results



RT	Mass	Response	Amount
6.55	97.00	131	0.023757
6.54	99.00	298	
6.53	61.00	262	

Reviewer: journept, 04-May-2020 15:12:14

Audit Action: Marked Compound Undetected

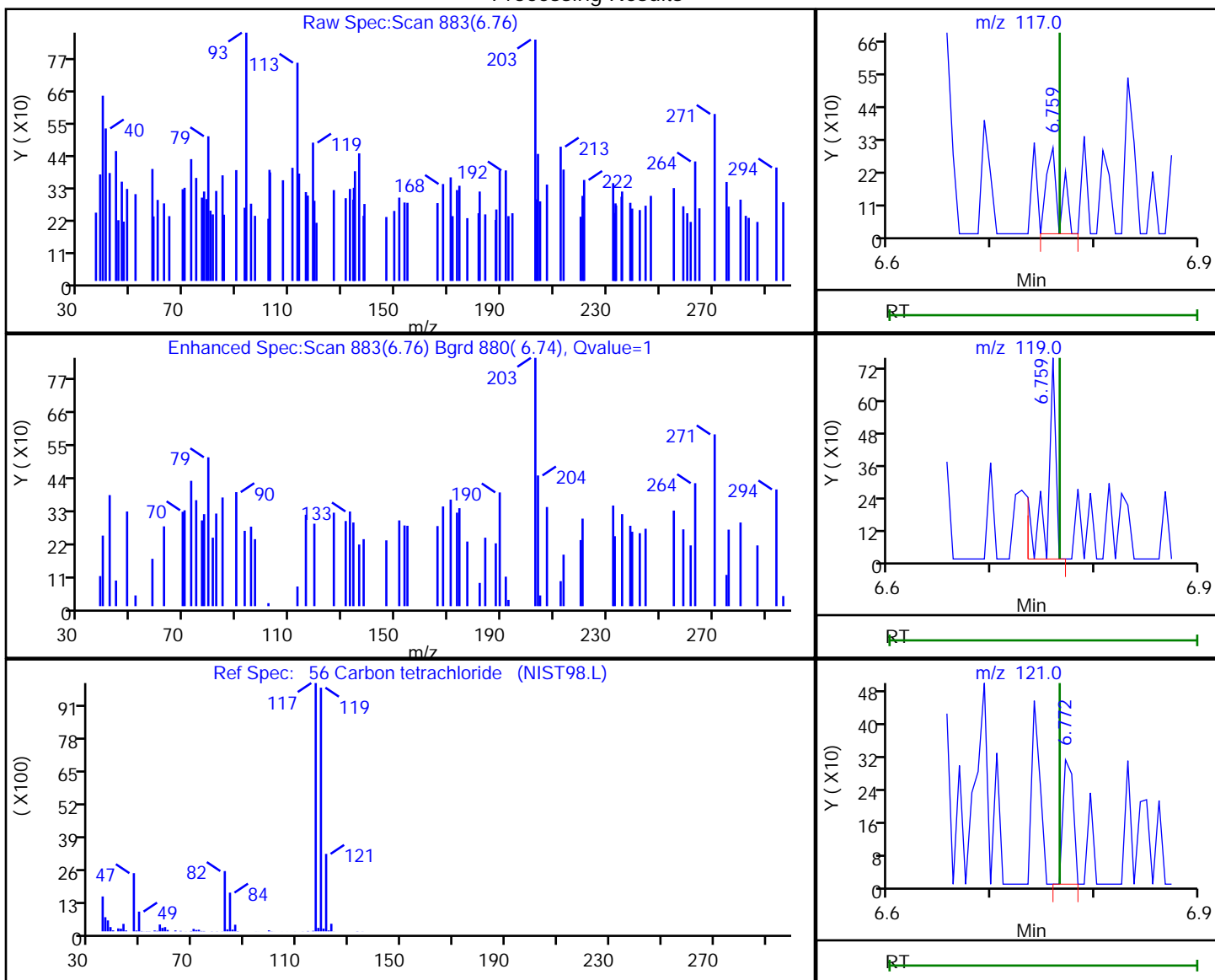
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050414.D  
 Injection Date: 04-May-2020 13:30:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-C-2 Lab Sample ID: 180-105108-2  
 Client ID: HD-COD-SW-7-0/1-0  
 Operator ID: 034635 ALS Bottle#: 14 Worklist Smp#: 14  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

56 Carbon tetrachloride, CAS: 56-23-5

Processing Results



RT	Mass	Response	Amount
6.76	117.00	260	0.056781
6.76	119.00	453	
6.77	121.00	213	

Reviewer: journetp, 04-May-2020 15:12:14  
 Audit Action: Marked Compound Undetected

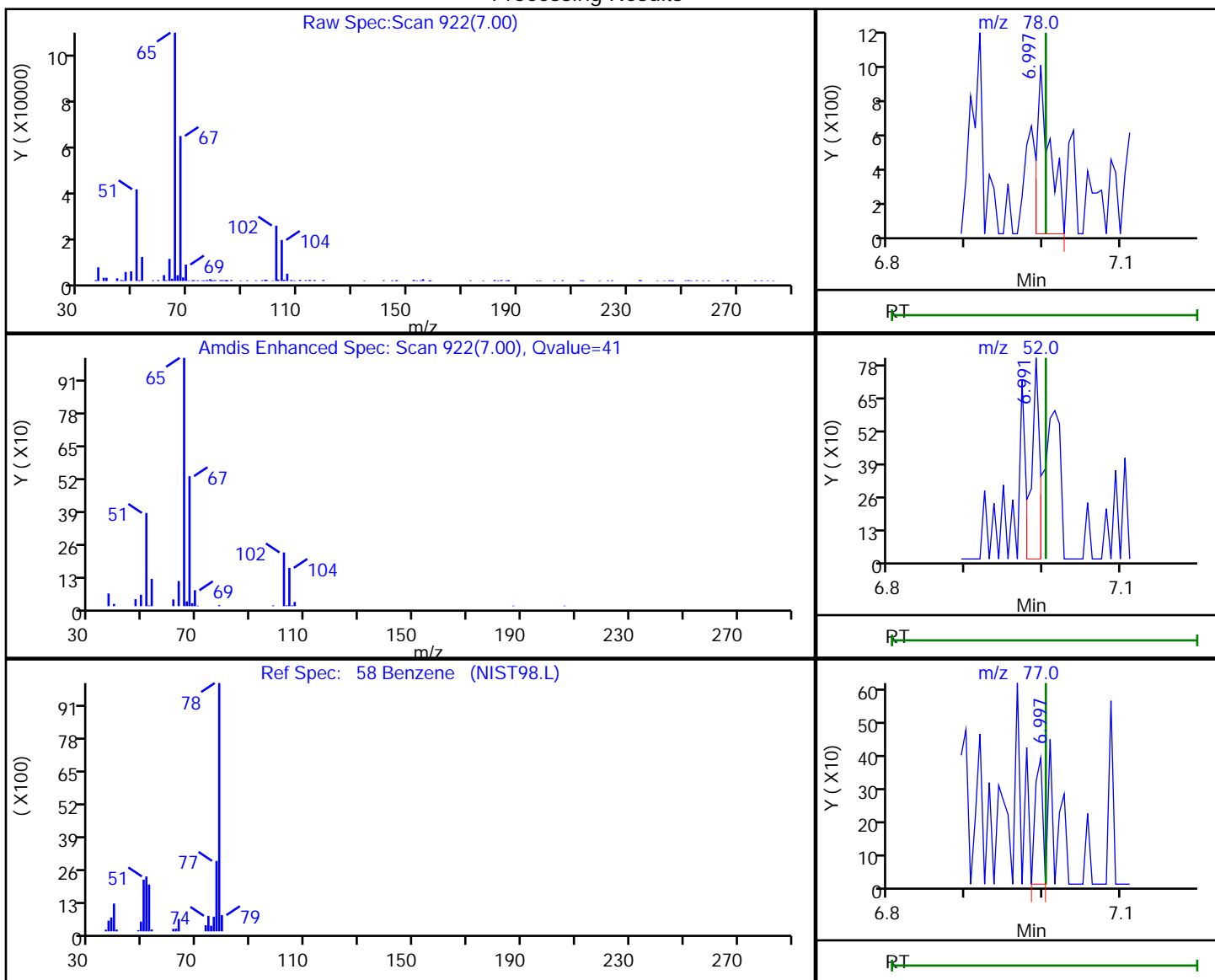
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050414.D  
 Injection Date: 04-May-2020 13:30:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-C-2 Lab Sample ID: 180-105108-2  
 Client ID: HD-COD-SW-7-0/1-0  
 Operator ID: 034635 ALS Bottle#: 14 Worklist Smp#: 14  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

58 Benzene, CAS: 71-43-2

Processing Results



RT	Mass	Response	Amount
7.00	78.00	1075	0.064544
6.99	52.00	603	
7.00	77.00	254	

Reviewer: journept, 04-May-2020 15:12:15  
 Audit Action: Marked Compound Undetected

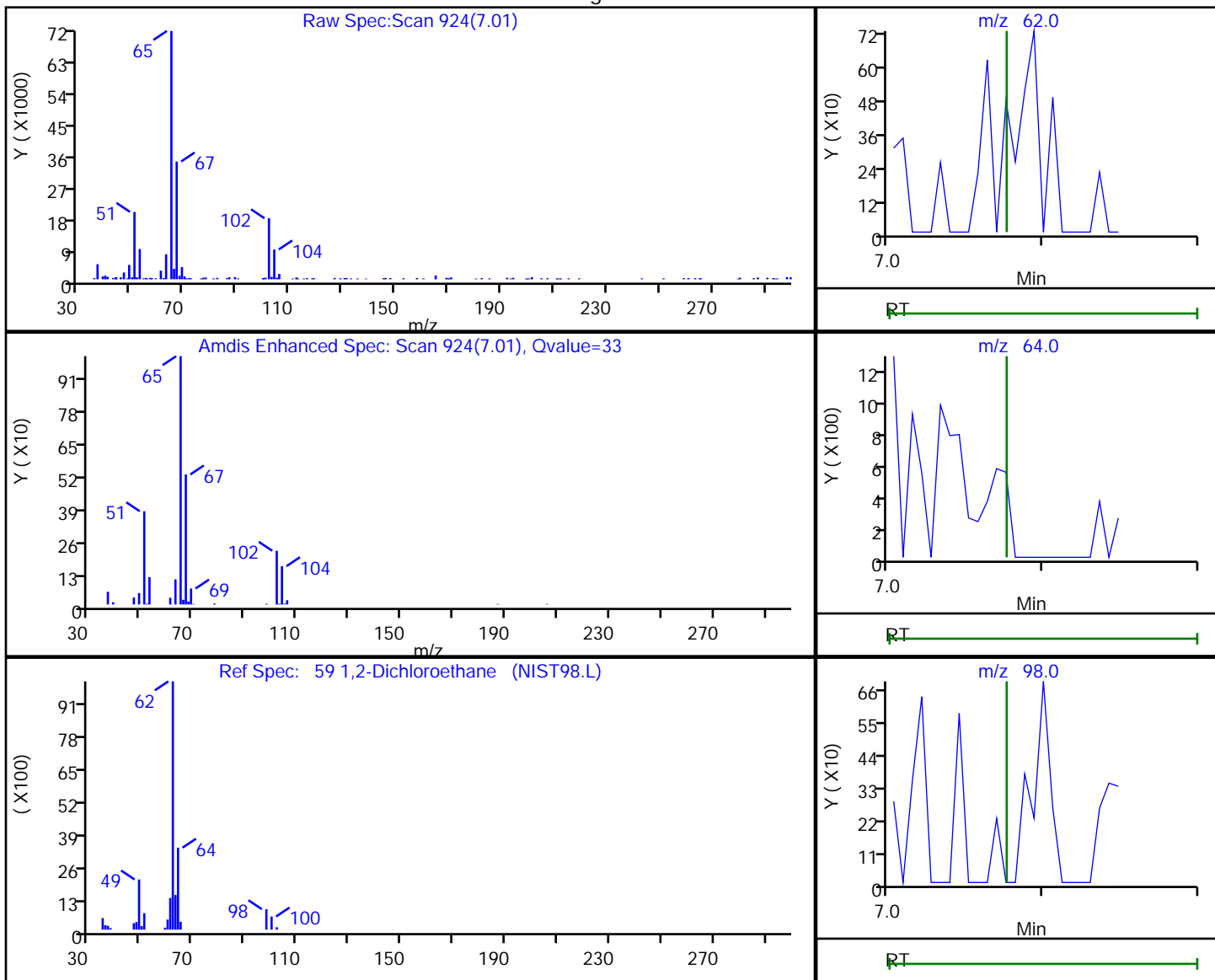
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050414.D  
 Injection Date: 04-May-2020 13:30:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-C-2 Lab Sample ID: 180-105108-2  
 Client ID: HD-COD-SW-7-0/1-0  
 Operator ID: 034635 ALS Bottle#: 14 Worklist Smp#: 14  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

59 1,2-Dichloroethane, CAS: 107-06-2

Processing Results



RT	Mass	Response	Amount
7.01	62.00	343	0.054162
7.00	64.00	1295	
7.00	98.00	895	

Reviewer: journetp, 04-May-2020 15:12:15  
 Audit Action: Marked Compound Undetected

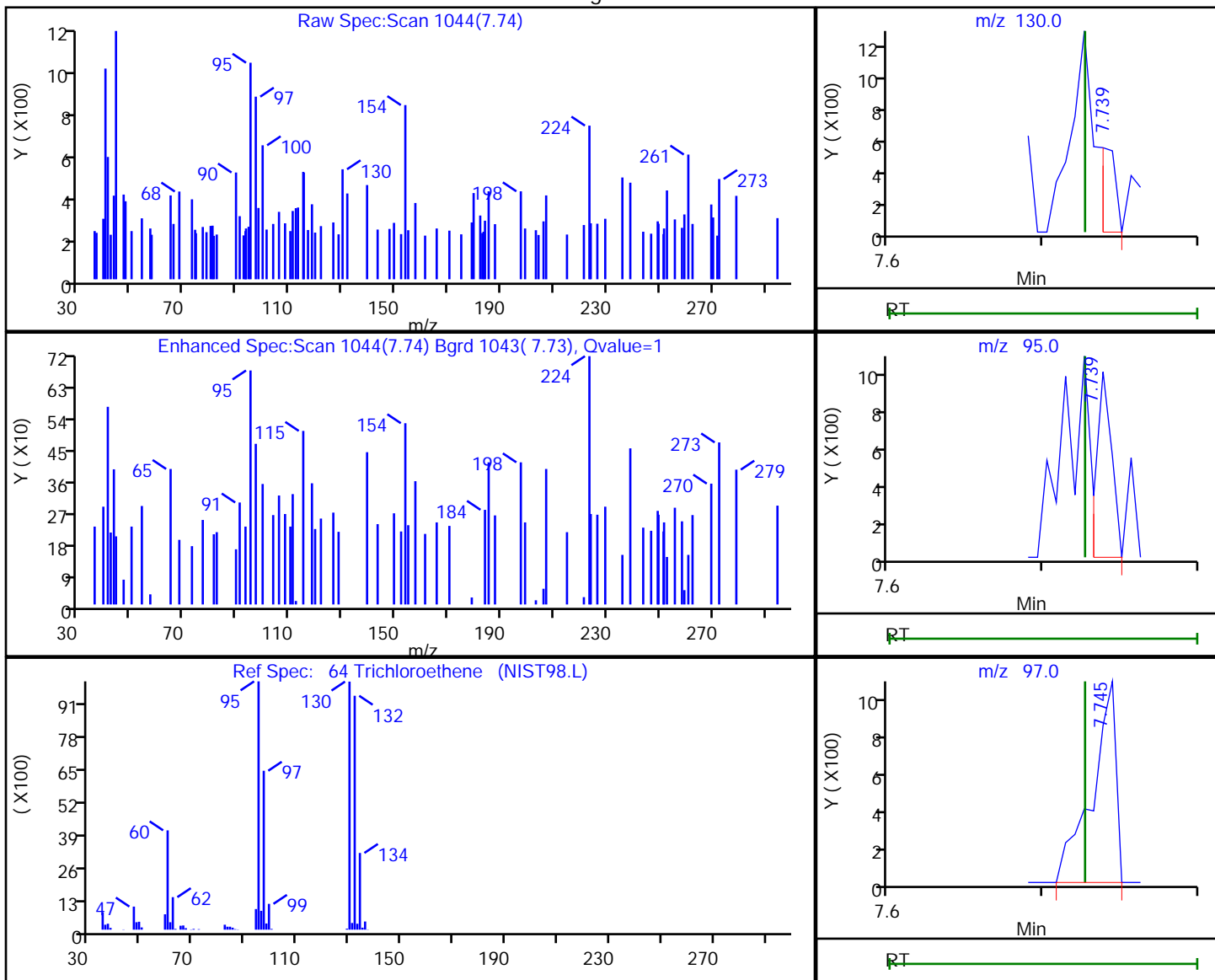
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050414.D  
 Injection Date: 04-May-2020 13:30:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-C-2 Lab Sample ID: 180-105108-2  
 Client ID: HD-COD-SW-7-0/1-0  
 Operator ID: 034635 ALS Bottle#: 14 Worklist Smp#: 14  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

64 Trichloroethene, CAS: 79-01-6

Processing Results



RT	Mass	Response	Amount
7.74	130.00	365	0.087999
7.74	95.00	687	
7.74	97.00	1161	

Reviewer: journeyp, 04-May-2020 15:12:15  
 Audit Action: Marked Compound Undetected

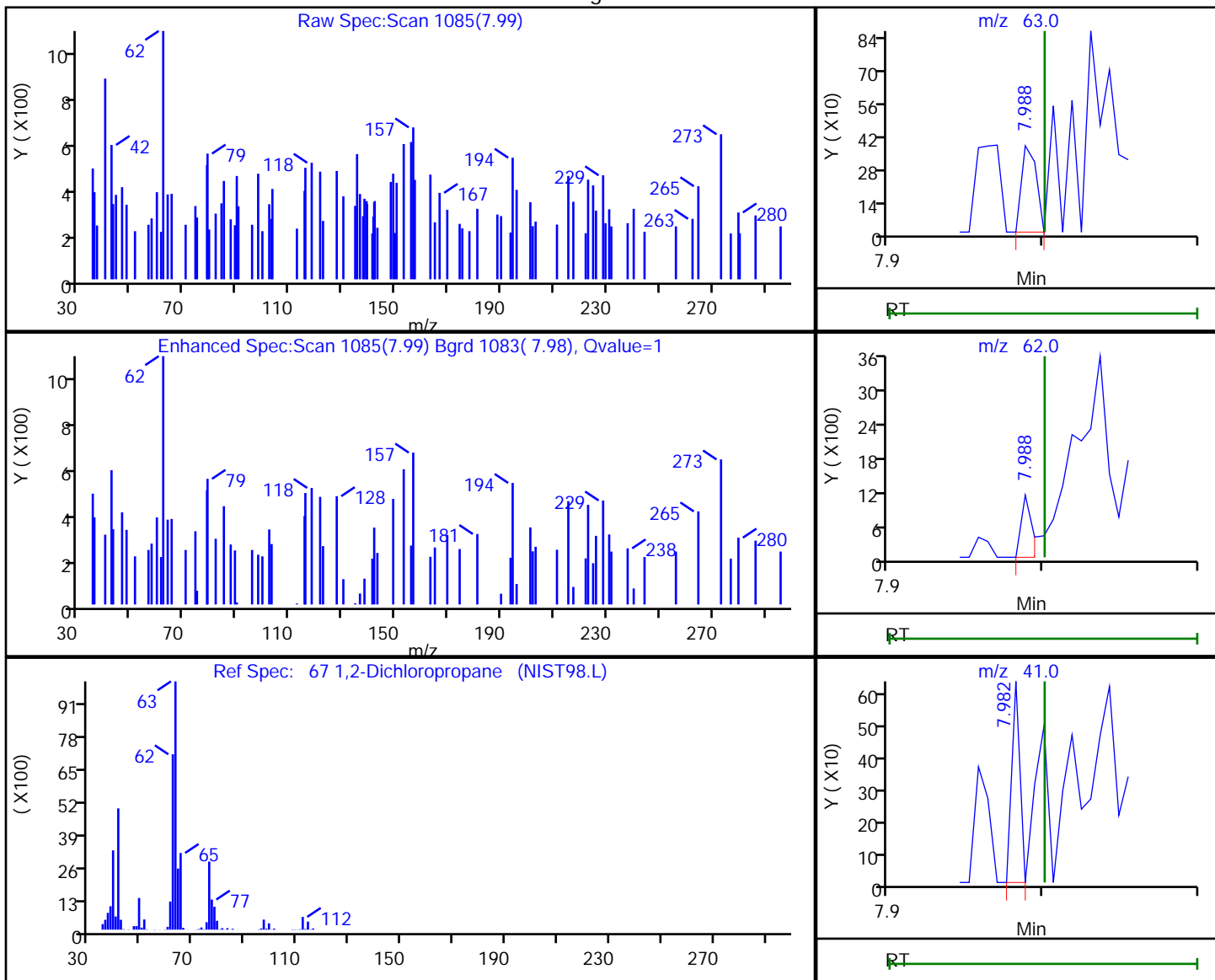
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050414.D  
 Injection Date: 04-May-2020 13:30:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-C-2 Lab Sample ID: 180-105108-2  
 Client ID: HD-COD-SW-7-0/1-0  
 Operator ID: 034635 ALS Bottle#: 14 Worklist Smp#: 14  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

67 1,2-Dichloropropane, CAS: 78-87-5

Processing Results



RT	Mass	Response	Amount
7.99	63.00	247	0.055561
7.99	62.00	527	
7.98	41.00	230	

Reviewer: journept, 04-May-2020 15:12:15  
 Audit Action: Marked Compound Undetected

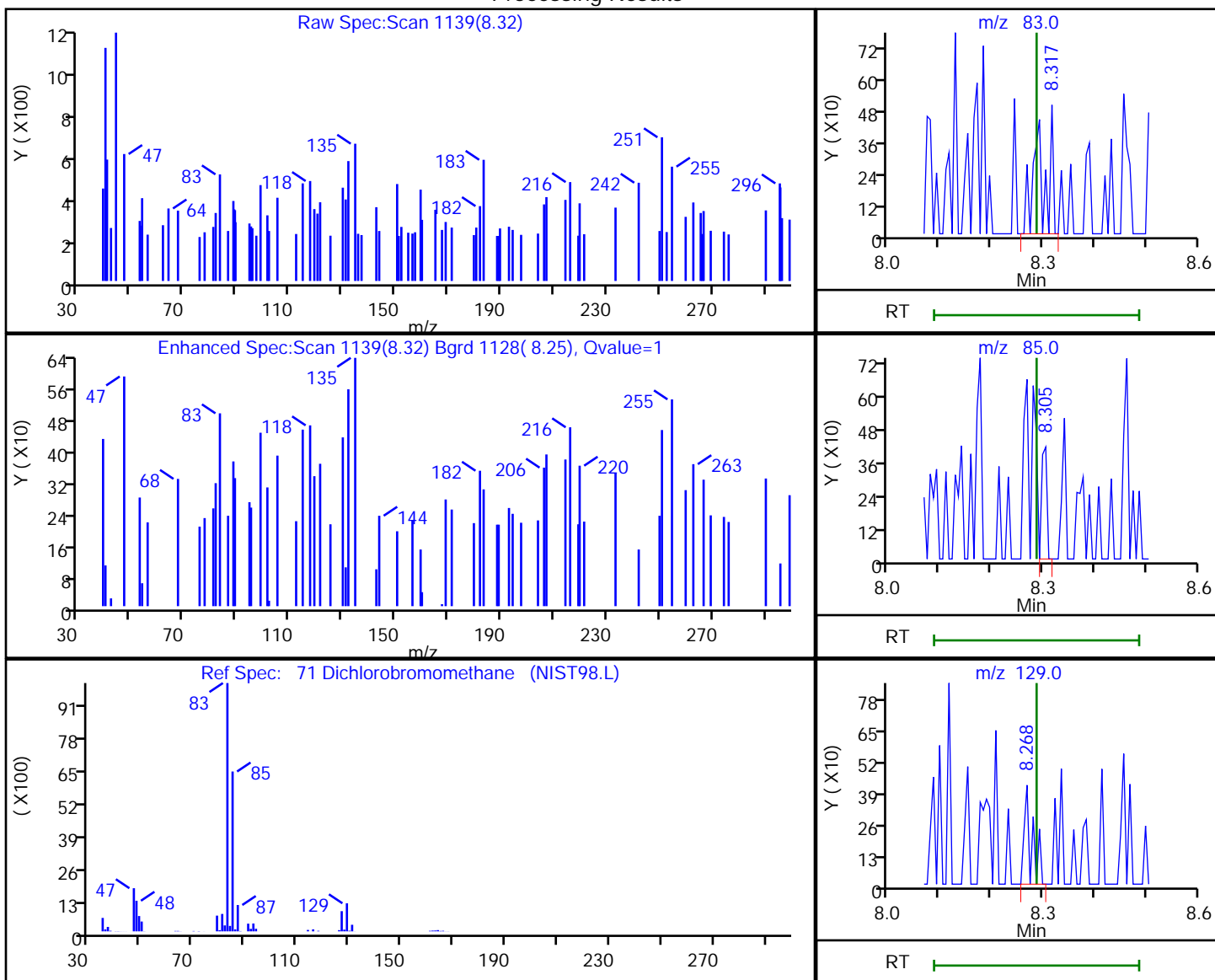
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050414.D  
 Injection Date: 04-May-2020 13:30:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-C-2 Lab Sample ID: 180-105108-2  
 Client ID: HD-COD-SW-7-0/1-0  
 Operator ID: 034635 ALS Bottle#: 14 Worklist Smp#: 14  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

71 Dichlorobromomethane, CAS: 75-27-4

Processing Results



RT	Mass	Response	Amount
8.32	83.00	755	0.144737
8.30	85.00	289	
8.27	129.00	420	

Reviewer: journeyp, 04-May-2020 15:12:15  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

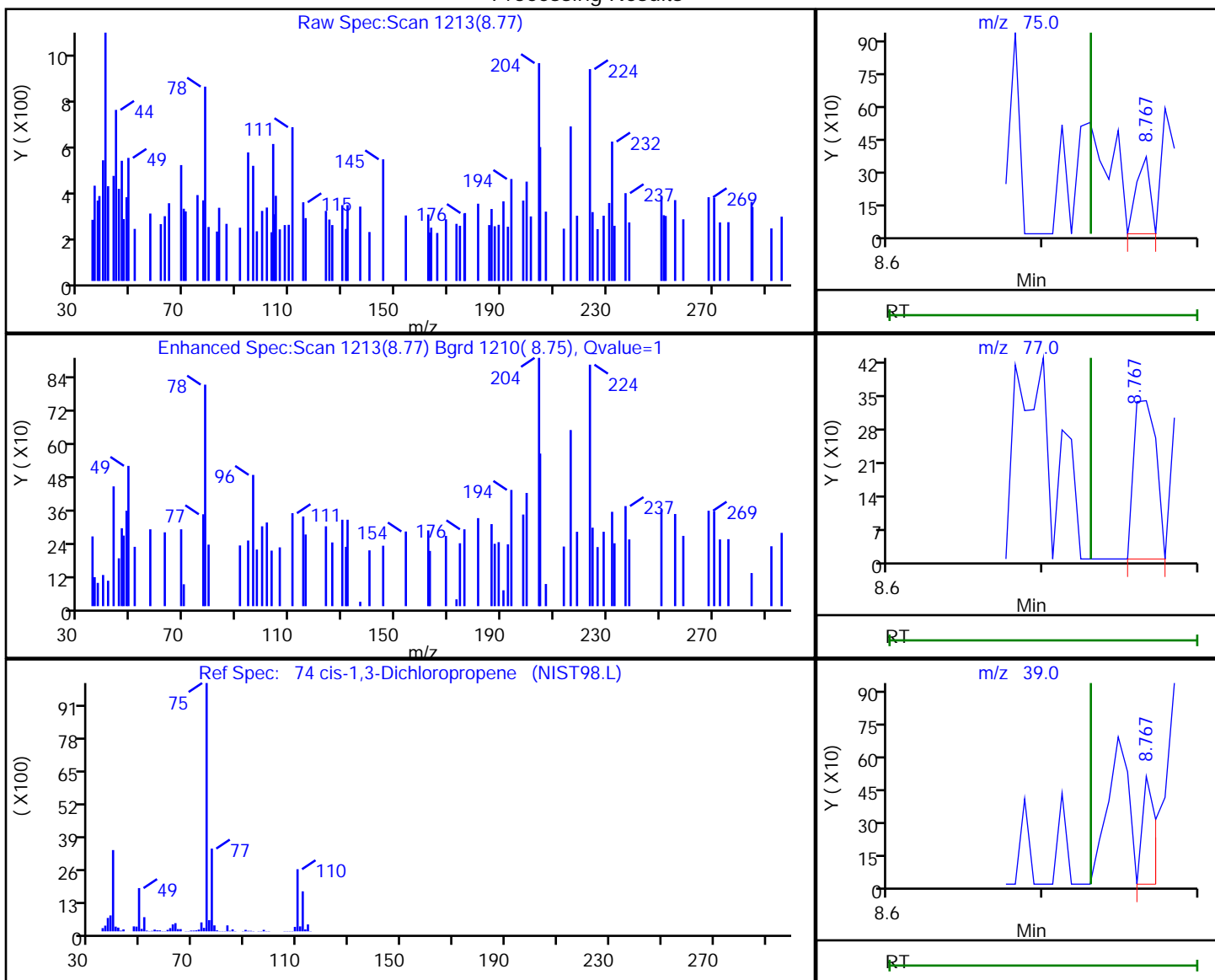


Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050414.D  
 Injection Date: 04-May-2020 13:30:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-C-2 Lab Sample ID: 180-105108-2  
 Client ID: HD-COD-SW-7-0/1-0  
 Operator ID: 034635 ALS Bottle#: 14 Worklist Smp#: 14  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

74 cis-1,3-Dichloropropene, CAS: 10061-01-5

Processing Results



RT	Mass	Response	Amount
8.77	75.00	219	0.033345
8.77	77.00	339	
8.77	39.00	294	

Reviewer: journept, 04-May-2020 15:12:15  
 Audit Action: Marked Compound Undetected

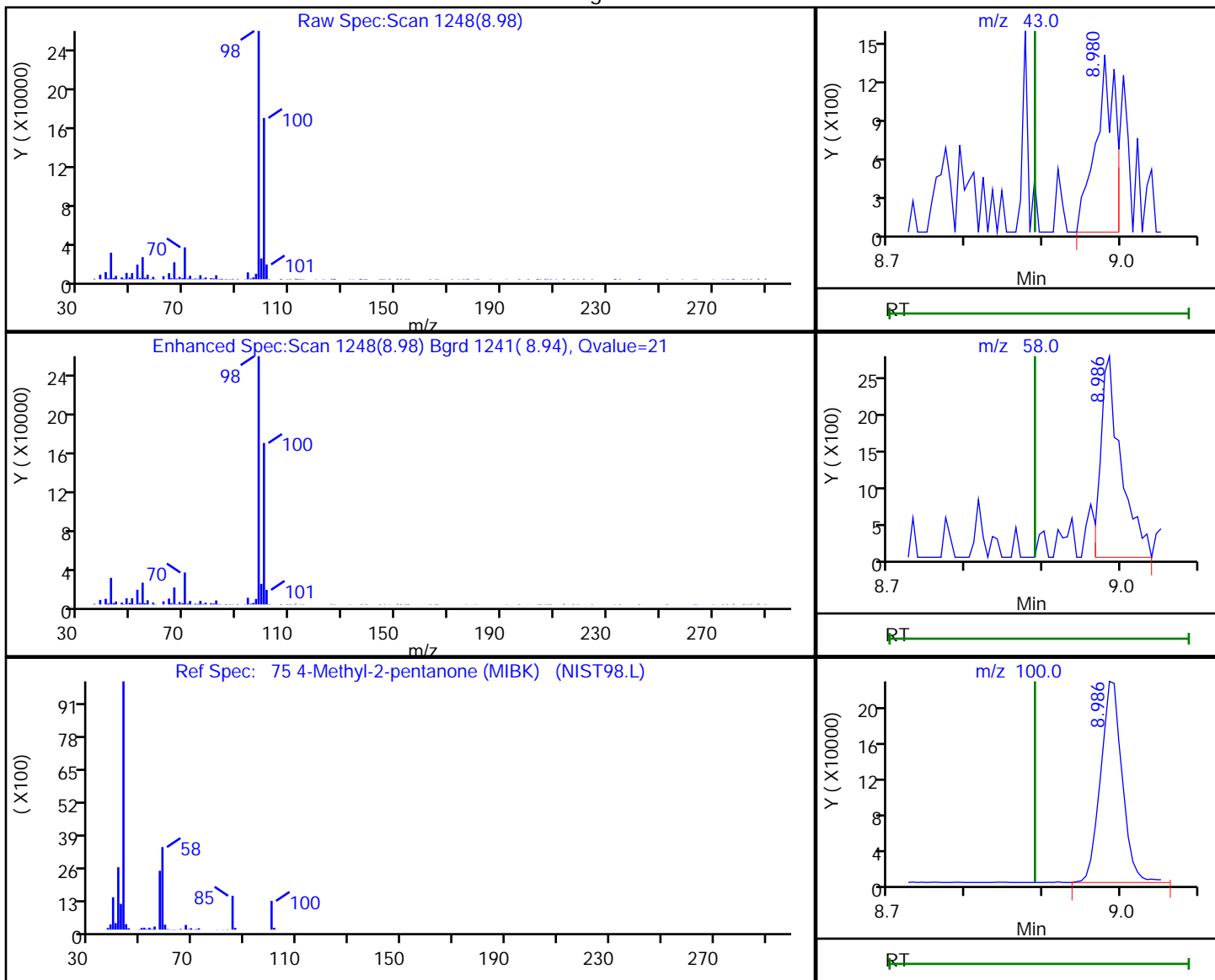
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050414.D  
 Injection Date: 04-May-2020 13:30:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-C-2 Lab Sample ID: 180-105108-2  
 Client ID: HD-COD-SW-7-0/1-0  
 Operator ID: 034635 ALS Bottle#: 14 Worklist Smp#: 14  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

75 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Processing Results



RT	Mass	Response	Amount
8.98	43.00	2386	15.986240
8.99	58.00	4898	
8.99	100.00	431064	

Reviewer: journeyp, 04-May-2020 15:12:15  
 Audit Action: Marked Compound Undetected

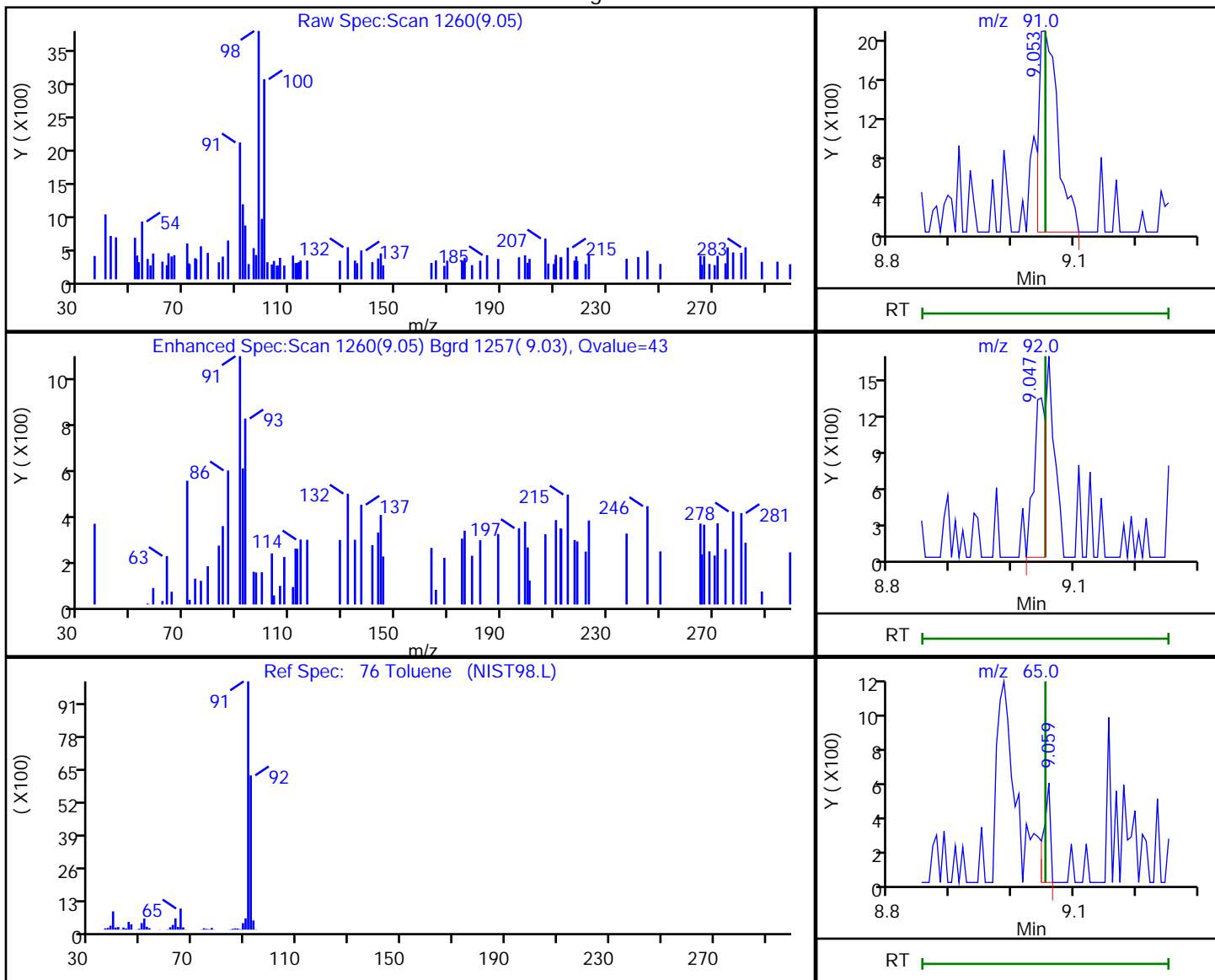
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050414.D  
 Injection Date: 04-May-2020 13:30:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-C-2 Lab Sample ID: 180-105108-2  
 Client ID: HD-COD-SW-7-0/1-0  
 Operator ID: 034635 ALS Bottle#: 14 Worklist Smp#: 14  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

76 Toluene, CAS: 108-88-3

Processing Results



RT	Mass	Response	Amount
9.05	91.00	4343	0.254110
9.05	92.00	1714	
9.06	65.00	424	

Reviewer: journetp, 04-May-2020 15:12:15  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050414.D

Injection Date: 04-May-2020 13:30:30

Instrument ID: CHHP5

Lims ID: 180-105108-C-2

Lab Sample ID: 180-105108-2

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

Operator ID: 034635

ALS Bottle#: 14 Worklist Smp#: 14

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

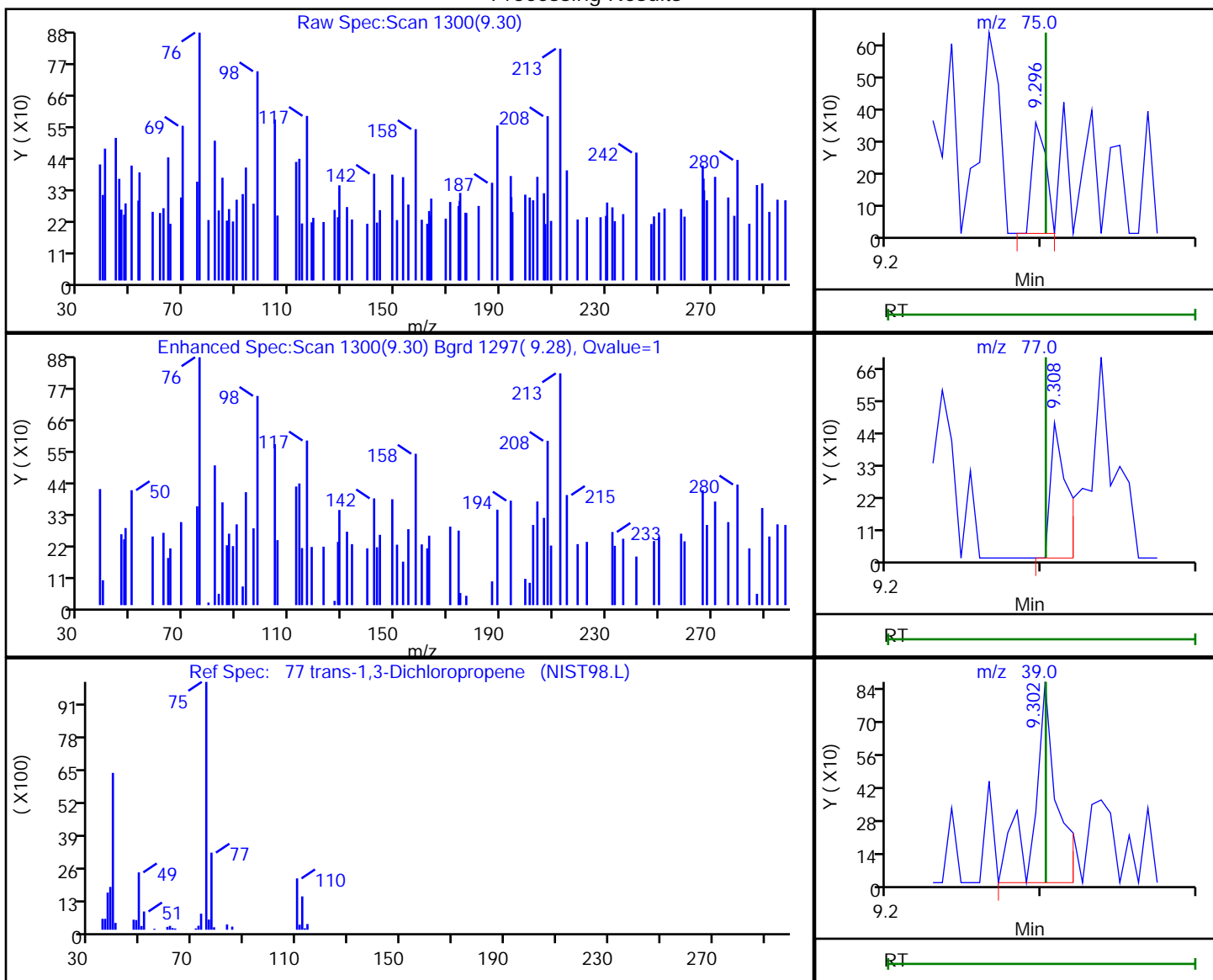
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

77 trans-1,3-Dichloropropene, CAS: 10061-02-6

Processing Results



RT	Mass	Response	Amount
9.30	75.00	221	0.039334
9.31	77.00	346	
9.30	39.00	924	

Reviewer: journeyp, 04-May-2020 15:12:15

Audit Action: Marked Compound Undetected

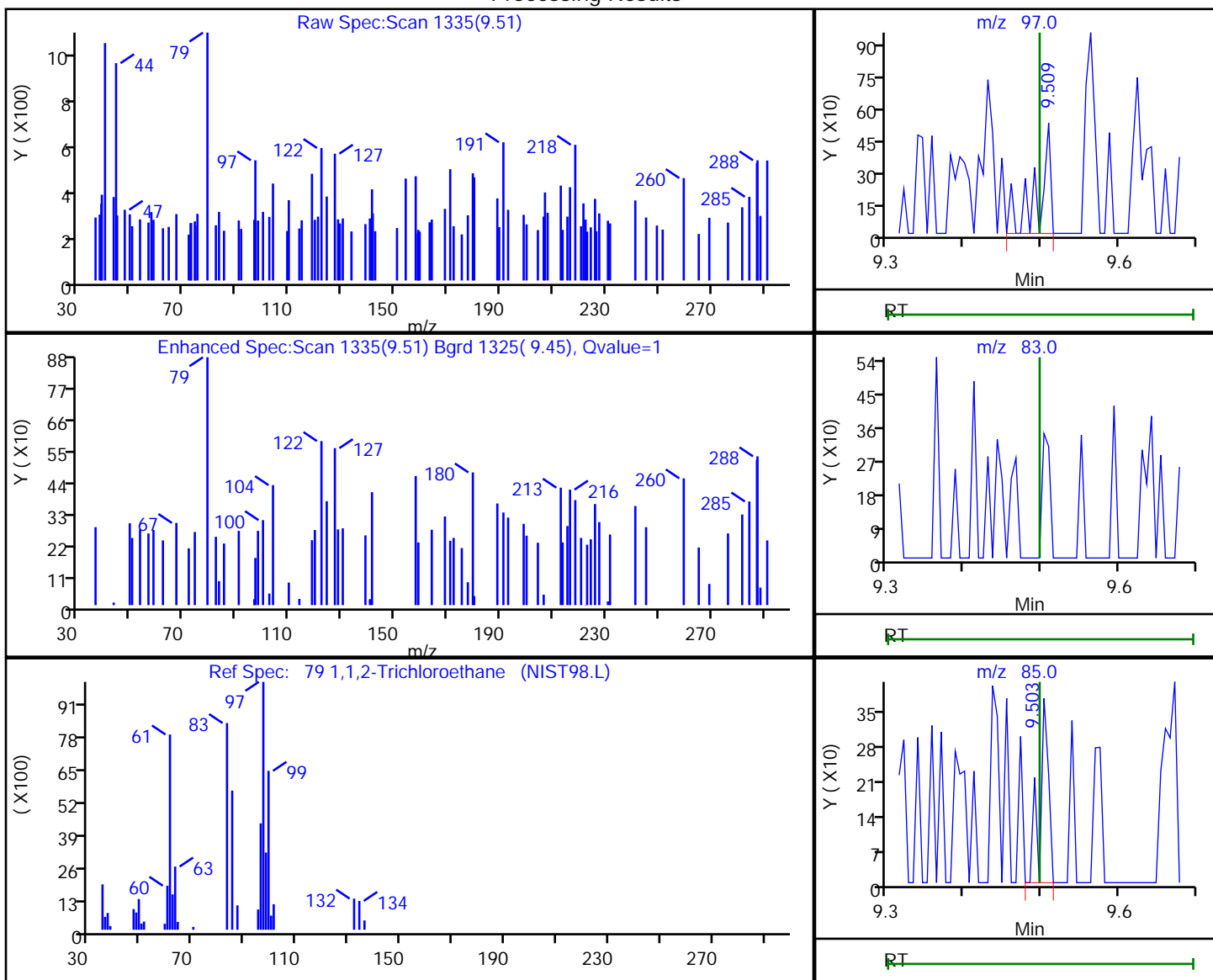
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050414.D  
 Injection Date: 04-May-2020 13:30:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-C-2 Lab Sample ID: 180-105108-2  
 Client ID: HD-COD-SW-7-0/1-0  
 Operator ID: 034635 ALS Bottle#: 14 Worklist Smp#: 14  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

79 1,1,2-Trichloroethane, CAS: 79-00-5

Processing Results



RT	Mass	Response	Amount
9.51	97.00	566	0.142475
9.50	83.00	0	
9.50	85.00	293	

Reviewer: journeyp, 04-May-2020 15:12:15  
 Audit Action: Marked Compound Undetected

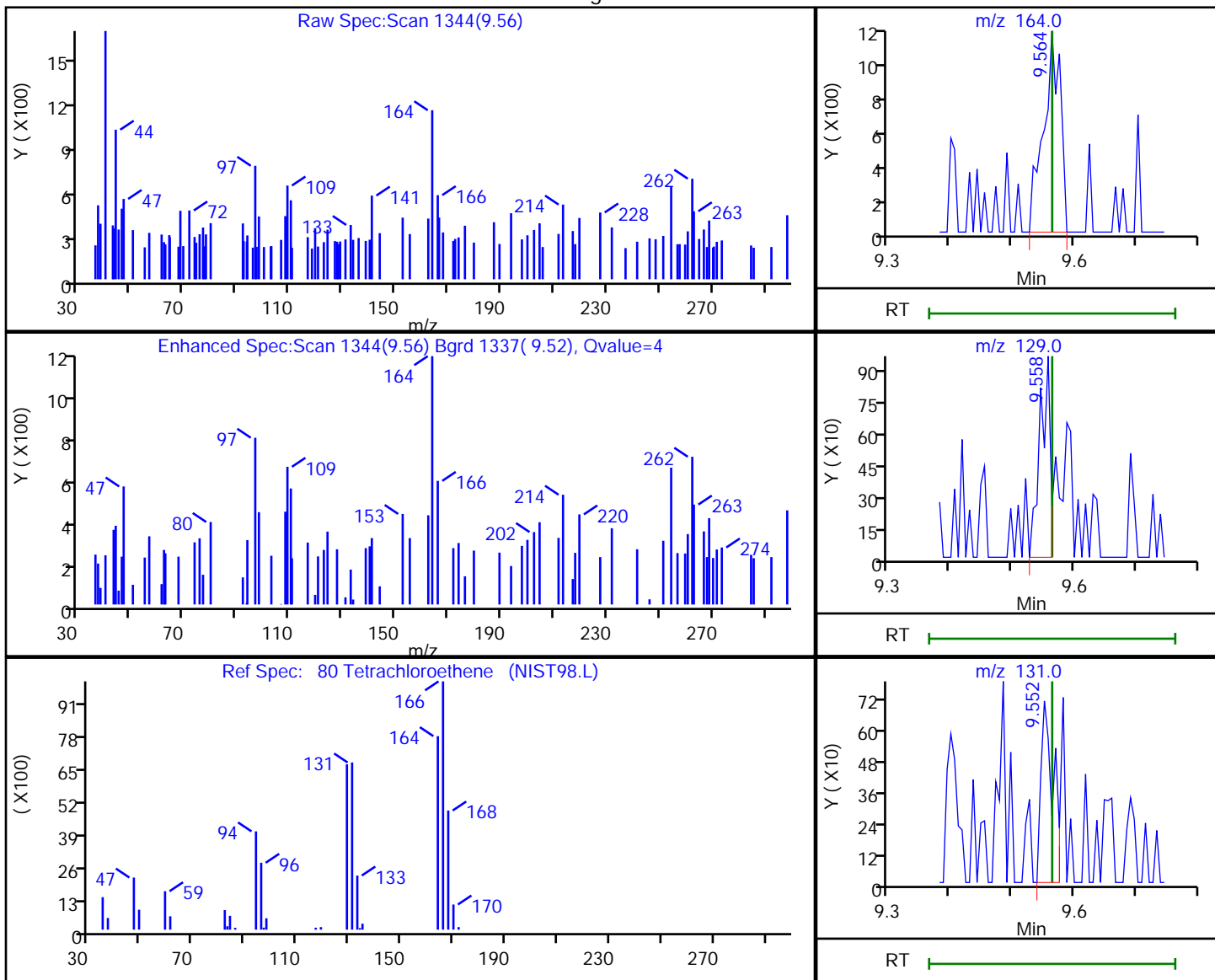
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050414.D  
 Injection Date: 04-May-2020 13:30:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-C-2 Lab Sample ID: 180-105108-2  
 Client ID: HD-COD-SW-7-0/1-0  
 Operator ID: 034635 ALS Bottle#: 14 Worklist Smp#: 14  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

80 Tetrachloroethene, CAS: 127-18-4

Processing Results



RT	Mass	Response	Amount
9.56	164.00	2117	0.622347
9.56	129.00	1104	
9.55	131.00	985	

Reviewer: journeyp, 04-May-2020 15:12:15  
 Audit Action: Marked Compound Undetected

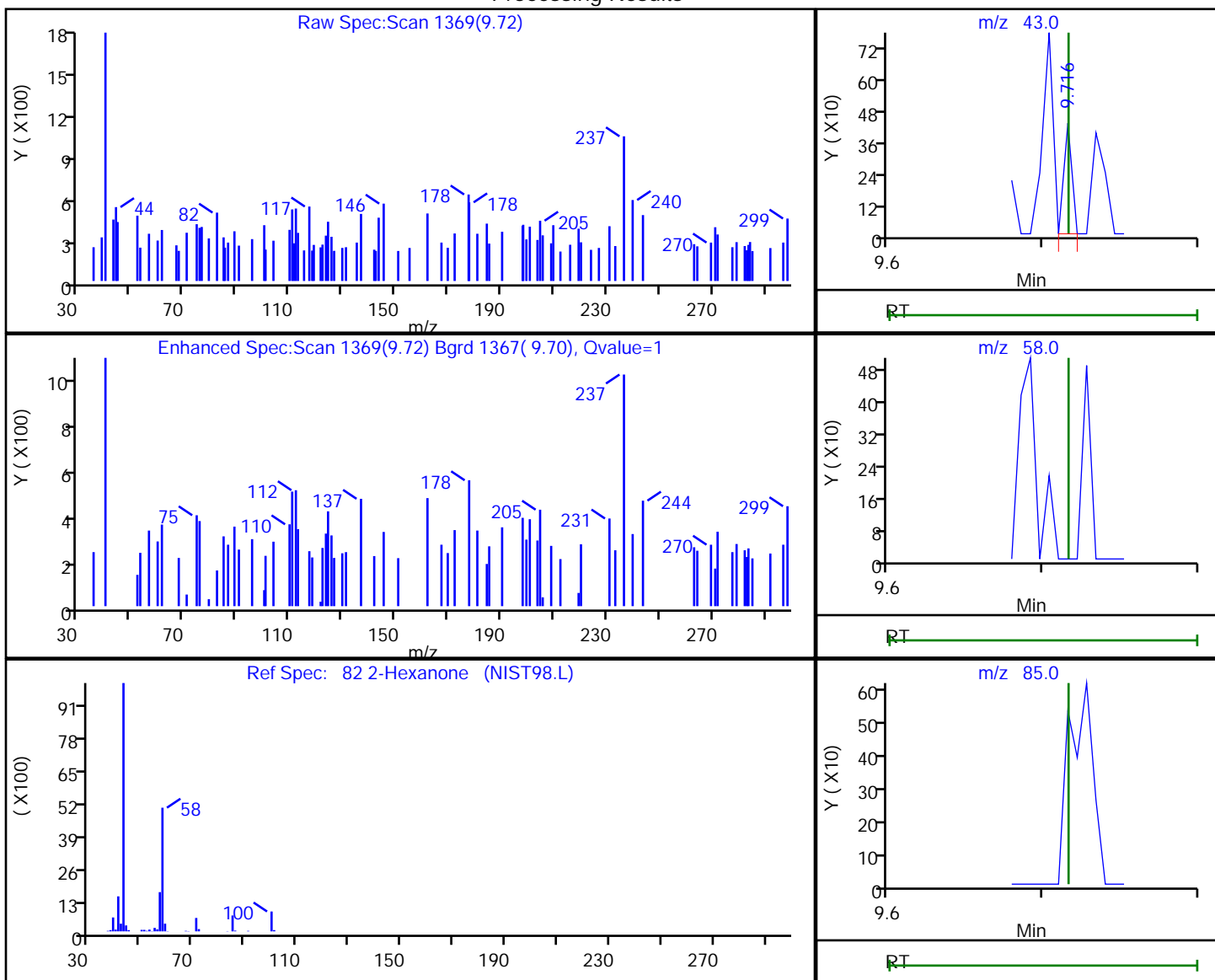
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050414.D  
 Injection Date: 04-May-2020 13:30:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-C-2 Lab Sample ID: 180-105108-2  
 Client ID: HD-COD-SW-7-0/1-0  
 Operator ID: 034635 ALS Bottle#: 14 Worklist Smp#: 14  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

82 2-Hexanone, CAS: 591-78-6

Processing Results



RT	Mass	Response	Amount
9.72	43.00	155	14.056338
9.72	58.00	0	
9.72	85.00	0	

Reviewer: journept, 04-May-2020 15:12:15  
 Audit Action: Marked Compound Undetected

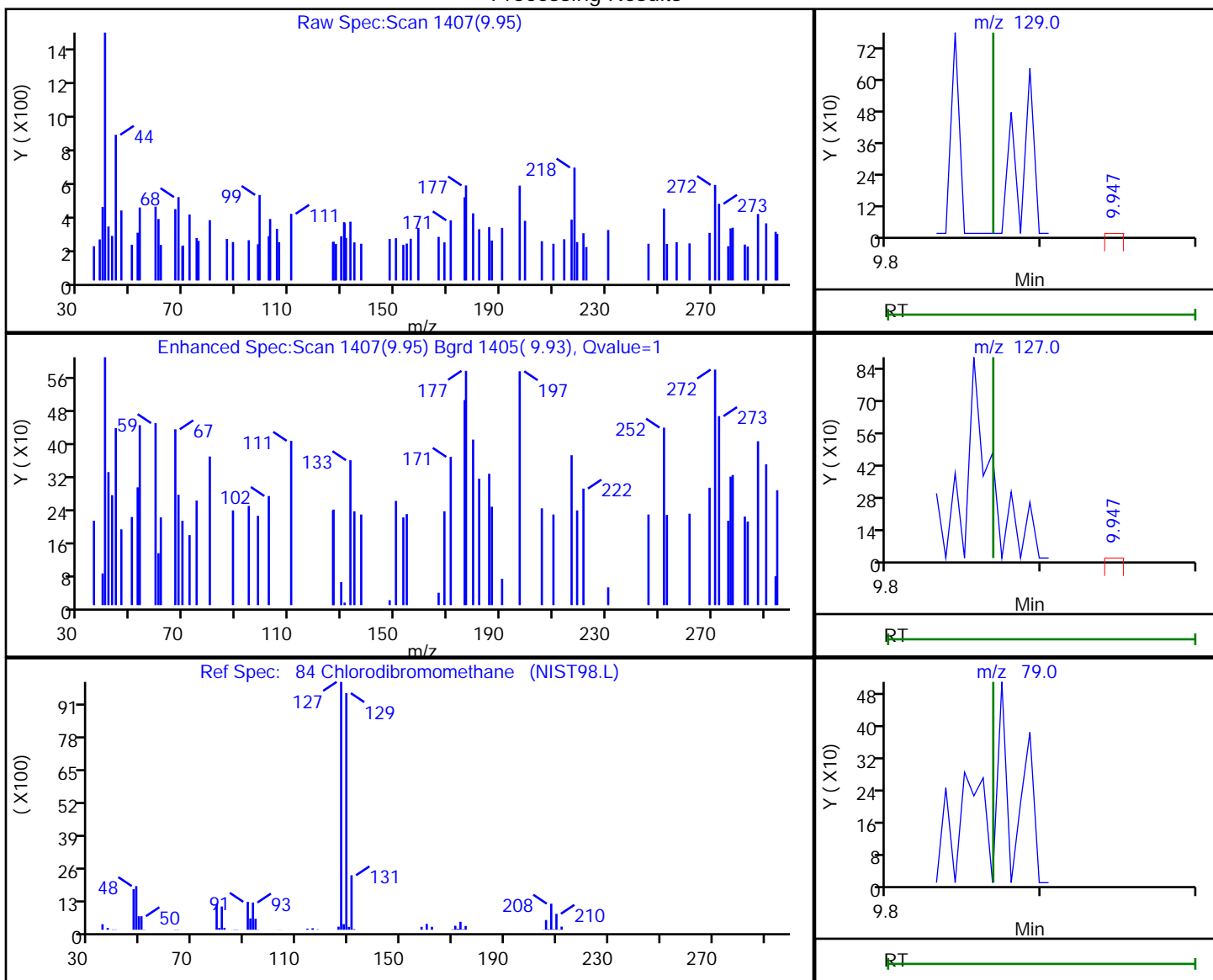
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050414.D  
 Injection Date: 04-May-2020 13:30:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-C-2 Lab Sample ID: 180-105108-2  
 Client ID: HD-COD-SW-7-0/1-0  
 Operator ID: 034635 ALS Bottle#: 14 Worklist Smp#: 14  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

84 Chlorodibromomethane, CAS: 124-48-1

Processing Results



RT	Mass	Response	Amount
9.95	129.00	96	0.028548
9.95	127.00	165	
9.87	79.00	0	

Reviewer: journept, 04-May-2020 15:12:15  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

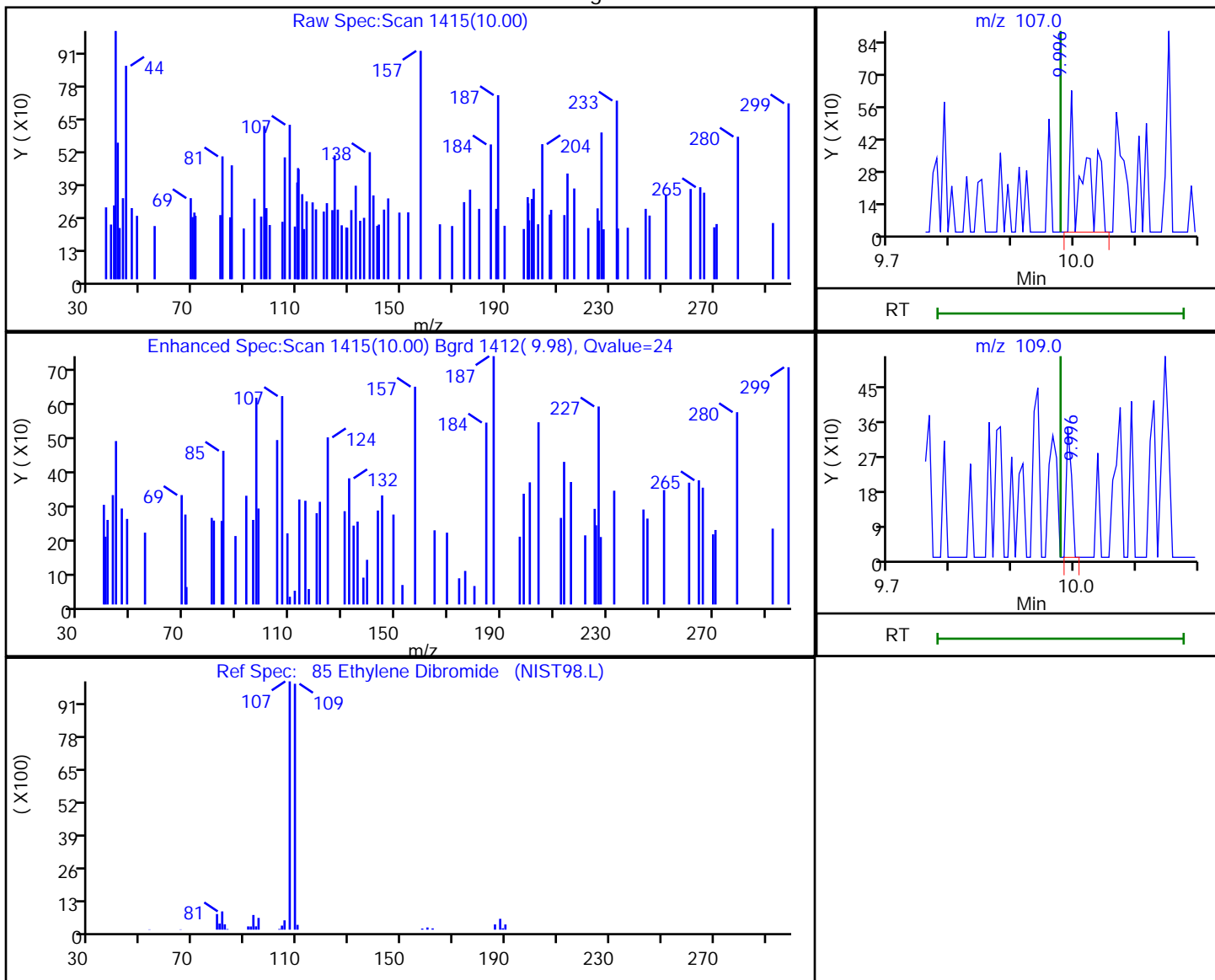


Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050414.D  
Injection Date: 04-May-2020 13:30:30 Instrument ID: CHHP5  
Lims ID: 180-105108-C-2 Lab Sample ID: 180-105108-2  
Client ID: HD-COD-SW-7-0/1-0  
Operator ID: 034635 ALS Bottle#: 14 Worklist Smp#: 14  
Purge Vol: 5.000 mL Dil. Factor: 1.0000  
Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
Column: DB-624 (0.18 mm) Detector: MS SCAN

85 Ethylene Dibromide, CAS: 106-93-4

Processing Results



RT	Mass	Response	Amount
10.00	107.00	873	0.234907
10.00	109.00	200	

Reviewer: journetp, 04-May-2020 15:12:15  
Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050414.D

Injection Date: 04-May-2020 13:30:30

Instrument ID: CHHP5

Lims ID: 180-105108-C-2

Lab Sample ID: 180-105108-2

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

Operator ID: 034635

ALS Bottle#: 14 Worklist Smp#: 14

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

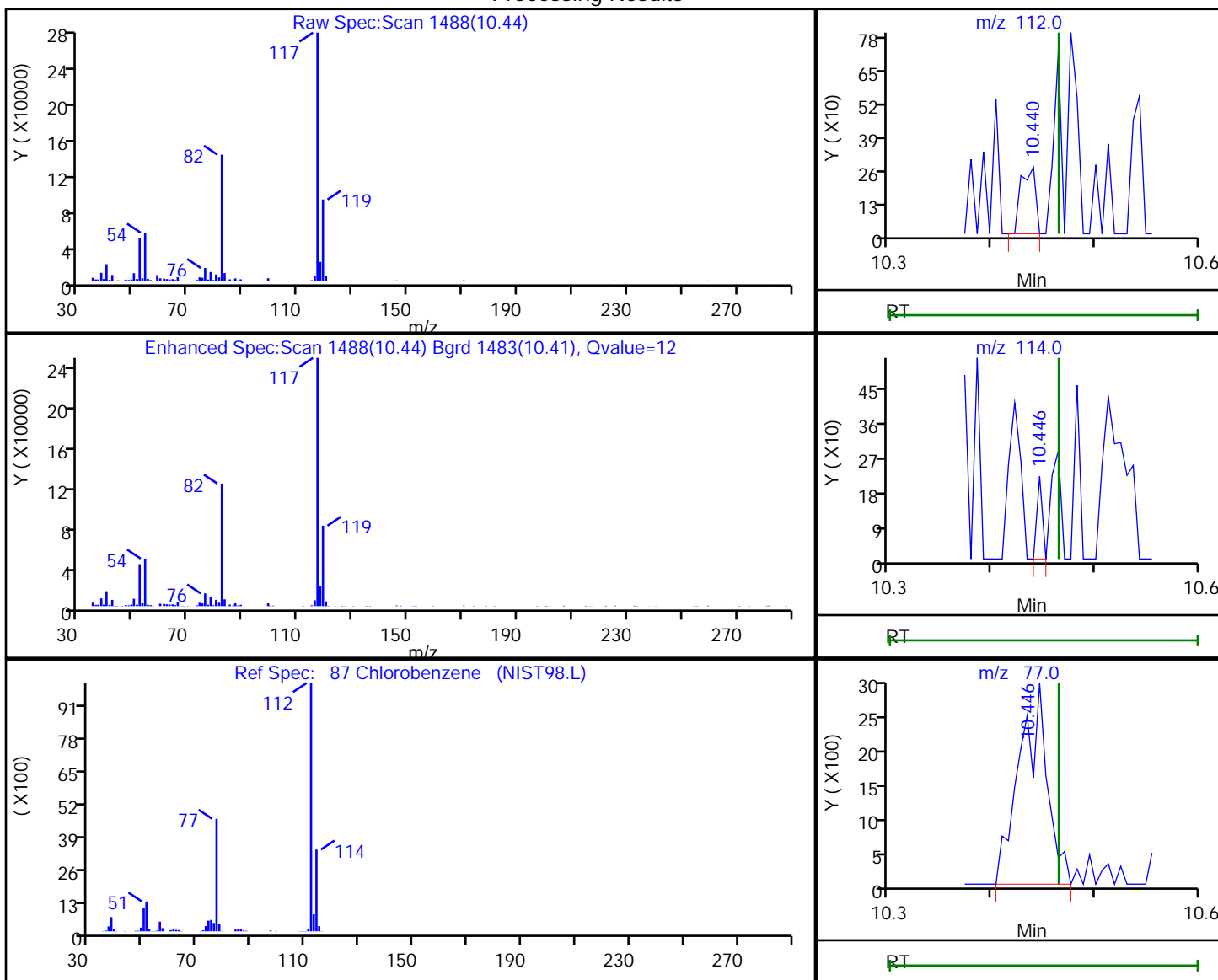
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

87 Chlorobenzene, CAS: 108-90-7

Processing Results



RT	Mass	Response	Amount
10.44	112.00	258	0.023473
10.45	114.00	79	
10.45	77.00	5568	

Reviewer: journept, 04-May-2020 15:12:15

Audit Action: Marked Compound Undetected

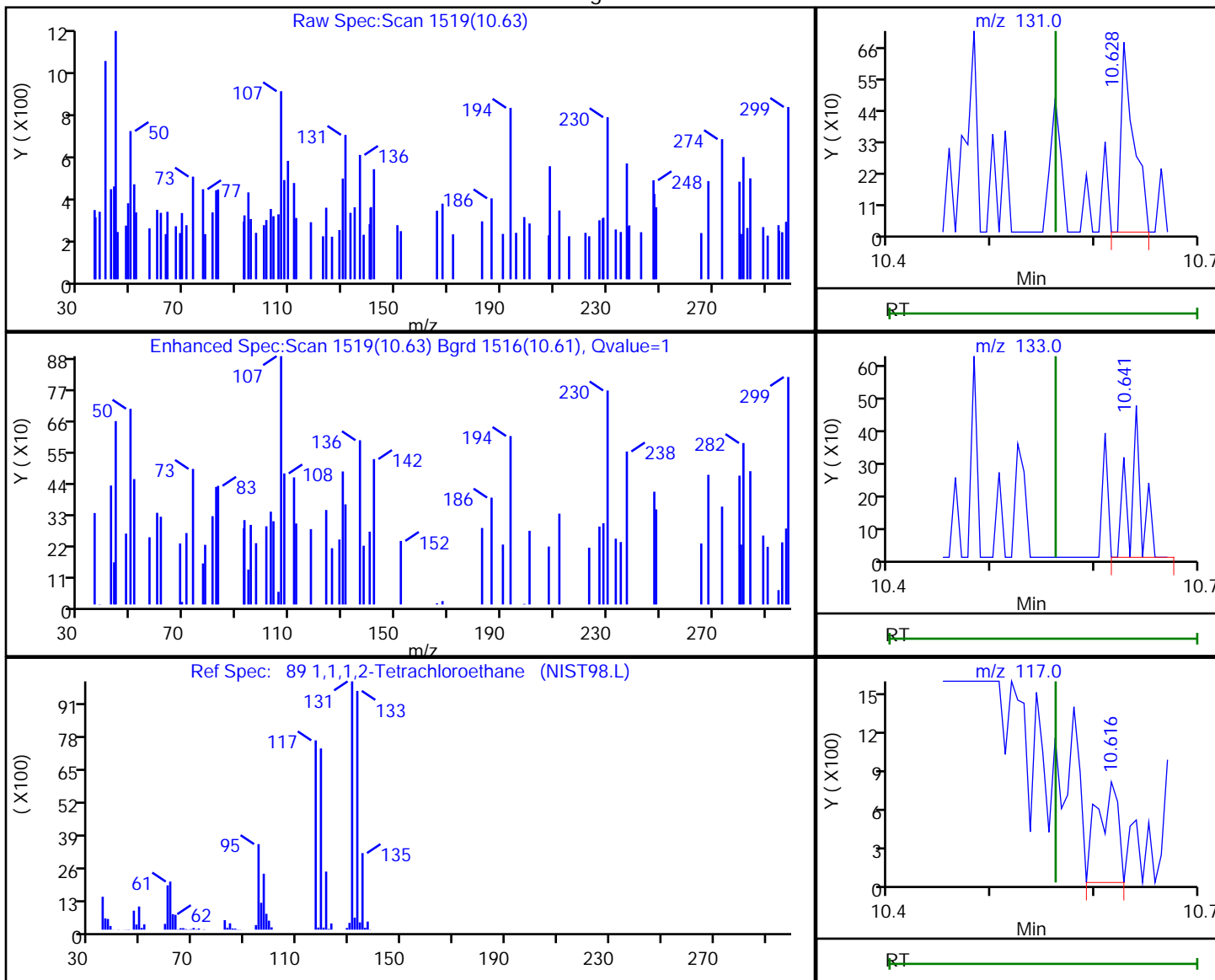
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050414.D  
Injection Date: 04-May-2020 13:30:30 Instrument ID: CHHP5  
Lims ID: 180-105108-C-2 Lab Sample ID: 180-105108-2  
Client ID: HD-COD-SW-7-0/1-0  
Operator ID: 034635 ALS Bottle#: 14 Worklist Smp#: 14  
Purge Vol: 5.000 mL Dil. Factor: 1.0000  
Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
Column: DB-624 (0.18 mm) Detector: MS SCAN

89 1,1,1,2-Tetrachloroethane, CAS: 630-20-6

Processing Results



RT	Mass	Response	Amount
10.63	131.00	578	0.161937
10.64	133.00	372	
10.62	117.00	1048	

Reviewer: journeyp, 04-May-2020 15:12:15  
Audit Action: Marked Compound Undetected

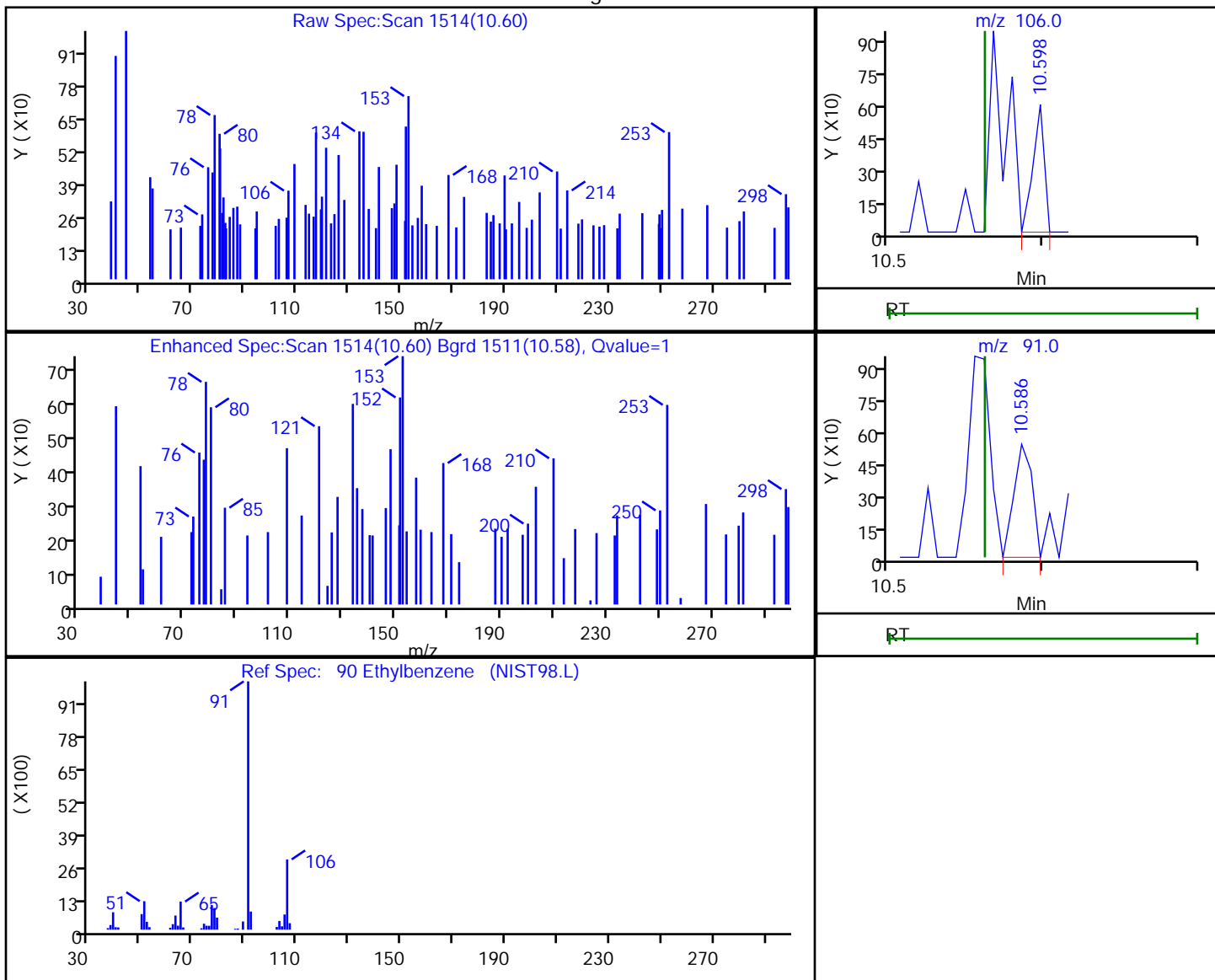
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050414.D  
Injection Date: 04-May-2020 13:30:30 Instrument ID: CHHP5  
Lims ID: 180-105108-C-2 Lab Sample ID: 180-105108-2  
Client ID: HD-COD-SW-7-0/1-0  
Operator ID: 034635 ALS Bottle#: 14 Worklist Smp#: 14  
Purge Vol: 5.000 mL Dil. Factor: 1.0000  
Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
Column: DB-624 (0.18 mm) Detector: MS SCAN

90 Ethylbenzene, CAS: 100-41-4

Processing Results



RT	Mass	Response	Amount
10.60	106.00	307	0.053960
10.59	91.00	439	

Reviewer: journtp, 04-May-2020 15:12:15  
Audit Action: Marked Compound Undetected

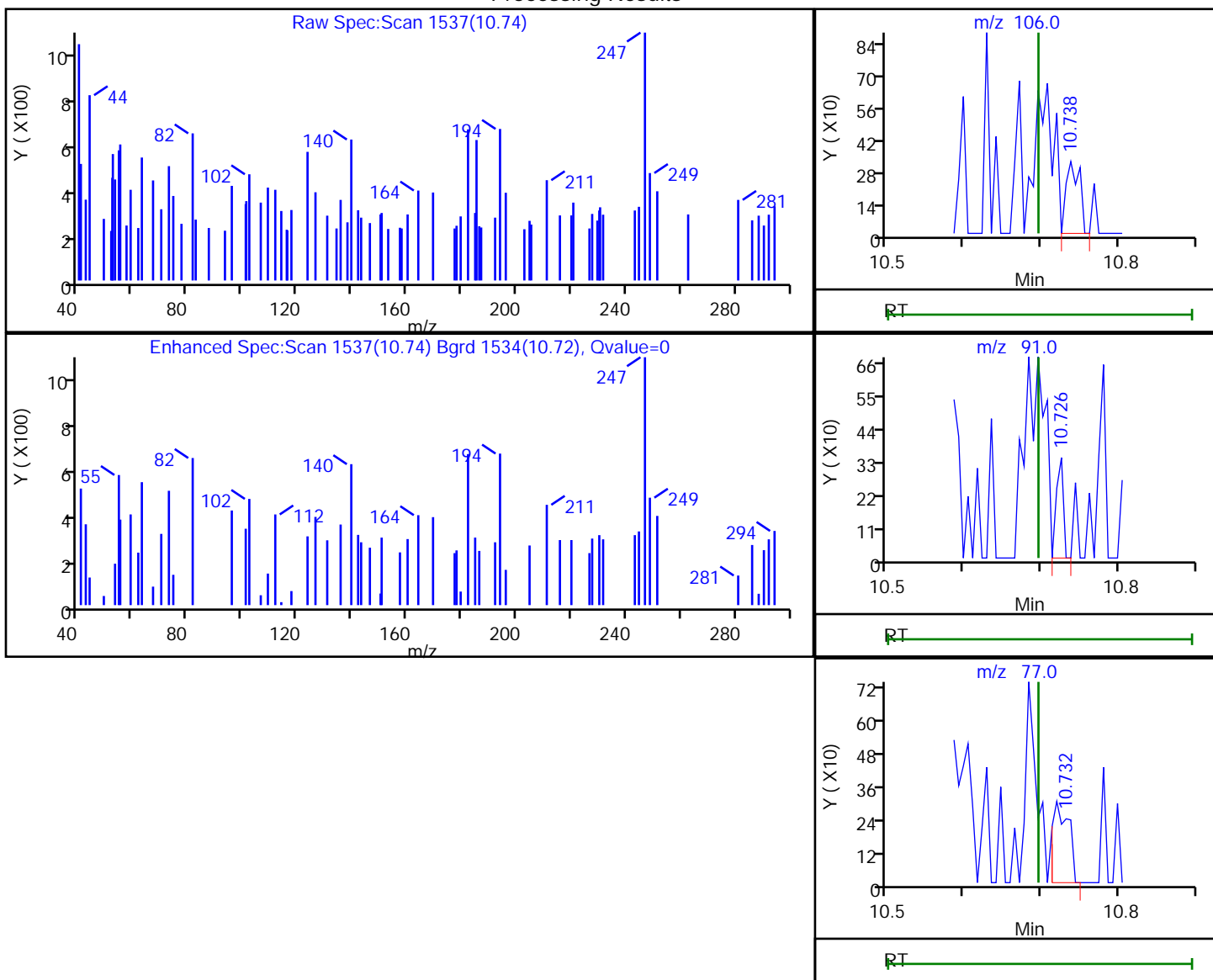
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050414.D  
 Injection Date: 04-May-2020 13:30:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-C-2 Lab Sample ID: 180-105108-2  
 Client ID: HD-COD-SW-7-0/1-0  
 Operator ID: 034635 ALS Bottle#: 14 Worklist Smp#: 14  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

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

Processing Results



RT	Mass	Response	Amount
10.74	106.00	380	0.053575
10.73	91.00	211	
10.73	77.00	432	

Reviewer: journetp, 04-May-2020 15:12:15  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050414.D

Injection Date: 04-May-2020 13:30:30

Instrument ID: CHHP5

Lims ID: 180-105108-C-2

Lab Sample ID: 180-105108-2

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

Operator ID: 034635

ALS Bottle#: 14 Worklist Smp#: 14

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

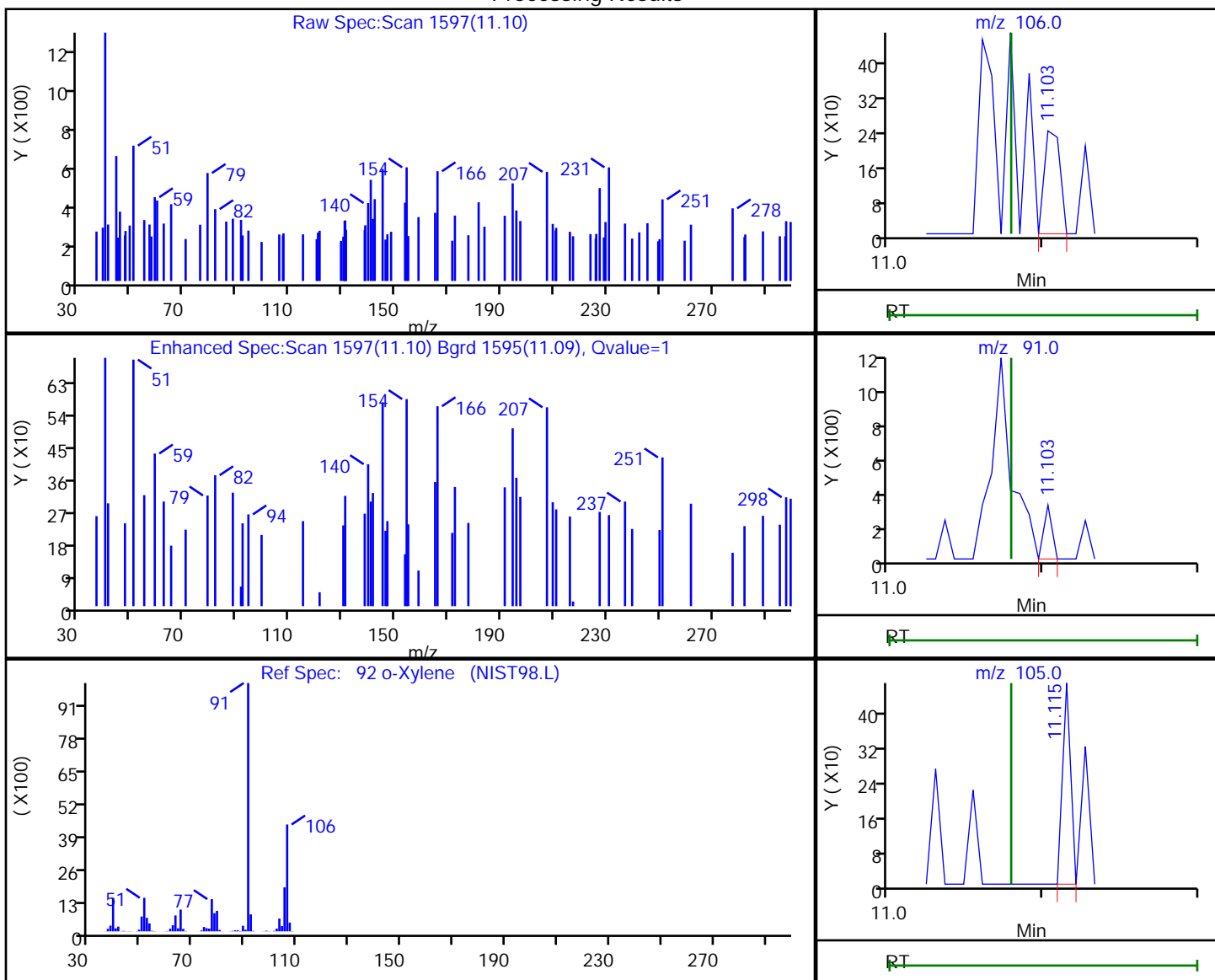
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

92 o-Xylene, CAS: 95-47-6

Processing Results



RT	Mass	Response	Amount
11.10	106.00	168	0.025376
11.10	91.00	114	
11.12	105.00	170	

Reviewer: journeyp, 04-May-2020 15:12:15

Audit Action: Marked Compound Undetected

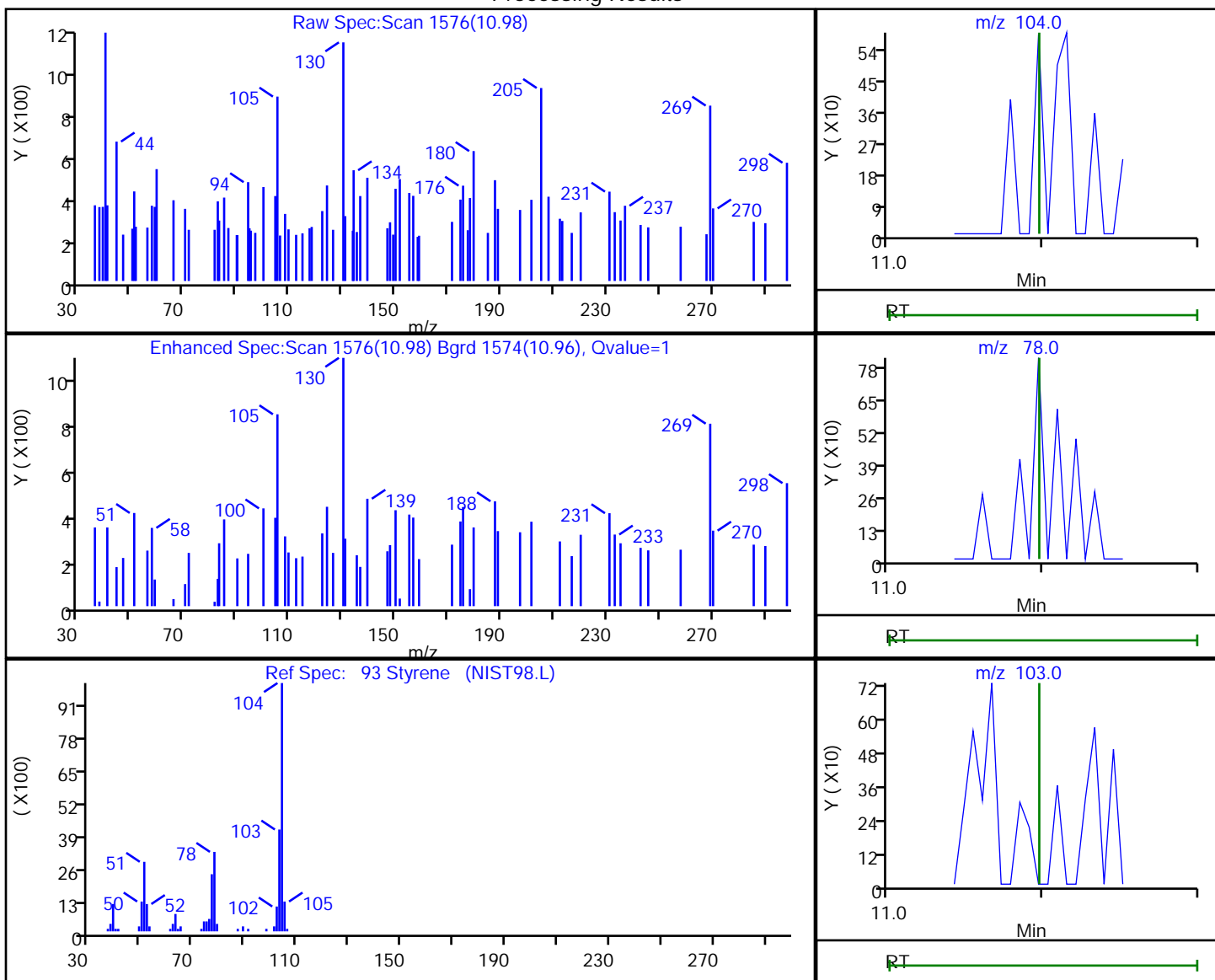
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050414.D  
 Injection Date: 04-May-2020 13:30:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-C-2 Lab Sample ID: 180-105108-2  
 Client ID: HD-COD-SW-7-0/1-0  
 Operator ID: 034635 ALS Bottle#: 14 Worklist Smp#: 14  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

93 Styrene, CAS: 100-42-5

Processing Results



RT	Mass	Response	Amount
10.98	104.00	224	0.019732
10.98	78.00	82	
10.99	103.00	73	

Reviewer: journetp, 04-May-2020 15:12:15  
 Audit Action: Marked Compound Undetected

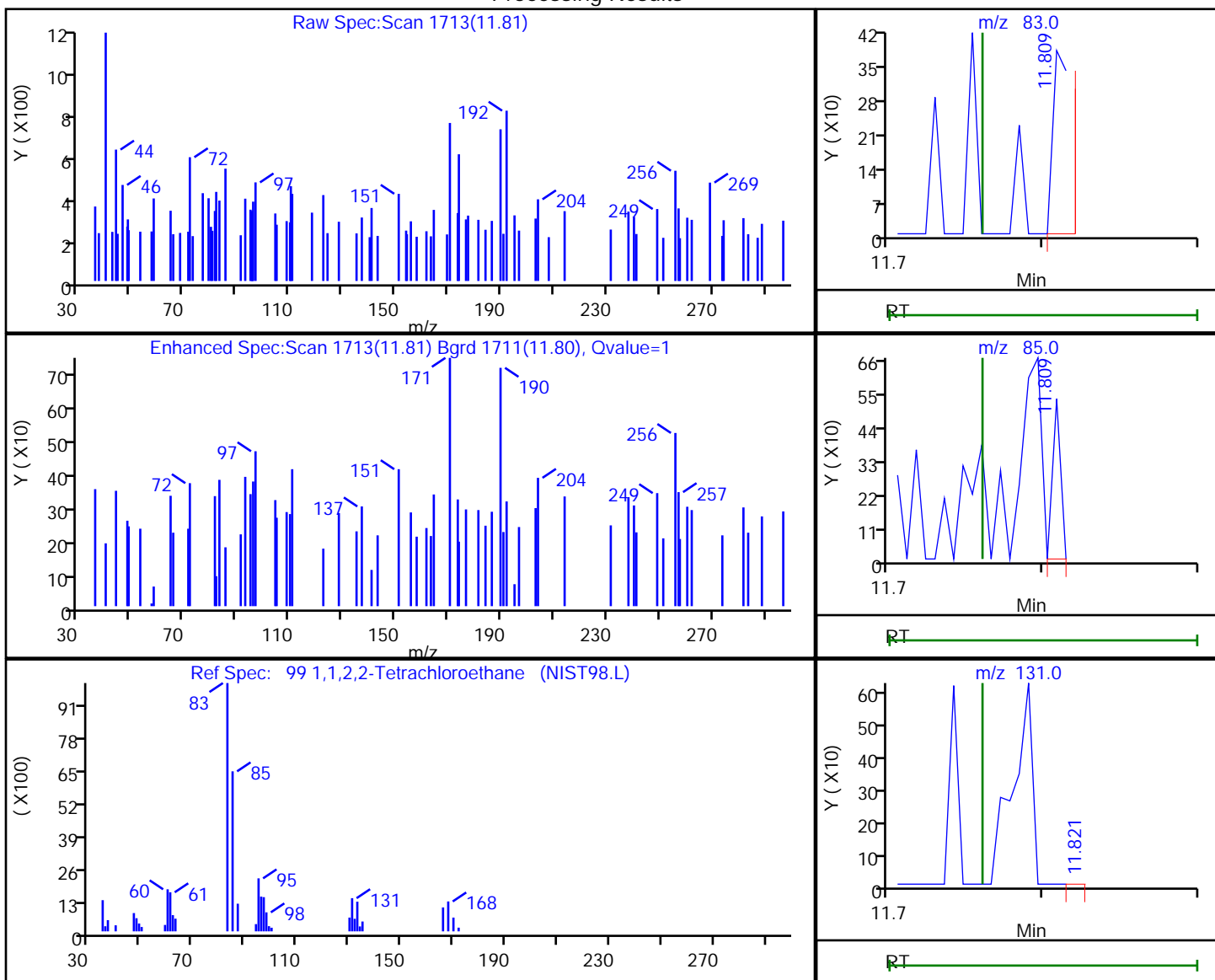
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050414.D  
 Injection Date: 04-May-2020 13:30:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-C-2 Lab Sample ID: 180-105108-2  
 Client ID: HD-COD-SW-7-0/1-0  
 Operator ID: 034635 ALS Bottle#: 14 Worklist Smp#: 14  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

99 1,1,2,2-Tetrachloroethane, CAS: 79-34-5

Processing Results



RT	Mass	Response	Amount
11.81	83.00	262	0.063880
11.81	85.00	194	
11.82	131.00	129	

Reviewer: journeyp, 04-May-2020 15:12:15  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

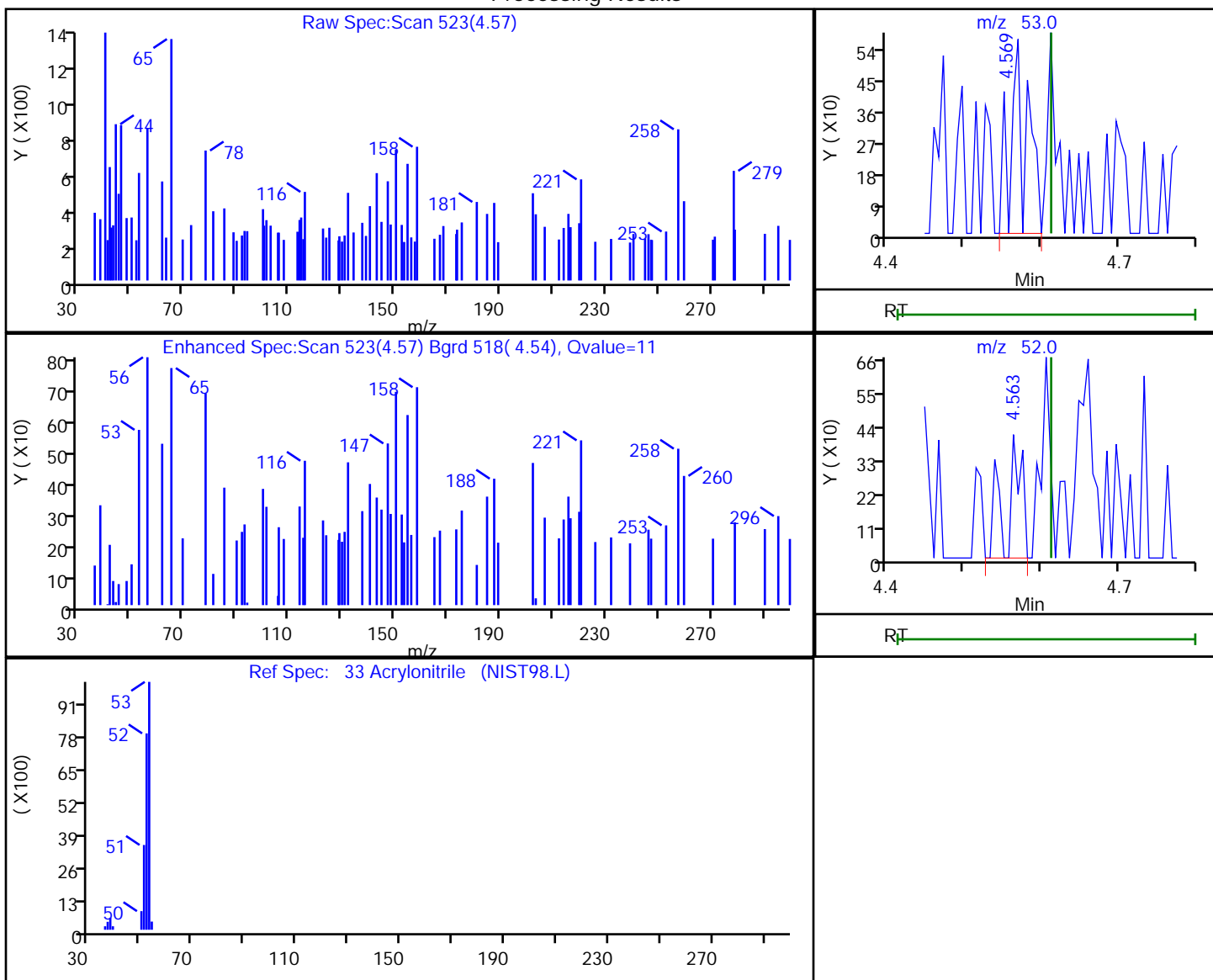


Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050414.D  
 Injection Date: 04-May-2020 13:30:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-C-2 Lab Sample ID: 180-105108-2  
 Client ID: HD-COD-SW-7-0/1-0  
 Operator ID: 034635 ALS Bottle#: 14 Worklist Smp#: 14  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

33 Acrylonitrile, CAS: 107-13-1

Processing Results



RT	Mass	Response	Amount
4.57	53.00	862	0.492472
4.56	52.00	558	

Reviewer: journtp, 04-May-2020 15:12:14  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: HD-COD-SW-8-0/1-0 Lab Sample ID: 180-105108-3  
 Matrix: Water Lab File ID: 5050119.D  
 Analysis Method: EPA 8260C Date Collected: 04/28/2020 10:20  
 Sample wt/vol: 5 (mL) Date Analyzed: 05/01/2020 22:37  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-624 ID: 0.18 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 314382 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	ND	^c	1.0	0.90
75-01-4	Vinyl chloride	ND	^c	1.0	0.40
74-83-9	Bromomethane	ND	^c *	1.0	0.89
75-00-3	Chloroethane	ND		1.0	0.90
75-35-4	1,1-Dichloroethene	ND		1.0	0.55
67-64-1	Acetone	9.6		5.0	3.4
75-15-0	Carbon disulfide	ND	^c	1.0	0.88
75-09-2	Methylene Chloride	ND		1.0	0.89
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.67
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.59
75-34-3	1,1-Dichloroethane	ND		1.0	0.31
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.71
74-97-5	Bromochloromethane	ND		1.0	0.63
78-93-3	2-Butanone (MEK)	ND		5.0	2.6
67-66-3	Chloroform	ND		1.0	0.60
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.60
56-23-5	Carbon tetrachloride	ND		1.0	0.88
71-43-2	Benzene	ND		1.0	0.60
107-06-2	1,2-Dichloroethane	ND		1.0	0.57
79-01-6	Trichloroethene	ND		1.0	0.69
78-87-5	1,2-Dichloropropane	ND		1.0	0.66
75-27-4	Bromodichloromethane	ND		1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	3.1
108-88-3	Toluene	ND		1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.58
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.45
127-18-4	Tetrachloroethene	ND		1.0	0.47
591-78-6	2-Hexanone	ND		5.0	3.3
124-48-1	Dibromochloromethane	ND		1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	ND		1.0	0.50
108-90-7	Chlorobenzene	ND		1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.57
100-41-4	Ethylbenzene	ND		1.0	0.51
1330-20-7	Xylenes, Total	ND		2.0	0.89
100-42-5	Styrene	ND		1.0	0.47

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: HD-COD-SW-8-0/1-0 Lab Sample ID: 180-105108-3  
 Matrix: Water Lab File ID: 5050119.D  
 Analysis Method: EPA 8260C Date Collected: 04/28/2020 10:20  
 Sample wt/vol: 5 (mL) Date Analyzed: 05/01/2020 22:37  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-624 ID: 0.18 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 314382 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	ND	^c	1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	ND	^c	1.0	0.60
107-13-1	Acrylonitrile	ND		20	7.8

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	86		62-146
2037-26-5	Toluene-d8 (Surr)	76		75-120
460-00-4	4-Bromofluorobenzene (Surr)	95		64-120
1868-53-7	Dibromofluoromethane (Surr)	102	^c	71-132

Eurofins TestAmerica, Pittsburgh  
Target Compound Quantitation Report

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050119.D  
 Lims ID: 180-105108-A-3  
 Client ID: HD-COD-SW-8-0/1-0  
 Sample Type: Client  
 Inject. Date: 01-May-2020 22:37:30 ALS Bottle#: 19 Worklist Smp#: 19  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: 180-0031777-019  
 Operator ID: 034635 Instrument ID: CHHP5  
 Method: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\MMSVOA\_LL\_CHHP5.m  
 Limit Group: VOA 8260C\_D ICAL  
 Last Update: 03-May-2020 16:03:33 Calib Date: 03-Apr-2020 19:09:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICAL File: \\chromna\Pittsburgh\ChromData\CHHP5\20200403-31442.b\5040310.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: CTX0317

First Level Reviewer: journetp

Date: 02-May-2020 18:47:06

Compound	Sig	RT (min.)	Exp RT (min.)	Diff RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.356	4.371	-0.015	0	303759	1000.0	
* 2 Fluorobenzene (IS)	96	7.343	7.345	-0.002	98	372877	50.0	
* 3 Chlorobenzene-d5	119	10.440	10.436	0.004	86	151466	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.770	12.772	-0.002	96	254482	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.625	6.628	-0.003	91	108989	51.2	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.990	6.993	-0.003	0	130106	43.1	
\$ 7 Toluene-d8 (Surr)	98	8.986	8.988	-0.002	94	467856	38.2	
\$ 8 4-Bromofluorobenzene (Surr	95	11.614	11.616	-0.002	88	219497	47.4	
12 Chloromethane	50		1.851				ND	U
13 Vinyl chloride	62		1.961				ND	U
15 Bromomethane	94		2.277				ND	U
16 Chloroethane	64		2.423				ND	U
22 1,1-Dichloroethene	96		3.390				ND	U
24 Acetone	43	3.517	3.512	0.005	100	61890	48.0	
26 Carbon disulfide	76		3.701				ND	U
31 Methylene Chloride	84		4.218				ND	U
33 Acrylonitrile	53		4.613				ND	U
34 trans-1,2-Dichloroethene	96		4.631				ND	U
35 Methyl tert-butyl ether	73		4.656				ND	U
37 1,1-Dichloroethane	63		5.264				ND	U
45 cis-1,2-Dichloroethene	96		6.018				ND	U
46 2-Butanone (MEK)	43		6.031				ND	U
49 Chlorobromomethane	128		6.298				ND	U
52 Chloroform	83		6.444				ND	U
53 1,1,1-Trichloroethane	97		6.596				ND	U
56 Carbon tetrachloride	117		6.761				ND	U
58 Benzene	78		6.998				ND	U
59 1,2-Dichloroethane	62		7.071				ND	U
64 Trichloroethene	130		7.728				ND	U
67 1,2-Dichloropropane	63		7.996				ND	U
71 Dichlorobromomethane	83		8.281				ND	U
74 cis-1,3-Dichloropropene	75		8.726				ND	U

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
75 4-Methyl-2-pentanone (MIBK	43		8.890				ND	U
76 Toluene	91		9.048				ND	U
77 trans-1,3-Dichloropropene	75		9.303				ND	U
79 1,1,2-Trichloroethane	97		9.498				ND	U
80 Tetrachloroethene	164		9.559				ND	U
82 2-Hexanone	43		9.717				ND	U
84 Chlorodibromomethane	129		9.869				ND	U
85 Ethylene Dibromide	107		9.973				ND	U
87 Chlorobenzene	112		10.465				ND	U
89 1,1,1,2-Tetrachloroethane	131		10.557				ND	U
90 Ethylbenzene	106		10.563				ND	U
91 m-Xylene & p-Xylene	106		10.697				ND	U
92 o-Xylene	106		11.074				ND	U
93 Styrene	104		11.098				ND	U
94 Bromoform	173		11.281				ND	U
99 1,1,2,2-Tetrachloroethane	83		11.755				ND	U
S 133 Xylenes, Total	106		1.000				ND	

**QC Flag Legend**

Review Flags

U - Marked Undetected

**Reagents:**

voaWI/SHP5\_00016

Amount Added: 5.00

Units: uL

Run Reagent

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050119.D

Injection Date: 01-May-2020 22:37:30

Instrument ID: CHHP5

Operator ID: 034635

Lims ID: 180-105108-A-3

Lab Sample ID: 180-105108-3

Worklist Smp#: 19

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

Purge Vol: 5.000 mL

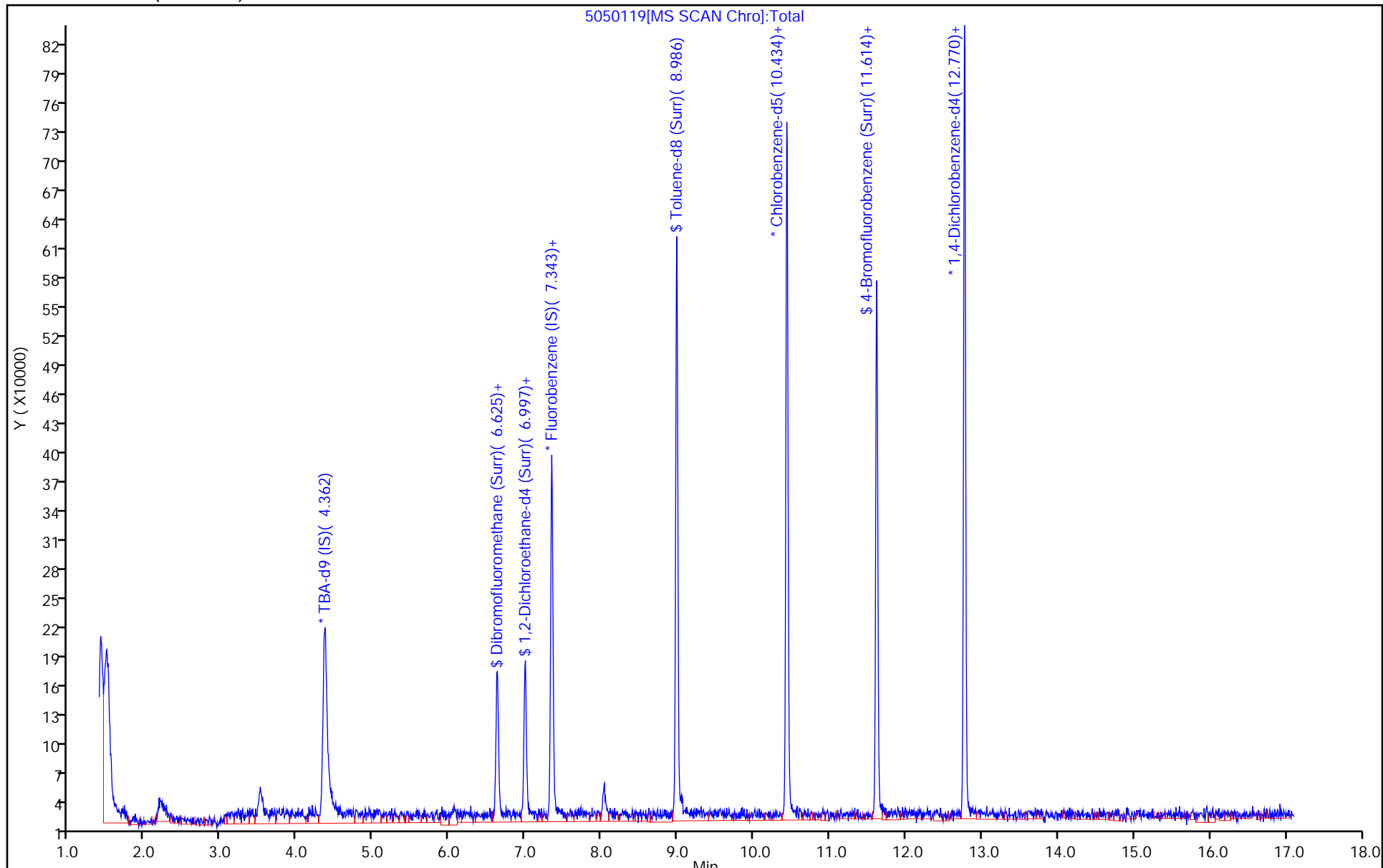
Dil. Factor: 1.0000

ALS Bottle#: 19

Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Pittsburgh  
Recovery Report

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050119.D  
 Lims ID: 180-105108-A-3  
 Client ID: HD-COD-SW-8-0/1-0  
 Sample Type: Client  
 Inject. Date: 01-May-2020 22:37:30 ALS Bottle#: 19 Worklist Smp#: 19  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: 180-0031777-019  
 Operator ID: 034635 Instrument ID: CHHP5  
 Method: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\MMSVOA\_LL\_CHHP5.m  
 Limit Group: VOA 8260C\_D ICAL  
 Last Update: 03-May-2020 16:03:33 Calib Date: 03-Apr-2020 19:09:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP5\20200403-31442.b\5040310.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: CTX0317

First Level Reviewer: journetp

Date: 02-May-2020 18:47:06

Compound	Amount Added	Amount Recovered	% Rec.
\$ 5 Dibromofluoromethane (Surr)	50.0	51.2	102.46
\$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	43.1	86.19
\$ 7 Toluene-d8 (Surr)	50.0	38.2	76.32
\$ 8 4-Bromofluorobenzene (Surr)	50.0	47.4	94.73

Euofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050119.D

Injection Date: 01-May-2020 22:37:30

Instrument ID: CHHP5

Lims ID: 180-105108-A-3

Lab Sample ID: 180-105108-3

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

Operator ID: 034635

ALS Bottle#: 19

Worklist Smp#: 19

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

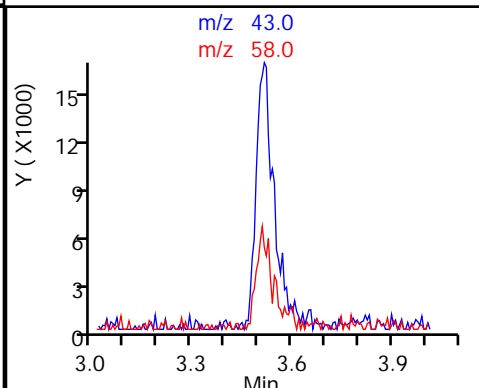
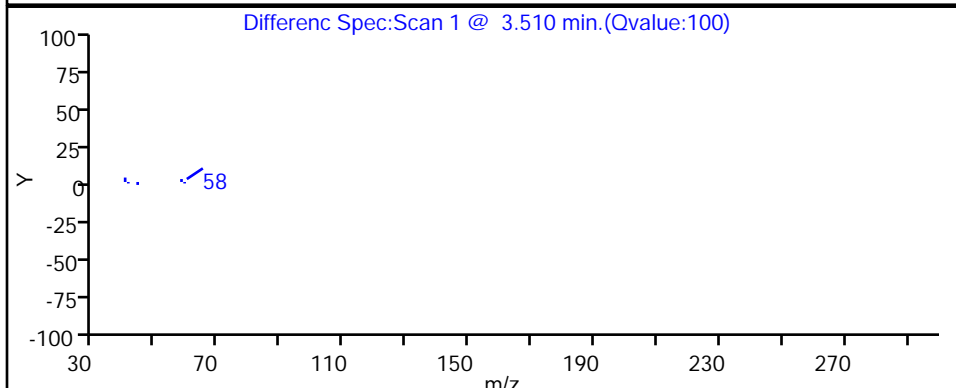
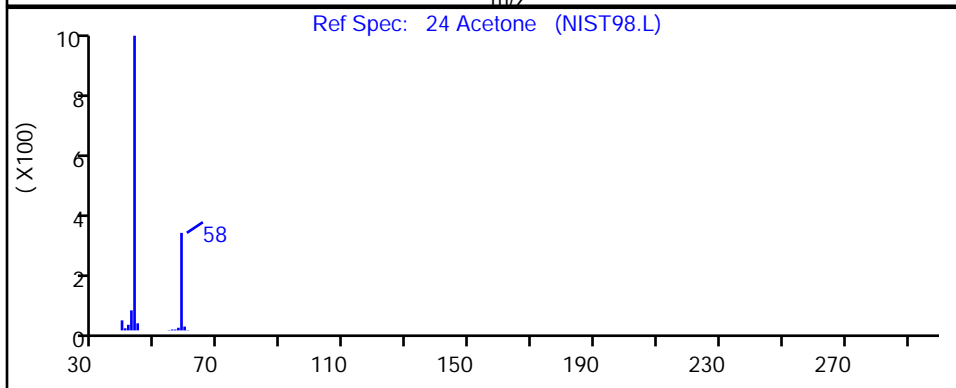
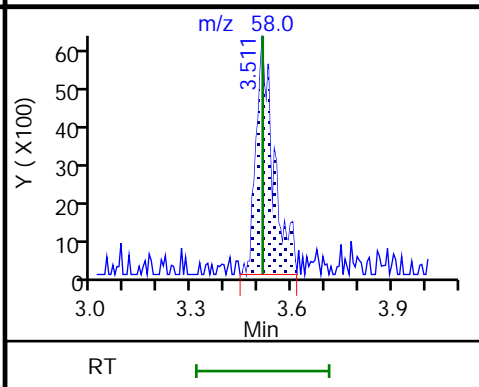
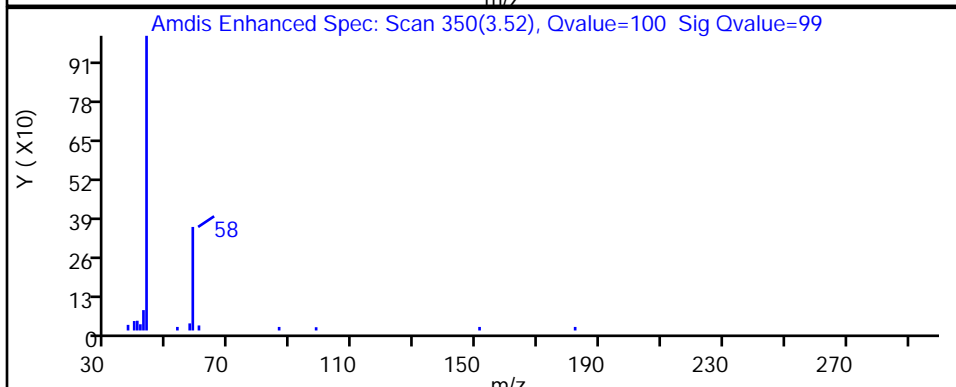
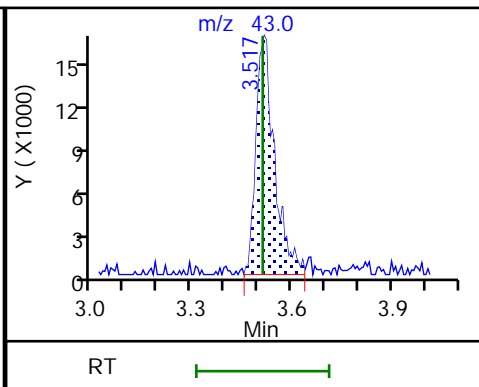
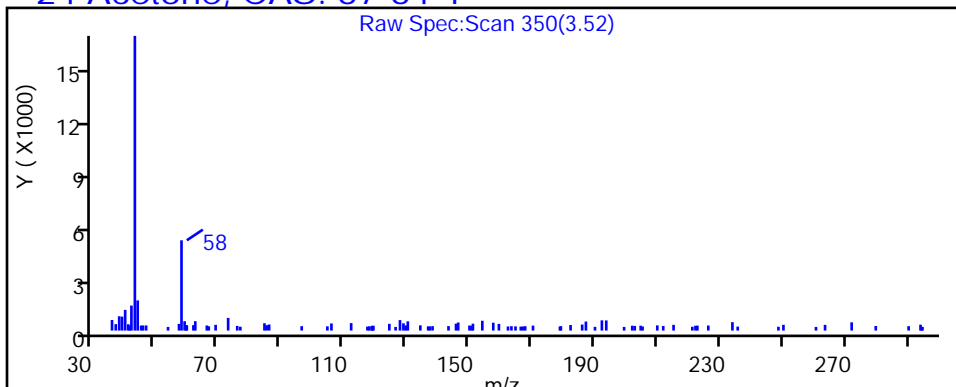
Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

24 Acetone, CAS: 67-64-1





Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050119.D

Injection Date: 01-May-2020 22:37:30

Instrument ID: CHHP5

Lims ID: 180-105108-A-3

Lab Sample ID: 180-105108-3

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

Operator ID: 034635

ALS Bottle#: 19 Worklist Smp#: 19

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

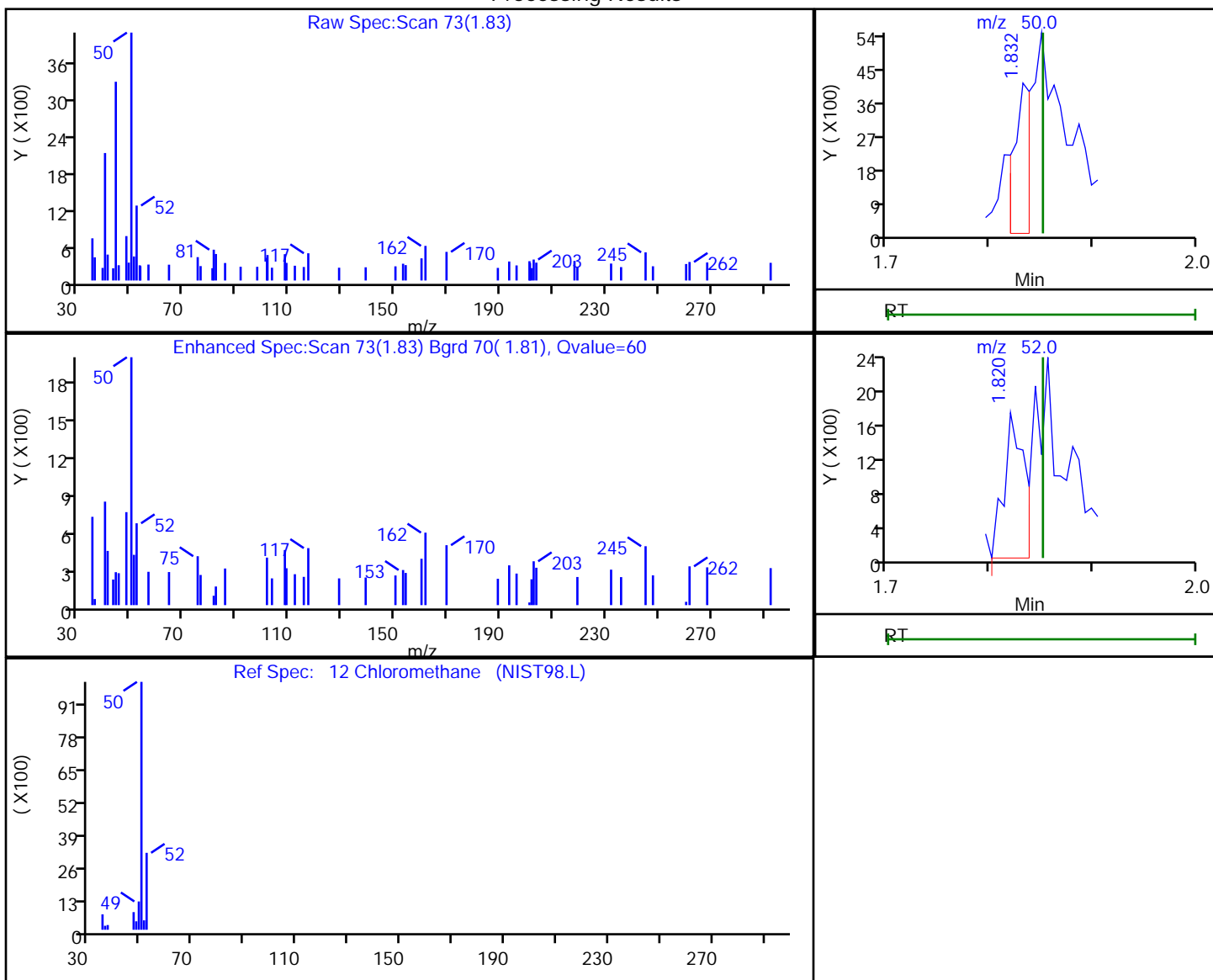
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

12 Chloromethane, CAS: 74-87-3

Processing Results



RT	Mass	Response	Amount
1.83	50.00	4593	1.262681
1.82	52.00	2286	

Reviewer: journtp, 02-May-2020 18:47:04

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050119.D

Injection Date: 01-May-2020 22:37:30

Instrument ID: CHHP5

Lims ID: 180-105108-A-3

Lab Sample ID: 180-105108-3

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

Operator ID: 034635

ALS Bottle#: 19 Worklist Smp#: 19

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

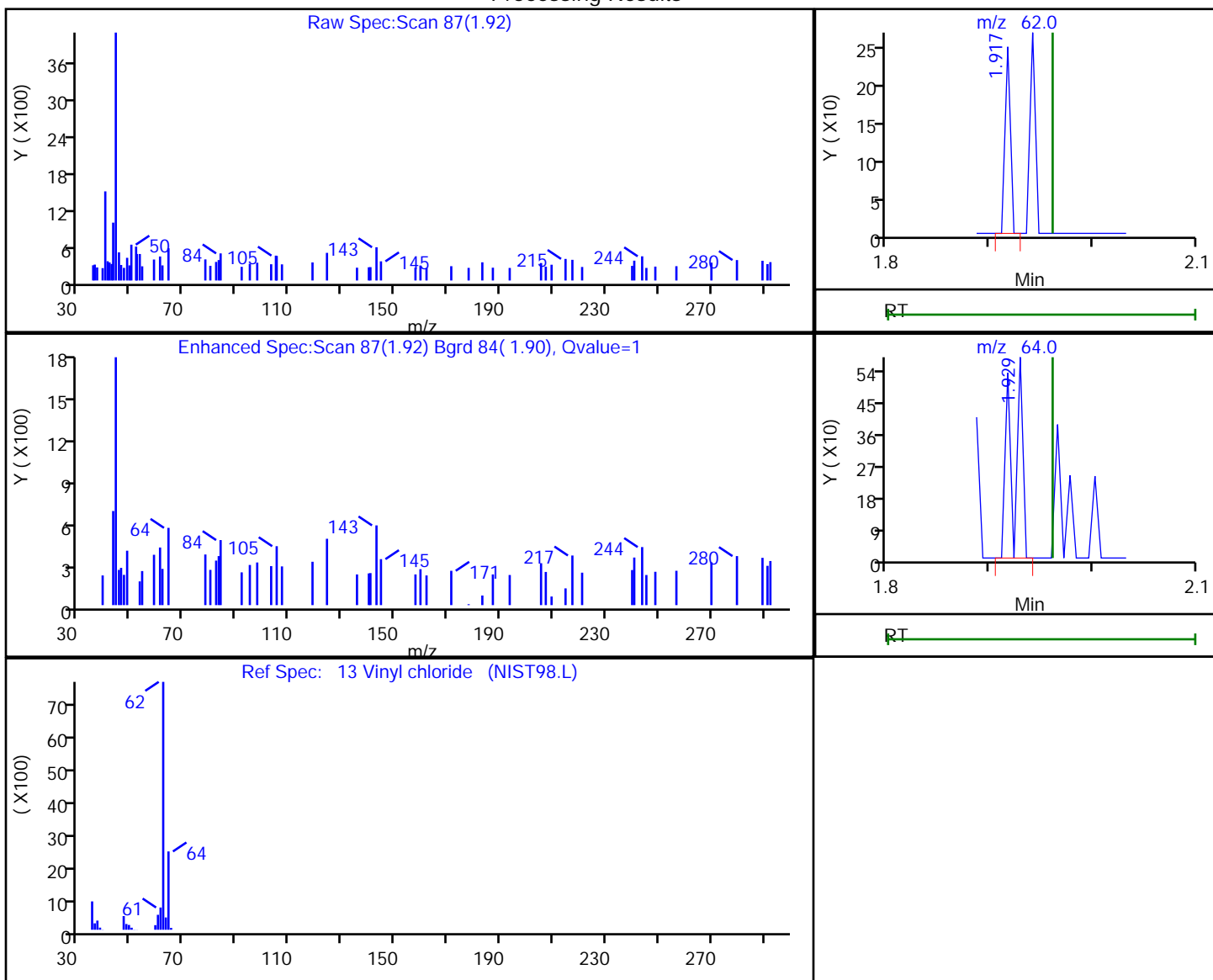
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

13 Vinyl chloride, CAS: 75-01-4

Processing Results



RT	Mass	Response	Amount
1.92	62.00	91	0.028092
1.93	64.00	404	

Reviewer: journetp, 02-May-2020 18:47:04

Audit Action: Marked Compound Undetected

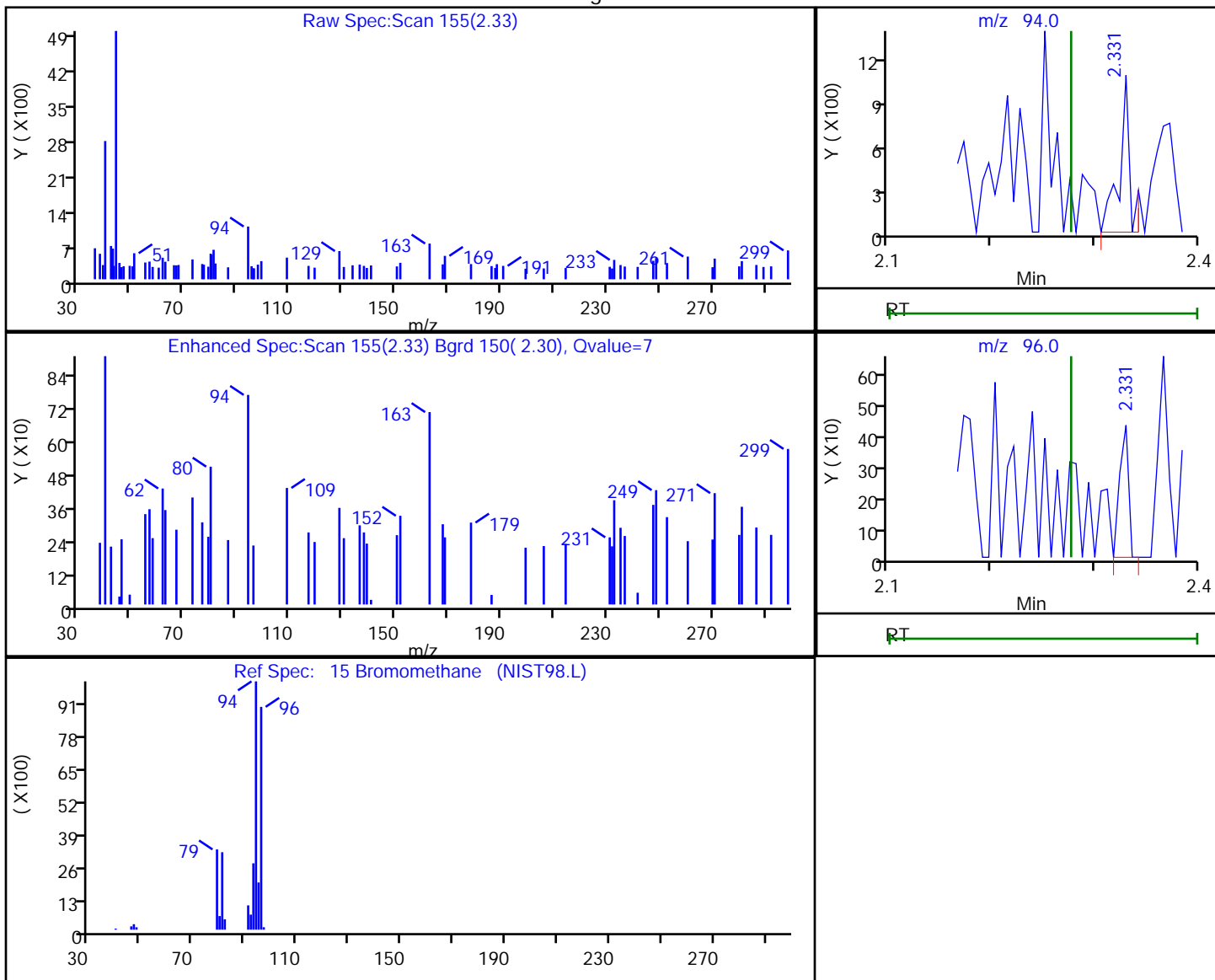
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050119.D  
Injection Date: 01-May-2020 22:37:30 Instrument ID: CHHP5  
Lims ID: 180-105108-A-3 Lab Sample ID: 180-105108-3  
Client ID: HD-COD-SW-8-0/1-0  
Operator ID: 034635 ALS Bottle#: 19 Worklist Smp#: 19  
Purge Vol: 5.000 mL Dil. Factor: 1.0000  
Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
Column: DB-624 (0.18 mm) Detector: MS SCAN

15 Bromomethane, CAS: 74-83-9

Processing Results



RT	Mass	Response	Amount
2.33	94.00	748	0.403293
2.33	96.00	257	

Reviewer: journtp, 02-May-2020 18:47:04

Audit Action: Marked Compound Undetected

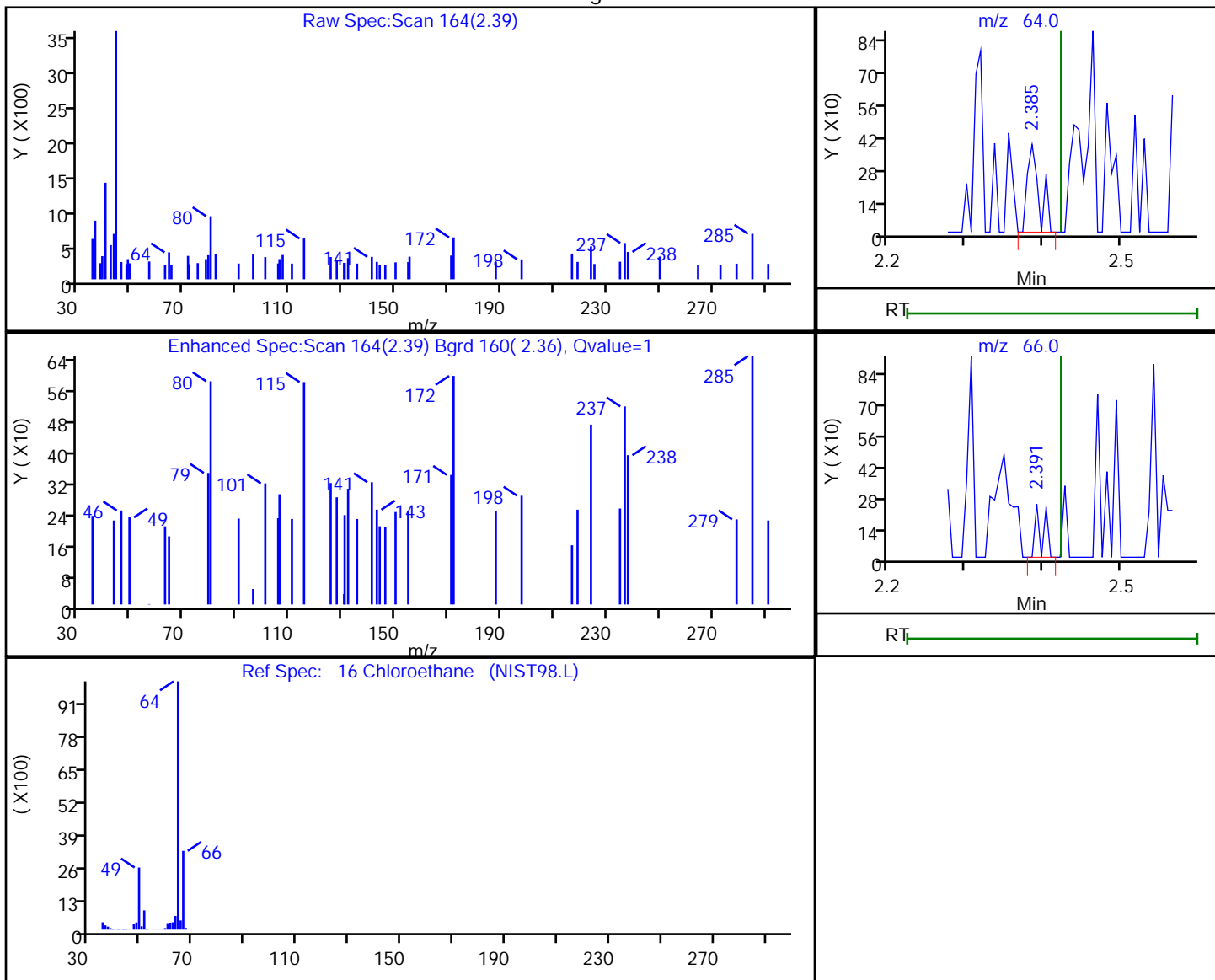
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050119.D  
Injection Date: 01-May-2020 22:37:30 Instrument ID: CHHP5  
Lims ID: 180-105108-A-3 Lab Sample ID: 180-105108-3  
Client ID: HD-COD-SW-8-0/1-0  
Operator ID: 034635 ALS Bottle#: 19 Worklist Smp#: 19  
Purge Vol: 5.000 mL Dil. Factor: 1.0000  
Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
Column: DB-624 (0.18 mm) Detector: MS SCAN

16 Chloroethane, CAS: 75-00-3

Processing Results



RT	Mass	Response	Amount
2.39	64.00	410	0.186563
2.39	66.00	172	

Reviewer: journtp, 02-May-2020 18:47:04  
Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050119.D

Injection Date: 01-May-2020 22:37:30

Instrument ID: CHHP5

Lims ID: 180-105108-A-3

Lab Sample ID: 180-105108-3

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

Operator ID: 034635

ALS Bottle#: 19 Worklist Smp#: 19

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

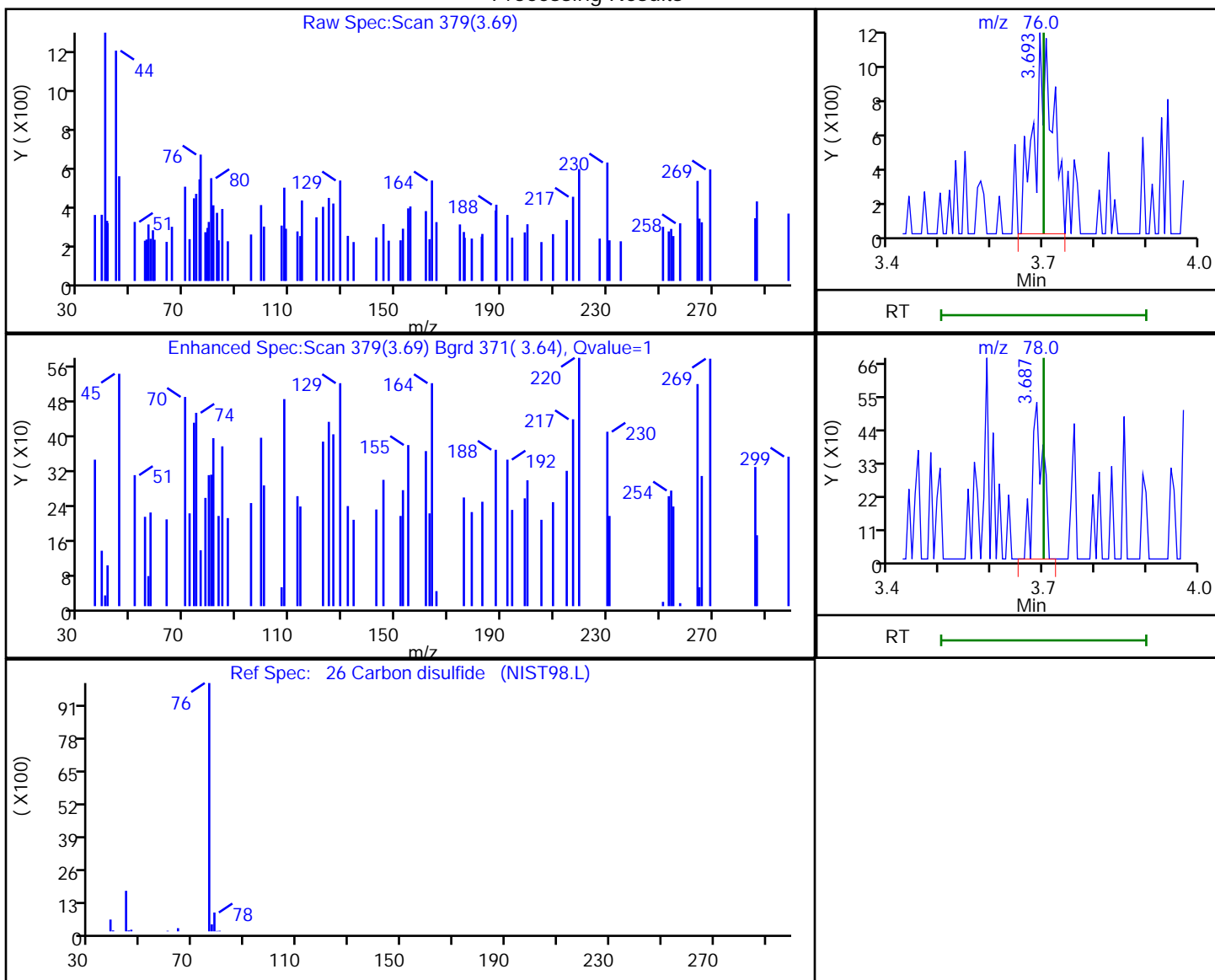
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

26 Carbon disulfide, CAS: 75-15-0

Processing Results



RT	Mass	Response	Amount
3.69	76.00	2951	0.704079
3.69	78.00	762	

Reviewer: journtp, 02-May-2020 18:46:58

Audit Action: Marked Compound Undetected

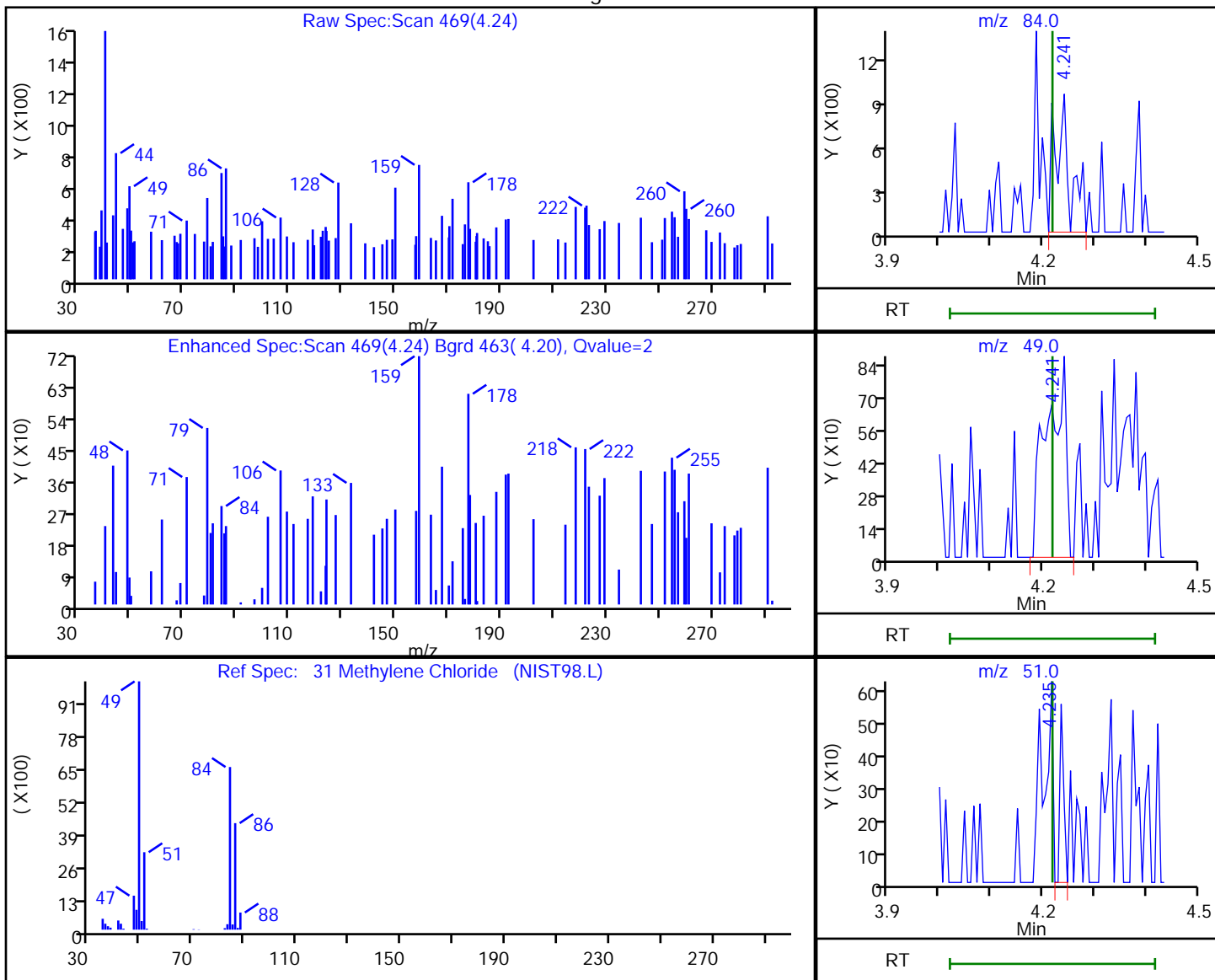
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050119.D  
 Injection Date: 01-May-2020 22:37:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-A-3 Lab Sample ID: 180-105108-3  
 Client ID: HD-COD-SW-8-0/1-0  
 Operator ID: 034635 ALS Bottle#: 19 Worklist Smp#: 19  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

31 Methylene Chloride, CAS: 75-09-2

Processing Results



RT	Mass	Response	Amount
4.24	84.00	1874	-0.924942
4.24	49.00	2259	
4.23	51.00	291	

Reviewer: journept, 02-May-2020 18:46:58  
 Audit Action: Marked Compound Undetected

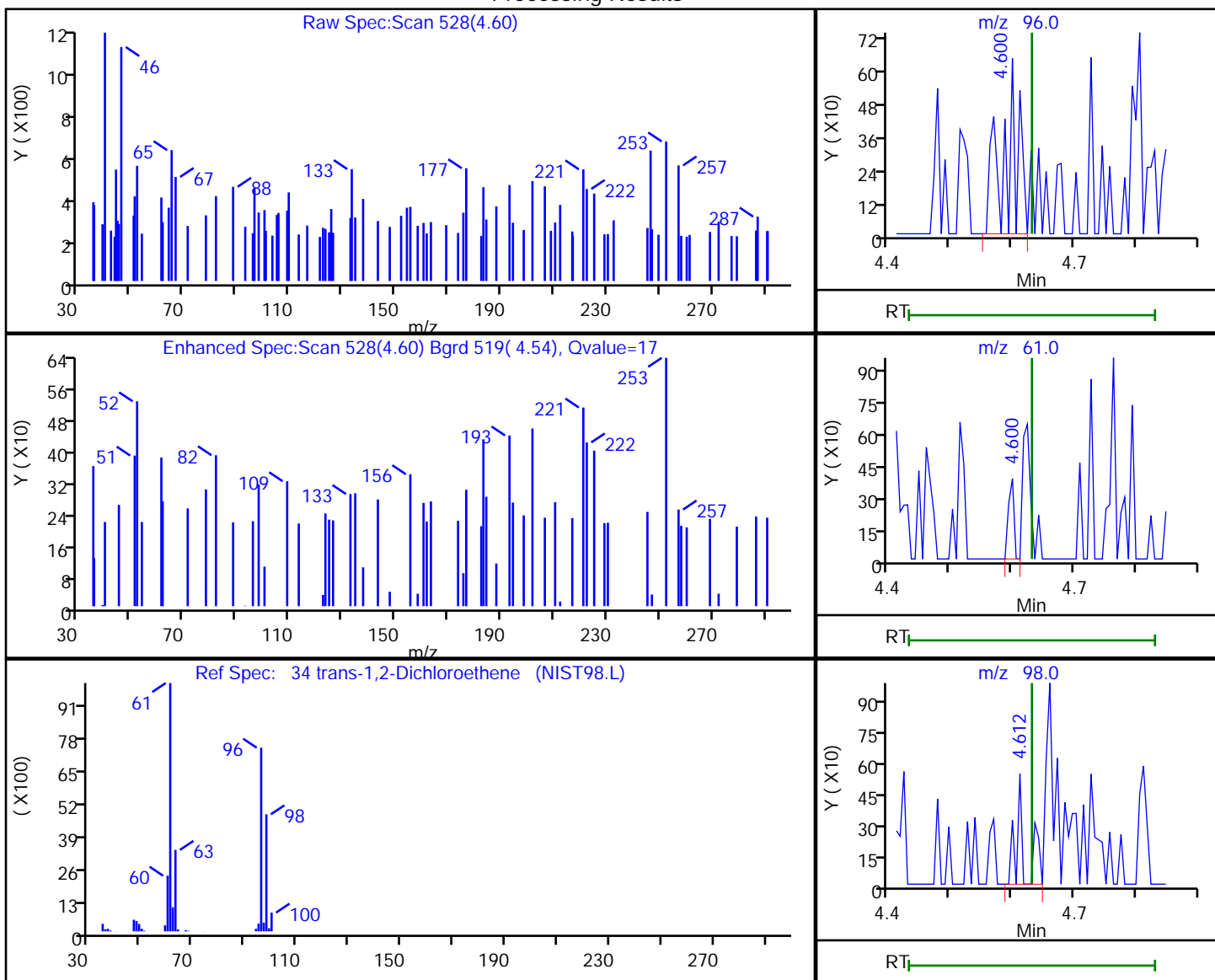
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050119.D  
 Injection Date: 01-May-2020 22:37:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-A-3 Lab Sample ID: 180-105108-3  
 Client ID: HD-COD-SW-8-0/1-0  
 Operator ID: 034635 ALS Bottle#: 19 Worklist Smp#: 19  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

34 trans-1,2-Dichloroethene, CAS: 156-60-5

Processing Results



RT	Mass	Response	Amount
4.60	96.00	1026	0.503365
4.60	61.00	236	
4.61	98.00	505	

Reviewer: journept, 02-May-2020 18:46:58  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050119.D

Injection Date: 01-May-2020 22:37:30

Instrument ID: CHHP5

Lims ID: 180-105108-A-3

Lab Sample ID: 180-105108-3

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

Operator ID: 034635

ALS Bottle#: 19 Worklist Smp#: 19

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

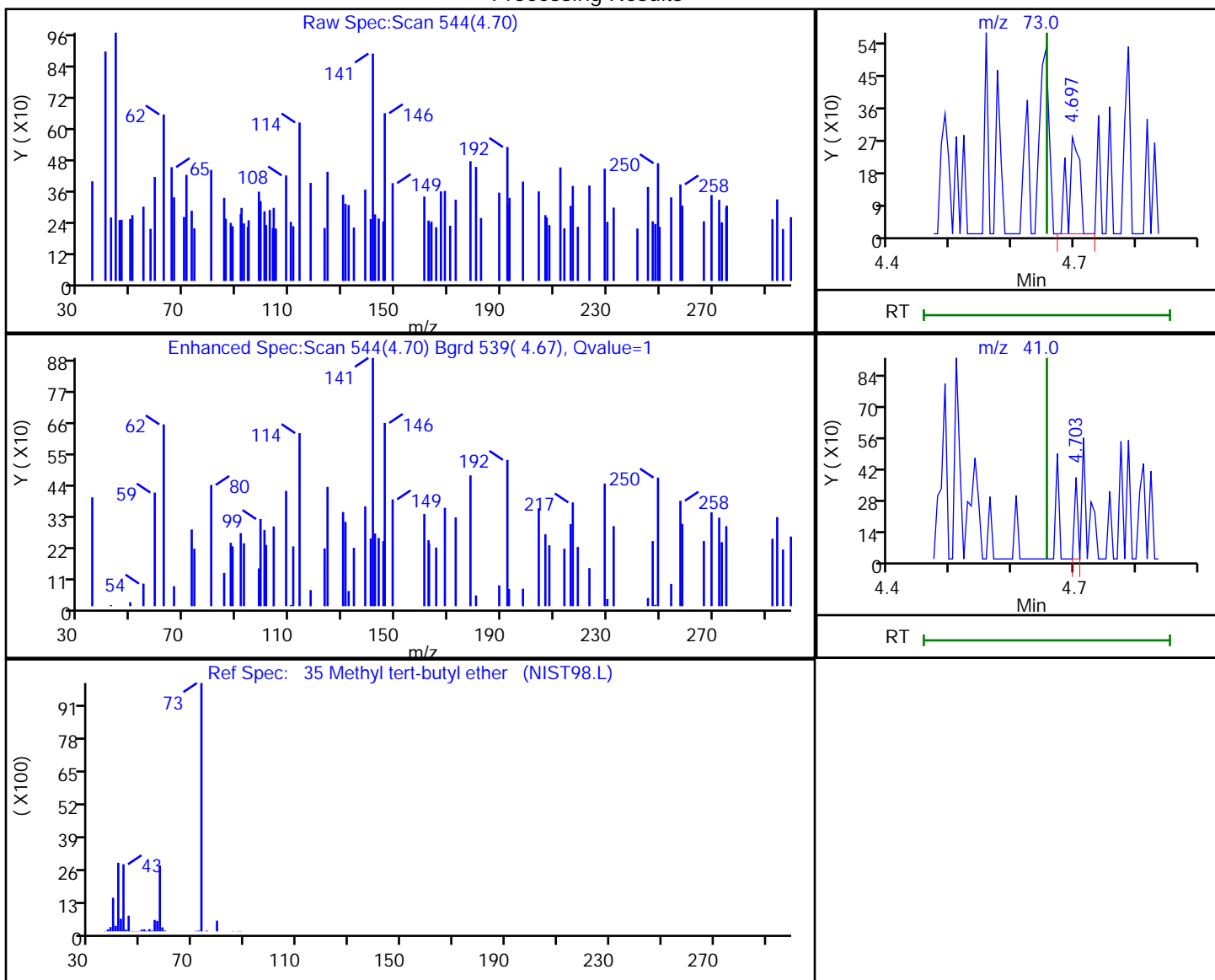
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

35 Methyl tert-butyl ether, CAS: 1634-04-4

Processing Results



RT	Mass	Response	Amount
4.70	73.00	339	0.059263
4.70	41.00	136	

Reviewer: journetp, 02-May-2020 18:46:58

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

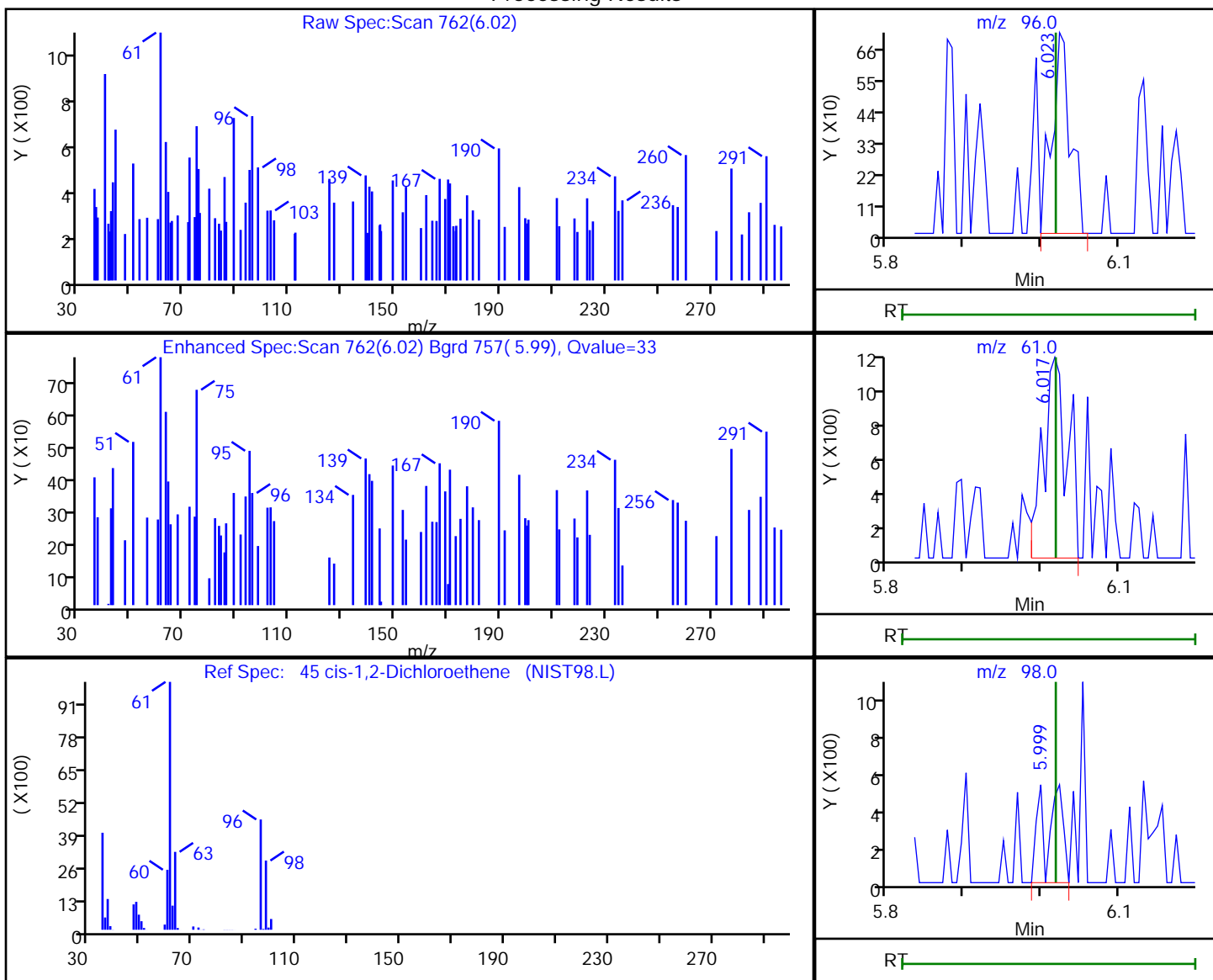


Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050119.D  
 Injection Date: 01-May-2020 22:37:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-A-3 Lab Sample ID: 180-105108-3  
 Client ID: HD-COD-SW-8-0/1-0  
 Operator ID: 034635 ALS Bottle#: 19 Worklist Smp#: 19  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

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

Processing Results



RT	Mass	Response	Amount
6.02	96.00	1191	0.491066
6.02	61.00	2556	
6.00	98.00	823	

Reviewer: journept, 02-May-2020 18:46:58  
 Audit Action: Marked Compound Undetected

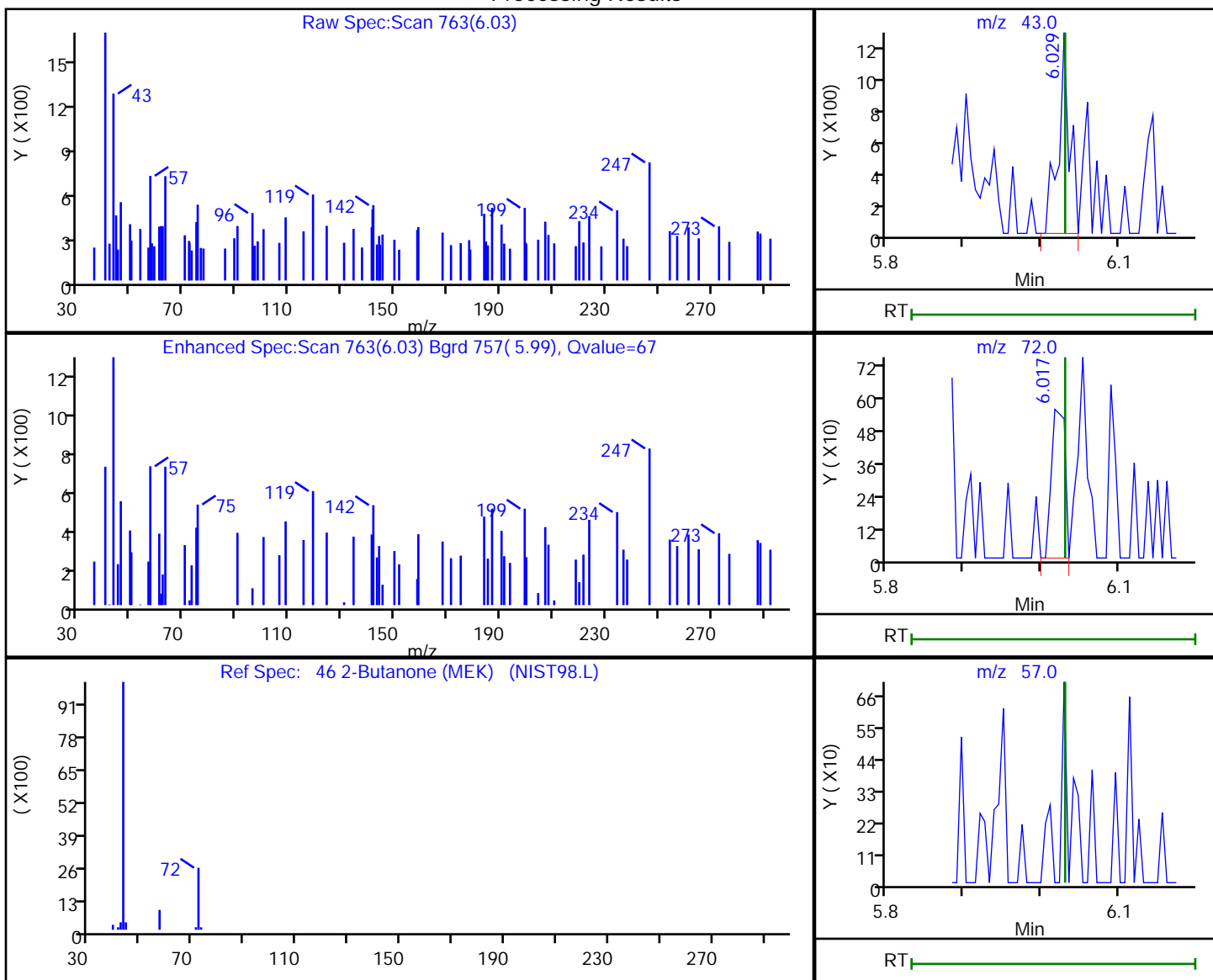
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050119.D  
 Injection Date: 01-May-2020 22:37:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-A-3 Lab Sample ID: 180-105108-3  
 Client ID: HD-COD-SW-8-0/1-0  
 Operator ID: 034635 ALS Bottle#: 19 Worklist Smp#: 19  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

46 2-Butanone (MEK), CAS: 78-93-3

Processing Results



RT	Mass	Response	Amount
6.03	43.00	1283	0.936901
6.02	72.00	678	
6.03	57.00	0	

Reviewer: journept, 02-May-2020 18:46:59  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050119.D

Injection Date: 01-May-2020 22:37:30

Instrument ID: CHHP5

Lims ID: 180-105108-A-3

Lab Sample ID: 180-105108-3

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

Operator ID: 034635

ALS Bottle#: 19 Worklist Smp#: 19

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

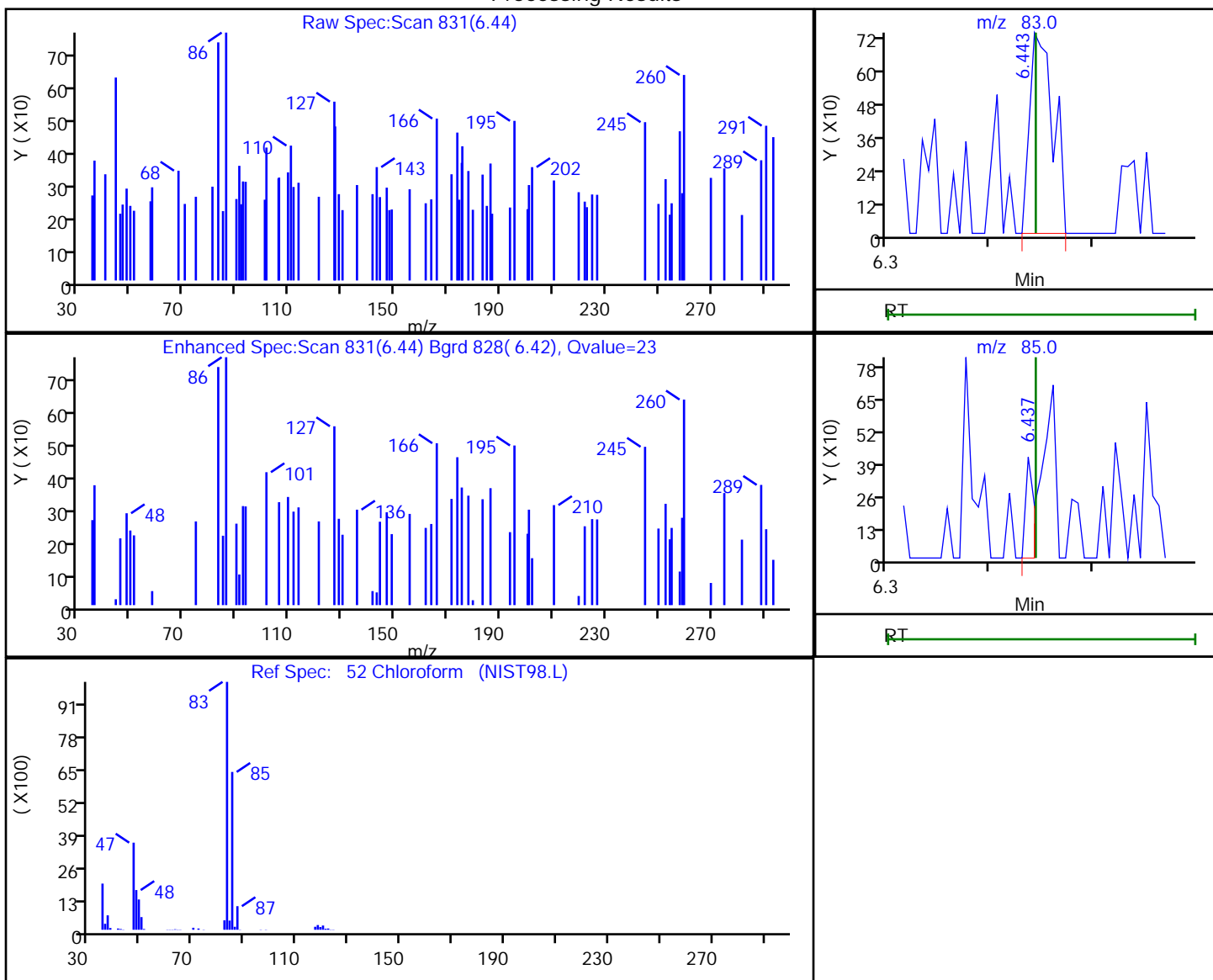
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

52 Chloroform, CAS: 67-66-3

Processing Results



RT	Mass	Response	Amount
6.44	83.00	1160	-1.457353
6.44	85.00	227	

Reviewer: journetp, 02-May-2020 18:46:59

Audit Action: Marked Compound Undetected

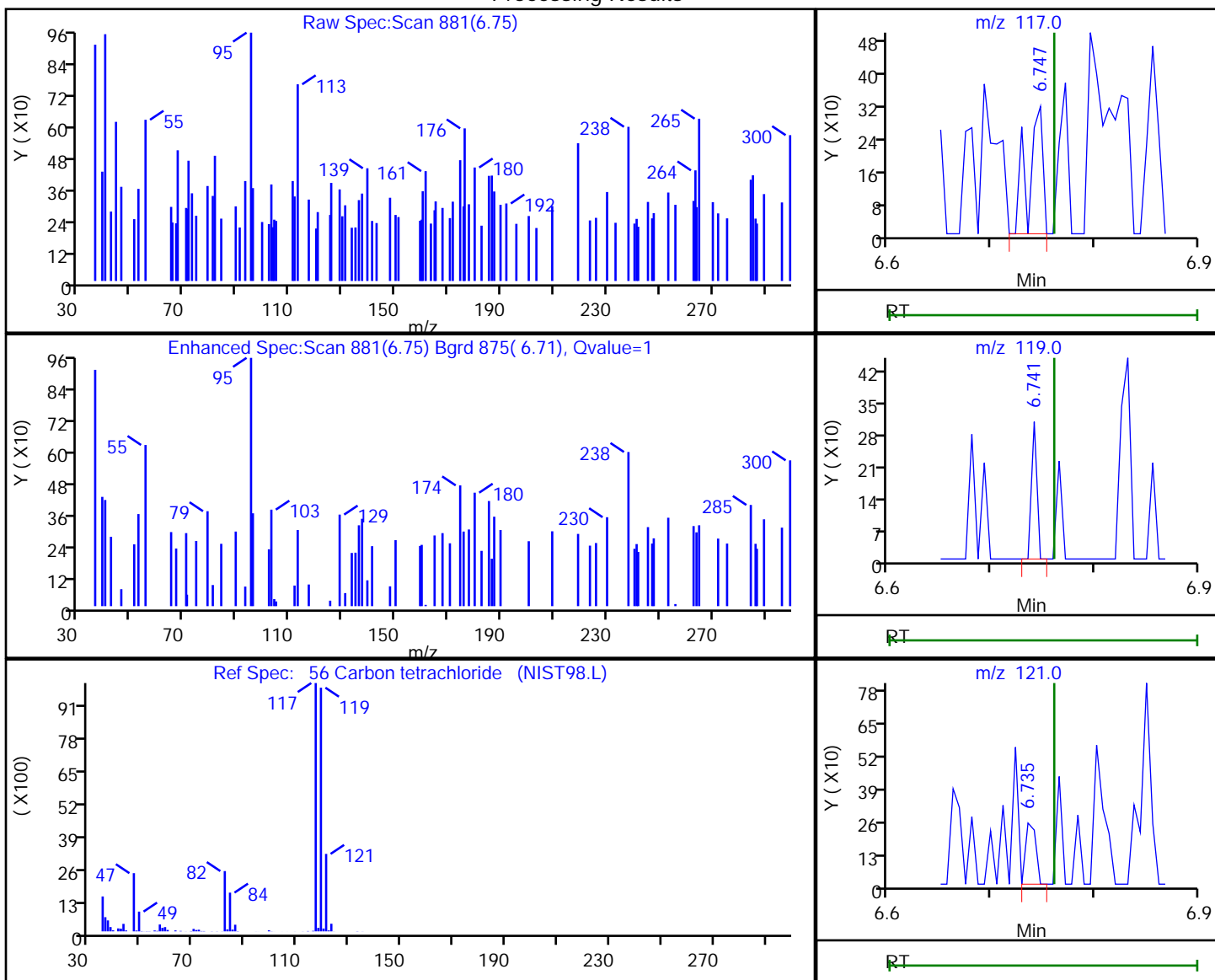
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050119.D  
 Injection Date: 01-May-2020 22:37:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-A-3 Lab Sample ID: 180-105108-3  
 Client ID: HD-COD-SW-8-0/1-0  
 Operator ID: 034635 ALS Bottle#: 19 Worklist Smp#: 19  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

56 Carbon tetrachloride, CAS: 56-23-5

Processing Results



RT	Mass	Response	Amount
6.75	117.00	304	0.120482
6.74	119.00	112	
6.73	121.00	168	

Reviewer: journetp, 02-May-2020 18:46:59  
 Audit Action: Marked Compound Undetected

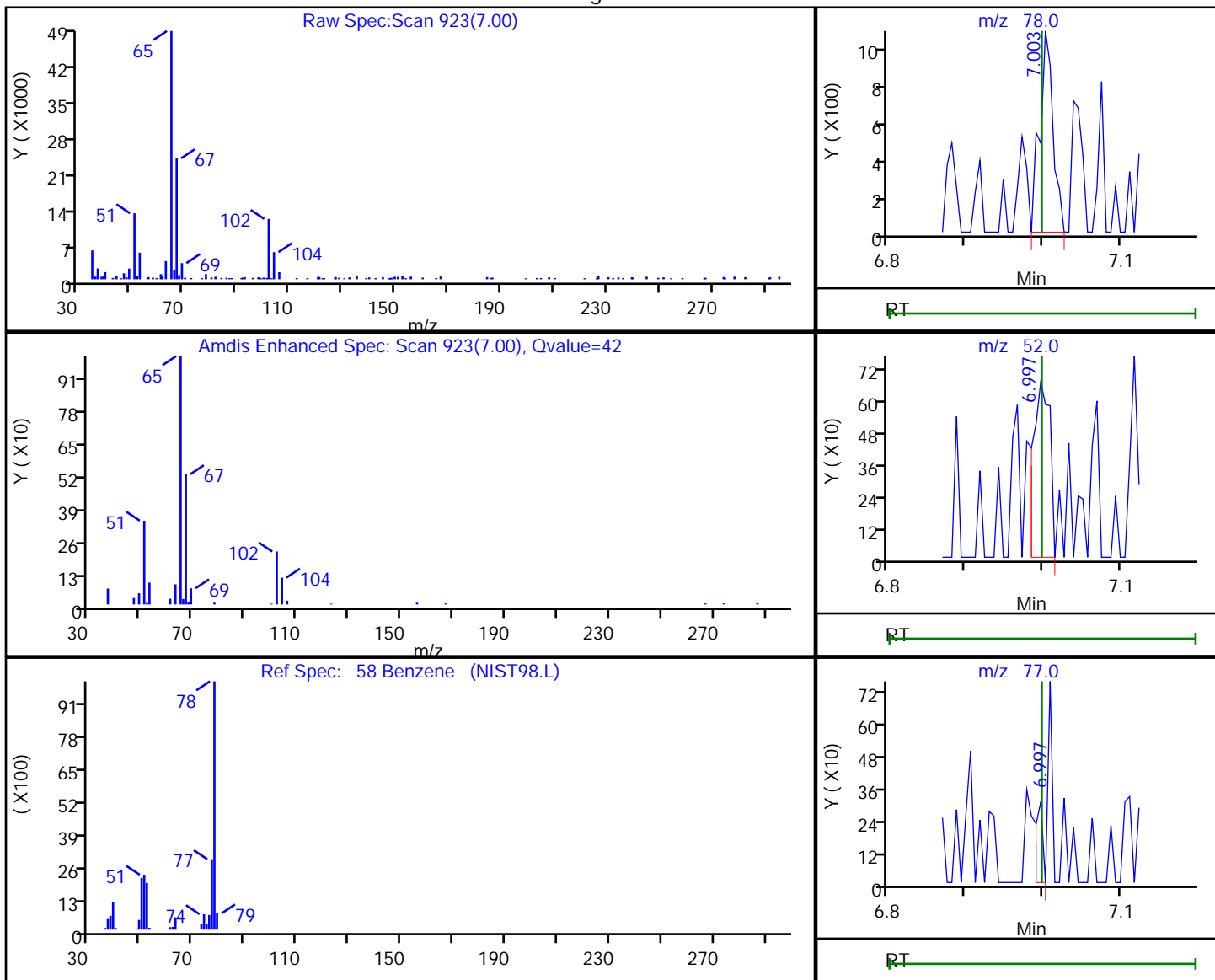
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050119.D  
Injection Date: 01-May-2020 22:37:30 Instrument ID: CHHP5  
Lims ID: 180-105108-A-3 Lab Sample ID: 180-105108-3  
Client ID: HD-COD-SW-8-0/1-0  
Operator ID: 034635 ALS Bottle#: 19 Worklist Smp#: 19  
Purge Vol: 5.000 mL Dil. Factor: 1.0000  
Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
Column: DB-624 (0.18 mm) Detector: MS SCAN

58 Benzene, CAS: 71-43-2

Processing Results



RT	Mass	Response	Amount
7.00	78.00	1207	0.131514
7.00	52.00	1001	
7.00	77.00	191	

Reviewer: journeyp, 02-May-2020 18:46:59  
Audit Action: Marked Compound Undetected

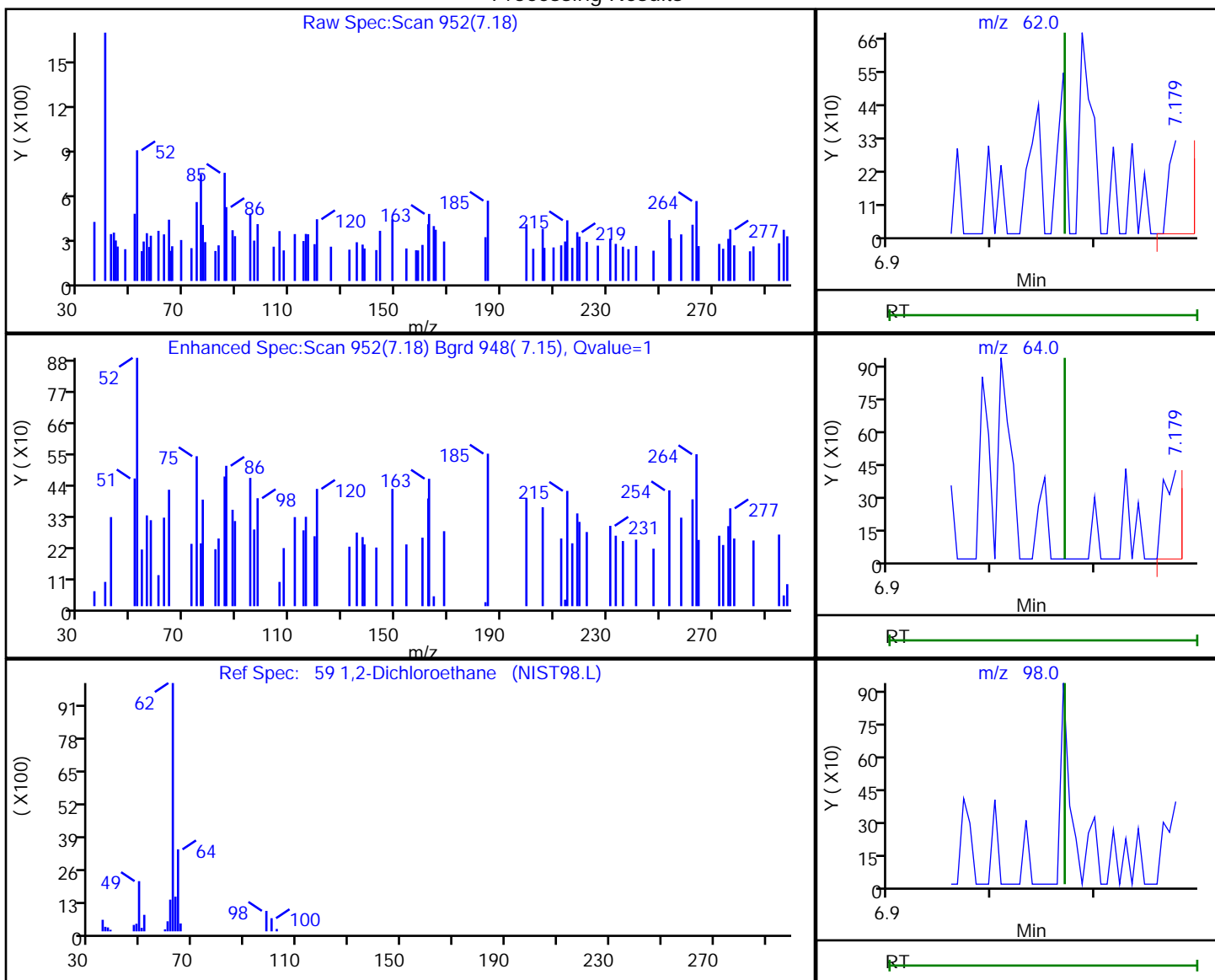
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050119.D  
 Injection Date: 01-May-2020 22:37:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-A-3 Lab Sample ID: 180-105108-3  
 Client ID: HD-COD-SW-8-0/1-0  
 Operator ID: 034635 ALS Bottle#: 19 Worklist Smp#: 19  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

59 1,2-Dichloroethane, CAS: 107-06-2

Processing Results



RT	Mass	Response	Amount
7.18	62.00	305	0.087401
7.18	64.00	395	
7.20	98.00	911	

Reviewer: journept, 02-May-2020 18:46:59  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050119.D

Injection Date: 01-May-2020 22:37:30

Instrument ID: CHHP5

Lims ID: 180-105108-A-3

Lab Sample ID: 180-105108-3

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

Operator ID: 034635

ALS Bottle#: 19 Worklist Smp#: 19

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

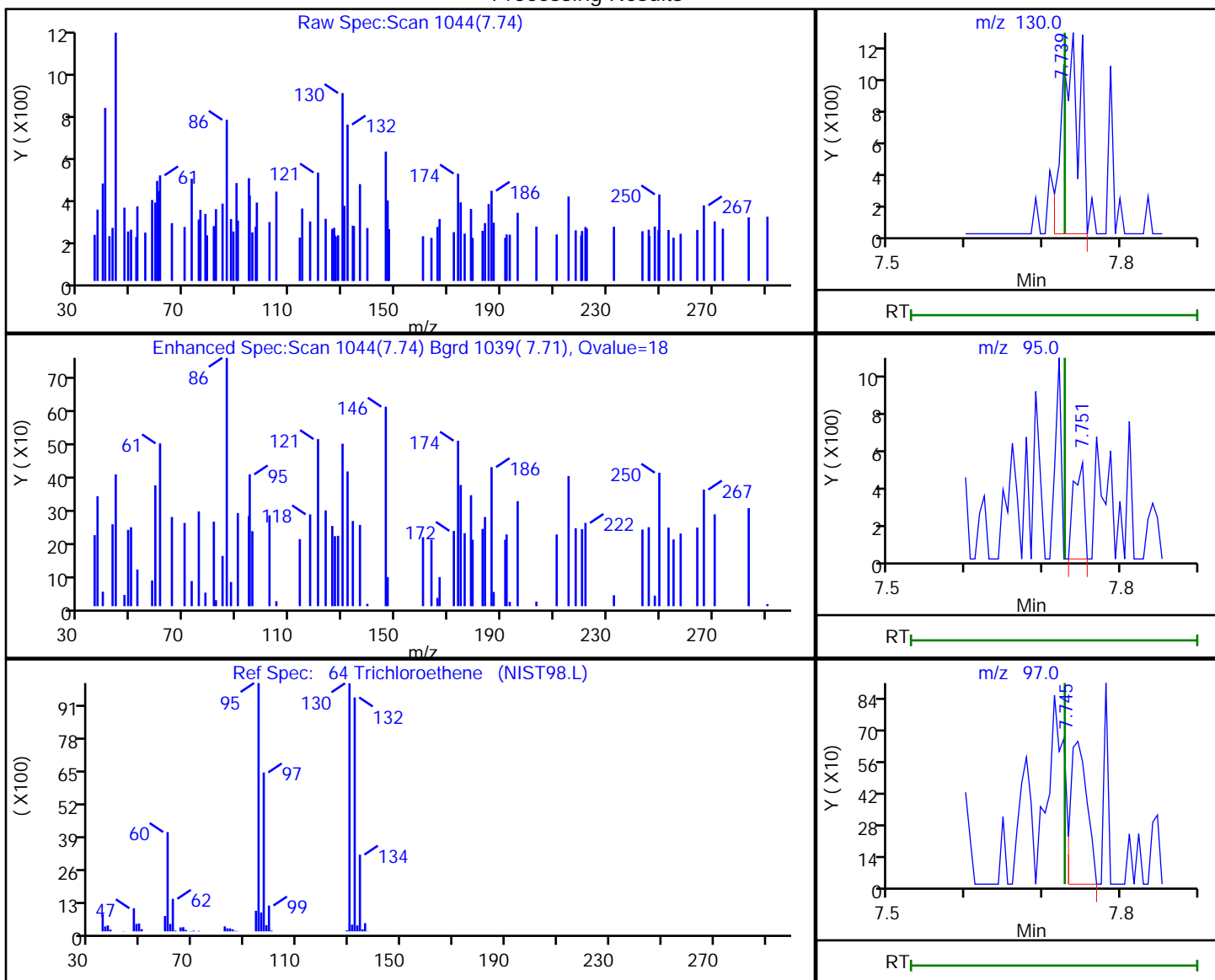
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

64 Trichloroethene, CAS: 79-01-6

Processing Results



RT	Mass	Response	Amount
7.74	130.00	1930	0.844425
7.75	95.00	464	
7.74	97.00	955	

Reviewer: journeyp, 02-May-2020 18:46:59

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050119.D

Injection Date: 01-May-2020 22:37:30

Instrument ID: CHHP5

Lims ID: 180-105108-A-3

Lab Sample ID: 180-105108-3

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

Operator ID: 034635

ALS Bottle#: 19 Worklist Smp#: 19

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

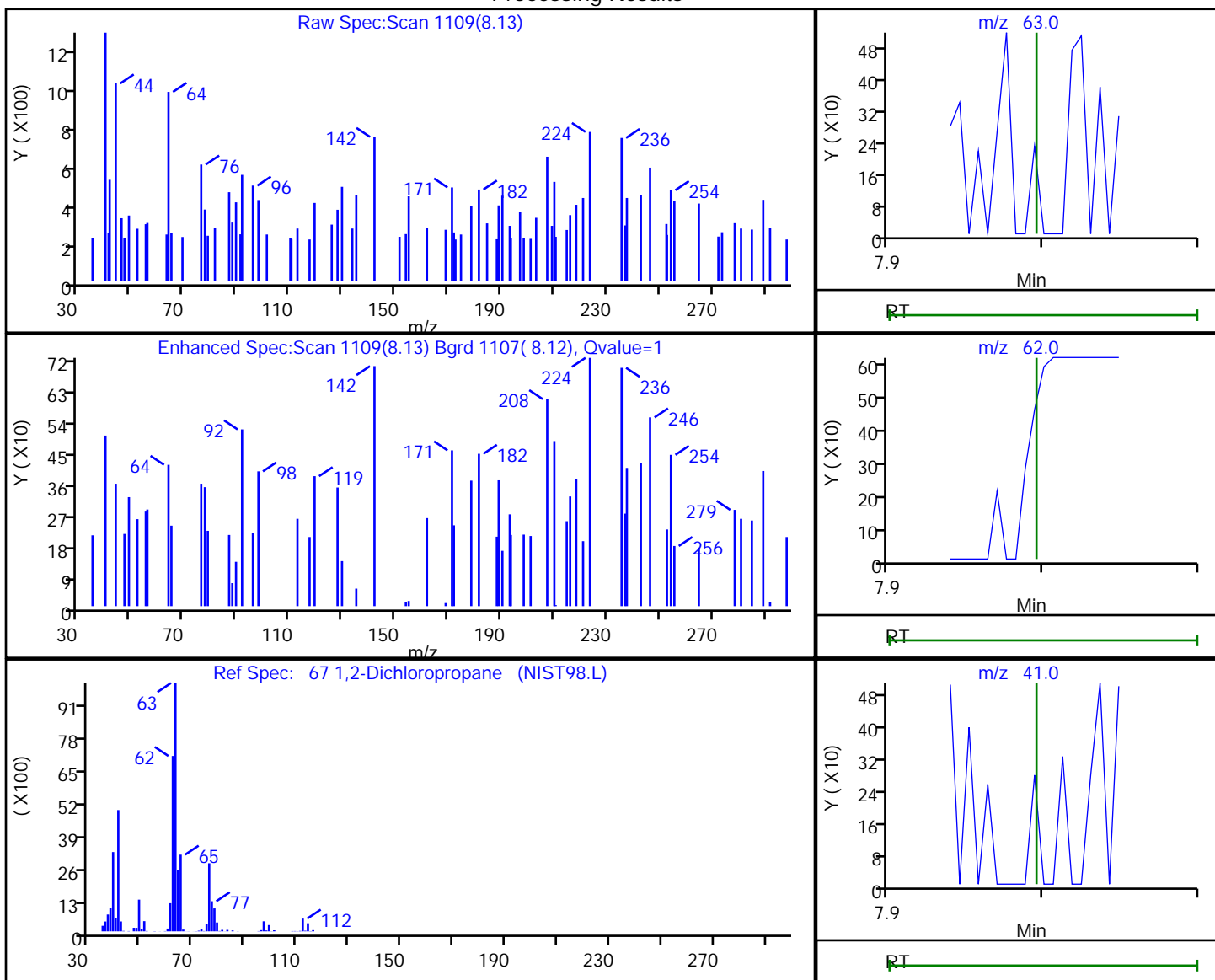
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

67 1,2-Dichloropropane, CAS: 78-87-5

Processing Results



RT	Mass	Response	Amount
8.13	63.00	82	0.033474
8.14	62.00	112	
8.13	41.00	687	

Reviewer: journetp, 02-May-2020 18:46:59

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID



Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050119.D

Injection Date: 01-May-2020 22:37:30

Instrument ID: CHHP5

Lims ID: 180-105108-A-3

Lab Sample ID: 180-105108-3

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

Operator ID: 034635

ALS Bottle#: 19 Worklist Smp#: 19

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

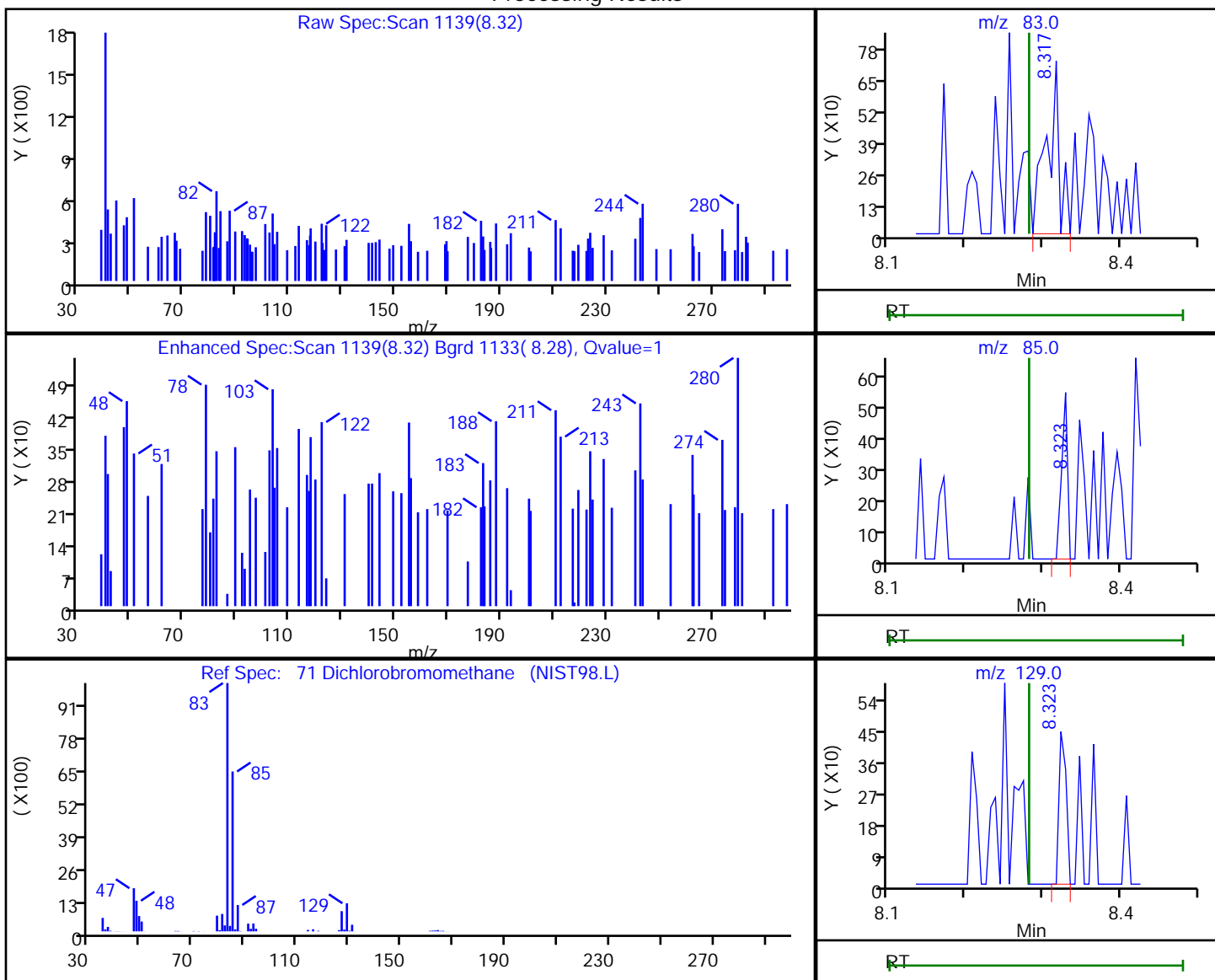
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

71 Dichlorobromomethane, CAS: 75-27-4

Processing Results



RT	Mass	Response	Amount
8.32	83.00	839	0.291886
8.32	85.00	286	
8.32	129.00	285	

Reviewer: journeyp, 02-May-2020 18:46:59

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050119.D

Injection Date: 01-May-2020 22:37:30

Instrument ID: CHHP5

Lims ID: 180-105108-A-3

Lab Sample ID: 180-105108-3

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

Operator ID: 034635

ALS Bottle#: 19 Worklist Smp#: 19

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

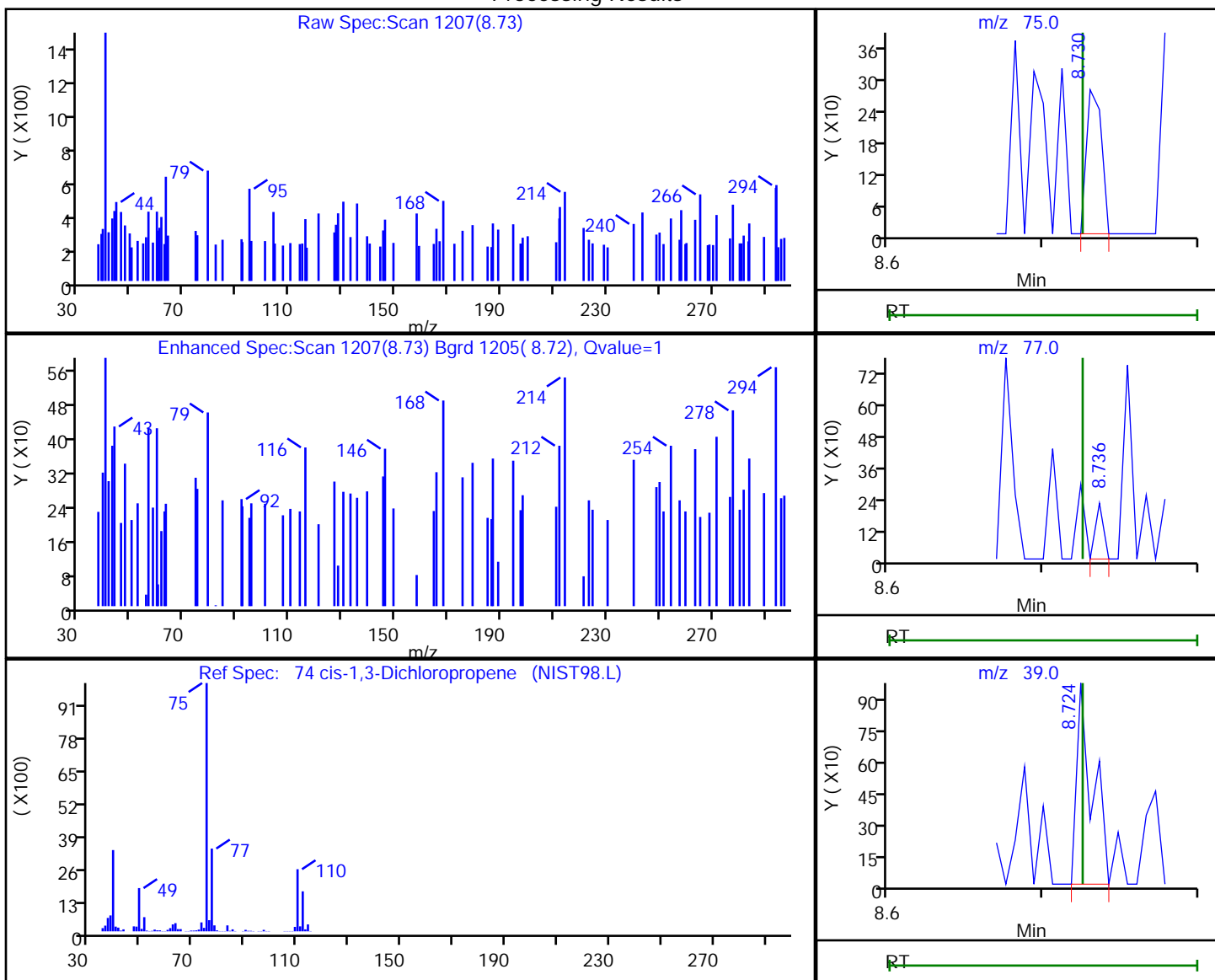
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

74 cis-1,3-Dichloropropene, CAS: 10061-01-5

Processing Results



RT	Mass	Response	Amount
8.73	75.00	187	0.051670
8.74	77.00	78	
8.72	39.00	689	

Reviewer: journept, 02-May-2020 18:46:59

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050119.D

Injection Date: 01-May-2020 22:37:30

Instrument ID: CHHP5

Lims ID: 180-105108-A-3

Lab Sample ID: 180-105108-3

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

Operator ID: 034635

ALS Bottle#: 19 Worklist Smp#: 19

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

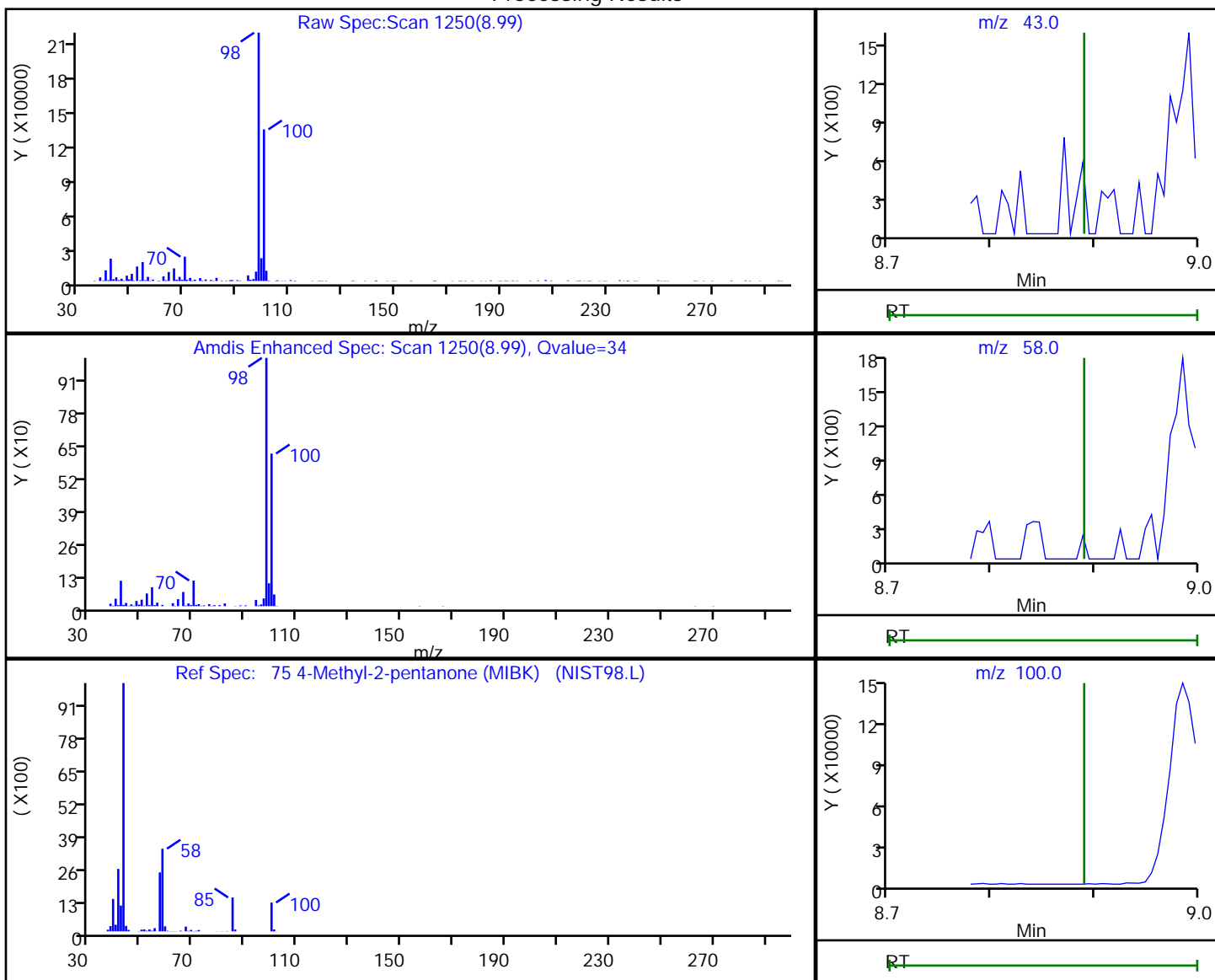
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

75 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Processing Results



RT	Mass	Response	Amount
8.99	43.00	1949	15.973317
8.99	58.00	3053	
8.99	100.00	289917	

Reviewer: journept, 02-May-2020 18:46:59

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050119.D

Injection Date: 01-May-2020 22:37:30

Instrument ID: CHHP5

Lims ID: 180-105108-A-3

Lab Sample ID: 180-105108-3

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

Operator ID: 034635

ALS Bottle#: 19 Worklist Smp#: 19

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

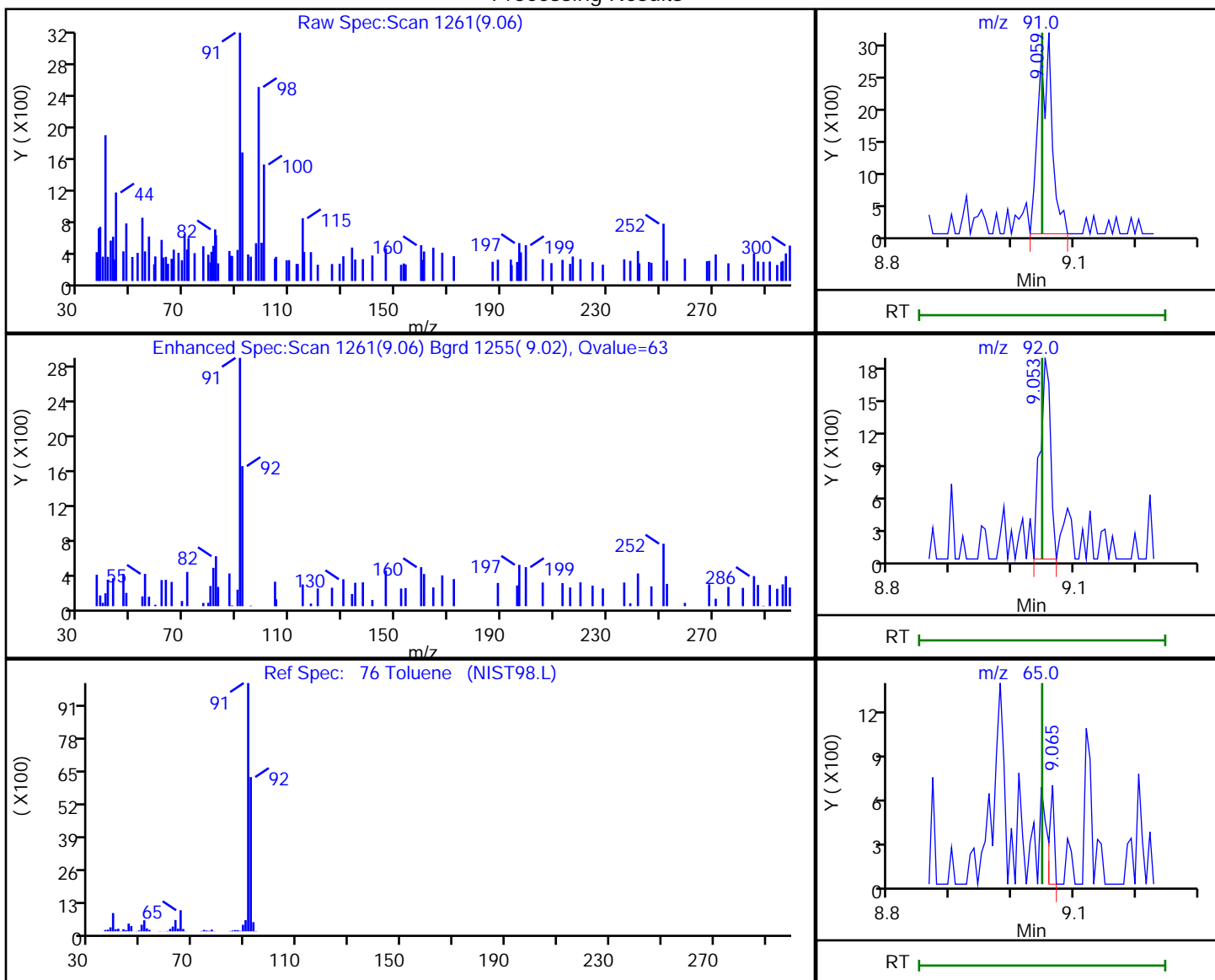
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

76 Toluene, CAS: 108-88-3

Processing Results



RT	Mass	Response	Amount
9.06	91.00	4648	0.324515
9.05	92.00	2155	
9.06	65.00	347	

Reviewer: journetp, 02-May-2020 18:46:59

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050119.D

Injection Date: 01-May-2020 22:37:30

Instrument ID: CHHP5

Lims ID: 180-105108-A-3

Lab Sample ID: 180-105108-3

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

Operator ID: 034635

ALS Bottle#: 19 Worklist Smp#: 19

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

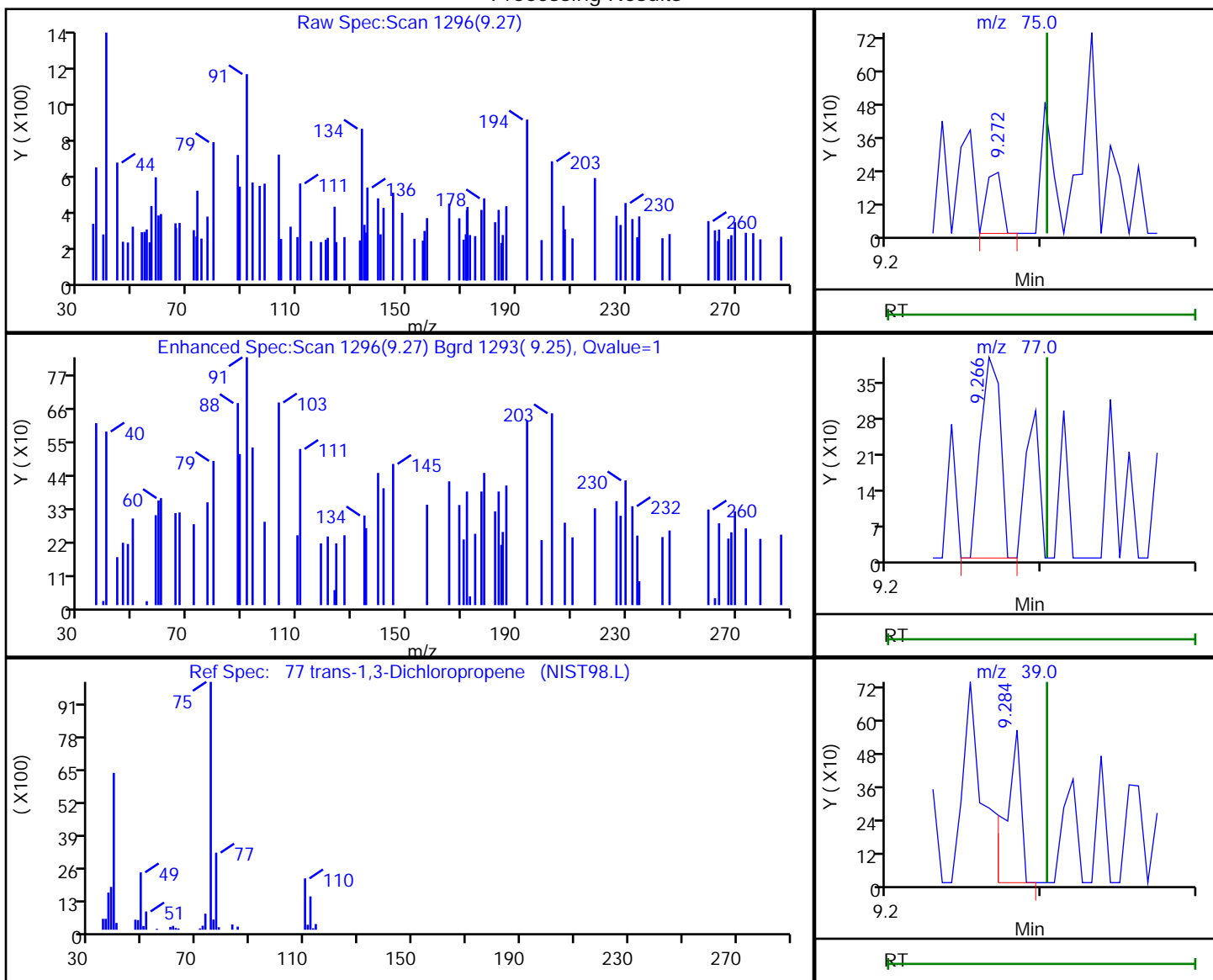
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

77 trans-1,3-Dichloropropene, CAS: 10061-02-6

Processing Results



RT	Mass	Response	Amount
9.27	75.00	158	0.033556
9.27	77.00	352	
9.28	39.00	377	

Reviewer: journeyp, 02-May-2020 18:46:59

Audit Action: Marked Compound Undetected

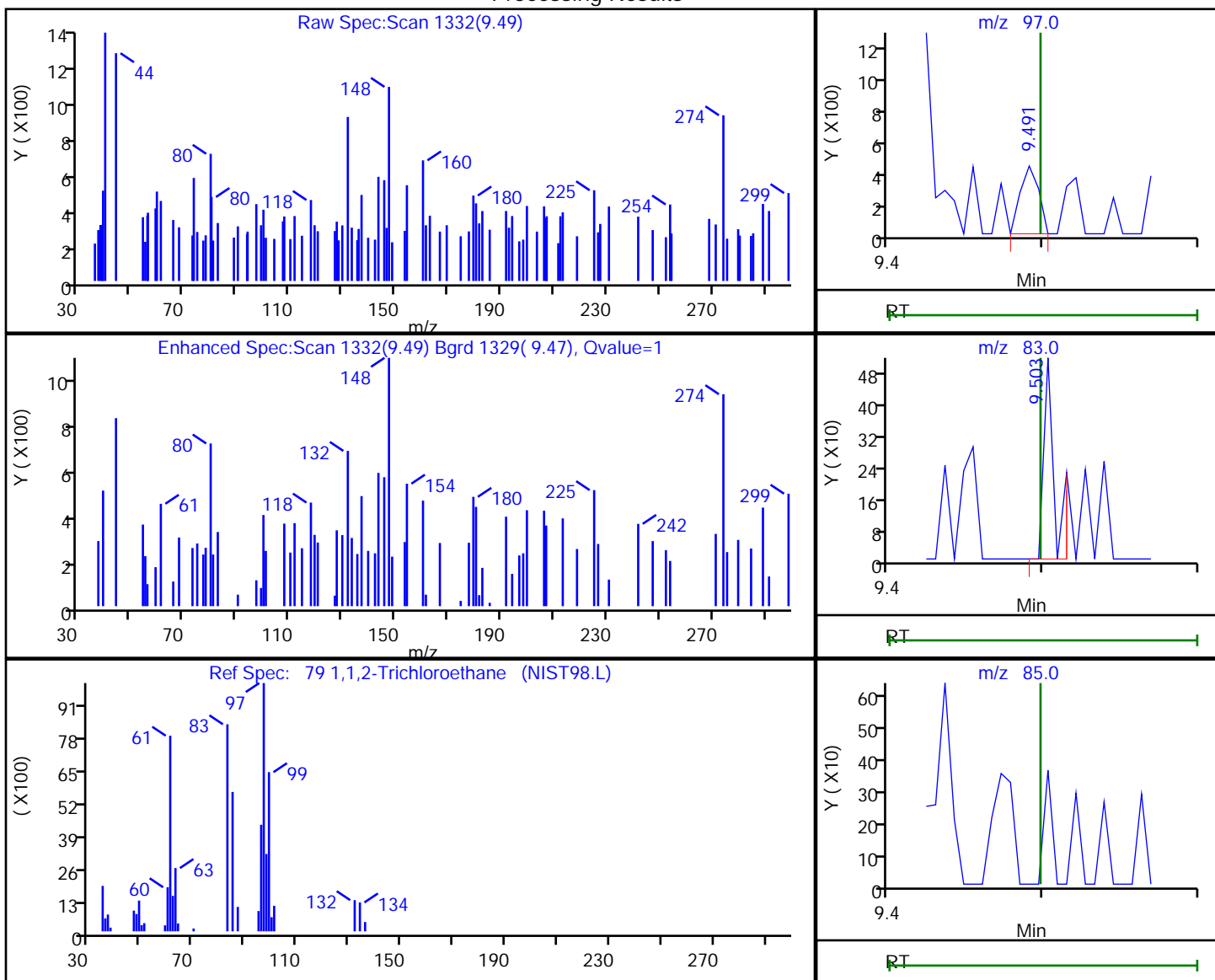
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050119.D  
 Injection Date: 01-May-2020 22:37:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-A-3 Lab Sample ID: 180-105108-3  
 Client ID: HD-COD-SW-8-0/1-0  
 Operator ID: 034635 ALS Bottle#: 19 Worklist Smp#: 19  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

79 1,1,2-Trichloroethane, CAS: 79-00-5

Processing Results



RT	Mass	Response	Amount
9.49	97.00	341	0.102427
9.50	83.00	268	
9.50	85.00	0	

Reviewer: journeyp, 02-May-2020 18:46:59  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050119.D

Injection Date: 01-May-2020 22:37:30

Instrument ID: CHHP5

Lims ID: 180-105108-A-3

Lab Sample ID: 180-105108-3

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

Operator ID: 034635

ALS Bottle#: 19 Worklist Smp#: 19

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

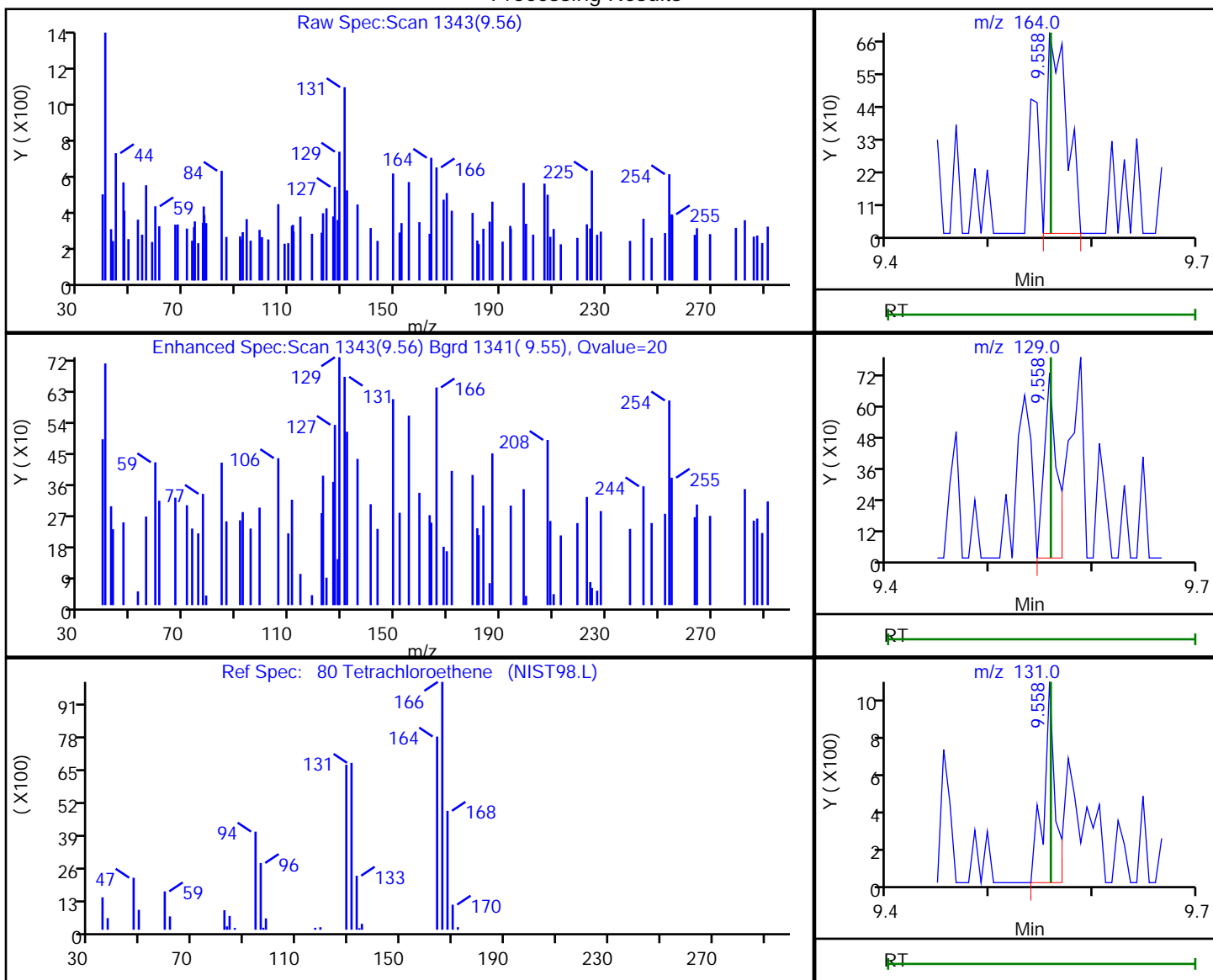
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

80 Tetrachloroethene, CAS: 127-18-4

Processing Results



RT	Mass	Response	Amount
9.56	164.00	898	0.315010
9.56	129.00	613	
9.56	131.00	829	

Reviewer: journefp, 02-May-2020 18:46:59

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050119.D

Injection Date: 01-May-2020 22:37:30

Instrument ID: CHHP5

Lims ID: 180-105108-A-3

Lab Sample ID: 180-105108-3

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

Operator ID: 034635

ALS Bottle#: 19 Worklist Smp#: 19

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

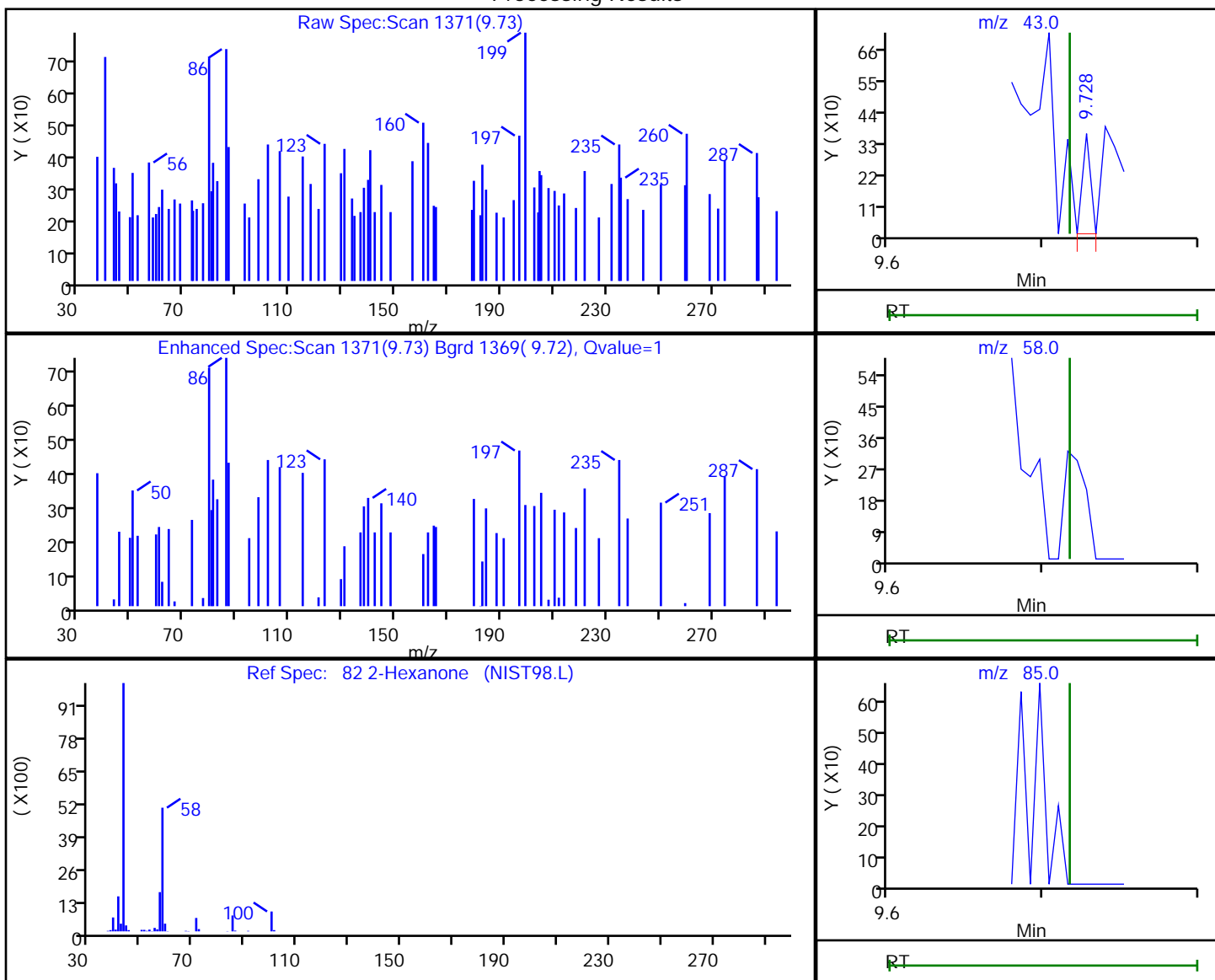
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

82 2-Hexanone, CAS: 591-78-6

Processing Results



RT	Mass	Response	Amount
9.73	43.00	131	14.056689
9.72	58.00	0	
9.72	85.00	0	

Reviewer: journetp, 02-May-2020 18:46:59

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID



Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050119.D

Injection Date: 01-May-2020 22:37:30

Instrument ID: CHHP5

Lims ID: 180-105108-A-3

Lab Sample ID: 180-105108-3

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

Operator ID: 034635

ALS Bottle#: 19 Worklist Smp#: 19

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

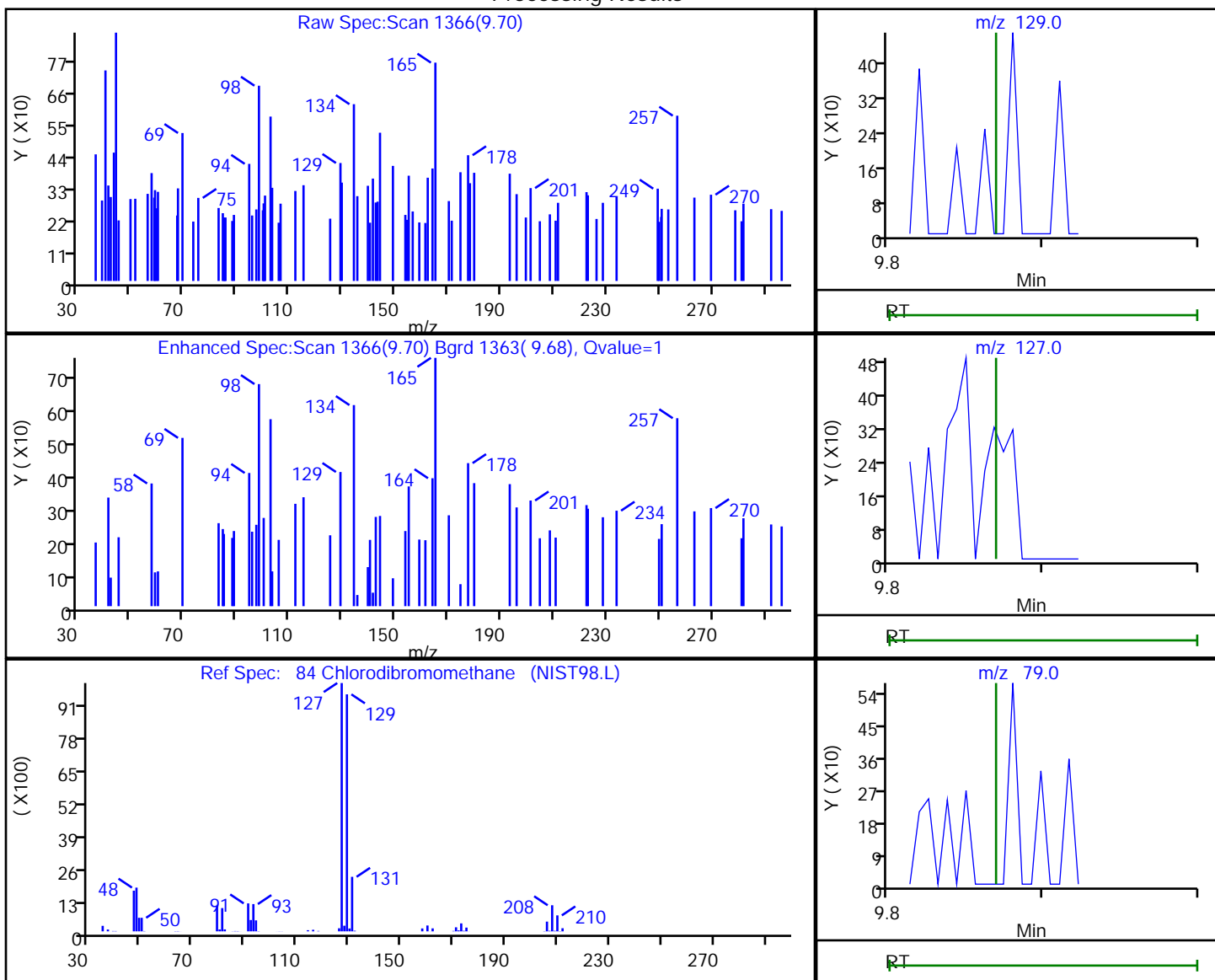
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

84 Chlorodibromomethane, CAS: 124-48-1

Processing Results



RT	Mass	Response	Amount
9.70	129.00	481	0.170679
9.70	127.00	137	
9.87	79.00	0	

Reviewer: journept, 02-May-2020 18:46:59

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050119.D

Injection Date: 01-May-2020 22:37:30

Instrument ID: CHHP5

Lims ID: 180-105108-A-3

Lab Sample ID: 180-105108-3

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

Operator ID: 034635

ALS Bottle#: 19 Worklist Smp#: 19

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

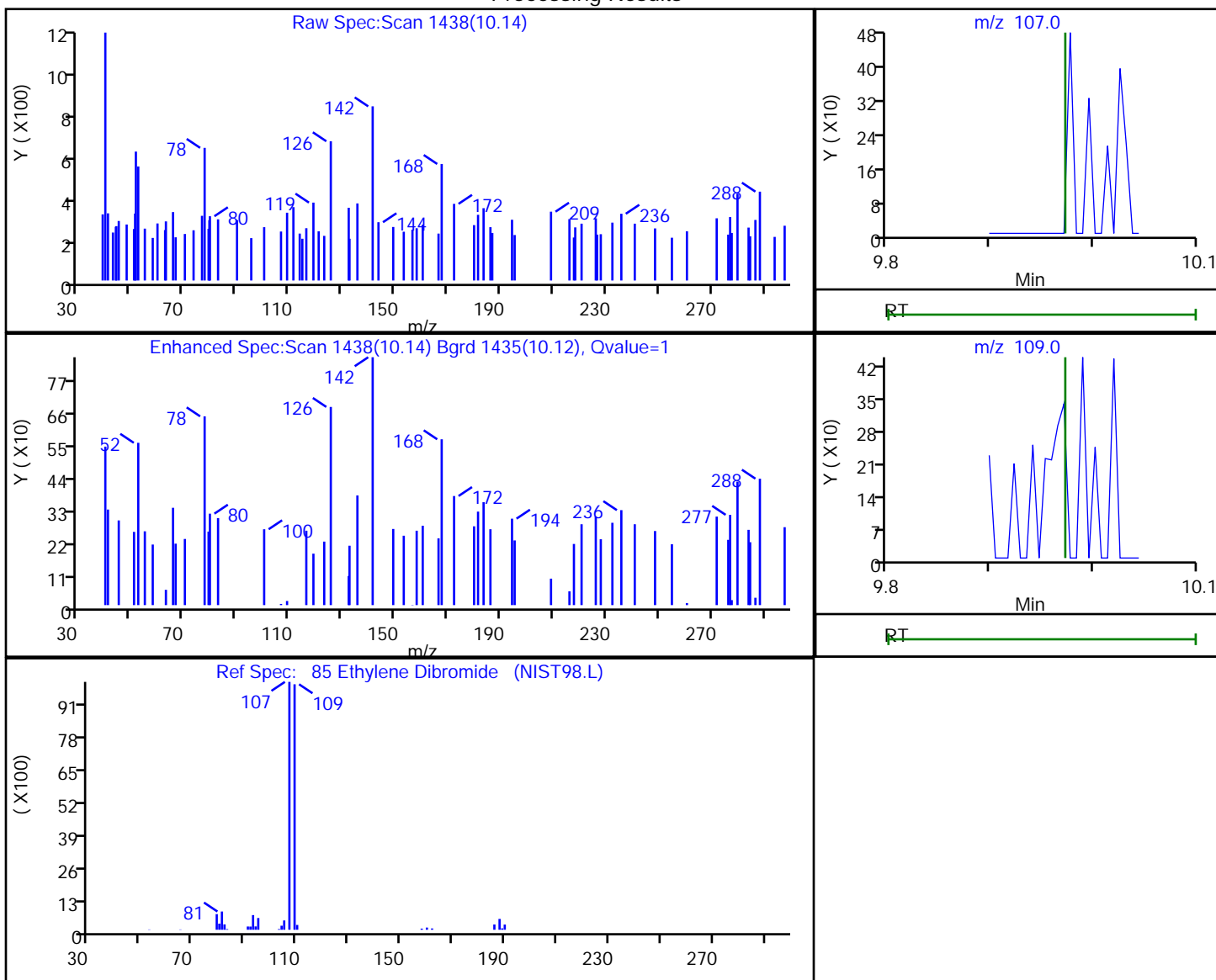
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

85 Ethylene Dibromide, CAS: 106-93-4

Processing Results



RT	Mass	Response	Amount
10.14	107.00	87	0.027934
10.12	109.00	735	

Reviewer: journetp, 02-May-2020 18:46:59

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050119.D

Injection Date: 01-May-2020 22:37:30

Instrument ID: CHHP5

Lims ID: 180-105108-A-3

Lab Sample ID: 180-105108-3

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

Operator ID: 034635

ALS Bottle#: 19

Worklist Smp#: 19

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

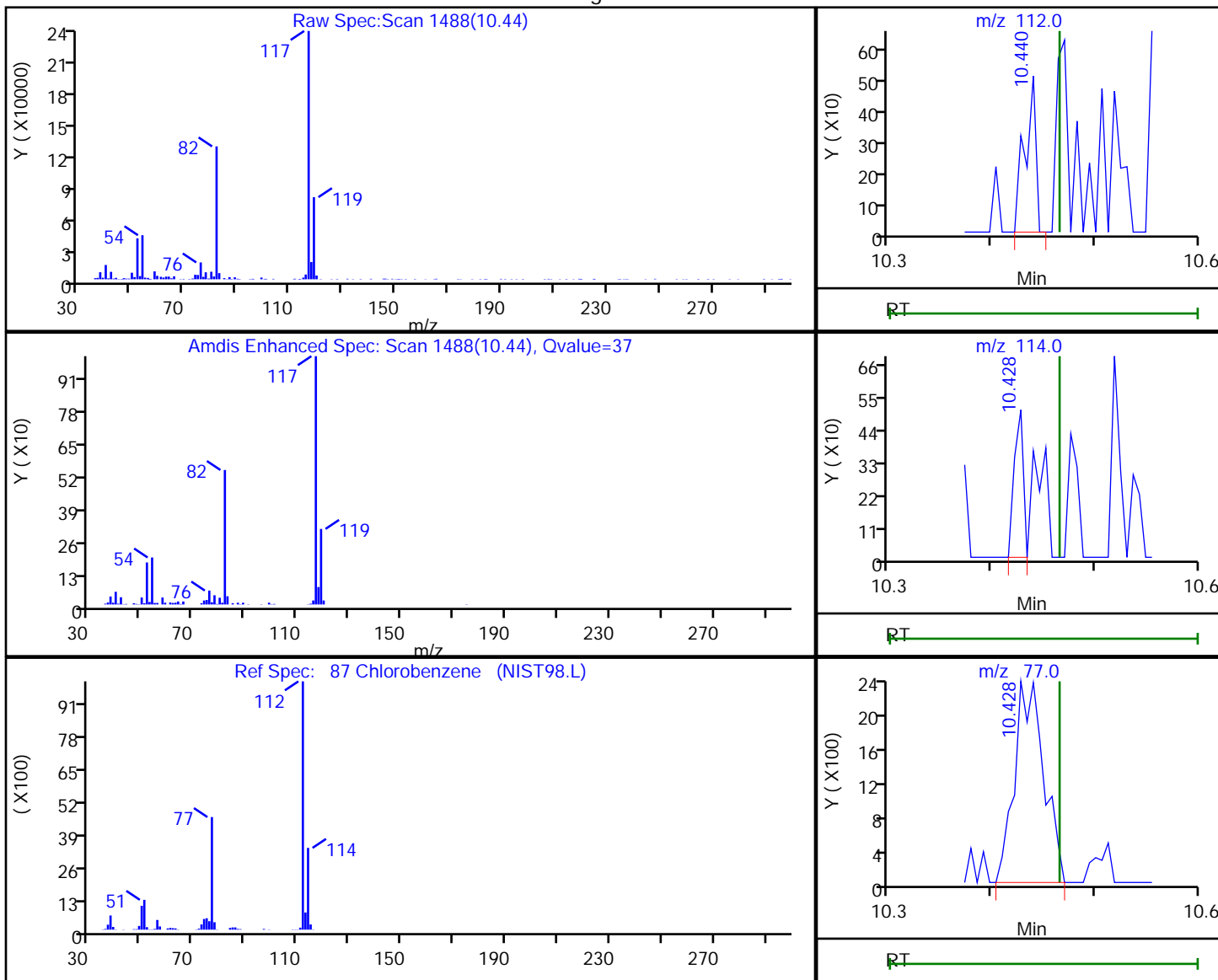
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

87 Chlorobenzene, CAS: 108-90-7

Processing Results



RT	Mass	Response	Amount
10.44	112.00	379	0.041146
10.43	114.00	307	
10.43	77.00	4592	

Reviewer: journept, 02-May-2020 18:46:59

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050119.D

Injection Date: 01-May-2020 22:37:30

Instrument ID: CHHP5

Lims ID: 180-105108-A-3

Lab Sample ID: 180-105108-3

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

Operator ID: 034635

ALS Bottle#: 19 Worklist Smp#: 19

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

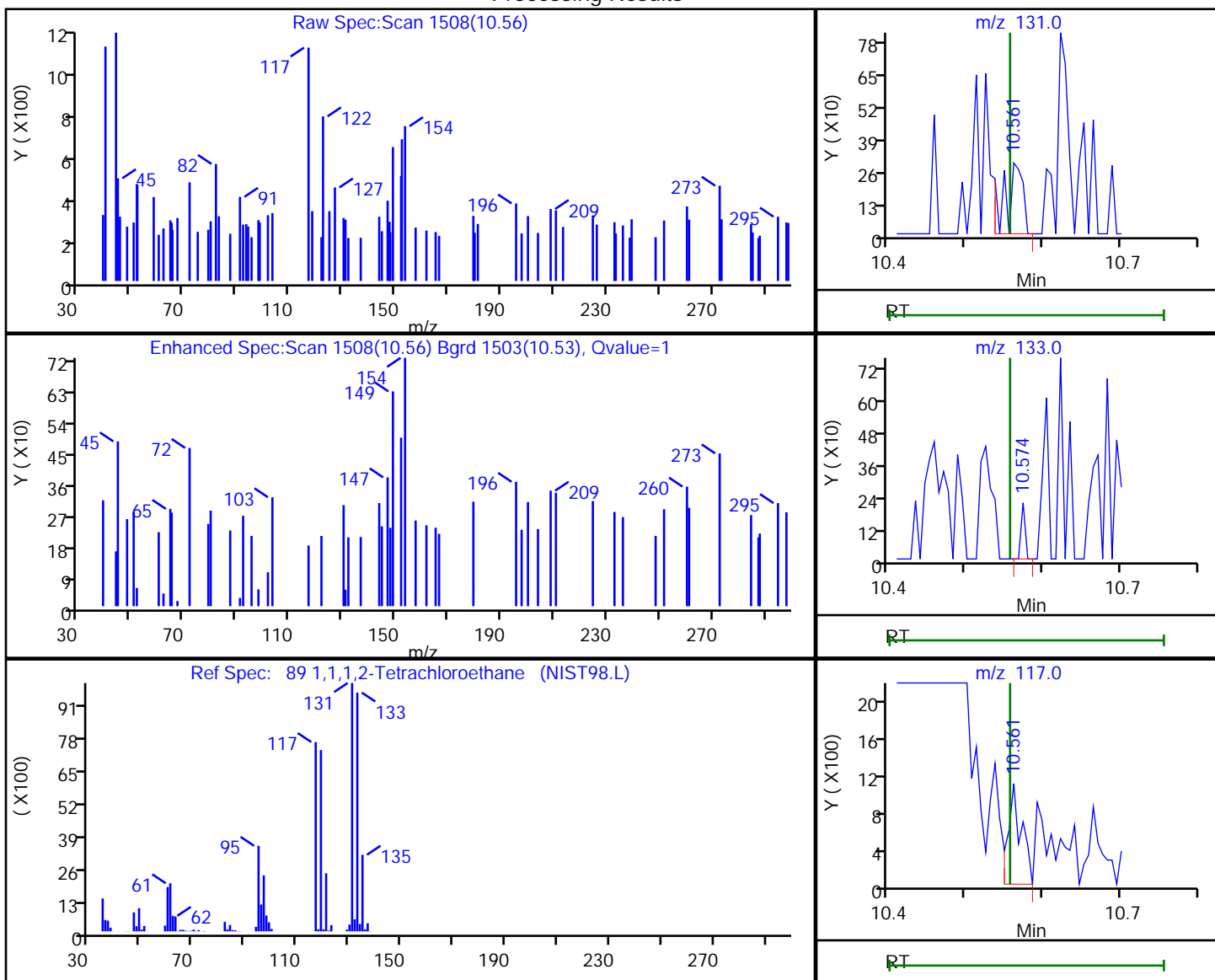
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

89 1,1,1,2-Tetrachloroethane, CAS: 630-20-6

Processing Results



RT	Mass	Response	Amount
10.56	131.00	452	0.151110
10.57	133.00	77	
10.56	117.00	1308	

Reviewer: journept, 02-May-2020 18:46:59

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050119.D

Injection Date: 01-May-2020 22:37:30

Instrument ID: CHHP5

Lims ID: 180-105108-A-3

Lab Sample ID: 180-105108-3

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

Operator ID: 034635

ALS Bottle#: 19 Worklist Smp#: 19

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

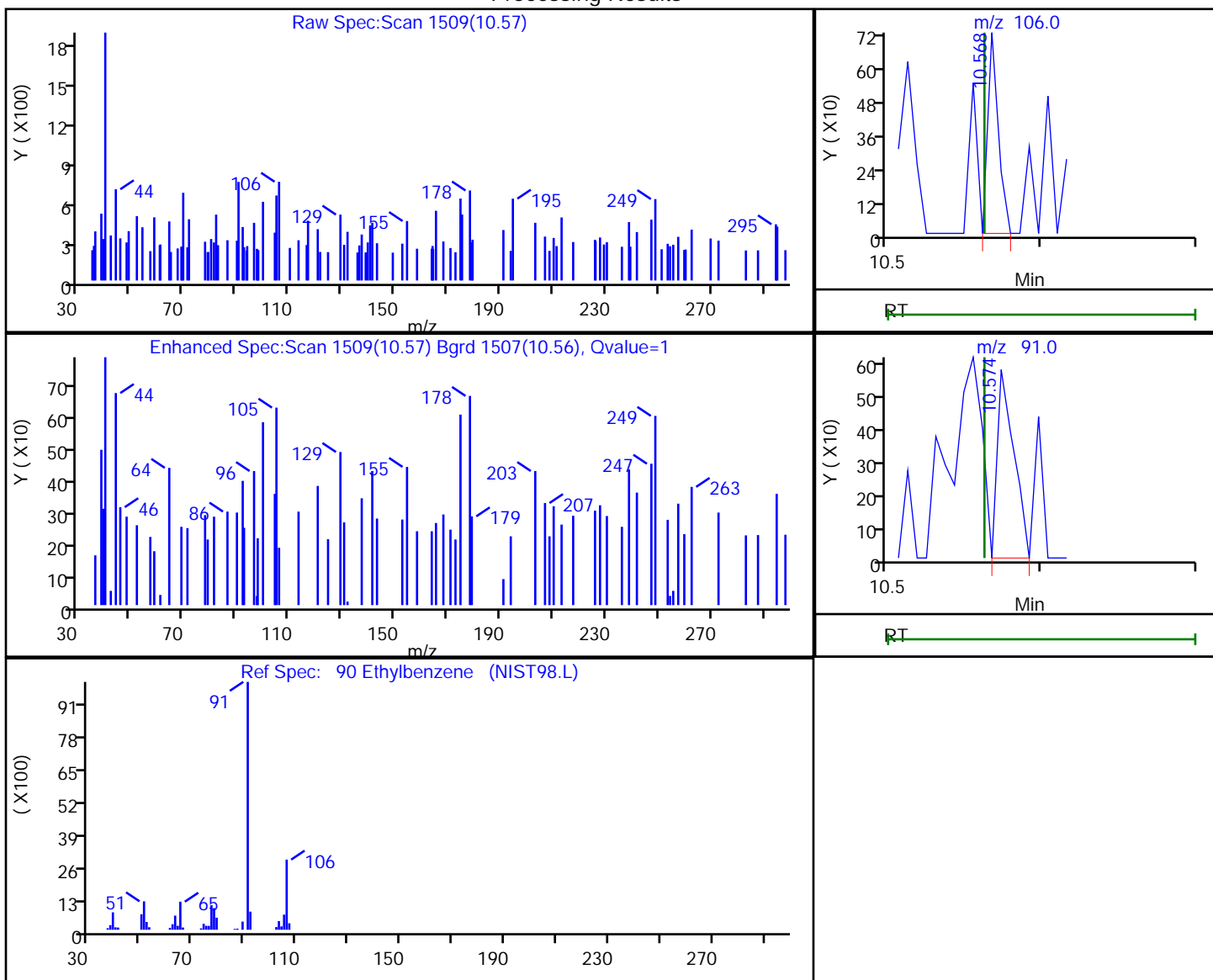
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

90 Ethylbenzene, CAS: 100-41-4

Processing Results



RT	Mass	Response	Amount
10.57	106.00	345	0.072359
10.57	91.00	429	

Reviewer: journept, 02-May-2020 18:46:59

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050119.D

Injection Date: 01-May-2020 22:37:30

Instrument ID: CHHP5

Lims ID: 180-105108-A-3

Lab Sample ID: 180-105108-3

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

Operator ID: 034635

ALS Bottle#: 19 Worklist Smp#: 19

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

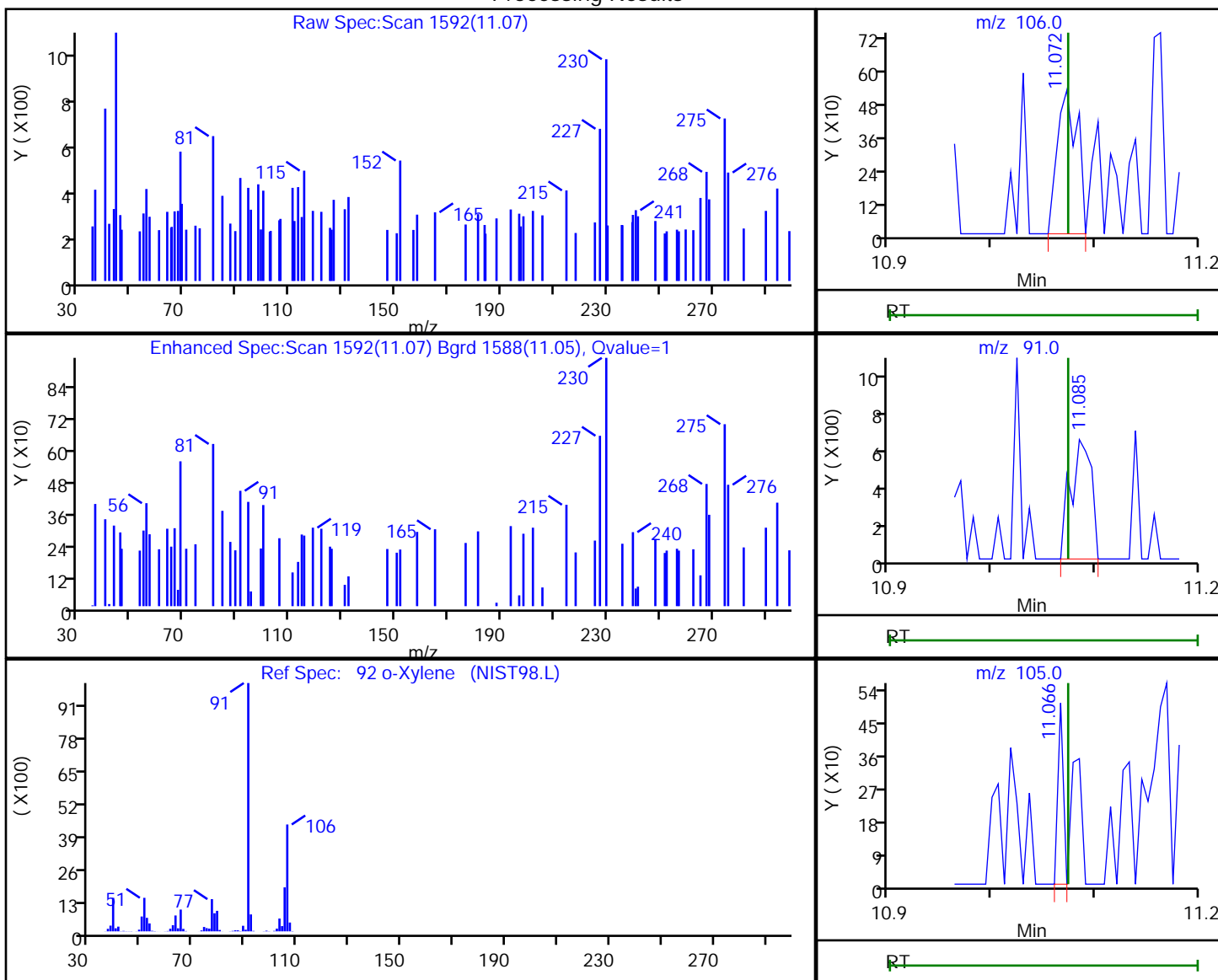
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

92 o-Xylene, CAS: 95-47-6

Processing Results



RT	Mass	Response	Amount
11.07	106.00	710	0.127968
11.08	91.00	863	
11.07	105.00	183	

Reviewer: journeyp, 02-May-2020 18:46:59

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050119.D

Injection Date: 01-May-2020 22:37:30

Instrument ID: CHHP5

Lims ID: 180-105108-A-3

Lab Sample ID: 180-105108-3

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

Operator ID: 034635

ALS Bottle#: 19 Worklist Smp#: 19

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

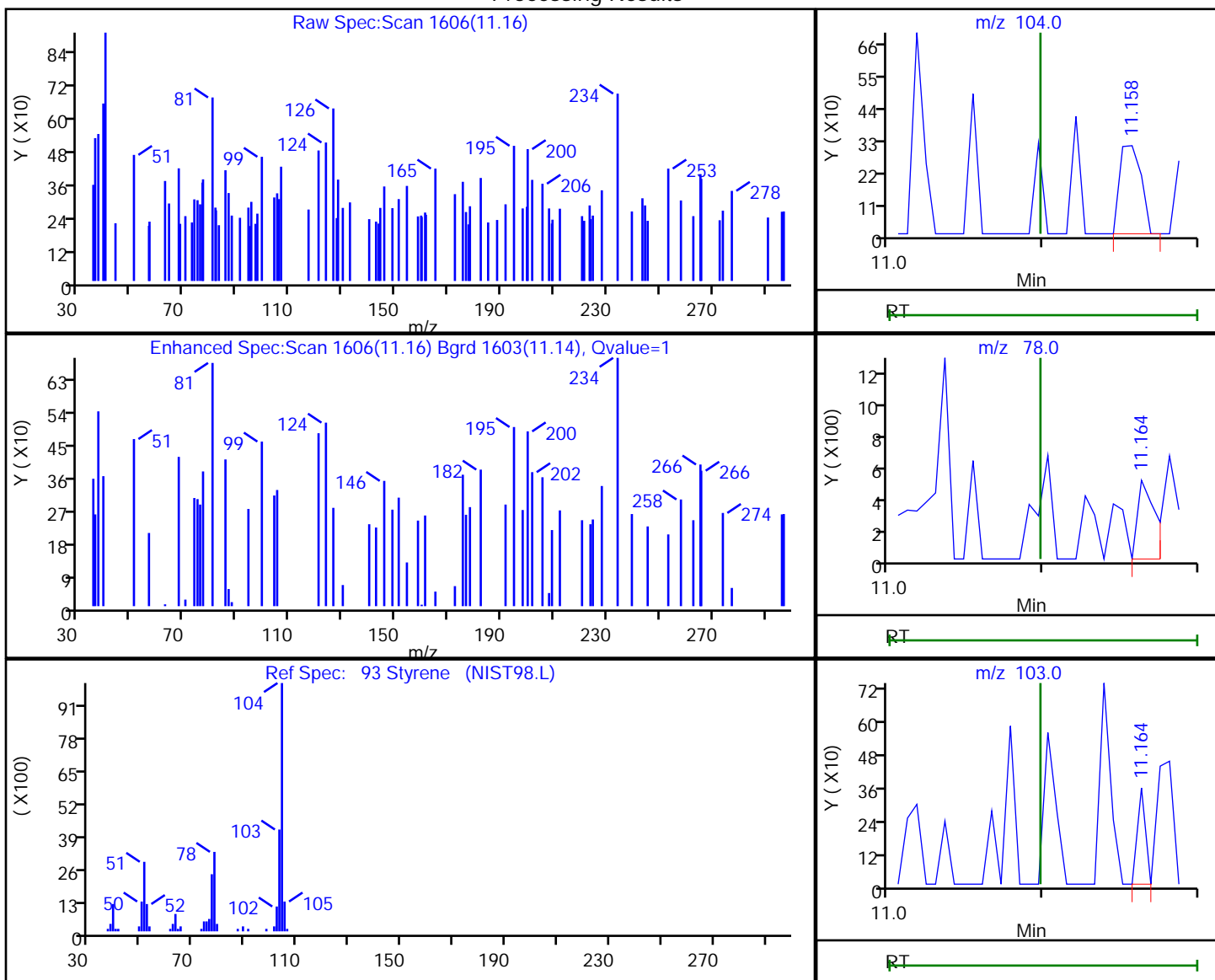
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

93 Styrene, CAS: 100-42-5

Processing Results



RT	Mass	Response	Amount
11.16	104.00	295	0.031009
11.16	78.00	393	
11.16	103.00	128	

Reviewer: journept, 02-May-2020 18:46:59

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050119.D

Injection Date: 01-May-2020 22:37:30

Instrument ID: CHHP5

Lims ID: 180-105108-A-3

Lab Sample ID: 180-105108-3

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

Operator ID: 034635

ALS Bottle#: 19 Worklist Smp#: 19

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

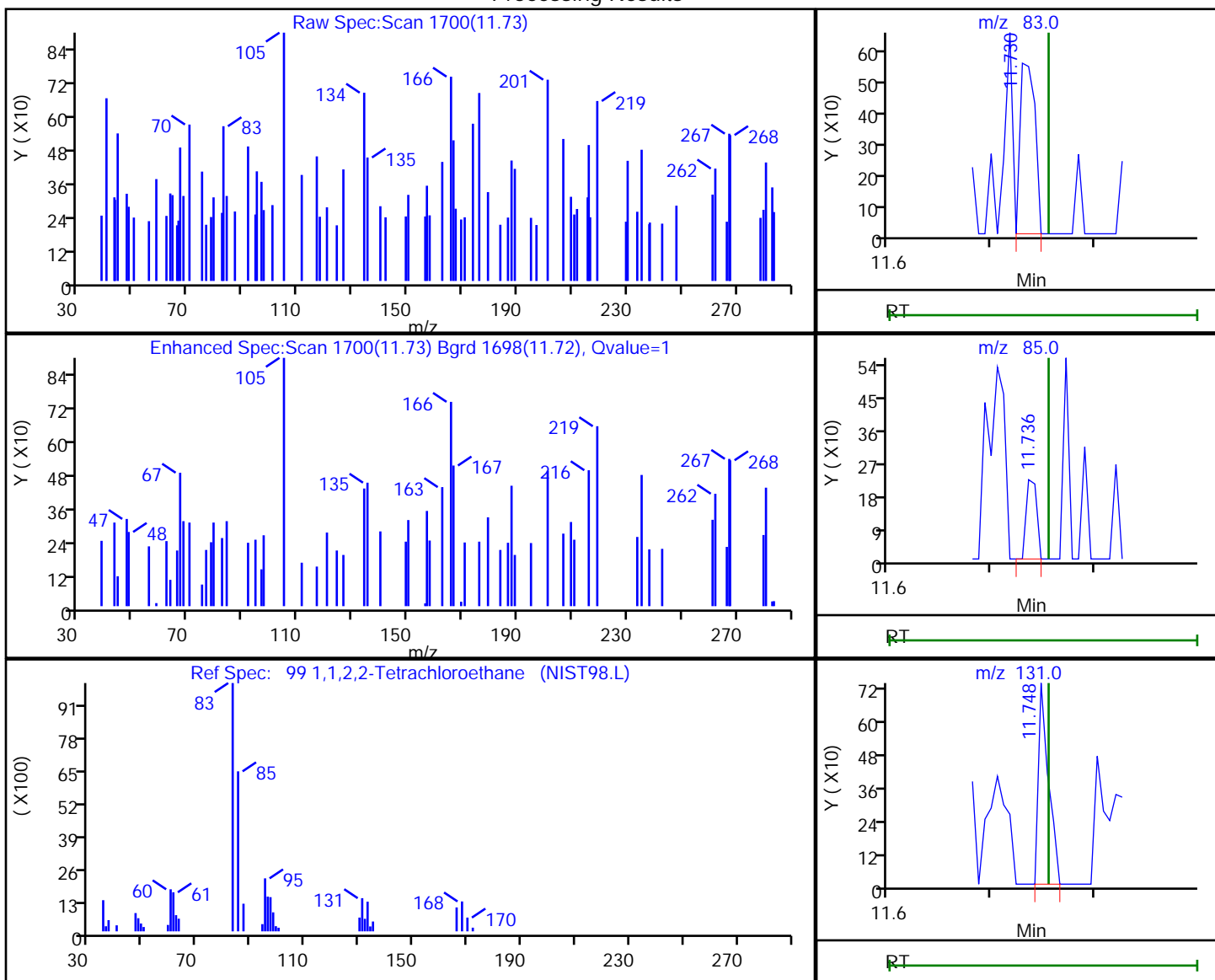
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

99 1,1,2,2-Tetrachloroethane, CAS: 79-34-5

Processing Results



RT	Mass	Response	Amount
11.73	83.00	560	0.162925
11.74	85.00	156	
11.75	131.00	504	

Reviewer: journetp, 02-May-2020 18:46:59

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID



FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: HD-COD-SW-9-0/1-0 Lab Sample ID: 180-105108-4  
 Matrix: Water Lab File ID: 5050415.D  
 Analysis Method: EPA 8260C Date Collected: 04/28/2020 13:25  
 Sample wt/vol: 5 (mL) Date Analyzed: 05/04/2020 13:55  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-624 ID: 0.18 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 314475 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	ND	^c	1.0	0.90
75-01-4	Vinyl chloride	ND		1.0	0.40
74-83-9	Bromomethane	ND	^c *	1.0	0.89
75-00-3	Chloroethane	ND		1.0	0.90
75-35-4	1,1-Dichloroethene	ND		1.0	0.55
67-64-1	Acetone	4.9	J	5.0	3.4
75-15-0	Carbon disulfide	ND		1.0	0.88
75-09-2	Methylene Chloride	ND		1.0	0.89
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.67
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.59
75-34-3	1,1-Dichloroethane	ND		1.0	0.31
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.71
74-97-5	Bromochloromethane	ND		1.0	0.63
78-93-3	2-Butanone (MEK)	ND	^c	5.0	2.6
67-66-3	Chloroform	ND		1.0	0.60
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.60
56-23-5	Carbon tetrachloride	ND		1.0	0.88
71-43-2	Benzene	ND		1.0	0.60
107-06-2	1,2-Dichloroethane	ND		1.0	0.57
79-01-6	Trichloroethene	ND		1.0	0.69
78-87-5	1,2-Dichloropropane	ND		1.0	0.66
75-27-4	Bromodichloromethane	ND		1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	3.1
108-88-3	Toluene	ND		1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.58
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.45
127-18-4	Tetrachloroethene	ND		1.0	0.47
591-78-6	2-Hexanone	ND		5.0	3.3
124-48-1	Dibromochloromethane	ND		1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	ND		1.0	0.50
108-90-7	Chlorobenzene	ND		1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.57
100-41-4	Ethylbenzene	ND		1.0	0.51
1330-20-7	Xylenes, Total	ND		2.0	0.89
100-42-5	Styrene	ND		1.0	0.47

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: HD-COD-SW-9-0/1-0 Lab Sample ID: 180-105108-4  
 Matrix: Water Lab File ID: 5050415.D  
 Analysis Method: EPA 8260C Date Collected: 04/28/2020 13:25  
 Sample wt/vol: 5 (mL) Date Analyzed: 05/04/2020 13:55  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-624 ID: 0.18 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 314475 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	ND	^c	1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	ND	^c	1.0	0.60
107-13-1	Acrylonitrile	ND		20	7.8

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		62-146
2037-26-5	Toluene-d8 (Surr)	96		75-120
460-00-4	4-Bromofluorobenzene (Surr)	79		64-120
1868-53-7	Dibromofluoromethane (Surr)	99		71-132

Eurofins TestAmerica, Pittsburgh  
Target Compound Quantitation Report

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050415.D  
 Lims ID: 180-105108-B-4  
 Client ID: HD-COD-SW-9-0/1-0  
 Sample Type: Client  
 Inject. Date: 04-May-2020 13:55:30 ALS Bottle#: 15 Worklist Smp#: 15  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: 180-0031789-015  
 Operator ID: 034635 Instrument ID: CHHP5  
 Method: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\MMSVOA\_LL\_CHHP5.m  
 Limit Group: VOA 8260C\_D ICAL  
 Last Update: 04-May-2020 13:53:44 Calib Date: 03-Apr-2020 19:09:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICAL File: \\chromna\Pittsburgh\ChromData\CHHP5\20200403-31442.b\5040310.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: CTX0327

First Level Reviewer: journetp

Date: 04-May-2020 15:12:59

Compound	Sig	RT (min.)	Exp RT (min.)	Diff RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.362	4.363	-0.001	0	262370	1000.0	
* 2 Fluorobenzene (IS)	96	7.349	7.344	0.005	99	629416	50.0	
* 3 Chlorobenzene-d5	119	10.439	10.434	0.005	84	168766	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.775	12.776	-0.001	95	234124	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.625	6.626	-0.001	92	177127	49.3	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.996	6.991	0.005	0	238874	46.9	
\$ 7 Toluene-d8 (Surr)	98	8.985	8.986	-0.001	94	658229	48.2	
\$ 8 4-Bromofluorobenzene (Surr	95	11.619	11.614	0.005	89	205108	39.7	
12 Chloromethane	50		1.844				ND	U
13 Vinyl chloride	62		1.966				ND	U
15 Bromomethane	94		2.288				ND	U
16 Chloroethane	64		2.416				ND	U
22 1,1-Dichloroethene	96		3.414				ND	U
24 Acetone	43	3.516	3.511	0.005	100	52776	24.3	
26 Carbon disulfide	76		3.706				ND	U
31 Methylene Chloride	84		4.217				ND	U
33 Acrylonitrile	53		4.612				ND	U
34 trans-1,2-Dichloroethene	96		4.631				ND	U
35 Methyl tert-butyl ether	73		4.655				ND	U
37 1,1-Dichloroethane	63		5.263				ND	U
45 cis-1,2-Dichloroethene	96		6.018				ND	U
46 2-Butanone (MEK)	43		6.036				ND	U
49 Chlorobromomethane	128		6.297				ND	U
52 Chloroform	83		6.443				ND	U
53 1,1,1-Trichloroethane	97		6.602				ND	U
56 Carbon tetrachloride	117		6.766				ND	U
58 Benzene	78		7.003				ND	U
59 1,2-Dichloroethane	62		7.076				ND	U
64 Trichloroethene	130		7.727				ND	U
67 1,2-Dichloropropane	63		8.001				ND	U
71 Dichlorobromomethane	83		8.287				ND	U
74 cis-1,3-Dichloropropene	75		8.731				ND	U

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
75 4-Methyl-2-pentanone (MIBK	43		8.889				ND	U
76 Toluene	91		9.053				ND	U
77 trans-1,3-Dichloropropene	75		9.303				ND	U
79 1,1,2-Trichloroethane	97		9.497				ND	U
80 Tetrachloroethene	164		9.564				ND	U
82 2-Hexanone	43		9.716				ND	U
84 Chlorodibromomethane	129		9.868				ND	U
85 Ethylene Dibromide	107		9.978				ND	U
87 Chlorobenzene	112		10.465				ND	U
89 1,1,1,2-Tetrachloroethane	131		10.562				ND	U
90 Ethylbenzene	106		10.562				ND	U
91 m-Xylene & p-Xylene	106		10.696				ND	U
92 o-Xylene	106		11.079				ND	U
93 Styrene	104		11.097				ND	U
94 Bromoform	173		11.280				ND	U
99 1,1,2,2-Tetrachloroethane	83		11.760				ND	U
S 133 Xylenes, Total	106		1.000				ND	

**QC Flag Legend**

Review Flags

U - Marked Undetected

**Reagents:**

voaWI/SHP5\_00016

Amount Added: 5.00

Units: uL

Run Reagent

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050415.D

Injection Date: 04-May-2020 13:55:30

Instrument ID: CHHP5

Operator ID: 034635

Lims ID: 180-105108-B-4

Lab Sample ID: 180-105108-4

Worklist Smp#: 15

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

Purge Vol: 5.000 mL

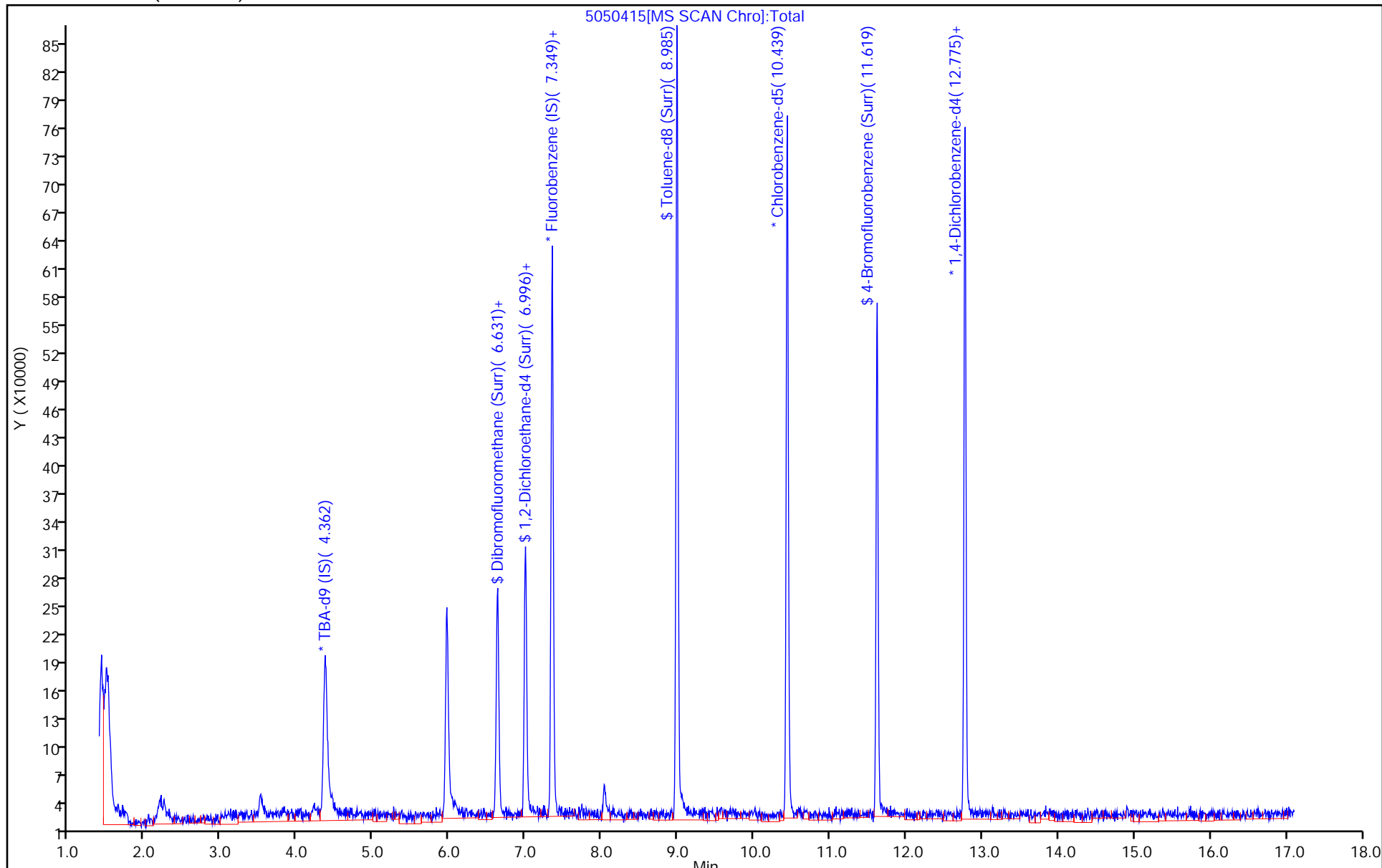
Dil. Factor: 1.0000

ALS Bottle#: 15

Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Pittsburgh  
Recovery Report

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050415.D  
 Lims ID: 180-105108-B-4  
 Client ID: HD-COD-SW-9-0/1-0  
 Sample Type: Client  
 Inject. Date: 04-May-2020 13:55:30 ALS Bottle#: 15 Worklist Smp#: 15  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: 180-0031789-015  
 Operator ID: 034635 Instrument ID: CHHP5  
 Method: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\MSVOA\_LL\_CHHP5.m  
 Limit Group: VOA 8260C\_D ICAL  
 Last Update: 04-May-2020 13:53:44 Calib Date: 03-Apr-2020 19:09:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP5\20200403-31442.b\5040310.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: CTX0327

First Level Reviewer: journetp

Date: 04-May-2020 15:12:59

Compound	Amount Added	Amount Recovered	% Rec.
\$ 5 Dibromofluoromethane (Surr)	50.0	49.3	98.65
\$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	46.9	93.75
\$ 7 Toluene-d8 (Surr)	50.0	48.2	96.36
\$ 8 4-Bromofluorobenzene (Surr)	50.0	39.7	79.45

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050415.D

Injection Date: 04-May-2020 13:55:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-4

Lab Sample ID: 180-105108-4

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

Operator ID: 034635

ALS Bottle#: 15

Worklist Smp#: 15

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

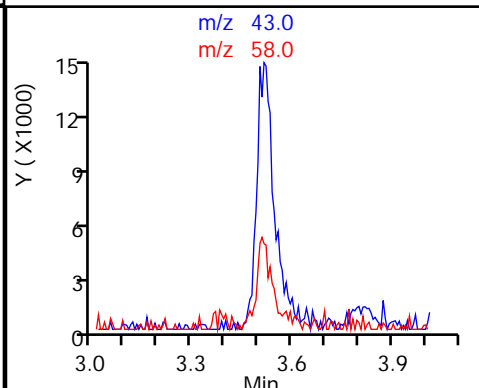
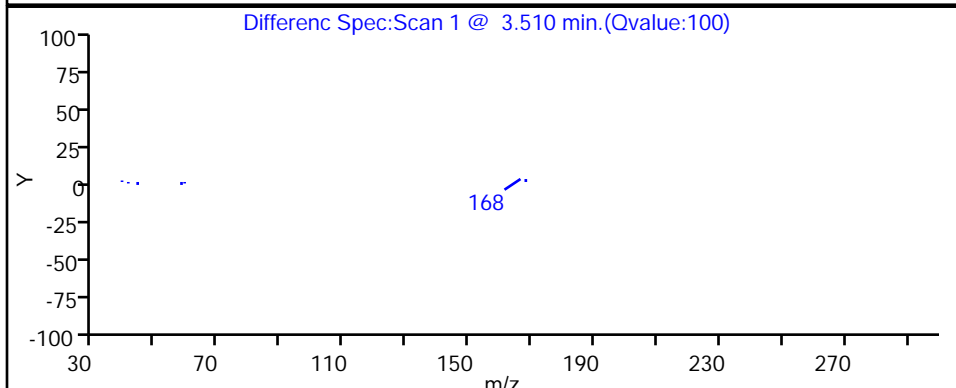
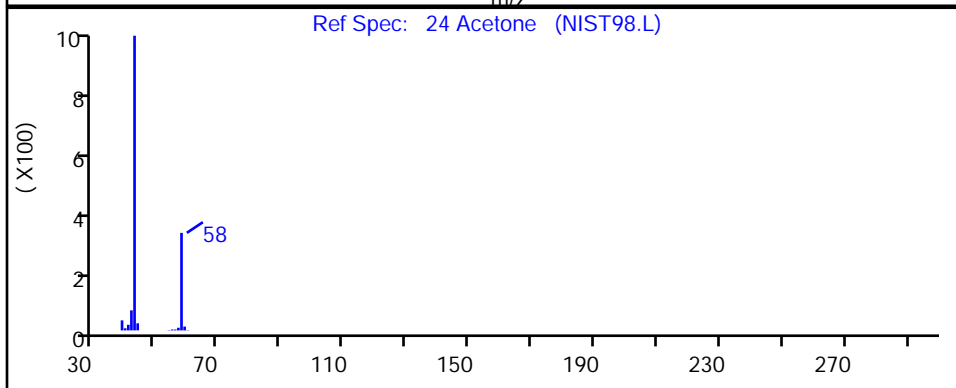
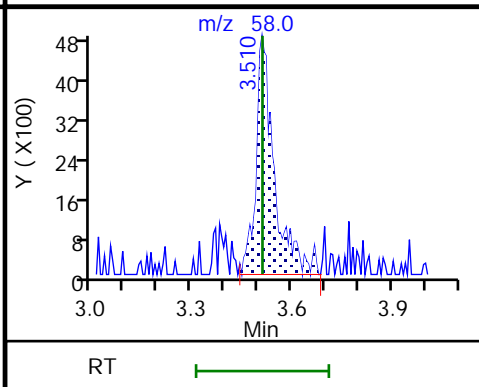
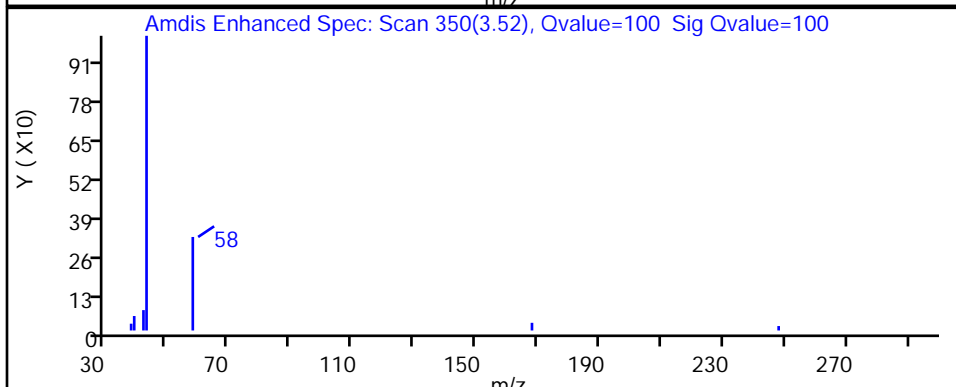
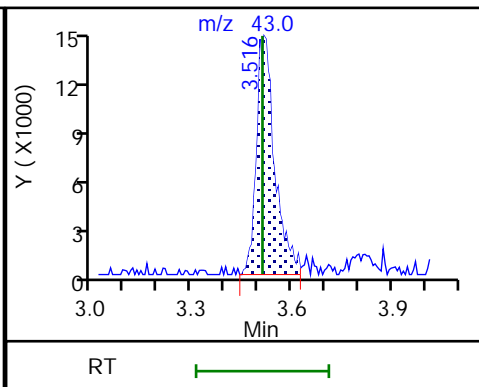
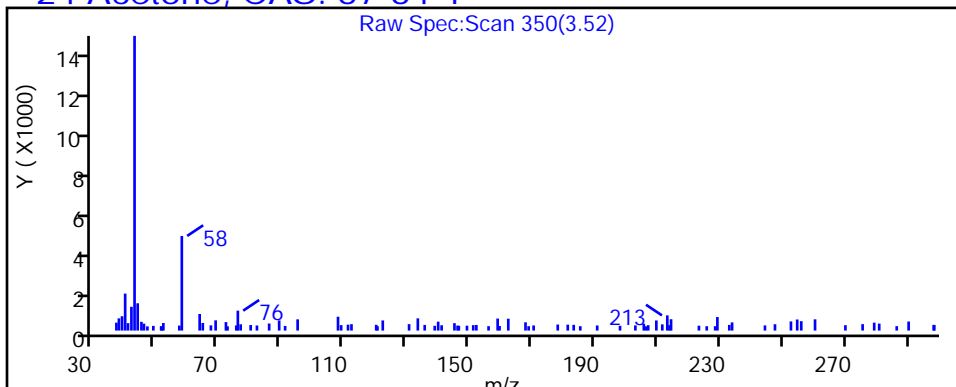
Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

24 Acetone, CAS: 67-64-1

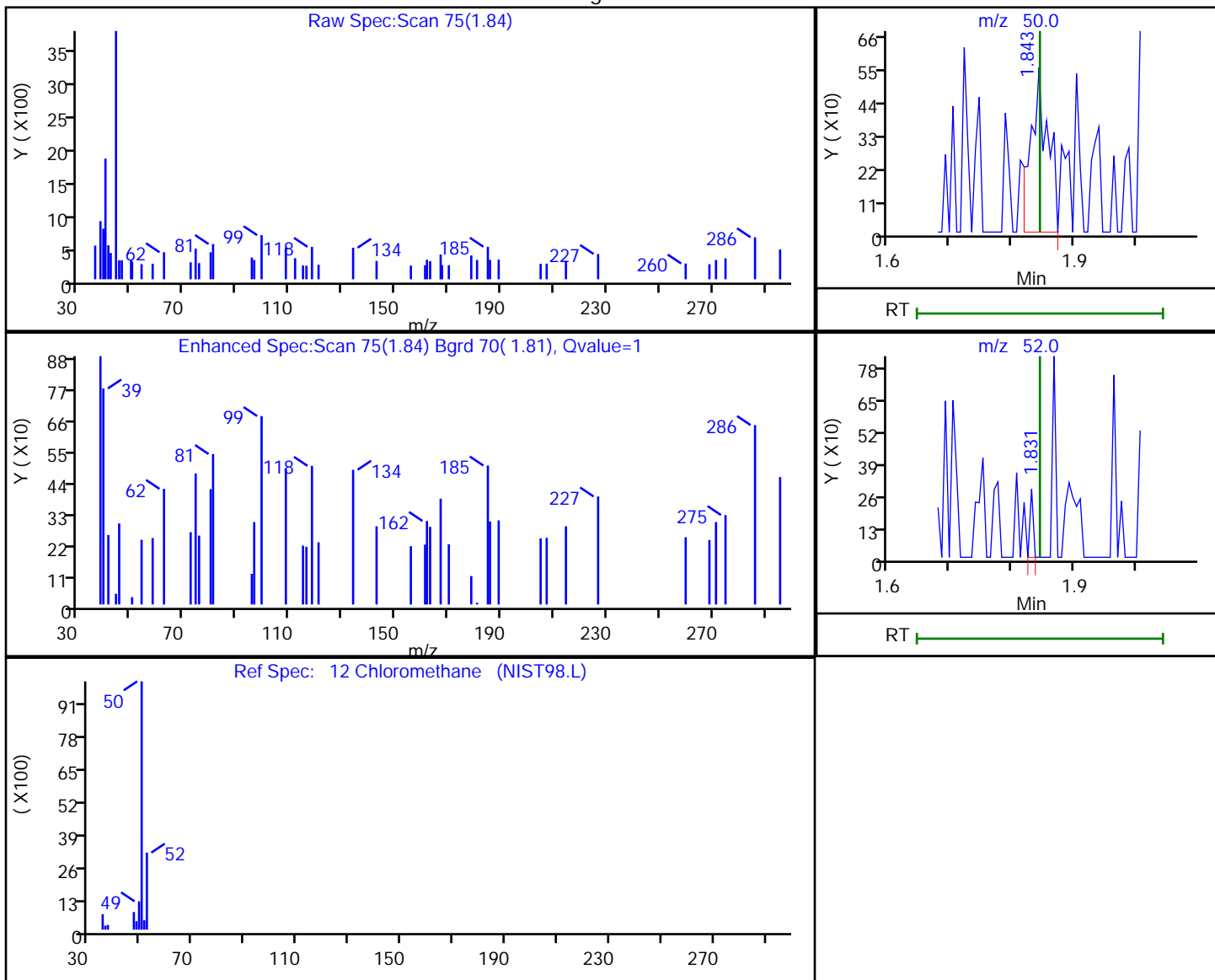


Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050415.D  
Injection Date: 04-May-2020 13:55:30 Instrument ID: CHHP5  
Lims ID: 180-105108-B-4 Lab Sample ID: 180-105108-4  
Client ID: HD-COD-SW-9-0/1-0  
Operator ID: 034635 ALS Bottle#: 15 Worklist Smp#: 15  
Purge Vol: 5.000 mL Dil. Factor: 1.0000  
Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
Column: DB-624 (0.18 mm) Detector: MS SCAN

12 Chloromethane, CAS: 74-87-3

Processing Results



RT	Mass	Response	Amount
1.84	50.00	1070	0.174264
1.83	52.00	102	

Reviewer: journtp, 04-May-2020 15:12:35  
Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID



Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050415.D

Injection Date: 04-May-2020 13:55:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-4

Lab Sample ID: 180-105108-4

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

Operator ID: 034635

ALS Bottle#: 15 Worklist Smp#: 15

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

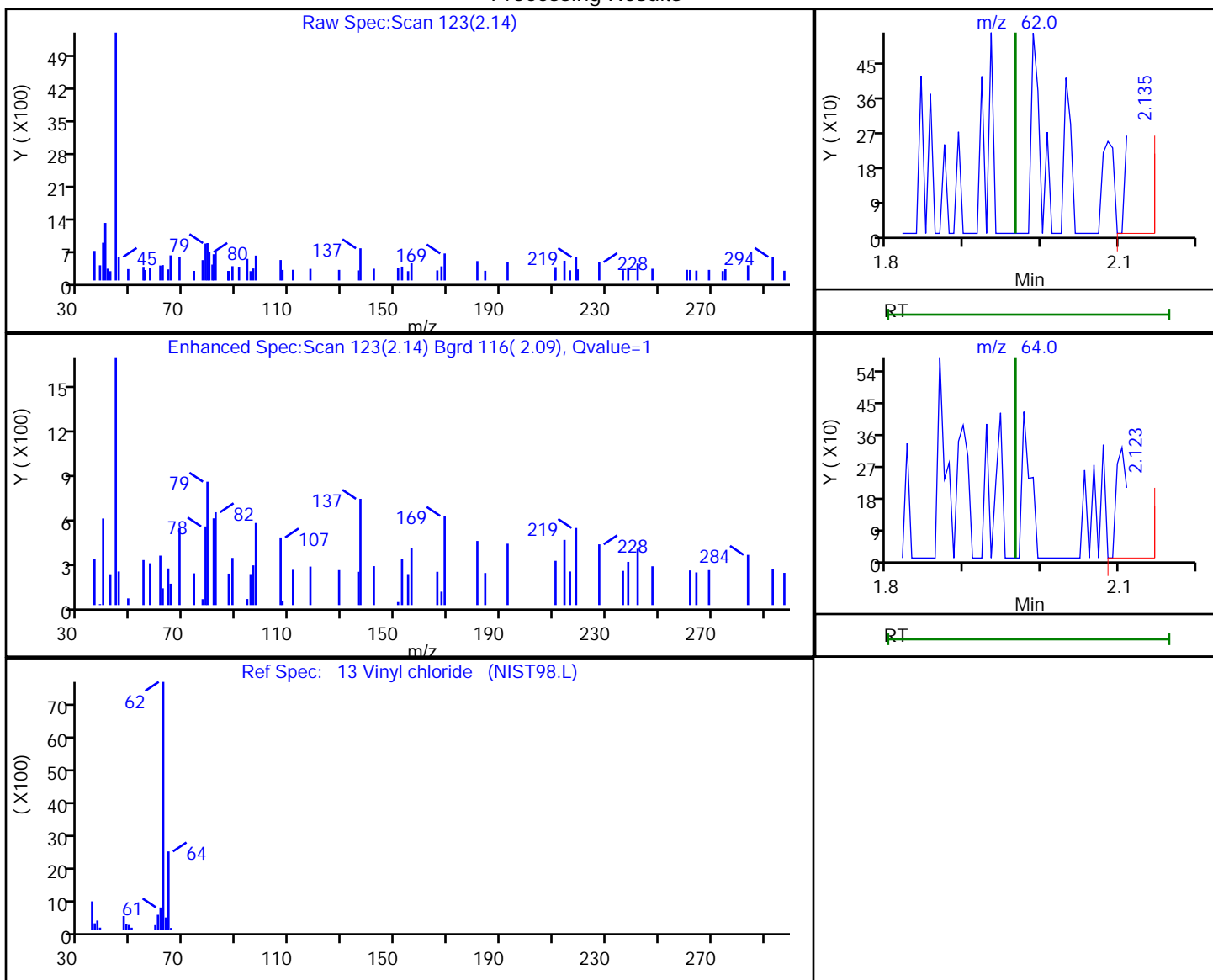
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

13 Vinyl chloride, CAS: 75-01-4

Processing Results



RT	Mass	Response	Amount
2.14	62.00	374	0.068398
2.12	64.00	802	

Reviewer: journetp, 04-May-2020 15:12:36

Audit Action: Marked Compound Undetected

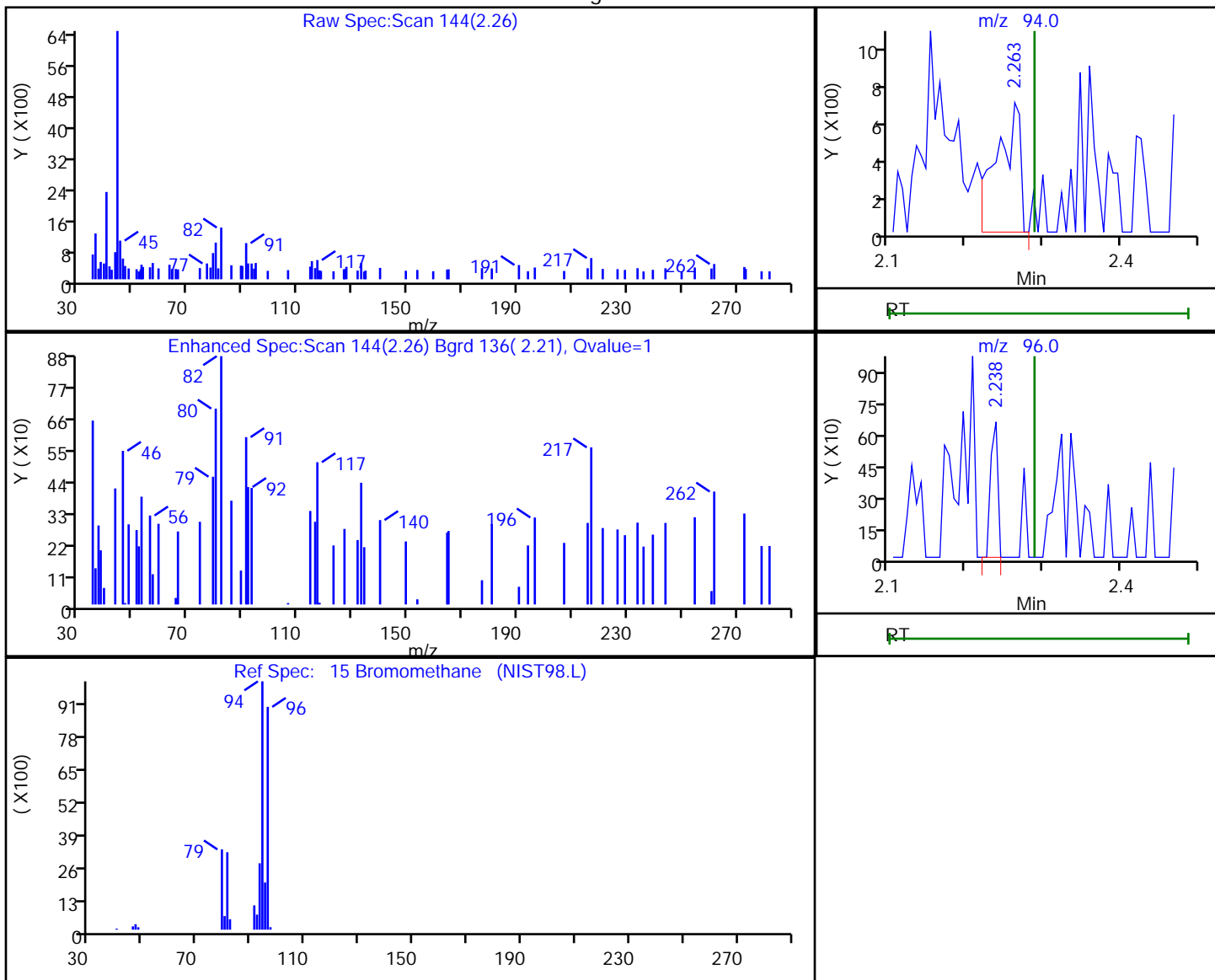
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050415.D  
Injection Date: 04-May-2020 13:55:30 Instrument ID: CHHP5  
Lims ID: 180-105108-B-4 Lab Sample ID: 180-105108-4  
Client ID: HD-COD-SW-9-0/1-0  
Operator ID: 034635 ALS Bottle#: 15 Worklist Smp#: 15  
Purge Vol: 5.000 mL Dil. Factor: 1.0000  
Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
Column: DB-624 (0.18 mm) Detector: MS SCAN

15 Bromomethane, CAS: 74-83-9

Processing Results



RT	Mass	Response	Amount
2.26	94.00	1455	0.464739
2.24	96.00	421	

Reviewer: journtp, 04-May-2020 15:12:36  
Audit Action: Marked Compound Undetected

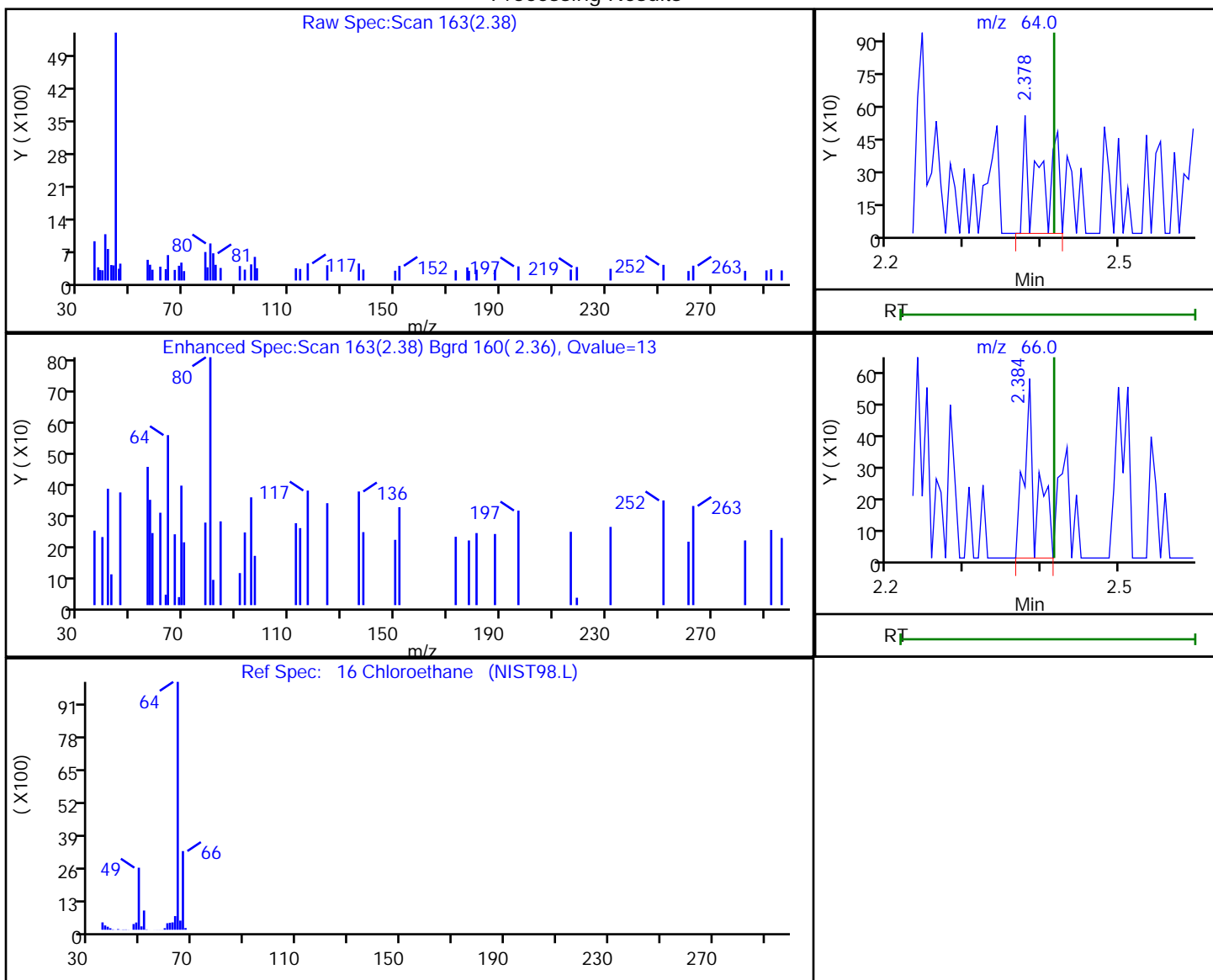
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050415.D  
 Injection Date: 04-May-2020 13:55:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-4 Lab Sample ID: 180-105108-4  
 Client ID: HD-COD-SW-9-0/1-0  
 Operator ID: 034635 ALS Bottle#: 15 Worklist Smp#: 15  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

16 Chloroethane, CAS: 75-00-3

Processing Results



RT	Mass	Response	Amount
2.38	64.00	878	0.236682
2.38	66.00	657	

Reviewer: journtp, 04-May-2020 15:12:36  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050415.D

Injection Date: 04-May-2020 13:55:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-4

Lab Sample ID: 180-105108-4

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

Operator ID: 034635

ALS Bottle#: 15 Worklist Smp#: 15

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

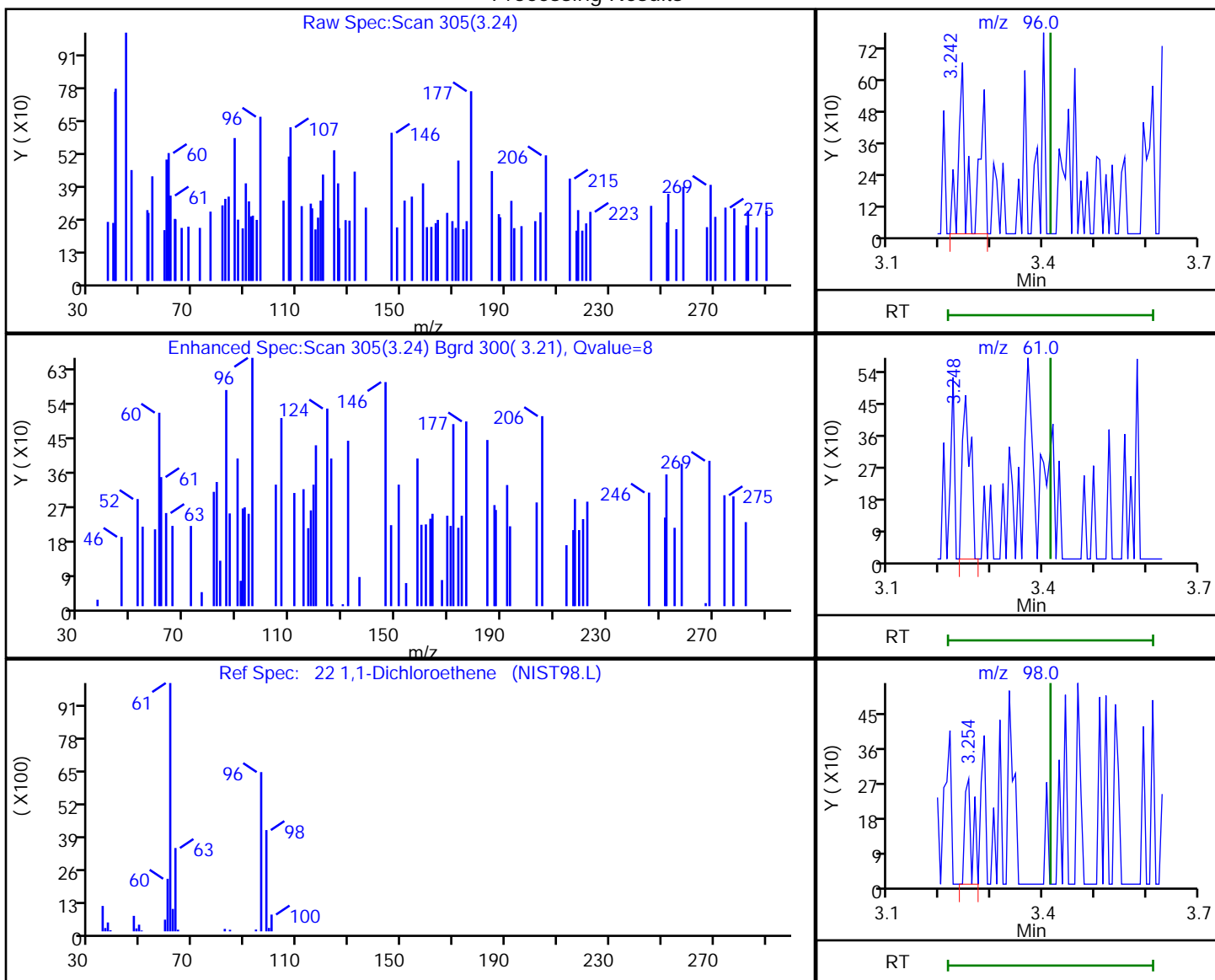
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

22 1,1-Dichloroethene, CAS: 75-35-4

Processing Results



RT	Mass	Response	Amount
3.24	96.00	995	-1.648092
3.25	61.00	521	
3.25	98.00	274	

Reviewer: journept, 04-May-2020 15:12:36

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050415.D

Injection Date: 04-May-2020 13:55:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-4

Lab Sample ID: 180-105108-4

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

Operator ID: 034635

ALS Bottle#: 15 Worklist Smp#: 15

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

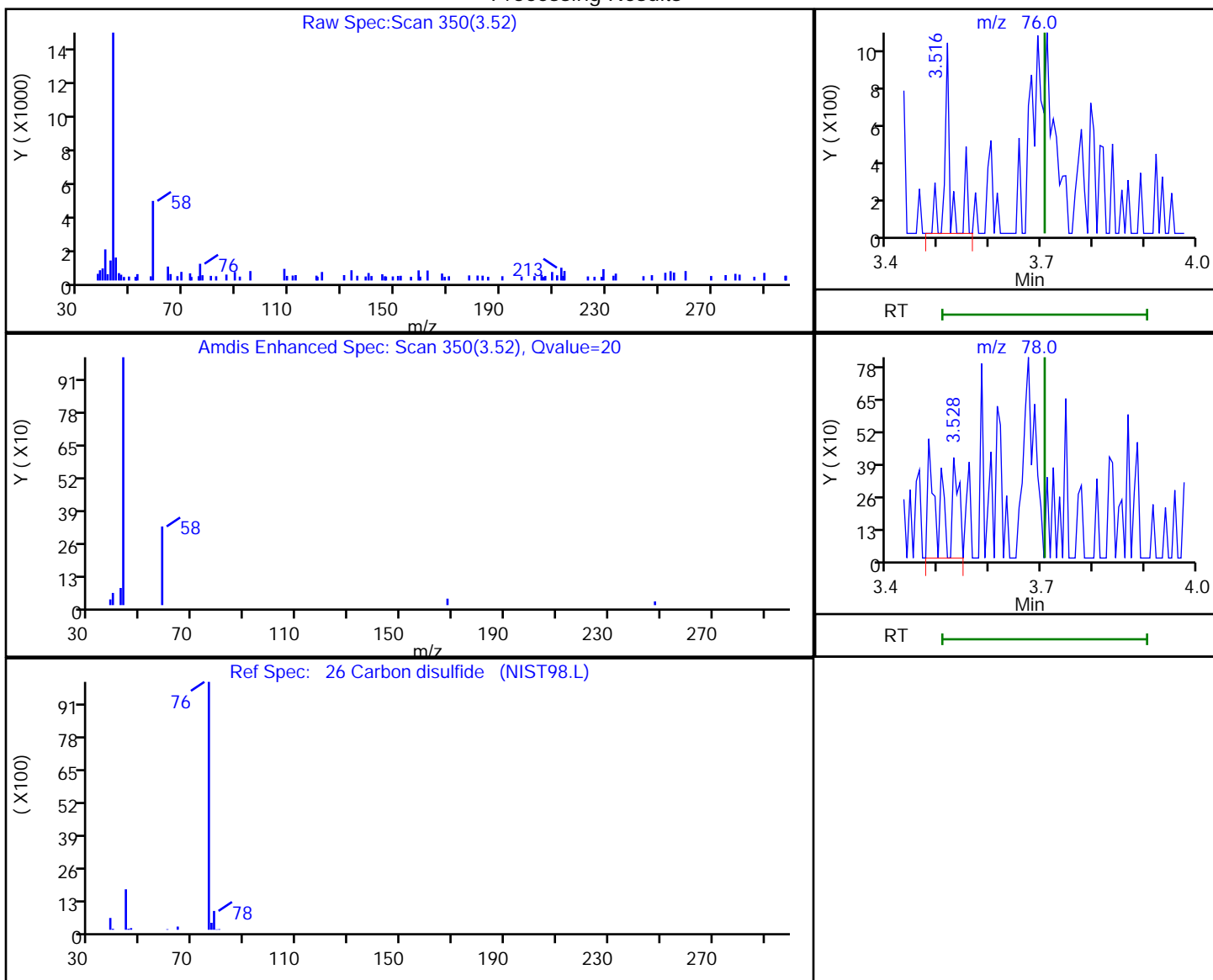
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

26 Carbon disulfide, CAS: 75-15-0

Processing Results



RT	Mass	Response	Amount
3.52	76.00	763	0.107846
3.53	78.00	945	

Reviewer: journetp, 04-May-2020 15:12:43

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050415.D

Injection Date: 04-May-2020 13:55:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-4

Lab Sample ID: 180-105108-4

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

Operator ID: 034635

ALS Bottle#: 15 Worklist Smp#: 15

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

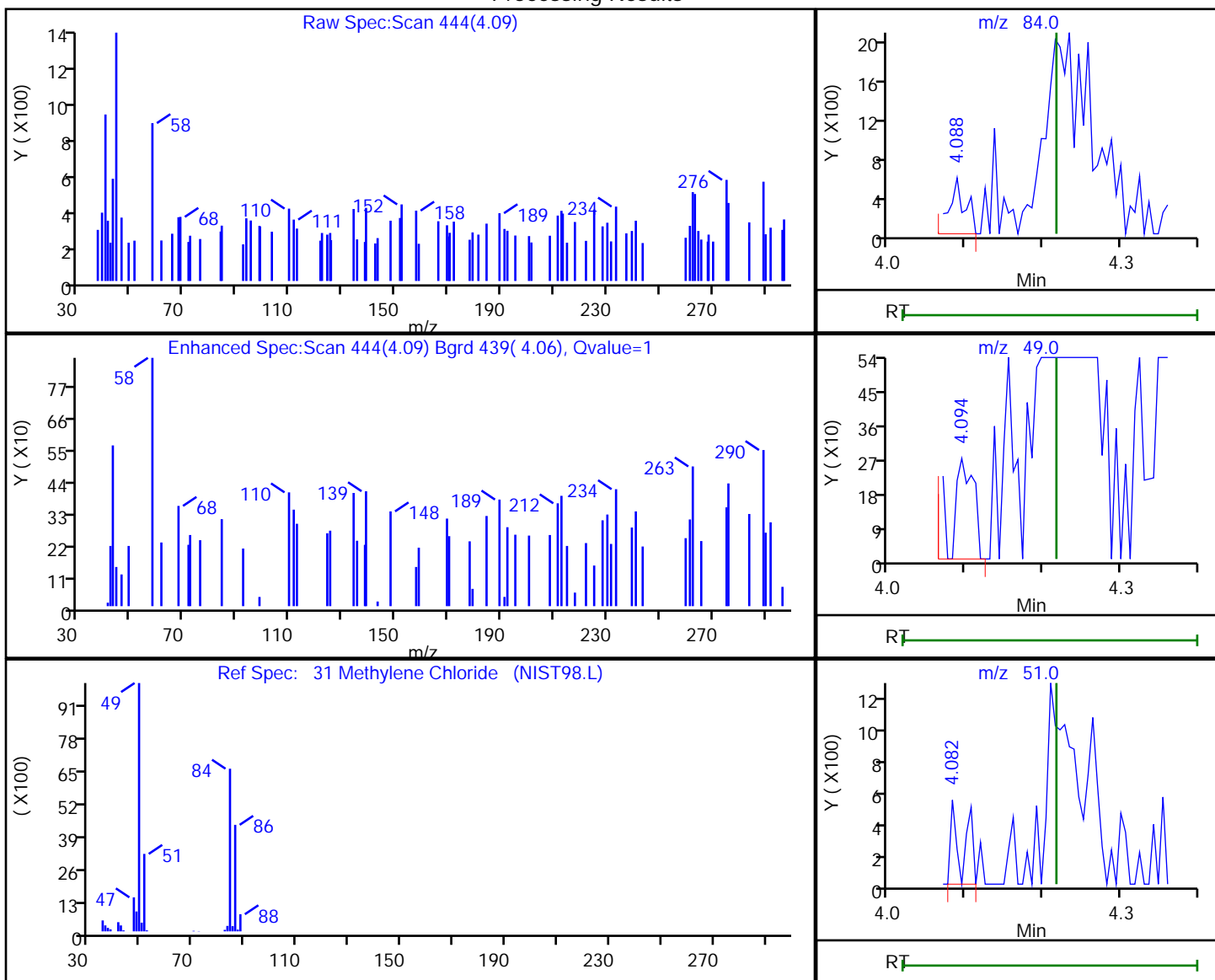
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

31 Methylene Chloride, CAS: 75-09-2

Processing Results



RT	Mass	Response	Amount
4.09	84.00	783	-1.514151
4.09	49.00	483	
4.08	51.00	569	

Reviewer: journept, 04-May-2020 15:12:43

Audit Action: Marked Compound Undetected

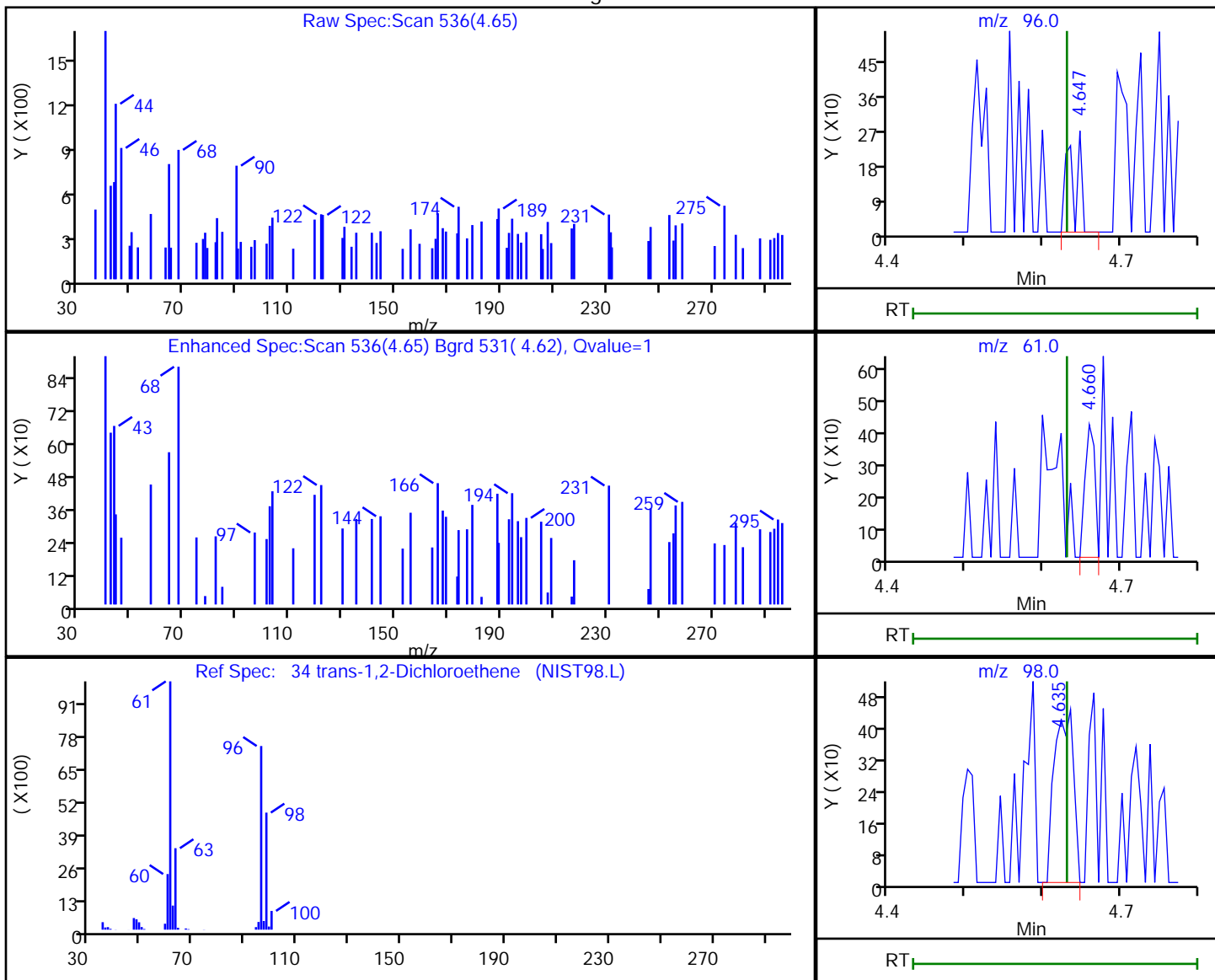
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050415.D  
 Injection Date: 04-May-2020 13:55:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-4 Lab Sample ID: 180-105108-4  
 Client ID: HD-COD-SW-9-0/1-0  
 Operator ID: 034635 ALS Bottle#: 15 Worklist Smp#: 15  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

34 trans-1,2-Dichloroethene, CAS: 156-60-5

Processing Results



RT	Mass	Response	Amount
4.65	96.00	254	0.073824
4.66	61.00	368	
4.64	98.00	751	

Reviewer: journept, 04-May-2020 15:12:43  
 Audit Action: Marked Compound Undetected

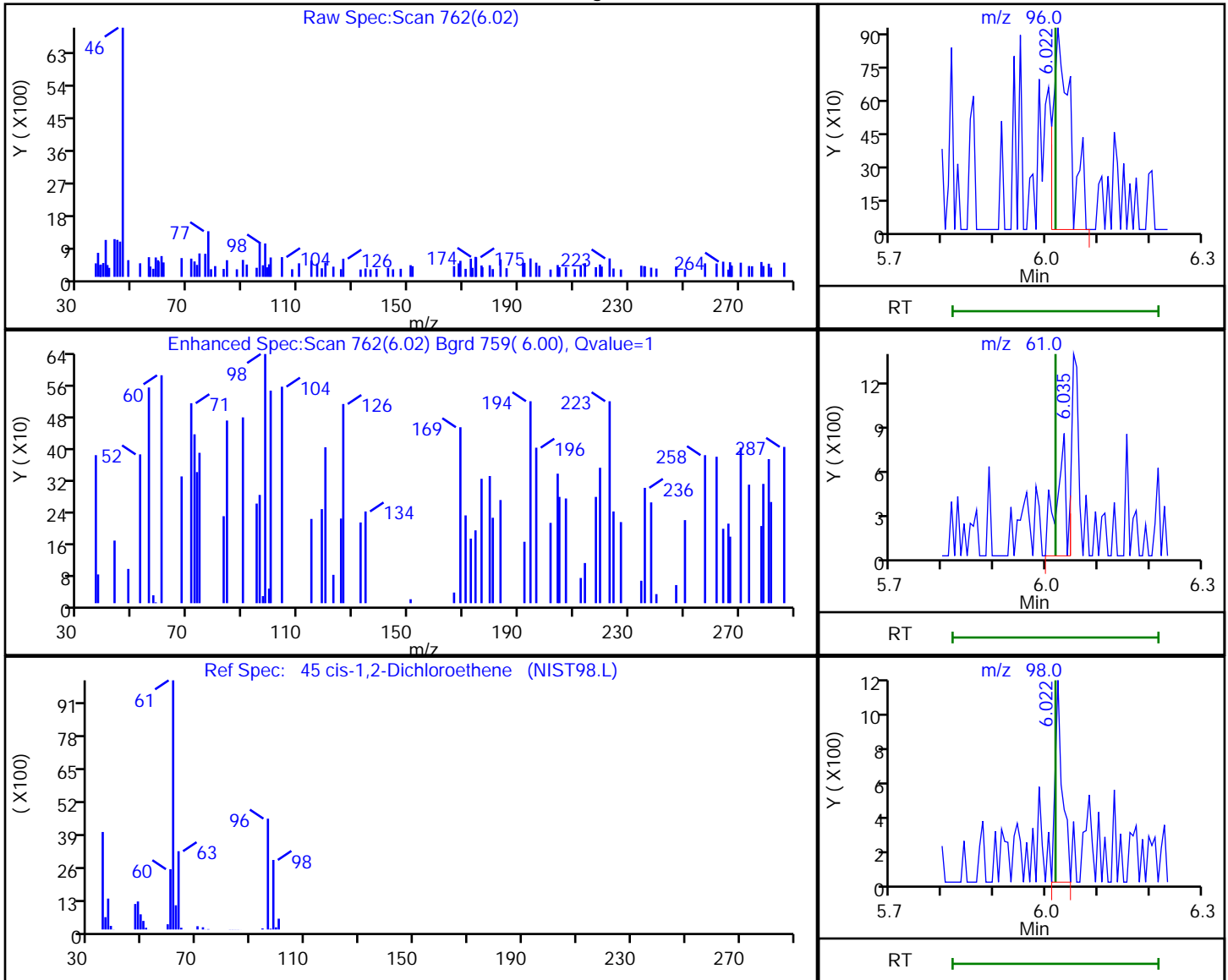
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050415.D  
Injection Date: 04-May-2020 13:55:30 Instrument ID: CHHP5  
Lims ID: 180-105108-B-4 Lab Sample ID: 180-105108-4  
Client ID: HD-COD-SW-9-0/1-0  
Operator ID: 034635 ALS Bottle#: 15 Worklist Smp#: 15  
Purge Vol: 5.000 mL Dil. Factor: 1.0000  
Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
Column: DB-624 (0.18 mm) Detector: MS SCAN

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

Processing Results



RT	Mass	Response	Amount
6.02	96.00	2080	0.508065
6.03	61.00	1164	
6.02	98.00	1157	

Reviewer: journept, 04-May-2020 15:12:43  
Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID



Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050415.D

Injection Date: 04-May-2020 13:55:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-4

Lab Sample ID: 180-105108-4

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

Operator ID: 034635

ALS Bottle#: 15 Worklist Smp#: 15

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

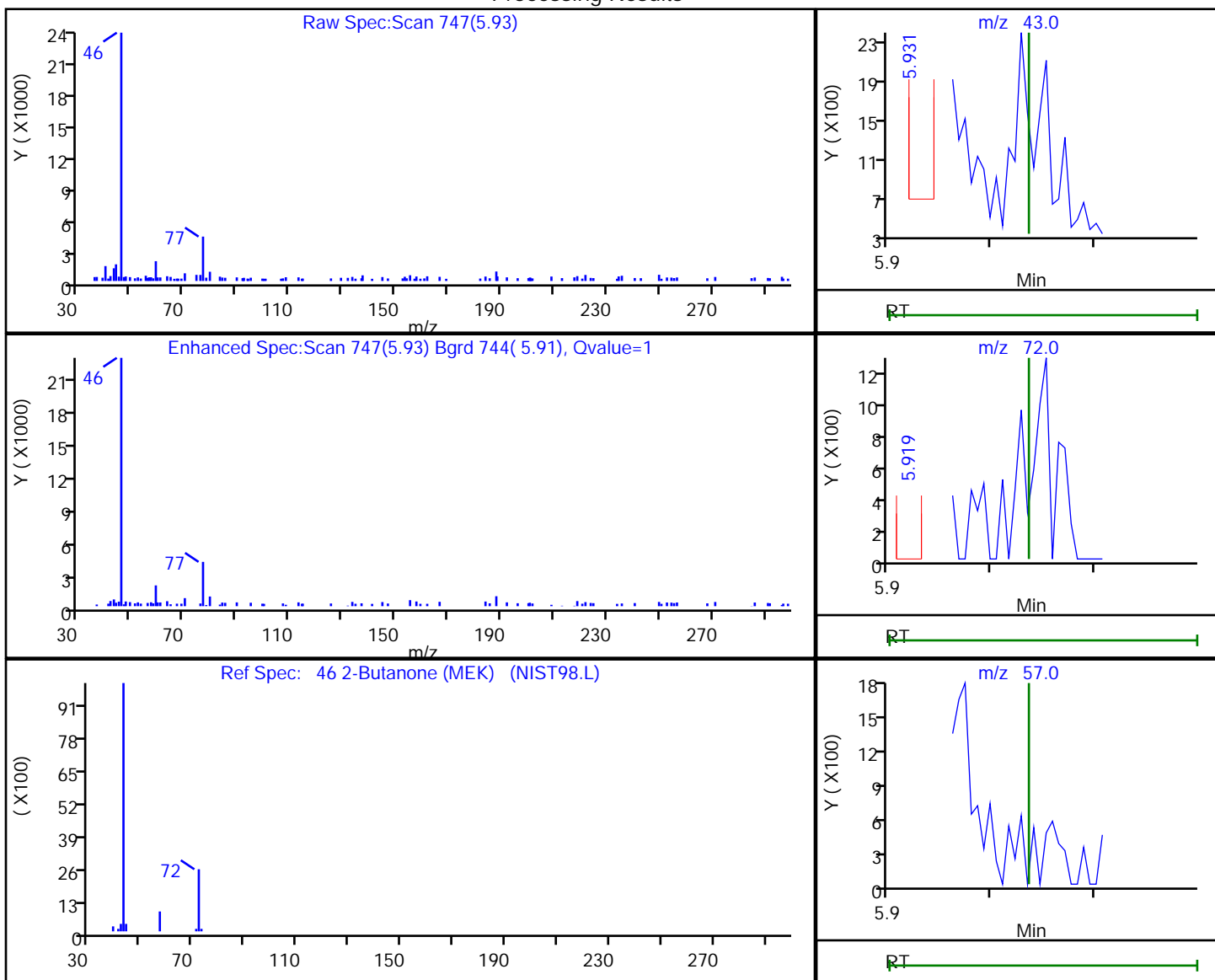
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

46 2-Butanone (MEK), CAS: 78-93-3

Processing Results



RT	Mass	Response	Amount
5.93	43.00	736	0.318400
5.92	72.00	525	
6.04	57.00	0	

Reviewer: journeyp, 04-May-2020 15:12:43

Audit Action: Marked Compound Undetected

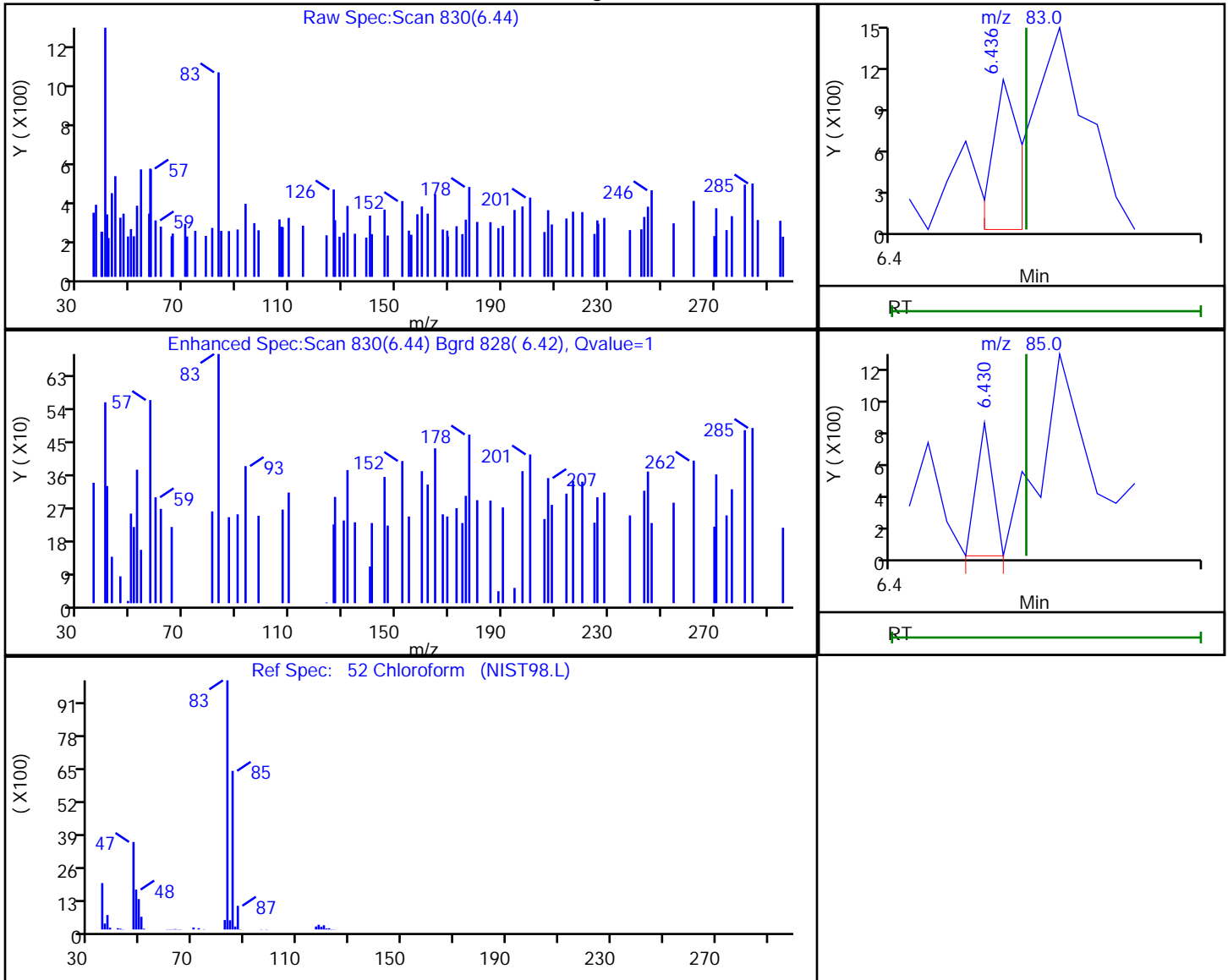
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050415.D  
 Injection Date: 04-May-2020 13:55:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-4 Lab Sample ID: 180-105108-4  
 Client ID: HD-COD-SW-9-0/1-0  
 Operator ID: 034635 ALS Bottle#: 15 Worklist Smp#: 15  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

52 Chloroform, CAS: 67-66-3

Processing Results



RT	Mass	Response	Amount
6.44	83.00	680	-1.643349
6.43	85.00	291	

Reviewer: journetp, 04-May-2020 15:12:43  
 Audit Action: Marked Compound Undetected

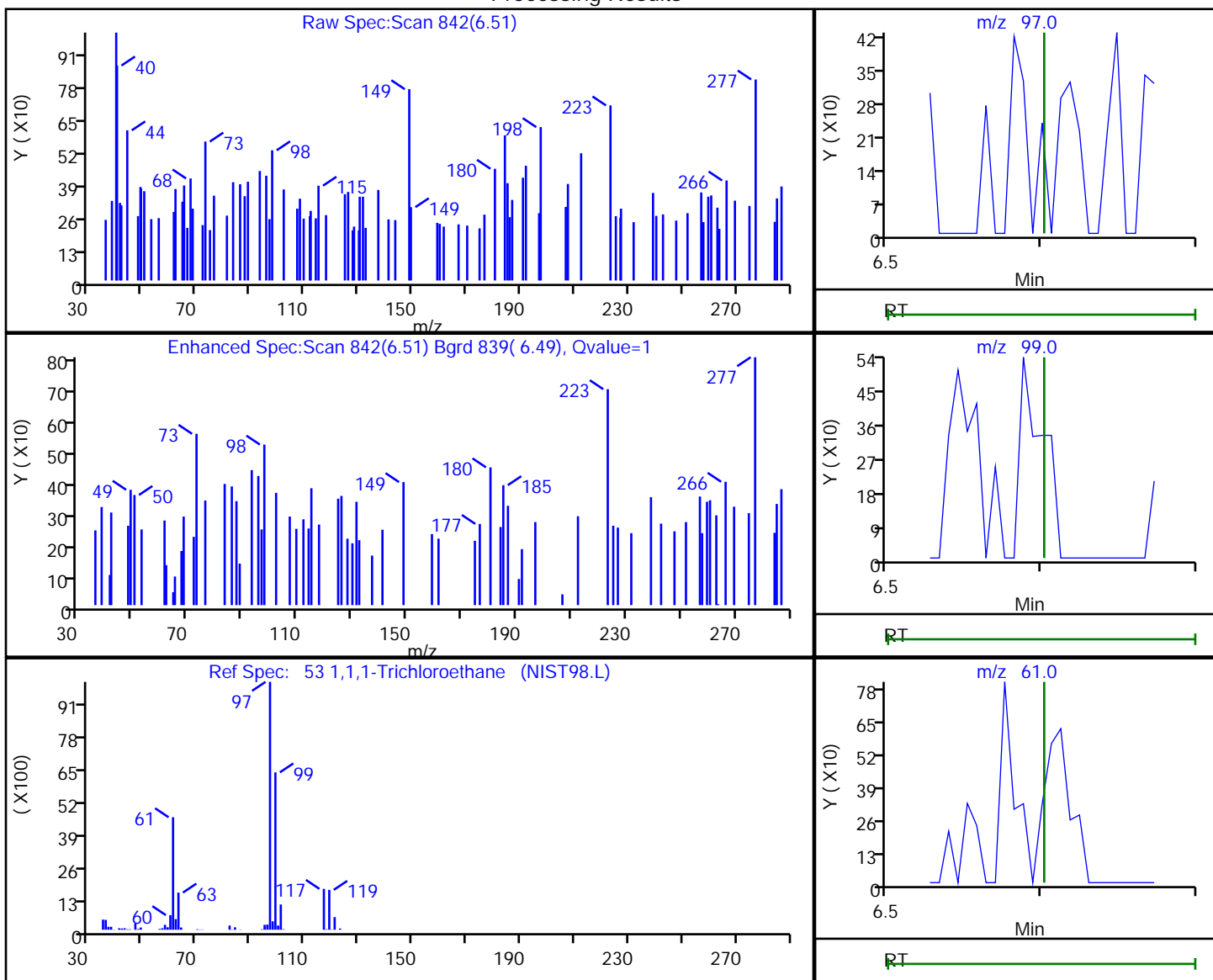
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050415.D  
 Injection Date: 04-May-2020 13:55:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-4 Lab Sample ID: 180-105108-4  
 Client ID: HD-COD-SW-9-0/1-0  
 Operator ID: 034635 ALS Bottle#: 15 Worklist Smp#: 15  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

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

Processing Results



RT	Mass	Response	Amount
6.51	97.00	263	0.051277
6.52	99.00	370	
6.52	61.00	296	

Reviewer: journept, 04-May-2020 15:12:44  
 Audit Action: Marked Compound Undetected

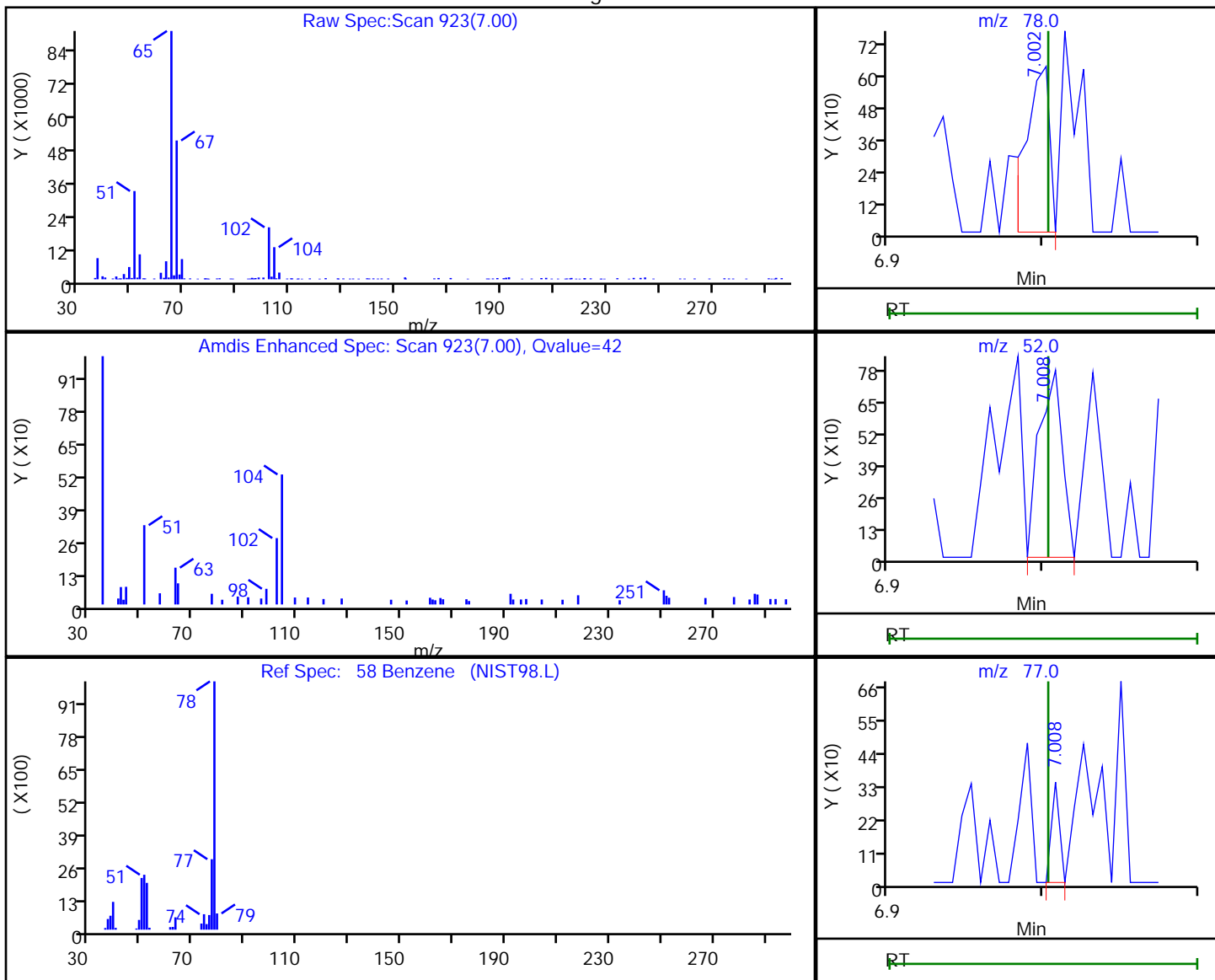
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050415.D  
 Injection Date: 04-May-2020 13:55:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-4 Lab Sample ID: 180-105108-4  
 Client ID: HD-COD-SW-9-0/1-0  
 Operator ID: 034635 ALS Bottle#: 15 Worklist Smp#: 15  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

58 Benzene, CAS: 71-43-2

Processing Results



RT	Mass	Response	Amount
7.00	78.00	673	0.043442
7.01	52.00	810	
7.01	77.00	123	

Reviewer: journeyp, 04-May-2020 15:12:44  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050415.D

Injection Date: 04-May-2020 13:55:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-4

Lab Sample ID: 180-105108-4

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

Operator ID: 034635

ALS Bottle#: 15 Worklist Smp#: 15

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

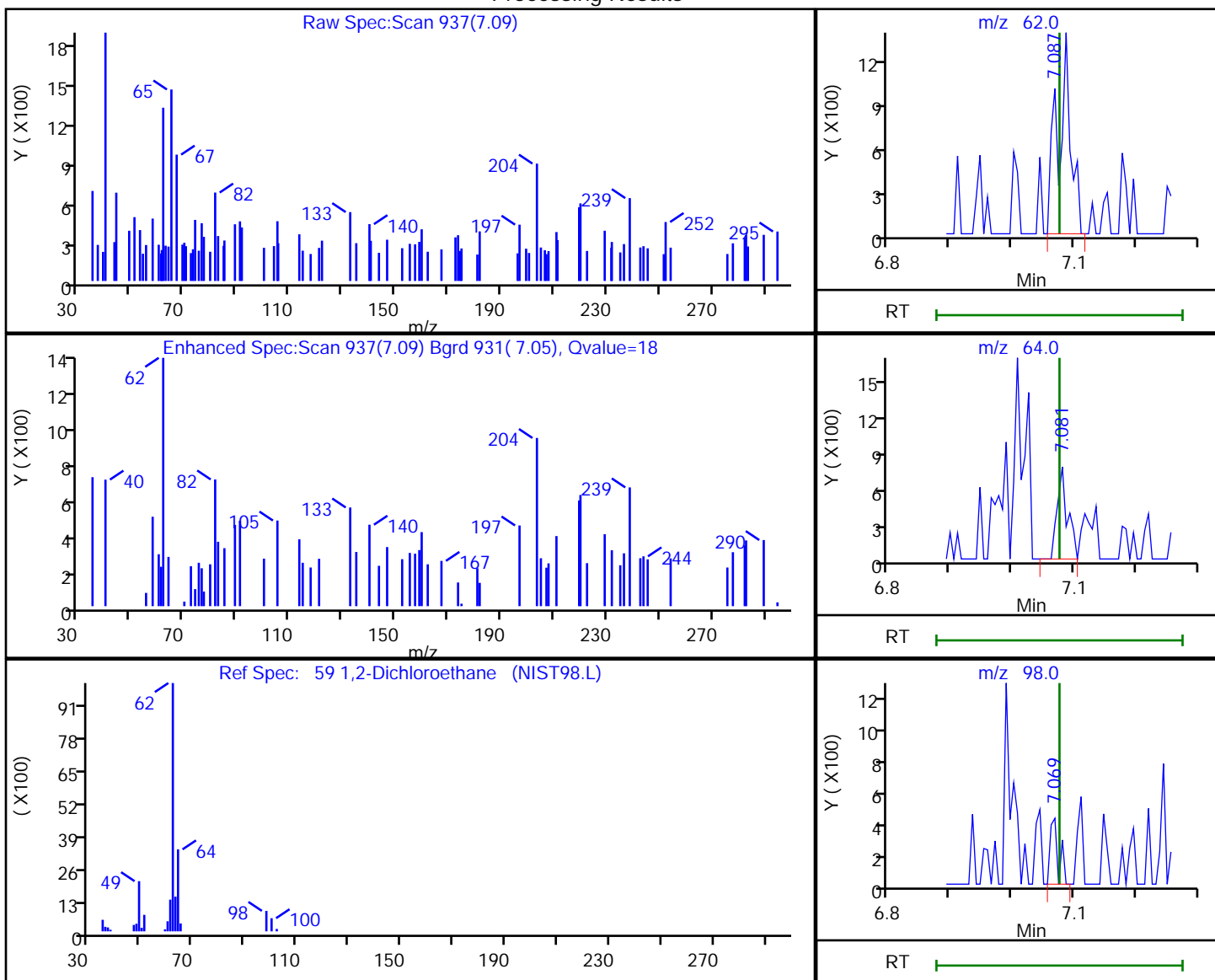
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

59 1,2-Dichloroethane, CAS: 107-06-2

Processing Results



RT	Mass	Response	Amount
7.09	62.00	1907	0.323740
7.08	64.00	869	
7.07	98.00	396	

Reviewer: journeyp, 04-May-2020 15:12:48

Audit Action: Marked Compound Undetected

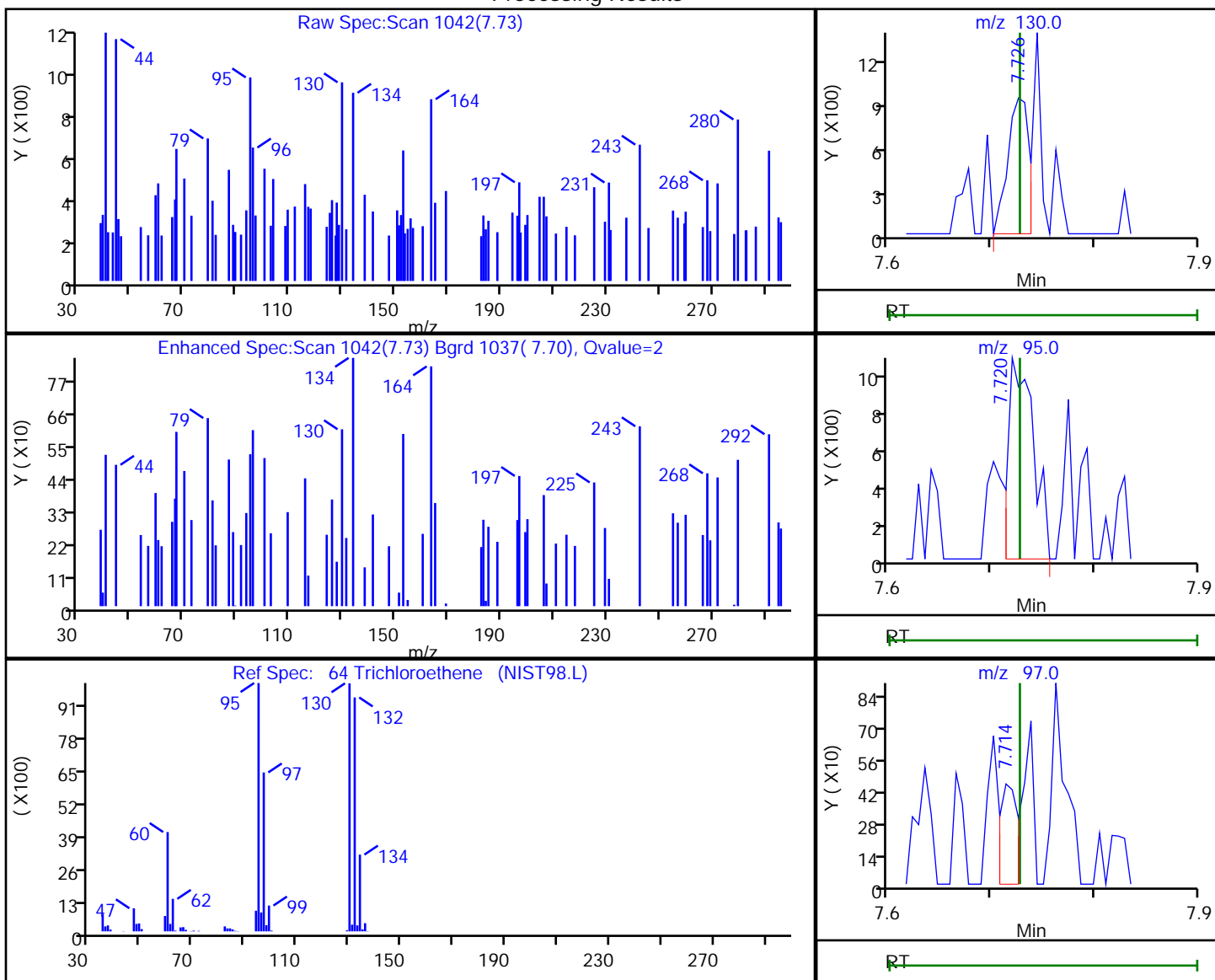
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050415.D  
 Injection Date: 04-May-2020 13:55:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-4 Lab Sample ID: 180-105108-4  
 Client ID: HD-COD-SW-9-0/1-0  
 Operator ID: 034635 ALS Bottle#: 15 Worklist Smp#: 15  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

64 Trichloroethene, CAS: 79-01-6

Processing Results



RT	Mass	Response	Amount
7.73	130.00	1293	0.335143
7.72	95.00	1801	
7.71	97.00	534	

Reviewer: journeyp, 04-May-2020 15:12:48  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050415.D

Injection Date: 04-May-2020 13:55:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-4

Lab Sample ID: 180-105108-4

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

Operator ID: 034635

ALS Bottle#: 15 Worklist Smp#: 15

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

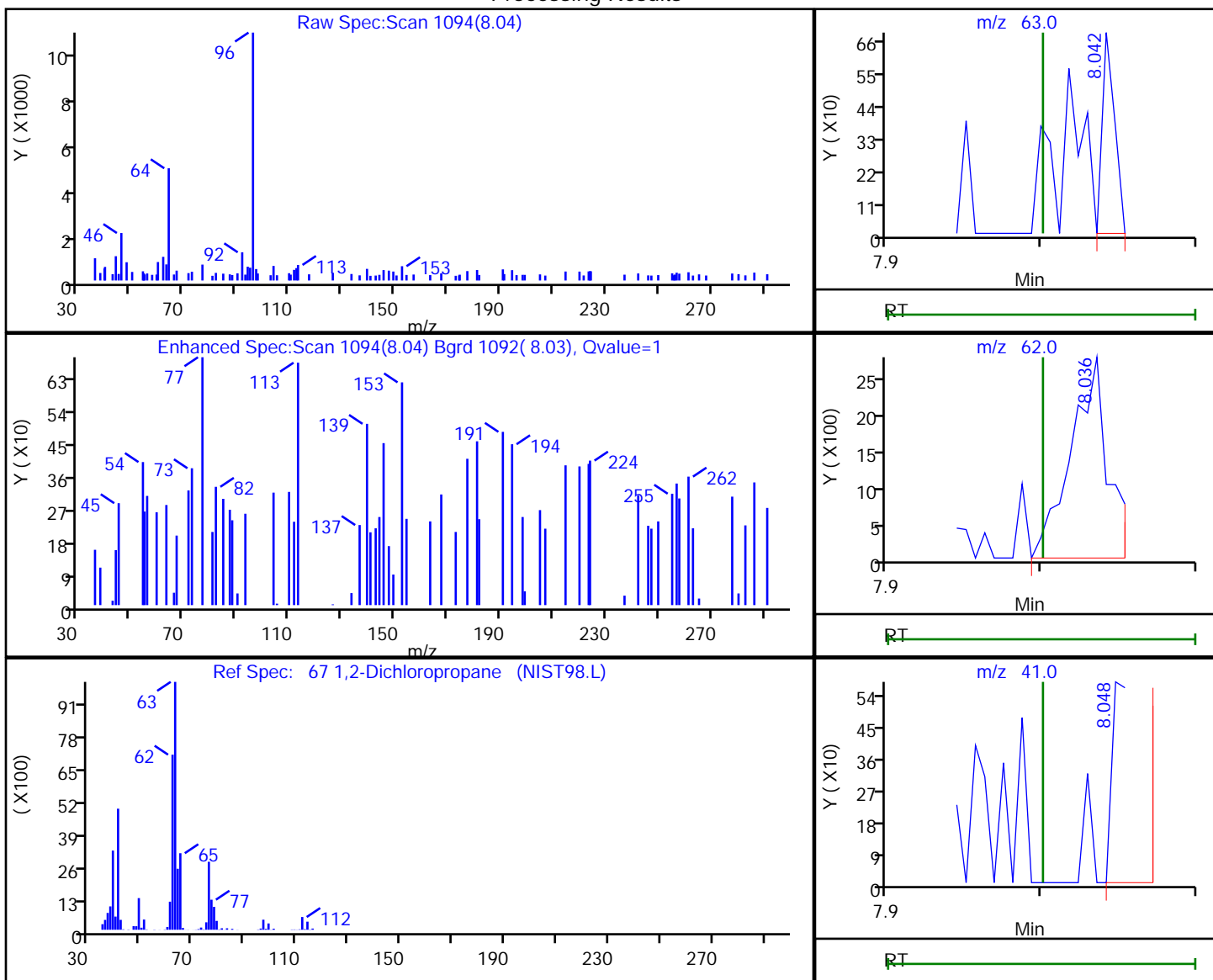
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

67 1,2-Dichloropropane, CAS: 78-87-5

Processing Results



RT	Mass	Response	Amount
8.04	63.00	383	0.092623
8.04	62.00	4620	
8.05	41.00	635	

Reviewer: journeyp, 04-May-2020 15:12:48

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050415.D

Injection Date: 04-May-2020 13:55:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-4

Lab Sample ID: 180-105108-4

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

Operator ID: 034635

ALS Bottle#: 15 Worklist Smp#: 15

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

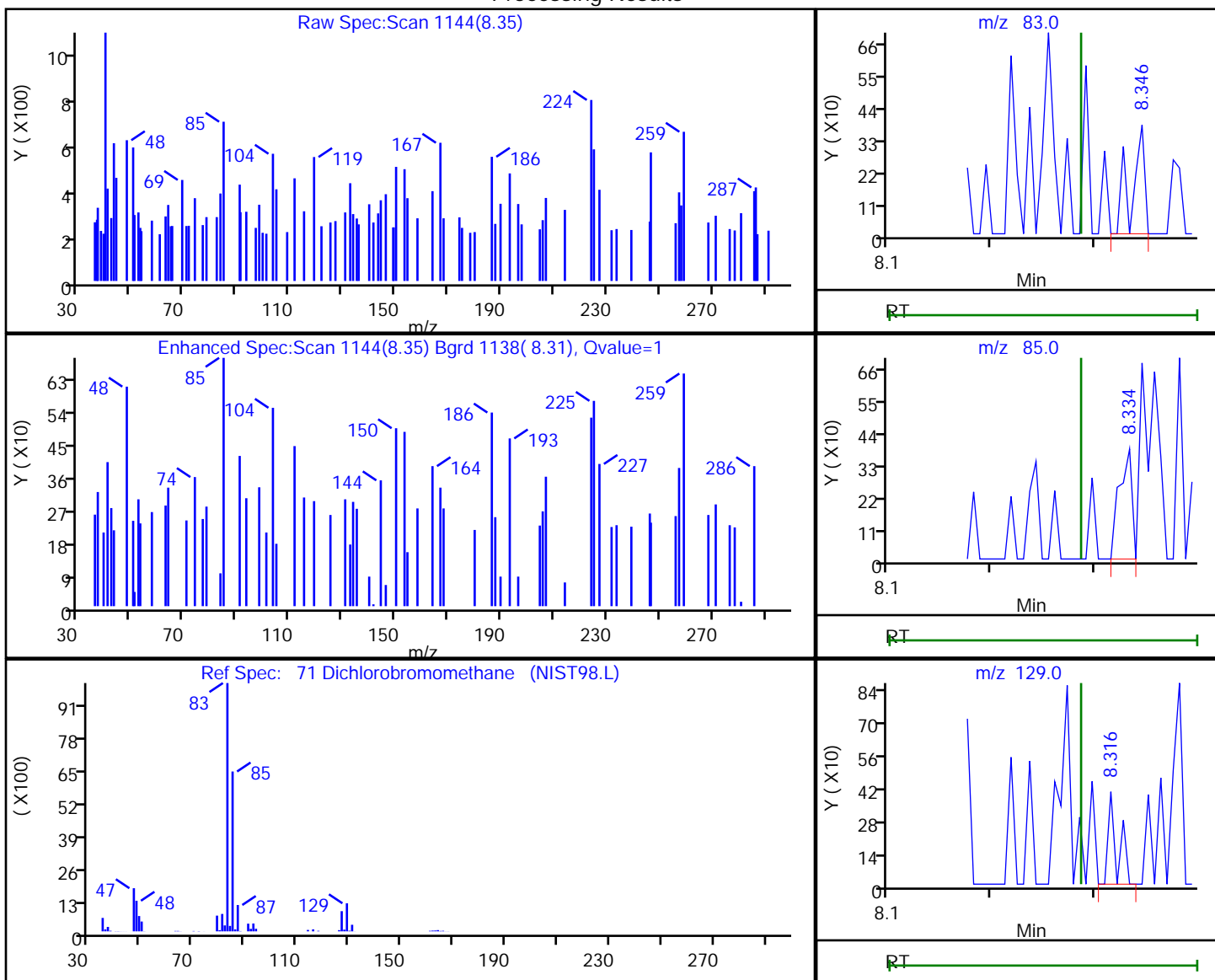
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

71 Dichlorobromomethane, CAS: 75-27-4

Processing Results



RT	Mass	Response	Amount
8.35	83.00	321	0.066158
8.33	85.00	327	
8.32	129.00	244	

Reviewer: journeyp, 04-May-2020 15:12:48

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

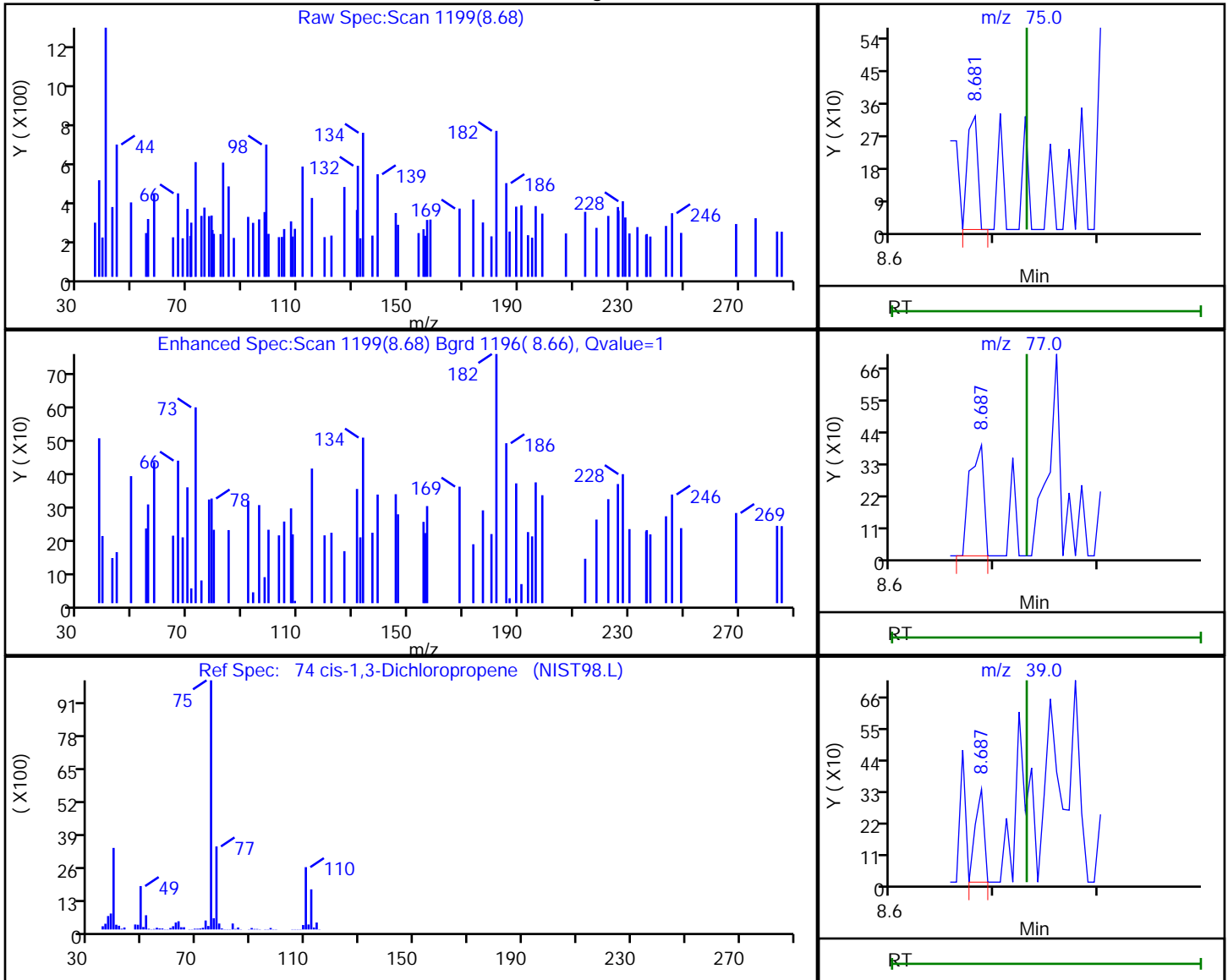


Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050415.D  
 Injection Date: 04-May-2020 13:55:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-4 Lab Sample ID: 180-105108-4  
 Client ID: HD-COD-SW-9-0/1-0  
 Operator ID: 034635 ALS Bottle#: 15 Worklist Smp#: 15  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

74 cis-1,3-Dichloropropene, CAS: 10061-01-5

Processing Results



RT	Mass	Response	Amount
8.68	75.00	217	0.035521
8.69	77.00	366	
8.69	39.00	195	

Reviewer: journept, 04-May-2020 15:12:48  
 Audit Action: Marked Compound Undetected

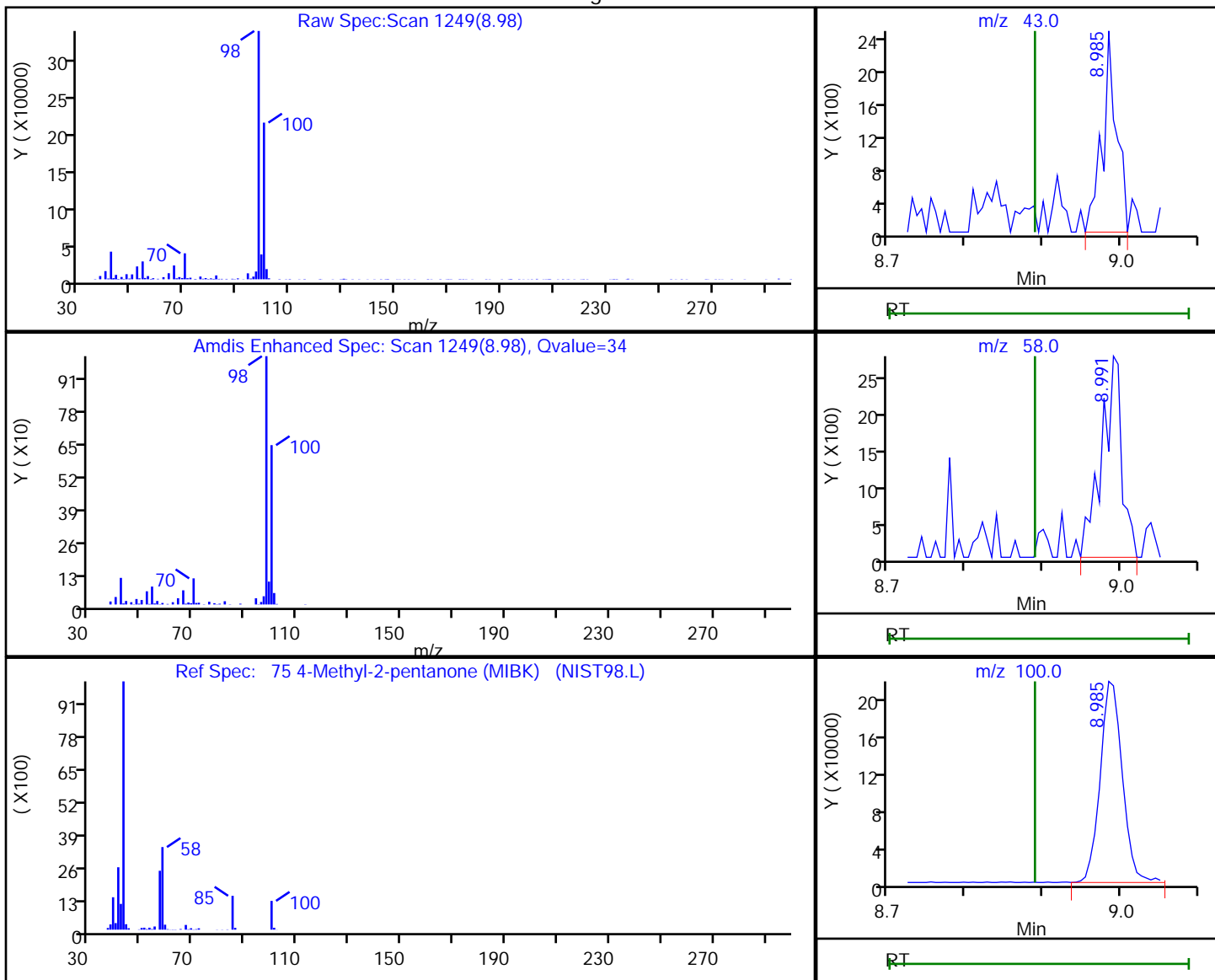
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050415.D  
 Injection Date: 04-May-2020 13:55:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-4 Lab Sample ID: 180-105108-4  
 Client ID: HD-COD-SW-9-0/1-0  
 Operator ID: 034635 ALS Bottle#: 15 Worklist Smp#: 15  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

75 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Processing Results



RT	Mass	Response	Amount
8.98	43.00	3138	16.195009
8.99	58.00	4982	
8.98	100.00	420918	

Reviewer: journept, 04-May-2020 15:12:48  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050415.D

Injection Date: 04-May-2020 13:55:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-4

Lab Sample ID: 180-105108-4

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

Operator ID: 034635

ALS Bottle#: 15 Worklist Smp#: 15

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

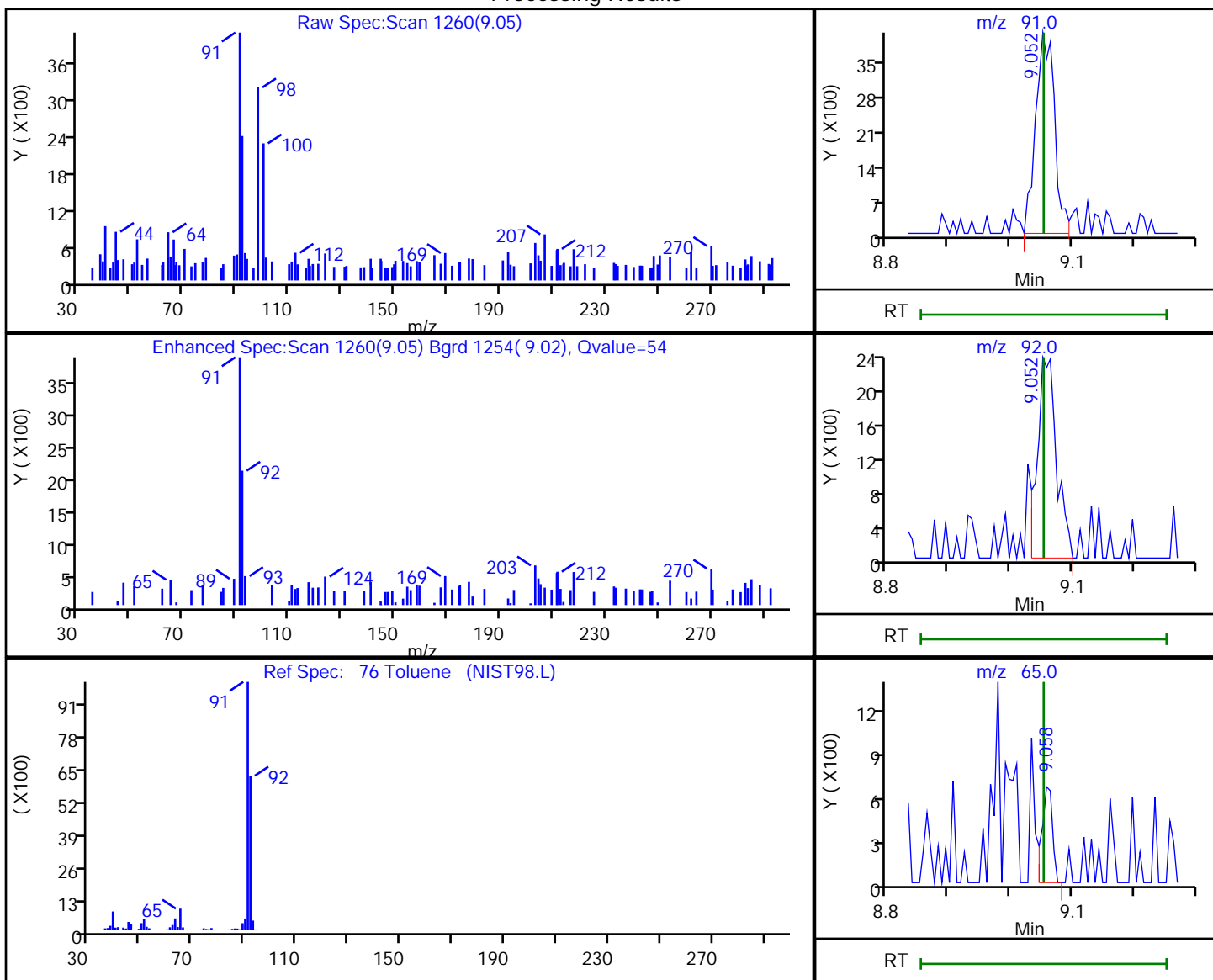
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

76 Toluene, CAS: 108-88-3

Processing Results



RT	Mass	Response	Amount
9.05	91.00	8686	0.544276
9.05	92.00	5168	
9.06	65.00	785	

Reviewer: journeyp, 04-May-2020 15:12:48

Audit Action: Marked Compound Undetected

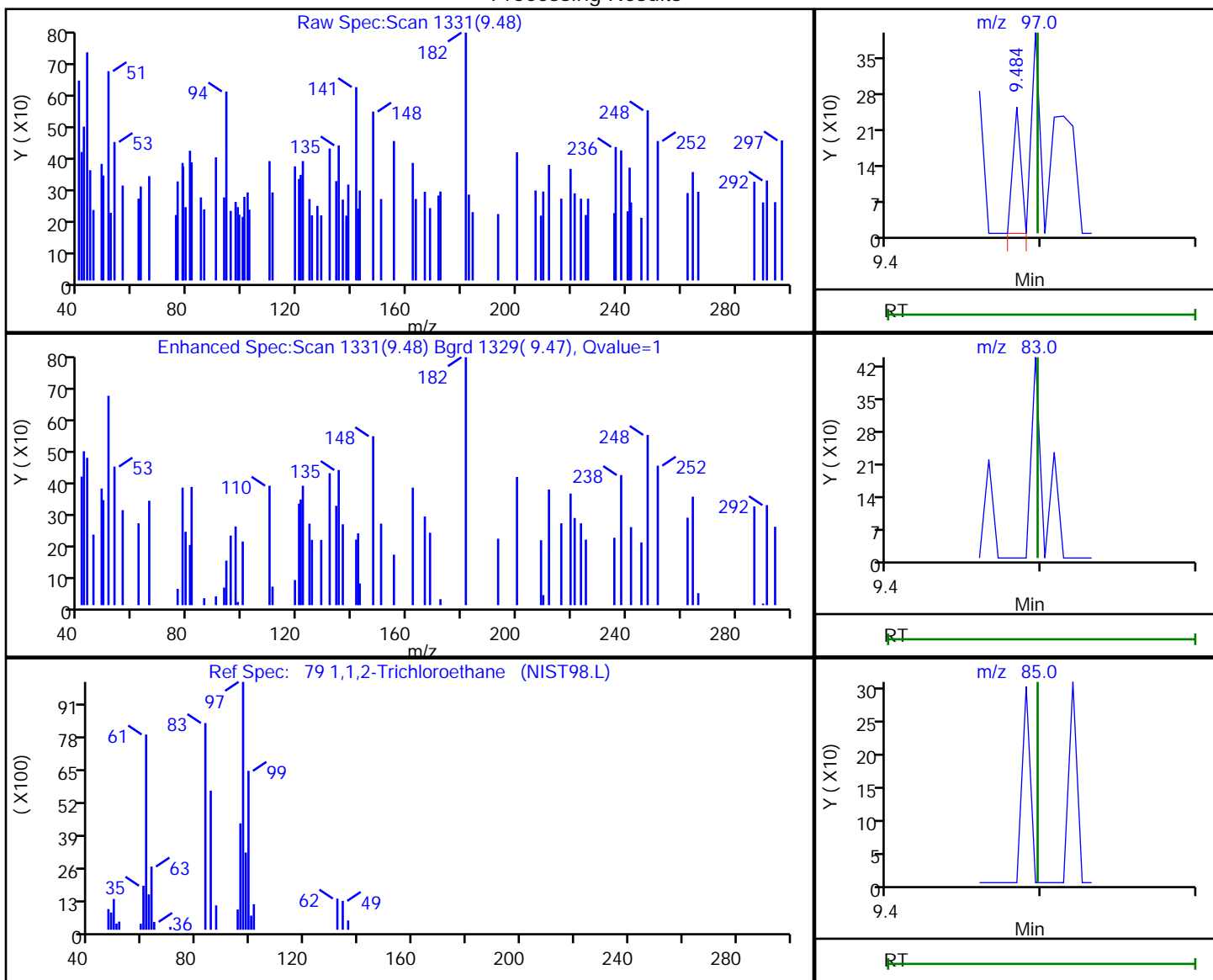
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050415.D  
 Injection Date: 04-May-2020 13:55:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-4 Lab Sample ID: 180-105108-4  
 Client ID: HD-COD-SW-9-0/1-0  
 Operator ID: 034635 ALS Bottle#: 15 Worklist Smp#: 15  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

79 1,1,2-Trichloroethane, CAS: 79-00-5

Processing Results



RT	Mass	Response	Amount
9.48	97.00	92	0.024802
9.50	83.00	0	
9.50	85.00	0	

Reviewer: journept, 04-May-2020 15:12:48  
 Audit Action: Marked Compound Undetected

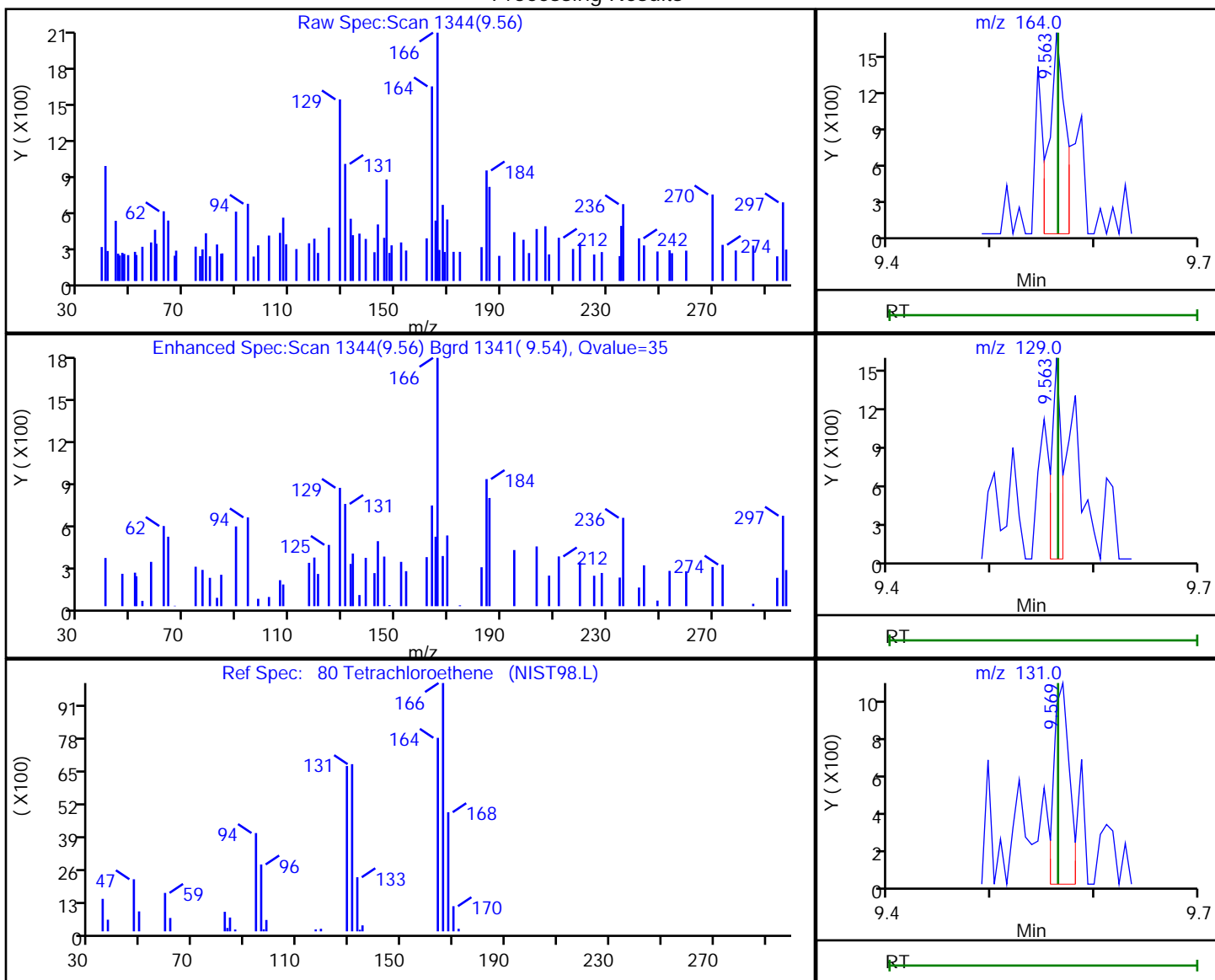
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050415.D  
 Injection Date: 04-May-2020 13:55:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-4 Lab Sample ID: 180-105108-4  
 Client ID: HD-COD-SW-9-0/1-0  
 Operator ID: 034635 ALS Bottle#: 15 Worklist Smp#: 15  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

80 Tetrachloroethene, CAS: 127-18-4

Processing Results



RT	Mass	Response	Amount
9.56	164.00	1733	0.545604
9.56	129.00	1006	
9.57	131.00	1151	

Reviewer: journeyp, 04-May-2020 15:12:48  
 Audit Action: Marked Compound Undetected

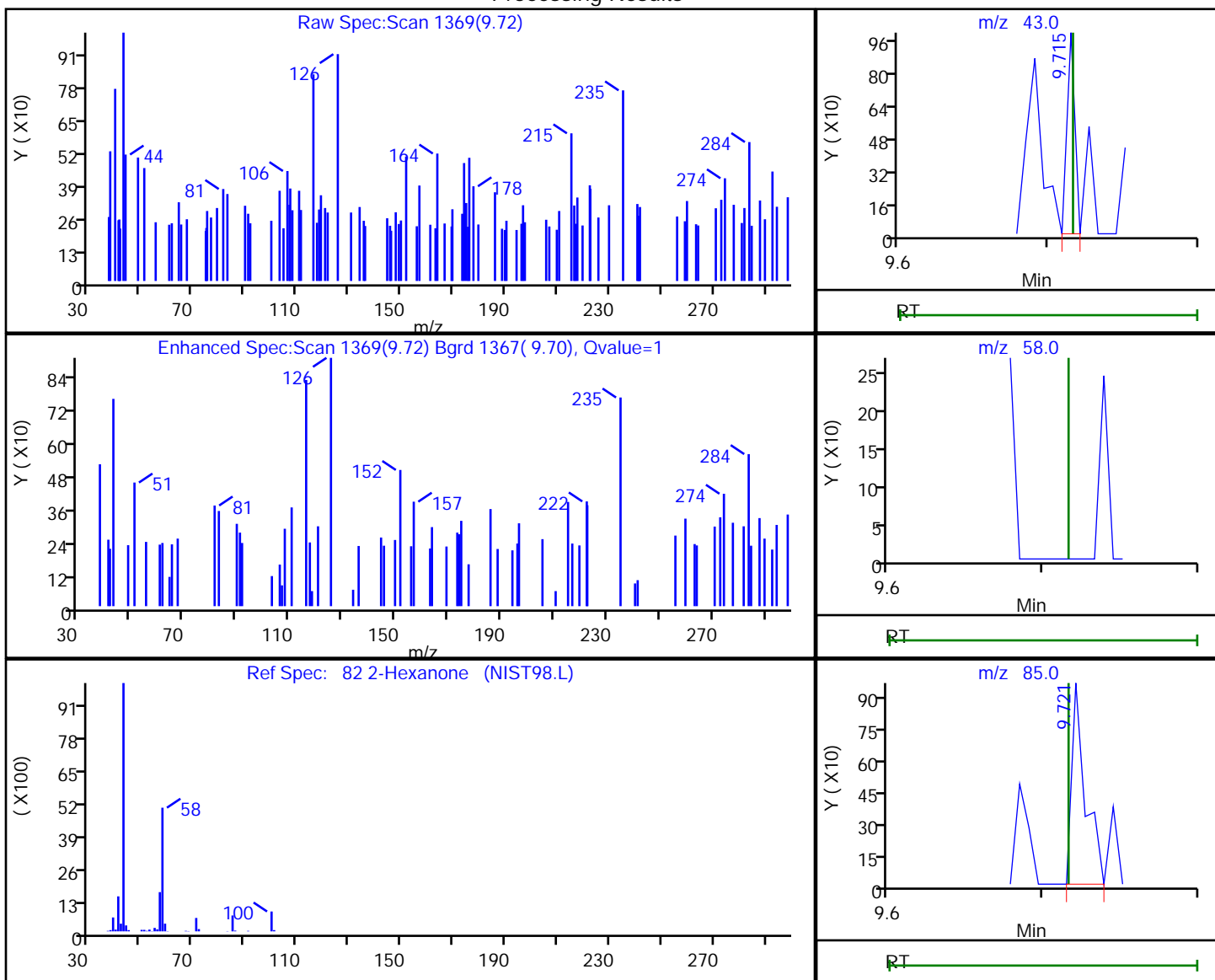
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050415.D  
 Injection Date: 04-May-2020 13:55:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-4 Lab Sample ID: 180-105108-4  
 Client ID: HD-COD-SW-9-0/1-0  
 Operator ID: 034635 ALS Bottle#: 15 Worklist Smp#: 15  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

82 2-Hexanone, CAS: 591-78-6

Processing Results



RT	Mass	Response	Amount
9.72	43.00	363	14.118467
9.72	85.00	596	
9.72	58.00	0	

Reviewer: journetp, 04-May-2020 15:12:49  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050415.D

Injection Date: 04-May-2020 13:55:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-4

Lab Sample ID: 180-105108-4

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

Operator ID: 034635

ALS Bottle#: 15 Worklist Smp#: 15

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

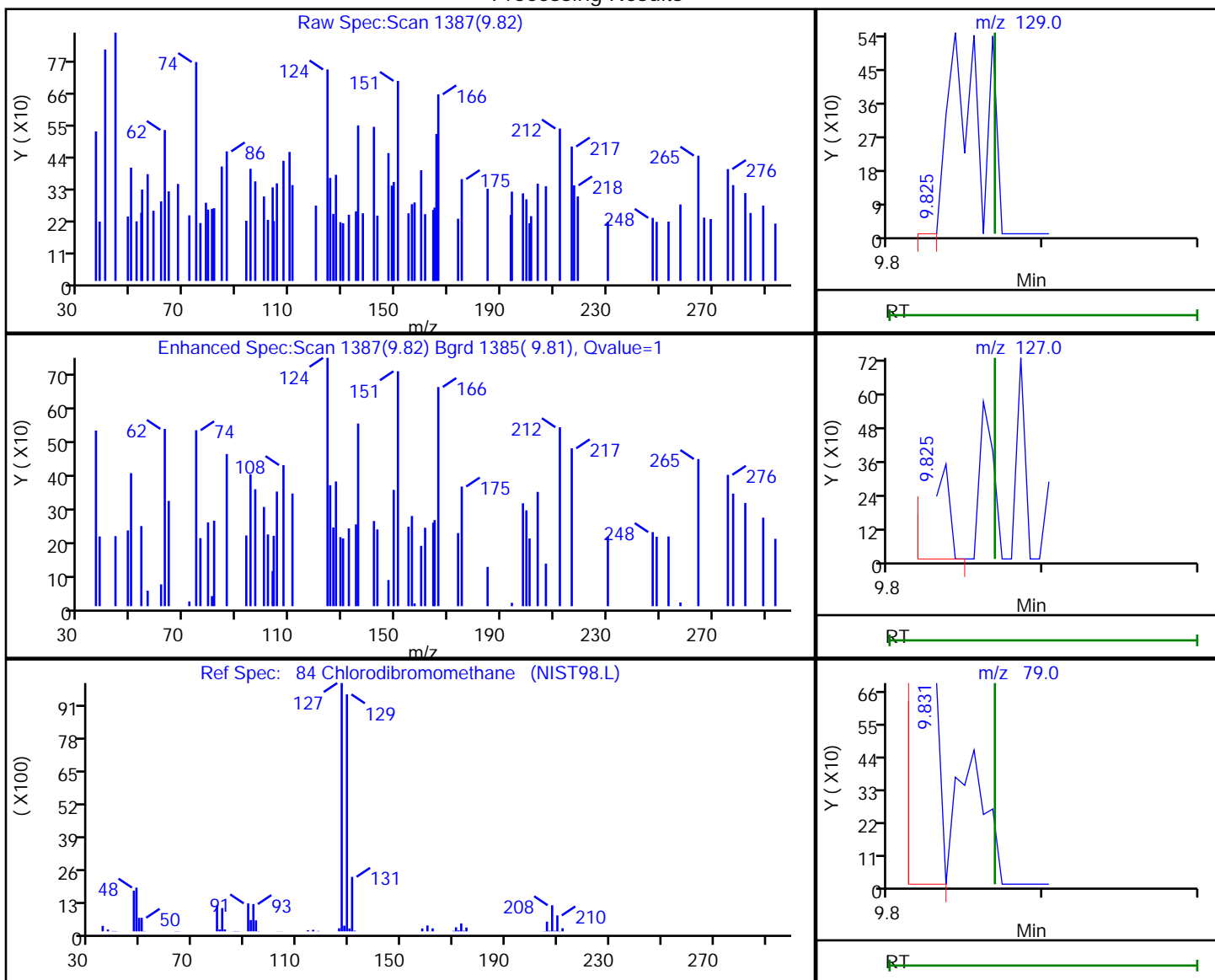
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

84 Chlorodibromomethane, CAS: 124-48-1

Processing Results



RT	Mass	Response	Amount
9.82	129.00	75	0.023885
9.82	127.00	342	
9.83	79.00	537	

Reviewer: journeyp, 04-May-2020 15:12:49

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050415.D

Injection Date: 04-May-2020 13:55:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-4

Lab Sample ID: 180-105108-4

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

Operator ID: 034635

ALS Bottle#: 15 Worklist Smp#: 15

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

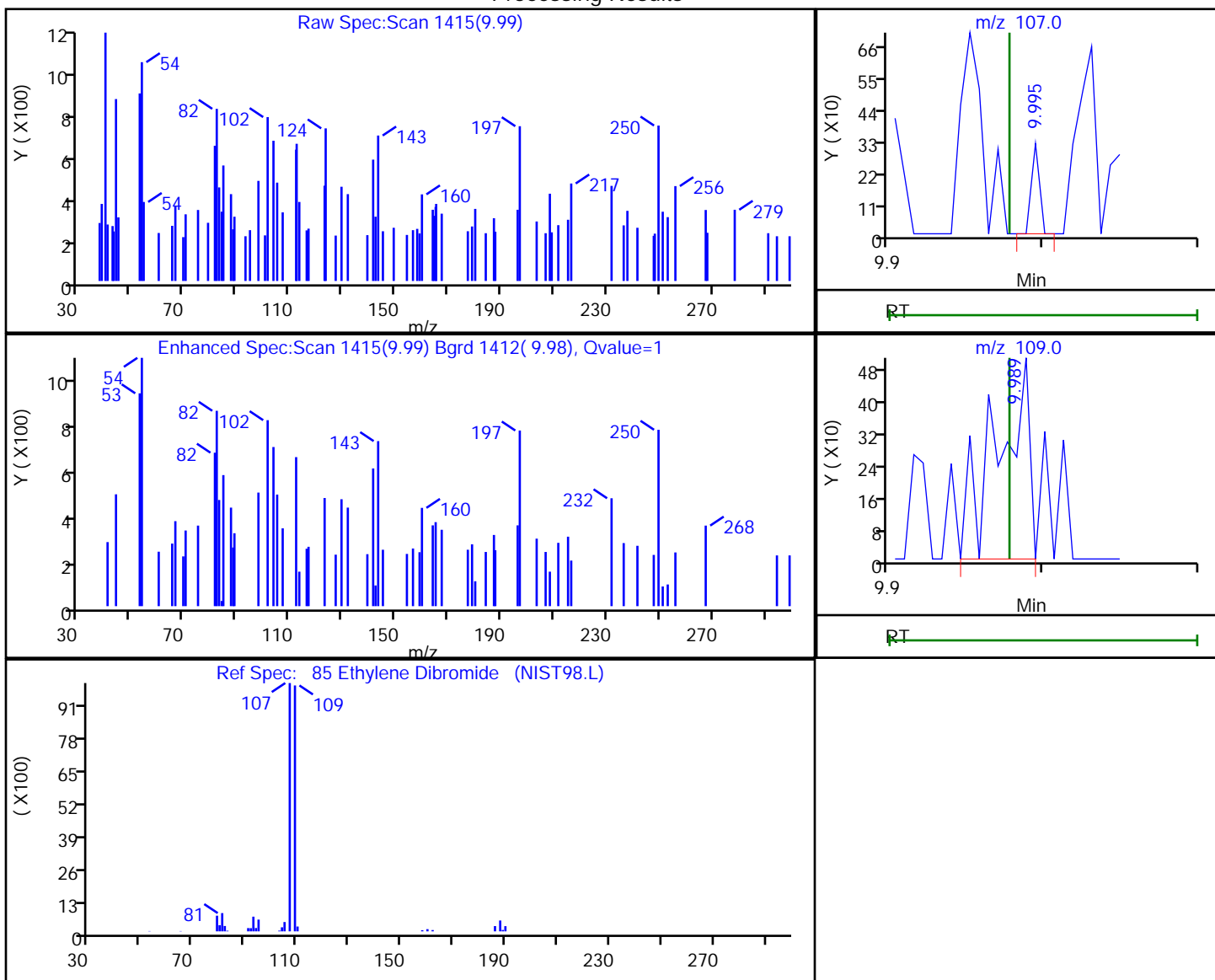
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

85 Ethylene Dibromide, CAS: 106-93-4

Processing Results



RT	Mass	Response	Amount
9.99	107.00	115	0.033140
9.99	109.00	737	

Reviewer: journetp, 04-May-2020 15:12:49

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID



Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050415.D

Injection Date: 04-May-2020 13:55:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-4

Lab Sample ID: 180-105108-4

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

Operator ID: 034635

ALS Bottle#: 15

Worklist Smp#: 15

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

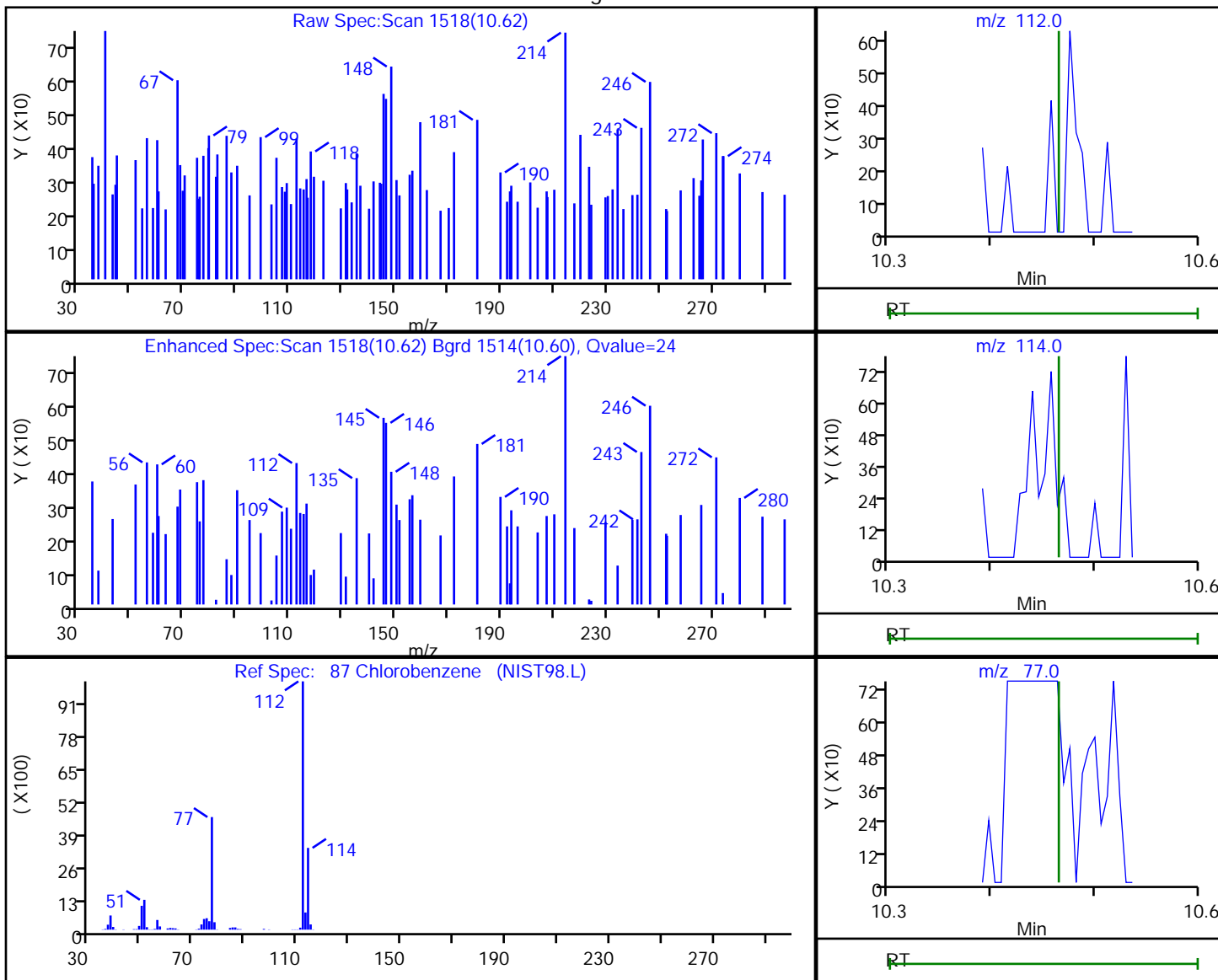
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

87 Chlorobenzene, CAS: 108-90-7

Processing Results



RT	Mass	Response	Amount
10.62	112.00	314	0.030595
10.63	114.00	400	
10.62	77.00	213	

Reviewer: journeyp, 04-May-2020 15:12:49

Audit Action: Marked Compound Undetected

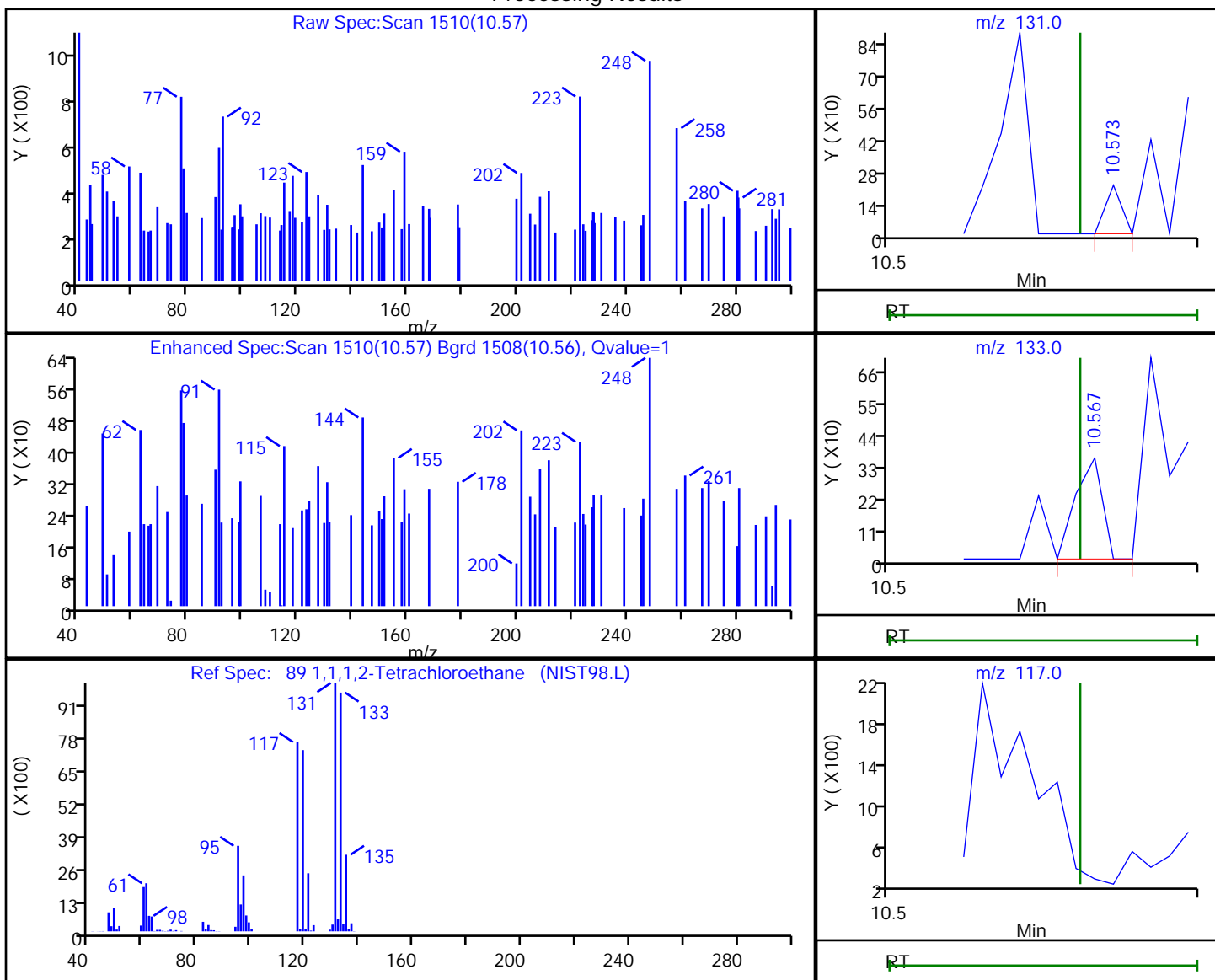
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050415.D  
 Injection Date: 04-May-2020 13:55:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-4 Lab Sample ID: 180-105108-4  
 Client ID: HD-COD-SW-9-0/1-0  
 Operator ID: 034635 ALS Bottle#: 15 Worklist Smp#: 15  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

89 1,1,1,2-Tetrachloroethane, CAS: 630-20-6

Processing Results



RT	Mass	Response	Amount
10.57	131.00	78	0.023403
10.57	133.00	214	
10.56	117.00	0	

Reviewer: journeyp, 04-May-2020 15:12:49  
 Audit Action: Marked Compound Undetected

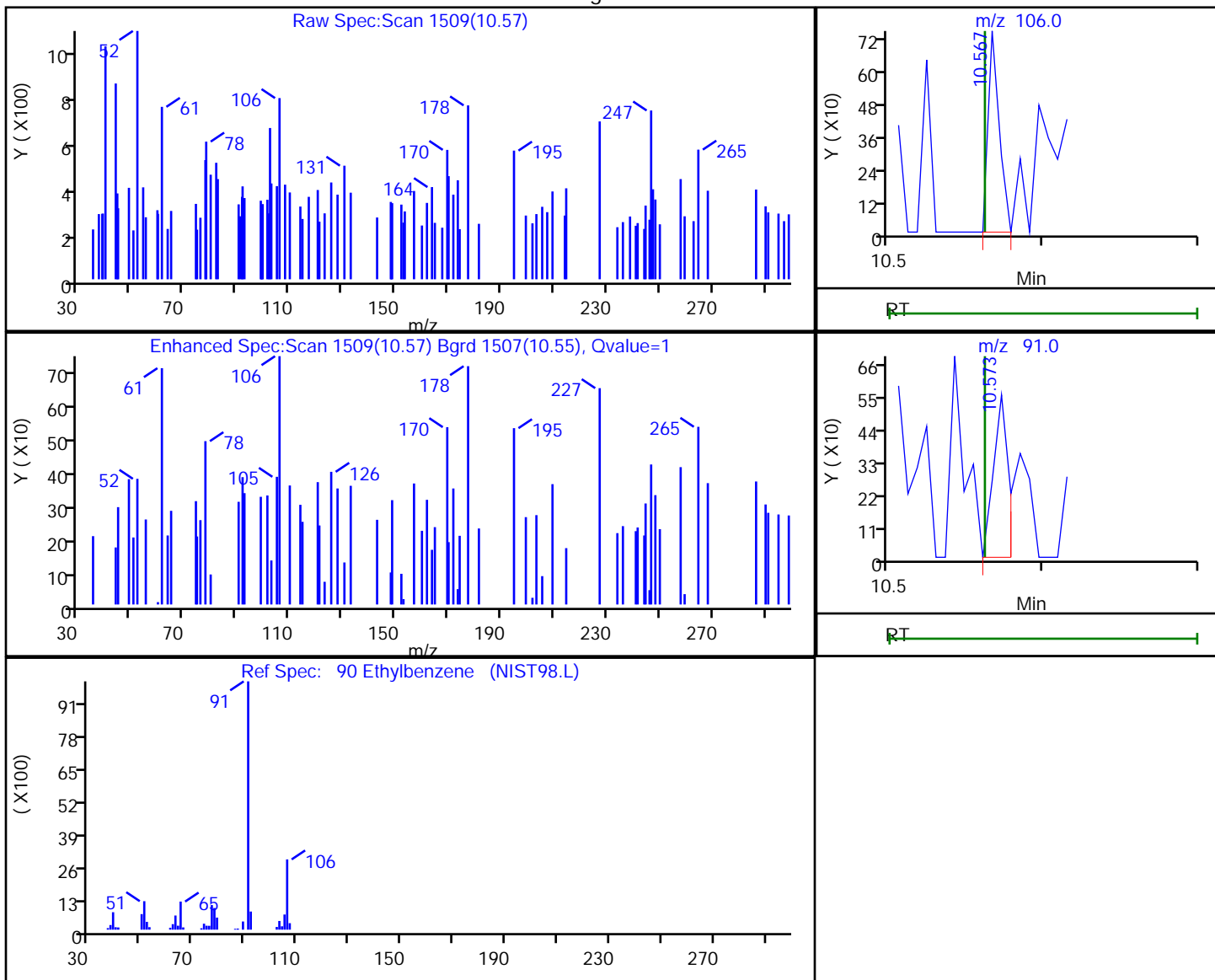
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050415.D  
Injection Date: 04-May-2020 13:55:30 Instrument ID: CHHP5  
Lims ID: 180-105108-B-4 Lab Sample ID: 180-105108-4  
Client ID: HD-COD-SW-9-0/1-0  
Operator ID: 034635 ALS Bottle#: 15 Worklist Smp#: 15  
Purge Vol: 5.000 mL Dil. Factor: 1.0000  
Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
Column: DB-624 (0.18 mm) Detector: MS SCAN

90 Ethylbenzene, CAS: 100-41-4

Processing Results



RT	Mass	Response	Amount
10.57	106.00	375	0.070588
10.57	91.00	376	

Reviewer: journetp, 04-May-2020 15:12:49  
Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050415.D

Injection Date: 04-May-2020 13:55:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-4

Lab Sample ID: 180-105108-4

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

Operator ID: 034635

ALS Bottle#: 15 Worklist Smp#: 15

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

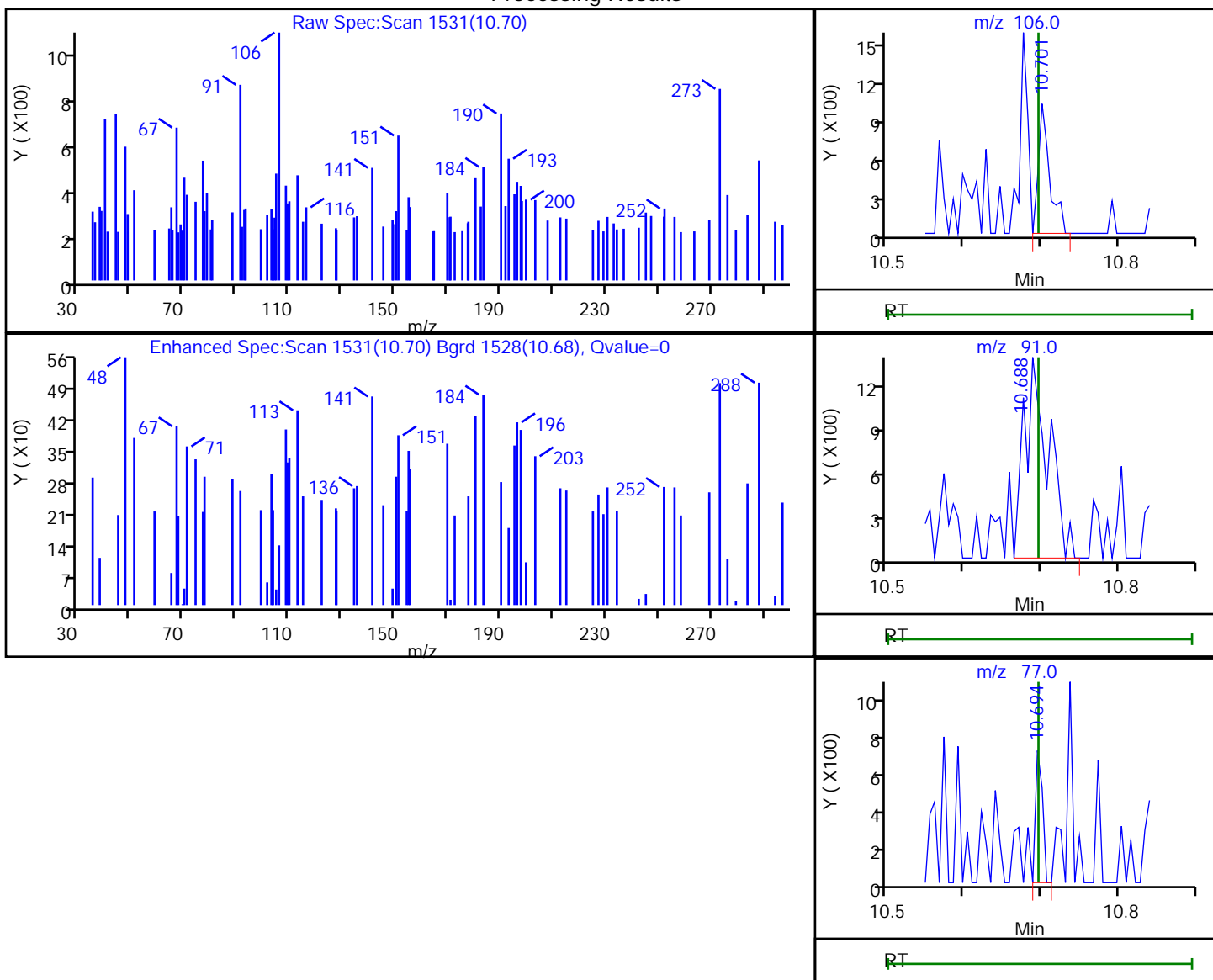
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

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

Processing Results



RT	Mass	Response	Amount
10.70	106.00	1056	0.159445
10.69	91.00	2847	
10.69	77.00	434	

Reviewer: journeyp, 04-May-2020 15:12:49

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050415.D

Injection Date: 04-May-2020 13:55:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-4

Lab Sample ID: 180-105108-4

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

Operator ID: 034635

ALS Bottle#: 15 Worklist Smp#: 15

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

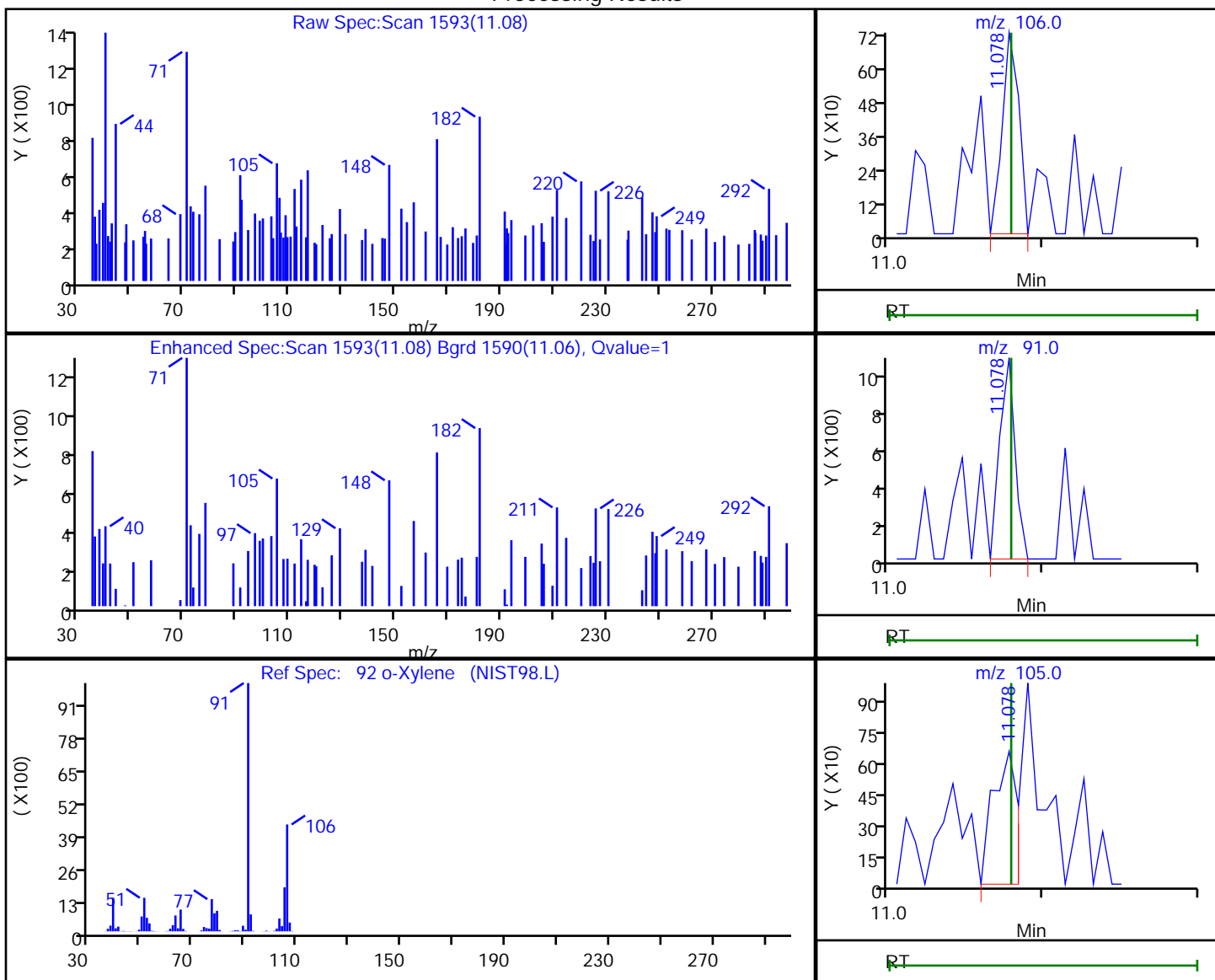
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

92 o-Xylene, CAS: 95-47-6

Processing Results



RT	Mass	Response	Amount
11.08	106.00	543	0.087836
11.08	91.00	715	
11.08	105.00	712	

Reviewer: journeyp, 04-May-2020 15:12:49

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050415.D

Injection Date: 04-May-2020 13:55:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-4

Lab Sample ID: 180-105108-4

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

Operator ID: 034635

ALS Bottle#: 15 Worklist Smp#: 15

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

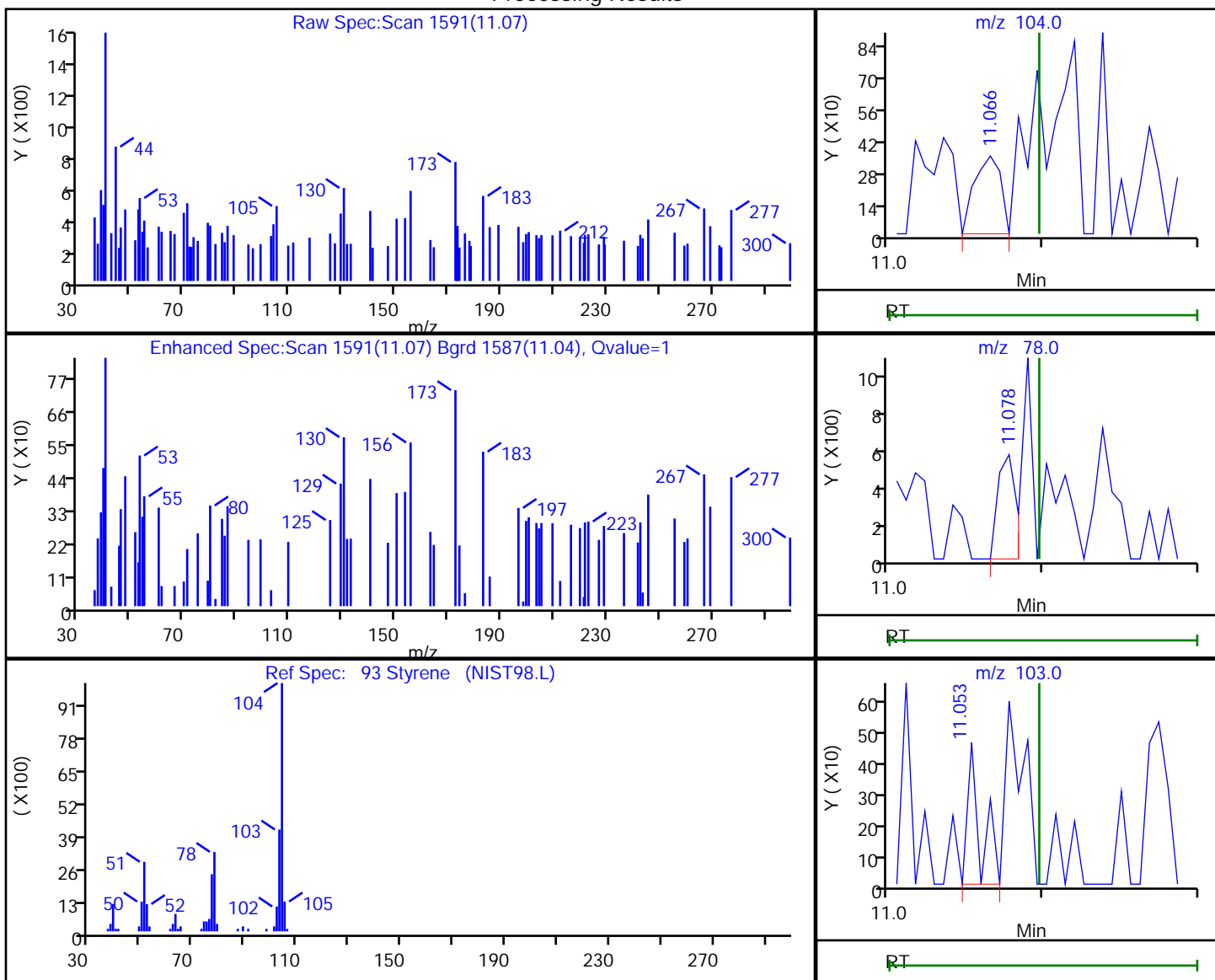
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

93 Styrene, CAS: 100-42-5

Processing Results



RT	Mass	Response	Amount
11.07	104.00	411	0.038773
11.08	78.00	434	
11.05	103.00	268	

Reviewer: journeyp, 04-May-2020 15:12:49  
 Audit Action: Marked Compound Undetected

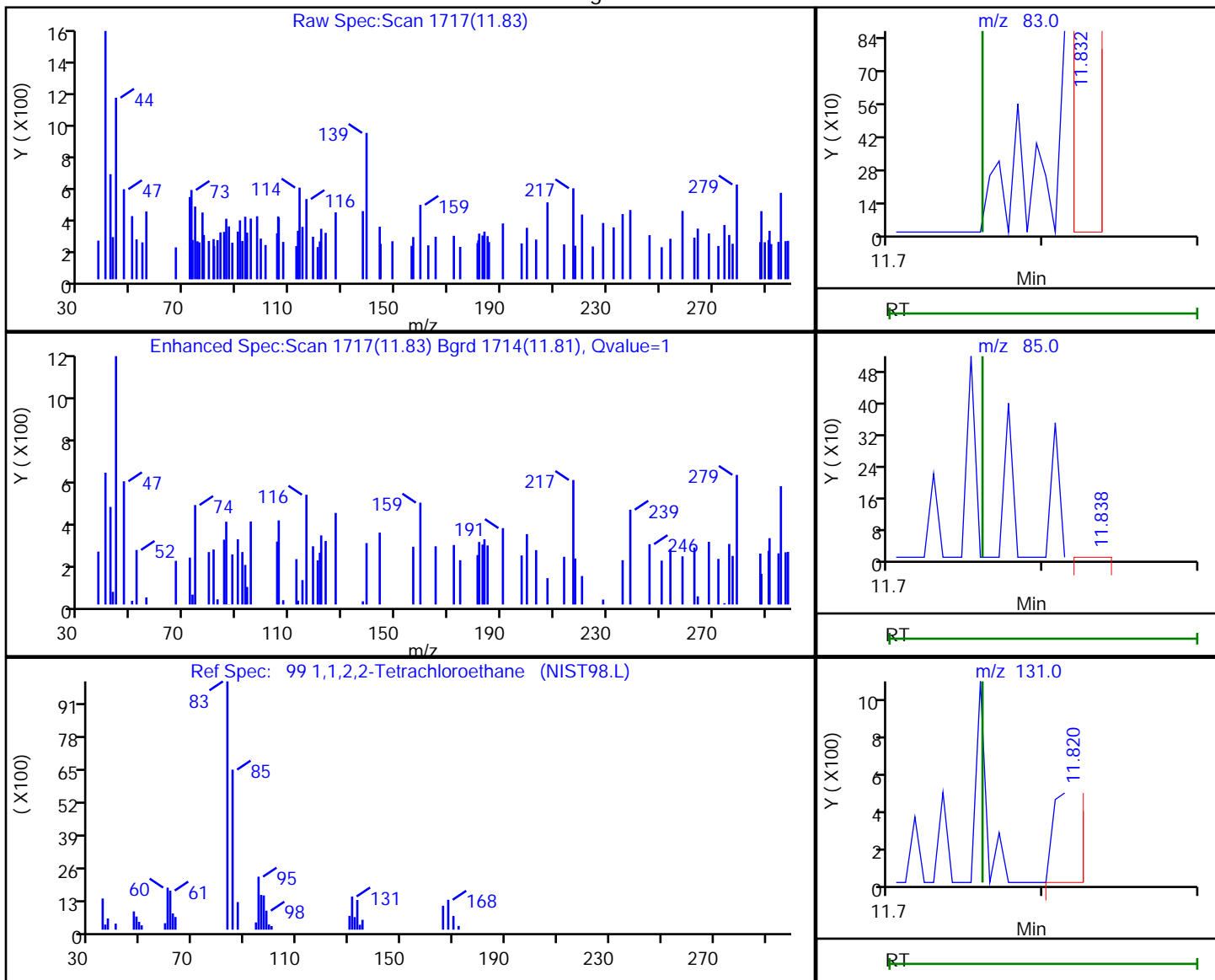
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050415.D  
 Injection Date: 04-May-2020 13:55:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-4 Lab Sample ID: 180-105108-4  
 Client ID: HD-COD-SW-9-0/1-0  
 Operator ID: 034635 ALS Bottle#: 15 Worklist Smp#: 15  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

99 1,1,2,2-Tetrachloroethane, CAS: 79-34-5

Processing Results



RT	Mass	Response	Amount
11.83	83.00	190	0.049612
11.84	85.00	290	
11.82	131.00	495	

Reviewer: journeyp, 04-May-2020 15:12:49  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: HD-COD-SW-13-0/1-0 Lab Sample ID: 180-105108-5  
 Matrix: Water Lab File ID: 5050416.D  
 Analysis Method: EPA 8260C Date Collected: 04/28/2020 10:40  
 Sample wt/vol: 5 (mL) Date Analyzed: 05/04/2020 14:20  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-624 ID: 0.18 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 314475 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	ND	^c	1.0	0.90
75-01-4	Vinyl chloride	ND		1.0	0.40
74-83-9	Bromomethane	ND	^c *	1.0	0.89
75-00-3	Chloroethane	ND		1.0	0.90
75-35-4	1,1-Dichloroethene	ND		1.0	0.55
67-64-1	Acetone	4.3	J	5.0	3.4
75-15-0	Carbon disulfide	ND		1.0	0.88
75-09-2	Methylene Chloride	ND		1.0	0.89
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.67
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.59
75-34-3	1,1-Dichloroethane	ND		1.0	0.31
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.71
74-97-5	Bromochloromethane	ND		1.0	0.63
78-93-3	2-Butanone (MEK)	ND	^c	5.0	2.6
67-66-3	Chloroform	ND		1.0	0.60
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.60
56-23-5	Carbon tetrachloride	ND		1.0	0.88
71-43-2	Benzene	ND		1.0	0.60
107-06-2	1,2-Dichloroethane	ND		1.0	0.57
79-01-6	Trichloroethene	ND		1.0	0.69
78-87-5	1,2-Dichloropropane	ND		1.0	0.66
75-27-4	Bromodichloromethane	ND		1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	3.1
108-88-3	Toluene	ND		1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.58
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.45
127-18-4	Tetrachloroethene	ND		1.0	0.47
591-78-6	2-Hexanone	ND		5.0	3.3
124-48-1	Dibromochloromethane	ND		1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	ND		1.0	0.50
108-90-7	Chlorobenzene	ND		1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.57
100-41-4	Ethylbenzene	ND		1.0	0.51
1330-20-7	Xylenes, Total	ND		2.0	0.89
100-42-5	Styrene	ND		1.0	0.47



FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: HD-COD-SW-13-0/1-0 Lab Sample ID: 180-105108-5  
 Matrix: Water Lab File ID: 5050416.D  
 Analysis Method: EPA 8260C Date Collected: 04/28/2020 10:40  
 Sample wt/vol: 5 (mL) Date Analyzed: 05/04/2020 14:20  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-624 ID: 0.18 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 314475 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	ND	^c	1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	ND	^c	1.0	0.60
107-13-1	Acrylonitrile	ND		20	7.8

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	87		62-146
2037-26-5	Toluene-d8 (Surr)	95		75-120
460-00-4	4-Bromofluorobenzene (Surr)	81		64-120
1868-53-7	Dibromofluoromethane (Surr)	95		71-132

Eurofins TestAmerica, Pittsburgh  
Target Compound Quantitation Report

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050416.D  
 Lims ID: 180-105108-B-5  
 Client ID: HD-COD-SW-13-0/1-0  
 Sample Type: Client  
 Inject. Date: 04-May-2020 14:20:30 ALS Bottle#: 16 Worklist Smp#: 16  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: 180-0031789-016  
 Operator ID: 034635 Instrument ID: CHHP5  
 Method: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\MMSVOA\_LL\_CHHP5.m  
 Limit Group: VOA 8260C\_D ICAL  
 Last Update: 04-May-2020 13:53:44 Calib Date: 03-Apr-2020 19:09:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP5\20200403-31442.b\5040310.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: CTX0327

First Level Reviewer: journetp

Date: 04-May-2020 15:14:22

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.364	4.363	0.001	0	251635	1000.0	
* 2 Fluorobenzene (IS)	96	7.345	7.344	0.001	99	610258	50.0	
* 3 Chlorobenzene-d5	119	10.435	10.434	0.001	85	150990	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.778	12.776	0.002	96	220247	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.627	6.626	0.001	92	164906	47.4	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.998	6.991	0.007	0	215316	43.6	
\$ 7 Toluene-d8 (Surr)	98	8.988	8.986	0.002	93	583540	47.7	
\$ 8 4-Bromofluorobenzene (Surr	95	11.616	11.614	0.002	88	186781	40.4	
12 Chloromethane	50		1.844				ND	U
13 Vinyl chloride	62		1.966				ND	U
15 Bromomethane	94		2.288				ND	U
16 Chloroethane	64		2.416				ND	U
22 1,1-Dichloroethene	96		3.414				ND	U
24 Acetone	43	3.531	3.511	0.020	94	45524	21.6	
26 Carbon disulfide	76		3.706				ND	U
31 Methylene Chloride	84		4.217				ND	U
33 Acrylonitrile	53		4.612				ND	U
34 trans-1,2-Dichloroethene	96		4.631				ND	U
35 Methyl tert-butyl ether	73		4.655				ND	U
37 1,1-Dichloroethane	63		5.263				ND	U
45 cis-1,2-Dichloroethene	96		6.018				ND	U
46 2-Butanone (MEK)	43		6.036				ND	U
49 Chlorobromomethane	128		6.297				ND	U
52 Chloroform	83		6.443				ND	U
53 1,1,1-Trichloroethane	97		6.602				ND	U
56 Carbon tetrachloride	117		6.766				ND	U
58 Benzene	78		7.003				ND	U
59 1,2-Dichloroethane	62		7.076				ND	U
64 Trichloroethene	130		7.727				ND	U
67 1,2-Dichloropropane	63		8.001				ND	U
71 Dichlorobromomethane	83		8.287				ND	U
74 cis-1,3-Dichloropropene	75		8.731				ND	U

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
75 4-Methyl-2-pentanone (MIBK	43		8.889				ND	U
76 Toluene	91		9.053				ND	U
77 trans-1,3-Dichloropropene	75		9.303				ND	U
79 1,1,2-Trichloroethane	97		9.497				ND	U
80 Tetrachloroethene	164		9.564				ND	U
82 2-Hexanone	43		9.716				ND	U
84 Chlorodibromomethane	129		9.868				ND	U
85 Ethylene Dibromide	107		9.978				ND	U
87 Chlorobenzene	112		10.465				ND	U
89 1,1,1,2-Tetrachloroethane	131		10.562				ND	U
90 Ethylbenzene	106		10.562				ND	U
91 m-Xylene & p-Xylene	106		10.696				ND	U
92 o-Xylene	106		11.079				ND	U
93 Styrene	104		11.097				ND	U
94 Bromoform	173		11.280				ND	U
99 1,1,2,2-Tetrachloroethane	83		11.760				ND	U
S 133 Xylenes, Total	106		1.000				ND	

**QC Flag Legend**

Review Flags

U - Marked Undetected

**Reagents:**

voaWI/SHP5\_00016

Amount Added: 5.00

Units: uL

Run Reagent

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050416.D

Injection Date: 04-May-2020 14:20:30

Instrument ID: CHHP5

Operator ID: 034635

Lims ID: 180-105108-B-5

Lab Sample ID: 180-105108-5

Worklist Smp#: 16

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

Purge Vol: 5.000 mL

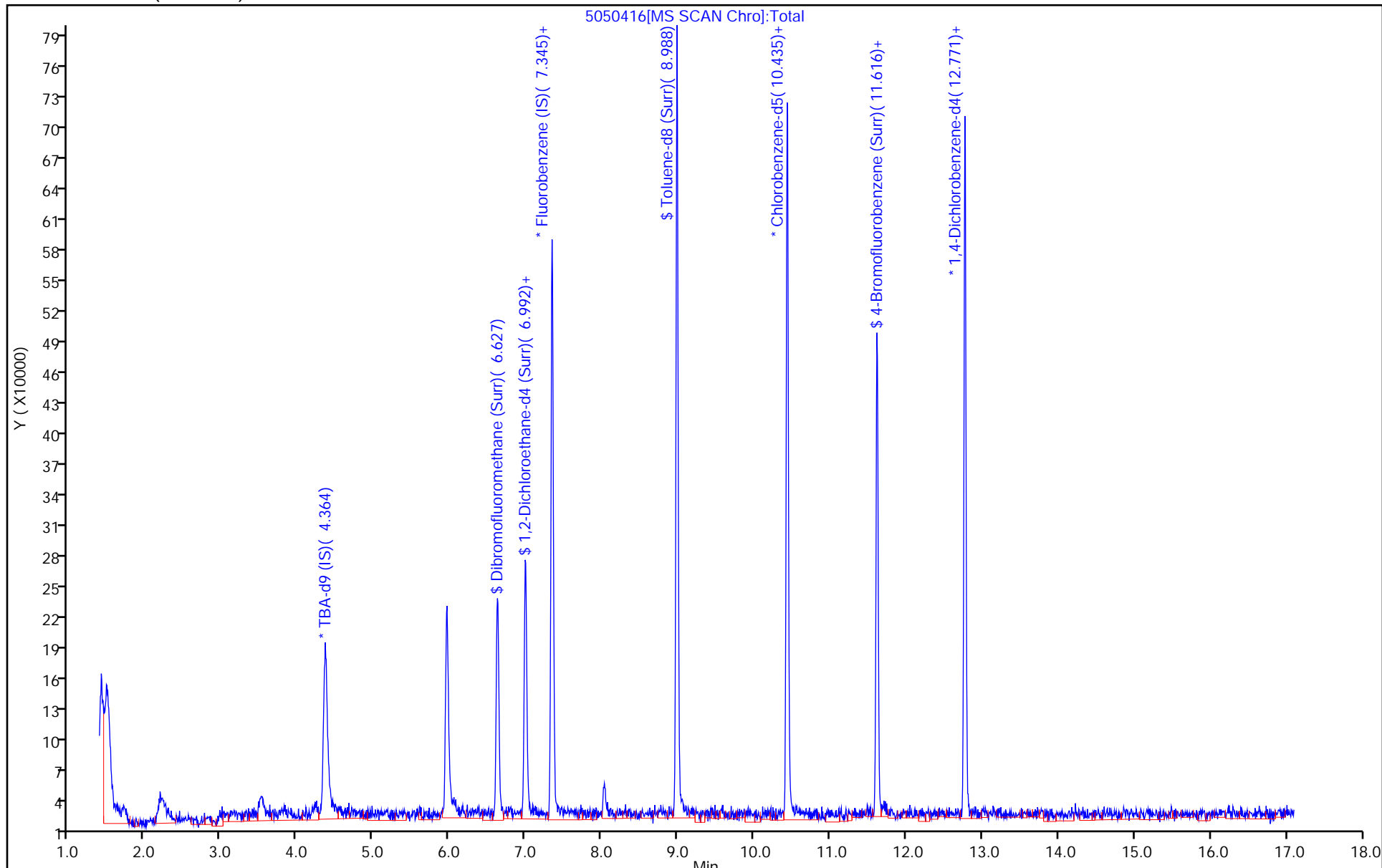
Dil. Factor: 1.0000

ALS Bottle#: 16

Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Pittsburgh  
Recovery Report

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050416.D  
 Lims ID: 180-105108-B-5  
 Client ID: HD-COD-SW-13-0/1-0  
 Sample Type: Client  
 Inject. Date: 04-May-2020 14:20:30 ALS Bottle#: 16 Worklist Smp#: 16  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: 180-0031789-016  
 Operator ID: 034635 Instrument ID: CHHP5  
 Method: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\MSVOA\_LL\_CHHP5.m  
 Limit Group: VOA 8260C\_D ICAL  
 Last Update: 04-May-2020 13:53:44 Calib Date: 03-Apr-2020 19:09:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP5\20200403-31442.b\5040310.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: CTX0327

First Level Reviewer: journetp

Date: 04-May-2020 15:14:22

Compound	Amount Added	Amount Recovered	% Rec.
\$ 5 Dibromofluoromethane (Surr)	50.0	47.4	94.72
\$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	43.6	87.16
\$ 7 Toluene-d8 (Surr)	50.0	47.7	95.49
\$ 8 4-Bromofluorobenzene (Surr)	50.0	40.4	80.86

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050416.D

Injection Date: 04-May-2020 14:20:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-5

Lab Sample ID: 180-105108-5

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

Operator ID: 034635

ALS Bottle#: 16

Worklist Smp#: 16

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

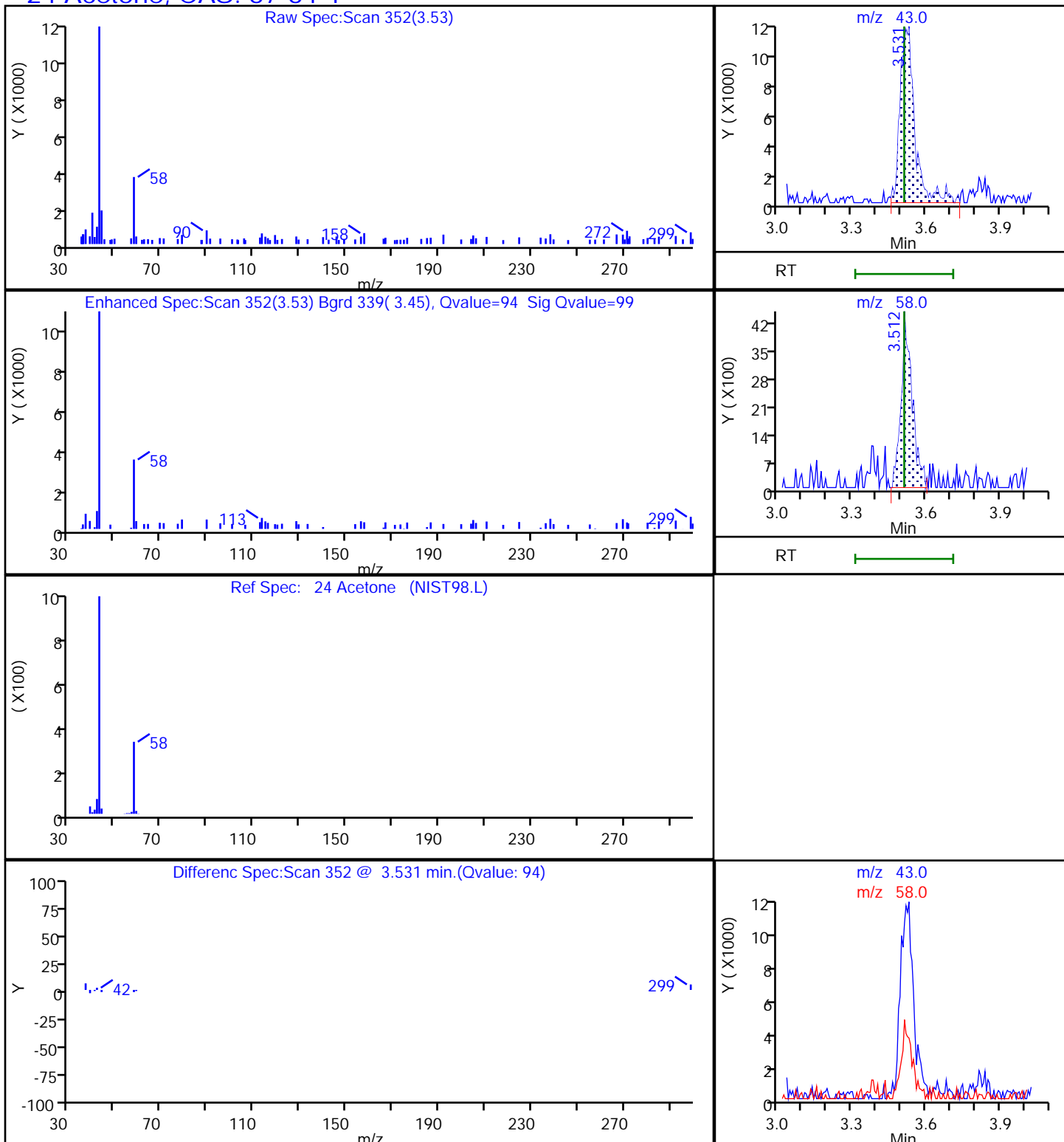
Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

24 Acetone, CAS: 67-64-1



Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050416.D

Injection Date: 04-May-2020 14:20:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-5

Lab Sample ID: 180-105108-5

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

Operator ID: 034635

ALS Bottle#: 16 Worklist Smp#: 16

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

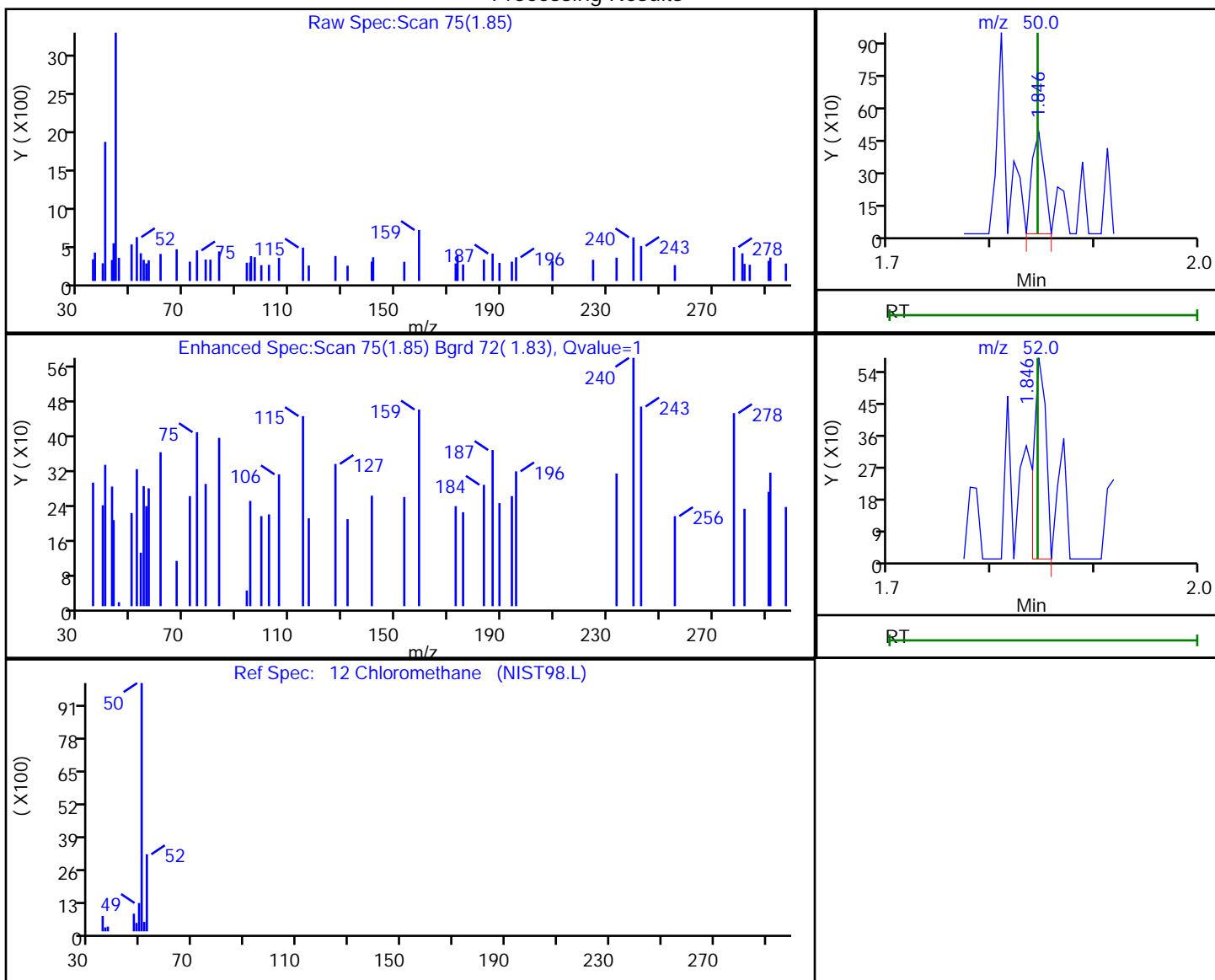
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

12 Chloromethane, CAS: 74-87-3

Processing Results



RT	Mass	Response	Amount
1.85	50.00	400	0.067191
1.85	52.00	463	

Reviewer: journtp, 04-May-2020 15:13:06

Audit Action: Marked Compound Undetected

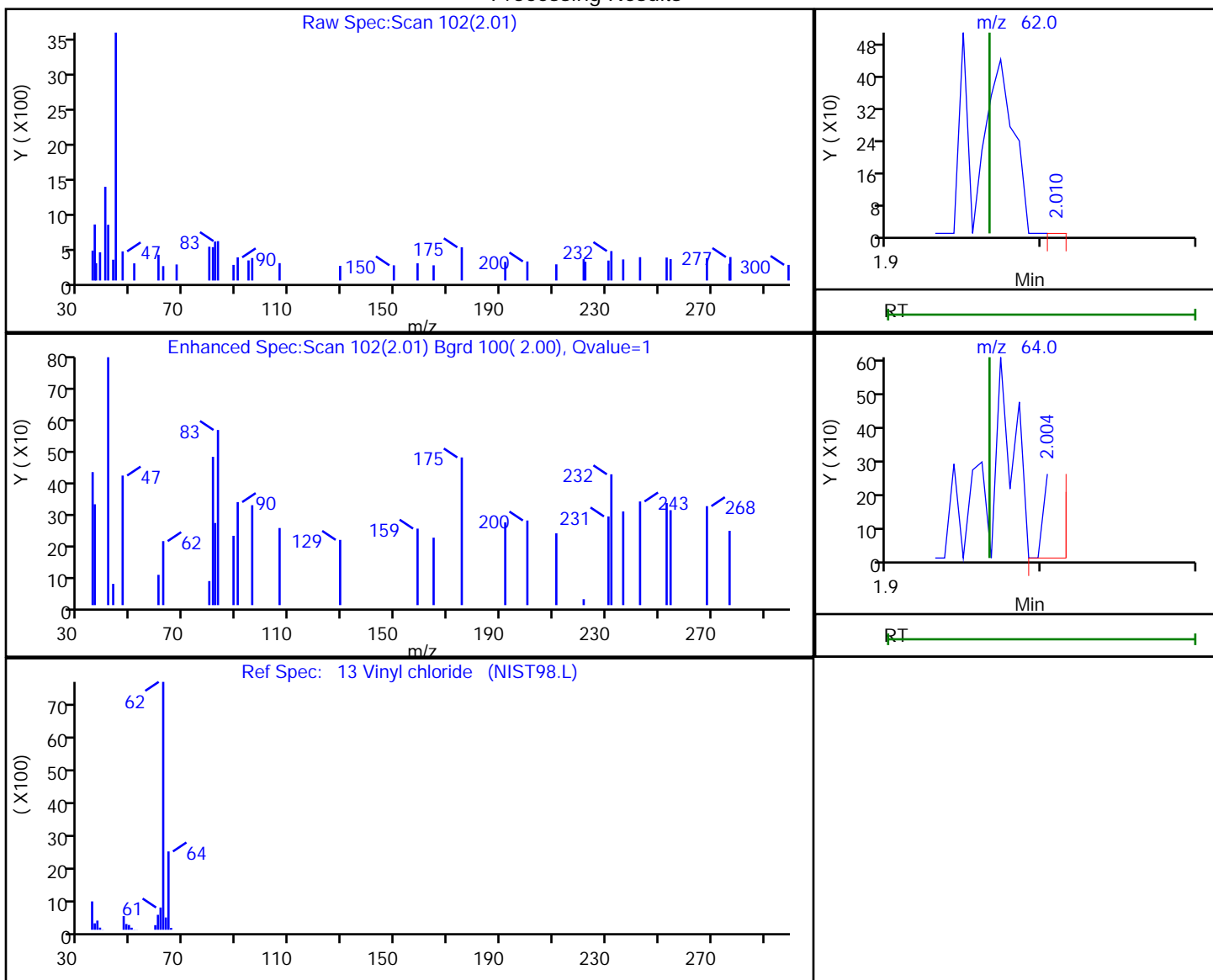
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050416.D  
 Injection Date: 04-May-2020 14:20:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-5 Lab Sample ID: 180-105108-5  
 Client ID: HD-COD-SW-13-0/1-0  
 Operator ID: 034635 ALS Bottle#: 16 Worklist Smp#: 16  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

13 Vinyl chloride, CAS: 75-01-4

Processing Results



RT	Mass	Response	Amount
2.01	62.00	75	0.014147
2.00	64.00	92	

Reviewer: journetp, 04-May-2020 15:13:06  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID



Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050416.D

Injection Date: 04-May-2020 14:20:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-5

Lab Sample ID: 180-105108-5

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

Operator ID: 034635

ALS Bottle#: 16 Worklist Smp#: 16

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

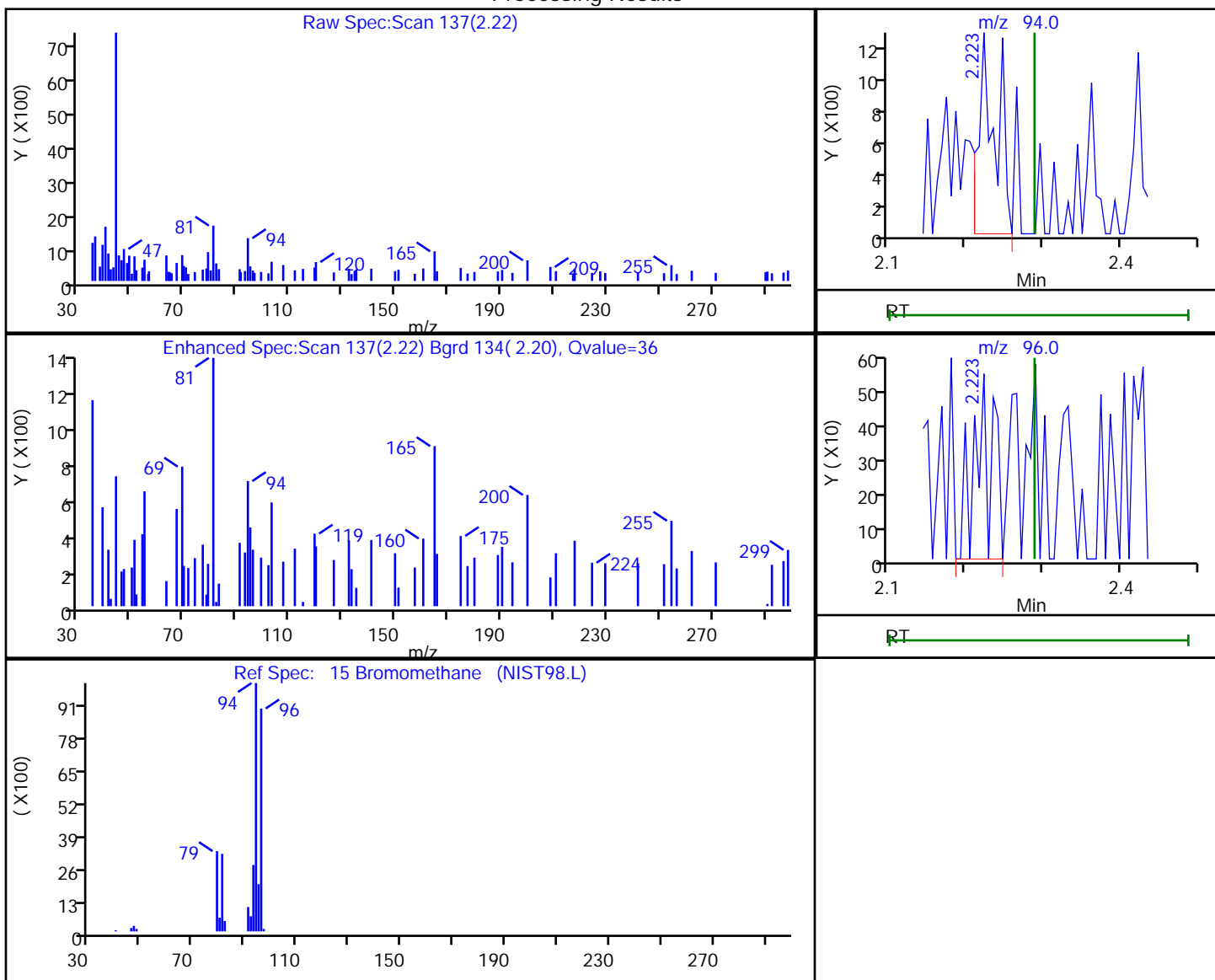
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

15 Bromomethane, CAS: 74-83-9

Processing Results



RT	Mass	Response	Amount
2.22	94.00	1950	0.642400
2.22	96.00	901	

Reviewer: journtp, 04-May-2020 15:13:06

Audit Action: Marked Compound Undetected

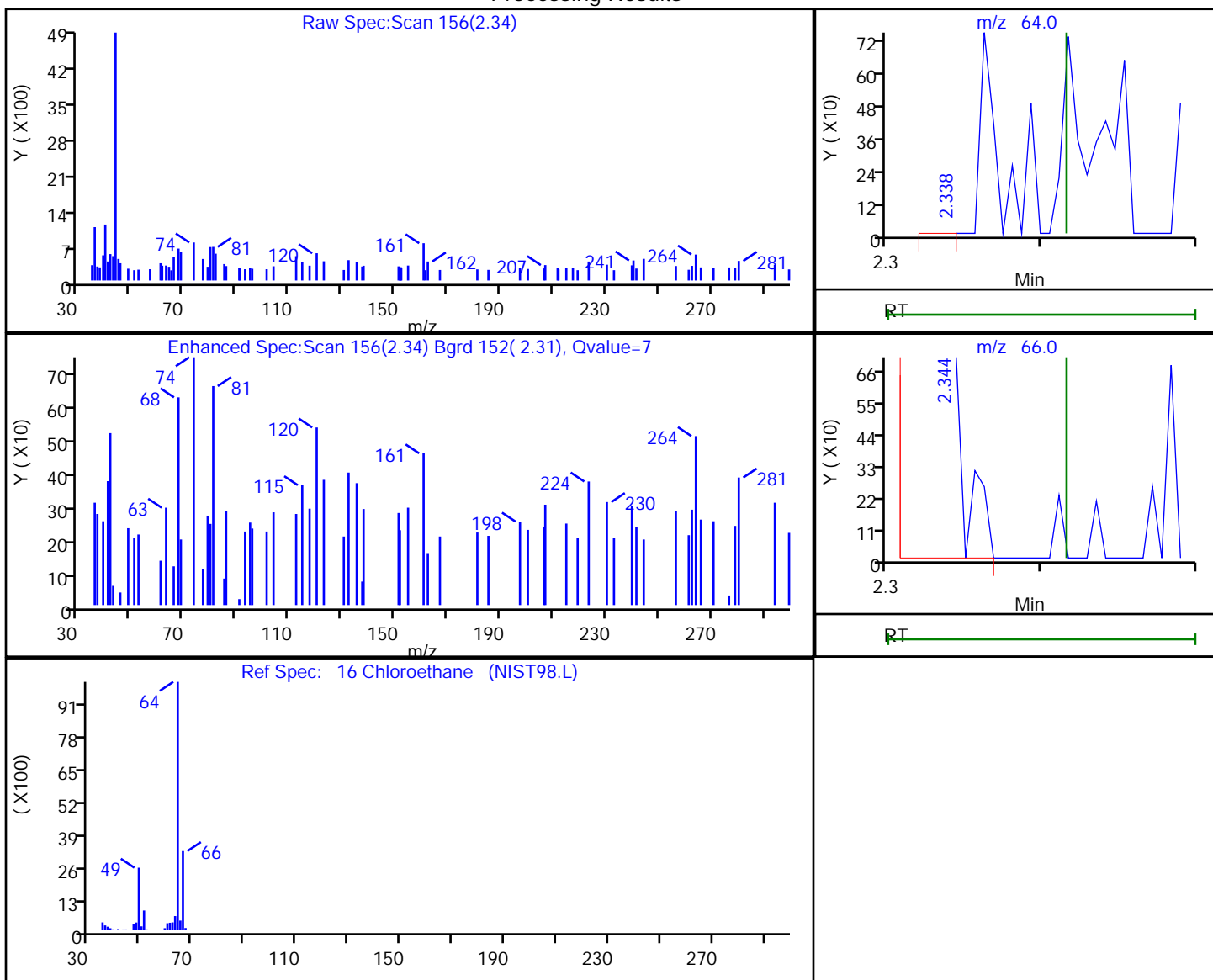
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050416.D  
 Injection Date: 04-May-2020 14:20:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-5 Lab Sample ID: 180-105108-5  
 Client ID: HD-COD-SW-13-0/1-0  
 Operator ID: 034635 ALS Bottle#: 16 Worklist Smp#: 16  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

16 Chloroethane, CAS: 75-00-3

Processing Results



RT	Mass	Response	Amount
2.34	64.00	187	0.051992
2.34	66.00	1135	

Reviewer: journetp, 04-May-2020 15:13:06  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050416.D

Injection Date: 04-May-2020 14:20:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-5

Lab Sample ID: 180-105108-5

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

Operator ID: 034635

ALS Bottle#: 16 Worklist Smp#: 16

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

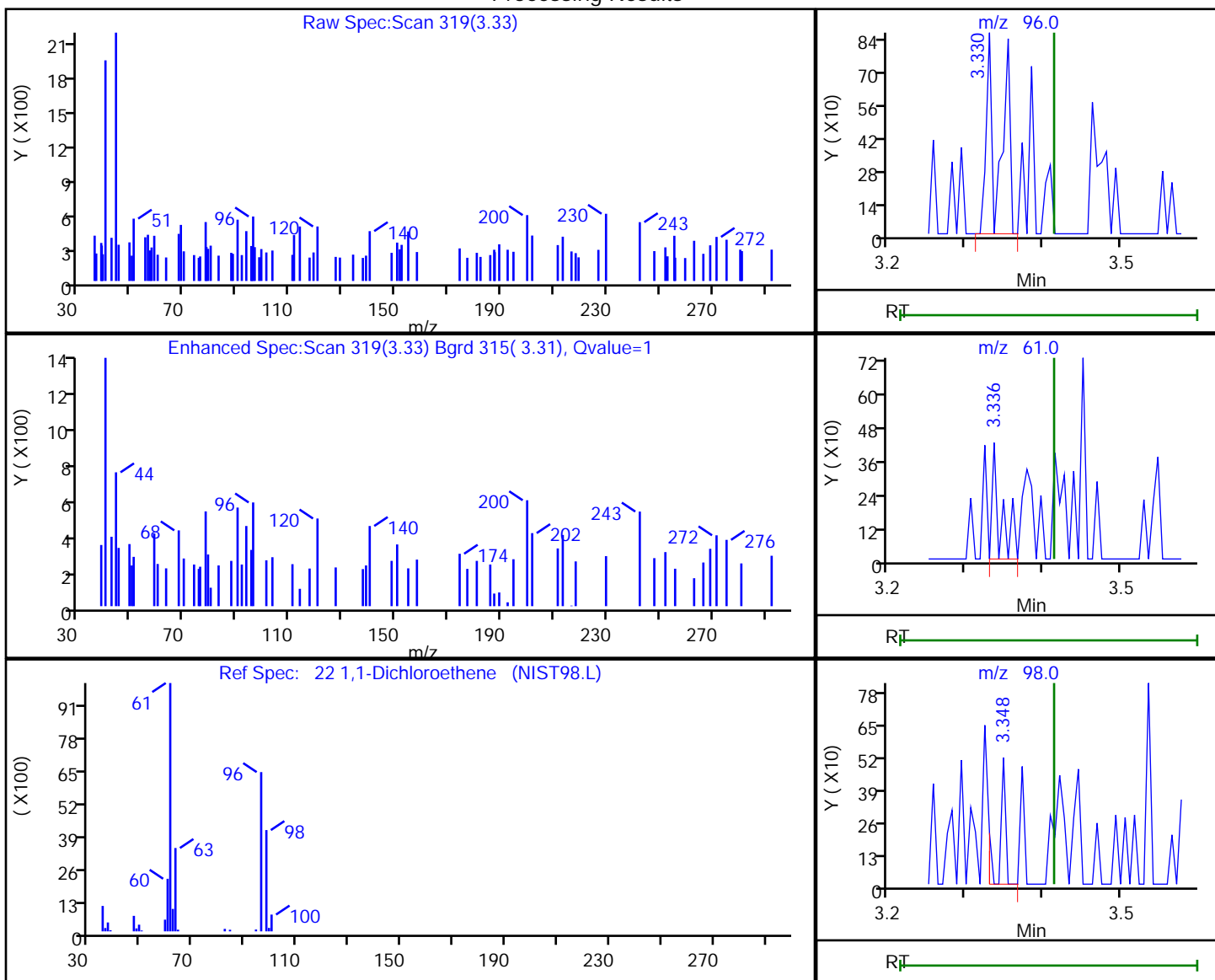
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

22 1,1-Dichloroethene, CAS: 75-35-4

Processing Results



RT	Mass	Response	Amount
3.33	96.00	963	-1.648708
3.34	61.00	311	
3.35	98.00	265	

Reviewer: journeyp, 04-May-2020 15:13:07

Audit Action: Marked Compound Undetected

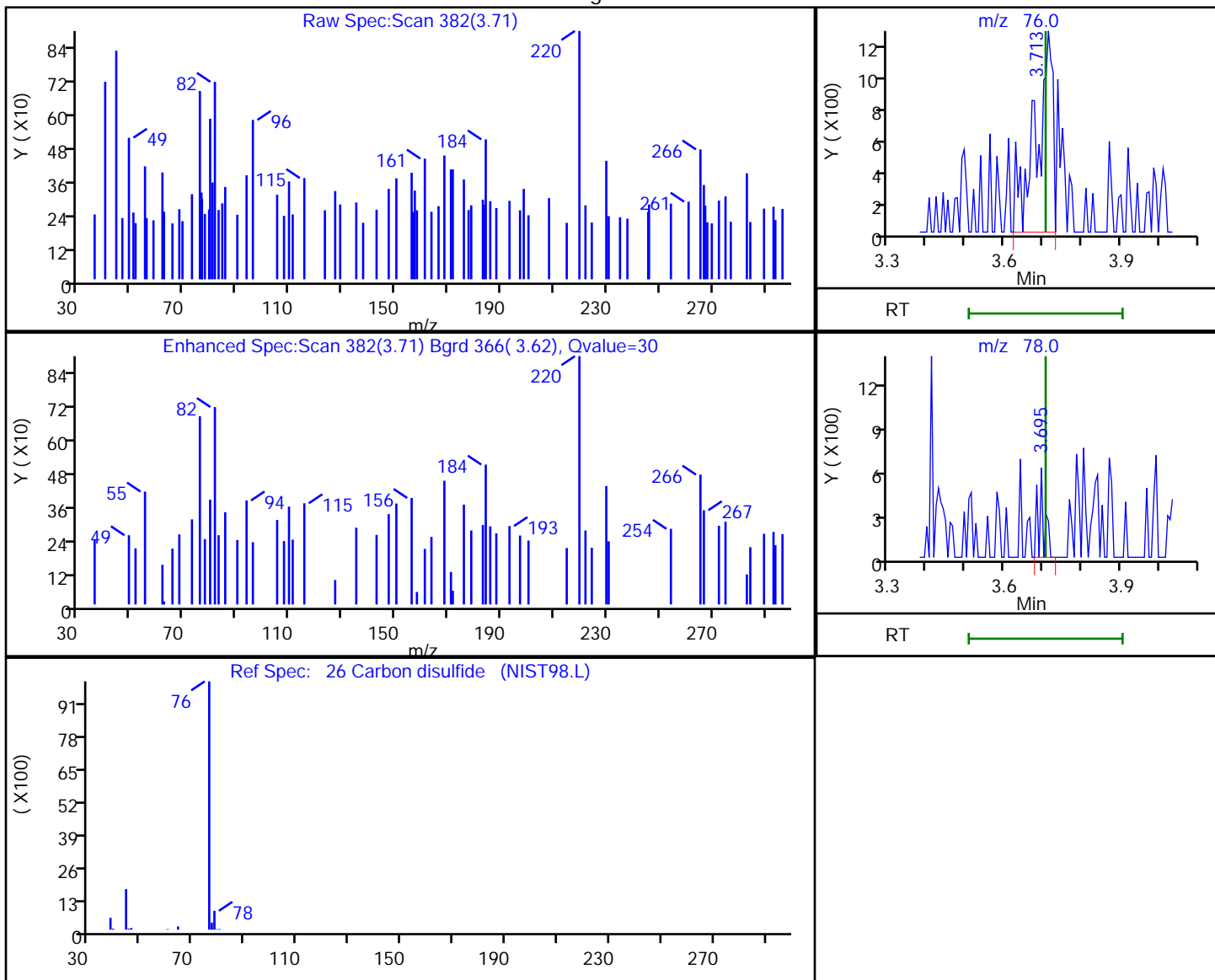
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050416.D  
Injection Date: 04-May-2020 14:20:30 Instrument ID: CHHP5  
Lims ID: 180-105108-B-5 Lab Sample ID: 180-105108-5  
Client ID: HD-COD-SW-13-0/1-0  
Operator ID: 034635 ALS Bottle#: 16 Worklist Smp#: 16  
Purge Vol: 5.000 mL Dil. Factor: 1.0000  
Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
Column: DB-624 (0.18 mm) Detector: MS SCAN

26 Carbon disulfide, CAS: 75-15-0

Processing Results



RT	Mass	Response	Amount
3.71	76.00	3818	0.556596
3.69	78.00	570	

Reviewer: journetp, 04-May-2020 15:13:16  
Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050416.D

Injection Date: 04-May-2020 14:20:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-5

Lab Sample ID: 180-105108-5

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

Operator ID: 034635

ALS Bottle#: 16 Worklist Smp#: 16

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

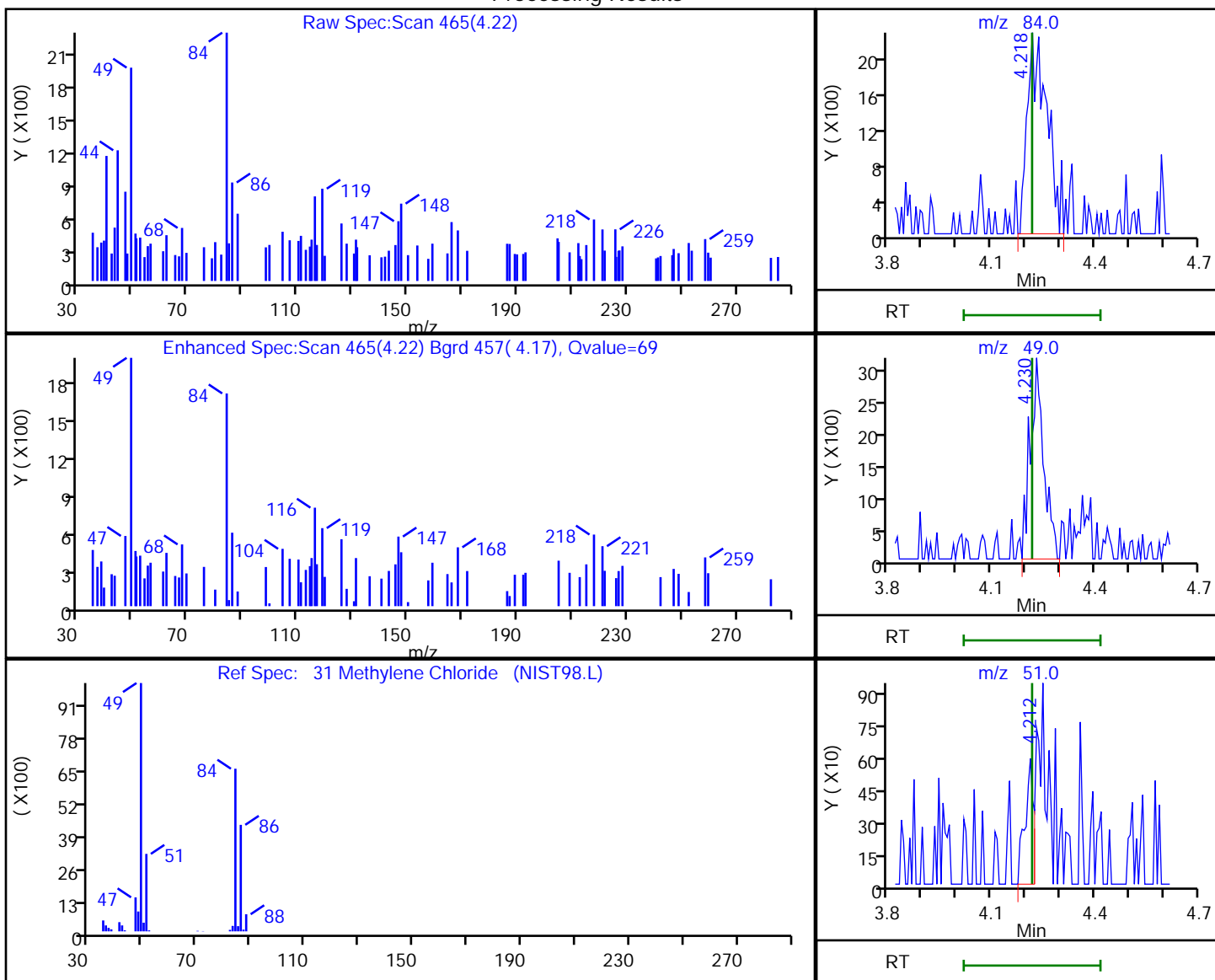
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

31 Methylene Chloride, CAS: 75-09-2

Processing Results



RT	Mass	Response	Amount
4.22	84.00	9144	0.626542
4.23	49.00	8546	
4.21	51.00	1017	

Reviewer: journept, 04-May-2020 15:13:16

Audit Action: Marked Compound Undetected

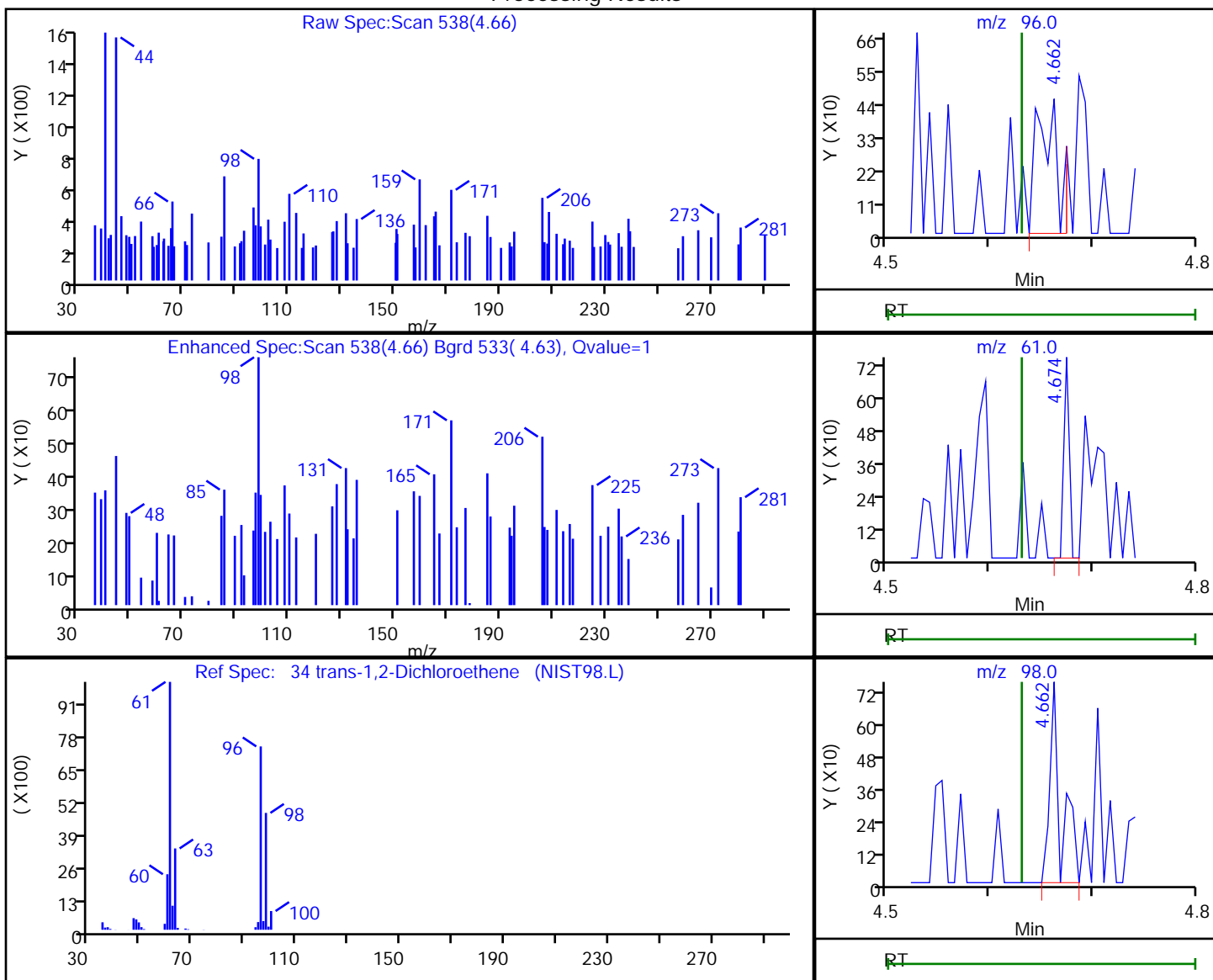
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050416.D  
 Injection Date: 04-May-2020 14:20:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-5 Lab Sample ID: 180-105108-5  
 Client ID: HD-COD-SW-13-0/1-0  
 Operator ID: 034635 ALS Bottle#: 16 Worklist Smp#: 16  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

34 trans-1,2-Dichloroethene, CAS: 156-60-5

Processing Results



RT	Mass	Response	Amount
4.66	96.00	643	0.192752
4.67	61.00	271	
4.66	98.00	581	

Reviewer: journept, 04-May-2020 15:13:16  
 Audit Action: Marked Compound Undetected

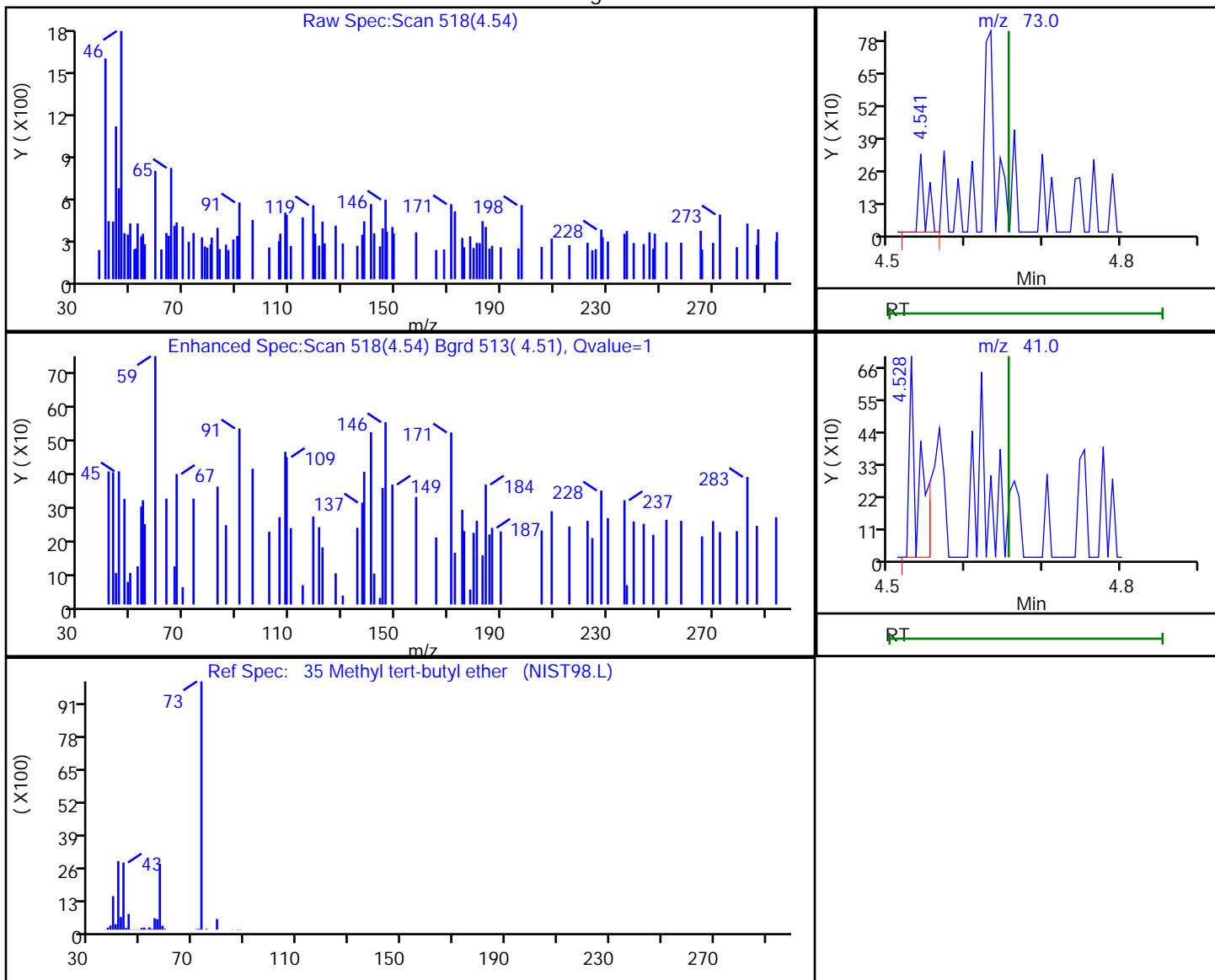
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050416.D  
Injection Date: 04-May-2020 14:20:30 Instrument ID: CHHP5  
Lims ID: 180-105108-B-5 Lab Sample ID: 180-105108-5  
Client ID: HD-COD-SW-13-0/1-0  
Operator ID: 034635 ALS Bottle#: 16 Worklist Smp#: 16  
Purge Vol: 5.000 mL Dil. Factor: 1.0000  
Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
Column: DB-624 (0.18 mm) Detector: MS SCAN

35 Methyl tert-butyl ether, CAS: 1634-04-4

Processing Results



RT	Mass	Response	Amount
4.54	73.00	191	0.020402
4.53	41.00	573	

Reviewer: journetp, 04-May-2020 15:13:16  
Audit Action: Marked Compound Undetected

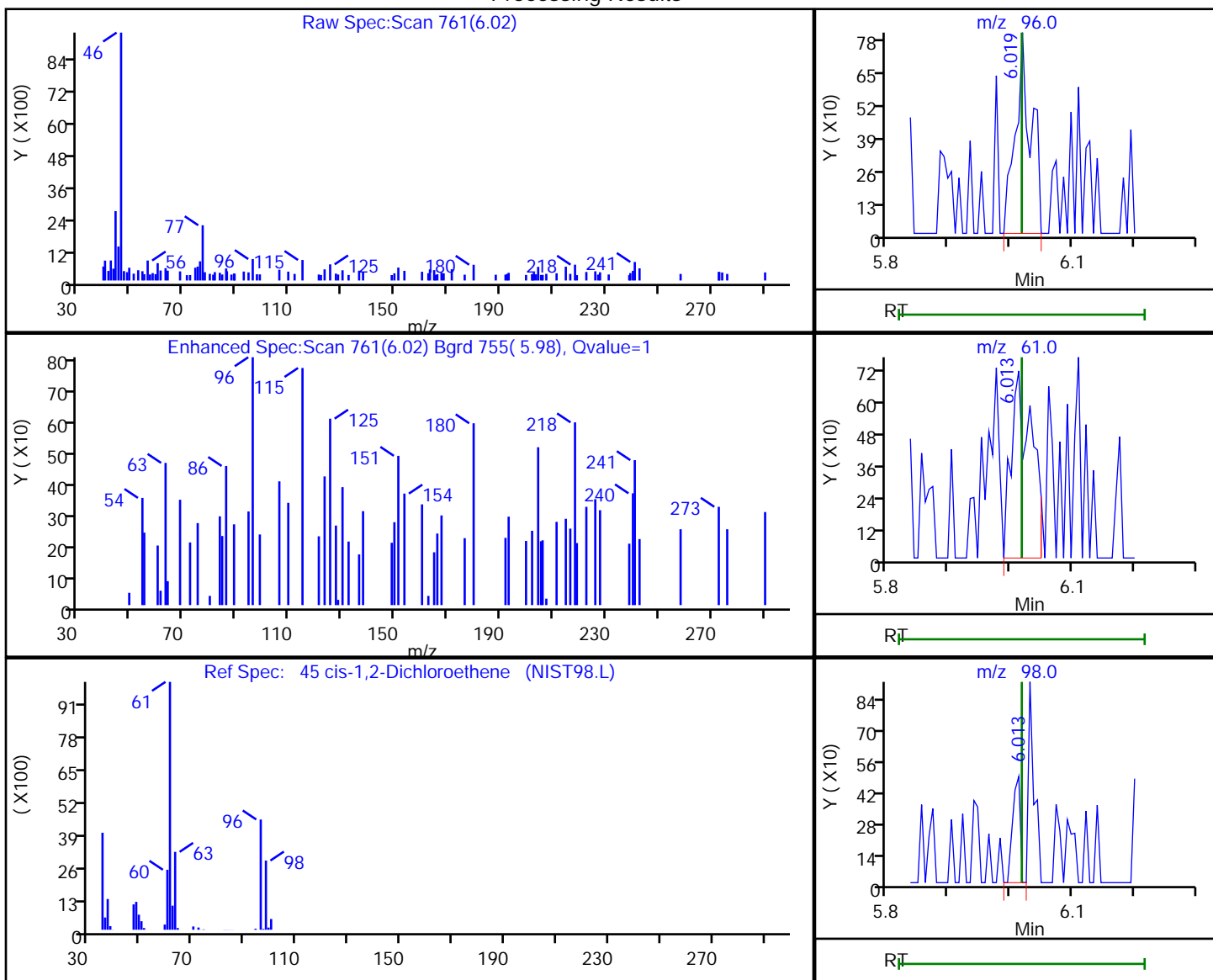
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050416.D  
 Injection Date: 04-May-2020 14:20:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-5 Lab Sample ID: 180-105108-5  
 Client ID: HD-COD-SW-13-0/1-0  
 Operator ID: 034635 ALS Bottle#: 16 Worklist Smp#: 16  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

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

Processing Results



RT	Mass	Response	Amount
6.02	96.00	1420	0.357741
6.01	61.00	1644	
6.01	98.00	409	

Reviewer: journeyp, 04-May-2020 15:13:16  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

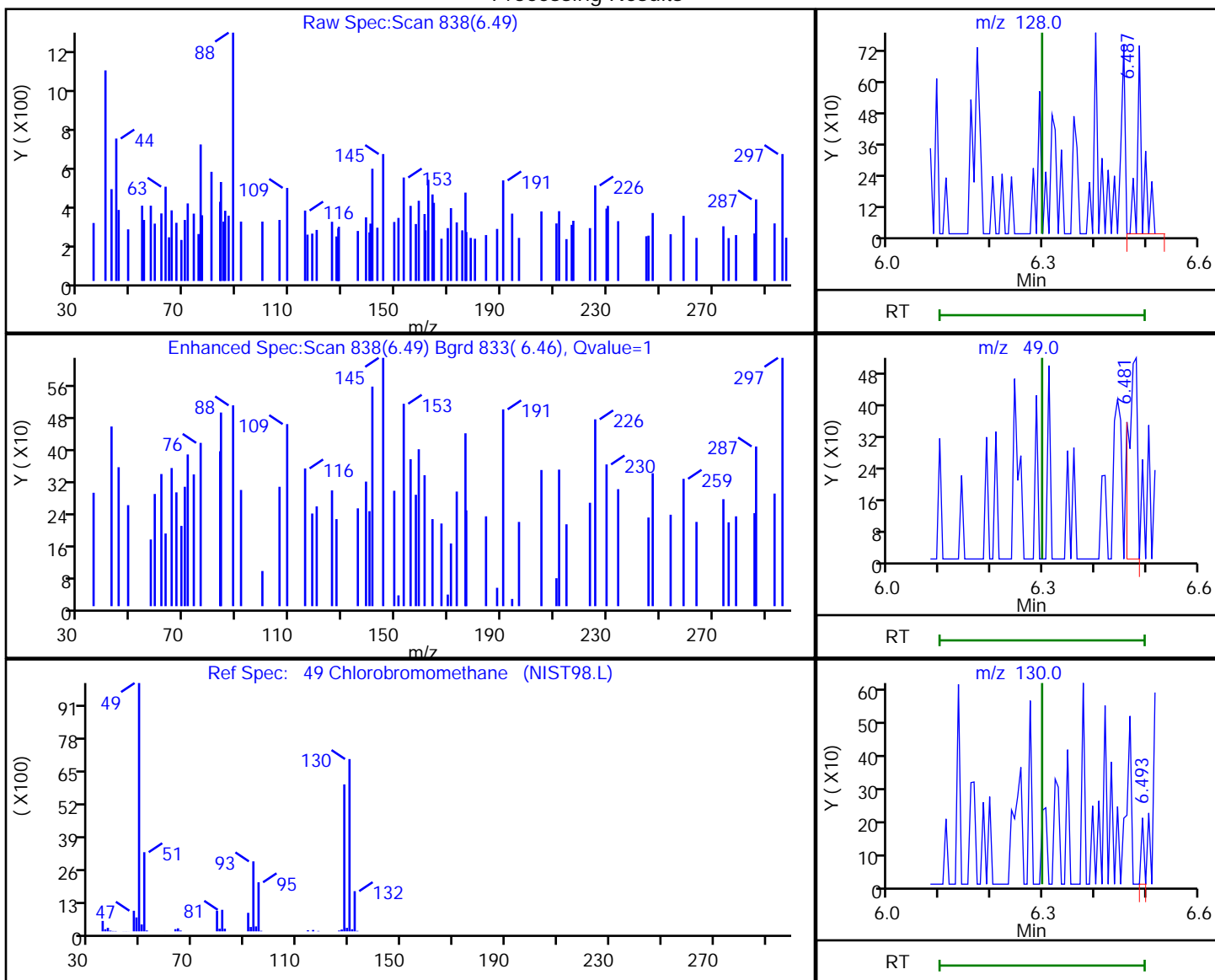


Euofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050416.D  
 Injection Date: 04-May-2020 14:20:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-5 Lab Sample ID: 180-105108-5  
 Client ID: HD-COD-SW-13-0/1-0  
 Operator ID: 034635 ALS Bottle#: 16 Worklist Smp#: 16  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

49 Chlorobromomethane, CAS: 74-97-5

Processing Results



RT	Mass	Response	Amount
6.49	128.00	540	0.255255
6.48	49.00	607	
6.49	130.00	74	

Reviewer: journept, 04-May-2020 15:13:16  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050416.D

Injection Date: 04-May-2020 14:20:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-5

Lab Sample ID: 180-105108-5

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

Operator ID: 034635

ALS Bottle#: 16 Worklist Smp#: 16

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

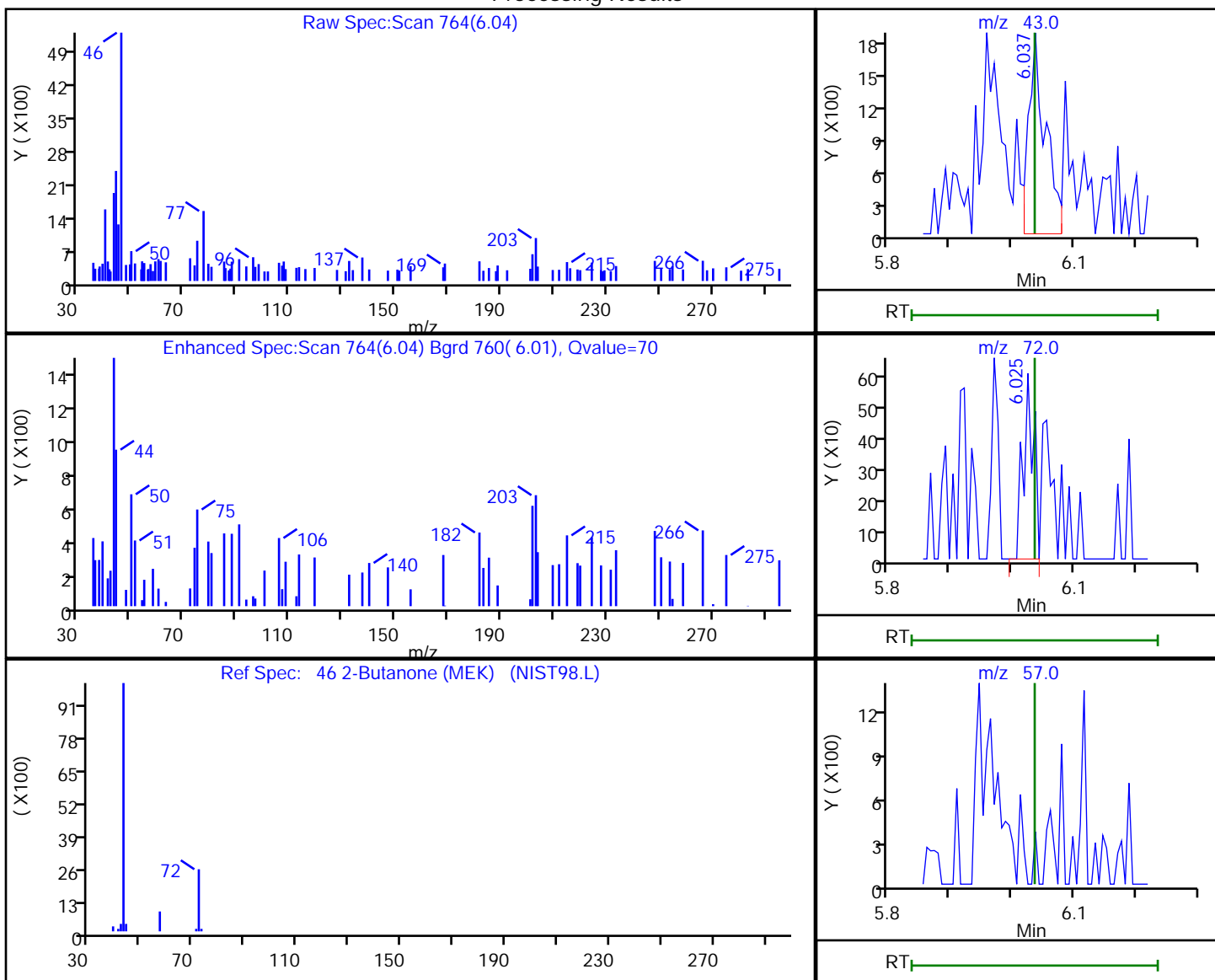
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

46 2-Butanone (MEK), CAS: 78-93-3

Processing Results



RT	Mass	Response	Amount
6.04	43.00	3539	1.579065
6.02	72.00	711	
6.04	57.00	0	

Reviewer: journeyp, 04-May-2020 15:13:16

Audit Action: Marked Compound Undetected

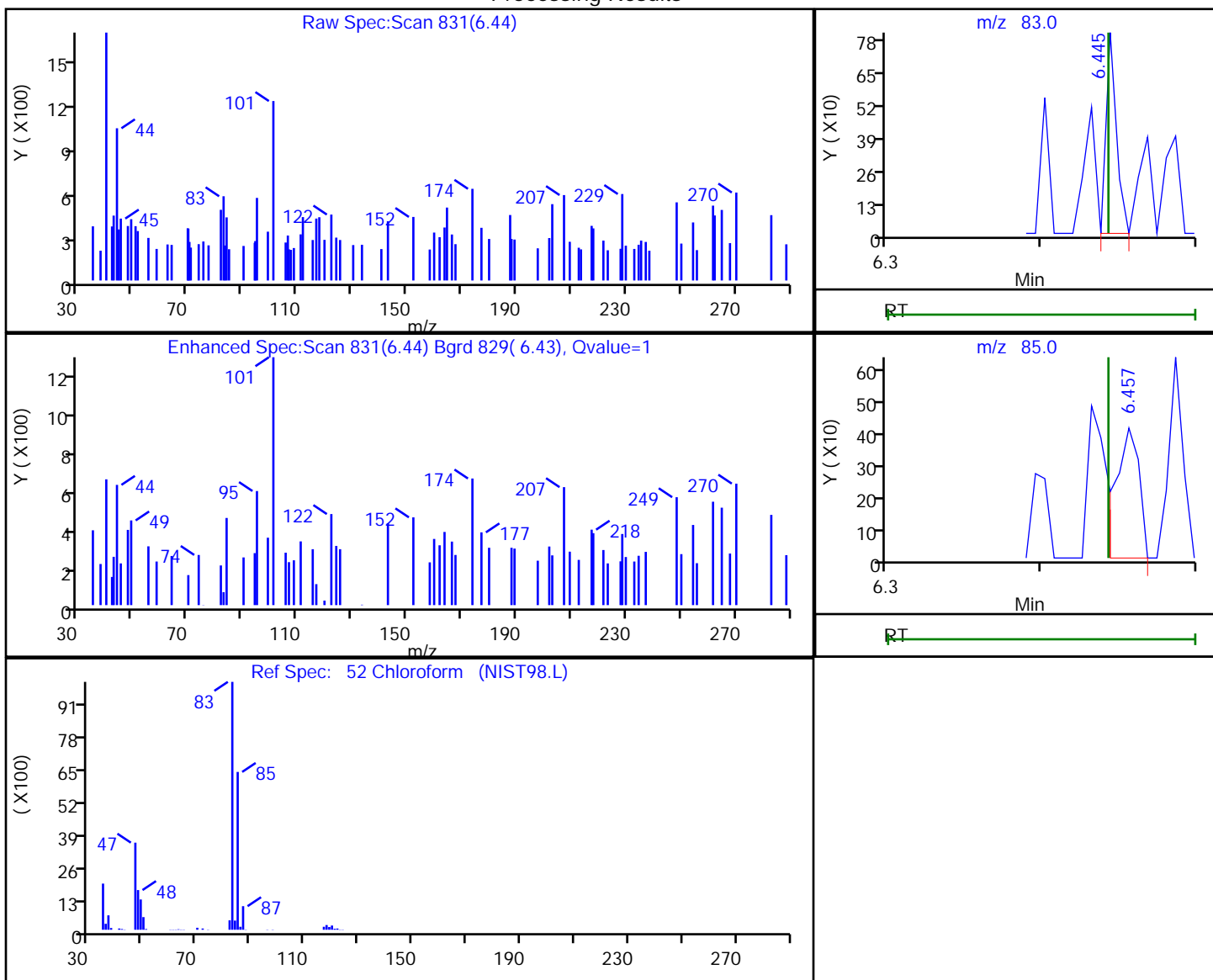
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfms\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050416.D  
 Injection Date: 04-May-2020 14:20:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-5 Lab Sample ID: 180-105108-5  
 Client ID: HD-COD-SW-13-0/1-0  
 Operator ID: 034635 ALS Bottle#: 16 Worklist Smp#: 16  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

52 Chloroform, CAS: 67-66-3

Processing Results



RT	Mass	Response	Amount
6.44	83.00	371	-1.686623
6.46	85.00	439	

Reviewer: journetp, 04-May-2020 15:13:16  
 Audit Action: Marked Compound Undetected

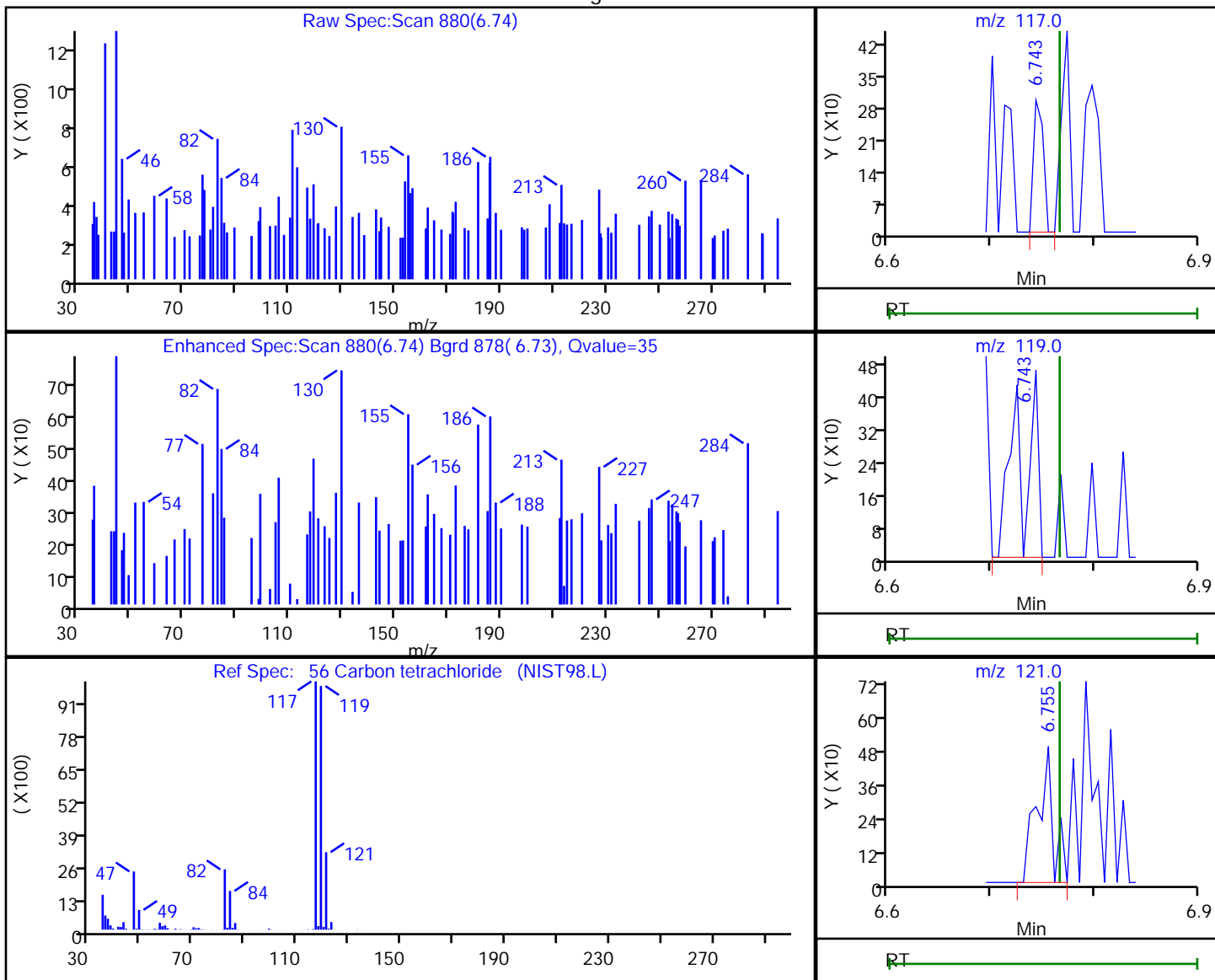
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050416.D  
 Injection Date: 04-May-2020 14:20:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-5 Lab Sample ID: 180-105108-5  
 Client ID: HD-COD-SW-13-0/1-0  
 Operator ID: 034635 ALS Bottle#: 16 Worklist Smp#: 16  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

56 Carbon tetrachloride, CAS: 56-23-5

Processing Results



RT	Mass	Response	Amount
6.74	117.00	195	0.047221
6.74	119.00	570	
6.75	121.00	535	

Reviewer: journept, 04-May-2020 15:13:16  
 Audit Action: Marked Compound Undetected

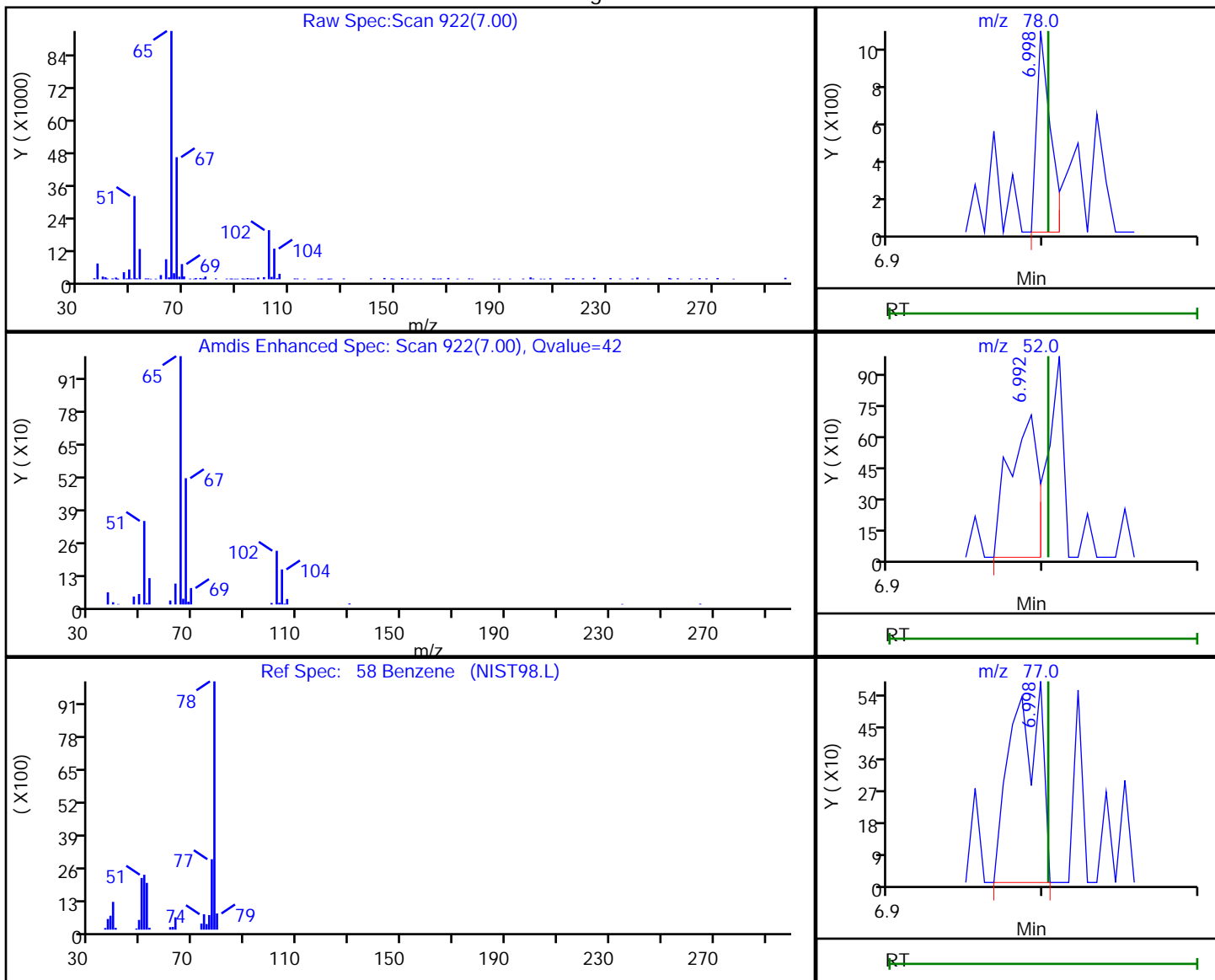
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050416.D  
 Injection Date: 04-May-2020 14:20:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-5 Lab Sample ID: 180-105108-5  
 Client ID: HD-COD-SW-13-0/1-0  
 Operator ID: 034635 ALS Bottle#: 16 Worklist Smp#: 16  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

58 Benzene, CAS: 71-43-2

Processing Results



RT	Mass	Response	Amount
7.00	78.00	636	0.042342
6.99	52.00	920	
7.00	77.00	776	

Reviewer: journept, 04-May-2020 15:13:17  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050416.D

Injection Date: 04-May-2020 14:20:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-5

Lab Sample ID: 180-105108-5

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

Operator ID: 034635

ALS Bottle#: 16 Worklist Smp#: 16

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

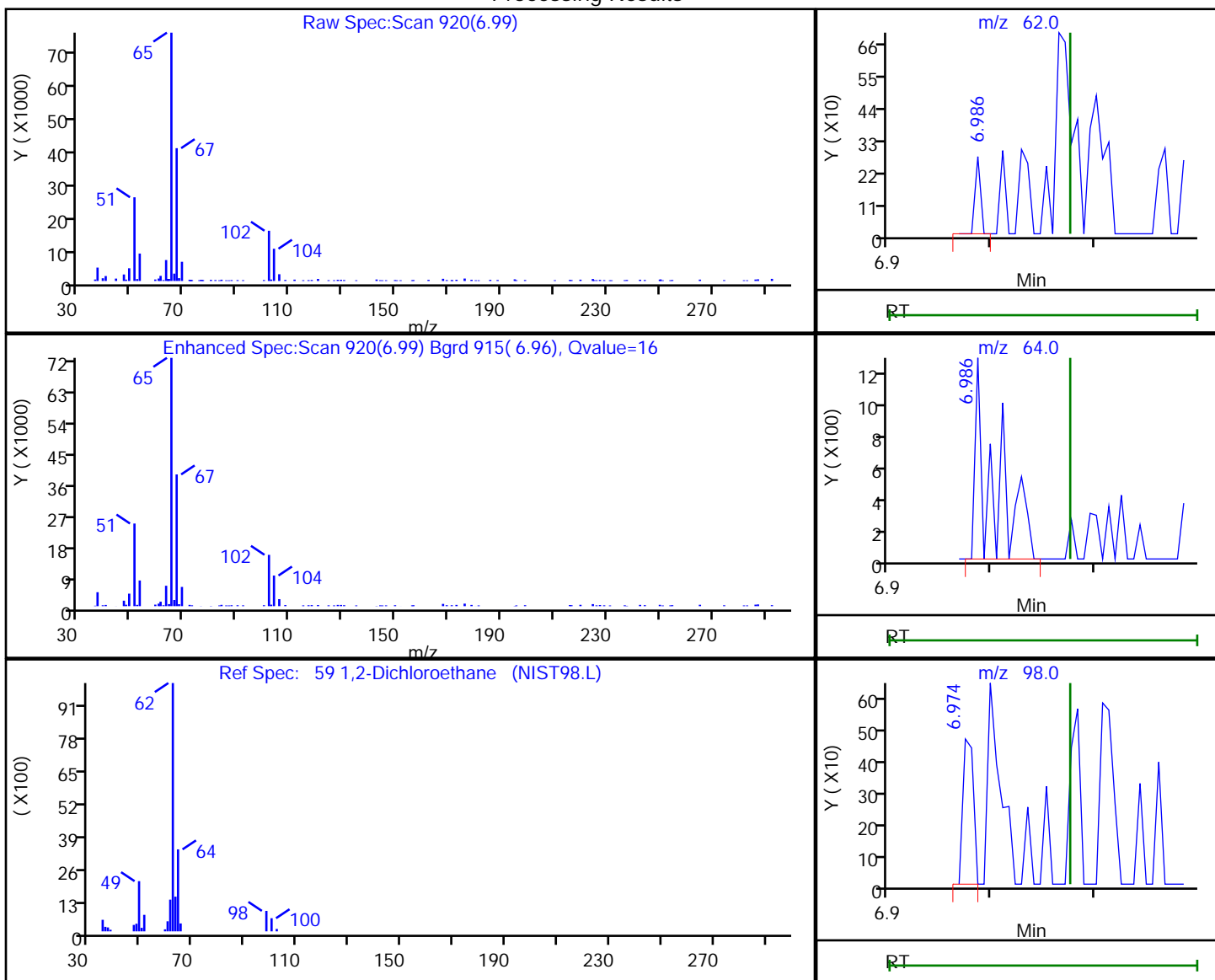
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

59 1,2-Dichloroethane, CAS: 107-06-2

Processing Results



RT	Mass	Response	Amount
6.99	62.00	97	0.016984
6.99	64.00	1434	
6.97	98.00	331	

Reviewer: journept, 04-May-2020 15:13:17

Audit Action: Marked Compound Undetected

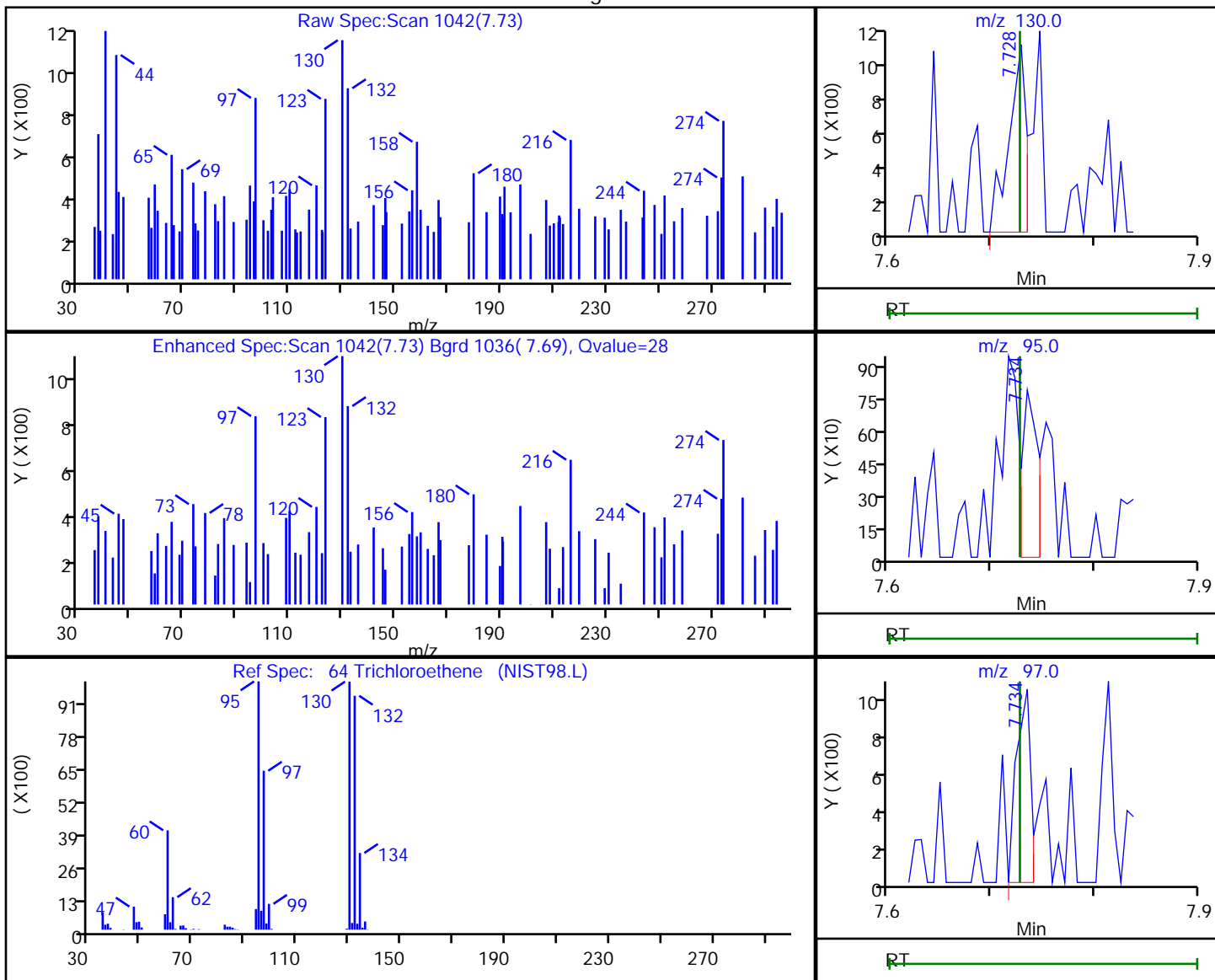
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050416.D  
Injection Date: 04-May-2020 14:20:30 Instrument ID: CHHP5  
Lims ID: 180-105108-B-5 Lab Sample ID: 180-105108-5  
Client ID: HD-COD-SW-13-0/1-0  
Operator ID: 034635 ALS Bottle#: 16 Worklist Smp#: 16  
Purge Vol: 5.000 mL Dil. Factor: 1.0000  
Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
Column: DB-624 (0.18 mm) Detector: MS SCAN

64 Trichloroethene, CAS: 79-01-6

Processing Results



RT	Mass	Response	Amount
7.73	130.00	1250	0.334169
7.73	95.00	844	
7.73	97.00	983	

Reviewer: journetp, 04-May-2020 15:13:17  
Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050416.D

Injection Date: 04-May-2020 14:20:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-5

Lab Sample ID: 180-105108-5

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

Operator ID: 034635

ALS Bottle#: 16 Worklist Smp#: 16

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

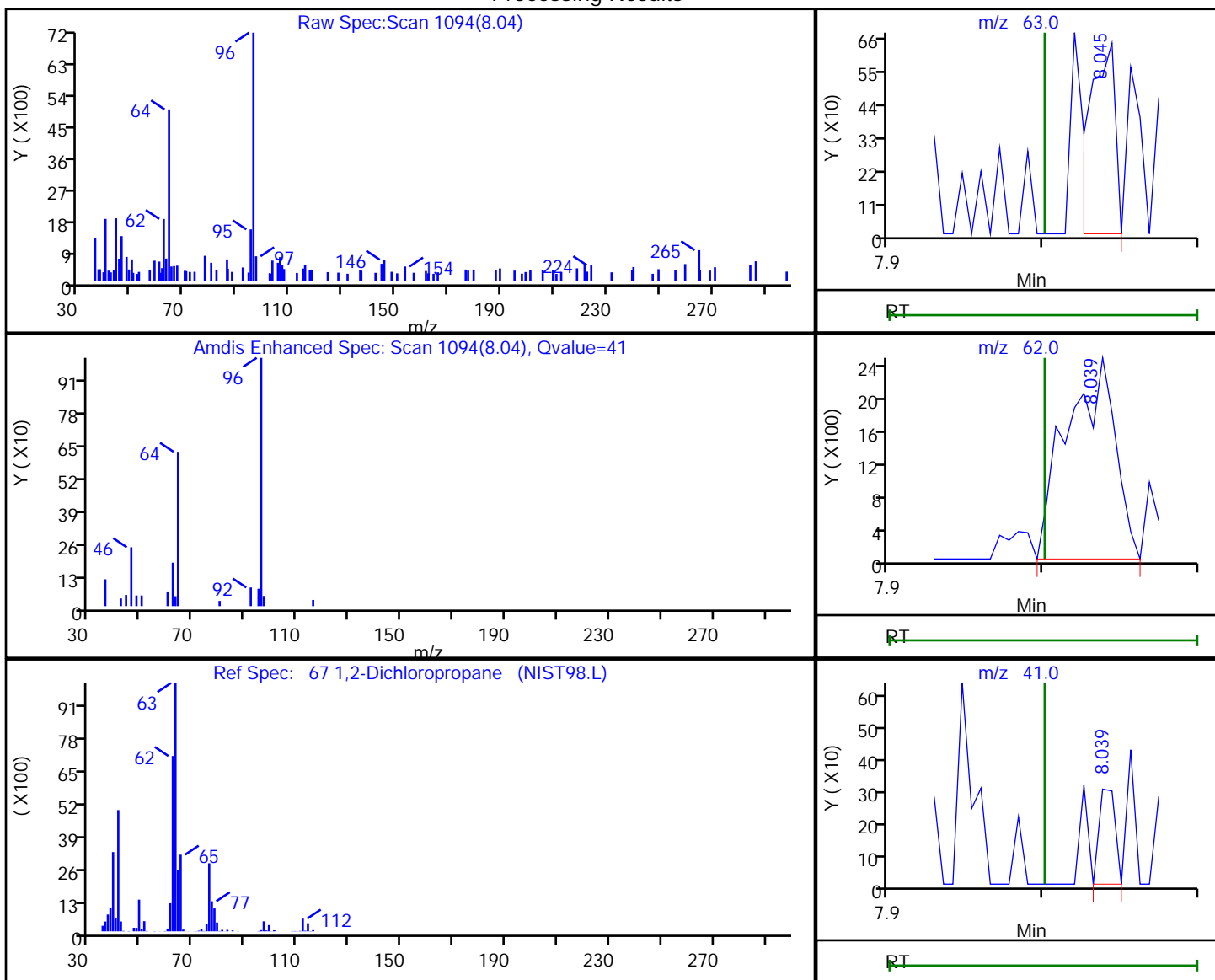
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

67 1,2-Dichloropropane, CAS: 78-87-5

Processing Results



RT	Mass	Response	Amount
8.04	63.00	740	0.184575
8.04	62.00	5335	
8.04	41.00	218	

Reviewer: journeyp, 04-May-2020 15:13:17

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

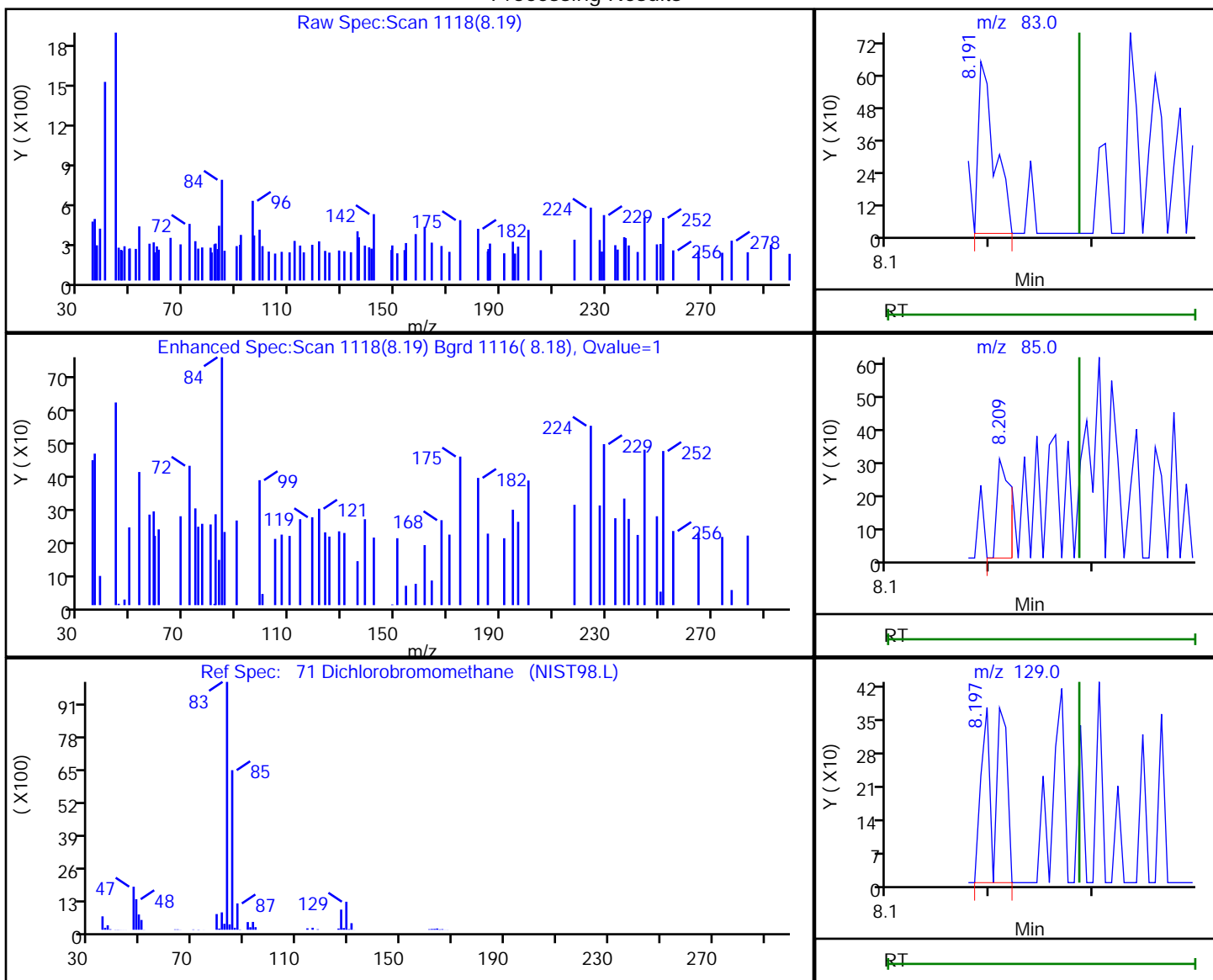


Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050416.D  
 Injection Date: 04-May-2020 14:20:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-5 Lab Sample ID: 180-105108-5  
 Client ID: HD-COD-SW-13-0/1-0  
 Operator ID: 034635 ALS Bottle#: 16 Worklist Smp#: 16  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

71 Dichlorobromomethane, CAS: 75-27-4

Processing Results



RT	Mass	Response	Amount
8.19	83.00	704	0.149650
8.21	85.00	277	
8.20	129.00	472	

Reviewer: journeyp, 04-May-2020 15:13:17  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050416.D

Injection Date: 04-May-2020 14:20:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-5

Lab Sample ID: 180-105108-5

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

Operator ID: 034635

ALS Bottle#: 16 Worklist Smp#: 16

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

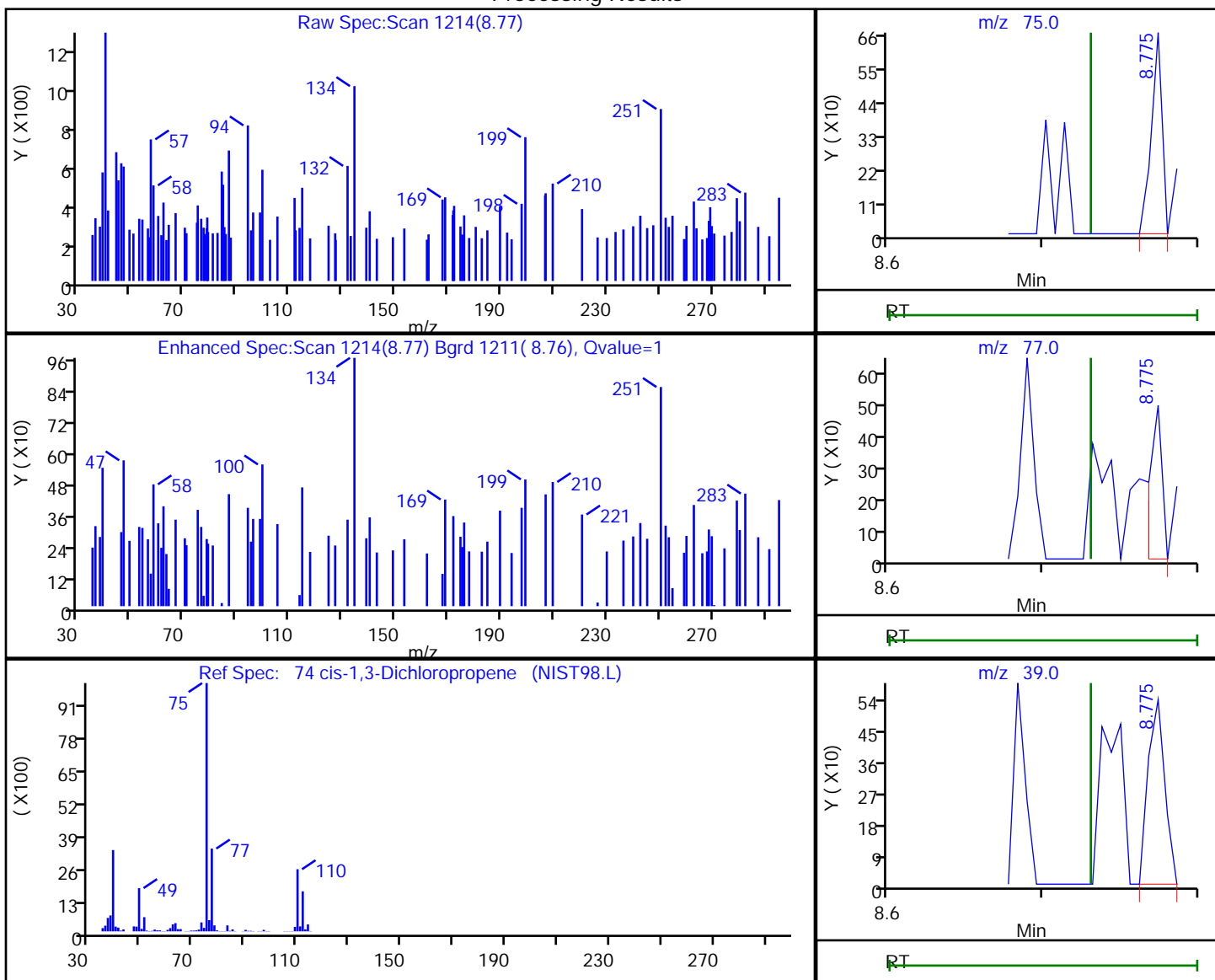
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

74 cis-1,3-Dichloropropene, CAS: 10061-01-5

Processing Results



RT	Mass	Response	Amount
8.77	75.00	319	0.053857
8.77	77.00	271	
8.77	39.00	405	

Reviewer: journetp, 04-May-2020 15:13:17

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050416.D

Injection Date: 04-May-2020 14:20:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-5

Lab Sample ID: 180-105108-5

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

Operator ID: 034635

ALS Bottle#: 16 Worklist Smp#: 16

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

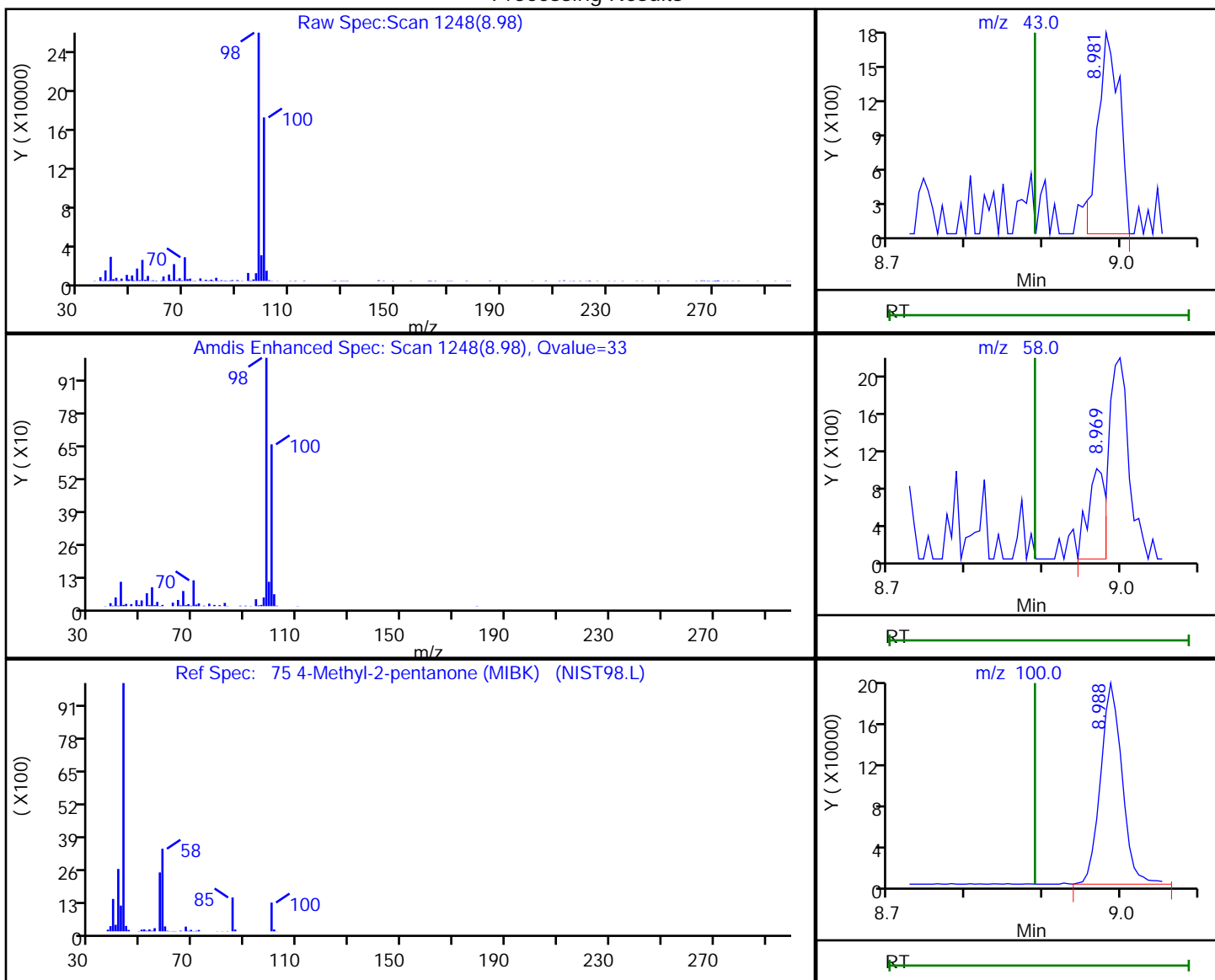
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

75 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Processing Results



RT	Mass	Response	Amount
8.98	43.00	3464	16.363348
8.97	58.00	1498	
8.99	100.00	381125	

Reviewer: journeyp, 04-May-2020 15:13:17

Audit Action: Marked Compound Undetected

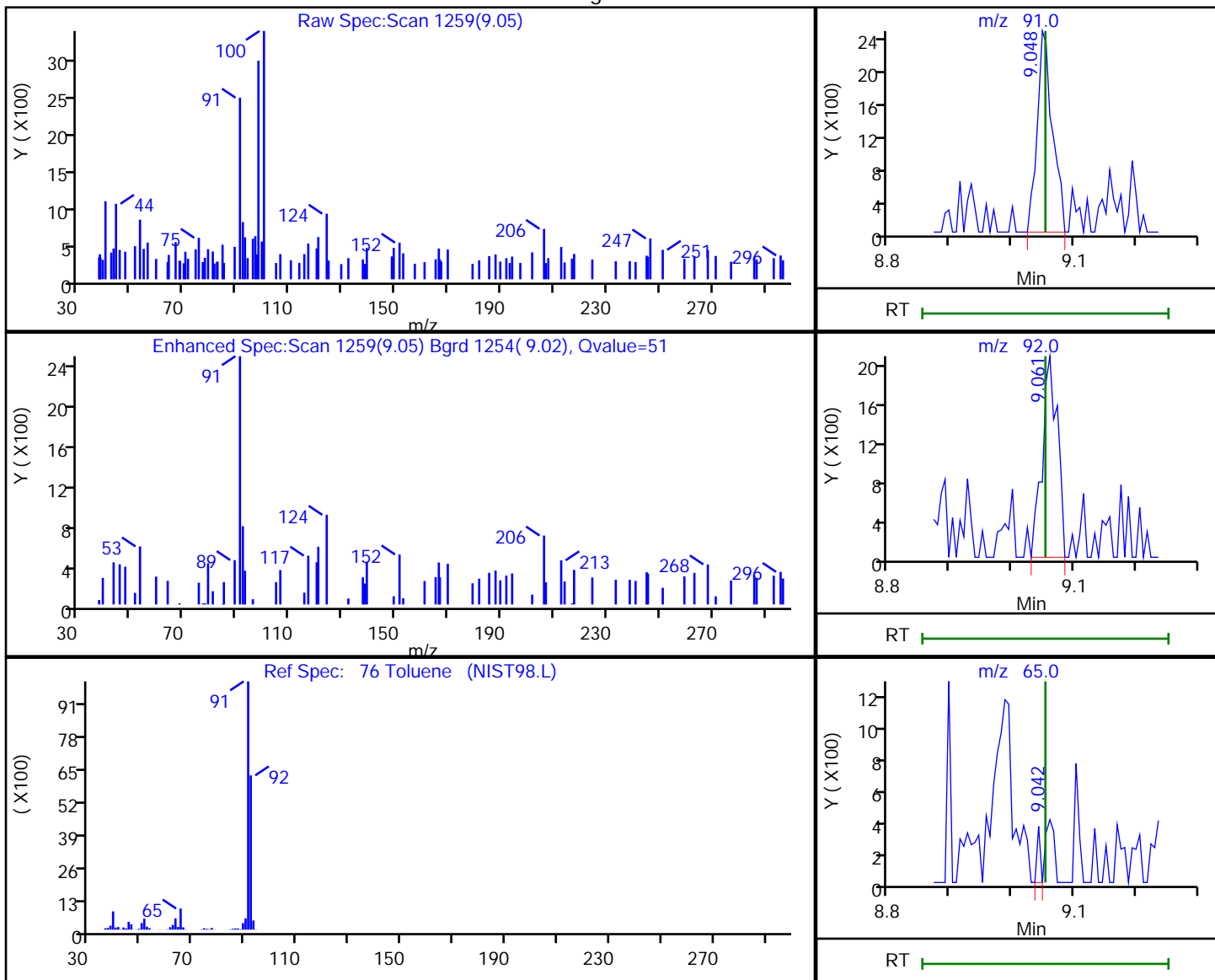
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050416.D  
 Injection Date: 04-May-2020 14:20:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-5 Lab Sample ID: 180-105108-5  
 Client ID: HD-COD-SW-13-0/1-0  
 Operator ID: 034635 ALS Bottle#: 16 Worklist Smp#: 16  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

76 Toluene, CAS: 108-88-3

Processing Results



RT	Mass	Response	Amount
9.05	91.00	4146	0.290379
9.06	92.00	3491	
9.04	65.00	126	

Reviewer: journetp, 04-May-2020 15:13:17  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050416.D

Injection Date: 04-May-2020 14:20:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-5

Lab Sample ID: 180-105108-5

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

Operator ID: 034635

ALS Bottle#: 16 Worklist Smp#: 16

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

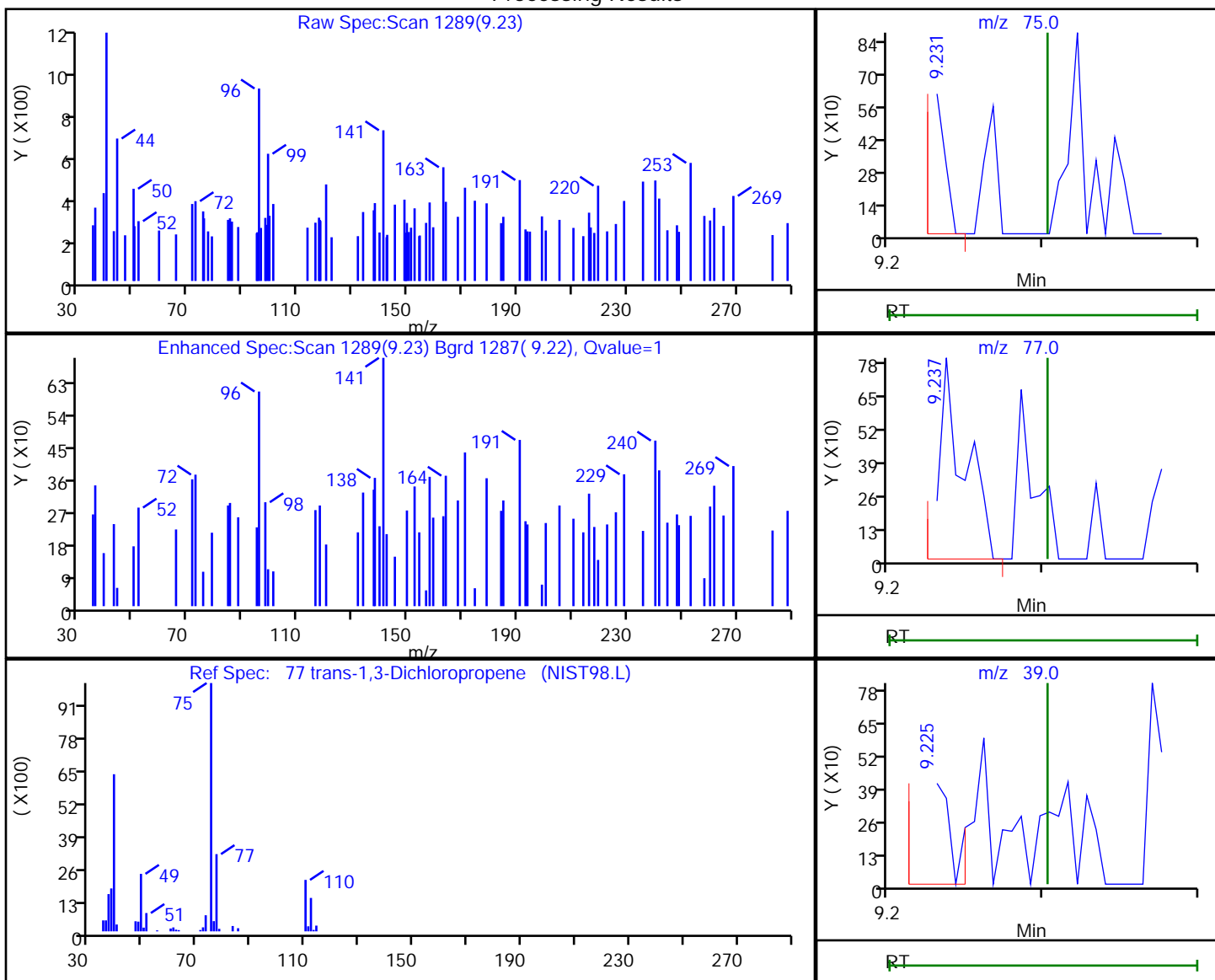
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

77 trans-1,3-Dichloropropene, CAS: 10061-02-6

Processing Results



RT	Mass	Response	Amount
9.23	75.00	330	0.070306
9.24	77.00	865	
9.22	39.00	799	

Reviewer: journetp, 04-May-2020 15:13:17

Audit Action: Marked Compound Undetected

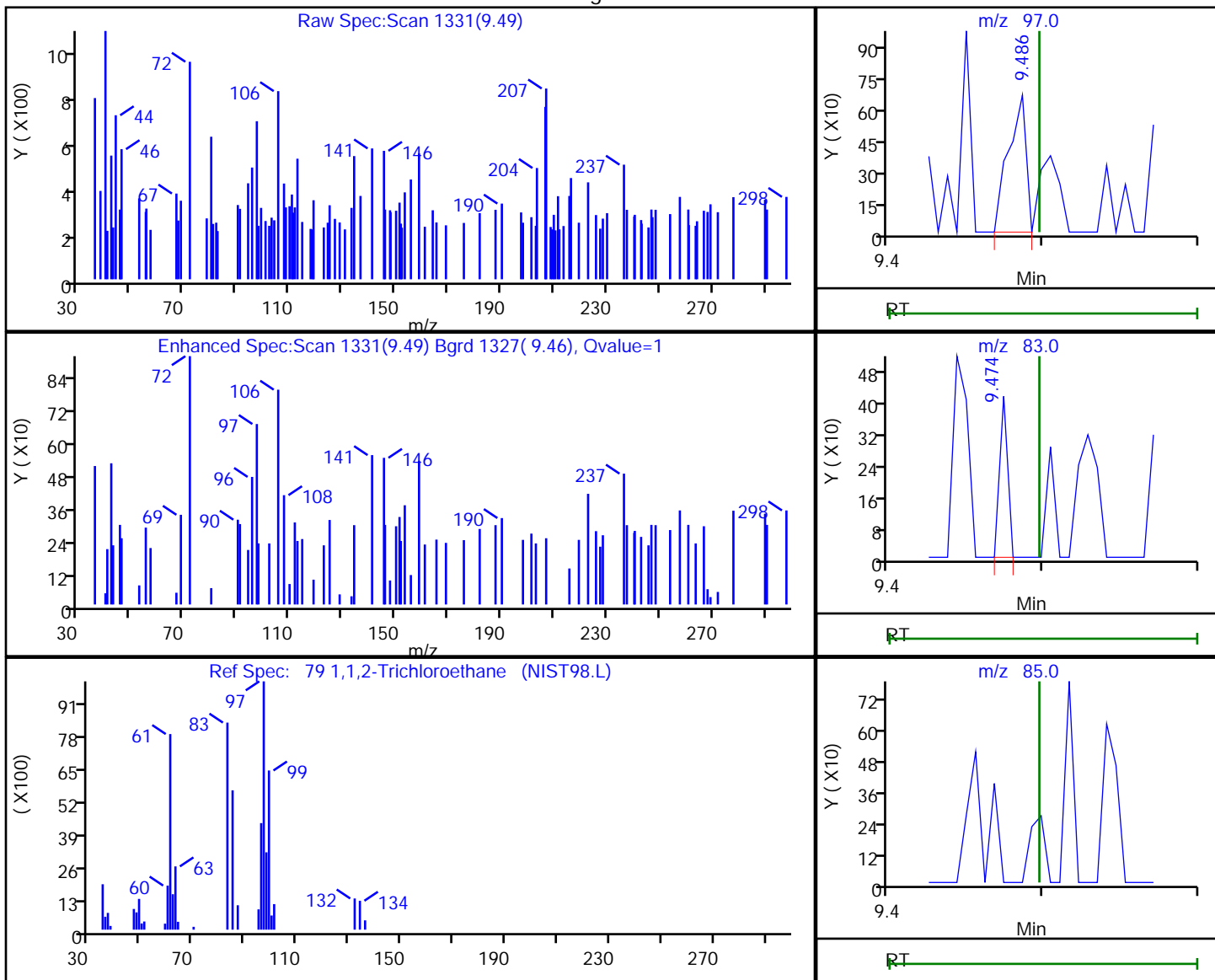
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050416.D  
Injection Date: 04-May-2020 14:20:30 Instrument ID: CHHP5  
Lims ID: 180-105108-B-5 Lab Sample ID: 180-105108-5  
Client ID: HD-COD-SW-13-0/1-0  
Operator ID: 034635 ALS Bottle#: 16 Worklist Smp#: 16  
Purge Vol: 5.000 mL Dil. Factor: 1.0000  
Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
Column: DB-624 (0.18 mm) Detector: MS SCAN

79 1,1,2-Trichloroethane, CAS: 79-00-5

Processing Results



RT	Mass	Response	Amount
9.49	97.00	527	0.158795
9.47	83.00	150	
9.50	85.00	0	

Reviewer: journeyp, 04-May-2020 15:13:17  
Audit Action: Marked Compound Undetected

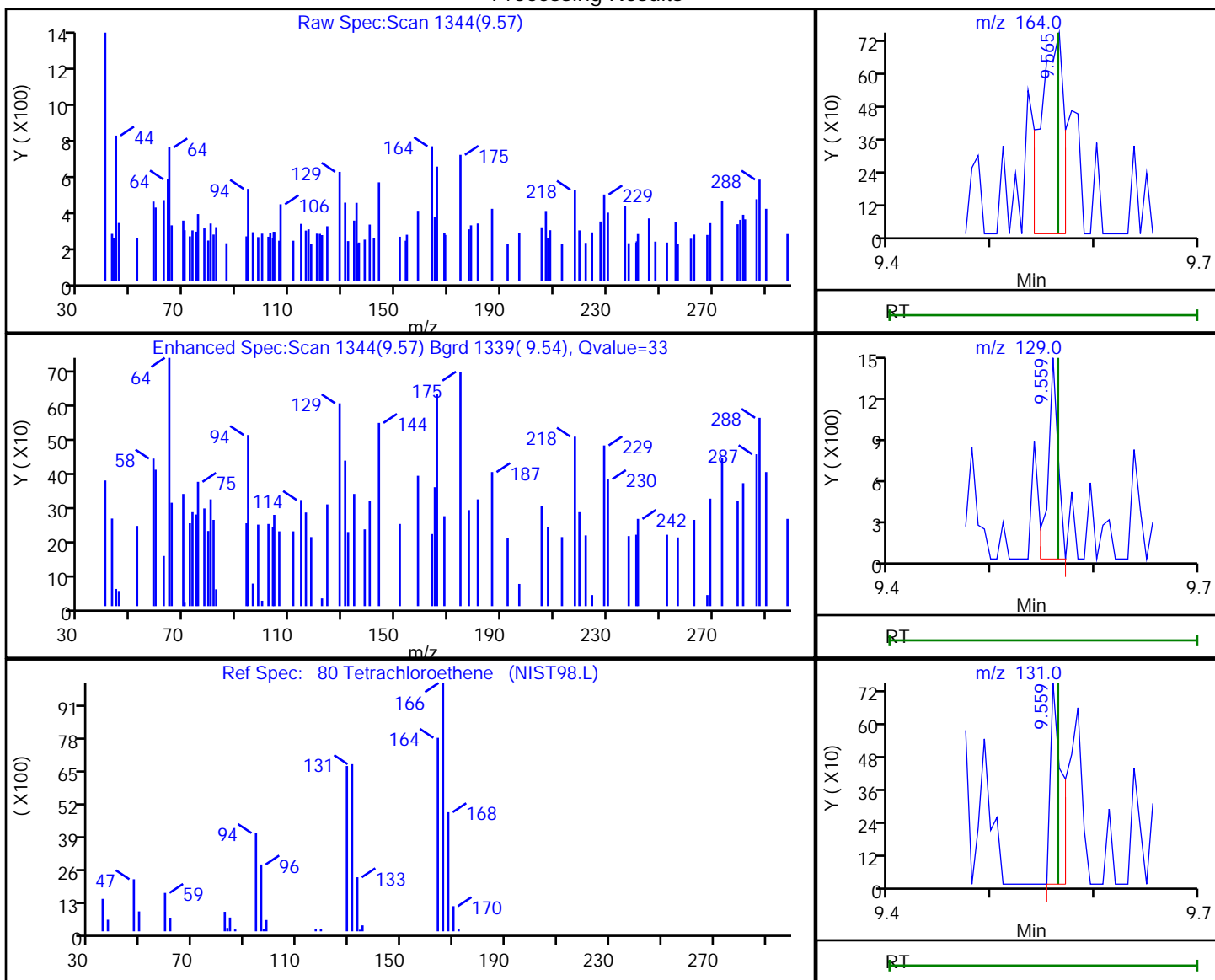
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050416.D  
 Injection Date: 04-May-2020 14:20:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-5 Lab Sample ID: 180-105108-5  
 Client ID: HD-COD-SW-13-0/1-0  
 Operator ID: 034635 ALS Bottle#: 16 Worklist Smp#: 16  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

80 Tetrachloroethene, CAS: 127-18-4

Processing Results



RT	Mass	Response	Amount
9.57	164.00	1159	0.407849
9.56	129.00	944	
9.56	131.00	574	

Reviewer: journeyp, 04-May-2020 15:13:17

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050416.D

Injection Date: 04-May-2020 14:20:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-5

Lab Sample ID: 180-105108-5

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

Operator ID: 034635

ALS Bottle#: 16 Worklist Smp#: 16

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

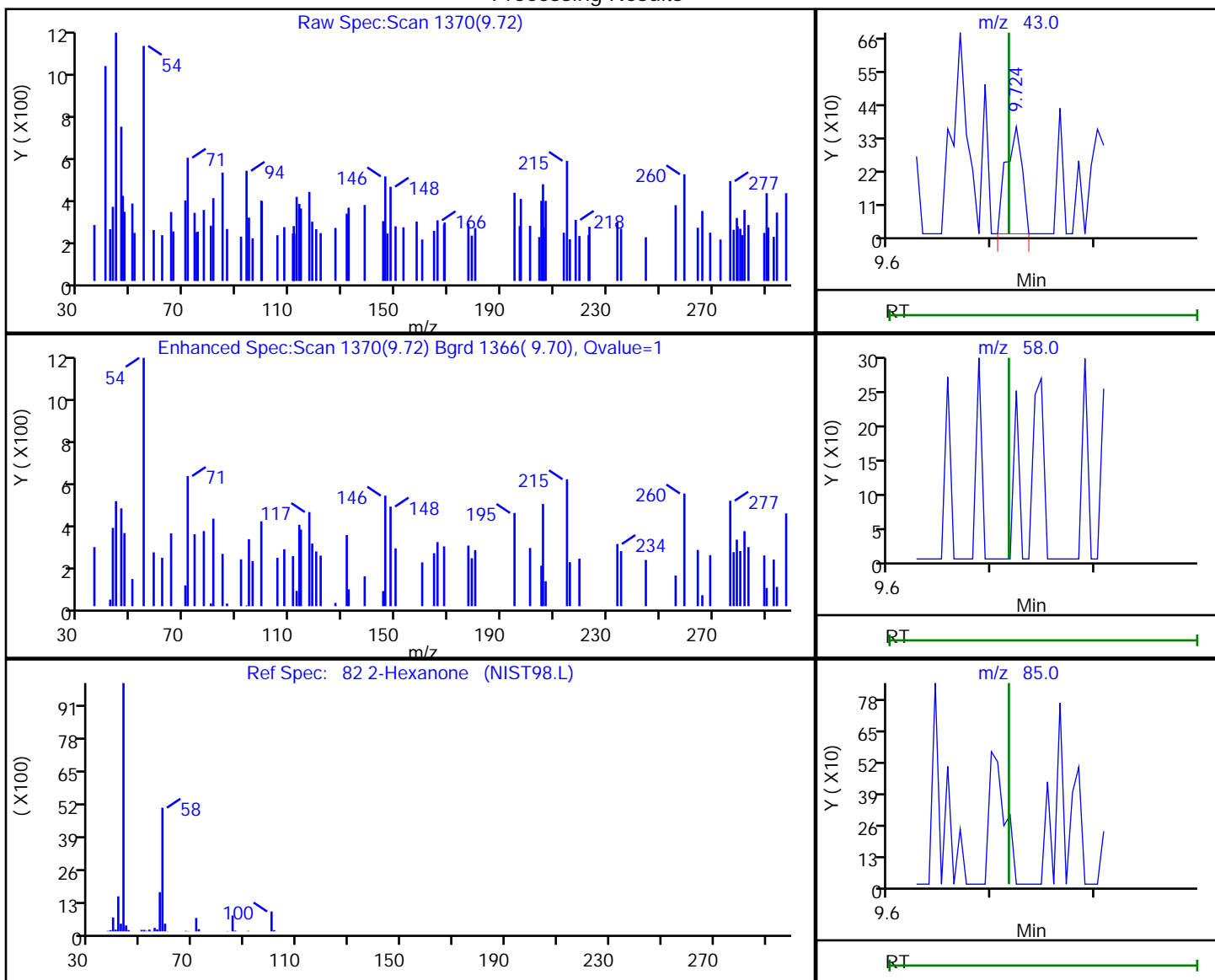
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

82 2-Hexanone, CAS: 591-78-6

Processing Results



RT	Mass	Response	Amount
9.72	43.00	385	14.137631
9.72	58.00	0	
9.72	85.00	0	

Reviewer: journeyp, 04-May-2020 15:13:17

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

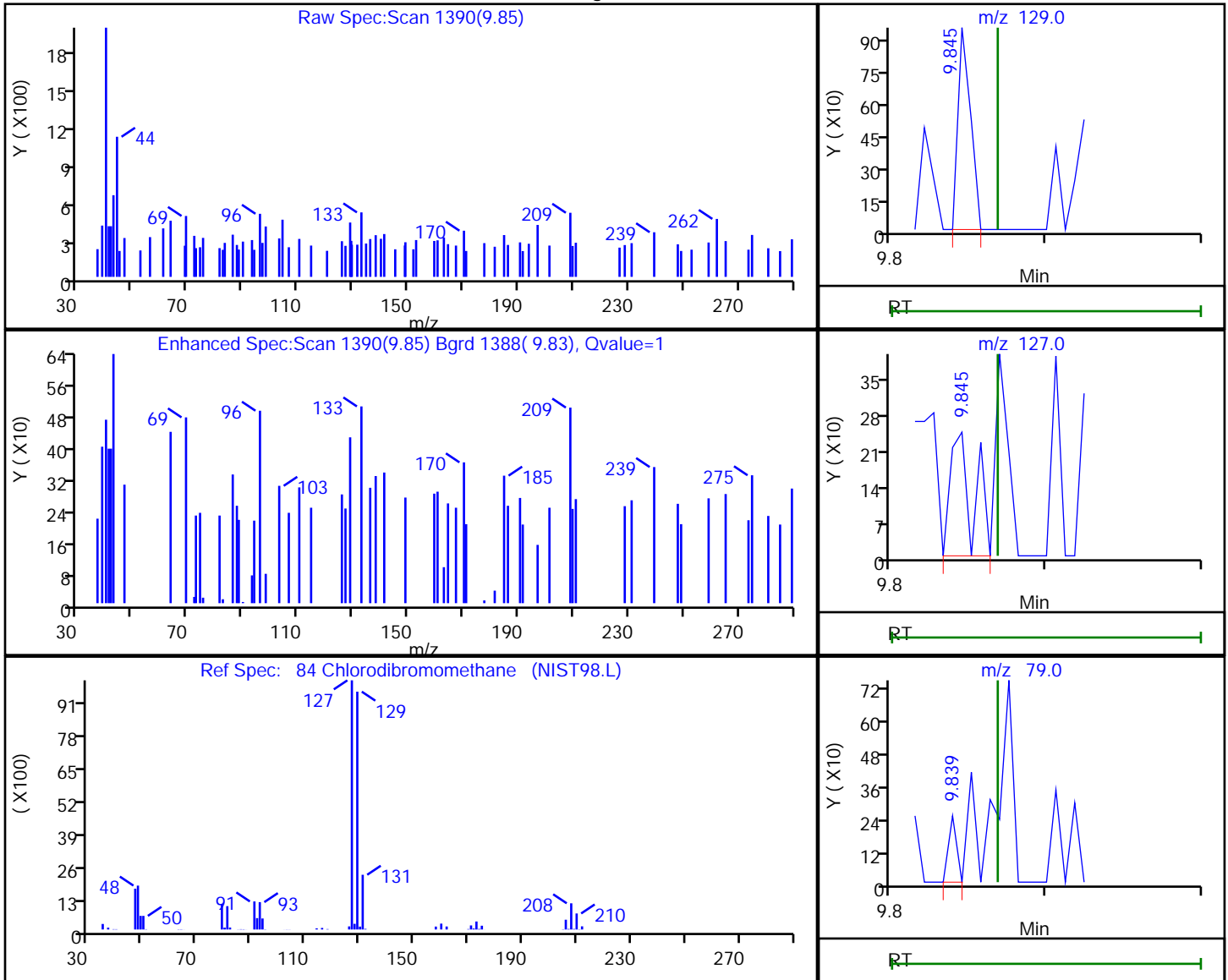


Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050416.D  
 Injection Date: 04-May-2020 14:20:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-5 Lab Sample ID: 180-105108-5  
 Client ID: HD-COD-SW-13-0/1-0  
 Operator ID: 034635 ALS Bottle#: 16 Worklist Smp#: 16  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

84 Chlorodibromomethane, CAS: 124-48-1

Processing Results



RT	Mass	Response	Amount
9.85	129.00	538	0.191507
9.85	127.00	247	
9.84	79.00	89	

Reviewer: journept, 04-May-2020 15:13:17  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050416.D

Injection Date: 04-May-2020 14:20:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-5

Lab Sample ID: 180-105108-5

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

Operator ID: 034635

ALS Bottle#: 16 Worklist Smp#: 16

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

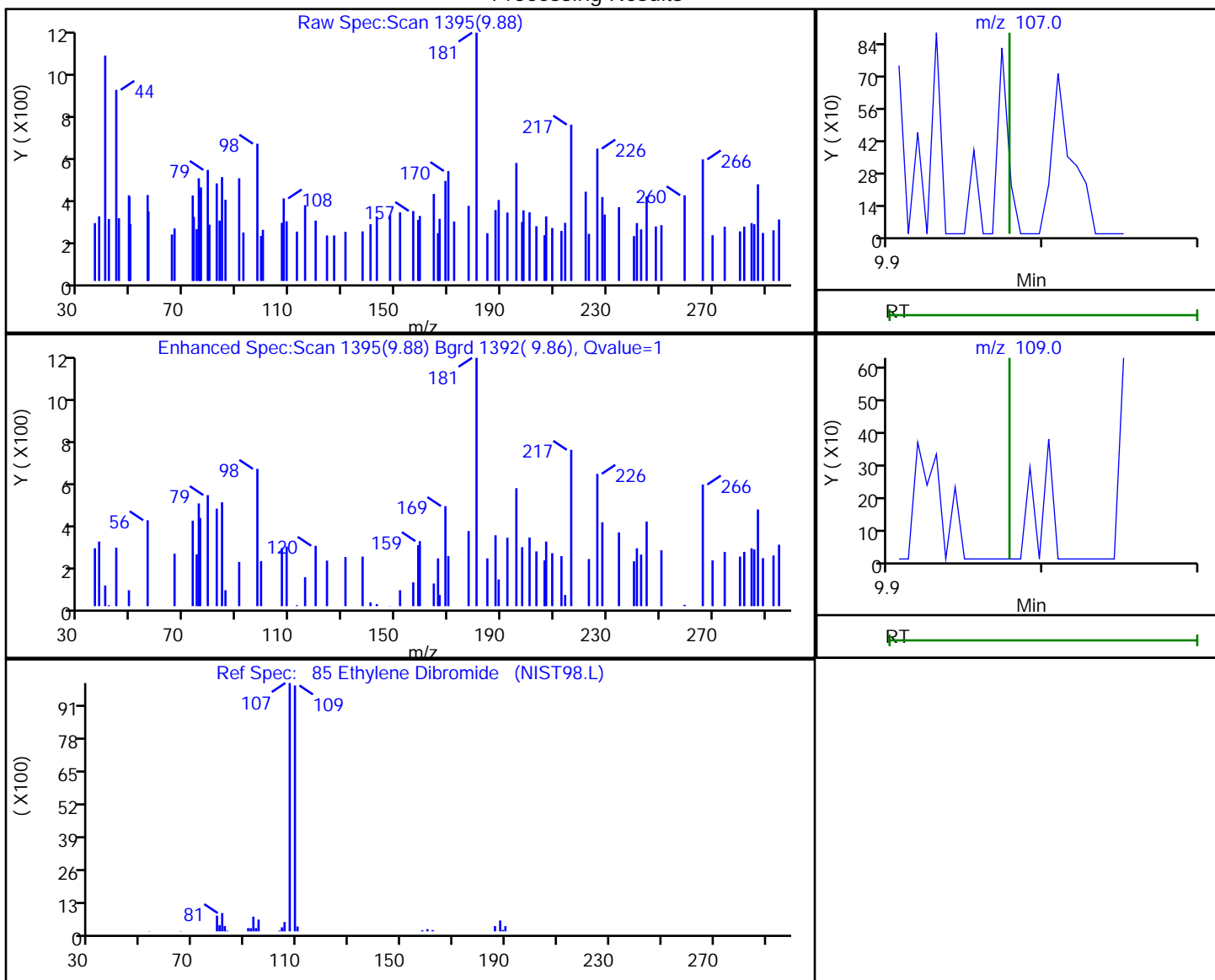
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

85 Ethylene Dibromide, CAS: 106-93-4

Processing Results



RT	Mass	Response	Amount
9.88	107.00	427	0.137535
9.88	109.00	270	

Reviewer: journetp, 04-May-2020 15:13:17

Audit Action: Marked Compound Undetected

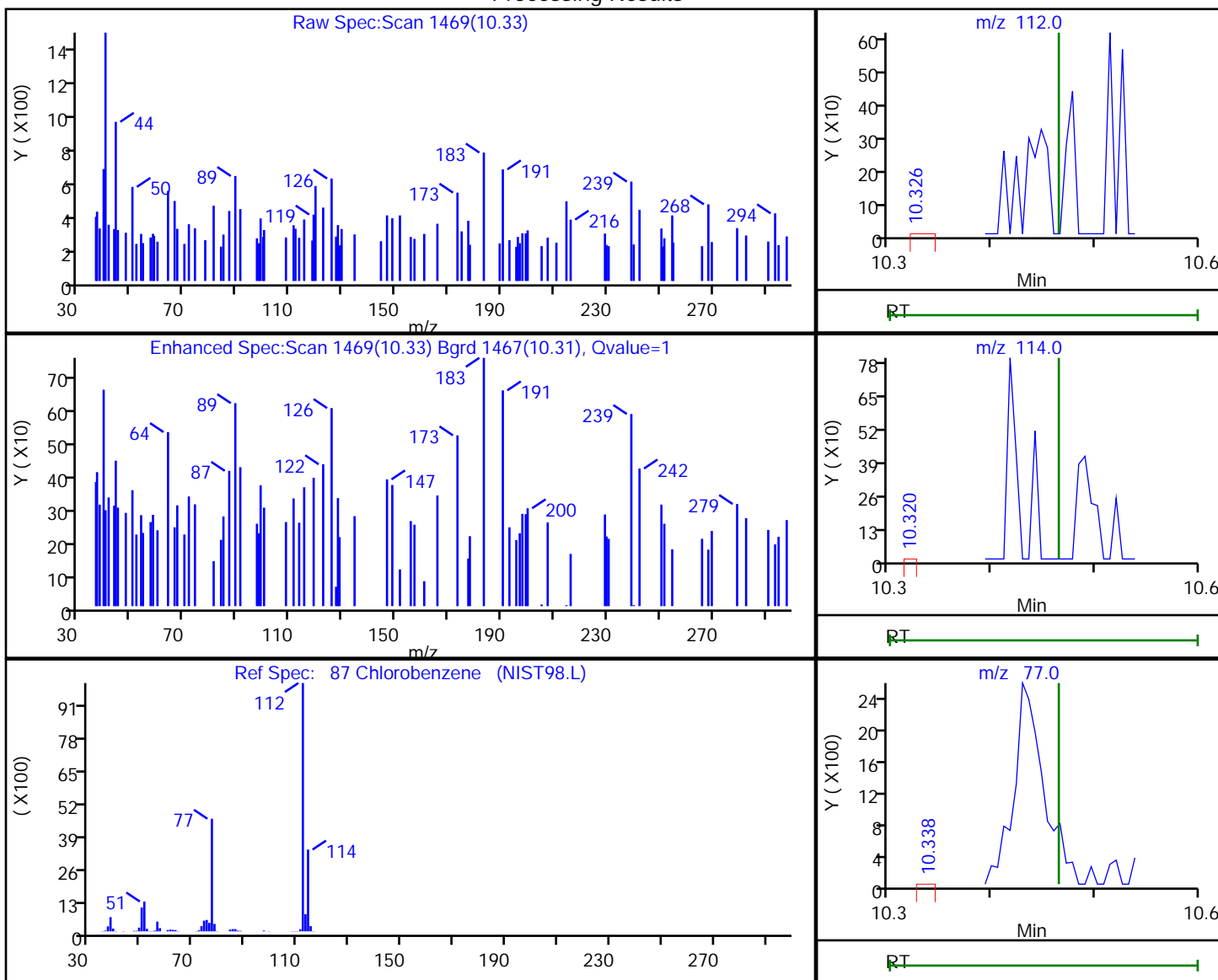
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050416.D  
 Injection Date: 04-May-2020 14:20:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-5 Lab Sample ID: 180-105108-5  
 Client ID: HD-COD-SW-13-0/1-0  
 Operator ID: 034635 ALS Bottle#: 16 Worklist Smp#: 16  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

87 Chlorobenzene, CAS: 108-90-7

Processing Results



RT	Mass	Response	Amount
10.33	112.00	202	0.021999
10.32	114.00	142	
10.34	77.00	270	

Reviewer: journeyp, 04-May-2020 15:13:17  
 Audit Action: Marked Compound Undetected

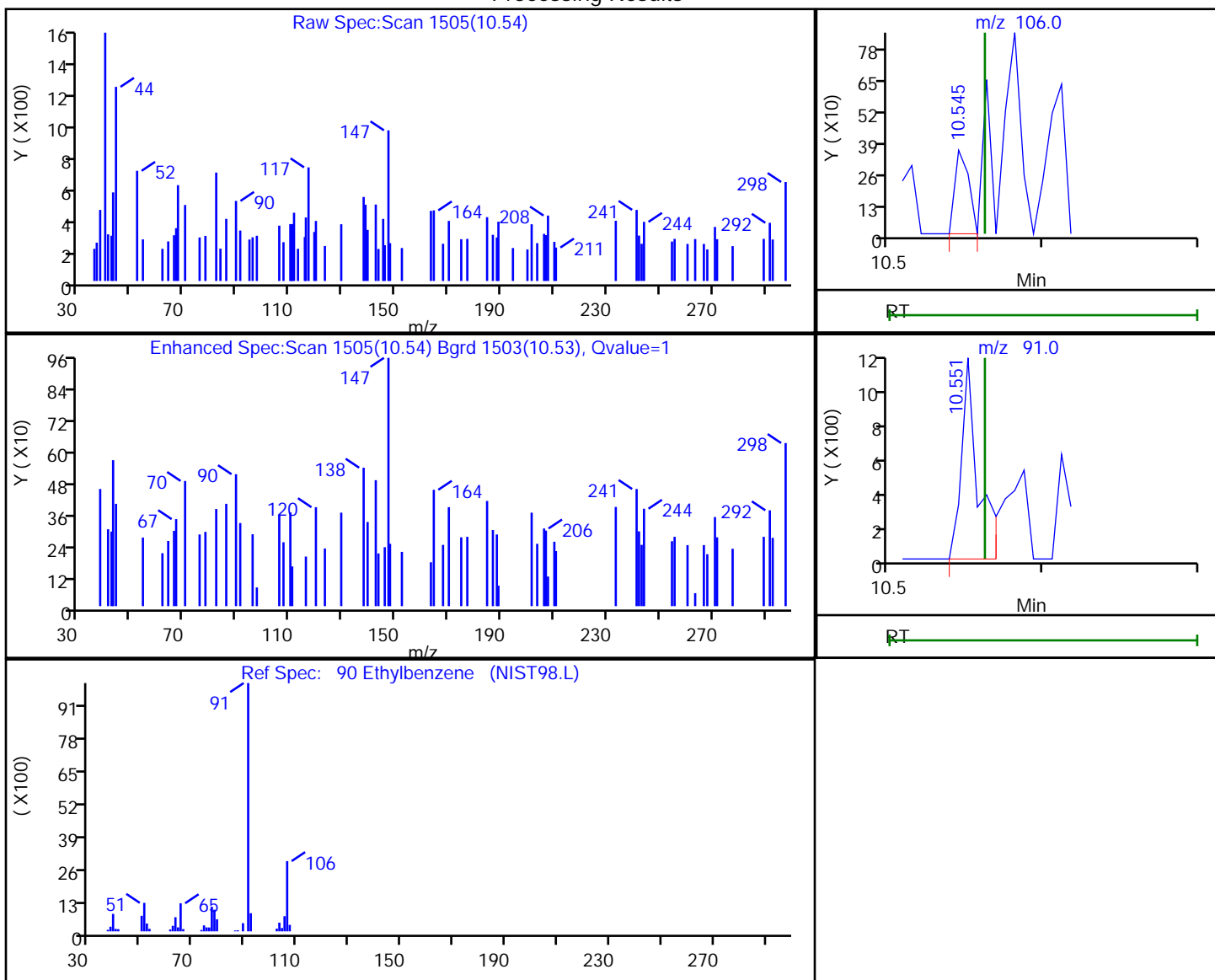
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050416.D  
 Injection Date: 04-May-2020 14:20:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-5 Lab Sample ID: 180-105108-5  
 Client ID: HD-COD-SW-13-0/1-0  
 Operator ID: 034635 ALS Bottle#: 16 Worklist Smp#: 16  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

90 Ethylbenzene, CAS: 100-41-4

Processing Results



RT	Mass	Response	Amount
10.54	106.00	220	0.046287
10.55	91.00	883	

Reviewer: journetp, 04-May-2020 15:13:17  
 Audit Action: Marked Compound Undetected

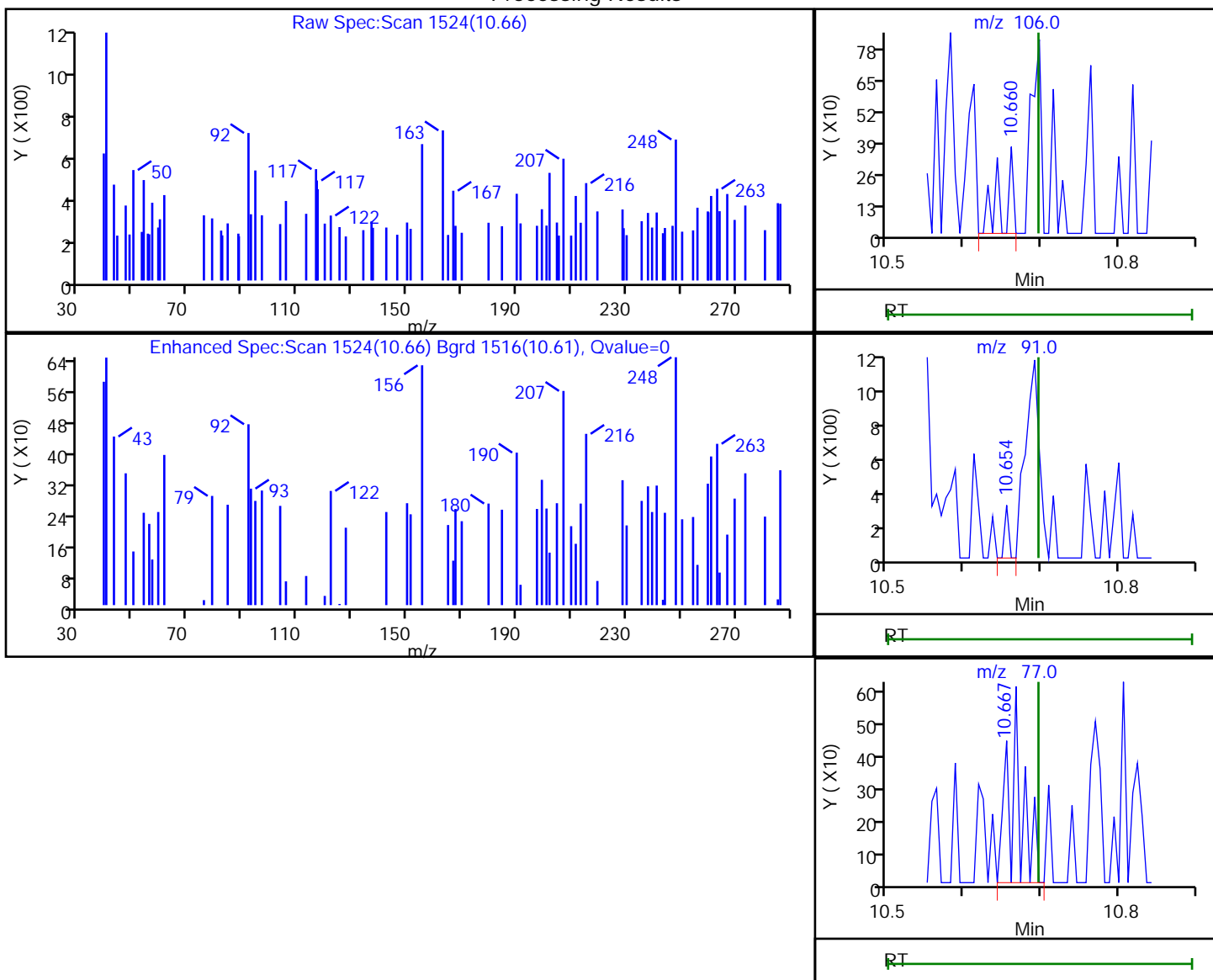
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050416.D  
Injection Date: 04-May-2020 14:20:30 Instrument ID: CHHP5  
Lims ID: 180-105108-B-5 Lab Sample ID: 180-105108-5  
Client ID: HD-COD-SW-13-0/1-0  
Operator ID: 034635 ALS Bottle#: 16 Worklist Smp#: 16  
Purge Vol: 5.000 mL Dil. Factor: 1.0000  
Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
Column: DB-624 (0.18 mm) Detector: MS SCAN

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

Processing Results



RT	Mass	Response	Amount
10.66	106.00	324	0.054680
10.65	91.00	113	
10.67	77.00	688	

Reviewer: journept, 04-May-2020 15:13:17  
Audit Action: Marked Compound Undetected

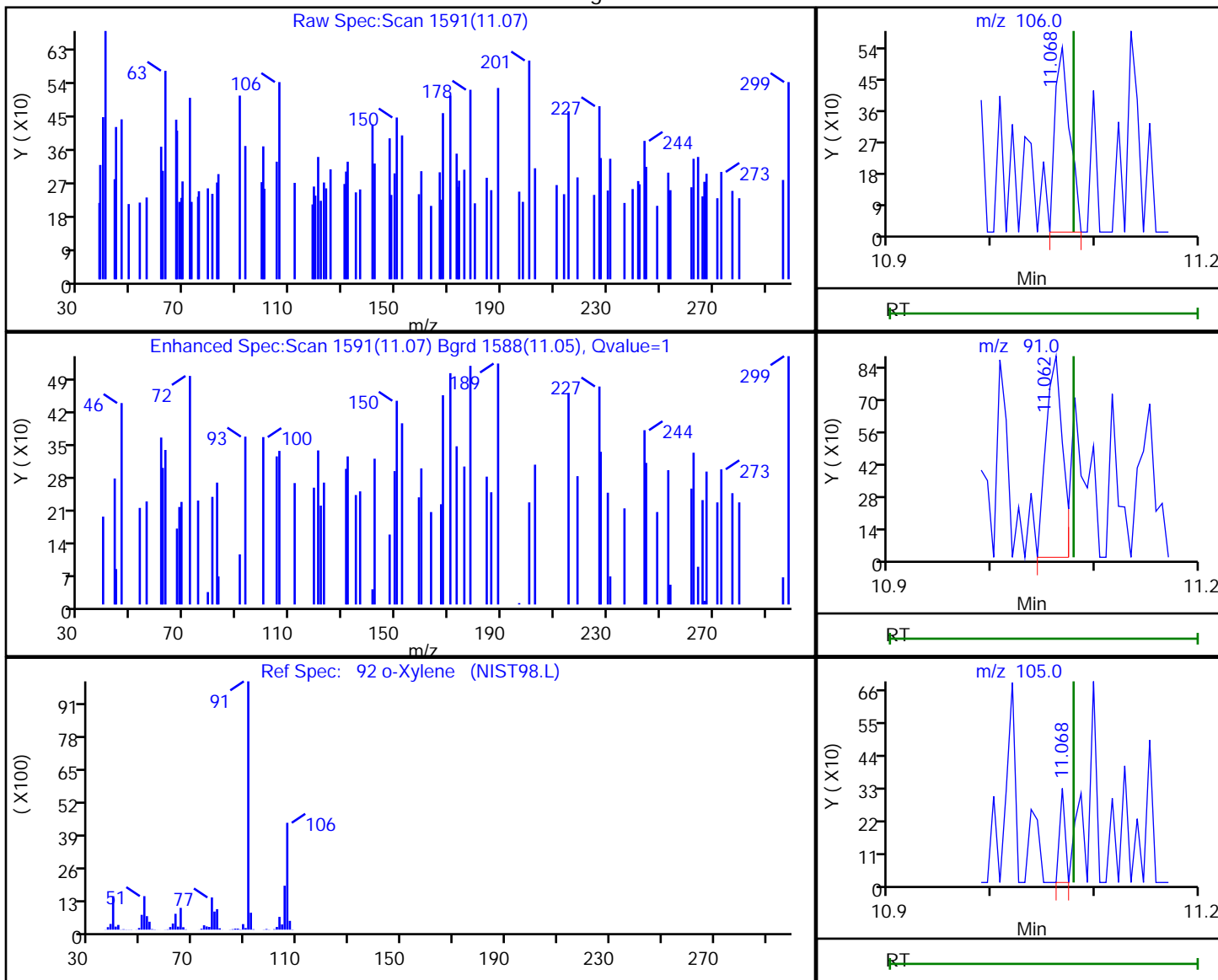
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050416.D  
 Injection Date: 04-May-2020 14:20:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-5 Lab Sample ID: 180-105108-5  
 Client ID: HD-COD-SW-13-0/1-0  
 Operator ID: 034635 ALS Bottle#: 16 Worklist Smp#: 16  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

92 o-Xylene, CAS: 95-47-6

Processing Results



RT	Mass	Response	Amount
11.07	106.00	538	0.097273
11.06	91.00	999	
11.07	105.00	118	

Reviewer: journeyp, 04-May-2020 15:13:17  
 Audit Action: Marked Compound Undetected

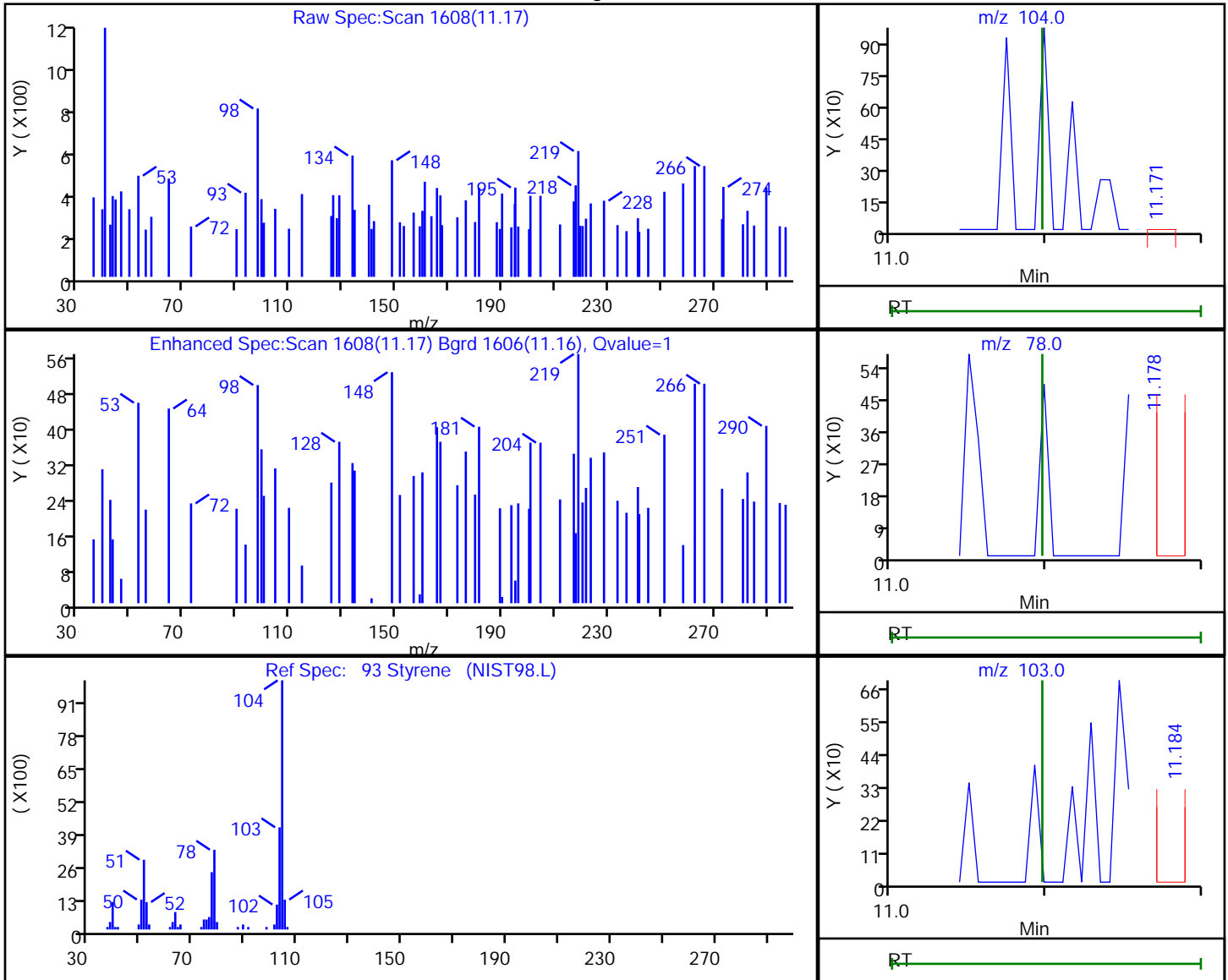
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050416.D  
Injection Date: 04-May-2020 14:20:30 Instrument ID: CHHP5  
Lims ID: 180-105108-B-5 Lab Sample ID: 180-105108-5  
Client ID: HD-COD-SW-13-0/1-0  
Operator ID: 034635 ALS Bottle#: 16 Worklist Smp#: 16  
Purge Vol: 5.000 mL Dil. Factor: 1.0000  
Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
Column: DB-624 (0.18 mm) Detector: MS SCAN

93 Styrene, CAS: 100-42-5

Processing Results



RT	Mass	Response	Amount
11.17	104.00	191	0.020140
11.18	78.00	199	
11.18	103.00	245	

Reviewer: journeyp, 04-May-2020 15:13:17  
Audit Action: Marked Compound Undetected

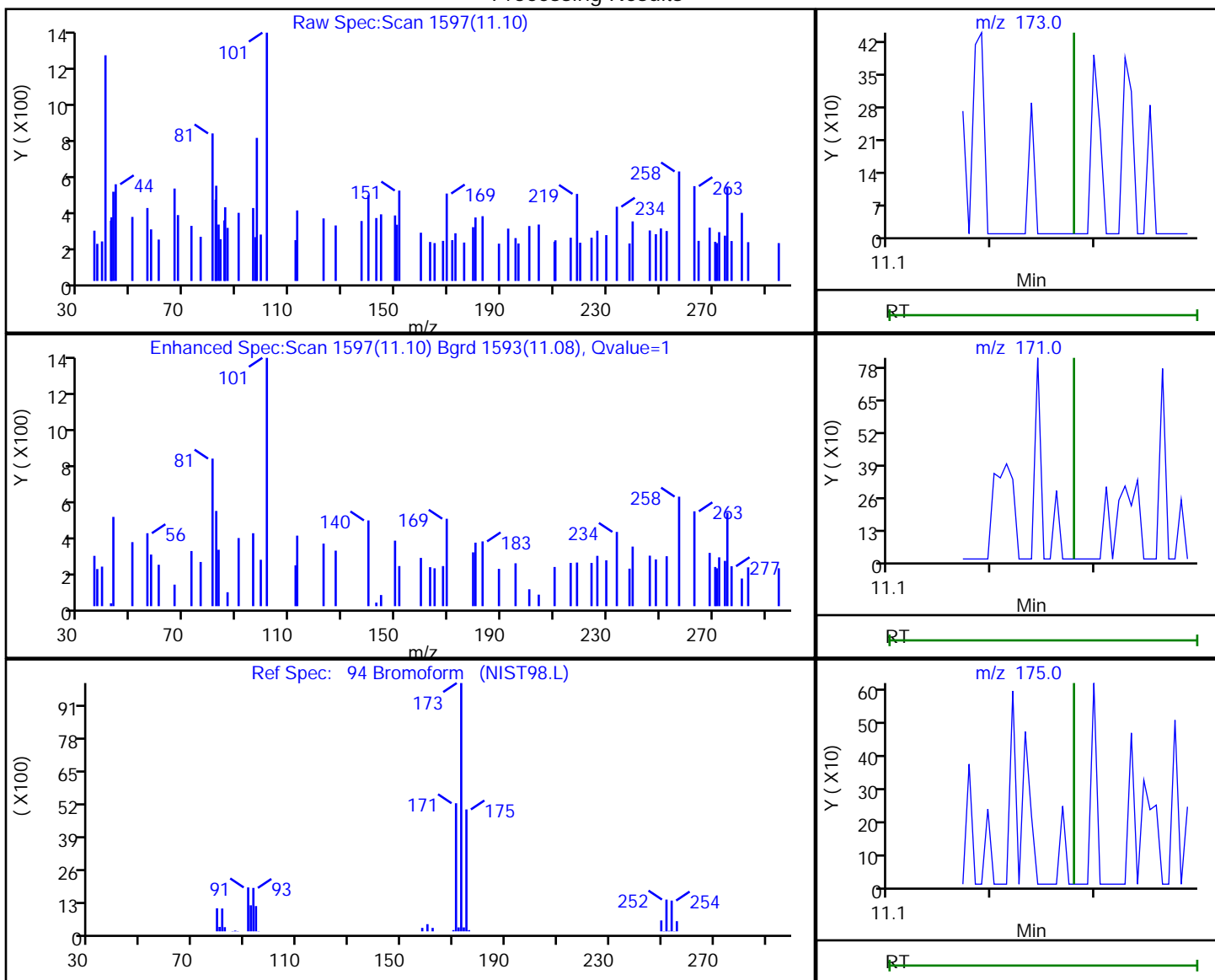
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050416.D  
 Injection Date: 04-May-2020 14:20:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-5 Lab Sample ID: 180-105108-5  
 Client ID: HD-COD-SW-13-0/1-0  
 Operator ID: 034635 ALS Bottle#: 16 Worklist Smp#: 16  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

94 Bromoform, CAS: 75-25-2

Processing Results



RT	Mass	Response	Amount
11.10	173.00	177	0.133276
11.10	171.00	80	
11.28	175.00	0	

Reviewer: journeyp, 04-May-2020 15:13:17

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

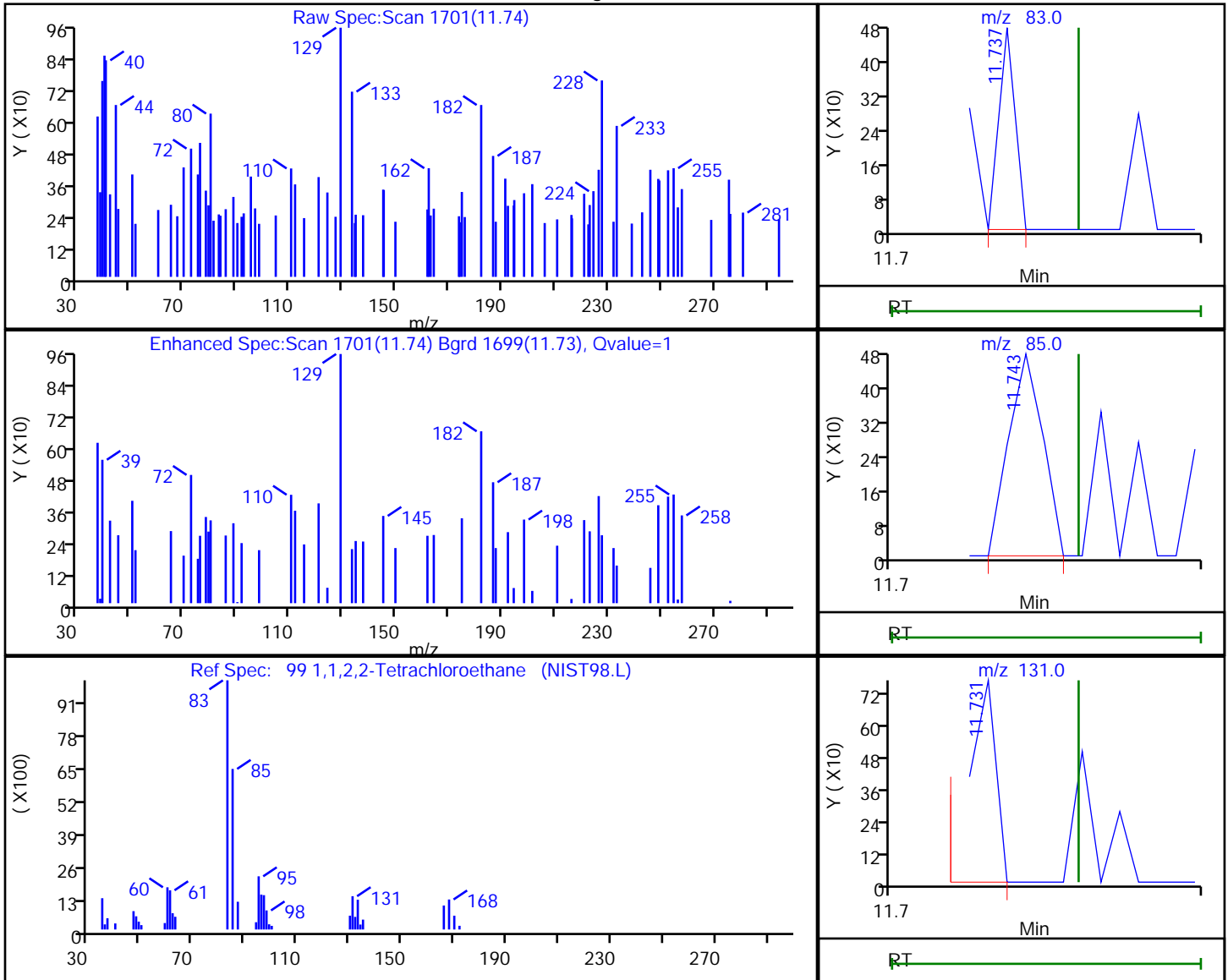


Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050416.D  
 Injection Date: 04-May-2020 14:20:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-5 Lab Sample ID: 180-105108-5  
 Client ID: HD-COD-SW-13-0/1-0  
 Operator ID: 034635 ALS Bottle#: 16 Worklist Smp#: 16  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

99 1,1,2,2-Tetrachloroethane, CAS: 79-34-5

Processing Results



RT	Mass	Response	Amount
11.74	83.00	173	0.050491
11.74	85.00	362	
11.73	131.00	426	

Reviewer: journept, 04-May-2020 15:13:17  
 Audit Action: Marked Compound Undetected

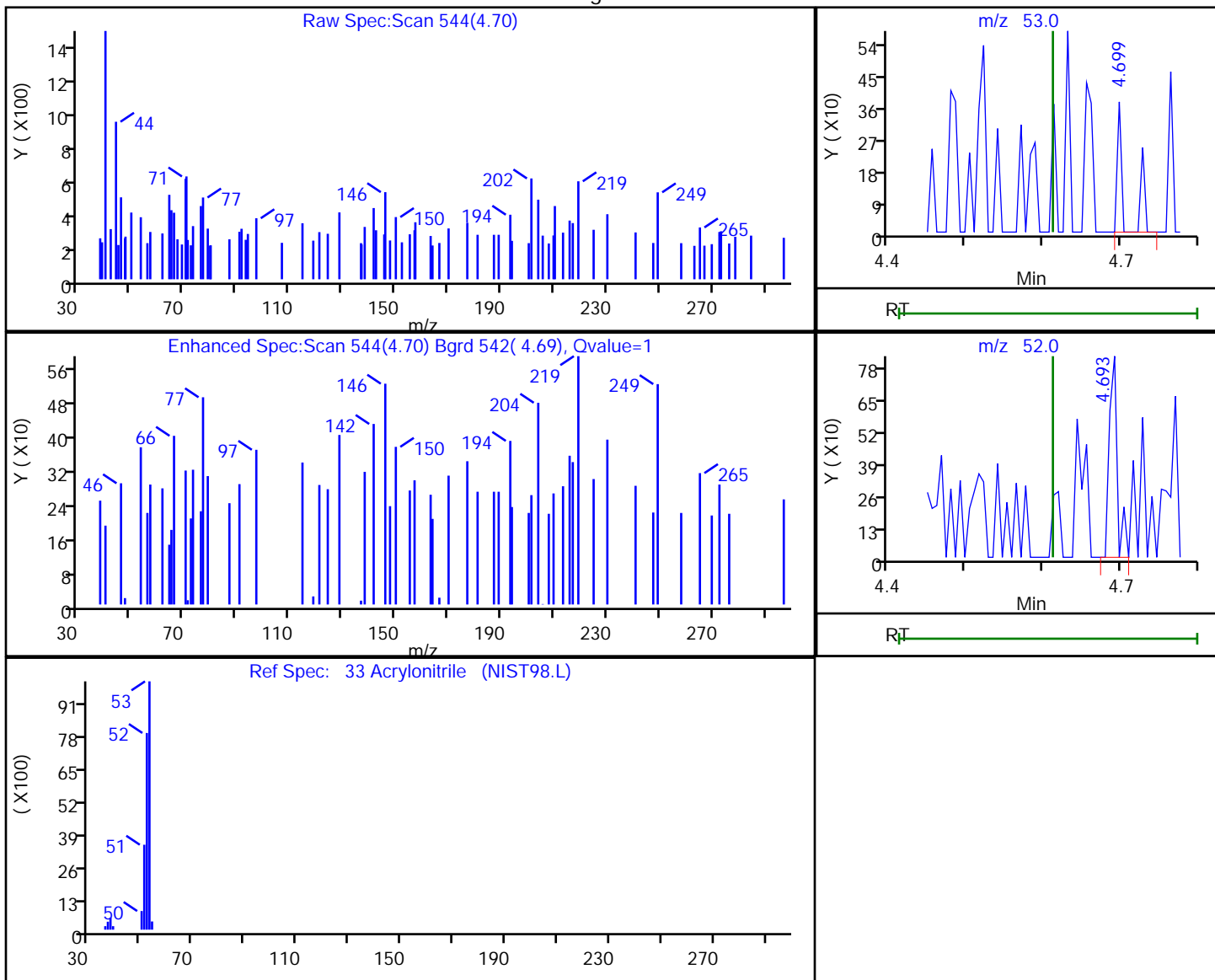
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050416.D  
Injection Date: 04-May-2020 14:20:30 Instrument ID: CHHP5  
Lims ID: 180-105108-B-5 Lab Sample ID: 180-105108-5  
Client ID: HD-COD-SW-13-0/1-0  
Operator ID: 034635 ALS Bottle#: 16 Worklist Smp#: 16  
Purge Vol: 5.000 mL Dil. Factor: 1.0000  
Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
Column: DB-624 (0.18 mm) Detector: MS SCAN

33 Acrylonitrile, CAS: 107-13-1

Processing Results



RT	Mass	Response	Amount
4.70	53.00	223	0.141270
4.69	52.00	598	

Reviewer: journetp, 04-May-2020 15:13:16  
Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: HD-COD-SW-15-0/1-0 Lab Sample ID: 180-105108-6  
 Matrix: Water Lab File ID: 5050122.D  
 Analysis Method: EPA 8260C Date Collected: 04/28/2020 12:45  
 Sample wt/vol: 5 (mL) Date Analyzed: 05/01/2020 23:51  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-624 ID: 0.18 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 314382 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	ND	^c	1.0	0.90
75-01-4	Vinyl chloride	ND	^c	1.0	0.40
74-83-9	Bromomethane	ND	^c *	1.0	0.89
75-00-3	Chloroethane	ND		1.0	0.90
75-35-4	1,1-Dichloroethene	ND		1.0	0.55
67-64-1	Acetone	8.9		5.0	3.4
75-15-0	Carbon disulfide	ND	^c	1.0	0.88
75-09-2	Methylene Chloride	ND		1.0	0.89
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.67
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.59
75-34-3	1,1-Dichloroethane	ND		1.0	0.31
156-59-2	cis-1,2-Dichloroethene	1.2		1.0	0.71
74-97-5	Bromochloromethane	ND		1.0	0.63
78-93-3	2-Butanone (MEK)	ND		5.0	2.6
67-66-3	Chloroform	ND		1.0	0.60
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.60
56-23-5	Carbon tetrachloride	ND		1.0	0.88
71-43-2	Benzene	ND		1.0	0.60
107-06-2	1,2-Dichloroethane	ND		1.0	0.57
79-01-6	Trichloroethene	1.5		1.0	0.69
78-87-5	1,2-Dichloropropane	ND		1.0	0.66
75-27-4	Bromodichloromethane	ND		1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	3.1
108-88-3	Toluene	ND		1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.58
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.45
127-18-4	Tetrachloroethene	2.8		1.0	0.47
591-78-6	2-Hexanone	ND		5.0	3.3
124-48-1	Dibromochloromethane	ND		1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	ND		1.0	0.50
108-90-7	Chlorobenzene	ND		1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.57
100-41-4	Ethylbenzene	ND		1.0	0.51
1330-20-7	Xylenes, Total	ND		2.0	0.89
100-42-5	Styrene	ND		1.0	0.47

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: HD-COD-SW-15-0/1-0 Lab Sample ID: 180-105108-6  
 Matrix: Water Lab File ID: 5050122.D  
 Analysis Method: EPA 8260C Date Collected: 04/28/2020 12:45  
 Sample wt/vol: 5 (mL) Date Analyzed: 05/01/2020 23:51  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-624 ID: 0.18 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 314382 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	ND	^c	1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	ND	^c	1.0	0.60
107-13-1	Acrylonitrile	ND		20	7.8

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	87		62-146
2037-26-5	Toluene-d8 (Surr)	75		75-120
460-00-4	4-Bromofluorobenzene (Surr)	92		64-120
1868-53-7	Dibromofluoromethane (Surr)	100	^c	71-132

Eurofins TestAmerica, Pittsburgh  
Target Compound Quantitation Report

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050122.D  
 Lims ID: 180-105108-A-6  
 Client ID: HD-COD-SW-15-0/1-0  
 Sample Type: Client  
 Inject. Date: 01-May-2020 23:51:30 ALS Bottle#: 22 Worklist Smp#: 22  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: 180-0031777-022  
 Operator ID: 034635 Instrument ID: CHHP5  
 Method: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\MMSVOA\_LL\_CHHP5.m  
 Limit Group: VOA 8260C\_D ICAL  
 Last Update: 03-May-2020 16:03:33 Calib Date: 03-Apr-2020 19:09:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICAL File: \\chromna\Pittsburgh\ChromData\CHHP5\20200403-31442.b\5040310.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: CTX0317

First Level Reviewer: journetp Date: 02-May-2020 18:48:46

Compound	Sig	RT (min.)	Exp RT (min.)	Diff RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.365	4.371	-0.006	0	333344	1000.0	
* 2 Fluorobenzene (IS)	96	7.346	7.345	0.001	99	366883	50.0	
* 3 Chlorobenzene-d5	119	10.436	10.436	0.000	86	149102	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.772	12.772	0.000	95	245748	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.622	6.628	-0.006	91	104308	49.8	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.993	6.993	0.000	0	129409	43.6	
\$ 7 Toluene-d8 (Surr)	98	8.988	8.988	0.000	93	454325	37.6	
\$ 8 4-Bromofluorobenzene (Surr	95	11.616	11.616	0.000	88	208990	45.8	
12 Chloromethane	50		1.851				ND	U
13 Vinyl chloride	62		1.961				ND	U
15 Bromomethane	94		2.277				ND	U
16 Chloroethane	64		2.423				ND	U
22 1,1-Dichloroethene	96		3.390				ND	U
24 Acetone	43	3.519	3.512	0.007	99	56505	44.6	
26 Carbon disulfide	76		3.701				ND	U
31 Methylene Chloride	84		4.218				ND	U
33 Acrylonitrile	53		4.613				ND	U
34 trans-1,2-Dichloroethene	96		4.631				ND	U
35 Methyl tert-butyl ether	73		4.656				ND	U
37 1,1-Dichloroethane	63		5.264				ND	U
45 cis-1,2-Dichloroethene	96	6.013	6.018	-0.005	83	14643	6.14	
46 2-Butanone (MEK)	43		6.031				ND	U
49 Chlorobromomethane	128		6.298				ND	U
52 Chloroform	83		6.444				ND	U
53 1,1,1-Trichloroethane	97	6.597	6.596	0.001	35	5431	1.82	
56 Carbon tetrachloride	117		6.761				ND	U
58 Benzene	78		6.998				ND	U
59 1,2-Dichloroethane	62		7.071				ND	U
64 Trichloroethene	130	7.723	7.728	-0.005	89	16540	7.35	
67 1,2-Dichloropropane	63		7.996				ND	U
71 Dichlorobromomethane	83		8.281				ND	U
74 cis-1,3-Dichloropropene	75		8.726				ND	U

Compound	Sig	RT (min.)	Exp RT (min.)	Diff RT (min.)	Q	Response	OnCol Amt ng	Flags
75 4-Methyl-2-pentanone (MIBK)	43		8.890				ND	U
76 Toluene	91		9.048				ND	U
77 trans-1,3-Dichloropropene	75		9.303				ND	U
79 1,1,2-Trichloroethane	97		9.498				ND	U
80 Tetrachloroethene	164	9.566	9.559	0.007	96	39599	14.1	
82 2-Hexanone	43		9.717				ND	U
84 Chlorodibromomethane	129		9.869				ND	U
85 Ethylene Dibromide	107		9.973				ND	U
87 Chlorobenzene	112		10.465				ND	U
89 1,1,1,2-Tetrachloroethane	131		10.557				ND	U
90 Ethylbenzene	106		10.563				ND	U
91 m-Xylene & p-Xylene	106		10.697				ND	U
92 o-Xylene	106		11.074				ND	U
93 Styrene	104		11.098				ND	U
94 Bromoform	173		11.281				ND	U
99 1,1,2,2-Tetrachloroethane	83		11.755				ND	U
S 133 Xylenes, Total	106		1.000				ND	

**QC Flag Legend**

Review Flags

U - Marked Undetected

**Reagents:**

voaWI/SHP5\_00016

Amount Added: 5.00

Units: uL

Run Reagent

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050122.D

Injection Date: 01-May-2020 23:51:30

Instrument ID: CHHP5

Operator ID: 034635

Lims ID: 180-105108-A-6

Lab Sample ID: 180-105108-6

Worklist Smp#: 22

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

Purge Vol: 5.000 mL

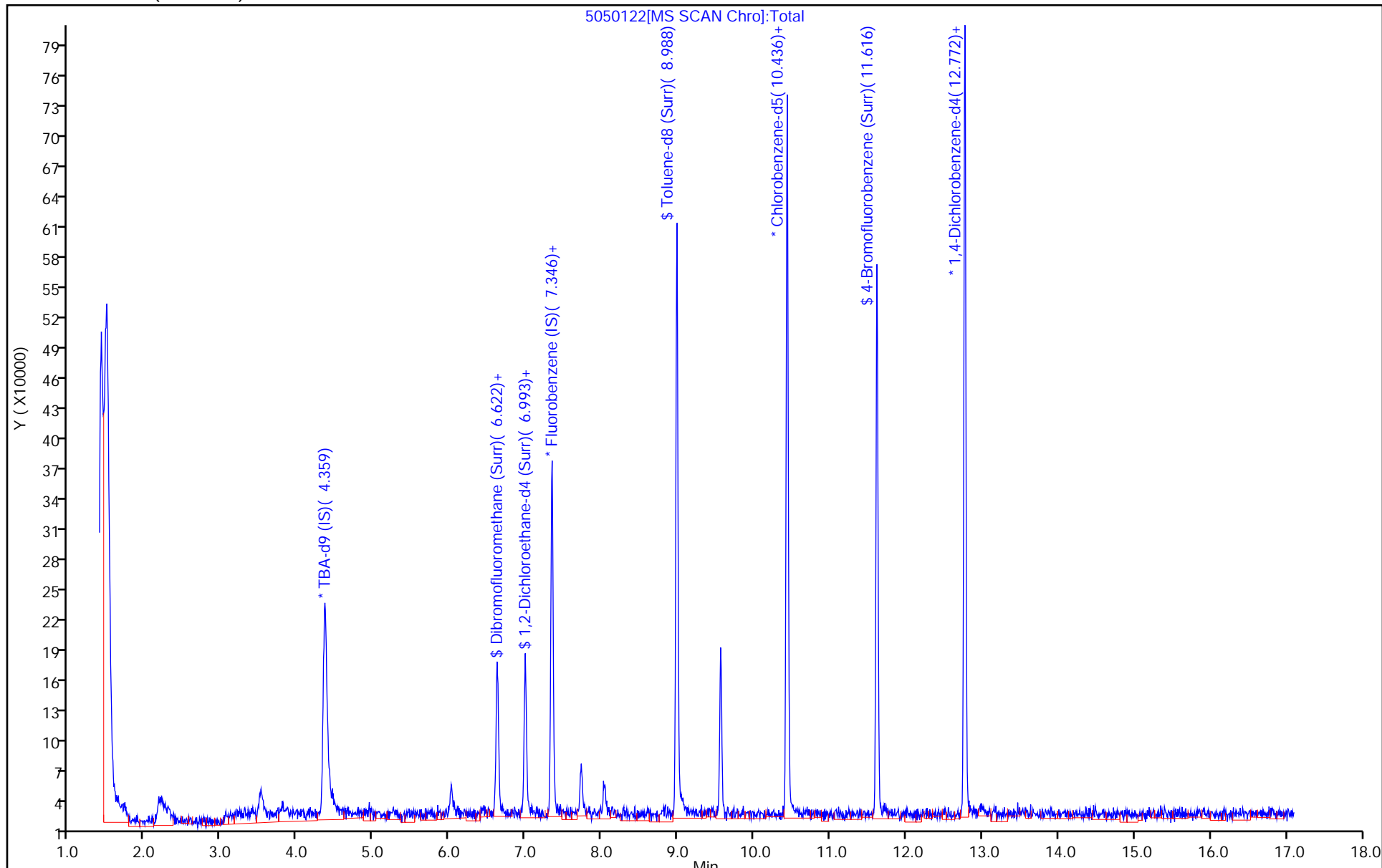
Dil. Factor: 1.0000

ALS Bottle#: 22

Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Pittsburgh  
Recovery Report

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050122.D  
 Lims ID: 180-105108-A-6  
 Client ID: HD-COD-SW-15-0/1-0  
 Sample Type: Client  
 Inject. Date: 01-May-2020 23:51:30 ALS Bottle#: 22 Worklist Smp#: 22  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: 180-0031777-022  
 Operator ID: 034635 Instrument ID: CHHP5  
 Method: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\MMSVOA\_LL\_CHHP5.m  
 Limit Group: VOA 8260C\_D ICAL  
 Last Update: 03-May-2020 16:03:33 Calib Date: 03-Apr-2020 19:09:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP5\20200403-31442.b\5040310.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: CTX0317

First Level Reviewer: journetp

Date: 02-May-2020 18:48:46

Compound	Amount Added	Amount Recovered	% Rec.
\$ 5 Dibromofluoromethane (Surr)	50.0	49.8	99.66
\$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	43.6	87.13
\$ 7 Toluene-d8 (Surr)	50.0	37.6	75.28
\$ 8 4-Bromofluorobenzene (Surr)	50.0	45.8	91.63



Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050122.D

Injection Date: 01-May-2020 23:51:30

Instrument ID: CHHP5

Lims ID: 180-105108-A-6

Lab Sample ID: 180-105108-6

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

Operator ID: 034635

ALS Bottle#: 22

Worklist Smp#: 22

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

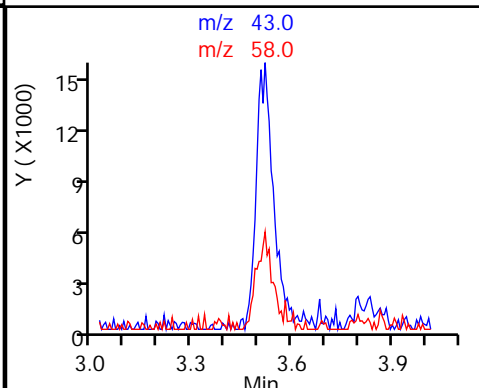
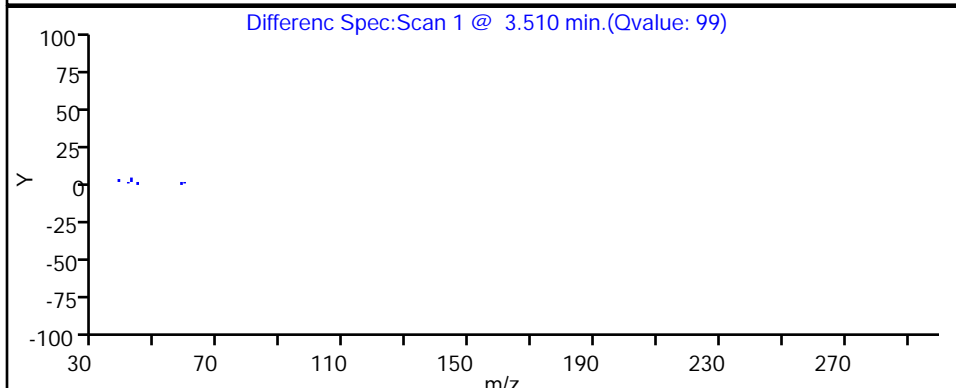
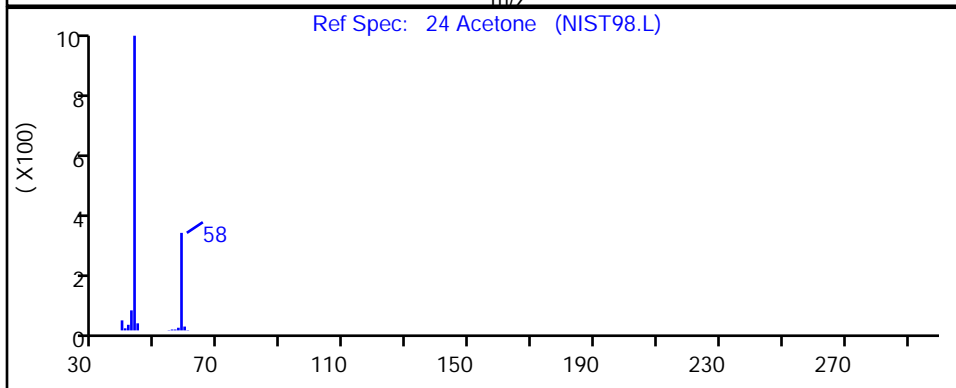
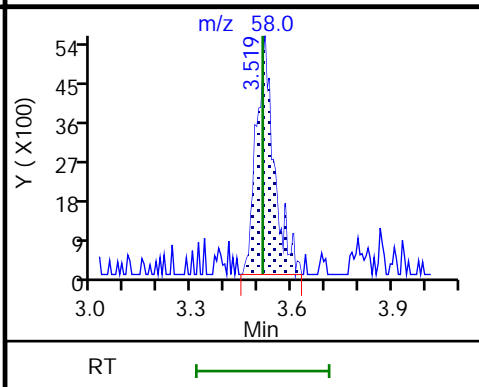
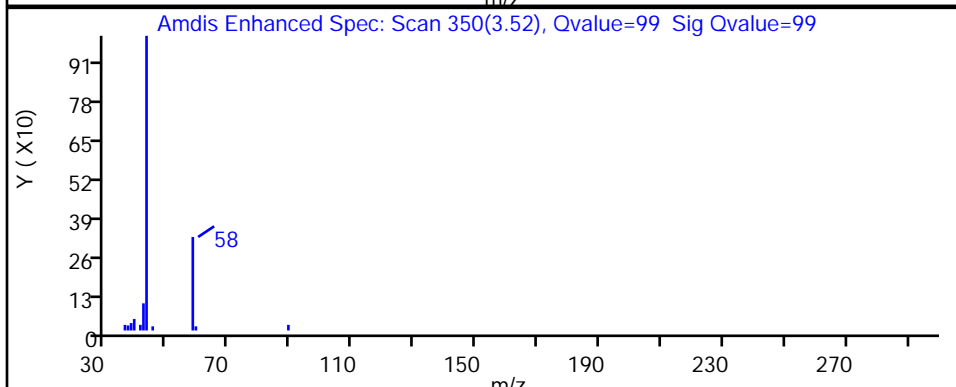
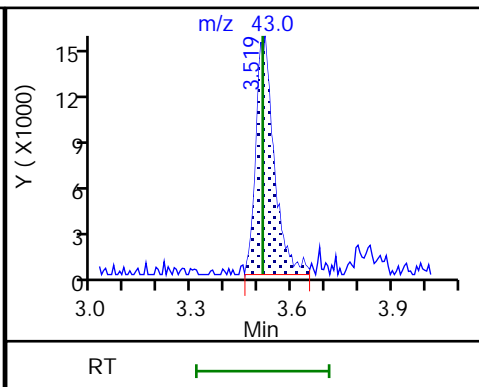
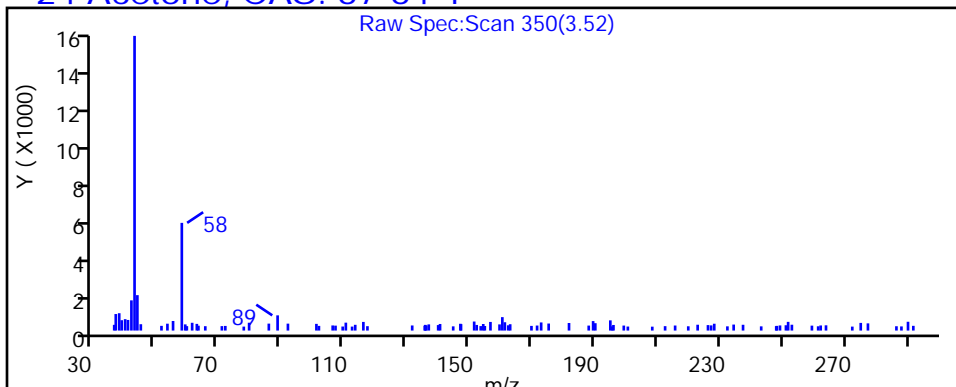
Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

24 Acetone, CAS: 67-64-1



Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050122.D

Injection Date: 01-May-2020 23:51:30

Instrument ID: CHHP5

Lims ID: 180-105108-A-6

Lab Sample ID: 180-105108-6

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

Operator ID: 034635

ALS Bottle#: 22

Worklist Smp#: 22

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

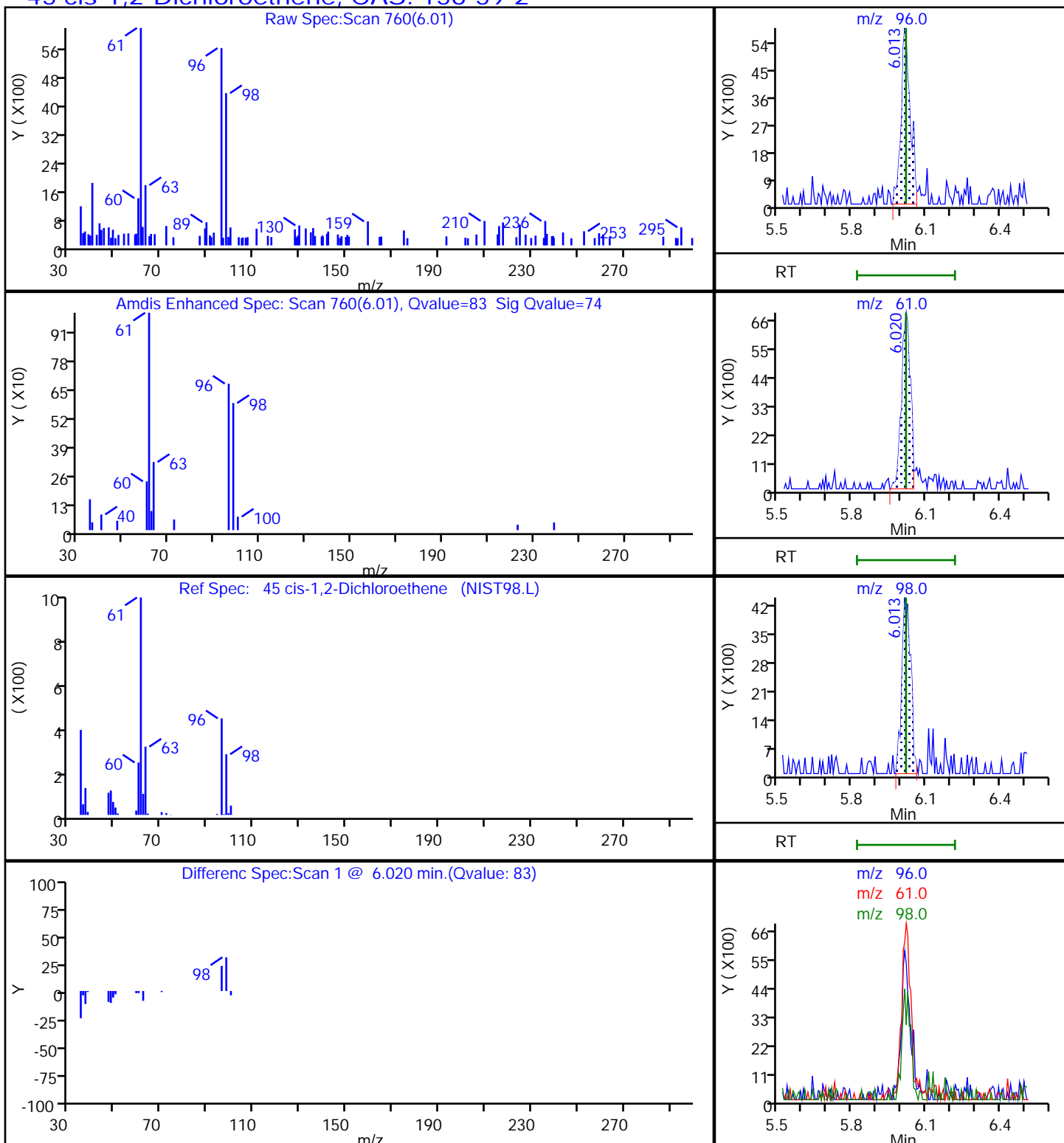
Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

### 45 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050122.D

Injection Date: 01-May-2020 23:51:30

Instrument ID: CHHP5

Lims ID: 180-105108-A-6

Lab Sample ID: 180-105108-6

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

Operator ID: 034635

ALS Bottle#: 22

Worklist Smp#: 22

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

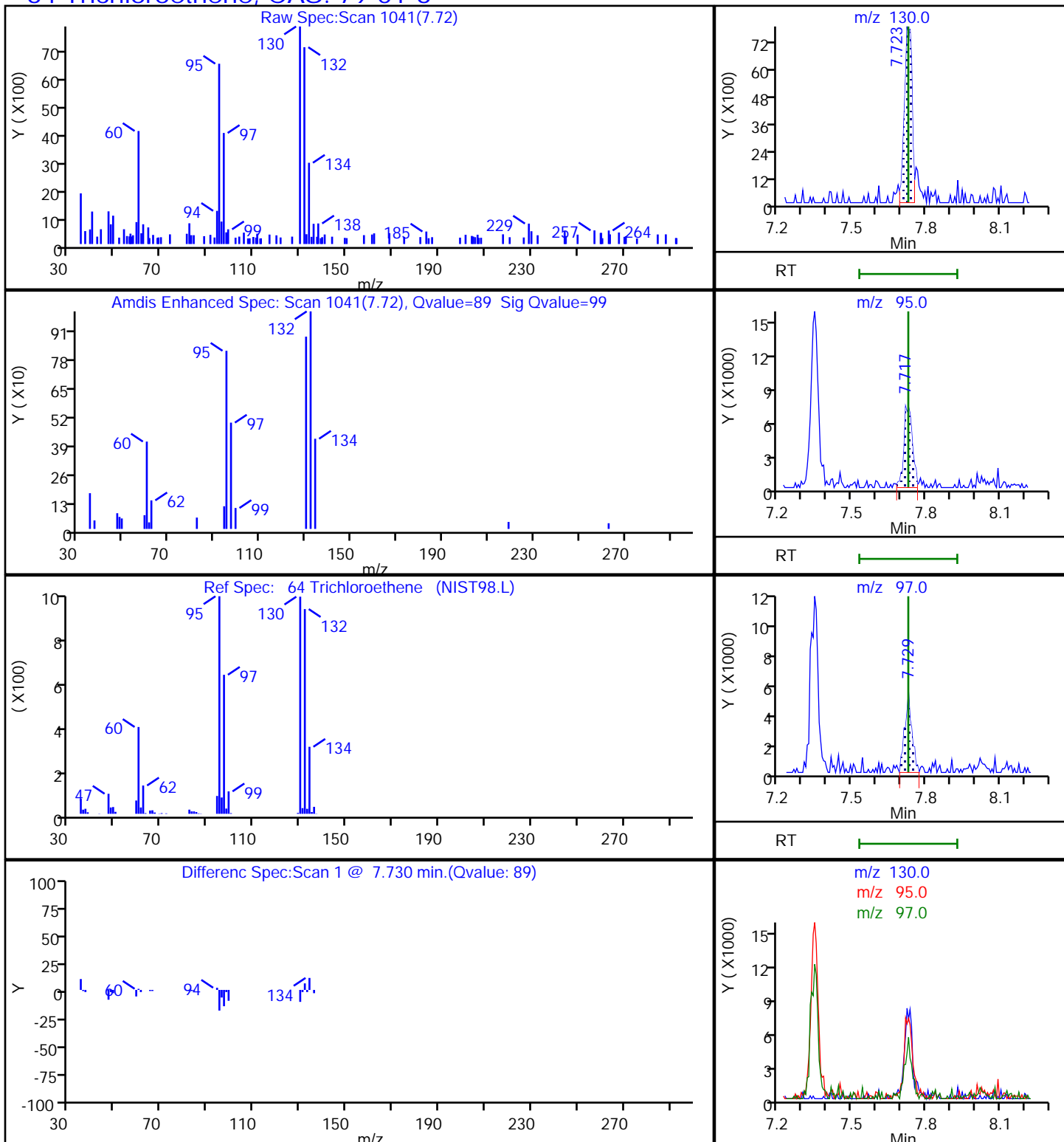
Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

### 64 Trichloroethene, CAS: 79-01-6



Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050122.D

Injection Date: 01-May-2020 23:51:30

Instrument ID: CHHP5

Lims ID: 180-105108-A-6

Lab Sample ID: 180-105108-6

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

Operator ID: 034635

ALS Bottle#: 22

Worklist Smp#: 22

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

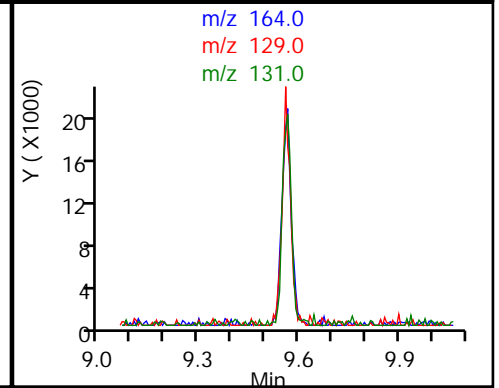
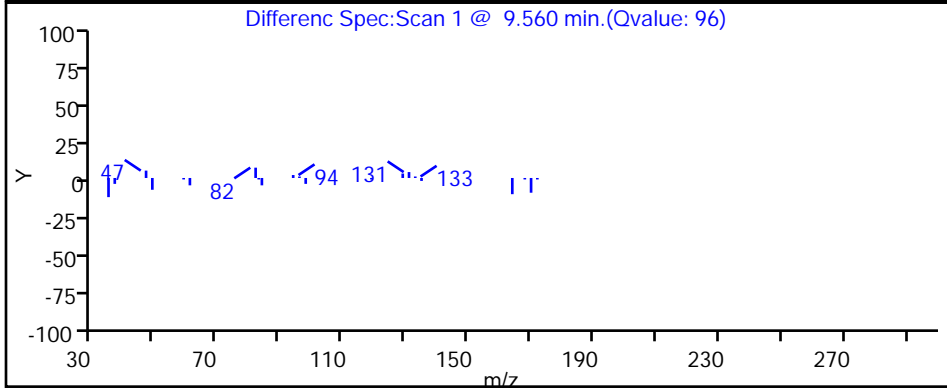
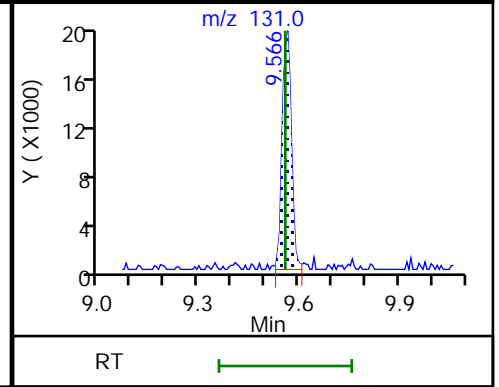
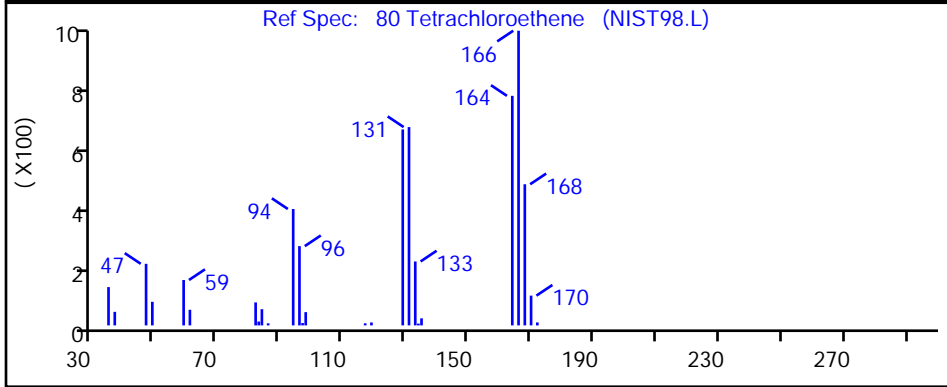
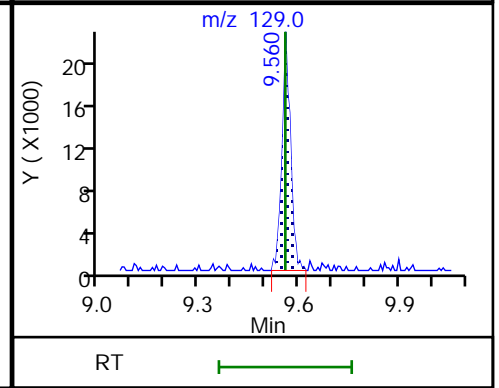
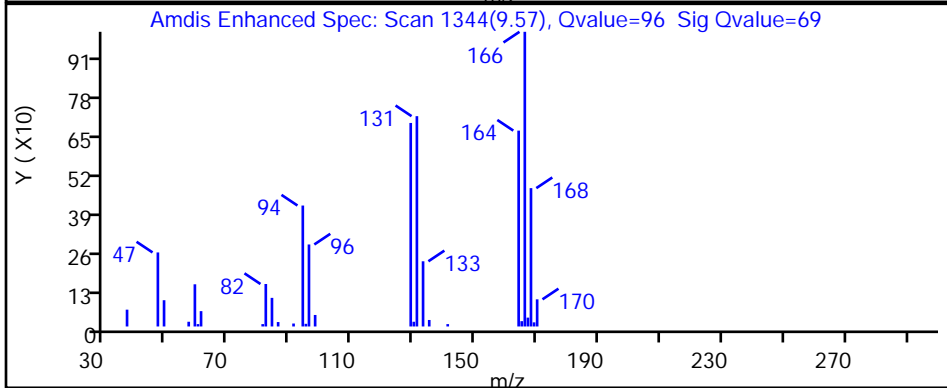
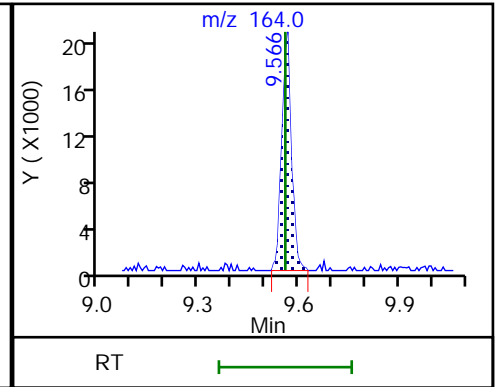
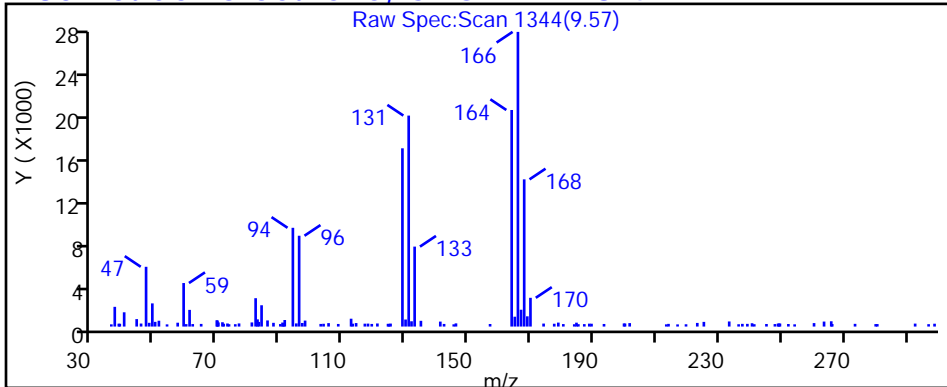
Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

80 Tetrachloroethene, CAS: 127-18-4



Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050122.D

Injection Date: 01-May-2020 23:51:30

Instrument ID: CHHP5

Lims ID: 180-105108-A-6

Lab Sample ID: 180-105108-6

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

Operator ID: 034635

ALS Bottle#: 22 Worklist Smp#: 22

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

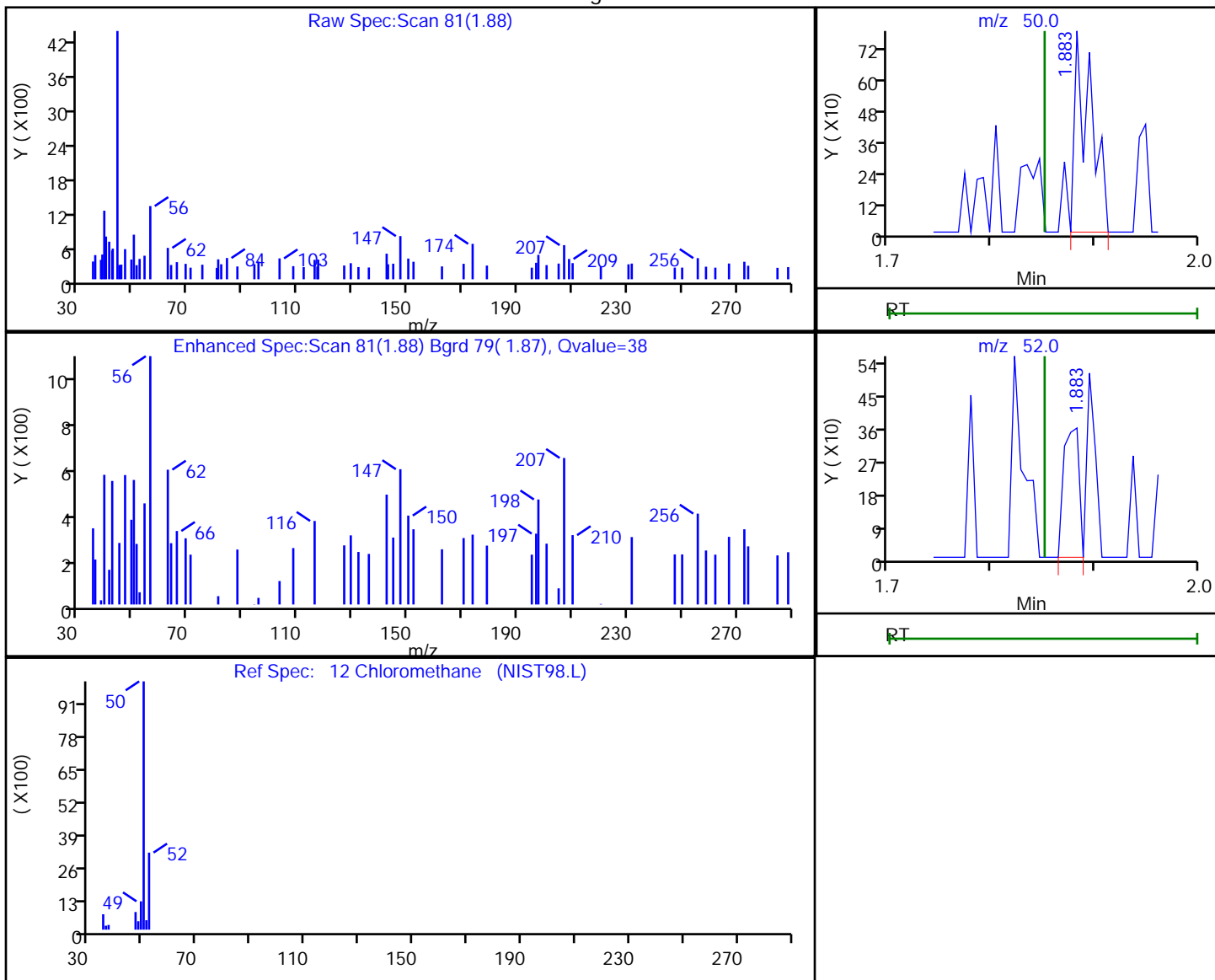
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

12 Chloromethane, CAS: 74-87-3

Processing Results



RT	Mass	Response	Amount
1.88	50.00	859	0.240010
1.88	52.00	369	

Reviewer: journetp, 02-May-2020 18:52:22

Audit Action: Marked Compound Undetected

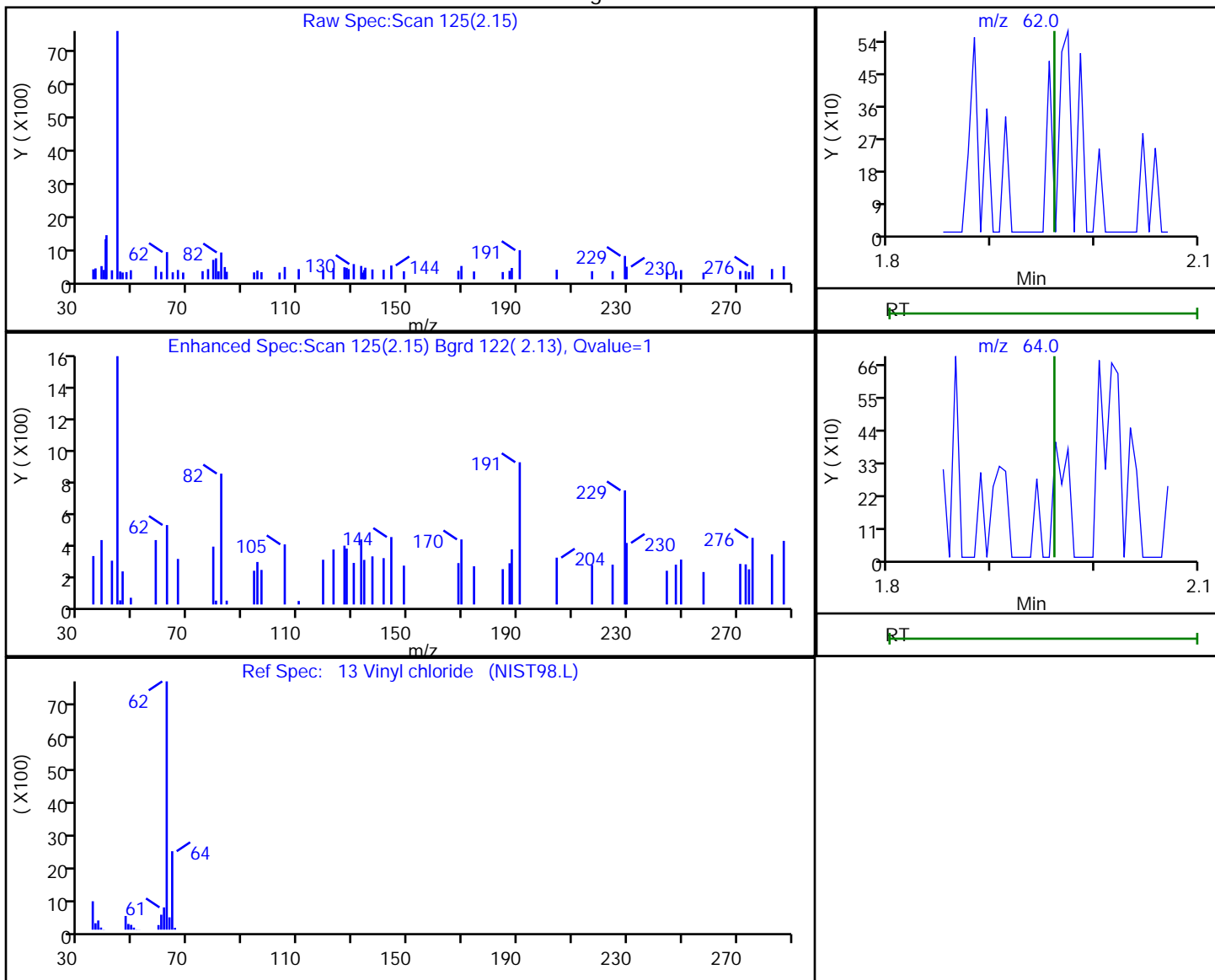
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050122.D  
 Injection Date: 01-May-2020 23:51:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-A-6 Lab Sample ID: 180-105108-6  
 Client ID: HD-COD-SW-15-0/1-0  
 Operator ID: 034635 ALS Bottle#: 22 Worklist Smp#: 22  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

13 Vinyl chloride, CAS: 75-01-4

Processing Results



RT	Mass	Response	Amount
2.15	62.00	378	0.118596
2.14	64.00	1269	

Reviewer: journetp, 02-May-2020 18:52:22  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050122.D

Injection Date: 01-May-2020 23:51:30

Instrument ID: CHHP5

Lims ID: 180-105108-A-6

Lab Sample ID: 180-105108-6

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

Operator ID: 034635

ALS Bottle#: 22 Worklist Smp#: 22

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

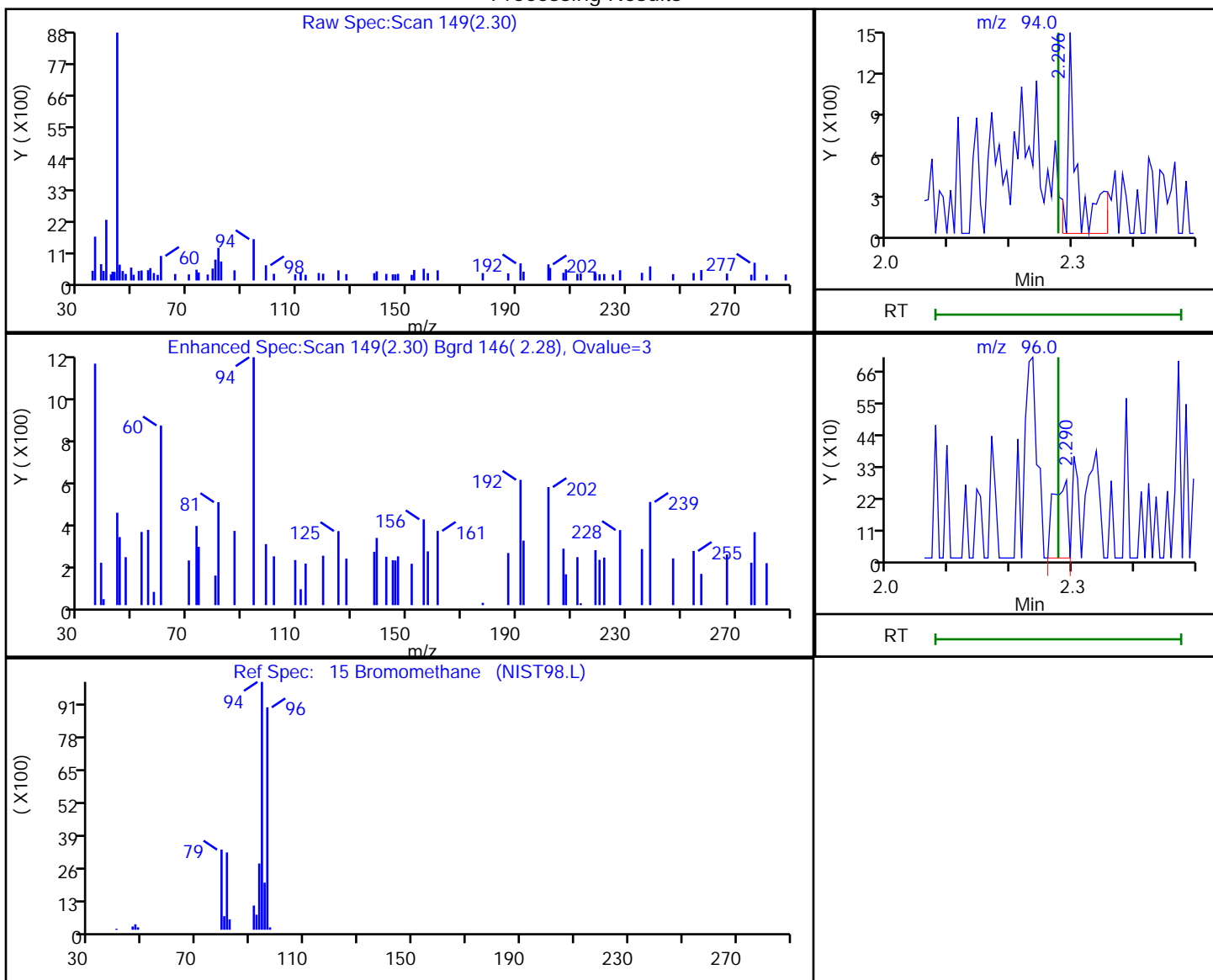
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

15 Bromomethane, CAS: 74-83-9

Processing Results



RT	Mass	Response	Amount
2.30	94.00	1552	0.850449
2.29	96.00	430	

Reviewer: journtp, 02-May-2020 18:52:22

Audit Action: Marked Compound Undetected

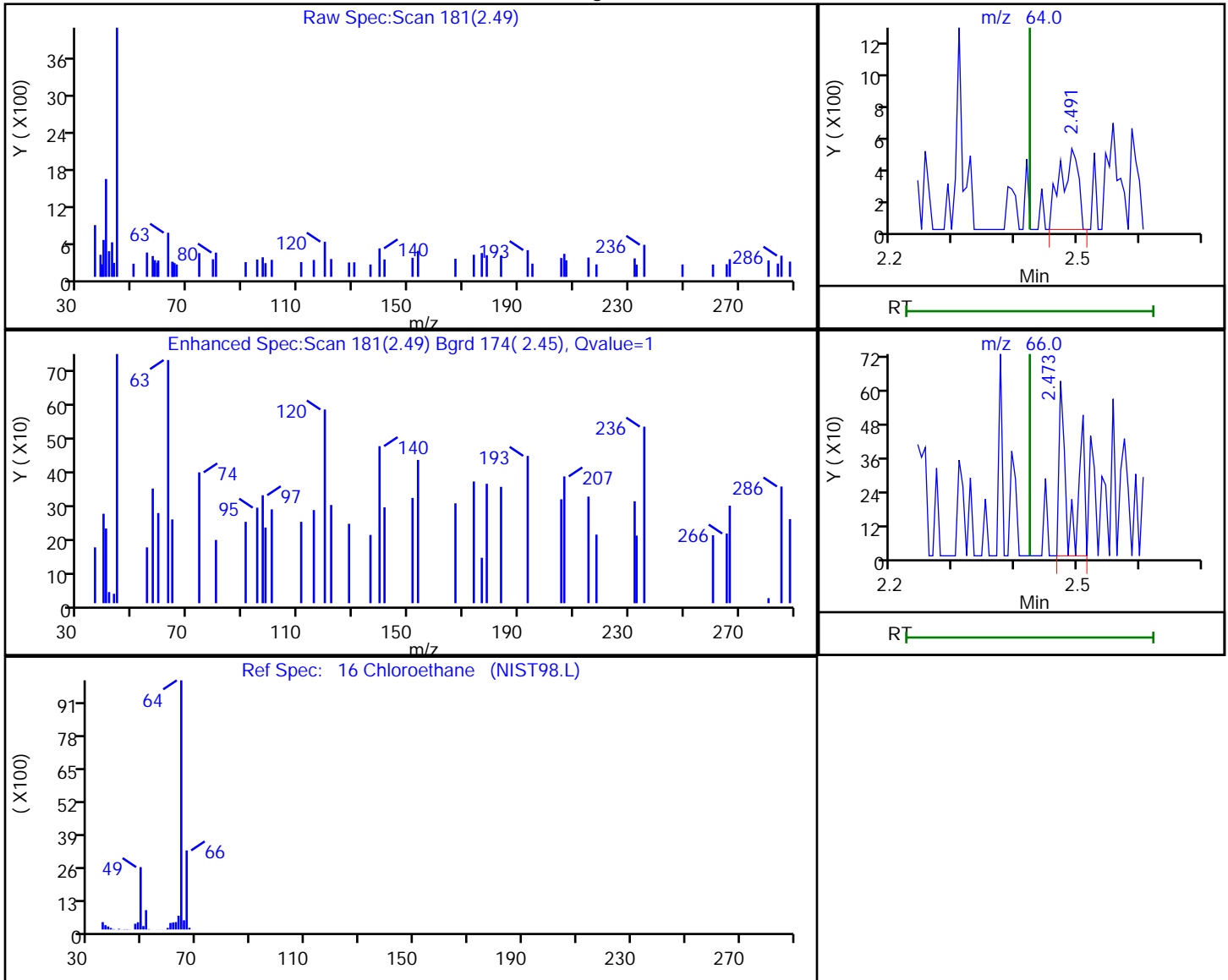
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050122.D  
Injection Date: 01-May-2020 23:51:30 Instrument ID: CHHP5  
Lims ID: 180-105108-A-6 Lab Sample ID: 180-105108-6  
Client ID: HD-COD-SW-15-0/1-0  
Operator ID: 034635 ALS Bottle#: 22 Worklist Smp#: 22  
Purge Vol: 5.000 mL Dil. Factor: 1.0000  
Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
Column: DB-624 (0.18 mm) Detector: MS SCAN

16 Chloroethane, CAS: 75-00-3

Processing Results



RT	Mass	Response	Amount
2.49	64.00	963	0.445355
2.47	66.00	733	

Reviewer: journetp, 02-May-2020 18:52:22  
Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

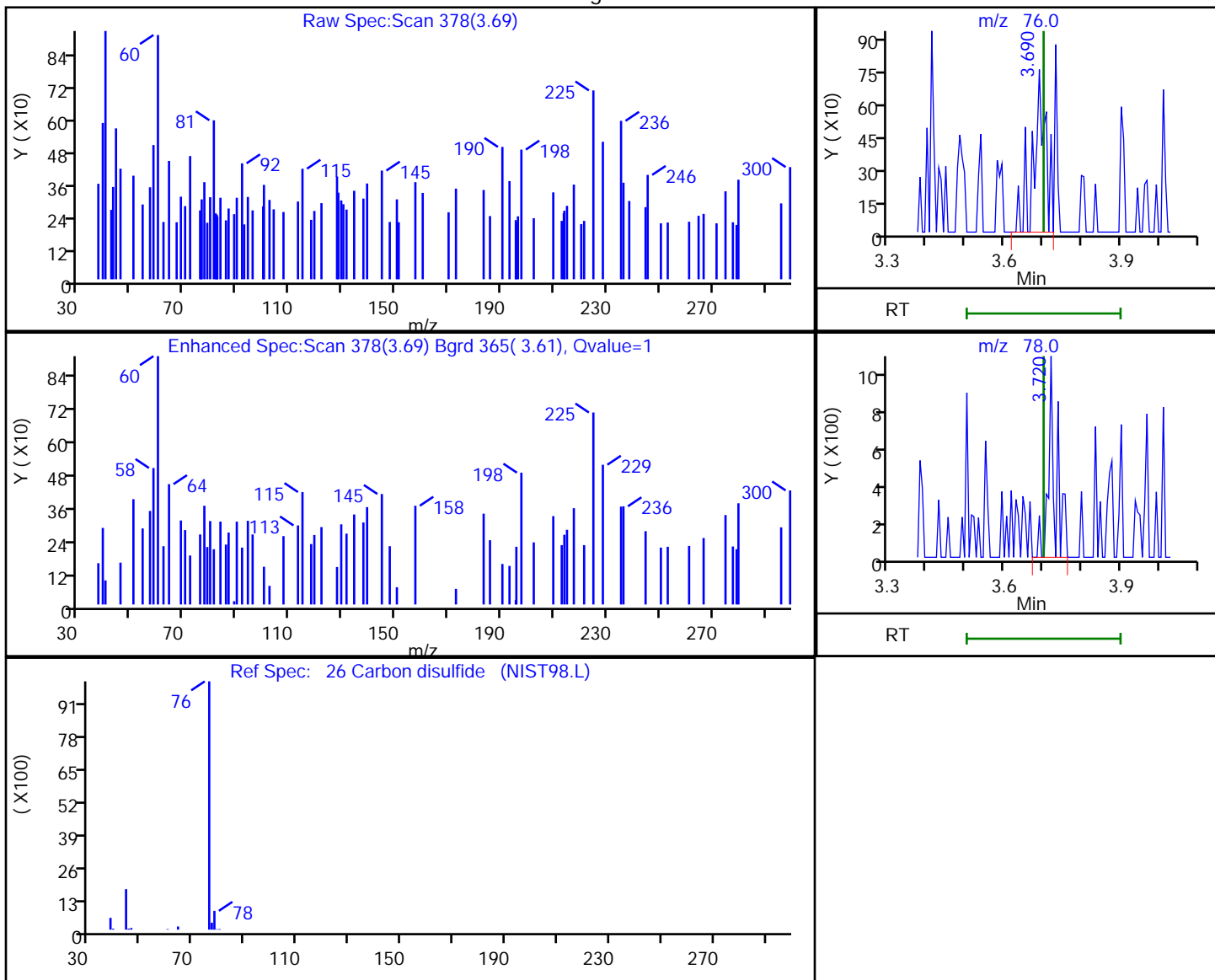


Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050122.D  
Injection Date: 01-May-2020 23:51:30 Instrument ID: CHHP5  
Lims ID: 180-105108-A-6 Lab Sample ID: 180-105108-6  
Client ID: HD-COD-SW-15-0/1-0  
Operator ID: 034635 ALS Bottle#: 22 Worklist Smp#: 22  
Purge Vol: 5.000 mL Dil. Factor: 1.0000  
Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
Column: DB-624 (0.18 mm) Detector: MS SCAN

26 Carbon disulfide, CAS: 75-15-0

Processing Results



RT	Mass	Response	Amount
3.69	76.00	1628	0.394770
3.72	78.00	1299	

Reviewer: journetp, 02-May-2020 18:48:11

Audit Action: Marked Compound Undetected

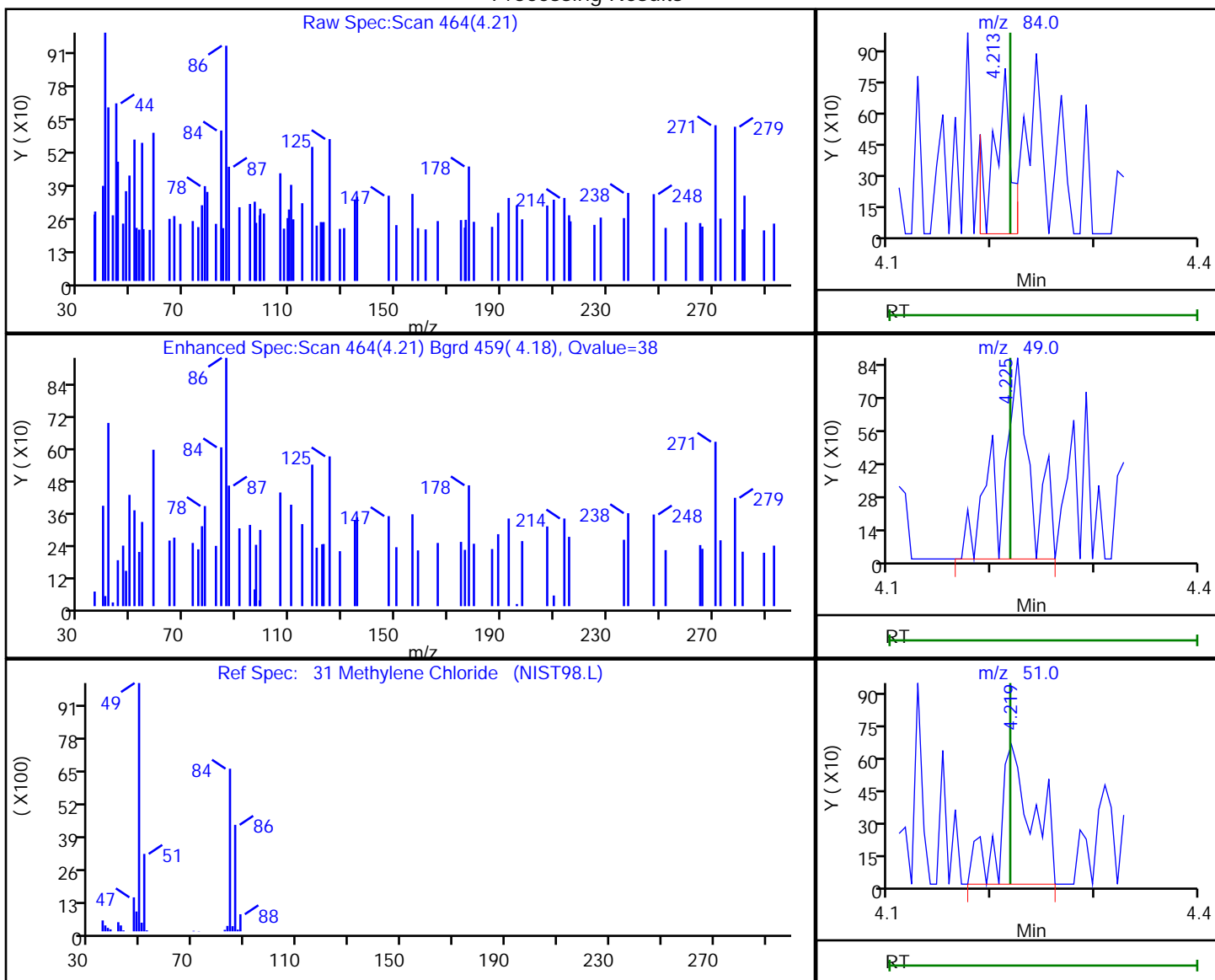
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050122.D  
 Injection Date: 01-May-2020 23:51:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-A-6 Lab Sample ID: 180-105108-6  
 Client ID: HD-COD-SW-15-0/1-0  
 Operator ID: 034635 ALS Bottle#: 22 Worklist Smp#: 22  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

31 Methylene Chloride, CAS: 75-09-2

Processing Results



RT	Mass	Response	Amount
4.21	84.00	957	-1.301566
4.22	49.00	1790	
4.22	51.00	1484	

Reviewer: journept, 02-May-2020 18:48:11

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050122.D

Injection Date: 01-May-2020 23:51:30

Instrument ID: CHHP5

Lims ID: 180-105108-A-6

Lab Sample ID: 180-105108-6

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

Operator ID: 034635

ALS Bottle#: 22 Worklist Smp#: 22

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

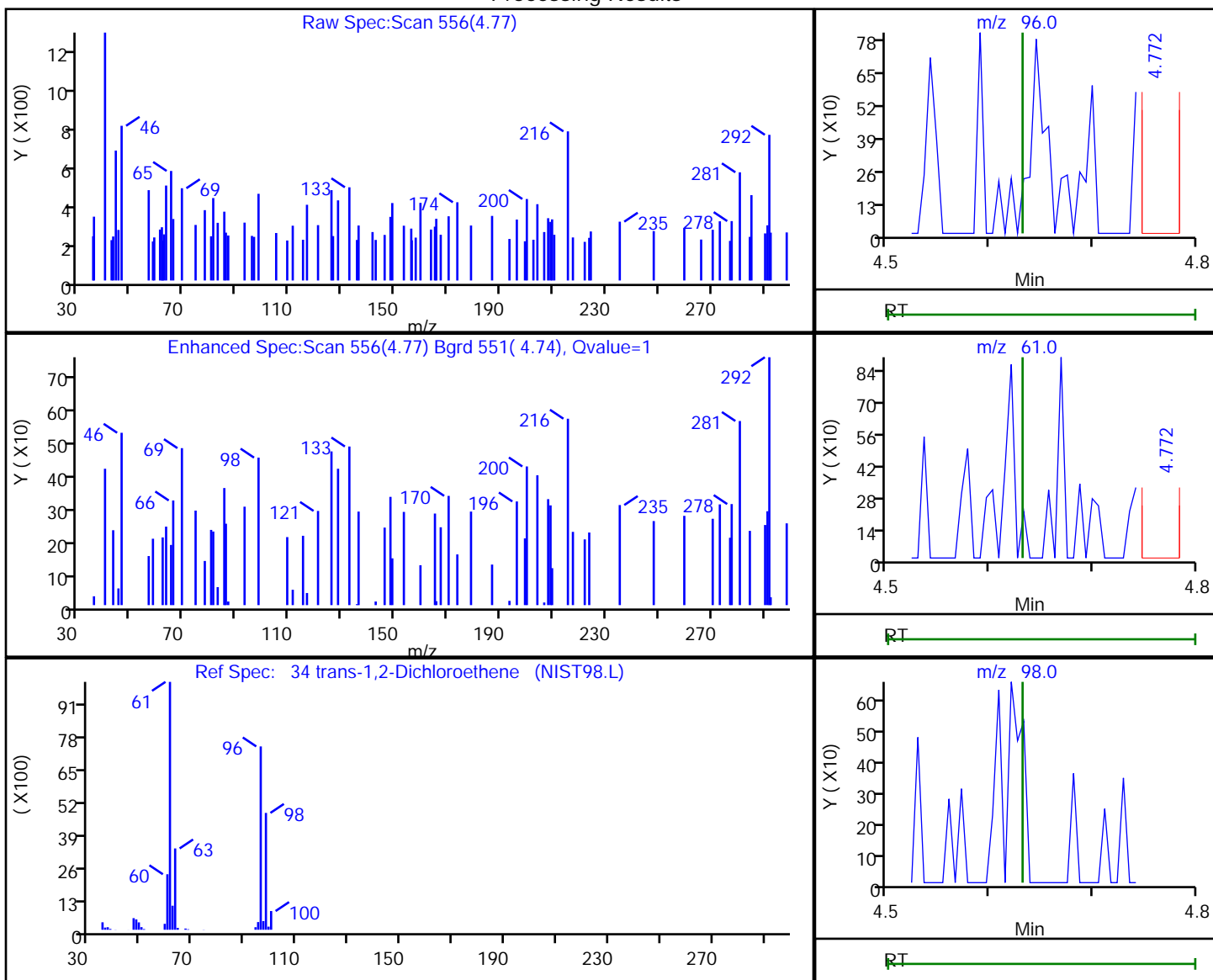
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

34 trans-1,2-Dichloroethene, CAS: 156-60-5

Processing Results



RT	Mass	Response	Amount
4.77	96.00	256	0.127648
4.77	61.00	462	
4.78	98.00	796	

Reviewer: journept, 02-May-2020 18:48:12

Audit Action: Marked Compound Undetected

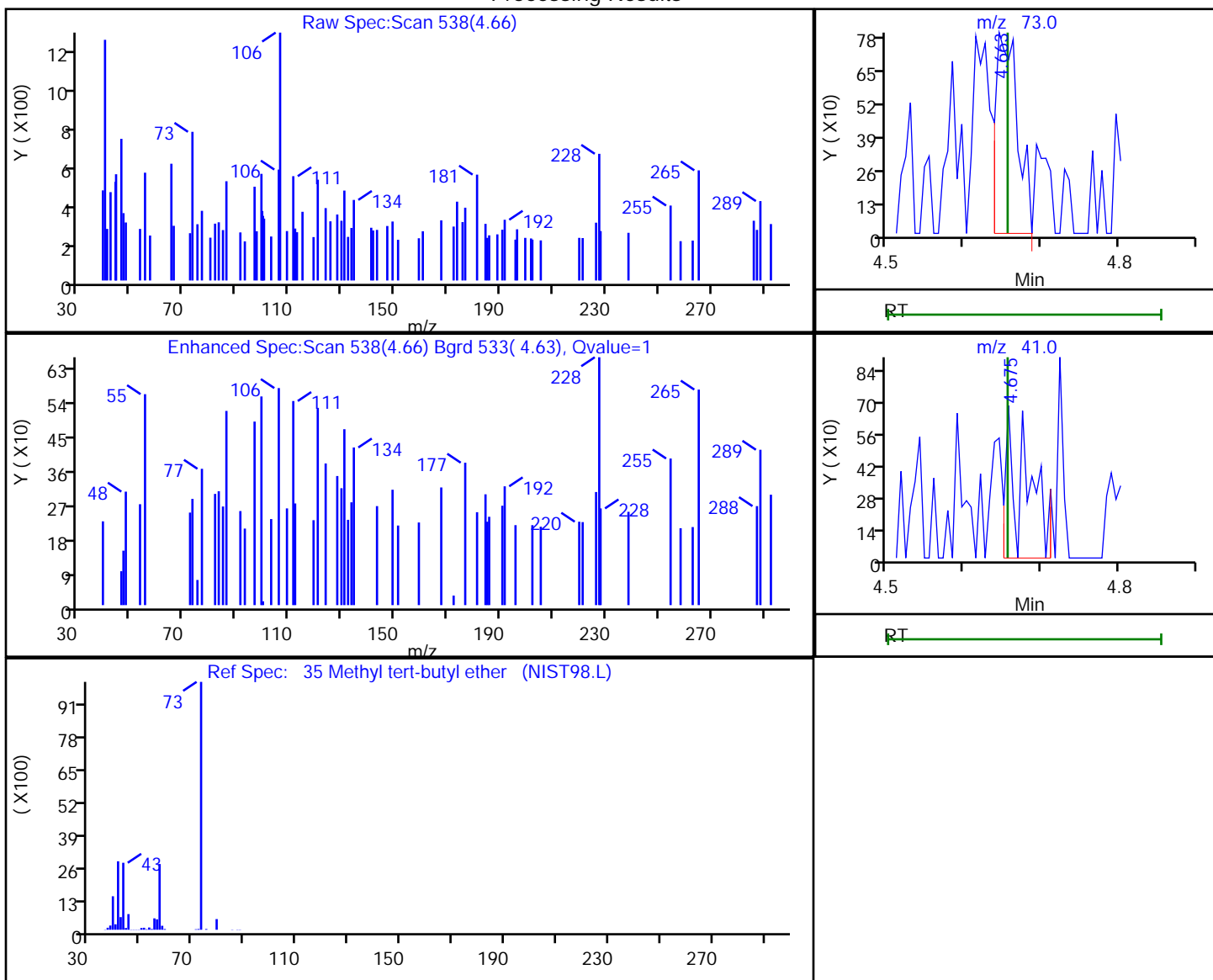
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050122.D  
 Injection Date: 01-May-2020 23:51:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-A-6 Lab Sample ID: 180-105108-6  
 Client ID: HD-COD-SW-15-0/1-0  
 Operator ID: 034635 ALS Bottle#: 22 Worklist Smp#: 22  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

35 Methyl tert-butyl ether, CAS: 1634-04-4

Processing Results



RT	Mass	Response	Amount
4.66	73.00	1567	0.278413
4.68	41.00	1268	

Reviewer: journtp, 02-May-2020 18:48:12  
 Audit Action: Marked Compound Undetected

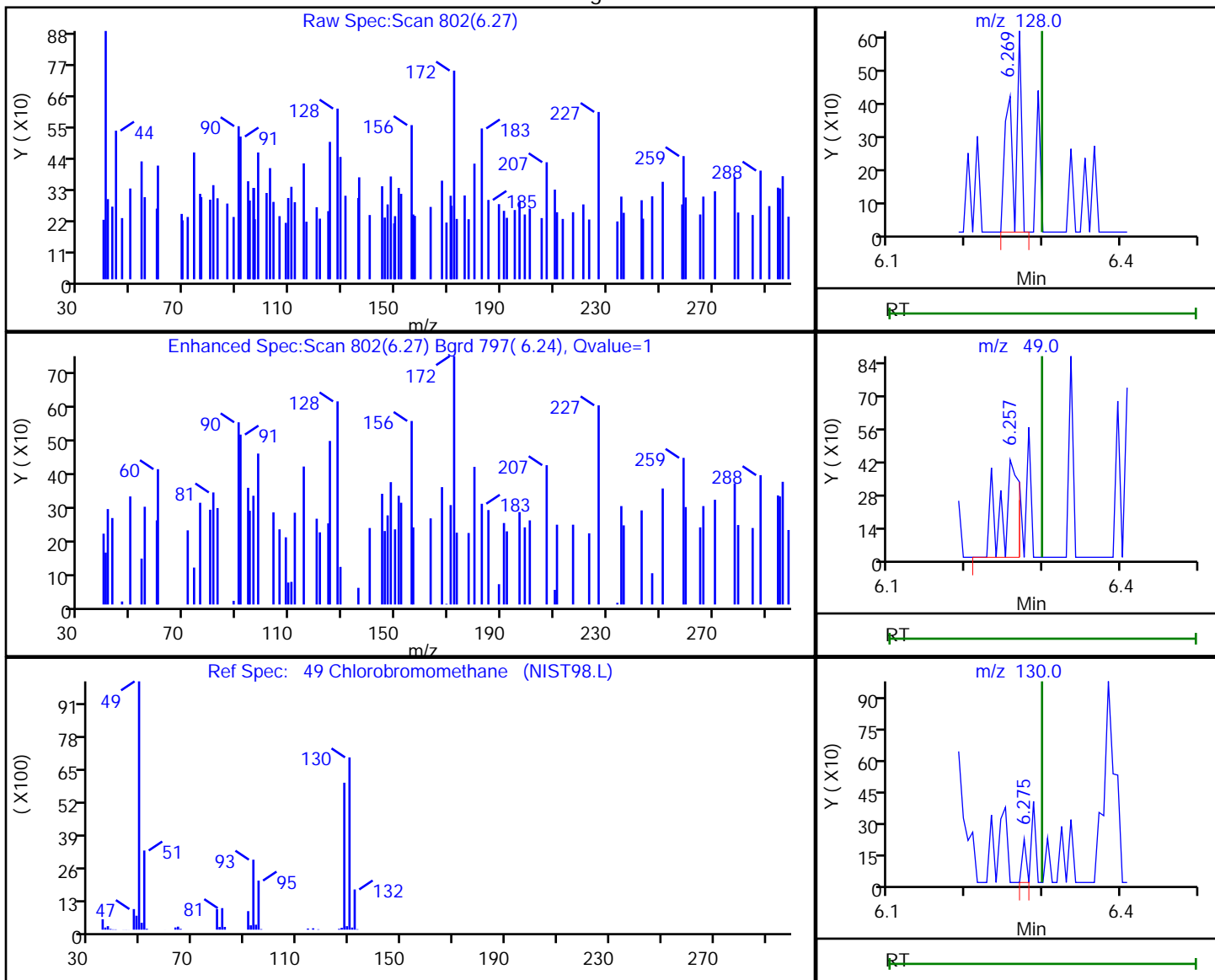
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050122.D  
 Injection Date: 01-May-2020 23:51:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-A-6 Lab Sample ID: 180-105108-6  
 Client ID: HD-COD-SW-15-0/1-0  
 Operator ID: 034635 ALS Bottle#: 22 Worklist Smp#: 22  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

49 Chlorobromomethane, CAS: 74-97-5

Processing Results



RT	Mass	Response	Amount
6.27	128.00	496	0.389985
6.26	49.00	649	
6.28	130.00	77	

Reviewer: journept, 02-May-2020 18:48:14  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050122.D

Injection Date: 01-May-2020 23:51:30

Instrument ID: CHHP5

Lims ID: 180-105108-A-6

Lab Sample ID: 180-105108-6

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

Operator ID: 034635

ALS Bottle#: 22 Worklist Smp#: 22

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

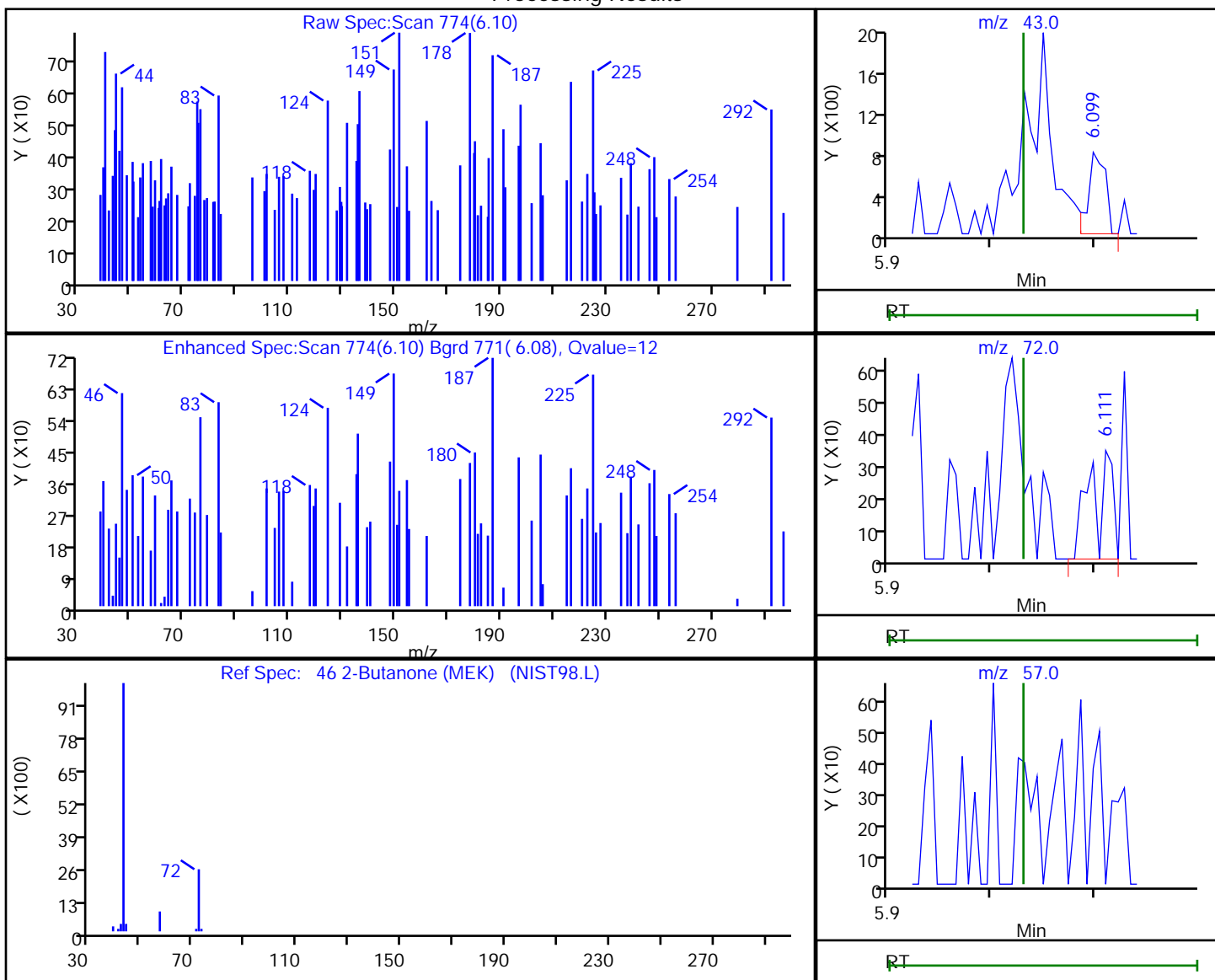
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

46 2-Butanone (MEK), CAS: 78-93-3

Processing Results



RT	Mass	Response	Amount
6.10	43.00	931	0.690963
6.11	72.00	504	
6.03	57.00	0	

Reviewer: journeyp, 02-May-2020 18:48:14

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050122.D

Injection Date: 01-May-2020 23:51:30

Instrument ID: CHHP5

Lims ID: 180-105108-A-6

Lab Sample ID: 180-105108-6

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

Operator ID: 034635

ALS Bottle#: 22 Worklist Smp#: 22

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

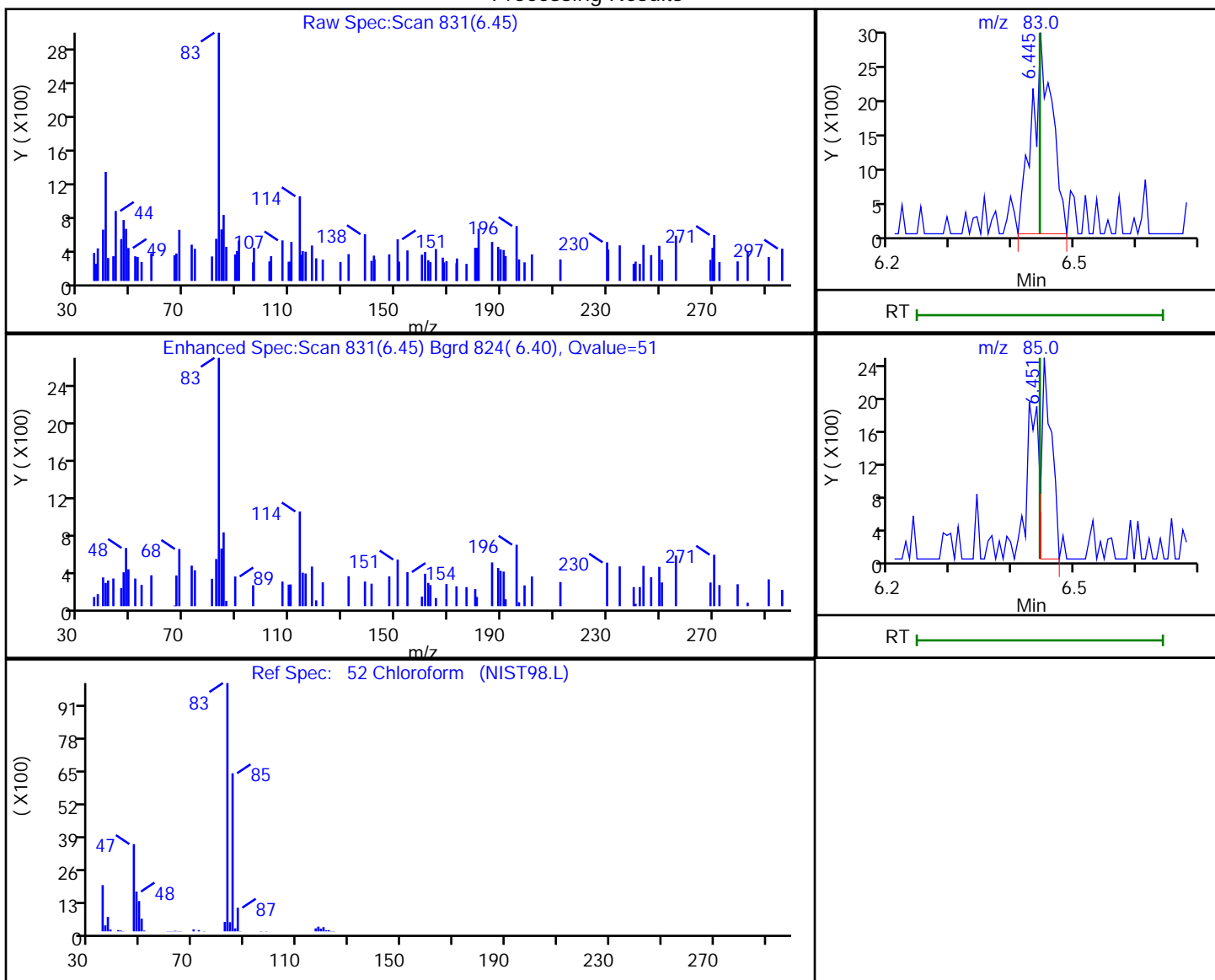
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

52 Chloroform, CAS: 67-66-3

Processing Results



RT	Mass	Response	Amount
6.45	83.00	6527	-0.112750
6.45	85.00	2646	

Reviewer: journtp, 02-May-2020 18:48:14

Audit Action: Marked Compound Undetected

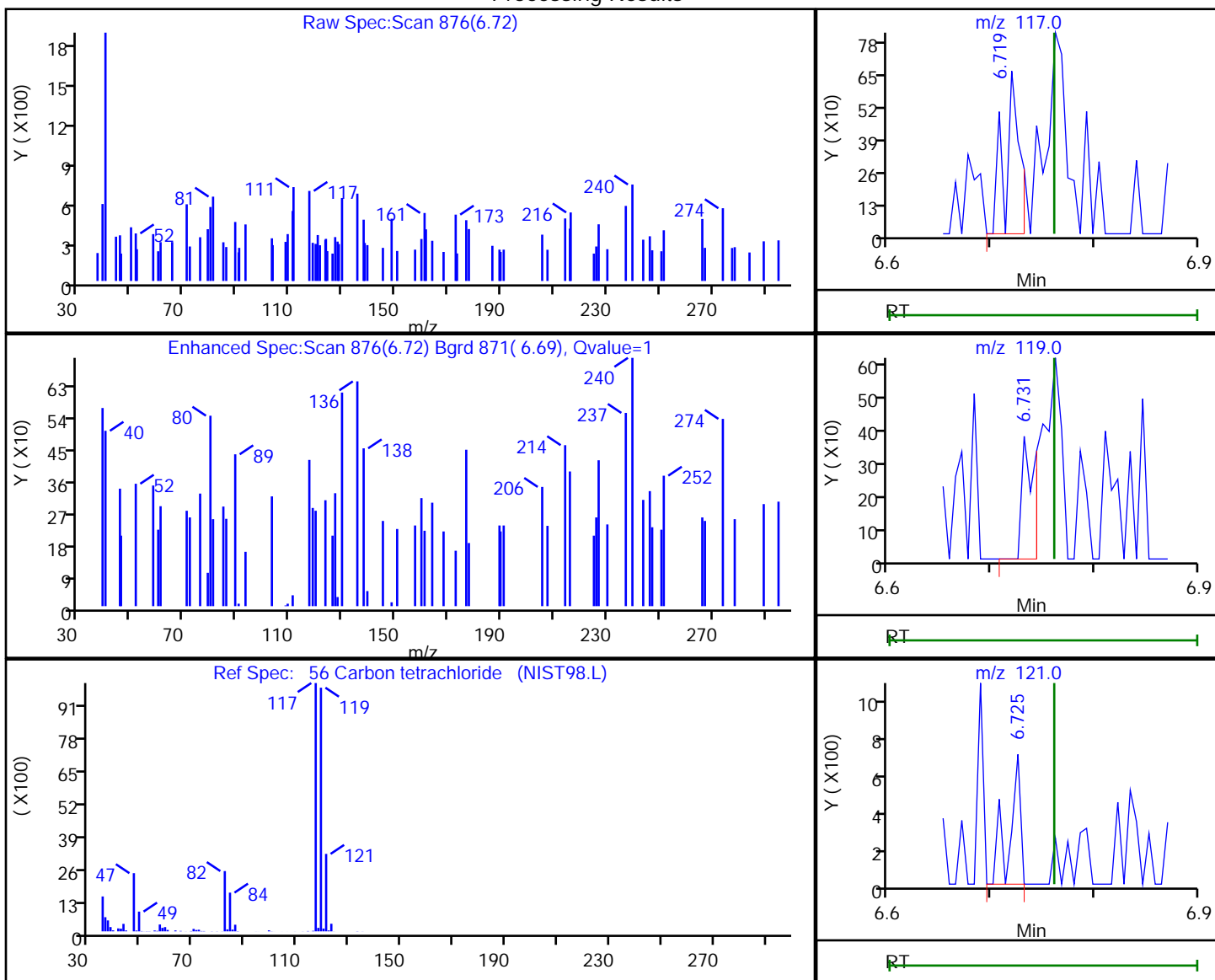
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050122.D  
 Injection Date: 01-May-2020 23:51:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-A-6 Lab Sample ID: 180-105108-6  
 Client ID: HD-COD-SW-15-0/1-0  
 Operator ID: 034635 ALS Bottle#: 22 Worklist Smp#: 22  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

56 Carbon tetrachloride, CAS: 56-23-5

Processing Results



RT	Mass	Response	Amount
6.72	117.00	656	0.264235
6.73	119.00	333	
6.73	121.00	487	

Reviewer: journept, 02-May-2020 18:48:29  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID



Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050122.D

Injection Date: 01-May-2020 23:51:30

Instrument ID: CHHP5

Lims ID: 180-105108-A-6

Lab Sample ID: 180-105108-6

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

Operator ID: 034635

ALS Bottle#: 22 Worklist Smp#: 22

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

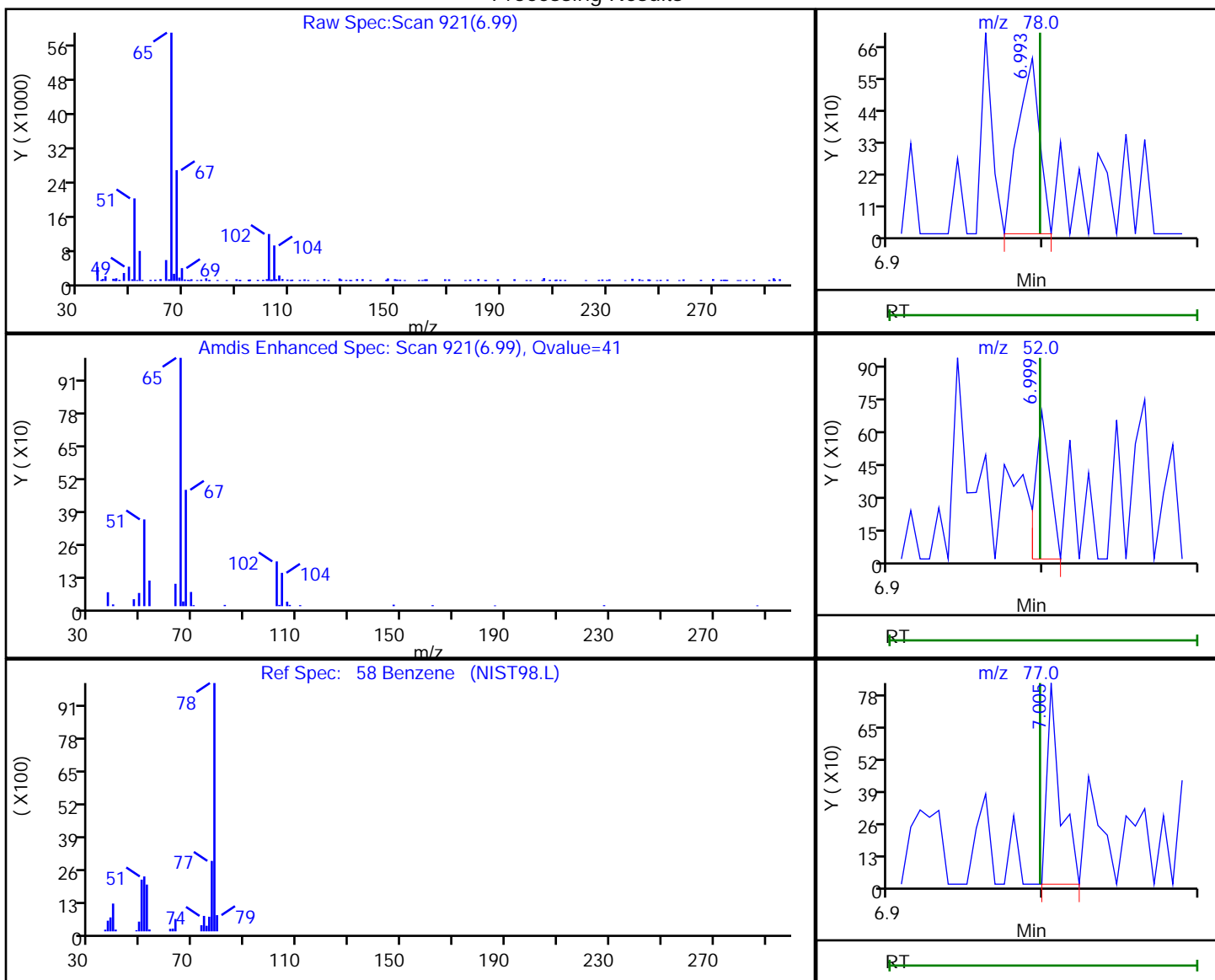
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

58 Benzene, CAS: 71-43-2

Processing Results



RT	Mass	Response	Amount
6.99	78.00	600	0.066444
7.00	52.00	458	
7.01	77.00	491	

Reviewer: journept, 02-May-2020 18:48:29

Audit Action: Marked Compound Undetected

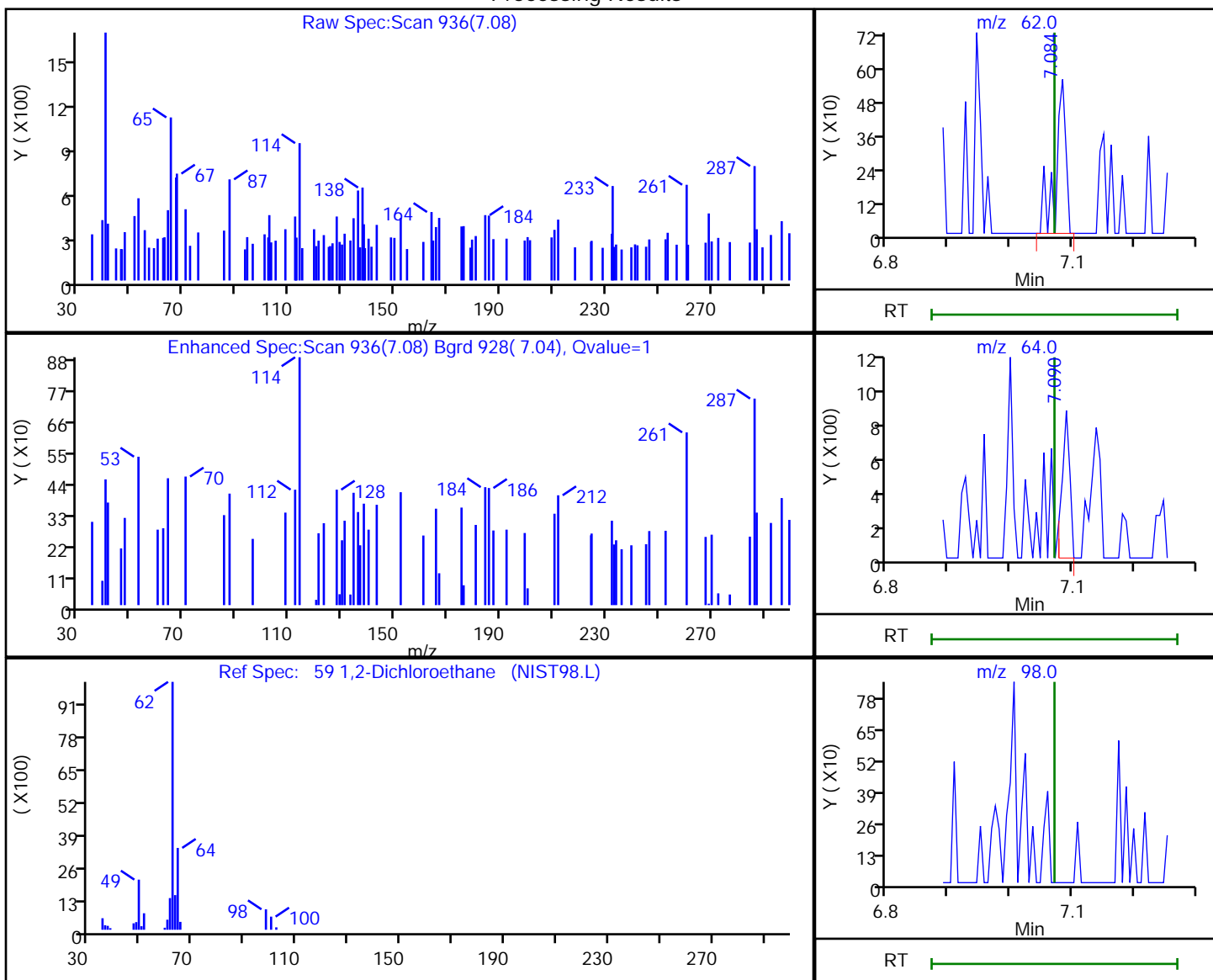
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050122.D  
 Injection Date: 01-May-2020 23:51:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-A-6 Lab Sample ID: 180-105108-6  
 Client ID: HD-COD-SW-15-0/1-0  
 Operator ID: 034635 ALS Bottle#: 22 Worklist Smp#: 22  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

59 1,2-Dichloroethane, CAS: 107-06-2

Processing Results



RT	Mass	Response	Amount
7.08	62.00	628	0.182901
7.09	64.00	706	
7.07	98.00	0	

Reviewer: journeyp, 02-May-2020 18:48:29  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050122.D

Injection Date: 01-May-2020 23:51:30

Instrument ID: CHHP5

Lims ID: 180-105108-A-6

Lab Sample ID: 180-105108-6

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

Operator ID: 034635

ALS Bottle#: 22 Worklist Smp#: 22

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

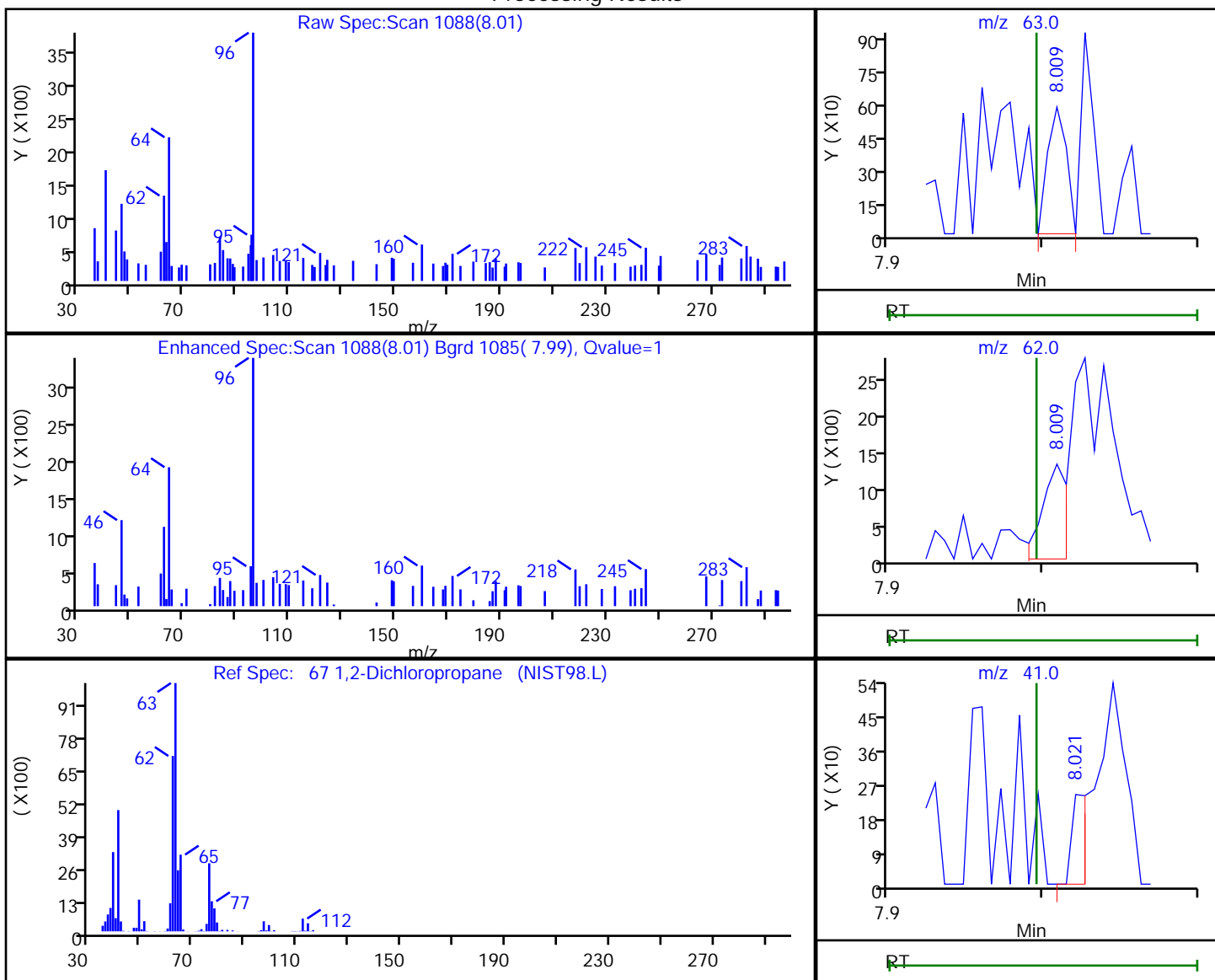
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

67 1,2-Dichloropropane, CAS: 78-87-5

Processing Results



RT	Mass	Response	Amount
8.01	63.00	498	0.206613
8.01	62.00	1431	
8.02	41.00	172	

Reviewer: journetp, 02-May-2020 18:48:37

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050122.D

Injection Date: 01-May-2020 23:51:30

Instrument ID: CHHP5

Lims ID: 180-105108-A-6

Lab Sample ID: 180-105108-6

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

Operator ID: 034635

ALS Bottle#: 22 Worklist Smp#: 22

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

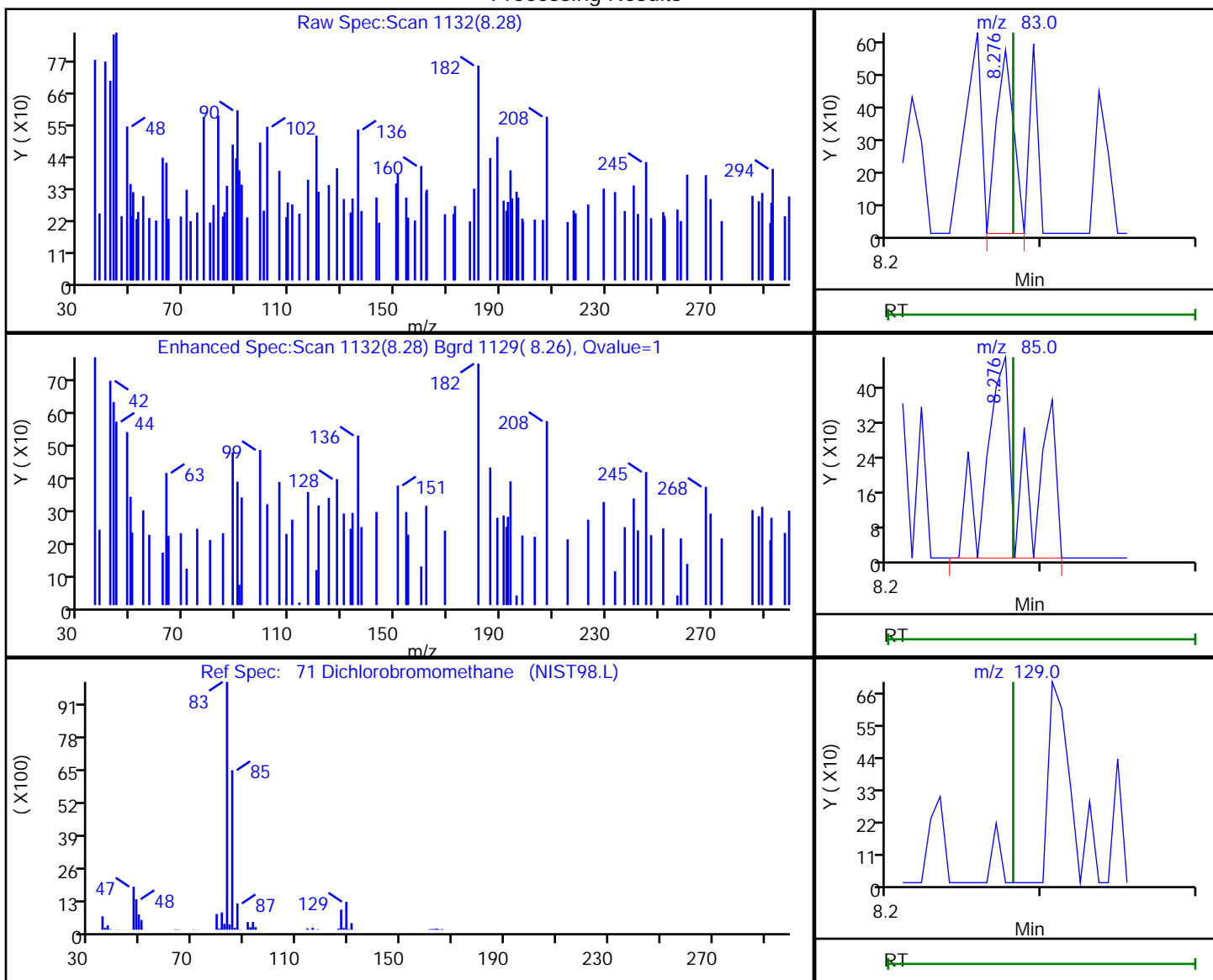
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

71 Dichlorobromomethane, CAS: 75-27-4

Processing Results



RT	Mass	Response	Amount
8.28	83.00	447	0.158051
8.28	85.00	819	
8.28	129.00	0	

Reviewer: journeyp, 02-May-2020 18:48:37

Audit Action: Marked Compound Undetected

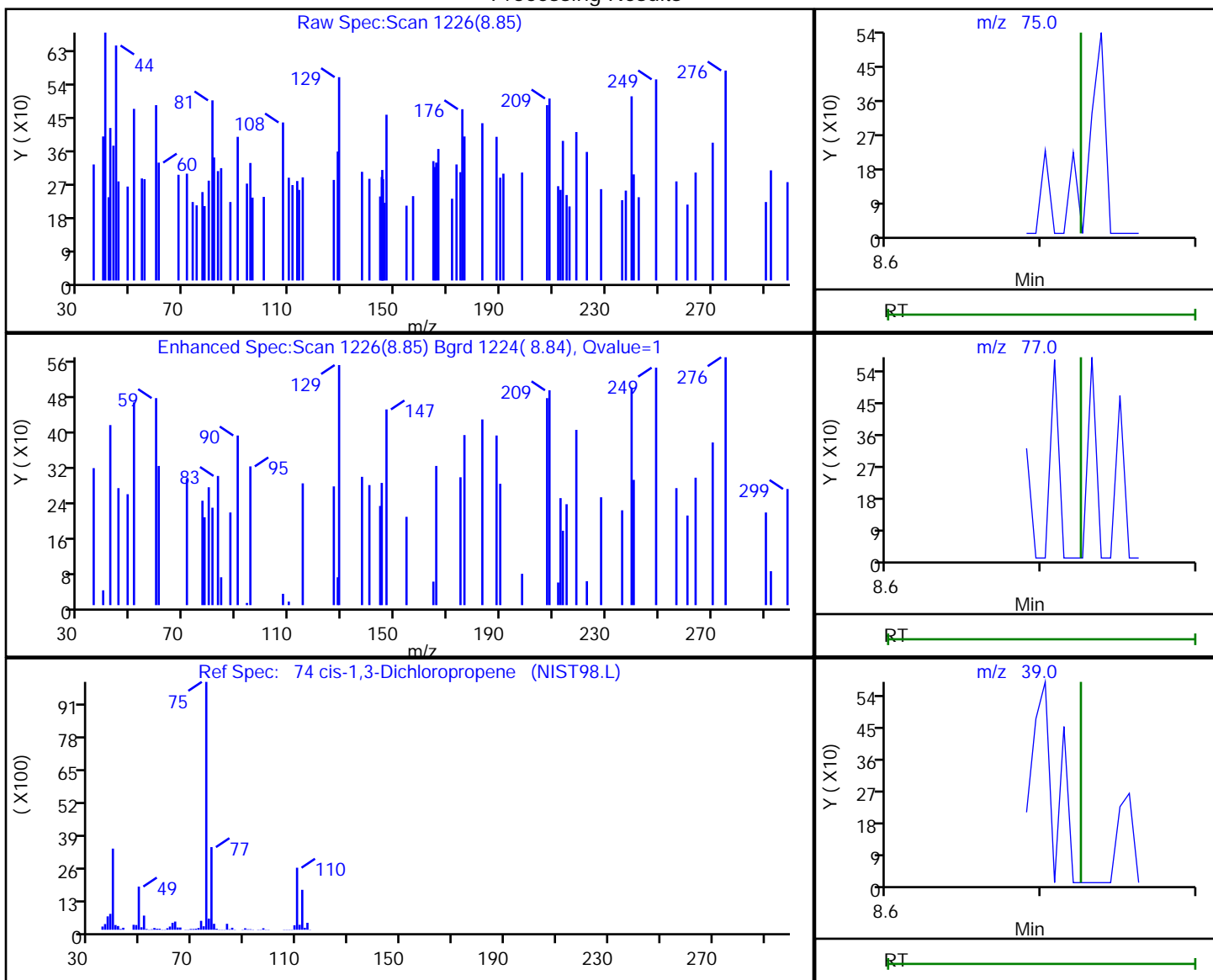
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050122.D  
 Injection Date: 01-May-2020 23:51:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-A-6 Lab Sample ID: 180-105108-6  
 Client ID: HD-COD-SW-15-0/1-0  
 Operator ID: 034635 ALS Bottle#: 22 Worklist Smp#: 22  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

74 cis-1,3-Dichloropropene, CAS: 10061-01-5

Processing Results



RT	Mass	Response	Amount
8.85	75.00	74	0.020781
8.85	77.00	195	
8.84	39.00	437	

Reviewer: journept, 02-May-2020 18:48:38  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050122.D

Injection Date: 01-May-2020 23:51:30

Instrument ID: CHHP5

Lims ID: 180-105108-A-6

Lab Sample ID: 180-105108-6

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

Operator ID: 034635

ALS Bottle#: 22 Worklist Smp#: 22

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

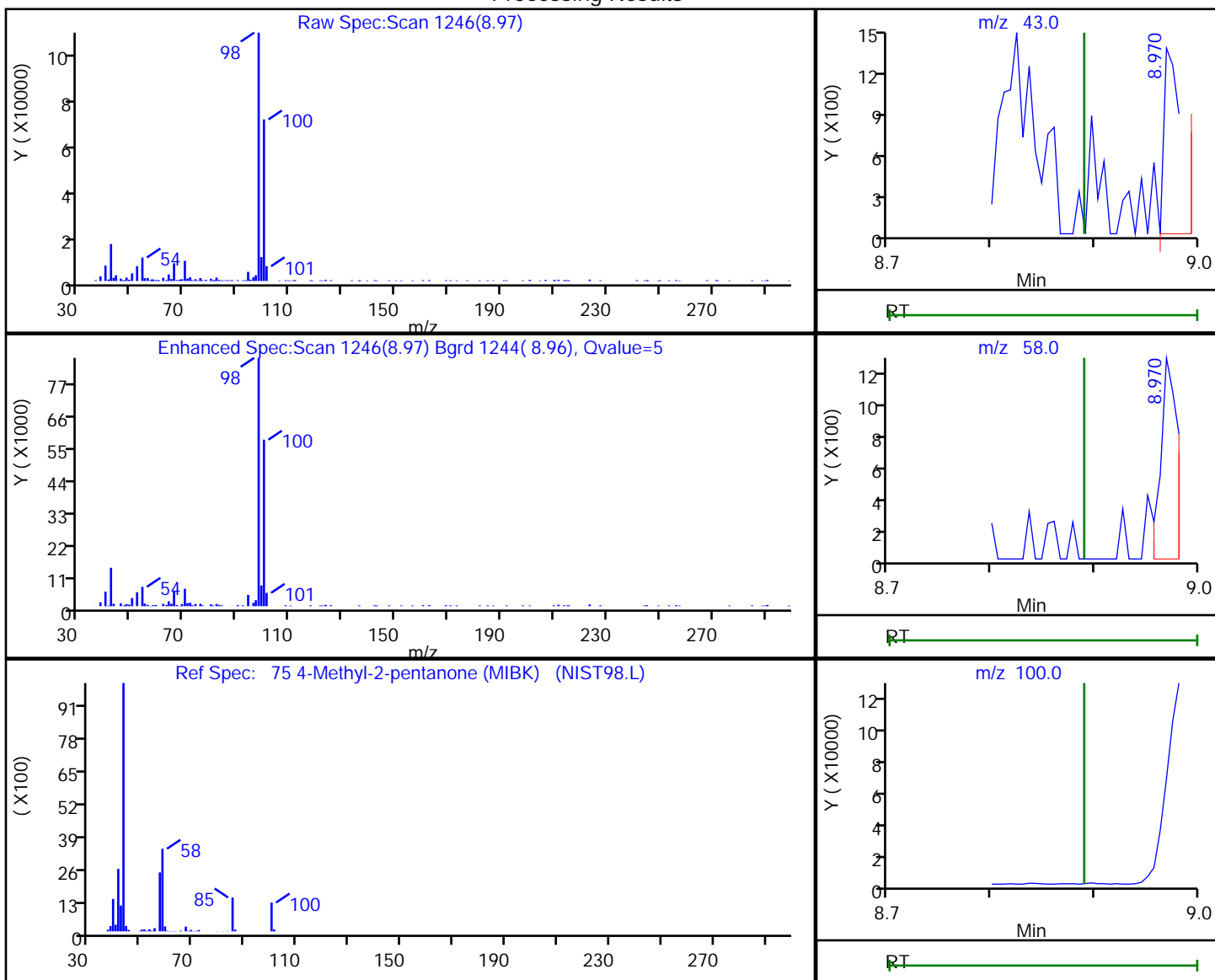
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

75 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Processing Results



RT	Mass	Response	Amount
8.97	43.00	1582	15.885922
8.97	58.00	1343	
8.99	100.00	288741	

Reviewer: journept, 02-May-2020 18:48:38

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050122.D

Injection Date: 01-May-2020 23:51:30

Instrument ID: CHHP5

Lims ID: 180-105108-A-6

Lab Sample ID: 180-105108-6

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

Operator ID: 034635

ALS Bottle#: 22 Worklist Smp#: 22

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

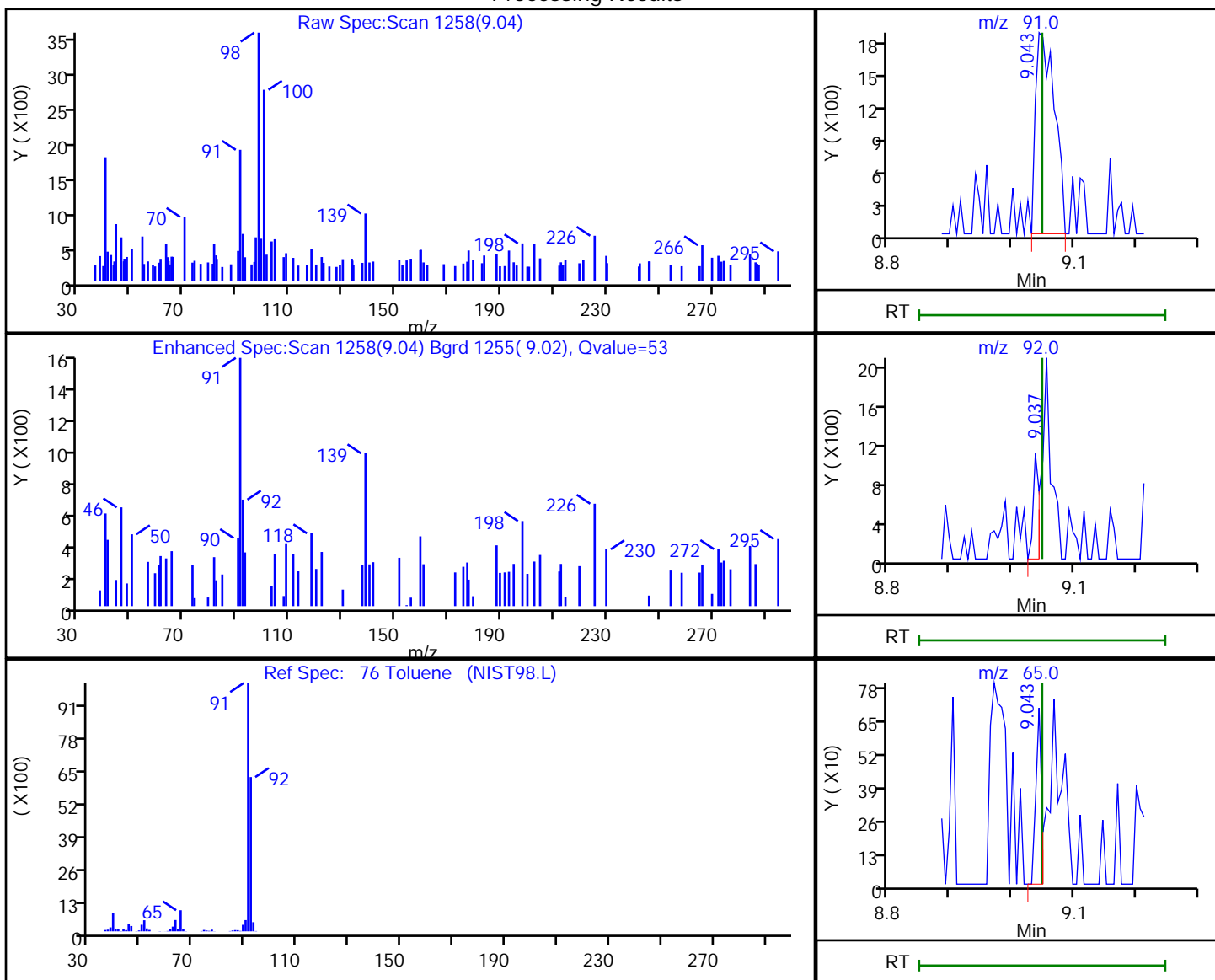
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

76 Toluene, CAS: 108-88-3

Processing Results



RT	Mass	Response	Amount
9.04	91.00	4022	0.285261
9.04	92.00	705	
9.04	65.00	446	

Reviewer: journeyp, 02-May-2020 18:48:38

Audit Action: Marked Compound Undetected

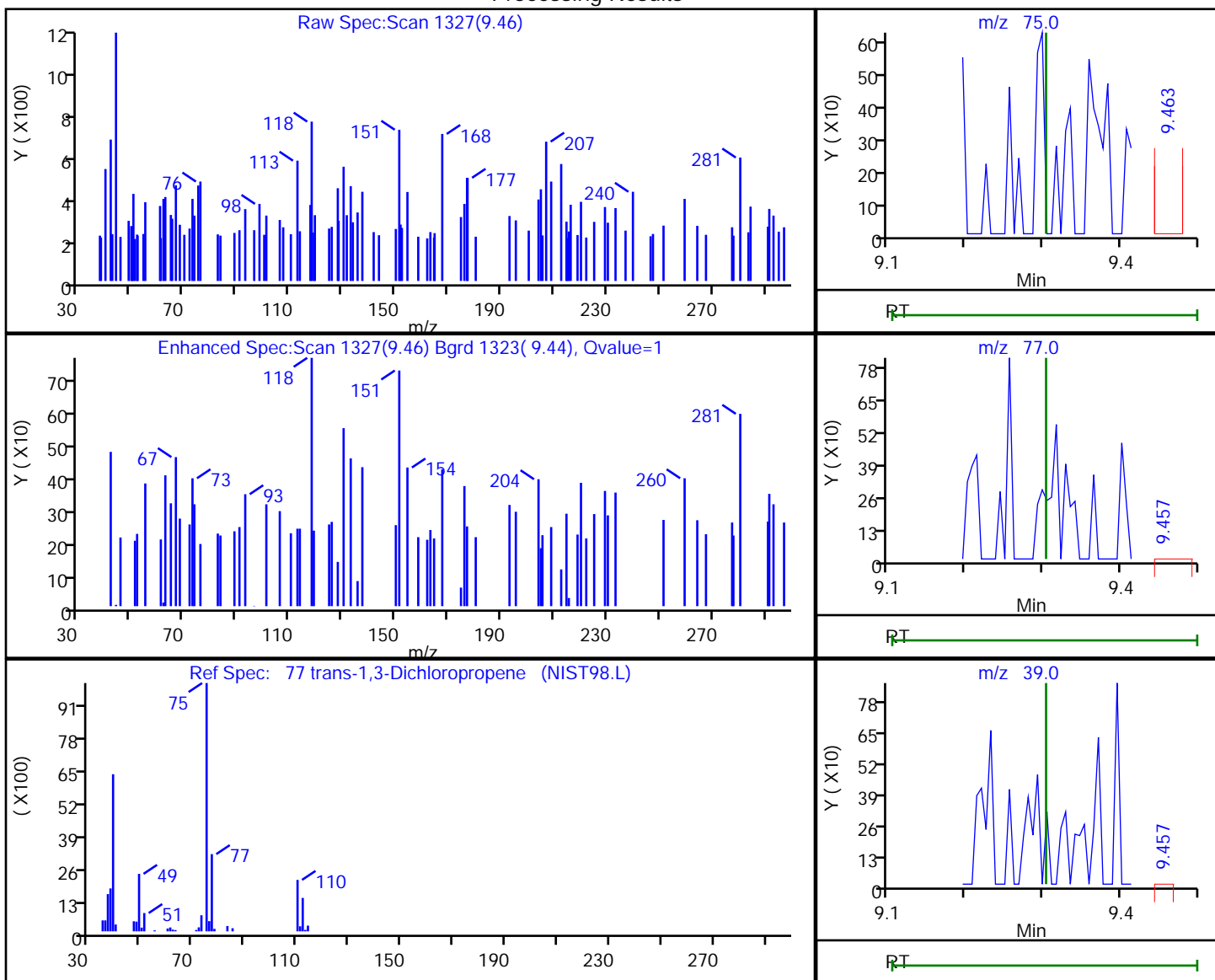
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050122.D  
 Injection Date: 01-May-2020 23:51:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-A-6 Lab Sample ID: 180-105108-6  
 Client ID: HD-COD-SW-15-0/1-0  
 Operator ID: 034635 ALS Bottle#: 22 Worklist Smp#: 22  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

77 trans-1,3-Dichloropropene, CAS: 10061-02-6

Processing Results



RT	Mass	Response	Amount
9.46	75.00	399	0.086083
9.46	77.00	600	
9.46	39.00	154	

Reviewer: journept, 02-May-2020 18:48:38  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

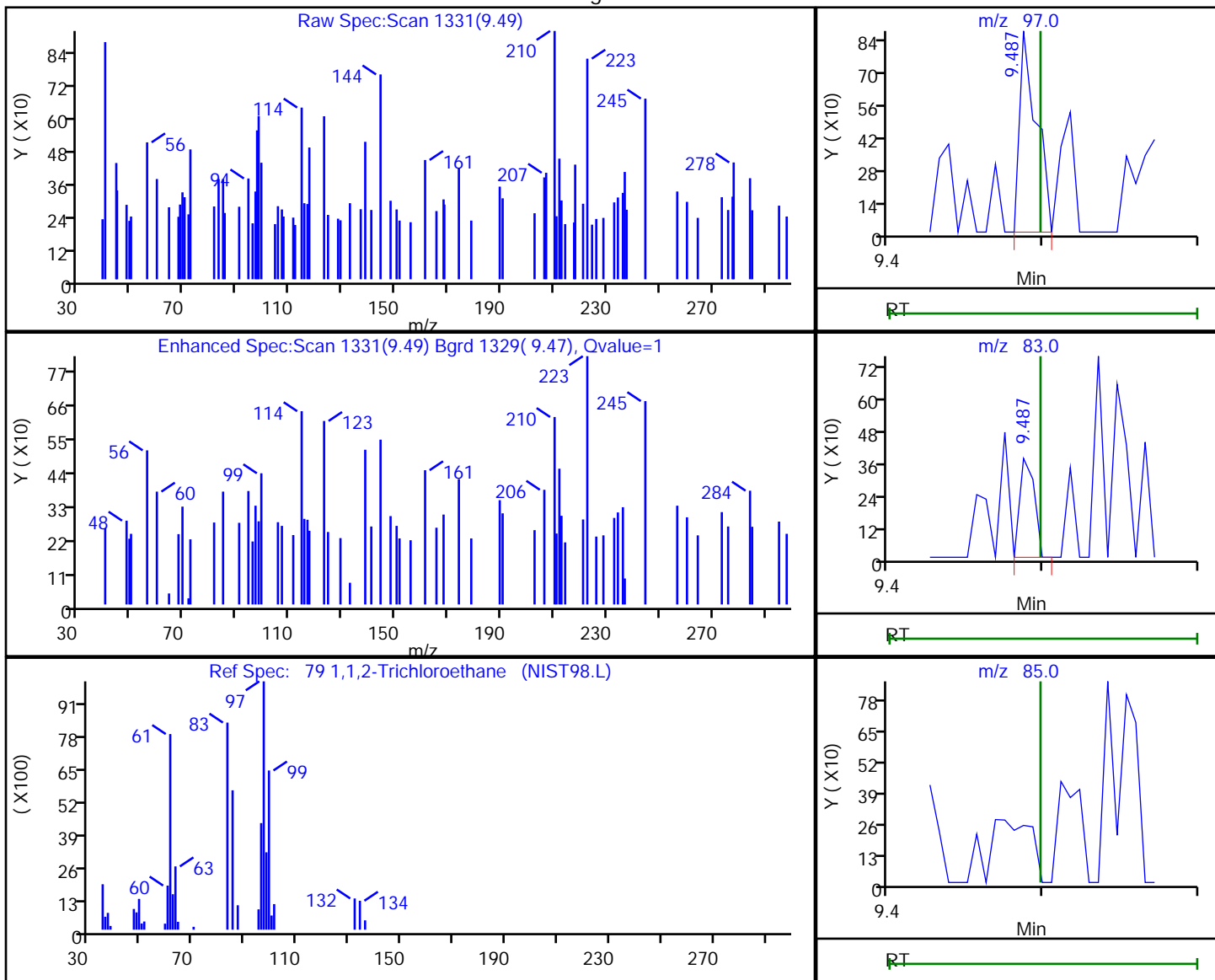


Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050122.D  
 Injection Date: 01-May-2020 23:51:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-A-6 Lab Sample ID: 180-105108-6  
 Client ID: HD-COD-SW-15-0/1-0  
 Operator ID: 034635 ALS Bottle#: 22 Worklist Smp#: 22  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

79 1,1,2-Trichloroethane, CAS: 79-00-5

Processing Results



RT	Mass	Response	Amount
9.49	97.00	657	0.200474
9.49	83.00	241	
9.50	85.00	0	

Reviewer: journeyp, 02-May-2020 18:48:38  
 Audit Action: Marked Compound Undetected

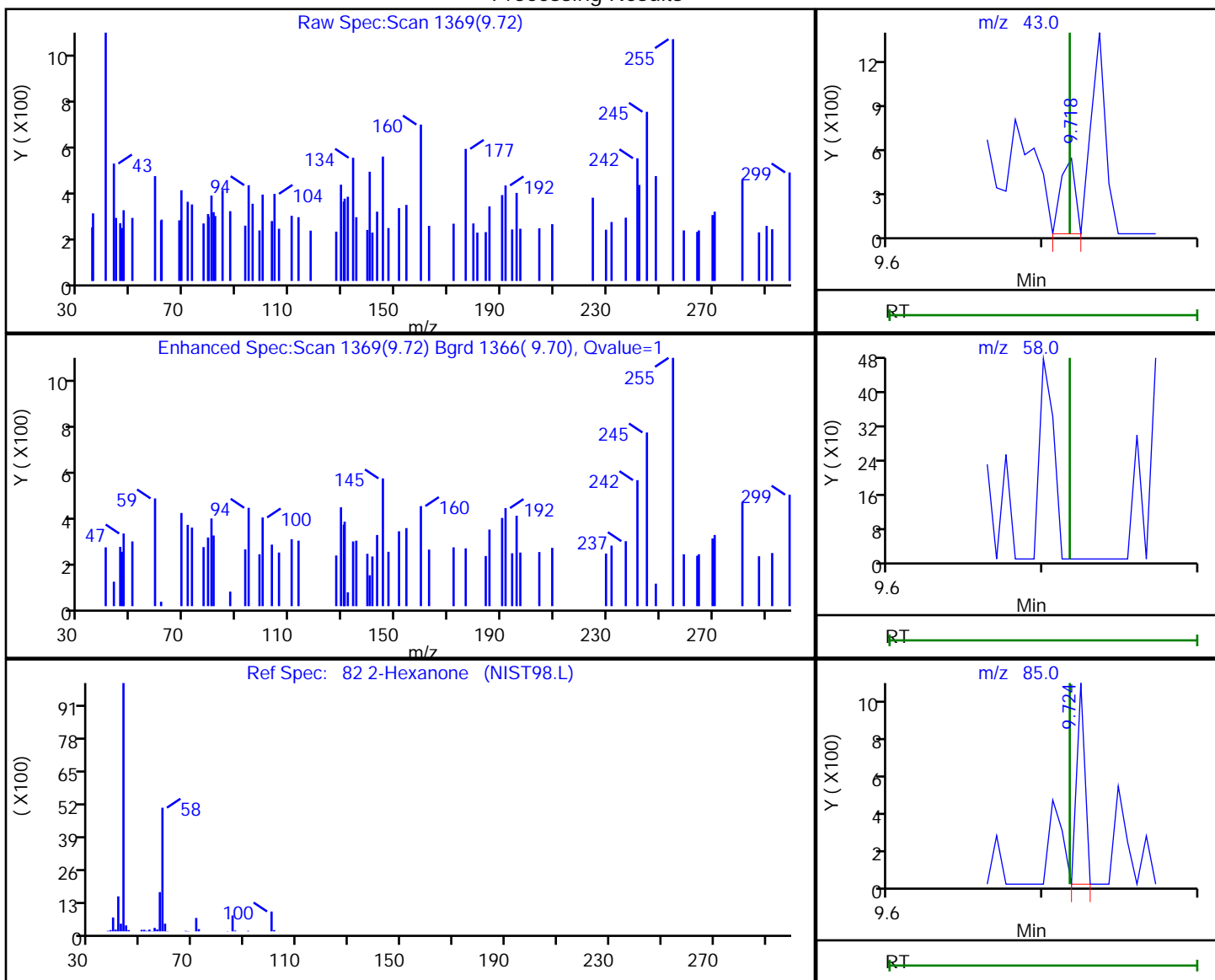
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050122.D  
 Injection Date: 01-May-2020 23:51:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-A-6 Lab Sample ID: 180-105108-6  
 Client ID: HD-COD-SW-15-0/1-0  
 Operator ID: 034635 ALS Bottle#: 22 Worklist Smp#: 22  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

82 2-Hexanone, CAS: 591-78-6

Processing Results



RT	Mass	Response	Amount
9.72	43.00	316	14.116952
9.72	58.00	0	
9.72	85.00	383	

Reviewer: journetp, 02-May-2020 18:48:43  
 Audit Action: Marked Compound Undetected

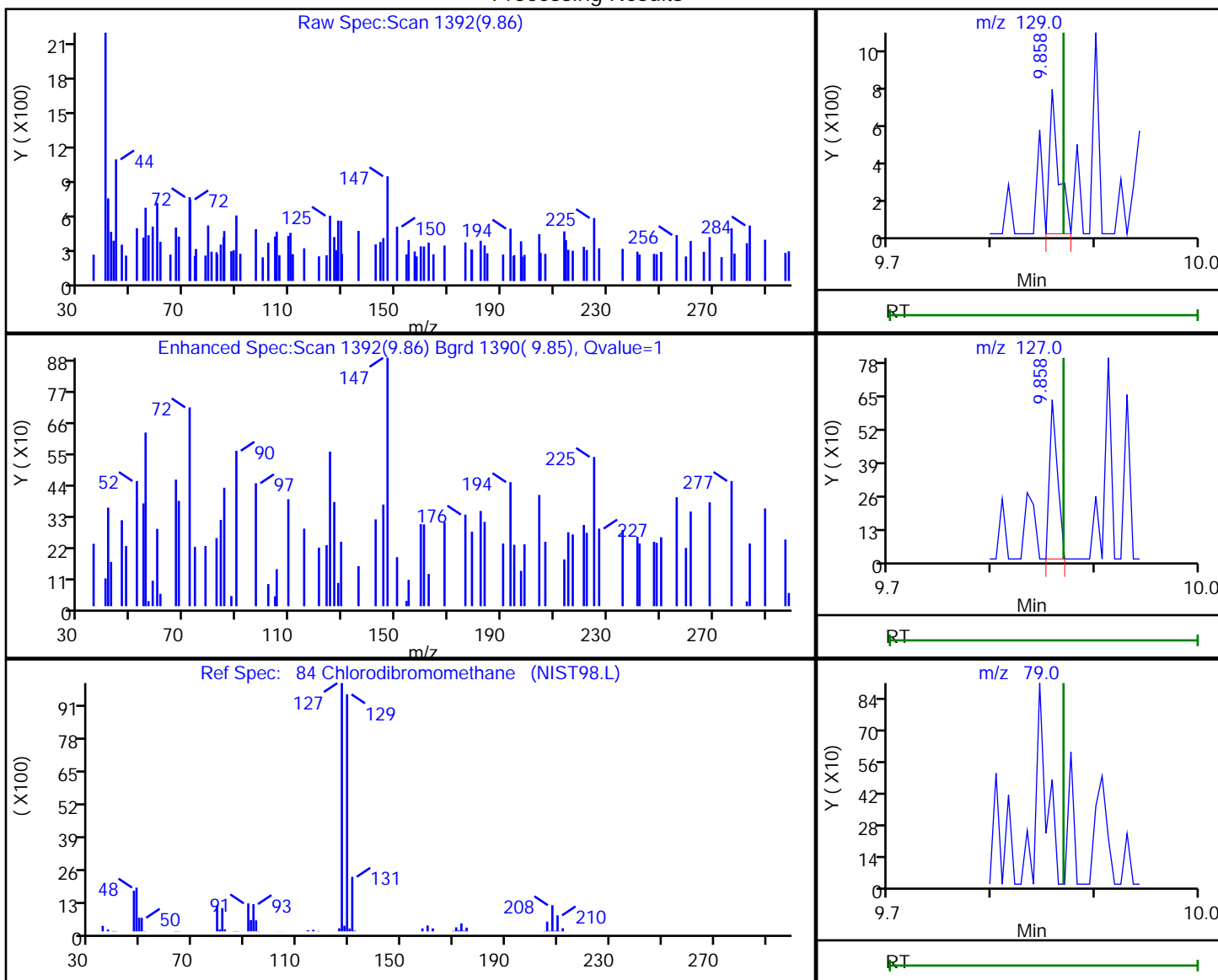
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050122.D  
 Injection Date: 01-May-2020 23:51:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-A-6 Lab Sample ID: 180-105108-6  
 Client ID: HD-COD-SW-15-0/1-0  
 Operator ID: 034635 ALS Bottle#: 22 Worklist Smp#: 22  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

84 Chlorodibromomethane, CAS: 124-48-1

Processing Results



RT	Mass	Response	Amount
9.86	129.00	455	0.164013
9.86	127.00	338	
9.87	79.00	0	

Reviewer: journeyp, 02-May-2020 18:48:43  
 Audit Action: Marked Compound Undetected

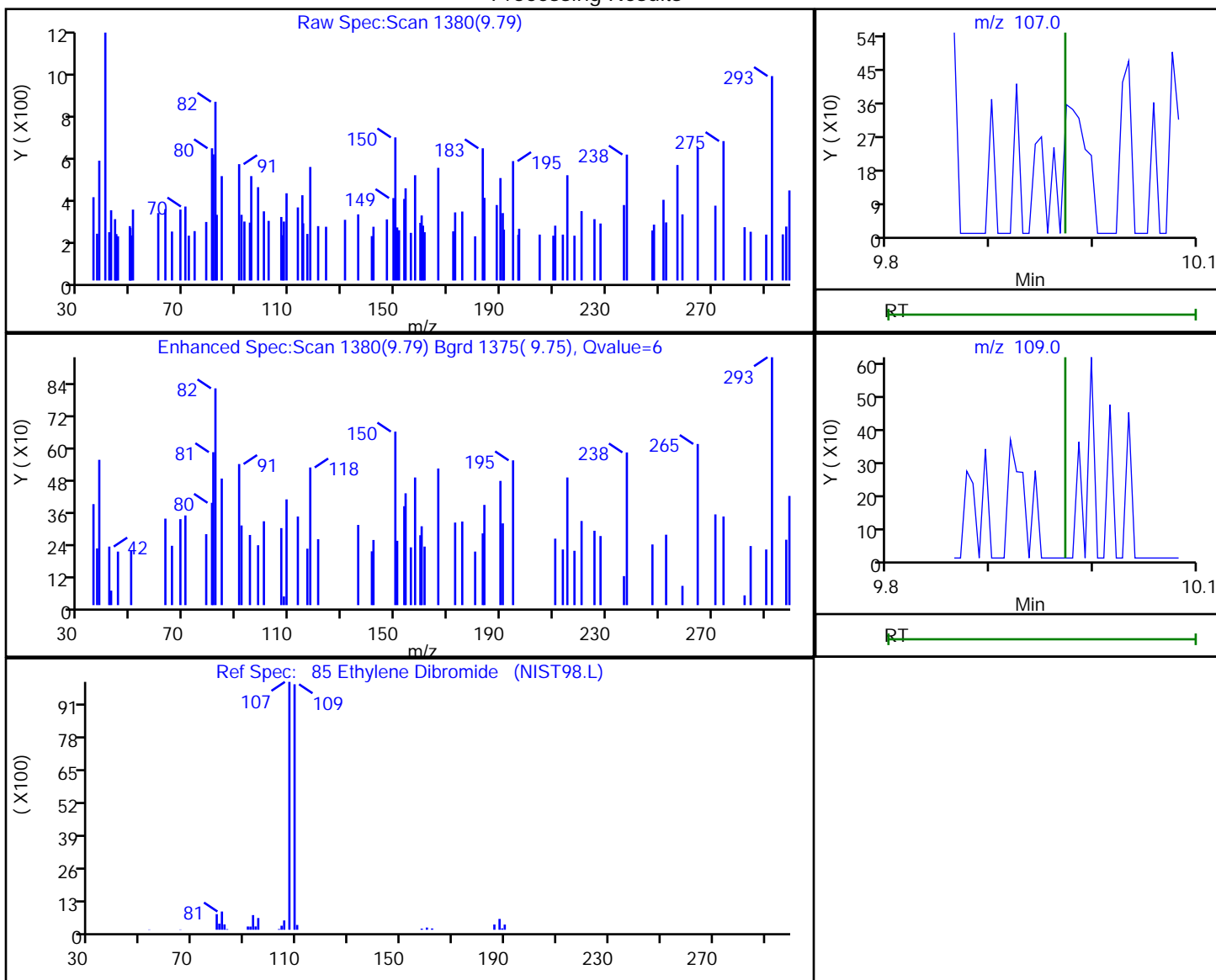
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050122.D  
 Injection Date: 01-May-2020 23:51:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-A-6 Lab Sample ID: 180-105108-6  
 Client ID: HD-COD-SW-15-0/1-0  
 Operator ID: 034635 ALS Bottle#: 22 Worklist Smp#: 22  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

85 Ethylene Dibromide, CAS: 106-93-4

Processing Results



RT	Mass	Response	Amount
9.79	107.00	183	0.059690
9.79	109.00	536	

Reviewer: journetp, 02-May-2020 18:48:43  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050122.D

Injection Date: 01-May-2020 23:51:30

Instrument ID: CHHP5

Lims ID: 180-105108-A-6

Lab Sample ID: 180-105108-6

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

Operator ID: 034635

ALS Bottle#: 22 Worklist Smp#: 22

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

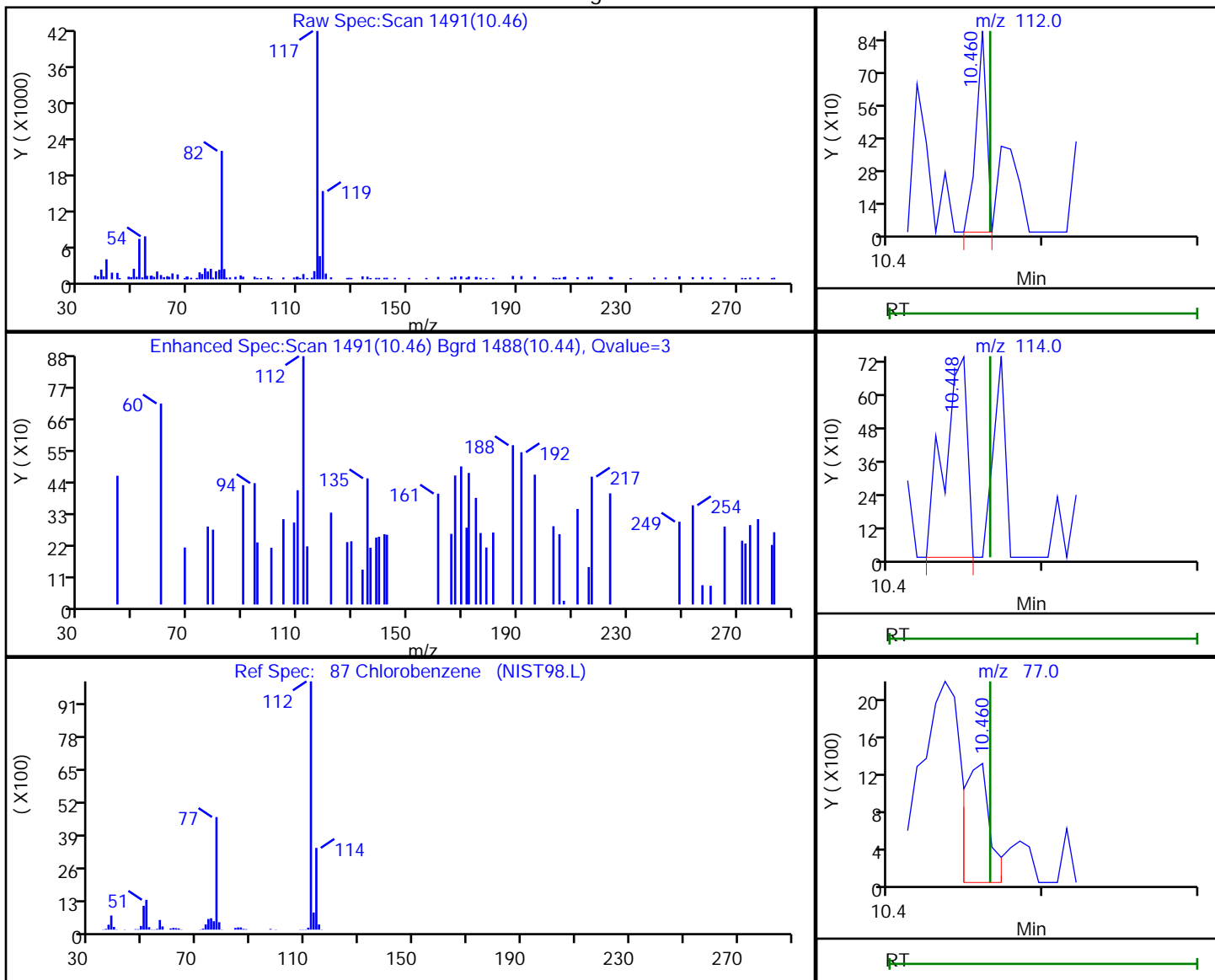
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

87 Chlorobenzene, CAS: 108-90-7

Processing Results



RT	Mass	Response	Amount
10.46	112.00	408	0.044996
10.45	114.00	753	
10.46	77.00	1533	

Reviewer: journeyp, 02-May-2020 18:48:43

Audit Action: Marked Compound Undetected

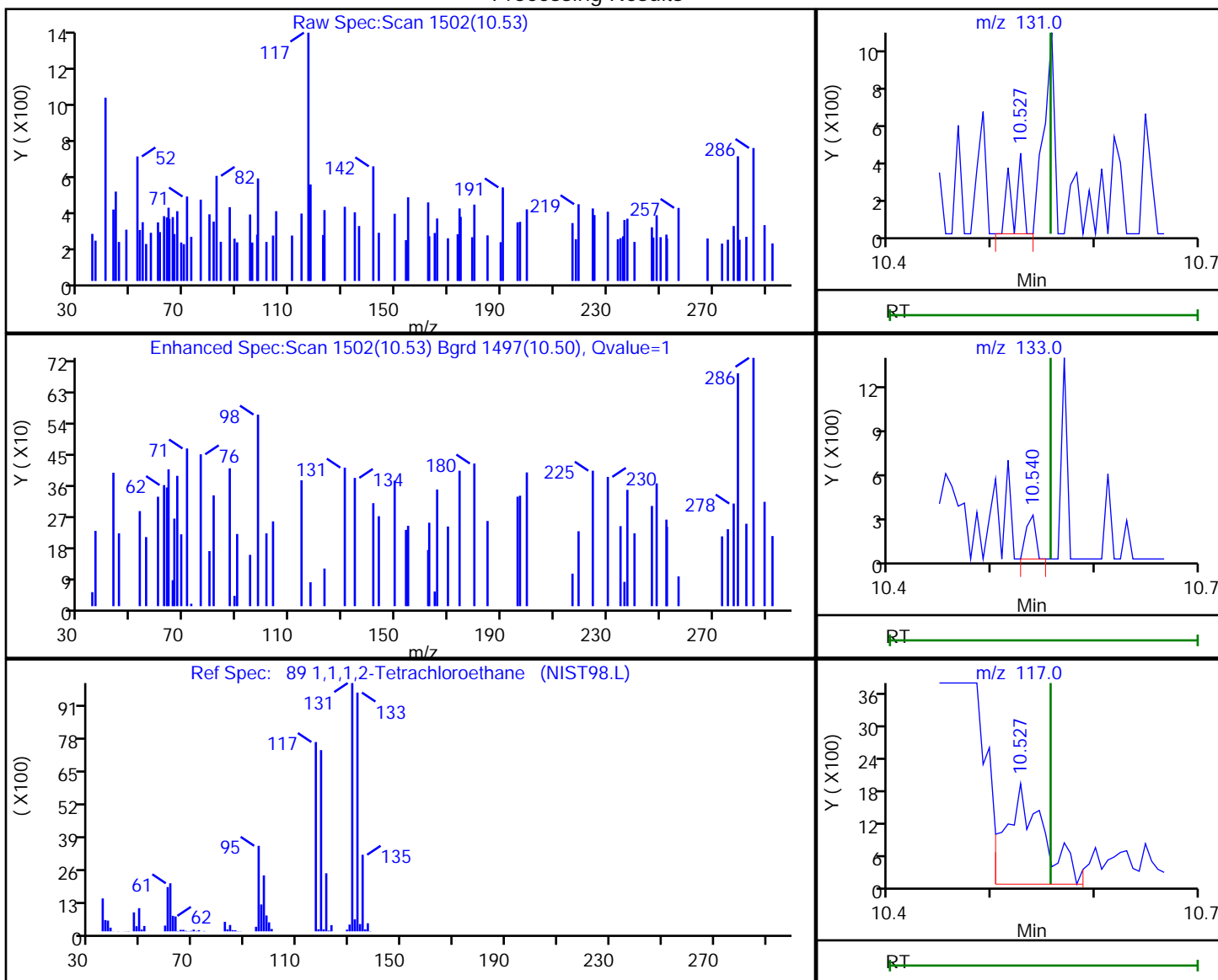
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050122.D  
 Injection Date: 01-May-2020 23:51:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-A-6 Lab Sample ID: 180-105108-6  
 Client ID: HD-COD-SW-15-0/1-0  
 Operator ID: 034635 ALS Bottle#: 22 Worklist Smp#: 22  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

89 1,1,1,2-Tetrachloroethane, CAS: 630-20-6

Processing Results



RT	Mass	Response	Amount
10.53	131.00	269	0.091356
10.54	133.00	189	
10.53	117.00	4702	

Reviewer: journetp, 02-May-2020 18:48:43  
 Audit Action: Marked Compound Undetected

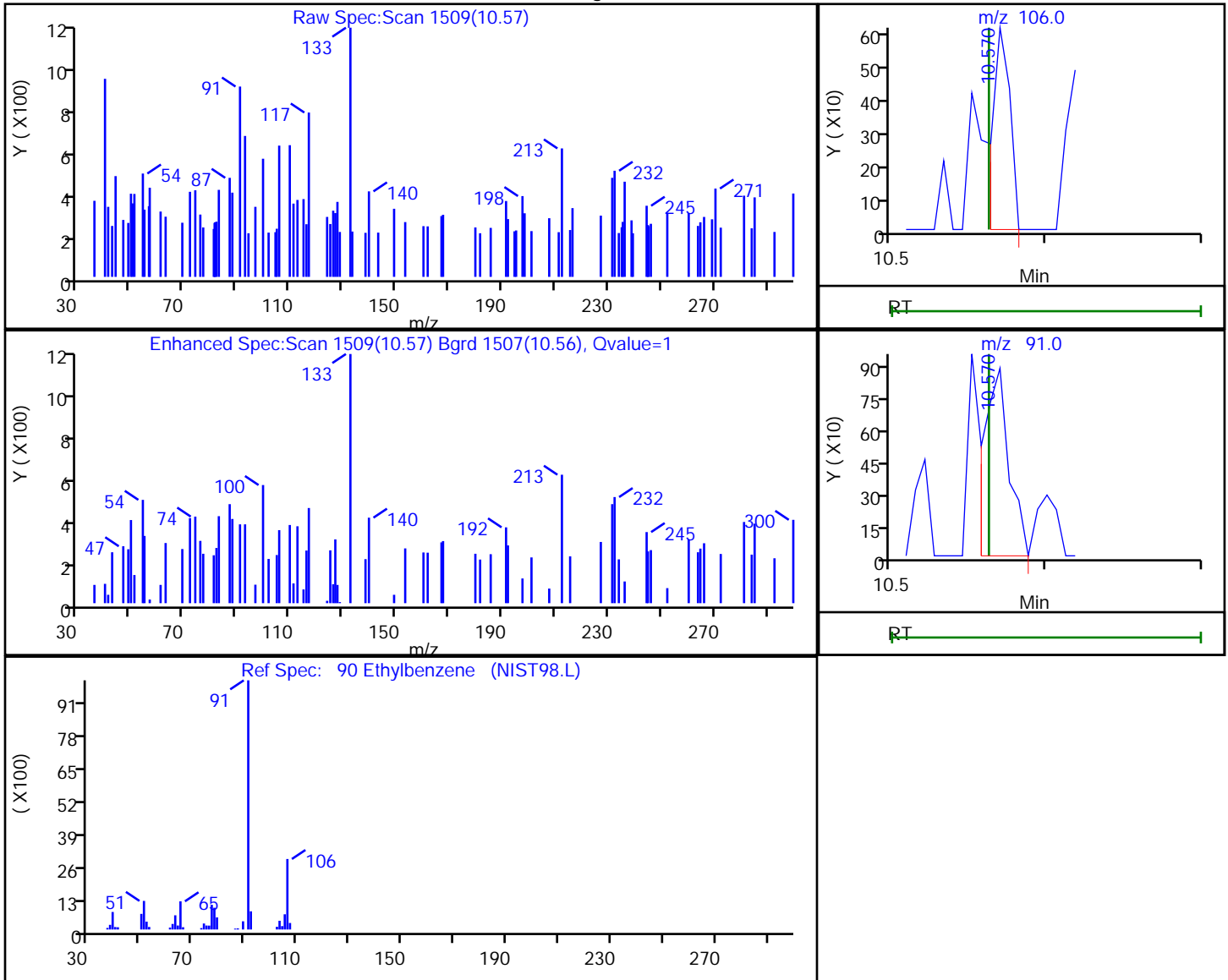
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050122.D  
Injection Date: 01-May-2020 23:51:30 Instrument ID: CHHP5  
Lims ID: 180-105108-A-6 Lab Sample ID: 180-105108-6  
Client ID: HD-COD-SW-15-0/1-0  
Operator ID: 034635 ALS Bottle#: 22 Worklist Smp#: 22  
Purge Vol: 5.000 mL Dil. Factor: 1.0000  
Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
Column: DB-624 (0.18 mm) Detector: MS SCAN

90 Ethylbenzene, CAS: 100-41-4

Processing Results



RT	Mass	Response	Amount
10.57	106.00	474	0.100991
10.57	91.00	1001	

Reviewer: journetp, 02-May-2020 18:48:43  
Audit Action: Marked Compound Undetected

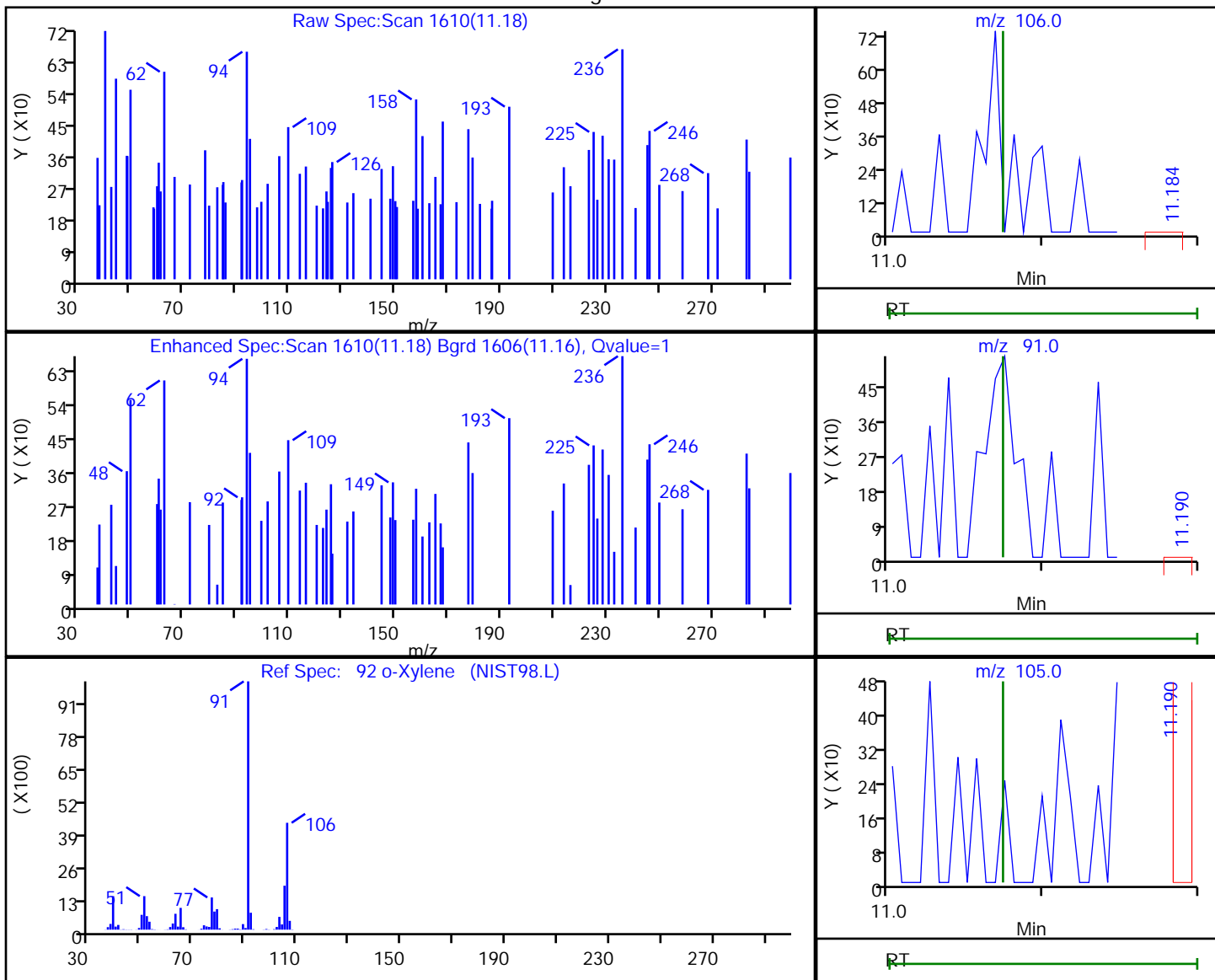
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050122.D  
 Injection Date: 01-May-2020 23:51:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-A-6 Lab Sample ID: 180-105108-6  
 Client ID: HD-COD-SW-15-0/1-0  
 Operator ID: 034635 ALS Bottle#: 22 Worklist Smp#: 22  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

92 o-Xylene, CAS: 95-47-6

Processing Results



RT	Mass	Response	Amount
11.18	106.00	226	0.041379
11.19	91.00	302	
11.19	105.00	158	

Reviewer: journetp, 02-May-2020 18:48:43  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

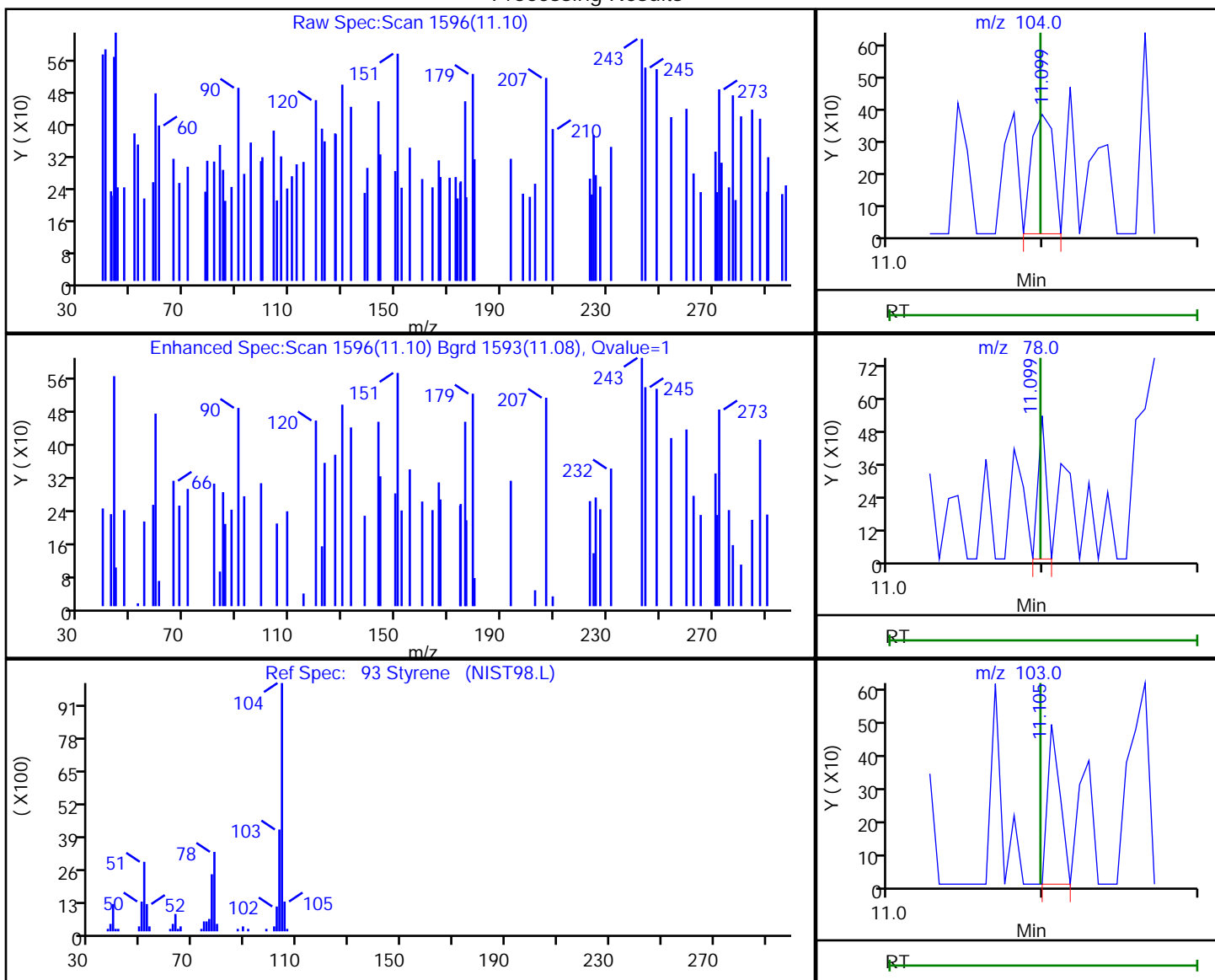


Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050122.D  
 Injection Date: 01-May-2020 23:51:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-A-6 Lab Sample ID: 180-105108-6  
 Client ID: HD-COD-SW-15-0/1-0  
 Operator ID: 034635 ALS Bottle#: 22 Worklist Smp#: 22  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

93 Styrene, CAS: 100-42-5

Processing Results



RT	Mass	Response	Amount
11.10	104.00	373	0.039829
11.10	78.00	193	
11.11	103.00	270	

Reviewer: journeyp, 02-May-2020 18:48:43  
 Audit Action: Marked Compound Undetected

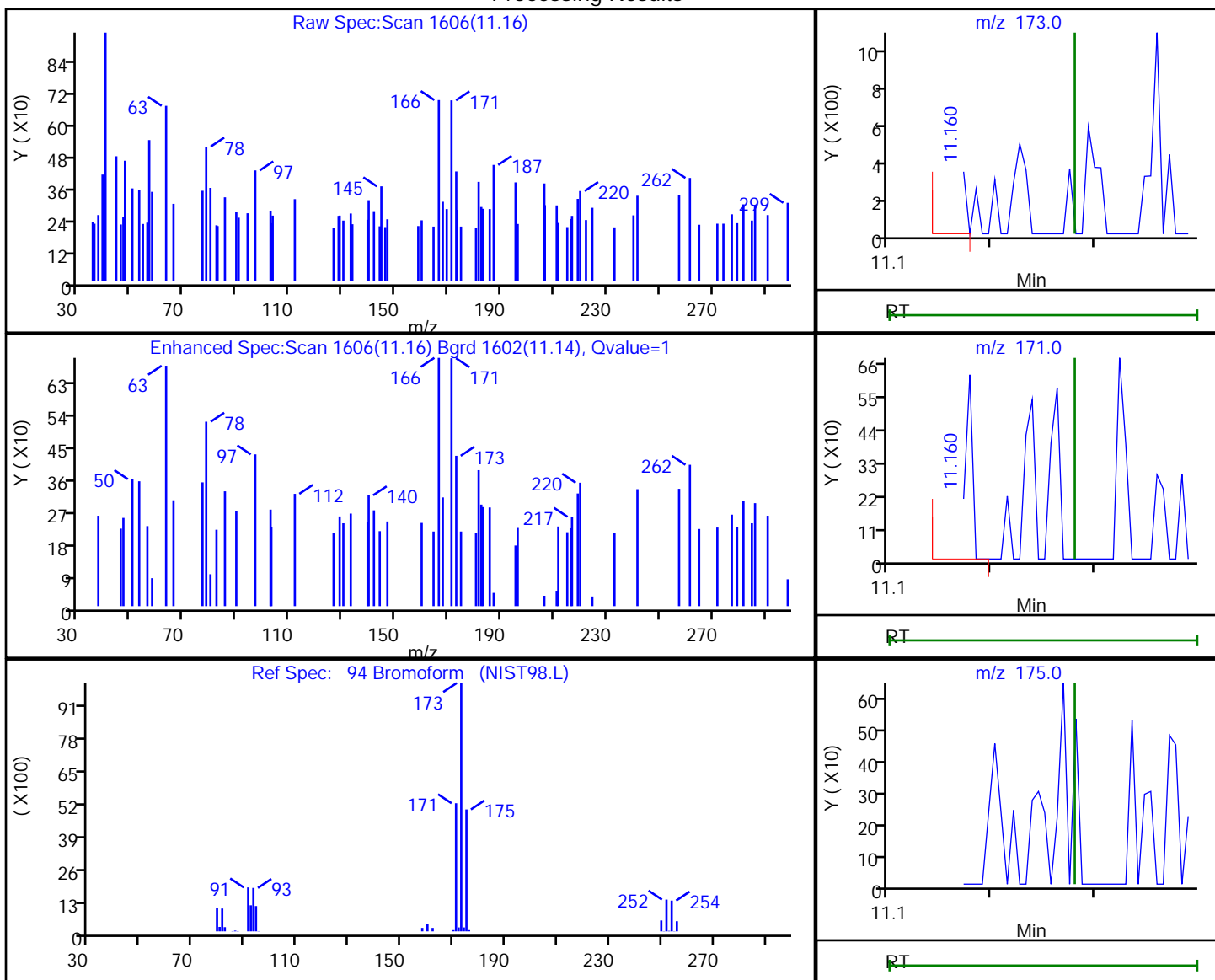
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050122.D  
 Injection Date: 01-May-2020 23:51:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-A-6 Lab Sample ID: 180-105108-6  
 Client ID: HD-COD-SW-15-0/1-0  
 Operator ID: 034635 ALS Bottle#: 22 Worklist Smp#: 22  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

94 Bromoform, CAS: 75-25-2

Processing Results



RT	Mass	Response	Amount
11.16	173.00	538	0.410228
11.16	171.00	552	
11.28	175.00	0	

Reviewer: journeyp, 02-May-2020 18:48:43  
 Audit Action: Marked Compound Undetected

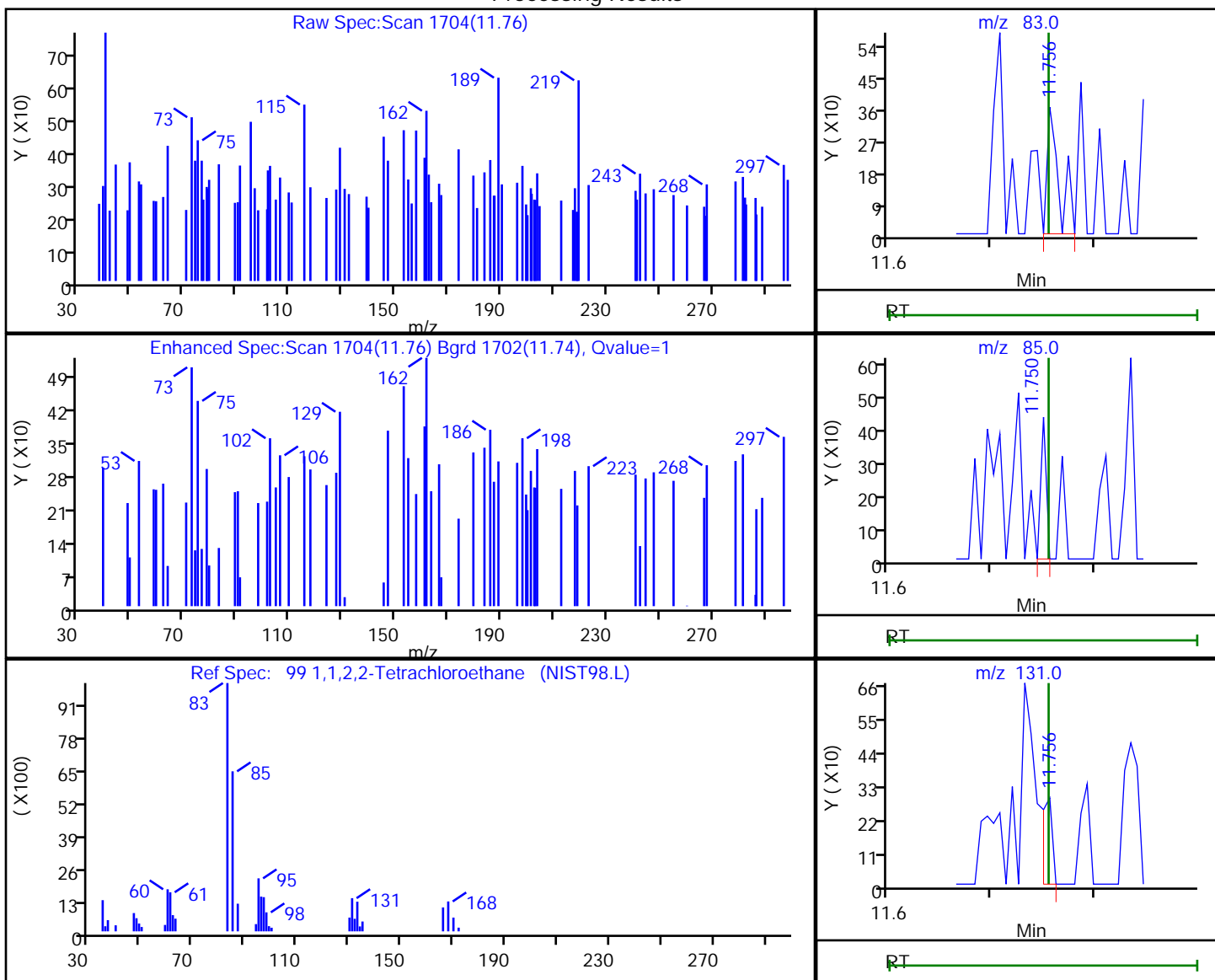
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050122.D  
 Injection Date: 01-May-2020 23:51:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-A-6 Lab Sample ID: 180-105108-6  
 Client ID: HD-COD-SW-15-0/1-0  
 Operator ID: 034635 ALS Bottle#: 22 Worklist Smp#: 22  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

99 1,1,2,2-Tetrachloroethane, CAS: 79-34-5

Processing Results



RT	Mass	Response	Amount
11.76	83.00	294	0.086892
11.75	85.00	157	
11.76	131.00	193	

Reviewer: journetp, 02-May-2020 18:48:43  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050122.D

Injection Date: 01-May-2020 23:51:30

Instrument ID: CHHP5

Lims ID: 180-105108-A-6

Lab Sample ID: 180-105108-6

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

Operator ID: 034635

ALS Bottle#: 22 Worklist Smp#: 22

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

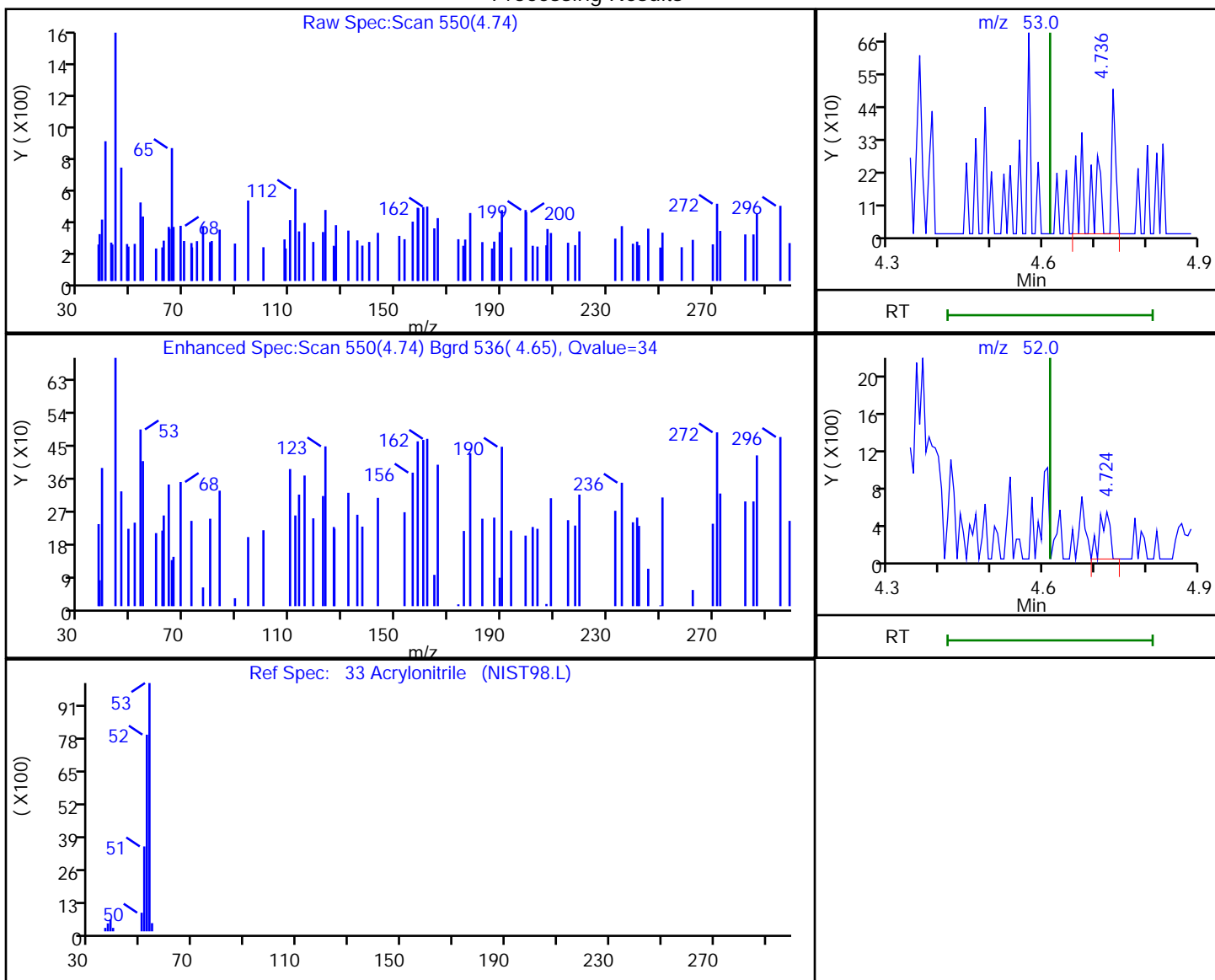
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

33 Acrylonitrile, CAS: 107-13-1

Processing Results



RT	Mass	Response	Amount
4.74	53.00	735	0.774493
4.72	52.00	688	

Reviewer: journetp, 02-May-2020 18:48:12

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: HD-COD-SW-16-0/1-0 Lab Sample ID: 180-105108-7  
 Matrix: Water Lab File ID: 5050123.D  
 Analysis Method: EPA 8260C Date Collected: 04/28/2020 10:55  
 Sample wt/vol: 5 (mL) Date Analyzed: 05/02/2020 00:15  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-624 ID: 0.18 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 314382 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	ND	^c	1.0	0.90
75-01-4	Vinyl chloride	ND	^c	1.0	0.40
74-83-9	Bromomethane	ND	^c *	1.0	0.89
75-00-3	Chloroethane	ND		1.0	0.90
75-35-4	1,1-Dichloroethene	ND		1.0	0.55
67-64-1	Acetone	9.4		5.0	3.4
75-15-0	Carbon disulfide	ND	^c	1.0	0.88
75-09-2	Methylene Chloride	ND		1.0	0.89
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.67
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.59
75-34-3	1,1-Dichloroethane	ND		1.0	0.31
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.71
74-97-5	Bromochloromethane	ND		1.0	0.63
78-93-3	2-Butanone (MEK)	ND		5.0	2.6
67-66-3	Chloroform	ND		1.0	0.60
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.60
56-23-5	Carbon tetrachloride	ND		1.0	0.88
71-43-2	Benzene	ND		1.0	0.60
107-06-2	1,2-Dichloroethane	ND		1.0	0.57
79-01-6	Trichloroethene	ND		1.0	0.69
78-87-5	1,2-Dichloropropane	ND		1.0	0.66
75-27-4	Bromodichloromethane	ND		1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	3.1
108-88-3	Toluene	ND		1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.58
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.45
127-18-4	Tetrachloroethene	ND		1.0	0.47
591-78-6	2-Hexanone	ND		5.0	3.3
124-48-1	Dibromochloromethane	ND		1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	ND		1.0	0.50
108-90-7	Chlorobenzene	ND		1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.57
100-41-4	Ethylbenzene	ND		1.0	0.51
1330-20-7	Xylenes, Total	ND		2.0	0.89
100-42-5	Styrene	ND		1.0	0.47

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: HD-COD-SW-16-0/1-0 Lab Sample ID: 180-105108-7  
 Matrix: Water Lab File ID: 5050123.D  
 Analysis Method: EPA 8260C Date Collected: 04/28/2020 10:55  
 Sample wt/vol: 5 (mL) Date Analyzed: 05/02/2020 00:15  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-624 ID: 0.18 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 314382 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	ND	^c	1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	ND	^c	1.0	0.60
107-13-1	Acrylonitrile	ND		20	7.8

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	86		62-146
2037-26-5	Toluene-d8 (Surr)	75		75-120
460-00-4	4-Bromofluorobenzene (Surr)	92		64-120
1868-53-7	Dibromofluoromethane (Surr)	102	^c	71-132

Eurofins TestAmerica, Pittsburgh  
Target Compound Quantitation Report

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050123.D  
 Lims ID: 180-105108-A-7  
 Client ID: HD-COD-SW-16-0/1-0  
 Sample Type: Client  
 Inject. Date: 02-May-2020 00:15:30 ALS Bottle#: 23 Worklist Smp#: 23  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: 180-0031777-023  
 Operator ID: 034635 Instrument ID: CHHP5  
 Method: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\MMSVOA\_LL\_CHHP5.m  
 Limit Group: VOA 8260C\_D ICAL  
 Last Update: 03-May-2020 16:26:57 Calib Date: 03-Apr-2020 19:09:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP5\20200403-31442.b\5040310.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: CTX0317

First Level Reviewer: journetp

Date: 02-May-2020 18:52:52

Compound	Sig	RT (min.)	Exp RT (min.)	Diff RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.363	4.364	-0.001	0	332503	1000.0	
* 2 Fluorobenzene (IS)	96	7.344	7.345	-0.001	99	361085	50.0	
* 3 Chlorobenzene-d5	119	10.434	10.435	-0.001	85	148282	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.777	12.771	0.006	93	244139	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.626	6.621	0.005	93	105459	51.2	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.991	6.992	-0.001	0	126024	43.1	
\$ 7 Toluene-d8 (Surr)	98	8.987	8.987	0.000	94	448160	37.3	
\$ 8 4-Bromofluorobenzene (Surr	95	11.615	11.615	0.000	88	207827	45.8	
12 Chloromethane	50		1.851				ND	U
13 Vinyl chloride	62		1.961				ND	U
15 Bromomethane	94		2.277				ND	U
16 Chloroethane	64		2.423				ND	U
22 1,1-Dichloroethene	96		3.390				ND	U
24 Acetone	43	3.517	3.512	0.005	100	58764	47.1	
26 Carbon disulfide	76		3.701				ND	
31 Methylene Chloride	84		4.218				ND	U
33 Acrylonitrile	53		4.613				ND	U
34 trans-1,2-Dichloroethene	96		4.631				ND	U
35 Methyl tert-butyl ether	73		4.656				ND	U
37 1,1-Dichloroethane	63		5.264				ND	U
45 cis-1,2-Dichloroethene	96		6.018				ND	U
46 2-Butanone (MEK)	43		6.031				ND	U
49 Chlorobromomethane	128		6.298				ND	U
52 Chloroform	83		6.444				ND	U
53 1,1,1-Trichloroethane	97		6.596				ND	U
56 Carbon tetrachloride	117		6.761				ND	U
58 Benzene	78		6.998				ND	U
59 1,2-Dichloroethane	62		7.071				ND	U
64 Trichloroethene	130		7.728				ND	U
67 1,2-Dichloropropane	63		7.996				ND	U
71 Dichlorobromomethane	83		8.281				ND	U
74 cis-1,3-Dichloropropene	75		8.726				ND	U

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
75 4-Methyl-2-pentanone (MIBK	43		8.890				ND	U
76 Toluene	91		9.048				ND	U
77 trans-1,3-Dichloropropene	75		9.303				ND	U
79 1,1,2-Trichloroethane	97		9.498				ND	U
80 Tetrachloroethene	164		9.559				ND	U
82 2-Hexanone	43		9.717				ND	U
84 Chlorodibromomethane	129		9.869				ND	U
85 Ethylene Dibromide	107		9.973				ND	U
87 Chlorobenzene	112		10.465				ND	U
89 1,1,1,2-Tetrachloroethane	131		10.557				ND	U
90 Ethylbenzene	106		10.563				ND	U
91 m-Xylene & p-Xylene	106		10.697				ND	U
92 o-Xylene	106		11.074				ND	U
93 Styrene	104		11.098				ND	U
94 Bromoform	173		11.281				ND	U
99 1,1,2,2-Tetrachloroethane	83		11.755				ND	U
S 133 Xylenes, Total	106		1.000				ND	

**QC Flag Legend**

Review Flags

U - Marked Undetected

**Reagents:**

voaWI/SHP5\_00016

Amount Added: 5.00

Units: uL

Run Reagent



Euofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050123.D

Injection Date: 02-May-2020 00:15:30

Instrument ID: CHHP5

Operator ID: 034635

Lims ID: 180-105108-A-7

Lab Sample ID: 180-105108-7

Worklist Smp#: 23

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

Purge Vol: 5.000 mL

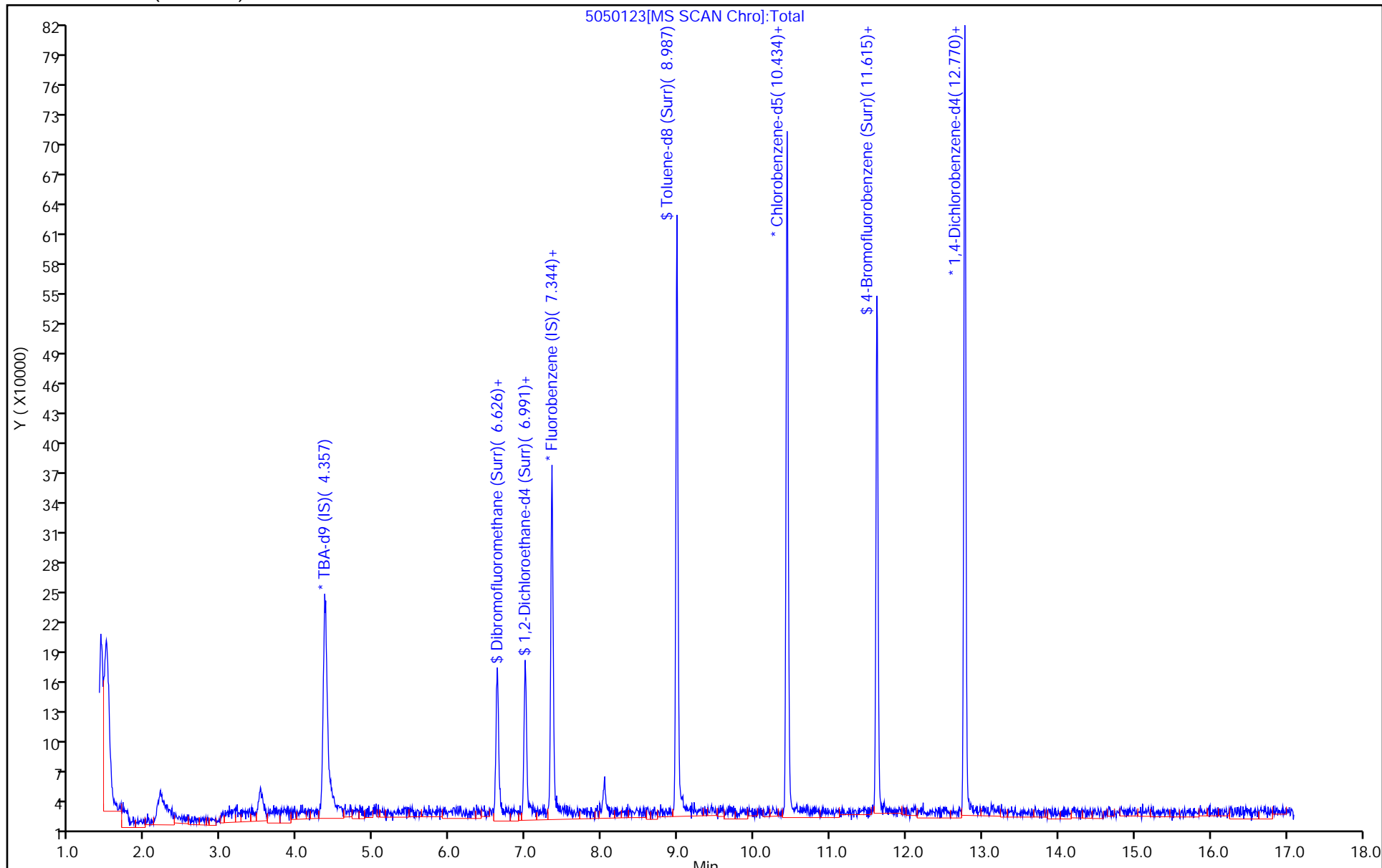
Dil. Factor: 1.0000

ALS Bottle#: 23

Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Pittsburgh  
Recovery Report

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050123.D  
 Lims ID: 180-105108-A-7  
 Client ID: HD-COD-SW-16-0/1-0  
 Sample Type: Client  
 Inject. Date: 02-May-2020 00:15:30 ALS Bottle#: 23 Worklist Smp#: 23  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: 180-0031777-023  
 Operator ID: 034635 Instrument ID: CHHP5  
 Method: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\MMSVOA\_LL\_CHHP5.m  
 Limit Group: VOA 8260C\_D ICAL  
 Last Update: 03-May-2020 16:26:57 Calib Date: 03-Apr-2020 19:09:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP5\20200403-31442.b\5040310.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: CTX0317

First Level Reviewer: journetp

Date: 02-May-2020 18:52:52

Compound	Amount Added	Amount Recovered	% Rec.
\$ 5 Dibromofluoromethane (Surr)	50.0	51.2	102.38
\$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	43.1	86.22
\$ 7 Toluene-d8 (Surr)	50.0	37.3	74.67
\$ 8 4-Bromofluorobenzene (Surr)	50.0	45.8	91.62

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050123.D

Injection Date: 02-May-2020 00:15:30

Instrument ID: CHHP5

Lims ID: 180-105108-A-7

Lab Sample ID: 180-105108-7

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

Operator ID: 034635

ALS Bottle#: 23

Worklist Smp#: 23

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

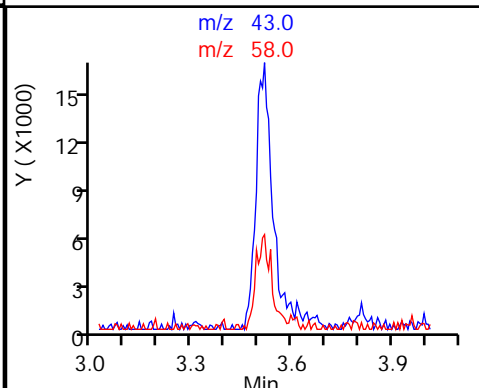
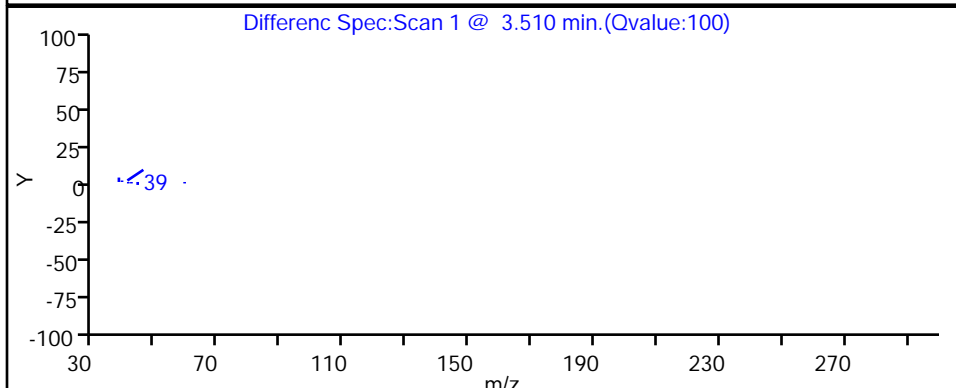
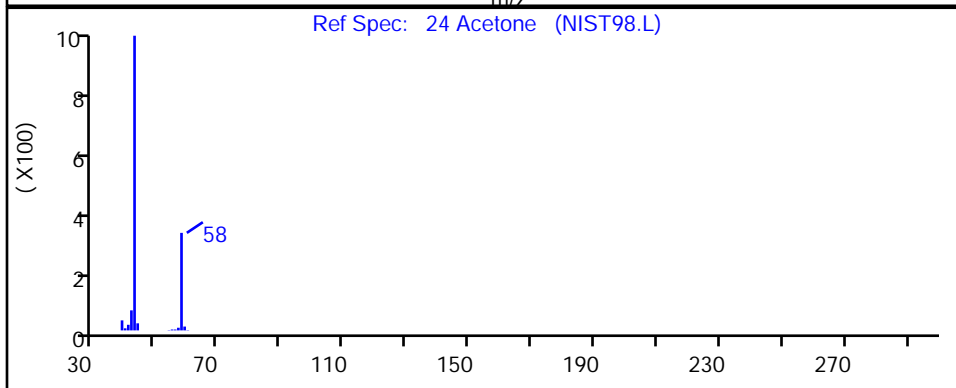
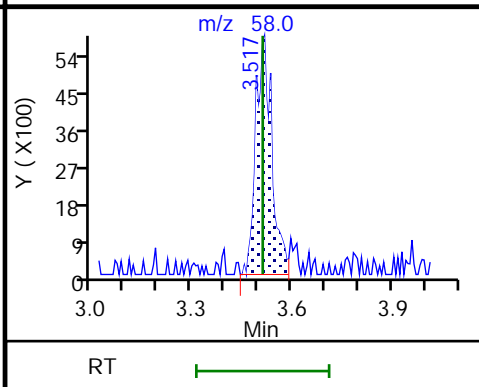
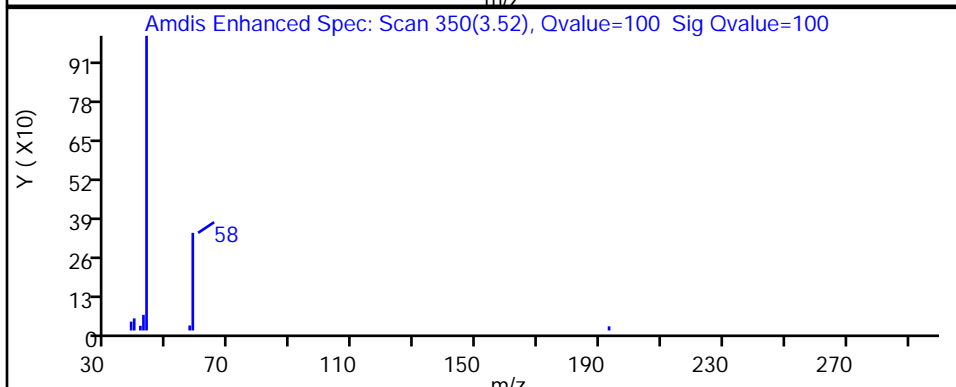
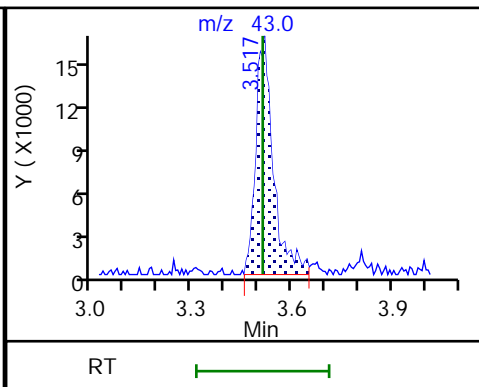
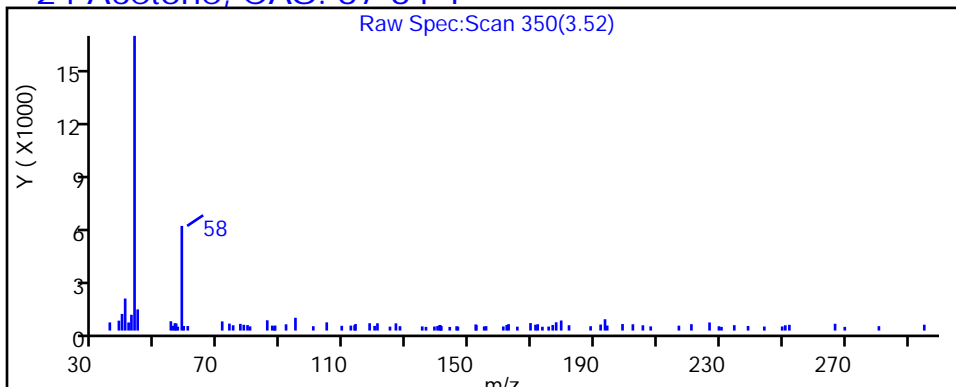
Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

24 Acetone, CAS: 67-64-1

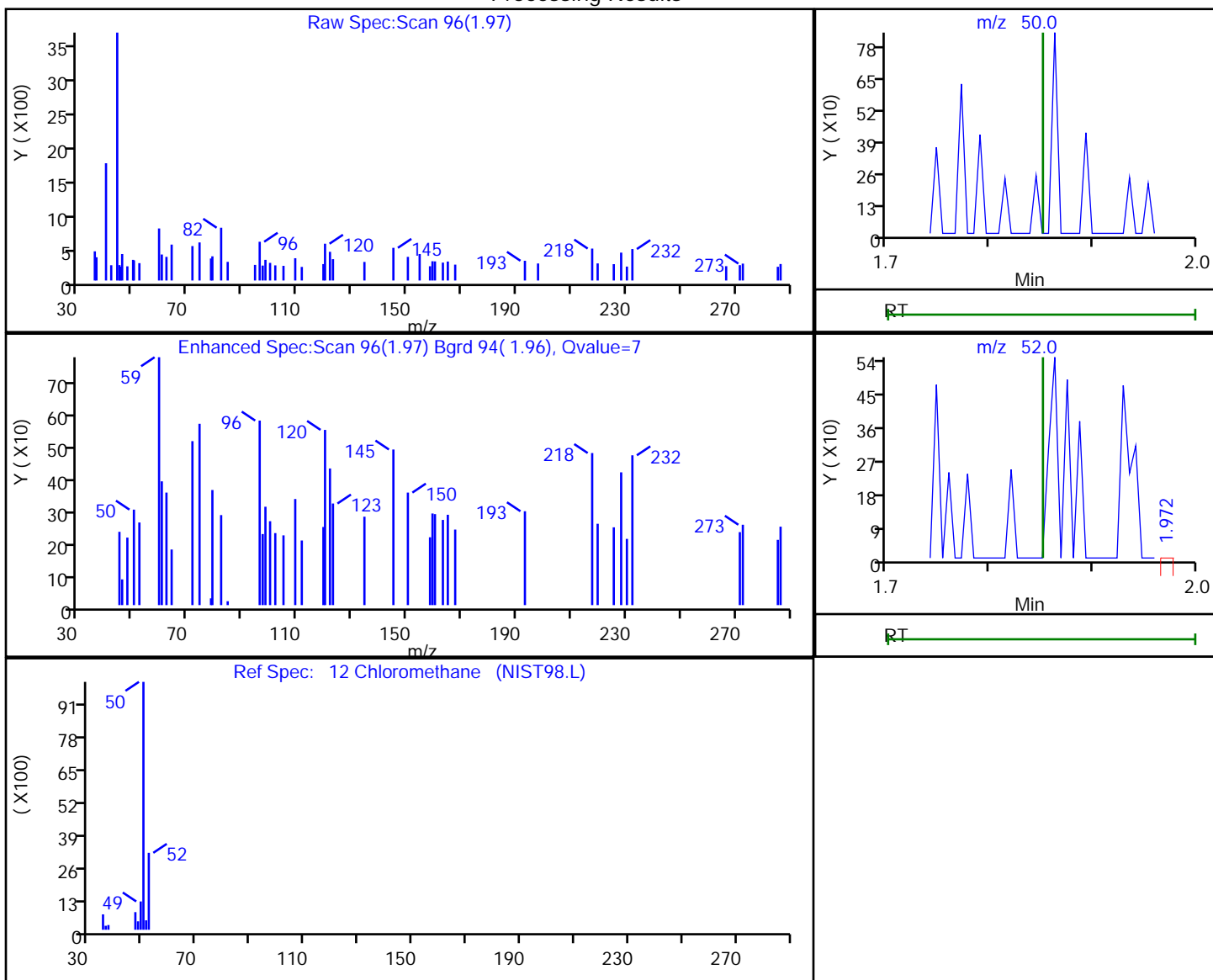


Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050123.D  
 Injection Date: 02-May-2020 00:15:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-A-7 Lab Sample ID: 180-105108-7  
 Client ID: HD-COD-SW-16-0/1-0  
 Operator ID: 034635 ALS Bottle#: 23 Worklist Smp#: 23  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

12 Chloromethane, CAS: 74-87-3

Processing Results



RT	Mass	Response	Amount
1.97	50.00	483	0.137120
1.97	52.00	94	

Reviewer: journetp, 02-May-2020 18:52:34

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050123.D

Injection Date: 02-May-2020 00:15:30

Instrument ID: CHHP5

Lims ID: 180-105108-A-7

Lab Sample ID: 180-105108-7

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

Operator ID: 034635

ALS Bottle#: 23 Worklist Smp#: 23

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

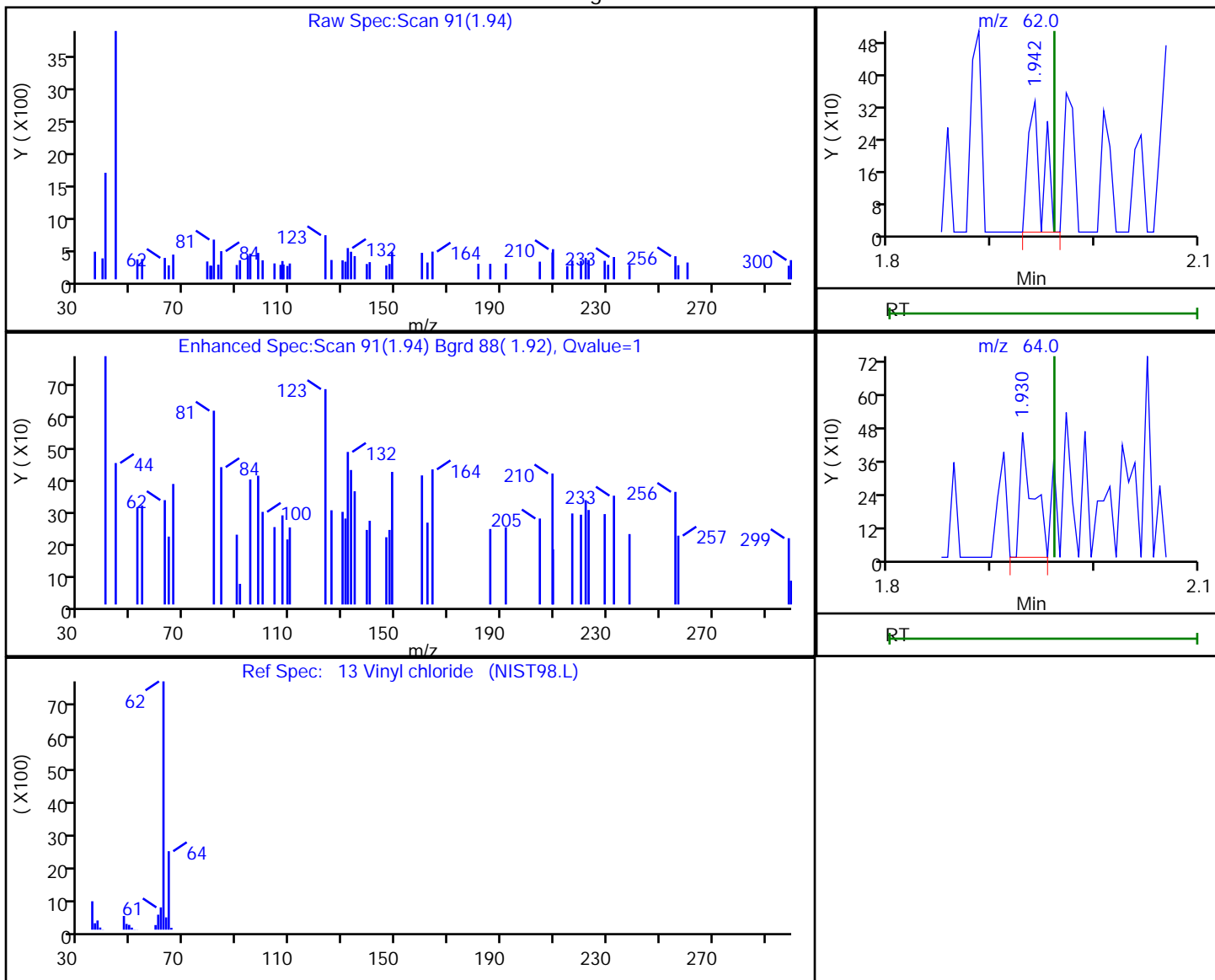
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

13 Vinyl chloride, CAS: 75-01-4

Processing Results



RT	Mass	Response	Amount
1.94	62.00	313	0.099780
1.93	64.00	408	

Reviewer: journetp, 02-May-2020 18:52:34

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050123.D

Injection Date: 02-May-2020 00:15:30

Instrument ID: CHHP5

Lims ID: 180-105108-A-7

Lab Sample ID: 180-105108-7

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

Operator ID: 034635

ALS Bottle#: 23 Worklist Smp#: 23

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

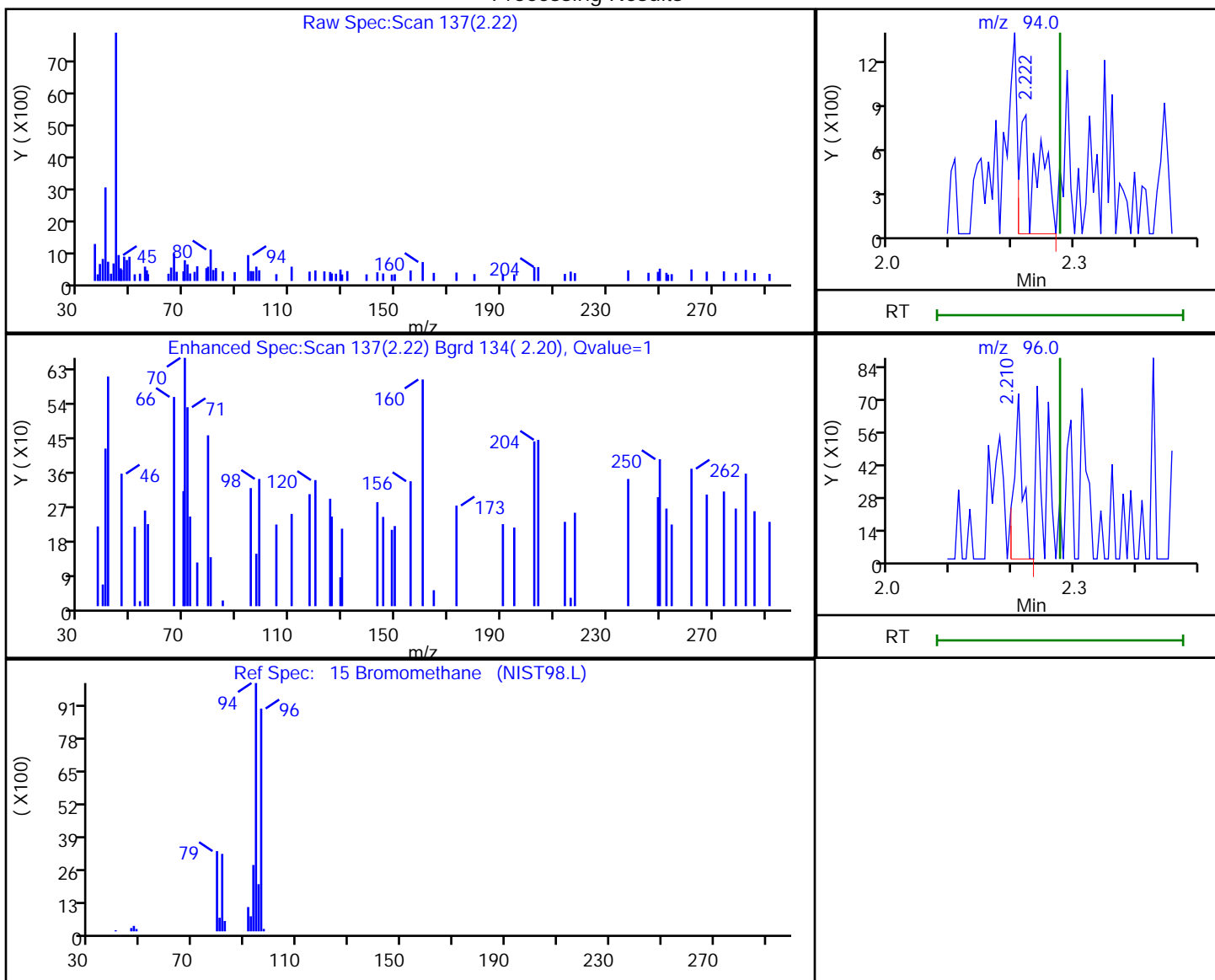
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

15 Bromomethane, CAS: 74-83-9

Processing Results



RT	Mass	Response	Amount
2.22	94.00	1723	0.959313
2.21	96.00	677	

Reviewer: journtp, 02-May-2020 18:52:34

Audit Action: Marked Compound Undetected

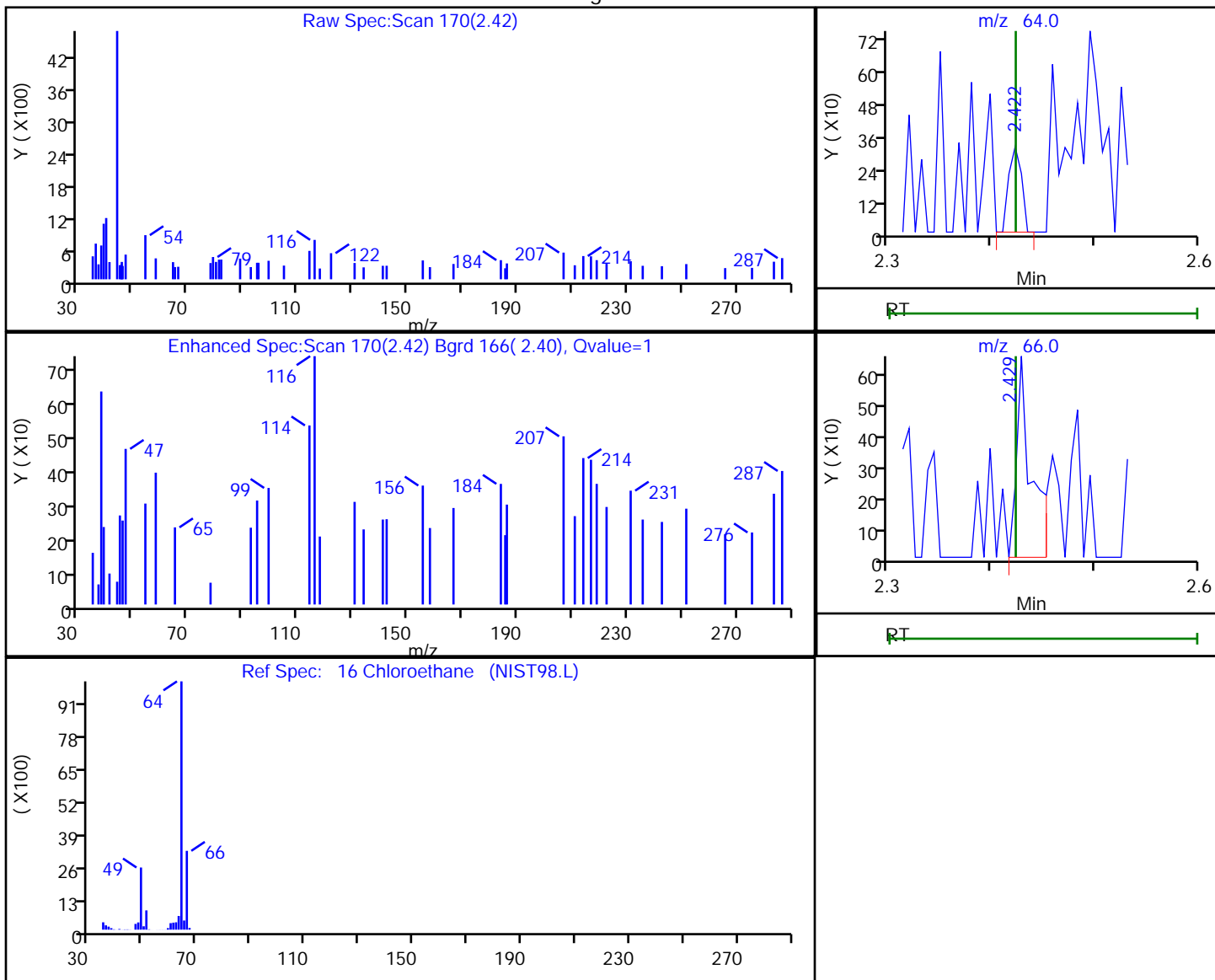
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050123.D  
Injection Date: 02-May-2020 00:15:30 Instrument ID: CHHP5  
Lims ID: 180-105108-A-7 Lab Sample ID: 180-105108-7  
Client ID: HD-COD-SW-16-0/1-0  
Operator ID: 034635 ALS Bottle#: 23 Worklist Smp#: 23  
Purge Vol: 5.000 mL Dil. Factor: 1.0000  
Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
Column: DB-624 (0.18 mm) Detector: MS SCAN

16 Chloroethane, CAS: 75-00-3

Processing Results



RT	Mass	Response	Amount
2.42	64.00	275	0.129220
2.43	66.00	651	

Reviewer: journetp, 02-May-2020 18:52:34

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050123.D

Injection Date: 02-May-2020 00:15:30

Instrument ID: CHHP5

Lims ID: 180-105108-A-7

Lab Sample ID: 180-105108-7

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

Operator ID: 034635

ALS Bottle#: 23 Worklist Smp#: 23

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

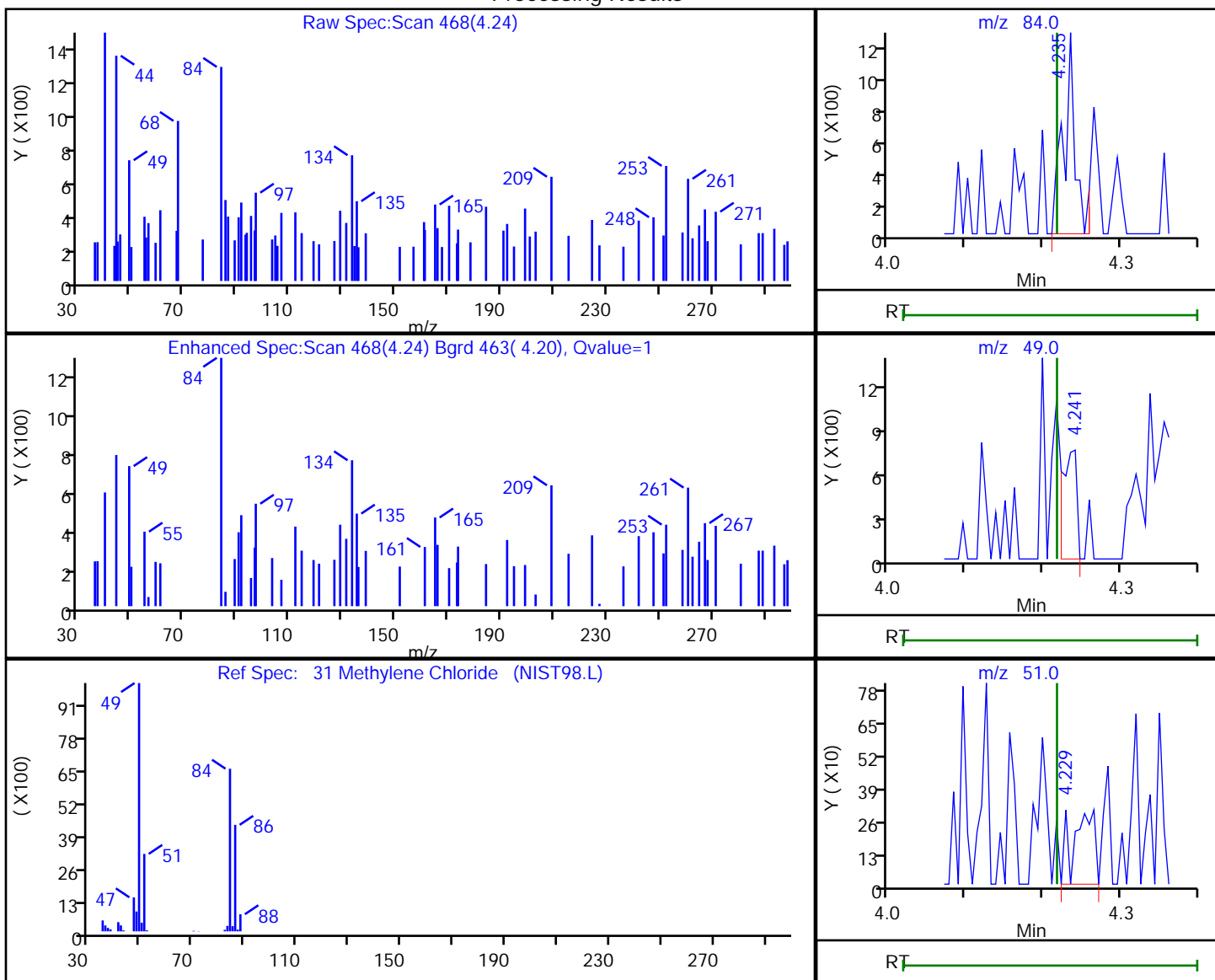
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

31 Methylene Chloride, CAS: 75-09-2

Processing Results



RT	Mass	Response	Amount
4.24	84.00	1371	-1.116407
4.24	49.00	954	
4.23	51.00	562	

Reviewer: journeyp, 02-May-2020 18:52:45

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID



Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050123.D

Injection Date: 02-May-2020 00:15:30

Instrument ID: CHHP5

Lims ID: 180-105108-A-7

Lab Sample ID: 180-105108-7

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

Operator ID: 034635

ALS Bottle#: 23 Worklist Smp#: 23

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

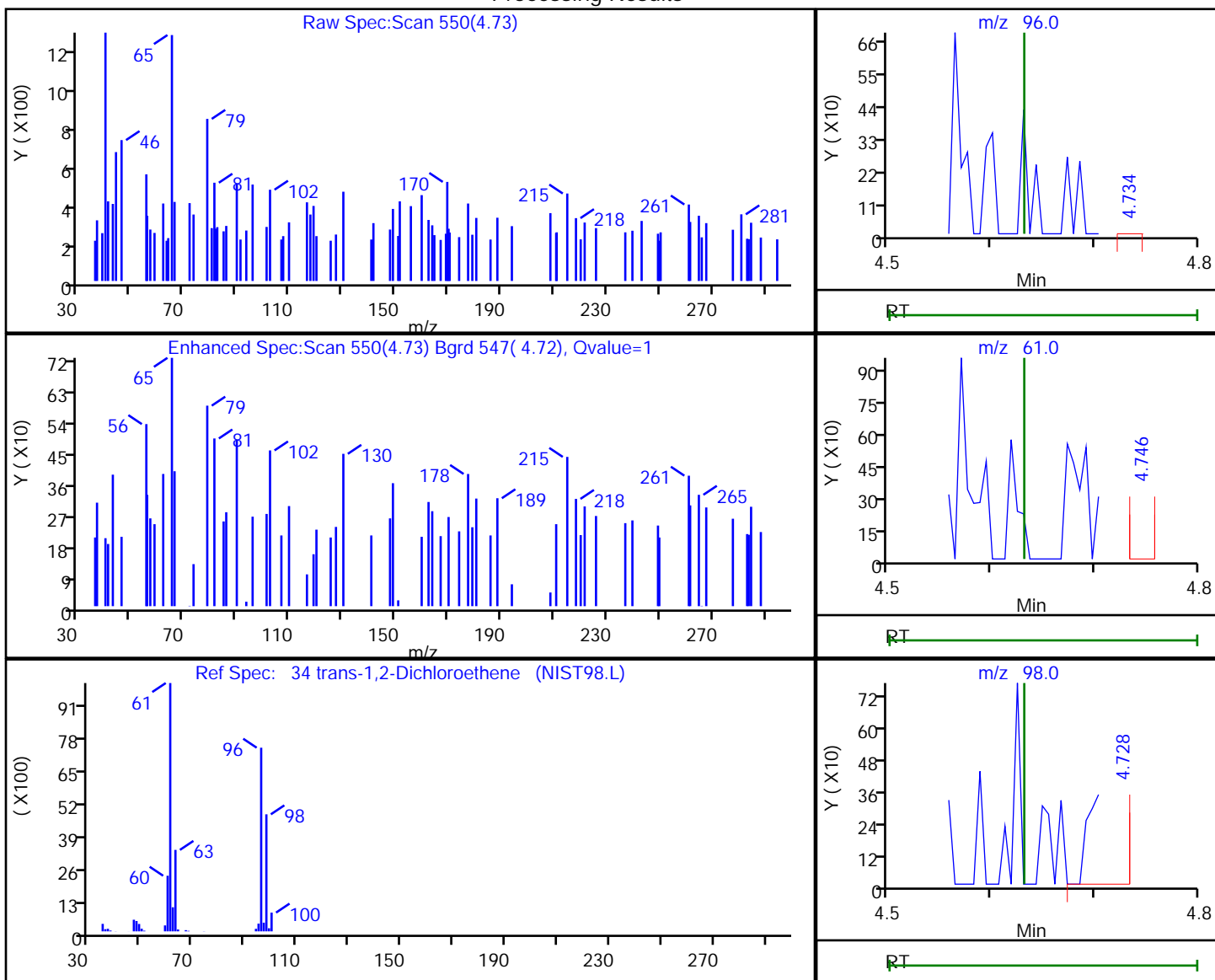
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

34 trans-1,2-Dichloroethene, CAS: 156-60-5

Processing Results



RT	Mass	Response	Amount
4.73	96.00	433	0.219371
4.75	61.00	198	
4.73	98.00	713	

Reviewer: journeyp, 02-May-2020 18:52:45

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050123.D

Injection Date: 02-May-2020 00:15:30

Instrument ID: CHHP5

Lims ID: 180-105108-A-7

Lab Sample ID: 180-105108-7

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

Operator ID: 034635

ALS Bottle#: 23 Worklist Smp#: 23

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

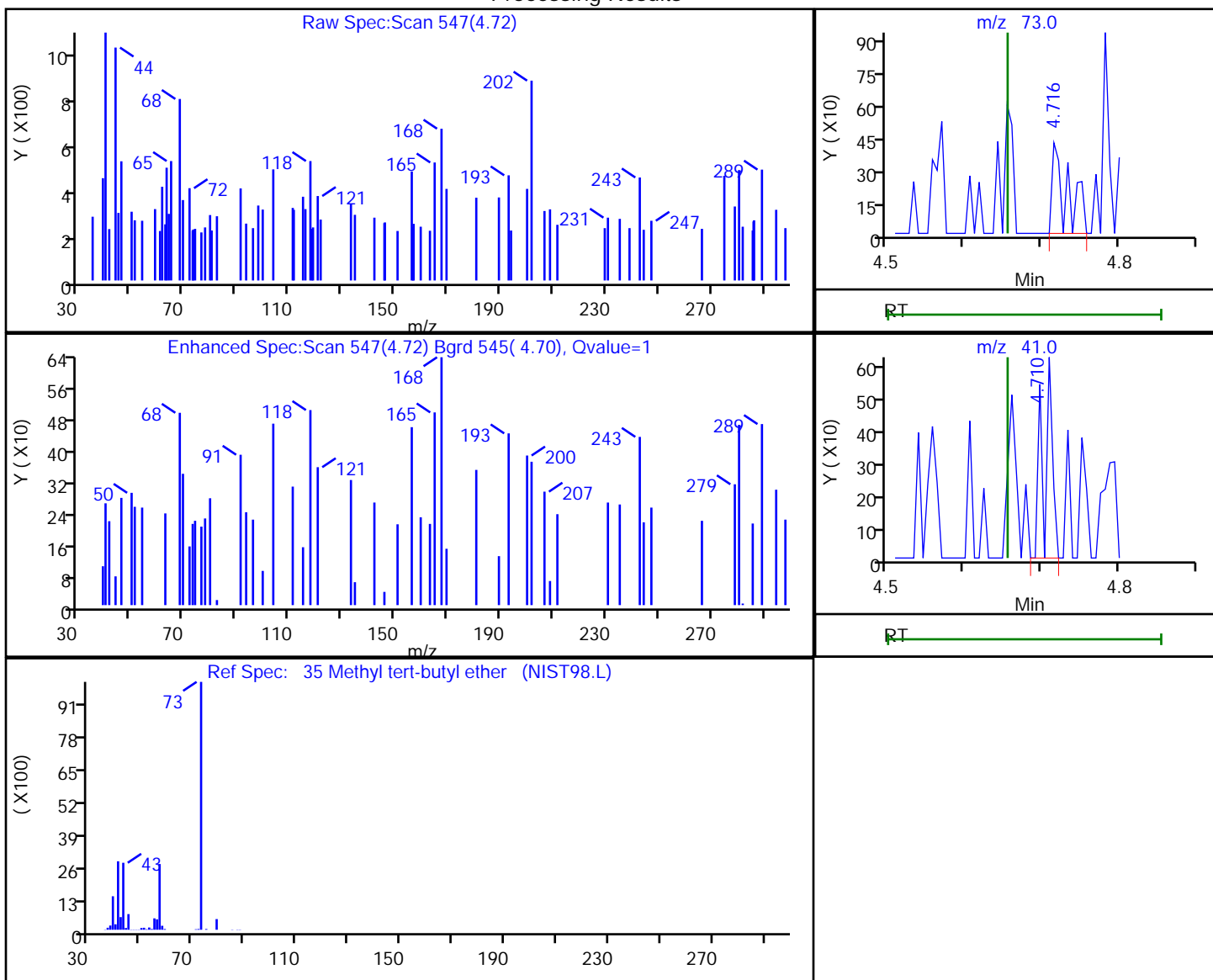
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

35 Methyl tert-butyl ether, CAS: 1634-04-4

Processing Results



RT	Mass	Response	Amount
4.72	73.00	575	0.103802
4.71	41.00	503	

Reviewer: journtp, 02-May-2020 18:52:45

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050123.D

Injection Date: 02-May-2020 00:15:30

Instrument ID: CHHP5

Lims ID: 180-105108-A-7

Lab Sample ID: 180-105108-7

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

Operator ID: 034635

ALS Bottle#: 23 Worklist Smp#: 23

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

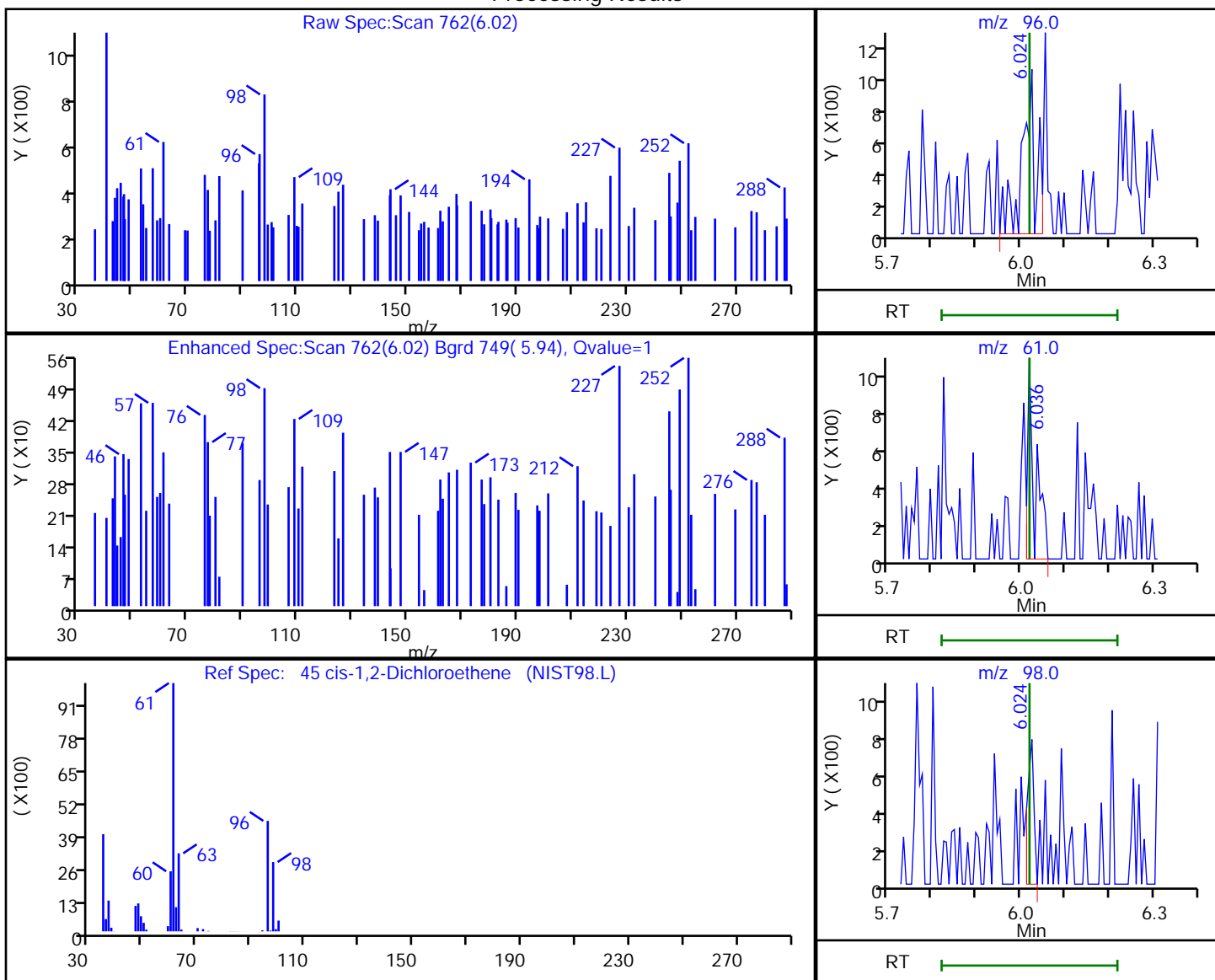
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

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

Processing Results



RT	Mass	Response	Amount
6.02	96.00	2040	0.868589
6.04	61.00	1282	
6.02	98.00	747	

Reviewer: journetp, 02-May-2020 18:52:45

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050123.D

Injection Date: 02-May-2020 00:15:30

Instrument ID: CHHP5

Lims ID: 180-105108-A-7

Lab Sample ID: 180-105108-7

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

Operator ID: 034635

ALS Bottle#: 23 Worklist Smp#: 23

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

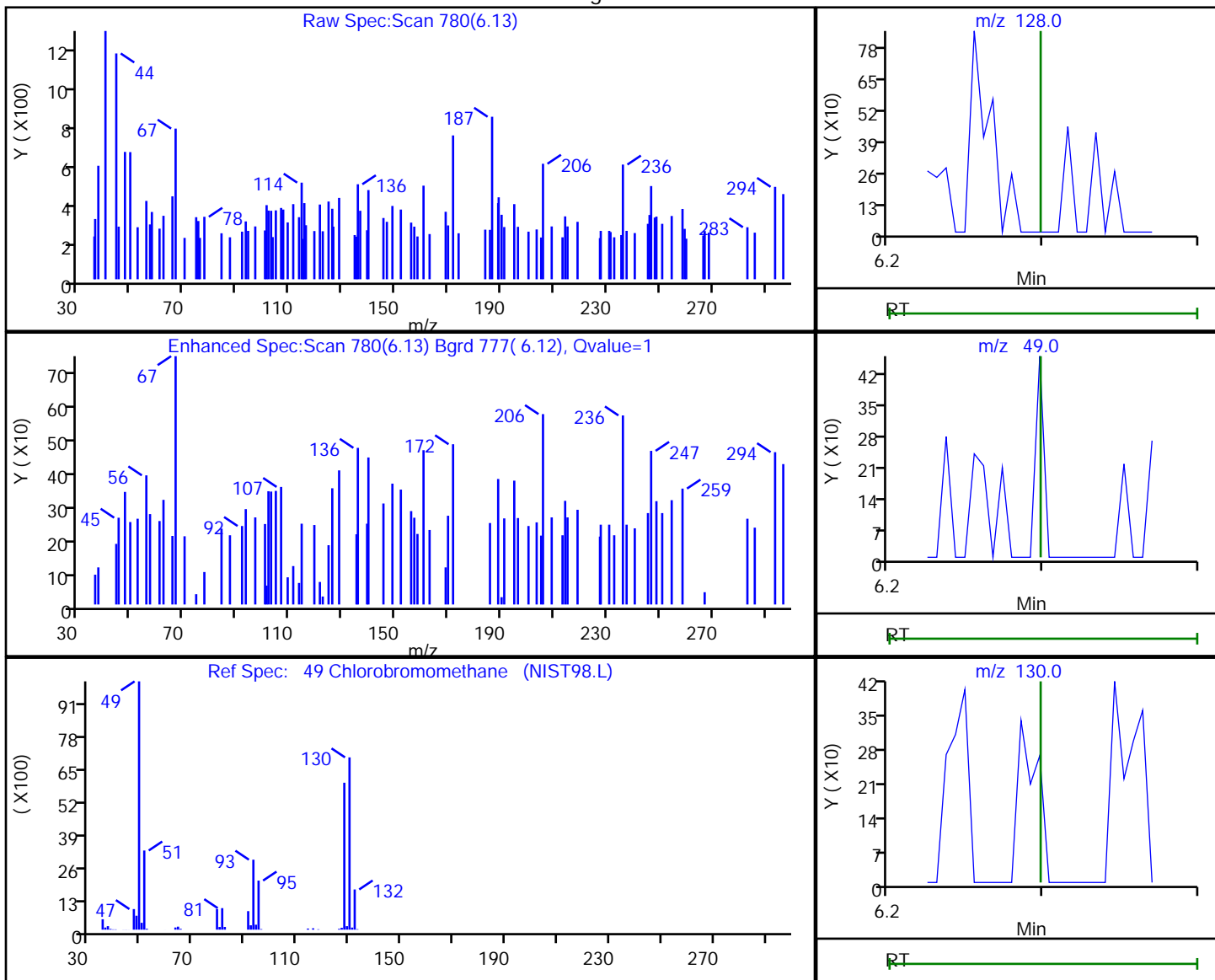
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

49 Chlorobromomethane, CAS: 74-97-5

Processing Results



RT	Mass	Response	Amount
6.13	128.00	274	0.218894
6.13	49.00	231	
6.15	130.00	321	

Reviewer: journeyp, 02-May-2020 18:52:45

Audit Action: Marked Compound Undetected

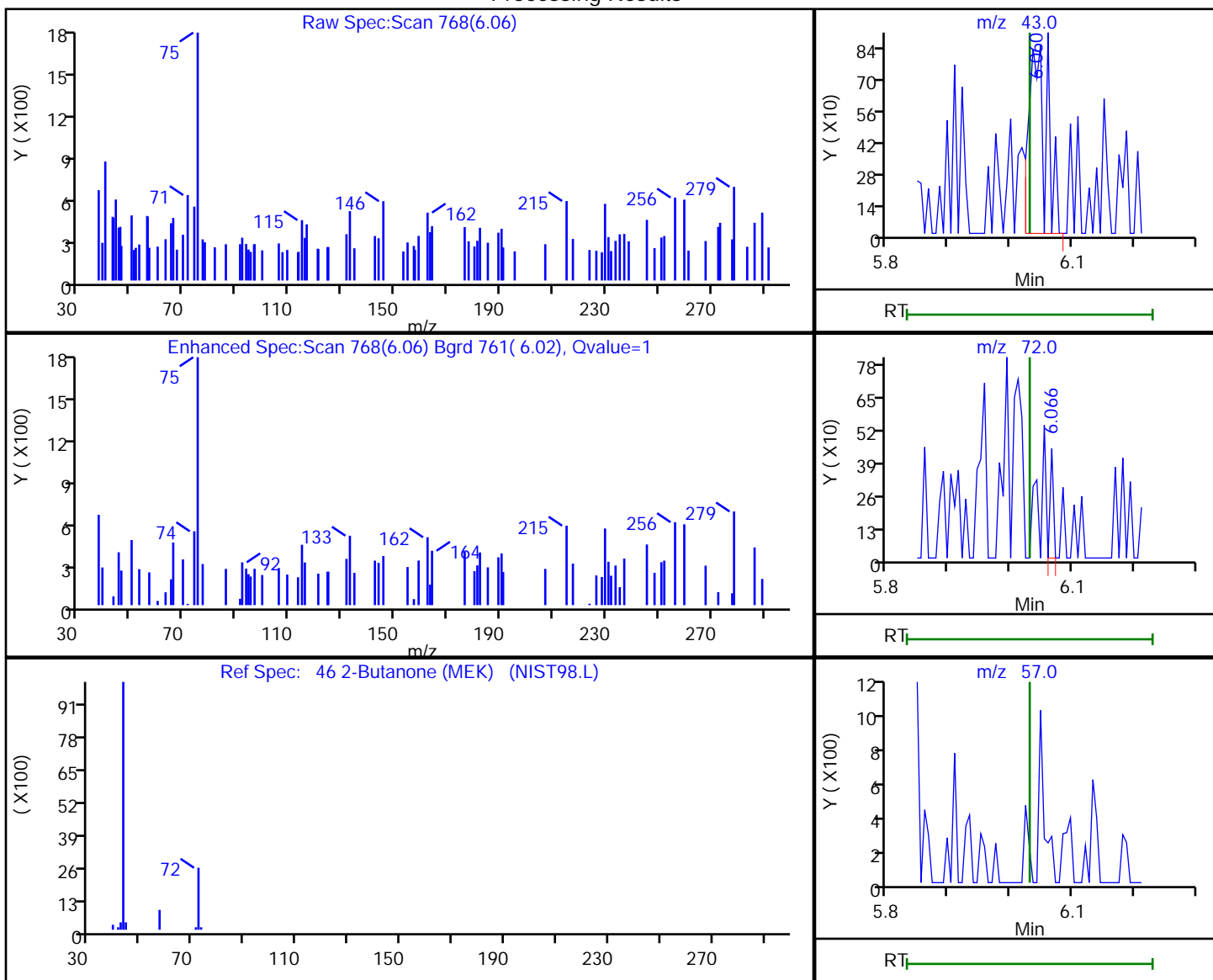
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050123.D  
 Injection Date: 02-May-2020 00:15:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-A-7 Lab Sample ID: 180-105108-7  
 Client ID: HD-COD-SW-16-0/1-0  
 Operator ID: 034635 ALS Bottle#: 23 Worklist Smp#: 23  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

46 2-Butanone (MEK), CAS: 78-93-3

Processing Results



RT	Mass	Response	Amount
6.06	43.00	1691	1.275167
6.07	72.00	160	
6.03	57.00	0	

Reviewer: journeyp, 02-May-2020 18:52:45  
 Audit Action: Marked Compound Undetected

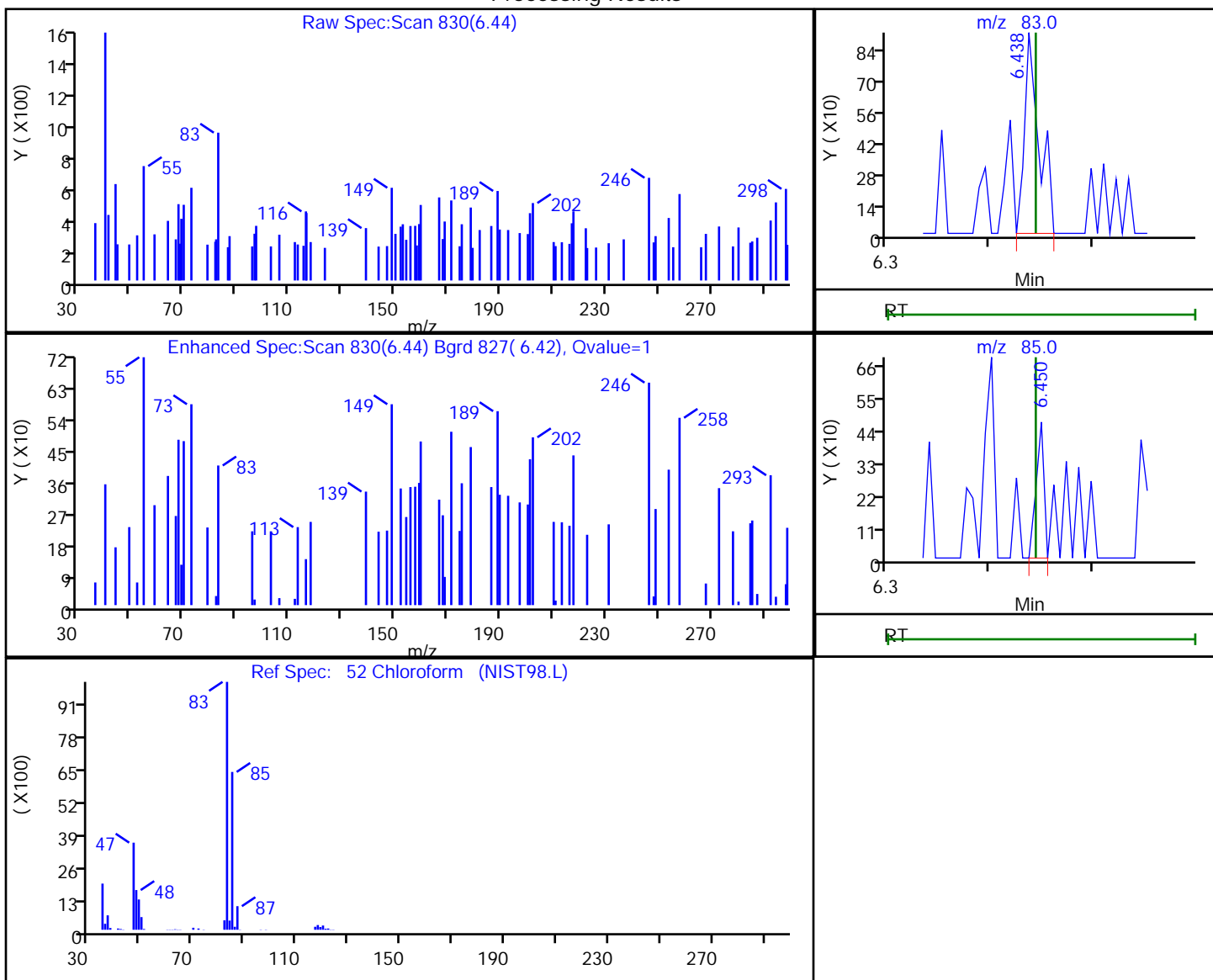
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050123.D  
 Injection Date: 02-May-2020 00:15:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-A-7 Lab Sample ID: 180-105108-7  
 Client ID: HD-COD-SW-16-0/1-0  
 Operator ID: 034635 ALS Bottle#: 23 Worklist Smp#: 23  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

52 Chloroform, CAS: 67-66-3

Processing Results



RT	Mass	Response	Amount
6.44	83.00	910	-1.511466
6.45	85.00	246	

Reviewer: journtp, 02-May-2020 18:52:45  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050123.D

Injection Date: 02-May-2020 00:15:30

Instrument ID: CHHP5

Lims ID: 180-105108-A-7

Lab Sample ID: 180-105108-7

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

Operator ID: 034635

ALS Bottle#: 23 Worklist Smp#: 23

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

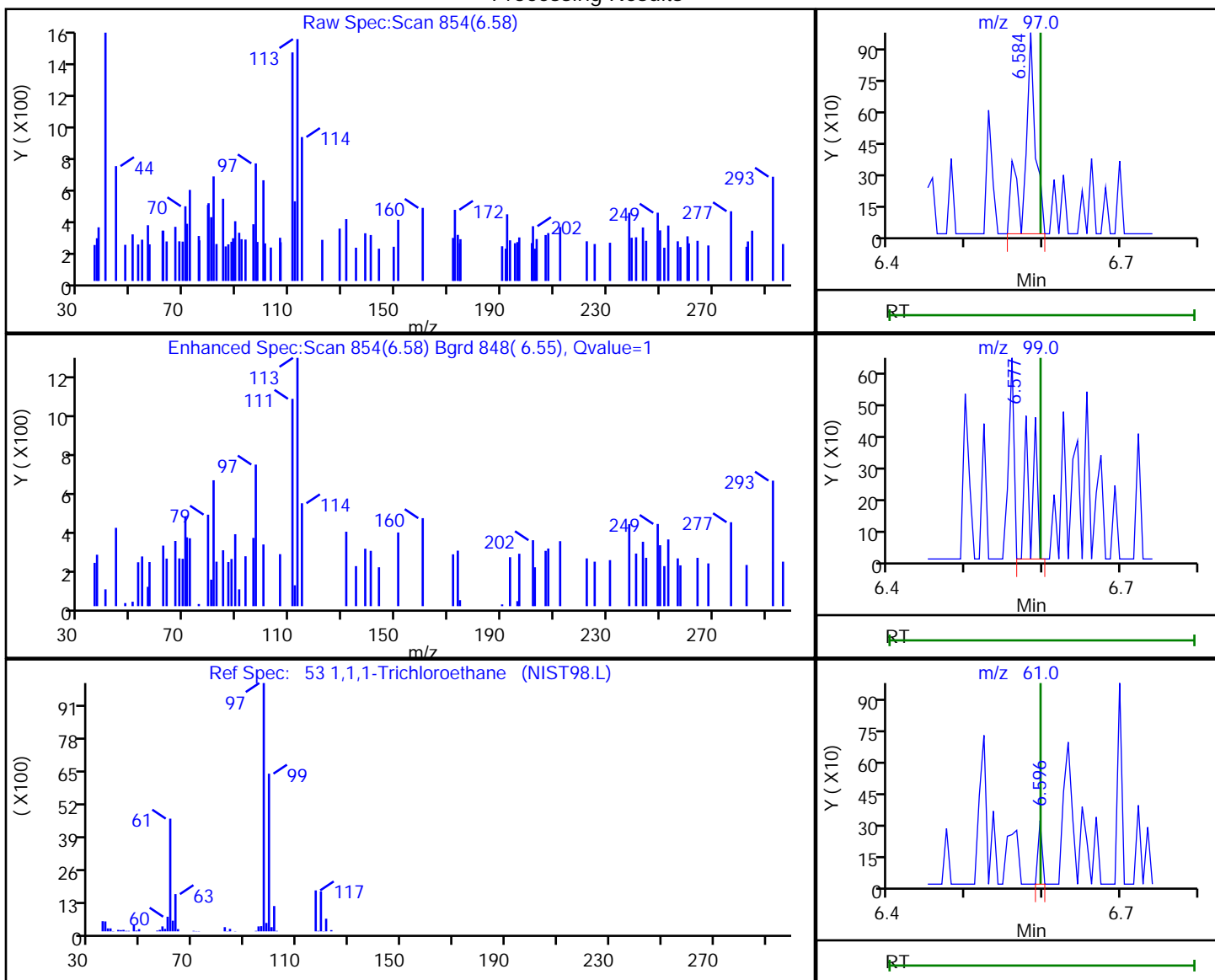
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

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

Processing Results



RT	Mass	Response	Amount
6.58	97.00	961	0.326602
6.58	99.00	332	
6.60	61.00	112	

Reviewer: journeyp, 02-May-2020 18:52:45

Audit Action: Marked Compound Undetected

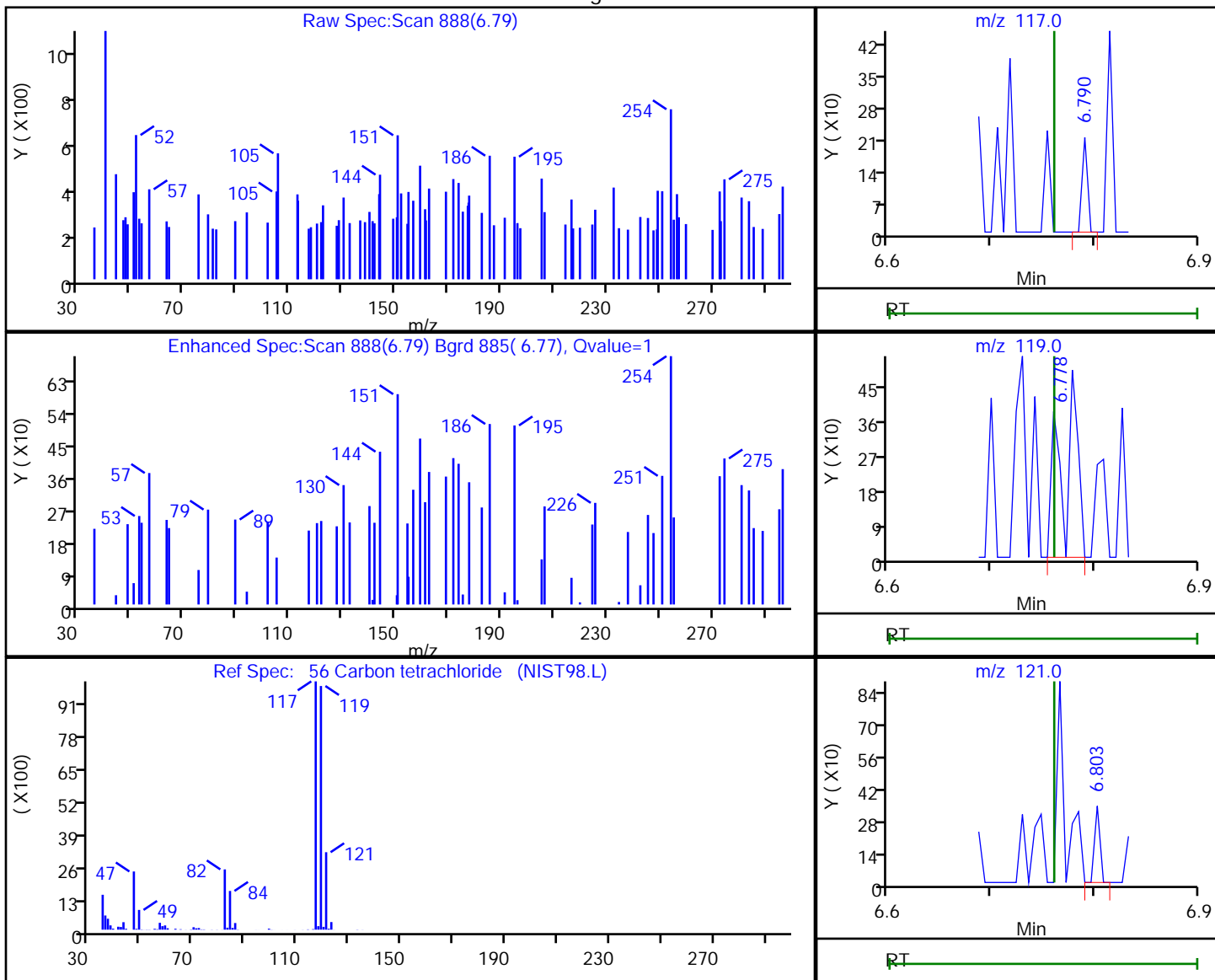
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050123.D  
Injection Date: 02-May-2020 00:15:30 Instrument ID: CHHP5  
Lims ID: 180-105108-A-7 Lab Sample ID: 180-105108-7  
Client ID: HD-COD-SW-16-0/1-0  
Operator ID: 034635 ALS Bottle#: 23 Worklist Smp#: 23  
Purge Vol: 5.000 mL Dil. Factor: 1.0000  
Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
Column: DB-624 (0.18 mm) Detector: MS SCAN

56 Carbon tetrachloride, CAS: 56-23-5

Processing Results



RT	Mass	Response	Amount
6.79	117.00	76	0.031104
6.78	119.00	509	
6.80	121.00	123	

Reviewer: journeyp, 02-May-2020 18:52:45  
Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID



Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050123.D

Injection Date: 02-May-2020 00:15:30

Instrument ID: CHHP5

Lims ID: 180-105108-A-7

Lab Sample ID: 180-105108-7

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

Operator ID: 034635

ALS Bottle#: 23 Worklist Smp#: 23

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

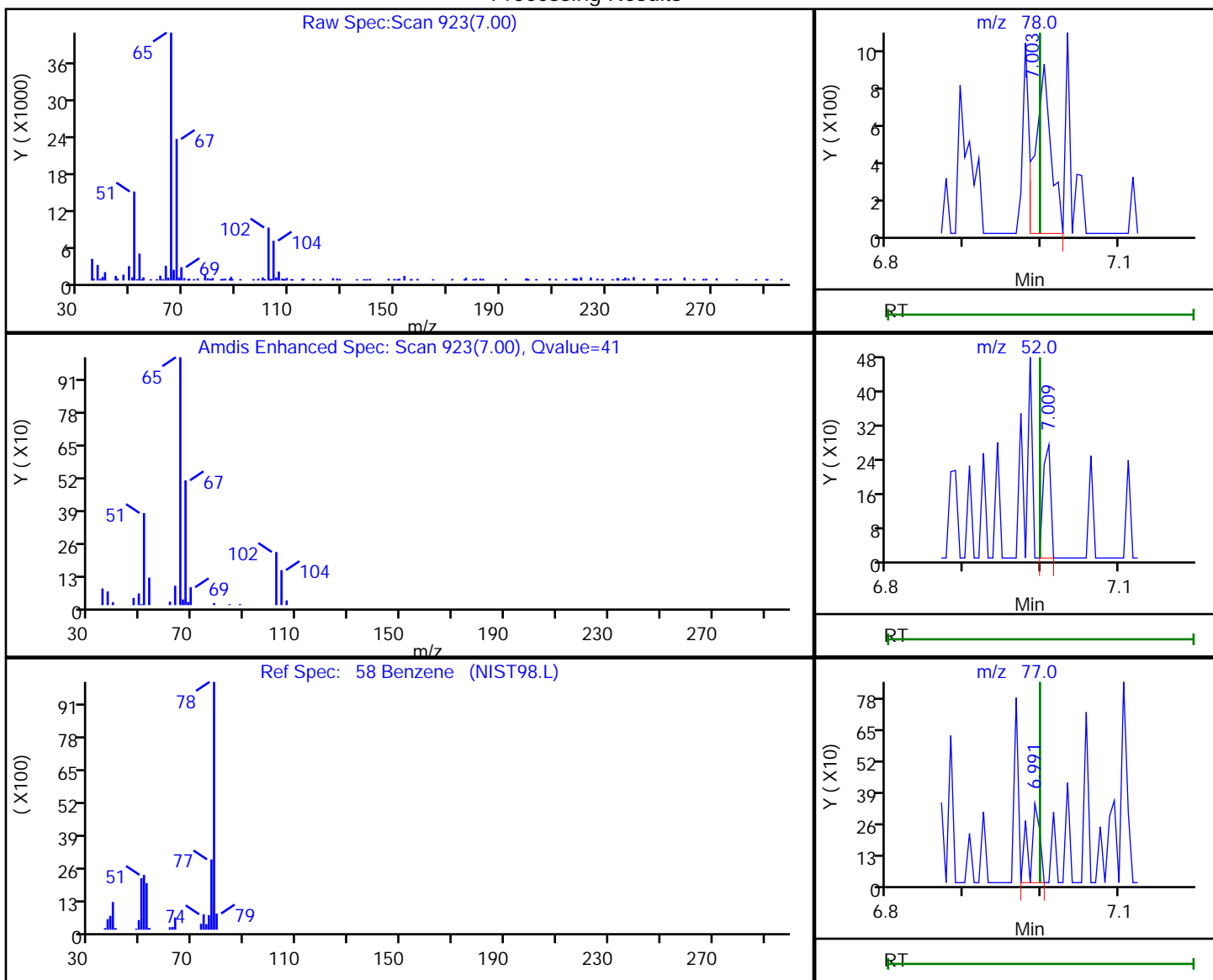
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

58 Benzene, CAS: 71-43-2

Processing Results



RT	Mass	Response	Amount
7.00	78.00	1271	0.143011
7.01	52.00	180	
6.99	77.00	300	

Reviewer: journeyp, 02-May-2020 18:52:45

Audit Action: Marked Compound Undetected

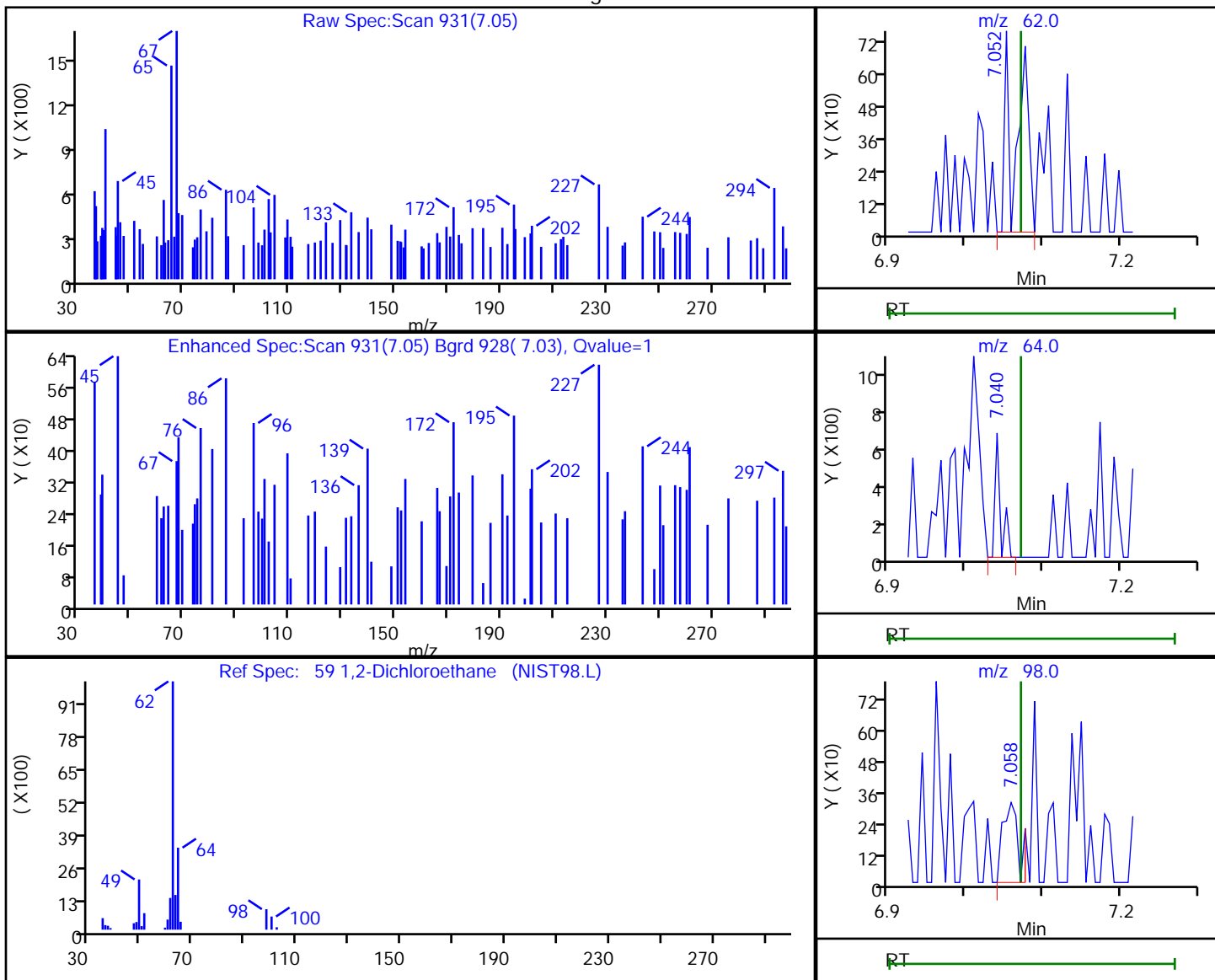
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050123.D  
 Injection Date: 02-May-2020 00:15:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-A-7 Lab Sample ID: 180-105108-7  
 Client ID: HD-COD-SW-16-0/1-0  
 Operator ID: 034635 ALS Bottle#: 23 Worklist Smp#: 23  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

59 1,2-Dichloroethane, CAS: 107-06-2

Processing Results



RT	Mass	Response	Amount
7.05	62.00	913	0.270175
7.04	64.00	323	
7.06	98.00	458	

Reviewer: journept, 02-May-2020 18:52:45  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050123.D

Injection Date: 02-May-2020 00:15:30

Instrument ID: CHHP5

Lims ID: 180-105108-A-7

Lab Sample ID: 180-105108-7

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

Operator ID: 034635

ALS Bottle#: 23 Worklist Smp#: 23

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

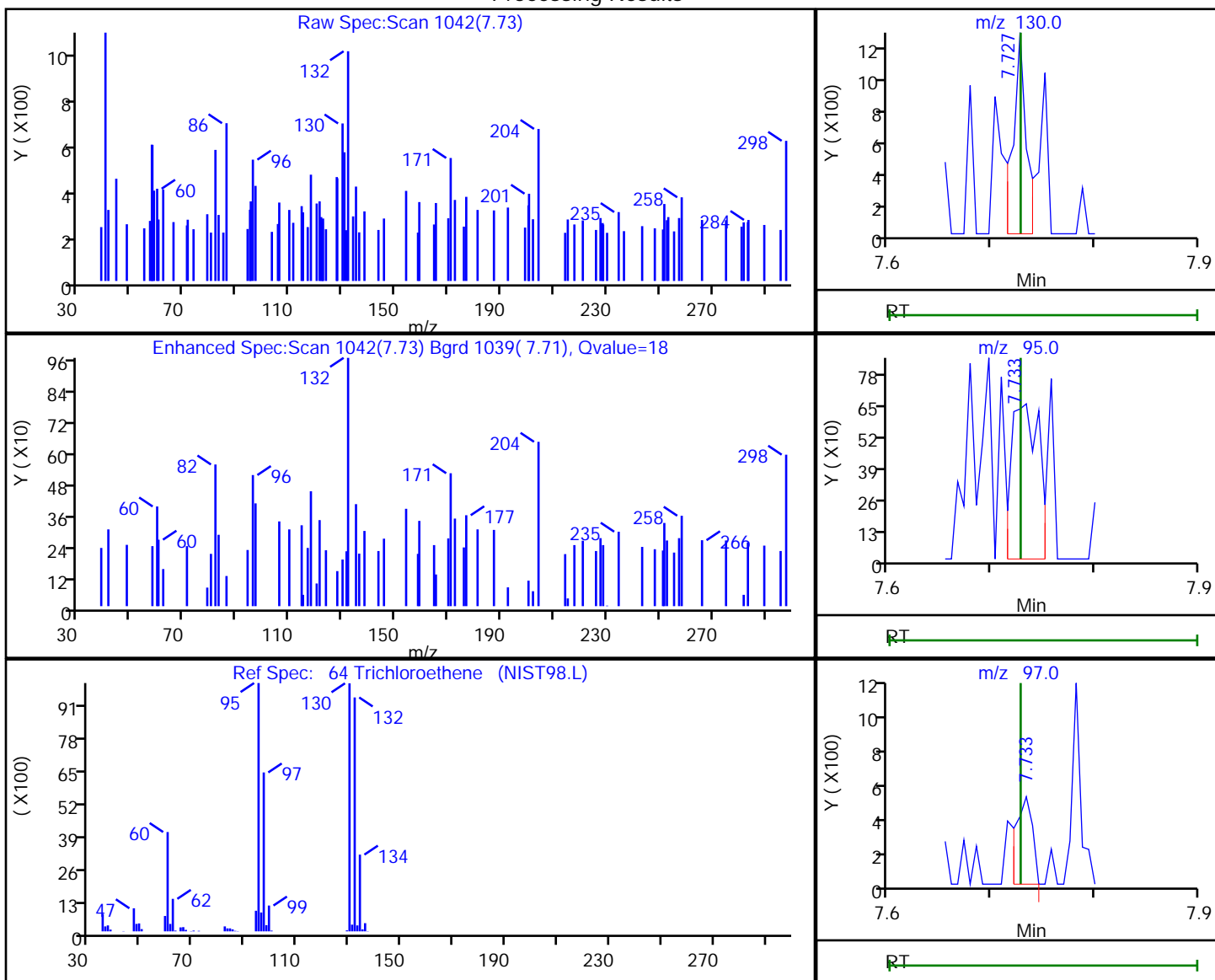
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

64 Trichloroethene, CAS: 79-01-6

Processing Results



RT	Mass	Response	Amount
7.73	130.00	1092	0.493381
7.73	95.00	1249	
7.73	97.00	580	

Reviewer: journefp, 02-May-2020 18:52:45

Audit Action: Marked Compound Undetected

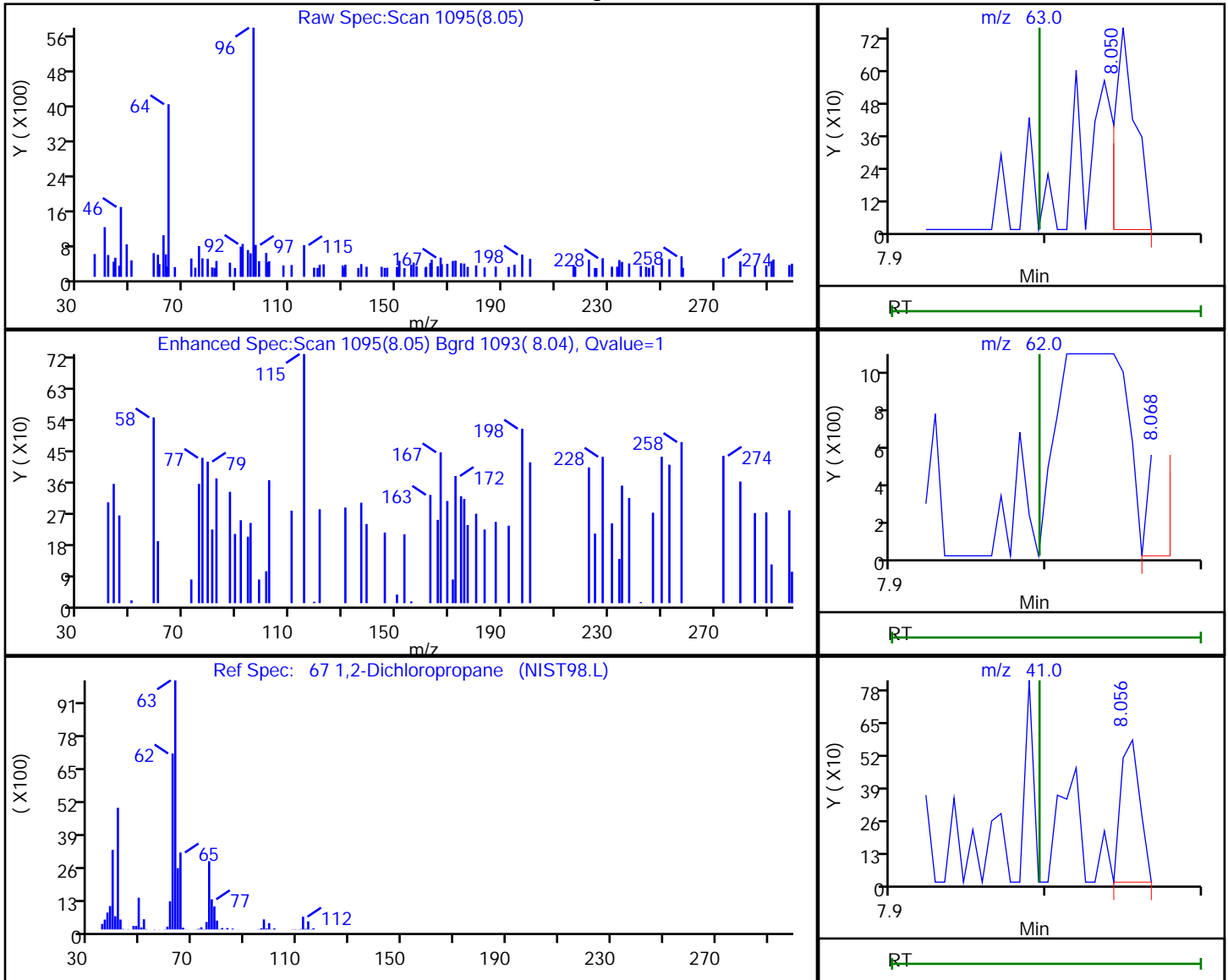
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050123.D  
 Injection Date: 02-May-2020 00:15:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-A-7 Lab Sample ID: 180-105108-7  
 Client ID: HD-COD-SW-16-0/1-0  
 Operator ID: 034635 ALS Bottle#: 23 Worklist Smp#: 23  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

67 1,2-Dichloropropane, CAS: 78-87-5

Processing Results



RT	Mass	Response	Amount
8.05	63.00	691	0.291289
8.07	62.00	366	
8.06	41.00	488	

Reviewer: journept, 02-May-2020 18:52:45  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050123.D

Injection Date: 02-May-2020 00:15:30

Instrument ID: CHHP5

Lims ID: 180-105108-A-7

Lab Sample ID: 180-105108-7

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

Operator ID: 034635

ALS Bottle#: 23 Worklist Smp#: 23

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

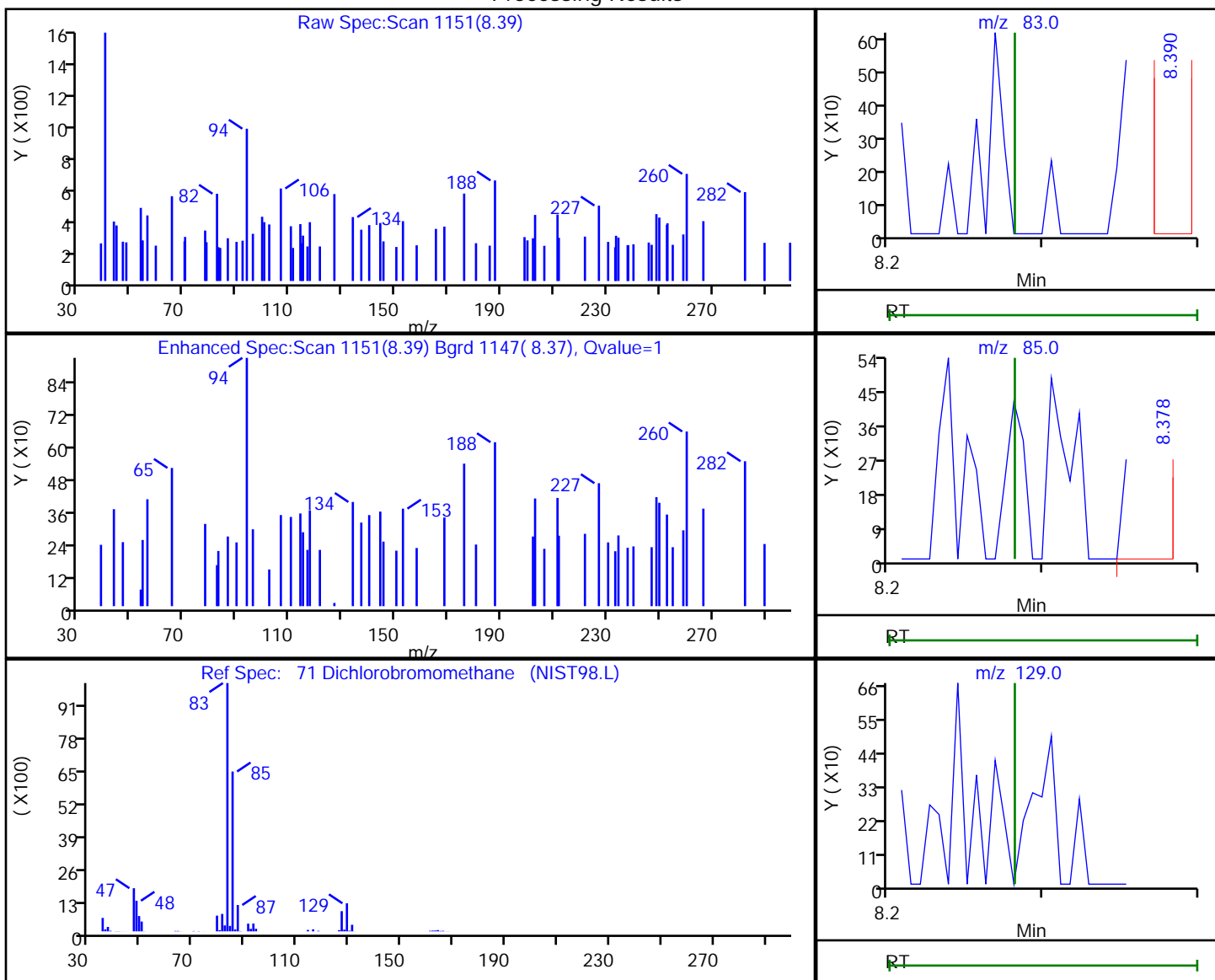
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

71 Dichlorobromomethane, CAS: 75-27-4

Processing Results



RT	Mass	Response	Amount
8.39	83.00	256	0.091970
8.38	85.00	576	
8.28	129.00	0	

Reviewer: journeyp, 02-May-2020 18:52:45

Audit Action: Marked Compound Undetected

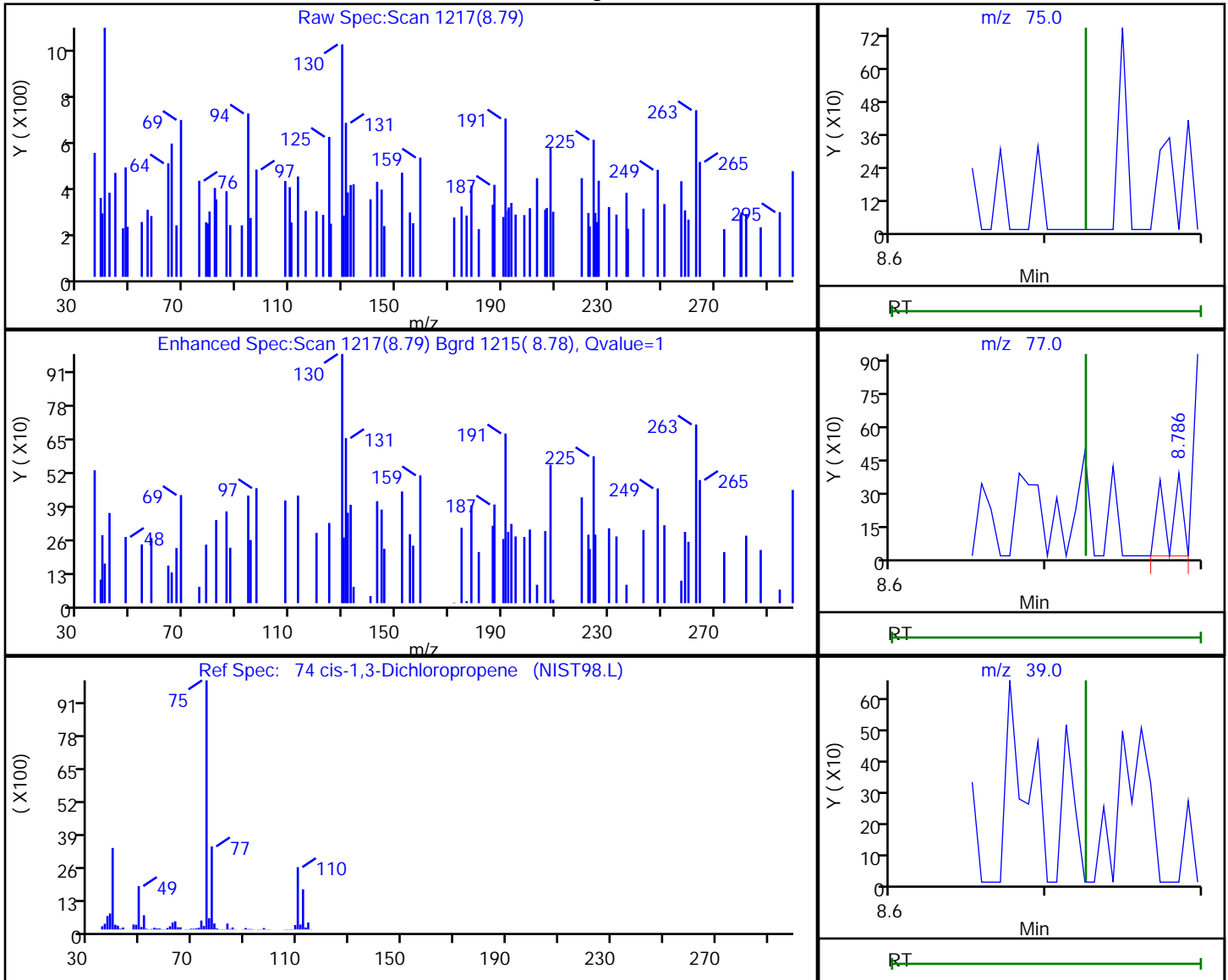
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050123.D  
 Injection Date: 02-May-2020 00:15:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-A-7 Lab Sample ID: 180-105108-7  
 Client ID: HD-COD-SW-16-0/1-0  
 Operator ID: 034635 ALS Bottle#: 23 Worklist Smp#: 23  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

74 cis-1,3-Dichloropropene, CAS: 10061-01-5

Processing Results



RT	Mass	Response	Amount
8.79	75.00	230	0.065627
8.79	77.00	265	
8.80	39.00	528	

Reviewer: journept, 02-May-2020 18:52:45  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050123.D

Injection Date: 02-May-2020 00:15:30

Instrument ID: CHHP5

Lims ID: 180-105108-A-7

Lab Sample ID: 180-105108-7

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

Operator ID: 034635

ALS Bottle#: 23

Worklist Smp#: 23

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

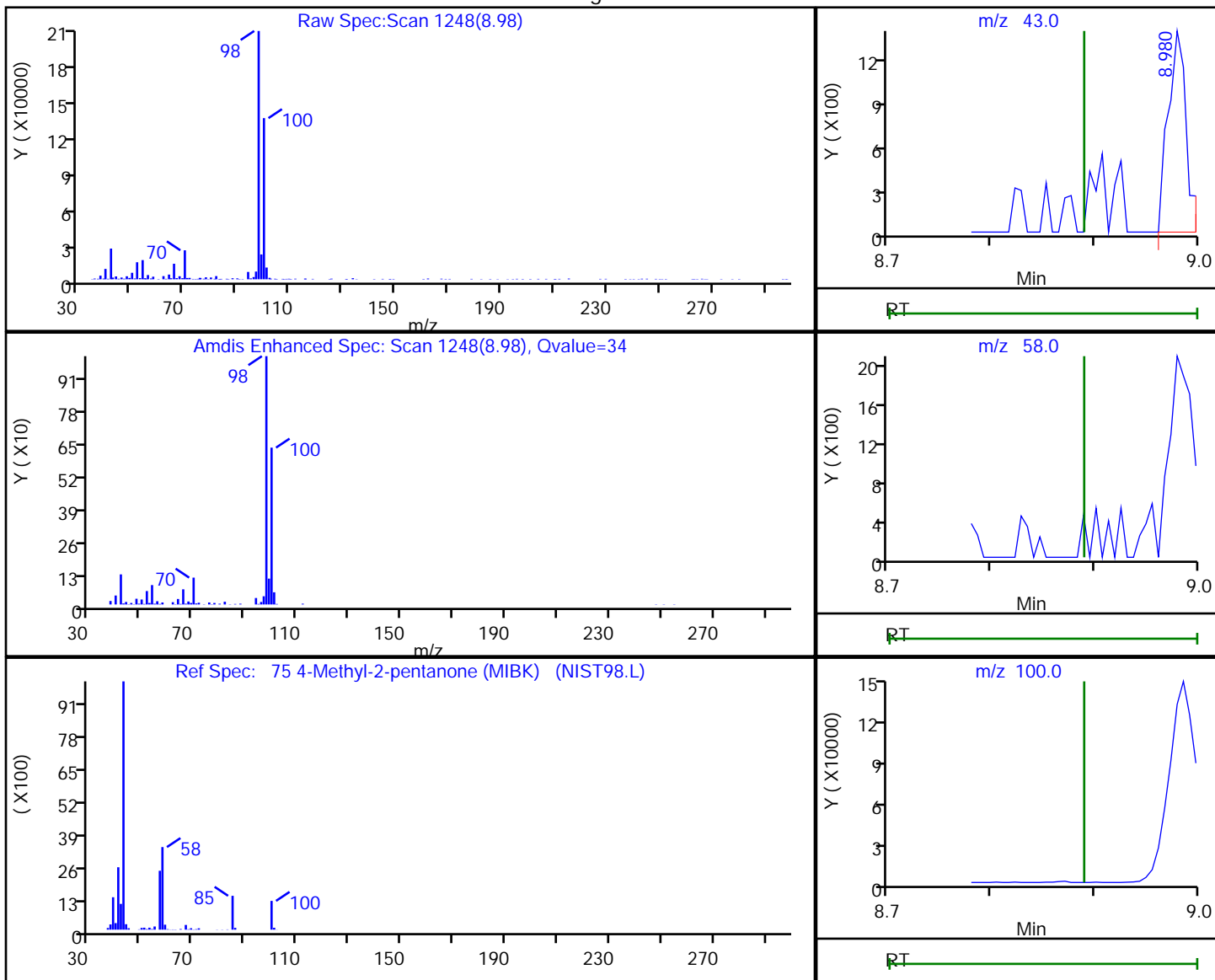
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

75 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Processing Results



RT	Mass	Response	Amount
8.98	43.00	1675	15.912475
8.98	58.00	3513	
8.99	100.00	287298	

Reviewer: journept, 02-May-2020 18:52:45

Audit Action: Marked Compound Undetected

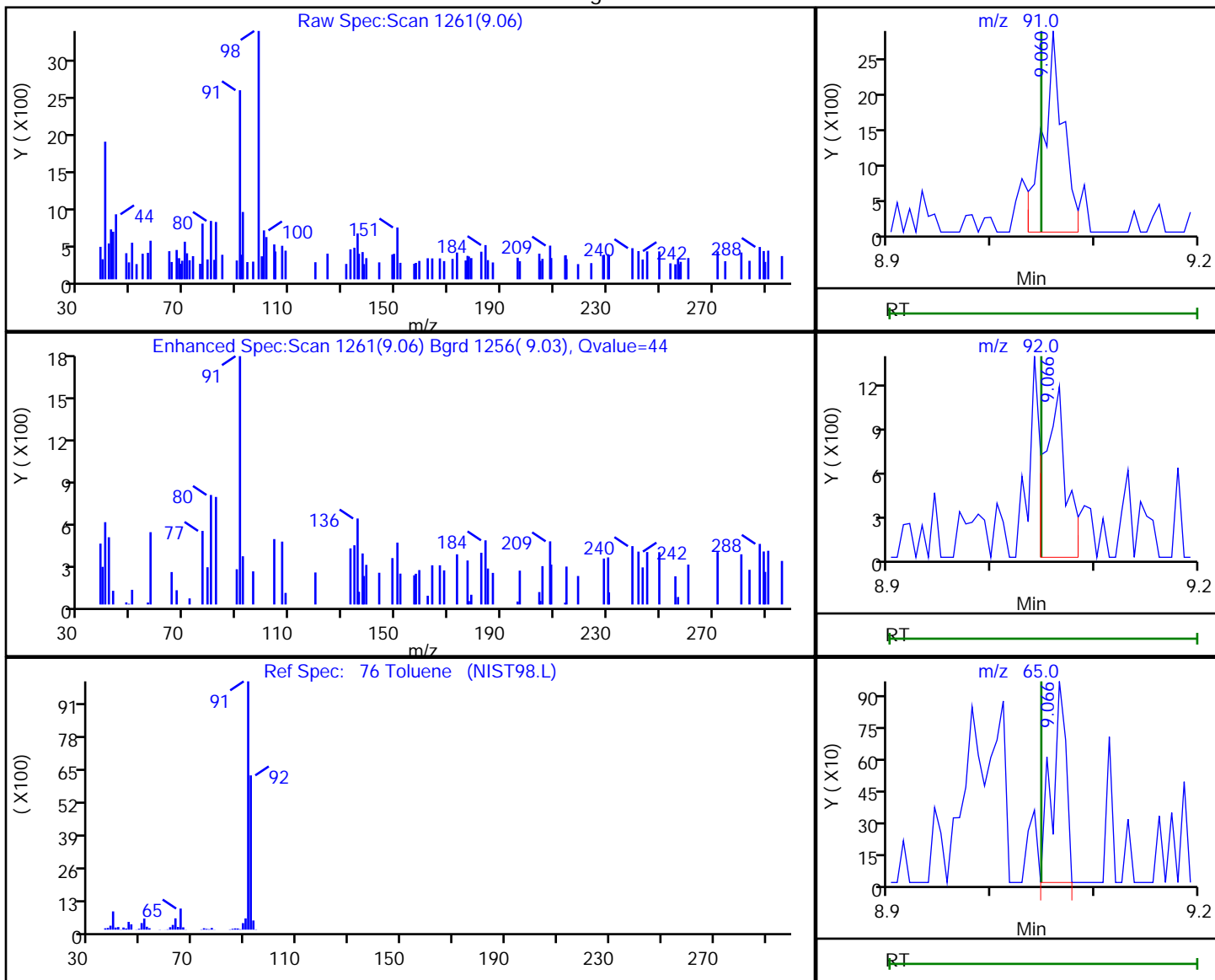
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050123.D  
Injection Date: 02-May-2020 00:15:30 Instrument ID: CHHP5  
Lims ID: 180-105108-A-7 Lab Sample ID: 180-105108-7  
Client ID: HD-COD-SW-16-0/1-0  
Operator ID: 034635 ALS Bottle#: 23 Worklist Smp#: 23  
Purge Vol: 5.000 mL Dil. Factor: 1.0000  
Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
Column: DB-624 (0.18 mm) Detector: MS SCAN

76 Toluene, CAS: 108-88-3

Processing Results



RT	Mass	Response	Amount
9.06	91.00	3927	0.280064
9.07	92.00	1669	
9.07	65.00	903	

Reviewer: journeyp, 02-May-2020 18:52:45  
Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

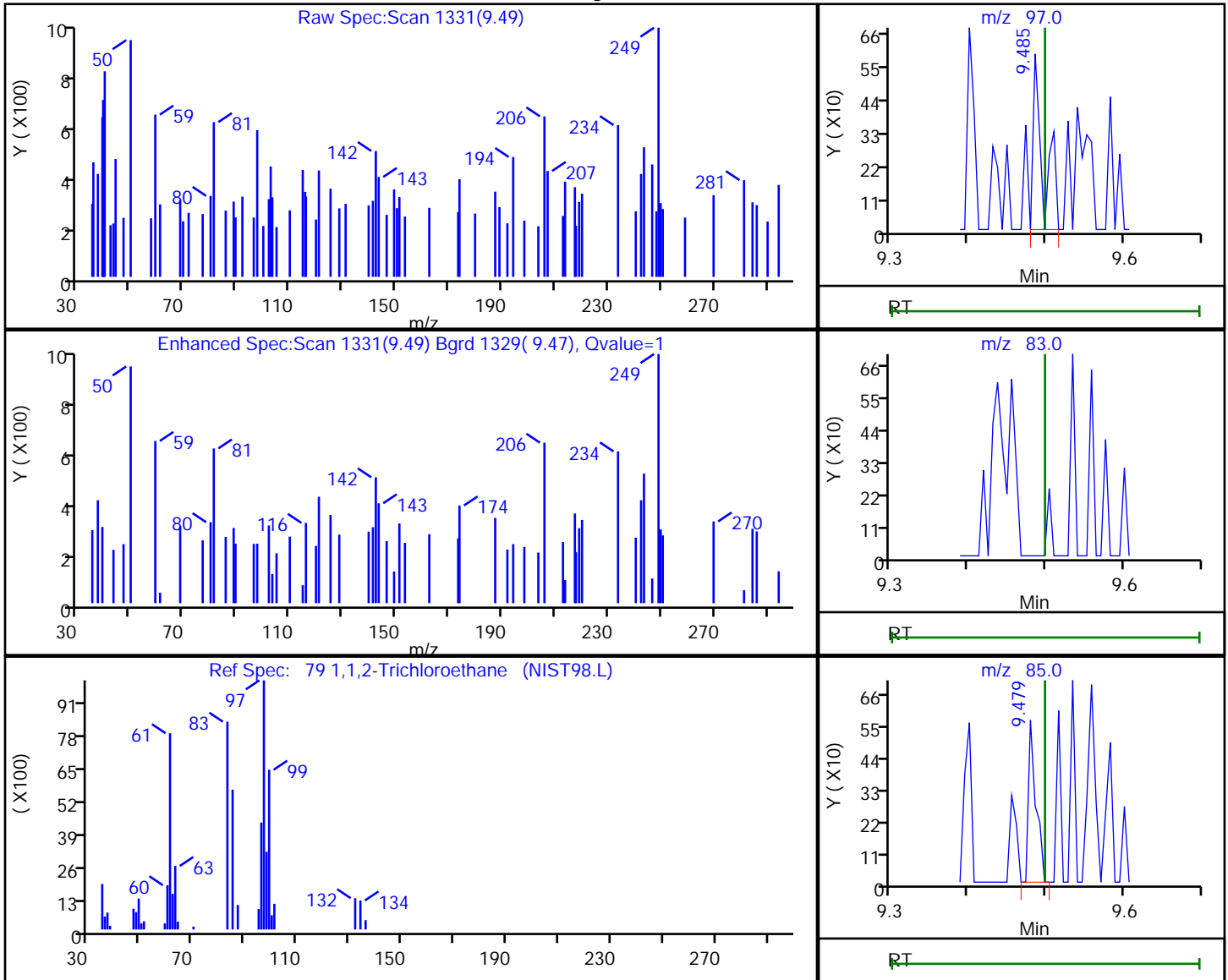


Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050123.D  
 Injection Date: 02-May-2020 00:15:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-A-7 Lab Sample ID: 180-105108-7  
 Client ID: HD-COD-SW-16-0/1-0  
 Operator ID: 034635 ALS Bottle#: 23 Worklist Smp#: 23  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

79 1,1,2-Trichloroethane, CAS: 79-00-5

Processing Results



RT	Mass	Response	Amount
9.49	97.00	537	0.164764
9.50	83.00	0	
9.48	85.00	380	

Reviewer: journept, 02-May-2020 18:52:45  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050123.D

Injection Date: 02-May-2020 00:15:30

Instrument ID: CHHP5

Lims ID: 180-105108-A-7

Lab Sample ID: 180-105108-7

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

Operator ID: 034635

ALS Bottle#: 23 Worklist Smp#: 23

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

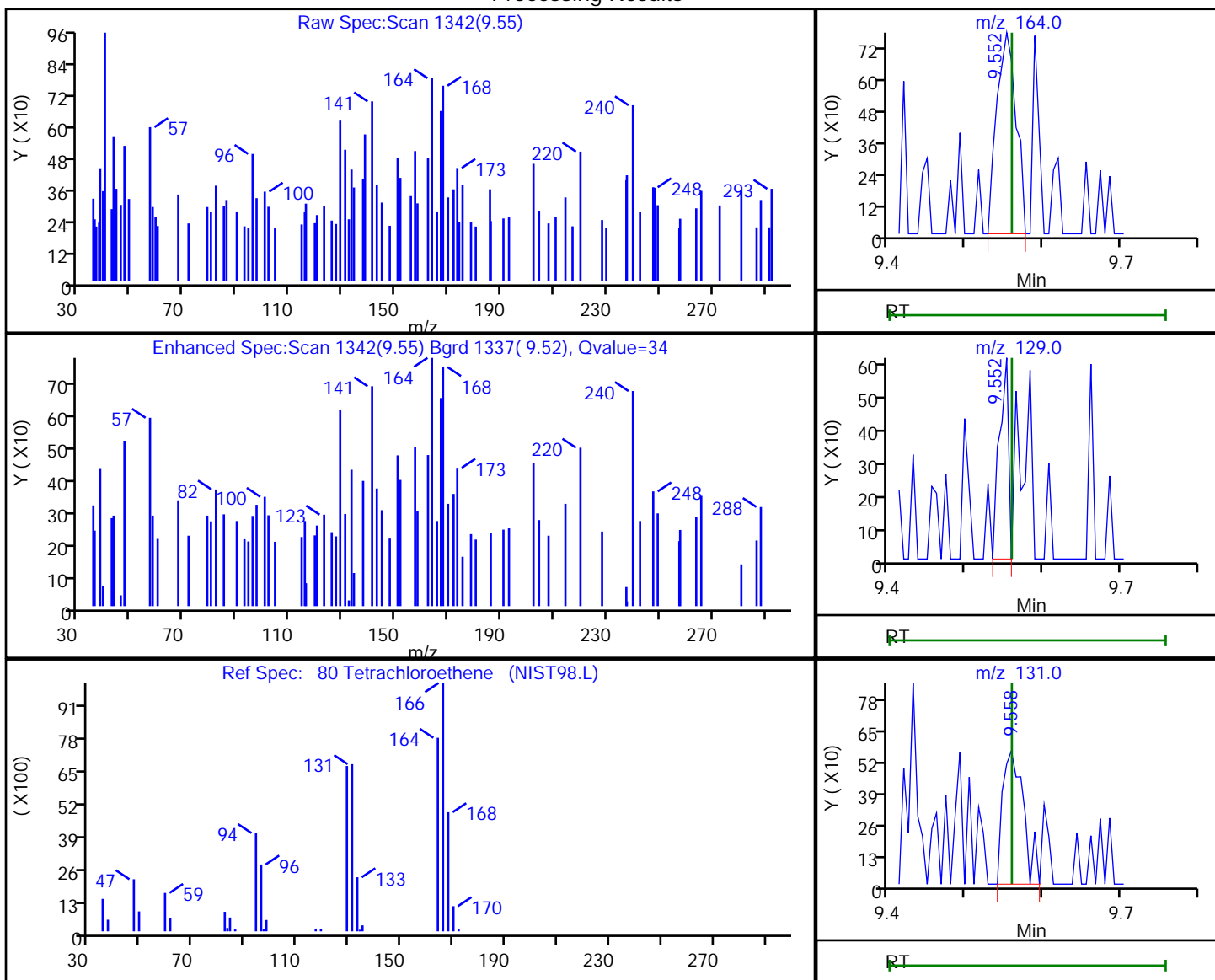
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

80 Tetrachloroethene, CAS: 127-18-4

Processing Results



RT	Mass	Response	Amount
9.55	164.00	1359	0.486962
9.55	129.00	503	
9.56	131.00	1042	

Reviewer: journeyp, 02-May-2020 18:52:45

Audit Action: Marked Compound Undetected

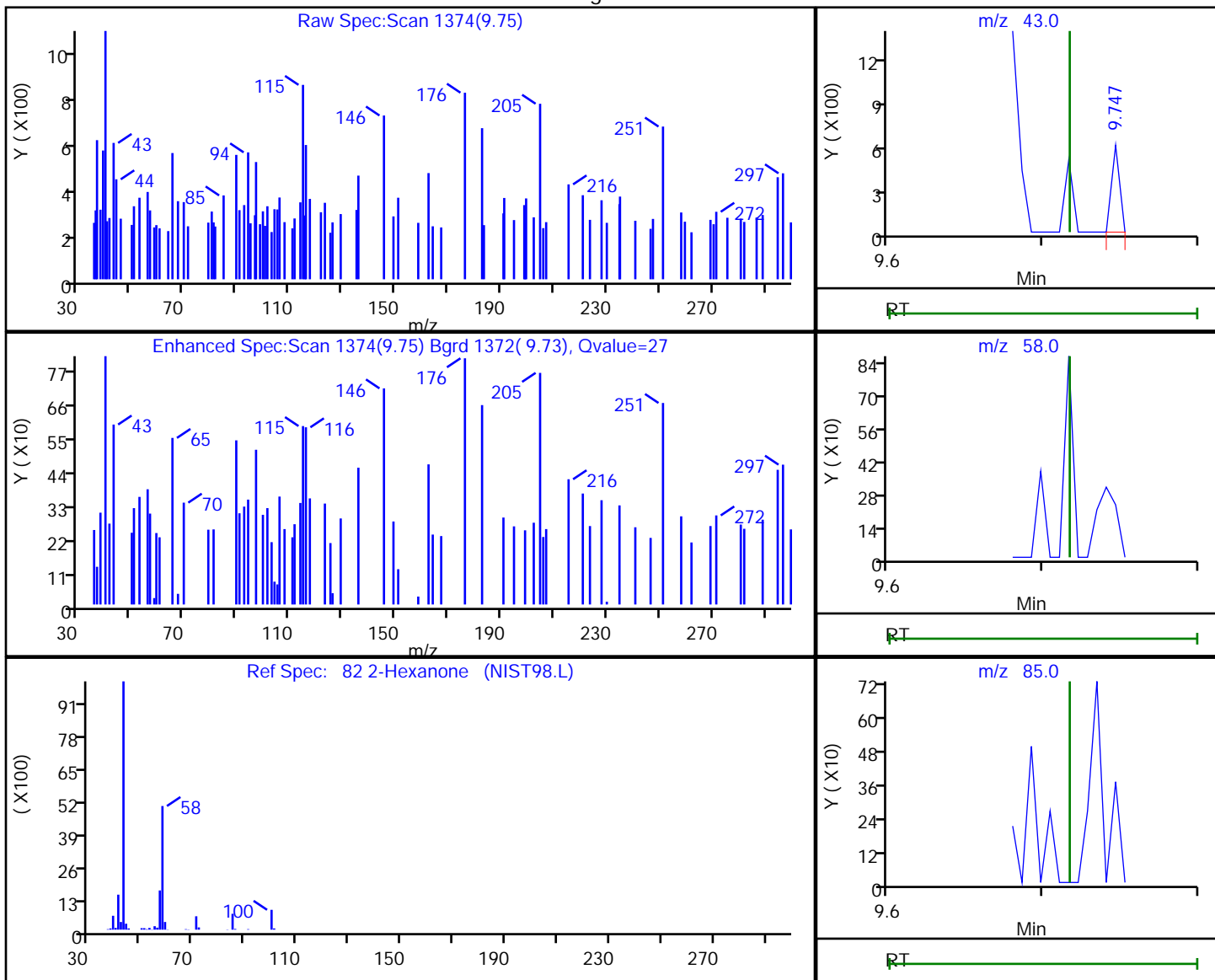
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050123.D  
 Injection Date: 02-May-2020 00:15:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-A-7 Lab Sample ID: 180-105108-7  
 Client ID: HD-COD-SW-16-0/1-0  
 Operator ID: 034635 ALS Bottle#: 23 Worklist Smp#: 23  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

82 2-Hexanone, CAS: 591-78-6

Processing Results



RT	Mass	Response	Amount
9.75	43.00	216	14.085118
9.72	58.00	0	
9.72	85.00	0	

Reviewer: journept, 02-May-2020 18:52:45  
 Audit Action: Marked Compound Undetected

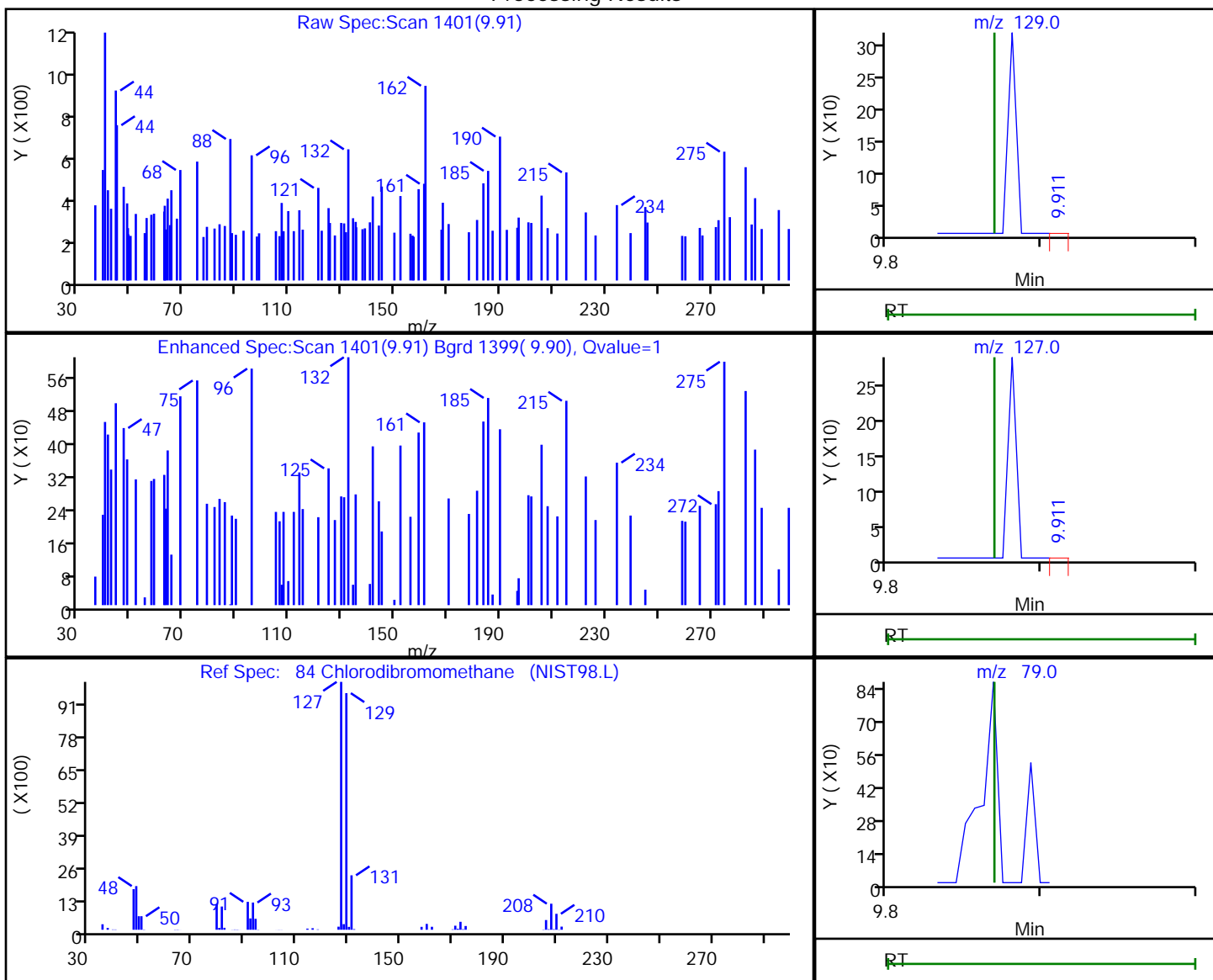
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050123.D  
 Injection Date: 02-May-2020 00:15:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-A-7 Lab Sample ID: 180-105108-7  
 Client ID: HD-COD-SW-16-0/1-0  
 Operator ID: 034635 ALS Bottle#: 23 Worklist Smp#: 23  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

84 Chlorodibromomethane, CAS: 124-48-1

Processing Results



RT	Mass	Response	Amount
9.91	129.00	97	0.035159
9.91	127.00	76	
9.87	79.00	0	

Reviewer: journept, 02-May-2020 18:52:50  
 Audit Action: Marked Compound Undetected

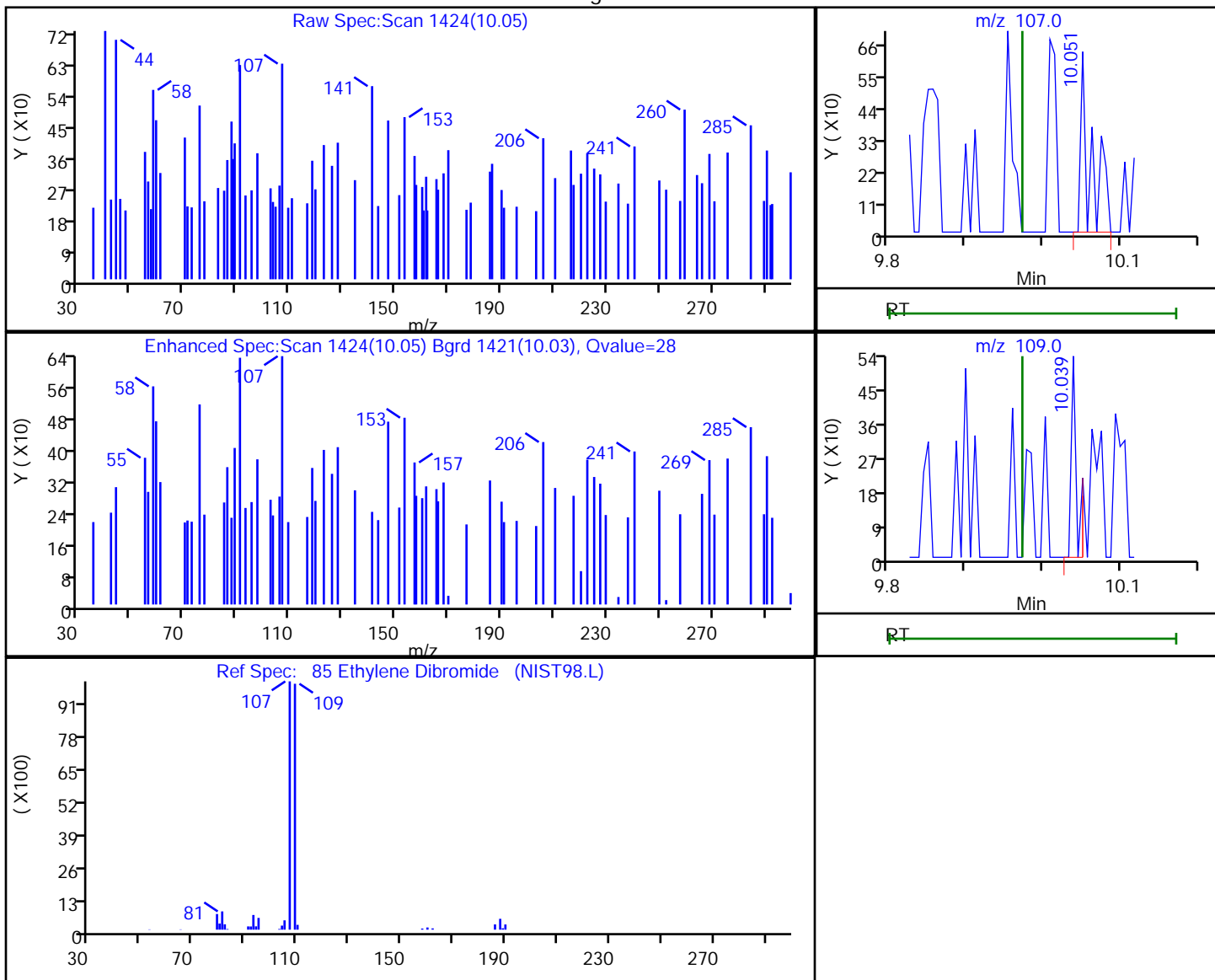
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050123.D  
Injection Date: 02-May-2020 00:15:30 Instrument ID: CHHP5  
Lims ID: 180-105108-A-7 Lab Sample ID: 180-105108-7  
Client ID: HD-COD-SW-16-0/1-0  
Operator ID: 034635 ALS Bottle#: 23 Worklist Smp#: 23  
Purge Vol: 5.000 mL Dil. Factor: 1.0000  
Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
Column: DB-624 (0.18 mm) Detector: MS SCAN

85 Ethylene Dibromide, CAS: 106-93-4

Processing Results



RT	Mass	Response	Amount
10.05	107.00	572	0.187603
10.04	109.00	271	

Reviewer: journetp, 02-May-2020 18:52:50  
Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050123.D

Injection Date: 02-May-2020 00:15:30

Instrument ID: CHHP5

Lims ID: 180-105108-A-7

Lab Sample ID: 180-105108-7

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

Operator ID: 034635

ALS Bottle#: 23 Worklist Smp#: 23

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

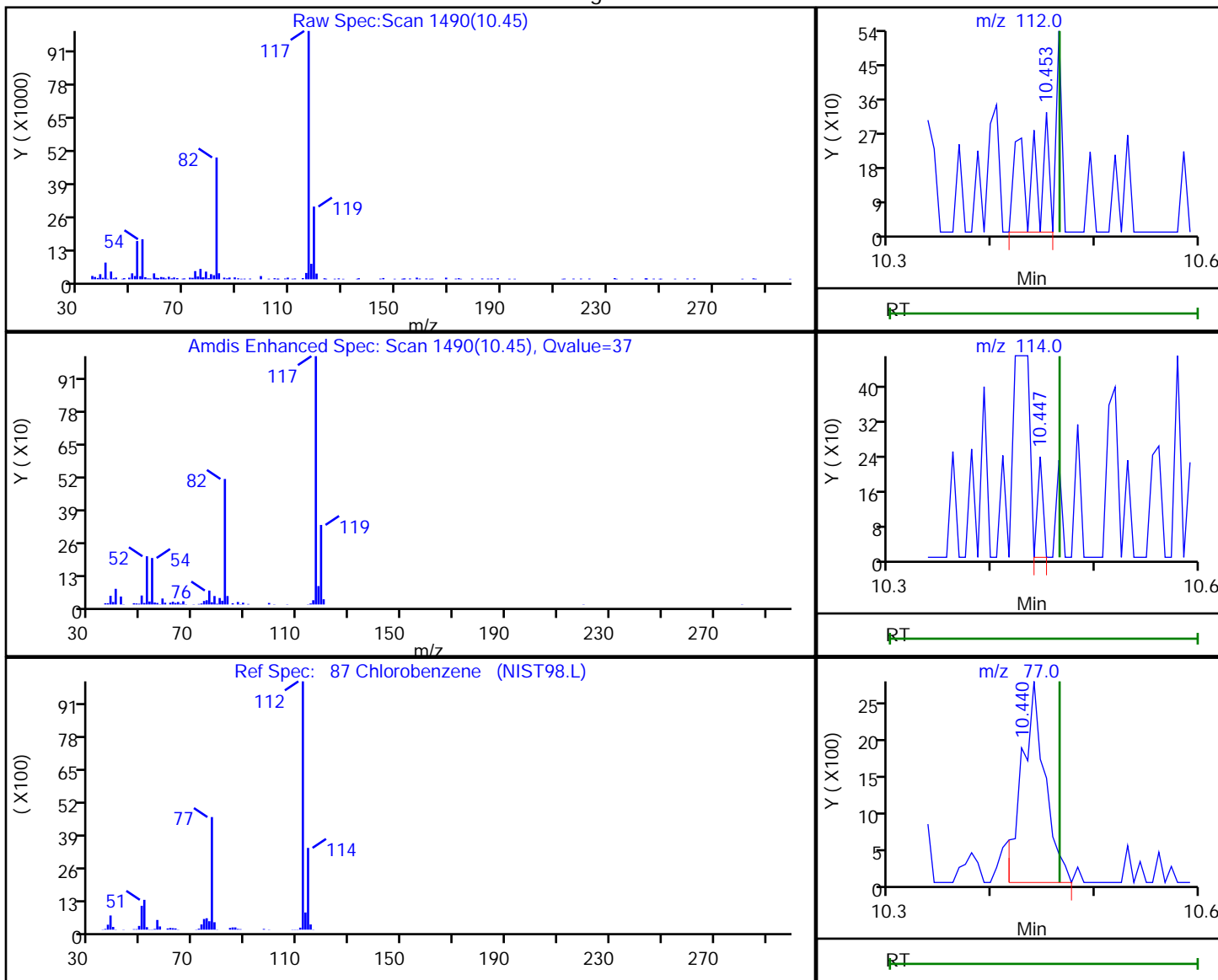
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

87 Chlorobenzene, CAS: 108-90-7

Processing Results



RT	Mass	Response	Amount
10.45	112.00	397	0.044025
10.45	114.00	85	
10.44	77.00	4279	

Reviewer: journeyp, 02-May-2020 18:52:50

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050123.D

Injection Date: 02-May-2020 00:15:30

Instrument ID: CHHP5

Lims ID: 180-105108-A-7

Lab Sample ID: 180-105108-7

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

Operator ID: 034635

ALS Bottle#: 23 Worklist Smp#: 23

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

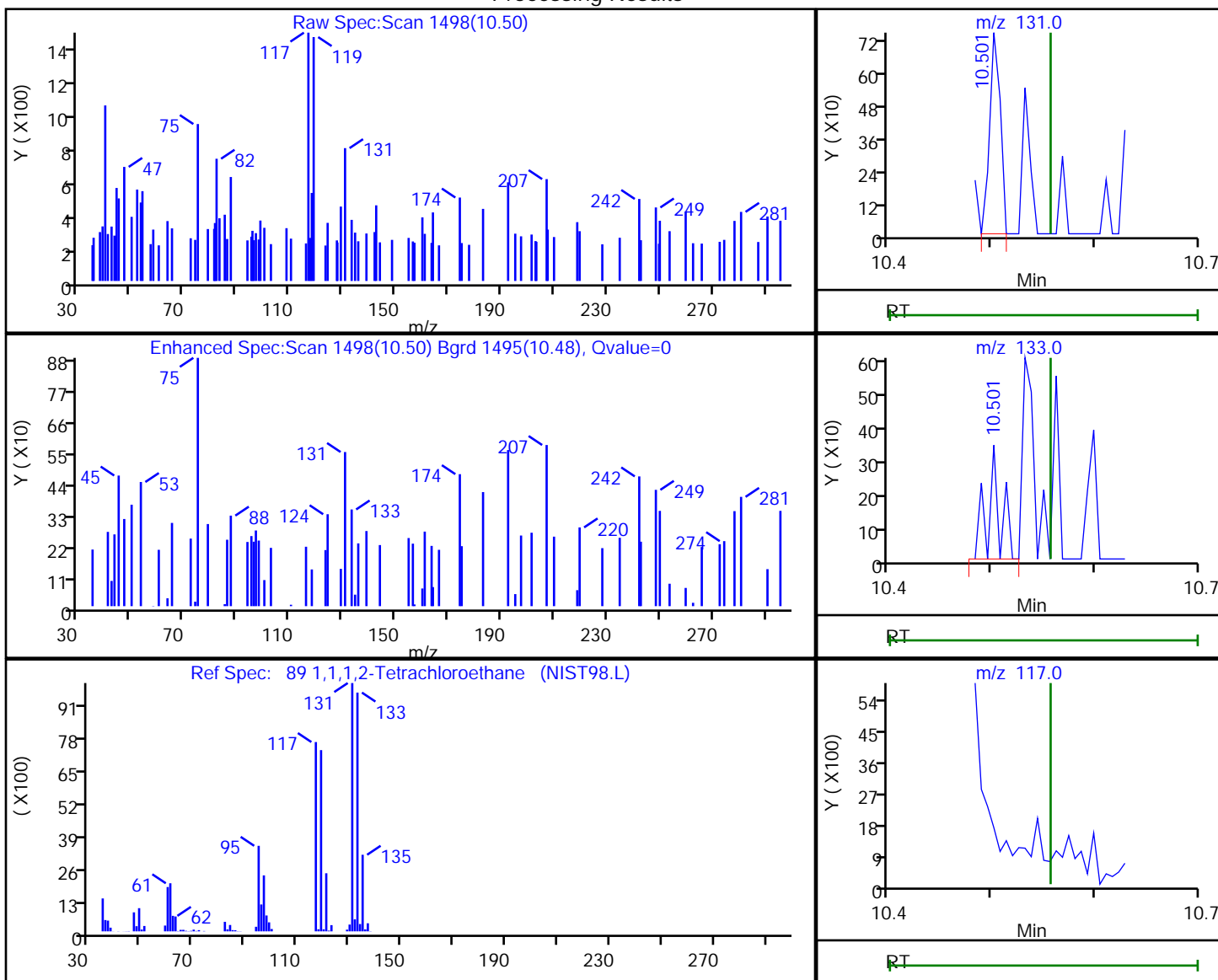
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

89 1,1,1,2-Tetrachloroethane, CAS: 630-20-6

Processing Results



RT	Mass	Response	Amount
10.50	131.00	541	0.184747
10.50	133.00	295	
10.56	117.00	0	

Reviewer: journept, 02-May-2020 18:52:50

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050123.D

Injection Date: 02-May-2020 00:15:30

Instrument ID: CHHP5

Lims ID: 180-105108-A-7

Lab Sample ID: 180-105108-7

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

Operator ID: 034635

ALS Bottle#: 23 Worklist Smp#: 23

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

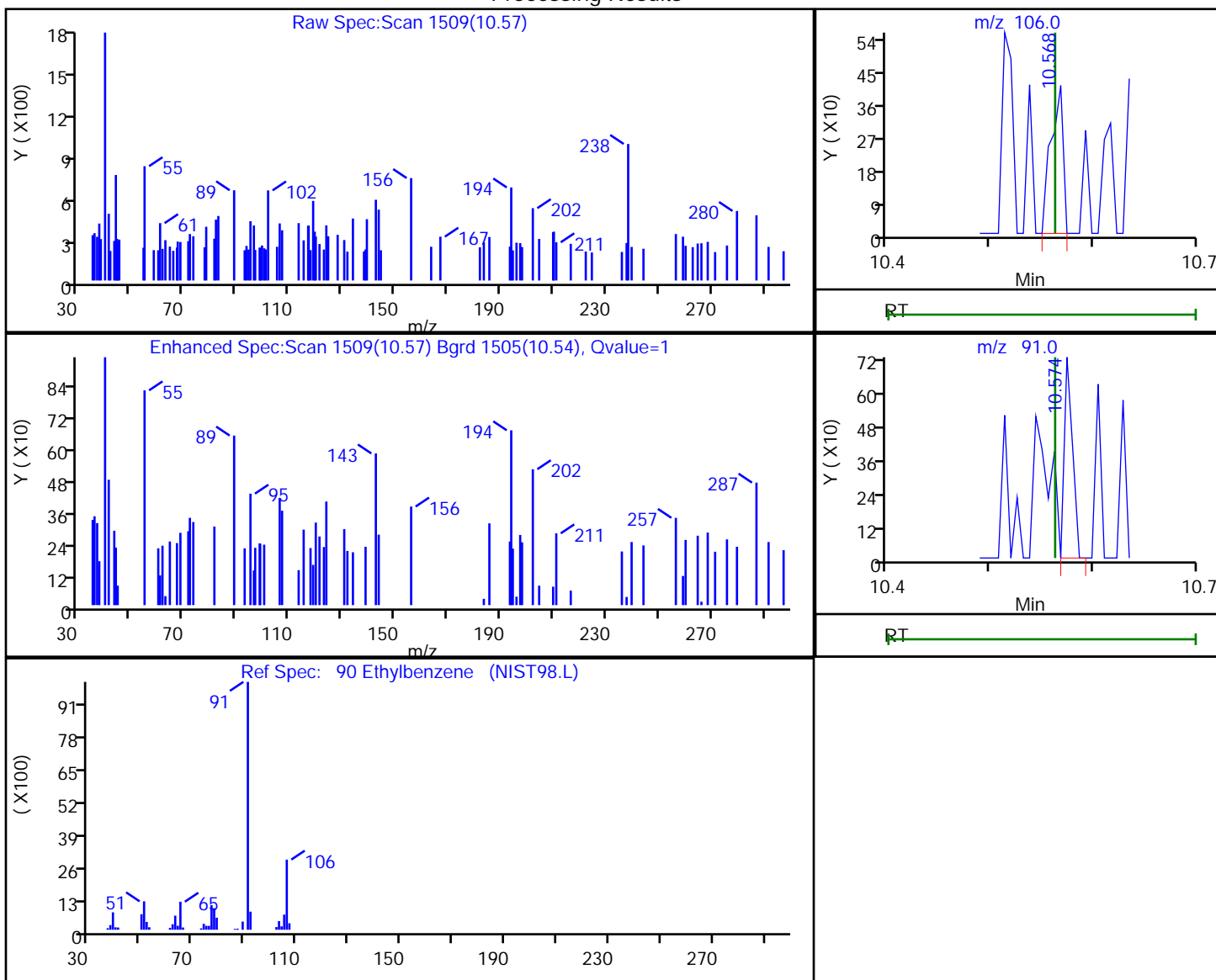
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

90 Ethylbenzene, CAS: 100-41-4

Processing Results



RT	Mass	Response	Amount
10.57	106.00	338	0.072413
10.57	91.00	401	

Reviewer: journetp, 02-May-2020 18:52:50

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID



Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050123.D

Injection Date: 02-May-2020 00:15:30

Instrument ID: CHHP5

Lims ID: 180-105108-A-7

Lab Sample ID: 180-105108-7

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

Operator ID: 034635

ALS Bottle#: 23 Worklist Smp#: 23

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

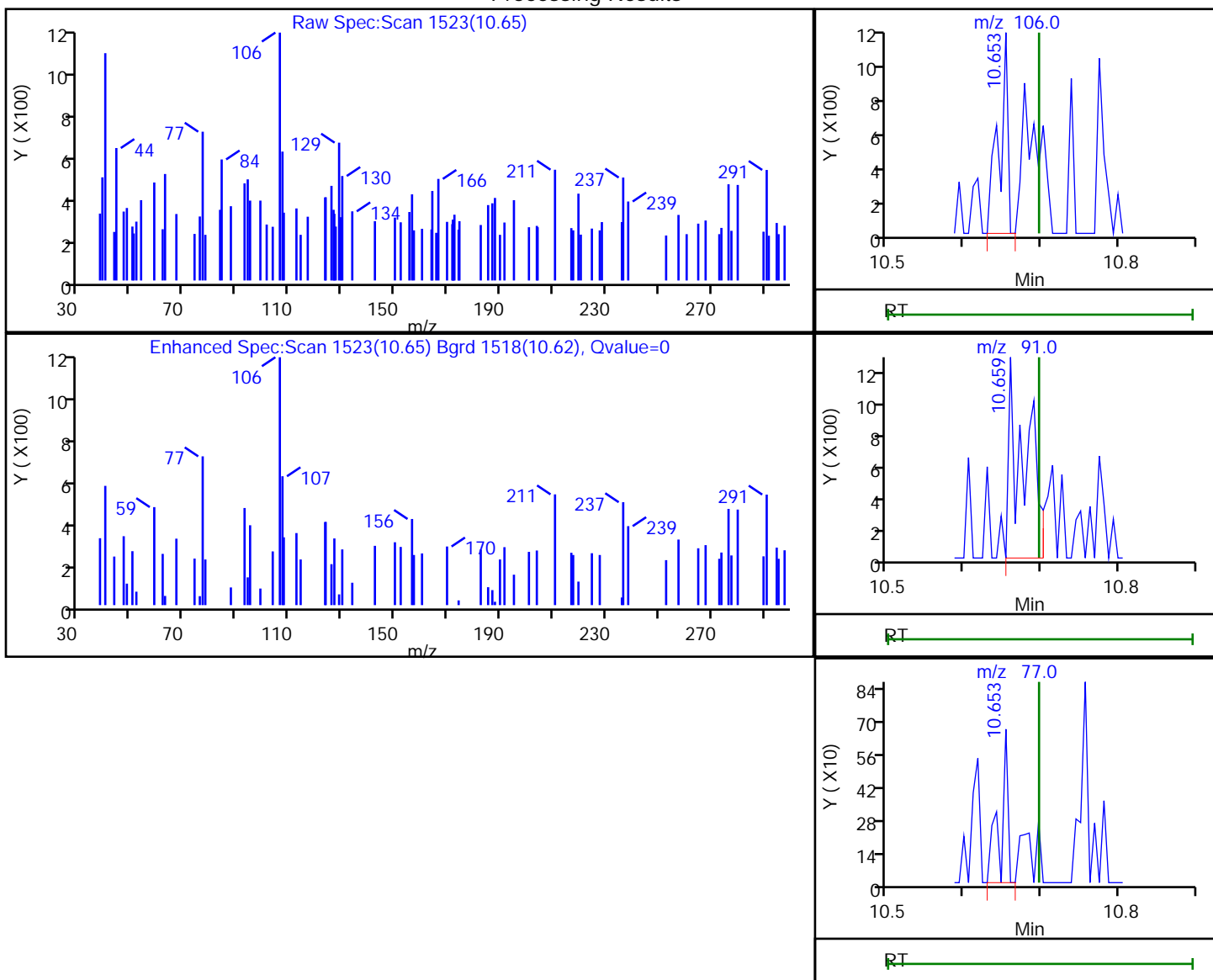
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

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

Processing Results



RT	Mass	Response	Amount
10.65	106.00	861	0.147961
10.66	91.00	1857	
10.65	77.00	445	

Reviewer: journeyp, 02-May-2020 18:52:50

Audit Action: Marked Compound Undetected

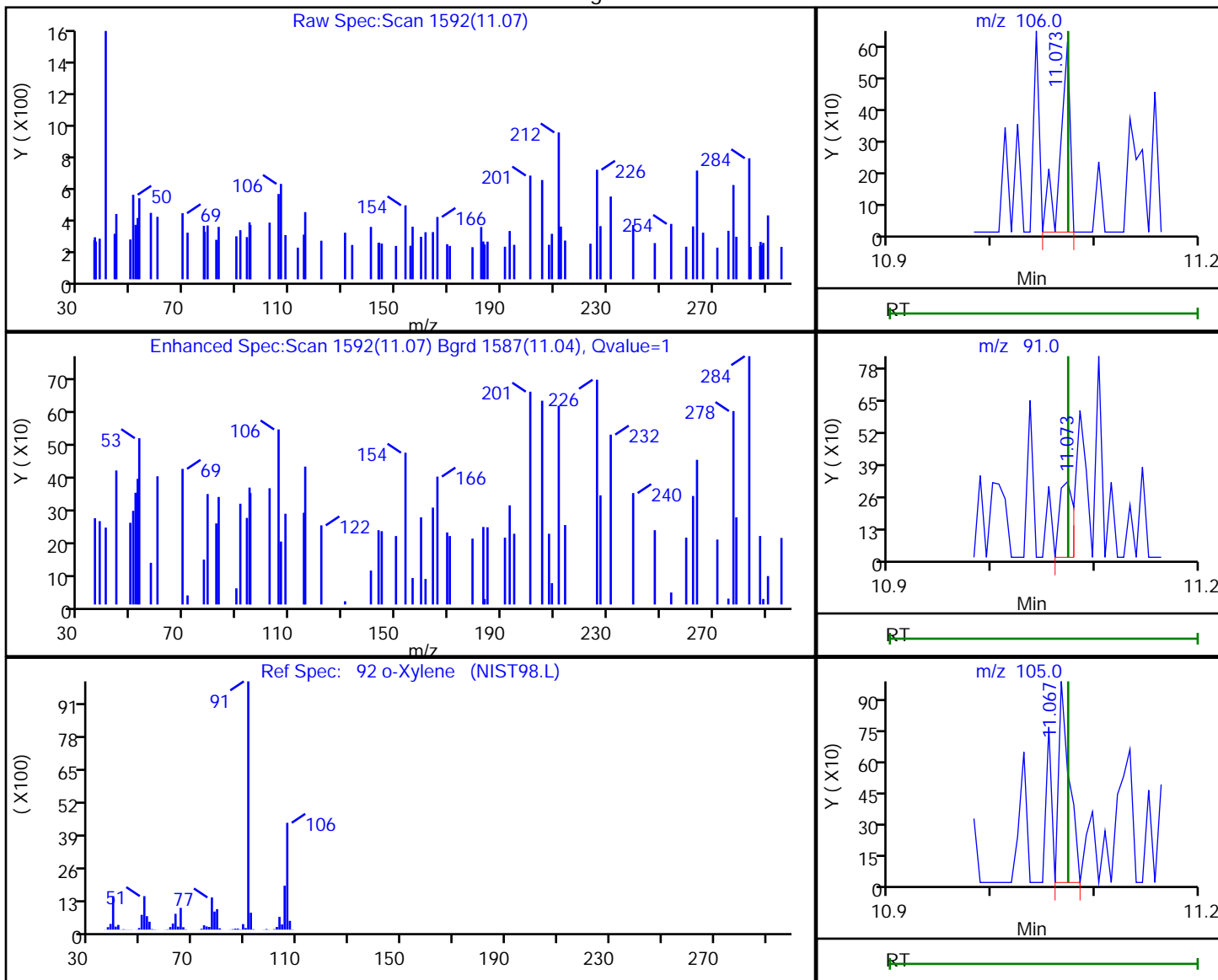
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050123.D  
Injection Date: 02-May-2020 00:15:30 Instrument ID: CHHP5  
Lims ID: 180-105108-A-7 Lab Sample ID: 180-105108-7  
Client ID: HD-COD-SW-16-0/1-0  
Operator ID: 034635 ALS Bottle#: 23 Worklist Smp#: 23  
Purge Vol: 5.000 mL Dil. Factor: 1.0000  
Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
Column: DB-624 (0.18 mm) Detector: MS SCAN

92 o-Xylene, CAS: 95-47-6

Processing Results



RT	Mass	Response	Amount
11.07	106.00	406	0.074747
11.07	91.00	293	
11.07	105.00	698	

Reviewer: journeyp, 02-May-2020 18:52:50  
Audit Action: Marked Compound Undetected

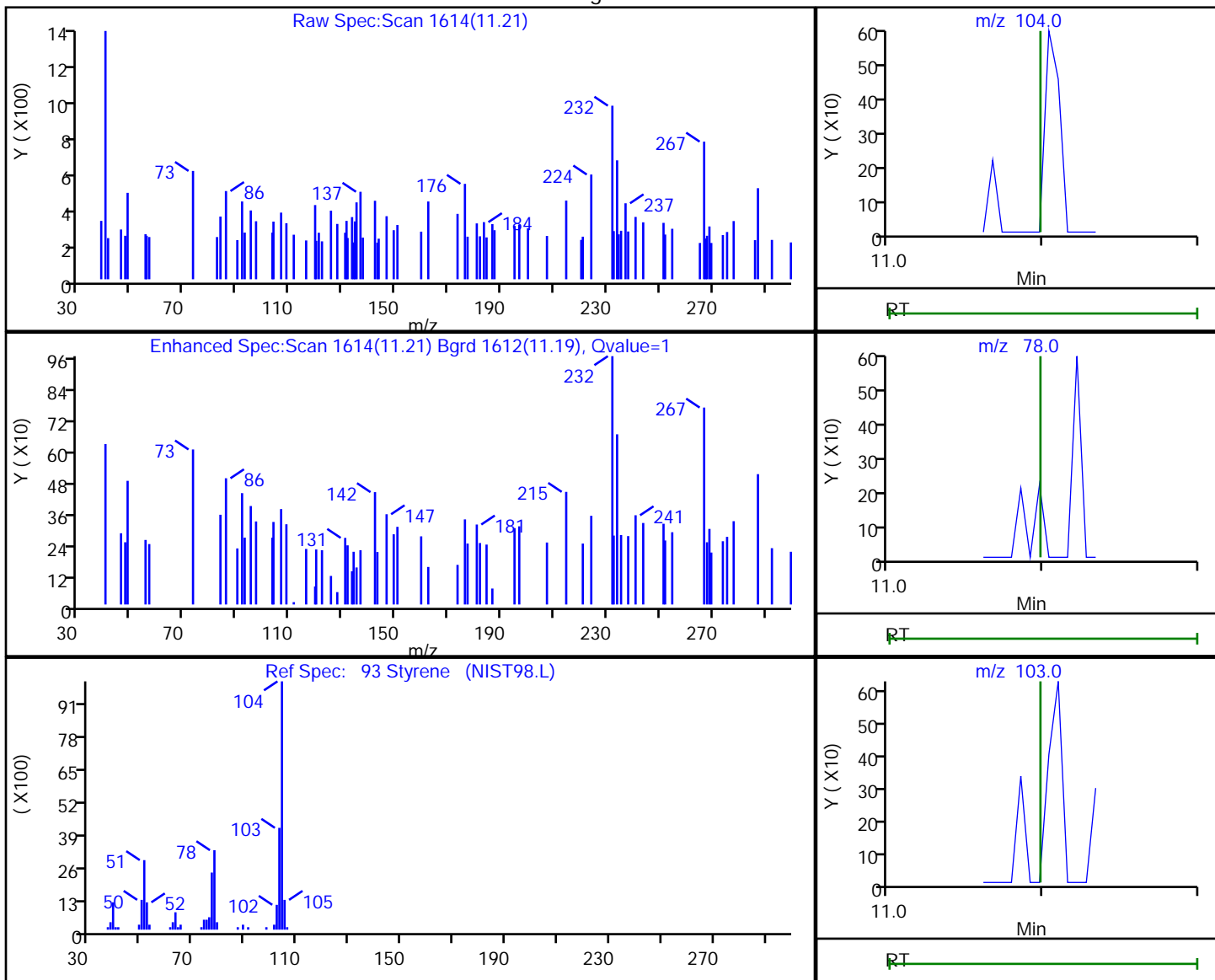
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050123.D  
Injection Date: 02-May-2020 00:15:30 Instrument ID: CHHP5  
Lims ID: 180-105108-A-7 Lab Sample ID: 180-105108-7  
Client ID: HD-COD-SW-16-0/1-0  
Operator ID: 034635 ALS Bottle#: 23 Worklist Smp#: 23  
Purge Vol: 5.000 mL Dil. Factor: 1.0000  
Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
Column: DB-624 (0.18 mm) Detector: MS SCAN

93 Styrene, CAS: 100-42-5

Processing Results



RT	Mass	Response	Amount
11.21	104.00	117	0.012562
11.21	78.00	98	
11.21	103.00	199	

Reviewer: journeyp, 02-May-2020 18:52:50  
Audit Action: Marked Compound Undetected

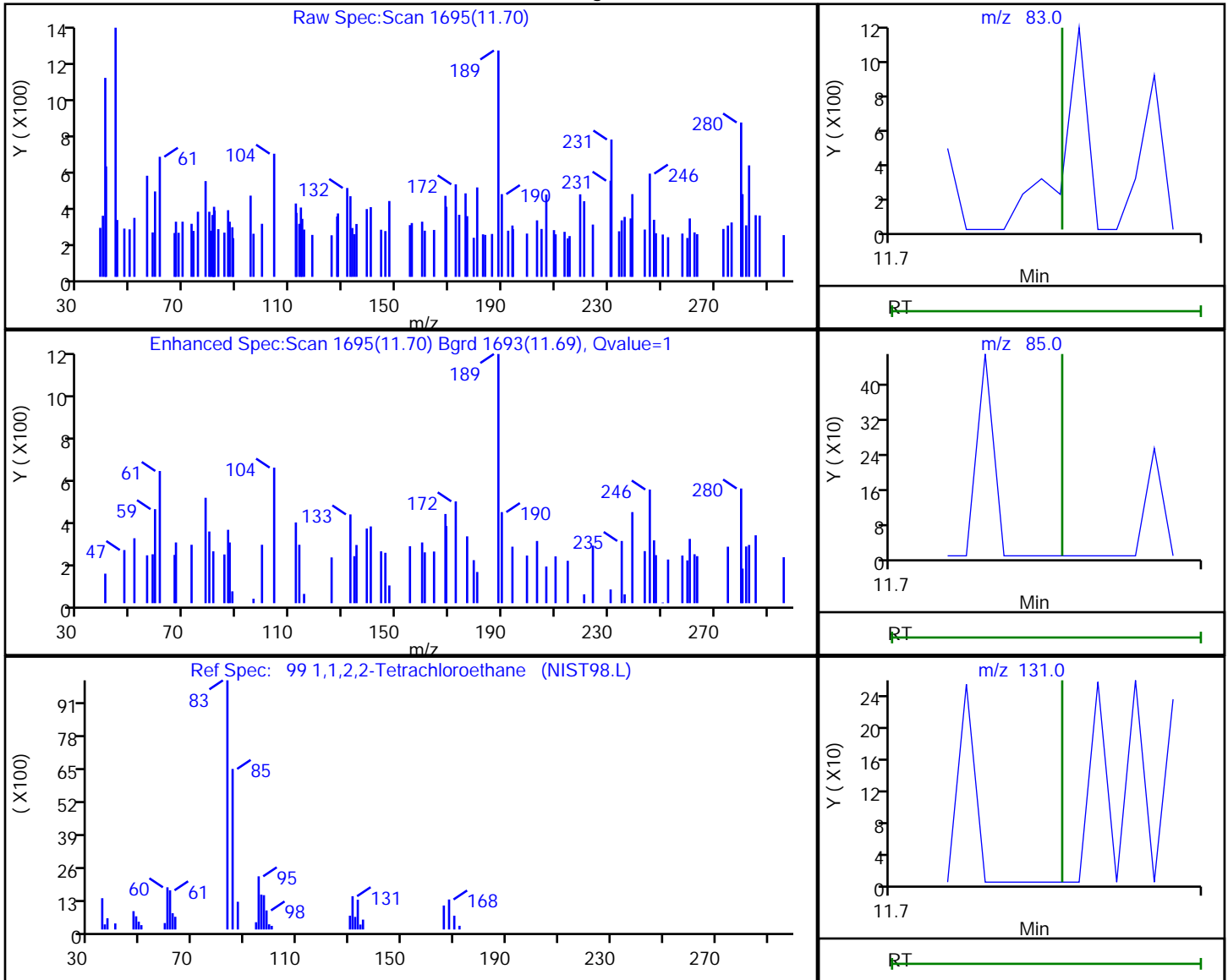
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050123.D  
Injection Date: 02-May-2020 00:15:30 Instrument ID: CHHP5  
Lims ID: 180-105108-A-7 Lab Sample ID: 180-105108-7  
Client ID: HD-COD-SW-16-0/1-0  
Operator ID: 034635 ALS Bottle#: 23 Worklist Smp#: 23  
Purge Vol: 5.000 mL Dil. Factor: 1.0000  
Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
Column: DB-624 (0.18 mm) Detector: MS SCAN

99 1,1,2,2-Tetrachloroethane, CAS: 79-34-5

Processing Results



RT	Mass	Response	Amount
11.70	83.00	91	0.027044
11.70	85.00	84	
11.76	131.00	0	

Reviewer: journeyp, 02-May-2020 18:52:50  
Audit Action: Marked Compound Undetected

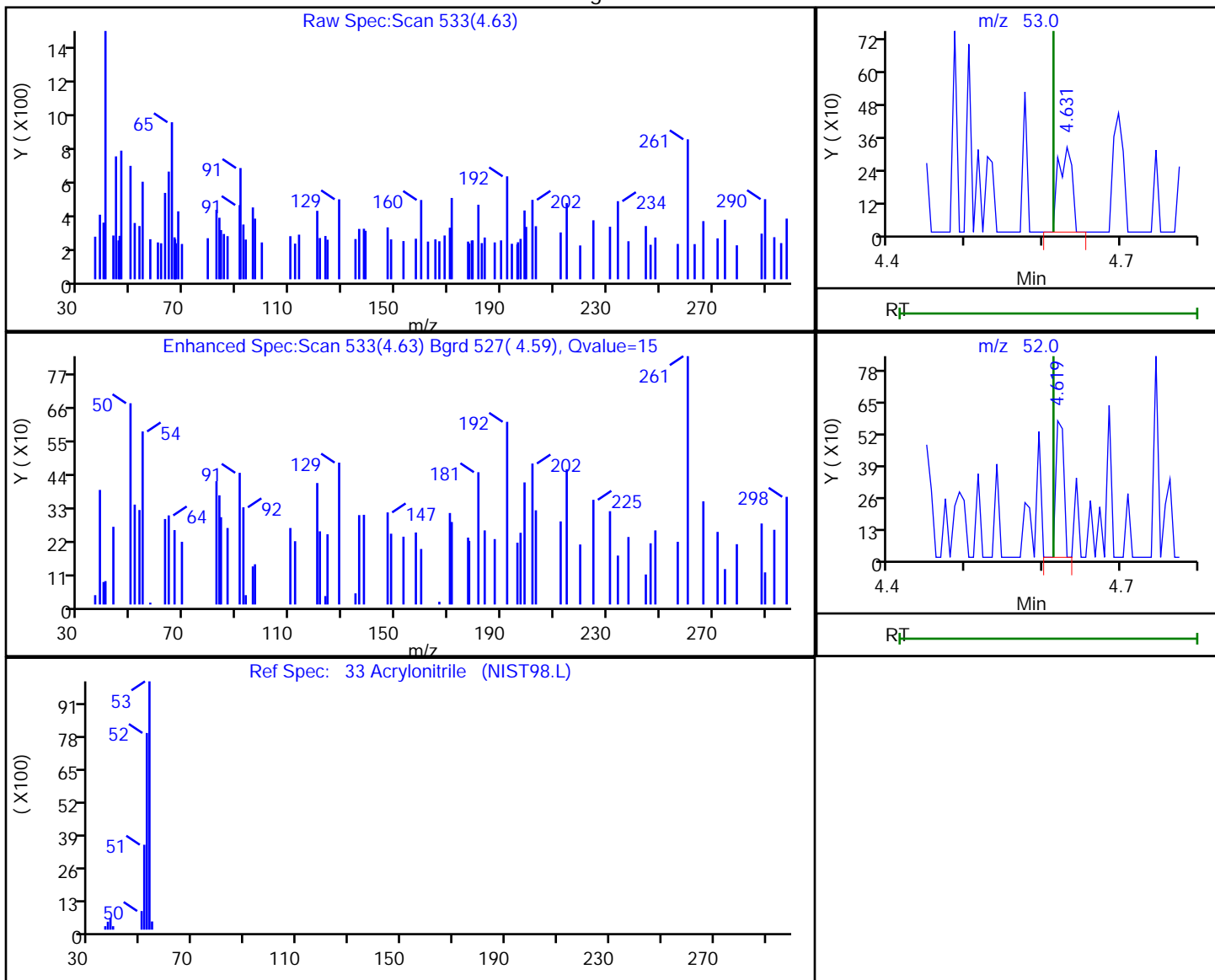
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050123.D  
Injection Date: 02-May-2020 00:15:30 Instrument ID: CHHP5  
Lims ID: 180-105108-A-7 Lab Sample ID: 180-105108-7  
Client ID: HD-COD-SW-16-0/1-0  
Operator ID: 034635 ALS Bottle#: 23 Worklist Smp#: 23  
Purge Vol: 5.000 mL Dil. Factor: 1.0000  
Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
Column: DB-624 (0.18 mm) Detector: MS SCAN

33 Acrylonitrile, CAS: 107-13-1

Processing Results



RT	Mass	Response	Amount
4.63	53.00	381	0.407918
4.62	52.00	400	

Reviewer: journetp, 02-May-2020 18:52:45  
Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: HD-COD-SW-17-0/1-0 Lab Sample ID: 180-105108-8  
 Matrix: Water Lab File ID: 5050408.D  
 Analysis Method: EPA 8260C Date Collected: 04/28/2020 11:10  
 Sample wt/vol: 5 (mL) Date Analyzed: 05/04/2020 11:04  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-624 ID: 0.18 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 314475 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	ND	^c	1.0	0.90
75-01-4	Vinyl chloride	ND		1.0	0.40
74-83-9	Bromomethane	ND	^c *	1.0	0.89
75-00-3	Chloroethane	ND		1.0	0.90
75-35-4	1,1-Dichloroethene	ND		1.0	0.55
67-64-1	Acetone	ND		5.0	3.4
75-15-0	Carbon disulfide	ND		1.0	0.88
75-09-2	Methylene Chloride	ND		1.0	0.89
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.67
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.59
75-34-3	1,1-Dichloroethane	ND		1.0	0.31
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.71
74-97-5	Bromochloromethane	ND		1.0	0.63
78-93-3	2-Butanone (MEK)	ND	^c	5.0	2.6
67-66-3	Chloroform	ND	F1	1.0	0.60
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.60
56-23-5	Carbon tetrachloride	ND		1.0	0.88
71-43-2	Benzene	ND		1.0	0.60
107-06-2	1,2-Dichloroethane	ND		1.0	0.57
79-01-6	Trichloroethene	ND		1.0	0.69
78-87-5	1,2-Dichloropropane	ND		1.0	0.66
75-27-4	Bromodichloromethane	ND		1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	ND	F1	1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	3.1
108-88-3	Toluene	ND		1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.58
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.45
127-18-4	Tetrachloroethene	1.2		1.0	0.47
591-78-6	2-Hexanone	ND		5.0	3.3
124-48-1	Dibromochloromethane	ND		1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	ND		1.0	0.50
108-90-7	Chlorobenzene	ND		1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.57
100-41-4	Ethylbenzene	ND		1.0	0.51
1330-20-7	Xylenes, Total	ND		2.0	0.89
100-42-5	Styrene	ND		1.0	0.47

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: HD-COD-SW-17-0/1-0 Lab Sample ID: 180-105108-8  
 Matrix: Water Lab File ID: 5050408.D  
 Analysis Method: EPA 8260C Date Collected: 04/28/2020 11:10  
 Sample wt/vol: 5 (mL) Date Analyzed: 05/04/2020 11:04  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-624 ID: 0.18 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 314475 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	ND	^c	1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	ND	^c	1.0	0.60
107-13-1	Acrylonitrile	ND		20	7.8

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	79		62-146
2037-26-5	Toluene-d8 (Surr)	103		75-120
460-00-4	4-Bromofluorobenzene (Surr)	79		64-120
1868-53-7	Dibromofluoromethane (Surr)	89		71-132

Eurofins TestAmerica, Pittsburgh  
Target Compound Quantitation Report

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050408.D  
 Lims ID: 180-105108-C-8  
 Client ID: HD-COD-SW-17-0/1-0  
 Sample Type: Client  
 Inject. Date: 04-May-2020 11:04:30 ALS Bottle#: 8 Worklist Smp#: 8  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: 180-0031789-008  
 Operator ID: 034635 Instrument ID: CHHP5  
 Method: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\MMSVOA\_LL\_CHHP5.m  
 Limit Group: VOA 8260C\_D ICAL  
 Last Update: 04-May-2020 11:25:29 Calib Date: 03-Apr-2020 19:09:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP5\20200403-31442.b\5040310.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: CTX0327

First Level Reviewer: journetp

Date: 04-May-2020 11:39:09

Compound	Sig	RT (min.)	Exp RT (min.)	Diff RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.359	4.363	-0.004	0	282198	1000.0	
* 2 Fluorobenzene (IS)	96	7.346	7.344	0.002	99	765424	50.0	
* 3 Chlorobenzene-d5	119	10.436	10.434	0.002	84	186369	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.773	12.776	-0.003	94	261014	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.628	6.626	0.002	92	195190	44.7	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.993	6.991	0.002	0	244813	39.5	
\$ 7 Toluene-d8 (Surr)	98	8.989	8.986	0.003	94	780236	51.7	
\$ 8 4-Bromofluorobenzene (Surr	95	11.617	11.614	0.003	93	225642	39.6	
11 Dichlorodifluoromethane	85		1.638				ND	U
12 Chloromethane	50		1.844				ND	U
14 Butadiene	39		1.966				ND	U
13 Vinyl chloride	62		1.966				ND	U
15 Bromomethane	94		2.288				ND	U
16 Chloroethane	64		2.416				ND	U
17 Dichlorofluoromethane	67		2.720				ND	U
18 Trichlorofluoromethane	101		2.726				ND	U
19 Ethanol	45		2.792				ND	U
20 Ethyl ether	59		3.104				ND	U
21 Acrolein	56		3.292				ND	U
22 1,1-Dichloroethene	96		3.414				ND	U
23 1,1,2-Trichloro-1,2,2-trif	101		3.469				ND	U
24 Acetone	43	3.520	3.511	0.009	85	39698	15.0	
25 Iodomethane	142		3.639				ND	U
26 Carbon disulfide	76		3.706				ND	U
27 Isopropyl alcohol	45	3.812	3.832	-0.020	59	7533	49.8	
29 Acetonitrile	41		3.979				ND	U
28 3-Chloro-1-propene	76		3.992				ND	U
30 Methyl acetate	43		4.016				ND	U
31 Methylene Chloride	84		4.217				ND	U
32 2-Methyl-2-propanol	59		4.503				ND	U
33 Acrylonitrile	53		4.612				ND	U
34 trans-1,2-Dichloroethene	96		4.631				ND	U



Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
35 Methyl tert-butyl ether	73		4.655				ND	U
36 Hexane	57		5.056				ND	U
37 1,1-Dichloroethane	63		5.263				ND	
38 Vinyl acetate	43		5.324				ND	U
39 2-Chloro-1,3-butadiene	53		5.364				ND	U
41 Isopropyl ether	45		5.377				ND	U
42 Tert-butyl ethyl ether	59		5.838				ND	U
44 2,2-Dichloropropane	97		6.005				ND	U
45 cis-1,2-Dichloroethene	96	6.026	6.018	0.008	38	12974	2.61	
47 Propionitrile	54		6.022				ND	U
46 2-Butanone (MEK)	43		6.036				ND	U
48 Ethyl acetate	43		6.126				ND	U
49 Chlorobromomethane	128		6.297				ND	U
51 Tetrahydrofuran	42		6.310				ND	U
50 Methacrylonitrile	41		6.375				ND	U
52 Chloroform	83		6.443				ND	U
53 1,1,1-Trichloroethane	97		6.602				ND	U
54 Cyclohexane	56		6.662				ND	U
56 Carbon tetrachloride	117		6.766				ND	U
55 1,1-Dichloropropene	75		6.784				ND	U
58 Benzene	78		7.003				ND	U
57 Isobutyl alcohol	41		7.003				ND	U
59 1,2-Dichloroethane	62		7.076				ND	U
62 n-Heptane	43		7.362				ND	U
61 Tert-amyl methyl ether	73		7.385				ND	U
151 Isooctane	57		7.641				ND	U
64 Trichloroethene	130	7.735	7.727	0.008	96	14480	3.09	
63 n-Butanol	56		7.762				ND	U
69 Methyl methacrylate	69		7.804				ND	U
65 Ethyl acrylate	55		7.951				ND	U
66 Methylcyclohexane	83		7.958				ND	U
67 1,2-Dichloropropane	63		8.001				ND	U
70 1,4-Dioxane	88		8.092				ND	U
68 Dibromomethane	93		8.092				ND	U
71 Dichlorobromomethane	83		8.287				ND	U
73 2-Chloroethyl vinyl ether	63		8.585				ND	U
74 cis-1,3-Dichloropropene	75		8.731				ND	U
75 4-Methyl-2-pentanone (MIBK)	43		8.889				ND	U
76 Toluene	91		9.053				ND	U
77 trans-1,3-Dichloropropene	75		9.303				ND	U
78 Ethyl methacrylate	69		9.364				ND	U
79 1,1,2-Trichloroethane	97		9.497				ND	U
80 Tetrachloroethene	164	9.567	9.564	0.003	95	20780	5.92	
81 1,3-Dichloropropane	76		9.656				ND	U
82 2-Hexanone	43		9.716				ND	U
83 n-Butyl acetate	43		9.860				ND	U
84 Chlorodibromomethane	129		9.868				ND	U
85 Ethylene Dibromide	107		9.978				ND	U
86 3-Chlorobenzotrifluoride	180		10.445				ND	U
87 Chlorobenzene	112		10.465				ND	U
89 1,1,1,2-Tetrachloroethane	131		10.562				ND	U
90 Ethylbenzene	106		10.562				ND	U

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
91 m-Xylene & p-Xylene	106		10.696				ND	U
88 4-Chlorobenzotrifluoride	180		10.774				ND	U
92 o-Xylene	106		11.079				ND	U
93 Styrene	104		11.097				ND	U
94 Bromoform	173		11.280				ND	U
98 Cyclohexanone	55		11.418				ND	U
97 Isopropylbenzene	105		11.444				ND	U
96 2-Chlorobenzotrifluoride	180		11.521				ND	U
100 Bromobenzene	156		11.754				ND	U
99 1,1,2,2-Tetrachloroethane	83		11.760				ND	U
102 trans-1,4-Dichloro-2-buten	53		11.797				ND	U
101 1,2,3-Trichloropropane	110		11.815				ND	U
103 N-Propylbenzene	120		11.858				ND	U
104 2-Chlorotoluene	126		11.949				ND	U
106 1,3,5-Trimethylbenzene	105		12.040				ND	U
107 4-Chlorotoluene	126		12.071				ND	U
105 3-Chlorotoluene	126		12.212				ND	U
108 tert-Butylbenzene	119		12.357				ND	U
110 1,2,4-Trimethylbenzene	105		12.411				ND	U
111 1,2-dichloro-4-(trifluorom	214		12.463				ND	U
112 sec-Butylbenzene	105		12.576				ND	U
113 1,3-Dichlorobenzene	146		12.697				ND	U
114 4-Isopropyltoluene	119		12.728				ND	U
117 1,2,3-Trimethylbenzene	105		12.763				ND	U
115 1,4-Dichlorobenzene	146		12.801				ND	U
119 Benzyl chloride	91		12.804				ND	U
116 2,4-Dichloro-1-(triflourom	214		12.836				ND	U
118 2,5-Dichlorobenzotrifluori	214		12.878				ND	U
120 n-Butylbenzene	91		13.141				ND	U
121 1,2-Dichlorobenzene	146		13.154				ND	U
122 1,2-Dibromo-3-Chloropropan	75		13.938				ND	U
123 2,4- & 2,5- & 2,6- Dichlor	125		14.125				ND	U
124 1,3,5-Trichlorobenzene	180		14.174				ND	U
125 2,3- & 3,4- Dichlorotoluen	125		14.484				ND	U
126 1,2,4-Trichlorobenzene	180		14.766				ND	U
127 Hexachlorobutadiene	225		14.906				ND	U
128 Naphthalene	128		15.027				ND	U
129 1,2,3-Trichlorobenzene	180		15.252				ND	U
130 2,3,6-Trichlorotoluene	159		16.090				ND	U
131 2,4,5-Trichlorotoluene	159		16.090				ND	U
S 134 1,2-Dichloroethene, Total	96				0		2.61	
S 154 Total BTEX	106		1.000				ND	
S 133 Xylenes, Total	106		1.000				ND	
S 135 1,3-Dichloropropene, Total	1		0.000				ND	
T 156 2-ethoxy-2-methyl butane T	59		0.000				ND	U
T 157 Ethanol TIC	45		0.000				ND	U

**QC Flag Legend**

Review Flags

U - Marked Undetected

**Reagents:**

voaWI/SHP5\_00016

Amount Added: 5.00

Units: uL

Run Reagent

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050408.D

Injection Date: 04-May-2020 11:04:30

Instrument ID: CHHP5

Operator ID: 034635

Lims ID: 180-105108-C-8

Lab Sample ID: 180-105108-8

Worklist Smp#: 8

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

Purge Vol: 5.000 mL

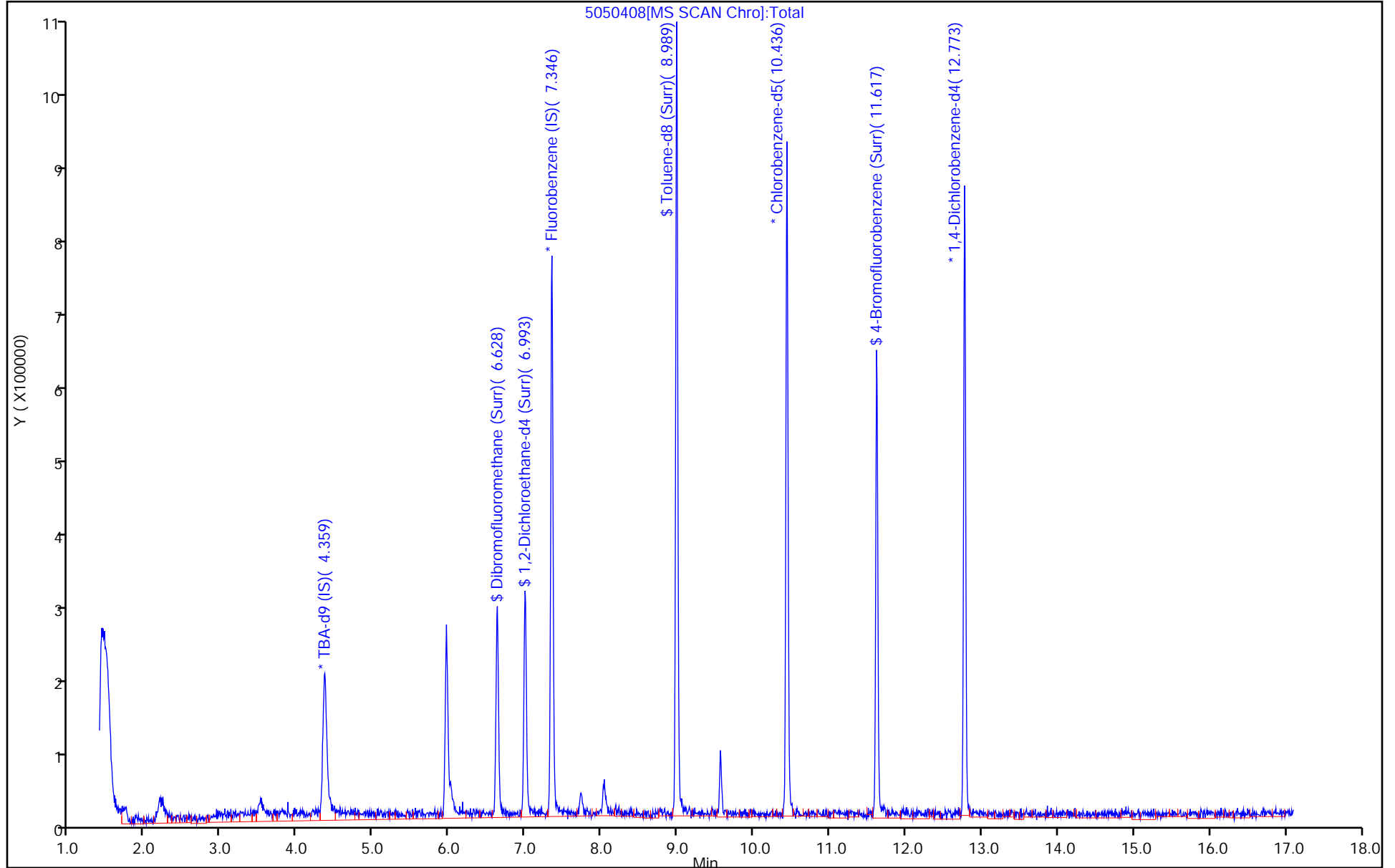
Dil. Factor: 1.0000

ALS Bottle#: 8

Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Pittsburgh  
Recovery Report

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050408.D  
 Lims ID: 180-105108-C-8  
 Client ID: HD-COD-SW-17-0/1-0  
 Sample Type: Client  
 Inject. Date: 04-May-2020 11:04:30 ALS Bottle#: 8 Worklist Smp#: 8  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: 180-0031789-008  
 Operator ID: 034635 Instrument ID: CHHP5  
 Method: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\MMSVOA\_LL\_CHHP5.m  
 Limit Group: VOA 8260C\_D ICAL  
 Last Update: 04-May-2020 11:25:29 Calib Date: 03-Apr-2020 19:09:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP5\20200403-31442.b\5040310.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: CTX0327

First Level Reviewer: journetp

Date: 04-May-2020 11:39:09

Compound	Amount Added	Amount Recovered	% Rec.
\$ 5 Dibromofluoromethane (Surr)	50.0	44.7	89.39
\$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	39.5	79.01
\$ 7 Toluene-d8 (Surr)	50.0	51.7	103.43
\$ 8 4-Bromofluorobenzene (Surr)	50.0	39.6	79.14

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050408.D

Injection Date: 04-May-2020 11:04:30

Instrument ID: CHHP5

Lims ID: 180-105108-C-8

Lab Sample ID: 180-105108-8

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

Operator ID: 034635

ALS Bottle#: 8 Worklist Smp#: 8

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

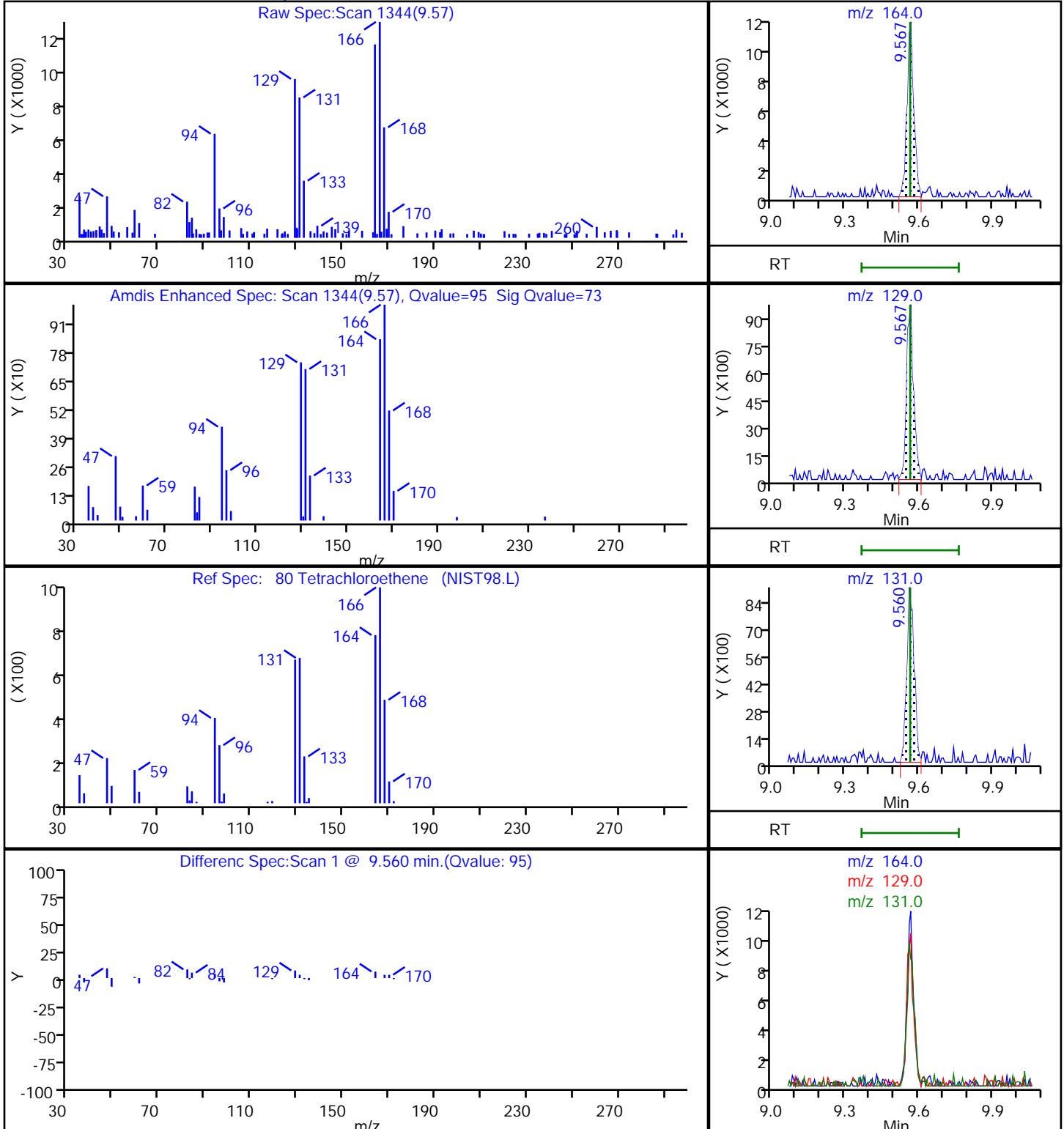
Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

80 Tetrachloroethene, CAS: 127-18-4

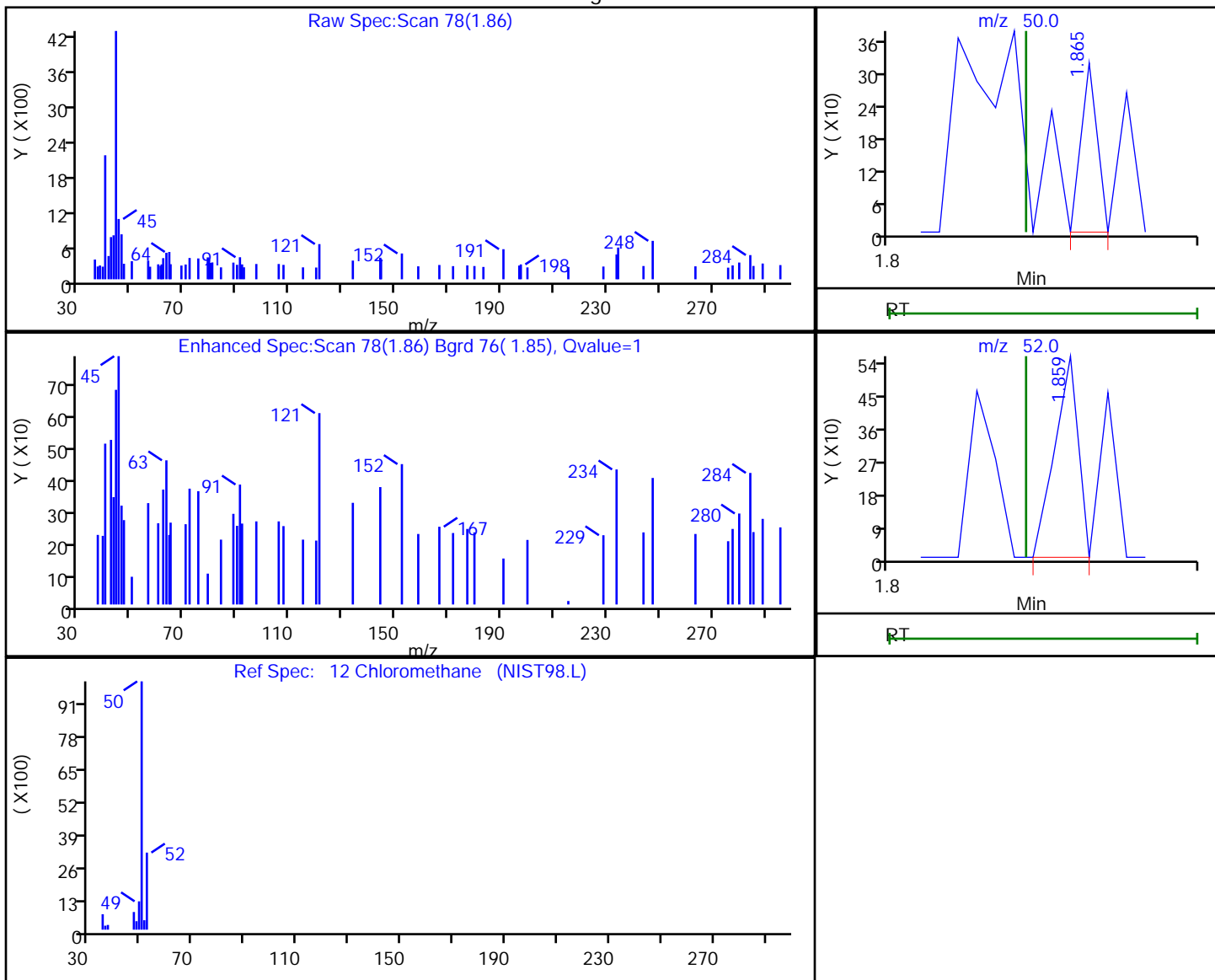


Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050408.D  
 Injection Date: 04-May-2020 11:04:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-C-8 Lab Sample ID: 180-105108-8  
 Client ID: HD-COD-SW-17-0/1-0  
 Operator ID: 034635 ALS Bottle#: 8 Worklist Smp#: 8  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

12 Chloromethane, CAS: 74-87-3

Processing Results



RT	Mass	Response	Amount
1.86	50.00	114	0.015267
1.86	52.00	296	

Reviewer: journtp, 04-May-2020 13:19:33  
 Audit Action: Marked Compound Undetected

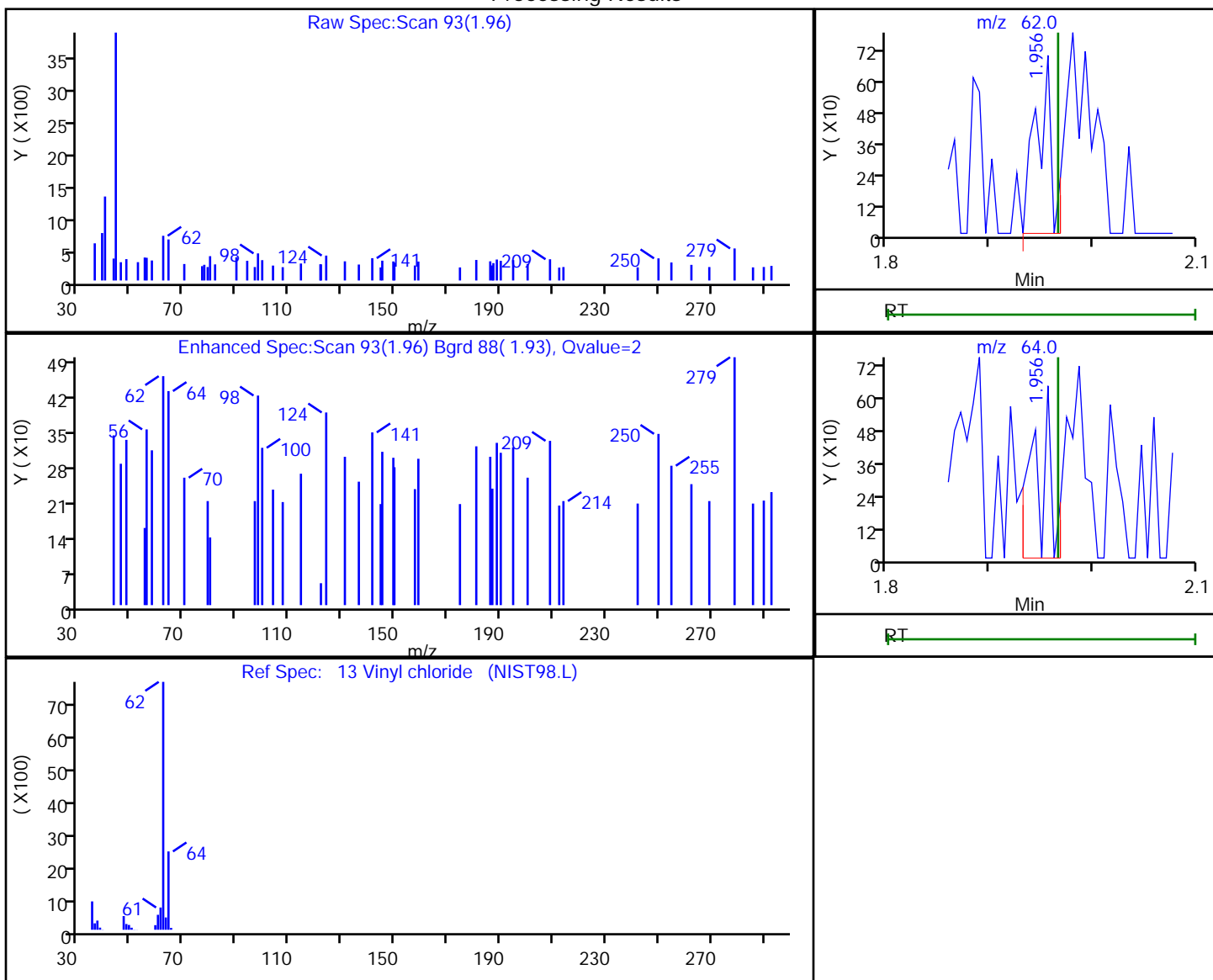
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050408.D  
 Injection Date: 04-May-2020 11:04:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-C-8 Lab Sample ID: 180-105108-8  
 Client ID: HD-COD-SW-17-0/1-0  
 Operator ID: 034635 ALS Bottle#: 8 Worklist Smp#: 8  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

13 Vinyl chloride, CAS: 75-01-4

Processing Results



RT	Mass	Response	Amount
1.96	62.00	735	0.110533
1.96	64.00	712	

Reviewer: journetp, 04-May-2020 13:19:33  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

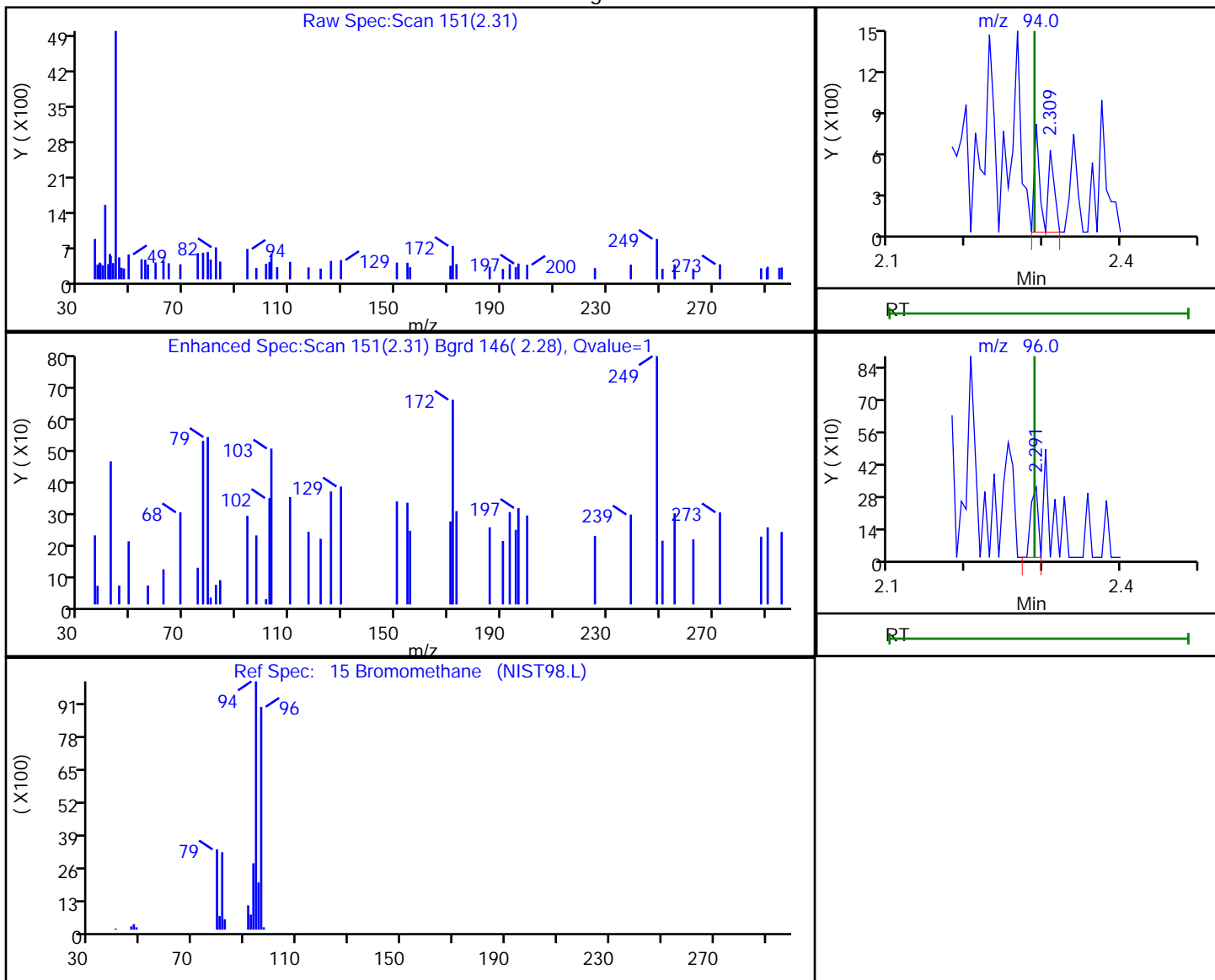


Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050408.D  
Injection Date: 04-May-2020 11:04:30 Instrument ID: CHHP5  
Lims ID: 180-105108-C-8 Lab Sample ID: 180-105108-8  
Client ID: HD-COD-SW-17-0/1-0  
Operator ID: 034635 ALS Bottle#: 8 Worklist Smp#: 8  
Purge Vol: 5.000 mL Dil. Factor: 1.0000  
Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
Column: DB-624 (0.18 mm) Detector: MS SCAN

15 Bromomethane, CAS: 74-83-9

Processing Results



RT	Mass	Response	Amount
2.31	94.00	693	0.182018
2.29	96.00	201	

Reviewer: journtp, 04-May-2020 13:19:34

Audit Action: Marked Compound Undetected

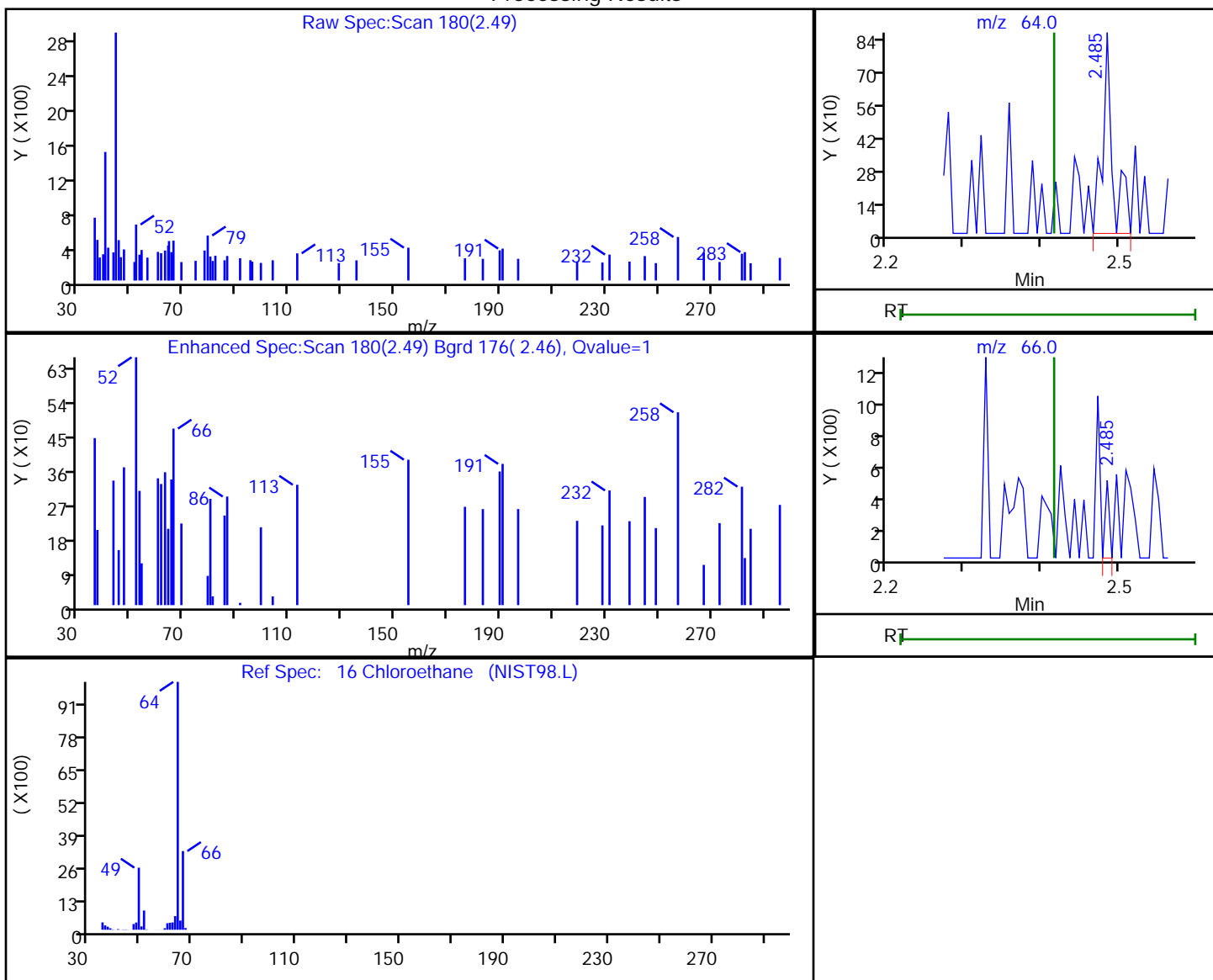
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050408.D  
 Injection Date: 04-May-2020 11:04:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-C-8 Lab Sample ID: 180-105108-8  
 Client ID: HD-COD-SW-17-0/1-0  
 Operator ID: 034635 ALS Bottle#: 8 Worklist Smp#: 8  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

16 Chloroethane, CAS: 75-00-3

Processing Results



RT	Mass	Response	Amount
2.49	64.00	802	0.177779
2.49	66.00	170	

Reviewer: journetp, 04-May-2020 13:19:34  
 Audit Action: Marked Compound Undetected

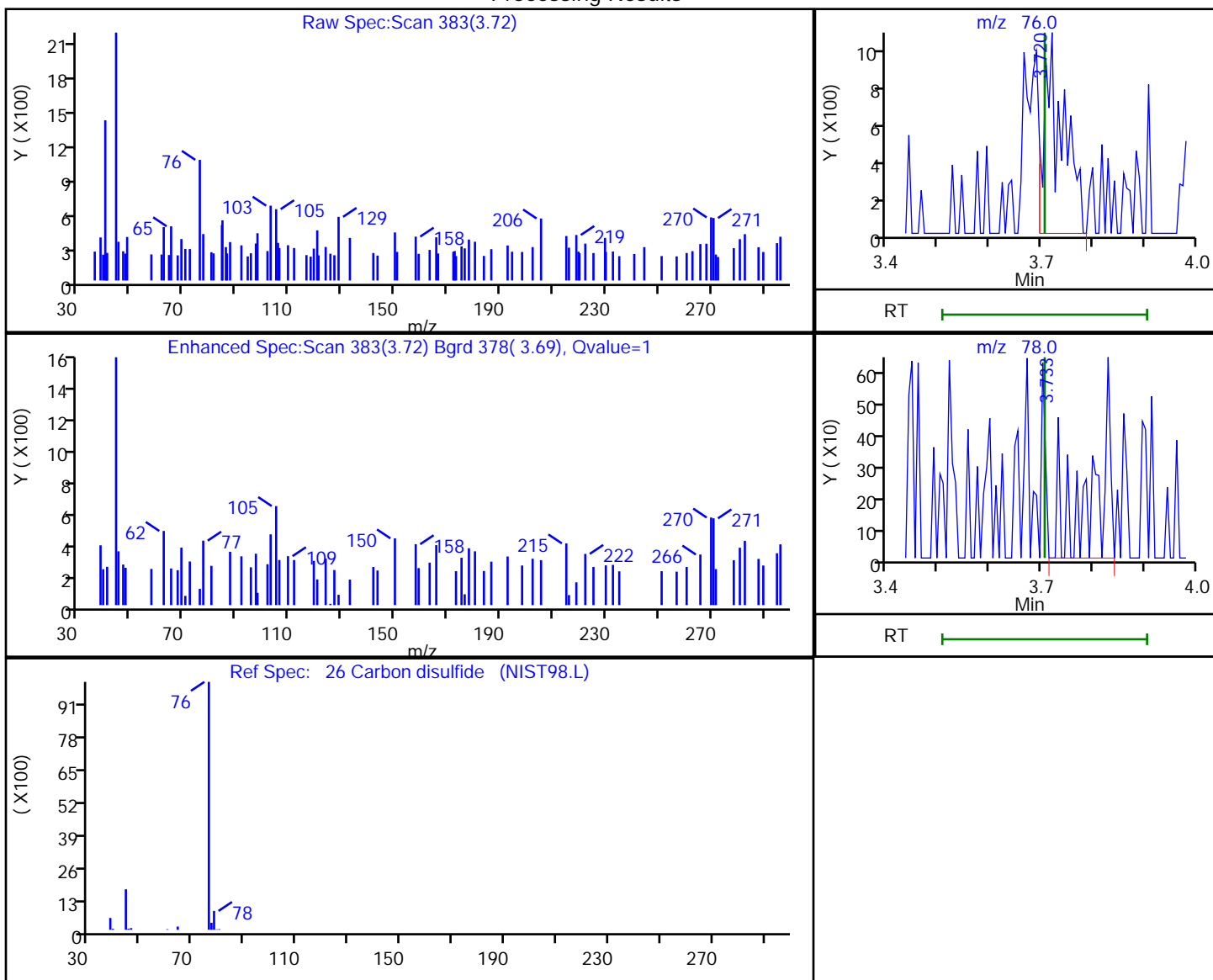
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050408.D  
 Injection Date: 04-May-2020 11:04:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-C-8 Lab Sample ID: 180-105108-8  
 Client ID: HD-COD-SW-17-0/1-0  
 Operator ID: 034635 ALS Bottle#: 8 Worklist Smp#: 8  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

26 Carbon disulfide, CAS: 75-15-0

Processing Results



RT	Mass	Response	Amount
3.72	76.00	2634	0.306148
3.73	78.00	1296	

Reviewer: journtp, 04-May-2020 13:19:39  
 Audit Action: Marked Compound Undetected

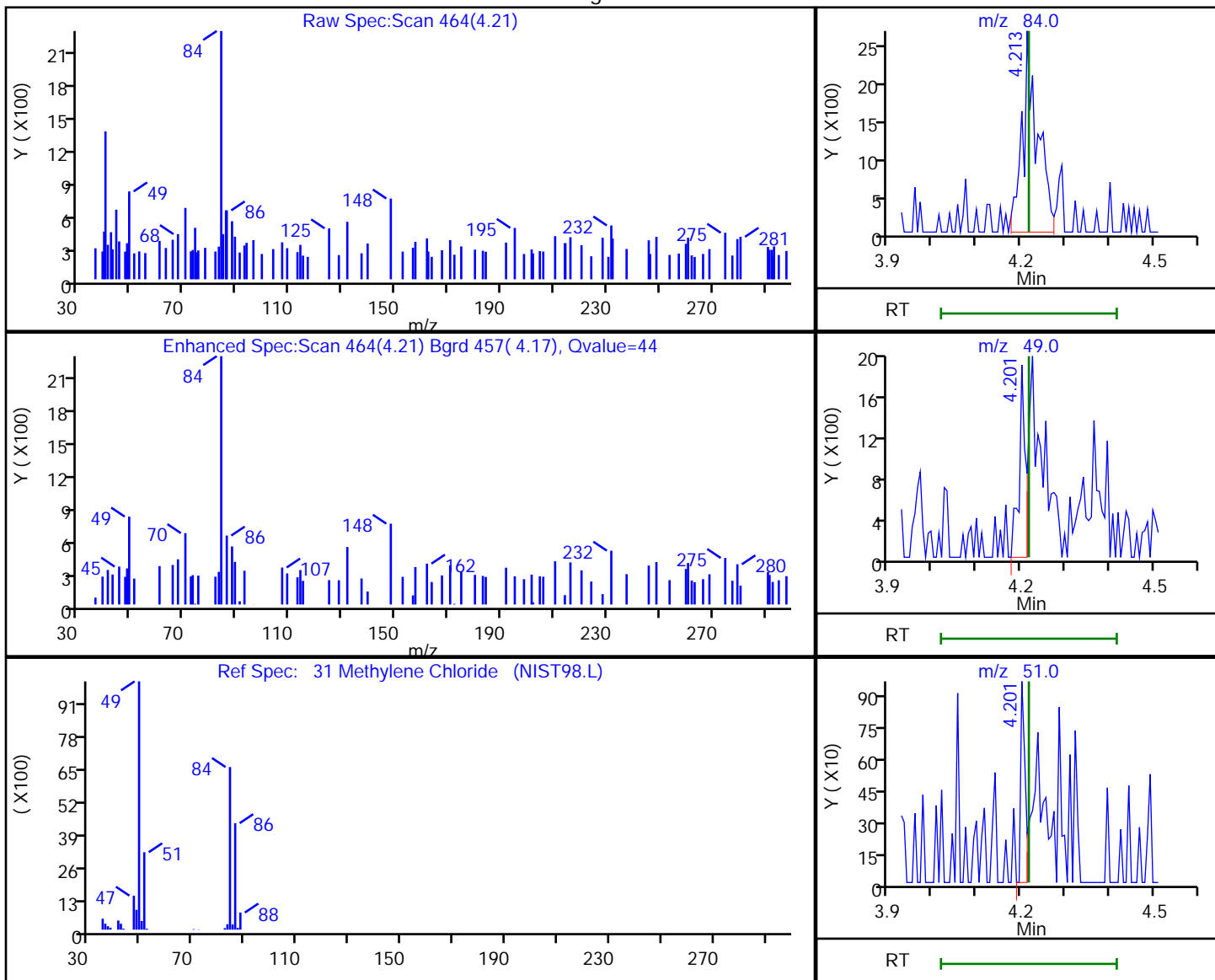
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050408.D  
 Injection Date: 04-May-2020 11:04:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-C-8 Lab Sample ID: 180-105108-8  
 Client ID: HD-COD-SW-17-0/1-0  
 Operator ID: 034635 ALS Bottle#: 8 Worklist Smp#: 8  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

31 Methylene Chloride, CAS: 75-09-2

Processing Results



RT	Mass	Response	Amount
4.21	84.00	6297	-0.426215
4.20	49.00	1825	
4.20	51.00	665	

Reviewer: journept, 04-May-2020 13:19:47  
 Audit Action: Marked Compound Undetected

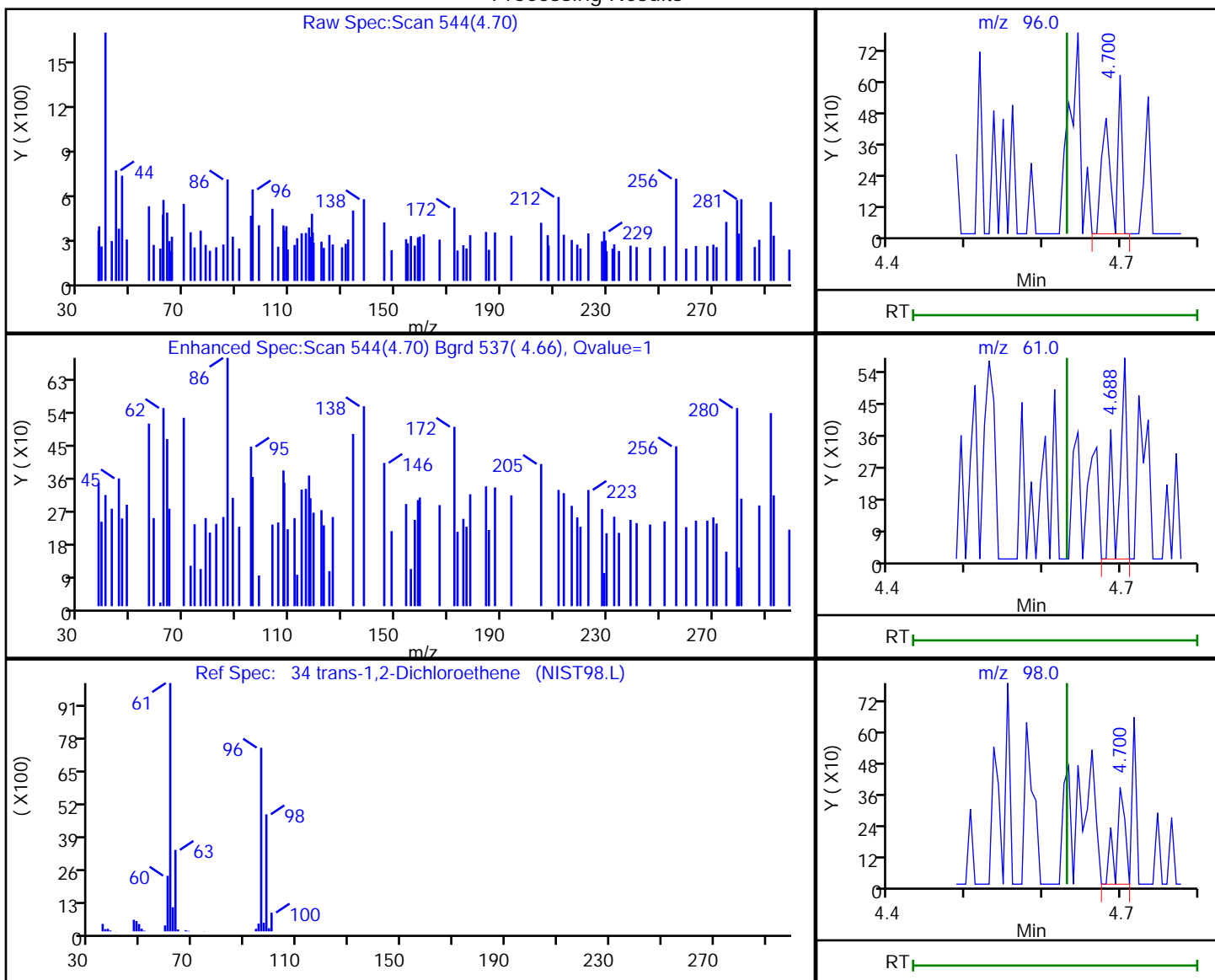
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050408.D  
 Injection Date: 04-May-2020 11:04:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-C-8 Lab Sample ID: 180-105108-8  
 Client ID: HD-COD-SW-17-0/1-0  
 Operator ID: 034635 ALS Bottle#: 8 Worklist Smp#: 8  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

34 trans-1,2-Dichloroethene, CAS: 156-60-5

Processing Results



RT	Mass	Response	Amount
4.70	96.00	574	0.137186
4.69	61.00	424	
4.70	98.00	310	

Reviewer: journeyp, 04-May-2020 13:19:47  
 Audit Action: Marked Compound Undetected

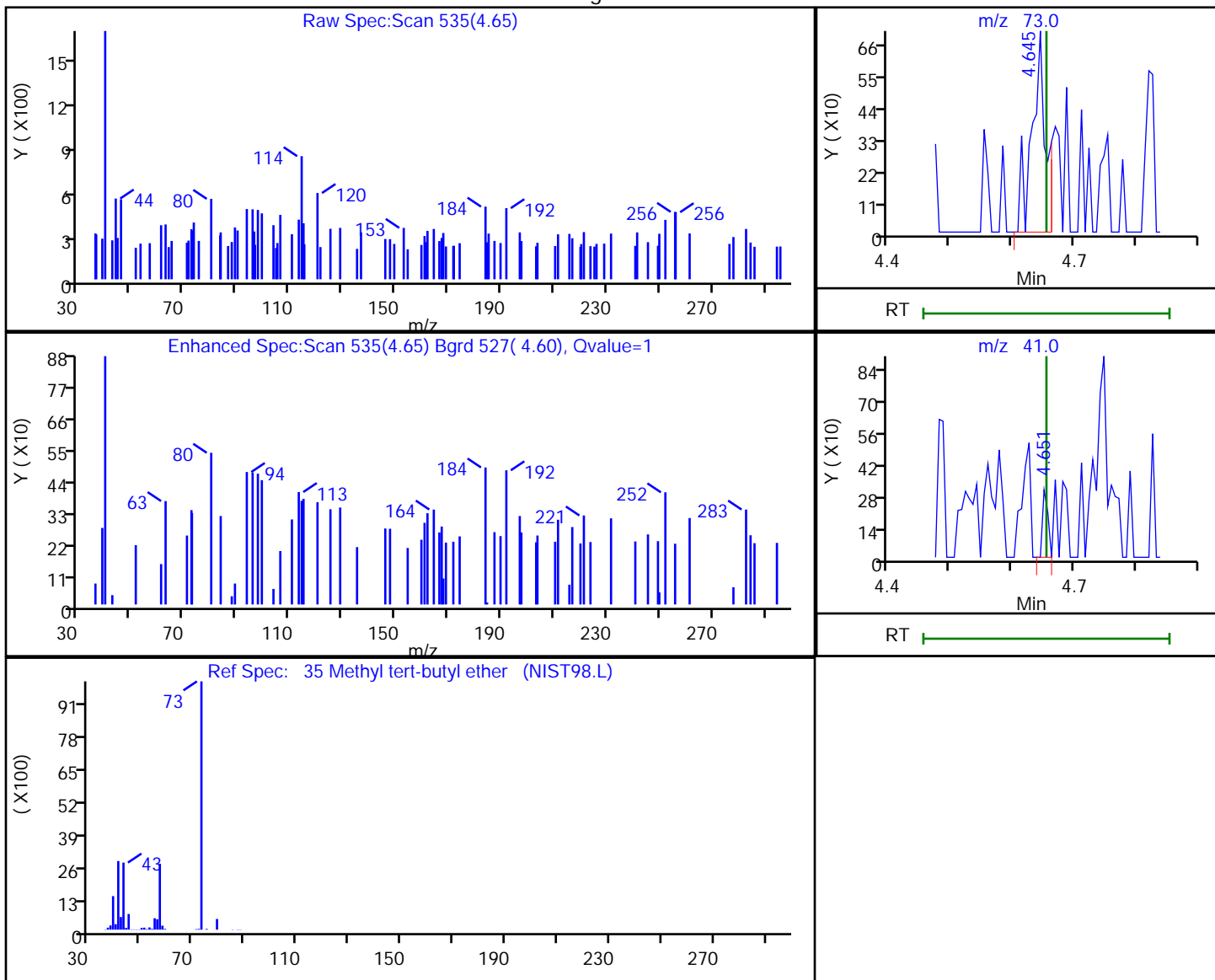
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050408.D  
 Injection Date: 04-May-2020 11:04:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-C-8 Lab Sample ID: 180-105108-8  
 Client ID: HD-COD-SW-17-0/1-0  
 Operator ID: 034635 ALS Bottle#: 8 Worklist Smp#: 8  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

35 Methyl tert-butyl ether, CAS: 1634-04-4

Processing Results



RT	Mass	Response	Amount
4.65	73.00	1099	0.093593
4.65	41.00	183	

Reviewer: journetp, 04-May-2020 13:19:48  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

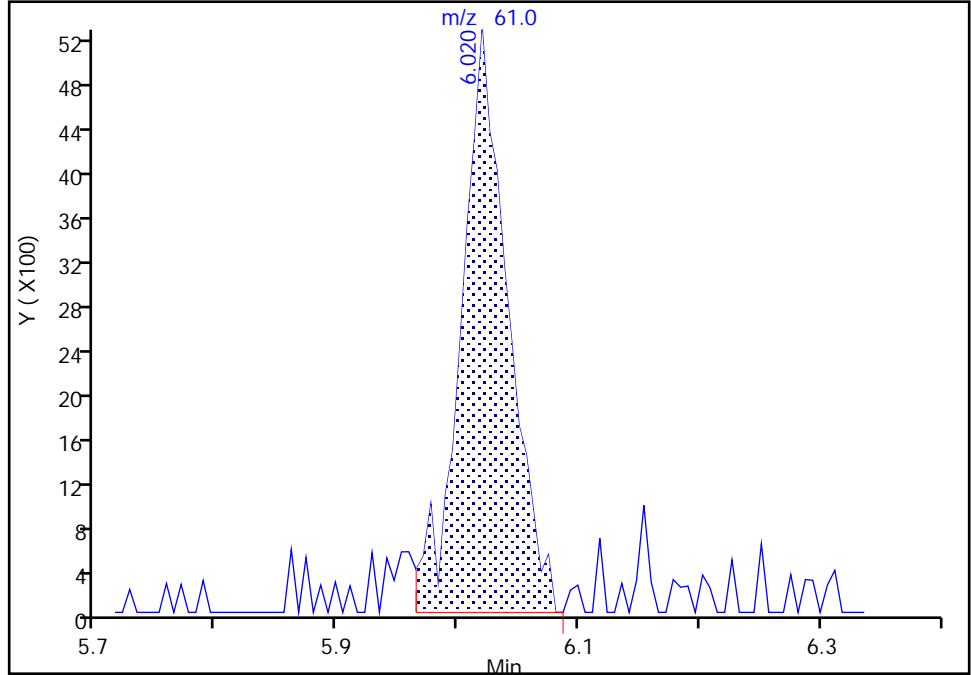
Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050408.D  
Injection Date: 04-May-2020 11:04:30 Instrument ID: CHHP5  
Lims ID: 180-105108-C-8 Lab Sample ID: 180-105108-8  
Client ID: HD-COD-SW-17-0/1-0  
Operator ID: 034635 ALS Bottle#: 8 Worklist Smp#: 8  
Purge Vol: 5.000 mL Dil. Factor: 1.0000  
Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
Column: DB-624 (0.18 mm) Detector: MS SCAN

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

Signal: 2

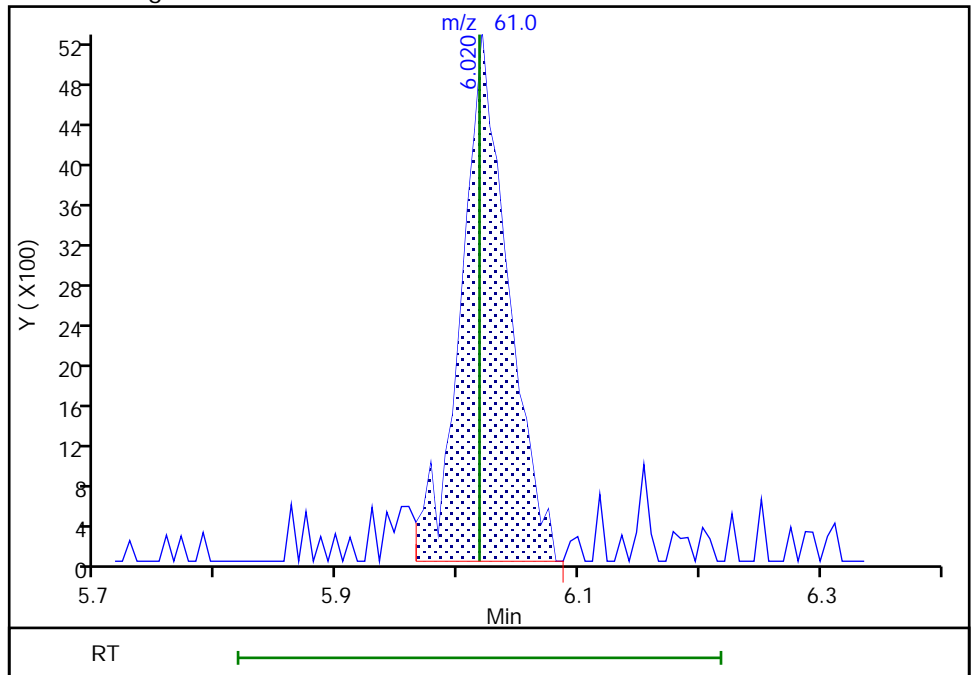
RT: 6.02  
Area: 14272  
Amount: 2.605947  
Amount Units: ng

Processing Integration Results



RT: 6.02  
Area: 14272  
Amount: 2.605947  
Amount Units: ng

Manual Integration Results



Eurofins TestAmerica, Pittsburgh

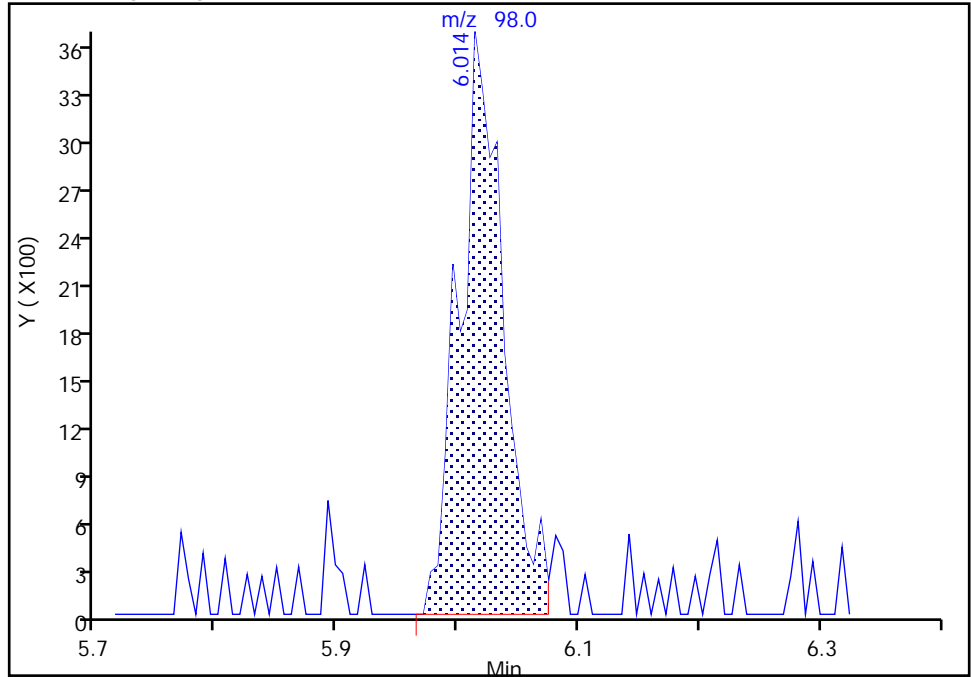
Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050408.D  
Injection Date: 04-May-2020 11:04:30 Instrument ID: CHHP5  
Lims ID: 180-105108-C-8 Lab Sample ID: 180-105108-8  
Client ID: HD-COD-SW-17-0/1-0  
Operator ID: 034635 ALS Bottle#: 8 Worklist Smp#: 8  
Purge Vol: 5.000 mL Dil. Factor: 1.0000  
Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
Column: DB-624 (0.18 mm) Detector: MS SCAN

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

Signal: 3

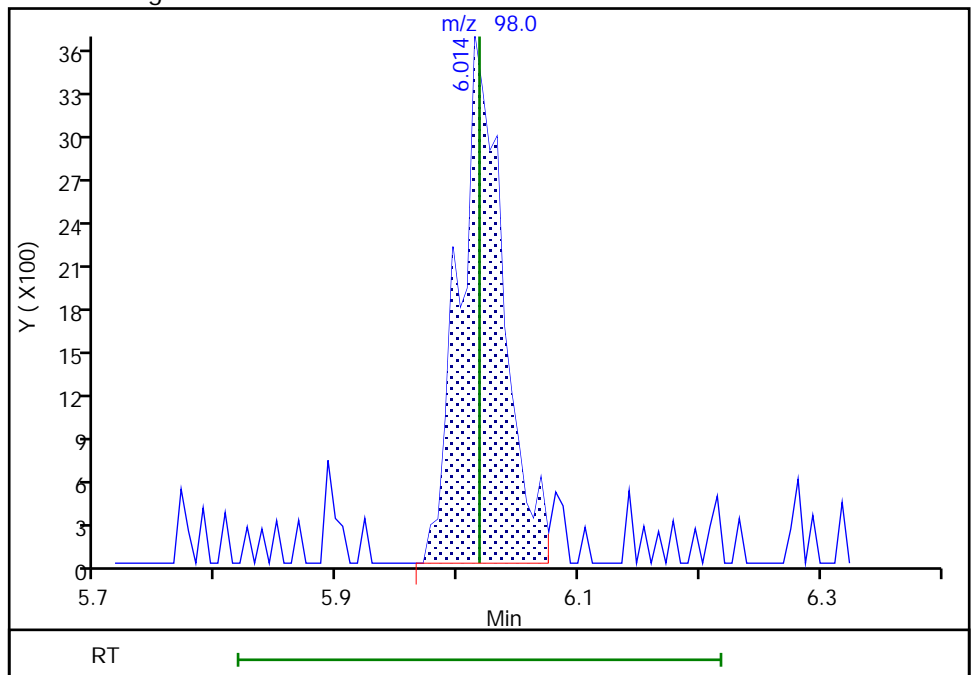
RT: 6.01  
Area: 9362  
Amount: 2.605947  
Amount Units: ng

Processing Integration Results



RT: 6.01  
Area: 9362  
Amount: 2.605947  
Amount Units: ng

Manual Integration Results



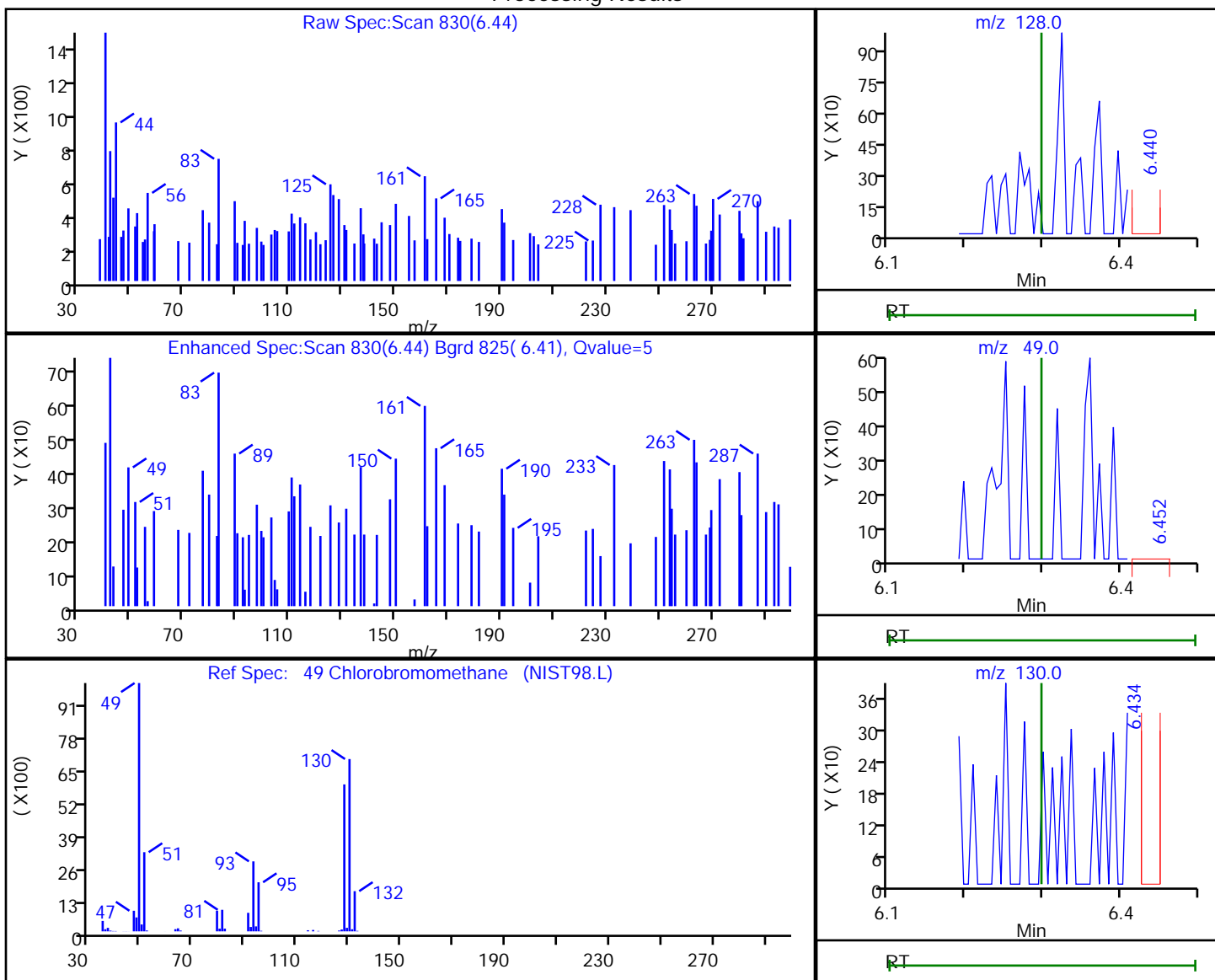


Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050408.D  
 Injection Date: 04-May-2020 11:04:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-C-8 Lab Sample ID: 180-105108-8  
 Client ID: HD-COD-SW-17-0/1-0  
 Operator ID: 034635 ALS Bottle#: 8 Worklist Smp#: 8  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

49 Chlorobromomethane, CAS: 74-97-5

Processing Results



RT	Mass	Response	Amount
6.44	128.00	342	0.128890
6.45	49.00	454	
6.43	130.00	256	

Reviewer: journeyp, 04-May-2020 13:19:57  
 Audit Action: Marked Compound Undetected

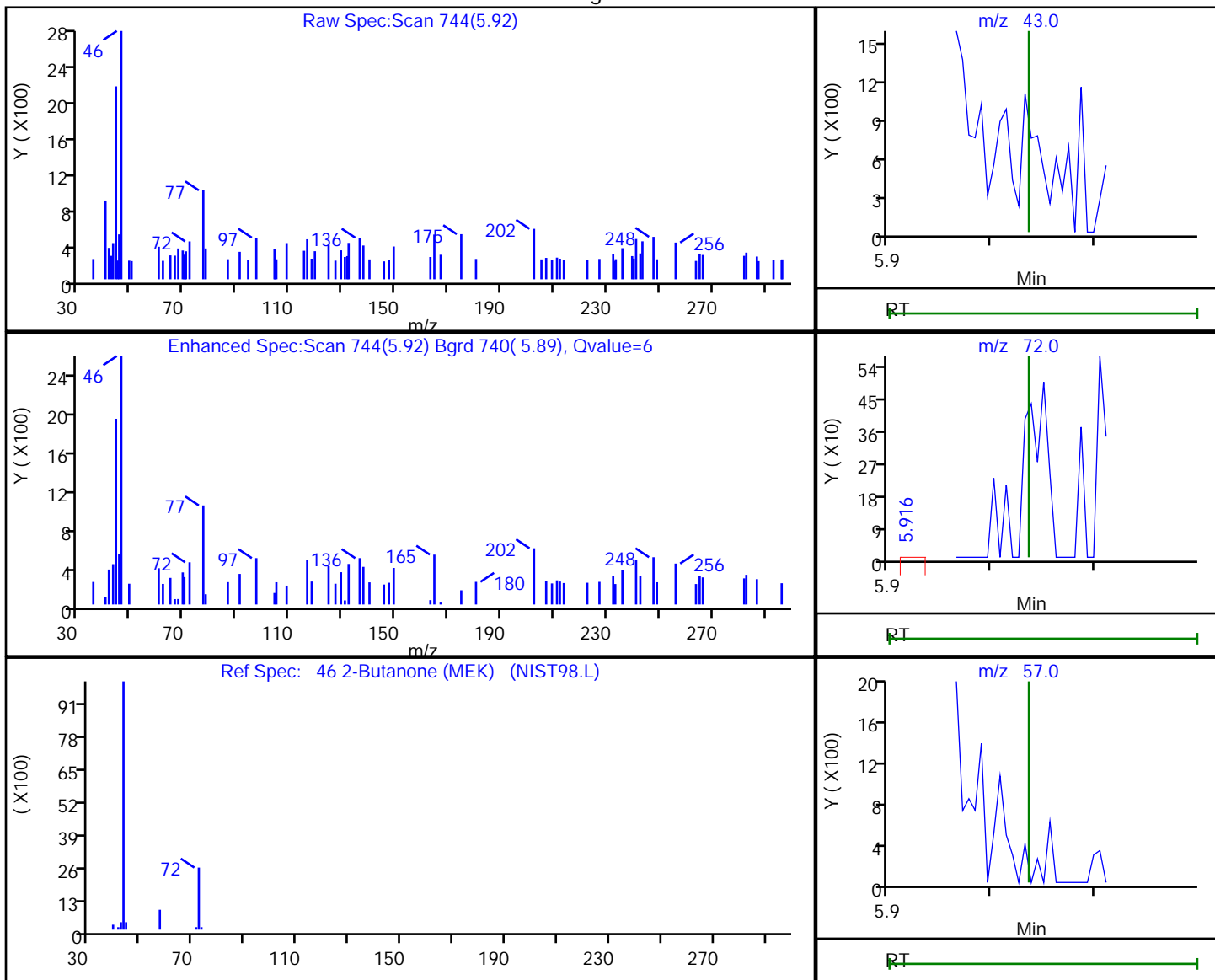
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050408.D  
Injection Date: 04-May-2020 11:04:30 Instrument ID: CHHP5  
Lims ID: 180-105108-C-8 Lab Sample ID: 180-105108-8  
Client ID: HD-COD-SW-17-0/1-0  
Operator ID: 034635 ALS Bottle#: 8 Worklist Smp#: 8  
Purge Vol: 5.000 mL Dil. Factor: 1.0000  
Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
Column: DB-624 (0.18 mm) Detector: MS SCAN

46 2-Butanone (MEK), CAS: 78-93-3

Processing Results



RT	Mass	Response	Amount
5.92	43.00	577	0.205261
5.92	72.00	386	
6.04	57.00	0	

Reviewer: journetp, 04-May-2020 13:19:57  
Audit Action: Marked Compound Undetected

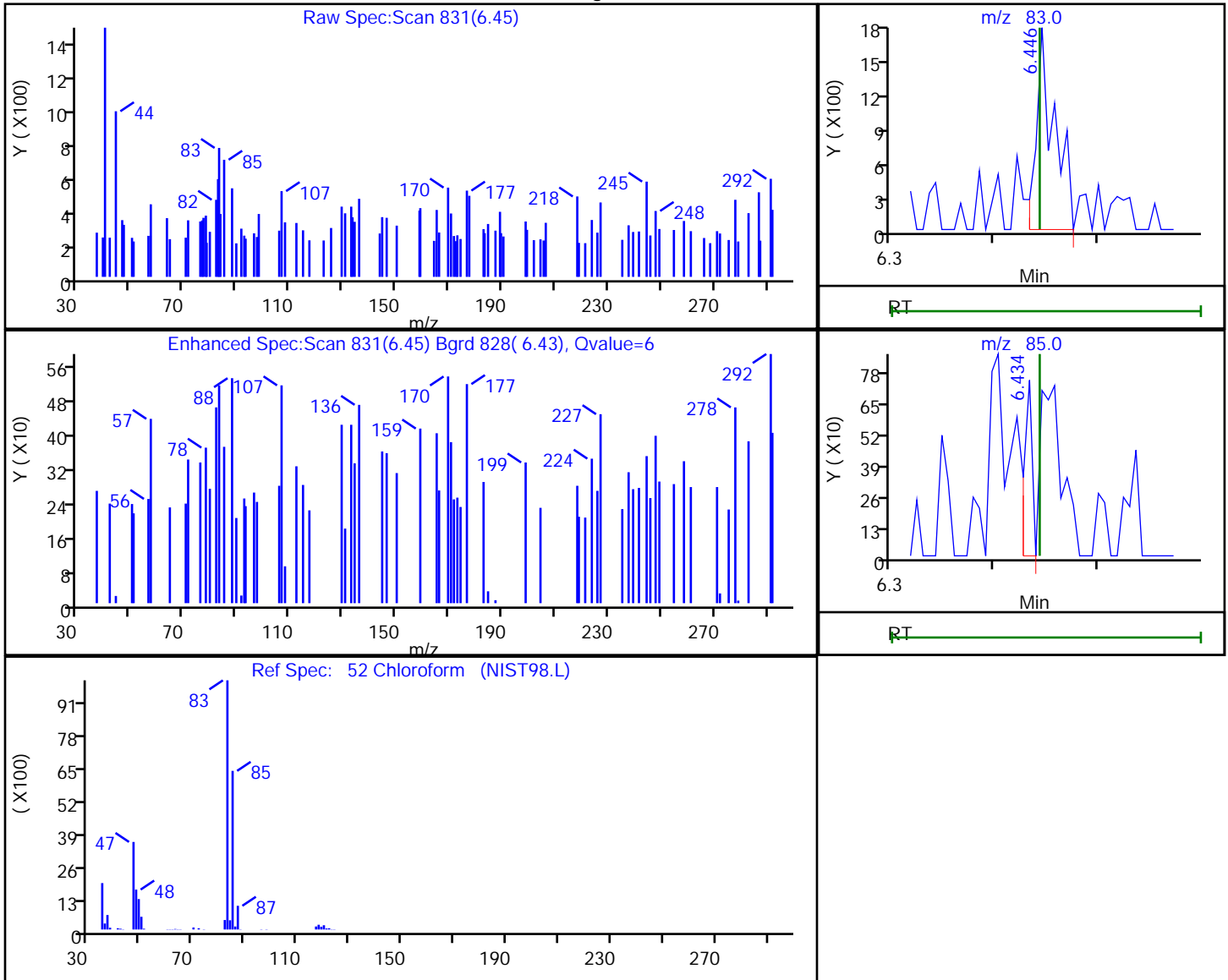
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050408.D  
 Injection Date: 04-May-2020 11:04:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-C-8 Lab Sample ID: 180-105108-8  
 Client ID: HD-COD-SW-17-0/1-0  
 Operator ID: 034635 ALS Bottle#: 8 Worklist Smp#: 8  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

52 Chloroform, CAS: 67-66-3

Processing Results



RT	Mass	Response	Amount
6.45	83.00	2112	-1.489567
6.43	85.00	394	

Reviewer: journtp, 04-May-2020 13:20:08  
 Audit Action: Marked Compound Undetected

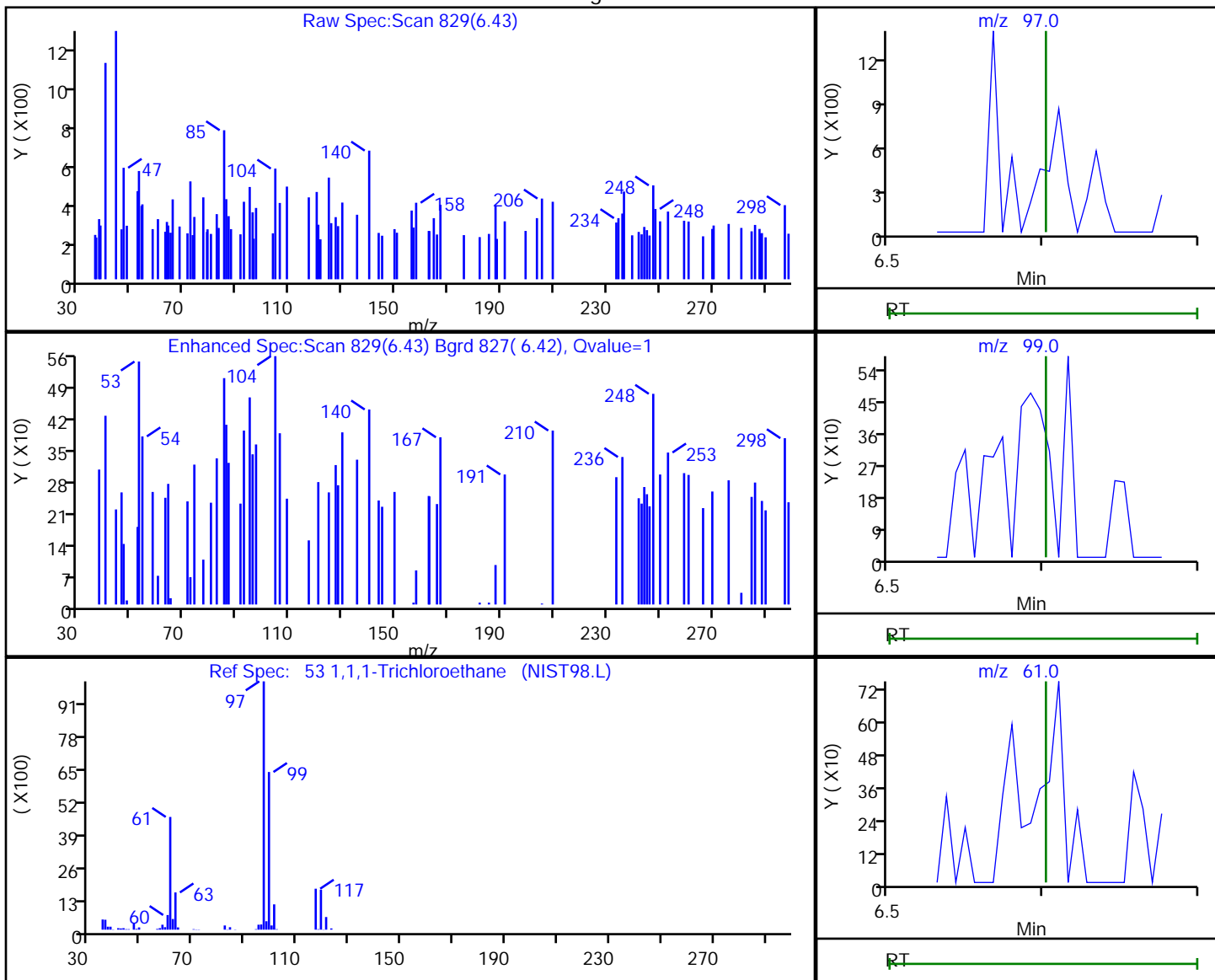
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050408.D  
 Injection Date: 04-May-2020 11:04:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-C-8 Lab Sample ID: 180-105108-8  
 Client ID: HD-COD-SW-17-0/1-0  
 Operator ID: 034635 ALS Bottle#: 8 Worklist Smp#: 8  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

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

Processing Results



RT	Mass	Response	Amount
6.43	97.00	328	0.052587
6.44	99.00	157	
6.43	61.00	175	

Reviewer: journept, 04-May-2020 13:20:08  
 Audit Action: Marked Compound Undetected

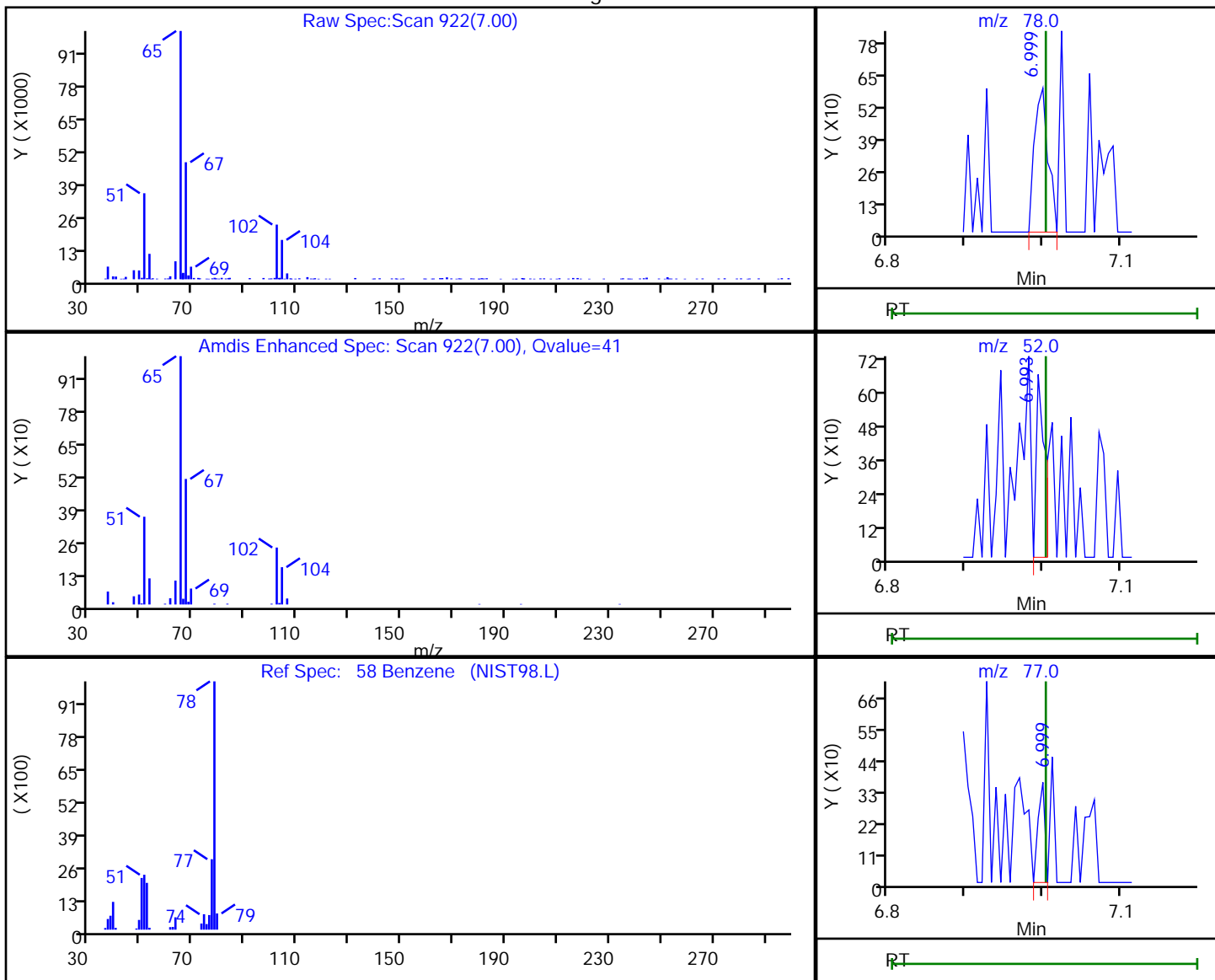
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050408.D  
Injection Date: 04-May-2020 11:04:30 Instrument ID: CHHP5  
Lims ID: 180-105108-C-8 Lab Sample ID: 180-105108-8  
Client ID: HD-COD-SW-17-0/1-0  
Operator ID: 034635 ALS Bottle#: 8 Worklist Smp#: 8  
Purge Vol: 5.000 mL Dil. Factor: 1.0000  
Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
Column: DB-624 (0.18 mm) Detector: MS SCAN

58 Benzene, CAS: 71-43-2

Processing Results



RT	Mass	Response	Amount
7.00	78.00	729	0.038695
6.99	52.00	524	
7.00	77.00	214	

Reviewer: journept, 04-May-2020 13:20:09  
Audit Action: Marked Compound Undetected

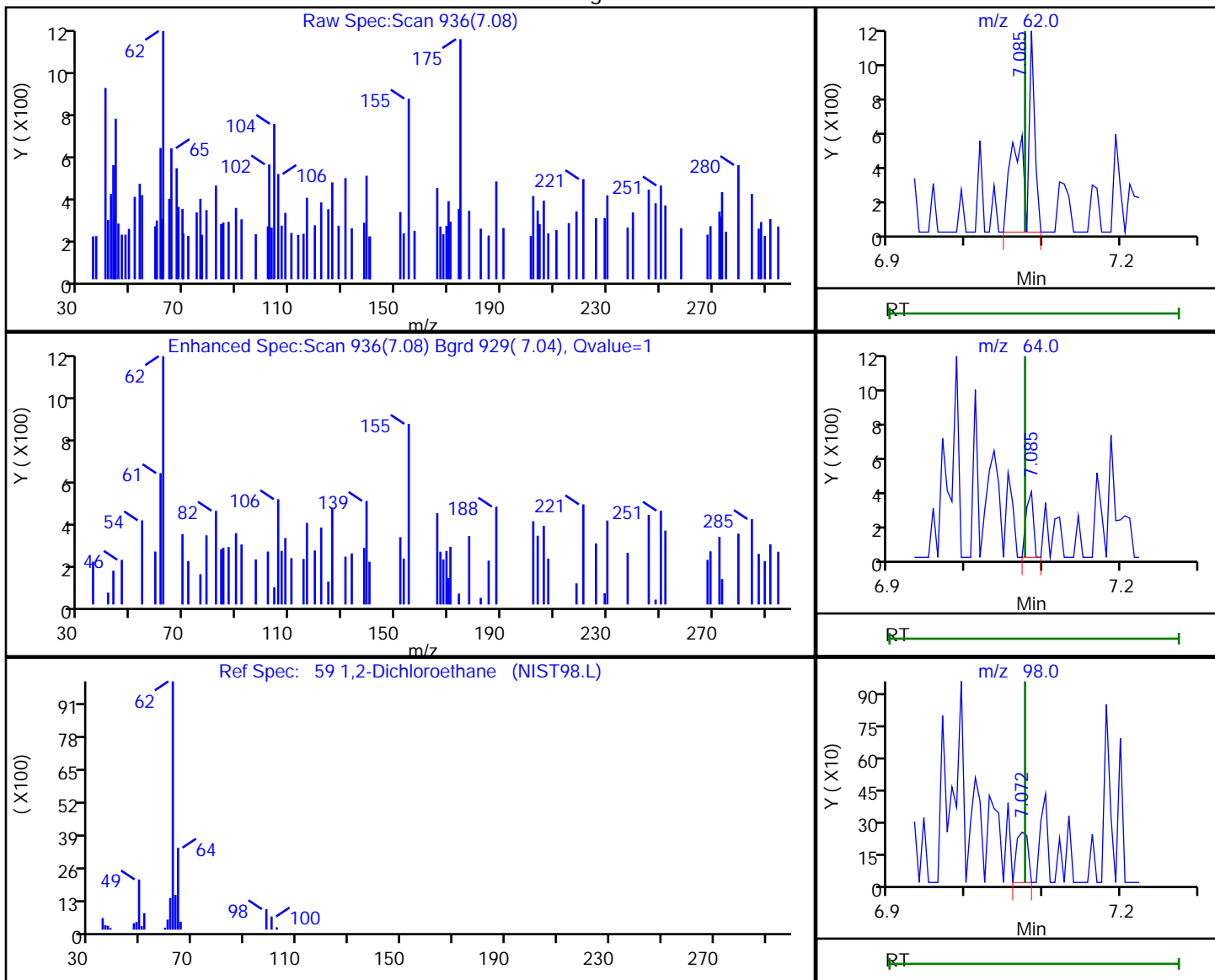
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050408.D  
 Injection Date: 04-May-2020 11:04:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-C-8 Lab Sample ID: 180-105108-8  
 Client ID: HD-COD-SW-17-0/1-0  
 Operator ID: 034635 ALS Bottle#: 8 Worklist Smp#: 8  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

59 1,2-Dichloroethane, CAS: 107-06-2

Processing Results



RT	Mass	Response	Amount
7.08	62.00	1223	0.170729
7.08	64.00	242	
7.07	98.00	244	

Reviewer: journetp, 04-May-2020 13:20:09  
 Audit Action: Marked Compound Undetected

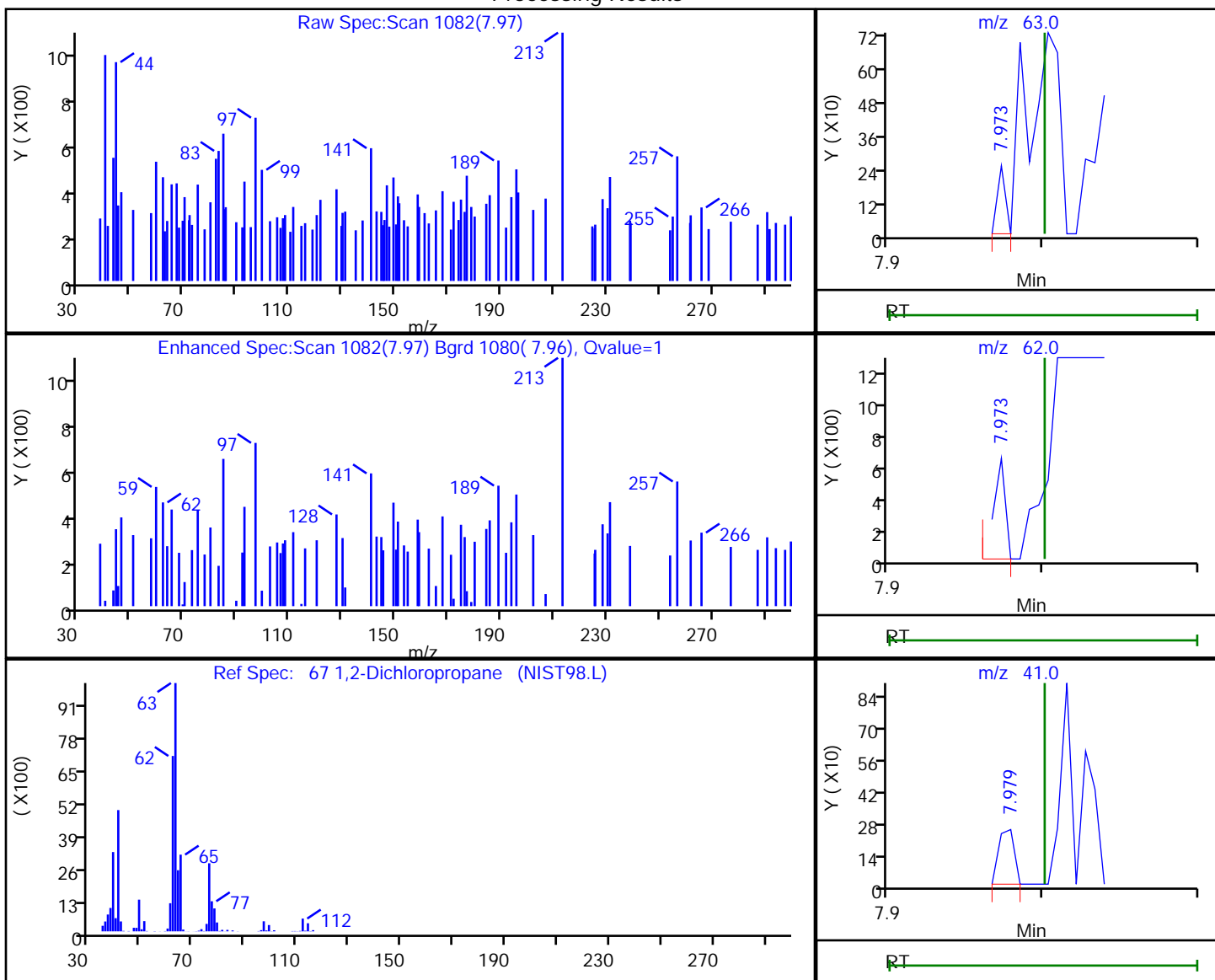
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050408.D  
 Injection Date: 04-May-2020 11:04:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-C-8 Lab Sample ID: 180-105108-8  
 Client ID: HD-COD-SW-17-0/1-0  
 Operator ID: 034635 ALS Bottle#: 8 Worklist Smp#: 8  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

67 1,2-Dichloropropane, CAS: 78-87-5

Processing Results



RT	Mass	Response	Amount
7.97	63.00	89	0.017699
7.97	62.00	317	
7.98	41.00	170	

Reviewer: journetp, 04-May-2020 13:20:16  
 Audit Action: Marked Compound Undetected

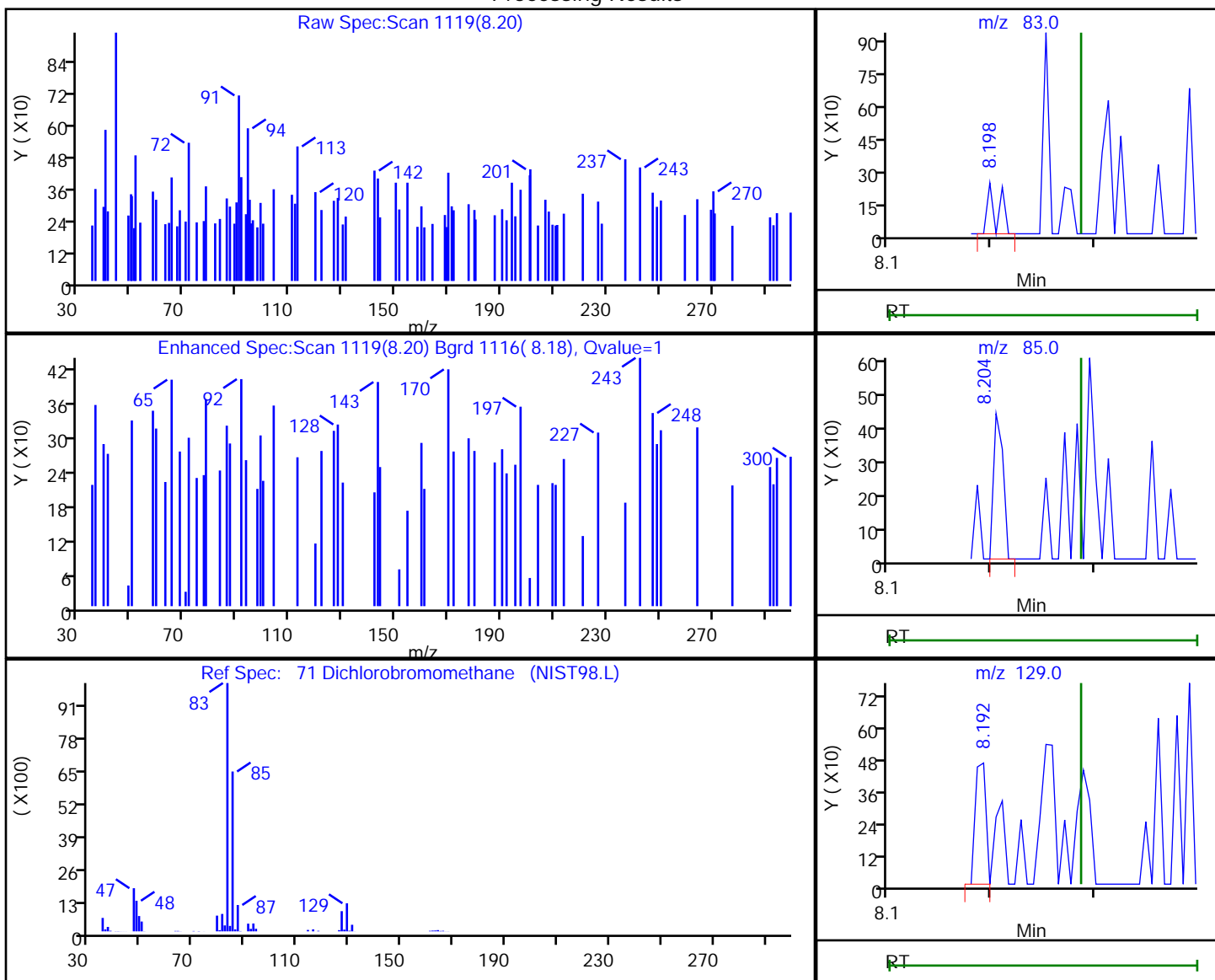
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050408.D  
 Injection Date: 04-May-2020 11:04:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-C-8 Lab Sample ID: 180-105108-8  
 Client ID: HD-COD-SW-17-0/1-0  
 Operator ID: 034635 ALS Bottle#: 8 Worklist Smp#: 8  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

71 Dichlorobromomethane, CAS: 75-27-4

Processing Results



RT	Mass	Response	Amount
8.20	83.00	165	0.027964
8.20	85.00	279	
8.19	129.00	332	

Reviewer: journeyp, 04-May-2020 13:20:17  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

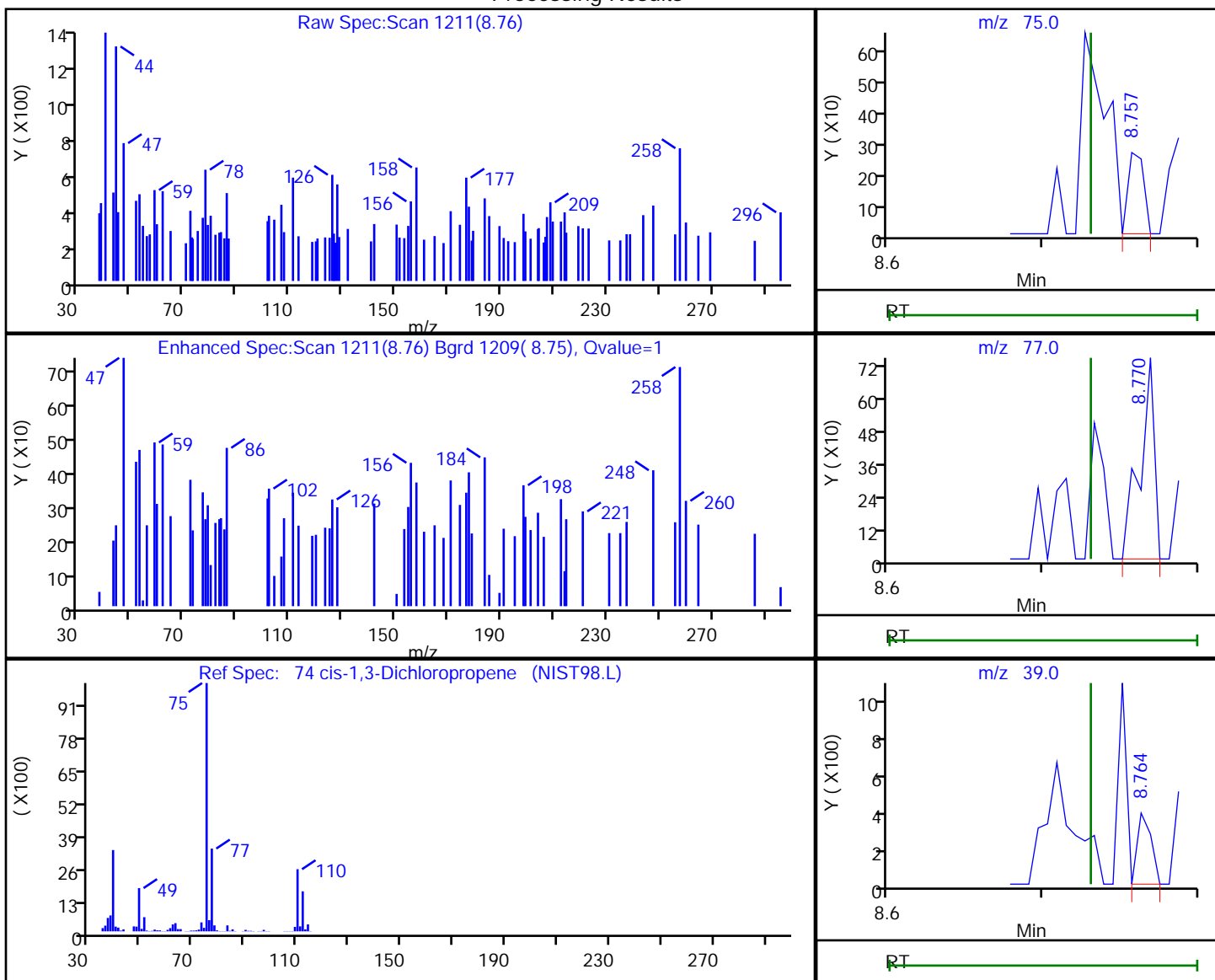


Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050408.D  
 Injection Date: 04-May-2020 11:04:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-C-8 Lab Sample ID: 180-105108-8  
 Client ID: HD-COD-SW-17-0/1-0  
 Operator ID: 034635 ALS Bottle#: 8 Worklist Smp#: 8  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

74 cis-1,3-Dichloropropene, CAS: 10061-01-5

Processing Results



RT	Mass	Response	Amount
8.76	75.00	186	0.025037
8.77	77.00	487	
8.76	39.00	225	

Reviewer: journeyp, 04-May-2020 13:20:17  
 Audit Action: Marked Compound Undetected

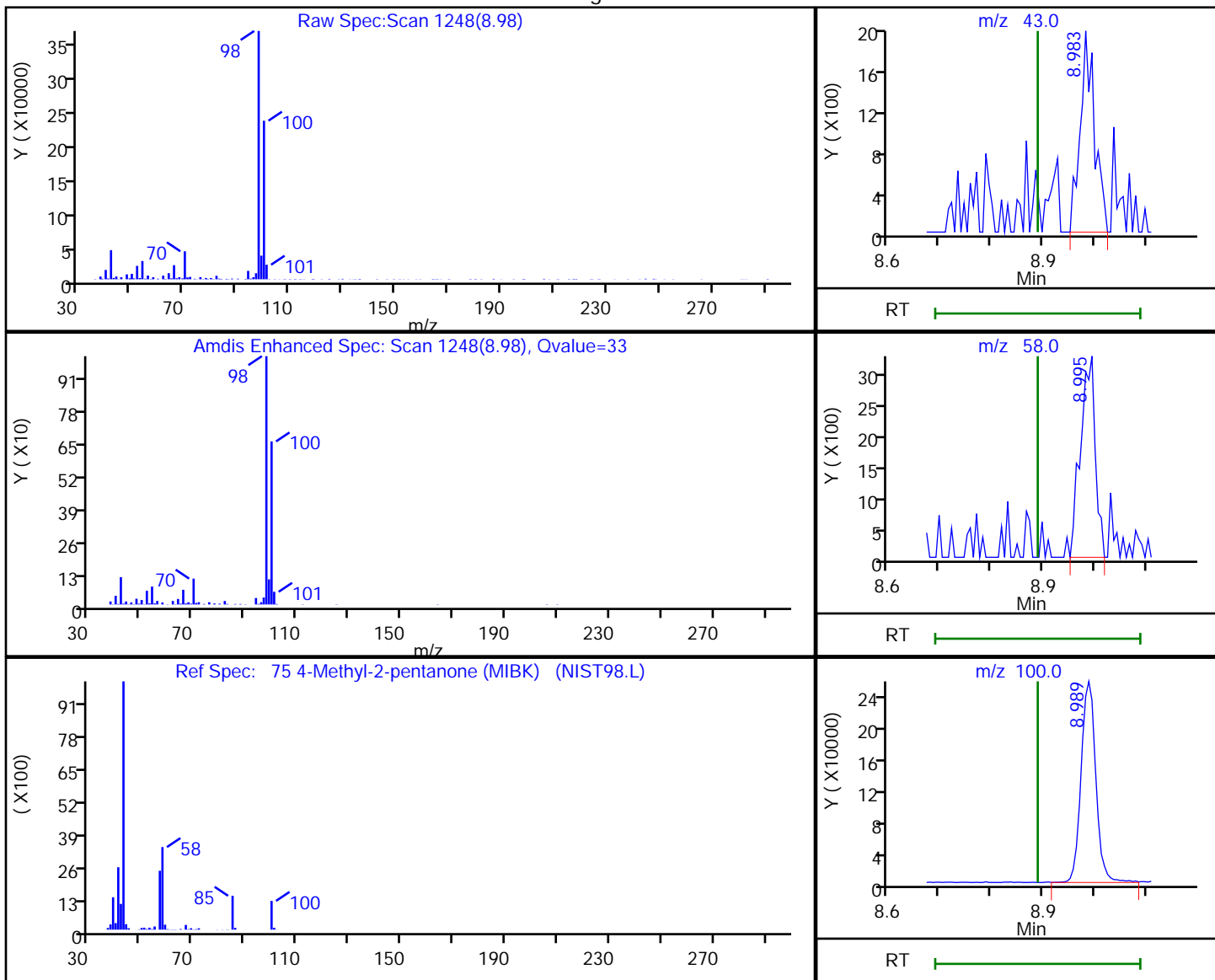
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050408.D  
 Injection Date: 04-May-2020 11:04:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-C-8 Lab Sample ID: 180-105108-8  
 Client ID: HD-COD-SW-17-0/1-0  
 Operator ID: 034635 ALS Bottle#: 8 Worklist Smp#: 8  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

75 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Processing Results



RT	Mass	Response	Amount
8.98	43.00	3764	16.257058
8.99	58.00	6595	
8.99	100.00	509962	

Reviewer: journept, 04-May-2020 13:20:17  
 Audit Action: Marked Compound Undetected

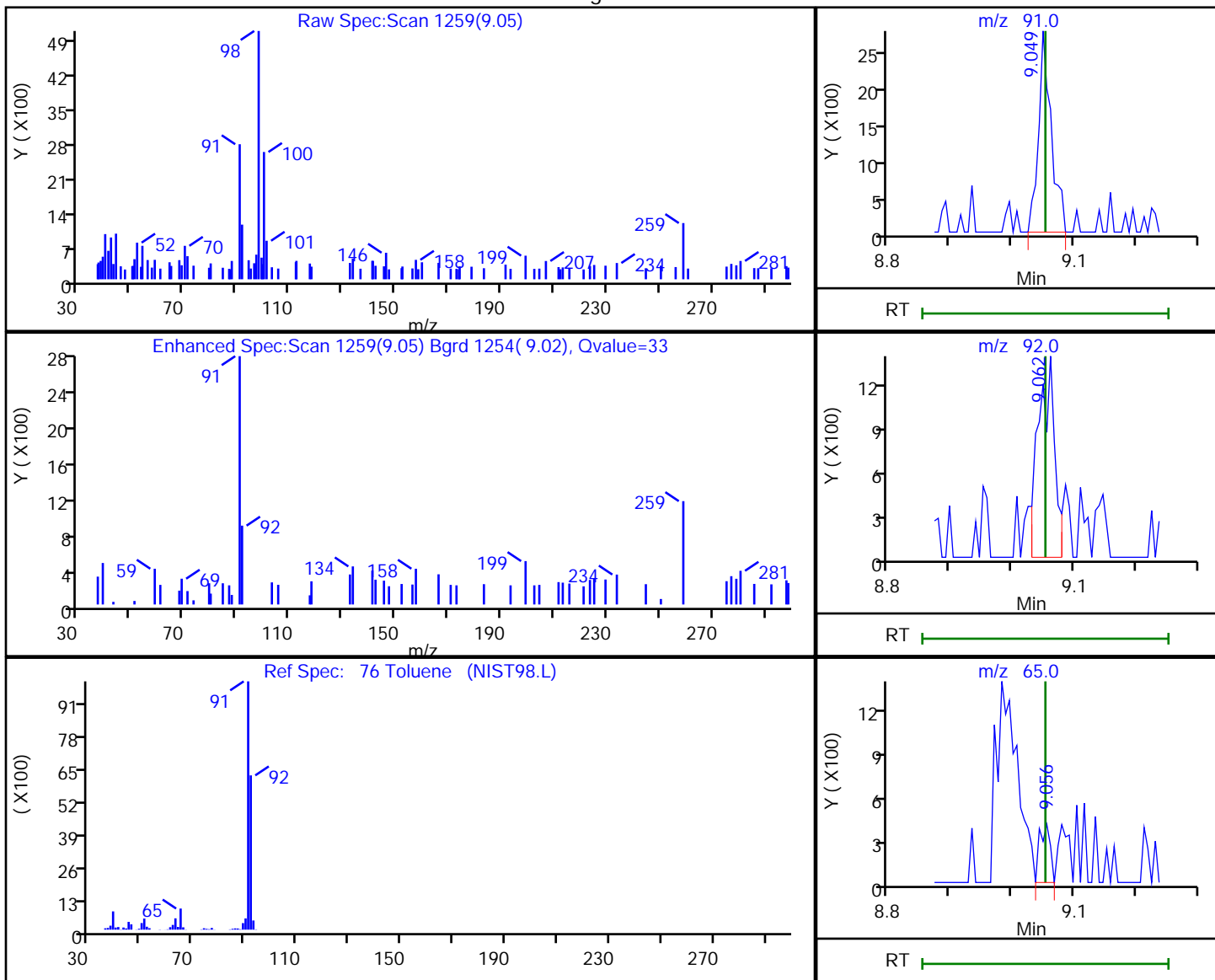
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050408.D  
Injection Date: 04-May-2020 11:04:30 Instrument ID: CHHP5  
Lims ID: 180-105108-C-8 Lab Sample ID: 180-105108-8  
Client ID: HD-COD-SW-17-0/1-0  
Operator ID: 034635 ALS Bottle#: 8 Worklist Smp#: 8  
Purge Vol: 5.000 mL Dil. Factor: 1.0000  
Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
Column: DB-624 (0.18 mm) Detector: MS SCAN

76 Toluene, CAS: 108-88-3

Processing Results



RT	Mass	Response	Amount
9.05	91.00	3976	0.225609
9.06	92.00	2414	
9.06	65.00	459	

Reviewer: journeyp, 04-May-2020 13:20:17  
Audit Action: Marked Compound Undetected

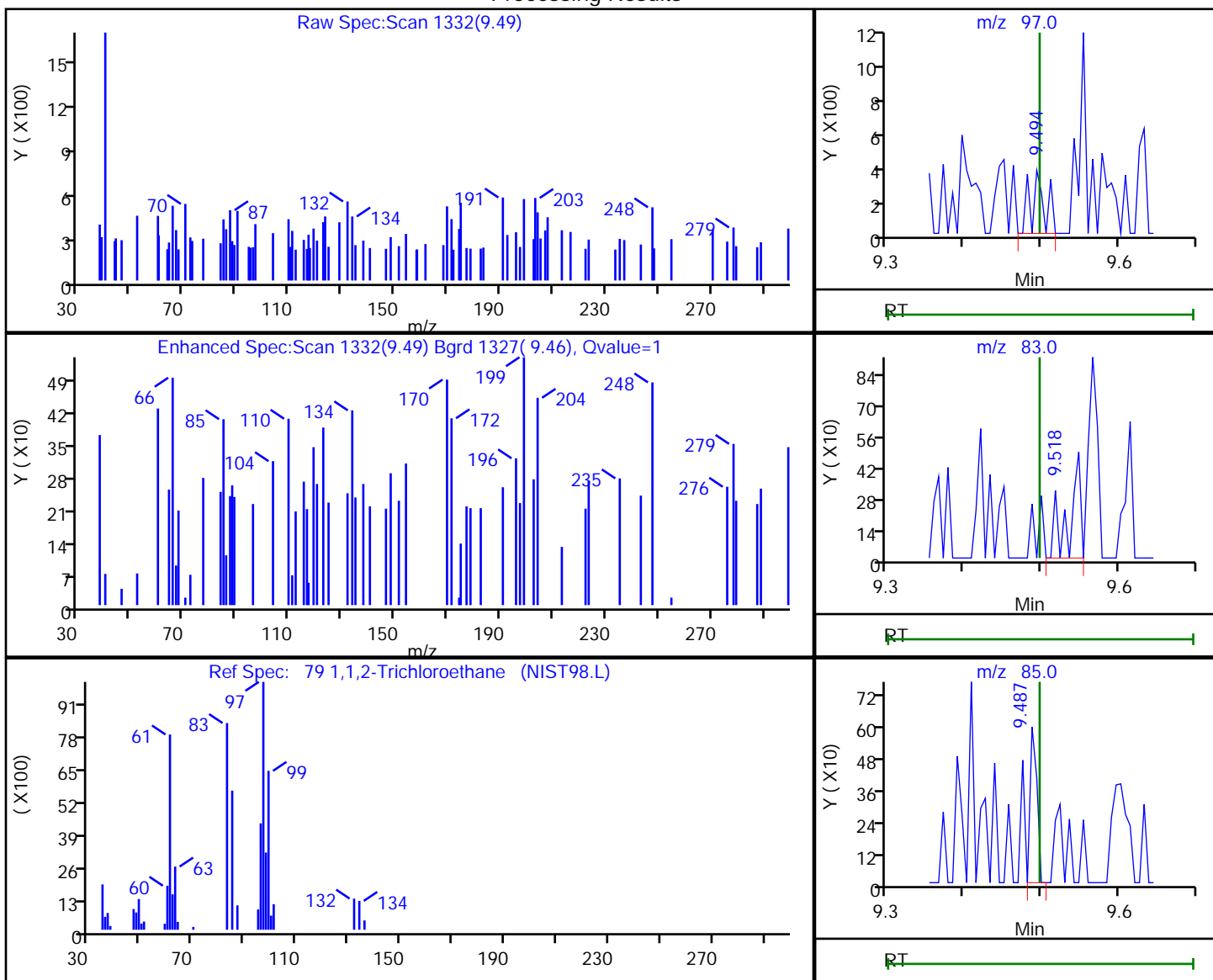
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050408.D  
 Injection Date: 04-May-2020 11:04:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-C-8 Lab Sample ID: 180-105108-8  
 Client ID: HD-COD-SW-17-0/1-0  
 Operator ID: 034635 ALS Bottle#: 8 Worklist Smp#: 8  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

79 1,1,2-Trichloroethane, CAS: 79-00-5

Processing Results



RT	Mass	Response	Amount
9.49	97.00	463	0.113027
9.52	83.00	476	
9.49	85.00	362	

Reviewer: journetp, 04-May-2020 13:20:17  
 Audit Action: Marked Compound Undetected

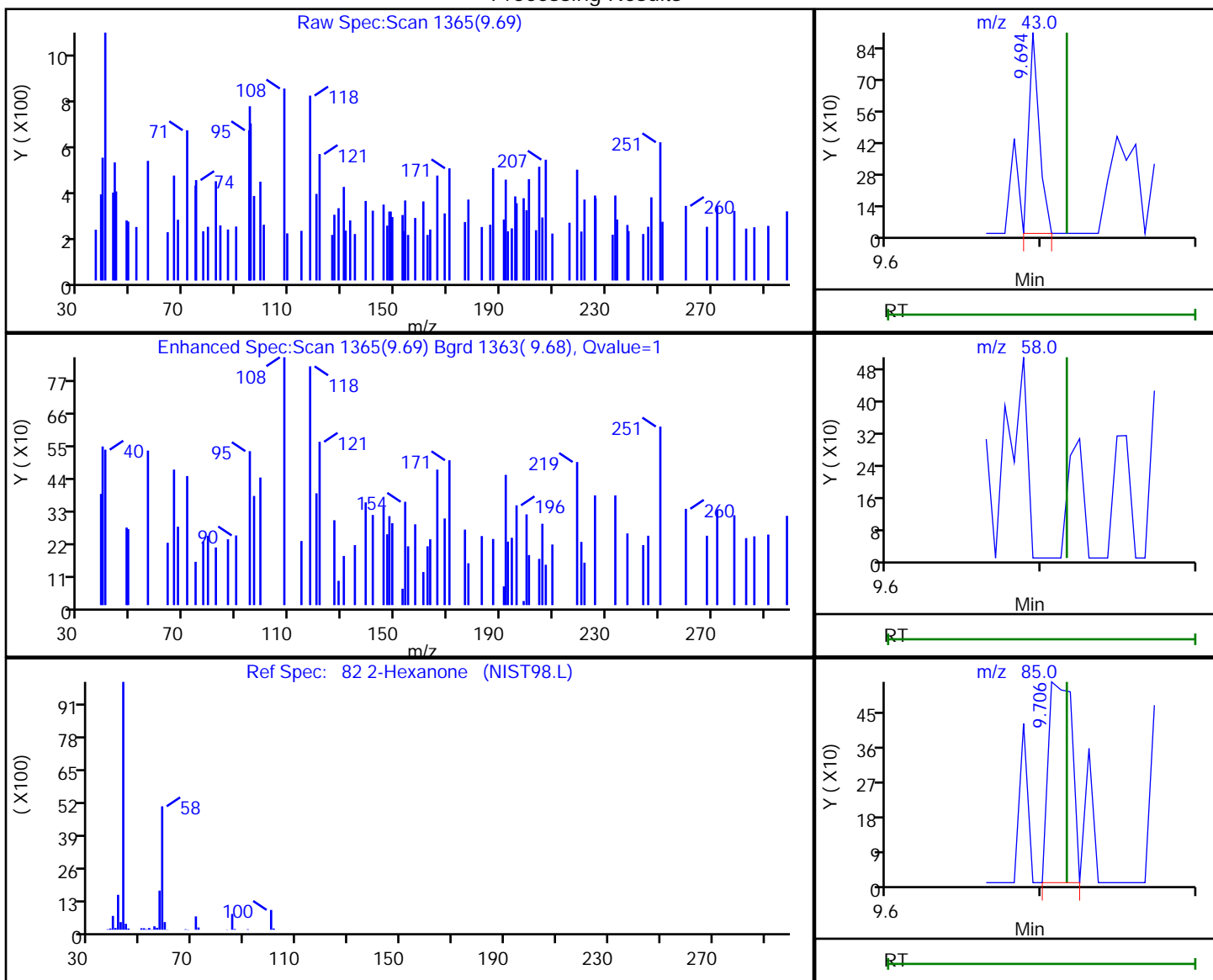
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050408.D  
 Injection Date: 04-May-2020 11:04:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-C-8 Lab Sample ID: 180-105108-8  
 Client ID: HD-COD-SW-17-0/1-0  
 Operator ID: 034635 ALS Bottle#: 8 Worklist Smp#: 8  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

82 2-Hexanone, CAS: 591-78-6

Processing Results



RT	Mass	Response	Amount
9.69	43.00	425	14.124689
9.72	58.00	0	
9.71	85.00	558	

Reviewer: journetp, 04-May-2020 13:20:23  
 Audit Action: Marked Compound Undetected

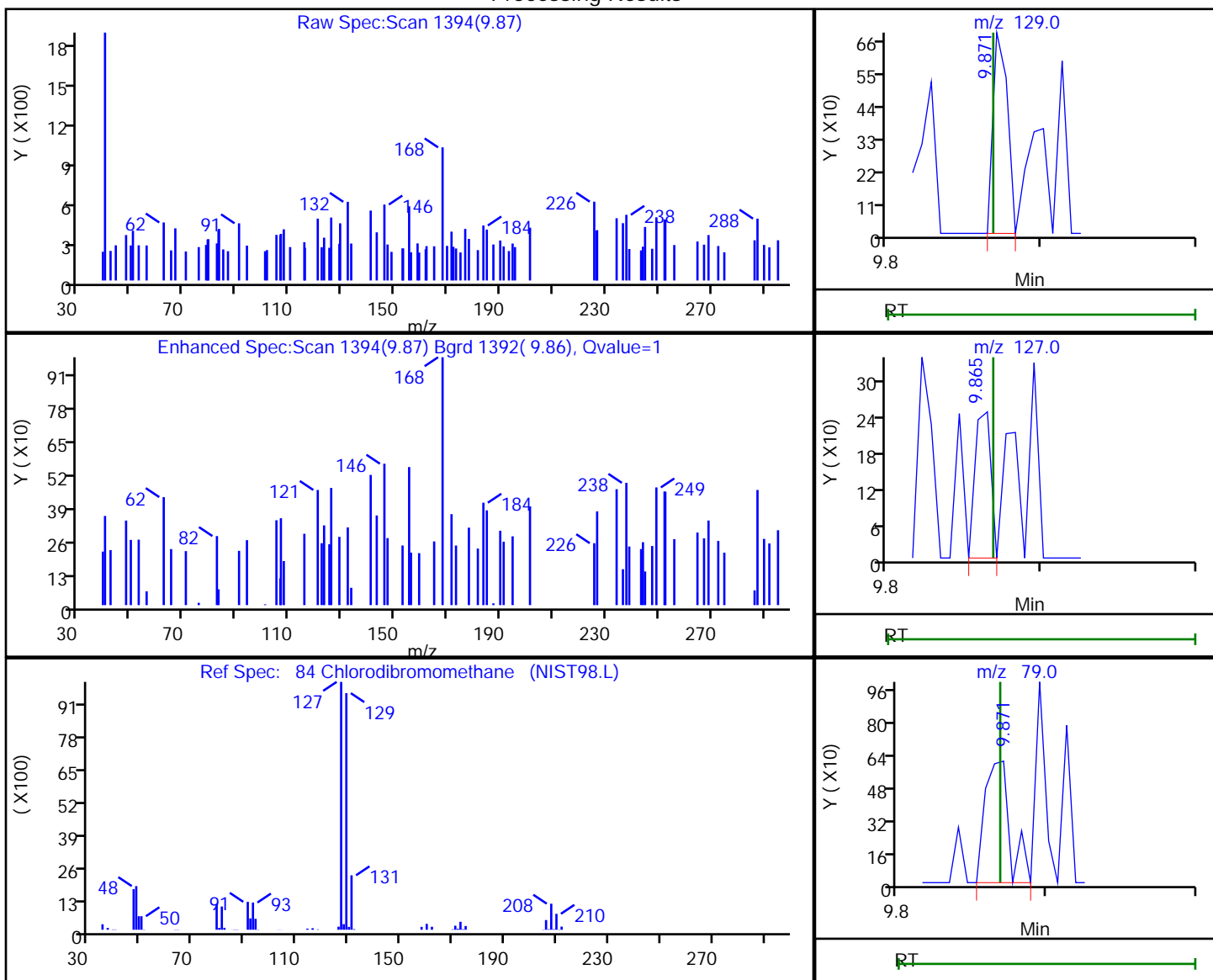
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050408.D  
 Injection Date: 04-May-2020 11:04:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-C-8 Lab Sample ID: 180-105108-8  
 Client ID: HD-COD-SW-17-0/1-0  
 Operator ID: 034635 ALS Bottle#: 8 Worklist Smp#: 8  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

84 Chlorodibromomethane, CAS: 124-48-1

Processing Results



RT	Mass	Response	Amount
9.87	129.00	445	0.128333
9.86	127.00	171	
9.87	79.00	697	

Reviewer: journetp, 04-May-2020 13:20:23  
 Audit Action: Marked Compound Undetected

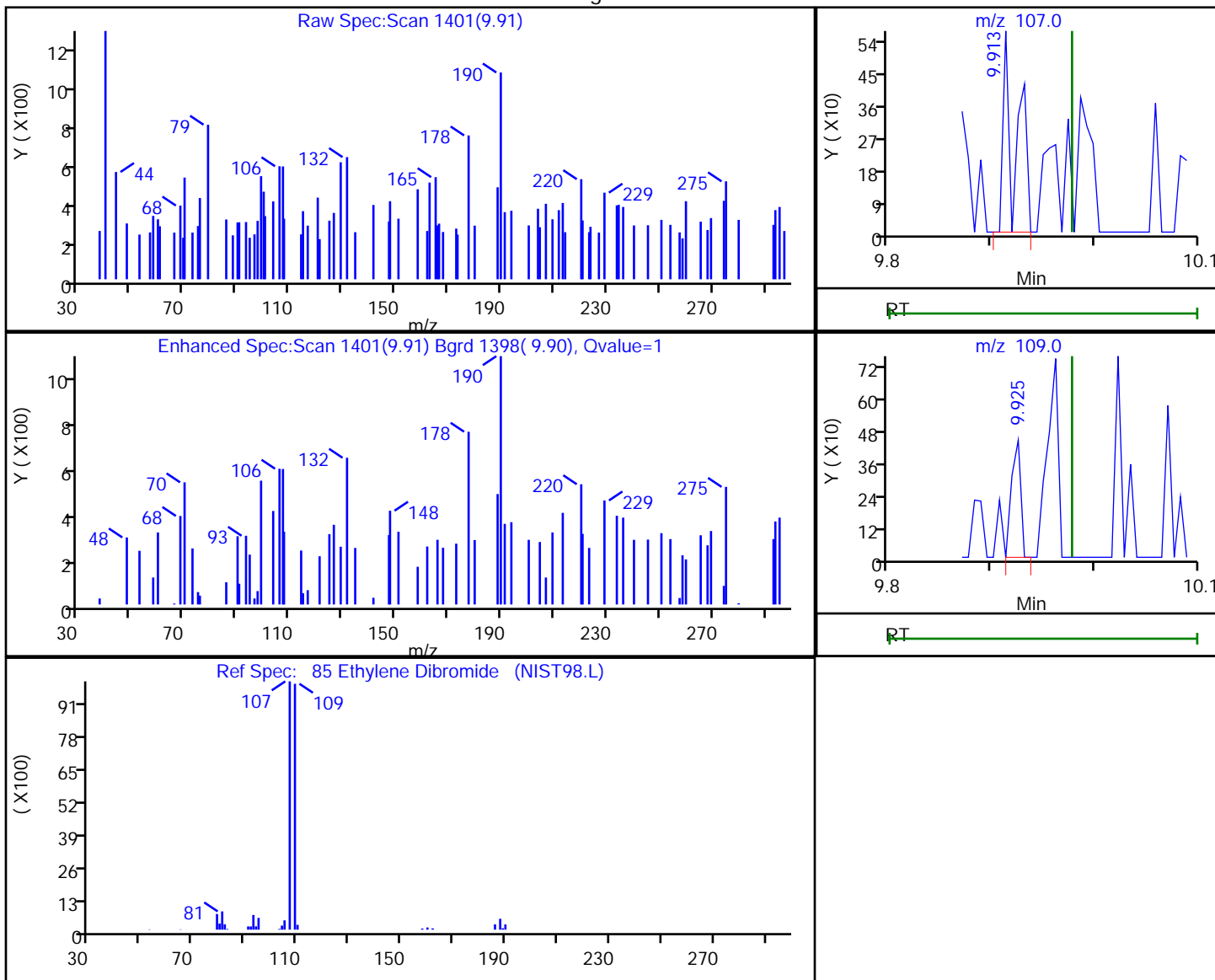
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050408.D  
Injection Date: 04-May-2020 11:04:30 Instrument ID: CHHP5  
Lims ID: 180-105108-C-8 Lab Sample ID: 180-105108-8  
Client ID: HD-COD-SW-17-0/1-0  
Operator ID: 034635 ALS Bottle#: 8 Worklist Smp#: 8  
Purge Vol: 5.000 mL Dil. Factor: 1.0000  
Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
Column: DB-624 (0.18 mm) Detector: MS SCAN

85 Ethylene Dibromide, CAS: 106-93-4

Processing Results



RT	Mass	Response	Amount
9.91	107.00	481	0.125518
9.93	109.00	272	

Reviewer: journetp, 04-May-2020 13:20:23  
Audit Action: Marked Compound Undetected

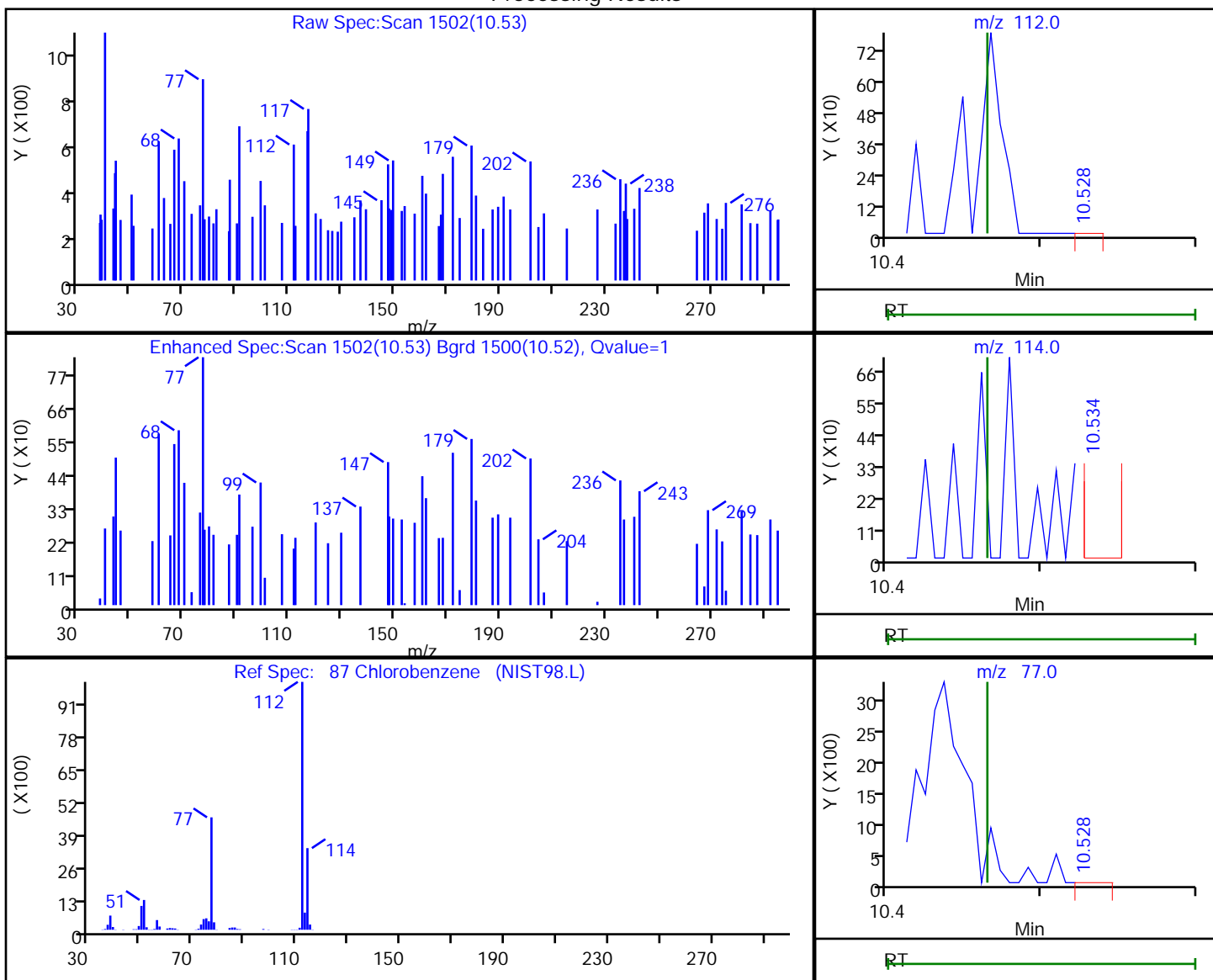
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050408.D  
 Injection Date: 04-May-2020 11:04:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-C-8 Lab Sample ID: 180-105108-8  
 Client ID: HD-COD-SW-17-0/1-0  
 Operator ID: 034635 ALS Bottle#: 8 Worklist Smp#: 8  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

87 Chlorobenzene, CAS: 108-90-7

Processing Results



RT	Mass	Response	Amount
10.53	112.00	155	0.013676
10.53	114.00	307	
10.53	77.00	598	

Reviewer: journeyp, 04-May-2020 13:20:23  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

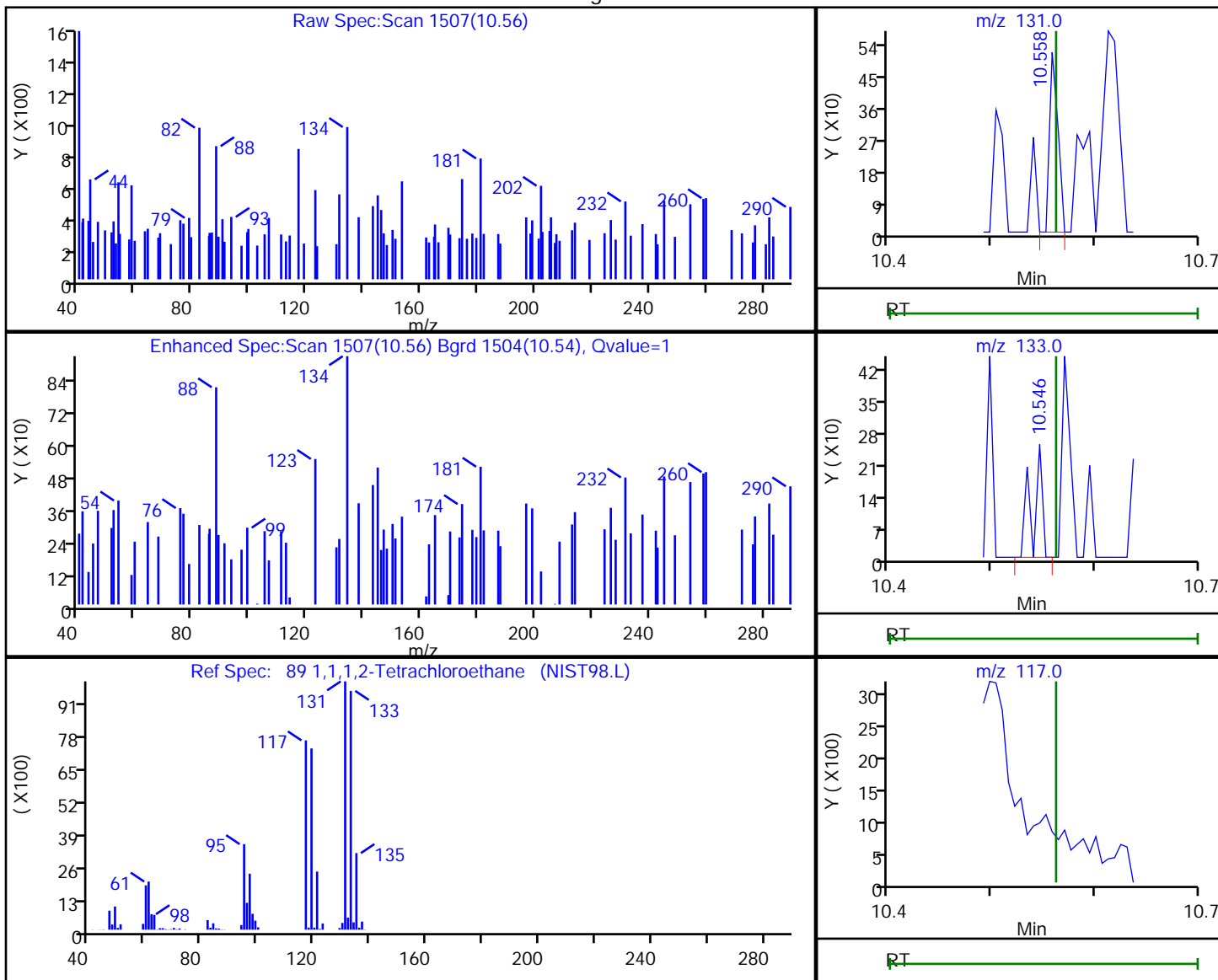


Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050408.D  
Injection Date: 04-May-2020 11:04:30 Instrument ID: CHHP5  
Lims ID: 180-105108-C-8 Lab Sample ID: 180-105108-8  
Client ID: HD-COD-SW-17-0/1-0  
Operator ID: 034635 ALS Bottle#: 8 Worklist Smp#: 8  
Purge Vol: 5.000 mL Dil. Factor: 1.0000  
Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
Column: DB-624 (0.18 mm) Detector: MS SCAN

89 1,1,1,2-Tetrachloroethane, CAS: 630-20-6

Processing Results



RT	Mass	Response	Amount
10.56	131.00	293	0.079609
10.55	133.00	164	
10.56	117.00	0	

Reviewer: journeyp, 04-May-2020 13:20:23  
Audit Action: Marked Compound Undetected

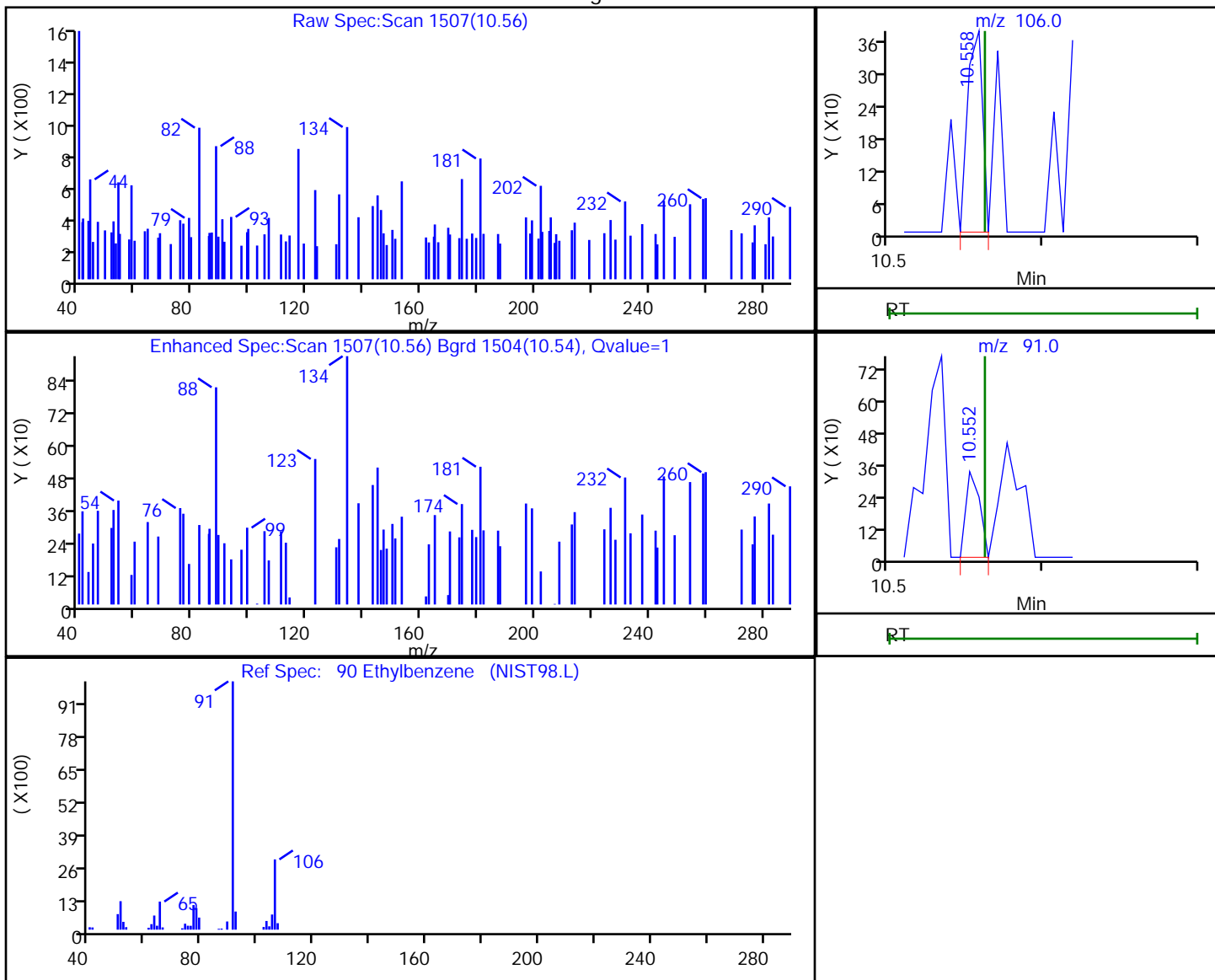
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050408.D  
Injection Date: 04-May-2020 11:04:30 Instrument ID: CHHP5  
Lims ID: 180-105108-C-8 Lab Sample ID: 180-105108-8  
Client ID: HD-COD-SW-17-0/1-0  
Operator ID: 034635 ALS Bottle#: 8 Worklist Smp#: 8  
Purge Vol: 5.000 mL Dil. Factor: 1.0000  
Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
Column: DB-624 (0.18 mm) Detector: MS SCAN

90 Ethylbenzene, CAS: 100-41-4

Processing Results



RT	Mass	Response	Amount
10.56	106.00	249	0.042444
10.55	91.00	201	

Reviewer: journetp, 04-May-2020 13:20:23  
Audit Action: Marked Compound Undetected

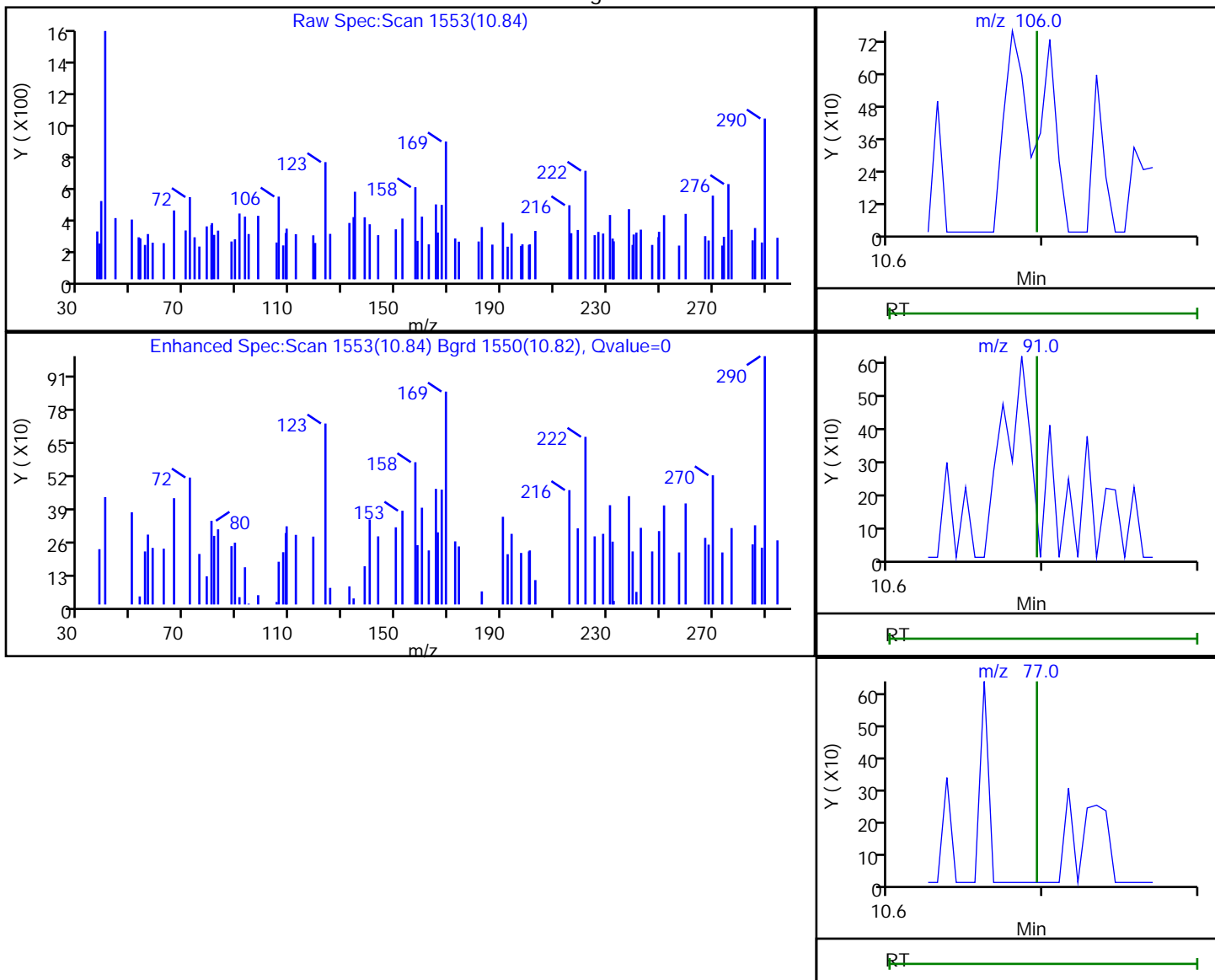
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050408.D  
 Injection Date: 04-May-2020 11:04:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-C-8 Lab Sample ID: 180-105108-8  
 Client ID: HD-COD-SW-17-0/1-0  
 Operator ID: 034635 ALS Bottle#: 8 Worklist Smp#: 8  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

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

Processing Results



RT	Mass	Response	Amount
10.84	106.00	185	0.025295
10.84	91.00	612	
10.85	77.00	393	

Reviewer: journept, 04-May-2020 13:20:23  
 Audit Action: Marked Compound Undetected

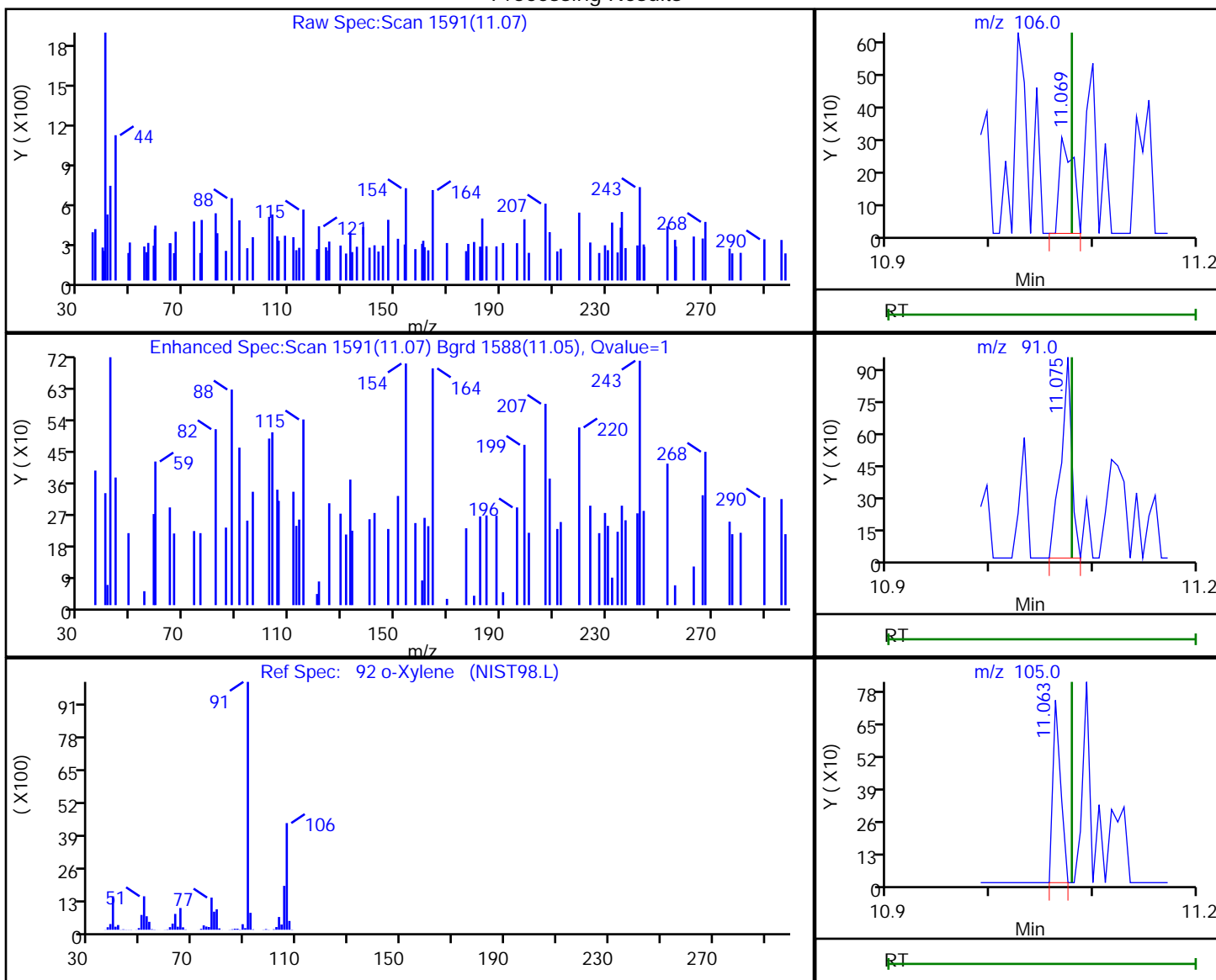
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050408.D  
 Injection Date: 04-May-2020 11:04:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-C-8 Lab Sample ID: 180-105108-8  
 Client ID: HD-COD-SW-17-0/1-0  
 Operator ID: 034635 ALS Bottle#: 8 Worklist Smp#: 8  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

92 o-Xylene, CAS: 95-47-6

Processing Results



RT	Mass	Response	Amount
11.07	106.00	277	0.040576
11.08	91.00	695	
11.06	105.00	391	

Reviewer: journept, 04-May-2020 13:20:23  
 Audit Action: Marked Compound Undetected

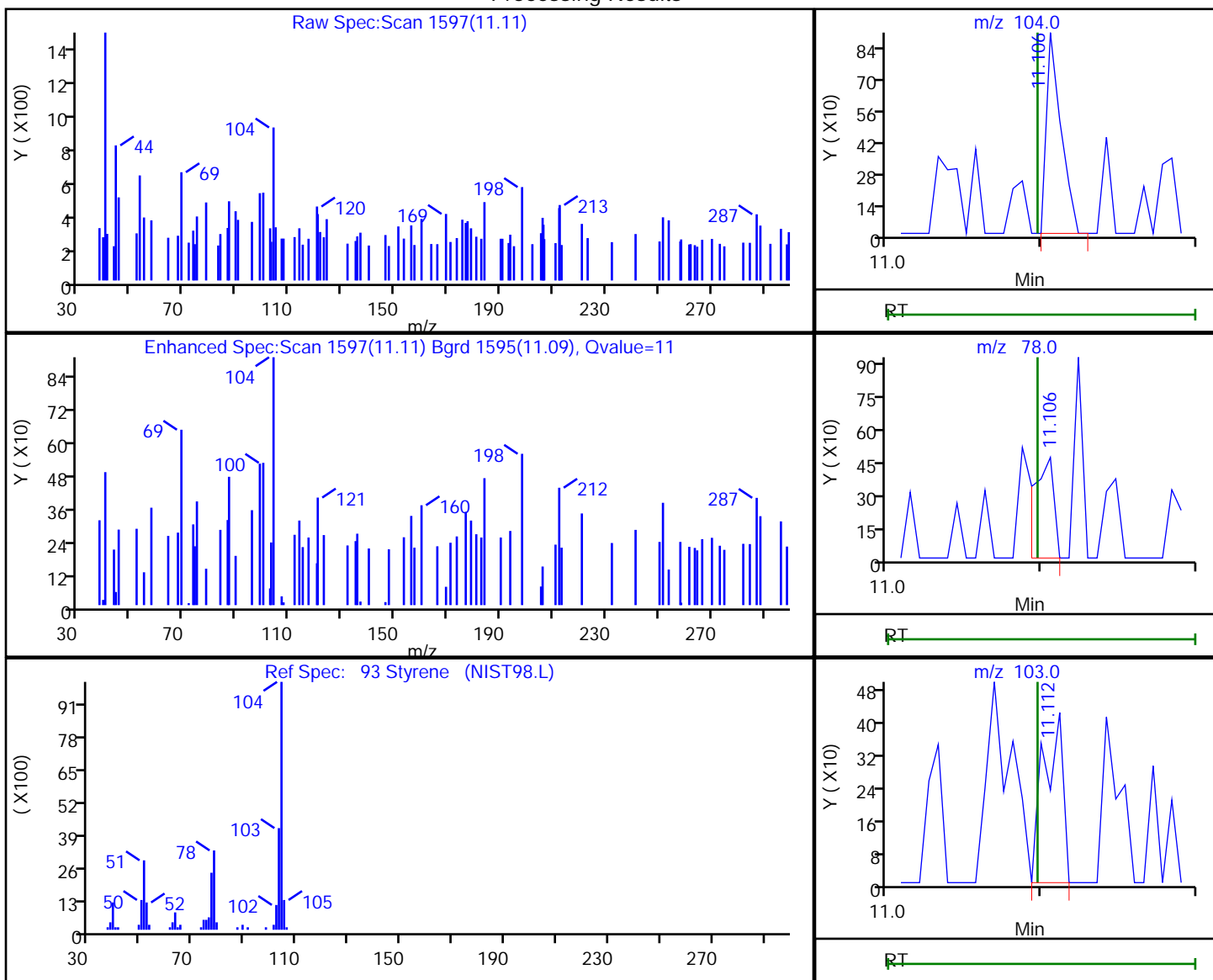
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050408.D  
 Injection Date: 04-May-2020 11:04:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-C-8 Lab Sample ID: 180-105108-8  
 Client ID: HD-COD-SW-17-0/1-0  
 Operator ID: 034635 ALS Bottle#: 8 Worklist Smp#: 8  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

93 Styrene, CAS: 100-42-5

Processing Results



RT	Mass	Response	Amount
11.11	104.00	597	0.051001
11.11	78.00	421	
11.11	103.00	363	

Reviewer: journept, 04-May-2020 13:20:23  
 Audit Action: Marked Compound Undetected

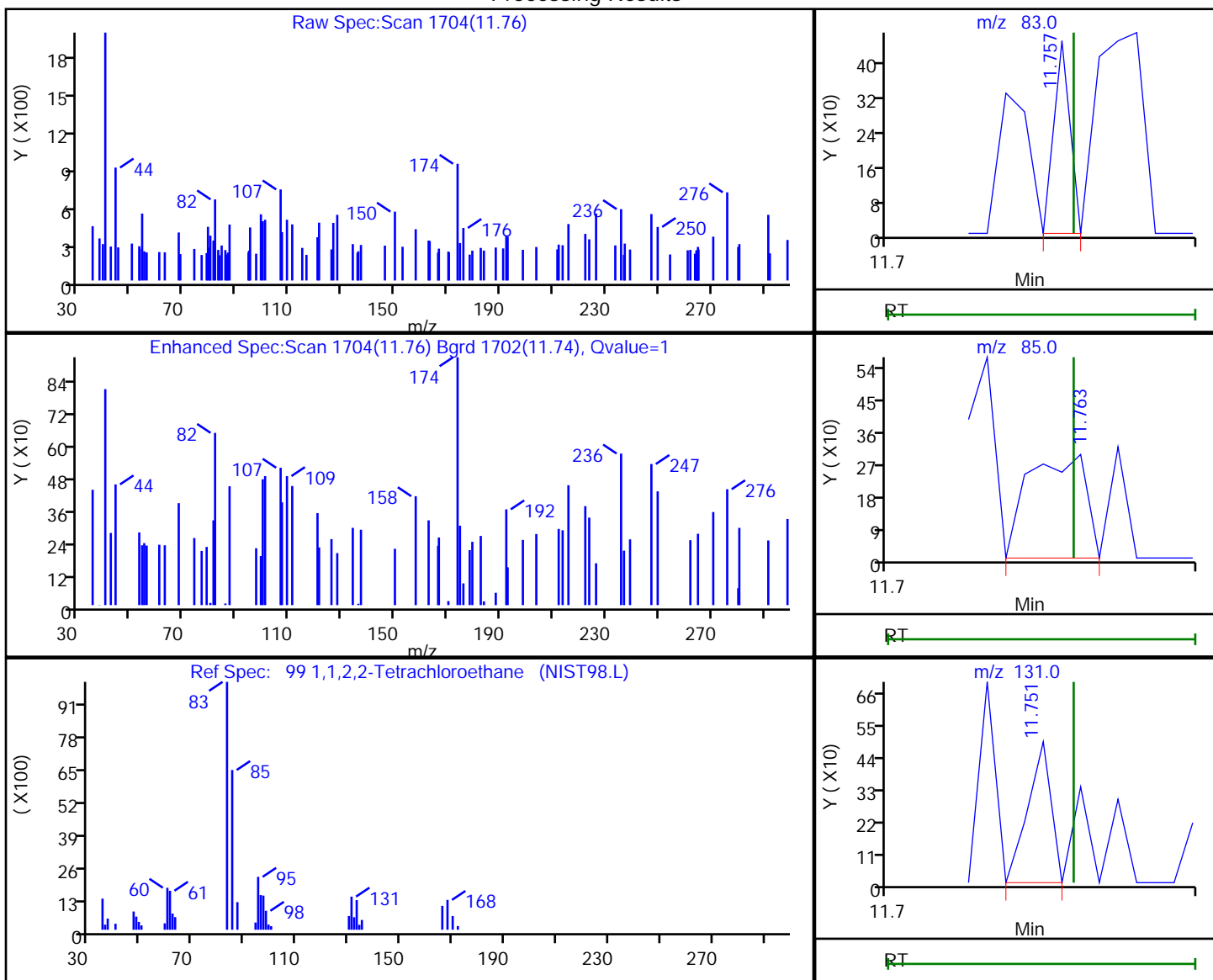
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050408.D  
 Injection Date: 04-May-2020 11:04:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-C-8 Lab Sample ID: 180-105108-8  
 Client ID: HD-COD-SW-17-0/1-0  
 Operator ID: 034635 ALS Bottle#: 8 Worklist Smp#: 8  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

99 1,1,2,2-Tetrachloroethane, CAS: 79-34-5

Processing Results



RT	Mass	Response	Amount
11.76	83.00	161	0.038069
11.76	85.00	376	
11.75	131.00	254	

Reviewer: journept, 04-May-2020 13:20:23  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: HD-COD-SW-26-0/1-0 Lab Sample ID: 180-105108-9  
 Matrix: Water Lab File ID: 5050107.D  
 Analysis Method: EPA 8260C Date Collected: 04/28/2020 11:55  
 Sample wt/vol: 5 (mL) Date Analyzed: 05/01/2020 17:43  
 Soil Aliquot Vol.: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-624 ID: 0.18 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 314382 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	ND	^c	1.0	0.90
75-01-4	Vinyl chloride	ND	^c	1.0	0.40
74-83-9	Bromomethane	ND	^c *	1.0	0.89
			F1		
75-00-3	Chloroethane	ND		1.0	0.90
75-35-4	1,1-Dichloroethene	ND	F1	1.0	0.55
67-64-1	Acetone	6.5	F1	5.0	3.4
75-15-0	Carbon disulfide	ND	^c F1	1.0	0.88
75-09-2	Methylene Chloride	ND		1.0	0.89
156-60-5	trans-1,2-Dichloroethene	ND	F1	1.0	0.67
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.59
75-34-3	1,1-Dichloroethane	ND		1.0	0.31
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.71
74-97-5	Bromochloromethane	ND		1.0	0.63
78-93-3	2-Butanone (MEK)	ND		5.0	2.6
67-66-3	Chloroform	ND	F1	1.0	0.60
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.60
56-23-5	Carbon tetrachloride	ND		1.0	0.88
71-43-2	Benzene	ND		1.0	0.60
107-06-2	1,2-Dichloroethane	ND		1.0	0.57
79-01-6	Trichloroethene	ND	F1	1.0	0.69
78-87-5	1,2-Dichloropropane	ND		1.0	0.66
75-27-4	Bromodichloromethane	ND		1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	ND	F1	1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	3.1
108-88-3	Toluene	ND		1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.58
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.45
127-18-4	Tetrachloroethene	1.6		1.0	0.47
591-78-6	2-Hexanone	ND		5.0	3.3
124-48-1	Dibromochloromethane	ND		1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	ND		1.0	0.50
108-90-7	Chlorobenzene	ND		1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.57
100-41-4	Ethylbenzene	ND		1.0	0.51
1330-20-7	Xylenes, Total	ND		2.0	0.89

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: HD-COD-SW-26-0/1-0 Lab Sample ID: 180-105108-9  
 Matrix: Water Lab File ID: 5050107.D  
 Analysis Method: EPA 8260C Date Collected: 04/28/2020 11:55  
 Sample wt/vol: 5 (mL) Date Analyzed: 05/01/2020 17:43  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-624 ID: 0.18 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 314382 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-42-5	Styrene	ND		1.0	0.47
75-25-2	Bromoform	ND	^c	1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	ND	^c	1.0	0.60
107-13-1	Acrylonitrile	ND		20	7.8

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	83		62-146
2037-26-5	Toluene-d8 (Surr)	71	X	75-120
460-00-4	4-Bromofluorobenzene (Surr)	88		64-120
1868-53-7	Dibromofluoromethane (Surr)	99	^c	71-132



Eurofins TestAmerica, Pittsburgh  
Target Compound Quantitation Report

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050107.D  
 Lims ID: 180-105108-B-9  
 Client ID: HD-COD-SW-26-0/1-0  
 Sample Type: Client  
 Inject. Date: 01-May-2020 17:43:30 ALS Bottle#: 7 Worklist Smp#: 7  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: 180-0031777-007  
 Operator ID: 034635 Instrument ID: CHHP5  
 Method: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\MMSVOA\_LL\_CHHP5.m  
 Limit Group: VOA 8260C\_D ICAL  
 Last Update: 03-May-2020 16:34:05 Calib Date: 03-Apr-2020 19:09:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP5\20200403-31442.b\5040310.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: CTX0317

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.371	4.364	0.007	0	360396	1000.0	
* 2 Fluorobenzene (IS)	96	7.346	7.345	0.001	99	391373	50.0	
* 3 Chlorobenzene-d5	119	10.436	10.435	0.001	85	162701	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.772	12.771	0.001	95	256471	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.628	6.621	0.007	92	110912	49.7	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.993	6.992	0.001	0	131088	41.4	
\$ 7 Toluene-d8 (Surr)	98	8.988	8.987	0.001	94	465289	35.3	M
\$ 8 4-Bromofluorobenzene (Surr	95	11.616	11.615	0.001	89	219118	44.0	
11 Dichlorodifluoromethane	85		1.638				ND	
12 Chloromethane	50		1.851				ND	U
14 Butadiene	39		1.961				ND	U
13 Vinyl chloride	62		1.961				ND	U
15 Bromomethane	94		2.277				ND	U
16 Chloroethane	64		2.423				ND	U
17 Dichlorofluoromethane	67		2.715				ND	U
18 Trichlorofluoromethane	101		2.727				ND	U
19 Ethanol	45		2.792				ND	U
20 Ethyl ether	59		3.104				ND	U
21 Acrolein	56		3.287				ND	U
22 1,1-Dichloroethene	96		3.390				ND	
23 1,1,2-Trichloro-1,2,2-trif	101		3.482				ND	
24 Acetone	43	3.501	3.512	-0.011	100	44184	32.7	
25 Iodomethane	142		3.597				ND	U
26 Carbon disulfide	76		3.701				ND	U
27 Isopropyl alcohol	45		3.832				ND	U
29 Acetonitrile	41		3.979				ND	U
28 3-Chloro-1-propene	76		3.987				ND	U
30 Methyl acetate	43		4.023				ND	U
31 Methylene Chloride	84		4.218				ND	U
32 2-Methyl-2-propanol	59		4.491				ND	U
33 Acrylonitrile	53		4.613				ND	U
34 trans-1,2-Dichloroethene	96		4.631				ND	U
35 Methyl tert-butyl ether	73		4.656				ND	U

Compound	Sig	RT (min.)	Exp RT (min.)	Diff RT (min.)	Q	Response	OnCol Amt ng	Flags
36 Hexane	57		5.045				ND	U
37 1,1-Dichloroethane	63		5.264				ND	U
38 Vinyl acetate	43		5.325				ND	U
39 2-Chloro-1,3-butadiene	53		5.364				ND	U
41 Isopropyl ether	45		5.377				ND	U
42 Tert-butyl ethyl ether	59		5.838				ND	U
44 2,2-Dichloropropane	97		6.000				ND	U
45 cis-1,2-Dichloroethene	96		6.018				ND	U
47 Propionitrile	54		6.022				ND	U
46 2-Butanone (MEK)	43	6.025	6.031	-0.006	67	3791	2.64	
48 Ethyl acetate	43		6.126				ND	U
49 Chlorobromomethane	128		6.298				ND	U
51 Tetrahydrofuran	42		6.304				ND	U
50 Methacrylonitrile	41		6.375				ND	U
52 Chloroform	83		6.444				ND	U
53 1,1,1-Trichloroethane	97		6.596				ND	U
54 Cyclohexane	56		6.663				ND	U
56 Carbon tetrachloride	117		6.761				ND	U
55 1,1-Dichloropropene	75		6.785				ND	U
58 Benzene	78		6.998				ND	U
57 Isobutyl alcohol	41		7.010				ND	U
59 1,2-Dichloroethane	62		7.071				ND	U
62 n-Heptane	43		7.351				ND	U
61 Tert-amyl methyl ether	73		7.385				ND	U
151 Isooctane	57		7.641				ND	U
64 Trichloroethene	130	7.717	7.728	-0.011	37	3187	1.33	
63 n-Butanol	56		7.762				ND	U
69 Methyl methacrylate	69		7.804				ND	U
65 Ethyl acrylate	55		7.951				ND	U
66 Methylcyclohexane	83		7.959				ND	U
67 1,2-Dichloropropane	63		7.996				ND	U
70 1,4-Dioxane	88		8.081				ND	U
68 Dibromomethane	93		8.087				ND	U
71 Dichlorobromomethane	83		8.281				ND	U
73 2-Chloroethyl vinyl ether	63		8.586				ND	U
74 cis-1,3-Dichloropropene	75		8.726				ND	U
75 4-Methyl-2-pentanone (MIBK)	43		8.890				ND	U
76 Toluene	91		9.048				ND	U
77 trans-1,3-Dichloropropene	75		9.303				ND	U
78 Ethyl methacrylate	69		9.364				ND	U
79 1,1,2-Trichloroethane	97		9.498				ND	U
80 Tetrachloroethene	164	9.566	9.559	0.007	95	24437	7.98	
81 1,3-Dichloropropane	76		9.650				ND	U
82 2-Hexanone	43		9.717				ND	U
83 n-Butyl acetate	43		9.860				ND	U
84 Chlorodibromomethane	129		9.869				ND	U
85 Ethylene Dibromide	107		9.973				ND	U
86 3-Chlorobenzotrifluoride	180		10.445				ND	U
87 Chlorobenzene	112		10.465				ND	U
89 1,1,1,2-Tetrachloroethane	131		10.557				ND	U
90 Ethylbenzene	106		10.563				ND	U
91 m-Xylene & p-Xylene	106		10.697				ND	U

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
88 4-Chlorobenzotrifluoride	180		10.774				ND	U
92 o-Xylene	106		11.074				ND	U
93 Styrene	104		11.098				ND	U
94 Bromoform	173		11.281				ND	U
98 Cyclohexanone	55		11.418				ND	U
97 Isopropylbenzene	105		11.439				ND	U
96 2-Chlorobenzotrifluoride	180		11.521				ND	U
100 Bromobenzene	156		11.755				ND	U
99 1,1,2,2-Tetrachloroethane	83		11.755				ND	U
102 trans-1,4-Dichloro-2-buten	53		11.792				ND	U
101 1,2,3-Trichloropropane	110		11.816				ND	U
103 N-Propylbenzene	120		11.852				ND	U
104 2-Chlorotoluene	126		11.944				ND	U
106 1,3,5-Trimethylbenzene	105		12.041				ND	U
107 4-Chlorotoluene	126		12.071				ND	U
105 3-Chlorotoluene	126		12.212				ND	U
108 tert-Butylbenzene	119		12.351				ND	U
110 1,2,4-Trimethylbenzene	105		12.412				ND	U
111 1,2-dichloro-4-(trifluorom	214		12.463				ND	U
112 sec-Butylbenzene	105		12.576				ND	U
113 1,3-Dichlorobenzene	146		12.692				ND	U
114 4-Isopropyltoluene	119		12.728				ND	U
117 1,2,3-Trimethylbenzene	105		12.763				ND	U
115 1,4-Dichlorobenzene	146		12.795				ND	U
119 Benzyl chloride	91		12.804				ND	U
116 2,4-Dichloro-1-(triflourom	214		12.836				ND	U
118 2,5-Dichlorobenzotrifluori	214		12.878				ND	U
120 n-Butylbenzene	91		13.136				ND	U
121 1,2-Dichlorobenzene	146		13.154				ND	U
122 1,2-Dibromo-3-Chloropropan	75		13.939				ND	U
123 2,4- & 2,5- & 2,6- Dichlor	125		14.125				ND	U
124 1,3,5-Trichlorobenzene	180		14.174				ND	U
125 2,3- & 3,4- Dichlorotoluen	125		14.484				ND	U
126 1,2,4-Trichlorobenzene	180		14.760				ND	U
127 Hexachlorobutadiene	225		14.906				ND	U
128 Naphthalene	128		15.034				ND	U
129 1,2,3-Trichlorobenzene	180		15.259				ND	U
130 2,3,6-Trichlorotoluene	159		16.090				ND	U
131 2,4,5-Trichlorotoluene	159		16.090				ND	U
S 133 Xylenes, Total	106		1.000				ND	
S 154 Total BTEX	106		1.000				ND	
S 134 1,2-Dichloroethene, Total	96		1.000				ND	
S 135 1,3-Dichloropropene, Total	1		0.000				ND	
T 157 Ethanol TIC	45		0.000				ND	U
T 156 2-ethoxy-2-methyl butane T	59		0.000				ND	U

### QC Flag Legend

#### Review Flags

M - Manually Integrated

U - Marked Undetected

### Reagents:

voaWI/SHP5\_00016

Amount Added: 5.00

Units: uL

Run Reagent

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050107.D

Injection Date: 01-May-2020 17:43:30

Instrument ID: CHHP5

Operator ID: 034635

Lims ID: 180-105108-B-9

Lab Sample ID: 180-105108-9

Worklist Smp#: 7

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

Purge Vol: 5.000 mL

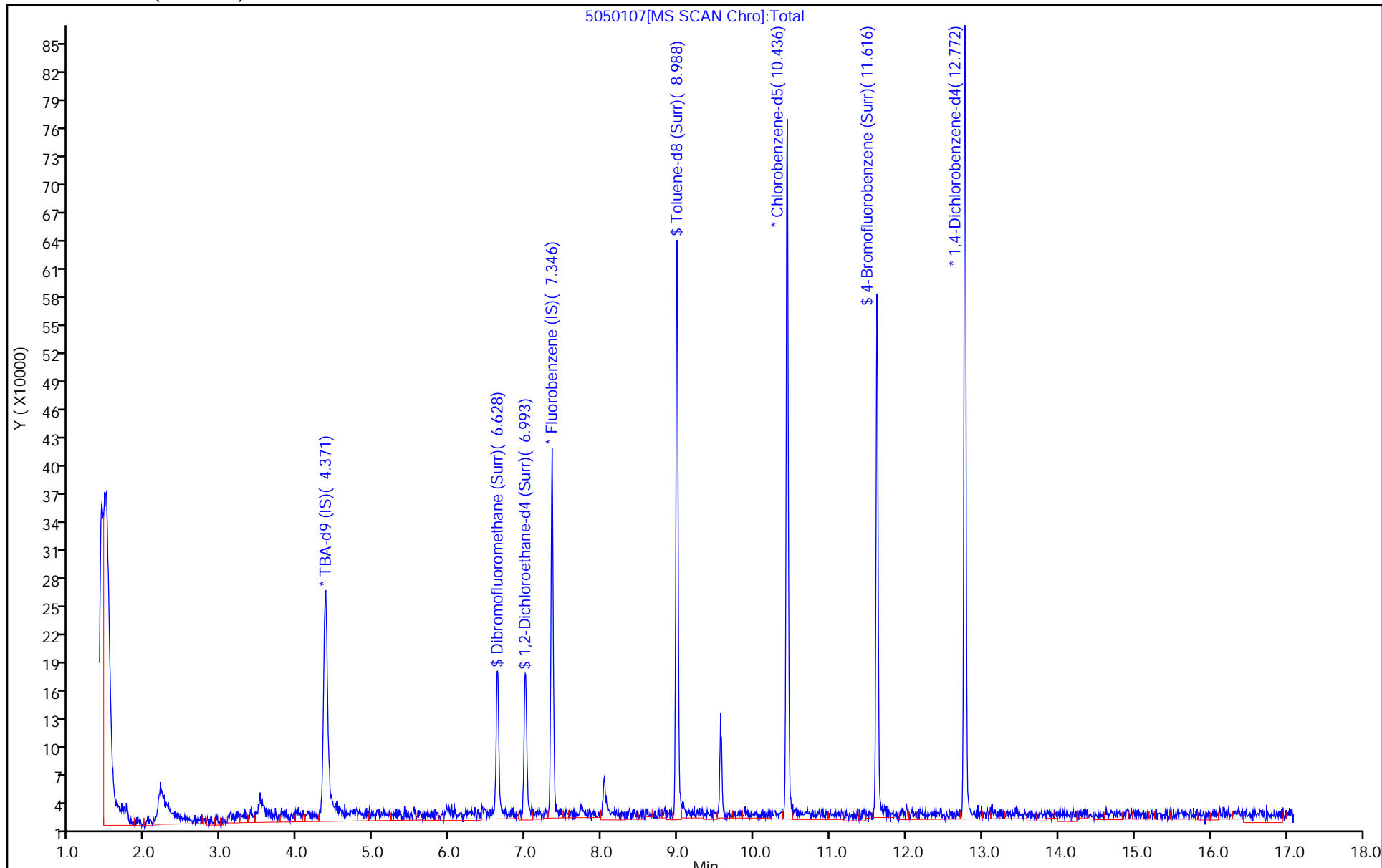
Dil. Factor: 1.0000

ALS Bottle#: 7

Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Pittsburgh  
Recovery Report

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050107.D  
 Lims ID: 180-105108-B-9  
 Client ID: HD-COD-SW-26-0/1-0  
 Sample Type: Client  
 Inject. Date: 01-May-2020 17:43:30 ALS Bottle#: 7 Worklist Smp#: 7  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: 180-0031777-007  
 Operator ID: 034635 Instrument ID: CHHP5  
 Method: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\MMSVOA\_LL\_CHHP5.m  
 Limit Group: VOA 8260C\_D ICAL  
 Last Update: 03-May-2020 16:34:05 Calib Date: 03-Apr-2020 19:09:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP5\20200403-31442.b\5040310.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: CTX0317

Compound	Amount Added	Amount Recovered	% Rec.
\$ 5 Dibromofluoromethane (Surr)	50.0	49.7	99.34
\$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	41.4	82.74
\$ 7 Toluene-d8 (Surr)	50.0	35.3	70.66
\$ 8 4-Bromofluorobenzene (Surr)	50.0	44.0	88.04

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050107.D

Injection Date: 01-May-2020 17:43:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-9

Lab Sample ID: 180-105108-9

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

Operator ID: 034635

ALS Bottle#: 7

Worklist Smp#: 7

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

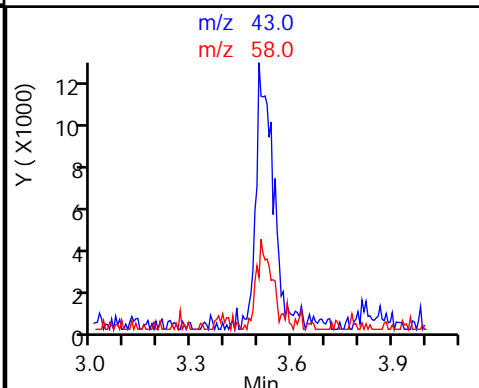
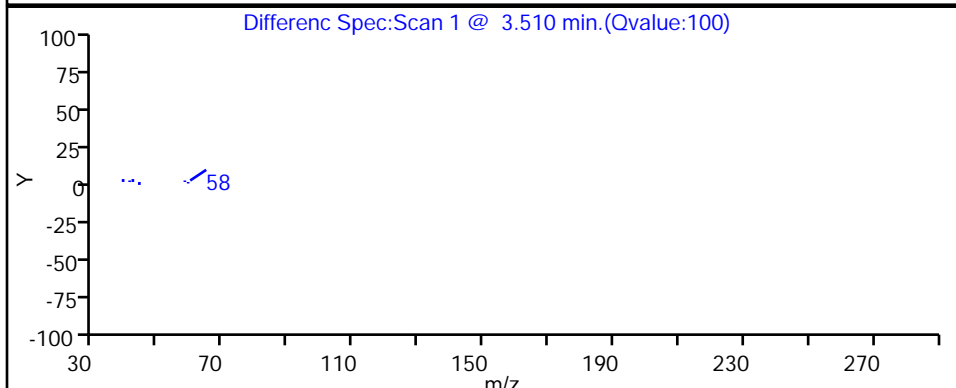
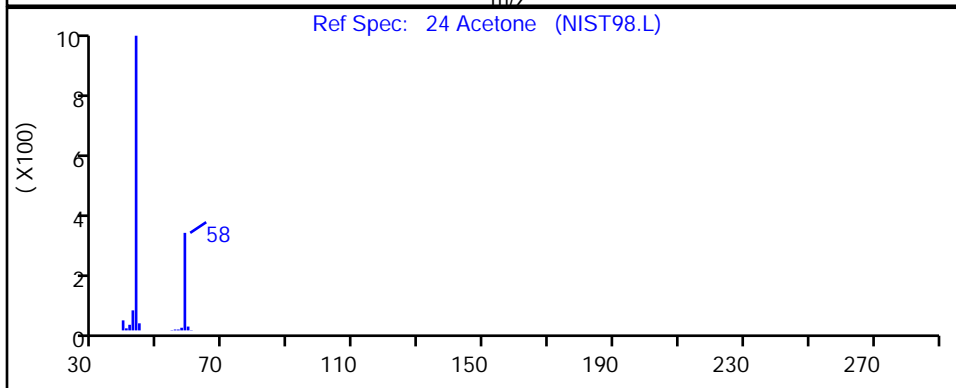
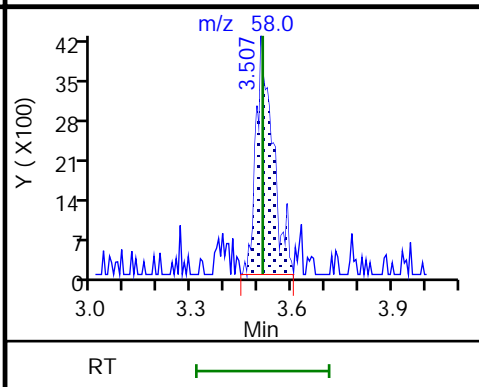
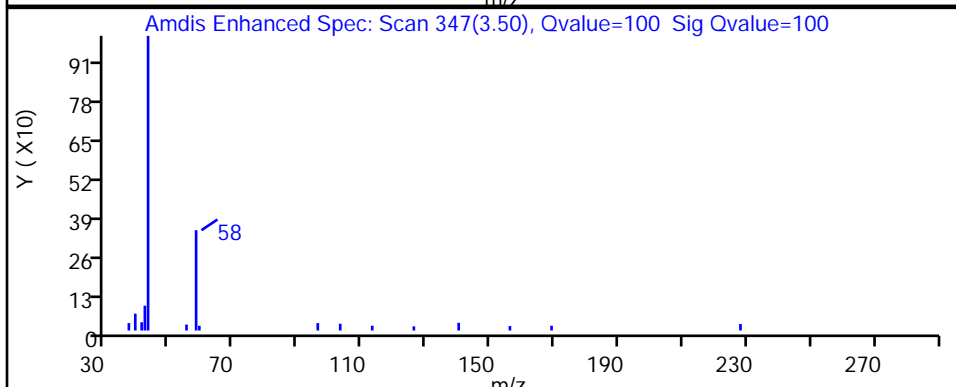
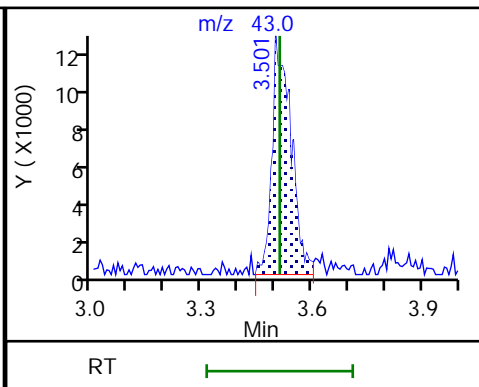
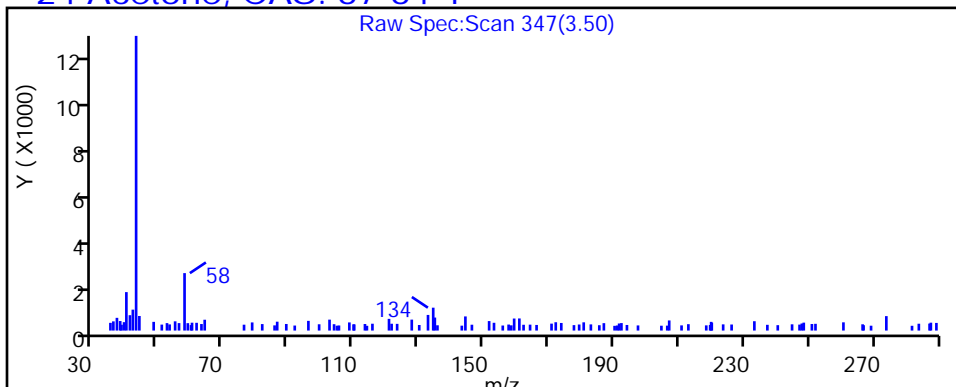
Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

24 Acetone, CAS: 67-64-1



Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050107.D

Injection Date: 01-May-2020 17:43:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-9

Lab Sample ID: 180-105108-9

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

Operator ID: 034635

ALS Bottle#: 7 Worklist Smp#: 7

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

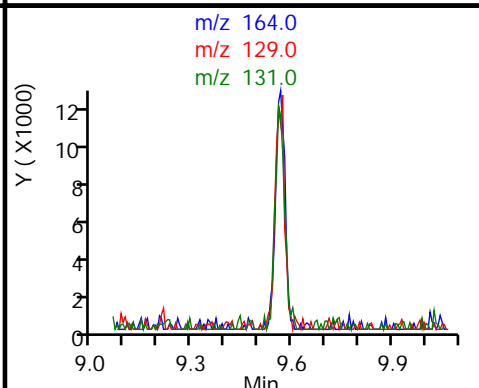
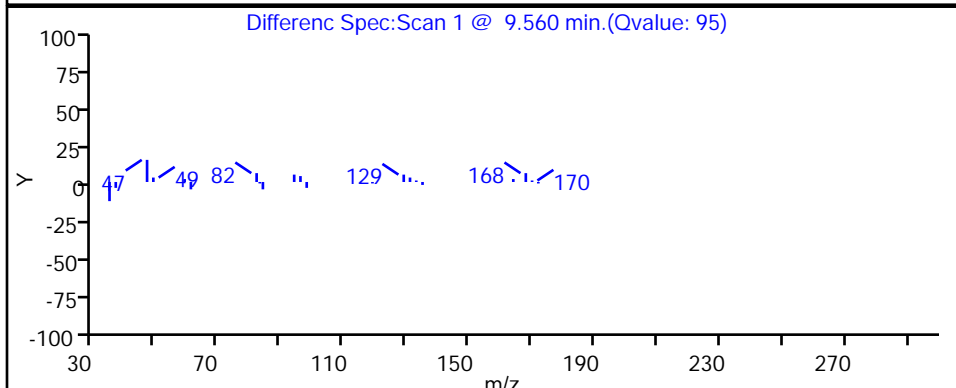
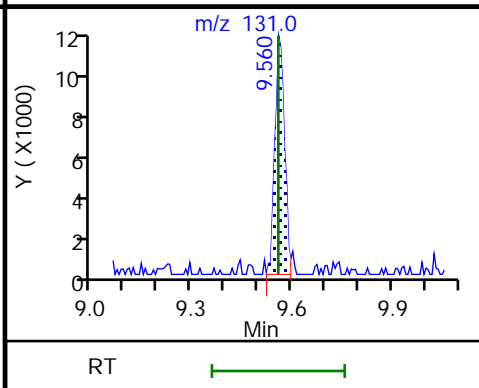
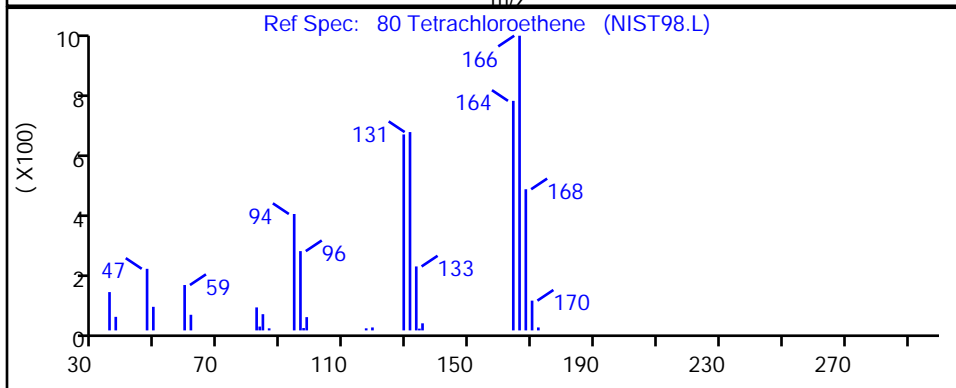
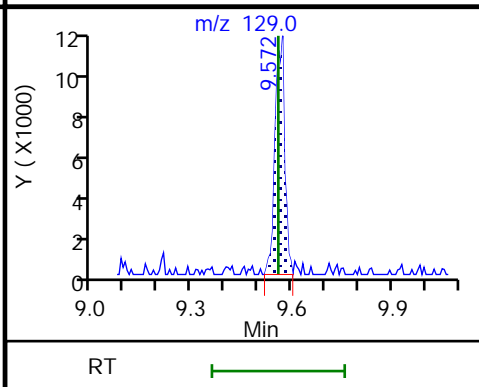
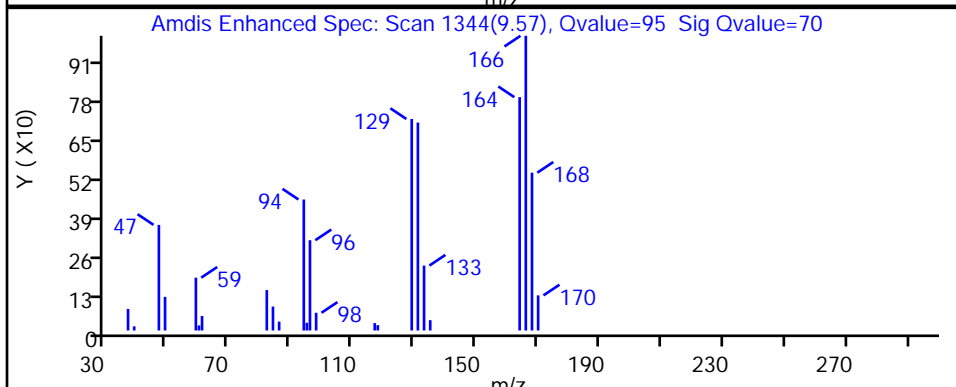
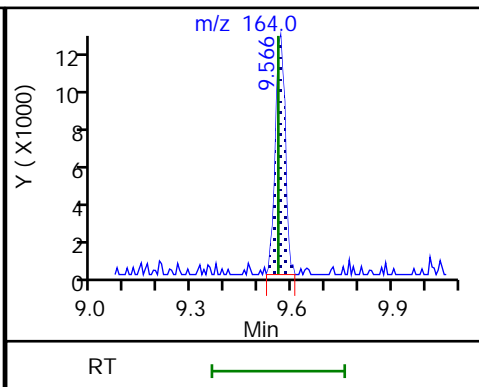
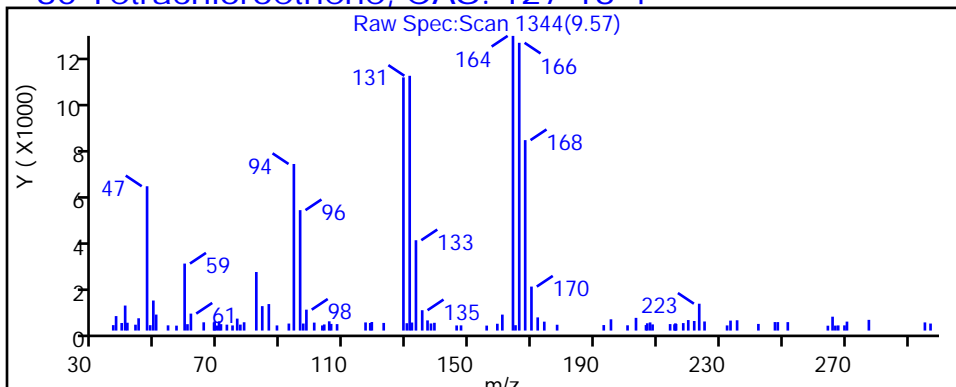
Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

80 Tetrachloroethene, CAS: 127-18-4





Eurofins TestAmerica, Pittsburgh

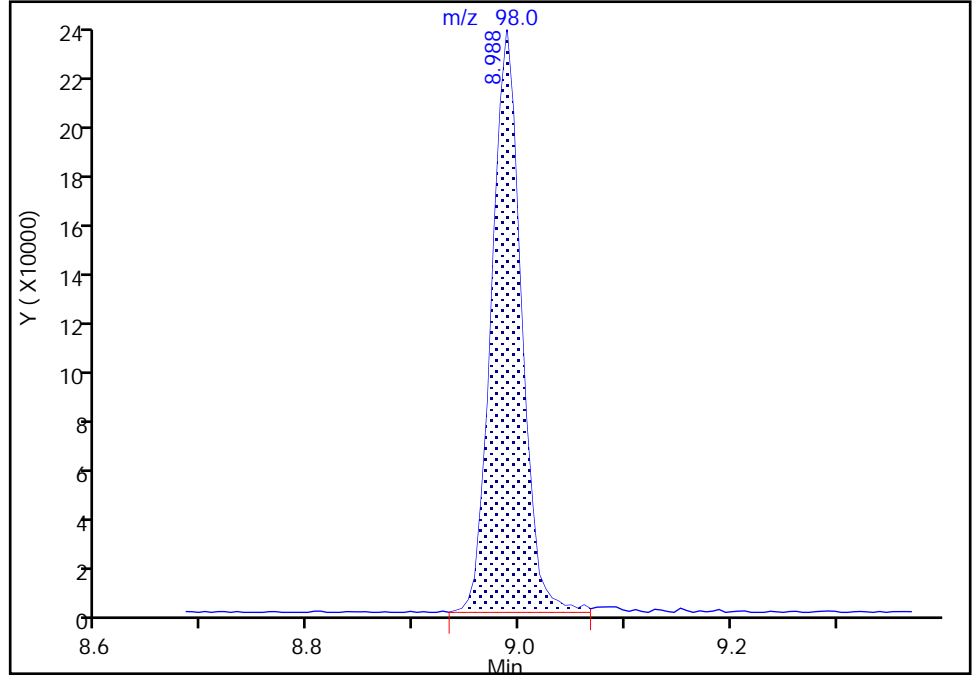
Data File:	\\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050107.D				
Injection Date:	01-May-2020 17:43:30	Instrument ID:	CHHP5		
Lims ID:	180-105108-B-9	Lab Sample ID:	180-105108-9		
Client ID:	HD-COD-SW-26-0/1-0				
Operator ID:	034635	ALS Bottle#:	7	Worklist Smp#:	7
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP5	Limit Group:	VOA 8260C_D ICAL		
Column:	DB-624 (0.18 mm)	Detector:	MS SCAN		

\$ 7 Toluene-d8 (Surr), CAS: 2037-26-5

Signal: 1

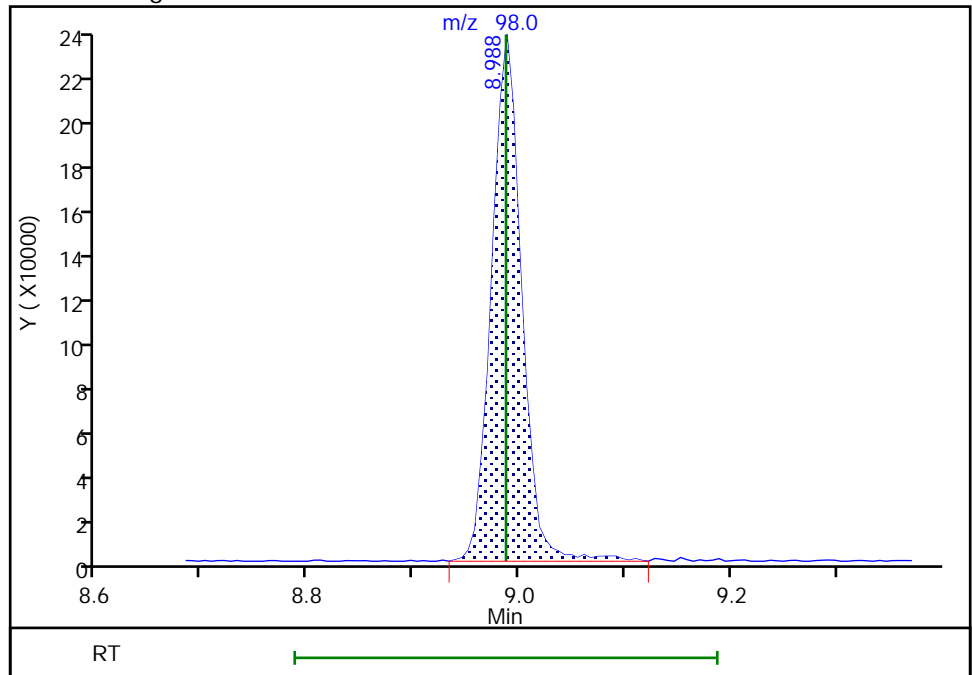
RT: 8.99  
Area: 461027  
Amount: 35.004185  
Amount Units: ng

Processing Integration Results



RT: 8.99  
Area: 465289  
Amount: 35.327784  
Amount Units: ng

Manual Integration Results

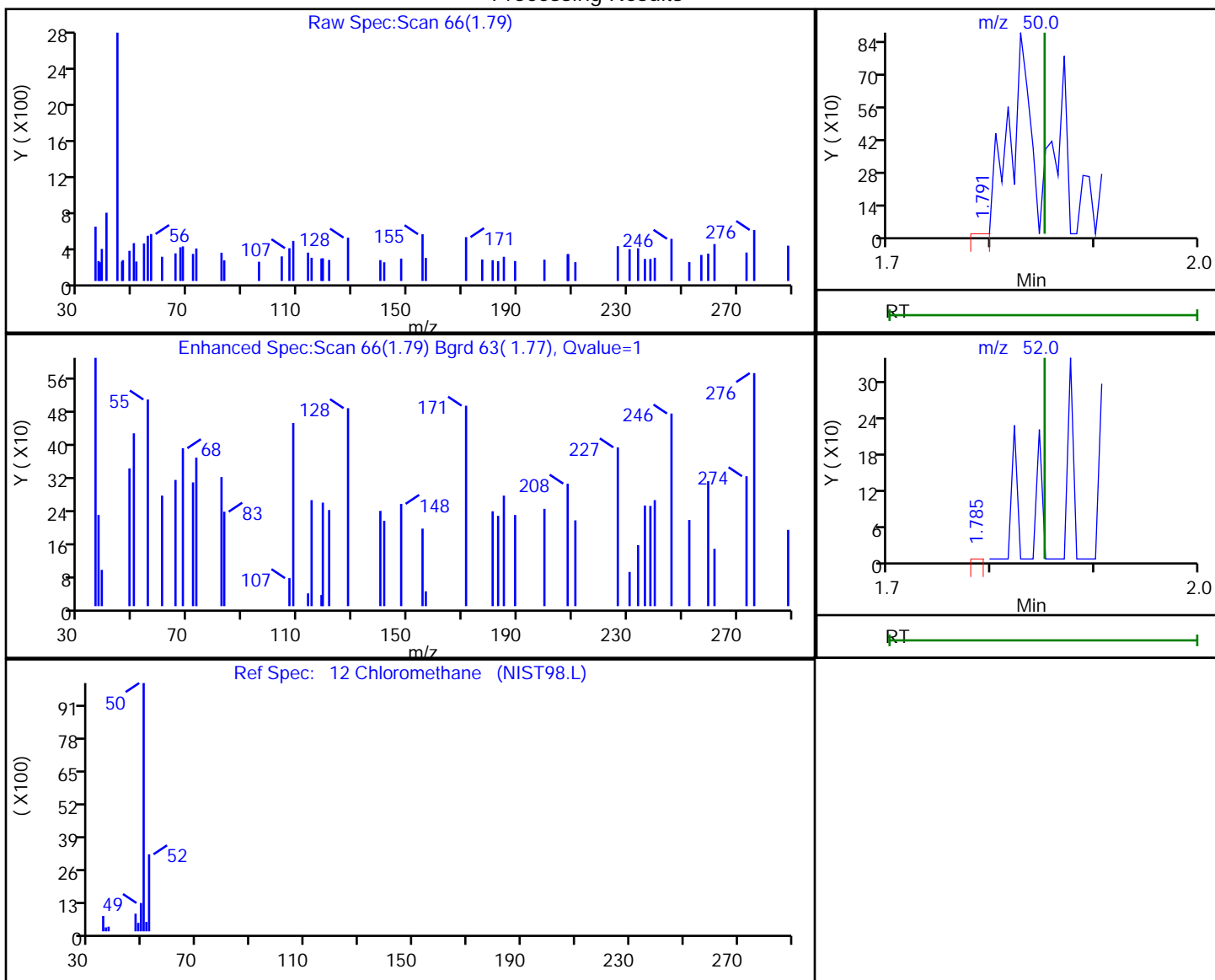


Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050107.D  
 Injection Date: 01-May-2020 17:43:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-9 Lab Sample ID: 180-105108-9  
 Client ID: HD-COD-SW-26-0/1-0  
 Operator ID: 034635 ALS Bottle#: 7 Worklist Smp#: 7  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

12 Chloromethane, CAS: 74-87-3

Processing Results



RT	Mass	Response	Amount
1.79	50.00	153	0.040074
1.79	52.00	138	

Reviewer: journetp, 02-May-2020 18:40:32  
 Audit Action: Marked Compound Undetected

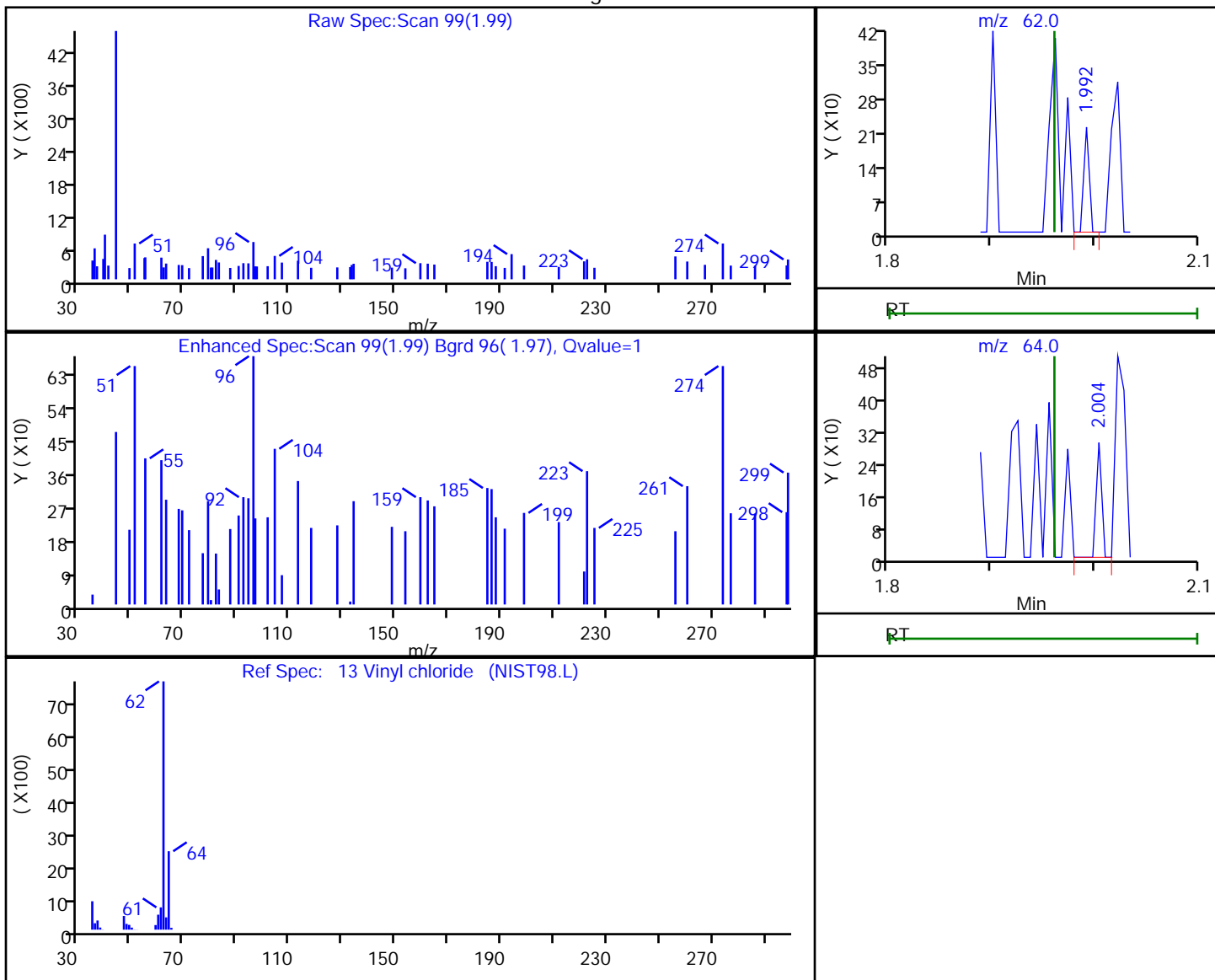
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050107.D  
Injection Date: 01-May-2020 17:43:30 Instrument ID: CHHP5  
Lims ID: 180-105108-B-9 Lab Sample ID: 180-105108-9  
Client ID: HD-COD-SW-26-0/1-0  
Operator ID: 034635 ALS Bottle#: 7 Worklist Smp#: 7  
Purge Vol: 5.000 mL Dil. Factor: 1.0000  
Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
Column: DB-624 (0.18 mm) Detector: MS SCAN

13 Vinyl chloride, CAS: 75-01-4

Processing Results



RT	Mass	Response	Amount
1.99	62.00	79	0.023235
2.00	64.00	105	

Reviewer: journetp, 02-May-2020 18:40:33

Audit Action: Marked Compound Undetected

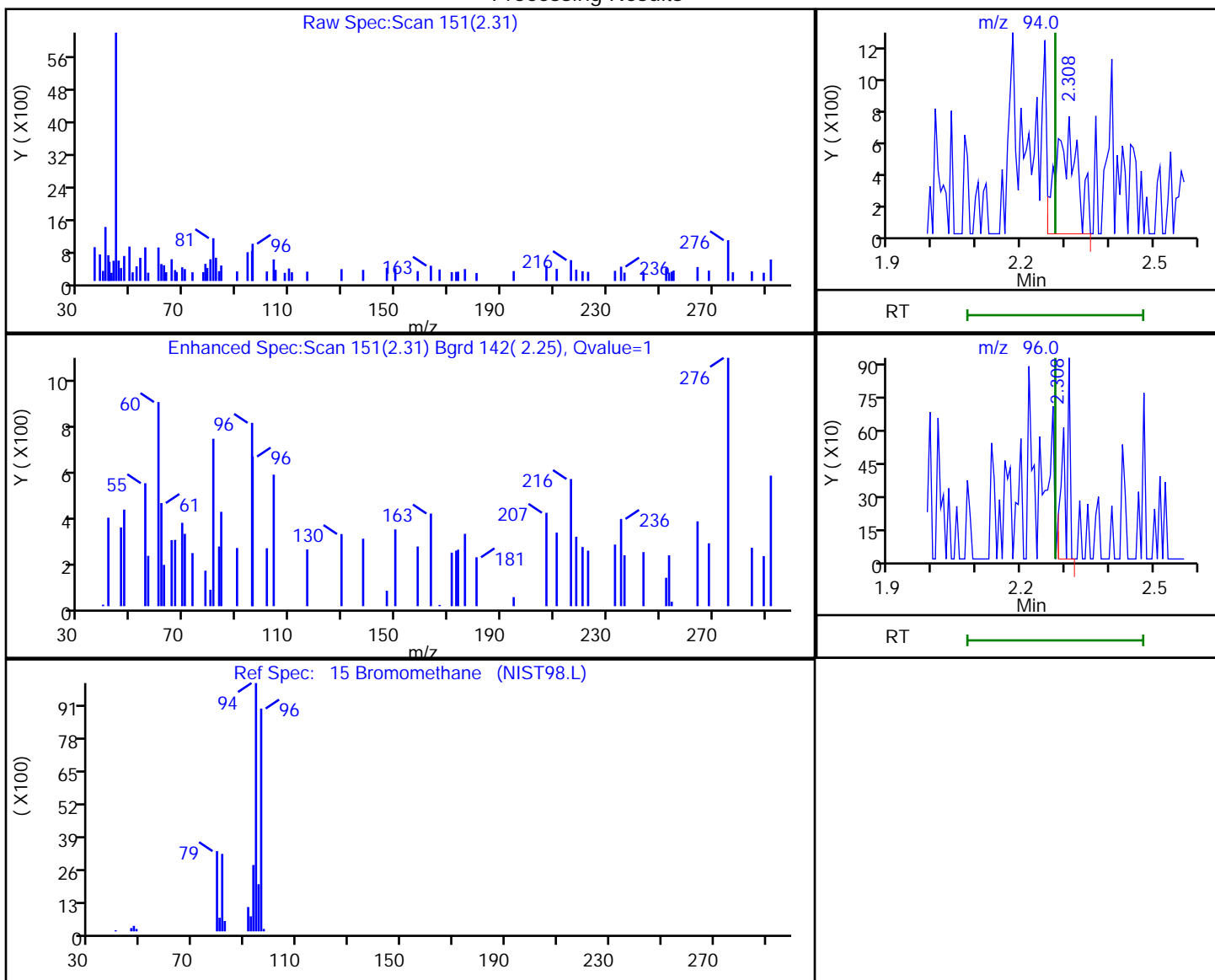
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050107.D  
 Injection Date: 01-May-2020 17:43:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-9 Lab Sample ID: 180-105108-9  
 Client ID: HD-COD-SW-26-0/1-0  
 Operator ID: 034635 ALS Bottle#: 7 Worklist Smp#: 7  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

15 Bromomethane, CAS: 74-83-9

Processing Results



RT	Mass	Response	Amount
2.31	94.00	2272	1.167083
2.31	96.00	758	

Reviewer: journtp, 02-May-2020 18:40:33  
 Audit Action: Marked Compound Undetected

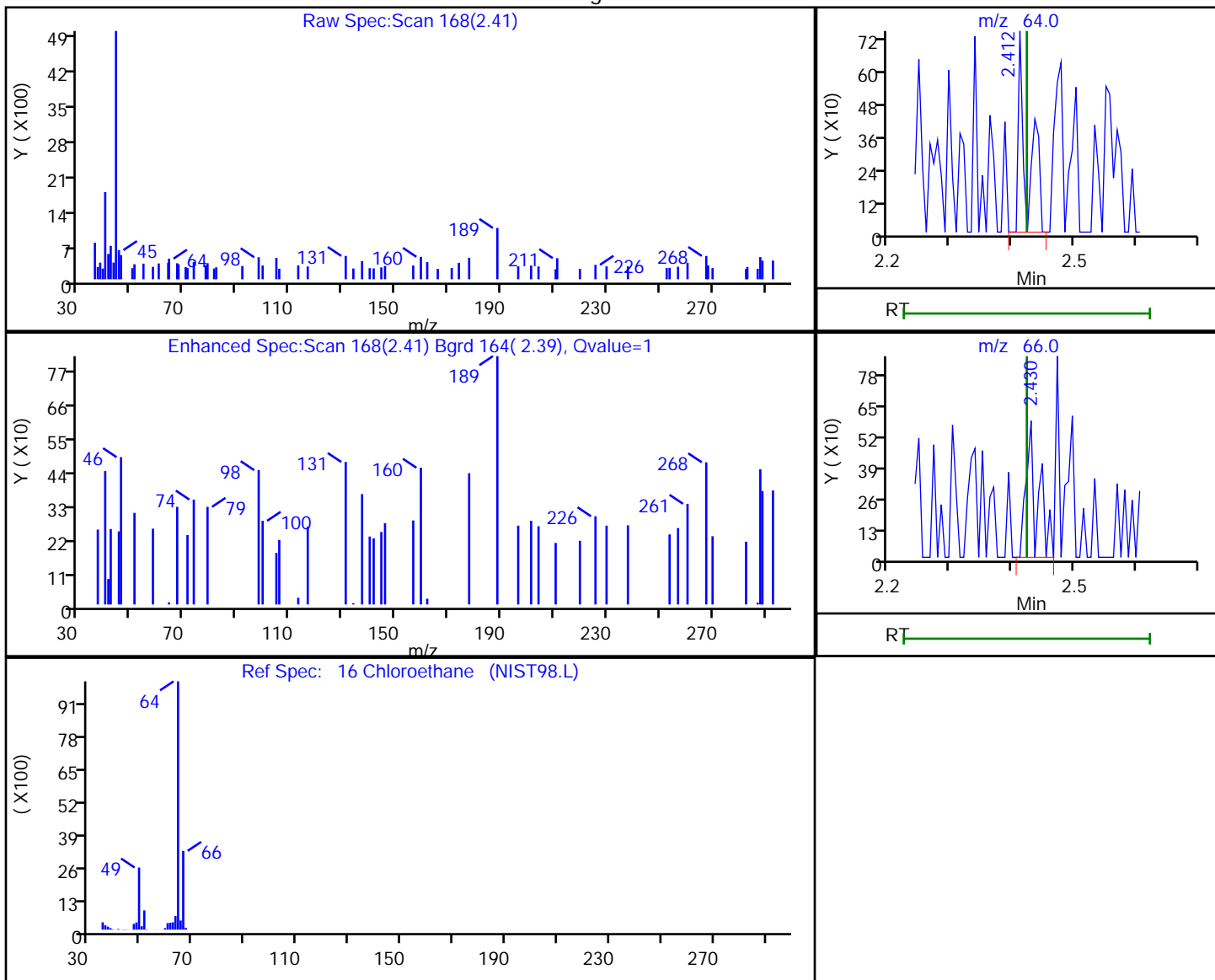
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050107.D  
 Injection Date: 01-May-2020 17:43:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-9 Lab Sample ID: 180-105108-9  
 Client ID: HD-COD-SW-26-0/1-0  
 Operator ID: 034635 ALS Bottle#: 7 Worklist Smp#: 7  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

16 Chloroethane, CAS: 75-00-3

Processing Results



RT	Mass	Response	Amount
2.41	64.00	727	0.315175
2.43	66.00	750	

Reviewer: journtp, 02-May-2020 18:40:33  
 Audit Action: Marked Compound Undetected

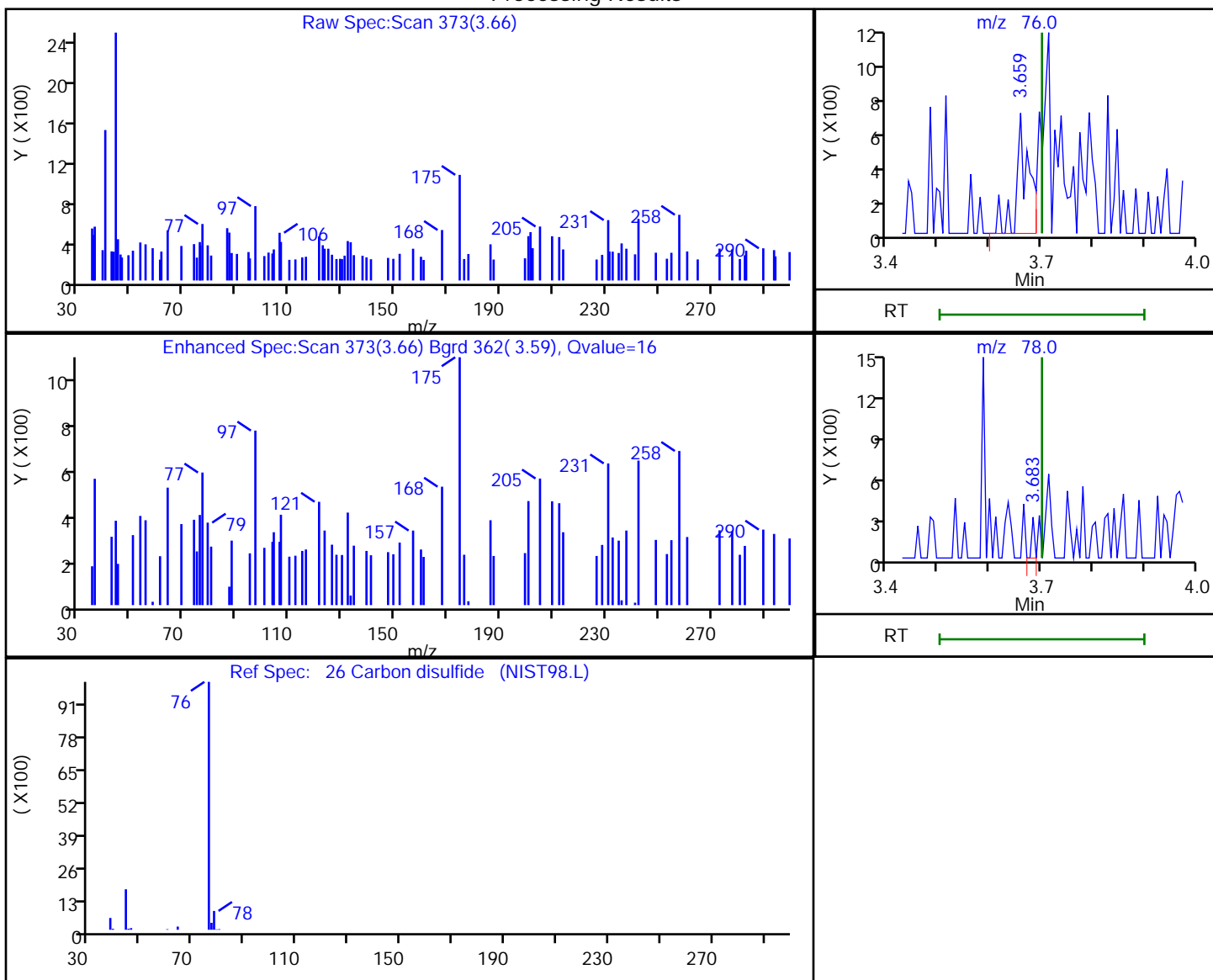
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050107.D  
 Injection Date: 01-May-2020 17:43:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-9 Lab Sample ID: 180-105108-9  
 Client ID: HD-COD-SW-26-0/1-0  
 Operator ID: 034635 ALS Bottle#: 7 Worklist Smp#: 7  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

26 Carbon disulfide, CAS: 75-15-0

Processing Results



RT	Mass	Response	Amount
3.66	76.00	1156	0.262775
3.68	78.00	106	

Reviewer: journetp, 02-May-2020 18:40:36  
 Audit Action: Marked Compound Undetected

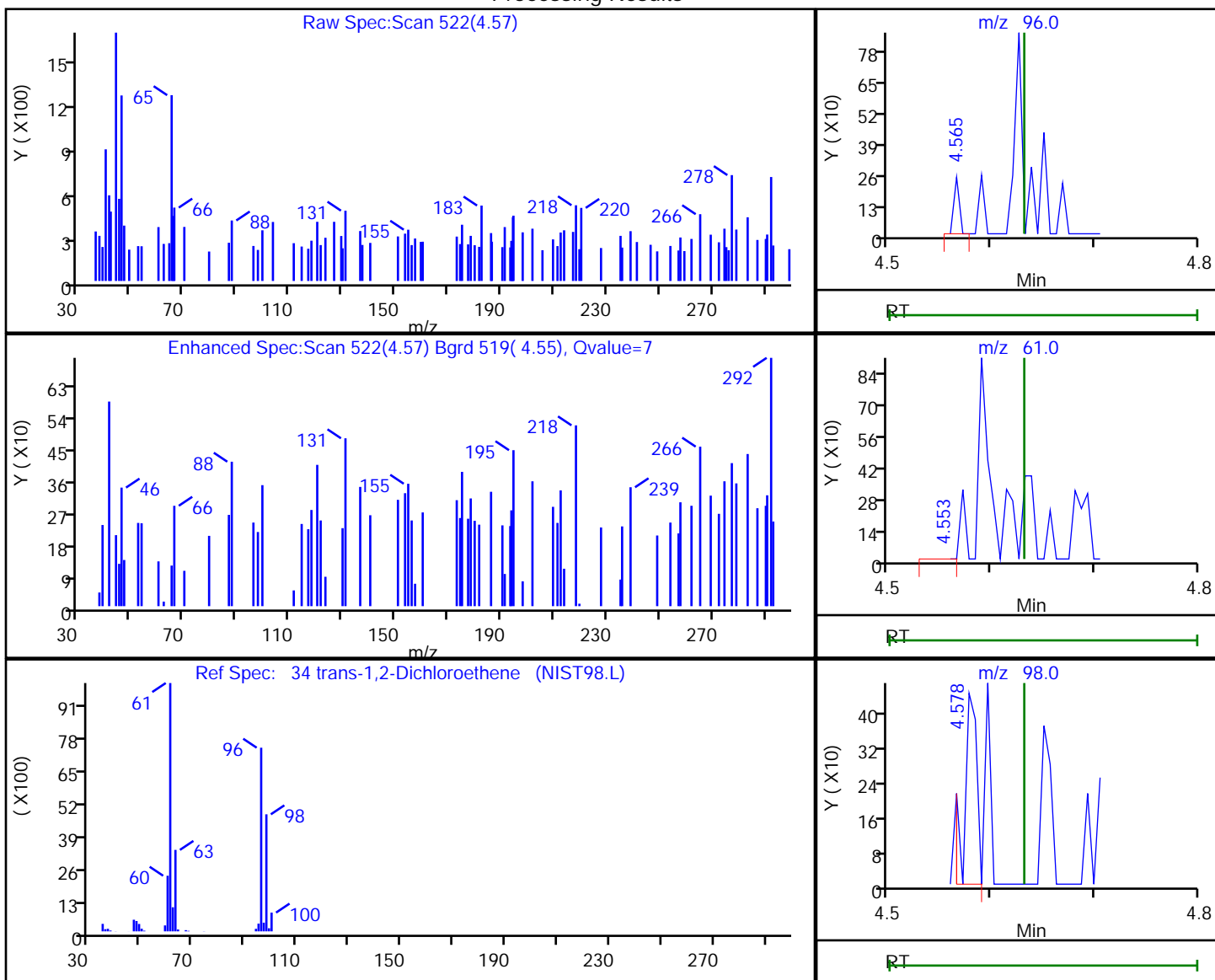
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050107.D  
Injection Date: 01-May-2020 17:43:30 Instrument ID: CHHP5  
Lims ID: 180-105108-B-9 Lab Sample ID: 180-105108-9  
Client ID: HD-COD-SW-26-0/1-0  
Operator ID: 034635 ALS Bottle#: 7 Worklist Smp#: 7  
Purge Vol: 5.000 mL Dil. Factor: 1.0000  
Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
Column: DB-624 (0.18 mm) Detector: MS SCAN

34 trans-1,2-Dichloroethene, CAS: 156-60-5

Processing Results



RT	Mass	Response	Amount
4.57	96.00	87	0.040666
4.55	61.00	306	
4.58	98.00	381	

Reviewer: journept, 02-May-2020 18:40:51  
Audit Action: Marked Compound Undetected

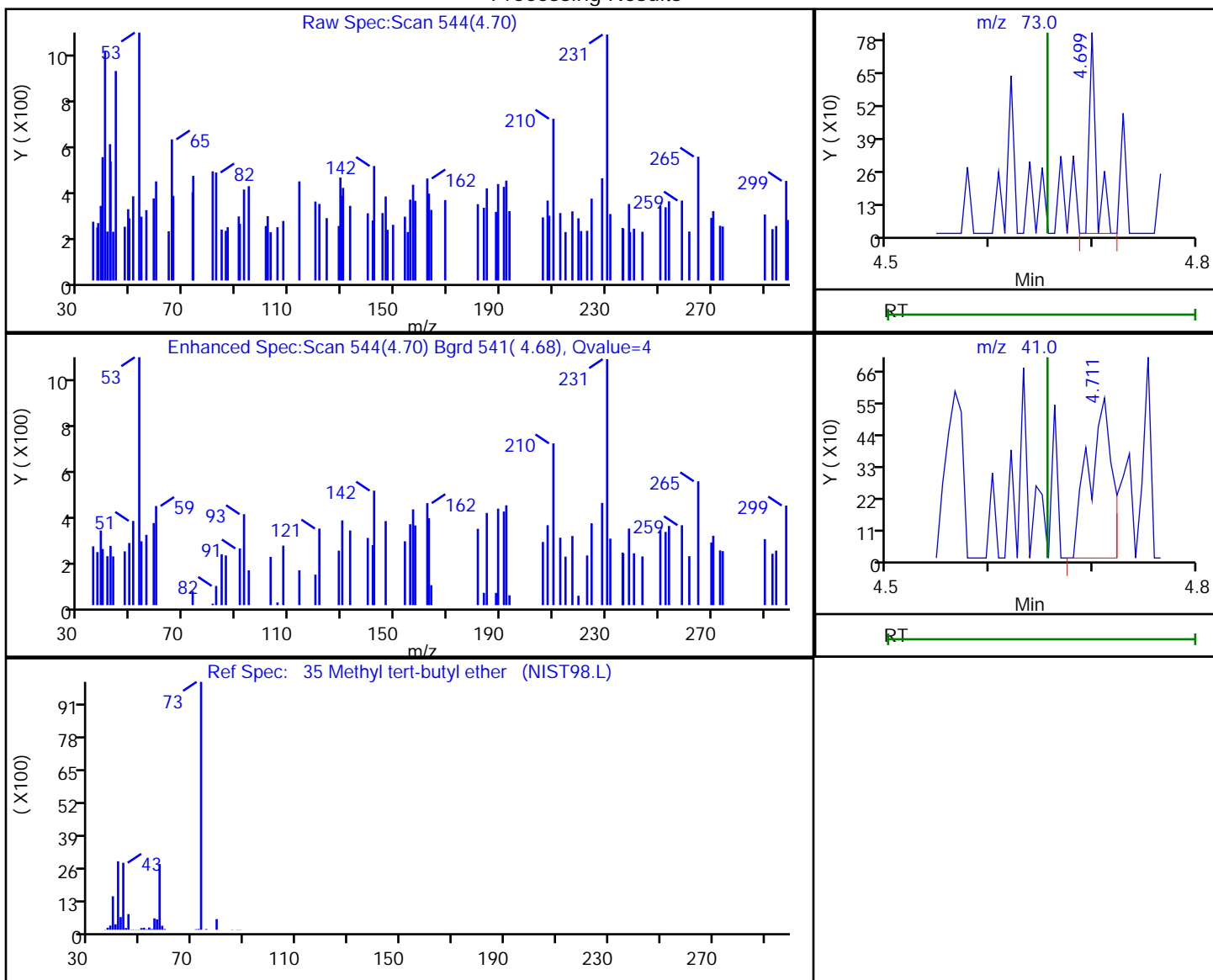
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050107.D  
 Injection Date: 01-May-2020 17:43:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-9 Lab Sample ID: 180-105108-9  
 Client ID: HD-COD-SW-26-0/1-0  
 Operator ID: 034635 ALS Bottle#: 7 Worklist Smp#: 7  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

35 Methyl tert-butyl ether, CAS: 1634-04-4

Processing Results



RT	Mass	Response	Amount
4.70	73.00	384	0.063957
4.71	41.00	879	

Reviewer: journetp, 02-May-2020 18:40:52

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

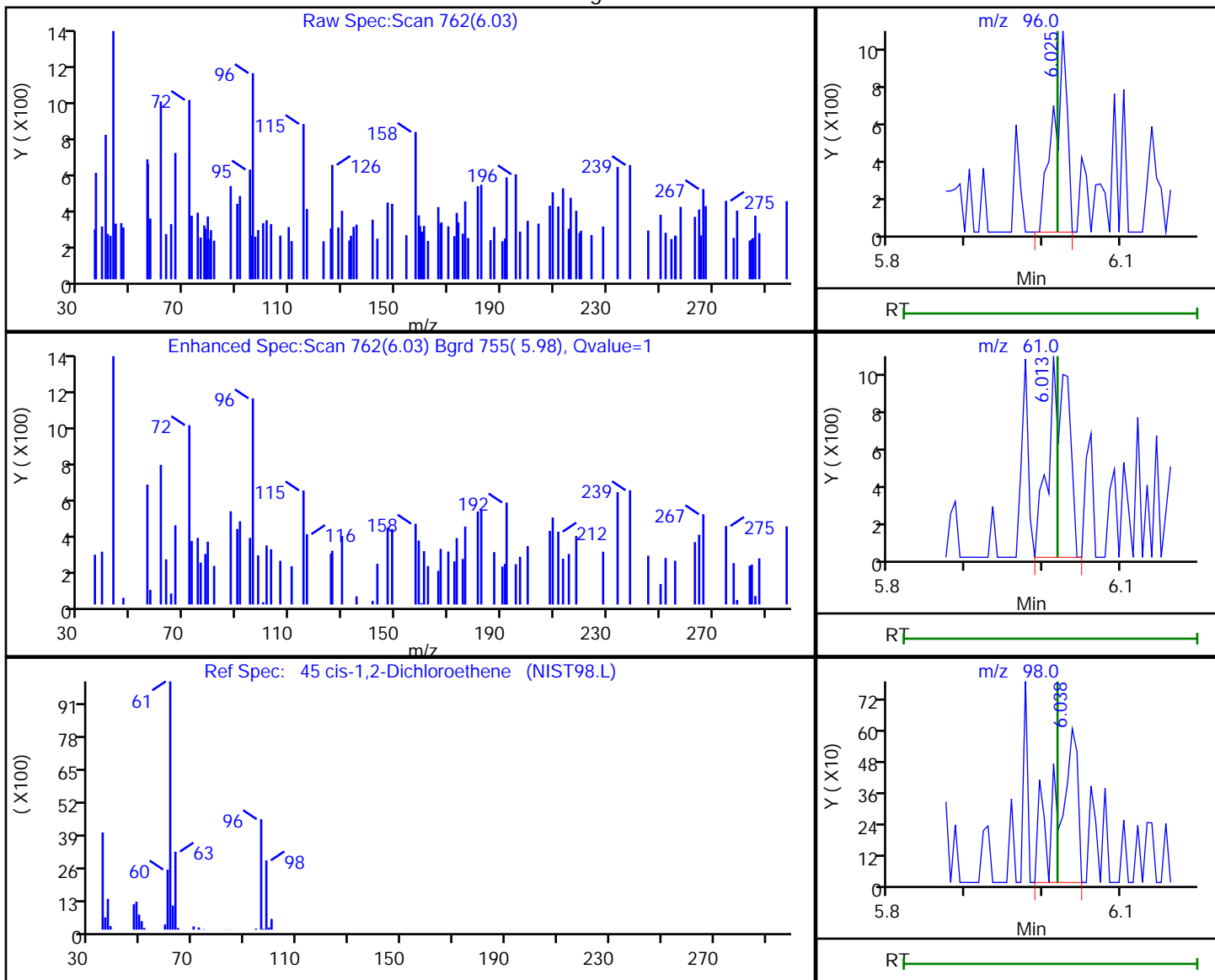


Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050107.D  
 Injection Date: 01-May-2020 17:43:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-9 Lab Sample ID: 180-105108-9  
 Client ID: HD-COD-SW-26-0/1-0  
 Operator ID: 034635 ALS Bottle#: 7 Worklist Smp#: 7  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

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

Processing Results



RT	Mass	Response	Amount
6.03	96.00	1300	0.510677
6.01	61.00	1846	
6.04	98.00	1123	

Reviewer: journeyp, 02-May-2020 18:40:53  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050107.D

Injection Date: 01-May-2020 17:43:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-9

Lab Sample ID: 180-105108-9

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

Operator ID: 034635

ALS Bottle#: 7 Worklist Smp#: 7

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

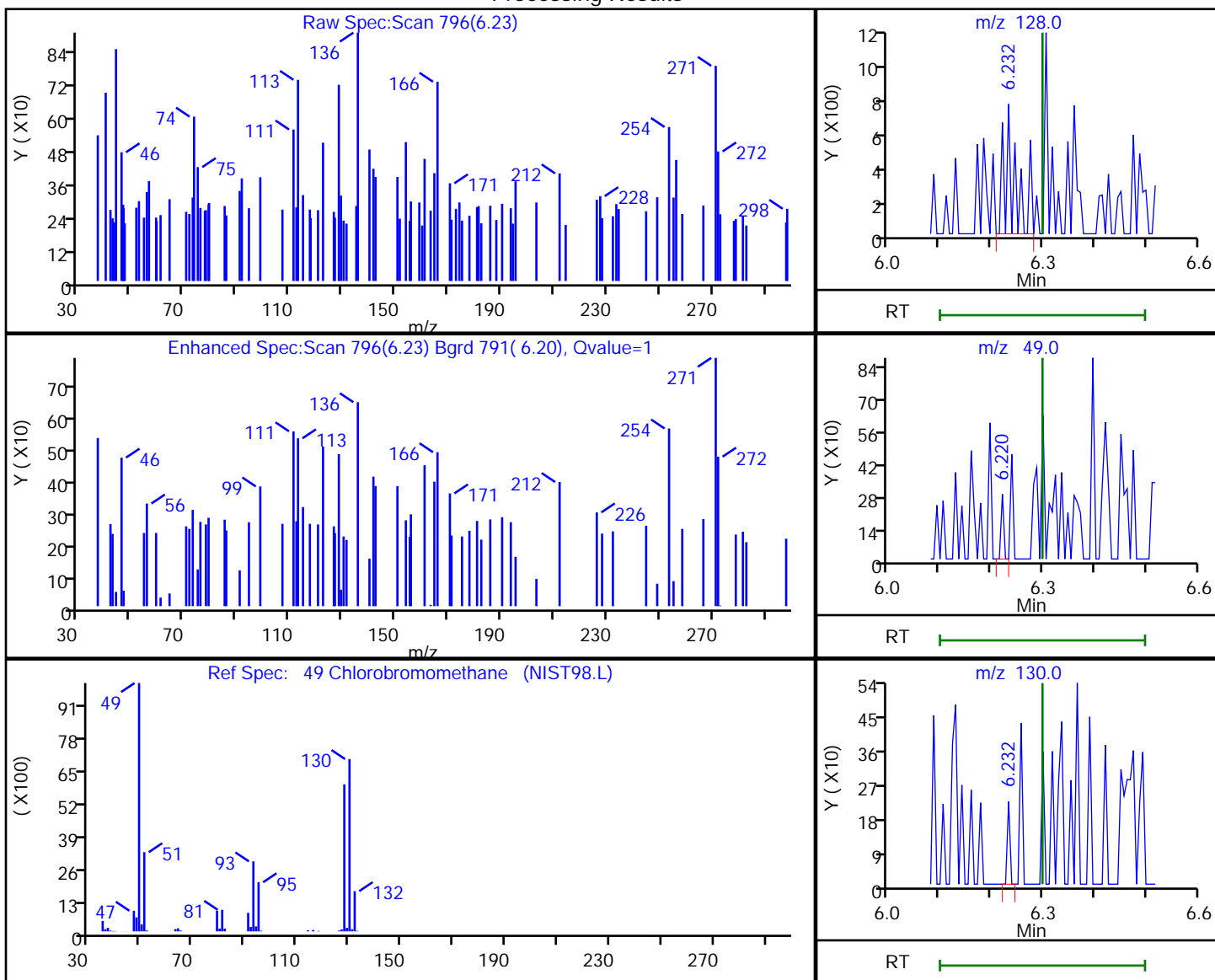
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

49 Chlorobromomethane, CAS: 74-97-5

Processing Results



RT	Mass	Response	Amount
6.23	128.00	988	0.728215
6.22	49.00	103	
6.23	130.00	80	

Reviewer: journept, 02-May-2020 18:41:07

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

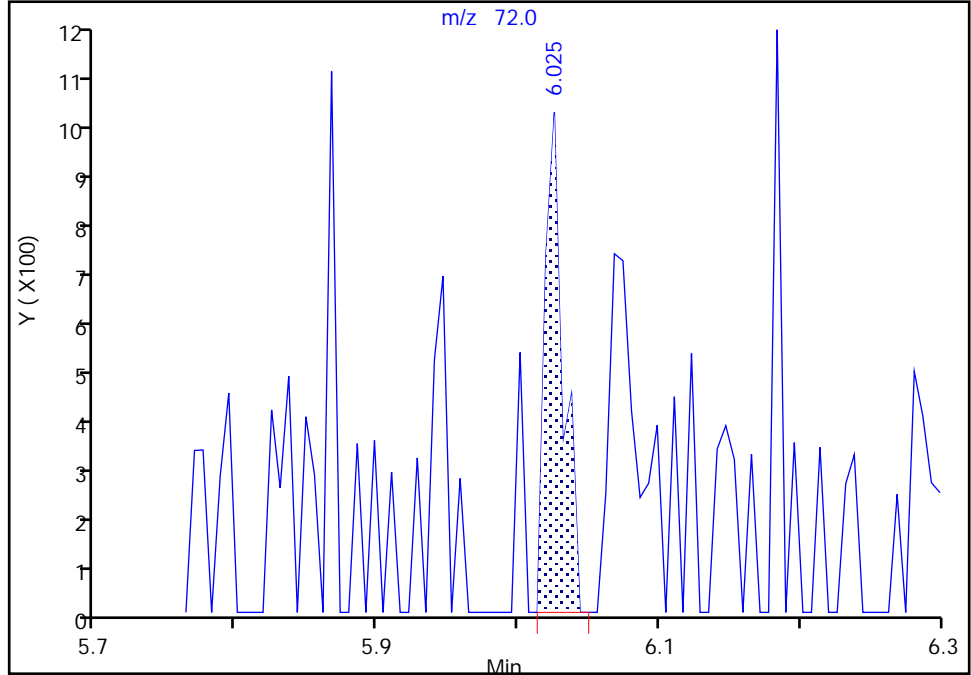
Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050107.D  
Injection Date: 01-May-2020 17:43:30 Instrument ID: CHHP5  
Lims ID: 180-105108-B-9 Lab Sample ID: 180-105108-9  
Client ID: HD-COD-SW-26-0/1-0  
Operator ID: 034635 ALS Bottle#: 7 Worklist Smp#: 7  
Purge Vol: 5.000 mL Dil. Factor: 1.0000  
Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
Column: DB-624 (0.18 mm) Detector: MS SCAN

46 2-Butanone (MEK), CAS: 78-93-3

Signal: 2

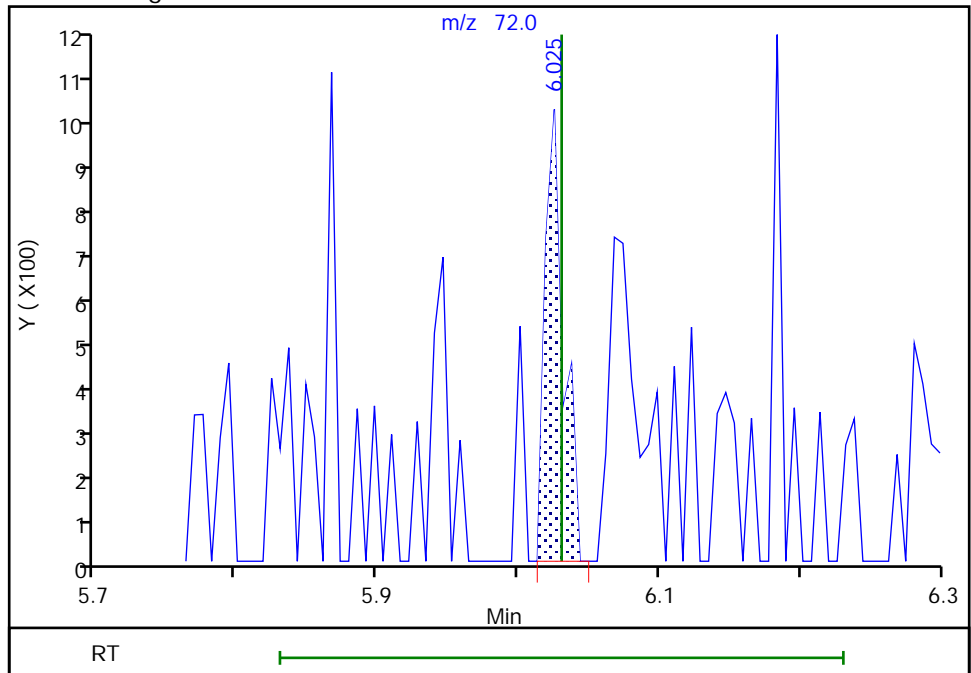
RT: 6.03  
Area: 860  
Amount: 2.637520  
Amount Units: ng

Processing Integration Results



RT: 6.03  
Area: 860  
Amount: 2.637520  
Amount Units: ng

Manual Integration Results



Reviewer: journetp, 02-May-2020 18:40:54  
Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

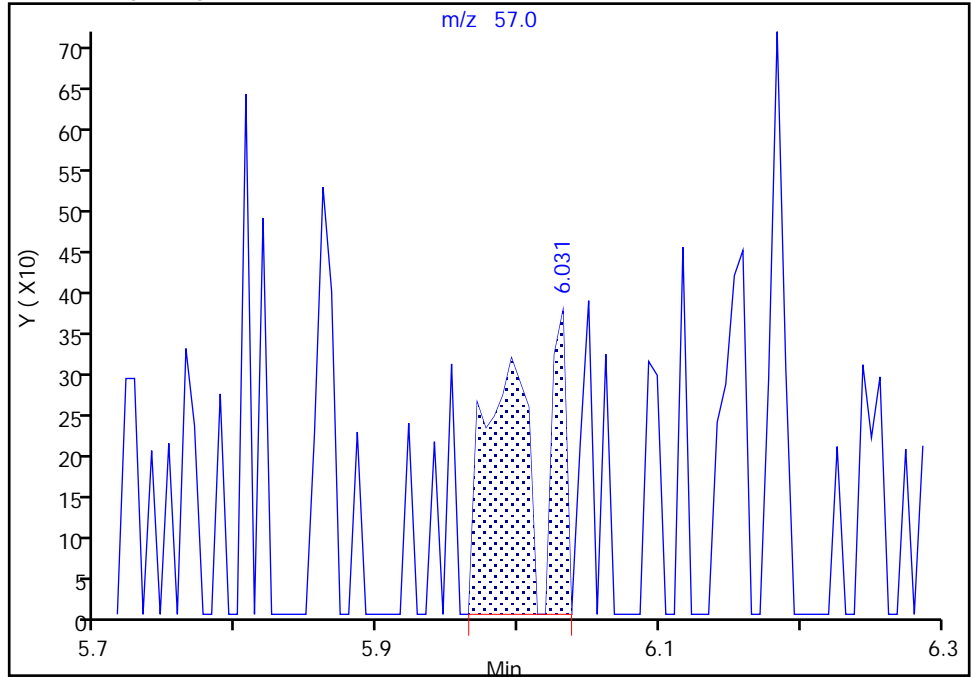
Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050107.D  
Injection Date: 01-May-2020 17:43:30 Instrument ID: CHHP5  
Lims ID: 180-105108-B-9 Lab Sample ID: 180-105108-9  
Client ID: HD-COD-SW-26-0/1-0  
Operator ID: 034635 ALS Bottle#: 7 Worklist Smp#: 7  
Purge Vol: 5.000 mL Dil. Factor: 1.0000  
Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
Column: DB-624 (0.18 mm) Detector: MS SCAN

46 2-Butanone (MEK), CAS: 78-93-3

Signal: 3

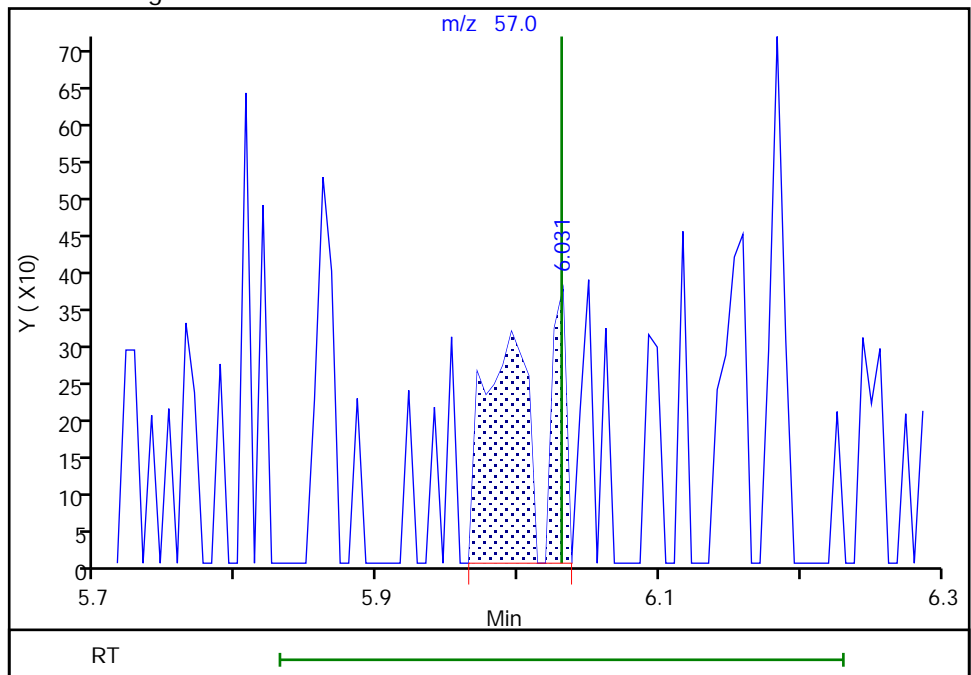
RT: 6.03  
Area: 933  
Amount: 2.637520  
Amount Units: ng

Processing Integration Results



RT: 6.03  
Area: 933  
Amount: 2.637520  
Amount Units: ng

Manual Integration Results

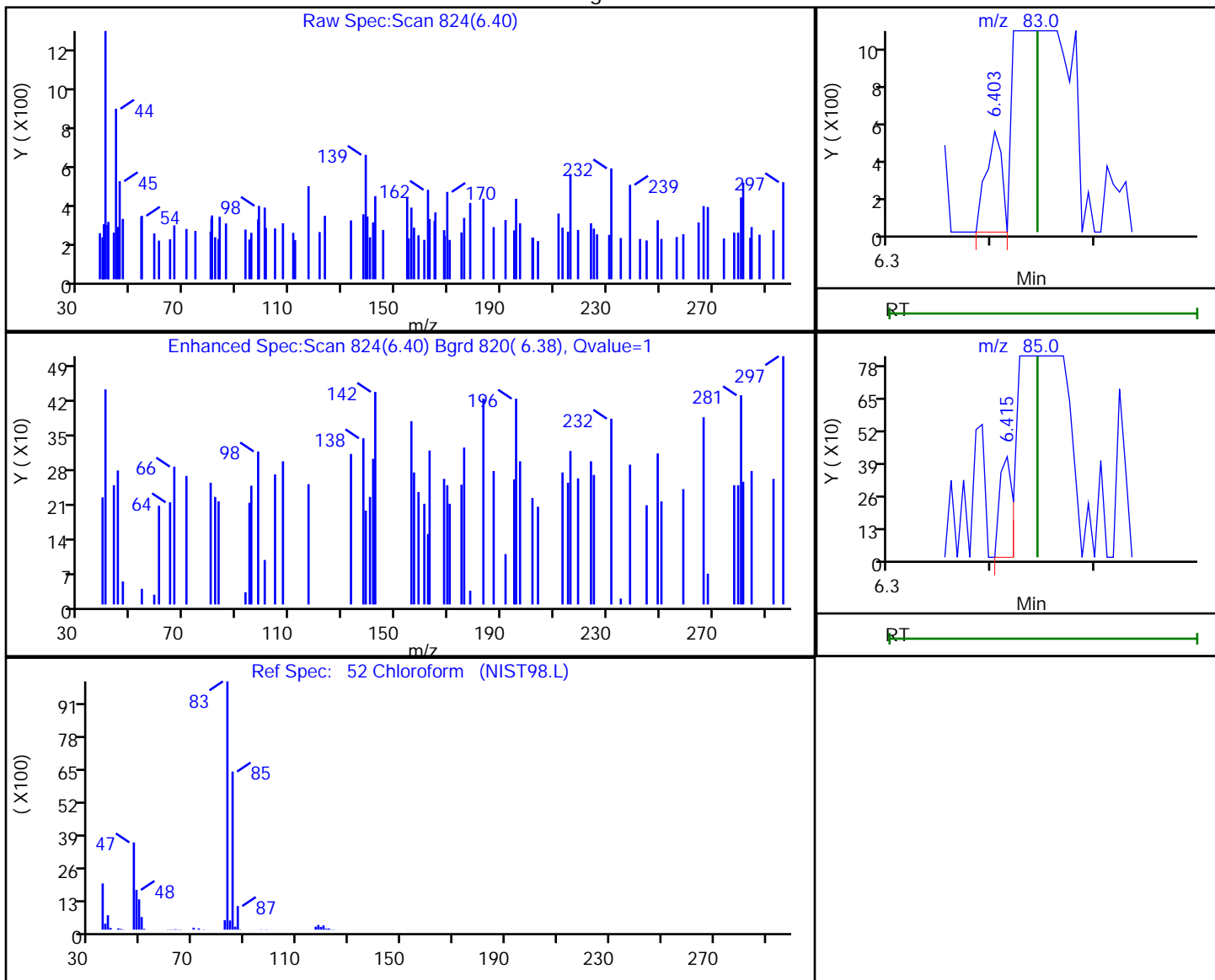


Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050107.D  
Injection Date: 01-May-2020 17:43:30 Instrument ID: CHHP5  
Lims ID: 180-105108-B-9 Lab Sample ID: 180-105108-9  
Client ID: HD-COD-SW-26-0/1-0  
Operator ID: 034635 ALS Bottle#: 7 Worklist Smp#: 7  
Purge Vol: 5.000 mL Dil. Factor: 1.0000  
Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
Column: DB-624 (0.18 mm) Detector: MS SCAN

52 Chloroform, CAS: 67-66-3

Processing Results



RT	Mass	Response	Amount
6.40	83.00	574	-1.607968
6.41	85.00	357	

Reviewer: journetp, 02-May-2020 18:41:07

Audit Action: Marked Compound Undetected

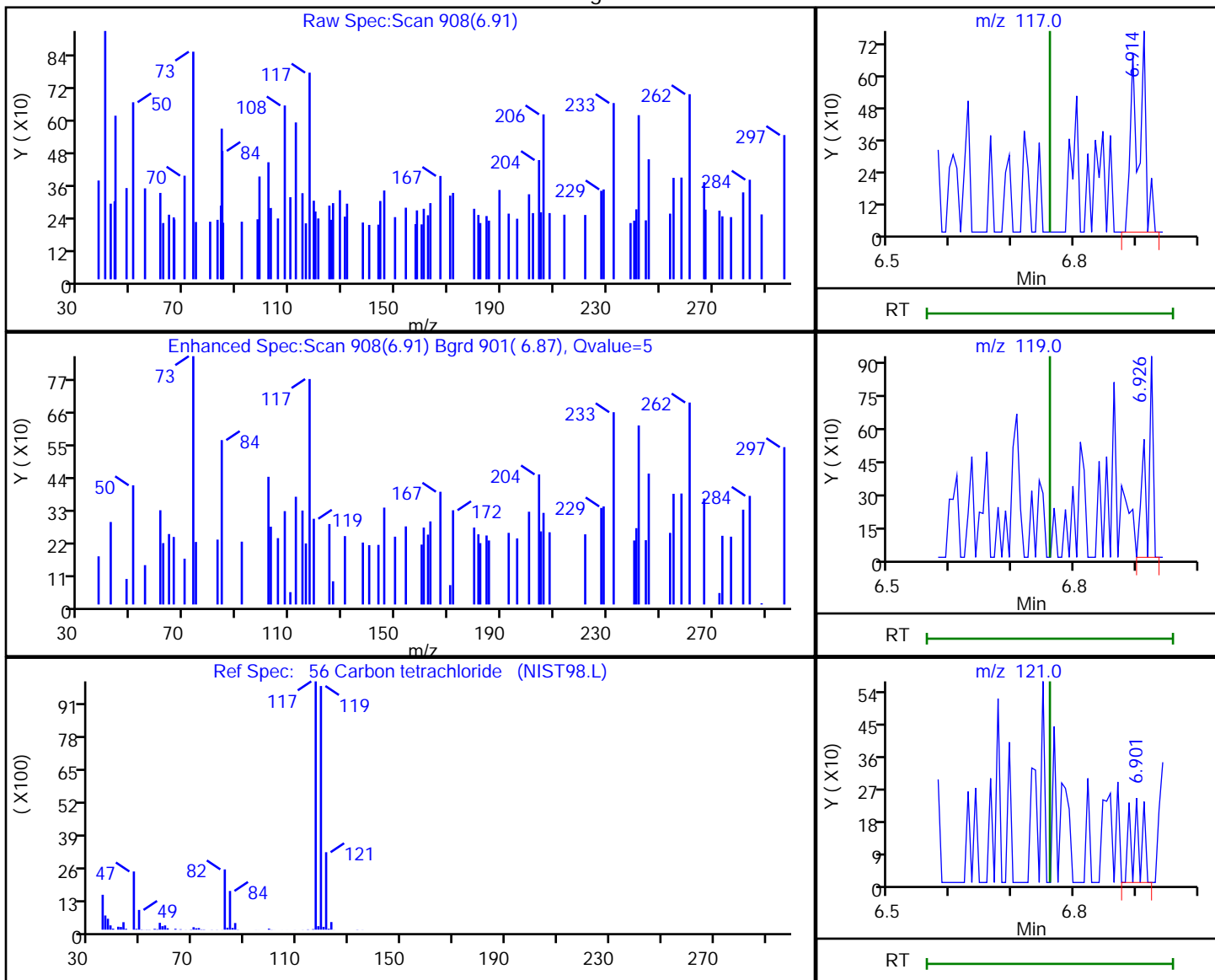
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050107.D  
 Injection Date: 01-May-2020 17:43:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-9 Lab Sample ID: 180-105108-9  
 Client ID: HD-COD-SW-26-0/1-0  
 Operator ID: 034635 ALS Bottle#: 7 Worklist Smp#: 7  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

56 Carbon tetrachloride, CAS: 56-23-5

Processing Results



RT	Mass	Response	Amount
6.91	117.00	869	0.328128
6.93	119.00	622	
6.90	121.00	250	

Reviewer: journetp, 02-May-2020 18:41:08  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050107.D

Injection Date: 01-May-2020 17:43:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-9

Lab Sample ID: 180-105108-9

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

Operator ID: 034635

ALS Bottle#: 7 Worklist Smp#: 7

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

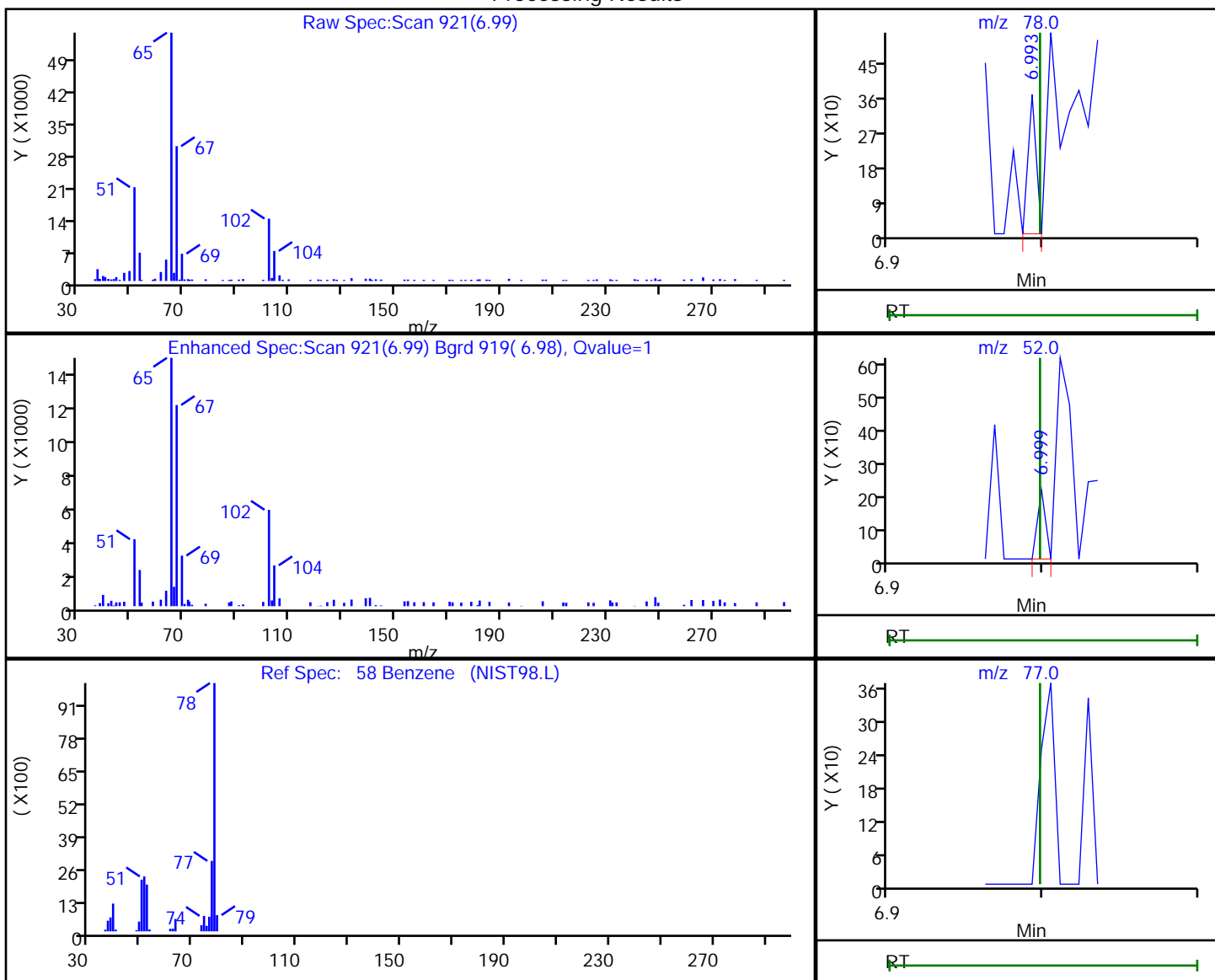
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

58 Benzene, CAS: 71-43-2

Processing Results



RT	Mass	Response	Amount
6.99	78.00	133	0.013807
7.00	52.00	78	
7.00	77.00	0	

Reviewer: journetp, 02-May-2020 18:41:08

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050107.D

Injection Date: 01-May-2020 17:43:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-9

Lab Sample ID: 180-105108-9

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

Operator ID: 034635

ALS Bottle#: 7 Worklist Smp#: 7

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

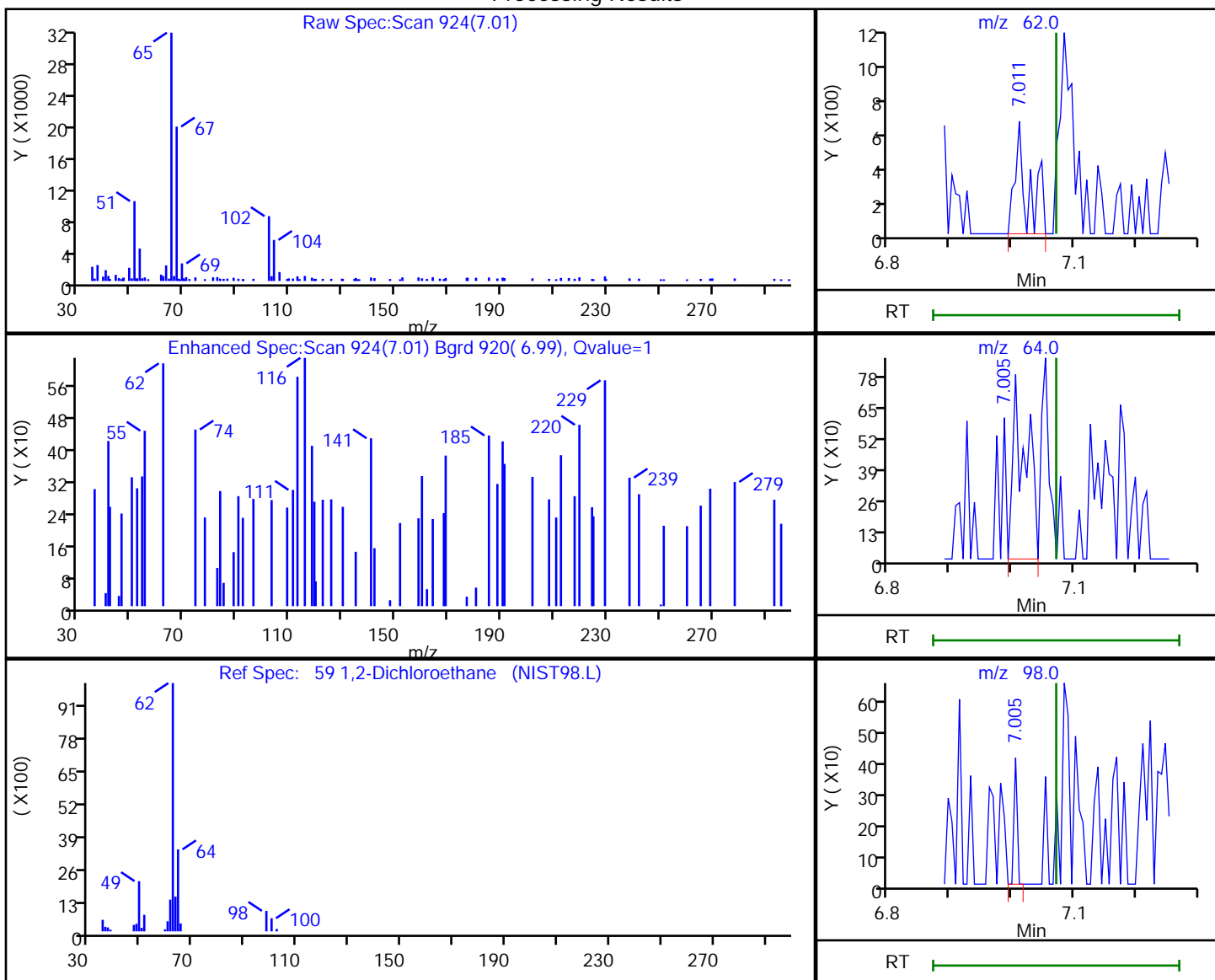
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

59 1,2-Dichloroethane, CAS: 107-06-2

Processing Results



RT	Mass	Response	Amount
7.01	62.00	891	0.243260
7.00	64.00	1180	
7.00	98.00	151	

Reviewer: journept, 02-May-2020 18:41:08

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID



Euofins TestAmerica, Pittsburgh

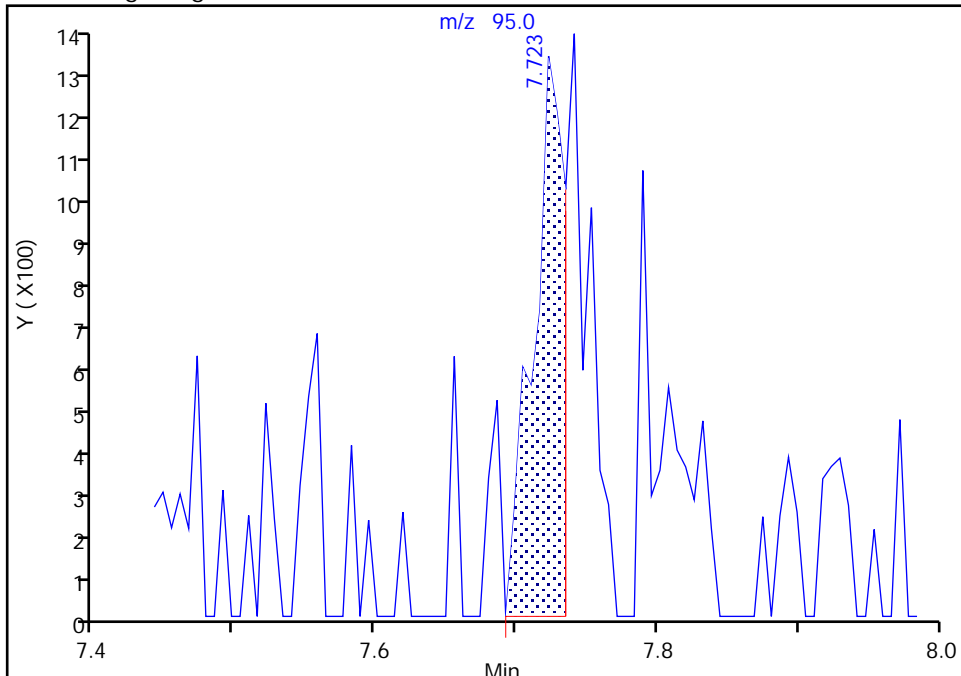
Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050107.D  
Injection Date: 01-May-2020 17:43:30 Instrument ID: CHHP5  
Lims ID: 180-105108-B-9 Lab Sample ID: 180-105108-9  
Client ID: HD-COD-SW-26-0/1-0  
Operator ID: 034635 ALS Bottle#: 7 Worklist Smp#: 7  
Purge Vol: 5.000 mL Dil. Factor: 1.0000  
Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
Column: DB-624 (0.18 mm) Detector: MS SCAN

64 Trichloroethene, CAS: 79-01-6

Signal: 2

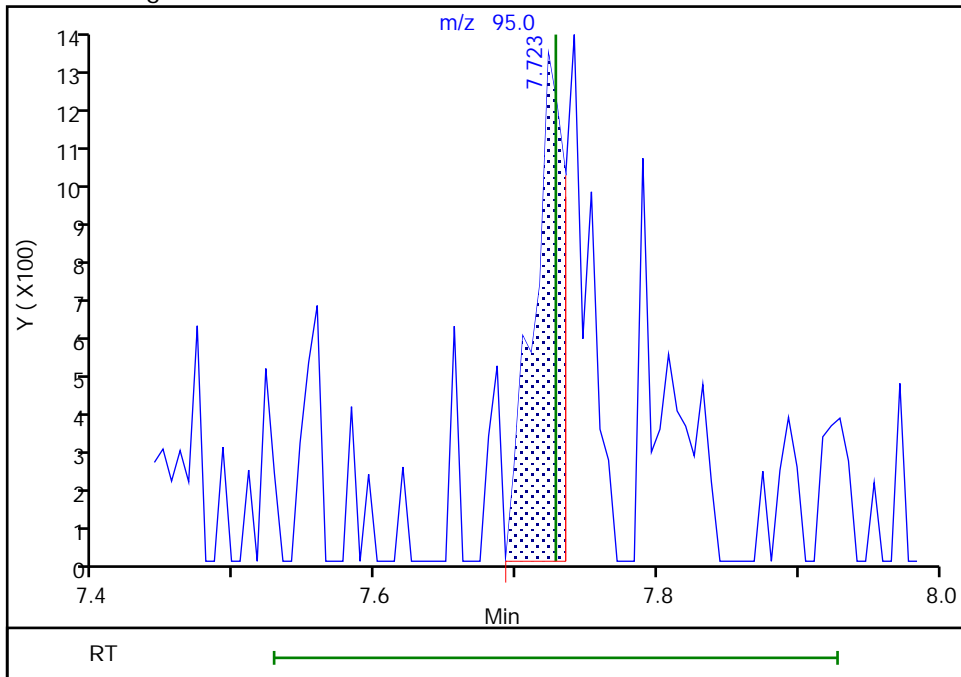
RT: 7.72  
Area: 2059  
Amount: 1.328497  
Amount Units: ng

Processing Integration Results



RT: 7.72  
Area: 2059  
Amount: 1.328497  
Amount Units: ng

Manual Integration Results



Reviewer: journetp, 02-May-2020 18:41:09  
Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

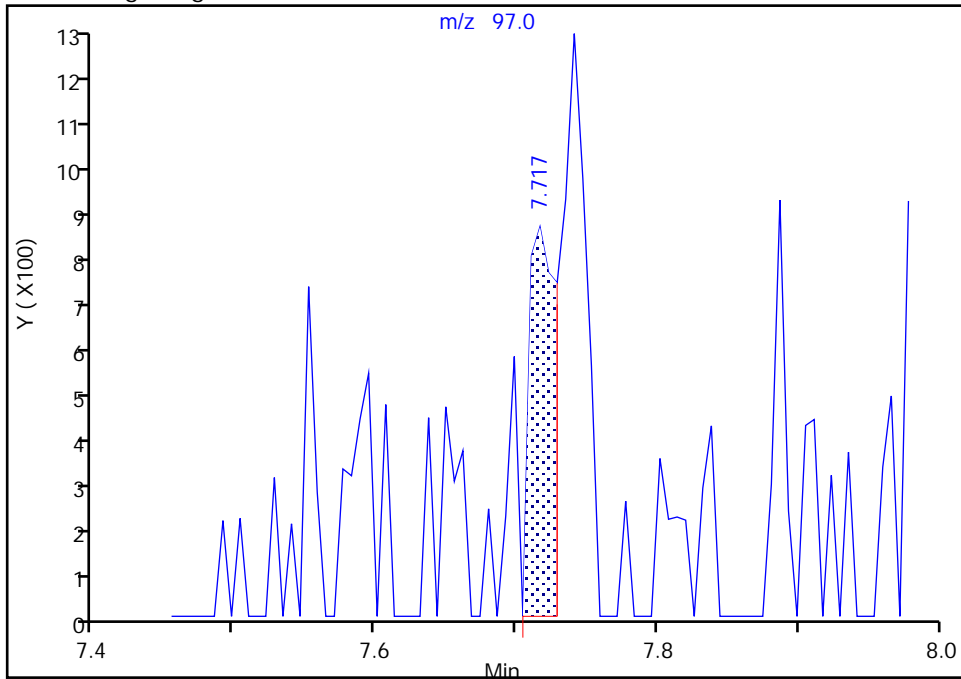
Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050107.D  
Injection Date: 01-May-2020 17:43:30 Instrument ID: CHHP5  
Lims ID: 180-105108-B-9 Lab Sample ID: 180-105108-9  
Client ID: HD-COD-SW-26-0/1-0  
Operator ID: 034635 ALS Bottle#: 7 Worklist Smp#: 7  
Purge Vol: 5.000 mL Dil. Factor: 1.0000  
Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
Column: DB-624 (0.18 mm) Detector: MS SCAN

64 Trichloroethene, CAS: 79-01-6

Signal: 3

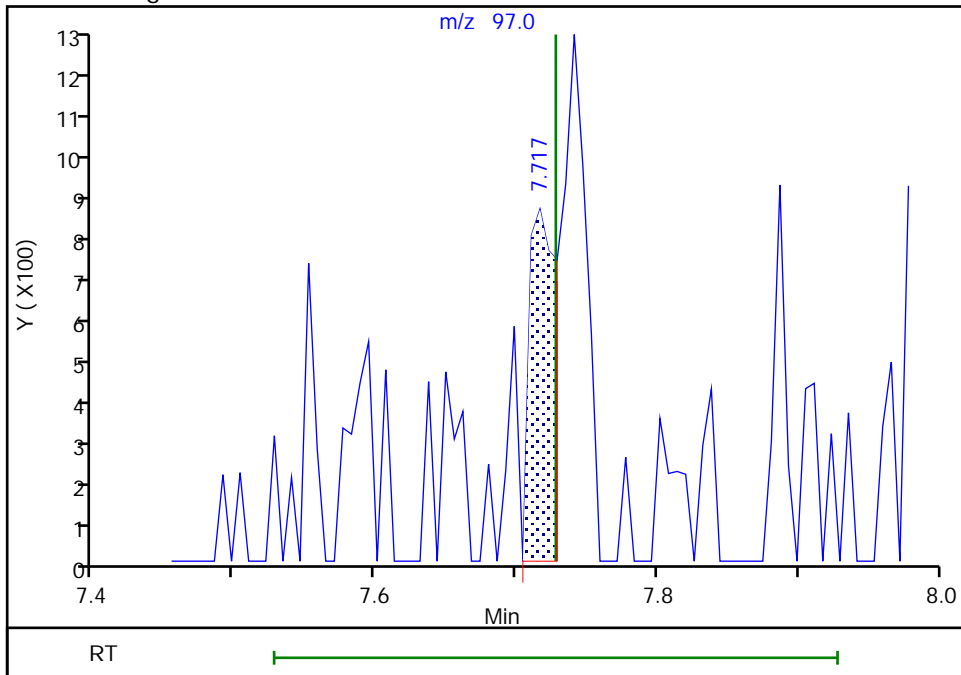
RT: 7.72  
Area: 1149  
Amount: 1.328497  
Amount Units: ng

Processing Integration Results



RT: 7.72  
Area: 1149  
Amount: 1.328497  
Amount Units: ng

Manual Integration Results



Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050107.D

Injection Date: 01-May-2020 17:43:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-9

Lab Sample ID: 180-105108-9

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

Operator ID: 034635

ALS Bottle#: 7 Worklist Smp#: 7

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

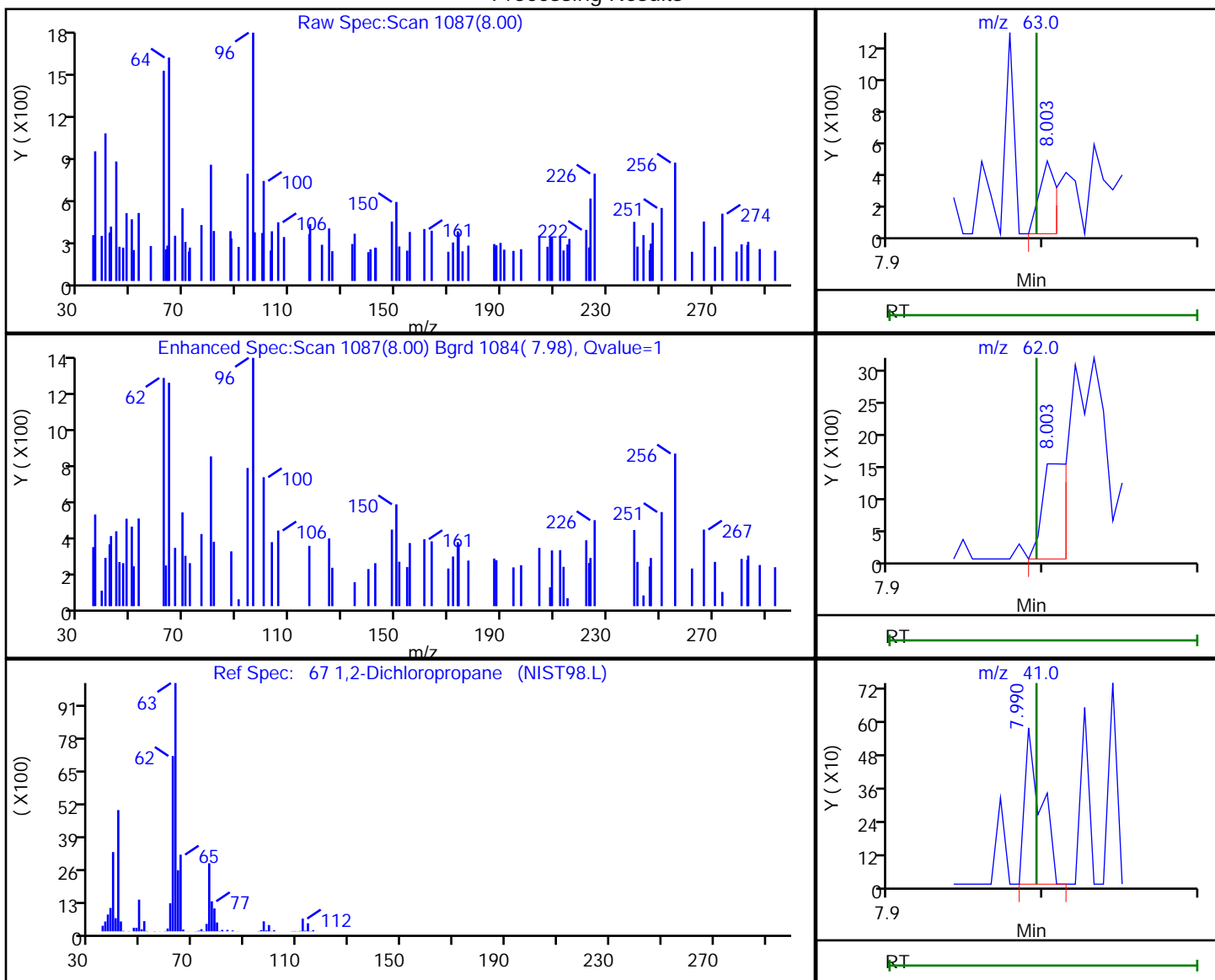
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

67 1,2-Dichloropropane, CAS: 78-87-5

Processing Results



RT	Mass	Response	Amount
8.00	63.00	363	0.141179
8.00	62.00	1732	
7.99	41.00	426	

Reviewer: journetp, 02-May-2020 18:41:24

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050107.D

Injection Date: 01-May-2020 17:43:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-9

Lab Sample ID: 180-105108-9

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

Operator ID: 034635

ALS Bottle#: 7 Worklist Smp#: 7

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

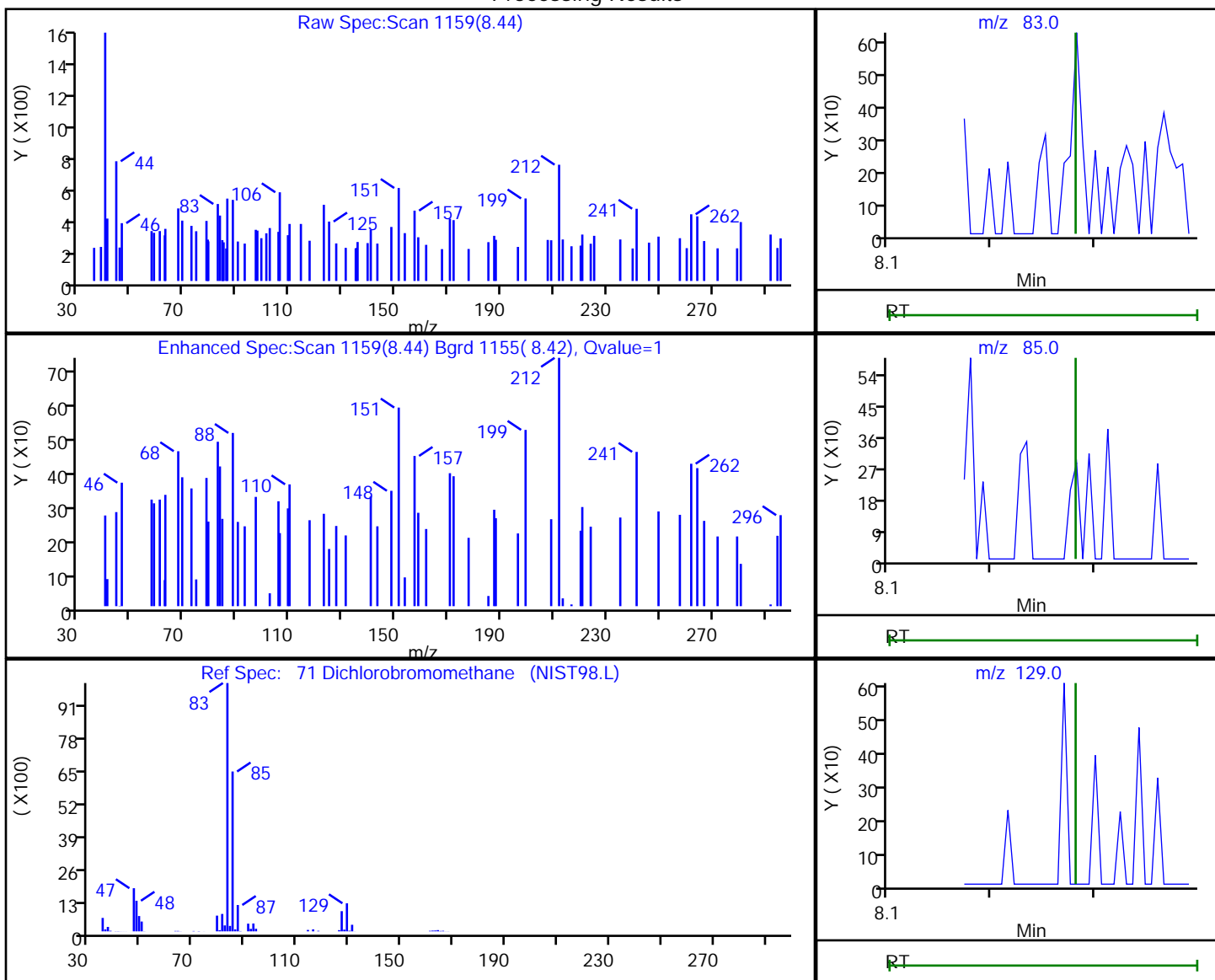
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

71 Dichlorobromomethane, CAS: 75-27-4

Processing Results



RT	Mass	Response	Amount
8.44	83.00	377	0.124959
8.44	85.00	256	
8.42	129.00	211	

Reviewer: journeyp, 02-May-2020 18:41:24

Audit Action: Marked Compound Undetected

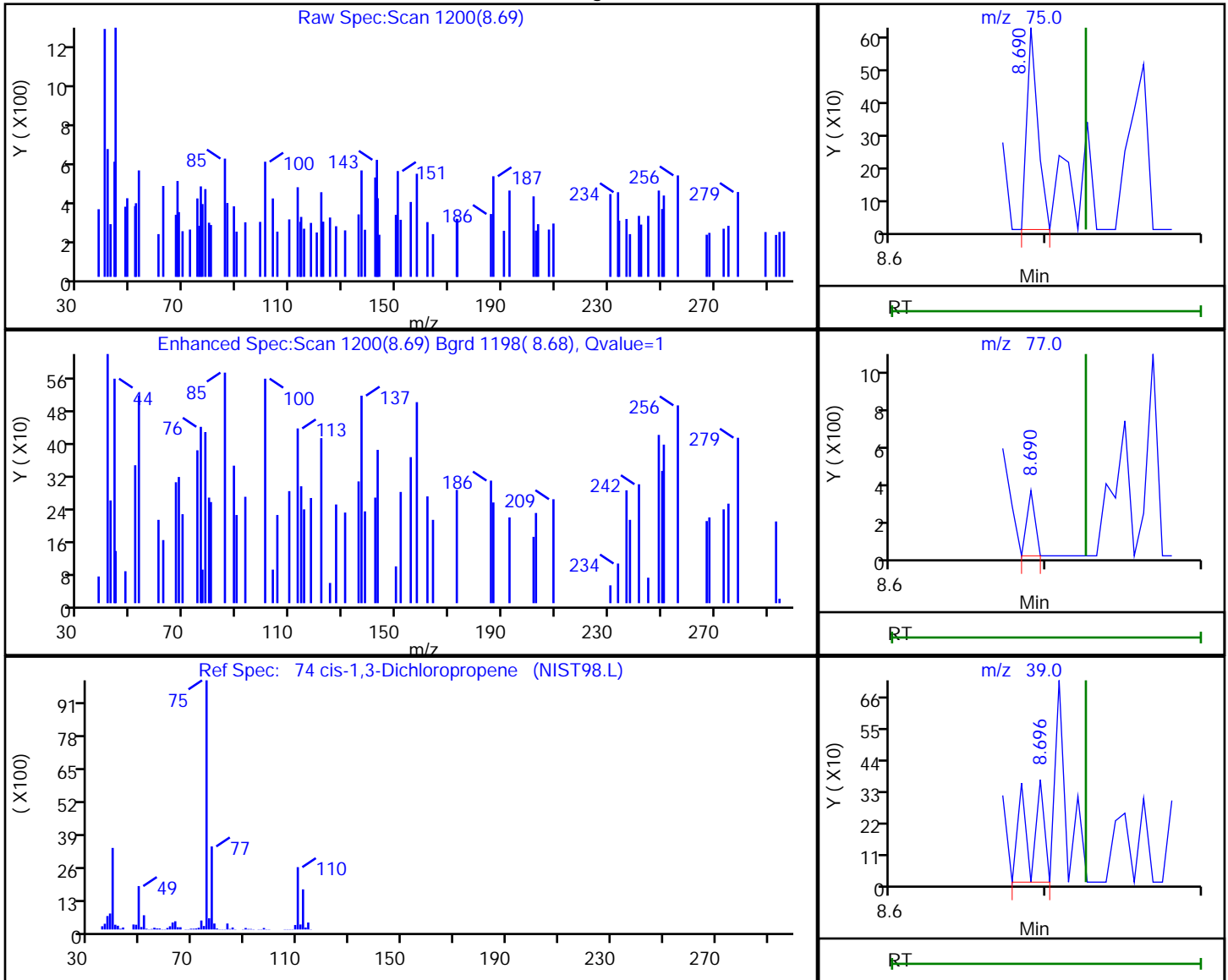
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050107.D  
Injection Date: 01-May-2020 17:43:30 Instrument ID: CHHP5  
Lims ID: 180-105108-B-9 Lab Sample ID: 180-105108-9  
Client ID: HD-COD-SW-26-0/1-0  
Operator ID: 034635 ALS Bottle#: 7 Worklist Smp#: 7  
Purge Vol: 5.000 mL Dil. Factor: 1.0000  
Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
Column: DB-624 (0.18 mm) Detector: MS SCAN

74 cis-1,3-Dichloropropene, CAS: 10061-01-5

Processing Results



RT	Mass	Response	Amount
8.69	75.00	306	0.080556
8.69	77.00	128	
8.70	39.00	261	

Reviewer: journept, 02-May-2020 18:41:24  
Audit Action: Marked Compound Undetected

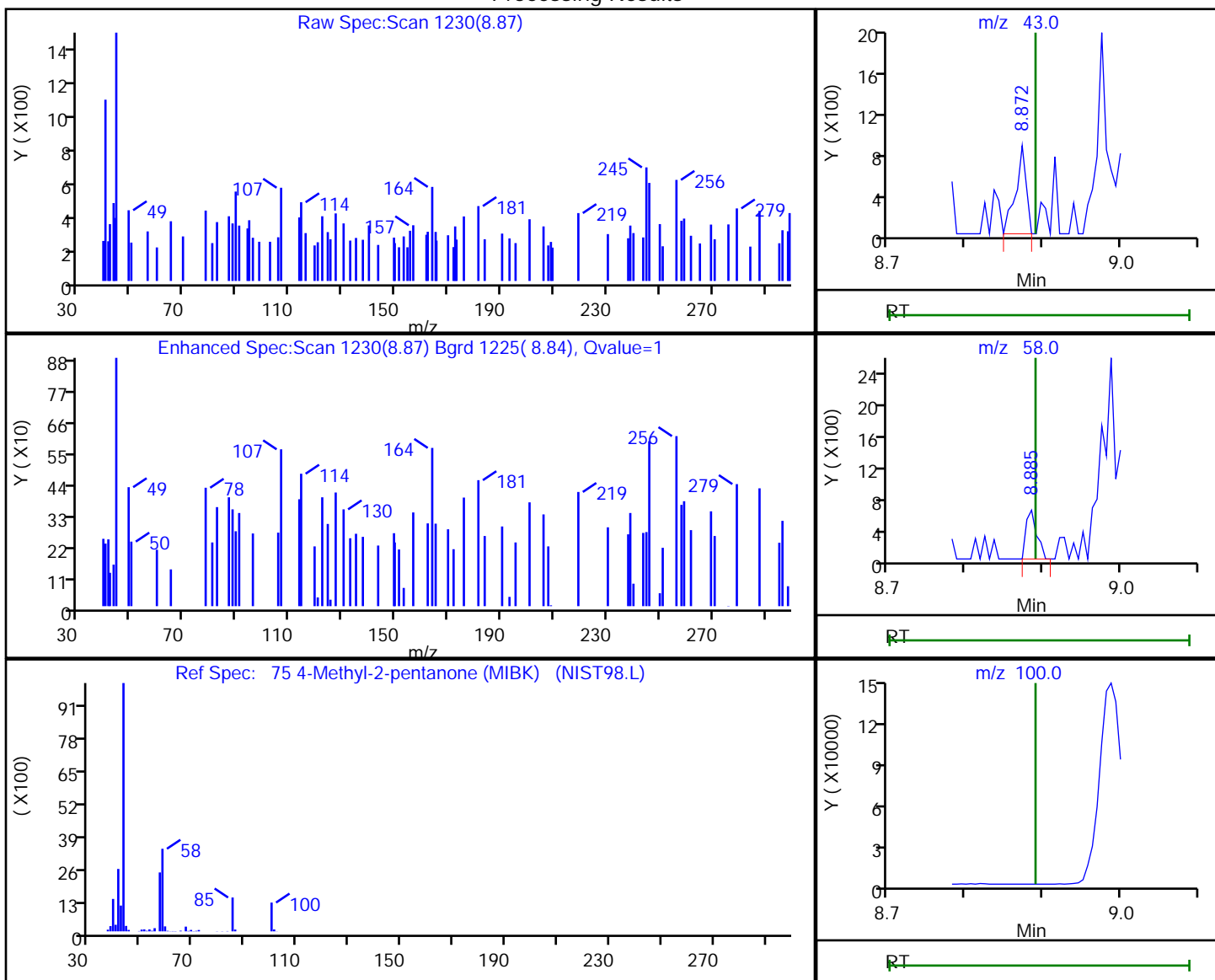
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050107.D  
 Injection Date: 01-May-2020 17:43:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-9 Lab Sample ID: 180-105108-9  
 Client ID: HD-COD-SW-26-0/1-0  
 Operator ID: 034635 ALS Bottle#: 7 Worklist Smp#: 7  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

75 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Processing Results



RT	Mass	Response	Amount
8.87	43.00	802	15.665985
8.88	58.00	596	
8.89	100.00	0	

Reviewer: journetp, 02-May-2020 18:41:24  
 Audit Action: Marked Compound Undetected

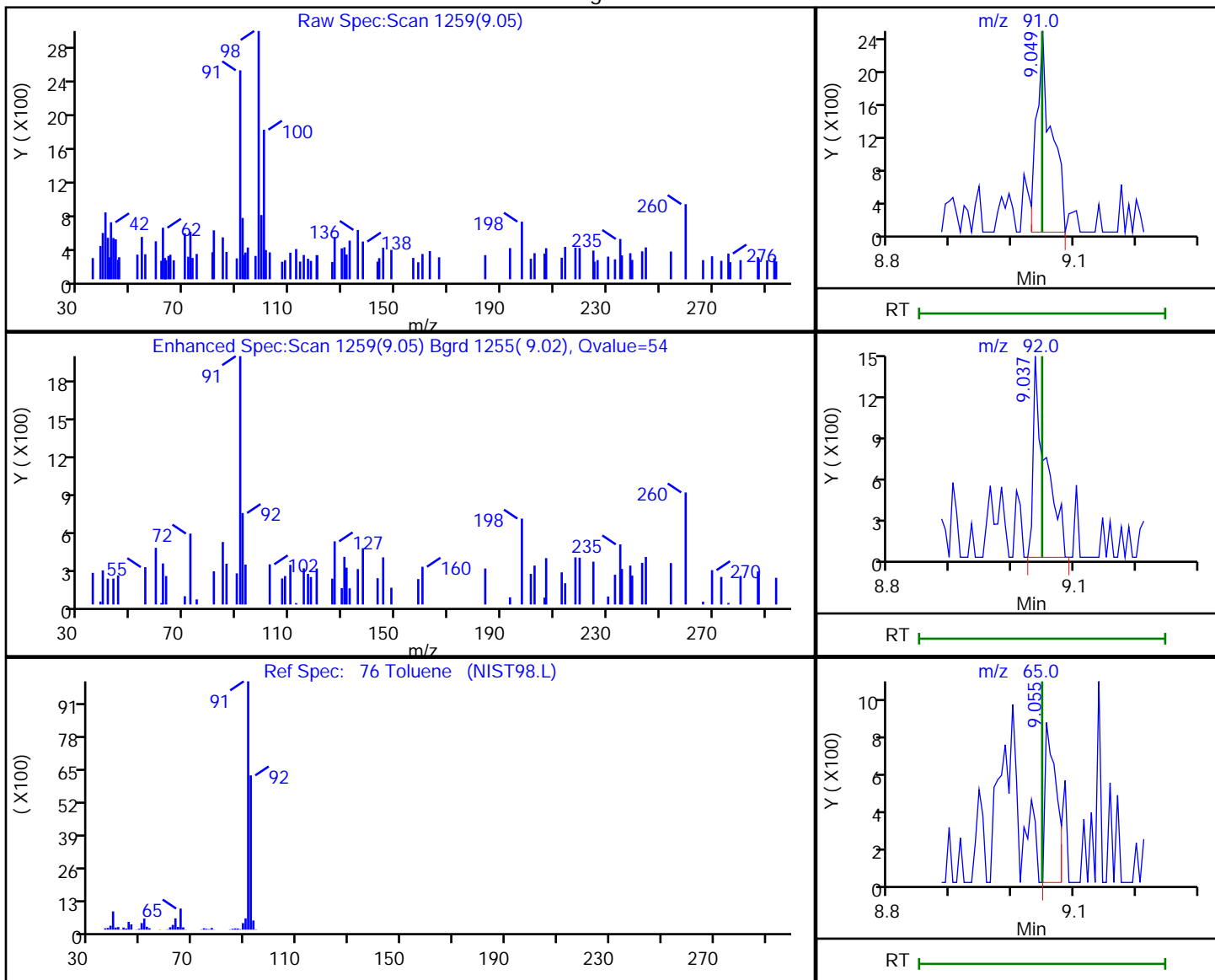
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050107.D  
 Injection Date: 01-May-2020 17:43:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-9 Lab Sample ID: 180-105108-9  
 Client ID: HD-COD-SW-26-0/1-0  
 Operator ID: 034635 ALS Bottle#: 7 Worklist Smp#: 7  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

76 Toluene, CAS: 108-88-3

Processing Results



RT	Mass	Response	Amount
9.05	91.00	4072	0.264668
9.04	92.00	2105	
9.05	65.00	1038	

Reviewer: journeyp, 02-May-2020 18:41:25  
 Audit Action: Marked Compound Undetected

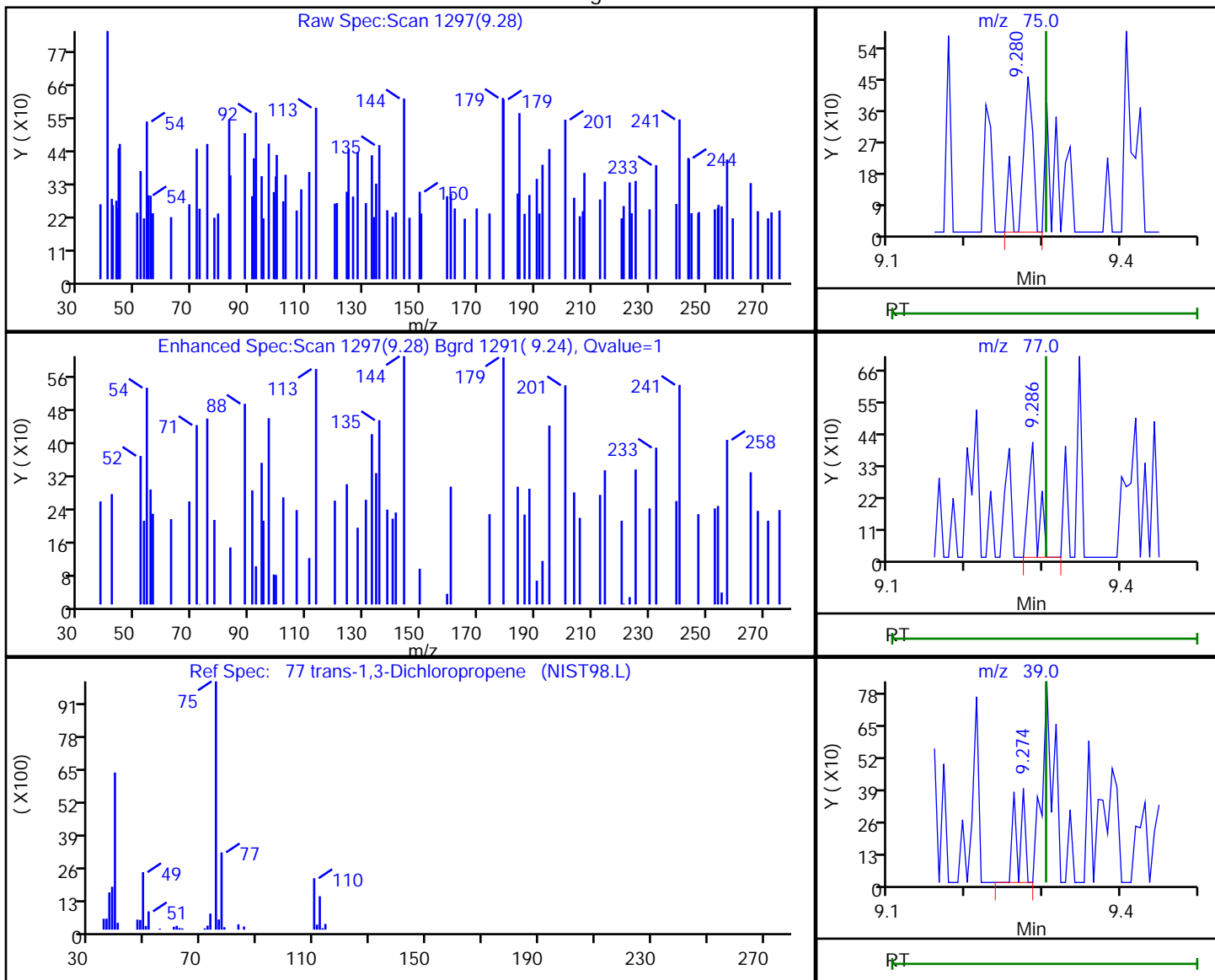
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050107.D  
 Injection Date: 01-May-2020 17:43:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-9 Lab Sample ID: 180-105108-9  
 Client ID: HD-COD-SW-26-0/1-0  
 Operator ID: 034635 ALS Bottle#: 7 Worklist Smp#: 7  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

77 trans-1,3-Dichloropropene, CAS: 10061-02-6

Processing Results



RT	Mass	Response	Amount
9.28	75.00	433	0.085610
9.29	77.00	307	
9.27	39.00	275	

Reviewer: journept, 02-May-2020 18:41:25  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID



Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050107.D

Injection Date: 01-May-2020 17:43:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-9

Lab Sample ID: 180-105108-9

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

Operator ID: 034635

ALS Bottle#: 7 Worklist Smp#: 7

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

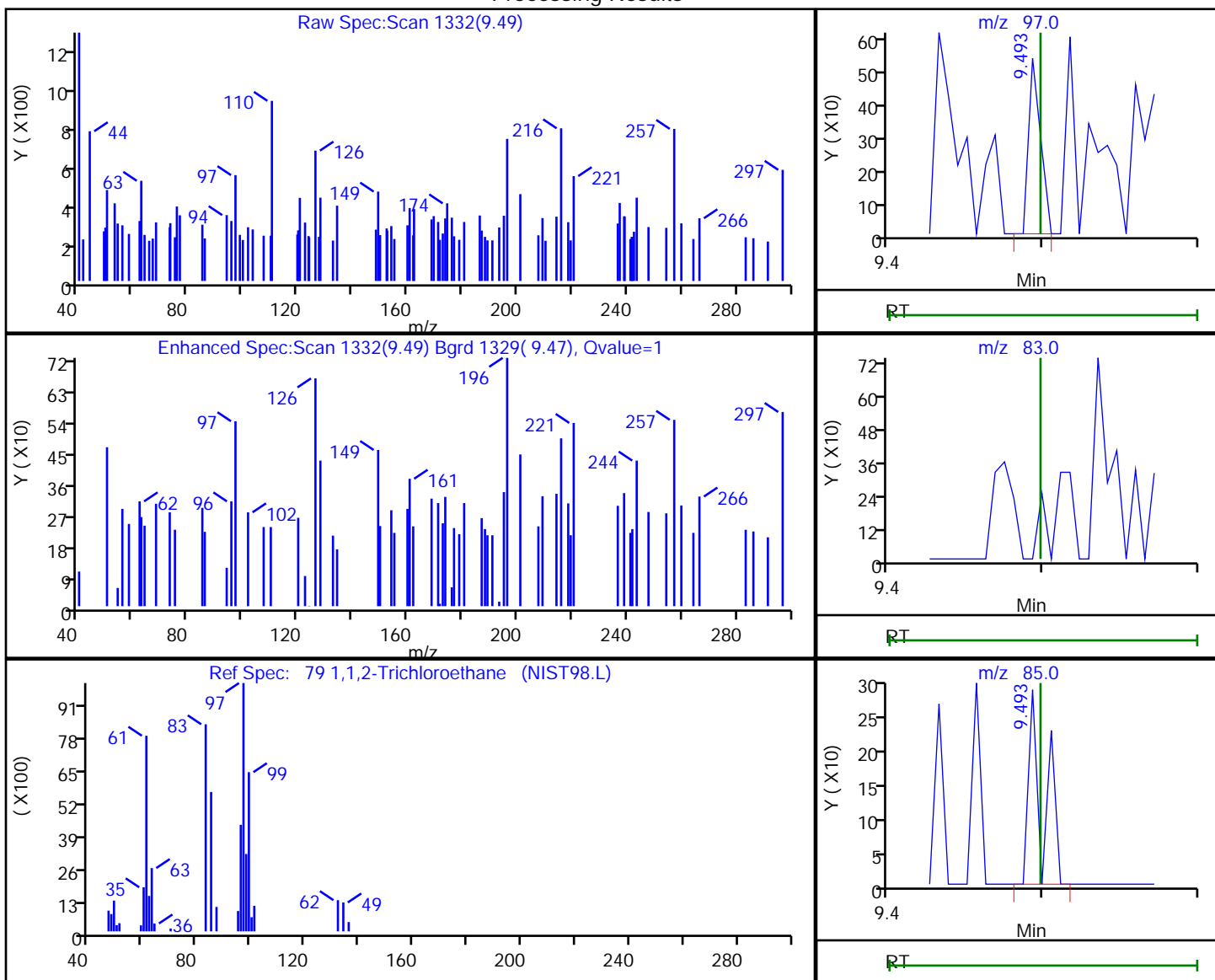
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

79 1,1,2-Trichloroethane, CAS: 79-00-5

Processing Results



RT	Mass	Response	Amount
9.49	97.00	292	0.081652
9.50	83.00	0	
9.49	85.00	188	

Reviewer: journetp, 02-May-2020 18:41:25

Audit Action: Marked Compound Undetected

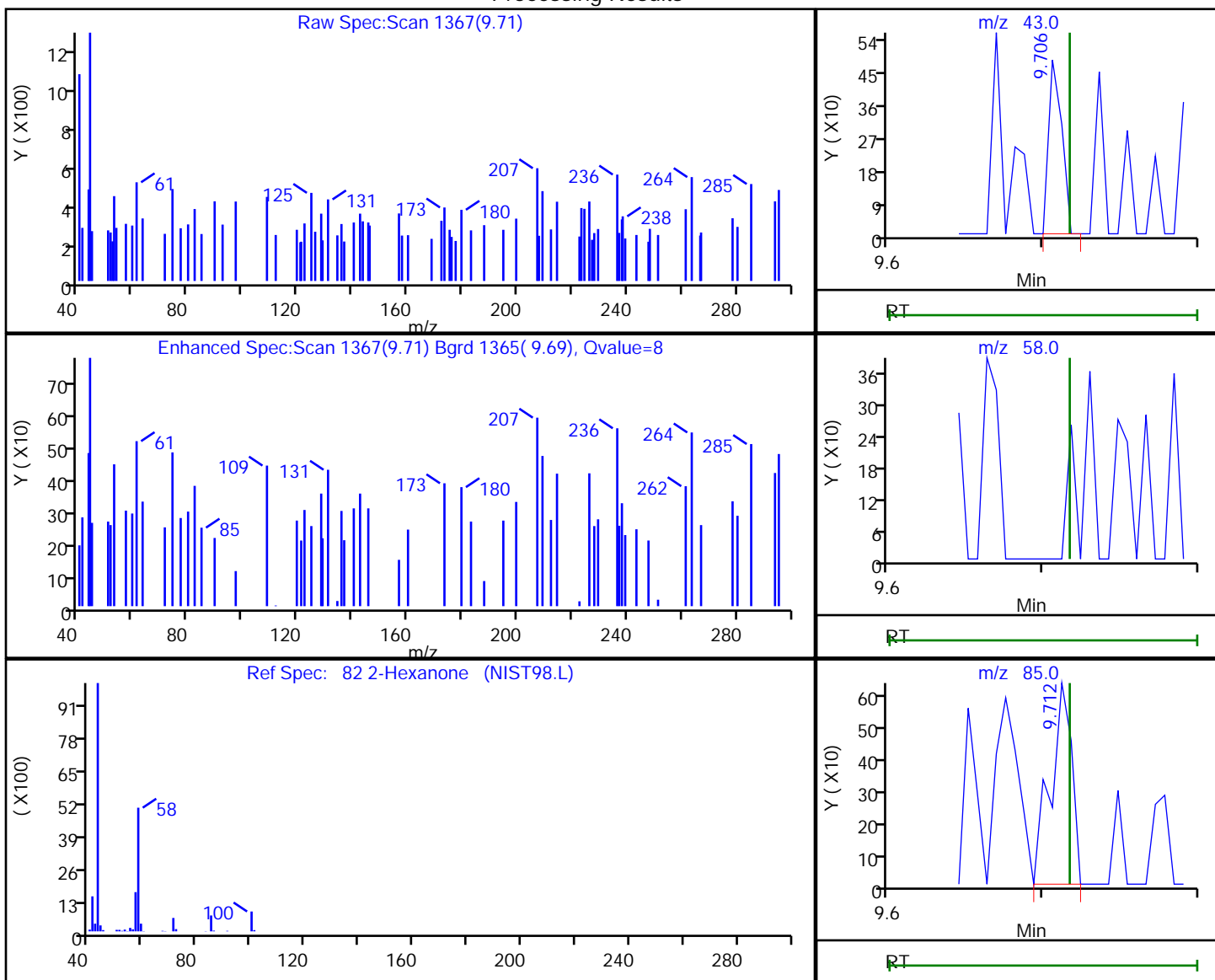
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050107.D  
 Injection Date: 01-May-2020 17:43:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-9 Lab Sample ID: 180-105108-9  
 Client ID: HD-COD-SW-26-0/1-0  
 Operator ID: 034635 ALS Bottle#: 7 Worklist Smp#: 7  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

82 2-Hexanone, CAS: 591-78-6

Processing Results



RT	Mass	Response	Amount
9.71	43.00	283	14.098699
9.71	85.00	611	
9.72	58.00	0	

Reviewer: journetp, 02-May-2020 18:41:30  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050107.D

Injection Date: 01-May-2020 17:43:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-9

Lab Sample ID: 180-105108-9

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

Operator ID: 034635

ALS Bottle#: 7

Worklist Smp#: 7

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

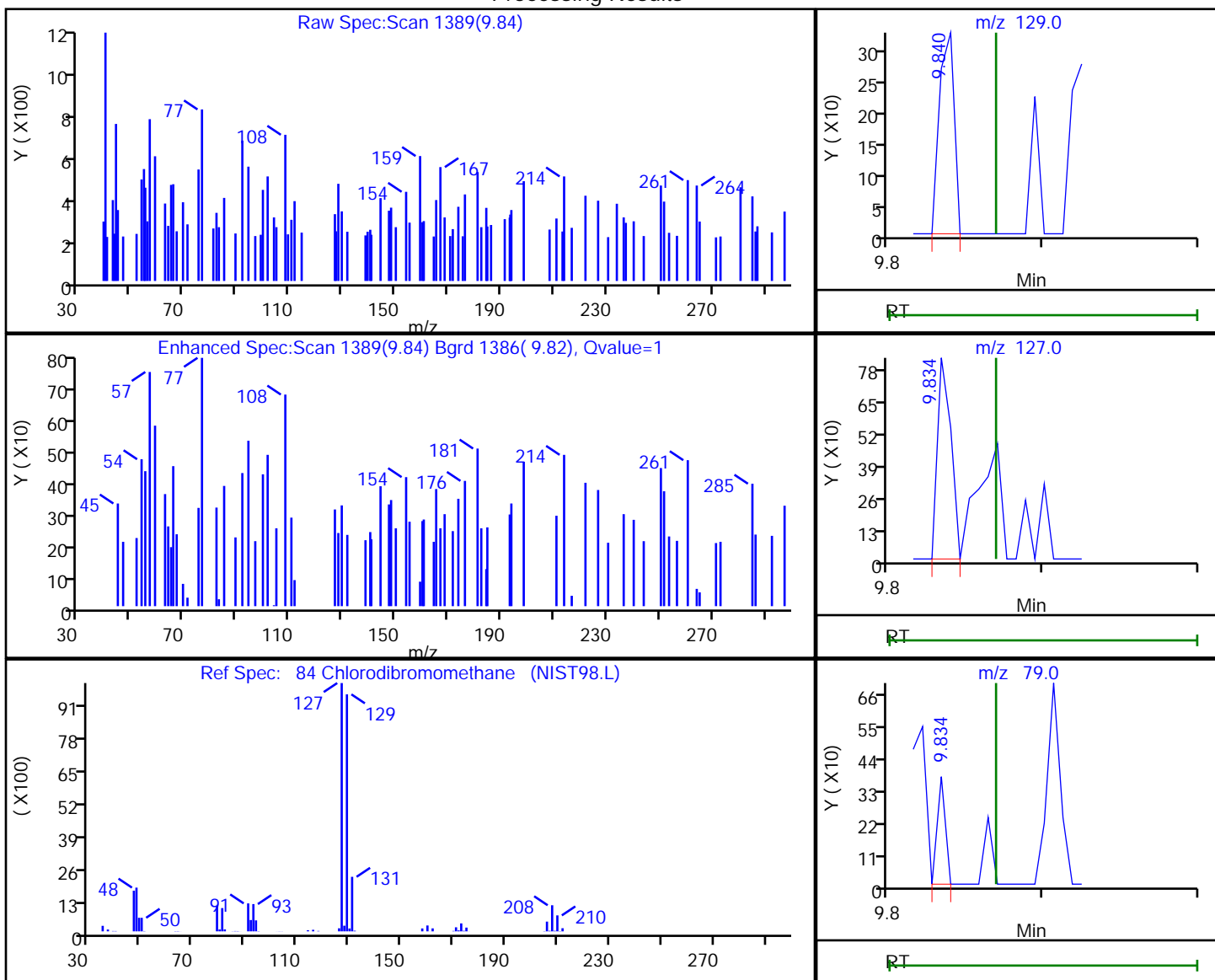
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

84 Chlorodibromomethane, CAS: 124-48-1

Processing Results



RT	Mass	Response	Amount
9.84	129.00	214	0.070693
9.83	127.00	496	
9.83	79.00	136	

Reviewer: journeyp, 02-May-2020 18:41:30

Audit Action: Marked Compound Undetected

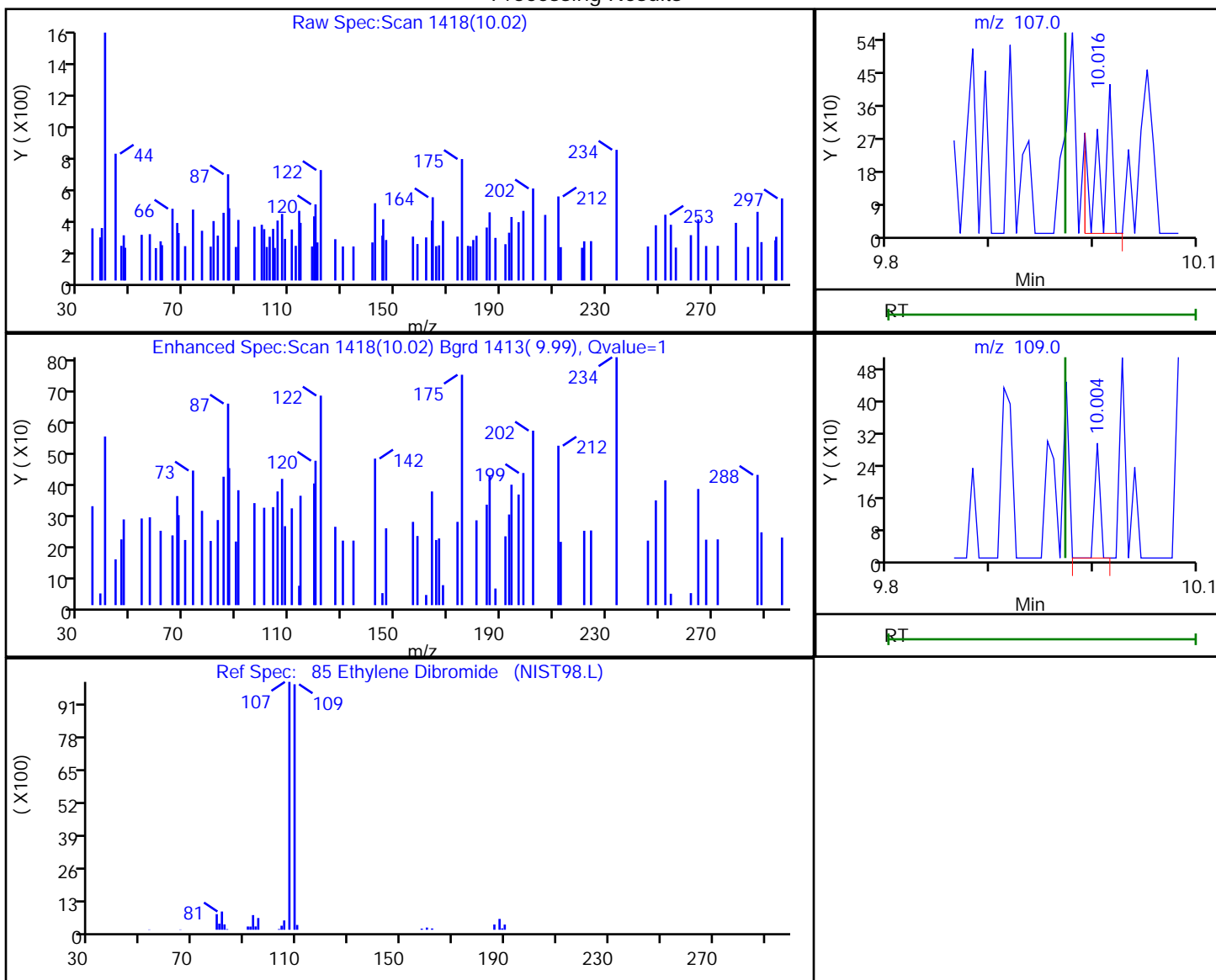
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050107.D  
 Injection Date: 01-May-2020 17:43:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-9 Lab Sample ID: 180-105108-9  
 Client ID: HD-COD-SW-26-0/1-0  
 Operator ID: 034635 ALS Bottle#: 7 Worklist Smp#: 7  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

85 Ethylene Dibromide, CAS: 106-93-4

Processing Results



RT	Mass	Response	Amount
10.02	107.00	356	0.106413
10.00	109.00	106	

Reviewer: journetp, 02-May-2020 18:41:31

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050107.D

Injection Date: 01-May-2020 17:43:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-9

Lab Sample ID: 180-105108-9

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

Operator ID: 034635

ALS Bottle#: 7 Worklist Smp#: 7

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

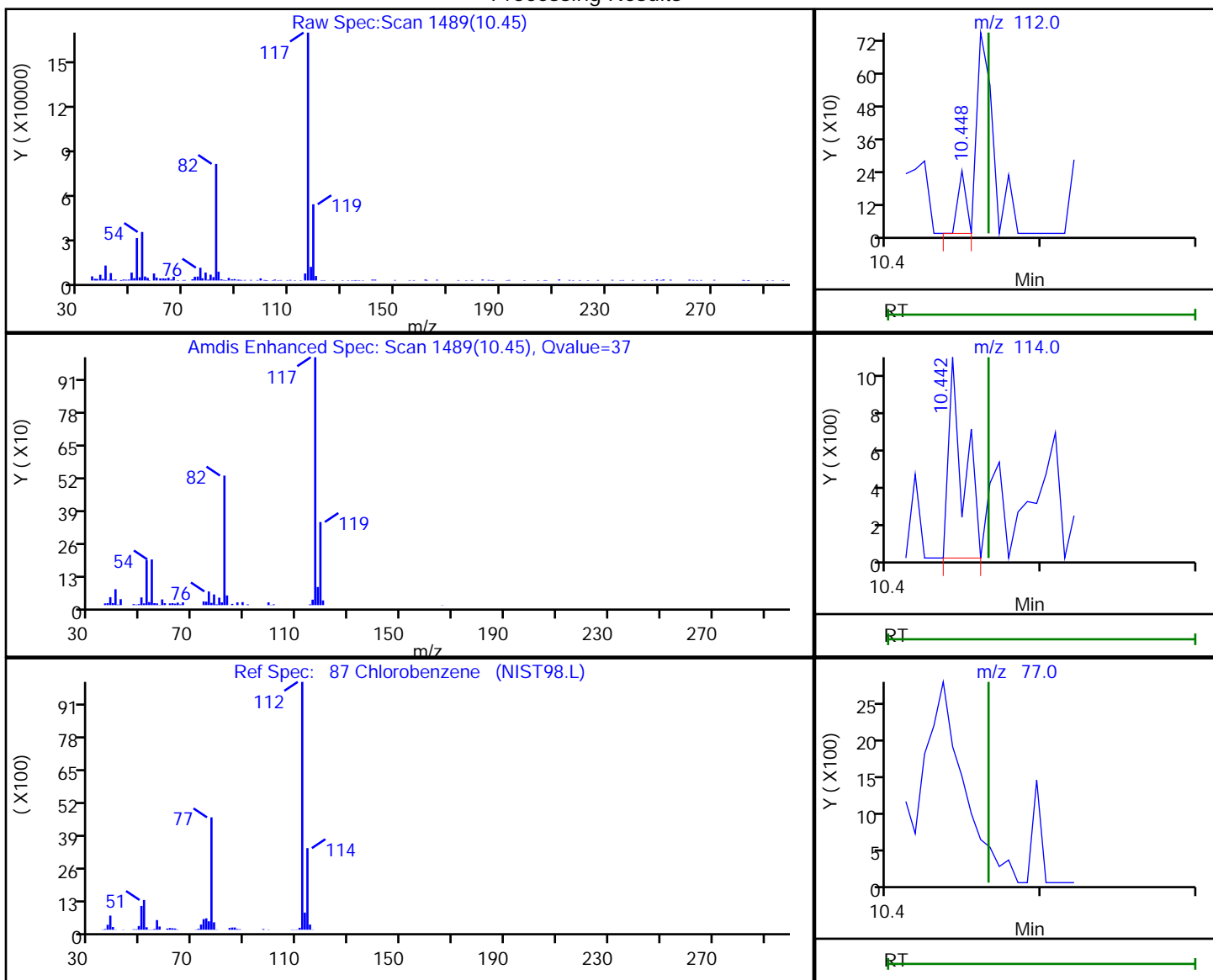
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

87 Chlorobenzene, CAS: 108-90-7

Processing Results



RT	Mass	Response	Amount
10.45	112.00	84	0.008490
10.44	114.00	715	
10.44	77.00	5311	

Reviewer: journept, 02-May-2020 18:41:31

Audit Action: Marked Compound Undetected

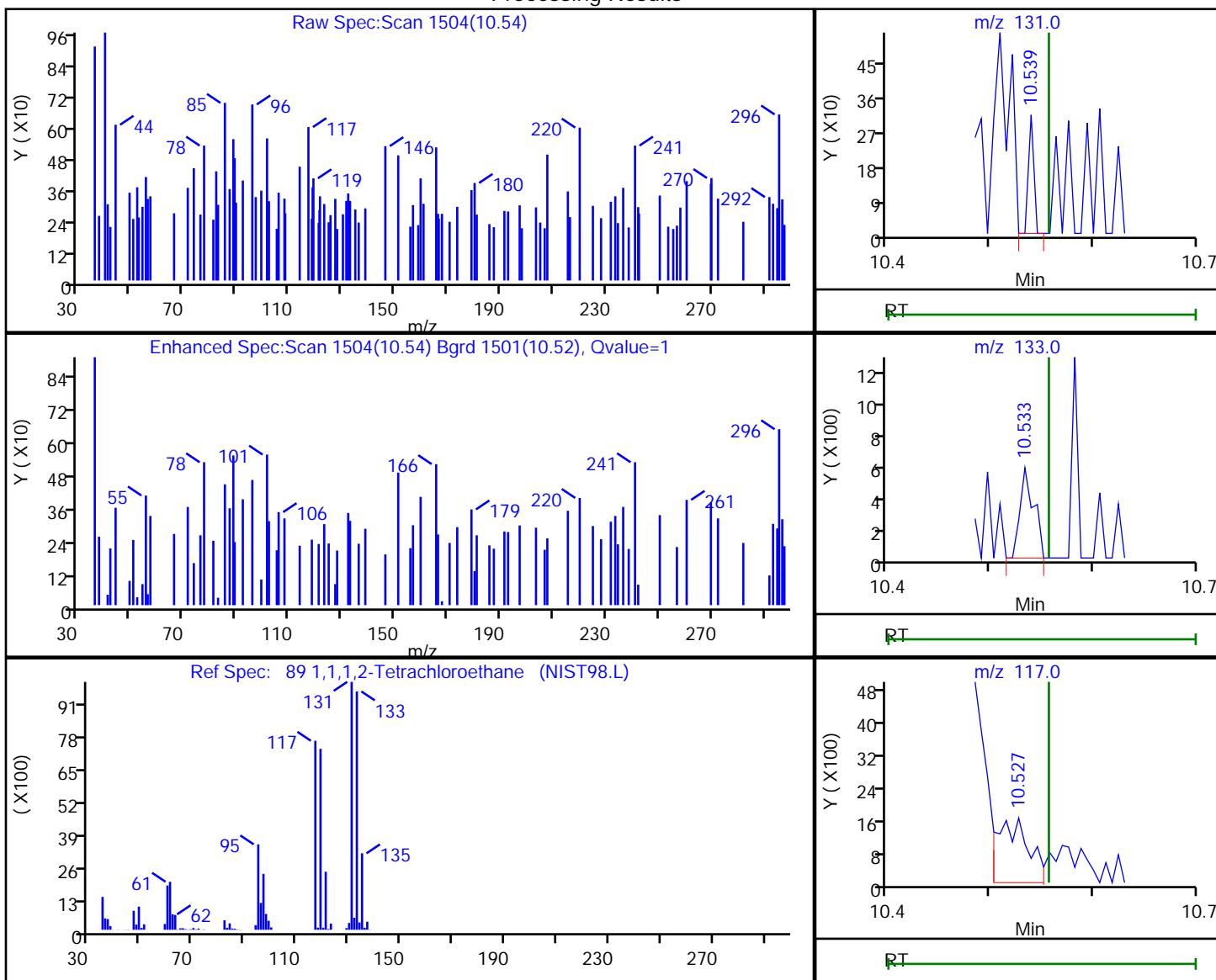
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050107.D  
 Injection Date: 01-May-2020 17:43:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-9 Lab Sample ID: 180-105108-9  
 Client ID: HD-COD-SW-26-0/1-0  
 Operator ID: 034635 ALS Bottle#: 7 Worklist Smp#: 7  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

89 1,1,1,2-Tetrachloroethane, CAS: 630-20-6

Processing Results



RT	Mass	Response	Amount
10.54	131.00	113	0.035169
10.53	133.00	522	
10.53	117.00	3416	

Reviewer: journeyp, 02-May-2020 18:41:31

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050107.D

Injection Date: 01-May-2020 17:43:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-9

Lab Sample ID: 180-105108-9

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

Operator ID: 034635

ALS Bottle#: 7 Worklist Smp#: 7

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

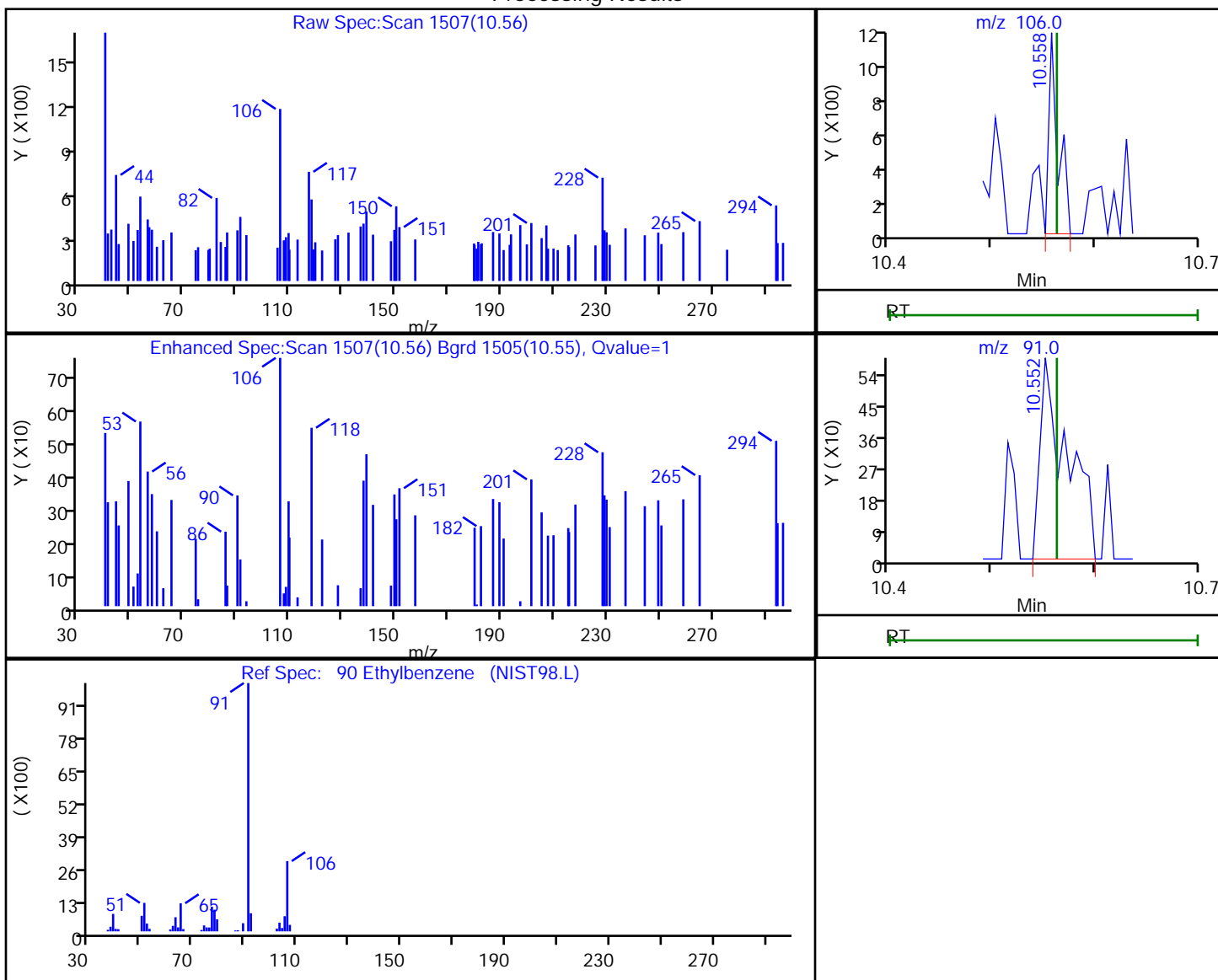
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

90 Ethylbenzene, CAS: 100-41-4

Processing Results



RT	Mass	Response	Amount
10.56	106.00	728	0.142144
10.55	91.00	1071	

Reviewer: journtp, 02-May-2020 18:41:31

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050107.D

Injection Date: 01-May-2020 17:43:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-9

Lab Sample ID: 180-105108-9

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

Operator ID: 034635

ALS Bottle#: 7 Worklist Smp#: 7

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

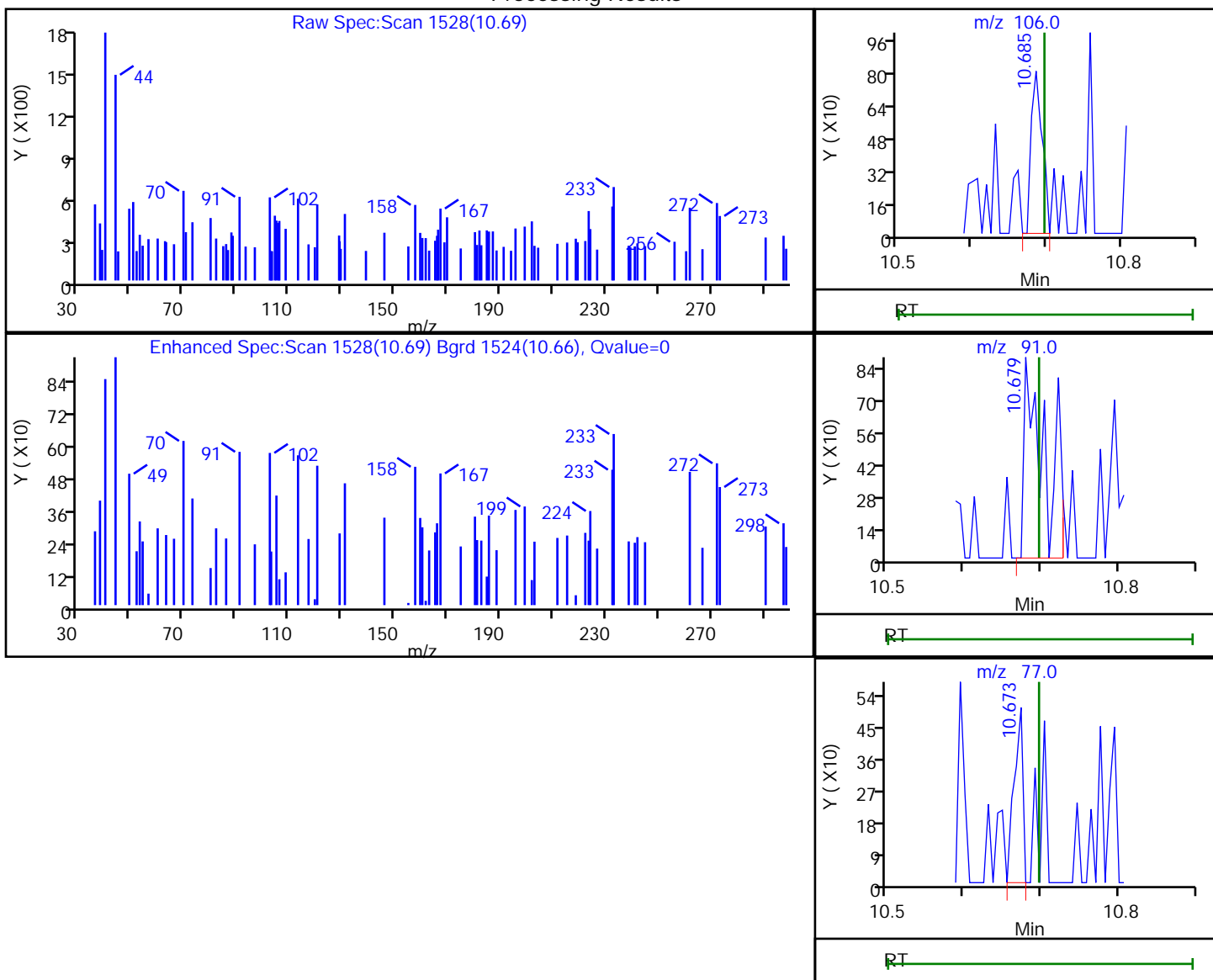
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

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

Processing Results



RT	Mass	Response	Amount
10.69	106.00	833	0.130463
10.68	91.00	1653	
10.67	77.00	396	

Reviewer: journetp, 02-May-2020 18:41:31

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

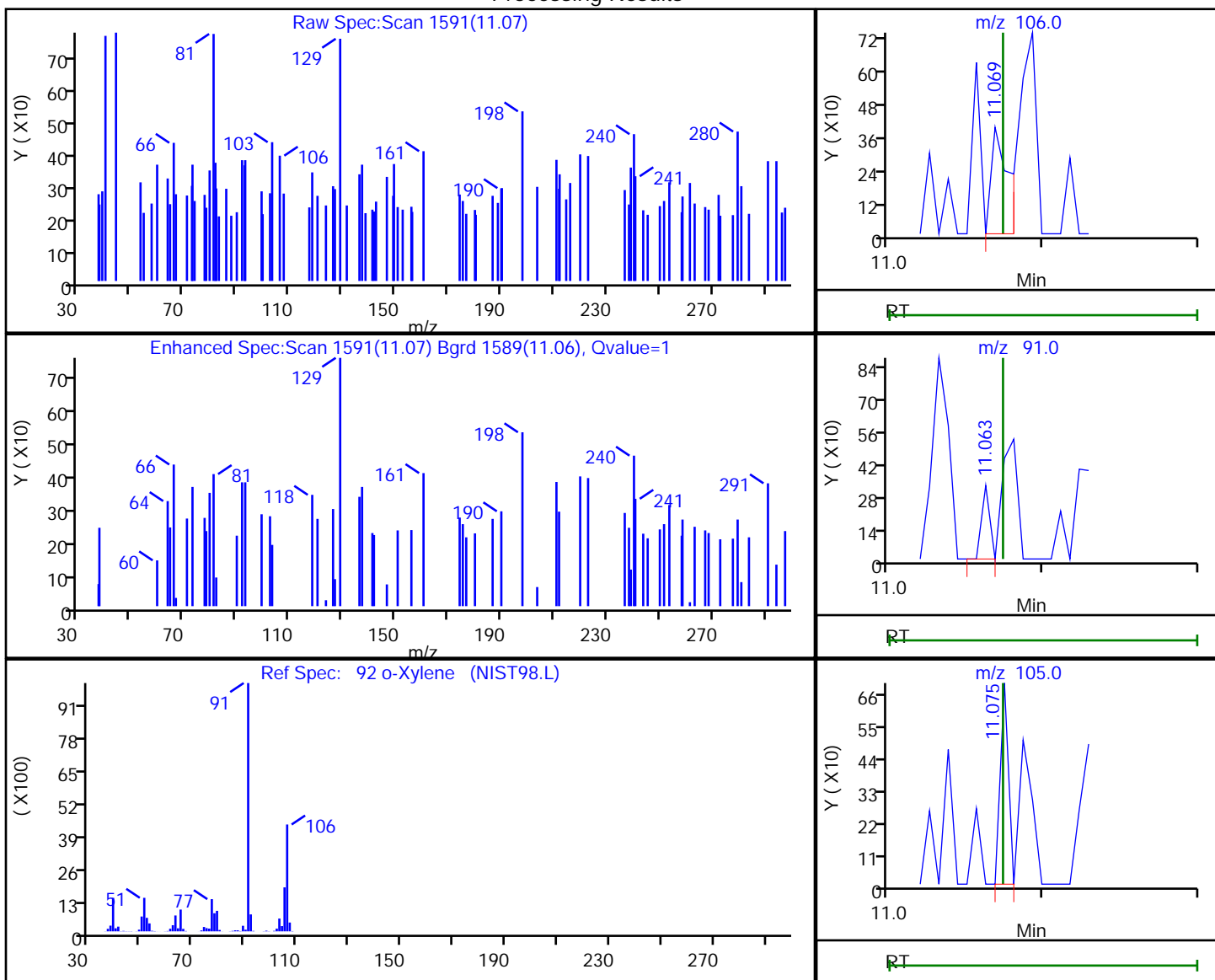


Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050107.D  
 Injection Date: 01-May-2020 17:43:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-9 Lab Sample ID: 180-105108-9  
 Client ID: HD-COD-SW-26-0/1-0  
 Operator ID: 034635 ALS Bottle#: 7 Worklist Smp#: 7  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

92 o-Xylene, CAS: 95-47-6

Processing Results



RT	Mass	Response	Amount
11.07	106.00	307	0.051512
11.06	91.00	116	
11.07	105.00	255	

Reviewer: journetp, 02-May-2020 18:41:31

Audit Action: Marked Compound Undetected

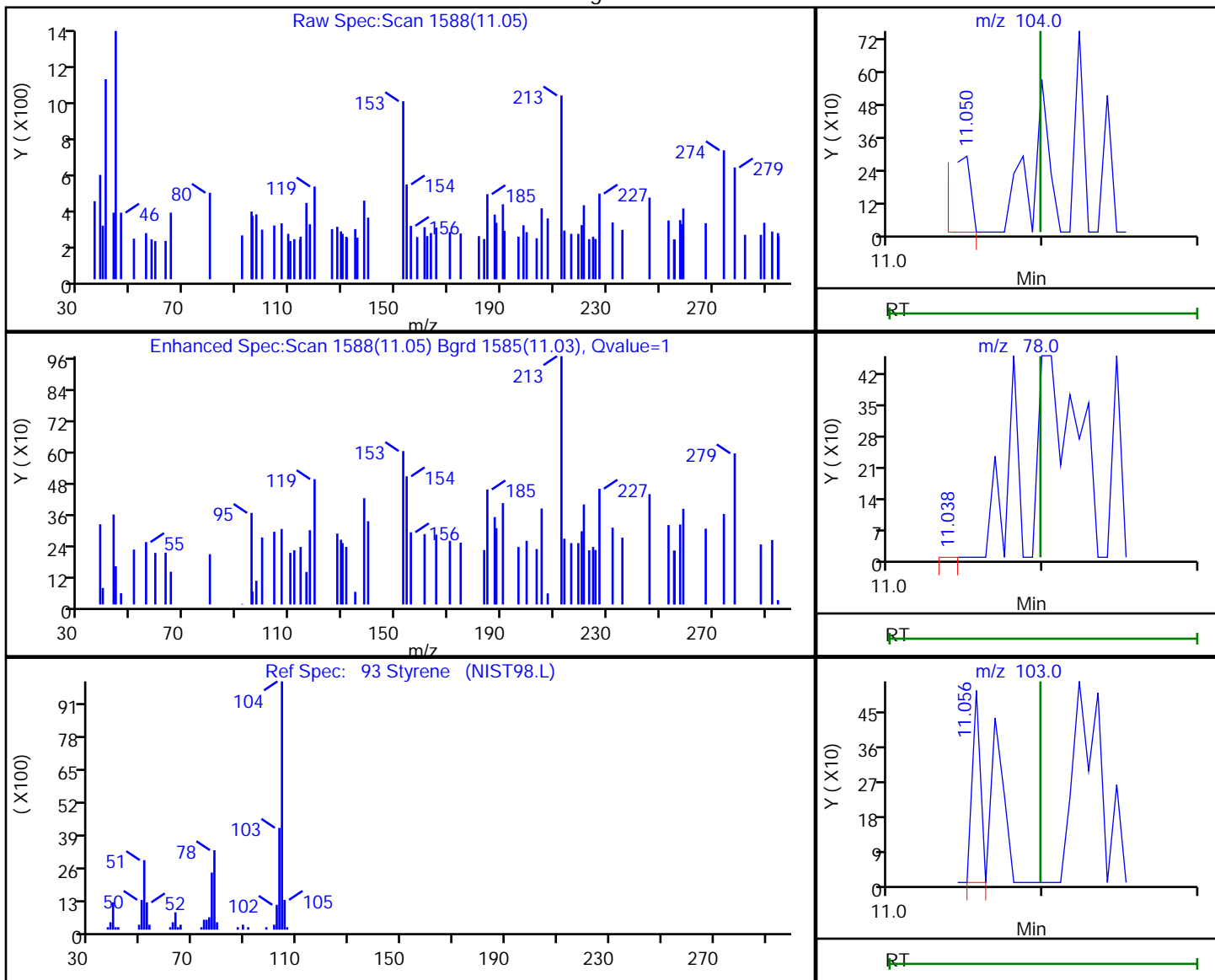
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050107.D  
 Injection Date: 01-May-2020 17:43:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-9 Lab Sample ID: 180-105108-9  
 Client ID: HD-COD-SW-26-0/1-0  
 Operator ID: 034635 ALS Bottle#: 7 Worklist Smp#: 7  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

93 Styrene, CAS: 100-42-5

Processing Results



RT	Mass	Response	Amount
11.05	104.00	197	0.019278
11.04	78.00	83	
11.06	103.00	184	

Reviewer: journetp, 02-May-2020 18:41:31  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050107.D

Injection Date: 01-May-2020 17:43:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-9

Lab Sample ID: 180-105108-9

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

Operator ID: 034635

ALS Bottle#: 7 Worklist Smp#: 7

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

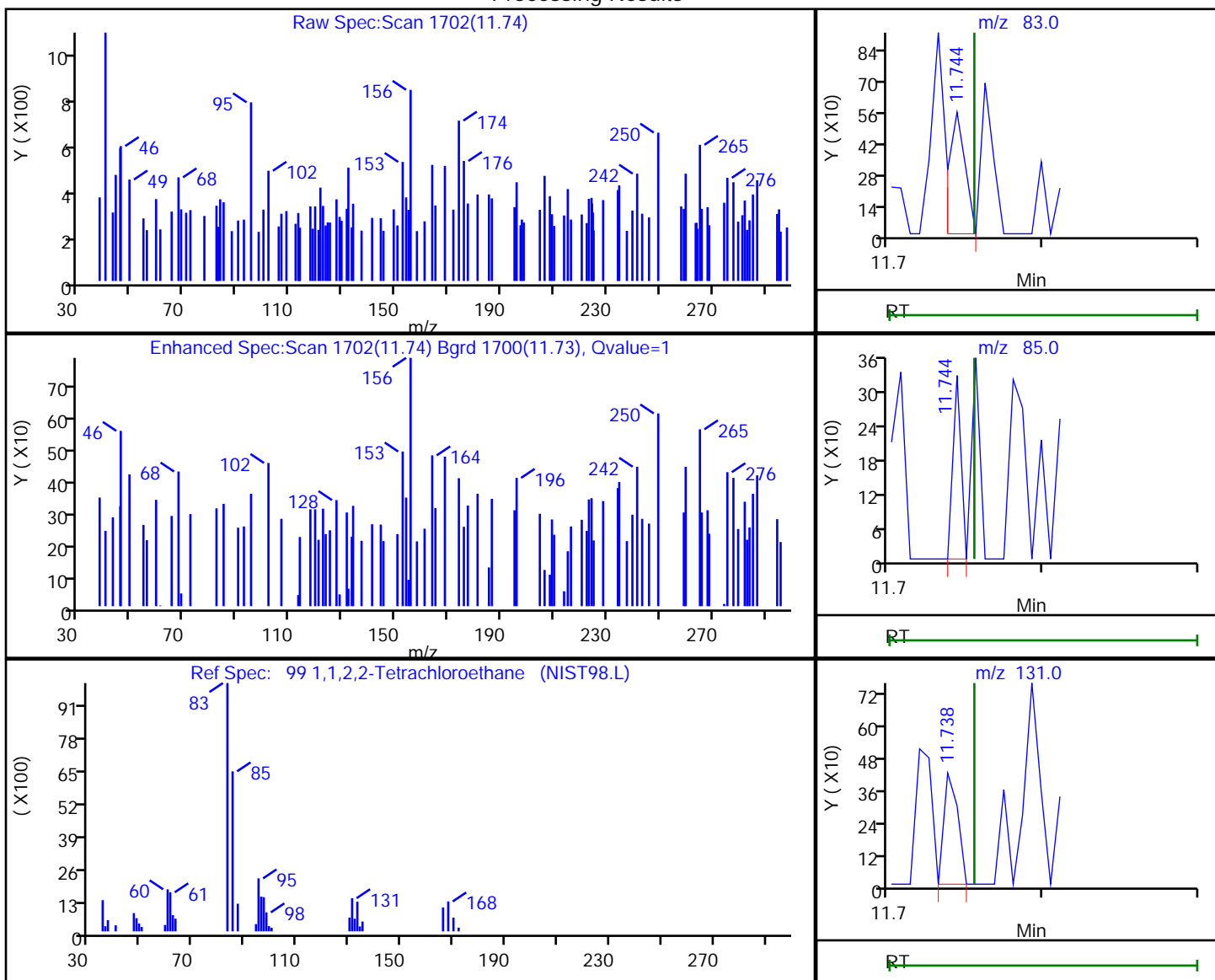
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

99 1,1,2,2-Tetrachloroethane, CAS: 79-34-5

Processing Results



RT	Mass	Response	Amount
11.74	83.00	412	0.111589
11.74	85.00	118	
11.74	131.00	260	

Reviewer: journeyp, 02-May-2020 18:41:31

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: HD-COD-SW-26-0/1-0 RA Lab Sample ID: 180-105108-9 RA  
 Matrix: Water Lab File ID: 5050409.D  
 Analysis Method: EPA 8260C Date Collected: 04/28/2020 11:55  
 Sample wt/vol: 5 (mL) Date Analyzed: 05/04/2020 11:29  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-624 ID: 0.18 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 314475 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	ND	^c	1.0	0.90
75-01-4	Vinyl chloride	ND		1.0	0.40
74-83-9	Bromomethane	ND	^c *	1.0	0.89
75-00-3	Chloroethane	ND		1.0	0.90
75-35-4	1,1-Dichloroethene	ND		1.0	0.55
67-64-1	Acetone	6.2		5.0	3.4
75-15-0	Carbon disulfide	ND		1.0	0.88
75-09-2	Methylene Chloride	ND		1.0	0.89
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.67
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.59
75-34-3	1,1-Dichloroethane	ND		1.0	0.31
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.71
74-97-5	Bromochloromethane	ND		1.0	0.63
78-93-3	2-Butanone (MEK)	ND	^c	5.0	2.6
67-66-3	Chloroform	ND		1.0	0.60
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.60
56-23-5	Carbon tetrachloride	ND		1.0	0.88
71-43-2	Benzene	ND		1.0	0.60
107-06-2	1,2-Dichloroethane	ND		1.0	0.57
79-01-6	Trichloroethene	ND		1.0	0.69
78-87-5	1,2-Dichloropropane	ND		1.0	0.66
75-27-4	Bromodichloromethane	ND		1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	3.1
108-88-3	Toluene	ND		1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.58
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.45
127-18-4	Tetrachloroethene	2.0		1.0	0.47
591-78-6	2-Hexanone	ND		5.0	3.3
124-48-1	Dibromochloromethane	ND		1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	ND		1.0	0.50
108-90-7	Chlorobenzene	ND		1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.57
100-41-4	Ethylbenzene	ND		1.0	0.51
1330-20-7	Xylenes, Total	ND		2.0	0.89
100-42-5	Styrene	ND		1.0	0.47

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: HD-COD-SW-26-0/1-0 RA Lab Sample ID: 180-105108-9 RA  
 Matrix: Water Lab File ID: 5050409.D  
 Analysis Method: EPA 8260C Date Collected: 04/28/2020 11:55  
 Sample wt/vol: 5 (mL) Date Analyzed: 05/04/2020 11:29  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-624 ID: 0.18 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 314475 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	<i>Bromoform</i>	ND	^c	1.0	0.98
79-34-5	<i>1,1,2,2-Tetrachloroethane</i>	ND	^c	1.0	0.60
107-13-1	<i>Acrylonitrile</i>	ND		20	7.8

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	79		62-146
2037-26-5	Toluene-d8 (Surr)	71	X	75-120
460-00-4	4-Bromofluorobenzene (Surr)	96		64-120
1868-53-7	Dibromofluoromethane (Surr)	99		71-132

Eurofins TestAmerica, Pittsburgh  
Target Compound Quantitation Report

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050409.D  
 Lims ID: 180-105108-A-9  
 Client ID: HD-COD-SW-26-0/1-0  
 Sample Type: Client  
 Inject. Date: 04-May-2020 11:29:30 ALS Bottle#: 9 Worklist Smp#: 9  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: 180-0031789-009  
 Operator ID: 034635 Instrument ID: CHHP5  
 Method: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\MMSVOA\_LL\_CHHP5.m  
 Limit Group: VOA 8260C\_D ICAL  
 Last Update: 04-May-2020 11:25:29 Calib Date: 03-Apr-2020 19:09:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP5\20200403-31442.b\5040310.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: CTX0327

First Level Reviewer: journetp

Date: 04-May-2020 13:21:21

Compound	Sig	RT (min.)	Exp RT (min.)	Diff RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.365	4.363	0.002	0	392122	1000.0	
* 2 Fluorobenzene (IS)	96	7.346	7.344	0.002	99	409550	50.0	
* 3 Chlorobenzene-d5	119	10.436	10.434	0.002	85	172572	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.772	12.776	-0.004	95	317110	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.628	6.626	0.002	93	115831	49.6	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.993	6.991	0.002	0	131605	39.7	
\$ 7 Toluene-d8 (Surr)	98	8.988	8.986	0.002	93	494330	35.4	
\$ 8 4-Bromofluorobenzene (Surr	95	11.617	11.614	0.002	91	252525	47.8	
12 Chloromethane	50		1.844				ND	U
13 Vinyl chloride	62		1.966				ND	U
15 Bromomethane	94		2.288				ND	U
16 Chloroethane	64		2.416				ND	U
22 1,1-Dichloroethene	96		3.414				ND	U
24 Acetone	43	3.519	3.511	0.008	96	43529	30.8	
26 Carbon disulfide	76		3.706				ND	U
31 Methylene Chloride	84		4.217				ND	U
33 Acrylonitrile	53		4.612				ND	U
34 trans-1,2-Dichloroethene	96		4.631				ND	U
35 Methyl tert-butyl ether	73		4.655				ND	U
37 1,1-Dichloroethane	63		5.263				ND	U
45 cis-1,2-Dichloroethene	96		6.018				ND	U
46 2-Butanone (MEK)	43		6.036				ND	U
49 Chlorobromomethane	128		6.297				ND	U
52 Chloroform	83		6.443				ND	U
53 1,1,1-Trichloroethane	97		6.602				ND	U
56 Carbon tetrachloride	117		6.766				ND	U
58 Benzene	78		7.003				ND	U
59 1,2-Dichloroethane	62		7.076				ND	U
64 Trichloroethene	130	7.735	7.727	0.008	55	3318	1.32	M
67 1,2-Dichloropropane	63		8.001				ND	U
71 Dichlorobromomethane	83		8.287				ND	U
74 cis-1,3-Dichloropropene	75		8.731				ND	U

Compound	Sig	RT (min.)	Exp RT (min.)	Diff RT (min.)	Q	Response	OnCol Amt ng	Flags
75 4-Methyl-2-pentanone (MIBK)	43		8.889				ND	U
76 Toluene	91		9.053				ND	U
77 trans-1,3-Dichloropropene	75		9.303				ND	U
79 1,1,2-Trichloroethane	97		9.497				ND	U
80 Tetrachloroethene	164	9.560	9.564	-0.004	97	32376	9.97	
82 2-Hexanone	43		9.716				ND	U
84 Chlorodibromomethane	129		9.868				ND	U
85 Ethylene Dibromide	107		9.978				ND	U
87 Chlorobenzene	112		10.465				ND	U
89 1,1,1,2-Tetrachloroethane	131		10.562				ND	U
90 Ethylbenzene	106		10.562				ND	U
91 m-Xylene & p-Xylene	106		10.696				ND	U
92 o-Xylene	106		11.079				ND	U
93 Styrene	104		11.097				ND	U
94 Bromoform	173		11.280				ND	U
99 1,1,2,2-Tetrachloroethane	83		11.760				ND	U
S 133 Xylenes, Total	106		1.000				ND	

### QC Flag Legend

Review Flags

M - Manually Integrated

U - Marked Undetected

### Reagents:

voaWI/SHP5\_00016

Amount Added: 5.00

Units: uL

Run Reagent

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050409.D

Injection Date: 04-May-2020 11:29:30

Instrument ID: CHHP5

Operator ID: 034635

Lims ID: 180-105108-A-9

Lab Sample ID: 180-105108-9

Worklist Smp#: 9

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

Purge Vol: 5.000 mL

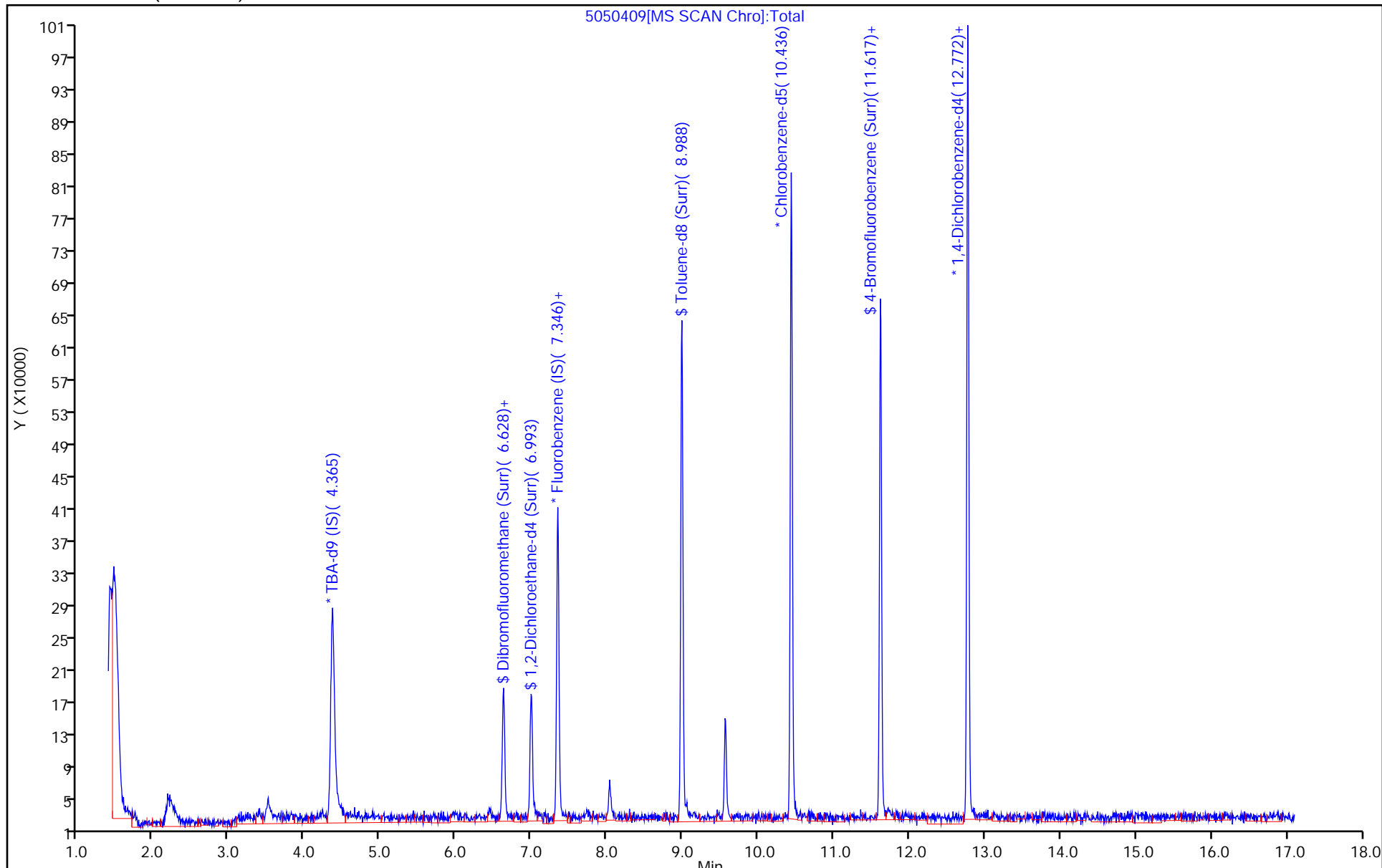
Dil. Factor: 1.0000

ALS Bottle#: 9

Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)





Eurofins TestAmerica, Pittsburgh  
Recovery Report

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050409.D  
 Lims ID: 180-105108-A-9  
 Client ID: HD-COD-SW-26-0/1-0  
 Sample Type: Client  
 Inject. Date: 04-May-2020 11:29:30 ALS Bottle#: 9 Worklist Smp#: 9  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: 180-0031789-009  
 Operator ID: 034635 Instrument ID: CHHP5  
 Method: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\MMSVOA\_LL\_CHHP5.m  
 Limit Group: VOA 8260C\_D ICAL  
 Last Update: 04-May-2020 11:25:29 Calib Date: 03-Apr-2020 19:09:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP5\20200403-31442.b\5040310.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: CTX0327

First Level Reviewer: journetp

Date: 04-May-2020 13:21:21

Compound	Amount Added	Amount Recovered	% Rec.
\$ 5 Dibromofluoromethane (Surr)	50.0	49.6	99.14
\$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	39.7	79.38
\$ 7 Toluene-d8 (Surr)	50.0	35.4	70.77
\$ 8 4-Bromofluorobenzene (Surr)	50.0	47.8	95.65

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050409.D

Injection Date: 04-May-2020 11:29:30

Instrument ID: CHHP5

Lims ID: 180-105108-A-9

Lab Sample ID: 180-105108-9

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

Operator ID: 034635

ALS Bottle#: 9

Worklist Smp#: 9

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

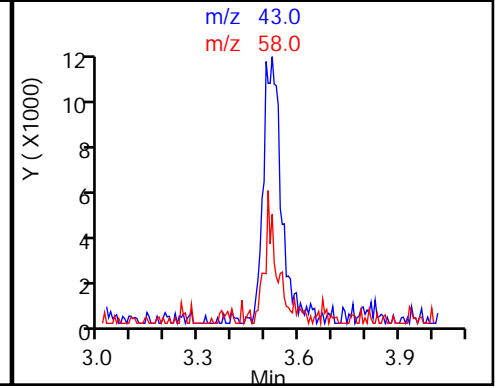
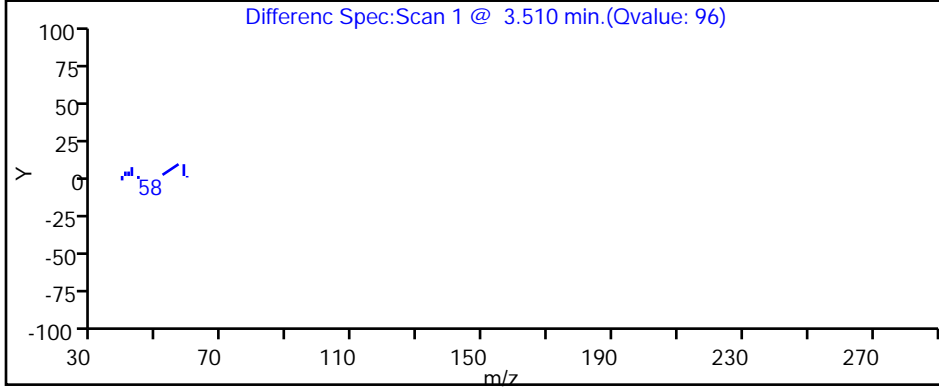
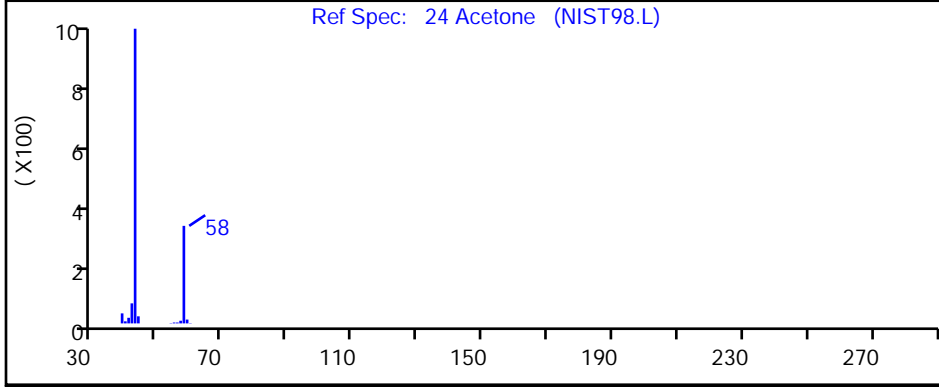
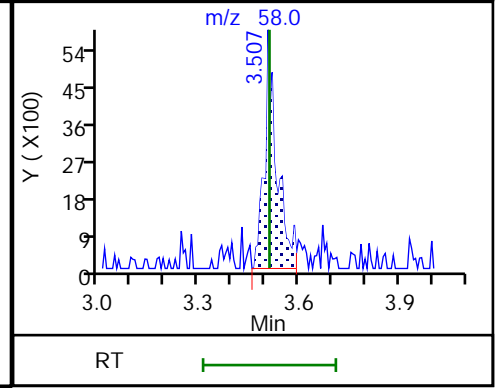
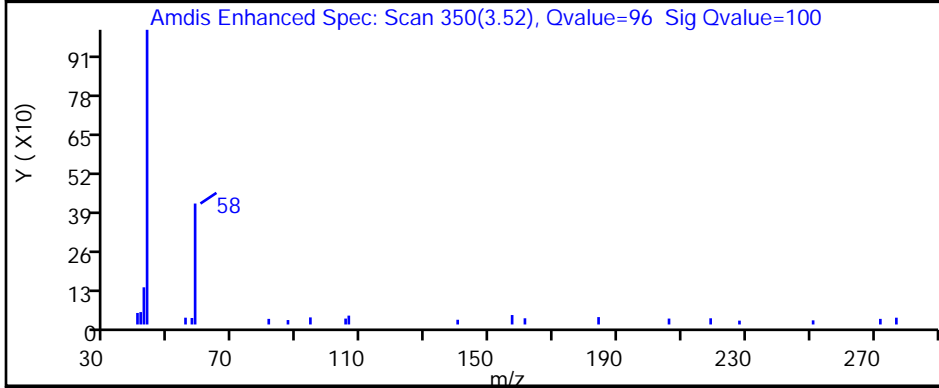
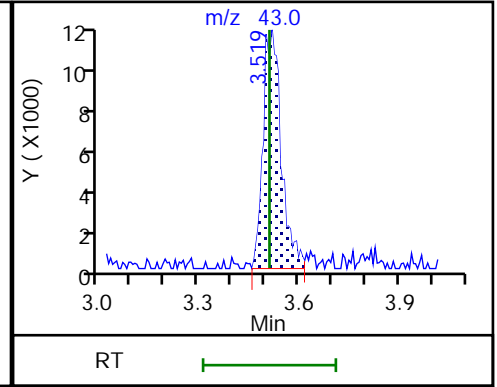
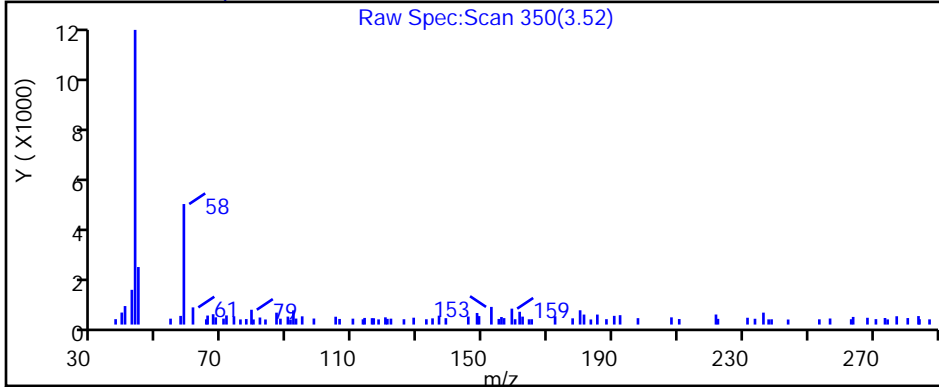
Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

24 Acetone, CAS: 67-64-1



Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050409.D

Injection Date: 04-May-2020 11:29:30

Instrument ID: CHHP5

Lims ID: 180-105108-A-9

Lab Sample ID: 180-105108-9

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

Operator ID: 034635

ALS Bottle#: 9 Worklist Smp#: 9

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

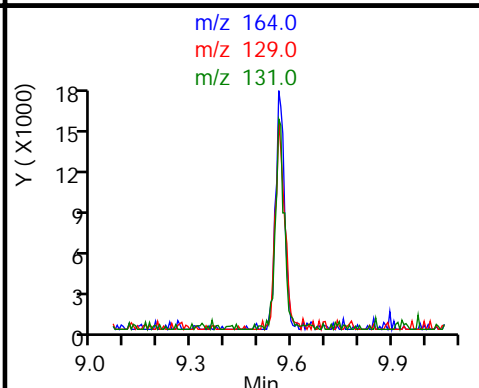
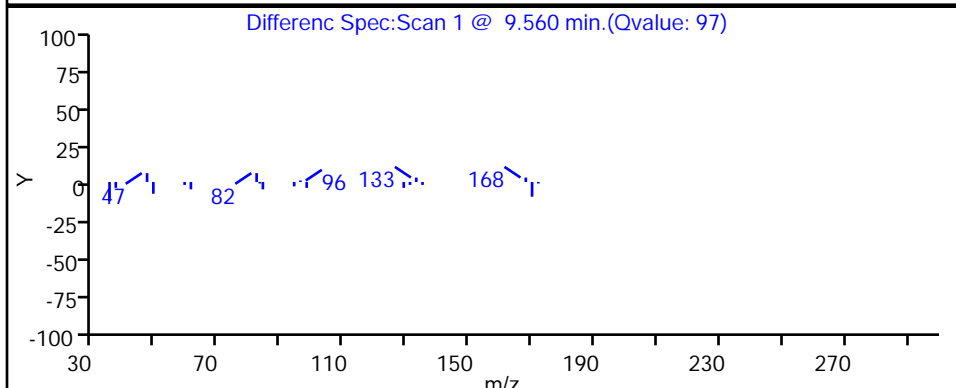
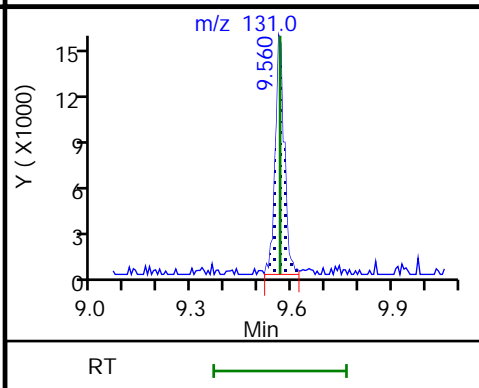
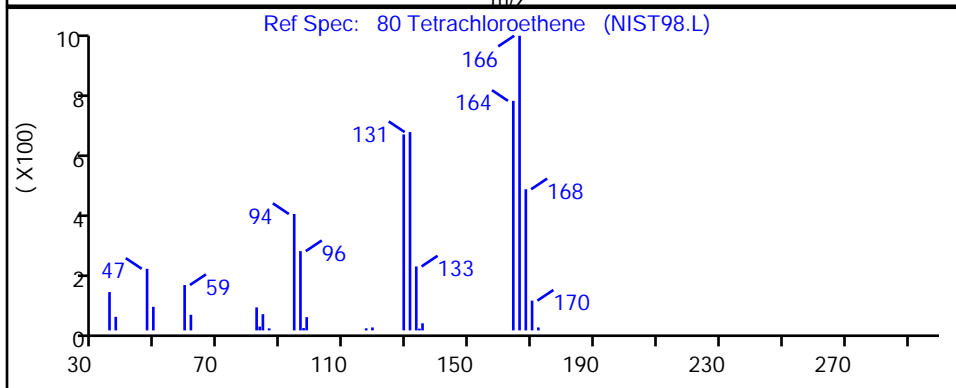
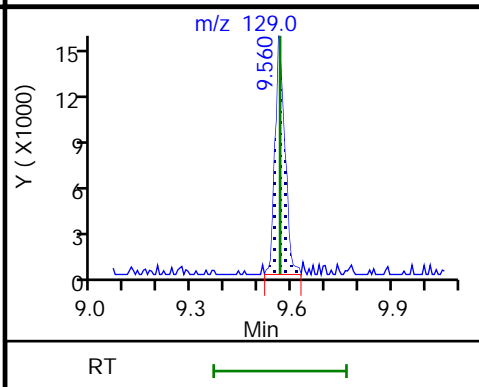
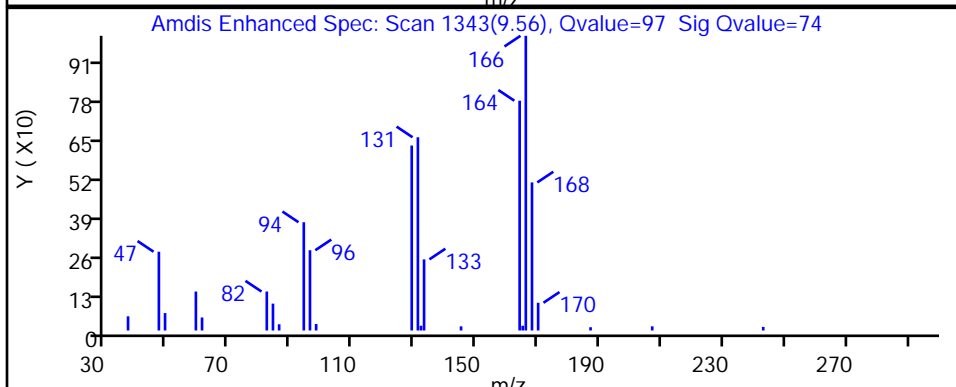
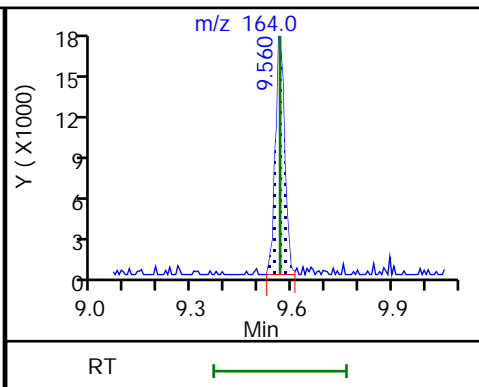
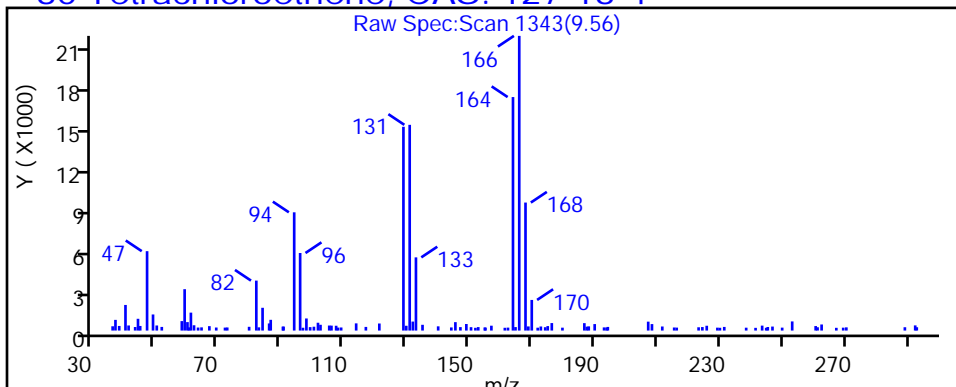
Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

80 Tetrachloroethene, CAS: 127-18-4

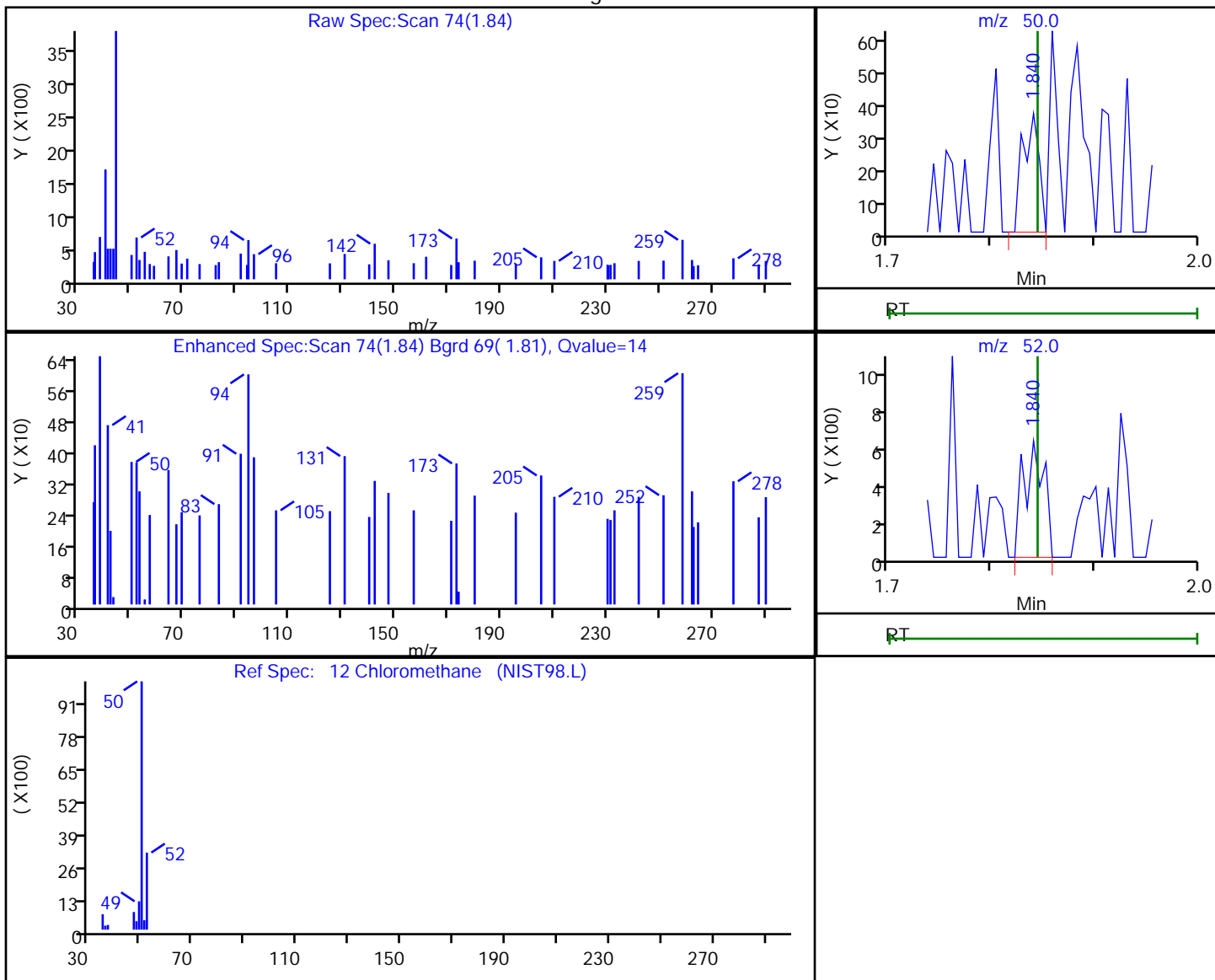


Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050409.D  
 Injection Date: 04-May-2020 11:29:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-A-9 Lab Sample ID: 180-105108-9  
 Client ID: HD-COD-SW-26-0/1-0  
 Operator ID: 034635 ALS Bottle#: 9 Worklist Smp#: 9  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

12 Chloromethane, CAS: 74-87-3

Processing Results



RT	Mass	Response	Amount
1.84	50.00	405	0.101370
1.84	52.00	862	

Reviewer: journtp, 04-May-2020 13:20:49  
 Audit Action: Marked Compound Undetected

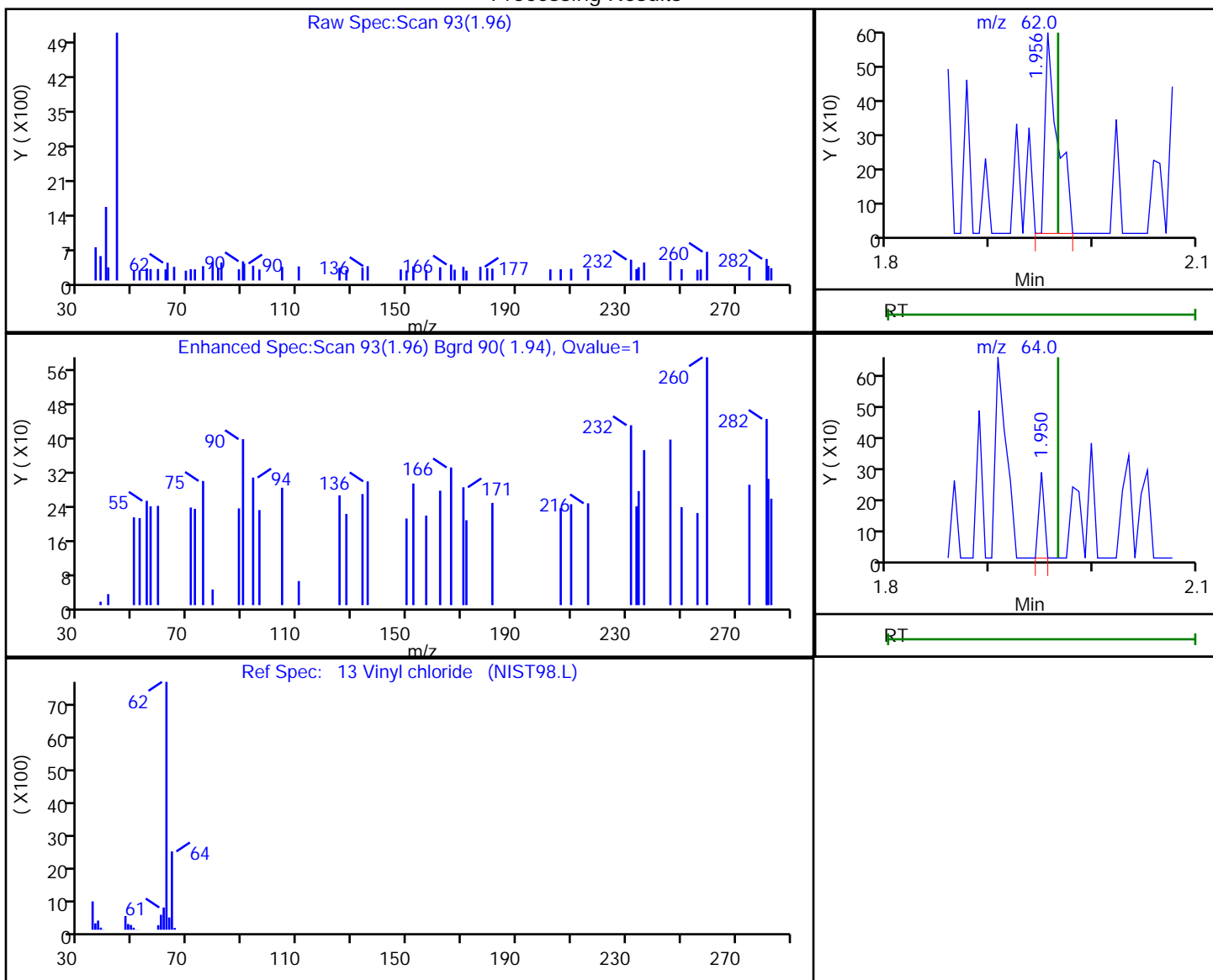
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050409.D  
 Injection Date: 04-May-2020 11:29:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-A-9 Lab Sample ID: 180-105108-9  
 Client ID: HD-COD-SW-26-0/1-0  
 Operator ID: 034635 ALS Bottle#: 9 Worklist Smp#: 9  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

13 Vinyl chloride, CAS: 75-01-4

Processing Results



RT	Mass	Response	Amount
1.96	62.00	503	0.141374
1.95	64.00	101	

Reviewer: journetp, 04-May-2020 13:20:49  
 Audit Action: Marked Compound Undetected

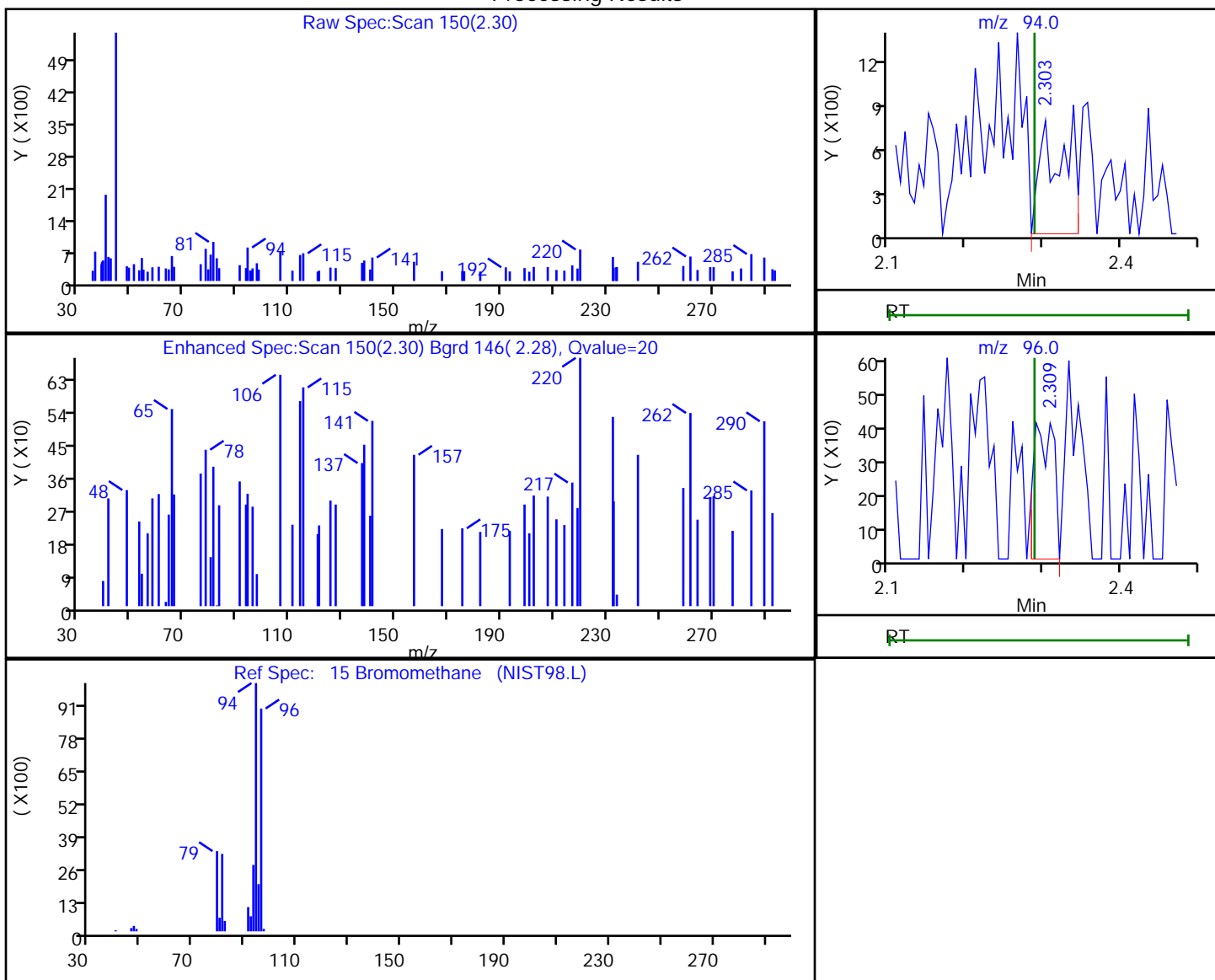
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050409.D  
 Injection Date: 04-May-2020 11:29:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-A-9 Lab Sample ID: 180-105108-9  
 Client ID: HD-COD-SW-26-0/1-0  
 Operator ID: 034635 ALS Bottle#: 9 Worklist Smp#: 9  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

15 Bromomethane, CAS: 74-83-9

Processing Results



RT	Mass	Response	Amount
2.30	94.00	1724	0.846281
2.31	96.00	737	

Reviewer: journtp, 04-May-2020 13:20:49  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050409.D

Injection Date: 04-May-2020 11:29:30

Instrument ID: CHHP5

Lims ID: 180-105108-A-9

Lab Sample ID: 180-105108-9

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

Operator ID: 034635

ALS Bottle#: 9 Worklist Smp#: 9

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

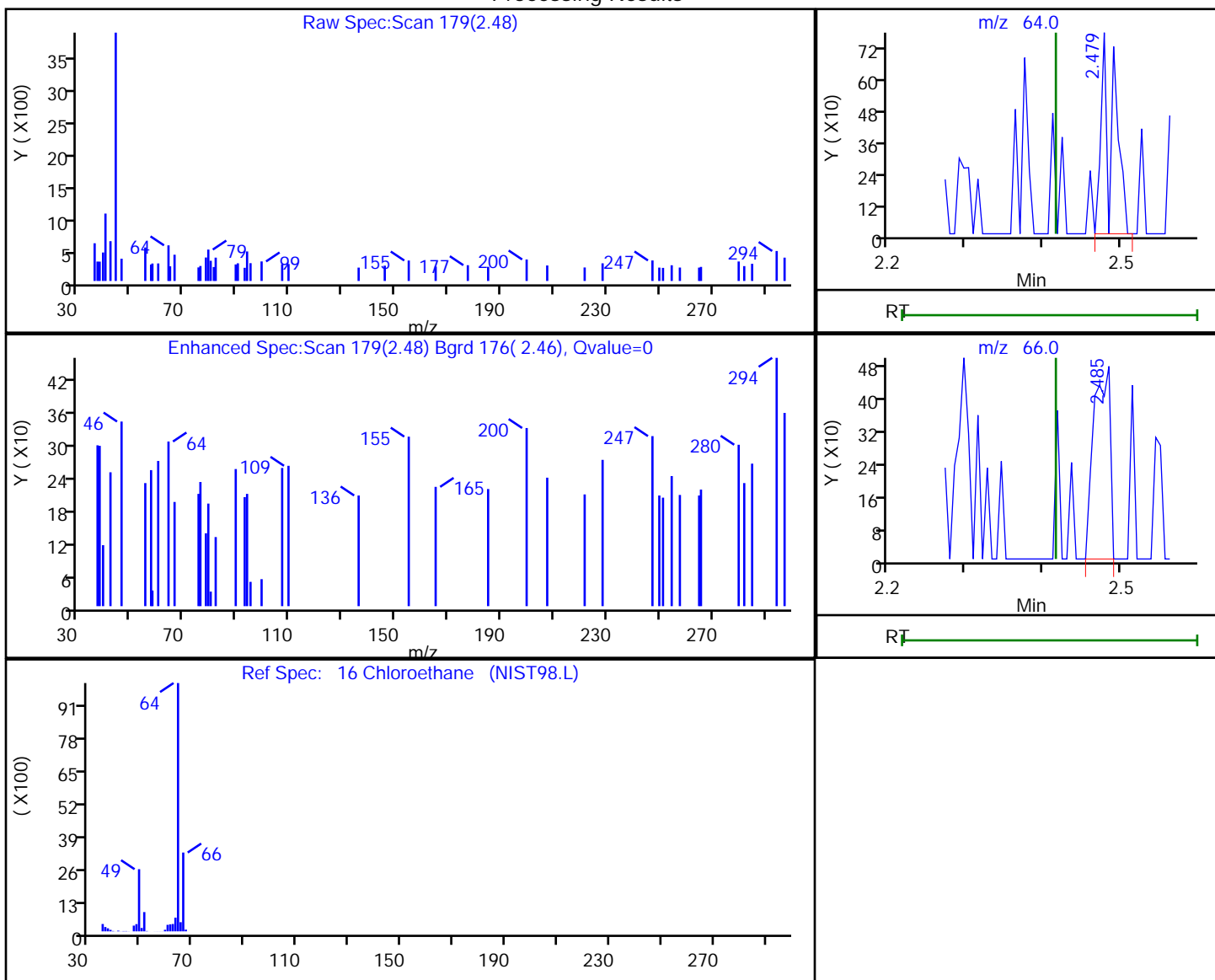
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

16 Chloroethane, CAS: 75-00-3

Processing Results



RT	Mass	Response	Amount
2.48	64.00	861	0.356701
2.49	66.00	703	

Reviewer: journetp, 04-May-2020 13:20:50

Audit Action: Marked Compound Undetected

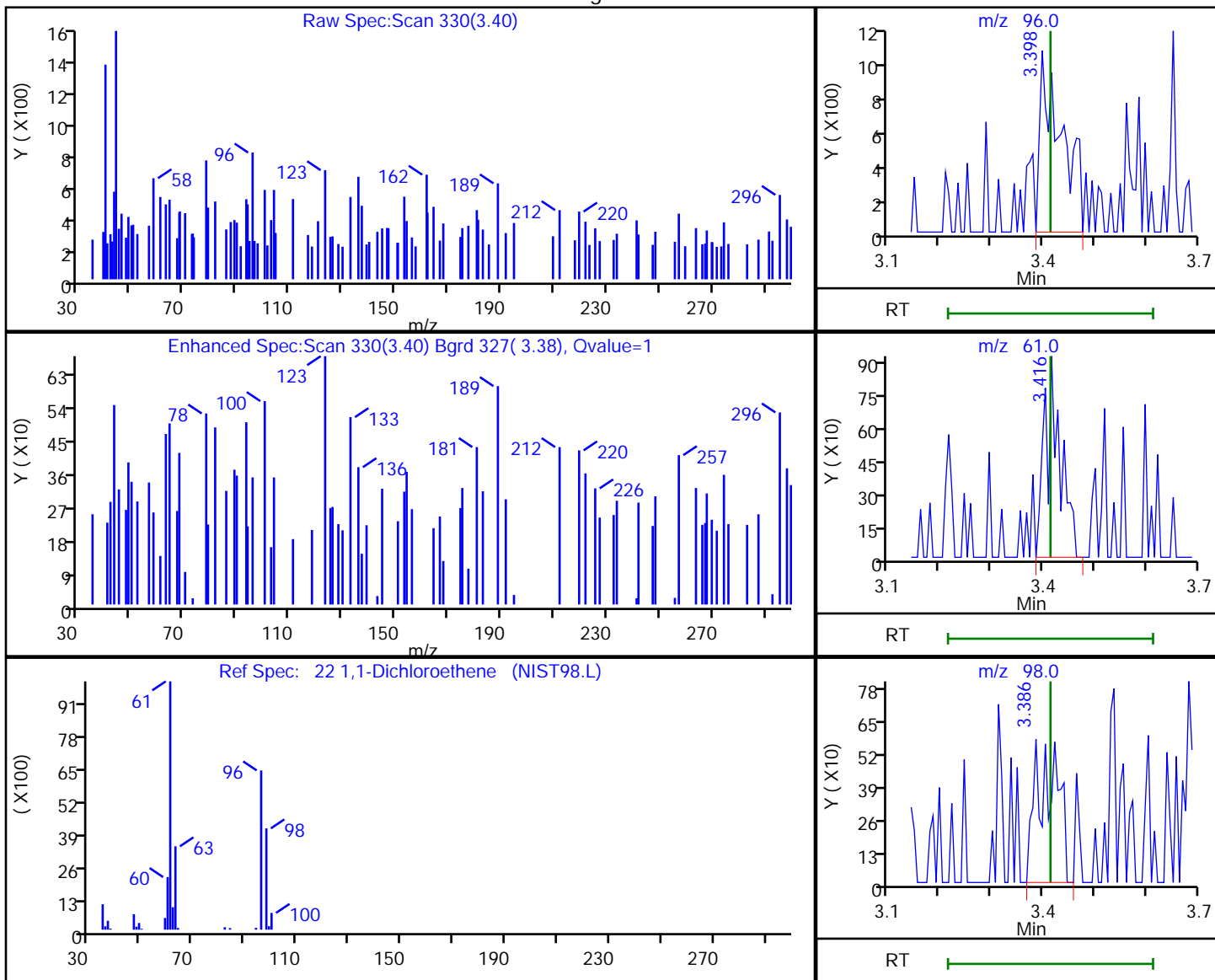
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050409.D  
 Injection Date: 04-May-2020 11:29:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-A-9 Lab Sample ID: 180-105108-9  
 Client ID: HD-COD-SW-26-0/1-0  
 Operator ID: 034635 ALS Bottle#: 9 Worklist Smp#: 9  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

22 1,1-Dichloroethene, CAS: 75-35-4

Processing Results



RT	Mass	Response	Amount
3.40	96.00	2991	-0.393574
3.42	61.00	1921	
3.39	98.00	1624	

Reviewer: journept, 04-May-2020 13:20:50  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID



Eurofins TestAmerica, Pittsburgh

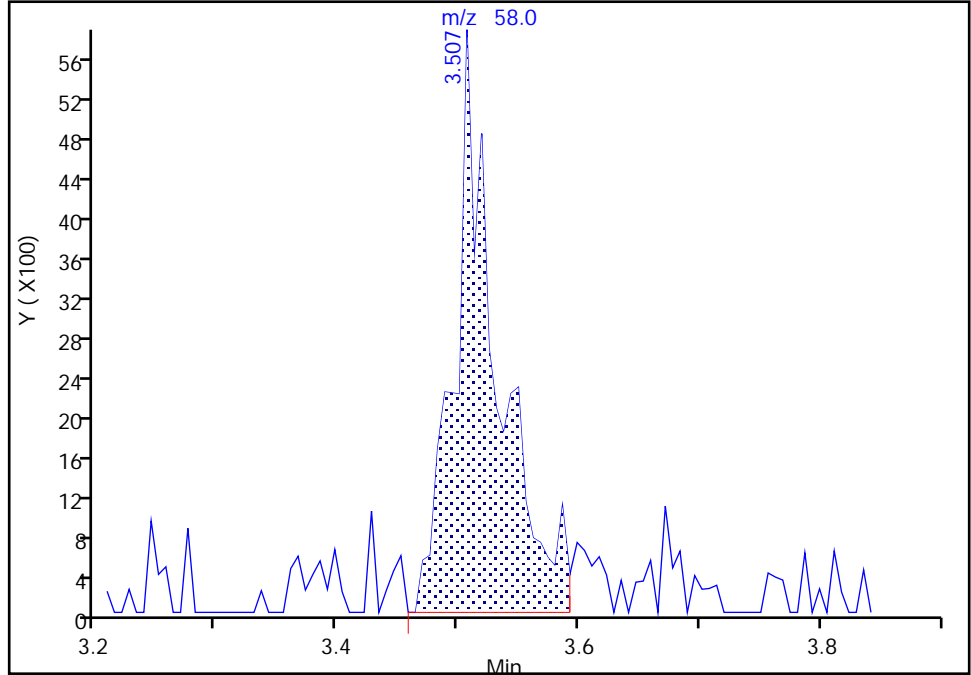
Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050409.D  
Injection Date: 04-May-2020 11:29:30 Instrument ID: CHHP5  
Lims ID: 180-105108-A-9 Lab Sample ID: 180-105108-9  
Client ID: HD-COD-SW-26-0/1-0  
Operator ID: 034635 ALS Bottle#: 9 Worklist Smp#: 9  
Purge Vol: 5.000 mL Dil. Factor: 1.0000  
Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
Column: DB-624 (0.18 mm) Detector: MS SCAN

24 Acetone, CAS: 67-64-1

Signal: 2

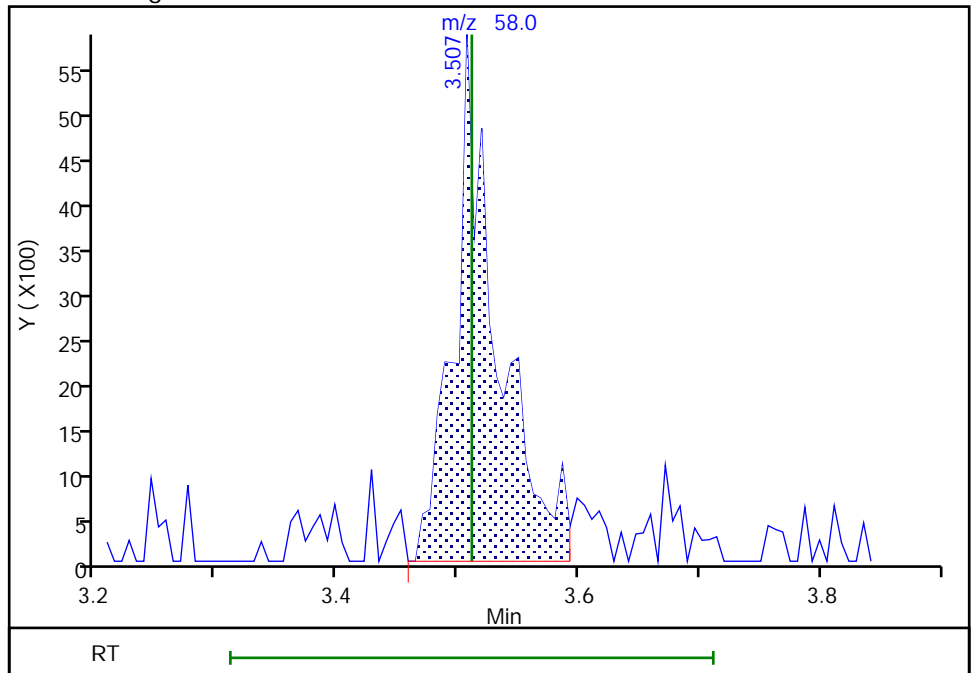
RT: 3.51  
Area: 14402  
Amount: 30.755376  
Amount Units: ng

Processing Integration Results



RT: 3.51  
Area: 14402  
Amount: 30.755376  
Amount Units: ng

Manual Integration Results



Reviewer: journetp, 04-May-2020 13:20:50  
Audit Action: Marked Compound Undetected

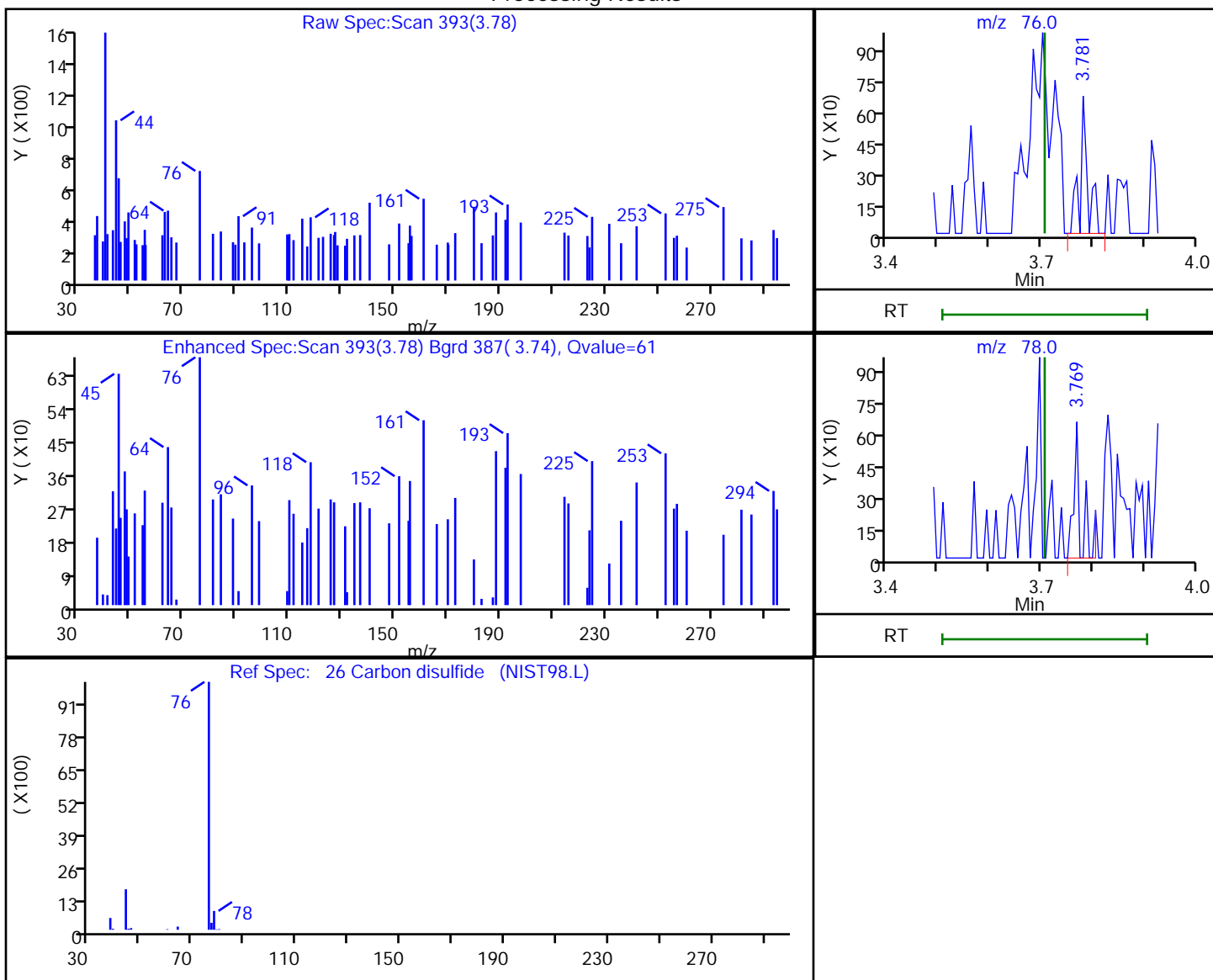
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050409.D  
 Injection Date: 04-May-2020 11:29:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-A-9 Lab Sample ID: 180-105108-9  
 Client ID: HD-COD-SW-26-0/1-0  
 Operator ID: 034635 ALS Bottle#: 9 Worklist Smp#: 9  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

26 Carbon disulfide, CAS: 75-15-0

Processing Results



RT	Mass	Response	Amount
3.78	76.00	725	0.157488
3.77	78.00	608	

Reviewer: journetp, 04-May-2020 13:20:50  
 Audit Action: Marked Compound Undetected

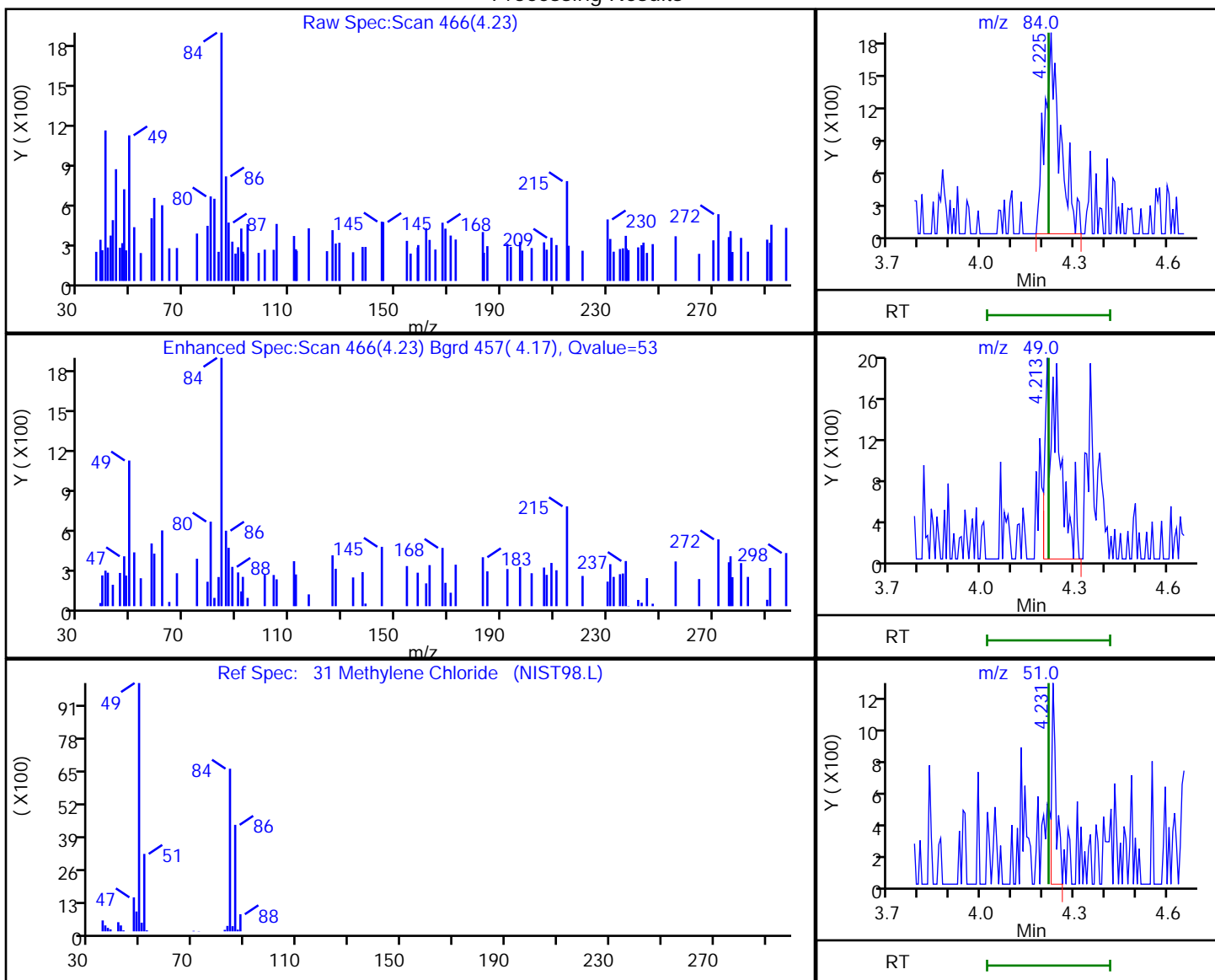
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050409.D  
 Injection Date: 04-May-2020 11:29:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-A-9 Lab Sample ID: 180-105108-9  
 Client ID: HD-COD-SW-26-0/1-0  
 Operator ID: 034635 ALS Bottle#: 9 Worklist Smp#: 9  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

31 Methylene Chloride, CAS: 75-09-2

Processing Results



RT	Mass	Response	Amount
4.23	84.00	6317	0.695160
4.21	49.00	6098	
4.23	51.00	1242	

Reviewer: journept, 04-May-2020 13:20:50  
 Audit Action: Marked Compound Undetected

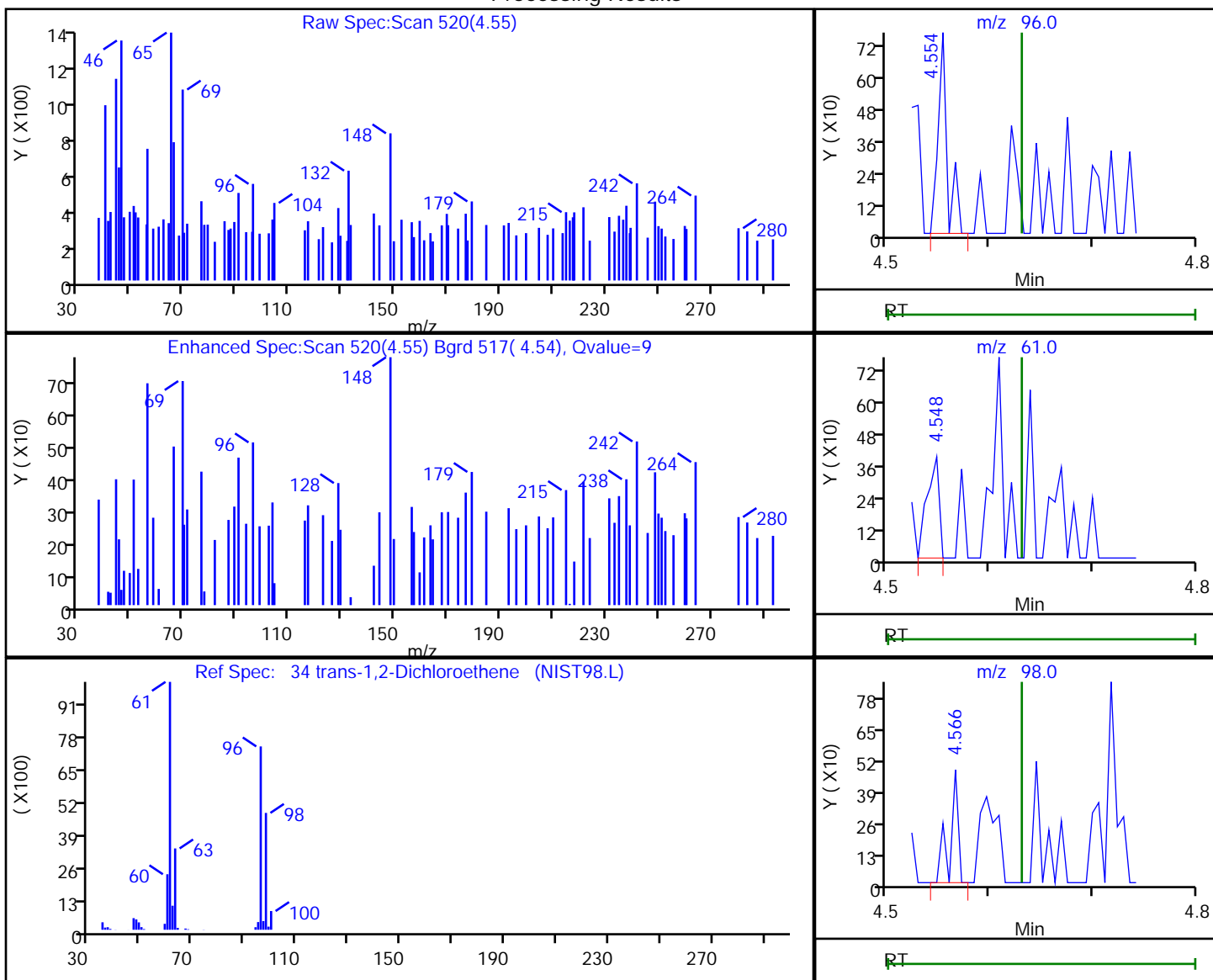
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050409.D  
 Injection Date: 04-May-2020 11:29:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-A-9 Lab Sample ID: 180-105108-9  
 Client ID: HD-COD-SW-26-0/1-0  
 Operator ID: 034635 ALS Bottle#: 9 Worklist Smp#: 9  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

34 trans-1,2-Dichloroethene, CAS: 156-60-5

Processing Results



RT	Mass	Response	Amount
4.55	96.00	484	0.216192
4.55	61.00	316	
4.57	98.00	263	

Reviewer: journept, 04-May-2020 13:20:50  
 Audit Action: Marked Compound Undetected

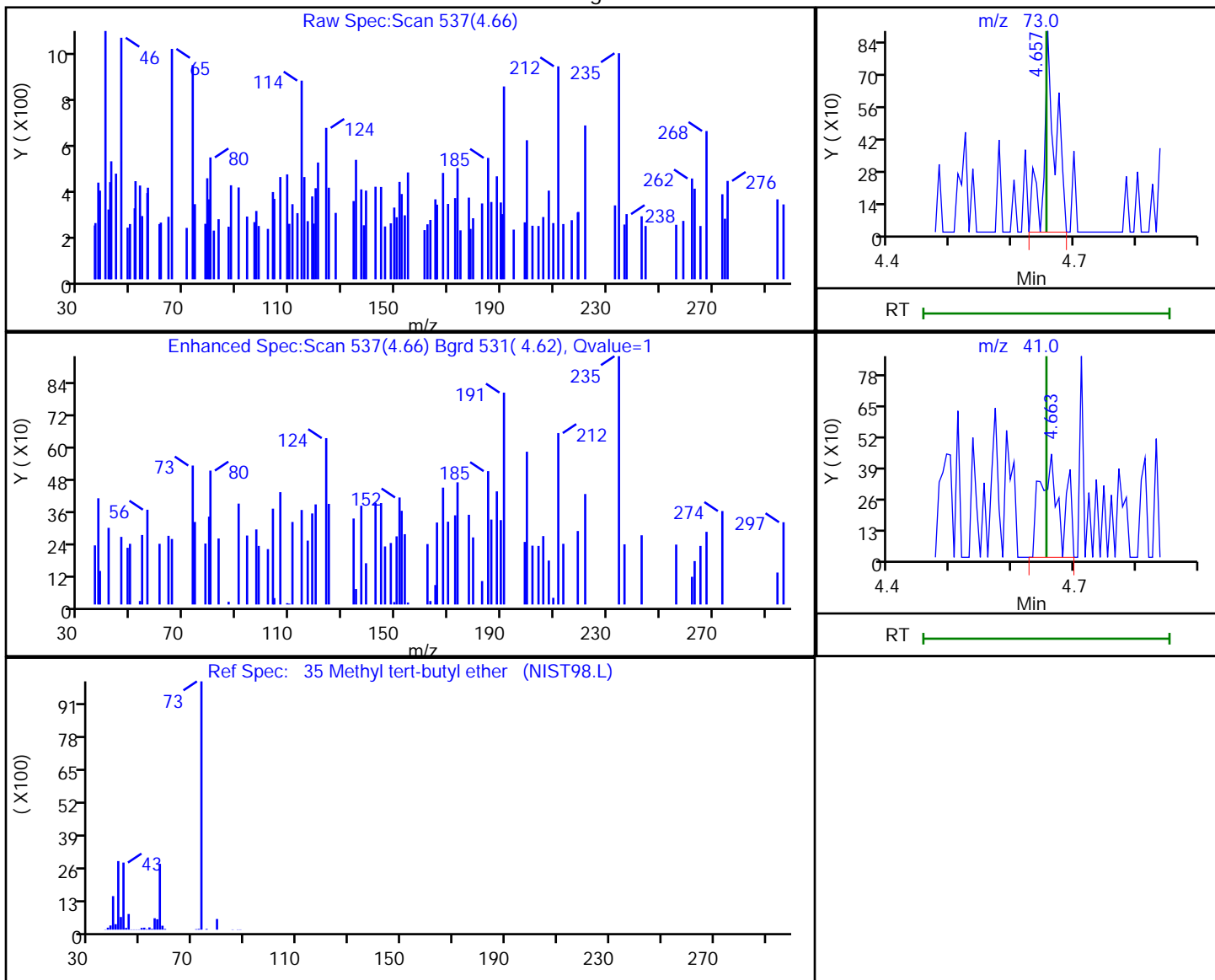
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050409.D  
Injection Date: 04-May-2020 11:29:30 Instrument ID: CHHP5  
Lims ID: 180-105108-A-9 Lab Sample ID: 180-105108-9  
Client ID: HD-COD-SW-26-0/1-0  
Operator ID: 034635 ALS Bottle#: 9 Worklist Smp#: 9  
Purge Vol: 5.000 mL Dil. Factor: 1.0000  
Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
Column: DB-624 (0.18 mm) Detector: MS SCAN

35 Methyl tert-butyl ether, CAS: 1634-04-4

Processing Results



RT	Mass	Response	Amount
4.66	73.00	1171	0.186379
4.66	41.00	1008	

Reviewer: journetp, 04-May-2020 13:20:51

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050409.D

Injection Date: 04-May-2020 11:29:30

Instrument ID: CHHP5

Lims ID: 180-105108-A-9

Lab Sample ID: 180-105108-9

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

Operator ID: 034635

ALS Bottle#: 9 Worklist Smp#: 9

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

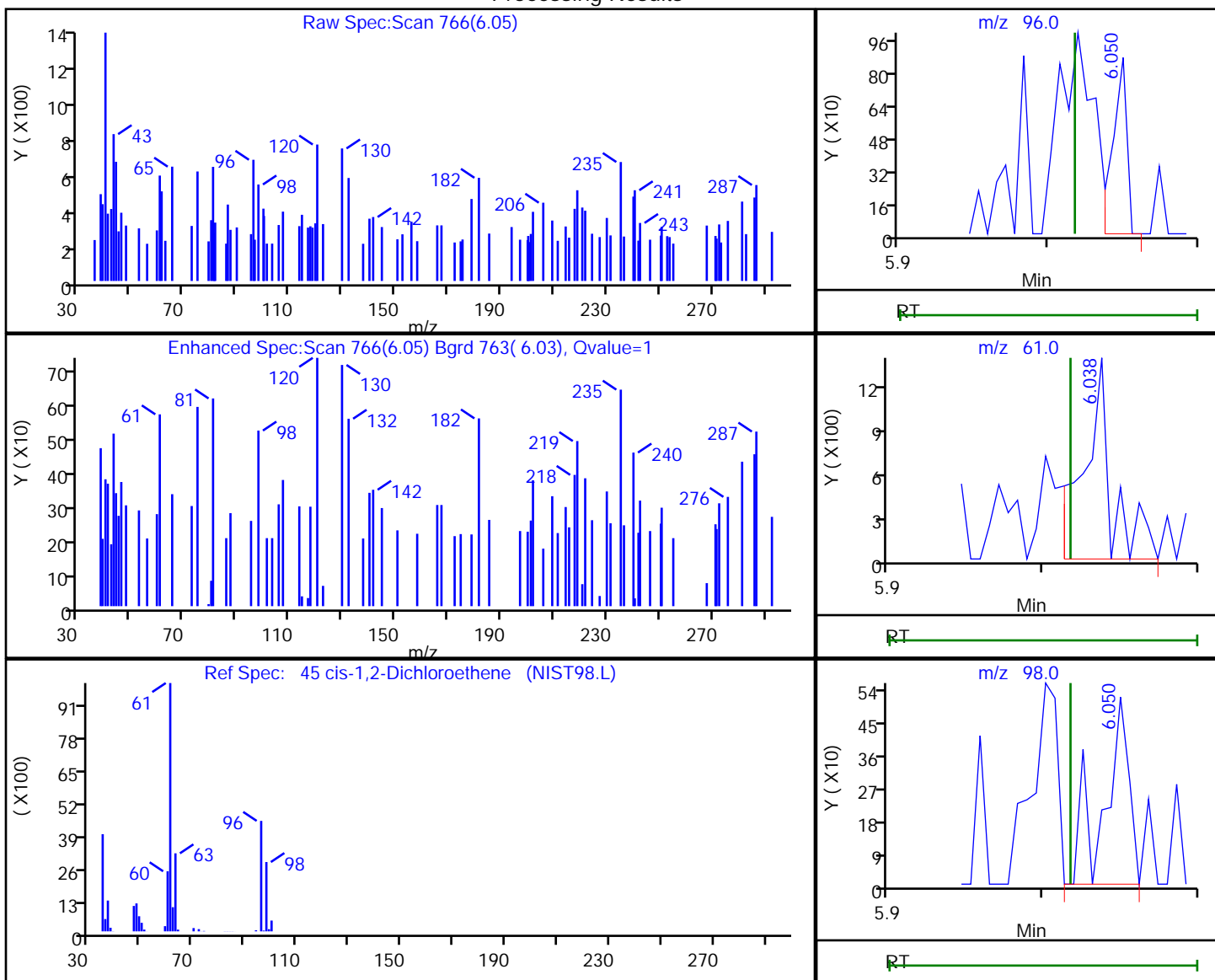
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

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

Processing Results



RT	Mass	Response	Amount
6.05	96.00	577	0.216602
6.04	61.00	1699	
6.05	98.00	583	

Reviewer: journept, 04-May-2020 13:20:58

Audit Action: Marked Compound Undetected

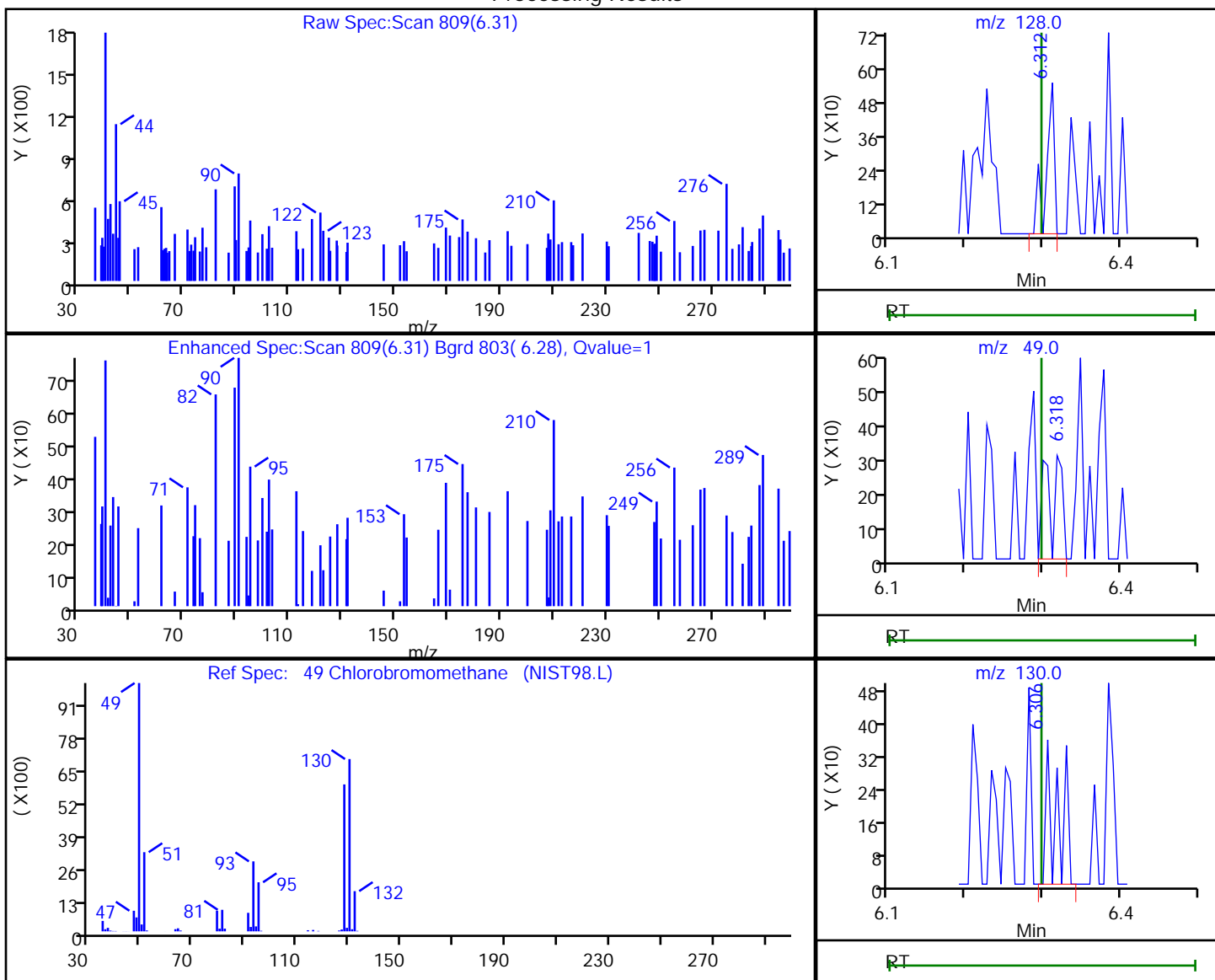
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050409.D  
 Injection Date: 04-May-2020 11:29:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-A-9 Lab Sample ID: 180-105108-9  
 Client ID: HD-COD-SW-26-0/1-0  
 Operator ID: 034635 ALS Bottle#: 9 Worklist Smp#: 9  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

49 Chlorobromomethane, CAS: 74-97-5

Processing Results



RT	Mass	Response	Amount
6.31	128.00	394	0.277513
6.32	49.00	420	
6.31	130.00	360	

Reviewer: journept, 04-May-2020 13:20:58  
 Audit Action: Marked Compound Undetected

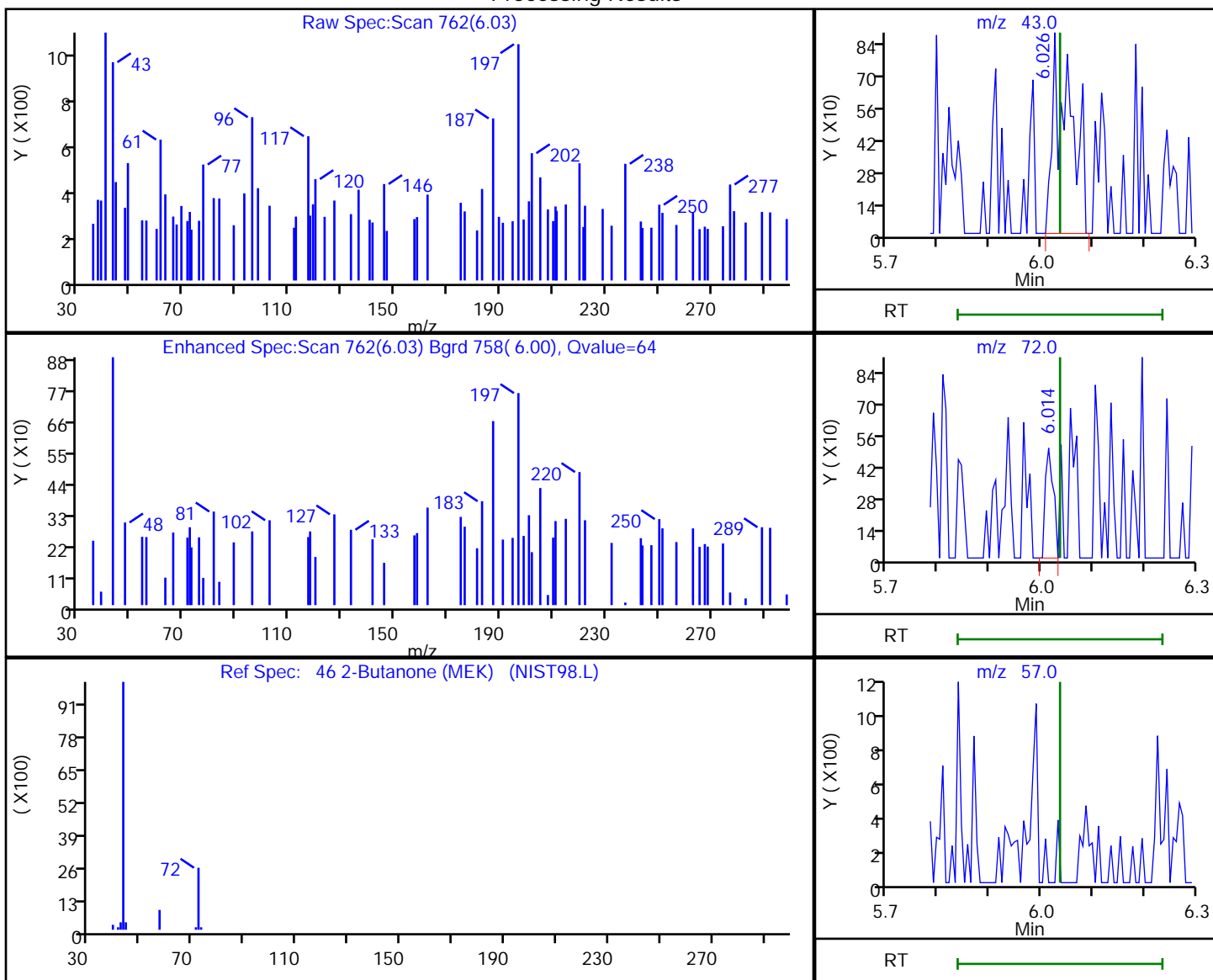
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050409.D  
 Injection Date: 04-May-2020 11:29:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-A-9 Lab Sample ID: 180-105108-9  
 Client ID: HD-COD-SW-26-0/1-0  
 Operator ID: 034635 ALS Bottle#: 9 Worklist Smp#: 9  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

46 2-Butanone (MEK), CAS: 78-93-3

Processing Results



RT	Mass	Response	Amount
6.03	43.00	2138	1.421457
6.01	72.00	540	
6.04	57.00	0	

Reviewer: journetp, 04-May-2020 13:20:58  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID



Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050409.D

Injection Date: 04-May-2020 11:29:30

Instrument ID: CHHP5

Lims ID: 180-105108-A-9

Lab Sample ID: 180-105108-9

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

Operator ID: 034635

ALS Bottle#: 9 Worklist Smp#: 9

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

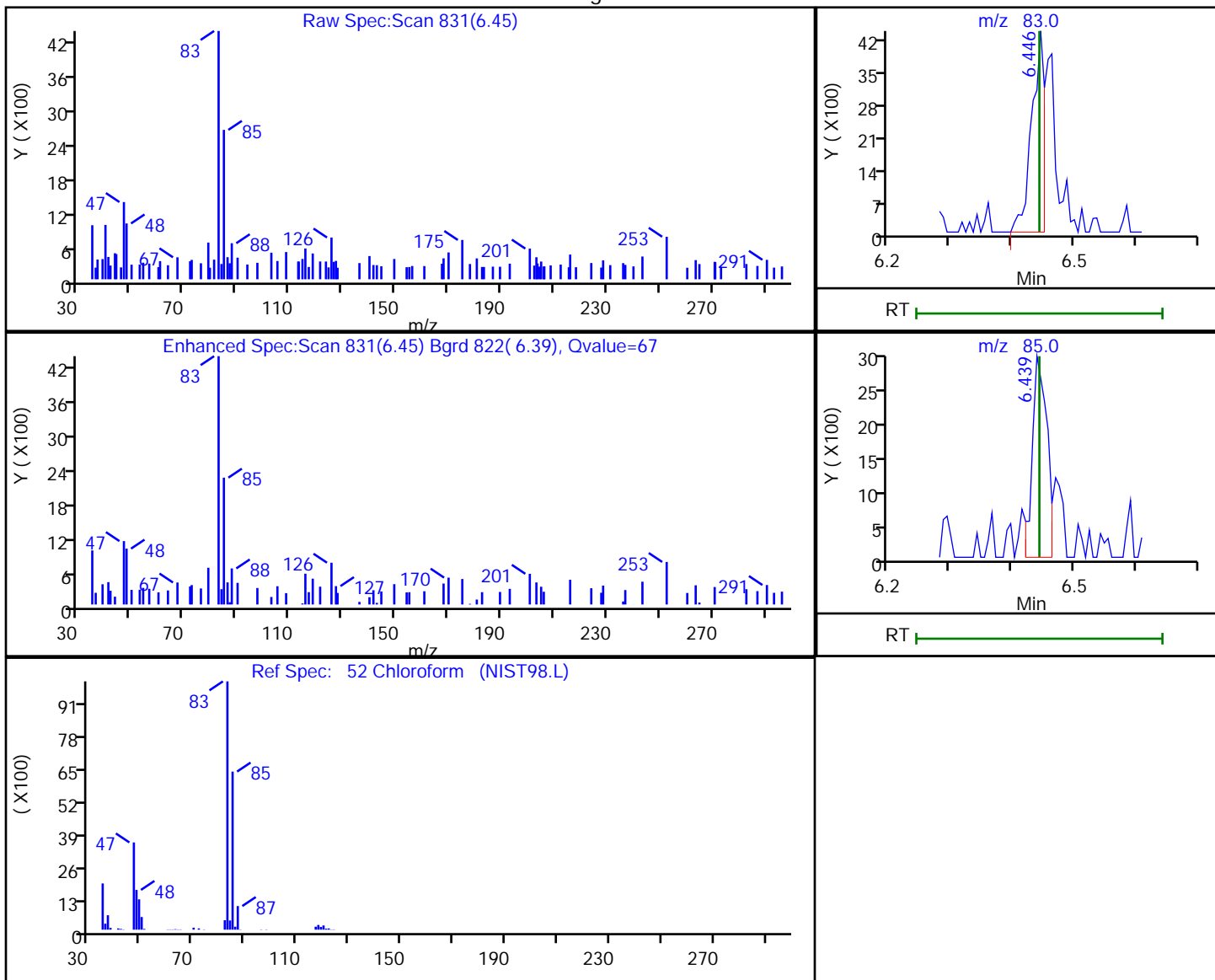
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

52 Chloroform, CAS: 67-66-3

Processing Results



RT	Mass	Response	Amount
6.45	83.00	6206	-0.354310
6.44	85.00	4885	

Reviewer: journtp, 04-May-2020 13:20:58

Audit Action: Marked Compound Undetected

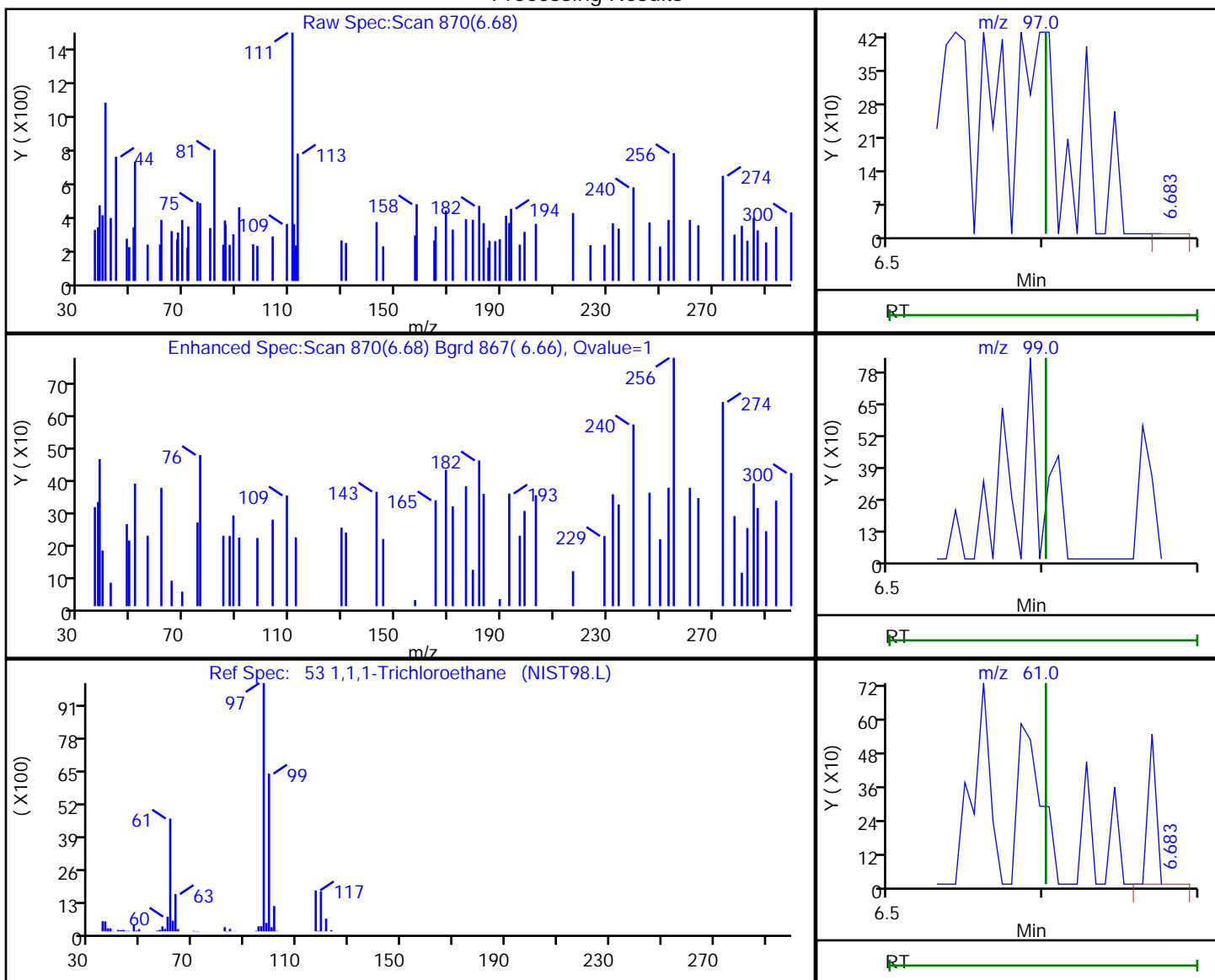
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050409.D  
 Injection Date: 04-May-2020 11:29:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-A-9 Lab Sample ID: 180-105108-9  
 Client ID: HD-COD-SW-26-0/1-0  
 Operator ID: 034635 ALS Bottle#: 9 Worklist Smp#: 9  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

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

Processing Results



RT	Mass	Response	Amount
6.68	97.00	77	0.023072
6.69	99.00	466	
6.68	61.00	411	

Reviewer: journeyp, 04-May-2020 13:20:59  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050409.D

Injection Date: 04-May-2020 11:29:30

Instrument ID: CHHP5

Lims ID: 180-105108-A-9

Lab Sample ID: 180-105108-9

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

Operator ID: 034635

ALS Bottle#: 9 Worklist Smp#: 9

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

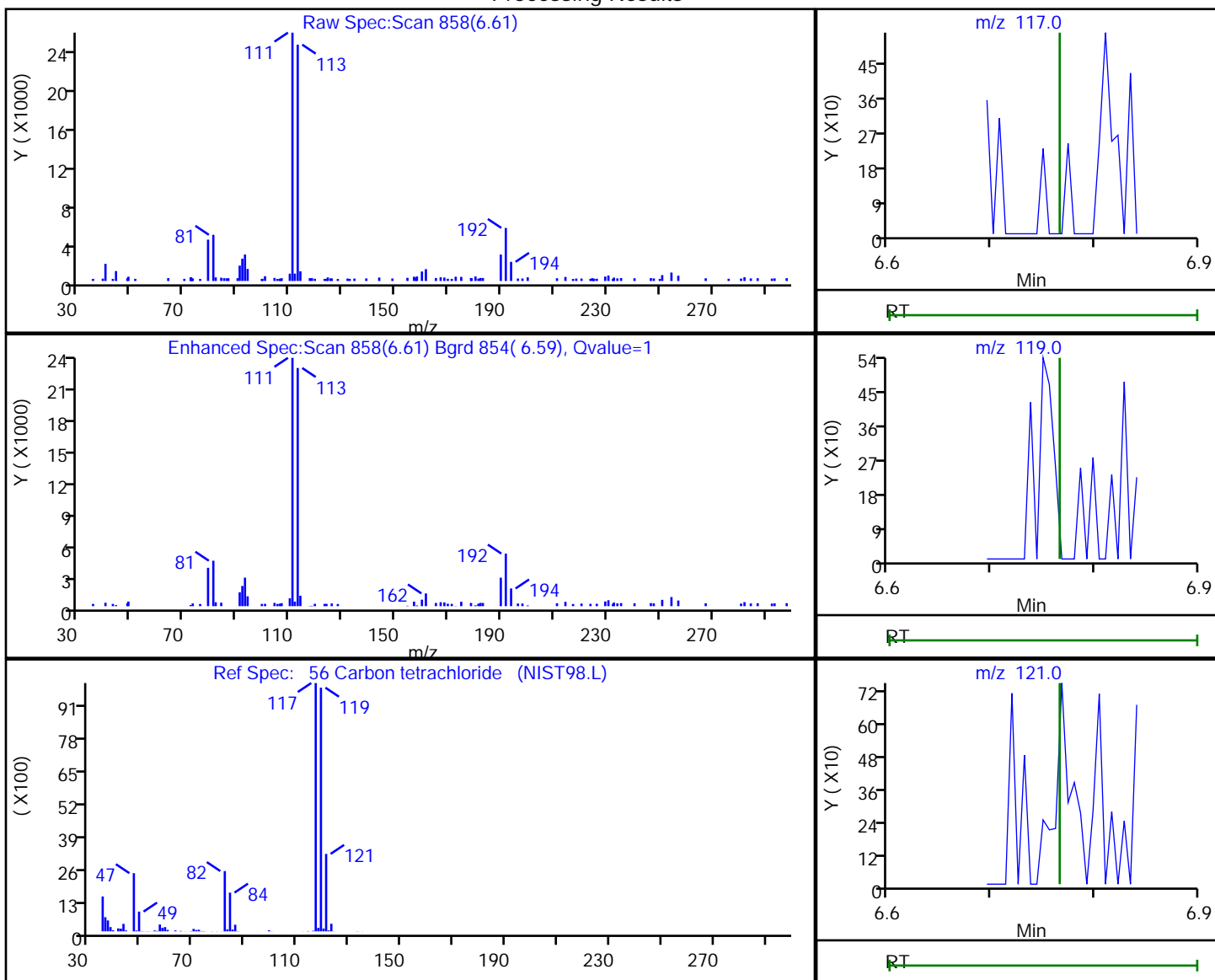
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

56 Carbon tetrachloride, CAS: 56-23-5

Processing Results



RT	Mass	Response	Amount
6.61	117.00	200	0.072167
6.60	119.00	739	
6.62	121.00	158	

Reviewer: journeyp, 04-May-2020 13:20:59

Audit Action: Marked Compound Undetected

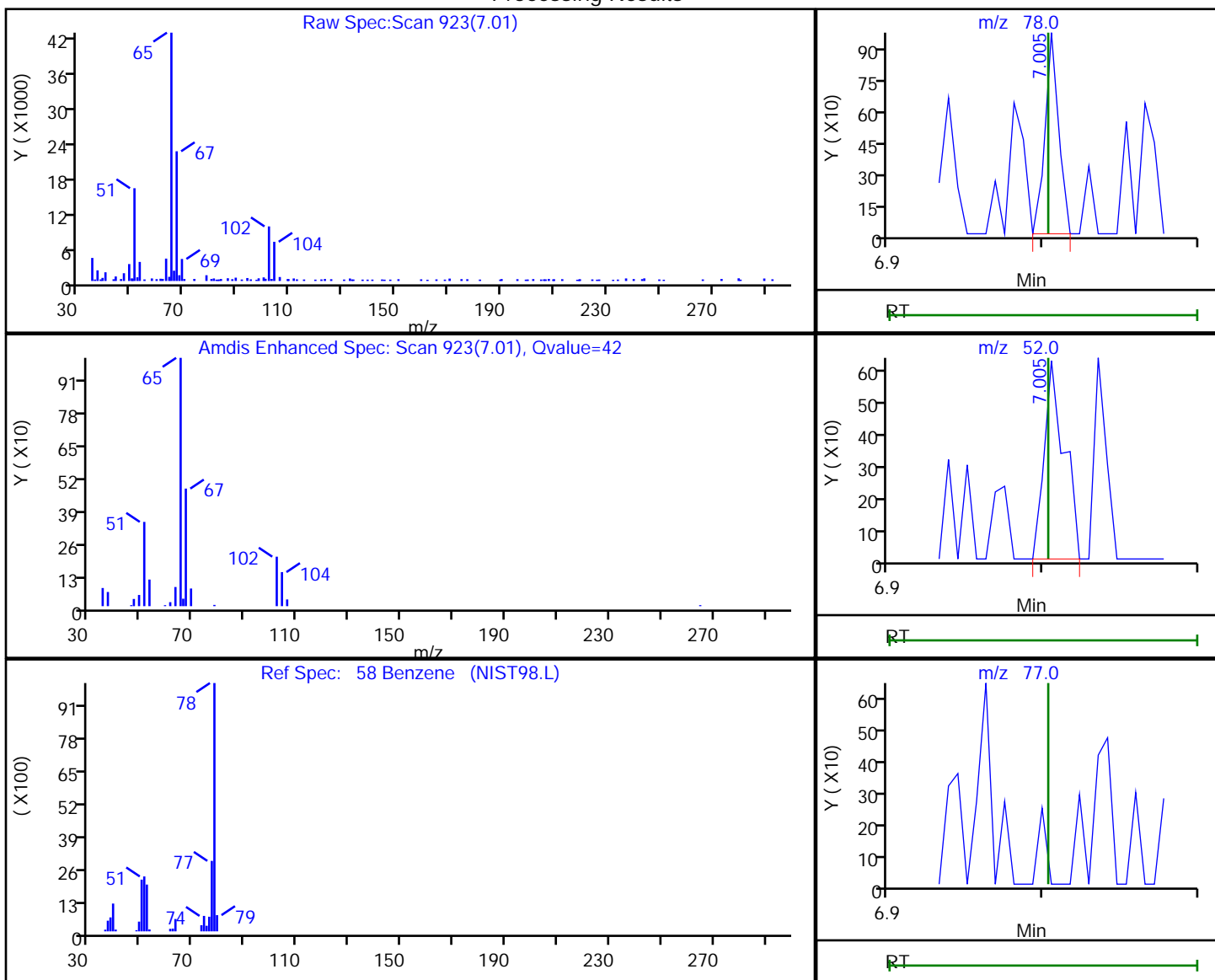
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050409.D  
 Injection Date: 04-May-2020 11:29:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-A-9 Lab Sample ID: 180-105108-9  
 Client ID: HD-COD-SW-26-0/1-0  
 Operator ID: 034635 ALS Bottle#: 9 Worklist Smp#: 9  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

58 Benzene, CAS: 71-43-2

Processing Results



RT	Mass	Response	Amount
7.01	78.00	598	0.059323
7.01	52.00	563	
7.00	77.00	0	

Reviewer: journept, 04-May-2020 13:20:59  
 Audit Action: Marked Compound Undetected

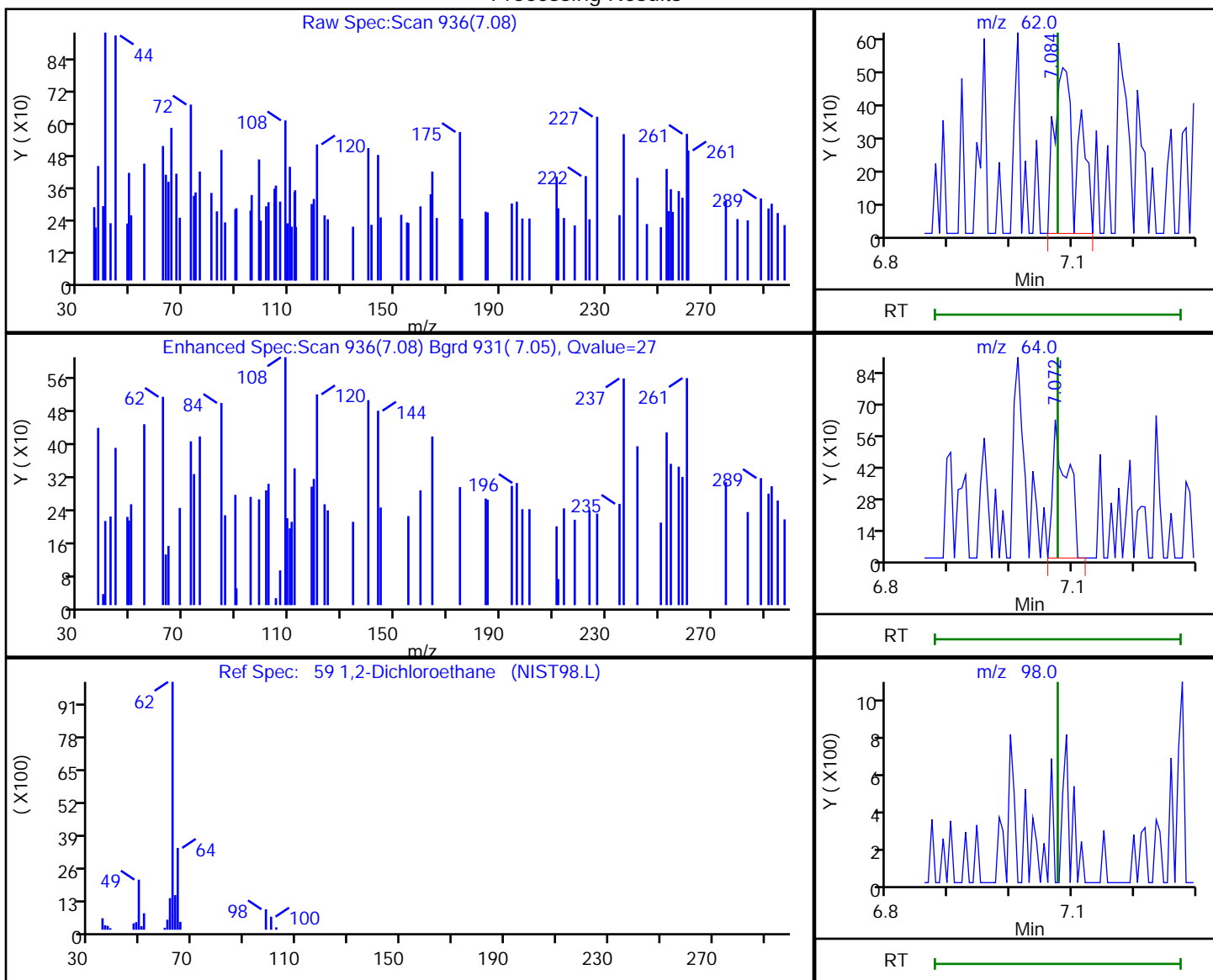
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050409.D  
 Injection Date: 04-May-2020 11:29:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-A-9 Lab Sample ID: 180-105108-9  
 Client ID: HD-COD-SW-26-0/1-0  
 Operator ID: 034635 ALS Bottle#: 9 Worklist Smp#: 9  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

59 1,2-Dichloroethane, CAS: 107-06-2

Processing Results



RT	Mass	Response	Amount
7.08	62.00	1317	0.343608
7.07	64.00	1022	
7.08	98.00	0	

Reviewer: journetp, 04-May-2020 13:20:59  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

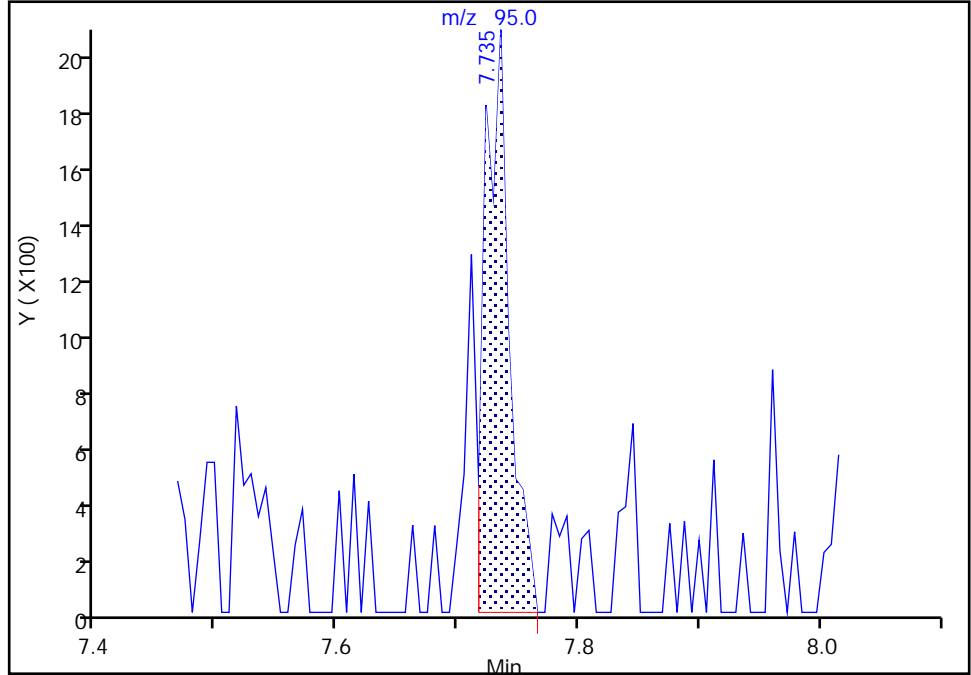
Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050409.D  
Injection Date: 04-May-2020 11:29:30 Instrument ID: CHHP5  
Lims ID: 180-105108-A-9 Lab Sample ID: 180-105108-9  
Client ID: HD-COD-SW-26-0/1-0  
Operator ID: 034635 ALS Bottle#: 9 Worklist Smp#: 9  
Purge Vol: 5.000 mL Dil. Factor: 1.0000  
Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
Column: DB-624 (0.18 mm) Detector: MS SCAN

64 Trichloroethene, CAS: 79-01-6

Signal: 2

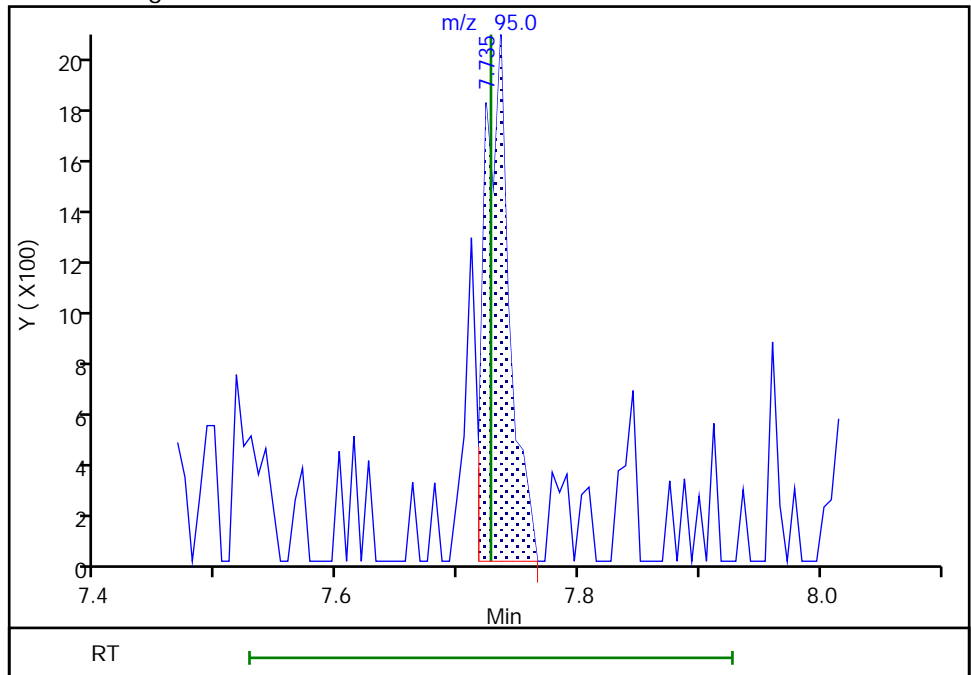
RT: 7.74  
Area: 2919  
Amount: 0.954043  
Amount Units: ng

Processing Integration Results



RT: 7.74  
Area: 2919  
Amount: 1.321718  
Amount Units: ng

Manual Integration Results



Reviewer: journetp, 04-May-2020 13:20:59  
Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

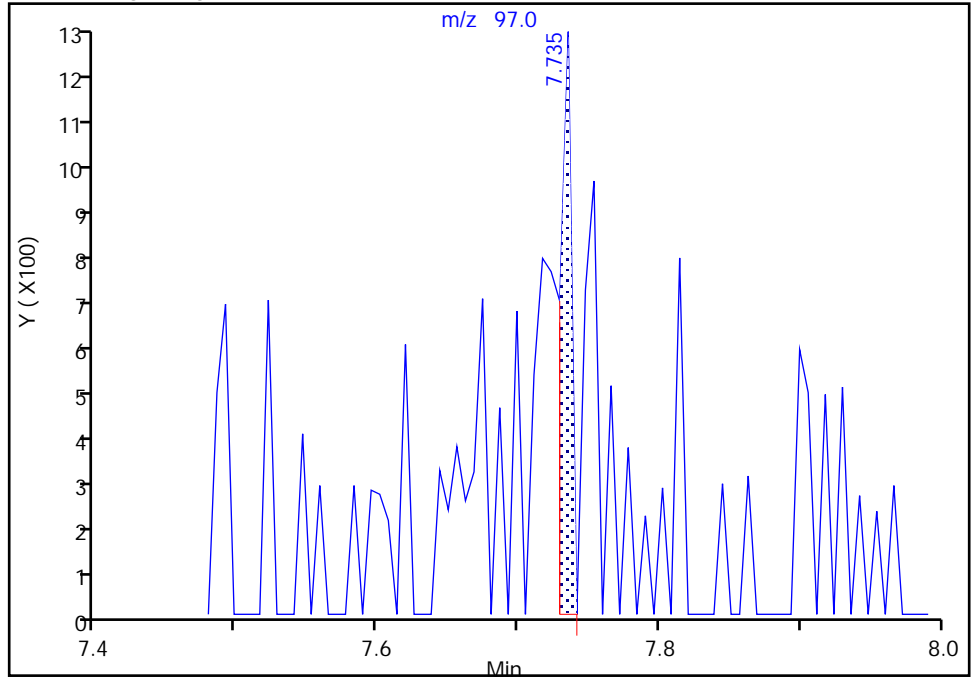
Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050409.D  
Injection Date: 04-May-2020 11:29:30 Instrument ID: CHHP5  
Lims ID: 180-105108-A-9 Lab Sample ID: 180-105108-9  
Client ID: HD-COD-SW-26-0/1-0  
Operator ID: 034635 ALS Bottle#: 9 Worklist Smp#: 9  
Purge Vol: 5.000 mL Dil. Factor: 1.0000  
Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
Column: DB-624 (0.18 mm) Detector: MS SCAN

64 Trichloroethene, CAS: 79-01-6

Signal: 3

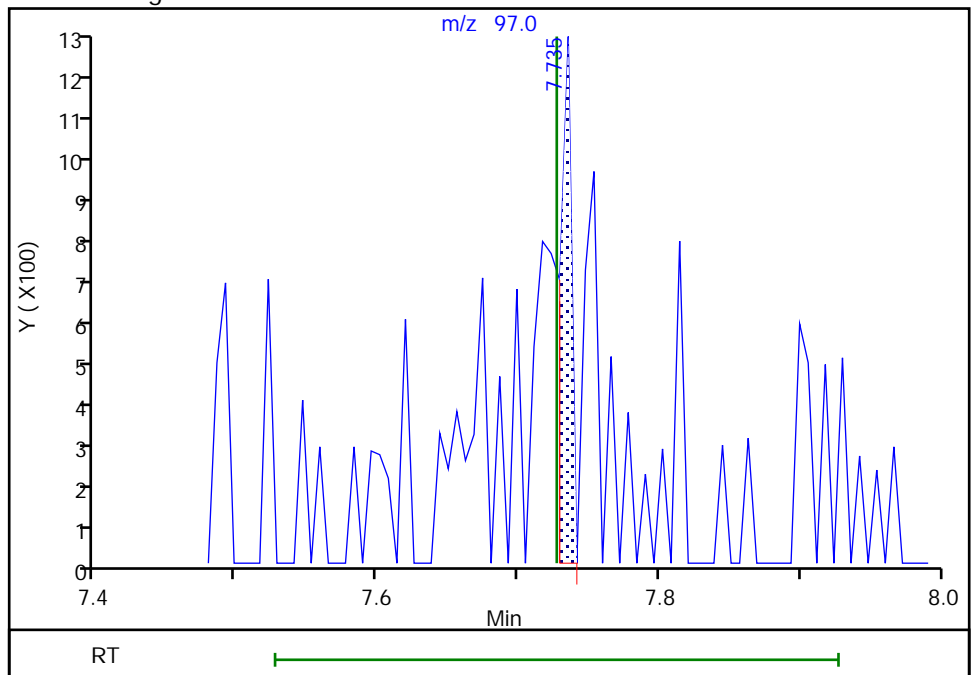
RT: 7.74  
Area: 714  
Amount: 0.954043  
Amount Units: ng

Processing Integration Results



RT: 7.74  
Area: 714  
Amount: 1.321718  
Amount Units: ng

Manual Integration Results



Eurofins TestAmerica, Pittsburgh

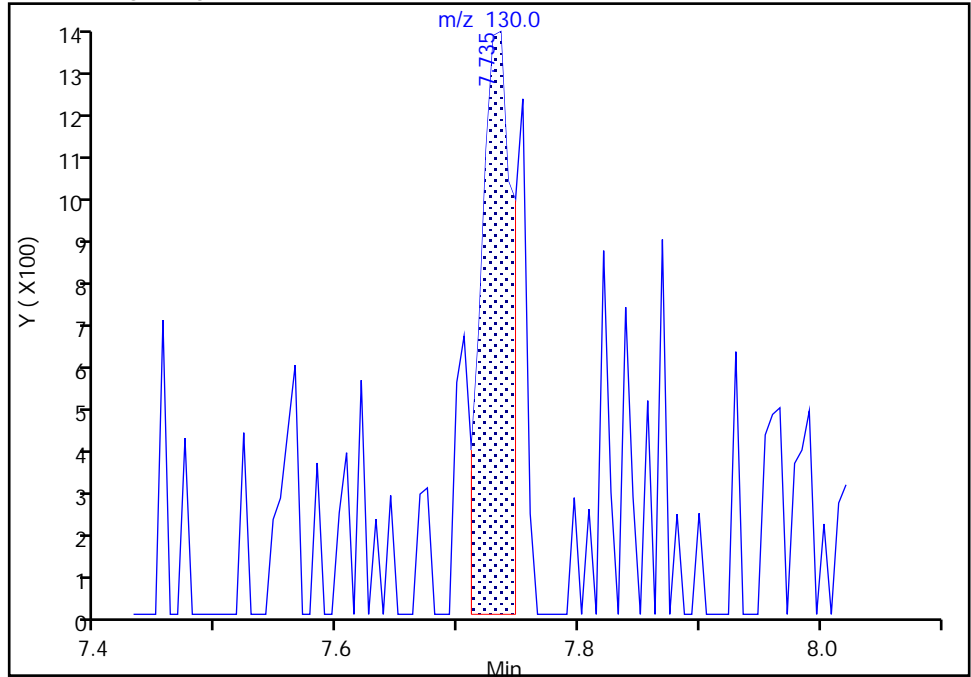
Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050409.D  
Injection Date: 04-May-2020 11:29:30 Instrument ID: CHHP5  
Lims ID: 180-105108-A-9 Lab Sample ID: 180-105108-9  
Client ID: HD-COD-SW-26-0/1-0  
Operator ID: 034635 ALS Bottle#: 9 Worklist Smp#: 9  
Purge Vol: 5.000 mL Dil. Factor: 1.0000  
Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
Column: DB-624 (0.18 mm) Detector: MS SCAN

64 Trichloroethene, CAS: 79-01-6

Signal: 1

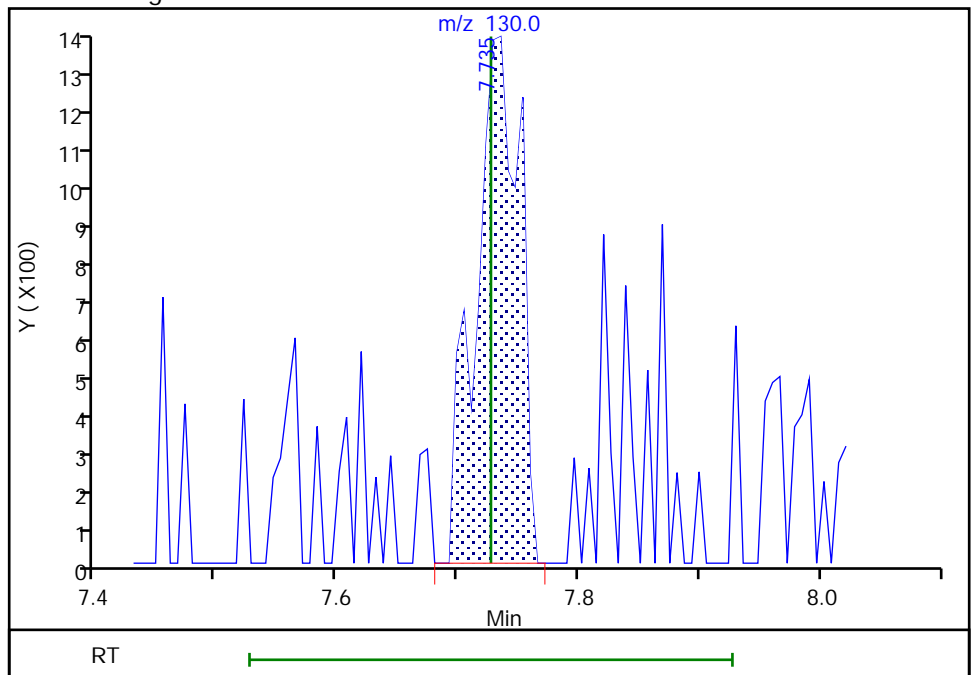
RT: 7.74  
Area: 2395  
Amount: 0.954043  
Amount Units: ng

Processing Integration Results



RT: 7.74  
Area: 3318  
Amount: 1.321718  
Amount Units: ng

Manual Integration Results



Reviewer: journtp, 04-May-2020 13:21:14

Audit Action: Manually Integrated

Audit Reason: Poor chromatography

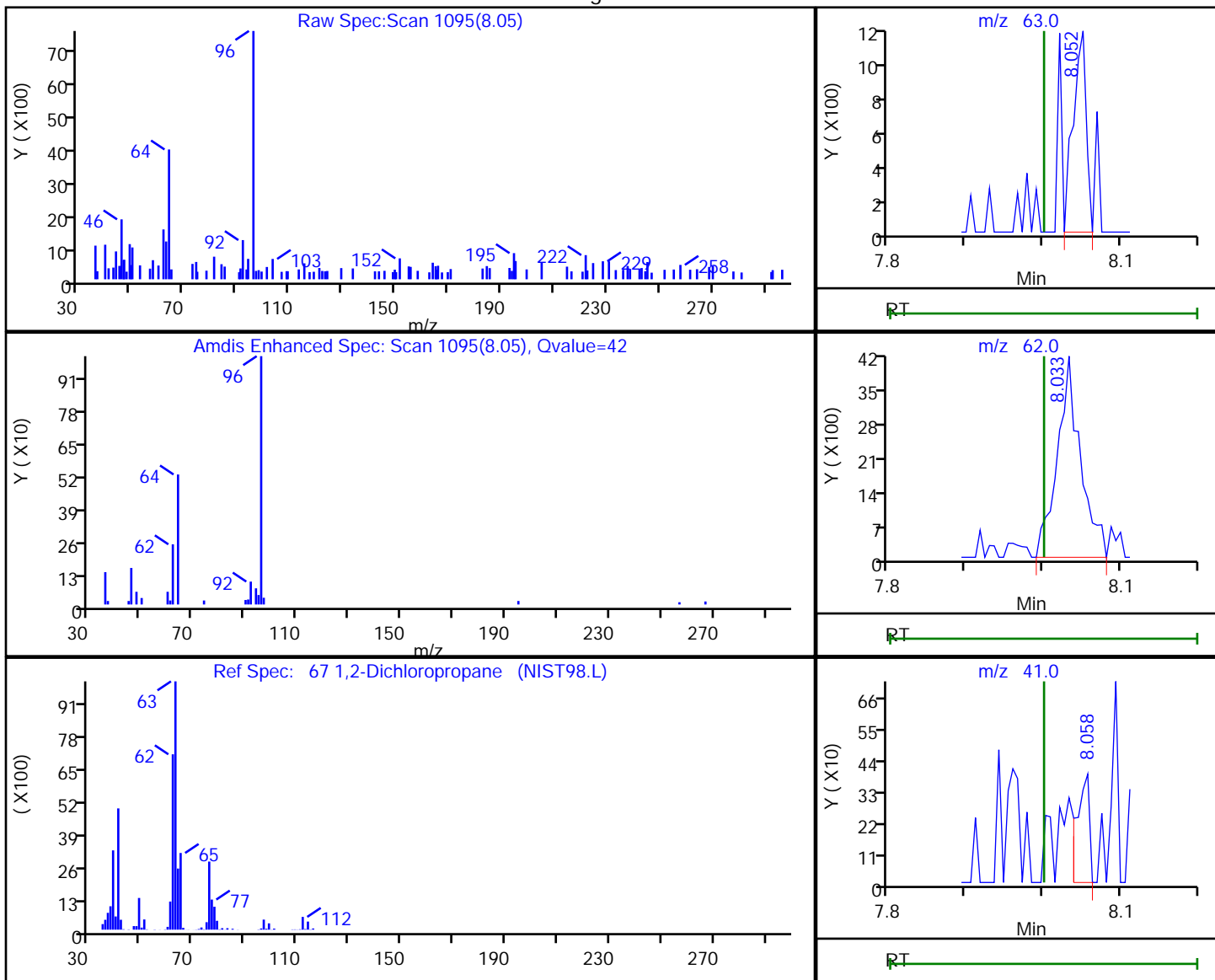


Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050409.D  
 Injection Date: 04-May-2020 11:29:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-A-9 Lab Sample ID: 180-105108-9  
 Client ID: HD-COD-SW-26-0/1-0  
 Operator ID: 034635 ALS Bottle#: 9 Worklist Smp#: 9  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

67 1,2-Dichloropropane, CAS: 78-87-5

Processing Results



RT	Mass	Response	Amount
8.05	63.00	1351	0.502116
8.03	62.00	8733	
8.06	41.00	432	

Reviewer: journept, 04-May-2020 13:20:59  
 Audit Action: Marked Compound Undetected

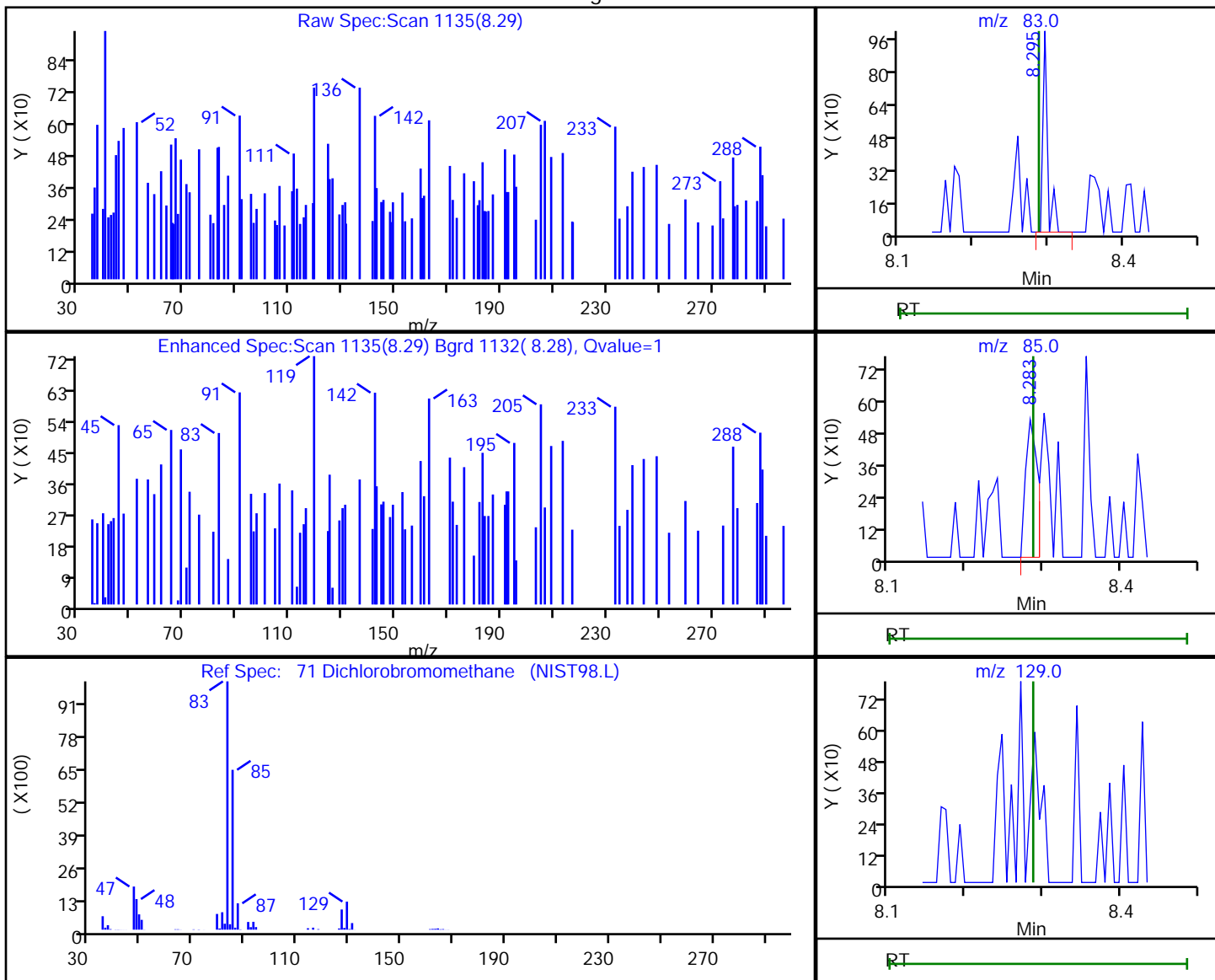
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050409.D  
 Injection Date: 04-May-2020 11:29:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-A-9 Lab Sample ID: 180-105108-9  
 Client ID: HD-COD-SW-26-0/1-0  
 Operator ID: 034635 ALS Bottle#: 9 Worklist Smp#: 9  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

71 Dichlorobromomethane, CAS: 75-27-4

Processing Results



RT	Mass	Response	Amount
8.29	83.00	441	0.139685
8.28	85.00	565	
8.29	129.00	0	

Reviewer: journept, 04-May-2020 13:20:59  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050409.D

Injection Date: 04-May-2020 11:29:30

Instrument ID: CHHP5

Lims ID: 180-105108-A-9

Lab Sample ID: 180-105108-9

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

Operator ID: 034635

ALS Bottle#: 9 Worklist Smp#: 9

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

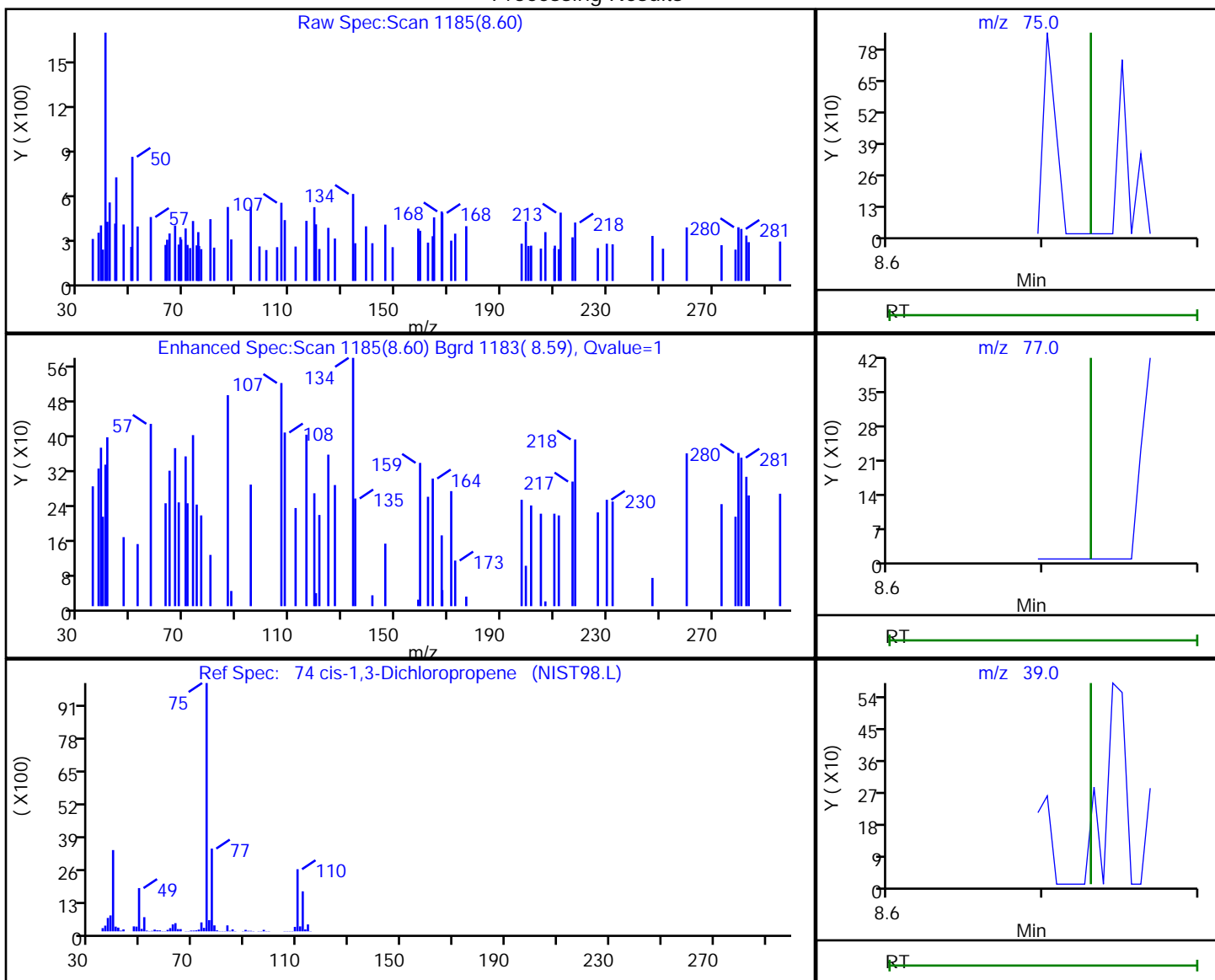
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

74 cis-1,3-Dichloropropene, CAS: 10061-01-5

Processing Results



RT	Mass	Response	Amount
8.60	75.00	201	0.050566
8.59	77.00	164	
8.61	39.00	256	

Reviewer: journeyp, 04-May-2020 13:20:59

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050409.D

Injection Date: 04-May-2020 11:29:30

Instrument ID: CHHP5

Lims ID: 180-105108-A-9

Lab Sample ID: 180-105108-9

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

Operator ID: 034635

ALS Bottle#: 9 Worklist Smp#: 9

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

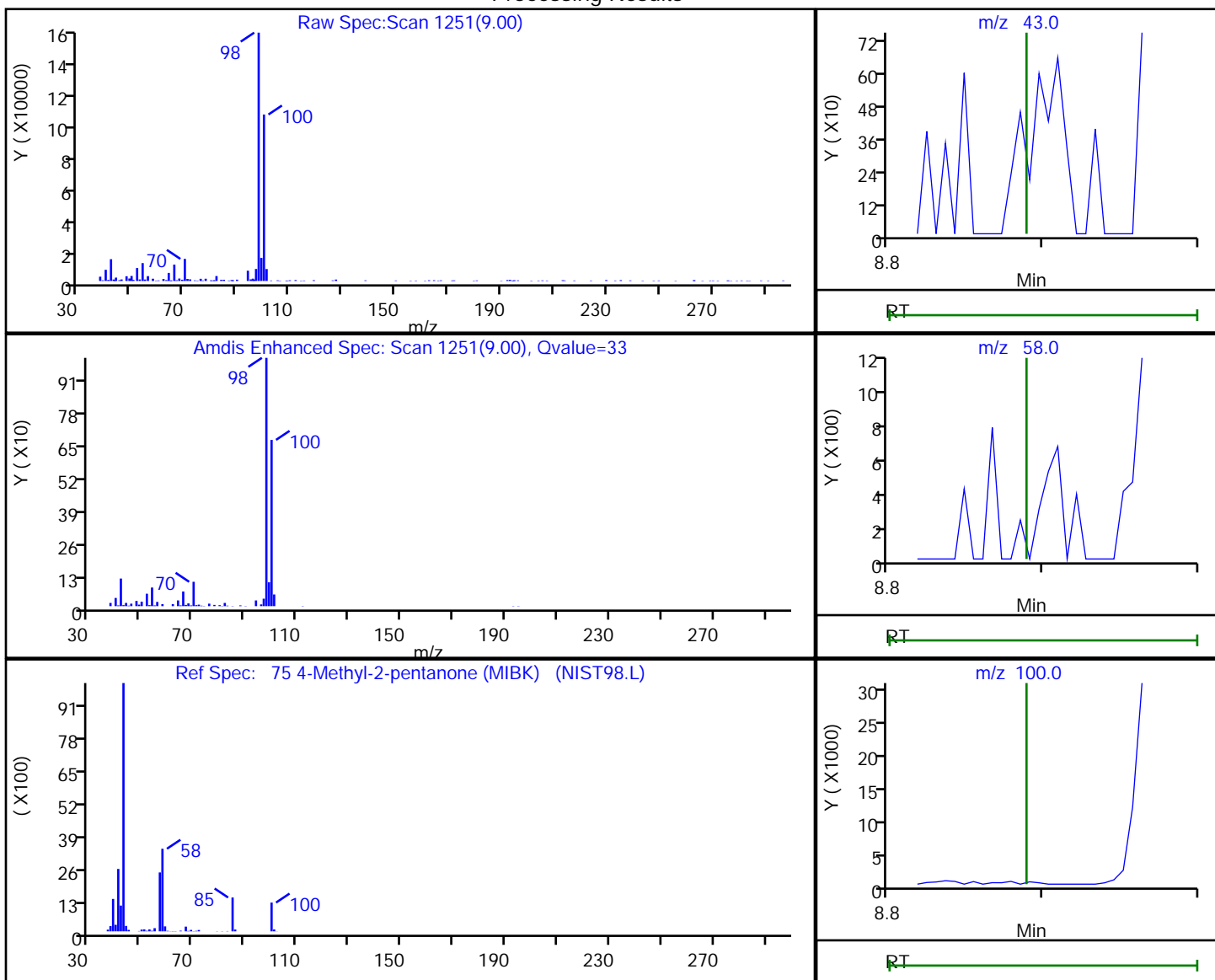
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

75 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Processing Results



RT	Mass	Response	Amount
9.00	43.00	1254	15.756472
8.99	58.00	4182	
8.99	100.00	326680	

Reviewer: journeyp, 04-May-2020 13:20:59

Audit Action: Marked Compound Undetected

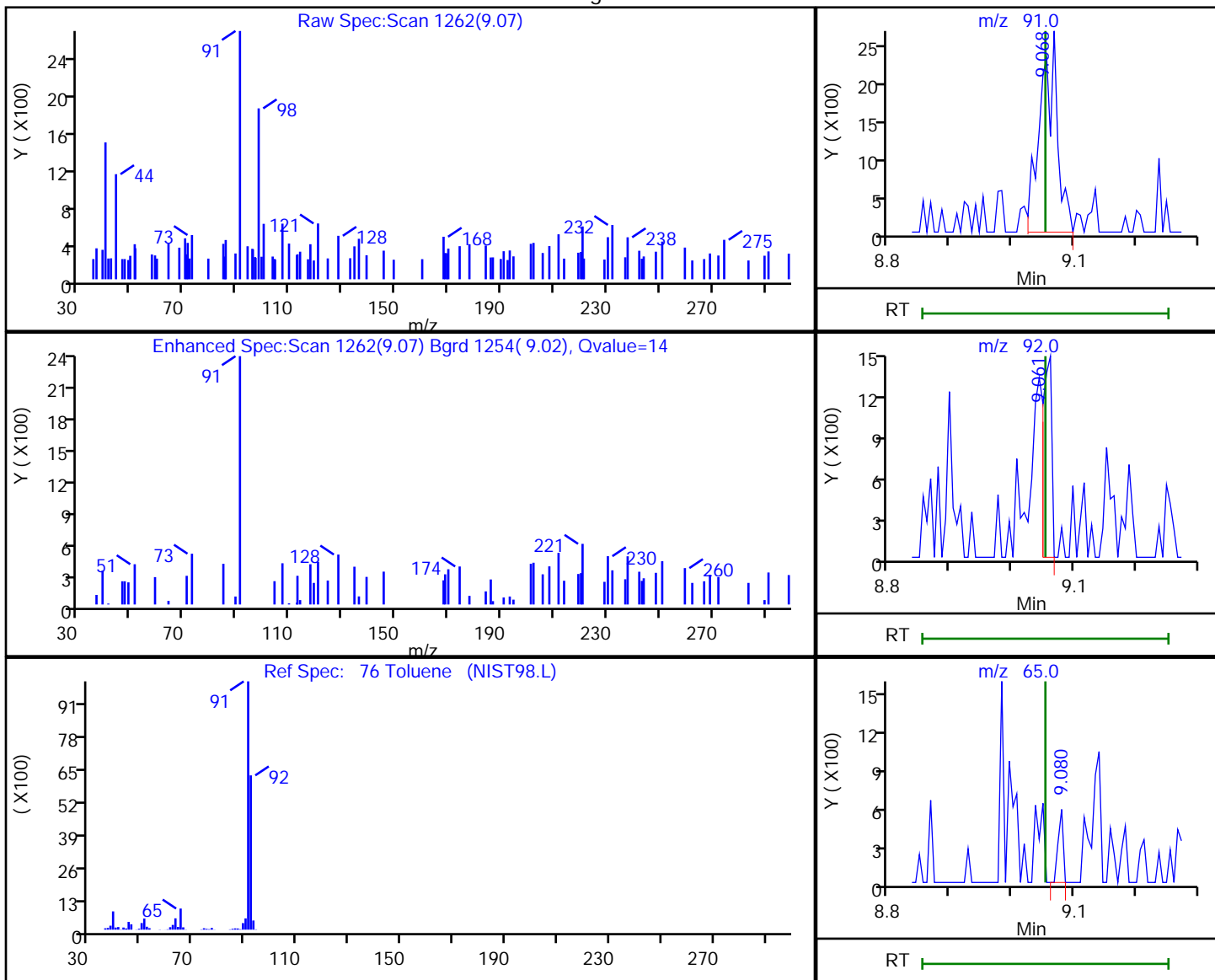
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050409.D  
 Injection Date: 04-May-2020 11:29:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-A-9 Lab Sample ID: 180-105108-9  
 Client ID: HD-COD-SW-26-0/1-0  
 Operator ID: 034635 ALS Bottle#: 9 Worklist Smp#: 9  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

76 Toluene, CAS: 108-88-3

Processing Results



RT	Mass	Response	Amount
9.07	91.00	5108	0.313015
9.06	92.00	1388	
9.08	65.00	314	

Reviewer: journeyp, 04-May-2020 13:20:59  
 Audit Action: Marked Compound Undetected

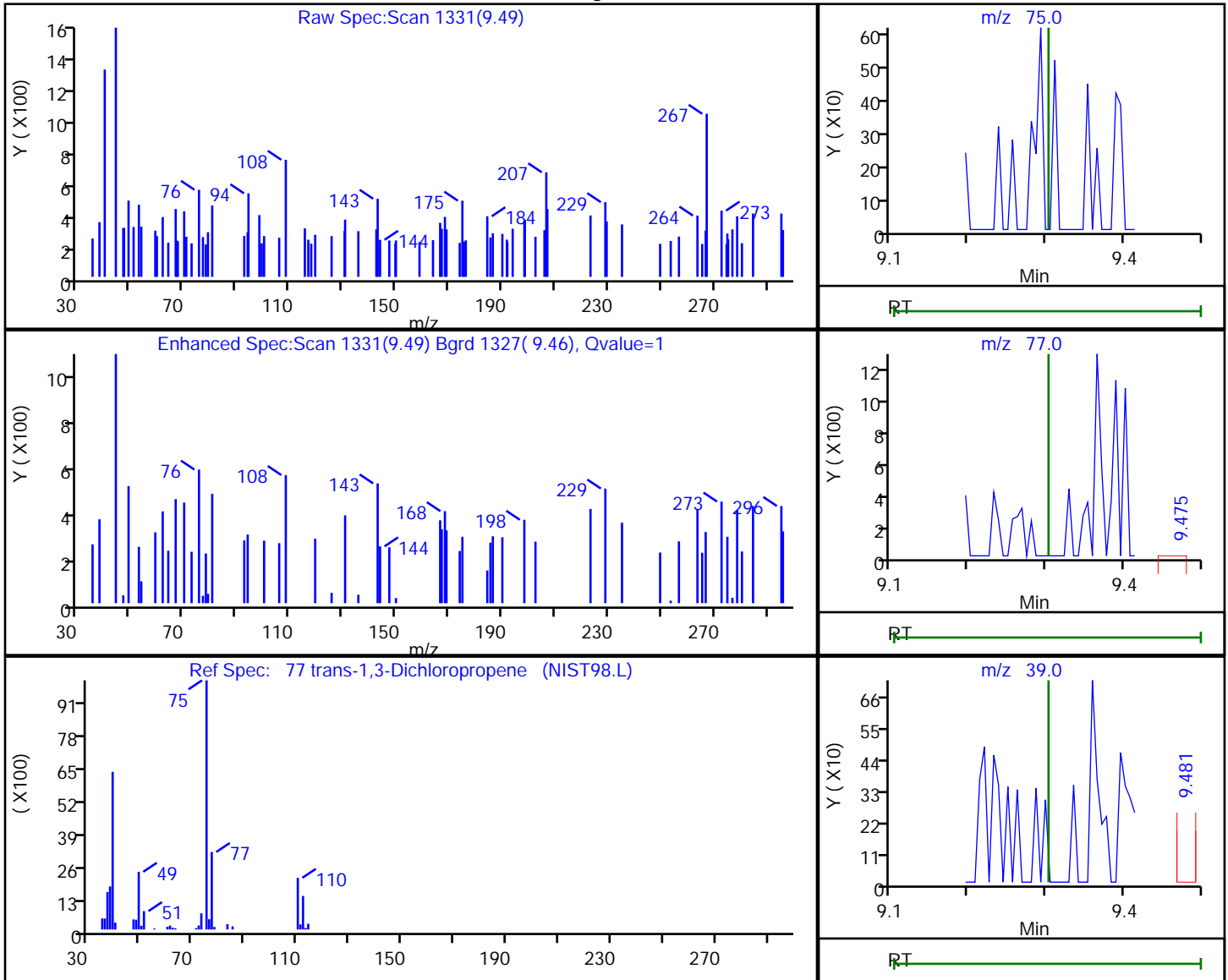
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050409.D  
Injection Date: 04-May-2020 11:29:30 Instrument ID: CHHP5  
Lims ID: 180-105108-A-9 Lab Sample ID: 180-105108-9  
Client ID: HD-COD-SW-26-0/1-0  
Operator ID: 034635 ALS Bottle#: 9 Worklist Smp#: 9  
Purge Vol: 5.000 mL Dil. Factor: 1.0000  
Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
Column: DB-624 (0.18 mm) Detector: MS SCAN

77 trans-1,3-Dichloropropene, CAS: 10061-02-6

Processing Results



RT	Mass	Response	Amount
9.49	75.00	469	0.087424
9.48	77.00	566	
9.48	39.00	122	

Reviewer: journeyp, 04-May-2020 13:21:03  
Audit Action: Marked Compound Undetected

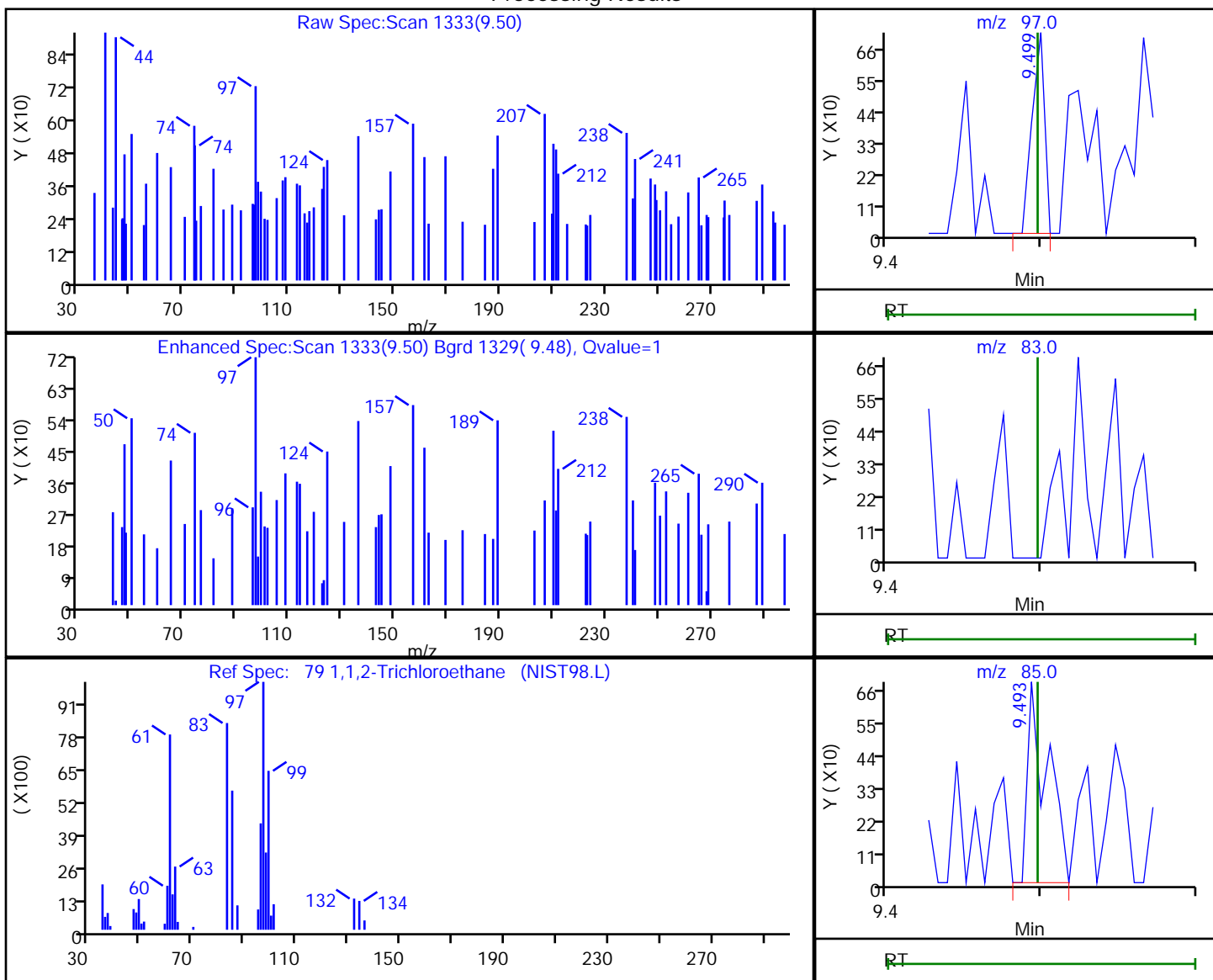
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050409.D  
 Injection Date: 04-May-2020 11:29:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-A-9 Lab Sample ID: 180-105108-9  
 Client ID: HD-COD-SW-26-0/1-0  
 Operator ID: 034635 ALS Bottle#: 9 Worklist Smp#: 9  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

79 1,1,2-Trichloroethane, CAS: 79-00-5

Processing Results



RT	Mass	Response	Amount
9.50	97.00	404	0.106509
9.50	83.00	0	
9.49	85.00	615	

Reviewer: journept, 04-May-2020 13:21:04  
 Audit Action: Marked Compound Undetected

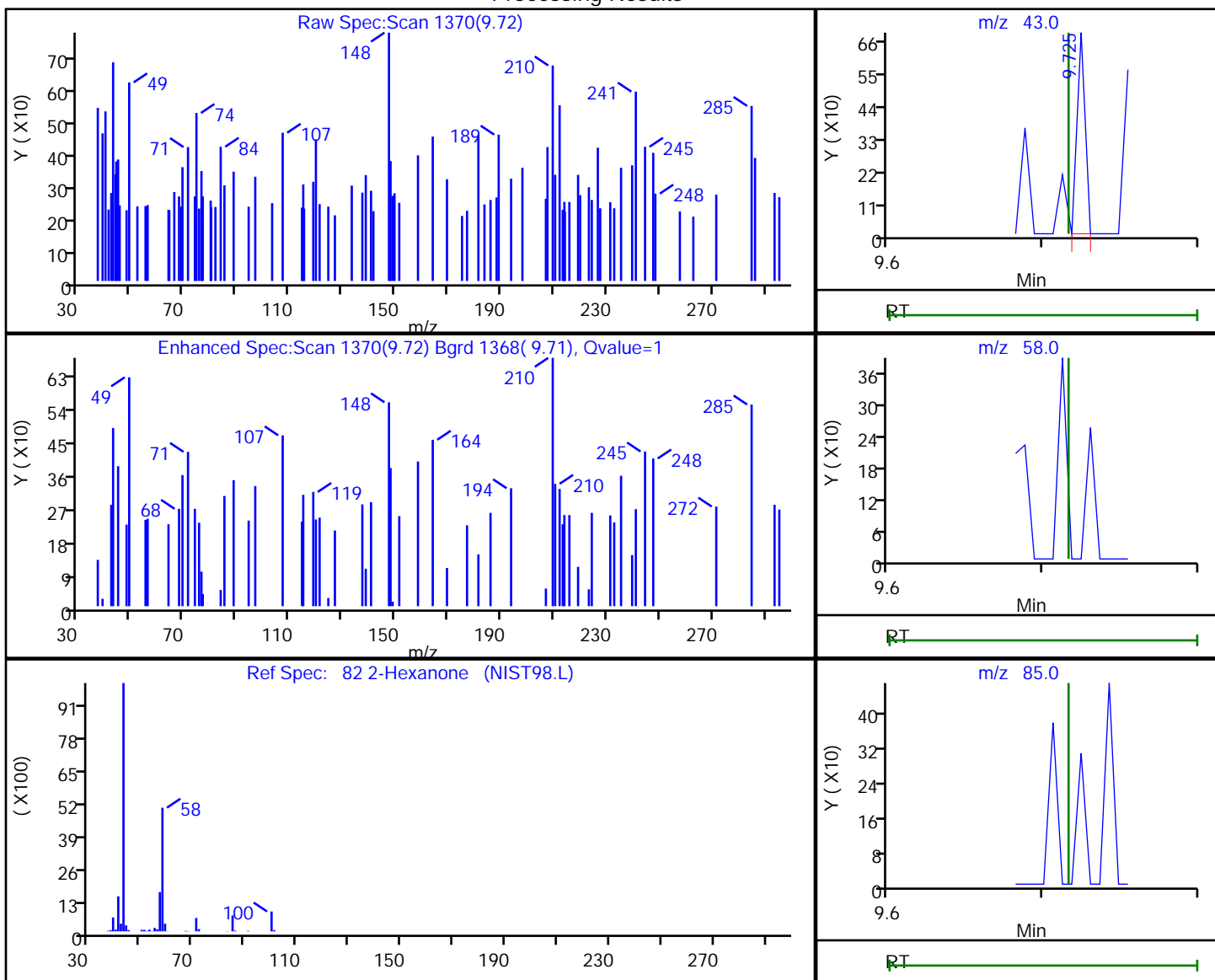
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050409.D  
 Injection Date: 04-May-2020 11:29:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-A-9 Lab Sample ID: 180-105108-9  
 Client ID: HD-COD-SW-26-0/1-0  
 Operator ID: 034635 ALS Bottle#: 9 Worklist Smp#: 9  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

82 2-Hexanone, CAS: 591-78-6

Processing Results



RT	Mass	Response	Amount
9.72	43.00	250	14.084733
9.72	58.00	0	
9.72	85.00	0	

Reviewer: journeyp, 04-May-2020 13:21:18  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

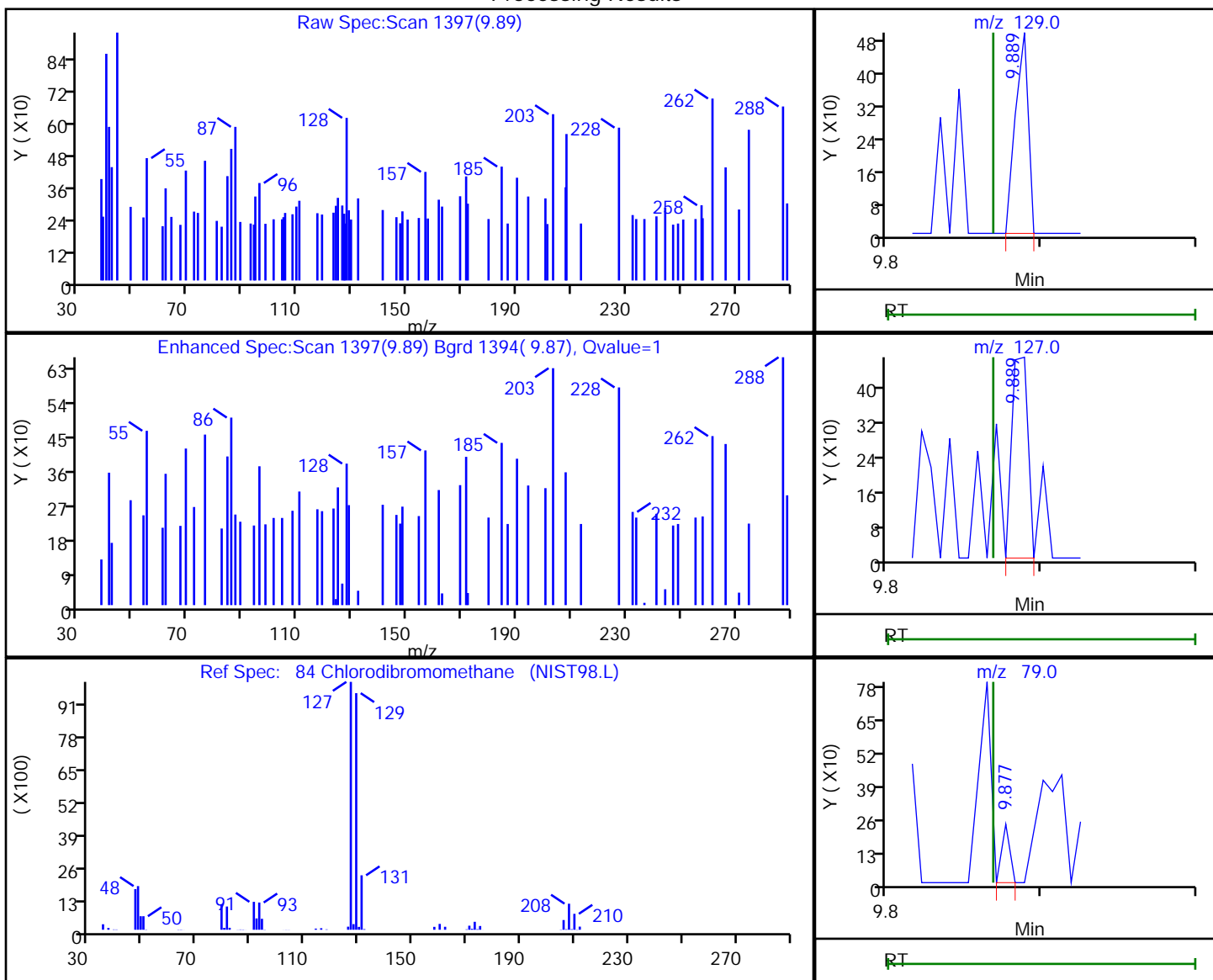


Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050409.D  
 Injection Date: 04-May-2020 11:29:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-A-9 Lab Sample ID: 180-105108-9  
 Client ID: HD-COD-SW-26-0/1-0  
 Operator ID: 034635 ALS Bottle#: 9 Worklist Smp#: 9  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

84 Chlorodibromomethane, CAS: 124-48-1

Processing Results



RT	Mass	Response	Amount
9.89	129.00	287	0.089385
9.89	127.00	339	
9.88	79.00	84	

Reviewer: journept, 04-May-2020 13:21:18  
 Audit Action: Marked Compound Undetected

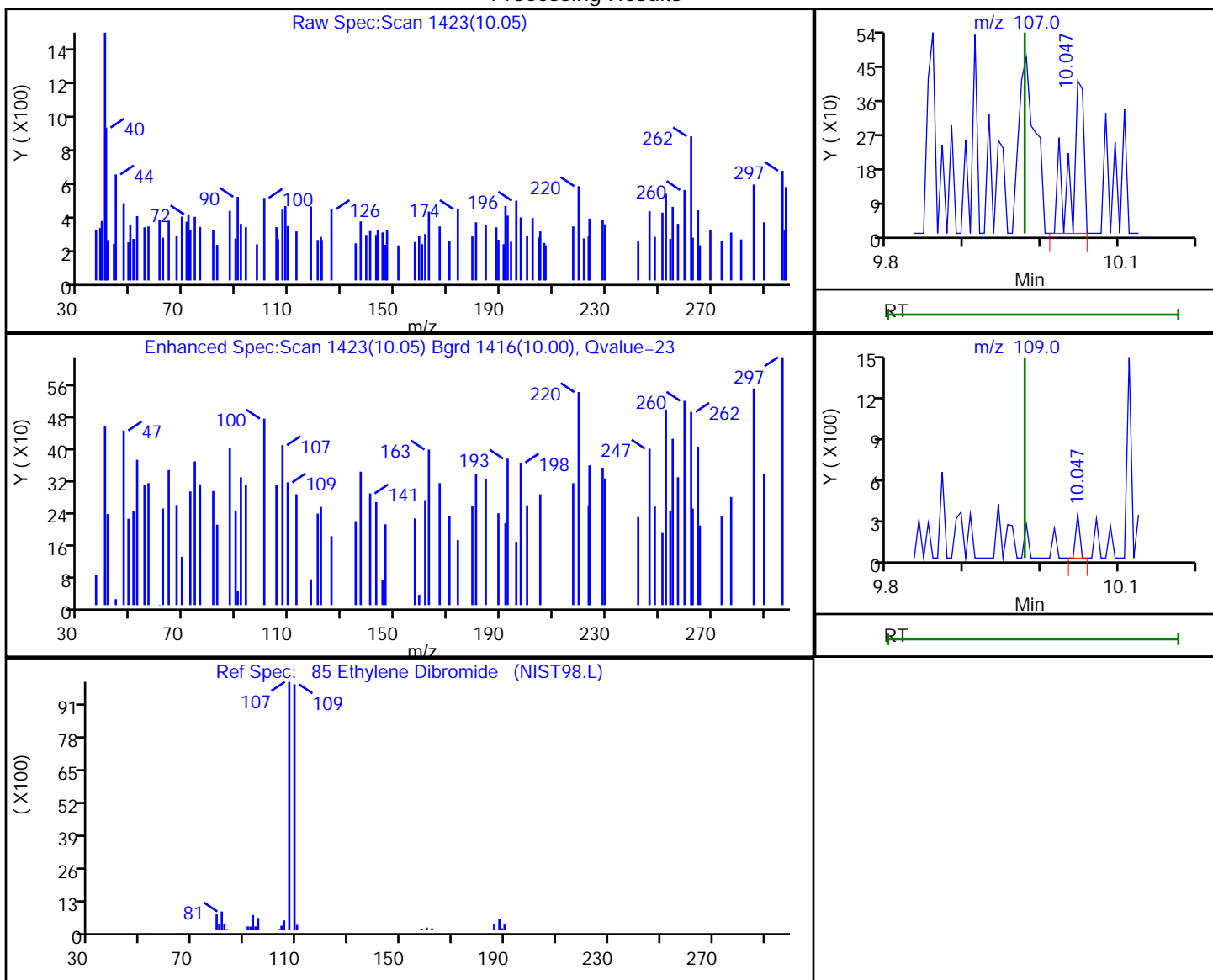
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050409.D  
 Injection Date: 04-May-2020 11:29:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-A-9 Lab Sample ID: 180-105108-9  
 Client ID: HD-COD-SW-26-0/1-0  
 Operator ID: 034635 ALS Bottle#: 9 Worklist Smp#: 9  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

85 Ethylene Dibromide, CAS: 106-93-4

Processing Results



RT	Mass	Response	Amount
10.05	107.00	456	0.128507
10.05	109.00	113	

Reviewer: journetp, 04-May-2020 13:21:18  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050409.D

Injection Date: 04-May-2020 11:29:30

Instrument ID: CHHP5

Lims ID: 180-105108-A-9

Lab Sample ID: 180-105108-9

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

Operator ID: 034635

ALS Bottle#: 9 Worklist Smp#: 9

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

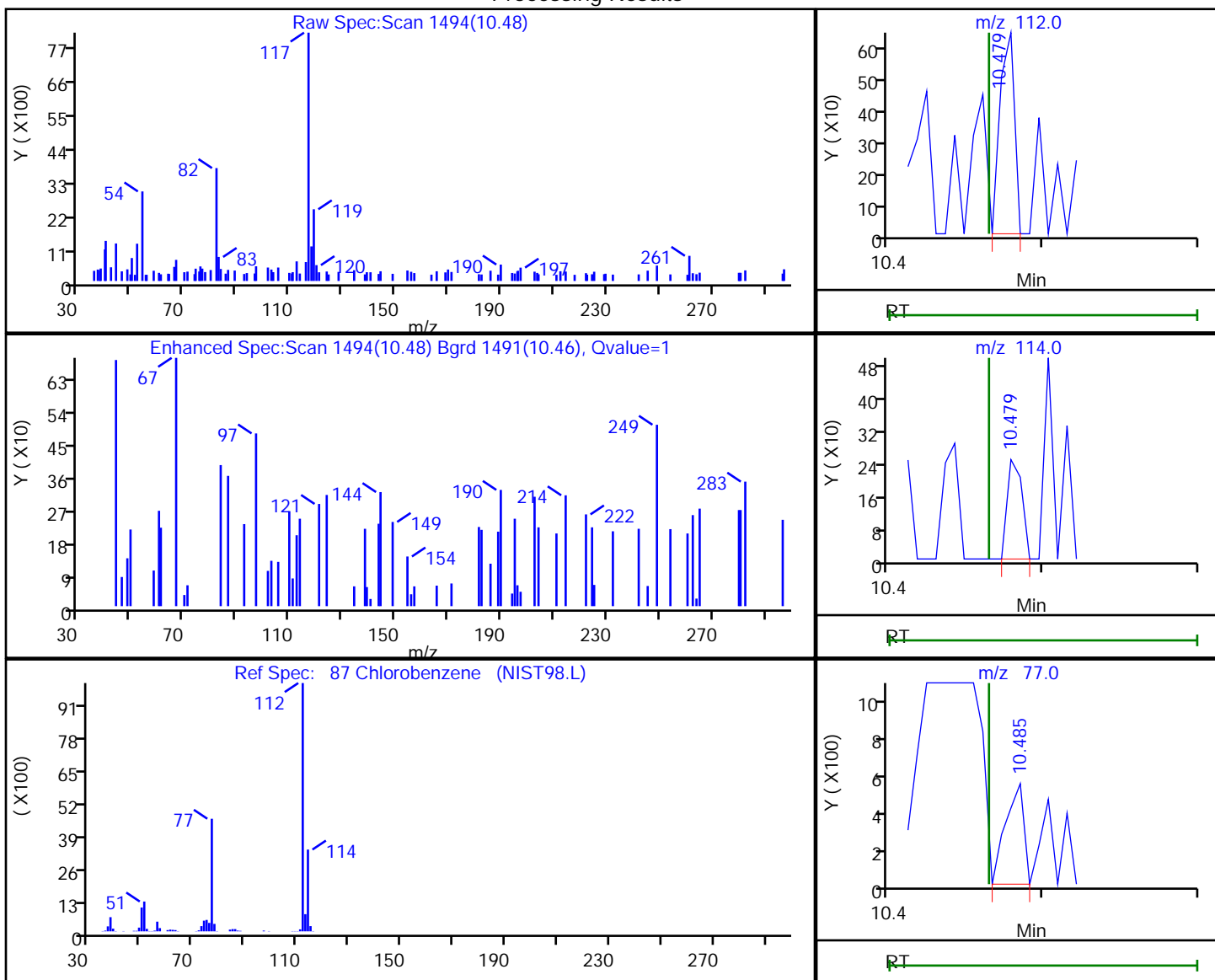
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

87 Chlorobenzene, CAS: 108-90-7

Processing Results



RT	Mass	Response	Amount
10.48	112.00	417	0.039734
10.48	114.00	162	
10.48	77.00	439	

Reviewer: journeyp, 04-May-2020 13:21:18

Audit Action: Marked Compound Undetected

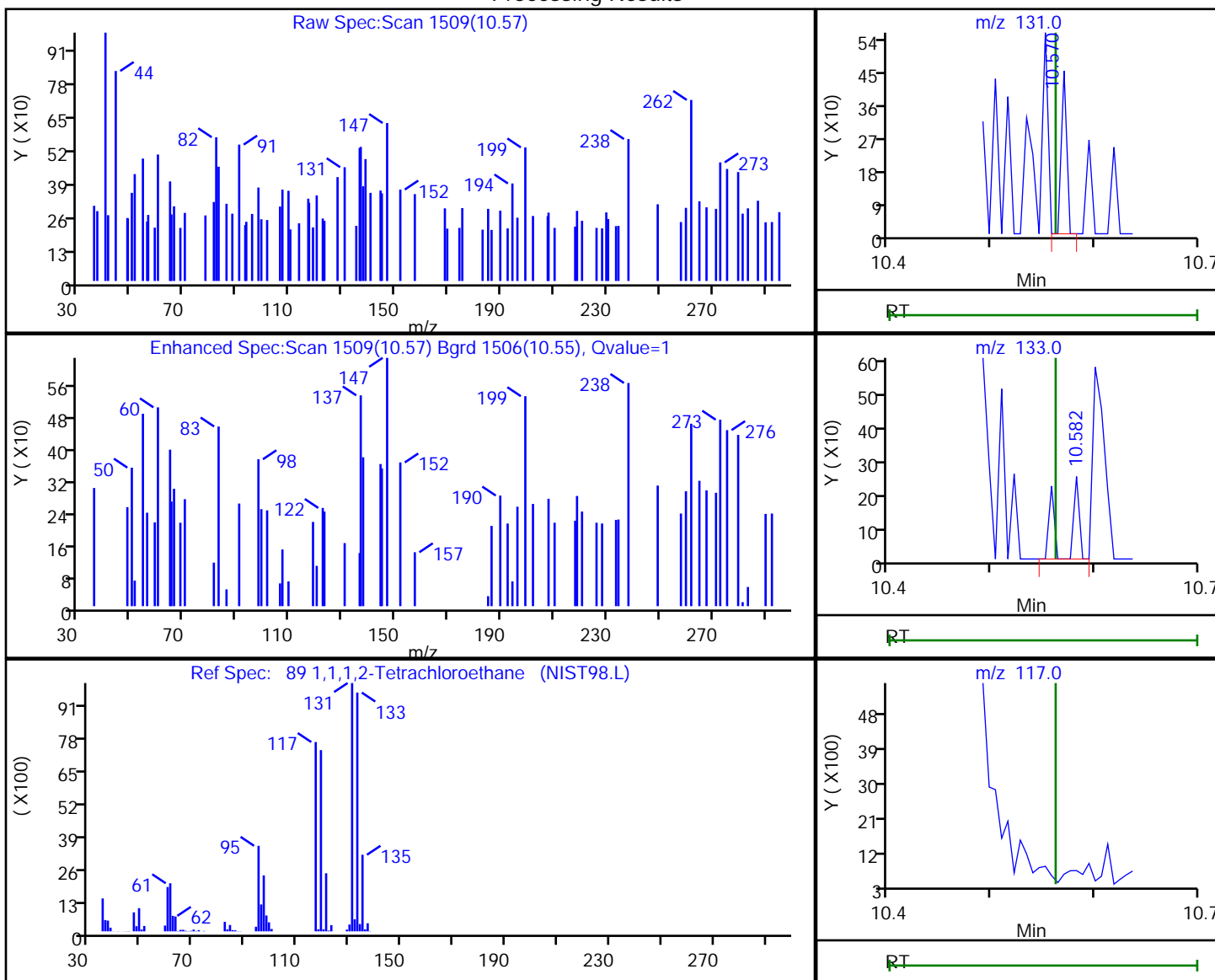
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050409.D  
 Injection Date: 04-May-2020 11:29:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-A-9 Lab Sample ID: 180-105108-9  
 Client ID: HD-COD-SW-26-0/1-0  
 Operator ID: 034635 ALS Bottle#: 9 Worklist Smp#: 9  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

89 1,1,1,2-Tetrachloroethane, CAS: 630-20-6

Processing Results



RT	Mass	Response	Amount
10.57	131.00	163	0.047829
10.58	133.00	172	
10.56	117.00	0	

Reviewer: journeyp, 04-May-2020 13:21:18  
 Audit Action: Marked Compound Undetected

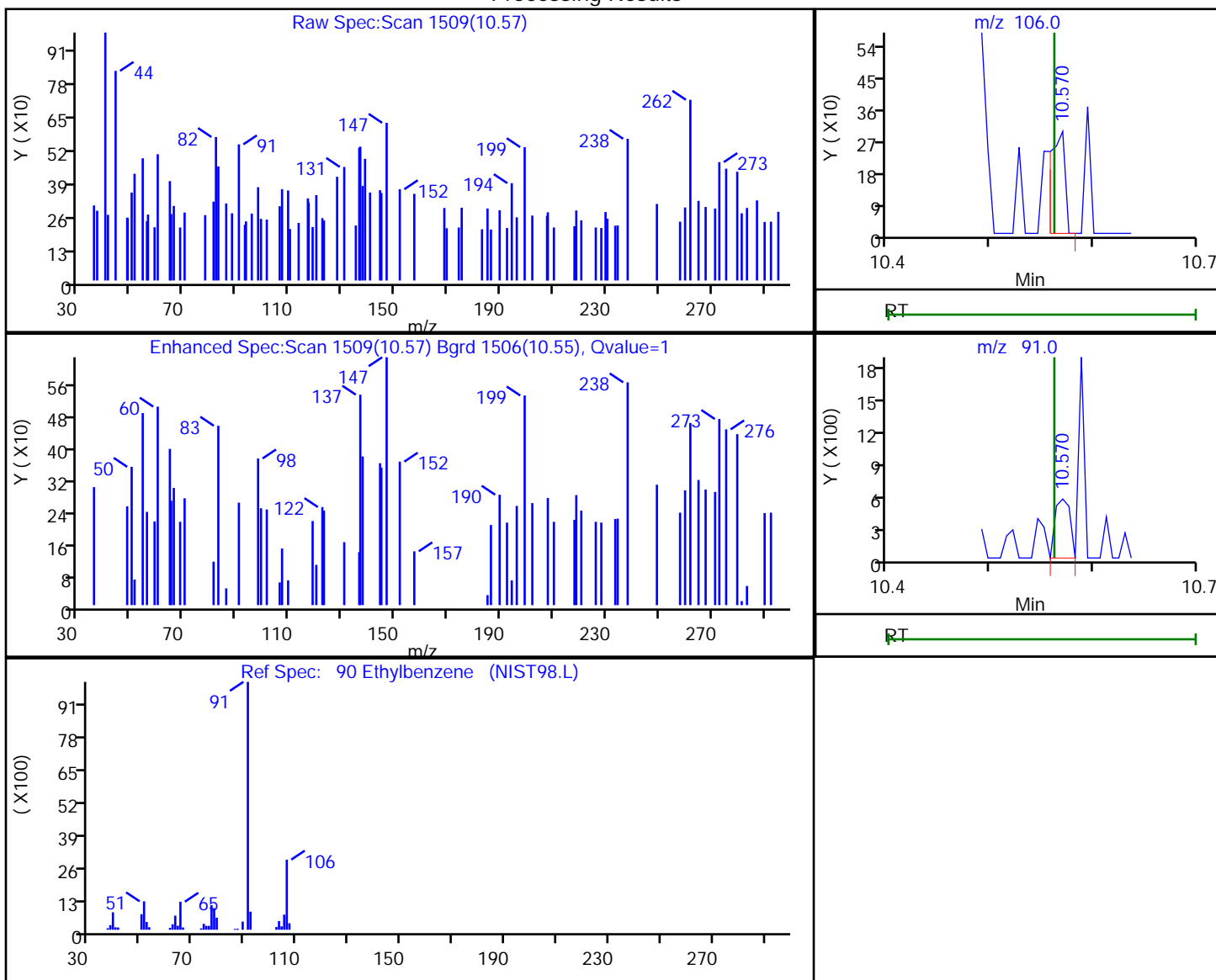
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050409.D  
 Injection Date: 04-May-2020 11:29:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-A-9 Lab Sample ID: 180-105108-9  
 Client ID: HD-COD-SW-26-0/1-0  
 Operator ID: 034635 ALS Bottle#: 9 Worklist Smp#: 9  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

90 Ethylbenzene, CAS: 100-41-4

Processing Results



RT	Mass	Response	Amount
10.57	106.00	284	0.052280
10.57	91.00	541	

Reviewer: journetp, 04-May-2020 13:21:18  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050409.D

Injection Date: 04-May-2020 11:29:30

Instrument ID: CHHP5

Lims ID: 180-105108-A-9

Lab Sample ID: 180-105108-9

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

Operator ID: 034635

ALS Bottle#: 9 Worklist Smp#: 9

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

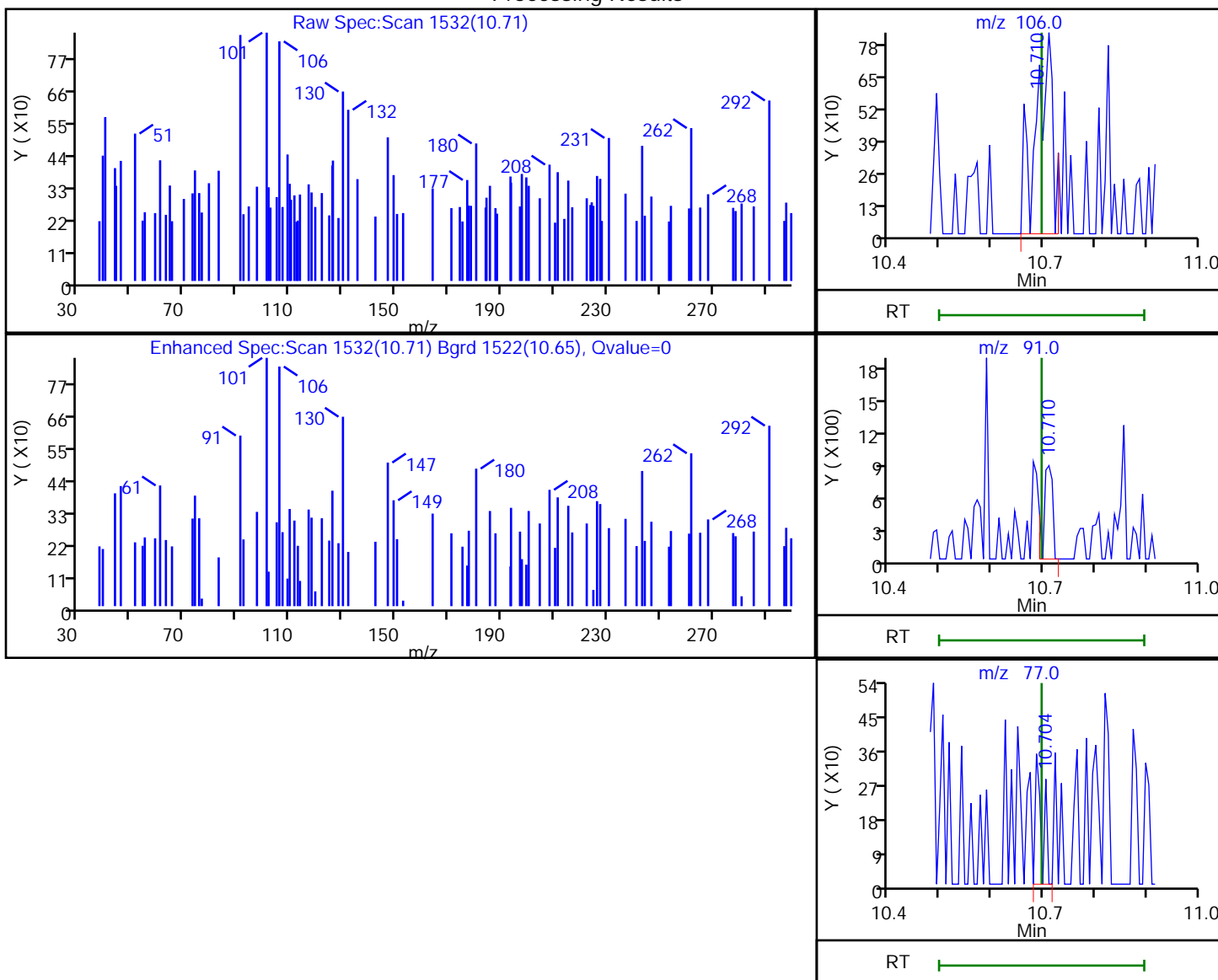
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

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

Processing Results



RT	Mass	Response	Amount
10.71	106.00	1886	0.278487
10.71	91.00	1015	
10.70	77.00	315	

Reviewer: journetp, 04-May-2020 13:21:18

Audit Action: Marked Compound Undetected

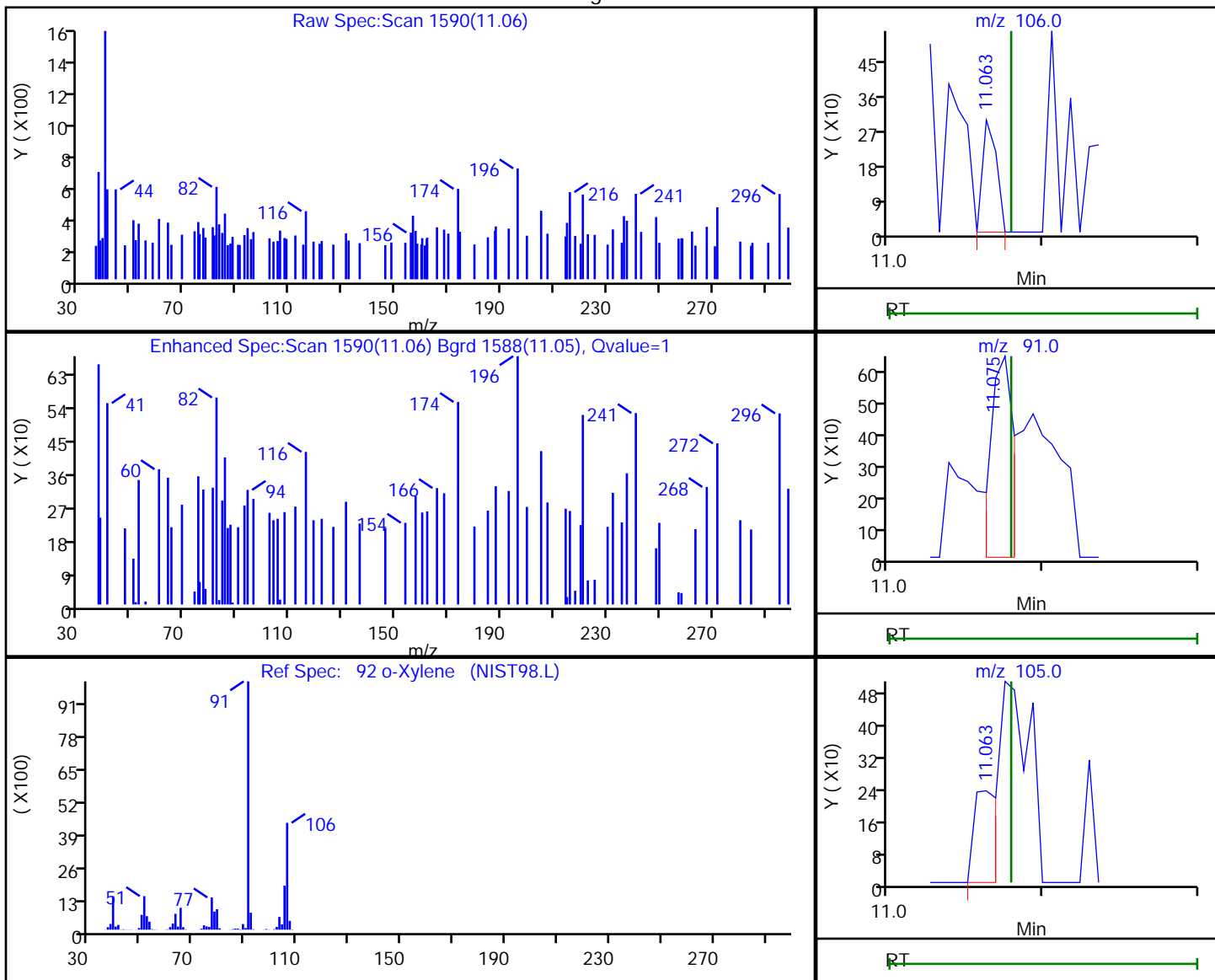
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050409.D  
 Injection Date: 04-May-2020 11:29:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-A-9 Lab Sample ID: 180-105108-9  
 Client ID: HD-COD-SW-26-0/1-0  
 Operator ID: 034635 ALS Bottle#: 9 Worklist Smp#: 9  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

92 o-Xylene, CAS: 95-47-6

Processing Results



RT	Mass	Response	Amount
11.06	106.00	185	0.029266
11.08	91.00	665	
11.06	105.00	246	

Reviewer: journeyp, 04-May-2020 13:21:18  
 Audit Action: Marked Compound Undetected

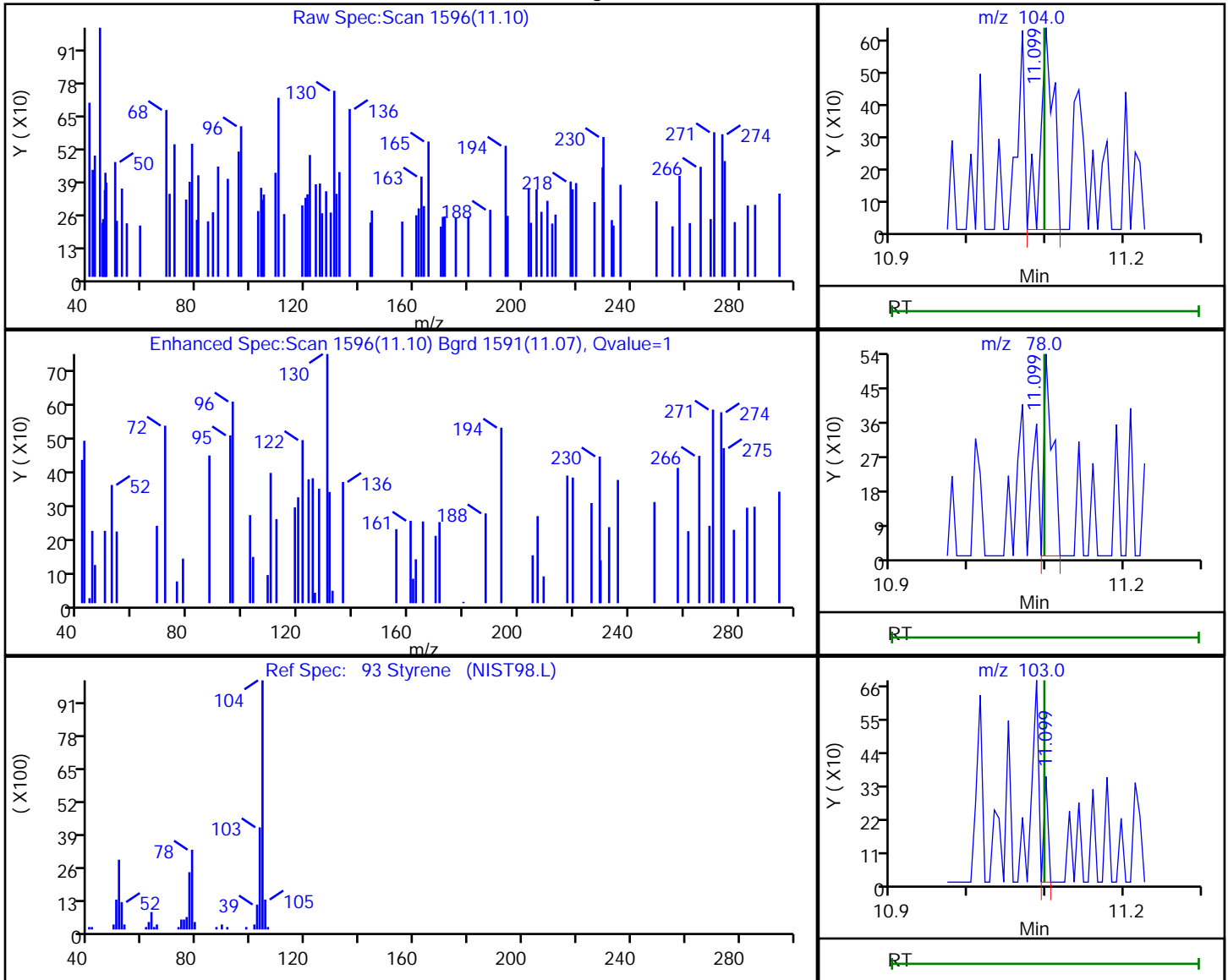
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050409.D  
Injection Date: 04-May-2020 11:29:30 Instrument ID: CHHP5  
Lims ID: 180-105108-A-9 Lab Sample ID: 180-105108-9  
Client ID: HD-COD-SW-26-0/1-0  
Operator ID: 034635 ALS Bottle#: 9 Worklist Smp#: 9  
Purge Vol: 5.000 mL Dil. Factor: 1.0000  
Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
Column: DB-624 (0.18 mm) Detector: MS SCAN

93 Styrene, CAS: 100-42-5

Processing Results



RT	Mass	Response	Amount
11.10	104.00	742	0.068456
11.10	78.00	407	
11.10	103.00	130	

Reviewer: journept, 04-May-2020 13:21:18  
Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

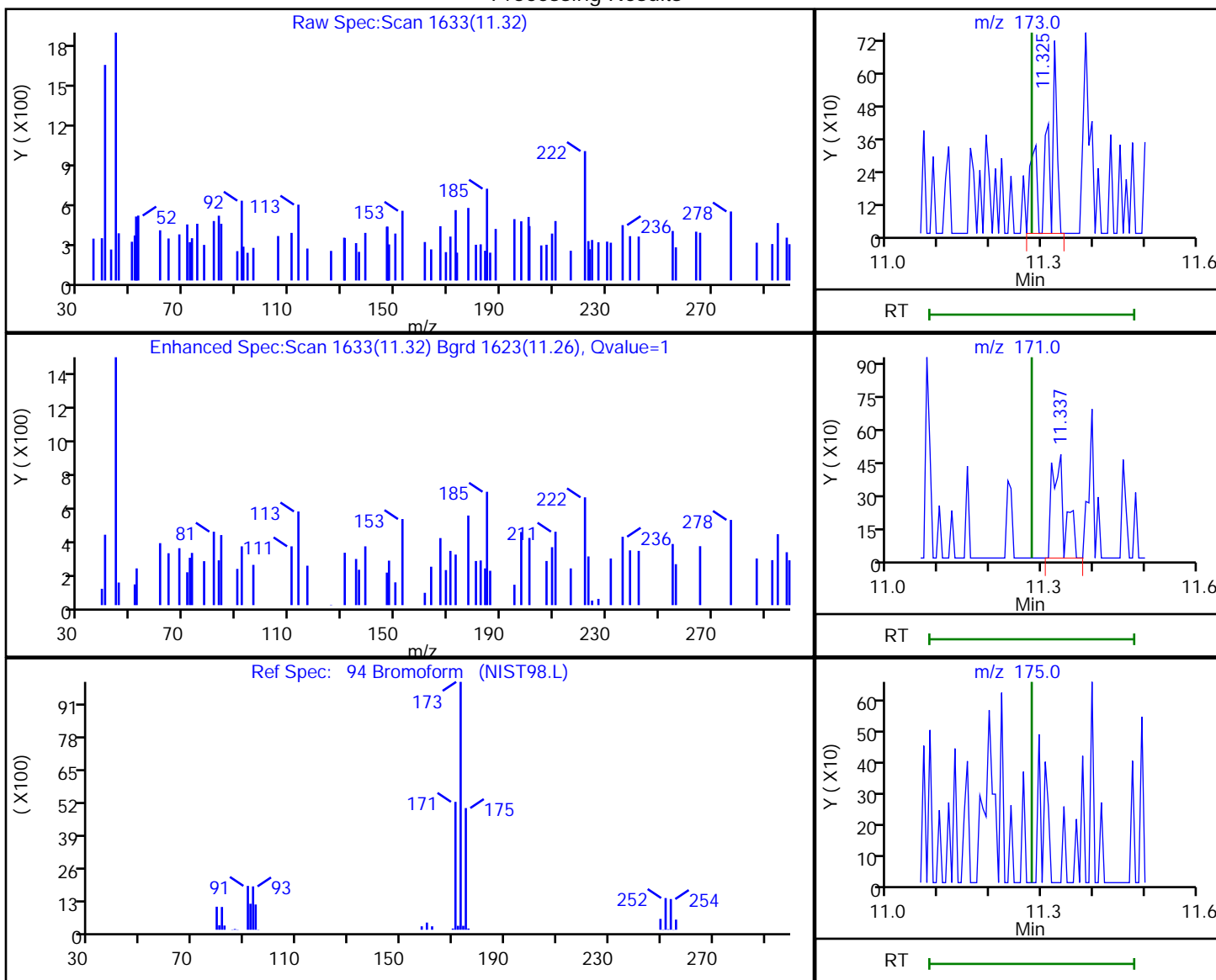


Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050409.D  
 Injection Date: 04-May-2020 11:29:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-A-9 Lab Sample ID: 180-105108-9  
 Client ID: HD-COD-SW-26-0/1-0  
 Operator ID: 034635 ALS Bottle#: 9 Worklist Smp#: 9  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

94 Bromoform, CAS: 75-25-2

Processing Results



RT	Mass	Response	Amount
11.32	173.00	964	0.635087
11.34	171.00	824	
11.28	175.00	0	

Reviewer: journeyp, 04-May-2020 13:21:18  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050409.D

Injection Date: 04-May-2020 11:29:30

Instrument ID: CHHP5

Lims ID: 180-105108-A-9

Lab Sample ID: 180-105108-9

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

Operator ID: 034635

ALS Bottle#: 9 Worklist Smp#: 9

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

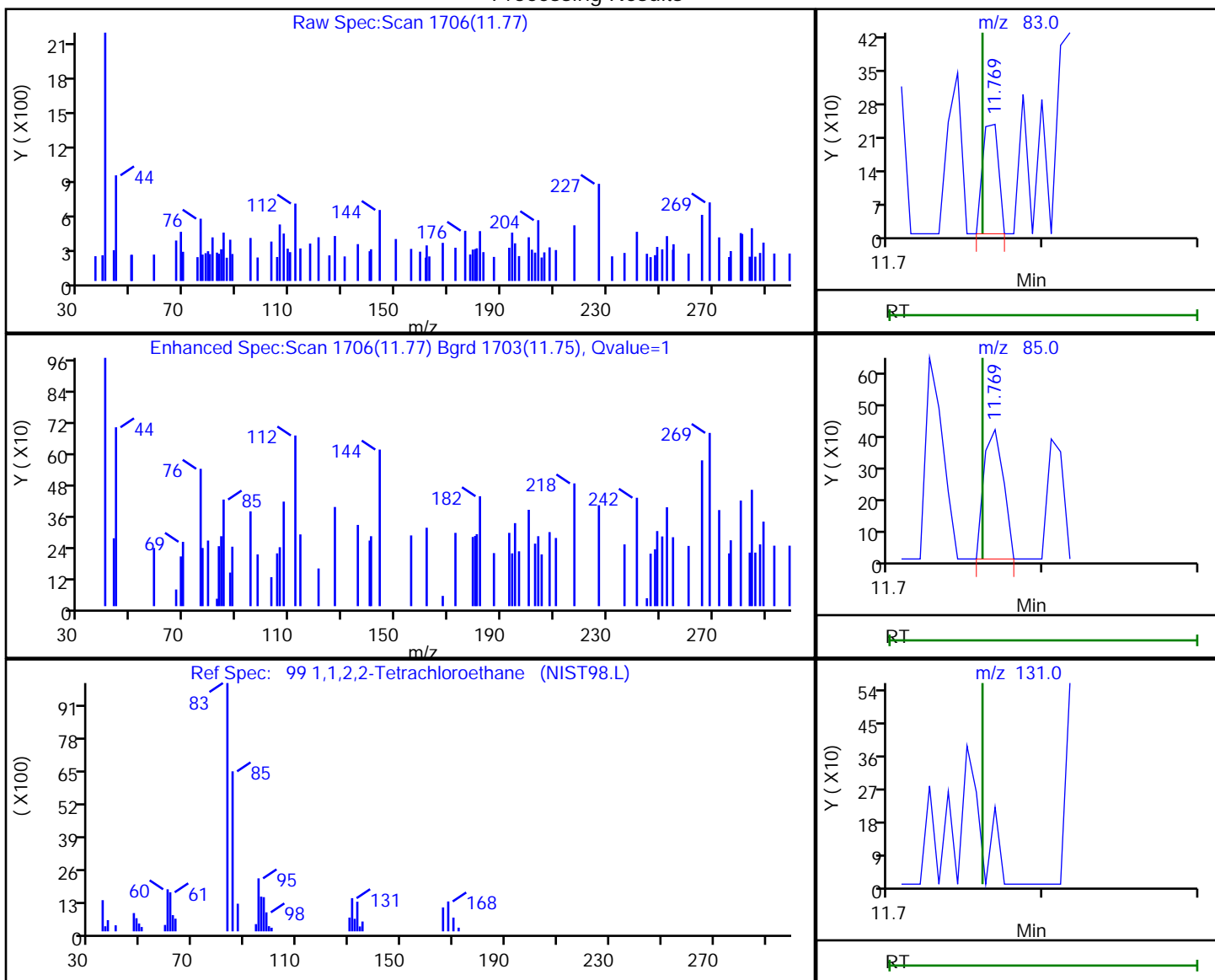
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

99 1,1,2,2-Tetrachloroethane, CAS: 79-34-5

Processing Results



RT	Mass	Response	Amount
11.77	83.00	169	0.043155
11.77	85.00	367	
11.76	131.00	0	

Reviewer: journeyp, 04-May-2020 13:21:18

Audit Action: Marked Compound Undetected

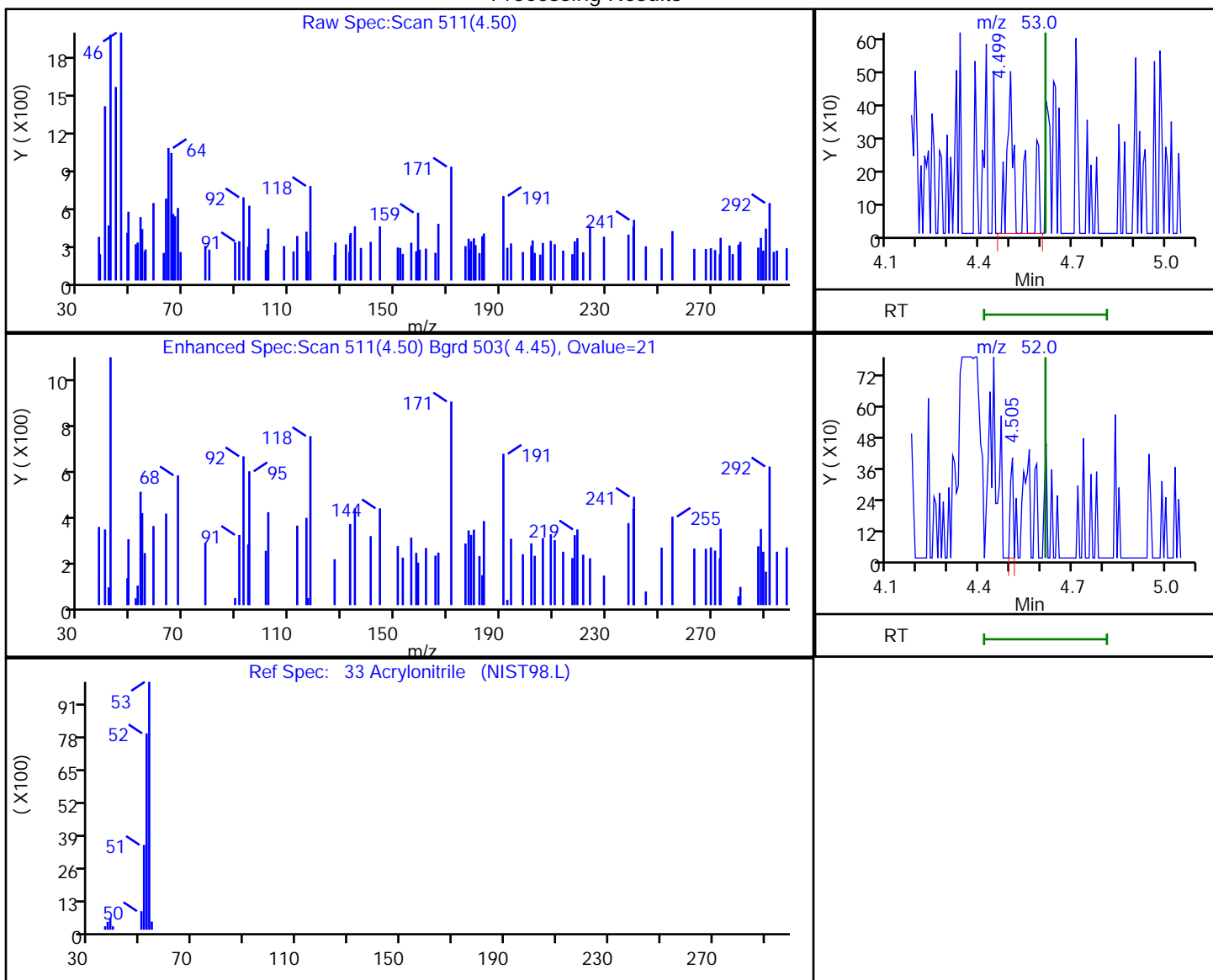
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050409.D  
 Injection Date: 04-May-2020 11:29:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-A-9 Lab Sample ID: 180-105108-9  
 Client ID: HD-COD-SW-26-0/1-0  
 Operator ID: 034635 ALS Bottle#: 9 Worklist Smp#: 9  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

33 Acrylonitrile, CAS: 107-13-1

Processing Results



RT	Mass	Response	Amount
4.50	53.00	1023	0.965665
4.50	52.00	253	

Reviewer: journtp, 04-May-2020 13:20:50  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: HD-COD-SW-27-0/1-0 Lab Sample ID: 180-105108-10  
 Matrix: Water Lab File ID: 5050417.D  
 Analysis Method: EPA 8260C Date Collected: 04/28/2020 11:35  
 Sample wt/vol: 5 (mL) Date Analyzed: 05/04/2020 14:45  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-624 ID: 0.18 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 314475 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	ND	^c	1.0	0.90
75-01-4	Vinyl chloride	ND		1.0	0.40
74-83-9	Bromomethane	ND	^c *	1.0	0.89
75-00-3	Chloroethane	ND		1.0	0.90
75-35-4	1,1-Dichloroethene	ND		1.0	0.55
67-64-1	Acetone	5.1		5.0	3.4
75-15-0	Carbon disulfide	ND		1.0	0.88
75-09-2	Methylene Chloride	ND		1.0	0.89
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.67
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.59
75-34-3	1,1-Dichloroethane	ND		1.0	0.31
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.71
74-97-5	Bromochloromethane	ND		1.0	0.63
78-93-3	2-Butanone (MEK)	ND	^c	5.0	2.6
67-66-3	Chloroform	ND		1.0	0.60
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.60
56-23-5	Carbon tetrachloride	ND		1.0	0.88
71-43-2	Benzene	ND		1.0	0.60
107-06-2	1,2-Dichloroethane	ND		1.0	0.57
79-01-6	Trichloroethene	ND		1.0	0.69
78-87-5	1,2-Dichloropropane	ND		1.0	0.66
75-27-4	Bromodichloromethane	ND		1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	3.1
108-88-3	Toluene	ND		1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.58
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.45
127-18-4	Tetrachloroethene	ND		1.0	0.47
591-78-6	2-Hexanone	ND		5.0	3.3
124-48-1	Dibromochloromethane	ND		1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	ND		1.0	0.50
108-90-7	Chlorobenzene	ND		1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.57
100-41-4	Ethylbenzene	ND		1.0	0.51
1330-20-7	Xylenes, Total	ND		2.0	0.89
100-42-5	Styrene	ND		1.0	0.47

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: HD-COD-SW-27-0/1-0 Lab Sample ID: 180-105108-10  
 Matrix: Water Lab File ID: 5050417.D  
 Analysis Method: EPA 8260C Date Collected: 04/28/2020 11:35  
 Sample wt/vol: 5 (mL) Date Analyzed: 05/04/2020 14:45  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-624 ID: 0.18 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 314475 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	ND	^c	1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	ND	^c	1.0	0.60
107-13-1	Acrylonitrile	ND		20	7.8

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		62-146
2037-26-5	Toluene-d8 (Surr)	98		75-120
460-00-4	4-Bromofluorobenzene (Surr)	83		64-120
1868-53-7	Dibromofluoromethane (Surr)	104		71-132

Eurofins TestAmerica, Pittsburgh  
Target Compound Quantitation Report

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050417.D  
 Lims ID: 180-105108-B-10  
 Client ID: HD-COD-SW-27-0/1-0  
 Sample Type: Client  
 Inject. Date: 04-May-2020 14:45:30 ALS Bottle#: 17 Worklist Smp#: 17  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: 180-0031789-017  
 Operator ID: 034635 Instrument ID: CHHP5  
 Method: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\MMSVOA\_LL\_CHHP5.m  
 Limit Group: VOA 8260C\_D ICAL  
 Last Update: 04-May-2020 13:53:44 Calib Date: 03-Apr-2020 19:09:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP5\20200403-31442.b\5040310.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: CTX0327

First Level Reviewer: journetp

Date: 04-May-2020 15:14:54

Compound	Sig	RT (min.)	Exp RT (min.)	Diff RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.362	4.363	-0.001	0	239923	1000.0	
* 2 Fluorobenzene (IS)	96	7.343	7.344	-0.002	99	563131	50.0	
* 3 Chlorobenzene-d5	119	10.439	10.434	0.005	85	146642	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.775	12.776	-0.001	95	206895	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.625	6.626	-0.001	92	167226	52.0	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.996	6.991	0.005	0	219017	48.0	
\$ 7 Toluene-d8 (Surr)	98	8.985	8.986	-0.001	93	581462	49.0	
\$ 8 4-Bromofluorobenzene (Surr	95	11.619	11.614	0.005	88	185885	41.4	
12 Chloromethane	50		1.844				ND	U
13 Vinyl chloride	62		1.966				ND	U
15 Bromomethane	94		2.288				ND	U
16 Chloroethane	64		2.416				ND	U
22 1,1-Dichloroethene	96		3.414				ND	
24 Acetone	43	3.516	3.511	0.005	94	49716	25.5	
26 Carbon disulfide	76		3.706				ND	U
31 Methylene Chloride	84		4.217				ND	U
33 Acrylonitrile	53		4.612				ND	U
34 trans-1,2-Dichloroethene	96		4.631				ND	U
35 Methyl tert-butyl ether	73		4.655				ND	U
37 1,1-Dichloroethane	63		5.263				ND	U
45 cis-1,2-Dichloroethene	96		6.018				ND	U
46 2-Butanone (MEK)	43		6.036				ND	U
49 Chlorobromomethane	128		6.297				ND	U
52 Chloroform	83		6.443				ND	U
53 1,1,1-Trichloroethane	97		6.602				ND	U
56 Carbon tetrachloride	117		6.766				ND	U
58 Benzene	78		7.003				ND	U
59 1,2-Dichloroethane	62		7.076				ND	U
64 Trichloroethene	130		7.727				ND	U
67 1,2-Dichloropropane	63		8.001				ND	U
71 Dichlorobromomethane	83		8.287				ND	U
74 cis-1,3-Dichloropropene	75		8.731				ND	U

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
75 4-Methyl-2-pentanone (MIBK	43		8.889				ND	U
76 Toluene	91		9.053				ND	U
77 trans-1,3-Dichloropropene	75		9.303				ND	U
79 1,1,2-Trichloroethane	97		9.497				ND	U
80 Tetrachloroethene	164		9.564				ND	U
82 2-Hexanone	43		9.716				ND	U
84 Chlorodibromomethane	129		9.868				ND	U
85 Ethylene Dibromide	107		9.978				ND	U
87 Chlorobenzene	112		10.465				ND	U
89 1,1,1,2-Tetrachloroethane	131		10.562				ND	U
90 Ethylbenzene	106		10.562				ND	U
91 m-Xylene & p-Xylene	106		10.696				ND	U
92 o-Xylene	106		11.079				ND	U
93 Styrene	104		11.097				ND	U
94 Bromoform	173		11.280				ND	U
99 1,1,2,2-Tetrachloroethane	83		11.760				ND	U
S 133 Xylenes, Total	106		1.000				ND	

**QC Flag Legend**

Review Flags

U - Marked Undetected

**Reagents:**

voaWI/SHP5\_00016

Amount Added: 5.00

Units: uL

Run Reagent

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050417.D

Injection Date: 04-May-2020 14:45:30

Instrument ID: CHHP5

Operator ID: 034635

Lims ID: 180-105108-B-10

Lab Sample ID: 180-105108-10

Worklist Smp#: 17

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

Purge Vol: 5.000 mL

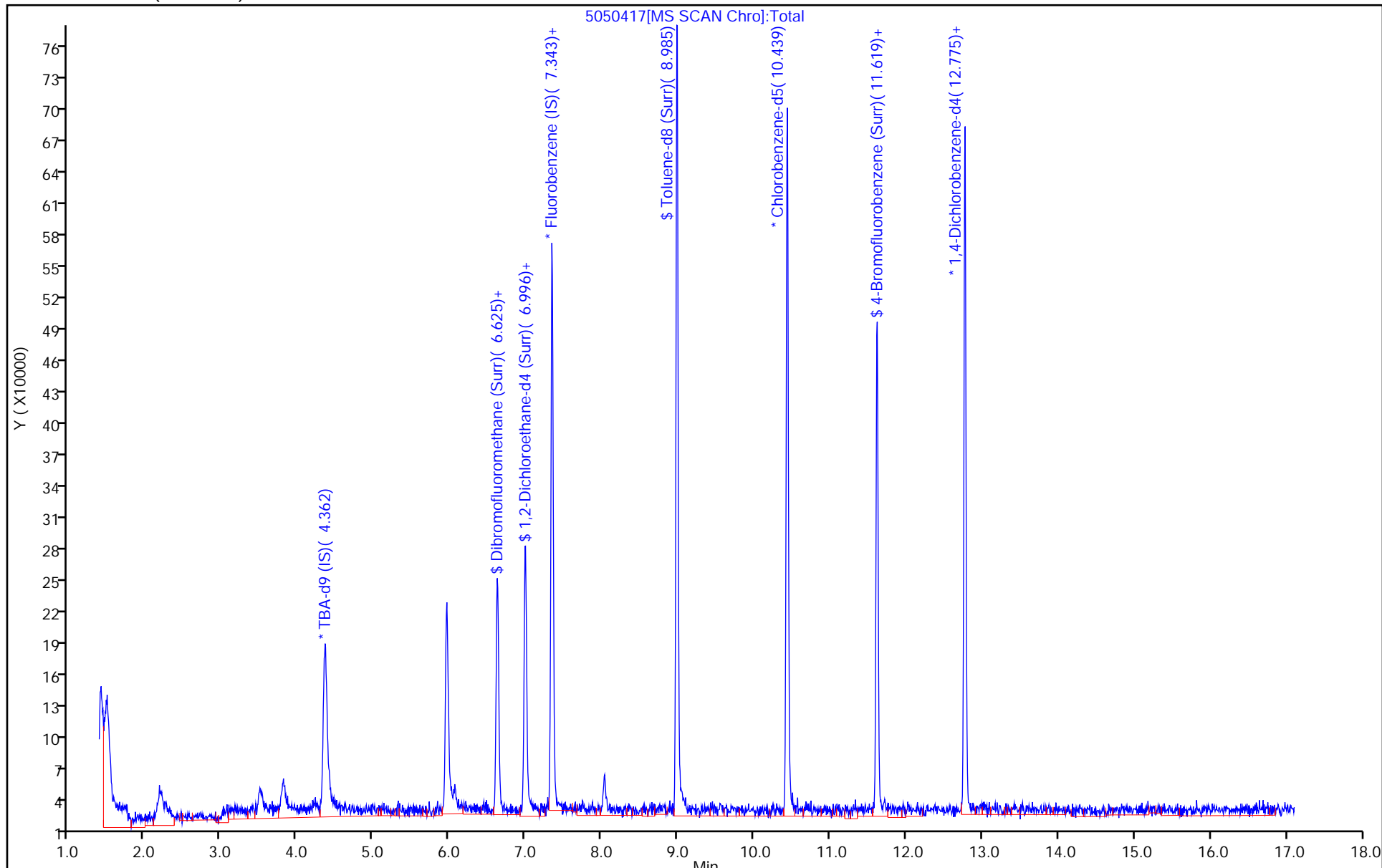
Dil. Factor: 1.0000

ALS Bottle#: 17

Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)





Eurofins TestAmerica, Pittsburgh  
Recovery Report

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050417.D  
 Lims ID: 180-105108-B-10  
 Client ID: HD-COD-SW-27-0/1-0  
 Sample Type: Client  
 Inject. Date: 04-May-2020 14:45:30 ALS Bottle#: 17 Worklist Smp#: 17  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: 180-0031789-017  
 Operator ID: 034635 Instrument ID: CHHP5  
 Method: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\MMSVOA\_LL\_CHHP5.m  
 Limit Group: VOA 8260C\_D ICAL  
 Last Update: 04-May-2020 13:53:44 Calib Date: 03-Apr-2020 19:09:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP5\20200403-31442.b\5040310.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: CTX0327

First Level Reviewer: journetp Date: 04-May-2020 15:14:54

Compound	Amount Added	Amount Recovered	% Rec.
\$ 5 Dibromofluoromethane (Surr)	50.0	52.0	104.09
\$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	48.0	96.07
\$ 7 Toluene-d8 (Surr)	50.0	49.0	97.97
\$ 8 4-Bromofluorobenzene (Surr)	50.0	41.4	82.86

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050417.D

Injection Date: 04-May-2020 14:45:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-10

Lab Sample ID: 180-105108-10

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

Operator ID: 034635

ALS Bottle#: 17

Worklist Smp#: 17

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

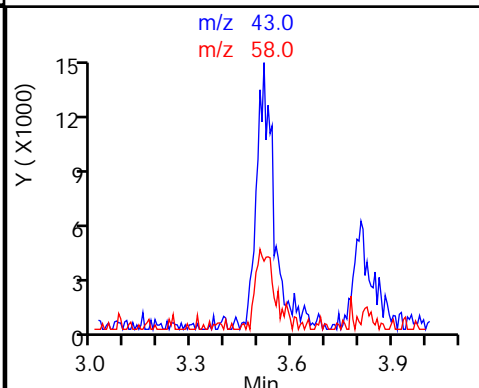
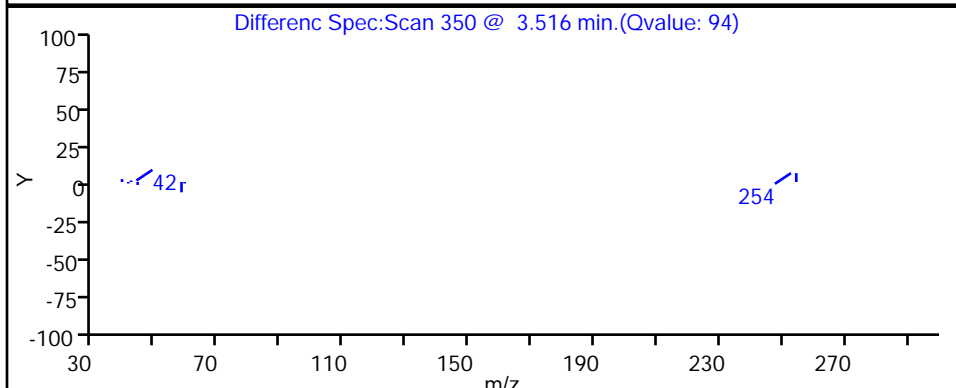
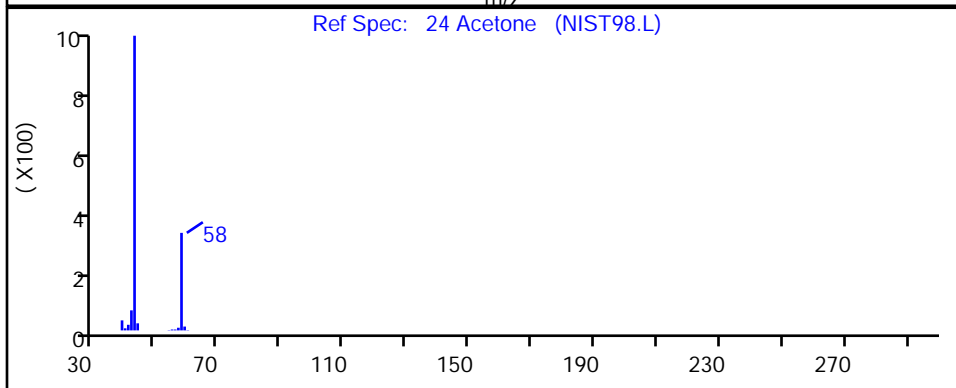
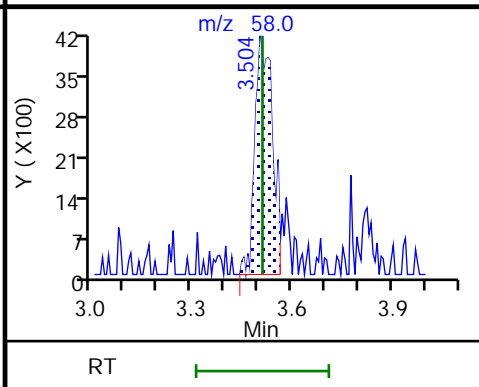
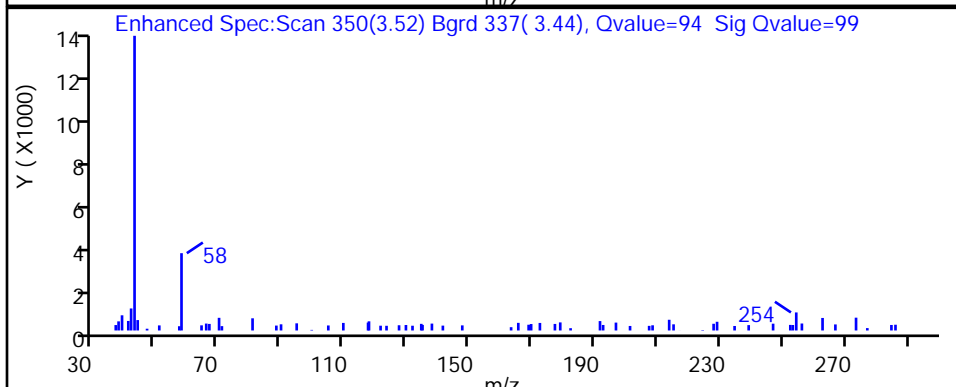
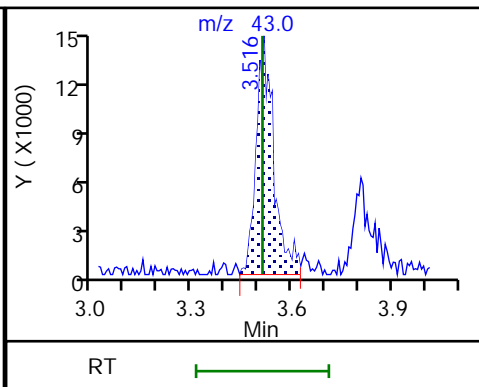
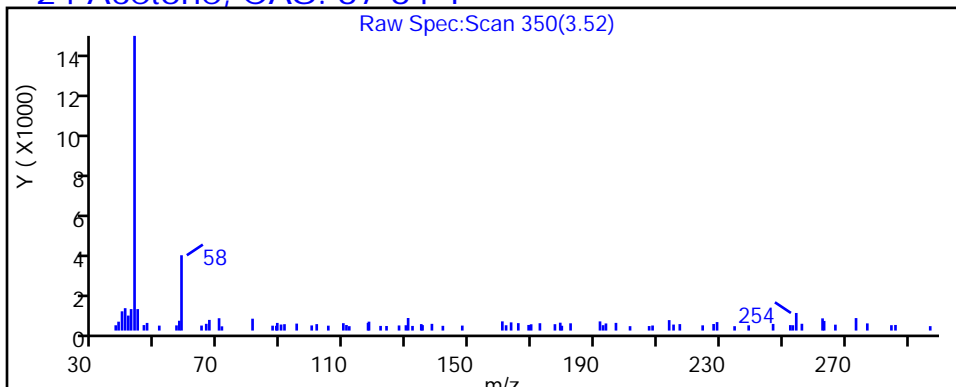
Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

24 Acetone, CAS: 67-64-1

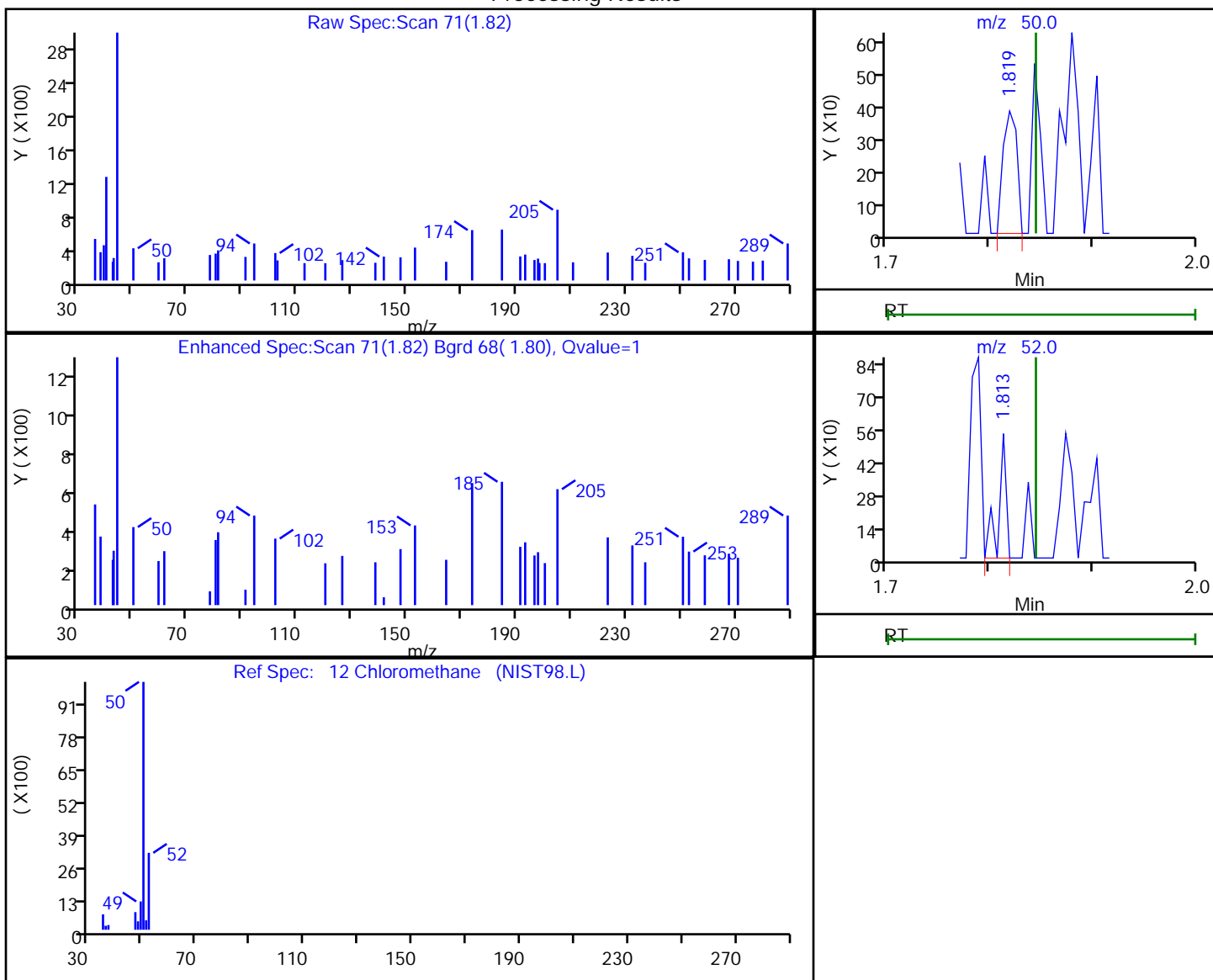


Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050417.D  
 Injection Date: 04-May-2020 14:45:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-10 Lab Sample ID: 180-105108-10  
 Client ID: HD-COD-SW-27-0/1-0  
 Operator ID: 034635 ALS Bottle#: 17 Worklist Smp#: 17  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

12 Chloromethane, CAS: 74-87-3

Processing Results



RT	Mass	Response	Amount
1.82	50.00	355	0.064622
1.81	52.00	274	

Reviewer: journtp, 04-May-2020 15:14:29  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050417.D

Injection Date: 04-May-2020 14:45:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-10

Lab Sample ID: 180-105108-10

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

Operator ID: 034635

ALS Bottle#: 17 Worklist Smp#: 17

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

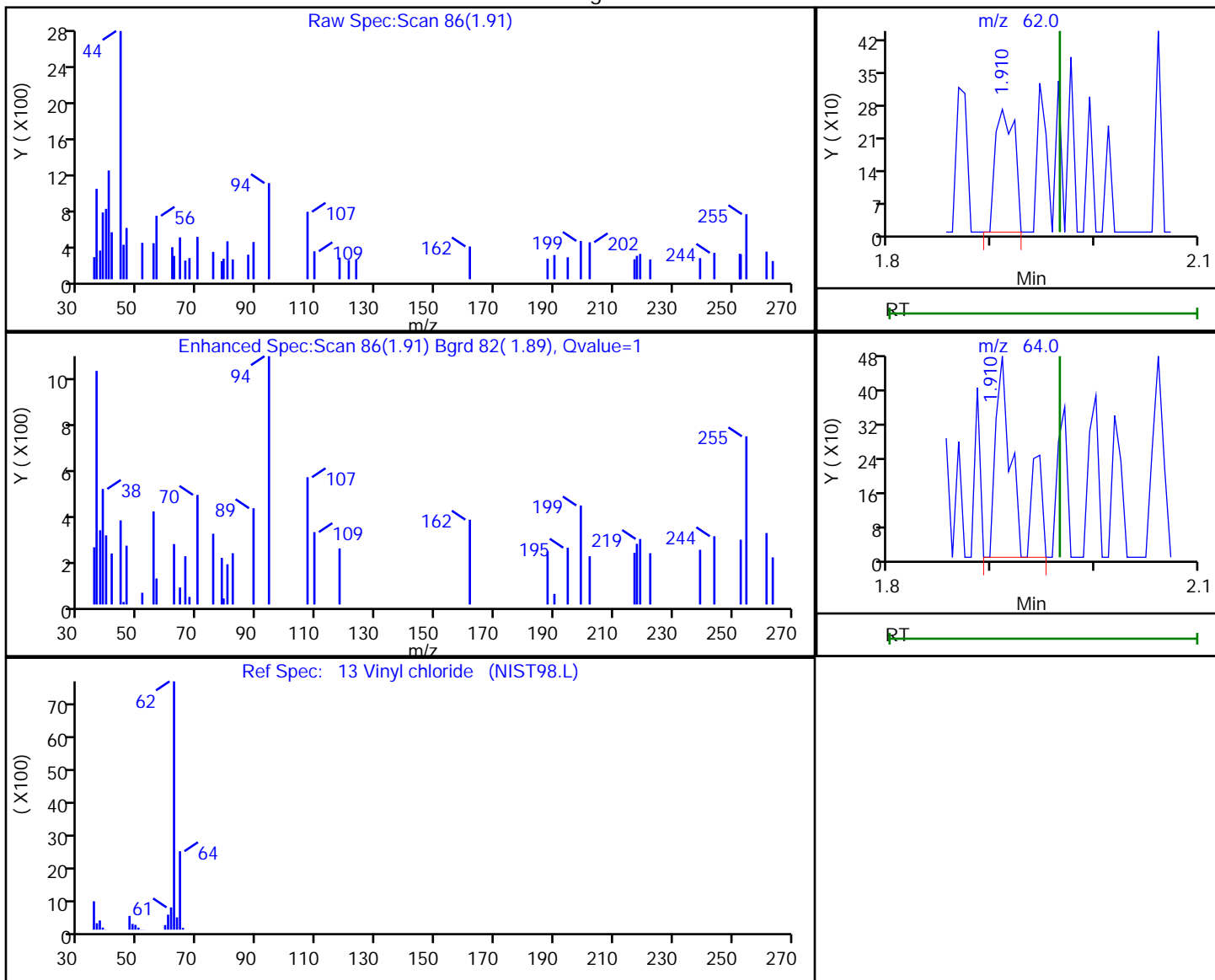
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

13 Vinyl chloride, CAS: 75-01-4

Processing Results



RT	Mass	Response	Amount
1.91	62.00	339	0.069294
1.91	64.00	625	

Reviewer: journejp, 04-May-2020 15:14:29

Audit Action: Marked Compound Undetected

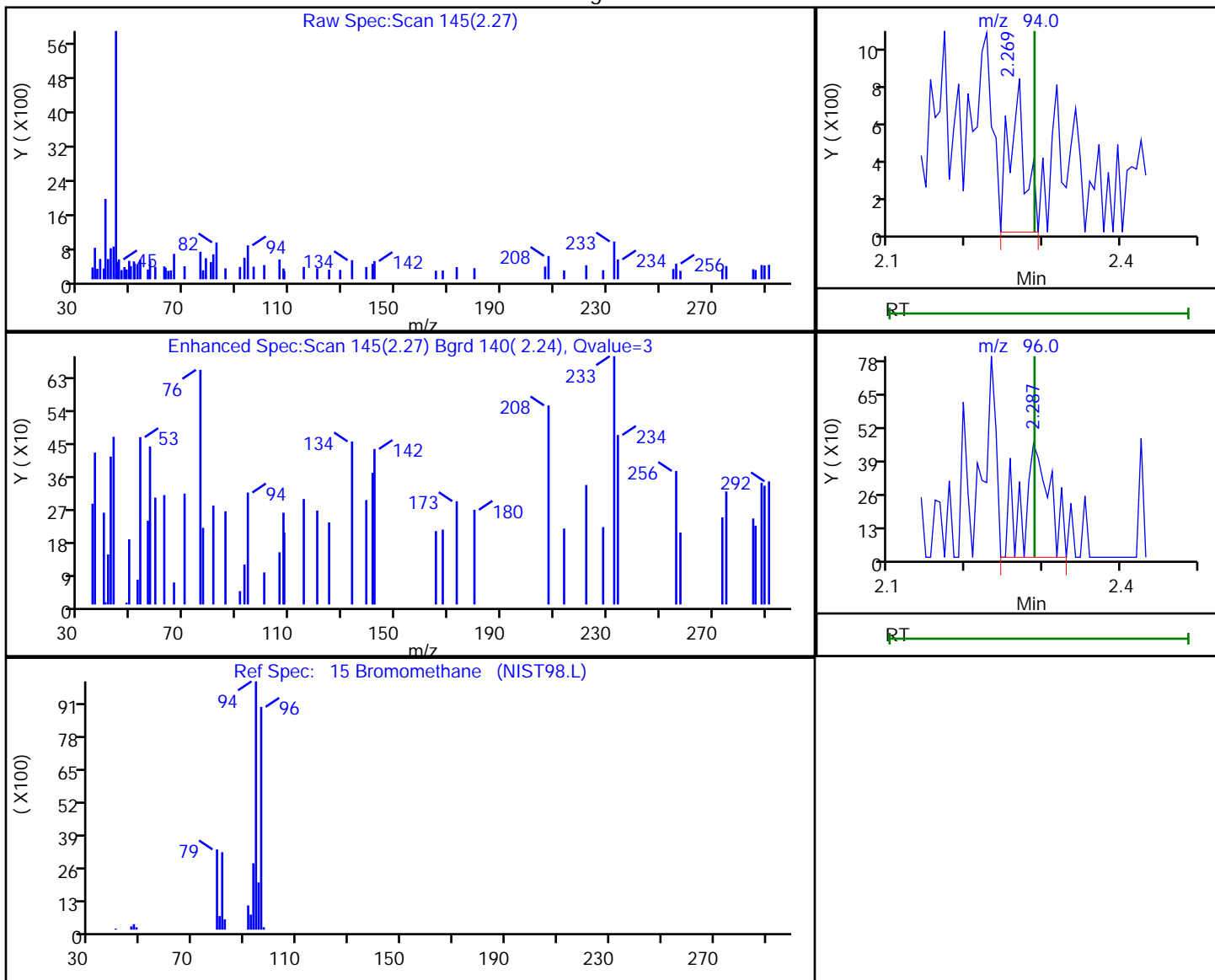
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050417.D  
 Injection Date: 04-May-2020 14:45:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-10 Lab Sample ID: 180-105108-10  
 Client ID: HD-COD-SW-27-0/1-0  
 Operator ID: 034635 ALS Bottle#: 17 Worklist Smp#: 17  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

15 Bromomethane, CAS: 74-83-9

Processing Results



RT	Mass	Response	Amount
2.27	94.00	1122	0.400560
2.29	96.00	1092	

Reviewer: journtp, 04-May-2020 15:14:30  
 Audit Action: Marked Compound Undetected

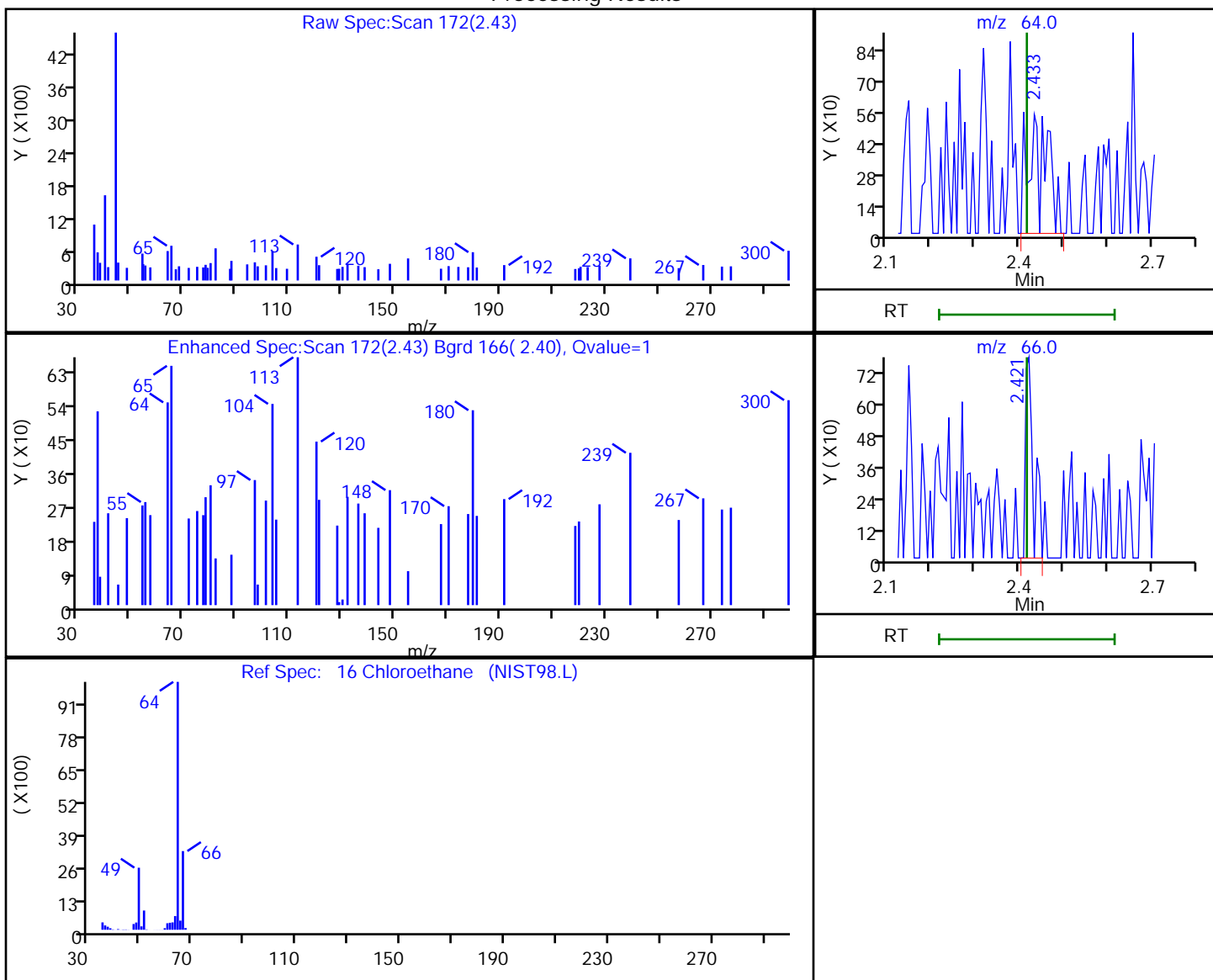
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050417.D  
 Injection Date: 04-May-2020 14:45:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-10 Lab Sample ID: 180-105108-10  
 Client ID: HD-COD-SW-27-0/1-0  
 Operator ID: 034635 ALS Bottle#: 17 Worklist Smp#: 17  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

16 Chloroethane, CAS: 75-00-3

Processing Results



RT	Mass	Response	Amount
2.43	64.00	1648	0.496541
2.42	66.00	978	

Reviewer: journetp, 04-May-2020 15:14:30  
 Audit Action: Marked Compound Undetected

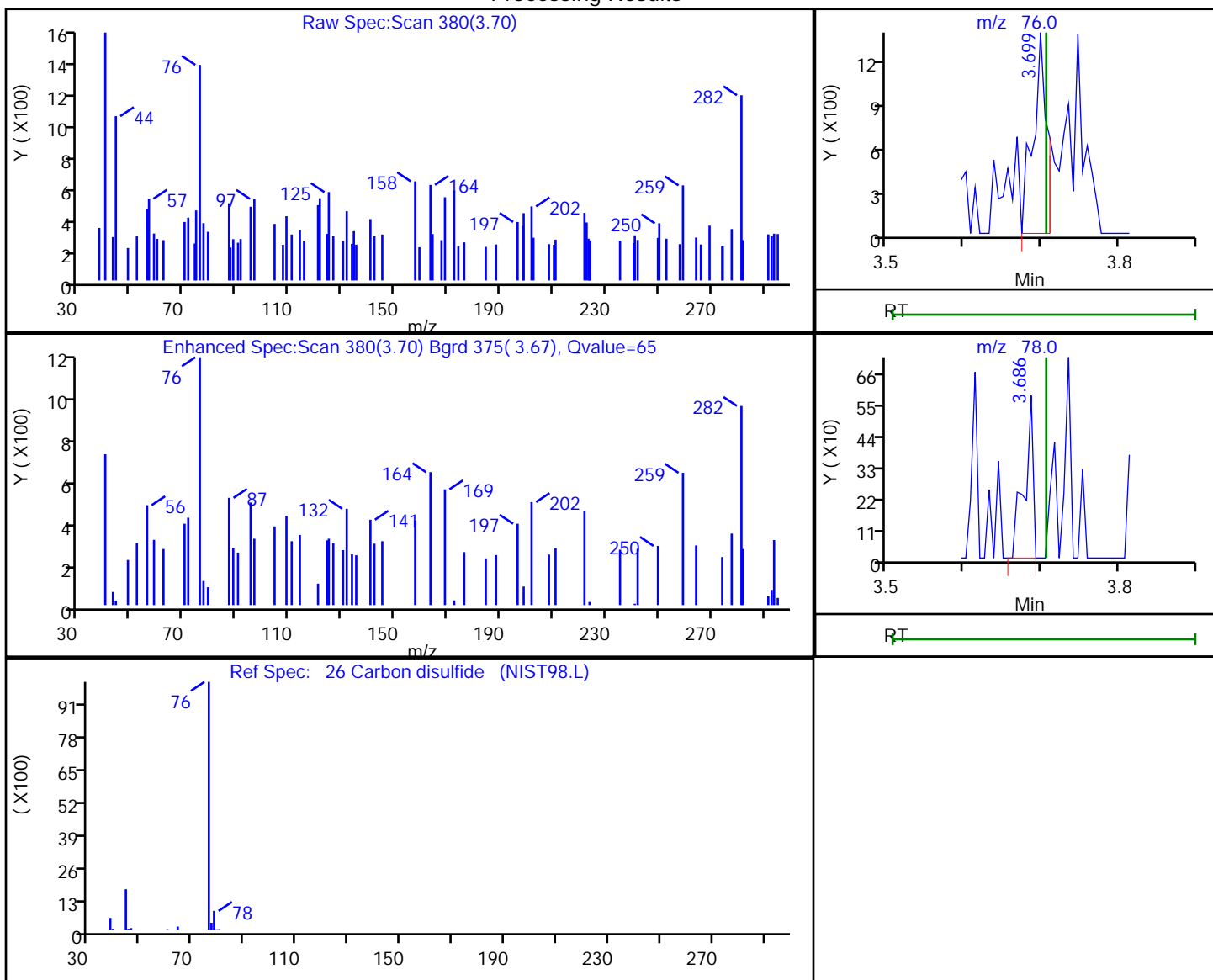
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050417.D  
 Injection Date: 04-May-2020 14:45:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-10 Lab Sample ID: 180-105108-10  
 Client ID: HD-COD-SW-27-0/1-0  
 Operator ID: 034635 ALS Bottle#: 17 Worklist Smp#: 17  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

26 Carbon disulfide, CAS: 75-15-0

Processing Results



RT	Mass	Response	Amount
3.70	76.00	1654	0.261303
3.69	78.00	455	

Reviewer: journetp, 04-May-2020 15:14:36  
 Audit Action: Marked Compound Undetected

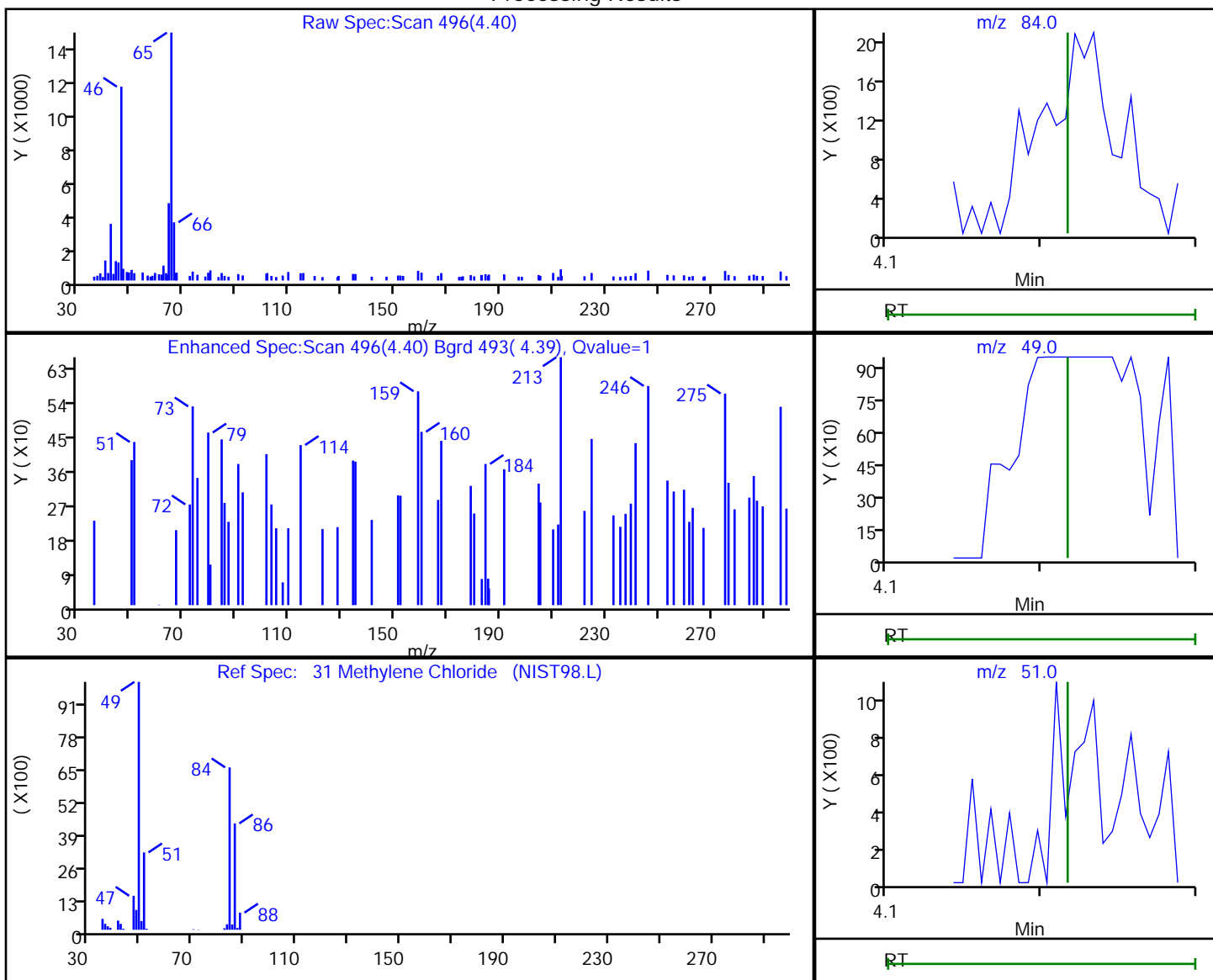
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050417.D  
 Injection Date: 04-May-2020 14:45:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-10 Lab Sample ID: 180-105108-10  
 Client ID: HD-COD-SW-27-0/1-0  
 Operator ID: 034635 ALS Bottle#: 17 Worklist Smp#: 17  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

31 Methylene Chloride, CAS: 75-09-2

Processing Results



RT	Mass	Response	Amount
4.40	84.00	160	-1.663703
4.40	49.00	968	
4.39	51.00	581	

Reviewer: journeyp, 04-May-2020 15:14:36  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

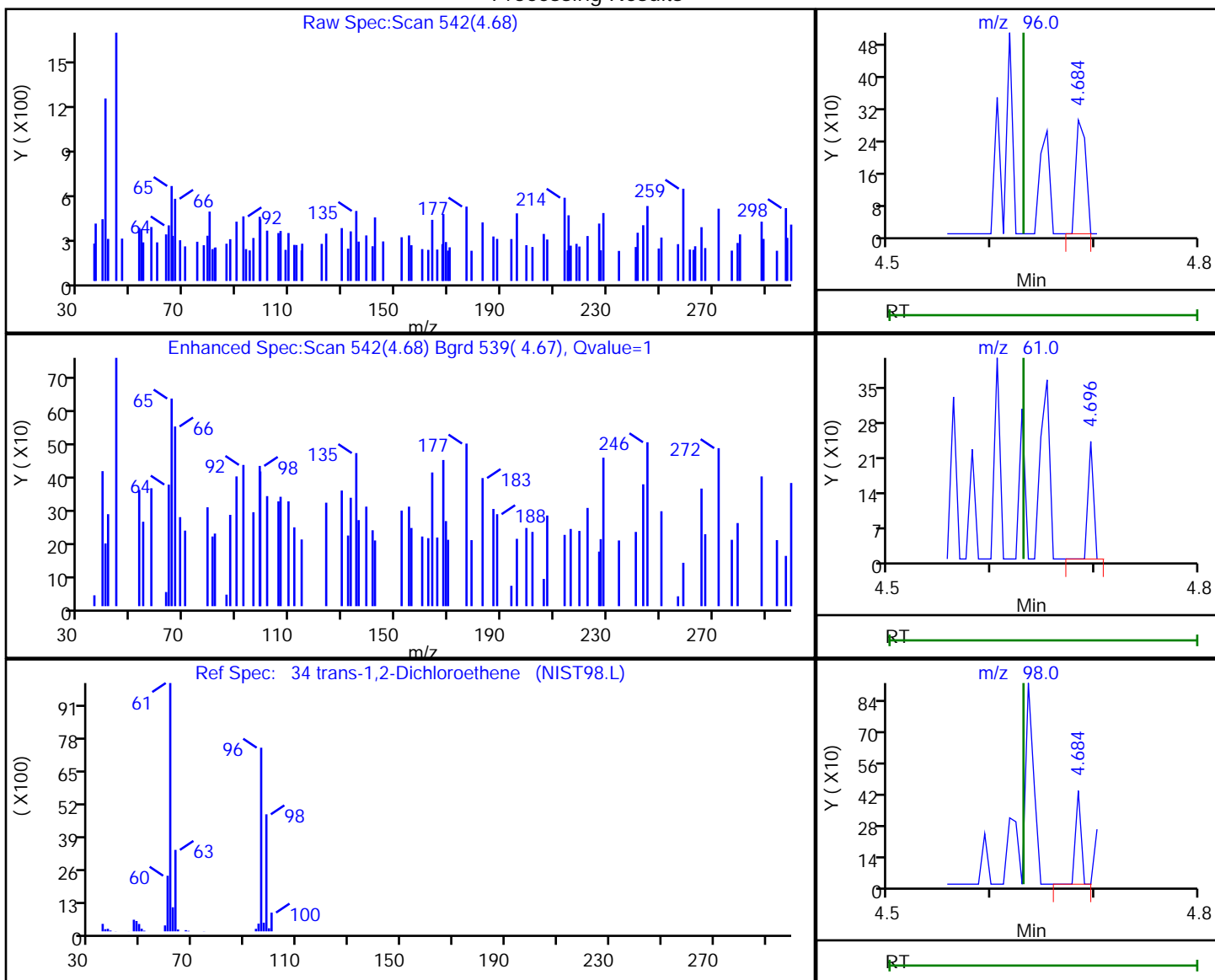


Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050417.D  
 Injection Date: 04-May-2020 14:45:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-10 Lab Sample ID: 180-105108-10  
 Client ID: HD-COD-SW-27-0/1-0  
 Operator ID: 034635 ALS Bottle#: 17 Worklist Smp#: 17  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

34 trans-1,2-Dichloroethene, CAS: 156-60-5

Processing Results



RT	Mass	Response	Amount
4.68	96.00	192	0.062373
4.70	61.00	86	
4.68	98.00	156	

Reviewer: journeyp, 04-May-2020 15:14:36  
 Audit Action: Marked Compound Undetected

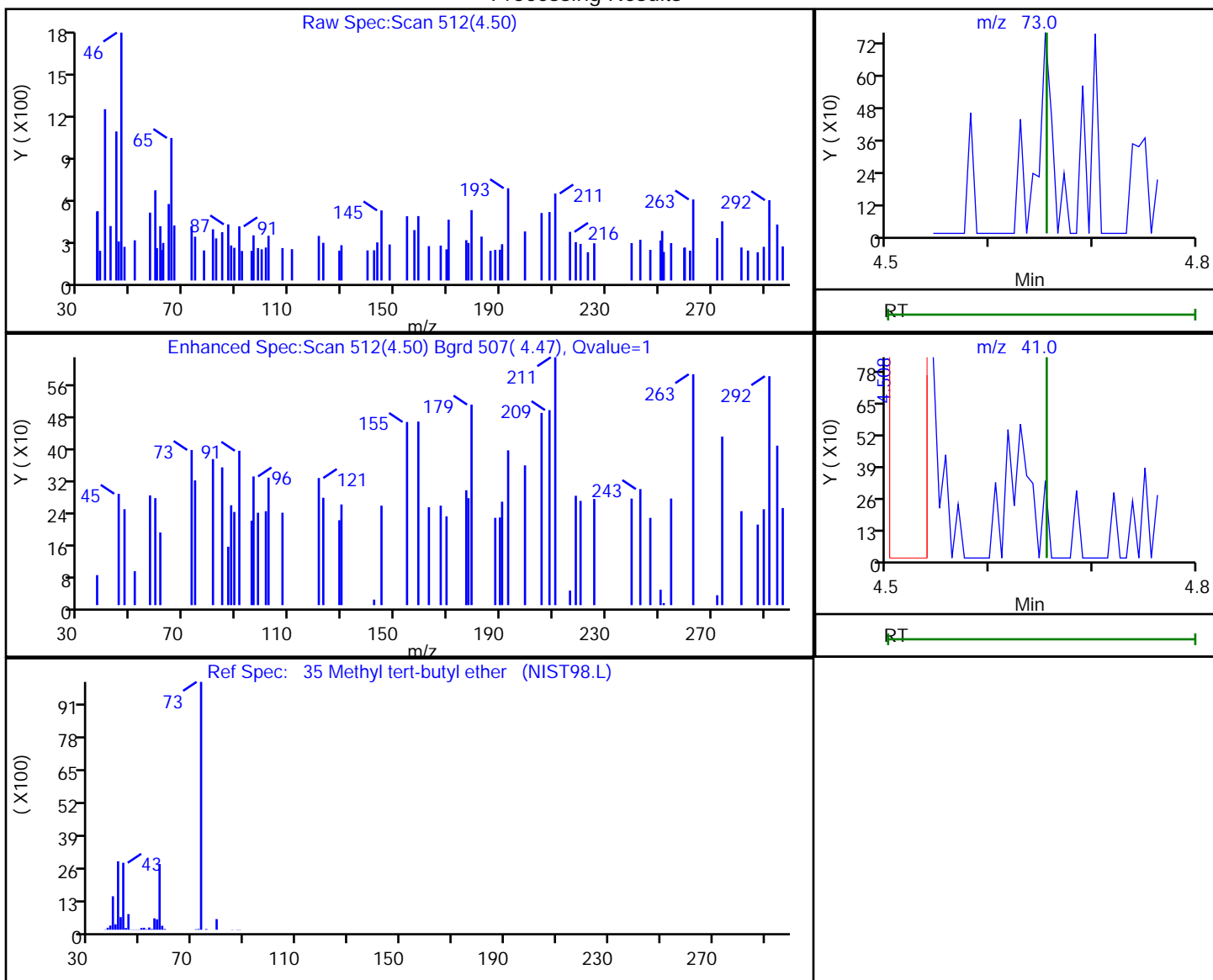
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050417.D  
 Injection Date: 04-May-2020 14:45:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-10 Lab Sample ID: 180-105108-10  
 Client ID: HD-COD-SW-27-0/1-0  
 Operator ID: 034635 ALS Bottle#: 17 Worklist Smp#: 17  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

35 Methyl tert-butyl ether, CAS: 1634-04-4

Processing Results



RT	Mass	Response	Amount
4.50	73.00	321	0.037157
4.51	41.00	460	

Reviewer: journetp, 04-May-2020 15:14:36  
 Audit Action: Marked Compound Undetected

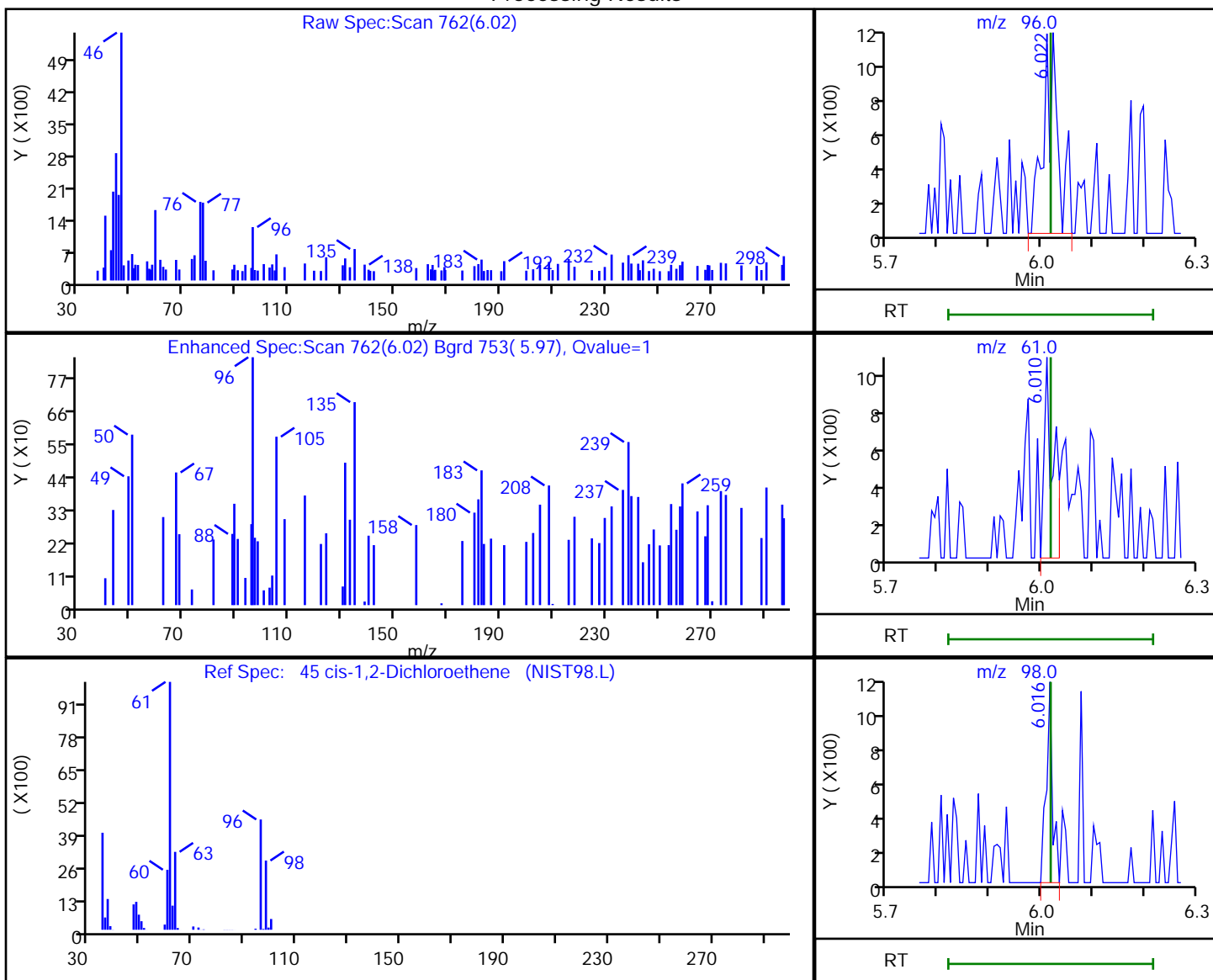
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050417.D  
 Injection Date: 04-May-2020 14:45:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-10 Lab Sample ID: 180-105108-10  
 Client ID: HD-COD-SW-27-0/1-0  
 Operator ID: 034635 ALS Bottle#: 17 Worklist Smp#: 17  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

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

Processing Results



RT	Mass	Response	Amount
6.02	96.00	2321	0.633665
6.01	61.00	1325	
6.02	98.00	980	

Reviewer: journept, 04-May-2020 15:14:36  
 Audit Action: Marked Compound Undetected

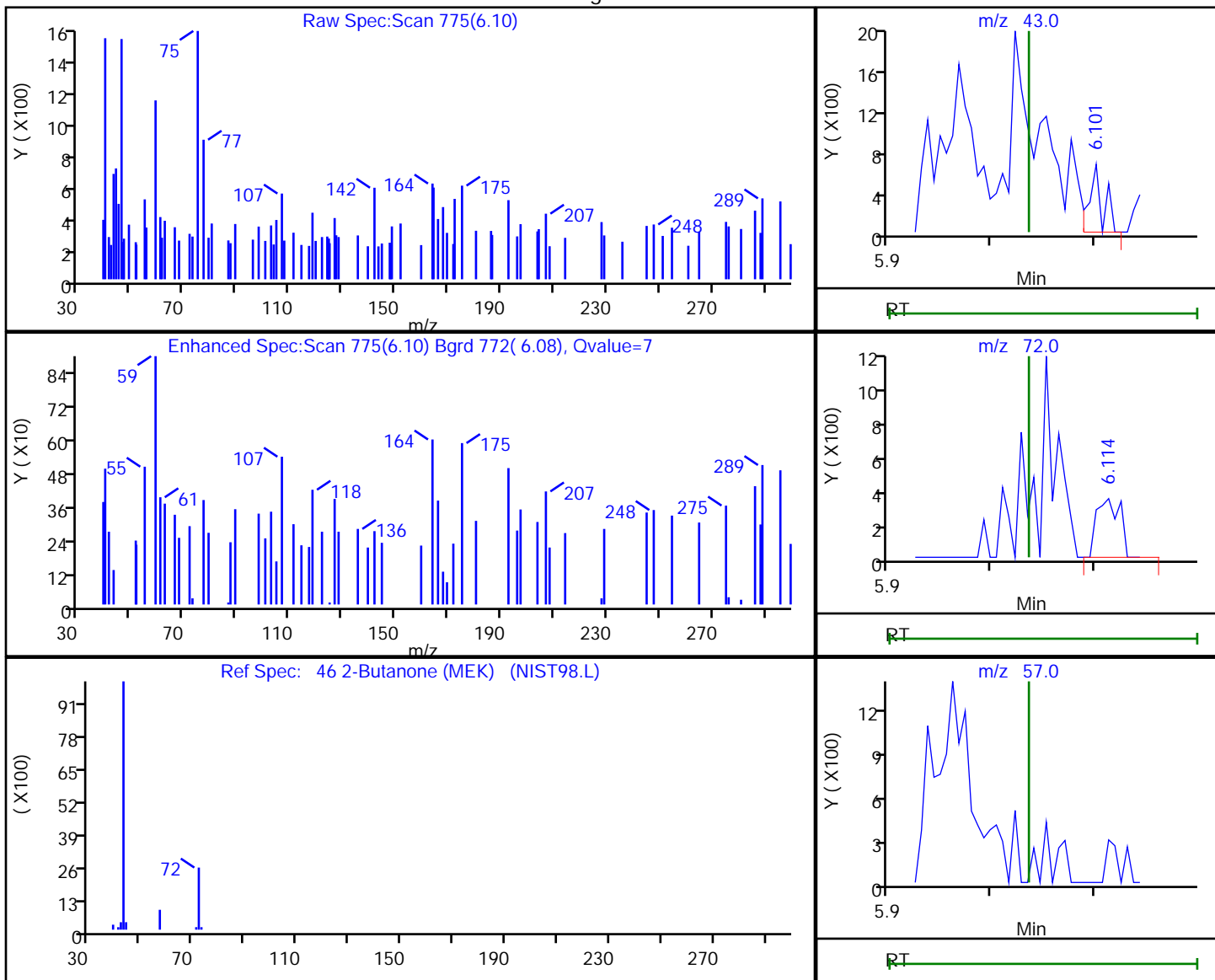
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050417.D  
 Injection Date: 04-May-2020 14:45:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-10 Lab Sample ID: 180-105108-10  
 Client ID: HD-COD-SW-27-0/1-0  
 Operator ID: 034635 ALS Bottle#: 17 Worklist Smp#: 17  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

46 2-Butanone (MEK), CAS: 78-93-3

Processing Results



RT	Mass	Response	Amount
6.10	43.00	591	0.285766
6.11	72.00	630	
6.04	57.00	0	

Reviewer: journept, 04-May-2020 15:14:36  
 Audit Action: Marked Compound Undetected

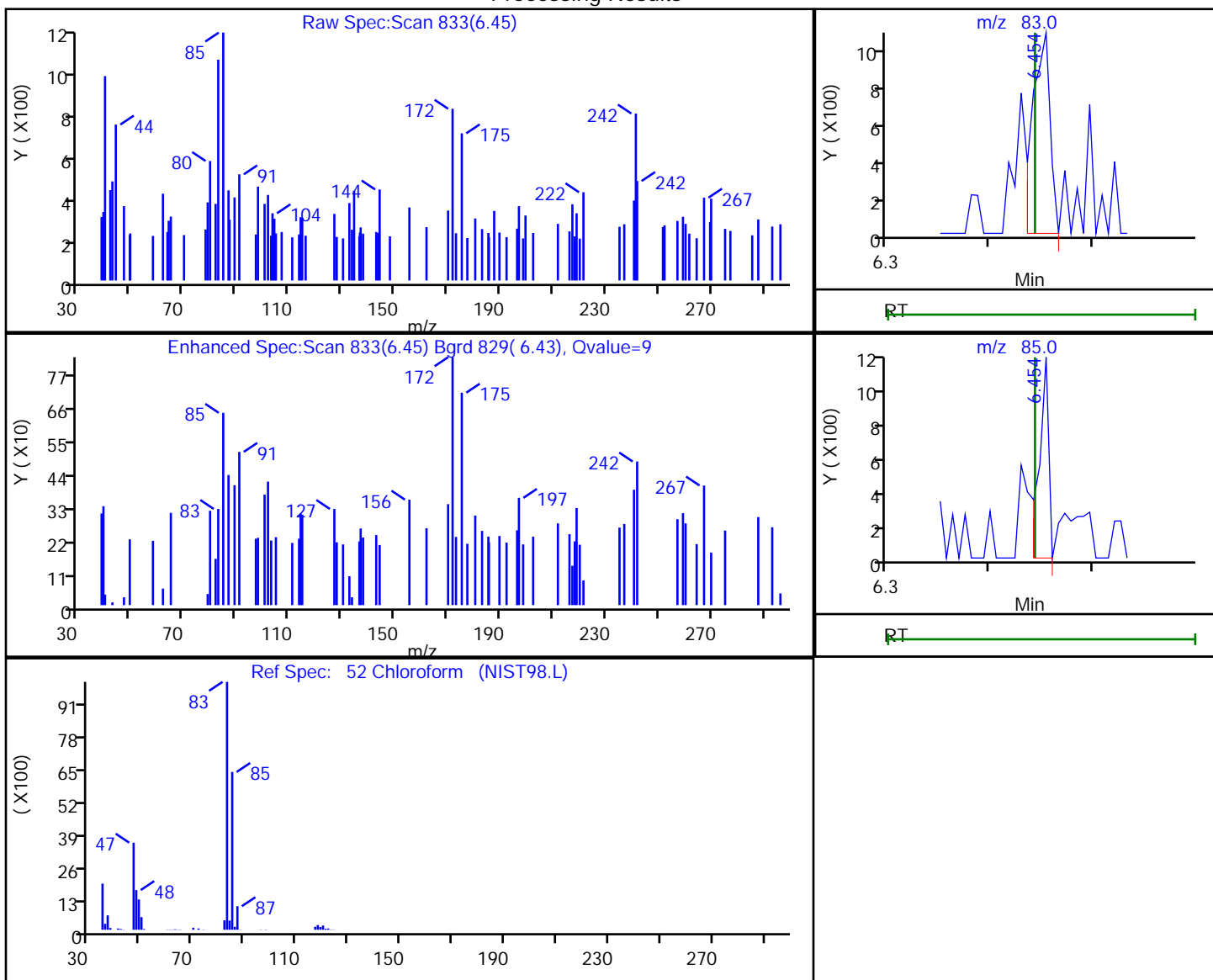
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050417.D  
 Injection Date: 04-May-2020 14:45:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-10 Lab Sample ID: 180-105108-10  
 Client ID: HD-COD-SW-27-0/1-0  
 Operator ID: 034635 ALS Bottle#: 17 Worklist Smp#: 17  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

52 Chloroform, CAS: 67-66-3

Processing Results



RT	Mass	Response	Amount
6.45	83.00	1254	-1.538336
6.45	85.00	763	

Reviewer: journtp, 04-May-2020 15:14:37

Audit Action: Marked Compound Undetected

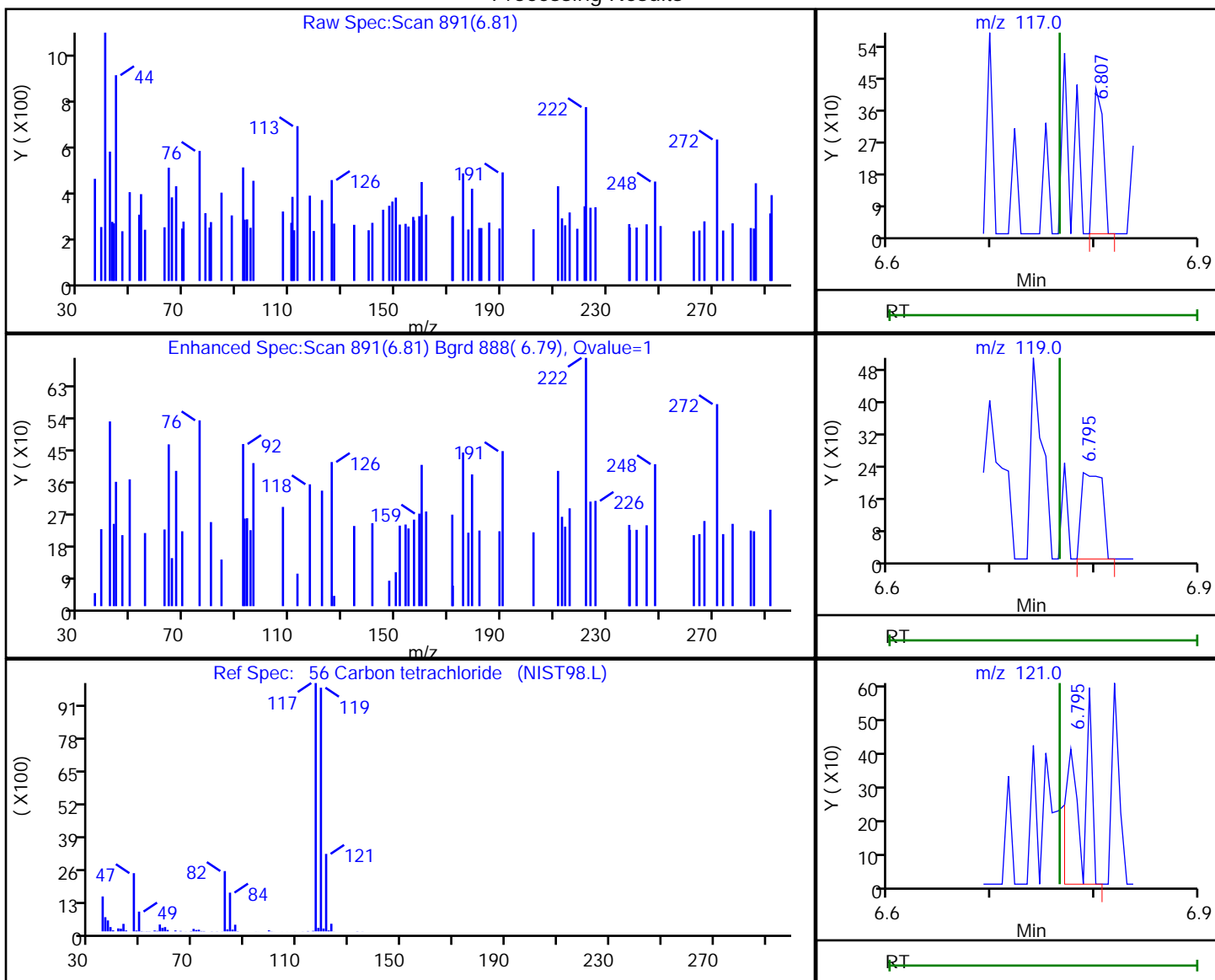
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050417.D  
 Injection Date: 04-May-2020 14:45:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-10 Lab Sample ID: 180-105108-10  
 Client ID: HD-COD-SW-27-0/1-0  
 Operator ID: 034635 ALS Bottle#: 17 Worklist Smp#: 17  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

56 Carbon tetrachloride, CAS: 56-23-5

Processing Results



RT	Mass	Response	Amount
6.81	117.00	279	0.073217
6.79	119.00	303	
6.79	121.00	548	

Reviewer: journept, 04-May-2020 15:14:37  
 Audit Action: Marked Compound Undetected

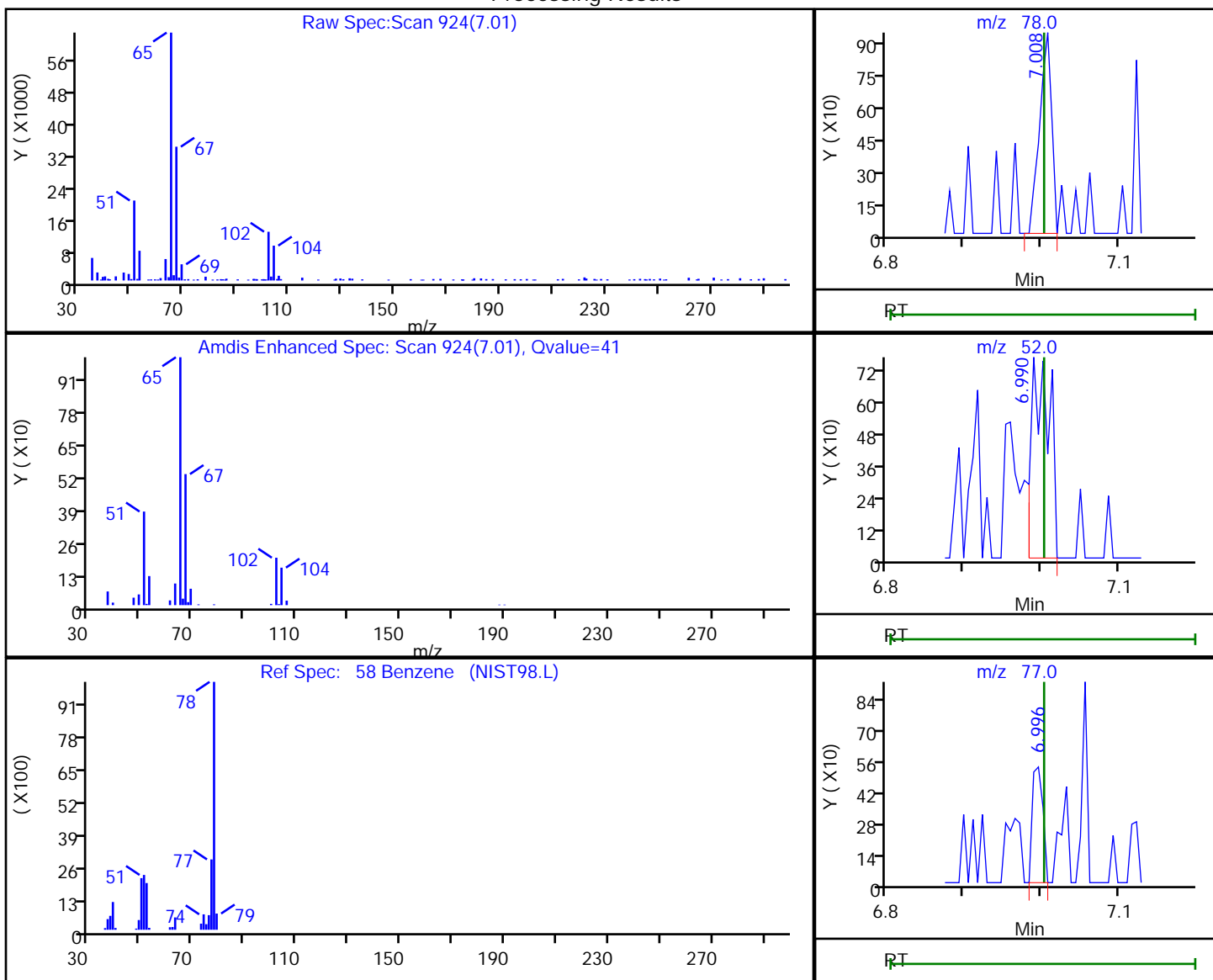
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050417.D  
 Injection Date: 04-May-2020 14:45:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-10 Lab Sample ID: 180-105108-10  
 Client ID: HD-COD-SW-27-0/1-0  
 Operator ID: 034635 ALS Bottle#: 17 Worklist Smp#: 17  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

58 Benzene, CAS: 71-43-2

Processing Results



RT	Mass	Response	Amount
7.01	78.00	1034	0.074601
6.99	52.00	1234	
7.00	77.00	500	

Reviewer: journept, 04-May-2020 15:14:37  
 Audit Action: Marked Compound Undetected

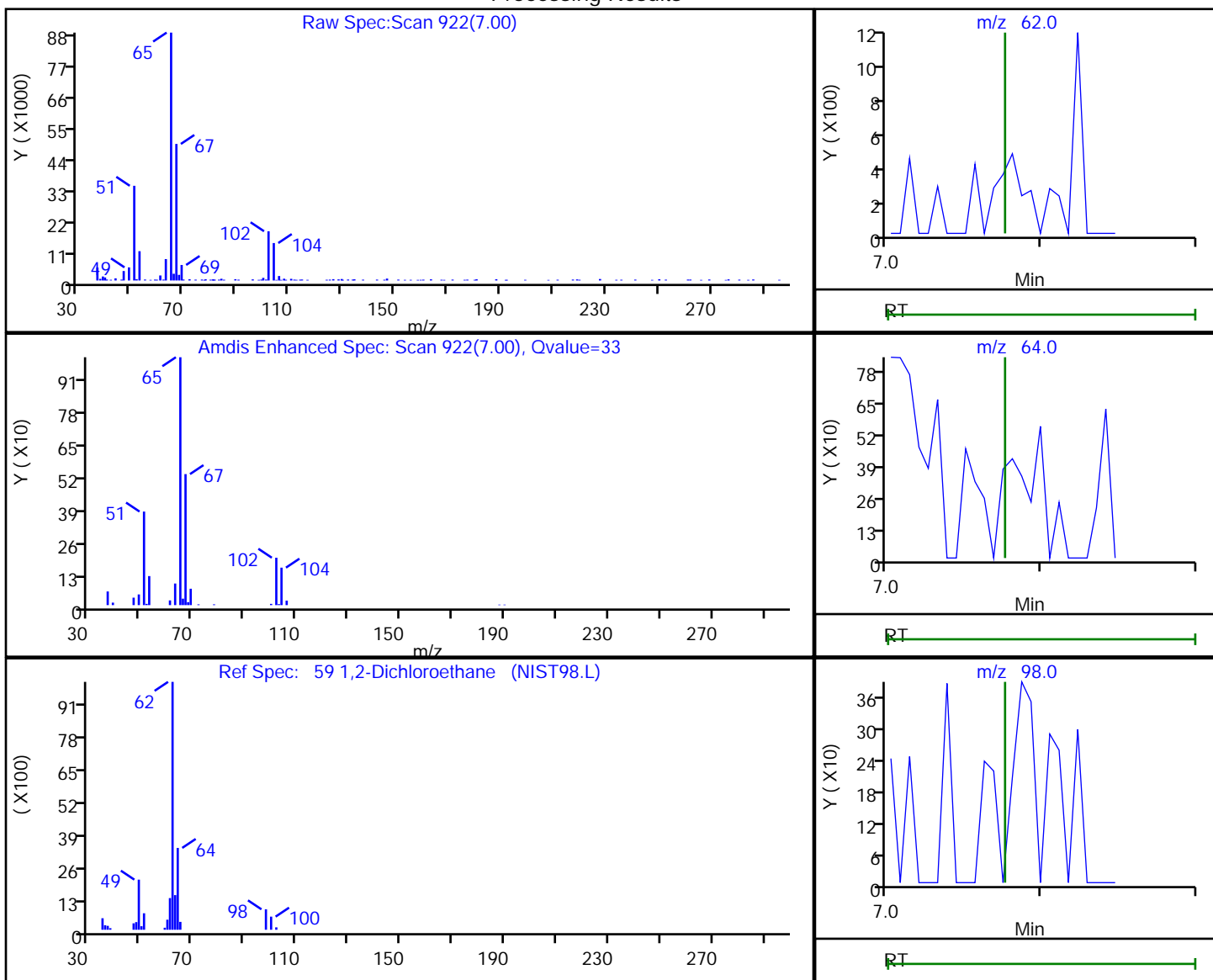
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050417.D  
 Injection Date: 04-May-2020 14:45:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-10 Lab Sample ID: 180-105108-10  
 Client ID: HD-COD-SW-27-0/1-0  
 Operator ID: 034635 ALS Bottle#: 17 Worklist Smp#: 17  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

59 1,2-Dichloroethane, CAS: 107-06-2

Processing Results



RT	Mass	Response	Amount
7.00	62.00	216	0.040985
7.00	64.00	1425	
6.98	98.00	546	

Reviewer: journeyp, 04-May-2020 15:14:37  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

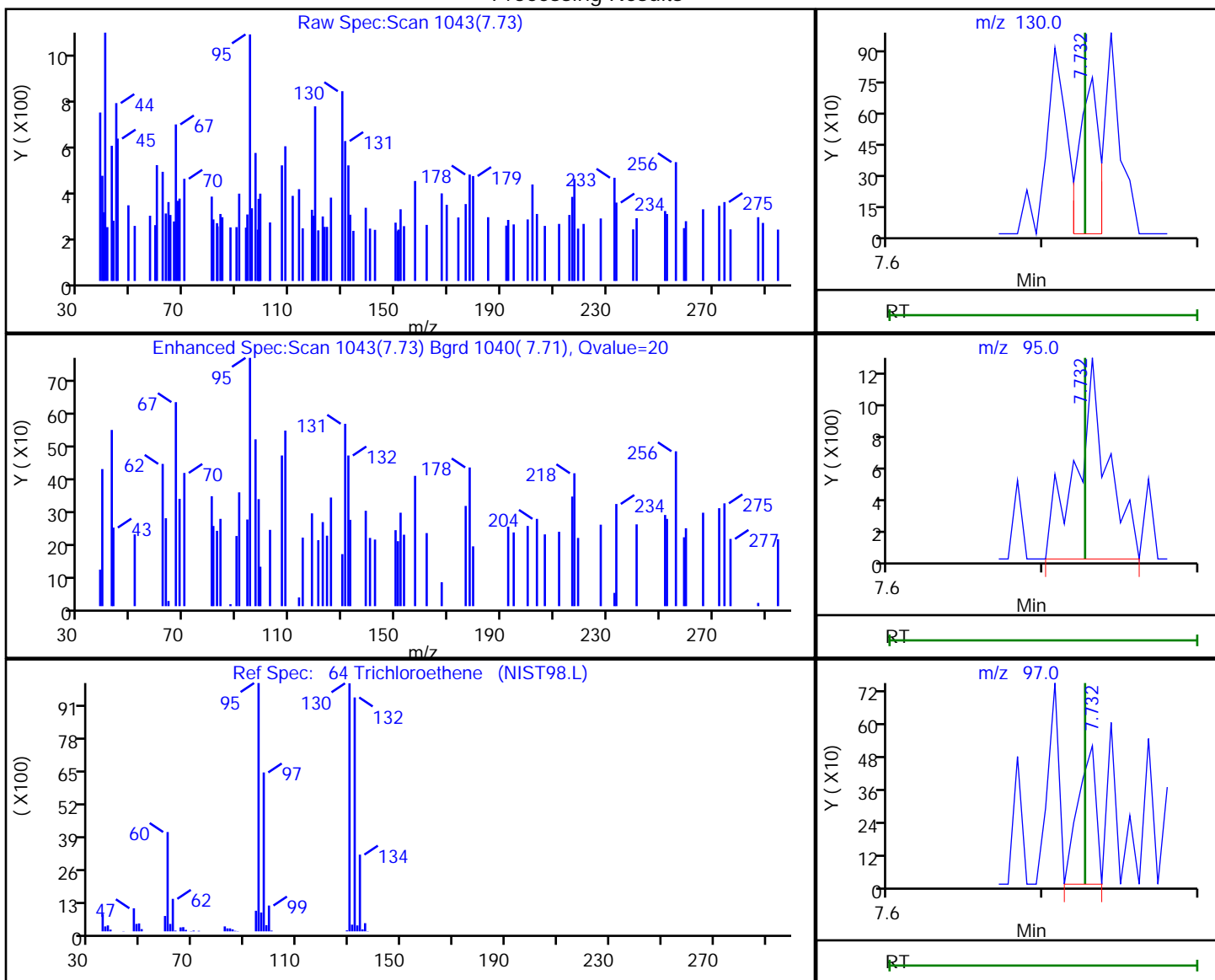


Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050417.D  
 Injection Date: 04-May-2020 14:45:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-10 Lab Sample ID: 180-105108-10  
 Client ID: HD-COD-SW-27-0/1-0  
 Operator ID: 034635 ALS Bottle#: 17 Worklist Smp#: 17  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

64 Trichloroethene, CAS: 79-01-6

Processing Results



RT	Mass	Response	Amount
7.73	130.00	709	0.205403
7.73	95.00	1818	
7.73	97.00	416	

Reviewer: journetp, 04-May-2020 15:14:37  
 Audit Action: Marked Compound Undetected

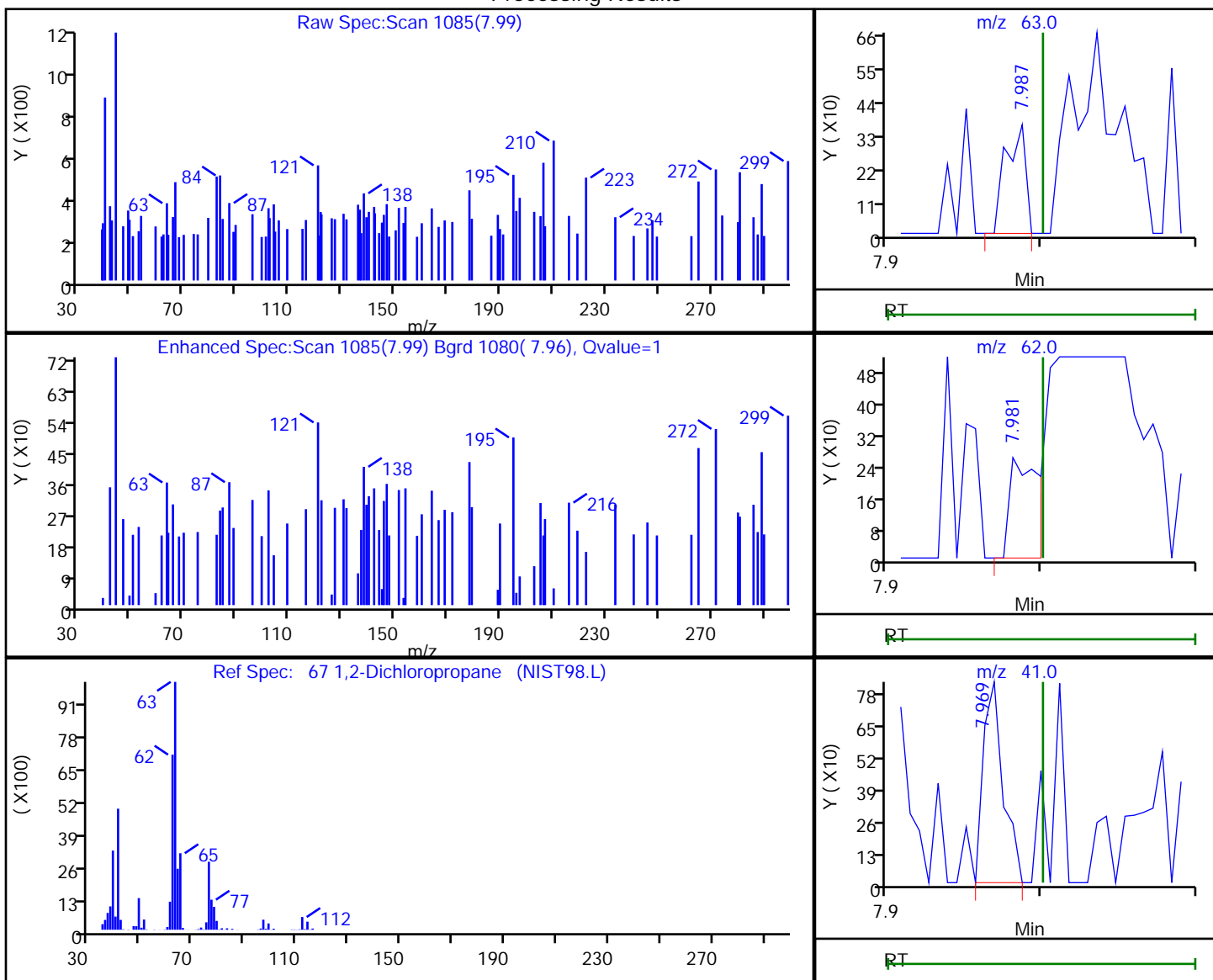
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050417.D  
 Injection Date: 04-May-2020 14:45:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-10 Lab Sample ID: 180-105108-10  
 Client ID: HD-COD-SW-27-0/1-0  
 Operator ID: 034635 ALS Bottle#: 17 Worklist Smp#: 17  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

67 1,2-Dichloropropane, CAS: 78-87-5

Processing Results



RT	Mass	Response	Amount
7.99	63.00	322	0.087037
7.98	62.00	334	
7.97	41.00	739	

Reviewer: journetp, 04-May-2020 15:14:37  
 Audit Action: Marked Compound Undetected

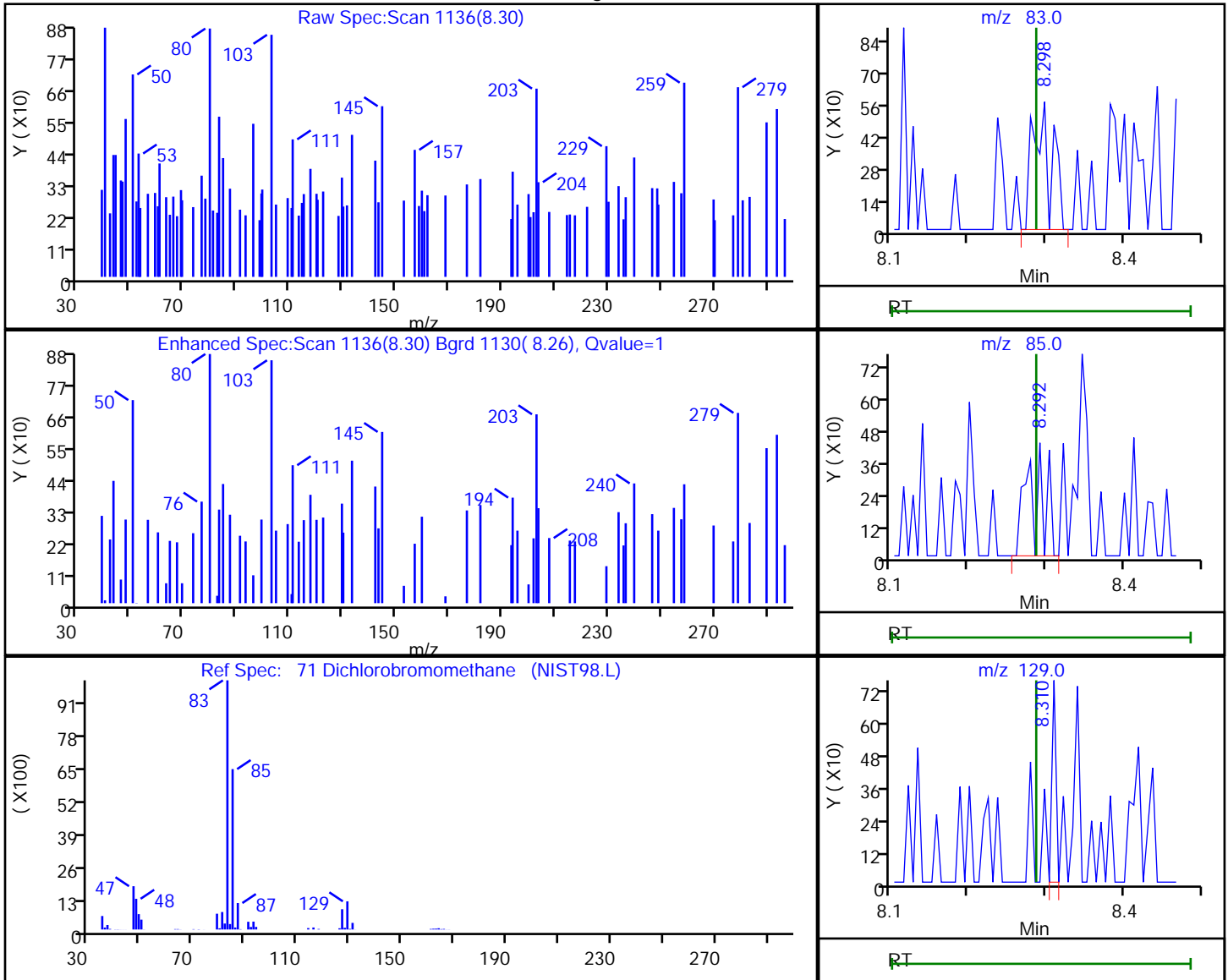
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050417.D  
 Injection Date: 04-May-2020 14:45:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-10 Lab Sample ID: 180-105108-10  
 Client ID: HD-COD-SW-27-0/1-0  
 Operator ID: 034635 ALS Bottle#: 17 Worklist Smp#: 17  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

71 Dichlorobromomethane, CAS: 75-27-4

Processing Results



RT	Mass	Response	Amount
8.30	83.00	939	0.216308
8.29	85.00	631	
8.31	129.00	276	

Reviewer: journeyp, 04-May-2020 15:14:37  
 Audit Action: Marked Compound Undetected

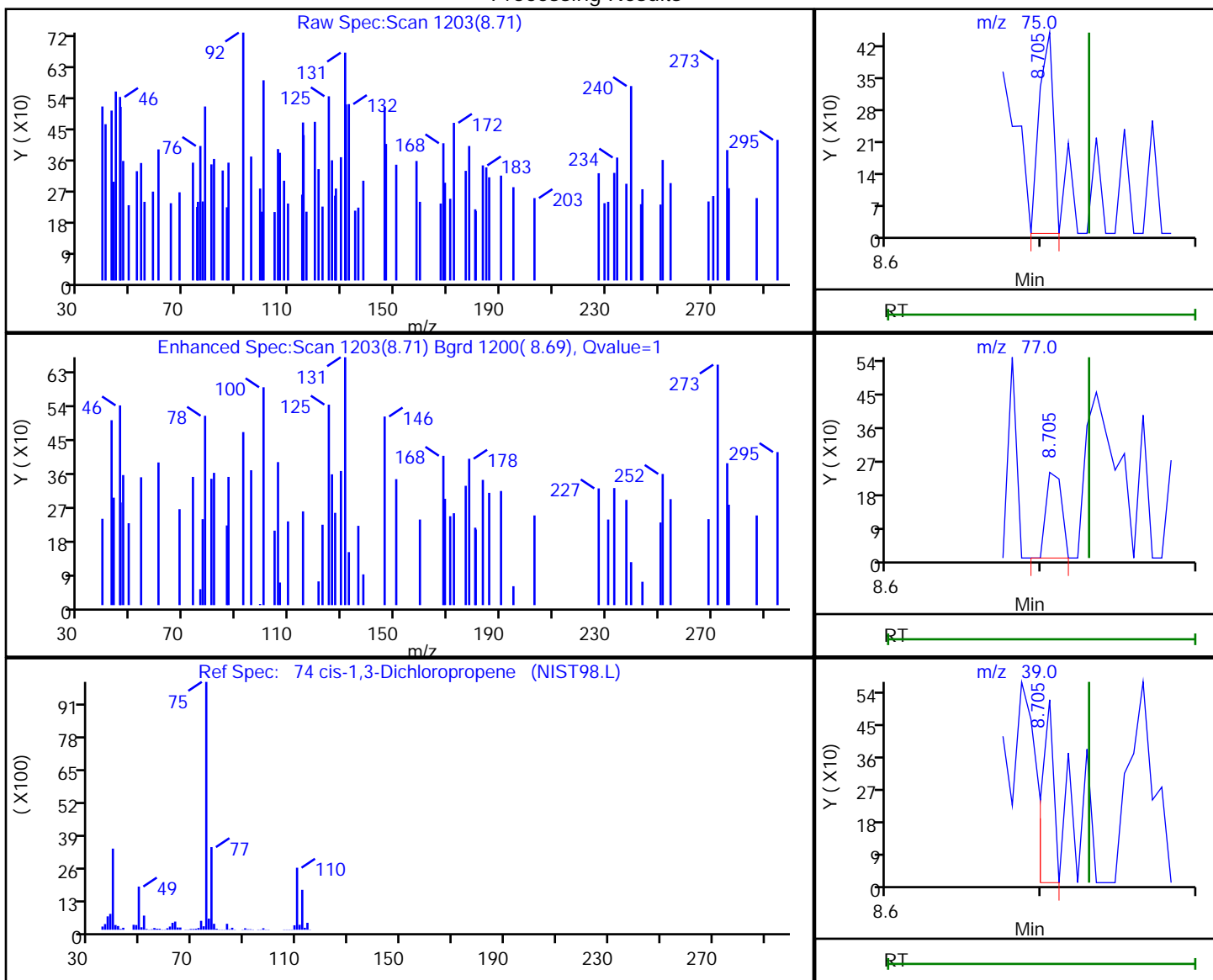
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050417.D  
 Injection Date: 04-May-2020 14:45:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-10 Lab Sample ID: 180-105108-10  
 Client ID: HD-COD-SW-27-0/1-0  
 Operator ID: 034635 ALS Bottle#: 17 Worklist Smp#: 17  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

74 cis-1,3-Dichloropropene, CAS: 10061-01-5

Processing Results



RT	Mass	Response	Amount
8.71	75.00	282	0.051595
8.71	77.00	163	
8.71	39.00	270	

Reviewer: journept, 04-May-2020 15:14:37  
 Audit Action: Marked Compound Undetected

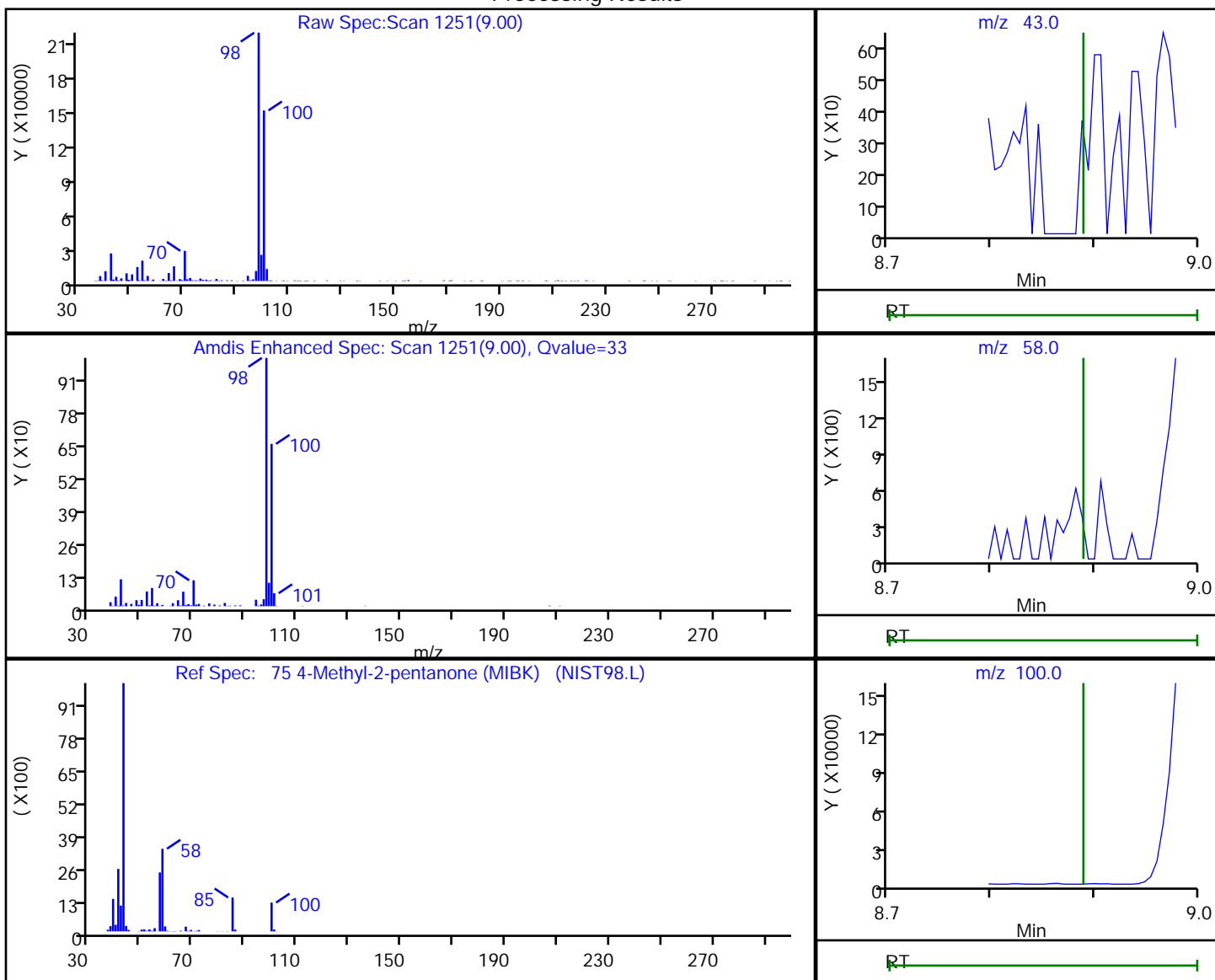
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050417.D  
 Injection Date: 04-May-2020 14:45:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-10 Lab Sample ID: 180-105108-10  
 Client ID: HD-COD-SW-27-0/1-0  
 Operator ID: 034635 ALS Bottle#: 17 Worklist Smp#: 17  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

75 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Processing Results



RT	Mass	Response	Amount
9.00	43.00	1388	15.841595
9.00	58.00	1957	
8.99	100.00	376970	

Reviewer: journeyp, 04-May-2020 15:14:37  
 Audit Action: Marked Compound Undetected

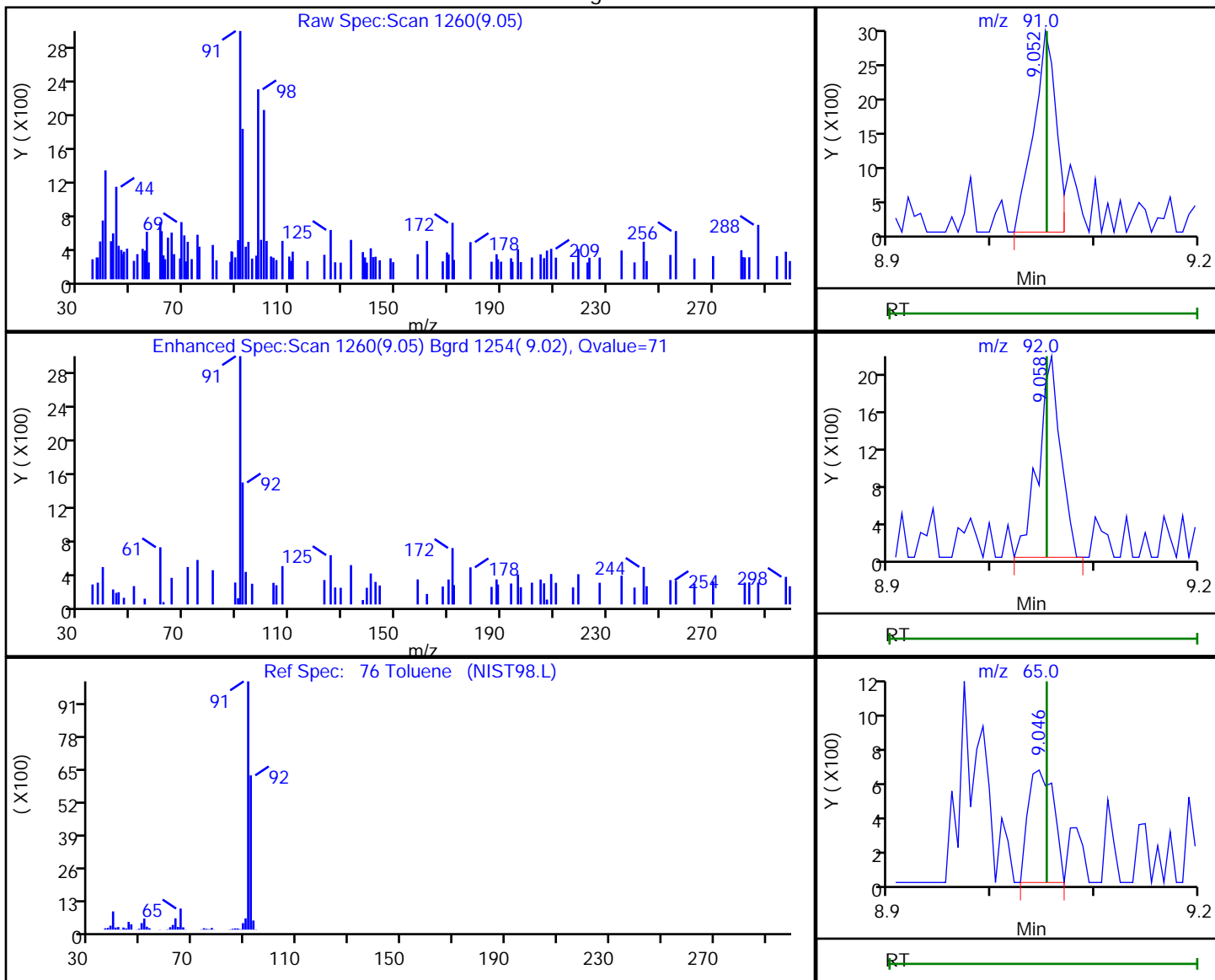
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050417.D  
 Injection Date: 04-May-2020 14:45:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-10 Lab Sample ID: 180-105108-10  
 Client ID: HD-COD-SW-27-0/1-0  
 Operator ID: 034635 ALS Bottle#: 17 Worklist Smp#: 17  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

76 Toluene, CAS: 108-88-3

Processing Results



RT	Mass	Response	Amount
9.05	91.00	4558	0.328700
9.06	92.00	3174	
9.05	65.00	1136	

Reviewer: journeyp, 04-May-2020 15:14:37  
 Audit Action: Marked Compound Undetected

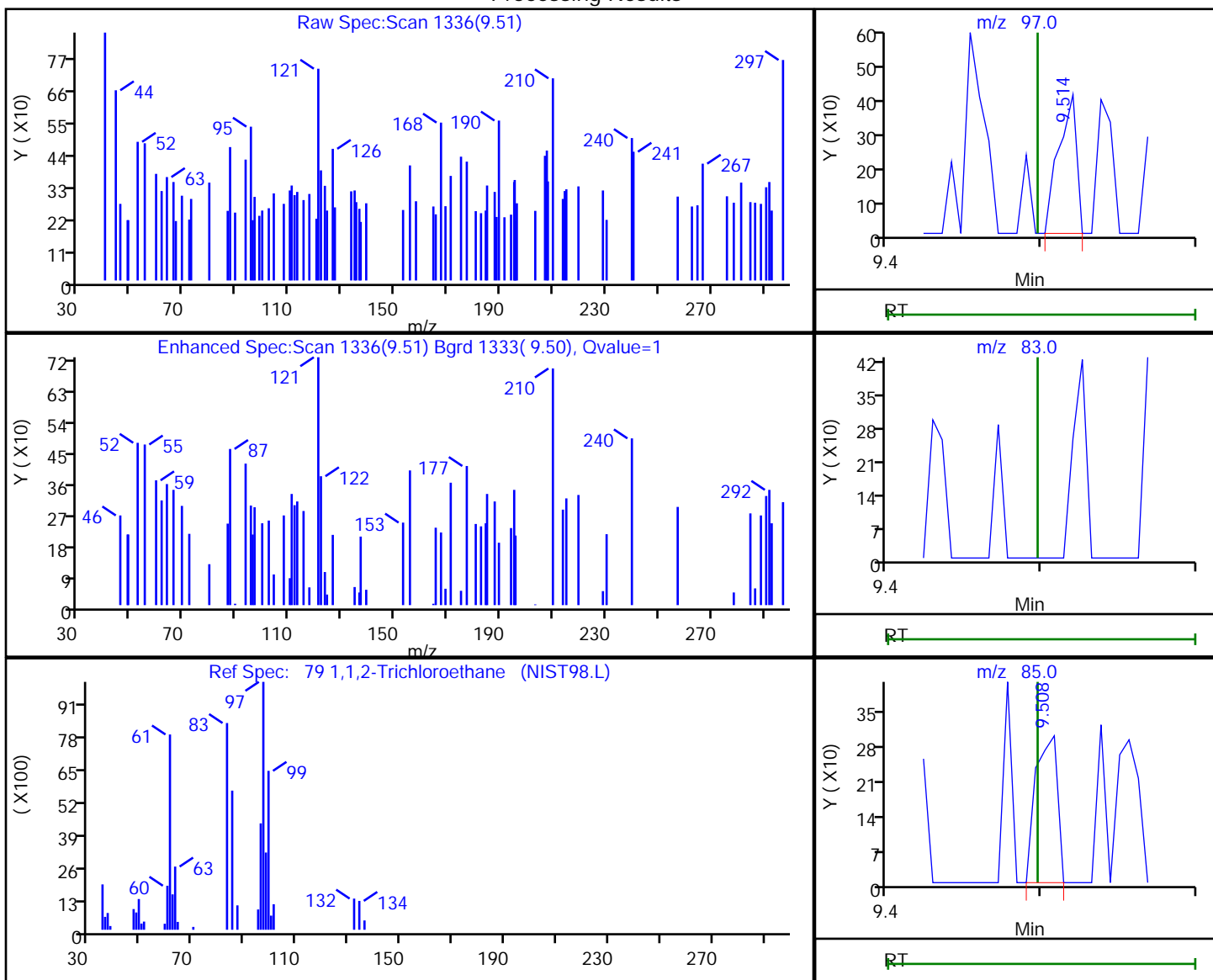
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050417.D  
 Injection Date: 04-May-2020 14:45:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-10 Lab Sample ID: 180-105108-10  
 Client ID: HD-COD-SW-27-0/1-0  
 Operator ID: 034635 ALS Bottle#: 17 Worklist Smp#: 17  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

79 1,1,2-Trichloroethane, CAS: 79-00-5

Processing Results



RT	Mass	Response	Amount
9.51	97.00	335	0.103935
9.50	83.00	0	
9.51	85.00	288	

Reviewer: journetp, 04-May-2020 15:14:37  
 Audit Action: Marked Compound Undetected

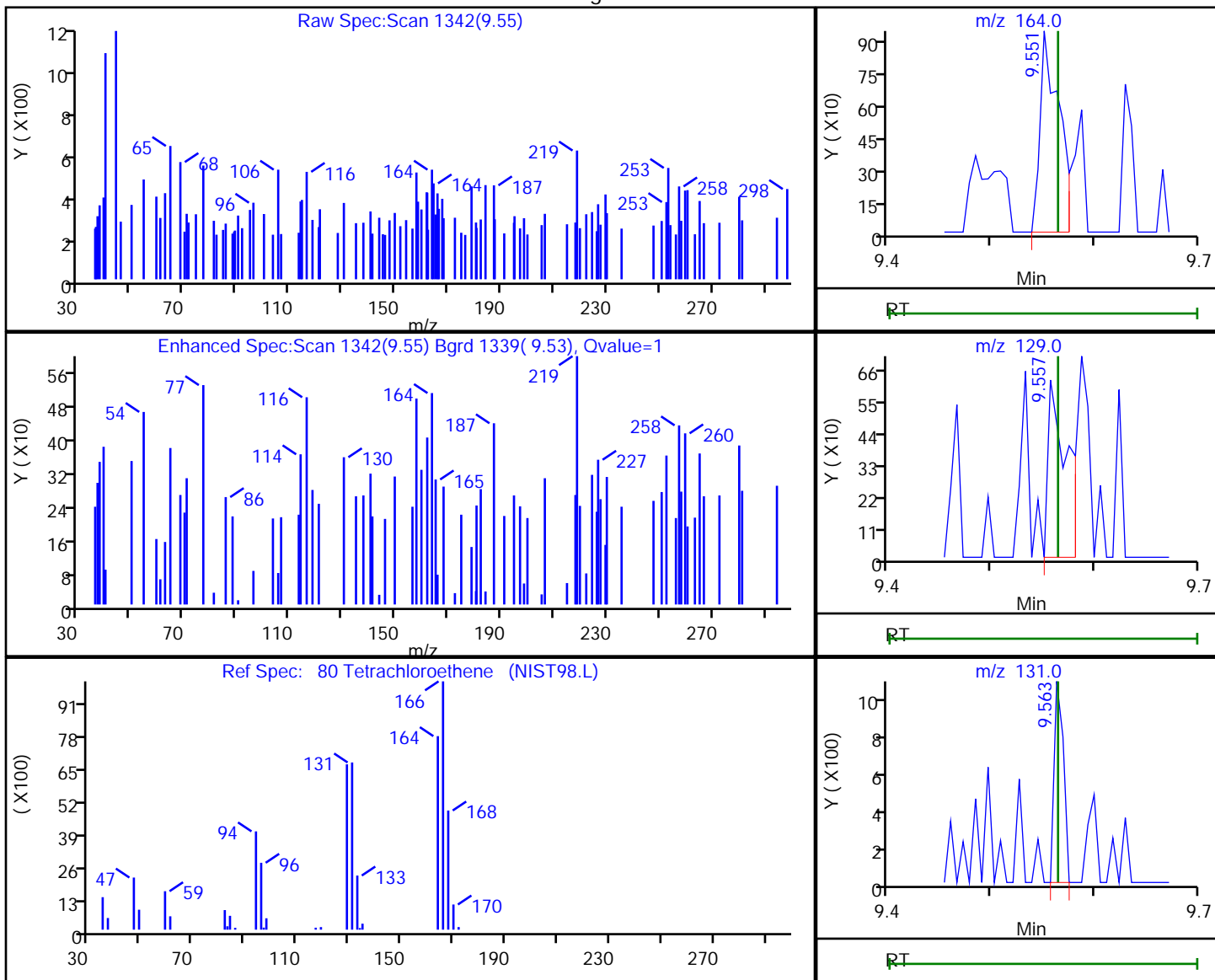
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050417.D  
 Injection Date: 04-May-2020 14:45:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-10 Lab Sample ID: 180-105108-10  
 Client ID: HD-COD-SW-27-0/1-0  
 Operator ID: 034635 ALS Bottle#: 17 Worklist Smp#: 17  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

80 Tetrachloroethene, CAS: 127-18-4

Processing Results



RT	Mass	Response	Amount
9.55	164.00	1224	0.443493
9.56	129.00	789	
9.56	131.00	670	

Reviewer: journetp, 04-May-2020 15:14:37  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

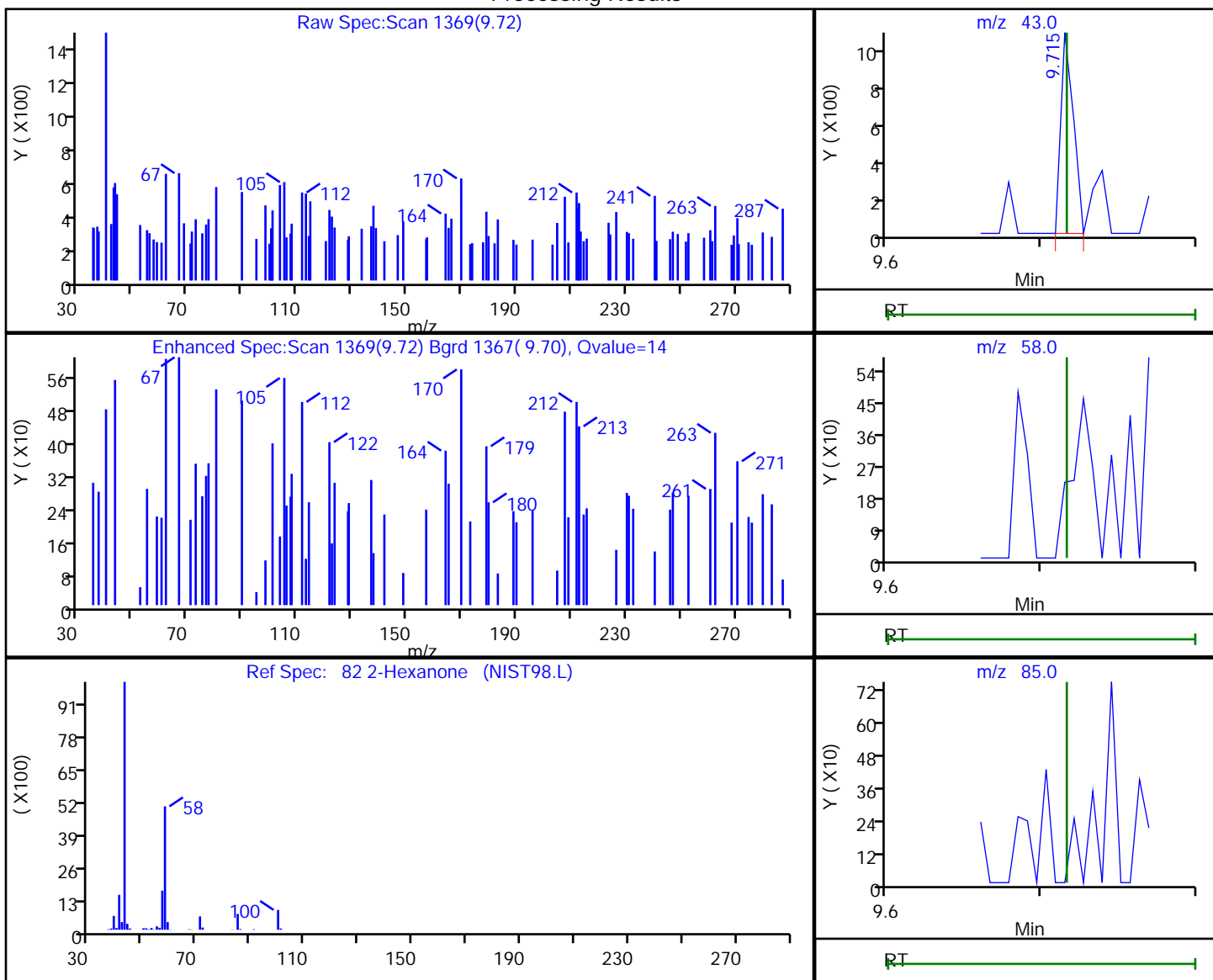


Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050417.D  
 Injection Date: 04-May-2020 14:45:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-10 Lab Sample ID: 180-105108-10  
 Client ID: HD-COD-SW-27-0/1-0  
 Operator ID: 034635 ALS Bottle#: 17 Worklist Smp#: 17  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

82 2-Hexanone, CAS: 591-78-6

Processing Results



RT	Mass	Response	Amount
9.72	43.00	614	14.216281
9.72	58.00	0	
9.72	85.00	0	

Reviewer: journeyp, 04-May-2020 15:14:37  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050417.D

Injection Date: 04-May-2020 14:45:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-10

Lab Sample ID: 180-105108-10

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

Operator ID: 034635

ALS Bottle#: 17 Worklist Smp#: 17

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

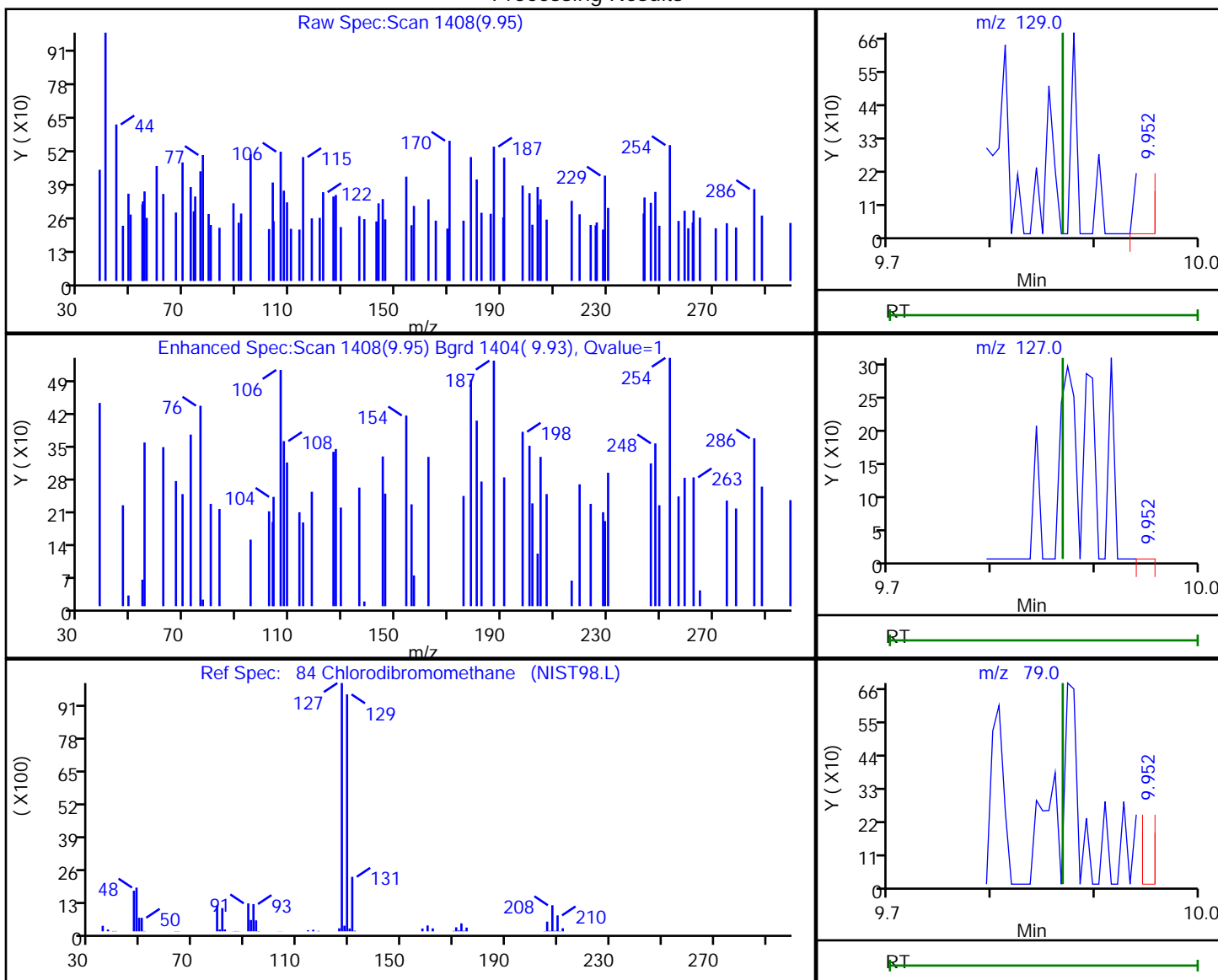
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

84 Chlorodibromomethane, CAS: 124-48-1

Processing Results



RT	Mass	Response	Amount
9.95	129.00	152	0.055710
9.95	127.00	208	
9.95	79.00	96	

Reviewer: journetp, 04-May-2020 15:14:37

Audit Action: Marked Compound Undetected

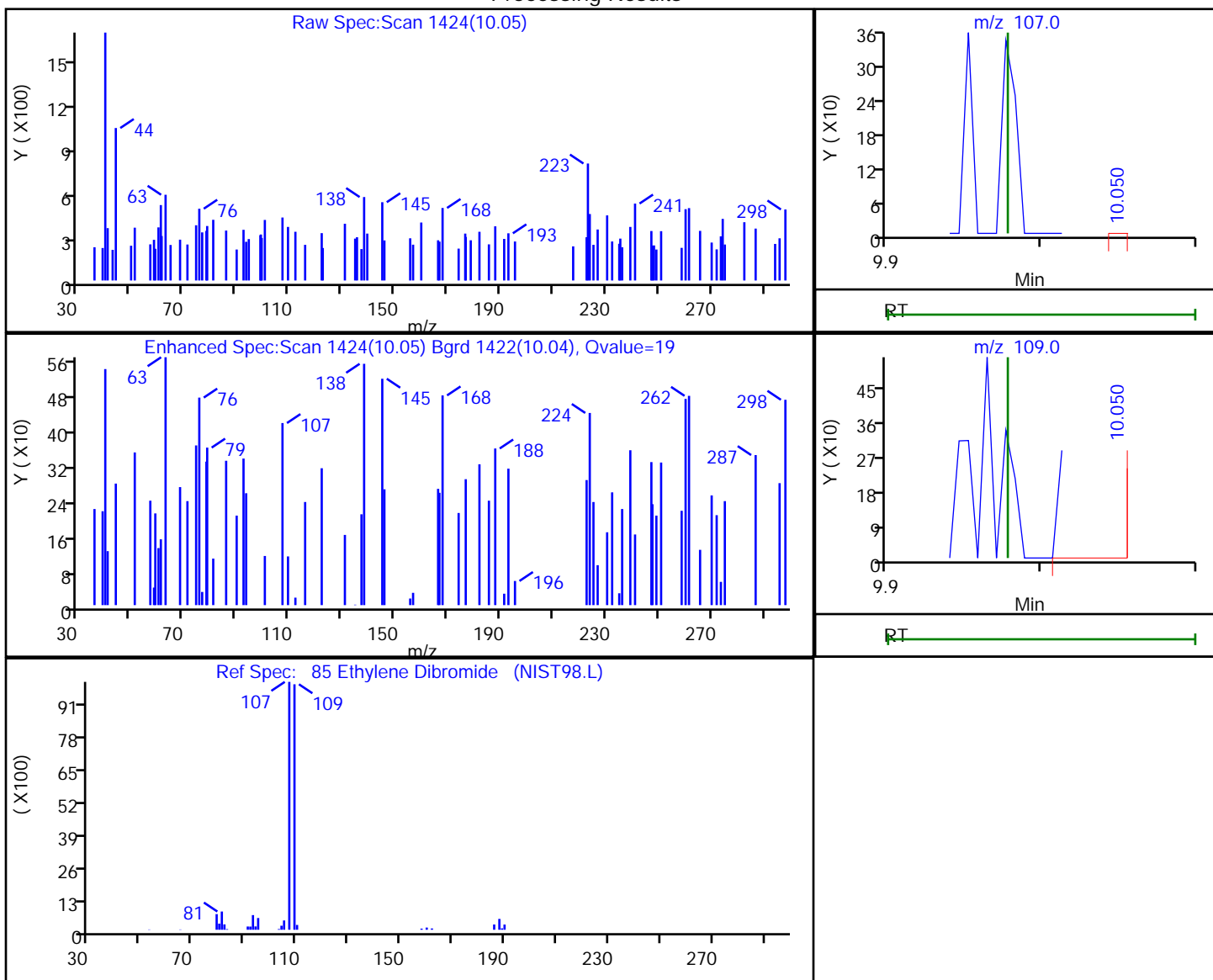
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050417.D  
 Injection Date: 04-May-2020 14:45:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-10 Lab Sample ID: 180-105108-10  
 Client ID: HD-COD-SW-27-0/1-0  
 Operator ID: 034635 ALS Bottle#: 17 Worklist Smp#: 17  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

85 Ethylene Dibromide, CAS: 106-93-4

Processing Results



RT	Mass	Response	Amount
10.05	107.00	151	0.050079
10.05	109.00	581	

Reviewer: journetp, 04-May-2020 15:14:37  
 Audit Action: Marked Compound Undetected

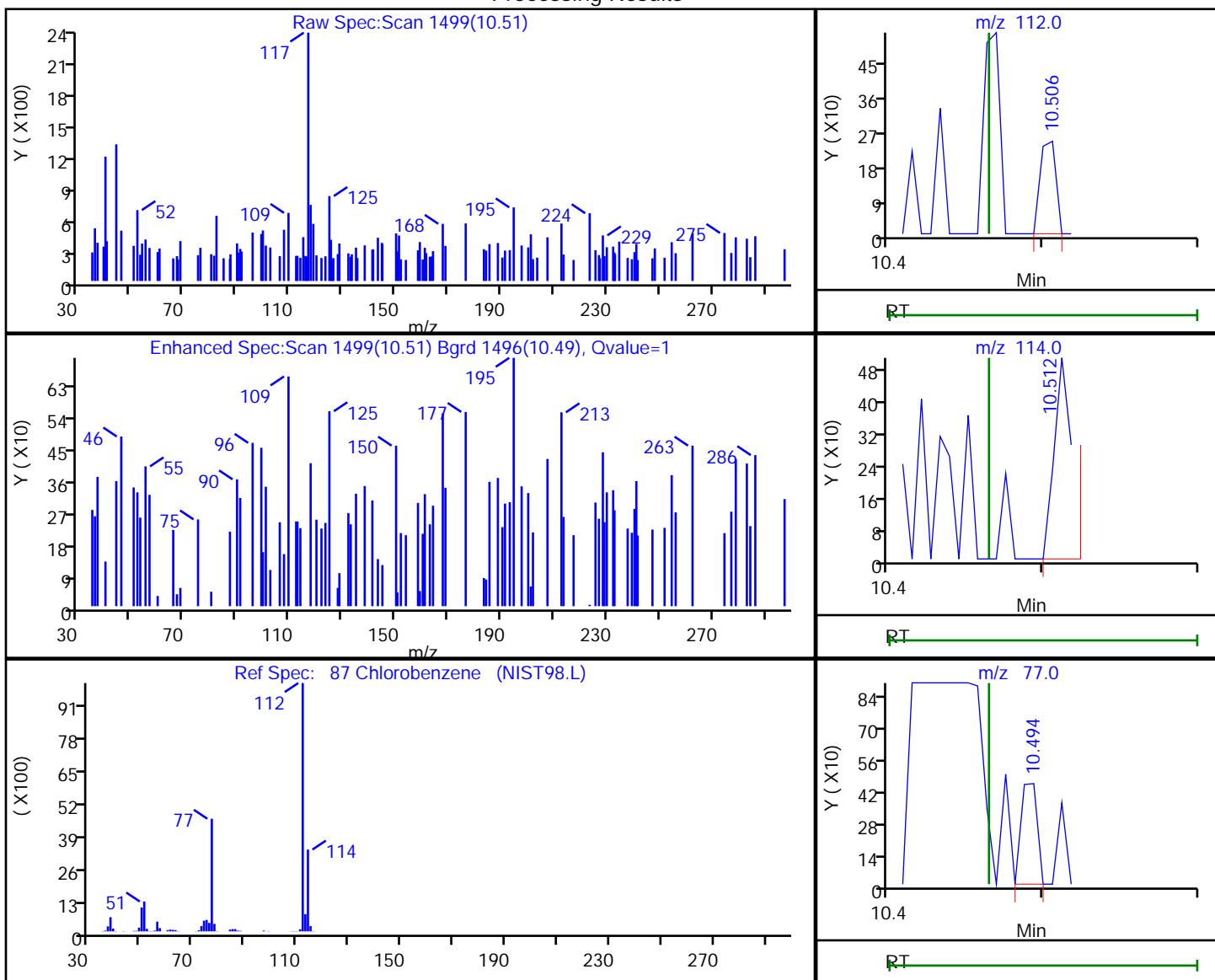
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050417.D  
 Injection Date: 04-May-2020 14:45:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-10 Lab Sample ID: 180-105108-10  
 Client ID: HD-COD-SW-27-0/1-0  
 Operator ID: 034635 ALS Bottle#: 17 Worklist Smp#: 17  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

87 Chlorobenzene, CAS: 108-90-7

Processing Results



RT	Mass	Response	Amount
10.51	112.00	171	0.019175
10.51	114.00	370	
10.49	77.00	327	

Reviewer: journept, 04-May-2020 15:14:37  
 Audit Action: Marked Compound Undetected

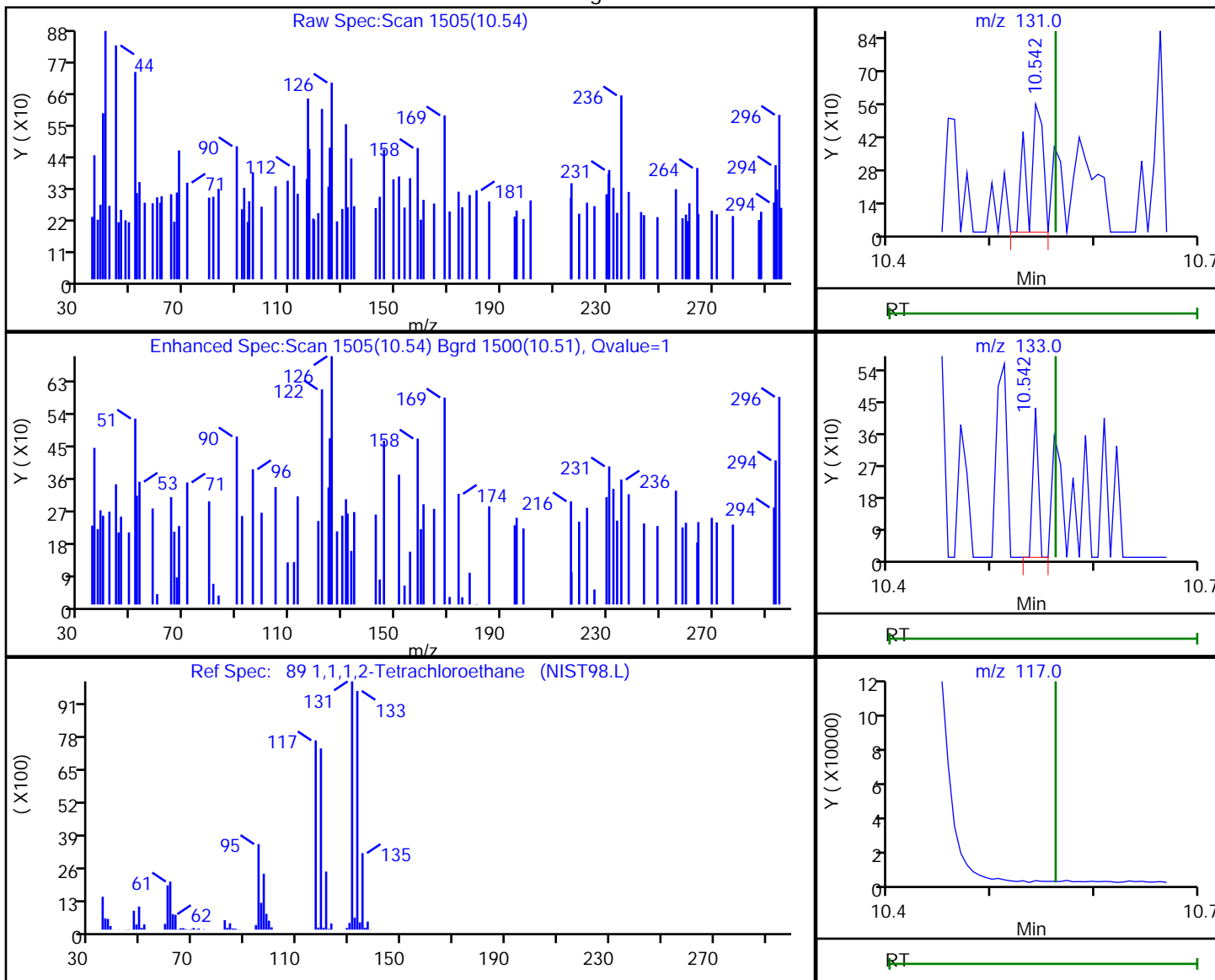
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050417.D  
Injection Date: 04-May-2020 14:45:30 Instrument ID: CHHP5  
Lims ID: 180-105108-B-10 Lab Sample ID: 180-105108-10  
Client ID: HD-COD-SW-27-0/1-0  
Operator ID: 034635 ALS Bottle#: 17 Worklist Smp#: 17  
Purge Vol: 5.000 mL Dil. Factor: 1.0000  
Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
Column: DB-624 (0.18 mm) Detector: MS SCAN

89 1,1,1,2-Tetrachloroethane, CAS: 630-20-6

Processing Results



RT	Mass	Response	Amount
10.54	131.00	526	0.181634
10.54	133.00	156	
10.56	117.00	0	

Reviewer: journeyp, 04-May-2020 15:14:37  
Audit Action: Marked Compound Undetected

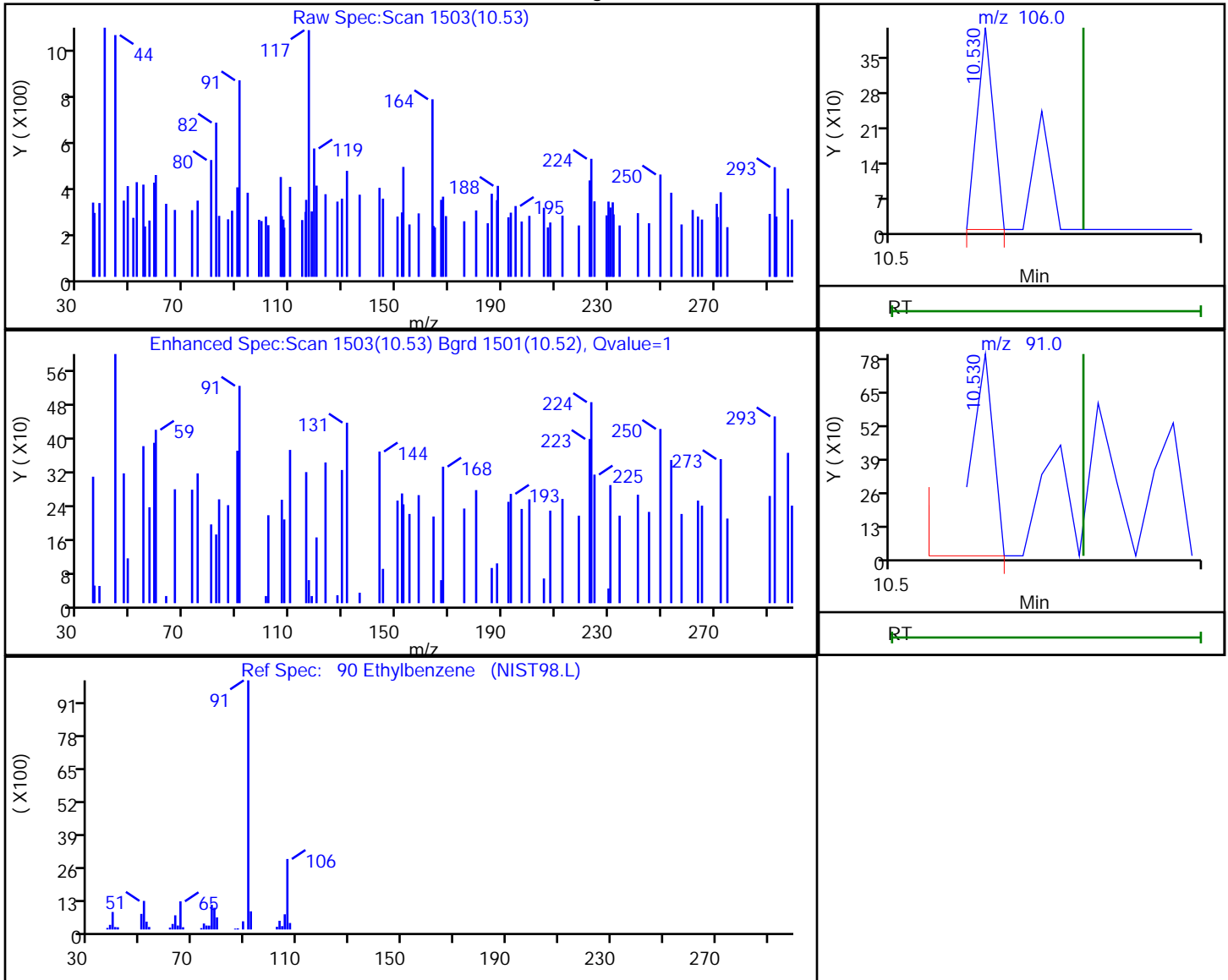
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050417.D  
 Injection Date: 04-May-2020 14:45:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-10 Lab Sample ID: 180-105108-10  
 Client ID: HD-COD-SW-27-0/1-0  
 Operator ID: 034635 ALS Bottle#: 17 Worklist Smp#: 17  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

90 Ethylbenzene, CAS: 100-41-4

Processing Results



RT	Mass	Response	Amount
10.53	106.00	148	0.032062
10.53	91.00	493	

Reviewer: journetp, 04-May-2020 15:14:37  
 Audit Action: Marked Compound Undetected

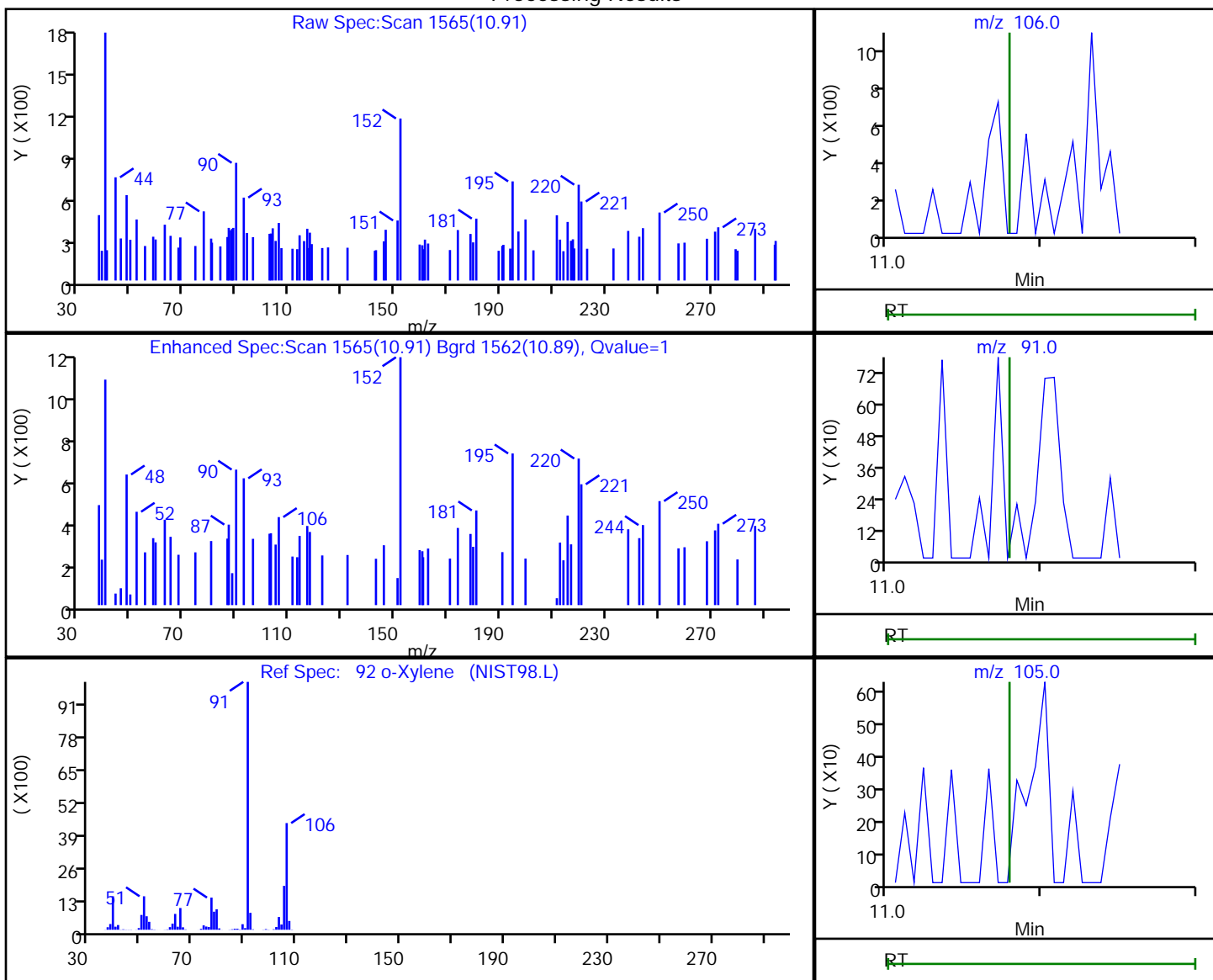
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050417.D  
 Injection Date: 04-May-2020 14:45:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-10 Lab Sample ID: 180-105108-10  
 Client ID: HD-COD-SW-27-0/1-0  
 Operator ID: 034635 ALS Bottle#: 17 Worklist Smp#: 17  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

92 o-Xylene, CAS: 95-47-6

Processing Results



RT	Mass	Response	Amount
10.91	106.00	312	0.058084
10.92	91.00	92	
10.91	105.00	294	

Reviewer: journeyp, 04-May-2020 15:14:37  
 Audit Action: Marked Compound Undetected

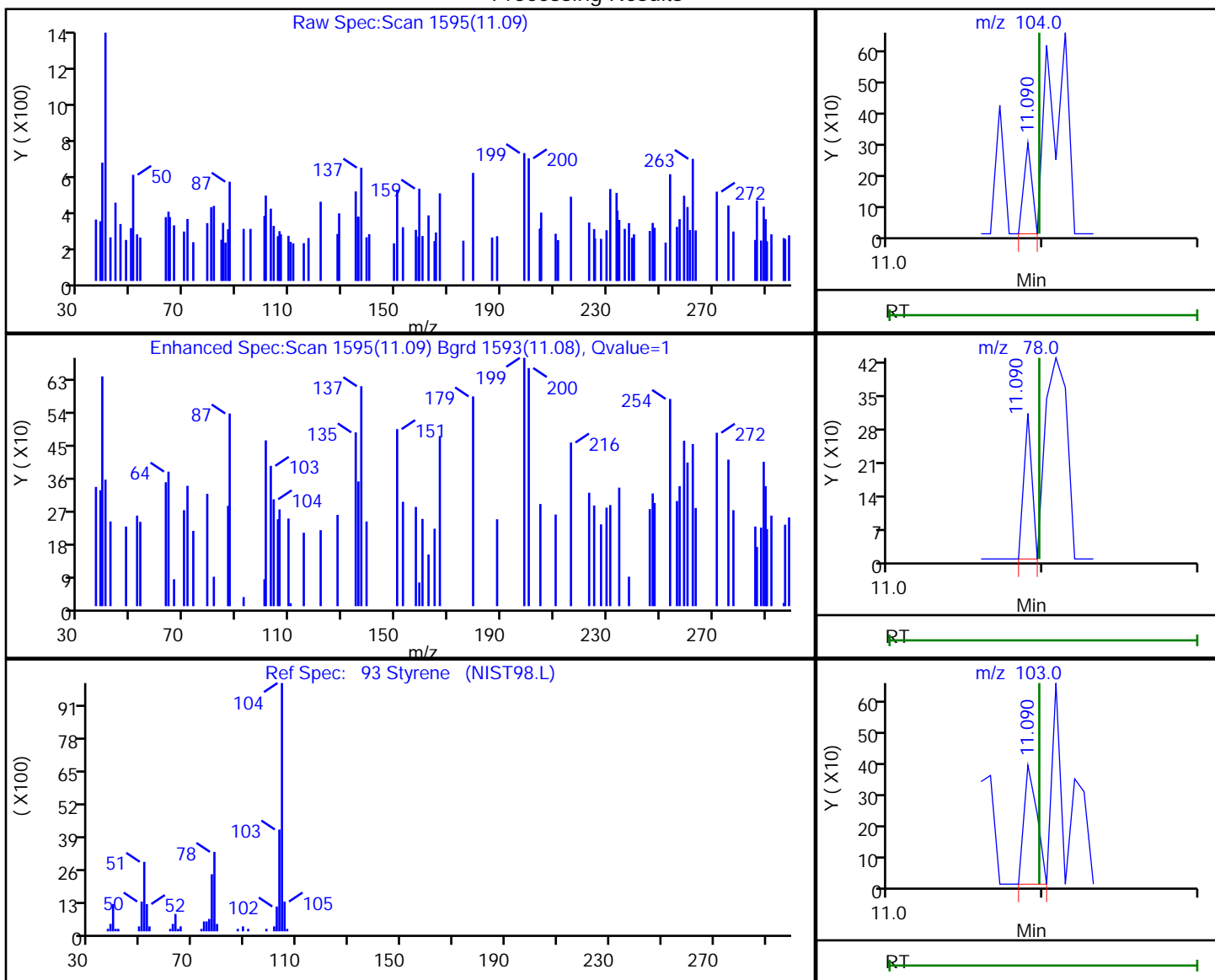
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050417.D  
 Injection Date: 04-May-2020 14:45:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-10 Lab Sample ID: 180-105108-10  
 Client ID: HD-COD-SW-27-0/1-0  
 Operator ID: 034635 ALS Bottle#: 17 Worklist Smp#: 17  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

93 Styrene, CAS: 100-42-5

Processing Results



RT	Mass	Response	Amount
11.09	104.00	107	0.011617
11.09	78.00	113	
11.09	103.00	224	

Reviewer: journept, 04-May-2020 15:14:37  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

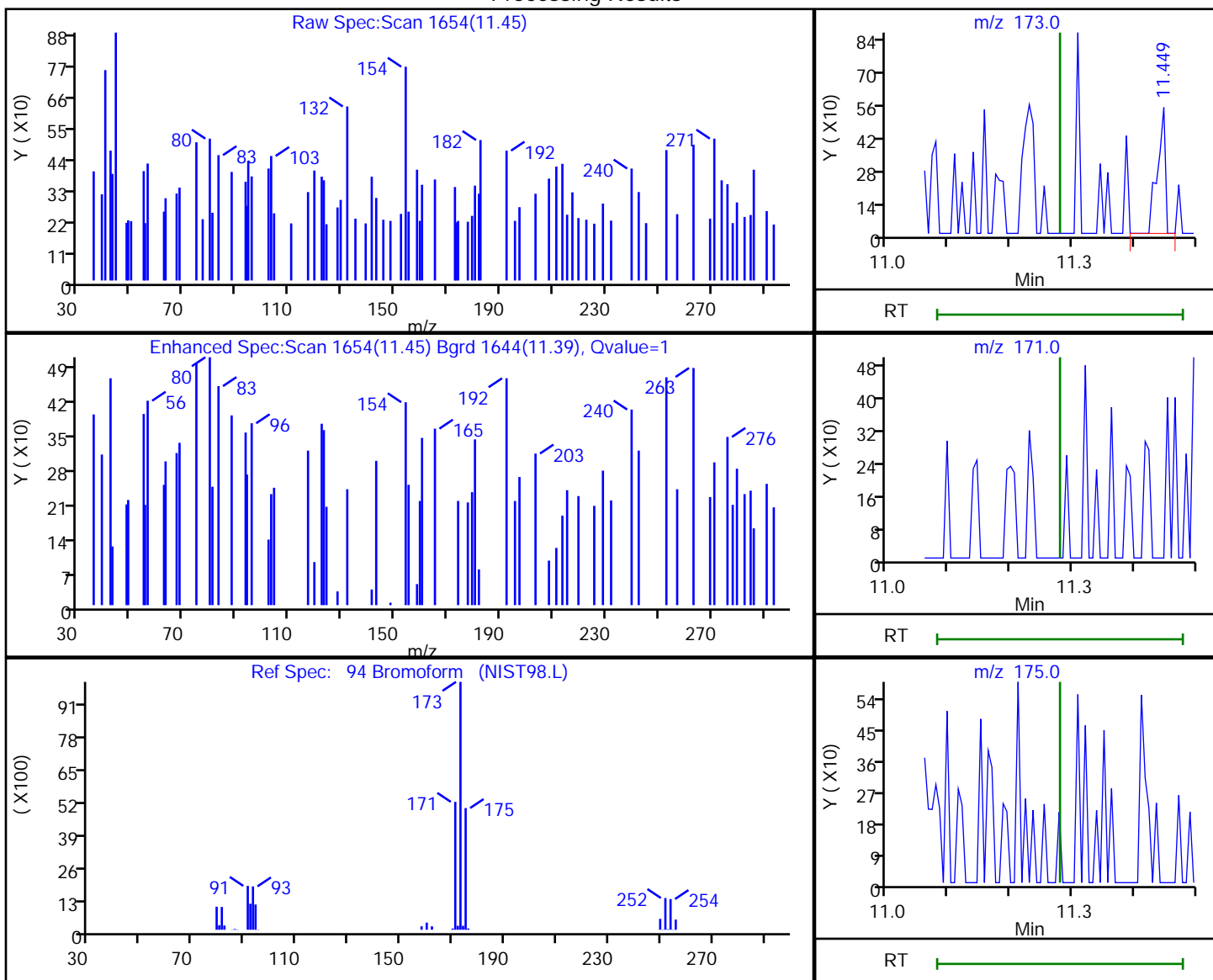


Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050417.D  
 Injection Date: 04-May-2020 14:45:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-10 Lab Sample ID: 180-105108-10  
 Client ID: HD-COD-SW-27-0/1-0  
 Operator ID: 034635 ALS Bottle#: 17 Worklist Smp#: 17  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

94 Bromoform, CAS: 75-25-2

Processing Results



RT	Mass	Response	Amount
11.45	173.00	484	0.375244
11.45	171.00	568	
11.28	175.00	0	

Reviewer: journeyp, 04-May-2020 15:14:37  
 Audit Action: Marked Compound Undetected

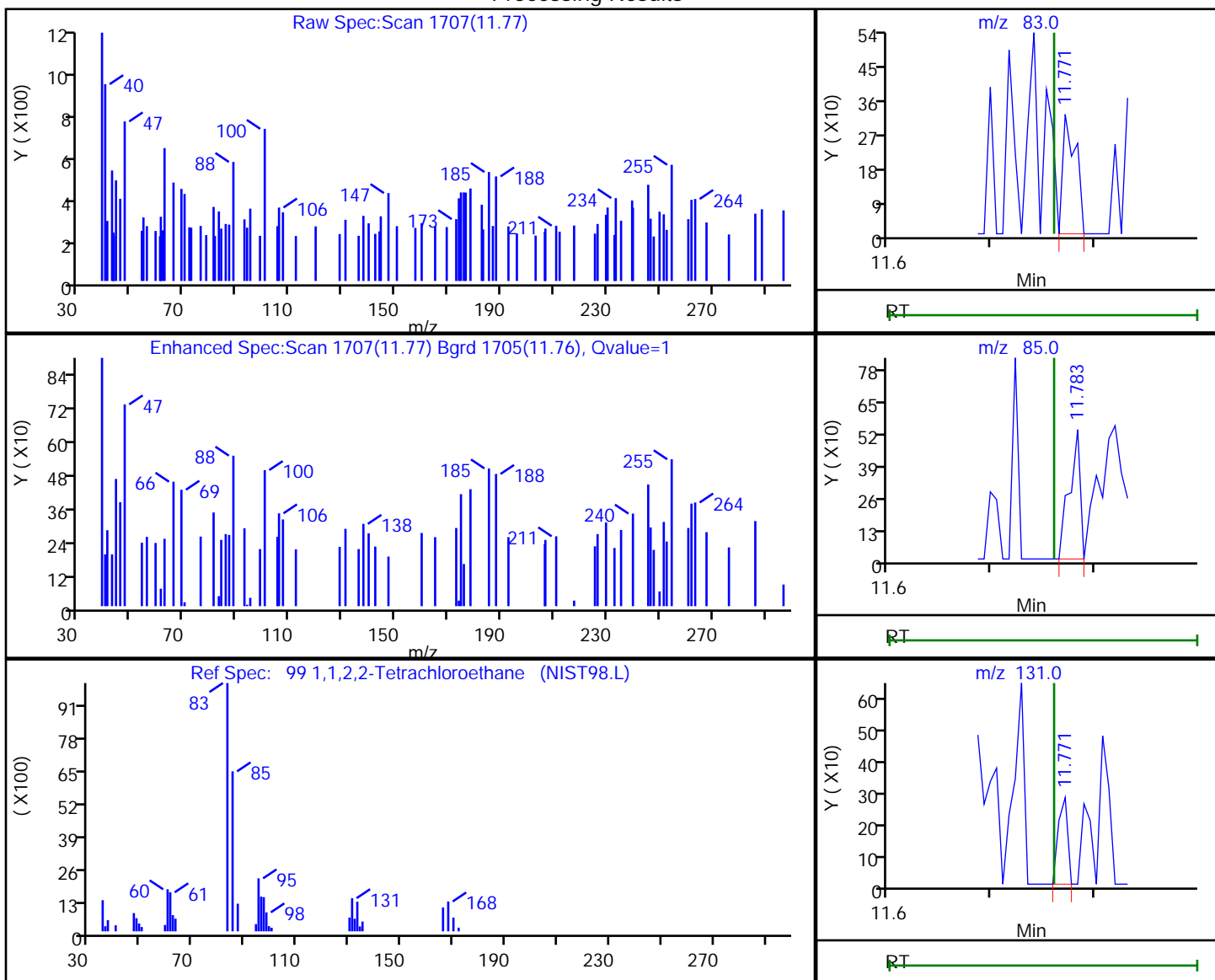
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050417.D  
 Injection Date: 04-May-2020 14:45:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-10 Lab Sample ID: 180-105108-10  
 Client ID: HD-COD-SW-27-0/1-0  
 Operator ID: 034635 ALS Bottle#: 17 Worklist Smp#: 17  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

99 1,1,2,2-Tetrachloroethane, CAS: 79-34-5

Processing Results



RT	Mass	Response	Amount
11.77	83.00	278	0.083541
11.78	85.00	388	
11.77	131.00	177	

Reviewer: journeyp, 04-May-2020 15:14:37  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: HD-COD-SW-28-0/1-0 Lab Sample ID: 180-105108-11  
 Matrix: Water Lab File ID: 5050418.D  
 Analysis Method: EPA 8260C Date Collected: 04/28/2020 13:35  
 Sample wt/vol: 5 (mL) Date Analyzed: 05/04/2020 15:09  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-624 ID: 0.18 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 314475 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	ND	^c	1.0	0.90
75-01-4	Vinyl chloride	ND		1.0	0.40
74-83-9	Bromomethane	ND	^c *	1.0	0.89
75-00-3	Chloroethane	ND		1.0	0.90
75-35-4	1,1-Dichloroethene	ND		1.0	0.55
67-64-1	Acetone	5.7		5.0	3.4
75-15-0	Carbon disulfide	ND		1.0	0.88
75-09-2	Methylene Chloride	ND		1.0	0.89
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.67
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.59
75-34-3	1,1-Dichloroethane	ND		1.0	0.31
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.71
74-97-5	Bromochloromethane	ND		1.0	0.63
78-93-3	2-Butanone (MEK)	ND	^c	5.0	2.6
67-66-3	Chloroform	ND		1.0	0.60
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.60
56-23-5	Carbon tetrachloride	ND		1.0	0.88
71-43-2	Benzene	ND		1.0	0.60
107-06-2	1,2-Dichloroethane	ND		1.0	0.57
79-01-6	Trichloroethene	ND		1.0	0.69
78-87-5	1,2-Dichloropropane	ND		1.0	0.66
75-27-4	Bromodichloromethane	ND		1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	3.1
108-88-3	Toluene	ND		1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.58
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.45
127-18-4	Tetrachloroethene	ND		1.0	0.47
591-78-6	2-Hexanone	ND		5.0	3.3
124-48-1	Dibromochloromethane	ND		1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	ND		1.0	0.50
108-90-7	Chlorobenzene	ND		1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.57
100-41-4	Ethylbenzene	ND		1.0	0.51
1330-20-7	Xylenes, Total	ND		2.0	0.89
100-42-5	Styrene	ND		1.0	0.47

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: HD-COD-SW-28-0/1-0 Lab Sample ID: 180-105108-11  
 Matrix: Water Lab File ID: 5050418.D  
 Analysis Method: EPA 8260C Date Collected: 04/28/2020 13:35  
 Sample wt/vol: 5 (mL) Date Analyzed: 05/04/2020 15:09  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-624 ID: 0.18 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 314475 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	ND	^c	1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	ND	^c	1.0	0.60
107-13-1	Acrylonitrile	ND		20	7.8

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		62-146
2037-26-5	Toluene-d8 (Surr)	99		75-120
460-00-4	4-Bromofluorobenzene (Surr)	83		64-120
1868-53-7	Dibromofluoromethane (Surr)	99		71-132

Eurofins TestAmerica, Pittsburgh  
Target Compound Quantitation Report

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050418.D  
 Lims ID: 180-105108-A-11  
 Client ID: HD-COD-SW-28-0/1-0  
 Sample Type: Client  
 Inject. Date: 04-May-2020 15:09:30 ALS Bottle#: 18 Worklist Smp#: 18  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: 180-0031789-018  
 Operator ID: 034635 Instrument ID: CHHP5  
 Method: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\MMSVOA\_LL\_CHHP5.m  
 Limit Group: VOA 8260C\_D ICAL  
 Last Update: 04-May-2020 15:42:51 Calib Date: 03-Apr-2020 19:09:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICAL File: \\chromna\Pittsburgh\ChromData\CHHP5\20200403-31442.b\5040310.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: CTX0327

First Level Reviewer: journetp

Date: 04-May-2020 15:42:51

Compound	Sig	RT (min.)	Exp RT (min.)	Diff RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.370	4.363	0.007	0	226393	1000.0	
* 2 Fluorobenzene (IS)	96	7.351	7.344	0.007	99	539588	50.0	
* 3 Chlorobenzene-d5	119	10.441	10.434	0.007	85	134962	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.771	12.776	-0.005	95	208703	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.633	6.626	0.007	93	152030	49.4	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.998	6.991	0.007	0	211013	48.3	
\$ 7 Toluene-d8 (Surr)	98	8.987	8.986	0.001	93	538475	49.3	
\$ 8 4-Bromofluorobenzene (Surr	95	11.615	11.614	0.001	88	172222	41.7	
12 Chloromethane	50		1.844				ND	U
13 Vinyl chloride	62		1.966				ND	U
15 Bromomethane	94		2.288				ND	U
16 Chloroethane	64		2.416				ND	U
22 1,1-Dichloroethene	96		3.414				ND	U
24 Acetone	43	3.512	3.511	0.001	99	53369	28.6	
26 Carbon disulfide	76		3.706				ND	U
31 Methylene Chloride	84		4.217				ND	U
33 Acrylonitrile	53		4.612				ND	U
34 trans-1,2-Dichloroethene	96		4.631				ND	U
35 Methyl tert-butyl ether	73		4.655				ND	U
37 1,1-Dichloroethane	63		5.263				ND	U
45 cis-1,2-Dichloroethene	96		6.018				ND	U
46 2-Butanone (MEK)	43		6.036				ND	U
49 Chlorobromomethane	128		6.297				ND	U
52 Chloroform	83		6.443				ND	U
53 1,1,1-Trichloroethane	97		6.602				ND	U
56 Carbon tetrachloride	117		6.766				ND	U
58 Benzene	78		7.003				ND	U
59 1,2-Dichloroethane	62		7.076				ND	U
64 Trichloroethene	130		7.727				ND	U
67 1,2-Dichloropropane	63		8.001				ND	U
71 Dichlorobromomethane	83		8.287				ND	U
74 cis-1,3-Dichloropropene	75		8.731				ND	U

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
75 4-Methyl-2-pentanone (MIBK	43		8.889				ND	U
76 Toluene	91		9.053				ND	U
77 trans-1,3-Dichloropropene	75		9.303				ND	U
79 1,1,2-Trichloroethane	97		9.497				ND	U
80 Tetrachloroethene	164		9.564				ND	U
82 2-Hexanone	43		9.716				ND	U
84 Chlorodibromomethane	129		9.868				ND	U
85 Ethylene Dibromide	107		9.978				ND	U
87 Chlorobenzene	112		10.465				ND	U
89 1,1,1,2-Tetrachloroethane	131		10.562				ND	U
90 Ethylbenzene	106		10.562				ND	U
91 m-Xylene & p-Xylene	106		10.696				ND	U
92 o-Xylene	106		11.079				ND	U
93 Styrene	104		11.097				ND	U
94 Bromoform	173		11.280				ND	U
99 1,1,2,2-Tetrachloroethane	83		11.760				ND	U
S 133 Xylenes, Total	106		1.000				ND	

**QC Flag Legend**

Review Flags

U - Marked Undetected

**Reagents:**

voaWI/SHP5\_00016

Amount Added: 5.00

Units: uL

Run Reagent

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050418.D

Injection Date: 04-May-2020 15:09:30

Instrument ID: CHHP5

Operator ID: 034635

Lims ID: 180-105108-A-11

Lab Sample ID: 180-105108-11

Worklist Smp#: 18

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

Purge Vol: 5.000 mL

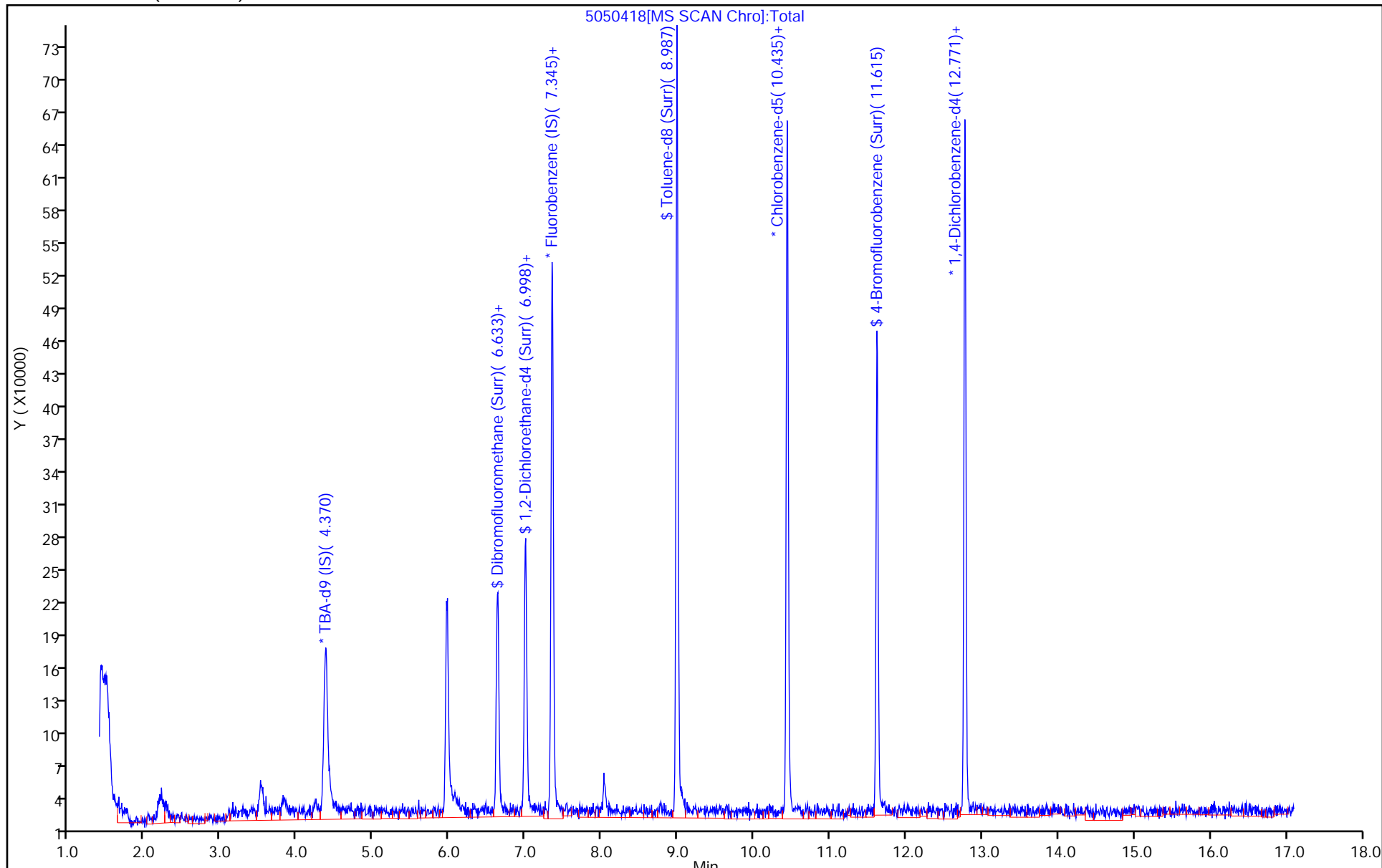
Dil. Factor: 1.0000

ALS Bottle#: 18

Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Pittsburgh  
Recovery Report

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050418.D  
 Lims ID: 180-105108-A-11  
 Client ID: HD-COD-SW-28-0/1-0  
 Sample Type: Client  
 Inject. Date: 04-May-2020 15:09:30 ALS Bottle#: 18 Worklist Smp#: 18  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: 180-0031789-018  
 Operator ID: 034635 Instrument ID: CHHP5  
 Method: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\MMSVOA\_LL\_CHHP5.m  
 Limit Group: VOA 8260C\_D ICAL  
 Last Update: 04-May-2020 15:42:51 Calib Date: 03-Apr-2020 19:09:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP5\20200403-31442.b\5040310.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: CTX0327

First Level Reviewer: journetp

Date: 04-May-2020 15:42:51

Compound	Amount Added	Amount Recovered	% Rec.
\$ 5 Dibromofluoromethane (Surr)	50.0	49.4	98.76
\$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	48.3	96.60
\$ 7 Toluene-d8 (Surr)	50.0	49.3	98.58
\$ 8 4-Bromofluorobenzene (Surr)	50.0	41.7	83.42



Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050418.D

Injection Date: 04-May-2020 15:09:30

Instrument ID: CHHP5

Lims ID: 180-105108-A-11

Lab Sample ID: 180-105108-11

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

Operator ID: 034635

ALS Bottle#: 18

Worklist Smp#: 18

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

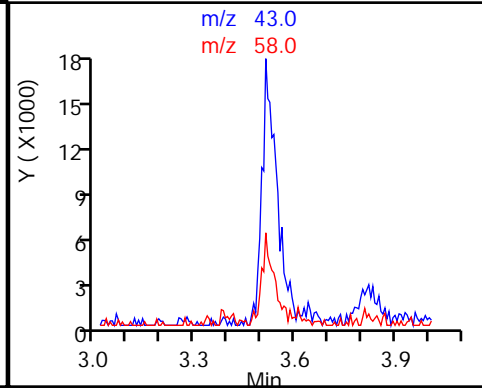
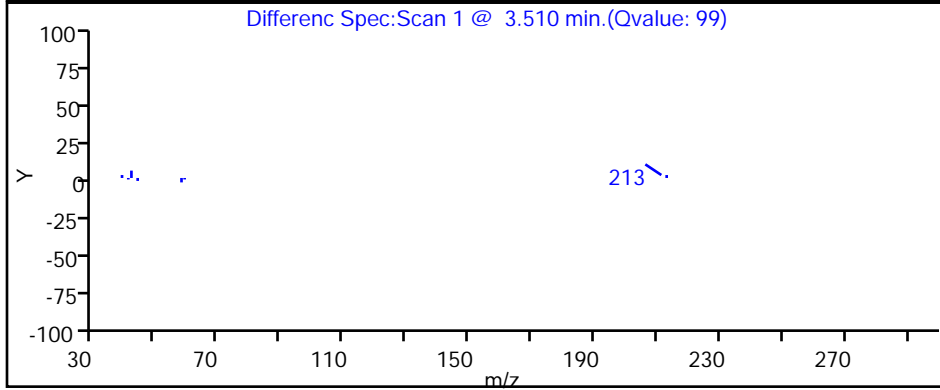
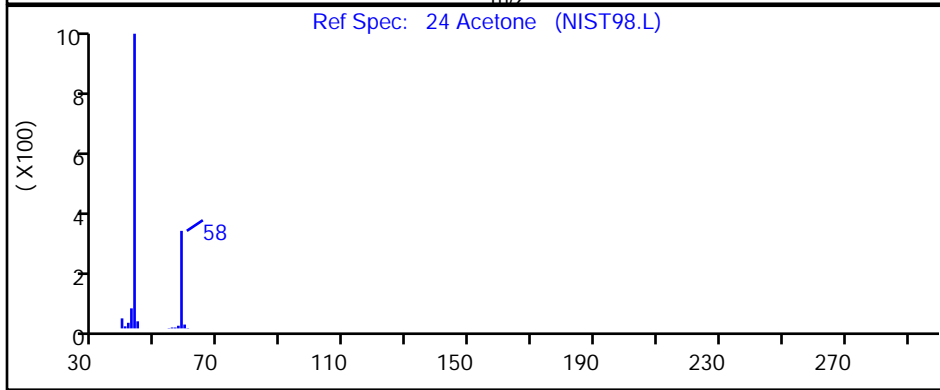
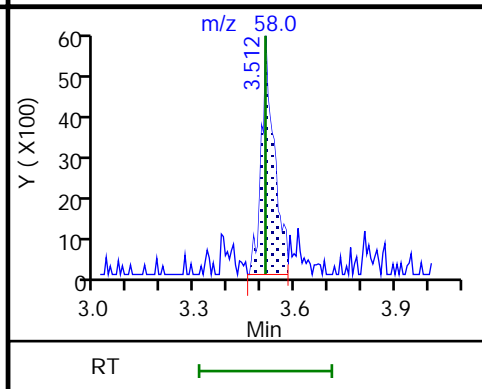
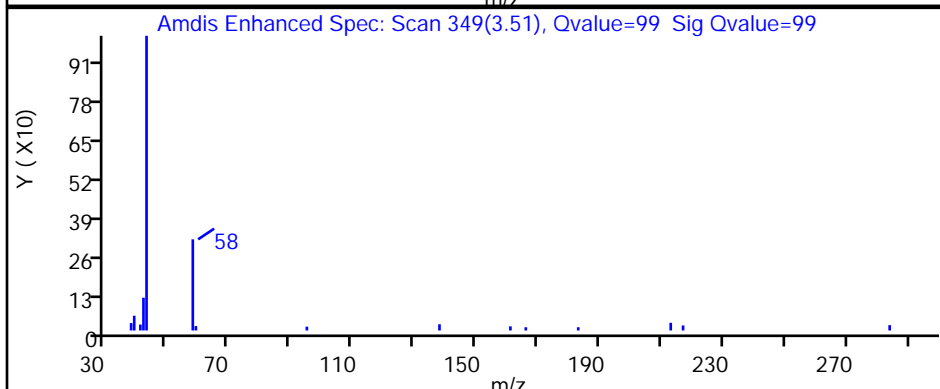
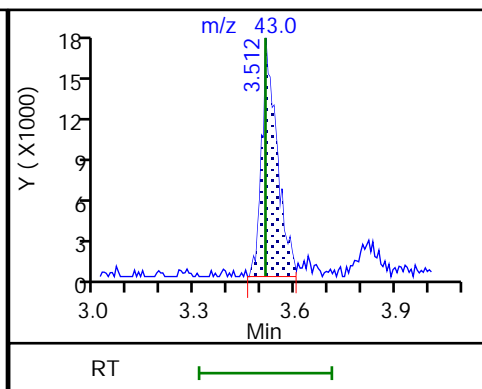
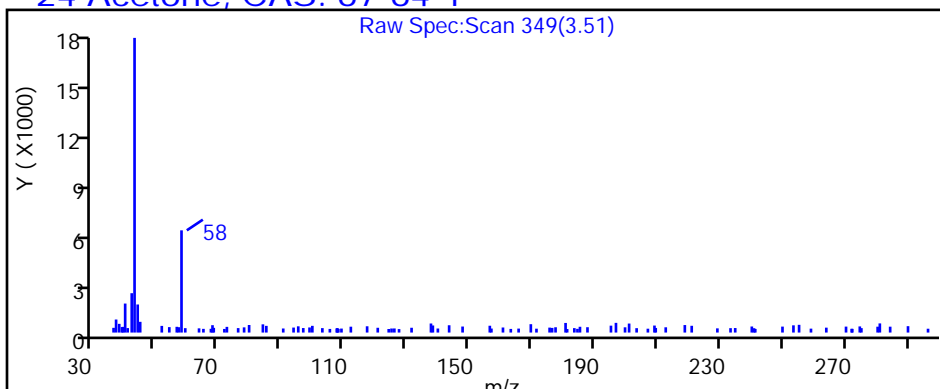
Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

24 Acetone, CAS: 67-64-1



Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050418.D

Injection Date: 04-May-2020 15:09:30

Instrument ID: CHHP5

Lims ID: 180-105108-A-11

Lab Sample ID: 180-105108-11

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

Operator ID: 034635

ALS Bottle#: 18 Worklist Smp#: 18

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

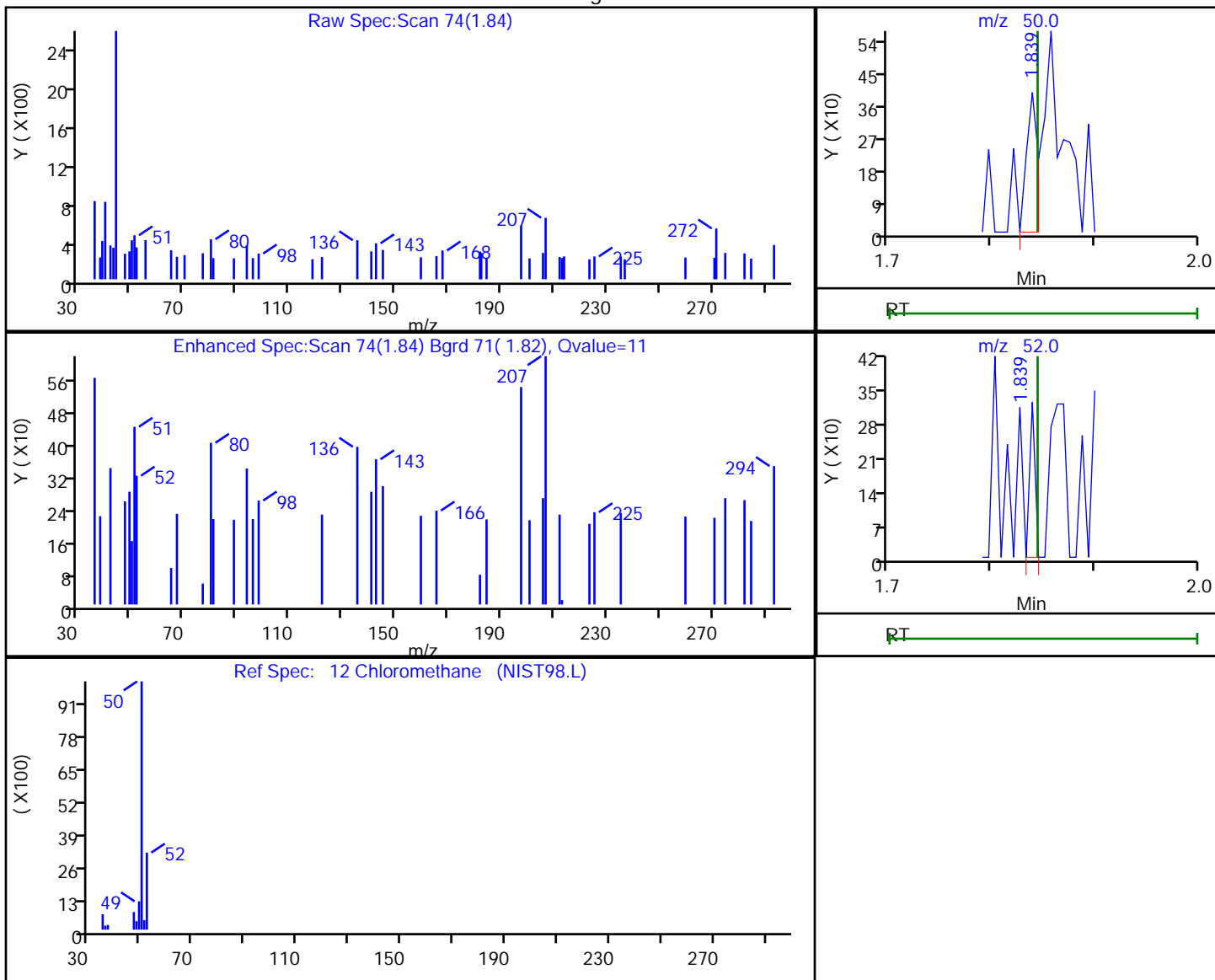
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

12 Chloromethane, CAS: 74-87-3

Processing Results



RT	Mass	Response	Amount
1.84	50.00	297	0.056423
1.84	52.00	117	

Reviewer: journtp, 04-May-2020 15:42:28

Audit Action: Marked Compound Undetected

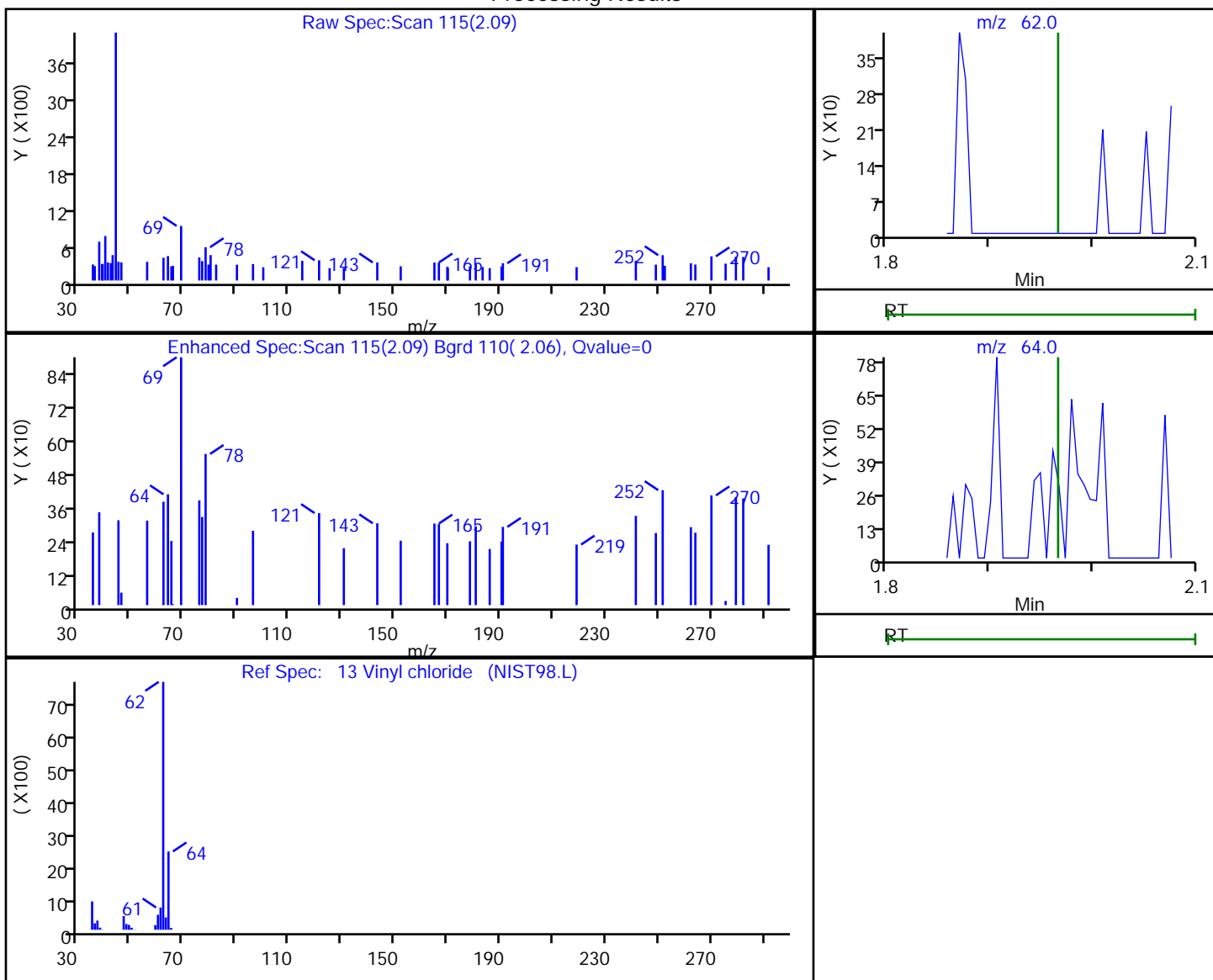
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050418.D  
 Injection Date: 04-May-2020 15:09:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-A-11 Lab Sample ID: 180-105108-11  
 Client ID: HD-COD-SW-28-0/1-0  
 Operator ID: 034635 ALS Bottle#: 18 Worklist Smp#: 18  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

13 Vinyl chloride, CAS: 75-01-4

Processing Results



RT	Mass	Response	Amount
2.09	62.00	319	0.068051
2.10	64.00	410	

Reviewer: journetp, 04-May-2020 15:42:28  
 Audit Action: Marked Compound Undetected

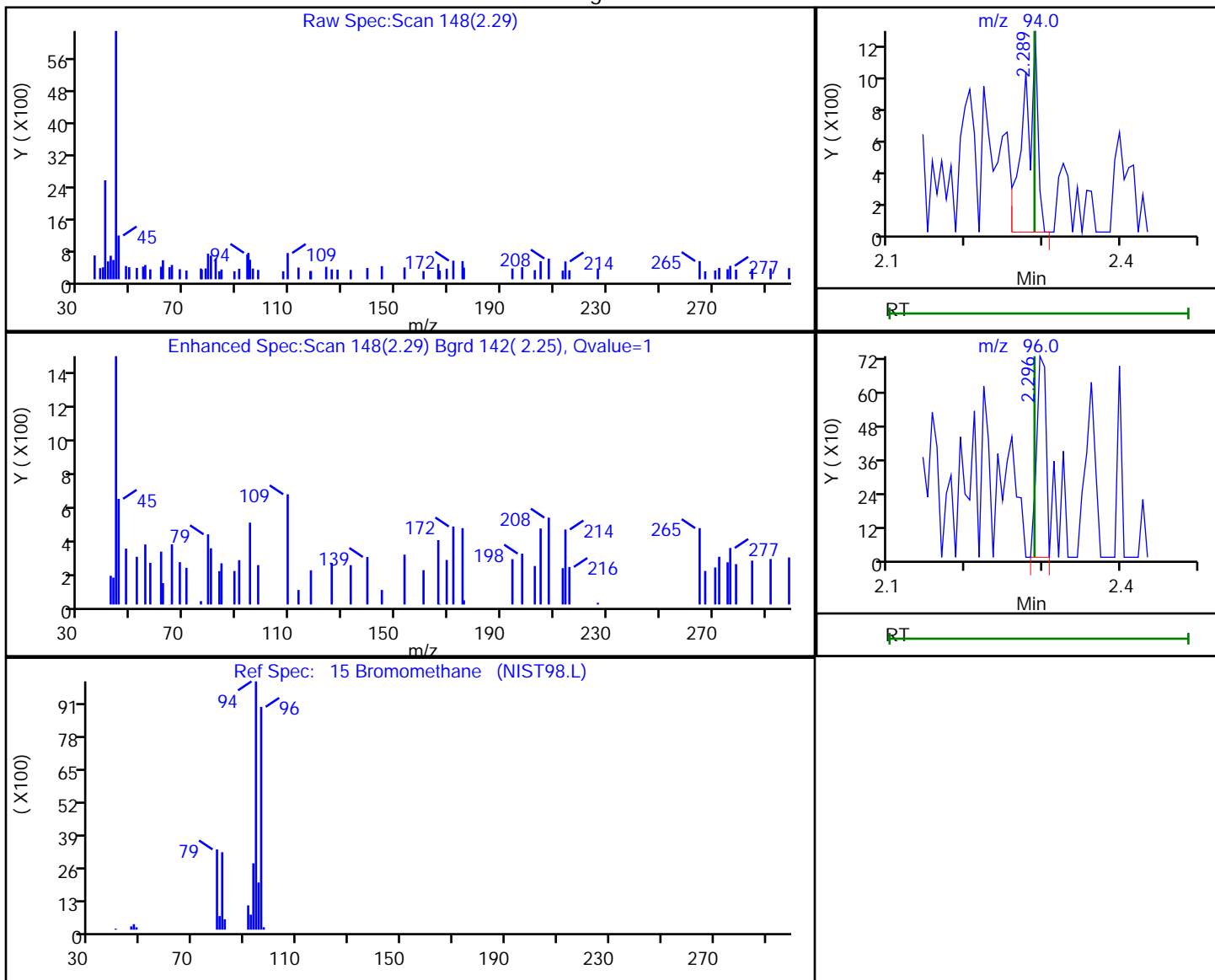
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050418.D  
Injection Date: 04-May-2020 15:09:30 Instrument ID: CHHP5  
Lims ID: 180-105108-A-11 Lab Sample ID: 180-105108-11  
Client ID: HD-COD-SW-28-0/1-0  
Operator ID: 034635 ALS Bottle#: 18 Worklist Smp#: 18  
Purge Vol: 5.000 mL Dil. Factor: 1.0000  
Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
Column: DB-624 (0.18 mm) Detector: MS SCAN

15 Bromomethane, CAS: 74-83-9

Processing Results



RT	Mass	Response	Amount
2.29	94.00	1514	0.564089
2.30	96.00	617	

Reviewer: journtp, 04-May-2020 15:42:28  
Audit Action: Marked Compound Undetected

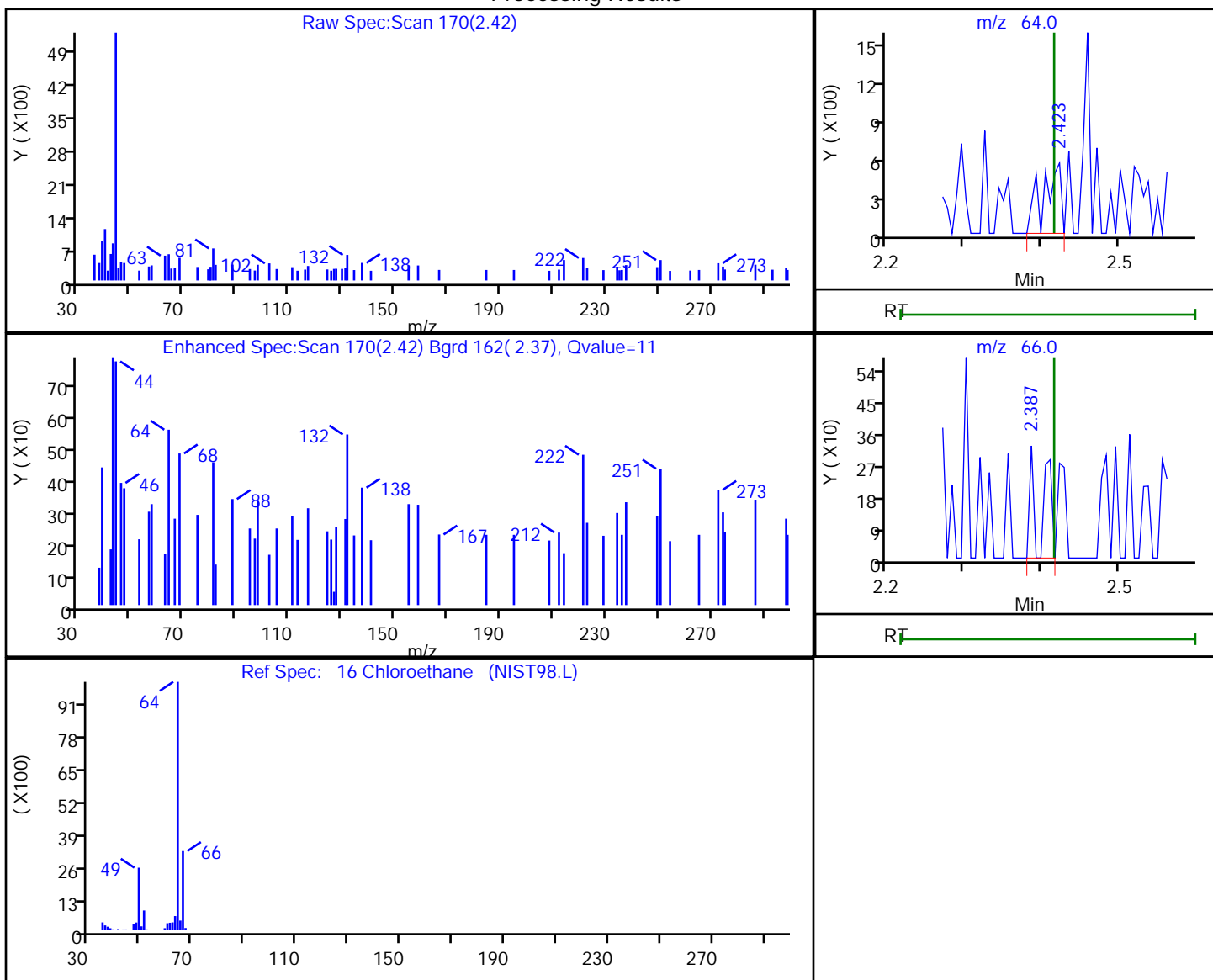
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050418.D  
Injection Date: 04-May-2020 15:09:30 Instrument ID: CHHP5  
Lims ID: 180-105108-A-11 Lab Sample ID: 180-105108-11  
Client ID: HD-COD-SW-28-0/1-0  
Operator ID: 034635 ALS Bottle#: 18 Worklist Smp#: 18  
Purge Vol: 5.000 mL Dil. Factor: 1.0000  
Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
Column: DB-624 (0.18 mm) Detector: MS SCAN

16 Chloroethane, CAS: 75-00-3

Processing Results



RT	Mass	Response	Amount
2.42	64.00	896	0.281743
2.39	66.00	320	

Reviewer: journetp, 04-May-2020 15:42:28  
Audit Action: Marked Compound Undetected

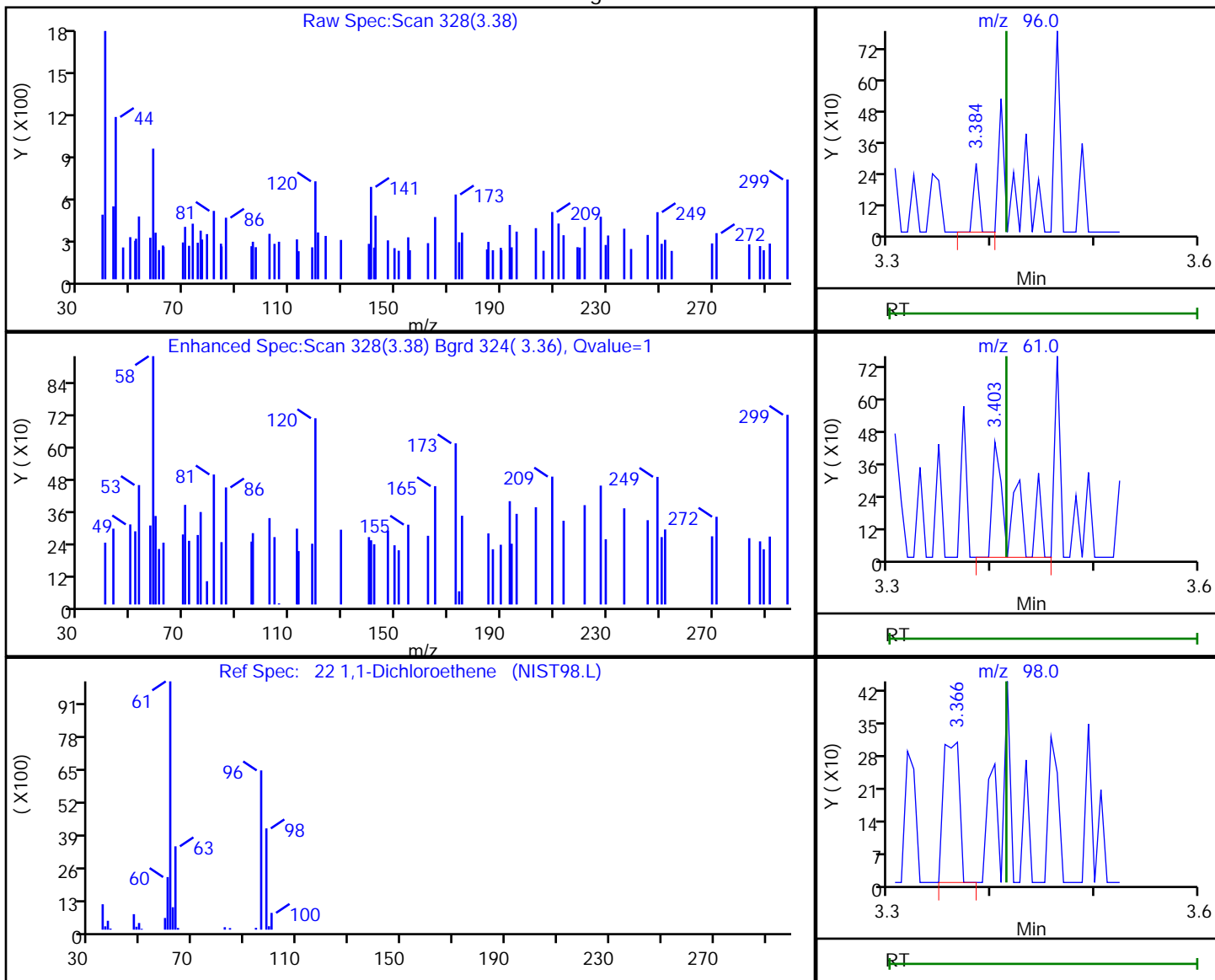
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050418.D  
 Injection Date: 04-May-2020 15:09:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-A-11 Lab Sample ID: 180-105108-11  
 Client ID: HD-COD-SW-28-0/1-0  
 Operator ID: 034635 ALS Bottle#: 18 Worklist Smp#: 18  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

22 1,1-Dichloroethene, CAS: 75-35-4

Processing Results



RT	Mass	Response	Amount
3.38	96.00	99	-1.954439
3.40	61.00	570	
3.37	98.00	330	

Reviewer: journept, 04-May-2020 15:42:28  
 Audit Action: Marked Compound Undetected

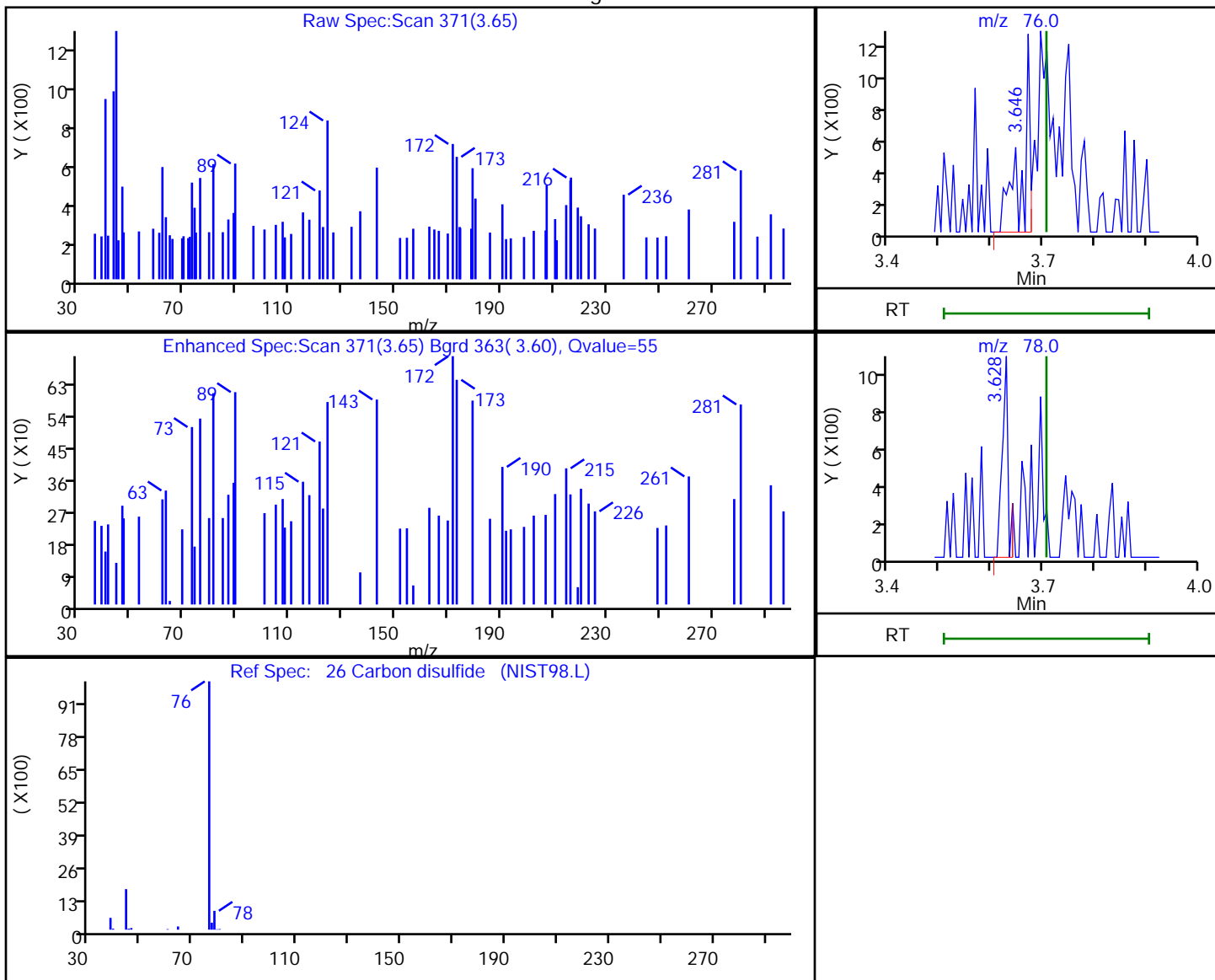
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050418.D  
Injection Date: 04-May-2020 15:09:30 Instrument ID: CHHP5  
Lims ID: 180-105108-A-11 Lab Sample ID: 180-105108-11  
Client ID: HD-COD-SW-28-0/1-0  
Operator ID: 034635 ALS Bottle#: 18 Worklist Smp#: 18  
Purge Vol: 5.000 mL Dil. Factor: 1.0000  
Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
Column: DB-624 (0.18 mm) Detector: MS SCAN

26 Carbon disulfide, CAS: 75-15-0

Processing Results



RT	Mass	Response	Amount
3.65	76.00	1271	0.209556
3.63	78.00	864	

Reviewer: journtp, 04-May-2020 15:42:35  
Audit Action: Marked Compound Undetected

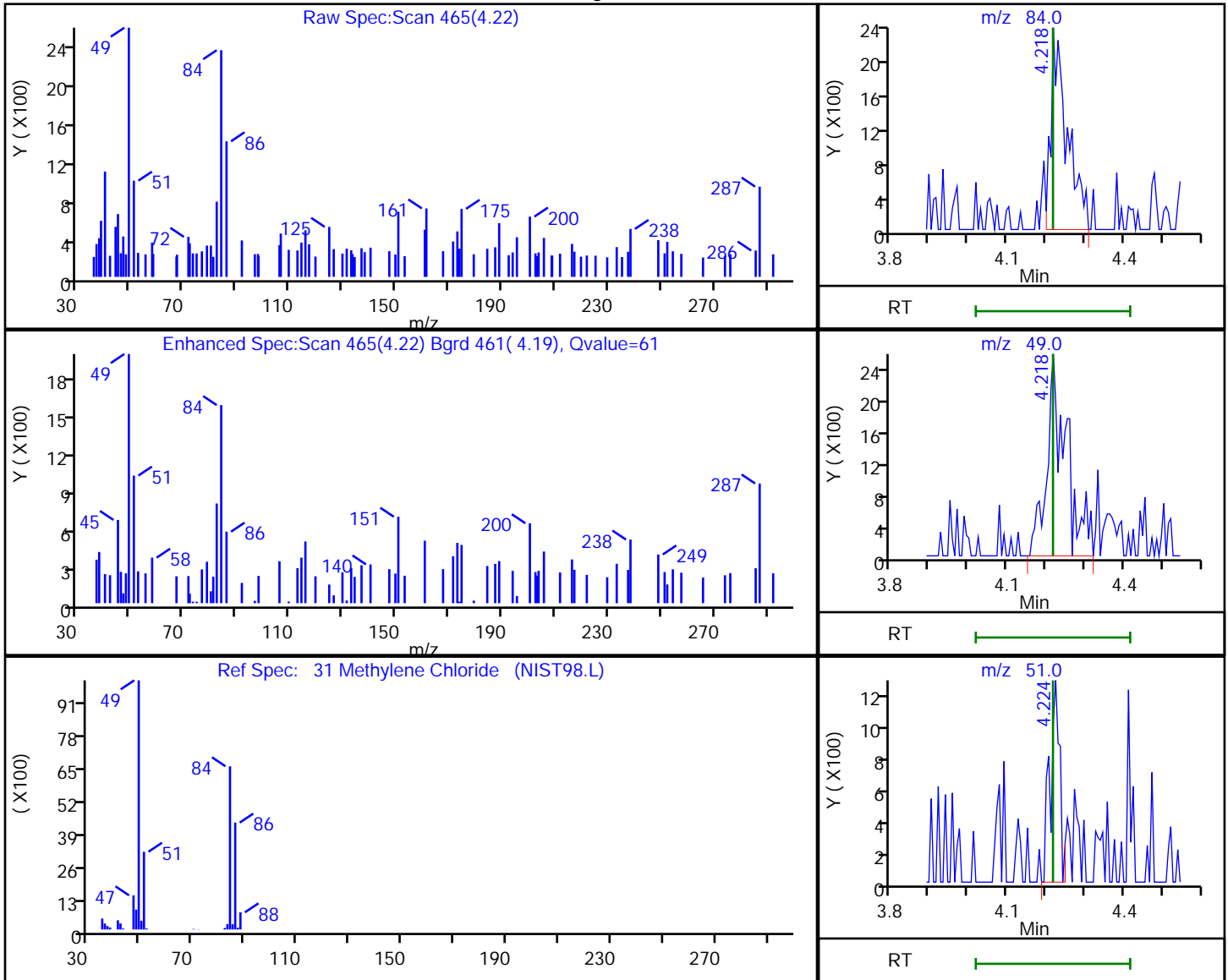
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050418.D  
Injection Date: 04-May-2020 15:09:30 Instrument ID: CHHP5  
Lims ID: 180-105108-A-11 Lab Sample ID: 180-105108-11  
Client ID: HD-COD-SW-28-0/1-0  
Operator ID: 034635 ALS Bottle#: 18 Worklist Smp#: 18  
Purge Vol: 5.000 mL Dil. Factor: 1.0000  
Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
Column: DB-624 (0.18 mm) Detector: MS SCAN

31 Methylene Chloride, CAS: 75-09-2

Processing Results



RT	Mass	Response	Amount
4.22	84.00	6834	0.265298
4.22	49.00	9131	
4.22	51.00	2174	

Reviewer: journetp, 04-May-2020 15:42:35  
Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

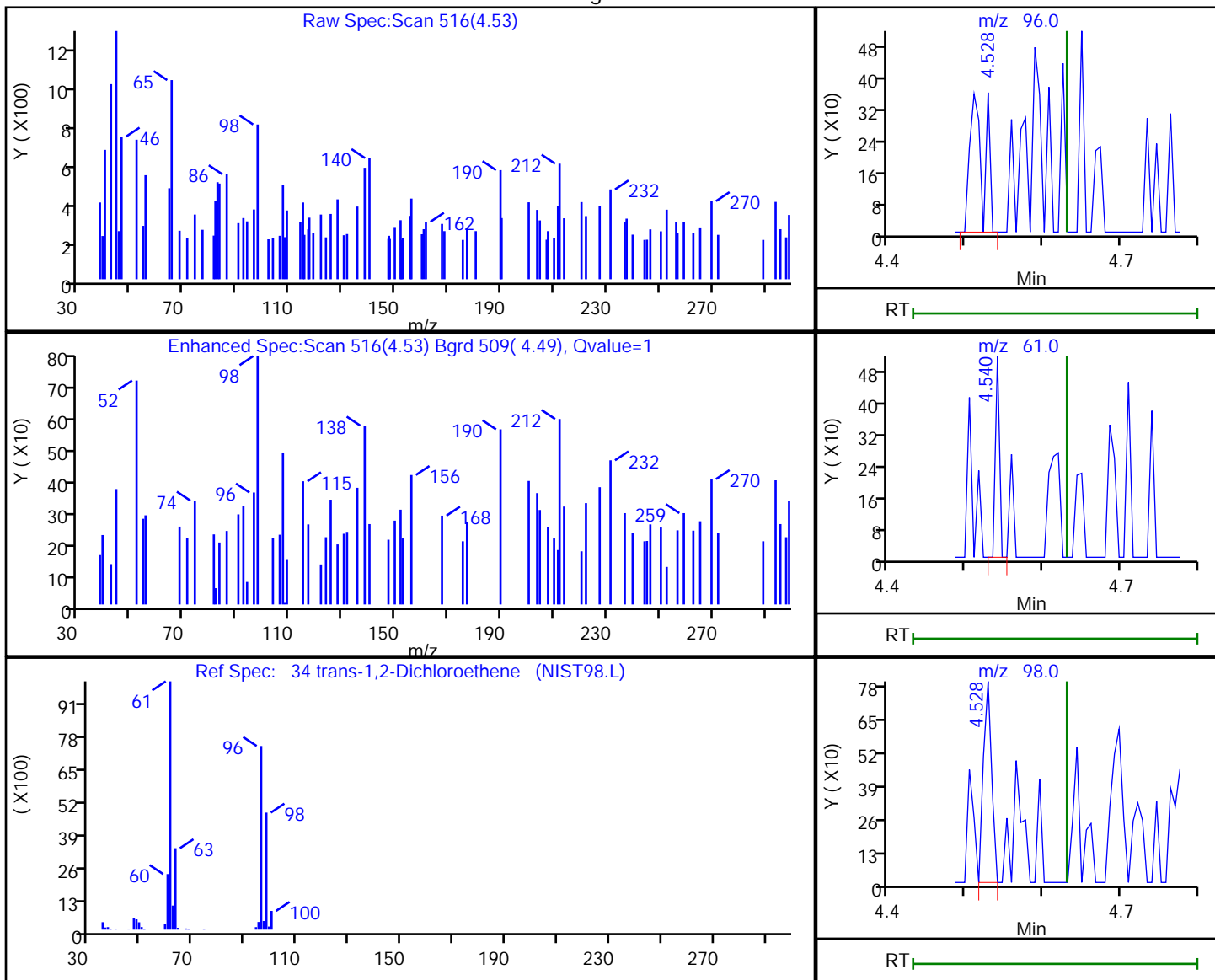


Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050418.D  
Injection Date: 04-May-2020 15:09:30 Instrument ID: CHHP5  
Lims ID: 180-105108-A-11 Lab Sample ID: 180-105108-11  
Client ID: HD-COD-SW-28-0/1-0  
Operator ID: 034635 ALS Bottle#: 18 Worklist Smp#: 18  
Purge Vol: 5.000 mL Dil. Factor: 1.0000  
Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
Column: DB-624 (0.18 mm) Detector: MS SCAN

34 trans-1,2-Dichloroethene, CAS: 156-60-5

Processing Results



RT	Mass	Response	Amount
4.53	96.00	444	0.150530
4.54	61.00	187	
4.53	98.00	589	

Reviewer: journeyp, 04-May-2020 15:42:35  
Audit Action: Marked Compound Undetected

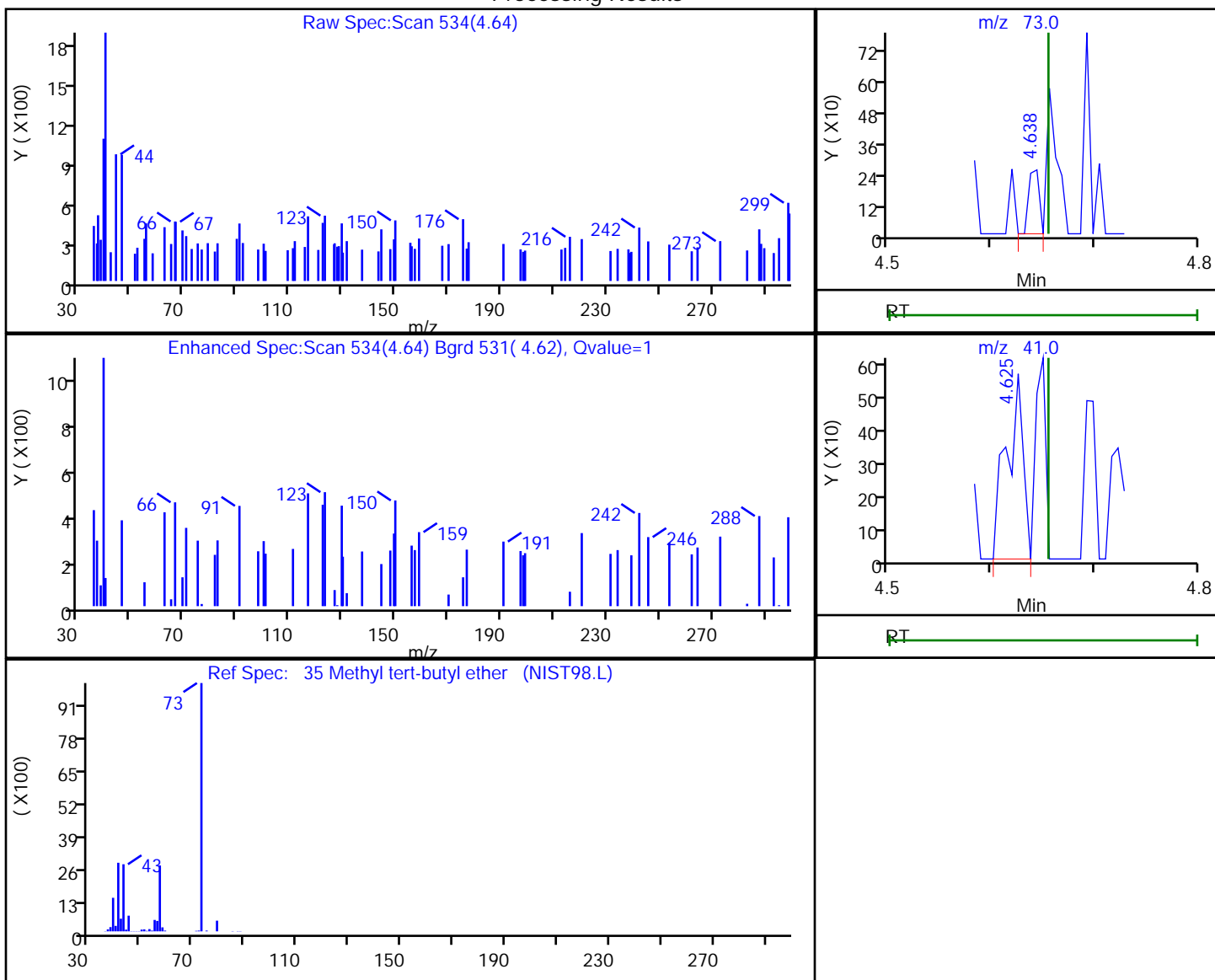
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050418.D  
 Injection Date: 04-May-2020 15:09:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-A-11 Lab Sample ID: 180-105108-11  
 Client ID: HD-COD-SW-28-0/1-0  
 Operator ID: 034635 ALS Bottle#: 18 Worklist Smp#: 18  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

35 Methyl tert-butyl ether, CAS: 1634-04-4

Processing Results



RT	Mass	Response	Amount
4.64	73.00	177	0.021383
4.63	41.00	640	

Reviewer: journetp, 04-May-2020 15:42:35  
 Audit Action: Marked Compound Undetected

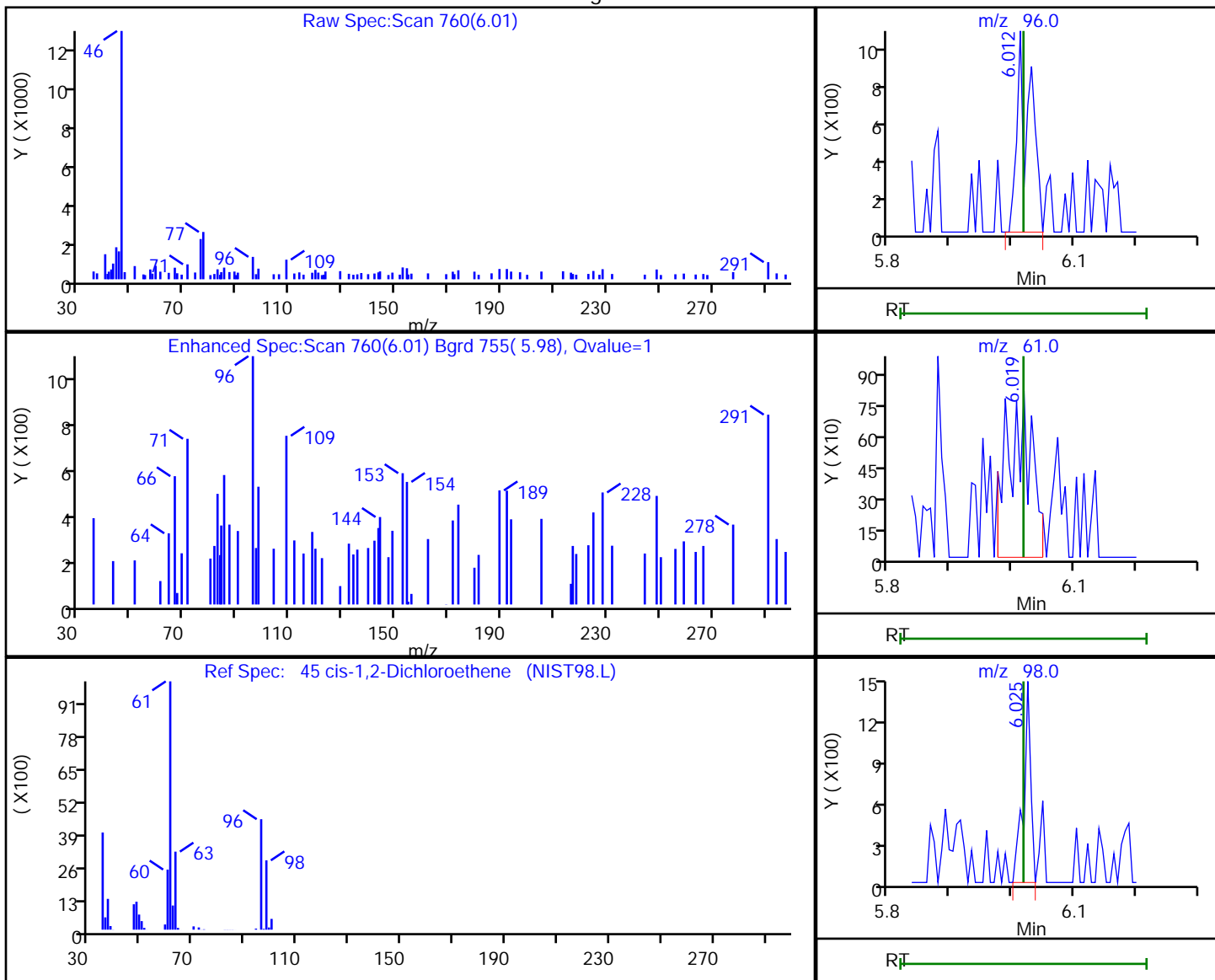
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050418.D  
 Injection Date: 04-May-2020 15:09:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-A-11 Lab Sample ID: 180-105108-11  
 Client ID: HD-COD-SW-28-0/1-0  
 Operator ID: 034635 ALS Bottle#: 18 Worklist Smp#: 18  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

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

Processing Results



RT	Mass	Response	Amount
6.01	96.00	1626	0.463289
6.02	61.00	2191	
6.02	98.00	1150	

Reviewer: journept, 04-May-2020 15:42:35  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050418.D

Injection Date: 04-May-2020 15:09:30

Instrument ID: CHHP5

Lims ID: 180-105108-A-11

Lab Sample ID: 180-105108-11

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

Operator ID: 034635

ALS Bottle#: 18 Worklist Smp#: 18

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

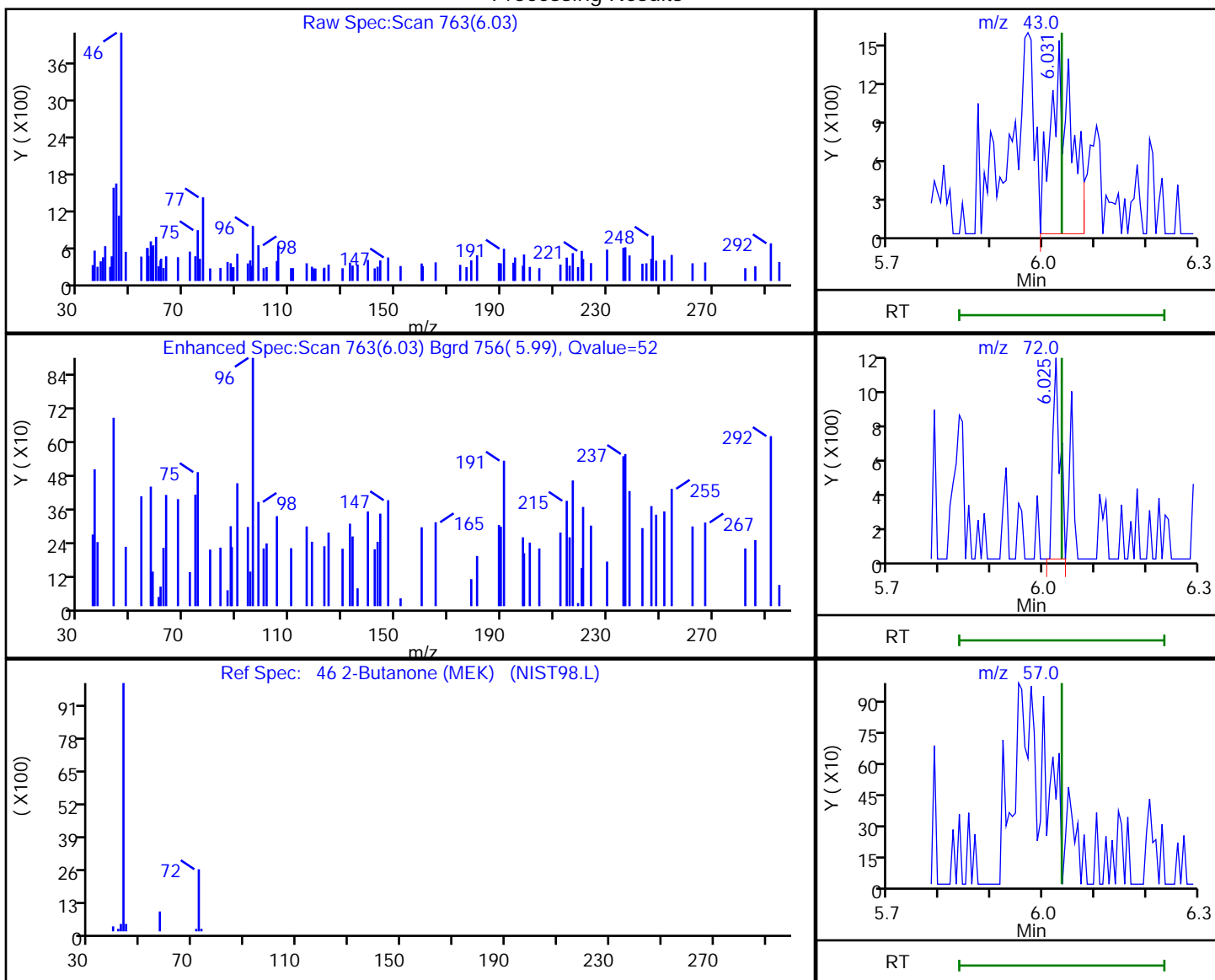
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

46 2-Butanone (MEK), CAS: 78-93-3

Processing Results



RT	Mass	Response	Amount
6.03	43.00	4098	2.067962
6.02	72.00	1076	
6.04	57.00	0	

Reviewer: journeyp, 04-May-2020 15:42:35

Audit Action: Marked Compound Undetected

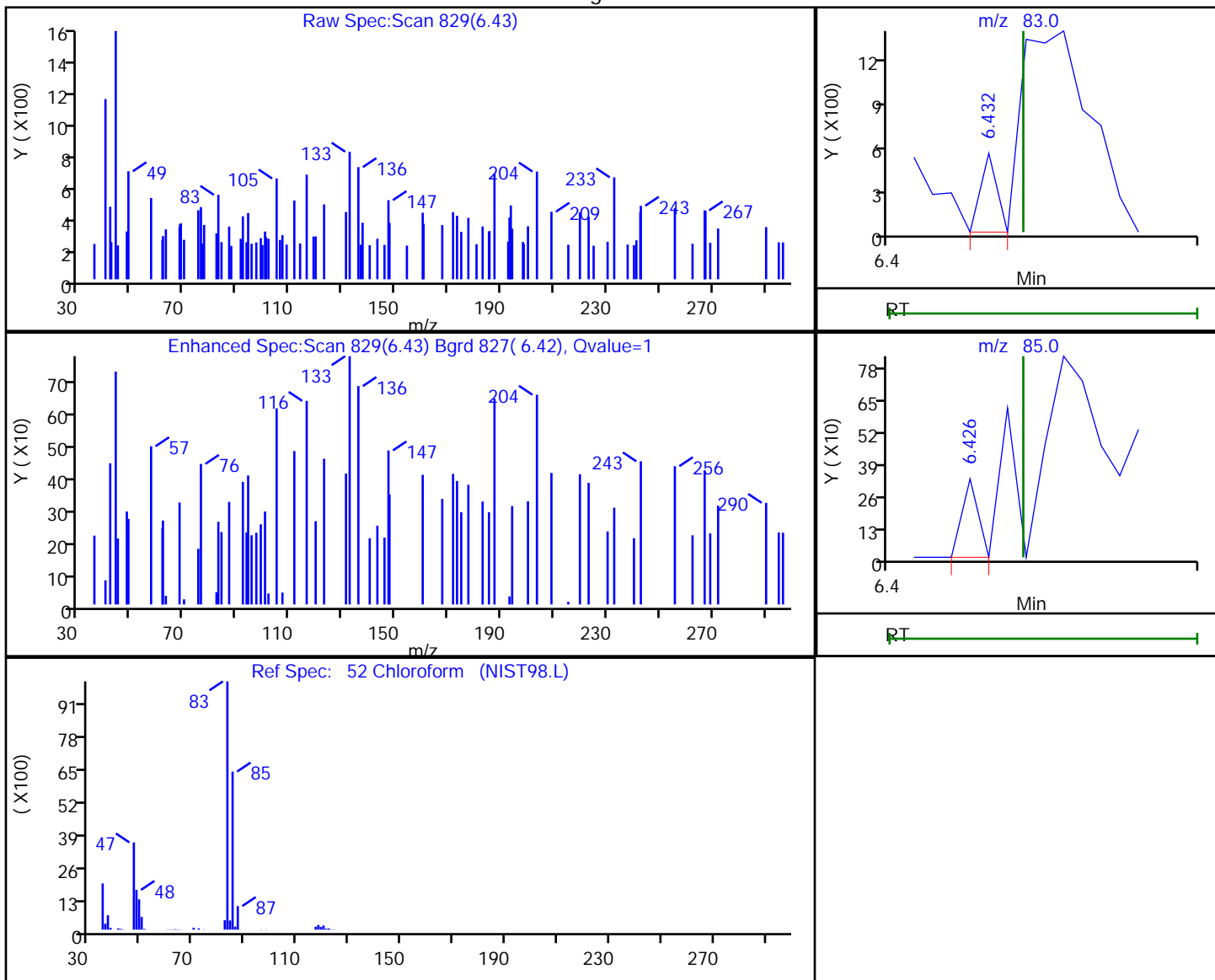
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050418.D  
 Injection Date: 04-May-2020 15:09:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-A-11 Lab Sample ID: 180-105108-11  
 Client ID: HD-COD-SW-28-0/1-0  
 Operator ID: 034635 ALS Bottle#: 18 Worklist Smp#: 18  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

52 Chloroform, CAS: 67-66-3

Processing Results



RT	Mass	Response	Amount
6.43	83.00	187	-1.710564
6.43	85.00	117	

Reviewer: journtp, 04-May-2020 15:42:36  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050418.D

Injection Date: 04-May-2020 15:09:30

Instrument ID: CHHP5

Lims ID: 180-105108-A-11

Lab Sample ID: 180-105108-11

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

Operator ID: 034635

ALS Bottle#: 18 Worklist Smp#: 18

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

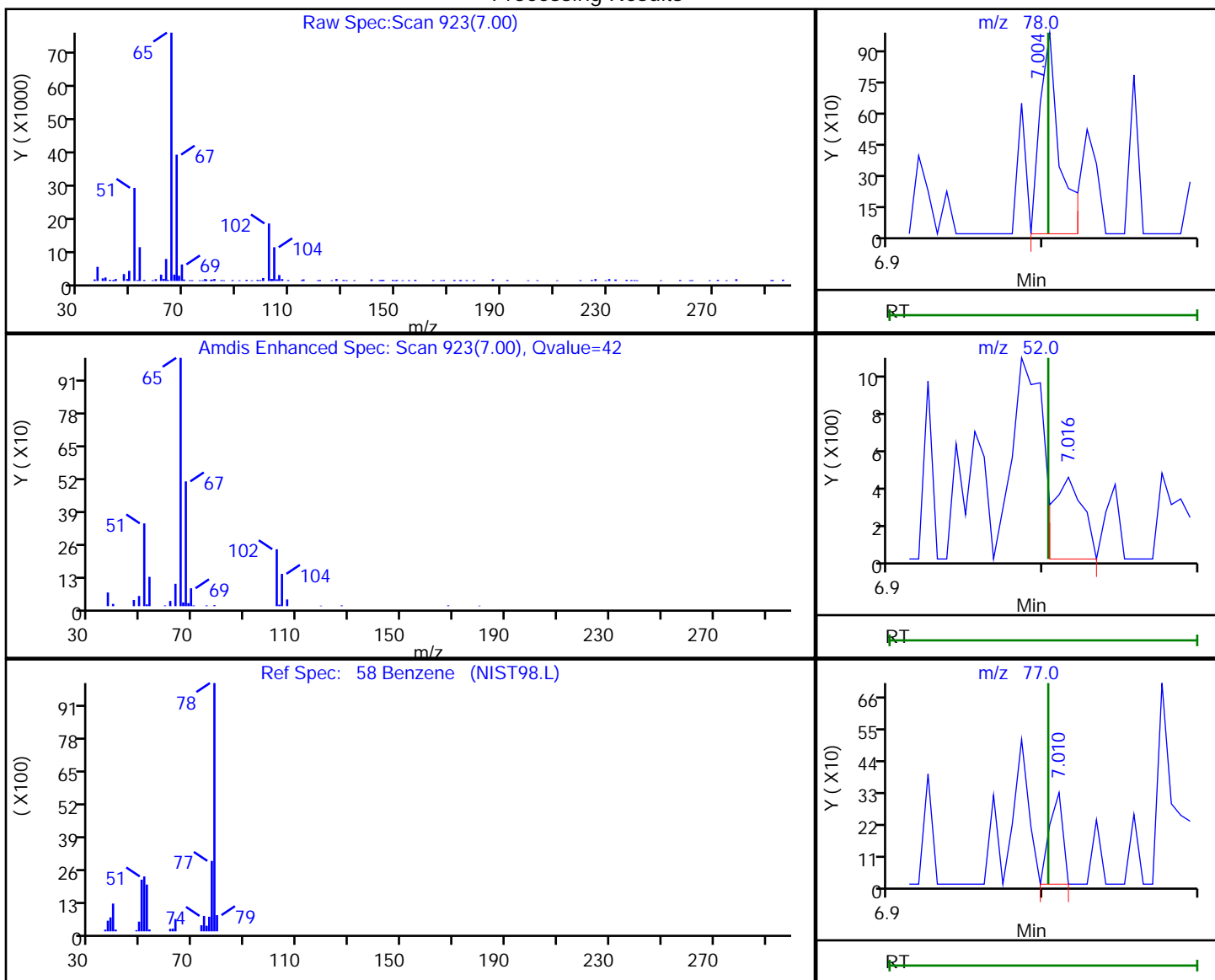
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

58 Benzene, CAS: 71-43-2

Processing Results



RT	Mass	Response	Amount
7.00	78.00	873	0.065733
7.02	52.00	599	
7.01	77.00	193	

Reviewer: journeyp, 04-May-2020 15:42:36

Audit Action: Marked Compound Undetected

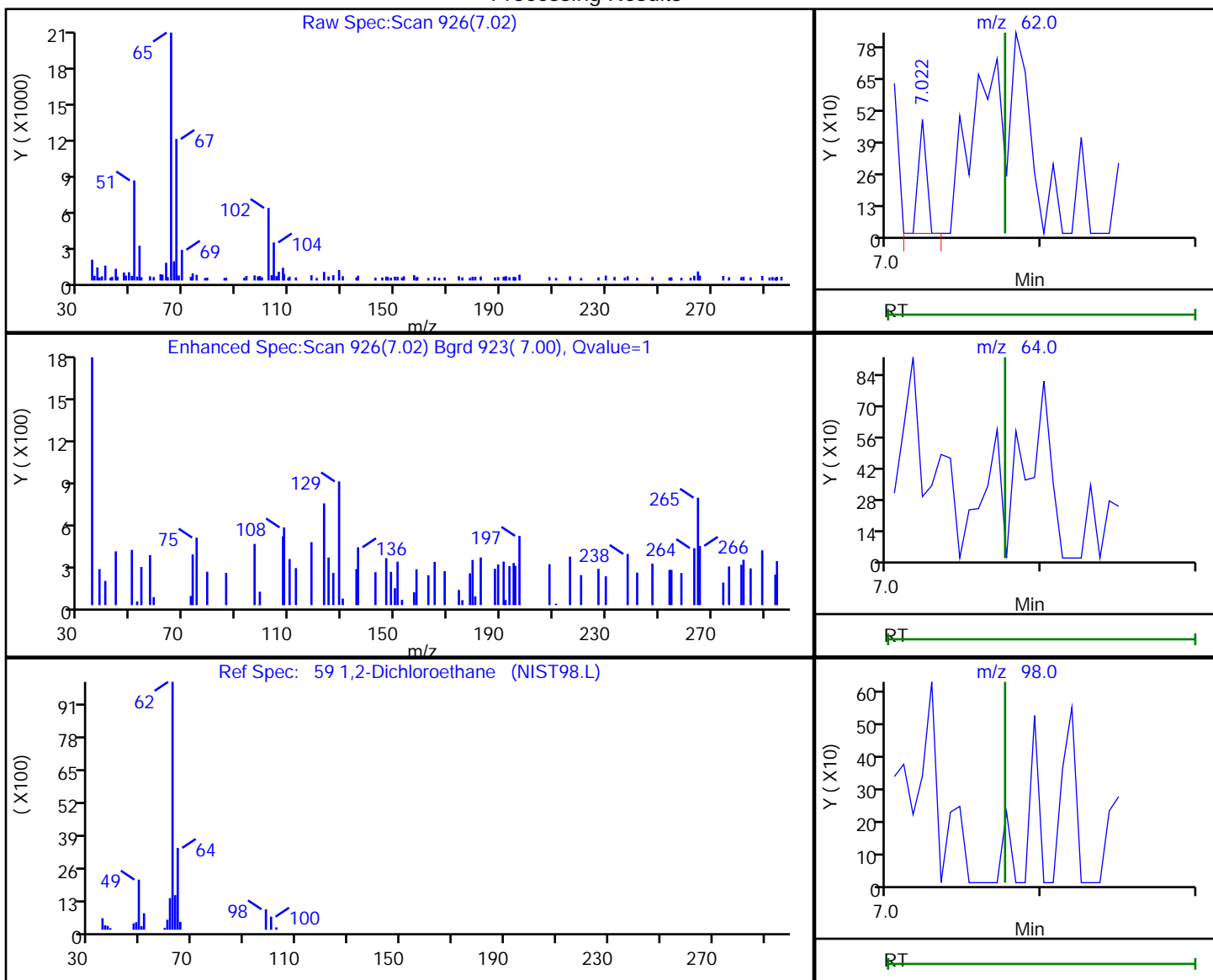
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050418.D  
 Injection Date: 04-May-2020 15:09:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-A-11 Lab Sample ID: 180-105108-11  
 Client ID: HD-COD-SW-28-0/1-0  
 Operator ID: 034635 ALS Bottle#: 18 Worklist Smp#: 18  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

59 1,2-Dichloroethane, CAS: 107-06-2

Processing Results



RT	Mass	Response	Amount
7.02	62.00	174	0.034456
7.02	64.00	1739	
7.03	98.00	1013	

Reviewer: journept, 04-May-2020 15:42:36  
 Audit Action: Marked Compound Undetected

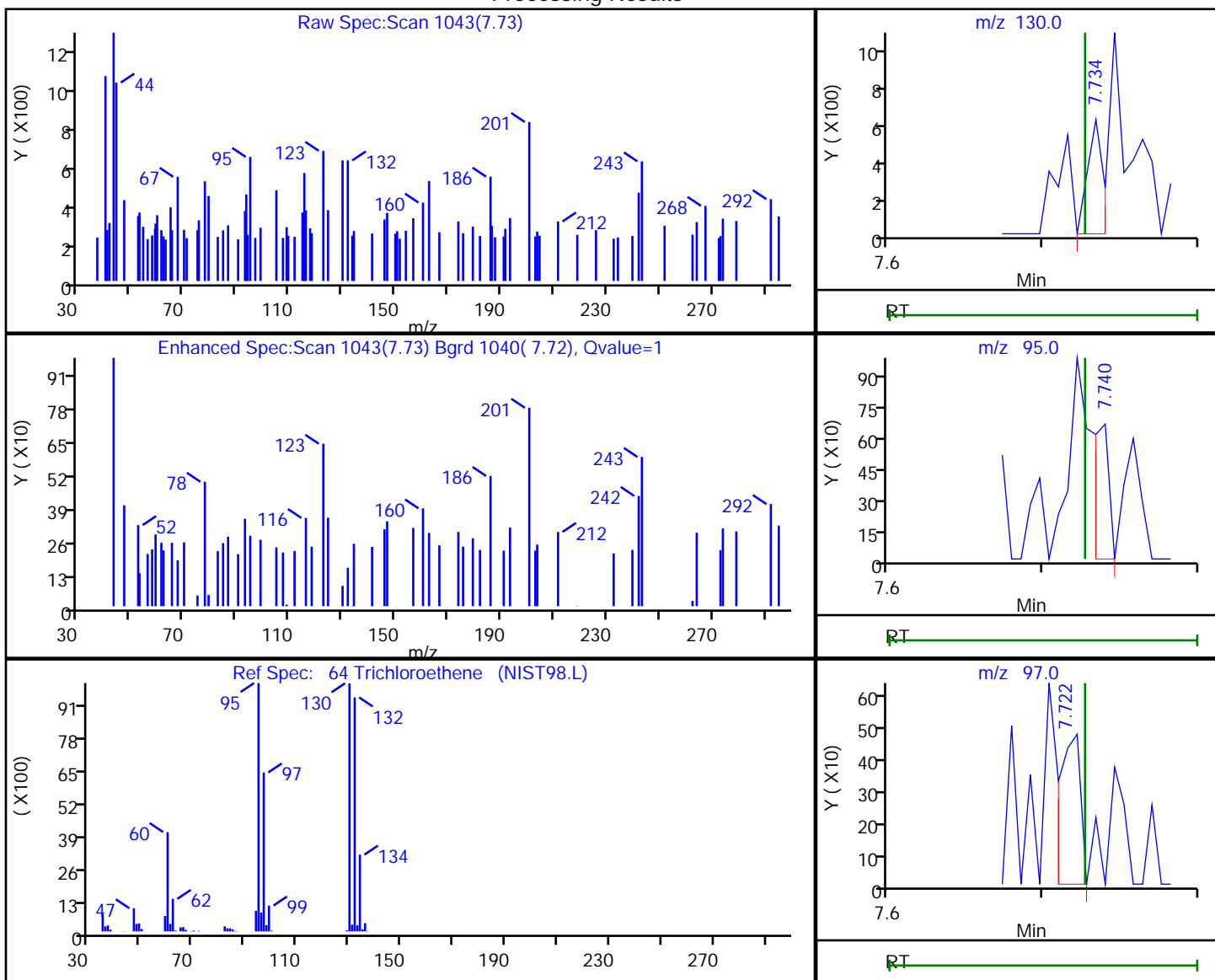
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050418.D  
 Injection Date: 04-May-2020 15:09:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-A-11 Lab Sample ID: 180-105108-11  
 Client ID: HD-COD-SW-28-0/1-0  
 Operator ID: 034635 ALS Bottle#: 18 Worklist Smp#: 18  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

64 Trichloroethene, CAS: 79-01-6

Processing Results



RT	Mass	Response	Amount
7.73	130.00	414	0.125172
7.74	95.00	465	
7.72	97.00	452	

Reviewer: journetp, 04-May-2020 15:42:36  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

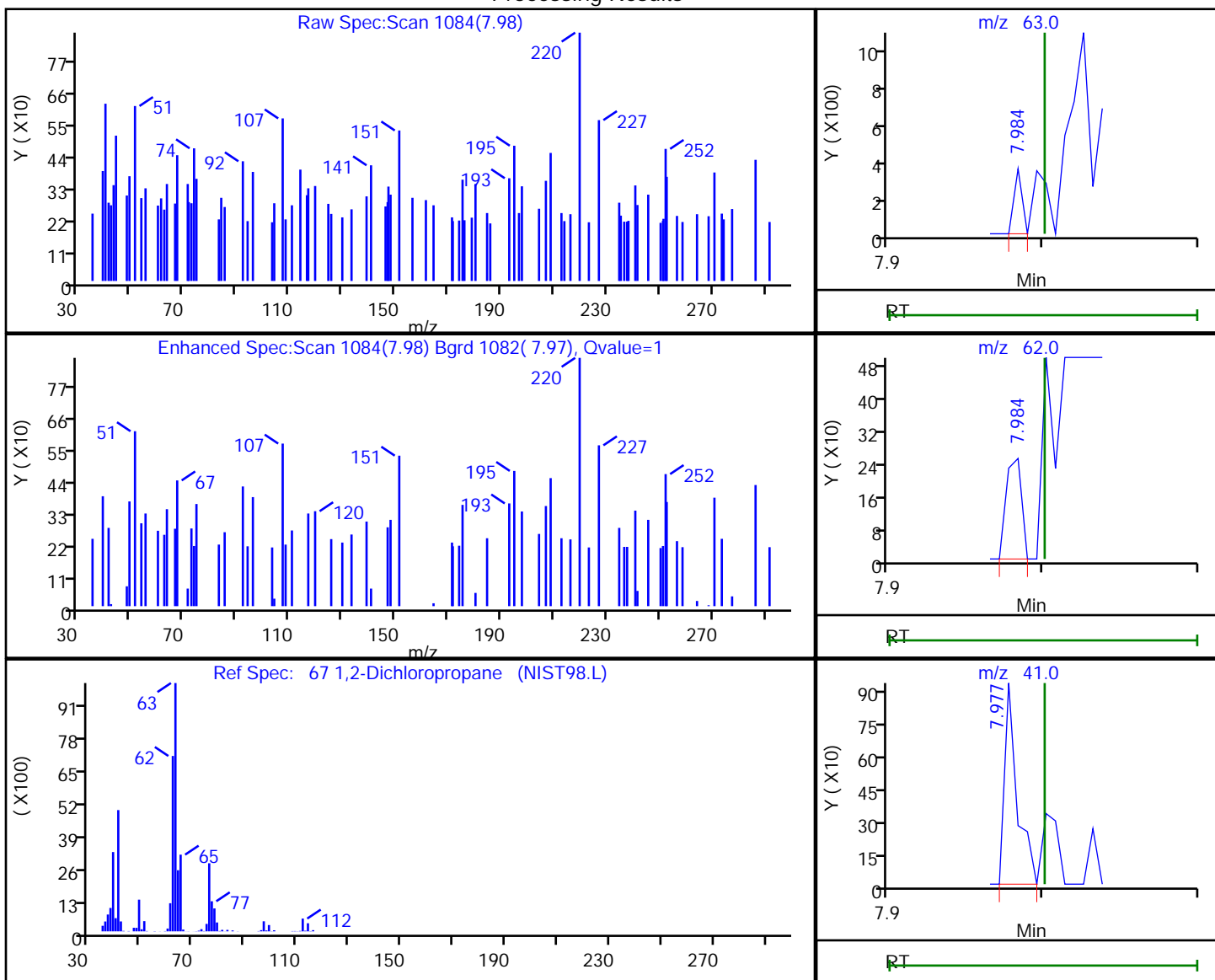


Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050418.D  
 Injection Date: 04-May-2020 15:09:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-A-11 Lab Sample ID: 180-105108-11  
 Client ID: HD-COD-SW-28-0/1-0  
 Operator ID: 034635 ALS Bottle#: 18 Worklist Smp#: 18  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

67 1,2-Dichloropropane, CAS: 78-87-5

Processing Results



RT	Mass	Response	Amount
7.98	63.00	123	0.034698
7.98	62.00	172	
7.98	41.00	530	

Reviewer: journeyp, 04-May-2020 15:42:36  
 Audit Action: Marked Compound Undetected

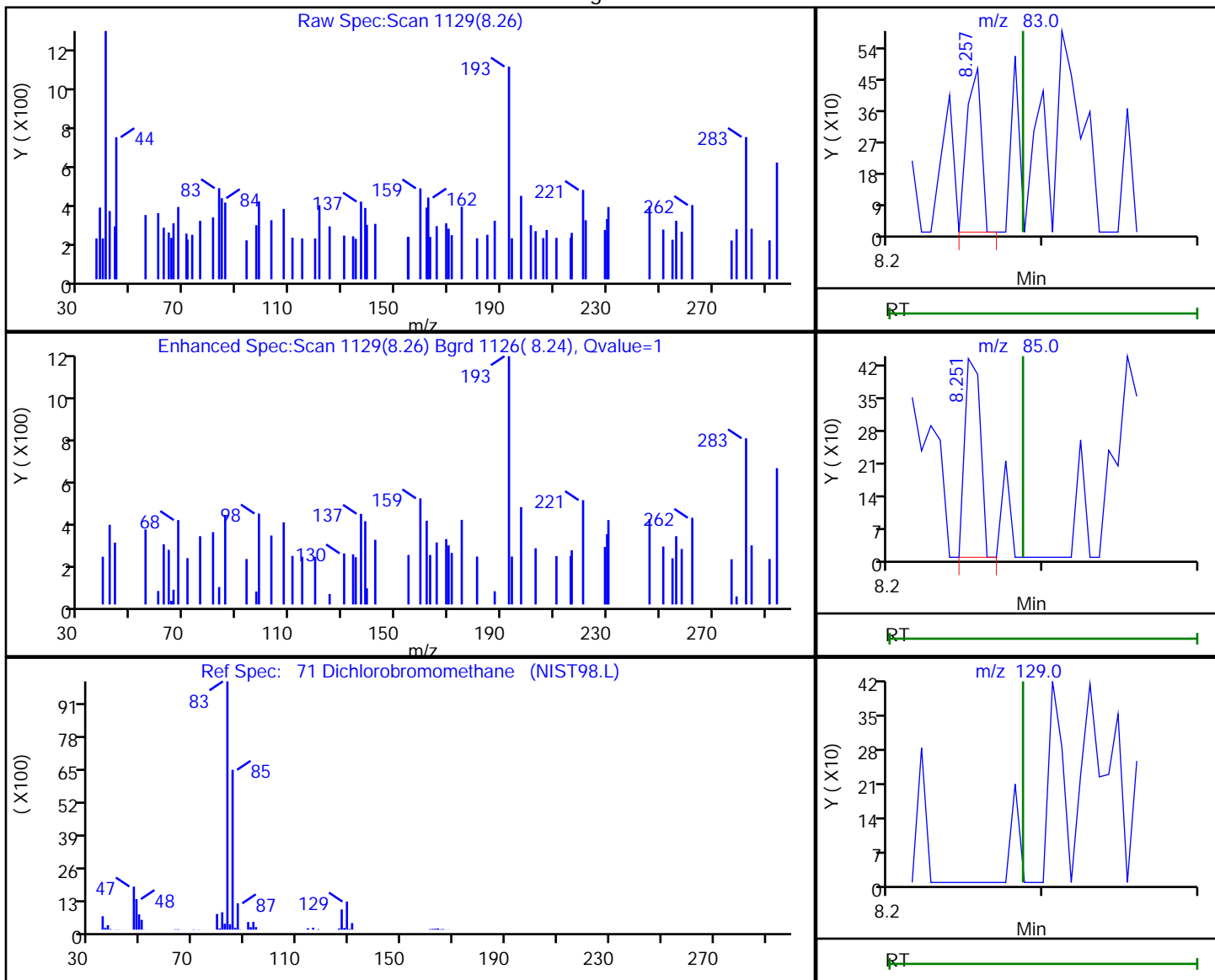
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050418.D  
Injection Date: 04-May-2020 15:09:30 Instrument ID: CHHP5  
Lims ID: 180-105108-A-11 Lab Sample ID: 180-105108-11  
Client ID: HD-COD-SW-28-0/1-0  
Operator ID: 034635 ALS Bottle#: 18 Worklist Smp#: 18  
Purge Vol: 5.000 mL Dil. Factor: 1.0000  
Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
Column: DB-624 (0.18 mm) Detector: MS SCAN

71 Dichlorobromomethane, CAS: 75-27-4

Processing Results



RT	Mass	Response	Amount
8.26	83.00	309	0.074287
8.25	85.00	305	
8.29	129.00	0	

Reviewer: journeyp, 04-May-2020 15:42:36  
Audit Action: Marked Compound Undetected

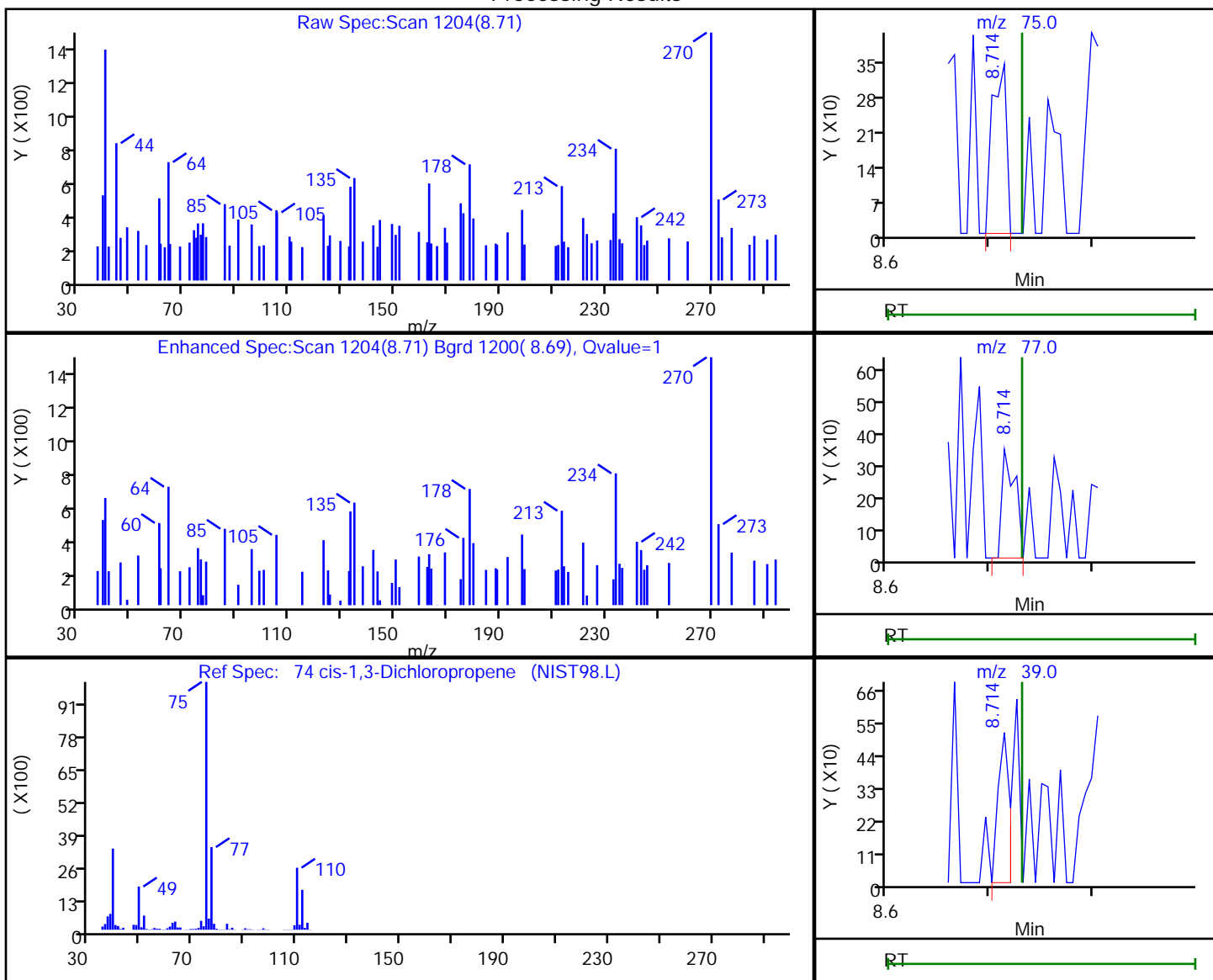
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050418.D  
 Injection Date: 04-May-2020 15:09:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-A-11 Lab Sample ID: 180-105108-11  
 Client ID: HD-COD-SW-28-0/1-0  
 Operator ID: 034635 ALS Bottle#: 18 Worklist Smp#: 18  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

74 cis-1,3-Dichloropropene, CAS: 10061-01-5

Processing Results



RT	Mass	Response	Amount
8.71	75.00	330	0.063011
8.71	77.00	305	
8.71	39.00	400	

Reviewer: journetp, 04-May-2020 15:42:36  
 Audit Action: Marked Compound Undetected

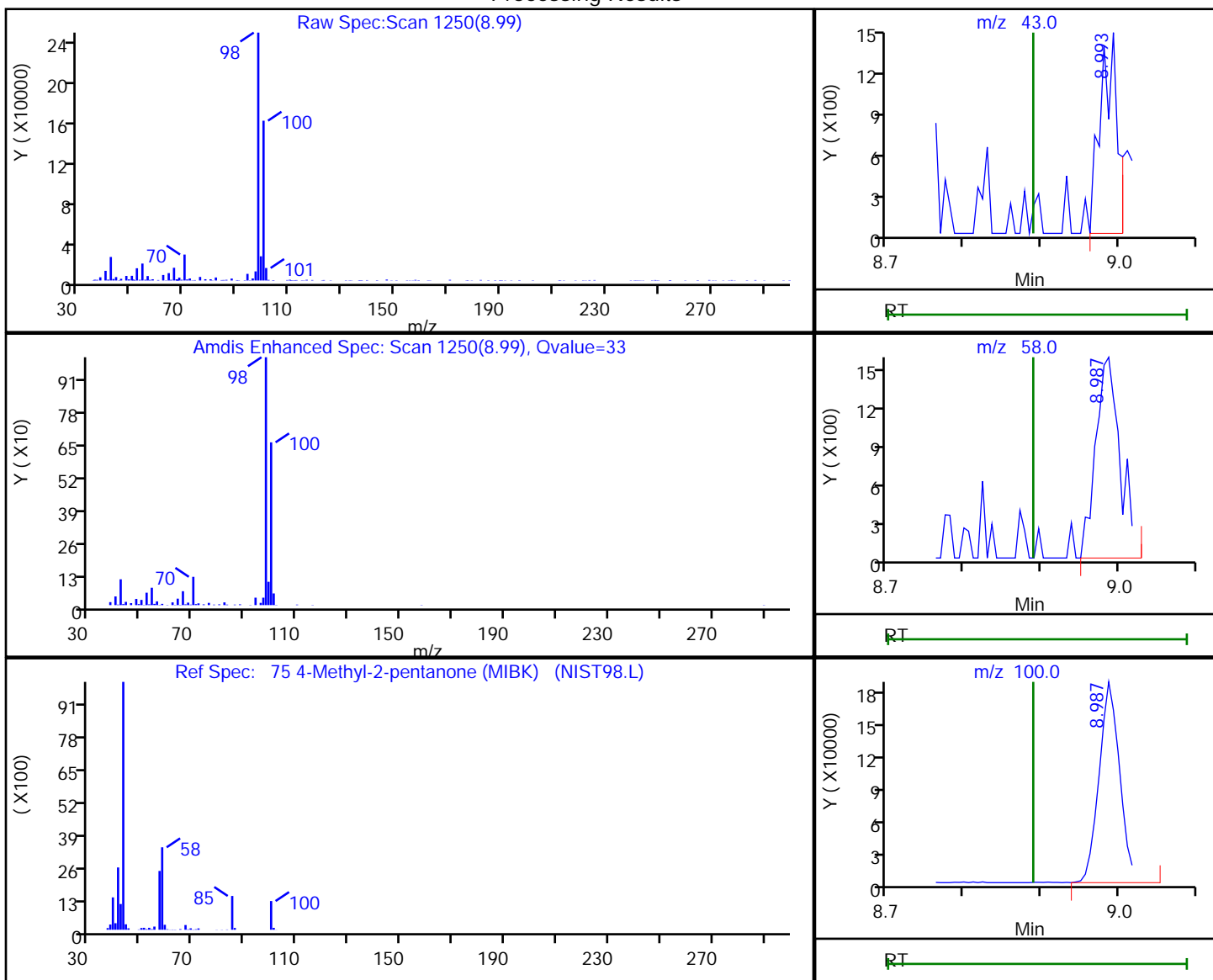
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050418.D  
 Injection Date: 04-May-2020 15:09:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-A-11 Lab Sample ID: 180-105108-11  
 Client ID: HD-COD-SW-28-0/1-0  
 Operator ID: 034635 ALS Bottle#: 18 Worklist Smp#: 18  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

75 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Processing Results



RT	Mass	Response	Amount
8.99	43.00	2251	16.120869
8.99	58.00	3354	
8.99	100.00	346522	

Reviewer: journept, 04-May-2020 15:42:36  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050418.D

Injection Date: 04-May-2020 15:09:30

Instrument ID: CHHP5

Lims ID: 180-105108-A-11

Lab Sample ID: 180-105108-11

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

Operator ID: 034635

ALS Bottle#: 18 Worklist Smp#: 18

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

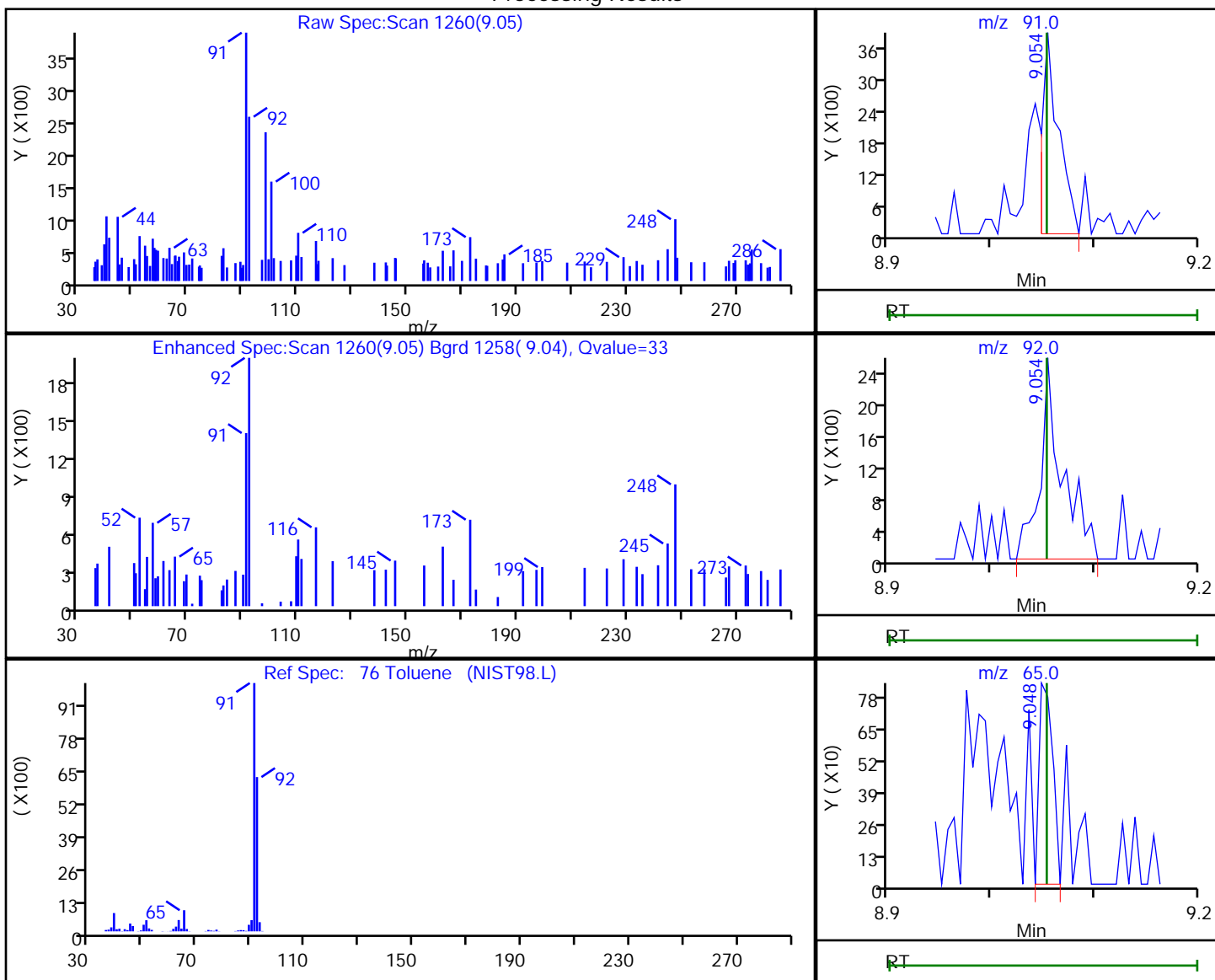
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

76 Toluene, CAS: 108-88-3

Processing Results



RT	Mass	Response	Amount
9.05	91.00	4212	0.330036
9.05	92.00	3820	
9.05	65.00	760	

Reviewer: journept, 04-May-2020 15:42:36

Audit Action: Marked Compound Undetected

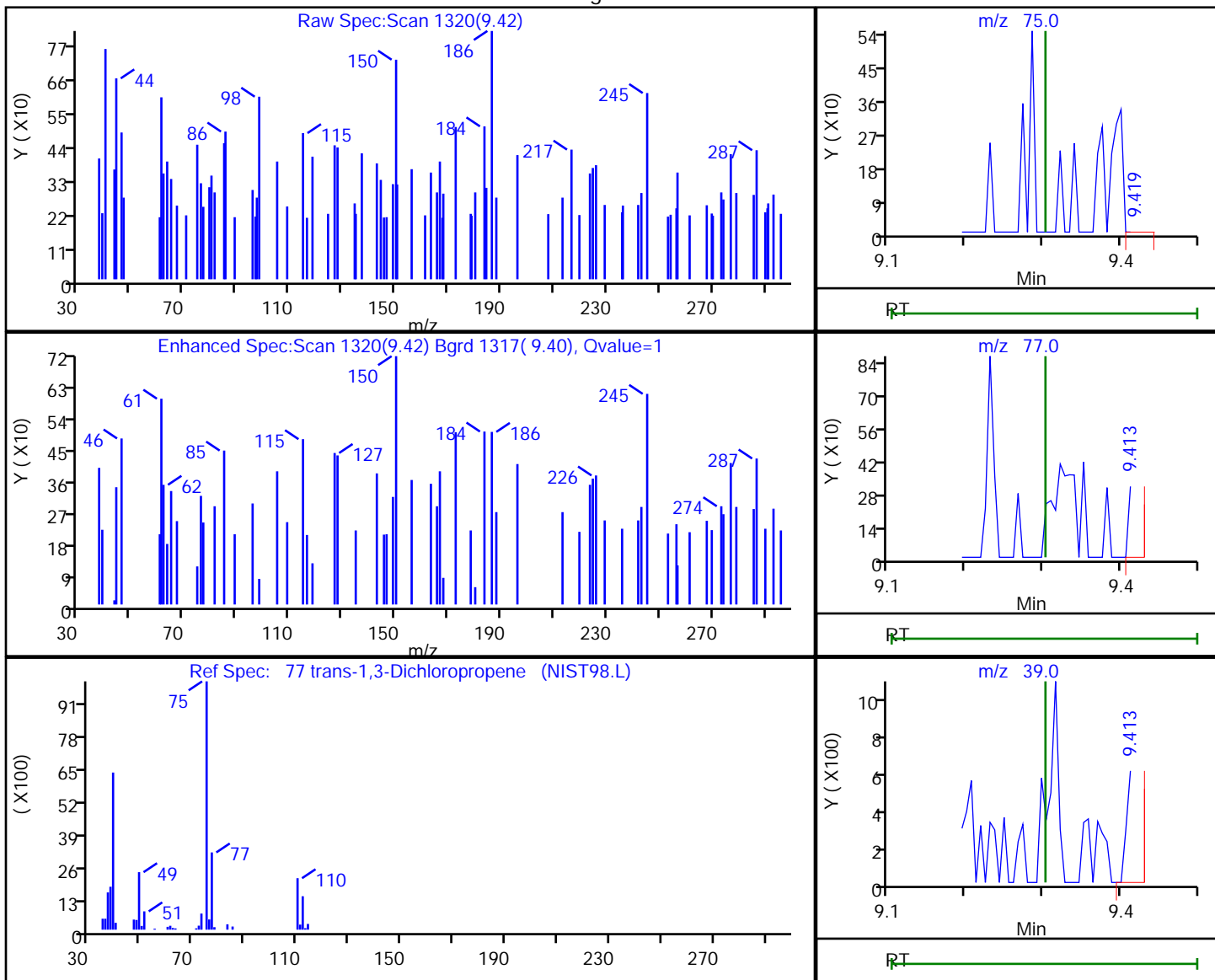
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050418.D  
 Injection Date: 04-May-2020 15:09:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-A-11 Lab Sample ID: 180-105108-11  
 Client ID: HD-COD-SW-28-0/1-0  
 Operator ID: 034635 ALS Bottle#: 18 Worklist Smp#: 18  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

77 trans-1,3-Dichloropropene, CAS: 10061-02-6

Processing Results



RT	Mass	Response	Amount
9.42	75.00	240	0.057204
9.41	77.00	454	
9.41	39.00	392	

Reviewer: journept, 04-May-2020 15:42:41

Audit Action: Marked Compound Undetected

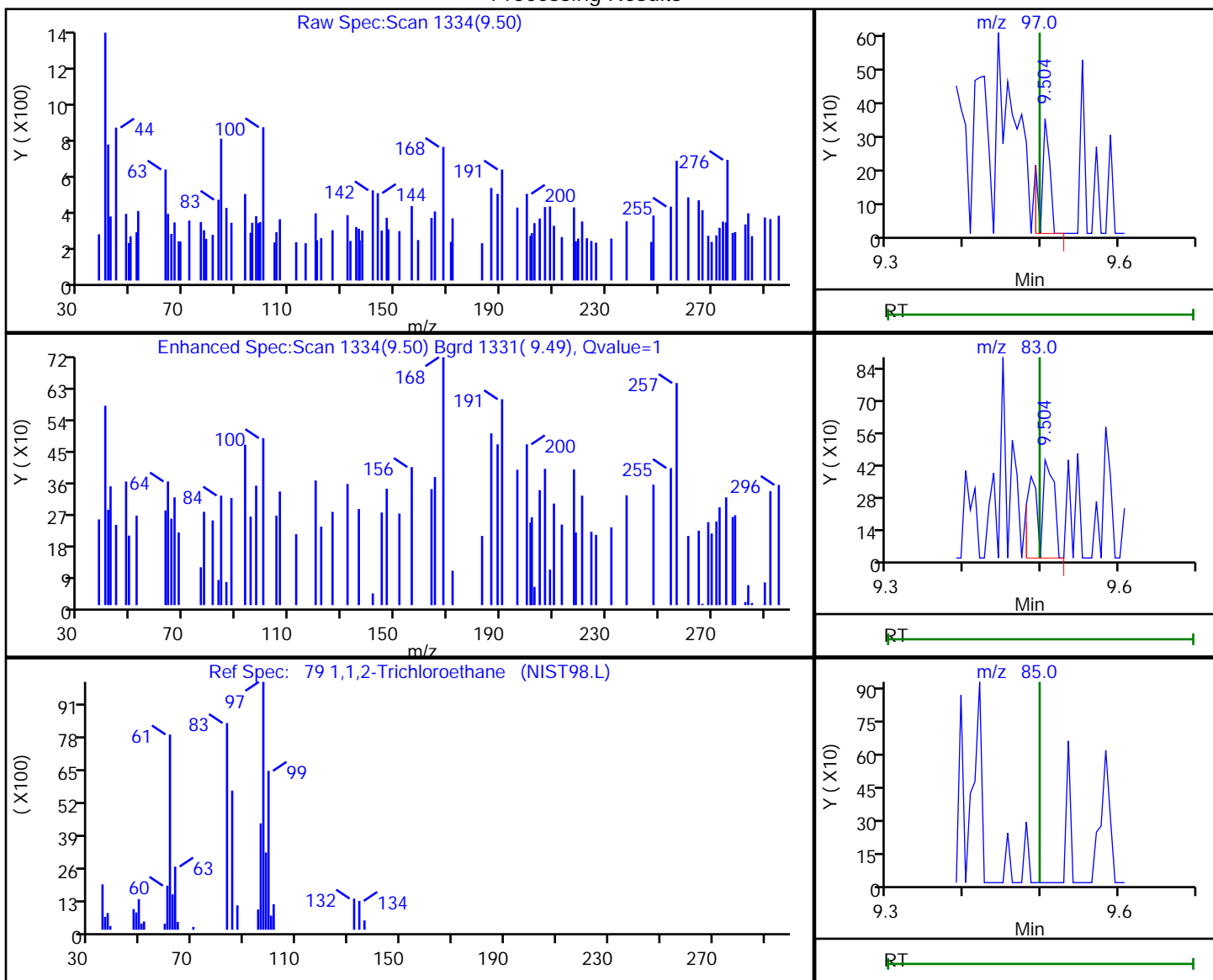
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050418.D  
 Injection Date: 04-May-2020 15:09:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-A-11 Lab Sample ID: 180-105108-11  
 Client ID: HD-COD-SW-28-0/1-0  
 Operator ID: 034635 ALS Bottle#: 18 Worklist Smp#: 18  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

79 1,1,2-Trichloroethane, CAS: 79-00-5

Processing Results



RT	Mass	Response	Amount
9.50	97.00	281	0.094726
9.50	83.00	749	
9.50	85.00	0	

Reviewer: journetp, 04-May-2020 15:42:41

Audit Action: Marked Compound Undetected

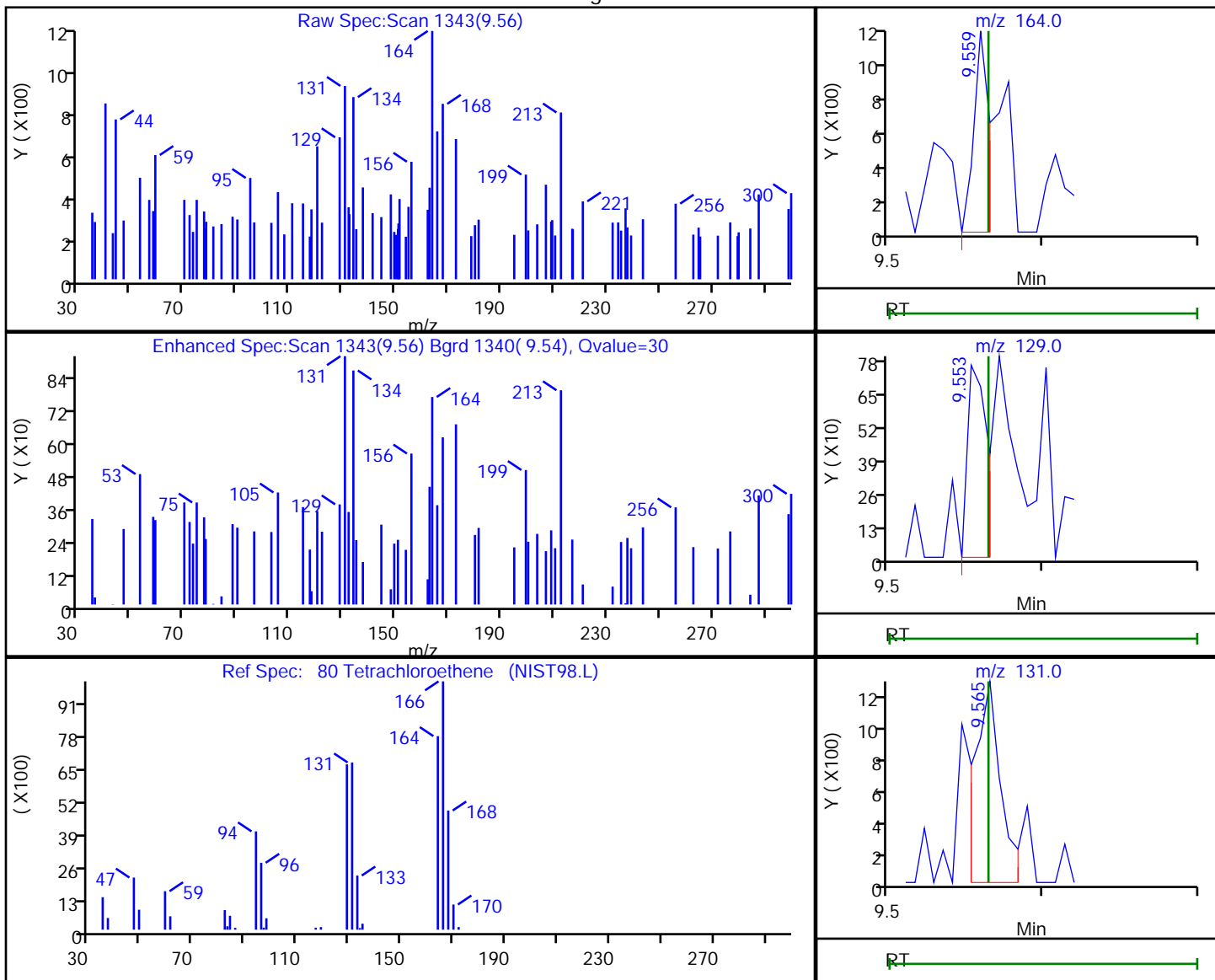
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050418.D  
 Injection Date: 04-May-2020 15:09:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-A-11 Lab Sample ID: 180-105108-11  
 Client ID: HD-COD-SW-28-0/1-0  
 Operator ID: 034635 ALS Bottle#: 18 Worklist Smp#: 18  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

80 Tetrachloroethene, CAS: 127-18-4

Processing Results



RT	Mass	Response	Amount
9.56	164.00	805	0.316919
9.55	129.00	673	
9.57	131.00	1496	

Reviewer: journept, 04-May-2020 15:42:41  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

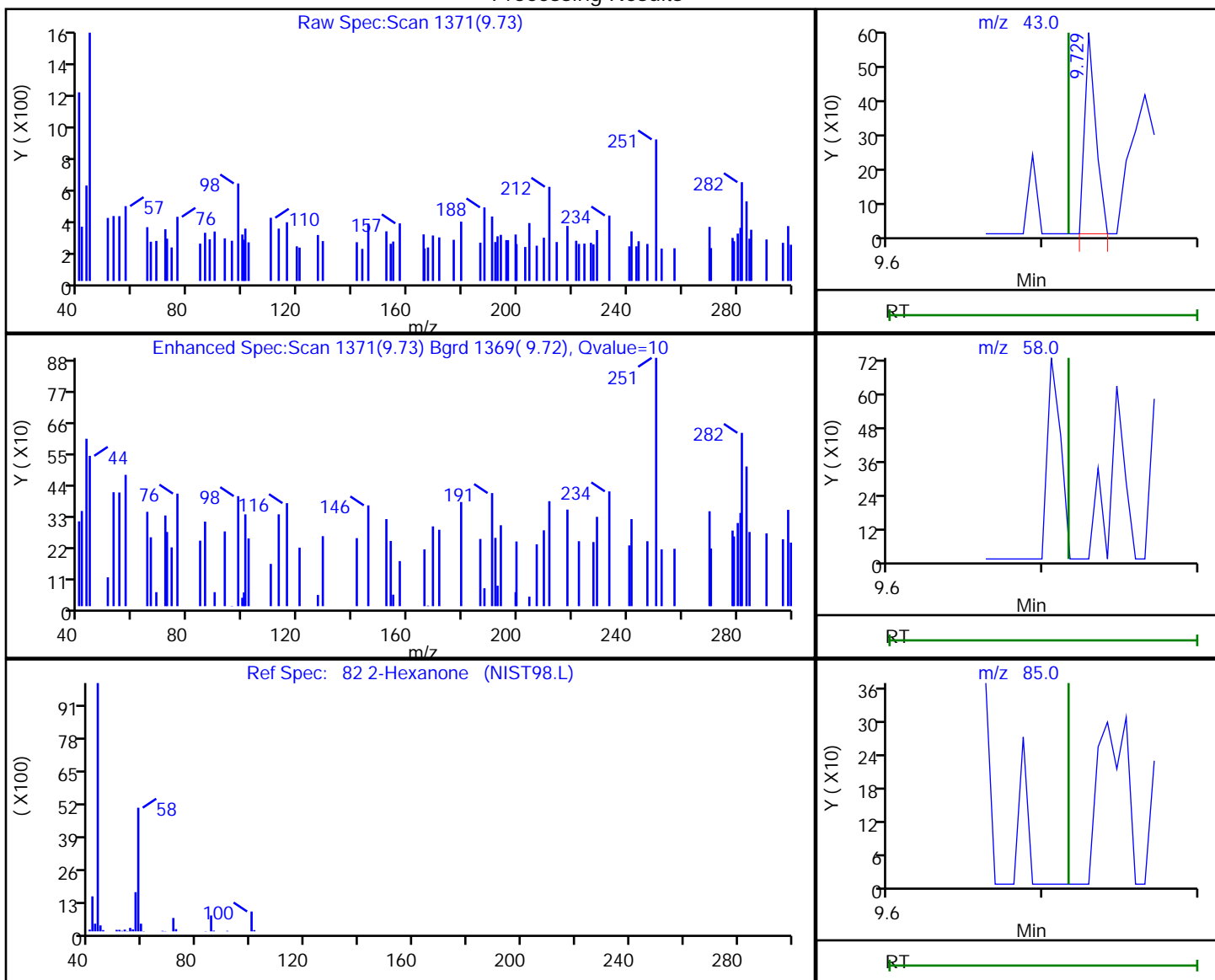


Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050418.D  
 Injection Date: 04-May-2020 15:09:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-A-11 Lab Sample ID: 180-105108-11  
 Client ID: HD-COD-SW-28-0/1-0  
 Operator ID: 034635 ALS Bottle#: 18 Worklist Smp#: 18  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

82 2-Hexanone, CAS: 591-78-6

Processing Results



RT	Mass	Response	Amount
9.73	43.00	299	14.121567
9.72	58.00	0	
9.72	85.00	0	

Reviewer: journetp, 04-May-2020 15:42:41

Audit Action: Marked Compound Undetected

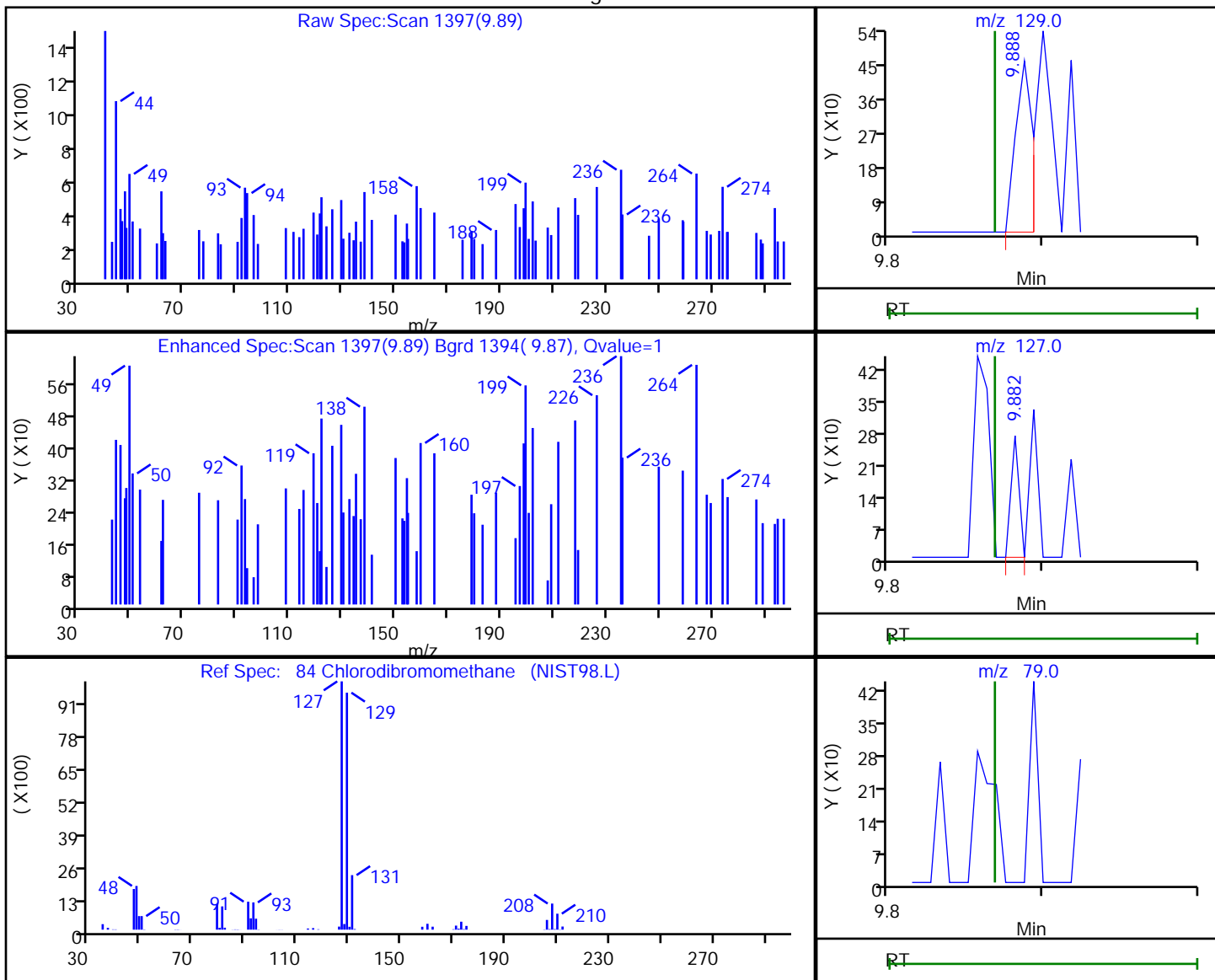
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050418.D  
 Injection Date: 04-May-2020 15:09:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-A-11 Lab Sample ID: 180-105108-11  
 Client ID: HD-COD-SW-28-0/1-0  
 Operator ID: 034635 ALS Bottle#: 18 Worklist Smp#: 18  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

84 Chlorodibromomethane, CAS: 124-48-1

Processing Results



RT	Mass	Response	Amount
9.89	129.00	351	0.139781
9.88	127.00	98	
9.87	79.00	0	

Reviewer: journeyp, 04-May-2020 15:42:41  
 Audit Action: Marked Compound Undetected

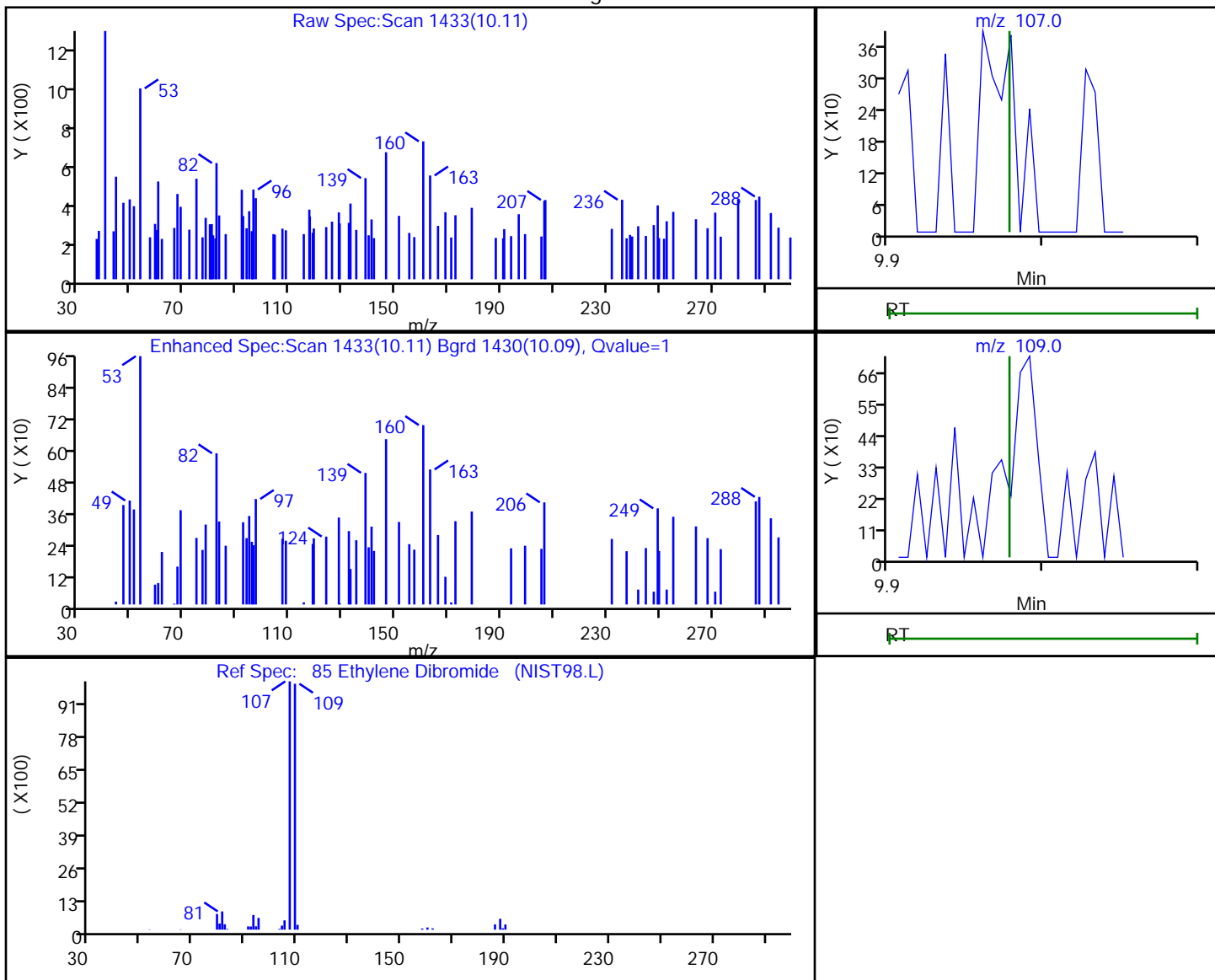
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050418.D  
Injection Date: 04-May-2020 15:09:30 Instrument ID: CHHP5  
Lims ID: 180-105108-A-11 Lab Sample ID: 180-105108-11  
Client ID: HD-COD-SW-28-0/1-0  
Operator ID: 034635 ALS Bottle#: 18 Worklist Smp#: 18  
Purge Vol: 5.000 mL Dil. Factor: 1.0000  
Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
Column: DB-624 (0.18 mm) Detector: MS SCAN

85 Ethylene Dibromide, CAS: 106-93-4

Processing Results



RT	Mass	Response	Amount
10.11	107.00	171	0.061619
10.11	109.00	167	

Reviewer: journetp, 04-May-2020 15:42:41

Audit Action: Marked Compound Undetected

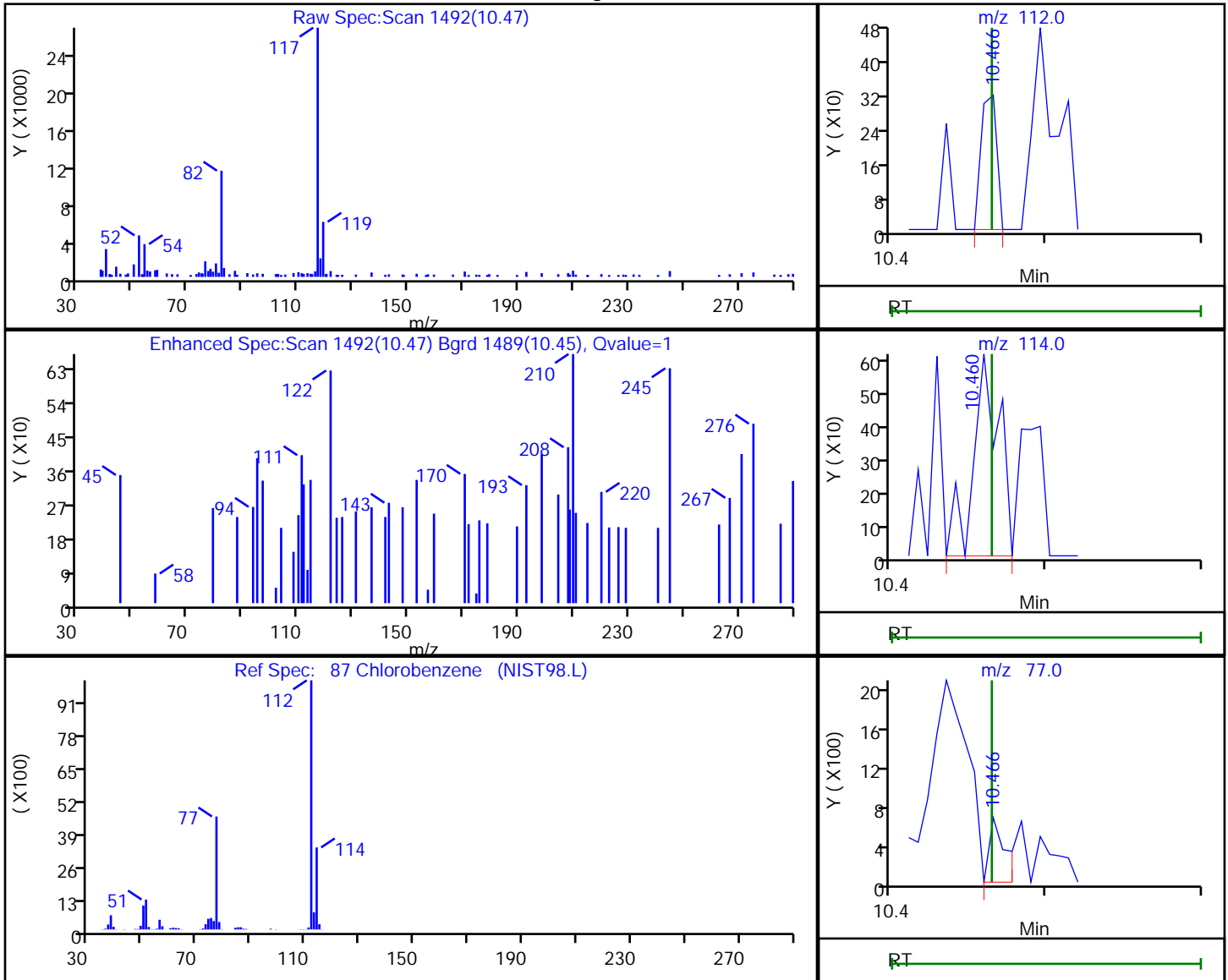
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050418.D  
 Injection Date: 04-May-2020 15:09:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-A-11 Lab Sample ID: 180-105108-11  
 Client ID: HD-COD-SW-28-0/1-0  
 Operator ID: 034635 ALS Bottle#: 18 Worklist Smp#: 18  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

87 Chlorobenzene, CAS: 108-90-7

Processing Results



RT	Mass	Response	Amount
10.47	112.00	224	0.027292
10.46	114.00	710	
10.47	77.00	464	

Reviewer: journetp, 04-May-2020 15:42:41  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050418.D

Injection Date: 04-May-2020 15:09:30

Instrument ID: CHHP5

Lims ID: 180-105108-A-11

Lab Sample ID: 180-105108-11

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

Operator ID: 034635

ALS Bottle#: 18 Worklist Smp#: 18

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

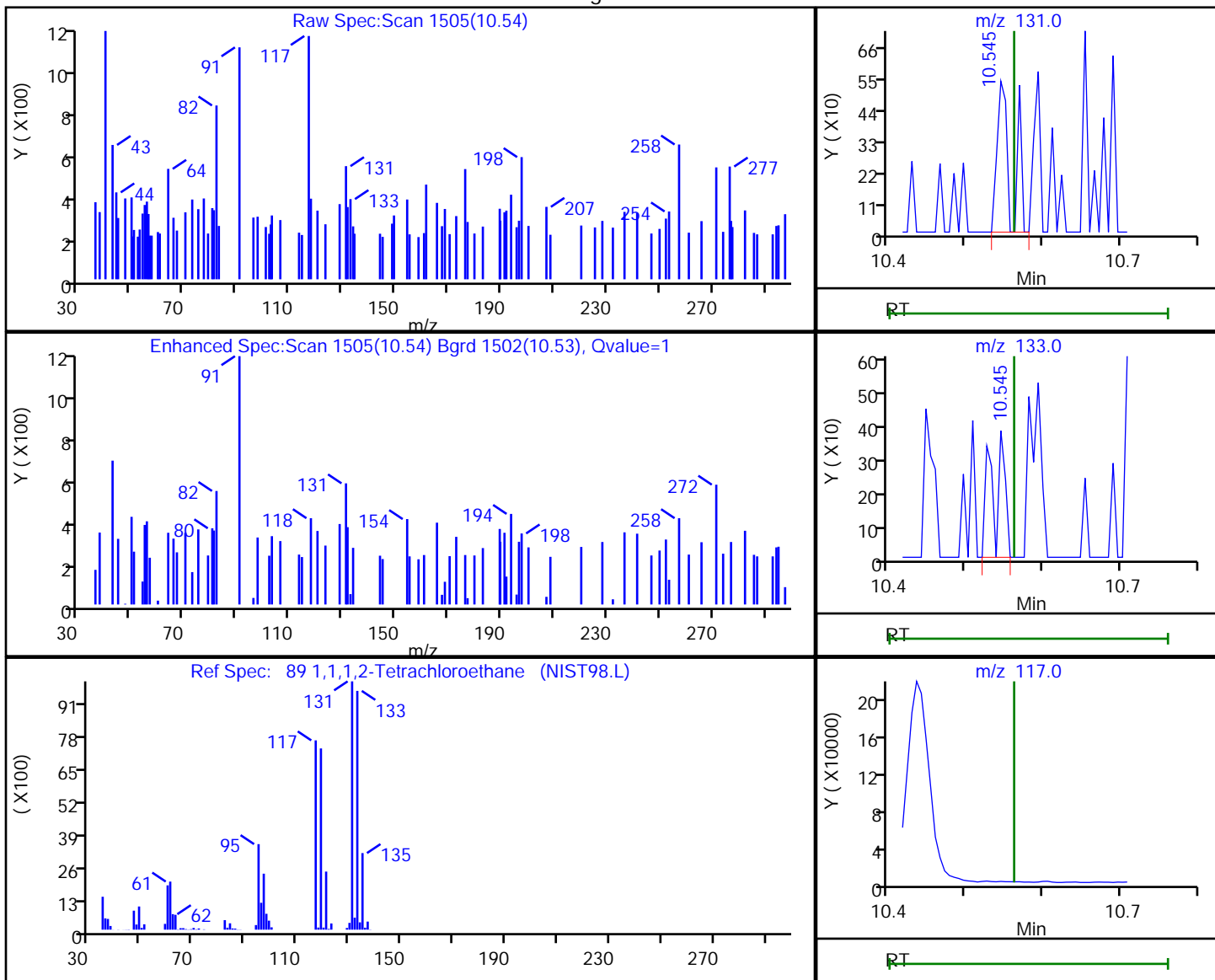
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

89 1,1,1,2-Tetrachloroethane, CAS: 630-20-6

Processing Results



RT	Mass	Response	Amount
10.54	131.00	653	0.245003
10.54	133.00	448	
10.56	117.00	0	

Reviewer: journetp, 04-May-2020 15:42:41

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050418.D

Injection Date: 04-May-2020 15:09:30

Instrument ID: CHHP5

Lims ID: 180-105108-A-11

Lab Sample ID: 180-105108-11

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

Operator ID: 034635

ALS Bottle#: 18 Worklist Smp#: 18

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

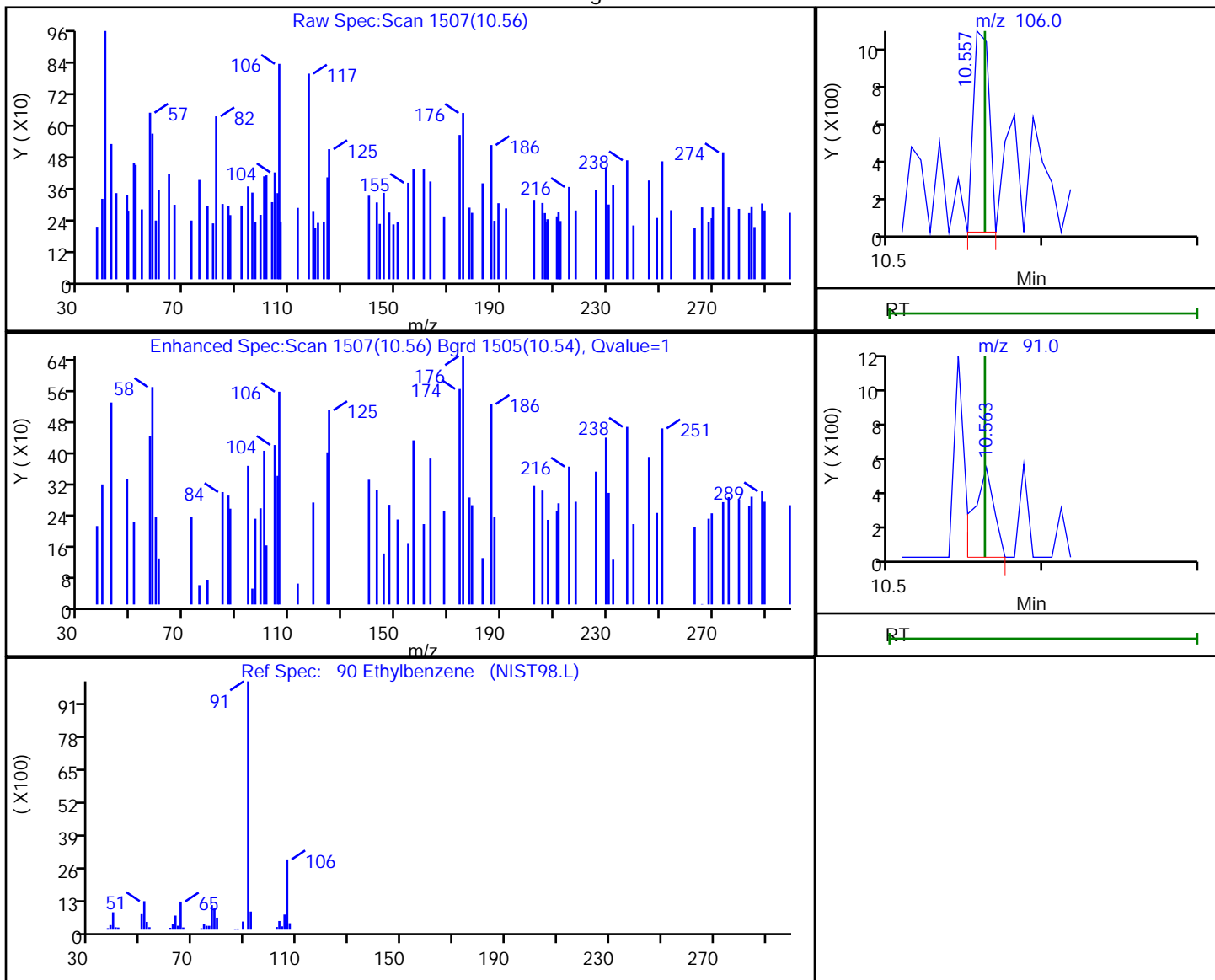
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

90 Ethylbenzene, CAS: 100-41-4

Processing Results



RT	Mass	Response	Amount
10.56	106.00	750	0.176537
10.56	91.00	454	

Reviewer: journtp, 04-May-2020 15:42:41

Audit Action: Marked Compound Undetected

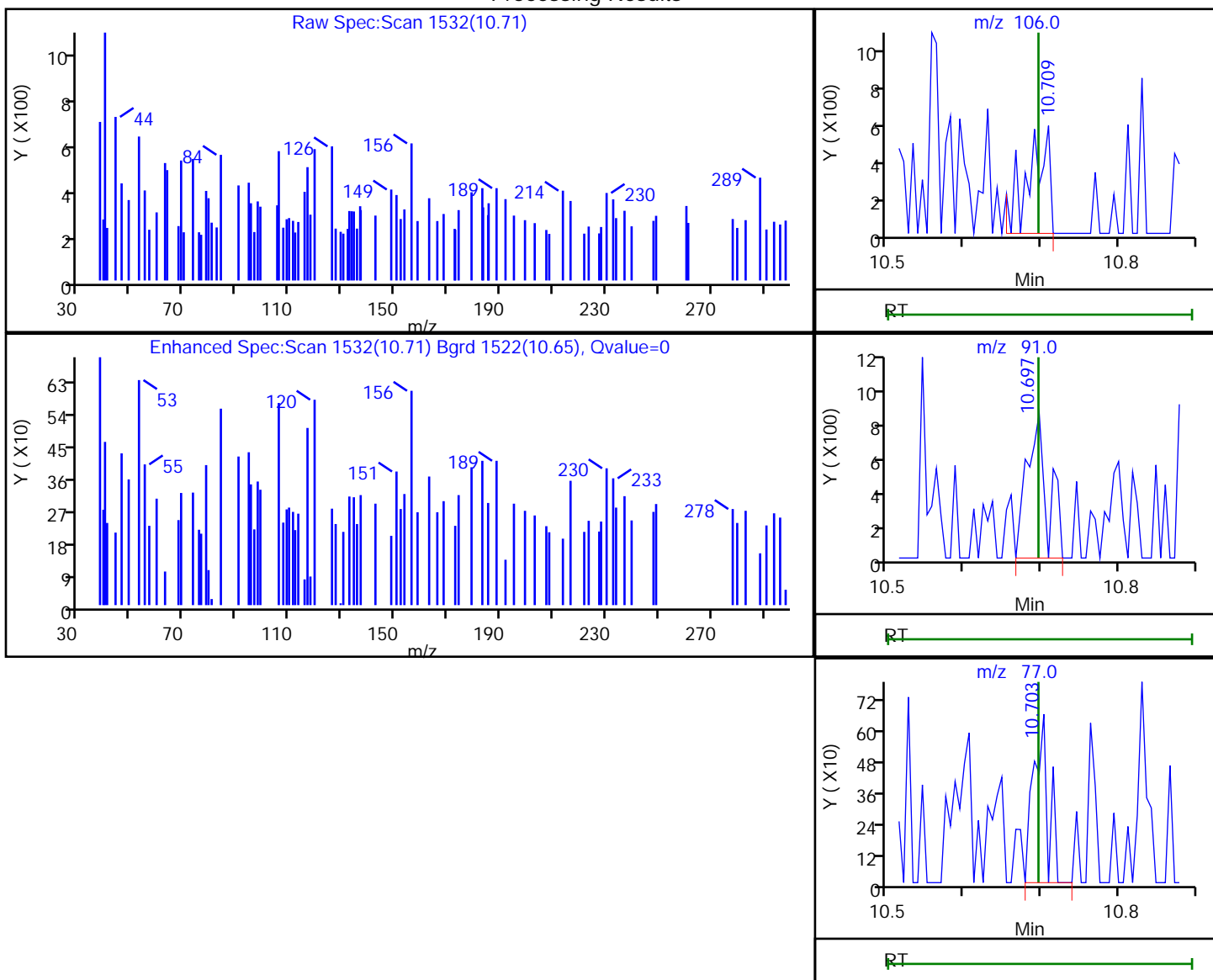
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050418.D  
 Injection Date: 04-May-2020 15:09:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-A-11 Lab Sample ID: 180-105108-11  
 Client ID: HD-COD-SW-28-0/1-0  
 Operator ID: 034635 ALS Bottle#: 18 Worklist Smp#: 18  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

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

Processing Results



RT	Mass	Response	Amount
10.71	106.00	1055	0.199193
10.70	91.00	1480	
10.70	77.00	870	

Reviewer: journetp, 04-May-2020 15:42:41  
 Audit Action: Marked Compound Undetected

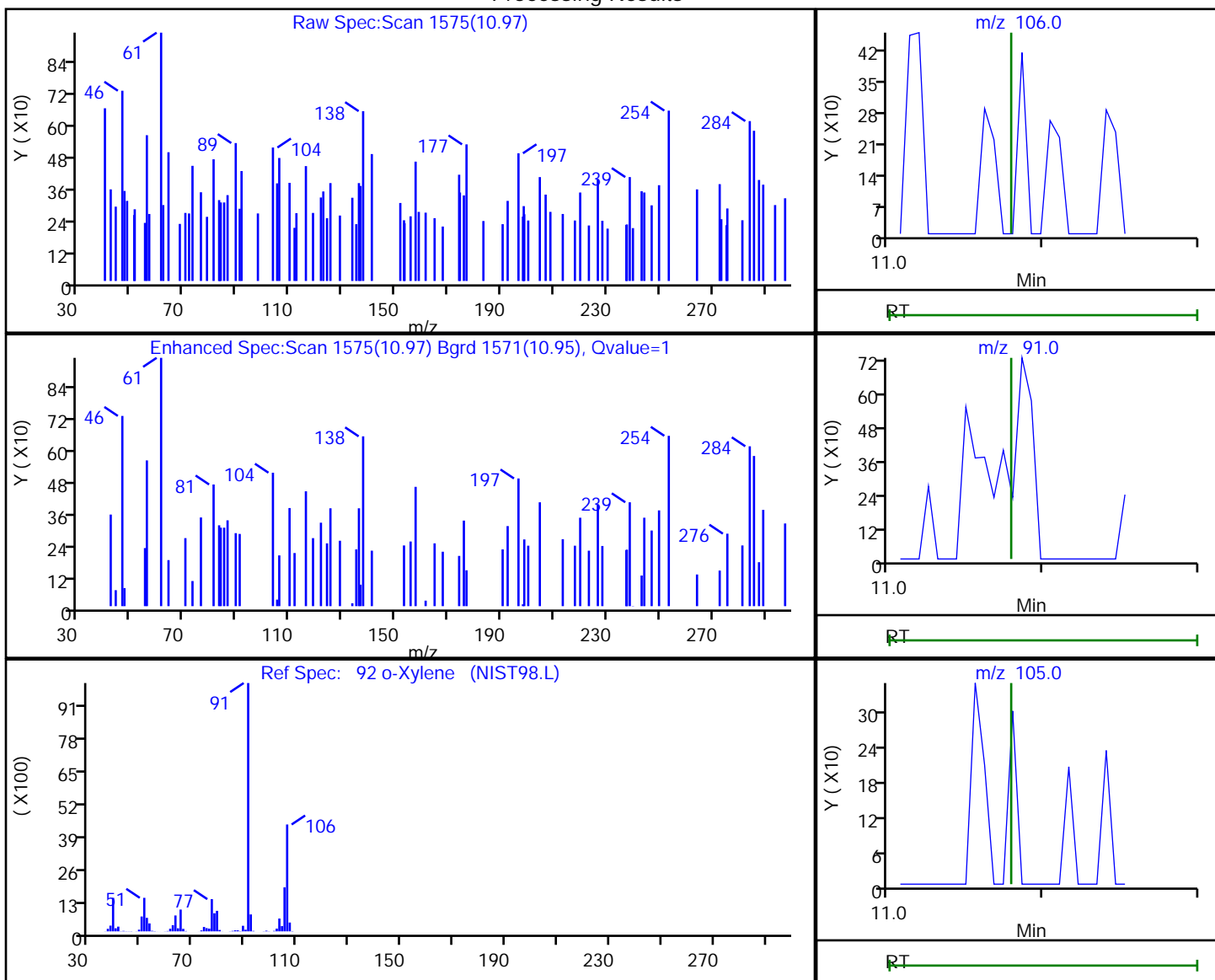
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050418.D  
 Injection Date: 04-May-2020 15:09:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-A-11 Lab Sample ID: 180-105108-11  
 Client ID: HD-COD-SW-28-0/1-0  
 Operator ID: 034635 ALS Bottle#: 18 Worklist Smp#: 18  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

92 o-Xylene, CAS: 95-47-6

Processing Results



RT	Mass	Response	Amount
10.97	106.00	429	0.086777
10.97	91.00	351	
10.97	105.00	427	

Reviewer: journept, 04-May-2020 15:42:41

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

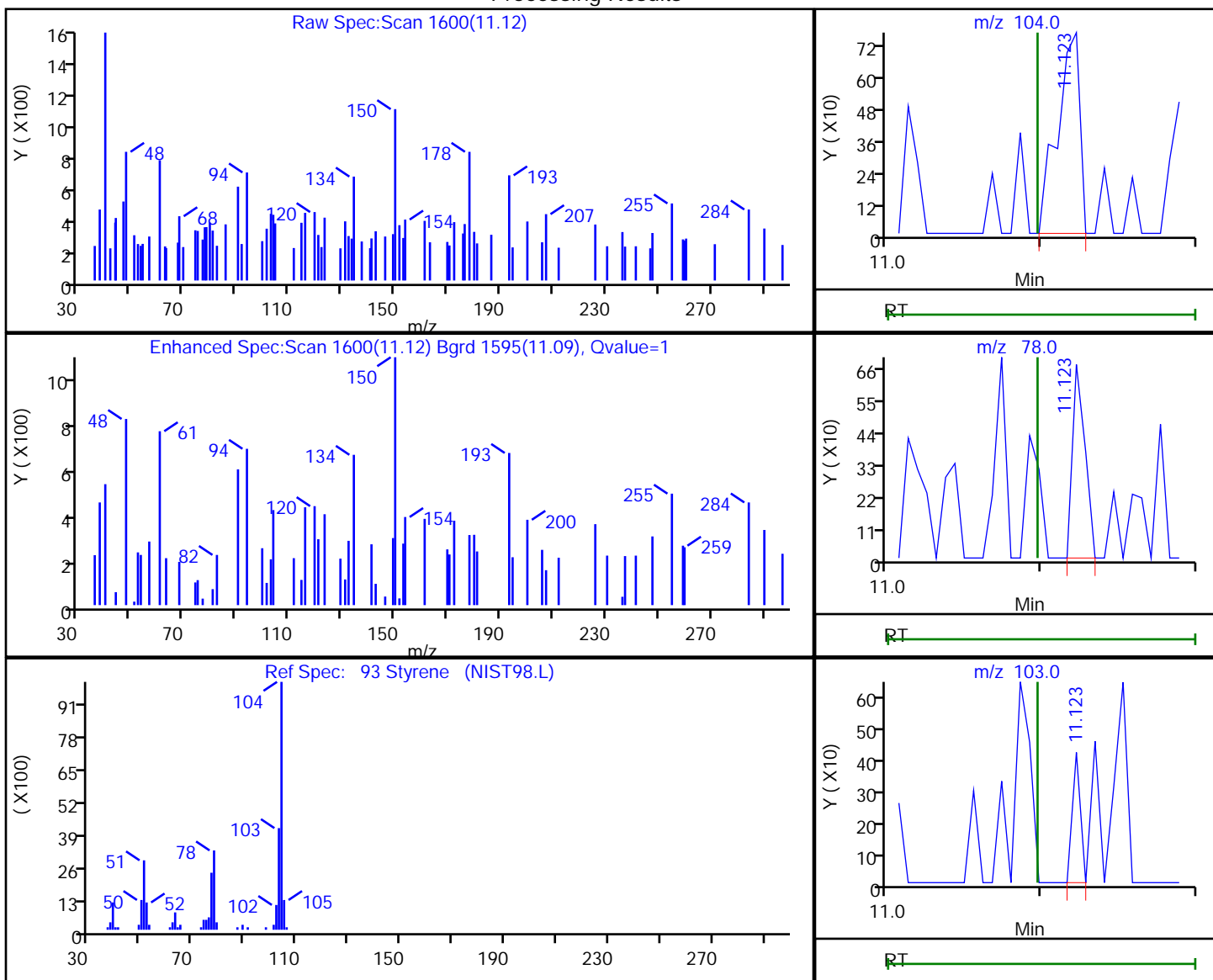


Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050418.D  
 Injection Date: 04-May-2020 15:09:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-A-11 Lab Sample ID: 180-105108-11  
 Client ID: HD-COD-SW-28-0/1-0  
 Operator ID: 034635 ALS Bottle#: 18 Worklist Smp#: 18  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

93 Styrene, CAS: 100-42-5

Processing Results



RT	Mass	Response	Amount
11.12	104.00	775	0.091425
11.12	78.00	377	
11.12	103.00	152	

Reviewer: journeyp, 04-May-2020 15:42:41  
 Audit Action: Marked Compound Undetected

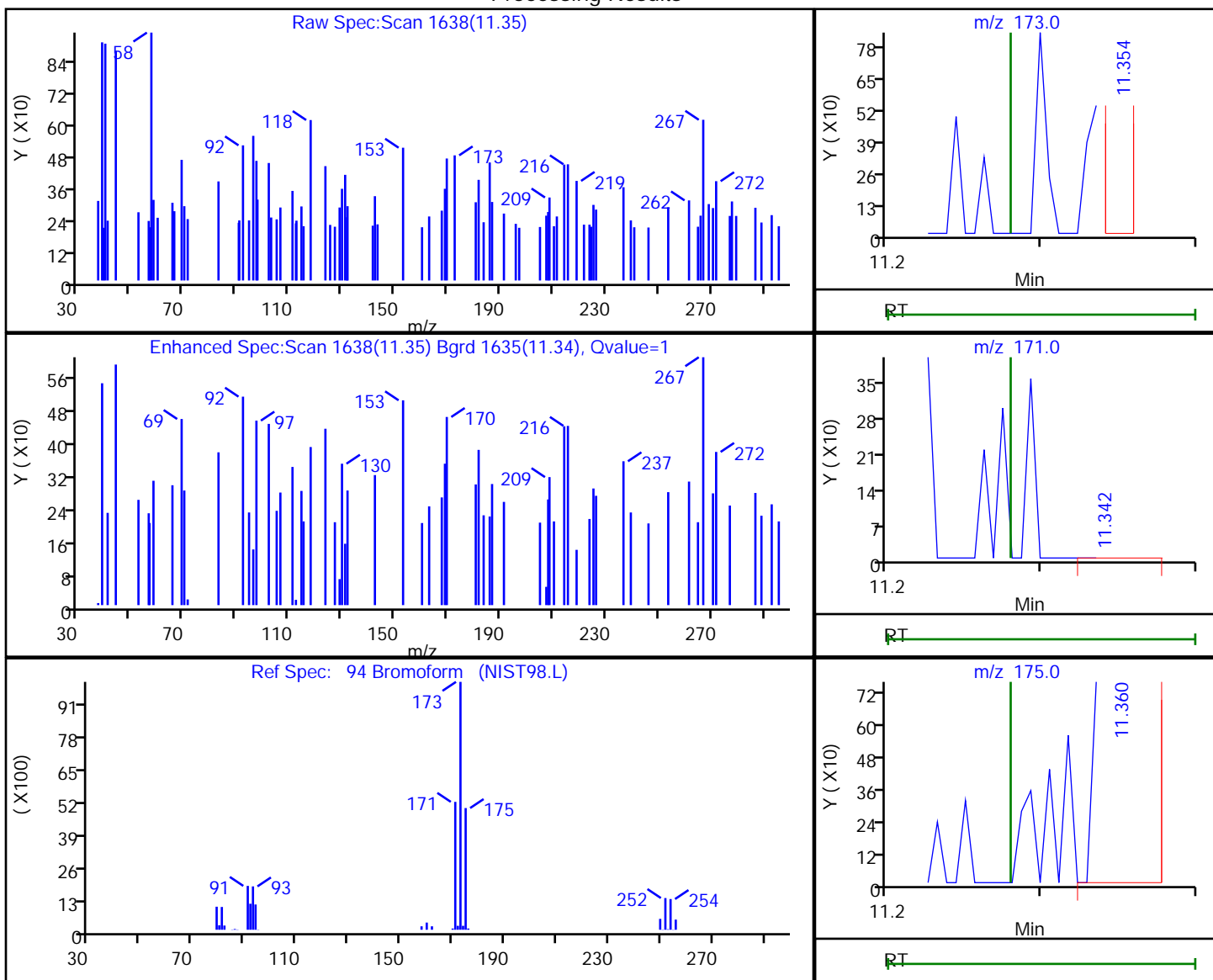
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050418.D  
 Injection Date: 04-May-2020 15:09:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-A-11 Lab Sample ID: 180-105108-11  
 Client ID: HD-COD-SW-28-0/1-0  
 Operator ID: 034635 ALS Bottle#: 18 Worklist Smp#: 18  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

94 Bromoform, CAS: 75-25-2

Processing Results



RT	Mass	Response	Amount
11.35	173.00	270	0.227446
11.34	171.00	379	
11.36	175.00	545	

Reviewer: journeyp, 04-May-2020 15:42:41

Audit Action: Marked Compound Undetected

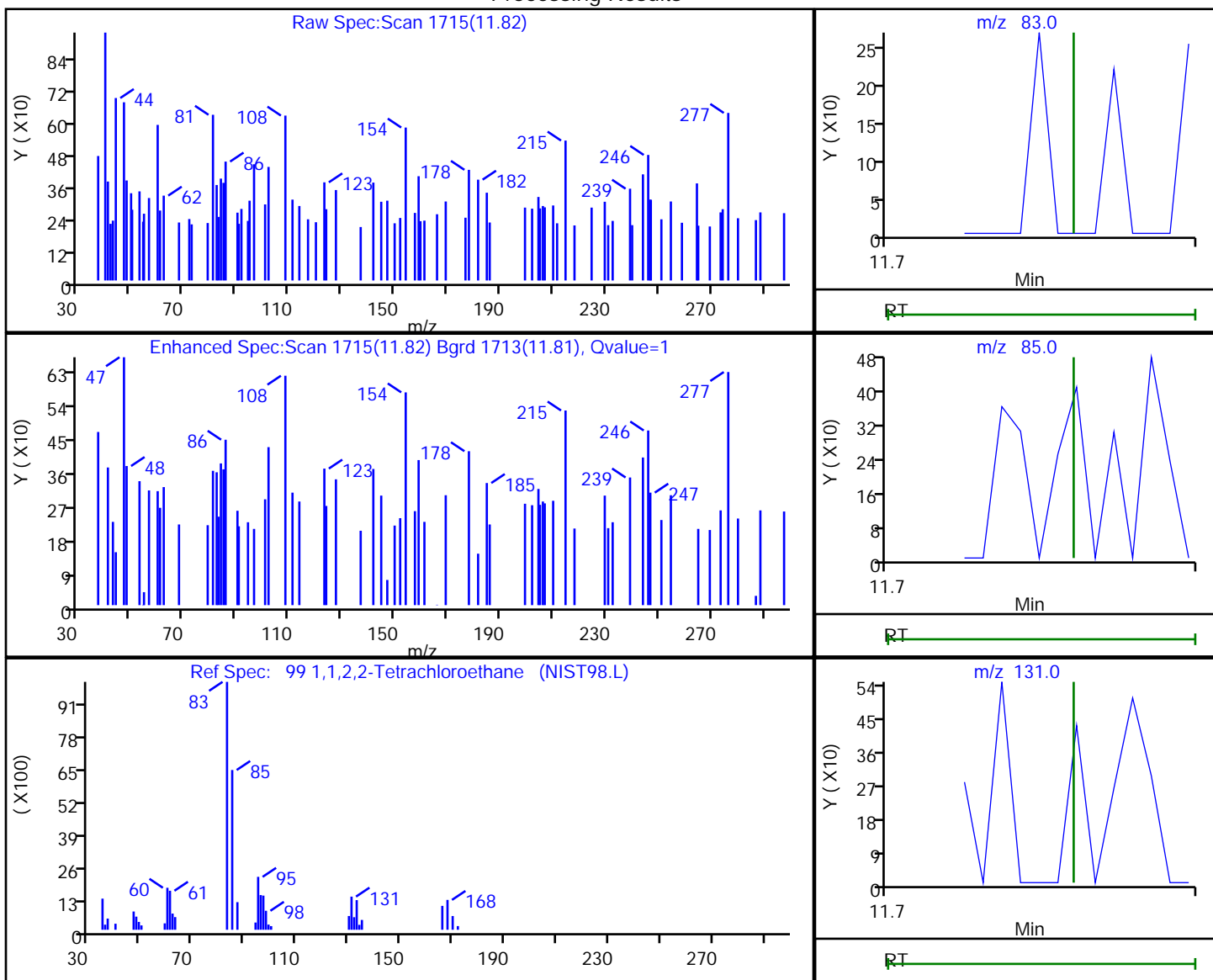
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050418.D  
 Injection Date: 04-May-2020 15:09:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-A-11 Lab Sample ID: 180-105108-11  
 Client ID: HD-COD-SW-28-0/1-0  
 Operator ID: 034635 ALS Bottle#: 18 Worklist Smp#: 18  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

99 1,1,2,2-Tetrachloroethane, CAS: 79-34-5

Processing Results



RT	Mass	Response	Amount
11.82	83.00	87	0.028407
11.82	85.00	211	
11.76	131.00	0	

Reviewer: journeyp, 04-May-2020 15:42:41  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: HD-COD-SW-29-0/1-0 Lab Sample ID: 180-105108-12  
 Matrix: Water Lab File ID: 5050419.D  
 Analysis Method: EPA 8260C Date Collected: 04/28/2020 10:05  
 Sample wt/vol: 5 (mL) Date Analyzed: 05/04/2020 15:33  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-624 ID: 0.18 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 314475 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	ND	^c	1.0	0.90
75-01-4	Vinyl chloride	ND		1.0	0.40
74-83-9	Bromomethane	ND	^c *	1.0	0.89
75-00-3	Chloroethane	ND		1.0	0.90
75-35-4	1,1-Dichloroethene	ND		1.0	0.55
67-64-1	Acetone	5.1		5.0	3.4
75-15-0	Carbon disulfide	ND		1.0	0.88
75-09-2	Methylene Chloride	ND		1.0	0.89
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.67
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.59
75-34-3	1,1-Dichloroethane	ND		1.0	0.31
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.71
74-97-5	Bromochloromethane	ND		1.0	0.63
78-93-3	2-Butanone (MEK)	ND	^c	5.0	2.6
67-66-3	Chloroform	ND		1.0	0.60
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.60
56-23-5	Carbon tetrachloride	ND		1.0	0.88
71-43-2	Benzene	ND		1.0	0.60
107-06-2	1,2-Dichloroethane	ND		1.0	0.57
79-01-6	Trichloroethene	ND		1.0	0.69
78-87-5	1,2-Dichloropropane	ND		1.0	0.66
75-27-4	Bromodichloromethane	ND		1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	3.1
108-88-3	Toluene	ND		1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.58
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.45
127-18-4	Tetrachloroethene	ND		1.0	0.47
591-78-6	2-Hexanone	ND		5.0	3.3
124-48-1	Dibromochloromethane	ND		1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	ND		1.0	0.50
108-90-7	Chlorobenzene	ND		1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.57
100-41-4	Ethylbenzene	ND		1.0	0.51
1330-20-7	Xylenes, Total	ND		2.0	0.89
100-42-5	Styrene	ND		1.0	0.47

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: HD-COD-SW-29-0/1-0 Lab Sample ID: 180-105108-12  
 Matrix: Water Lab File ID: 5050419.D  
 Analysis Method: EPA 8260C Date Collected: 04/28/2020 10:05  
 Sample wt/vol: 5 (mL) Date Analyzed: 05/04/2020 15:33  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-624 ID: 0.18 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 314475 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	ND	^c	1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	ND	^c	1.0	0.60
107-13-1	Acrylonitrile	ND		20	7.8

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		62-146
2037-26-5	Toluene-d8 (Surr)	99		75-120
460-00-4	4-Bromofluorobenzene (Surr)	90		64-120
1868-53-7	Dibromofluoromethane (Surr)	100		71-132

Eurofins TestAmerica, Pittsburgh  
Target Compound Quantitation Report

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050419.D  
 Lims ID: 180-105108-B-12  
 Client ID: HD-COD-SW-29-0/1-0  
 Sample Type: Client  
 Inject. Date: 04-May-2020 15:33:30 ALS Bottle#: 19 Worklist Smp#: 19  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: 180-0031789-019  
 Operator ID: 034635 Instrument ID: CHHP5  
 Method: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\MMSVOA\_LL\_CHHP5.m  
 Limit Group: VOA 8260C\_D ICAL  
 Last Update: 08-May-2020 10:31:24 Calib Date: 03-Apr-2020 19:09:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP5\20200403-31442.b\5040310.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: CTX0306

First Level Reviewer: journetp

Date: 08-May-2020 10:24:00

Compound	Sig	RT (min.)	Exp RT (min.)	Diff RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.369	4.363	0.006	0	232811	1000.0	
* 2 Fluorobenzene (IS)	96	7.350	7.344	0.006	99	541764	50.0	
* 3 Chlorobenzene-d5	119	10.434	10.434	0.000	85	136109	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.770	12.776	-0.006	95	207303	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.632	6.626	0.006	93	153830	49.8	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.997	6.991	0.006	0	213373	48.6	
\$ 7 Toluene-d8 (Surr)	98	8.986	8.986	0.000	94	545754	49.5	
\$ 8 4-Bromofluorobenzene (Surr	95	11.614	11.614	0.000	88	186846	44.9	
12 Chloromethane	50		1.844				ND	U
13 Vinyl chloride	62		1.966				ND	U
15 Bromomethane	94		2.288				ND	U
16 Chloroethane	64		2.416				ND	U
22 1,1-Dichloroethene	96		3.414				ND	U
24 Acetone	43	3.523	3.511	0.012	98	47388	25.3	
26 Carbon disulfide	76		3.706				ND	
31 Methylene Chloride	84		4.217				ND	
33 Acrylonitrile	53		4.612				ND	U
34 trans-1,2-Dichloroethene	96		4.631				ND	U
35 Methyl tert-butyl ether	73		4.655				ND	U
37 1,1-Dichloroethane	63		5.263				ND	U
45 cis-1,2-Dichloroethene	96		6.018				ND	U
46 2-Butanone (MEK)	43		6.036				ND	U
49 Chlorobromomethane	128		6.297				ND	U
52 Chloroform	83		6.443				ND	U
53 1,1,1-Trichloroethane	97		6.602				ND	U
56 Carbon tetrachloride	117		6.766				ND	U
58 Benzene	78		7.003				ND	U
59 1,2-Dichloroethane	62		7.076				ND	U
64 Trichloroethene	130		7.727				ND	U
67 1,2-Dichloropropane	63		8.001				ND	U
71 Dichlorobromomethane	83		8.287				ND	U
74 cis-1,3-Dichloropropene	75		8.731				ND	U

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
75 4-Methyl-2-pentanone (MIBK	43		8.889				ND	U
76 Toluene	91		9.053				ND	U
77 trans-1,3-Dichloropropene	75		9.303				ND	U
79 1,1,2-Trichloroethane	97		9.497				ND	U
80 Tetrachloroethene	164		9.564				ND	U
82 2-Hexanone	43		9.716				ND	U
84 Chlorodibromomethane	129		9.868				ND	U
85 Ethylene Dibromide	107		9.978				ND	U
87 Chlorobenzene	112		10.465				ND	U
89 1,1,1,2-Tetrachloroethane	131		10.562				ND	U
90 Ethylbenzene	106		10.562				ND	U
91 m-Xylene & p-Xylene	106		10.696				ND	U
92 o-Xylene	106		11.079				ND	U
93 Styrene	104		11.097				ND	U
94 Bromoform	173		11.280				ND	U
99 1,1,2,2-Tetrachloroethane	83		11.760				ND	U
S 133 Xylenes, Total	106		1.000				ND	

**QC Flag Legend**

Review Flags

U - Marked Undetected

**Reagents:**

voaWI/SHP5\_00016

Amount Added: 5.00

Units: uL

Run Reagent

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050419.D

Injection Date: 04-May-2020 15:33:30

Instrument ID: CHHP5

Operator ID: 034635

Lims ID: 180-105108-B-12

Lab Sample ID: 180-105108-12

Worklist Smp#: 19

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

Purge Vol: 5.000 mL

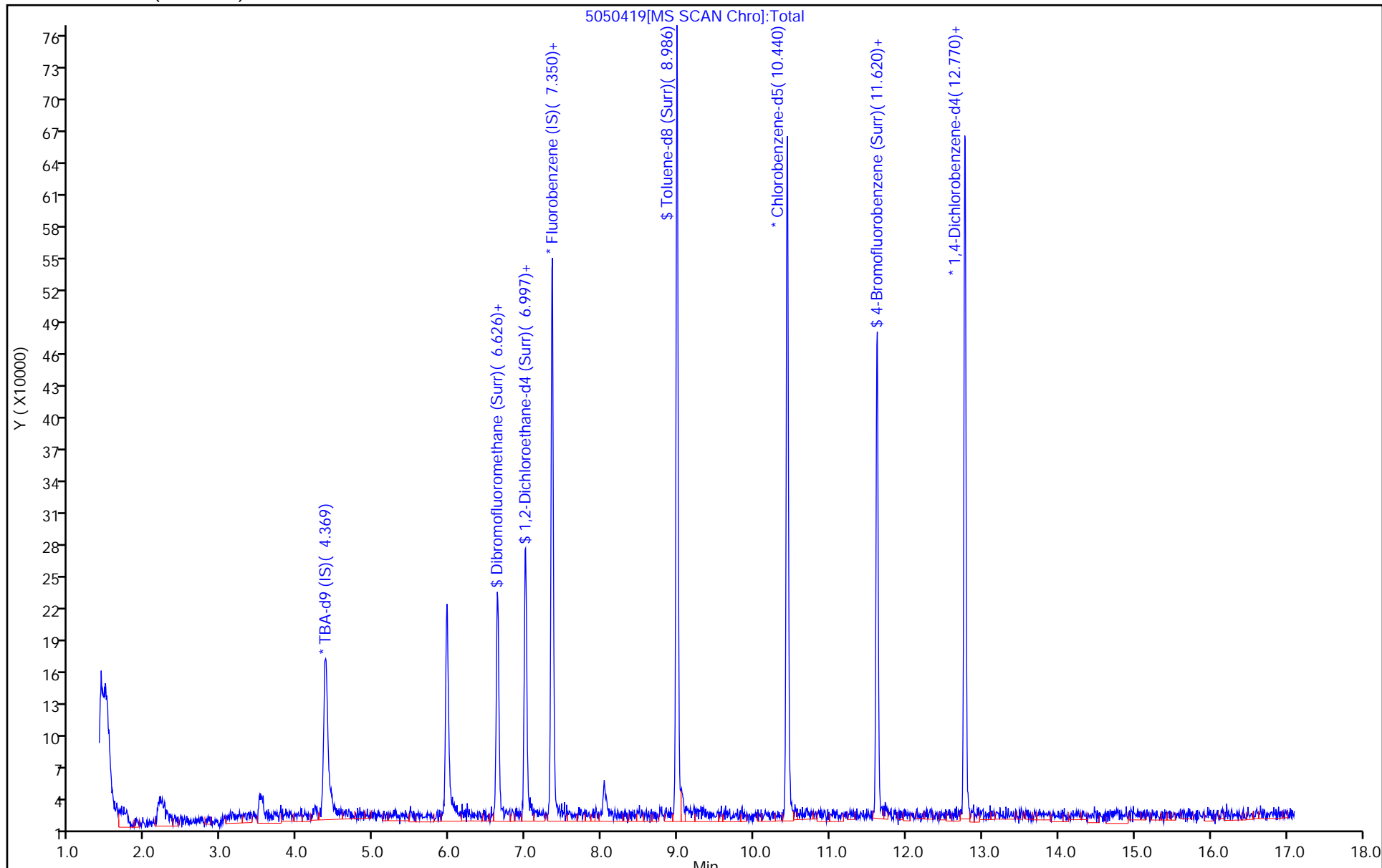
Dil. Factor: 1.0000

ALS Bottle#: 19

Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)





Eurofins TestAmerica, Pittsburgh  
Recovery Report

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050419.D  
 Lims ID: 180-105108-B-12  
 Client ID: HD-COD-SW-29-0/1-0  
 Sample Type: Client  
 Inject. Date: 04-May-2020 15:33:30 ALS Bottle#: 19 Worklist Smp#: 19  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: 180-0031789-019  
 Operator ID: 034635 Instrument ID: CHHP5  
 Method: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\MMSVOA\_LL\_CHHP5.m  
 Limit Group: VOA 8260C\_D ICAL  
 Last Update: 08-May-2020 10:31:24 Calib Date: 03-Apr-2020 19:09:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP5\20200403-31442.b\5040310.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: CTX0306

First Level Reviewer: journetp

Date: 08-May-2020 10:24:00

Compound	Amount Added	Amount Recovered	% Rec.
\$ 5 Dibromofluoromethane (Surr)	50.0	49.8	99.53
\$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	48.6	97.29
\$ 7 Toluene-d8 (Surr)	50.0	49.5	99.07
\$ 8 4-Bromofluorobenzene (Surr)	50.0	44.9	89.74

Euofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050419.D

Injection Date: 04-May-2020 15:33:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-12

Lab Sample ID: 180-105108-12

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

Operator ID: 034635

ALS Bottle#: 19

Worklist Smp#: 19

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

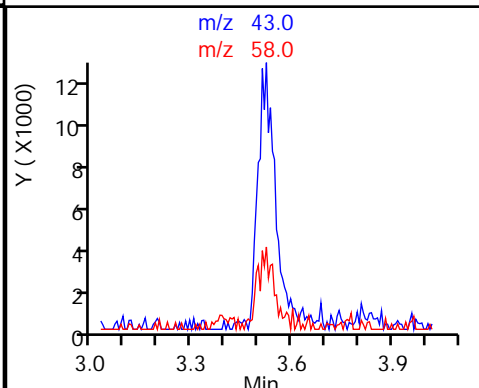
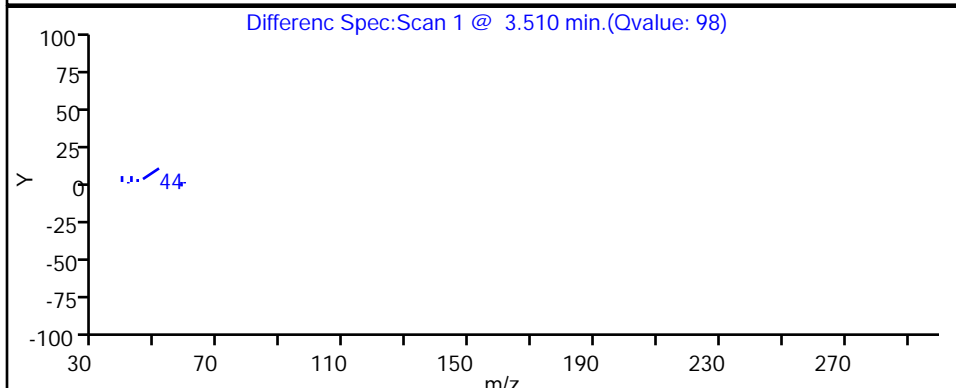
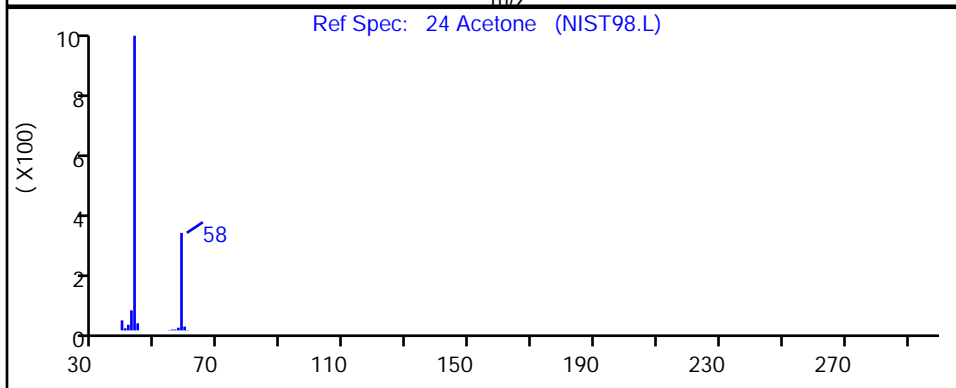
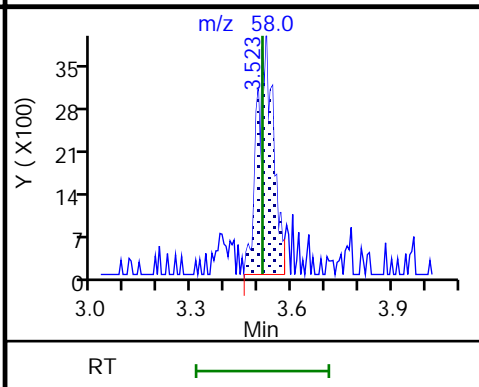
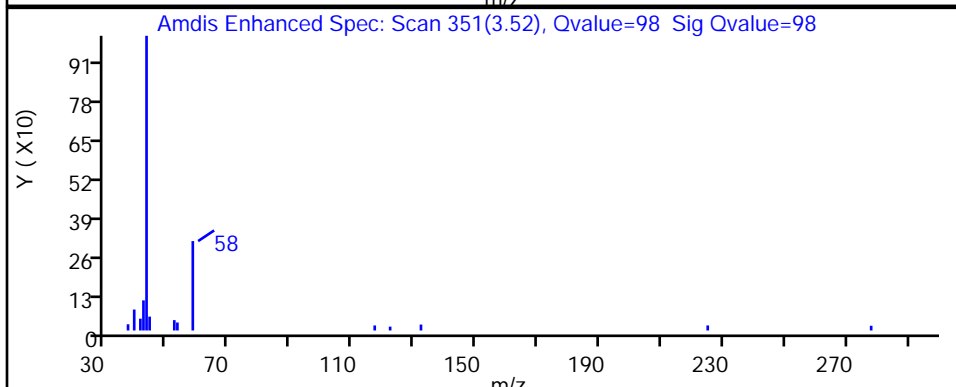
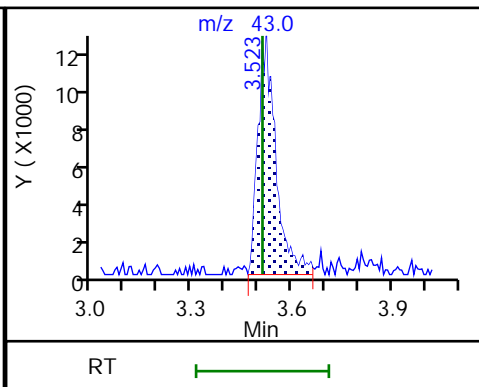
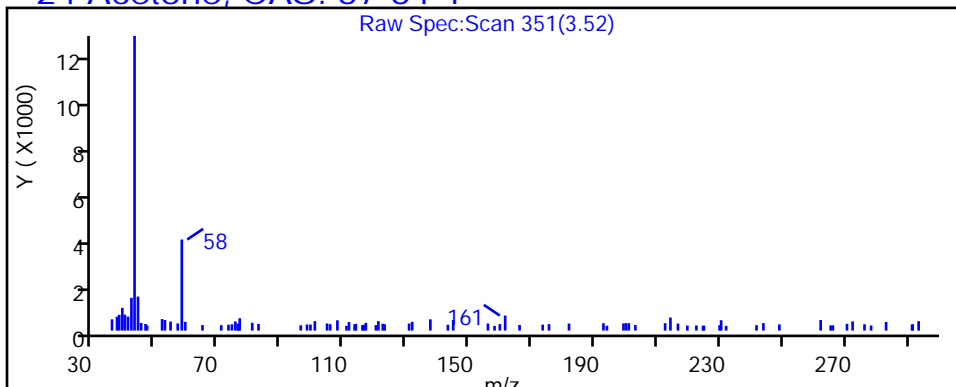
Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

24 Acetone, CAS: 67-64-1

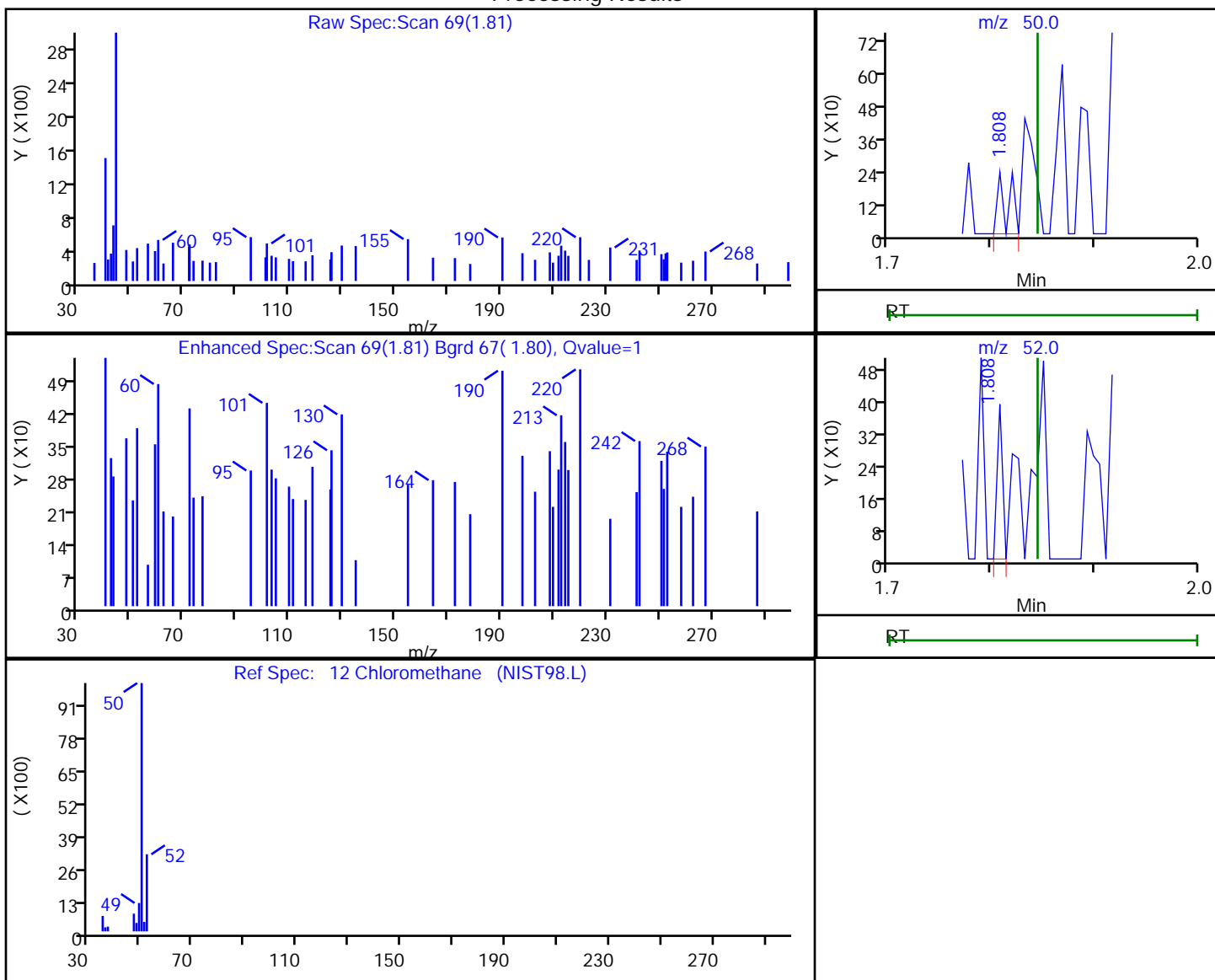


Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050419.D  
 Injection Date: 04-May-2020 15:33:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-12 Lab Sample ID: 180-105108-12  
 Client ID: HD-COD-SW-29-0/1-0  
 Operator ID: 034635 ALS Bottle#: 19 Worklist Smp#: 19  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

12 Chloromethane, CAS: 74-87-3

Processing Results



RT	Mass	Response	Amount
1.81	50.00	168	0.031788
1.81	52.00	141	

Reviewer: journtp, 08-May-2020 10:23:51

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050419.D

Injection Date: 04-May-2020 15:33:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-12

Lab Sample ID: 180-105108-12

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

Operator ID: 034635

ALS Bottle#: 19 Worklist Smp#: 19

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

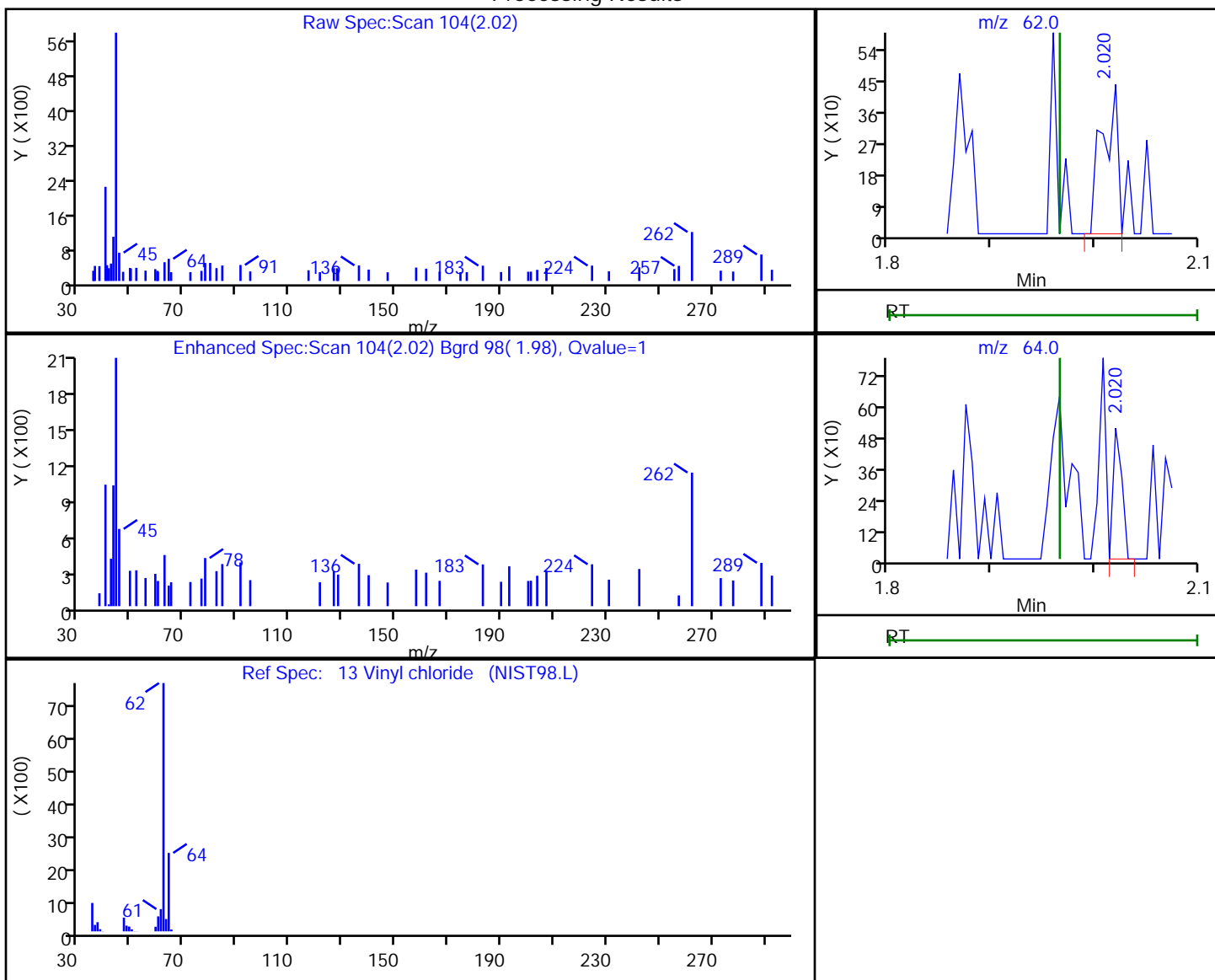
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

13 Vinyl chloride, CAS: 75-01-4

Processing Results



RT	Mass	Response	Amount
2.02	62.00	451	0.095824
2.02	64.00	303	

Reviewer: journetp, 08-May-2020 10:18:17

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050419.D

Injection Date: 04-May-2020 15:33:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-12

Lab Sample ID: 180-105108-12

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

Operator ID: 034635

ALS Bottle#: 19 Worklist Smp#: 19

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

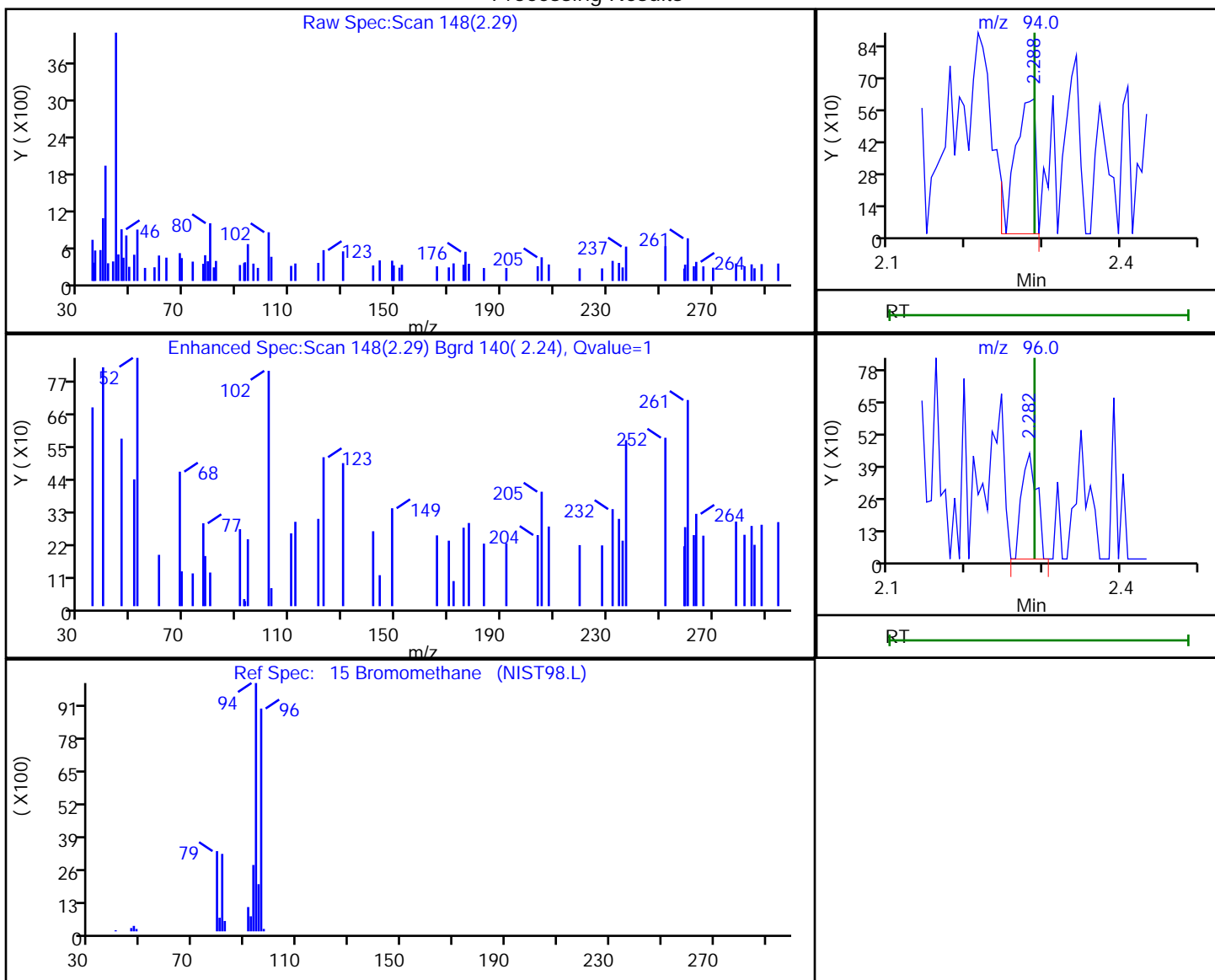
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

15 Bromomethane, CAS: 74-83-9

Processing Results



RT	Mass	Response	Amount
2.29	94.00	1137	0.421924
2.28	96.00	592	

Reviewer: journtp, 08-May-2020 10:23:52

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050419.D

Injection Date: 04-May-2020 15:33:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-12

Lab Sample ID: 180-105108-12

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

Operator ID: 034635

ALS Bottle#: 19 Worklist Smp#: 19

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

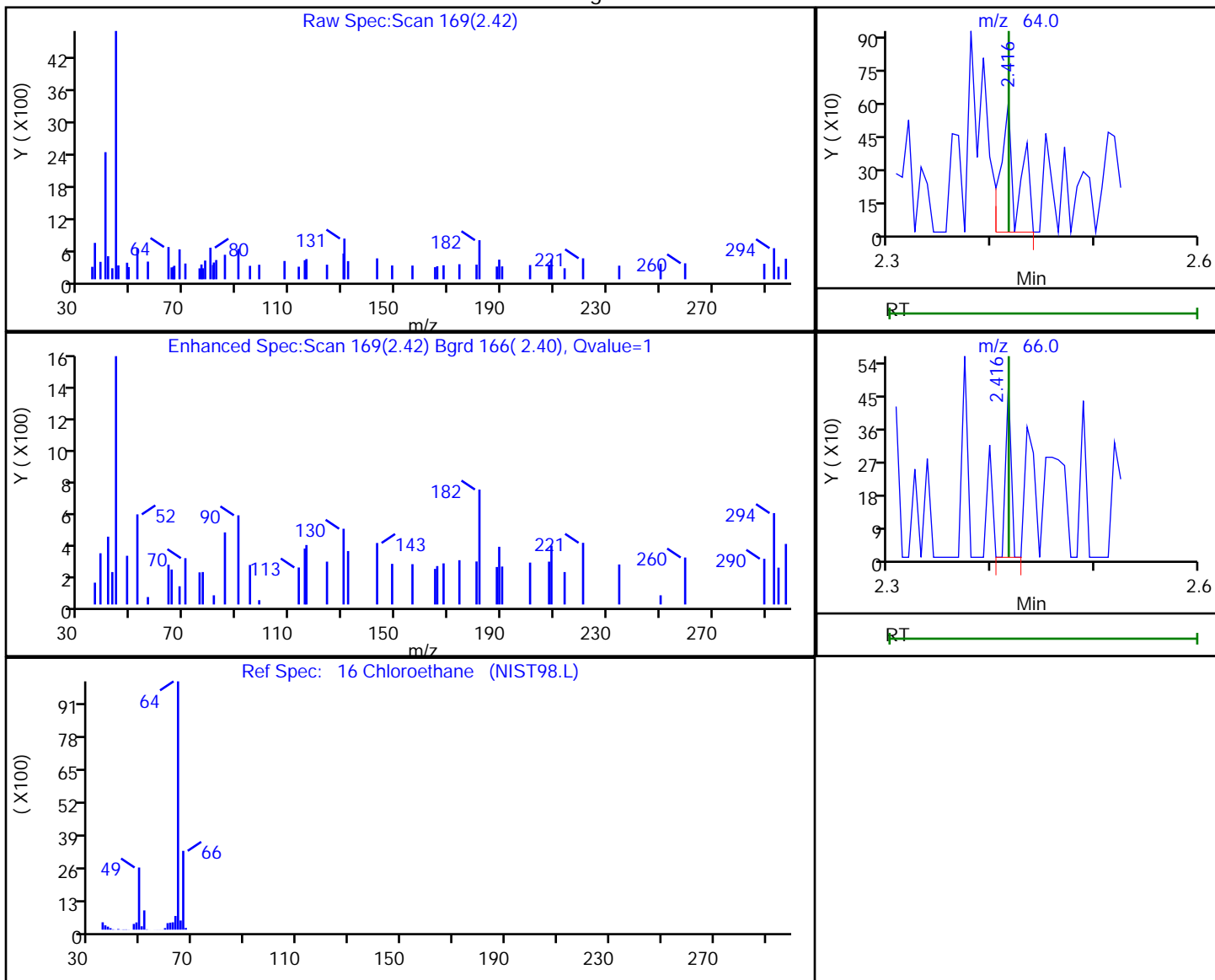
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

16 Chloroethane, CAS: 75-00-3

Processing Results



RT	Mass	Response	Amount
2.42	64.00	650	0.203569
2.42	66.00	176	

Reviewer: journtp, 08-May-2020 10:18:17

Audit Action: Marked Compound Undetected

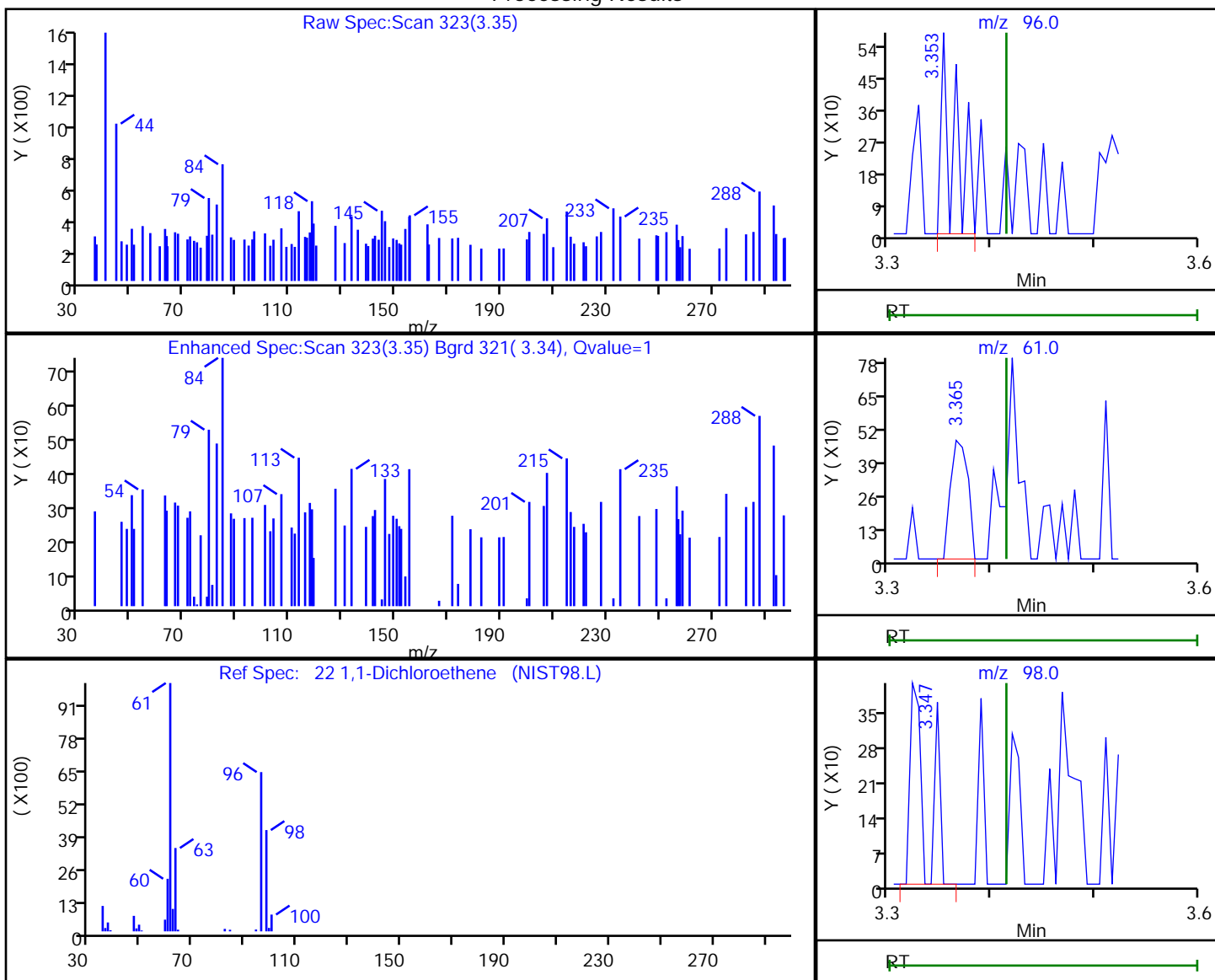
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050419.D  
 Injection Date: 04-May-2020 15:33:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-12 Lab Sample ID: 180-105108-12  
 Client ID: HD-COD-SW-29-0/1-0  
 Operator ID: 034635 ALS Bottle#: 19 Worklist Smp#: 19  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

22 1,1-Dichloroethene, CAS: 75-35-4

Processing Results



RT	Mass	Response	Amount
3.35	96.00	524	-1.782618
3.36	61.00	550	
3.35	98.00	415	

Reviewer: journeyp, 08-May-2020 10:18:18  
 Audit Action: Marked Compound Undetected

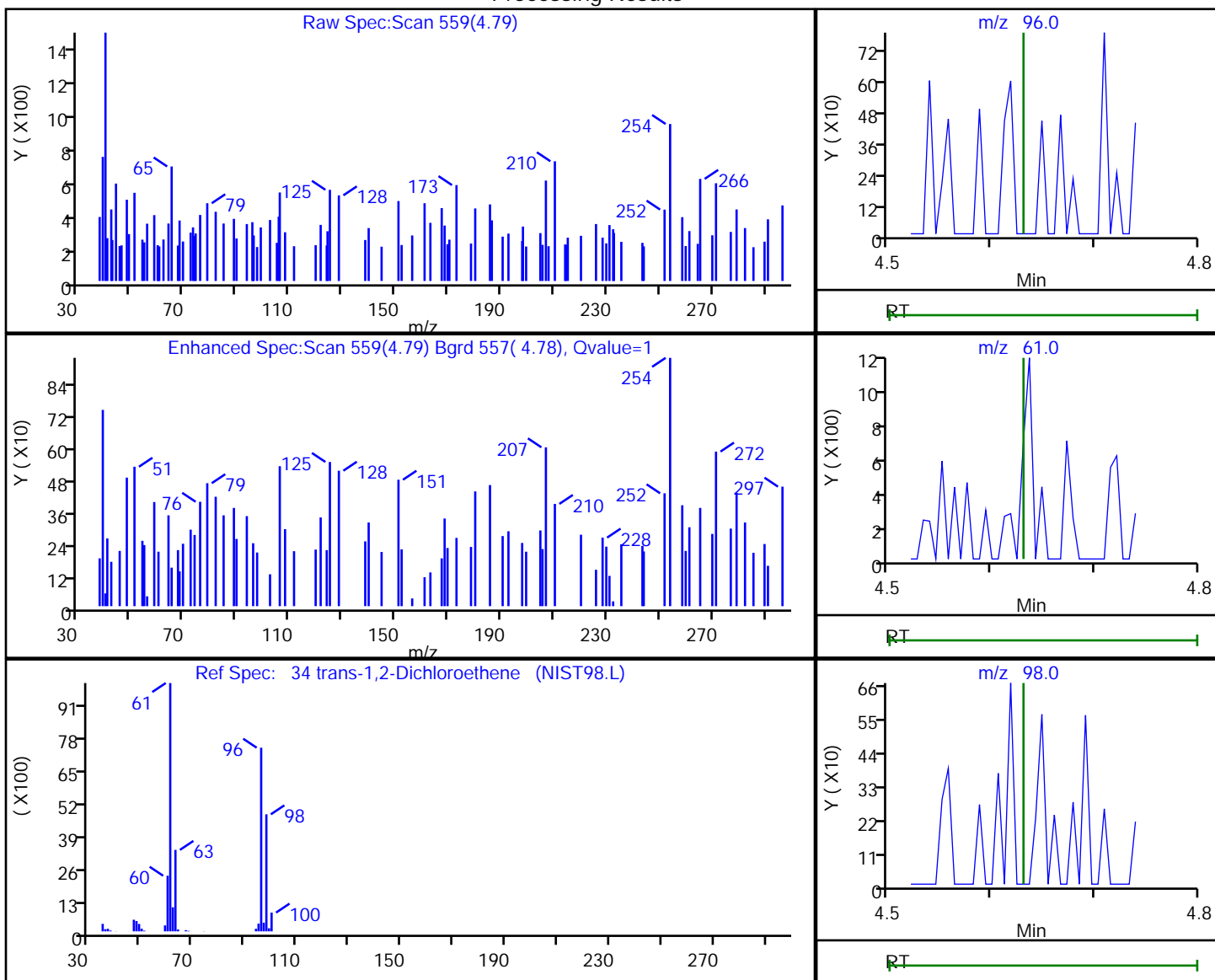
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050419.D  
 Injection Date: 04-May-2020 15:33:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-12 Lab Sample ID: 180-105108-12  
 Client ID: HD-COD-SW-29-0/1-0  
 Operator ID: 034635 ALS Bottle#: 19 Worklist Smp#: 19  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

34 trans-1,2-Dichloroethene, CAS: 156-60-5

Processing Results



RT	Mass	Response	Amount
4.79	96.00	710	0.239745
4.78	61.00	1303	
4.79	98.00	182	

Reviewer: journept, 08-May-2020 10:18:26  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

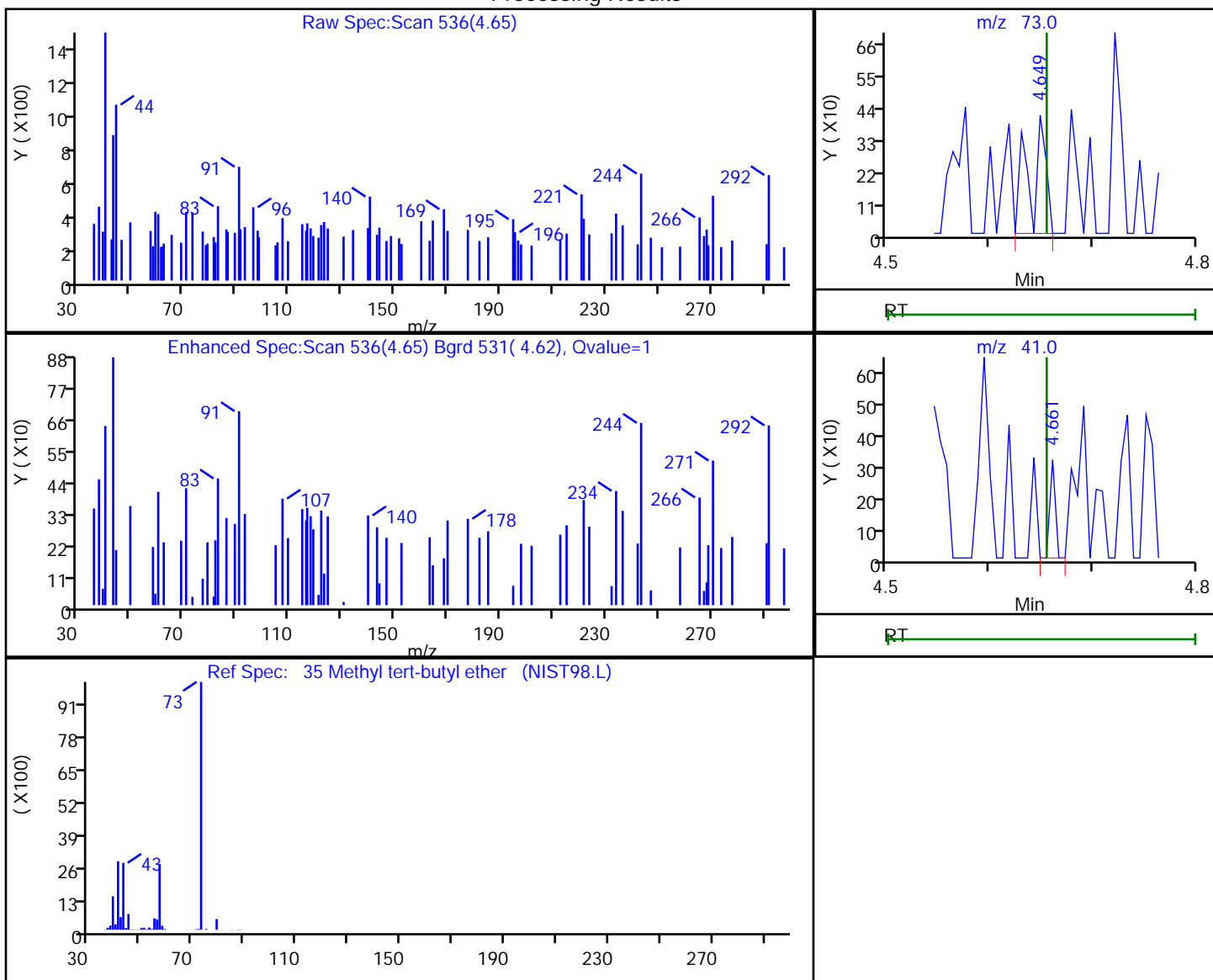


Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050419.D  
 Injection Date: 04-May-2020 15:33:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-12 Lab Sample ID: 180-105108-12  
 Client ID: HD-COD-SW-29-0/1-0  
 Operator ID: 034635 ALS Bottle#: 19 Worklist Smp#: 19  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

35 Methyl tert-butyl ether, CAS: 1634-04-4

Processing Results



RT	Mass	Response	Amount
4.65	73.00	442	0.053181
4.66	41.00	115	

Reviewer: journetp, 08-May-2020 10:18:26  
 Audit Action: Marked Compound Undetected

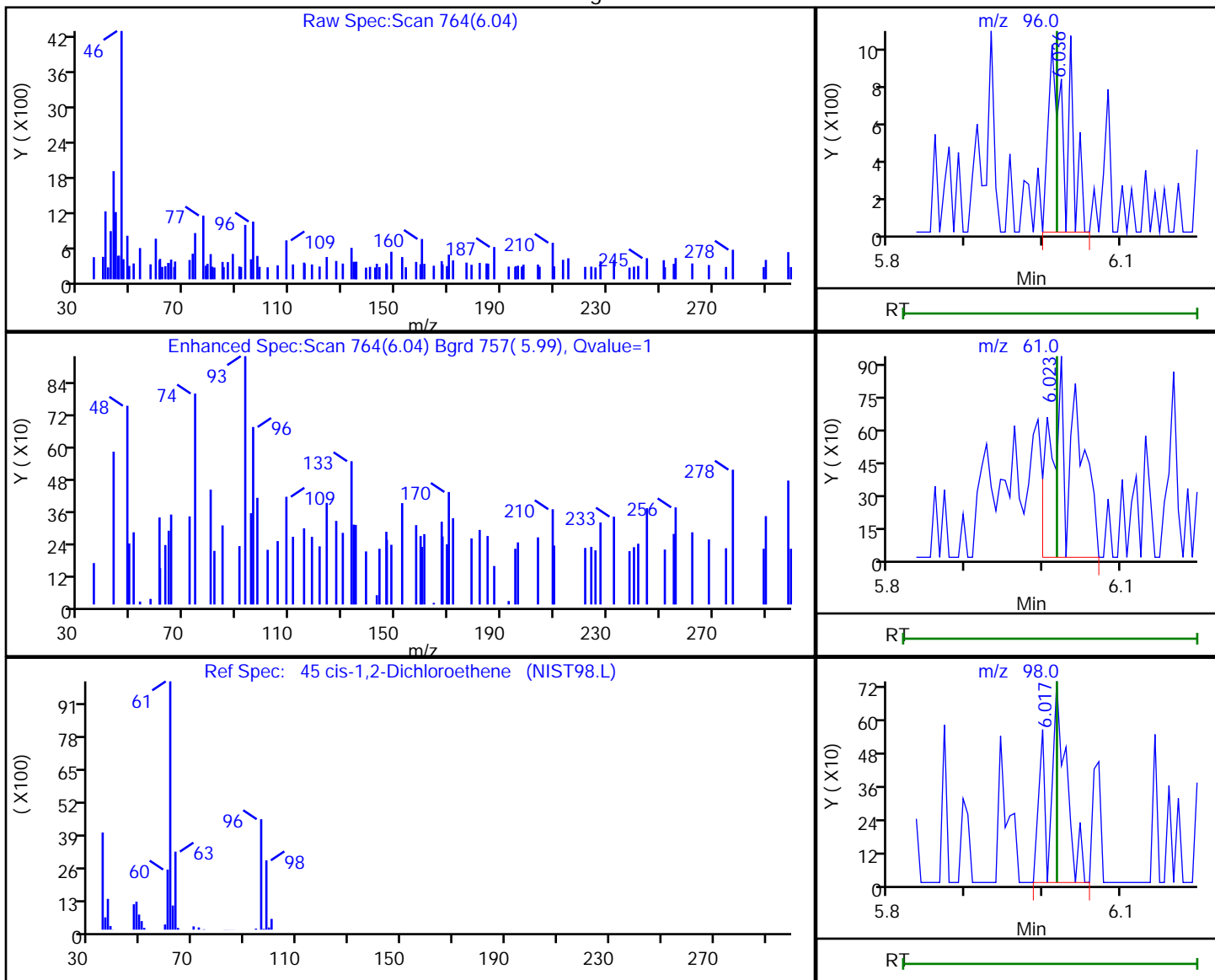
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050419.D  
 Injection Date: 04-May-2020 15:33:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-12 Lab Sample ID: 180-105108-12  
 Client ID: HD-COD-SW-29-0/1-0  
 Operator ID: 034635 ALS Bottle#: 19 Worklist Smp#: 19  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

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

Processing Results



RT	Mass	Response	Amount
6.04	96.00	1556	0.441563
6.02	61.00	2133	
6.02	98.00	1200	

Reviewer: journetp, 08-May-2020 10:18:27  
 Audit Action: Marked Compound Undetected

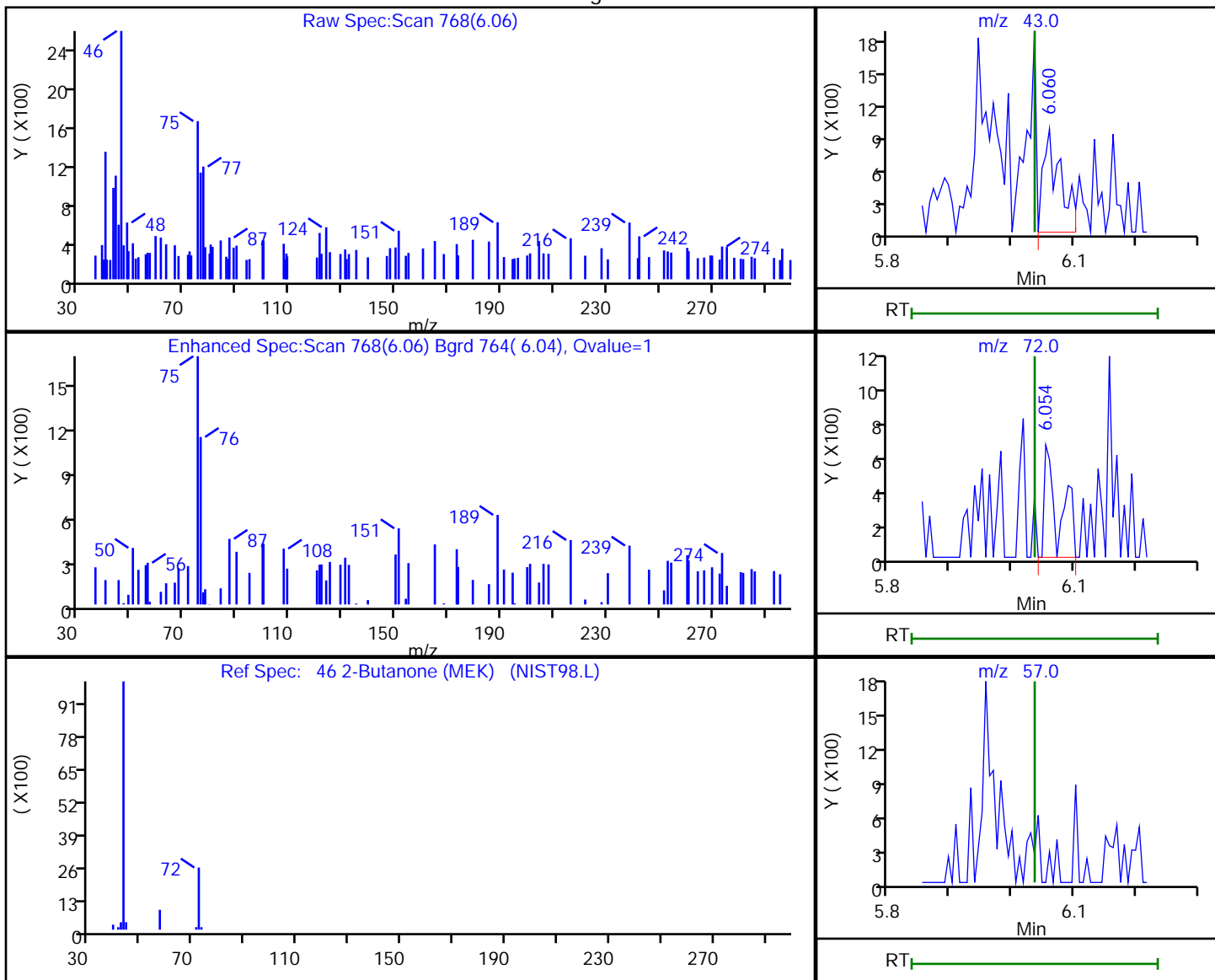
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050419.D  
 Injection Date: 04-May-2020 15:33:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-12 Lab Sample ID: 180-105108-12  
 Client ID: HD-COD-SW-29-0/1-0  
 Operator ID: 034635 ALS Bottle#: 19 Worklist Smp#: 19  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

46 2-Butanone (MEK), CAS: 78-93-3

Processing Results



RT	Mass	Response	Amount
6.06	43.00	1841	0.925287
6.05	72.00	997	
6.04	57.00	0	

Reviewer: journept, 08-May-2020 10:23:56  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050419.D

Injection Date: 04-May-2020 15:33:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-12

Lab Sample ID: 180-105108-12

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

Operator ID: 034635

ALS Bottle#: 19 Worklist Smp#: 19

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

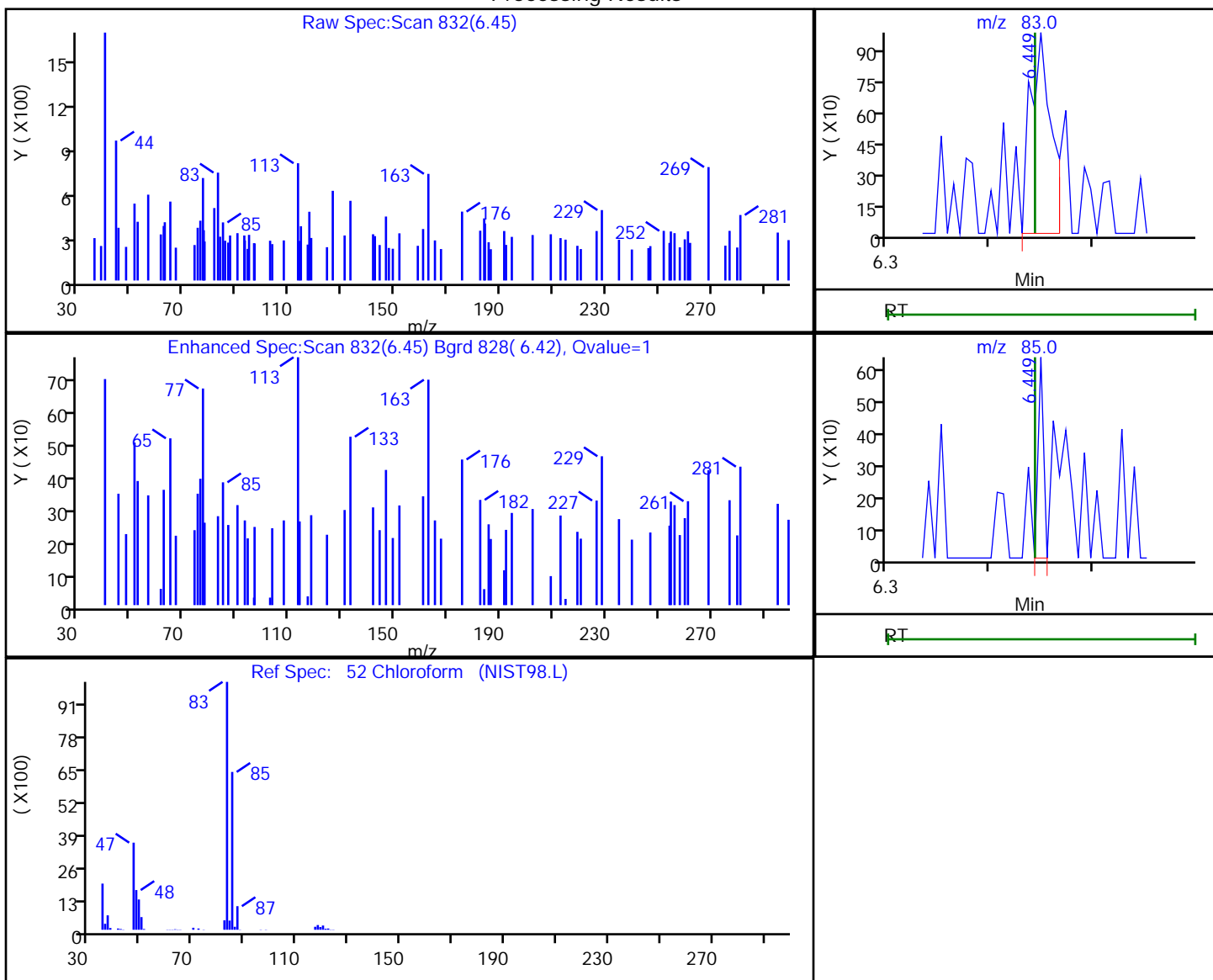
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

52 Chloroform, CAS: 67-66-3

Processing Results



RT	Mass	Response	Amount
6.45	83.00	1391	-1.507128
6.45	85.00	231	

Reviewer: journtp, 08-May-2020 10:18:27

Audit Action: Marked Compound Undetected

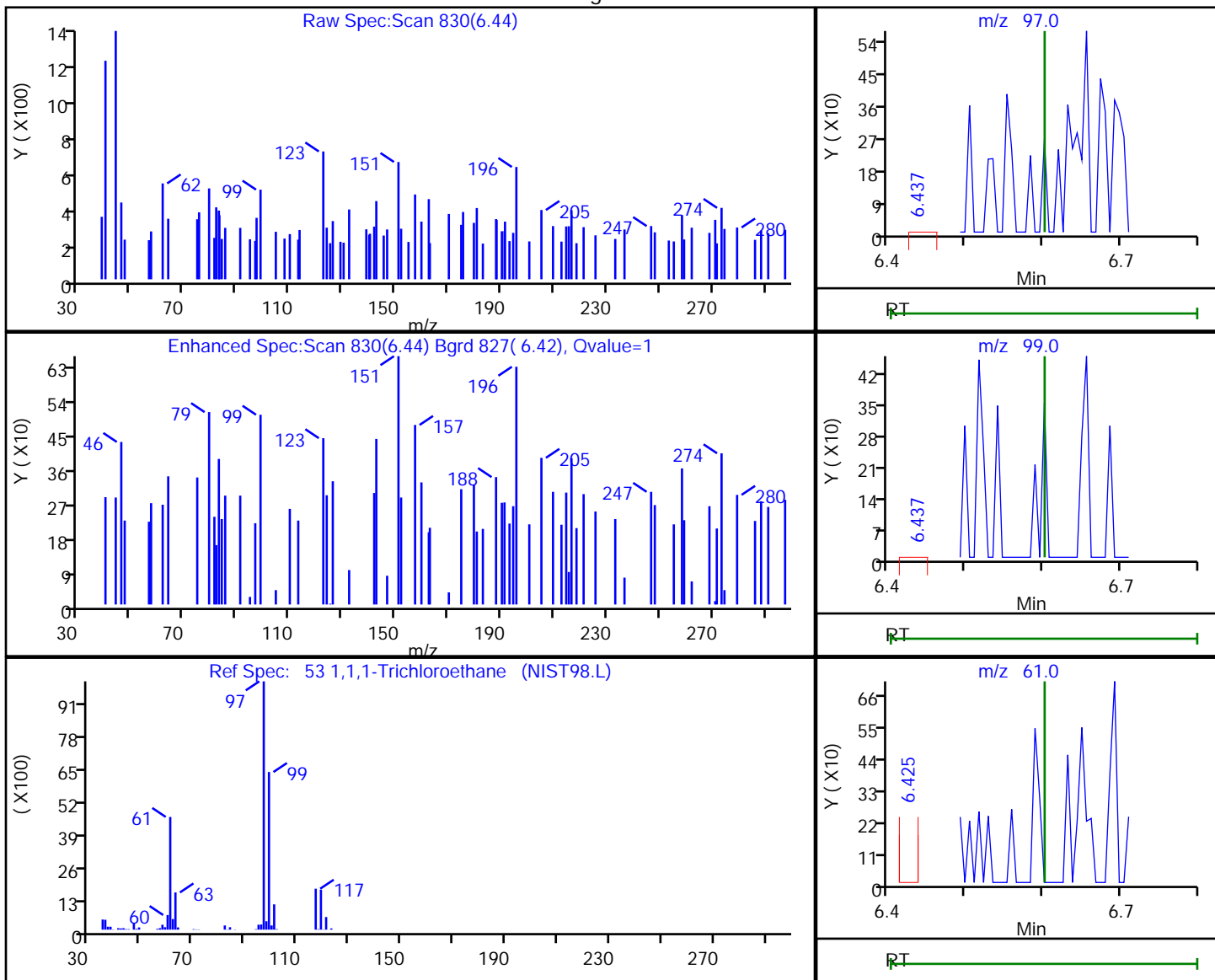
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050419.D  
Injection Date: 04-May-2020 15:33:30 Instrument ID: CHHP5  
Lims ID: 180-105108-B-12 Lab Sample ID: 180-105108-12  
Client ID: HD-COD-SW-29-0/1-0  
Operator ID: 034635 ALS Bottle#: 19 Worklist Smp#: 19  
Purge Vol: 5.000 mL Dil. Factor: 1.0000  
Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
Column: DB-624 (0.18 mm) Detector: MS SCAN

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

Processing Results



RT	Mass	Response	Amount
6.44	97.00	392	0.088793
6.44	99.00	392	
6.42	61.00	274	

Reviewer: journeyp, 08-May-2020 10:18:27  
Audit Action: Marked Compound Undetected

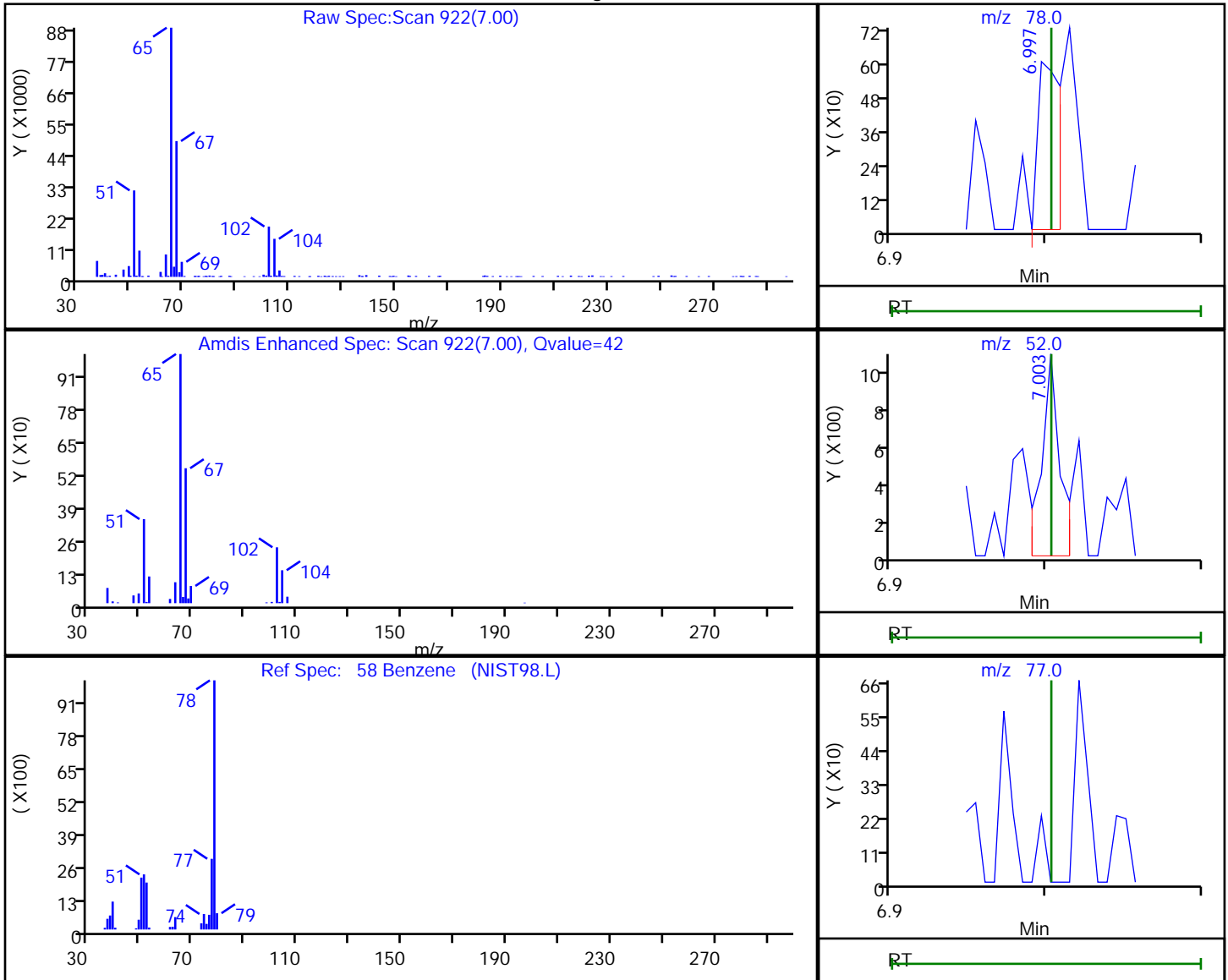
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050419.D  
 Injection Date: 04-May-2020 15:33:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-12 Lab Sample ID: 180-105108-12  
 Client ID: HD-COD-SW-29-0/1-0  
 Operator ID: 034635 ALS Bottle#: 19 Worklist Smp#: 19  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

58 Benzene, CAS: 71-43-2

Processing Results



RT	Mass	Response	Amount
7.00	78.00	617	0.046271
7.00	52.00	897	
7.00	77.00	0	

Reviewer: journept, 08-May-2020 10:18:27  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050419.D

Injection Date: 04-May-2020 15:33:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-12

Lab Sample ID: 180-105108-12

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

Operator ID: 034635

ALS Bottle#: 19 Worklist Smp#: 19

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

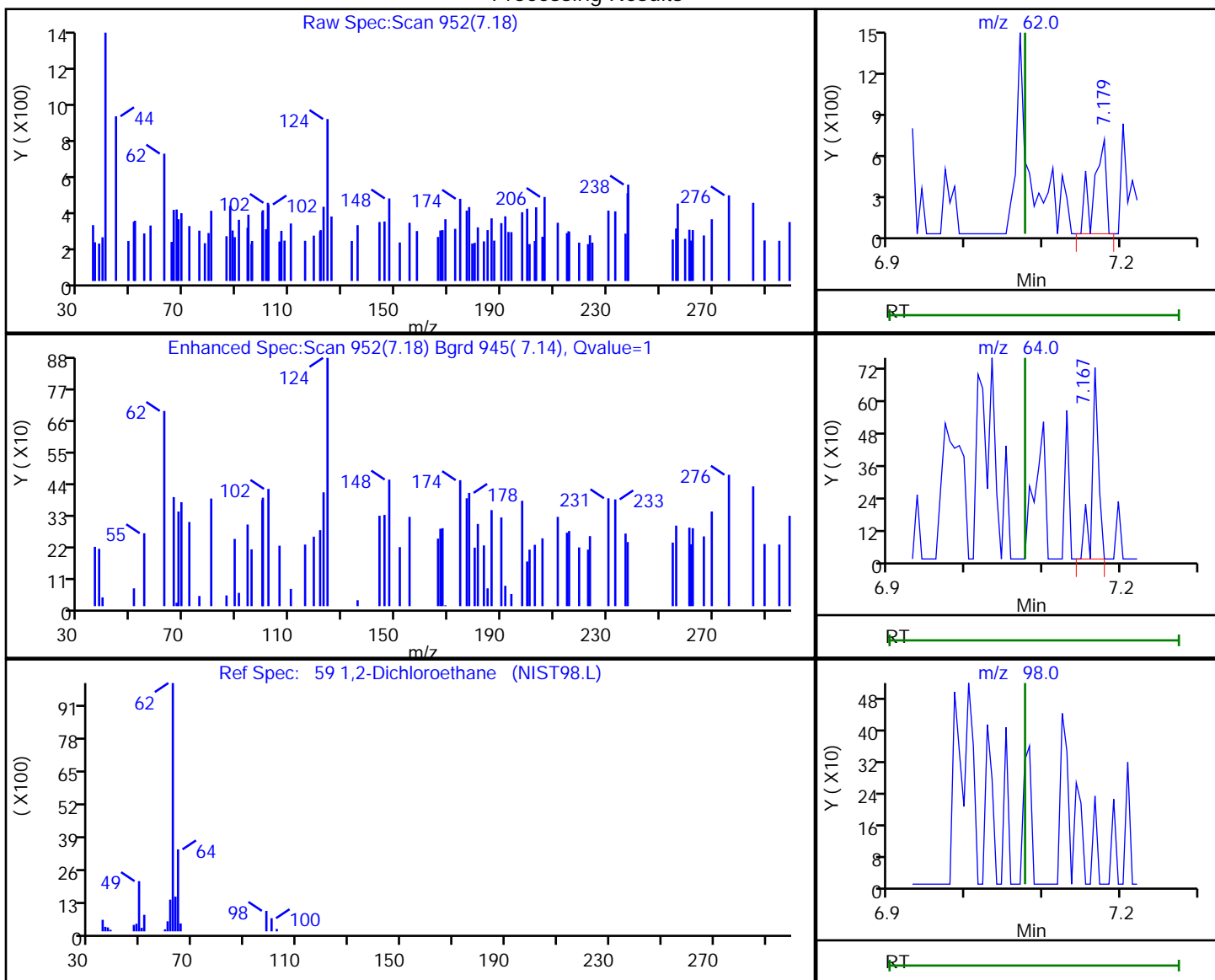
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

59 1,2-Dichloroethane, CAS: 107-06-2

Processing Results



RT	Mass	Response	Amount
7.18	62.00	764	0.150684
7.17	64.00	428	
7.08	98.00	0	

Reviewer: journetp, 08-May-2020 10:18:27

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050419.D

Injection Date: 04-May-2020 15:33:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-12

Lab Sample ID: 180-105108-12

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

Operator ID: 034635

ALS Bottle#: 19 Worklist Smp#: 19

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

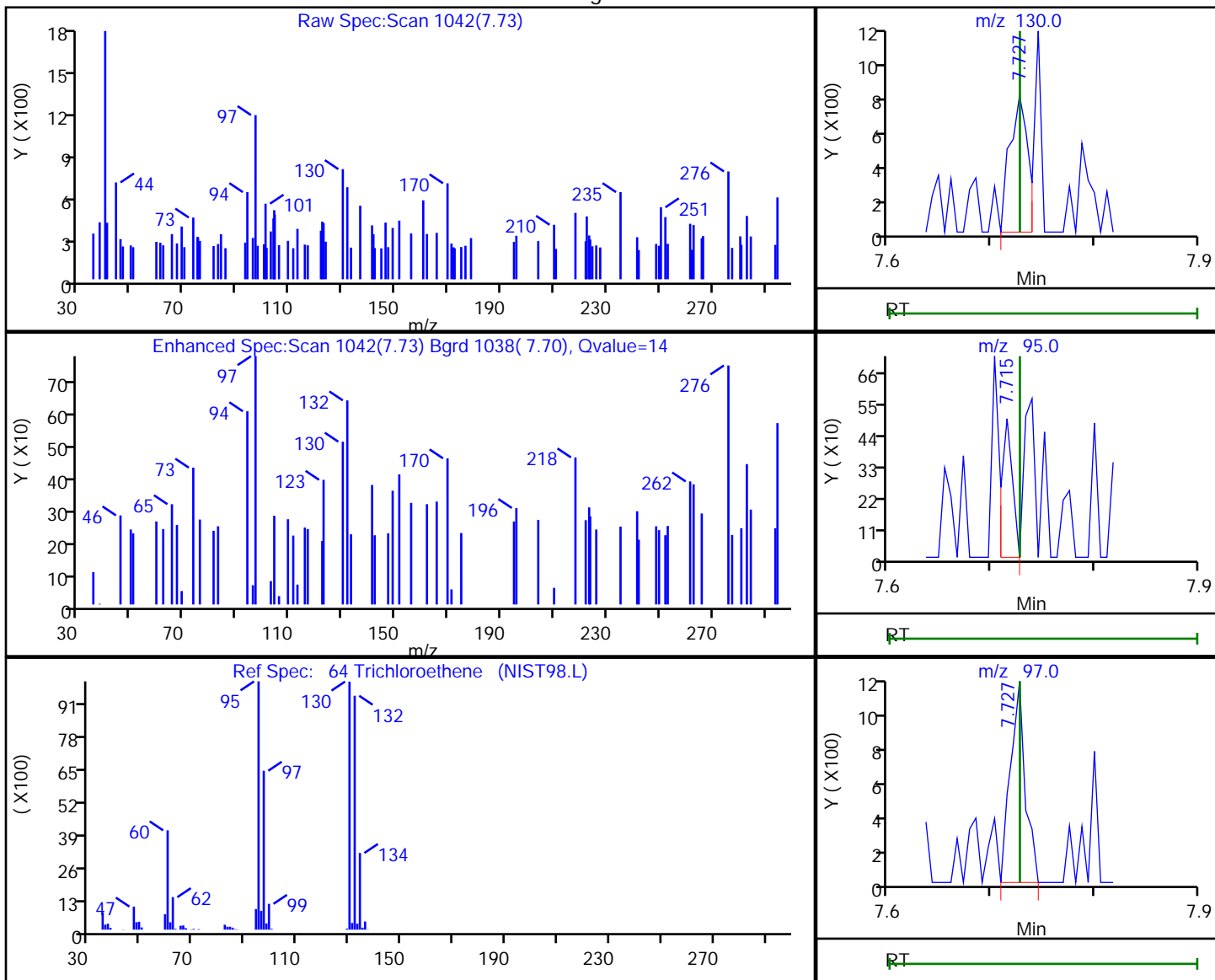
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

64 Trichloroethene, CAS: 79-01-6

Processing Results



RT	Mass	Response	Amount
7.73	130.00	942	0.283668
7.71	95.00	358	
7.73	97.00	1140	

Reviewer: journeyp, 08-May-2020 10:18:27

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID



Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050419.D

Injection Date: 04-May-2020 15:33:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-12

Lab Sample ID: 180-105108-12

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

Operator ID: 034635

ALS Bottle#: 19 Worklist Smp#: 19

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

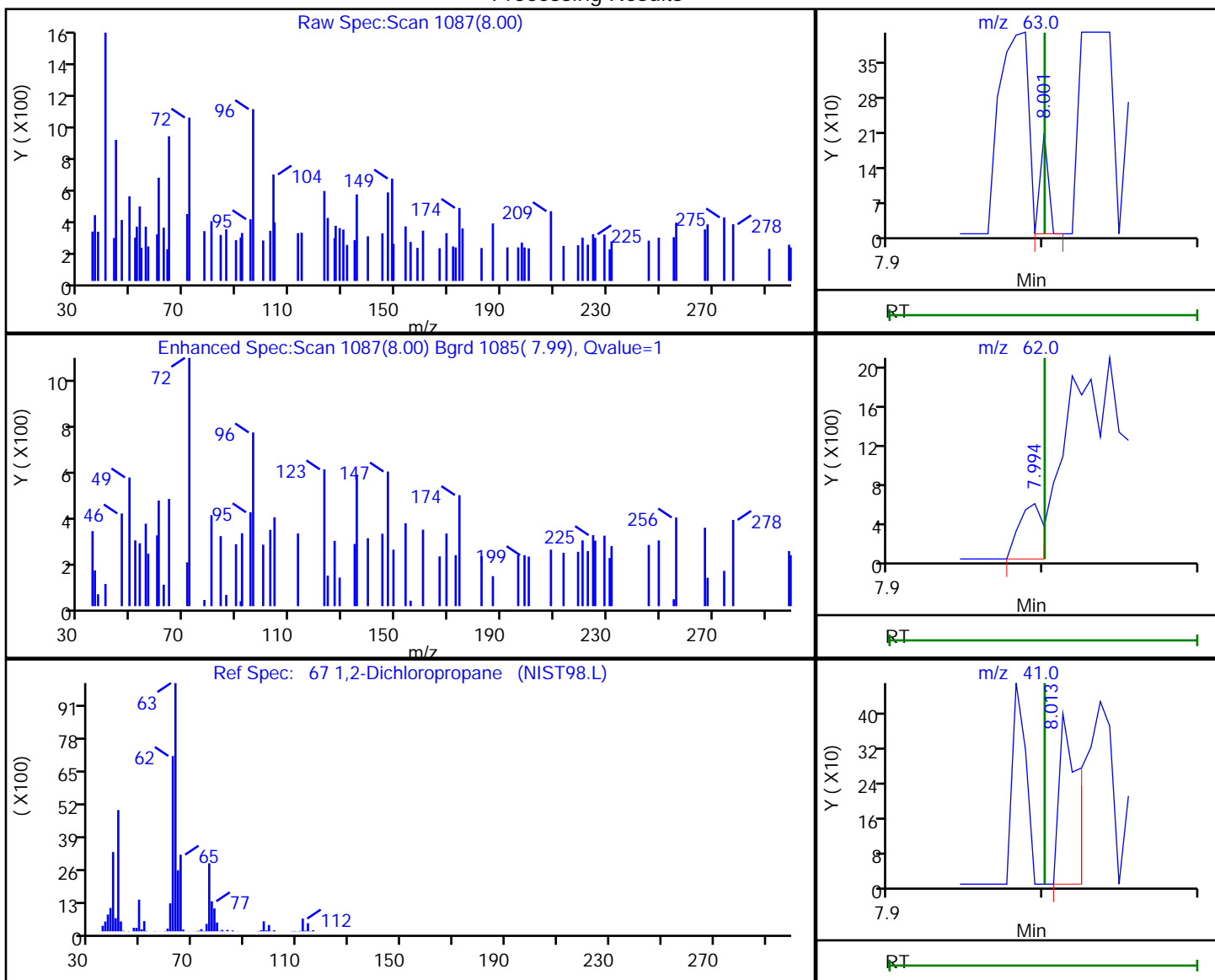
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

67 1,2-Dichloropropane, CAS: 78-87-5

Processing Results



RT	Mass	Response	Amount
8.00	63.00	74	0.020791
7.99	62.00	626	
8.01	41.00	338	

Reviewer: journetp, 08-May-2020 10:18:27

Audit Action: Marked Compound Undetected

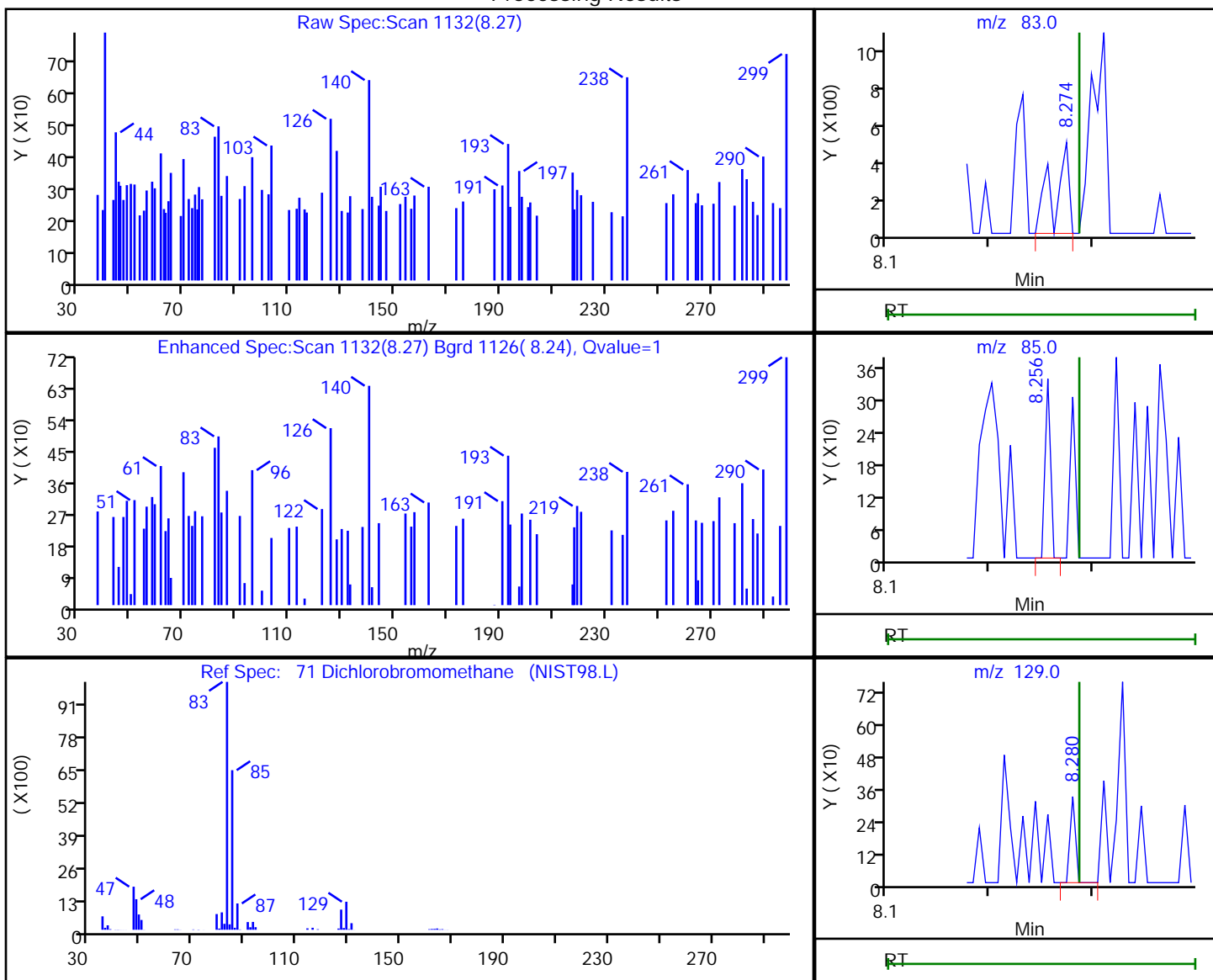
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050419.D  
 Injection Date: 04-May-2020 15:33:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-12 Lab Sample ID: 180-105108-12  
 Client ID: HD-COD-SW-29-0/1-0  
 Operator ID: 034635 ALS Bottle#: 19 Worklist Smp#: 19  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

71 Dichlorobromomethane, CAS: 75-27-4

Processing Results



RT	Mass	Response	Amount
8.27	83.00	495	0.118526
8.26	85.00	122	
8.28	129.00	119	

Reviewer: journeyp, 08-May-2020 10:18:27  
 Audit Action: Marked Compound Undetected

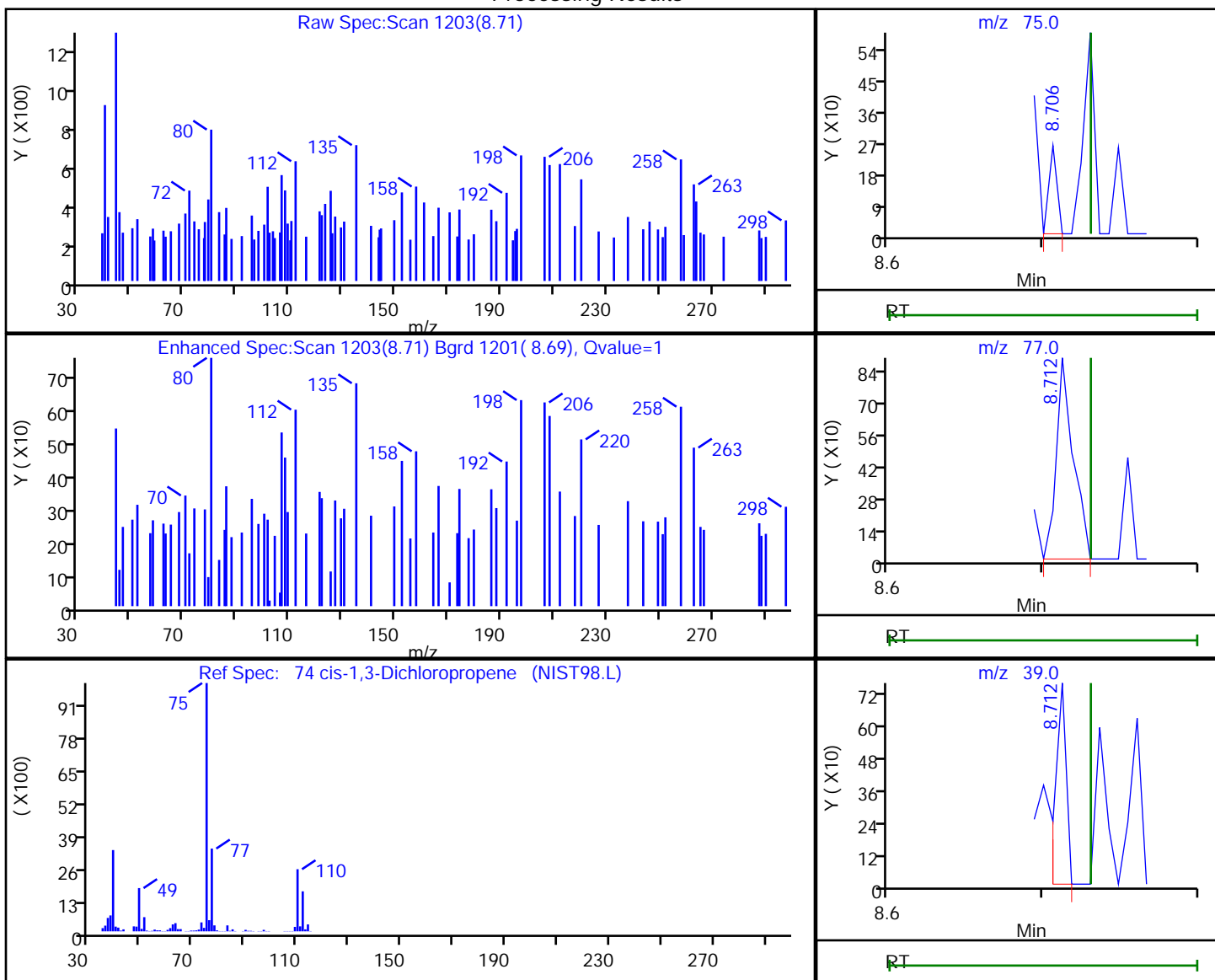
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050419.D  
 Injection Date: 04-May-2020 15:33:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-12 Lab Sample ID: 180-105108-12  
 Client ID: HD-COD-SW-29-0/1-0  
 Operator ID: 034635 ALS Bottle#: 19 Worklist Smp#: 19  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

74 cis-1,3-Dichloropropene, CAS: 10061-01-5

Processing Results



RT	Mass	Response	Amount
8.71	75.00	94	0.017877
8.71	77.00	679	
8.71	39.00	364	

Reviewer: journetp, 08-May-2020 10:18:28  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050419.D

Injection Date: 04-May-2020 15:33:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-12

Lab Sample ID: 180-105108-12

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

Operator ID: 034635

ALS Bottle#: 19 Worklist Smp#: 19

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

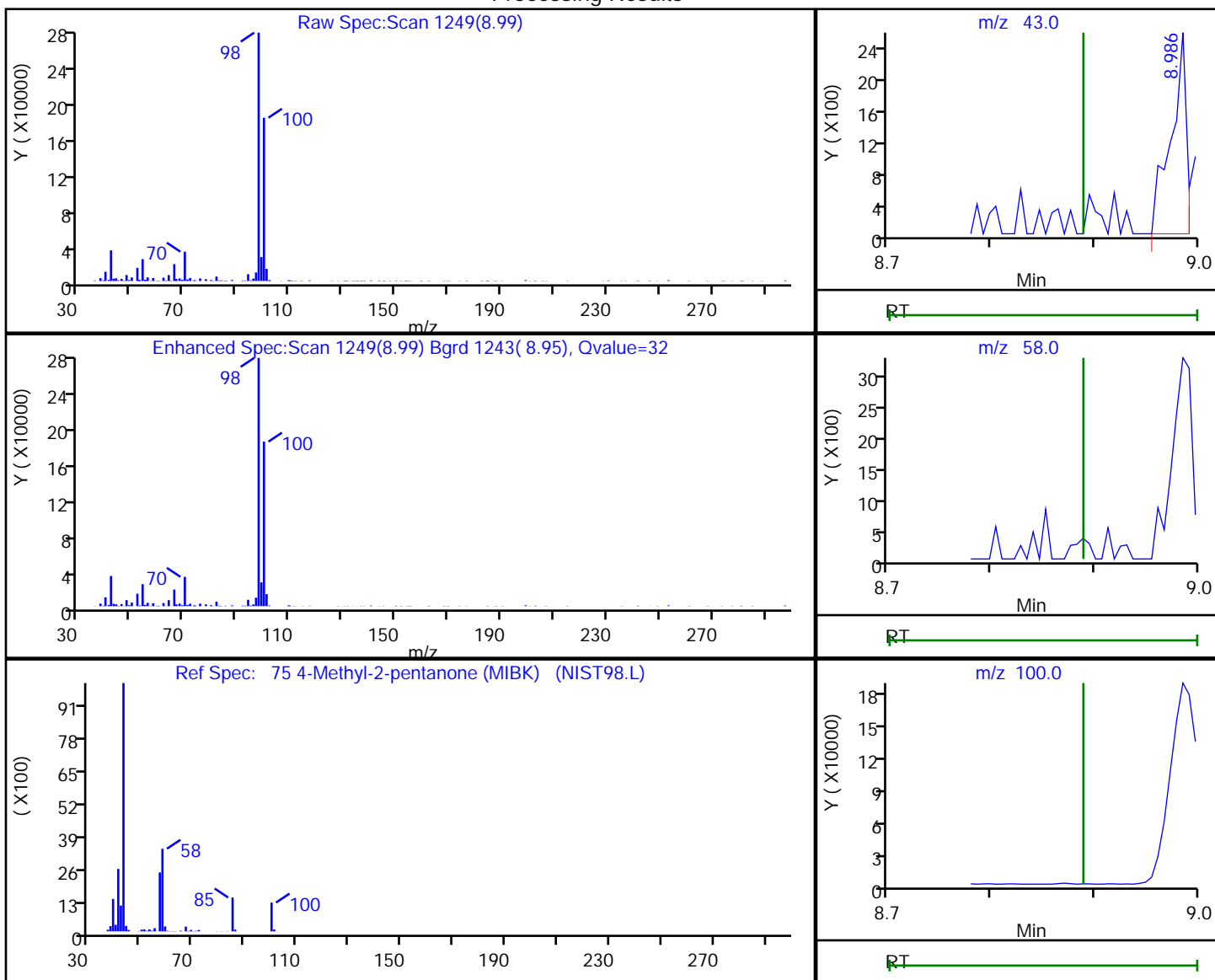
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

75 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Processing Results



RT	Mass	Response	Amount
8.99	43.00	2703	16.243995
8.99	58.00	4563	
8.99	100.00	363588	

Reviewer: journetp, 08-May-2020 10:23:45

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050419.D

Injection Date: 04-May-2020 15:33:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-12

Lab Sample ID: 180-105108-12

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

Operator ID: 034635

ALS Bottle#: 19 Worklist Smp#: 19

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

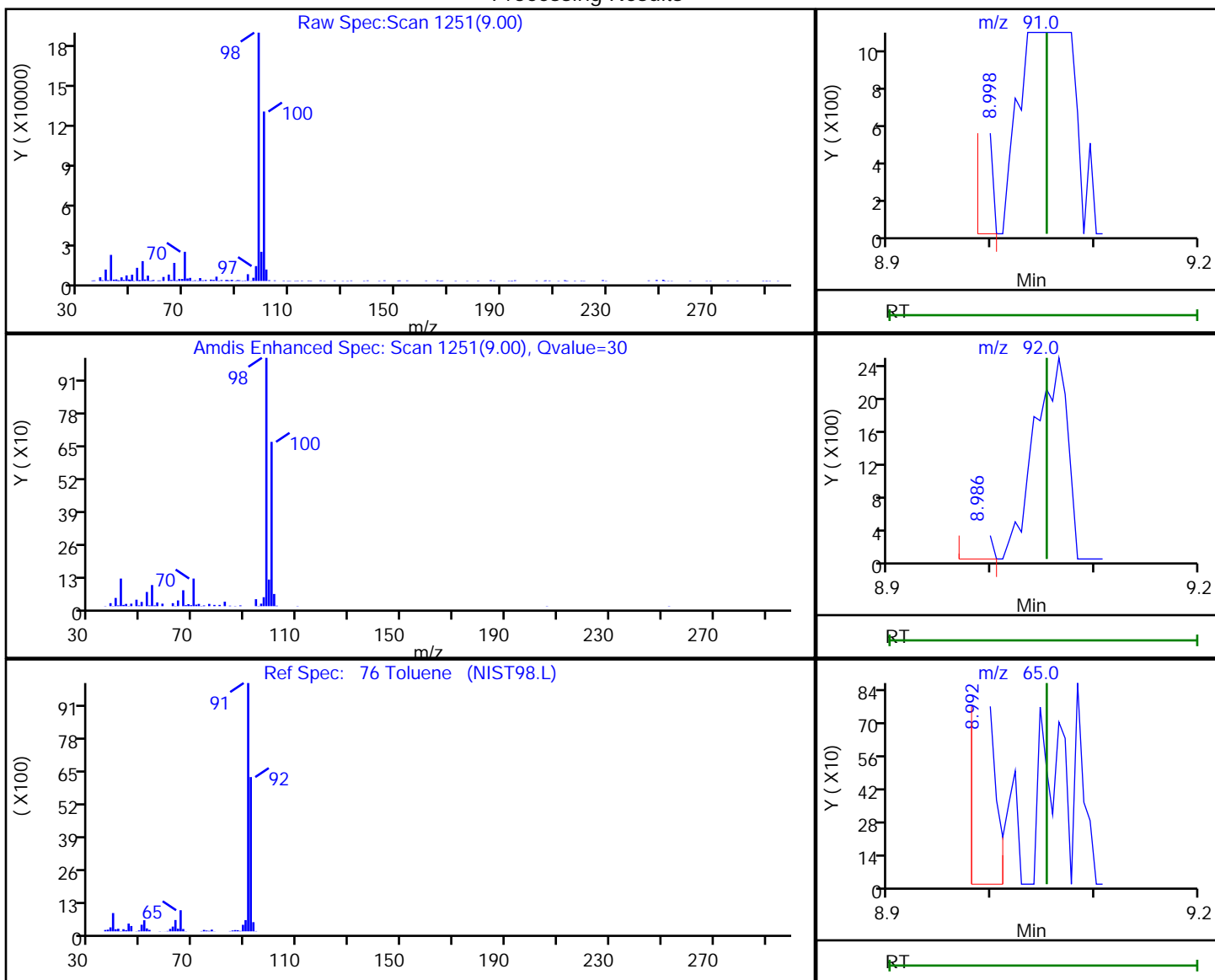
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

76 Toluene, CAS: 108-88-3

Processing Results



RT	Mass	Response	Amount
9.00	91.00	311	0.024163
8.99	92.00	671	
8.99	65.00	941	

Reviewer: journept, 08-May-2020 10:23:45

Audit Action: Marked Compound Undetected

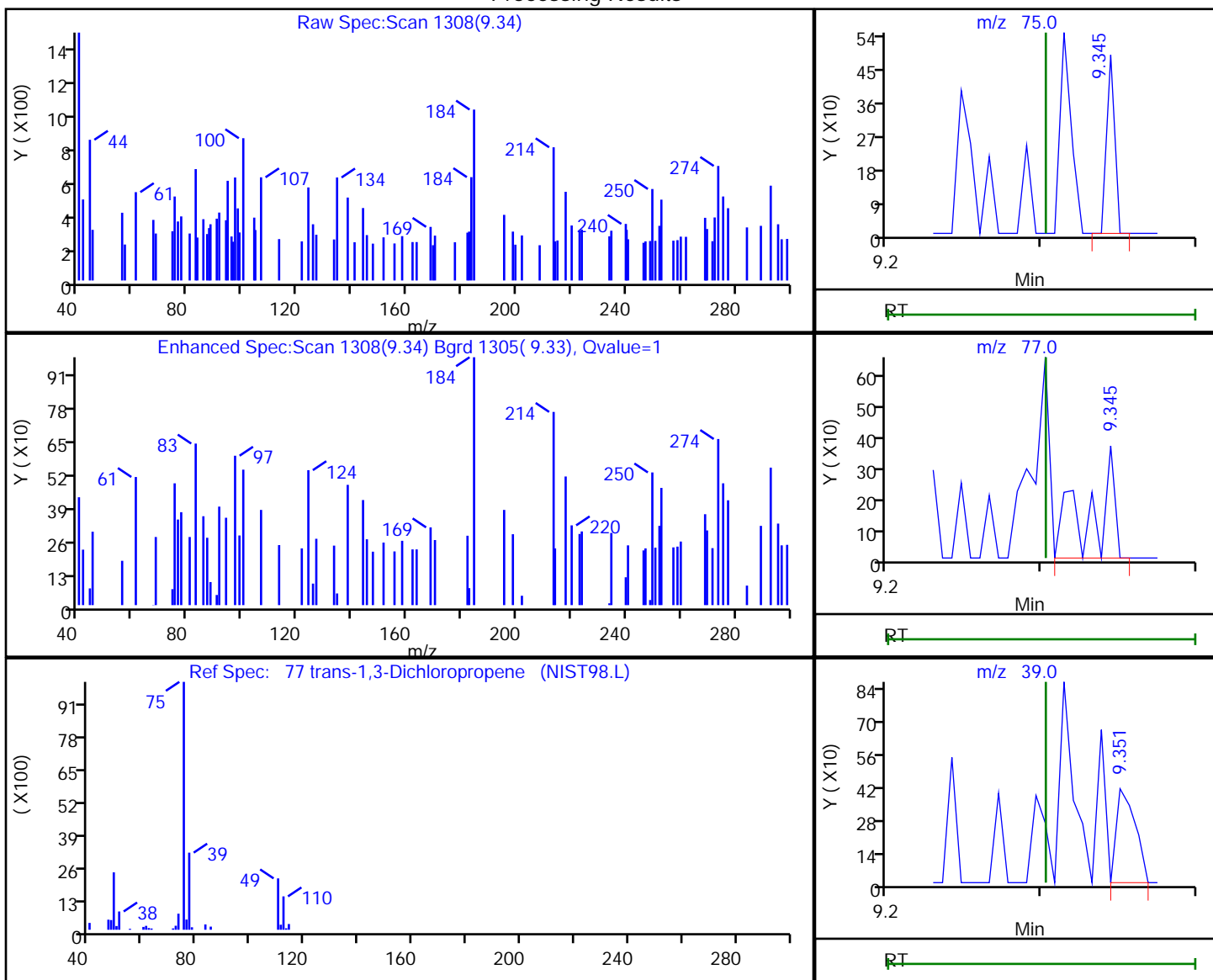
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050419.D  
 Injection Date: 04-May-2020 15:33:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-12 Lab Sample ID: 180-105108-12  
 Client ID: HD-COD-SW-29-0/1-0  
 Operator ID: 034635 ALS Bottle#: 19 Worklist Smp#: 19  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

77 trans-1,3-Dichloropropene, CAS: 10061-02-6

Processing Results



RT	Mass	Response	Amount
9.34	75.00	176	0.041596
9.34	77.00	371	
9.35	39.00	344	

Reviewer: journept, 08-May-2020 10:23:45  
 Audit Action: Marked Compound Undetected

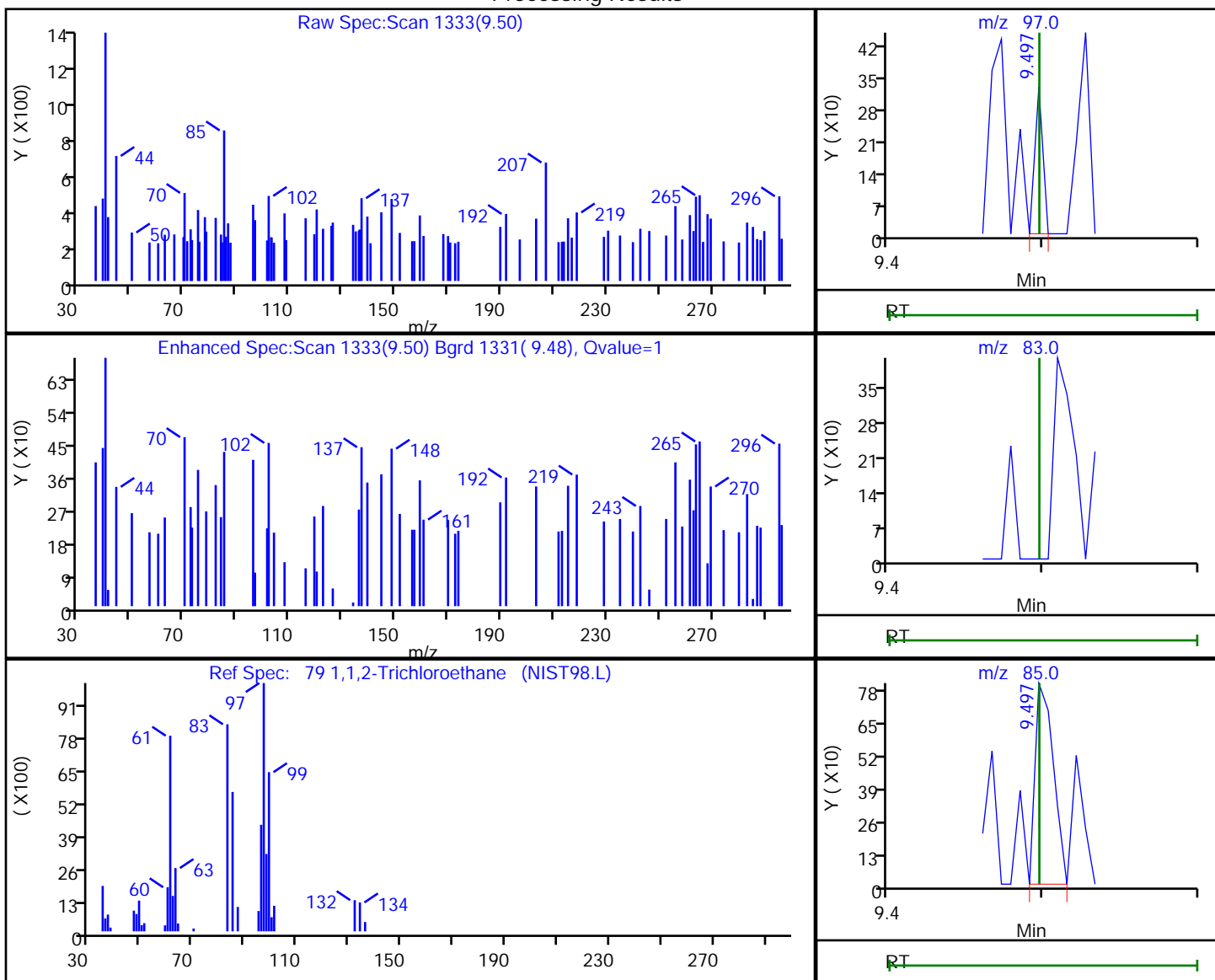
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050419.D  
 Injection Date: 04-May-2020 15:33:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-12 Lab Sample ID: 180-105108-12  
 Client ID: HD-COD-SW-29-0/1-0  
 Operator ID: 034635 ALS Bottle#: 19 Worklist Smp#: 19  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

79 1,1,2-Trichloroethane, CAS: 79-00-5

Processing Results



RT	Mass	Response	Amount
9.50	97.00	118	0.039443
9.50	83.00	0	
9.50	85.00	658	

Reviewer: journetp, 08-May-2020 10:23:45  
 Audit Action: Marked Compound Undetected

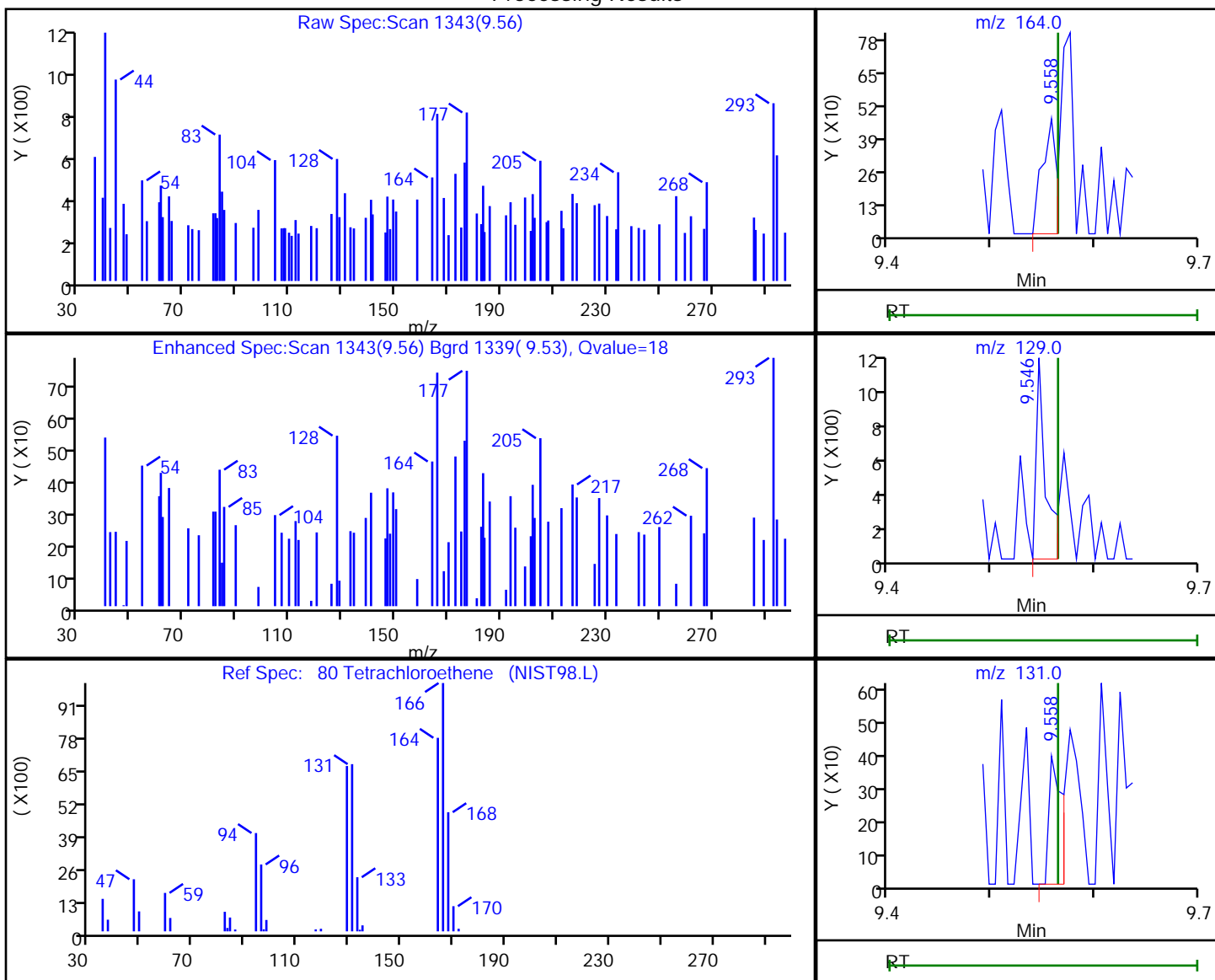
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050419.D  
 Injection Date: 04-May-2020 15:33:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-12 Lab Sample ID: 180-105108-12  
 Client ID: HD-COD-SW-29-0/1-0  
 Operator ID: 034635 ALS Bottle#: 19 Worklist Smp#: 19  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

80 Tetrachloroethene, CAS: 127-18-4

Processing Results



RT	Mass	Response	Amount
9.56	164.00	445	0.173715
9.55	129.00	744	
9.56	131.00	345	

Reviewer: journeyp, 08-May-2020 10:23:45  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

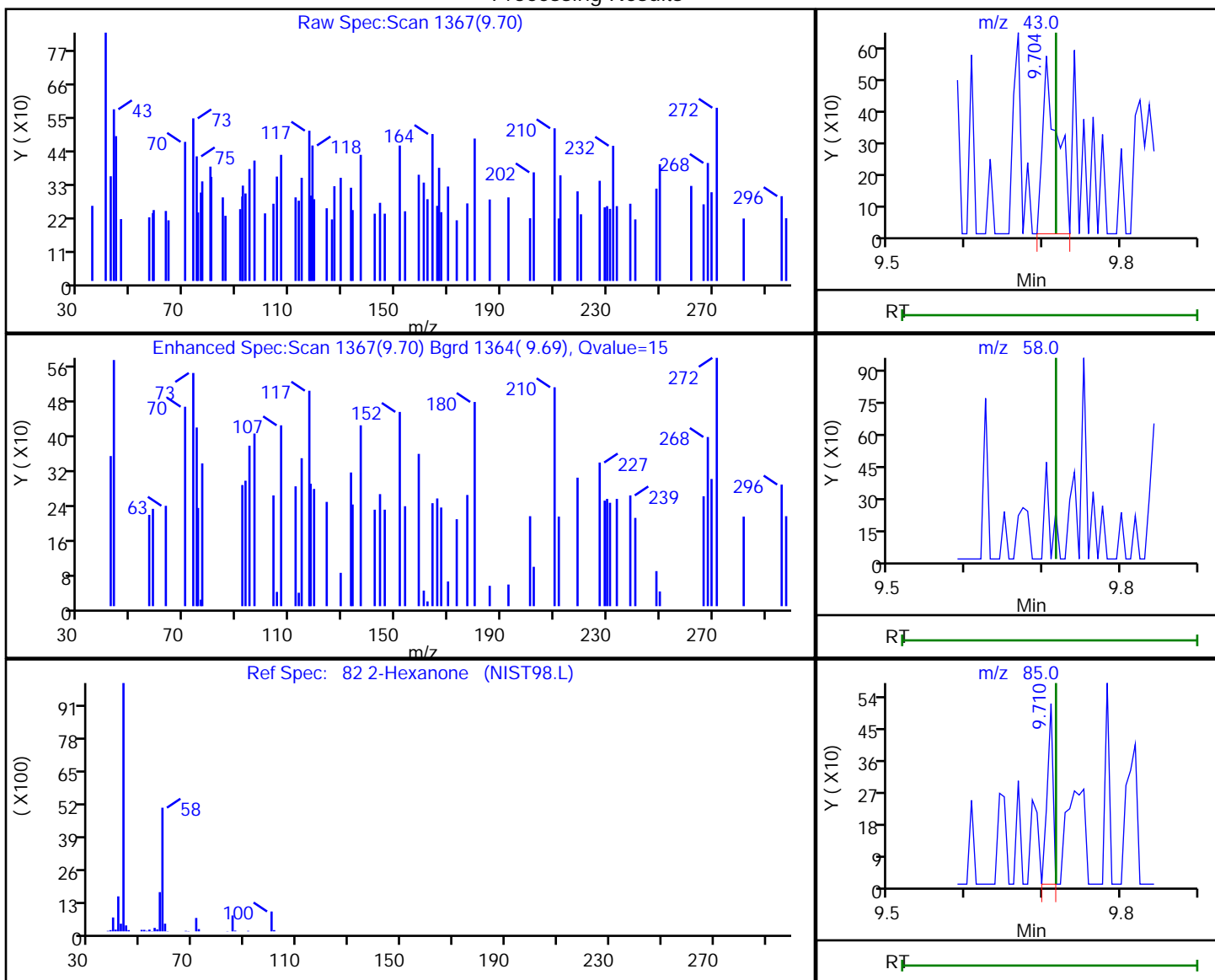


Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050419.D  
 Injection Date: 04-May-2020 15:33:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-12 Lab Sample ID: 180-105108-12  
 Client ID: HD-COD-SW-29-0/1-0  
 Operator ID: 034635 ALS Bottle#: 19 Worklist Smp#: 19  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

82 2-Hexanone, CAS: 591-78-6

Processing Results



RT	Mass	Response	Amount
9.70	43.00	760	14.283376
9.72	58.00	0	
9.71	85.00	268	

Reviewer: journeyp, 08-May-2020 10:23:45  
 Audit Action: Marked Compound Undetected

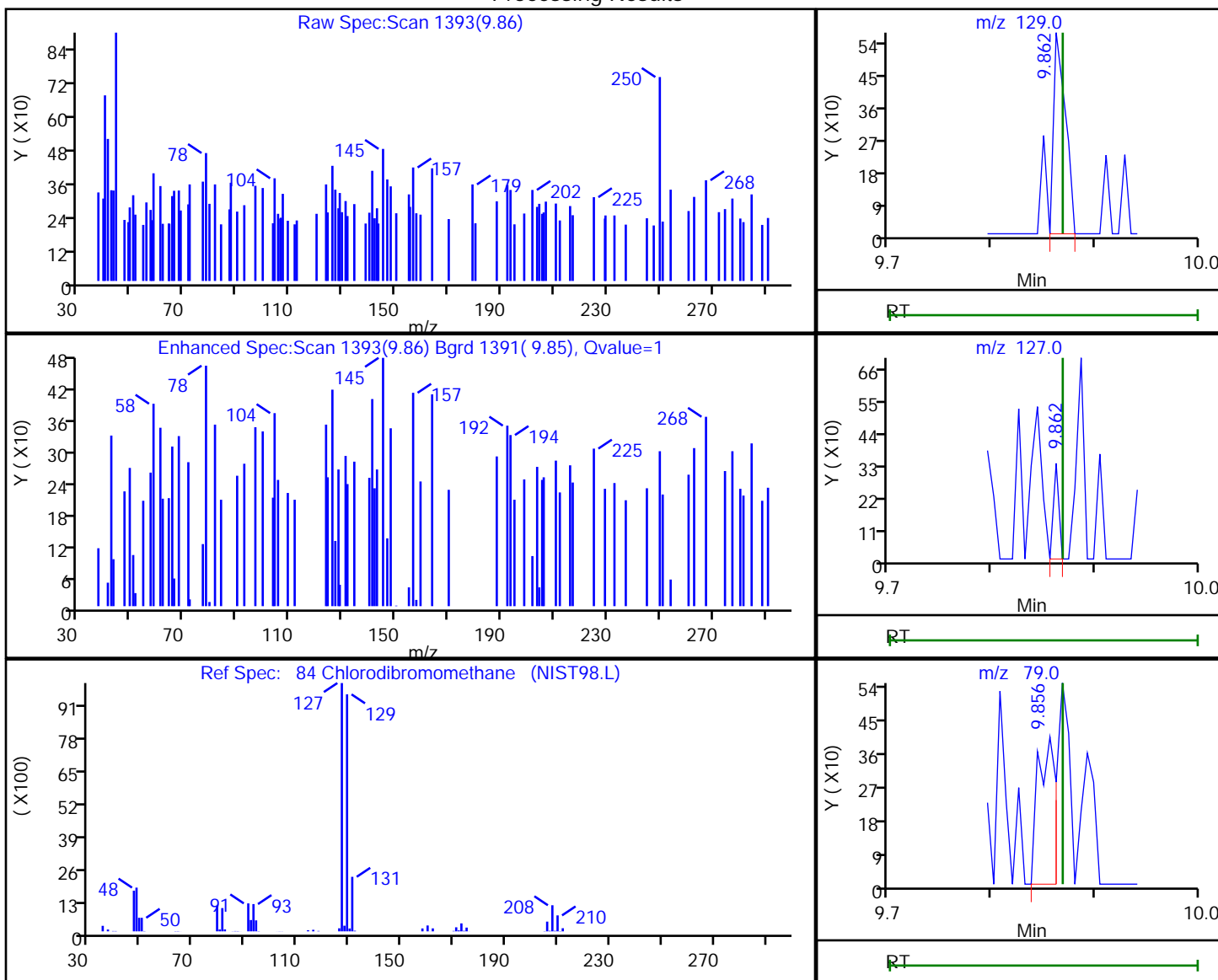
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050419.D  
 Injection Date: 04-May-2020 15:33:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-12 Lab Sample ID: 180-105108-12  
 Client ID: HD-COD-SW-29-0/1-0  
 Operator ID: 034635 ALS Bottle#: 19 Worklist Smp#: 19  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

84 Chlorodibromomethane, CAS: 124-48-1

Processing Results



RT	Mass	Response	Amount
9.86	129.00	452	0.178485
9.86	127.00	120	
9.86	79.00	478	

Reviewer: journetp, 08-May-2020 10:23:45  
 Audit Action: Marked Compound Undetected

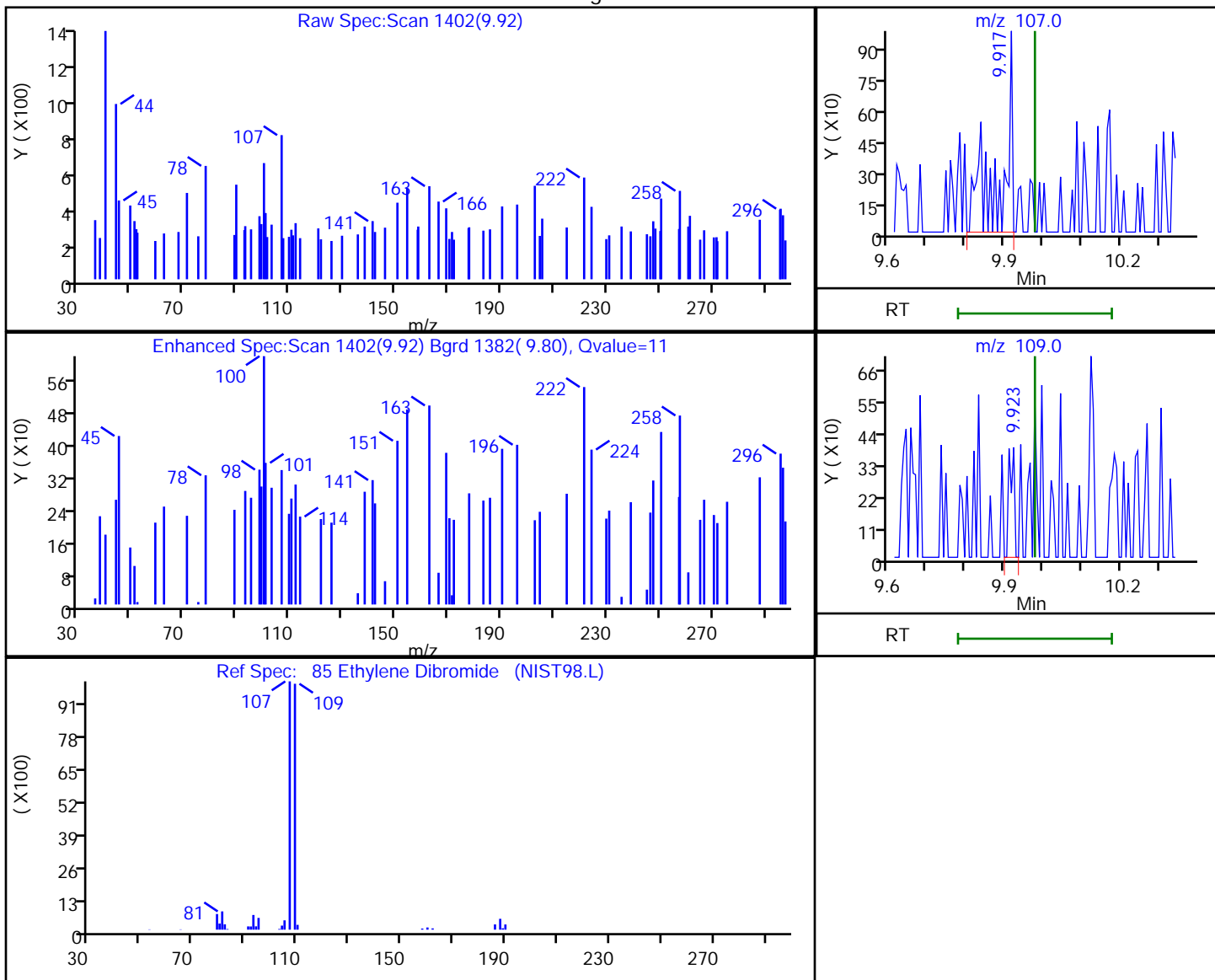
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050419.D  
 Injection Date: 04-May-2020 15:33:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-12 Lab Sample ID: 180-105108-12  
 Client ID: HD-COD-SW-29-0/1-0  
 Operator ID: 034635 ALS Bottle#: 19 Worklist Smp#: 19  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

85 Ethylene Dibromide, CAS: 106-93-4

Processing Results



RT	Mass	Response	Amount
9.92	107.00	1708	0.610287
9.92	109.00	364	

Reviewer: journetp, 08-May-2020 10:23:45  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050419.D

Injection Date: 04-May-2020 15:33:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-12

Lab Sample ID: 180-105108-12

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

Operator ID: 034635

ALS Bottle#: 19 Worklist Smp#: 19

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

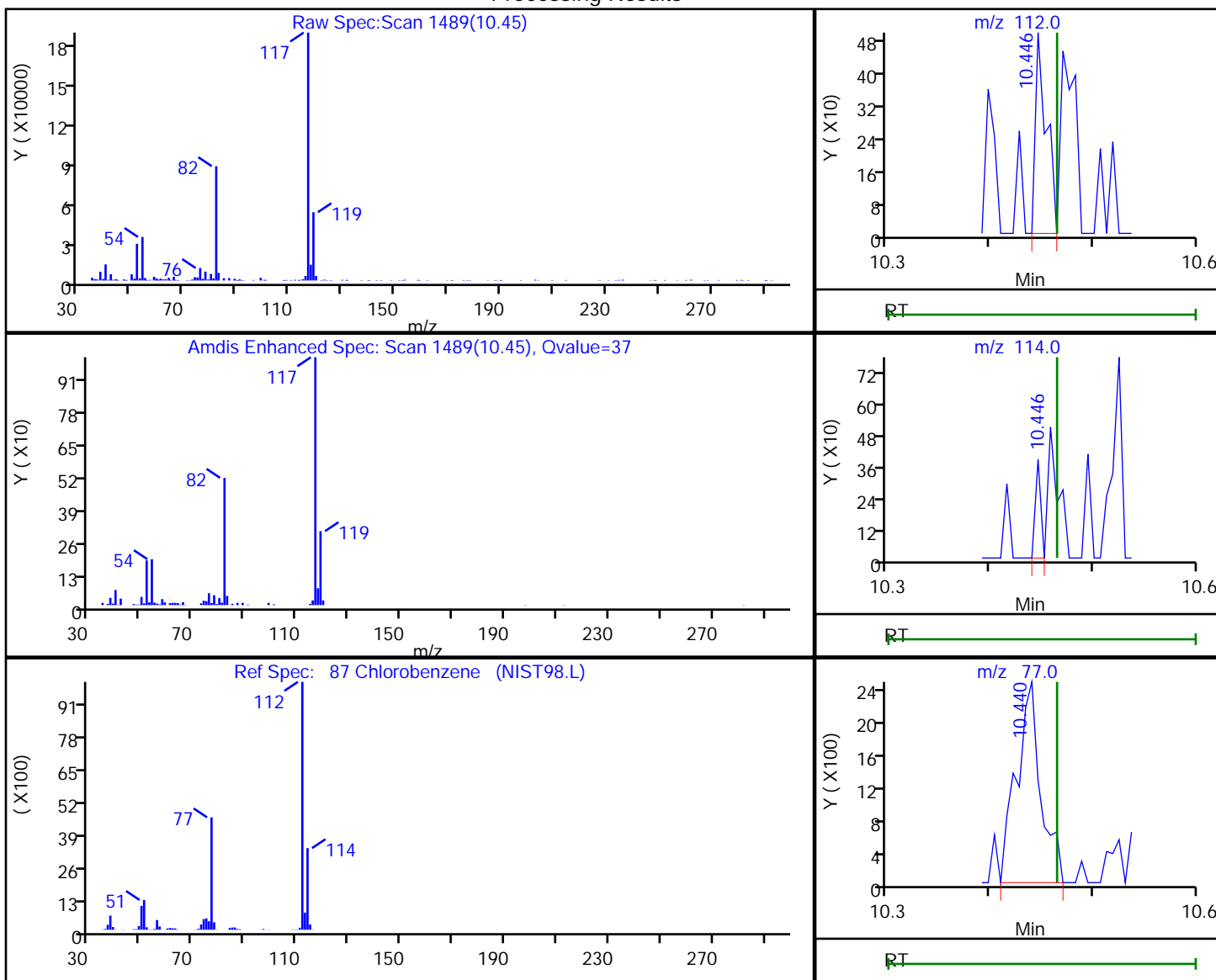
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

87 Chlorobenzene, CAS: 108-90-7

Processing Results



RT	Mass	Response	Amount
10.45	112.00	372	0.044943
10.45	114.00	138	
10.44	77.00	4016	

Reviewer: journetp, 08-May-2020 10:23:45

Audit Action: Marked Compound Undetected

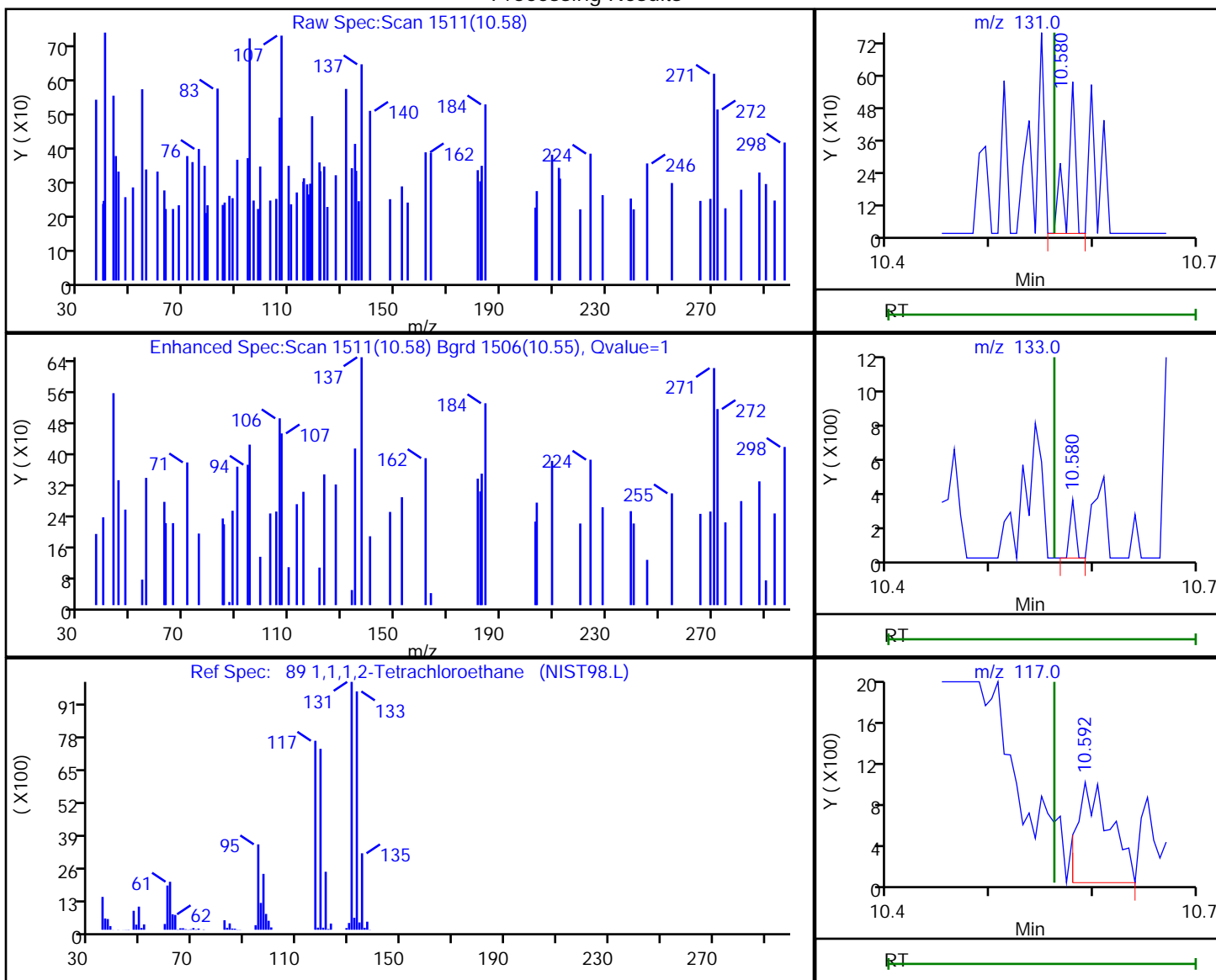
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050419.D  
 Injection Date: 04-May-2020 15:33:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-12 Lab Sample ID: 180-105108-12  
 Client ID: HD-COD-SW-29-0/1-0  
 Operator ID: 034635 ALS Bottle#: 19 Worklist Smp#: 19  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

89 1,1,1,2-Tetrachloroethane, CAS: 630-20-6

Processing Results



RT	Mass	Response	Amount
10.58	131.00	303	0.112726
10.58	133.00	122	
10.59	117.00	2201	

Reviewer: journeyp, 08-May-2020 10:23:45  
 Audit Action: Marked Compound Undetected

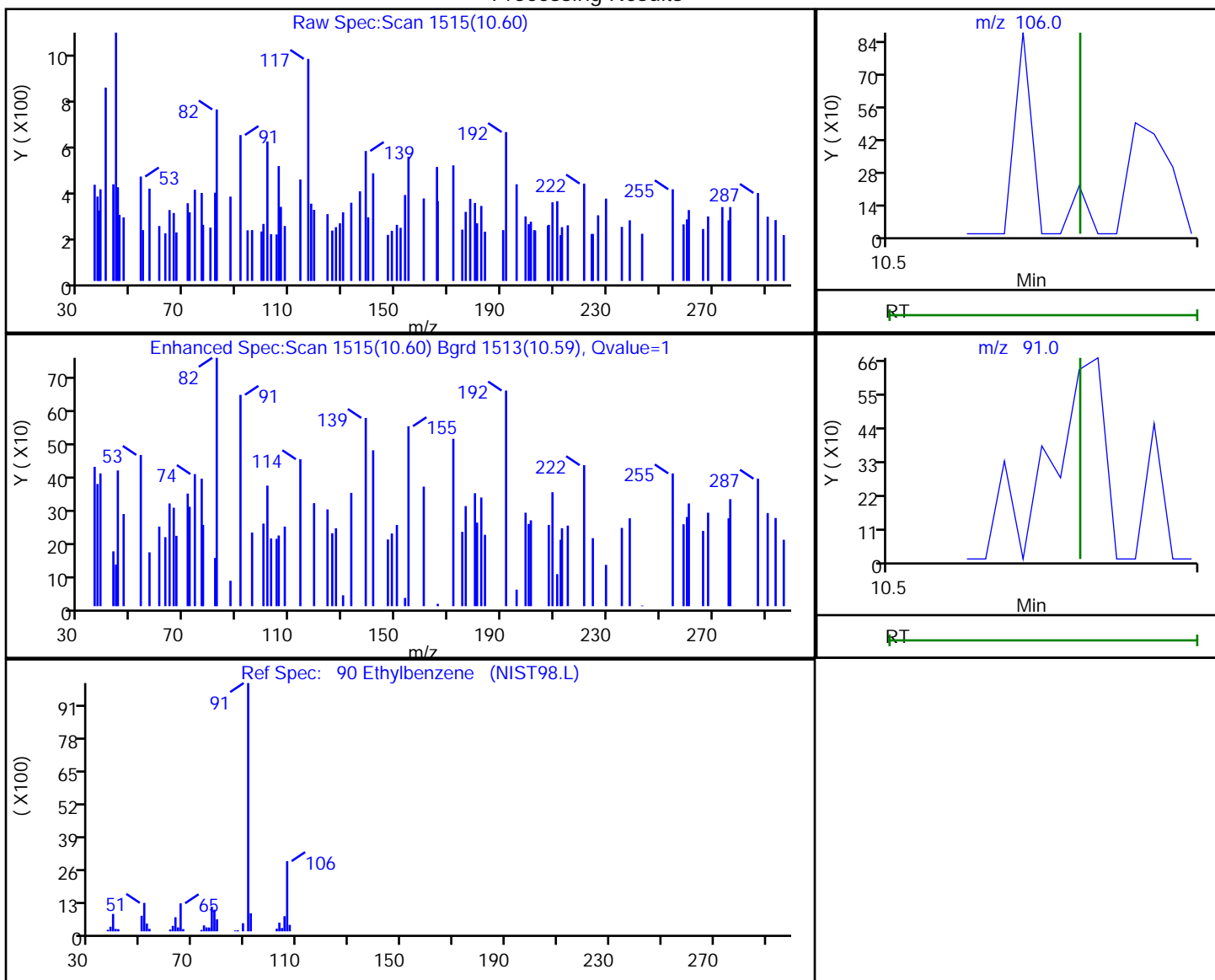
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050419.D  
 Injection Date: 04-May-2020 15:33:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-12 Lab Sample ID: 180-105108-12  
 Client ID: HD-COD-SW-29-0/1-0  
 Operator ID: 034635 ALS Bottle#: 19 Worklist Smp#: 19  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

90 Ethylbenzene, CAS: 100-41-4

Processing Results



RT	Mass	Response	Amount
10.60	106.00	303	0.070720
10.60	91.00	234	

Reviewer: journetp, 08-May-2020 10:23:45  
 Audit Action: Marked Compound Undetected

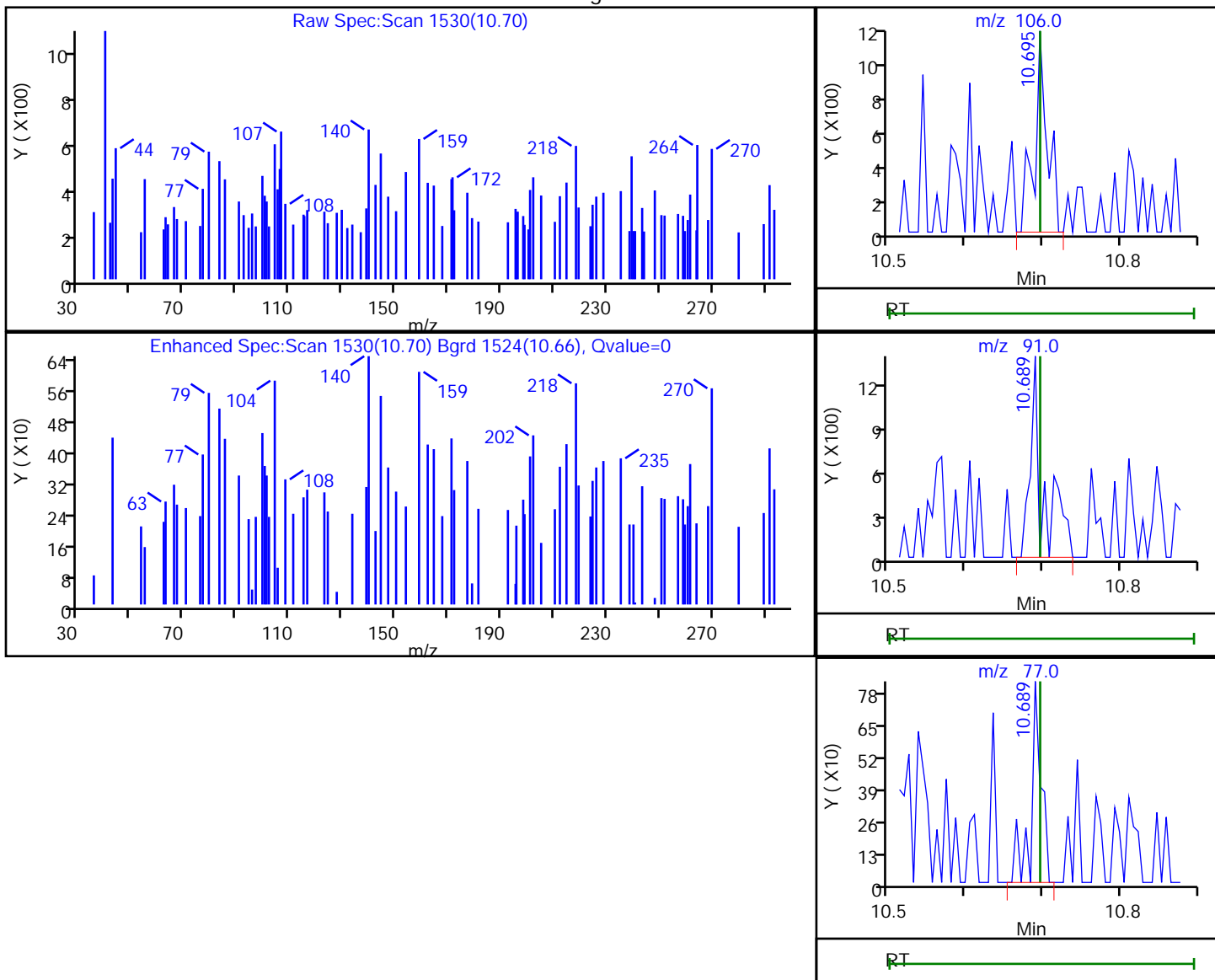
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050419.D  
 Injection Date: 04-May-2020 15:33:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-12 Lab Sample ID: 180-105108-12  
 Client ID: HD-COD-SW-29-0/1-0  
 Operator ID: 034635 ALS Bottle#: 19 Worklist Smp#: 19  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

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

Processing Results



RT	Mass	Response	Amount
10.70	106.00	1315	0.246191
10.69	91.00	1552	
10.69	77.00	754	

Reviewer: journetp, 08-May-2020 10:23:45  
 Audit Action: Marked Compound Undetected

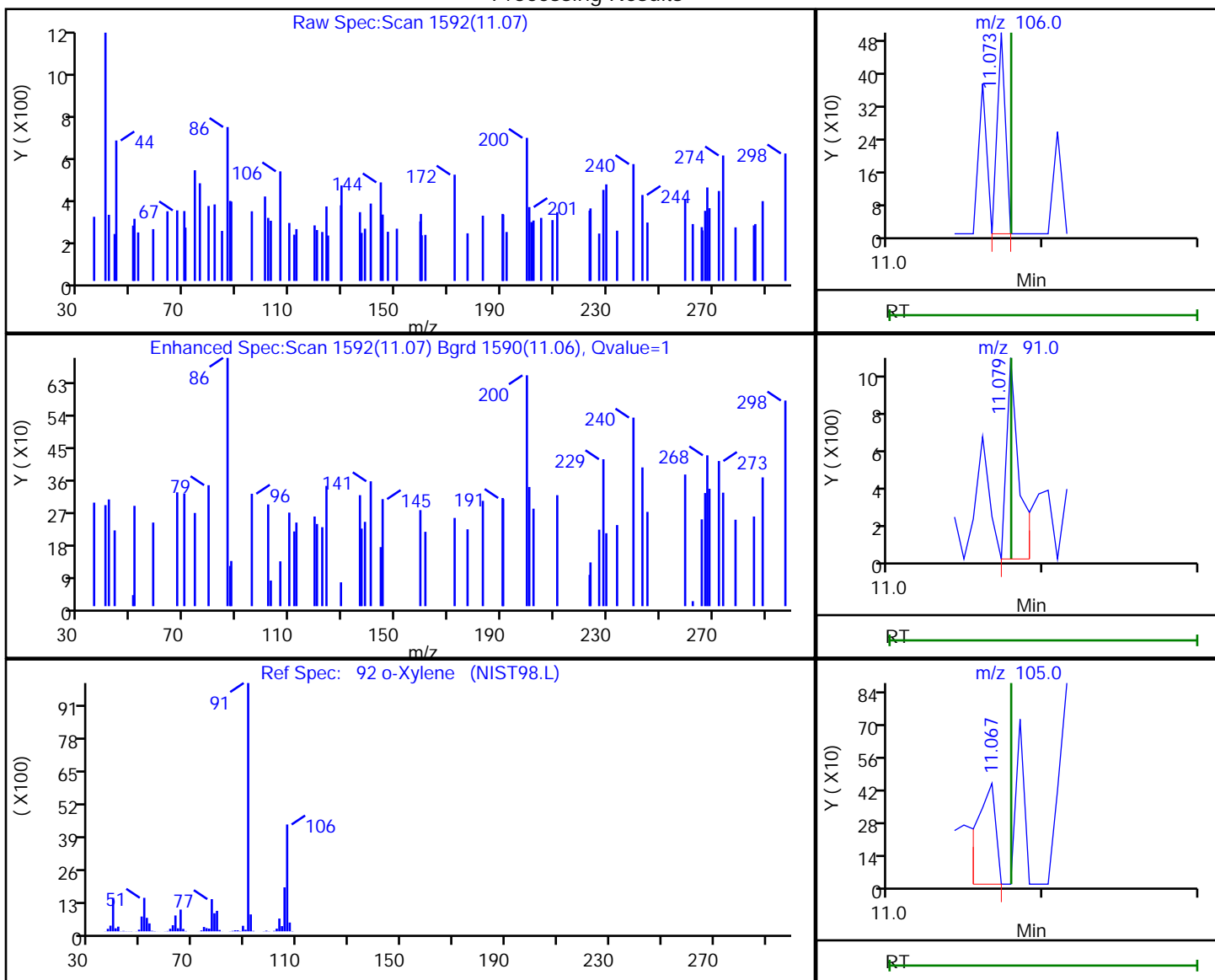
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050419.D  
 Injection Date: 04-May-2020 15:33:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-12 Lab Sample ID: 180-105108-12  
 Client ID: HD-COD-SW-29-0/1-0  
 Operator ID: 034635 ALS Bottle#: 19 Worklist Smp#: 19  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

92 o-Xylene, CAS: 95-47-6

Processing Results



RT	Mass	Response	Amount
11.07	106.00	181	0.036304
11.08	91.00	577	
11.07	105.00	370	

Reviewer: journeyp, 08-May-2020 10:23:45  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

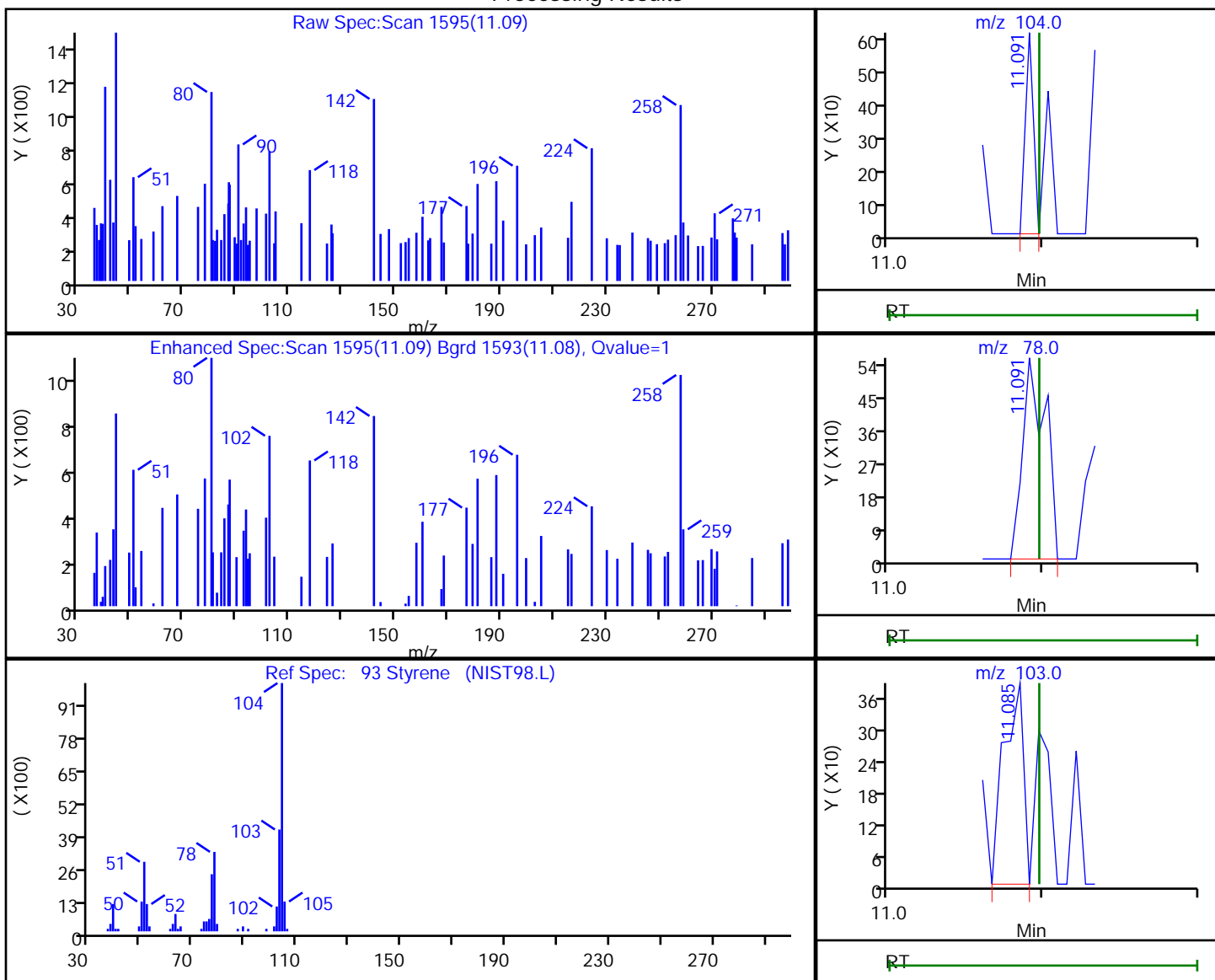


Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050419.D  
 Injection Date: 04-May-2020 15:33:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-12 Lab Sample ID: 180-105108-12  
 Client ID: HD-COD-SW-29-0/1-0  
 Operator ID: 034635 ALS Bottle#: 19 Worklist Smp#: 19  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

93 Styrene, CAS: 100-42-5

Processing Results



RT	Mass	Response	Amount
11.09	104.00	226	0.026436
11.09	78.00	574	
11.08	103.00	342	

Reviewer: journept, 08-May-2020 10:23:45  
 Audit Action: Marked Compound Undetected

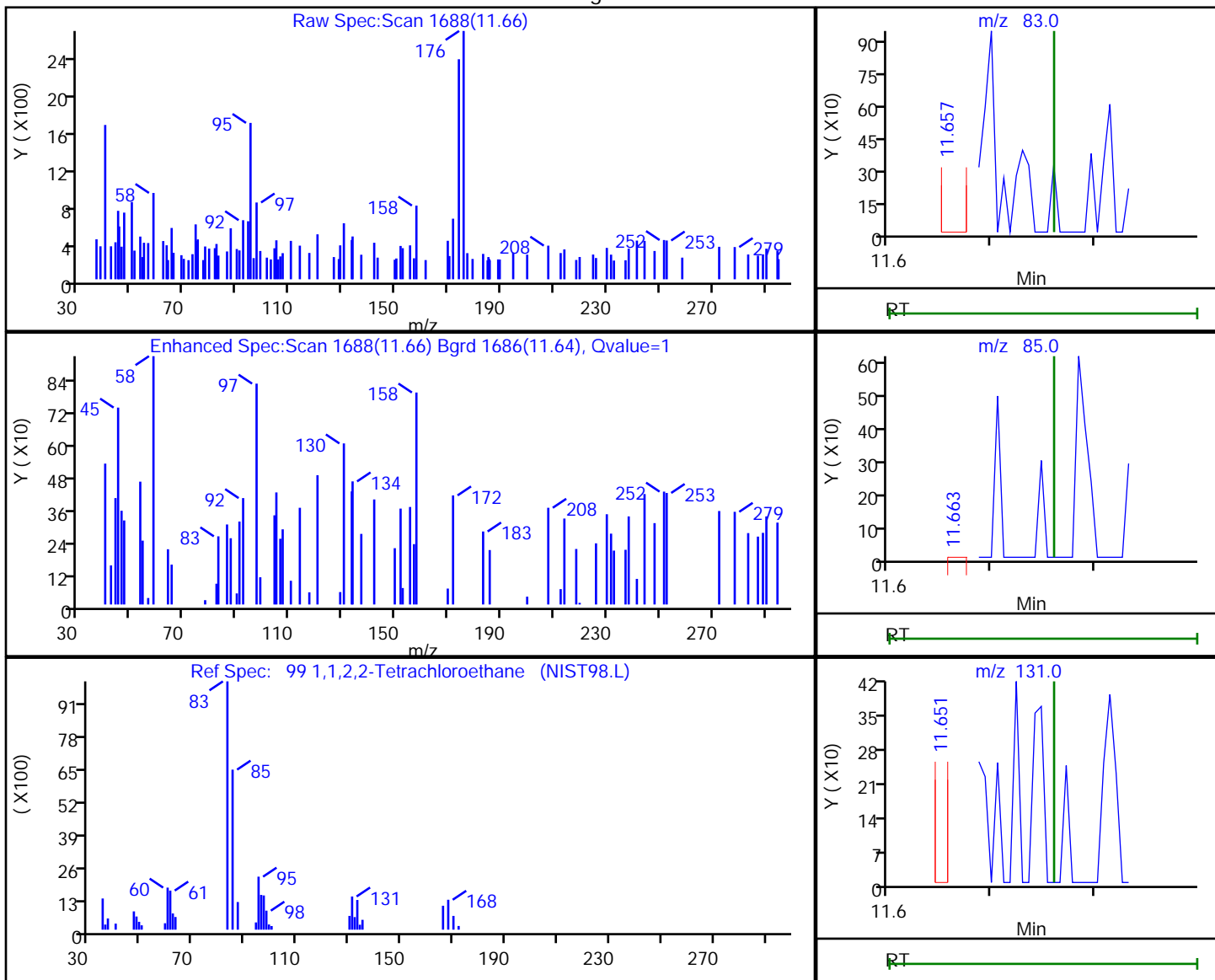
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050419.D  
 Injection Date: 04-May-2020 15:33:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-12 Lab Sample ID: 180-105108-12  
 Client ID: HD-COD-SW-29-0/1-0  
 Operator ID: 034635 ALS Bottle#: 19 Worklist Smp#: 19  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

99 1,1,2,2-Tetrachloroethane, CAS: 79-34-5

Processing Results



RT	Mass	Response	Amount
11.66	83.00	182	0.058925
11.66	85.00	336	
11.65	131.00	178	

Reviewer: journeyp, 08-May-2020 10:23:45  
 Audit Action: Marked Compound Undetected

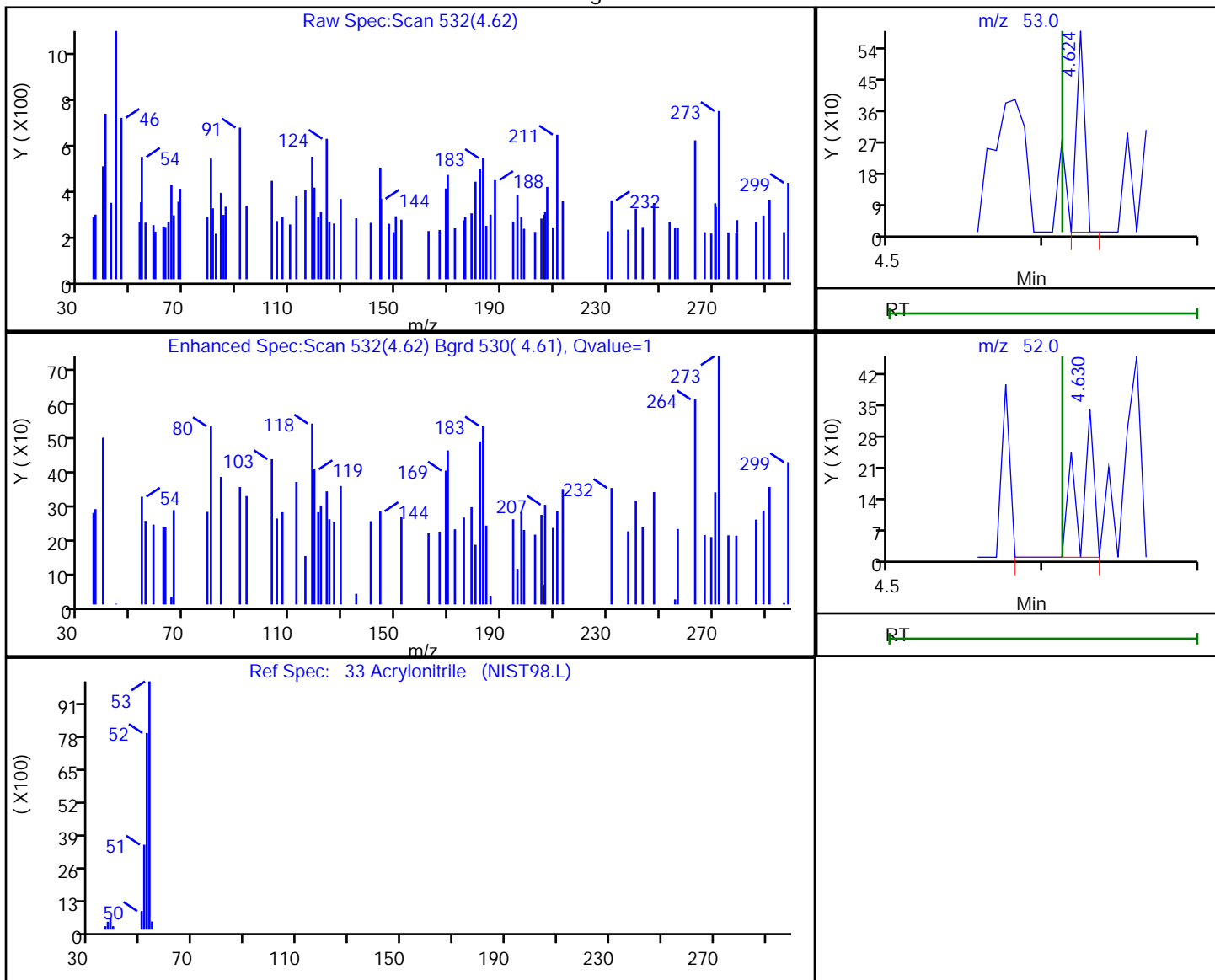
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050419.D  
Injection Date: 04-May-2020 15:33:30 Instrument ID: CHHP5  
Lims ID: 180-105108-B-12 Lab Sample ID: 180-105108-12  
Client ID: HD-COD-SW-29-0/1-0  
Operator ID: 034635 ALS Bottle#: 19 Worklist Smp#: 19  
Purge Vol: 5.000 mL Dil. Factor: 1.0000  
Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
Column: DB-624 (0.18 mm) Detector: MS SCAN

33 Acrylonitrile, CAS: 107-13-1

Processing Results



RT	Mass	Response	Amount
4.62	53.00	215	0.153421
4.63	52.00	210	

Reviewer: journetp, 08-May-2020 10:18:26

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: HD-QC1-0/1-1 Lab Sample ID: 180-105108-13  
 Matrix: Water Lab File ID: 5050420.D  
 Analysis Method: EPA 8260C Date Collected: 04/28/2020 12:00  
 Sample wt/vol: 5 (mL) Date Analyzed: 05/04/2020 15:58  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-624 ID: 0.18 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 314475 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	ND	^c	1.0	0.90
75-01-4	Vinyl chloride	ND		1.0	0.40
74-83-9	Bromomethane	ND	^c *	1.0	0.89
75-00-3	Chloroethane	ND		1.0	0.90
75-35-4	1,1-Dichloroethene	ND		1.0	0.55
67-64-1	Acetone	4.7	J	5.0	3.4
75-15-0	Carbon disulfide	ND		1.0	0.88
75-09-2	Methylene Chloride	ND		1.0	0.89
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.67
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.59
75-34-3	1,1-Dichloroethane	ND		1.0	0.31
156-59-2	cis-1,2-Dichloroethene	0.74	J	1.0	0.71
74-97-5	Bromochloromethane	ND		1.0	0.63
78-93-3	2-Butanone (MEK)	ND	^c	5.0	2.6
67-66-3	Chloroform	ND		1.0	0.60
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.60
56-23-5	Carbon tetrachloride	ND		1.0	0.88
71-43-2	Benzene	ND		1.0	0.60
107-06-2	1,2-Dichloroethane	ND		1.0	0.57
79-01-6	Trichloroethene	0.69	J	1.0	0.69
78-87-5	1,2-Dichloropropane	ND		1.0	0.66
75-27-4	Bromodichloromethane	ND		1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	3.1
108-88-3	Toluene	ND		1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.58
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.45
127-18-4	Tetrachloroethene	1.4		1.0	0.47
591-78-6	2-Hexanone	ND		5.0	3.3
124-48-1	Dibromochloromethane	ND		1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	ND		1.0	0.50
108-90-7	Chlorobenzene	ND		1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.57
100-41-4	Ethylbenzene	ND		1.0	0.51
1330-20-7	Xylenes, Total	ND		2.0	0.89
100-42-5	Styrene	ND		1.0	0.47

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: HD-QC1-0/1-1 Lab Sample ID: 180-105108-13  
 Matrix: Water Lab File ID: 5050420.D  
 Analysis Method: EPA 8260C Date Collected: 04/28/2020 12:00  
 Sample wt/vol: 5 (mL) Date Analyzed: 05/04/2020 15:58  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-624 ID: 0.18 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 314475 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	ND	^c	1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	ND	^c	1.0	0.60
107-13-1	Acrylonitrile	ND		20	7.8

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	91		62-146
2037-26-5	Toluene-d8 (Surr)	88		75-120
460-00-4	4-Bromofluorobenzene (Surr)	75		64-120
1868-53-7	Dibromofluoromethane (Surr)	94		71-132

Eurofins TestAmerica, Pittsburgh  
Target Compound Quantitation Report

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050420.D  
 Lims ID: 180-105108-B-13  
 Client ID: HD-QC1-0/1-1  
 Sample Type: Client  
 Inject. Date: 04-May-2020 15:58:30 ALS Bottle#: 20 Worklist Smp#: 20  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: 180-0031789-020  
 Operator ID: 034635 Instrument ID: CHHP5  
 Method: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\MMSVOA\_LL\_CHHP5.m  
 Limit Group: VOA 8260C\_D ICAL  
 Last Update: 08-May-2020 10:31:24 Calib Date: 03-Apr-2020 19:09:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP5\20200403-31442.b\5040310.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: CTX0306

First Level Reviewer: journetp

Date: 08-May-2020 10:24:33

Compound	Sig	RT (min.)	Exp RT (min.)	Diff RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.373	4.363	0.010	0	236433	1000.0	
* 2 Fluorobenzene (IS)	96	7.342	7.344	-0.002	99	541591	50.0	
* 3 Chlorobenzene-d5	119	10.439	10.434	0.005	86	140359	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.775	12.776	-0.001	95	203133	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.630	6.626	0.004	92	144520	46.8	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.995	6.991	0.004	0	198493	45.3	
\$ 7 Toluene-d8 (Surr)	98	8.991	8.986	0.005	94	499902	44.0	
\$ 8 4-Bromofluorobenzene (Surr	95	11.619	11.614	0.005	88	161453	37.6	
12 Chloromethane	50		1.844				ND	U
13 Vinyl chloride	62		1.966				ND	U
15 Bromomethane	94		2.288				ND	U
16 Chloroethane	64		2.416				ND	U
22 1,1-Dichloroethene	96		3.414				ND	
24 Acetone	43	3.522	3.511	0.011	100	44301	23.7	
26 Carbon disulfide	76		3.706				ND	U
31 Methylene Chloride	84		4.217				ND	U
33 Acrylonitrile	53		4.612				ND	U
34 trans-1,2-Dichloroethene	96		4.631				ND	U
35 Methyl tert-butyl ether	73		4.655				ND	U
37 1,1-Dichloroethane	63		5.263				ND	
45 cis-1,2-Dichloroethene	96	6.028	6.018	0.010	57	13068	3.71	
46 2-Butanone (MEK)	43		6.036				ND	
49 Chlorobromomethane	128		6.297				ND	U
52 Chloroform	83		6.443				ND	U
53 1,1,1-Trichloroethane	97		6.602				ND	U
56 Carbon tetrachloride	117		6.766				ND	U
58 Benzene	78		7.003				ND	U
59 1,2-Dichloroethane	62		7.076				ND	U
64 Trichloroethene	130	7.725	7.727	-0.002	92	11525	3.47	
67 1,2-Dichloropropane	63		8.001				ND	U
71 Dichlorobromomethane	83		8.287				ND	U
74 cis-1,3-Dichloropropene	75		8.731				ND	U

Compound	Sig	RT (min.)	Exp RT (min.)	Diff RT (min.)	Q	Response	OnCol Amt ng	Flags
75 4-Methyl-2-pentanone (MIBK)	43		8.889				ND	U
76 Toluene	91		9.053				ND	U
77 trans-1,3-Dichloropropene	75		9.303				ND	U
79 1,1,2-Trichloroethane	97		9.497				ND	U
80 Tetrachloroethene	164	9.556	9.564	-0.008	93	18937	7.17	
82 2-Hexanone	43		9.716				ND	U
84 Chlorodibromomethane	129		9.868				ND	U
85 Ethylene Dibromide	107		9.978				ND	U
87 Chlorobenzene	112		10.465				ND	U
89 1,1,1,2-Tetrachloroethane	131		10.562				ND	U
90 Ethylbenzene	106		10.562				ND	U
91 m-Xylene & p-Xylene	106		10.696				ND	U
92 o-Xylene	106		11.079				ND	U
93 Styrene	104		11.097				ND	U
94 Bromoform	173		11.280				ND	U
99 1,1,2,2-Tetrachloroethane	83		11.760				ND	U
S 133 Xylenes, Total	106		1.000				ND	

**QC Flag Legend**

Review Flags

U - Marked Undetected

**Reagents:**

voaWI/SHP5\_00016

Amount Added: 5.00

Units: uL

Run Reagent

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050420.D

Injection Date: 04-May-2020 15:58:30

Instrument ID: CHHP5

Operator ID: 034635

Lims ID: 180-105108-B-13

Lab Sample ID: 180-105108-13

Worklist Smp#: 20

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

Purge Vol: 5.000 mL

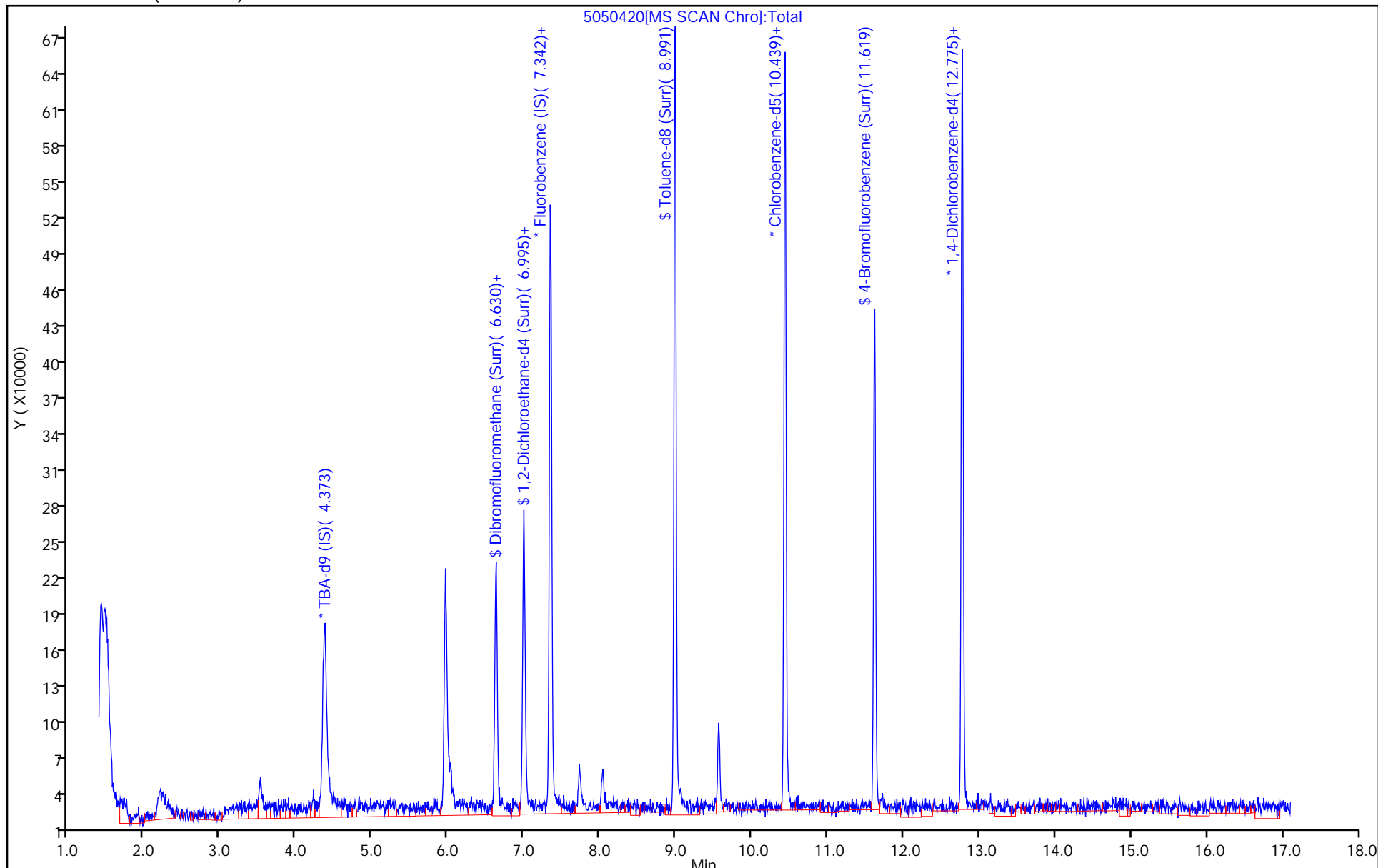
Dil. Factor: 1.0000

ALS Bottle#: 20

Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)





Eurofins TestAmerica, Pittsburgh  
Recovery Report

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050420.D  
 Lims ID: 180-105108-B-13  
 Client ID: HD-QC1-0/1-1  
 Sample Type: Client  
 Inject. Date: 04-May-2020 15:58:30 ALS Bottle#: 20 Worklist Smp#: 20  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: 180-0031789-020  
 Operator ID: 034635 Instrument ID: CHHP5  
 Method: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\MMSVOA\_LL\_CHHP5.m  
 Limit Group: VOA 8260C\_D ICAL  
 Last Update: 08-May-2020 10:31:24 Calib Date: 03-Apr-2020 19:09:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP5\20200403-31442.b\5040310.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: CTX0306

First Level Reviewer: journetp

Date: 08-May-2020 10:24:33

Compound	Amount Added	Amount Recovered	% Rec.
\$ 5 Dibromofluoromethane (Surr)	50.0	46.8	93.54
\$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	45.3	90.53
\$ 7 Toluene-d8 (Surr)	50.0	44.0	88.00
\$ 8 4-Bromofluorobenzene (Surr)	50.0	37.6	75.19

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050420.D

Injection Date: 04-May-2020 15:58:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-13

Lab Sample ID: 180-105108-13

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

Operator ID: 034635

ALS Bottle#: 20

Worklist Smp#: 20

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

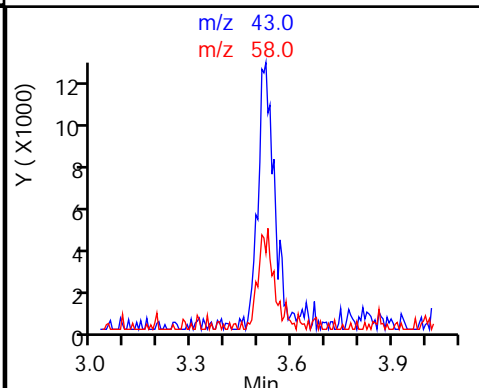
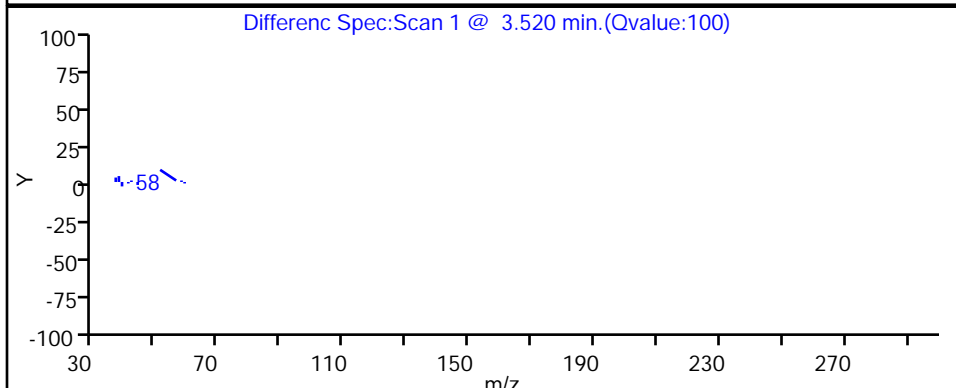
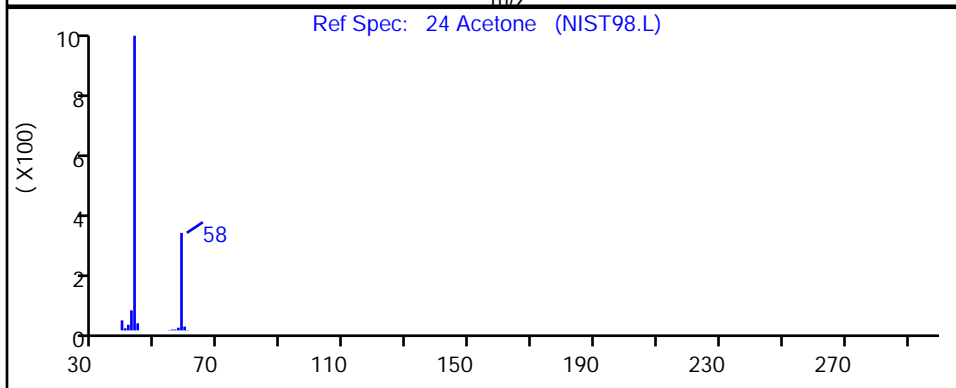
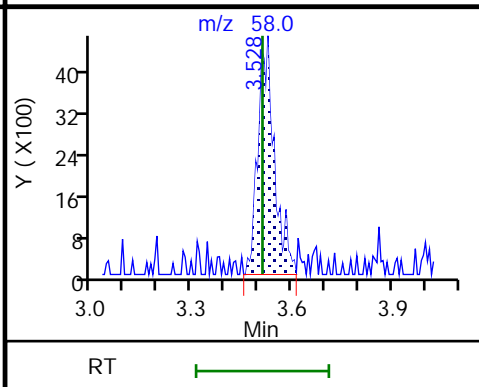
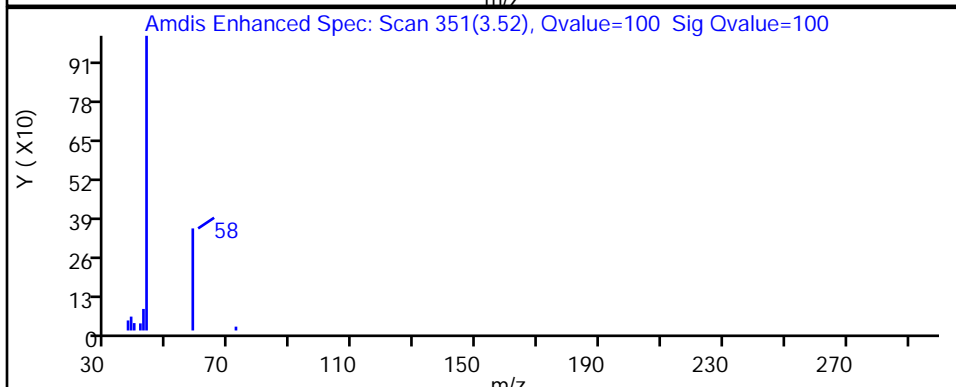
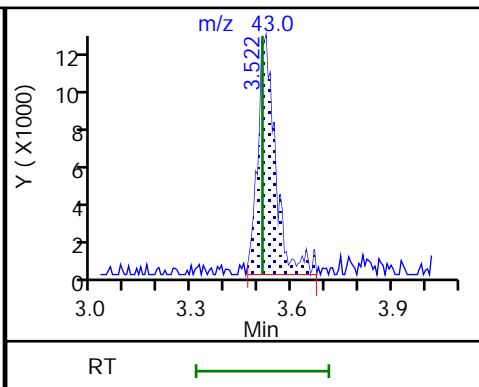
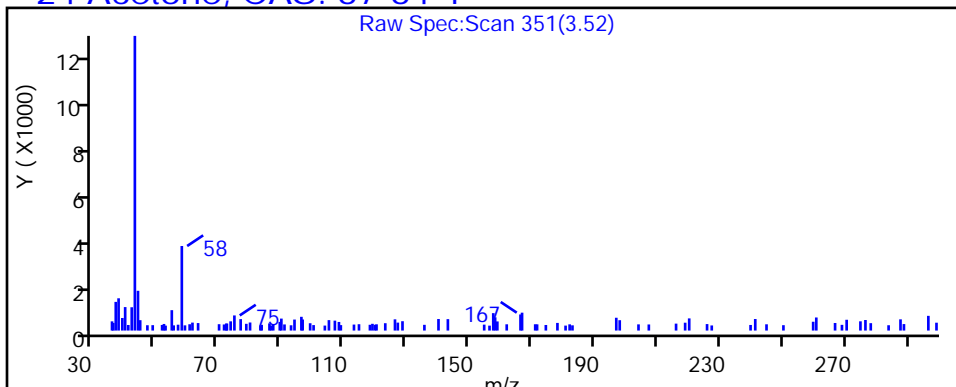
Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

24 Acetone, CAS: 67-64-1



Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050420.D

Injection Date: 04-May-2020 15:58:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-13

Lab Sample ID: 180-105108-13

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

Operator ID: 034635

ALS Bottle#: 20

Worklist Smp#: 20

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

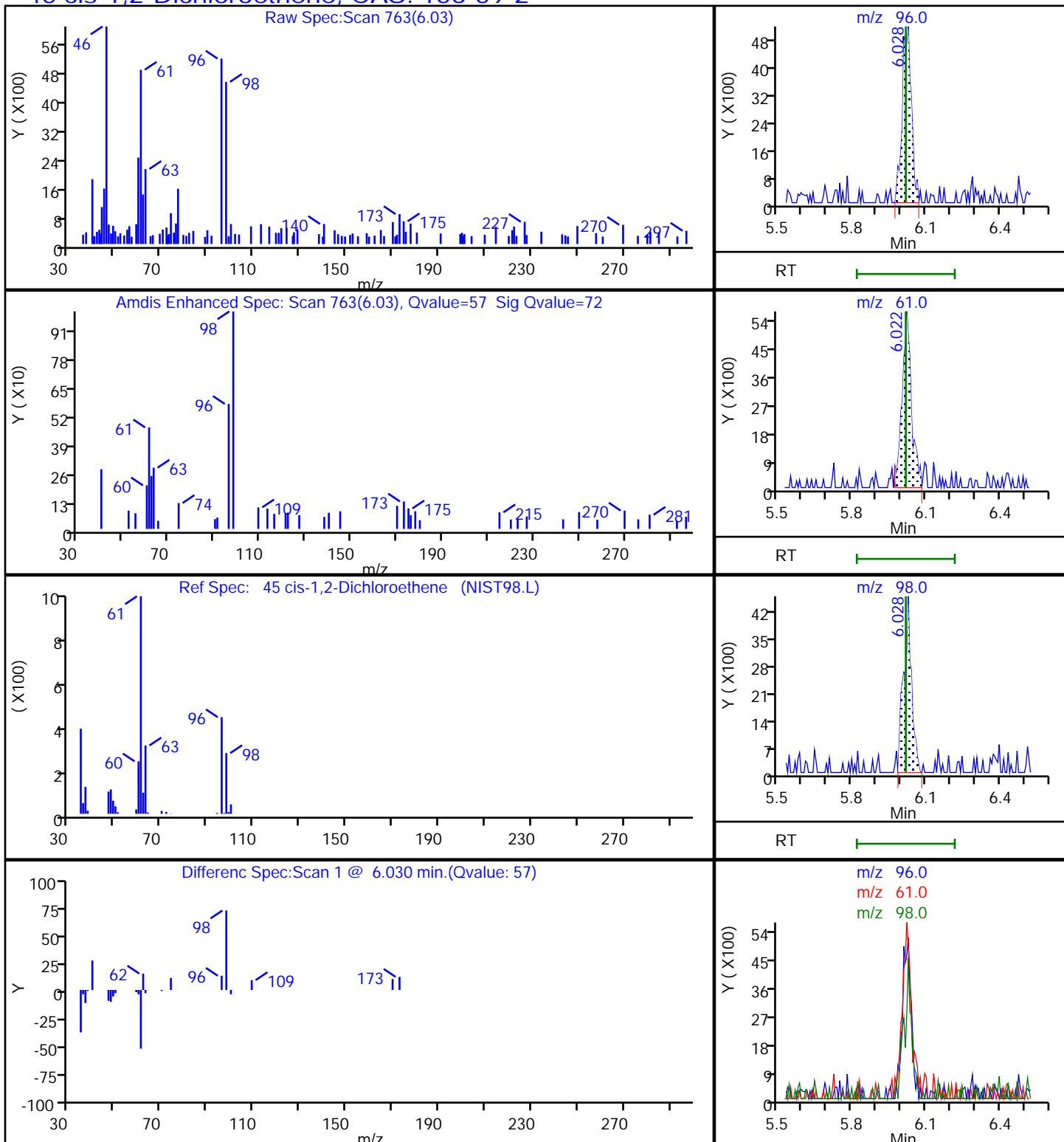
Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

### 45 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050420.D

Injection Date: 04-May-2020 15:58:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-13

Lab Sample ID: 180-105108-13

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

Operator ID: 034635

ALS Bottle#: 20

Worklist Smp#: 20

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

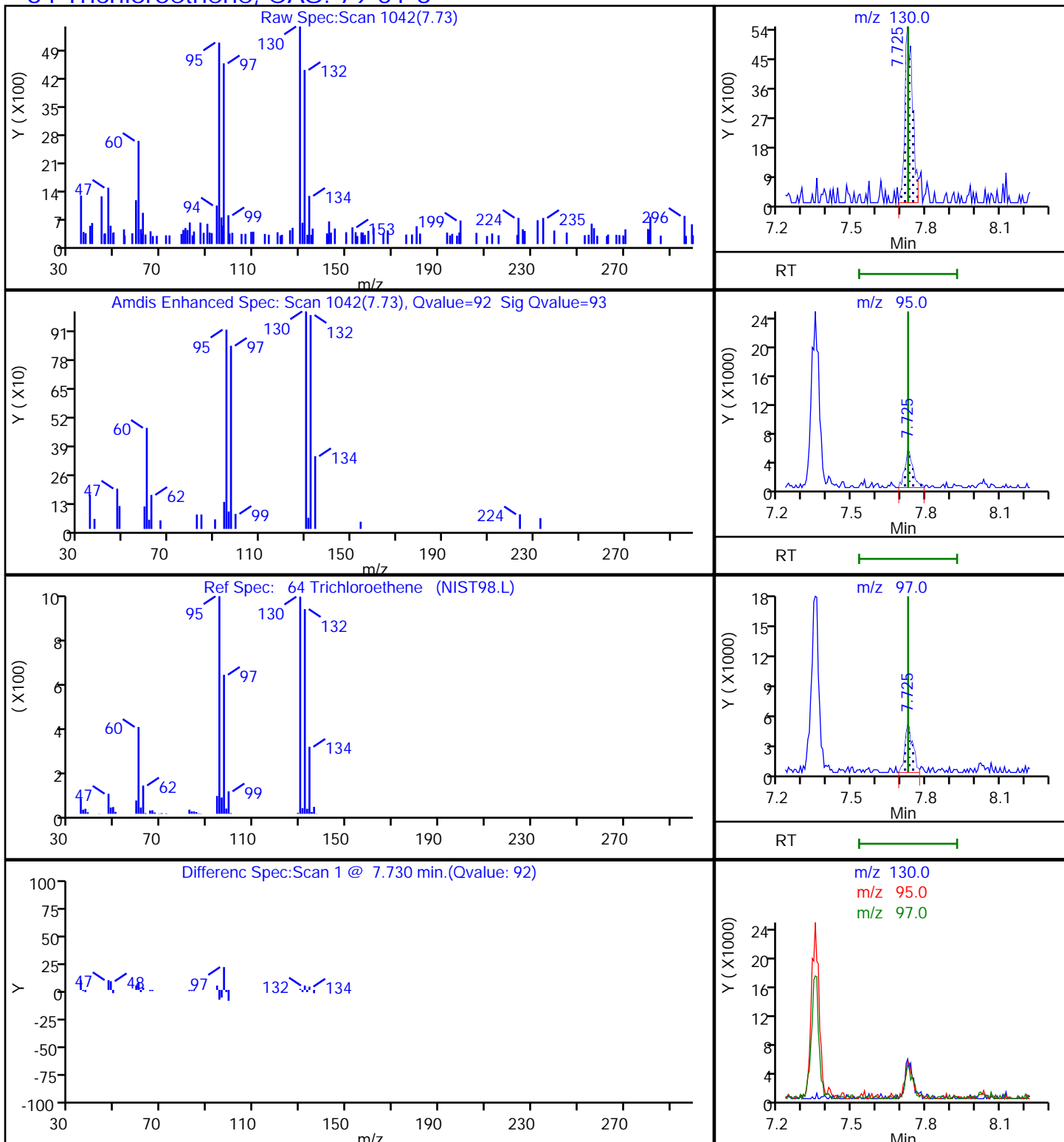
Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

### 64 Trichloroethene, CAS: 79-01-6



Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050420.D

Injection Date: 04-May-2020 15:58:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-13

Lab Sample ID: 180-105108-13

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

Operator ID: 034635

ALS Bottle#: 20

Worklist Smp#: 20

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

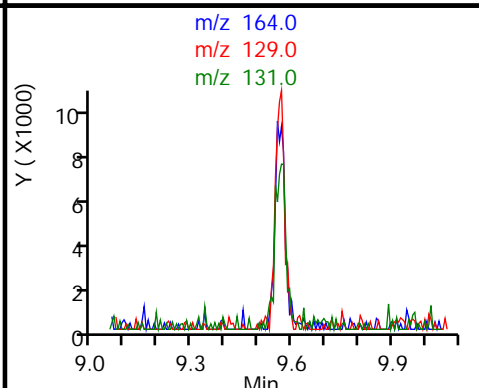
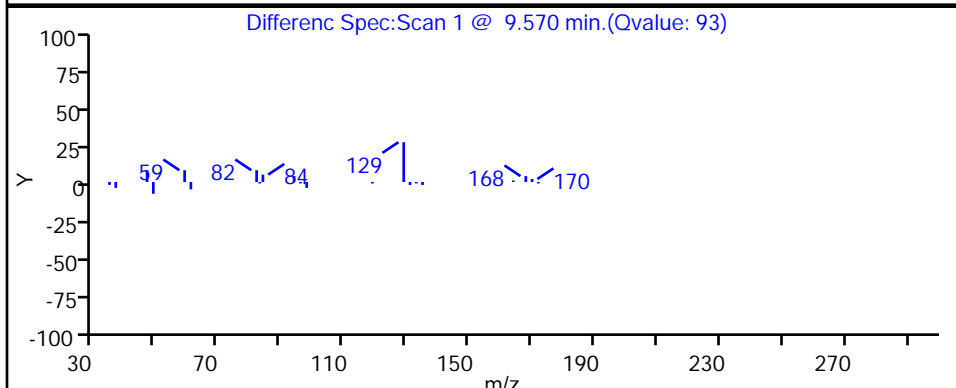
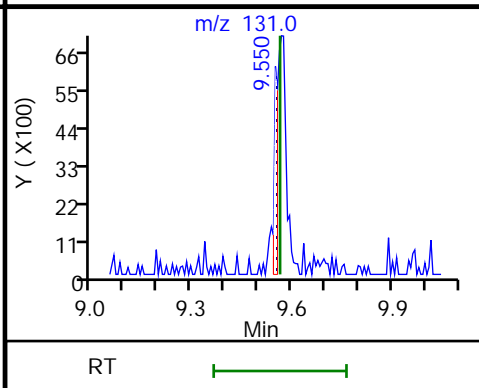
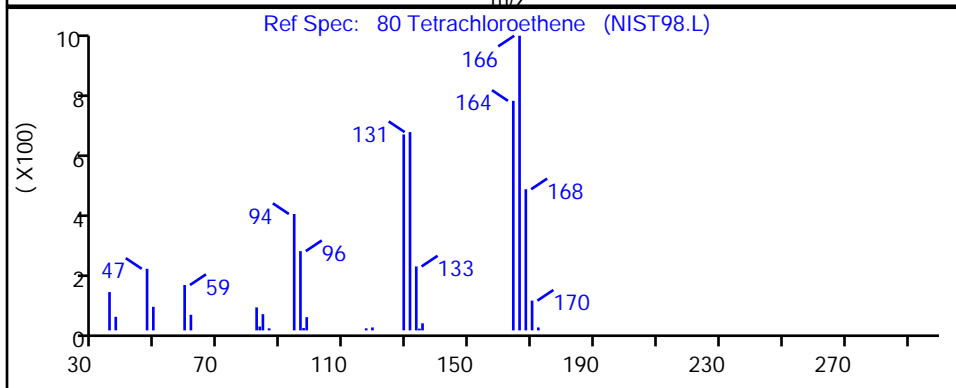
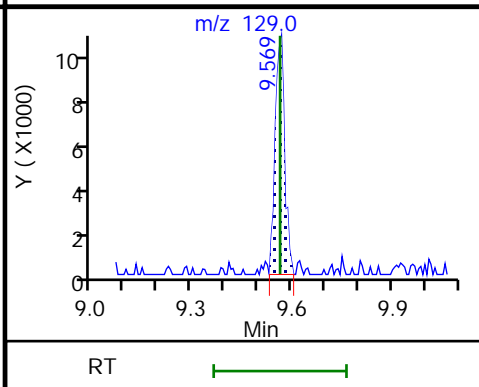
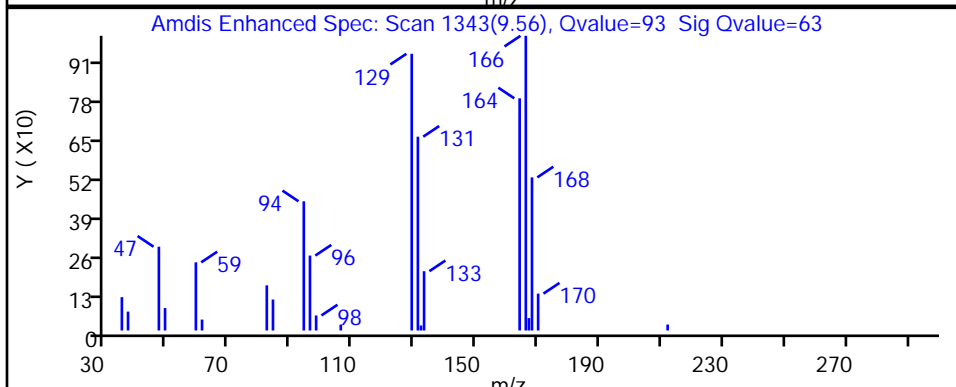
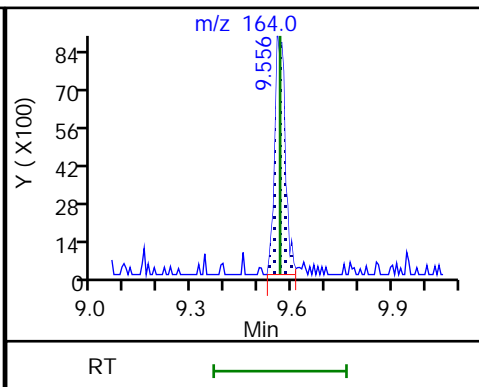
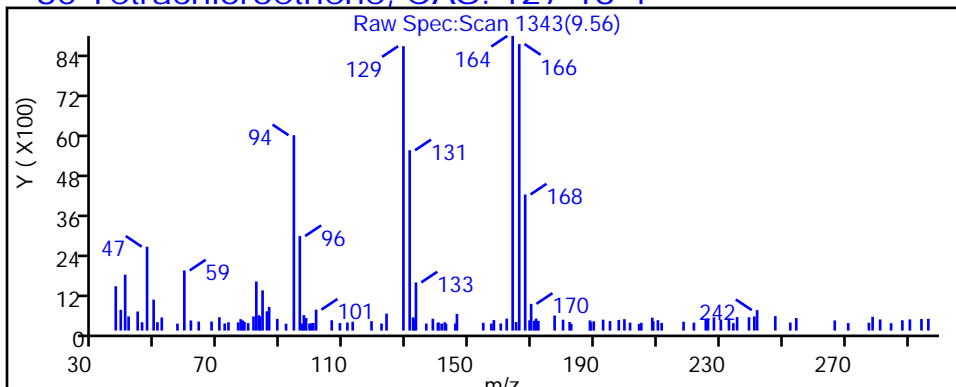
Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

### 80 Tetrachloroethene, CAS: 127-18-4

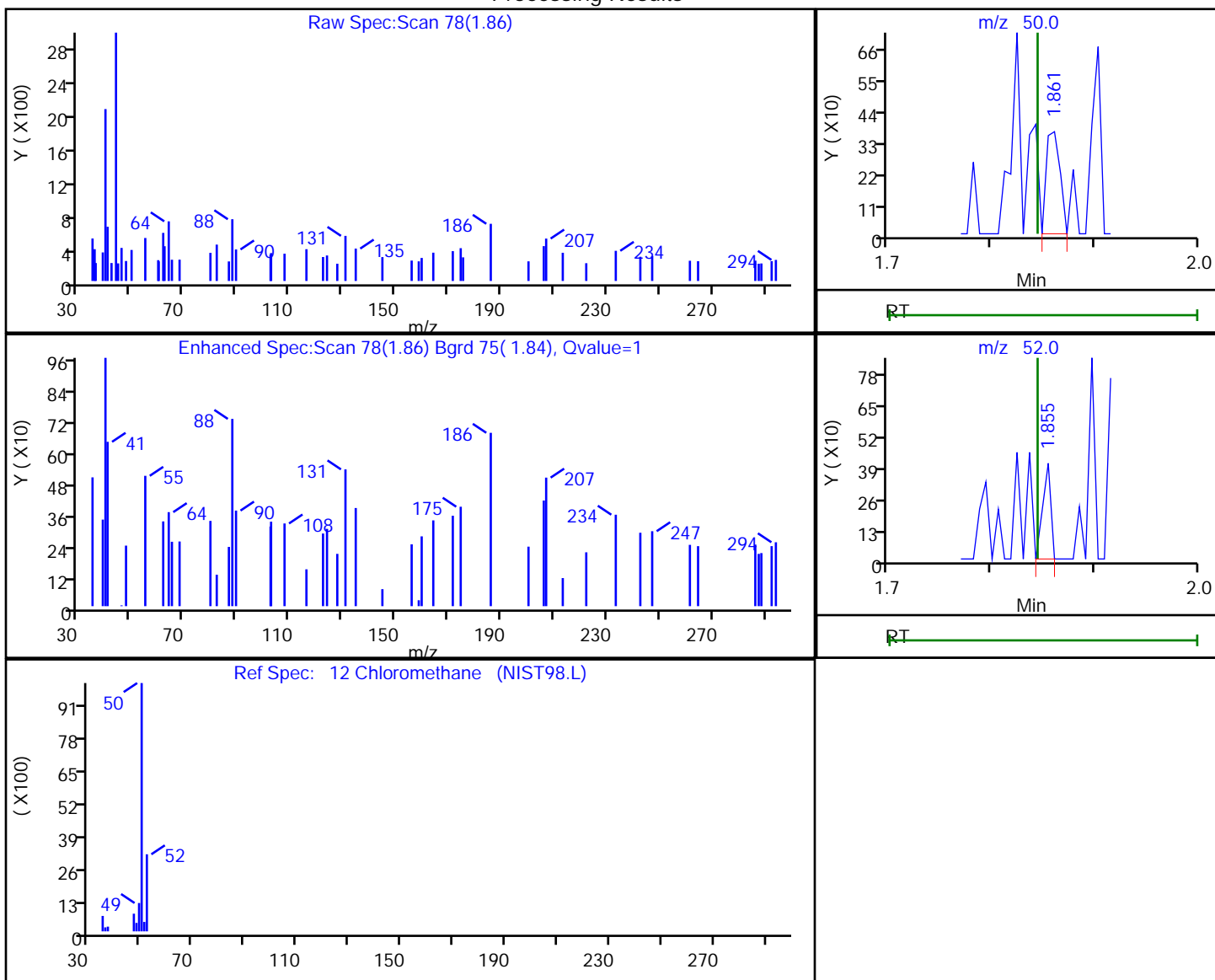


Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050420.D  
 Injection Date: 04-May-2020 15:58:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-13 Lab Sample ID: 180-105108-13  
 Client ID: HD-QC1-0/1-1  
 Operator ID: 034635 ALS Bottle#: 20 Worklist Smp#: 20  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

12 Chloromethane, CAS: 74-87-3

Processing Results



RT	Mass	Response	Amount
1.86	50.00	339	0.064164
1.85	52.00	220	

Reviewer: journtp, 08-May-2020 10:24:07  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050420.D

Injection Date: 04-May-2020 15:58:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-13

Lab Sample ID: 180-105108-13

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

Operator ID: 034635

ALS Bottle#: 20 Worklist Smp#: 20

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

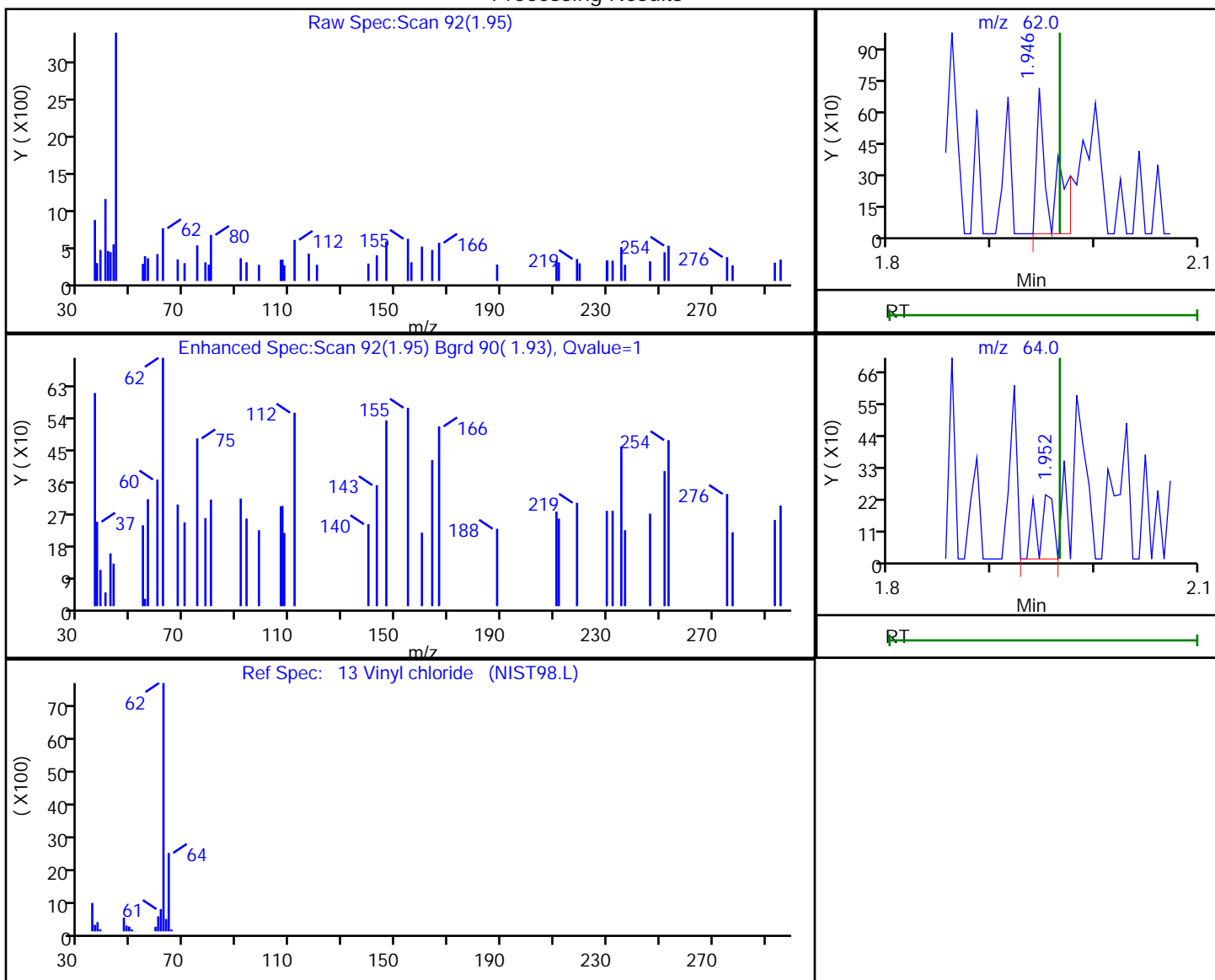
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

13 Vinyl chloride, CAS: 75-01-4

Processing Results



RT	Mass	Response	Amount
1.95	62.00	659	0.140062
1.95	64.00	235	

Reviewer: journetp, 08-May-2020 10:24:07

Audit Action: Marked Compound Undetected

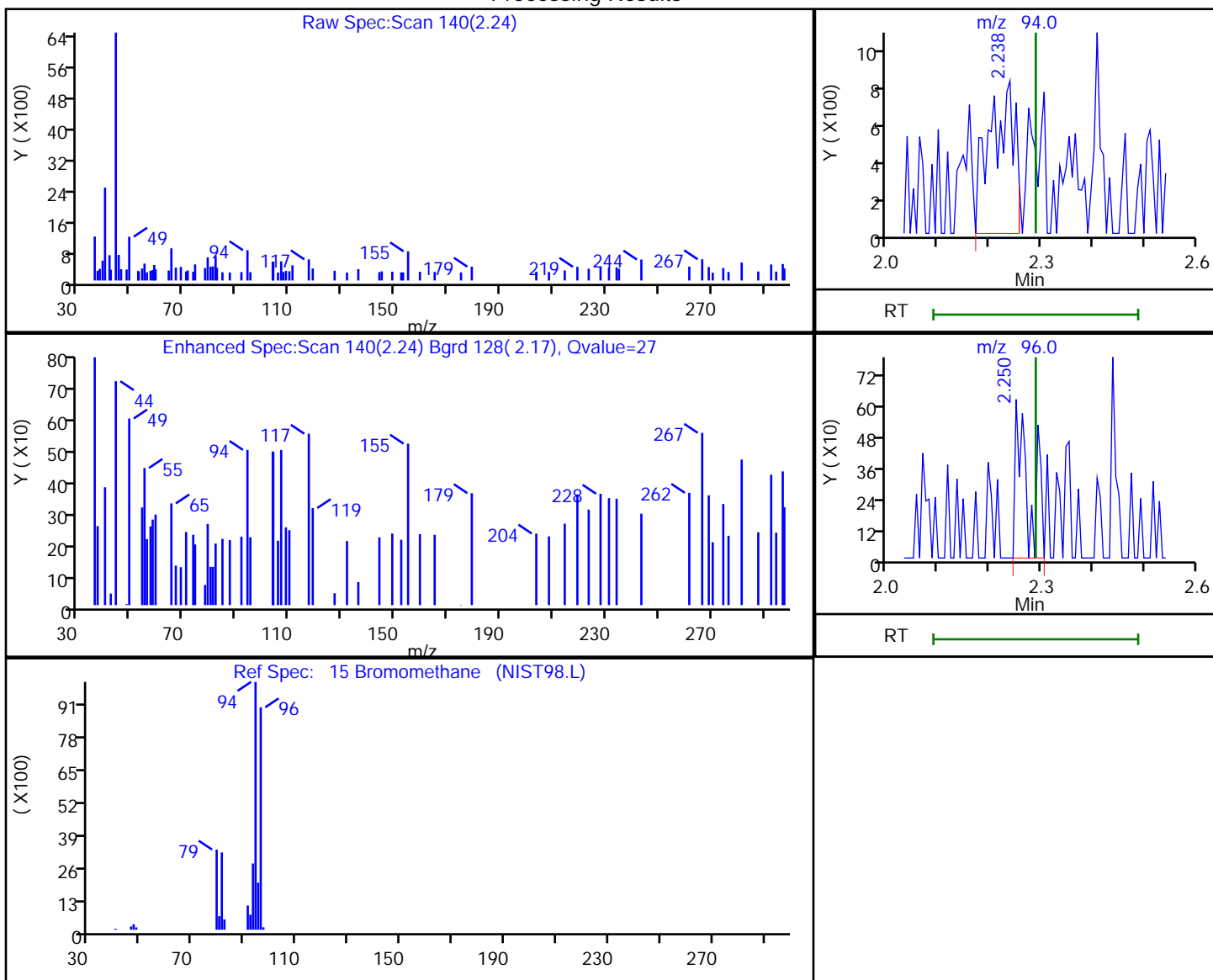
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050420.D  
 Injection Date: 04-May-2020 15:58:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-13 Lab Sample ID: 180-105108-13  
 Client ID: HD-QC1-0/1-1  
 Operator ID: 034635 ALS Bottle#: 20 Worklist Smp#: 20  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

15 Bromomethane, CAS: 74-83-9

Processing Results



RT	Mass	Response	Amount
2.24	94.00	2615	0.970699
2.25	96.00	1077	

Reviewer: journtp, 08-May-2020 10:24:07

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

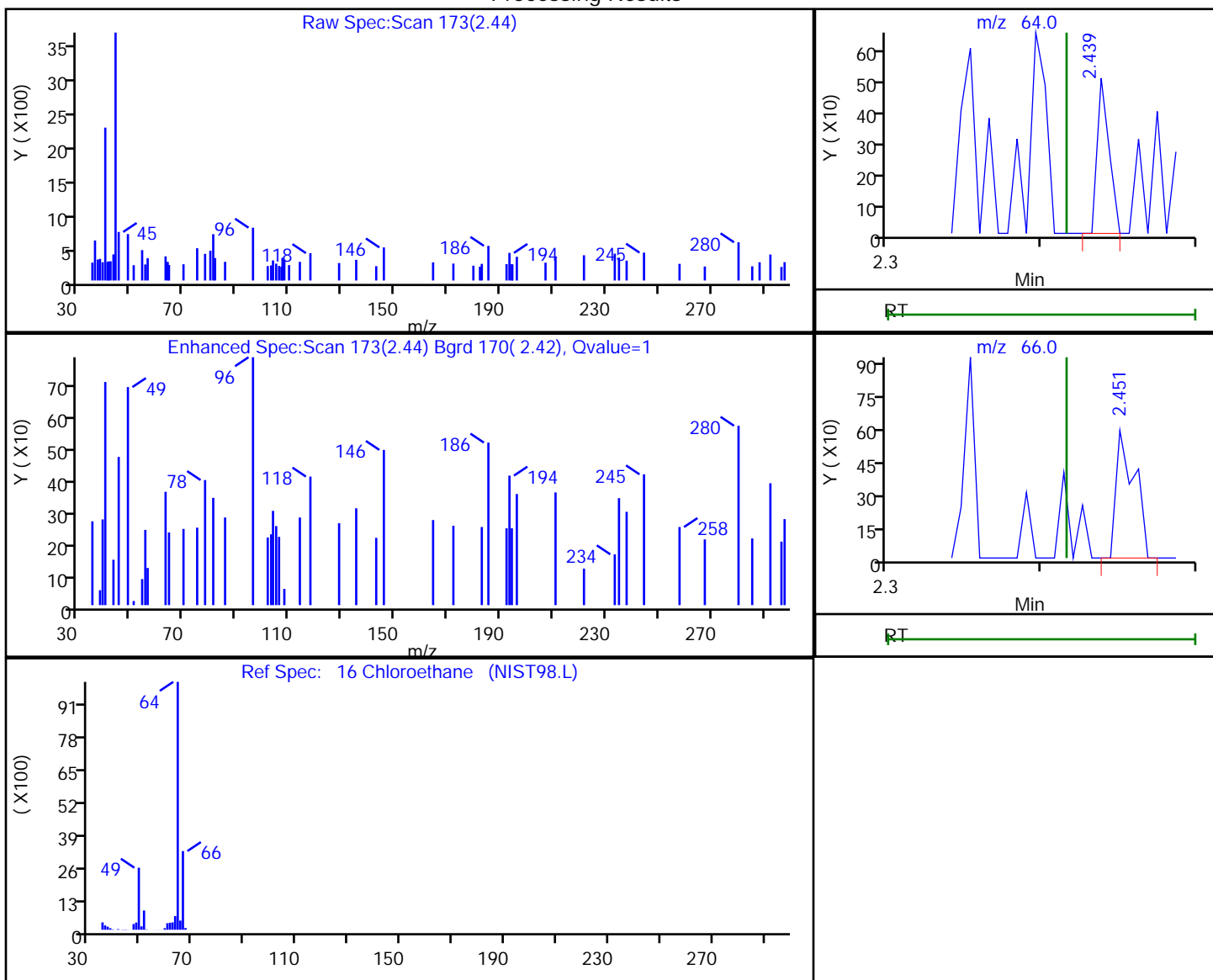


Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050420.D  
 Injection Date: 04-May-2020 15:58:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-13 Lab Sample ID: 180-105108-13  
 Client ID: HD-QC1-0/1-1  
 Operator ID: 034635 ALS Bottle#: 20 Worklist Smp#: 20  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

16 Chloroethane, CAS: 75-00-3

Processing Results



RT	Mass	Response	Amount
2.44	64.00	270	0.084586
2.45	66.00	491	

Reviewer: journetp, 08-May-2020 10:24:07

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050420.D

Injection Date: 04-May-2020 15:58:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-13

Lab Sample ID: 180-105108-13

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

Operator ID: 034635

ALS Bottle#: 20 Worklist Smp#: 20

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

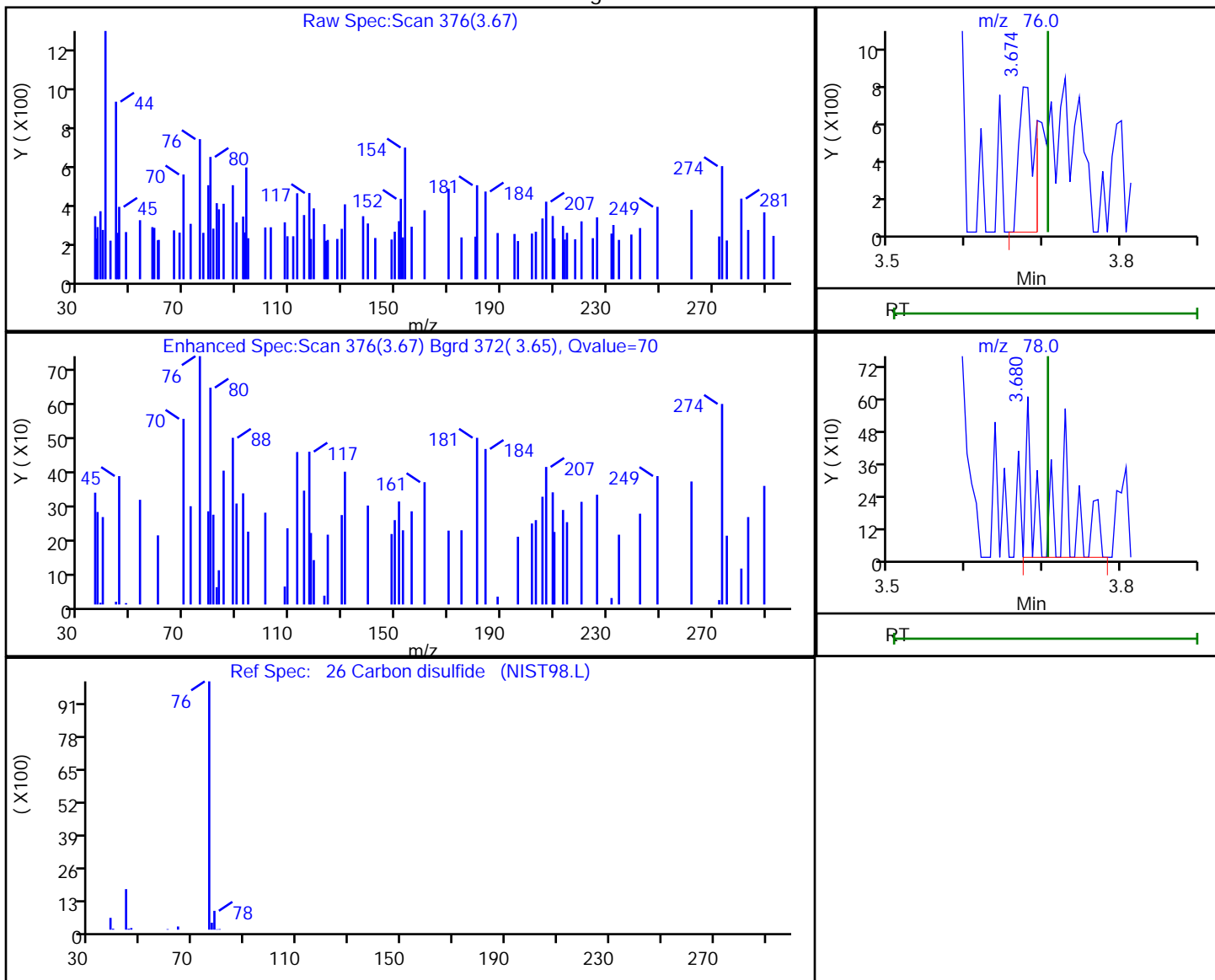
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

26 Carbon disulfide, CAS: 75-15-0

Processing Results



RT	Mass	Response	Amount
3.67	76.00	1001	0.164430
3.68	78.00	938	

Reviewer: journtp, 08-May-2020 10:24:11

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050420.D

Injection Date: 04-May-2020 15:58:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-13

Lab Sample ID: 180-105108-13

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

Operator ID: 034635

ALS Bottle#: 20 Worklist Smp#: 20

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

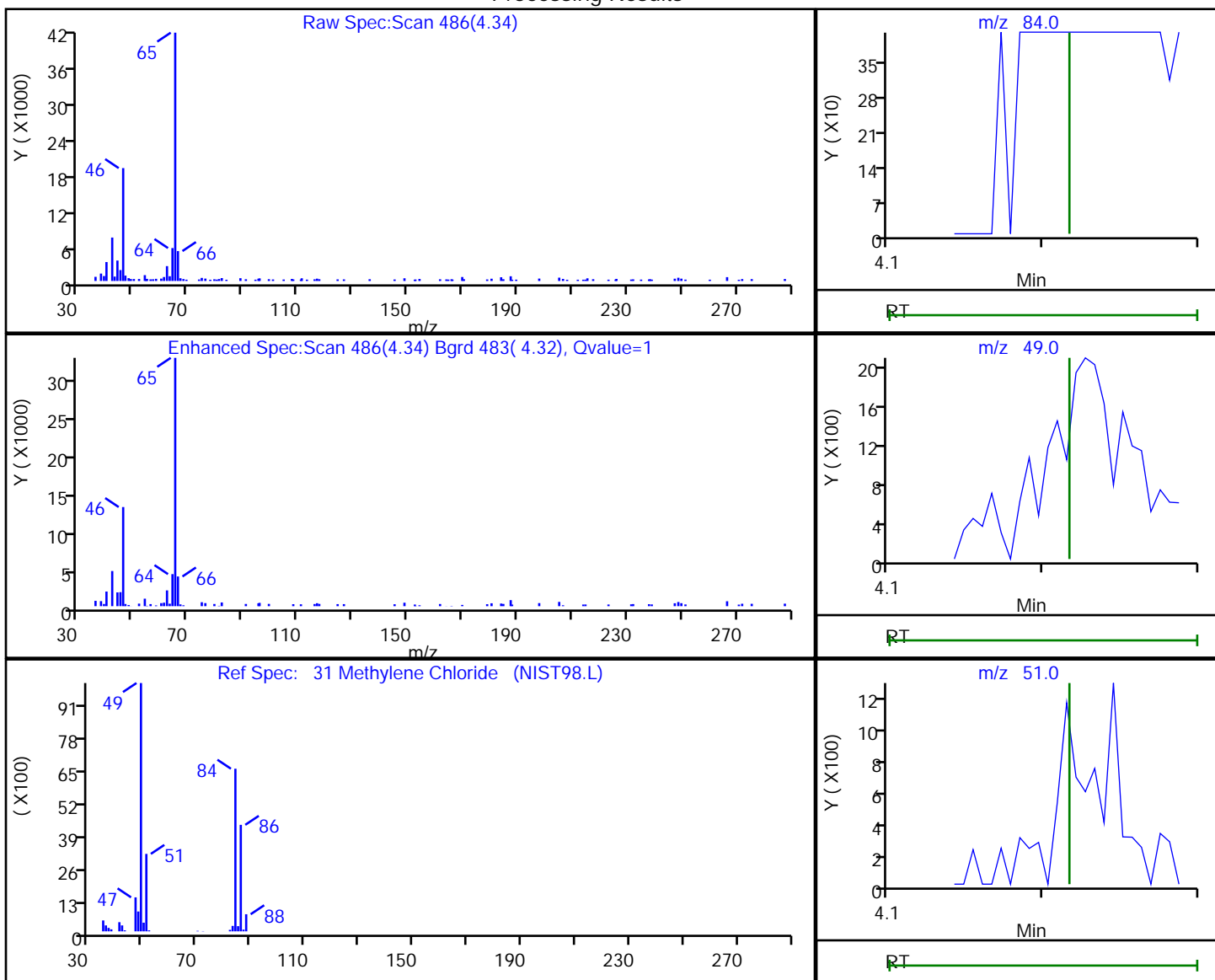
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

31 Methylene Chloride, CAS: 75-09-2

Processing Results



RT	Mass	Response	Amount
4.34	84.00	73	-1.686970
4.36	49.00	1165	
4.34	51.00	101	

Reviewer: journept, 08-May-2020 10:24:11

Audit Action: Marked Compound Undetected

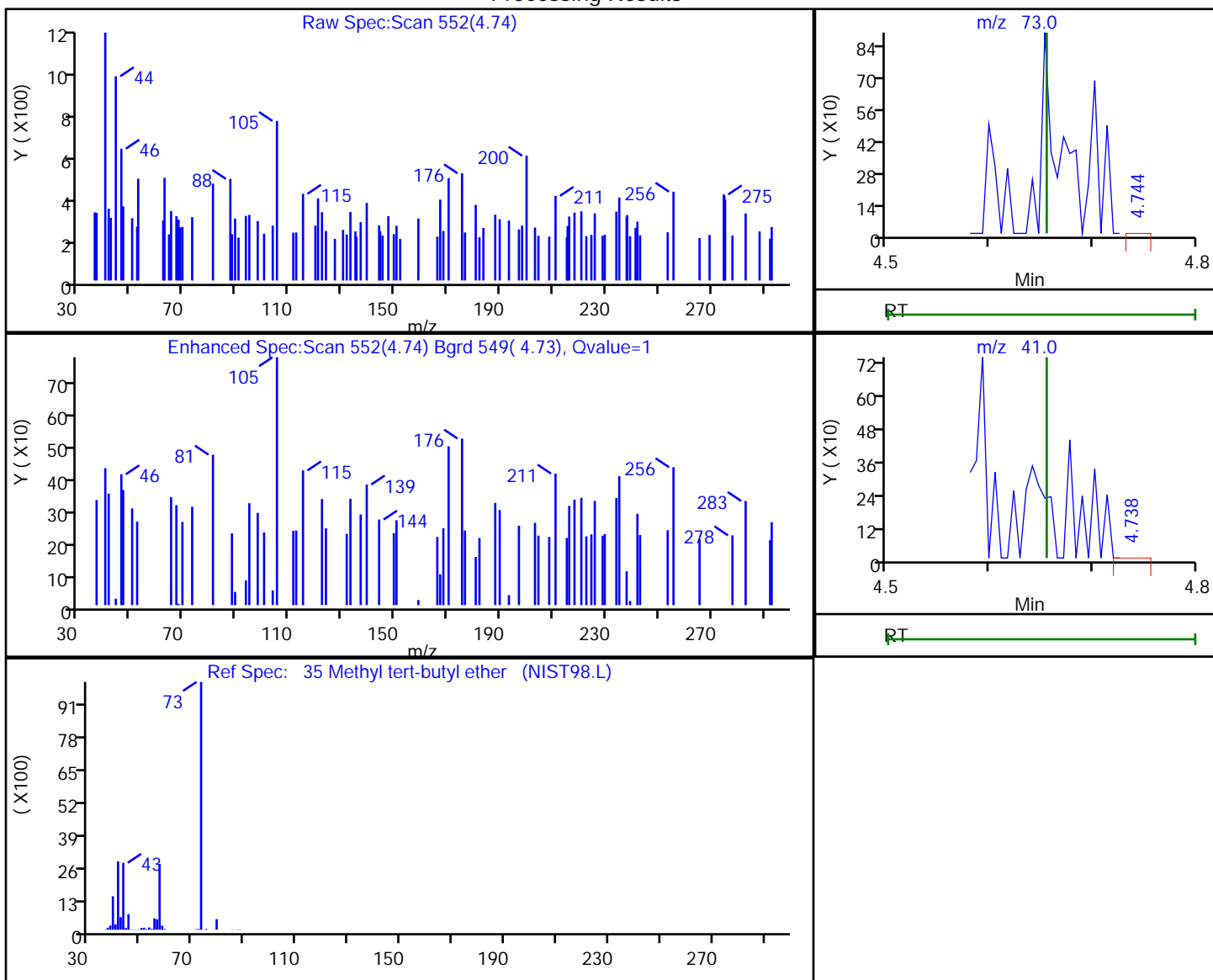
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfms\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050420.D  
 Injection Date: 04-May-2020 15:58:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-13 Lab Sample ID: 180-105108-13  
 Client ID: HD-QC1-0/1-1  
 Operator ID: 034635 ALS Bottle#: 20 Worklist Smp#: 20  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

35 Methyl tert-butyl ether, CAS: 1634-04-4

Processing Results



RT	Mass	Response	Amount
4.74	73.00	112	0.013480
4.74	41.00	678	

Reviewer: journetp, 08-May-2020 10:24:11

Audit Action: Marked Compound Undetected

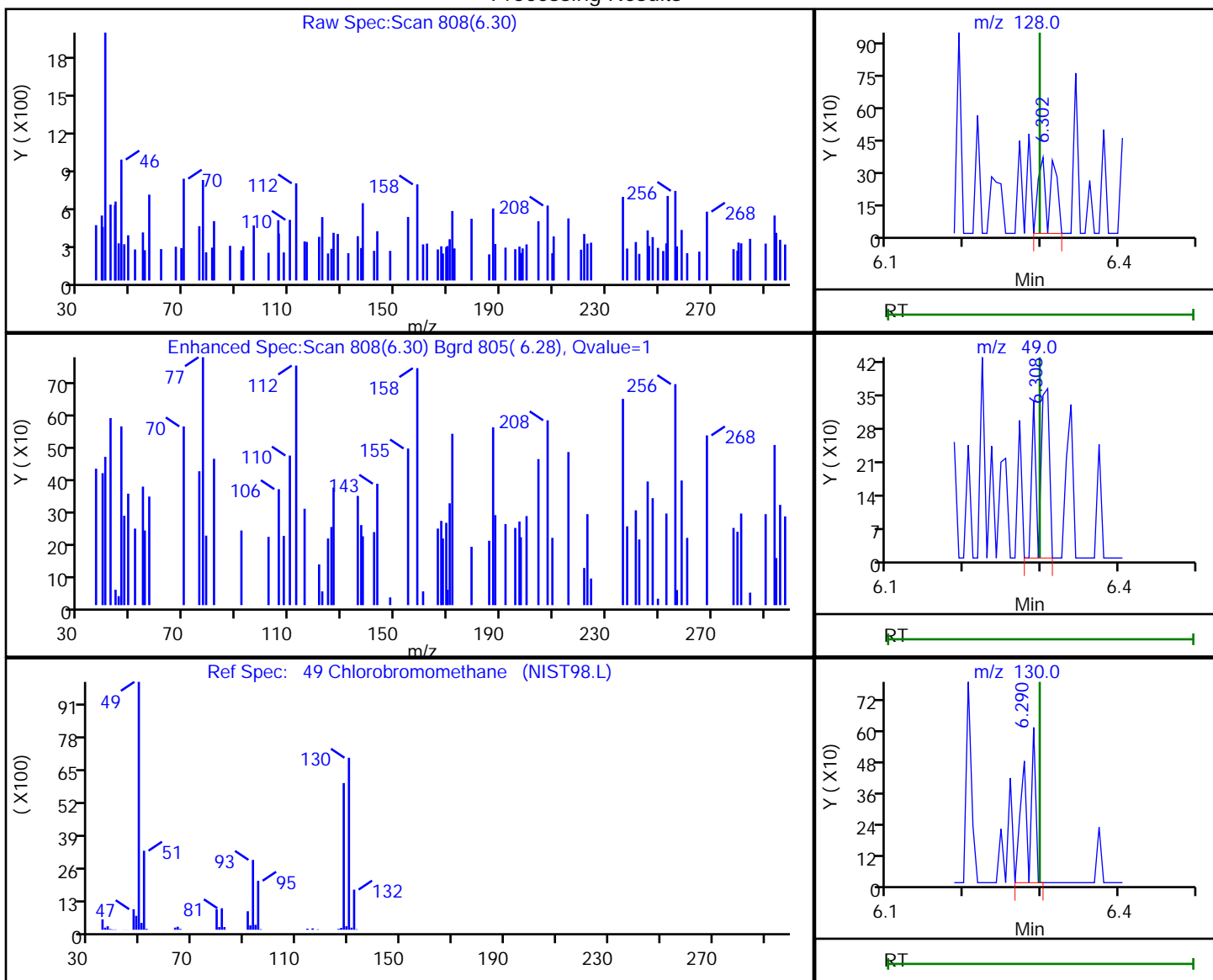
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050420.D  
 Injection Date: 04-May-2020 15:58:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-13 Lab Sample ID: 180-105108-13  
 Client ID: HD-QC1-0/1-1  
 Operator ID: 034635 ALS Bottle#: 20 Worklist Smp#: 20  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

49 Chlorobromomethane, CAS: 74-97-5

Processing Results



RT	Mass	Response	Amount
6.30	128.00	448	0.238616
6.31	49.00	382	
6.29	130.00	492	

Reviewer: journept, 08-May-2020 10:24:16  
 Audit Action: Marked Compound Undetected

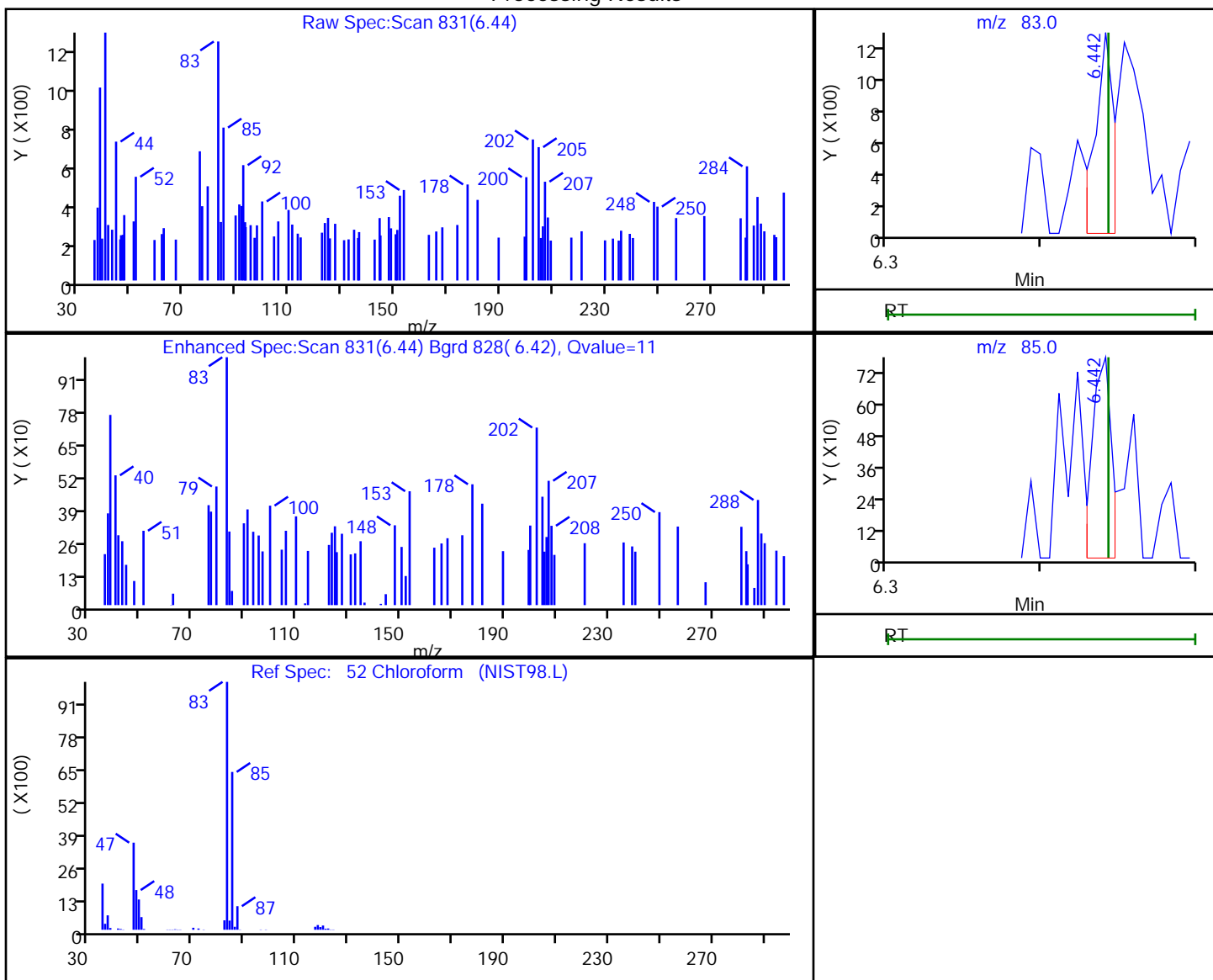
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050420.D  
 Injection Date: 04-May-2020 15:58:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-13 Lab Sample ID: 180-105108-13  
 Client ID: HD-QC1-0/1-1  
 Operator ID: 034635 ALS Bottle#: 20 Worklist Smp#: 20  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

52 Chloroform, CAS: 67-66-3

Processing Results



RT	Mass	Response	Amount
6.44	83.00	1043	-1.565909
6.44	85.00	689	

Reviewer: journetp, 08-May-2020 10:24:16  
 Audit Action: Marked Compound Undetected

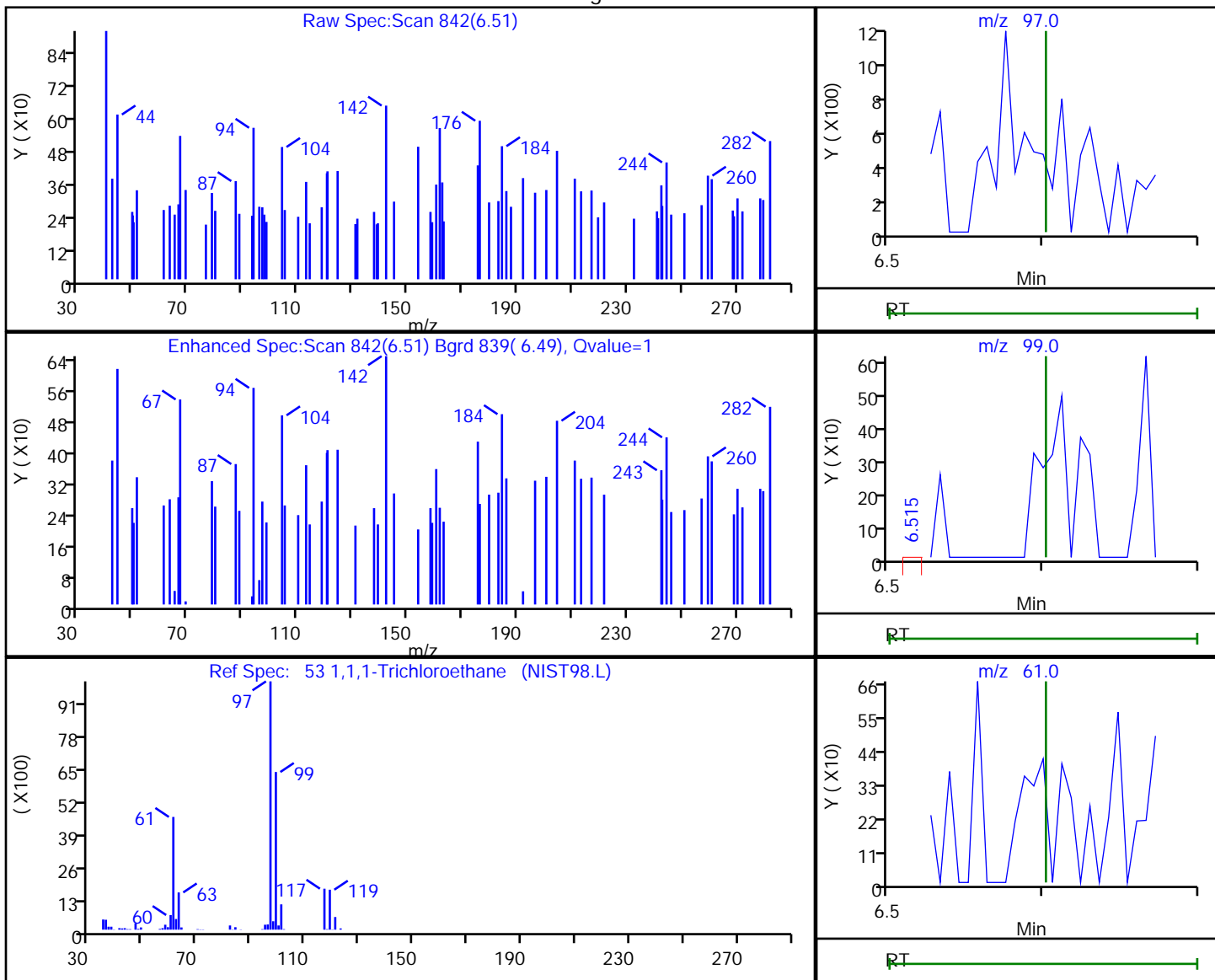
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050420.D  
 Injection Date: 04-May-2020 15:58:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-13 Lab Sample ID: 180-105108-13  
 Client ID: HD-QC1-0/1-1  
 Operator ID: 034635 ALS Bottle#: 20 Worklist Smp#: 20  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

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

Processing Results



RT	Mass	Response	Amount
6.51	97.00	184	0.041692
6.51	99.00	77	
6.50	61.00	309	

Reviewer: journeyp, 08-May-2020 10:24:17  
 Audit Action: Marked Compound Undetected

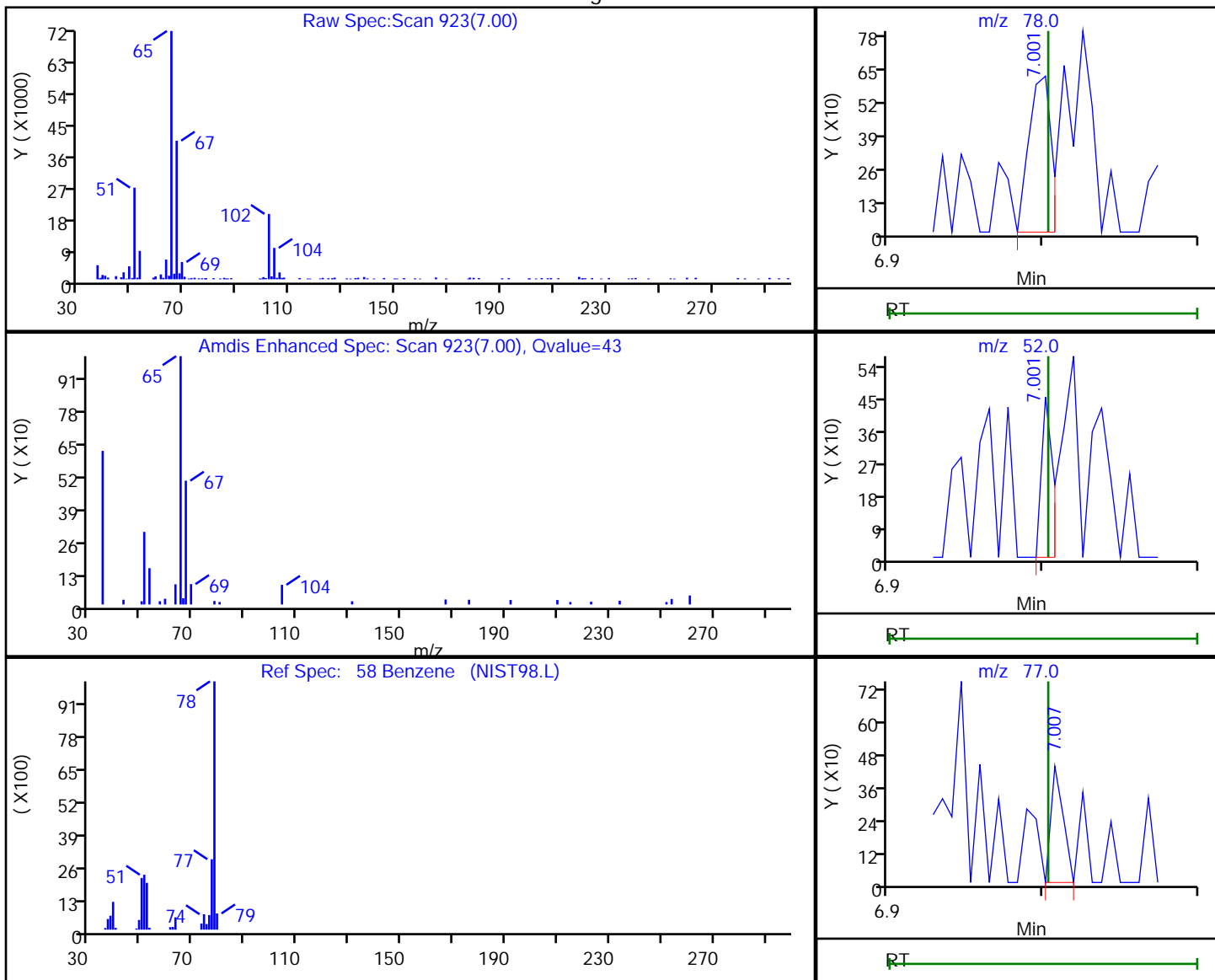
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050420.D  
 Injection Date: 04-May-2020 15:58:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-13 Lab Sample ID: 180-105108-13  
 Client ID: HD-QC1-0/1-1  
 Operator ID: 034635 ALS Bottle#: 20 Worklist Smp#: 20  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

58 Benzene, CAS: 71-43-2

Processing Results



RT	Mass	Response	Amount
7.00	78.00	633	0.047486
7.00	52.00	237	
7.01	77.00	239	

Reviewer: journeyp, 08-May-2020 10:24:17  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

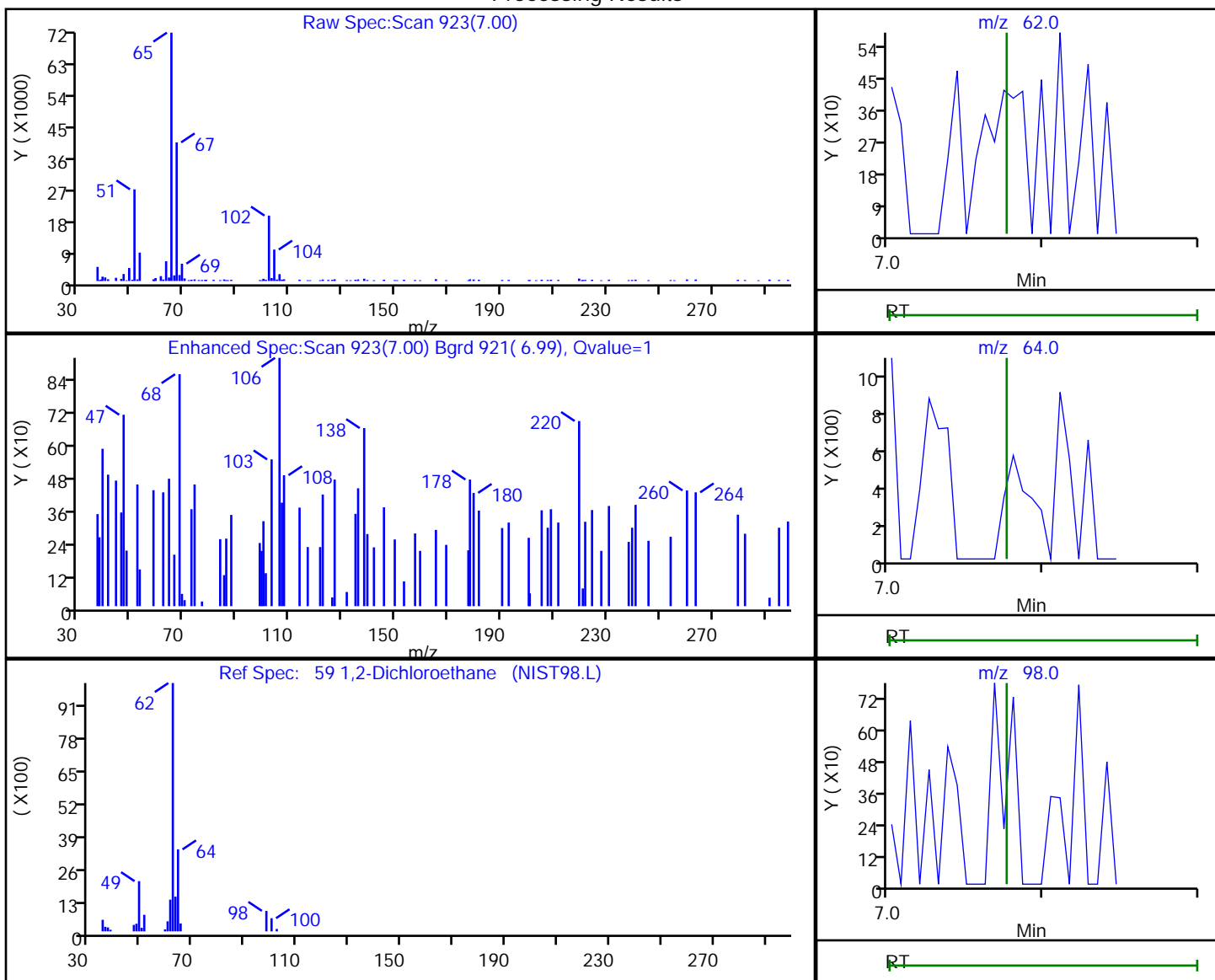


Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050420.D  
 Injection Date: 04-May-2020 15:58:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-13 Lab Sample ID: 180-105108-13  
 Client ID: HD-QC1-0/1-1  
 Operator ID: 034635 ALS Bottle#: 20 Worklist Smp#: 20  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

59 1,2-Dichloroethane, CAS: 107-06-2

Processing Results



RT	Mass	Response	Amount
7.00	62.00	267	0.052677
7.00	64.00	872	
7.01	98.00	963	

Reviewer: journetp, 08-May-2020 10:24:17  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050420.D

Injection Date: 04-May-2020 15:58:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-13

Lab Sample ID: 180-105108-13

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

Operator ID: 034635

ALS Bottle#: 20 Worklist Smp#: 20

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

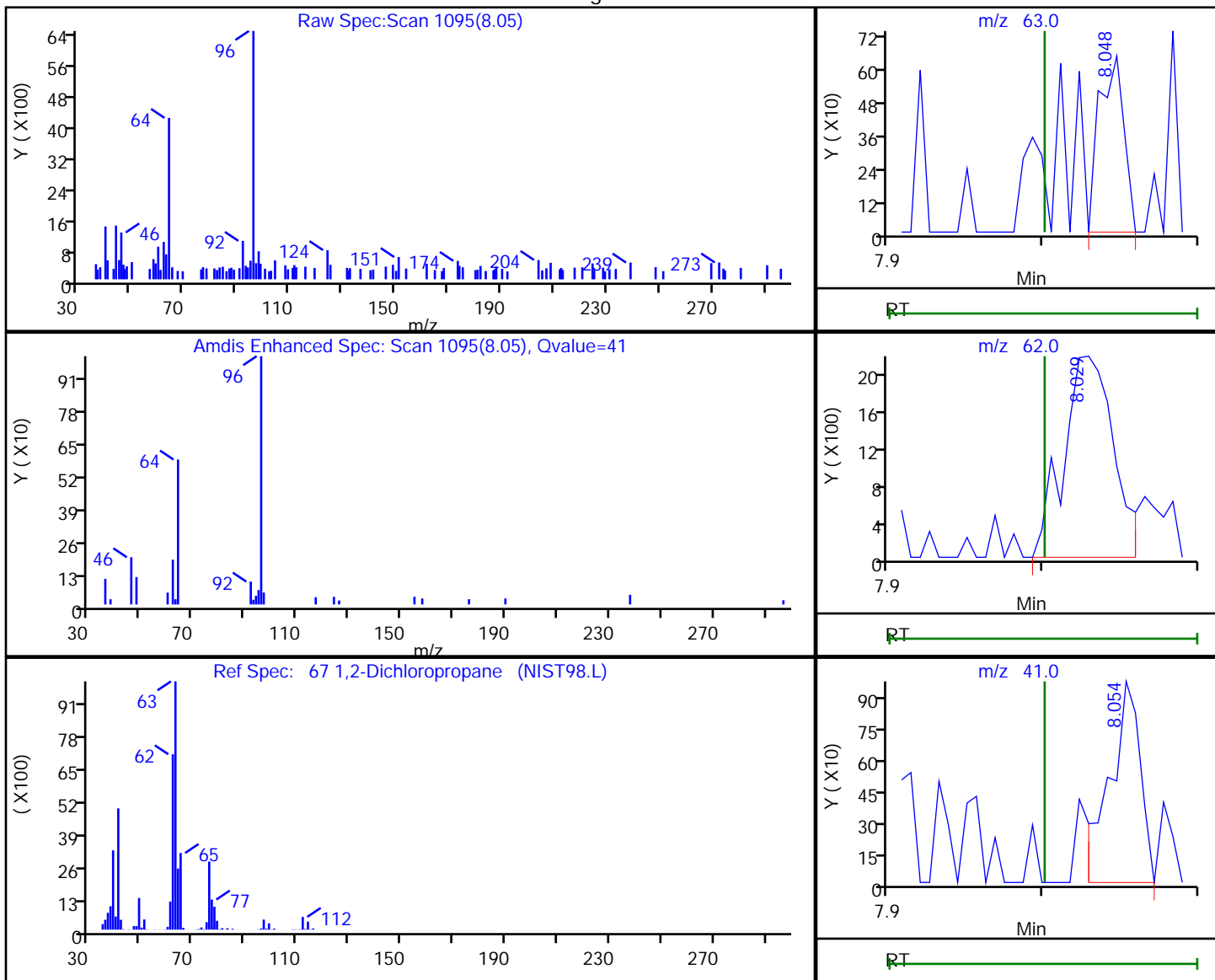
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

67 1,2-Dichloropropane, CAS: 78-87-5

Processing Results



RT	Mass	Response	Amount
8.05	63.00	719	0.202075
8.03	62.00	4864	
8.05	41.00	1365	

Reviewer: journetp, 08-May-2020 10:24:24

Audit Action: Marked Compound Undetected

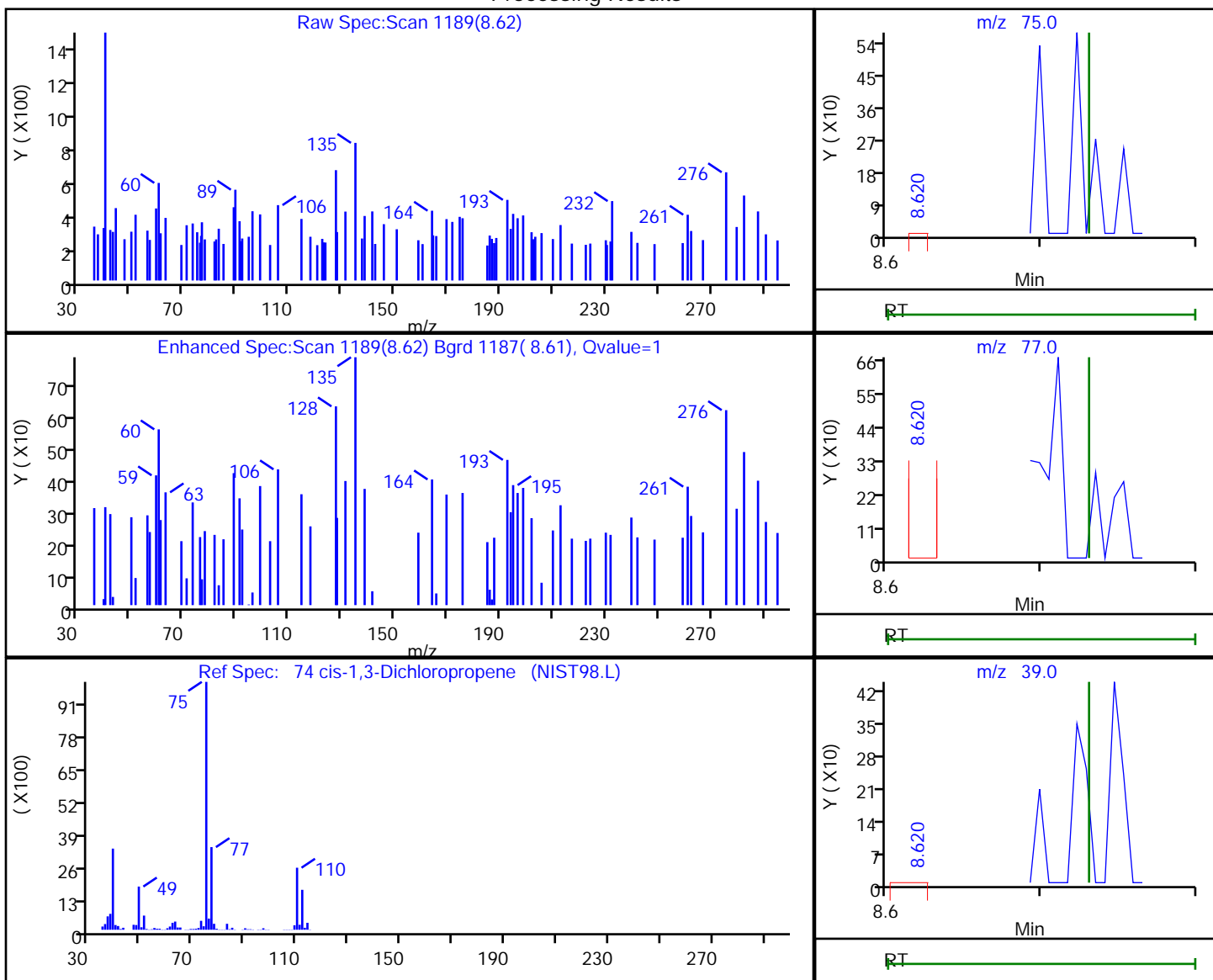
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050420.D  
 Injection Date: 04-May-2020 15:58:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-13 Lab Sample ID: 180-105108-13  
 Client ID: HD-QC1-0/1-1  
 Operator ID: 034635 ALS Bottle#: 20 Worklist Smp#: 20  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

74 cis-1,3-Dichloropropene, CAS: 10061-01-5

Processing Results



RT	Mass	Response	Amount
8.62	75.00	101	0.019214
8.62	77.00	219	
8.62	39.00	212	

Reviewer: journept, 08-May-2020 10:24:24  
 Audit Action: Marked Compound Undetected

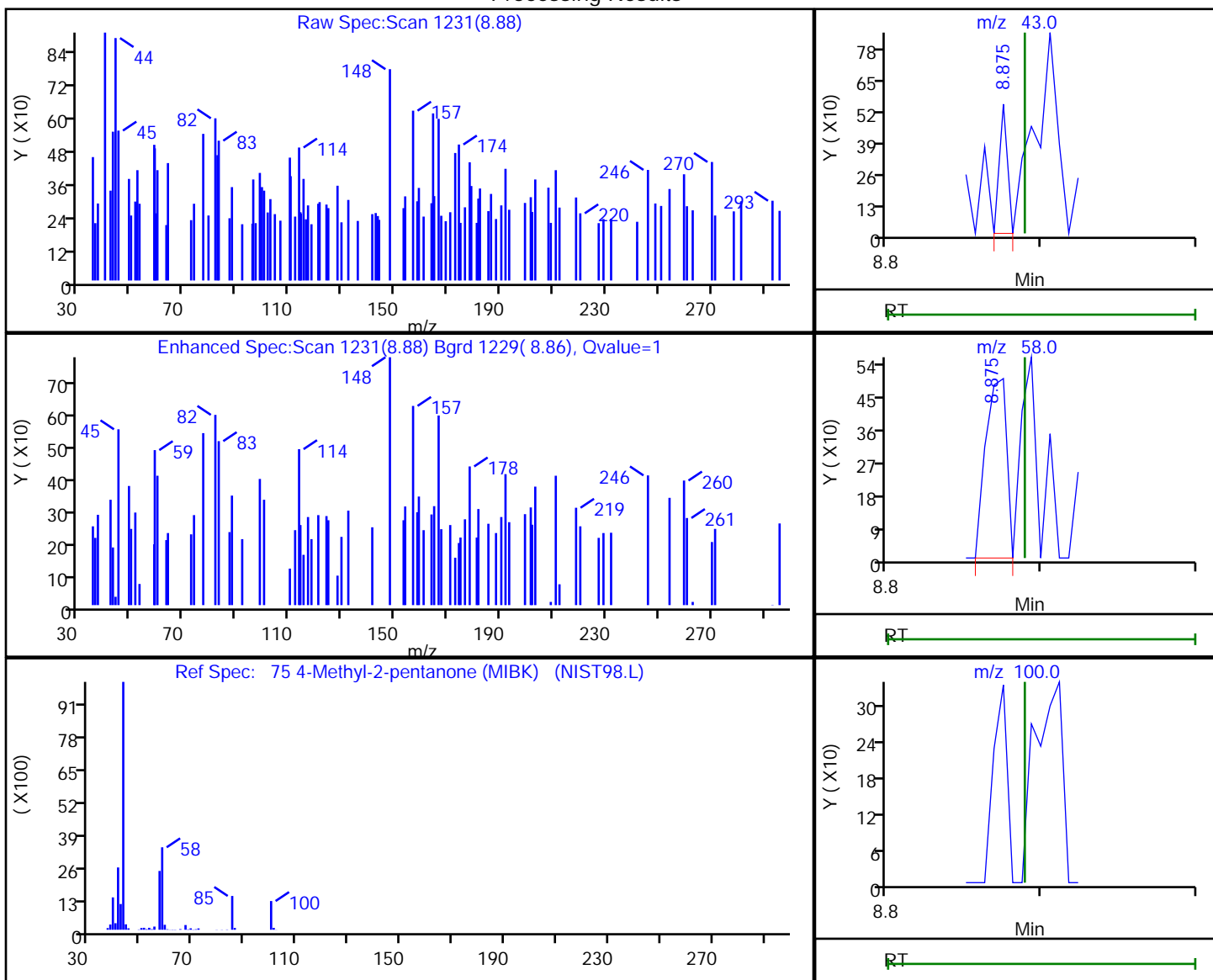
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050420.D  
 Injection Date: 04-May-2020 15:58:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-13 Lab Sample ID: 180-105108-13  
 Client ID: HD-QC1-0/1-1  
 Operator ID: 034635 ALS Bottle#: 20 Worklist Smp#: 20  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

75 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Processing Results



RT	Mass	Response	Amount
8.88	43.00	199	15.530037
8.88	58.00	469	
8.89	100.00	0	

Reviewer: journeyp, 08-May-2020 10:24:24  
 Audit Action: Marked Compound Undetected

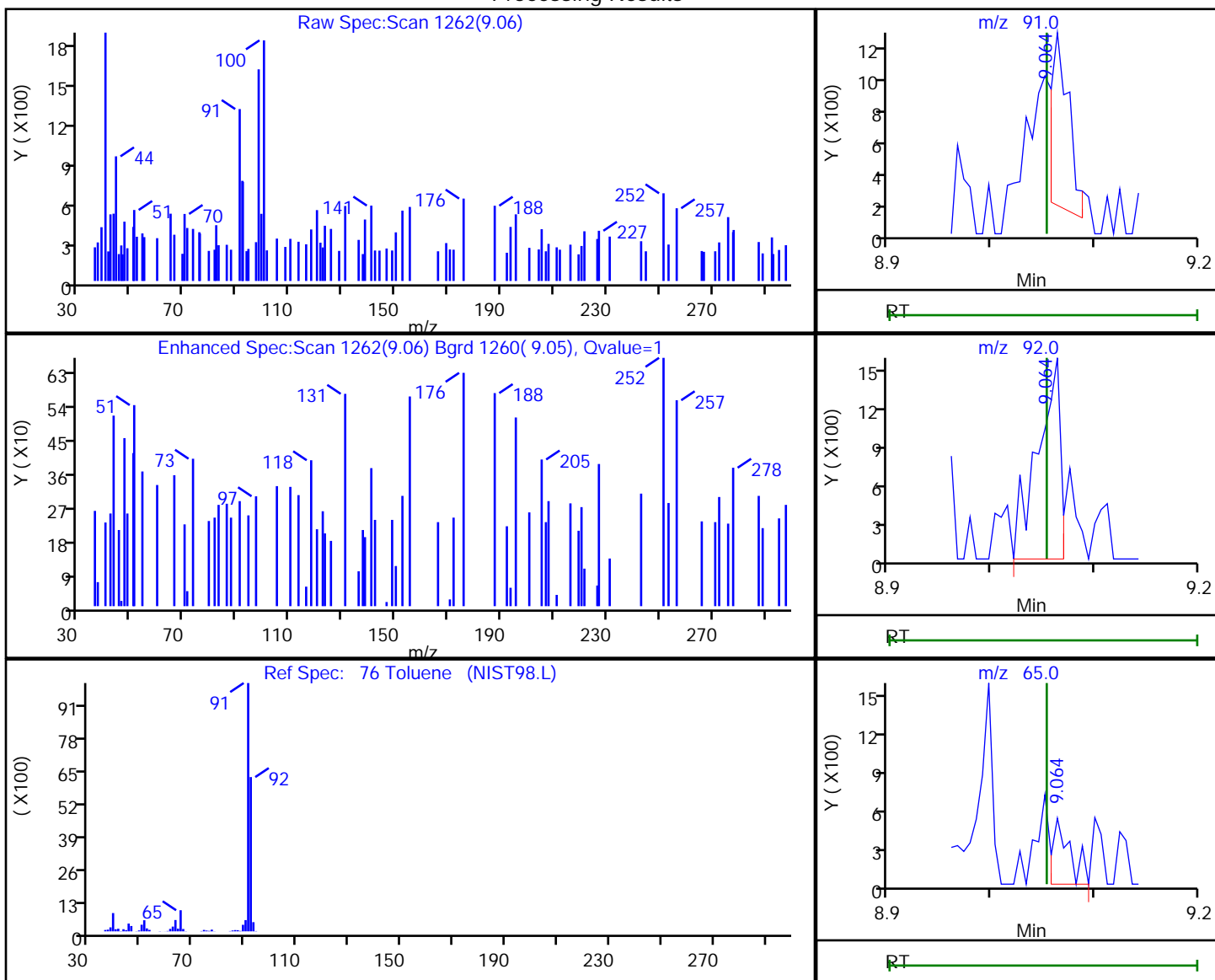
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050420.D  
 Injection Date: 04-May-2020 15:58:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-13 Lab Sample ID: 180-105108-13  
 Client ID: HD-QC1-0/1-1  
 Operator ID: 034635 ALS Bottle#: 20 Worklist Smp#: 20  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

76 Toluene, CAS: 108-88-3

Processing Results



RT	Mass	Response	Amount
9.06	91.00	1344	0.101261
9.06	92.00	2340	
9.06	65.00	597	

Reviewer: journeyp, 08-May-2020 10:24:24  
 Audit Action: Marked Compound Undetected

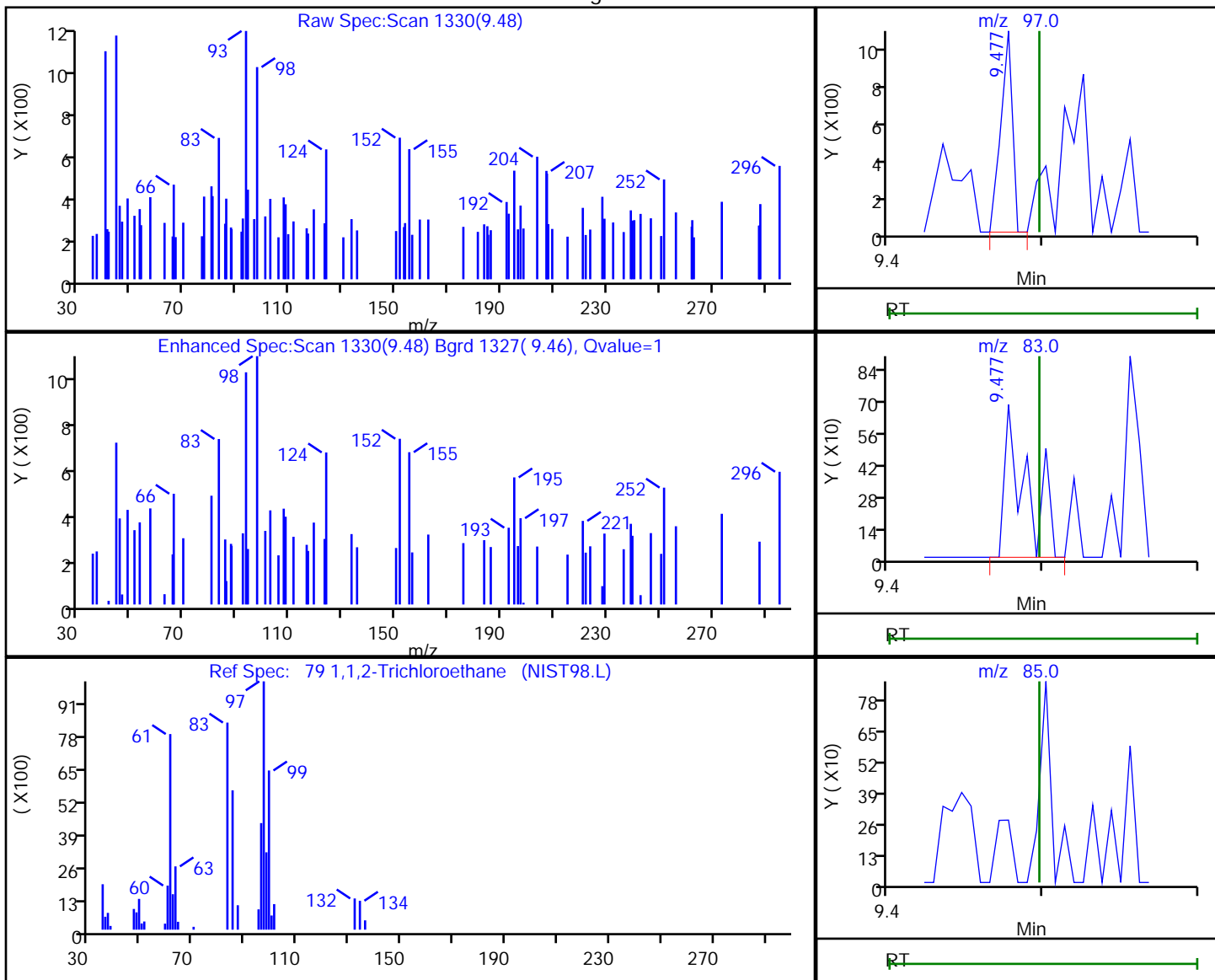
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050420.D  
 Injection Date: 04-May-2020 15:58:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-13 Lab Sample ID: 180-105108-13  
 Client ID: HD-QC1-0/1-1  
 Operator ID: 034635 ALS Bottle#: 20 Worklist Smp#: 20  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

79 1,1,2-Trichloroethane, CAS: 79-00-5

Processing Results



RT	Mass	Response	Amount
9.48	97.00	531	0.172119
9.48	83.00	661	
9.50	85.00	0	

Reviewer: journept, 08-May-2020 10:24:24  
 Audit Action: Marked Compound Undetected

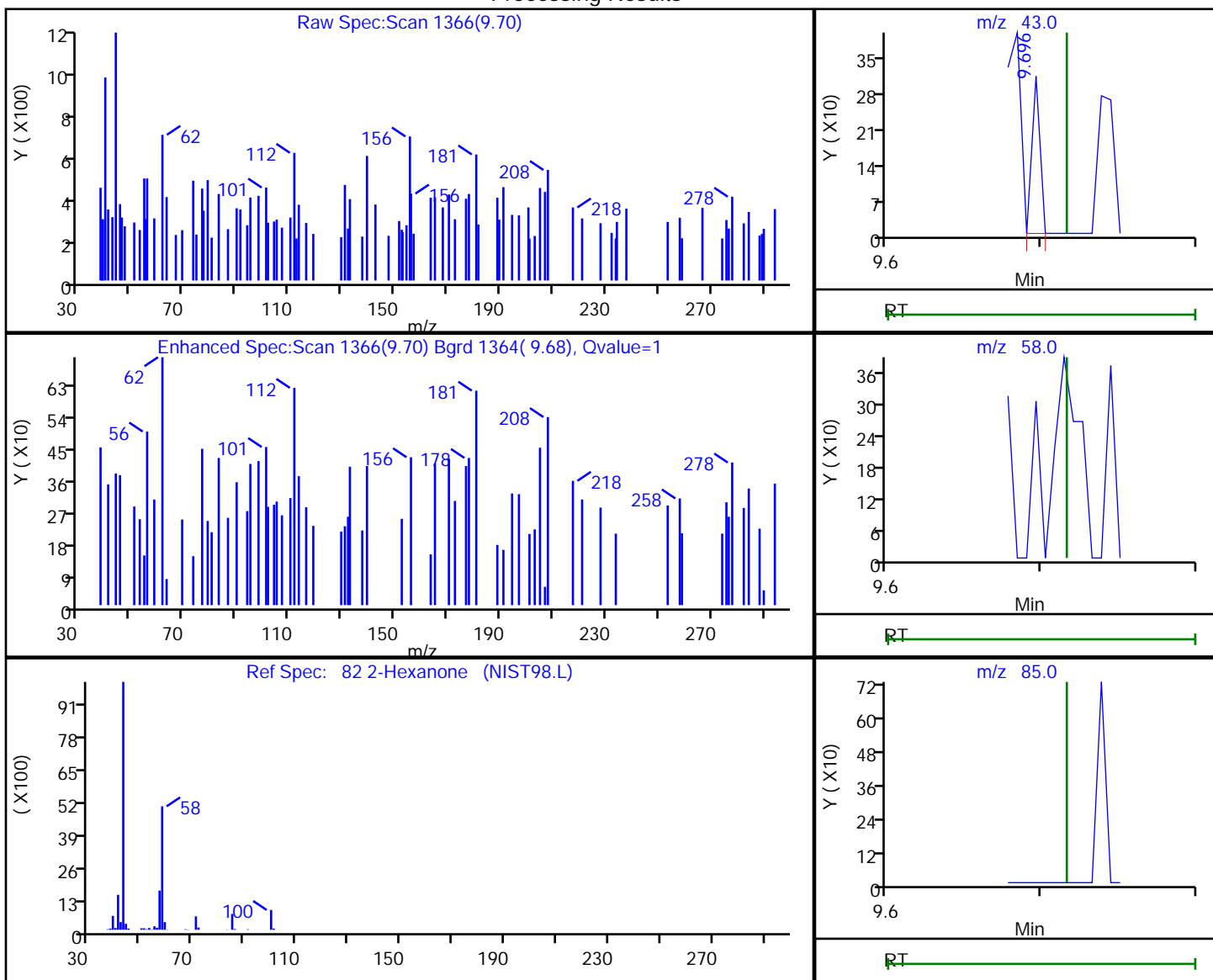
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050420.D  
 Injection Date: 04-May-2020 15:58:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-13 Lab Sample ID: 180-105108-13  
 Client ID: HD-QC1-0/1-1  
 Operator ID: 034635 ALS Bottle#: 20 Worklist Smp#: 20  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

82 2-Hexanone, CAS: 591-78-6

Processing Results



RT	Mass	Response	Amount
9.70	43.00	112	14.053474
9.72	58.00	0	
9.72	85.00	0	

Reviewer: journeyp, 08-May-2020 10:24:29  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050420.D

Injection Date: 04-May-2020 15:58:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-13

Lab Sample ID: 180-105108-13

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

Operator ID: 034635

ALS Bottle#: 20 Worklist Smp#: 20

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

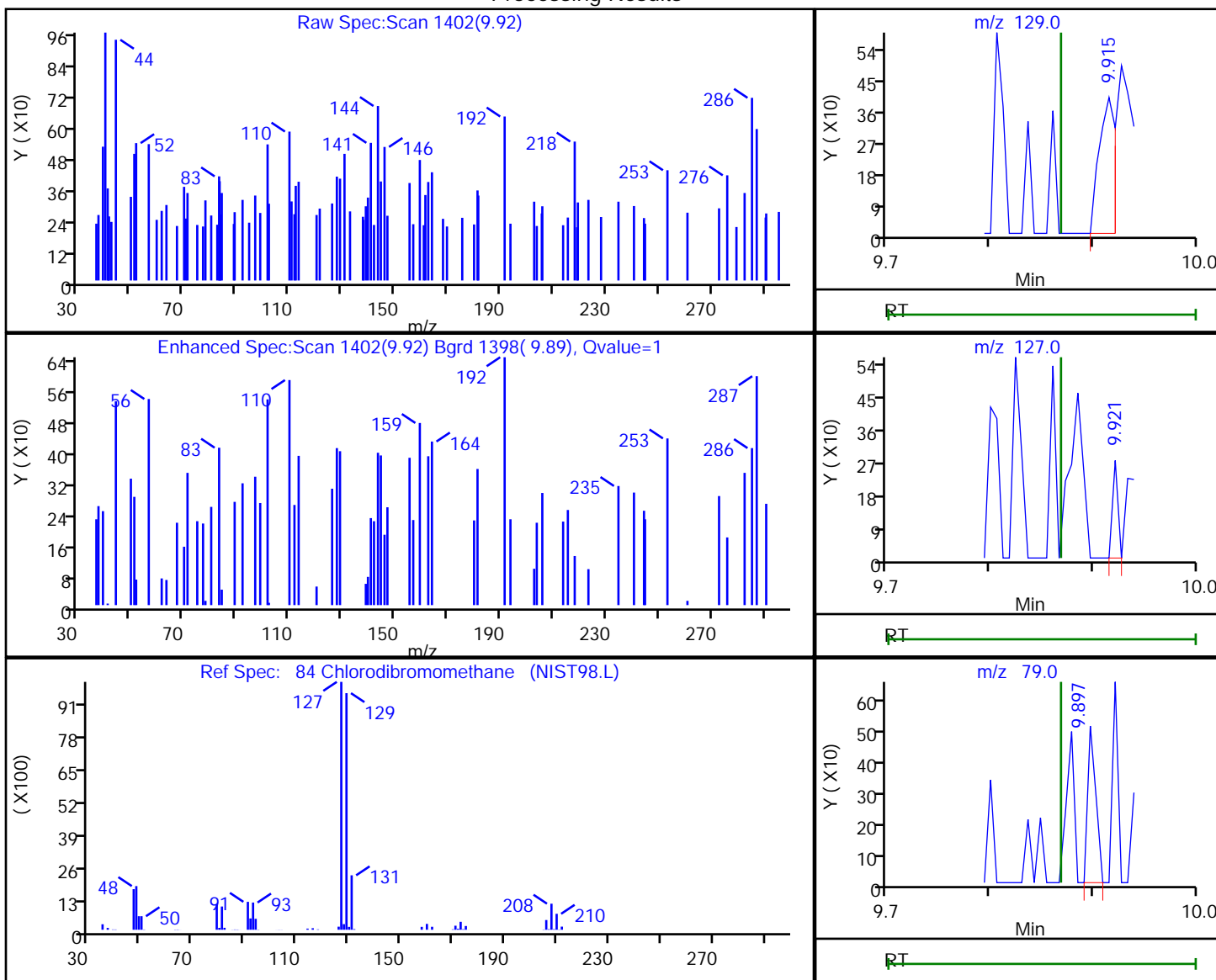
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

84 Chlorodibromomethane, CAS: 124-48-1

Processing Results



RT	Mass	Response	Amount
9.92	129.00	445	0.170401
9.92	127.00	99	
9.90	79.00	281	

Reviewer: journeyp, 08-May-2020 10:24:29

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

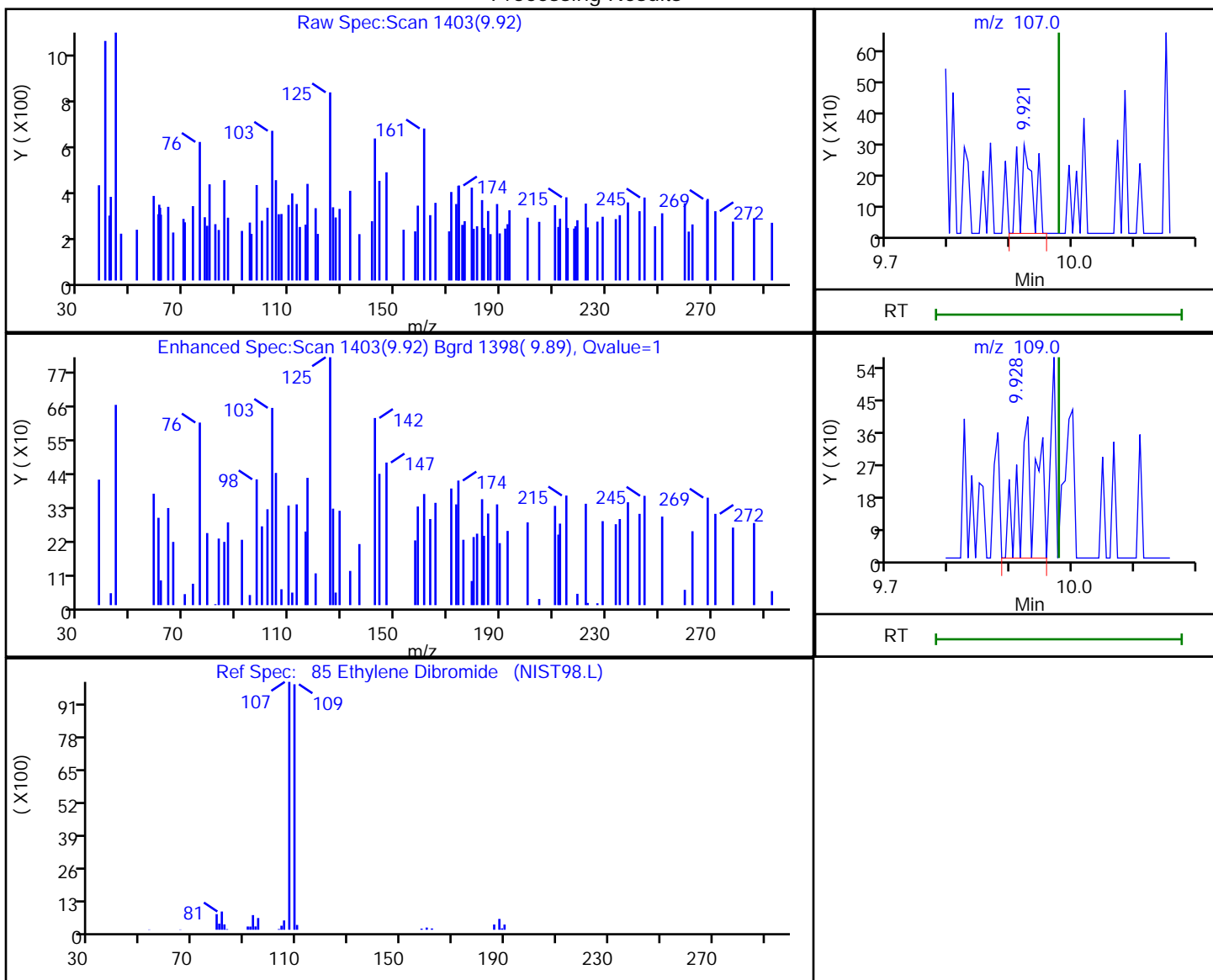


Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050420.D  
 Injection Date: 04-May-2020 15:58:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-13 Lab Sample ID: 180-105108-13  
 Client ID: HD-QC1-0/1-1  
 Operator ID: 034635 ALS Bottle#: 20 Worklist Smp#: 20  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

85 Ethylene Dibromide, CAS: 106-93-4

Processing Results



RT	Mass	Response	Amount
9.92	107.00	453	0.156961
9.93	109.00	754	

Reviewer: journetp, 08-May-2020 10:24:29  
 Audit Action: Marked Compound Undetected

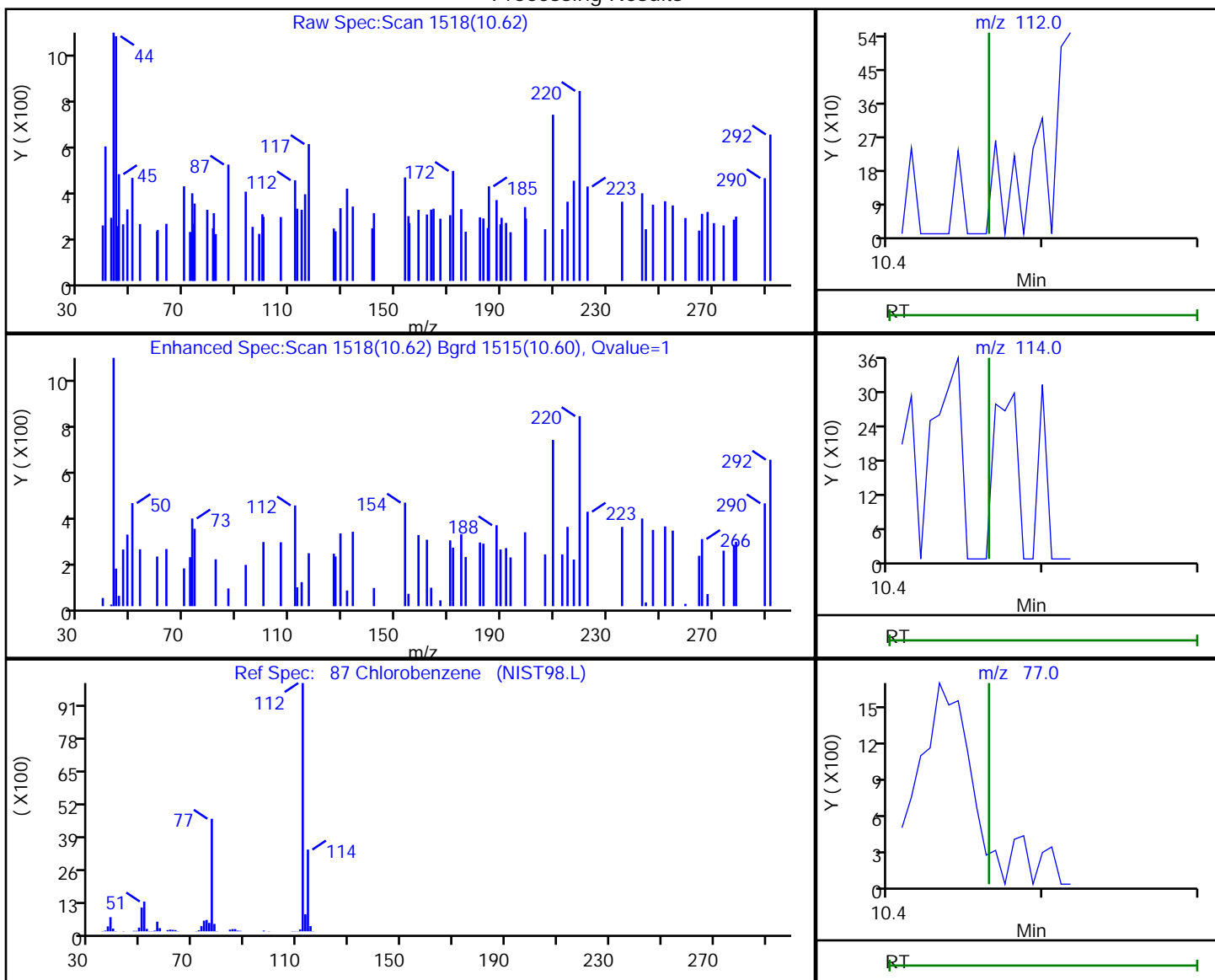
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050420.D  
 Injection Date: 04-May-2020 15:58:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-13 Lab Sample ID: 180-105108-13  
 Client ID: HD-QC1-0/1-1  
 Operator ID: 034635 ALS Bottle#: 20 Worklist Smp#: 20  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

87 Chlorobenzene, CAS: 108-90-7

Processing Results



RT	Mass	Response	Amount
10.62	112.00	314	0.036787
10.61	114.00	233	
10.61	77.00	128	

Reviewer: journeyp, 08-May-2020 10:24:29  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050420.D

Injection Date: 04-May-2020 15:58:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-13

Lab Sample ID: 180-105108-13

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

Operator ID: 034635

ALS Bottle#: 20 Worklist Smp#: 20

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

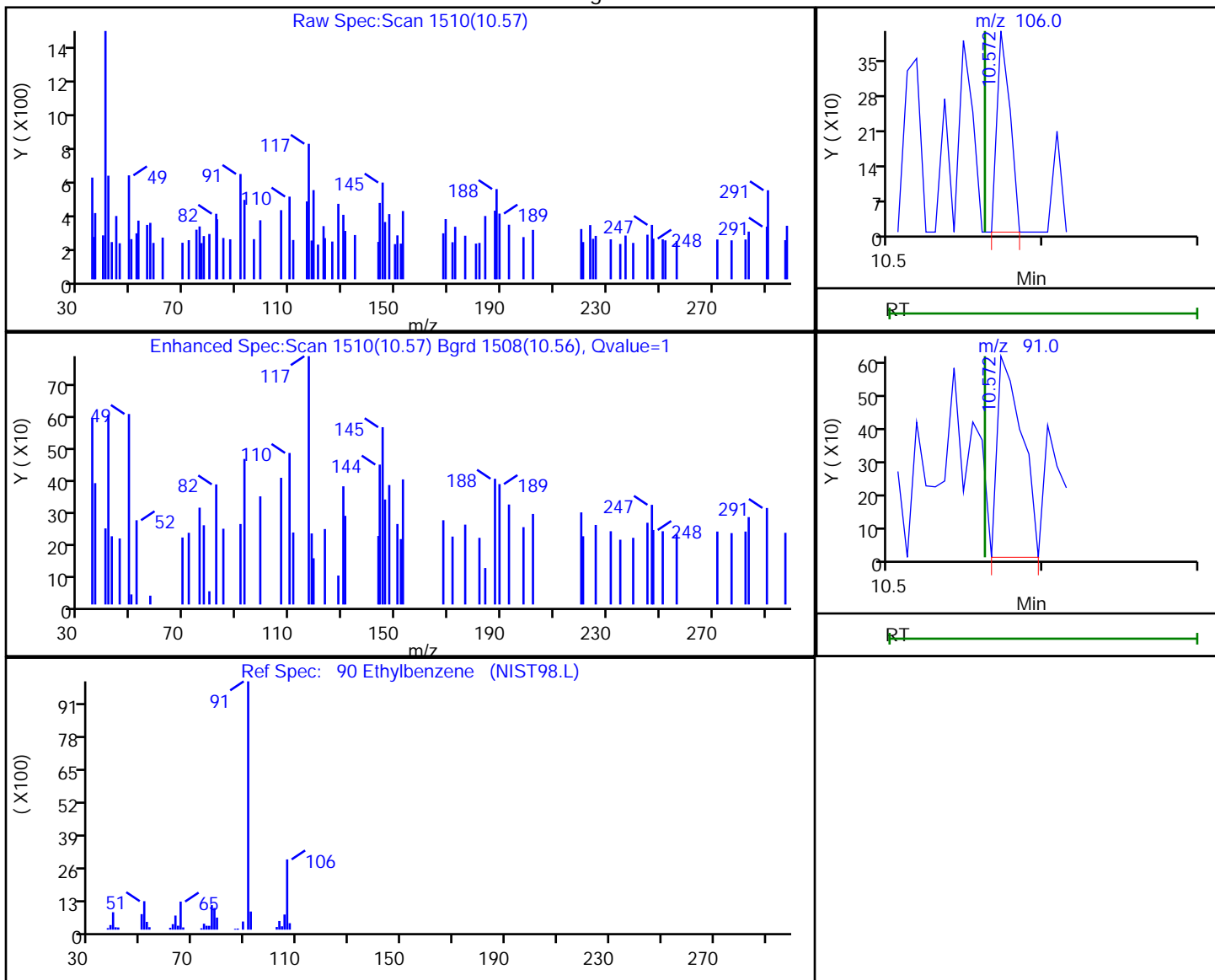
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

90 Ethylbenzene, CAS: 100-41-4

Processing Results



RT	Mass	Response	Amount
10.57	106.00	236	0.053414
10.57	91.00	678	

Reviewer: journtp, 08-May-2020 10:24:29

Audit Action: Marked Compound Undetected

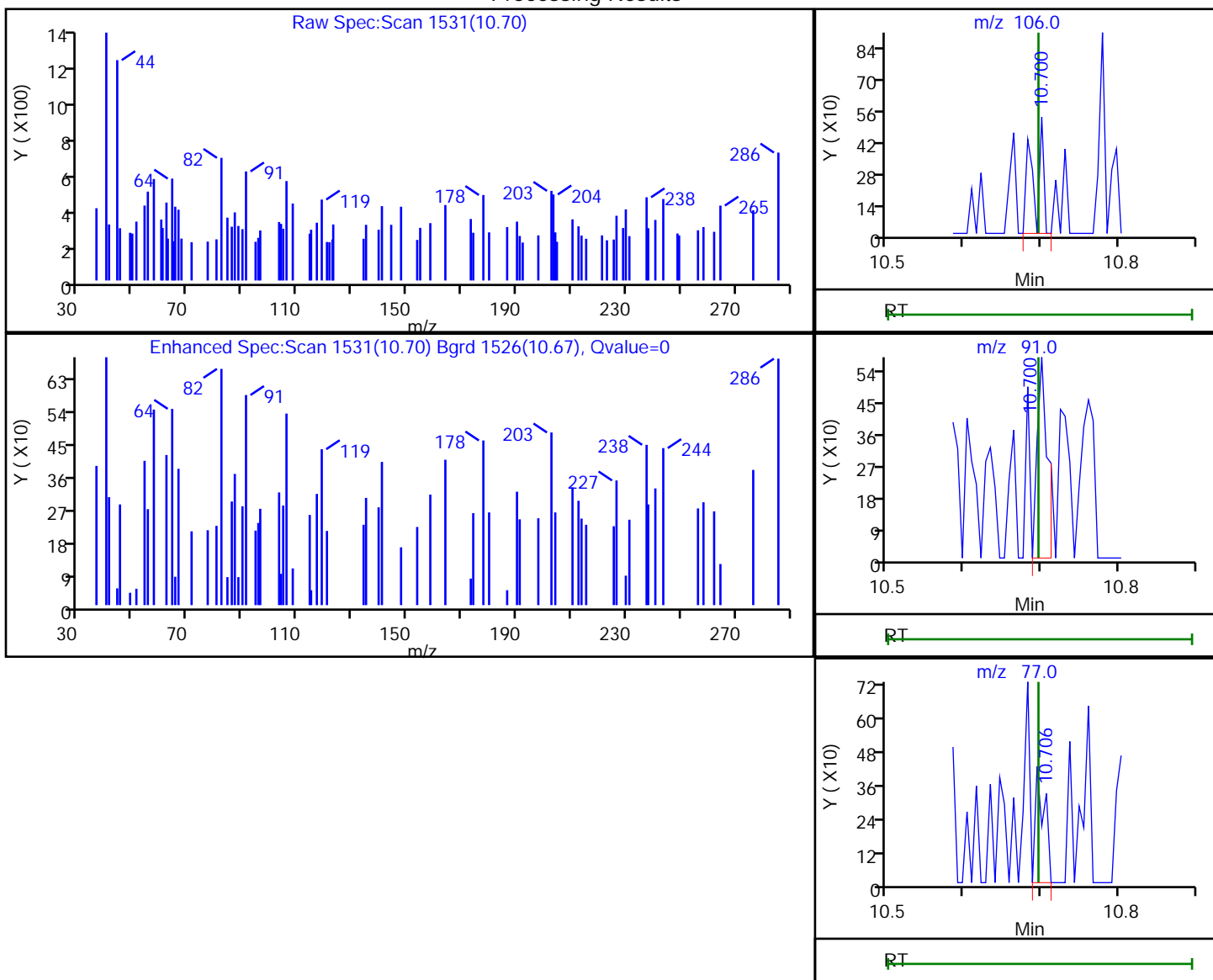
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050420.D  
 Injection Date: 04-May-2020 15:58:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-13 Lab Sample ID: 180-105108-13  
 Client ID: HD-QC1-0/1-1  
 Operator ID: 034635 ALS Bottle#: 20 Worklist Smp#: 20  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

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

Processing Results



RT	Mass	Response	Amount
10.70	106.00	453	0.082242
10.70	91.00	542	
10.71	77.00	347	

Reviewer: journeyp, 08-May-2020 10:24:29  
 Audit Action: Marked Compound Undetected

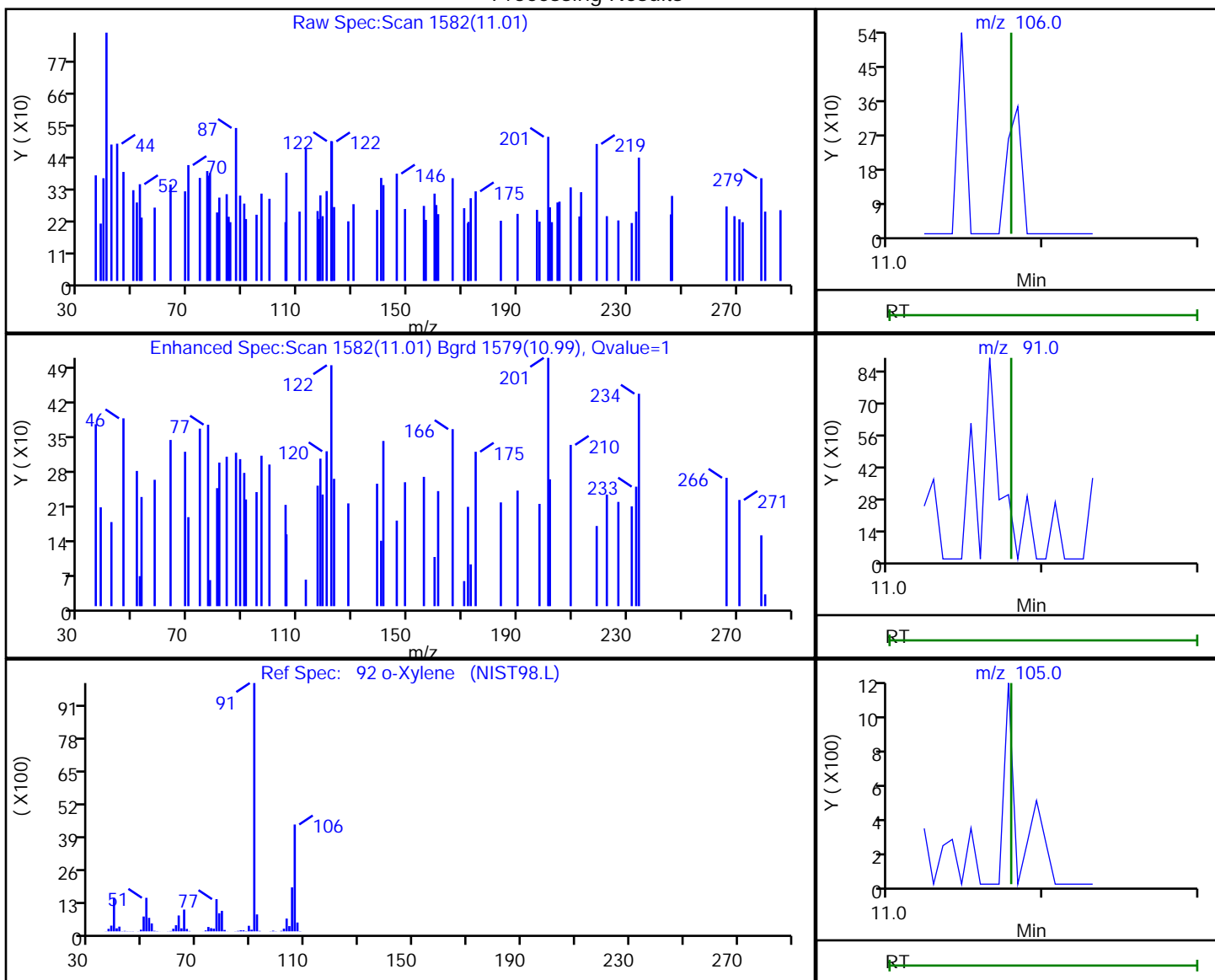
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050420.D  
 Injection Date: 04-May-2020 15:58:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-13 Lab Sample ID: 180-105108-13  
 Client ID: HD-QC1-0/1-1  
 Operator ID: 034635 ALS Bottle#: 20 Worklist Smp#: 20  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

92 o-Xylene, CAS: 95-47-6

Processing Results



RT	Mass	Response	Amount
11.01	106.00	226	0.043957
11.01	91.00	79	
11.00	105.00	179	

Reviewer: journept, 08-May-2020 10:24:29  
 Audit Action: Marked Compound Undetected

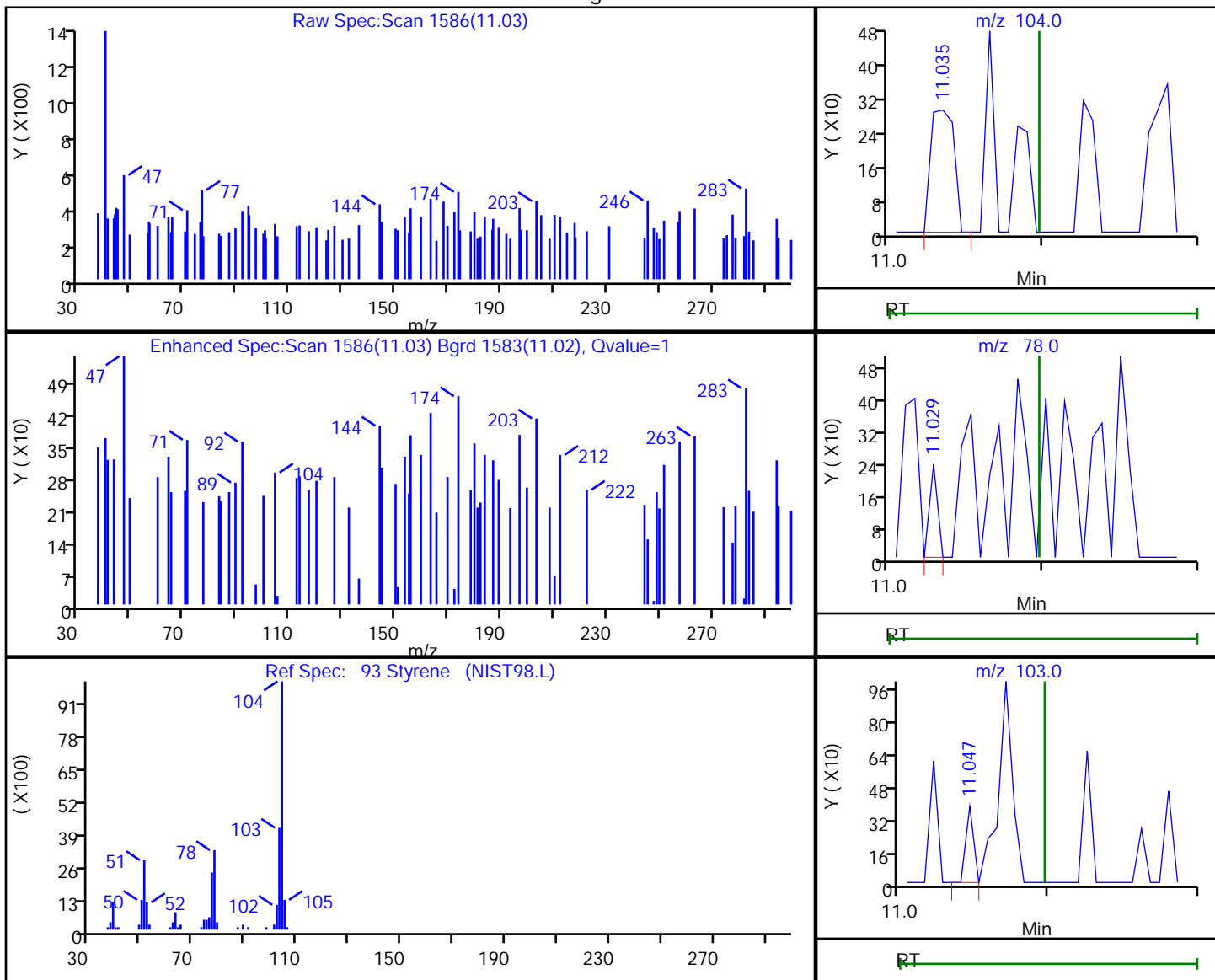
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050420.D  
 Injection Date: 04-May-2020 15:58:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-13 Lab Sample ID: 180-105108-13  
 Client ID: HD-QC1-0/1-1  
 Operator ID: 034635 ALS Bottle#: 20 Worklist Smp#: 20  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

93 Styrene, CAS: 100-42-5

Processing Results



RT	Mass	Response	Amount
11.03	104.00	305	0.034597
11.03	78.00	85	
11.05	103.00	138	

Reviewer: journept, 08-May-2020 10:24:29  
 Audit Action: Marked Compound Undetected

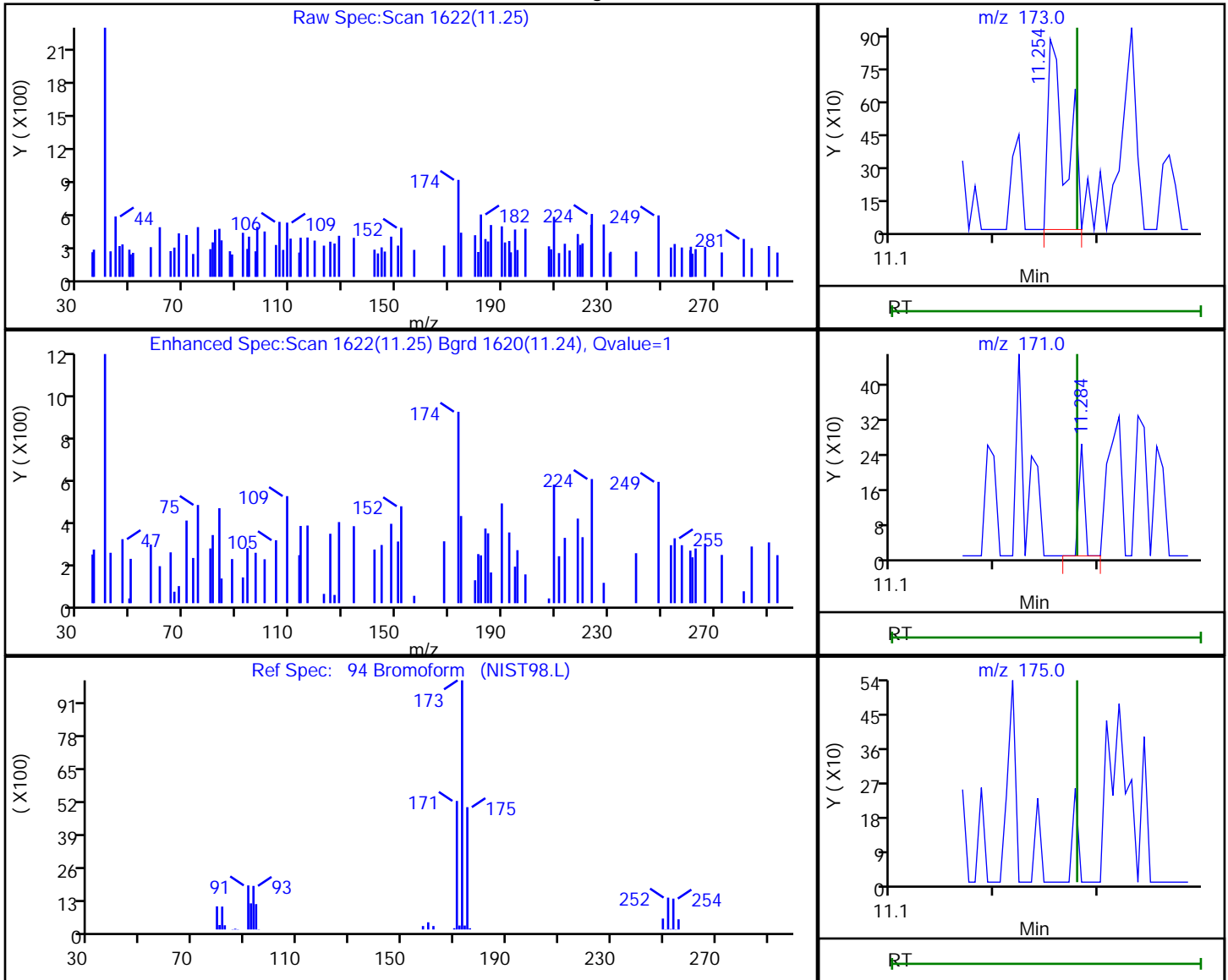
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050420.D  
 Injection Date: 04-May-2020 15:58:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-13 Lab Sample ID: 180-105108-13  
 Client ID: HD-QC1-0/1-1  
 Operator ID: 034635 ALS Bottle#: 20 Worklist Smp#: 20  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

94 Bromoform, CAS: 75-25-2

Processing Results



RT	Mass	Response	Amount
11.25	173.00	1011	0.818913
11.28	171.00	94	
11.28	175.00	0	

Reviewer: journetp, 08-May-2020 10:24:29  
 Audit Action: Marked Compound Undetected

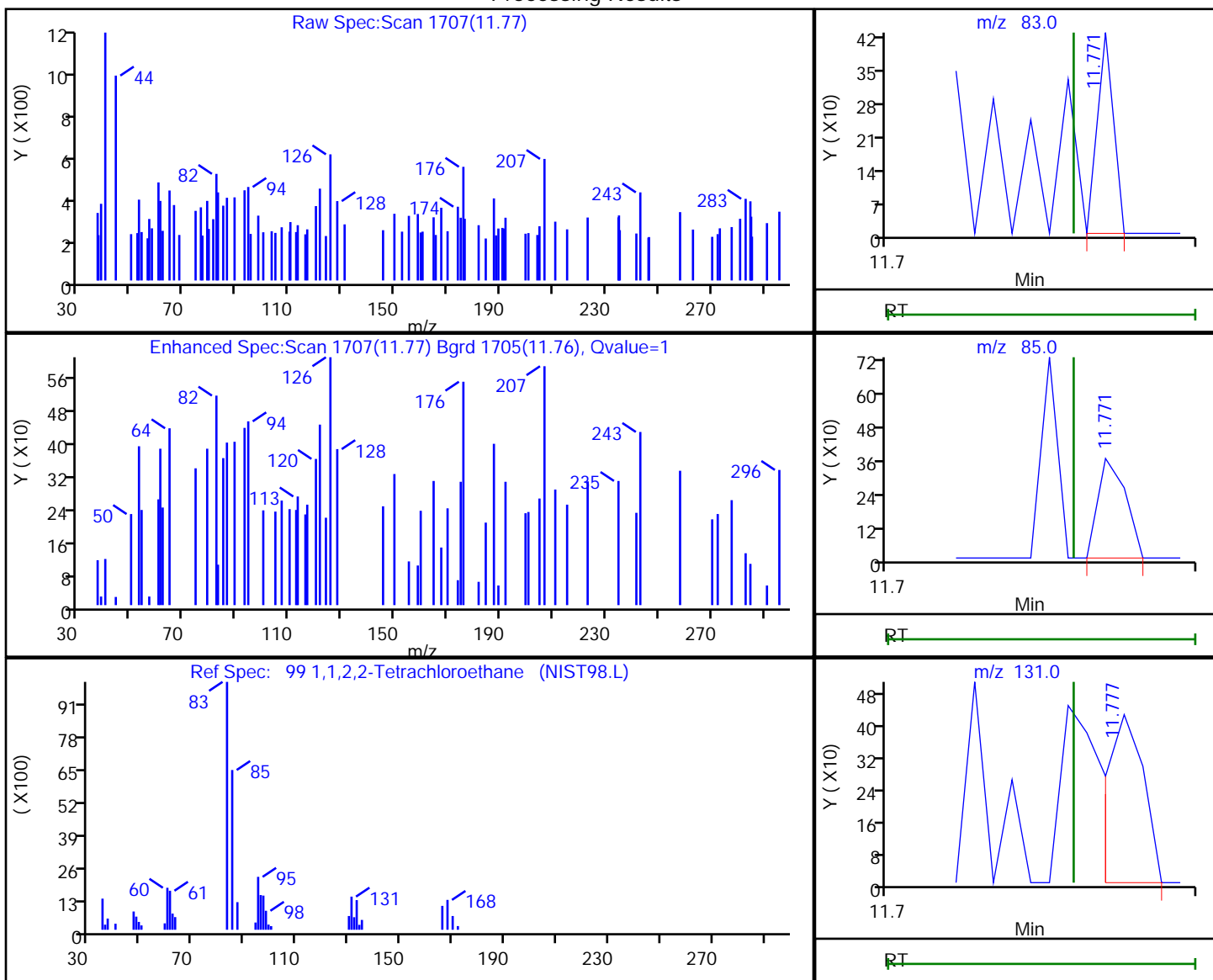
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050420.D  
 Injection Date: 04-May-2020 15:58:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-13 Lab Sample ID: 180-105108-13  
 Client ID: HD-QC1-0/1-1  
 Operator ID: 034635 ALS Bottle#: 20 Worklist Smp#: 20  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

99 1,1,2,2-Tetrachloroethane, CAS: 79-34-5

Processing Results



RT	Mass	Response	Amount
11.77	83.00	155	0.048664
11.77	85.00	224	
11.78	131.00	362	

Reviewer: journeyp, 08-May-2020 10:24:29  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

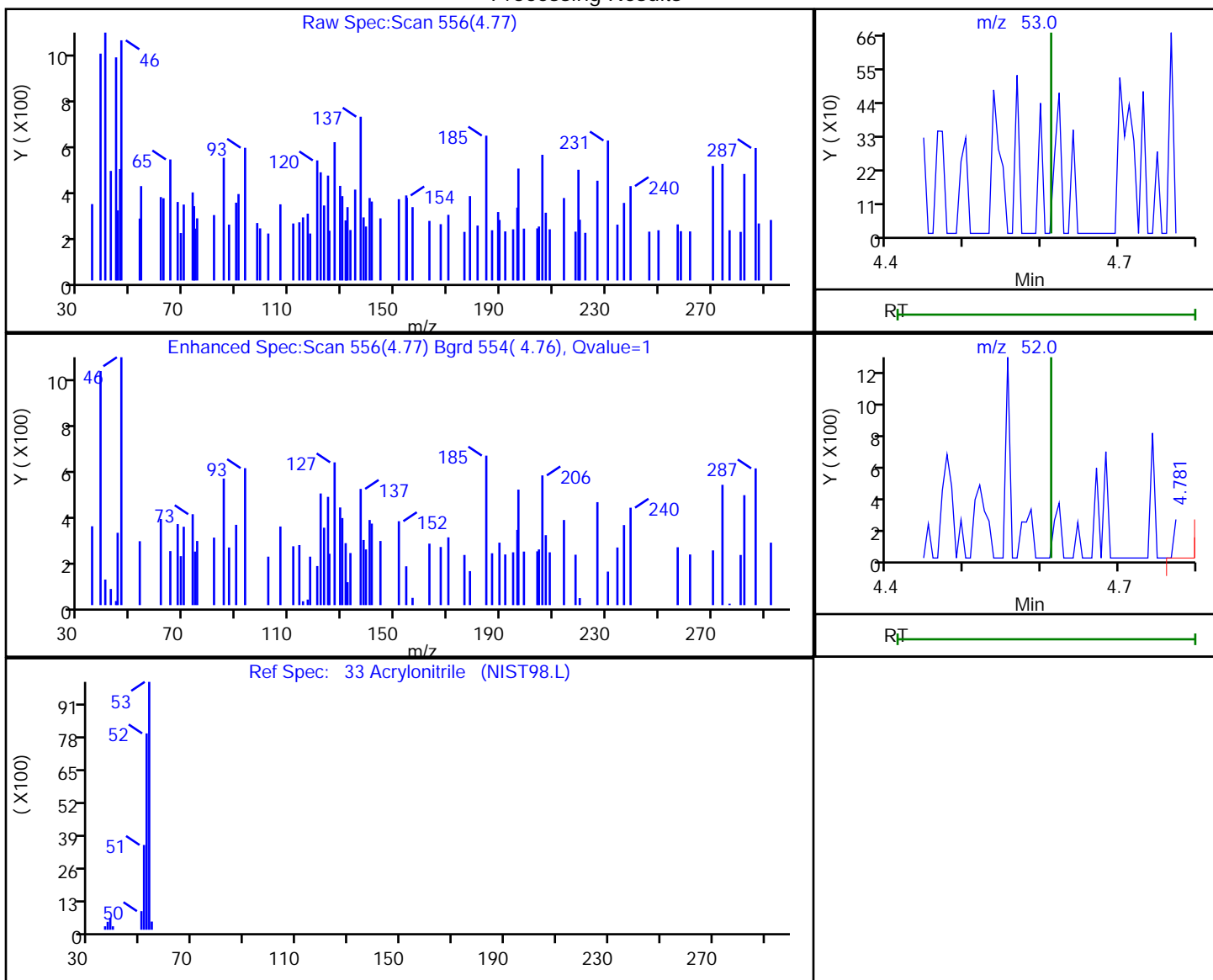


Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050420.D  
 Injection Date: 04-May-2020 15:58:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-13 Lab Sample ID: 180-105108-13  
 Client ID: HD-QC1-0/1-1  
 Operator ID: 034635 ALS Bottle#: 20 Worklist Smp#: 20  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

33 Acrylonitrile, CAS: 107-13-1

Processing Results



RT	Mass	Response	Amount
4.77	53.00	810	0.578191
4.78	52.00	293	

Reviewer: journetp, 08-May-2020 10:24:11

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: HD-QC1-0/1-2 Lab Sample ID: 180-105108-14  
 Matrix: Water Lab File ID: 5050108.D  
 Analysis Method: EPA 8260C Date Collected: 04/28/2020 00:00  
 Sample wt/vol: 5 (mL) Date Analyzed: 05/01/2020 18:07  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-624 ID: 0.18 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 314382 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	ND	^c	1.0	0.90
75-01-4	Vinyl chloride	ND	^c	1.0	0.40
74-83-9	Bromomethane	ND	^c *	1.0	0.89
75-00-3	Chloroethane	ND		1.0	0.90
75-35-4	1,1-Dichloroethene	ND		1.0	0.55
67-64-1	Acetone	7.2		5.0	3.4
75-15-0	Carbon disulfide	ND	^c	1.0	0.88
75-09-2	Methylene Chloride	ND		1.0	0.89
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.67
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.59
75-34-3	1,1-Dichloroethane	ND		1.0	0.31
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.71
74-97-5	Bromochloromethane	ND		1.0	0.63
78-93-3	2-Butanone (MEK)	ND		5.0	2.6
67-66-3	Chloroform	ND		1.0	0.60
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.60
56-23-5	Carbon tetrachloride	ND		1.0	0.88
71-43-2	Benzene	ND		1.0	0.60
107-06-2	1,2-Dichloroethane	ND		1.0	0.57
79-01-6	Trichloroethene	ND		1.0	0.69
78-87-5	1,2-Dichloropropane	ND		1.0	0.66
75-27-4	Bromodichloromethane	ND		1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	3.1
108-88-3	Toluene	ND		1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.58
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.45
127-18-4	Tetrachloroethene	ND		1.0	0.47
591-78-6	2-Hexanone	ND		5.0	3.3
124-48-1	Dibromochloromethane	ND		1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	ND		1.0	0.50
108-90-7	Chlorobenzene	ND		1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.57
100-41-4	Ethylbenzene	ND		1.0	0.51
1330-20-7	Xylenes, Total	ND		2.0	0.89
100-42-5	Styrene	ND		1.0	0.47

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: HD-QC1-0/1-2 Lab Sample ID: 180-105108-14  
 Matrix: Water Lab File ID: 5050108.D  
 Analysis Method: EPA 8260C Date Collected: 04/28/2020 00:00  
 Sample wt/vol: 5 (mL) Date Analyzed: 05/01/2020 18:07  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-624 ID: 0.18 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 314382 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	ND	^c	1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	ND	^c	1.0	0.60
107-13-1	Acrylonitrile	ND		20	7.8

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	83		62-146
2037-26-5	Toluene-d8 (Surr)	75		75-120
460-00-4	4-Bromofluorobenzene (Surr)	91		64-120
1868-53-7	Dibromofluoromethane (Surr)	98	^c	71-132

Eurofins TestAmerica, Pittsburgh  
Target Compound Quantitation Report

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050108.D  
 Lims ID: 180-105108-B-14  
 Client ID: HD-QC1-0/1-2  
 Sample Type: Client  
 Inject. Date: 01-May-2020 18:07:30 ALS Bottle#: 8 Worklist Smp#: 8  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: 180-0031777-008  
 Operator ID: 034635 Instrument ID: CHHP5  
 Method: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\MMSVOA\_LL\_CHHP5.m  
 Limit Group: VOA 8260C\_D ICAL  
 Last Update: 03-May-2020 16:03:33 Calib Date: 03-Apr-2020 19:09:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP5\20200403-31442.b\5040310.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: CTX0317

First Level Reviewer: journetp

Date: 01-May-2020 18:46:43

Compound	Sig	RT (min.)	Exp RT (min.)	Diff RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.362	4.371	-0.009	0	369104	1000.0	
* 2 Fluorobenzene (IS)	96	7.349	7.345	0.004	99	377811	50.0	
* 3 Chlorobenzene-d5	119	10.439	10.436	0.003	84	149981	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.775	12.772	0.003	96	248305	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.625	6.628	-0.003	93	105795	49.1	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.996	6.993	0.003	0	127354	41.6	
\$ 7 Toluene-d8 (Surr)	98	8.985	8.988	-0.003	93	458118	37.7	
\$ 8 4-Bromofluorobenzene (Surr	95	11.619	11.616	0.003	89	208068	45.3	
12 Chloromethane	50		1.851				ND	U
13 Vinyl chloride	62		1.961				ND	U
15 Bromomethane	94		2.277				ND	U
16 Chloroethane	64		2.423				ND	U
22 1,1-Dichloroethene	96		3.390				ND	U
24 Acetone	43	3.528	3.512	0.016	99	46761	35.8	
26 Carbon disulfide	76		3.701				ND	U
31 Methylene Chloride	84		4.218				ND	U
33 Acrylonitrile	53		4.613				ND	U
34 trans-1,2-Dichloroethene	96		4.631				ND	U
35 Methyl tert-butyl ether	73		4.656				ND	U
37 1,1-Dichloroethane	63		5.264				ND	U
45 cis-1,2-Dichloroethene	96		6.018				ND	U
46 2-Butanone (MEK)	43		6.031				ND	U
49 Chlorobromomethane	128		6.298				ND	U
52 Chloroform	83		6.444				ND	U
53 1,1,1-Trichloroethane	97		6.596				ND	U
56 Carbon tetrachloride	117		6.761				ND	U
58 Benzene	78		6.998				ND	U
59 1,2-Dichloroethane	62		7.071				ND	U
64 Trichloroethene	130		7.728				ND	U
67 1,2-Dichloropropane	63		7.996				ND	U
71 Dichlorobromomethane	83		8.281				ND	U
74 cis-1,3-Dichloropropene	75		8.726				ND	U

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
75 4-Methyl-2-pentanone (MIBK	43		8.890				ND	U
76 Toluene	91		9.048				ND	U
77 trans-1,3-Dichloropropene	75		9.303				ND	U
79 1,1,2-Trichloroethane	97		9.498				ND	U
80 Tetrachloroethene	164		9.559				ND	U
82 2-Hexanone	43		9.717				ND	U
84 Chlorodibromomethane	129		9.869				ND	U
85 Ethylene Dibromide	107		9.973				ND	U
87 Chlorobenzene	112		10.465				ND	U
89 1,1,1,2-Tetrachloroethane	131		10.557				ND	U
90 Ethylbenzene	106		10.563				ND	U
91 m-Xylene & p-Xylene	106		10.697				ND	U
92 o-Xylene	106		11.074				ND	U
93 Styrene	104		11.098				ND	U
94 Bromoform	173		11.281				ND	U
99 1,1,2,2-Tetrachloroethane	83		11.755				ND	U
S 133 Xylenes, Total	106		1.000				ND	

**QC Flag Legend**

Review Flags

U - Marked Undetected

**Reagents:**

voaWI/SHP5\_00016

Amount Added: 5.00

Units: uL

Run Reagent

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050108.D

Injection Date: 01-May-2020 18:07:30

Instrument ID: CHHP5

Operator ID: 034635

Lims ID: 180-105108-B-14

Lab Sample ID: 180-105108-14

Worklist Smp#: 8

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

Purge Vol: 5.000 mL

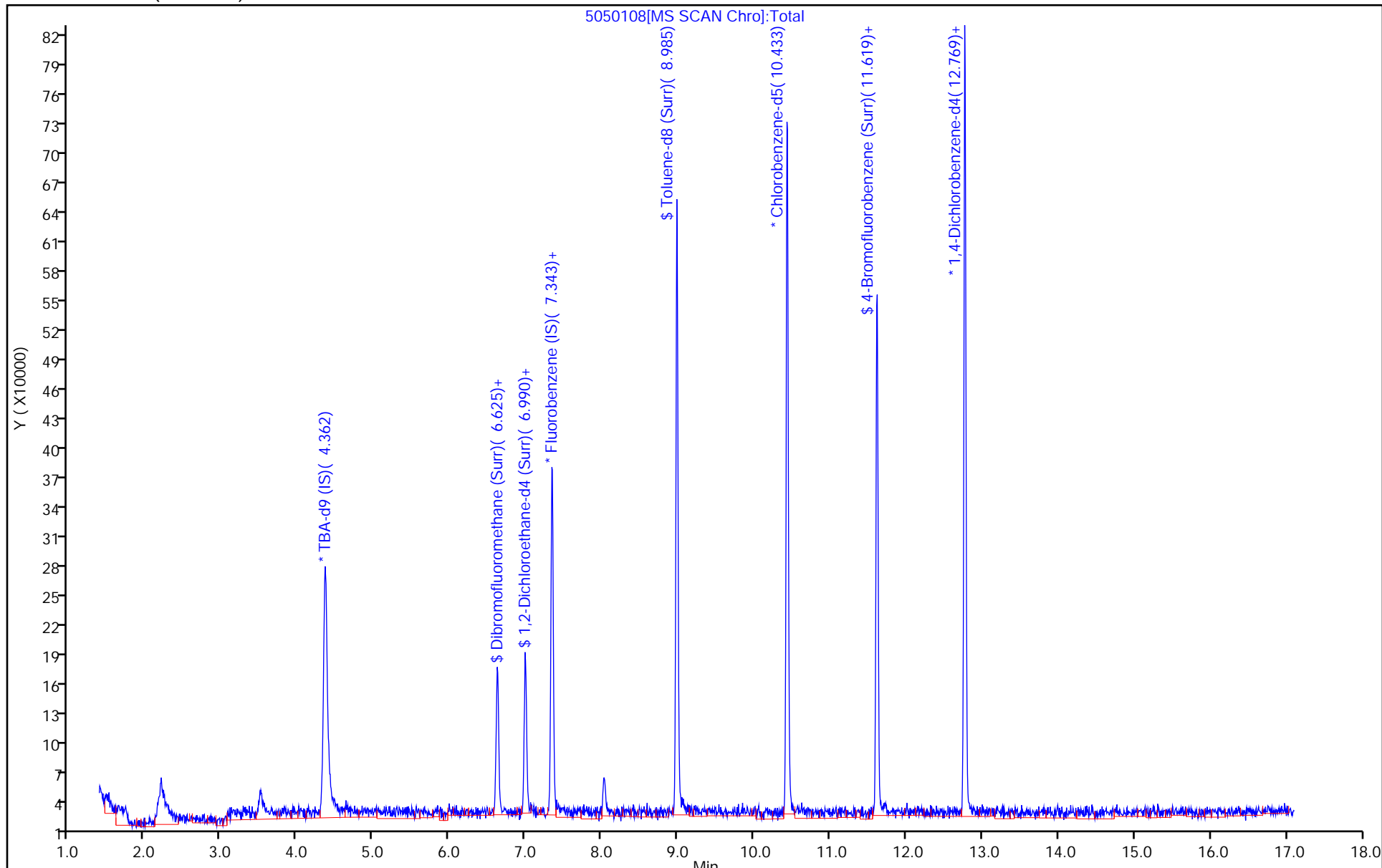
Dil. Factor: 1.0000

ALS Bottle#: 8

Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Pittsburgh  
Recovery Report

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050108.D  
 Lims ID: 180-105108-B-14  
 Client ID: HD-QC1-0/1-2  
 Sample Type: Client  
 Inject. Date: 01-May-2020 18:07:30 ALS Bottle#: 8 Worklist Smp#: 8  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: 180-0031777-008  
 Operator ID: 034635 Instrument ID: CHHP5  
 Method: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\MMSVOA\_LL\_CHHP5.m  
 Limit Group: VOA 8260C\_D ICAL  
 Last Update: 03-May-2020 16:03:33 Calib Date: 03-Apr-2020 19:09:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP5\20200403-31442.b\5040310.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: CTX0317

First Level Reviewer: journetp

Date: 01-May-2020 18:46:43

Compound	Amount Added	Amount Recovered	% Rec.
\$ 5 Dibromofluoromethane (Surr)	50.0	49.1	98.16
\$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	41.6	83.27
\$ 7 Toluene-d8 (Surr)	50.0	37.7	75.47
\$ 8 4-Bromofluorobenzene (Surr)	50.0	45.3	90.69

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050108.D

Injection Date: 01-May-2020 18:07:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-14

Lab Sample ID: 180-105108-14

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

Operator ID: 034635

ALS Bottle#: 8 Worklist Smp#: 8

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

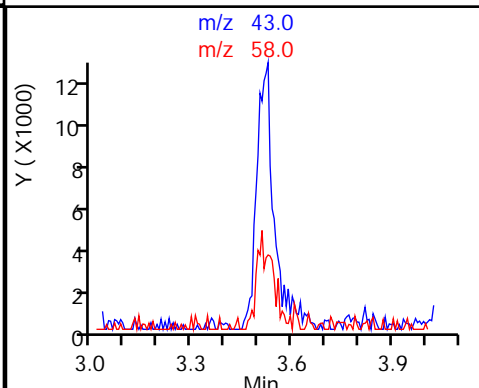
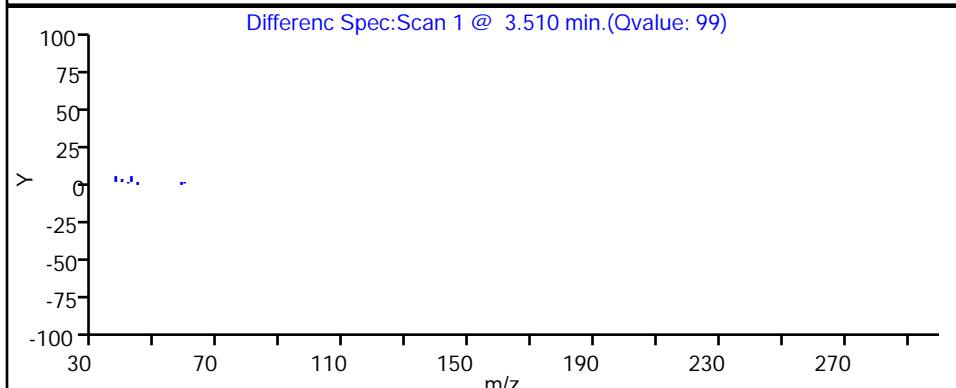
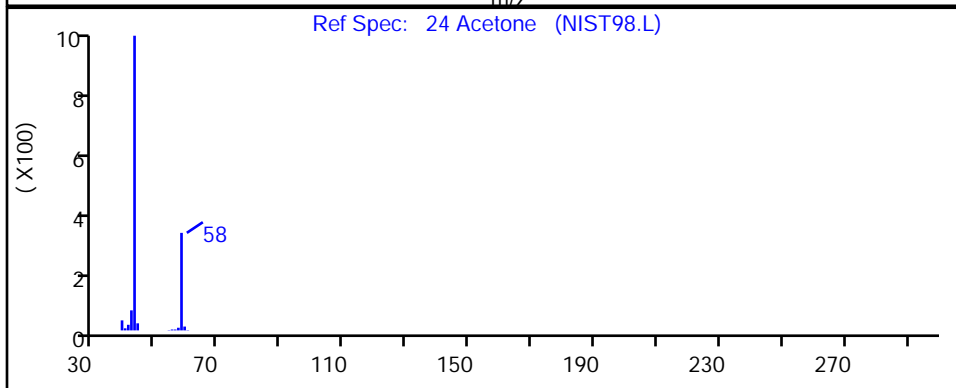
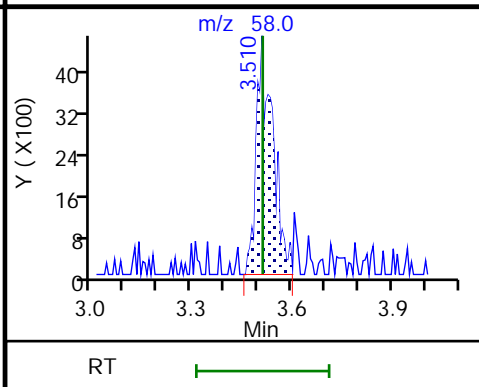
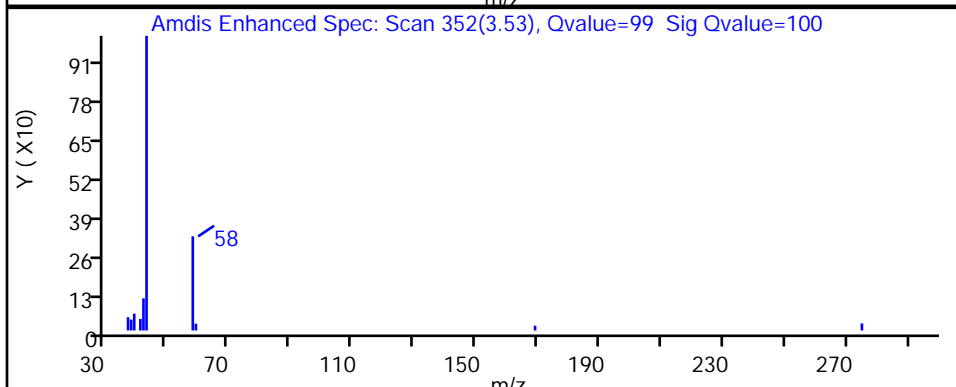
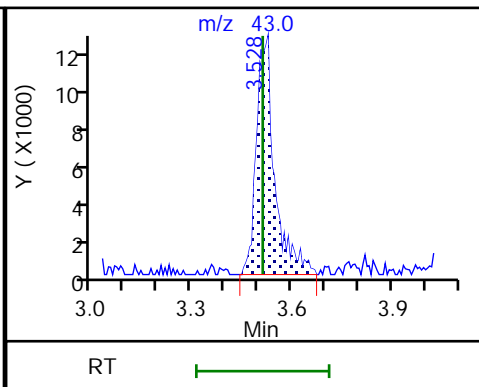
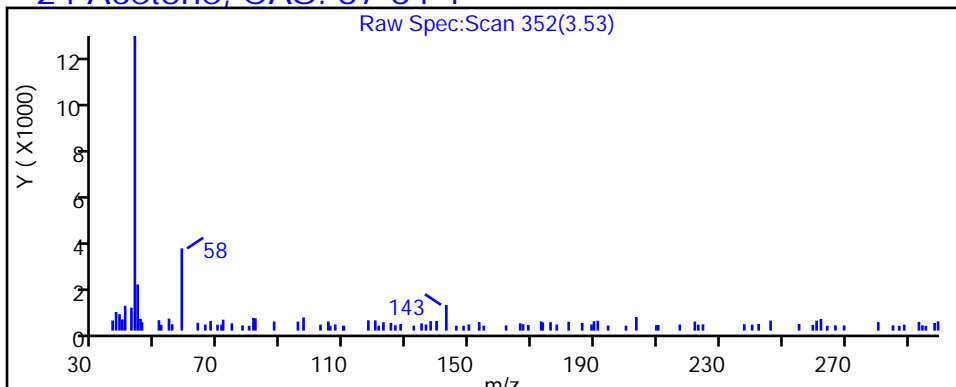
Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

24 Acetone, CAS: 67-64-1



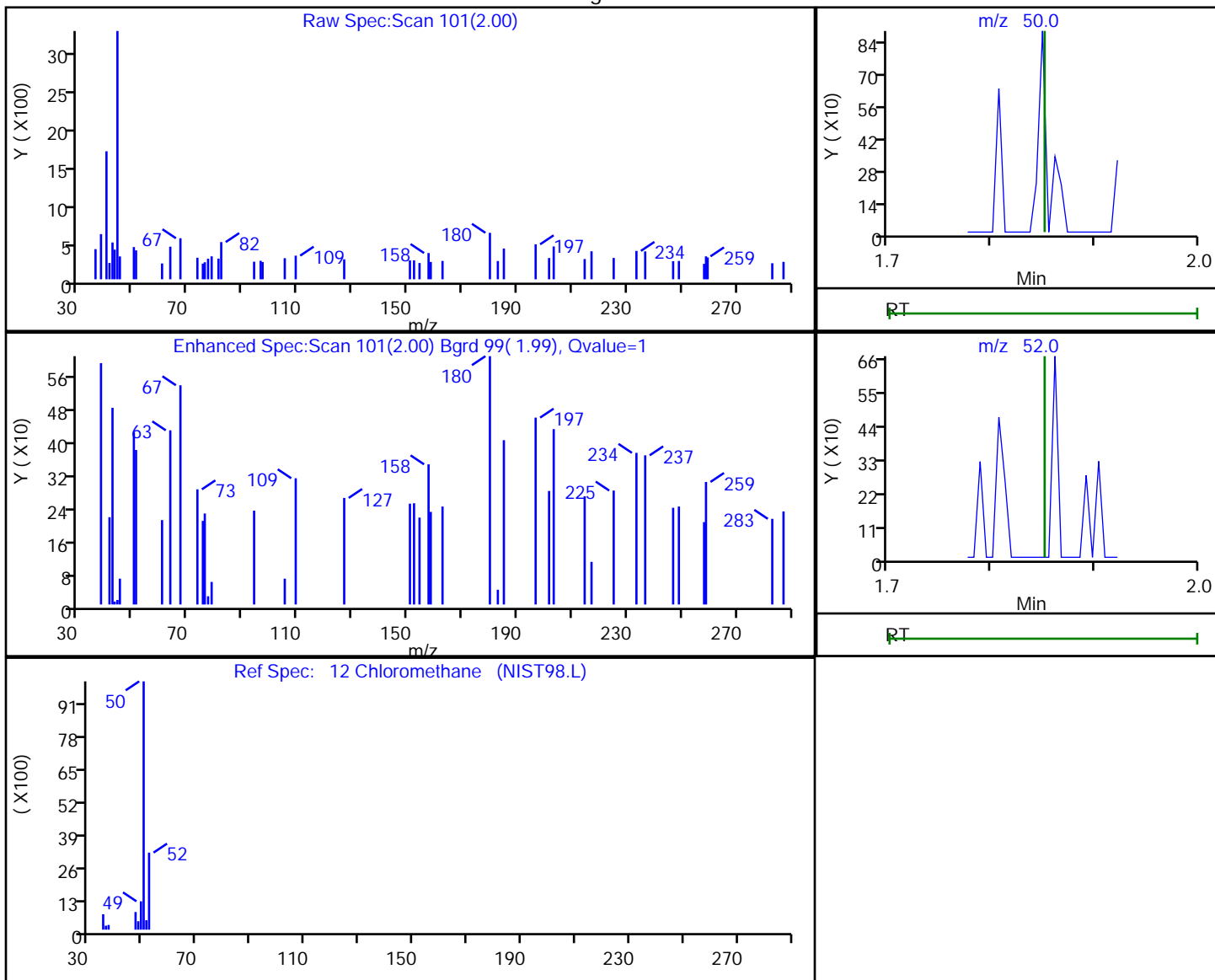


Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050108.D  
Injection Date: 01-May-2020 18:07:30 Instrument ID: CHHP5  
Lims ID: 180-105108-B-14 Lab Sample ID: 180-105108-14  
Client ID: HD-QC1-0/1-2  
Operator ID: 034635 ALS Bottle#: 8 Worklist Smp#: 8  
Purge Vol: 5.000 mL Dil. Factor: 1.0000  
Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
Column: DB-624 (0.18 mm) Detector: MS SCAN

12 Chloromethane, CAS: 74-87-3

Processing Results



RT	Mass	Response	Amount
2.00	50.00	342	0.092793
2.01	52.00	119	

Reviewer: journetp, 01-May-2020 18:45:47  
Audit Action: Marked Compound Undetected

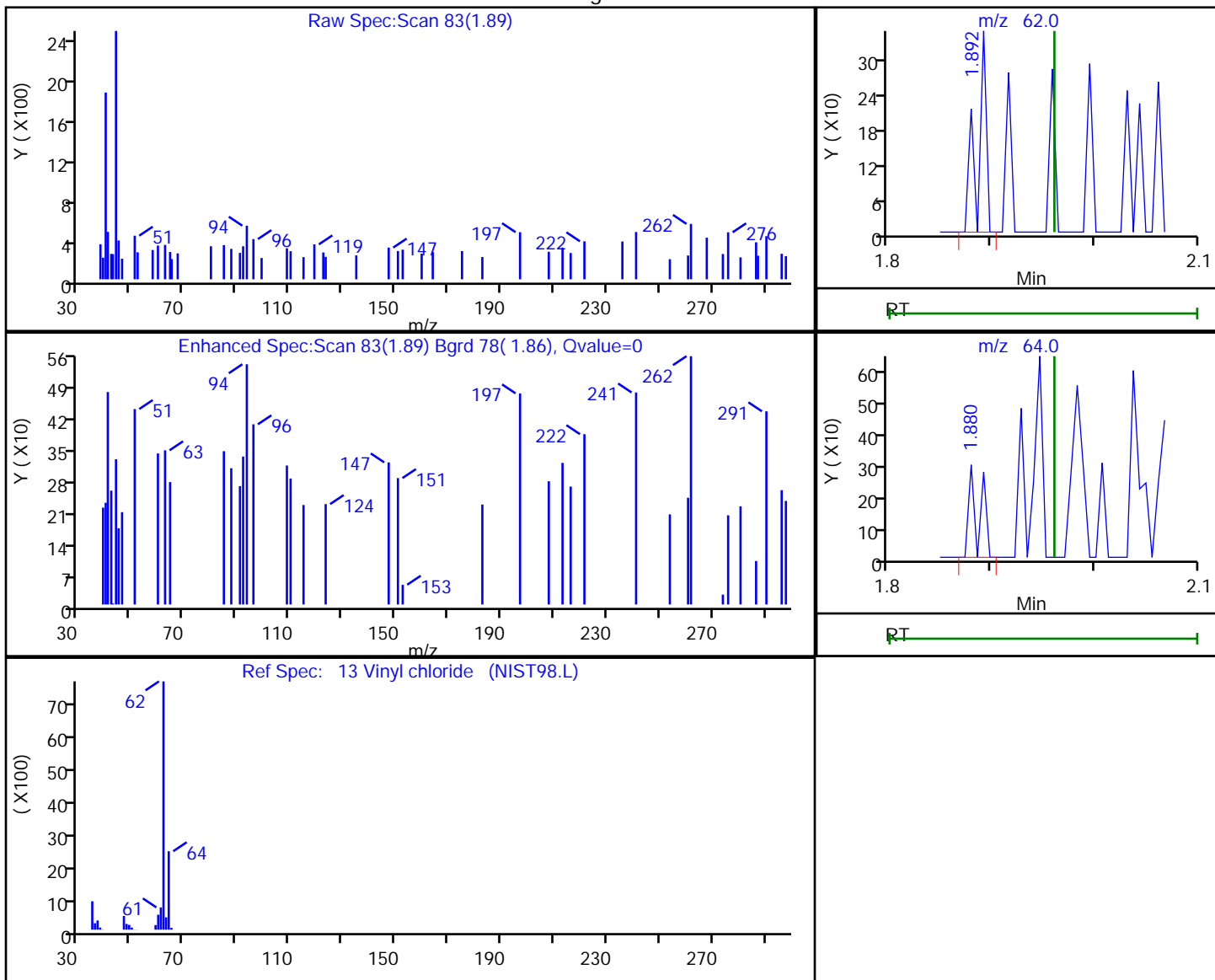
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050108.D  
 Injection Date: 01-May-2020 18:07:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-14 Lab Sample ID: 180-105108-14  
 Client ID: HD-QC1-0/1-2  
 Operator ID: 034635 ALS Bottle#: 8 Worklist Smp#: 8  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

13 Vinyl chloride, CAS: 75-01-4

Processing Results



RT	Mass	Response	Amount
1.89	62.00	202	0.061544
1.88	64.00	208	

Reviewer: journetp, 01-May-2020 18:45:47  
 Audit Action: Marked Compound Undetected

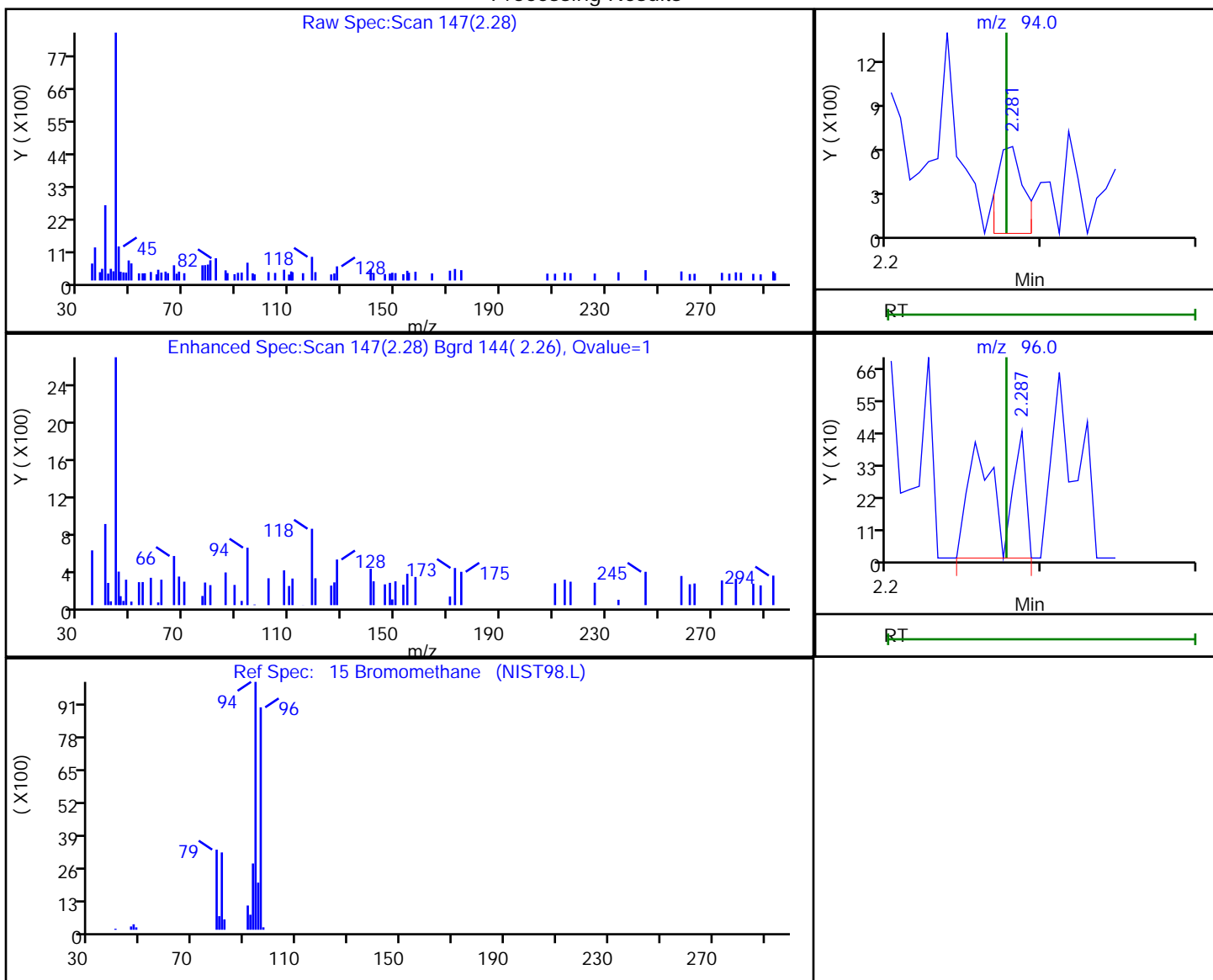
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050108.D  
 Injection Date: 01-May-2020 18:07:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-14 Lab Sample ID: 180-105108-14  
 Client ID: HD-QC1-0/1-2  
 Operator ID: 034635 ALS Bottle#: 8 Worklist Smp#: 8  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

15 Bromomethane, CAS: 74-83-9

Processing Results



RT	Mass	Response	Amount
2.28	94.00	737	0.392173
2.29	96.00	693	

Reviewer: journtp, 01-May-2020 18:45:47

Audit Action: Marked Compound Undetected

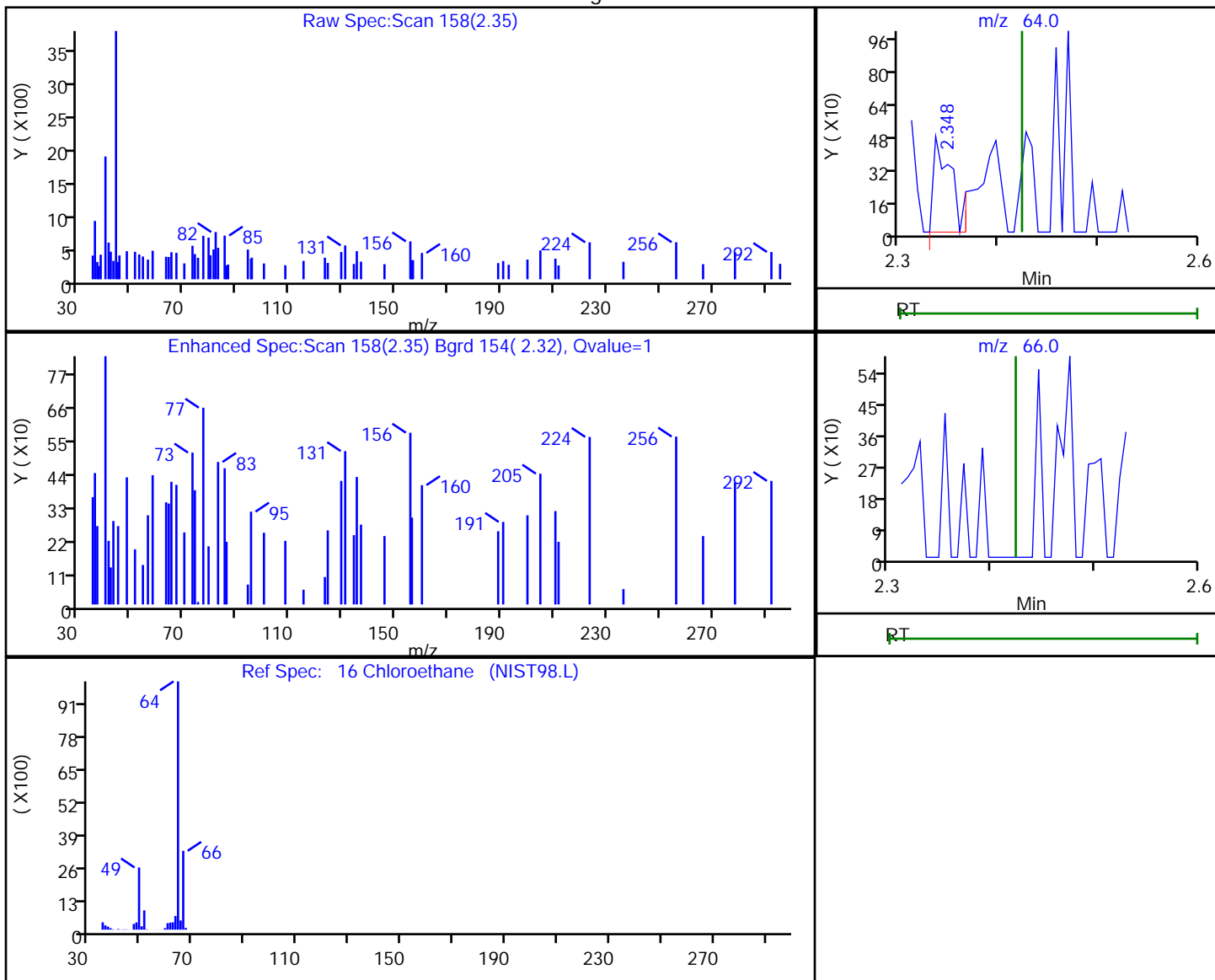
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050108.D  
 Injection Date: 01-May-2020 18:07:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-14 Lab Sample ID: 180-105108-14  
 Client ID: HD-QC1-0/1-2  
 Operator ID: 034635 ALS Bottle#: 8 Worklist Smp#: 8  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

16 Chloroethane, CAS: 75-00-3

Processing Results



RT	Mass	Response	Amount
2.35	64.00	596	0.267657
2.33	66.00	477	

Reviewer: journetp, 01-May-2020 18:45:47

Audit Action: Marked Compound Undetected

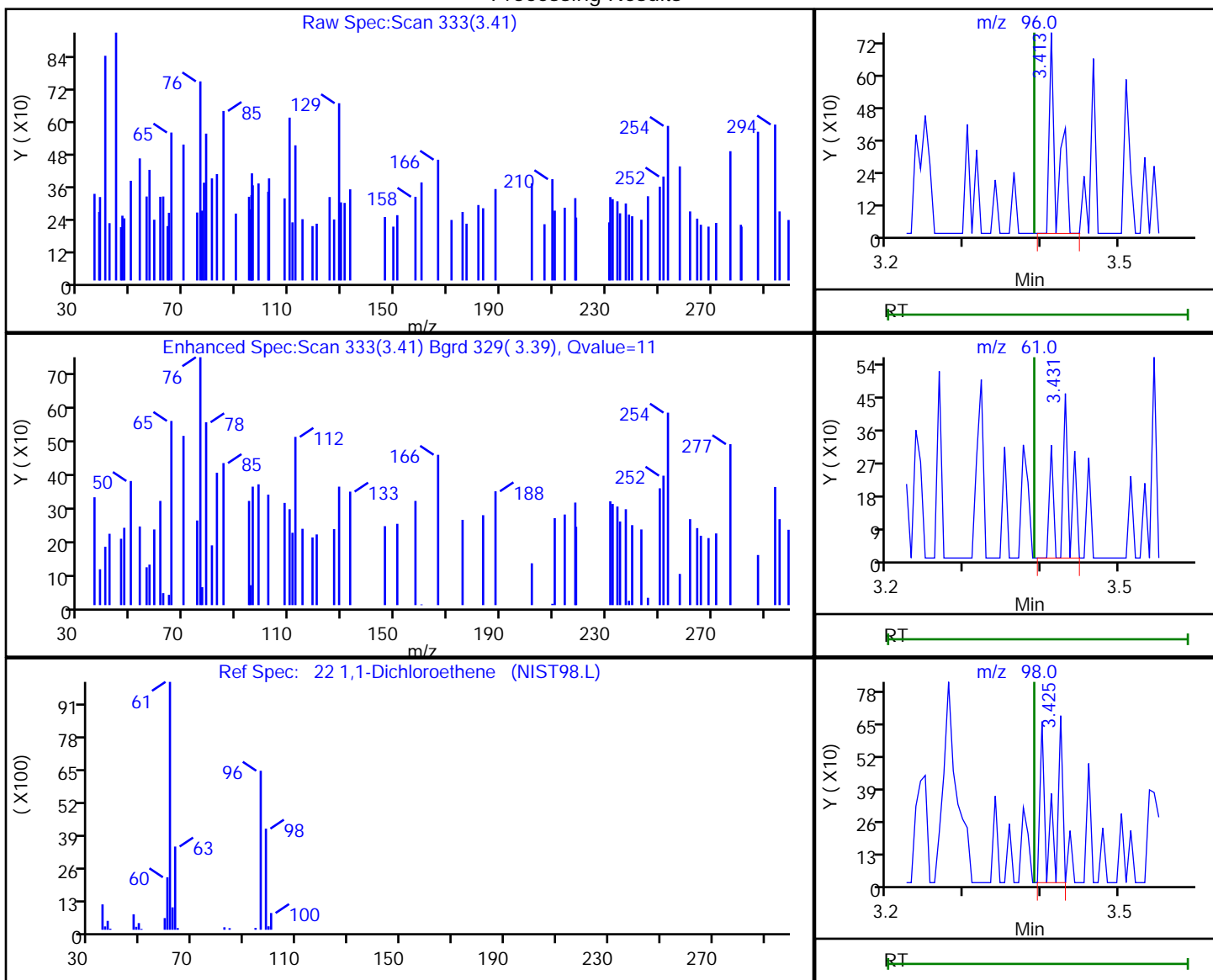
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050108.D  
 Injection Date: 01-May-2020 18:07:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-14 Lab Sample ID: 180-105108-14  
 Client ID: HD-QC1-0/1-2  
 Operator ID: 034635 ALS Bottle#: 8 Worklist Smp#: 8  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

22 1,1-Dichloroethene, CAS: 75-35-4

Processing Results



RT	Mass	Response	Amount
3.41	96.00	539	-1.681896
3.43	61.00	391	
3.42	98.00	622	

Reviewer: journeyp, 01-May-2020 18:45:48  
 Audit Action: Marked Compound Undetected

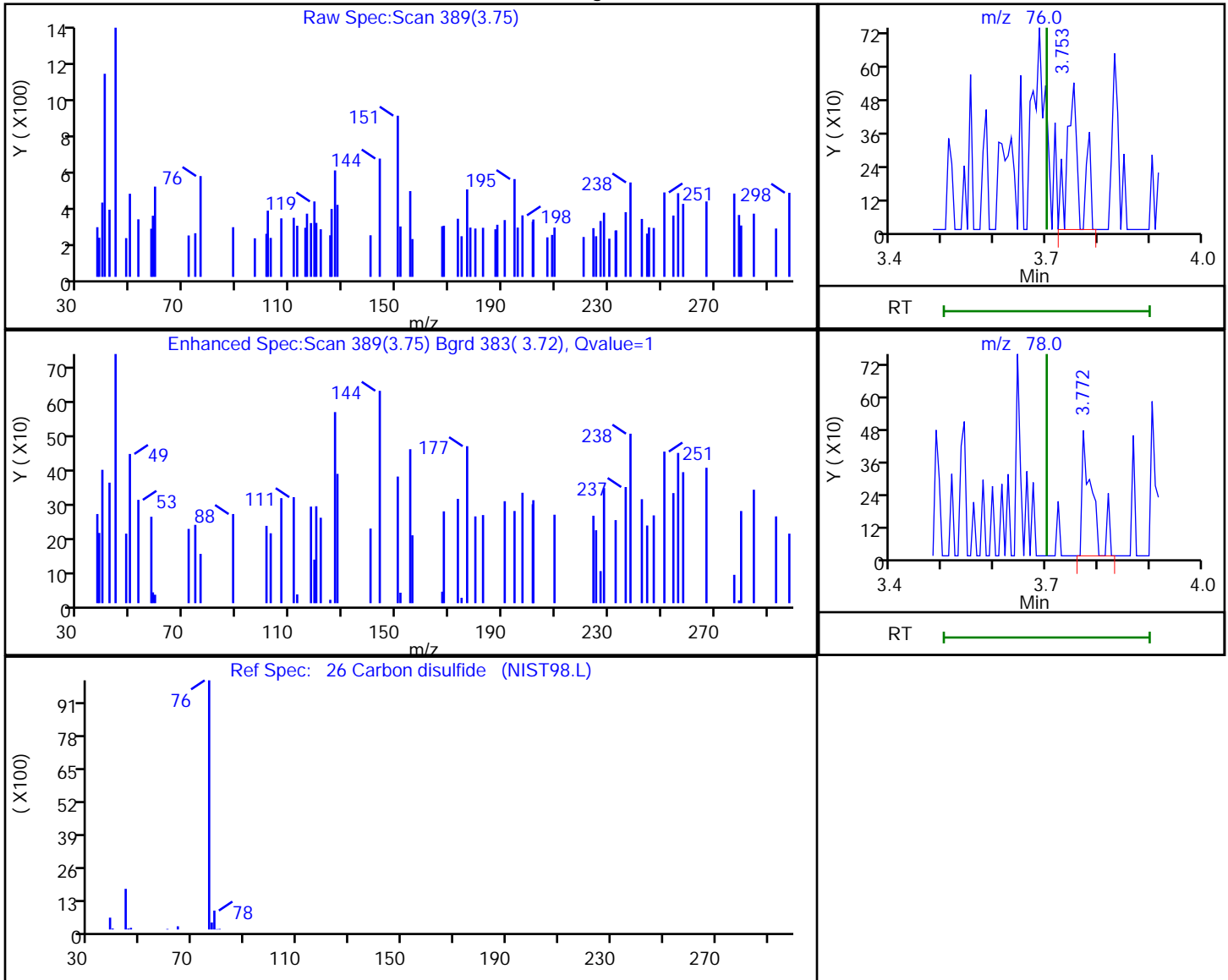
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050108.D  
 Injection Date: 01-May-2020 18:07:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-14 Lab Sample ID: 180-105108-14  
 Client ID: HD-QC1-0/1-2  
 Operator ID: 034635 ALS Bottle#: 8 Worklist Smp#: 8  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

26 Carbon disulfide, CAS: 75-15-0

Processing Results



RT	Mass	Response	Amount
3.75	76.00	885	0.208395
3.77	78.00	622	

Reviewer: journetp, 01-May-2020 18:45:55  
Audit Action: Marked Compound Undetected

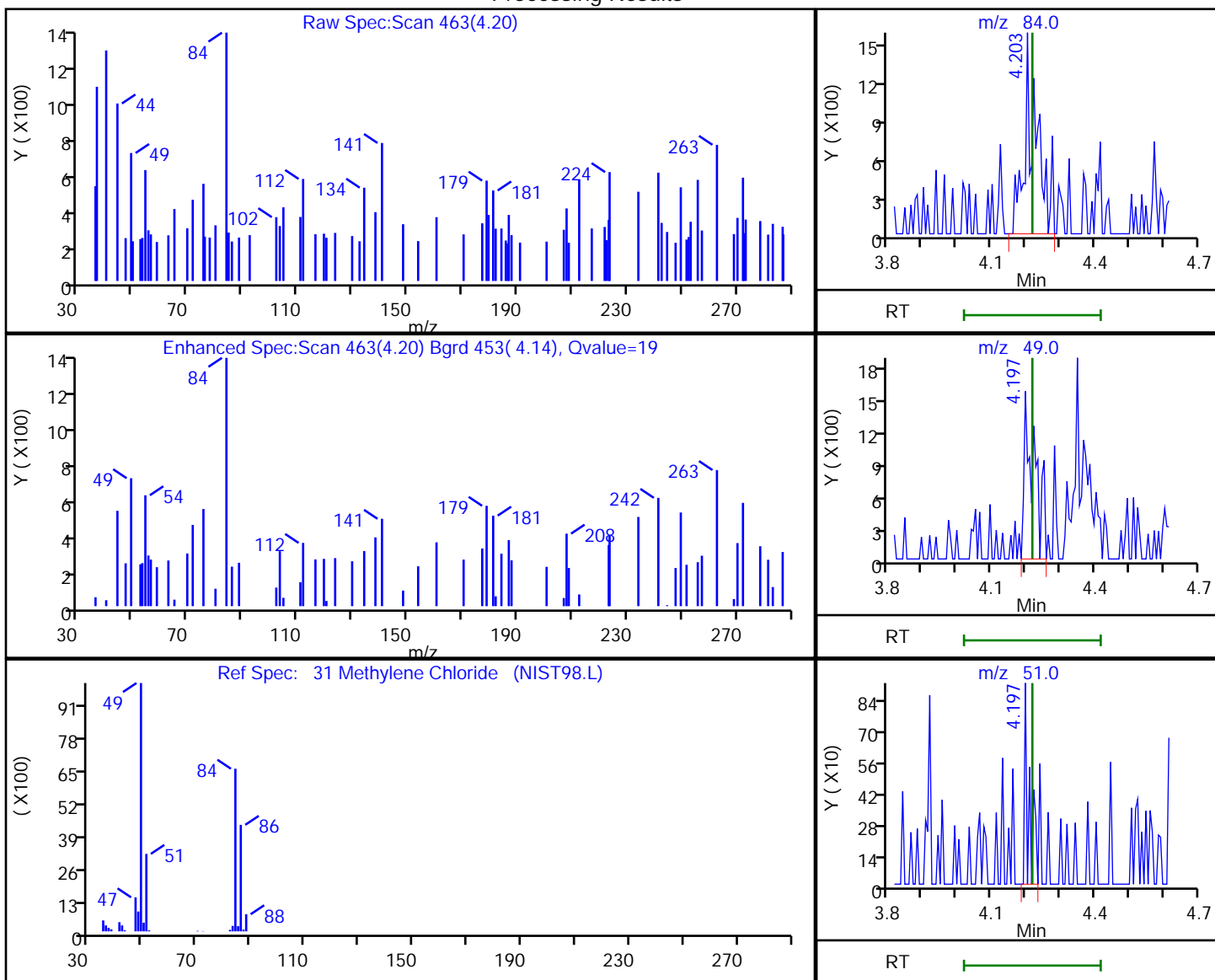
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050108.D  
 Injection Date: 01-May-2020 18:07:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-14 Lab Sample ID: 180-105108-14  
 Client ID: HD-QC1-0/1-2  
 Operator ID: 034635 ALS Bottle#: 8 Worklist Smp#: 8  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

31 Methylene Chloride, CAS: 75-09-2

Processing Results



RT	Mass	Response	Amount
4.20	84.00	3989	-0.062982
4.20	49.00	3366	
4.20	51.00	794	

Reviewer: journept, 01-May-2020 18:45:55  
 Audit Action: Marked Compound Undetected

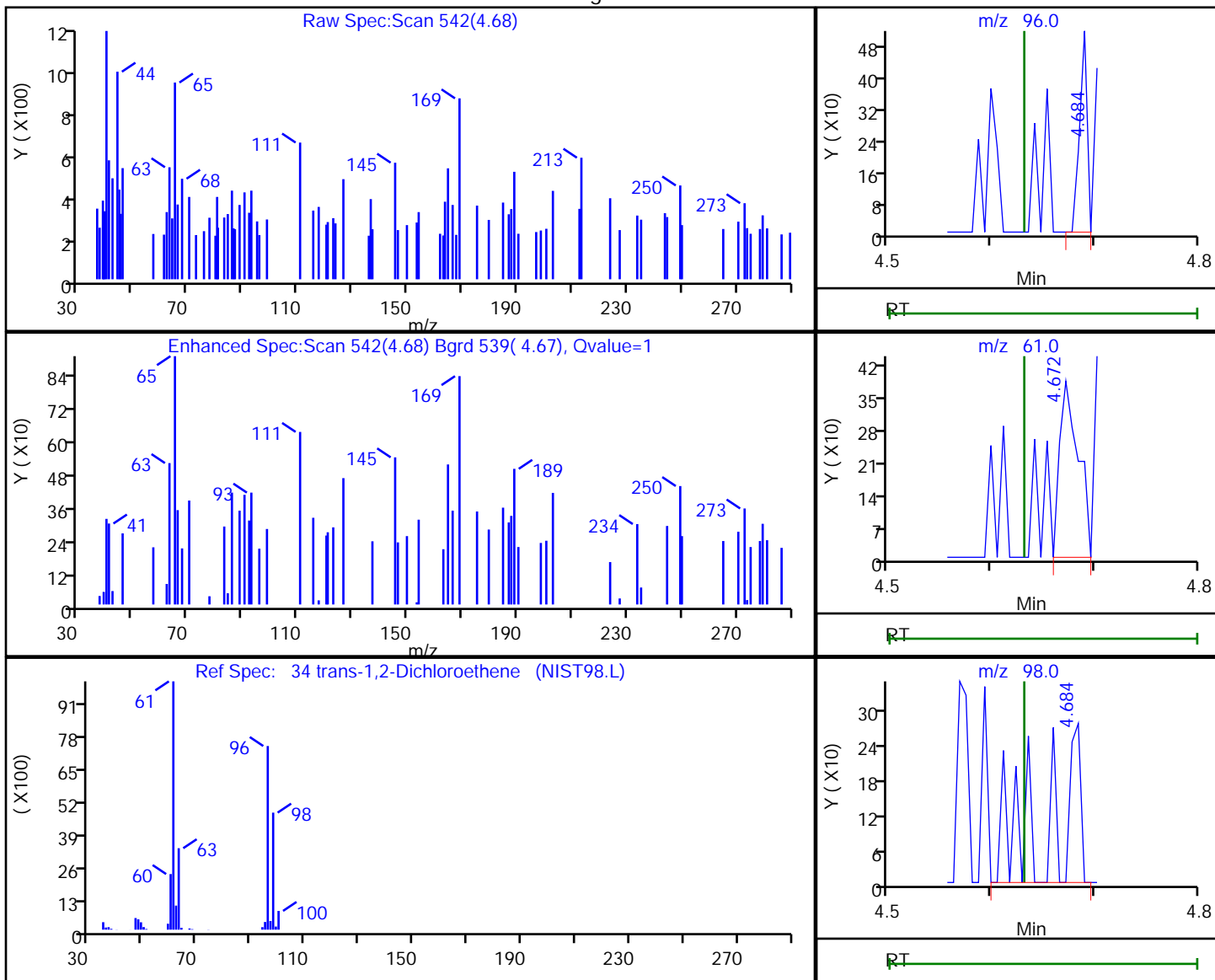
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050108.D  
 Injection Date: 01-May-2020 18:07:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-14 Lab Sample ID: 180-105108-14  
 Client ID: HD-QC1-0/1-2  
 Operator ID: 034635 ALS Bottle#: 8 Worklist Smp#: 8  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

34 trans-1,2-Dichloroethene, CAS: 156-60-5

Processing Results



RT	Mass	Response	Amount
4.68	96.00	261	0.126377
4.67	61.00	481	
4.68	98.00	538	

Reviewer: journeyp, 01-May-2020 18:45:55  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

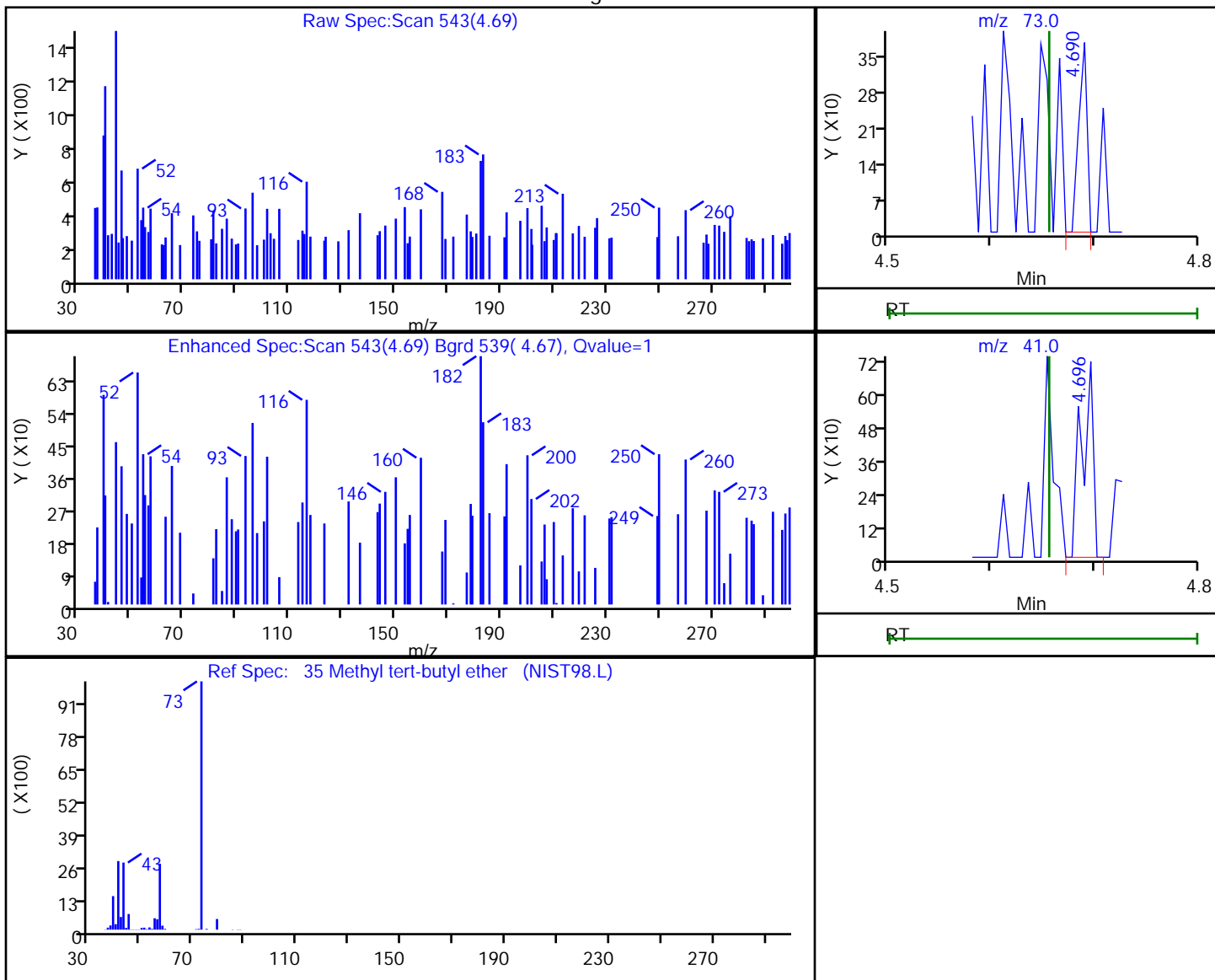


Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050108.D  
Injection Date: 01-May-2020 18:07:30 Instrument ID: CHHP5  
Lims ID: 180-105108-B-14 Lab Sample ID: 180-105108-14  
Client ID: HD-QC1-0/1-2  
Operator ID: 034635 ALS Bottle#: 8 Worklist Smp#: 8  
Purge Vol: 5.000 mL Dil. Factor: 1.0000  
Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
Column: DB-624 (0.18 mm) Detector: MS SCAN

35 Methyl tert-butyl ether, CAS: 1634-04-4

Processing Results



RT	Mass	Response	Amount
4.69	73.00	212	0.036577
4.70	41.00	555	

Reviewer: journtp, 01-May-2020 18:45:55  
Audit Action: Marked Compound Undetected

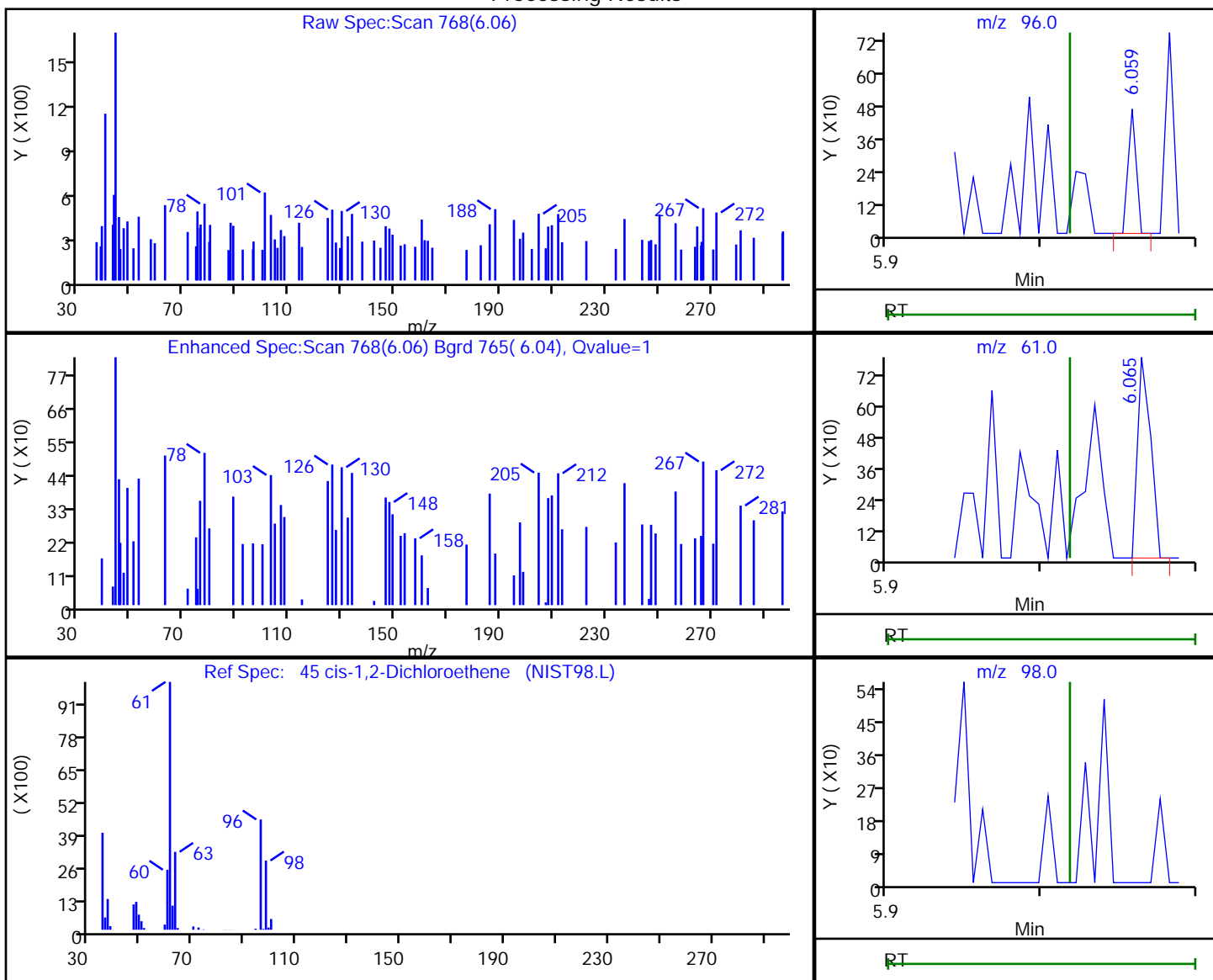
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050108.D  
 Injection Date: 01-May-2020 18:07:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-14 Lab Sample ID: 180-105108-14  
 Client ID: HD-QC1-0/1-2  
 Operator ID: 034635 ALS Bottle#: 8 Worklist Smp#: 8  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

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

Processing Results



RT	Mass	Response	Amount
6.06	96.00	169	0.068771
6.07	61.00	460	
6.02	98.00	0	

Reviewer: journept, 01-May-2020 18:45:55  
 Audit Action: Marked Compound Undetected

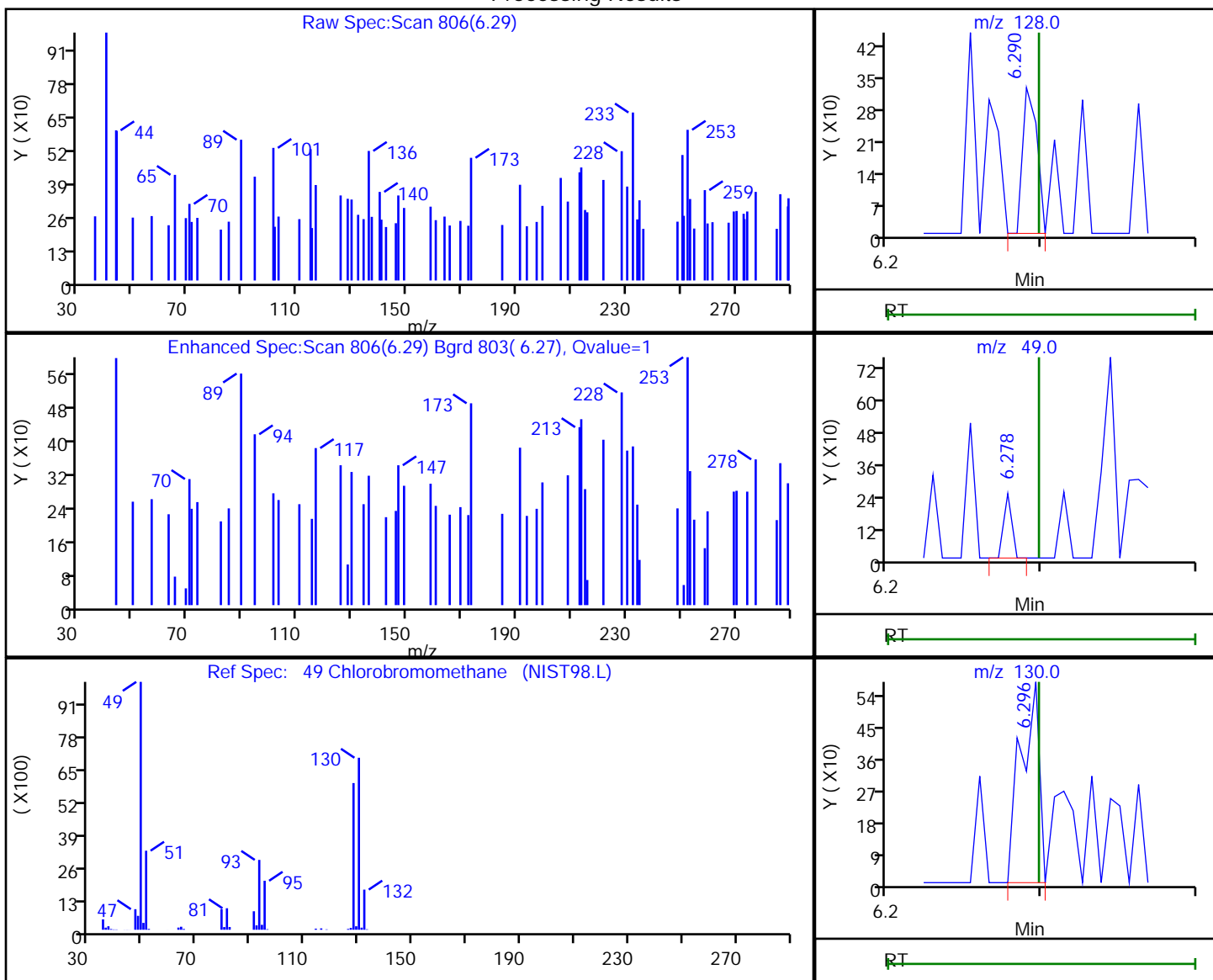
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050108.D  
 Injection Date: 01-May-2020 18:07:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-14 Lab Sample ID: 180-105108-14  
 Client ID: HD-QC1-0/1-2  
 Operator ID: 034635 ALS Bottle#: 8 Worklist Smp#: 8  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

49 Chlorobromomethane, CAS: 74-97-5

Processing Results



RT	Mass	Response	Amount
6.29	128.00	206	0.157285
6.28	49.00	88	
6.30	130.00	476	

Reviewer: journept, 01-May-2020 18:45:56  
 Audit Action: Marked Compound Undetected

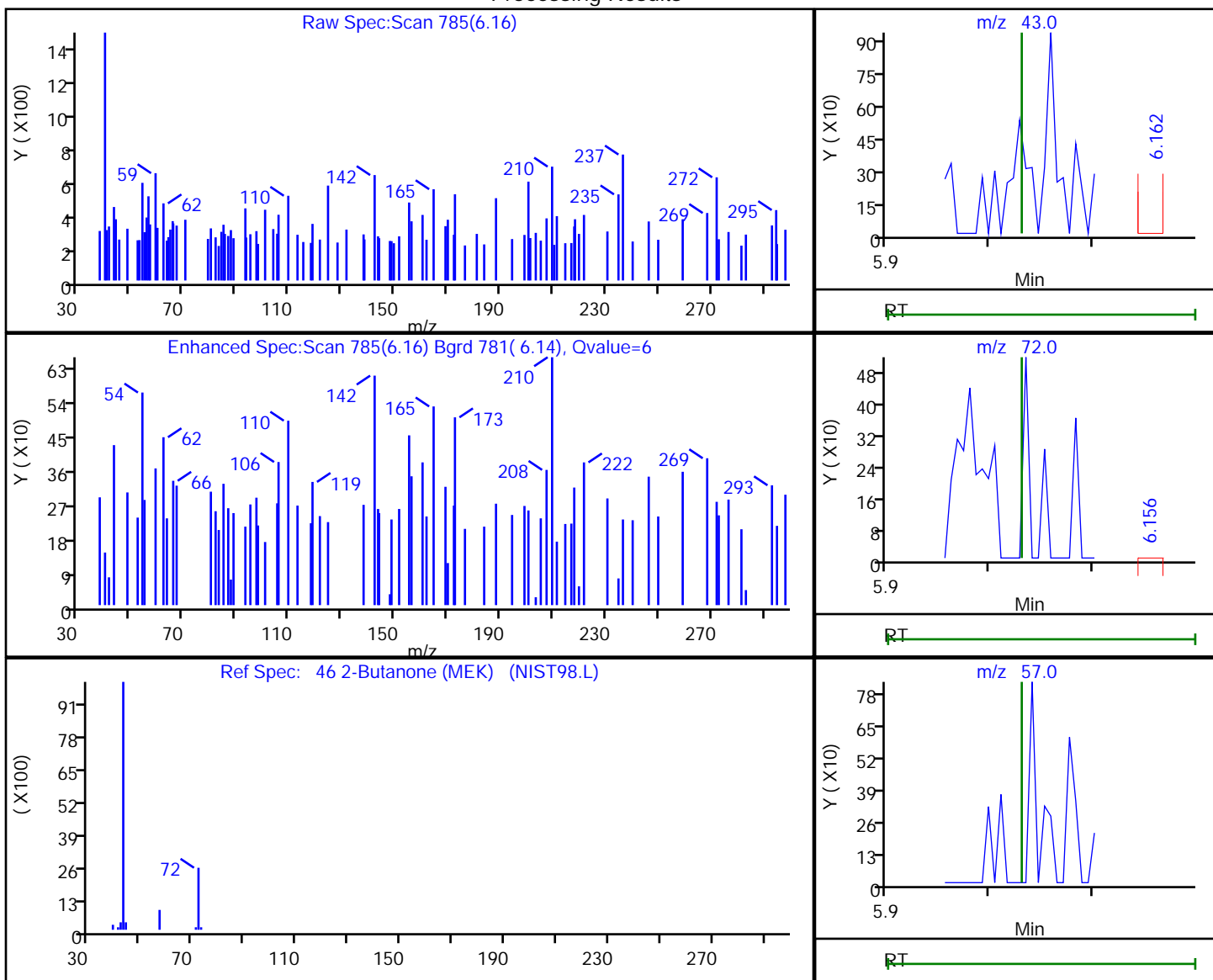
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050108.D  
 Injection Date: 01-May-2020 18:07:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-14 Lab Sample ID: 180-105108-14  
 Client ID: HD-QC1-0/1-2  
 Operator ID: 034635 ALS Bottle#: 8 Worklist Smp#: 8  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

46 2-Butanone (MEK), CAS: 78-93-3

Processing Results



RT	Mass	Response	Amount
6.16	43.00	277	0.199636
6.16	72.00	261	
6.03	57.00	0	

Reviewer: journeyp, 01-May-2020 18:45:55  
 Audit Action: Marked Compound Undetected

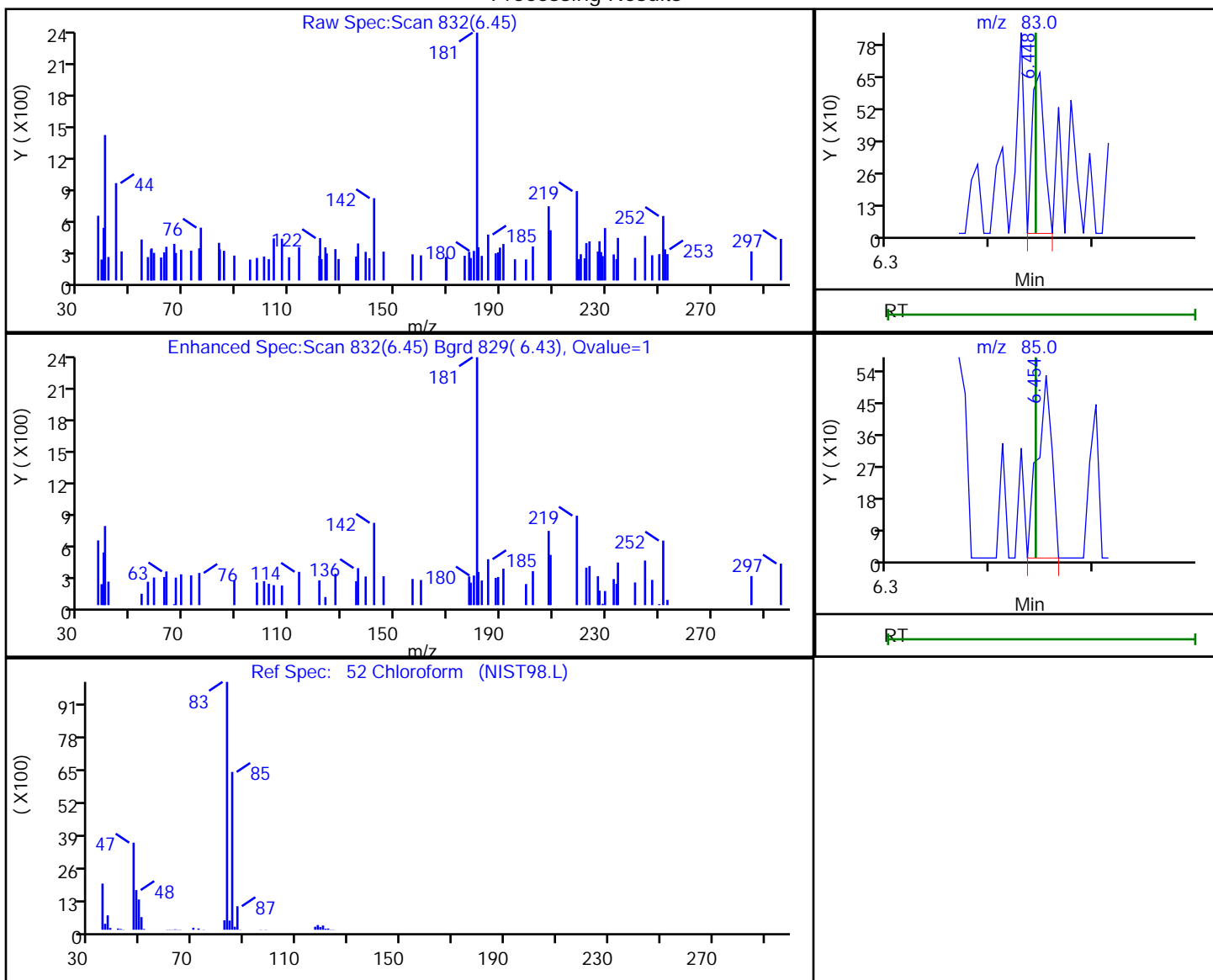
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050108.D  
 Injection Date: 01-May-2020 18:07:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-14 Lab Sample ID: 180-105108-14  
 Client ID: HD-QC1-0/1-2  
 Operator ID: 034635 ALS Bottle#: 8 Worklist Smp#: 8  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

52 Chloroform, CAS: 67-66-3

Processing Results



RT	Mass	Response	Amount
6.45	83.00	552	-1.608480
6.45	85.00	505	

Reviewer: journtp, 01-May-2020 18:45:56  
 Audit Action: Marked Compound Undetected

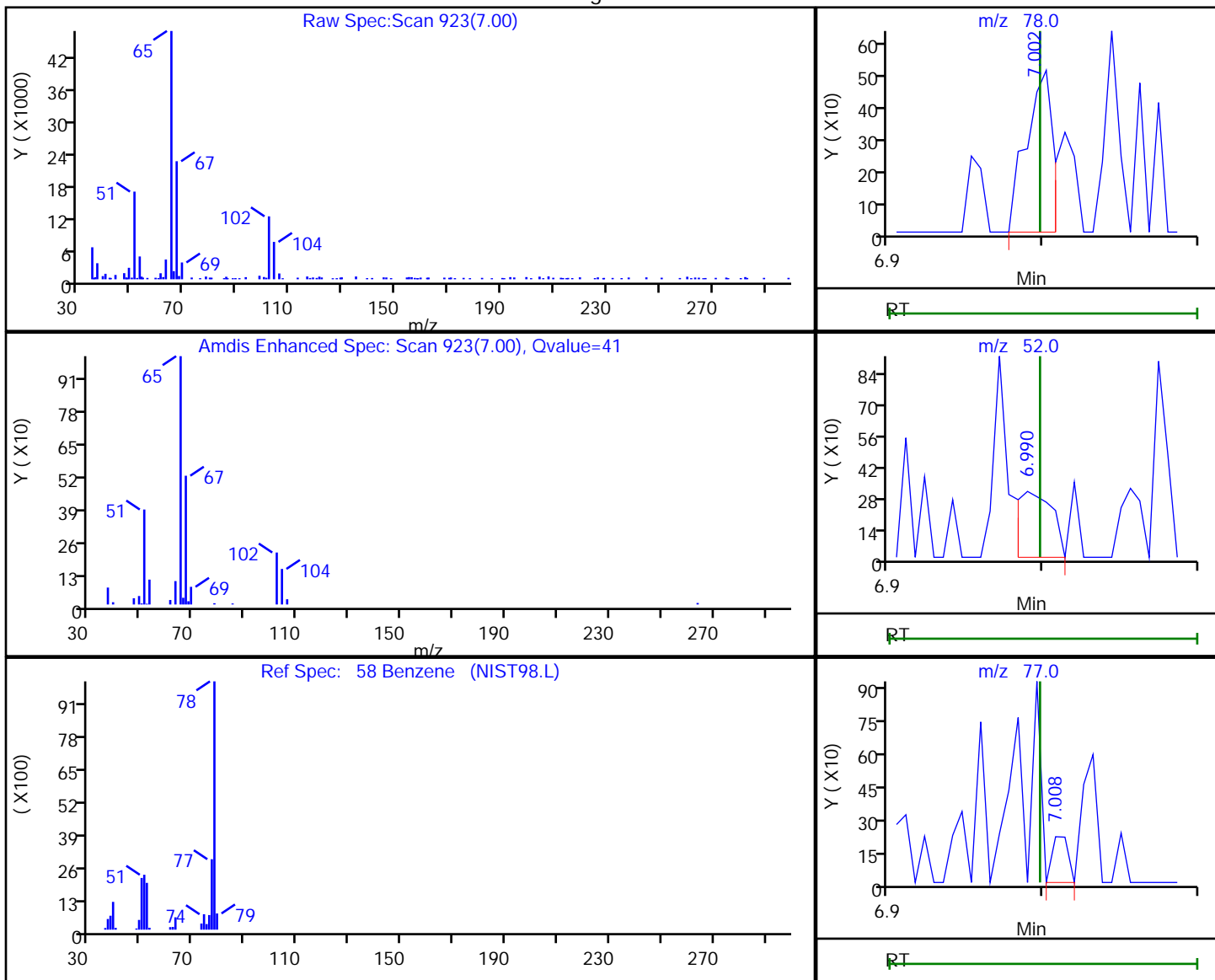
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050108.D  
 Injection Date: 01-May-2020 18:07:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-14 Lab Sample ID: 180-105108-14  
 Client ID: HD-QC1-0/1-2  
 Operator ID: 034635 ALS Bottle#: 8 Worklist Smp#: 8  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

58 Benzene, CAS: 71-43-2

Processing Results



RT	Mass	Response	Amount
7.00	78.00	618	0.066458
6.99	52.00	475	
7.01	77.00	153	

Reviewer: journept, 01-May-2020 18:45:56  
 Audit Action: Marked Compound Undetected

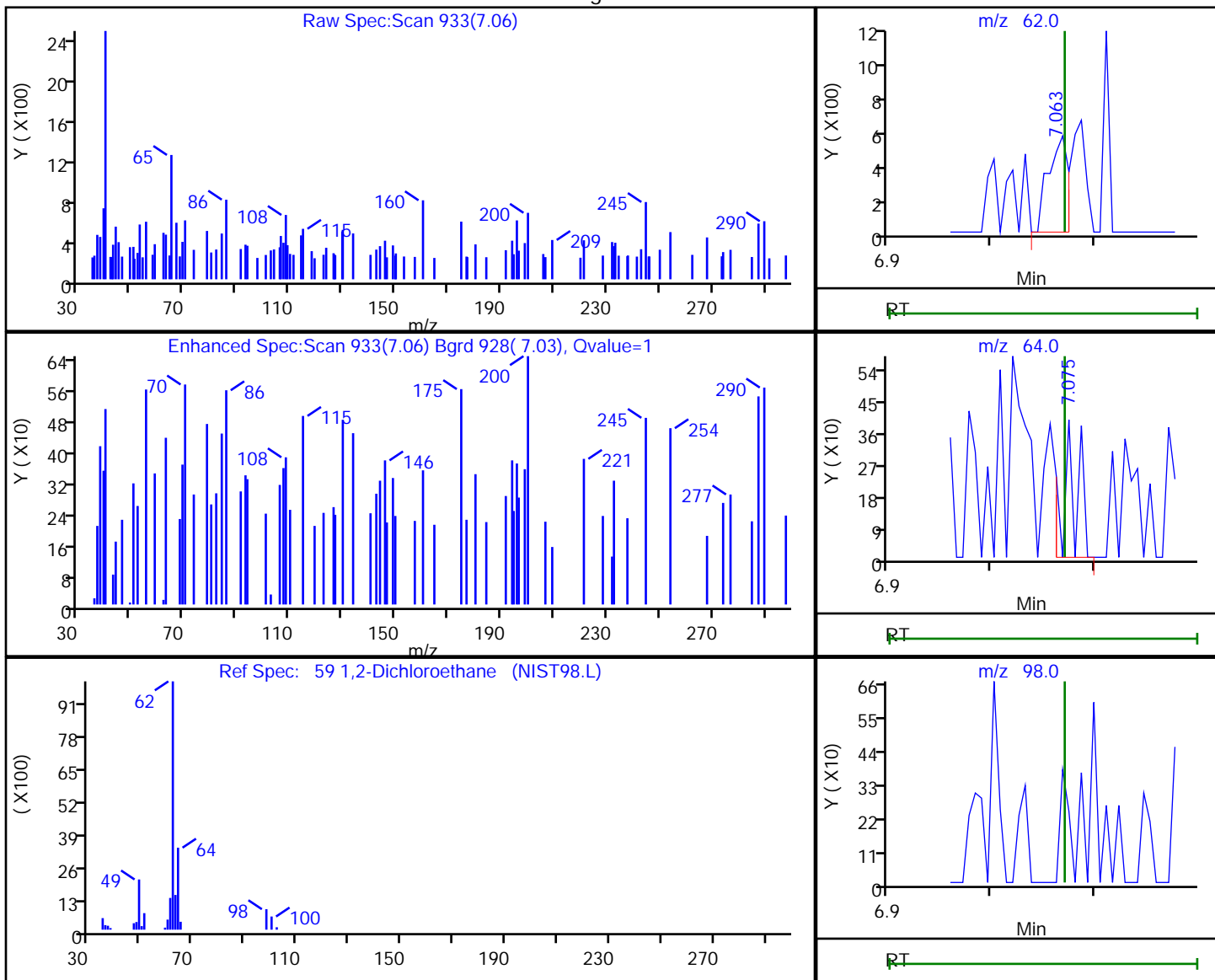
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050108.D  
 Injection Date: 01-May-2020 18:07:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-14 Lab Sample ID: 180-105108-14  
 Client ID: HD-QC1-0/1-2  
 Operator ID: 034635 ALS Bottle#: 8 Worklist Smp#: 8  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

59 1,2-Dichloroethane, CAS: 107-06-2

Processing Results



RT	Mass	Response	Amount
7.06	62.00	730	0.206458
7.07	64.00	368	
7.07	98.00	0	

Reviewer: journetp, 01-May-2020 18:45:56  
 Audit Action: Marked Compound Undetected

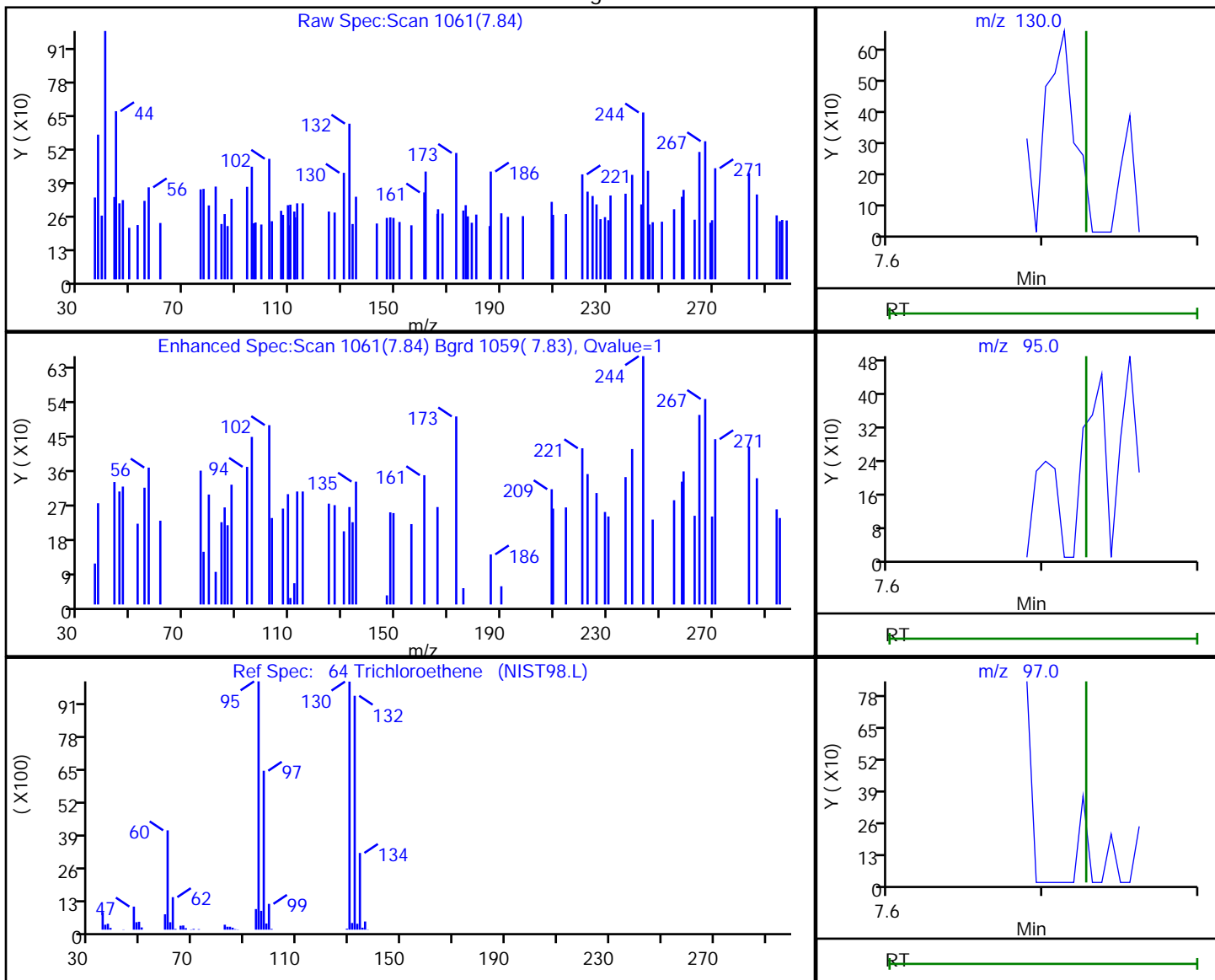
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050108.D  
 Injection Date: 01-May-2020 18:07:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-14 Lab Sample ID: 180-105108-14  
 Client ID: HD-QC1-0/1-2  
 Operator ID: 034635 ALS Bottle#: 8 Worklist Smp#: 8  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

64 Trichloroethene, CAS: 79-01-6

Processing Results



RT	Mass	Response	Amount
7.84	130.00	153	0.066067
7.84	95.00	241	
7.84	97.00	875	

Reviewer: journeyp, 01-May-2020 18:45:56  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

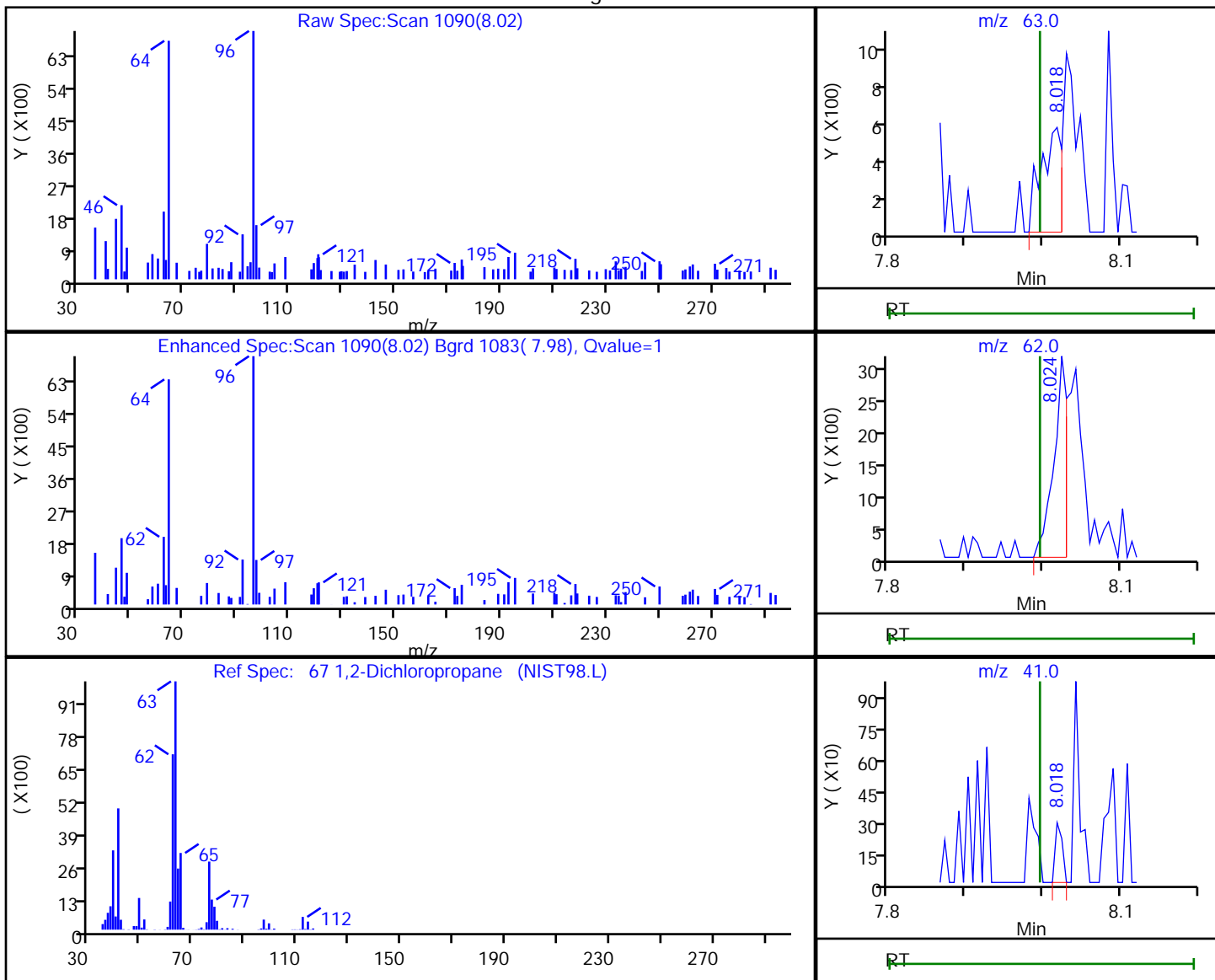


Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050108.D  
 Injection Date: 01-May-2020 18:07:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-14 Lab Sample ID: 180-105108-14  
 Client ID: HD-QC1-0/1-2  
 Operator ID: 034635 ALS Bottle#: 8 Worklist Smp#: 8  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

67 1,2-Dichloropropane, CAS: 78-87-5

Processing Results



RT	Mass	Response	Amount
8.02	63.00	1001	0.403288
8.02	62.00	3743	
8.02	41.00	184	

Reviewer: journetp, 01-May-2020 18:45:56  
 Audit Action: Marked Compound Undetected

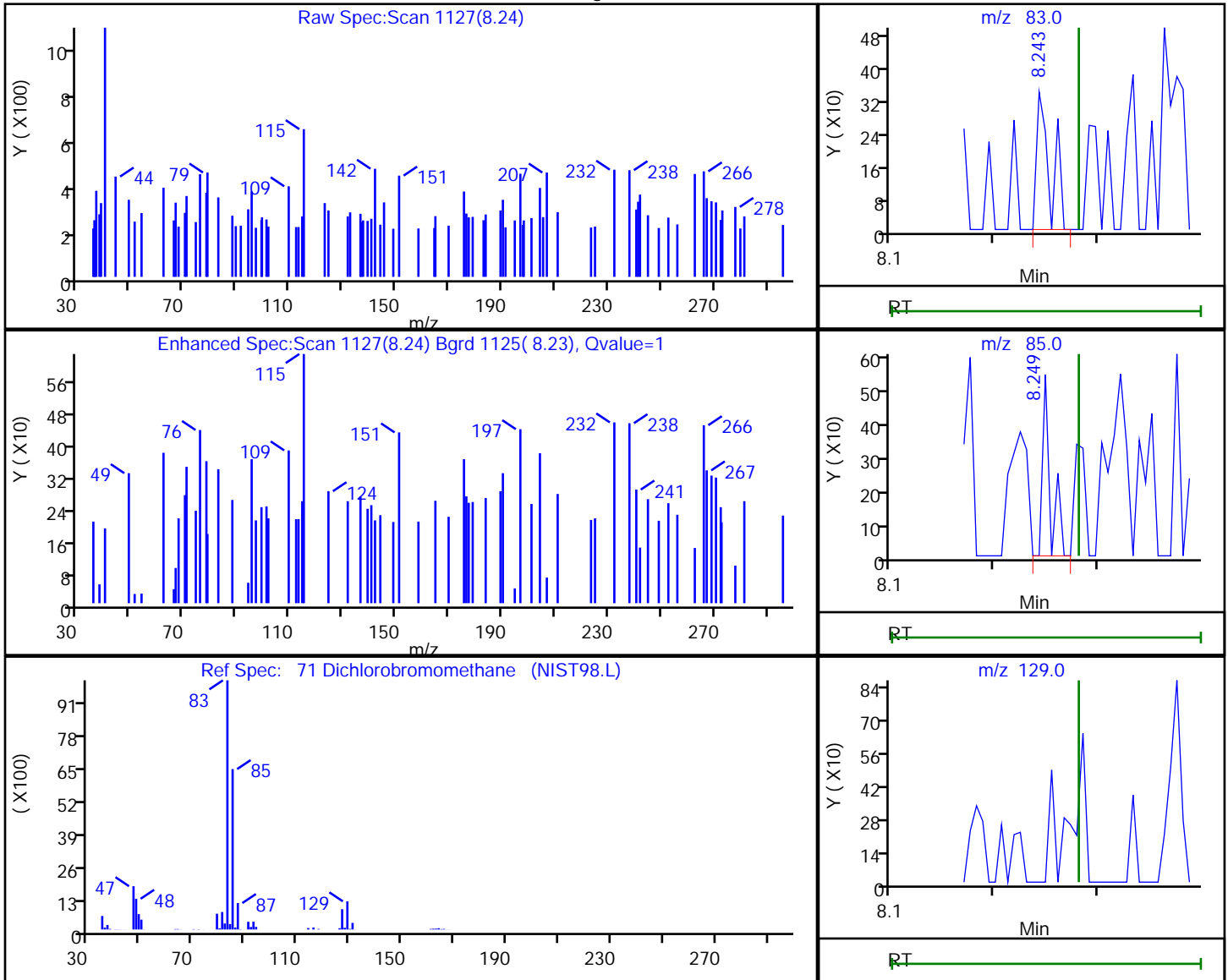
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050108.D  
 Injection Date: 01-May-2020 18:07:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-14 Lab Sample ID: 180-105108-14  
 Client ID: HD-QC1-0/1-2  
 Operator ID: 034635 ALS Bottle#: 8 Worklist Smp#: 8  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

71 Dichlorobromomethane, CAS: 75-27-4

Processing Results



RT	Mass	Response	Amount
8.24	83.00	308	0.105753
8.25	85.00	288	
8.28	129.00	0	

Reviewer: journept, 01-May-2020 18:45:56  
 Audit Action: Marked Compound Undetected

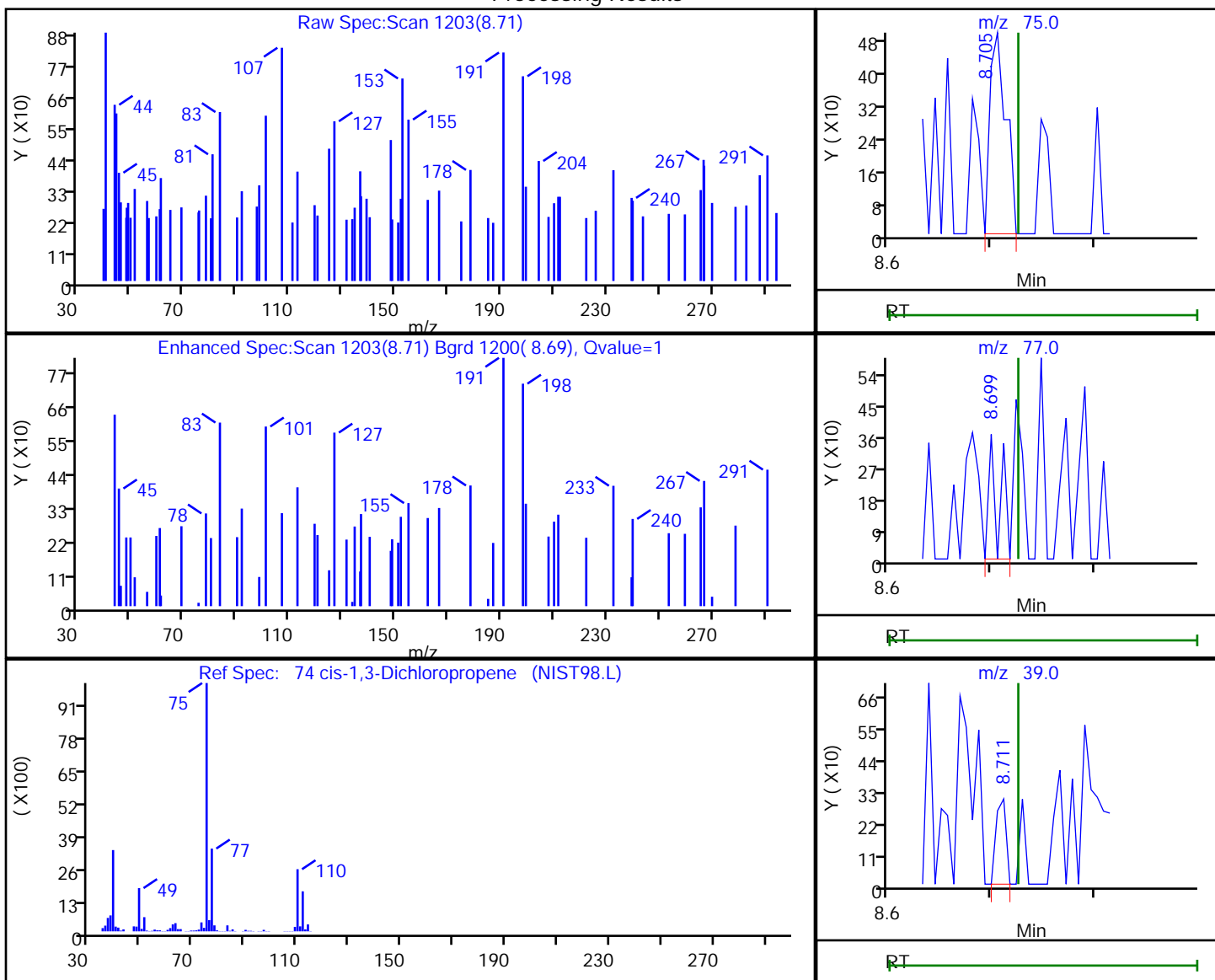
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050108.D  
 Injection Date: 01-May-2020 18:07:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-14 Lab Sample ID: 180-105108-14  
 Client ID: HD-QC1-0/1-2  
 Operator ID: 034635 ALS Bottle#: 8 Worklist Smp#: 8  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

74 cis-1,3-Dichloropropene, CAS: 10061-01-5

Processing Results



RT	Mass	Response	Amount
8.71	75.00	538	0.146715
8.70	77.00	257	
8.71	39.00	203	

Reviewer: journeyp, 01-May-2020 18:45:56  
 Audit Action: Marked Compound Undetected

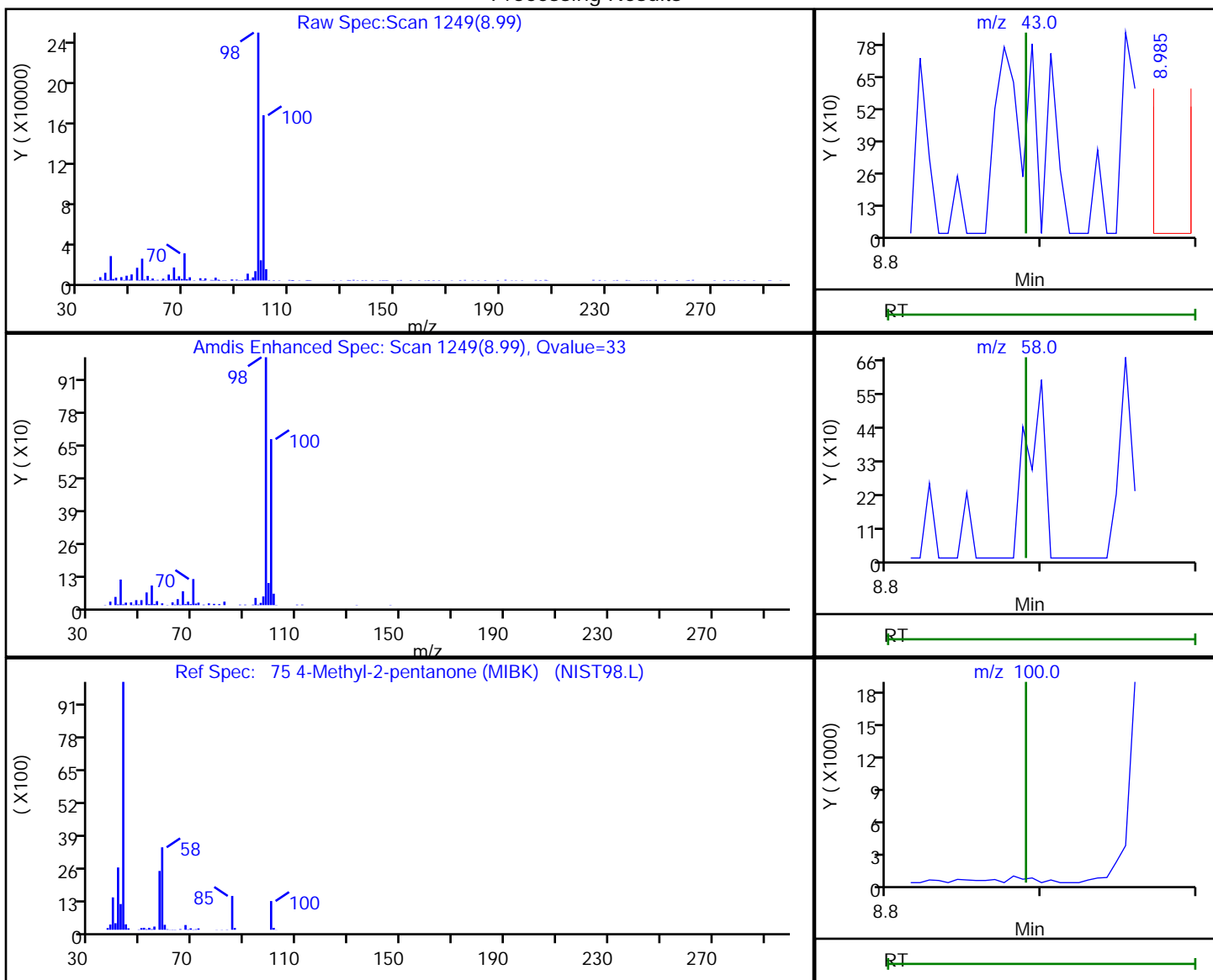
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050108.D  
 Injection Date: 01-May-2020 18:07:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-14 Lab Sample ID: 180-105108-14  
 Client ID: HD-QC1-0/1-2  
 Operator ID: 034635 ALS Bottle#: 8 Worklist Smp#: 8  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

75 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Processing Results



RT	Mass	Response	Amount
8.99	43.00	1543	15.873447
9.00	58.00	3479	
8.99	100.00	298258	

Reviewer: journept, 01-May-2020 18:45:56  
 Audit Action: Marked Compound Undetected

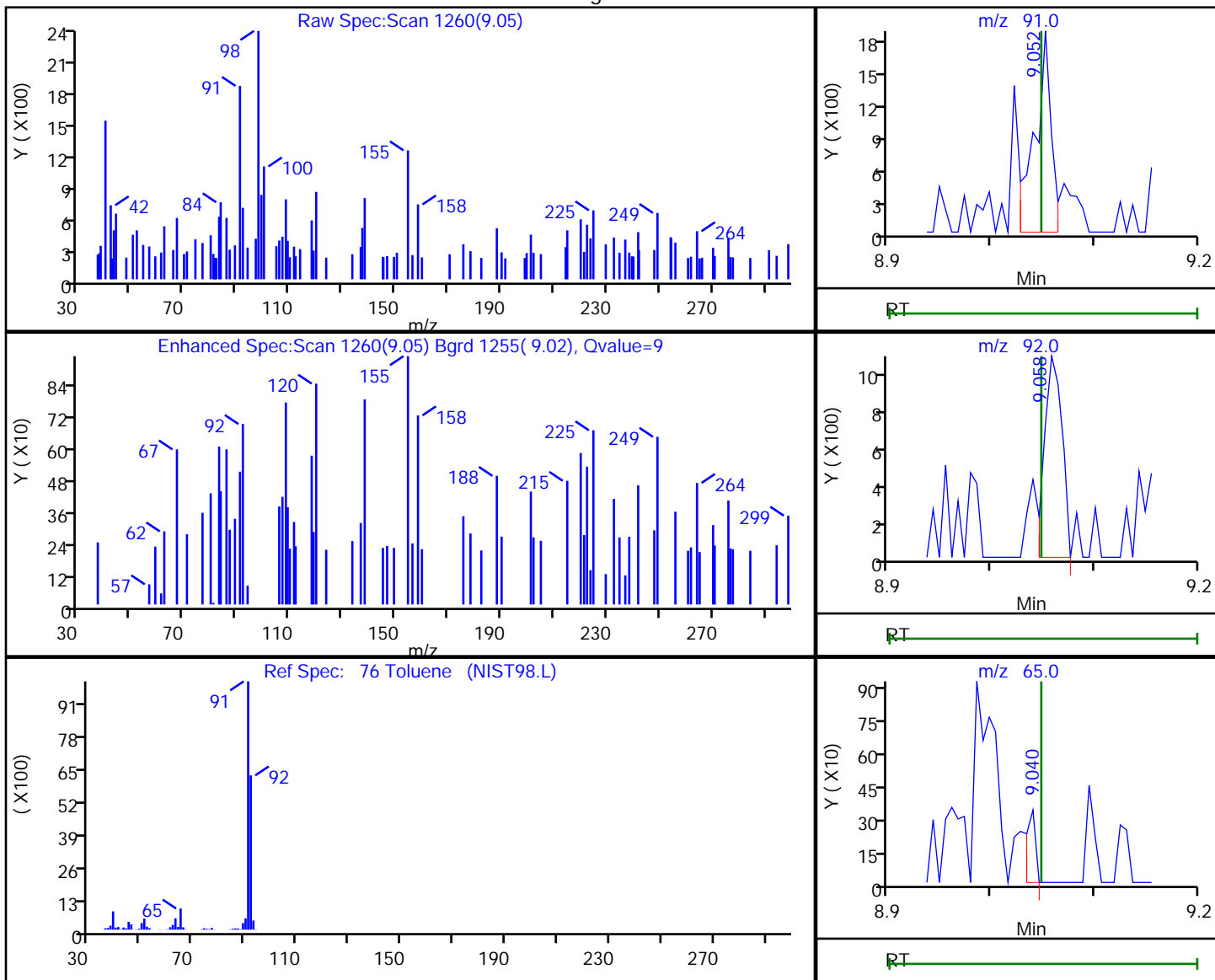
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050108.D  
 Injection Date: 01-May-2020 18:07:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-14 Lab Sample ID: 180-105108-14  
 Client ID: HD-QC1-0/1-2  
 Operator ID: 034635 ALS Bottle#: 8 Worklist Smp#: 8  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

76 Toluene, CAS: 108-88-3

Processing Results



RT	Mass	Response	Amount
9.05	91.00	2111	0.148846
9.06	92.00	1236	
9.04	65.00	204	

Reviewer: journeyp, 01-May-2020 18:45:56  
 Audit Action: Marked Compound Undetected

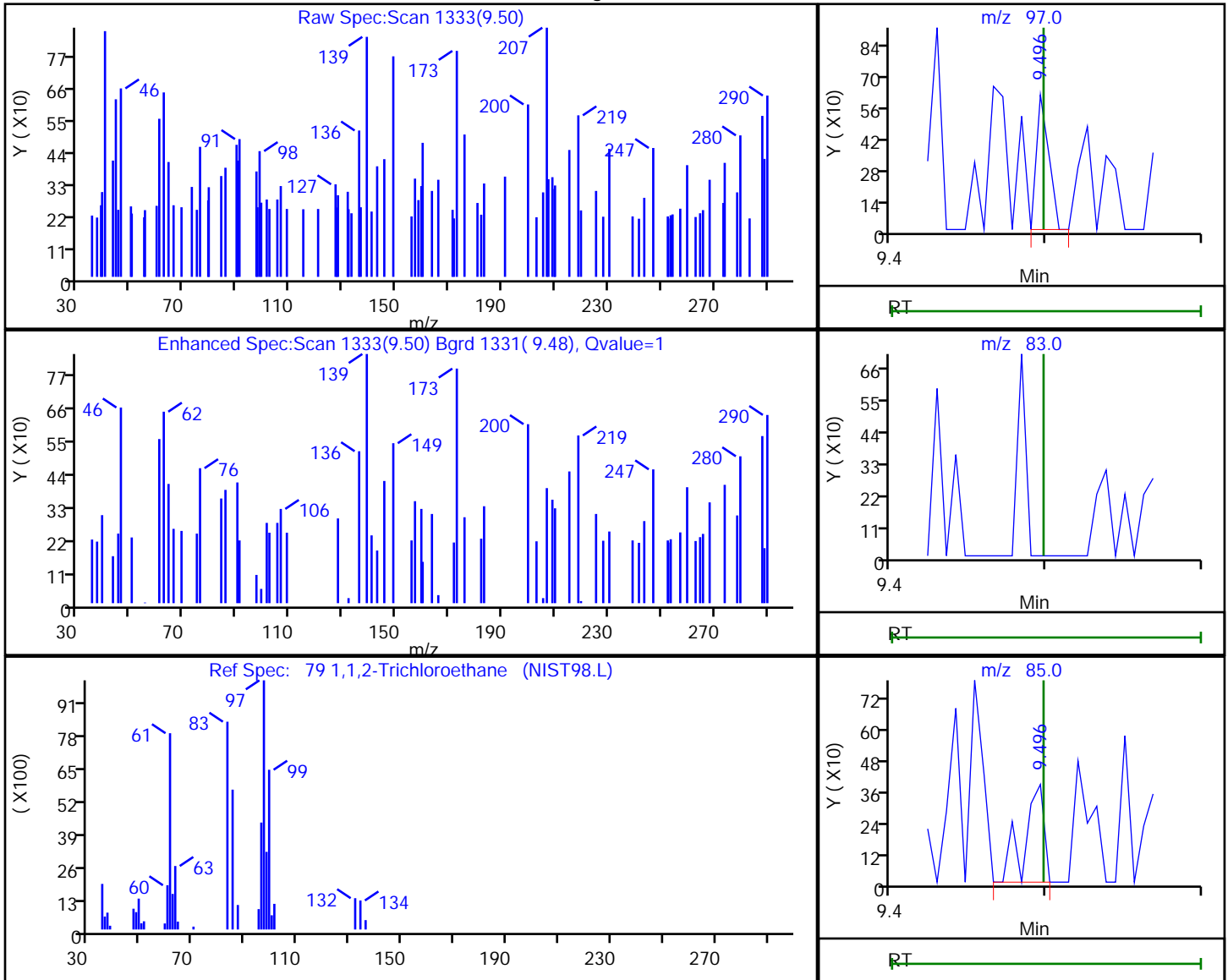
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050108.D  
 Injection Date: 01-May-2020 18:07:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-14 Lab Sample ID: 180-105108-14  
 Client ID: HD-QC1-0/1-2  
 Operator ID: 034635 ALS Bottle#: 8 Worklist Smp#: 8  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

79 1,1,2-Trichloroethane, CAS: 79-00-5

Processing Results



RT	Mass	Response	Amount
9.50	97.00	338	0.102531
9.50	83.00	0	
9.50	85.00	337	

Reviewer: journetp, 01-May-2020 18:45:56  
 Audit Action: Marked Compound Undetected

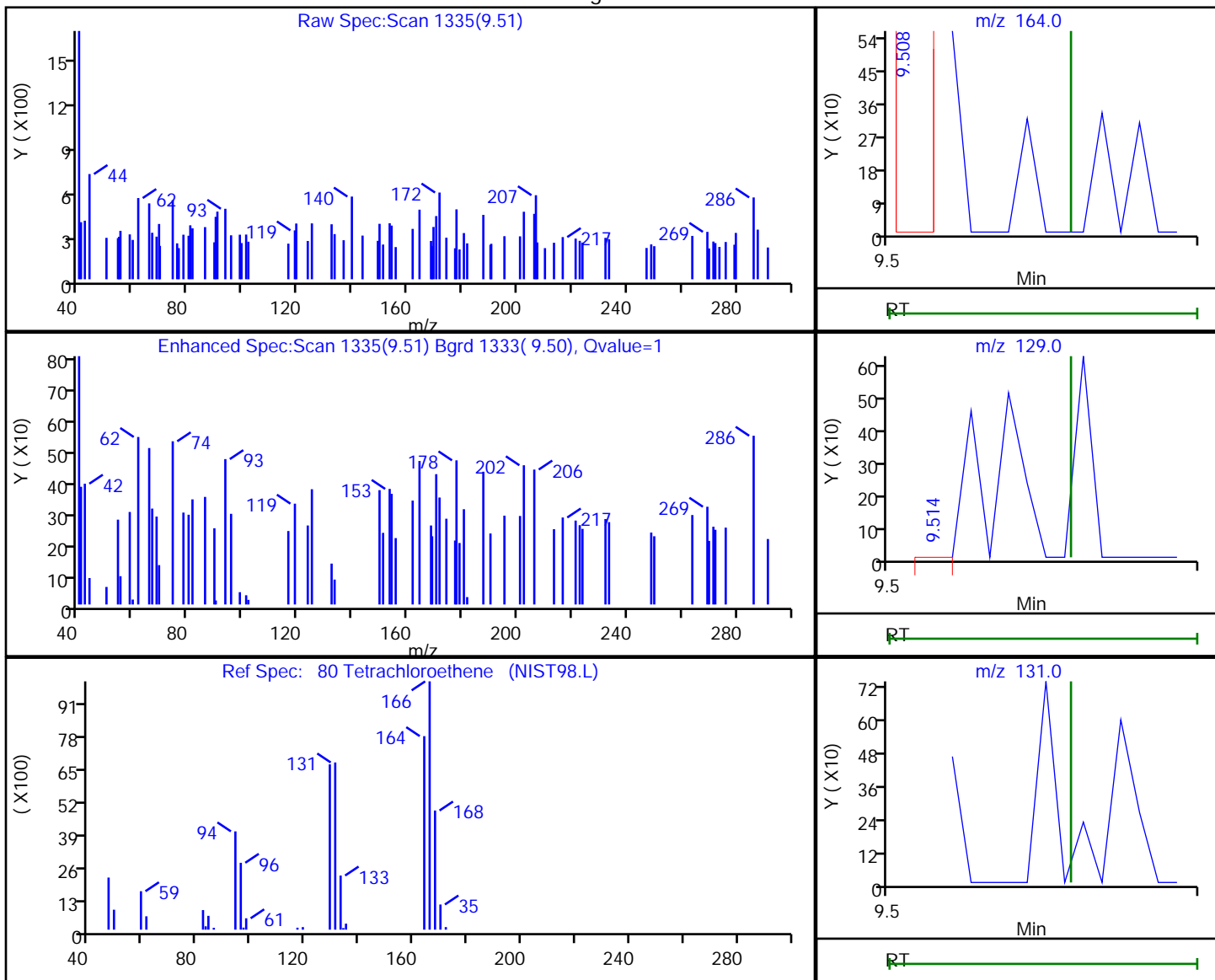
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050108.D  
 Injection Date: 01-May-2020 18:07:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-14 Lab Sample ID: 180-105108-14  
 Client ID: HD-QC1-0/1-2  
 Operator ID: 034635 ALS Bottle#: 8 Worklist Smp#: 8  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

80 Tetrachloroethene, CAS: 127-18-4

Processing Results



RT	Mass	Response	Amount
9.51	164.00	171	0.060579
9.51	129.00	118	
9.50	131.00	131	

Reviewer: journetp, 01-May-2020 18:45:56  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfms\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050108.D

Injection Date: 01-May-2020 18:07:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-14

Lab Sample ID: 180-105108-14

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

Operator ID: 034635

ALS Bottle#: 8 Worklist Smp#: 8

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

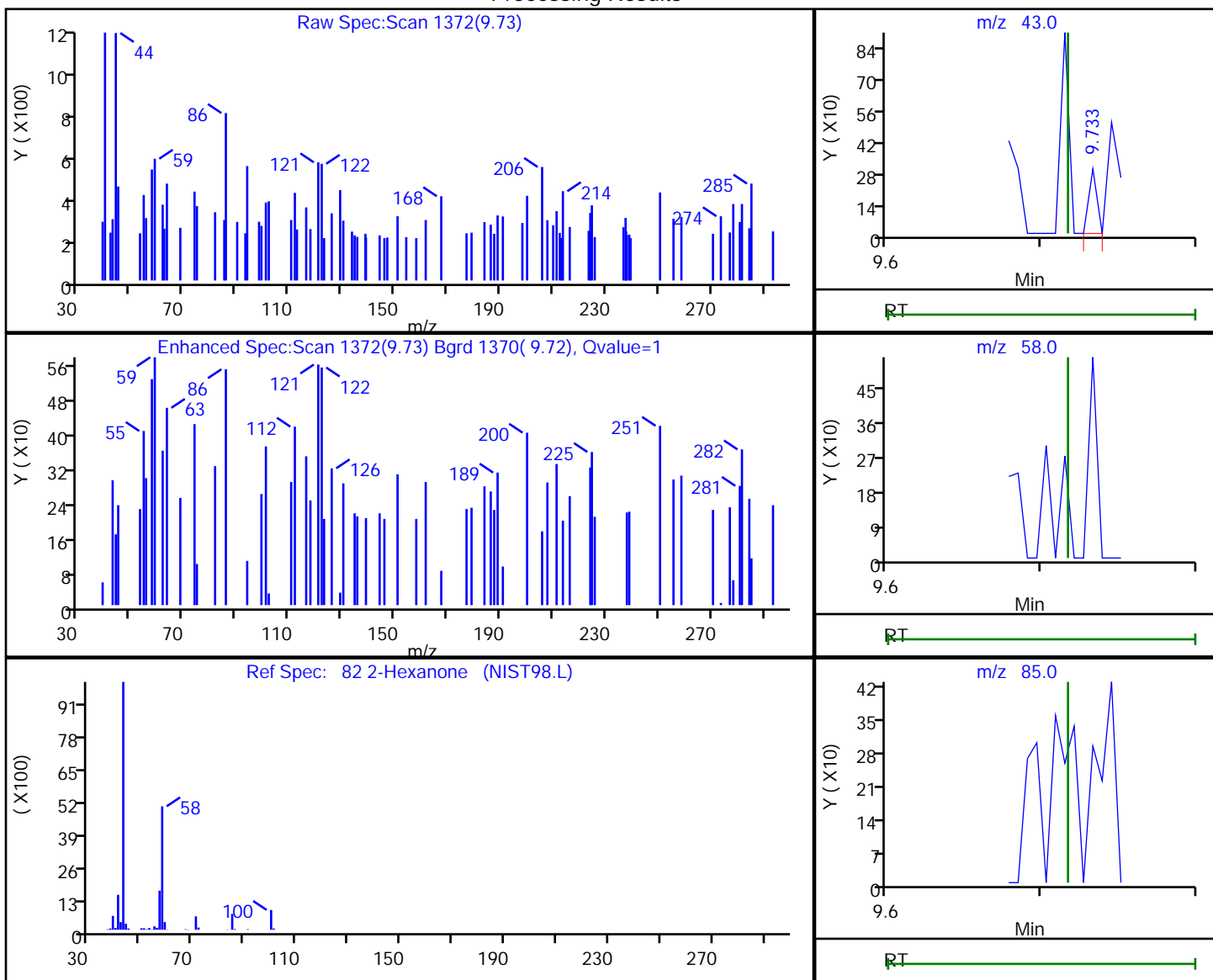
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

82 2-Hexanone, CAS: 591-78-6

Processing Results



RT	Mass	Response	Amount
9.73	43.00	106	14.049093
9.72	58.00	0	
9.72	85.00	0	

Reviewer: journetp, 01-May-2020 18:45:56

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID



Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050108.D

Injection Date: 01-May-2020 18:07:30

Instrument ID: CHHP5

Lims ID: 180-105108-B-14

Lab Sample ID: 180-105108-14

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

Operator ID: 034635

ALS Bottle#: 8

Worklist Smp#: 8

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

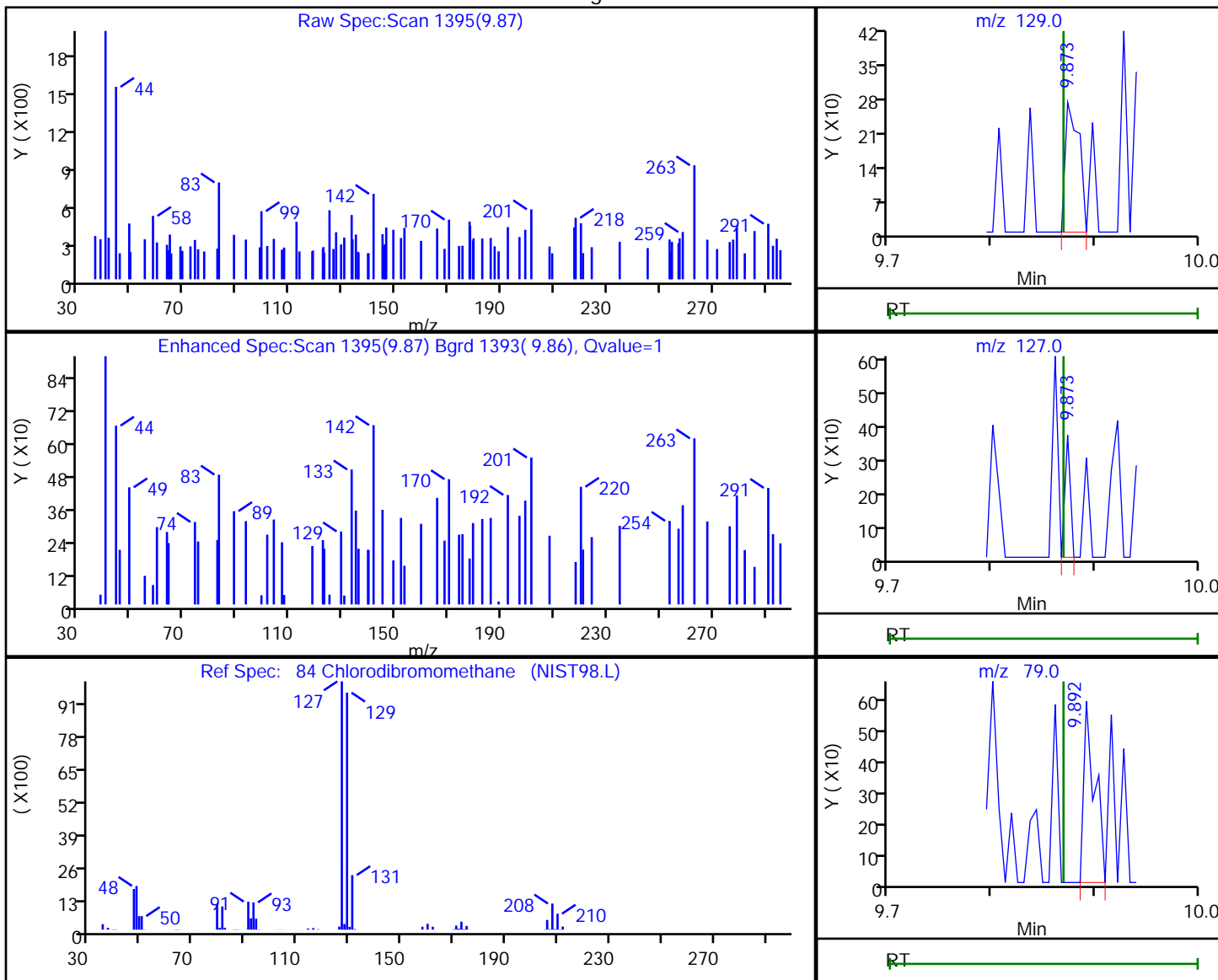
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

84 Chlorodibromomethane, CAS: 124-48-1

Processing Results



RT	Mass	Response	Amount
9.87	129.00	251	0.089947
9.87	127.00	133	
9.89	79.00	444	

Reviewer: journetp, 01-May-2020 18:45:56

Audit Action: Marked Compound Undetected

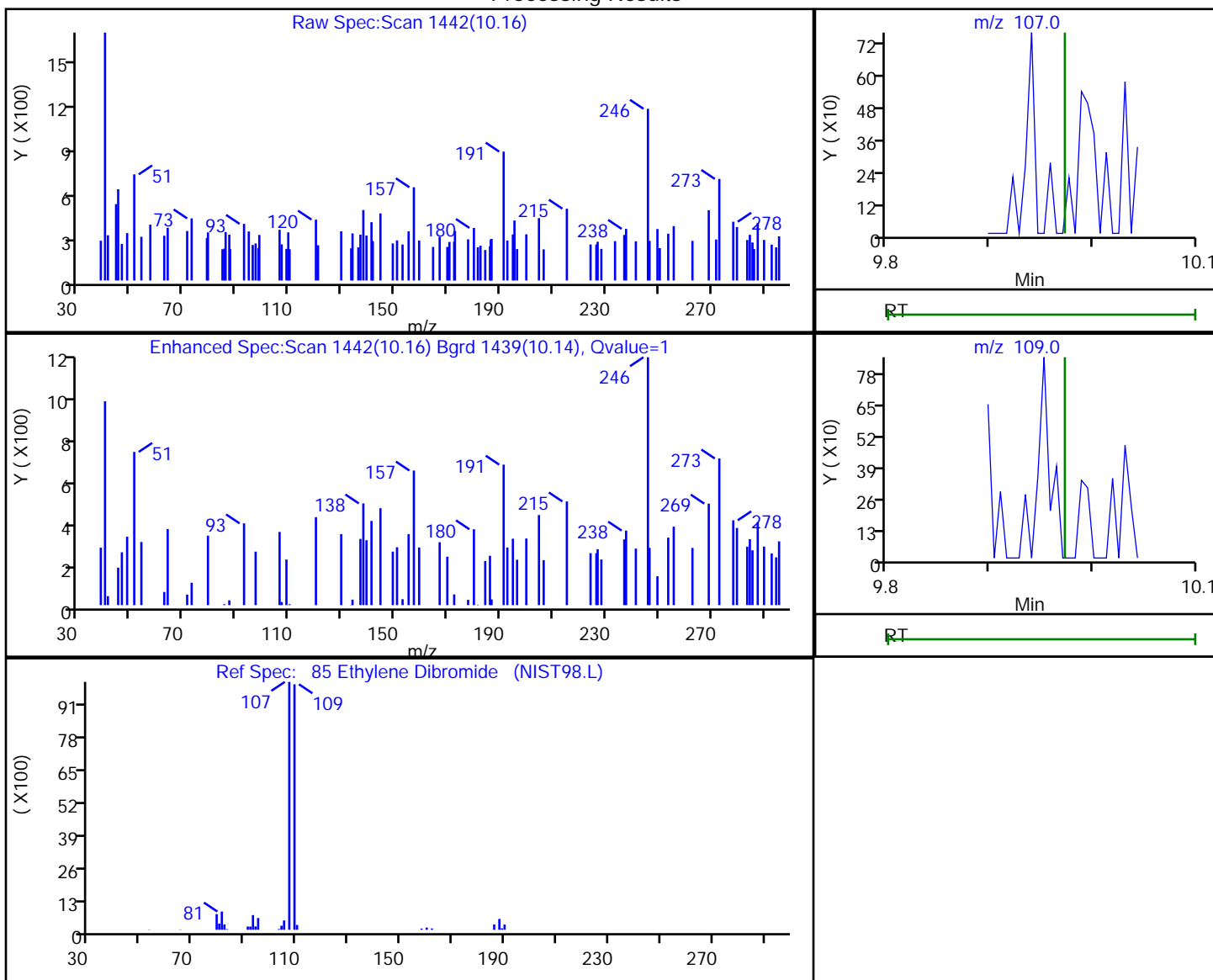
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050108.D  
 Injection Date: 01-May-2020 18:07:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-14 Lab Sample ID: 180-105108-14  
 Client ID: HD-QC1-0/1-2  
 Operator ID: 034635 ALS Bottle#: 8 Worklist Smp#: 8  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

85 Ethylene Dibromide, CAS: 106-93-4

Processing Results



RT	Mass	Response	Amount
10.16	107.00	87	0.028211
10.16	109.00	287	

Reviewer: journetp, 01-May-2020 18:45:56  
 Audit Action: Marked Compound Undetected

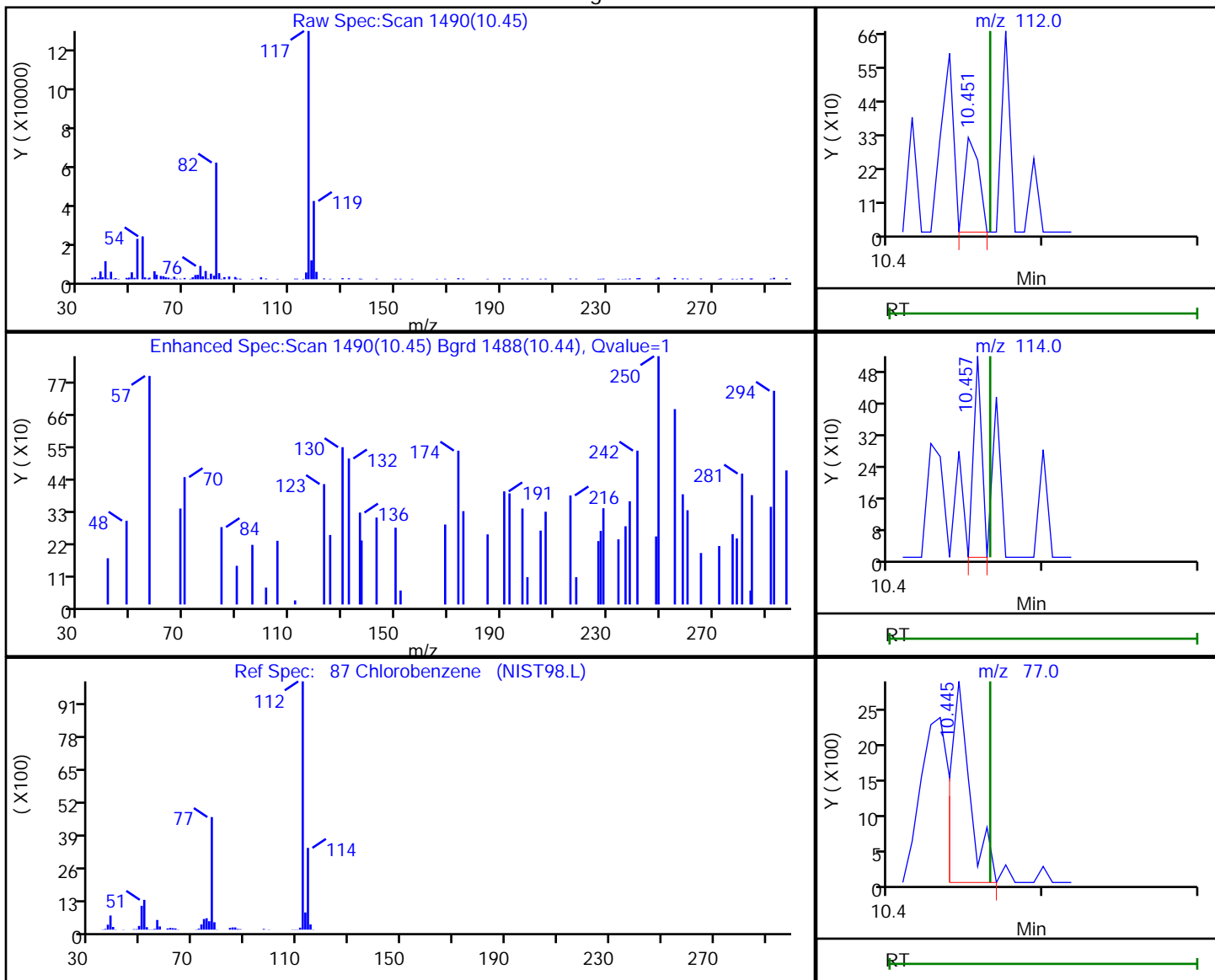
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050108.D  
 Injection Date: 01-May-2020 18:07:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-14 Lab Sample ID: 180-105108-14  
 Client ID: HD-QC1-0/1-2  
 Operator ID: 034635 ALS Bottle#: 8 Worklist Smp#: 8  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

87 Chlorobenzene, CAS: 108-90-7

Processing Results



RT	Mass	Response	Amount
10.45	112.00	200	0.021928
10.46	114.00	190	
10.45	77.00	2452	

Reviewer: journetp, 01-May-2020 18:45:56  
 Audit Action: Marked Compound Undetected

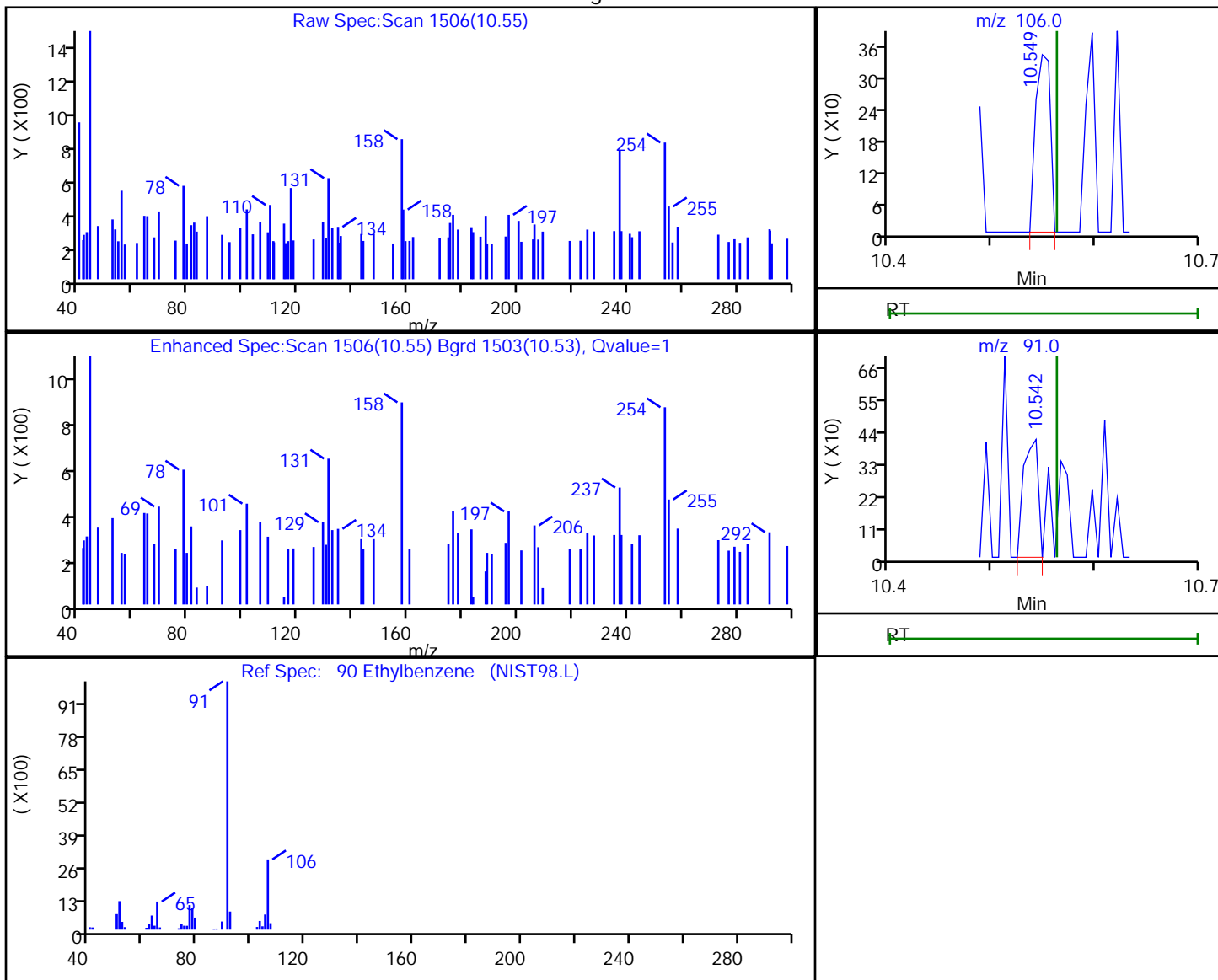
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050108.D  
 Injection Date: 01-May-2020 18:07:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-14 Lab Sample ID: 180-105108-14  
 Client ID: HD-QC1-0/1-2  
 Operator ID: 034635 ALS Bottle#: 8 Worklist Smp#: 8  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

90 Ethylbenzene, CAS: 100-41-4

Processing Results



RT	Mass	Response	Amount
10.55	106.00	333	0.070533
10.54	91.00	403	

Reviewer: journetp, 01-May-2020 18:45:56  
 Audit Action: Marked Compound Undetected

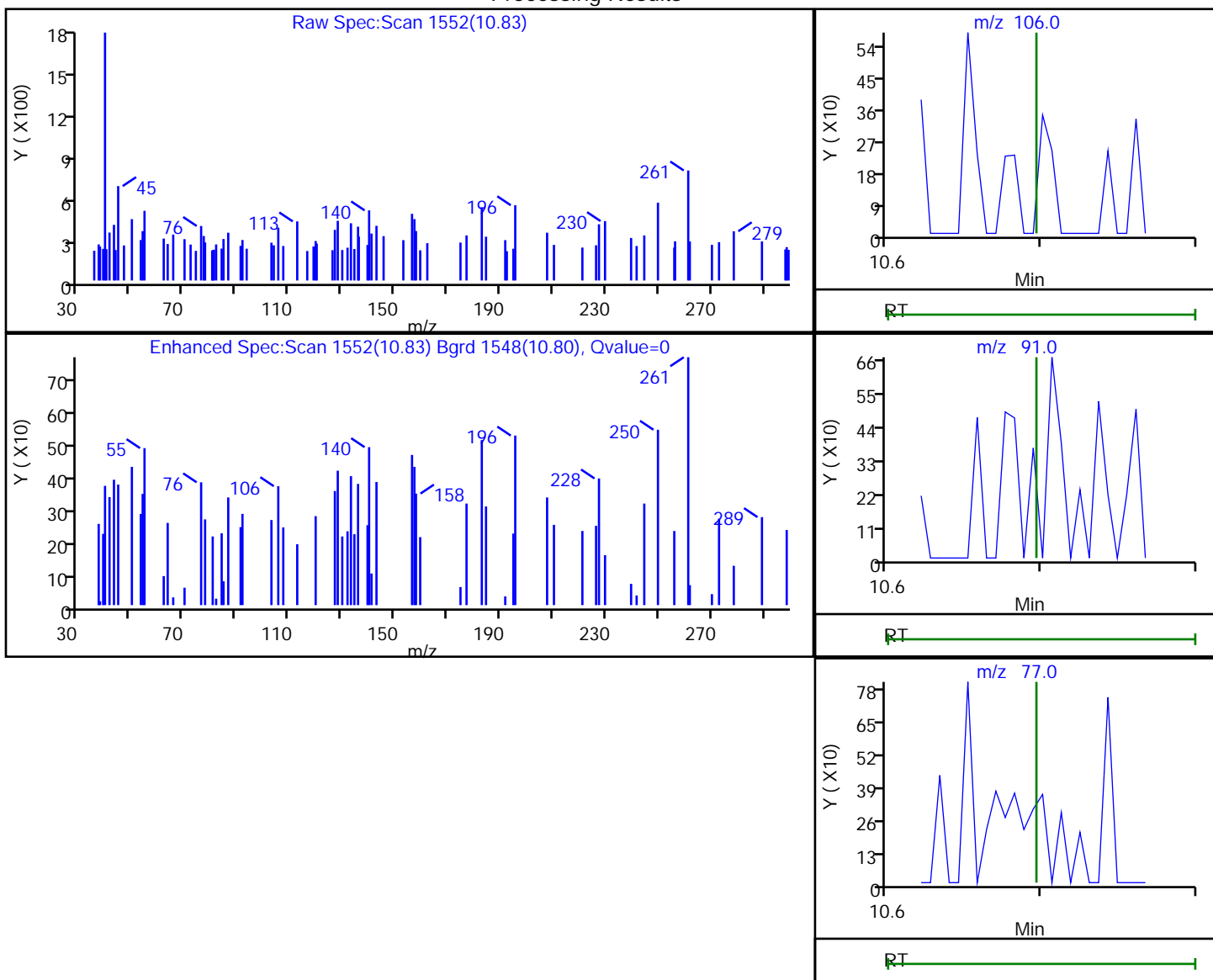
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050108.D  
 Injection Date: 01-May-2020 18:07:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-14 Lab Sample ID: 180-105108-14  
 Client ID: HD-QC1-0/1-2  
 Operator ID: 034635 ALS Bottle#: 8 Worklist Smp#: 8  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

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

Processing Results



RT	Mass	Response	Amount
10.83	106.00	235	0.039927
10.82	91.00	277	
10.83	77.00	411	

Reviewer: journetp, 01-May-2020 18:45:56  
 Audit Action: Marked Compound Undetected

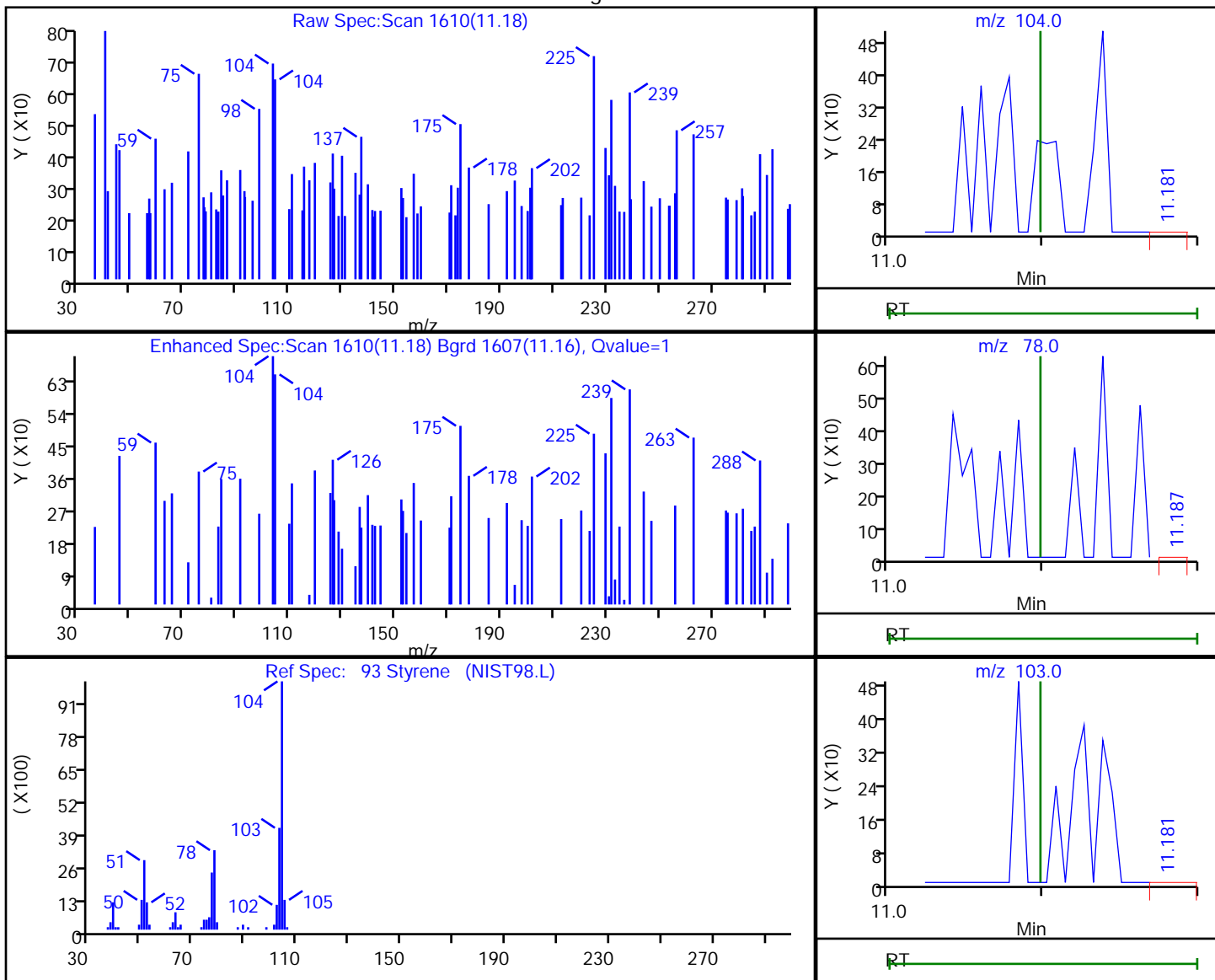
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050108.D  
 Injection Date: 01-May-2020 18:07:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-14 Lab Sample ID: 180-105108-14  
 Client ID: HD-QC1-0/1-2  
 Operator ID: 034635 ALS Bottle#: 8 Worklist Smp#: 8  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

93 Styrene, CAS: 100-42-5

Processing Results



RT	Mass	Response	Amount
11.18	104.00	477	0.050636
11.19	78.00	222	
11.18	103.00	555	

Reviewer: journeyp, 01-May-2020 18:45:56  
 Audit Action: Marked Compound Undetected

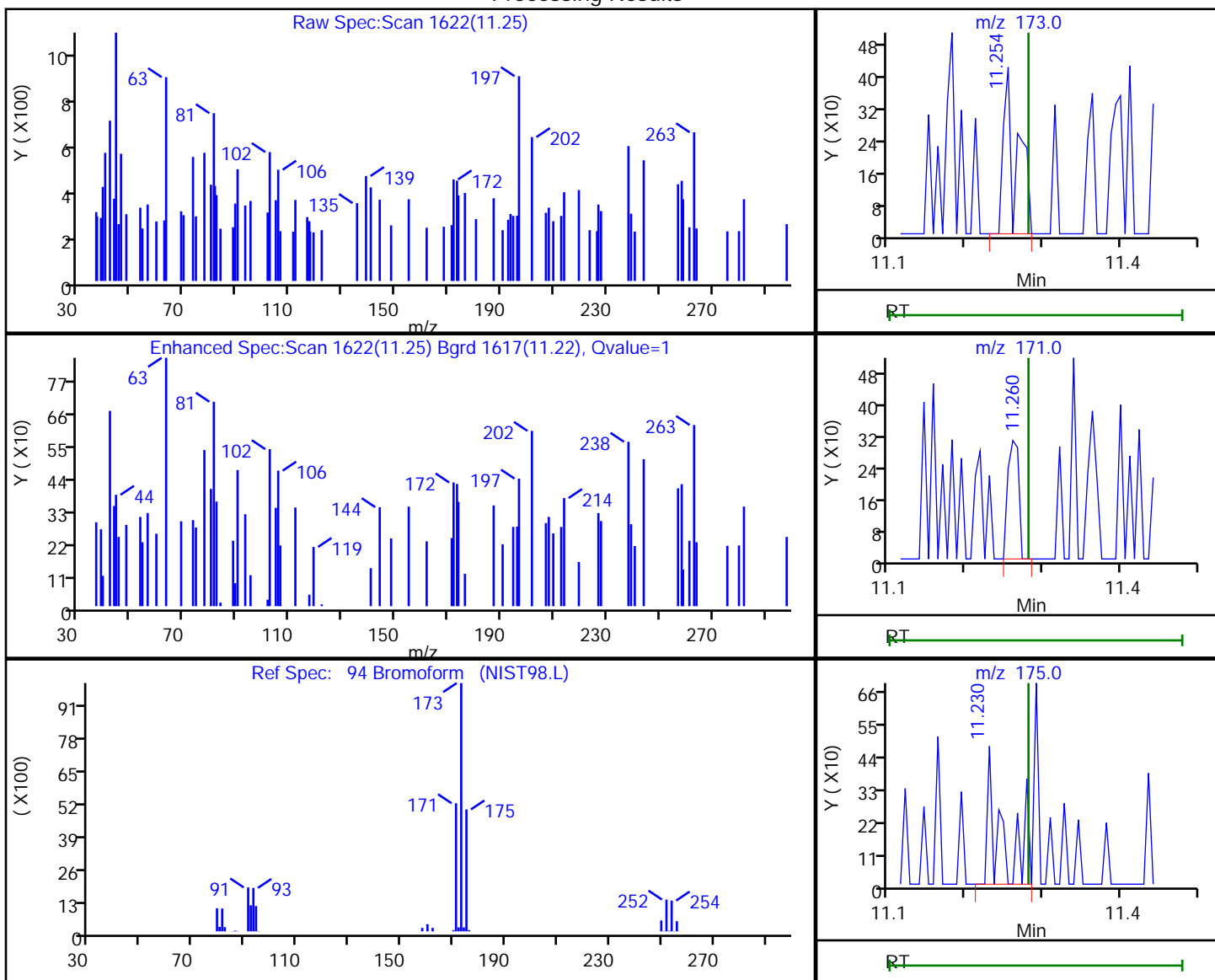
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050108.D  
 Injection Date: 01-May-2020 18:07:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-14 Lab Sample ID: 180-105108-14  
 Client ID: HD-QC1-0/1-2  
 Operator ID: 034635 ALS Bottle#: 8 Worklist Smp#: 8  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

94 Bromoform, CAS: 75-25-2

Processing Results



RT	Mass	Response	Amount
11.25	173.00	503	0.381293
11.26	171.00	297	
11.23	175.00	558	

Reviewer: journetp, 01-May-2020 18:45:56  
 Audit Action: Marked Compound Undetected

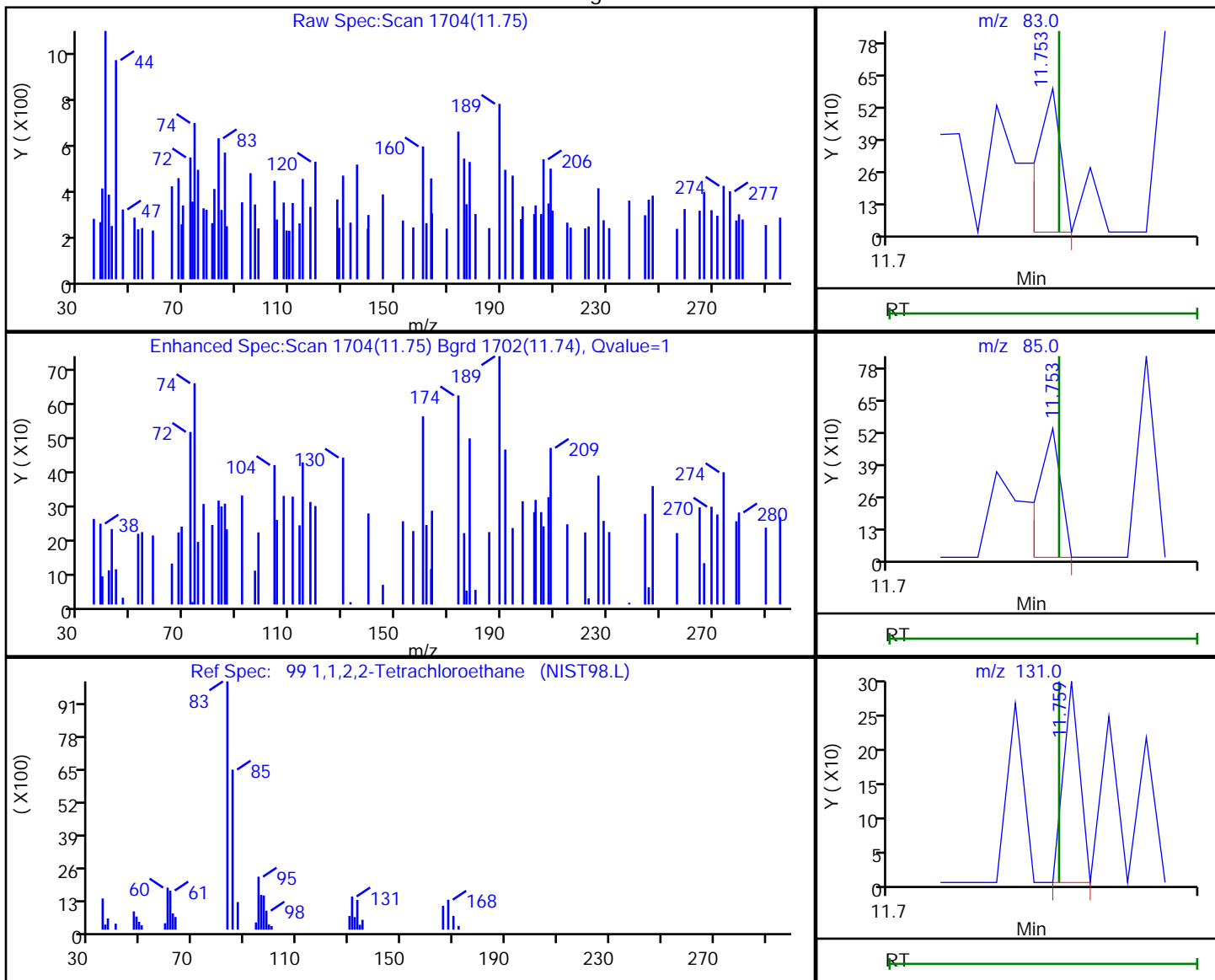
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050108.D  
Injection Date: 01-May-2020 18:07:30 Instrument ID: CHHP5  
Lims ID: 180-105108-B-14 Lab Sample ID: 180-105108-14  
Client ID: HD-QC1-0/1-2  
Operator ID: 034635 ALS Bottle#: 8 Worklist Smp#: 8  
Purge Vol: 5.000 mL Dil. Factor: 1.0000  
Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
Column: DB-624 (0.18 mm) Detector: MS SCAN

99 1,1,2,2-Tetrachloroethane, CAS: 79-34-5

Processing Results



RT	Mass	Response	Amount
11.75	83.00	319	0.093728
11.75	85.00	276	
11.76	131.00	107	

Reviewer: journeyp, 01-May-2020 18:45:56  
Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

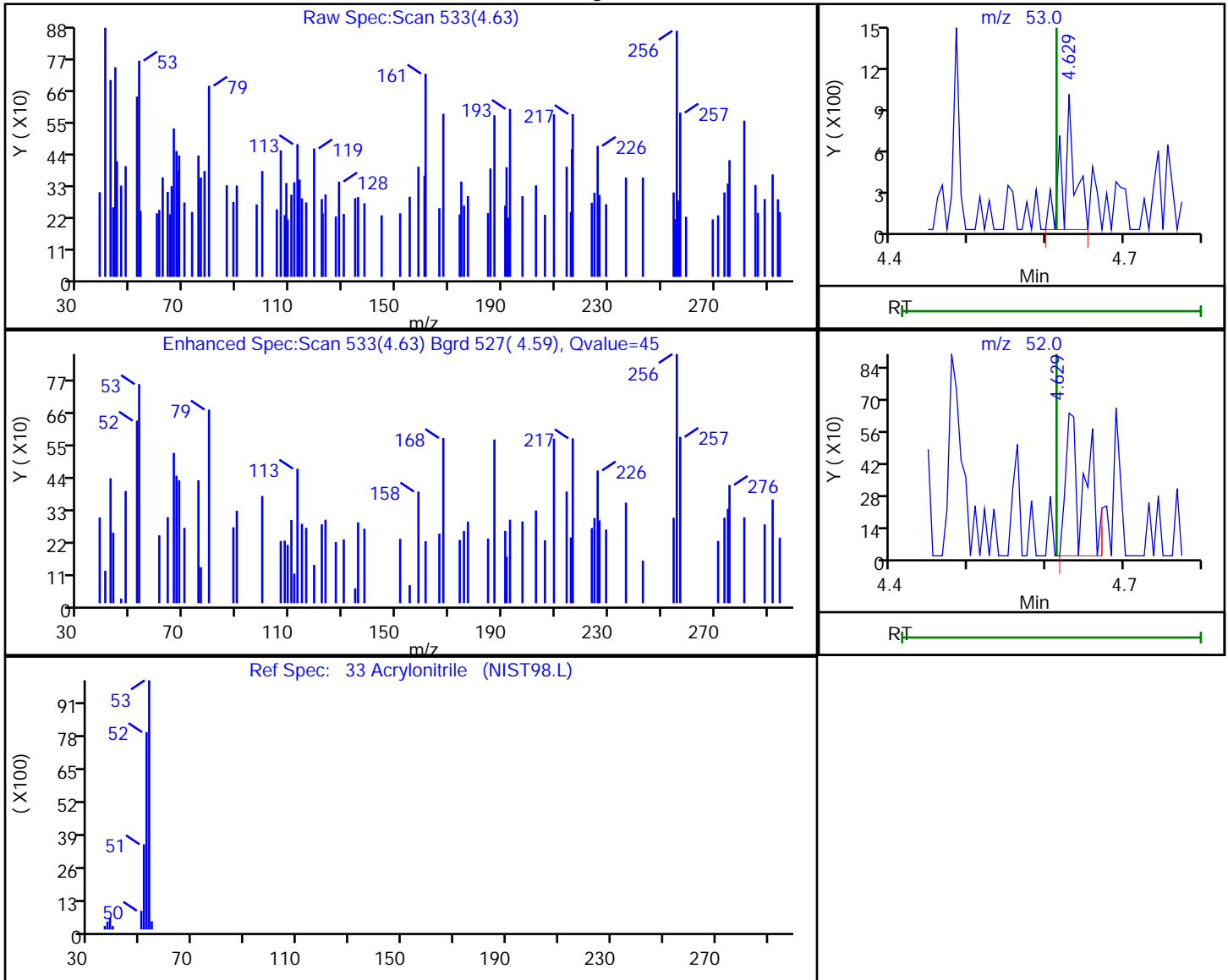


Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050108.D  
 Injection Date: 01-May-2020 18:07:30 Instrument ID: CHHP5  
 Lims ID: 180-105108-B-14 Lab Sample ID: 180-105108-14  
 Client ID: HD-QC1-0/1-2  
 Operator ID: 034635 ALS Bottle#: 8 Worklist Smp#: 8  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

33 Acrylonitrile, CAS: 107-13-1

Processing Results



RT	Mass	Response	Amount
4.63	53.00	1069	1.093857
4.63	52.00	1074	

Reviewer: journetp, 01-May-2020 18:45:55  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM VI  
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA  
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1 Analy Batch No.: 310901

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

Instrument ID: CHHP5 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/24/2020 02:01 Calibration End Date: 03/24/2020 07:18 Calibration ID: 43118

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-310901/10	5032303.D
Level 2	IC 180-310901/11	5032304.D
Level 3	ICIS 180-310901/12	5032305.D
Level 4	IC 180-310901/13	5032306p.D
Level 5	IC 180-310901/15	5032308.D
Level 6	IC 180-310901/16	5032309P.D
Level 7	IC 180-310901/17	5032310.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7															
Dichlorodifluoromethane	0.3792 0.3845	0.3621 0.3854	0.3916	0.3879	0.3842	Lin2	-0.036	0.3836			0.1000			0.9990		0.9900	
Chloromethane	0.4789 0.5032	0.4541 0.5463	0.4568	0.4852	0.4898	Ave		0.4878			0.1000	6.4	20.0				
Vinyl chloride	0.4032 0.4568	0.4202 0.4665	0.4171	0.4361	0.4407	Ave		0.4344			0.1000	5.2	20.0				
1,3-Butadiene	0.4721 0.4360	0.4263 0.4502	0.4281	0.4465	0.4419	Ave		0.4430			0.0100	3.5	20.0				
Bromomethane	0.2106 0.2890	0.2244 0.2849	0.2317	0.2501	0.2504	Ave		0.2487			0.0500	11.9	20.0				
Chloroethane	0.2620 0.3023	0.2846 0.3265	0.2926	0.2916	0.3031	Ave		0.2947			0.0500	6.7	20.0				
Dichlorofluoromethane	0.6016 0.6851	0.6364 0.7376	0.6253	0.6554	0.6771	Ave		0.6598			0.0100	6.8	20.0				
Trichlorofluoromethane	0.5593 0.5560	0.5368 0.5762	0.5083	0.5612	0.5607	Ave		0.5512			0.1000	4.0	20.0				
Ethyl ether	0.3706 0.4496	0.3931 0.4802	0.3565	0.2704	0.4251	Qua	1.1608	0.2510	0.0009199		0.0100			0.9970		0.9900	
1,1-Dichloroethene	0.2246 0.2312	0.3052 +++++	0.2228	0.2280	0.2307	Lin	0.4549	0.2281			0.1000			0.9980		0.9900	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2543 0.2533	0.3021 +++++	0.2578	0.2604	0.2595	Lin2	-0.029	0.2659			0.1000			0.9940		0.9900	
Acetone	0.1938 0.1653	0.1767 +++++	0.1620	0.1662	0.1728	Ave		0.1728			0.0500	6.7	20.0				
Iodomethane	0.3735 0.4498	0.3860 +++++	0.4268	0.4042	0.4326	Ave		0.4121			0.0100	7.1	20.0				
Carbon disulfide	0.4879 0.6482	0.5057 +++++	0.5257	0.5702	0.6344	Ave		0.5620			0.1000	12.0	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 TestAmerica, Pittsburgh Job No.: 180-105108-1 Analy Batch No.: 310901

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

Instrument ID: CHHP5 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/24/2020 02:01 Calibration End Date: 03/24/2020 07:18 Calibration ID: 43118

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															
Allyl chloride	0.1099 0.1662	0.1402 ++++	0.1489	0.1438	0.1634	Ave		0.1454		0.0100	14.0		20.0				
Methyl acetate	0.2314 0.2612	0.2378 ++++	0.2708	0.2299	0.2558	Ave		0.2478		0.1000	6.9		20.0				
Methylene Chloride	0.4325 0.3317	0.3302 ++++	0.3409	0.3199	0.3260	Lin2	0.5481	0.3209		0.1000				0.9990		0.9900	
tert-Butyl alcohol	1.0073 0.9298	1.0183 1.0005	1.2011	1.0376	0.9512	Ave		1.0208		0.0100	8.6		20.0				
Acrylonitrile	0.1204 0.1348	0.1225 ++++	0.1427	0.1221	0.1334	Ave		0.1293		0.0100	7.0		20.0				
trans-1,2-Dichloroethene	0.2603 0.2818	0.2684 ++++	0.2791	0.2716	0.2788	Ave		0.2733		0.1000	3.0		20.0				
Methyl tert-butyl ether	0.6310 0.8346	0.7251 ++++	0.8495	0.7444	0.8177	Ave		0.7670		0.1000	10.9		20.0				
Hexane	0.4023 0.4637	0.4252 0.4987	0.4350	0.4599	0.4644	Ave		0.4499		0.0100	7.0		20.0				
1,1-Dichloroethane	0.4551 0.5525	0.4968 0.6058	0.5483	0.5233	0.5517	Ave		0.5333		0.2000	9.0		20.0				
2,2-Dichloropropane	0.0690 0.0666	0.0616 0.0699	0.0663	0.0647	0.0656	Ave		0.0664		0.0100	4.1		20.0				
cis-1,2-Dichloroethene	0.2897 0.3354	0.2953 0.3720	0.3316	0.3212	0.3313	Ave		0.3252		0.1000	8.5		20.0				
2-Butanone (MEK)	0.1396 0.2019	0.1641 0.2256	0.1795	0.1776	0.1971	Ave		0.1836		0.0500	15.1		20.0				
Bromochloromethane	0.1765 0.1753	0.1551 0.1911	0.1826	0.1581	0.1746	Ave		0.1733		0.0100	7.4		20.0				
Tetrahydrofuran	0.1261 0.1055	0.0949 0.1175	0.1073	0.0894	0.1019	Ave		0.1061		0.0100	11.9		20.0				
Chloroform	0.7461 0.5543	0.5309 0.5993	0.5764	0.5313	0.5568	Lin2	0.9511	0.5459		0.2000				0.9960		0.9900	
1,1,1-Trichloroethane	0.3871 0.4194	0.3841 0.4515	0.4041	0.3960	0.4098	Ave		0.4074		0.1000	5.7		20.0				
Cyclohexane	0.4789 0.5361	0.4858 0.5595	0.5131	0.5329	0.5309	Ave		0.5196		0.1000	5.6		20.0				
Carbon tetrachloride	0.2881 0.3557	0.3157 0.3812	0.3335	0.3385	0.3558	Ave		0.3383		0.1000	9.0		20.0				
1,1-Dichloropropene	0.3248 0.3896	0.3614 0.4191	0.3683	0.3779	0.3917	Ave		0.3761		0.0100	7.8		20.0				
Benzene	1.0942 1.2649	1.1706 1.3747	1.2520	1.2012	1.2570	Ave		1.2307		0.5000	7.1		20.0				

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI  
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA  
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1 Analy Batch No.: 310901

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

Instrument ID: CHHP5 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/24/2020 02:01 Calibration End Date: 03/24/2020 07:18 Calibration ID: 43118

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															
Isobutyl alcohol	0.0067 0.0094	0.0068 0.0106	0.0093	0.0075	0.0097	Ave		0.0086		*	0.0100	17.8	20.0				
1,2-Dichloroethane	0.4035 0.4803	0.4385 0.5264	0.5001	0.4462	0.4805	Ave		0.4679			0.1000	8.8	20.0				
n-Heptane	0.3755 0.4257	0.3863 0.4419	0.3765	0.4176	0.4313	Ave		0.4078			0.0100	6.8	20.0				
Trichloroethene	0.2618 0.3185	0.2893 0.3462	0.3018	0.3074	0.3204	Ave		0.3065			0.2000	8.7	20.0				
Methylcyclohexane	0.4520 0.5587	0.4652 0.5792	0.4976	0.5408	0.5460	Ave		0.5199			0.1000	9.4	20.0				
1,2-Dichloropropane	0.3043 0.3391	0.3023 0.3650	0.3354	0.3167	0.3366	Ave		0.3285			0.1000	6.8	20.0				
1,4-Dioxane	0.0028 0.0029	0.0023 ++++	0.0025	0.0023	0.0027	Lin1	-0.049	0.0027		*	0.0100			0.9940		0.9900	
Dibromomethane	0.1889 0.2014	0.1801 0.2202	0.1973	0.1811	0.1950	Ave		0.1949			0.0100	7.1	20.0				
Bromodichloromethane	0.3431 0.4155	0.3179 0.4591	0.4035	0.3603	0.3988	Ave		0.3854			0.2000	12.5	20.0				
cis-1,3-Dichloropropene	0.3989 0.5126	0.3976 0.5776	0.5584	0.4459	0.5060	Ave		0.4853			0.2000	15.0	20.0				
4-Methyl-2-pentanone (MIBK)	0.8718 1.2220	0.7309 1.3325	0.9470	1.0191	1.2378	Lin1	-19.99	1.2915			0.1000			0.9920		0.9900	
Toluene	5.3457 5.0653	4.2689 4.9418	4.0212	4.6020	4.8517	Ave		4.7281			0.4000	9.8	20.0				
trans-1,3-Dichloropropene	1.4064 1.8429	1.2485 1.7776	1.4722	1.4343	1.6983	Ave		1.5543			0.1000	14.2	20.0				
Ethyl methacrylate	1.3369 1.8540	1.1783 1.7136	1.5473	1.3924	1.6132	Ave		1.5194			0.0100	15.3	20.0				
1,1,2-Trichloroethane	1.2188 1.3240	0.9085 1.0842	1.1236	0.9592	1.0746	Ave		1.0990			0.1000	13.0	20.0				
Tetrachloroethene	1.0978 1.0633	0.8508 0.9018	0.8585	0.8970	0.9181	Ave		0.9410			0.2000	10.5	20.0				
1,3-Dichloropropane	2.2174 2.1930	1.6903 1.9579	2.0052	1.7184	1.9140	Ave		1.9566			0.0100	10.6	20.0				
2-Hexanone	0.7355 1.0720	0.5596 1.0302	0.8811	0.8238	0.9579	Lin1	-14.59	1.0408			0.1000			0.9920		0.9900	
Dibromochloromethane	0.8209 1.0553	0.7249 1.0875	0.9045	0.8791	1.0398	Ave		0.9303			0.1000	14.5	20.0				
1,2-Dibromoethane (EDB)	1.0710 1.0277	0.9117 1.1179	1.0482	0.9622	1.0581	Ave		1.0281			0.1000	6.8	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 TestAmerica, Pittsburgh Job No.: 180-105108-1 Analy Batch No.: 310901

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

Instrument ID: CHHP5 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/24/2020 02:01 Calibration End Date: 03/24/2020 07:18 Calibration ID: 43118

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															
Chlorobenzene	2.7283 3.0587	2.8352 3.2761	3.1990	2.9851	3.2024	Ave		3.0407			0.5000	6.7		20.0			
1,1,1,2-Tetrachloroethane	0.8035 1.0485	0.9154 1.1158	0.9825	0.9751	1.0710	Ave		0.9874			0.0100	10.7		20.0			
Ethylbenzene	1.2628 1.6257	1.4833 1.7363	1.5820	1.6221	1.7053	Ave		1.5739			0.1000	10.2		20.0			
m-Xylene & p-Xylene	1.6823 2.0681	1.7825 2.1824	1.7984	2.0476	2.1740	Ave		1.9622			0.1000	10.4		20.0			
o-Xylene	1.5373 2.0000	1.7181 2.1148	1.4243	1.9121	2.1140	Ave		1.8315			0.3000	15.1		20.0			
Styrene	2.4150 3.4559	2.8934 3.6846	2.5046	3.3499	3.6799	Ave		3.1405			0.3000	17.1		20.0			
Bromoform	0.3483 ++++	0.4071 ++++	0.3630	0.4835	0.5971	Ave		0.4398			0.1000	23.3	*	20.0			
Isopropylbenzene	3.9713 5.2304	4.3982 5.4984	3.6014	5.1835	5.4667	Ave		4.7643			0.1000	16.1		20.0			
Bromobenzene	0.7332 0.6732	0.7612 0.8802	0.8131	0.7737	0.7821	Ave		0.7738			0.0100	8.3		20.0			
1,1,2,2-Tetrachloroethane	1.0083 1.2272	1.1170 1.2427	0.9453	1.1582	1.2437	Ave		1.1346			0.3000	10.5		20.0			
trans-1,4-Dichloro-2-butene	0.1734 0.1835	0.1973 0.2556	0.2264	0.2057	0.2270	Ave		0.2098			0.0100	13.6		20.0			
1,2,3-Trichloropropane	0.2637 0.2004	0.2349 0.2780	0.2801	0.2385	0.2476	Ave		0.2490			0.0100	11.2		20.0			
N-Propylbenzene	0.7619 0.7321	0.7768 0.9673	0.8579	0.8792	0.8717	Ave		0.8353			0.0100	9.9		20.0			
2-Chlorotoluene	0.6182 0.5999	0.7141 0.8353	0.7523	0.7350	0.7536	Ave		0.7155			0.0100	11.5		20.0			
1,3,5-Trimethylbenzene	1.9507 2.1718	2.3682 2.9880	2.5980	2.6706	2.6786	Ave		2.4894			0.0100	14.1		20.0			
4-Chlorotoluene	0.6849 0.6557	0.7514 0.8689	0.8026	0.7782	0.7897	Ave		0.7616			0.0100	9.5		20.0			
tert-Butylbenzene	1.6637 2.0965	1.9700 2.4851	2.1333	2.1766	2.2732	Ave		2.1140			0.0100	12.1		20.0			
1,2,4-Trimethylbenzene	1.9996 2.6680	2.4035 3.0238	2.7139	2.6960	2.7636	Ave		2.6098			0.0100	12.4		20.0			
sec-Butylbenzene	2.6067 3.4025	2.8540 3.5475	3.1091	3.2286	3.3017	Ave		3.1500			0.0100	10.3		20.0			
1,3-Dichlorobenzene	1.4164 1.5356	1.4328 1.6289	1.5200	1.4953	1.5556	Ave		1.5121			0.6000	4.8		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 TestAmerica, Pittsburgh Job No.: 180-105108-1 Analy Batch No.: 310901

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

Instrument ID: CHHP5 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/24/2020 02:01 Calibration End Date: 03/24/2020 07:18 Calibration ID: 43118

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															
4-Isopropyltoluene	2.0998 2.8263	2.4642 3.0824	2.6786	2.8381	2.8361	Ave		2.6893		0.0100	11.9		20.0				
1,4-Dichlorobenzene	1.4218 1.6207	1.4288 1.6533	1.5746	1.5233	1.5333	Ave		1.5365		0.5000	5.8		20.0				
n-Butylbenzene	1.8732 2.8631	2.0107 2.5855	2.1953	2.3874	2.4345	Ave		2.3357		0.0100	14.5		20.0				
1,2-Dichlorobenzene	1.2021 1.6123	1.2997 1.4755	1.4719	1.4170	1.4090	Ave		1.4125		0.4000	9.3		20.0				
1,2-Dibromo-3-Chloropropane	0.0721 0.1097	0.0796 0.1019	0.0935	0.0780	0.0901	Ave		0.0893		0.0500	15.2		20.0				
1,2,4-Trichlorobenzene	0.4621 0.5348	0.3773 0.6243	0.4804	0.6474	0.6058	Ave		0.5331		0.2000	18.6		20.0				
Hexachlorobutadiene	0.2687 0.2396	0.2302 0.2827	0.2586	0.3306	0.2930	Ave		0.2719		0.0100	12.5		20.0				
Naphthalene	0.6755 1.1406	0.6912 1.3121	0.9149	1.1764	1.3103	Ave		1.0316		0.0100	26.4	*	20.0				
1,2,3-Trichlorobenzene	0.2590 0.3443	0.2850 0.4400	0.3254	0.4023	0.4667	Ave		0.3604		0.0100	21.7	*	20.0				
Dibromofluoromethane (Surr)	0.2961 0.2889	0.2749 0.2971	0.2827	0.2693	0.2879	Ave		0.2853			3.6		20.0				
1,2-Dichloroethane-d4 (Surr)	0.4097 0.4090	0.4064 0.4323	0.4000	0.3658	0.4106	Ave		0.4048			4.9		20.0				
Toluene-d8 (Surr)	5.3938 3.9608	3.7823 3.8935	3.4693	3.7680	4.0646	Ave		4.0475			15.4		20.0				
4-Bromofluorobenzene (Surr)	1.6807 1.6032	1.5469 1.5851	1.1072	1.5256	1.6598	Ave		1.5298			12.7		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 TestAmerica, Pittsburgh Job No.: 180-105108-1 Analy Batch No.: 310901

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

Instrument ID: CHHP5 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/24/2020 02:01 Calibration End Date: 03/24/2020 07:18 Calibration ID: 43118

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-310901/10	5032303.D
Level 2	IC 180-310901/11	5032304.D
Level 3	ICIS 180-310901/12	5032305.D
Level 4	IC 180-310901/13	5032306p.D
Level 5	IC 180-310901/15	5032308.D
Level 6	IC 180-310901/16	5032309P.D
Level 7	IC 180-310901/17	5032310.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			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	Lin2	26326 785727	127264 934188	259657	356666	700239	5.00 200	25.0 250	50.0	75.0	175
Chloromethane	FB	Ave	33253 1028276	159579 1324245	302902	446168	892701	5.00 200	25.0 250	50.0	75.0	175
Vinyl chloride	FB	Ave	27997 933513	147689 1130818	276525	401004	803181	5.00 200	25.0 250	50.0	75.0	175
1,3-Butadiene	FB	Ave	32780 890930	149836 1091214	283861	410559	805395	5.00 200	25.0 250	50.0	75.0	175
Bromomethane	FB	Ave	14620 590639	78849 690595	153597	229947	456316	5.00 200	25.0 250	50.0	75.0	175
Chloroethane	FB	Ave	18193 617643	100036 791508	194005	268189	552467	5.00 200	25.0 250	50.0	75.0	175
Dichlorofluoromethane	FB	Ave	41770 1400064	223644 1787782	414582	602716	1234164	5.00 200	25.0 250	50.0	75.0	175
Trichlorofluoromethane	FB	Ave	38831 1136119	188661 1396661	337005	516043	1022038	5.00 200	25.0 250	50.0	75.0	175
Ethyl ether	FB	Qua	25734 918637	138171 1163935	236374	248627	774845	5.00 200	25.0 250	50.0	75.0	175
1,1-Dichloroethene	FB	Lin	15591 472543	107252 ++++	147702	209660	420426	5.00 200	25.0 ++++	50.0	75.0	175
1,1,2-Trichloro-1,2,2-trifluoroethane	FB	Lin2	17653 517627	106165 ++++	170934	239490	472932	5.00 200	25.0 ++++	50.0	75.0	175
Acetone	FB	Ave	67291 675761	124173 ++++	214778	305646	629739	25.0 400	50.0 ++++	100	150	350
Iodomethane	FB	Ave	25931 919060	135657 ++++	282953	371715	788493	5.00 200	25.0 ++++	50.0	75.0	175
Carbon disulfide	FB	Ave	33874 1324653	177720 ++++	348588	524358	1156251	5.00 200	25.0 ++++	50.0	75.0	175
Allyl chloride	FB	Ave	7629 339668	49269 ++++	98754	132236	297845	5.00 200	25.0 ++++	50.0	75.0	175

FORM VI  
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA  
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1 Analy Batch No.: 310901

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

Instrument ID: CHHP5 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/24/2020 02:01 Calibration End Date: 03/24/2020 07:18 Calibration ID: 43118

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			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
Methyl acetate	FB	Ave	32137 1067307	167145 ++++	359118	422887	932376	10.0 400	50.0 ++++	100	150	350
Methylene Chloride	FB	Lin2	30027 677889	116042 ++++	226053	294139	594239	5.00 200	25.0 ++++	50.0	75.0	175
tert-Butyl alcohol	TBAd 9	Ave	15681 499322	78001 936066	175091	187154	424527	50.0 2000	250 2500	500	750	1750
Acrylonitrile	FB	Ave	83602 2754494	430551 ++++	946367	1122911	2432308	50.0 2000	250 ++++	500	750	1750
trans-1,2-Dichloroethene	FB	Ave	18070 575927	94330 ++++	185043	249727	508087	5.00 200	25.0 ++++	50.0	75.0	175
Methyl tert-butyl ether	FB	Ave	43809 1705375	254849 ++++	563276	684507	1490425	5.00 200	25.0 ++++	50.0	75.0	175
Hexane	FB	Ave	27932 947556	149429 1208830	288446	422921	846519	5.00 200	25.0 250	50.0	75.0	175
1,1-Dichloroethane	FB	Ave	31600 1129009	174603 1468344	363528	481195	1005498	5.00 200	25.0 250	50.0	75.0	175
2,2-Dichloropropane	FB	Ave	4788 136081	21640 169406	43976	59513	119611	5.00 200	25.0 250	50.0	75.0	175
cis-1,2-Dichloroethene	FB	Ave	20111 685365	103797 901778	219856	295378	603875	5.00 200	25.0 250	50.0	75.0	175
2-Butanone (MEK)	FB	Ave	48477 825161	115342 1093427	238075	326602	718447	25.0 400	50.0 500	100	150	350
Bromochloromethane	FB	Ave	12253 358157	54499 463289	121060	145422	318319	5.00 200	25.0 250	50.0	75.0	175
Tetrahydrofuran	FB	Ave	17509 431299	66729 569509	142312	164373	371631	10.0 400	50.0 500	100	150	350
Chloroform	FB	Lin2	51803 1132602	186596 1452682	382146	488561	1014791	5.00 200	25.0 250	50.0	75.0	175
1,1,1-Trichloroethane	FB	Ave	26876 857111	134978 1094510	267961	364181	746892	5.00 200	25.0 250	50.0	75.0	175
Cyclohexane	FB	Ave	33254 1095573	170716 1356239	340213	490054	967701	5.00 200	25.0 250	50.0	75.0	175
Carbon tetrachloride	FB	Ave	20000 726851	110945 923915	221116	311245	648580	5.00 200	25.0 250	50.0	75.0	175
1,1-Dichloropropene	FB	Ave	22552 796172	127005 1015770	244182	347486	713868	5.00 200	25.0 250	50.0	75.0	175
Benzene	FB	Ave	75969 2584691	411404 3332246	830138	1104601	2291164	5.00 200	25.0 250	50.0	75.0	175
Isobutyl alcohol	FB	Ave	11709 479696	59946 641700	154436	173119	441497	125 5000	625 6250	1250	1875	4375
1,2-Dichloroethane	FB	Ave	28018 981369	154104 1275964	331613	410319	875847	5.00 200	25.0 250	50.0	75.0	175



FORM VI  
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA  
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1 Analy Batch No.: 310901

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

Instrument ID: CHHP5 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/24/2020 02:01 Calibration End Date: 03/24/2020 07:18 Calibration ID: 43118

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			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-Heptane	FB	Ave	26069 869817	135776 1071158	249664	384041	786049	5.00 200	25.0 250	50.0	75.0	175
Trichloroethene	FB	Ave	18176 650810	101668 839157	200073	282724	583985	5.00 200	25.0 250	50.0	75.0	175
Methylcyclohexane	FB	Ave	31384 1141774	163502 1403842	329949	497321	995188	5.00 200	25.0 250	50.0	75.0	175
1,2-Dichloropropane	FB	Ave	21129 692923	106238 884631	222351	291261	613600	5.00 200	25.0 250	50.0	75.0	175
1,4-Dioxane	FB	Lin1	3903 116549	16060 ++++	33589	41474	99292	100 4000	500 ++++	1000	1500	3500
Dibromomethane	FB	Ave	13113 411645	63284 533751	130826	166547	355466	5.00 200	25.0 250	50.0	75.0	175
Bromodichloromethane	FB	Ave	23819 849028	111729 1112805	267503	331326	726797	5.00 200	25.0 250	50.0	75.0	175
cis-1,3-Dichloropropene	FB	Ave	27697 1047569	139736 1400123	370220	410056	922221	5.00 200	25.0 250	50.0	75.0	175
4-Methyl-2-pentanone (MIBK)	CBNZ d5	Lin1	86096 1492782	149798 1998751	512166	537793	1282614	25.0 400	50.0 500	100	150	350
Toluene	CBNZ d5	Ave	105582 3093786	437480 3706304	1087347	1214308	2513792	5.00 200	25.0 250	50.0	75.0	175
trans-1,3-Dichloropropene	CBNZ d5	Ave	27778 1125621	127944 1333221	398094	378448	879952	5.00 200	25.0 250	50.0	75.0	175
Ethyl methacrylate	CBNZ d5	Ave	26404 1132390	120756 1285168	418407	367396	835820	5.00 200	25.0 250	50.0	75.0	175
1,1,2-Trichloroethane	CBNZ d5	Ave	24073 808646	93104 813164	303826	253107	556768	5.00 200	25.0 250	50.0	75.0	175
Tetrachloroethene	CBNZ d5	Ave	21682 649416	87189 676376	232151	236680	475677	5.00 200	25.0 250	50.0	75.0	175
1,3-Dichloropropane	CBNZ d5	Ave	43795 1339412	173222 1468414	542224	453422	991662	5.00 200	25.0 250	50.0	75.0	175
2-Hexanone	CBNZ d5	Lin1	72634 1309455	114704 1545264	476510	434765	992647	25.0 400	50.0 500	100	150	350
Dibromochloromethane	CBNZ d5	Ave	16214 644566	74291 815589	244567	231965	538767	5.00 200	25.0 250	50.0	75.0	175
1,2-Dibromoethane (EDB)	CBNZ d5	Ave	21154 627717	93428 838385	283426	253887	548216	5.00 200	25.0 250	50.0	75.0	175
Chlorobenzene	CBNZ d5	Ave	53886 1868165	290555 2457040	865019	787653	1659212	5.00 200	25.0 250	50.0	75.0	175
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	15870 640433	93806 836879	265669	257299	554932	5.00 200	25.0 250	50.0	75.0	175
Ethylbenzene	CBNZ d5	Ave	24942 992945	152010 1302191	427773	428018	883541	5.00 200	25.0 250	50.0	75.0	175

FORM VI  
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA  
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1 Analy Batch No.: 310901

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

Instrument ID: CHHP5 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/24/2020 02:01 Calibration End Date: 03/24/2020 07:18 Calibration ID: 43118

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			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
m-Xylene & p-Xylene	CBNZ d5	Ave	33226 1263161	182674 1636764	486282	540292	1126380	5.00 200	25.0 250	50.0	75.0	175
o-Xylene	CBNZ d5	Ave	30364 1221535	176068 1586124	385144	504531	1095305	5.00 200	25.0 250	50.0	75.0	175
Styrene	CBNZ d5	Ave	47698 2110783	296521 2763404	677263	883908	1906645	5.00 200	25.0 250	50.0	75.0	175
Bromoform	CBNZ d5	Ave	6879 +++++	41715 +++++	98147	127585	309374	5.00 +++++	25.0 +++++	50.0	75.0	175
Isopropylbenzene	CBNZ d5	Ave	78437 3194653	450731 4123789	973835	1367724	2832415	5.00 200	25.0 250	50.0	75.0	175
Bromobenzene	DCBd 4	Ave	22398 838497	122946 1033327	261807	340766	711168	5.00 200	25.0 250	50.0	75.0	175
1,1,2,2-Tetrachloroethane	CBNZ d5	Ave	19914 749575	114473 932014	255618	305599	644393	5.00 200	25.0 250	50.0	75.0	175
trans-1,4-Dichloro-2-butene	DCBd 4	Ave	5298 228543	31863 300098	72887	90600	206367	5.00 200	25.0 250	50.0	75.0	175
1,2,3-Trichloropropane	DCBd 4	Ave	8056 249632	37935 326393	90182	105029	225095	5.00 200	25.0 250	50.0	75.0	175
N-Propylbenzene	DCBd 4	Ave	23275 911881	125469 1135672	276239	387266	792612	5.00 200	25.0 250	50.0	75.0	175
2-Chlorotoluene	DCBd 4	Ave	18884 747207	115335 980712	242247	323753	685191	5.00 200	25.0 250	50.0	75.0	175
1,3,5-Trimethylbenzene	DCBd 4	Ave	59588 2705202	382510 3507917	836531	1176264	2435540	5.00 200	25.0 250	50.0	75.0	175
4-Chlorotoluene	DCBd 4	Ave	20920 816733	121359 1020143	258413	342742	718079	5.00 200	25.0 250	50.0	75.0	175
tert-Butylbenzene	DCBd 4	Ave	50821 2611371	318191 2917549	686882	958666	2066931	5.00 200	25.0 250	50.0	75.0	175
1,2,4-Trimethylbenzene	DCBd 4	Ave	61081 3323281	388212 3549945	873839	1187477	2512865	5.00 200	25.0 250	50.0	75.0	175
sec-Butylbenzene	DCBd 4	Ave	79627 4238180	460979 4164800	1001096	1422039	3002110	5.00 200	25.0 250	50.0	75.0	175
1,3-Dichlorobenzene	DCBd 4	Ave	43265 1912751	231424 1912403	489430	658602	1414449	5.00 200	25.0 250	50.0	75.0	175
4-Isopropyltoluene	DCBd 4	Ave	64143 3520424	398020 3618821	862462	1250023	2578805	5.00 200	25.0 250	50.0	75.0	175
1,4-Dichlorobenzene	DCBd 4	Ave	43431 2018702	230784 1940988	507005	670928	1394161	5.00 200	25.0 250	50.0	75.0	175
n-Butylbenzene	DCBd 4	Ave	57219 3566320	324774 3035384	706850	1051518	2213676	5.00 200	25.0 250	50.0	75.0	175
1,2-Dichlorobenzene	DCBd 4	Ave	36719 2008277	209934 1732270	473935	624132	1281170	5.00 200	25.0 250	50.0	75.0	175

FORM VI  
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA  
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1 Analy Batch No.: 310901

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

Instrument ID: CHHP5 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/24/2020 02:01 Calibration End Date: 03/24/2020 07:18 Calibration ID: 43118

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			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			
1,2-Dibromo-3-Chloropropane	DCBd 4	Ave	2203 136681	12865 119630	30096	34349	81968	5.00 200	25.0 250	50.0	75.0	175
1,2,4-Trichlorobenzene	DCBd 4	Ave	14116 666140	60944 732920	154676	285126	550840	5.00 200	25.0 250	50.0	75.0	175
Hexachlorobutadiene	DCBd 4	Ave	8208 298469	37175 331913	83251	145611	266459	5.00 200	25.0 250	50.0	75.0	175
Naphthalene	DCBd 4	Ave	20635 1420728	111648 1540372	294581	518154	1191434	5.00 200	25.0 250	50.0	75.0	175
1,2,3-Trichlorobenzene	DCBd 4	Ave	7912 428913	46030 516543	104778	177186	424365	5.00 200	25.0 250	50.0	75.0	175
Dibromofluoromethane (Surr)	FB	Ave	20561 590355	96601 720138	187445	247682	524755	5.00 200	25.0 250	50.0	75.0	175
1,2-Dichloroethane-d4 (Surr)	FB	Ave	28445 835696	142845 1047738	265234	336370	748339	5.00 200	25.0 250	50.0	75.0	175
Toluene-d8 (Surr)	CBNZ d5	Ave	106533 2419204	387607 2920142	938108	994249	2105983	5.00 200	25.0 250	50.0	75.0	175
4-Bromofluorobenzene (Surr)	CBNZ d5	Ave	33195 979201	158528 1188809	299382	402546	859974	5.00 200	25.0 250	50.0	75.0	175

Curve Type Legend:

Ave = Average ISTD  
Lin = Linear ISTD  
Lin1 = Linear 1/conc ISTD  
Lin2 = Linear 1/conc^2 ISTD  
Qua = Quadratic ISTD

FORM VI  
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA  
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1 Analy Batch No.: 310901

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

Instrument ID: CHHP5 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/24/2020 02:01 Calibration End Date: 03/24/2020 07:18 Calibration ID: 43118

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-310901/10	5032303.D
Level 2	IC 180-310901/11	5032304.D
Level 3	ICIS 180-310901/12	5032305.D
Level 4	IC 180-310901/13	5032306p.D
Level 5	IC 180-310901/15	5032308.D
Level 6	IC 180-310901/16	5032309P.D
Level 7	IC 180-310901/17	5032310.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	0.7 0.5	-5.2	2.3	1.2	0.2	0.3	50 30	30	30	30	30	30
Chloromethane	-1.8 12.0	-6.9	-6.3	-0.5	0.4	3.2	50 30	30	30	30	30	30
Vinyl chloride	-7.2 7.4	-3.3	-4.0	0.4	1.4	5.2	50 30	30	30	30	30	30
1,3-Butadiene	6.6 1.6	-3.8	-3.4	0.8	-0.3	-1.6	50 30	30	30	30	30	30
Bromomethane	-15.3 14.6	-9.8	-6.9	0.5	0.7	16.2	50 30	30	30	30	30	30
Chloroethane	-11.1 10.8	-3.4	-0.7	-1.0	2.9	2.6	50 30	30	30	30	30	30
Dichlorofluoromethane	-8.8 11.8	-3.6	-5.2	-0.7	2.6	3.8	50 30	30	30	30	30	30
Trichlorofluoromethane	1.5 4.5	-2.6	-7.8	1.8	1.7	0.9	50 30	30	30	30	30	30
Ethyl ether	-45.4 -0.8	24.0	10.4	-17.3	1.1	1.4	50 30	30	30	30	30	30
1,1-Dichloroethene	-41.4 ++++	25.8	-6.3	-2.7	0.0	0.4	50	30	30	30	30	30
1,1,2-Trichloro-1,2,2-trifluoroethane	-2.2 ++++	14.0	-2.8	-1.9	-2.4	-4.7	50	30	30	30	30	30
Acetone	12.2 ++++	2.2	-6.3	-3.8	0.0	-4.3	50	30	30	30	30	30
Iodomethane	-9.4 ++++	-6.3	3.5	-1.9	5.0	9.1	50	30	30	30	30	30
Carbon disulfide	-13.2 ++++	-10.0	-6.5	1.5	12.9	15.3	50	30	30	30	30	30
Allyl chloride	-24.4 ++++	-3.6	2.4	-1.1	12.4	14.3	50	30	30	30	30	30

FORM VI  
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA  
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1 Analy Batch No.: 310901

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

Instrument ID: CHHP5 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/24/2020 02:01 Calibration End Date: 03/24/2020 07:18 Calibration ID: 43118

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
Methyl acetate	-6.6 ++++	-4.0	9.3	-7.2	3.2	5.4	50	30	30	30	30	30
Methylene Chloride	0.6 ++++	-3.9	2.8	-2.6	0.6	2.5	50	30	30	30	30	30
tert-Butyl alcohol	-1.3 -2.0	-0.2	17.7	1.6	-6.8	-8.9	50 30	30	30	30	30	30
Acrylonitrile	-6.9 ++++	-5.3	10.4	-5.6	3.2	4.2	50	30	30	30	30	30
trans-1,2-Dichloroethene	-4.8 ++++	-1.8	2.1	-0.6	2.0	3.1	50	30	30	30	30	30
Methyl tert-butyl ether	-17.7 ++++	-5.5	10.8	-3.0	6.6	8.8	50	30	30	30	30	30
Hexane	-10.6 10.9	-5.5	-3.3	2.2	3.2	3.1	50 30	30	30	30	30	30
1,1-Dichloroethane	-14.7 13.6	-6.9	2.8	-1.9	3.4	3.6	50 30	30	30	30	30	30
2,2-Dichloropropane	3.9 5.3	-7.2	-0.1	-2.5	-1.1	0.3	50 30	30	30	30	30	30
cis-1,2-Dichloroethene	-10.9 14.4	-9.2	2.0	-1.2	1.9	3.1	50 30	30	30	30	30	30
2-Butanone (MEK)	-24.0 22.8	-10.6	-2.2	-3.3	7.3	10.0	50 30	30	30	30	30	30
Bromochloromethane	1.8 10.3	-10.5	5.3	-8.8	0.8	1.1	50 30	30	30	30	30	30
Tetrahydrofuran	18.8 10.7	-10.5	1.2	-15.8	-3.9	-0.5	50 30	30	30	30	30	30
Chloroform	1.8 9.1	-9.7	2.1	-5.0	1.0	0.7	50 30	30	30	30	30	30
1,1,1-Trichloroethane	-5.0 10.8	-5.7	-0.8	-2.8	0.6	2.9	50 30	30	30	30	30	30
Cyclohexane	-7.8 7.7	-6.5	-1.3	2.6	2.2	3.2	50 30	30	30	30	30	30
Carbon tetrachloride	-14.9 12.7	-6.7	-1.4	0.0	5.2	5.1	50 30	30	30	30	30	30
1,1-Dichloropropene	-13.6 11.4	-3.9	-2.1	0.5	4.1	3.6	50 30	30	30	30	30	30
Benzene	-11.1 11.7	-4.9	1.7	-2.4	2.1	2.8	50 30	30	30	30	30	30
Isobutyl alcohol	-21.4 23.4	-20.5	8.5	-12.3	12.9	9.4	50 30	30	30	30	30	30
1,2-Dichloroethane	-13.8 12.5	-6.3	6.9	-4.6	2.7	2.6	50 30	30	30	30	30	30

FORM VI  
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA  
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1 Analy Batch No.: 310901

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

Instrument ID: CHHP5 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/24/2020 02:01 Calibration End Date: 03/24/2020 07:18 Calibration ID: 43118

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-Heptane	-7.9 8.4	-5.3	-7.7	2.4	5.7	4.4	50 30	30	30	30	30	30
Trichloroethene	-14.6 13.0	-5.6	-1.5	0.3	4.5	3.9	50 30	30	30	30	30	30
Methylcyclohexane	-13.1 11.4	-10.5	-4.3	4.0	5.0	7.5	50 30	30	30	30	30	30
1,2-Dichloropropane	-7.4 11.1	-8.0	2.1	-3.6	2.5	3.2	50 30	30	30	30	30	30
1,4-Dioxane	21.7 ++++	-12.2	-4.8	-15.7	0.9	5.6	50	30	30	30	30	30
Dibromomethane	-3.1 13.0	-7.6	1.3	-7.1	0.1	3.4	50 30	30	30	30	30	30
Bromodichloromethane	-11.0 19.1	-17.5	4.7	-6.5	3.5	7.8	50 30	30	30	30	30	30
cis-1,3-Dichloropropene	-17.8 19.0	-18.1	15.1	-8.1	4.3	5.6	50 30	30	30	30	30	30
4-Methyl-2-pentanone (MIBK)	29.4 6.3	-12.5	-11.2	-10.8	0.3	-1.5	50 30	30	30	30	30	30
Toluene	13.1 4.5	-9.7	-15.0	-2.7	2.6	7.1	50 30	30	30	30	30	30
trans-1,3-Dichloropropene	-9.5 14.4	-19.7	-5.3	-7.7	9.3	18.6	50 30	30	30	30	30	30
Ethyl methacrylate	-12.0 12.8	-22.4	1.8	-8.4	6.2	22.0	50 30	30	30	30	30	30
1,1,2-Trichloroethane	10.9 -1.3	-17.3	2.2	-12.7	-2.2	20.5	50 30	30	30	30	30	30
Tetrachloroethene	16.7 -4.2	-9.6	-8.8	-4.7	-2.4	13.0	50 30	30	30	30	30	30
1,3-Dichloropropane	13.3 0.1	-13.6	2.5	-12.2	-2.2	12.1	50 30	30	30	30	30	30
2-Hexanone	26.7 1.8	-18.2	-1.3	-11.5	-4.0	6.5	50 30	30	30	30	30	30
Dibromochloromethane	-11.8 16.9	-22.1	-2.8	-5.5	11.8	13.4	50 30	30	30	30	30	30
1,2-Dibromoethane (EDB)	4.2 8.7	-11.3	2.0	-6.4	2.9	0.0	50 30	30	30	30	30	30
Chlorobenzene	-10.3 7.7	-6.8	5.2	-1.8	5.3	0.6	50 30	30	30	30	30	30
1,1,1,2-Tetrachloroethane	-18.6 13.0	-7.3	-0.5	-1.2	8.5	6.2	50 30	30	30	30	30	30
Ethylbenzene	-19.8 10.3	-5.8	0.5	3.1	8.3	3.3	50 30	30	30	30	30	30

FORM VI  
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA  
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1 Analy Batch No.: 310901

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

Instrument ID: CHHP5 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/24/2020 02:01 Calibration End Date: 03/24/2020 07:18 Calibration ID: 43118

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
m-Xylene & p-Xylene	-14.3 11.2	-9.2	-8.3	4.4	10.8	5.4	50 30	30	30	30	30	30
o-Xylene	-16.1 15.5	-6.2	-22.2	4.4	15.4	9.2	50 30	30	30	30	30	30
Styrene	-23.1 17.3	-7.9	-20.2	6.7	17.2	10.0	50 30	30	30	30	30	30
Bromoform	-20.8 ++++	-7.4	-17.5	9.9	35.8 *	++++	50	30	30	30	30	
Isopropylbenzene	-16.6 15.4	-7.7	-24.4	8.8	14.7	9.8	50 30	30	30	30	30	30
Bromobenzene	-5.2 13.7	-1.6	5.1	0.0	1.1	-13.0	50 30	30	30	30	30	30
1,1,2,2-Tetrachloroethane	-11.1 9.5	-1.6	-16.7	2.1	9.6	8.2	50 30	30	30	30	30	30
trans-1,4-Dichloro-2-butene	-17.3 21.8	-6.0	7.9	-2.0	8.2	-12.6	50 30	30	30	30	30	30
1,2,3-Trichloropropane	5.9 11.6	-5.7	12.5	-4.2	-0.6	-19.5	50 30	30	30	30	30	30
N-Propylbenzene	-8.8 15.8	-7.0	2.7	5.3	4.4	-12.4	50 30	30	30	30	30	30
2-Chlorotoluene	-13.6 16.8	-0.2	5.2	2.7	5.3	-16.2	50 30	30	30	30	30	30
1,3,5-Trimethylbenzene	-21.6 20.0	-4.9	4.4	7.3	7.6	-12.8	50 30	30	30	30	30	30
4-Chlorotoluene	-10.1 14.1	-1.3	5.4	2.2	3.7	-13.9	50 30	30	30	30	30	30
tert-Butylbenzene	-21.3 17.6	-6.8	0.9	3.0	7.5	-0.8	50 30	30	30	30	30	30
1,2,4-Trimethylbenzene	-23.4 15.9	-7.9	4.0	3.3	5.9	2.2	50 30	30	30	30	30	30
sec-Butylbenzene	-17.2 12.6	-9.4	-1.3	2.5	4.8	8.0	50 30	30	30	30	30	30
1,3-Dichlorobenzene	-6.3 7.7	-5.2	0.5	-1.1	2.9	1.6	50 30	30	30	30	30	30
4-Isopropyltoluene	-21.9 14.6	-8.4	-0.4	5.5	5.5	5.1	50 30	30	30	30	30	30
1,4-Dichlorobenzene	-7.5 7.6	-7.0	2.5	-0.9	-0.2	5.5	50 30	30	30	30	30	30
n-Butylbenzene	-19.8 10.7	-13.9	-6.0	2.2	4.2	22.6	50 30	30	30	30	30	30
1,2-Dichlorobenzene	-14.9 4.5	-8.0	4.2	0.3	-0.2	14.1	50 30	30	30	30	30	30

FORM VI  
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA  
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1 Analy Batch No.: 310901

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

Instrument ID: CHHP5 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/24/2020 02:01 Calibration End Date: 03/24/2020 07:18 Calibration ID: 43118

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
1,2-Dibromo-3-Chloropropane	-19.2 14.1	-10.8	4.7	-12.7	1.0	22.9	50 30	30	30	30	30	30
1,2,4-Trichlorobenzene	-13.3 17.1	-29.2	-9.9	21.4	13.6	0.3	50 30	30	30	30	30	30
Hexachlorobutadiene	-1.2 4.0	-15.4	-4.9	21.6	7.8	-11.9	50 30	30	30	30	30	30
Naphthalene	-34.5 27.2	-33.0 *	-11.3	14.0	27.0	10.6	50 30	30	30	30	30	30
1,2,3-Trichlorobenzene	-28.1 22.1	-20.9	-9.7	11.6	29.5	-4.5	50 30	30	30	30	30	30
Dibromofluoromethane (Surr)	3.8 4.1	-3.6	-0.9	-5.6	0.9	1.3	50 30	30	30	30	30	30
1,2-Dichloroethane-d4 (Surr)	1.2 6.8	0.4	-1.2	-9.6	1.4	1.0	50 30	30	30	30	30	30
Toluene-d8 (Surr)	33.3 -3.8	-6.6	-14.3	-6.9	0.4	-2.1	50 30	30	30	30	30	30
4-Bromofluorobenzene (Surr)	9.9 3.6	1.1	-27.6	-0.3	8.5	4.8	50 30	30	30	30	30	30



Eurofins TestAmerica, Pittsburgh  
Target Compound Quantitation Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP5\20200324-31295.b\5032303.D  
 Lims ID: IC 1  
 Client ID:  
 Sample Type: IC Calib Level: 1  
 Inject. Date: 24-Mar-2020 02:01:30 ALS Bottle#: 3 Worklist Smp#: 10  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: 180-0031295-010  
 Operator ID: 034635 Instrument ID: CHHP5  
 Sublist: chrom-MSVOA\_LL\_CHHP5\*sub144  
 Method: \\chromna\Pittsburgh\ChromData\CHHP5\20200324-31295.b\MSVOA\_LL\_CHHP5.m  
 Limit Group: VOA 8260C\_D ICAL  
 Last Update: 26-Mar-2020 23:38:08 Calib Date: 24-Mar-2020 04:51:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP5\20200324-31295.b\5032310.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: CTX0332

First Level Reviewer: journetp

Date: 24-Mar-2020 14:17:16

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.392	4.400	-0.008	0	311344	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.373	7.375	-0.002	98	694313	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.463	10.465	-0.002	86	197509	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.799	12.801	-0.002	96	305468	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.661	6.657	0.004	79	20561	5.00	5.19	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	7.026	7.022	0.004	0	28445	5.00	5.06	
\$ 7 Toluene-d8 (Surr)	98	9.009	9.011	-0.002	94	106533	5.00	6.66	
\$ 8 4-Bromofluorobenzene (Surr	95	11.643	11.640	0.003	88	33195	5.00	5.49	
11 Dichlorodifluoromethane	85	1.648	1.650	-0.002	96	26326	5.00	5.04	
12 Chloromethane	50	1.849	1.845	0.004	97	33253	5.00	4.91	
13 Vinyl chloride	62	1.965	1.973	-0.008	75	27997	5.00	4.64	
14 Butadiene	39	1.977	1.979	-0.002	98	32780	5.00	5.33	
15 Bromomethane	94	2.299	2.295	0.004	84	14620	5.00	4.23	
16 Chloroethane	64	2.439	2.435	0.004	80	18193	5.00	4.45	
17 Dichlorofluoromethane	67	2.725	2.733	-0.008	93	41770	5.00	4.56	
18 Trichlorofluoromethane	101	2.737	2.745	-0.008	91	38831	5.00	5.07	
20 Ethyl ether	59	3.127	3.129	-0.002	88	25734	5.00	2.73	
22 1,1-Dichloroethene	96	3.431	3.439	-0.008	94	15591	5.00	2.93	
23 1,1,2-Trichloro-1,2,2-trif	101	3.498	3.494	0.004	71	17653	5.00	4.89	
24 Acetone	43	3.552	3.542	0.010	99	67291	25.0	28.0	
25 Iodomethane	142	3.650	3.640	0.010	98	25931	5.00	4.53	
26 Carbon disulfide	76	3.723	3.731	-0.008	99	33874	5.00	4.34	
28 3-Chloro-1-propene	76	4.033	4.023	0.010	84	7629	5.00	3.78	
30 Methyl acetate	43	4.051	4.060	-0.009	99	32137	10.0	9.34	
31 Methylene Chloride	84	4.258	4.254	0.004	93	30027	5.00	5.03	
32 2-Methyl-2-propanol	59	4.532	4.528	0.004	93	15681	50.0	49.3	
33 Acrylonitrile	53	4.641	4.644	-0.003	100	83602	50.0	46.5	
34 trans-1,2-Dichloroethene	96	4.672	4.662	0.010	84	18070	5.00	4.76	
35 Methyl tert-butyl ether	73	4.684	4.686	-0.002	97	43809	5.00	4.11	
36 Hexane	57	5.085	5.082	0.003	93	27932	5.00	4.47	
37 1,1-Dichloroethane	63	5.298	5.301	-0.003	96	31600	5.00	4.27	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
44 2,2-Dichloropropane	97	6.035	6.043	-0.008	42	4788	5.00	5.19	
45 cis-1,2-Dichloroethene	96	6.047	6.043	0.004	83	20111	5.00	4.45	
46 2-Butanone (MEK)	43	6.059	6.061	-0.002	98	48477	25.0	19.0	
49 Chlorobromomethane	128	6.320	6.329	-0.009	98	12253	5.00	5.09	
51 Tetrahydrofuran	42	6.345	6.341	0.004	93	17509	10.0	11.9	
52 Chloroform	83	6.473	6.475	-0.002	92	51803	5.00	5.09	
53 1,1,1-Trichloroethane	97	6.631	6.633	-0.002	98	26876	5.00	4.75	
54 Cyclohexane	56	6.692	6.694	-0.002	92	33254	5.00	4.61	
56 Carbon tetrachloride	117	6.801	6.797	0.004	94	20000	5.00	4.26	
55 1,1-Dichloropropene	75	6.819	6.815	0.004	93	22552	5.00	4.32	
58 Benzene	78	7.026	7.034	-0.008	96	75969	5.00	4.45	
57 Isobutyl alcohol	41	7.032	7.034	-0.002	40	11709	125.0	98.2	
59 1,2-Dichloroethane	62	7.105	7.107	-0.002	98	28018	5.00	4.31	
62 n-Heptane	43	7.385	7.387	-0.002	40	26069	5.00	4.60	
64 Trichloroethene	130	7.756	7.758	-0.002	97	18176	5.00	4.27	
66 Methylcyclohexane	83	7.993	7.983	0.010	91	31384	5.00	4.35	
67 1,2-Dichloropropane	63	8.024	8.032	-0.008	90	21129	5.00	4.63	
70 1,4-Dioxane	88	8.103	8.111	-0.008	44	3903	100.0	121.7	
68 Dibromomethane	93	8.121	8.117	0.004	91	13113	5.00	4.85	
71 Dichlorobromomethane	83	8.310	8.312	-0.002	98	23819	5.00	4.45	
74 cis-1,3-Dichloropropene	75	8.754	8.756	-0.002	93	27697	5.00	4.11	
75 4-Methyl-2-pentanone (MIBK)	43	8.912	8.914	-0.002	98	86096	25.0	32.4	
76 Toluene	91	9.082	9.078	0.004	98	105582	5.00	5.65	
77 trans-1,3-Dichloropropene	75	9.326	9.334	-0.008	95	27778	5.00	4.52	
78 Ethyl methacrylate	69	9.387	9.389	-0.003	91	26404	5.00	4.40	
79 1,1,2-Trichloroethane	97	9.520	9.522	-0.002	94	24073	5.00	5.55	
80 Tetrachloroethene	164	9.593	9.589	0.004	93	21682	5.00	5.83	
81 1,3-Dichloropropane	76	9.685	9.681	0.004	94	43795	5.00	5.67	
82 2-Hexanone	43	9.739	9.741	-0.002	98	72634	25.0	31.7	
84 Chlorodibromomethane	129	9.891	9.894	-0.003	89	16214	5.00	4.41	
85 Ethylene Dibromide	107	10.007	10.003	0.004	99	21154	5.00	5.21	
87 Chlorobenzene	112	10.488	10.490	-0.002	93	53886	5.00	4.49	
89 1,1,1,2-Tetrachloroethane	131	10.579	10.581	-0.002	44	15870	5.00	4.07	
90 Ethylbenzene	106	10.585	10.593	-0.008	98	24942	5.00	4.01	
91 m-Xylene & p-Xylene	106	10.719	10.721	-0.002	0	33226	5.00	4.29	
92 o-Xylene	106	11.102	11.098	0.004	95	30364	5.00	4.20	
93 Styrene	104	11.120	11.122	-0.002	96	47698	5.00	3.84	
94 Bromoform	173	11.303	11.299	0.004	93	6879	5.00	3.96	
97 Isopropylbenzene	105	11.467	11.463	0.004	95	78437	5.00	4.17	
100 Bromobenzene	156	11.783	11.779	0.004	92	22398	5.00	4.74	
99 1,1,2,2-Tetrachloroethane	83	11.777	11.786	-0.009	73	19914	5.00	4.44	
102 trans-1,4-Dichloro-2-buten	53	11.820	11.816	0.004	60	5298	5.00	4.13	
101 1,2,3-Trichloropropane	110	11.838	11.834	0.004	90	8056	5.00	5.30	
103 N-Propylbenzene	120	11.887	11.883	0.004	98	23275	5.00	4.56	
104 2-Chlorotoluene	126	11.972	11.974	-0.002	96	18884	5.00	4.32	
106 1,3,5-Trimethylbenzene	105	12.063	12.065	-0.002	93	59588	5.00	3.92	
107 4-Chlorotoluene	126	12.100	12.096	0.004	97	20920	5.00	4.50	
108 tert-Butylbenzene	119	12.380	12.376	0.004	93	50821	5.00	3.93	
110 1,2,4-Trimethylbenzene	105	12.434	12.436	-0.002	96	61081	5.00	3.83	
112 sec-Butylbenzene	105	12.599	12.601	-0.002	94	79627	5.00	4.14	
113 1,3-Dichlorobenzene	146	12.720	12.722	-0.002	97	43265	5.00	4.68	
114 4-Isopropyltoluene	119	12.757	12.753	0.004	96	64143	5.00	3.90	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
115 1,4-Dichlorobenzene	146	12.824	12.820	0.004	84	43431	5.00	4.63	
120 n-Butylbenzene	91	13.164	13.166	-0.002	96	57219	5.00	4.01	
121 1,2-Dichlorobenzene	146	13.177	13.179	-0.003	95	36719	5.00	4.26	
122 1,2-Dibromo-3-Chloropropan	75	13.961	13.969	-0.008	9	2203	5.00	4.04	
126 1,2,4-Trichlorobenzene	180	14.783	14.785	-0.002	93	14116	5.00	4.33	
127 Hexachlorobutadiene	225	14.935	14.931	0.004	94	8208	5.00	4.94	
128 Naphthalene	128	15.050	15.058	-0.008	96	20635	5.00	3.27	
129 1,2,3-Trichlorobenzene	180	15.281	15.283	-0.002	89	7912	5.00	3.59	
S 133 Xylenes, Total	106				0		10.0	8.48	
S 134 1,2-Dichloroethene, Total	96				0		10.0	9.21	
S 154 Total BTEX	106				0		25.0	22.6	
S 135 1,3-Dichloropropene, Total	1				0		10.0	8.63	

**Reagents:**

VOA8260INT_00105	Amount Added: 2.00	Units: uL
VOA8260SURR_00105	Amount Added: 0.20	Units: uL
voaWKetmix1st_00024	Amount Added: 0.80	Units: uL
VOA8260VOAPRI_00396	Amount Added: 0.20	Units: uL

Eurofins TestAmerica, Pittsburgh

Data File: \\chromna\Pittsburgh\ChromData\CHHP5\20200324-31295.b\5032303.D

Injection Date: 24-Mar-2020 02:01:30

Instrument ID: CHHP5

Operator ID: 034635

Lims ID: IC 1

Worklist Smp#: 10

Client ID:

Purge Vol: 5.000 mL

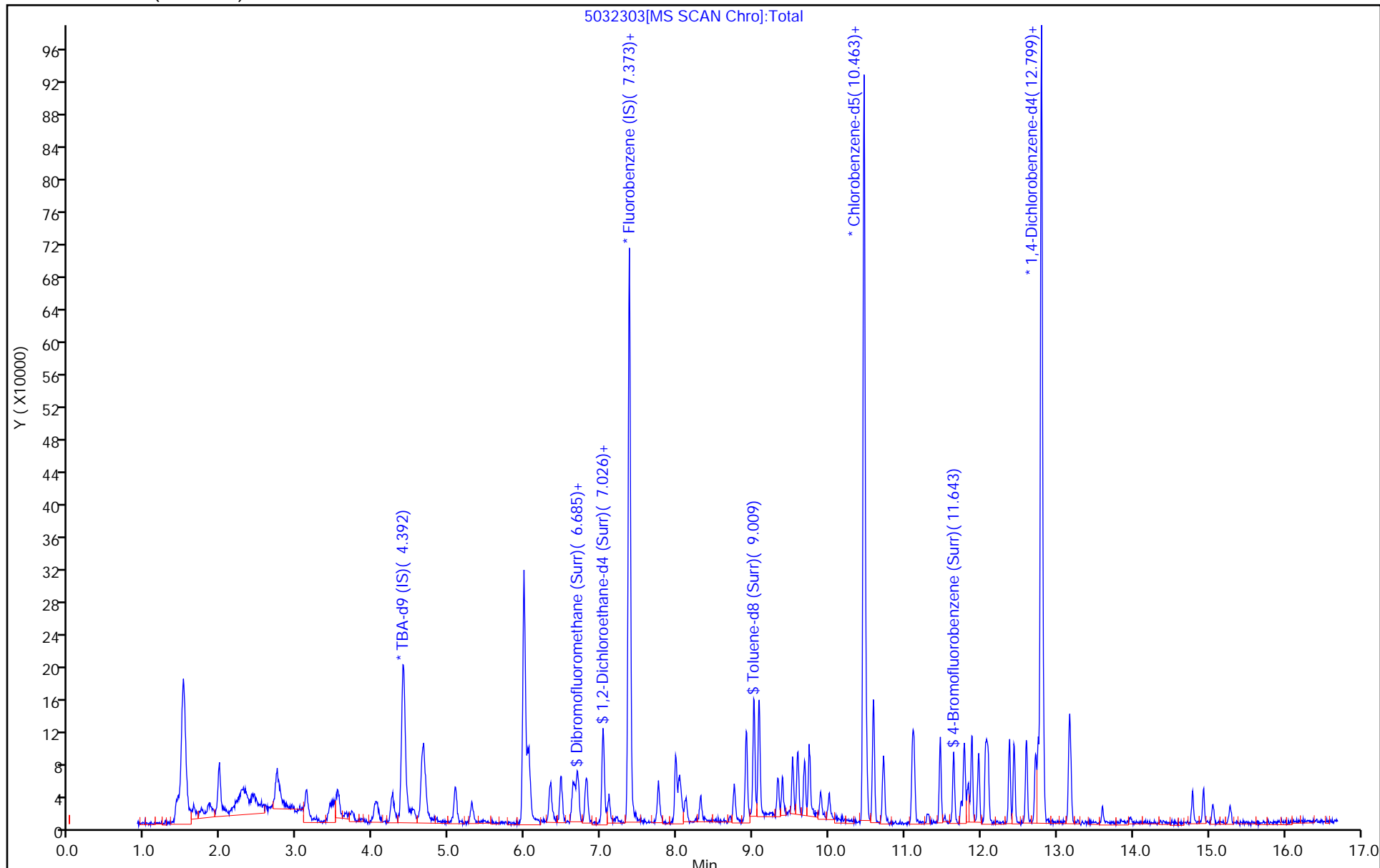
Dil. Factor: 1.0000

ALS Bottle#: 3

Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Pittsburgh  
Target Compound Quantitation Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP5\20200324-31295.b\5032304.D  
 Lims ID: IC 5  
 Client ID:  
 Sample Type: IC Calib Level: 2  
 Inject. Date: 24-Mar-2020 02:25:30 ALS Bottle#: 4 Worklist Smp#: 11  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: 180-0031295-011  
 Operator ID: 034635 Instrument ID: CHHP5  
 Sublist: chrom-MSVOA\_LL\_CHHP5\*sub144  
 Method: \\chromna\Pittsburgh\ChromData\CHHP5\20200324-31295.b\MSVOA\_LL\_CHHP5.m  
 Limit Group: VOA 8260C\_D ICAL  
 Last Update: 26-Mar-2020 23:38:29 Calib Date: 24-Mar-2020 04:51:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP5\20200324-31295.b\5032310.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: CTX0332

First Level Reviewer: journetp

Date: 24-Mar-2020 14:38:51

Compound	Sig	RT (min.)	Exp RT (min.)	Diff RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.397	4.400	-0.003	0	306400	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.372	7.375	-0.003	99	702894	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.462	10.465	-0.003	86	204961	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.798	12.801	-0.003	95	323042	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.654	6.657	-0.003	94	96601	25.0	24.1	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	7.025	7.022	0.003	0	142845	25.0	25.1	
\$ 7 Toluene-d8 (Surr)	98	9.008	9.011	-0.003	94	387607	25.0	23.4	
\$ 8 4-Bromofluorobenzene (Surr	95	11.642	11.640	0.002	89	158528	25.0	25.3	
11 Dichlorodifluoromethane	85	1.641	1.650	-0.009	99	127264	25.0	23.7	
12 Chloromethane	50	1.848	1.845	0.003	99	159579	25.0	23.3	
13 Vinyl chloride	62	1.970	1.973	-0.003	77	147689	25.0	24.2	
14 Butadiene	39	1.982	1.979	0.003	95	149836	25.0	24.1	
15 Bromomethane	94	2.298	2.295	0.003	92	78849	25.0	22.6	
16 Chloroethane	64	2.438	2.435	0.003	99	100036	25.0	24.1	
17 Dichlorofluoromethane	67	2.730	2.733	-0.003	96	223644	25.0	24.1	
18 Trichlorofluoromethane	101	2.742	2.745	-0.003	72	188661	25.0	24.3	
20 Ethyl ether	59	3.125	3.129	-0.004	96	138171	25.0	31.0	
22 1,1-Dichloroethene	96	3.442	3.439	0.003	96	107252	25.0	31.5	
23 1,1,2-Trichloro-1,2,2-trif	101	3.478	3.494	-0.016	91	106165	25.0	28.5	
24 Acetone	43	3.545	3.542	0.003	100	124173	50.0	51.1	
25 Iodomethane	142	3.636	3.640	-0.004	99	135657	25.0	23.4	
26 Carbon disulfide	76	3.728	3.731	-0.003	99	177720	25.0	22.5	
28 3-Chloro-1-propene	76	4.032	4.023	0.009	93	49269	25.0	24.1	
30 Methyl acetate	43	4.050	4.060	-0.010	98	167145	50.0	48.0	
31 Methylene Chloride	84	4.251	4.254	-0.003	94	116042	25.0	24.0	
32 2-Methyl-2-propanol	59	4.537	4.528	0.009	92	78001	250.0	249.4	
33 Acrylonitrile	53	4.646	4.644	0.002	100	430551	250.0	236.8	
34 trans-1,2-Dichloroethene	96	4.671	4.662	0.009	98	94330	25.0	24.6	
35 Methyl tert-butyl ether	73	4.683	4.686	-0.003	97	254849	25.0	23.6	
36 Hexane	57	5.084	5.082	0.002	95	149429	25.0	23.6	
37 1,1-Dichloroethane	63	5.303	5.301	0.002	96	174603	25.0	23.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
44 2,2-Dichloropropane	97	6.039	6.043	-0.004	61	21640	25.0	23.2	
45 cis-1,2-Dichloroethene	96	6.046	6.043	0.003	82	103797	25.0	22.7	
46 2-Butanone (MEK)	43	6.070	6.061	0.009	100	115342	50.0	44.7	
49 Chlorobromomethane	128	6.331	6.329	0.002	97	54499	25.0	22.4	
51 Tetrahydrofuran	42	6.344	6.341	0.003	89	66729	50.0	44.7	
52 Chloroform	83	6.477	6.475	0.002	94	186596	25.0	22.6	
53 1,1,1-Trichloroethane	97	6.630	6.633	-0.003	98	134978	25.0	23.6	
54 Cyclohexane	56	6.690	6.694	-0.004	93	170716	25.0	23.4	
56 Carbon tetrachloride	117	6.794	6.797	-0.003	97	110945	25.0	23.3	
55 1,1-Dichloropropene	75	6.812	6.815	-0.003	95	127005	25.0	24.0	
58 Benzene	78	7.031	7.034	-0.003	97	411404	25.0	23.8	
57 Isobutyl alcohol	41	7.031	7.034	-0.003	43	59946	625.0	496.8	
59 1,2-Dichloroethane	62	7.110	7.107	0.003	98	154104	25.0	23.4	
62 n-Heptane	43	7.384	7.387	-0.003	92	135776	25.0	23.7	
64 Trichloroethene	130	7.761	7.758	0.003	98	101668	25.0	23.6	
66 Methylcyclohexane	83	7.986	7.983	0.003	91	163502	25.0	22.4	
67 1,2-Dichloropropane	63	8.029	8.032	-0.003	94	106238	25.0	23.0	
70 1,4-Dioxane	88	8.114	8.111	0.003	38	16060	500.0	439.2	
68 Dibromomethane	93	8.114	8.117	-0.003	92	63284	25.0	23.1	
71 Dichlorobromomethane	83	8.315	8.312	0.003	99	111729	25.0	20.6	
74 cis-1,3-Dichloropropene	75	8.753	8.756	-0.003	95	139736	25.0	20.5	
75 4-Methyl-2-pentanone (MIBK)	43	8.911	8.914	-0.003	97	149798	50.0	43.8	
76 Toluene	91	9.081	9.078	0.003	98	437480	25.0	22.6	
77 trans-1,3-Dichloropropene	75	9.331	9.334	-0.003	96	127944	25.0	20.1	
78 Ethyl methacrylate	69	9.391	9.389	0.002	89	120756	25.0	19.4	
79 1,1,2-Trichloroethane	97	9.525	9.522	0.003	92	93104	25.0	20.7	
80 Tetrachloroethene	164	9.592	9.589	0.003	98	87189	25.0	22.6	
81 1,3-Dichloropropane	76	9.677	9.681	-0.004	93	173222	25.0	21.6	
82 2-Hexanone	43	9.738	9.741	-0.003	99	114704	50.0	40.9	
84 Chlorodibromomethane	129	9.896	9.894	0.002	90	74291	25.0	19.5	
85 Ethylene Dibromide	107	10.006	10.003	0.003	98	93428	25.0	22.2	
87 Chlorobenzene	112	10.493	10.490	0.003	95	290555	25.0	23.3	
89 1,1,1,2-Tetrachloroethane	131	10.584	10.581	0.003	92	93806	25.0	23.2	
90 Ethylbenzene	106	10.584	10.593	-0.009	98	152010	25.0	23.6	
91 m-Xylene & p-Xylene	106	10.718	10.721	-0.003	0	182674	25.0	22.7	
92 o-Xylene	106	11.101	11.098	0.003	96	176068	25.0	23.5	
93 Styrene	104	11.119	11.122	-0.003	95	296521	25.0	23.0	
94 Bromoform	173	11.308	11.299	0.009	95	41715	25.0	23.1	
97 Isopropylbenzene	105	11.466	11.463	0.003	96	450731	25.0	23.1	
100 Bromobenzene	156	11.782	11.779	0.003	96	122946	25.0	24.6	
99 1,1,2,2-Tetrachloroethane	83	11.782	11.786	-0.004	95	114473	25.0	24.6	
102 trans-1,4-Dichloro-2-buten	53	11.819	11.816	0.003	74	31863	25.0	23.5	
101 1,2,3-Trichloropropane	110	11.837	11.834	0.003	84	37935	25.0	23.6	
103 N-Propylbenzene	120	11.880	11.883	-0.003	99	125469	25.0	23.2	
104 2-Chlorotoluene	126	11.971	11.974	-0.003	97	115335	25.0	24.9	
106 1,3,5-Trimethylbenzene	105	12.062	12.065	-0.003	94	382510	25.0	23.8	
107 4-Chlorotoluene	126	12.093	12.096	-0.004	97	121359	25.0	24.7	
108 tert-Butylbenzene	119	12.378	12.376	0.002	93	318191	25.0	23.3	
110 1,2,4-Trimethylbenzene	105	12.439	12.436	0.003	97	388212	25.0	23.0	
112 sec-Butylbenzene	105	12.604	12.601	0.003	95	460979	25.0	22.7	
113 1,3-Dichlorobenzene	146	12.719	12.722	-0.003	98	231424	25.0	23.7	
114 4-Isopropyltoluene	119	12.756	12.753	0.003	96	398020	25.0	22.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
115 1,4-Dichlorobenzene	146	12.823	12.820	0.003	94	230784	25.0	23.2	
120 n-Butylbenzene	91	13.163	13.166	-0.003	97	324774	25.0	21.5	
121 1,2-Dichlorobenzene	146	13.181	13.179	0.002	97	209934	25.0	23.0	
122 1,2-Dibromo-3-Chloropropan	75	13.966	13.969	-0.003	74	12865	25.0	22.3	
126 1,2,4-Trichlorobenzene	180	14.787	14.785	0.002	92	60944	25.0	17.7	
127 Hexachlorobutadiene	225	14.927	14.931	-0.004	97	37175	25.0	21.2	
128 Naphthalene	128	15.055	15.058	-0.003	96	111648	25.0	16.8	
129 1,2,3-Trichlorobenzene	180	15.280	15.283	-0.003	95	46030	25.0	19.8	
S 133 Xylenes, Total	106				0		50.0	46.2	
S 134 1,2-Dichloroethene, Total	96				0		50.0	47.3	
S 154 Total BTEX	106				0		125.0	116.1	
S 135 1,3-Dichloropropene, Total	1				0		50.0	40.6	

**Reagents:**

VOA8260INT_00105	Amount Added: 2.00	Units: uL
VOA8260SURR_00105	Amount Added: 1.00	Units: uL
voaWKetmix1st_00024	Amount Added: 1.00	Units: uL
VOA8260VOAPRI_00396	Amount Added: 1.00	Units: uL

Eurofins TestAmerica, Pittsburgh

Data File: \\chromna\Pittsburgh\ChromData\CHHP5\20200324-31295.b\5032304.D

Injection Date: 24-Mar-2020 02:25:30

Instrument ID: CHHP5

Operator ID: 034635

Lims ID: IC 5

Worklist Smp#: 11

Client ID:

Purge Vol: 5.000 mL

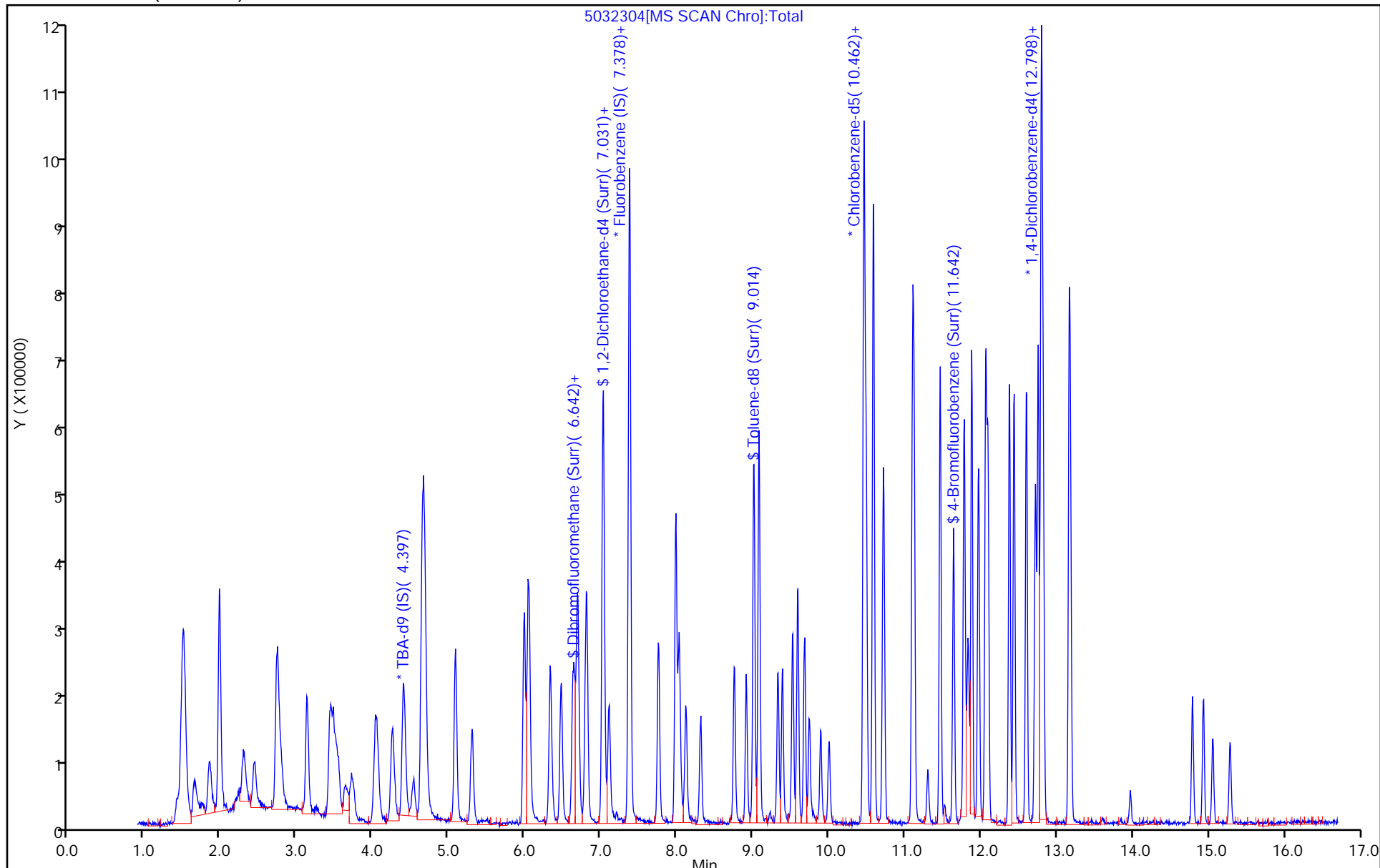
Dil. Factor: 1.0000

ALS Bottle#: 4

Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)





Eurofins TestAmerica, Pittsburgh  
Target Compound Quantitation Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP5\20200324-31295.b\5032305.D  
 Lims ID: icis 10  
 Client ID:  
 Sample Type: ICIS Calib Level: 3  
 Inject. Date: 24-Mar-2020 02:49:30 ALS Bottle#: 5 Worklist Smp#: 12  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: 180-0031295-012  
 Operator ID: 034635 Instrument ID: CHHP5  
 Sublist: chrom-MSVOA\_LL\_CHHP5\*sub144  
 Method: \\chromna\Pittsburgh\ChromData\CHHP5\20200324-31295.b\MSVOA\_LL\_CHHP5.m  
 Limit Group: VOA 8260C\_D ICAL  
 Last Update: 26-Mar-2020 23:38:58 Calib Date: 24-Mar-2020 04:51:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP5\20200324-31295.b\5032310.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: CTX0332

First Level Reviewer: journetp

Date: 24-Mar-2020 14:18:57

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.400	4.400	0.000	0	291545	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.375	7.375	0.000	99	663032	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.465	10.465	0.000	86	270403	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.801	12.801	0.000	93	321988	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.657	6.657	0.000	93	187445	50.0	49.5	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	7.022	7.022	0.000	0	265234	50.0	49.4	
\$ 7 Toluene-d8 (Surr)	98	9.011	9.011	0.000	93	938108	50.0	42.9	
\$ 8 4-Bromofluorobenzene (Surr	95	11.640	11.640	0.000	89	299382	50.0	36.2	
11 Dichlorodifluoromethane	85	1.650	1.650	0.000	99	259657	50.0	51.1	
12 Chloromethane	50	1.845	1.845	0.000	100	302902	50.0	46.8	
13 Vinyl chloride	62	1.973	1.973	0.000	66	276525	50.0	48.0	
14 Butadiene	39	1.979	1.979	0.000	93	283861	50.0	48.3	
15 Bromomethane	94	2.295	2.295	0.000	92	153597	50.0	46.6	
16 Chloroethane	64	2.435	2.435	0.000	99	194005	50.0	49.6	
17 Dichlorofluoromethane	67	2.733	2.733	0.000	96	414582	50.0	47.4	
18 Trichlorofluoromethane	101	2.745	2.745	0.000	97	337005	50.0	46.1	
20 Ethyl ether	59	3.129	3.129	0.000	92	236374	50.0	55.2	
22 1,1-Dichloroethene	96	3.439	3.439	0.000	98	147702	50.0	46.8	
23 1,1,2-Trichloro-1,2,2-trif	101	3.494	3.494	0.000	92	170934	50.0	48.6	
24 Acetone	43	3.542	3.542	0.000	99	214778	100.0	93.7	
25 Iodomethane	142	3.640	3.640	0.000	98	282953	50.0	51.8	
26 Carbon disulfide	76	3.731	3.731	0.000	100	348588	50.0	46.8	
28 3-Chloro-1-propene	76	4.023	4.023	0.000	91	98754	50.0	51.2	
30 Methyl acetate	43	4.060	4.060	0.000	98	359118	100.0	109.3	
31 Methylene Chloride	84	4.254	4.254	0.000	95	226053	50.0	51.4	
32 2-Methyl-2-propanol	59	4.528	4.528	0.000	92	175091	500.0	588.3	
33 Acrylonitrile	53	4.644	4.644	0.000	98	946367	500.0	551.8	
34 trans-1,2-Dichloroethene	96	4.662	4.662	0.000	98	185043	50.0	51.1	
35 Methyl tert-butyl ether	73	4.686	4.686	0.000	97	563276	50.0	55.4	
36 Hexane	57	5.082	5.082	0.000	95	288446	50.0	48.3	
37 1,1-Dichloroethane	63	5.301	5.301	0.000	96	363528	50.0	51.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
44 2,2-Dichloropropane	97	6.043	6.043	0.000	88	43976	50.0	50.0	
45 cis-1,2-Dichloroethene	96	6.043	6.043	0.000	82	219856	50.0	51.0	
46 2-Butanone (MEK)	43	6.061	6.061	0.000	93	238075	100.0	97.8	
49 Chlorobromomethane	128	6.329	6.329	0.000	98	121060	50.0	52.7	
51 Tetrahydrofuran	42	6.341	6.341	0.000	89	142312	100.0	101.2	
52 Chloroform	83	6.475	6.475	0.000	94	382146	50.0	51.1	
53 1,1,1-Trichloroethane	97	6.633	6.633	0.000	98	267961	50.0	49.6	
54 Cyclohexane	56	6.694	6.694	0.000	92	340213	50.0	49.4	
56 Carbon tetrachloride	117	6.797	6.797	0.000	97	221116	50.0	49.3	
55 1,1-Dichloropropene	75	6.815	6.815	0.000	95	244182	50.0	49.0	
58 Benzene	78	7.034	7.034	0.000	97	830138	50.0	50.9	
57 Isobutyl alcohol	41	7.034	7.034	0.000	45	154436	1250.0	1356.8	
59 1,2-Dichloroethane	62	7.107	7.107	0.000	97	331613	50.0	53.4	
62 n-Heptane	43	7.387	7.387	0.000	91	249664	50.0	46.2	
64 Trichloroethene	130	7.758	7.758	0.000	98	200073	50.0	49.2	
66 Methylcyclohexane	83	7.983	7.983	0.000	91	329949	50.0	47.9	
67 1,2-Dichloropropane	63	8.032	8.032	0.000	95	222351	50.0	51.0	
70 1,4-Dioxane	88	8.111	8.111	0.000	44	33589	1000.0	951.7	
68 Dibromomethane	93	8.117	8.117	0.000	93	130826	50.0	50.6	
71 Dichlorobromomethane	83	8.312	8.312	0.000	98	267503	50.0	52.3	
74 cis-1,3-Dichloropropene	75	8.756	8.756	0.000	95	370220	50.0	57.5	
75 4-Methyl-2-pentanone (MIBK)	43	8.914	8.914	0.000	97	512166	100.0	88.8	
76 Toluene	91	9.078	9.078	0.000	98	1087347	50.0	42.5	
77 trans-1,3-Dichloropropene	75	9.334	9.334	0.000	95	398094	50.0	47.4	
78 Ethyl methacrylate	69	9.389	9.389	0.000	91	418407	50.0	50.9	
79 1,1,2-Trichloroethane	97	9.522	9.522	0.000	92	303826	50.0	51.1	
80 Tetrachloroethene	164	9.589	9.589	0.000	96	232151	50.0	45.6	
81 1,3-Dichloropropane	76	9.681	9.681	0.000	94	542224	50.0	51.2	
82 2-Hexanone	43	9.741	9.741	0.000	97	476510	100.0	98.7	
84 Chlorodibromomethane	129	9.894	9.894	0.000	91	244567	50.0	48.6	
85 Ethylene Dibromide	107	10.003	10.003	0.000	99	283426	50.0	51.0	
87 Chlorobenzene	112	10.490	10.490	0.000	93	865019	50.0	52.6	
89 1,1,1,2-Tetrachloroethane	131	10.581	10.581	0.000	92	265669	50.0	49.8	
90 Ethylbenzene	106	10.593	10.593	0.000	99	427773	50.0	50.3	
91 m-Xylene & p-Xylene	106	10.721	10.721	0.000	0	486282	50.0	45.8	
92 o-Xylene	106	11.098	11.098	0.000	97	385144	50.0	38.9	
93 Styrene	104	11.122	11.122	0.000	95	677263	50.0	39.9	
94 Bromoform	173	11.299	11.299	0.000	93	98147	50.0	41.3	
97 Isopropylbenzene	105	11.463	11.463	0.000	96	973835	50.0	37.8	
100 Bromobenzene	156	11.779	11.779	0.000	96	261807	50.0	52.5	
99 1,1,2,2-Tetrachloroethane	83	11.786	11.786	0.000	93	255618	50.0	41.7	
102 trans-1,4-Dichloro-2-buten	53	11.816	11.816	0.000	81	72887	50.0	53.9	
101 1,2,3-Trichloropropane	110	11.834	11.834	0.000	86	90182	50.0	56.2	
103 N-Propylbenzene	120	11.883	11.883	0.000	99	276239	50.0	51.4	
104 2-Chlorotoluene	126	11.974	11.974	0.000	97	242247	50.0	52.6	
106 1,3,5-Trimethylbenzene	105	12.065	12.065	0.000	94	836531	50.0	52.2	
107 4-Chlorotoluene	126	12.096	12.096	0.000	98	258413	50.0	52.7	
108 tert-Butylbenzene	119	12.376	12.376	0.000	93	686882	50.0	50.5	
110 1,2,4-Trimethylbenzene	105	12.436	12.436	0.000	97	873839	50.0	52.0	
112 sec-Butylbenzene	105	12.601	12.601	0.000	94	1001096	50.0	49.4	
113 1,3-Dichlorobenzene	146	12.722	12.722	0.000	97	489430	50.0	50.3	
114 4-Isopropyltoluene	119	12.753	12.753	0.000	97	862462	50.0	49.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
115 1,4-Dichlorobenzene	146	12.820	12.820	0.000	95	507005	50.0	51.2	
120 n-Butylbenzene	91	13.166	13.166	0.000	98	706850	50.0	47.0	
121 1,2-Dichlorobenzene	146	13.179	13.179	0.000	97	473935	50.0	52.1	
122 1,2-Dibromo-3-Chloropropan	75	13.969	13.969	0.000	83	30096	50.0	52.3	
126 1,2,4-Trichlorobenzene	180	14.785	14.785	0.000	94	154676	50.0	45.1	
127 Hexachlorobutadiene	225	14.931	14.931	0.000	97	83251	50.0	47.5	
128 Naphthalene	128	15.058	15.058	0.000	97	294581	50.0	44.3	
129 1,2,3-Trichlorobenzene	180	15.283	15.283	0.000	92	104778	50.0	45.1	
S 133 Xylenes, Total	106				0		100.0	84.7	
S 134 1,2-Dichloroethene, Total	96				0		100.0	102.0	
S 154 Total BTEX	106				0		250.0	228.4	
S 135 1,3-Dichloropropene, Total	1				0		100.0	104.9	

**Reagents:**

VOA8260INT_00105	Amount Added: 2.00	Units: uL
VOA8260SURR_00105	Amount Added: 2.00	Units: uL
voaWKetmix1st_00024	Amount Added: 2.00	Units: uL
VOA8260VOAPRI_00396	Amount Added: 2.00	Units: uL

Eurofins TestAmerica, Pittsburgh

Data File: \\chromna\Pittsburgh\ChromData\CHHP5\20200324-31295.b\5032305.D

Injection Date: 24-Mar-2020 02:49:30

Instrument ID: CHHP5

Operator ID: 034635

Lims ID: icis 10

Worklist Smp#: 12

Client ID:

Purge Vol: 5.000 mL

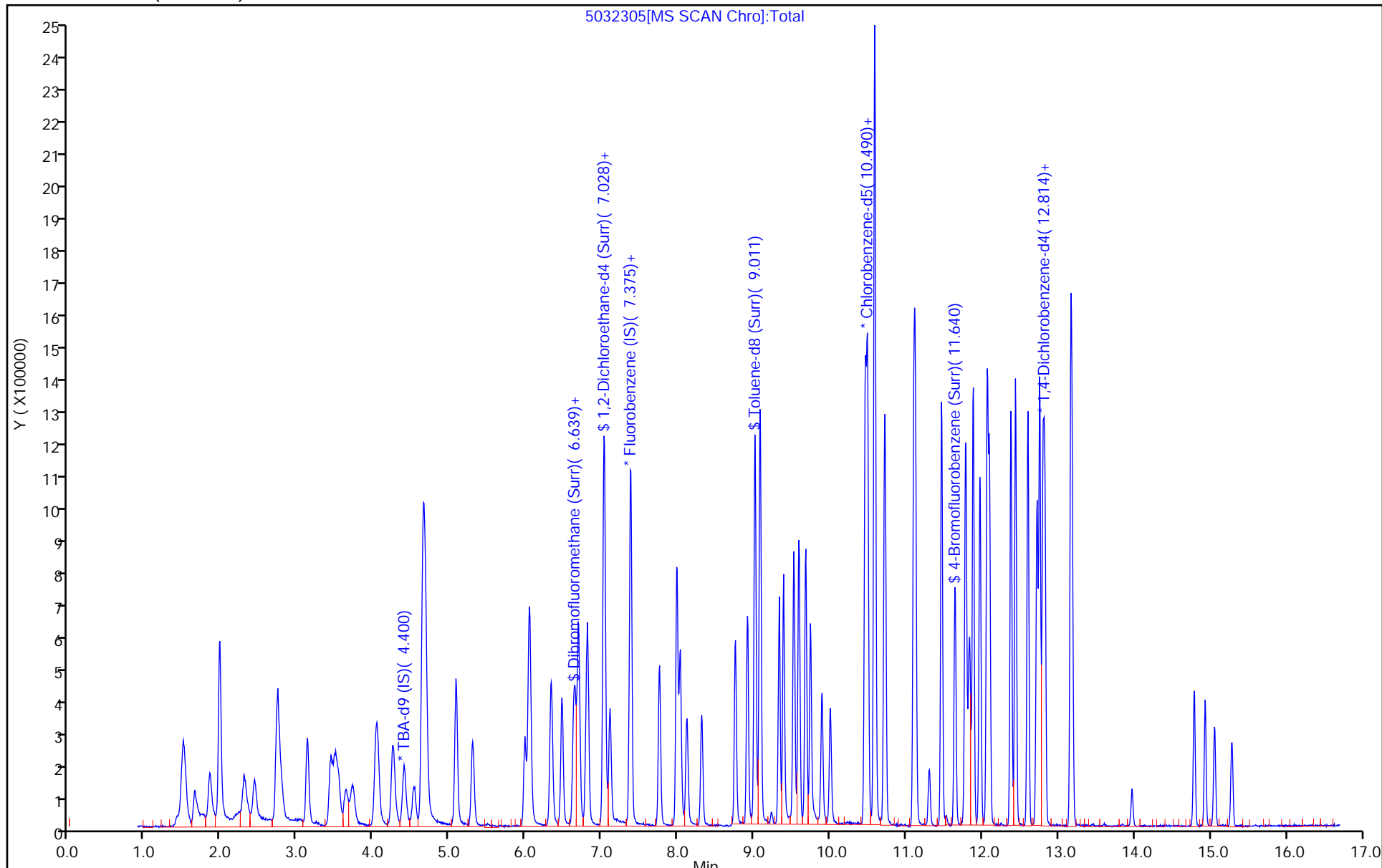
Dil. Factor: 1.0000

ALS Bottle#: 5

Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Pittsburgh  
Target Compound Quantitation Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP5\20200324-31295.b\5032306p.D  
 Lims ID: ic 15  
 Client ID:  
 Sample Type: IC Calib Level: 0  
 Inject. Date: 24-Mar-2020 03:13:30 ALS Bottle#: 6 Worklist Smp#: 13  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: 180-0031295-013  
 Operator ID: 034635 Instrument ID: CHHP5  
 Method: \\chromna\Pittsburgh\ChromData\CHHP5\20200324-31295.b\MSVOA\_LL\_CHHP5.m  
 Limit Group: VOA 8260C\_D ICAL  
 Last Update: 26-Mar-2020 23:38:58 Calib Date: 24-Mar-2020 04:51:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP5\20200324-31295.b\5032310.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: CTX0332

First Level Reviewer: journetp

Date: 25-Mar-2020 16:11:17

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.398	4.400	-0.002	0	240499	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.373	7.375	-0.002	99	613062	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.463	10.465	-0.002	85	175909	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.799	12.801	-0.002	93	293634	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.655	6.657	-0.002	94	247682	75.0	70.8	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	7.020	7.022	-0.002	0	336370	75.0	67.8	
\$ 7 Toluene-d8 (Surr)	98	9.009	9.011	-0.002	93	994249	75.0	69.8	
\$ 8 4-Bromofluorobenzene (Surr	95	11.643	11.640	0.003	89	402546	75.0	74.8	
11 Dichlorodifluoromethane	85	1.648	1.650	-0.002	99	356666	75.0	75.9	
12 Chloromethane	50	1.855	1.845	0.010	99	446168	75.0	74.6	
13 Vinyl chloride	62	1.977	1.973	0.004	64	401004	75.0	75.3	
14 Butadiene	39	1.977	1.979	-0.002	95	410559	75.0	75.6	
15 Bromomethane	94	2.311	2.295	0.016	91	229947	75.0	75.4	
16 Chloroethane	64	2.439	2.435	0.004	99	268189	75.0	74.2	
17 Dichlorofluoromethane	67	2.731	2.733	-0.002	97	602716	75.0	74.5	
18 Trichlorofluoromethane	101	2.749	2.745	0.004	68	516043	75.0	76.4	
20 Ethyl ether	59	3.133	3.129	0.004	93	248627	75.0	62.1	
22 1,1-Dichloroethene	96	3.437	3.439	-0.002	97	209660	75.0	73.0	
23 1,1,2-Trichloro-1,2,2-trif	101	3.504	3.494	0.010	92	239490	75.0	73.6	
24 Acetone	43	3.540	3.542	-0.002	100	305646	150.0	144.3	
25 Iodomethane	142	3.644	3.640	0.004	99	371715	75.0	73.6	
26 Carbon disulfide	76	3.735	3.731	0.004	99	524358	75.0	76.1	
28 3-Chloro-1-propene	76	4.033	4.023	0.010	90	132236	75.0	74.2	
30 Methyl acetate	43	4.057	4.060	-0.003	98	422887	150.0	139.2	
31 Methylene Chloride	84	4.258	4.254	0.004	94	294139	75.0	73.0	
32 2-Methyl-2-propanol	59	4.526	4.528	-0.002	93	187154	750.0	762.3	
33 Acrylonitrile	53	4.641	4.644	-0.003	100	1122911	750.0	708.1	
34 trans-1,2-Dichloroethene	96	4.666	4.662	0.004	97	249727	75.0	74.5	
35 Methyl tert-butyl ether	73	4.684	4.686	-0.002	97	684507	75.0	72.8	
36 Hexane	57	5.086	5.082	0.004	94	422921	75.0	76.7	
37 1,1-Dichloroethane	63	5.298	5.301	-0.003	97	481195	75.0	73.6	
44 2,2-Dichloropropane	97	6.047	6.043	0.004	91	59513	75.0	73.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
45 cis-1,2-Dichloroethene	96	6.053	6.043	0.010	84	295378	75.0	74.1	
46 2-Butanone (MEK)	43	6.059	6.061	-0.002	100	326602	150.0	145.1	
49 Chlorobromomethane	128	6.327	6.329	-0.002	98	145422	75.0	68.4	
51 Tetrahydrofuran	42	6.345	6.341	0.004	89	164373	150.0	126.4	
52 Chloroform	83	6.479	6.475	0.004	94	488561	75.0	71.3	
53 1,1,1-Trichloroethane	97	6.631	6.633	-0.002	99	364181	75.0	72.9	
54 Cyclohexane	56	6.692	6.694	-0.002	92	490054	75.0	76.9	
56 Carbon tetrachloride	117	6.795	6.797	-0.002	96	311245	75.0	75.0	
55 1,1-Dichloropropene	75	6.819	6.815	0.004	94	347486	75.0	75.4	
58 Benzene	78	7.032	7.034	-0.002	97	1104601	75.0	73.2	
57 Isobutyl alcohol	41	7.038	7.034	0.004	44	173119	1875.0	1644.9	
59 1,2-Dichloroethane	62	7.105	7.107	-0.002	97	410319	75.0	71.5	
62 n-Heptane	43	7.385	7.387	-0.002	93	384041	75.0	76.8	
64 Trichloroethene	130	7.762	7.758	0.004	98	282724	75.0	75.2	
66 Methylcyclohexane	83	7.987	7.983	0.004	91	497321	75.0	78.0	
67 1,2-Dichloropropane	63	8.030	8.032	-0.002	93	291261	75.0	72.3	
70 1,4-Dioxane	88	8.115	8.111	0.004	40	41474	1500.0	1264.9	
68 Dibromomethane	93	8.121	8.117	0.004	97	166547	75.0	69.7	
71 Dichlorobromomethane	83	8.310	8.312	-0.002	99	331326	75.0	70.1	
74 cis-1,3-Dichloropropene	75	8.754	8.756	-0.002	94	410056	75.0	68.9	
75 4-Methyl-2-pentanone (MIBK)	43	8.912	8.914	-0.002	98	537793	150.0	133.8	
76 Toluene	91	9.082	9.078	0.004	98	1214308	75.0	73.0	
77 trans-1,3-Dichloropropene	75	9.332	9.334	-0.002	95	378448	75.0	69.2	
78 Ethyl methacrylate	69	9.387	9.389	-0.002	90	367396	75.0	68.7	
79 1,1,2-Trichloroethane	97	9.526	9.522	0.004	92	253107	75.0	65.5	
80 Tetrachloroethene	164	9.593	9.589	0.004	97	236680	75.0	71.5	
81 1,3-Dichloropropane	76	9.679	9.681	-0.002	94	453422	75.0	65.9	
82 2-Hexanone	43	9.739	9.741	-0.002	97	434765	150.0	132.7	
84 Chlorodibromomethane	129	9.891	9.894	-0.003	90	231965	75.0	70.9	
85 Ethylene Dibromide	107	10.007	10.003	0.004	97	253887	75.0	70.2	
87 Chlorobenzene	112	10.494	10.490	0.004	94	787653	75.0	73.6	
89 1,1,1,2-Tetrachloroethane	131	10.579	10.581	-0.002	92	257299	75.0	74.1	
90 Ethylbenzene	106	10.591	10.593	-0.002	99	428018	75.0	77.3	
91 m-Xylene & p-Xylene	106	10.719	10.721	-0.002	0	540292	75.0	78.3	
92 o-Xylene	106	11.102	11.098	0.004	97	504531	75.0	78.3	
93 Styrene	104	11.120	11.122	-0.002	95	883908	75.0	80.0	
94 Bromoform	173	11.303	11.299	0.004	96	127585	75.0	82.5	
97 Isopropylbenzene	105	11.467	11.463	0.004	95	1367724	75.0	81.6	
100 Bromobenzene	156	11.783	11.779	0.004	95	340766	75.0	75.0	
99 1,1,2,2-Tetrachloroethane	83	11.783	11.786	-0.003	93	305599	75.0	76.6	
102 trans-1,4-Dichloro-2-buten	53	11.820	11.816	0.004	78	90600	75.0	73.5	
101 1,2,3-Trichloropropane	110	11.838	11.834	0.004	84	105029	75.0	71.8	
103 N-Propylbenzene	120	11.881	11.883	-0.002	99	387266	75.0	78.9	
104 2-Chlorotoluene	126	11.972	11.974	-0.002	96	323753	75.0	77.1	
106 1,3,5-Trimethylbenzene	105	12.063	12.065	-0.002	94	1176264	75.0	80.5	
107 4-Chlorotoluene	126	12.094	12.096	-0.002	97	342742	75.0	76.6	a
108 tert-Butylbenzene	119	12.380	12.376	0.004	93	958666	75.0	77.2	
110 1,2,4-Trimethylbenzene	105	12.440	12.436	0.004	97	1187477	75.0	77.5	
112 sec-Butylbenzene	105	12.599	12.601	-0.002	94	1422039	75.0	76.9	
113 1,3-Dichlorobenzene	146	12.720	12.722	-0.002	98	658602	75.0	74.2	
114 4-Isopropyltoluene	119	12.757	12.753	0.004	97	1250023	75.0	79.1	
115 1,4-Dichlorobenzene	146	12.824	12.820	0.004	95	670928	75.0	74.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
120 n-Butylbenzene	91	13.164	13.166	-0.002	98	1051518	75.0	76.7	
121 1,2-Dichlorobenzene	146	13.183	13.179	0.004	97	624132	75.0	75.2	
122 1,2-Dibromo-3-Chloropropan	75	13.967	13.969	-0.002	83	34349	75.0	65.5	
126 1,2,4-Trichlorobenzene	180	14.789	14.785	0.004	94	285126	75.0	91.1	
127 Hexachlorobutadiene	225	14.929	14.931	-0.002	96	145611	75.0	91.2	
128 Naphthalene	128	15.050	15.058	-0.008	97	518154	75.0	85.5	
129 1,2,3-Trichlorobenzene	180	15.287	15.283	0.004	94	177186	75.0	83.7	
S 133 Xylenes, Total	106				0		150.0	156.6	
S 134 1,2-Dichloroethene, Total	96				0		150.0	148.6	
S 154 Total BTEX	106				0		375.0	380.1	
S 135 1,3-Dichloropropene, Total	1				0		150.0	138.1	

### QC Flag Legend

Review Flags

a - User Assigned ID

### Reagents:

VOA8260INT_00105	Amount Added: 2.00	Units: uL
VOA8260SURR_00105	Amount Added: 3.00	Units: uL
voaWKetmix1st_00024	Amount Added: 3.00	Units: uL
VOA8260VOAPRI_00396	Amount Added: 3.00	Units: uL

Eurofins TestAmerica, Pittsburgh

Data File: \\chromna\Pittsburgh\ChromData\CHHP5\20200324-31295.b\5032306p.D

Injection Date: 24-Mar-2020 03:13:30

Instrument ID: CHHP5

Operator ID: 034635

Lims ID: ic 15

Worklist Smp#: 13

Client ID:

Purge Vol: 5.000 mL

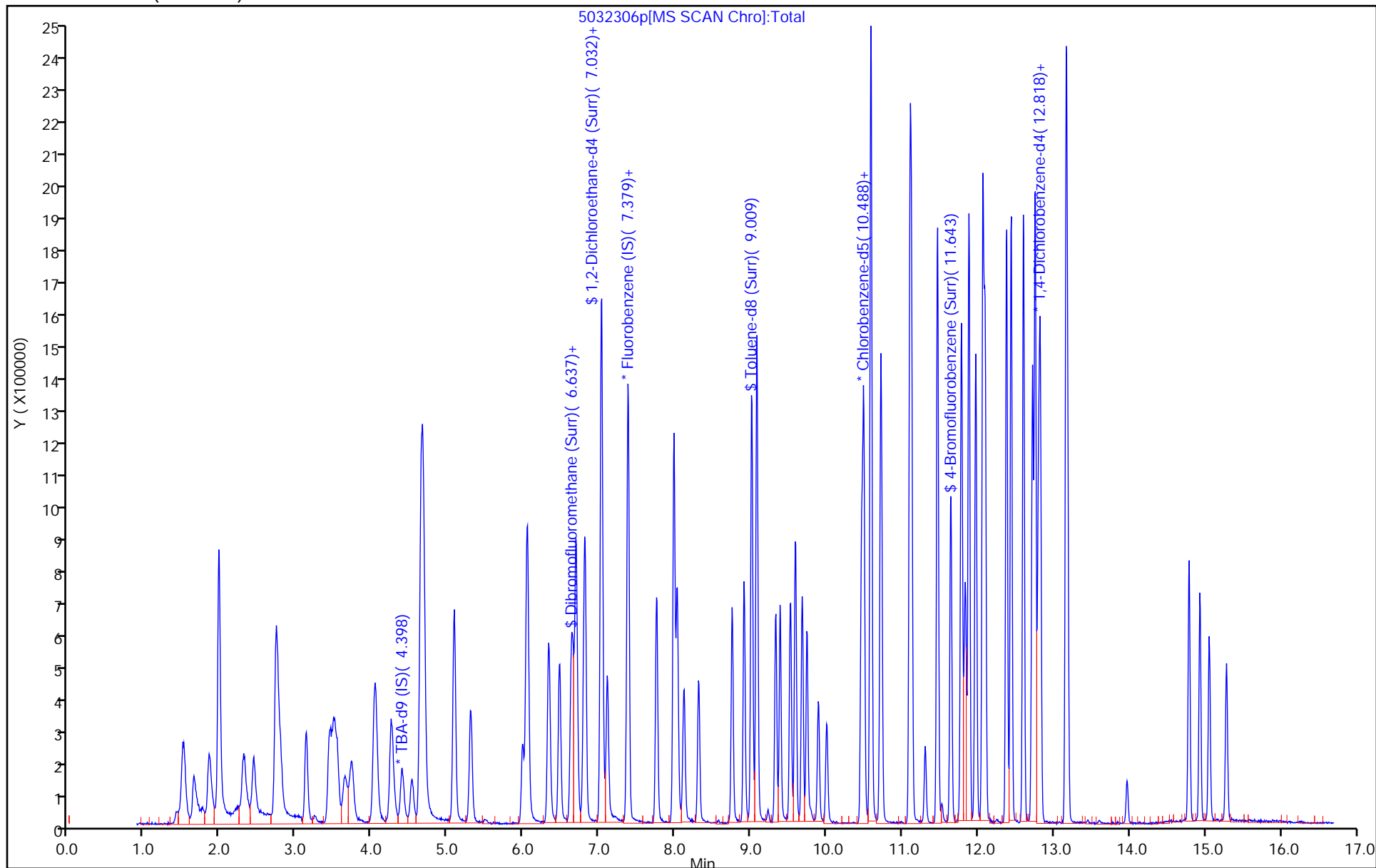
Dil. Factor: 1.0000

ALS Bottle#: 6

Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)





Eurofins TestAmerica, Pittsburgh

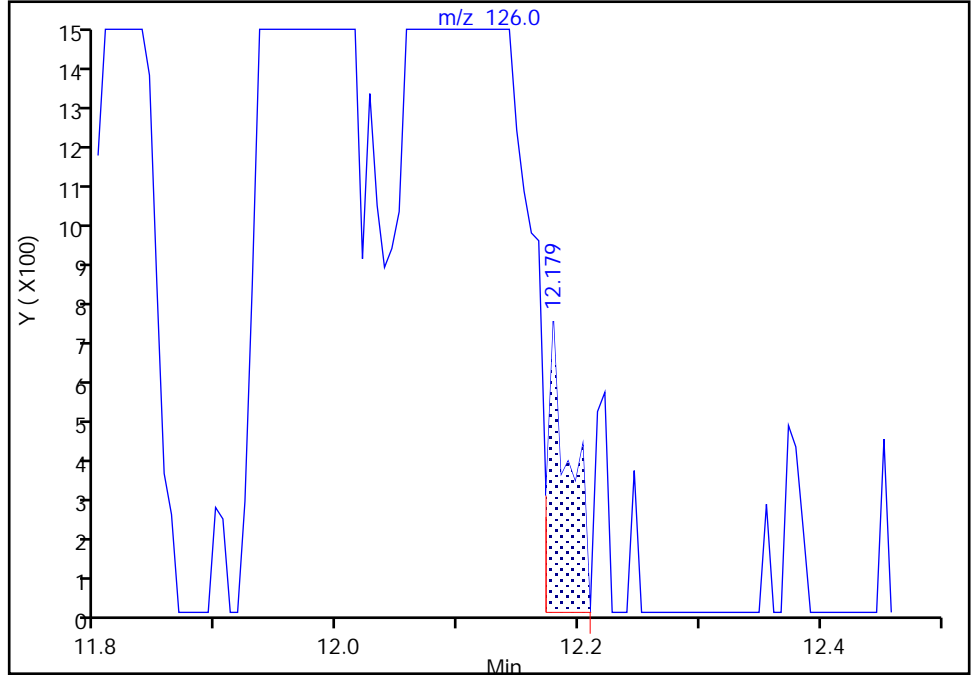
Data File: \\chromna\Pittsburgh\ChromData\CHHP5\20200324-31295.b\5032306p.D  
Injection Date: 24-Mar-2020 03:13:30 Instrument ID: CHHP5  
Lims ID: ic 15  
Client ID:  
Operator ID: 034635 ALS Bottle#: 6 Worklist Smp#: 13  
Purge Vol: 5.000 mL Dil. Factor: 1.0000  
Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
Column: DB-624 (0.18 mm) Detector: MS SCAN

107 4-Chlorotoluene, CAS: 106-43-4

Signal: 1

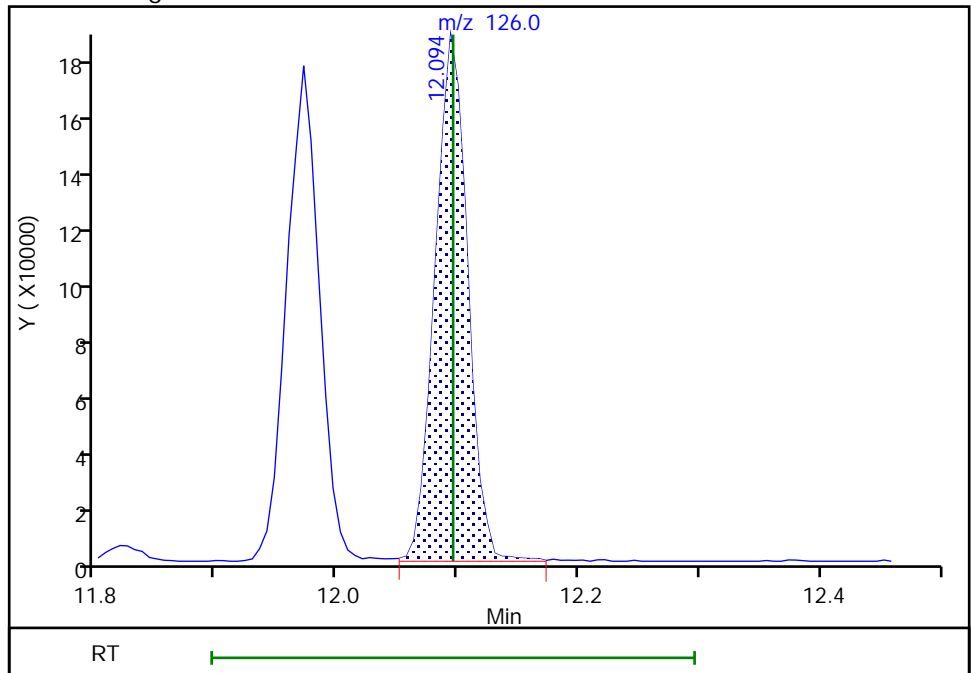
RT: 12.18  
Area: 885  
Amount: 0.197867  
Amount Units: ng

Processing Integration Results



RT: 12.09  
Area: 342742  
Amount: 76.629943  
Amount Units: ng

Manual Integration Results



Eurofins TestAmerica, Pittsburgh  
Target Compound Quantitation Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP5\20200324-31295.b\5032308.D  
 Lims ID: ic 35  
 Client ID:  
 Sample Type: IC Calib Level: 6  
 Inject. Date: 24-Mar-2020 04:02:30 ALS Bottle#: 8 Worklist Smp#: 15  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: 180-0031295-015  
 Operator ID: 034635 Instrument ID: CHHP5  
 Sublist: chrom-MSVOA\_LL\_CHHP5\*sub144  
 Method: \\chromna\Pittsburgh\ChromData\CHHP5\20200324-31295.b\MSVOA\_LL\_CHHP5.m  
 Limit Group: VOA 8260C\_D ICAL  
 Last Update: 26-Mar-2020 23:39:29 Calib Date: 24-Mar-2020 04:51:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP5\20200324-31295.b\5032310.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: CTX0332

First Level Reviewer: journetp

Date: 24-Mar-2020 14:21:04

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.398	4.400	-0.002	0	255032	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.373	7.375	-0.002	99	520768	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.464	10.465	-0.001	85	148035	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.800	12.801	-0.001	92	259793	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.655	6.657	-0.002	94	524755	175.0	176.6	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	7.020	7.022	-0.002	0	748339	175.0	177.5	
\$ 7 Toluene-d8 (Surr)	98	9.010	9.011	-0.001	93	2105983	175.0	175.7	
\$ 8 4-Bromofluorobenzene (Surr	95	11.644	11.640	0.004	89	859974	175.0	189.9	
11 Dichlorodifluoromethane	85	1.643	1.650	-0.007	100	700239	175.0	175.4	
12 Chloromethane	50	1.843	1.845	-0.002	99	892701	175.0	175.7	
13 Vinyl chloride	62	1.965	1.973	-0.008	75	803181	175.0	177.5	
14 Butadiene	39	1.971	1.979	-0.008	95	805395	175.0	174.5	
15 Bromomethane	94	2.300	2.295	0.005	91	456316	175.0	176.2	
16 Chloroethane	64	2.433	2.435	-0.002	100	552467	175.0	180.0	
17 Dichlorofluoromethane	67	2.732	2.733	-0.001	98	1234164	175.0	179.6	
18 Trichlorofluoromethane	101	2.744	2.745	-0.001	99	1022038	175.0	178.0	
20 Ethyl ether	59	3.127	3.129	-0.002	94	774845	175.0	177.0	
22 1,1-Dichloroethene	96	3.431	3.439	-0.008	97	420426	175.0	175.0	
23 1,1,2-Trichloro-1,2,2-trif	101	3.492	3.494	-0.002	92	472932	175.0	170.9	
24 Acetone	43	3.535	3.542	-0.007	99	629739	350.0	349.9	
25 Iodomethane	142	3.632	3.640	-0.008	99	788493	175.0	183.7	
26 Carbon disulfide	76	3.717	3.731	-0.014	99	1156251	175.0	197.5	
28 3-Chloro-1-propene	76	4.027	4.023	0.004	91	297845	175.0	196.7	
30 Methyl acetate	43	4.052	4.060	-0.008	98	932376	350.0	361.2	
31 Methylene Chloride	84	4.252	4.254	-0.002	96	594239	175.0	176.1	
32 2-Methyl-2-propanol	59	4.526	4.528	-0.002	93	424527	1750.0	1630.6	
33 Acrylonitrile	53	4.642	4.644	-0.002	99	2432308	1750.0	1805.6	
34 trans-1,2-Dichloroethene	96	4.666	4.662	0.004	98	508087	175.0	178.5	
35 Methyl tert-butyl ether	73	4.684	4.686	-0.002	98	1490425	175.0	186.6	
36 Hexane	57	5.080	5.082	-0.002	94	846519	175.0	180.7	
37 1,1-Dichloroethane	63	5.299	5.301	-0.002	97	1005498	175.0	181.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
44 2,2-Dichloropropane	97	6.041	6.043	-0.002	90	119611	175.0	173.0	
45 cis-1,2-Dichloroethene	96	6.047	6.043	0.004	84	603875	175.0	178.3	
46 2-Butanone (MEK)	43	6.059	6.061	-0.002	100	718447	350.0	375.6	
49 Chlorobromomethane	128	6.333	6.329	0.004	98	318319	175.0	176.3	
51 Tetrahydrofuran	42	6.339	6.341	-0.002	89	371631	350.0	336.3	
52 Chloroform	83	6.473	6.475	-0.002	93	1014791	175.0	176.7	
53 1,1,1-Trichloroethane	97	6.625	6.633	-0.008	98	746892	175.0	176.0	
54 Cyclohexane	56	6.692	6.694	-0.002	92	967701	175.0	178.8	
56 Carbon tetrachloride	117	6.795	6.797	-0.002	96	648580	175.0	184.0	
55 1,1-Dichloropropene	75	6.814	6.815	-0.001	95	713868	175.0	182.2	
58 Benzene	78	7.027	7.034	-0.008	97	2291164	175.0	178.7	
57 Isobutyl alcohol	41	7.033	7.034	-0.001	90	441497	4375.0	4938.5	
59 1,2-Dichloroethane	62	7.106	7.107	-0.001	98	875847	175.0	179.7	
62 n-Heptane	43	7.385	7.387	-0.002	93	786049	175.0	185.1	
64 Trichloroethene	130	7.757	7.758	-0.001	98	583985	175.0	182.9	
66 Methylcyclohexane	83	7.988	7.983	0.005	91	995188	175.0	183.8	
67 1,2-Dichloropropane	63	8.024	8.032	-0.008	95	613600	175.0	179.3	
70 1,4-Dioxane	88	8.109	8.111	-0.002	41	99292	3500.0	3532.0	
68 Dibromomethane	93	8.115	8.117	-0.002	95	355466	175.0	175.1	
71 Dichlorobromomethane	83	8.310	8.312	-0.002	99	726797	175.0	181.0	
74 cis-1,3-Dichloropropene	75	8.754	8.756	-0.002	95	922221	175.0	182.5	
75 4-Methyl-2-pentanone (MIBK)	43	8.912	8.914	-0.002	97	1282614	350.0	350.9	
76 Toluene	91	9.083	9.078	0.005	98	2513792	175.0	179.6	
77 trans-1,3-Dichloropropene	75	9.332	9.334	-0.002	95	879952	175.0	191.2	
78 Ethyl methacrylate	69	9.387	9.389	-0.002	89	835820	175.0	185.8	
79 1,1,2-Trichloroethane	97	9.521	9.522	-0.001	93	556768	175.0	171.1	
80 Tetrachloroethene	164	9.588	9.589	-0.001	98	475677	175.0	170.7	
81 1,3-Dichloropropane	76	9.679	9.681	-0.002	93	991662	175.0	171.2	
82 2-Hexanone	43	9.740	9.741	-0.001	96	992647	350.0	336.1	
84 Chlorodibromomethane	129	9.892	9.894	-0.002	90	538767	175.0	195.6	
85 Ethylene Dibromide	107	10.001	10.003	-0.002	99	548216	175.0	180.1	
87 Chlorobenzene	112	10.494	10.490	0.004	94	1659212	175.0	184.3	
89 1,1,1,2-Tetrachloroethane	131	10.585	10.581	0.004	93	554932	175.0	189.8	
90 Ethylbenzene	106	10.591	10.593	-0.002	99	883541	175.0	189.6	
91 m-Xylene & p-Xylene	106	10.719	10.721	-0.002	0	1126380	175.0	193.9	
92 o-Xylene	106	11.102	11.098	0.004	97	1095305	175.0	202.0	
93 Styrene	104	11.121	11.122	-0.001	95	1906645	175.0	205.1	
94 Bromoform	173	11.303	11.299	0.004	96	309374	175.0	237.6	
97 Isopropylbenzene	105	11.467	11.463	0.004	95	2832415	175.0	200.8	
100 Bromobenzene	156	11.778	11.779	-0.001	96	711168	175.0	176.9	
99 1,1,2,2-Tetrachloroethane	83	11.784	11.786	-0.002	94	644393	175.0	191.8	
102 trans-1,4-Dichloro-2-buten	53	11.820	11.816	0.004	85	206367	175.0	189.3	
101 1,2,3-Trichloropropane	110	11.839	11.834	0.005	85	225095	175.0	174.0	
103 N-Propylbenzene	120	11.881	11.883	-0.002	99	792612	175.0	182.6	
104 2-Chlorotoluene	126	11.972	11.974	-0.002	96	685191	175.0	184.3	
106 1,3,5-Trimethylbenzene	105	12.064	12.065	-0.001	93	2435540	175.0	188.3	
107 4-Chlorotoluene	126	12.094	12.096	-0.002	98	718079	175.0	181.5	
108 tert-Butylbenzene	119	12.374	12.376	-0.002	94	2066931	175.0	188.2	
110 1,2,4-Trimethylbenzene	105	12.435	12.436	-0.001	97	2512865	175.0	185.3	
112 sec-Butylbenzene	105	12.599	12.601	-0.002	94	3002110	175.0	183.4	
113 1,3-Dichlorobenzene	146	12.721	12.722	-0.001	98	1414449	175.0	180.0	
114 4-Isopropyltoluene	119	12.757	12.753	0.004	97	2578805	175.0	184.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
115 1,4-Dichlorobenzene	146	12.824	12.820	0.004	94	1394161	175.0	174.6	
120 n-Butylbenzene	91	13.159	13.166	-0.007	98	2213676	175.0	182.4	
121 1,2-Dichlorobenzene	146	13.183	13.179	0.004	97	1281170	175.0	174.6	
122 1,2-Dibromo-3-Chloropropan	75	13.968	13.969	-0.001	83	81968	175.0	176.7	
126 1,2,4-Trichlorobenzene	180	14.789	14.785	0.004	94	550840	175.0	198.8	
127 Hexachlorobutadiene	225	14.929	14.931	-0.002	97	266459	175.0	188.6	
128 Naphthalene	128	15.051	15.058	-0.007	97	1191434	175.0	222.3	
129 1,2,3-Trichlorobenzene	180	15.282	15.283	-0.001	95	424365	175.0	226.6	
S 133 Xylenes, Total	106				0		350.0	395.9	
S 134 1,2-Dichloroethene, Total	96				0		350.0	356.8	
S 154 Total BTEX	106				0		875.0	943.8	
S 135 1,3-Dichloropropene, Total	1				0		350.0	373.7	

**Reagents:**

VOA8260INT_00105	Amount Added: 2.00	Units: uL
VOA8260SURR_00105	Amount Added: 7.00	Units: uL
voaWKetmix1st_00024	Amount Added: 7.00	Units: uL
VOA8260VOAPRI_00396	Amount Added: 7.00	Units: uL

Eurofins TestAmerica, Pittsburgh

Data File: \\chromna\Pittsburgh\ChromData\CHHP5\20200324-31295.b\5032308.D

Injection Date: 24-Mar-2020 04:02:30

Instrument ID: CHHP5

Operator ID: 034635

Lims ID: ic 35

Worklist Smp#: 15

Client ID:

Purge Vol: 5.000 mL

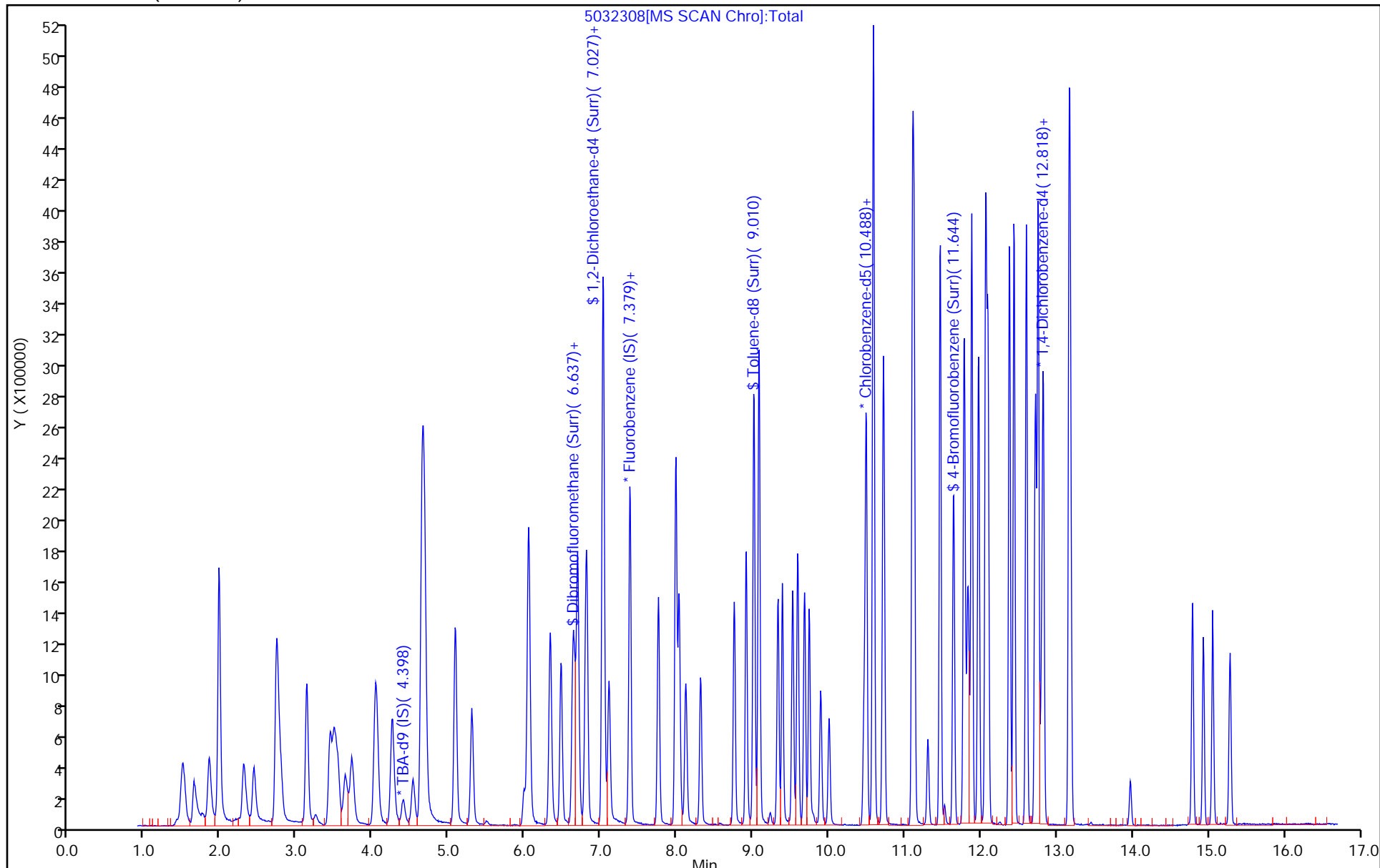
Dil. Factor: 1.0000

ALS Bottle#: 8

Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Pittsburgh  
Target Compound Quantitation Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP5\20200324-31295.b\5032309P.D  
 Lims ID: ic 40  
 Client ID:  
 Sample Type: IC Calib Level: 0  
 Inject. Date: 24-Mar-2020 04:26:30 ALS Bottle#: 9 Worklist Smp#: 16  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: 180-0031295-016  
 Operator ID: 034635 Instrument ID: CHHP5  
 Method: \\chromna\Pittsburgh\ChromData\CHHP5\20200324-31295.b\MSVOA\_LL\_CHHP5.m  
 Limit Group: VOA 8260C\_D ICAL  
 Last Update: 26-Mar-2020 23:39:29 Calib Date: 24-Mar-2020 04:51:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP5\20200324-31295.b\5032310.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: CTX0332

First Level Reviewer: journetp

Date: 25-Mar-2020 16:12:30

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.392	4.400	-0.008	0	268505	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.373	7.375	-0.002	98	510861	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.464	10.465	-0.001	84	152695	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.800	12.801	-0.001	91	311403	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.655	6.657	-0.002	93	590355	200.0	202.5	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	7.020	7.022	-0.002	0	835696	200.0	202.0	
\$ 7 Toluene-d8 (Surr)	98	9.010	9.011	-0.001	94	2419204	200.0	195.7	
\$ 8 4-Bromofluorobenzene (Surr	95	11.638	11.640	-0.002	89	979201	200.0	209.6	
11 Dichlorodifluoromethane	85	1.643	1.650	-0.007	99	785727	200.0	200.6	
12 Chloromethane	50	1.837	1.845	-0.008	99	1028276	200.0	206.3	
13 Vinyl chloride	62	1.965	1.973	-0.008	97	933513	200.0	210.3	
14 Butadiene	39	1.971	1.979	-0.008	94	890930	200.0	196.8	
15 Bromomethane	94	2.300	2.295	0.005	91	590639	200.0	232.4	
16 Chloroethane	64	2.434	2.435	-0.001	100	617643	200.0	205.1	
17 Dichlorofluoromethane	67	2.732	2.733	-0.001	97	1400064	200.0	207.7	
18 Trichlorofluoromethane	101	2.744	2.745	-0.001	98	1136119	200.0	201.7	
20 Ethyl ether	59	3.127	3.129	-0.002	94	918637	200.0	202.8	
22 1,1-Dichloroethene	96	3.431	3.439	-0.008	96	472543	200.0	200.8	E
23 1,1,2-Trichloro-1,2,2-trif	101	3.498	3.494	0.004	91	517627	200.0	190.6	
24 Acetone	43	3.535	3.542	-0.007	100	675761	400.0	382.8	
25 Iodomethane	142	3.638	3.640	-0.002	99	919060	200.0	218.3	E
26 Carbon disulfide	76	3.717	3.731	-0.014	100	1324653	200.0	230.7	E
28 3-Chloro-1-propene	76	4.027	4.023	0.004	91	339668	200.0	228.6	Ea
30 Methyl acetate	43	4.052	4.060	-0.008	98	1067307	400.0	421.5	E
31 Methylene Chloride	84	4.253	4.254	-0.002	96	677889	200.0	205.0	E
32 2-Methyl-2-propanol	59	4.526	4.528	-0.002	94	499322	2000.0	1821.7	
33 Acrylonitrile	53	4.642	4.644	-0.002	100	2754494	2000.0	2084.5	E
34 trans-1,2-Dichloroethene	96	4.660	4.662	-0.002	98	575927	200.0	206.2	E
35 Methyl tert-butyl ether	73	4.678	4.686	-0.008	98	1705375	200.0	217.6	E
36 Hexane	57	5.080	5.082	-0.002	94	947556	200.0	206.1	
37 1,1-Dichloroethane	63	5.299	5.301	-0.002	96	1129009	200.0	207.2	
44 2,2-Dichloropropane	97	6.041	6.043	-0.002	95	136081	200.0	200.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
45 cis-1,2-Dichloroethene	96	6.047	6.043	0.004	83	685365	200.0	206.3	
46 2-Butanone (MEK)	43	6.059	6.061	-0.002	100	825161	400.0	439.8	
49 Chlorobromomethane	128	6.327	6.329	-0.002	97	358157	200.0	202.2	
51 Tetrahydrofuran	42	6.339	6.341	-0.002	88	431299	400.0	397.9	
52 Chloroform	83	6.473	6.475	-0.002	94	1132602	200.0	201.3	
53 1,1,1-Trichloroethane	97	6.631	6.633	-0.002	98	857111	200.0	205.9	
54 Cyclohexane	56	6.692	6.694	-0.002	92	1095573	200.0	206.4	
56 Carbon tetrachloride	117	6.795	6.797	-0.002	97	726851	200.0	210.3	
55 1,1-Dichloropropene	75	6.814	6.815	-0.001	95	796172	200.0	207.2	
58 Benzene	78	7.033	7.034	-0.001	97	2584691	200.0	205.6	
57 Isobutyl alcohol	41	7.033	7.034	-0.001	72	479696	5000.0	5469.8	
59 1,2-Dichloroethane	62	7.106	7.107	-0.001	98	981369	200.0	205.3	
62 n-Heptane	43	7.385	7.387	-0.002	92	869817	200.0	208.7	
64 Trichloroethene	130	7.757	7.758	-0.001	98	650810	200.0	207.8	
66 Methylcyclohexane	83	7.988	7.983	0.005	90	1141774	200.0	214.9	
67 1,2-Dichloropropane	63	8.030	8.032	-0.002	93	692923	200.0	206.5	
70 1,4-Dioxane	88	8.109	8.111	-0.002	43	116549	4000.0	4222.8	E
68 Dibromomethane	93	8.116	8.117	-0.001	96	411645	200.0	206.8	
71 Dichlorobromomethane	83	8.310	8.312	-0.002	100	849028	200.0	215.6	
74 cis-1,3-Dichloropropene	75	8.754	8.756	-0.002	94	1047569	200.0	211.3	
75 4-Methyl-2-pentanone (MIBK)	43	8.912	8.914	-0.002	98	1492782	400.0	394.0	
76 Toluene	91	9.083	9.078	0.005	98	3093786	200.0	214.3	
77 trans-1,3-Dichloropropene	75	9.326	9.334	-0.008	95	1125621	200.0	237.1	
78 Ethyl methacrylate	69	9.387	9.389	-0.002	90	1132390	200.0	244.0	
79 1,1,2-Trichloroethane	97	9.521	9.522	-0.001	92	808646	200.0	240.9	
80 Tetrachloroethene	164	9.588	9.589	-0.001	98	649416	200.0	226.0	
81 1,3-Dichloropropane	76	9.679	9.681	-0.002	92	1339412	200.0	224.2	
82 2-Hexanone	43	9.740	9.741	-0.001	97	1309455	400.0	426.0	
84 Chlorodibromomethane	129	9.892	9.894	-0.002	90	644566	200.0	226.9	
85 Ethylene Dibromide	107	10.001	10.003	-0.002	99	627717	200.0	199.9	
87 Chlorobenzene	112	10.488	10.490	-0.002	94	1868165	200.0	201.2	
89 1,1,1,2-Tetrachloroethane	131	10.579	10.581	-0.002	92	640433	200.0	212.4	
90 Ethylbenzene	106	10.591	10.593	-0.002	99	992945	200.0	206.6	
91 m-Xylene & p-Xylene	106	10.719	10.721	-0.002	0	1263161	200.0	210.8	
92 o-Xylene	106	11.102	11.098	0.004	97	1221535	200.0	218.4	
93 Styrene	104	11.121	11.122	-0.001	95	2110783	200.0	220.1	
94 Bromoform	173	11.303	11.299	0.004	96	361379	200.0	269.1	E
97 Isopropylbenzene	105	11.468	11.463	0.005	96	3194653	200.0	219.6	
100 Bromobenzene	156	11.778	11.779	-0.001	96	838497	200.0	174.0	
99 1,1,2,2-Tetrachloroethane	83	11.784	11.786	-0.002	94	749575	200.0	216.3	
102 trans-1,4-Dichloro-2-buten	53	11.820	11.816	0.004	87	228543	200.0	174.9	
101 1,2,3-Trichloropropane	110	11.839	11.834	0.005	85	249632	200.0	161.0	
103 N-Propylbenzene	120	11.881	11.883	-0.002	99	911881	200.0	175.3	
104 2-Chlorotoluene	126	11.972	11.974	-0.002	96	747207	200.0	167.7	
106 1,3,5-Trimethylbenzene	105	12.064	12.065	-0.001	94	2705202	200.0	174.5	
107 4-Chlorotoluene	126	12.094	12.096	-0.002	99	816733	200.0	172.2	a
108 tert-Butylbenzene	119	12.374	12.376	-0.002	93	2611371	200.0	198.3	
110 1,2,4-Trimethylbenzene	105	12.441	12.436	0.005	97	3323281	200.0	204.5	
112 sec-Butylbenzene	105	12.605	12.601	0.004	94	4238180	200.0	216.0	
113 1,3-Dichlorobenzene	146	12.721	12.722	-0.001	98	1912751	200.0	203.1	
114 4-Isopropyltoluene	119	12.751	12.753	-0.002	97	3520424	200.0	210.2	
115 1,4-Dichlorobenzene	146	12.824	12.820	0.004	94	2018702	200.0	210.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
120 n-Butylbenzene	91	13.159	13.166	-0.007	98	3566320	200.0	245.2	
121 1,2-Dichlorobenzene	146	13.183	13.179	0.004	97	2008277	200.0	228.3	
122 1,2-Dibromo-3-Chloropropan	75	13.968	13.969	-0.001	79	136681	200.0	245.8	
126 1,2,4-Trichlorobenzene	180	14.789	14.785	0.004	93	666140	200.0	200.6	
127 Hexachlorobutadiene	225	14.929	14.931	-0.002	97	298469	200.0	176.2	
128 Naphthalene	128	15.051	15.058	-0.007	97	1420728	200.0	221.1	
129 1,2,3-Trichlorobenzene	180	15.282	15.283	-0.001	96	428913	200.0	191.1	
S 133 Xylenes, Total	106				0		400.0	429.2	
S 134 1,2-Dichloroethene, Total	96				0		400.0	412.5	
S 154 Total BTEX	106				0		1000.0	1055.6	
S 135 1,3-Dichloropropene, Total	1				0		400.0	448.4	

### QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Review Flags

a - User Assigned ID

### Reagents:

VOA8260INT_00105	Amount Added: 2.00	Units: uL
VOA8260SURR_00105	Amount Added: 8.00	Units: uL
voaWKetmix1st_00024	Amount Added: 8.00	Units: uL
VOA8260VOAPRI_00396	Amount Added: 8.00	Units: uL



Eurofins TestAmerica, Pittsburgh

Data File: \\chromna\Pittsburgh\ChromData\CHHP5\20200324-31295.b\5032309P.D

Injection Date: 24-Mar-2020 04:26:30

Instrument ID: CHHP5

Operator ID: 034635

Lims ID: ic 40

Worklist Smp#: 16

Client ID:

Purge Vol: 5.000 mL

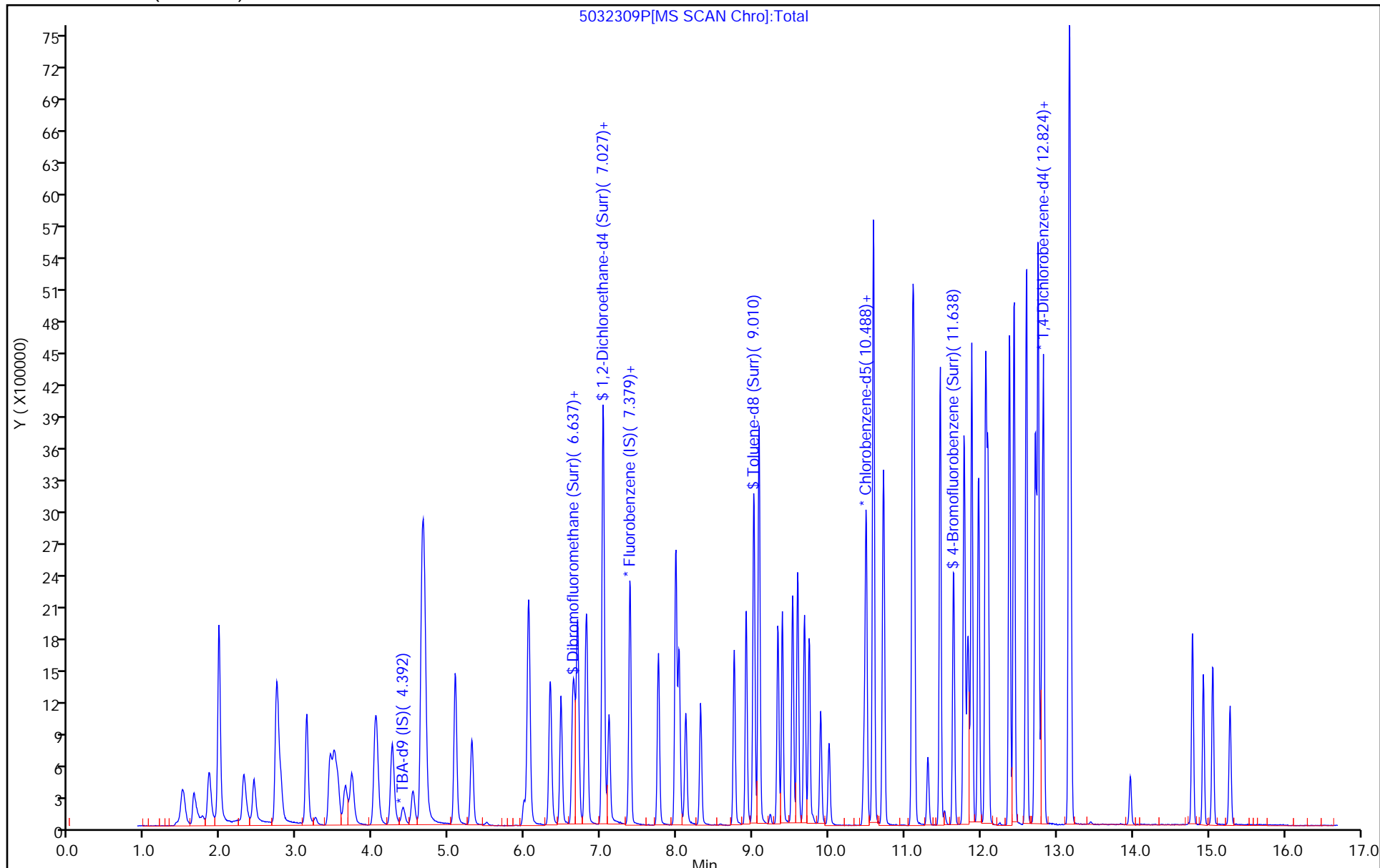
Dil. Factor: 1.0000

ALS Bottle#: 9

Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Pittsburgh

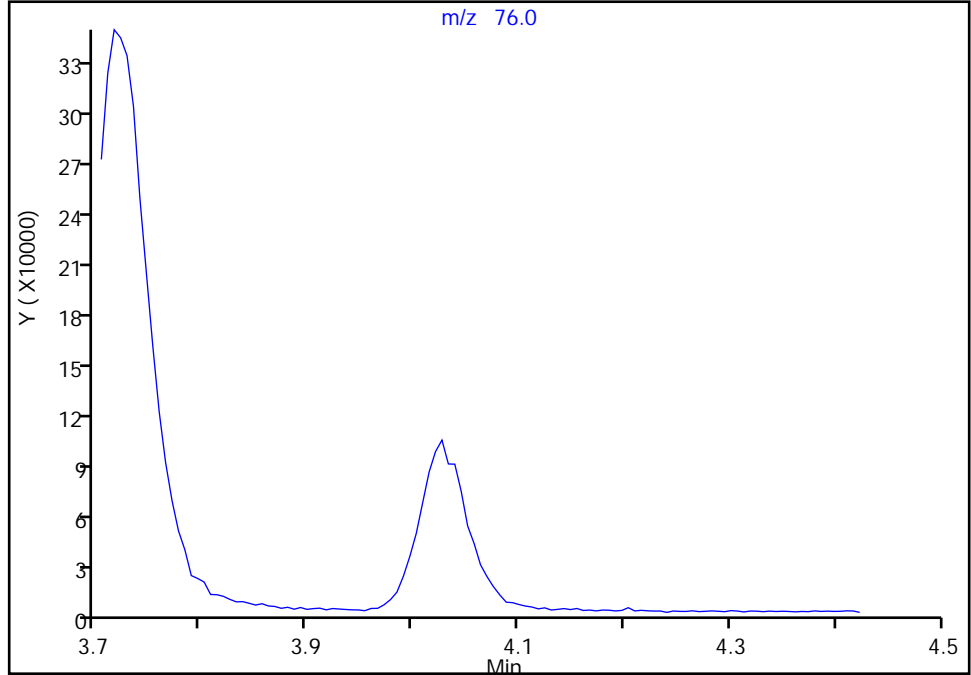
Data File: \\chromna\Pittsburgh\ChromData\CHHP5\20200324-31295.b\5032309P.D  
Injection Date: 24-Mar-2020 04:26:30 Instrument ID: CHHP5  
Lims ID: ic 40  
Client ID:  
Operator ID: 034635 ALS Bottle#: 9 Worklist Smp#: 16  
Purge Vol: 5.000 mL Dil. Factor: 1.0000  
Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
Column: DB-624 (0.18 mm) Detector: MS SCAN

28 3-Chloro-1-propene, CAS: 107-05-1

Signal: 1

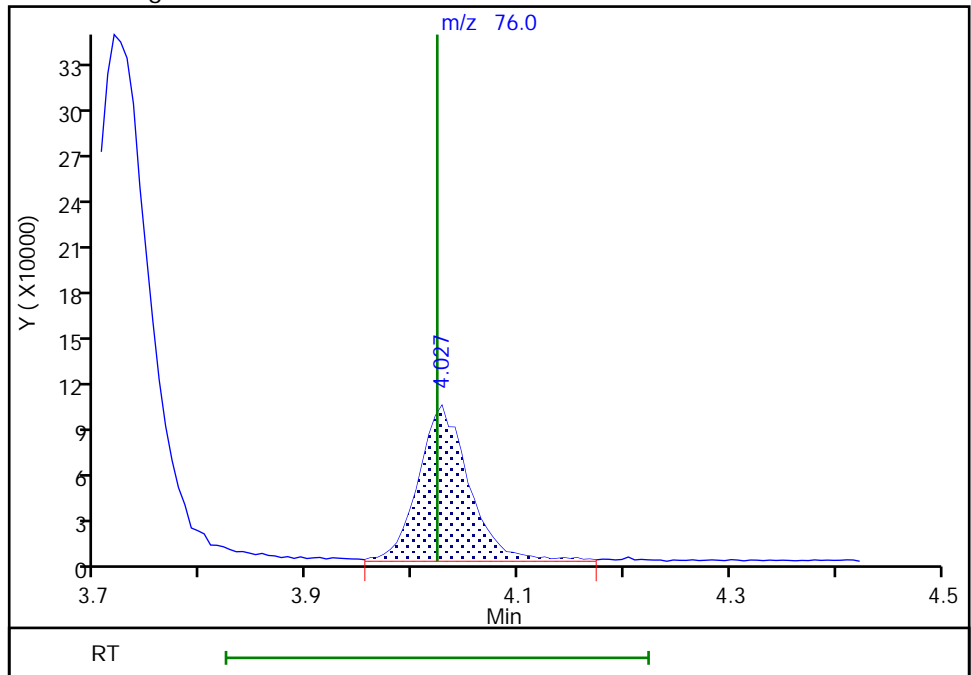
Not Detected  
Expected RT: 4.02

Processing Integration Results



RT: 4.03  
Area: 339668  
Amount: 228.6318  
Amount Units: ng

Manual Integration Results



Eurofins TestAmerica, Pittsburgh

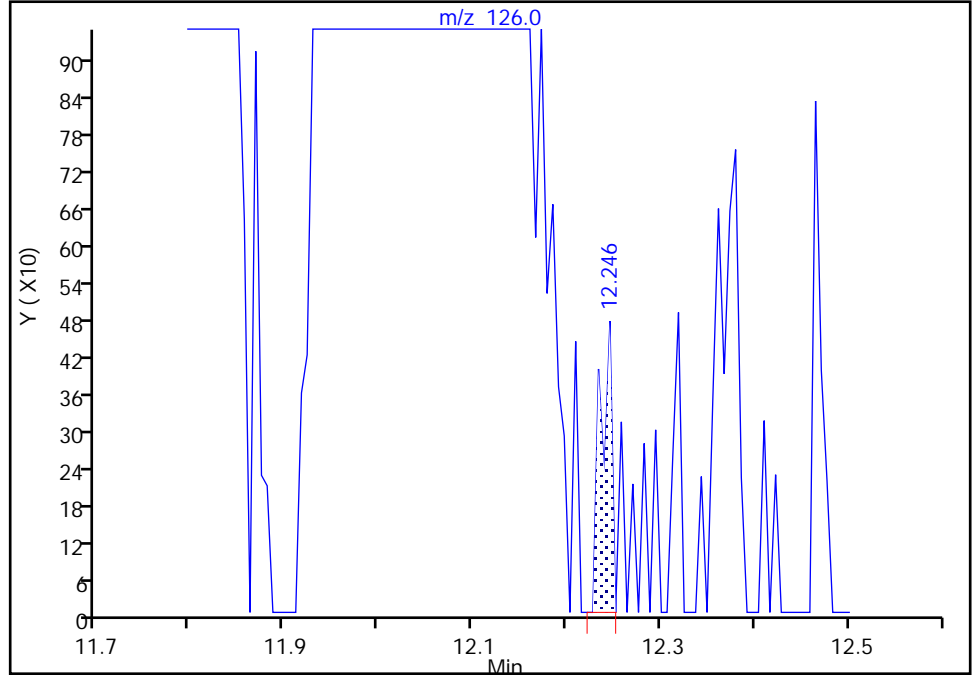
Data File: \\chromna\Pittsburgh\ChromData\CHHP5\20200324-31295.b\5032309P.D  
Injection Date: 24-Mar-2020 04:26:30 Instrument ID: CHHP5  
Lims ID: ic 40  
Client ID:  
Operator ID: 034635 ALS Bottle#: 9 Worklist Smp#: 16  
Purge Vol: 5.000 mL Dil. Factor: 1.0000  
Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
Column: DB-624 (0.18 mm) Detector: MS SCAN

107 4-Chlorotoluene, CAS: 106-43-4

Signal: 1

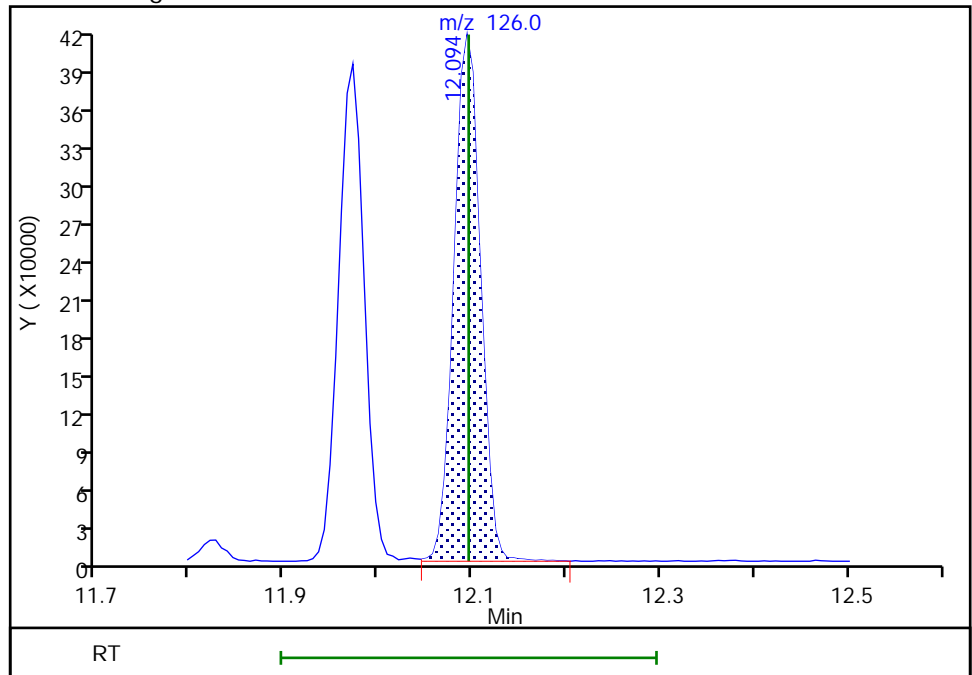
RT: 12.25  
Area: 401  
Amount: 0.084539  
Amount Units: ng

Processing Integration Results



RT: 12.09  
Area: 816733  
Amount: 172.1848  
Amount Units: ng

Manual Integration Results



Eurofins TestAmerica, Pittsburgh  
Target Compound Quantitation Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP5\20200324-31295.b\5032310.D  
 Lims ID: ic 50  
 Client ID:  
 Sample Type: IC Calib Level: 8  
 Inject. Date: 24-Mar-2020 04:51:30 ALS Bottle#: 10 Worklist Smp#: 17  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: 180-0031295-017  
 Operator ID: 034635 Instrument ID: CHHP5  
 Sublist: chrom-MSVOA\_LL\_CHHP5\*sub144  
 Method: \\chromna\Pittsburgh\ChromData\CHHP5\20200324-31295.b\MSVOA\_LL\_CHHP5.m  
 Limit Group: VOA 8260C\_D ICAL  
 Last Update: 26-Mar-2020 23:39:57 Calib Date: 24-Mar-2020 04:51:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP5\20200324-31295.b\5032310.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: CTX0332

First Level Reviewer: journetp

Date: 24-Mar-2020 14:23:25

Compound	Sig	RT (min.)	Exp RT (min.)	Diff RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.398	4.400	-0.002	0	374234	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.372	7.375	-0.003	98	484780	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.463	10.465	-0.002	84	149999	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.799	12.801	-0.002	94	234803	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.654	6.657	-0.003	94	720138	250.0	260.4	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	7.019	7.022	-0.003	0	1047738	250.0	266.9	
\$ 7 Toluene-d8 (Surr)	98	9.015	9.011	0.004	93	2920142	250.0	240.5	
\$ 8 4-Bromofluorobenzene (Surr	95	11.643	11.640	0.003	89	1188809	250.0	259.0	
11 Dichlorodifluoromethane	85	1.648	1.650	-0.002	99	934188	250.0	251.3	
12 Chloromethane	50	1.849	1.845	0.004	99	1324245	250.0	280.0	
13 Vinyl chloride	62	1.964	1.973	-0.009	98	1130818	250.0	268.5	
14 Butadiene	39	1.970	1.979	-0.009	94	1091214	250.0	254.0	
15 Bromomethane	94	2.293	2.295	-0.002	91	690595	250.0	286.4	
16 Chloroethane	64	2.433	2.435	-0.002	100	791508	250.0	277.0	
17 Dichlorofluoromethane	67	2.731	2.733	-0.002	97	1787782	250.0	279.5	
18 Trichlorofluoromethane	101	2.743	2.745	-0.002	98	1396661	250.0	261.3	
20 Ethyl ether	59	3.126	3.129	-0.003	94	1163935	250.0	248.1	
22 1,1-Dichloroethene	96	3.436	3.439	-0.003	96	853772	250.0	384.1	
23 1,1,2-Trichloro-1,2,2-trif	101	3.497	3.494	0.003	93	930949	250.0	361.2	
24 Acetone	43	3.540	3.542	-0.002	99	1381935	500.0	824.9	
25 Iodomethane	142	3.631	3.640	-0.009	99	1592529	250.0	398.5	
26 Carbon disulfide	76	3.716	3.731	-0.015	100	2504334	250.0	459.6	
28 3-Chloro-1-propene	76	4.026	4.023	0.003	90	647205	250.0	459.1	
30 Methyl acetate	43	4.051	4.060	-0.009	99	2168645	500.0	902.6	
31 Methylene Chloride	84	4.252	4.254	-0.002	96	1266059	250.0	405.2	
32 2-Methyl-2-propanol	59	4.525	4.528	-0.003	92	936066	2500.0	2450.2	
33 Acrylonitrile	53	4.641	4.644	-0.003	100	5453195	2500.0	4348.7	
34 trans-1,2-Dichloroethene	96	4.665	4.662	0.003	96	1063002	250.0	401.1	
35 Methyl tert-butyl ether	73	4.683	4.686	-0.003	98	3220445	250.0	433.0	
36 Hexane	57	5.085	5.082	0.003	93	1208830	250.0	277.1	
37 1,1-Dichloroethane	63	5.298	5.301	-0.003	96	1468344	250.0	284.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
44 2,2-Dichloropropane	97	6.040	6.043	-0.003	93	169406	250.0	263.2	
45 cis-1,2-Dichloroethene	96	6.046	6.043	0.003	83	901778	250.0	286.0	
46 2-Butanone (MEK)	43	6.058	6.061	-0.003	100	1093427	500.0	614.2	
49 Chlorobromomethane	128	6.332	6.329	0.003	98	463289	250.0	275.7	
51 Tetrahydrofuran	42	6.338	6.341	-0.003	88	569509	500.0	553.6	
52 Chloroform	83	6.478	6.475	0.003	94	1452682	250.0	272.7	
53 1,1,1-Trichloroethane	97	6.630	6.633	-0.003	98	1094510	250.0	277.1	
54 Cyclohexane	56	6.691	6.694	-0.003	92	1356239	250.0	269.2	
56 Carbon tetrachloride	117	6.794	6.797	-0.003	97	923915	250.0	281.6	
55 1,1-Dichloropropene	75	6.813	6.815	-0.002	95	1015770	250.0	278.6	
58 Benzene	78	7.032	7.034	-0.002	97	3332246	250.0	279.3	
57 Isobutyl alcohol	41	7.032	7.034	-0.002	93	641700	6250.0	7710.7	
59 1,2-Dichloroethane	62	7.105	7.107	-0.002	98	1275964	250.0	281.2	
62 n-Heptane	43	7.384	7.387	-0.003	93	1071158	250.0	270.9	
64 Trichloroethene	130	7.756	7.758	-0.002	98	839157	250.0	282.4	
66 Methylcyclohexane	83	7.987	7.983	0.004	91	1403842	250.0	278.5	
67 1,2-Dichloropropane	63	8.029	8.032	-0.003	94	884631	250.0	277.8	
70 1,4-Dioxane	88	8.108	8.111	-0.003	97	149290	5000.0	5693.7	
68 Dibromomethane	93	8.115	8.117	-0.003	96	533751	250.0	282.5	
71 Dichlorobromomethane	83	8.309	8.312	-0.003	99	1112805	250.0	297.8	
74 cis-1,3-Dichloropropene	75	8.753	8.756	-0.003	95	1400123	250.0	297.6	
75 4-Methyl-2-pentanone (MIBK)	43	8.911	8.914	-0.003	97	1998751	500.0	531.4	
76 Toluene	91	9.082	9.078	0.004	98	3706304	250.0	261.3	
77 trans-1,3-Dichloropropene	75	9.331	9.334	-0.003	94	1333221	250.0	285.9	
78 Ethyl methacrylate	69	9.386	9.389	-0.003	89	1285168	250.0	282.0	
79 1,1,2-Trichloroethane	97	9.520	9.522	-0.002	92	813164	250.0	246.6	
80 Tetrachloroethene	164	9.587	9.589	-0.002	98	676376	250.0	239.6	
81 1,3-Dichloropropane	76	9.678	9.681	-0.003	93	1468414	250.0	250.2	
82 2-Hexanone	43	9.739	9.741	-0.002	97	1545264	500.0	508.9	
84 Chlorodibromomethane	129	9.891	9.894	-0.003	90	815589	250.0	292.2	
85 Ethylene Dibromide	107	10.000	10.003	-0.003	98	838385	250.0	271.8	
87 Chlorobenzene	112	10.493	10.490	0.003	94	2457040	250.0	269.4	
89 1,1,1,2-Tetrachloroethane	131	10.584	10.581	0.003	92	836879	250.0	282.5	
90 Ethylbenzene	106	10.590	10.593	-0.003	98	1302191	250.0	275.8	
91 m-Xylene & p-Xylene	106	10.718	10.721	-0.003	0	1636764	250.0	278.1	
92 o-Xylene	106	11.101	11.098	0.003	97	1586124	250.0	288.7	
93 Styrene	104	11.120	11.122	-0.002	95	2763404	250.0	293.3	
94 Bromoform	173	11.302	11.299	0.003	96	474647	250.0	359.8	
97 Isopropylbenzene	105	11.467	11.463	0.003	96	4123789	250.0	288.5	
100 Bromobenzene	156	11.783	11.779	0.004	97	1033327	250.0	284.4	
99 1,1,2,2-Tetrachloroethane	83	11.783	11.786	-0.003	96	932014	250.0	273.8	
102 trans-1,4-Dichloro-2-buten	53	11.819	11.816	0.003	84	300098	250.0	304.5	
101 1,2,3-Trichloropropane	110	11.838	11.834	0.004	84	326393	250.0	279.1	
103 N-Propylbenzene	120	11.880	11.883	-0.003	99	1135672	250.0	289.5	
104 2-Chlorotoluene	126	11.971	11.974	-0.003	96	980712	250.0	291.9	
106 1,3,5-Trimethylbenzene	105	12.063	12.065	-0.002	93	3507917	250.0	300.1	
107 4-Chlorotoluene	126	12.093	12.096	-0.003	98	1020143	250.0	285.2	
108 tert-Butylbenzene	119	12.379	12.376	0.003	93	2917549	250.0	293.9	
110 1,2,4-Trimethylbenzene	105	12.440	12.436	0.004	97	3549945	250.0	289.7	
112 sec-Butylbenzene	105	12.604	12.601	0.003	94	4164800	250.0	281.5	
113 1,3-Dichlorobenzene	146	12.720	12.722	-0.002	98	1912403	250.0	269.3	
114 4-Isopropyltoluene	119	12.756	12.753	0.003	97	3618821	250.0	286.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
115 1,4-Dichlorobenzene	146	12.823	12.820	0.003	95	1940988	250.0	269.0	
120 n-Butylbenzene	91	13.164	13.166	-0.002	97	3035384	250.0	276.7	
121 1,2-Dichlorobenzene	146	13.182	13.179	0.003	97	1732270	250.0	261.2	
122 1,2-Dibromo-3-Chloropropan	75	13.967	13.969	-0.002	83	119630	250.0	285.3	
126 1,2,4-Trichlorobenzene	180	14.788	14.785	0.003	94	732920	250.0	292.7	
127 Hexachlorobutadiene	225	14.934	14.931	0.003	98	331913	250.0	259.9	
128 Naphthalene	128	15.056	15.058	-0.002	97	1540372	250.0	318.0	
129 1,2,3-Trichlorobenzene	180	15.281	15.283	-0.002	95	516543	250.0	305.2	
S 133 Xylenes, Total	106				0		500.0	566.7	
S 134 1,2-Dichloroethene, Total	96				0		500.0	687.1	
S 154 Total BTEX	106				0		1250.0	1383.1	
S 135 1,3-Dichloropropene, Total	1				0		500.0	583.5	

**Reagents:**

VOA8260INT_00105	Amount Added: 2.00	Units: uL
VOA8260SURR_00105	Amount Added: 10.00	Units: uL
voaWKetmix1st_00024	Amount Added: 10.00	Units: uL
VOA8260VOAPRI_00396	Amount Added: 10.00	Units: uL

Eurofins TestAmerica, Pittsburgh

Data File: \\chromna\Pittsburgh\ChromData\CHHP5\20200324-31295.b\5032310.D

Injection Date: 24-Mar-2020 04:51:30

Instrument ID: CHHP5

Operator ID: 034635

Lims ID: ic 50

Worklist Smp#: 17

Client ID:

Purge Vol: 5.000 mL

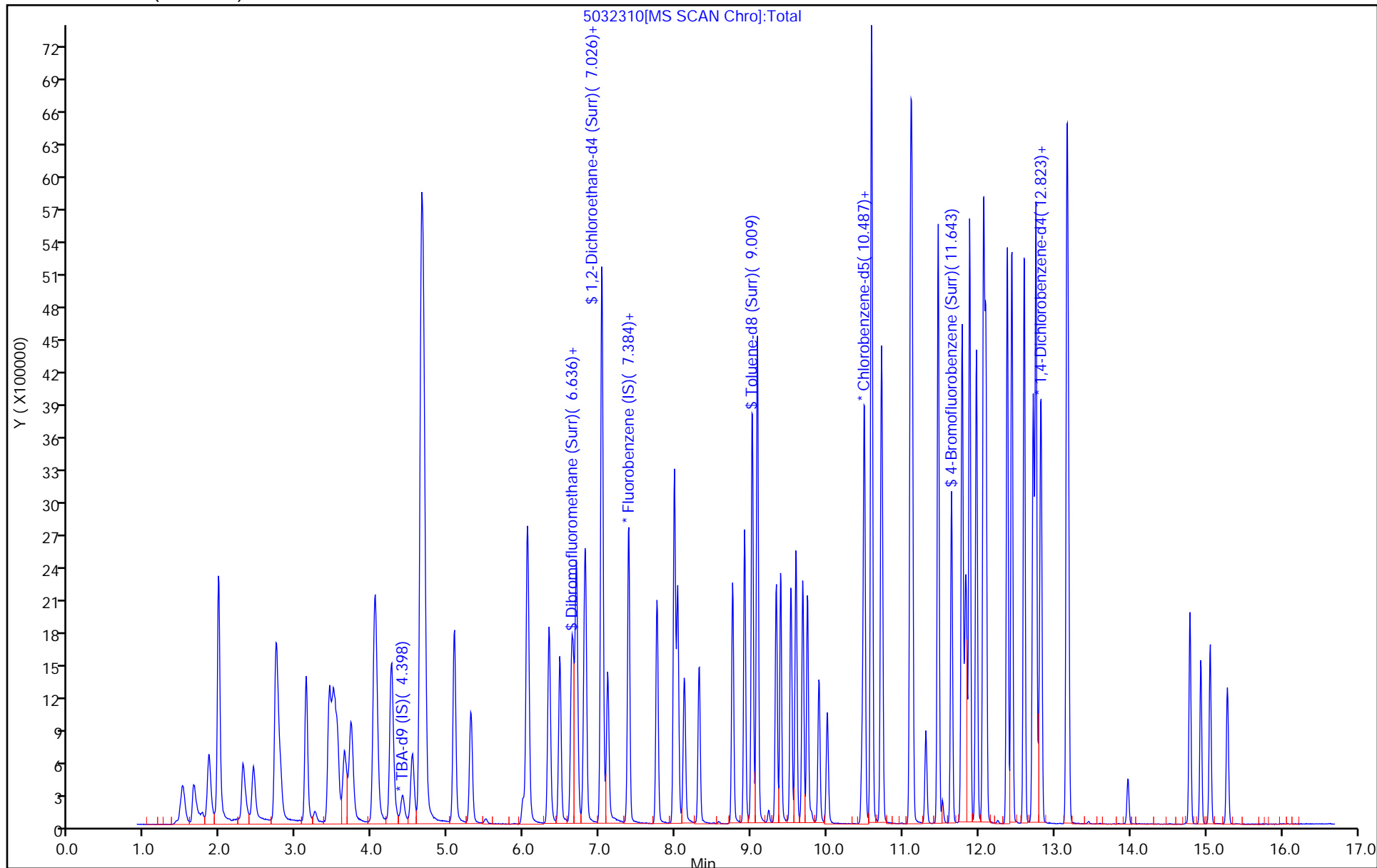
Dil. Factor: 1.0000

ALS Bottle#: 10

Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)



FORM VII  
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1  
 SDG No.: \_\_\_\_\_  
 Lab Sample ID: CCVIS 180-314382/4 Calibration Date: 05/01/2020 16:29  
 Instrument ID: CHHP5 Calib Start Date: 12/28/2019 10:53  
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 12/28/2019 14:57  
 Lab File ID: 5050104.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
2-Chloroethyl vinyl ether	Lin1		0.1783	0.0100	20.4	20.0	1.8	20.0



Eurofins TestAmerica, Pittsburgh  
Target Compound Quantitation Report

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050104.D  
 Lims ID: CCVIS  
 Client ID:  
 Sample Type: CCVIS  
 Inject. Date: 01-May-2020 16:29:30 ALS Bottle#: 4 Worklist Smp#: 4  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: 180-0031777-004  
 Operator ID: 034635 Instrument ID: CHHP5  
 Sublist: chrom-MSVOA\_LL\_CHHP5\*sub145  
 Method: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\MSVOA\_LL\_CHHP5.m  
 Limit Group: VOA 8260C\_D ICAL  
 Last Update: 03-May-2020 17:18:42 Calib Date: 03-Apr-2020 19:09:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP5\20200403-31442.b\5040310.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: CTX0317

First Level Reviewer: journetp

Date: 01-May-2020 16:57:02

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.364	4.364	0.000	0	251469	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.345	7.345	0.000	99	569153	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.435	10.435	0.000	84	142051	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.771	12.771	0.000	92	264858	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.621	6.621	0.000	93	128333	50.0	39.5	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.992	6.992	0.000	0	186195	50.0	40.4	
\$ 7 Toluene-d8 (Surr)	98	8.987	8.987	0.000	93	496909	50.0	43.2	
\$ 8 4-Bromofluorobenzene (Surr	95	11.615	11.615	0.000	89	196217	50.0	45.1	
11 Dichlorodifluoromethane	85	1.638	1.638	0.000	99	114469	50.0	26.3	
12 Chloromethane	50	1.851	1.851	0.000	99	167528	50.0	30.2	
14 Butadiene	39	1.961	1.961	0.000	92	154813	50.0	30.7	
13 Vinyl chloride	62	1.961	1.961	0.000	68	197161	50.0	39.9	
15 Bromomethane	94	2.277	2.277	0.000	88	365954	50.0	129.3	
16 Chloroethane	64	2.423	2.423	0.000	100	188309	50.0	56.1	
17 Dichlorofluoromethane	67	2.715	2.715	0.000	97	442951	50.0	59.0	
18 Trichlorofluoromethane	101	2.727	2.727	0.000	69	375863	50.0	59.9	
20 Ethyl ether	59	3.104	3.104	0.000	88	151972	50.0	42.1	
21 Acrolein	56	3.287	3.287	0.000	96	94200	150.0	125.1	
22 1,1-Dichloroethene	96	3.390	3.390	0.000	97	115879	50.0	42.6	
23 1,1,2-Trichloro-1,2,2-trif	101	3.482	3.482	0.000	92	139842	50.0	46.3	
24 Acetone	43	3.512	3.512	0.000	100	224414	100.0	114.1	
25 Iodomethane	142	3.597	3.597	0.000	99	200800	50.0	42.8	
26 Carbon disulfide	76	3.701	3.701	0.000	99	244286	50.0	38.2	
28 3-Chloro-1-propene	76	3.987	3.987	0.000	89	69109	50.0	41.8	
30 Methyl acetate	43	4.023	4.023	0.000	96	275255	100.0	97.6	
31 Methylene Chloride	84	4.218	4.218	0.000	89	182155	50.0	48.2	
32 2-Methyl-2-propanol	59	4.491	4.491	0.000	88	131883	500.0	513.7	
33 Acrylonitrile	53	4.613	4.613	0.000	99	702146	500.0	476.9	
34 trans-1,2-Dichloroethene	96	4.631	4.631	0.000	98	144230	50.0	46.4	
35 Methyl tert-butyl ether	73	4.656	4.656	0.000	96	371687	50.0	42.6	
36 Hexane	57	5.045	5.045	0.000	91	209558	50.0	40.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
37 1,1-Dichloroethane	63	5.264	5.264	0.000	96	246418	50.0	40.6	
38 Vinyl acetate	43	5.325	5.325	0.000	98	201597	50.0	33.0	
44 2,2-Dichloropropane	97	6.000	6.000	0.000	59	33083	50.0	43.8	
45 cis-1,2-Dichloroethene	96	6.018	6.018	0.000	81	166737	50.0	45.0	
46 2-Butanone (MEK)	43	6.031	6.031	0.000	98	206522	100.0	98.8	
49 Chlorobromomethane	128	6.298	6.298	0.000	94	90516	50.0	45.9	
51 Tetrahydrofuran	42	6.304	6.304	0.000	83	89495	100.0	74.1	
52 Chloroform	83	6.444	6.444	0.000	94	297528	50.0	46.1	
53 1,1,1-Trichloroethane	97	6.596	6.596	0.000	98	189288	50.0	40.8	
54 Cyclohexane	56	6.663	6.663	0.000	91	231401	50.0	39.1	
56 Carbon tetrachloride	117	6.761	6.761	0.000	95	167920	50.0	43.6	
55 1,1-Dichloropropene	75	6.785	6.785	0.000	97	189830	50.0	44.3	
58 Benzene	78	6.998	6.998	0.000	97	642878	50.0	45.9	
57 Isobutyl alcohol	41	7.010	7.010	0.000	91	146350	1250.0	1497.9	
59 1,2-Dichloroethane	62	7.071	7.071	0.000	97	240579	50.0	45.2	
62 n-Heptane	43	7.351	7.351	0.000	85	172577	50.0	37.2	
64 Trichloroethene	130	7.728	7.728	0.000	97	154059	50.0	44.2	
66 Methylcyclohexane	83	7.959	7.959	0.000	87	272756	50.0	46.1	
67 1,2-Dichloropropane	63	7.996	7.996	0.000	92	153056	50.0	40.9	
70 1,4-Dioxane	88	8.081	8.081	0.000	49	44079	1000.0	1445.4	
68 Dibromomethane	93	8.087	8.087	0.000	96	106912	50.0	48.2	
71 Dichlorobromomethane	83	8.281	8.281	0.000	98	178510	50.0	40.7	
73 2-Chloroethyl vinyl ether	63	8.586	8.586	0.000	94	202939	100.0	101.8	
74 cis-1,3-Dichloropropene	75	8.726	8.726	0.000	94	221838	50.0	40.2	
75 4-Methyl-2-pentanone (MIBK)	43	8.890	8.890	0.000	98	288414	100.0	94.1	
76 Toluene	91	9.048	9.048	0.000	98	687772	50.0	51.2	
77 trans-1,3-Dichloropropene	75	9.303	9.303	0.000	95	208699	50.0	47.3	
78 Ethyl methacrylate	69	9.364	9.364	0.000	88	186624	50.0	43.2	
79 1,1,2-Trichloroethane	97	9.498	9.498	0.000	91	167638	50.0	53.7	
80 Tetrachloroethene	164	9.559	9.559	0.000	97	132392	50.0	49.5	
81 1,3-Dichloropropane	76	9.650	9.650	0.000	91	283577	50.0	51.0	
82 2-Hexanone	43	9.717	9.717	0.000	95	246920	100.0	97.5	
84 Chlorodibromomethane	129	9.869	9.869	0.000	89	139390	50.0	52.7	
85 Ethylene Dibromide	107	9.973	9.973	0.000	98	160945	50.0	55.1	
87 Chlorobenzene	112	10.465	10.465	0.000	96	488473	50.0	56.5	
89 1,1,1,2-Tetrachloroethane	131	10.557	10.557	0.000	92	158415	50.0	56.5	
90 Ethylbenzene	106	10.563	10.563	0.000	98	242834	50.0	54.3	
91 m-Xylene & p-Xylene	106	10.697	10.697	0.000	0	303973	50.0	54.5	
92 o-Xylene	106	11.074	11.074	0.000	95	292187	50.0	56.2	
93 Styrene	104	11.098	11.098	0.000	95	513692	50.0	57.6	
94 Bromoform	173	11.281	11.281	0.000	92	78198	50.0	62.6	
97 Isopropylbenzene	105	11.439	11.439	0.000	96	733797	50.0	54.2	
100 Bromobenzene	156	11.755	11.755	0.000	96	207612	50.0	50.6	
99 1,1,2,2-Tetrachloroethane	83	11.755	11.755	0.000	96	216388	50.0	67.1	
102 trans-1,4-Dichloro-2-buten	53	11.792	11.792	0.000	63	54010	50.0	48.6	
101 1,2,3-Trichloropropane	110	11.816	11.816	0.000	85	78964	50.0	59.9	
103 N-Propylbenzene	120	11.852	11.852	0.000	98	238899	50.0	54.0	
104 2-Chlorotoluene	126	11.944	11.944	0.000	97	201315	50.0	53.1	
106 1,3,5-Trimethylbenzene	105	12.041	12.041	0.000	95	662498	50.0	50.2	
107 4-Chlorotoluene	126	12.071	12.071	0.000	98	221118	50.0	54.8	
108 tert-Butylbenzene	119	12.351	12.351	0.000	93	551615	50.0	49.3	
110 1,2,4-Trimethylbenzene	105	12.412	12.412	0.000	97	689661	50.0	49.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
112 sec-Butylbenzene	105	12.576	12.576	0.000	94	816803	50.0	49.0	
113 1,3-Dichlorobenzene	146	12.692	12.692	0.000	97	400748	50.0	50.0	
114 4-Isopropyltoluene	119	12.728	12.728	0.000	96	703136	50.0	49.4	
115 1,4-Dichlorobenzene	146	12.795	12.795	0.000	95	429177	50.0	52.7	
120 n-Butylbenzene	91	13.136	13.136	0.000	98	591043	50.0	47.8	
121 1,2-Dichlorobenzene	146	13.154	13.154	0.000	98	397006	50.0	53.1	
122 1,2-Dibromo-3-Chloropropan	75	13.939	13.939	0.000	80	24583	50.0	52.0	
126 1,2,4-Trichlorobenzene	180	14.760	14.760	0.000	94	118308	50.0	41.9	
127 Hexachlorobutadiene	225	14.906	14.906	0.000	96	66843	50.0	46.4	
128 Naphthalene	128	15.034	15.034	0.000	97	243306	50.0	44.5	
129 1,2,3-Trichlorobenzene	180	15.259	15.259	0.000	96	99272	50.0	52.0	
S 133 Xylenes, Total	106				0		100.0	110.7	
S 154 Total BTEX	106				0		250.0	262.1	
S 134 1,2-Dichloroethene, Total	96				0		100.0	91.4	
S 135 1,3-Dichloropropene, Total	1				0		100.0	87.4	

**Reagents:**

VOAKetPRI_00001	Amount Added: 2.00	Units: uL	
VOACR2ND_00033	Amount Added: 6.00	Units: uL	
VOAVAPRI_00038	Amount Added: 2.00	Units: uL	
VOA8260VOAPRI_00403	Amount Added: 2.00	Units: uL	
VOACEVEPRI_00064	Amount Added: 2.00	Units: uL	
voaWI/SHP5_00016	Amount Added: 5.00	Units: uL	Run Reagent

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050104.D

Injection Date: 01-May-2020 16:29:30

Instrument ID: CHHP5

Operator ID: 034635

Lims ID: CCVIS

Worklist Smp#: 4

Client ID:

Purge Vol: 5.000 mL

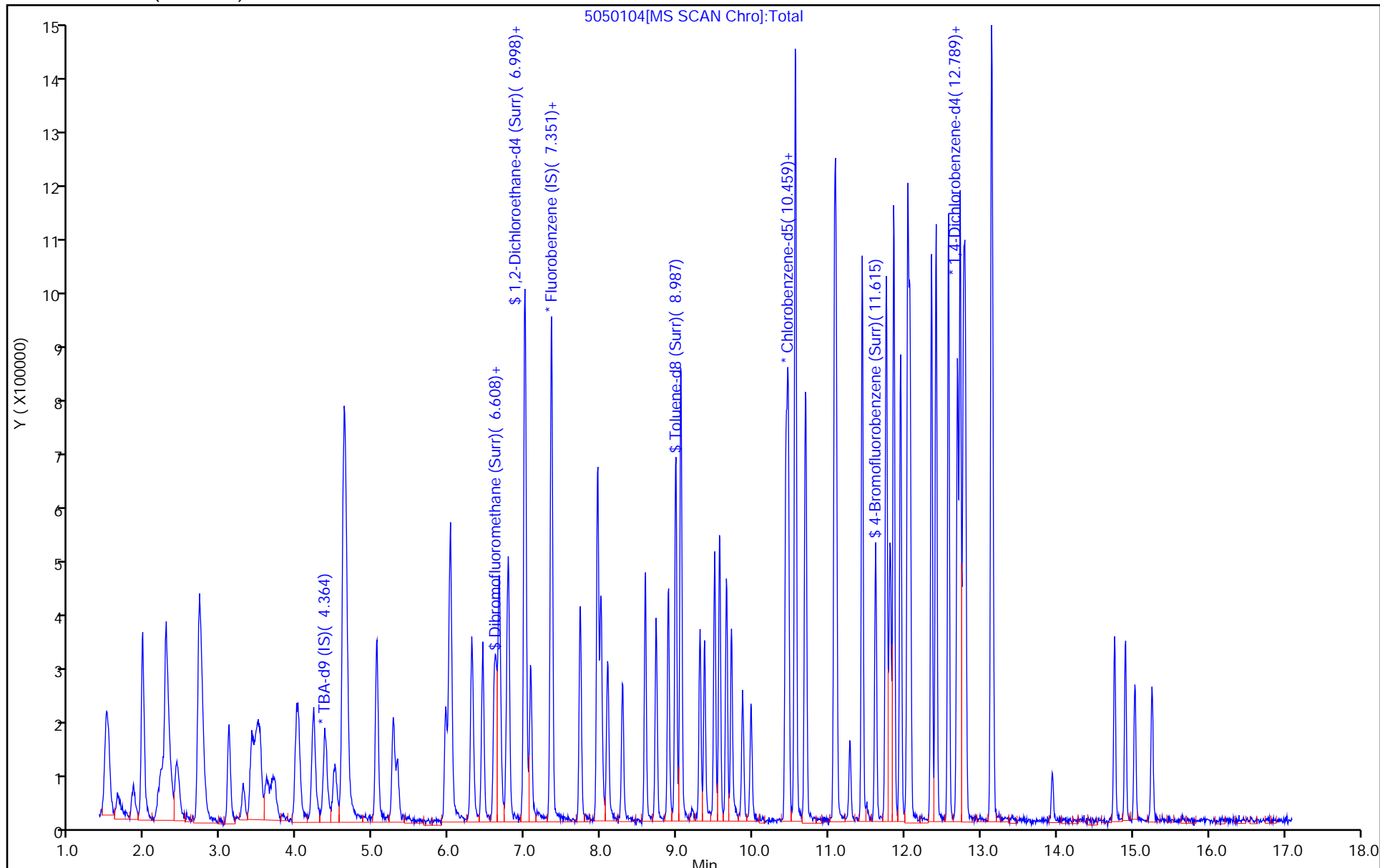
Dil. Factor: 1.0000

ALS Bottle#: 4

Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)



FORM VII  
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1

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

Lab Sample ID: CCVIS 180-314382/4 Calibration Date: 05/01/2020 16:29

Instrument ID: CHHP5 Calib Start Date: 03/24/2020 02:01

GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 03/24/2020 07:18

Lab File ID: 5050104.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	Lin2		0.2011	0.1000	5.26	10.0	-47.4*	20.0
Chloromethane	Ave	0.4878	0.2944	0.1000	6.03	10.0	-39.7*	20.0
1,3-Butadiene	Ave	0.4430	0.2720	0.0100	6.14	10.0	-38.6*	20.0
Vinyl chloride	Ave	0.4344	0.3464	0.1000	7.97	10.0	-20.3*	20.0
Bromomethane	Ave	0.2487	0.6430	0.0500	25.9	10.0	158.5*	20.0
Chloroethane	Ave	0.2947	0.3309	0.0500	11.2	10.0	12.3	20.0
Dichlorofluoromethane	Ave	0.6598	0.7783	0.0100	11.8	10.0	18.0	20.0
Trichlorofluoromethane	Ave	0.5512	0.6604	0.1000	12.0	10.0	19.8	20.0
Ethyl ether	Qua		0.2670	0.0100	8.42	10.0	-15.8	20.0
1,1-Dichloroethene	Lin		0.2036	0.1000	8.53	10.0	-14.7	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Lin2		0.2457	0.1000	9.26	10.0	-7.4	20.0
Acetone	Ave	0.1728	0.1972	0.0500	22.8	20.0	14.1	20.0
Iodomethane	Ave	0.4121	0.3528	0.0100	8.56	10.0	-14.4	20.0
Carbon disulfide	Ave	0.5620	0.4292	0.1000	7.64	10.0	-23.6*	20.0
Allyl chloride	Ave	0.1454	0.1214	0.0100	8.35	10.0	-16.5	20.0
Methyl acetate	Ave	0.2478	0.2418	0.1000	19.5	20.0	-2.4	20.0
Methylene Chloride	Lin2		0.3201	0.1000	9.63	10.0	-3.7	20.0
tert-Butyl alcohol	Ave	1.021	1.049	0.0100	103	100	2.7	20.0
Acrylonitrile	Ave	0.1293	0.1234	0.0100	95.4	100	-4.6	20.0
trans-1,2-Dichloroethene	Ave	0.2733	0.2534	0.1000	9.27	10.0	-7.3	20.0
Methyl tert-butyl ether	Ave	0.7670	0.6531	0.1000	8.51	10.0	-14.9	20.0
Hexane	Ave	0.4499	0.3682	0.0100	8.18	10.0	-18.2	20.0
1,1-Dichloroethane	Ave	0.5333	0.4330	0.2000	8.12	10.0	-18.8	20.0
2,2-Dichloropropane	Ave	0.0664	0.0581	0.0100	8.76	10.0	-12.4	20.0
cis-1,2-Dichloroethene	Ave	0.3252	0.2930	0.1000	9.01	10.0	-9.9	20.0
2-Butanone (MEK)	Ave	0.1836	0.1814	0.0500	19.8	20.0	-1.2	20.0
Bromochloromethane	Ave	0.1733	0.1590	0.0100	9.18	10.0	-8.2	20.0
Tetrahydrofuran	Ave	0.1061	0.0786	0.0100	14.8	20.0	-25.9*	20.0
Chloroform	Lin2		0.5228	0.2000	9.23	10.0	-7.7	20.0
1,1,1-Trichloroethane	Ave	0.4074	0.3326	0.1000	8.16	10.0	-18.4	20.0
Cyclohexane	Ave	0.5196	0.4066	0.1000	7.82	10.0	-21.8*	20.0
Carbon tetrachloride	Ave	0.3383	0.2950	0.1000	8.72	10.0	-12.8	20.0
1,1-Dichloropropene	Ave	0.3761	0.3335	0.0100	8.87	10.0	-11.3	20.0
Benzene	Ave	1.231	1.130	0.5000	9.18	10.0	-8.2	20.0
Isobutyl alcohol	Ave	0.0086	0.0103	0.0100	300	250	19.8	20.0
1,2-Dichloroethane	Ave	0.4679	0.4227	0.1000	9.03	10.0	-9.7	20.0
n-Heptane	Ave	0.4078	0.3032	0.0100	7.43	10.0	-25.7*	20.0
Trichloroethene	Ave	0.3065	0.2707	0.2000	8.83	10.0	-11.7	20.0
Methylcyclohexane	Ave	0.5199	0.4792	0.1000	9.22	10.0	-7.8	20.0
1,2-Dichloropropane	Ave	0.3285	0.2689	0.1000	8.19	10.0	-18.1	20.0

FORM VII  
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1

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

Lab Sample ID: CCVIS 180-314382/4 Calibration Date: 05/01/2020 16:29

Instrument ID: CHHP5 Calib Start Date: 03/24/2020 02:01

GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 03/24/2020 07:18

Lab File ID: 5050104.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
1,4-Dioxane	Lin1		0.0039*	0.0100	289	200	44.5*	20.0
Dibromomethane	Ave	0.1949	0.1878	0.0100	9.64	10.0	-3.6	20.0
Bromodichloromethane	Ave	0.3854	0.3136	0.2000	8.14	10.0	-18.6	20.0
cis-1,3-Dichloropropene	Ave	0.4853	0.3898	0.2000	8.03	10.0	-19.7	20.0
4-Methyl-2-pentanone (MIBK)	Lin1		1.015	0.1000	18.8	20.0	-5.9	20.0
Toluene	Ave	4.728	4.842	0.4000	10.2	10.0	2.4	20.0
trans-1,3-Dichloropropene	Ave	1.554	1.469	0.1000	9.45	10.0	-5.5	20.0
Ethyl methacrylate	Ave	1.519	1.314	0.0100	8.65	10.0	-13.5	20.0
1,1,2-Trichloroethane	Ave	1.099	1.180	0.1000	10.7	10.0	7.4	20.0
Tetrachloroethene	Ave	0.9410	0.9320	0.2000	9.90	10.0	-1.0	20.0
1,3-Dichloropropane	Ave	1.957	1.996	0.0100	10.2	10.0	2.0	20.0
2-Hexanone	Lin1		0.8691	0.1000	19.5	20.0	-2.5	20.0
Dibromochloromethane	Ave	0.9303	0.9813	0.1000	10.5	10.0	5.5	20.0
1,2-Dibromoethane (EDB)	Ave	1.028	1.133	0.1000	11.0	10.0	10.2	20.0
Chlorobenzene	Ave	3.041	3.439	0.5000	11.3	10.0	13.1	20.0
1,1,1,2-Tetrachloroethane	Ave	0.9874	1.115	0.0100	11.3	10.0	12.9	20.0
Ethylbenzene	Ave	1.574	1.709	0.1000	10.9	10.0	8.6	20.0
m-Xylene & p-Xylene	Ave	1.962	2.140	0.1000	10.9	10.0	9.1	20.0
o-Xylene	Ave	1.832	2.057	0.3000	11.2	10.0	12.3	20.0
Styrene	Ave	3.140	3.616	0.3000	11.5	10.0	15.2	20.0
Bromoform	Ave	0.4398	0.5505	0.1000	12.5	10.0	25.2*	20.0
Isopropylbenzene	Ave	4.764	5.166	0.1000	10.8	10.0	8.4	20.0
1,1,2,2-Tetrachloroethane	Ave	1.135	1.523	0.3000	13.4	10.0	34.3*	20.0
Bromobenzene	Ave	0.7738	0.7839	0.0100	10.1	10.0	1.3	20.0
trans-1,4-Dichloro-2-butene	Ave	0.2098	0.2039	0.0100	9.72	10.0	-2.8	20.0
1,2,3-Trichloropropane	Ave	0.2490	0.2981	0.0100	12.0	10.0	19.7	20.0
N-Propylbenzene	Ave	0.8353	0.9020	0.0100	10.8	10.0	8.0	20.0
2-Chlorotoluene	Ave	0.7155	0.7601	0.0100	10.6	10.0	6.2	20.0
1,3,5-Trimethylbenzene	Ave	2.489	2.501	0.0100	10.0	10.0	0.5	20.0
4-Chlorotoluene	Ave	0.7616	0.8349	0.0100	11.0	10.0	9.6	20.0
tert-Butylbenzene	Ave	2.114	2.083	0.0100	9.85	10.0	-1.5	20.0
1,2,4-Trimethylbenzene	Ave	2.610	2.604	0.0100	9.98	10.0	-0.2	20.0
sec-Butylbenzene	Ave	3.150	3.084	0.0100	9.79	10.0	-2.1	20.0
1,3-Dichlorobenzene	Ave	1.512	1.513	0.6000	10.0	10.0	0.0	20.0
4-Isopropyltoluene	Ave	2.689	2.655	0.0100	9.87	10.0	-1.3	20.0
1,4-Dichlorobenzene	Ave	1.537	1.620	0.5000	10.5	10.0	5.5	20.0
n-Butylbenzene	Ave	2.336	2.232	0.0100	9.55	10.0	-4.5	20.0
1,2-Dichlorobenzene	Ave	1.413	1.499	0.4000	10.6	10.0	6.1	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.0893	0.0928	0.0500	10.4	10.0	4.0	20.0
1,2,4-Trichlorobenzene	Ave	0.5331	0.4467	0.2000	8.38	10.0	-16.2	20.0
Hexachlorobutadiene	Ave	0.2719	0.2524	0.0100	9.28	10.0	-7.2	20.0

FORM VII  
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1  
 SDG No.: \_\_\_\_\_  
 Lab Sample ID: CCVIS 180-314382/4 Calibration Date: 05/01/2020 16:29  
 Instrument ID: CHHP5 Calib Start Date: 03/24/2020 02:01  
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 03/24/2020 07:18  
 Lab File ID: 5050104.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
Naphthalene	Ave	1.032	0.9186	0.0100	8.91	10.0	-10.9	20.0
1,2,3-Trichlorobenzene	Ave	0.3604	0.3748	0.0100	10.4	10.0	4.0	20.0
Dibromofluoromethane (Surr)	Ave	0.2853	0.2255		7.90	10.0	-21.0*	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.4048	0.3271		8.08	10.0	-19.2	20.0
Toluene-d8 (Surr)	Ave	4.047	3.498		8.64	10.0	-13.6	20.0
4-Bromofluorobenzene (Surr)	Ave	1.530	1.381		9.03	10.0	-9.7	20.0

Eurofins TestAmerica, Pittsburgh  
Target Compound Quantitation Report

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050104.D  
 Lims ID: CCVIS  
 Client ID:  
 Sample Type: CCVIS  
 Inject. Date: 01-May-2020 16:29:30 ALS Bottle#: 4 Worklist Smp#: 4  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: 180-0031777-004  
 Operator ID: 034635 Instrument ID: CHHP5  
 Sublist: chrom-MSVOA\_LL\_CHHP5\*sub145  
 Method: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\MSVOA\_LL\_CHHP5.m  
 Limit Group: VOA 8260C\_D ICAL  
 Last Update: 03-May-2020 17:18:42 Calib Date: 03-Apr-2020 19:09:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP5\20200403-31442.b\5040310.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: CTX0317

First Level Reviewer: journetp

Date: 01-May-2020 16:57:02

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.364	4.364	0.000	0	251469	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.345	7.345	0.000	99	569153	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.435	10.435	0.000	84	142051	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.771	12.771	0.000	92	264858	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.621	6.621	0.000	93	128333	50.0	39.5	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.992	6.992	0.000	0	186195	50.0	40.4	
\$ 7 Toluene-d8 (Surr)	98	8.987	8.987	0.000	93	496909	50.0	43.2	
\$ 8 4-Bromofluorobenzene (Surr	95	11.615	11.615	0.000	89	196217	50.0	45.1	
11 Dichlorodifluoromethane	85	1.638	1.638	0.000	99	114469	50.0	26.3	
12 Chloromethane	50	1.851	1.851	0.000	99	167528	50.0	30.2	
14 Butadiene	39	1.961	1.961	0.000	92	154813	50.0	30.7	
13 Vinyl chloride	62	1.961	1.961	0.000	68	197161	50.0	39.9	
15 Bromomethane	94	2.277	2.277	0.000	88	365954	50.0	129.3	
16 Chloroethane	64	2.423	2.423	0.000	100	188309	50.0	56.1	
17 Dichlorofluoromethane	67	2.715	2.715	0.000	97	442951	50.0	59.0	
18 Trichlorofluoromethane	101	2.727	2.727	0.000	69	375863	50.0	59.9	
20 Ethyl ether	59	3.104	3.104	0.000	88	151972	50.0	42.1	
21 Acrolein	56	3.287	3.287	0.000	96	94200	150.0	125.1	
22 1,1-Dichloroethene	96	3.390	3.390	0.000	97	115879	50.0	42.6	
23 1,1,2-Trichloro-1,2,2-trif	101	3.482	3.482	0.000	92	139842	50.0	46.3	
24 Acetone	43	3.512	3.512	0.000	100	224414	100.0	114.1	
25 Iodomethane	142	3.597	3.597	0.000	99	200800	50.0	42.8	
26 Carbon disulfide	76	3.701	3.701	0.000	99	244286	50.0	38.2	
28 3-Chloro-1-propene	76	3.987	3.987	0.000	89	69109	50.0	41.8	
30 Methyl acetate	43	4.023	4.023	0.000	96	275255	100.0	97.6	
31 Methylene Chloride	84	4.218	4.218	0.000	89	182155	50.0	48.2	
32 2-Methyl-2-propanol	59	4.491	4.491	0.000	88	131883	500.0	513.7	
33 Acrylonitrile	53	4.613	4.613	0.000	99	702146	500.0	476.9	
34 trans-1,2-Dichloroethene	96	4.631	4.631	0.000	98	144230	50.0	46.4	
35 Methyl tert-butyl ether	73	4.656	4.656	0.000	96	371687	50.0	42.6	
36 Hexane	57	5.045	5.045	0.000	91	209558	50.0	40.9	



Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
37 1,1-Dichloroethane	63	5.264	5.264	0.000	96	246418	50.0	40.6	
38 Vinyl acetate	43	5.325	5.325	0.000	98	201597	50.0	33.0	
44 2,2-Dichloropropane	97	6.000	6.000	0.000	59	33083	50.0	43.8	
45 cis-1,2-Dichloroethene	96	6.018	6.018	0.000	81	166737	50.0	45.0	
46 2-Butanone (MEK)	43	6.031	6.031	0.000	98	206522	100.0	98.8	
49 Chlorobromomethane	128	6.298	6.298	0.000	94	90516	50.0	45.9	
51 Tetrahydrofuran	42	6.304	6.304	0.000	83	89495	100.0	74.1	
52 Chloroform	83	6.444	6.444	0.000	94	297528	50.0	46.1	
53 1,1,1-Trichloroethane	97	6.596	6.596	0.000	98	189288	50.0	40.8	
54 Cyclohexane	56	6.663	6.663	0.000	91	231401	50.0	39.1	
56 Carbon tetrachloride	117	6.761	6.761	0.000	95	167920	50.0	43.6	
55 1,1-Dichloropropene	75	6.785	6.785	0.000	97	189830	50.0	44.3	
58 Benzene	78	6.998	6.998	0.000	97	642878	50.0	45.9	
57 Isobutyl alcohol	41	7.010	7.010	0.000	91	146350	1250.0	1497.9	
59 1,2-Dichloroethane	62	7.071	7.071	0.000	97	240579	50.0	45.2	
62 n-Heptane	43	7.351	7.351	0.000	85	172577	50.0	37.2	
64 Trichloroethene	130	7.728	7.728	0.000	97	154059	50.0	44.2	
66 Methylcyclohexane	83	7.959	7.959	0.000	87	272756	50.0	46.1	
67 1,2-Dichloropropane	63	7.996	7.996	0.000	92	153056	50.0	40.9	
70 1,4-Dioxane	88	8.081	8.081	0.000	49	44079	1000.0	1445.4	
68 Dibromomethane	93	8.087	8.087	0.000	96	106912	50.0	48.2	
71 Dichlorobromomethane	83	8.281	8.281	0.000	98	178510	50.0	40.7	
73 2-Chloroethyl vinyl ether	63	8.586	8.586	0.000	94	202939	100.0	101.8	
74 cis-1,3-Dichloropropene	75	8.726	8.726	0.000	94	221838	50.0	40.2	
75 4-Methyl-2-pentanone (MIBK)	43	8.890	8.890	0.000	98	288414	100.0	94.1	
76 Toluene	91	9.048	9.048	0.000	98	687772	50.0	51.2	
77 trans-1,3-Dichloropropene	75	9.303	9.303	0.000	95	208699	50.0	47.3	
78 Ethyl methacrylate	69	9.364	9.364	0.000	88	186624	50.0	43.2	
79 1,1,2-Trichloroethane	97	9.498	9.498	0.000	91	167638	50.0	53.7	
80 Tetrachloroethene	164	9.559	9.559	0.000	97	132392	50.0	49.5	
81 1,3-Dichloropropane	76	9.650	9.650	0.000	91	283577	50.0	51.0	
82 2-Hexanone	43	9.717	9.717	0.000	95	246920	100.0	97.5	
84 Chlorodibromomethane	129	9.869	9.869	0.000	89	139390	50.0	52.7	
85 Ethylene Dibromide	107	9.973	9.973	0.000	98	160945	50.0	55.1	
87 Chlorobenzene	112	10.465	10.465	0.000	96	488473	50.0	56.5	
89 1,1,1,2-Tetrachloroethane	131	10.557	10.557	0.000	92	158415	50.0	56.5	
90 Ethylbenzene	106	10.563	10.563	0.000	98	242834	50.0	54.3	
91 m-Xylene & p-Xylene	106	10.697	10.697	0.000	0	303973	50.0	54.5	
92 o-Xylene	106	11.074	11.074	0.000	95	292187	50.0	56.2	
93 Styrene	104	11.098	11.098	0.000	95	513692	50.0	57.6	
94 Bromoform	173	11.281	11.281	0.000	92	78198	50.0	62.6	
97 Isopropylbenzene	105	11.439	11.439	0.000	96	733797	50.0	54.2	
100 Bromobenzene	156	11.755	11.755	0.000	96	207612	50.0	50.6	
99 1,1,2,2-Tetrachloroethane	83	11.755	11.755	0.000	96	216388	50.0	67.1	
102 trans-1,4-Dichloro-2-buten	53	11.792	11.792	0.000	63	54010	50.0	48.6	
101 1,2,3-Trichloropropane	110	11.816	11.816	0.000	85	78964	50.0	59.9	
103 N-Propylbenzene	120	11.852	11.852	0.000	98	238899	50.0	54.0	
104 2-Chlorotoluene	126	11.944	11.944	0.000	97	201315	50.0	53.1	
106 1,3,5-Trimethylbenzene	105	12.041	12.041	0.000	95	662498	50.0	50.2	
107 4-Chlorotoluene	126	12.071	12.071	0.000	98	221118	50.0	54.8	
108 tert-Butylbenzene	119	12.351	12.351	0.000	93	551615	50.0	49.3	
110 1,2,4-Trimethylbenzene	105	12.412	12.412	0.000	97	689661	50.0	49.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
112 sec-Butylbenzene	105	12.576	12.576	0.000	94	816803	50.0	49.0	
113 1,3-Dichlorobenzene	146	12.692	12.692	0.000	97	400748	50.0	50.0	
114 4-Isopropyltoluene	119	12.728	12.728	0.000	96	703136	50.0	49.4	
115 1,4-Dichlorobenzene	146	12.795	12.795	0.000	95	429177	50.0	52.7	
120 n-Butylbenzene	91	13.136	13.136	0.000	98	591043	50.0	47.8	
121 1,2-Dichlorobenzene	146	13.154	13.154	0.000	98	397006	50.0	53.1	
122 1,2-Dibromo-3-Chloropropan	75	13.939	13.939	0.000	80	24583	50.0	52.0	
126 1,2,4-Trichlorobenzene	180	14.760	14.760	0.000	94	118308	50.0	41.9	
127 Hexachlorobutadiene	225	14.906	14.906	0.000	96	66843	50.0	46.4	
128 Naphthalene	128	15.034	15.034	0.000	97	243306	50.0	44.5	
129 1,2,3-Trichlorobenzene	180	15.259	15.259	0.000	96	99272	50.0	52.0	
S 133 Xylenes, Total	106				0		100.0	110.7	
S 154 Total BTEX	106				0		250.0	262.1	
S 134 1,2-Dichloroethene, Total	96				0		100.0	91.4	
S 135 1,3-Dichloropropene, Total	1				0		100.0	87.4	

**Reagents:**

VOAKetPRI_00001	Amount Added: 2.00	Units: uL	
VOACR2ND_00033	Amount Added: 6.00	Units: uL	
VOAVAPRI_00038	Amount Added: 2.00	Units: uL	
VOA8260VOAPRI_00403	Amount Added: 2.00	Units: uL	
VOACEVEPRI_00064	Amount Added: 2.00	Units: uL	
voaWI/SHP5_00016	Amount Added: 5.00	Units: uL	Run Reagent

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050104.D

Injection Date: 01-May-2020 16:29:30

Instrument ID: CHHP5

Operator ID: 034635

Lims ID: CCVIS

Worklist Smp#: 4

Client ID:

Purge Vol: 5.000 mL

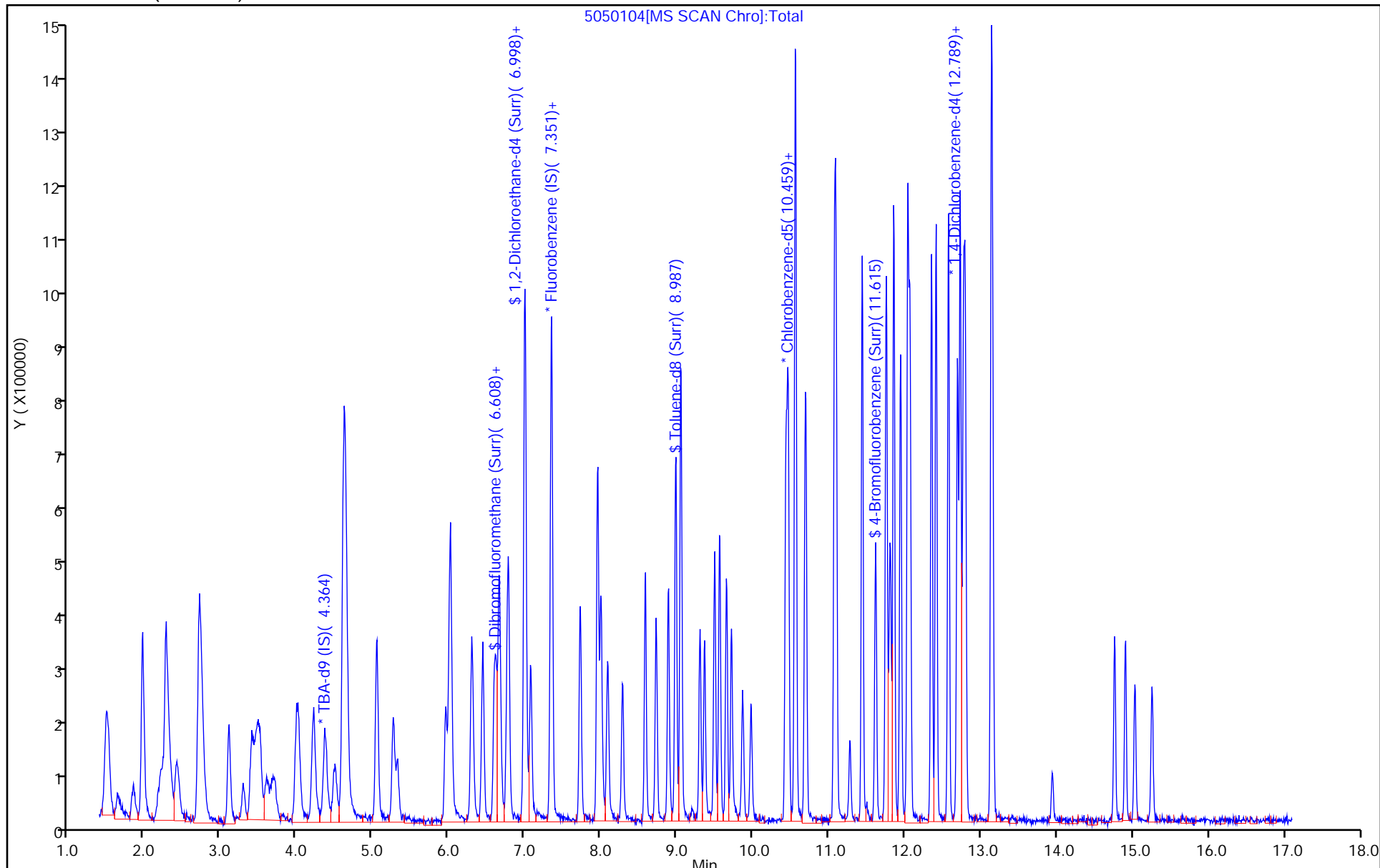
Dil. Factor: 1.0000

ALS Bottle#: 4

Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)



FORM VII  
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1  
 SDG No.: \_\_\_\_\_  
 Lab Sample ID: CCVIS 180-314382/4 Calibration Date: 05/01/2020 16:29  
 Instrument ID: CHHP5 Calib Start Date: 03/30/2020 19:53  
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 03/30/2020 23:20  
 Lab File ID: 5050104.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
Vinyl acetate	Ave	0.5372	0.3542	0.0100	6.59	10.0	-34.1*	20.0

Eurofins TestAmerica, Pittsburgh  
Target Compound Quantitation Report

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050104.D  
 Lims ID: CCVIS  
 Client ID:  
 Sample Type: CCVIS  
 Inject. Date: 01-May-2020 16:29:30 ALS Bottle#: 4 Worklist Smp#: 4  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: 180-0031777-004  
 Operator ID: 034635 Instrument ID: CHHP5  
 Sublist: chrom-MSVOA\_LL\_CHHP5\*sub145  
 Method: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\MSVOA\_LL\_CHHP5.m  
 Limit Group: VOA 8260C\_D ICAL  
 Last Update: 03-May-2020 17:18:42 Calib Date: 03-Apr-2020 19:09:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP5\20200403-31442.b\5040310.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: CTX0317

First Level Reviewer: journetp

Date: 01-May-2020 16:57:02

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.364	4.364	0.000	0	251469	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.345	7.345	0.000	99	569153	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.435	10.435	0.000	84	142051	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.771	12.771	0.000	92	264858	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.621	6.621	0.000	93	128333	50.0	39.5	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.992	6.992	0.000	0	186195	50.0	40.4	
\$ 7 Toluene-d8 (Surr)	98	8.987	8.987	0.000	93	496909	50.0	43.2	
\$ 8 4-Bromofluorobenzene (Surr	95	11.615	11.615	0.000	89	196217	50.0	45.1	
11 Dichlorodifluoromethane	85	1.638	1.638	0.000	99	114469	50.0	26.3	
12 Chloromethane	50	1.851	1.851	0.000	99	167528	50.0	30.2	
14 Butadiene	39	1.961	1.961	0.000	92	154813	50.0	30.7	
13 Vinyl chloride	62	1.961	1.961	0.000	68	197161	50.0	39.9	
15 Bromomethane	94	2.277	2.277	0.000	88	365954	50.0	129.3	
16 Chloroethane	64	2.423	2.423	0.000	100	188309	50.0	56.1	
17 Dichlorofluoromethane	67	2.715	2.715	0.000	97	442951	50.0	59.0	
18 Trichlorofluoromethane	101	2.727	2.727	0.000	69	375863	50.0	59.9	
20 Ethyl ether	59	3.104	3.104	0.000	88	151972	50.0	42.1	
21 Acrolein	56	3.287	3.287	0.000	96	94200	150.0	125.1	
22 1,1-Dichloroethene	96	3.390	3.390	0.000	97	115879	50.0	42.6	
23 1,1,2-Trichloro-1,2,2-trif	101	3.482	3.482	0.000	92	139842	50.0	46.3	
24 Acetone	43	3.512	3.512	0.000	100	224414	100.0	114.1	
25 Iodomethane	142	3.597	3.597	0.000	99	200800	50.0	42.8	
26 Carbon disulfide	76	3.701	3.701	0.000	99	244286	50.0	38.2	
28 3-Chloro-1-propene	76	3.987	3.987	0.000	89	69109	50.0	41.8	
30 Methyl acetate	43	4.023	4.023	0.000	96	275255	100.0	97.6	
31 Methylene Chloride	84	4.218	4.218	0.000	89	182155	50.0	48.2	
32 2-Methyl-2-propanol	59	4.491	4.491	0.000	88	131883	500.0	513.7	
33 Acrylonitrile	53	4.613	4.613	0.000	99	702146	500.0	476.9	
34 trans-1,2-Dichloroethene	96	4.631	4.631	0.000	98	144230	50.0	46.4	
35 Methyl tert-butyl ether	73	4.656	4.656	0.000	96	371687	50.0	42.6	
36 Hexane	57	5.045	5.045	0.000	91	209558	50.0	40.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
37 1,1-Dichloroethane	63	5.264	5.264	0.000	96	246418	50.0	40.6	
38 Vinyl acetate	43	5.325	5.325	0.000	98	201597	50.0	33.0	
44 2,2-Dichloropropane	97	6.000	6.000	0.000	59	33083	50.0	43.8	
45 cis-1,2-Dichloroethene	96	6.018	6.018	0.000	81	166737	50.0	45.0	
46 2-Butanone (MEK)	43	6.031	6.031	0.000	98	206522	100.0	98.8	
49 Chlorobromomethane	128	6.298	6.298	0.000	94	90516	50.0	45.9	
51 Tetrahydrofuran	42	6.304	6.304	0.000	83	89495	100.0	74.1	
52 Chloroform	83	6.444	6.444	0.000	94	297528	50.0	46.1	
53 1,1,1-Trichloroethane	97	6.596	6.596	0.000	98	189288	50.0	40.8	
54 Cyclohexane	56	6.663	6.663	0.000	91	231401	50.0	39.1	
56 Carbon tetrachloride	117	6.761	6.761	0.000	95	167920	50.0	43.6	
55 1,1-Dichloropropene	75	6.785	6.785	0.000	97	189830	50.0	44.3	
58 Benzene	78	6.998	6.998	0.000	97	642878	50.0	45.9	
57 Isobutyl alcohol	41	7.010	7.010	0.000	91	146350	1250.0	1497.9	
59 1,2-Dichloroethane	62	7.071	7.071	0.000	97	240579	50.0	45.2	
62 n-Heptane	43	7.351	7.351	0.000	85	172577	50.0	37.2	
64 Trichloroethene	130	7.728	7.728	0.000	97	154059	50.0	44.2	
66 Methylcyclohexane	83	7.959	7.959	0.000	87	272756	50.0	46.1	
67 1,2-Dichloropropane	63	7.996	7.996	0.000	92	153056	50.0	40.9	
70 1,4-Dioxane	88	8.081	8.081	0.000	49	44079	1000.0	1445.4	
68 Dibromomethane	93	8.087	8.087	0.000	96	106912	50.0	48.2	
71 Dichlorobromomethane	83	8.281	8.281	0.000	98	178510	50.0	40.7	
73 2-Chloroethyl vinyl ether	63	8.586	8.586	0.000	94	202939	100.0	101.8	
74 cis-1,3-Dichloropropene	75	8.726	8.726	0.000	94	221838	50.0	40.2	
75 4-Methyl-2-pentanone (MIBK)	43	8.890	8.890	0.000	98	288414	100.0	94.1	
76 Toluene	91	9.048	9.048	0.000	98	687772	50.0	51.2	
77 trans-1,3-Dichloropropene	75	9.303	9.303	0.000	95	208699	50.0	47.3	
78 Ethyl methacrylate	69	9.364	9.364	0.000	88	186624	50.0	43.2	
79 1,1,2-Trichloroethane	97	9.498	9.498	0.000	91	167638	50.0	53.7	
80 Tetrachloroethene	164	9.559	9.559	0.000	97	132392	50.0	49.5	
81 1,3-Dichloropropane	76	9.650	9.650	0.000	91	283577	50.0	51.0	
82 2-Hexanone	43	9.717	9.717	0.000	95	246920	100.0	97.5	
84 Chlorodibromomethane	129	9.869	9.869	0.000	89	139390	50.0	52.7	
85 Ethylene Dibromide	107	9.973	9.973	0.000	98	160945	50.0	55.1	
87 Chlorobenzene	112	10.465	10.465	0.000	96	488473	50.0	56.5	
89 1,1,1,2-Tetrachloroethane	131	10.557	10.557	0.000	92	158415	50.0	56.5	
90 Ethylbenzene	106	10.563	10.563	0.000	98	242834	50.0	54.3	
91 m-Xylene & p-Xylene	106	10.697	10.697	0.000	0	303973	50.0	54.5	
92 o-Xylene	106	11.074	11.074	0.000	95	292187	50.0	56.2	
93 Styrene	104	11.098	11.098	0.000	95	513692	50.0	57.6	
94 Bromoform	173	11.281	11.281	0.000	92	78198	50.0	62.6	
97 Isopropylbenzene	105	11.439	11.439	0.000	96	733797	50.0	54.2	
100 Bromobenzene	156	11.755	11.755	0.000	96	207612	50.0	50.6	
99 1,1,2,2-Tetrachloroethane	83	11.755	11.755	0.000	96	216388	50.0	67.1	
102 trans-1,4-Dichloro-2-buten	53	11.792	11.792	0.000	63	54010	50.0	48.6	
101 1,2,3-Trichloropropane	110	11.816	11.816	0.000	85	78964	50.0	59.9	
103 N-Propylbenzene	120	11.852	11.852	0.000	98	238899	50.0	54.0	
104 2-Chlorotoluene	126	11.944	11.944	0.000	97	201315	50.0	53.1	
106 1,3,5-Trimethylbenzene	105	12.041	12.041	0.000	95	662498	50.0	50.2	
107 4-Chlorotoluene	126	12.071	12.071	0.000	98	221118	50.0	54.8	
108 tert-Butylbenzene	119	12.351	12.351	0.000	93	551615	50.0	49.3	
110 1,2,4-Trimethylbenzene	105	12.412	12.412	0.000	97	689661	50.0	49.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
112 sec-Butylbenzene	105	12.576	12.576	0.000	94	816803	50.0	49.0	
113 1,3-Dichlorobenzene	146	12.692	12.692	0.000	97	400748	50.0	50.0	
114 4-Isopropyltoluene	119	12.728	12.728	0.000	96	703136	50.0	49.4	
115 1,4-Dichlorobenzene	146	12.795	12.795	0.000	95	429177	50.0	52.7	
120 n-Butylbenzene	91	13.136	13.136	0.000	98	591043	50.0	47.8	
121 1,2-Dichlorobenzene	146	13.154	13.154	0.000	98	397006	50.0	53.1	
122 1,2-Dibromo-3-Chloropropan	75	13.939	13.939	0.000	80	24583	50.0	52.0	
126 1,2,4-Trichlorobenzene	180	14.760	14.760	0.000	94	118308	50.0	41.9	
127 Hexachlorobutadiene	225	14.906	14.906	0.000	96	66843	50.0	46.4	
128 Naphthalene	128	15.034	15.034	0.000	97	243306	50.0	44.5	
129 1,2,3-Trichlorobenzene	180	15.259	15.259	0.000	96	99272	50.0	52.0	
S 133 Xylenes, Total	106				0		100.0	110.7	
S 154 Total BTEX	106				0		250.0	262.1	
S 134 1,2-Dichloroethene, Total	96				0		100.0	91.4	
S 135 1,3-Dichloropropene, Total	1				0		100.0	87.4	

**Reagents:**

VOAKetPRI_00001	Amount Added: 2.00	Units: uL	
VOACR2ND_00033	Amount Added: 6.00	Units: uL	
VOAVAPRI_00038	Amount Added: 2.00	Units: uL	
VOA8260VOAPRI_00403	Amount Added: 2.00	Units: uL	
VOACEVEPRI_00064	Amount Added: 2.00	Units: uL	
voaWI/SHP5_00016	Amount Added: 5.00	Units: uL	Run Reagent

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050104.D

Injection Date: 01-May-2020 16:29:30

Instrument ID: CHHP5

Operator ID: 034635

Lims ID: CCVIS

Worklist Smp#: 4

Client ID:

Purge Vol: 5.000 mL

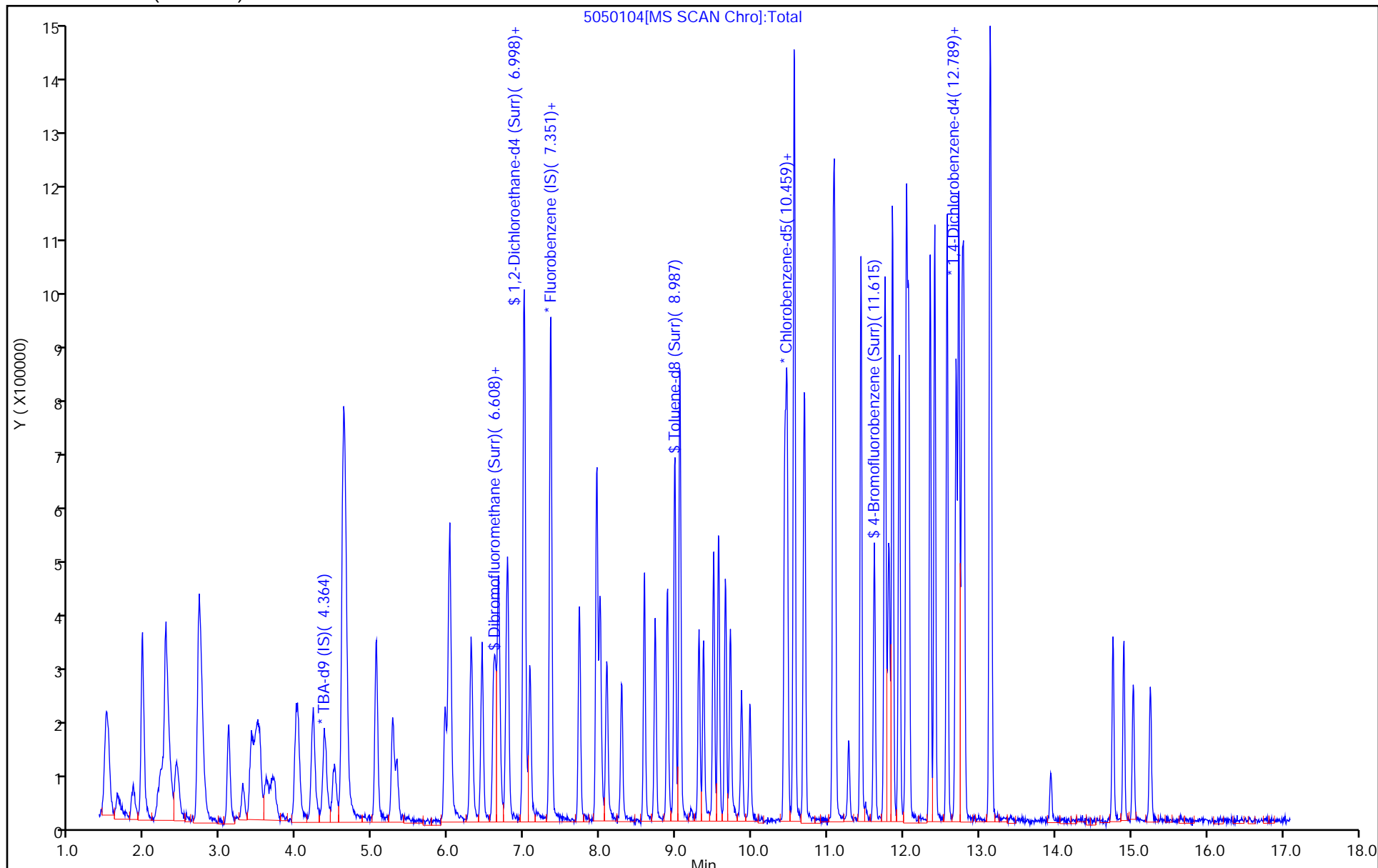
Dil. Factor: 1.0000

ALS Bottle#: 4

Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)





FORM VII  
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1  
 SDG No.: \_\_\_\_\_  
 Lab Sample ID: CCVIS 180-314382/4 Calibration Date: 05/01/2020 16:29  
 Instrument ID: CHHP5 Calib Start Date: 04/03/2020 16:11  
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 04/03/2020 19:09  
 Lab File ID: 5050104.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
Acrolein	Ave	0.0662	0.0552	0.0100	25.0	30.0	-16.6	20.0

Eurofins TestAmerica, Pittsburgh  
Target Compound Quantitation Report

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050104.D  
 Lims ID: CCVIS  
 Client ID:  
 Sample Type: CCVIS  
 Inject. Date: 01-May-2020 16:29:30 ALS Bottle#: 4 Worklist Smp#: 4  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: 180-0031777-004  
 Operator ID: 034635 Instrument ID: CHHP5  
 Sublist: chrom-MSVOA\_LL\_CHHP5\*sub145  
 Method: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\MSVOA\_LL\_CHHP5.m  
 Limit Group: VOA 8260C\_D ICAL  
 Last Update: 03-May-2020 17:18:42 Calib Date: 03-Apr-2020 19:09:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP5\20200403-31442.b\5040310.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: CTX0317

First Level Reviewer: journetp

Date: 01-May-2020 16:57:02

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.364	4.364	0.000	0	251469	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.345	7.345	0.000	99	569153	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.435	10.435	0.000	84	142051	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.771	12.771	0.000	92	264858	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.621	6.621	0.000	93	128333	50.0	39.5	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.992	6.992	0.000	0	186195	50.0	40.4	
\$ 7 Toluene-d8 (Surr)	98	8.987	8.987	0.000	93	496909	50.0	43.2	
\$ 8 4-Bromofluorobenzene (Surr	95	11.615	11.615	0.000	89	196217	50.0	45.1	
11 Dichlorodifluoromethane	85	1.638	1.638	0.000	99	114469	50.0	26.3	
12 Chloromethane	50	1.851	1.851	0.000	99	167528	50.0	30.2	
14 Butadiene	39	1.961	1.961	0.000	92	154813	50.0	30.7	
13 Vinyl chloride	62	1.961	1.961	0.000	68	197161	50.0	39.9	
15 Bromomethane	94	2.277	2.277	0.000	88	365954	50.0	129.3	
16 Chloroethane	64	2.423	2.423	0.000	100	188309	50.0	56.1	
17 Dichlorofluoromethane	67	2.715	2.715	0.000	97	442951	50.0	59.0	
18 Trichlorofluoromethane	101	2.727	2.727	0.000	69	375863	50.0	59.9	
20 Ethyl ether	59	3.104	3.104	0.000	88	151972	50.0	42.1	
21 Acrolein	56	3.287	3.287	0.000	96	94200	150.0	125.1	
22 1,1-Dichloroethene	96	3.390	3.390	0.000	97	115879	50.0	42.6	
23 1,1,2-Trichloro-1,2,2-trif	101	3.482	3.482	0.000	92	139842	50.0	46.3	
24 Acetone	43	3.512	3.512	0.000	100	224414	100.0	114.1	
25 Iodomethane	142	3.597	3.597	0.000	99	200800	50.0	42.8	
26 Carbon disulfide	76	3.701	3.701	0.000	99	244286	50.0	38.2	
28 3-Chloro-1-propene	76	3.987	3.987	0.000	89	69109	50.0	41.8	
30 Methyl acetate	43	4.023	4.023	0.000	96	275255	100.0	97.6	
31 Methylene Chloride	84	4.218	4.218	0.000	89	182155	50.0	48.2	
32 2-Methyl-2-propanol	59	4.491	4.491	0.000	88	131883	500.0	513.7	
33 Acrylonitrile	53	4.613	4.613	0.000	99	702146	500.0	476.9	
34 trans-1,2-Dichloroethene	96	4.631	4.631	0.000	98	144230	50.0	46.4	
35 Methyl tert-butyl ether	73	4.656	4.656	0.000	96	371687	50.0	42.6	
36 Hexane	57	5.045	5.045	0.000	91	209558	50.0	40.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
37 1,1-Dichloroethane	63	5.264	5.264	0.000	96	246418	50.0	40.6	
38 Vinyl acetate	43	5.325	5.325	0.000	98	201597	50.0	33.0	
44 2,2-Dichloropropane	97	6.000	6.000	0.000	59	33083	50.0	43.8	
45 cis-1,2-Dichloroethene	96	6.018	6.018	0.000	81	166737	50.0	45.0	
46 2-Butanone (MEK)	43	6.031	6.031	0.000	98	206522	100.0	98.8	
49 Chlorobromomethane	128	6.298	6.298	0.000	94	90516	50.0	45.9	
51 Tetrahydrofuran	42	6.304	6.304	0.000	83	89495	100.0	74.1	
52 Chloroform	83	6.444	6.444	0.000	94	297528	50.0	46.1	
53 1,1,1-Trichloroethane	97	6.596	6.596	0.000	98	189288	50.0	40.8	
54 Cyclohexane	56	6.663	6.663	0.000	91	231401	50.0	39.1	
56 Carbon tetrachloride	117	6.761	6.761	0.000	95	167920	50.0	43.6	
55 1,1-Dichloropropene	75	6.785	6.785	0.000	97	189830	50.0	44.3	
58 Benzene	78	6.998	6.998	0.000	97	642878	50.0	45.9	
57 Isobutyl alcohol	41	7.010	7.010	0.000	91	146350	1250.0	1497.9	
59 1,2-Dichloroethane	62	7.071	7.071	0.000	97	240579	50.0	45.2	
62 n-Heptane	43	7.351	7.351	0.000	85	172577	50.0	37.2	
64 Trichloroethene	130	7.728	7.728	0.000	97	154059	50.0	44.2	
66 Methylcyclohexane	83	7.959	7.959	0.000	87	272756	50.0	46.1	
67 1,2-Dichloropropane	63	7.996	7.996	0.000	92	153056	50.0	40.9	
70 1,4-Dioxane	88	8.081	8.081	0.000	49	44079	1000.0	1445.4	
68 Dibromomethane	93	8.087	8.087	0.000	96	106912	50.0	48.2	
71 Dichlorobromomethane	83	8.281	8.281	0.000	98	178510	50.0	40.7	
73 2-Chloroethyl vinyl ether	63	8.586	8.586	0.000	94	202939	100.0	101.8	
74 cis-1,3-Dichloropropene	75	8.726	8.726	0.000	94	221838	50.0	40.2	
75 4-Methyl-2-pentanone (MIBK)	43	8.890	8.890	0.000	98	288414	100.0	94.1	
76 Toluene	91	9.048	9.048	0.000	98	687772	50.0	51.2	
77 trans-1,3-Dichloropropene	75	9.303	9.303	0.000	95	208699	50.0	47.3	
78 Ethyl methacrylate	69	9.364	9.364	0.000	88	186624	50.0	43.2	
79 1,1,2-Trichloroethane	97	9.498	9.498	0.000	91	167638	50.0	53.7	
80 Tetrachloroethene	164	9.559	9.559	0.000	97	132392	50.0	49.5	
81 1,3-Dichloropropane	76	9.650	9.650	0.000	91	283577	50.0	51.0	
82 2-Hexanone	43	9.717	9.717	0.000	95	246920	100.0	97.5	
84 Chlorodibromomethane	129	9.869	9.869	0.000	89	139390	50.0	52.7	
85 Ethylene Dibromide	107	9.973	9.973	0.000	98	160945	50.0	55.1	
87 Chlorobenzene	112	10.465	10.465	0.000	96	488473	50.0	56.5	
89 1,1,1,2-Tetrachloroethane	131	10.557	10.557	0.000	92	158415	50.0	56.5	
90 Ethylbenzene	106	10.563	10.563	0.000	98	242834	50.0	54.3	
91 m-Xylene & p-Xylene	106	10.697	10.697	0.000	0	303973	50.0	54.5	
92 o-Xylene	106	11.074	11.074	0.000	95	292187	50.0	56.2	
93 Styrene	104	11.098	11.098	0.000	95	513692	50.0	57.6	
94 Bromoform	173	11.281	11.281	0.000	92	78198	50.0	62.6	
97 Isopropylbenzene	105	11.439	11.439	0.000	96	733797	50.0	54.2	
100 Bromobenzene	156	11.755	11.755	0.000	96	207612	50.0	50.6	
99 1,1,2,2-Tetrachloroethane	83	11.755	11.755	0.000	96	216388	50.0	67.1	
102 trans-1,4-Dichloro-2-buten	53	11.792	11.792	0.000	63	54010	50.0	48.6	
101 1,2,3-Trichloropropane	110	11.816	11.816	0.000	85	78964	50.0	59.9	
103 N-Propylbenzene	120	11.852	11.852	0.000	98	238899	50.0	54.0	
104 2-Chlorotoluene	126	11.944	11.944	0.000	97	201315	50.0	53.1	
106 1,3,5-Trimethylbenzene	105	12.041	12.041	0.000	95	662498	50.0	50.2	
107 4-Chlorotoluene	126	12.071	12.071	0.000	98	221118	50.0	54.8	
108 tert-Butylbenzene	119	12.351	12.351	0.000	93	551615	50.0	49.3	
110 1,2,4-Trimethylbenzene	105	12.412	12.412	0.000	97	689661	50.0	49.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
112 sec-Butylbenzene	105	12.576	12.576	0.000	94	816803	50.0	49.0	
113 1,3-Dichlorobenzene	146	12.692	12.692	0.000	97	400748	50.0	50.0	
114 4-Isopropyltoluene	119	12.728	12.728	0.000	96	703136	50.0	49.4	
115 1,4-Dichlorobenzene	146	12.795	12.795	0.000	95	429177	50.0	52.7	
120 n-Butylbenzene	91	13.136	13.136	0.000	98	591043	50.0	47.8	
121 1,2-Dichlorobenzene	146	13.154	13.154	0.000	98	397006	50.0	53.1	
122 1,2-Dibromo-3-Chloropropan	75	13.939	13.939	0.000	80	24583	50.0	52.0	
126 1,2,4-Trichlorobenzene	180	14.760	14.760	0.000	94	118308	50.0	41.9	
127 Hexachlorobutadiene	225	14.906	14.906	0.000	96	66843	50.0	46.4	
128 Naphthalene	128	15.034	15.034	0.000	97	243306	50.0	44.5	
129 1,2,3-Trichlorobenzene	180	15.259	15.259	0.000	96	99272	50.0	52.0	
S 133 Xylenes, Total	106				0		100.0	110.7	
S 154 Total BTEX	106				0		250.0	262.1	
S 134 1,2-Dichloroethene, Total	96				0		100.0	91.4	
S 135 1,3-Dichloropropene, Total	1				0		100.0	87.4	

**Reagents:**

VOAKetPRI_00001	Amount Added: 2.00	Units: uL	
VOACR2ND_00033	Amount Added: 6.00	Units: uL	
VOAVAPRI_00038	Amount Added: 2.00	Units: uL	
VOA8260VOAPRI_00403	Amount Added: 2.00	Units: uL	
VOACEVEPRI_00064	Amount Added: 2.00	Units: uL	
voaWI/SHP5_00016	Amount Added: 5.00	Units: uL	Run Reagent

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050104.D

Injection Date: 01-May-2020 16:29:30

Instrument ID: CHHP5

Operator ID: 034635

Lims ID: CCVIS

Worklist Smp#: 4

Client ID:

Purge Vol: 5.000 mL

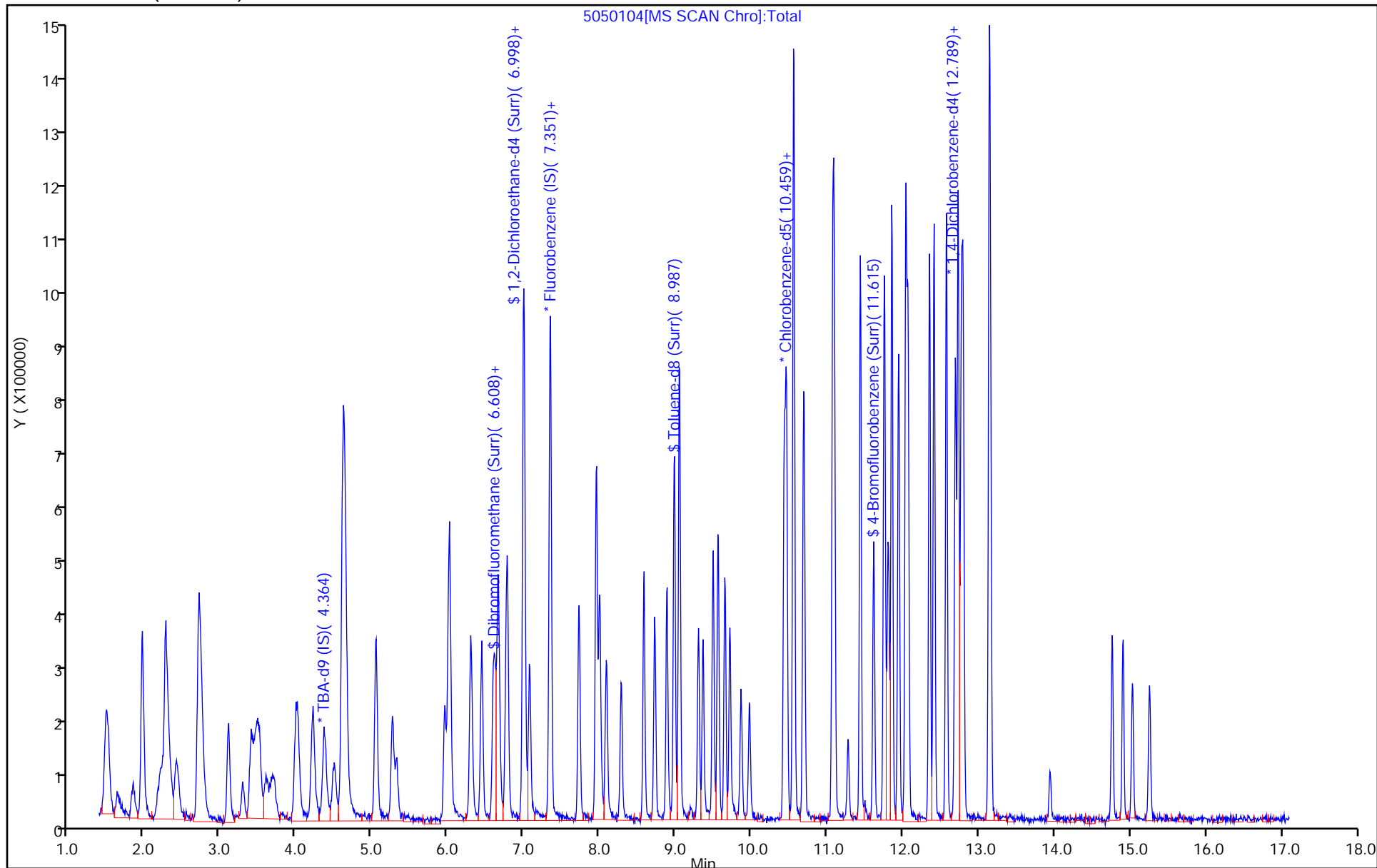
Dil. Factor: 1.0000

ALS Bottle#: 4

Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)



FORM VII  
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1  
 SDG No.: \_\_\_\_\_  
 Lab Sample ID: CCVIS 180-314475/2 Calibration Date: 05/04/2020 08:26  
 Instrument ID: CHHP5 Calib Start Date: 12/28/2019 10:53  
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 12/28/2019 14:57  
 Lab File ID: 5050402.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
2-Chloroethyl vinyl ether	Lin1		0.2263	0.0100	25.5	20.0	27.4*	20.0

Eurofins TestAmerica, Pittsburgh  
Target Compound Quantitation Report

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050402.D  
 Lims ID: CCVIS  
 Client ID:  
 Sample Type: CCVIS  
 Inject. Date: 04-May-2020 08:26:30 ALS Bottle#: 2 Worklist Smp#: 2  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: 180-0031789-002  
 Operator ID: 034635 Instrument ID: CHHP5  
 Sublist: chrom-MSVOA\_LL\_CHHP5\*sub145  
 Method: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\MSVOA\_LL\_CHHP5.m  
 Limit Group: VOA 8260C\_D ICAL  
 Last Update: 04-May-2020 13:45:20 Calib Date: 03-Apr-2020 19:09:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP5\20200403-31442.b\5040310.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: CTX0327

First Level Reviewer: journetp

Date: 04-May-2020 08:53:37

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.363	4.363	0.000	0	272445	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.344	7.344	0.000	99	695213	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.434	10.434	0.000	84	176716	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.776	12.776	0.000	91	323991	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.626	6.626	0.000	93	179557	50.0	45.3	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.991	6.991	0.000	0	228644	50.0	40.6	
\$ 7 Toluene-d8 (Surr)	98	8.986	8.986	0.000	93	786990	50.0	55.0	
\$ 8 4-Bromofluorobenzene (Surr	95	11.614	11.614	0.000	91	272074	50.0	50.3	
11 Dichlorodifluoromethane	85	1.638	1.638	0.000	98	201454	50.0	37.9	
12 Chloromethane	50	1.844	1.844	0.000	99	206230	50.0	30.4	
14 Butadiene	39	1.966	1.966	0.000	89	201649	50.0	32.7	
13 Vinyl chloride	62	1.966	1.966	0.000	59	244970	50.0	40.6	
15 Bromomethane	94	2.288	2.288	0.000	89	363449	50.0	105.1	
16 Chloroethane	64	2.416	2.416	0.000	99	199070	50.0	48.6	
17 Dichlorofluoromethane	67	2.720	2.720	0.000	95	434201	50.0	47.3	
18 Trichlorofluoromethane	101	2.726	2.726	0.000	69	430413	50.0	56.2	
20 Ethyl ether	59	3.104	3.104	0.000	88	164031	50.0	37.3	
21 Acrolein	56	3.292	3.292	0.000	99	116733	150.0	126.9	
22 1,1-Dichloroethene	96	3.414	3.414	0.000	97	168297	50.0	51.1	
23 1,1,2-Trichloro-1,2,2-trif	101	3.469	3.469	0.000	92	198968	50.0	53.9	
24 Acetone	43	3.511	3.511	0.000	100	193547	100.0	80.6	
25 Iodomethane	142	3.639	3.639	0.000	99	283099	50.0	49.4	
26 Carbon disulfide	76	3.706	3.706	0.000	100	388329	50.0	49.7	
28 3-Chloro-1-propene	76	3.992	3.992	0.000	88	95888	50.0	47.4	
30 Methyl acetate	43	4.016	4.016	0.000	97	320513	100.0	93.0	
31 Methylene Chloride	84	4.217	4.217	0.000	89	222015	50.0	48.0	
32 2-Methyl-2-propanol	59	4.503	4.503	0.000	92	152457	500.0	548.2	
33 Acrylonitrile	53	4.612	4.612	0.000	100	738636	500.0	410.7	
34 trans-1,2-Dichloroethene	96	4.631	4.631	0.000	97	194176	50.0	51.1	
35 Methyl tert-butyl ether	73	4.655	4.655	0.000	98	437366	50.0	41.0	
36 Hexane	57	5.056	5.056	0.000	92	275453	50.0	44.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
37 1,1-Dichloroethane	63	5.263	5.263	0.000	96	307472	50.0	41.5	
38 Vinyl acetate	43	5.324	5.324	0.000	97	249568	50.0	33.4	
44 2,2-Dichloropropane	97	6.005	6.005	0.000	65	44091	50.0	47.8	
45 cis-1,2-Dichloroethene	96	6.018	6.018	0.000	78	217037	50.0	48.0	
46 2-Butanone (MEK)	43	6.036	6.036	0.000	97	190804	100.0	74.7	
49 Chlorobromomethane	128	6.297	6.297	0.000	91	108208	50.0	44.9	
51 Tetrahydrofuran	42	6.310	6.310	0.000	84	106023	100.0	71.9	
52 Chloroform	83	6.443	6.443	0.000	95	345139	50.0	43.7	
53 1,1,1-Trichloroethane	97	6.602	6.602	0.000	99	260601	50.0	46.0	
54 Cyclohexane	56	6.662	6.662	0.000	90	308445	50.0	42.7	
56 Carbon tetrachloride	117	6.766	6.766	0.000	95	236236	50.0	50.2	
55 1,1-Dichloropropene	75	6.784	6.784	0.000	96	262019	50.0	50.1	
58 Benzene	78	7.003	7.003	0.000	97	800930	50.0	46.8	
57 Isobutyl alcohol	41	7.003	7.003	0.000	45	139655	1250.0	1170.2	
59 1,2-Dichloroethane	62	7.076	7.076	0.000	97	270949	50.0	41.6	
62 n-Heptane	43	7.362	7.362	0.000	88	222865	50.0	39.3	
64 Trichloroethene	130	7.727	7.727	0.000	96	212679	50.0	49.9	
66 Methylcyclohexane	83	7.958	7.958	0.000	88	375452	50.0	51.9	
67 1,2-Dichloropropane	63	8.001	8.001	0.000	94	192759	50.0	42.2	
70 1,4-Dioxane	88	8.092	8.092	0.000	44	42835	1000.0	1153.6	
68 Dibromomethane	93	8.092	8.092	0.000	96	128706	50.0	47.5	
71 Dichlorobromomethane	83	8.287	8.287	0.000	99	221554	50.0	41.3	
73 2-Chloroethyl vinyl ether	63	8.585	8.585	0.000	93	314617	100.0	127.4	
74 cis-1,3-Dichloropropene	75	8.731	8.731	0.000	94	271958	50.0	40.3	
75 4-Methyl-2-pentanone (MIBK)	43	8.889	8.889	0.000	95	347639	100.0	91.6	
76 Toluene	91	9.053	9.053	0.000	97	918258	50.0	55.0	
77 trans-1,3-Dichloropropene	75	9.303	9.303	0.000	93	253427	50.0	46.1	
78 Ethyl methacrylate	69	9.364	9.364	0.000	87	227987	50.0	42.5	
79 1,1,2-Trichloroethane	97	9.497	9.497	0.000	91	200941	50.0	51.7	
80 Tetrachloroethene	164	9.564	9.564	0.000	95	189684	50.0	57.0	
81 1,3-Dichloropropane	76	9.656	9.656	0.000	89	330591	50.0	47.8	
82 2-Hexanone	43	9.716	9.716	0.000	94	261927	100.0	85.2	
84 Chlorodibromomethane	129	9.868	9.868	0.000	90	174058	50.0	52.9	
85 Ethylene Dibromide	107	9.978	9.978	0.000	97	192318	50.0	52.9	
87 Chlorobenzene	112	10.465	10.465	0.000	96	621928	50.0	57.9	
89 1,1,1,2-Tetrachloroethane	131	10.562	10.562	0.000	93	204272	50.0	58.5	
90 Ethylbenzene	106	10.562	10.562	0.000	98	323905	50.0	58.2	
91 m-Xylene & p-Xylene	106	10.696	10.696	0.000	0	407821	50.0	58.8	
92 o-Xylene	106	11.079	11.079	0.000	96	376202	50.0	58.1	
93 Styrene	104	11.097	11.097	0.000	94	638338	50.0	57.5	
94 Bromoform	173	11.280	11.280	0.000	96	104285	50.0	67.1	
97 Isopropylbenzene	105	11.444	11.444	0.000	95	1005766	50.0	59.7	
100 Bromobenzene	156	11.754	11.754	0.000	93	268452	50.0	53.5	
99 1,1,2,2-Tetrachloroethane	83	11.760	11.760	0.000	94	257522	50.0	64.2	
102 trans-1,4-Dichloro-2-buten	53	11.797	11.797	0.000	88	62942	50.0	46.3	
101 1,2,3-Trichloropropane	110	11.815	11.815	0.000	85	85072	50.0	52.7	
103 N-Propylbenzene	120	11.858	11.858	0.000	98	314073	50.0	58.0	
104 2-Chlorotoluene	126	11.949	11.949	0.000	98	261055	50.0	56.3	
106 1,3,5-Trimethylbenzene	105	12.040	12.040	0.000	96	867927	50.0	53.8	
107 4-Chlorotoluene	126	12.071	12.071	0.000	97	288386	50.0	58.4	
108 tert-Butylbenzene	119	12.357	12.357	0.000	92	755662	50.0	55.2	
110 1,2,4-Trimethylbenzene	105	12.411	12.411	0.000	97	895867	50.0	53.0	



Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
112 sec-Butylbenzene	105	12.576	12.576	0.000	94	1106329	50.0	54.2	
113 1,3-Dichlorobenzene	146	12.697	12.697	0.000	98	515202	50.0	52.6	
114 4-Isopropyltoluene	119	12.728	12.728	0.000	96	959780	50.0	55.1	
115 1,4-Dichlorobenzene	146	12.801	12.801	0.000	96	548822	50.0	55.1	
120 n-Butylbenzene	91	13.141	13.141	0.000	98	764320	50.0	50.5	
121 1,2-Dichlorobenzene	146	13.154	13.154	0.000	99	501864	50.0	54.8	
122 1,2-Dibromo-3-Chloropropan	75	13.938	13.938	0.000	84	30351	50.0	52.5	
126 1,2,4-Trichlorobenzene	180	14.766	14.766	0.000	94	170523	50.0	49.4	
127 Hexachlorobutadiene	225	14.906	14.906	0.000	96	89341	50.0	50.7	
128 Naphthalene	128	15.027	15.027	0.000	97	358431	50.0	53.6	
129 1,2,3-Trichlorobenzene	180	15.252	15.252	0.000	94	121673	50.0	52.1	
S 134 1,2-Dichloroethene, Total	96				0		100.0	99.1	
S 154 Total BTEX	106				0		250.0	276.9	
S 133 Xylenes, Total	106				0		100.0	116.9	
S 135 1,3-Dichloropropene, Total	1				0		100.0	86.4	

**Reagents:**

voaWKet2ndRes_00050	Amount Added: 2.00	Units: uL	
VOACR2ND_00033	Amount Added: 6.00	Units: uL	
VOAVAPRI_00038	Amount Added: 2.00	Units: uL	
VOA8260VOAPRI_00403	Amount Added: 2.00	Units: uL	
VOACEVEPRI_00064	Amount Added: 2.00	Units: uL	
voaWI/SHP5_00016	Amount Added: 5.00	Units: uL	Run Reagent

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050402.D

Injection Date: 04-May-2020 08:26:30

Instrument ID: CHHP5

Operator ID: 034635

Lims ID: CCVIS

Worklist Smp#: 2

Client ID:

Purge Vol: 5.000 mL

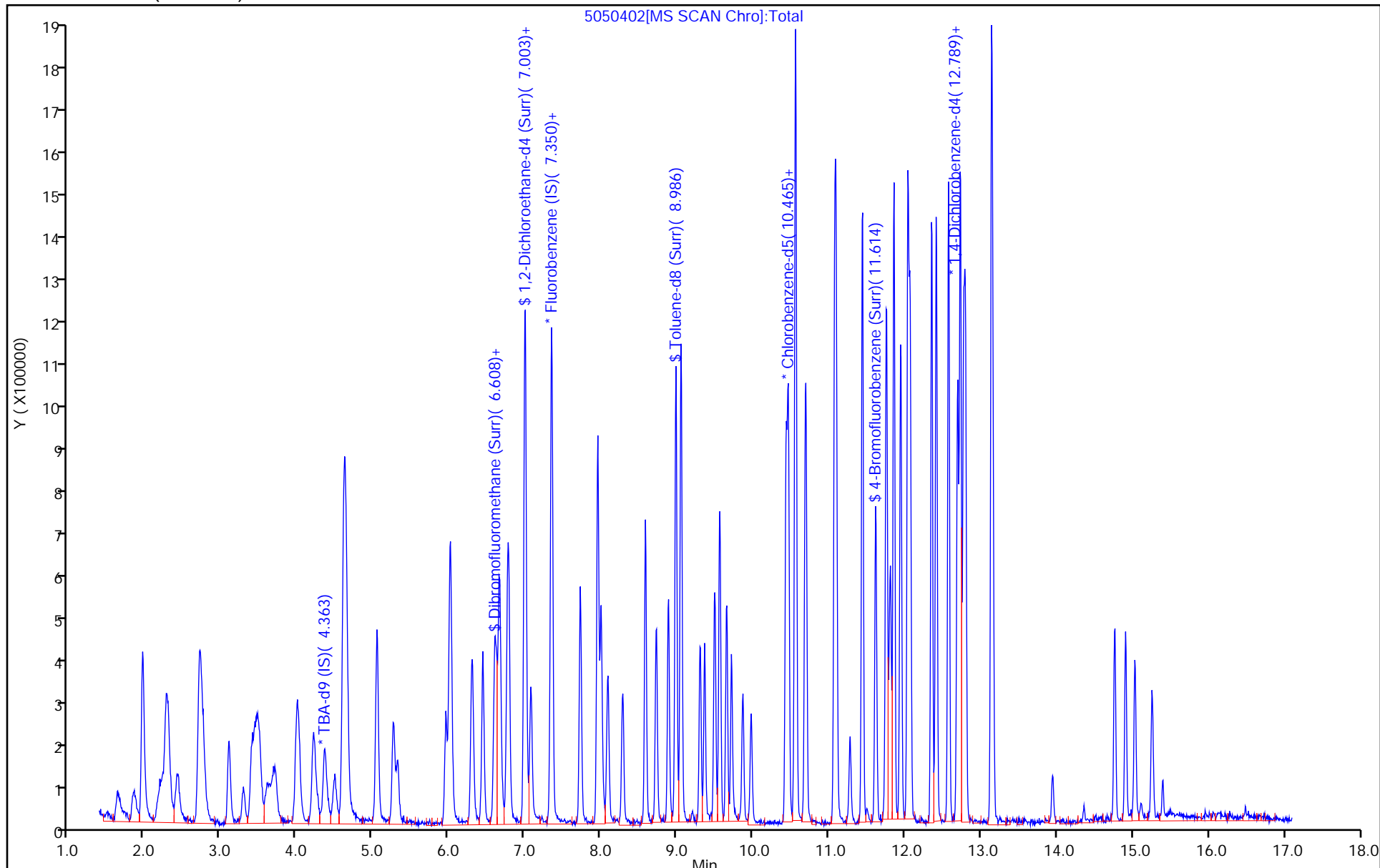
Dil. Factor: 1.0000

ALS Bottle#: 2

Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)



FORM VII  
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1  
 SDG No.: \_\_\_\_\_  
 Lab Sample ID: CCVIS 180-314475/2 Calibration Date: 05/04/2020 08:26  
 Instrument ID: CHHP5 Calib Start Date: 03/24/2020 02:01  
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 03/24/2020 07:18  
 Lab File ID: 5050402.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	Lin2		0.2898	0.1000	7.57	10.0	-24.3*	20.0
Chloromethane	Ave	0.4878	0.2966	0.1000	6.08	10.0	-39.2*	20.0
1,3-Butadiene	Ave	0.4430	0.2901	0.0100	6.55	10.0	-34.5*	20.0
Vinyl chloride	Ave	0.4344	0.3524	0.1000	8.11	10.0	-18.9	20.0
Bromomethane	Ave	0.2487	0.5228	0.0500	21.0	10.0	110.2*	20.0
Chloroethane	Ave	0.2947	0.2863	0.0500	9.72	10.0	-2.8	20.0
Dichlorofluoromethane	Ave	0.6598	0.6246	0.0100	9.47	10.0	-5.3	20.0
Trichlorofluoromethane	Ave	0.5512	0.6191	0.1000	11.2	10.0	12.3	20.0
Ethyl ether	Qua		0.2359	0.0100	7.46	10.0	-25.4*	20.0
1,1-Dichloroethene	Lin		0.2421	0.1000	10.2	10.0	2.2	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Lin2		0.2862	0.1000	10.8	10.0	7.8	20.0
Acetone	Ave	0.1728	0.1392	0.0500	16.1	20.0	-19.4	20.0
Iodomethane	Ave	0.4121	0.4072	0.0100	9.88	10.0	-1.2	20.0
Carbon disulfide	Ave	0.5620	0.5586	0.1000	9.94	10.0	-0.6	20.0
Allyl chloride	Ave	0.1454	0.1379	0.0100	9.49	10.0	-5.1	20.0
Methyl acetate	Ave	0.2478	0.2305	0.1000	18.6	20.0	-7.0	20.0
Methylene Chloride	Lin2		0.3194	0.1000	9.61	10.0	-3.9	20.0
tert-Butyl alcohol	Ave	1.021	1.119	0.0100	110	100	9.6	20.0
Acrylonitrile	Ave	0.1293	0.1063	0.0100	82.1	100	-17.9	20.0
trans-1,2-Dichloroethene	Ave	0.2733	0.2793	0.1000	10.2	10.0	2.2	20.0
Methyl tert-butyl ether	Ave	0.7670	0.6291	0.1000	8.20	10.0	-18.0	20.0
Hexane	Ave	0.4499	0.3962	0.0100	8.81	10.0	-11.9	20.0
1,1-Dichloroethane	Ave	0.5333	0.4423	0.2000	8.29	10.0	-17.1	20.0
2,2-Dichloropropane	Ave	0.0664	0.0634	0.0100	9.55	10.0	-4.5	20.0
cis-1,2-Dichloroethene	Ave	0.3252	0.3122	0.1000	9.60	10.0	-4.0	20.0
2-Butanone (MEK)	Ave	0.1836	0.1372	0.0500	14.9	20.0	-25.3*	20.0
Bromochloromethane	Ave	0.1733	0.1557	0.0100	8.98	10.0	-10.2	20.0
Tetrahydrofuran	Ave	0.1061	0.0763	0.0100	14.4	20.0	-28.1*	20.0
Chloroform	Lin2		0.4965	0.2000	8.75	10.0	-12.5	20.0
1,1,1-Trichloroethane	Ave	0.4074	0.3749	0.1000	9.20	10.0	-8.0	20.0
Cyclohexane	Ave	0.5196	0.4437	0.1000	8.54	10.0	-14.6	20.0
Carbon tetrachloride	Ave	0.3383	0.3398	0.1000	10.0	10.0	0.4	20.0
1,1-Dichloropropene	Ave	0.3761	0.3769	0.0100	10.0	10.0	0.2	20.0
Benzene	Ave	1.231	1.152	0.5000	9.36	10.0	-6.4	20.0
Isobutyl alcohol	Ave	0.0086	0.0080*	0.0100	234	250	-6.4	20.0
1,2-Dichloroethane	Ave	0.4679	0.3897	0.1000	8.33	10.0	-16.7	20.0
n-Heptane	Ave	0.4078	0.3206	0.0100	7.86	10.0	-21.4*	20.0
Trichloroethene	Ave	0.3065	0.3059	0.2000	9.98	10.0	-0.2	20.0
Methylcyclohexane	Ave	0.5199	0.5401	0.1000	10.4	10.0	3.9	20.0
1,2-Dichloropropane	Ave	0.3285	0.2773	0.1000	8.44	10.0	-15.6	20.0

FORM VII  
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1  
 SDG No.: \_\_\_\_\_  
 Lab Sample ID: CCVIS 180-314475/2 Calibration Date: 05/04/2020 08:26  
 Instrument ID: CHHP5 Calib Start Date: 03/24/2020 02:01  
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 03/24/2020 07:18  
 Lab File ID: 5050402.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
1,4-Dioxane	Lin1		0.0031*	0.0100	231	200	15.4	20.0
Dibromomethane	Ave	0.1949	0.1851	0.0100	9.50	10.0	-5.0	20.0
Bromodichloromethane	Ave	0.3854	0.3187	0.2000	8.27	10.0	-17.3	20.0
cis-1,3-Dichloropropene	Ave	0.4853	0.3912	0.2000	8.06	10.0	-19.4	20.0
4-Methyl-2-pentanone (MIBK)	Lin1		0.9836	0.1000	18.3	20.0	-8.4	20.0
Toluene	Ave	4.728	5.196	0.4000	11.0	10.0	9.9	20.0
trans-1,3-Dichloropropene	Ave	1.554	1.434	0.1000	9.23	10.0	-7.7	20.0
Ethyl methacrylate	Ave	1.519	1.290	0.0100	8.49	10.0	-15.1	20.0
1,1,2-Trichloroethane	Ave	1.099	1.137	0.1000	10.3	10.0	3.5	20.0
Tetrachloroethene	Ave	0.9410	1.073	0.2000	11.4	10.0	14.1	20.0
1,3-Dichloropropane	Ave	1.957	1.871	0.0100	9.56	10.0	-4.4	20.0
2-Hexanone	Lin1		0.7411	0.1000	17.0	20.0	-14.8	20.0
Dibromochloromethane	Ave	0.9303	0.9850	0.1000	10.6	10.0	5.9	20.0
1,2-Dibromoethane (EDB)	Ave	1.028	1.088	0.1000	10.6	10.0	5.9	20.0
Chlorobenzene	Ave	3.041	3.519	0.5000	11.6	10.0	15.7	20.0
1,1,1,2-Tetrachloroethane	Ave	0.9874	1.156	0.0100	11.7	10.0	17.1	20.0
Ethylbenzene	Ave	1.574	1.833	0.1000	11.6	10.0	16.5	20.0
m-Xylene & p-Xylene	Ave	1.962	2.308	0.1000	11.8	10.0	17.6	20.0
o-Xylene	Ave	1.832	2.129	0.3000	11.6	10.0	16.2	20.0
Styrene	Ave	3.140	3.612	0.3000	11.5	10.0	15.0	20.0
Bromoform	Ave	0.4398	0.5901	0.1000	13.4	10.0	34.2*	20.0
Isopropylbenzene	Ave	4.764	5.691	0.1000	11.9	10.0	19.5	20.0
Bromobenzene	Ave	0.7738	0.8286	0.0100	10.7	10.0	7.1	20.0
1,1,2,2-Tetrachloroethane	Ave	1.135	1.457	0.3000	12.8	10.0	28.4*	20.0
trans-1,4-Dichloro-2-butene	Ave	0.2098	0.1943	0.0100	9.26	10.0	-7.4	20.0
1,2,3-Trichloropropane	Ave	0.2490	0.2626	0.0100	10.5	10.0	5.4	20.0
N-Propylbenzene	Ave	0.8353	0.9694	0.0100	11.6	10.0	16.1	20.0
2-Chlorotoluene	Ave	0.7155	0.8058	0.0100	11.3	10.0	12.6	20.0
1,3,5-Trimethylbenzene	Ave	2.489	2.679	0.0100	10.8	10.0	7.6	20.0
4-Chlorotoluene	Ave	0.7616	0.8901	0.0100	11.7	10.0	16.9	20.0
tert-Butylbenzene	Ave	2.114	2.332	0.0100	11.0	10.0	10.3	20.0
1,2,4-Trimethylbenzene	Ave	2.610	2.765	0.0100	10.6	10.0	6.0	20.0
sec-Butylbenzene	Ave	3.150	3.415	0.0100	10.8	10.0	8.4	20.0
1,3-Dichlorobenzene	Ave	1.512	1.590	0.6000	10.5	10.0	5.2	20.0
4-Isopropyltoluene	Ave	2.689	2.962	0.0100	11.0	10.0	10.2	20.0
1,4-Dichlorobenzene	Ave	1.537	1.694	0.5000	11.0	10.0	10.2	20.0
n-Butylbenzene	Ave	2.336	2.359	0.0100	10.1	10.0	1.0	20.0
1,2-Dichlorobenzene	Ave	1.413	1.549	0.4000	11.0	10.0	9.7	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.0893	0.0937	0.0500	10.5	10.0	4.9	20.0
1,2,4-Trichlorobenzene	Ave	0.5331	0.5263	0.2000	9.87	10.0	-1.3	20.0
Hexachlorobutadiene	Ave	0.2719	0.2758	0.0100	10.1	10.0	1.4	20.0

FORM VII  
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1  
 SDG No.: \_\_\_\_\_  
 Lab Sample ID: CCVIS 180-314475/2 Calibration Date: 05/04/2020 08:26  
 Instrument ID: CHHP5 Calib Start Date: 03/24/2020 02:01  
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 03/24/2020 07:18  
 Lab File ID: 5050402.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
Naphthalene	Ave	1.032	1.106	0.0100	10.7	10.0	7.2	20.0
1,2,3-Trichlorobenzene	Ave	0.3604	0.3755	0.0100	10.4	10.0	4.2	20.0
Dibromofluoromethane (Surr)	Ave	0.2853	0.2583		9.05	10.0	-9.5	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.4048	0.3289		8.12	10.0	-18.8	20.0
Toluene-d8 (Surr)	Ave	4.047	4.453		11.0	10.0	10.0	20.0
4-Bromofluorobenzene (Surr)	Ave	1.530	1.540		10.1	10.0	0.6	20.0

Eurofins TestAmerica, Pittsburgh  
Target Compound Quantitation Report

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050402.D  
 Lims ID: CCVIS  
 Client ID:  
 Sample Type: CCVIS  
 Inject. Date: 04-May-2020 08:26:30 ALS Bottle#: 2 Worklist Smp#: 2  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: 180-0031789-002  
 Operator ID: 034635 Instrument ID: CHHP5  
 Sublist: chrom-MSVOA\_LL\_CHHP5\*sub145  
 Method: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\MSVOA\_LL\_CHHP5.m  
 Limit Group: VOA 8260C\_D ICAL  
 Last Update: 04-May-2020 13:45:20 Calib Date: 03-Apr-2020 19:09:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP5\20200403-31442.b\5040310.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: CTX0327

First Level Reviewer: journetp

Date: 04-May-2020 08:53:37

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.363	4.363	0.000	0	272445	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.344	7.344	0.000	99	695213	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.434	10.434	0.000	84	176716	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.776	12.776	0.000	91	323991	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.626	6.626	0.000	93	179557	50.0	45.3	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.991	6.991	0.000	0	228644	50.0	40.6	
\$ 7 Toluene-d8 (Surr)	98	8.986	8.986	0.000	93	786990	50.0	55.0	
\$ 8 4-Bromofluorobenzene (Surr	95	11.614	11.614	0.000	91	272074	50.0	50.3	
11 Dichlorodifluoromethane	85	1.638	1.638	0.000	98	201454	50.0	37.9	
12 Chloromethane	50	1.844	1.844	0.000	99	206230	50.0	30.4	
14 Butadiene	39	1.966	1.966	0.000	89	201649	50.0	32.7	
13 Vinyl chloride	62	1.966	1.966	0.000	59	244970	50.0	40.6	
15 Bromomethane	94	2.288	2.288	0.000	89	363449	50.0	105.1	
16 Chloroethane	64	2.416	2.416	0.000	99	199070	50.0	48.6	
17 Dichlorofluoromethane	67	2.720	2.720	0.000	95	434201	50.0	47.3	
18 Trichlorofluoromethane	101	2.726	2.726	0.000	69	430413	50.0	56.2	
20 Ethyl ether	59	3.104	3.104	0.000	88	164031	50.0	37.3	
21 Acrolein	56	3.292	3.292	0.000	99	116733	150.0	126.9	
22 1,1-Dichloroethene	96	3.414	3.414	0.000	97	168297	50.0	51.1	
23 1,1,2-Trichloro-1,2,2-trif	101	3.469	3.469	0.000	92	198968	50.0	53.9	
24 Acetone	43	3.511	3.511	0.000	100	193547	100.0	80.6	
25 Iodomethane	142	3.639	3.639	0.000	99	283099	50.0	49.4	
26 Carbon disulfide	76	3.706	3.706	0.000	100	388329	50.0	49.7	
28 3-Chloro-1-propene	76	3.992	3.992	0.000	88	95888	50.0	47.4	
30 Methyl acetate	43	4.016	4.016	0.000	97	320513	100.0	93.0	
31 Methylene Chloride	84	4.217	4.217	0.000	89	222015	50.0	48.0	
32 2-Methyl-2-propanol	59	4.503	4.503	0.000	92	152457	500.0	548.2	
33 Acrylonitrile	53	4.612	4.612	0.000	100	738636	500.0	410.7	
34 trans-1,2-Dichloroethene	96	4.631	4.631	0.000	97	194176	50.0	51.1	
35 Methyl tert-butyl ether	73	4.655	4.655	0.000	98	437366	50.0	41.0	
36 Hexane	57	5.056	5.056	0.000	92	275453	50.0	44.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
37 1,1-Dichloroethane	63	5.263	5.263	0.000	96	307472	50.0	41.5	
38 Vinyl acetate	43	5.324	5.324	0.000	97	249568	50.0	33.4	
44 2,2-Dichloropropane	97	6.005	6.005	0.000	65	44091	50.0	47.8	
45 cis-1,2-Dichloroethene	96	6.018	6.018	0.000	78	217037	50.0	48.0	
46 2-Butanone (MEK)	43	6.036	6.036	0.000	97	190804	100.0	74.7	
49 Chlorobromomethane	128	6.297	6.297	0.000	91	108208	50.0	44.9	
51 Tetrahydrofuran	42	6.310	6.310	0.000	84	106023	100.0	71.9	
52 Chloroform	83	6.443	6.443	0.000	95	345139	50.0	43.7	
53 1,1,1-Trichloroethane	97	6.602	6.602	0.000	99	260601	50.0	46.0	
54 Cyclohexane	56	6.662	6.662	0.000	90	308445	50.0	42.7	
56 Carbon tetrachloride	117	6.766	6.766	0.000	95	236236	50.0	50.2	
55 1,1-Dichloropropene	75	6.784	6.784	0.000	96	262019	50.0	50.1	
58 Benzene	78	7.003	7.003	0.000	97	800930	50.0	46.8	
57 Isobutyl alcohol	41	7.003	7.003	0.000	45	139655	1250.0	1170.2	
59 1,2-Dichloroethane	62	7.076	7.076	0.000	97	270949	50.0	41.6	
62 n-Heptane	43	7.362	7.362	0.000	88	222865	50.0	39.3	
64 Trichloroethene	130	7.727	7.727	0.000	96	212679	50.0	49.9	
66 Methylcyclohexane	83	7.958	7.958	0.000	88	375452	50.0	51.9	
67 1,2-Dichloropropane	63	8.001	8.001	0.000	94	192759	50.0	42.2	
70 1,4-Dioxane	88	8.092	8.092	0.000	44	42835	1000.0	1153.6	
68 Dibromomethane	93	8.092	8.092	0.000	96	128706	50.0	47.5	
71 Dichlorobromomethane	83	8.287	8.287	0.000	99	221554	50.0	41.3	
73 2-Chloroethyl vinyl ether	63	8.585	8.585	0.000	93	314617	100.0	127.4	
74 cis-1,3-Dichloropropene	75	8.731	8.731	0.000	94	271958	50.0	40.3	
75 4-Methyl-2-pentanone (MIBK)	43	8.889	8.889	0.000	95	347639	100.0	91.6	
76 Toluene	91	9.053	9.053	0.000	97	918258	50.0	55.0	
77 trans-1,3-Dichloropropene	75	9.303	9.303	0.000	93	253427	50.0	46.1	
78 Ethyl methacrylate	69	9.364	9.364	0.000	87	227987	50.0	42.5	
79 1,1,2-Trichloroethane	97	9.497	9.497	0.000	91	200941	50.0	51.7	
80 Tetrachloroethene	164	9.564	9.564	0.000	95	189684	50.0	57.0	
81 1,3-Dichloropropane	76	9.656	9.656	0.000	89	330591	50.0	47.8	
82 2-Hexanone	43	9.716	9.716	0.000	94	261927	100.0	85.2	
84 Chlorodibromomethane	129	9.868	9.868	0.000	90	174058	50.0	52.9	
85 Ethylene Dibromide	107	9.978	9.978	0.000	97	192318	50.0	52.9	
87 Chlorobenzene	112	10.465	10.465	0.000	96	621928	50.0	57.9	
89 1,1,1,2-Tetrachloroethane	131	10.562	10.562	0.000	93	204272	50.0	58.5	
90 Ethylbenzene	106	10.562	10.562	0.000	98	323905	50.0	58.2	
91 m-Xylene & p-Xylene	106	10.696	10.696	0.000	0	407821	50.0	58.8	
92 o-Xylene	106	11.079	11.079	0.000	96	376202	50.0	58.1	
93 Styrene	104	11.097	11.097	0.000	94	638338	50.0	57.5	
94 Bromoform	173	11.280	11.280	0.000	96	104285	50.0	67.1	
97 Isopropylbenzene	105	11.444	11.444	0.000	95	1005766	50.0	59.7	
100 Bromobenzene	156	11.754	11.754	0.000	93	268452	50.0	53.5	
99 1,1,2,2-Tetrachloroethane	83	11.760	11.760	0.000	94	257522	50.0	64.2	
102 trans-1,4-Dichloro-2-buten	53	11.797	11.797	0.000	88	62942	50.0	46.3	
101 1,2,3-Trichloropropane	110	11.815	11.815	0.000	85	85072	50.0	52.7	
103 N-Propylbenzene	120	11.858	11.858	0.000	98	314073	50.0	58.0	
104 2-Chlorotoluene	126	11.949	11.949	0.000	98	261055	50.0	56.3	
106 1,3,5-Trimethylbenzene	105	12.040	12.040	0.000	96	867927	50.0	53.8	
107 4-Chlorotoluene	126	12.071	12.071	0.000	97	288386	50.0	58.4	
108 tert-Butylbenzene	119	12.357	12.357	0.000	92	755662	50.0	55.2	
110 1,2,4-Trimethylbenzene	105	12.411	12.411	0.000	97	895867	50.0	53.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
112 sec-Butylbenzene	105	12.576	12.576	0.000	94	1106329	50.0	54.2	
113 1,3-Dichlorobenzene	146	12.697	12.697	0.000	98	515202	50.0	52.6	
114 4-Isopropyltoluene	119	12.728	12.728	0.000	96	959780	50.0	55.1	
115 1,4-Dichlorobenzene	146	12.801	12.801	0.000	96	548822	50.0	55.1	
120 n-Butylbenzene	91	13.141	13.141	0.000	98	764320	50.0	50.5	
121 1,2-Dichlorobenzene	146	13.154	13.154	0.000	99	501864	50.0	54.8	
122 1,2-Dibromo-3-Chloropropan	75	13.938	13.938	0.000	84	30351	50.0	52.5	
126 1,2,4-Trichlorobenzene	180	14.766	14.766	0.000	94	170523	50.0	49.4	
127 Hexachlorobutadiene	225	14.906	14.906	0.000	96	89341	50.0	50.7	
128 Naphthalene	128	15.027	15.027	0.000	97	358431	50.0	53.6	
129 1,2,3-Trichlorobenzene	180	15.252	15.252	0.000	94	121673	50.0	52.1	
S 134 1,2-Dichloroethene, Total	96				0		100.0	99.1	
S 154 Total BTEX	106				0		250.0	276.9	
S 133 Xylenes, Total	106				0		100.0	116.9	
S 135 1,3-Dichloropropene, Total	1				0		100.0	86.4	

**Reagents:**

voaWKet2ndRes_00050	Amount Added: 2.00	Units: uL	
VOACR2ND_00033	Amount Added: 6.00	Units: uL	
VOAVAPRI_00038	Amount Added: 2.00	Units: uL	
VOA8260VOAPRI_00403	Amount Added: 2.00	Units: uL	
VOACEVEPRI_00064	Amount Added: 2.00	Units: uL	
voaWI/SHP5_00016	Amount Added: 5.00	Units: uL	Run Reagent



Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050402.D

Injection Date: 04-May-2020 08:26:30

Instrument ID: CHHP5

Operator ID: 034635

Lims ID: CCVIS

Worklist Smp#: 2

Client ID:

Purge Vol: 5.000 mL

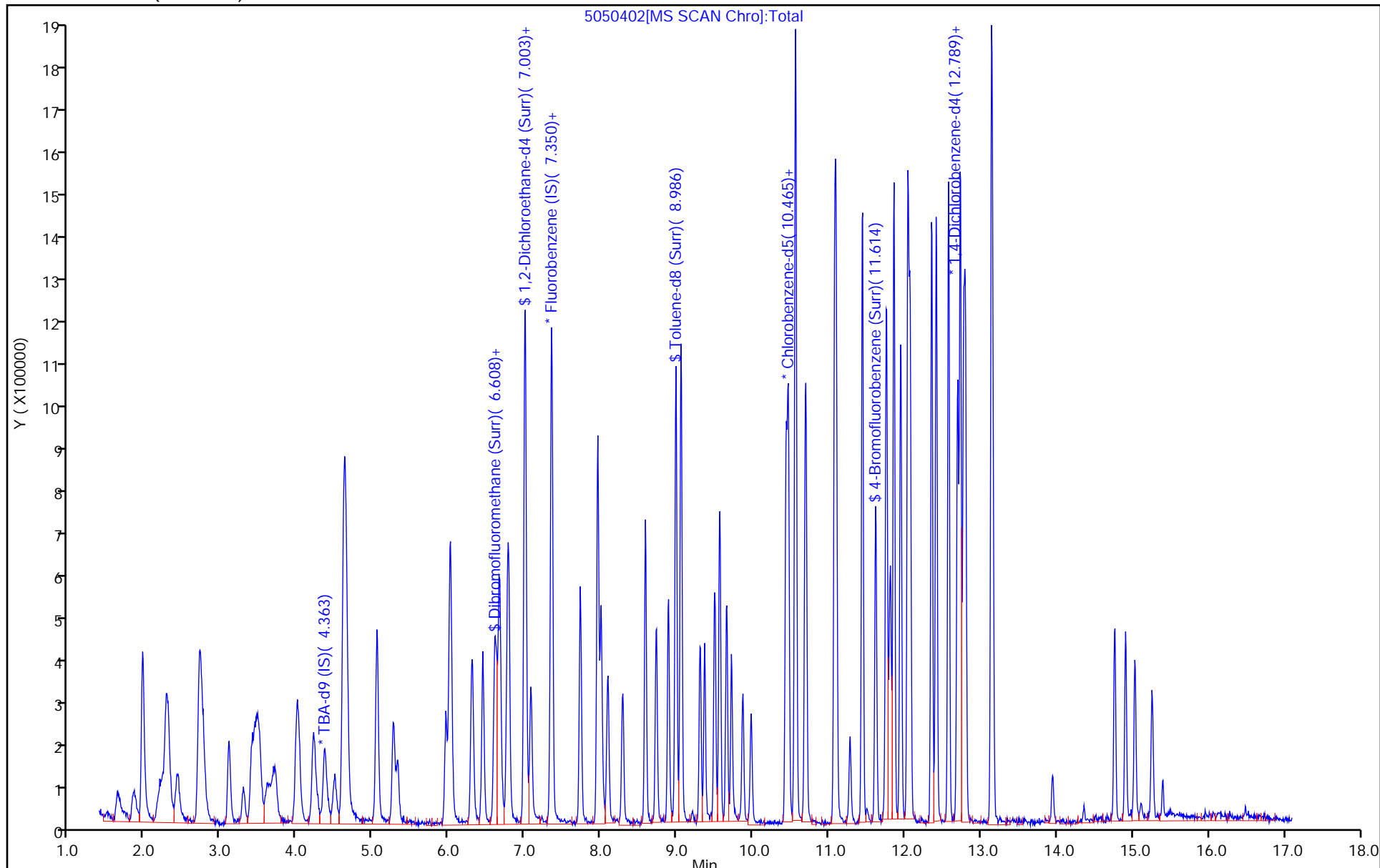
Dil. Factor: 1.0000

ALS Bottle#: 2

Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)



FORM VII  
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1  
 SDG No.: \_\_\_\_\_  
 Lab Sample ID: CCVIS 180-314475/2 Calibration Date: 05/04/2020 08:26  
 Instrument ID: CHHP5 Calib Start Date: 03/30/2020 19:53  
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 03/30/2020 23:20  
 Lab File ID: 5050402.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
Vinyl acetate	Ave	0.5372	0.3590	0.0100	6.68	10.0	-33.2*	20.0

Eurofins TestAmerica, Pittsburgh  
Target Compound Quantitation Report

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050402.D  
 Lims ID: CCVIS  
 Client ID:  
 Sample Type: CCVIS  
 Inject. Date: 04-May-2020 08:26:30 ALS Bottle#: 2 Worklist Smp#: 2  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: 180-0031789-002  
 Operator ID: 034635 Instrument ID: CHHP5  
 Sublist: chrom-MSVOA\_LL\_CHHP5\*sub145  
 Method: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\MSVOA\_LL\_CHHP5.m  
 Limit Group: VOA 8260C\_D ICAL  
 Last Update: 04-May-2020 13:45:20 Calib Date: 03-Apr-2020 19:09:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP5\20200403-31442.b\5040310.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: CTX0327

First Level Reviewer: journetp Date: 04-May-2020 08:53:37

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.363	4.363	0.000	0	272445	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.344	7.344	0.000	99	695213	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.434	10.434	0.000	84	176716	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.776	12.776	0.000	91	323991	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.626	6.626	0.000	93	179557	50.0	45.3	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.991	6.991	0.000	0	228644	50.0	40.6	
\$ 7 Toluene-d8 (Surr)	98	8.986	8.986	0.000	93	786990	50.0	55.0	
\$ 8 4-Bromofluorobenzene (Surr	95	11.614	11.614	0.000	91	272074	50.0	50.3	
11 Dichlorodifluoromethane	85	1.638	1.638	0.000	98	201454	50.0	37.9	
12 Chloromethane	50	1.844	1.844	0.000	99	206230	50.0	30.4	
14 Butadiene	39	1.966	1.966	0.000	89	201649	50.0	32.7	
13 Vinyl chloride	62	1.966	1.966	0.000	59	244970	50.0	40.6	
15 Bromomethane	94	2.288	2.288	0.000	89	363449	50.0	105.1	
16 Chloroethane	64	2.416	2.416	0.000	99	199070	50.0	48.6	
17 Dichlorofluoromethane	67	2.720	2.720	0.000	95	434201	50.0	47.3	
18 Trichlorofluoromethane	101	2.726	2.726	0.000	69	430413	50.0	56.2	
20 Ethyl ether	59	3.104	3.104	0.000	88	164031	50.0	37.3	
21 Acrolein	56	3.292	3.292	0.000	99	116733	150.0	126.9	
22 1,1-Dichloroethene	96	3.414	3.414	0.000	97	168297	50.0	51.1	
23 1,1,2-Trichloro-1,2,2-trif	101	3.469	3.469	0.000	92	198968	50.0	53.9	
24 Acetone	43	3.511	3.511	0.000	100	193547	100.0	80.6	
25 Iodomethane	142	3.639	3.639	0.000	99	283099	50.0	49.4	
26 Carbon disulfide	76	3.706	3.706	0.000	100	388329	50.0	49.7	
28 3-Chloro-1-propene	76	3.992	3.992	0.000	88	95888	50.0	47.4	
30 Methyl acetate	43	4.016	4.016	0.000	97	320513	100.0	93.0	
31 Methylene Chloride	84	4.217	4.217	0.000	89	222015	50.0	48.0	
32 2-Methyl-2-propanol	59	4.503	4.503	0.000	92	152457	500.0	548.2	
33 Acrylonitrile	53	4.612	4.612	0.000	100	738636	500.0	410.7	
34 trans-1,2-Dichloroethene	96	4.631	4.631	0.000	97	194176	50.0	51.1	
35 Methyl tert-butyl ether	73	4.655	4.655	0.000	98	437366	50.0	41.0	
36 Hexane	57	5.056	5.056	0.000	92	275453	50.0	44.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
37 1,1-Dichloroethane	63	5.263	5.263	0.000	96	307472	50.0	41.5	
38 Vinyl acetate	43	5.324	5.324	0.000	97	249568	50.0	33.4	
44 2,2-Dichloropropane	97	6.005	6.005	0.000	65	44091	50.0	47.8	
45 cis-1,2-Dichloroethene	96	6.018	6.018	0.000	78	217037	50.0	48.0	
46 2-Butanone (MEK)	43	6.036	6.036	0.000	97	190804	100.0	74.7	
49 Chlorobromomethane	128	6.297	6.297	0.000	91	108208	50.0	44.9	
51 Tetrahydrofuran	42	6.310	6.310	0.000	84	106023	100.0	71.9	
52 Chloroform	83	6.443	6.443	0.000	95	345139	50.0	43.7	
53 1,1,1-Trichloroethane	97	6.602	6.602	0.000	99	260601	50.0	46.0	
54 Cyclohexane	56	6.662	6.662	0.000	90	308445	50.0	42.7	
56 Carbon tetrachloride	117	6.766	6.766	0.000	95	236236	50.0	50.2	
55 1,1-Dichloropropene	75	6.784	6.784	0.000	96	262019	50.0	50.1	
58 Benzene	78	7.003	7.003	0.000	97	800930	50.0	46.8	
57 Isobutyl alcohol	41	7.003	7.003	0.000	45	139655	1250.0	1170.2	
59 1,2-Dichloroethane	62	7.076	7.076	0.000	97	270949	50.0	41.6	
62 n-Heptane	43	7.362	7.362	0.000	88	222865	50.0	39.3	
64 Trichloroethene	130	7.727	7.727	0.000	96	212679	50.0	49.9	
66 Methylcyclohexane	83	7.958	7.958	0.000	88	375452	50.0	51.9	
67 1,2-Dichloropropane	63	8.001	8.001	0.000	94	192759	50.0	42.2	
70 1,4-Dioxane	88	8.092	8.092	0.000	44	42835	1000.0	1153.6	
68 Dibromomethane	93	8.092	8.092	0.000	96	128706	50.0	47.5	
71 Dichlorobromomethane	83	8.287	8.287	0.000	99	221554	50.0	41.3	
73 2-Chloroethyl vinyl ether	63	8.585	8.585	0.000	93	314617	100.0	127.4	
74 cis-1,3-Dichloropropene	75	8.731	8.731	0.000	94	271958	50.0	40.3	
75 4-Methyl-2-pentanone (MIBK)	43	8.889	8.889	0.000	95	347639	100.0	91.6	
76 Toluene	91	9.053	9.053	0.000	97	918258	50.0	55.0	
77 trans-1,3-Dichloropropene	75	9.303	9.303	0.000	93	253427	50.0	46.1	
78 Ethyl methacrylate	69	9.364	9.364	0.000	87	227987	50.0	42.5	
79 1,1,2-Trichloroethane	97	9.497	9.497	0.000	91	200941	50.0	51.7	
80 Tetrachloroethene	164	9.564	9.564	0.000	95	189684	50.0	57.0	
81 1,3-Dichloropropane	76	9.656	9.656	0.000	89	330591	50.0	47.8	
82 2-Hexanone	43	9.716	9.716	0.000	94	261927	100.0	85.2	
84 Chlorodibromomethane	129	9.868	9.868	0.000	90	174058	50.0	52.9	
85 Ethylene Dibromide	107	9.978	9.978	0.000	97	192318	50.0	52.9	
87 Chlorobenzene	112	10.465	10.465	0.000	96	621928	50.0	57.9	
89 1,1,1,2-Tetrachloroethane	131	10.562	10.562	0.000	93	204272	50.0	58.5	
90 Ethylbenzene	106	10.562	10.562	0.000	98	323905	50.0	58.2	
91 m-Xylene & p-Xylene	106	10.696	10.696	0.000	0	407821	50.0	58.8	
92 o-Xylene	106	11.079	11.079	0.000	96	376202	50.0	58.1	
93 Styrene	104	11.097	11.097	0.000	94	638338	50.0	57.5	
94 Bromoform	173	11.280	11.280	0.000	96	104285	50.0	67.1	
97 Isopropylbenzene	105	11.444	11.444	0.000	95	1005766	50.0	59.7	
100 Bromobenzene	156	11.754	11.754	0.000	93	268452	50.0	53.5	
99 1,1,2,2-Tetrachloroethane	83	11.760	11.760	0.000	94	257522	50.0	64.2	
102 trans-1,4-Dichloro-2-buten	53	11.797	11.797	0.000	88	62942	50.0	46.3	
101 1,2,3-Trichloropropane	110	11.815	11.815	0.000	85	85072	50.0	52.7	
103 N-Propylbenzene	120	11.858	11.858	0.000	98	314073	50.0	58.0	
104 2-Chlorotoluene	126	11.949	11.949	0.000	98	261055	50.0	56.3	
106 1,3,5-Trimethylbenzene	105	12.040	12.040	0.000	96	867927	50.0	53.8	
107 4-Chlorotoluene	126	12.071	12.071	0.000	97	288386	50.0	58.4	
108 tert-Butylbenzene	119	12.357	12.357	0.000	92	755662	50.0	55.2	
110 1,2,4-Trimethylbenzene	105	12.411	12.411	0.000	97	895867	50.0	53.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
112 sec-Butylbenzene	105	12.576	12.576	0.000	94	1106329	50.0	54.2	
113 1,3-Dichlorobenzene	146	12.697	12.697	0.000	98	515202	50.0	52.6	
114 4-Isopropyltoluene	119	12.728	12.728	0.000	96	959780	50.0	55.1	
115 1,4-Dichlorobenzene	146	12.801	12.801	0.000	96	548822	50.0	55.1	
120 n-Butylbenzene	91	13.141	13.141	0.000	98	764320	50.0	50.5	
121 1,2-Dichlorobenzene	146	13.154	13.154	0.000	99	501864	50.0	54.8	
122 1,2-Dibromo-3-Chloropropan	75	13.938	13.938	0.000	84	30351	50.0	52.5	
126 1,2,4-Trichlorobenzene	180	14.766	14.766	0.000	94	170523	50.0	49.4	
127 Hexachlorobutadiene	225	14.906	14.906	0.000	96	89341	50.0	50.7	
128 Naphthalene	128	15.027	15.027	0.000	97	358431	50.0	53.6	
129 1,2,3-Trichlorobenzene	180	15.252	15.252	0.000	94	121673	50.0	52.1	
S 134 1,2-Dichloroethene, Total	96				0		100.0	99.1	
S 154 Total BTEX	106				0		250.0	276.9	
S 133 Xylenes, Total	106				0		100.0	116.9	
S 135 1,3-Dichloropropene, Total	1				0		100.0	86.4	

**Reagents:**

voaWKet2ndRes_00050	Amount Added: 2.00	Units: uL	
VOACR2ND_00033	Amount Added: 6.00	Units: uL	
VOAVAPRI_00038	Amount Added: 2.00	Units: uL	
VOA8260VOAPRI_00403	Amount Added: 2.00	Units: uL	
VOACEVEPRI_00064	Amount Added: 2.00	Units: uL	
voaWI/SHP5_00016	Amount Added: 5.00	Units: uL	Run Reagent

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050402.D

Injection Date: 04-May-2020 08:26:30

Instrument ID: CHHP5

Operator ID: 034635

Lims ID: CCVIS

Worklist Smp#: 2

Client ID:

Purge Vol: 5.000 mL

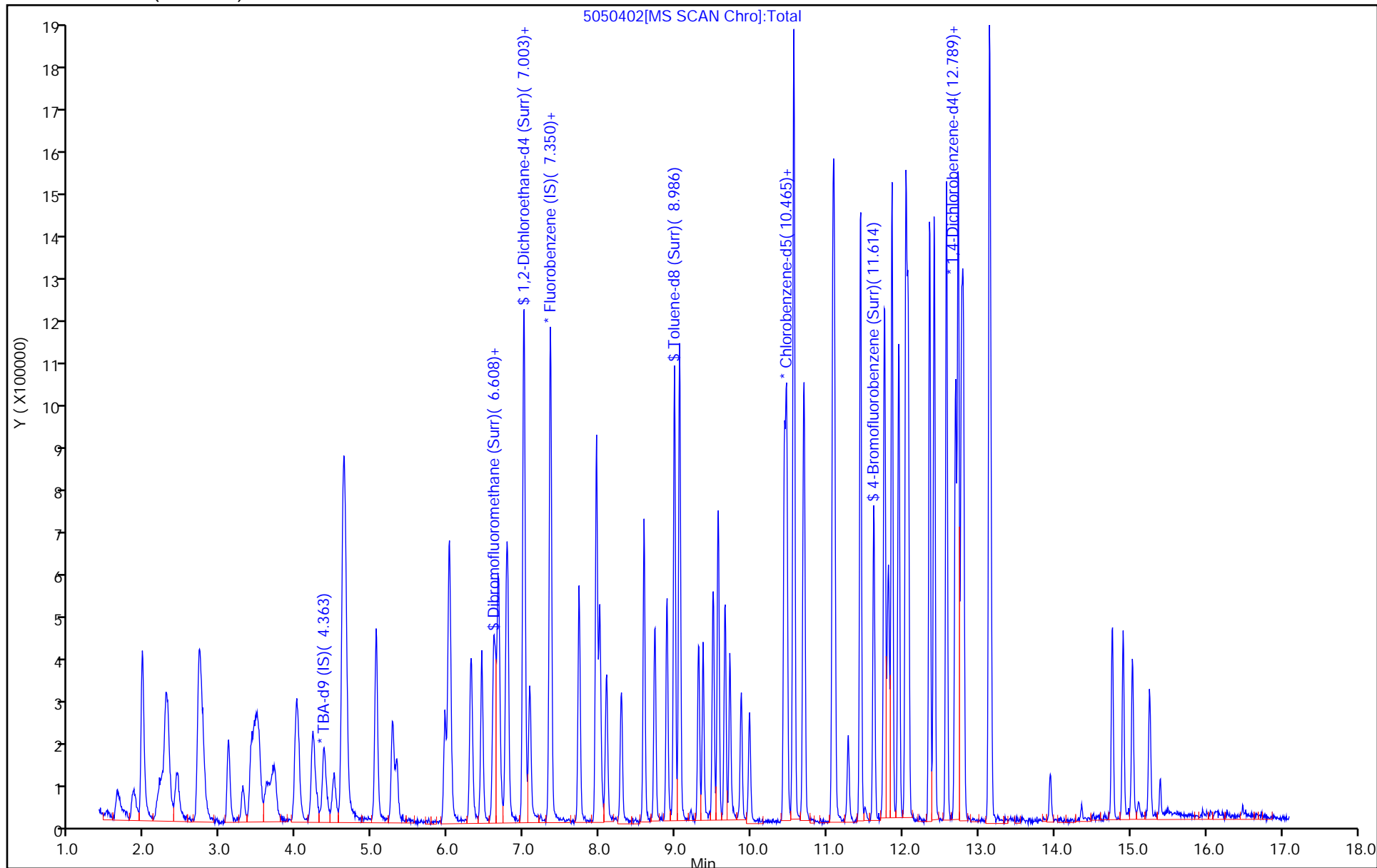
Dil. Factor: 1.0000

ALS Bottle#: 2

Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)



FORM VII  
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1  
 SDG No.: \_\_\_\_\_  
 Lab Sample ID: CCVIS 180-314475/2 Calibration Date: 05/04/2020 08:26  
 Instrument ID: CHHP5 Calib Start Date: 04/03/2020 16:11  
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 04/03/2020 19:09  
 Lab File ID: 5050402.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
Acrolein	Ave	0.0662	0.0560	0.0100	25.4	30.0	-15.4	20.0

Eurofins TestAmerica, Pittsburgh  
Target Compound Quantitation Report

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050402.D  
 Lims ID: CCVIS  
 Client ID:  
 Sample Type: CCVIS  
 Inject. Date: 04-May-2020 08:26:30 ALS Bottle#: 2 Worklist Smp#: 2  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: 180-0031789-002  
 Operator ID: 034635 Instrument ID: CHHP5  
 Sublist: chrom-MSVOA\_LL\_CHHP5\*sub145  
 Method: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\MSVOA\_LL\_CHHP5.m  
 Limit Group: VOA 8260C\_D ICAL  
 Last Update: 04-May-2020 13:45:20 Calib Date: 03-Apr-2020 19:09:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP5\20200403-31442.b\5040310.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: CTX0327

First Level Reviewer: journeyt

Date: 04-May-2020 08:53:37

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.363	4.363	0.000	0	272445	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.344	7.344	0.000	99	695213	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.434	10.434	0.000	84	176716	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.776	12.776	0.000	91	323991	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.626	6.626	0.000	93	179557	50.0	45.3	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.991	6.991	0.000	0	228644	50.0	40.6	
\$ 7 Toluene-d8 (Surr)	98	8.986	8.986	0.000	93	786990	50.0	55.0	
\$ 8 4-Bromofluorobenzene (Surr	95	11.614	11.614	0.000	91	272074	50.0	50.3	
11 Dichlorodifluoromethane	85	1.638	1.638	0.000	98	201454	50.0	37.9	
12 Chloromethane	50	1.844	1.844	0.000	99	206230	50.0	30.4	
14 Butadiene	39	1.966	1.966	0.000	89	201649	50.0	32.7	
13 Vinyl chloride	62	1.966	1.966	0.000	59	244970	50.0	40.6	
15 Bromomethane	94	2.288	2.288	0.000	89	363449	50.0	105.1	
16 Chloroethane	64	2.416	2.416	0.000	99	199070	50.0	48.6	
17 Dichlorofluoromethane	67	2.720	2.720	0.000	95	434201	50.0	47.3	
18 Trichlorofluoromethane	101	2.726	2.726	0.000	69	430413	50.0	56.2	
20 Ethyl ether	59	3.104	3.104	0.000	88	164031	50.0	37.3	
21 Acrolein	56	3.292	3.292	0.000	99	116733	150.0	126.9	
22 1,1-Dichloroethene	96	3.414	3.414	0.000	97	168297	50.0	51.1	
23 1,1,2-Trichloro-1,2,2-trif	101	3.469	3.469	0.000	92	198968	50.0	53.9	
24 Acetone	43	3.511	3.511	0.000	100	193547	100.0	80.6	
25 Iodomethane	142	3.639	3.639	0.000	99	283099	50.0	49.4	
26 Carbon disulfide	76	3.706	3.706	0.000	100	388329	50.0	49.7	
28 3-Chloro-1-propene	76	3.992	3.992	0.000	88	95888	50.0	47.4	
30 Methyl acetate	43	4.016	4.016	0.000	97	320513	100.0	93.0	
31 Methylene Chloride	84	4.217	4.217	0.000	89	222015	50.0	48.0	
32 2-Methyl-2-propanol	59	4.503	4.503	0.000	92	152457	500.0	548.2	
33 Acrylonitrile	53	4.612	4.612	0.000	100	738636	500.0	410.7	
34 trans-1,2-Dichloroethene	96	4.631	4.631	0.000	97	194176	50.0	51.1	
35 Methyl tert-butyl ether	73	4.655	4.655	0.000	98	437366	50.0	41.0	
36 Hexane	57	5.056	5.056	0.000	92	275453	50.0	44.0	



Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
37 1,1-Dichloroethane	63	5.263	5.263	0.000	96	307472	50.0	41.5	
38 Vinyl acetate	43	5.324	5.324	0.000	97	249568	50.0	33.4	
44 2,2-Dichloropropane	97	6.005	6.005	0.000	65	44091	50.0	47.8	
45 cis-1,2-Dichloroethene	96	6.018	6.018	0.000	78	217037	50.0	48.0	
46 2-Butanone (MEK)	43	6.036	6.036	0.000	97	190804	100.0	74.7	
49 Chlorobromomethane	128	6.297	6.297	0.000	91	108208	50.0	44.9	
51 Tetrahydrofuran	42	6.310	6.310	0.000	84	106023	100.0	71.9	
52 Chloroform	83	6.443	6.443	0.000	95	345139	50.0	43.7	
53 1,1,1-Trichloroethane	97	6.602	6.602	0.000	99	260601	50.0	46.0	
54 Cyclohexane	56	6.662	6.662	0.000	90	308445	50.0	42.7	
56 Carbon tetrachloride	117	6.766	6.766	0.000	95	236236	50.0	50.2	
55 1,1-Dichloropropene	75	6.784	6.784	0.000	96	262019	50.0	50.1	
58 Benzene	78	7.003	7.003	0.000	97	800930	50.0	46.8	
57 Isobutyl alcohol	41	7.003	7.003	0.000	45	139655	1250.0	1170.2	
59 1,2-Dichloroethane	62	7.076	7.076	0.000	97	270949	50.0	41.6	
62 n-Heptane	43	7.362	7.362	0.000	88	222865	50.0	39.3	
64 Trichloroethene	130	7.727	7.727	0.000	96	212679	50.0	49.9	
66 Methylcyclohexane	83	7.958	7.958	0.000	88	375452	50.0	51.9	
67 1,2-Dichloropropane	63	8.001	8.001	0.000	94	192759	50.0	42.2	
70 1,4-Dioxane	88	8.092	8.092	0.000	44	42835	1000.0	1153.6	
68 Dibromomethane	93	8.092	8.092	0.000	96	128706	50.0	47.5	
71 Dichlorobromomethane	83	8.287	8.287	0.000	99	221554	50.0	41.3	
73 2-Chloroethyl vinyl ether	63	8.585	8.585	0.000	93	314617	100.0	127.4	
74 cis-1,3-Dichloropropene	75	8.731	8.731	0.000	94	271958	50.0	40.3	
75 4-Methyl-2-pentanone (MIBK)	43	8.889	8.889	0.000	95	347639	100.0	91.6	
76 Toluene	91	9.053	9.053	0.000	97	918258	50.0	55.0	
77 trans-1,3-Dichloropropene	75	9.303	9.303	0.000	93	253427	50.0	46.1	
78 Ethyl methacrylate	69	9.364	9.364	0.000	87	227987	50.0	42.5	
79 1,1,2-Trichloroethane	97	9.497	9.497	0.000	91	200941	50.0	51.7	
80 Tetrachloroethene	164	9.564	9.564	0.000	95	189684	50.0	57.0	
81 1,3-Dichloropropane	76	9.656	9.656	0.000	89	330591	50.0	47.8	
82 2-Hexanone	43	9.716	9.716	0.000	94	261927	100.0	85.2	
84 Chlorodibromomethane	129	9.868	9.868	0.000	90	174058	50.0	52.9	
85 Ethylene Dibromide	107	9.978	9.978	0.000	97	192318	50.0	52.9	
87 Chlorobenzene	112	10.465	10.465	0.000	96	621928	50.0	57.9	
89 1,1,1,2-Tetrachloroethane	131	10.562	10.562	0.000	93	204272	50.0	58.5	
90 Ethylbenzene	106	10.562	10.562	0.000	98	323905	50.0	58.2	
91 m-Xylene & p-Xylene	106	10.696	10.696	0.000	0	407821	50.0	58.8	
92 o-Xylene	106	11.079	11.079	0.000	96	376202	50.0	58.1	
93 Styrene	104	11.097	11.097	0.000	94	638338	50.0	57.5	
94 Bromoform	173	11.280	11.280	0.000	96	104285	50.0	67.1	
97 Isopropylbenzene	105	11.444	11.444	0.000	95	1005766	50.0	59.7	
100 Bromobenzene	156	11.754	11.754	0.000	93	268452	50.0	53.5	
99 1,1,2,2-Tetrachloroethane	83	11.760	11.760	0.000	94	257522	50.0	64.2	
102 trans-1,4-Dichloro-2-buten	53	11.797	11.797	0.000	88	62942	50.0	46.3	
101 1,2,3-Trichloropropane	110	11.815	11.815	0.000	85	85072	50.0	52.7	
103 N-Propylbenzene	120	11.858	11.858	0.000	98	314073	50.0	58.0	
104 2-Chlorotoluene	126	11.949	11.949	0.000	98	261055	50.0	56.3	
106 1,3,5-Trimethylbenzene	105	12.040	12.040	0.000	96	867927	50.0	53.8	
107 4-Chlorotoluene	126	12.071	12.071	0.000	97	288386	50.0	58.4	
108 tert-Butylbenzene	119	12.357	12.357	0.000	92	755662	50.0	55.2	
110 1,2,4-Trimethylbenzene	105	12.411	12.411	0.000	97	895867	50.0	53.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
112 sec-Butylbenzene	105	12.576	12.576	0.000	94	1106329	50.0	54.2	
113 1,3-Dichlorobenzene	146	12.697	12.697	0.000	98	515202	50.0	52.6	
114 4-Isopropyltoluene	119	12.728	12.728	0.000	96	959780	50.0	55.1	
115 1,4-Dichlorobenzene	146	12.801	12.801	0.000	96	548822	50.0	55.1	
120 n-Butylbenzene	91	13.141	13.141	0.000	98	764320	50.0	50.5	
121 1,2-Dichlorobenzene	146	13.154	13.154	0.000	99	501864	50.0	54.8	
122 1,2-Dibromo-3-Chloropropan	75	13.938	13.938	0.000	84	30351	50.0	52.5	
126 1,2,4-Trichlorobenzene	180	14.766	14.766	0.000	94	170523	50.0	49.4	
127 Hexachlorobutadiene	225	14.906	14.906	0.000	96	89341	50.0	50.7	
128 Naphthalene	128	15.027	15.027	0.000	97	358431	50.0	53.6	
129 1,2,3-Trichlorobenzene	180	15.252	15.252	0.000	94	121673	50.0	52.1	
S 134 1,2-Dichloroethene, Total	96				0		100.0	99.1	
S 154 Total BTEX	106				0		250.0	276.9	
S 133 Xylenes, Total	106				0		100.0	116.9	
S 135 1,3-Dichloropropene, Total	1				0		100.0	86.4	

**Reagents:**

voaWKet2ndRes_00050	Amount Added: 2.00	Units: uL	
VOACR2ND_00033	Amount Added: 6.00	Units: uL	
VOAVAPRI_00038	Amount Added: 2.00	Units: uL	
VOA8260VOAPRI_00403	Amount Added: 2.00	Units: uL	
VOACEVEPRI_00064	Amount Added: 2.00	Units: uL	
voaWI/SHP5_00016	Amount Added: 5.00	Units: uL	Run Reagent

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050402.D

Injection Date: 04-May-2020 08:26:30

Instrument ID: CHHP5

Operator ID: 034635

Lims ID: CCVIS

Worklist Smp#: 2

Client ID:

Purge Vol: 5.000 mL

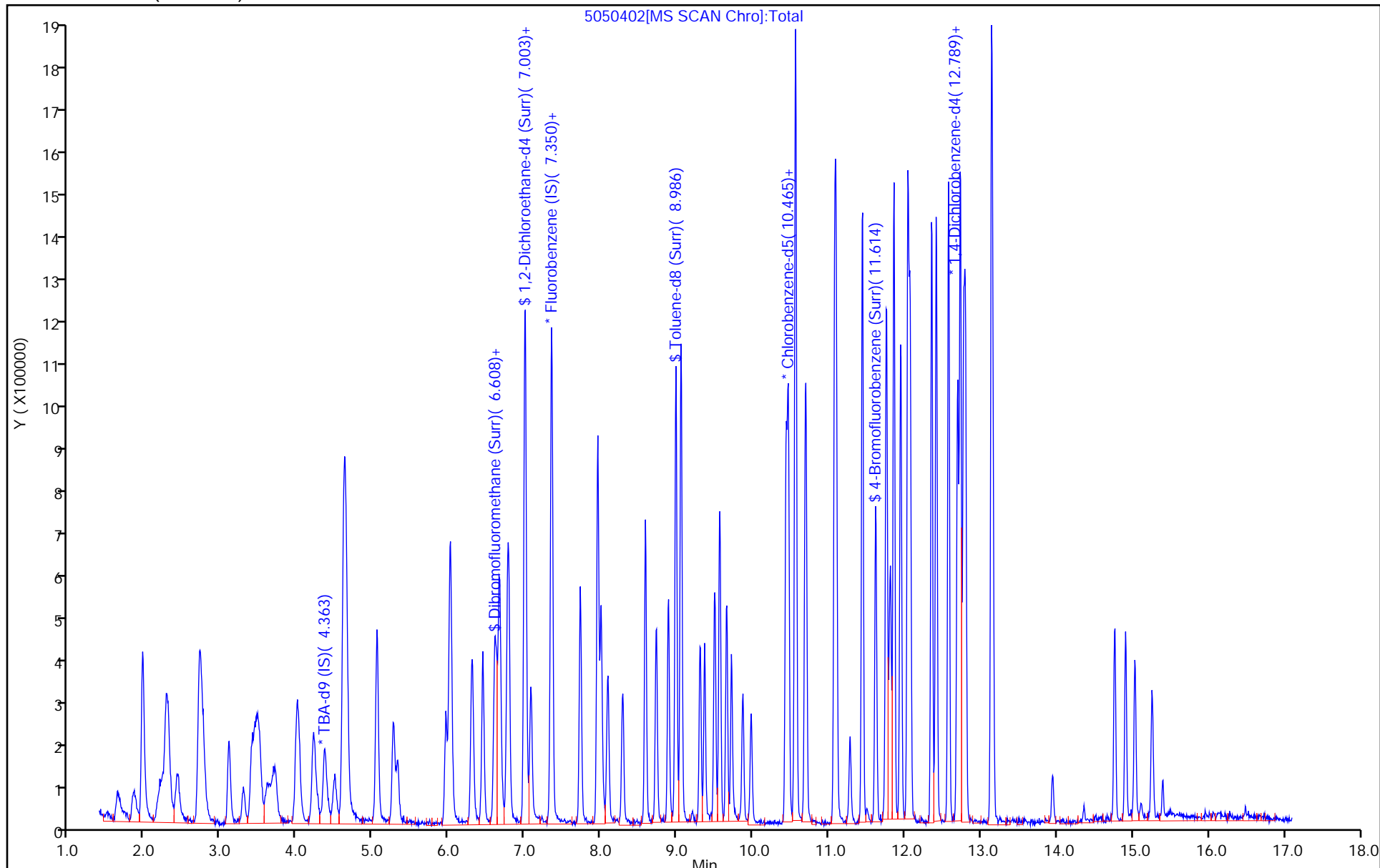
Dil. Factor: 1.0000

ALS Bottle#: 2

Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Pittsburgh  
Target Compound Quantitation Report

Data File: \\chromna\Pittsburgh\ChromData\CHHP5\20200324-31295.b\5032401.D  
 Lims ID: BFB  
 Client ID:  
 Sample Type: BFB  
 Inject. Date: 24-Mar-2020 01:11:30 ALS Bottle#: 1 Worklist Smp#: 1  
 Injection Vol: 5.0 mL Dil. Factor: 1.0000  
 Sample Info: 180-0031295-001  
 Misc. Info.: BFB  
 Operator ID: 034635 Instrument ID: CHHP5  
 Method: \\chromna\Pittsburgh\ChromData\CHHP5\20200324-31295.b\MSVOA\_LL\_CHHP5.m  
 Limit Group: VOA 8260C\_D ICAL  
 Last Update: 26-Mar-2020 23:41:29 Calib Date: 24-Mar-2020 04:51:30  
 Integrator: RTE ID Type: RT Order ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP5\20200324-31295.b\5032310.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: CTX0332

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
\$ 10 BFB	95	8.353	8.353	0.000	0	530080	NR	NR	

**QC Flag Legend**

Processing Flags  
 NR - Missing Quant Standard

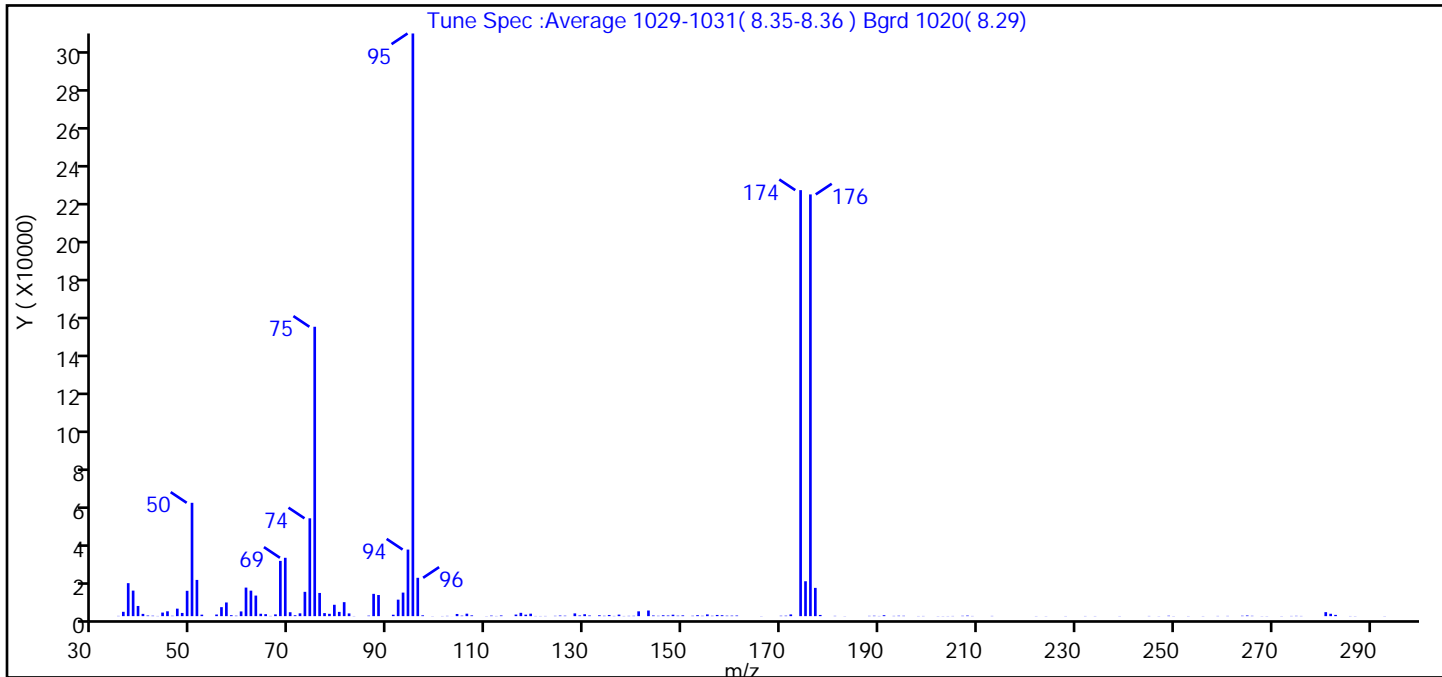
**Reagents:**

VOABFB25\_00121 Amount Added: 1.00 Units: uL

Eurofins TestAmerica, Pittsburgh

Data File: \\chromna\Pittsburgh\ChromData\CHHP5\20200324-31295.b\5032401.D  
 Injection Date: 24-Mar-2020 01:11:30 Instrument ID: CHHP5  
 Lims ID: BFB  
 Client ID:  
 Operator ID: 034635 ALS Bottle#: 1 Worklist Smp#: 1  
 Injection Vol: 5.0 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Tune Method: BFB Method 8260

\$ 10 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	19.5
75	30 to 60% of m/z 95	49.7
96	5 to 9% of m/z 95	6.6
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	73.1
175	5 to 9% of m/z 174	6.0 (8.2)
176	Greater than 95% but less than 101% of m/z 174	72.4 (99.0)
177	5 to 9% of m/z 176	4.9 (6.7)

Data File: \\chromna\Pittsburgh\ChromData\CHHP5\20200324-31295.b\5032401.D\MSVOA\_LL\_CHHP5.rsl\spectra  
Injection Date: 24-Mar-2020 01:11:30  
Spectrum: Tune Spec :Average 1029-1031( 8.35-8.36 ) Bgrd 1020( 8.29)  
Base Peak: 95.00  
Minimum % Base Peak: 0  
Number of Points: 167

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	123	79.00	5956	134.00	189	194.00	211
36.00	2272	80.00	2233	135.00	615	195.00	184
37.00	17280	81.00	7326	136.00	114	198.00	86
38.00	13378	82.00	1435	137.00	789	199.00	100
39.00	5328	83.00	80	138.00	93	202.00	76
40.00	1183	86.00	253	139.00	150	203.00	72
41.00	322	87.00	11678	140.00	176	204.00	80
42.00	216	88.00	11060	141.00	2517	205.00	101
43.00	97	91.00	741	143.00	2951	207.00	179
44.00	1870	92.00	8635	144.00	344	208.00	288
45.00	2542	93.00	12332	145.00	182	209.00	99
46.00	190	94.00	34864	146.00	454	213.00	119
47.00	3927	95.00	305152	147.00	325	222.00	78
48.00	1680	96.00	20080	148.00	742	224.00	67
49.00	13270	97.00	433	149.00	237	228.00	80
50.00	59360	99.00	71	150.00	403	232.00	88
51.00	18968	101.00	84	152.00	194	234.00	82
52.00	774	102.00	137	153.00	504	239.00	80
55.00	851	103.00	16	154.00	179	245.00	104
56.00	4708	104.00	1136	155.00	907	247.00	68
57.00	7160	105.00	250	156.00	189	249.00	211
58.00	490	106.00	1289	157.00	624	250.00	76
59.00	228	107.00	396	158.00	475	253.00	78
60.00	2467	110.00	75	159.00	245	256.00	78
61.00	14952	111.00	275	160.00	267	259.00	112
62.00	13357	112.00	95	161.00	322	261.00	126
63.00	10771	113.00	351	166.00	70	264.00	205
64.00	1252	116.00	831	170.00	204	265.00	337
65.00	1039	117.00	1733	171.00	232	266.00	165
66.00	111	118.00	774	172.00	895	268.00	67
67.00	921	119.00	1285	174.00	223104	269.00	76
68.00	28936	120.00	92	175.00	18272	272.00	77
69.00	30560	121.00	88	176.00	220864	274.00	110

Report Date: 26-Mar-2020 23:41:30

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Data File:

\\chromna\Pittsburgh\ChromData\CHHP5\20200324-31295.b\5032401.D\MMSVOA\_LL\_CHHP5.rsl\spectra

Injection Date:

24-Mar-2020 01:11:30

Spectrum:

Tune Spec :Average 1029-1031( 8.35-8.36 ) Bgrd 1020( 8.29)

Base Peak:

95.00

Minimum % Base Peak: 0

Number of Points:

167

m/z	Y	m/z	Y	m/z	Y	m/z	Y
70.00	2043	122.00	102	177.00	14800	275.00	155
71.00	462	124.00	159	178.00	629	276.00	104
72.00	1469	125.00	307	181.00	143	281.00	2089
73.00	12733	126.00	223	183.00	67	282.00	1238
74.00	51232	128.00	1441	188.00	141	283.00	660
75.00	151552	129.00	354	189.00	209	286.00	84
76.00	12145	130.00	997	190.00	98	287.00	75
77.00	1589	131.00	341	191.00	474	293.00	73
78.00	1223	133.00	447	193.00	135		

Report Date: 26-Mar-2020 23:41:30

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Pittsburgh

Data File: \\chromna\Pittsburgh\ChromData\CHHP5\20200324-31295.b\5032401.D

Injection Date: 24-Mar-2020 01:11:30

Instrument ID: CHHP5

Operator ID: 034635

Lims ID: BFB

Worklist Smp#: 1

Client ID:

Injection Vol: 5.0 mL

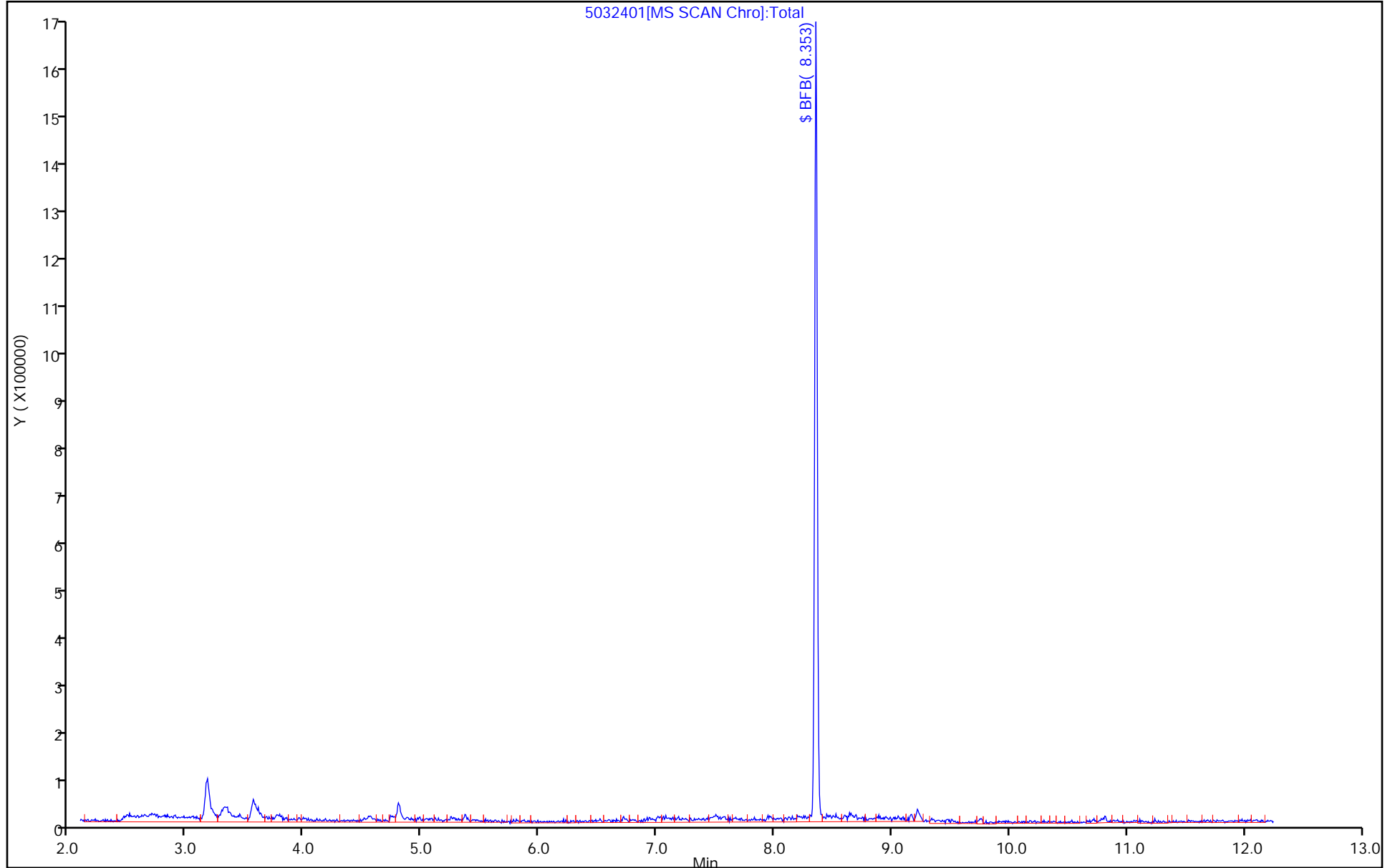
Dil. Factor: 1.0000

ALS Bottle#: 1

Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)





Eurofins TestAmerica, Pittsburgh  
Target Compound Quantitation Report

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050102.D  
 Lims ID: BFB  
 Client ID:  
 Sample Type: BFB  
 Inject. Date: 01-May-2020 15:18:30 ALS Bottle#: 2 Worklist Smp#: 2  
 Injection Vol: 5.0 mL Dil. Factor: 1.0000  
 Sample Info: 180-0031777-002  
 Operator ID: 034635 Instrument ID: CHHP5  
 Method: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\MMSVOA\_LL\_CHHP5.m  
 Limit Group: VOA 8260C\_D ICAL  
 Last Update: 03-May-2020 17:18:39 Calib Date: 03-Apr-2020 19:09:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP5\20200403-31442.b\5040310.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: CTX0317

First Level Reviewer: journetp Date: 01-May-2020 15:48:47

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
----------	-----	-----------	---------------	---------------	---	----------	------------	--------------	-------

\$ 10 BFB	95	11.614	11.614	0.000	0	200984	NR	NR	
-----------	----	--------	--------	-------	---	--------	----	----	--

**QC Flag Legend**

Processing Flags

NR - Missing Quant Standard

**Reagents:**

VOABFB25\_00122

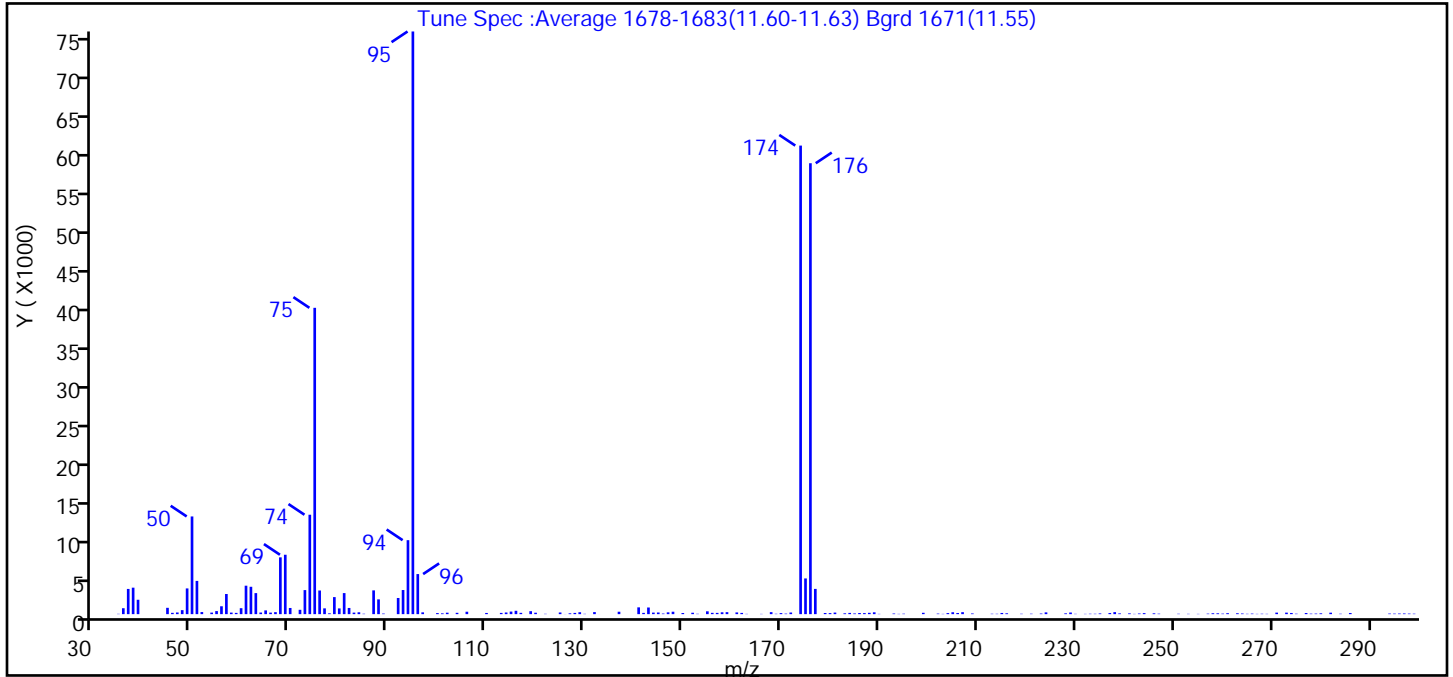
Amount Added: 1.00

Units: uL

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050102.D  
 Injection Date: 01-May-2020 15:18:30 Instrument ID: CHHP5  
 Lims ID: BFB  
 Client ID:  
 Operator ID: 034635 ALS Bottle#: 2 Worklist Smp#: 2  
 Injection Vol: 5.0 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Tune Method: BFB Method 8260

\$ 10 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	16.8
75	30 to 60% of m/z 95	52.6
96	5 to 9% of m/z 95	6.9
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	80.4
175	5 to 9% of m/z 174	6.1 (7.6)
176	Greater than 95% but less than 101% of m/z 174	77.4 (96.2)
177	5 to 9% of m/z 176	4.3 (5.6)

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050102.D\MSVOA\_LL\_CHHP5.rslt\spectra.  
Injection Date: 01-May-2020 15:18:30  
Spectrum: Tune Spec :Average 1678-1683(11.60-11.63) Bgrd 1671(11.55)  
Base Peak: 95.00  
Minimum % Base Peak: 0  
Number of Points: 183

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	40	89.00	76	161.00	225	232.00	36
36.00	771	92.00	2103	162.00	162	233.00	53
37.00	3281	93.00	3139	163.00	34	234.00	49
38.00	3446	94.00	9630	166.00	33	235.00	93
39.00	1872	95.00	75856	168.00	259	237.00	143
45.00	823	96.00	5217	169.00	49	238.00	261
46.00	171	97.00	233	170.00	138	239.00	98
47.00	218	100.00	138	171.00	69	241.00	102
48.00	521	101.00	105	172.00	212	242.00	33
49.00	3349	102.00	189	174.00	61000	243.00	86
50.00	12718	104.00	173	175.00	4648	244.00	132
51.00	4326	106.00	315	176.00	58704	246.00	106
52.00	271	110.00	154	177.00	3286	247.00	60
54.00	201	113.00	162	179.00	149	251.00	49
55.00	398	114.00	216	180.00	137	253.00	40
56.00	1026	115.00	335	181.00	204	255.00	34
57.00	2622	116.00	435	183.00	108	257.00	66
58.00	202	117.00	170	184.00	162	258.00	116
59.00	164	119.00	385	185.00	90	259.00	110
60.00	775	120.00	186	186.00	147	260.00	68
61.00	3703	122.00	43	187.00	136	261.00	125
62.00	3562	125.00	217	188.00	173	263.00	116
63.00	2738	126.00	9	189.00	238	264.00	85
64.00	209	127.00	109	190.00	34	265.00	45
65.00	487	128.00	160	193.00	82	266.00	73
66.00	200	129.00	250	194.00	36	267.00	36
67.00	259	130.00	41	195.00	58	268.00	54
68.00	7393	132.00	265	199.00	176	269.00	40
69.00	7733	133.00	3	202.00	72	271.00	198
70.00	803	137.00	313	203.00	34	273.00	197
72.00	566	141.00	883	204.00	140	274.00	153
73.00	3130	142.00	165	205.00	248	275.00	57
74.00	12942	143.00	865	206.00	151	277.00	146

Report Date: 03-May-2020 17:18:40

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050102.D\MSVOA\_LL\_CHHP5.rslt\spectra.

Injection Date: 01-May-2020 15:18:30

Spectrum: Tune Spec :Average 1678-1683(11.60-11.63) Bgrd 1671(11.55)

Base Peak: 95.00

Minimum % Base Peak: 0

Number of Points: 183

m/z	Y	m/z	Y	m/z	Y	m/z	Y
75.00	39880	144.00	201	207.00	257	278.00	66
76.00	3078	145.00	216	209.00	88	279.00	74
77.00	753	146.00	79	213.00	52	280.00	108
78.00	107	147.00	235	214.00	47	282.00	190
79.00	2219	148.00	315	215.00	154	284.00	53
80.00	746	150.00	147	216.00	110	286.00	143
81.00	2741	152.00	183	219.00	50	294.00	77
82.00	804	153.00	46	221.00	57	295.00	69
83.00	199	155.00	369	223.00	79	296.00	81
84.00	242	156.00	170	224.00	230	297.00	88
85.00	53	157.00	165	228.00	106	298.00	73
87.00	3094	158.00	242	229.00	213	299.00	59
88.00	1924	159.00	259	230.00	40		

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050102.D

Injection Date: 01-May-2020 15:18:30

Instrument ID: CHHP5

Operator ID: 034635

Lims ID: BFB

Worklist Smp#: 2

Client ID:

Injection Vol: 5.0 mL

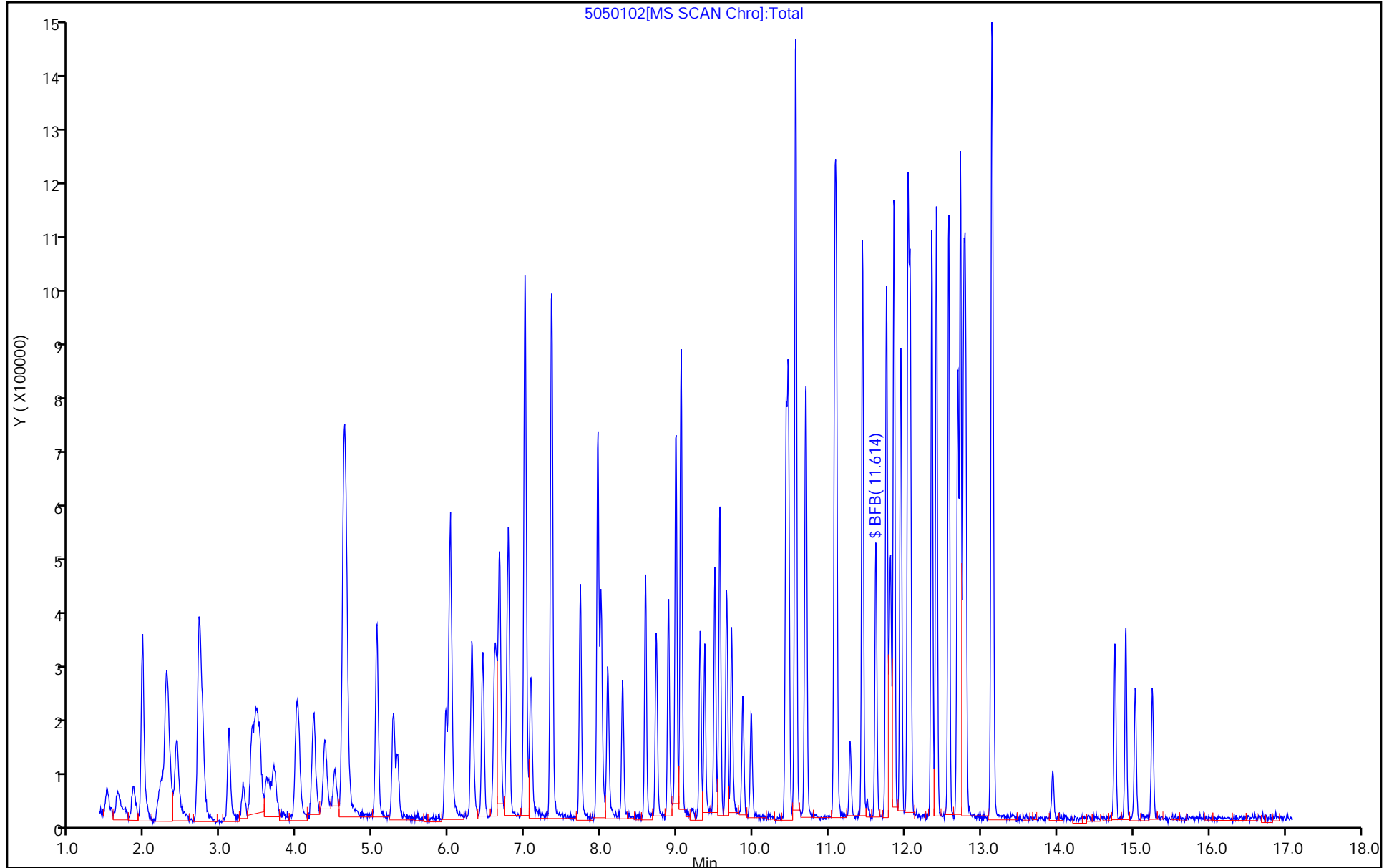
Dil. Factor: 1.0000

ALS Bottle#: 2

Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Pittsburgh  
Target Compound Quantitation Report

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050401.D  
 Lims ID: BFB  
 Client ID:  
 Sample Type: BFB  
 Inject. Date: 04-May-2020 07:47:30 ALS Bottle#: 1 Worklist Smp#: 1  
 Injection Vol: 5.0 mL Dil. Factor: 1.0000  
 Sample Info: 180-0031789-001  
 Operator ID: 034635 Instrument ID: CHHP5  
 Method: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\MMSVOA\_LL\_CHHP5.m  
 Limit Group: VOA 8260C\_D ICAL  
 Last Update: 04-May-2020 13:45:25 Calib Date: 03-Apr-2020 19:09:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICAL File: \\chromna\Pittsburgh\ChromData\CHHP5\20200403-31442.b\5040310.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: CTX0327

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
\$ 10 BFB	95	11.625	11.625	0.000	0	255228	NR	NR	

**QC Flag Legend**

Processing Flags

NR - Missing Quant Standard

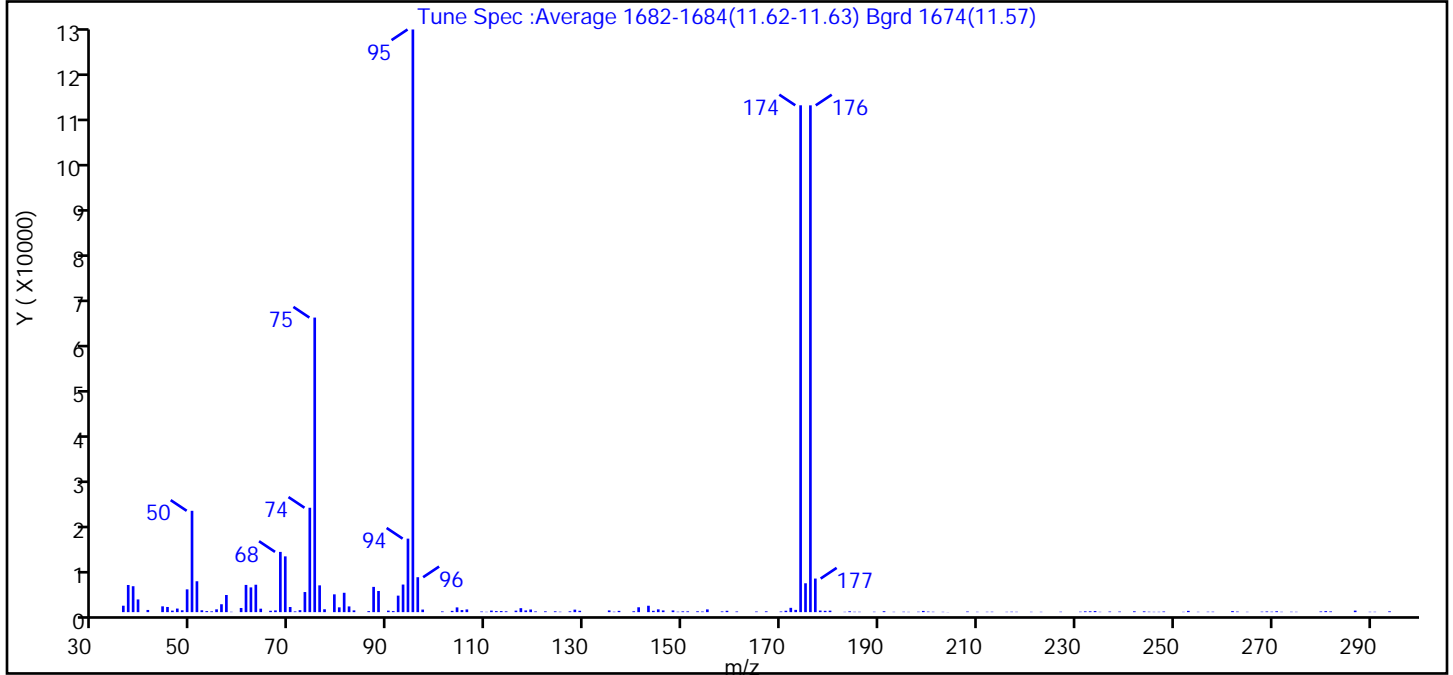
**Reagents:**

VOABFB25\_00122 Amount Added: 1.00 Units: uL

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050401.D  
 Injection Date: 04-May-2020 07:47:30 Instrument ID: CHHP5  
 Lims ID: BFB  
 Client ID:  
 Operator ID: 034635 ALS Bottle#: 1 Worklist Smp#: 1  
 Injection Vol: 5.0 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Tune Method: BFB Method 8260

\$ 10 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	17.4
75	30 to 60% of m/z 95	50.6
96	5 to 9% of m/z 95	6.0
173	Less than 2% of m/z 174	0.4 (0.4)
174	50 to 120% of m/z 95	87.0
175	5 to 9% of m/z 174	5.0 (5.7)
176	Greater than 95% but less than 101% of m/z 174	87.0 (100.0)
177	5 to 9% of m/z 176	5.8 (6.6)

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050401.D\MSVOA\_LL\_CHHP5.rslt\spectra.  
 Injection Date: 04-May-2020 07:47:30  
 Spectrum: Tune Spec :Average 1682-1684(11.62-11.63) Bgrd 1674(11.57)  
 Base Peak: 95.00  
 Minimum % Base Peak: 0  
 Number of Points: 168

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1377	83.00	376	146.00	364	213.00	89
37.00	5815	86.00	215	148.00	367	216.00	70
38.00	5552	87.00	5410	149.00	92	217.00	93
39.00	2724	88.00	4529	150.00	173	218.00	75
41.00	470	90.00	325	151.00	172	221.00	72
44.00	1241	91.00	227	153.00	184	223.00	69
45.00	1108	92.00	3538	154.00	132	227.00	91
46.00	326	93.00	5910	155.00	587	231.00	97
47.00	768	94.00	15743	158.00	157	232.00	172
48.00	399	95.00	124792	159.00	292	233.00	181
49.00	4881	96.00	7481	161.00	141	234.00	231
50.00	21704	97.00	551	165.00	132	235.00	73
51.00	6616	101.00	153	167.00	174	237.00	128
52.00	398	103.00	274	170.00	141	239.00	124
53.00	226	104.00	1017	171.00	299	242.00	178
54.00	169	105.00	441	172.00	923	244.00	169
55.00	604	106.00	582	173.00	486	245.00	90
56.00	1693	109.00	136	174.00	108552	246.00	70
57.00	3673	110.00	69	175.00	6183	247.00	72
58.00	78	111.00	331	176.00	108544	248.00	139
60.00	891	112.00	226	177.00	7193	252.00	69
61.00	5829	113.00	233	178.00	340	253.00	273
62.00	5302	114.00	178	179.00	285	255.00	72
63.00	5871	116.00	322	180.00	321	257.00	90
64.00	741	117.00	853	183.00	68	258.00	95
65.00	6	118.00	368	184.00	182	262.00	220
66.00	295	119.00	565	185.00	80	263.00	123
67.00	372	120.00	154	186.00	79	265.00	71
68.00	12904	122.00	171	189.00	85	268.00	105
69.00	11944	124.00	175	191.00	195	269.00	150
70.00	1101	125.00	91	193.00	71	270.00	101
71.00	156	127.00	173	195.00	89	271.00	194
72.00	425	128.00	537	196.00	61	272.00	78



Report Date: 04-May-2020 13:45:25

Chrom Revision: 2.3 11-Mar-2020 18:53:20

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050401.D\MSVOA\_LL\_CHHP5.rslt\spectra.

Injection Date: 04-May-2020 07:47:30

Spectrum: Tune Spec :Average 1682-1684(11.62-11.63) Bgrd 1674(11.57)

Base Peak: 95.00

Minimum % Base Peak: 0

Number of Points: 168

m/z	Y	m/z	Y	m/z	Y	m/z	Y
73.00	4307	129.00	295	198.00	91	274.00	86
74.00	22360	135.00	365	199.00	259	275.00	72
75.00	63088	136.00	88	200.00	116	280.00	151
76.00	5738	137.00	275	201.00	82	281.00	219
77.00	617	140.00	194	203.00	68	282.00	155
79.00	3814	141.00	1043	204.00	29	287.00	326
80.00	1026	143.00	1372	208.00	134	290.00	75
81.00	4148	144.00	283	210.00	74	291.00	76
82.00	1230	145.00	598	212.00	77	294.00	172

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050401.D

Injection Date: 04-May-2020 07:47:30

Instrument ID: CHHP5

Operator ID: 034635

Lims ID: BFB

Worklist Smp#: 1

Client ID:

Injection Vol: 5.0 mL

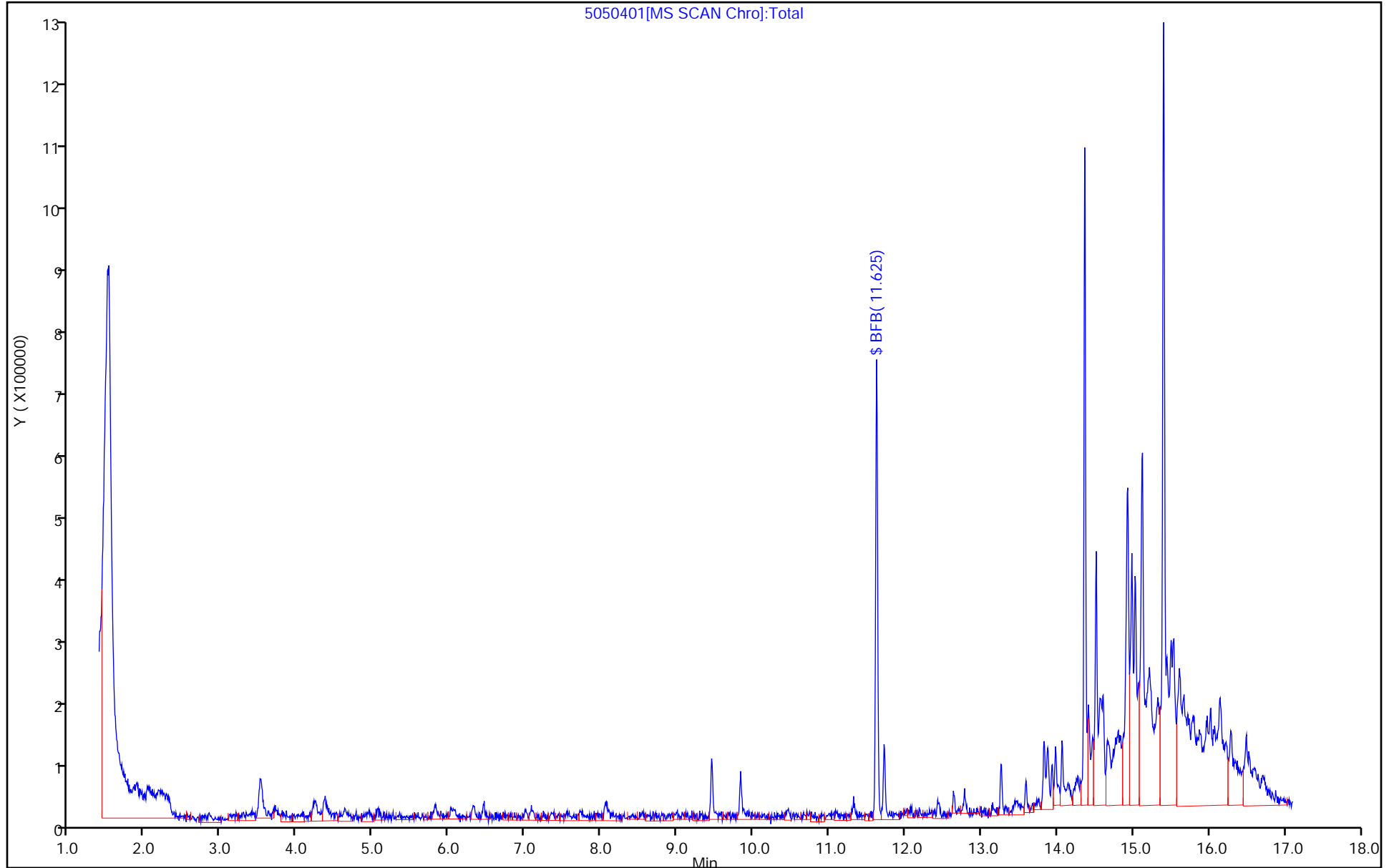
Dil. Factor: 1.0000

ALS Bottle#: 1

Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)



FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: \_\_\_\_\_ Lab Sample ID: MB 180-314382/6  
 Matrix: Water Lab File ID: 5050106.D  
 Analysis Method: EPA 8260C Date Collected: \_\_\_\_\_  
 Sample wt/vol: 5 (mL) Date Analyzed: 05/01/2020 17:18  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-624 ID: 0.18 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 314382 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	ND		1.0	0.90
75-01-4	Vinyl chloride	ND		1.0	0.40
74-83-9	Bromomethane	ND		1.0	0.89
75-00-3	Chloroethane	ND		1.0	0.90
75-35-4	1,1-Dichloroethene	ND		1.0	0.55
67-64-1	Acetone	ND		5.0	3.4
75-15-0	Carbon disulfide	ND		1.0	0.88
75-09-2	Methylene Chloride	ND		1.0	0.89
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.67
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.59
75-34-3	1,1-Dichloroethane	ND		1.0	0.31
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.71
74-97-5	Bromochloromethane	ND		1.0	0.63
78-93-3	2-Butanone (MEK)	ND		5.0	2.6
67-66-3	Chloroform	ND		1.0	0.60
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.60
56-23-5	Carbon tetrachloride	ND		1.0	0.88
71-43-2	Benzene	ND		1.0	0.60
107-06-2	1,2-Dichloroethane	ND		1.0	0.57
79-01-6	Trichloroethene	ND		1.0	0.69
78-87-5	1,2-Dichloropropane	ND		1.0	0.66
75-27-4	Bromodichloromethane	ND		1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	3.1
108-88-3	Toluene	ND		1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.58
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.45
127-18-4	Tetrachloroethene	ND		1.0	0.47
591-78-6	2-Hexanone	ND		5.0	3.3
124-48-1	Dibromochloromethane	ND		1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	ND		1.0	0.50
108-90-7	Chlorobenzene	ND		1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.57
100-41-4	Ethylbenzene	ND		1.0	0.51
1330-20-7	Xylenes, Total	ND		2.0	0.89
100-42-5	Styrene	ND		1.0	0.47

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: \_\_\_\_\_ Lab Sample ID: MB 180-314382/6  
 Matrix: Water Lab File ID: 5050106.D  
 Analysis Method: EPA 8260C Date Collected: \_\_\_\_\_  
 Sample wt/vol: 5 (mL) Date Analyzed: 05/01/2020 17:18  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-624 ID: 0.18 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 314382 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	ND		1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.60
107-13-1	Acrylonitrile	ND		20	7.8

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	79		62-146
2037-26-5	Toluene-d8 (Surr)	99		75-120
460-00-4	4-Bromofluorobenzene (Surr)	83		64-120
1868-53-7	Dibromofluoromethane (Surr)	83		71-132

Eurofins TestAmerica, Pittsburgh  
Target Compound Quantitation Report

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050106.D  
 Lims ID: mb  
 Client ID:  
 Sample Type: MB  
 Inject. Date: 01-May-2020 17:18:30 ALS Bottle#: 6 Worklist Smp#: 6  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: 180-0031777-006  
 Operator ID: 034635 Instrument ID: CHHP5  
 Method: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\MMSVOA\_LL\_CHHP5.m  
 Limit Group: VOA 8260C\_D ICAL  
 Last Update: 03-May-2020 16:03:33 Calib Date: 03-Apr-2020 19:09:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICAL File: \\chromna\Pittsburgh\ChromData\CHHP5\20200403-31442.b\5040310.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: CTX0317

First Level Reviewer: journetp Date: 01-May-2020 17:52:28

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.361	4.371	-0.010	0	285554	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.342	7.345	-0.003	99	804482	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.439	10.436	0.003	86	195593	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.775	12.772	0.003	96	283131	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.624	6.628	-0.004	92	189739	50.0	41.3	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.996	6.993	0.003	0	257125	50.0	39.5	
\$ 7 Toluene-d8 (Surr)	98	8.985	8.988	-0.003	93	787405	50.0	49.7	
\$ 8 4-Bromofluorobenzene (Surr	95	11.619	11.616	0.003	89	247927	50.0	41.4	
11 Dichlorodifluoromethane	85		1.638					ND	
12 Chloromethane	50		1.851					ND	
14 Butadiene	39		1.961					ND	
13 Vinyl chloride	62		1.961					ND	U
15 Bromomethane	94		2.277					ND	U
16 Chloroethane	64		2.423					ND	
17 Dichlorofluoromethane	67		2.715					ND	
18 Trichlorofluoromethane	101		2.727					ND	
19 Ethanol	45		2.792					ND	U
20 Ethyl ether	59		3.104					ND	
21 Acrolein	56		3.287					ND	
22 1,1-Dichloroethene	96		3.390					ND	
23 1,1,2-Trichloro-1,2,2-trif	101		3.482					ND	
24 Acetone	43	3.510	3.512	-0.002	99	27136		9.76	
25 Iodomethane	142		3.597					ND	U
26 Carbon disulfide	76		3.701					ND	U
27 Isopropyl alcohol	45		3.832					ND	U
29 Acetonitrile	41		3.979					ND	U
28 3-Chloro-1-propene	76		3.987					ND	U
30 Methyl acetate	43		4.023					ND	U
31 Methylene Chloride	84		4.218					ND	U
32 2-Methyl-2-propanol	59		4.491					ND	U
33 Acrylonitrile	53		4.613					ND	U
34 trans-1,2-Dichloroethene	96		4.631					ND	U

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
35 Methyl tert-butyl ether	73		4.656					ND	U
36 Hexane	57		5.045					ND	U
37 1,1-Dichloroethane	63		5.264					ND	U
38 Vinyl acetate	43		5.325					ND	U
39 2-Chloro-1,3-butadiene	53		5.364					ND	U
41 Isopropyl ether	45		5.377					ND	U
42 Tert-butyl ethyl ether	59		5.838					ND	U
44 2,2-Dichloropropane	97		6.000					ND	U
45 cis-1,2-Dichloroethene	96		6.018					ND	U
47 Propionitrile	54		6.022					ND	U
46 2-Butanone (MEK)	43		6.031					ND	U
48 Ethyl acetate	43		6.126					ND	U
49 Chlorobromomethane	128		6.298					ND	U
51 Tetrahydrofuran	42		6.304					ND	U
50 Methacrylonitrile	41		6.375					ND	U
52 Chloroform	83		6.444					ND	U
53 1,1,1-Trichloroethane	97		6.596					ND	U
54 Cyclohexane	56		6.663					ND	U
56 Carbon tetrachloride	117		6.761					ND	U
55 1,1-Dichloropropene	75		6.785					ND	U
58 Benzene	78		6.998					ND	U
57 Isobutyl alcohol	41		7.010					ND	U
59 1,2-Dichloroethane	62		7.071					ND	U
62 n-Heptane	43		7.351					ND	U
61 Tert-amyl methyl ether	73		7.385					ND	U
151 Isooctane	57		7.641					ND	U
64 Trichloroethene	130		7.728					ND	U
63 n-Butanol	56		7.762					ND	U
69 Methyl methacrylate	69		7.804					ND	U
65 Ethyl acrylate	55		7.951					ND	U
66 Methylcyclohexane	83		7.959					ND	U
67 1,2-Dichloropropane	63		7.996					ND	U
70 1,4-Dioxane	88		8.081					ND	U
68 Dibromomethane	93		8.087					ND	U
71 Dichlorobromomethane	83		8.281					ND	U
73 2-Chloroethyl vinyl ether	63		8.586					ND	U
74 cis-1,3-Dichloropropene	75		8.726					ND	U
75 4-Methyl-2-pentanone (MIBK)	43		8.890					ND	U
76 Toluene	91		9.048					ND	U
77 trans-1,3-Dichloropropene	75		9.303					ND	U
78 Ethyl methacrylate	69		9.364					ND	U
79 1,1,2-Trichloroethane	97		9.498					ND	U
80 Tetrachloroethene	164		9.559					ND	U
81 1,3-Dichloropropane	76		9.650					ND	U
82 2-Hexanone	43		9.717					ND	U
83 n-Butyl acetate	43		9.860					ND	U
84 Chlorodibromomethane	129		9.869					ND	U
85 Ethylene Dibromide	107		9.973					ND	U
86 3-Chlorobenzotrifluoride	180		10.445					ND	U
87 Chlorobenzene	112		10.465					ND	U
89 1,1,1,2-Tetrachloroethane	131		10.557					ND	U
90 Ethylbenzene	106		10.563					ND	U

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
91 m-Xylene & p-Xylene	106		10.697					ND	U
88 4-Chlorobenzotrifluoride	180		10.774					ND	U
92 o-Xylene	106		11.074					ND	U
93 Styrene	104		11.098					ND	U
94 Bromoform	173		11.281					ND	U
98 Cyclohexanone	55		11.418					ND	U
97 Isopropylbenzene	105		11.439					ND	U
96 2-Chlorobenzotrifluoride	180		11.521					ND	U
100 Bromobenzene	156		11.755					ND	U
99 1,1,2,2-Tetrachloroethane	83		11.755					ND	U
102 trans-1,4-Dichloro-2-buten	53		11.792					ND	U
101 1,2,3-Trichloropropane	110		11.816					ND	U
103 N-Propylbenzene	120		11.852					ND	U
104 2-Chlorotoluene	126		11.944					ND	U
106 1,3,5-Trimethylbenzene	105		12.041					ND	U
107 4-Chlorotoluene	126		12.071					ND	U
105 3-Chlorotoluene	126		12.212					ND	U
108 tert-Butylbenzene	119		12.351					ND	U
110 1,2,4-Trimethylbenzene	105		12.412					ND	U
111 1,2-dichloro-4-(trifluorom	214		12.463					ND	U
112 sec-Butylbenzene	105		12.576					ND	U
113 1,3-Dichlorobenzene	146		12.692					ND	U
114 4-Isopropyltoluene	119		12.728					ND	U
117 1,2,3-Trimethylbenzene	105		12.763					ND	U
115 1,4-Dichlorobenzene	146		12.795					ND	U
119 Benzyl chloride	91		12.804					ND	U
116 2,4-Dichloro-1-(triflourom	214		12.836					ND	U
118 2,5-Dichlorobenzotrifluori	214		12.878					ND	U
120 n-Butylbenzene	91		13.136					ND	U
121 1,2-Dichlorobenzene	146		13.154					ND	U
122 1,2-Dibromo-3-Chloropropan	75		13.939					ND	U
123 2,4- & 2,5- & 2,6- Dichlor	125		14.125					ND	U
124 1,3,5-Trichlorobenzene	180		14.174					ND	U
125 2,3- & 3,4- Dichlorotoluen	125		14.484					ND	U
126 1,2,4-Trichlorobenzene	180		14.760					ND	U
127 Hexachlorobutadiene	225		14.906					ND	U
128 Naphthalene	128		15.034					ND	U
129 1,2,3-Trichlorobenzene	180		15.259					ND	U
130 2,3,6-Trichlorotoluene	159		16.090					ND	U
131 2,4,5-Trichlorotoluene	159		16.090					ND	U
S 133 Xylenes, Total	106		1.000					ND	
S 154 Total BTEX	106		1.000					ND	
S 134 1,2-Dichloroethene, Total	96		1.000					ND	
S 135 1,3-Dichloropropene, Total	1		0.000					ND	

**QC Flag Legend**

Review Flags

U - Marked Undetected

**Reagents:**

voaWI/SHP5\_00016

Amount Added: 5.00

Units: uL

Run Reagent



Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050106.D

Injection Date: 01-May-2020 17:18:30

Instrument ID: CHHP5

Operator ID: 034635

Lims ID: mb

Worklist Smp#: 6

Client ID:

Purge Vol: 5.000 mL

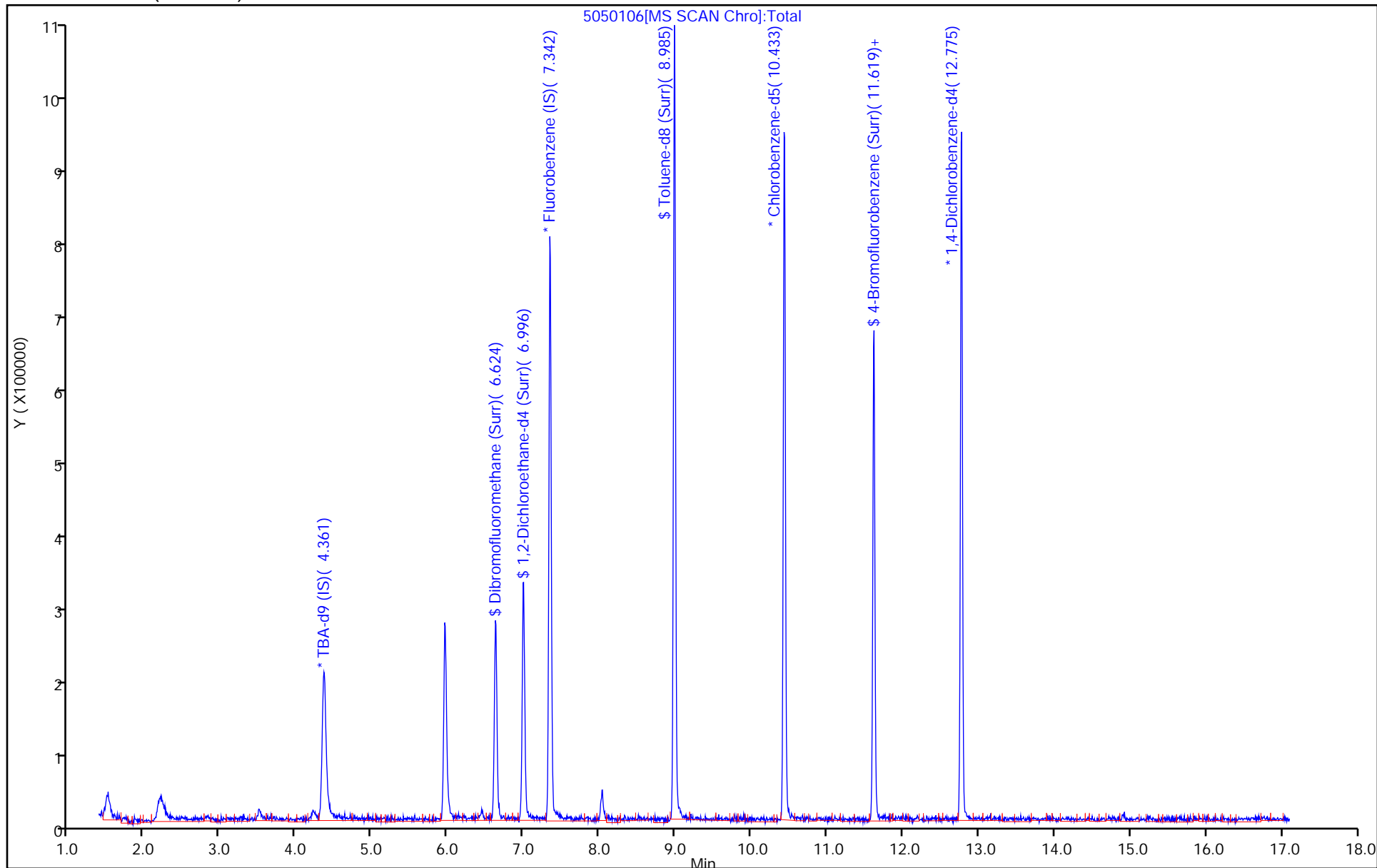
Dil. Factor: 1.0000

ALS Bottle#: 6

Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Pittsburgh  
Recovery Report

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050106.D  
 Lims ID: mb  
 Client ID:  
 Sample Type: MB  
 Inject. Date: 01-May-2020 17:18:30 ALS Bottle#: 6 Worklist Smp#: 6  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: 180-0031777-006  
 Operator ID: 034635 Instrument ID: CHHP5  
 Method: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\MMSVOA\_LL\_CHHP5.m  
 Limit Group: VOA 8260C\_D ICAL  
 Last Update: 03-May-2020 16:03:33 Calib Date: 03-Apr-2020 19:09:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP5\20200403-31442.b\5040310.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: CTX0317

First Level Reviewer: journetp

Date: 01-May-2020 17:52:28

Compound	Amount Added	Amount Recovered	% Rec.
\$ 5 Dibromofluoromethane (Surr)	50.0	41.3	82.67
\$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	39.5	78.95
\$ 7 Toluene-d8 (Surr)	50.0	49.7	99.46
\$ 8 4-Bromofluorobenzene (Surr)	50.0	41.4	82.86

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050106.D

Injection Date: 01-May-2020 17:18:30

Instrument ID: CHHP5

Lims ID: mb

Client ID:

Operator ID: 034635

ALS Bottle#: 6

Worklist Smp#: 6

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

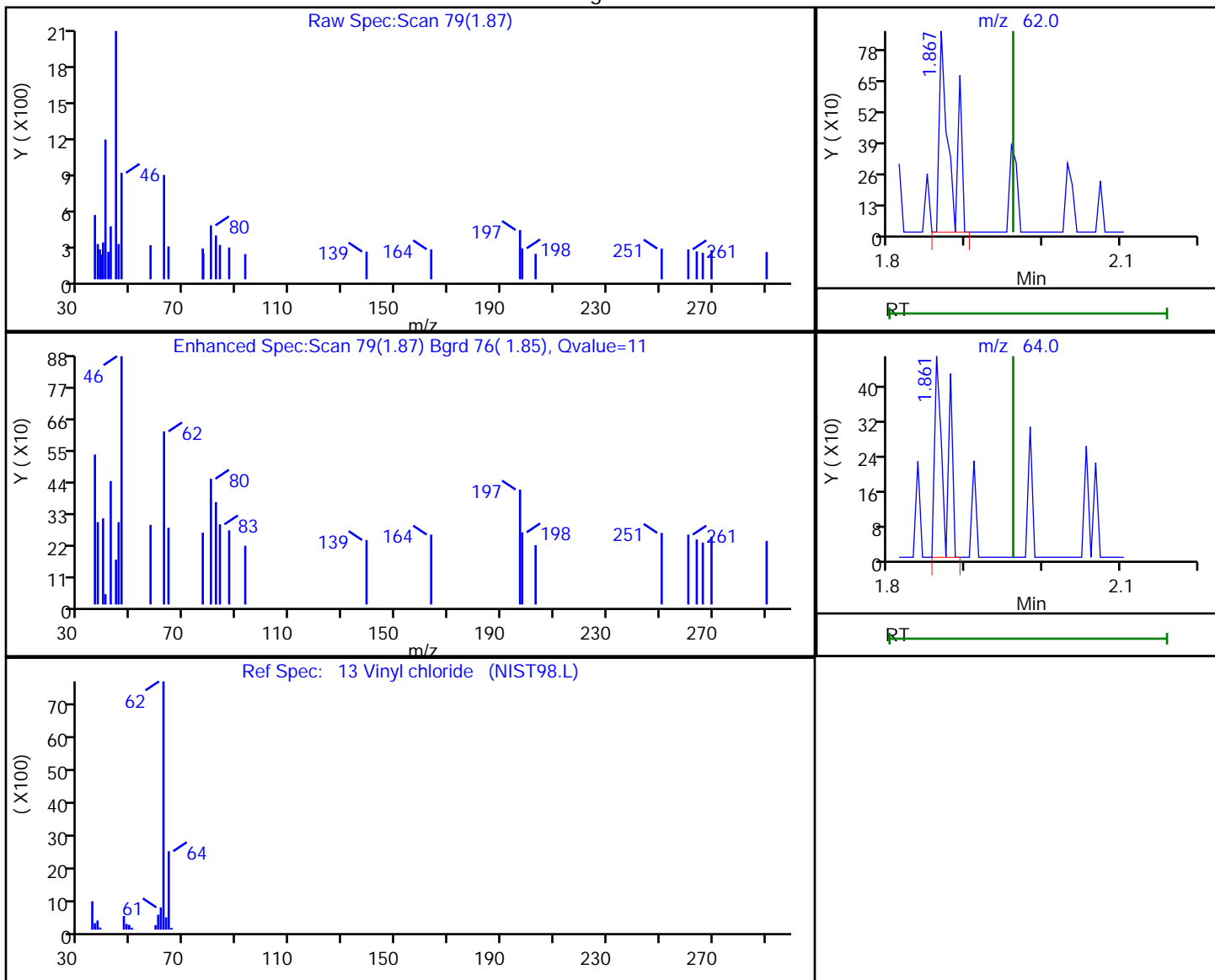
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

13 Vinyl chloride, CAS: 75-01-4

Processing Results



RT	Mass	Response	Amount
1.87	62.00	827	0.118330
1.86	64.00	420	

Reviewer: journetp, 01-May-2020 17:51:52

Audit Action: Marked Compound Undetected

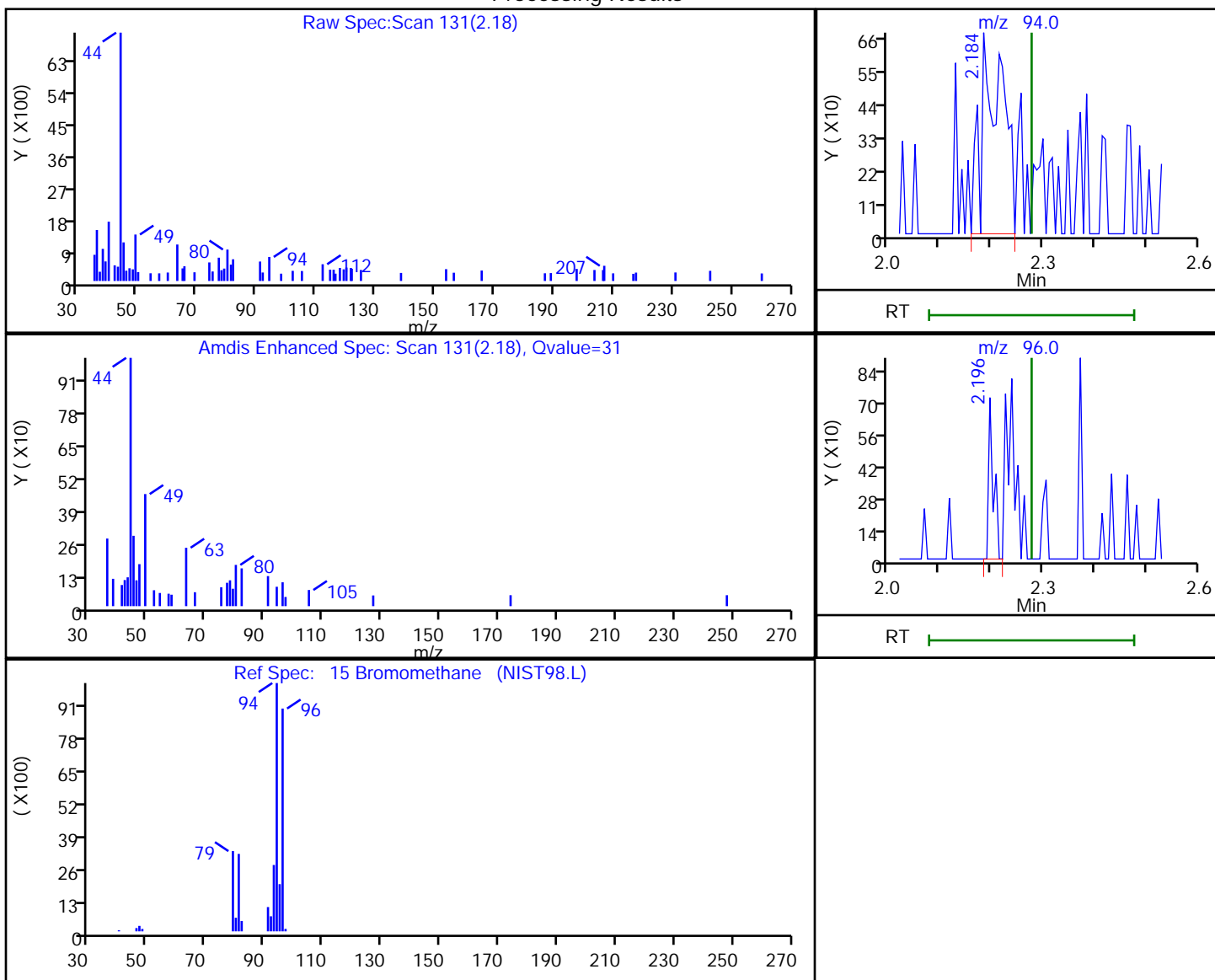
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050106.D  
 Injection Date: 01-May-2020 17:18:30 Instrument ID: CHHP5  
 Lims ID: mb  
 Client ID:  
 Operator ID: 034635 ALS Bottle#: 6 Worklist Smp#: 6  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

15 Bromomethane, CAS: 74-83-9

Processing Results



RT	Mass	Response	Amount
2.18	94.00	1977	0.494054
2.20	96.00	474	

Reviewer: journtp, 01-May-2020 17:51:53  
 Audit Action: Marked Compound Undetected

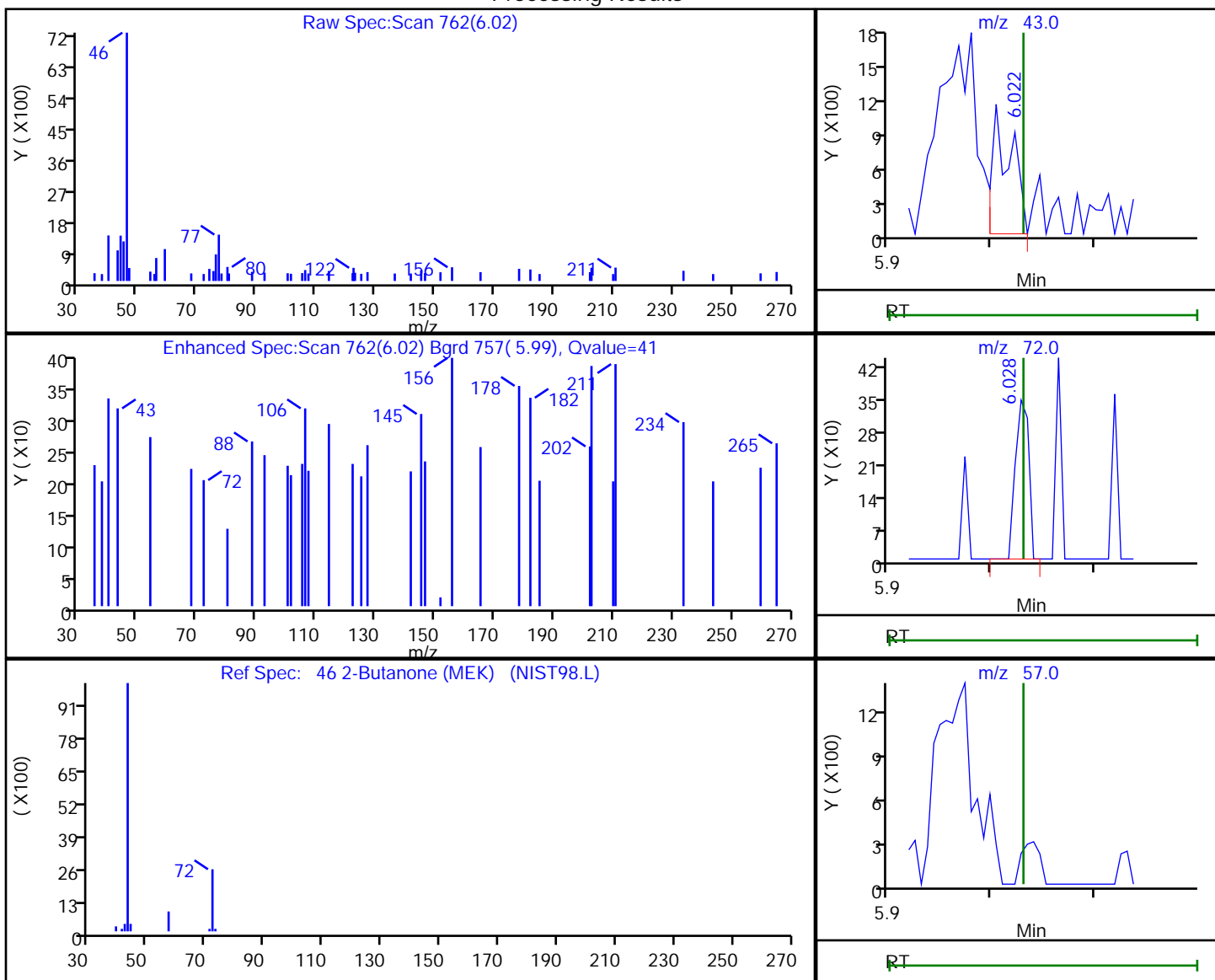
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050106.D  
 Injection Date: 01-May-2020 17:18:30 Instrument ID: CHHP5  
 Lims ID: mb  
 Client ID:  
 Operator ID: 034635 ALS Bottle#: 6 Worklist Smp#: 6  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

46 2-Butanone (MEK), CAS: 78-93-3

Processing Results



RT	Mass	Response	Amount
6.02	43.00	1438	9.152043
6.03	72.00	312	
6.03	57.00	0	

Reviewer: journept, 01-May-2020 17:52:08  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050106.D

Injection Date: 01-May-2020 17:18:30

Instrument ID: CHHP5

Lims ID: mb

Client ID:

Operator ID: 034635

ALS Bottle#: 6

Worklist Smp#: 6

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

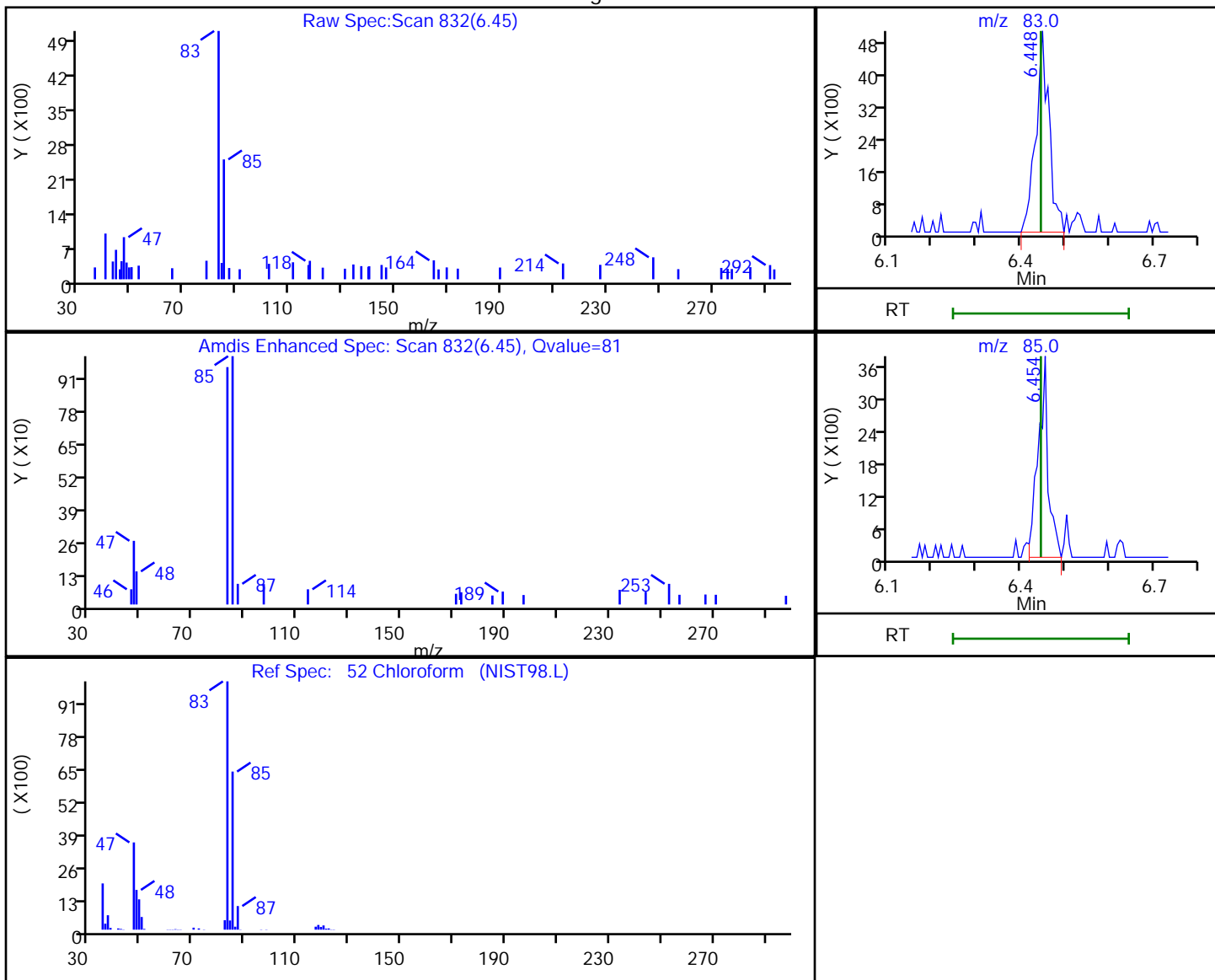
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

52 Chloroform, CAS: 67-66-3

Processing Results



RT	Mass	Response	Amount
6.45	83.00	10529	1.118622
6.45	85.00	5995	

Reviewer: journtp, 01-May-2020 17:52:10

Audit Action: Marked Compound Undetected

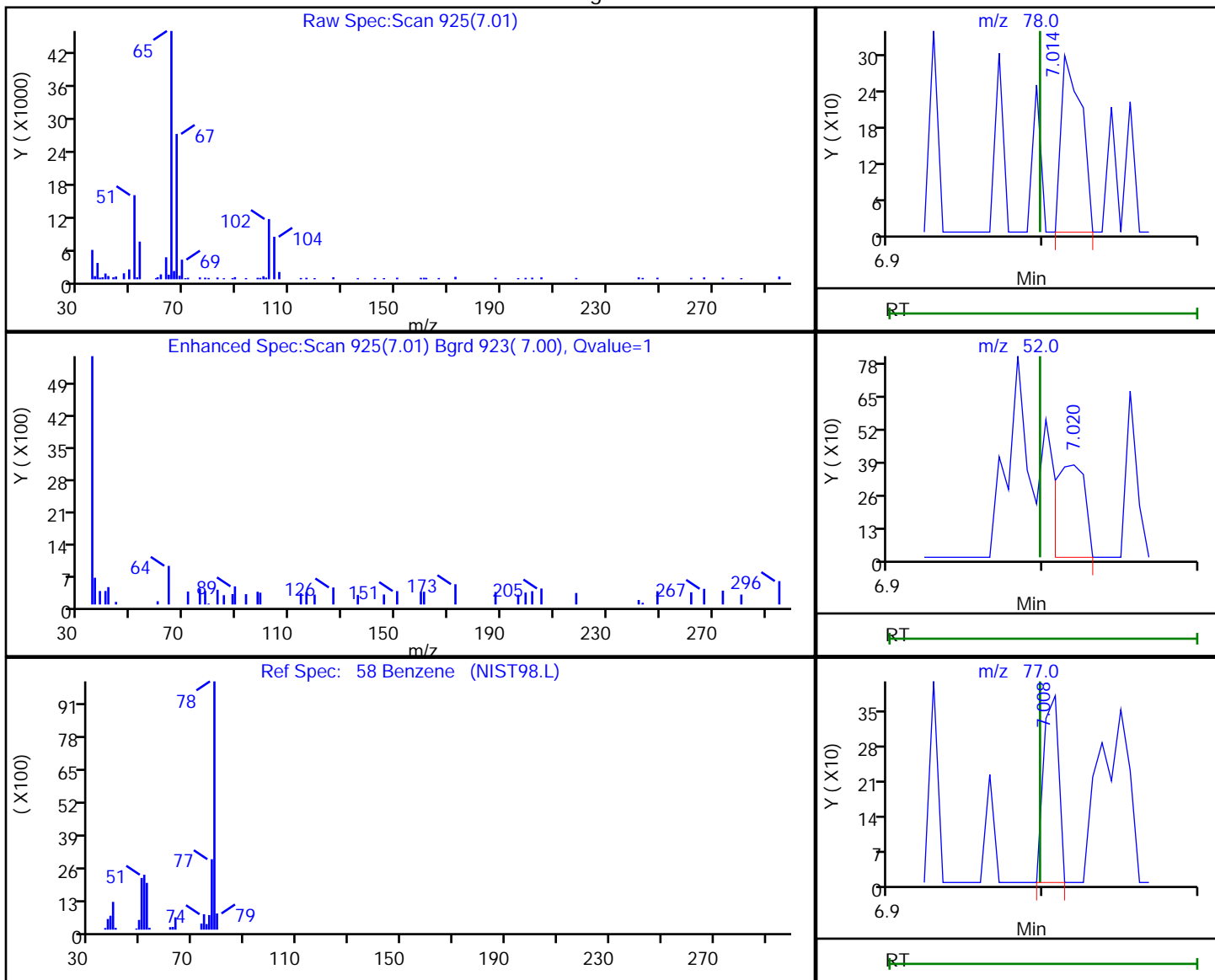
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050106.D  
 Injection Date: 01-May-2020 17:18:30 Instrument ID: CHHP5  
 Lims ID: mb  
 Client ID:  
 Operator ID: 034635 ALS Bottle#: 6 Worklist Smp#: 6  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

58 Benzene, CAS: 71-43-2

Processing Results



RT	Mass	Response	Amount
7.01	78.00	269	0.013585
7.02	52.00	501	
7.01	77.00	258	

Reviewer: journept, 01-May-2020 17:52:11  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050106.D

Injection Date: 01-May-2020 17:18:30

Instrument ID: CHHP5

Lims ID: mb

Client ID:

Operator ID: 034635

ALS Bottle#: 6

Worklist Smp#: 6

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

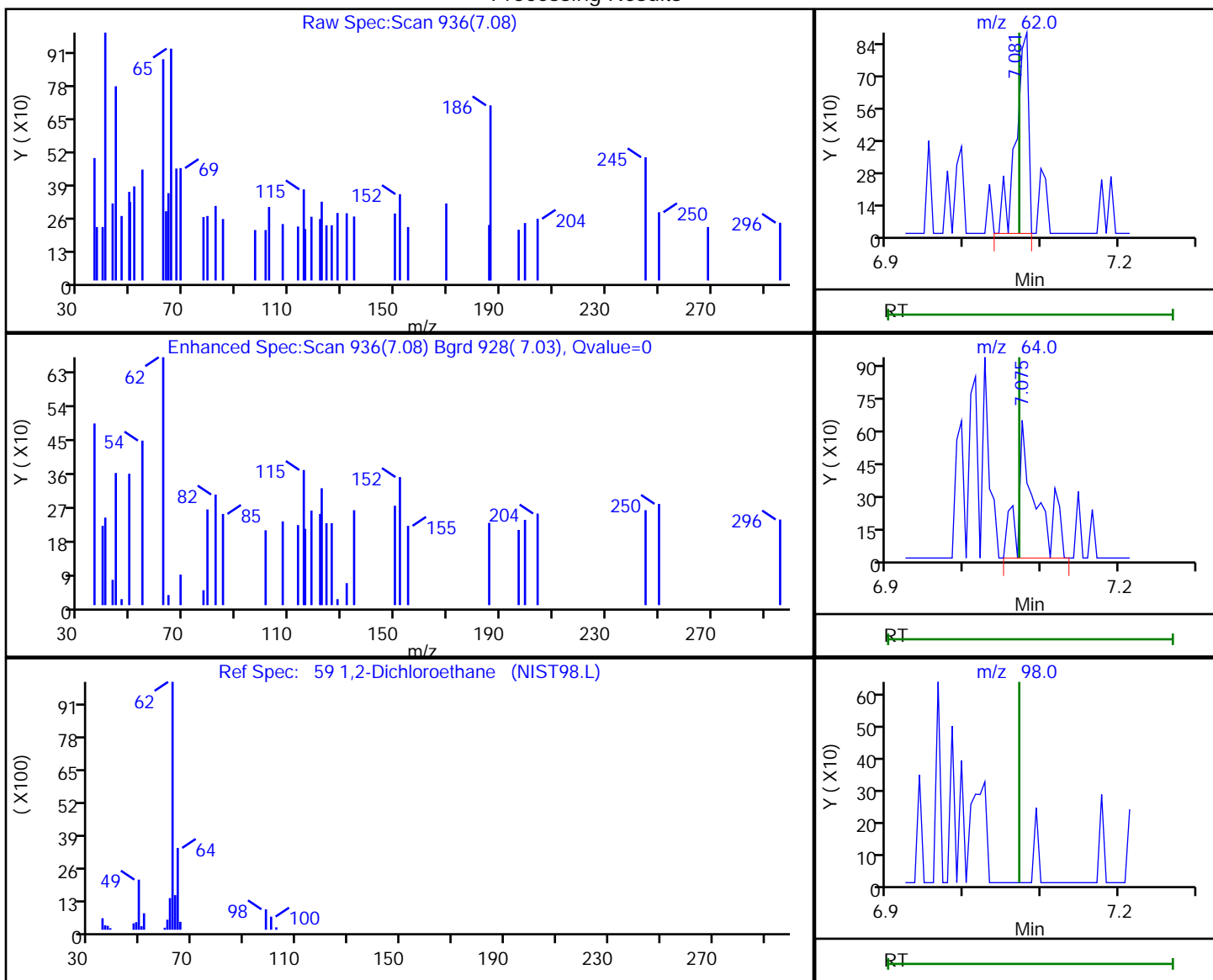
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

59 1,2-Dichloroethane, CAS: 107-06-2

Processing Results



RT	Mass	Response	Amount
7.08	62.00	998	0.132556
7.07	64.00	1096	
7.07	98.00	0	

Reviewer: journept, 01-May-2020 17:52:11

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID



Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050106.D

Injection Date: 01-May-2020 17:18:30

Instrument ID: CHHP5

Lims ID: mb

Client ID:

Operator ID: 034635

ALS Bottle#: 6

Worklist Smp#: 6

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

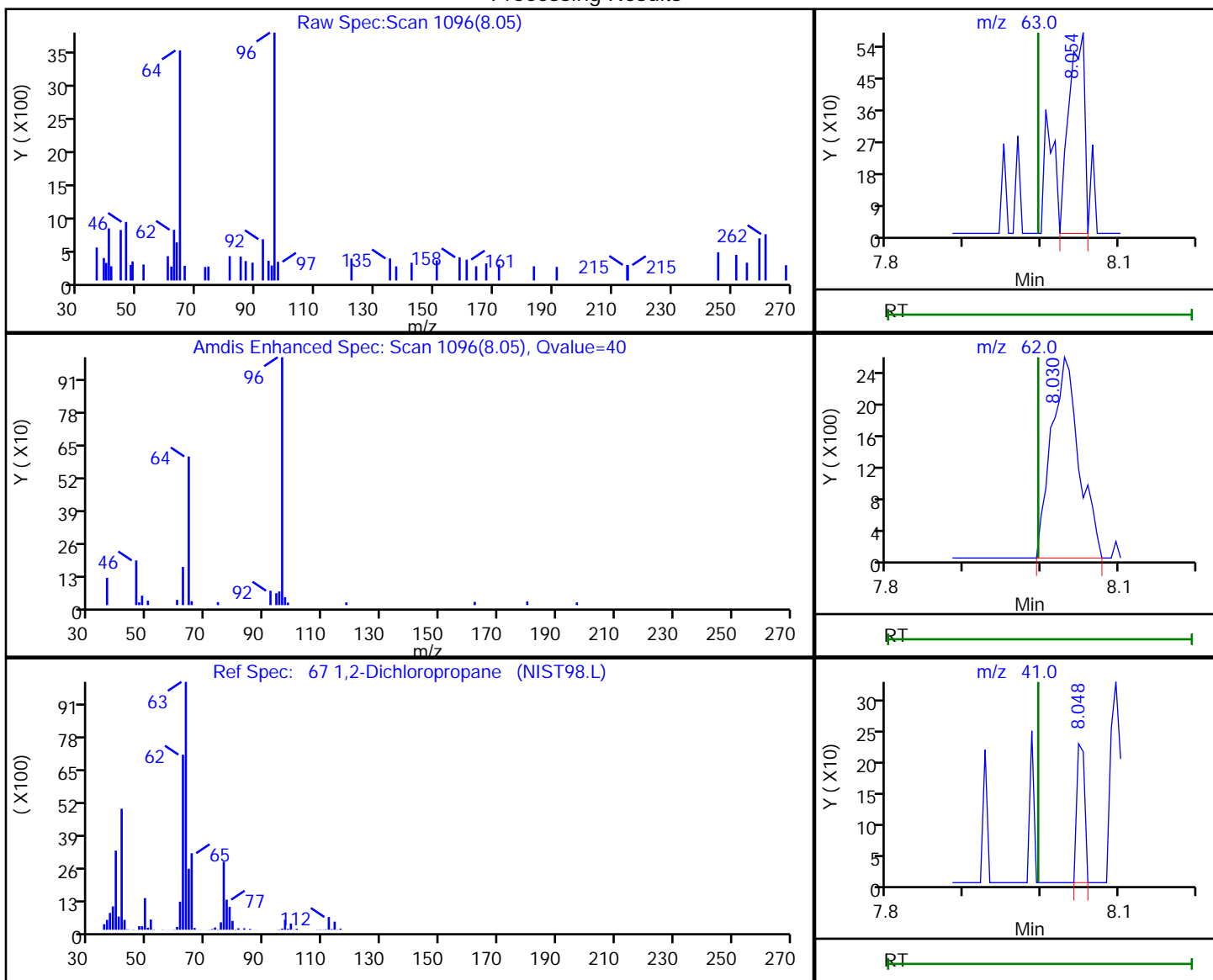
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

67 1,2-Dichloropropane, CAS: 78-87-5

Processing Results



RT	Mass	Response	Amount
8.05	63.00	804	0.152123
8.03	62.00	6374	
8.05	41.00	161	

Reviewer: journept, 01-May-2020 17:52:13

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050106.D

Injection Date: 01-May-2020 17:18:30

Instrument ID: CHHP5

Lims ID: mb

Client ID:

Operator ID: 034635

ALS Bottle#: 6

Worklist Smp#: 6

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

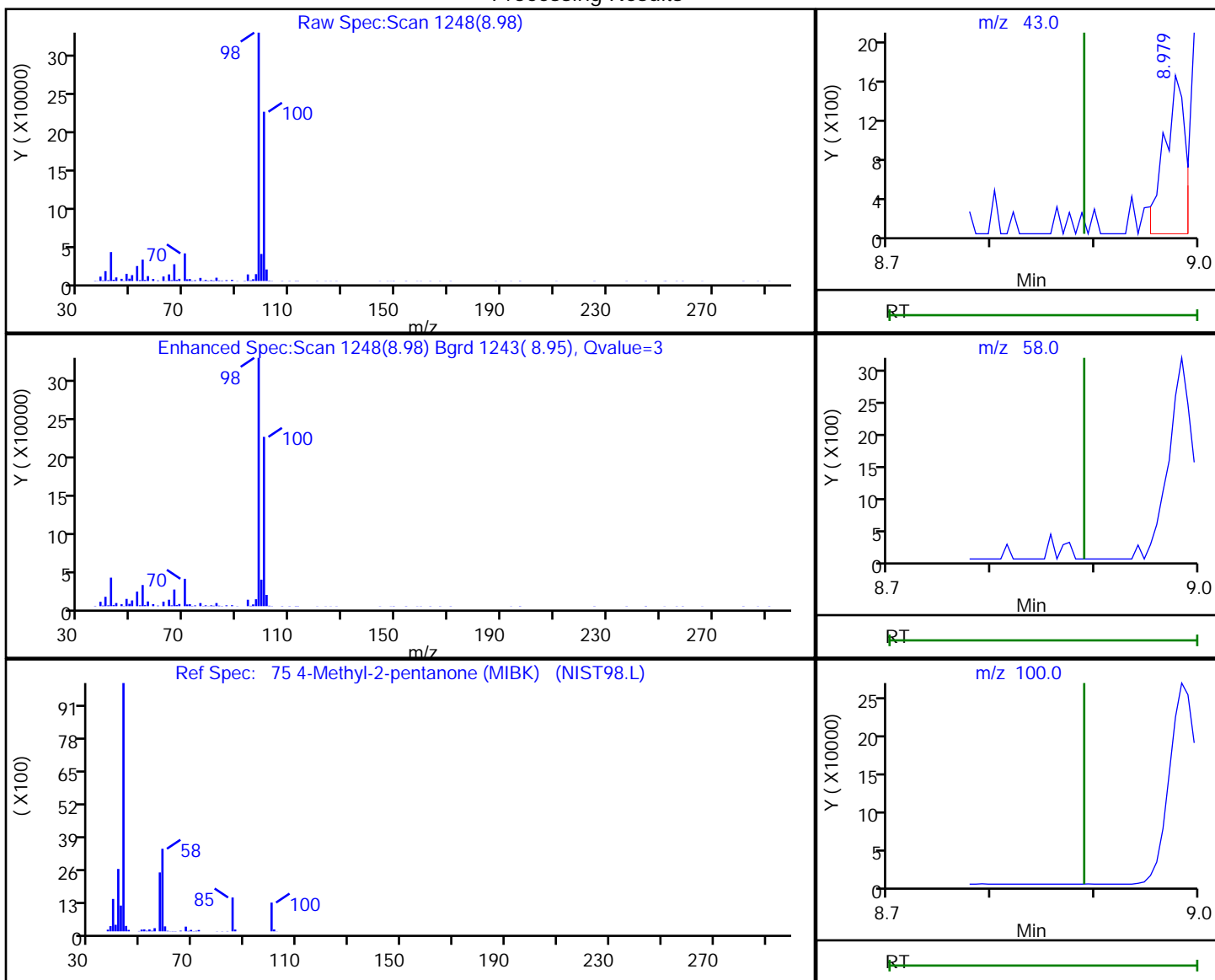
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

75 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Processing Results



RT	Mass	Response	Amount
8.98	43.00	2229	15.916349
8.98	58.00	5553	
8.98	100.00	520203	

Reviewer: journept, 01-May-2020 17:52:14

Audit Action: Marked Compound Undetected

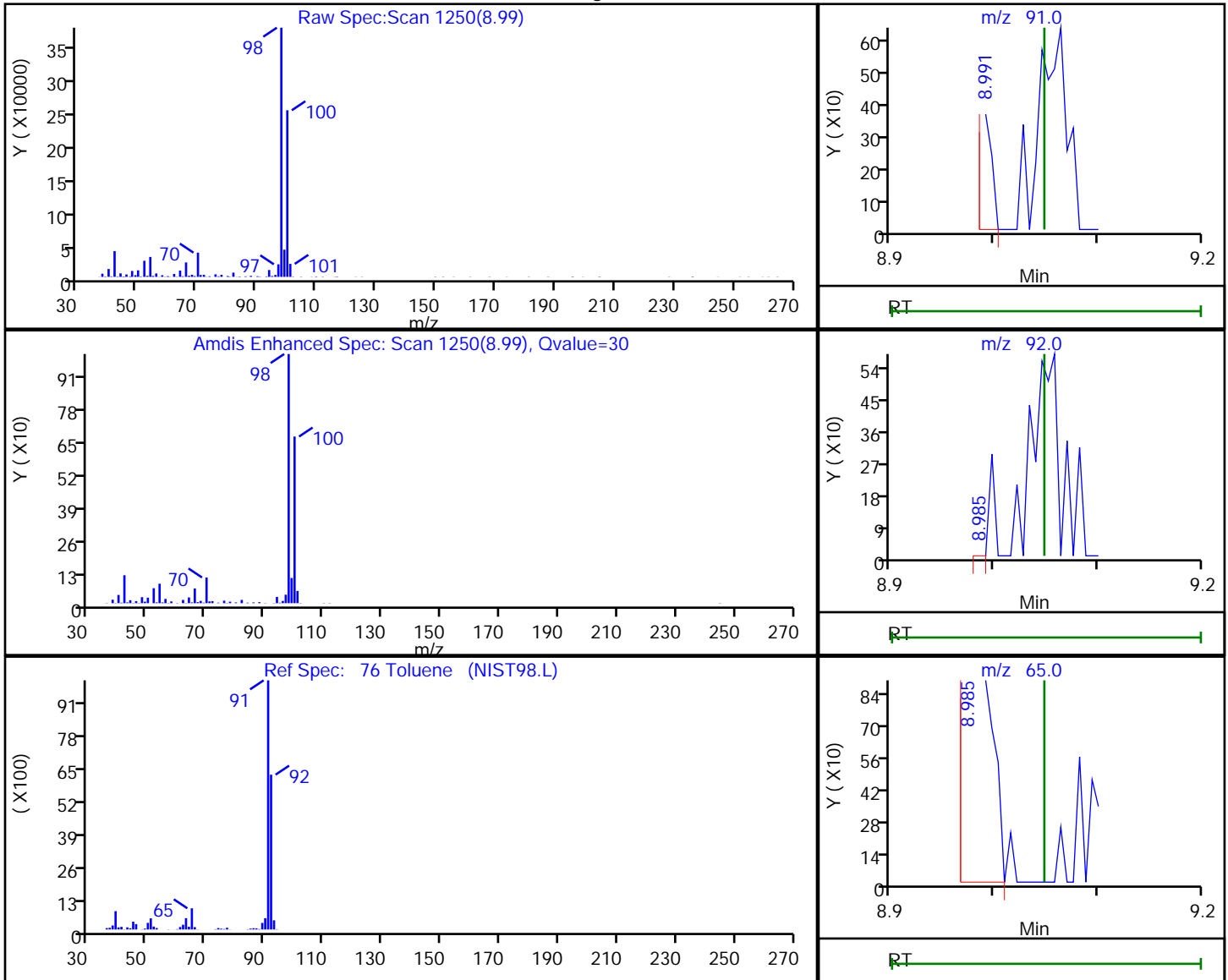
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050106.D  
 Injection Date: 01-May-2020 17:18:30 Instrument ID: CHHP5  
 Lims ID: mb  
 Client ID:  
 Operator ID: 034635 ALS Bottle#: 6 Worklist Smp#: 6  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

76 Toluene, CAS: 108-88-3

Processing Results



RT	Mass	Response	Amount
8.99	91.00	218	0.011787
8.98	92.00	88	
8.98	65.00	1987	

Reviewer: journept, 01-May-2020 17:52:14  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050106.D

Injection Date: 01-May-2020 17:18:30 Instrument ID: CHHP5

Lims ID: mb

Client ID:

Operator ID: 034635 ALS Bottle#: 6 Worklist Smp#: 6

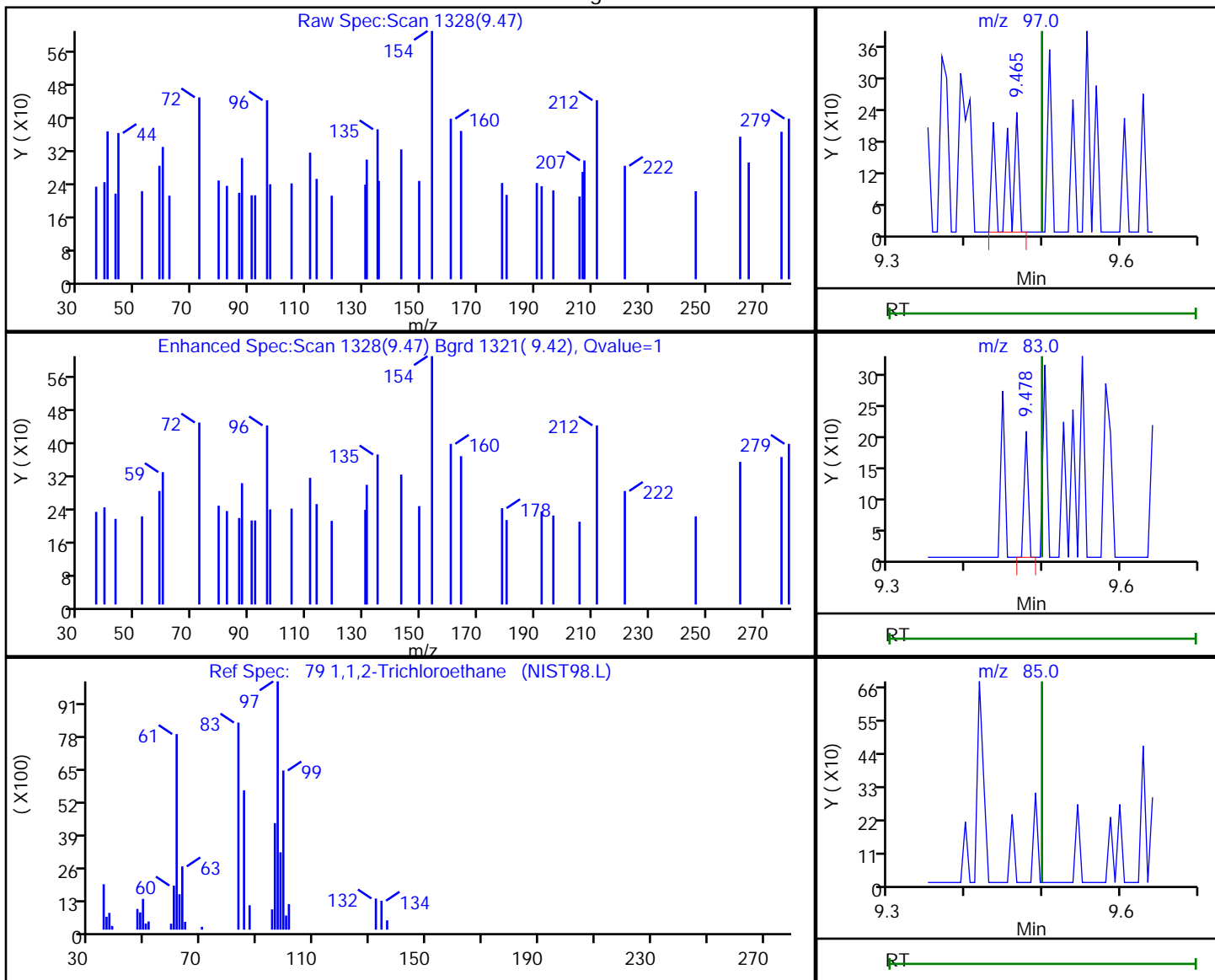
Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm) Detector: MS SCAN

79 1,1,2-Trichloroethane, CAS: 79-00-5

Processing Results



RT	Mass	Response	Amount
9.47	97.00	236	0.054895
9.48	83.00	74	
9.50	85.00	0	

Reviewer: journetp, 01-May-2020 17:52:14

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050106.D

Injection Date: 01-May-2020 17:18:30 Instrument ID: CHHP5

Lims ID: mb

Client ID:

Operator ID: 034635 ALS Bottle#: 6 Worklist Smp#: 6

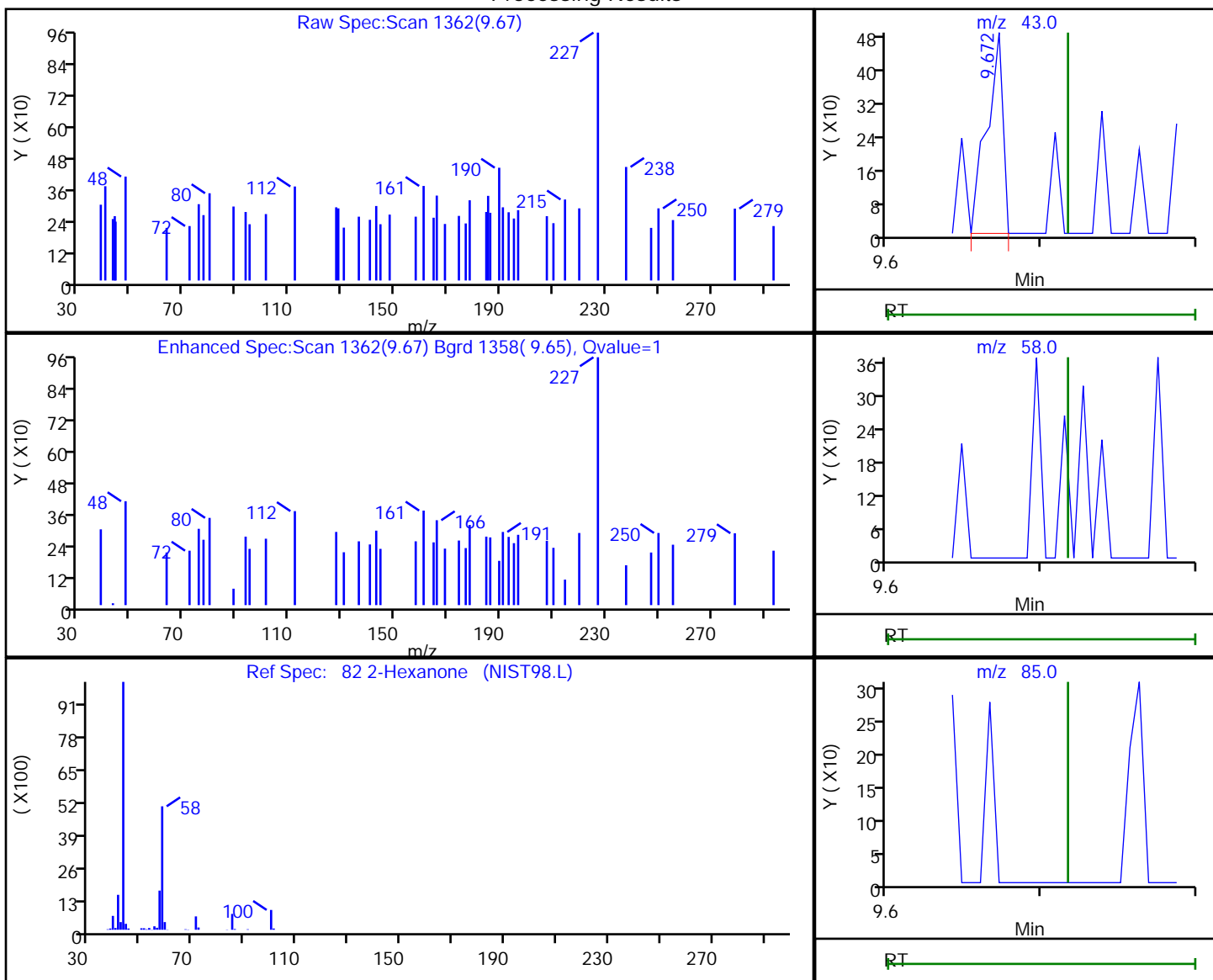
Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm) Detector: MS SCAN

82 2-Hexanone, CAS: 591-78-6

Processing Results



RT	Mass	Response	Amount
9.67	43.00	351	14.101348
9.72	58.00	0	
9.72	85.00	0	

Reviewer: journetp, 01-May-2020 17:52:15  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050106.D

Injection Date: 01-May-2020 17:18:30

Instrument ID: CHHP5

Lims ID: mb

Client ID:

Operator ID: 034635

ALS Bottle#: 6

Worklist Smp#: 6

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

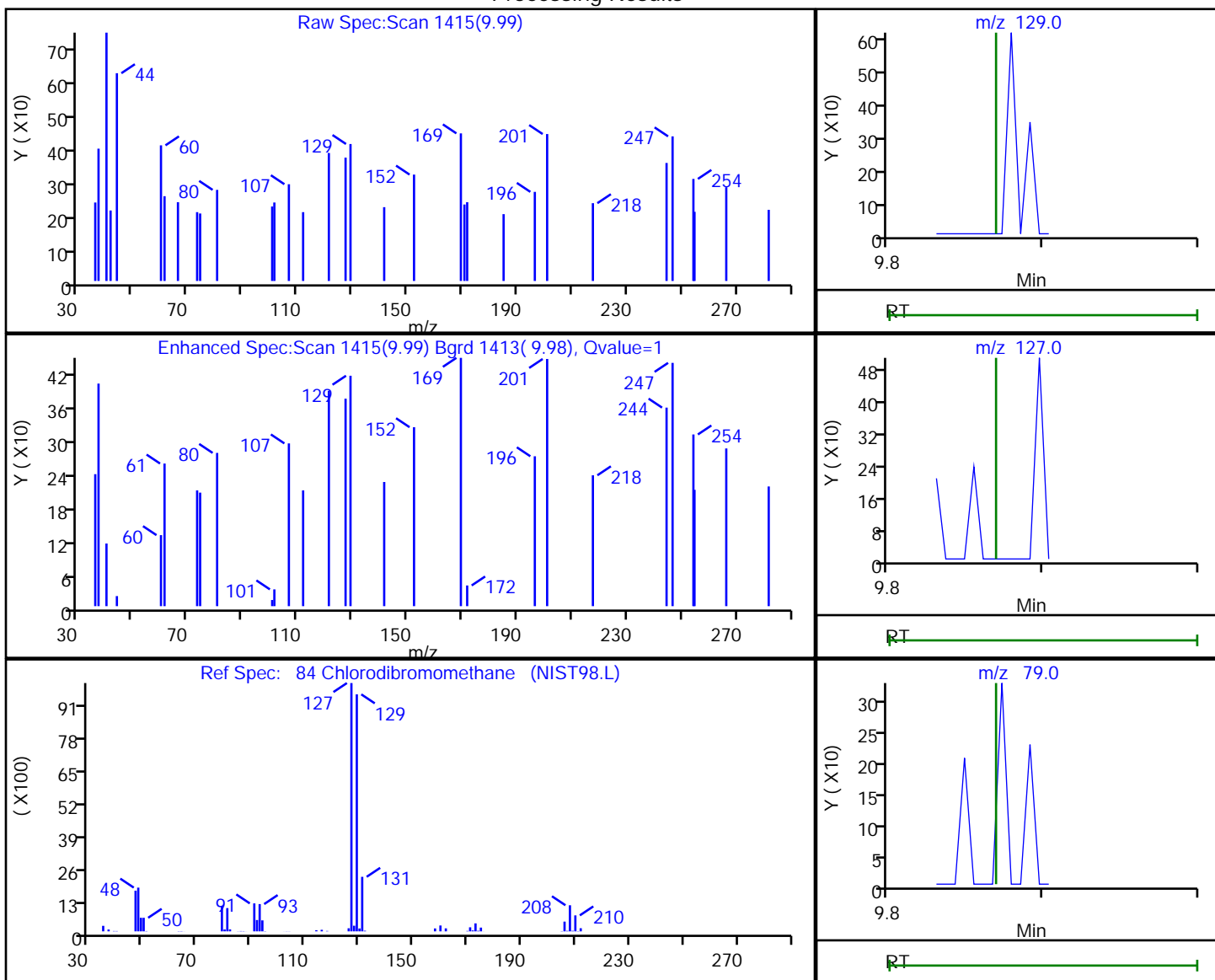
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

84 Chlorodibromomethane, CAS: 124-48-1

Processing Results



RT	Mass	Response	Amount
9.99	129.00	150	0.041218
9.99	127.00	245	
9.87	79.00	0	

Reviewer: journeyp, 01-May-2020 17:52:15  
Audit Action: Marked Compound Undetected

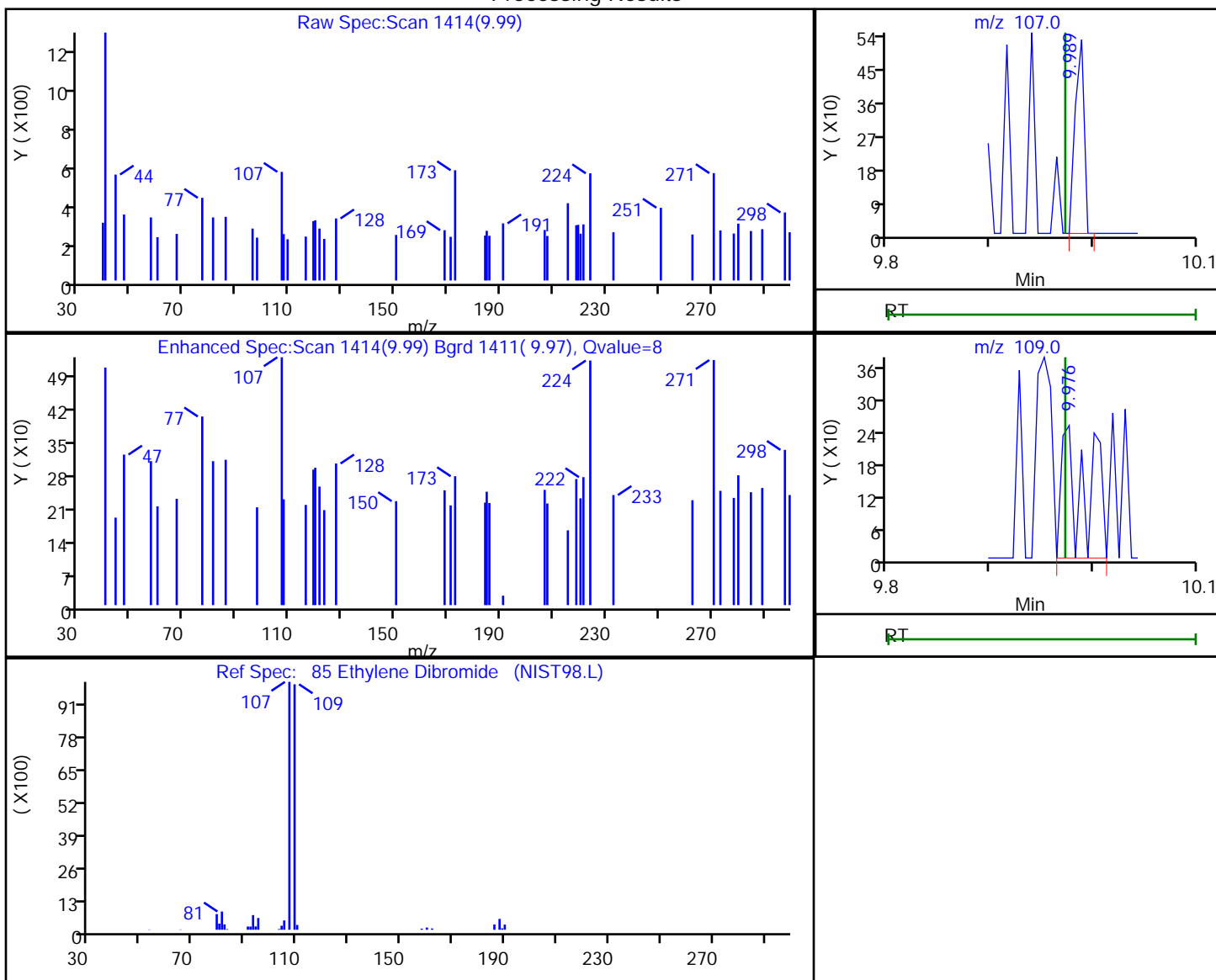
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050106.D  
 Injection Date: 01-May-2020 17:18:30 Instrument ID: CHHP5  
 Lims ID: mb  
 Client ID:  
 Operator ID: 034635 ALS Bottle#: 6 Worklist Smp#: 6  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

85 Ethylene Dibromide, CAS: 106-93-4

Processing Results



RT	Mass	Response	Amount
9.99	107.00	319	0.079318
9.98	109.00	407	

Reviewer: journetp, 01-May-2020 17:52:15  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050106.D

Injection Date: 01-May-2020 17:18:30

Instrument ID: CHHP5

Lims ID: mb

Client ID:

Operator ID: 034635

ALS Bottle#: 6

Worklist Smp#: 6

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

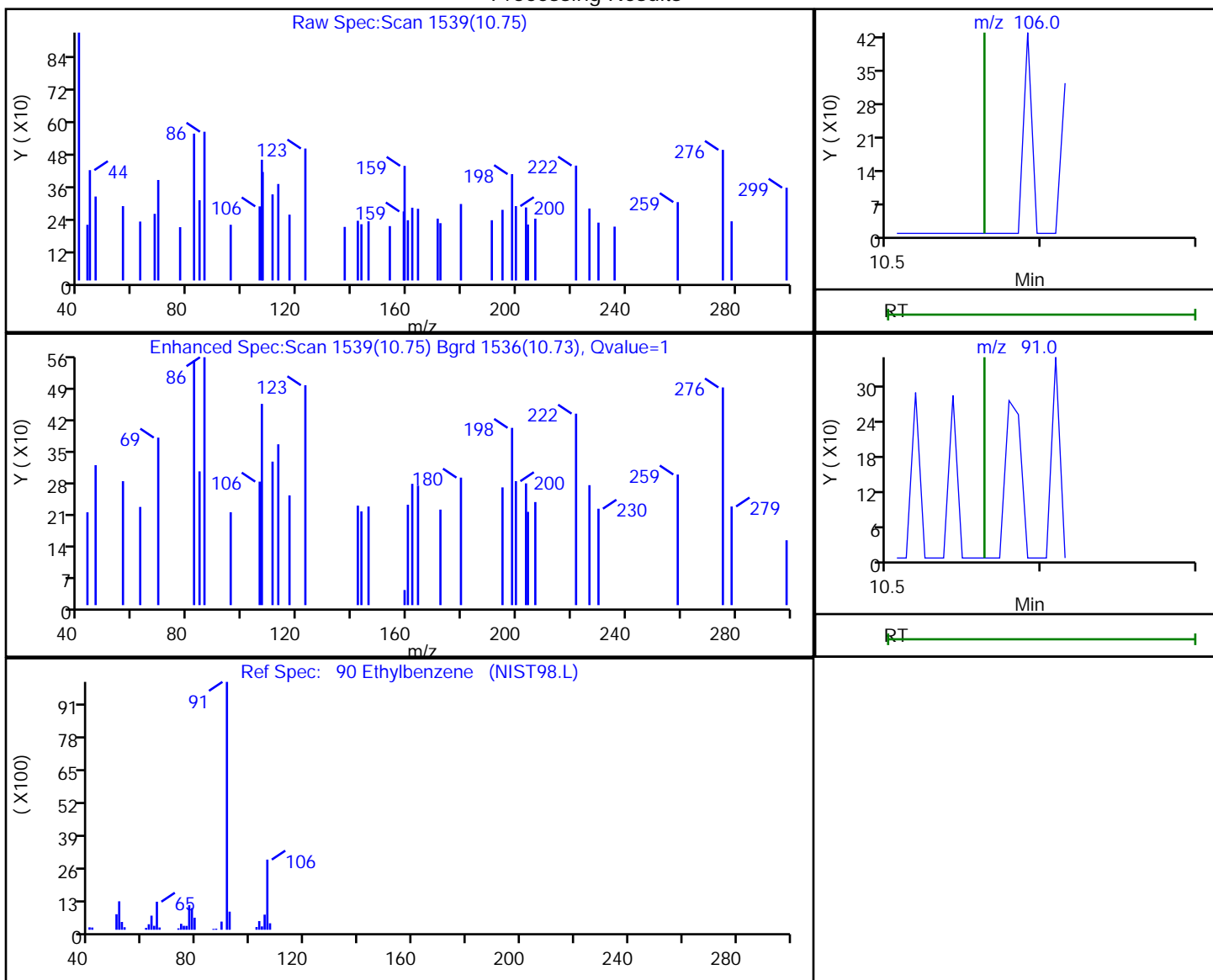
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

90 Ethylbenzene, CAS: 100-41-4

Processing Results



RT	Mass	Response	Amount
10.75	106.00	184	0.029885
10.74	91.00	114	

Reviewer: journetp, 01-May-2020 17:52:15

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

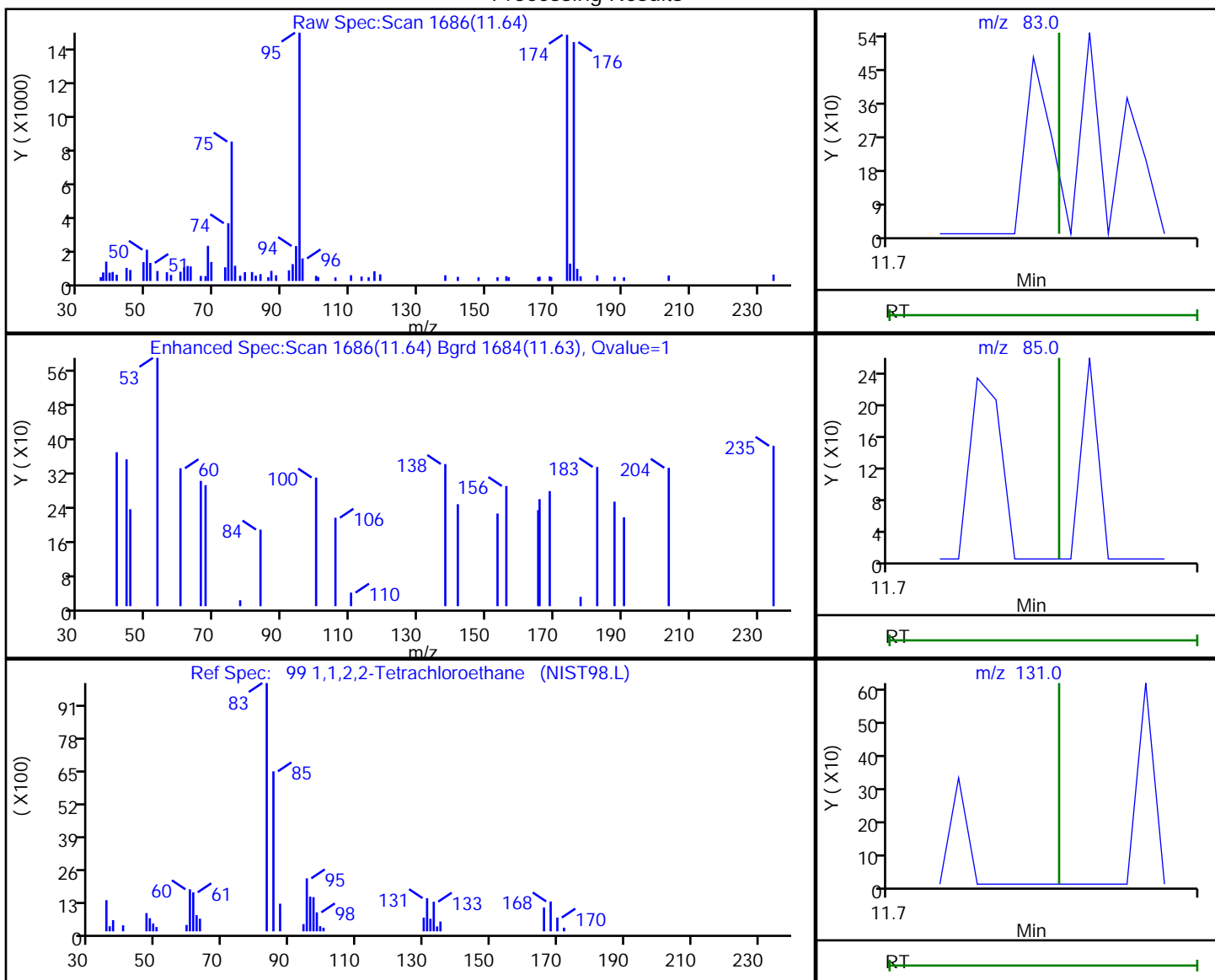


Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050106.D  
 Injection Date: 01-May-2020 17:18:30 Instrument ID: CHHP5  
 Lims ID: mb  
 Client ID:  
 Operator ID: 034635 ALS Bottle#: 6 Worklist Smp#: 6  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

99 1,1,2,2-Tetrachloroethane, CAS: 79-34-5

Processing Results



RT	Mass	Response	Amount
11.64	83.00	147	0.033119
11.65	85.00	215	
11.64	131.00	244	

Reviewer: journept, 01-May-2020 17:52:16  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050106.D

Injection Date: 01-May-2020 17:18:30

Instrument ID: CHHP5

Lims ID: mb

Client ID:

Operator ID: 034635

ALS Bottle#: 6

Worklist Smp#: 6

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

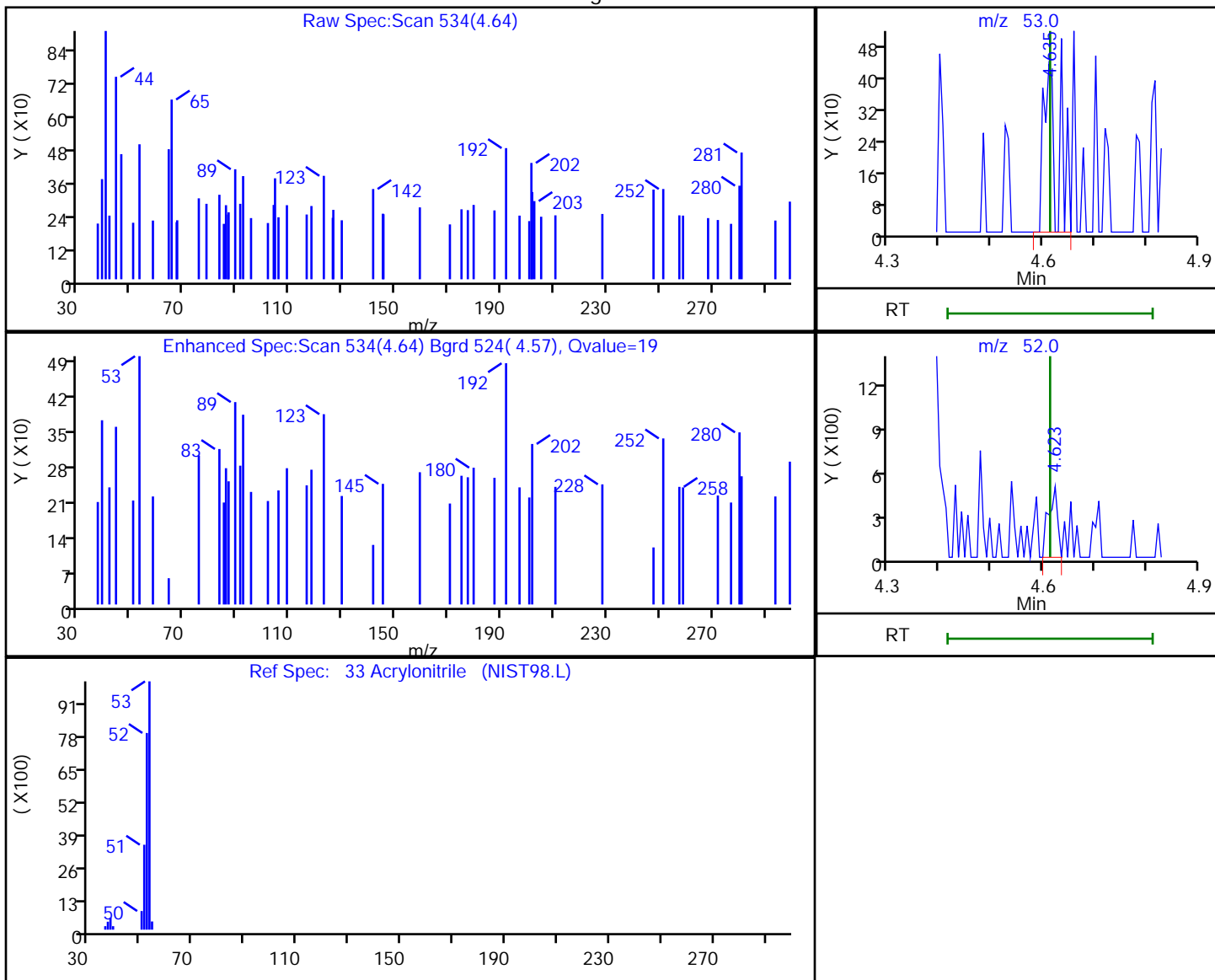
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

33 Acrylonitrile, CAS: 107-13-1

Processing Results



RT	Mass	Response	Amount
4.64	53.00	829	0.398378
4.62	52.00	584	

Reviewer: journetp, 01-May-2020 17:52:05

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: \_\_\_\_\_ Lab Sample ID: MB 180-314475/5  
 Matrix: Water Lab File ID: 5050405.D  
 Analysis Method: EPA 8260C Date Collected: \_\_\_\_\_  
 Sample wt/vol: 5 (mL) Date Analyzed: 05/04/2020 09:39  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-624 ID: 0.18 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 314475 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	ND		1.0	0.90
75-01-4	Vinyl chloride	ND		1.0	0.40
74-83-9	Bromomethane	ND		1.0	0.89
75-00-3	Chloroethane	ND		1.0	0.90
75-35-4	1,1-Dichloroethene	ND		1.0	0.55
67-64-1	Acetone	ND		5.0	3.4
75-15-0	Carbon disulfide	ND		1.0	0.88
75-09-2	Methylene Chloride	ND		1.0	0.89
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.67
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.59
75-34-3	1,1-Dichloroethane	ND		1.0	0.31
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.71
74-97-5	Bromochloromethane	ND		1.0	0.63
78-93-3	2-Butanone (MEK)	ND		5.0	2.6
67-66-3	Chloroform	ND		1.0	0.60
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.60
56-23-5	Carbon tetrachloride	ND		1.0	0.88
71-43-2	Benzene	ND		1.0	0.60
107-06-2	1,2-Dichloroethane	ND		1.0	0.57
79-01-6	Trichloroethene	ND		1.0	0.69
78-87-5	1,2-Dichloropropane	ND		1.0	0.66
75-27-4	Bromodichloromethane	ND		1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	3.1
108-88-3	Toluene	ND		1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.58
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.45
127-18-4	Tetrachloroethene	ND		1.0	0.47
591-78-6	2-Hexanone	ND		5.0	3.3
124-48-1	Dibromochloromethane	ND		1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	ND		1.0	0.50
108-90-7	Chlorobenzene	ND		1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.57
100-41-4	Ethylbenzene	ND		1.0	0.51
1330-20-7	Xylenes, Total	ND		2.0	0.89
100-42-5	Styrene	ND		1.0	0.47

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: \_\_\_\_\_ Lab Sample ID: MB 180-314475/5  
 Matrix: Water Lab File ID: 5050405.D  
 Analysis Method: EPA 8260C Date Collected: \_\_\_\_\_  
 Sample wt/vol: 5 (mL) Date Analyzed: 05/04/2020 09:39  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-624 ID: 0.18 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 314475 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	ND		1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.60
107-13-1	Acrylonitrile	ND		20	7.8

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	82		62-146
2037-26-5	Toluene-d8 (Surr)	102		75-120
460-00-4	4-Bromofluorobenzene (Surr)	90		64-120
1868-53-7	Dibromofluoromethane (Surr)	89		71-132

Eurofins TestAmerica, Pittsburgh  
Target Compound Quantitation Report

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050405.D  
 Lims ID: mb  
 Client ID:  
 Sample Type: MB  
 Inject. Date: 04-May-2020 09:39:30 ALS Bottle#: 5 Worklist Smp#: 5  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: 180-0031789-005  
 Operator ID: 034635 Instrument ID: CHHP5  
 Method: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\MMSVOA\_LL\_CHHP5.m  
 Limit Group: VOA 8260C\_D ICAL  
 Last Update: 04-May-2020 11:25:29 Calib Date: 03-Apr-2020 19:09:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICAL File: \\chromna\Pittsburgh\ChromData\CHHP5\20200403-31442.b\5040310.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: CTX0327

First Level Reviewer: journetp Date: 04-May-2020 11:05:27

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.370	4.363	0.007	0	376101	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.345	7.344	0.001	100	971137	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.436	10.434	0.002	85	249306	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.772	12.776	-0.004	95	377745	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.633	6.626	0.007	93	247317	50.0	44.6	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.998	6.991	0.007	0	321291	50.0	40.9	
\$ 7 Toluene-d8 (Surr)	98	8.988	8.986	0.002	93	1032597	50.0	51.2	
\$ 8 4-Bromofluorobenzene (Surr	95	11.616	11.614	0.002	91	342189	50.0	44.9	
11 Dichlorodifluoromethane	85		1.638					ND	
12 Chloromethane	50		1.844					ND	
14 Butadiene	39		1.966					ND	U
13 Vinyl chloride	62		1.966					ND	U
15 Bromomethane	94		2.288					ND	U
16 Chloroethane	64		2.416					ND	U
17 Dichlorofluoromethane	67		2.720					ND	U
18 Trichlorofluoromethane	101		2.726					ND	U
19 Ethanol	45		2.792					ND	U
20 Ethyl ether	59		3.104					ND	
21 Acrolein	56		3.292					ND	
22 1,1-Dichloroethene	96		3.414					ND	
23 1,1,2-Trichloro-1,2,2-trif	101		3.469					ND	
24 Acetone	43	3.513	3.511	0.002	99	28969		8.63	
25 Iodomethane	142		3.639					ND	U
26 Carbon disulfide	76		3.706					ND	U
27 Isopropyl alcohol	45		3.832					ND	U
29 Acetonitrile	41		3.979					ND	U
28 3-Chloro-1-propene	76		3.992					ND	U
30 Methyl acetate	43		4.016					ND	
31 Methylene Chloride	84		4.217					ND	U
32 2-Methyl-2-propanol	59		4.503					ND	U
33 Acrylonitrile	53		4.612					ND	U
34 trans-1,2-Dichloroethene	96		4.631					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
35 Methyl tert-butyl ether	73		4.655					ND	
36 Hexane	57		5.056					ND	U
37 1,1-Dichloroethane	63		5.263					ND	
38 Vinyl acetate	43		5.324					ND	
39 2-Chloro-1,3-butadiene	53		5.364					ND	
41 Isopropyl ether	45		5.377					ND	U
42 Tert-butyl ethyl ether	59		5.838					ND	
44 2,2-Dichloropropane	97		6.005					ND	U
45 cis-1,2-Dichloroethene	96		6.018					ND	U
47 Propionitrile	54		6.022					ND	U
46 2-Butanone (MEK)	43		6.036					ND	U
48 Ethyl acetate	43		6.126					ND	U
49 Chlorobromomethane	128		6.297					ND	U
51 Tetrahydrofuran	42		6.310					ND	U
50 Methacrylonitrile	41		6.375					ND	U
52 Chloroform	83		6.443					ND	U
53 1,1,1-Trichloroethane	97		6.602					ND	
54 Cyclohexane	56		6.662					ND	
56 Carbon tetrachloride	117		6.766					ND	
55 1,1-Dichloropropene	75		6.784					ND	U
58 Benzene	78		7.003					ND	U
57 Isobutyl alcohol	41		7.003					ND	U
59 1,2-Dichloroethane	62		7.076					ND	U
62 n-Heptane	43		7.362					ND	U
61 Tert-amyl methyl ether	73		7.385					ND	U
151 Isooctane	57		7.641					ND	U
64 Trichloroethene	130		7.727					ND	
63 n-Butanol	56		7.762					ND	U
69 Methyl methacrylate	69		7.804					ND	
65 Ethyl acrylate	55		7.951					ND	U
66 Methylcyclohexane	83		7.958					ND	
67 1,2-Dichloropropane	63		8.001					ND	U
70 1,4-Dioxane	88		8.092					ND	U
68 Dibromomethane	93		8.092					ND	
71 Dichlorobromomethane	83		8.287					ND	
73 2-Chloroethyl vinyl ether	63		8.585					ND	U
74 cis-1,3-Dichloropropene	75		8.731					ND	U
75 4-Methyl-2-pentanone (MIBK)	43		8.889					ND	U
76 Toluene	91		9.053					ND	U
77 trans-1,3-Dichloropropene	75		9.303					ND	U
78 Ethyl methacrylate	69		9.364					ND	U
79 1,1,2-Trichloroethane	97		9.497					ND	U
80 Tetrachloroethene	164		9.564					ND	U
81 1,3-Dichloropropane	76		9.656					ND	U
82 2-Hexanone	43		9.716					ND	U
83 n-Butyl acetate	43		9.860					ND	U
84 Chlorodibromomethane	129		9.868					ND	U
85 Ethylene Dibromide	107		9.978					ND	U
86 3-Chlorobenzotrifluoride	180		10.445					ND	U
87 Chlorobenzene	112		10.465					ND	U
89 1,1,1,2-Tetrachloroethane	131		10.562					ND	U
90 Ethylbenzene	106		10.562					ND	U

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
91 m-Xylene & p-Xylene	106		10.696					ND	U
88 4-Chlorobenzotrifluoride	180		10.774					ND	U
92 o-Xylene	106		11.079					ND	U
93 Styrene	104		11.097					ND	U
94 Bromoform	173		11.280					ND	U
98 Cyclohexanone	55		11.418					ND	U
97 Isopropylbenzene	105		11.444					ND	U
96 2-Chlorobenzotrifluoride	180		11.521					ND	U
100 Bromobenzene	156		11.754					ND	U
99 1,1,2,2-Tetrachloroethane	83		11.760					ND	U
102 trans-1,4-Dichloro-2-buten	53		11.797					ND	U
101 1,2,3-Trichloropropane	110		11.815					ND	U
103 N-Propylbenzene	120		11.858					ND	U
104 2-Chlorotoluene	126		11.949					ND	U
106 1,3,5-Trimethylbenzene	105		12.040					ND	U
107 4-Chlorotoluene	126		12.071					ND	U
105 3-Chlorotoluene	126		12.212					ND	U
108 tert-Butylbenzene	119		12.357					ND	U
110 1,2,4-Trimethylbenzene	105		12.411					ND	U
111 1,2-dichloro-4-(trifluorom	214		12.463					ND	U
112 sec-Butylbenzene	105		12.576					ND	U
113 1,3-Dichlorobenzene	146		12.697					ND	U
114 4-Isopropyltoluene	119		12.728					ND	U
117 1,2,3-Trimethylbenzene	105		12.763					ND	U
115 1,4-Dichlorobenzene	146		12.801					ND	U
119 Benzyl chloride	91		12.804					ND	U
116 2,4-Dichloro-1-(triflourom	214		12.836					ND	U
118 2,5-Dichlorobenzotrifluori	214		12.878					ND	U
120 n-Butylbenzene	91		13.141					ND	U
121 1,2-Dichlorobenzene	146		13.154					ND	U
122 1,2-Dibromo-3-Chloropropan	75		13.938					ND	U
123 2,4- & 2,5- & 2,6- Dichlor	125		14.125					ND	U
124 1,3,5-Trichlorobenzene	180		14.174					ND	U
125 2,3- & 3,4- Dichlorotoluen	125		14.484					ND	U
126 1,2,4-Trichlorobenzene	180		14.766					ND	U
127 Hexachlorobutadiene	225	14.907	14.906	0.001	81	2927		1.42	
128 Naphthalene	128		15.027					ND	U
129 1,2,3-Trichlorobenzene	180		15.252					ND	U
130 2,3,6-Trichlorotoluene	159	16.239	16.090	0.149	1	76		NC	
131 2,4,5-Trichlorotoluene	159	16.239	16.090	0.149	0	76		NC	
S 134 1,2-Dichloroethene, Total	96		1.000					ND	
S 154 Total BTEX	106		1.000					ND	
S 133 Xylenes, Total	106		1.000					ND	
S 135 1,3-Dichloropropene, Total	1		0.000					ND	

**QC Flag Legend**

Processing Flags

NC - Not Calibrated

Review Flags

U - Marked Undetected

**Reagents:**

voaWI/SHP5\_00016

Amount Added: 5.00

Units: uL

Run Reagent



Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050405.D

Injection Date: 04-May-2020 09:39:30

Instrument ID: CHHP5

Operator ID: 034635

Lims ID: mb

Worklist Smp#: 5

Client ID:

Purge Vol: 5.000 mL

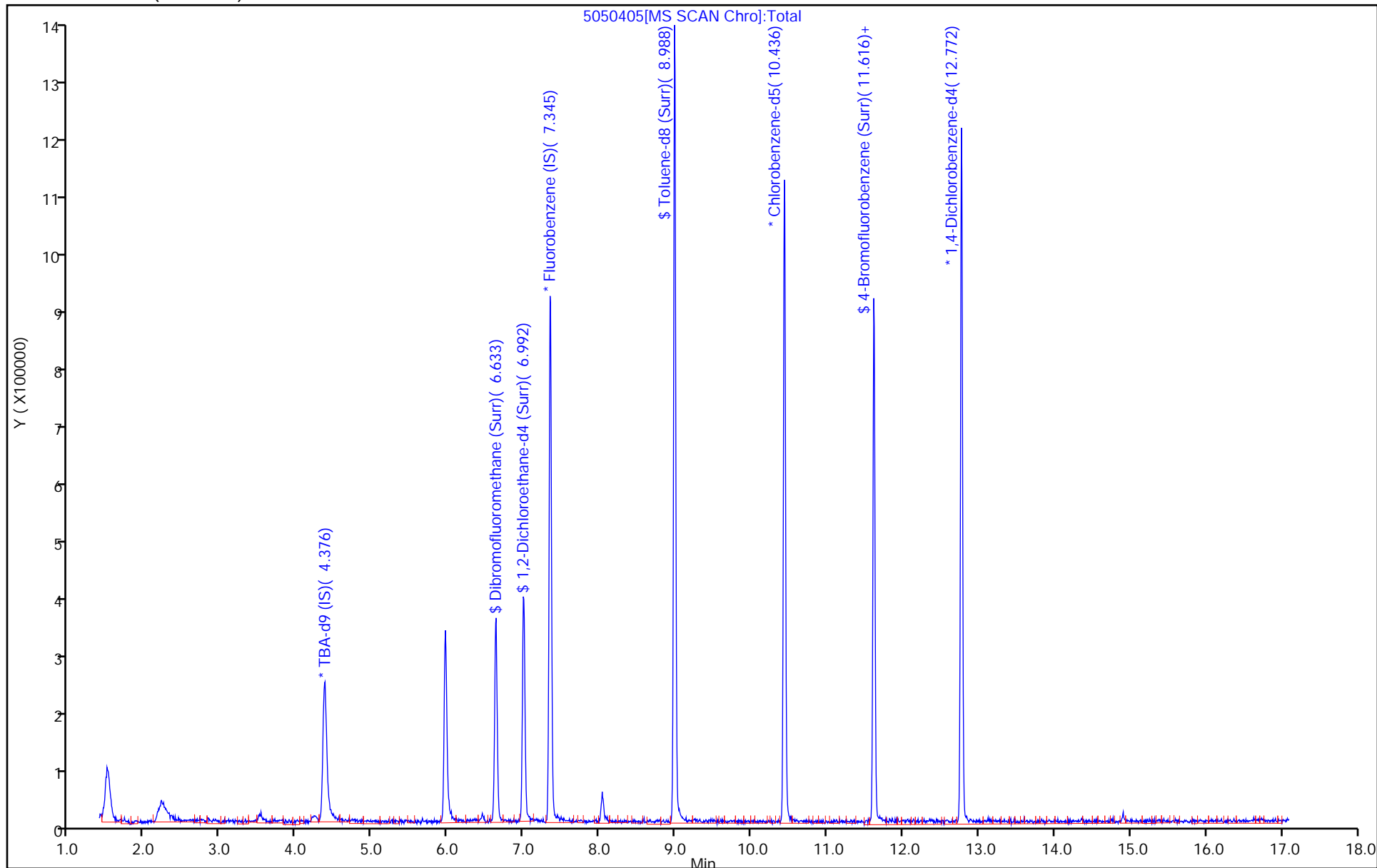
Dil. Factor: 1.0000

ALS Bottle#: 5

Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Pittsburgh  
Recovery Report

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050405.D  
 Lims ID: mb  
 Client ID:  
 Sample Type: MB  
 Inject. Date: 04-May-2020 09:39:30 ALS Bottle#: 5 Worklist Smp#: 5  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: 180-0031789-005  
 Operator ID: 034635 Instrument ID: CHHP5  
 Method: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\MSVOA\_LL\_CHHP5.m  
 Limit Group: VOA 8260C\_D ICAL  
 Last Update: 04-May-2020 11:25:29 Calib Date: 03-Apr-2020 19:09:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP5\20200403-31442.b\5040310.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: CTX0327

First Level Reviewer: journetp

Date: 04-May-2020 11:05:27

Compound	Amount Added	Amount Recovered	% Rec.
\$ 5 Dibromofluoromethane (Surr)	50.0	44.6	89.27
\$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	40.9	81.73
\$ 7 Toluene-d8 (Surr)	50.0	51.2	102.33
\$ 8 4-Bromofluorobenzene (Surr)	50.0	44.9	89.72

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050405.D

Injection Date: 04-May-2020 09:39:30

Instrument ID: CHHP5

Lims ID: mb

Client ID:

Operator ID: 034635

ALS Bottle#: 5

Worklist Smp#: 5

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

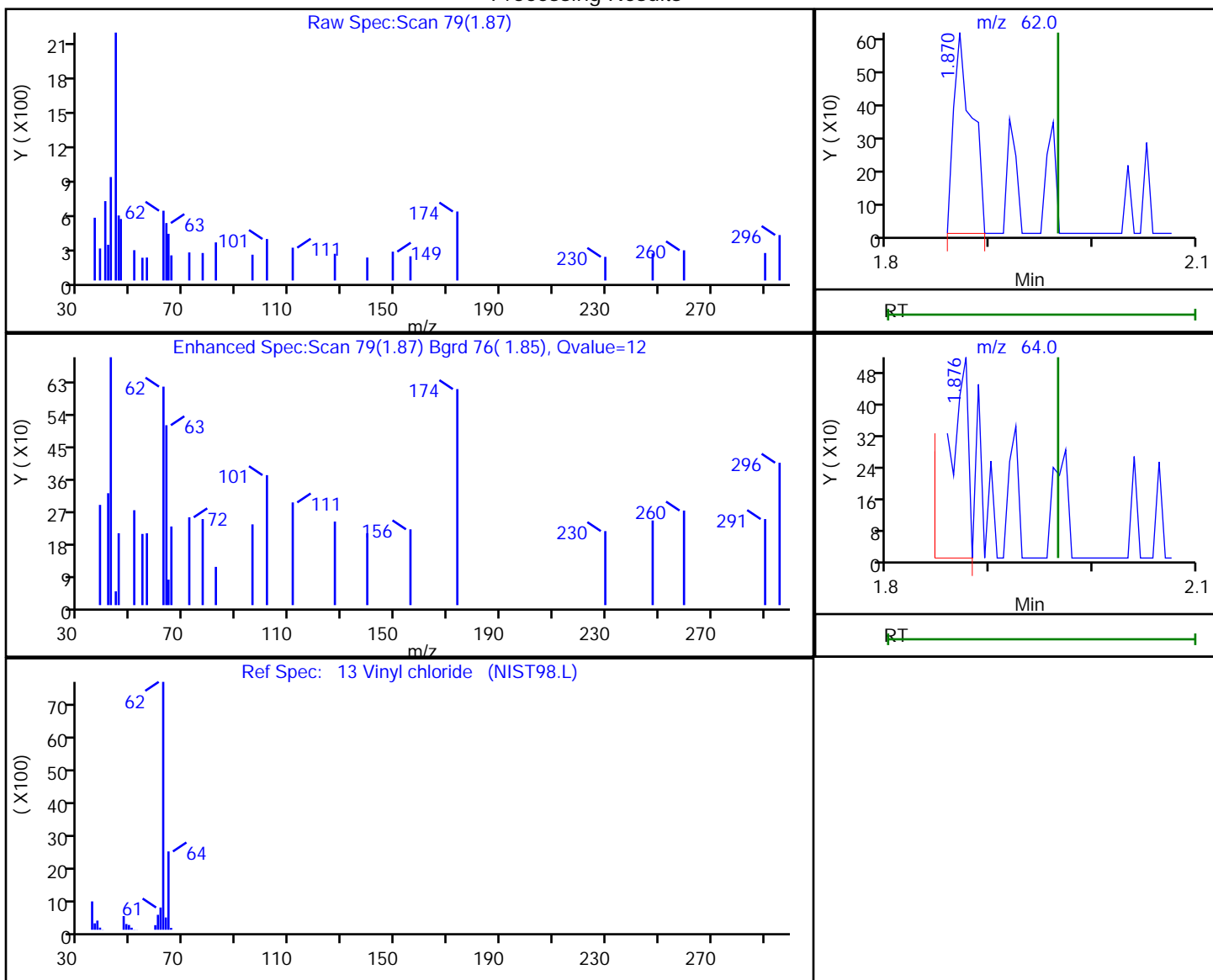
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

13 Vinyl chloride, CAS: 75-01-4

Processing Results



RT	Mass	Response	Amount
1.87	62.00	757	0.089727
1.88	64.00	655	

Reviewer: journetp, 04-May-2020 10:26:52

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050405.D

Injection Date: 04-May-2020 09:39:30

Instrument ID: CHHP5

Lims ID: mb

Client ID:

Operator ID: 034635

ALS Bottle#: 5

Worklist Smp#: 5

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

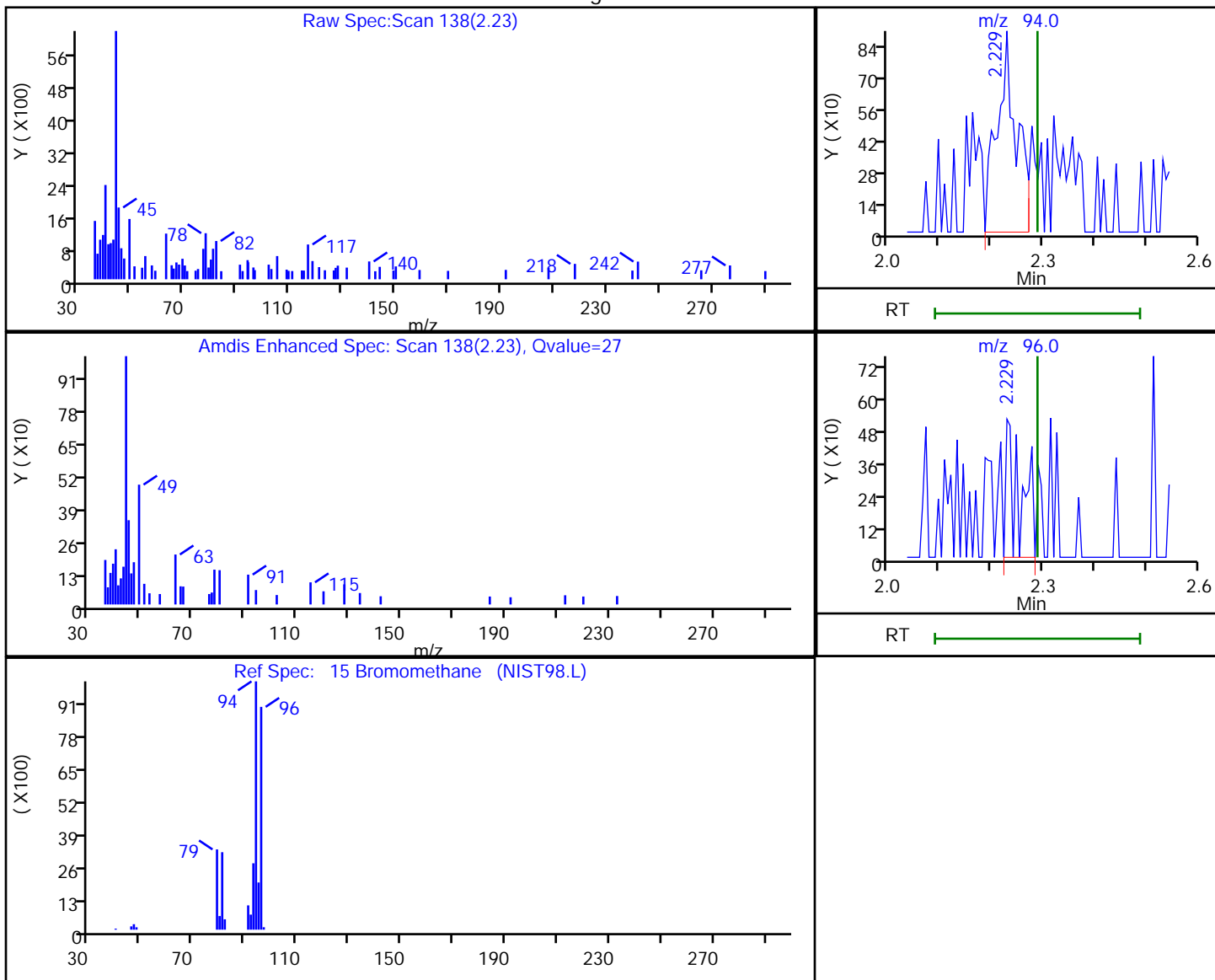
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

15 Bromomethane, CAS: 74-83-9

Processing Results



RT	Mass	Response	Amount
2.23	94.00	2389	0.494561
2.23	96.00	968	

Reviewer: journtp, 04-May-2020 10:26:52

Audit Action: Marked Compound Undetected

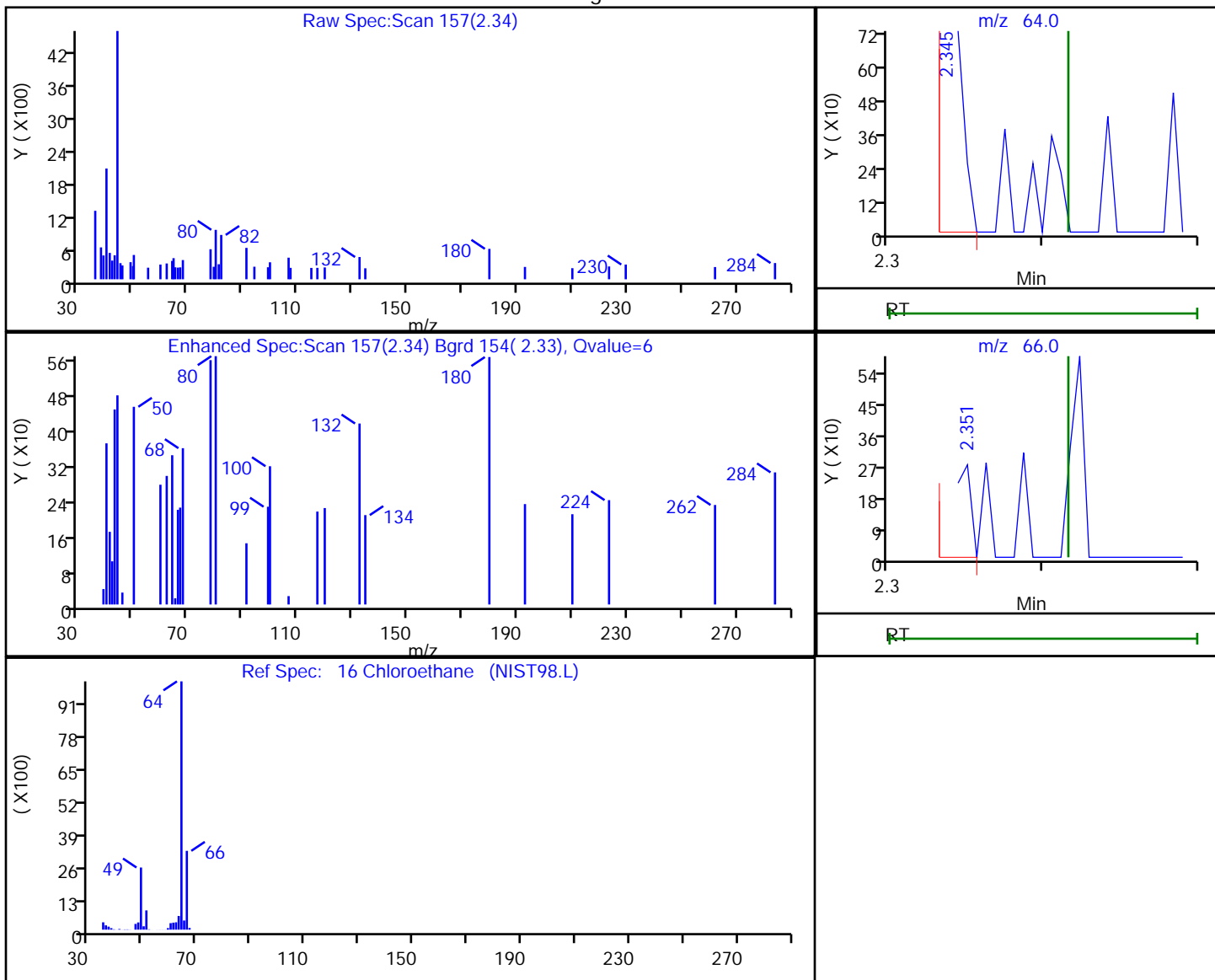
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050405.D  
 Injection Date: 04-May-2020 09:39:30 Instrument ID: CHHP5  
 Lims ID: mb  
 Client ID:  
 Operator ID: 034635 ALS Bottle#: 5 Worklist Smp#: 5  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

16 Chloroethane, CAS: 75-00-3

Processing Results



RT	Mass	Response	Amount
2.34	64.00	357	0.062373
2.35	66.00	176	

Reviewer: journetp, 04-May-2020 10:26:52  
 Audit Action: Marked Compound Undetected

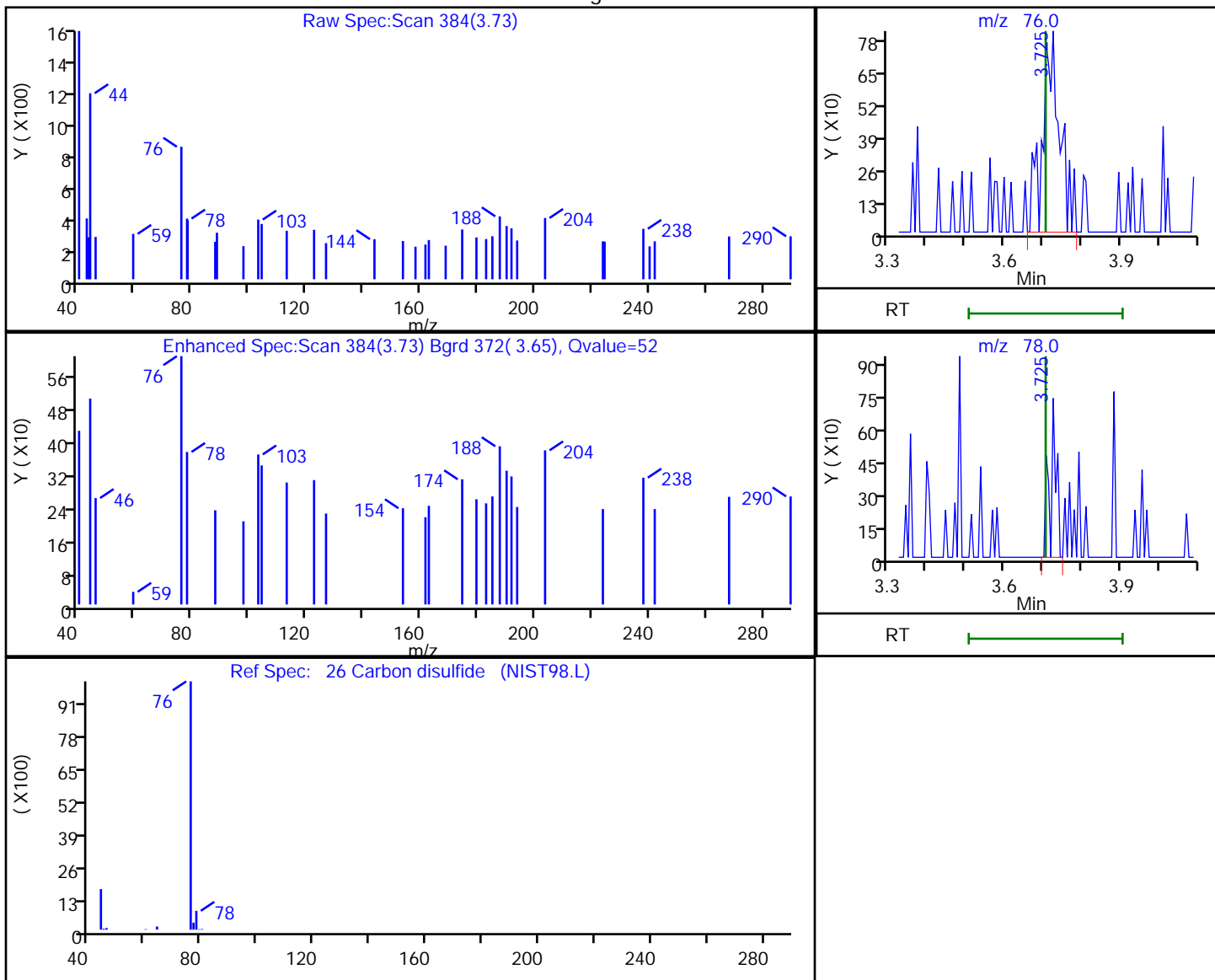
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050405.D  
Injection Date: 04-May-2020 09:39:30 Instrument ID: CHHP5  
Lims ID: mb  
Client ID:  
Operator ID: 034635 ALS Bottle#: 5 Worklist Smp#: 5  
Purge Vol: 5.000 mL Dil. Factor: 1.0000  
Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
Column: DB-624 (0.18 mm) Detector: MS SCAN

26 Carbon disulfide, CAS: 75-15-0

Processing Results



RT	Mass	Response	Amount
3.73	76.00	2588	0.237084
3.73	78.00	856	

Reviewer: journetp, 04-May-2020 10:26:58  
Audit Action: Marked Compound Undetected

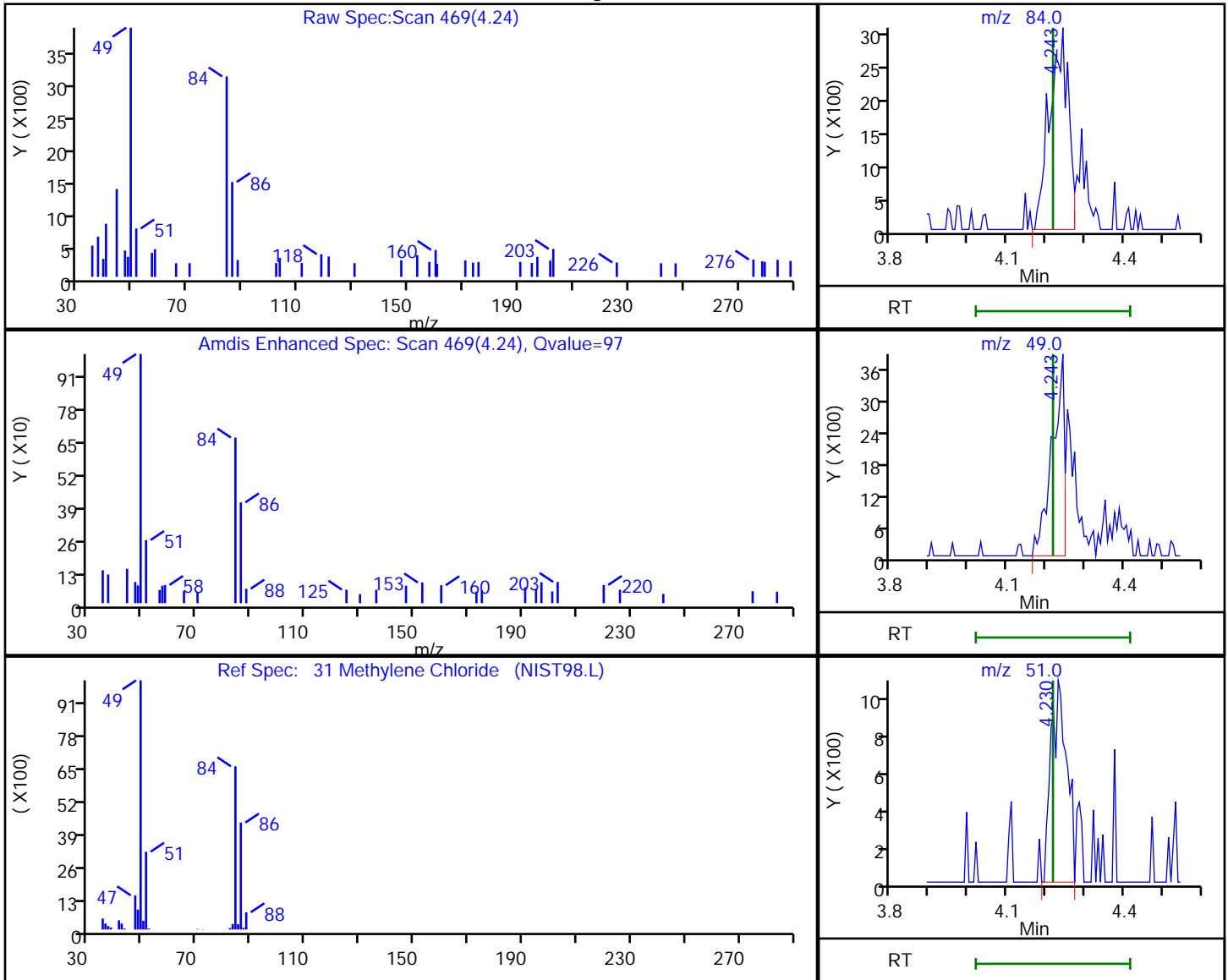
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050405.D  
 Injection Date: 04-May-2020 09:39:30 Instrument ID: CHHP5  
 Lims ID: mb  
 Client ID:  
 Operator ID: 034635 ALS Bottle#: 5 Worklist Smp#: 5  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

31 Methylene Chloride, CAS: 75-09-2

Processing Results



RT	Mass	Response	Amount
4.24	84.00	10251	-0.063375
4.24	49.00	8269	
4.23	51.00	3021	

Reviewer: journept, 04-May-2020 10:27:01

Audit Action: Marked Compound Undetected

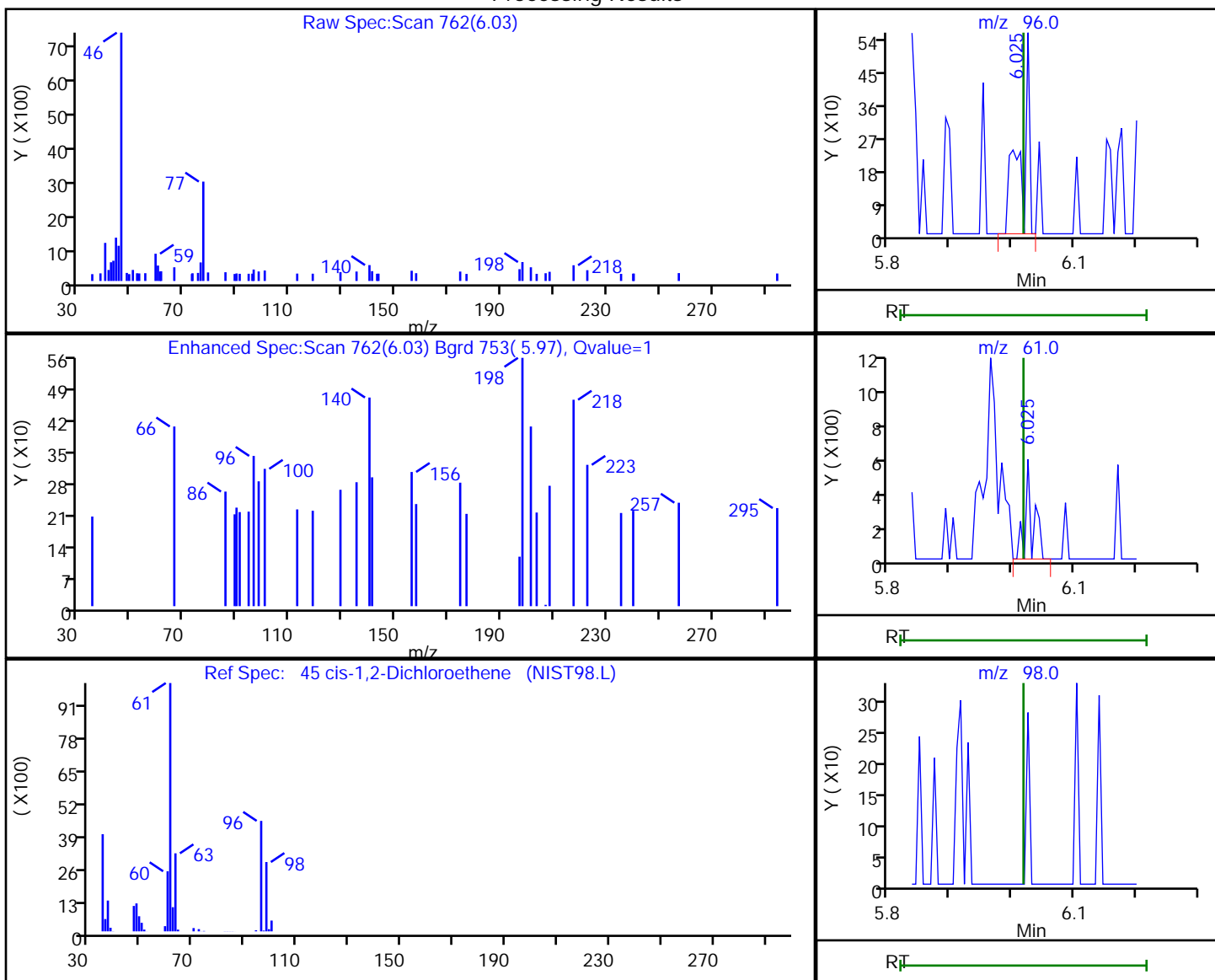
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050405.D  
 Injection Date: 04-May-2020 09:39:30 Instrument ID: CHHP5  
 Lims ID: mb  
 Client ID:  
 Operator ID: 034635 ALS Bottle#: 5 Worklist Smp#: 5  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

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

Processing Results



RT	Mass	Response	Amount
6.03	96.00	520	0.082322
6.03	61.00	481	
6.02	98.00	0	

Reviewer: journept, 04-May-2020 10:27:08  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

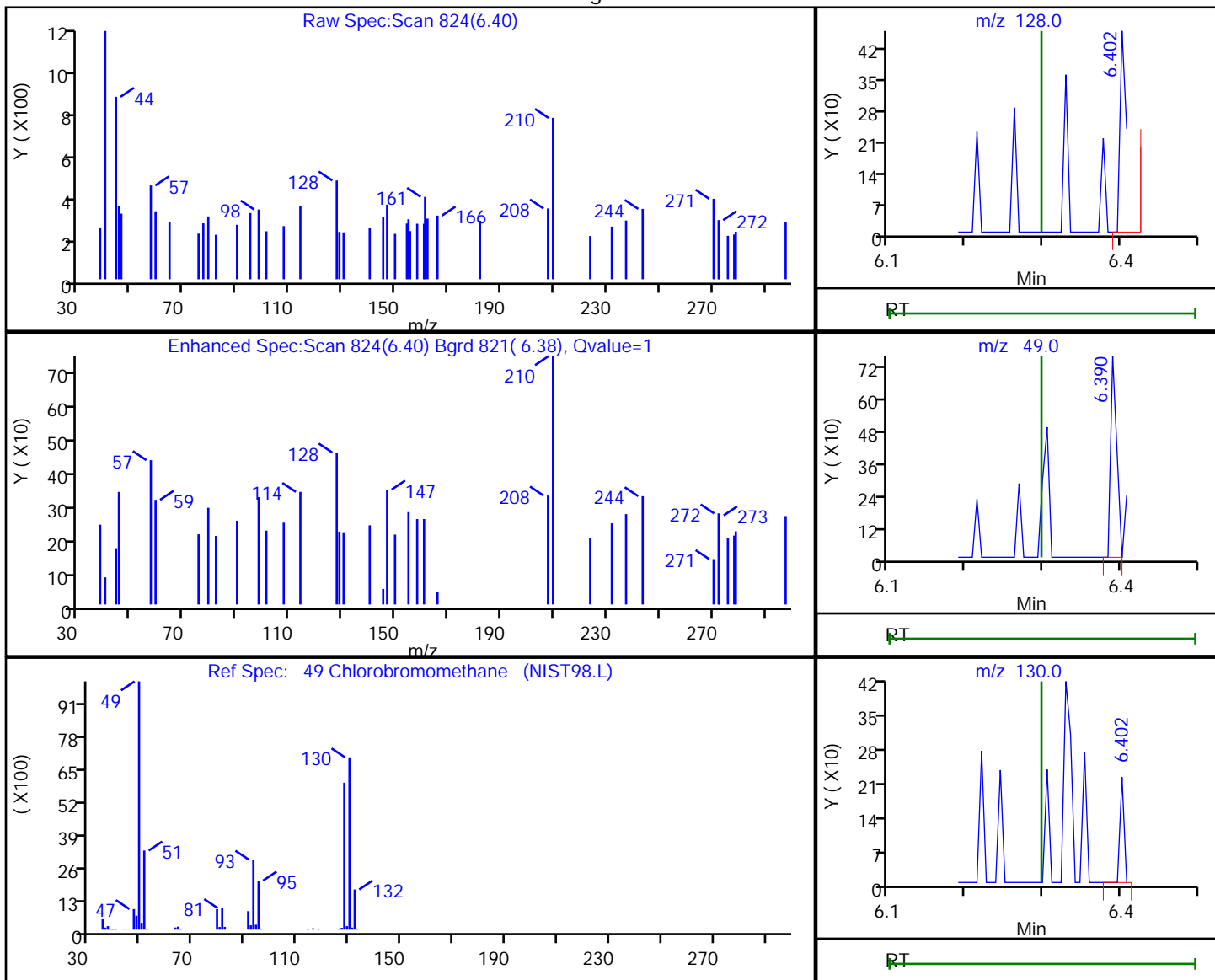


Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050405.D  
 Injection Date: 04-May-2020 09:39:30 Instrument ID: CHHP5  
 Lims ID: mb  
 Client ID:  
 Operator ID: 034635 ALS Bottle#: 5 Worklist Smp#: 5  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

49 Chlorobromomethane, CAS: 74-97-5

Processing Results



RT	Mass	Response	Amount
6.40	128.00	335	0.099508
6.39	49.00	414	
6.40	130.00	80	

Reviewer: journept, 04-May-2020 10:27:09  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050405.D

Injection Date: 04-May-2020 09:39:30

Instrument ID: CHHP5

Lims ID: mb

Client ID:

Operator ID: 034635

ALS Bottle#: 5

Worklist Smp#: 5

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

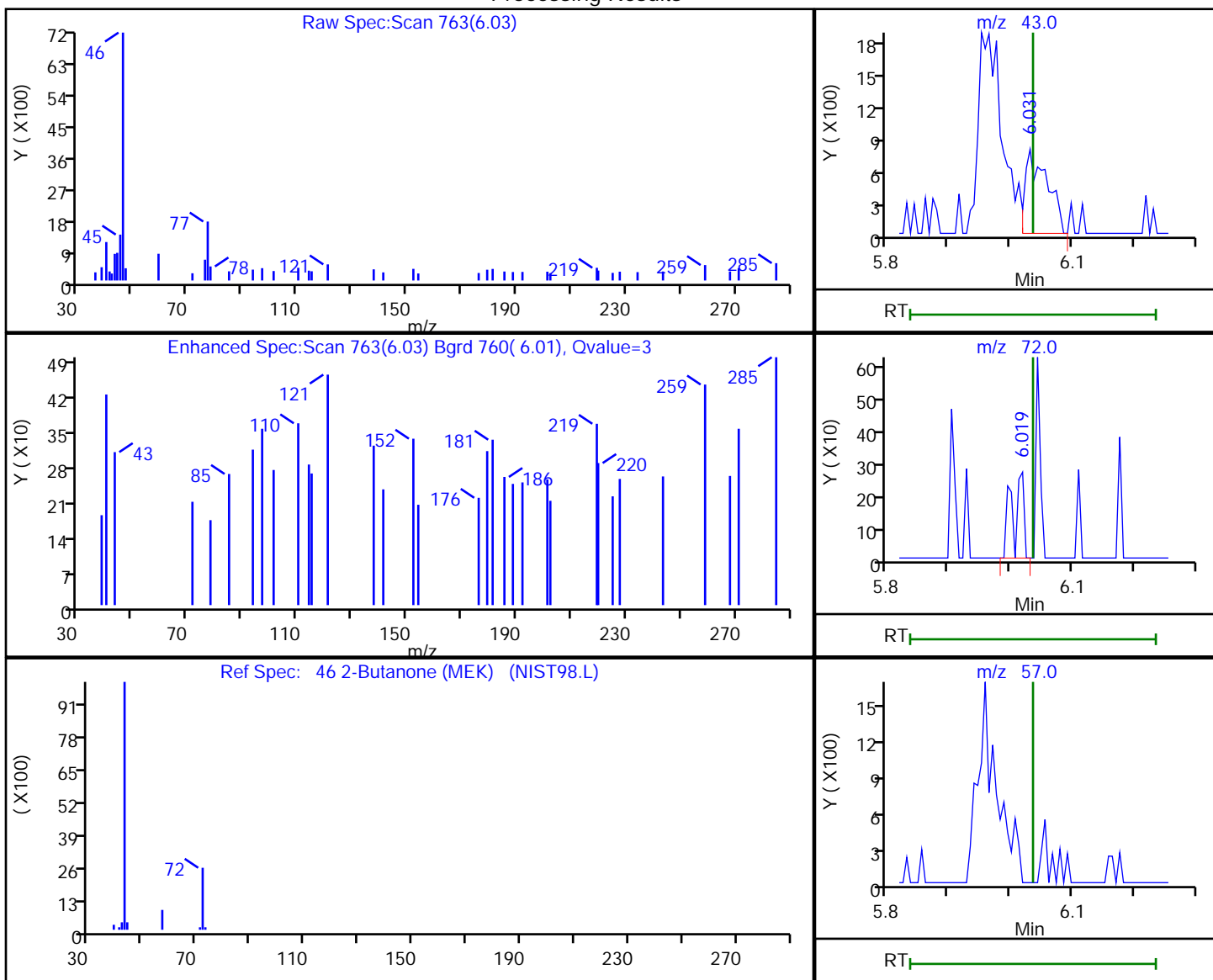
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

46 2-Butanone (MEK), CAS: 78-93-3

Processing Results



RT	Mass	Response	Amount
6.03	43.00	1889	0.529644
6.02	72.00	343	
6.04	57.00	0	

Reviewer: journeyp, 04-May-2020 10:27:08

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050405.D

Injection Date: 04-May-2020 09:39:30

Instrument ID: CHHP5

Lims ID: mb

Client ID:

Operator ID: 034635

ALS Bottle#: 5

Worklist Smp#: 5

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

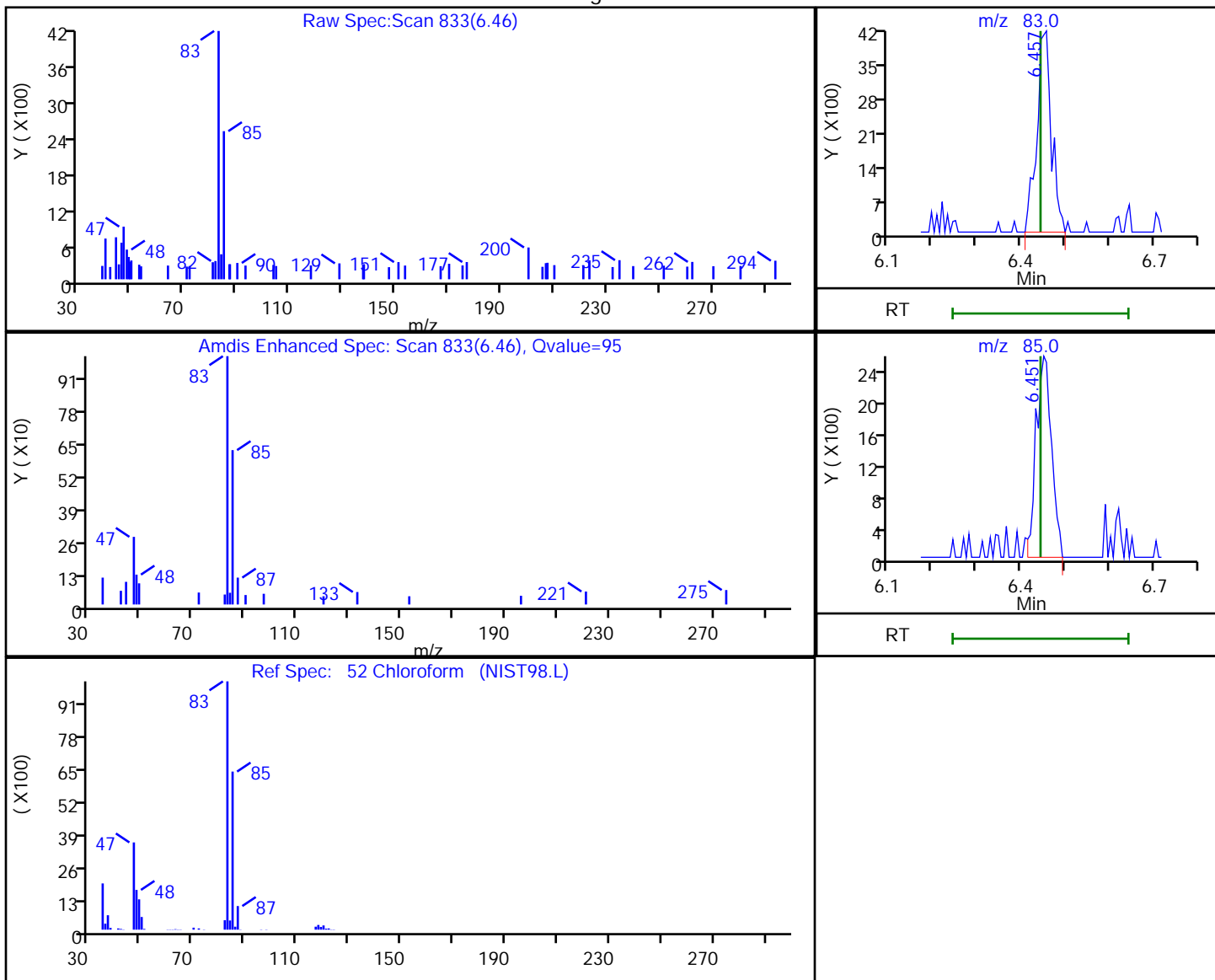
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

52 Chloroform, CAS: 67-66-3

Processing Results



RT	Mass	Response	Amount
6.46	83.00	9479	-0.848250
6.45	85.00	6156	

Reviewer: journtp, 04-May-2020 10:27:09

Audit Action: Marked Compound Undetected

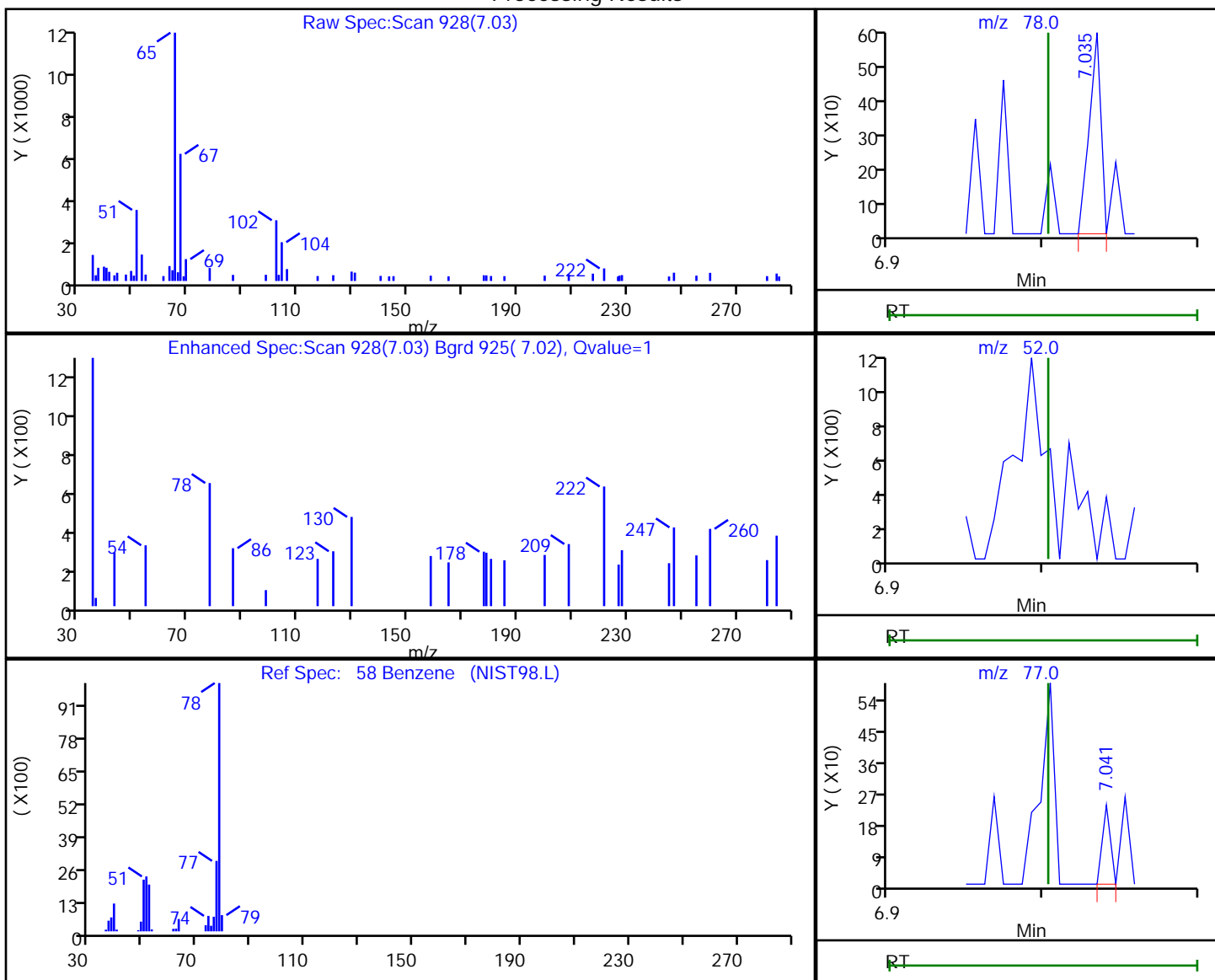
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050405.D  
 Injection Date: 04-May-2020 09:39:30 Instrument ID: CHHP5  
 Lims ID: mb  
 Client ID:  
 Operator ID: 034635 ALS Bottle#: 5 Worklist Smp#: 5  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

58 Benzene, CAS: 71-43-2

Processing Results



RT	Mass	Response	Amount
7.03	78.00	316	0.013220
7.00	52.00	0	
7.04	77.00	84	

Reviewer: journeyp, 04-May-2020 10:27:13  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050405.D

Injection Date: 04-May-2020 09:39:30

Instrument ID: CHHP5

Lims ID: mb

Client ID:

Operator ID: 034635

ALS Bottle#: 5

Worklist Smp#: 5

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

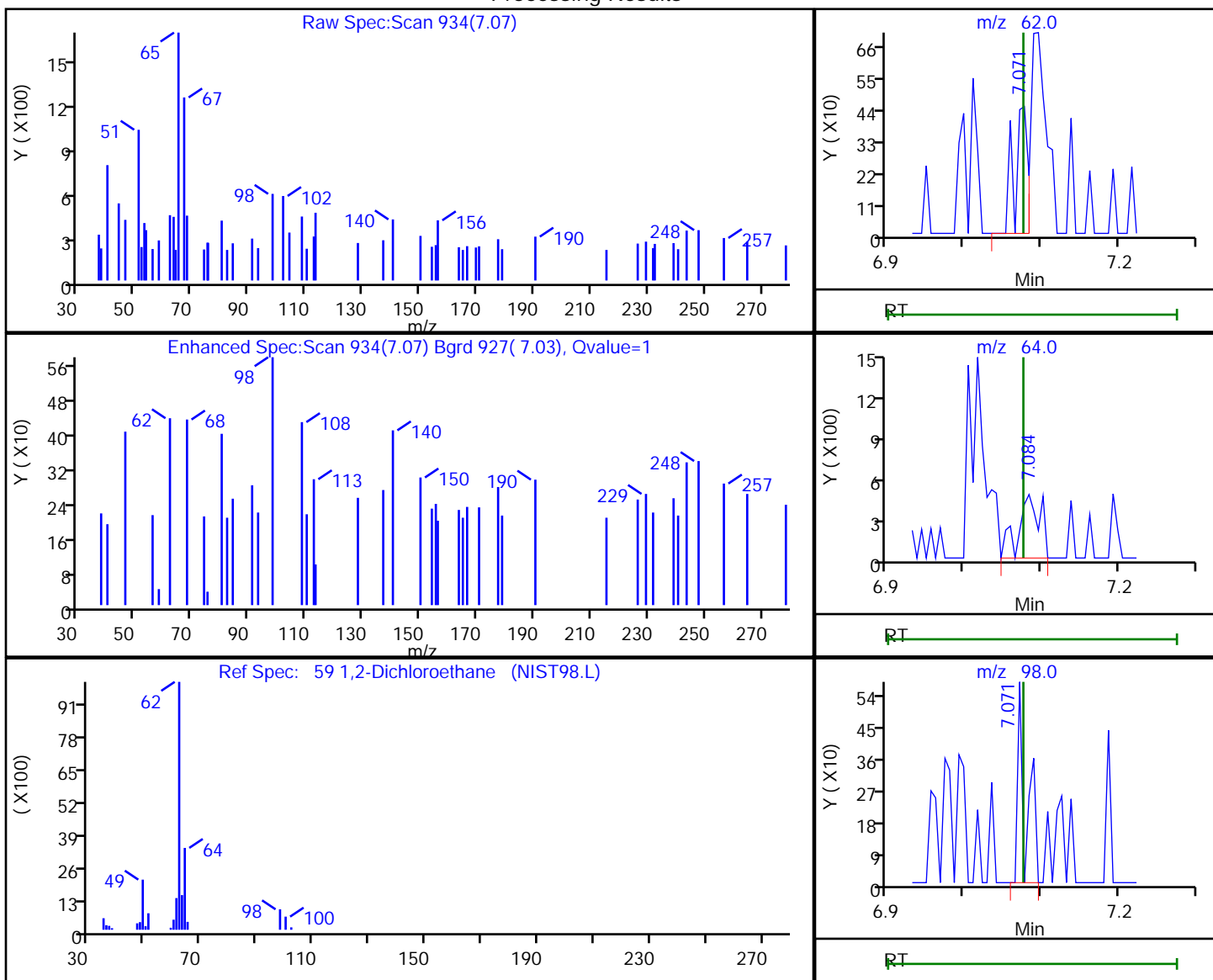
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

59 1,2-Dichloroethane, CAS: 107-06-2

Processing Results



RT	Mass	Response	Amount
7.07	62.00	537	0.059085
7.08	64.00	911	
7.07	98.00	429	

Reviewer: journept, 04-May-2020 10:27:14

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050405.D

Injection Date: 04-May-2020 09:39:30 Instrument ID: CHHP5

Lims ID: mb

Client ID:

Operator ID: 034635 ALS Bottle#: 5 Worklist Smp#: 5

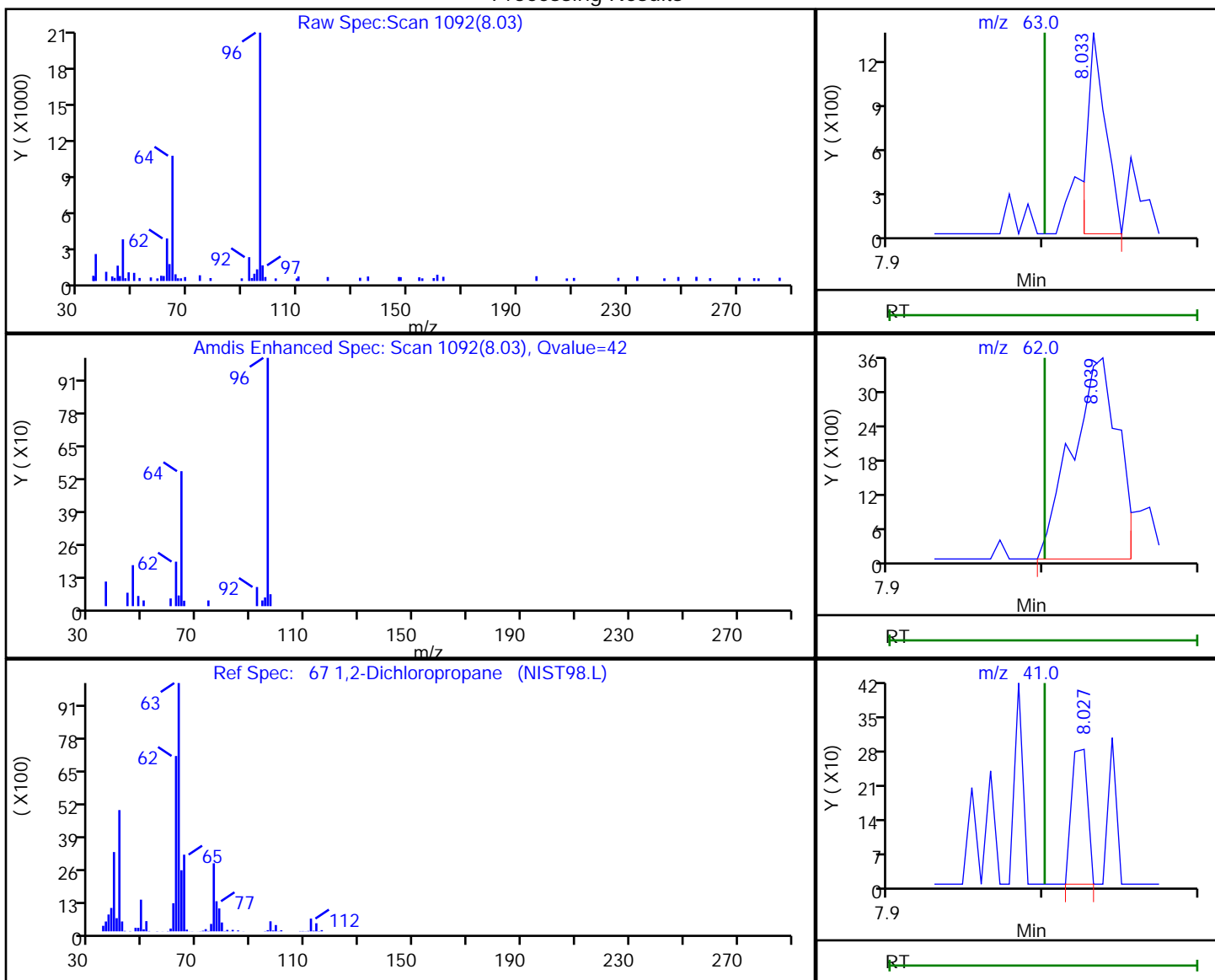
Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm) Detector: MS SCAN

67 1,2-Dichloropropane, CAS: 78-87-5

Processing Results



RT	Mass	Response	Amount
8.03	63.00	1099	0.172255
8.04	62.00	7446	
8.03	41.00	203	

Reviewer: journeyp, 04-May-2020 10:27:18

Audit Action: Marked Compound Undetected

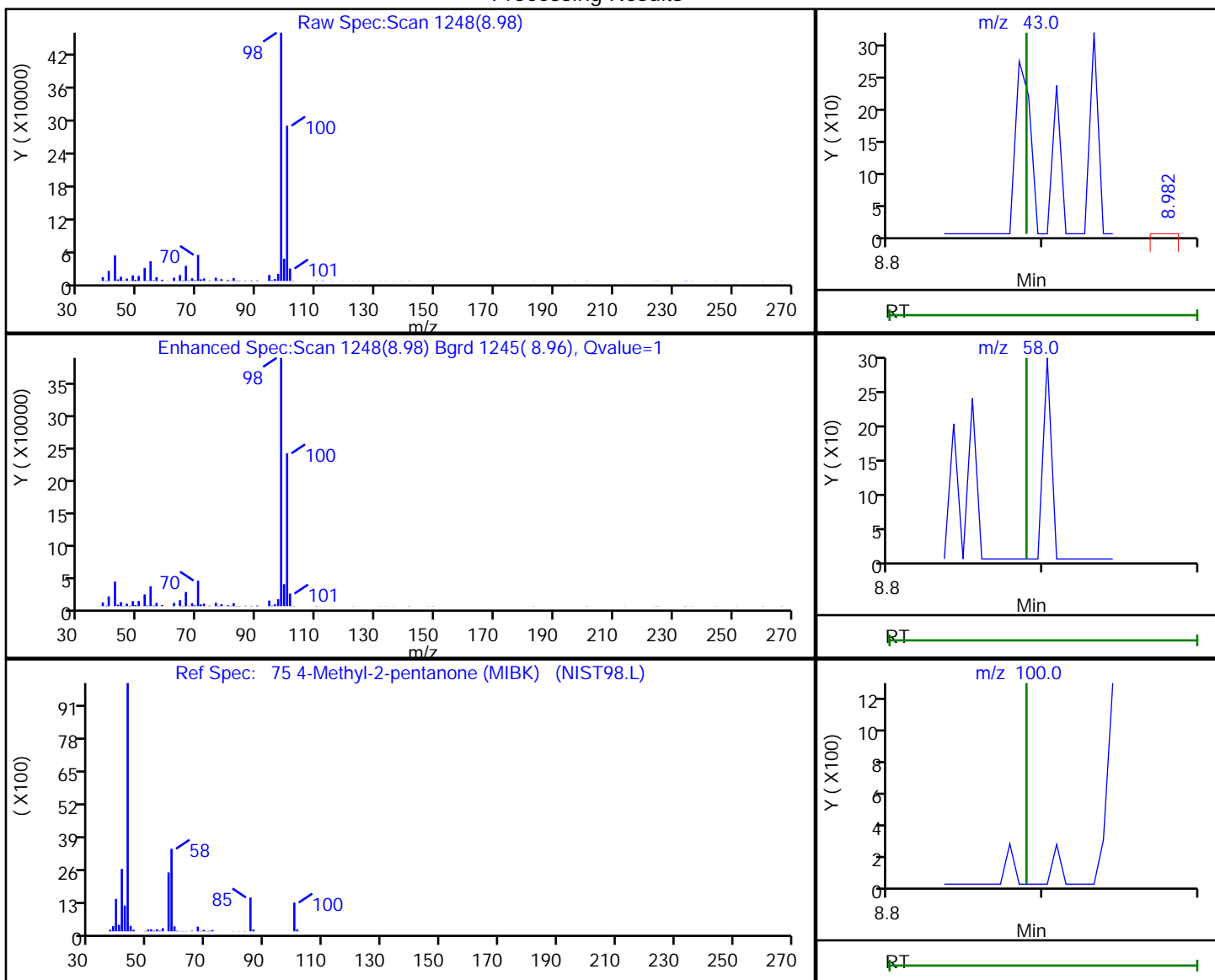
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050405.D  
 Injection Date: 04-May-2020 09:39:30 Instrument ID: CHHP5  
 Lims ID: mb  
 Client ID:  
 Operator ID: 034635 ALS Bottle#: 5 Worklist Smp#: 5  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

75 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Processing Results



RT	Mass	Response	Amount
8.98	43.00	2159	15.810422
8.99	58.00	6306	
8.99	100.00	668259	

Reviewer: journetp, 04-May-2020 10:27:25  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050405.D

Injection Date: 04-May-2020 09:39:30

Instrument ID: CHHP5

Lims ID: mb

Client ID:

Operator ID: 034635

ALS Bottle#: 5

Worklist Smp#: 5

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

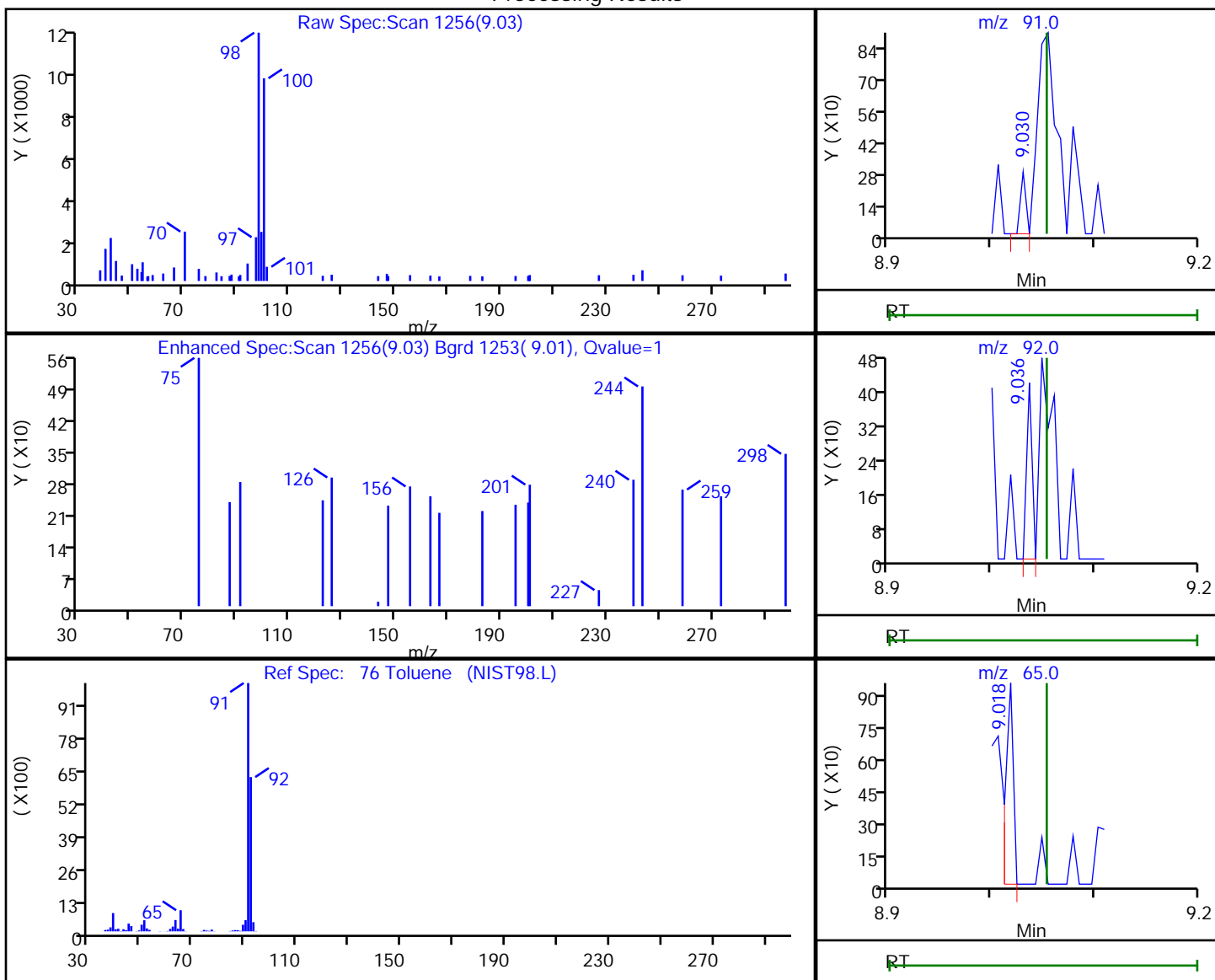
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

76 Toluene, CAS: 108-88-3

Processing Results



RT	Mass	Response	Amount
9.03	91.00	101	0.004284
9.04	92.00	153	
9.02	65.00	485	

Reviewer: journetp, 04-May-2020 10:27:25

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID



Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050405.D

Injection Date: 04-May-2020 09:39:30

Instrument ID: CHHP5

Lims ID: mb

Client ID:

Operator ID: 034635

ALS Bottle#: 5

Worklist Smp#: 5

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

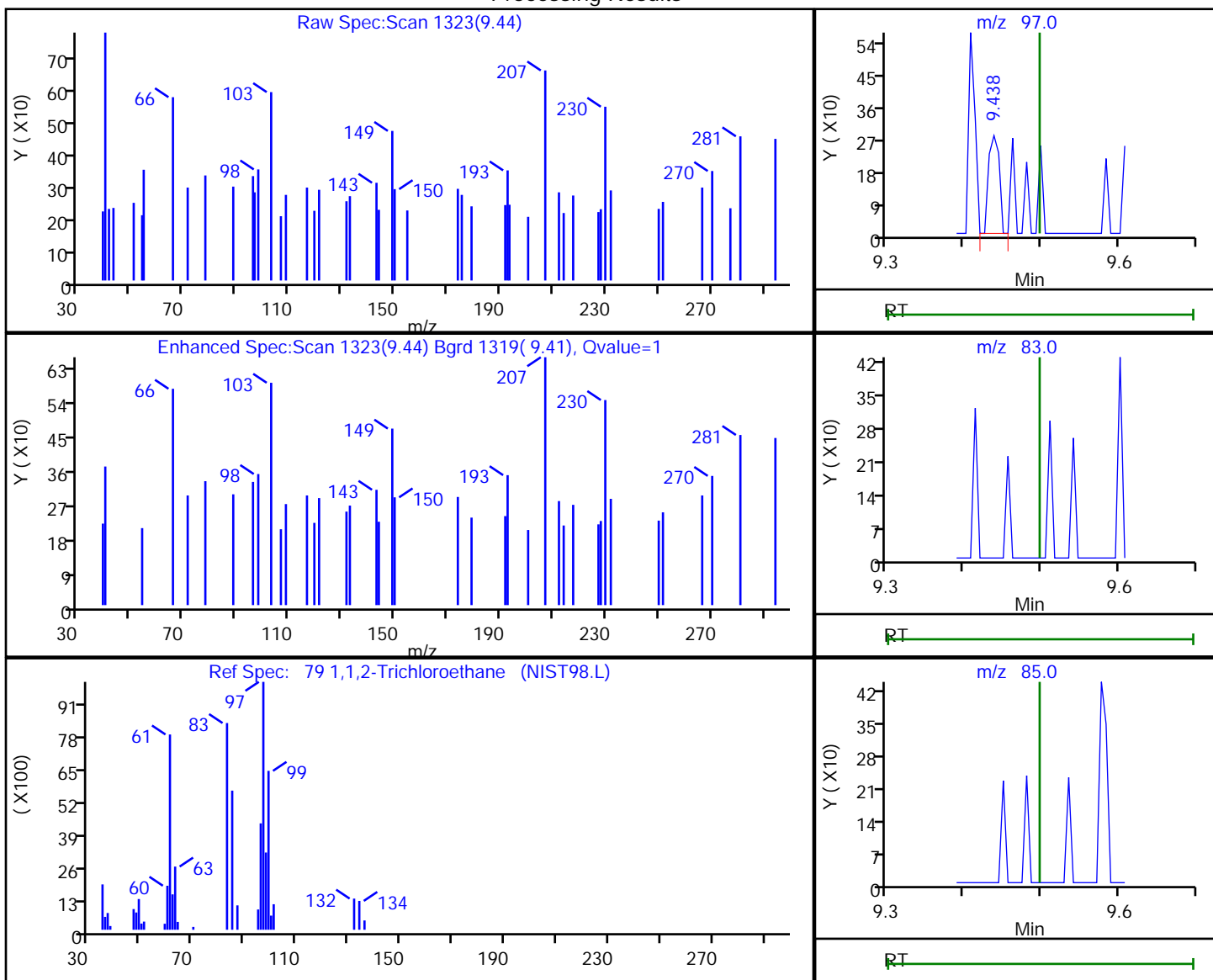
Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

79 1,1,2-Trichloroethane, CAS: 79-00-5

Processing Results



RT	Mass	Response	Amount
9.44	97.00	267	0.048725
9.50	83.00	0	
9.50	85.00	0	

Reviewer: journeyp, 04-May-2020 10:27:25

Audit Action: Marked Compound Undetected

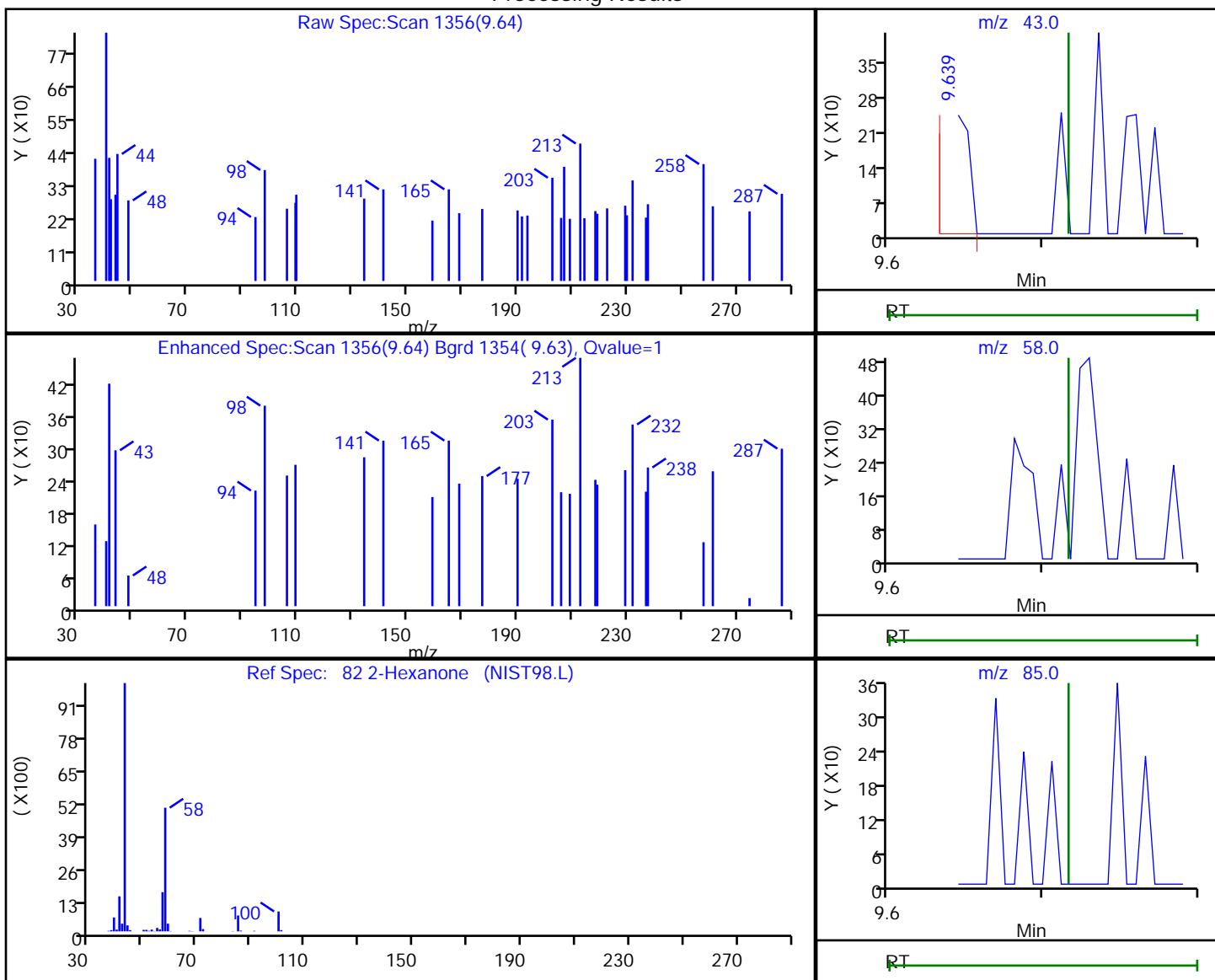
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050405.D  
 Injection Date: 04-May-2020 09:39:30 Instrument ID: CHHP5  
 Lims ID: mb  
 Client ID:  
 Operator ID: 034635 ALS Bottle#: 5 Worklist Smp#: 5  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

82 2-Hexanone, CAS: 591-78-6

Processing Results



RT	Mass	Response	Amount
9.64	43.00	269	14.066974
9.72	58.00	0	
9.72	85.00	0	

Reviewer: journetp, 04-May-2020 10:27:25  
 Audit Action: Marked Compound Undetected

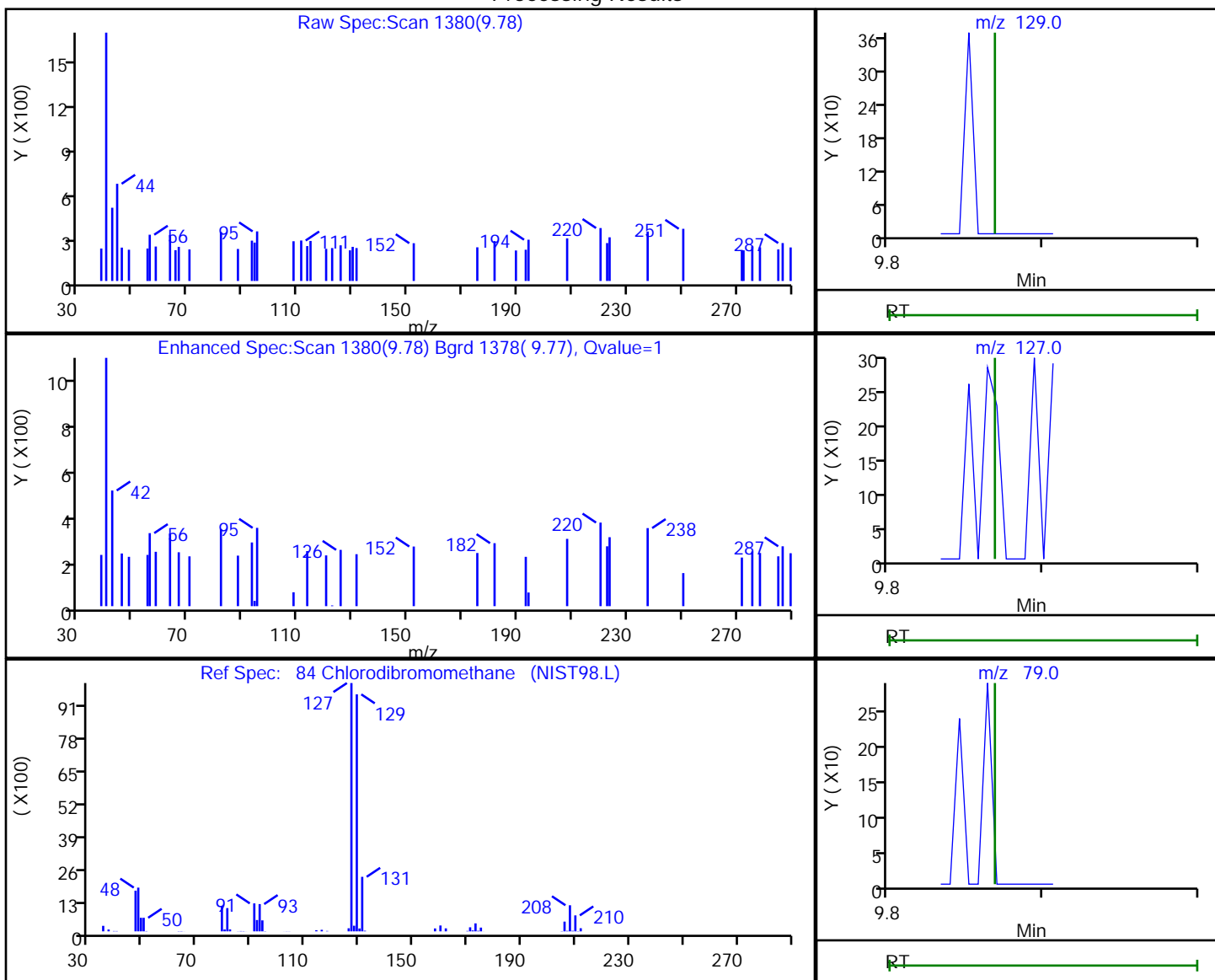
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050405.D  
 Injection Date: 04-May-2020 09:39:30 Instrument ID: CHHP5  
 Lims ID: mb  
 Client ID:  
 Operator ID: 034635 ALS Bottle#: 5 Worklist Smp#: 5  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

84 Chlorodibromomethane, CAS: 124-48-1

Processing Results



RT	Mass	Response	Amount
9.78	129.00	74	0.015953
9.79	127.00	460	
9.87	79.00	0	

Reviewer: journeyp, 04-May-2020 10:27:26  
 Audit Action: Marked Compound Undetected

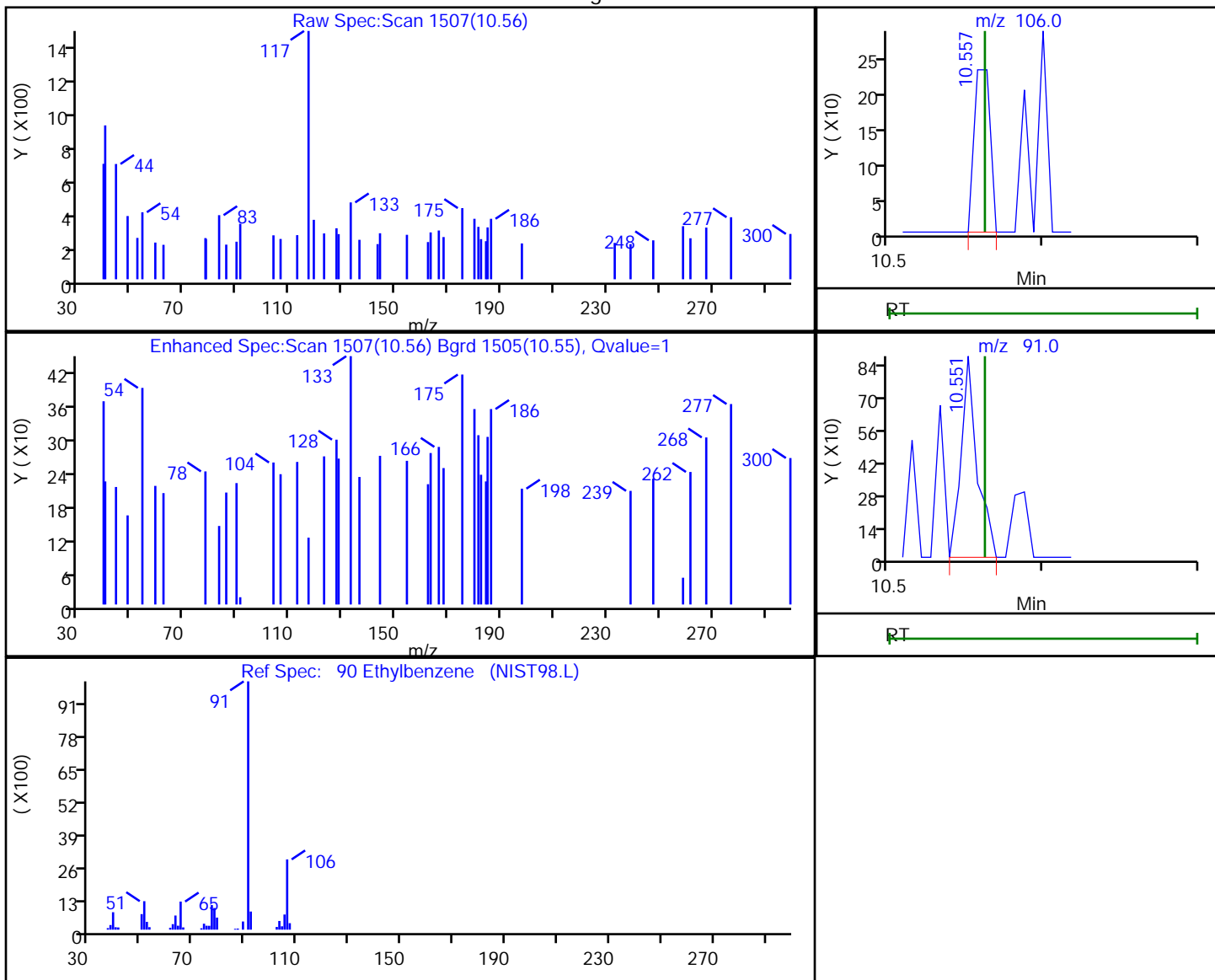
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050405.D  
 Injection Date: 04-May-2020 09:39:30 Instrument ID: CHHP5  
 Lims ID: mb  
 Client ID:  
 Operator ID: 034635 ALS Bottle#: 5 Worklist Smp#: 5  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

90 Ethylbenzene, CAS: 100-41-4

Processing Results



RT	Mass	Response	Amount
10.56	106.00	171	0.021790
10.55	91.00	630	

Reviewer: journetp, 04-May-2020 10:27:26  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050405.D

Injection Date: 04-May-2020 09:39:30 Instrument ID: CHHP5

Lims ID: mb

Client ID:

Operator ID: 034635 ALS Bottle#: 5 Worklist Smp#: 5

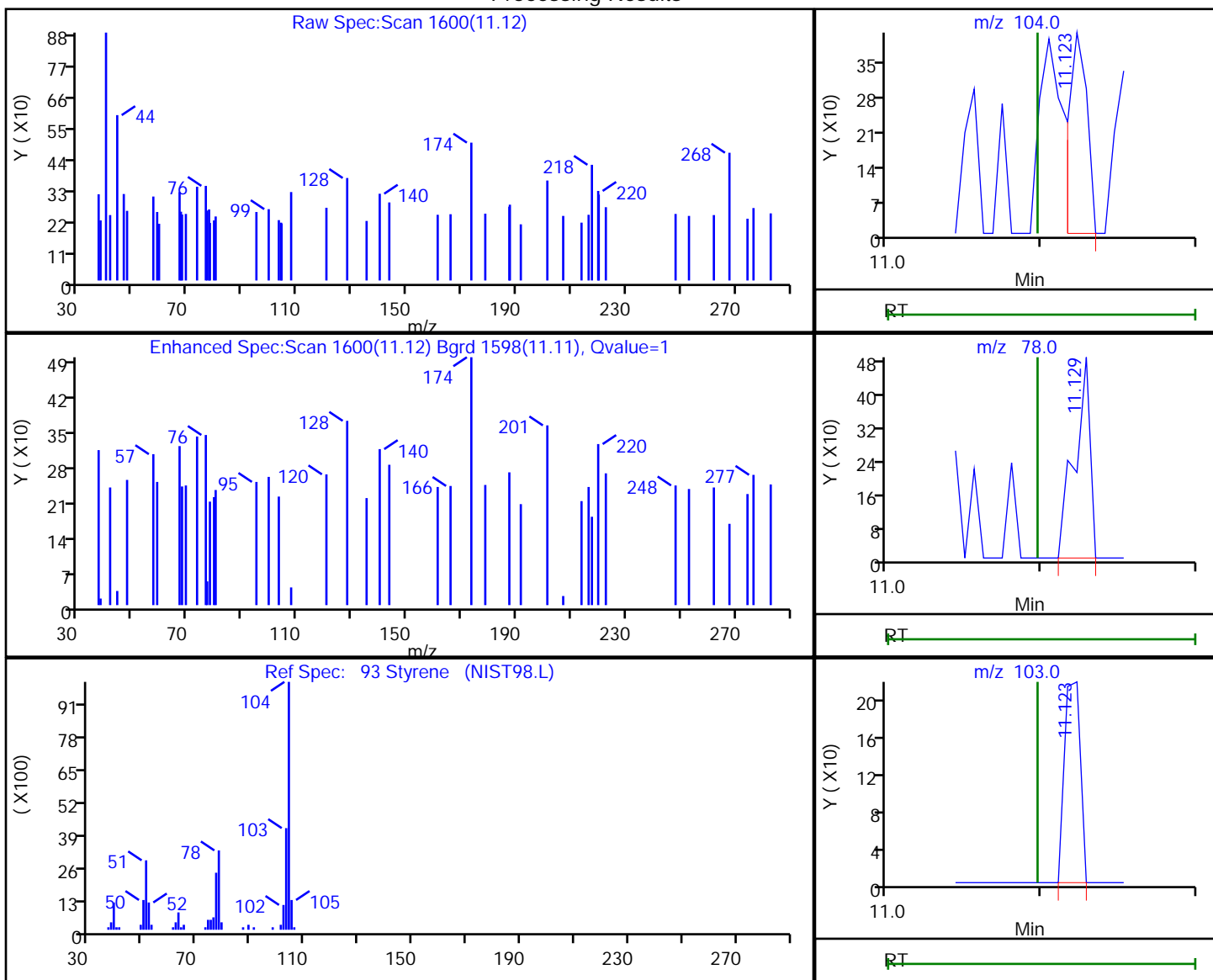
Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm) Detector: MS SCAN

93 Styrene, CAS: 100-42-5

Processing Results



RT	Mass	Response	Amount
11.12	104.00	340	0.021713
11.13	78.00	336	
11.12	103.00	155	

Reviewer: journept, 04-May-2020 10:27:26

Audit Action: Marked Compound Undetected

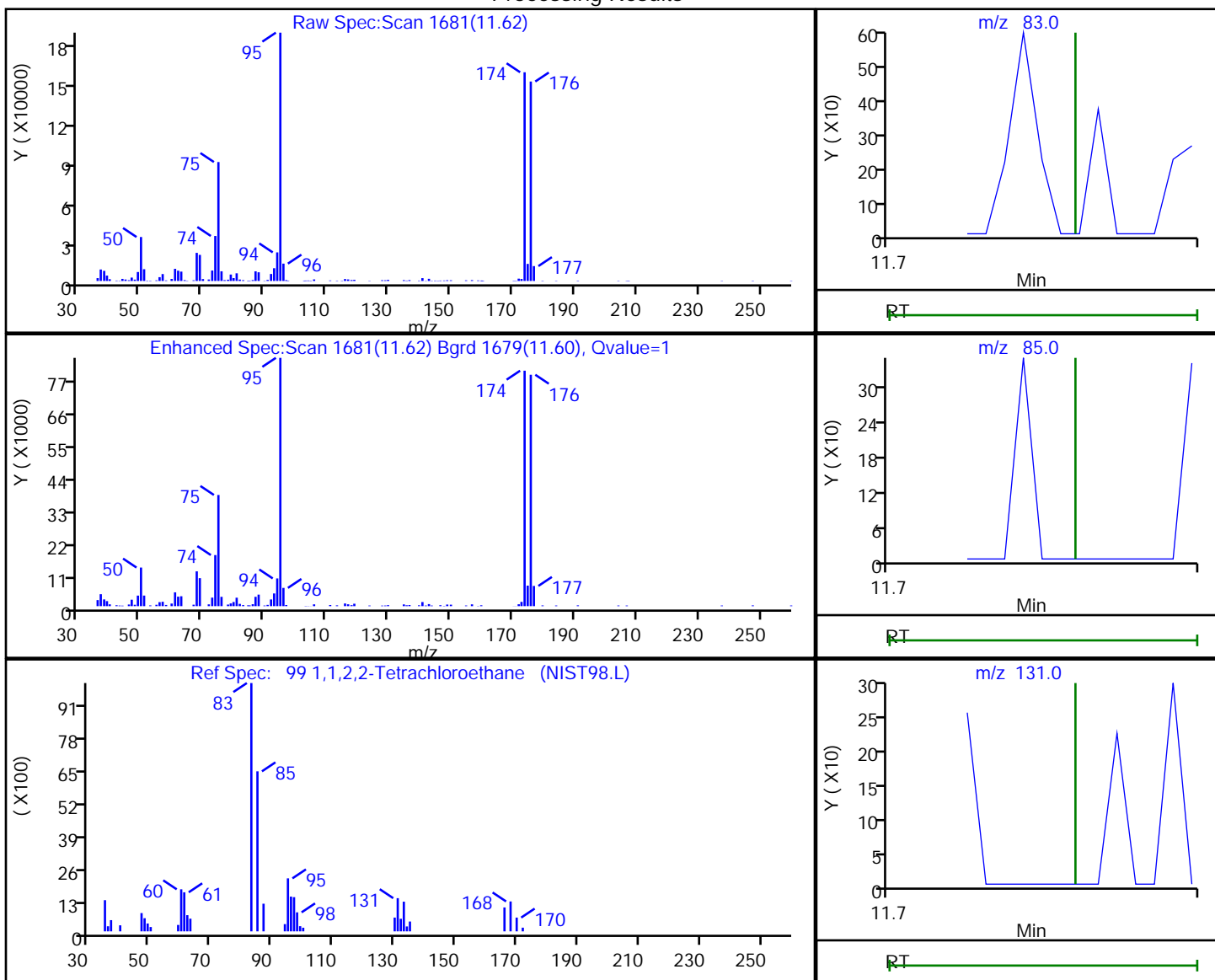
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050405.D  
 Injection Date: 04-May-2020 09:39:30 Instrument ID: CHHP5  
 Lims ID: mb  
 Client ID:  
 Operator ID: 034635 ALS Bottle#: 5 Worklist Smp#: 5  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

99 1,1,2,2-Tetrachloroethane, CAS: 79-34-5

Processing Results



RT	Mass	Response	Amount
11.62	83.00	212	0.037473
11.62	85.00	88	
11.61	131.00	266	

Reviewer: journeyp, 04-May-2020 10:27:27  
 Audit Action: Marked Compound Undetected

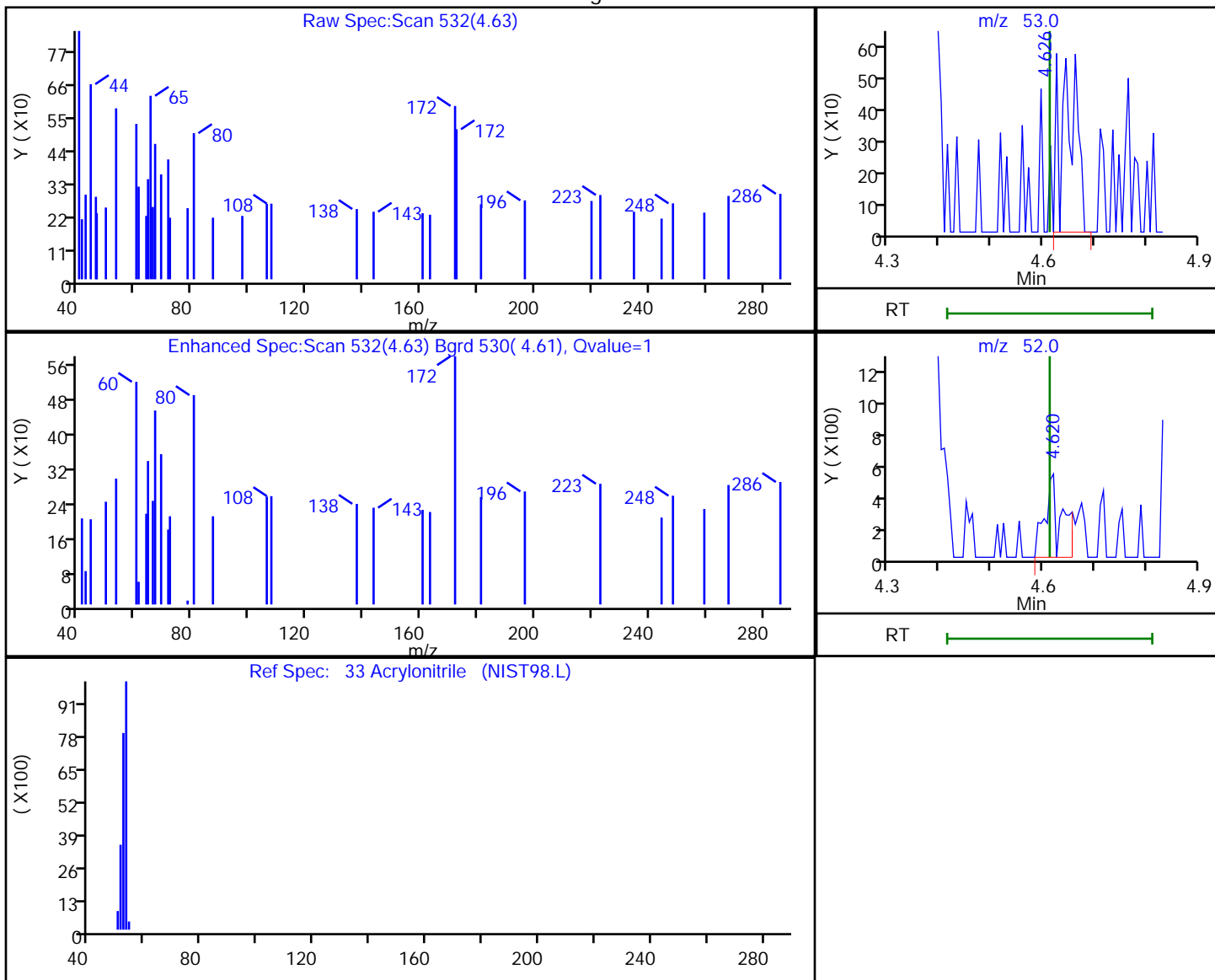
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050405.D  
 Injection Date: 04-May-2020 09:39:30 Instrument ID: CHHP5  
 Lims ID: mb  
 Client ID:  
 Operator ID: 034635 ALS Bottle#: 5 Worklist Smp#: 5  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C\_D ICAL  
 Column: DB-624 (0.18 mm) Detector: MS SCAN

33 Acrylonitrile, CAS: 107-13-1

Processing Results



RT	Mass	Response	Amount
4.63	53.00	1161	0.462178
4.62	52.00	1185	

Reviewer: journetp, 04-May-2020 10:27:02  
 Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: \_\_\_\_\_ Lab Sample ID: LCS 180-314382/11  
 Matrix: Water Lab File ID: 5050111.D  
 Analysis Method: EPA 8260C Date Collected: \_\_\_\_\_  
 Sample wt/vol: 5 (mL) Date Analyzed: 05/01/2020 19:21  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-624 ID: 0.18 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 314382 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	6.03		1.0	0.90
75-01-4	Vinyl chloride	7.69		1.0	0.40
74-83-9	Bromomethane	24.5		1.0	0.89
75-00-3	Chloroethane	12.8		1.0	0.90
75-35-4	1,1-Dichloroethene	8.63		1.0	0.55
67-64-1	Acetone	11.6		5.0	3.4
75-15-0	Carbon disulfide	7.56		1.0	0.88
75-09-2	Methylene Chloride	9.00		1.0	0.89
156-60-5	trans-1,2-Dichloroethene	8.94		1.0	0.67
1634-04-4	Methyl tert-butyl ether	7.72		1.0	0.59
75-34-3	1,1-Dichloroethane	7.98		1.0	0.31
156-59-2	cis-1,2-Dichloroethene	8.82		1.0	0.71
74-97-5	Bromochloromethane	8.53		1.0	0.63
78-93-3	2-Butanone (MEK)	12.2		5.0	2.6
67-66-3	Chloroform	8.16		1.0	0.60
71-55-6	1,1,1-Trichloroethane	7.71		1.0	0.60
56-23-5	Carbon tetrachloride	8.40		1.0	0.88
71-43-2	Benzene	8.96		1.0	0.60
107-06-2	1,2-Dichloroethane	8.06		1.0	0.57
79-01-6	Trichloroethene	8.79		1.0	0.69
78-87-5	1,2-Dichloropropane	7.81		1.0	0.66
75-27-4	Bromodichloromethane	7.55		1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	7.45		1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	15.5		5.0	3.1
108-88-3	Toluene	9.84		1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	8.39		1.0	0.58
79-00-5	1,1,2-Trichloroethane	9.11		1.0	0.45
127-18-4	Tetrachloroethene	9.62		1.0	0.47
591-78-6	2-Hexanone	14.0		5.0	3.3
124-48-1	Dibromochloromethane	8.85		1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	9.45		1.0	0.50
108-90-7	Chlorobenzene	10.8		1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	10.1		1.0	0.57
100-41-4	Ethylbenzene	10.7		1.0	0.51
1330-20-7	Xylenes, Total	20.8		2.0	0.89
100-42-5	Styrene	10.7		1.0	0.47



FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: \_\_\_\_\_ Lab Sample ID: LCS 180-314382/11  
 Matrix: Water Lab File ID: 5050111.D  
 Analysis Method: EPA 8260C Date Collected: \_\_\_\_\_  
 Sample wt/vol: 5 (mL) Date Analyzed: 05/01/2020 19:21  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-624 ID: 0.18 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 314382 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	10.4		1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	11.2		1.0	0.60
107-13-1	Acrylonitrile	78.7		20	7.8

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	75		62-146
2037-26-5	Toluene-d8 (Surr)	88		75-120
460-00-4	4-Bromofluorobenzene (Surr)	88		64-120
1868-53-7	Dibromofluoromethane (Surr)	76		71-132

Eurofins TestAmerica, Pittsburgh  
Target Compound Quantitation Report

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050111.D  
 Lims ID: lcs  
 Client ID:  
 Sample Type: LCS  
 Inject. Date: 01-May-2020 19:21:30 ALS Bottle#: 11 Worklist Smp#: 11  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: 180-0031777-011  
 Operator ID: 034635 Instrument ID: CHHP5  
 Method: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\MMSVOA\_LL\_CHHP5.m  
 Limit Group: VOA 8260C\_D ICAL  
 Last Update: 03-May-2020 16:34:05 Calib Date: 03-Apr-2020 19:09:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP5\20200403-31442.b\5040310.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: CTX0317

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.374	4.364	0.010	0	249688	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.342	7.345	-0.003	99	643170	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.433	10.435	-0.002	85	164351	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.769	12.771	-0.002	95	282466	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.625	6.621	0.004	93	140304	50.0	38.2	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.996	6.992	0.004	0	194949	50.0	37.4	
\$ 7 Toluene-d8 (Surr)	98	8.985	8.987	-0.002	93	582574	50.0	43.8	
\$ 8 4-Bromofluorobenzene (Surr	95	11.619	11.615	0.004	88	221693	50.0	44.1	
11 Dichlorodifluoromethane	85	1.642	1.638	0.004	99	117555	50.0	23.9	
12 Chloromethane	50	1.843	1.851	-0.008	98	189116	50.0	30.1	
14 Butadiene	39	1.965	1.961	0.004	89	179707	50.0	31.5	
13 Vinyl chloride	62	1.971	1.961	0.010	83	214860	50.0	38.5	
15 Bromomethane	94	2.281	2.277	0.004	90	392536	50.0	122.7	
16 Chloroethane	64	2.421	2.423	-0.002	99	242382	50.0	63.9	
17 Dichlorofluoromethane	67	2.719	2.715	0.004	96	474382	50.0	55.9	
18 Trichlorofluoromethane	101	2.731	2.727	0.004	68	397141	50.0	56.0	
20 Ethyl ether	59	3.102	3.104	-0.002	88	145702	50.0	35.8	
21 Acrolein	56	3.297	3.287	0.010	99	92381	150.0	108.5	
22 1,1-Dichloroethene	96	3.412	3.390	0.022	98	132464	50.0	43.2	
23 1,1,2-Trichloro-1,2,2-trif	101	3.455	3.482	-0.027	94	161186	50.0	47.2	
24 Acetone	43	3.516	3.512	0.004	100	129432	100.0	58.2	
25 Iodomethane	142	3.601	3.597	0.004	98	228632	50.0	43.1	
26 Carbon disulfide	76	3.704	3.701	0.003	100	273448	50.0	37.8	
28 3-Chloro-1-propene	76	3.996	3.987	0.009	88	77606	50.0	41.5	
30 Methyl acetate	43	4.021	4.023	-0.002	96	269423	100.0	84.5	
31 Methylene Chloride	84	4.222	4.218	0.004	90	192917	50.0	45.0	
32 2-Methyl-2-propanol	59	4.507	4.491	0.016	91	134212	500.0	526.5	
33 Acrylonitrile	53	4.611	4.613	-0.002	99	654384	500.0	393.3	
34 trans-1,2-Dichloroethene	96	4.635	4.631	0.004	98	157095	50.0	44.7	
35 Methyl tert-butyl ether	73	4.653	4.656	-0.003	97	381039	50.0	38.6	
36 Hexane	57	5.055	5.045	0.010	93	224959	50.0	38.9	
37 1,1-Dichloroethane	63	5.268	5.264	0.004	97	273632	50.0	39.9	
38 Vinyl acetate	43	5.323	5.325	-0.002	98	231912	50.0	33.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
44 2,2-Dichloropropane	97	6.004	6.000	0.004	60	32483	50.0	38.0	
45 cis-1,2-Dichloroethene	96	6.016	6.018	-0.002	80	184515	50.0	44.1	
46 2-Butanone (MEK)	43	6.034	6.031	0.003	99	143910	100.0	60.9	
49 Chlorobromomethane	128	6.296	6.298	-0.002	96	95085	50.0	42.6	
51 Tetrahydrofuran	42	6.320	6.304	0.016	86	84423	100.0	61.9	
52 Chloroform	83	6.448	6.444	0.004	95	298838	50.0	40.8	
53 1,1,1-Trichloroethane	97	6.600	6.596	0.004	98	202146	50.0	38.6	
54 Cyclohexane	56	6.667	6.663	0.004	90	248234	50.0	37.1	
56 Carbon tetrachloride	117	6.771	6.761	0.010	96	182727	50.0	42.0	
55 1,1-Dichloropropene	75	6.783	6.785	-0.002	94	214646	50.0	44.4	
58 Benzene	78	7.002	6.998	0.004	97	709583	50.0	44.8	
57 Isobutyl alcohol	41	7.008	7.010	-0.002	89	134897	1250.0	1221.8	
59 1,2-Dichloroethane	62	7.075	7.071	0.004	98	242534	50.0	40.3	
62 n-Heptane	43	7.355	7.351	0.004	87	195158	50.0	37.2	
64 Trichloroethene	130	7.726	7.728	-0.002	95	173342	50.0	44.0	
66 Methylcyclohexane	83	7.957	7.959	-0.002	88	291270	50.0	43.5	
67 1,2-Dichloropropane	63	8.005	7.996	0.009	94	164994	50.0	39.0	
70 1,4-Dioxane	88	8.078	8.081	-0.003	45	42434	1000.0	1234.0	
68 Dibromomethane	93	8.091	8.087	0.004	93	103221	50.0	41.2	
71 Dichlorobromomethane	83	8.285	8.281	0.004	99	187062	50.0	37.7	
73 2-Chloroethyl vinyl ether	63	8.583	8.586	-0.003	93	191367	100.0	86.2	
74 cis-1,3-Dichloropropene	75	8.723	8.726	-0.003	94	232592	50.0	37.3	
75 4-Methyl-2-pentanone (MIBK)	43	8.888	8.890	-0.002	96	263600	100.0	77.6	
76 Toluene	91	9.052	9.048	0.004	98	764329	50.0	49.2	
77 trans-1,3-Dichloropropene	75	9.301	9.303	-0.002	94	214356	50.0	42.0	
78 Ethyl methacrylate	69	9.362	9.364	-0.002	88	185392	50.0	37.1	
79 1,1,2-Trichloroethane	97	9.502	9.498	0.004	92	164492	50.0	45.5	
80 Tetrachloroethene	164	9.563	9.559	0.004	95	148840	50.0	48.1	
81 1,3-Dichloropropane	76	9.654	9.650	0.004	90	296040	50.0	46.0	
82 2-Hexanone	43	9.715	9.717	-0.002	95	192385	100.0	70.2	
84 Chlorodibromomethane	129	9.867	9.869	-0.002	90	135328	50.0	44.3	
85 Ethylene Dibromide	107	9.977	9.973	0.003	99	159751	50.0	47.3	
87 Chlorobenzene	112	10.463	10.465	-0.002	96	540693	50.0	54.1	
89 1,1,1,2-Tetrachloroethane	131	10.554	10.557	-0.003	90	164510	50.0	50.7	
90 Ethylbenzene	106	10.561	10.563	-0.002	98	277603	50.0	53.7	
91 m-Xylene & p-Xylene	106	10.694	10.697	-0.003	0	336036	50.0	52.1	
92 o-Xylene	106	11.078	11.074	0.004	96	314343	50.0	52.2	
93 Styrene	104	11.096	11.098	-0.002	96	554017	50.0	53.7	
94 Bromoform	173	11.272	11.281	-0.009	95	75494	50.0	52.2	
97 Isopropylbenzene	105	11.443	11.439	0.004	95	799275	50.0	51.0	
100 Bromobenzene	156	11.753	11.755	-0.002	95	217127	50.0	49.7	
99 1,1,2,2-Tetrachloroethane	83	11.759	11.755	0.004	94	209052	50.0	56.1	
102 trans-1,4-Dichloro-2-buten	53	11.795	11.792	0.003	86	51248	50.0	43.2	
101 1,2,3-Trichloropropane	110	11.814	11.816	-0.002	86	78785	50.0	56.0	
103 N-Propylbenzene	120	11.856	11.852	0.004	99	253283	50.0	53.7	
104 2-Chlorotoluene	126	11.941	11.944	-0.003	97	218902	50.0	54.2	
106 1,3,5-Trimethylbenzene	105	12.039	12.041	-0.002	94	724474	50.0	51.5	
107 4-Chlorotoluene	126	12.069	12.071	-0.002	97	240981	50.0	56.0	
108 tert-Butylbenzene	119	12.349	12.351	-0.002	93	610259	50.0	51.1	
110 1,2,4-Trimethylbenzene	105	12.410	12.412	-0.002	97	742964	50.0	50.4	
112 sec-Butylbenzene	105	12.574	12.576	-0.002	94	893567	50.0	50.2	
113 1,3-Dichlorobenzene	146	12.696	12.692	0.004	98	432375	50.0	50.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
114 4-Isopropyltoluene	119	12.726	12.728	-0.002	96	788005	50.0	51.9	
115 1,4-Dichlorobenzene	146	12.793	12.795	-0.002	95	446274	50.0	51.4	
120 n-Butylbenzene	91	13.140	13.136	0.004	97	643910	50.0	48.8	
121 1,2-Dichlorobenzene	146	13.152	13.154	-0.002	97	419264	50.0	52.5	
122 1,2-Dibromo-3-Chloropropan	75	13.943	13.939	0.004	79	23652	50.0	46.9	
126 1,2,4-Trichlorobenzene	180	14.764	14.760	0.004	93	128228	50.0	42.6	
127 Hexachlorobutadiene	225	14.904	14.906	-0.002	96	74145	50.0	48.3	
128 Naphthalene	128	15.032	15.034	-0.002	97	253851	50.0	43.6	
129 1,2,3-Trichlorobenzene	180	15.251	15.259	-0.008	94	102937	50.0	50.6	
S 133 Xylenes, Total	106				0		100.0	104.3	
S 154 Total BTEX	106				0		250.0	252.0	
S 134 1,2-Dichloroethene, Total	96				0		100.0	88.8	
S 135 1,3-Dichloropropene, Total	1				0		100.0	79.2	

**Reagents:**

VOACEVEPRI_00064	Amount Added: 2.00	Units: uL	
VOAACR2ND_00033	Amount Added: 6.00	Units: uL	
VOA8260VOAPRI_00403	Amount Added: 2.00	Units: uL	
VOAVAPRI_00038	Amount Added: 2.00	Units: uL	
VOAKetPRI_00001	Amount Added: 2.00	Units: uL	
voaWI/SHP5_00016	Amount Added: 5.00	Units: uL	Run Reagent

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050111.D

Injection Date: 01-May-2020 19:21:30

Instrument ID: CHHP5

Operator ID: 034635

Lims ID: lcs

Worklist Smp#: 11

Client ID:

Purge Vol: 5.000 mL

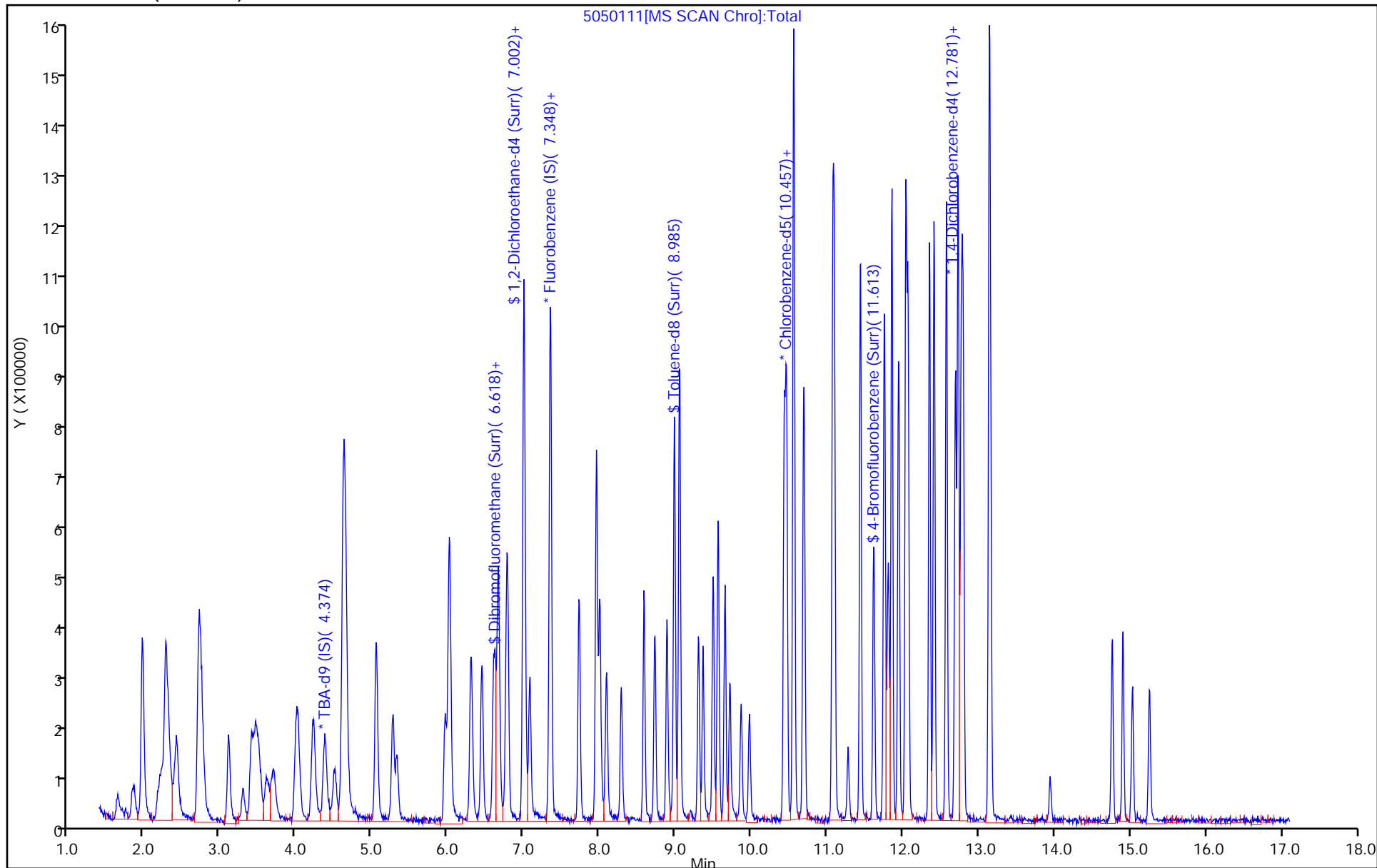
Dil. Factor: 1.0000

ALS Bottle#: 11

Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Pittsburgh  
Recovery Report

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050111.D  
 Lims ID: lcs  
 Client ID:  
 Sample Type: LCS  
 Inject. Date: 01-May-2020 19:21:30 ALS Bottle#: 11 Worklist Smp#: 11  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: 180-0031777-011  
 Operator ID: 034635 Instrument ID: CHHP5  
 Method: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\MMSVOA\_LL\_CHHP5.m  
 Limit Group: VOA 8260C\_D ICAL  
 Last Update: 03-May-2020 16:34:05 Calib Date: 03-Apr-2020 19:09:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP5\20200403-31442.b\5040310.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: CTX0317

Compound	Amount Added	Amount Recovered	% Rec.
\$ 5 Dibromofluoromethane (Surr)	50.0	38.2	76.47
\$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	37.4	74.87
\$ 7 Toluene-d8 (Surr)	50.0	43.8	87.58
\$ 8 4-Bromofluorobenzene (Surr)	50.0	44.1	88.18

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: \_\_\_\_\_ Lab Sample ID: LCS 180-314475/3  
 Matrix: Water Lab File ID: 5050403.D  
 Analysis Method: EPA 8260C Date Collected: \_\_\_\_\_  
 Sample wt/vol: 5 (mL) Date Analyzed: 05/04/2020 08:50  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-624 ID: 0.18 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 314475 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	5.25		1.0	0.90
75-01-4	Vinyl chloride	6.91		1.0	0.40
74-83-9	Bromomethane	15.1		1.0	0.89
75-00-3	Chloroethane	8.17		1.0	0.90
75-35-4	1,1-Dichloroethene	9.01		1.0	0.55
67-64-1	Acetone	15.9		5.0	3.4
75-15-0	Carbon disulfide	8.19		1.0	0.88
75-09-2	Methylene Chloride	8.43		1.0	0.89
156-60-5	trans-1,2-Dichloroethene	9.11		1.0	0.67
1634-04-4	Methyl tert-butyl ether	7.34		1.0	0.59
75-34-3	1,1-Dichloroethane	7.57		1.0	0.31
156-59-2	cis-1,2-Dichloroethene	8.45		1.0	0.71
74-97-5	Bromochloromethane	8.19		1.0	0.63
78-93-3	2-Butanone (MEK)	15.3		5.0	2.6
67-66-3	Chloroform	7.62		1.0	0.60
71-55-6	1,1,1-Trichloroethane	8.37		1.0	0.60
56-23-5	Carbon tetrachloride	9.01		1.0	0.88
71-43-2	Benzene	8.28		1.0	0.60
107-06-2	1,2-Dichloroethane	7.32		1.0	0.57
79-01-6	Trichloroethene	9.21		1.0	0.69
78-87-5	1,2-Dichloropropane	7.17		1.0	0.66
75-27-4	Bromodichloromethane	7.47		1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	7.36		1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	16.4		5.0	3.1
108-88-3	Toluene	10.1		1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	8.65		1.0	0.58
79-00-5	1,1,2-Trichloroethane	9.64		1.0	0.45
127-18-4	Tetrachloroethene	10.7		1.0	0.47
591-78-6	2-Hexanone	15.9		5.0	3.3
124-48-1	Dibromochloromethane	9.80		1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	9.72		1.0	0.50
108-90-7	Chlorobenzene	10.8		1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	11.0		1.0	0.57
100-41-4	Ethylbenzene	10.9		1.0	0.51
1330-20-7	Xylenes, Total	22.7		2.0	0.89
100-42-5	Styrene	11.2		1.0	0.47

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: \_\_\_\_\_ Lab Sample ID: LCS 180-314475/3  
 Matrix: Water Lab File ID: 5050403.D  
 Analysis Method: EPA 8260C Date Collected: \_\_\_\_\_  
 Sample wt/vol: 5 (mL) Date Analyzed: 05/04/2020 08:50  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-624 ID: 0.18 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 314475 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	12.2		1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	11.8		1.0	0.60
107-13-1	Acrylonitrile	68.2		20	7.8

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	73		62-146
2037-26-5	Toluene-d8 (Surr)	104		75-120
460-00-4	4-Bromofluorobenzene (Surr)	96		64-120
1868-53-7	Dibromofluoromethane (Surr)	80		71-132



Eurofins TestAmerica, Pittsburgh  
Target Compound Quantitation Report

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050403.D  
 Lims ID: LCS  
 Client ID:  
 Sample Type: LCS  
 Inject. Date: 04-May-2020 08:50:30 ALS Bottle#: 3 Worklist Smp#: 3  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: 180-0031789-003  
 Operator ID: 034635 Instrument ID: CHHP5  
 Method: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\MMSVOA\_LL\_CHHP5.m  
 Limit Group: VOA 8260C\_D ICAL  
 Last Update: 04-May-2020 11:25:29 Calib Date: 03-Apr-2020 19:09:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP5\20200403-31442.b\5040310.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: CTX0327

First Level Reviewer: journetp

Date: 04-May-2020 09:58:54

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.374	4.363	0.011	0	298482	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.349	7.344	0.005	99	808460	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.439	10.434	0.005	84	195256	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.776	12.776	0.000	91	357568	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.631	6.626	0.005	92	183971	50.0	39.9	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.996	6.991	0.005	0	240416	50.0	36.7	
\$ 7 Toluene-d8 (Surr)	98	8.986	8.986	0.000	93	818887	50.0	51.8	
\$ 8 4-Bromofluorobenzene (Surr	95	11.620	11.614	0.006	91	288197	50.0	48.2	
11 Dichlorodifluoromethane	85	1.643	1.638	0.005	99	187137	50.0	30.3	
12 Chloromethane	50	1.856	1.844	0.012	99	207080	50.0	26.3	
14 Butadiene	39	1.971	1.966	0.005	89	195646	50.0	27.3	
13 Vinyl chloride	62	1.971	1.966	0.005	68	242606	50.0	34.5	
15 Bromomethane	94	2.282	2.288	-0.006	88	304189	50.0	75.6	
16 Chloroethane	64	2.428	2.416	0.012	99	194675	50.0	40.9	
17 Dichlorofluoromethane	67	2.726	2.720	0.006	96	457227	50.0	42.9	
18 Trichlorofluoromethane	101	2.732	2.726	0.006	97	440329	50.0	49.4	
20 Ethyl ether	59	3.109	3.104	0.005	89	165724	50.0	32.4	
21 Acrolein	56	3.304	3.292	0.012	97	111515	150.0	104.2	
22 1,1-Dichloroethene	96	3.401	3.414	-0.013	97	173405	50.0	45.0	
23 1,1,2-Trichloro-1,2,2-trif	101	3.468	3.469	-0.001	92	203216	50.0	47.4	
24 Acetone	43	3.516	3.511	0.005	100	221676	100.0	79.3	
25 Iodomethane	142	3.614	3.639	-0.025	98	305052	50.0	45.8	
26 Carbon disulfide	76	3.705	3.706	-0.001	100	372110	50.0	40.9	
28 3-Chloro-1-propene	76	4.003	3.992	0.011	85	103931	50.0	44.2	
30 Methyl acetate	43	4.021	4.016	0.005	96	316814	100.0	79.1	
31 Methylene Chloride	84	4.228	4.217	0.011	90	227703	50.0	42.2	
32 2-Methyl-2-propanol	59	4.502	4.503	-0.001	92	155921	500.0	511.7	
33 Acrylonitrile	53	4.618	4.612	0.006	99	712629	500.0	340.8	
34 trans-1,2-Dichloroethene	96	4.636	4.631	0.005	97	201194	50.0	45.5	
35 Methyl tert-butyl ether	73	4.654	4.655	-0.001	97	455033	50.0	36.7	
36 Hexane	57	5.056	5.056	0.000	92	292525	50.0	40.2	
37 1,1-Dichloroethane	63	5.275	5.263	0.012	97	326508	50.0	37.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
38 Vinyl acetate	43	5.323	5.324	-0.001	98	221873	50.0	25.5	
44 2,2-Dichloropropane	97	6.017	6.005	0.012	65	49210	50.0	45.8	
45 cis-1,2-Dichloroethene	96	6.017	6.018	-0.001	80	222179	50.0	42.3	
46 2-Butanone (MEK)	43	6.035	6.036	-0.001	98	227359	100.0	76.6	
49 Chlorobromomethane	128	6.303	6.297	0.006	88	114714	50.0	40.9	
51 Tetrahydrofuran	42	6.315	6.310	0.005	85	102929	100.0	60.0	
52 Chloroform	83	6.449	6.443	0.006	94	351822	50.0	38.1	
53 1,1,1-Trichloroethane	97	6.601	6.602	-0.001	98	275594	50.0	41.8	
54 Cyclohexane	56	6.662	6.662	0.000	89	315169	50.0	37.5	
56 Carbon tetrachloride	117	6.777	6.766	0.011	97	246327	50.0	45.0	
55 1,1-Dichloropropene	75	6.783	6.784	-0.001	94	264371	50.0	43.5	
58 Benzene	78	7.002	7.003	-0.001	97	823647	50.0	41.4	
57 Isobutyl alcohol	41	7.008	7.003	0.005	63	153874	1250.0	1108.7	
59 1,2-Dichloroethane	62	7.081	7.076	0.005	97	277081	50.0	36.6	
62 n-Heptane	43	7.361	7.362	-0.001	87	243071	50.0	36.9	
64 Trichloroethene	130	7.726	7.727	-0.001	95	228118	50.0	46.0	
66 Methylcyclohexane	83	7.957	7.958	-0.001	87	377760	50.0	44.9	
67 1,2-Dichloropropane	63	8.000	8.001	-0.001	93	190333	50.0	35.8	
70 1,4-Dioxane	88	8.085	8.092	-0.007	44	49813	1000.0	1153.6	
68 Dibromomethane	93	8.091	8.092	-0.001	95	128032	50.0	40.6	
71 Dichlorobromomethane	83	8.286	8.287	-0.001	99	232871	50.0	37.4	
73 2-Chloroethyl vinyl ether	63	8.584	8.585	-0.001	93	244963	100.0	87.6	
74 cis-1,3-Dichloropropene	75	8.730	8.731	-0.001	95	288723	50.0	36.8	
75 4-Methyl-2-pentanone (MIBK)	43	8.888	8.889	-0.001	96	335507	100.0	82.0	
76 Toluene	91	9.052	9.053	-0.001	99	935013	50.0	50.6	
77 trans-1,3-Dichloropropene	75	9.308	9.303	0.005	93	262392	50.0	43.2	
78 Ethyl methacrylate	69	9.363	9.364	-0.001	87	230525	50.0	38.9	
79 1,1,2-Trichloroethane	97	9.497	9.497	0.000	91	206965	50.0	48.2	
80 Tetrachloroethene	164	9.563	9.564	-0.001	97	196083	50.0	53.4	
81 1,3-Dichloropropane	76	9.655	9.656	-0.001	89	347056	50.0	45.4	
82 2-Hexanone	43	9.716	9.716	0.000	93	266619	100.0	79.6	
84 Chlorodibromomethane	129	9.868	9.868	0.000	89	177939	50.0	49.0	
85 Ethylene Dibromide	107	9.977	9.978	-0.001	98	195135	50.0	48.6	
87 Chlorobenzene	112	10.464	10.465	-0.001	96	643473	50.0	54.2	
89 1,1,1,2-Tetrachloroethane	131	10.555	10.562	-0.007	92	212384	50.0	55.1	
90 Ethylbenzene	106	10.561	10.562	-0.001	98	334677	50.0	54.5	
91 m-Xylene & p-Xylene	106	10.695	10.696	-0.001	0	420019	50.0	54.8	
92 o-Xylene	106	11.078	11.079	-0.001	95	417328	50.0	58.3	
93 Styrene	104	11.096	11.097	-0.001	94	688516	50.0	56.1	
94 Bromoform	173	11.279	11.280	-0.001	94	104468	50.0	60.8	
97 Isopropylbenzene	105	11.443	11.444	-0.001	95	1069184	50.0	57.5	
100 Bromobenzene	156	11.753	11.754	-0.001	94	278396	50.0	50.3	
99 1,1,2,2-Tetrachloroethane	83	11.760	11.760	0.000	94	261569	50.0	59.0	
102 trans-1,4-Dichloro-2-buten	53	11.802	11.797	0.005	83	66316	50.0	44.2	
101 1,2,3-Trichloropropane	110	11.814	11.815	-0.001	85	93260	50.0	52.4	
103 N-Propylbenzene	120	11.857	11.858	-0.001	98	338323	50.0	56.6	
104 2-Chlorotoluene	126	11.942	11.949	-0.007	97	286295	50.0	56.0	
106 1,3,5-Trimethylbenzene	105	12.039	12.040	-0.001	95	934781	50.0	52.5	
107 4-Chlorotoluene	126	12.070	12.071	-0.001	97	299461	50.0	55.0	
108 tert-Butylbenzene	119	12.356	12.357	-0.001	91	799023	50.0	52.9	
110 1,2,4-Trimethylbenzene	105	12.410	12.411	-0.001	97	948637	50.0	50.8	
112 sec-Butylbenzene	105	12.575	12.576	-0.001	94	1188771	50.0	52.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
113 1,3-Dichlorobenzene	146	12.696	12.697	-0.001	98	556104	50.0	51.4	
114 4-Isopropyltoluene	119	12.733	12.728	0.005	96	1010815	50.0	52.6	
115 1,4-Dichlorobenzene	146	12.794	12.801	-0.007	94	552256	50.0	50.3	
120 n-Butylbenzene	91	13.141	13.141	-0.001	96	851206	50.0	51.0	
121 1,2-Dichlorobenzene	146	13.153	13.154	-0.001	98	514936	50.0	51.0	
122 1,2-Dibromo-3-Chloropropan	75	13.944	13.938	0.006	86	28609	50.0	44.8	
126 1,2,4-Trichlorobenzene	180	14.765	14.766	-0.001	93	186887	50.0	49.0	
127 Hexachlorobutadiene	225	14.905	14.906	-0.001	96	104287	50.0	53.6	
128 Naphthalene	128	15.032	15.027	0.005	96	360861	50.0	48.9	
129 1,2,3-Trichlorobenzene	180	15.258	15.252	0.006	94	136257	50.0	52.9	
S 134 1,2-Dichloroethene, Total	96				0		100.0	87.8	
S 154 Total BTEX	106				0		250.0	259.6	
S 133 Xylenes, Total	106				0		100.0	113.2	
S 135 1,3-Dichloropropene, Total	1				0		100.0	80.0	

**Reagents:**

voaWKet2ndRes_00050	Amount Added: 2.00	Units: uL	
VOACEVEPRI_00064	Amount Added: 2.00	Units: uL	
VOA8260VOAPRI_00403	Amount Added: 2.00	Units: uL	
VOAACR2ND_00033	Amount Added: 6.00	Units: uL	
VOAVAPRI_00038	Amount Added: 2.00	Units: uL	
voaWI/SHP5_00016	Amount Added: 5.00	Units: uL	Run Reagent

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050403.D

Injection Date: 04-May-2020 08:50:30

Instrument ID: CHHP5

Operator ID: 034635

Lims ID: LCS

Worklist Smp#: 3

Client ID:

Purge Vol: 5.000 mL

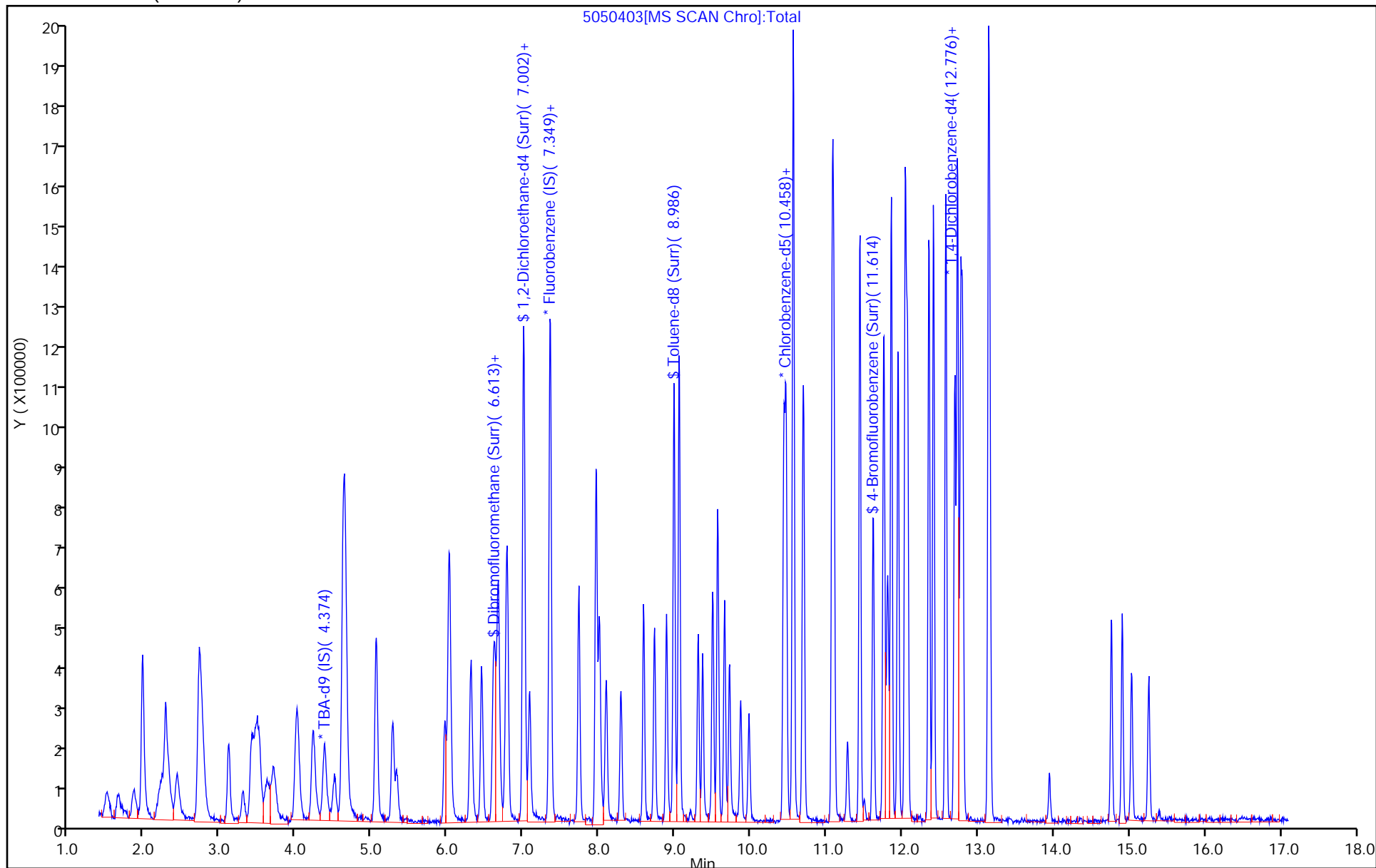
Dil. Factor: 1.0000

ALS Bottle#: 3

Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Pittsburgh  
Recovery Report

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050403.D  
 Lims ID: LCS  
 Client ID:  
 Sample Type: LCS  
 Inject. Date: 04-May-2020 08:50:30 ALS Bottle#: 3 Worklist Smp#: 3  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: 180-0031789-003  
 Operator ID: 034635 Instrument ID: CHHP5  
 Method: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\MSVOA\_LL\_CHHP5.m  
 Limit Group: VOA 8260C\_D ICAL  
 Last Update: 04-May-2020 11:25:29 Calib Date: 03-Apr-2020 19:09:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP5\20200403-31442.b\5040310.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: CTX0327

First Level Reviewer: journetp

Date: 04-May-2020 09:58:54

Compound	Amount Added	Amount Recovered	% Rec.
\$ 5 Dibromofluoromethane (Surr)	50.0	39.9	79.77
\$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	36.7	73.46
\$ 7 Toluene-d8 (Surr)	50.0	51.8	103.62
\$ 8 4-Bromofluorobenzene (Surr)	50.0	48.2	96.48

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: HD-COD-SW-17-0/1-0 MS Lab Sample ID: 180-105108-8 MS  
 Matrix: Water Lab File ID: 5050411.D  
 Analysis Method: EPA 8260C Date Collected: 04/28/2020 11:10  
 Sample wt/vol: 5 (mL) Date Analyzed: 05/04/2020 12:18  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-624 ID: 0.18 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 314475 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	5.60		1.0	0.90
75-01-4	Vinyl chloride	6.91		1.0	0.40
74-83-9	Bromomethane	12.7		1.0	0.89
75-00-3	Chloroethane	8.58		1.0	0.90
75-35-4	1,1-Dichloroethene	8.53		1.0	0.55
67-64-1	Acetone	9.56		5.0	3.4
75-15-0	Carbon disulfide	8.30		1.0	0.88
75-09-2	Methylene Chloride	7.96		1.0	0.89
156-60-5	trans-1,2-Dichloroethene	8.58		1.0	0.67
1634-04-4	Methyl tert-butyl ether	6.51		1.0	0.59
75-34-3	1,1-Dichloroethane	7.33		1.0	0.31
156-59-2	cis-1,2-Dichloroethene	8.45		1.0	0.71
74-97-5	Bromochloromethane	8.09		1.0	0.63
78-93-3	2-Butanone (MEK)	10.0		5.0	2.6
67-66-3	Chloroform	7.04		1.0	0.60
71-55-6	1,1,1-Trichloroethane	7.39		1.0	0.60
56-23-5	Carbon tetrachloride	8.76		1.0	0.88
71-43-2	Benzene	8.13		1.0	0.60
107-06-2	1,2-Dichloroethane	6.85		1.0	0.57
79-01-6	Trichloroethene	9.03		1.0	0.69
78-87-5	1,2-Dichloropropane	6.87		1.0	0.66
75-27-4	Bromodichloromethane	7.25		1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	6.40		1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	14.4		5.0	3.1
108-88-3	Toluene	9.18		1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	7.69		1.0	0.58
79-00-5	1,1,2-Trichloroethane	8.30		1.0	0.45
127-18-4	Tetrachloroethene	10.6		1.0	0.47
591-78-6	2-Hexanone	14.1		5.0	3.3
124-48-1	Dibromochloromethane	8.54		1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	8.58		1.0	0.50
108-90-7	Chlorobenzene	9.82		1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	9.60		1.0	0.57
100-41-4	Ethylbenzene	9.95		1.0	0.51
1330-20-7	Xylenes, Total	19.8		2.0	0.89
100-42-5	Styrene	9.99		1.0	0.47

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: HD-COD-SW-17-0/1-0 MS Lab Sample ID: 180-105108-8 MS  
 Matrix: Water Lab File ID: 5050411.D  
 Analysis Method: EPA 8260C Date Collected: 04/28/2020 11:10  
 Sample wt/vol: 5 (mL) Date Analyzed: 05/04/2020 12:18  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-624 ID: 0.18 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 314475 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	10.4		1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	9.86		1.0	0.60
107-13-1	Acrylonitrile	58.0		20	7.8

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	72		62-146
2037-26-5	Toluene-d8 (Surr)	98		75-120
460-00-4	4-Bromofluorobenzene (Surr)	93		64-120
1868-53-7	Dibromofluoromethane (Surr)	84		71-132

Eurofins TestAmerica, Pittsburgh  
Target Compound Quantitation Report

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050411.D  
 Lims ID: 180-105108-B-8 MS  
 Client ID:  
 Sample Type: MS  
 Inject. Date: 04-May-2020 12:18:30 ALS Bottle#: 11 Worklist Smp#: 11  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: 180-0031789-011  
 Operator ID: 034635 Instrument ID: CHHP5  
 Method: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\MMSVOA\_LL\_CHHP5.m  
 Limit Group: VOA 8260C\_D ICAL  
 Last Update: 04-May-2020 11:25:29 Calib Date: 03-Apr-2020 19:09:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP5\20200403-31442.b\5040310.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: CTX0327

First Level Reviewer: journeyp

Date: 04-May-2020 13:22:43

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.368	4.363	0.005	0	206067	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.343	7.344	-0.001	97	773903	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.433	10.434	-0.001	84	195039	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.769	12.776	-0.007	93	310298	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.631	6.626	0.005	93	184711	50.0	41.8	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.996	6.991	0.005	0	225211	50.0	35.9	
\$ 7 Toluene-d8 (Surr)	98	8.985	8.986	-0.001	93	771147	50.0	48.8	
\$ 8 4-Bromofluorobenzene (Surr	95	11.613	11.614	-0.001	90	276944	50.0	46.4	
11 Dichlorodifluoromethane	85	1.649	1.638	0.011	99	172546	50.0	29.2	
12 Chloromethane	50	1.849	1.844	0.005	100	211392	50.0	28.0	
14 Butadiene	39	1.971	1.966	0.005	93	182005	50.0	26.5	
13 Vinyl chloride	62	1.977	1.966	0.011	97	232396	50.0	34.6	
15 Bromomethane	94	2.300	2.288	0.012	90	243675	50.0	63.3	
16 Chloroethane	64	2.434	2.416	0.018	98	195729	50.0	42.9	
17 Dichlorofluoromethane	67	2.719	2.720	-0.001	96	438577	50.0	42.9	
18 Trichlorofluoromethane	101	2.732	2.726	0.006	77	419010	50.0	49.1	
20 Ethyl ether	59	3.103	3.104	-0.001	89	155359	50.0	31.7	
21 Acrolein	56	3.297	3.292	0.005	99	81882	150.0	79.9	
22 1,1-Dichloroethene	96	3.425	3.414	0.011	97	157600	50.0	42.7	
23 1,1,2-Trichloro-1,2,2-trif	101	3.486	3.469	0.017	94	190662	50.0	46.4	
24 Acetone	43	3.516	3.511	0.005	100	127826	100.0	47.8	
25 Iodomethane	142	3.632	3.639	-0.007	96	271311	50.0	42.5	
26 Carbon disulfide	76	3.717	3.706	0.011	100	360988	50.0	41.5	
28 3-Chloro-1-propene	76	3.997	3.992	0.005	86	92579	50.0	41.1	
30 Methyl acetate	43	4.021	4.016	0.005	97	261873	100.0	68.3	
31 Methylene Chloride	84	4.234	4.217	0.017	88	206292	50.0	39.8	
32 2-Methyl-2-propanol	59	4.496	4.503	-0.007	90	84575	500.0	402.0	
33 Acrylonitrile	53	4.617	4.612	0.005	99	580156	500.0	289.8	
34 trans-1,2-Dichloroethene	96	4.636	4.631	0.005	97	181383	50.0	42.9	
35 Methyl tert-butyl ether	73	4.654	4.655	-0.001	97	386539	50.0	32.6	
36 Hexane	57	5.055	5.056	-0.001	93	269054	50.0	38.6	
37 1,1-Dichloroethane	63	5.274	5.263	0.011	97	302695	50.0	36.7	



Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
38 Vinyl acetate	43	5.329	5.324	0.005	98	196010	50.0	23.6	
44 2,2-Dichloropropane	97	6.017	6.005	0.012	58	42731	50.0	41.6	
45 cis-1,2-Dichloroethene	96	6.023	6.018	0.005	83	212743	50.0	42.3	
46 2-Butanone (MEK)	43	6.035	6.036	-0.001	97	142727	100.0	50.2	
49 Chlorobromomethane	128	6.303	6.297	0.006	90	108463	50.0	40.4	
51 Tetrahydrofuran	42	6.315	6.310	0.005	81	88287	100.0	53.8	
52 Chloroform	83	6.449	6.443	0.006	93	312290	50.0	35.2	
53 1,1,1-Trichloroethane	97	6.601	6.602	-0.001	99	233002	50.0	36.9	
54 Cyclohexane	56	6.668	6.662	0.006	88	296651	50.0	36.9	
56 Carbon tetrachloride	117	6.771	6.766	0.005	96	229396	50.0	43.8	
55 1,1-Dichloropropene	75	6.789	6.784	0.005	95	243307	50.0	41.8	
58 Benzene	78	7.002	7.003	-0.001	97	774116	50.0	40.6	
57 Isobutyl alcohol	41	7.008	7.003	0.005	41	98431	1250.0	740.9	
59 1,2-Dichloroethane	62	7.081	7.076	0.005	97	248244	50.0	34.3	
62 n-Heptane	43	7.361	7.362	-0.001	86	211532	50.0	33.5	
64 Trichloroethene	130	7.732	7.727	0.005	95	214249	50.0	45.2	
66 Methylcyclohexane	83	7.957	7.958	-0.001	87	351716	50.0	43.7	
67 1,2-Dichloropropane	63	8.000	8.001	-0.001	92	174591	50.0	34.3	
70 1,4-Dioxane	88	8.085	8.092	-0.007	37	21443	1000.0	528.7	
68 Dibromomethane	93	8.091	8.092	-0.001	96	115060	50.0	38.1	
71 Dichlorobromomethane	83	8.286	8.287	-0.001	98	216362	50.0	36.3	
73 2-Chloroethyl vinyl ether	63	8.590	8.585	0.005	22	1629	100.0	7.67	
74 cis-1,3-Dichloropropene	75	8.730	8.731	-0.001	96	240455	50.0	32.0	
75 4-Methyl-2-pentanone (MIBK)	43	8.888	8.889	-0.001	95	284952	100.0	72.0	
76 Toluene	91	9.052	9.053	-0.001	98	846288	50.0	45.9	
77 trans-1,3-Dichloropropene	75	9.308	9.303	0.005	94	233042	50.0	38.4	
78 Ethyl methacrylate	69	9.363	9.364	-0.001	87	192845	50.0	32.5	
79 1,1,2-Trichloroethane	97	9.496	9.497	-0.001	91	177953	50.0	41.5	
80 Tetrachloroethene	164	9.563	9.564	-0.001	97	194572	50.0	53.0	
81 1,3-Dichloropropane	76	9.655	9.656	-0.001	89	309101	50.0	40.5	
82 2-Hexanone	43	9.721	9.716	0.005	94	229366	100.0	70.5	
84 Chlorodibromomethane	129	9.868	9.868	0.000	89	154871	50.0	42.7	
85 Ethylene Dibromide	107	9.977	9.978	-0.001	96	172055	50.0	42.9	
87 Chlorobenzene	112	10.470	10.465	0.005	97	582091	50.0	49.1	
89 1,1,1,2-Tetrachloroethane	131	10.555	10.562	-0.007	93	184844	50.0	48.0	
90 Ethylbenzene	106	10.561	10.562	-0.001	98	305454	50.0	49.8	
91 m-Xylene & p-Xylene	106	10.695	10.696	-0.001	0	379665	50.0	49.6	
92 o-Xylene	106	11.078	11.079	-0.001	95	352435	50.0	49.3	
93 Styrene	104	11.096	11.097	-0.001	95	611663	50.0	49.9	
94 Bromoform	173	11.279	11.280	-0.001	94	89256	50.0	52.0	
97 Isopropylbenzene	105	11.443	11.444	-0.001	95	932086	50.0	50.2	
100 Bromobenzene	156	11.753	11.754	-0.001	93	243924	50.0	50.8	
99 1,1,2,2-Tetrachloroethane	83	11.759	11.760	-0.001	95	218249	50.0	49.3	
102 trans-1,4-Dichloro-2-buten	53	11.796	11.797	-0.001	61	55489	50.0	42.6	
101 1,2,3-Trichloropropane	110	11.814	11.815	-0.001	84	74679	50.0	48.3	
103 N-Propylbenzene	120	11.857	11.858	-0.001	98	291860	50.0	56.3	
104 2-Chlorotoluene	126	11.948	11.949	-0.001	98	237507	50.0	53.5	
106 1,3,5-Trimethylbenzene	105	12.039	12.040	-0.001	95	778733	50.0	50.4	
107 4-Chlorotoluene	126	12.070	12.071	-0.001	97	263756	50.0	55.8	
108 tert-Butylbenzene	119	12.356	12.357	-0.001	92	644829	50.0	49.2	
110 1,2,4-Trimethylbenzene	105	12.416	12.411	0.005	96	766026	50.0	47.3	
112 sec-Butylbenzene	105	12.575	12.576	-0.001	94	949407	50.0	48.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
113 1,3-Dichlorobenzene	146	12.696	12.697	-0.001	98	445773	50.0	47.5	
114 4-Isopropyltoluene	119	12.727	12.728	-0.001	97	795863	50.0	47.7	
115 1,4-Dichlorobenzene	146	12.794	12.801	-0.007	96	461064	50.0	48.4	
120 n-Butylbenzene	91	13.140	13.141	-0.001	97	628719	50.0	43.4	
121 1,2-Dichlorobenzene	146	13.153	13.154	-0.001	96	393416	50.0	44.9	
122 1,2-Dibromo-3-Chloropropan	75	13.943	13.938	0.005	86	20394	50.0	36.8	
126 1,2,4-Trichlorobenzene	180	14.765	14.766	-0.001	92	111261	50.0	33.6	
127 Hexachlorobutadiene	225	14.905	14.906	-0.001	97	65266	50.0	38.7	
128 Naphthalene	128	15.026	15.027	-0.001	96	210904	50.0	32.9	
129 1,2,3-Trichlorobenzene	180	15.251	15.252	-0.001	95	86415	50.0	38.6	
S 134 1,2-Dichloroethene, Total	96				0		100.0	85.1	
S 154 Total BTEX	106				0		250.0	235.2	
S 133 Xylenes, Total	106				0		100.0	98.9	
S 135 1,3-Dichloropropene, Total	1				0		100.0	70.4	

**Reagents:**

VOACEVEPRI_00064	Amount Added: 2.00	Units: uL	
VOA8260VOAPRI_00403	Amount Added: 2.00	Units: uL	
VOAVAPRI_00038	Amount Added: 2.00	Units: uL	
VOAACR2ND_00033	Amount Added: 6.00	Units: uL	
voaWKet2ndRes_00050	Amount Added: 2.00	Units: uL	
voaWI/SHP5_00016	Amount Added: 5.00	Units: uL	Run Reagent

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050411.D

Injection Date: 04-May-2020 12:18:30

Instrument ID: CHHP5

Operator ID: 034635

Lims ID: 180-105108-B-8 MS

Worklist Smp#: 11

Client ID:

Purge Vol: 5.000 mL

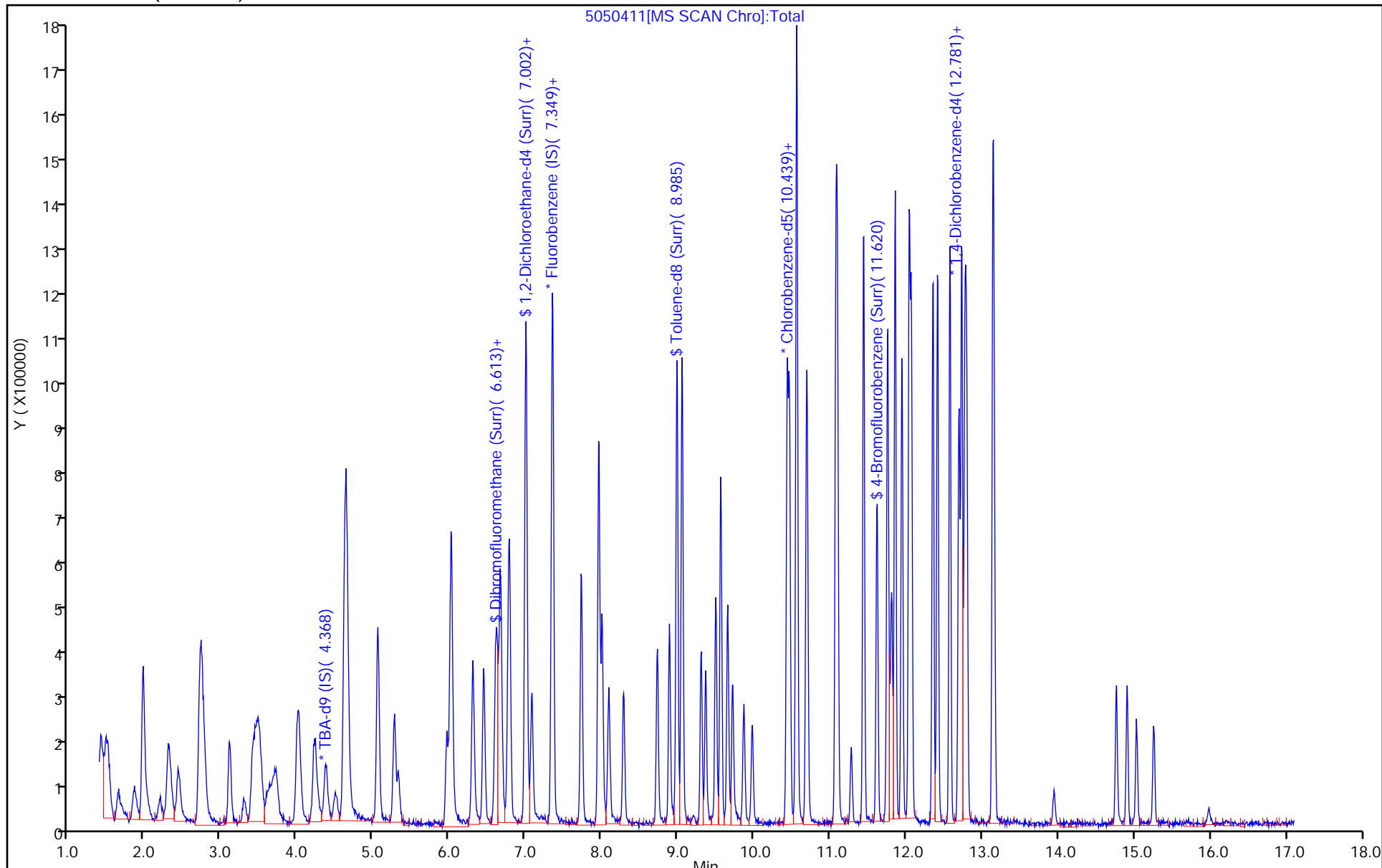
Dil. Factor: 1.0000

ALS Bottle#: 11

Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Pittsburgh  
Recovery Report

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050411.D  
 Lims ID: 180-105108-B-8 MS  
 Client ID:  
 Sample Type: MS  
 Inject. Date: 04-May-2020 12:18:30 ALS Bottle#: 11 Worklist Smp#: 11  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: 180-0031789-011  
 Operator ID: 034635 Instrument ID: CHHP5  
 Method: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\MMSVOA\_LL\_CHHP5.m  
 Limit Group: VOA 8260C\_D ICAL  
 Last Update: 04-May-2020 11:25:29 Calib Date: 03-Apr-2020 19:09:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP5\20200403-31442.b\5040310.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: CTX0327

First Level Reviewer: journetp

Date: 04-May-2020 13:22:43

Compound	Amount Added	Amount Recovered	% Rec.
\$ 5 Dibromofluoromethane (Surr)	50.0	41.8	83.66
\$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	35.9	71.89
\$ 7 Toluene-d8 (Surr)	50.0	48.8	97.69
\$ 8 4-Bromofluorobenzene (Surr)	50.0	46.4	92.82

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: HD-COD-SW-26-0/1-0 MS Lab Sample ID: 180-105108-9 MS  
 Matrix: Water Lab File ID: 5050109.D  
 Analysis Method: EPA 8260C Date Collected: 04/28/2020 11:55  
 Sample wt/vol: 5 (mL) Date Analyzed: 05/01/2020 18:32  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-624 ID: 0.18 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 314382 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	4.83		1.0	0.90
75-01-4	Vinyl chloride	6.60		1.0	0.40
74-83-9	Bromomethane	18.5		1.0	0.89
75-00-3	Chloroethane	8.60		1.0	0.90
75-35-4	1,1-Dichloroethene	8.35		1.0	0.55
67-64-1	Acetone	12.8		5.0	3.4
75-15-0	Carbon disulfide	7.15		1.0	0.88
75-09-2	Methylene Chloride	7.75		1.0	0.89
156-60-5	trans-1,2-Dichloroethene	8.43		1.0	0.67
1634-04-4	Methyl tert-butyl ether	6.59		1.0	0.59
75-34-3	1,1-Dichloroethane	7.41		1.0	0.31
156-59-2	cis-1,2-Dichloroethene	7.96		1.0	0.71
74-97-5	Bromochloromethane	8.26		1.0	0.63
78-93-3	2-Butanone (MEK)	10.9		5.0	2.6
67-66-3	Chloroform	7.42		1.0	0.60
71-55-6	1,1,1-Trichloroethane	7.59		1.0	0.60
56-23-5	Carbon tetrachloride	8.29		1.0	0.88
71-43-2	Benzene	8.23		1.0	0.60
107-06-2	1,2-Dichloroethane	7.49		1.0	0.57
79-01-6	Trichloroethene	8.84		1.0	0.69
78-87-5	1,2-Dichloropropane	7.14		1.0	0.66
75-27-4	Bromodichloromethane	6.88		1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	6.30		1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	14.8		5.0	3.1
108-88-3	Toluene	9.44		1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	7.87		1.0	0.58
79-00-5	1,1,2-Trichloroethane	8.56		1.0	0.45
127-18-4	Tetrachloroethene	11.6		1.0	0.47
591-78-6	2-Hexanone	13.8		5.0	3.3
124-48-1	Dibromochloromethane	8.18		1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	8.44		1.0	0.50
108-90-7	Chlorobenzene	9.77		1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	9.38		1.0	0.57
100-41-4	Ethylbenzene	9.66		1.0	0.51
1330-20-7	Xylenes, Total	19.8		2.0	0.89
100-42-5	Styrene	9.99		1.0	0.47

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: HD-COD-SW-26-0/1-0 MS Lab Sample ID: 180-105108-9 MS  
 Matrix: Water Lab File ID: 5050109.D  
 Analysis Method: EPA 8260C Date Collected: 04/28/2020 11:55  
 Sample wt/vol: 5 (mL) Date Analyzed: 05/01/2020 18:32  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-624 ID: 0.18 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 314382 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	9.78		1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	10.6		1.0	0.60
107-13-1	Acrylonitrile	69.1		20	7.8

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	72		62-146
2037-26-5	Toluene-d8 (Surr)	92		75-120
460-00-4	4-Bromofluorobenzene (Surr)	85		64-120
1868-53-7	Dibromofluoromethane (Surr)	77		71-132

Eurofins TestAmerica, Pittsburgh  
Target Compound Quantitation Report

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050109.D  
 Lims ID: 180-105108-B-9 MS  
 Client ID: HD-COD-SW-26-0/1-0  
 Sample Type: MS  
 Inject. Date: 01-May-2020 18:32:30 ALS Bottle#: 9 Worklist Smp#: 9  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: 180-0031777-009  
 Operator ID: 034635 Instrument ID: CHHP5  
 Method: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\MMSVOA\_LL\_CHHP5.m  
 Limit Group: VOA 8260C\_D ICAL  
 Last Update: 03-May-2020 16:03:33 Calib Date: 03-Apr-2020 19:09:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP5\20200403-31442.b\5040310.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: CTX0317

First Level Reviewer: journetp

Date: 02-May-2020 18:41:59

Compound	Sig	RT (min.)	Exp RT (min.)	Diff RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.374	4.371	0.003	0	243871	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.342	7.345	-0.003	97	672550	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.433	10.436	-0.003	85	168321	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.775	12.772	0.003	95	291190	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.625	6.628	-0.003	92	147525	50.0	38.4	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.990	6.993	-0.003	0	196435	50.0	36.1	
\$ 7 Toluene-d8 (Surr)	98	8.985	8.988	-0.003	94	624691	50.0	45.8	
\$ 8 4-Bromofluorobenzene (Surr	95	11.613	11.616	-0.003	89	219463	50.0	42.6	
11 Dichlorodifluoromethane	85	1.636	1.638	-0.002	97	123515	50.0	24.0	
12 Chloromethane	50	1.849	1.851	-0.002	99	158543	50.0	24.2	
14 Butadiene	39	1.959	1.961	-0.002	97	155704	50.0	26.1	
13 Vinyl chloride	62	1.971	1.961	0.010	88	192913	50.0	33.0	
15 Bromomethane	94	2.281	2.277	0.004	90	309394	50.0	92.5	
16 Chloroethane	64	2.415	2.423	-0.008	99	170441	50.0	43.0	
17 Dichlorofluoromethane	67	2.719	2.715	0.004	95	376183	50.0	42.4	
18 Trichlorofluoromethane	101	2.719	2.727	-0.008	73	342633	50.0	46.2	
20 Ethyl ether	59	3.102	3.104	-0.002	88	143275	50.0	33.7	
21 Acrolein	56	3.297	3.287	0.010	94	94881	150.0	106.6	
22 1,1-Dichloroethene	96	3.406	3.390	0.016	98	134227	50.0	41.8	
23 1,1,2-Trichloro-1,2,2-trif	101	3.473	3.482	-0.009	93	160565	50.0	45.0	
24 Acetone	43	3.510	3.512	-0.002	99	149227	100.0	64.2	
25 Iodomethane	142	3.607	3.597	0.010	99	211978	50.0	38.2	
26 Carbon disulfide	76	3.698	3.701	-0.003	100	270104	50.0	35.7	
28 3-Chloro-1-propene	76	3.997	3.987	0.010	87	72642	50.0	37.1	
30 Methyl acetate	43	4.027	4.023	0.004	96	248202	100.0	74.5	
31 Methylene Chloride	84	4.216	4.218	-0.002	90	174727	50.0	38.8	
32 2-Methyl-2-propanol	59	4.495	4.491	0.004	88	109295	500.0	439.0	
33 Acrylonitrile	53	4.611	4.613	-0.002	99	600807	500.0	345.4	
34 trans-1,2-Dichloroethene	96	4.635	4.631	0.004	97	154948	50.0	42.1	
35 Methyl tert-butyl ether	73	4.647	4.656	-0.009	96	339799	50.0	32.9	
36 Hexane	57	5.055	5.045	0.010	92	222352	50.0	36.7	
37 1,1-Dichloroethane	63	5.268	5.264	0.004	97	265947	50.0	37.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
38 Vinyl acetate	43	5.323	5.325	-0.002	97	254291	50.0	35.2	
44 2,2-Dichloropropane	97	6.016	6.000	0.016	61	35417	50.0	39.7	
45 cis-1,2-Dichloroethene	96	6.016	6.018	-0.002	83	174203	50.0	39.8	
46 2-Butanone (MEK)	43	6.035	6.031	0.004	87	134134	100.0	54.3	
49 Chlorobromomethane	128	6.302	6.298	0.004	93	96269	50.0	41.3	
51 Tetrahydrofuran	42	6.314	6.304	0.010	79	76716	100.0	53.8	
52 Chloroform	83	6.448	6.444	0.004	94	285306	50.0	37.1	
53 1,1,1-Trichloroethane	97	6.594	6.596	-0.002	98	207889	50.0	37.9	
54 Cyclohexane	56	6.667	6.663	0.004	89	252425	50.0	36.1	
56 Carbon tetrachloride	117	6.771	6.761	0.010	95	188574	50.0	41.4	
55 1,1-Dichloropropene	75	6.783	6.785	-0.002	96	215499	50.0	42.6	
58 Benzene	78	7.002	6.998	0.004	97	681204	50.0	41.2	
57 Isobutyl alcohol	41	7.008	7.010	-0.002	47	124254	1250.0	1076.2	
59 1,2-Dichloroethane	62	7.075	7.071	0.004	98	235816	50.0	37.5	
62 n-Heptane	43	7.355	7.351	0.004	87	208178	50.0	37.9	
64 Trichloroethene	130	7.726	7.728	-0.002	95	182219	50.0	44.2	
66 Methylcyclohexane	83	7.963	7.959	0.004	87	294596	50.0	42.1	
67 1,2-Dichloropropane	63	7.999	7.996	0.003	92	157745	50.0	35.7	
70 1,4-Dioxane	88	8.085	8.081	0.004	43	34389	1000.0	960.4	
68 Dibromomethane	93	8.085	8.087	-0.002	95	101136	50.0	38.6	
71 Dichlorobromomethane	83	8.285	8.281	0.004	97	178425	50.0	34.4	
73 2-Chloroethyl vinyl ether	63	8.583	8.586	-0.003	94	18381	100.0	14.4	
74 cis-1,3-Dichloropropene	75	8.729	8.726	0.003	94	205559	50.0	31.5	
75 4-Methyl-2-pentanone (MIBK)	43	8.888	8.890	-0.002	95	253527	100.0	73.8	
76 Toluene	91	9.052	9.048	0.004	97	751633	50.0	47.2	
77 trans-1,3-Dichloropropene	75	9.307	9.303	0.004	93	205830	50.0	39.3	
78 Ethyl methacrylate	69	9.362	9.364	-0.002	88	173287	50.0	33.9	
79 1,1,2-Trichloroethane	97	9.496	9.498	-0.002	93	158430	50.0	42.8	
80 Tetrachloroethene	164	9.563	9.559	0.004	96	183409	50.0	57.9	
81 1,3-Dichloropropane	76	9.654	9.650	0.004	90	268255	50.0	40.7	
82 2-Hexanone	43	9.715	9.717	-0.002	94	191946	100.0	68.8	
84 Chlorodibromomethane	129	9.867	9.869	-0.002	89	128075	50.0	40.9	
85 Ethylene Dibromide	107	9.971	9.973	-0.002	100	146025	50.0	42.2	
87 Chlorobenzene	112	10.463	10.465	-0.002	96	500087	50.0	48.9	
89 1,1,1,2-Tetrachloroethane	131	10.555	10.557	-0.002	92	155858	50.0	46.9	
90 Ethylbenzene	106	10.561	10.563	-0.002	98	255817	50.0	48.3	
91 m-Xylene & p-Xylene	106	10.694	10.697	-0.003	0	322779	50.0	48.9	
92 o-Xylene	106	11.072	11.074	-0.002	96	309434	50.0	50.2	
93 Styrene	104	11.096	11.098	-0.002	95	527943	50.0	49.9	
94 Bromoform	173	11.278	11.281	-0.003	95	72414	50.0	48.9	
97 Isopropylbenzene	105	11.443	11.439	0.004	96	804403	50.0	50.2	
100 Bromobenzene	156	11.753	11.755	-0.002	96	203600	50.0	45.2	
99 1,1,2,2-Tetrachloroethane	83	11.759	11.755	0.004	95	202771	50.0	53.1	
102 trans-1,4-Dichloro-2-buten	53	11.789	11.792	-0.003	75	51468	50.0	42.1	
101 1,2,3-Trichloropropane	110	11.808	11.816	-0.008	86	67961	50.0	46.9	
103 N-Propylbenzene	120	11.856	11.852	0.004	98	263737	50.0	54.2	
104 2-Chlorotoluene	126	11.948	11.944	0.004	97	209679	50.0	50.3	
106 1,3,5-Trimethylbenzene	105	12.039	12.041	-0.002	94	695797	50.0	48.0	
107 4-Chlorotoluene	126	12.069	12.071	-0.002	98	231698	50.0	52.2	
108 tert-Butylbenzene	119	12.349	12.351	-0.002	93	576468	50.0	46.8	
110 1,2,4-Trimethylbenzene	105	12.410	12.412	-0.002	96	714120	50.0	47.0	
112 sec-Butylbenzene	105	12.574	12.576	-0.002	94	888082	50.0	48.4	



Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
113 1,3-Dichlorobenzene	146	12.696	12.692	0.004	98	413270	50.0	46.9	
114 4-Isopropyltoluene	119	12.726	12.728	-0.002	96	755381	50.0	48.2	
115 1,4-Dichlorobenzene	146	12.793	12.795	-0.002	95	432816	50.0	48.4	
120 n-Butylbenzene	91	13.134	13.136	-0.002	97	621953	50.0	45.7	
121 1,2-Dichlorobenzene	146	13.158	13.154	0.004	96	375615	50.0	45.7	
122 1,2-Dibromo-3-Chloropropan	75	13.943	13.939	0.004	79	22530	50.0	43.3	
126 1,2,4-Trichlorobenzene	180	14.764	14.760	0.004	92	106573	50.0	34.3	
127 Hexachlorobutadiene	225	14.904	14.906	-0.002	97	62217	50.0	39.3	
128 Naphthalene	128	15.026	15.034	-0.008	97	203212	50.0	33.8	
129 1,2,3-Trichlorobenzene	180	15.257	15.259	-0.002	96	77764	50.0	37.1	
S 133 Xylenes, Total	106				0		100.0	99.1	
S 154 Total BTEX	106				0		250.0	235.7	
S 134 1,2-Dichloroethene, Total	96				0		100.0	82.0	
S 135 1,3-Dichloropropene, Total	1				0		100.0	70.8	

**Reagents:**

VOACEVEPRI_00064	Amount Added: 2.00	Units: uL	
VOACR2ND_00033	Amount Added: 6.00	Units: uL	
VOA8260VOAPRI_00403	Amount Added: 2.00	Units: uL	
VOAVAPRI_00038	Amount Added: 2.00	Units: uL	
VOAKetPRI_00001	Amount Added: 2.00	Units: uL	
voaWI/SHP5_00016	Amount Added: 5.00	Units: uL	Run Reagent

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050109.D

Injection Date: 01-May-2020 18:32:30

Instrument ID: CHHP5

Operator ID: 034635

Lims ID: 180-105108-B-9 MS

Worklist Smp#: 9

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

Purge Vol: 5.000 mL

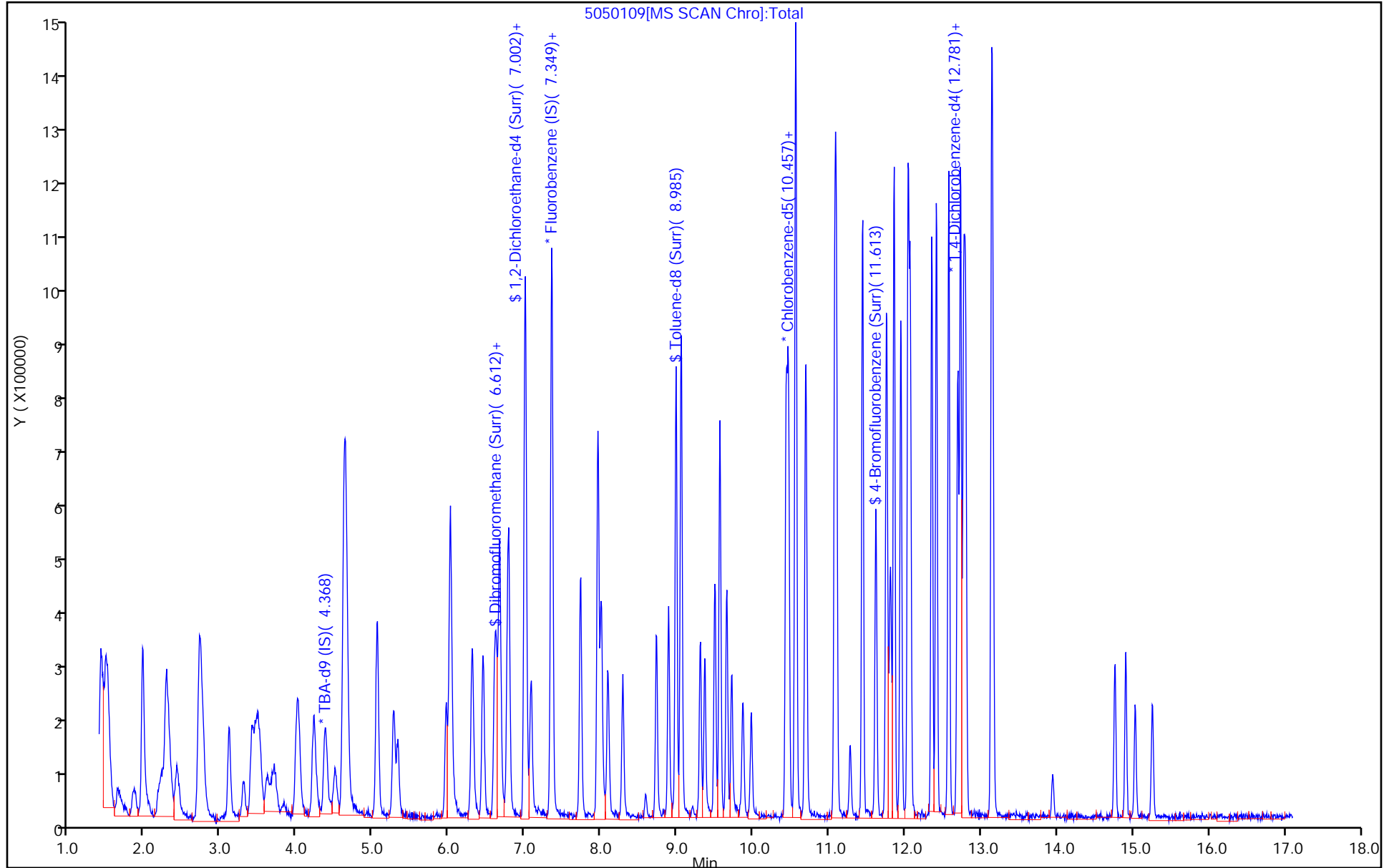
Dil. Factor: 1.0000

ALS Bottle#: 9

Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Pittsburgh  
Recovery Report

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050109.D  
 Lims ID: 180-105108-B-9 MS  
 Client ID: HD-COD-SW-26-0/1-0  
 Sample Type: MS  
 Inject. Date: 01-May-2020 18:32:30 ALS Bottle#: 9 Worklist Smp#: 9  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: 180-0031777-009  
 Operator ID: 034635 Instrument ID: CHHP5  
 Method: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\MMSVOA\_LL\_CHHP5.m  
 Limit Group: VOA 8260C\_D ICAL  
 Last Update: 03-May-2020 16:03:33 Calib Date: 03-Apr-2020 19:09:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP5\20200403-31442.b\5040310.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: CTX0317

First Level Reviewer: journetp

Date: 02-May-2020 18:41:59

Compound	Amount Added	Amount Recovered	% Rec.
\$ 5 Dibromofluoromethane (Surr)	50.0	38.4	76.89
\$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	36.1	72.15
\$ 7 Toluene-d8 (Surr)	50.0	45.8	91.69
\$ 8 4-Bromofluorobenzene (Surr)	50.0	42.6	85.23

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: HD-COD-SW-17-0/1-0 MSD Lab Sample ID: 180-105108-8 MSD  
 Matrix: Water Lab File ID: 5050412.D  
 Analysis Method: EPA 8260C Date Collected: 04/28/2020 11:10  
 Sample wt/vol: 5 (mL) Date Analyzed: 05/04/2020 12:42  
 Soil Aliquot Vol.: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-624 ID: 0.18 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 314475 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	5.55		1.0	0.90
75-01-4	Vinyl chloride	7.17		1.0	0.40
74-83-9	Bromomethane	14.5		1.0	0.89
75-00-3	Chloroethane	8.89		1.0	0.90
75-35-4	1,1-Dichloroethene	8.78		1.0	0.55
67-64-1	Acetone	10.6		5.0	3.4
75-15-0	Carbon disulfide	8.34		1.0	0.88
75-09-2	Methylene Chloride	8.62		1.0	0.89
156-60-5	trans-1,2-Dichloroethene	9.08		1.0	0.67
1634-04-4	Methyl tert-butyl ether	7.09		1.0	0.59
75-34-3	1,1-Dichloroethane	7.45		1.0	0.31
156-59-2	cis-1,2-Dichloroethene	8.72		1.0	0.71
74-97-5	Bromochloromethane	8.46		1.0	0.63
78-93-3	2-Butanone (MEK)	11.9		5.0	2.6
67-66-3	Chloroform	7.35		1.0	0.60
71-55-6	1,1,1-Trichloroethane	8.09		1.0	0.60
56-23-5	Carbon tetrachloride	8.86		1.0	0.88
71-43-2	Benzene	8.39		1.0	0.60
107-06-2	1,2-Dichloroethane	7.35		1.0	0.57
79-01-6	Trichloroethene	8.95		1.0	0.69
78-87-5	1,2-Dichloropropane	7.29		1.0	0.66
75-27-4	Bromodichloromethane	7.40		1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	7.03		1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	15.5		5.0	3.1
108-88-3	Toluene	9.62		1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	8.13		1.0	0.58
79-00-5	1,1,2-Trichloroethane	9.03		1.0	0.45
127-18-4	Tetrachloroethene	10.2		1.0	0.47
591-78-6	2-Hexanone	14.3		5.0	3.3
124-48-1	Dibromochloromethane	8.96		1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	9.07		1.0	0.50
108-90-7	Chlorobenzene	10.5		1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	10.1		1.0	0.57
100-41-4	Ethylbenzene	10.6		1.0	0.51
1330-20-7	Xylenes, Total	21.2		2.0	0.89
100-42-5	Styrene	10.6		1.0	0.47

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: HD-COD-SW-17-0/1-0 MSD Lab Sample ID: 180-105108-8 MSD  
 Matrix: Water Lab File ID: 5050412.D  
 Analysis Method: EPA 8260C Date Collected: 04/28/2020 11:10  
 Sample wt/vol: 5 (mL) Date Analyzed: 05/04/2020 12:42  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-624 ID: 0.18 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 314475 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	11.6		1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	11.2		1.0	0.60
107-13-1	Acrylonitrile	65.4		20	7.8

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	72		62-146
2037-26-5	Toluene-d8 (Surr)	91		75-120
460-00-4	4-Bromofluorobenzene (Surr)	89		64-120
1868-53-7	Dibromofluoromethane (Surr)	80		71-132

Eurofins TestAmerica, Pittsburgh  
Target Compound Quantitation Report

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050412.D  
 Lims ID: 180-105108-B-8 MSD  
 Client ID:  
 Sample Type: MSD  
 Inject. Date: 04-May-2020 12:42:30 ALS Bottle#: 12 Worklist Smp#: 12  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: 180-0031789-012  
 Operator ID: 034635 Instrument ID: CHHP5  
 Method: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\MMSVOA\_LL\_CHHP5.m  
 Limit Group: VOA 8260C\_D ICAL  
 Last Update: 04-May-2020 11:25:29 Calib Date: 03-Apr-2020 19:09:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP5\20200403-31442.b\5040310.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: CTX0327

First Level Reviewer: journetp

Date: 04-May-2020 13:23:59

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.371	4.363	0.008	0	270623	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.346	7.344	0.002	99	820381	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.436	10.434	0.002	85	210137	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.772	12.776	-0.004	92	363150	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.628	6.626	0.002	93	186724	50.0	39.9	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.993	6.991	0.002	0	238856	50.0	36.0	
\$ 7 Toluene-d8 (Surr)	98	8.988	8.986	0.002	93	771667	50.0	45.4	
\$ 8 4-Bromofluorobenzene (Surr	95	11.616	11.614	0.002	90	286302	50.0	44.5	
11 Dichlorodifluoromethane	85	1.640	1.638	0.002	99	200874	50.0	32.0	
12 Chloromethane	50	1.846	1.844	0.002	97	222076	50.0	27.7	
14 Butadiene	39	1.968	1.966	0.002	91	203581	50.0	28.0	
13 Vinyl chloride	62	1.968	1.966	0.002	64	255658	50.0	35.9	
15 Bromomethane	94	2.278	2.288	-0.010	90	295309	50.0	72.4	
16 Chloroethane	64	2.430	2.416	0.014	98	214969	50.0	44.5	
17 Dichlorofluoromethane	67	2.722	2.720	0.002	96	473627	50.0	43.8	
18 Trichlorofluoromethane	101	2.735	2.726	0.009	84	448465	50.0	49.6	
20 Ethyl ether	59	3.106	3.104	0.002	87	176625	50.0	34.0	
21 Acrolein	56	3.300	3.292	0.008	98	103873	150.0	95.7	
22 1,1-Dichloroethene	96	3.416	3.414	0.002	97	171764	50.0	43.9	
23 1,1,2-Trichloro-1,2,2-trif	101	3.471	3.469	0.002	91	203442	50.0	46.7	
24 Acetone	43	3.525	3.511	0.014	100	150161	100.0	53.0	
25 Iodomethane	142	3.629	3.639	-0.010	100	297115	50.0	43.9	
26 Carbon disulfide	76	3.714	3.706	0.008	100	384488	50.0	41.7	
28 3-Chloro-1-propene	76	3.994	3.992	0.002	87	100278	50.0	42.0	
30 Methyl acetate	43	4.024	4.016	0.008	98	311684	100.0	76.7	
31 Methylene Chloride	84	4.225	4.217	0.008	89	235896	50.0	43.1	
32 2-Methyl-2-propanol	59	4.511	4.503	0.008	95	130225	500.0	471.4	
33 Acrylonitrile	53	4.614	4.612	0.002	99	693719	500.0	326.9	
34 trans-1,2-Dichloroethene	96	4.639	4.631	0.008	75	203654	50.0	45.4	
35 Methyl tert-butyl ether	73	4.657	4.655	0.002	96	445995	50.0	35.4	
36 Hexane	57	5.052	5.056	-0.004	93	290704	50.0	39.4	
37 1,1-Dichloroethane	63	5.271	5.263	0.008	97	326091	50.0	37.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
38 Vinyl acetate	43	5.326	5.324	0.002	98	222116	50.0	25.2	
44 2,2-Dichloropropane	97	6.020	6.005	0.015	58	43515	50.0	39.9	
45 cis-1,2-Dichloroethene	96	6.020	6.018	0.002	79	232529	50.0	43.6	
46 2-Butanone (MEK)	43	6.032	6.036	-0.004	79	179214	100.0	59.5	
49 Chlorobromomethane	128	6.299	6.297	0.002	89	120254	50.0	42.3	
51 Tetrahydrofuran	42	6.312	6.310	0.002	81	99069	100.0	56.9	
52 Chloroform	83	6.445	6.443	0.002	93	344738	50.0	36.7	
53 1,1,1-Trichloroethane	97	6.598	6.602	-0.004	99	270453	50.0	40.5	
54 Cyclohexane	56	6.665	6.662	0.002	90	331659	50.0	38.9	
56 Carbon tetrachloride	117	6.768	6.766	0.002	97	245895	50.0	44.3	
55 1,1-Dichloropropene	75	6.786	6.784	0.002	95	270623	50.0	43.9	
58 Benzene	78	7.005	7.003	0.002	97	846681	50.0	41.9	
57 Isobutyl alcohol	41	7.011	7.003	0.008	47	147287	1250.0	1045.8	
59 1,2-Dichloroethane	62	7.078	7.076	0.002	97	282114	50.0	36.7	
62 n-Heptane	43	7.358	7.362	-0.004	89	266295	50.0	39.8	
64 Trichloroethene	130	7.729	7.727	0.002	98	225073	50.0	44.8	
66 Methylcyclohexane	83	7.960	7.958	0.002	88	383575	50.0	45.0	
67 1,2-Dichloropropane	63	8.003	8.001	0.002	92	196378	50.0	36.4	
70 1,4-Dioxane	88	8.094	8.092	0.002	39	37789	1000.0	867.0	
68 Dibromomethane	93	8.088	8.092	-0.004	96	126808	50.0	39.7	
71 Dichlorobromomethane	83	8.283	8.287	-0.004	98	233872	50.0	37.0	
73 2-Chloroethyl vinyl ether	63	8.550	8.585	-0.035	1	435	100.0	7.25	
74 cis-1,3-Dichloropropene	75	8.733	8.731	0.002	95	279827	50.0	35.1	
75 4-Methyl-2-pentanone (MIBK)	43	8.885	8.889	-0.004	96	335839	100.0	77.3	
76 Toluene	91	9.055	9.053	0.002	98	955540	50.0	48.1	
77 trans-1,3-Dichloropropene	75	9.305	9.303	0.002	94	265631	50.0	40.7	
78 Ethyl methacrylate	69	9.366	9.364	0.002	86	227892	50.0	35.7	
79 1,1,2-Trichloroethane	97	9.499	9.497	0.002	91	208646	50.0	45.2	
80 Tetrachloroethene	164	9.566	9.564	0.002	96	202269	50.0	51.1	
81 1,3-Dichloropropane	76	9.658	9.656	0.002	91	352191	50.0	42.8	
82 2-Hexanone	43	9.718	9.716	0.002	96	250626	100.0	71.3	
84 Chlorodibromomethane	129	9.864	9.868	-0.004	91	175178	50.0	44.8	
85 Ethylene Dibromide	107	9.974	9.978	-0.004	100	195922	50.0	45.3	
87 Chlorobenzene	112	10.467	10.465	0.002	95	669972	50.0	52.4	
89 1,1,1,2-Tetrachloroethane	131	10.558	10.562	-0.004	90	208902	50.0	50.3	
90 Ethylbenzene	106	10.564	10.562	0.002	98	349261	50.0	52.8	
91 m-Xylene & p-Xylene	106	10.698	10.696	0.002	0	432450	50.0	52.4	
92 o-Xylene	106	11.075	11.079	-0.004	96	411532	50.0	53.5	
93 Styrene	104	11.099	11.097	0.002	95	698360	50.0	52.9	
94 Bromoform	173	11.282	11.280	0.002	95	106846	50.0	57.8	
97 Isopropylbenzene	105	11.440	11.444	-0.004	95	1085203	50.0	54.2	
100 Bromobenzene	156	11.756	11.754	0.002	96	284346	50.0	50.6	
99 1,1,2,2-Tetrachloroethane	83	11.756	11.760	-0.004	94	267477	50.0	56.1	
102 trans-1,4-Dichloro-2-buten	53	11.793	11.797	-0.004	77	61969	50.0	40.7	
101 1,2,3-Trichloropropane	110	11.811	11.815	-0.004	85	96428	50.0	53.3	
103 N-Propylbenzene	120	11.860	11.858	0.002	98	345915	50.0	57.0	
104 2-Chlorotoluene	126	11.945	11.949	-0.004	97	286582	50.0	55.1	
106 1,3,5-Trimethylbenzene	105	12.042	12.040	0.002	95	954685	50.0	52.8	
107 4-Chlorotoluene	126	12.067	12.071	-0.004	97	301051	50.0	54.4	
108 tert-Butylbenzene	119	12.353	12.357	-0.004	93	809826	50.0	52.7	
110 1,2,4-Trimethylbenzene	105	12.413	12.411	0.002	96	964710	50.0	50.9	
112 sec-Butylbenzene	105	12.578	12.576	0.002	94	1227201	50.0	53.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
113 1,3-Dichlorobenzene	146	12.693	12.697	-0.004	97	574831	50.0	52.3	
114 4-Isopropyltoluene	119	12.730	12.728	0.002	96	1044528	50.0	53.5	
115 1,4-Dichlorobenzene	146	12.797	12.801	-0.004	95	592142	50.0	53.1	
120 n-Butylbenzene	91	13.137	13.141	-0.004	97	862032	50.0	50.8	
121 1,2-Dichlorobenzene	146	13.156	13.154	0.002	98	529052	50.0	51.6	
122 1,2-Dibromo-3-Chloropropan	75	13.934	13.938	-0.004	83	28903	50.0	44.6	
126 1,2,4-Trichlorobenzene	180	14.762	14.766	-0.004	91	184724	50.0	47.7	
127 Hexachlorobutadiene	225	14.902	14.906	-0.004	98	96791	50.0	49.0	
128 Naphthalene	128	15.029	15.027	0.002	96	352494	50.0	47.0	
129 1,2,3-Trichlorobenzene	180	15.254	15.252	0.002	95	141444	50.0	54.0	
S 134 1,2-Dichloroethene, Total	96				0		100.0	89.0	
S 154 Total BTEX	106				0		250.0	248.7	
S 133 Xylenes, Total	106				0		100.0	105.9	
S 135 1,3-Dichloropropene, Total	1				0		100.0	75.8	

**Reagents:**

VOACEVEPRI_00064	Amount Added: 2.00	Units: uL	
VOA8260VOAPRI_00403	Amount Added: 2.00	Units: uL	
VOAVAPRI_00038	Amount Added: 2.00	Units: uL	
VOAACR2ND_00033	Amount Added: 6.00	Units: uL	
voaWKet2ndRes_00050	Amount Added: 2.00	Units: uL	
voaWI/SHP5_00016	Amount Added: 5.00	Units: uL	Run Reagent



Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050412.D

Injection Date: 04-May-2020 12:42:30

Instrument ID: CHHP5

Operator ID: 034635

Lims ID: 180-105108-B-8 MSD

Worklist Smp#: 12

Client ID:

Purge Vol: 5.000 mL

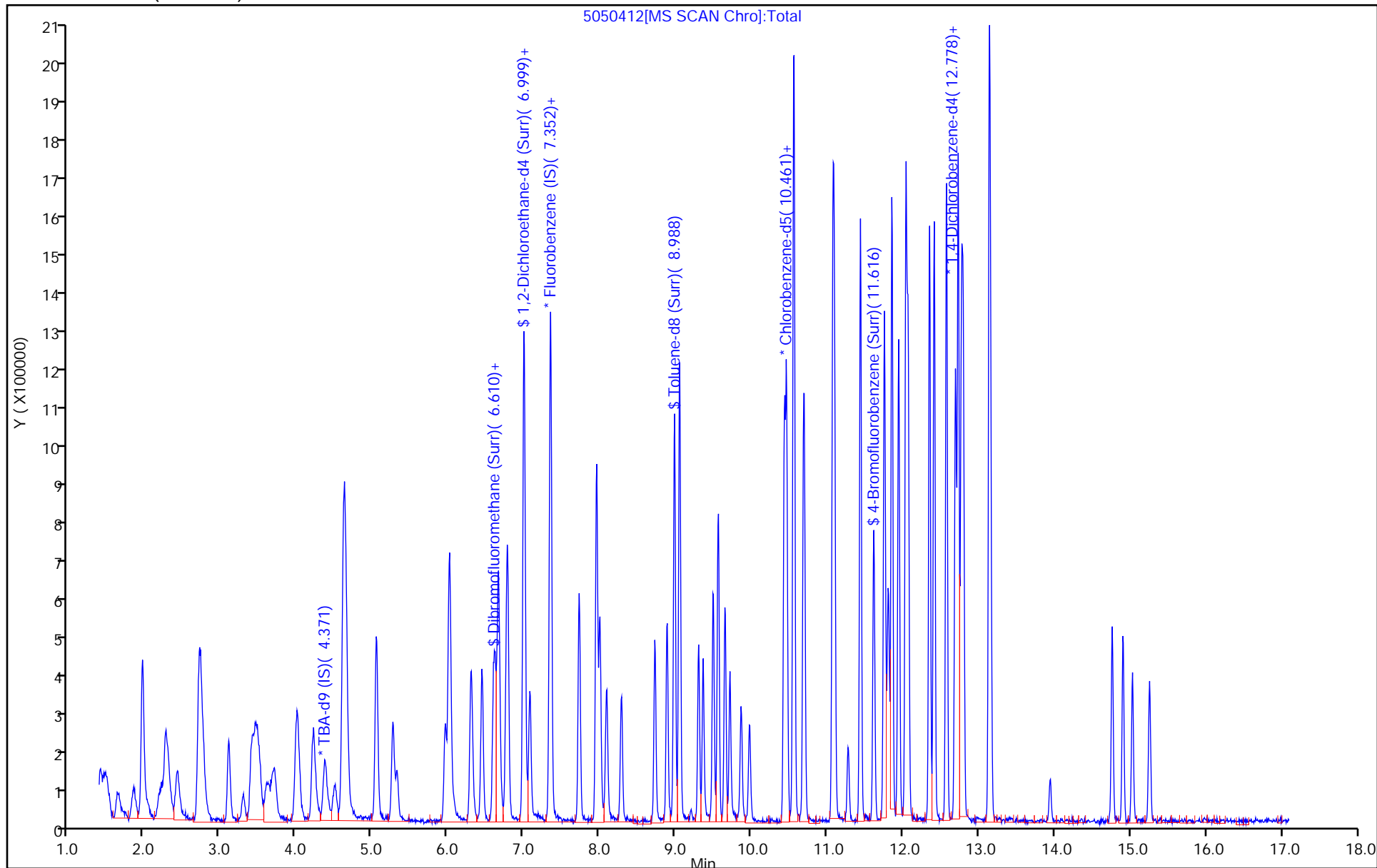
Dil. Factor: 1.0000

ALS Bottle#: 12

Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Pittsburgh  
Recovery Report

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\5050412.D  
 Lims ID: 180-105108-B-8 MSD  
 Client ID:  
 Sample Type: MSD  
 Inject. Date: 04-May-2020 12:42:30 ALS Bottle#: 12 Worklist Smp#: 12  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: 180-0031789-012  
 Operator ID: 034635 Instrument ID: CHHP5  
 Method: \\chromfs\Pittsburgh\ChromData\CHHP5\20200504-31789.b\MMSVOA\_LL\_CHHP5.m  
 Limit Group: VOA 8260C\_D ICAL  
 Last Update: 04-May-2020 11:25:29 Calib Date: 03-Apr-2020 19:09:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP5\20200403-31442.b\5040310.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: CTX0327

First Level Reviewer: journetp

Date: 04-May-2020 13:23:59

Compound	Amount Added	Amount Recovered	% Rec.
\$ 5 Dibromofluoromethane (Surr)	50.0	39.9	79.78
\$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	36.0	71.92
\$ 7 Toluene-d8 (Surr)	50.0	45.4	90.73
\$ 8 4-Bromofluorobenzene (Surr)	50.0	44.5	89.06

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: HD-COD-SW-26-0/1-0 MSD Lab Sample ID: 180-105108-9 MSD  
 Matrix: Water Lab File ID: 5050110.D  
 Analysis Method: EPA 8260C Date Collected: 04/28/2020 11:55  
 Sample wt/vol: 5 (mL) Date Analyzed: 05/01/2020 18:57  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-624 ID: 0.18 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 314382 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	4.22		1.0	0.90
75-01-4	Vinyl chloride	5.43		1.0	0.40
74-83-9	Bromomethane	18.5		1.0	0.89
75-00-3	Chloroethane	9.65		1.0	0.90
75-35-4	1,1-Dichloroethene	7.05		1.0	0.55
67-64-1	Acetone	12.0		5.0	3.4
75-15-0	Carbon disulfide	6.01		1.0	0.88
75-09-2	Methylene Chloride	8.09		1.0	0.89
156-60-5	trans-1,2-Dichloroethene	7.90		1.0	0.67
1634-04-4	Methyl tert-butyl ether	7.97		1.0	0.59
75-34-3	1,1-Dichloroethane	7.09		1.0	0.31
156-59-2	cis-1,2-Dichloroethene	8.14		1.0	0.71
74-97-5	Bromochloromethane	8.85		1.0	0.63
78-93-3	2-Butanone (MEK)	11.8		5.0	2.6
67-66-3	Chloroform	7.28		1.0	0.60
71-55-6	1,1,1-Trichloroethane	6.39		1.0	0.60
56-23-5	Carbon tetrachloride	6.84		1.0	0.88
71-43-2	Benzene	7.90		1.0	0.60
107-06-2	1,2-Dichloroethane	8.22		1.0	0.57
79-01-6	Trichloroethene	7.74		1.0	0.69
78-87-5	1,2-Dichloropropane	7.43		1.0	0.66
75-27-4	Bromodichloromethane	7.43		1.0	0.64
10061-01-5	cis-1,3-Dichloropropene	7.06		1.0	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	17.1		5.0	3.1
108-88-3	Toluene	8.70		1.0	0.46
10061-02-6	trans-1,3-Dichloropropene	8.34		1.0	0.58
79-00-5	1,1,2-Trichloroethane	9.77		1.0	0.45
127-18-4	Tetrachloroethene	10.5		1.0	0.47
591-78-6	2-Hexanone	15.7		5.0	3.3
124-48-1	Dibromochloromethane	8.88		1.0	0.84
106-93-4	1,2-Dibromoethane (EDB)	9.60		1.0	0.50
108-90-7	Chlorobenzene	9.73		1.0	0.50
630-20-6	1,1,1,2-Tetrachloroethane	9.54		1.0	0.57
100-41-4	Ethylbenzene	9.02		1.0	0.51
1330-20-7	Xylenes, Total	18.8		2.0	0.89
100-42-5	Styrene	9.86		1.0	0.47

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: HD-COD-SW-26-0/1-0 MSD Lab Sample ID: 180-105108-9 MSD  
 Matrix: Water Lab File ID: 5050110.D  
 Analysis Method: EPA 8260C Date Collected: 04/28/2020 11:55  
 Sample wt/vol: 5 (mL) Date Analyzed: 05/01/2020 18:57  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-624 ID: 0.18 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 314382 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	11.2		1.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	12.5		1.0	0.60
107-13-1	Acrylonitrile	86.6		20	7.8

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	80		62-146
2037-26-5	Toluene-d8 (Surr)	97		75-120
460-00-4	4-Bromofluorobenzene (Surr)	93		64-120
1868-53-7	Dibromofluoromethane (Surr)	83		71-132

Eurofins TestAmerica, Pittsburgh  
Target Compound Quantitation Report

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050110.D  
 Lims ID: 180-105108-A-9 MSD  
 Client ID: HD-COD-SW-26-0/1-0  
 Sample Type: MSD  
 Inject. Date: 01-May-2020 18:57:30 ALS Bottle#: 10 Worklist Smp#: 10  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: 180-0031777-010  
 Operator ID: 034635 Instrument ID: CHHP5  
 Method: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\MMSVOA\_LL\_CHHP5.m  
 Limit Group: VOA 8260C\_D ICAL  
 Last Update: 03-May-2020 16:03:33 Calib Date: 03-Apr-2020 19:09:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP5\20200403-31442.b\5040310.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: CTX0317

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.382	4.371	0.011	0	268669	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.345	7.345	0.000	98	669795	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.436	10.436	0.000	85	171563	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.772	12.772	0.000	93	306359	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.627	6.628	-0.001	91	157954	50.0	41.3	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.992	6.993	-0.001	0	217215	50.0	40.1	
\$ 7 Toluene-d8 (Surr)	98	8.982	8.988	-0.006	93	675421	50.0	48.6	
\$ 8 4-Bromofluorobenzene (Surr	95	11.616	11.616	0.000	91	244943	50.0	46.7	
11 Dichlorodifluoromethane	85	1.651	1.638	0.013	97	97321	50.0	19.0	
12 Chloromethane	50	1.840	1.851	-0.011	97	137837	50.0	21.1	
14 Butadiene	39	1.961	1.961	0.000	92	131021	50.0	22.1	
13 Vinyl chloride	62	1.967	1.961	0.006	83	157841	50.0	27.1	
15 Bromomethane	94	2.278	2.277	0.001	90	308722	50.0	92.7	
16 Chloroethane	64	2.411	2.423	-0.012	99	190471	50.0	48.2	
17 Dichlorofluoromethane	67	2.716	2.715	0.001	97	333627	50.0	37.7	
18 Trichlorofluoromethane	101	2.716	2.727	-0.011	72	281385	50.0	38.1	
20 Ethyl ether	59	3.105	3.104	0.001	89	154172	50.0	36.4	
21 Acrolein	56	3.300	3.287	0.013	98	109537	150.0	123.6	
22 1,1-Dichloroethene	96	3.403	3.390	0.013	96	113812	50.0	35.3	
23 1,1,2-Trichloro-1,2,2-trif	101	3.458	3.482	-0.024	92	128244	50.0	36.1	
24 Acetone	43	3.513	3.512	0.001	100	138547	100.0	59.9	
25 Iodomethane	142	3.604	3.597	0.007	98	210516	50.0	38.1	
26 Carbon disulfide	76	3.695	3.701	-0.006	100	226367	50.0	30.1	
28 3-Chloro-1-propene	76	3.999	3.987	0.012	89	71041	50.0	36.5	
30 Methyl acetate	43	4.030	4.023	0.007	98	300881	100.0	90.6	
31 Methylene Chloride	84	4.218	4.218	0.000	91	181329	50.0	40.5	
32 2-Methyl-2-propanol	59	4.504	4.491	0.013	90	144825	500.0	528.0	
33 Acrylonitrile	53	4.614	4.613	0.001	100	749965	500.0	432.9	
34 trans-1,2-Dichloroethene	96	4.626	4.631	-0.005	93	144709	50.0	39.5	
35 Methyl tert-butyl ether	73	4.656	4.656	0.000	97	409400	50.0	39.8	
36 Hexane	57	5.052	5.045	0.007	92	184325	50.0	30.6	
37 1,1-Dichloroethane	63	5.271	5.264	0.007	97	253352	50.0	35.5	
38 Vinyl acetate	43	5.325	5.325	0.000	98	272821	50.0	37.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
44 2,2-Dichloropropane	97	6.013	6.000	0.013	54	32293	50.0	36.3	
45 cis-1,2-Dichloroethene	96	6.013	6.018	-0.005	81	177366	50.0	40.7	
46 2-Butanone (MEK)	43	6.031	6.031	0.000	91	145076	100.0	59.0	
49 Chlorobromomethane	128	6.299	6.298	0.001	93	102789	50.0	44.3	
51 Tetrahydrofuran	42	6.311	6.304	0.007	87	101650	100.0	71.5	
52 Chloroform	83	6.451	6.444	0.007	94	279029	50.0	36.4	
53 1,1,1-Trichloroethane	97	6.603	6.596	0.007	98	174324	50.0	31.9	
54 Cyclohexane	56	6.664	6.663	0.001	89	203164	50.0	29.2	
56 Carbon tetrachloride	117	6.767	6.761	0.006	96	155057	50.0	34.2	
55 1,1-Dichloropropene	75	6.785	6.785	0.000	97	176934	50.0	35.1	
58 Benzene	78	6.998	6.998	0.000	97	651456	50.0	39.5	
57 Isobutyl alcohol	41	7.011	7.010	0.001	91	161098	1250.0	1401.1	
59 1,2-Dichloroethane	62	7.077	7.071	0.006	98	257653	50.0	41.1	
62 n-Heptane	43	7.351	7.351	0.000	90	165183	50.0	30.2	
64 Trichloroethene	130	7.728	7.728	0.000	97	158972	50.0	38.7	
66 Methylcyclohexane	83	7.960	7.959	0.001	88	244506	50.0	35.1	
67 1,2-Dichloropropane	63	7.996	7.996	0.000	93	163471	50.0	37.1	
70 1,4-Dioxane	88	8.087	8.081	0.006	46	45999	1000.0	1283.8	
68 Dibromomethane	93	8.087	8.087	0.000	95	113005	50.0	43.3	
71 Dichlorobromomethane	83	8.288	8.281	0.007	99	191693	50.0	37.1	
73 2-Chloroethyl vinyl ether	63	8.586	8.586	0.000	24	2007	100.0	7.90	
74 cis-1,3-Dichloropropene	75	8.726	8.726	0.000	94	229436	50.0	35.3	
75 4-Methyl-2-pentanone (MIBK)	43	8.890	8.890	0.000	95	309689	100.0	85.4	
76 Toluene	91	9.055	9.048	0.007	98	705898	50.0	43.5	
77 trans-1,3-Dichloropropene	75	9.304	9.303	0.001	94	222393	50.0	41.7	
78 Ethyl methacrylate	69	9.365	9.364	0.001	88	202182	50.0	38.8	
79 1,1,2-Trichloroethane	97	9.493	9.498	-0.005	91	184268	50.0	48.9	
80 Tetrachloroethene	164	9.560	9.559	0.001	95	170253	50.0	52.7	
81 1,3-Dichloropropane	76	9.651	9.650	0.001	91	310915	50.0	46.3	
82 2-Hexanone	43	9.718	9.717	0.001	95	229790	100.0	78.4	
84 Chlorodibromomethane	129	9.870	9.869	0.001	89	141807	50.0	44.4	
85 Ethylene Dibromide	107	9.973	9.973	0.000	100	169282	50.0	48.0	
87 Chlorobenzene	112	10.466	10.465	0.001	95	507775	50.0	48.7	
89 1,1,1,2-Tetrachloroethane	131	10.557	10.557	0.000	92	161612	50.0	47.7	
90 Ethylbenzene	106	10.563	10.563	0.000	98	243481	50.0	45.1	
91 m-Xylene & p-Xylene	106	10.691	10.697	-0.006	0	309476	50.0	46.0	
92 o-Xylene	106	11.074	11.074	0.000	96	300619	50.0	47.8	
93 Styrene	104	11.093	11.098	-0.005	95	531037	50.0	49.3	
94 Bromoform	173	11.275	11.281	-0.006	93	84864	50.0	56.2	
97 Isopropylbenzene	105	11.439	11.439	0.000	96	735187	50.0	45.0	
100 Bromobenzene	156	11.756	11.755	0.001	94	215785	50.0	45.5	
99 1,1,2,2-Tetrachloroethane	83	11.762	11.755	0.007	95	242501	50.0	62.3	
102 trans-1,4-Dichloro-2-buten	53	11.798	11.792	0.006	82	57643	50.0	44.8	
101 1,2,3-Trichloropropane	110	11.816	11.816	0.000	87	81849	50.0	53.6	
103 N-Propylbenzene	120	11.853	11.852	0.001	99	232842	50.0	45.5	
104 2-Chlorotoluene	126	11.944	11.944	0.000	97	208020	50.0	47.5	
106 1,3,5-Trimethylbenzene	105	12.042	12.041	0.001	94	681283	50.0	44.7	
107 4-Chlorotoluene	126	12.066	12.071	-0.005	98	226603	50.0	48.6	
108 tert-Butylbenzene	119	12.352	12.351	0.001	92	537132	50.0	41.5	
110 1,2,4-Trimethylbenzene	105	12.413	12.412	0.001	96	703536	50.0	44.0	
112 sec-Butylbenzene	105	12.577	12.576	0.001	94	799007	50.0	41.4	
113 1,3-Dichlorobenzene	146	12.692	12.692	0.000	98	444834	50.0	48.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
114 4-Isopropyltoluene	119	12.729	12.728	0.001	96	687147	50.0	41.7	
115 1,4-Dichlorobenzene	146	12.796	12.795	0.001	94	463300	50.0	49.2	
120 n-Butylbenzene	91	13.137	13.136	0.001	97	579678	50.0	40.5	
121 1,2-Dichlorobenzene	146	13.155	13.154	0.001	97	431312	50.0	49.8	
122 1,2-Dibromo-3-Chloropropan	75	13.934	13.939	-0.005	82	27239	50.0	49.8	
126 1,2,4-Trichlorobenzene	180	14.761	14.760	0.001	93	145652	50.0	44.6	
127 Hexachlorobutadiene	225	14.901	14.906	-0.005	96	64056	50.0	38.4	
128 Naphthalene	128	15.029	15.034	-0.005	97	292489	50.0	46.3	
129 1,2,3-Trichlorobenzene	180	15.254	15.259	-0.005	96	111605	50.0	50.5	
S 133 Xylenes, Total	106				0		100.0	93.8	
S 154 Total BTEX	106				0		250.0	221.9	
S 134 1,2-Dichloroethene, Total	96				0		100.0	80.2	
S 135 1,3-Dichloropropene, Total	1				0		100.0	77.0	

**Reagents:**

VOACEVEPRI_00064	Amount Added: 2.00	Units: uL	
VOACR2ND_00033	Amount Added: 6.00	Units: uL	
VOA8260VOAPRI_00403	Amount Added: 2.00	Units: uL	
VOAVAPRI_00038	Amount Added: 2.00	Units: uL	
VOAKetPRI_00001	Amount Added: 2.00	Units: uL	
voaWI/SHP5_00016	Amount Added: 5.00	Units: uL	Run Reagent

Eurofins TestAmerica, Pittsburgh

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050110.D

Injection Date: 01-May-2020 18:57:30

Instrument ID: CHHP5

Operator ID: 034635

Lims ID: 180-105108-A-9 MSD

Worklist Smp#: 10

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

Purge Vol: 5.000 mL

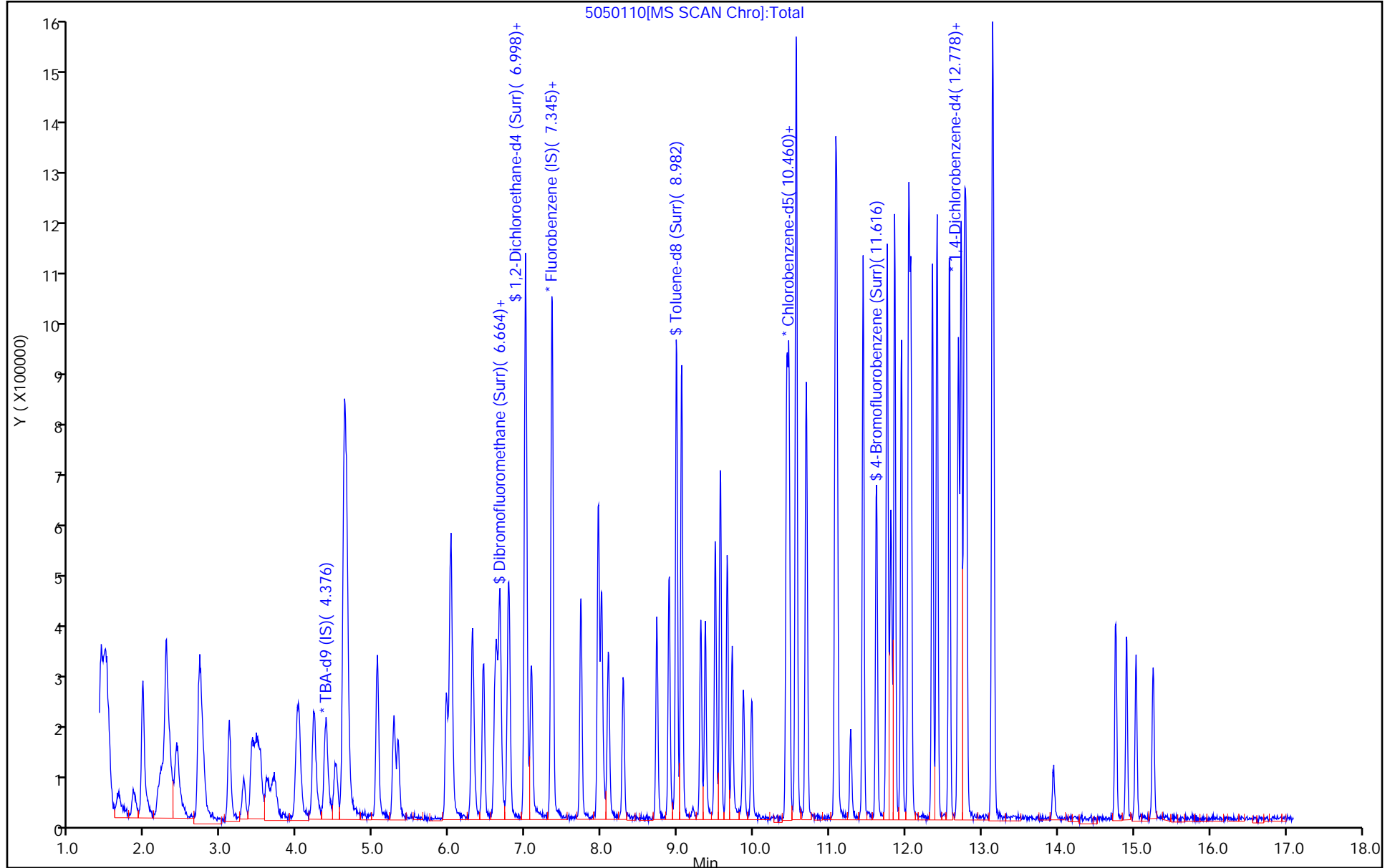
Dil. Factor: 1.0000

ALS Bottle#: 10

Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C\_D ICAL

Column: DB-624 (0.18 mm)





Eurofins TestAmerica, Pittsburgh  
Recovery Report

Data File: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\5050110.D  
 Lims ID: 180-105108-A-9 MSD  
 Client ID: HD-COD-SW-26-0/1-0  
 Sample Type: MSD  
 Inject. Date: 01-May-2020 18:57:30 ALS Bottle#: 10 Worklist Smp#: 10  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: 180-0031777-010  
 Operator ID: 034635 Instrument ID: CHHP5  
 Method: \\chromfs\Pittsburgh\ChromData\CHHP5\20200501-31777.b\MMSVOA\_LL\_CHHP5.m  
 Limit Group: VOA 8260C\_D ICAL  
 Last Update: 03-May-2020 16:03:33 Calib Date: 03-Apr-2020 19:09:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\chromna\Pittsburgh\ChromData\CHHP5\20200403-31442.b\5040310.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: CTX0317

Compound	Amount Added	Amount Recovered	% Rec.
\$ 5 Dibromofluoromethane (Surr)	50.0	41.3	82.66
\$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	40.1	80.11
\$ 7 Toluene-d8 (Surr)	50.0	48.6	97.27
\$ 8 4-Bromofluorobenzene (Surr)	50.0	46.7	93.33

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1

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

Instrument ID: CHHP5 Start Date: 03/24/2020 01:11

Analysis Batch Number: 310901 End Date: 03/24/2020 15:10

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-310901/1		03/24/2020 01:11	1	5032401.D	DB-624 0.18 (mm)
IC 180-310901/10		03/24/2020 02:01	1	5032303.D	DB-624 0.18 (mm)
IC 180-310901/11		03/24/2020 02:25	1	5032304.D	DB-624 0.18 (mm)
ICIS 180-310901/12		03/24/2020 02:49	1	5032305.D	DB-624 0.18 (mm)
IC 180-310901/13		03/24/2020 03:13	1	5032306p.D	DB-624 0.18 (mm)
IC 180-310901/15		03/24/2020 04:02	1	5032308.D	DB-624 0.18 (mm)
IC 180-310901/16		03/24/2020 04:26	1	5032309P.D	DB-624 0.18 (mm)
IC 180-310901/17		03/24/2020 04:51	1	5032310.D	DB-624 0.18 (mm)
ZZZZZ		03/24/2020 07:18	1		DB-624 0.18 (mm)
ICV 180-310901/25		03/24/2020 15:10	1		DB-624 0.18 (mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1

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

Instrument ID: CHHP5 Start Date: 05/01/2020 15:18

Analysis Batch Number: 314382 End Date: 05/02/2020 03:31

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-314382/2		05/01/2020 15:18	1	5050102.D	DB-624 0.18 (mm)
CCVIS 180-314382/4		05/01/2020 16:29	1	5050104.D	DB-624 0.18 (mm)
ZZZZZ		05/01/2020 16:54	1		DB-624 0.18 (mm)
MB 180-314382/6		05/01/2020 17:18	1	5050106.D	DB-624 0.18 (mm)
180-105108-9		05/01/2020 17:43	1	5050107.D	DB-624 0.18 (mm)
180-105108-14		05/01/2020 18:07	1	5050108.D	DB-624 0.18 (mm)
180-105108-9 MS		05/01/2020 18:32	1	5050109.D	DB-624 0.18 (mm)
180-105108-9 MSD		05/01/2020 18:57	1	5050110.D	DB-624 0.18 (mm)
LCS 180-314382/11		05/01/2020 19:21	1	5050111.D	DB-624 0.18 (mm)
ZZZZZ		05/01/2020 21:47	1		DB-624 0.18 (mm)
ZZZZZ		05/01/2020 22:12	1		DB-624 0.18 (mm)
180-105108-3		05/01/2020 22:37	1	5050119.D	DB-624 0.18 (mm)
ZZZZZ		05/01/2020 23:02	1		DB-624 0.18 (mm)
ZZZZZ		05/01/2020 23:26	1		DB-624 0.18 (mm)
180-105108-6		05/01/2020 23:51	1	5050122.D	DB-624 0.18 (mm)
180-105108-7		05/02/2020 00:15	1	5050123.D	DB-624 0.18 (mm)
ZZZZZ		05/02/2020 00:40	1		DB-624 0.18 (mm)
ZZZZZ		05/02/2020 01:04	1		DB-624 0.18 (mm)
ZZZZZ		05/02/2020 01:28	1		DB-624 0.18 (mm)
ZZZZZ		05/02/2020 01:53	250		DB-624 0.18 (mm)
ZZZZZ		05/02/2020 02:17	25		DB-624 0.18 (mm)
ZZZZZ		05/02/2020 02:42	25		DB-624 0.18 (mm)
ZZZZZ		05/02/2020 03:31	1		DB-624 0.18 (mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Pittsburgh Job No.: 180-105108-1

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

Instrument ID: CHHP5 Start Date: 05/04/2020 07:47

Analysis Batch Number: 314475 End Date: 05/04/2020 17:35

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-314475/1		05/04/2020 07:47	1	5050401.D	DB-624 0.18 (mm)
CCVIS 180-314475/2		05/04/2020 08:26	1	5050402.D	DB-624 0.18 (mm)
LCS 180-314475/3		05/04/2020 08:50	1	5050403.D	DB-624 0.18 (mm)
ZZZZZ		05/04/2020 09:15	1		DB-624 0.18 (mm)
MB 180-314475/5		05/04/2020 09:39	1	5050405.D	DB-624 0.18 (mm)
ZZZZZ		05/04/2020 10:05	1		DB-624 0.18 (mm)
ZZZZZ		05/04/2020 10:30	1		DB-624 0.18 (mm)
180-105108-8		05/04/2020 11:04	1	5050408.D	DB-624 0.18 (mm)
180-105108-9 RA		05/04/2020 11:29	1	5050409.D	DB-624 0.18 (mm)
180-105108-8 MS		05/04/2020 12:18	1	5050411.D	DB-624 0.18 (mm)
180-105108-8 MSD		05/04/2020 12:42	1	5050412.D	DB-624 0.18 (mm)
180-105108-1		05/04/2020 13:06	1	5050413.D	DB-624 0.18 (mm)
180-105108-2		05/04/2020 13:30	1	5050414.D	DB-624 0.18 (mm)
180-105108-4		05/04/2020 13:55	1	5050415.D	DB-624 0.18 (mm)
180-105108-5		05/04/2020 14:20	1	5050416.D	DB-624 0.18 (mm)
180-105108-10		05/04/2020 14:45	1	5050417.D	DB-624 0.18 (mm)
180-105108-11		05/04/2020 15:09	1	5050418.D	DB-624 0.18 (mm)
180-105108-12		05/04/2020 15:33	1	5050419.D	DB-624 0.18 (mm)
180-105108-13		05/04/2020 15:58	1	5050420.D	DB-624 0.18 (mm)
ZZZZZ		05/04/2020 16:22	1		DB-624 0.18 (mm)
ZZZZZ		05/04/2020 16:47	1		DB-624 0.18 (mm)
ZZZZZ		05/04/2020 17:11	1		DB-624 0.18 (mm)
ZZZZZ		05/04/2020 17:35	1		DB-624 0.18 (mm)

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Pittsbur Job No.: 180-105108-1

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

Batch Number: 314382 Batch Start Date: 05/01/20 15:18 Batch Analyst: Journet, Patrick

Batch Method: EPA 8260C Batch End Date: \_\_\_\_\_

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	VOA8260VOAPRI 00403	VOAACR2ND 00033	VOABFB25 00122
BFB 180-314382/2		EPA 8260C		5 mL	5 mL				1 uL
CCVIS 180-314382/4		EPA 8260C		5 mL	5 mL		2 uL	6 uL	
MB 180-314382/6		EPA 8260C		5 mL	5 mL				
180-105108-B-9	HD-COD-SW-26-0/1-0	EPA 8260C	T	5 mL	5 mL	<2 SU			
180-105108-B-14	HD-QC1-0/1-2	EPA 8260C	T	5 mL	5 mL	<2 SU			
180-105108-B-9 MS	HD-COD-SW-26-0/1-0	EPA 8260C	T	5 mL	5 mL	<2 SU	2 uL	6 uL	
180-105108-A-9 MSD	HD-COD-SW-26-0/1-0	EPA 8260C	T	5 mL	5 mL	<2 SU	2 uL	6 uL	
LCS 180-314382/11		EPA 8260C		5 mL	5 mL		2 uL	6 uL	
180-105108-A-3	HD-COD-SW-8-0/1-0	EPA 8260C	T	5 mL	5 mL	<2 SU			
180-105108-A-6	HD-COD-SW-15-0/1-0	EPA 8260C	T	5 mL	5 mL	<2 SU			
180-105108-A-7	HD-COD-SW-16-0/1-0	EPA 8260C	T	5 mL	5 mL	<2 SU			

Lab Sample ID	Client Sample ID	Method Chain	Basis	VOACEVEPRI 00064	VOAKetPRI 00001	VOAVAPRI 00038	voaWI/SHP5 00016		
BFB 180-314382/2		EPA 8260C							
CCVIS 180-314382/4		EPA 8260C		2 uL	2 uL	2 uL	5 uL		
MB 180-314382/6		EPA 8260C					5 uL		
180-105108-B-9	HD-COD-SW-26-0/1-0	EPA 8260C	T				5 uL		
180-105108-B-14	HD-QC1-0/1-2	EPA 8260C	T				5 uL		
180-105108-B-9 MS	HD-COD-SW-26-0/1-0	EPA 8260C	T	2 uL	2 uL	2 uL	5 uL		
180-105108-A-9 MSD	HD-COD-SW-26-0/1-0	EPA 8260C	T	2 uL	2 uL	2 uL	5 uL		
LCS 180-314382/11		EPA 8260C		2 uL	2 uL	2 uL	5 uL		
180-105108-A-3	HD-COD-SW-8-0/1-0	EPA 8260C	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 TestAmerica, Pittsbur Job No.: 180-105108-1

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

Batch Number: 314382 Batch Start Date: 05/01/20 15:18 Batch Analyst: Journet, Patrick

Batch Method: EPA 8260C Batch End Date: \_\_\_\_\_

Lab Sample ID	Client Sample ID	Method Chain	Basis	VOACEVEPRI 00064	VOAKetPRI 00001	VOAVAPRI 00038	voaWI/SHP5 00016		
180-105108-A-6	HD-COD-SW-15-0/1 -0	EPA 8260C	T				5 uL		
180-105108-A-7	HD-COD-SW-16-0/1 -0	EPA 8260C	T				5 uL		

Batch Notes	
Batch Comment	3167192-MEOH
pH Indicator ID	HC902937
Vial Lot Number	0217701E

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 TestAmerica, Pittsbur Job No.: 180-105108-1

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

Batch Number: 314475 Batch Start Date: 05/04/20 07:47 Batch Analyst: Journet, Patrick

Batch Method: EPA 8260C Batch End Date: \_\_\_\_\_

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	VOA8260VOAPRI 00403	VOAACR2ND 00033	VOABFB25 00122
BFB 180-314475/1		EPA 8260C		5 mL	5 mL				1 uL
CCVIS 180-314475/2		EPA 8260C		5 mL	5 mL		2 uL	6 uL	
LCS 180-314475/3		EPA 8260C		5 mL	5 mL		2 uL	6 uL	
MB 180-314475/5		EPA 8260C		5 mL	5 mL				
180-105108-C-8	HD-COD-SW-17-0/1-0	EPA 8260C	T	5 mL	5 mL	<2 SU			
180-105108-A-9	HD-COD-SW-26-0/1-0	EPA 8260C	T	5 mL	5 mL	<2 SU			
180-105108-B-8 MS	HD-COD-SW-17-0/1-0	EPA 8260C	T	5 mL	5 mL	<2 SU	2 uL	6 uL	
180-105108-B-8 MSD	HD-COD-SW-17-0/1-0	EPA 8260C	T	5 mL	5 mL	<2 SU	2 uL	6 uL	
180-105108-B-1	HD-COD-SW-6-0/1-0	EPA 8260C	T	5 mL	5 mL	<2 SU			
180-105108-C-2	HD-COD-SW-7-0/1-0	EPA 8260C	T	5 mL	5 mL	<2 SU			
180-105108-B-4	HD-COD-SW-9-0/1-0	EPA 8260C	T	5 mL	5 mL	<2 SU			
180-105108-B-5	HD-COD-SW-13-0/1-0	EPA 8260C	T	5 mL	5 mL	<2 SU			
180-105108-B-10	HD-COD-SW-27-0/1-0	EPA 8260C	T	5 mL	5 mL	<2 SU			
180-105108-A-11	HD-COD-SW-28-0/1-0	EPA 8260C	T	5 mL	5 mL	<2 SU			
180-105108-B-12	HD-COD-SW-29-0/1-0	EPA 8260C	T	5 mL	5 mL	<2 SU			
180-105108-B-13	HD-QC1-0/1-1	EPA 8260C	T	5 mL	5 mL	<2 SU			

Lab Sample ID	Client Sample ID	Method Chain	Basis	VOACEVEPRI 00064	VOAVAPRI 00038	voaWI/SHP5 00016	voaWKet2ndRes 00050		
BFB 180-314475/1		EPA 8260C							
CCVIS 180-314475/2		EPA 8260C		2 uL	2 uL	5 uL	2 uL		
LCS 180-314475/3		EPA 8260C		2 uL	2 uL	5 uL	2 uL		
MB 180-314475/5		EPA 8260C				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 TestAmerica, Pittsbur Job No.: 180-105108-1

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

Batch Number: 314475 Batch Start Date: 05/04/20 07:47 Batch Analyst: Journet, Patrick

Batch Method: EPA 8260C Batch End Date: \_\_\_\_\_

Lab Sample ID	Client Sample ID	Method Chain	Basis	VOACEVEPRI 00064	VOAVAPRI 00038	voaWI/SHP5 00016	voaWKet2ndRes 00050		
180-105108-C-8	HD-COD-SW-17-0/1-0	EPA 8260C	T			5 uL			
180-105108-A-9	HD-COD-SW-26-0/1-0	EPA 8260C	T			5 uL			
180-105108-B-8 MS	HD-COD-SW-17-0/1-0	EPA 8260C	T	2 uL	2 uL	5 uL	2 uL		
180-105108-B-8 MSD	HD-COD-SW-17-0/1-0	EPA 8260C	T	2 uL	2 uL	5 uL	2 uL		
180-105108-B-1	HD-COD-SW-6-0/1-0	EPA 8260C	T			5 uL			
180-105108-C-2	HD-COD-SW-7-0/1-0	EPA 8260C	T			5 uL			
180-105108-B-4	HD-COD-SW-9-0/1-0	EPA 8260C	T			5 uL			
180-105108-B-5	HD-COD-SW-13-0/1-0	EPA 8260C	T			5 uL			
180-105108-B-10	HD-COD-SW-27-0/1-0	EPA 8260C	T			5 uL			
180-105108-A-11	HD-COD-SW-28-0/1-0	EPA 8260C	T			5 uL			
180-105108-B-12	HD-COD-SW-29-0/1-0	EPA 8260C	T			5 uL			
180-105108-B-13	HD-QC1-0/1-1	EPA 8260C	T			5 uL			

Batch Notes	
Batch Comment	3167192-MEOH
pH Indicator ID	HC902937
Vial Lot Number	0217701E

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

**TestAmerica Pittsburgh**  
301 Alpha Drive

Pittsburgh, PA 15238  
phone 412.963.7058 fax 412.963.2470

**Client Contact**  
Groundwater Sciences Corporation  
2601 Market Place St. Suite 310  
Harrisburg, PA 17110

Phone (717) 901-8180  
FAX (717) 657-1611  
Project Name: Surface Water Monthly  
Site: FYNOP, York PA  
Quote # 18000557

**Project Manager:** Chris O'Neil  
**Tel/Fax:** 717-901-8176 / (717) 756-1246

**Analysis Turnaround Time**

Calendar (C) or Work Days (W)

TAT if different from below: Standard

2 weeks  
1 week  
2 days  
1 day

**Sample Identification**

HD-COD-SW-6-0/1-0	4/28/20 1135	Surface Water	Water	3	X
HD-COD-SW-7-0/1-0	1120	Surface Water	Water	3	X
HD-COD-SW-8-0/1-0	1020	Surface Water	Water	3	X
HD-COD-SW-9-0/1-0	1325	Surface Water	Water	3	X
HD-COD-SW-13-0/1-0	1040	Surface Water	Water	3	X
HD-COD-SW-15-0/1-0	1245	Surface Water	Water	3	X
HD-COD-SW-16-0/1-0	1055	Surface Water	Water	3	X
HD-COD-SW-17-0/1-0	1110	Surface Water	Water	3	X
HD-COD-SW-26-0/1-0	1155	Surface Water	Water	3	X
HD-COD-SW-27-0/1-0	1135	Surface Water	Water	3	X
HD-COD-SW-28-0/1-0	1335	Surface Water	Water	3	X
HD-COD-SW-29-0/1-0	1005	Surface Water	Water	3	X
HD-QC1-0/1-1	1200	Surface Water	Water	3	X
HD-QC1-0/1-2	---	Trip Blank	Water	2	X

**Possible Hazard Identification**  
Non-Hazard Flammable Skin Irritant  
**Preservation Used:** 1= Ice, 2= HCl, 3= H2SO4, 4= HNO3, 5= NaOH, 6= Unpreserved 7= Na2S2O3  
Number of Containers: 41  
Field Filter: N

**Special Instructions/QC Requirements & Comments:** CLP Like Deliverables, Project Specific Analyte Lists

Relinquished by: Casey Littlefield  
Relinquished by: [Signature]  
Relinquished by: [Signature]

Company: GSC  
Company: ETA  
Company: [Signature]

Date/Time: 4/28/20 1430  
Date/Time: 4/28/20  
Date/Time:

Received by: Dennis Rom  
Received by: FED EX  
Received by: Julie Wilson

Company: ETA  
Company: ETA  
Company: [Signature]

Date/Time: 4/28/20 1430  
Date/Time:  
Date/Time: 4-29-20

8.45

**TestAmerica Laboratories, Inc.**  
COC No: 11920204728  
1 of 2 COCs  
Job No: 10012.42

**Date Submitted:** 4/28/20  
**Carrier:** FEDEX

**Site Contact:** Casey Littlefield  
**Lab Contact:** Carrie Gamber

**Container No.:** ↑  
**SDG No.:**

**Sample Specific Notes:**



180-105108 Chain of Custody

**Harrisburg #267**

SW-846 Method VOCs via (8260C) Modified QAPP List

**Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)**  
Return To Client Disposal By Lab Archive For Months

**Chain of Custody Record**

TestAmerica Pittsburgh  
301 Alpha Drive

Pittsburgh, PA 15238  
phone 412.963.7058 fax 412.963.2470

**Client Contact**  
Groundwater Sciences Corporation  
2601 Market Place St. Suite 310  
Harrisburg, PA 17110

Phone (717) 901-8180  
FAX (717) 657-1611

Project Name: Surface Water Monthly

Site: FYNOP, York PA

Quote # 18000557

**Project Manager:** Chris O'Neil  
Tel/Fax: 717-901-8176 / (717) 756-1246

**Analysis Turnaround Time**

Calendar (C) or Work Days (W)

IAT If different from Below Standard

- 2 weeks
- 1 week
- 2 days
- 1 day

**Site Contact:** Casey Littlefield  
**Lab Contact:** Carrie Gamber

**Date Submitted:** FEDEX

**COC No.:** 2 of 2 COCs

**Job No.:** 10012.42

**Harrisburg #267**

SW-846 Method VOCs via (8260) Modified QAPP List

**Sample Identification**

Sample Date	Sample Time	Sample Type	Matrix	# of Cont.
4/28/20	1155	Surface	W	3
↓	1155	water	W	3

Sample Specific Notes:

**Possible Hazard Identification**  
Non-Hazard Flammable Skin Irritant Poison B Unknown  
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4= HNO3; 5= NaOH; 6= Unpreserved 7= Na2S2O3  
Field Filter

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return To Client Disposal By Lab Archive For Months

Special Instructions/QC Requirements & Comments: CLP Like Deliverables, Project Specific Analyte Lists

Relinquished by: <i>[Signature]</i>	Company: GSC	Date/Time: 4/28/20 1430	Received by: Dennis R...	Company: ETA	Date/Time: 4/28/20 1430
Relinquished by: <i>[Signature]</i>	Company: GTA	Date/Time: 4/28/20	Received by: FED EX	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by: <i>[Signature]</i>	Company: <i>[Signature]</i>	Date/Time: 4-29-20

8:45

Do Not Lift Using This Tag

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Lot # 157463 434 RIT2 EXP 11/18

ORIGIN ID:GTYA (717) 464-6245

TESTAMERICA HARRISBURG SC  
5020 RITTER RD  
SUITES 205/206  
MECHANICSBURG, PA 170554837  
UNITED STATES US

SHIP DATE: 28APR20  
ACTWGT: 50.00 LB MAN  
CAD: 0129689/CAFE3211

BILL RECIPIENT

TO **SAMPLE RECEIVING**  
**TESTAMERICA PITTSBURGH**  
**301 ALPHA DRIVE**  
**RIDC PARK**  
**PITTSBURGH PA 152382907**

RT **97**  
FZ

1  
10:30  
78  
04.25

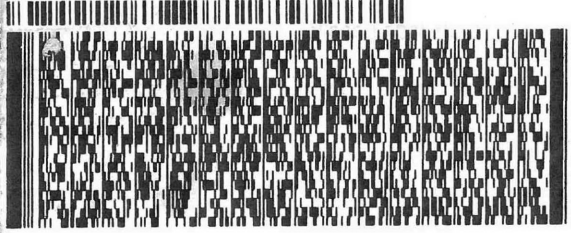
(412) 963-7068

REF:

INU:

PO:

DEPT:



**FedEx**  
Express



**WED - 29 APR 10:30A**  
**PRIORITY OVERNIGHT**

TRK# **4690 5823 7859**  
0201

# XH AGCA

**15238**  
PA-US **PIT**

Uncorrected temp 23 °C  
Thermometer ID 17

CF 0 Initials B

PT-WI-SR-001 effective 7/26/13



180-105108 Waybill

# Login Sample Receipt Checklist

Client: Groundwater Sciences Corporation

Job Number: 180-105108-1

**Login Number: 105108**  
**List Number: 1**  
**Creator: Jodis, Matthew V**

**List Source: Eurofins TestAmerica, Pittsburgh**

<b>Question</b>	<b>Answer</b>	<b>Comment</b>
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
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.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	