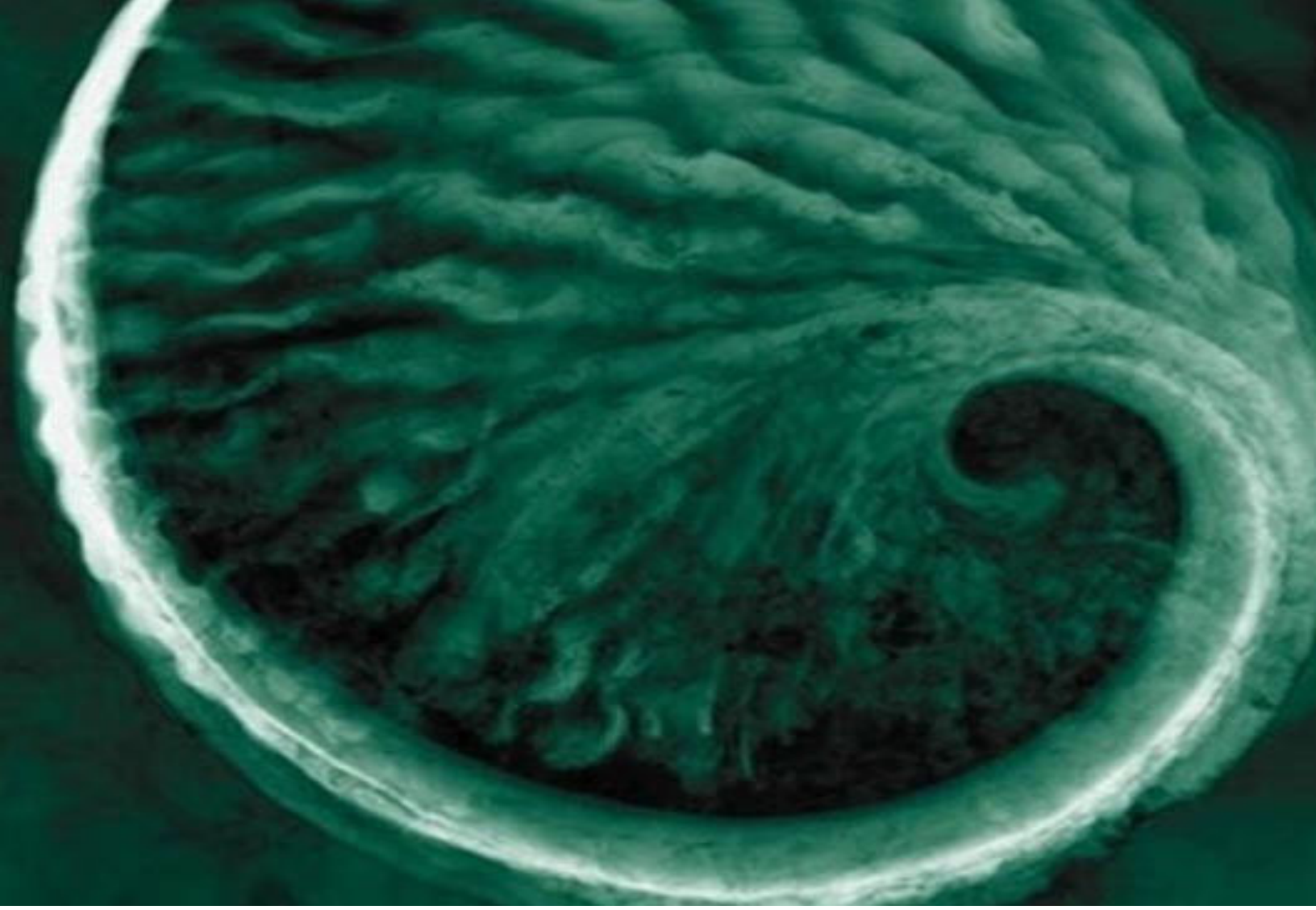


Sub Slab Depressurization System Corrective Measure Report

Robintech/Compudyne, Inc. Oswego, New York

24 May 2019

Project No.: 0495737

The business of sustainability

ERMCVS

CONTENTS

List of Tables

List of Figures

Acronyms and Abbreviations

Name	Description
COC	Chain of Customer
CVOC	Chlorinated Volatile Organic Compounds
ERM	ERM Consulting & Engineering, Inc.
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
PID	Photoionization Detector
PMP	Performance Monitoring Program
SSDS	Sub-Slab Depressurization System
VOC	Volatile Organic Compounds
USEPA	United States Environmental Protection Agency

1. INTRODUCTION

ERM Consulting & Engineering, Inc. (ERM) was contracted to complete an evaluation of the sub-slab depressurization system (SSDS) at the Robintech/Compudyne, Inc. Facility in Owego, NY (the Site, Figure 1). ERM submitted an SSDS Corrective Measure Plan to the New York State Department of Environmental Conservation (NYSDEC) project manager, which was accepted with modification on 6 December 2018. The evaluation of the SSDS was completed on 6 and 7 February 2019; this report documents those activities.

PROJECT BACKGROUND

The Site identified as the Robintech/Compudyne, Inc. makes up a portion of a former printed circuit board plant in Owego, New York with manufacturing operations, which ceased in 2018. The Site is in the New York State Superfund Program under Site Number 754007. A groundwater pump and treat remediation system at the site continues in full operation to minimize off-site migration of chlorinated volatile organic compounds (CVOC) and to reduce CVOC mass onsite. A sub-slab depressurization system continues to be operated, maintained and monitored at the Site for the purpose of preventing vapor intrusion. Groundwater monitoring is conducted on a semi-annual basis pursuant to a NYSDEC approved Performance Monitoring Program (PMP) dated 21 February 1997. Based on the vacuum measurement presented in the April 2018 Semi-annual PMP Report, the NYSDEC requested an evaluation of the SSDS to confirm the effectiveness of the system. Testing was completed in February 2019, which included an evaluation of existing vacuum monitoring points, an evaluation of vacuum measurement techniques, replacement of vacuum monitoring points, and sampling of indoor air for volatile organic compounds (VOC).

2. VACUUM MONITORING POINT EVALUATION

Sub-slab vacuum is evaluated on a monthly basis by Sanmina-SCI personnel at vacuum monitoring points using Magnehelic® Differential Pressure Gauges (Magnehelic). Magnehelics offer a quick means to collect differential pressure; however, at lower ranges they can be very sensitive and prone to inaccurate measurements. A summary of the vacuum measurements is presented as Table 1. ERM measured vacuum at these monitoring points using both Magnehelic and a digital manometer to evaluate if there are differences in these measurement techniques and to determine if there was a better way to measure the distribution of sub-slab vacuum. The resulting measurements are summarized in Table 2. The results show that there is a variability in the instruments used to take the measurements and there appears to be differences when different people measure vacuum using a Magnehelic. Note the variability on Table 1 in the measurements collected on 6 February 2019 by ERM versus measurement collected during other events. These differences are likely due to the sensitivity of the Magnehelic and slight differences in the method in which various personnel collected the measurements with the Magnehelic. The manometer also showed variability in vacuum measurements when compared to the Magnehelic measurements. The Manometer measurements show better vacuum distribution when compared to the average Magnehelic vacuum measurements. There was significant variability when comparing the Manometer and Magnehelic measurements collected on the same day, which makes it inconclusive on whether one measurement technique is better than the other.

3. VACUUM MONITORING POINT REPLACEMENT

New vacuum monitoring points were installed to further evaluate the distribution of vacuum on the sub-slab (Figure 2). Vapor Pins® were installed through the concrete slab away from walls or obstructions that have the potential to influence vacuum distribution under the building slabs. Each of the new Vapor Pins® monitoring points were installed following the manufacturer's procedures and were helium tested to ensure a proper installation. Each of the Vapor Pins® will be installed with a flush-mount security cover to protect the vacuum monitoring point and to minimize interference with facility operations. Vacuum at each of the newly installed monitoring point/ Vapor Pins® were measured and are summarized in Table 3. These data shows the SSDS has good vacuum distribution with the exception of the northwest corner of the Broadway Building.

4. INDOOR AIR EVALUATION

ERM completed an indoor air monitoring event to evaluate the effectiveness of the SSDS. Prior to conducting the sampling event, a pre-sampling building inspection was performed to inventory products and chemicals used and/or stored within the facility, consistent with the NYSDOH guidance (Appendix A). Three indoor air sample locations (one in the Broadway Building and two in the main building) were selected in areas not affected by overhead heating or ventilation (Figure 2). A properly calibrated photoionization detector (PID) equipped with an 11.7-electronvolt lamp was used to screen these areas for VOCs in the ambient indoor and outdoor air at each sampling location.

6-liter SUMMA® canisters with calibrated flow controllers were set for an 8 hour testing period in the select locations. The indoor-air samples were collected with the sample inlet positioned approximately 3 to 5 feet above the floor surface to represent the "breathing zone." One outdoor ambient-air sample was collected at location upwind of the building, and the sample inlets were placed approximately 5 feet above the ground surface. The vacuum on the SUMMA® canister flow controllers was recorded at the start and end of the 8 hour sampling period (Appendix B). Following the sampling event, the valves on the canisters were closed and the Swagelok®-type nut was placed over the inlet and secured. Vacuum readings were recorded on the chain-of-custody (COC) to demonstrate that the seals on the canisters had not been compromised in transit to the project laboratory. The samples were managed under COC protocols and were submitted to the project laboratory for VOC analysis by USEPA Method TO-15. The analytical data is summarized as Table 4 and the analytical report is provided as Appendix C.

The indoor air data indicates all VOCs are below the New York State Department of Health's guidance values for indoor air. These data indicate the SSDS and competency of the concrete slab are minimizing vapor intrusion.

5. DISCUSSION

Based on the results of the SSDS evaluation, the vacuum distribution under the slab of the Main Building is sufficient to minimize the potential for vapor intrusion. Vacuum measurements in the northwest corner of the Broadway Building suggest the SSDS is not effectively applying vacuum in this area. The analytical data from the indoor air sampling shows all VOC concentrations within this portion of the building are within the NYSDOH's guidelines, including sample location IA-2BB which was located in the northwest corner of the Broadway Building. The Broadway Building has not been an active portion of the facility for many years and with the shutdown of operations at the Site, this area will not be occupied within the immediate future. Based on the analytical data, the SSDS and competency of the building's concrete slab are effectively minimizing the potential risk of vapor intrusion. Due to the current inactivity in the northwest corner of the Broadway Building and the analytical results collected in this area, no further action is

suggested at this time. If future use of this portion of the building changes, actions can be evaluated to increase the vacuum on this portion of the building to further minimize the potential for vapor intrusion.

TABLES

TABLE 1: SUB-SLAB SYSTEM DEPRESSURIZATION VACUUM MONITORING
FORMER ROBINTECH / COMPUDYNE, INC. SITE
NYSDEC SITE NO. 754007
ERM PROJECT NO. 0495737

Location	Vacuum Reading With Magnehelic (in H2O)																				
	2/17/2017	3/1/2017	3/16/2017	3/30/2017	4/13/2017	5/11/2017	6/4/2017	7/6/2017	8/10/2017	9/11/2017	10/9/2017	1/8/2018	3/5/2018	4/2/2018	5/11/2018	6/8/2018	7/21/2018	8/27/2018	9/15/2018	10/12/2018	10/22/2018
1A-1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-0.005	0.000	0.000	0.000	0.000	0.000	0.000	-0.010	0.000	-0.020	0.000	0.000	0.000	-0.005
1A-2	0.000	0.000	-0.060	-0.070	-0.090	-0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-0.010	-0.010	0.000	0.000	0.000	0.000
1A-3	-0.001	-0.001	-0.001	-0.001	-0.005	-0.005	-0.010	-0.010	-0.020	-0.005	-0.020	0.000	0.000	-0.001	0.000	0.000	-0.040	-0.015	-0.010	-0.010	-0.030
Well 1	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	y	y	y	Y	Y	Y	Y
1B-1	-0.055	-0.080	-0.090	-0.080	-0.070	-0.045	-0.050	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Well 1	Y	Y	Y	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	y	y	y	Y	Y	Y	Y
2B-1	0.000	0.000	0.000	0.000	0.000	-0.075	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2B-2	0.000	0.000	-0.040	-0.040	0.000	-0.045	-0.075	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2B-3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Well 2	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	y	y	y	Y	Y	Y	Y
3B-1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
3B-3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Well 3	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	y	y	y	Y	Y	Y	Y
4B-1	-0.100	-0.090	-0.070	-0.080	-0.090	-0.075	-0.080	-0.09	-0.12	-0.075	-0.095	-0.05	-0.09	-0.095	-0.09	-0.09	-0.085	-0.085	-0.090	-0.100	-0.100
4B-2	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-0.01	0.000	0.000	0.000	-0.025	0.000	0.000	-0.010	-0.015	0.000	0.000	0.000	-0.005
4B-3	-0.030	-0.030	-0.010	-0.010	-0.020	-0.010	NM	-0.045	-0.05	-0.025	-0.04	-0.25	0	-0.03	-0.01	-0.02	-0.03	-0.030	-0.250	-0.025	-0.040
Well 4	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	y	y	y	Y	Y	Y	Y
5B-2	-0.020	-0.020	-0.005	-0.001	-0.005	-0.005	-0.010	-0.005	-0.010	-0.005	-0.025	-0.005	-0.010	-0.005	-0.010	-0.010	-0.025	-0.010	-0.010	-0.010	0.000
5B-3	-0.005	-0.005	-0.001	-0.001	-0.001	-0.001	0.000	0.000	-0.04	0.000	0.000	0.000	0.000	0.000	0.000	-0.010	-0.030	-0.005	-0.005	-0.005	-0.030
Well 5	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	y	y	y	Y	Y	Y	Y

Location	Vacuum Reading With Magnehelic (in H2O)						
	11/23/2018	12/29/2018	1/31/2019	2/6/2019	2/22/2019	3/24/2019	Average
1A-1	0.000	0.000	0.000	-0.030	-0.005	0.000	-0.003
1A-2	0.000	0.000	0.000	-0.060	0.000	0.000	-0.012
1A-3	-0.020	-0.030	-0.020	-0.100	-0.025	-0.030	-0.015
Well 1	Y	Y	Y	Y	Y	Y	
1B-1	0.000	0.000	0.000	0.000	0.000	0.000	-0.018
Well 1	Y	Y	Y	Y	Y	Y	
2B-1	0.000	0.000	0.000	-0.080	0.000	0.000	-0.006
2B-2	0.000	0.000	0.000	-0.010	0.000	0.000	-0.008
2B-3	0.000	0.000	0.000	-0.030	0.000	0.000	-0.001
Well 2	Y	Y	Y	Y	Y	Y	
3B-1	0.000	0.000	0.000	-0.050	0.000	0.000	-0.002
3B-3	0.000	0.000	0.000	-0.010	0.000	0.000	0.000
Well 3	Y	Y	Y	Y	Y	Y	
4B-1	-0.090	-0.095	-0.095	-0.020	-0.135	-0.140	-0.088
4B-2	-0.005	-0.005	-0.010	-0.090	-0.010	-0.010	-0.007
4B-3	-0.030	-0.050	-0.095	-0.180	-0.160	-0.160	-0.059
Well 4	Y	Y	Y	Y	Y	Y	
5B-2	-0.015	-0.025	-0.060	-0.060	-0.100	-0.110	-0.018
5B-3	-0.005	-0.010	-0.030	-0.090	-0.060	-0.055	-0.013
Well 5	Y	Y	Y	Y	Y	Y	

Notes:
All vacuum measurements are in inches of water (in H20)
Vacuum measurements are measured and recorded on a monthly basis
Vacuum monitoring points 3B-2 and 5B-1 were inadvertently removed during maintenance activities and/or facility remodel.
Y- indicates there was vacuum at the designated suction point/ well.
All vacuum measurements were collected by Sanmina personal except the measures summarized for 6 February 2019 which were measured by ERM
NM- not measured due to accessibility issues

TABLE 2: COMPARISON OF VACUUM MEASURING TECHNIQUES
FORMER ROBINTECH / COMPUDYNE, INC. SITE
NYSDEC SITE NO. 754007
ERM PROJECT NO. 0495737

Vacuum Reading (in H2O)			
Locations	Magnehelic		Manometer
	Average	2/6/2019	2/6/2019
1A-1	-0.003	-0.030	-0.006
1A-2	-0.012	-0.060	-0.006
1A-3	-0.015	-0.100	-0.030
1B-1	-0.018	0.000	0.000
2B-1	-0.006	-0.080	-0.001
2B-2	-0.008	-0.010	-0.250
2B-3	-0.001	-0.030	-0.004
3B-1	-0.002	-0.050	-0.001
3B-3	0.000	-0.010	-0.002
4B-1	-0.088	-0.02	-0.124
4B-2	-0.007	-0.090	-0.019
4B-3	-0.059	-0.18	-0.123
5B-2	-0.018	-0.060	-0.081
5B-3	-0.013	-0.090	-0.021

Notes:
All vacuum measurements are in inches of water (in H20)
The average vacuum measurements are for vacuum measurements collected between February 2017 and March 2019. These data are summarized on Table 1.

TABLE 3: SUMMARY OF VACUUM MEASURING
FORMER ROBINTECH / COMPUDYNE, INC. SITE
NYSDEC SITE NO. 754007
ERM PROJECT NO. 0495737

Location		Vacuum (Inches of H2O)	Monitoring Point Type
Broadway Building	1A-1	-0.009	MP
	1A-2	-0.008	MP
	1A-3	-0.034	MP
	1BB-1	-0.018	VPMP
	1BB-2	-0.007	VPMP
	1BB-3	-0.001	VPMP
	2B-1	-0.003	MP
	2B-2	0.003	MP
	2B-3	0.005	MP
	2BB-1	0.001	VPMP
	2BB-2	0.000	VPMP
	2BB-3	0.003	VPMP
	2BB-4	0.003	VPMP
Main Building	3B-1	0.000	MP
	3B-3	-0.003	MP
	4B-1	-0.128	MP
	4B-2	-0.021	MP
	4B-3	-0.129	MP
	3MB-1	-0.013	VPMP
	3MB-2	-0.007	VPMP
	3MB-3	-0.027	VPMP
	4MB-1	-0.880	VPMP
	4MB-2	-0.014	VPMP
	4MB-3	-0.041	VPMP
	4MB-4	-0.089	VPMP
	5MB-1	-0.120	VPMP
	5MB-2	-0.033	VPMP
	5B-2	-0.086	MP
	5B-3	-0.041	MP

Notes:
All vacuum measurements are in inches of water (in H20)
All vacuum measurements were measured with a digital manometer 6 May 2019.
Negative pressures indicate vacuum and positive pressures indicate pressure
MP- Original monitoring point
VPMP- VaporPin monitoring point

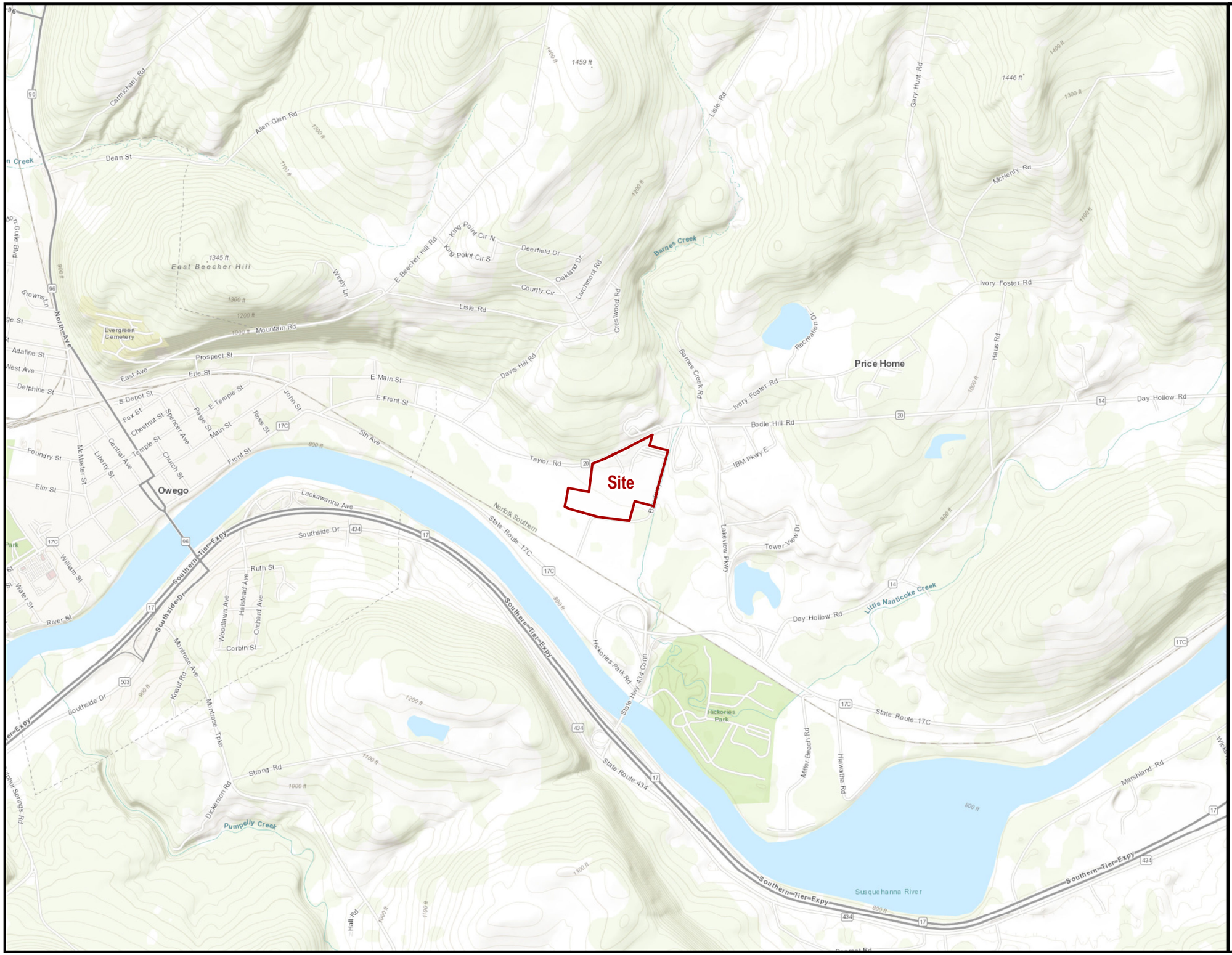
TABLE 4: SUMMARY OF AMBIENT AND INDOOR AIR ANLAYTICAL DATA
FORMER ROBINTECH / COMPUDYNE, INC. SITE
NYSDEC SITE NO. 754007
ERM PROJECT NO. 0495737

Analyte	Location ID Sample Date	AA-01 06-Feb-19	IA-1BB 06-Feb-19	IA-2BB 06-Feb-19	IA-3BB 06-Feb-19	IA-3MB 06-Feb-19	IA-4MB 06-Feb-19	IA-4MB 06-Feb-19
Method TO15, µg/m3								
1,1,1-Trichloroethane	µg/m3	*< 1.1*	*< 1.1*	*< 1.1*	*< 1.1*	*< 1.1*	*< 1.1*	*< 1.1*
1,1,2,2-Tetrachloroethane	µg/m3	*< 1.4*	*< 1.4*	*< 1.4*	*< 1.4*	*< 1.4*	*< 1.4*	*< 1.4*
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	µg/m3	0.58 J	0.61 J	0.47 J	0.49 J	0.52 J	0.50 J	0.49 J
1,1,2-Trichloroethane	µg/m3	*< 1.1*	*< 1.1*	*< 1.1*	*< 1.1*	*< 1.1*	*< 1.1*	*< 1.1*
1,1-Dichloroethane	µg/m3	*< 0.81*	*< 0.81*	*< 0.81*	*< 0.81*	*< 0.81*	*< 0.81*	*< 0.81*
1,1-Dichloroethene	µg/m3	*< 0.79*	*< 0.79*	*< 0.79*	*< 0.79*	*< 0.79*	*< 0.79*	*< 0.79*
1,2,4-Trichlorobenzene	µg/m3	*< 3.7*	*< 3.7*	*< 3.7*	*< 3.7*	*< 3.7*	*< 3.7*	*< 3.7*
1,2,4-Trimethylbenzene	µg/m3	*< 0.98*	*< 0.98*	*< 0.98*	*< 0.98*	*< 0.98*	*< 0.98*	*< 0.98*
1,2-dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	µg/m3	*< 1.4*	*< 1.4*	*< 1.4*	*< 1.4*	*< 1.4*	*< 1.4*	*< 1.4*
1,2-Dichlorobenzene	µg/m3	*< 1.2*	*< 1.2*	*< 1.2*	*< 1.2*	*< 1.2*	*< 1.2*	*< 1.2*
1,2-Dichloroethane	µg/m3	*< 0.81*	*< 0.81*	*< 0.81*	*< 0.81*	*< 0.81*	*< 0.81*	*< 0.81*
1,2-Dichloroethene	µg/m3	*< 1.6*	*< 1.6*	*< 1.6*	*< 1.6*	*< 1.6*	*< 1.6*	*< 1.6*
1,2-Dichloropropane	µg/m3	*< 0.92*	*< 0.92*	*< 0.92*	*< 0.92*	*< 0.92*	*< 0.92*	*< 0.92*
1,3,5-Trimethylbenzene	µg/m3	*< 0.98*	*< 0.98*	*< 0.98*	*< 0.98*	*< 0.98*	*< 0.98*	*< 0.98*
1,3-Butadiene	µg/m3	*< 0.44*	*< 0.44*	*< 0.44*	*< 0.44*	*< 0.44*	*< 0.44*	*< 0.44*
1,3-Dichlorobenzene	µg/m3	*< 1.2*	*< 1.2*	*< 1.2*	*< 1.2*	*< 1.2*	*< 1.2*	*< 1.2*
1,4-Dichlorobenzene	µg/m3	*< 1.2*	*< 1.2*	*< 1.2*	*< 1.2*	*< 1.2*	*< 1.2*	*< 1.2*
1,4-Dioxane	µg/m3	*< 18*	*< 18*	*< 18*	*< 18*	*< 18*	*< 18*	*< 18*
2,2,4-Trimethylpentane	µg/m3	*< 0.93*	*< 0.93*	*< 0.93*	*< 0.93*	*< 0.93*	*< 0.93*	*< 0.93*
2-Butanone	µg/m3	*< 1.5*	*< 1.5*	*< 1.5*	0.87 J	0.68 J	*< 1.5*	0.62 J
2-Hexanone	µg/m3	*< 2.0*	*< 2.0*	*< 2.0*	*< 2.0*	*< 2.0*	*< 2.0*	*< 2.0*
4-Ethyltoluene	µg/m3	*< 0.98*	*< 0.98*	*< 0.98*	*< 0.98*	*< 0.98*	*< 0.98*	*< 0.98*
4-Isopropyltoluene	µg/m3	*< 1.1*	*< 1.1*	*< 1.1*	*< 1.1*	*< 1.1*	*< 1.1*	*< 1.1*
4-Methyl-2-pentanone	µg/m3	*< 2.0*	*< 2.0*	*< 2.0*	*< 2.0*	*< 2.0*	*< 2.0*	*< 2.0*
Acetone	µg/m3	*< 12*	*< 12*	*< 12*	*< 12*	6.8 J	*< 12*	*< 12*
Allyl chloride	µg/m3	*< 1.6*	*< 1.6*	*< 1.6*	*< 1.6*	*< 1.6*	*< 1.6*	*< 1.6*
Benzene	µg/m3	0.30 J	0.32 J	0.36 J	0.29 J	0.29 J	0.27 J	0.35 J
Benzyl chloride	µg/m3	*< 1.0*	*< 1.0*	*< 1.0*	*< 1.0*	*< 1.0*	*< 1.0*	*< 1.0*
Bromodichloromethane	µg/m3	*< 1.3*	*< 1.3*	*< 1.3*	*< 1.3*	*< 1.3*	*< 1.3*	*< 1.3*
Bromoform	µg/m3	*< 2.1*	*< 2.1*	*< 2.1*	*< 2.1*	*< 2.1*	*< 2.1*	*< 2.1*
Butane	µg/m3	1.9	2.0	2.0	2.0	2.4	2.0	2.8
Carbon disulfide	µg/m3	*< 1.6*	0.40 J	*< 1.6*	*< 1.6*	*< 1.6*	0.40 J	*< 1.6*
Carbon tetrachloride	µg/m3	0.56 J	0.57 J	0.46 J	0.48 J	0.49 J	0.53 J	0.43 J
Chlorobenzene	µg/m3	*< 0.92*	*< 0.92*	*< 0.92*	*< 0.92*	*< 0.92*	*< 0.92*	*< 0.92*
Chlorodifluoromethane	µg/m3	1.1 J	2.3	1.0 J	1.3 J	3.5	1.3 J	1.3 J
Chloroethane	µg/m3	*< 1.3*	*< 1.3*	*< 1.3*	*< 1.3*	*< 1.3*	*< 1.3*	*< 1.3*
Chloroform	µg/m3	*< 0.98*	*< 0.98*	*< 0.98*	*< 0.98*	*< 0.98*	*< 0.98*	*< 0.98*
cis-1,2-Dichloroethene	µg/m3	*< 0.79*	*< 0.79*	*< 0.79*	*< 0.79*	*< 0.79*	*< 0.79*	*< 0.79*
cis-1,3-Dichloropropene	µg/m3	*< 0.91*	*< 0.91*	*< 0.91*	*< 0.91*	*< 0.91*	*< 0.91*	*< 0.91*
Cyclohexane	µg/m3	*< 0.69*	*< 0.69*	*< 0.69*	*< 0.69*	*< 0.69*	*< 0.69*	0.24 J
Dibromochloromethane	µg/m3	*< 1.7*	*< 1.7*	*< 1.7*	*< 1.7*	*< 1.7*	*< 1.7*	*< 1.7*
Dichlorodifluoromethane (Freon 12)	µg/m3	2.4 J	2.4	2.3 J	2.3 J	2.6	2.4 J	2.4 J
Ethylbenzene	µg/m3	*< 0.87*	*< 0.87*	*< 0.87*	*< 0.87*	*< 0.87*	*< 0.87*	*< 0.87*
Ethylene dibromide	µg/m3	*< 1.5*	*< 1.5*	*< 1.5*	*< 1.5*	*< 1.5*	*< 1.5*	*< 1.5*
Heptane	µg/m3	*< 0.82*	*< 0.82*	*< 0.82*	*< 0.82*	*< 0.82*	*< 0.82*	*< 0.82*
Hexachlorobutadiene	µg/m3	*< 2.1*	*< 2.1*	*< 2.1*	*< 2.1*	*< 2.1*	*< 2.1*	*< 2.1*
Isopropyl alcohol	µg/m3	*< 12*	*< 12*	50	*< 12*	*< 12*	*< 12*	*< 12*
Isopropylbenzene (Cumene)	µg/m3	*< 0.98*	*< 0.98*	*< 0.98*	*< 0.98*	*< 0.98*	*< 0.98*	*< 0.98*
m,p-Xylenes	µg/m3	*< 2.2*	*< 2.2*	*< 2.2*	*< 2.2*	*< 2.2*	*< 2.2*	0.47 J
Methyl bromide	µg/m3	*< 0.78*	*< 0.78*	*< 0.78*	*< 0.78*	*< 0.78*	*< 0.78*	*< 0.78*
Methyl chloride	µg/m3	1.1	1.0	0.99 J	0.96 J	0.96 J	1.0	1.1
Methyl methacrylate	µg/m3	*< 2.0*	*< 2.0*	*< 2.0*	*< 2.0*	*< 2.0*	*< 2.0*	*< 2.0*
Methyl tert-butyl ether	µg/m3	*< 0.72*	*< 0.72*	*< 0.72*	*< 0.72*	*< 0.72*	*< 0.72*	*< 0.72*
Methylene chloride	µg/m3	*< 1.7*	*< 1.7*	*< 1.7*	*< 1.7*	*< 1.7*	*< 1.7*	*< 1.7*
Naphthalene	µg/m3	*< 2.6*	*< 2.6*	*< 2.6*	*< 2.6*	*< 2.6*	*< 2.6*	*< 2.6*
n-Butylbenzene	µg/m3	*< 1.1*	*< 1.1*	*< 1.1*	*< 1.1*	*< 1.1*	*< 1.1*	*< 1.1*
n-Hexane	µg/m3	*< 0.70*	*< 0.70*	*< 0.70*	*< 0.70*	*< 0.70*	*< 0.70*	*< 0.70*
n-Propylbenzene	µg/m3	*< 0.98*	*< 0.98*	*< 0.98*	*< 0.98*	*< 0.98*	*< 0.98*	*< 0.98*
o-Chlorotoluene (2-chlorotoluene)	µg/m3	*< 1.0*	*< 1.0*	*< 1.0*	*< 1.0*	*< 1.0*	*< 1.0*	*< 1.0*
o-Xylene	µg/m3	*< 0.87*	*< 0.87*	*< 0.87*	*< 0.87*	*< 0.87*	*< 0.87*	*< 0.87*
sec-Butylbenzene	µg/m3	*< 1.1*	*< 1.1*	*< 1.1*	*< 1.1*	*< 1.1*	*< 1.1*	*< 1.1*
Styrene	µg/m3	*< 0.85*	*< 0.85*	*< 0.85*	*< 0.85*	*< 0.85*	*< 0.85*	*< 0.85*
tert-Butyl alcohol	µg/m3	*< 15*	*< 15*	*< 15*	*< 15*	*< 15*	*< 15*	*< 15*
tert-Butylbenzene	µg/m3	*< 1.1*	*< 1.1*	*< 1.1*	*< 1.1*	*< 1.1*	*< 1.1*	*< 1.1*
Tetrachloroethene	µg/m3	1.6	0.37 J	1.6	0.39 J	0.40 J	*< 1.4*	*< 1.4*
Tetrahydrofuran	µg/m3	*< 15*	*< 15*	*< 15*	*< 15*	*< 15*	*< 15*	*< 15*
Toluene	µg/m3	0.26 J	*< 0.75*	*< 0.75*	*< 0.75*	*< 0.75*	*< 0.75*	0.99
trans-1,2-Dichloroethene	µg/m3	*< 0.79*	*< 0.79*	*< 0.79*	*< 0.79*	*< 0.79*	*< 0.79*	*< 0.79*
trans-1,3-Dichloropropene	µg/m3	*< 0.91*	*< 0.91*	*< 0.91*	*< 0.91*	*< 0.91*	*< 0.91*	*< 0.91*
Trichloroethene	µg/m3	*< 1.1*	0.75 J	*< 1.1*	0.47 J	0.17 J	*< 1.1*	*< 1.1*
Trichlorofluoromethane (Freon 11)	µg/m3	1.3	2.6	1.2	1.2	1.6	1.4	1.4
Vinyl bromide	µg/m3	*< 0.87*	*< 0.87*	*< 0.87*	*< 0.87*	*< 0.87*	*< 0.87*	*< 0.87*
Vinyl chloride	µg/m3	*< 0.51*	*< 0.51*	*< 0.51*	*< 0.51*	*< 0.51*	*< 0.51*	*< 0.51*
Xylene, Total	µg/m3	*< 3.0*	*< 3.0*	*< 3.0*	*< 3.0*	*< 3.0*	*< 3.0*	*< 3.0*

Notes:
< = Compound not detected at concentrations
above the laboratory reporting detection limit.
The laboratory reporting detection limit is
Empty cells = Not analyzed
Units are in µg/m3 = micrograms per cubic meter

Qualifiers - Organic:
J = The analyte was positively identified; associated numerical value is the approximate concentration of the analyte in the sample.
All analyses performed by TestAmerica - Buffalo, NY.

FIGURES



Legend

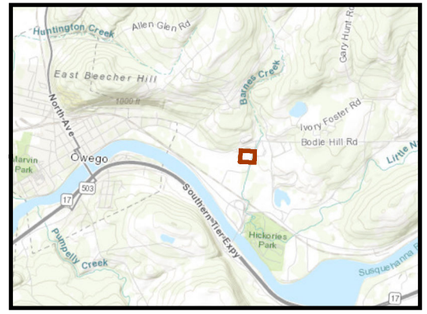
Robintech Compudyne Site Boundary

N

0 500 1,000 2,000 3,000 4,000
Feet

Figure 1: Site Location Map
Sanmina
Owego, NY
December 2017

ERM



Legend

- Indoor Air Sample Location
- Sub-Slab Vapor Pin Location
- Sub-Slab Depressurization Blower and Emission Stack
- Suction Point
- Monitoring Point
- Abandoned Monitoring Point

Structures

- Sub-Slab System A Piping
- Sub-Slab System B Piping
- Building Outline
- Out Building
- Robintech Compudyne Site Boundary
- Broadway Complex Env. Easement

N

0 12.5 25 50 75 100
Feet

Figure 2: Vapor Intrusion Sample Locations and Sub-Slab Depressurization Monitoring Points
Sanmina
Owego, NY
May 2019

ERM

APPENDIX B SAMPLING FORMS

Structure Sampling Questionnaire and Building Inventory

New York State Department of Environmental Conservation

Site Name: Sanmina | Site Code: 754007 | Operable Unit: 01

Building Code: BB | Building Name: Broadway

Address: 1200 Taylor Rd | Apt/Suite No:

City: Owego | State: NY | Zip: | County:

Contact Information

Preparer's Name: Michael Fox | Phone No: (857) 505-0852

Preparer's Affiliation: ERM | Company Code: ERM

Purpose of Investigation: Indoor air sampling | Date of Inspection:

Contact Name: Earl Kimble | Affiliation: MANAGER

Phone No: | Alt. Phone No: | Email:

Number of Occupants (total): 17 | Number of Children: 0

☐ Occupant Interviewed? ☒ Owner Occupied? ☐ Owner Interviewed?

Owner Name (if different): Sanmina Corporation | Owner Phone:

Owner Mailing Address:

Building Details

Bldg Type (Res/Com/Ind/Mixed): INDUSTRIAL | Bldg Size (S/M/L): LARGE

If Commercial or Industrial Facility, Select Operations: MANUFACTURING

If Residential Select Structure Type:

Number of Floors: 1 | Approx. Year Construction: | ☒ Building Insulated? ☐ Attached Garage?

Describe Overall Building 'Tightness' and Airflows(e.g., results of smoke tests):

Tight

Foundation Description

Foundation Type: NO BASEMENT/SLAB | Foundation Depth (bgs): | Unit: FEET

Foundation Floor Material: POURED CONCRETE

Foundation Wall Material: POURED CONCRETE

Foundation Floor Thickness: | Foundation Wall Thickness: | Unit: INCHES

☒ Floor penetrations? Describe Floor Penetrations: SSDS

☐ Wall penetrations? Describe Wall Penetrations:

Basement is: | Basement is: | ☐ Sumps/Drains? | Water In Sump?:

Describe Foundation Condition (cracks, seepage, etc.) : no cracks

☒ Radon Mitigation System Installed? ☒ VOC Mitigation System Installed? ☒ Mitigation System On?

Heating/Cooling/Ventilation Systems

Heating System: FORCED AIR | Heat Fuel Type: ELECTRIC | ☐ Central A/C Present?

Vented Appliances

Water Heater Fuel Type: ELECTRIC | Clothes Dryer Fuel Type:

Water Htr Vent Location: | Dryer Vent Location:

Structure Sampling Questionnaire and Building Inventory

New York State Department of Environmental Conservation

PRODUCT INVENTORY

Building Name: Broadway Bldg Code: BB Date:

Bldg Address: 1200 Taylor Rd Apt/Suite No:

Bldg City/State/Zip: Owego NY

Make and Model of PID: MiniRae3000 Date of Calibration: 02/06/2019

Location	Product Name/Description	Size (oz)	Condition *	Chemical Ingredients	PID Reading	COC Y/N?
						☐
						☐
						☐
						☐
						☐
						☐
						☐
						☐
						☐
						☐
						☐
						☐
						☐
						☐
						☐
						☐
						☐

* Describe the condition of the product containers as **Unopened (UO)**, **Used (U)**, or **Deteriorated (D)**

** Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

Product Inventory Complete? Yes Were there any elevated PID readings taken on site? No ☐ Products with COC?

Structure Sampling Questionnaire and Building Inventory

New York State Department of Environmental Conservation

Site Name: Sanmina Site Code: 754007 Operable Unit: 01

Building Code: BB Building Name: Broadway

Address: 1200 Taylor Rd Apt/Suite No:

City: Owego State: NY Zip: County:

Factors Affecting Indoor Air Quailty

Frequency Basement/Lowest Level is Occupied?: ALMOST NEVER Floor Material: TILE

☐ Inhabited? ☒ HVAC System On? ☐ Bathroom Exhaust Fan? ☐ Kitchen Exhaust Fan?

Alternate Heat Source: ☐ Is there smoking in the building?

☐ Air Fresheners? Description/Location of Air Freshener:

☐ Cleaning Products Used Recently?: Description of Cleaning Products:

☐ Cosmetic Products Used Recently?: Description of Cosmetic Products:

☐ New Carpet or Furniture? Location of New Carpet/Furniture:

☐ Recent Dry Cleaning? Location of Recently Dry Cleaned Fabrics:

☐ Recent Painting/Staining? Location of New Painting:

☐ Solvent or Chemical Odors? Describe Odors (if any):

☐ Do Any Occupants Use Solvents At Work? If So, List Solvents Used:

☐ Recent Pesticide/Rodenticide? Description of Last Use:

Describe Any Household Activities (chemical use,/storage, unvented appliances, hobbies, etc.) That May Affect Indoor Air Quality:

Manufacturing operations offices

☐ Any Prior Testing For Radon? If So, When?:

☐ Any Prior Testing For VOCs? If So, When?:

Sampling Conditions

Weather Conditions: MOSTLY CLOUDY Outdoor Temperature: 30 °F

Current Building Use: MANUFACTURING Barometric Pressure: in(hg)

Product Inventory Complete? Yes ☒ Building Questionnaire Completed?

Structure Sampling Questionnaire and Building Inventory

New York State Department of Environmental Conservation

Building Code: BB Address: Owego, NY

Sampling Information

Sampler Name(s): Michael Fox

Sampler Company Code: ERM

Sample Collection Date: Feb 6, 2019

Date Samples Sent To Lab: Feb 7, 2019

Sample Chain of Custody Number:

Outdoor Air Sample Location ID: SAN-AA

SUMMA Canister Information

Sample ID:	SAN-IA-1BB(02060	SAN-AA(02060			
Location Code:	1BB	AA			
Location Type:	FIRST FLOOR	OUTDOOR			
Canister ID:	3010	4581			
Regulator ID:	6561	6555			
Matrix:	Indoor Air	Ambient Outd			
Sampling Method:	SUMMA AIR SAMPLI	SUMMA AIR SA			

Sampling Area Info

Slab Thickness (inches):					
Sub-Slab Material:					
Sub-Slab Moisture:					
Seal Type:					
Seal Adequate?:	☐	☐	☐	☐	☐

Sample Times and Vacuum Readings

Sample Start Date/Time:	02/06/2019 8:54	02/06/2019 0			
Vacuum Gauge Start:	-29.5	-29.5			
Sample End Date/Time:	02/06/2019 16:0	02/06/2019 1			
Vacuum Gauge End:	-8	-6			
Sample Duration (hrs):	8	8			
Vacuum Gauge Unit:	in(hg)	in(hg)			

Sample QA/QC Readings

Vapor Port Purge:	☐	☐	☐	☐	☐
Purge PID Reading:					
Purge PID Unit:					
Tracer Test Pass:	☐	☐	☐	☐	☐

Sample start and end times should be entered using the following format: MM/DD/YYYY HH:MM

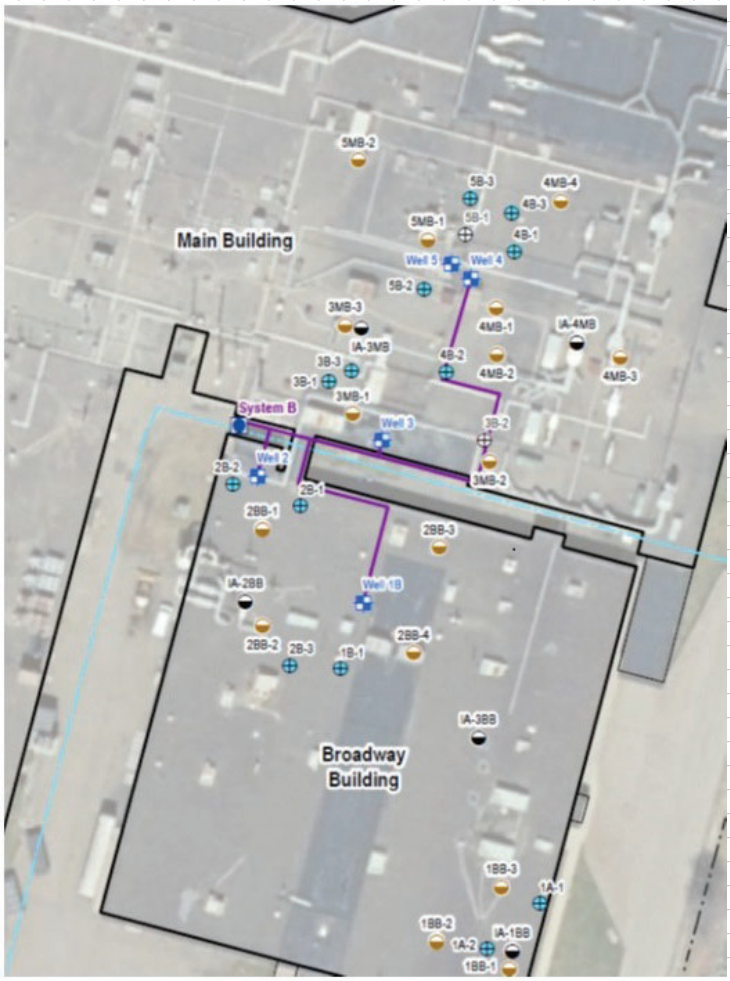
Structure Sampling Questionnaire and Building Inventory

New York State Department of Environmental Conservation

LOWEST BUILDING LEVEL LAYOUT SKETCH

Please click the box with the blue border below to upload a sketch of the lowest building level .
The sketch should be in a standard image format (.jpg, .png, .tiff)

Clear Image



Design Sketch

Design Sketch Guidelines and Recommended Symbology

- Identify and label the locations of all sub-slab, indoor air, and outdoor air samples on the layout sketch.
- Measure the distance of all sample locations from identifiable features, and include on the layout sketch.
- Identify room use (bedroom, living room, den, kitchen, etc.) on the layout sket
- Identify the locations of the following features on the layout sketch, using the appropriate symbols:

B or **F**	Boiler or Furnace	o	Other floor or wall penetrations (label appropriately)
HW	Hot Water Heater	**xxxxxxx**	Perimeter Drains (draw inside or outside outer walls as appropriate)
FP	Fireplaces	**######**	Areas of broken-up concrete
WS	Wood Stoves	● SS-1	Location & label of sub-slab samples
W/D	Washer / Dryer	● IA-1	Location & label of indoor air samples
S	Sumps	● OA-1	Location & label of outdoor air samples
@	Floor Drains	● PFET-1	Location and label of any pressure field test holes.

Structure Sampling Questionnaire and Building Inventory

New York State Department of Environmental Conservation

Site Name: Sanmina | Site Code: 754007 | Operable Unit: 01

Building Code: BB | Building Name: Broadway

Address: 1200 Taylor Rd | Apt/Suite No:

City: Owego | State: NY | Zip: | County: Tioga

Contact Information

Preparer's Name: Michael Fox | Phone No: (857) 505-0852

Preparer's Affiliation: ERM | Company Code: ERM

Purpose of Investigation: Indoor air sampling | Date of Inspection:

Contact Name: Earl Kimble | Affiliation: MANAGER

Phone No: | Alt. Phone No: | Email:

Number of Occupants (total): 17 | Number of Children: 0

☐ Occupant Interviewed? ☒ Owner Occupied? ☐ Owner Interviewed?

Owner Name (if different): Sanmina Corporation | Owner Phone:

Owner Mailing Address:

Building Details

Bldg Type (Res/Com/Ind/Mixed): INDUSTRIAL | Bldg Size (S/M/L): LARGE

If Commercial or Industrial Facility, Select Operations: MANUFACTURING

If Residential Select Structure Type:

Number of Floors: 1 | Approx. Year Construction: | ☒ Building Insulated? | ☐ Attached Garage?

Describe Overall Building 'Tightness' and Airflows(e.g., results of smoke tests):

Tight

Foundation Description

Foundation Type: NO BASEMENT/SLAB | Foundation Depth (bgs): | Unit: FEET

Foundation Floor Material: POURED CONCRETE

Foundation Wall Material: POURED CONCRETE

Foundation Floor Thickness: | Foundation Wall Thickness: | Unit: INCHES

☒ Floor penetrations? Describe Floor Penetrations: SSDS

☐ Wall penetrations? Describe Wall Penetrations:

Basement is: | Basement is: | ☐ Sumps/Drains? | Water In Sump?:

Describe Foundation Condition (cracks, seepage, etc.) : no cracks

☒ Radon Mitigation System Installed? ☒ VOC Mitigation System Installed? ☒ Mitigation System On?

Heating/Cooling/Ventilation Systems

Heating System: FORCED AIR | Heat Fuel Type: ELECTRIC | ☐ Central A/C Present?

Vented Appliances

Water Heater Fuel Type: ELECTRIC | Clothes Dryer Fuel Type:

Water Htr Vent Location: | Dryer Vent Location:

Structure Sampling Questionnaire and Building Inventory

New York State Department of Environmental Conservation

PRODUCT INVENTORY

Building Name: Broadway Bldg Code: BB Date: 02/06/2019

Bldg Address: 1200 Taylor Rd Apt/Suite No:

Bldg City/State/Zip: Owego NY

Make and Model of PID: MiniRae3000 Date of Calibration: 02/06/2019

Location	Product Name/Description	Size (oz)	Condition *	Chemical Ingredients	PID Reading	COC Y/N?
2BB	Organic Solder Protection	32 g	empty	propan-2-ol	0.0	☐
	NPTH Acid Cleaner	32 g	empty	unknown	0.0	☐
	Ormecon CSN	32 g	empty	unknown	0.0	☐
	Sterling CM Plus A-C	96g	empty	unknown	0.0	☐
	Reverse Osmosis Water	1700 g	used	unknown	0.0	☐
						☐
						☐
						☐
						☐
						☐
						☐
						☐
						☐
						☐
						☐

* Describe the condition of the product containers as **Unopened (UO)**, **Used (U)**, or **Deteriorated (D)**

** Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

Product Inventory Complete? Yes Were there any elevated PID readings taken on site? No ☐ Products with COC?

Structure Sampling Questionnaire and Building Inventory

New York State Department of Environmental Conservation

Site Name: Sanmina Site Code: 754007 Operable Unit: 01

Building Code: BB Building Name: Broadway

Address: 1200 Taylor Rd Apt/Suite No:

City: Owego State: NY Zip: County: Tioga

Factors Affecting Indoor Air Quailty

Frequency Basement/Lowest Level is Occupied?: ALMOST NEVER Floor Material: TILE

☐ Inhabited? ☒ HVAC System On? ☐ Bathroom Exhaust Fan? ☐ Kitchen Exhaust Fan?

Alternate Heat Source: ☐ Is there smoking in the building?

☐ Air Fresheners? Description/Location of Air Freshener:

☐ Cleaning Products Used Recently?: Description of Cleaning Products:

☐ Cosmetic Products Used Recently?: Description of Cosmetic Products:

☐ New Carpet or Furniture? Location of New Carpet/Furniture:

☐ Recent Dry Cleaning? Location of Recently Dry Cleaned Fabrics:

☐ Recent Painting/Staining? Location of New Painting:

☐ Solvent or Chemical Odors? Describe Odors (if any):

☐ Do Any Occupants Use Solvents At Work? If So, List Solvents Used:

☐ Recent Pesticide/Rodenticide? Description of Last Use:

Describe Any Household Activities (chemical use,/storage, unvented appliances, hobbies, etc.) That May Affect Indoor Air Quality:

Manufacturing operations plating

☐ Any Prior Testing For Radon? If So, When?:

☐ Any Prior Testing For VOCs? If So, When?:

Sampling Conditions

Weather Conditions: MOSTLY CLOUDY Outdoor Temperature: 30 °F

Current Building Use: MANUFACTURING Barometric Pressure: in(hg)

Product Inventory Complete? Yes ☒ Building Questionnaire Completed?

Structure Sampling Questionnaire and Building Inventory

New York State Department of Environmental Conservation

Building Code: BB Address: Owego, NY

Sampling Information

Sampler Name(s): Michael Fox

Sampler Company Code: ERM

Sample Collection Date: Feb 6, 2019

Date Samples Sent To Lab: Feb 7, 2019

Sample Chain of Custody Number:

Outdoor Air Sample Location ID: SAN-AA

SUMMA Canister Information

Sample ID:	SAN-IA-2BB(02060	SAN-AA(02060			
Location Code:	2BB	AA			
Location Type:	FIRST FLOOR	OUTDOOR			
Canister ID:	4428	4581			
Regulator ID:	6562	6555			
Matrix:	Indoor Air	Ambient Outd			
Sampling Method:	SUMMA AIR SAMPLI	SUMMA AIR SA			

Sampling Area Info

Slab Thickness (inches):					
Sub-Slab Material:					
Sub-Slab Moisture:					
Seal Type:					
Seal Adequate?:	☐	☐	☐	☐	☐

Sample Times and Vacuum Readings

Sample Start Date/Time:	02/06/2019 9:07	02/06/2019 0			
Vacuum Gauge Start:	-30	-29.5			
Sample End Date/Time:	02/06/2019 16:0	02/06/2019 1			
Vacuum Gauge End:	-6.5	-6			
Sample Duration (hrs):	8	8			
Vacuum Gauge Unit:	in(hg)	in(hg)			

Sample QA/QC Readings

Vapor Port Purge:	☐	☐	☐	☐	☐
Purge PID Reading:					
Purge PID Unit:					
Tracer Test Pass:	☐	☐	☐	☐	☐

Sample start and end times should be entered using the following format: MM/DD/YYYY HH:MM

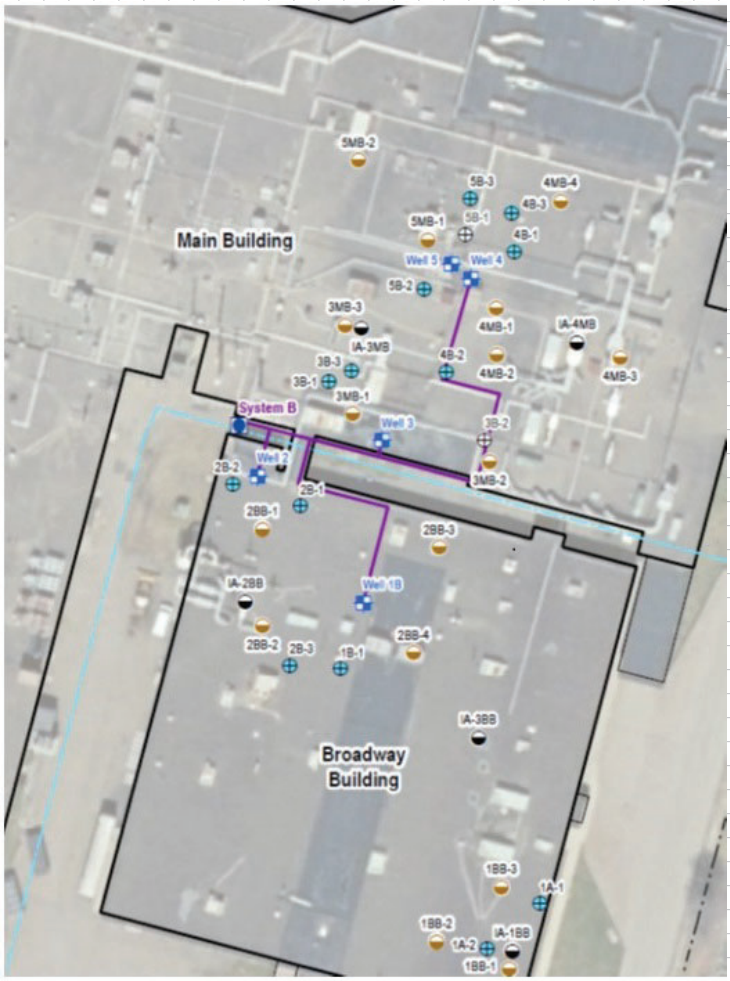
Structure Sampling Questionnaire and Building Inventory

New York State Department of Environmental Conservation

LOWEST BUILDING LEVEL LAYOUT SKETCH

Please click the box with the blue border below to upload a sketch of the lowest building level .
The sketch should be in a standard image format (.jpg, .png, .tiff)

Clear Image



Design Sketch

Design Sketch Guidelines and Recommended Symbology

- Identify and label the locations of all sub-slab, indoor air, and outdoor air samples on the layout sketch.
- Measure the distance of all sample locations from identifiable features, and include on the layout sketch.
- Identify room use (bedroom, living room, den, kitchen, etc.) on the layout sket
- Identify the locations of the following features on the layout sketch, using the appropriate symbols:

B or **F**	Boiler or Furnace	o	Other floor or wall penetrations (label appropriately)
HW	Hot Water Heater	**xxxxxxx**	Perimeter Drains (draw inside or outside outer walls as appropriate)
FP	Fireplaces	**######**	Areas of broken-up concrete
WS	Wood Stoves	● SS-1	Location & label of sub-slab samples
W/D	Washer / Dryer	● IA-1	Location & label of indoor air samples
S	Sumps	● OA-1	Location & label of outdoor air samples
@	Floor Drains	● PFET-1	Location and label of any pressure field test holes.

Structure Sampling Questionnaire and Building Inventory

New York State Department of Environmental Conservation

Site Name: Sanmina | Site Code: 754007 | Operable Unit: 01

Building Code: BB | Building Name: Broadway

Address: 1200 Taylor Rd | Apt/Suite No:

City: Owego | State: NY | Zip: | County: Tioga

Contact Information

Preparer's Name: Michael Fox | Phone No: (857) 505-0852

Preparer's Affiliation: ERM | Company Code: ERM

Purpose of Investigation: Indoor air sampling | Date of Inspection:

Contact Name: Earl Kimble | Affiliation: MANAGER

Phone No: | Alt. Phone No: | Email:

Number of Occupants (total): 17 | Number of Children: 0

☐ Occupant Interviewed? ☒ Owner Occupied? ☐ Owner Interviewed?

Owner Name (if different): Sanmina Corporation | Owner Phone:

Owner Mailing Address:

Building Details

Bldg Type (Res/Com/Ind/Mixed): INDUSTRIAL | Bldg Size (S/M/L): LARGE

If Commercial or Industrial Facility, Select Operations: MANUFACTURING

If Residential Select Structure Type:

Number of Floors: 1 | Approx. Year Construction: | ☒ Building Insulated? | ☐ Attached Garage?

Describe Overall Building 'Tightness' and Airflows(e.g., results of smoke tests):

Tight

Foundation Description

Foundation Type: NO BASEMENT/SLAB | Foundation Depth (bgs): | Unit: FEET

Foundation Floor Material: POURED CONCRETE

Foundation Wall Material: POURED CONCRETE

Foundation Floor Thickness: | Foundation Wall Thickness: | Unit: INCHES

☒ Floor penetrations? Describe Floor Penetrations: SSDS

☐ Wall penetrations? Describe Wall Penetrations:

Basement is: | Basement is: | ☐ Sumps/Drains? | Water In Sump?:

Describe Foundation Condition (cracks, seepage, etc.) : no cracks

☒ Radon Mitigation System Installed? ☒ VOC Mitigation System Installed? ☒ Mitigation System On?

Heating/Cooling/Ventilation Systems

Heating System: FORCED AIR | Heat Fuel Type: ELECTRIC | ☐ Central A/C Present?

Vented Appliances

Water Heater Fuel Type: ELECTRIC | Clothes Dryer Fuel Type:

Water Htr Vent Location: | Dryer Vent Location:

Structure Sampling Questionnaire and Building Inventory

New York State Department of Environmental Conservation

PRODUCT INVENTORY

Building Name: Broadway Bldg Code: BB Date: 02/06/2019

Bldg Address: 1200 Taylor Rd Apt/Suite No:

Bldg City/State/Zip: Owego NY

Make and Model of PID: MiniRae3000 Date of Calibration: 02/06/2019

Location	Product Name/Description	Size (oz)	Condition *	Chemical Ingredients	PID Reading	COC Y/N?
3BB	GramSilica Gel Pak	1	empty	unknown	0.0	☐
						☐
						☐
						☐
						☐
						☐
						☐
						☐
						☐
						☐
						☐
						☐
						☐
						☐
						☐
						☐
						☐

* Describe the condition of the product containers as **Unopened (UO)**, **Used (U)**, or **Deteriorated (D)**

** Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

Product Inventory Complete? Yes Were there any elevated PID readings taken on site? No ☐ Products with COC?

Structure Sampling Questionnaire and Building Inventory

New York State Department of Environmental Conservation

Site Name: Sanmina Site Code: 754007 Operable Unit: 01

Building Code: BB Building Name: Broadway

Address: 1200 Taylor Rd Apt/Suite No:

City: Owego State: NY Zip: County: Tioga

Factors Affecting Indoor Air Quailty

Frequency Basement/Lowest Level is Occupied?: ALMOST NEVER Floor Material: TILE

☐ Inhabited? ☒ HVAC System On? ☐ Bathroom Exhaust Fan? ☐ Kitchen Exhaust Fan?

Alternate Heat Source: ☐ Is there smoking in the building?

☐ Air Fresheners? Description/Location of Air Freshener:

☐ Cleaning Products Used Recently?: Description of Cleaning Products:

☐ Cosmetic Products Used Recently?: Description of Cosmetic Products:

☐ New Carpet or Furniture? Location of New Carpet/Furniture:

☐ Recent Dry Cleaning? Location of Recently Dry Cleaned Fabrics:

☐ Recent Painting/Staining? Location of New Painting:

☐ Solvent or Chemical Odors? Describe Odors (if any):

☐ Do Any Occupants Use Solvents At Work? If So, List Solvents Used:

☐ Recent Pesticide/Rodenticide? Description of Last Use:

Describe Any Household Activities (chemical use,/storage, unvented appliances, hobbies, etc.) That May Affect Indoor Air Quality:

Manufacturing operations

☐ Any Prior Testing For Radon? If So, When?:

☐ Any Prior Testing For VOCs? If So, When?:

Sampling Conditions

Weather Conditions: MOSTLY CLOUDY Outdoor Temperature: 30 °F

Current Building Use: MANUFACTURING Barometric Pressure: in(hg)

Product Inventory Complete? Yes ☒ Building Questionnaire Completed?

Structure Sampling Questionnaire and Building Inventory

New York State Department of Environmental Conservation

Building Code: BB Address: Owego, NY

Sampling Information

Sampler Name(s): Michael Fox

Sampler Company Code: ERM

Sample Collection Date: Feb 6, 2019

Date Samples Sent To Lab: Feb 7, 2019

Sample Chain of Custody Number:

Outdoor Air Sample Location ID: SAN-AA

SUMMA Canister Information

Sample ID:	SAN-IA-3BB(02060	SAN-AA(02060			
Location Code:	3BB	AA			
Location Type:	FIRST FLOOR	OUTDOOR			
Canister ID:	5398	4581			
Regulator ID:	6550	6555			
Matrix:	Indoor Air	Ambient Outd			
Sampling Method:	SUMMA AIR SAMPLI	SUMMA AIR SA			

Sampling Area Info

Slab Thickness (inches):					
Sub-Slab Material:					
Sub-Slab Moisture:					
Seal Type:					
Seal Adequate?:	☐	☐	☐	☐	☐

Sample Times and Vacuum Readings

Sample Start Date/Time:	02/06/2019 9:12	02/06/2019 0			
Vacuum Gauge Start:	-30	-29.5			
Sample End Date/Time:	02/06/2019 16:0	02/06/2019 1			
Vacuum Gauge End:	-5.5	-6			
Sample Duration (hrs):	8	8			
Vacuum Gauge Unit:	in(hg)	in(hg)			

Sample QA/QC Readings

Vapor Port Purge:	☐	☐	☐	☐	☐
Purge PID Reading:					
Purge PID Unit:					
Tracer Test Pass:	☐	☐	☐	☐	☐

Sample start and end times should be entered using the following format: MM/DD/YYYY HH:MM

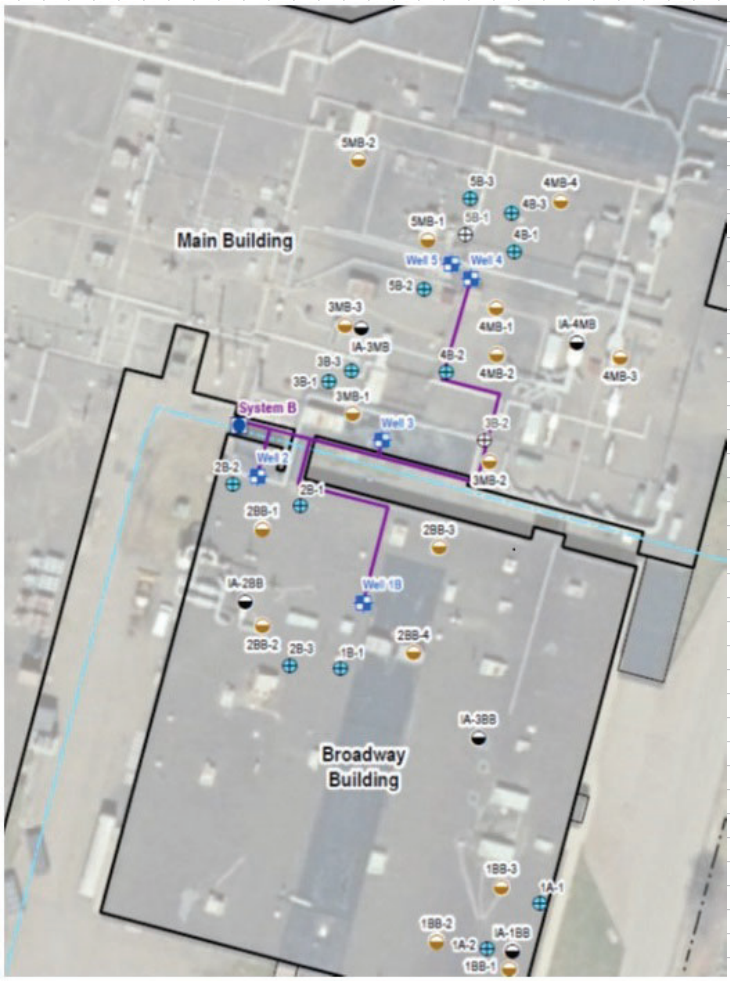
Structure Sampling Questionnaire and Building Inventory

New York State Department of Environmental Conservation

LOWEST BUILDING LEVEL LAYOUT SKETCH

Please click the box with the blue border below to upload a sketch of the lowest building level .
The sketch should be in a standard image format (.jpg, .png, .tiff)

Clear Image



Design Sketch

Design Sketch Guidelines and Recommended Symbology

- Identify and label the locations of all sub-slab, indoor air, and outdoor air samples on the layout sketch.
- Measure the distance of all sample locations from identifiable features, and include on the layout sketch.
- Identify room use (bedroom, living room, den, kitchen, etc.) on the layout sket
- Identify the locations of the following features on the layout sketch, using the appropriate symbols:

B or **F**	Boiler or Furnace	o	Other floor or wall penetrations (label appropriately)
HW	Hot Water Heater	**xxxxxxx**	Perimeter Drains (draw inside or outside outer walls as appropriate)
FP	Fireplaces	**######**	Areas of broken-up concrete
WS	Wood Stoves	● SS-1	Location & label of sub-slab samples
W/D	Washer / Dryer	● IA-1	Location & label of indoor air samples
S	Sumps	● OA-1	Location & label of outdoor air samples
@	Floor Drains	● PFET-1	Location and label of any pressure field test holes.

Structure Sampling Questionnaire and Building Inventory

New York State Department of Environmental Conservation

Site Name: Sanmina | Site Code: 754007 | Operable Unit: 01

Building Code: MB | Building Name: Main

Address: 1200 Taylor Rd | Apt/Suite No:

City: Owego | State: NY | Zip: | County: Tioga

Contact Information

Preparer's Name: Michael Fox | Phone No: (857) 505-0852

Preparer's Affiliation: ERM | Company Code: ERM

Purpose of Investigation: Indoor air sampling | Date of Inspection: 02/06/2019

Contact Name: Earl Kimble | Affiliation: MANAGER

Phone No: | Alt. Phone No: | Email:

Number of Occupants (total): 17 | Number of Children: 0

☐ Occupant Interviewed? ☒ Owner Occupied? ☐ Owner Interviewed?

Owner Name (if different): Sanmina Corporation | Owner Phone:

Owner Mailing Address:

Building Details

Bldg Type (Res/Com/Ind/Mixed): INDUSTRIAL | Bldg Size (S/M/L): LARGE

If Commercial or Industrial Facility, Select Operations: MANUFACTURING

If Residential Select Structure Type:

Number of Floors: 1 | Approx. Year Construction: | ☒ Building Insulated? ☐ Attached Garage?

Describe Overall Building 'Tightness' and Airflows(e.g., results of smoke tests):

Tight

Foundation Description

Foundation Type: NO BASEMENT/SLAB | Foundation Depth (bgs): | Unit: FEET

Foundation Floor Material: POURED CONCRETE

Foundation Wall Material: POURED CONCRETE

Foundation Floor Thickness: | Foundation Wall Thickness: | Unit: INCHES

☒ Floor penetrations? Describe Floor Penetrations: SSDS

☐ Wall penetrations? Describe Wall Penetrations:

Basement is: | Basement is: | ☐ Sumps/Drains? | Water In Sump?:

Describe Foundation Condition (cracks, seepage, etc.) : no cracks

☒ Radon Mitigation System Installed? ☒ VOC Mitigation System Installed? ☒ Mitigation System On?

Heating/Cooling/Ventilation Systems

Heating System: FORCED AIR | Heat Fuel Type: ELECTRIC | ☐ Central A/C Present?

Vented Appliances

Water Heater Fuel Type: ELECTRIC | Clothes Dryer Fuel Type:

Water Htr Vent Location: | Dryer Vent Location:

Structure Sampling Questionnaire and Building Inventory

New York State Department of Environmental Conservation

PRODUCT INVENTORY

Building Name: Main Bldg Code: MB Date:

Bldg Address: 1200 Taylor Rd Apt/Suite No:

Bldg City/State/Zip: Owego NY

Make and Model of PID: MiniRae3000 Date of Calibration: 02/06/2019

Location	Product Name/Description	Size (oz)	Condition *	Chemical Ingredients	PID Reading	COC Y/N?
						☐
						☐
						☐
						☐
						☐
						☐
						☐
						☐
						☐
						☐
						☐
						☐
						☐
						☐
						☐
						☐

* Describe the condition of the product containers as **Unopened (UO)**, **Used (U)**, or **Deteriorated (D)**

** Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

Product Inventory Complete? Yes Were there any elevated PID readings taken on site? No ☐ Products with COC?

Structure Sampling Questionnaire and Building Inventory

New York State Department of Environmental Conservation

Site Name: Sanmina Site Code: 754007 Operable Unit: 01

Building Code: MB Building Name: Main

Address: 1200 Taylor Rd Apt/Suite No:

City: Owego State: NY Zip: County: Tioga

Factors Affecting Indoor Air Quailty

Frequency Basement/Lowest Level is Occupied?: ALMOST NEVER Floor Material: TILE

☐ Inhabited? ☒ HVAC System On? ☐ Bathroom Exhaust Fan? ☐ Kitchen Exhaust Fan?

Alternate Heat Source: ☐ Is there smoking in the building?

☐ Air Fresheners? Description/Location of Air Freshener:

☐ Cleaning Products Used Recently?: Description of Cleaning Products:

☐ Cosmetic Products Used Recently?: Description of Cosmetic Products:

☐ New Carpet or Furniture? Location of New Carpet/Furniture:

☐ Recent Dry Cleaning? Location of Recently Dry Cleaned Fabrics:

☐ Recent Painting/Staining? Location of New Painting:

☐ Solvent or Chemical Odors? Describe Odors (if any):

☐ Do Any Occupants Use Solvents At Work? If So, List Solvents Used:

☐ Recent Pesticide/Rodenticide? Description of Last Use:

Describe Any Household Activities (chemical use,/storage, unvented appliances, hobbies, etc.) That May Affect Indoor Air Quality:

Manufacturing operations offices

☐ Any Prior Testing For Radon? If So, When?:

☐ Any Prior Testing For VOCs? If So, When?:

Sampling Conditions

Weather Conditions: MOSTLY CLOUDY Outdoor Temperature: 30 °F

Current Building Use: MANUFACTURING Barometric Pressure: in(hg)

Product Inventory Complete? Yes ☒ Building Questionnaire Completed?

Structure Sampling Questionnaire and Building Inventory

New York State Department of Environmental Conservation

Building Code: MB Address: Owego, NY

Sampling Information

Sampler Name(s): Michael Fox

Sampler Company Code: ERM

Sample Collection Date: Feb 6, 2019

Date Samples Sent To Lab: Feb 7, 2019

Sample Chain of Custody Number:

Outdoor Air Sample Location ID: SAN-AA

SUMMA Canister Information

Sample ID:	SAN-IA-3MB(02060	SAN-AA(02060			
Location Code:	3MB	AA			
Location Type:	FIRST FLOOR	OUTDOOR			
Canister ID:	4066	4581			
Regulator ID:	6563	6555			
Matrix:	Indoor Air	Ambient Outd			
Sampling Method:	SUMMA AIR SAMPLI	SUMMA AIR SA			

Sampling Area Info

Slab Thickness (inches):					
Sub-Slab Material:					
Sub-Slab Moisture:					
Seal Type:					
Seal Adequate?:	☐	☐	☐	☐	☐

Sample Times and Vacuum Readings

Sample Start Date/Time:	02/06/2019 8:30	02/06/2019 8			
Vacuum Gauge Start:	-30	-29.5			
Sample End Date/Time:	02/06/2019 15:4	02/06/2019 1			
Vacuum Gauge End:	-6.5	-6			
Sample Duration (hrs):	8	8			
Vacuum Gauge Unit:	in(hg)	in(hg)			

Sample QA/QC Readings

Vapor Port Purge:	☐	☐	☐	☐	☐
Purge PID Reading:					
Purge PID Unit:					
Tracer Test Pass:	☐	☐	☐	☐	☐

Sample start and end times should be entered using the following format: MM/DD/YYYY HH:MM

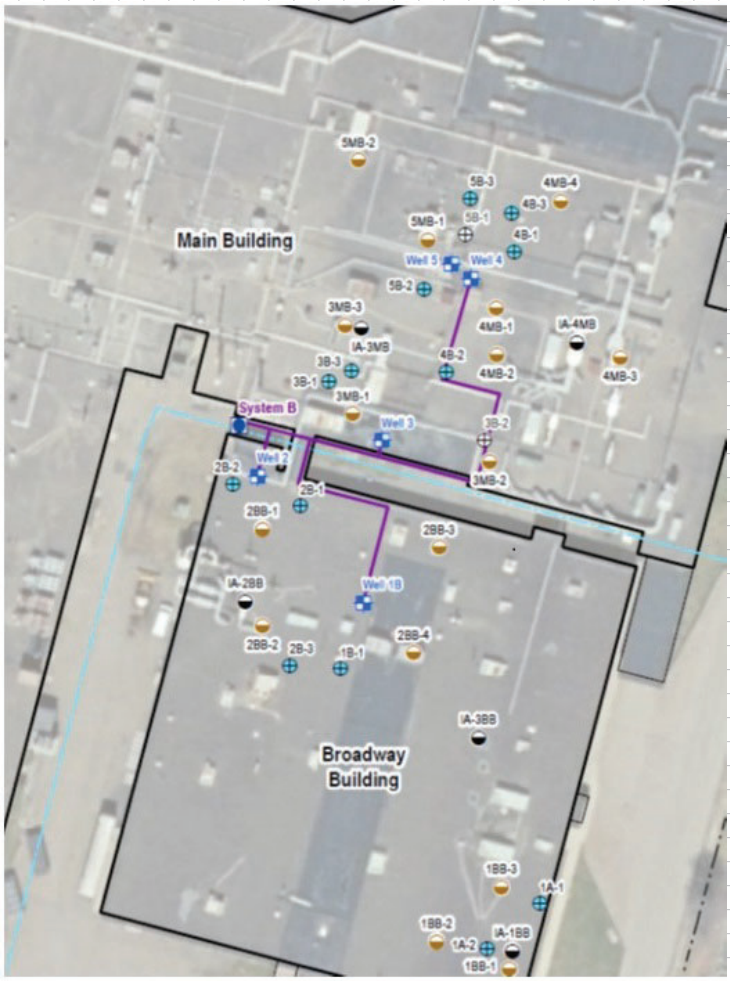
Structure Sampling Questionnaire and Building Inventory

New York State Department of Environmental Conservation

LOWEST BUILDING LEVEL LAYOUT SKETCH

Please click the box with the blue border below to upload a sketch of the lowest building level .
The sketch should be in a standard image format (.jpg, .png, .tiff)

Clear Image



Design Sketch

Design Sketch Guidelines and Recommended Symbology

- Identify and label the locations of all sub-slab, indoor air, and outdoor air samples on the layout sketch.
- Measure the distance of all sample locations from identifiable features, and include on the layout sketch.
- Identify room use (bedroom, living room, den, kitchen, etc.) on the layout sket
- Identify the locations of the following features on the layout sketch, using the appropriate symbols:

B or **F**	Boiler or Furnace	o	Other floor or wall penetrations (label appropriately)
HW	Hot Water Heater	**xxxxxxx**	Perimeter Drains (draw inside or outside outer walls as appropriate)
FP	Fireplaces	**######**	Areas of broken-up concrete
WS	Wood Stoves	● SS-1	Location & label of sub-slab samples
W/D	Washer / Dryer	● IA-1	Location & label of indoor air samples
S	Sumps	● OA-1	Location & label of outdoor air samples
@	Floor Drains	● PFET-1	Location and label of any pressure field test holes.

Structure Sampling Questionnaire and Building Inventory

New York State Department of Environmental Conservation

Site Name: Sanmina | Site Code: 754007 | Operable Unit: 01

Building Code: MB | Building Name: Main

Address: 1200 Taylor Rd | Apt/Suite No:

City: Owego | State: NY | Zip: | County: Tioga

Contact Information

Preparer's Name: Michael Fox | Phone No: (857) 505-0852

Preparer's Affiliation: ERM | Company Code: ERM

Purpose of Investigation: Indoor air sampling | Date of Inspection:

Contact Name: Earl Kimble | Affiliation: MANAGER

Phone No: | Alt. Phone No: | Email:

Number of Occupants (total): 17 | Number of Children: 0

☐ Occupant Interviewed? ☒ Owner Occupied? ☐ Owner Interviewed?

Owner Name (if different): Sanmina Corporation | Owner Phone:

Owner Mailing Address:

Building Details

Bldg Type (Res/Com/Ind/Mixed): INDUSTRIAL | Bldg Size (S/M/L): LARGE

If Commercial or Industrial Facility, Select Operations: MANUFACTURING

If Residential Select Structure Type:

Number of Floors: 1 | Approx. Year Construction: | ☒ Building Insulated? ☐ Attached Garage?

Describe Overall Building 'Tightness' and Airflows(e.g., results of smoke tests):

Tight

Foundation Description

Foundation Type: NO BASEMENT/SLAB | Foundation Depth (bgs): | Unit: FEET

Foundation Floor Material: POURED CONCRETE

Foundation Wall Material: POURED CONCRETE

Foundation Floor Thickness: | Foundation Wall Thickness: | Unit: INCHES

☒ Floor penetrations? Describe Floor Penetrations: SSDS

☐ Wall penetrations? Describe Wall Penetrations:

Basement is: | Basement is: | ☐ Sumps/Drains? | Water In Sump?:

Describe Foundation Condition (cracks, seepage, etc.) : no cracks

☒ Radon Mitigation System Installed? ☒ VOC Mitigation System Installed? ☒ Mitigation System On?

Heating/Cooling/Ventilation Systems

Heating System: FORCED AIR | Heat Fuel Type: ELECTRIC | ☐ Central A/C Present?

Vented Appliances

Water Heater Fuel Type: ELECTRIC | Clothes Dryer Fuel Type:

Water Htr Vent Location: | Dryer Vent Location:

Structure Sampling Questionnaire and Building Inventory

New York State Department of Environmental Conservation

PRODUCT INVENTORY

Building Name: Main Bldg Code: MB Date:

Bldg Address: 1200 Taylor Rd Apt/Suite No:

Bldg City/State/Zip: Owego NY

Make and Model of PID: MiniRae3000 Date of Calibration: 02/06/2019

Location	Product Name/Description	Size (oz)	Condition *	Chemical Ingredients	PID Reading	COC Y/N?
4MB	Oremecon 7001	32 g	empty	unknown	0.0	☐
	Oremecon omp 7000B-C	64 g	empty	unknown	0.0	☐
	Haz waste drum	55 g	used	RQ UN3265, methane, sulfonic acid, citric acid, thiourea	0.0	☐
	sodium hypochlorite solution	55 g	used	sodium hypochlorite	0.0	☐
	copper brightener	30 g	empty	unknown	0.0	☐
						☐
						☐
						☐
						☐
						☐
						☐
						☐
						☐
						☐
						☐

* Describe the condition of the product containers as **Unopened (UO)**, **Used (U)**, or **Deteriorated (D)**

** Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

Product Inventory Complete? Yes Were there any elevated PID readings taken on site? No ☐ Products with COC?

Structure Sampling Questionnaire and Building Inventory

New York State Department of Environmental Conservation

Site Name: Sanmina Site Code: 754007 Operable Unit: 01

Building Code: MB Building Name: Main

Address: 1200 Taylor Rd Apt/Suite No:

City: Owego State: NY Zip: County: Tioga

Factors Affecting Indoor Air Quailty

Frequency Basement/Lowest Level is Occupied?: ALMOST NEVER Floor Material: TILE

☐ Inhabited? ☒ HVAC System On? ☐ Bathroom Exhaust Fan? ☐ Kitchen Exhaust Fan?

Alternate Heat Source: ☐ Is there smoking in the building?

☐ Air Fresheners? Description/Location of Air Freshener:

☐ Cleaning Products Used Recently?: Description of Cleaning Products:

☐ Cosmetic Products Used Recently?: Description of Cosmetic Products:

☐ New Carpet or Furniture? Location of New Carpet/Furniture:

☐ Recent Dry Cleaning? Location of Recently Dry Cleaned Fabrics:

☐ Recent Painting/Staining? Location of New Painting:

☐ Solvent or Chemical Odors? Describe Odors (if any):

☐ Do Any Occupants Use Solvents At Work? If So, List Solvents Used:

☐ Recent Pesticide/Rodenticide? Description of Last Use:

Describe Any Household Activities (chemical use,/storage, unvented appliances, hobbies, etc.) That May Affect Indoor Air Quality:

Manufacturing operations

☐ Any Prior Testing For Radon? If So, When?:

☐ Any Prior Testing For VOCs? If So, When?:

Sampling Conditions

Weather Conditions: MOSTLY CLOUDY Outdoor Temperature: 30 °F

Current Building Use: MANUFACTURING Barometric Pressure: in(hg)

Product Inventory Complete? Yes ☒ Building Questionnaire Completed?

Structure Sampling Questionnaire and Building Inventory

New York State Department of Environmental Conservation

Building Code: MB Address: Owego, NY

Sampling Information

Sampler Name(s): Michael Fox

Sampler Company Code: ERM

Sample Collection Date: Feb 6, 2019

Date Samples Sent To Lab: Feb 7, 2019

Sample Chain of Custody Number:

Outdoor Air Sample Location ID: SAN-AA

SUMMA Canister Information

Sample ID:	SAN-IA-4MB(02060	SAN-AA(02060	SAN-IA-4MB(0		
Location Code:	4MB	AA	DUP		
Location Type:	FIRST FLOOR	OUTDOOR	FIRST FLOOR		
Canister ID:	3429	4581	4077		
Regulator ID:	6560	6555	6558		
Matrix:	Indoor Air	Ambient Outd	Indoor Air		
Sampling Method:	SUMMA AIR SAMPLI	SUMMA AIR SA	SUMMA AIR SA		

Sampling Area Info

Slab Thickness (inches):					
Sub-Slab Material:					
Sub-Slab Moisture:					
Seal Type:					
Seal Adequate?:	☐	☐	☐	☐	☐

Sample Times and Vacuum Readings

Sample Start Date/Time:	02/06/2019 8:35	02/06/2019 0	02/06/2019 1		
Vacuum Gauge Start:	-30	-29.5	-30		
Sample End Date/Time:	02/06/2019 15:5	02/06/2019 1			
Vacuum Gauge End:	-7	-6			
Sample Duration (hrs):	8	8			
Vacuum Gauge Unit:	in(hg)	in(hg)	in(hg)		

Sample QA/QC Readings

Vapor Port Purge:	☐	☐	☐	☐	☐
Purge PID Reading:					
Purge PID Unit:					
Tracer Test Pass:	☐	☐	☐	☐	☐

Sample start and end times should be entered using the following format: MM/DD/YYYY HH:MM

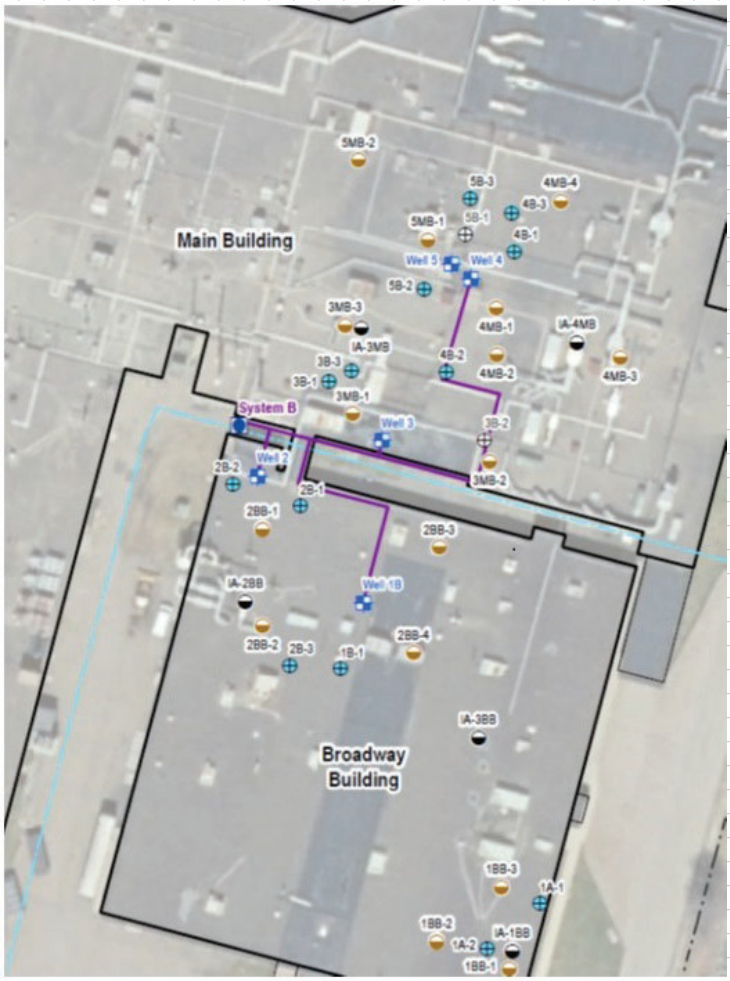
Structure Sampling Questionnaire and Building Inventory

New York State Department of Environmental Conservation

LOWEST BUILDING LEVEL LAYOUT SKETCH

Please click the box with the blue border below to upload a sketch of the lowest building level .
The sketch should be in a standard image format (.jpg, .png, .tiff)

Clear Image



Design Sketch

Design Sketch Guidelines and Recommended Symbology

- Identify and label the locations of all sub-slab, indoor air, and outdoor air samples on the layout sketch.
- Measure the distance of all sample locations from identifiable features, and include on the layout sketch.
- Identify room use (bedroom, living room, den, kitchen, etc.) on the layout sket
- Identify the locations of the following features on the layout sketch, using the appropriate symbols:

B or **F**	Boiler or Furnace	o	Other floor or wall penetrations (label appropriately)
HW	Hot Water Heater	**xxxxxxx**	Perimeter Drains (draw inside or outside outer walls as appropriate)
FP	Fireplaces	**######**	Areas of broken-up concrete
WS	Wood Stoves	● SS-1	Location & label of sub-slab samples
W/D	Washer / Dryer	● IA-1	Location & label of indoor air samples
S	Sumps	● OA-1	Location & label of outdoor air samples
@	Floor Drains	● PFET-1	Location and label of any pressure field test holes.

APPENDIX A STRUCTURE SAMPLING QUESTIONNAIRE

Environmental Resources Management
5788 Widewaters Parkway
Dewitt, New York 13213
Phone: (315) 445-2554
Fax: (315) 445-2543

Project #: 0495737
Project Name: Sanmina

Location: Owego
Project Manager: Rob Sents

Sample Location:	SAN-IA-1BB	**Collector(s):**	Tim Daniluk
Address:	1200 Taylor Rd, Owego, NY 13827		Mike Fox
PID Meter Used: (Model, Serial #)	MimiRAE 3000		

SUMMA Canister Record:

INDOOR AIR		**SUBSTRUCTURE SOIL GAS**		**AMBIENT AIR**	
Canister Serial No:	3010	Canister Serial No:		Canister Serial No:	4581
Flow Controller Id No:	6561	Flow Controller Id No:		Flow Controller Id No:	6555
Start Date/Time:	6-Feb-19	Start Date/Time:		Start Date/Time:	6-Feb-19
Start Pressure: (inches Hg)	-29.5	Start Pressure: (inches Hg)		Start Pressure: (inches Hg)	-29.5
Stop Date/Time:	6-Feb-19	Stop Date/Time:		Stop Date/Time:	2/6/2019 15:45
Stop Pressure: (inches Hg)	-8.0	Stop Pressure: (inches Hg)		Stop Pressure: (inches Hg)	-6
Sample ID:	**SAN-IA-1BB(02062019)**	**Sample ID:**		**Sample ID:**	San-AA (02062019)

Other Sampling Information:

Sample Category ID: (B, 1, 2, 3…)		Sample Category ID: (A or A-1)		Sample Category ID: (AA)	
Story/Level	1	Basement or Crawl Space?		Direction from Building	
Room		Floor Slab Thickness (inches) *[if present]*		Distance from Building	
Indoor Air Temp (^{o}F)	70	Potential Vapor Entry Points Observed?		Intake Height Above Ground Level (ft.)	
Intake Height Above Floor Level (ft.)	5	Ground Surface Condition (Crawl Space Only)		Intake Tubing used?	
Noticeable Odor?	None	If *A* , intake depth, if *A-1* , Intake Height (ft. relative to floor level)		Distance to nearest Roadway (ft.)	
PID Reading (ppm)	0	PID Reading (ppm)		PID Reading (ppm)	
Barometric Pressure ("Hg or mb)	28.1	Noticeable Odor?		Noticeable Odor?	
Duplicate Sample?		Percent O_2/CO_2/CH_4		Duplicate Sample?	
		Duplicate Sample?			

Comments:

Environmental Resources Management
5788 Widewaters Parkway
Dewitt, New York 13213
Phone: (315) 445-2554
Fax: (315) 445-2543

Project #: 0495737
Project Name: Sanmina

Location: Owego
Project Manager: Rob Sents

Sample Location:	SAN-IA-2BB	**Collector(s):**	Tim Daniluk
Address:	1200 Taylor Rd, Owego, NY		Mike Fox
PID Meter Used: (Model, Serial #)	MimiRAE 3000		

SUMMA Canister Record:

INDOOR AIR		**SUBSTRUCTURE SOIL GAS**		**AMBIENT AIR**	
Canister Serial No:	4428	Canister Serial No:		Canister Serial No:	4581
Flow Controller Id No:	6562	Flow Controller Id No:		Flow Controller Id No:	6555
Start Date/Time:	6-Feb-19	Start Date/Time:		Start Date/Time:	6-Feb-19
Start Pressure: (inches Hg)	-30	Start Pressure: (inches Hg)		Start Pressure: (inches Hg)	-29.5
Stop Date/Time:	2/6/2019 16:04	Stop Date/Time:		Stop Date/Time:	2/6/2019 15:45
Stop Pressure: (inches Hg)	-6.5	Stop Pressure: (inches Hg)		Stop Pressure: (inches Hg)	-6
Sample ID:	**SAN-IA-2BB(02062019)**	**Sample ID:**		**Sample ID:**	San-AA (02062019)

Other Sampling Information:

Sample Category ID: (B, 1, 2, 3…)		Sample Category ID: (A or A-1)		Sample Category ID: (AA)	
Story/Level	1	Basement or Crawl Space?		Direction from Building	
Room		Floor Slab Thickness (inches) *[if present]*		Distance from Building	
Indoor Air Temp (^{o}F)	70	Potential Vapor Entry Points Observed?		Intake Height Above Ground Level (ft.)	
Intake Height Above Floor Level (ft.)	5	Ground Surface Condition (Crawl Space Only)		Intake Tubing used?	
Noticeable Odor?	None	If *A* , intake depth, if *A-1* , Intake Height (ft. relative to floor level)		Distance to nearest Roadway (ft.)	
PID Reading (ppm)	0	PID Reading (ppm)		PID Reading (ppm)	
Barometric Pressure ("Hg or mb)	28.1	Noticeable Odor?		Noticeable Odor?	
Duplicate Sample?		Percent O_2/CO_2/CH_4		Duplicate Sample?	
		Duplicate Sample?			

Comments:

Environmental Resources Management
5788 Widewaters Parkway
Dewitt, New York 13213
Phone: (315) 445-2554
Fax: (315) 445-2543

Project #: 0495737
Project Name: Sanmina

Location: Owego
Project Manager: Rob Sents

Sample Location:	SAN-IA-3BB	**Collector(s):**	Tim Daniluk
Address:	1200 Taylor Rd, Owego, NY		Mike Fox
PID Meter Used: (Model, Serial #)	MimiRAE 3000		

SUMMA Canister Record:

INDOOR AIR		**SUBSTRUCTURE SOIL GAS**		**AMBIENT AIR**	
Canister Serial No:	5398	Canister Serial No:		Canister Serial No:	4581
Flow Controller Id No:	6550	Flow Controller Id No:		Flow Controller Id No:	6555
Start Date/Time:	6-Feb-19	Start Date/Time:		Start Date/Time:	6-Feb-19
Start Pressure: (inches Hg)	-30	Start Pressure: (inches Hg)		Start Pressure: (inches Hg)	-29.5
Stop Date/Time:	2/6/2019 16:09	Stop Date/Time:		Stop Date/Time:	2/6/2019 15:45
Stop Pressure: (inches Hg)	-5.5	Stop Pressure: (inches Hg)		Stop Pressure: (inches Hg)	-6
Sample ID: **SAN-IA-3BB(02062019)**		**Sample ID:**		**Sample ID:** SS-AA-01 (02062019)	

Other Sampling Information:

Sample Category ID: (B, 1, 2, 3…)		Sample Category ID: (A or A-1)		Sample Category ID: (AA)	
Story/Level	1	Basement or Crawl Space?		Direction from Building	
Room		Floor Slab Thickness (inches) *[if present]*		Distance from Building	
Indoor Air Temp (^{o}F)	70	Potential Vapor Entry Points Observed?		Intake Height Above Ground Level (ft.)	
Intake Height Above Floor Level (ft.)	5	Ground Surface Condition (Crawl Space Only)		Intake Tubing used?	
Noticeable Odor?	None	If *A* , intake depth, if *A-1* , Intake Height (ft. relative to floor level)		Distance to nearest Roadway (ft.)	
PID Reading (ppm)	0	PID Reading (ppm)		PID Reading (ppm)	
Barometric Pressure ("Hg or mb)	-28.1	Noticeable Odor?		Noticeable Odor?	
Duplicate Sample?		Percent O_2/CO_2/CH_4		Duplicate Sample?	
		Duplicate Sample?			

Comments:

Environmental Resources Management
5788 Widewaters Parkway
Dewitt, New York 13213
Phone: (315) 445-2554
Fax: (315) 445-2543

Project #: 0495737
Project Name: Sanmina

Location: Owego
Project Manager: Rob Sents

Sample Location:	SAN-IA-3MB	**Collector(s):**	Tim Daniluk
Address:	1200 Taylor Rd, Owego, NY		Mike Fox
PID Meter Used: (Model, Serial #)	MimiRAE 3000		

SUMMA Canister Record:

INDOOR AIR		**SUBSTRUCTURE SOIL GAS**		**AMBIENT AIR**	
Canister Serial No:	4066	Canister Serial No:		Canister Serial No:	4581
Flow Controller Id No:	6563	Flow Controller Id No:		Flow Controller Id No:	6555
Start Date/Time:	6-Feb-19	Start Date/Time:		Start Date/Time:	6-Feb-19
Start Pressure: (inches Hg)	-30	Start Pressure: (inches Hg)		Start Pressure: (inches Hg)	-29.5
Stop Date/Time:	2/6/2019 15:40	Stop Date/Time:		Stop Date/Time:	2/6/2019 15:45
Stop Pressure: (inches Hg)	-6.5	Stop Pressure: (inches Hg)		Stop Pressure: (inches Hg)	-6
Sample ID: **SAN-IA-3MB(02062019)**		**Sample ID:**		**Sample ID:** SS-AA-01 (02062019)	

Other Sampling Information:

Sample Category ID: (B, 1, 2, 3…)		Sample Category ID: (A or A-1)		Sample Category ID: (AA)	
Story/Level	1	Basement or Crawl Space?		Direction from Building	
Room		Floor Slab Thickness (inches) *[if present]*		Distance from Building	
Indoor Air Temp (^{o}F)	70	Potential Vapor Entry Points Observed?		Intake Height Above Ground Level (ft.)	
Intake Height Above Floor Level (ft.)	5	Ground Surface Condition (Crawl Space Only)		Intake Tubing used?	
Noticeable Odor?	None	If *A* , intake depth, if *A-1* , Intake Height (ft. relative to floor level)		Distance to nearest Roadway (ft.)	
PID Reading (ppm)	0	PID Reading (ppm)		PID Reading (ppm)	
Barometric Pressure ("Hg or mb)	-28.1	Noticeable Odor?		Noticeable Odor?	
Duplicate Sample?		Percent O_2/CO_2/CH_4		Duplicate Sample?	
		Duplicate Sample?			

Comments:

Environmental Resources Management
5788 Widewaters Parkway
Dewitt, New York 13213
Phone: (315) 445-2554
Fax: (315) 445-2543

Project #: 0495737
Project Name: Sanmina

Location: Owego
Project Manager: Rob Sents

Sample Location:	SAN-IA-4MB	**Collector(s):**	Tim Daniluk
Address:	1200 Taylor Rd, Owego, NY		Mike Fox
PID Meter Used: (Model, Serial #)	MimiRAE 3000		

SUMMA Canister Record:

INDOOR AIR		**SUBSTRUCTURE SOIL GAS**		**AMBIENT AIR**	
Canister Serial No:	3429	Canister Serial No:		Canister Serial No:	4581
Flow Controller Id No:	6560	Flow Controller Id No:		Flow Controller Id No:	6555
Start Date/Time:	6-Feb-19	Start Date/Time:		Start Date/Time:	6-Feb-19
Start Pressure: (inches Hg)	-30	Start Pressure: (inches Hg)		Start Pressure: (inches Hg)	-29.5
Stop Date/Time:	2/6/2019 15:53	Stop Date/Time:		Stop Date/Time:	2/6/2019 15:45
Stop Pressure: (inches Hg)	-7	Stop Pressure: (inches Hg)		Stop Pressure: (inches Hg)	-6
Sample ID: **SAN-IA-4MB(02062019)**		**Sample ID:**		**Sample ID:** SS-AA-01 (02062019)	

Other Sampling Information:

Sample Category ID: (B, 1, 2, 3…)		Sample Category ID: (A or A-1)		Sample Category ID: (AA)	
Story/Level	1	Basement or Crawl Space?		Direction from Building	
Room		Floor Slab Thickness (inches) *[if present]*		Distance from Building	
Indoor Air Temp (^{o}F)	70	Potential Vapor Entry Points Observed?		Intake Height Above Ground Level (ft.)	
Intake Height Above Floor Level (ft.)	5	Ground Surface Condition (Crawl Space Only)		Intake Tubing used?	
Noticeable Odor?	None	If *A* , intake depth, if *A-1* , Intake Height (ft. relative to floor level)		Distance to nearest Roadway (ft.)	
PID Reading (ppm)	0	PID Reading (ppm)		PID Reading (ppm)	
Barometric Pressure ("Hg or mb)	-28.1	Noticeable Odor?		Noticeable Odor?	
Duplicate Sample?		Percent O_2/CO_2/CH_4		Duplicate Sample?	
SAN-IA-DUP(02062019)		Duplicate Sample?			

Comments:

APPENDIX C ANALYTICAL REPORT

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Burlington
30 Community Drive
Suite 11
South Burlington, VT 05403
Tel: (802)660-1990

TestAmerica Job ID: 200-47338-1
Client Project/Site: Sanmina

For:
ERM-Northeast
5784 Widewaters Pkwy
Dewitt, New York 13214

Attn: Mr. Robert Sents

Melissa Deyo

Authorized for release by:
2/19/2019 10:12:56 AM

Melissa Deyo, Project Manager I
(716)504-9874
melissa.deyo@testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Definitions/Glossary

Client: ERM-Northeast
Project/Site: Sanmina

TestAmerica Job ID: 200-47338-1

Qualifiers

Air - GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
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)
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)

Job ID: 200-47338-1

Laboratory: TestAmerica Burlington

Narrative

Job Narrative
200-47338-1

Receipt
The samples were received on 2/8/2019 10:25 AM; the samples arrived in good condition, properly preserved and, where required, on ice.

Air Toxics
Method(s) TO-15: The continuing calibration verification (CCV) associated with batch 200-139939 recovered above the upper control limit for Benzyl chloride, Bromoform and Hexachlorobutadiene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: SAN-AA-01(02062019) (200-47338-1), SAN-IA-3MB(02062019) (200-47338-2), SAN-IA-4MB(02062019) (200-47338-3), SAN-IA-1BB(02062019) (200-47338-4), SAN-IA-2BB(02062019) (200-47338-5), SAN-IA-3BB(02062019) (200-47338-6) and SAN-IA-DUP(02062019) (200-47338-7).

Method(s) TO-15: The laboratory control sample (LCS) for analytical batch 200-139939 recovered outside control limits for the following analytes: 1,2,4-Trichlorobenzene, Naphthalene and n-Butylbenzene. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

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

Detection Summary

Client: ERM-Northeast
Project/Site: Sanmina

TestAmerica Job ID: 200-47338-1

Client Sample ID: SAN-AA-01(02062019) — Lab Sample ID: 200-47338-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.094	J	0.20	0.071	ppb v/v	1		TO-15	Total/NA
Carbon tetrachloride	0.088	J	0.20	0.024	ppb v/v	1		TO-15	Total/NA
Chloromethane	0.52		0.50	0.25	ppb v/v	1		TO-15	Total/NA
Dichlorodifluoromethane	0.49	J	0.50	0.20	ppb v/v	1		TO-15	Total/NA
Freon 22	0.31	J	0.50	0.26	ppb v/v	1		TO-15	Total/NA
Freon TF	0.076	J	0.20	0.031	ppb v/v	1		TO-15	Total/NA
n-Butane	0.81		0.50	0.31	ppb v/v	1		TO-15	Total/NA
Tetrachloroethene	0.24		0.20	0.029	ppb v/v	1		TO-15	Total/NA
Toluene	0.069	J	0.20	0.069	ppb v/v	1		TO-15	Total/NA
Trichlorofluoromethane	0.23		0.20	0.062	ppb v/v	1		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.30	J	0.64	0.23	ug/m3	1		TO-15	Total/NA
Carbon tetrachloride	0.56	J	1.3	0.15	ug/m3	1		TO-15	Total/NA
Chloromethane	1.1		1.0	0.52	ug/m3	1		TO-15	Total/NA
Dichlorodifluoromethane	2.4	J	2.5	0.99	ug/m3	1		TO-15	Total/NA
Freon 22	1.1	J	1.8	0.92	ug/m3	1		TO-15	Total/NA
Freon TF	0.58	J	1.5	0.24	ug/m3	1		TO-15	Total/NA
n-Butane	1.9		1.2	0.74	ug/m3	1		TO-15	Total/NA
Tetrachloroethene	1.6		1.4	0.20	ug/m3	1		TO-15	Total/NA
Toluene	0.26	J	0.75	0.26	ug/m3	1		TO-15	Total/NA
Trichlorofluoromethane	1.3		1.1	0.35	ug/m3	1		TO-15	Total/NA

Client Sample ID: SAN-IA-3MB(02062019) — Lab Sample ID: 200-47338-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	2.9	J	5.0	2.6	ppb v/v	1		TO-15	Total/NA
Benzene	0.090	J	0.20	0.071	ppb v/v	1		TO-15	Total/NA
Carbon tetrachloride	0.078	J	0.20	0.024	ppb v/v	1		TO-15	Total/NA
Chloromethane	0.47	J	0.50	0.25	ppb v/v	1		TO-15	Total/NA
Dichlorodifluoromethane	0.52		0.50	0.20	ppb v/v	1		TO-15	Total/NA
Freon 22	0.99		0.50	0.26	ppb v/v	1		TO-15	Total/NA
Freon TF	0.068	J	0.20	0.031	ppb v/v	1		TO-15	Total/NA
Methyl Ethyl Ketone	0.23	J	0.50	0.20	ppb v/v	1		TO-15	Total/NA
n-Butane	1.0		0.50	0.31	ppb v/v	1		TO-15	Total/NA
Tetrachloroethene	0.059	J	0.20	0.029	ppb v/v	1		TO-15	Total/NA
Trichloroethene	0.032	J	0.20	0.030	ppb v/v	1		TO-15	Total/NA
Trichlorofluoromethane	0.28		0.20	0.062	ppb v/v	1		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	6.8	J	12	6.2	ug/m3	1		TO-15	Total/NA
Benzene	0.29	J	0.64	0.23	ug/m3	1		TO-15	Total/NA
Carbon tetrachloride	0.49	J	1.3	0.15	ug/m3	1		TO-15	Total/NA
Chloromethane	0.96	J	1.0	0.52	ug/m3	1		TO-15	Total/NA
Dichlorodifluoromethane	2.6		2.5	0.99	ug/m3	1		TO-15	Total/NA
Freon 22	3.5		1.8	0.92	ug/m3	1		TO-15	Total/NA
Freon TF	0.52	J	1.5	0.24	ug/m3	1		TO-15	Total/NA
Methyl Ethyl Ketone	0.68	J	1.5	0.59	ug/m3	1		TO-15	Total/NA
n-Butane	2.4		1.2	0.74	ug/m3	1		TO-15	Total/NA
Tetrachloroethene	0.40	J	1.4	0.20	ug/m3	1		TO-15	Total/NA
Trichloroethene	0.17	J	1.1	0.16	ug/m3	1		TO-15	Total/NA
Trichlorofluoromethane	1.6		1.1	0.35	ug/m3	1		TO-15	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: ERM-Northeast
Project/Site: Sanmina

TestAmerica Job ID: 200-47338-1

Client Sample ID: SAN-IA-4MB(02062019) — Lab Sample ID: 200-47338-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.086	J	0.20	0.071	ppb v/v	1		TO-15	Total/NA
Carbon disulfide	0.13	J	0.50	0.12	ppb v/v	1		TO-15	Total/NA
Carbon tetrachloride	0.084	J	0.20	0.024	ppb v/v	1		TO-15	Total/NA
Chloromethane	0.50		0.50	0.25	ppb v/v	1		TO-15	Total/NA
Dichlorodifluoromethane	0.48	J	0.50	0.20	ppb v/v	1		TO-15	Total/NA
Freon 22	0.37	J	0.50	0.26	ppb v/v	1		TO-15	Total/NA
Freon TF	0.065	J	0.20	0.031	ppb v/v	1		TO-15	Total/NA
n-Butane	0.85		0.50	0.31	ppb v/v	1		TO-15	Total/NA
Trichlorofluoromethane	0.25		0.20	0.062	ppb v/v	1		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.27	J	0.64	0.23	ug/m3	1		TO-15	Total/NA
Carbon disulfide	0.40	J	1.6	0.37	ug/m3	1		TO-15	Total/NA
Carbon tetrachloride	0.53	J	1.3	0.15	ug/m3	1		TO-15	Total/NA
Chloromethane	1.0		1.0	0.52	ug/m3	1		TO-15	Total/NA
Dichlorodifluoromethane	2.4	J	2.5	0.99	ug/m3	1		TO-15	Total/NA
Freon 22	1.3	J	1.8	0.92	ug/m3	1		TO-15	Total/NA
Freon TF	0.50	J	1.5	0.24	ug/m3	1		TO-15	Total/NA
n-Butane	2.0		1.2	0.74	ug/m3	1		TO-15	Total/NA
Trichlorofluoromethane	1.4		1.1	0.35	ug/m3	1		TO-15	Total/NA

Client Sample ID: SAN-IA-1BB(02062019) — Lab Sample ID: 200-47338-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.10	J	0.20	0.071	ppb v/v	1		TO-15	Total/NA
Carbon disulfide	0.13	J	0.50	0.12	ppb v/v	1		TO-15	Total/NA
Carbon tetrachloride	0.090	J	0.20	0.024	ppb v/v	1		TO-15	Total/NA
Chloromethane	0.51		0.50	0.25	ppb v/v	1		TO-15	Total/NA
Dichlorodifluoromethane	0.50		0.50	0.20	ppb v/v	1		TO-15	Total/NA
Freon 22	0.65		0.50	0.26	ppb v/v	1		TO-15	Total/NA
Freon TF	0.079	J	0.20	0.031	ppb v/v	1		TO-15	Total/NA
n-Butane	0.83		0.50	0.31	ppb v/v	1		TO-15	Total/NA
Tetrachloroethene	0.054	J	0.20	0.029	ppb v/v	1		TO-15	Total/NA
Trichloroethene	0.14	J	0.20	0.030	ppb v/v	1		TO-15	Total/NA
Trichlorofluoromethane	0.46		0.20	0.062	ppb v/v	1		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.32	J	0.64	0.23	ug/m3	1		TO-15	Total/NA
Carbon disulfide	0.40	J	1.6	0.37	ug/m3	1		TO-15	Total/NA
Carbon tetrachloride	0.57	J	1.3	0.15	ug/m3	1		TO-15	Total/NA
Chloromethane	1.0		1.0	0.52	ug/m3	1		TO-15	Total/NA
Dichlorodifluoromethane	2.4		2.5	0.99	ug/m3	1		TO-15	Total/NA
Freon 22	2.3		1.8	0.92	ug/m3	1		TO-15	Total/NA
Freon TF	0.61	J	1.5	0.24	ug/m3	1		TO-15	Total/NA
n-Butane	2.0		1.2	0.74	ug/m3	1		TO-15	Total/NA
Tetrachloroethene	0.37	J	1.4	0.20	ug/m3	1		TO-15	Total/NA
Trichloroethene	0.75	J	1.1	0.16	ug/m3	1		TO-15	Total/NA
Trichlorofluoromethane	2.6		1.1	0.35	ug/m3	1		TO-15	Total/NA

Client Sample ID: SAN-IA-2BB(02062019) — Lab Sample ID: 200-47338-5

This Detection Summary does not include radiochemical test results.

Client Sample ID: SAN-IA-2BB(02062019) (Continued) — Lab Sample ID: 200-47338-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.11	J	0.20	0.071	ppb v/v	1		TO-15	Total/NA
Carbon tetrachloride	0.073	J	0.20	0.024	ppb v/v	1		TO-15	Total/NA
Chloromethane	0.48	J	0.50	0.25	ppb v/v	1		TO-15	Total/NA
Dichlorodifluoromethane	0.47	J	0.50	0.20	ppb v/v	1		TO-15	Total/NA
Freon 22	0.30	J	0.50	0.26	ppb v/v	1		TO-15	Total/NA
Freon TF	0.061	J	0.20	0.031	ppb v/v	1		TO-15	Total/NA
Isopropyl alcohol	20		5.0	1.8	ppb v/v	1		TO-15	Total/NA
n-Butane	0.85		0.50	0.31	ppb v/v	1		TO-15	Total/NA
Tetrachloroethene	0.24		0.20	0.029	ppb v/v	1		TO-15	Total/NA
Trichlorofluoromethane	0.21		0.20	0.062	ppb v/v	1		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.36	J	0.64	0.23	ug/m3	1		TO-15	Total/NA
Carbon tetrachloride	0.46	J	1.3	0.15	ug/m3	1		TO-15	Total/NA
Chloromethane	0.99	J	1.0	0.52	ug/m3	1		TO-15	Total/NA
Dichlorodifluoromethane	2.3	J	2.5	0.99	ug/m3	1		TO-15	Total/NA
Freon 22	1.0	J	1.8	0.92	ug/m3	1		TO-15	Total/NA
Freon TF	0.47	J	1.5	0.24	ug/m3	1		TO-15	Total/NA
Isopropyl alcohol	50		12	4.4	ug/m3	1		TO-15	Total/NA
n-Butane	2.0		1.2	0.74	ug/m3	1		TO-15	Total/NA
Tetrachloroethene	1.6		1.4	0.20	ug/m3	1		TO-15	Total/NA
Trichlorofluoromethane	1.2		1.1	0.35	ug/m3	1		TO-15	Total/NA

Client Sample ID: SAN-IA-3BB(02062019) — Lab Sample ID: 200-47338-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.090	J	0.20	0.071	ppb v/v	1		TO-15	Total/NA
Carbon tetrachloride	0.076	J	0.20	0.024	ppb v/v	1		TO-15	Total/NA
Chloromethane	0.47	J	0.50	0.25	ppb v/v	1		TO-15	Total/NA
Dichlorodifluoromethane	0.46	J	0.50	0.20	ppb v/v	1		TO-15	Total/NA
Freon 22	0.38	J	0.50	0.26	ppb v/v	1		TO-15	Total/NA
Freon TF	0.065	J	0.20	0.031	ppb v/v	1		TO-15	Total/NA
Methyl Ethyl Ketone	0.29	J	0.50	0.20	ppb v/v	1		TO-15	Total/NA
n-Butane	0.85		0.50	0.31	ppb v/v	1		TO-15	Total/NA
Tetrachloroethene	0.057	J	0.20	0.029	ppb v/v	1		TO-15	Total/NA
Trichloroethene	0.088	J	0.20	0.030	ppb v/v	1		TO-15	Total/NA
Trichlorofluoromethane	0.20		0.20	0.062	ppb v/v	1		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.29	J	0.64	0.23	ug/m3	1		TO-15	Total/NA
Carbon tetrachloride	0.48	J	1.3	0.15	ug/m3	1		TO-15	Total/NA
Chloromethane	0.96	J	1.0	0.52	ug/m3	1		TO-15	Total/NA
Dichlorodifluoromethane	2.3	J	2.5	0.99	ug/m3	1		TO-15	Total/NA
Freon 22	1.3	J	1.8	0.92	ug/m3	1		TO-15	Total/NA
Freon TF	0.49	J	1.5	0.24	ug/m3	1		TO-15	Total/NA
Methyl Ethyl Ketone	0.87	J	1.5	0.59	ug/m3	1		TO-15	Total/NA
n-Butane	2.0		1.2	0.74	ug/m3	1		TO-15	Total/NA
Tetrachloroethene	0.39	J	1.4	0.20	ug/m3	1		TO-15	Total/NA
Trichloroethene	0.47	J	1.1	0.16	ug/m3	1		TO-15	Total/NA
Trichlorofluoromethane	1.2		1.1	0.35	ug/m3	1		TO-15	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: ERM-Northeast
Project/Site: Sanmina

TestAmerica Job ID: 200-47338-1

Client Sample ID: SAN-IA-DUP(02062019) — Lab Sample ID: 200-47338-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.11	J	0.20	0.071	ppb v/v	1		TO-15	Total/NA
Carbon tetrachloride	0.068	J	0.20	0.024	ppb v/v	1		TO-15	Total/NA
Chloromethane	0.53		0.50	0.25	ppb v/v	1		TO-15	Total/NA
Cyclohexane	0.070	J	0.20	0.063	ppb v/v	1		TO-15	Total/NA
Dichlorodifluoromethane	0.49	J	0.50	0.20	ppb v/v	1		TO-15	Total/NA
Freon 22	0.37	J	0.50	0.26	ppb v/v	1		TO-15	Total/NA
Freon TF	0.064	J	0.20	0.031	ppb v/v	1		TO-15	Total/NA
m,p-Xylene	0.11	J	0.50	0.070	ppb v/v	1		TO-15	Total/NA
Methyl Ethyl Ketone	0.21	J	0.50	0.20	ppb v/v	1		TO-15	Total/NA
n-Butane	1.2		0.50	0.31	ppb v/v	1		TO-15	Total/NA
Toluene	0.26		0.20	0.069	ppb v/v	1		TO-15	Total/NA
Trichlorofluoromethane	0.25		0.20	0.062	ppb v/v	1		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.35	J	0.64	0.23	ug/m3	1		TO-15	Total/NA
Carbon tetrachloride	0.43	J	1.3	0.15	ug/m3	1		TO-15	Total/NA
Chloromethane	1.1		1.0	0.52	ug/m3	1		TO-15	Total/NA
Cyclohexane	0.24	J	0.69	0.22	ug/m3	1		TO-15	Total/NA
Dichlorodifluoromethane	2.4	J	2.5	0.99	ug/m3	1		TO-15	Total/NA
Freon 22	1.3	J	1.8	0.92	ug/m3	1		TO-15	Total/NA
Freon TF	0.49	J	1.5	0.24	ug/m3	1		TO-15	Total/NA
m,p-Xylene	0.47	J	2.2	0.30	ug/m3	1		TO-15	Total/NA
Methyl Ethyl Ketone	0.62	J	1.5	0.59	ug/m3	1		TO-15	Total/NA
n-Butane	2.8		1.2	0.74	ug/m3	1		TO-15	Total/NA
Toluene	0.99		0.75	0.26	ug/m3	1		TO-15	Total/NA
Trichlorofluoromethane	1.4		1.1	0.35	ug/m3	1		TO-15	Total/NA

This Detection Summary does not include radiochemical test results.

Client: ERM-Northeast
Project/Site: Sanmina

TestAmerica Job ID: 200-47338-1

Client Sample ID: SAN-AA-01(02062019)
Date Collected: 02/06/19 15:45
Date Received: 02/08/19 10:25
Sample Container: Summa Canister 6L

Lab Sample ID: 200-47338-1
Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.20	0.068	ppb v/v			02/13/19 02:25	1
1,1,2,2-Tetrachloroethane	ND		0.20	0.076	ppb v/v			02/13/19 02:25	1
1,1,2-Trichloroethane	ND		0.20	0.078	ppb v/v			02/13/19 02:25	1
1,1-Dichloroethane	ND		0.20	0.026	ppb v/v			02/13/19 02:25	1
1,1-Dichloroethene	ND		0.20	0.034	ppb v/v			02/13/19 02:25	1
1,2,4-Trichlorobenzene	ND	*	0.50	0.24	ppb v/v			02/13/19 02:25	1
1,2,4-Trimethylbenzene	ND		0.20	0.080	ppb v/v			02/13/19 02:25	1
1,2-Dibromoethane	ND		0.20	0.069	ppb v/v			02/13/19 02:25	1
1,2-Dichlorobenzene	ND		0.20	0.071	ppb v/v			02/13/19 02:25	1
1,2-Dichloroethane	ND		0.20	0.063	ppb v/v			02/13/19 02:25	1
1,2-Dichloroethene, Total	ND		0.40	0.11	ppb v/v			02/13/19 02:25	1
1,2-Dichloropropane	ND		0.20	0.12	ppb v/v			02/13/19 02:25	1
1,2-Dichlorotetrafluoroethane	ND		0.20	0.068	ppb v/v			02/13/19 02:25	1
1,3,5-Trimethylbenzene	ND		0.20	0.058	ppb v/v			02/13/19 02:25	1
1,3-Butadiene	ND		0.20	0.065	ppb v/v			02/13/19 02:25	1
1,3-Dichlorobenzene	ND		0.20	0.082	ppb v/v			02/13/19 02:25	1
1,4-Dichlorobenzene	ND		0.20	0.065	ppb v/v			02/13/19 02:25	1
1,4-Dioxane	ND		5.0	1.3	ppb v/v			02/13/19 02:25	1
2,2,4-Trimethylpentane	ND		0.20	0.088	ppb v/v			02/13/19 02:25	1
2-Chlorotoluene	ND		0.20	0.071	ppb v/v			02/13/19 02:25	1
3-Chloropropene	ND		0.50	0.27	ppb v/v			02/13/19 02:25	1
4-Ethyltoluene	ND		0.20	0.069	ppb v/v			02/13/19 02:25	1
4-Isopropyltoluene	ND		0.20	0.075	ppb v/v			02/13/19 02:25	1
Acetone	ND		5.0	2.6	ppb v/v			02/13/19 02:25	1
Benzene	**0.094**	**J**	0.20	0.071	ppb v/v			02/13/19 02:25	1
Benzyl chloride	ND		0.20	0.12	ppb v/v			02/13/19 02:25	1
Bromodichloromethane	ND		0.20	0.094	ppb v/v			02/13/19 02:25	1
Bromoethene(Vinyl Bromide)	ND		0.20	0.056	ppb v/v			02/13/19 02:25	1
Bromoform	ND		0.20	0.086	ppb v/v			02/13/19 02:25	1
Bromomethane	ND		0.20	0.062	ppb v/v			02/13/19 02:25	1
Carbon disulfide	ND		0.50	0.12	ppb v/v			02/13/19 02:25	1
Carbon tetrachloride	**0.088**	**J**	0.20	0.024	ppb v/v			02/13/19 02:25	1
Chlorobenzene	ND		0.20	0.040	ppb v/v			02/13/19 02:25	1
Chloroethane	ND		0.50	0.21	ppb v/v			02/13/19 02:25	1
Chloroform	ND		0.20	0.052	ppb v/v			02/13/19 02:25	1
Chloromethane	**0.52**		0.50	0.25	ppb v/v			02/13/19 02:25	1
cis-1,2-Dichloroethene	ND		0.20	0.037	ppb v/v			02/13/19 02:25	1
cis-1,3-Dichloropropene	ND		0.20	0.098	ppb v/v			02/13/19 02:25	1
Cumene	ND		0.20	0.059	ppb v/v			02/13/19 02:25	1
Cyclohexane	ND		0.20	0.063	ppb v/v			02/13/19 02:25	1
Dibromochloromethane	ND		0.20	0.071	ppb v/v			02/13/19 02:25	1
Dichlorodifluoromethane	**0.49**	**J**	0.50	0.20	ppb v/v			02/13/19 02:25	1
Ethylbenzene	ND		0.20	0.073	ppb v/v			02/13/19 02:25	1
Freon 22	**0.31**	**J**	0.50	0.26	ppb v/v			02/13/19 02:25	1
Freon TF	**0.076**	**J**	0.20	0.031	ppb v/v			02/13/19 02:25	1
Hexachlorobutadiene	ND		0.20	0.082	ppb v/v			02/13/19 02:25	1
Isopropyl alcohol	ND		5.0	1.8	ppb v/v			02/13/19 02:25	1
m,p-Xylene	ND		0.50	0.070	ppb v/v			02/13/19 02:25	1

Client Sample ID: SAN-AA-01(02062019) **Lab Sample ID: 200-47338-1**
Date Collected: 02/06/19 15:45 **Matrix: Air**
Date Received: 02/08/19 10:25
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Butyl Ketone (2-Hexanone)	ND		0.50	0.42	ppb v/v			02/13/19 02:25	1
Methyl Ethyl Ketone	ND		0.50	0.20	ppb v/v			02/13/19 02:25	1
methyl isobutyl ketone	ND		0.50	0.36	ppb v/v			02/13/19 02:25	1
Methyl methacrylate	ND		0.50	0.22	ppb v/v			02/13/19 02:25	1
Methyl tert-butyl ether	ND		0.20	0.061	ppb v/v			02/13/19 02:25	1
Methylene Chloride	ND		0.50	0.20	ppb v/v			02/13/19 02:25	1
Naphthalene	ND	*	0.50	0.31	ppb v/v			02/13/19 02:25	1
n-Butane	**0.81**		0.50	0.31	ppb v/v			02/13/19 02:25	1
n-Butylbenzene	ND	*	0.20	0.080	ppb v/v			02/13/19 02:25	1
n-Heptane	ND		0.20	0.14	ppb v/v			02/13/19 02:25	1
n-Hexane	ND		0.20	0.16	ppb v/v			02/13/19 02:25	1
n-Propylbenzene	ND		0.20	0.069	ppb v/v			02/13/19 02:25	1
sec-Butylbenzene	ND		0.20	0.066	ppb v/v			02/13/19 02:25	1
Styrene	ND		0.20	0.086	ppb v/v			02/13/19 02:25	1
tert-Butyl alcohol	ND		5.0	1.5	ppb v/v			02/13/19 02:25	1
tert-Butylbenzene	ND		0.20	0.058	ppb v/v			02/13/19 02:25	1
Tetrachloroethene	**0.24**		0.20	0.029	ppb v/v			02/13/19 02:25	1
Tetrahydrofuran	ND		5.0	2.6	ppb v/v			02/13/19 02:25	1
Toluene	**0.069**	**J**	0.20	0.069	ppb v/v			02/13/19 02:25	1
trans-1,2-Dichloroethene	ND		0.20	0.074	ppb v/v			02/13/19 02:25	1
trans-1,3-Dichloropropene	ND		0.20	0.12	ppb v/v			02/13/19 02:25	1
Trichloroethene	ND		0.20	0.030	ppb v/v			02/13/19 02:25	1
Trichlorofluoromethane	**0.23**		0.20	0.062	ppb v/v			02/13/19 02:25	1
Vinyl chloride	ND		0.20	0.041	ppb v/v			02/13/19 02:25	1
Xylene (total)	ND		0.70	0.14	ppb v/v			02/13/19 02:25	1
Xylene, o-	ND		0.20	0.071	ppb v/v			02/13/19 02:25	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.1	0.37	ug/m3			02/13/19 02:25	1
1,1,2,2-Tetrachloroethane	ND		1.4	0.52	ug/m3			02/13/19 02:25	1
1,1,2-Trichloroethane	ND		1.1	0.43	ug/m3			02/13/19 02:25	1
1,1-Dichloroethane	ND		0.81	0.11	ug/m3			02/13/19 02:25	1
1,1-Dichloroethene	ND		0.79	0.13	ug/m3			02/13/19 02:25	1
1,2,4-Trichlorobenzene	ND	*	3.7	1.8	ug/m3			02/13/19 02:25	1
1,2,4-Trimethylbenzene	ND		0.98	0.39	ug/m3			02/13/19 02:25	1
1,2-Dibromoethane	ND		1.5	0.53	ug/m3			02/13/19 02:25	1
1,2-Dichlorobenzene	ND		1.2	0.43	ug/m3			02/13/19 02:25	1
1,2-Dichloroethane	ND		0.81	0.25	ug/m3			02/13/19 02:25	1
1,2-Dichloroethene, Total	ND		1.6	0.44	ug/m3			02/13/19 02:25	1
1,2-Dichloropropane	ND		0.92	0.55	ug/m3			02/13/19 02:25	1
1,2-Dichlorotetrafluoroethane	ND		1.4	0.48	ug/m3			02/13/19 02:25	1
1,3,5-Trimethylbenzene	ND		0.98	0.29	ug/m3			02/13/19 02:25	1
1,3-Butadiene	ND		0.44	0.14	ug/m3			02/13/19 02:25	1
1,3-Dichlorobenzene	ND		1.2	0.49	ug/m3			02/13/19 02:25	1
1,4-Dichlorobenzene	ND		1.2	0.39	ug/m3			02/13/19 02:25	1
1,4-Dioxane	ND		18	4.7	ug/m3			02/13/19 02:25	1
2,2,4-Trimethylpentane	ND		0.93	0.41	ug/m3			02/13/19 02:25	1
2-Chlorotoluene	ND		1.0	0.37	ug/m3			02/13/19 02:25	1
3-Chloropropene	ND		1.6	0.85	ug/m3			02/13/19 02:25	1

Client Sample ID: SAN-AA-01(02062019)
Date Collected: 02/06/19 15:45
Date Received: 02/08/19 10:25
Sample Container: Summa Canister 6L

Lab Sample ID: 200-47338-1
Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Ethyltoluene	ND		0.98	0.34	ug/m3			02/13/19 02:25	1
4-Isopropyltoluene	ND		1.1	0.41	ug/m3			02/13/19 02:25	1
Acetone	ND		12	6.2	ug/m3			02/13/19 02:25	1
Benzene	**0.30**	**J**	0.64	0.23	ug/m3			02/13/19 02:25	1
Benzyl chloride	ND		1.0	0.62	ug/m3			02/13/19 02:25	1
Bromodichloromethane	ND		1.3	0.63	ug/m3			02/13/19 02:25	1
Bromoethene(Vinyl Bromide)	ND		0.87	0.24	ug/m3			02/13/19 02:25	1
Bromoform	ND		2.1	0.89	ug/m3			02/13/19 02:25	1
Bromomethane	ND		0.78	0.24	ug/m3			02/13/19 02:25	1
Carbon disulfide	ND		1.6	0.37	ug/m3			02/13/19 02:25	1
Carbon tetrachloride	**0.56**	**J**	1.3	0.15	ug/m3			02/13/19 02:25	1
Chlorobenzene	ND		0.92	0.18	ug/m3			02/13/19 02:25	1
Chloroethane	ND		1.3	0.55	ug/m3			02/13/19 02:25	1
Chloroform	ND		0.98	0.25	ug/m3			02/13/19 02:25	1
Chloromethane	**1.1**		1.0	0.52	ug/m3			02/13/19 02:25	1
cis-1,2-Dichloroethene	ND		0.79	0.15	ug/m3			02/13/19 02:25	1
cis-1,3-Dichloropropene	ND		0.91	0.44	ug/m3			02/13/19 02:25	1
Cumene	ND		0.98	0.29	ug/m3			02/13/19 02:25	1
Cyclohexane	ND		0.69	0.22	ug/m3			02/13/19 02:25	1
Dibromochloromethane	ND		1.7	0.60	ug/m3			02/13/19 02:25	1
Dichlorodifluoromethane	**2.4**	**J**	2.5	0.99	ug/m3			02/13/19 02:25	1
Ethylbenzene	ND		0.87	0.32	ug/m3			02/13/19 02:25	1
Freon 22	**1.1**	**J**	1.8	0.92	ug/m3			02/13/19 02:25	1
Freon TF	**0.58**	**J**	1.5	0.24	ug/m3			02/13/19 02:25	1
Hexachlorobutadiene	ND		2.1	0.87	ug/m3			02/13/19 02:25	1
Isopropyl alcohol	ND		12	4.4	ug/m3			02/13/19 02:25	1
m,p-Xylene	ND		2.2	0.30	ug/m3			02/13/19 02:25	1
Methyl Butyl Ketone (2-Hexanone)	ND		2.0	1.7	ug/m3			02/13/19 02:25	1
Methyl Ethyl Ketone	ND		1.5	0.59	ug/m3			02/13/19 02:25	1
methyl isobutyl ketone	ND		2.0	1.5	ug/m3			02/13/19 02:25	1
Methyl methacrylate	ND		2.0	0.90	ug/m3			02/13/19 02:25	1
Methyl tert-butyl ether	ND		0.72	0.22	ug/m3			02/13/19 02:25	1
Methylene Chloride	ND		1.7	0.69	ug/m3			02/13/19 02:25	1
Naphthalene	ND	*	2.6	1.6	ug/m3			02/13/19 02:25	1
n-Butane	**1.9**		1.2	0.74	ug/m3			02/13/19 02:25	1
n-Butylbenzene	ND	*	1.1	0.44	ug/m3			02/13/19 02:25	1
n-Heptane	ND		0.82	0.57	ug/m3			02/13/19 02:25	1
n-Hexane	ND		0.70	0.56	ug/m3			02/13/19 02:25	1
n-Propylbenzene	ND		0.98	0.34	ug/m3			02/13/19 02:25	1
sec-Butylbenzene	ND		1.1	0.36	ug/m3			02/13/19 02:25	1
Styrene	ND		0.85	0.37	ug/m3			02/13/19 02:25	1
tert-Butyl alcohol	ND		15	4.5	ug/m3			02/13/19 02:25	1
tert-Butylbenzene	ND		1.1	0.32	ug/m3			02/13/19 02:25	1
Tetrachloroethene	**1.6**		1.4	0.20	ug/m3			02/13/19 02:25	1
Tetrahydrofuran	ND		15	7.7	ug/m3			02/13/19 02:25	1
Toluene	**0.26**	**J**	0.75	0.26	ug/m3			02/13/19 02:25	1
trans-1,2-Dichloroethene	ND		0.79	0.29	ug/m3			02/13/19 02:25	1
trans-1,3-Dichloropropene	ND		0.91	0.54	ug/m3			02/13/19 02:25	1

Client Sample ID: SAN-AA-01(02062019)

Lab Sample ID: 200-47338-1

Date Collected: 02/06/19 15:45
Matrix: Air
Date Received: 02/08/19 10:25
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	ND		1.1	0.16	ug/m3			02/13/19 02:25	1
Trichlorofluoromethane	**1.3**		1.1	0.35	ug/m3			02/13/19 02:25	1
Vinyl chloride	ND		0.51	0.10	ug/m3			02/13/19 02:25	1
Xylene (total)	ND		3.0	0.61	ug/m3			02/13/19 02:25	1
Xylene, o-	ND		0.87	0.31	ug/m3			02/13/19 02:25	1

Client Sample ID: SAN-IA-3MB(02062019)

Lab Sample ID: 200-47338-2

Date Collected: 02/06/19 15:40
Matrix: Air
Date Received: 02/08/19 10:25
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.20	0.068	ppb v/v			02/13/19 03:20	1
1,1,2,2-Tetrachloroethane	ND		0.20	0.076	ppb v/v			02/13/19 03:20	1
1,1,2-Trichloroethane	ND		0.20	0.078	ppb v/v			02/13/19 03:20	1
1,1-Dichloroethane	ND		0.20	0.026	ppb v/v			02/13/19 03:20	1
1,1-Dichloroethene	ND		0.20	0.034	ppb v/v			02/13/19 03:20	1
1,2,4-Trichlorobenzene	ND	*	0.50	0.24	ppb v/v			02/13/19 03:20	1
1,2,4-Trimethylbenzene	ND		0.20	0.080	ppb v/v			02/13/19 03:20	1
1,2-Dibromoethane	ND		0.20	0.069	ppb v/v			02/13/19 03:20	1
1,2-Dichlorobenzene	ND		0.20	0.071	ppb v/v			02/13/19 03:20	1
1,2-Dichloroethane	ND		0.20	0.063	ppb v/v			02/13/19 03:20	1
1,2-Dichloroethene, Total	ND		0.40	0.11	ppb v/v			02/13/19 03:20	1
1,2-Dichloropropane	ND		0.20	0.12	ppb v/v			02/13/19 03:20	1
1,2-Dichlorotetrafluoroethane	ND		0.20	0.068	ppb v/v			02/13/19 03:20	1
1,3,5-Trimethylbenzene	ND		0.20	0.058	ppb v/v			02/13/19 03:20	1
1,3-Butadiene	ND		0.20	0.065	ppb v/v			02/13/19 03:20	1
1,3-Dichlorobenzene	ND		0.20	0.082	ppb v/v			02/13/19 03:20	1
1,4-Dichlorobenzene	ND		0.20	0.065	ppb v/v			02/13/19 03:20	1
1,4-Dioxane	ND		5.0	1.3	ppb v/v			02/13/19 03:20	1
2,2,4-Trimethylpentane	ND		0.20	0.088	ppb v/v			02/13/19 03:20	1
2-Chlorotoluene	ND		0.20	0.071	ppb v/v			02/13/19 03:20	1
3-Chloropropene	ND		0.50	0.27	ppb v/v			02/13/19 03:20	1
4-Ethyltoluene	ND		0.20	0.069	ppb v/v			02/13/19 03:20	1
4-Isopropyltoluene	ND		0.20	0.075	ppb v/v			02/13/19 03:20	1
Acetone	**2.9**	**J**	5.0	2.6	ppb v/v			02/13/19 03:20	1
Benzene	**0.090**	**J**	0.20	0.071	ppb v/v			02/13/19 03:20	1
Benzyl chloride	ND		0.20	0.12	ppb v/v			02/13/19 03:20	1
Bromodichloromethane	ND		0.20	0.094	ppb v/v			02/13/19 03:20	1
Bromoethene(Vinyl Bromide)	ND		0.20	0.056	ppb v/v			02/13/19 03:20	1
Bromoform	ND		0.20	0.086	ppb v/v			02/13/19 03:20	1
Bromomethane	ND		0.20	0.062	ppb v/v			02/13/19 03:20	1
Carbon disulfide	ND		0.50	0.12	ppb v/v			02/13/19 03:20	1
Carbon tetrachloride	**0.078**	**J**	0.20	0.024	ppb v/v			02/13/19 03:20	1
Chlorobenzene	ND		0.20	0.040	ppb v/v			02/13/19 03:20	1
Chloroethane	ND		0.50	0.21	ppb v/v			02/13/19 03:20	1
Chloroform	ND		0.20	0.052	ppb v/v			02/13/19 03:20	1

Client Sample ID: SAN-IA-3MB(02062019) — **Lab Sample ID: 200-47338-2**
Date Collected: 02/06/19 15:40 — **Matrix: Air**
Date Received: 02/08/19 10:25
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	**0.47**	**J**	0.50	0.25	ppb v/v			02/13/19 03:20	1
cis-1,2-Dichloroethene	ND		0.20	0.037	ppb v/v			02/13/19 03:20	1
cis-1,3-Dichloropropene	ND		0.20	0.098	ppb v/v			02/13/19 03:20	1
Cumene	ND		0.20	0.059	ppb v/v			02/13/19 03:20	1
Cyclohexane	ND		0.20	0.063	ppb v/v			02/13/19 03:20	1
Dibromochloromethane	ND		0.20	0.071	ppb v/v			02/13/19 03:20	1
Dichlorodifluoromethane	**0.52**		0.50	0.20	ppb v/v			02/13/19 03:20	1
Ethylbenzene	ND		0.20	0.073	ppb v/v			02/13/19 03:20	1
Freon 22	**0.99**		0.50	0.26	ppb v/v			02/13/19 03:20	1
Freon TF	**0.068**	**J**	0.20	0.031	ppb v/v			02/13/19 03:20	1
Hexachlorobutadiene	ND		0.20	0.082	ppb v/v			02/13/19 03:20	1
Isopropyl alcohol	ND		5.0	1.8	ppb v/v			02/13/19 03:20	1
m,p-Xylene	ND		0.50	0.070	ppb v/v			02/13/19 03:20	1
Methyl Butyl Ketone (2-Hexanone)	ND		0.50	0.42	ppb v/v			02/13/19 03:20	1
Methyl Ethyl Ketone	**0.23**	**J**	0.50	0.20	ppb v/v			02/13/19 03:20	1
methyl isobutyl ketone	ND		0.50	0.36	ppb v/v			02/13/19 03:20	1
Methyl methacrylate	ND		0.50	0.22	ppb v/v			02/13/19 03:20	1
Methyl tert-butyl ether	ND		0.20	0.061	ppb v/v			02/13/19 03:20	1
Methylene Chloride	ND		0.50	0.20	ppb v/v			02/13/19 03:20	1
Naphthalene	ND	*	0.50	0.31	ppb v/v			02/13/19 03:20	1
n-Butane	**1.0**		0.50	0.31	ppb v/v			02/13/19 03:20	1
n-Butylbenzene	ND	*	0.20	0.080	ppb v/v			02/13/19 03:20	1
n-Heptane	ND		0.20	0.14	ppb v/v			02/13/19 03:20	1
n-Hexane	ND		0.20	0.16	ppb v/v			02/13/19 03:20	1
n-Propylbenzene	ND		0.20	0.069	ppb v/v			02/13/19 03:20	1
sec-Butylbenzene	ND		0.20	0.066	ppb v/v			02/13/19 03:20	1
Styrene	ND		0.20	0.086	ppb v/v			02/13/19 03:20	1
tert-Butyl alcohol	ND		5.0	1.5	ppb v/v			02/13/19 03:20	1
tert-Butylbenzene	ND		0.20	0.058	ppb v/v			02/13/19 03:20	1
Tetrachloroethene	**0.059**	**J**	0.20	0.029	ppb v/v			02/13/19 03:20	1
Tetrahydrofuran	ND		5.0	2.6	ppb v/v			02/13/19 03:20	1
Toluene	ND		0.20	0.069	ppb v/v			02/13/19 03:20	1
trans-1,2-Dichloroethene	ND		0.20	0.074	ppb v/v			02/13/19 03:20	1
trans-1,3-Dichloropropene	ND		0.20	0.12	ppb v/v			02/13/19 03:20	1
Trichloroethene	**0.032**	**J**	0.20	0.030	ppb v/v			02/13/19 03:20	1
Trichlorofluoromethane	**0.28**		0.20	0.062	ppb v/v			02/13/19 03:20	1
Vinyl chloride	ND		0.20	0.041	ppb v/v			02/13/19 03:20	1
Xylene (total)	ND		0.70	0.14	ppb v/v			02/13/19 03:20	1
Xylene, o-	ND		0.20	0.071	ppb v/v			02/13/19 03:20	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.1	0.37	ug/m3			02/13/19 03:20	1
1,1,2,2-Tetrachloroethane	ND		1.4	0.52	ug/m3			02/13/19 03:20	1
1,1,2-Trichloroethane	ND		1.1	0.43	ug/m3			02/13/19 03:20	1
1,1-Dichloroethane	ND		0.81	0.11	ug/m3			02/13/19 03:20	1
1,1-Dichloroethene	ND		0.79	0.13	ug/m3			02/13/19 03:20	1
1,2,4-Trichlorobenzene	ND	*	3.7	1.8	ug/m3			02/13/19 03:20	1
1,2,4-Trimethylbenzene	ND		0.98	0.39	ug/m3			02/13/19 03:20	1
1,2-Dibromoethane	ND		1.5	0.53	ug/m3			02/13/19 03:20	1

Client Sample ID: SAN-IA-3MB(02062019) **Lab Sample ID: 200-47338-2**
Date Collected: 02/06/19 15:40 **Matrix: Air**
Date Received: 02/08/19 10:25
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		1.2	0.43	ug/m3			02/13/19 03:20	1
1,2-Dichloroethane	ND		0.81	0.25	ug/m3			02/13/19 03:20	1
1,2-Dichloroethene, Total	ND		1.6	0.44	ug/m3			02/13/19 03:20	1
1,2-Dichloropropane	ND		0.92	0.55	ug/m3			02/13/19 03:20	1
1,2-Dichlorotetrafluoroethane	ND		1.4	0.48	ug/m3			02/13/19 03:20	1
1,3,5-Trimethylbenzene	ND		0.98	0.29	ug/m3			02/13/19 03:20	1
1,3-Butadiene	ND		0.44	0.14	ug/m3			02/13/19 03:20	1
1,3-Dichlorobenzene	ND		1.2	0.49	ug/m3			02/13/19 03:20	1
1,4-Dichlorobenzene	ND		1.2	0.39	ug/m3			02/13/19 03:20	1
1,4-Dioxane	ND		18	4.7	ug/m3			02/13/19 03:20	1
2,2,4-Trimethylpentane	ND		0.93	0.41	ug/m3			02/13/19 03:20	1
2-Chlorotoluene	ND		1.0	0.37	ug/m3			02/13/19 03:20	1
3-Chloropropene	ND		1.6	0.85	ug/m3			02/13/19 03:20	1
4-Ethyltoluene	ND		0.98	0.34	ug/m3			02/13/19 03:20	1
4-Isopropyltoluene	ND		1.1	0.41	ug/m3			02/13/19 03:20	1
Acetone	**6.8**	**J**	12	6.2	ug/m3			02/13/19 03:20	1
Benzene	**0.29**	**J**	0.64	0.23	ug/m3			02/13/19 03:20	1
Benzyl chloride	ND		1.0	0.62	ug/m3			02/13/19 03:20	1
Bromodichloromethane	ND		1.3	0.63	ug/m3			02/13/19 03:20	1
Bromoethene(Vinyl Bromide)	ND		0.87	0.24	ug/m3			02/13/19 03:20	1
Bromoform	ND		2.1	0.89	ug/m3			02/13/19 03:20	1
Bromomethane	ND		0.78	0.24	ug/m3			02/13/19 03:20	1
Carbon disulfide	ND		1.6	0.37	ug/m3			02/13/19 03:20	1
Carbon tetrachloride	**0.49**	**J**	1.3	0.15	ug/m3			02/13/19 03:20	1
Chlorobenzene	ND		0.92	0.18	ug/m3			02/13/19 03:20	1
Chloroethane	ND		1.3	0.55	ug/m3			02/13/19 03:20	1
Chloroform	ND		0.98	0.25	ug/m3			02/13/19 03:20	1
Chloromethane	**0.96**	**J**	1.0	0.52	ug/m3			02/13/19 03:20	1
cis-1,2-Dichloroethene	ND		0.79	0.15	ug/m3			02/13/19 03:20	1
cis-1,3-Dichloropropene	ND		0.91	0.44	ug/m3			02/13/19 03:20	1
Cumene	ND		0.98	0.29	ug/m3			02/13/19 03:20	1
Cyclohexane	ND		0.69	0.22	ug/m3			02/13/19 03:20	1
Dibromochloromethane	ND		1.7	0.60	ug/m3			02/13/19 03:20	1
Dichlorodifluoromethane	**2.6**		2.5	0.99	ug/m3			02/13/19 03:20	1
Ethylbenzene	ND		0.87	0.32	ug/m3			02/13/19 03:20	1
Freon 22	**3.5**		1.8	0.92	ug/m3			02/13/19 03:20	1
Freon TF	**0.52**	**J**	1.5	0.24	ug/m3			02/13/19 03:20	1
Hexachlorobutadiene	ND		2.1	0.87	ug/m3			02/13/19 03:20	1
Isopropyl alcohol	ND		12	4.4	ug/m3			02/13/19 03:20	1
m,p-Xylene	ND		2.2	0.30	ug/m3			02/13/19 03:20	1
Methyl Butyl Ketone (2-Hexanone)	ND		2.0	1.7	ug/m3			02/13/19 03:20	1
Methyl Ethyl Ketone	**0.68**	**J**	1.5	0.59	ug/m3			02/13/19 03:20	1
methyl isobutyl ketone	ND		2.0	1.5	ug/m3			02/13/19 03:20	1
Methyl methacrylate	ND		2.0	0.90	ug/m3			02/13/19 03:20	1
Methyl tert-butyl ether	ND		0.72	0.22	ug/m3			02/13/19 03:20	1
Methylene Chloride	ND		1.7	0.69	ug/m3			02/13/19 03:20	1
Naphthalene	ND	*	2.6	1.6	ug/m3			02/13/19 03:20	1
n-Butane	**2.4**		1.2	0.74	ug/m3			02/13/19 03:20	1

Client Sample ID: SAN-IA-3MB(02062019)

Lab Sample ID: 200-47338-2

Date Collected: 02/06/19 15:40
Matrix: Air
Date Received: 02/08/19 10:25
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Butylbenzene	ND	*	1.1	0.44	ug/m3			02/13/19 03:20	1
n-Heptane	ND		0.82	0.57	ug/m3			02/13/19 03:20	1
n-Hexane	ND		0.70	0.56	ug/m3			02/13/19 03:20	1
n-Propylbenzene	ND		0.98	0.34	ug/m3			02/13/19 03:20	1
sec-Butylbenzene	ND		1.1	0.36	ug/m3			02/13/19 03:20	1
Styrene	ND		0.85	0.37	ug/m3			02/13/19 03:20	1
tert-Butyl alcohol	ND		15	4.5	ug/m3			02/13/19 03:20	1
tert-Butylbenzene	ND		1.1	0.32	ug/m3			02/13/19 03:20	1
Tetrachloroethene	**0.40**	**J**	1.4	0.20	ug/m3			02/13/19 03:20	1
Tetrahydrofuran	ND		15	7.7	ug/m3			02/13/19 03:20	1
Toluene	ND		0.75	0.26	ug/m3			02/13/19 03:20	1
trans-1,2-Dichloroethene	ND		0.79	0.29	ug/m3			02/13/19 03:20	1
trans-1,3-Dichloropropene	ND		0.91	0.54	ug/m3			02/13/19 03:20	1
Trichloroethene	**0.17**	**J**	1.1	0.16	ug/m3			02/13/19 03:20	1
Trichlorofluoromethane	**1.6**		1.1	0.35	ug/m3			02/13/19 03:20	1
Vinyl chloride	ND		0.51	0.10	ug/m3			02/13/19 03:20	1
Xylene (total)	ND		3.0	0.61	ug/m3			02/13/19 03:20	1
Xylene, o-	ND		0.87	0.31	ug/m3			02/13/19 03:20	1

Client Sample ID: SAN-IA-4MB(02062019)

Lab Sample ID: 200-47338-3

Date Collected: 02/06/19 15:53
Matrix: Air
Date Received: 02/08/19 10:25
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.20	0.068	ppb v/v			02/13/19 04:14	1
1,1,2,2-Tetrachloroethane	ND		0.20	0.076	ppb v/v			02/13/19 04:14	1
1,1,2-Trichloroethane	ND		0.20	0.078	ppb v/v			02/13/19 04:14	1
1,1-Dichloroethane	ND		0.20	0.026	ppb v/v			02/13/19 04:14	1
1,1-Dichloroethene	ND		0.20	0.034	ppb v/v			02/13/19 04:14	1
1,2,4-Trichlorobenzene	ND	*	0.50	0.24	ppb v/v			02/13/19 04:14	1
1,2,4-Trimethylbenzene	ND		0.20	0.080	ppb v/v			02/13/19 04:14	1
1,2-Dibromoethane	ND		0.20	0.069	ppb v/v			02/13/19 04:14	1
1,2-Dichlorobenzene	ND		0.20	0.071	ppb v/v			02/13/19 04:14	1
1,2-Dichloroethane	ND		0.20	0.063	ppb v/v			02/13/19 04:14	1
1,2-Dichloroethene, Total	ND		0.40	0.11	ppb v/v			02/13/19 04:14	1
1,2-Dichloropropane	ND		0.20	0.12	ppb v/v			02/13/19 04:14	1
1,2-Dichlorotetrafluoroethane	ND		0.20	0.068	ppb v/v			02/13/19 04:14	1
1,3,5-Trimethylbenzene	ND		0.20	0.058	ppb v/v			02/13/19 04:14	1
1,3-Butadiene	ND		0.20	0.065	ppb v/v			02/13/19 04:14	1
1,3-Dichlorobenzene	ND		0.20	0.082	ppb v/v			02/13/19 04:14	1
1,4-Dichlorobenzene	ND		0.20	0.065	ppb v/v			02/13/19 04:14	1
1,4-Dioxane	ND		5.0	1.3	ppb v/v			02/13/19 04:14	1
2,2,4-Trimethylpentane	ND		0.20	0.088	ppb v/v			02/13/19 04:14	1
2-Chlorotoluene	ND		0.20	0.071	ppb v/v			02/13/19 04:14	1
3-Chloropropene	ND		0.50	0.27	ppb v/v			02/13/19 04:14	1
4-Ethyltoluene	ND		0.20	0.069	ppb v/v			02/13/19 04:14	1

Client Sample ID: SAN-IA-4MB(02062019) — **Lab Sample ID: 200-47338-3**
Date Collected: 02/06/19 15:53 — **Matrix: Air**
Date Received: 02/08/19 10:25
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Isopropyltoluene	ND		0.20	0.075	ppb v/v			02/13/19 04:14	1
Acetone	ND		5.0	2.6	ppb v/v			02/13/19 04:14	1
Benzene	**0.086**	**J**	0.20	0.071	ppb v/v			02/13/19 04:14	1
Benzyl chloride	ND		0.20	0.12	ppb v/v			02/13/19 04:14	1
Bromodichloromethane	ND		0.20	0.094	ppb v/v			02/13/19 04:14	1
Bromoethene(Vinyl Bromide)	ND		0.20	0.056	ppb v/v			02/13/19 04:14	1
Bromoform	ND		0.20	0.086	ppb v/v			02/13/19 04:14	1
Bromomethane	ND		0.20	0.062	ppb v/v			02/13/19 04:14	1
Carbon disulfide	**0.13**	**J**	0.50	0.12	ppb v/v			02/13/19 04:14	1
Carbon tetrachloride	**0.084**	**J**	0.20	0.024	ppb v/v			02/13/19 04:14	1
Chlorobenzene	ND		0.20	0.040	ppb v/v			02/13/19 04:14	1
Chloroethane	ND		0.50	0.21	ppb v/v			02/13/19 04:14	1
Chloroform	ND		0.20	0.052	ppb v/v			02/13/19 04:14	1
Chloromethane	**0.50**		0.50	0.25	ppb v/v			02/13/19 04:14	1
cis-1,2-Dichloroethene	ND		0.20	0.037	ppb v/v			02/13/19 04:14	1
cis-1,3-Dichloropropene	ND		0.20	0.098	ppb v/v			02/13/19 04:14	1
Cumene	ND		0.20	0.059	ppb v/v			02/13/19 04:14	1
Cyclohexane	ND		0.20	0.063	ppb v/v			02/13/19 04:14	1
Dibromochloromethane	ND		0.20	0.071	ppb v/v			02/13/19 04:14	1
Dichlorodifluoromethane	**0.48**	**J**	0.50	0.20	ppb v/v			02/13/19 04:14	1
Ethylbenzene	ND		0.20	0.073	ppb v/v			02/13/19 04:14	1
Freon 22	**0.37**	**J**	0.50	0.26	ppb v/v			02/13/19 04:14	1
Freon TF	**0.065**	**J**	0.20	0.031	ppb v/v			02/13/19 04:14	1
Hexachlorobutadiene	ND		0.20	0.082	ppb v/v			02/13/19 04:14	1
Isopropyl alcohol	ND		5.0	1.8	ppb v/v			02/13/19 04:14	1
m,p-Xylene	ND		0.50	0.070	ppb v/v			02/13/19 04:14	1
Methyl Butyl Ketone (2-Hexanone)	ND		0.50	0.42	ppb v/v			02/13/19 04:14	1
Methyl Ethyl Ketone	ND		0.50	0.20	ppb v/v			02/13/19 04:14	1
methyl isobutyl ketone	ND		0.50	0.36	ppb v/v			02/13/19 04:14	1
Methyl methacrylate	ND		0.50	0.22	ppb v/v			02/13/19 04:14	1
Methyl tert-butyl ether	ND		0.20	0.061	ppb v/v			02/13/19 04:14	1
Methylene Chloride	ND		0.50	0.20	ppb v/v			02/13/19 04:14	1
Naphthalene	ND	*	0.50	0.31	ppb v/v			02/13/19 04:14	1
n-Butane	**0.85**		0.50	0.31	ppb v/v			02/13/19 04:14	1
n-Butylbenzene	ND	*	0.20	0.080	ppb v/v			02/13/19 04:14	1
n-Heptane	ND		0.20	0.14	ppb v/v			02/13/19 04:14	1
n-Hexane	ND		0.20	0.16	ppb v/v			02/13/19 04:14	1
n-Propylbenzene	ND		0.20	0.069	ppb v/v			02/13/19 04:14	1
sec-Butylbenzene	ND		0.20	0.066	ppb v/v			02/13/19 04:14	1
Styrene	ND		0.20	0.086	ppb v/v			02/13/19 04:14	1
tert-Butyl alcohol	ND		5.0	1.5	ppb v/v			02/13/19 04:14	1
tert-Butylbenzene	ND		0.20	0.058	ppb v/v			02/13/19 04:14	1
Tetrachloroethene	ND		0.20	0.029	ppb v/v			02/13/19 04:14	1
Tetrahydrofuran	ND		5.0	2.6	ppb v/v			02/13/19 04:14	1
Toluene	ND		0.20	0.069	ppb v/v			02/13/19 04:14	1
trans-1,2-Dichloroethene	ND		0.20	0.074	ppb v/v			02/13/19 04:14	1
trans-1,3-Dichloropropene	ND		0.20	0.12	ppb v/v			02/13/19 04:14	1
Trichloroethene	ND		0.20	0.030	ppb v/v			02/13/19 04:14	1

Client Sample ID: SAN-IA-4MB(02062019) — **Lab Sample ID: 200-47338-3**
Date Collected: 02/06/19 15:53 — **Matrix: Air**
Date Received: 02/08/19 10:25
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichlorofluoromethane	**0.25**		0.20	0.062	ppb v/v			02/13/19 04:14	1
Vinyl chloride	ND		0.20	0.041	ppb v/v			02/13/19 04:14	1
Xylene (total)	ND		0.70	0.14	ppb v/v			02/13/19 04:14	1
Xylene, o-	ND		0.20	0.071	ppb v/v			02/13/19 04:14	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.1	0.37	ug/m3			02/13/19 04:14	1
1,1,2,2-Tetrachloroethane	ND		1.4	0.52	ug/m3			02/13/19 04:14	1
1,1,2-Trichloroethane	ND		1.1	0.43	ug/m3			02/13/19 04:14	1
1,1-Dichloroethane	ND		0.81	0.11	ug/m3			02/13/19 04:14	1
1,1-Dichloroethene	ND		0.79	0.13	ug/m3			02/13/19 04:14	1
1,2,4-Trichlorobenzene	ND	*	3.7	1.8	ug/m3			02/13/19 04:14	1
1,2,4-Trimethylbenzene	ND		0.98	0.39	ug/m3			02/13/19 04:14	1
1,2-Dibromoethane	ND		1.5	0.53	ug/m3			02/13/19 04:14	1
1,2-Dichlorobenzene	ND		1.2	0.43	ug/m3			02/13/19 04:14	1
1,2-Dichloroethane	ND		0.81	0.25	ug/m3			02/13/19 04:14	1
1,2-Dichloroethene, Total	ND		1.6	0.44	ug/m3			02/13/19 04:14	1
1,2-Dichloropropane	ND		0.92	0.55	ug/m3			02/13/19 04:14	1
1,2-Dichlorotetrafluoroethane	ND		1.4	0.48	ug/m3			02/13/19 04:14	1
1,3,5-Trimethylbenzene	ND		0.98	0.29	ug/m3			02/13/19 04:14	1
1,3-Butadiene	ND		0.44	0.14	ug/m3			02/13/19 04:14	1
1,3-Dichlorobenzene	ND		1.2	0.49	ug/m3			02/13/19 04:14	1
1,4-Dichlorobenzene	ND		1.2	0.39	ug/m3			02/13/19 04:14	1
1,4-Dioxane	ND		18	4.7	ug/m3			02/13/19 04:14	1
2,2,4-Trimethylpentane	ND		0.93	0.41	ug/m3			02/13/19 04:14	1
2-Chlorotoluene	ND		1.0	0.37	ug/m3			02/13/19 04:14	1
3-Chloropropene	ND		1.6	0.85	ug/m3			02/13/19 04:14	1
4-Ethyltoluene	ND		0.98	0.34	ug/m3			02/13/19 04:14	1
4-Isopropyltoluene	ND		1.1	0.41	ug/m3			02/13/19 04:14	1
Acetone	ND		12	6.2	ug/m3			02/13/19 04:14	1
Benzene	**0.27**	**J**	0.64	0.23	ug/m3			02/13/19 04:14	1
Benzyl chloride	ND		1.0	0.62	ug/m3			02/13/19 04:14	1
Bromodichloromethane	ND		1.3	0.63	ug/m3			02/13/19 04:14	1
Bromoethene(Vinyl Bromide)	ND		0.87	0.24	ug/m3			02/13/19 04:14	1
Bromoform	ND		2.1	0.89	ug/m3			02/13/19 04:14	1
Bromomethane	ND		0.78	0.24	ug/m3			02/13/19 04:14	1
Carbon disulfide	**0.40**	**J**	1.6	0.37	ug/m3			02/13/19 04:14	1
Carbon tetrachloride	**0.53**	**J**	1.3	0.15	ug/m3			02/13/19 04:14	1
Chlorobenzene	ND		0.92	0.18	ug/m3			02/13/19 04:14	1
Chloroethane	ND		1.3	0.55	ug/m3			02/13/19 04:14	1
Chloroform	ND		0.98	0.25	ug/m3			02/13/19 04:14	1
Chloromethane	**1.0**		1.0	0.52	ug/m3			02/13/19 04:14	1
cis-1,2-Dichloroethene	ND		0.79	0.15	ug/m3			02/13/19 04:14	1
cis-1,3-Dichloropropene	ND		0.91	0.44	ug/m3			02/13/19 04:14	1
Cumene	ND		0.98	0.29	ug/m3			02/13/19 04:14	1
Cyclohexane	ND		0.69	0.22	ug/m3			02/13/19 04:14	1
Dibromochloromethane	ND		1.7	0.60	ug/m3			02/13/19 04:14	1
Dichlorodifluoromethane	**2.4**	**J**	2.5	0.99	ug/m3			02/13/19 04:14	1
Ethylbenzene	ND		0.87	0.32	ug/m3			02/13/19 04:14	1

Client Sample ID: SAN-IA-4MB(02062019)

Lab Sample ID: 200-47338-3

Date Collected: 02/06/19 15:53
Matrix: Air
Date Received: 02/08/19 10:25
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Freon 22	**1.3**	**J**	1.8	0.92	ug/m3			02/13/19 04:14	1
Freon TF	**0.50**	**J**	1.5	0.24	ug/m3			02/13/19 04:14	1
Hexachlorobutadiene	ND		2.1	0.87	ug/m3			02/13/19 04:14	1
Isopropyl alcohol	ND		12	4.4	ug/m3			02/13/19 04:14	1
m,p-Xylene	ND		2.2	0.30	ug/m3			02/13/19 04:14	1
Methyl Butyl Ketone (2-Hexanone)	ND		2.0	1.7	ug/m3			02/13/19 04:14	1
Methyl Ethyl Ketone	ND		1.5	0.59	ug/m3			02/13/19 04:14	1
methyl isobutyl ketone	ND		2.0	1.5	ug/m3			02/13/19 04:14	1
Methyl methacrylate	ND		2.0	0.90	ug/m3			02/13/19 04:14	1
Methyl tert-butyl ether	ND		0.72	0.22	ug/m3			02/13/19 04:14	1
Methylene Chloride	ND		1.7	0.69	ug/m3			02/13/19 04:14	1
Naphthalene	ND	*	2.6	1.6	ug/m3			02/13/19 04:14	1
n-Butane	**2.0**		1.2	0.74	ug/m3			02/13/19 04:14	1
n-Butylbenzene	ND	*	1.1	0.44	ug/m3			02/13/19 04:14	1
n-Heptane	ND		0.82	0.57	ug/m3			02/13/19 04:14	1
n-Hexane	ND		0.70	0.56	ug/m3			02/13/19 04:14	1
n-Propylbenzene	ND		0.98	0.34	ug/m3			02/13/19 04:14	1
sec-Butylbenzene	ND		1.1	0.36	ug/m3			02/13/19 04:14	1
Styrene	ND		0.85	0.37	ug/m3			02/13/19 04:14	1
tert-Butyl alcohol	ND		15	4.5	ug/m3			02/13/19 04:14	1
tert-Butylbenzene	ND		1.1	0.32	ug/m3			02/13/19 04:14	1
Tetrachloroethene	ND		1.4	0.20	ug/m3			02/13/19 04:14	1
Tetrahydrofuran	ND		15	7.7	ug/m3			02/13/19 04:14	1
Toluene	ND		0.75	0.26	ug/m3			02/13/19 04:14	1
trans-1,2-Dichloroethene	ND		0.79	0.29	ug/m3			02/13/19 04:14	1
trans-1,3-Dichloropropene	ND		0.91	0.54	ug/m3			02/13/19 04:14	1
Trichloroethene	ND		1.1	0.16	ug/m3			02/13/19 04:14	1
Trichlorofluoromethane	**1.4**		1.1	0.35	ug/m3			02/13/19 04:14	1
Vinyl chloride	ND		0.51	0.10	ug/m3			02/13/19 04:14	1
Xylene (total)	ND		3.0	0.61	ug/m3			02/13/19 04:14	1
Xylene, o-	ND		0.87	0.31	ug/m3			02/13/19 04:14	1

Client Sample ID: SAN-IA-1BB(02062019)

Lab Sample ID: 200-47338-4

Date Collected: 02/06/19 16:01
Matrix: Air
Date Received: 02/08/19 10:25
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.20	0.068	ppb v/v			02/13/19 05:08	1
1,1,2,2-Tetrachloroethane	ND		0.20	0.076	ppb v/v			02/13/19 05:08	1
1,1,2-Trichloroethane	ND		0.20	0.078	ppb v/v			02/13/19 05:08	1
1,1-Dichloroethane	ND		0.20	0.026	ppb v/v			02/13/19 05:08	1
1,1-Dichloroethene	ND		0.20	0.034	ppb v/v			02/13/19 05:08	1
1,2,4-Trichlorobenzene	ND	*	0.50	0.24	ppb v/v			02/13/19 05:08	1
1,2,4-Trimethylbenzene	ND		0.20	0.080	ppb v/v			02/13/19 05:08	1
1,2-Dibromoethane	ND		0.20	0.069	ppb v/v			02/13/19 05:08	1
1,2-Dichlorobenzene	ND		0.20	0.071	ppb v/v			02/13/19 05:08	1

Client Sample ID: SAN-IA-1BB(02062019) **Lab Sample ID: 200-47338-4**
Date Collected: 02/06/19 16:01 **Matrix: Air**
Date Received: 02/08/19 10:25
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		0.20	0.063	ppb v/v			02/13/19 05:08	1
1,2-Dichloroethene, Total	ND		0.40	0.11	ppb v/v			02/13/19 05:08	1
1,2-Dichloropropane	ND		0.20	0.12	ppb v/v			02/13/19 05:08	1
1,2-Dichlorotetrafluoroethane	ND		0.20	0.068	ppb v/v			02/13/19 05:08	1
1,3,5-Trimethylbenzene	ND		0.20	0.058	ppb v/v			02/13/19 05:08	1
1,3-Butadiene	ND		0.20	0.065	ppb v/v			02/13/19 05:08	1
1,3-Dichlorobenzene	ND		0.20	0.082	ppb v/v			02/13/19 05:08	1
1,4-Dichlorobenzene	ND		0.20	0.065	ppb v/v			02/13/19 05:08	1
1,4-Dioxane	ND		5.0	1.3	ppb v/v			02/13/19 05:08	1
2,2,4-Trimethylpentane	ND		0.20	0.088	ppb v/v			02/13/19 05:08	1
2-Chlorotoluene	ND		0.20	0.071	ppb v/v			02/13/19 05:08	1
3-Chloropropene	ND		0.50	0.27	ppb v/v			02/13/19 05:08	1
4-Ethyltoluene	ND		0.20	0.069	ppb v/v			02/13/19 05:08	1
4-Isopropyltoluene	ND		0.20	0.075	ppb v/v			02/13/19 05:08	1
Acetone	ND		5.0	2.6	ppb v/v			02/13/19 05:08	1
Benzene	**0.10**	**J**	0.20	0.071	ppb v/v			02/13/19 05:08	1
Benzyl chloride	ND		0.20	0.12	ppb v/v			02/13/19 05:08	1
Bromodichloromethane	ND		0.20	0.094	ppb v/v			02/13/19 05:08	1
Bromoethene(Vinyl Bromide)	ND		0.20	0.056	ppb v/v			02/13/19 05:08	1
Bromoform	ND		0.20	0.086	ppb v/v			02/13/19 05:08	1
Bromomethane	ND		0.20	0.062	ppb v/v			02/13/19 05:08	1
Carbon disulfide	**0.13**	**J**	0.50	0.12	ppb v/v			02/13/19 05:08	1
Carbon tetrachloride	**0.090**	**J**	0.20	0.024	ppb v/v			02/13/19 05:08	1
Chlorobenzene	ND		0.20	0.040	ppb v/v			02/13/19 05:08	1
Chloroethane	ND		0.50	0.21	ppb v/v			02/13/19 05:08	1
Chloroform	ND		0.20	0.052	ppb v/v			02/13/19 05:08	1
Chloromethane	**0.51**		0.50	0.25	ppb v/v			02/13/19 05:08	1
cis-1,2-Dichloroethene	ND		0.20	0.037	ppb v/v			02/13/19 05:08	1
cis-1,3-Dichloropropene	ND		0.20	0.098	ppb v/v			02/13/19 05:08	1
Cumene	ND		0.20	0.059	ppb v/v			02/13/19 05:08	1
Cyclohexane	ND		0.20	0.063	ppb v/v			02/13/19 05:08	1
Dibromochloromethane	ND		0.20	0.071	ppb v/v			02/13/19 05:08	1
Dichlorodifluoromethane	**0.50**		0.50	0.20	ppb v/v			02/13/19 05:08	1
Ethylbenzene	ND		0.20	0.073	ppb v/v			02/13/19 05:08	1
Freon 22	**0.65**		0.50	0.26	ppb v/v			02/13/19 05:08	1
Freon TF	**0.079**	**J**	0.20	0.031	ppb v/v			02/13/19 05:08	1
Hexachlorobutadiene	ND		0.20	0.082	ppb v/v			02/13/19 05:08	1
Isopropyl alcohol	ND		5.0	1.8	ppb v/v			02/13/19 05:08	1
m,p-Xylene	ND		0.50	0.070	ppb v/v			02/13/19 05:08	1
Methyl Butyl Ketone (2-Hexanone)	ND		0.50	0.42	ppb v/v			02/13/19 05:08	1
Methyl Ethyl Ketone	ND		0.50	0.20	ppb v/v			02/13/19 05:08	1
methyl isobutyl ketone	ND		0.50	0.36	ppb v/v			02/13/19 05:08	1
Methyl methacrylate	ND		0.50	0.22	ppb v/v			02/13/19 05:08	1
Methyl tert-butyl ether	ND		0.20	0.061	ppb v/v			02/13/19 05:08	1
Methylene Chloride	ND		0.50	0.20	ppb v/v			02/13/19 05:08	1
Naphthalene	ND	*	0.50	0.31	ppb v/v			02/13/19 05:08	1
n-Butane	**0.83**		0.50	0.31	ppb v/v			02/13/19 05:08	1
n-Butylbenzene	ND	*	0.20	0.080	ppb v/v			02/13/19 05:08	1

Client Sample ID: SAN-IA-1BB(02062019) **Lab Sample ID: 200-47338-4**
Date Collected: 02/06/19 16:01 **Matrix: Air**
Date Received: 02/08/19 10:25
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Heptane	ND		0.20	0.14	ppb v/v			02/13/19 05:08	1
n-Hexane	ND		0.20	0.16	ppb v/v			02/13/19 05:08	1
n-Propylbenzene	ND		0.20	0.069	ppb v/v			02/13/19 05:08	1
sec-Butylbenzene	ND		0.20	0.066	ppb v/v			02/13/19 05:08	1
Styrene	ND		0.20	0.086	ppb v/v			02/13/19 05:08	1
tert-Butyl alcohol	ND		5.0	1.5	ppb v/v			02/13/19 05:08	1
tert-Butylbenzene	ND		0.20	0.058	ppb v/v			02/13/19 05:08	1
Tetrachloroethene	**0.054**	**J**	0.20	0.029	ppb v/v			02/13/19 05:08	1
Tetrahydrofuran	ND		5.0	2.6	ppb v/v			02/13/19 05:08	1
Toluene	ND		0.20	0.069	ppb v/v			02/13/19 05:08	1
trans-1,2-Dichloroethene	ND		0.20	0.074	ppb v/v			02/13/19 05:08	1
trans-1,3-Dichloropropene	ND		0.20	0.12	ppb v/v			02/13/19 05:08	1
Trichloroethene	**0.14**	**J**	0.20	0.030	ppb v/v			02/13/19 05:08	1
Trichlorofluoromethane	**0.46**		0.20	0.062	ppb v/v			02/13/19 05:08	1
Vinyl chloride	ND		0.20	0.041	ppb v/v			02/13/19 05:08	1
Xylene (total)	ND		0.70	0.14	ppb v/v			02/13/19 05:08	1
Xylene, o-	ND		0.20	0.071	ppb v/v			02/13/19 05:08	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.1	0.37	ug/m3			02/13/19 05:08	1
1,1,2,2-Tetrachloroethane	ND		1.4	0.52	ug/m3			02/13/19 05:08	1
1,1,2-Trichloroethane	ND		1.1	0.43	ug/m3			02/13/19 05:08	1
1,1-Dichloroethane	ND		0.81	0.11	ug/m3			02/13/19 05:08	1
1,1-Dichloroethene	ND		0.79	0.13	ug/m3			02/13/19 05:08	1
1,2,4-Trichlorobenzene	ND	*	3.7	1.8	ug/m3			02/13/19 05:08	1
1,2,4-Trimethylbenzene	ND		0.98	0.39	ug/m3			02/13/19 05:08	1
1,2-Dibromoethane	ND		1.5	0.53	ug/m3			02/13/19 05:08	1
1,2-Dichlorobenzene	ND		1.2	0.43	ug/m3			02/13/19 05:08	1
1,2-Dichloroethane	ND		0.81	0.25	ug/m3			02/13/19 05:08	1
1,2-Dichloroethene, Total	ND		1.6	0.44	ug/m3			02/13/19 05:08	1
1,2-Dichloropropane	ND		0.92	0.55	ug/m3			02/13/19 05:08	1
1,2-Dichlorotetrafluoroethane	ND		1.4	0.48	ug/m3			02/13/19 05:08	1
1,3,5-Trimethylbenzene	ND		0.98	0.29	ug/m3			02/13/19 05:08	1
1,3-Butadiene	ND		0.44	0.14	ug/m3			02/13/19 05:08	1
1,3-Dichlorobenzene	ND		1.2	0.49	ug/m3			02/13/19 05:08	1
1,4-Dichlorobenzene	ND		1.2	0.39	ug/m3			02/13/19 05:08	1
1,4-Dioxane	ND		18	4.7	ug/m3			02/13/19 05:08	1
2,2,4-Trimethylpentane	ND		0.93	0.41	ug/m3			02/13/19 05:08	1
2-Chlorotoluene	ND		1.0	0.37	ug/m3			02/13/19 05:08	1
3-Chloropropene	ND		1.6	0.85	ug/m3			02/13/19 05:08	1
4-Ethyltoluene	ND		0.98	0.34	ug/m3			02/13/19 05:08	1
4-Isopropyltoluene	ND		1.1	0.41	ug/m3			02/13/19 05:08	1
Acetone	ND		12	6.2	ug/m3			02/13/19 05:08	1
Benzene	**0.32**	**J**	0.64	0.23	ug/m3			02/13/19 05:08	1
Benzyl chloride	ND		1.0	0.62	ug/m3			02/13/19 05:08	1
Bromodichloromethane	ND		1.3	0.63	ug/m3			02/13/19 05:08	1
Bromoethene(Vinyl Bromide)	ND		0.87	0.24	ug/m3			02/13/19 05:08	1
Bromoform	ND		2.1	0.89	ug/m3			02/13/19 05:08	1
Bromomethane	ND		0.78	0.24	ug/m3			02/13/19 05:08	1

Client: ERM-Northeast
Project/Site: Sanmina

TestAmerica Job ID: 200-47338-1

Client Sample ID: SAN-IA-1BB(02062019) — **Lab Sample ID: 200-47338-4**
Date Collected: 02/06/19 16:01 — **Matrix: Air**
Date Received: 02/08/19 10:25
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	**0.40**	**J**	1.6	0.37	ug/m3			02/13/19 05:08	1
Carbon tetrachloride	**0.57**	**J**	1.3	0.15	ug/m3			02/13/19 05:08	1
Chlorobenzene	ND		0.92	0.18	ug/m3			02/13/19 05:08	1
Chloroethane	ND		1.3	0.55	ug/m3			02/13/19 05:08	1
Chloroform	ND		0.98	0.25	ug/m3			02/13/19 05:08	1
Chloromethane	**1.0**		1.0	0.52	ug/m3			02/13/19 05:08	1
cis-1,2-Dichloroethene	ND		0.79	0.15	ug/m3			02/13/19 05:08	1
cis-1,3-Dichloropropene	ND		0.91	0.44	ug/m3			02/13/19 05:08	1
Cumene	ND		0.98	0.29	ug/m3			02/13/19 05:08	1
Cyclohexane	ND		0.69	0.22	ug/m3			02/13/19 05:08	1
Dibromochloromethane	ND		1.7	0.60	ug/m3			02/13/19 05:08	1
Dichlorodifluoromethane	**2.4**		2.5	0.99	ug/m3			02/13/19 05:08	1
Ethylbenzene	ND		0.87	0.32	ug/m3			02/13/19 05:08	1
Freon 22	**2.3**		1.8	0.92	ug/m3			02/13/19 05:08	1
Freon TF	**0.61**	**J**	1.5	0.24	ug/m3			02/13/19 05:08	1
Hexachlorobutadiene	ND		2.1	0.87	ug/m3			02/13/19 05:08	1
Isopropyl alcohol	ND		12	4.4	ug/m3			02/13/19 05:08	1
m,p-Xylene	ND		2.2	0.30	ug/m3			02/13/19 05:08	1
Methyl Butyl Ketone (2-Hexanone)	ND		2.0	1.7	ug/m3			02/13/19 05:08	1
Methyl Ethyl Ketone	ND		1.5	0.59	ug/m3			02/13/19 05:08	1
methyl isobutyl ketone	ND		2.0	1.5	ug/m3			02/13/19 05:08	1
Methyl methacrylate	ND		2.0	0.90	ug/m3			02/13/19 05:08	1
Methyl tert-butyl ether	ND		0.72	0.22	ug/m3			02/13/19 05:08	1
Methylene Chloride	ND		1.7	0.69	ug/m3			02/13/19 05:08	1
Naphthalene	ND	*	2.6	1.6	ug/m3			02/13/19 05:08	1
n-Butane	**2.0**		1.2	0.74	ug/m3			02/13/19 05:08	1
n-Butylbenzene	ND	*	1.1	0.44	ug/m3			02/13/19 05:08	1
n-Heptane	ND		0.82	0.57	ug/m3			02/13/19 05:08	1
n-Hexane	ND		0.70	0.56	ug/m3			02/13/19 05:08	1
n-Propylbenzene	ND		0.98	0.34	ug/m3			02/13/19 05:08	1
sec-Butylbenzene	ND		1.1	0.36	ug/m3			02/13/19 05:08	1
Styrene	ND		0.85	0.37	ug/m3			02/13/19 05:08	1
tert-Butyl alcohol	ND		15	4.5	ug/m3			02/13/19 05:08	1
tert-Butylbenzene	ND		1.1	0.32	ug/m3			02/13/19 05:08	1
Tetrachloroethene	**0.37**	**J**	1.4	0.20	ug/m3			02/13/19 05:08	1
Tetrahydrofuran	ND		15	7.7	ug/m3			02/13/19 05:08	1
Toluene	ND		0.75	0.26	ug/m3			02/13/19 05:08	1
trans-1,2-Dichloroethene	ND		0.79	0.29	ug/m3			02/13/19 05:08	1
trans-1,3-Dichloropropene	ND		0.91	0.54	ug/m3			02/13/19 05:08	1
Trichloroethene	**0.75**	**J**	1.1	0.16	ug/m3			02/13/19 05:08	1
Trichlorofluoromethane	**2.6**		1.1	0.35	ug/m3			02/13/19 05:08	1
Vinyl chloride	ND		0.51	0.10	ug/m3			02/13/19 05:08	1
Xylene (total)	ND		3.0	0.61	ug/m3			02/13/19 05:08	1
Xylene, o-	ND		0.87	0.31	ug/m3			02/13/19 05:08	1

Client Sample ID: SAN-IA-2BB(02062019) — **Lab Sample ID: 200-47338-5**
Date Collected: 02/06/19 16:04 — **Matrix: Air**
Date Received: 02/08/19 10:25
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.20	0.068	ppb v/v			02/13/19 06:02	1
1,1,2,2-Tetrachloroethane	ND		0.20	0.076	ppb v/v			02/13/19 06:02	1
1,1,2-Trichloroethane	ND		0.20	0.078	ppb v/v			02/13/19 06:02	1
1,1-Dichloroethane	ND		0.20	0.026	ppb v/v			02/13/19 06:02	1
1,1-Dichloroethene	ND		0.20	0.034	ppb v/v			02/13/19 06:02	1
1,2,4-Trichlorobenzene	ND	*	0.50	0.24	ppb v/v			02/13/19 06:02	1
1,2,4-Trimethylbenzene	ND		0.20	0.080	ppb v/v			02/13/19 06:02	1
1,2-Dibromoethane	ND		0.20	0.069	ppb v/v			02/13/19 06:02	1
1,2-Dichlorobenzene	ND		0.20	0.071	ppb v/v			02/13/19 06:02	1
1,2-Dichloroethane	ND		0.20	0.063	ppb v/v			02/13/19 06:02	1
1,2-Dichloroethene, Total	ND		0.40	0.11	ppb v/v			02/13/19 06:02	1
1,2-Dichloropropane	ND		0.20	0.12	ppb v/v			02/13/19 06:02	1
1,2-Dichlorotetrafluoroethane	ND		0.20	0.068	ppb v/v			02/13/19 06:02	1
1,3,5-Trimethylbenzene	ND		0.20	0.058	ppb v/v			02/13/19 06:02	1
1,3-Butadiene	ND		0.20	0.065	ppb v/v			02/13/19 06:02	1
1,3-Dichlorobenzene	ND		0.20	0.082	ppb v/v			02/13/19 06:02	1
1,4-Dichlorobenzene	ND		0.20	0.065	ppb v/v			02/13/19 06:02	1
1,4-Dioxane	ND		5.0	1.3	ppb v/v			02/13/19 06:02	1
2,2,4-Trimethylpentane	ND		0.20	0.088	ppb v/v			02/13/19 06:02	1
2-Chlorotoluene	ND		0.20	0.071	ppb v/v			02/13/19 06:02	1
3-Chloropropene	ND		0.50	0.27	ppb v/v			02/13/19 06:02	1
4-Ethyltoluene	ND		0.20	0.069	ppb v/v			02/13/19 06:02	1
4-Isopropyltoluene	ND		0.20	0.075	ppb v/v			02/13/19 06:02	1
Acetone	ND		5.0	2.6	ppb v/v			02/13/19 06:02	1
Benzene	**0.11**	**J**	0.20	0.071	ppb v/v			02/13/19 06:02	1
Benzyl chloride	ND		0.20	0.12	ppb v/v			02/13/19 06:02	1
Bromodichloromethane	ND		0.20	0.094	ppb v/v			02/13/19 06:02	1
Bromoethene(Vinyl Bromide)	ND		0.20	0.056	ppb v/v			02/13/19 06:02	1
Bromoform	ND		0.20	0.086	ppb v/v			02/13/19 06:02	1
Bromomethane	ND		0.20	0.062	ppb v/v			02/13/19 06:02	1
Carbon disulfide	ND		0.50	0.12	ppb v/v			02/13/19 06:02	1
Carbon tetrachloride	**0.073**	**J**	0.20	0.024	ppb v/v			02/13/19 06:02	1
Chlorobenzene	ND		0.20	0.040	ppb v/v			02/13/19 06:02	1
Chloroethane	ND		0.50	0.21	ppb v/v			02/13/19 06:02	1
Chloroform	ND		0.20	0.052	ppb v/v			02/13/19 06:02	1
Chloromethane	**0.48**	**J**	0.50	0.25	ppb v/v			02/13/19 06:02	1
cis-1,2-Dichloroethene	ND		0.20	0.037	ppb v/v			02/13/19 06:02	1
cis-1,3-Dichloropropene	ND		0.20	0.098	ppb v/v			02/13/19 06:02	1
Cumene	ND		0.20	0.059	ppb v/v			02/13/19 06:02	1
Cyclohexane	ND		0.20	0.063	ppb v/v			02/13/19 06:02	1
Dibromochloromethane	ND		0.20	0.071	ppb v/v			02/13/19 06:02	1
Dichlorodifluoromethane	**0.47**	**J**	0.50	0.20	ppb v/v			02/13/19 06:02	1
Ethylbenzene	ND		0.20	0.073	ppb v/v			02/13/19 06:02	1
Freon 22	**0.30**	**J**	0.50	0.26	ppb v/v			02/13/19 06:02	1
Freon TF	**0.061**	**J**	0.20	0.031	ppb v/v			02/13/19 06:02	1
Hexachlorobutadiene	ND		0.20	0.082	ppb v/v			02/13/19 06:02	1
Isopropyl alcohol	**20**		5.0	1.8	ppb v/v			02/13/19 06:02	1
m,p-Xylene	ND		0.50	0.070	ppb v/v			02/13/19 06:02	1

Client Sample ID: SAN-IA-2BB(02062019) — **Lab Sample ID: 200-47338-5**
Date Collected: 02/06/19 16:04 — **Matrix: Air**
Date Received: 02/08/19 10:25
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Butyl Ketone (2-Hexanone)	ND		0.50	0.42	ppb v/v			02/13/19 06:02	1
Methyl Ethyl Ketone	ND		0.50	0.20	ppb v/v			02/13/19 06:02	1
methyl isobutyl ketone	ND		0.50	0.36	ppb v/v			02/13/19 06:02	1
Methyl methacrylate	ND		0.50	0.22	ppb v/v			02/13/19 06:02	1
Methyl tert-butyl ether	ND		0.20	0.061	ppb v/v			02/13/19 06:02	1
Methylene Chloride	ND		0.50	0.20	ppb v/v			02/13/19 06:02	1
Naphthalene	ND	*	0.50	0.31	ppb v/v			02/13/19 06:02	1
n-Butane	**0.85**		0.50	0.31	ppb v/v			02/13/19 06:02	1
n-Butylbenzene	ND	*	0.20	0.080	ppb v/v			02/13/19 06:02	1
n-Heptane	ND		0.20	0.14	ppb v/v			02/13/19 06:02	1
n-Hexane	ND		0.20	0.16	ppb v/v			02/13/19 06:02	1
n-Propylbenzene	ND		0.20	0.069	ppb v/v			02/13/19 06:02	1
sec-Butylbenzene	ND		0.20	0.066	ppb v/v			02/13/19 06:02	1
Styrene	ND		0.20	0.086	ppb v/v			02/13/19 06:02	1
tert-Butyl alcohol	ND		5.0	1.5	ppb v/v			02/13/19 06:02	1
tert-Butylbenzene	ND		0.20	0.058	ppb v/v			02/13/19 06:02	1
Tetrachloroethene	**0.24**		0.20	0.029	ppb v/v			02/13/19 06:02	1
Tetrahydrofuran	ND		5.0	2.6	ppb v/v			02/13/19 06:02	1
Toluene	ND		0.20	0.069	ppb v/v			02/13/19 06:02	1
trans-1,2-Dichloroethene	ND		0.20	0.074	ppb v/v			02/13/19 06:02	1
trans-1,3-Dichloropropene	ND		0.20	0.12	ppb v/v			02/13/19 06:02	1
Trichloroethene	ND		0.20	0.030	ppb v/v			02/13/19 06:02	1
Trichlorofluoromethane	**0.21**		0.20	0.062	ppb v/v			02/13/19 06:02	1
Vinyl chloride	ND		0.20	0.041	ppb v/v			02/13/19 06:02	1
Xylene (total)	ND		0.70	0.14	ppb v/v			02/13/19 06:02	1
Xylene, o-	ND		0.20	0.071	ppb v/v			02/13/19 06:02	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.1	0.37	ug/m3			02/13/19 06:02	1
1,1,2,2-Tetrachloroethane	ND		1.4	0.52	ug/m3			02/13/19 06:02	1
1,1,2-Trichloroethane	ND		1.1	0.43	ug/m3			02/13/19 06:02	1
1,1-Dichloroethane	ND		0.81	0.11	ug/m3			02/13/19 06:02	1
1,1-Dichloroethene	ND		0.79	0.13	ug/m3			02/13/19 06:02	1
1,2,4-Trichlorobenzene	ND	*	3.7	1.8	ug/m3			02/13/19 06:02	1
1,2,4-Trimethylbenzene	ND		0.98	0.39	ug/m3			02/13/19 06:02	1
1,2-Dibromoethane	ND		1.5	0.53	ug/m3			02/13/19 06:02	1
1,2-Dichlorobenzene	ND		1.2	0.43	ug/m3			02/13/19 06:02	1
1,2-Dichloroethane	ND		0.81	0.25	ug/m3			02/13/19 06:02	1
1,2-Dichloroethene, Total	ND		1.6	0.44	ug/m3			02/13/19 06:02	1
1,2-Dichloropropane	ND		0.92	0.55	ug/m3			02/13/19 06:02	1
1,2-Dichlorotetrafluoroethane	ND		1.4	0.48	ug/m3			02/13/19 06:02	1
1,3,5-Trimethylbenzene	ND		0.98	0.29	ug/m3			02/13/19 06:02	1
1,3-Butadiene	ND		0.44	0.14	ug/m3			02/13/19 06:02	1
1,3-Dichlorobenzene	ND		1.2	0.49	ug/m3			02/13/19 06:02	1
1,4-Dichlorobenzene	ND		1.2	0.39	ug/m3			02/13/19 06:02	1
1,4-Dioxane	ND		18	4.7	ug/m3			02/13/19 06:02	1
2,2,4-Trimethylpentane	ND		0.93	0.41	ug/m3			02/13/19 06:02	1
2-Chlorotoluene	ND		1.0	0.37	ug/m3			02/13/19 06:02	1
3-Chloropropene	ND		1.6	0.85	ug/m3			02/13/19 06:02	1

Client Sample ID: SAN-IA-2BB(02062019) — **Lab Sample ID: 200-47338-5**
Date Collected: 02/06/19 16:04 — **Matrix: Air**
Date Received: 02/08/19 10:25
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Ethyltoluene	ND		0.98	0.34	ug/m3			02/13/19 06:02	1
4-Isopropyltoluene	ND		1.1	0.41	ug/m3			02/13/19 06:02	1
Acetone	ND		12	6.2	ug/m3			02/13/19 06:02	1
Benzene	**0.36**	**J**	0.64	0.23	ug/m3			02/13/19 06:02	1
Benzyl chloride	ND		1.0	0.62	ug/m3			02/13/19 06:02	1
Bromodichloromethane	ND		1.3	0.63	ug/m3			02/13/19 06:02	1
Bromoethene(Vinyl Bromide)	ND		0.87	0.24	ug/m3			02/13/19 06:02	1
Bromoform	ND		2.1	0.89	ug/m3			02/13/19 06:02	1
Bromomethane	ND		0.78	0.24	ug/m3			02/13/19 06:02	1
Carbon disulfide	ND		1.6	0.37	ug/m3			02/13/19 06:02	1
Carbon tetrachloride	**0.46**	**J**	1.3	0.15	ug/m3			02/13/19 06:02	1
Chlorobenzene	ND		0.92	0.18	ug/m3			02/13/19 06:02	1
Chloroethane	ND		1.3	0.55	ug/m3			02/13/19 06:02	1
Chloroform	ND		0.98	0.25	ug/m3			02/13/19 06:02	1
Chloromethane	**0.99**	**J**	1.0	0.52	ug/m3			02/13/19 06:02	1
cis-1,2-Dichloroethene	ND		0.79	0.15	ug/m3			02/13/19 06:02	1
cis-1,3-Dichloropropene	ND		0.91	0.44	ug/m3			02/13/19 06:02	1
Cumene	ND		0.98	0.29	ug/m3			02/13/19 06:02	1
Cyclohexane	ND		0.69	0.22	ug/m3			02/13/19 06:02	1
Dibromochloromethane	ND		1.7	0.60	ug/m3			02/13/19 06:02	1
Dichlorodifluoromethane	**2.3**	**J**	2.5	0.99	ug/m3			02/13/19 06:02	1
Ethylbenzene	ND		0.87	0.32	ug/m3			02/13/19 06:02	1
Freon 22	**1.0**	**J**	1.8	0.92	ug/m3			02/13/19 06:02	1
Freon TF	**0.47**	**J**	1.5	0.24	ug/m3			02/13/19 06:02	1
Hexachlorobutadiene	ND		2.1	0.87	ug/m3			02/13/19 06:02	1
Isopropyl alcohol	**50**		12	4.4	ug/m3			02/13/19 06:02	1
m,p-Xylene	ND		2.2	0.30	ug/m3			02/13/19 06:02	1
Methyl Butyl Ketone (2-Hexanone)	ND		2.0	1.7	ug/m3			02/13/19 06:02	1
Methyl Ethyl Ketone	ND		1.5	0.59	ug/m3			02/13/19 06:02	1
methyl isobutyl ketone	ND		2.0	1.5	ug/m3			02/13/19 06:02	1
Methyl methacrylate	ND		2.0	0.90	ug/m3			02/13/19 06:02	1
Methyl tert-butyl ether	ND		0.72	0.22	ug/m3			02/13/19 06:02	1
Methylene Chloride	ND		1.7	0.69	ug/m3			02/13/19 06:02	1
Naphthalene	ND	*	2.6	1.6	ug/m3			02/13/19 06:02	1
n-Butane	**2.0**		1.2	0.74	ug/m3			02/13/19 06:02	1
n-Butylbenzene	ND	*	1.1	0.44	ug/m3			02/13/19 06:02	1
n-Heptane	ND		0.82	0.57	ug/m3			02/13/19 06:02	1
n-Hexane	ND		0.70	0.56	ug/m3			02/13/19 06:02	1
n-Propylbenzene	ND		0.98	0.34	ug/m3			02/13/19 06:02	1
sec-Butylbenzene	ND		1.1	0.36	ug/m3			02/13/19 06:02	1
Styrene	ND		0.85	0.37	ug/m3			02/13/19 06:02	1
tert-Butyl alcohol	ND		15	4.5	ug/m3			02/13/19 06:02	1
tert-Butylbenzene	ND		1.1	0.32	ug/m3			02/13/19 06:02	1
Tetrachloroethene	**1.6**		1.4	0.20	ug/m3			02/13/19 06:02	1
Tetrahydrofuran	ND		15	7.7	ug/m3			02/13/19 06:02	1
Toluene	ND		0.75	0.26	ug/m3			02/13/19 06:02	1
trans-1,2-Dichloroethene	ND		0.79	0.29	ug/m3			02/13/19 06:02	1
trans-1,3-Dichloropropene	ND		0.91	0.54	ug/m3			02/13/19 06:02	1

Client Sample ID: SAN-IA-2BB(02062019)

Lab Sample ID: 200-47338-5
Matrix: Air
Date Collected: 02/06/19 16:04
Date Received: 02/08/19 10:25
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	ND		1.1	0.16	ug/m3			02/13/19 06:02	1
Trichlorofluoromethane	**1.2**		1.1	0.35	ug/m3			02/13/19 06:02	1
Vinyl chloride	ND		0.51	0.10	ug/m3			02/13/19 06:02	1
Xylene (total)	ND		3.0	0.61	ug/m3			02/13/19 06:02	1
Xylene, o-	ND		0.87	0.31	ug/m3			02/13/19 06:02	1

Client Sample ID: SAN-IA-3BB(02062019)

Lab Sample ID: 200-47338-6
Matrix: Air
Date Collected: 02/06/19 16:09
Date Received: 02/08/19 10:25
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.20	0.068	ppb v/v			02/13/19 06:56	1
1,1,2,2-Tetrachloroethane	ND		0.20	0.076	ppb v/v			02/13/19 06:56	1
1,1,2-Trichloroethane	ND		0.20	0.078	ppb v/v			02/13/19 06:56	1
1,1-Dichloroethane	ND		0.20	0.026	ppb v/v			02/13/19 06:56	1
1,1-Dichloroethene	ND		0.20	0.034	ppb v/v			02/13/19 06:56	1
1,2,4-Trichlorobenzene	ND	*	0.50	0.24	ppb v/v			02/13/19 06:56	1
1,2,4-Trimethylbenzene	ND		0.20	0.080	ppb v/v			02/13/19 06:56	1
1,2-Dibromoethane	ND		0.20	0.069	ppb v/v			02/13/19 06:56	1
1,2-Dichlorobenzene	ND		0.20	0.071	ppb v/v			02/13/19 06:56	1
1,2-Dichloroethane	ND		0.20	0.063	ppb v/v			02/13/19 06:56	1
1,2-Dichloroethene, Total	ND		0.40	0.11	ppb v/v			02/13/19 06:56	1
1,2-Dichloropropane	ND		0.20	0.12	ppb v/v			02/13/19 06:56	1
1,2-Dichlorotetrafluoroethane	ND		0.20	0.068	ppb v/v			02/13/19 06:56	1
1,3,5-Trimethylbenzene	ND		0.20	0.058	ppb v/v			02/13/19 06:56	1
1,3-Butadiene	ND		0.20	0.065	ppb v/v			02/13/19 06:56	1
1,3-Dichlorobenzene	ND		0.20	0.082	ppb v/v			02/13/19 06:56	1
1,4-Dichlorobenzene	ND		0.20	0.065	ppb v/v			02/13/19 06:56	1
1,4-Dioxane	ND		5.0	1.3	ppb v/v			02/13/19 06:56	1
2,2,4-Trimethylpentane	ND		0.20	0.088	ppb v/v			02/13/19 06:56	1
2-Chlorotoluene	ND		0.20	0.071	ppb v/v			02/13/19 06:56	1
3-Chloropropene	ND		0.50	0.27	ppb v/v			02/13/19 06:56	1
4-Ethyltoluene	ND		0.20	0.069	ppb v/v			02/13/19 06:56	1
4-Isopropyltoluene	ND		0.20	0.075	ppb v/v			02/13/19 06:56	1
Acetone	ND		5.0	2.6	ppb v/v			02/13/19 06:56	1
Benzene	**0.090**	**J**	0.20	0.071	ppb v/v			02/13/19 06:56	1
Benzyl chloride	ND		0.20	0.12	ppb v/v			02/13/19 06:56	1
Bromodichloromethane	ND		0.20	0.094	ppb v/v			02/13/19 06:56	1
Bromoethene(Vinyl Bromide)	ND		0.20	0.056	ppb v/v			02/13/19 06:56	1
Bromoform	ND		0.20	0.086	ppb v/v			02/13/19 06:56	1
Bromomethane	ND		0.20	0.062	ppb v/v			02/13/19 06:56	1
Carbon disulfide	ND		0.50	0.12	ppb v/v			02/13/19 06:56	1
Carbon tetrachloride	**0.076**	**J**	0.20	0.024	ppb v/v			02/13/19 06:56	1
Chlorobenzene	ND		0.20	0.040	ppb v/v			02/13/19 06:56	1
Chloroethane	ND		0.50	0.21	ppb v/v			02/13/19 06:56	1
Chloroform	ND		0.20	0.052	ppb v/v			02/13/19 06:56	1

Client Sample ID: SAN-IA-3BB(02062019) — **Lab Sample ID: 200-47338-6**
Date Collected: 02/06/19 16:09 — **Matrix: Air**
Date Received: 02/08/19 10:25
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	**0.47**	**J**	0.50	0.25	ppb v/v			02/13/19 06:56	1
cis-1,2-Dichloroethene	ND		0.20	0.037	ppb v/v			02/13/19 06:56	1
cis-1,3-Dichloropropene	ND		0.20	0.098	ppb v/v			02/13/19 06:56	1
Cumene	ND		0.20	0.059	ppb v/v			02/13/19 06:56	1
Cyclohexane	ND		0.20	0.063	ppb v/v			02/13/19 06:56	1
Dibromochloromethane	ND		0.20	0.071	ppb v/v			02/13/19 06:56	1
Dichlorodifluoromethane	**0.46**	**J**	0.50	0.20	ppb v/v			02/13/19 06:56	1
Ethylbenzene	ND		0.20	0.073	ppb v/v			02/13/19 06:56	1
Freon 22	**0.38**	**J**	0.50	0.26	ppb v/v			02/13/19 06:56	1
Freon TF	**0.065**	**J**	0.20	0.031	ppb v/v			02/13/19 06:56	1
Hexachlorobutadiene	ND		0.20	0.082	ppb v/v			02/13/19 06:56	1
Isopropyl alcohol	ND		5.0	1.8	ppb v/v			02/13/19 06:56	1
m,p-Xylene	ND		0.50	0.070	ppb v/v			02/13/19 06:56	1
Methyl Butyl Ketone (2-Hexanone)	ND		0.50	0.42	ppb v/v			02/13/19 06:56	1
Methyl Ethyl Ketone	**0.29**	**J**	0.50	0.20	ppb v/v			02/13/19 06:56	1
methyl isobutyl ketone	ND		0.50	0.36	ppb v/v			02/13/19 06:56	1
Methyl methacrylate	ND		0.50	0.22	ppb v/v			02/13/19 06:56	1
Methyl tert-butyl ether	ND		0.20	0.061	ppb v/v			02/13/19 06:56	1
Methylene Chloride	ND		0.50	0.20	ppb v/v			02/13/19 06:56	1
Naphthalene	ND	*	0.50	0.31	ppb v/v			02/13/19 06:56	1
n-Butane	**0.85**		0.50	0.31	ppb v/v			02/13/19 06:56	1
n-Butylbenzene	ND	*	0.20	0.080	ppb v/v			02/13/19 06:56	1
n-Heptane	ND		0.20	0.14	ppb v/v			02/13/19 06:56	1
n-Hexane	ND		0.20	0.16	ppb v/v			02/13/19 06:56	1
n-Propylbenzene	ND		0.20	0.069	ppb v/v			02/13/19 06:56	1
sec-Butylbenzene	ND		0.20	0.066	ppb v/v			02/13/19 06:56	1
Styrene	ND		0.20	0.086	ppb v/v			02/13/19 06:56	1
tert-Butyl alcohol	ND		5.0	1.5	ppb v/v			02/13/19 06:56	1
tert-Butylbenzene	ND		0.20	0.058	ppb v/v			02/13/19 06:56	1
Tetrachloroethene	**0.057**	**J**	0.20	0.029	ppb v/v			02/13/19 06:56	1
Tetrahydrofuran	ND		5.0	2.6	ppb v/v			02/13/19 06:56	1
Toluene	ND		0.20	0.069	ppb v/v			02/13/19 06:56	1
trans-1,2-Dichloroethene	ND		0.20	0.074	ppb v/v			02/13/19 06:56	1
trans-1,3-Dichloropropene	ND		0.20	0.12	ppb v/v			02/13/19 06:56	1
Trichloroethene	**0.088**	**J**	0.20	0.030	ppb v/v			02/13/19 06:56	1
Trichlorofluoromethane	**0.20**		0.20	0.062	ppb v/v			02/13/19 06:56	1
Vinyl chloride	ND		0.20	0.041	ppb v/v			02/13/19 06:56	1
Xylene (total)	ND		0.70	0.14	ppb v/v			02/13/19 06:56	1
Xylene, o-	ND		0.20	0.071	ppb v/v			02/13/19 06:56	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.1	0.37	ug/m3			02/13/19 06:56	1
1,1,2,2-Tetrachloroethane	ND		1.4	0.52	ug/m3			02/13/19 06:56	1
1,1,2-Trichloroethane	ND		1.1	0.43	ug/m3			02/13/19 06:56	1
1,1-Dichloroethane	ND		0.81	0.11	ug/m3			02/13/19 06:56	1
1,1-Dichloroethene	ND		0.79	0.13	ug/m3			02/13/19 06:56	1
1,2,4-Trichlorobenzene	ND	*	3.7	1.8	ug/m3			02/13/19 06:56	1
1,2,4-Trimethylbenzene	ND		0.98	0.39	ug/m3			02/13/19 06:56	1
1,2-Dibromoethane	ND		1.5	0.53	ug/m3			02/13/19 06:56	1

Client Sample ID: SAN-IA-3BB(02062019) **Lab Sample ID: 200-47338-6**
Date Collected: 02/06/19 16:09 **Matrix: Air**
Date Received: 02/08/19 10:25
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		1.2	0.43	ug/m3			02/13/19 06:56	1
1,2-Dichloroethane	ND		0.81	0.25	ug/m3			02/13/19 06:56	1
1,2-Dichloroethene, Total	ND		1.6	0.44	ug/m3			02/13/19 06:56	1
1,2-Dichloropropane	ND		0.92	0.55	ug/m3			02/13/19 06:56	1
1,2-Dichlorotetrafluoroethane	ND		1.4	0.48	ug/m3			02/13/19 06:56	1
1,3,5-Trimethylbenzene	ND		0.98	0.29	ug/m3			02/13/19 06:56	1
1,3-Butadiene	ND		0.44	0.14	ug/m3			02/13/19 06:56	1
1,3-Dichlorobenzene	ND		1.2	0.49	ug/m3			02/13/19 06:56	1
1,4-Dichlorobenzene	ND		1.2	0.39	ug/m3			02/13/19 06:56	1
1,4-Dioxane	ND		18	4.7	ug/m3			02/13/19 06:56	1
2,2,4-Trimethylpentane	ND		0.93	0.41	ug/m3			02/13/19 06:56	1
2-Chlorotoluene	ND		1.0	0.37	ug/m3			02/13/19 06:56	1
3-Chloropropene	ND		1.6	0.85	ug/m3			02/13/19 06:56	1
4-Ethyltoluene	ND		0.98	0.34	ug/m3			02/13/19 06:56	1
4-Isopropyltoluene	ND		1.1	0.41	ug/m3			02/13/19 06:56	1
Acetone	ND		12	6.2	ug/m3			02/13/19 06:56	1
Benzene	**0.29**	**J**	0.64	0.23	ug/m3			02/13/19 06:56	1
Benzyl chloride	ND		1.0	0.62	ug/m3			02/13/19 06:56	1
Bromodichloromethane	ND		1.3	0.63	ug/m3			02/13/19 06:56	1
Bromoethene(Vinyl Bromide)	ND		0.87	0.24	ug/m3			02/13/19 06:56	1
Bromoform	ND		2.1	0.89	ug/m3			02/13/19 06:56	1
Bromomethane	ND		0.78	0.24	ug/m3			02/13/19 06:56	1
Carbon disulfide	ND		1.6	0.37	ug/m3			02/13/19 06:56	1
Carbon tetrachloride	**0.48**	**J**	1.3	0.15	ug/m3			02/13/19 06:56	1
Chlorobenzene	ND		0.92	0.18	ug/m3			02/13/19 06:56	1
Chloroethane	ND		1.3	0.55	ug/m3			02/13/19 06:56	1
Chloroform	ND		0.98	0.25	ug/m3			02/13/19 06:56	1
Chloromethane	**0.96**	**J**	1.0	0.52	ug/m3			02/13/19 06:56	1
cis-1,2-Dichloroethene	ND		0.79	0.15	ug/m3			02/13/19 06:56	1
cis-1,3-Dichloropropene	ND		0.91	0.44	ug/m3			02/13/19 06:56	1
Cumene	ND		0.98	0.29	ug/m3			02/13/19 06:56	1
Cyclohexane	ND		0.69	0.22	ug/m3			02/13/19 06:56	1
Dibromochloromethane	ND		1.7	0.60	ug/m3			02/13/19 06:56	1
Dichlorodifluoromethane	**2.3**	**J**	2.5	0.99	ug/m3			02/13/19 06:56	1
Ethylbenzene	ND		0.87	0.32	ug/m3			02/13/19 06:56	1
Freon 22	**1.3**	**J**	1.8	0.92	ug/m3			02/13/19 06:56	1
Freon TF	**0.49**	**J**	1.5	0.24	ug/m3			02/13/19 06:56	1
Hexachlorobutadiene	ND		2.1	0.87	ug/m3			02/13/19 06:56	1
Isopropyl alcohol	ND		12	4.4	ug/m3			02/13/19 06:56	1
m,p-Xylene	ND		2.2	0.30	ug/m3			02/13/19 06:56	1
Methyl Butyl Ketone (2-Hexanone)	ND		2.0	1.7	ug/m3			02/13/19 06:56	1
Methyl Ethyl Ketone	**0.87**	**J**	1.5	0.59	ug/m3			02/13/19 06:56	1
methyl isobutyl ketone	ND		2.0	1.5	ug/m3			02/13/19 06:56	1
Methyl methacrylate	ND		2.0	0.90	ug/m3			02/13/19 06:56	1
Methyl tert-butyl ether	ND		0.72	0.22	ug/m3			02/13/19 06:56	1
Methylene Chloride	ND		1.7	0.69	ug/m3			02/13/19 06:56	1
Naphthalene	ND	*	2.6	1.6	ug/m3			02/13/19 06:56	1
n-Butane	**2.0**		1.2	0.74	ug/m3			02/13/19 06:56	1

Client Sample ID: SAN-IA-3BB(02062019)

Lab Sample ID: 200-47338-6

Date Collected: 02/06/19 16:09
Matrix: Air
Date Received: 02/08/19 10:25
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Butylbenzene	ND	*	1.1	0.44	ug/m3			02/13/19 06:56	1
n-Heptane	ND		0.82	0.57	ug/m3			02/13/19 06:56	1
n-Hexane	ND		0.70	0.56	ug/m3			02/13/19 06:56	1
n-Propylbenzene	ND		0.98	0.34	ug/m3			02/13/19 06:56	1
sec-Butylbenzene	ND		1.1	0.36	ug/m3			02/13/19 06:56	1
Styrene	ND		0.85	0.37	ug/m3			02/13/19 06:56	1
tert-Butyl alcohol	ND		15	4.5	ug/m3			02/13/19 06:56	1
tert-Butylbenzene	ND		1.1	0.32	ug/m3			02/13/19 06:56	1
Tetrachloroethene	**0.39**	**J**	1.4	0.20	ug/m3			02/13/19 06:56	1
Tetrahydrofuran	ND		15	7.7	ug/m3			02/13/19 06:56	1
Toluene	ND		0.75	0.26	ug/m3			02/13/19 06:56	1
trans-1,2-Dichloroethene	ND		0.79	0.29	ug/m3			02/13/19 06:56	1
trans-1,3-Dichloropropene	ND		0.91	0.54	ug/m3			02/13/19 06:56	1
Trichloroethene	**0.47**	**J**	1.1	0.16	ug/m3			02/13/19 06:56	1
Trichlorofluoromethane	**1.2**		1.1	0.35	ug/m3			02/13/19 06:56	1
Vinyl chloride	ND		0.51	0.10	ug/m3			02/13/19 06:56	1
Xylene (total)	ND		3.0	0.61	ug/m3			02/13/19 06:56	1
Xylene, o-	ND		0.87	0.31	ug/m3			02/13/19 06:56	1

Client Sample ID: SAN-IA-DUP(02062019)

Lab Sample ID: 200-47338-7

Date Collected: 02/06/19 00:00
Matrix: Air
Date Received: 02/08/19 10:25
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.20	0.068	ppb v/v			02/13/19 07:49	1
1,1,2,2-Tetrachloroethane	ND		0.20	0.076	ppb v/v			02/13/19 07:49	1
1,1,2-Trichloroethane	ND		0.20	0.078	ppb v/v			02/13/19 07:49	1
1,1-Dichloroethane	ND		0.20	0.026	ppb v/v			02/13/19 07:49	1
1,1-Dichloroethene	ND		0.20	0.034	ppb v/v			02/13/19 07:49	1
1,2,4-Trichlorobenzene	ND	*	0.50	0.24	ppb v/v			02/13/19 07:49	1
1,2,4-Trimethylbenzene	ND		0.20	0.080	ppb v/v			02/13/19 07:49	1
1,2-Dibromoethane	ND		0.20	0.069	ppb v/v			02/13/19 07:49	1
1,2-Dichlorobenzene	ND		0.20	0.071	ppb v/v			02/13/19 07:49	1
1,2-Dichloroethane	ND		0.20	0.063	ppb v/v			02/13/19 07:49	1
1,2-Dichloroethene, Total	ND		0.40	0.11	ppb v/v			02/13/19 07:49	1
1,2-Dichloropropane	ND		0.20	0.12	ppb v/v			02/13/19 07:49	1
1,2-Dichlorotetrafluoroethane	ND		0.20	0.068	ppb v/v			02/13/19 07:49	1
1,3,5-Trimethylbenzene	ND		0.20	0.058	ppb v/v			02/13/19 07:49	1
1,3-Butadiene	ND		0.20	0.065	ppb v/v			02/13/19 07:49	1
1,3-Dichlorobenzene	ND		0.20	0.082	ppb v/v			02/13/19 07:49	1
1,4-Dichlorobenzene	ND		0.20	0.065	ppb v/v			02/13/19 07:49	1
1,4-Dioxane	ND		5.0	1.3	ppb v/v			02/13/19 07:49	1
2,2,4-Trimethylpentane	ND		0.20	0.088	ppb v/v			02/13/19 07:49	1
2-Chlorotoluene	ND		0.20	0.071	ppb v/v			02/13/19 07:49	1
3-Chloropropene	ND		0.50	0.27	ppb v/v			02/13/19 07:49	1
4-Ethyltoluene	ND		0.20	0.069	ppb v/v			02/13/19 07:49	1

Client Sample ID: SAN-IA-DUP(02062019) — **Lab Sample ID: 200-47338-7**
Date Collected: 02/06/19 00:00 — **Matrix: Air**
Date Received: 02/08/19 10:25
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Isopropyltoluene	ND		0.20	0.075	ppb v/v			02/13/19 07:49	1
Acetone	ND		5.0	2.6	ppb v/v			02/13/19 07:49	1
Benzene	**0.11**	**J**	0.20	0.071	ppb v/v			02/13/19 07:49	1
Benzyl chloride	ND		0.20	0.12	ppb v/v			02/13/19 07:49	1
Bromodichloromethane	ND		0.20	0.094	ppb v/v			02/13/19 07:49	1
Bromoethene(Vinyl Bromide)	ND		0.20	0.056	ppb v/v			02/13/19 07:49	1
Bromoform	ND		0.20	0.086	ppb v/v			02/13/19 07:49	1
Bromomethane	ND		0.20	0.062	ppb v/v			02/13/19 07:49	1
Carbon disulfide	ND		0.50	0.12	ppb v/v			02/13/19 07:49	1
Carbon tetrachloride	**0.068**	**J**	0.20	0.024	ppb v/v			02/13/19 07:49	1
Chlorobenzene	ND		0.20	0.040	ppb v/v			02/13/19 07:49	1
Chloroethane	ND		0.50	0.21	ppb v/v			02/13/19 07:49	1
Chloroform	ND		0.20	0.052	ppb v/v			02/13/19 07:49	1
Chloromethane	**0.53**		0.50	0.25	ppb v/v			02/13/19 07:49	1
cis-1,2-Dichloroethene	ND		0.20	0.037	ppb v/v			02/13/19 07:49	1
cis-1,3-Dichloropropene	ND		0.20	0.098	ppb v/v			02/13/19 07:49	1
Cumene	ND		0.20	0.059	ppb v/v			02/13/19 07:49	1
Cyclohexane	**0.070**	**J**	0.20	0.063	ppb v/v			02/13/19 07:49	1
Dibromochloromethane	ND		0.20	0.071	ppb v/v			02/13/19 07:49	1
Dichlorodifluoromethane	**0.49**	**J**	0.50	0.20	ppb v/v			02/13/19 07:49	1
Ethylbenzene	ND		0.20	0.073	ppb v/v			02/13/19 07:49	1
Freon 22	**0.37**	**J**	0.50	0.26	ppb v/v			02/13/19 07:49	1
Freon TF	**0.064**	**J**	0.20	0.031	ppb v/v			02/13/19 07:49	1
Hexachlorobutadiene	ND		0.20	0.082	ppb v/v			02/13/19 07:49	1
Isopropyl alcohol	ND		5.0	1.8	ppb v/v			02/13/19 07:49	1
m,p-Xylene	**0.11**	**J**	0.50	0.070	ppb v/v			02/13/19 07:49	1
Methyl Butyl Ketone (2-Hexanone)	ND		0.50	0.42	ppb v/v			02/13/19 07:49	1
Methyl Ethyl Ketone	**0.21**	**J**	0.50	0.20	ppb v/v			02/13/19 07:49	1
methyl isobutyl ketone	ND		0.50	0.36	ppb v/v			02/13/19 07:49	1
Methyl methacrylate	ND		0.50	0.22	ppb v/v			02/13/19 07:49	1
Methyl tert-butyl ether	ND		0.20	0.061	ppb v/v			02/13/19 07:49	1
Methylene Chloride	ND		0.50	0.20	ppb v/v			02/13/19 07:49	1
Naphthalene	ND	*	0.50	0.31	ppb v/v			02/13/19 07:49	1
n-Butane	**1.2**		0.50	0.31	ppb v/v			02/13/19 07:49	1
n-Butylbenzene	ND	*	0.20	0.080	ppb v/v			02/13/19 07:49	1
n-Heptane	ND		0.20	0.14	ppb v/v			02/13/19 07:49	1
n-Hexane	ND		0.20	0.16	ppb v/v			02/13/19 07:49	1
n-Propylbenzene	ND		0.20	0.069	ppb v/v			02/13/19 07:49	1
sec-Butylbenzene	ND		0.20	0.066	ppb v/v			02/13/19 07:49	1
Styrene	ND		0.20	0.086	ppb v/v			02/13/19 07:49	1
tert-Butyl alcohol	ND		5.0	1.5	ppb v/v			02/13/19 07:49	1
tert-Butylbenzene	ND		0.20	0.058	ppb v/v			02/13/19 07:49	1
Tetrachloroethene	ND		0.20	0.029	ppb v/v			02/13/19 07:49	1
Tetrahydrofuran	ND		5.0	2.6	ppb v/v			02/13/19 07:49	1
Toluene	**0.26**		0.20	0.069	ppb v/v			02/13/19 07:49	1
trans-1,2-Dichloroethene	ND		0.20	0.074	ppb v/v			02/13/19 07:49	1
trans-1,3-Dichloropropene	ND		0.20	0.12	ppb v/v			02/13/19 07:49	1
Trichloroethene	ND		0.20	0.030	ppb v/v			02/13/19 07:49	1

Client Sample ID: SAN-IA-DUP(02062019) — **Lab Sample ID: 200-47338-7**
Date Collected: 02/06/19 00:00 — **Matrix: Air**
Date Received: 02/08/19 10:25
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichlorofluoromethane	**0.25**		0.20	0.062	ppb v/v			02/13/19 07:49	1
Vinyl chloride	ND		0.20	0.041	ppb v/v			02/13/19 07:49	1
Xylene (total)	ND		0.70	0.14	ppb v/v			02/13/19 07:49	1
Xylene, o-	ND		0.20	0.071	ppb v/v			02/13/19 07:49	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.1	0.37	ug/m3			02/13/19 07:49	1
1,1,2,2-Tetrachloroethane	ND		1.4	0.52	ug/m3			02/13/19 07:49	1
1,1,2-Trichloroethane	ND		1.1	0.43	ug/m3			02/13/19 07:49	1
1,1-Dichloroethane	ND		0.81	0.11	ug/m3			02/13/19 07:49	1
1,1-Dichloroethene	ND		0.79	0.13	ug/m3			02/13/19 07:49	1
1,2,4-Trichlorobenzene	ND	*	3.7	1.8	ug/m3			02/13/19 07:49	1
1,2,4-Trimethylbenzene	ND		0.98	0.39	ug/m3			02/13/19 07:49	1
1,2-Dibromoethane	ND		1.5	0.53	ug/m3			02/13/19 07:49	1
1,2-Dichlorobenzene	ND		1.2	0.43	ug/m3			02/13/19 07:49	1
1,2-Dichloroethane	ND		0.81	0.25	ug/m3			02/13/19 07:49	1
1,2-Dichloroethene, Total	ND		1.6	0.44	ug/m3			02/13/19 07:49	1
1,2-Dichloropropane	ND		0.92	0.55	ug/m3			02/13/19 07:49	1
1,2-Dichlorotetrafluoroethane	ND		1.4	0.48	ug/m3			02/13/19 07:49	1
1,3,5-Trimethylbenzene	ND		0.98	0.29	ug/m3			02/13/19 07:49	1
1,3-Butadiene	ND		0.44	0.14	ug/m3			02/13/19 07:49	1
1,3-Dichlorobenzene	ND		1.2	0.49	ug/m3			02/13/19 07:49	1
1,4-Dichlorobenzene	ND		1.2	0.39	ug/m3			02/13/19 07:49	1
1,4-Dioxane	ND		18	4.7	ug/m3			02/13/19 07:49	1
2,2,4-Trimethylpentane	ND		0.93	0.41	ug/m3			02/13/19 07:49	1
2-Chlorotoluene	ND		1.0	0.37	ug/m3			02/13/19 07:49	1
3-Chloropropene	ND		1.6	0.85	ug/m3			02/13/19 07:49	1
4-Ethyltoluene	ND		0.98	0.34	ug/m3			02/13/19 07:49	1
4-Isopropyltoluene	ND		1.1	0.41	ug/m3			02/13/19 07:49	1
Acetone	ND		12	6.2	ug/m3			02/13/19 07:49	1
Benzene	**0.35**	**J**	0.64	0.23	ug/m3			02/13/19 07:49	1
Benzyl chloride	ND		1.0	0.62	ug/m3			02/13/19 07:49	1
Bromodichloromethane	ND		1.3	0.63	ug/m3			02/13/19 07:49	1
Bromoethene(Vinyl Bromide)	ND		0.87	0.24	ug/m3			02/13/19 07:49	1
Bromoform	ND		2.1	0.89	ug/m3			02/13/19 07:49	1
Bromomethane	ND		0.78	0.24	ug/m3			02/13/19 07:49	1
Carbon disulfide	ND		1.6	0.37	ug/m3			02/13/19 07:49	1
Carbon tetrachloride	**0.43**	**J**	1.3	0.15	ug/m3			02/13/19 07:49	1
Chlorobenzene	ND		0.92	0.18	ug/m3			02/13/19 07:49	1
Chloroethane	ND		1.3	0.55	ug/m3			02/13/19 07:49	1
Chloroform	ND		0.98	0.25	ug/m3			02/13/19 07:49	1
Chloromethane	**1.1**		1.0	0.52	ug/m3			02/13/19 07:49	1
cis-1,2-Dichloroethene	ND		0.79	0.15	ug/m3			02/13/19 07:49	1
cis-1,3-Dichloropropene	ND		0.91	0.44	ug/m3			02/13/19 07:49	1
Cumene	ND		0.98	0.29	ug/m3			02/13/19 07:49	1
Cyclohexane	**0.24**	**J**	0.69	0.22	ug/m3			02/13/19 07:49	1
Dibromochloromethane	ND		1.7	0.60	ug/m3			02/13/19 07:49	1
Dichlorodifluoromethane	**2.4**	**J**	2.5	0.99	ug/m3			02/13/19 07:49	1
Ethylbenzene	ND		0.87	0.32	ug/m3			02/13/19 07:49	1

Client: ERM-Northeast
Project/Site: Sanmina

TestAmerica Job ID: 200-47338-1

Client Sample ID: SAN-IA-DUP(02062019)
Date Collected: 02/06/19 00:00
Date Received: 02/08/19 10:25
Sample Container: Summa Canister 6L

Lab Sample ID: 200-47338-7
Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Freon 22	**1.3**	**J**	1.8	0.92	ug/m3			02/13/19 07:49	1
Freon TF	**0.49**	**J**	1.5	0.24	ug/m3			02/13/19 07:49	1
Hexachlorobutadiene	ND		2.1	0.87	ug/m3			02/13/19 07:49	1
Isopropyl alcohol	ND		12	4.4	ug/m3			02/13/19 07:49	1
m,p-Xylene	**0.47**	**J**	2.2	0.30	ug/m3			02/13/19 07:49	1
Methyl Butyl Ketone (2-Hexanone)	ND		2.0	1.7	ug/m3			02/13/19 07:49	1
Methyl Ethyl Ketone	**0.62**	**J**	1.5	0.59	ug/m3			02/13/19 07:49	1
methyl isobutyl ketone	ND		2.0	1.5	ug/m3			02/13/19 07:49	1
Methyl methacrylate	ND		2.0	0.90	ug/m3			02/13/19 07:49	1
Methyl tert-butyl ether	ND		0.72	0.22	ug/m3			02/13/19 07:49	1
Methylene Chloride	ND		1.7	0.69	ug/m3			02/13/19 07:49	1
Naphthalene	ND	*	2.6	1.6	ug/m3			02/13/19 07:49	1
n-Butane	**2.8**		1.2	0.74	ug/m3			02/13/19 07:49	1
n-Butylbenzene	ND	*	1.1	0.44	ug/m3			02/13/19 07:49	1
n-Heptane	ND		0.82	0.57	ug/m3			02/13/19 07:49	1
n-Hexane	ND		0.70	0.56	ug/m3			02/13/19 07:49	1
n-Propylbenzene	ND		0.98	0.34	ug/m3			02/13/19 07:49	1
sec-Butylbenzene	ND		1.1	0.36	ug/m3			02/13/19 07:49	1
Styrene	ND		0.85	0.37	ug/m3			02/13/19 07:49	1
tert-Butyl alcohol	ND		15	4.5	ug/m3			02/13/19 07:49	1
tert-Butylbenzene	ND		1.1	0.32	ug/m3			02/13/19 07:49	1
Tetrachloroethene	ND		1.4	0.20	ug/m3			02/13/19 07:49	1
Tetrahydrofuran	ND		15	7.7	ug/m3			02/13/19 07:49	1
Toluene	**0.99**		0.75	0.26	ug/m3			02/13/19 07:49	1
trans-1,2-Dichloroethene	ND		0.79	0.29	ug/m3			02/13/19 07:49	1
trans-1,3-Dichloropropene	ND		0.91	0.54	ug/m3			02/13/19 07:49	1
Trichloroethene	ND		1.1	0.16	ug/m3			02/13/19 07:49	1
Trichlorofluoromethane	**1.4**		1.1	0.35	ug/m3			02/13/19 07:49	1
Vinyl chloride	ND		0.51	0.10	ug/m3			02/13/19 07:49	1
Xylene (total)	ND		3.0	0.61	ug/m3			02/13/19 07:49	1
Xylene, o-	ND		0.87	0.31	ug/m3			02/13/19 07:49	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Lab Sample ID: MB 200-139939/6
Matrix: Air
Analysis Batch: 139939

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.20	0.068	ppb v/v			02/12/19 18:44	1
1,1,2,2-Tetrachloroethane	ND		0.20	0.076	ppb v/v			02/12/19 18:44	1
1,1,2-Trichloroethane	ND		0.20	0.078	ppb v/v			02/12/19 18:44	1
1,1-Dichloroethane	ND		0.20	0.026	ppb v/v			02/12/19 18:44	1
1,1-Dichloroethene	ND		0.20	0.034	ppb v/v			02/12/19 18:44	1
1,2,4-Trichlorobenzene	ND		0.50	0.24	ppb v/v			02/12/19 18:44	1
1,2,4-Trimethylbenzene	ND		0.20	0.080	ppb v/v			02/12/19 18:44	1
1,2-Dibromoethane	ND		0.20	0.069	ppb v/v			02/12/19 18:44	1
1,2-Dichlorobenzene	ND		0.20	0.071	ppb v/v			02/12/19 18:44	1
1,2-Dichloroethane	ND		0.20	0.063	ppb v/v			02/12/19 18:44	1
1,2-Dichloroethene, Total	ND		0.40	0.11	ppb v/v			02/12/19 18:44	1
1,2-Dichloropropane	ND		0.20	0.12	ppb v/v			02/12/19 18:44	1
1,2-Dichlorotetrafluoroethane	ND		0.20	0.068	ppb v/v			02/12/19 18:44	1
1,3,5-Trimethylbenzene	ND		0.20	0.058	ppb v/v			02/12/19 18:44	1
1,3-Butadiene	ND		0.20	0.065	ppb v/v			02/12/19 18:44	1
1,3-Dichlorobenzene	ND		0.20	0.082	ppb v/v			02/12/19 18:44	1
1,4-Dichlorobenzene	ND		0.20	0.065	ppb v/v			02/12/19 18:44	1
1,4-Dioxane	ND		5.0	1.3	ppb v/v			02/12/19 18:44	1
2,2,4-Trimethylpentane	ND		0.20	0.088	ppb v/v			02/12/19 18:44	1
2-Chlorotoluene	ND		0.20	0.071	ppb v/v			02/12/19 18:44	1
3-Chloropropene	ND		0.50	0.27	ppb v/v			02/12/19 18:44	1
4-Ethyltoluene	ND		0.20	0.069	ppb v/v			02/12/19 18:44	1
4-Isopropyltoluene	ND		0.20	0.075	ppb v/v			02/12/19 18:44	1
Acetone	ND		5.0	2.6	ppb v/v			02/12/19 18:44	1
Benzene	ND		0.20	0.071	ppb v/v			02/12/19 18:44	1
Benzyl chloride	ND		0.20	0.12	ppb v/v			02/12/19 18:44	1
Bromodichloromethane	ND		0.20	0.094	ppb v/v			02/12/19 18:44	1
Bromoethene(Vinyl Bromide)	ND		0.20	0.056	ppb v/v			02/12/19 18:44	1
Bromoform	ND		0.20	0.086	ppb v/v			02/12/19 18:44	1
Bromomethane	ND		0.20	0.062	ppb v/v			02/12/19 18:44	1
Carbon disulfide	ND		0.50	0.12	ppb v/v			02/12/19 18:44	1
Carbon tetrachloride	ND		0.20	0.024	ppb v/v			02/12/19 18:44	1
Chlorobenzene	ND		0.20	0.040	ppb v/v			02/12/19 18:44	1
Chloroethane	ND		0.50	0.21	ppb v/v			02/12/19 18:44	1
Chloroform	ND		0.20	0.052	ppb v/v			02/12/19 18:44	1
Chloromethane	ND		0.50	0.25	ppb v/v			02/12/19 18:44	1
cis-1,2-Dichloroethene	ND		0.20	0.037	ppb v/v			02/12/19 18:44	1
cis-1,3-Dichloropropene	ND		0.20	0.098	ppb v/v			02/12/19 18:44	1
Cumene	ND		0.20	0.059	ppb v/v			02/12/19 18:44	1
Cyclohexane	ND		0.20	0.063	ppb v/v			02/12/19 18:44	1
Dibromochloromethane	ND		0.20	0.071	ppb v/v			02/12/19 18:44	1
Dichlorodifluoromethane	ND		0.50	0.20	ppb v/v			02/12/19 18:44	1
Ethylbenzene	ND		0.20	0.073	ppb v/v			02/12/19 18:44	1
Freon 22	ND		0.50	0.26	ppb v/v			02/12/19 18:44	1
Freon TF	ND		0.20	0.031	ppb v/v			02/12/19 18:44	1
Hexachlorobutadiene	ND		0.20	0.082	ppb v/v			02/12/19 18:44	1
Isopropyl alcohol	ND		5.0	1.8	ppb v/v			02/12/19 18:44	1
m,p-Xylene	ND		0.50	0.070	ppb v/v			02/12/19 18:44	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: MB 200-139939/6
Matrix: Air
Analysis Batch: 139939

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Butyl Ketone (2-Hexanone)	ND		0.50	0.42	ppb v/v			02/12/19 18:44	1
Methyl Ethyl Ketone	ND		0.50	0.20	ppb v/v			02/12/19 18:44	1
methyl isobutyl ketone	ND		0.50	0.36	ppb v/v			02/12/19 18:44	1
Methyl methacrylate	ND		0.50	0.22	ppb v/v			02/12/19 18:44	1
Methyl tert-butyl ether	ND		0.20	0.061	ppb v/v			02/12/19 18:44	1
Methylene Chloride	ND		0.50	0.20	ppb v/v			02/12/19 18:44	1
Naphthalene	ND		0.50	0.31	ppb v/v			02/12/19 18:44	1
n-Butane	ND		0.50	0.31	ppb v/v			02/12/19 18:44	1
n-Butylbenzene	ND		0.20	0.080	ppb v/v			02/12/19 18:44	1
n-Heptane	ND		0.20	0.14	ppb v/v			02/12/19 18:44	1
n-Hexane	ND		0.20	0.16	ppb v/v			02/12/19 18:44	1
n-Propylbenzene	ND		0.20	0.069	ppb v/v			02/12/19 18:44	1
sec-Butylbenzene	ND		0.20	0.066	ppb v/v			02/12/19 18:44	1
Styrene	ND		0.20	0.086	ppb v/v			02/12/19 18:44	1
tert-Butyl alcohol	ND		5.0	1.5	ppb v/v			02/12/19 18:44	1
tert-Butylbenzene	ND		0.20	0.058	ppb v/v			02/12/19 18:44	1
Tetrachloroethene	ND		0.20	0.029	ppb v/v			02/12/19 18:44	1
Tetrahydrofuran	ND		5.0	2.6	ppb v/v			02/12/19 18:44	1
Toluene	ND		0.20	0.069	ppb v/v			02/12/19 18:44	1
trans-1,2-Dichloroethene	ND		0.20	0.074	ppb v/v			02/12/19 18:44	1
trans-1,3-Dichloropropene	ND		0.20	0.12	ppb v/v			02/12/19 18:44	1
Trichloroethene	ND		0.20	0.030	ppb v/v			02/12/19 18:44	1
Trichlorofluoromethane	ND		0.20	0.062	ppb v/v			02/12/19 18:44	1
Vinyl chloride	ND		0.20	0.041	ppb v/v			02/12/19 18:44	1
Xylene (total)	ND		0.70	0.14	ppb v/v			02/12/19 18:44	1
Xylene, o-	ND		0.20	0.071	ppb v/v			02/12/19 18:44	1

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.1	0.37	ug/m3			02/12/19 18:44	1
1,1,2,2-Tetrachloroethane	ND		1.4	0.52	ug/m3			02/12/19 18:44	1
1,1,2-Trichloroethane	ND		1.1	0.43	ug/m3			02/12/19 18:44	1
1,1-Dichloroethane	ND		0.81	0.11	ug/m3			02/12/19 18:44	1
1,1-Dichloroethene	ND		0.79	0.13	ug/m3			02/12/19 18:44	1
1,2,4-Trichlorobenzene	ND		3.7	1.8	ug/m3			02/12/19 18:44	1
1,2,4-Trimethylbenzene	ND		0.98	0.39	ug/m3			02/12/19 18:44	1
1,2-Dibromoethane	ND		1.5	0.53	ug/m3			02/12/19 18:44	1
1,2-Dichlorobenzene	ND		1.2	0.43	ug/m3			02/12/19 18:44	1
1,2-Dichloroethane	ND		0.81	0.25	ug/m3			02/12/19 18:44	1
1,2-Dichloroethene, Total	ND		1.6	0.44	ug/m3			02/12/19 18:44	1
1,2-Dichloropropane	ND		0.92	0.55	ug/m3			02/12/19 18:44	1
1,2-Dichlorotetrafluoroethane	ND		1.4	0.48	ug/m3			02/12/19 18:44	1
1,3,5-Trimethylbenzene	ND		0.98	0.29	ug/m3			02/12/19 18:44	1
1,3-Butadiene	ND		0.44	0.14	ug/m3			02/12/19 18:44	1
1,3-Dichlorobenzene	ND		1.2	0.49	ug/m3			02/12/19 18:44	1
1,4-Dichlorobenzene	ND		1.2	0.39	ug/m3			02/12/19 18:44	1
1,4-Dioxane	ND		18	4.7	ug/m3			02/12/19 18:44	1
2,2,4-Trimethylpentane	ND		0.93	0.41	ug/m3			02/12/19 18:44	1
2-Chlorotoluene	ND		1.0	0.37	ug/m3			02/12/19 18:44	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: MB 200-139939/6
Matrix: Air
Analysis Batch: 139939

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
3-Chloropropene	ND		1.6	0.85	ug/m3			02/12/19 18:44	1
4-Ethyltoluene	ND		0.98	0.34	ug/m3			02/12/19 18:44	1
4-Isopropyltoluene	ND		1.1	0.41	ug/m3			02/12/19 18:44	1
Acetone	ND		12	6.2	ug/m3			02/12/19 18:44	1
Benzene	ND		0.64	0.23	ug/m3			02/12/19 18:44	1
Benzyl chloride	ND		1.0	0.62	ug/m3			02/12/19 18:44	1
Bromodichloromethane	ND		1.3	0.63	ug/m3			02/12/19 18:44	1
Bromoethene(Vinyl Bromide)	ND		0.87	0.24	ug/m3			02/12/19 18:44	1
Bromoform	ND		2.1	0.89	ug/m3			02/12/19 18:44	1
Bromomethane	ND		0.78	0.24	ug/m3			02/12/19 18:44	1
Carbon disulfide	ND		1.6	0.37	ug/m3			02/12/19 18:44	1
Carbon tetrachloride	ND		1.3	0.15	ug/m3			02/12/19 18:44	1
Chlorobenzene	ND		0.92	0.18	ug/m3			02/12/19 18:44	1
Chloroethane	ND		1.3	0.55	ug/m3			02/12/19 18:44	1
Chloroform	ND		0.98	0.25	ug/m3			02/12/19 18:44	1
Chloromethane	ND		1.0	0.52	ug/m3			02/12/19 18:44	1
cis-1,2-Dichloroethene	ND		0.79	0.15	ug/m3			02/12/19 18:44	1
cis-1,3-Dichloropropene	ND		0.91	0.44	ug/m3			02/12/19 18:44	1
Cumene	ND		0.98	0.29	ug/m3			02/12/19 18:44	1
Cyclohexane	ND		0.69	0.22	ug/m3			02/12/19 18:44	1
Dibromochloromethane	ND		1.7	0.60	ug/m3			02/12/19 18:44	1
Dichlorodifluoromethane	ND		2.5	0.99	ug/m3			02/12/19 18:44	1
Ethylbenzene	ND		0.87	0.32	ug/m3			02/12/19 18:44	1
Freon 22	ND		1.8	0.92	ug/m3			02/12/19 18:44	1
Freon TF	ND		1.5	0.24	ug/m3			02/12/19 18:44	1
Hexachlorobutadiene	ND		2.1	0.87	ug/m3			02/12/19 18:44	1
Isopropyl alcohol	ND		12	4.4	ug/m3			02/12/19 18:44	1
m,p-Xylene	ND		2.2	0.30	ug/m3			02/12/19 18:44	1
Methyl Butyl Ketone (2-Hexanone)	ND		2.0	1.7	ug/m3			02/12/19 18:44	1
Methyl Ethyl Ketone	ND		1.5	0.59	ug/m3			02/12/19 18:44	1
methyl isobutyl ketone	ND		2.0	1.5	ug/m3			02/12/19 18:44	1
Methyl methacrylate	ND		2.0	0.90	ug/m3			02/12/19 18:44	1
Methyl tert-butyl ether	ND		0.72	0.22	ug/m3			02/12/19 18:44	1
Methylene Chloride	ND		1.7	0.69	ug/m3			02/12/19 18:44	1
Naphthalene	ND		2.6	1.6	ug/m3			02/12/19 18:44	1
n-Butane	ND		1.2	0.74	ug/m3			02/12/19 18:44	1
n-Butylbenzene	ND		1.1	0.44	ug/m3			02/12/19 18:44	1
n-Heptane	ND		0.82	0.57	ug/m3			02/12/19 18:44	1
n-Hexane	ND		0.70	0.56	ug/m3			02/12/19 18:44	1
n-Propylbenzene	ND		0.98	0.34	ug/m3			02/12/19 18:44	1
sec-Butylbenzene	ND		1.1	0.36	ug/m3			02/12/19 18:44	1
Styrene	ND		0.85	0.37	ug/m3			02/12/19 18:44	1
tert-Butyl alcohol	ND		15	4.5	ug/m3			02/12/19 18:44	1
tert-Butylbenzene	ND		1.1	0.32	ug/m3			02/12/19 18:44	1
Tetrachloroethene	ND		1.4	0.20	ug/m3			02/12/19 18:44	1
Tetrahydrofuran	ND		15	7.7	ug/m3			02/12/19 18:44	1
Toluene	ND		0.75	0.26	ug/m3			02/12/19 18:44	1
trans-1,2-Dichloroethene	ND		0.79	0.29	ug/m3			02/12/19 18:44	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: MB 200-139939/6
Matrix: Air
Analysis Batch: 139939

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		0.91	0.54	ug/m3			02/12/19 18:44	1
Trichloroethene	ND		1.1	0.16	ug/m3			02/12/19 18:44	1
Trichlorofluoromethane	ND		1.1	0.35	ug/m3			02/12/19 18:44	1
Vinyl chloride	ND		0.51	0.10	ug/m3			02/12/19 18:44	1
Xylene (total)	ND		3.0	0.61	ug/m3			02/12/19 18:44	1
Xylene, o-	ND		0.87	0.31	ug/m3			02/12/19 18:44	1

Lab Sample ID: LCS 200-139939/4
Matrix: Air
Analysis Batch: 139939

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	10.0	10.8		ppb v/v		108	70 - 130
1,1,2,2-Tetrachloroethane	10.0	10.1		ppb v/v		101	69 - 129
1,1,2-Trichloroethane	10.0	10.1		ppb v/v		101	69 - 129
1,1-Dichloroethane	10.0	8.37		ppb v/v		84	66 - 126
1,1-Dichloroethene	10.0	9.16		ppb v/v		92	67 - 127
1,2,4-Trichlorobenzene	10.0	13.2	*	ppb v/v		132	59 - 126
1,2,4-Trimethylbenzene	10.0	12.1		ppb v/v		121	65 - 125
1,2-Dibromoethane	10.0	11.0		ppb v/v		110	70 - 130
1,2-Dichlorobenzene	10.0	12.0		ppb v/v		120	67 - 127
1,2-Dichloroethane	10.0	9.87		ppb v/v		99	67 - 132
1,2-Dichloropropane	10.0	9.23		ppb v/v		92	67 - 127
1,2-Dichlorotetrafluoroethane	10.0	10.2		ppb v/v		102	78 - 138
1,3,5-Trimethylbenzene	10.0	11.7		ppb v/v		117	65 - 125
1,3-Butadiene	10.0	10.3		ppb v/v		103	59 - 125
1,3-Dichlorobenzene	10.0	11.9		ppb v/v		119	67 - 127
1,4-Dichlorobenzene	10.0	12.0		ppb v/v		120	66 - 126
1,4-Dioxane	10.0	9.02		ppb v/v		90	66 - 132
2,2,4-Trimethylpentane	10.0	9.40		ppb v/v		94	67 - 127
2-Chlorotoluene	10.0	11.2		ppb v/v		112	67 - 127
3-Chloropropene	10.0	11.7		ppb v/v		117	53 - 133
4-Ethyltoluene	10.0	12.0		ppb v/v		120	69 - 129
4-Isopropyltoluene	10.0	12.3		ppb v/v		123	67 - 129
Acetone	10.0	8.40		ppb v/v		84	64 - 136
Benzene	10.0	9.68		ppb v/v		97	67 - 127
Benzyl chloride	10.0	13.3		ppb v/v		133	54 - 135
Bromodichloromethane	10.0	10.6		ppb v/v		106	69 - 129
Bromoethene(Vinyl Bromide)	10.0	10.1		ppb v/v		101	67 - 127
Bromoform	10.0	10.6		ppb v/v		106	34 - 170
Bromomethane	10.0	10.0		ppb v/v		100	68 - 128
Carbon disulfide	10.0	9.24		ppb v/v		92	81 - 141
Carbon tetrachloride	10.0	10.8		ppb v/v		108	62 - 143
Chlorobenzene	10.0	10.5		ppb v/v		105	68 - 128
Chloroethane	10.0	9.39		ppb v/v		94	65 - 125
Chloroform	10.0	9.52		ppb v/v		95	69 - 129
Chloromethane	10.0	9.57		ppb v/v		96	57 - 126
cis-1,2-Dichloroethene	10.0	8.94		ppb v/v		89	67 - 127

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 200-139939/4
Matrix: Air
Analysis Batch: 139939

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,3-Dichloropropene	10.0	10.1		ppb v/v		101	70 - 130
Cumene	10.0	11.6		ppb v/v		116	67 - 127
Cyclohexane	10.0	10.0		ppb v/v		100	69 - 129
Dibromochloromethane	10.0	11.5		ppb v/v		115	66 - 130
Dichlorodifluoromethane	10.0	10.0		ppb v/v		100	68 - 128
Ethylbenzene	10.0	10.6		ppb v/v		106	68 - 128
Freon 22	10.0	9.40		ppb v/v		94	64 - 128
Freon TF	10.0	9.71		ppb v/v		97	68 - 128
Hexachlorobutadiene	10.0	12.5		ppb v/v		125	62 - 130
Isopropyl alcohol	10.0	7.44		ppb v/v		74	55 - 124
m,p-Xylene	20.0	22.3		ppb v/v		111	68 - 128
Methyl Butyl Ketone (2-Hexanone)	10.0	9.37		ppb v/v		94	61 - 127
Methyl Ethyl Ketone	10.0	8.86		ppb v/v		89	62 - 122
methyl isobutyl ketone	10.0	9.22		ppb v/v		92	62 - 130
Methyl methacrylate	10.0	10.3		ppb v/v		103	70 - 130
Methyl tert-butyl ether	10.0	9.16		ppb v/v		92	67 - 127
Methylene Chloride	10.0	8.39		ppb v/v		84	62 - 122
Naphthalene	10.0	13.4	*	ppb v/v		134	50 - 121
n-Butane	10.0	9.34		ppb v/v		93	56 - 130
n-Butylbenzene	10.0	12.8	*	ppb v/v		128	67 - 127
n-Heptane	10.0	9.13		ppb v/v		91	62 - 130
n-Hexane	10.0	8.71		ppb v/v		87	71 - 131
n-Propylbenzene	10.0	11.6		ppb v/v		116	67 - 127
sec-Butylbenzene	10.0	11.7		ppb v/v		117	66 - 126
Styrene	10.0	11.8		ppb v/v		118	68 - 128
tert-Butyl alcohol	10.0	8.36		ppb v/v		84	64 - 124
tert-Butylbenzene	10.0	11.7		ppb v/v		117	63 - 125
Tetrachloroethene	10.0	11.3		ppb v/v		113	70 - 130
Tetrahydrofuran	10.0	8.52		ppb v/v		85	61 - 136
Toluene	10.0	10.4		ppb v/v		104	67 - 127
trans-1,2-Dichloroethene	10.0	8.84		ppb v/v		88	72 - 132
trans-1,3-Dichloropropene	10.0	10.8		ppb v/v		108	69 - 129
Trichloroethene	10.0	10.4		ppb v/v		104	68 - 128
Trichlorofluoromethane	10.0	10.2		ppb v/v		102	67 - 127
Vinyl chloride	10.0	10.6		ppb v/v		106	62 - 125
Xylene, o-	10.0	11.2		ppb v/v		112	67 - 127

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	55	58.9		ug/m3		108	70 - 130
1,1,2,2-Tetrachloroethane	69	69.2		ug/m3		101	69 - 129
1,1,2-Trichloroethane	55	55.1		ug/m3		101	69 - 129
1,1-Dichloroethane	40	33.9		ug/m3		84	66 - 126
1,1-Dichloroethene	40	36.3		ug/m3		92	67 - 127
1,2,4-Trichlorobenzene	74	97.6	*	ug/m3		132	59 - 126
1,2,4-Trimethylbenzene	49	59.4		ug/m3		121	65 - 125
1,2-Dibromoethane	77	84.3		ug/m3		110	70 - 130
1,2-Dichlorobenzene	60	72.1		ug/m3		120	67 - 127

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 200-139939/4
Matrix: Air
Analysis Batch: 139939

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	40	39.9		ug/m3		99	67 - 132
1,2-Dichloropropane	46	42.7		ug/m3		92	67 - 127
1,2-Dichlorotetrafluoroethane	70	71.0		ug/m3		102	78 - 138
1,3,5-Trimethylbenzene	49	57.6		ug/m3		117	65 - 125
1,3-Butadiene	22	22.8		ug/m3		103	59 - 125
1,3-Dichlorobenzene	60	71.4		ug/m3		119	67 - 127
1,4-Dichlorobenzene	60	72.3		ug/m3		120	66 - 126
1,4-Dioxane	36	32.5		ug/m3		90	66 - 132
2,2,4-Trimethylpentane	47	43.9		ug/m3		94	67 - 127
2-Chlorotoluene	52	58.0		ug/m3		112	67 - 127
3-Chloropropene	31	36.7		ug/m3		117	53 - 133
4-Ethyltoluene	49	59.2		ug/m3		120	69 - 129
4-Isopropyltoluene	55	67.7		ug/m3		123	67 - 129
Acetone	24	19.9		ug/m3		84	64 - 136
Benzene	32	30.9		ug/m3		97	67 - 127
Benzyl chloride	52	68.6		ug/m3		133	54 - 135
Bromodichloromethane	67	70.8		ug/m3		106	69 - 129
Bromoethene(Vinyl Bromide)	44	44.0		ug/m3		101	67 - 127
Bromoform	100	109		ug/m3		106	34 - 170
Bromomethane	39	38.9		ug/m3		100	68 - 128
Carbon disulfide	31	28.8		ug/m3		92	81 - 141
Carbon tetrachloride	63	68.0		ug/m3		108	62 - 143
Chlorobenzene	46	48.4		ug/m3		105	68 - 128
Chloroethane	26	24.8		ug/m3		94	65 - 125
Chloroform	49	46.5		ug/m3		95	69 - 129
Chloromethane	21	19.8		ug/m3		96	57 - 126
cis-1,2-Dichloroethene	40	35.4		ug/m3		89	67 - 127
cis-1,3-Dichloropropene	45	45.9		ug/m3		101	70 - 130
Cumene	49	56.8		ug/m3		116	67 - 127
Cyclohexane	34	34.4		ug/m3		100	69 - 129
Dibromochloromethane	85	97.6		ug/m3		115	66 - 130
Dichlorodifluoromethane	49	49.5		ug/m3		100	68 - 128
Ethylbenzene	43	46.2		ug/m3		106	68 - 128
Freon 22	35	33.2		ug/m3		94	64 - 128
Freon TF	77	74.4		ug/m3		97	68 - 128
Hexachlorobutadiene	110	134		ug/m3		125	62 - 130
Isopropyl alcohol	25	18.3		ug/m3		74	55 - 124
m,p-Xylene	87	96.6		ug/m3		111	68 - 128
Methyl Butyl Ketone (2-Hexanone)	41	38.4		ug/m3		94	61 - 127
Methyl Ethyl Ketone	29	26.1		ug/m3		89	62 - 122
methyl isobutyl ketone	41	37.8		ug/m3		92	62 - 130
Methyl methacrylate	41	42.4		ug/m3		103	70 - 130
Methyl tert-butyl ether	36	33.0		ug/m3		92	67 - 127
Methylene Chloride	35	29.2		ug/m3		84	62 - 122
Naphthalene	52	70.5	*	ug/m3		134	50 - 121
n-Butane	24	22.2		ug/m3		93	56 - 130
n-Butylbenzene	55	70.3	*	ug/m3		128	67 - 127

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 200-139939/4
Matrix: Air
Analysis Batch: 139939

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
n-Heptane	41	37.4		ug/m3		91	62 - 130
n-Hexane	35	30.7		ug/m3		87	71 - 131
n-Propylbenzene	49	57.0		ug/m3		116	67 - 127
sec-Butylbenzene	55	64.4		ug/m3		117	66 - 126
Styrene	43	50.1		ug/m3		118	68 - 128
tert-Butyl alcohol	30	25.3		ug/m3		84	64 - 124
tert-Butylbenzene	55	64.2		ug/m3		117	63 - 125
Tetrachloroethene	68	76.5		ug/m3		113	70 - 130
Tetrahydrofuran	29	25.1		ug/m3		85	61 - 136
Toluene	38	39.3		ug/m3		104	67 - 127
trans-1,2-Dichloroethene	40	35.0		ug/m3		88	72 - 132
trans-1,3-Dichloropropene	45	49.1		ug/m3		108	69 - 129
Trichloroethene	54	55.9		ug/m3		104	68 - 128
Trichlorofluoromethane	56	57.4		ug/m3		102	67 - 127
Vinyl chloride	26	27.0		ug/m3		106	62 - 125
Xylene, o-	43	48.7		ug/m3		112	67 - 127

QC Association Summary

Client: ERM-Northeast
Project/Site: Sanmina

TestAmerica Job ID: 200-47338-1

Air - GC/MS VOA

Analysis Batch: 139939

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
200-47338-1	SAN-AA-01(02062019)	Total/NA	Air	TO-15	
200-47338-2	SAN-IA-3MB(02062019)	Total/NA	Air	TO-15	
200-47338-3	SAN-IA-4MB(02062019)	Total/NA	Air	TO-15	
200-47338-4	SAN-IA-1BB(02062019)	Total/NA	Air	TO-15	
200-47338-5	SAN-IA-2BB(02062019)	Total/NA	Air	TO-15	
200-47338-6	SAN-IA-3BB(02062019)	Total/NA	Air	TO-15	
200-47338-7	SAN-IA-DUP(02062019)	Total/NA	Air	TO-15	
MB 200-139939/6	Method Blank	Total/NA	Air	TO-15	
LCS 200-139939/4	Lab Control Sample	Total/NA	Air	TO-15	

Lab Chronicle

Client: ERM-Northeast
Project/Site: Sanmina

TestAmerica Job ID: 200-47338-1

Client Sample ID: SAN-AA-01(02062019)
Lab Sample ID: 200-47338-1
Date Collected: 02/06/19 15:45
Matrix: Air
Date Received: 02/08/19 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1	139939	02/13/19 02:25	K1P	TAL BUR

Client Sample ID: SAN-IA-3MB(02062019)
Lab Sample ID: 200-47338-2
Date Collected: 02/06/19 15:40
Matrix: Air
Date Received: 02/08/19 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1	139939	02/13/19 03:20	K1P	TAL BUR

Client Sample ID: SAN-IA-4MB(02062019)
Lab Sample ID: 200-47338-3
Date Collected: 02/06/19 15:53
Matrix: Air
Date Received: 02/08/19 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1	139939	02/13/19 04:14	K1P	TAL BUR

Client Sample ID: SAN-IA-1BB(02062019)
Lab Sample ID: 200-47338-4
Date Collected: 02/06/19 16:01
Matrix: Air
Date Received: 02/08/19 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1	139939	02/13/19 05:08	K1P	TAL BUR

Client Sample ID: SAN-IA-2BB(02062019)
Lab Sample ID: 200-47338-5
Date Collected: 02/06/19 16:04
Matrix: Air
Date Received: 02/08/19 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1	139939	02/13/19 06:02	K1P	TAL BUR

Client Sample ID: SAN-IA-3BB(02062019)
Lab Sample ID: 200-47338-6
Date Collected: 02/06/19 16:09
Matrix: Air
Date Received: 02/08/19 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1	139939	02/13/19 06:56	K1P	TAL BUR

Lab Chronicle

Client: ERM-Northeast
Project/Site: Sanmina

TestAmerica Job ID: 200-47338-1

Client Sample ID: SAN-IA-DUP(02062019) **Lab Sample ID: 200-47338-7**
Date Collected: 02/06/19 00:00 **Matrix: Air**
Date Received: 02/08/19 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1	139939	02/13/19 07:49	K1P	TAL BUR

Laboratory References:

TAL BUR = TestAmerica Burlington, 30 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

Accreditation/Certification Summary

Client: ERM-Northeast
Project/Site: Sanmina

TestAmerica Job ID: 200-47338-1

Laboratory: TestAmerica Burlington

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	10391	04-01-19

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
TO-15		Air	1,2-Dichloroethene, Total
TO-15		Air	4-Ethyltoluene
TO-15		Air	4-Isopropyltoluene
TO-15		Air	Cumene
TO-15		Air	Freon 22
TO-15		Air	Methyl Butyl Ketone (2-Hexanone)
TO-15		Air	n-Butane
TO-15		Air	n-Butylbenzene
TO-15		Air	n-Propylbenzene
TO-15		Air	sec-Butylbenzene
TO-15		Air	tert-Butylbenzene
TO-15		Air	Tetrahydrofuran

Laboratory: TestAmerica Buffalo

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

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	10026	03-31-19

Method Summary

Client: ERM-Northeast
Project/Site: Sanmina

TestAmerica Job ID: 200-47338-1

Method	Method Description	Protocol	Laboratory
TO-15	Volatile Organic Compounds in Ambient Air	EPA	TAL BUR

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

TAL BUR = TestAmerica Burlington, 30 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

Sample Summary

Client: ERM-Northeast
Project/Site: Sanmina

TestAmerica Job ID: 200-47338-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
200-47338-1	SAN-AA-01(02062019)	Air	02/06/19 15:45	02/08/19 10:25
200-47338-2	SAN-IA-3MB(02062019)	Air	02/06/19 15:40	02/08/19 10:25
200-47338-3	SAN-IA-4MB(02062019)	Air	02/06/19 15:53	02/08/19 10:25
200-47338-4	SAN-IA-1BB(02062019)	Air	02/06/19 16:01	02/08/19 10:25
200-47338-5	SAN-IA-2BB(02062019)	Air	02/06/19 16:04	02/08/19 10:25
200-47338-6	SAN-IA-3BB(02062019)	Air	02/06/19 16:09	02/08/19 10:25
200-47338-7	SAN-IA-DUP(02062019)	Air	02/06/19 00:00	02/08/19 10:25

TestAmerica Burlington
30 Community Drive
Suite 11
South Burlington, VT 05403-6809
phone 802.660.1990 fax 802.660.1919

Canister Samples Chain of Custody Record

TestAmerica Laboratories, Inc. assumes no liability with respect to the collection and shipment of these samples.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact Information	**Client Project Manager:** Rob Sents	**Samples Collected By:** Mike Fox	COC No:
Company Name: ERM	Phone: 315-455-2554		___1___ of ___1___ COCs
Address: 5784 Widewaters Pkwy	Email: Rob.sents@erm.com		
City/State/Zip: Syracuse, NY 13214			**For Lab Use Only:**
Phone: 315-455-2554	**Site Contact:**		Walk-in Client:
FAX:	**Tel/Fax**		Lab Sampling:
Project Name: Sanmina	**Anaylsis Turnaround Time**		Job / SDG No.:
Site/Location: Oswego, NY	Standard (Specific): X Standard		(See below for Add'l Items)
PO# 0495737	Rush (Specifiy):		

Sample Identification	Sample Date(s)	Time Start	Time Stop	Canister Vacuum in Field, 'Hg (Start)'	Canister Vacuum in Field, 'Hg (Stop)'	Flow Controller ID	Canister ID	TO-14/15 (Standard / Low Level)	TO-15 SIM	EPA 3C	EPA 25C	ASTM D-1946	EPA 15/16	Other (Please specify in notes section)	Sample Type	Indoor Air/Ambient Air	Sub-Slab	Soil Gas	Soil Vapor Extraction (SVE)	Landfill Gas	Other (Please specify in notes section)	Sample Specific Notes:
SAN-AA-01(02062019)	2/6/19	0822	1545	-29.5	-6.0	6555	4581	X								X						
SAN-IA-3MB(02062019)	2/6/19	0830	1540	-29	-6.5	6563	4066	X								X						
SAN-IA-4MB(02062019)	2/6/19	0835	1553	-30	-7.0	6560	3429	X								X						
SAN-IA-1BB(02062019)	2/6/19	0854	1601	-29.5	-8.0	6561	3010	X								X						
SAN-IA-2BB(02062019)	2/6/19	0907	1604	-30	-6.5	6562	4428	X								X						
SAN-IA-3BB(02062019)	2/6/19	0912	1609	-30	-5.5	6550	5398	X								X						
SAN-IA-DUP(02062019)	2/6/19	0	8	-30	-5.0	6558	4077	X								X						
2-7-19 RE																						

Temperature (Fahrenheit)		
	Interior	Ambient
Start		
Stop	70°F	30°F

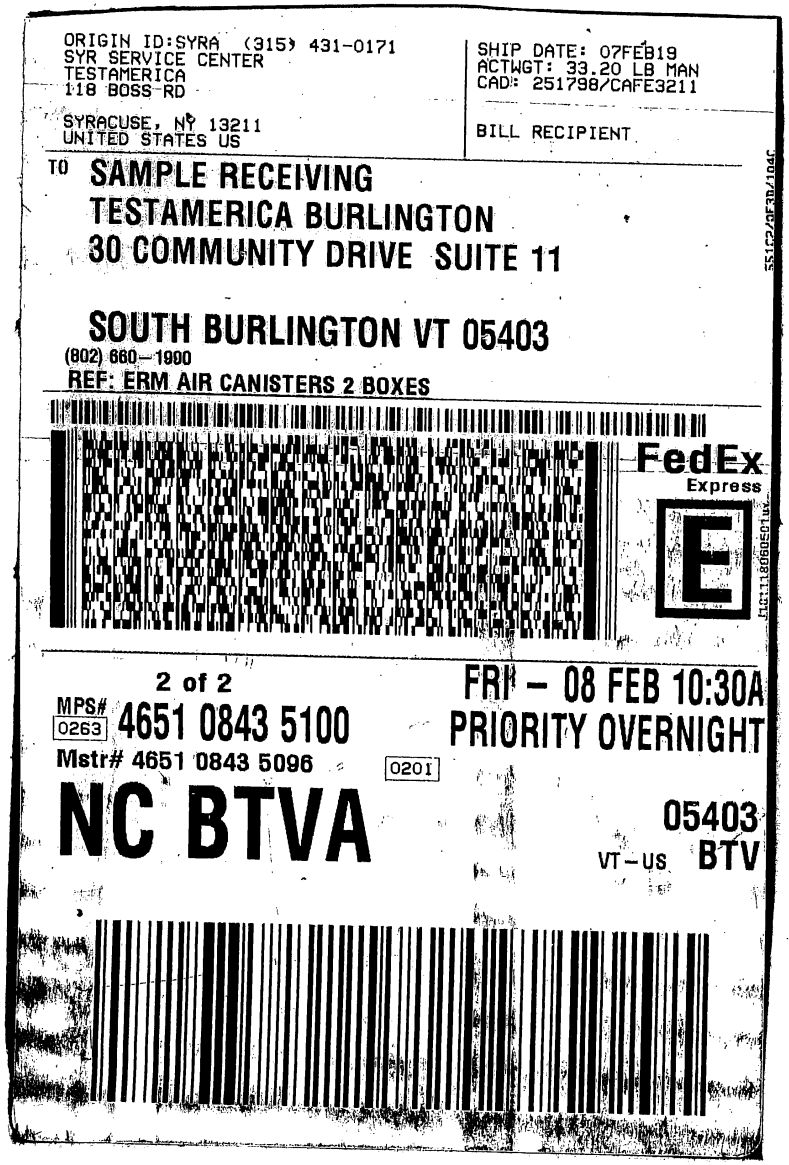
Pressure (inches of Hg)		
	Interior	Ambient
Start		
Stop		30.04

200-47338 Chain of Custody

Special Instructions/QC Requirements & Comments: Level IV ASP Cat B

Samples Shipped by: MF Fox	**Date / Time:** 02/07/2019 1215	**Samples Received by:** RE Hyland, TA Syr	Syracuse #225
Samples Relinquished by: RE Hyland	**Date / Time:** 2-7-19, 19:00	**Received by:** Taylor Johnson TABK 2/8/19 1025	
Relinquished by:	**Date / Time:**	**Received by:**	
Lab Use Only: **Shipper Name:**	**Opened by:**	**Condition:**	

Form No. CA-C-WI-003, Rev. 2.5, dated 9/22/2017



ORIGIN ID:SYRA (315) 431-0171
SYR SERVICE CENTER
TESTAMERICA
118 BOSS RD

SYRACUSE, NY 13211
UNITED STATES US

SHIP DATE: 07FEB19
ACTWGT: 33.20 LB MAN
CAD: 251798/CAFE3211

BILL RECIPIENT

TO SAMPLE RECEIVING
TESTAMERICA BURLINGTON
30 COMMUNITY DRIVE SUITE 11

SOUTH BURLINGTON VT 05403
(802) 660-1990
REF: ERM AIR CANISTERS 2 BOXES

FedEx Express

2 of 2
MPS# 0263 4651 0843 5100
Mstr# 4651 0843 5096
0201

FRI - 08 FEB 10:30A
PRIORITY OVERNIGHT

NC BTVA

05403
VT-US BTV

ORIGIN ID:SYRA (315) 431-0171
SYR SERVICE CENTER
TESTAMERICA
118 BOSS RD

SYRACUSE, NY 13211
UNITED STATES US

SHIP DATE: 07FEB19
ACTWGT: 33.20 LB MAN
CAD: 251798/CAFE3211

BILL RECIPIENT

TO SAMPLE RECEIVING
TESTAMERICA BURLINGTON
30 COMMUNITY DRIVE SUITE 11

SOUTH BURLINGTON VT 05403
(802) 660-1990
REF: ERM AIR CANISTERS 2 BOXES

FedEx Express

1 of 2
TRK# 0201 4651 0843 5096
MASTER

FRI - 08 FEB 10:30A
PRIORITY OVERNIGHT

NC BTVA

05403
VT-US BTV

Login Sample Receipt Checklist

Client: ERM-Northeast

Job Number: 200-47338-1

Login Number: 47338
List Number: 2
Creator: Hall, Samuel C

List Source: TestAmerica Burlington

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	Not present
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.	N/A	Thermal preservation not required.
Cooler Temperature is acceptable.	N/A	
Cooler Temperature is recorded.	N/A	Thermal preservation not required.
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	MF
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.	N/A	
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 <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Pre-Shipment Clean Canister Certification Report

Canister Cleaning & Pre-Shipment Leak Test

System ID	Max DF#	# Cycles	Cleaning Start Date/Time		System Start Temp(s):		Technician	Can Size	Certification Type:
Bottom Rack	1	25	1/7/2019	1430	21	21	EJE	6 liter	batch

Port	Can ID	Initial[1] (psia)	Final (psia)	Diff.[3]	Final ("Hg)	Initial Reading Gauge:	Date:	Time:	Tech:	Temp:	Final Reading Gauge:	Date:	Time:	Tech:	Temp:
1	5416	.02	.02	.00	-30.5	G26	1.18.19	9:58	EE	21	G26	1.22.19	10:35	EE	22
2	5116	"	.02	.00	"	G26	"	"	"	"	G26	"	"	"	"
3	4834	"	.02	.00	"	G26	"	"	"	"	G26	"	"	"	"
4	2905	"	.05	.03	"	G26	"	"	"	"	G26	"	"	"	"
5	5019	"	.04	.02	"	G26	"	"	"	"	G26	"	"	"	"
6	3010	"	.02	.00	"	G26	"	"	"	"	G26	"	"	"	"
7	4557	.02	.02	.00	-29.9	G26	1.22.19	1234	EE	22	G26	1.23.19	11:05	EE	21
8	2634	.02	.12	.10	-30.5	G26	1.18.19	9:59	EE	21	G26	1.22.19	10:34	EE	22
9	3316	"	.02	.00	"	G26	"	"	"	"	G26	"	"	"	"
10	3293	"	.02	.00	"	G26	"	"	"	"	G26	"	"	"	"
11	3482	"	.12	.10	"	G26	"	"	"	"	G26	"	"	"	"
12	3514	"	.02	.00	"	G26	"	"	"	"	G26	"	"	"	"

[1] Batch Certification: The reading is taken on the "batch" canister and this value is used as the initial pressure for all canisters in the batch.

[3] Difference = Final Pressure - Initial Pressure . Acceptance Criteria: (1) The difference must be less than or equal to + 0.25psi. (2) Pressure readings must be at least 24 hours apart.

If time frame was not met, the PM must authorize shipment of canister **PM Authorization** **Date:**

Clean Canister Certification Analysis & Authorization of Release to Inventory

Test Method: ☑ TO15 Routine ☐ TO15 LL

Can ID	Date	Sequence	Analyst	Inventory Level 1	2	3	4	Secondary Review Limited	Review Date	Reviewer
4557	1/17/19	34174	GGG		XXXXX				1/18/19	

Inventory Level 1: Individual Canister Certification (TO15LL 0.01).

Inventory Level 2: Individual or Batch Certification (TO15 0.04 ppbv).

Inventory Level 3: Individual or Batch Certification (TO15 0.2 ppbv).

Inventory Level Limited: Canisters may only be used for certain projects.

Dup Tees/Vac gauges (enter IDs if included):

Comments:

Form ID: FAI023:12
Revision Date: 12/18/2018

TestAmerica Burlington

Page 48 of 168

2/19/2019

200-46938-A-7
4557
Location: Air-Storage
Bottle: Summa Canister 6L
Sampled: 1/7/2019 12:00 AM
200-1247183

Loc: 200
46938
#7
A

Pre-Shipment Clean Canister Certification Report

Canister Cleaning & Pre-Shipment Leak Test

System ID	Max DF#	# Cycles	Cleaning Start Date/Time		System Start Temp(s):		Technician	Can Size	Certification Type:
Bottom Rack	10	25	1/12/2019	1510	21	21	SML	6 liter	batch

						Initial Reading					Final Reading				
Port	Can ID	Initial[1] (psia)	Final (psia)	Diff.[3]	Final ("Hg)	Gauge:	Date:	Time:	Tech:	Temp:	Gauge:	Date:	Time:	Tech:	Temp:
1	6256	103	103	.00	-30.4	G26	1/13/19	1400	SL	20.0	G26	1.22.19	9:29	EK	22
2	5160		103	.00		G26					G26				
3	3541		.03	.00		G26					G26				
4	4825		.03	.00		G26					G26				
5	5636		.03	.00		G26					G26				
6	4299	.02	.02	.00	-29.9	G26	1.22.19	1234	EK	22	G26	1.23.19	1230	EK	21
7	4776	.03	.03	.00	-30.4	G26	1/13/19	1400	SL	20.0	G26	1.22.19	9:29	EK	22
8	4451		.05	.02		G26					G26				
9	5148		.03	.00		G26					G26				
10	4022		.03	.00		G26					G26				
11	2675		.16	.13		G26					G26				
12	5398		.03	.00		G26					G26				

[1] Batch Certification: The reading is taken on the "batch" canister and this value is used as the initial pressure for all canisters in the batch.

[3] Difference = Final Pressure - Initial Pressure . Acceptance Criteria: (1) The difference must be less than or equal to + 0.25psi. (2) Pressure readings must be at least 24 hours apart.

If time frame was not met, the PM must authorize shipment of canister **PM Authorization** **Date:**

Clean Canister Certification Analysis & Authorization of Release to Inventory

Test Method: ☐TO15 Routine ☐ TO15 LL

Can ID	Date	Sequence	Analyst	Inventory Level 1	2	3	4	Secondary Review: Limited	Review Date	Review
4299	1/15/19	B134140	EGG		XXXX				1/15/19	

Inventory Level 1: Individual Canister Certification (TO15LL 0.01).

Inventory Level 2: Individual or Batch Certification (TO15 0.04 ppbv).

Inventory Level 3: Individual or Batch Certification (TO15 0.2 ppbv).

Inventory Level Limited: Canisters may only be used for certain projects.

Dup Tees/Vac gauges (enter IDs if included):

Comments:

Form ID: FAI023:12
Revision Date: 12/18/2018

TestAmerica Burlington

Page 49 of 168

2/19/2019

4299
Location: Air-Storage
Bottle: Summa Canister 6L
Sampled: 1/12/2019 12:00 AM 200-1248674

200-47009-A-6

Loc: 200
47009
#6
A

Pre-Shipment Clean Canister Certification Report

Canister Cleaning & Pre-Shipment Leak Test

System ID	Max DF#	# Cycles	Cleaning Start Date/Time		System Start Temp(s):		Technician	Can Size	Certification Type:
Top Rack	1	25	1/17/2019	1433	21	21	EJE	6 liter	batch

Port	Can ID	Initial[1] (psia)	Final (psia)	Diff.[3]	Final ("Hg)	Initial Reading Gauge:	Initial Reading Date:	Initial Reading Time:	Initial Reading Tech:	Initial Reading Temp:	Final Reading Gauge:	Final Reading Date:	Final Reading Time:	Final Reading Tech:	Final Reading Temp:
1	4917	.02	.02	.00	-29.7	G26	1/18/2019	9:58	EE	20	G26	1-29-19	1350	EE	21
2	2919		.02	.00		G26					G26				
3	3028		.02	.00		G26					G26				
4	2745	.02	.02	.00	-29.7	G26	1-29-19	1416	EE	21	G26	1-30-19	1454	EE	21
5	4717	.02	.03	.01	-29.7	G26	1/18/2019	9:58	EE	20	G26	1-29-19	1350	EE	21
6	2547		.09	.07		G26					G26				
7	5902		.18	.16		G26					G26				
8	4428		.15	.13		G26					G26				
9	4581		.02	.00		G26					G26				
10	4716		.02	.00		G26					G26				
11	3429		.02	.00		G26					G26				
12	4906		.02	.00		G26					G26				

[1] Batch Certification: The reading is taken on the "batch" canister and this value is used as the initial pressure for all canisters in the batch.

[3] Difference = Final Pressure - Initial Pressure . Acceptance Criteria: (1) The difference must be less than or equal to + 0.25psi. (2) Pressure readings must be at least 24 hours apart.

If time frame was not met, the PM must authorize shipment of canister **PM Authorization** **Date:**

Clean Canister Certification Analysis & Authorization of Release to Inventory

Test Method: ☑ TO15 Routine ☐ TO15 LL

Can ID	Date	Sequence	Analyst	Inventory Level 1	2	3	4	Secondary Review Limited	Review Date	Reviewer
2745	1/26/19	34301	EMT		XXXX				1/26/19	DT

Inventory Level 1: Individual Canister Certification (TO15LL 0.01).
Inventory Level 2: Individual or Batch Certification (TO15 0.04 ppbv).
Inventory Level 3: Individual or Batch Certification (TO15 0.2 ppbv).
Inventory Level Limited: Canisters may only be used for certain projects.
Dup Tees/Vac gauges (enter IDs if included):

Comments: Ran in 34217 But LCS↓

200-47057-A-4
2745
Location: Air-Storage
Bottle: Summa Canister 6L
Sampled: 1/17/2019 12:00 AM 200-1249929

Loc: 200
47057
#4
A

Form ID: FAI023:12
Revision Date: 12/18/2018

TestAmerica Burlington

15

Pre-Shipment Clean Canister Certification Report

Canister Cleaning & Pre-Shipment Leak Test

System ID	Max DF#	# Cycles	Cleaning Start Date/Time		System Start Temp(s):		Technician	Can Size	Certification Type:
Bottom Rack	1	25	1/18/2019	1511	21	21	EJE	6 liter	batch

Port	Can ID	Initial[1] (psia)	Final (psia)	Diff.[3]	Final ("Hg)	Initial Reading Gauge:	Date:	Time:	Tech:	Temp:	Final Reading Gauge:	Date:	Time:	Tech:	Temp:
1	3412	.02	.02	.00	-29.5	G26	1/30.19	1654	CE	21	G26	1/31.19	1316	CE	22
2	3326	.02	.02	.00	-29.7	G26	1.21.19	8:06	CE	21	G26	1/30.19	1254	CE	21
3	4365		.12	.10		G26					G26				
4	4220		.02	.00		G26					G26				
5	3455		.02	.00		G26					G26				
6	4081		.02	.00		G26					G26				
7	4553		.09	.07		G26					G26				
8	5035		.02	.00		G26					G26				
9	2737		.02	.00		G26					G26				
10	4795		.02	.00		G26					G26				
11	3011		.12	.10		G26					G26				
12	4066		.02	.00		G26					G26				

[1] Batch Certification: The reading is taken on the "batch" canister and this value is used as the initial pressure for all canisters in the batch.

[3] Difference = Final Pressure - Initial Pressure . Acceptance Criteria: (1) The difference must be less than or equal to + 0.25psi. (2) Pressure readings must be at least 24 hours apart.

If time frame was not met, the PM must authorize shipment of canister **PM Authorization** **Date:**

Clean Canister Certification Analysis & Authorization of Release to Inventory

Test Method: ☑ TO15 Routine ☐ TO15 LL

Can ID	Date	Sequence	Analyst	Inventory Level 1	2	3	4	Secondary Review Limited	Review Date	Reviewer
3412	1/25/19	34287	G66		xxxxx				1/25/19	ERT

Inventory Level 1: Individual Canister Certification (TO15LL 0.01).

Inventory Level 2: Individual or Batch Certification (TO15 0.04 ppbv).

Inventory Level 3: Individual or Batch Certification (TO15 0.2 ppbv).

Inventory Level Limited: Canisters may only be used for certain projects.

Dup Tees/Vac gauges (enter IDs if included):

Comments:

Form ID: FAI023:12
Revision Date: 12/18/2018

TestAmerica Burlington

Pre-Shipment Clean Canister Certification Report

Canister Cleaning & Pre-Shipment Leak Test

System ID	Max DF#	# Cycles	Cleaning Start Date/Time		System Start Temp(s):		Technician	Can Size	Certification Type:
Bottom Rack	200	25	1/22/2019	1513	22	22	EJE	6 liter	batch

Port	Can ID	Initial[1] (psia)	Final (psia)	Diff.[3]	Final ("Hg)	Initial Reading Gauge:	Date:	Time:	Tech:	Temp:	Final Reading Gauge:	Date:	Time:	Tech:	Temp:
1	3289	.02	.02	.00	-29.7	G26	1.23.19	834	EE	21	G26	1.30.19	9:44	EE	21
2	4555	↓	.02	.00	↓	G26	↓	↓	↓	↓	G26	↓	↓	↓	↓
3	5966	↓	.02	.00	↓	G26	↓	↓	↓	↓	G26	↓	↓	↓	↓
4	4546	↓	.11	.09	↓	G26	↓	↓	↓	↓	G26	↓	↓	↓	↓
5	2690	↓	.02	.00	↓	G26	↓	↓	↓	↓	G26	↓	↓	↓	↓
6	3283	↓	.02	.00	↓	G26	↓	↓	↓	↓	G26	↓	↓	↓	↓
7	3534	.02	.09	.07	-29.9	G26	1.30.19	10:14	EE	21	G26	1.31.19	12:16	EE	22
8	3161	.02	.02	.00	-29.7	G26	1.23.19	834	EE	21	G26	1.30.19	9:44	EE	21
9	4305	↓	.02	.00	↓	G26	↓	↓	↓	↓	G26	↓	↓	↓	↓
10	4372	↓	.04	.02	↓	G26	↓	↓	↓	↓	G26	↓	↓	↓	↓
11	4077	↓	.02	.00	↓	G26	↓	↓	↓	↓	G26	↓	↓	↓	↓
12	2644	↓	.02	.00	↓	G26	↓	↓	↓	↓	G26	↓	↓	↓	↓

[1] Batch Certification: The reading is taken on the "batch" canister and this value is used as the initial pressure for all canisters in the batch.

[3] Difference = Final Pressure - Initial Pressure . Acceptance Criteria: (1) The difference must be less than or equal to + 0.25psi. (2) Pressure readings must be at least 24 hours apart.

If time frame was not met, the PM must authorize shipment of canister **PM Authorization** **Date:**

Clean Canister Certification Analysis & Authorization of Release to Inventory

Test Method: ☑ TO15 Routine ☐ TO15 LL

Can ID	Date	Sequence	Analyst	Inventory Level 1	2	3	4	Secondary Review Limited	Review Date	Reviewer
3534	1/26/19	34301	ERG		XXXX				1/26/19	UR

Inventory Level 1: Individual Canister Certification (TO15LL 0.01).

Inventory Level 2: Individual or Batch Certification (TO15 0.04 ppbv).

Inventory Level 3: Individual or Batch Certification (TO15 0.2 ppbv).

Inventory Level Limited: Canisters may only be used for certain projects.

Dup Tees/Vac gauges (enter IDs if included):

Comments:

Form ID: FAI023:12
Revision Date: 12/18/2018

TestAmerica Burlington

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-46938-1

SDG No.:

Client Sample ID: 4557 Lab Sample ID: 200-46938-7

Matrix: Air Lab File ID: 34174-05.D

Analysis Method: TO-15 Date Collected: 01/07/2019 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 01/16/2019 14:52

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 139172 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	1.0	U	1.0	1.0
75-71-8	Dichlorodifluoromethane	0.10	U	0.10	0.10
75-45-6	Freon 22	0.10	U	0.10	0.10
76-14-2	1,2-Dichlorotetrafluoroethane	0.040	U	0.040	0.040
74-87-3	Chloromethane	0.10	U	0.10	0.10
106-97-8	n-Butane	0.10	U	0.10	0.10
75-01-4	Vinyl chloride	0.040	U	0.040	0.040
106-99-0	1,3-Butadiene	0.040	U	0.040	0.040
74-83-9	Bromomethane	0.040	U	0.040	0.040
75-00-3	Chloroethane	0.10	U	0.10	0.10
593-60-2	Bromoethene(Vinyl Bromide)	0.040	U	0.040	0.040
75-69-4	Trichlorofluoromethane	0.040	U	0.040	0.040
64-17-5	Ethanol	1.0	U	1.0	1.0
76-13-1	Freon TF	0.040	U	0.040	0.040
75-35-4	1,1-Dichloroethene	0.040	U	0.040	0.040
67-64-1	Acetone	1.0	U	1.0	1.0
67-63-0	Isopropyl alcohol	1.0	U	1.0	1.0
75-15-0	Carbon disulfide	0.10	U	0.10	0.10
107-05-1	3-Chloropropene	0.10	U	0.10	0.10
75-09-2	Methylene Chloride	0.10	U	0.10	0.10
75-65-0	tert-Butyl alcohol	1.0	U	1.0	1.0
1634-04-4	Methyl tert-butyl ether	0.040	U	0.040	0.040
156-60-5	trans-1,2-Dichloroethene	0.040	U	0.040	0.040
110-54-3	n-Hexane	0.040	U	0.040	0.040
75-34-3	1,1-Dichloroethane	0.040	U	0.040	0.040
108-05-4	Vinyl acetate	1.0	U	1.0	1.0
141-78-6	Ethyl acetate	1.0	U	1.0	1.0
78-93-3	Methyl Ethyl Ketone	0.10	U	0.10	0.10
156-59-2	cis-1,2-Dichloroethene	0.040	U	0.040	0.040
540-59-0	1,2-Dichloroethene, Total	0.080	U	0.080	0.080
67-66-3	Chloroform	0.040	U	0.040	0.040
109-99-9	Tetrahydrofuran	1.0	U	1.0	1.0
71-55-6	1,1,1-Trichloroethane	0.040	U	0.040	0.040
110-82-7	Cyclohexane	0.040	U	0.040	0.040
56-23-5	Carbon tetrachloride	0.040	U	0.040	0.040
540-84-1	2,2,4-Trimethylpentane	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-46938-1

SDG No.:

Client Sample ID: 4557 Lab Sample ID: 200-46938-7

Matrix: Air Lab File ID: 34174-05.D

Analysis Method: TO-15 Date Collected: 01/07/2019 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 01/16/2019 14:52

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 139172 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
71-43-2	Benzene	0.040	U	0.040	0.040
107-06-2	1,2-Dichloroethane	0.040	U	0.040	0.040
142-82-5	n-Heptane	0.040	U	0.040	0.040
79-01-6	Trichloroethene	0.040	U	0.040	0.040
80-62-6	Methyl methacrylate	0.10	U	0.10	0.10
78-87-5	1,2-Dichloropropane	0.040	U	0.040	0.040
123-91-1	1,4-Dioxane	1.0	U	1.0	1.0
75-27-4	Bromodichloromethane	0.040	U	0.040	0.040
10061-01-5	cis-1,3-Dichloropropene	0.040	U	0.040	0.040
108-10-1	methyl isobutyl ketone	0.10	U	0.10	0.10
108-88-3	Toluene	0.040	U	0.040	0.040
10061-02-6	trans-1,3-Dichloropropene	0.040	U	0.040	0.040
79-00-5	1,1,2-Trichloroethane	0.040	U	0.040	0.040
127-18-4	Tetrachloroethene	0.040	U	0.040	0.040
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.10	U	0.10	0.10
124-48-1	Dibromochloromethane	0.040	U	0.040	0.040
106-93-4	1,2-Dibromoethane	0.040	U	0.040	0.040
108-90-7	Chlorobenzene	0.040	U	0.040	0.040
100-41-4	Ethylbenzene	0.040	U	0.040	0.040
179601-23-1	m,p-Xylene	0.10	U	0.10	0.10
95-47-6	Xylene, o-	0.040	U	0.040	0.040
1330-20-7	Xylene (total)	0.14	U	0.14	0.14
100-42-5	Styrene	0.040	U	0.040	0.040
75-25-2	Bromoform	0.040	U	0.040	0.040
98-82-8	Cumene	0.040	U	0.040	0.040
79-34-5	1,1,2,2-Tetrachloroethane	0.040	U	0.040	0.040
103-65-1	n-Propylbenzene	0.040	U	0.040	0.040
622-96-8	4-Ethyltoluene	0.040	U	0.040	0.040
108-67-8	1,3,5-Trimethylbenzene	0.040	U	0.040	0.040
95-49-8	2-Chlorotoluene	0.040	U	0.040	0.040
98-06-6	tert-Butylbenzene	0.040	U	0.040	0.040
95-63-6	1,2,4-Trimethylbenzene	0.040	U	0.040	0.040
135-98-8	sec-Butylbenzene	0.040	U	0.040	0.040
99-87-6	4-Isopropyltoluene	0.040	U	0.040	0.040
541-73-1	1,3-Dichlorobenzene	0.040	U	0.040	0.040
106-46-7	1,4-Dichlorobenzene	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-46938-1

SDG No.:

Client Sample ID: 4557 Lab Sample ID: 200-46938-7

Matrix: Air Lab File ID: 34174-05.D

Analysis Method: TO-15 Date Collected: 01/07/2019 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 01/16/2019 14:52

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 139172 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
100-44-7	Benzyl chloride	0.040	U	0.040	0.040
104-51-8	n-Butylbenzene	0.040	U	0.040	0.040
95-50-1	1,2-Dichlorobenzene	0.040	U	0.040	0.040
120-82-1	1,2,4-Trichlorobenzene	0.10	U	0.10	0.10
87-68-3	Hexachlorobutadiene	0.040	U	0.040	0.040
91-20-3	Naphthalene	0.10	U	0.10	0.10

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\chromna\Burlington\ChromData\CHX.i\20190116-34174.b\34174-05.D
Lims ID: 200-46938-A-7
Client ID: 4557
Sample Type: Client
Inject. Date: 16-Jan-2019 14:52:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 200.000 mL Dil. Factor: 0.2000
Sample Info: 200-0034174-005
Misc. Info.: 46938-07
Operator ID: GGG Instrument ID: CHX.i

Method: \\chromna\Burlington\ChromData\CHX.i\20190116-34174.b\TO15_MasterMethod_X.m.m
Limit Group: AI_TO15_ICAL
Last Update: 17-Jan-2019 13:23:10 Calib Date: 12-Jan-2019 21:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Burlington\ChromData\CHX.i\20190112-34115.b\34115-11.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: CTX0332

First Level Reviewer: puangmaleek Date: 17-Jan-2019 13:23:10

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
1 Propene	41		4.078				ND	
2 Dichlorodifluoromethane	85		4.163				ND	U
3 Chlorodifluoromethane	51		4.233				ND	U
4 1,2-Dichloro-1,1,2,2-tetra	85		4.500				ND	U
5 Chloromethane	50		4.688				ND	U
6 Butane	43		4.918				ND	U
7 Vinyl chloride	62		4.976				ND	U
8 Butadiene	54		5.062				ND	U
10 Bromomethane	94		5.859				ND	U
11 Chloroethane	64		6.116				ND	U
13 Vinyl bromide	106		6.539				ND	
14 Trichlorofluoromethane	101		6.635				ND	U
17 Ethanol	45	7.234	7.234	0.016	96	7452	0.1930	M
20 1,1,2-Trichloro-1,2,2-trif	101		7.726				ND	
21 1,1-Dichloroethene	96		7.790				ND	U
22 Acetone	43		8.036				ND	
23 Carbon disulfide	76	8.224	8.213	0.011	98	15100	0.0261	
24 Isopropyl alcohol	45		8.304				ND	
25 3-Chloro-1-propene	41		8.593				ND	U
27 Methylene Chloride	49		8.898				ND	
28 2-Methyl-2-propanol	59		9.096				ND	
29 Methyl tert-butyl ether	73		9.299				ND	U
31 trans-1,2-Dichloroethene	61		9.347				ND	U
S 30 1,2-Dichloroethene, Total	61		9.665				ND	
33 Hexane	57		9.722				ND	U
34 1,1-Dichloroethane	63		10.251				ND	U
35 Vinyl acetate	43		10.310				ND	U
37 cis-1,2-Dichloroethene	96		11.375				ND	U
38 2-Butanone (MEK)	72		11.412				ND	U
39 Ethyl acetate	88		11.439				ND	
* 40 Chlorobromomethane	128	11.835	11.835	0.000	68	1625244	10.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
41 Tetrahydrofuran	42		11.840				ND	U
42 Chloroform	83		11.947				ND	
43 Cyclohexane	84		12.199				ND	
44 1,1,1-Trichloroethane	97		12.225				ND	
45 Carbon tetrachloride	117		12.466				ND	U
46 Isooctane	57		12.851				ND	
47 Benzene	78	12.921	12.921	0.011	74	5218	0.007406	7M
48 1,2-Dichloroethane	62		13.087				ND	
49 n-Heptane	43		13.204				ND	U
* 50 1,4-Difluorobenzene	114	13.675	13.675	0.000	92	8208454	10.0	
53 Trichloroethene	95		14.114				ND	
54 1,2-Dichloropropane	63		14.627				ND	
55 Methyl methacrylate	69		14.745				ND	
56 1,4-Dioxane	88	14.841	14.841	0.021	85	2819	0.0193	7M
57 Dibromomethane	174	14.873	14.873	0.010	80	2202	0.006400	7M
58 Dichlorobromomethane	83		15.119				ND	
60 cis-1,3-Dichloropropene	75		15.970				ND	U
61 4-Methyl-2-pentanone (MIBK	43		16.227				ND	U
65 Toluene	92	16.527	16.527	0.006	68	4045	0.007541	7M
66 trans-1,3-Dichloropropene	75		17.077				ND	U
67 1,1,2-Trichloroethane	83		17.436				ND	
68 Tetrachloroethene	166	17.538	17.538	0.000	97	4601	0.008642	7M
69 2-Hexanone	43		17.842				ND	U
71 Chlorodibromomethane	129		18.169				ND	U
72 Ethylene Dibromide	107	18.442	18.442	0.006	34	1839	0.003852	7M
* 74 Chlorobenzene-d5	117	19.287	19.287	0.000	82	7126392	10.0	
75 Chlorobenzene	112		19.346				ND	
76 Ethylbenzene	91	19.485	19.485	0.006	63	4661	0.003740	7M
S 73 Xylenes, Total	106				0		0.003859	7
78 m-Xylene & p-Xylene	106		19.720				ND	
79 o-Xylene	106	20.512	20.512	-0.011	17	1856	0.003859	7M
80 Styrene	104	20.582	20.582	0.011	48	2786	0.003774	7M
81 Bromoform	173		20.977				ND	
82 Isopropylbenzene	105		21.154				ND	U
84 1,1,2,2-Tetrachloroethane	83		21.780				ND	U
85 N-Propylbenzene	91		21.839				ND	
88 4-Ethyltoluene	105		22.015				ND	
89 2-Chlorotoluene	91		22.037				ND	
90 1,3,5-Trimethylbenzene	105	22.122	22.122	0.005	58	2520	0.001940	7M
92 tert-Butylbenzene	119		22.588				ND	
93 1,2,4-Trimethylbenzene	105		22.684				ND	
94 sec-Butylbenzene	105		22.903				ND	U
95 4-Isopropyltoluene	119		23.096				ND	U
96 1,3-Dichlorobenzene	146	23.144	23.139	0.005	93	12289	0.0152	
97 1,4-Dichlorobenzene	146	23.273	23.272	0.001	97	14622	0.0192	
98 Benzyl chloride	91		23.476				ND	
100 n-Butylbenzene	91		23.674				ND	
101 1,2-Dichlorobenzene	146	23.818	23.818	0.000	98	11596	0.0139	
103 1,2,4-Trichlorobenzene	180	26.370	26.365	0.005	91	21306	0.0445	
104 Hexachlorobutadiene	225		26.546				ND	
105 Naphthalene	128	26.873	26.867	0.006	98	26359	0.0209	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

U - Marked Undetected

Reagents:

ATTO15XISs_00002 Amount Added: 20.00 Units: mL Run Reagent

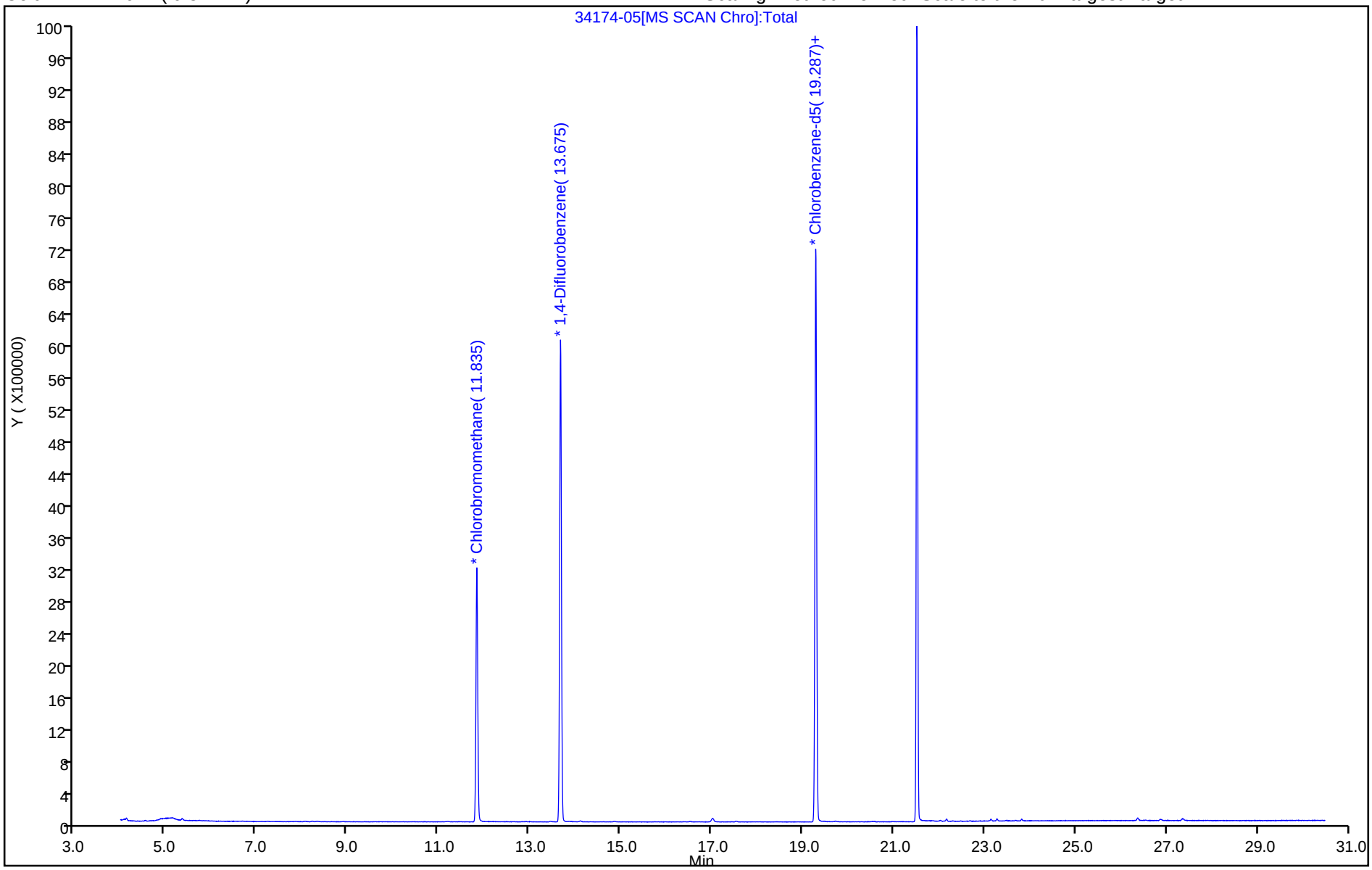
Report Date: 17-Jan-2019 13:23:10 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Burlington

Data File: \\chromna\Burlington\ChromData\CHX.i\20190116-34174.b\34174-05.D

Injection Date:	16-Jan-2019 14:52:30	Instrument ID:	CHX.i	Operator ID:	GGG
Lims ID:	200-46938-A-7	Lab Sample ID:	200-46938-7	Worklist Smp#:	5
Client ID:	4557				
Purge Vol:	200.000 mL	Dil. Factor:	0.2000	ALS Bottle#:	4
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



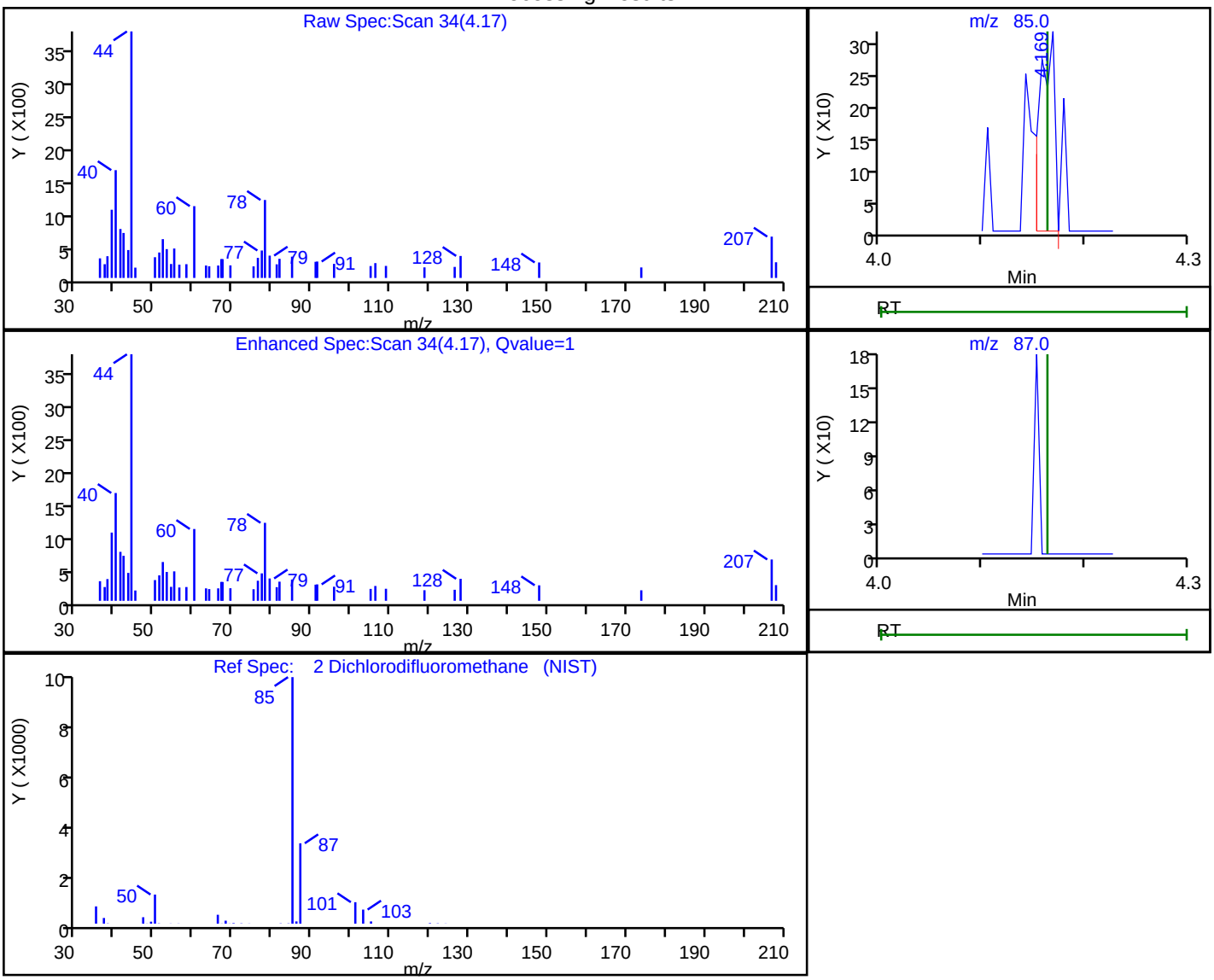
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\chromna\Burlington\ChromData\CHX.i\20190116-34174.b\34174-05.D				
Injection Date:	16-Jan-2019 14:52:30	Instrument ID:	CHX.i		
Lims ID:	200-46938-A-7	Lab Sample ID:	200-46938-7		
Client ID:	4557				
Operator ID:	GGG	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

2 Dichlorodifluoromethane, CAS: 75-71-8

Processing Results



RT	Mass	Response	Amount
4.17	85.00	313	0.000422
4.16	87.00	0	

Reviewer: puangmaleek, 17-Jan-2019 13:19:15

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

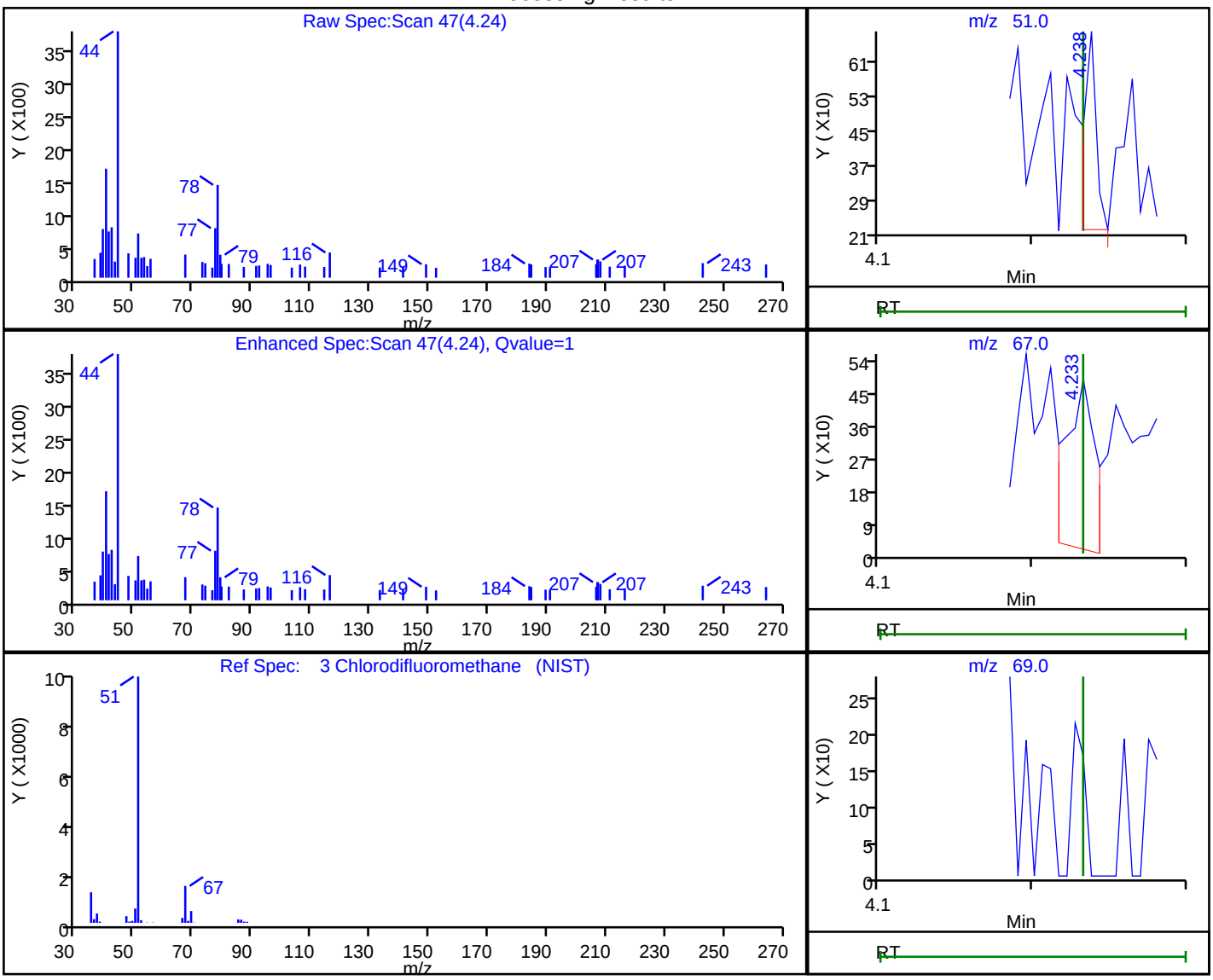
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\chromna\Burlington\ChromData\CHX.i\20190116-34174.b\34174-05.D				
Injection Date:	16-Jan-2019 14:52:30	Instrument ID:	CHX.i		
Lims ID:	200-46938-A-7	Lab Sample ID:	200-46938-7		
Client ID:	4557				
Operator ID:	GGG	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

3 Chlorodifluoromethane, CAS: 75-45-6

Processing Results



RT	Mass	Response	Amount
4.24	51.00	249	0.000739
4.23	67.00	634	
4.23	69.00	0	

Reviewer: puangmaleek, 17-Jan-2019 13:19:18

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

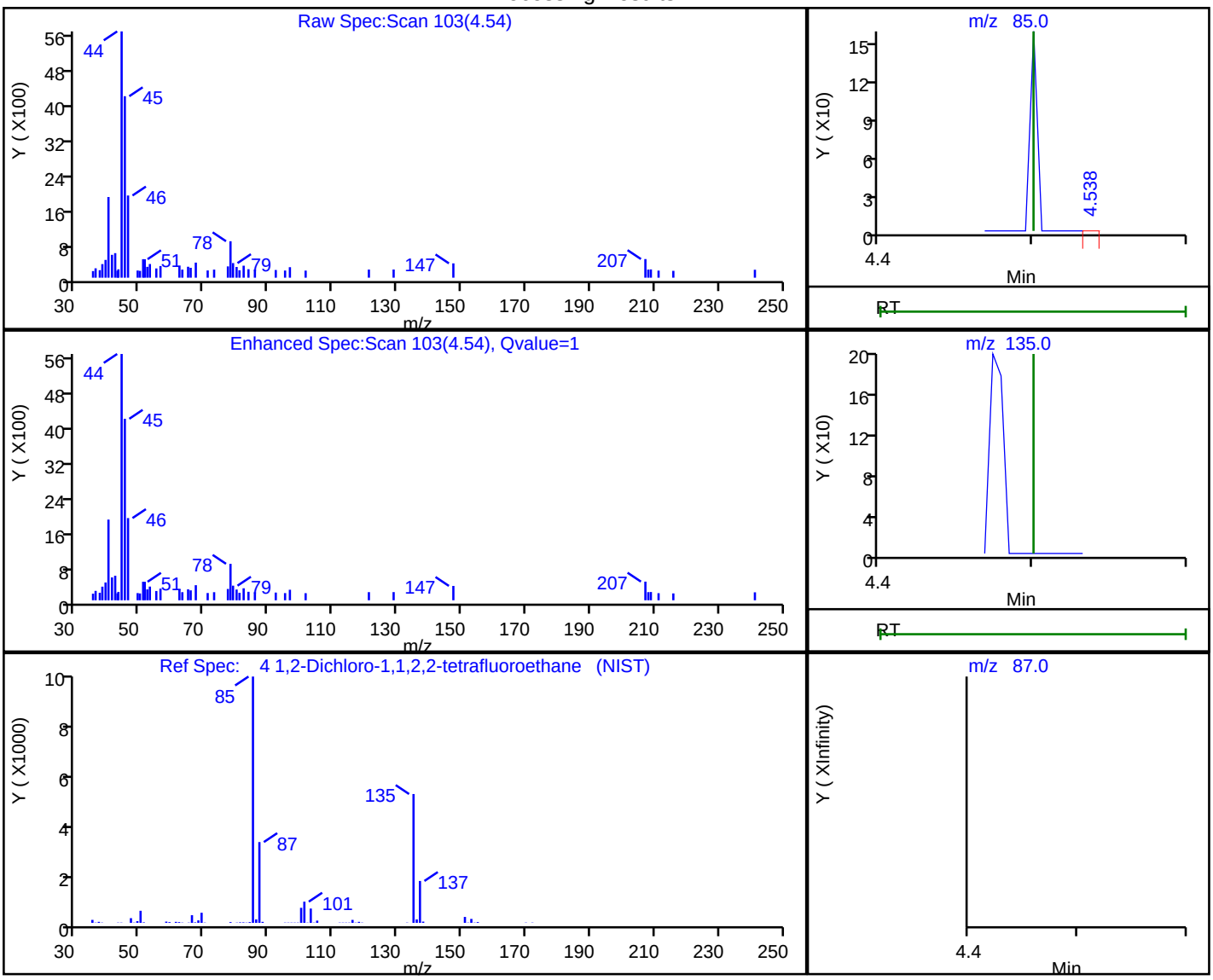
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\chromna\Burlington\ChromData\CHX.i\20190116-34174.b\34174-05.D				
Injection Date:	16-Jan-2019 14:52:30	Instrument ID:	CHX.i		
Lims ID:	200-46938-A-7	Lab Sample ID:	200-46938-7		
Client ID:	4557				
Operator ID:	GGG	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

4 1,2-Dichloro-1,1,2,2-tetrafluoroethane, CAS: 76-14-2

Processing Results



RT	Mass	Response	Amount
4.54	85.00	59	0.000077
4.50	135.00	0	
4.50	87.00	0	

Reviewer: puangmaleek, 17-Jan-2019 13:19:19

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

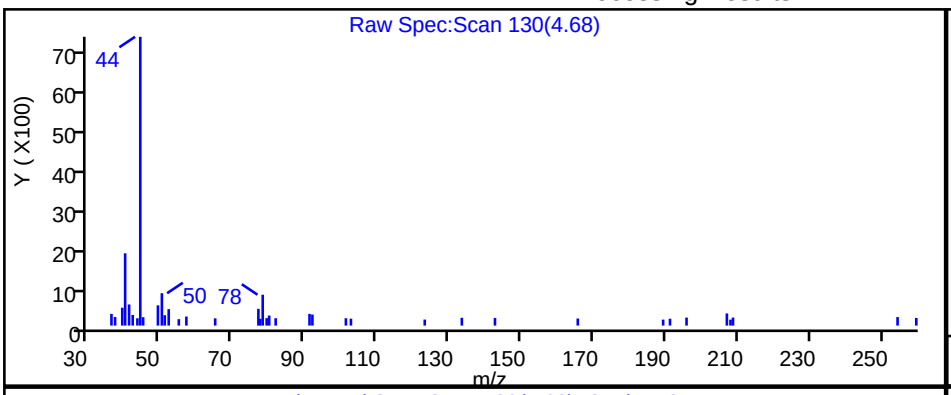
User Disabled Compound Report

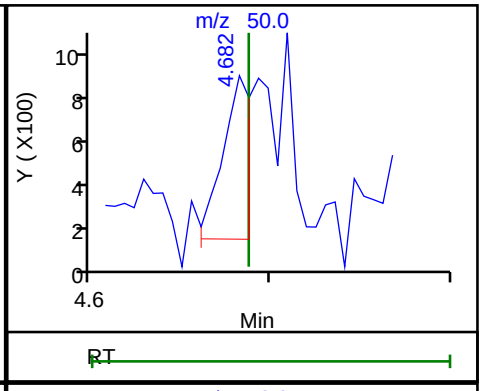
TestAmerica Burlington

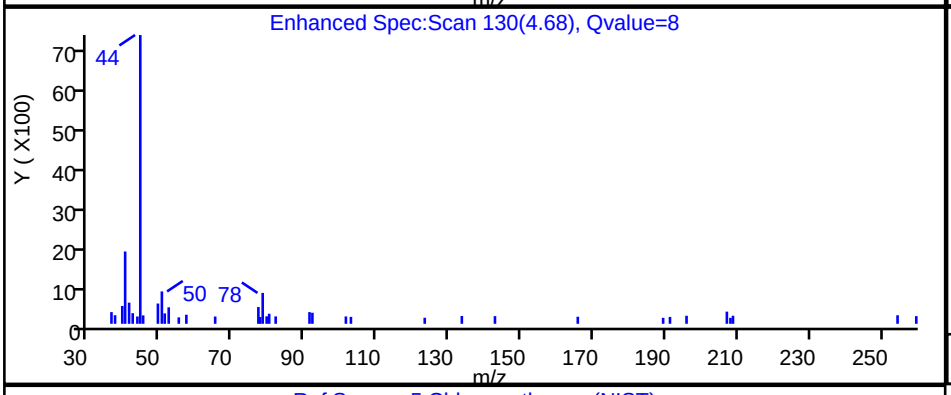
Data File:	\\chromna\Burlington\ChromData\CHX.i\20190116-34174.b\34174-05.D				
Injection Date:	16-Jan-2019 14:52:30	Instrument ID:	CHX.i		
Lims ID:	200-46938-A-7	Lab Sample ID:	200-46938-7		
Client ID:	4557				
Operator ID:	GGG	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

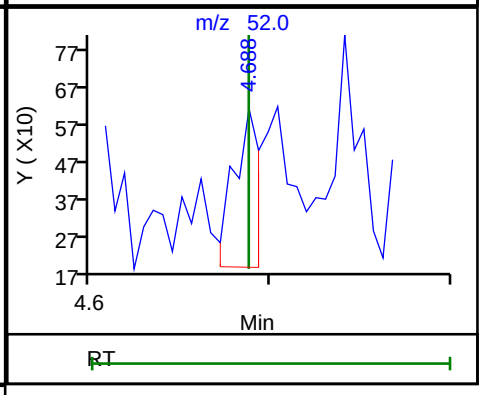
5 Chloromethane, CAS: 74-87-3

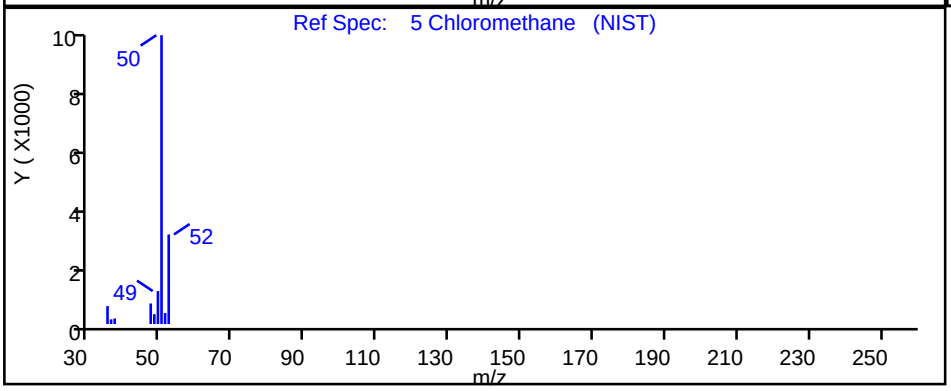
Processing Results











RT	Mass	Response	Amount
4.68	50.00	765	0.003910
4.69	52.00	425	

Reviewer: puangmaleek, 17-Jan-2019 13:19:20

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

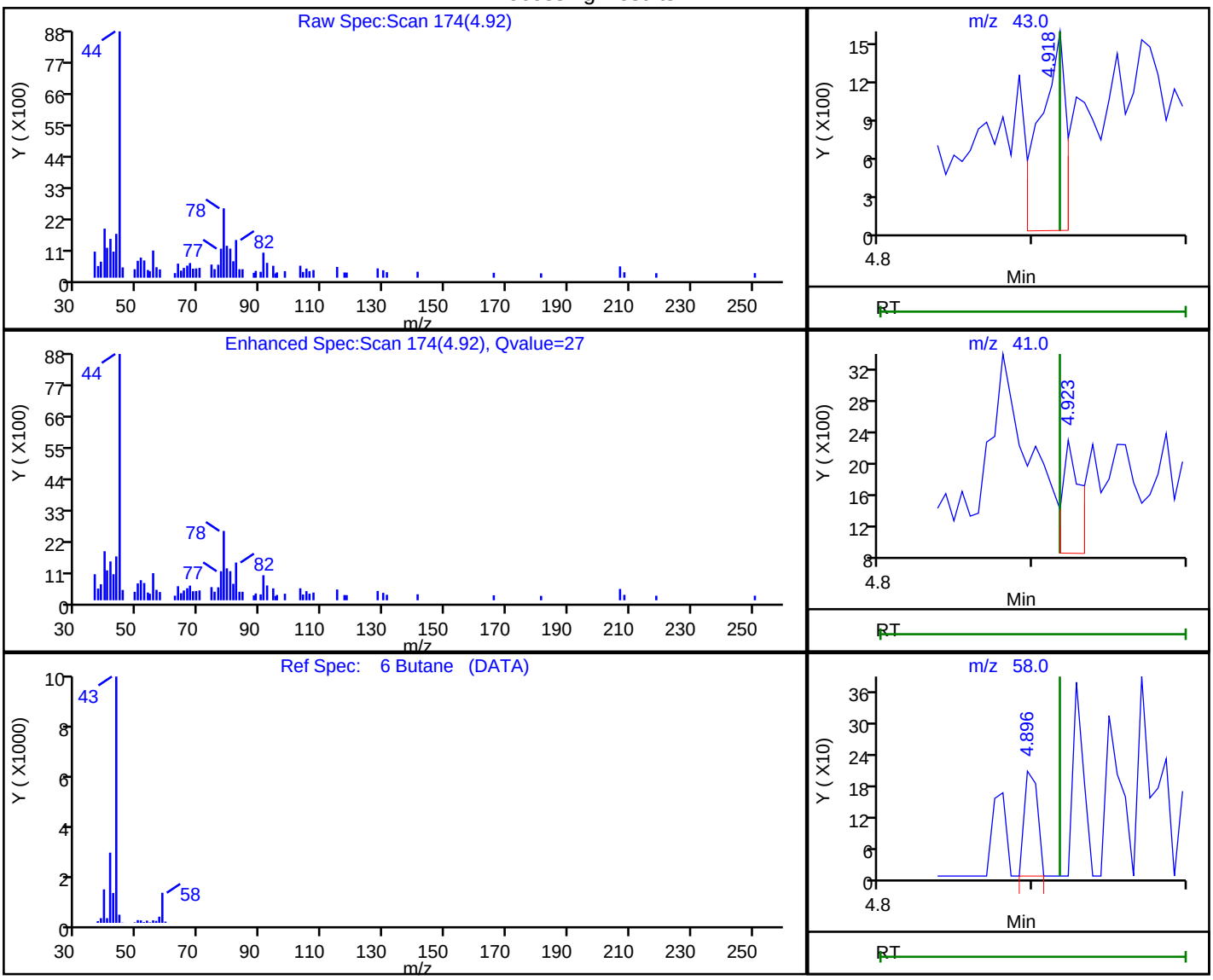
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\chromna\Burlington\ChromData\CHX.i\20190116-34174.b\34174-05.D				
Injection Date:	16-Jan-2019 14:52:30	Instrument ID:	CHX.i		
Lims ID:	200-46938-A-7	Lab Sample ID:	200-46938-7		
Client ID:	4557				
Operator ID:	GGG	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

6 Butane, CAS: 106-97-8

Processing Results



RT	Mass	Response	Amount
4.92	43.00	1808	0.012575
4.92	41.00	1179	
4.90	58.00	123	

Reviewer: puangmaleek, 17-Jan-2019 13:19:22

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

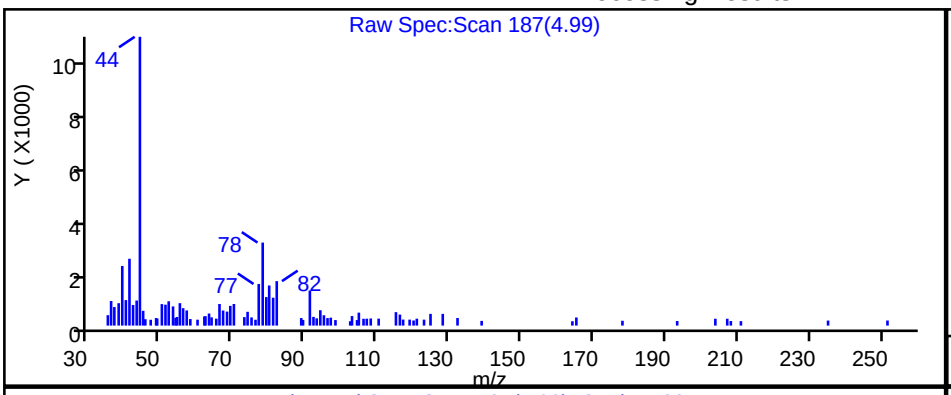
User Disabled Compound Report

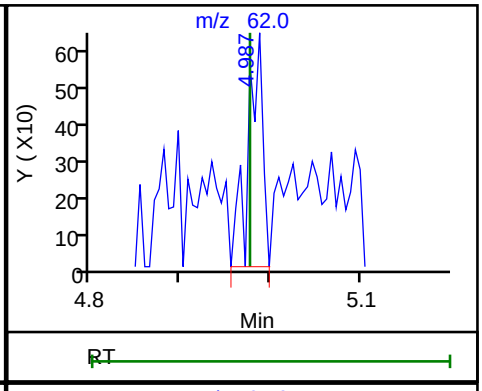
TestAmerica Burlington

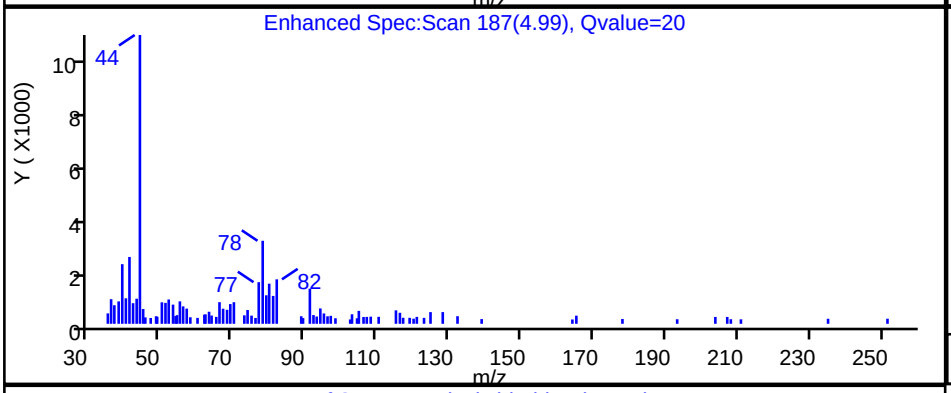
Data File:	\\chromna\Burlington\ChromData\CHX.i\20190116-34174.b\34174-05.D				
Injection Date:	16-Jan-2019 14:52:30	Instrument ID:	CHX.i		
Lims ID:	200-46938-A-7	Lab Sample ID:	200-46938-7		
Client ID:	4557				
Operator ID:	GGG	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

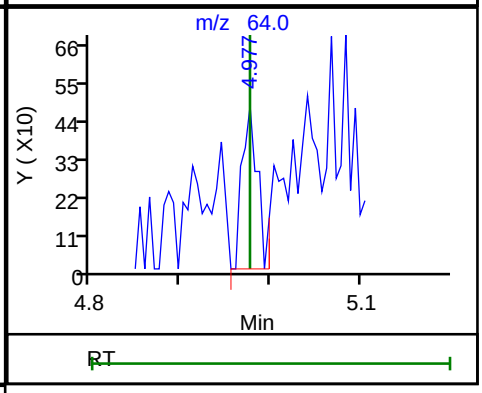
7 Vinyl chloride, CAS: 75-01-4

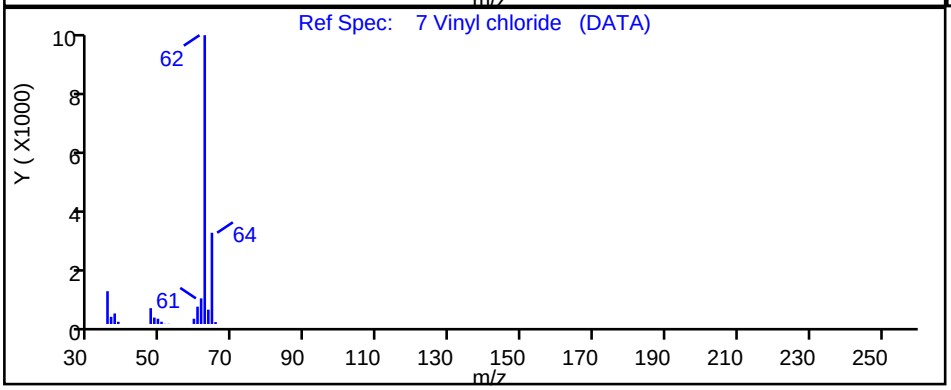
Processing Results











RT	Mass	Response	Amount
4.99	62.00	737	0.006758
4.98	64.00	599	

Reviewer: puangmaleek, 17-Jan-2019 13:19:24

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

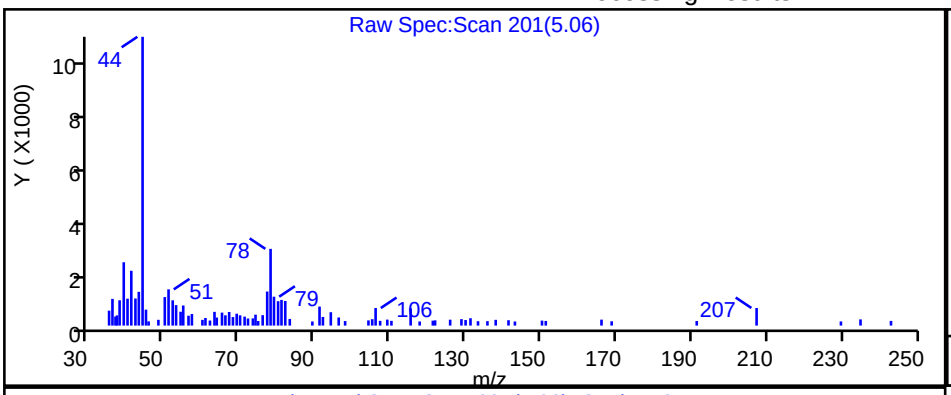
User Disabled Compound Report

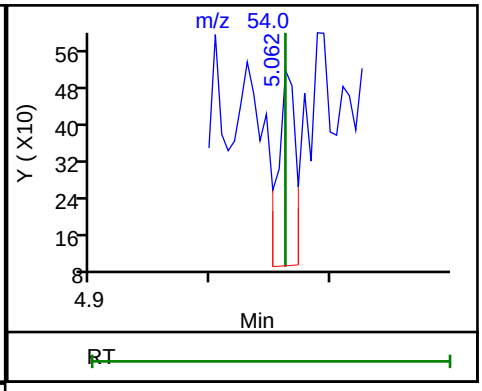
TestAmerica Burlington

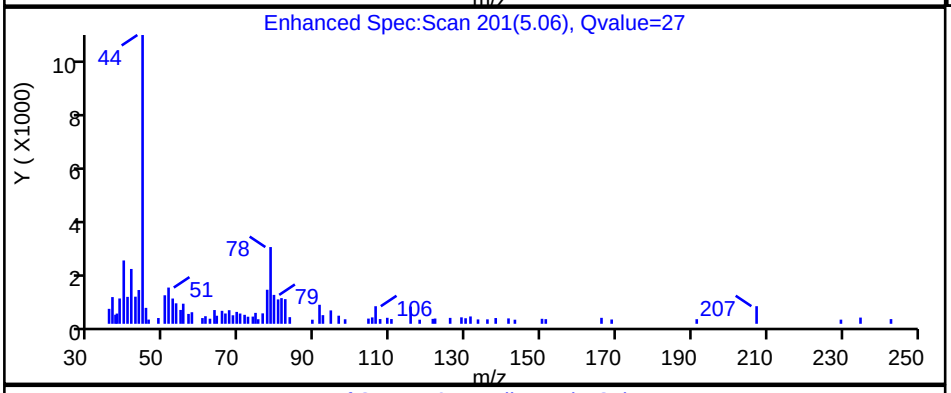
Data File:	\\chromna\Burlington\ChromData\CHX.i\20190116-34174.b\34174-05.D				
Injection Date:	16-Jan-2019 14:52:30	Instrument ID:	CHX.i		
Lims ID:	200-46938-A-7	Lab Sample ID:	200-46938-7		
Client ID:	4557				
Operator ID:	GGG	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

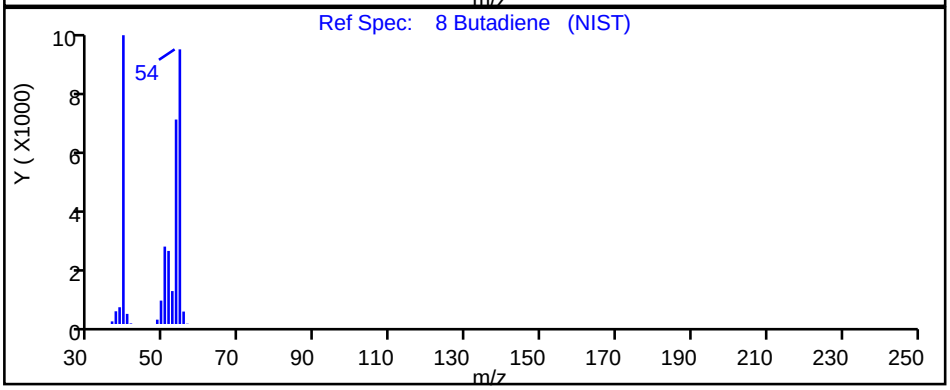
8 Butadiene, CAS: 106-99-0

Processing Results









RT	Mass	Response	Amount
5.06	54.00	442	0.005709

Reviewer: puangmaleek, 17-Jan-2019 13:19:25

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

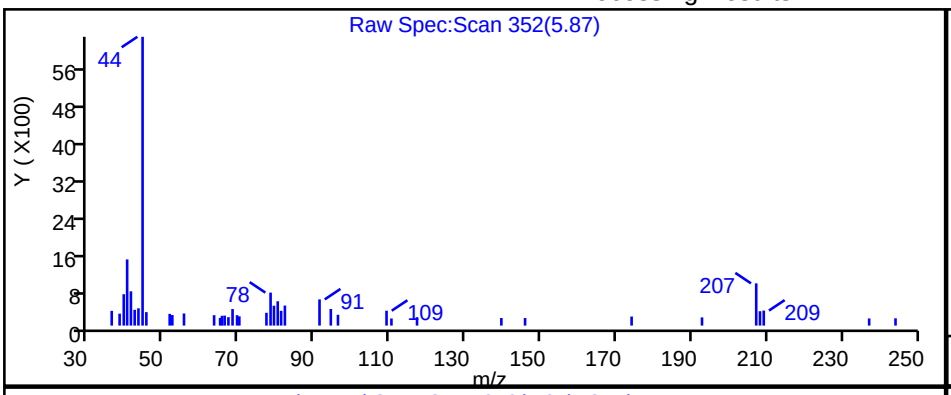
User Disabled Compound Report

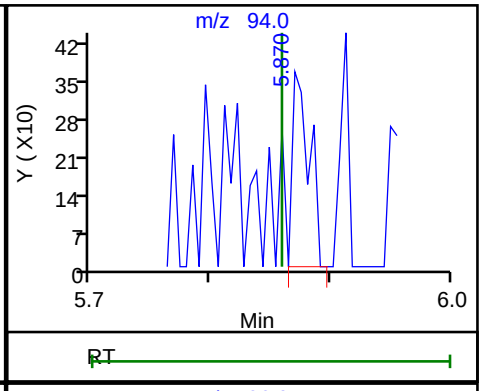
TestAmerica Burlington

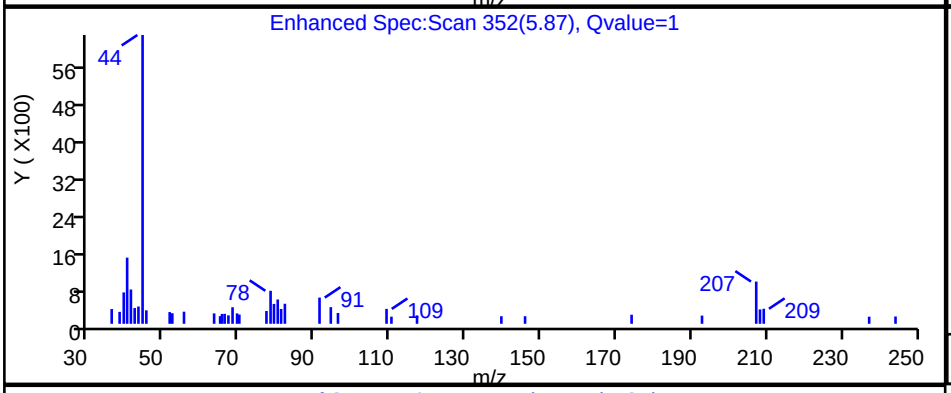
Data File:	\\chromna\Burlington\ChromData\CHX.i\20190116-34174.b\34174-05.D				
Injection Date:	16-Jan-2019 14:52:30	Instrument ID:	CHX.i		
Lims ID:	200-46938-A-7	Lab Sample ID:	200-46938-7		
Client ID:	4557				
Operator ID:	GGG	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

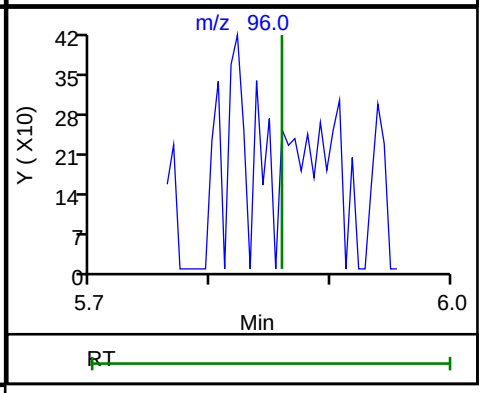
10 Bromomethane, CAS: 74-83-9

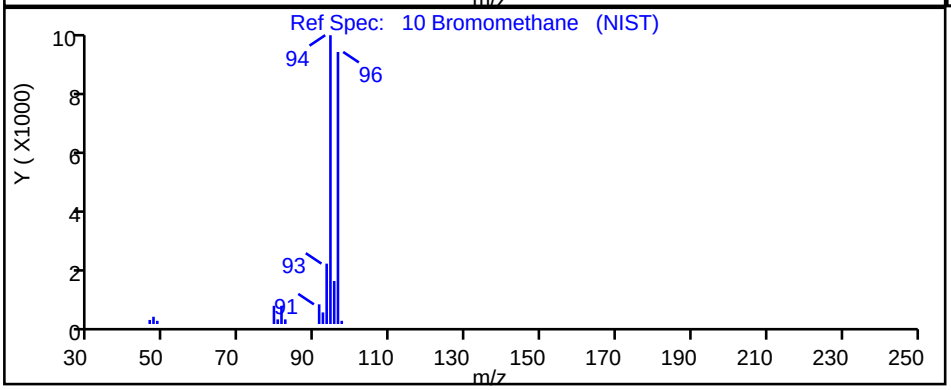
Processing Results











RT	Mass	Response	Amount
5.87	94.00	352	0.001536
5.86	96.00	0	

Reviewer: puangmaleek, 17-Jan-2019 13:19:26

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

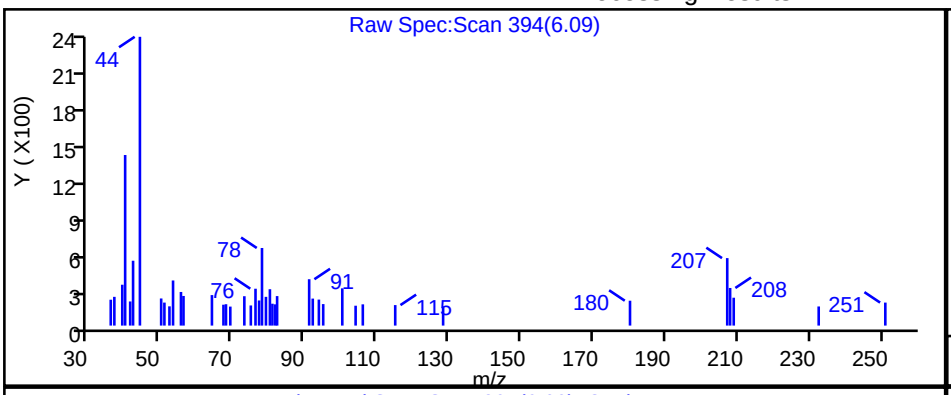
User Disabled Compound Report

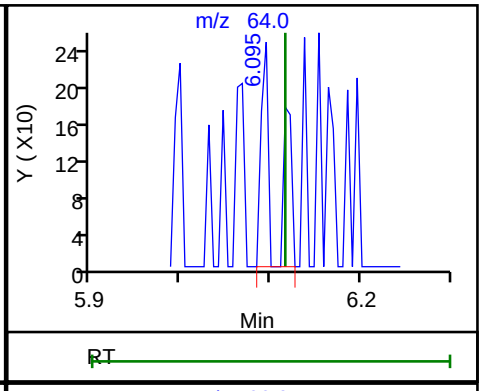
TestAmerica Burlington

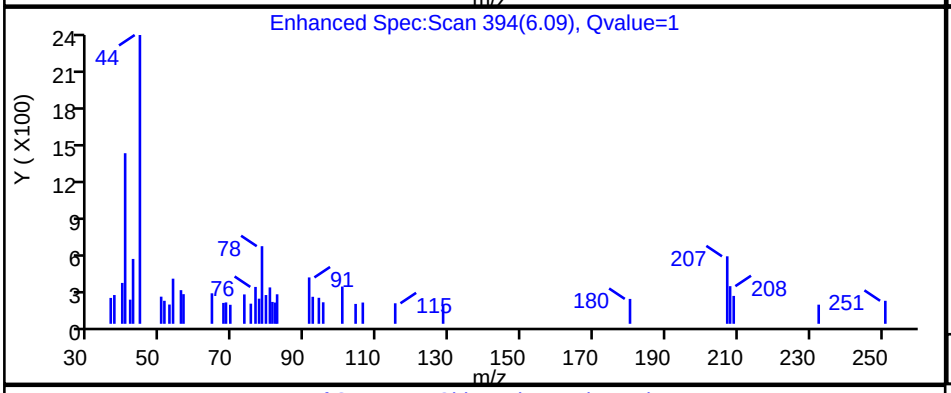
Data File:	\\chromna\Burlington\ChromData\CHX.i\20190116-34174.b\34174-05.D				
Injection Date:	16-Jan-2019 14:52:30	Instrument ID:	CHX.i		
Lims ID:	200-46938-A-7	Lab Sample ID:	200-46938-7		
Client ID:	4557				
Operator ID:	GGG	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

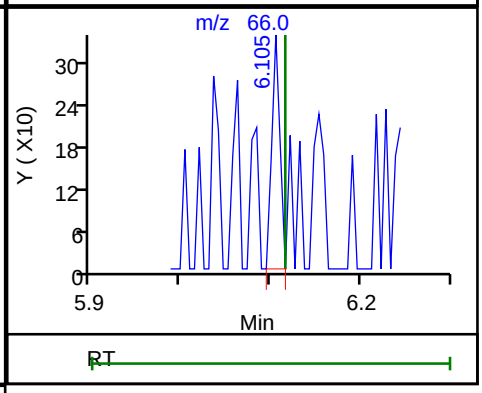
11 Chloroethane, CAS: 75-00-3

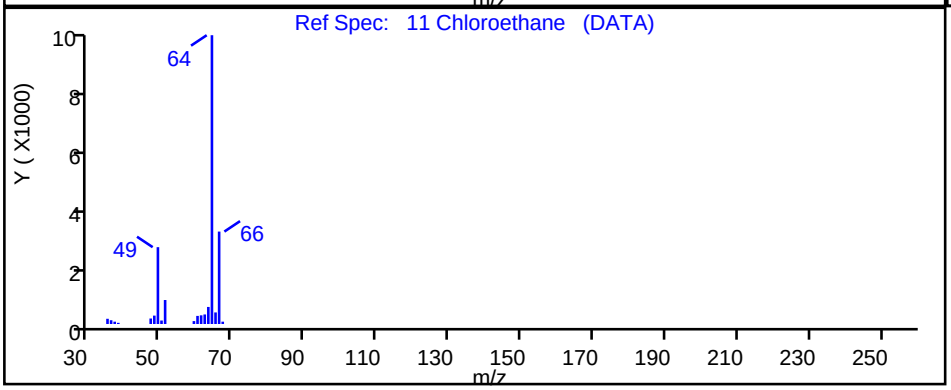
Processing Results











RT	Mass	Response	Amount
6.09	64.00	241	0.002285
6.11	66.00	207	

Reviewer: puangmaleek, 17-Jan-2019 13:19:28

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

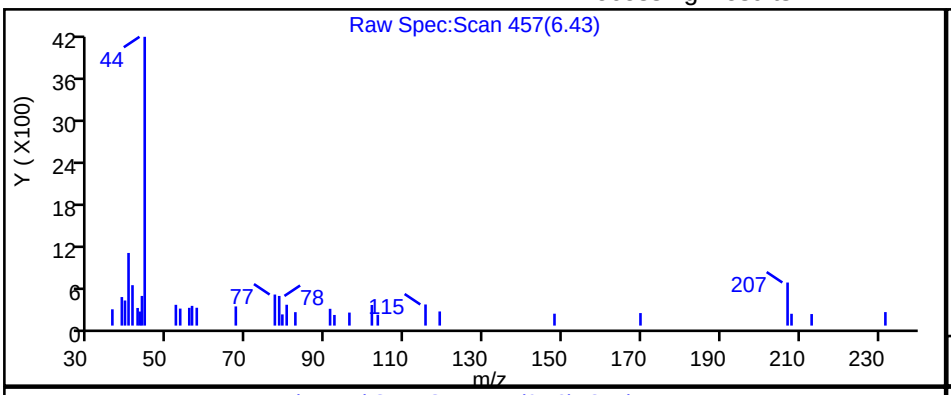
User Disabled Compound Report

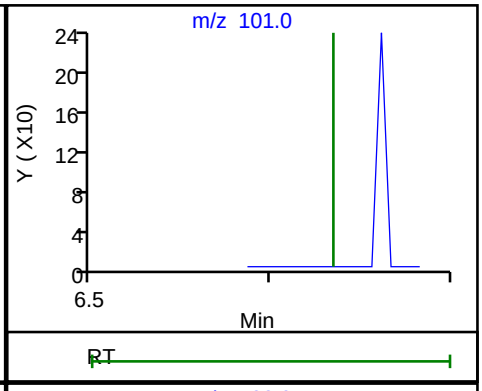
TestAmerica Burlington

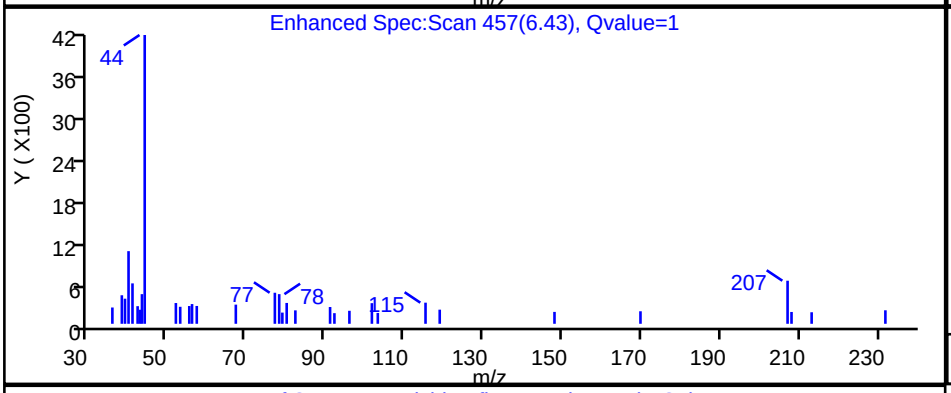
Data File:	\\chromna\Burlington\ChromData\CHX.i\20190116-34174.b\34174-05.D				
Injection Date:	16-Jan-2019 14:52:30	Instrument ID:	CHX.i		
Lims ID:	200-46938-A-7	Lab Sample ID:	200-46938-7		
Client ID:	4557				
Operator ID:	GGG	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

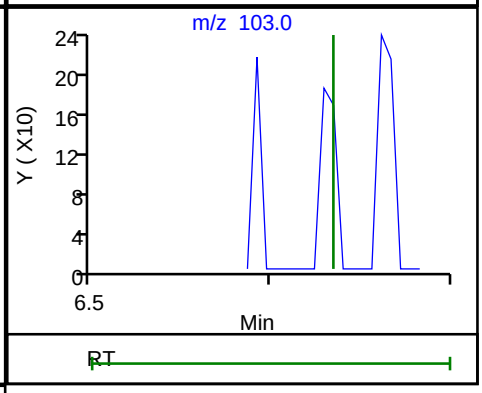
14 Trichlorofluoromethane, CAS: 75-69-4

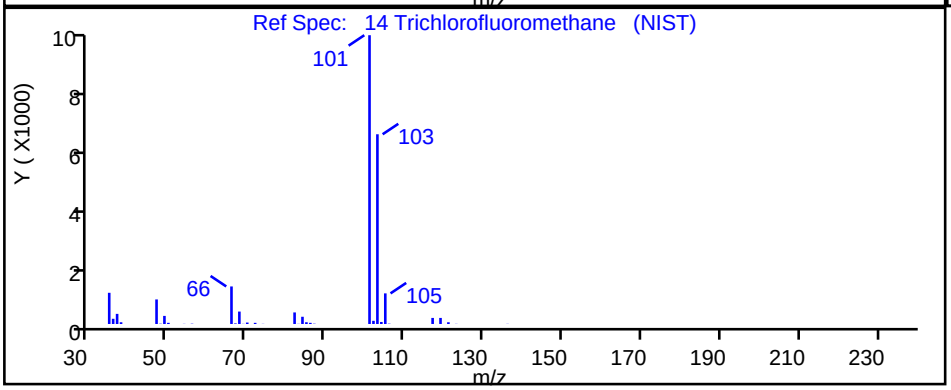
Processing Results











RT	Mass	Response	Amount
6.43	101.00	164	0.000255
6.63	103.00	0	

Reviewer: puangmaleek, 17-Jan-2019 13:19:29

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

TestAmerica Burlington

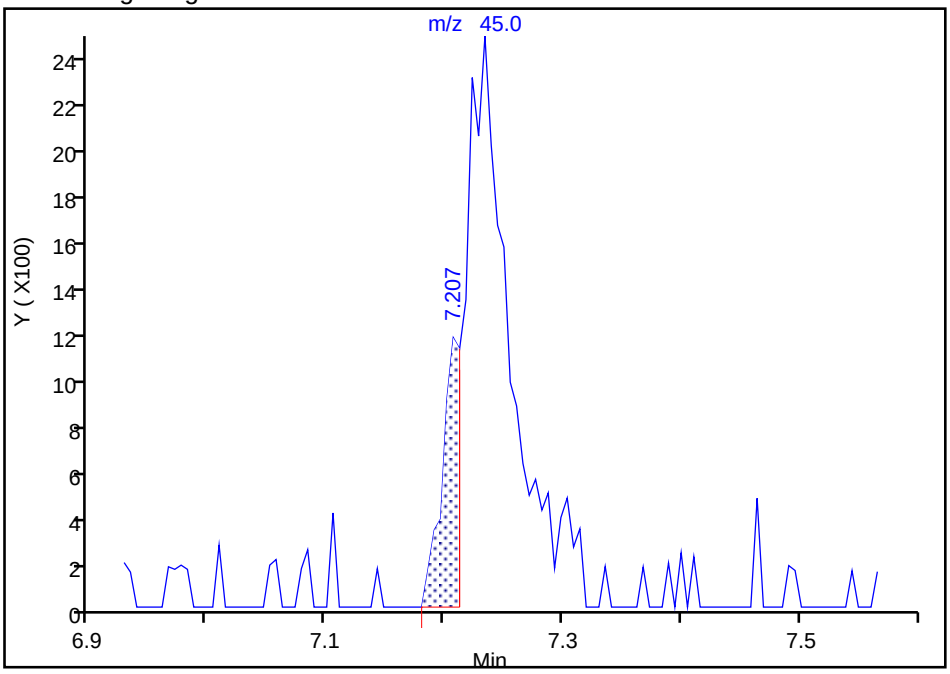
Data File:	\\chromna\Burlington\ChromData\CHX.i\20190116-34174.b\34174-05.D				
Injection Date:	16-Jan-2019 14:52:30	Instrument ID:	CHX.i		
Lims ID:	200-46938-A-7	Lab Sample ID:	200-46938-7		
Client ID:	4557				
Operator ID:	GGG	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

17 Ethanol, CAS: 64-17-5

Signal: 1

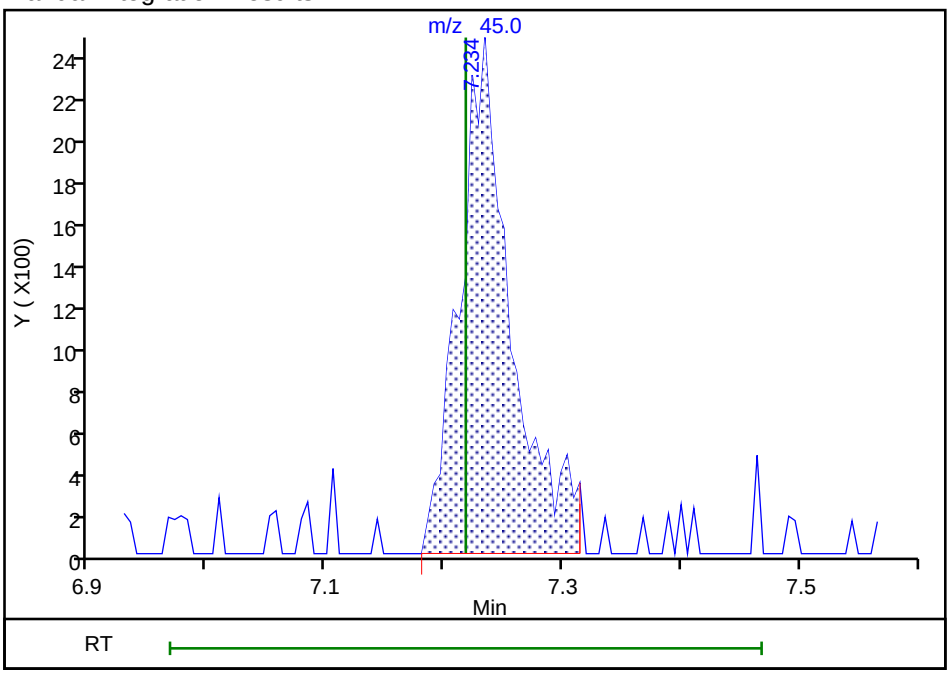
Processing Integration Results

RT: 7.21
Area: 1292
Amount: 0.033464
Amount Units: ppb v/v



Manual Integration Results

RT: 7.23
Area: 7452
Amount: 0.193015
Amount Units: ppb v/v



Reviewer: puangmaleek, 17-Jan-2019 13:19:41
Audit Action: Manually Integrated Audit Reason: Assign Peak

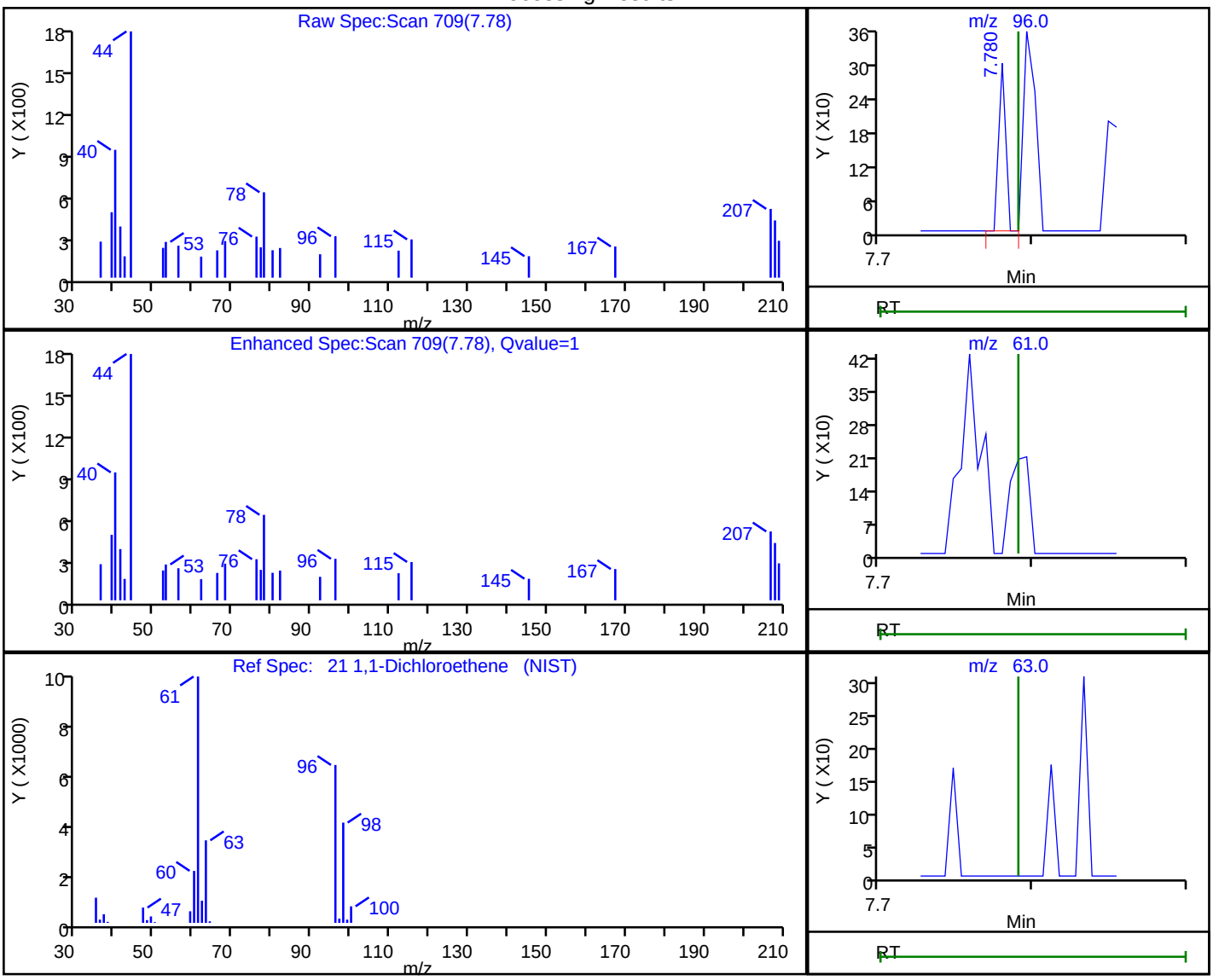
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\chromna\Burlington\ChromData\CHX.i\20190116-34174.b\34174-05.D				
Injection Date:	16-Jan-2019 14:52:30	Instrument ID:	CHX.i		
Lims ID:	200-46938-A-7	Lab Sample ID:	200-46938-7		
Client ID:	4557				
Operator ID:	GGG	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

21 1,1-Dichloroethene, CAS: 75-35-4

Processing Results



RT	Mass	Response	Amount
7.78	96.00	96	0.000373
7.79	61.00	0	
7.79	63.00	0	

Reviewer: puangmaleek, 17-Jan-2019 13:19:45

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

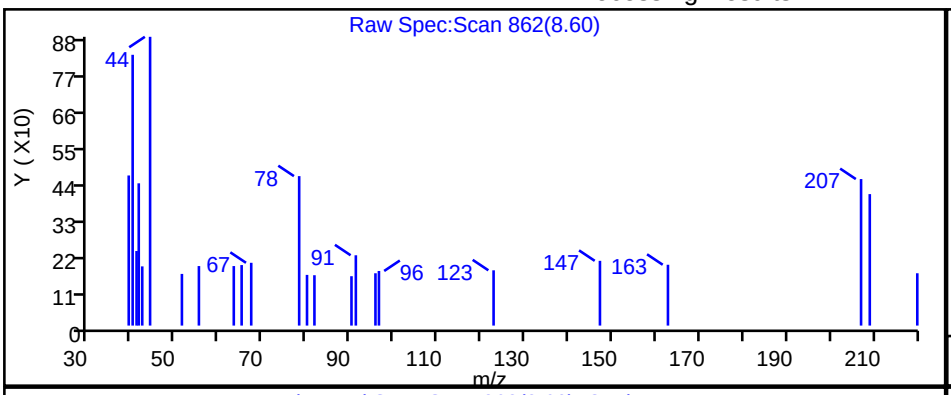
User Disabled Compound Report

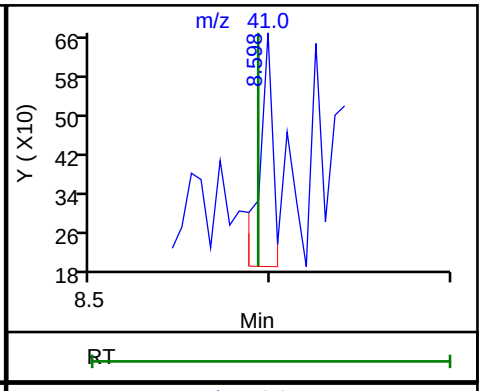
TestAmerica Burlington

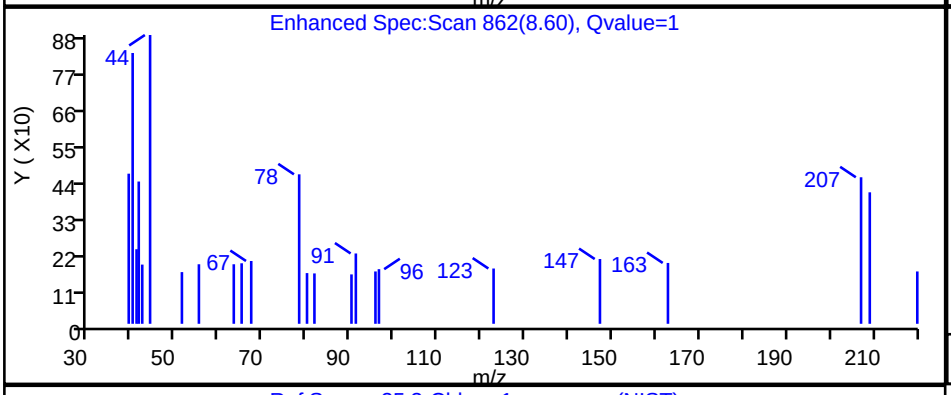
Data File:	\\chromna\Burlington\ChromData\CHX.i\20190116-34174.b\34174-05.D				
Injection Date:	16-Jan-2019 14:52:30	Instrument ID:	CHX.i		
Lims ID:	200-46938-A-7	Lab Sample ID:	200-46938-7		
Client ID:	4557				
Operator ID:	GGG	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

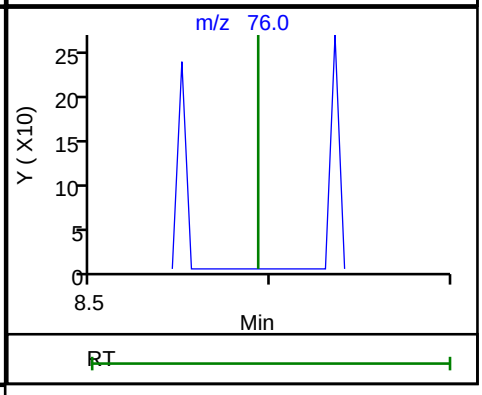
25 3-Chloro-1-propene, CAS: 107-05-1

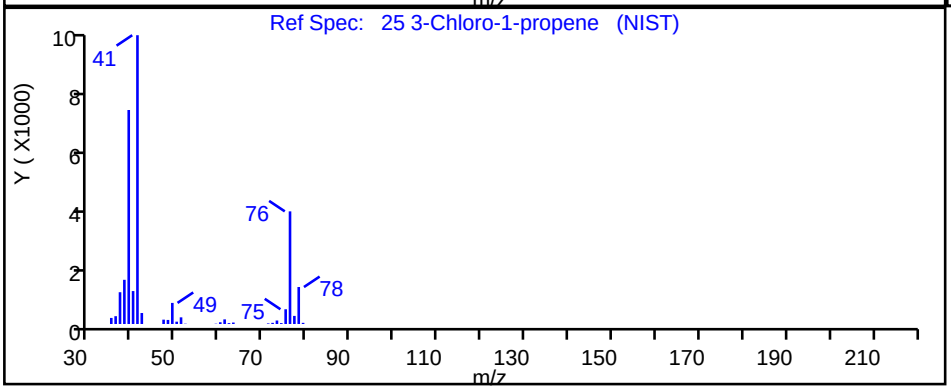
Processing Results











RT	Mass	Response	Amount
8.60	41.00	249	0.001582
8.59	76.00	0	

Reviewer: puangmaleek, 17-Jan-2019 13:19:50

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

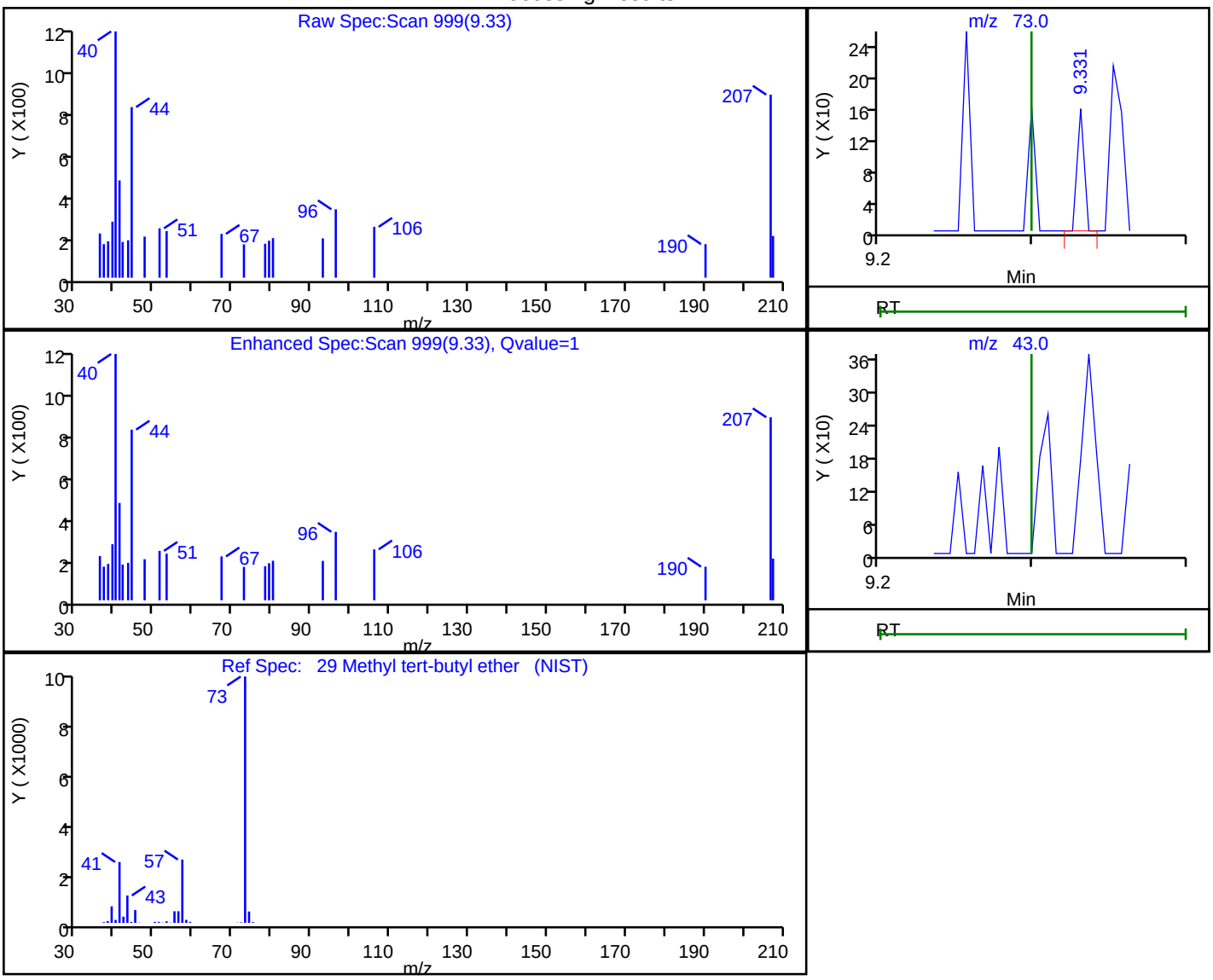
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\chromna\Burlington\ChromData\CHX.i\20190116-34174.b\34174-05.D				
Injection Date:	16-Jan-2019 14:52:30	Instrument ID:	CHX.i		
Lims ID:	200-46938-A-7	Lab Sample ID:	200-46938-7		
Client ID:	4557				
Operator ID:	GGG	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

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

Processing Results



RT	Mass	Response	Amount
9.33	73.00	50	0.000076
9.30	43.00	0	

Reviewer: puangmaleek, 17-Jan-2019 13:19:52

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

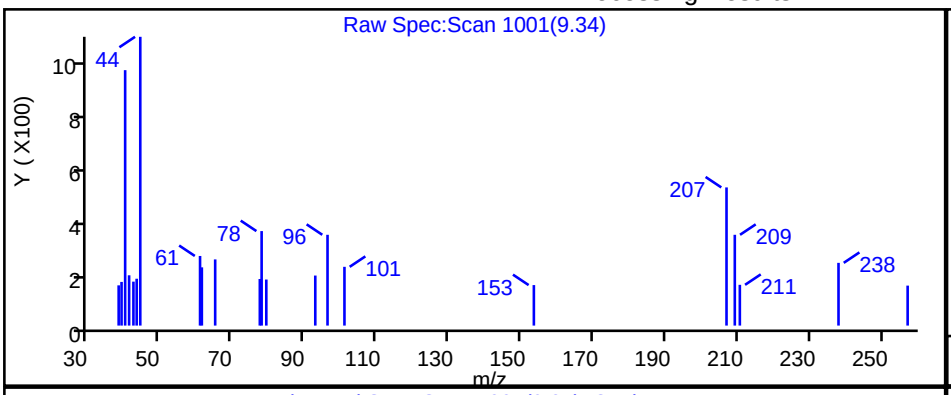
User Disabled Compound Report

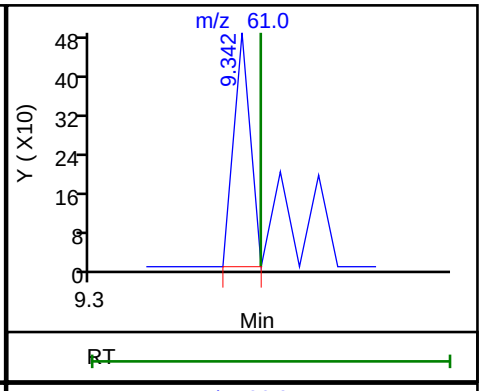
TestAmerica Burlington

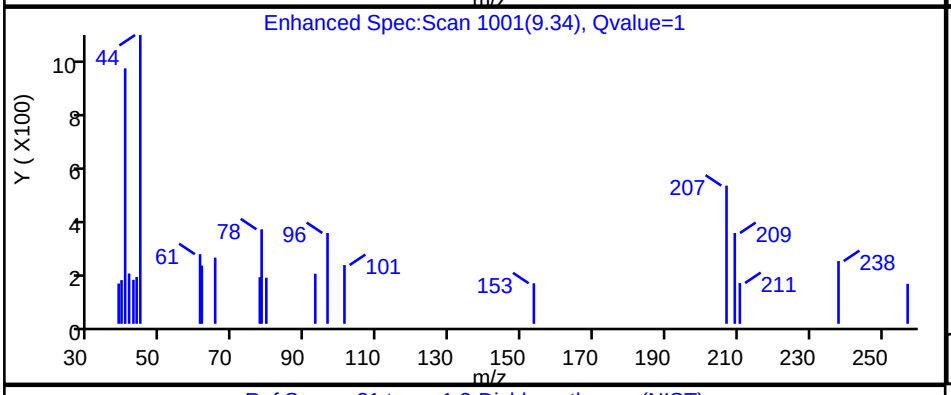
Data File:	\\chromna\Burlington\ChromData\CHX.i\20190116-34174.b\34174-05.D				
Injection Date:	16-Jan-2019 14:52:30	Instrument ID:	CHX.i		
Lims ID:	200-46938-A-7	Lab Sample ID:	200-46938-7		
Client ID:	4557				
Operator ID:	GGG	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

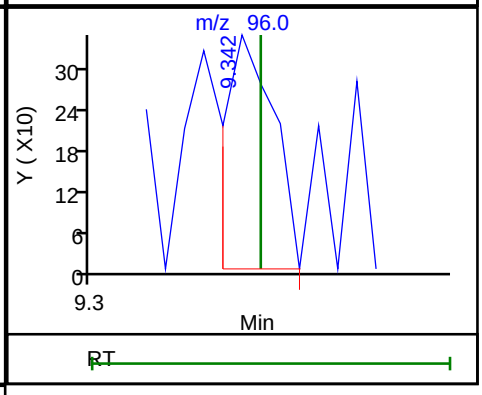
31 trans-1,2-Dichloroethene, CAS: 156-60-5

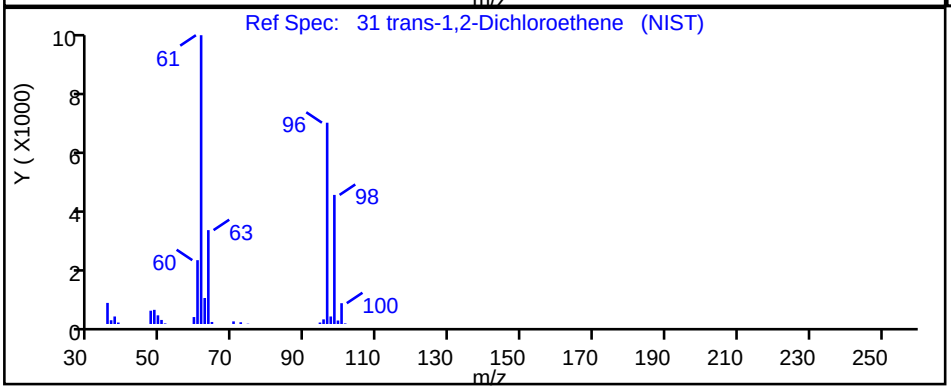
Processing Results











RT	Mass	Response	Amount
9.34	61.00	155	0.000525
9.34	96.00	333	

Reviewer: puangmaleek, 17-Jan-2019 13:19:54

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

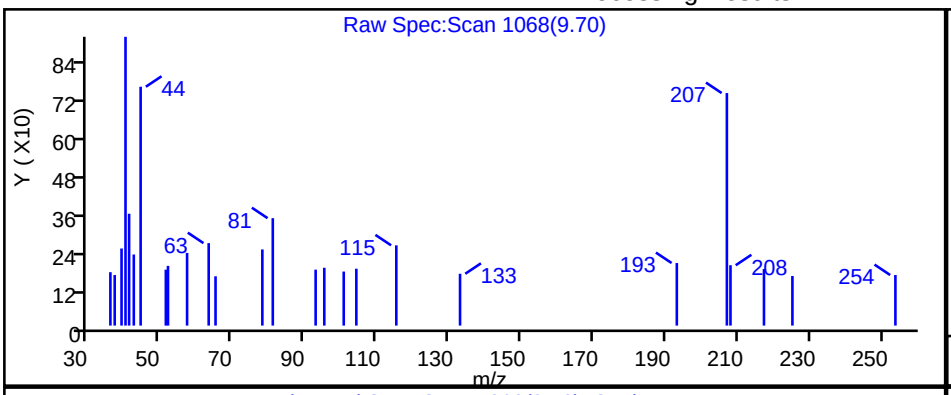
User Disabled Compound Report

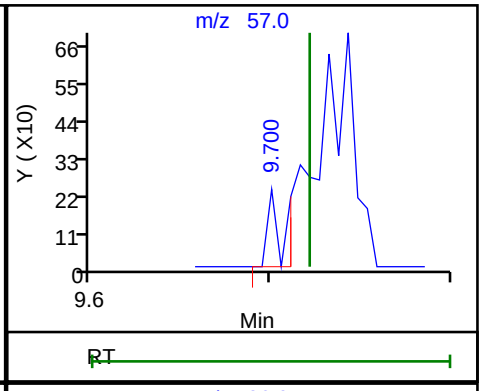
TestAmerica Burlington

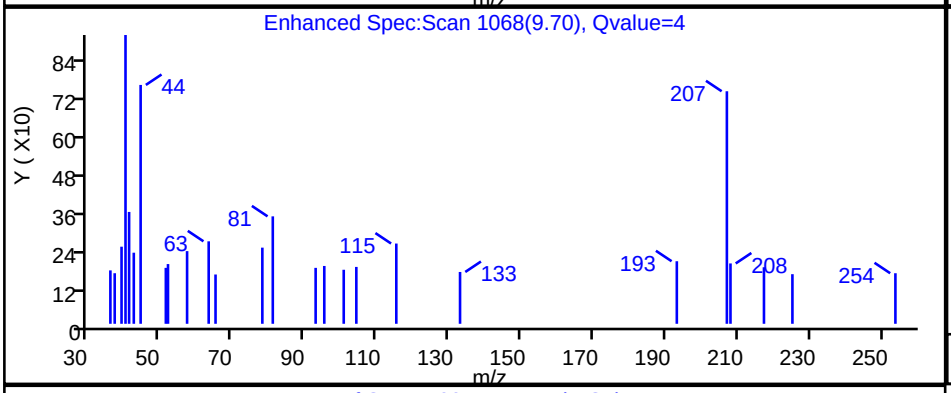
Data File:	\\chromna\Burlington\ChromData\CHX.i\20190116-34174.b\34174-05.D				
Injection Date:	16-Jan-2019 14:52:30	Instrument ID:	CHX.i		
Lims ID:	200-46938-A-7	Lab Sample ID:	200-46938-7		
Client ID:	4557				
Operator ID:	GGG	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

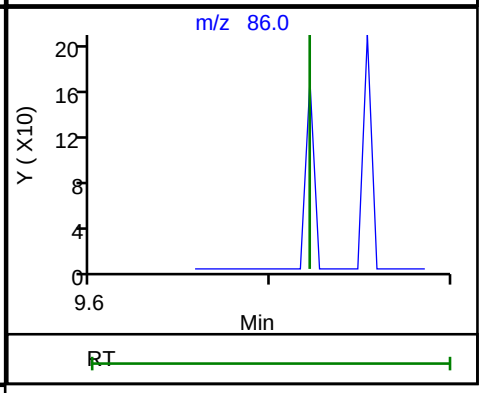
33 Hexane, CAS: 110-54-3

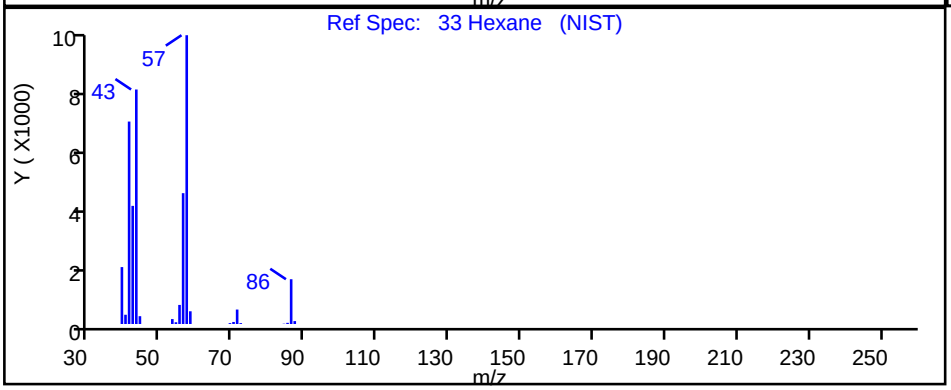
Processing Results











RT	Mass	Response	Amount
9.70	57.00	141	0.000517
9.72	86.00	0	

Reviewer: puangmaleek, 17-Jan-2019 13:19:56

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

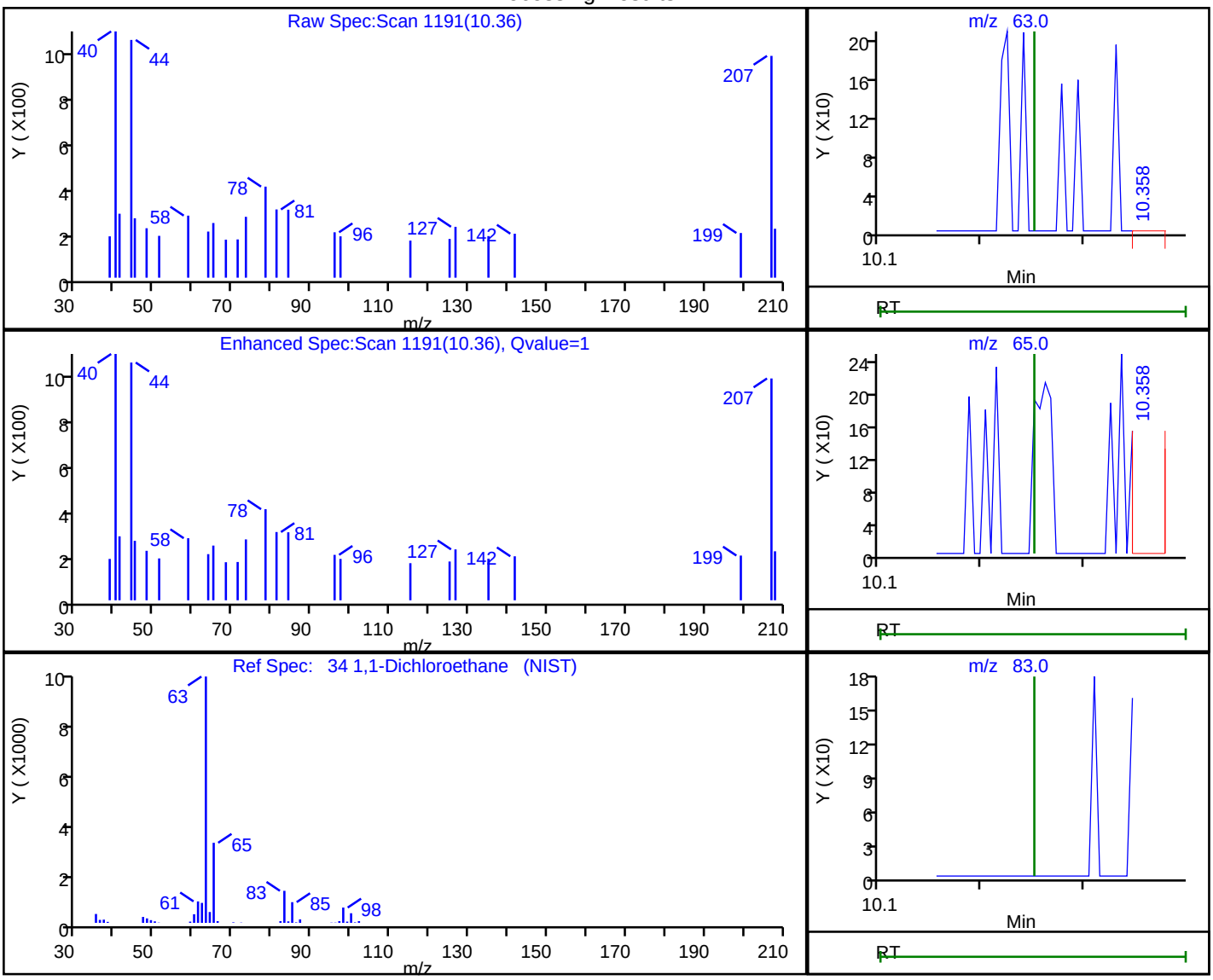
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\chromna\Burlington\ChromData\CHX.i\20190116-34174.b\34174-05.D				
Injection Date:	16-Jan-2019 14:52:30	Instrument ID:	CHX.i		
Lims ID:	200-46938-A-7	Lab Sample ID:	200-46938-7		
Client ID:	4557				
Operator ID:	GGG	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

34 1,1-Dichloroethane, CAS: 75-34-3

Processing Results



RT	Mass	Response	Amount
10.36	63.00	112	0.000302
10.36	65.00	187	
10.25	83.00	0	

Reviewer: puangmaleek, 17-Jan-2019 13:19:57

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

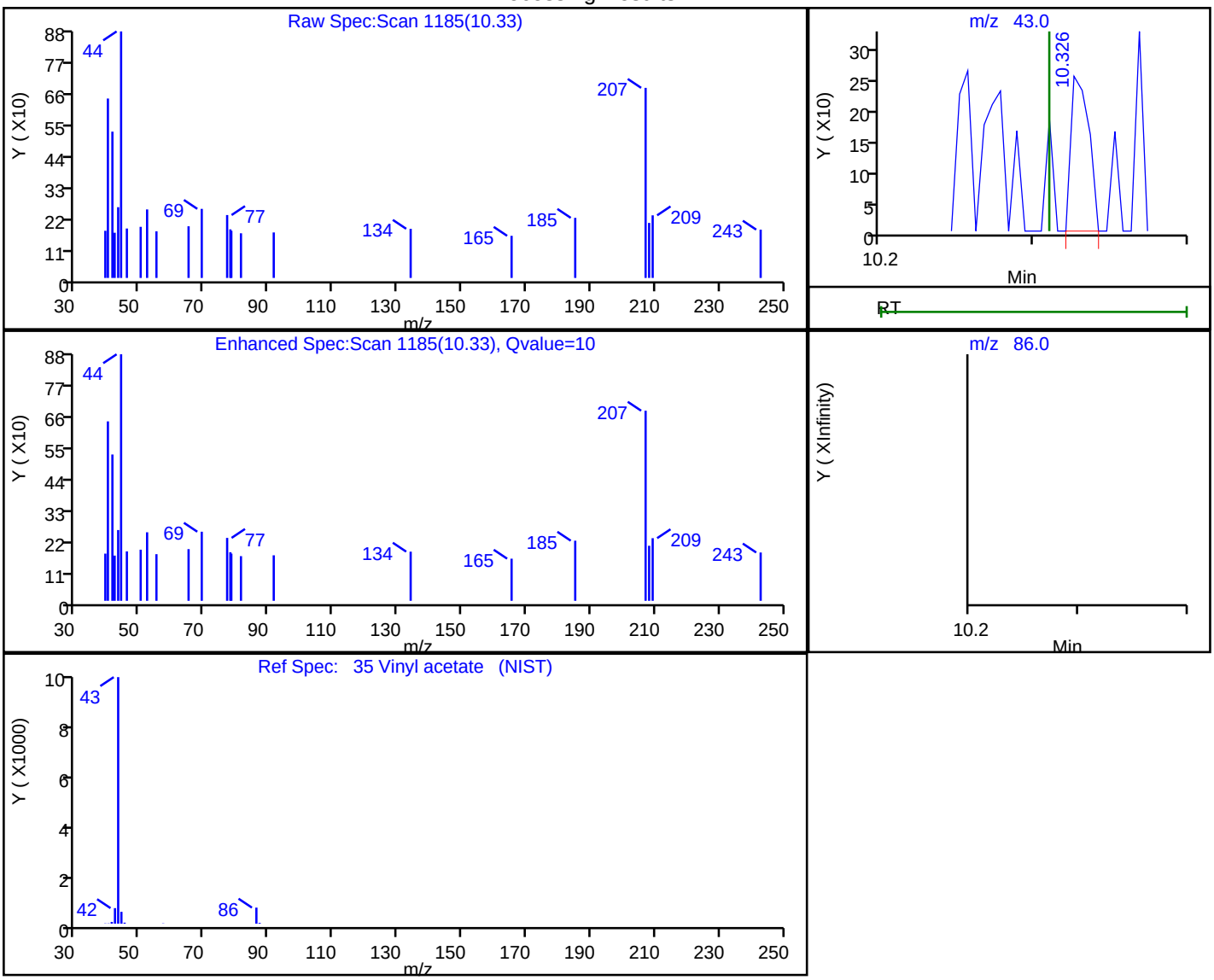
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\chromna\Burlington\ChromData\CHX.i\20190116-34174.b\34174-05.D				
Injection Date:	16-Jan-2019 14:52:30	Instrument ID:	CHX.i		
Lims ID:	200-46938-A-7	Lab Sample ID:	200-46938-7		
Client ID:	4557				
Operator ID:	GGG	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

35 Vinyl acetate, CAS: 108-05-4

Processing Results



RT	Mass	Response	Amount
10.33	43.00	205	0.000619
10.31	86.00	0	

Reviewer: puangmaleek, 17-Jan-2019 13:19:59

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

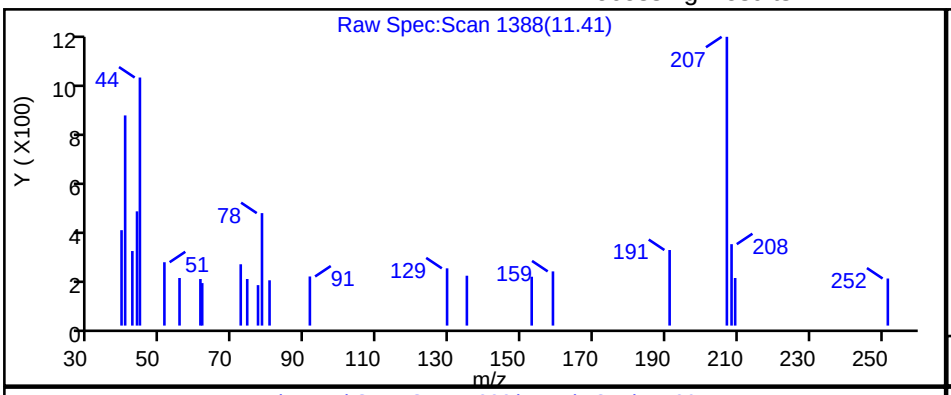
User Disabled Compound Report

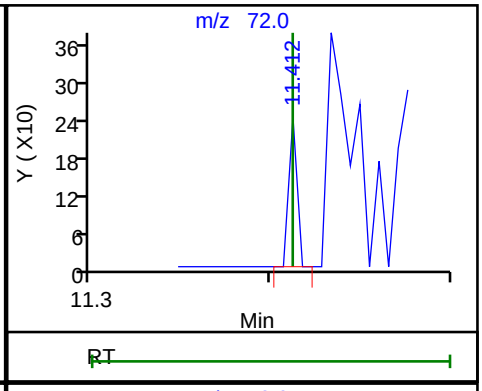
TestAmerica Burlington

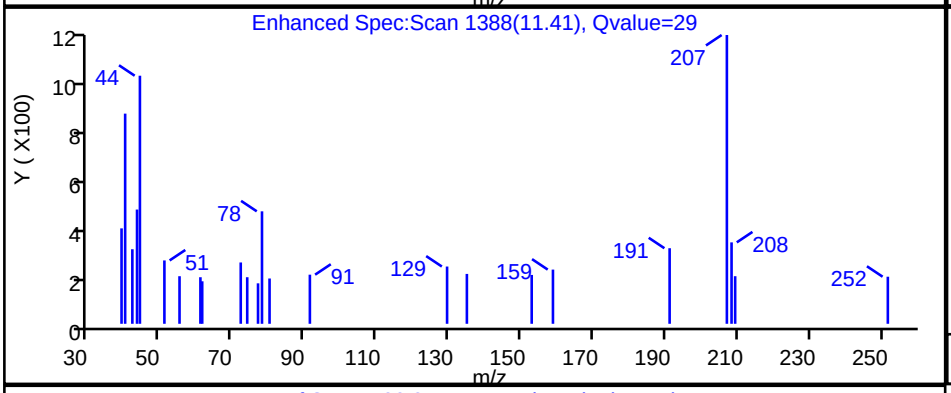
Data File:	\\chromna\Burlington\ChromData\CHX.i\20190116-34174.b\34174-05.D				
Injection Date:	16-Jan-2019 14:52:30	Instrument ID:	CHX.i		
Lims ID:	200-46938-A-7	Lab Sample ID:	200-46938-7		
Client ID:	4557				
Operator ID:	GGG	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

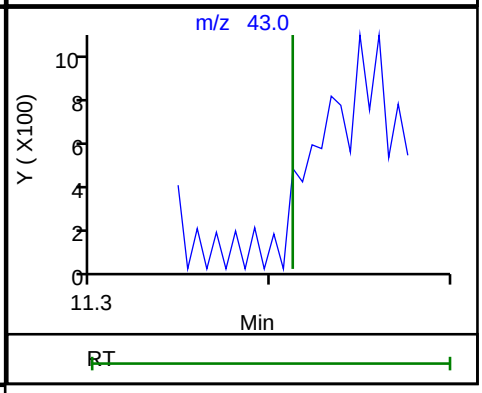
38 2-Butanone (MEK), CAS: 78-93-3

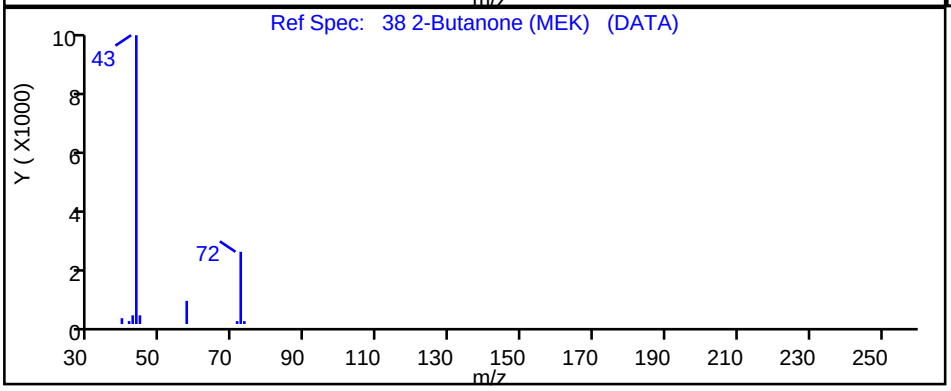
Processing Results











RT	Mass	Response	Amount
11.41	72.00	77	0.000711
11.41	43.00	0	

Reviewer: puangmaleek, 17-Jan-2019 13:20:01

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

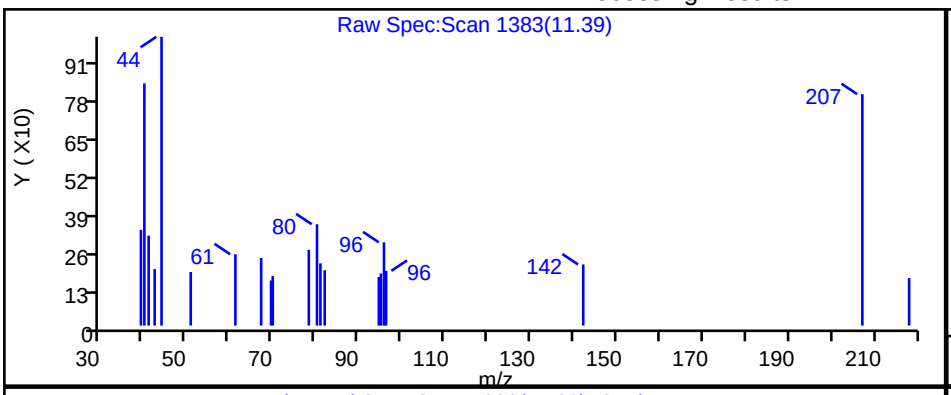
User Disabled Compound Report

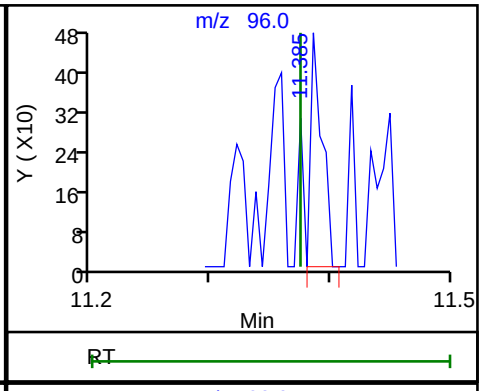
TestAmerica Burlington

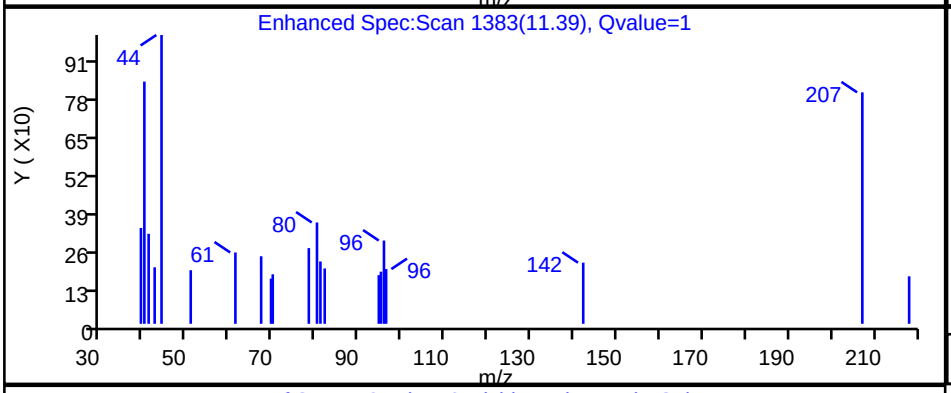
Data File:	\\chromna\Burlington\ChromData\CHX.i\20190116-34174.b\34174-05.D				
Injection Date:	16-Jan-2019 14:52:30	Instrument ID:	CHX.i		
Lims ID:	200-46938-A-7	Lab Sample ID:	200-46938-7		
Client ID:	4557				
Operator ID:	GGG	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

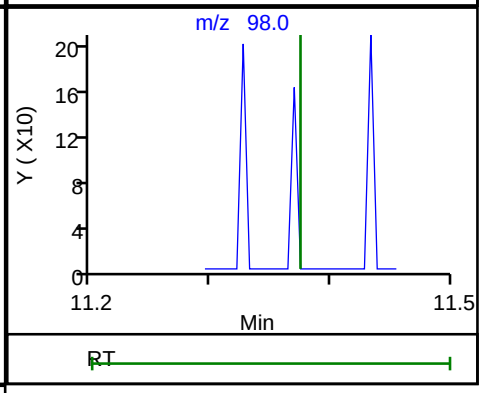
37 cis-1,2-Dichloroethene, CAS: 156-59-2

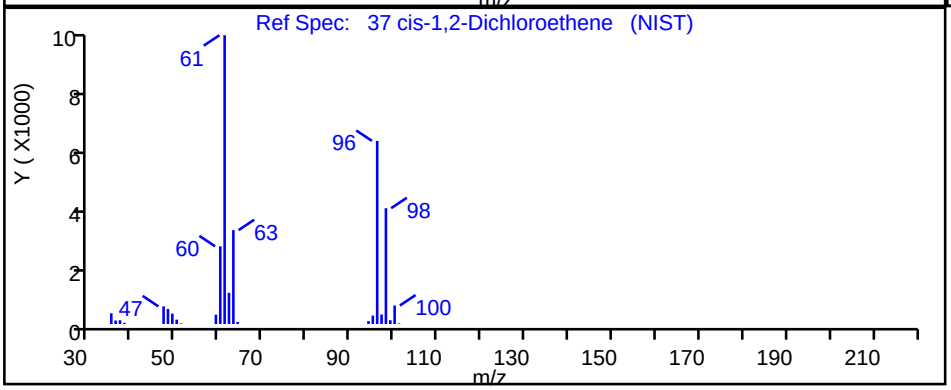
Processing Results











RT	Mass	Response	Amount
11.39	96.00	312	0.001189
11.37	98.00	0	

Reviewer: puangmaleek, 17-Jan-2019 13:20:00

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

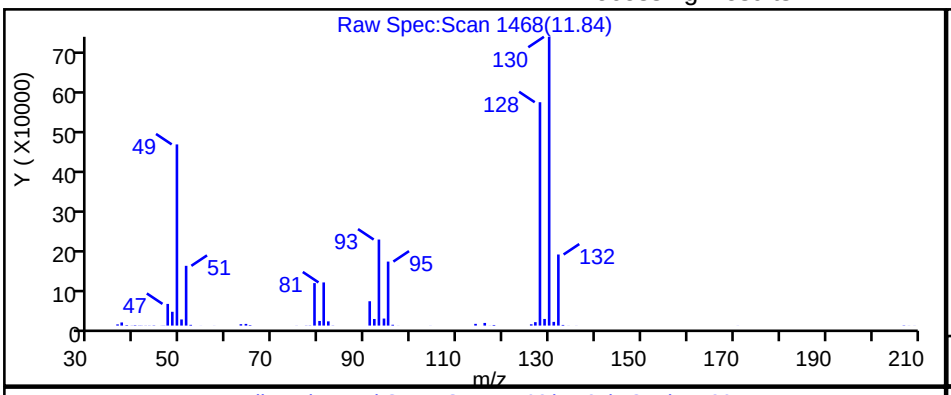
User Disabled Compound Report

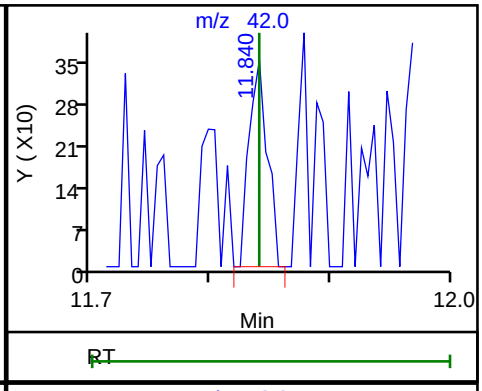
TestAmerica Burlington

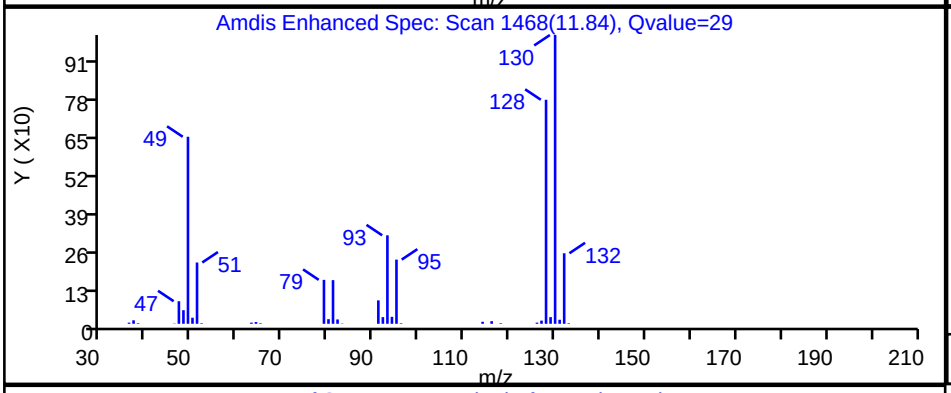
Data File:	\\chromna\Burlington\ChromData\CHX.i\20190116-34174.b\34174-05.D				
Injection Date:	16-Jan-2019 14:52:30	Instrument ID:	CHX.i		
Lims ID:	200-46938-A-7	Lab Sample ID:	200-46938-7		
Client ID:	4557				
Operator ID:	GGG	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

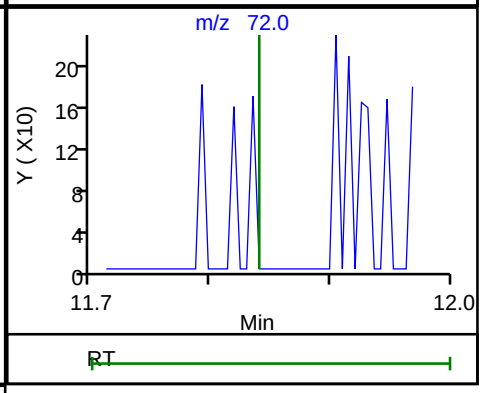
41 Tetrahydrofuran, CAS: 109-99-9

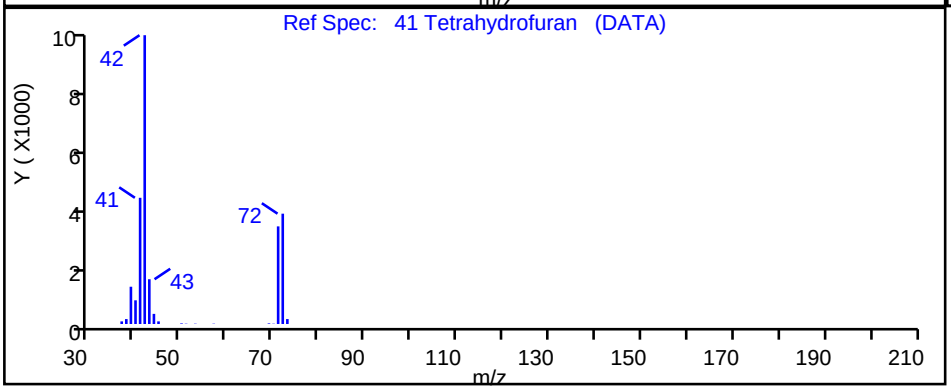
Processing Results











RT	Mass	Response	Amount
11.84	42.00	376	0.002712
11.84	72.00	0	

Reviewer: puangmaleek, 17-Jan-2019 13:20:04

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

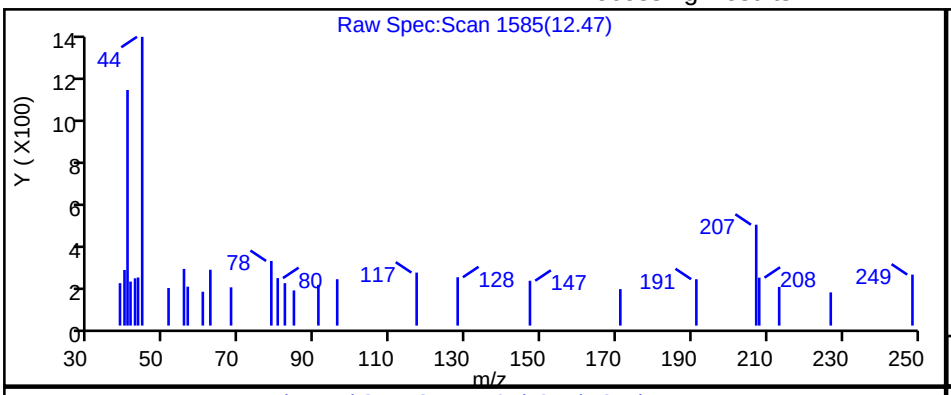
User Disabled Compound Report

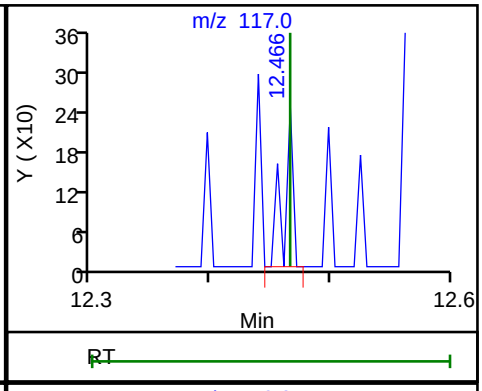
TestAmerica Burlington

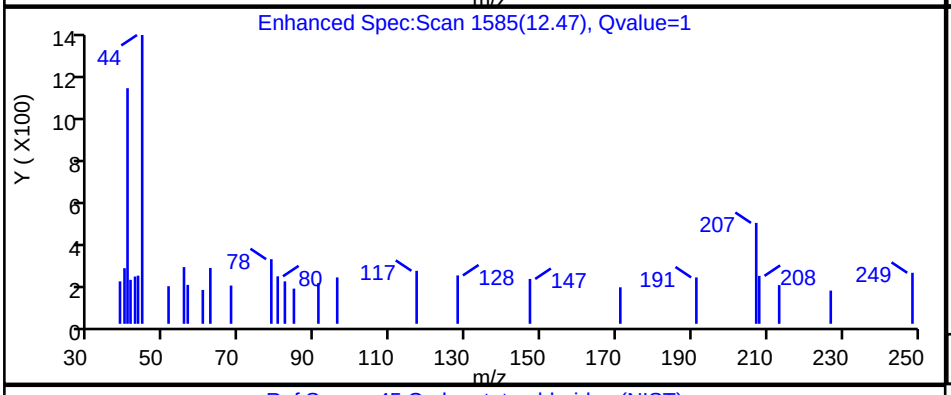
Data File:	\\chromna\Burlington\ChromData\CHX.i\20190116-34174.b\34174-05.D				
Injection Date:	16-Jan-2019 14:52:30	Instrument ID:	CHX.i		
Lims ID:	200-46938-A-7	Lab Sample ID:	200-46938-7		
Client ID:	4557				
Operator ID:	GGG	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

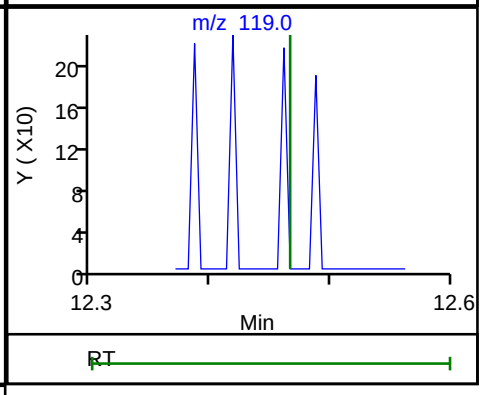
45 Carbon tetrachloride, CAS: 56-23-5

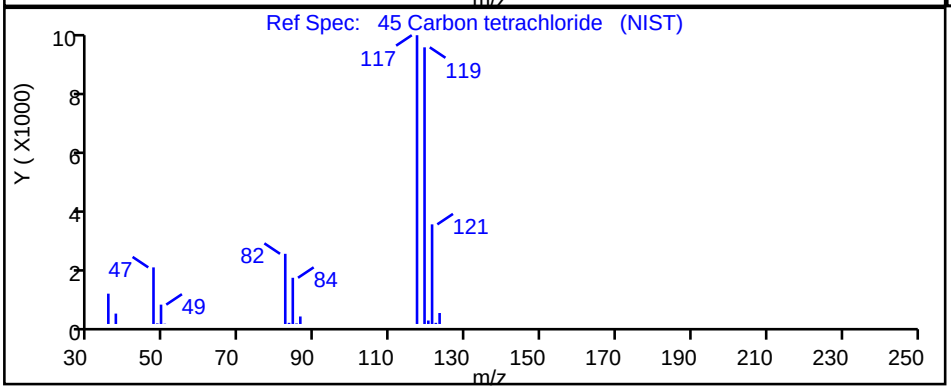
Processing Results











RT	Mass	Response	Amount
12.47	117.00	127	0.000215
12.47	119.00	0	

Reviewer: puangmaleek, 17-Jan-2019 13:20:06

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

TestAmerica Burlington

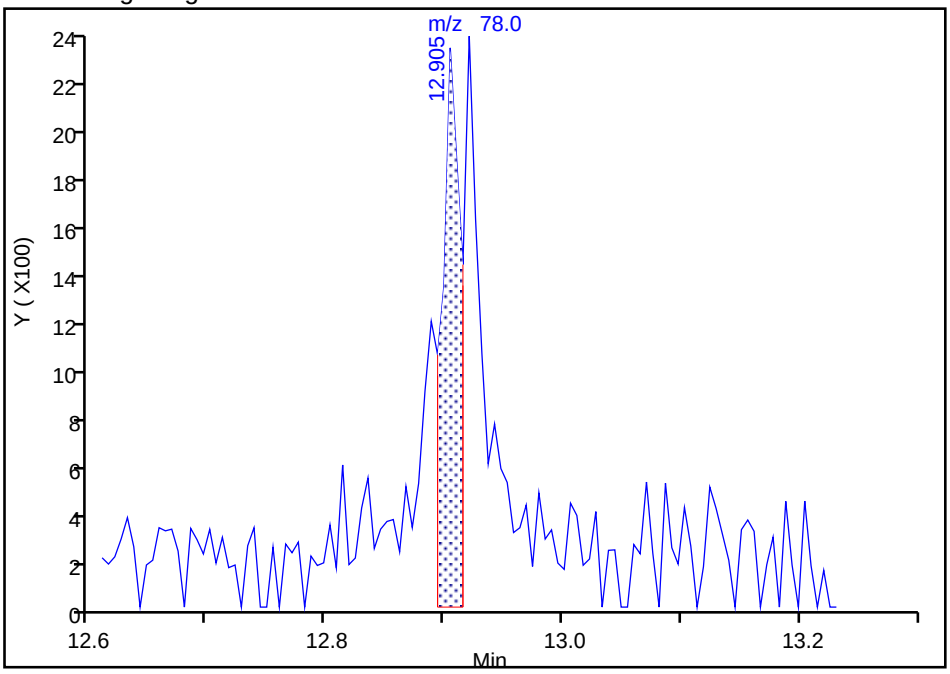
Data File:	\\chromna\Burlington\ChromData\CHX.i\20190116-34174.b\34174-05.D				
Injection Date:	16-Jan-2019 14:52:30	Instrument ID:	CHX.i		
Lims ID:	200-46938-A-7	Lab Sample ID:	200-46938-7		
Client ID:	4557				
Operator ID:	GGG	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

47 Benzene, CAS: 71-43-2

Signal: 1

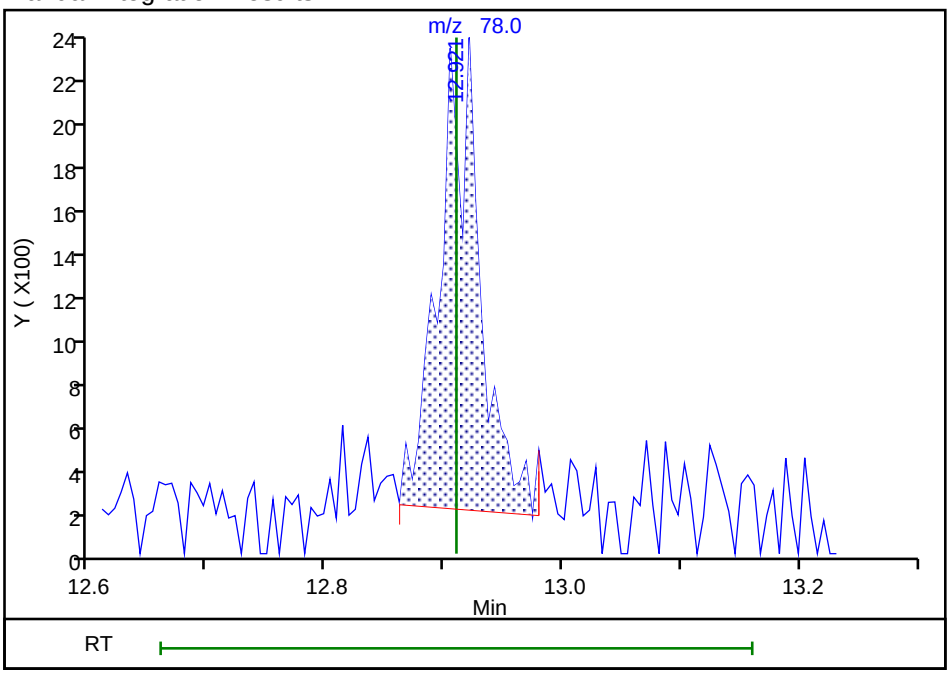
Processing Integration Results

RT: 12.90
Area: 2568
Amount: 0.003645
Amount Units: ppb v/v



Manual Integration Results

RT: 12.92
Area: 5218
Amount: 0.007406
Amount Units: ppb v/v



Reviewer: puangmaleek, 17-Jan-2019 13:20:15
Audit Action: Manually Integrated Audit Reason: Assign Peak

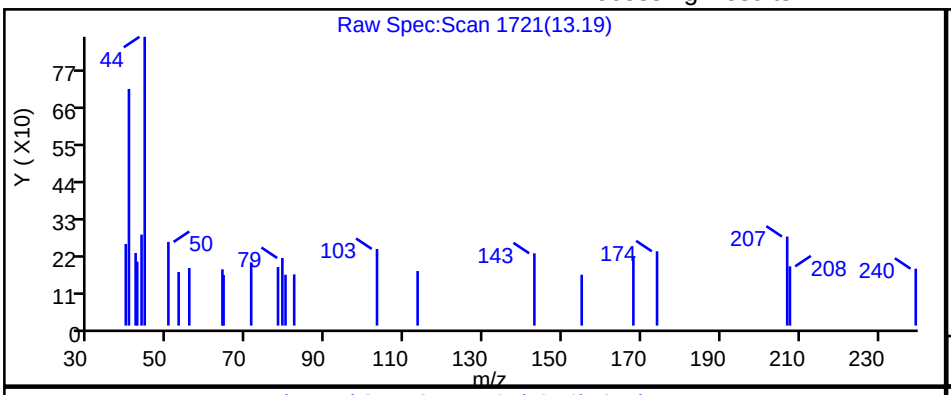
User Disabled Compound Report

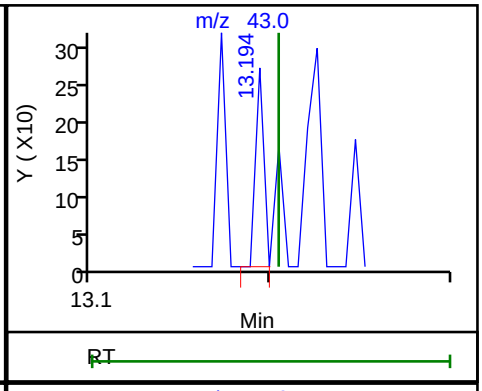
TestAmerica Burlington

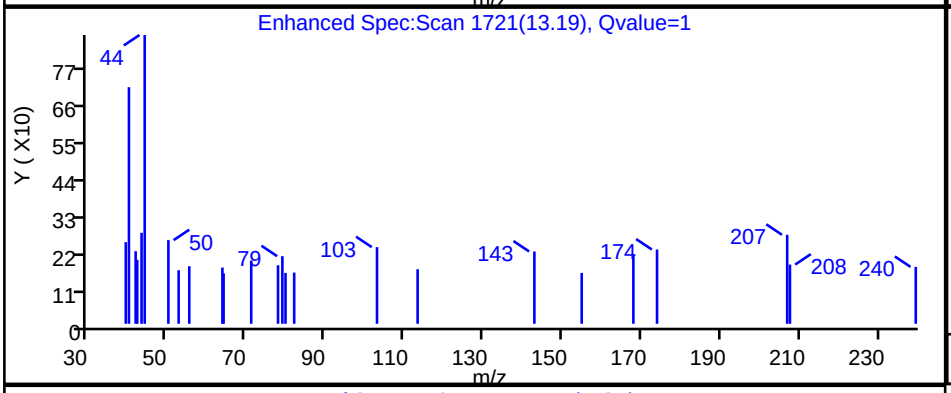
Data File:	\\chromna\Burlington\ChromData\CHX.i\20190116-34174.b\34174-05.D				
Injection Date:	16-Jan-2019 14:52:30	Instrument ID:	CHX.i		
Lims ID:	200-46938-A-7	Lab Sample ID:	200-46938-7		
Client ID:	4557				
Operator ID:	GGG	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

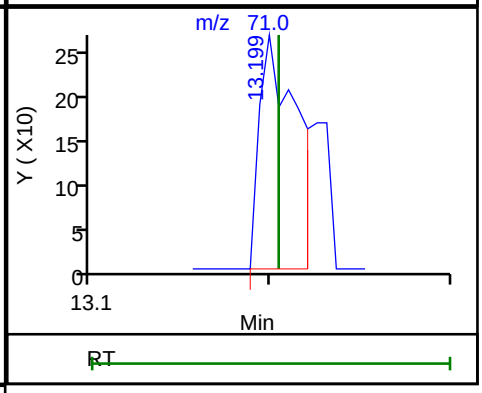
49 n-Heptane, CAS: 142-82-5

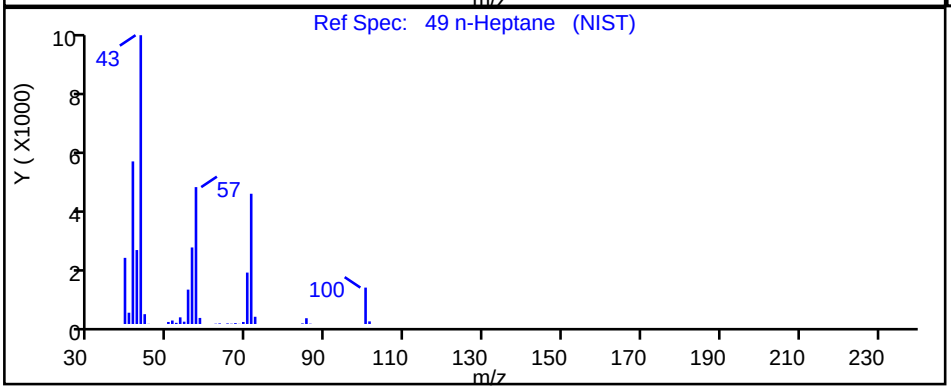
Processing Results











RT	Mass	Response	Amount
13.19	43.00	87	0.000345
13.20	71.00	384	

Reviewer: puangmaleek, 17-Jan-2019 13:20:20

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

TestAmerica Burlington

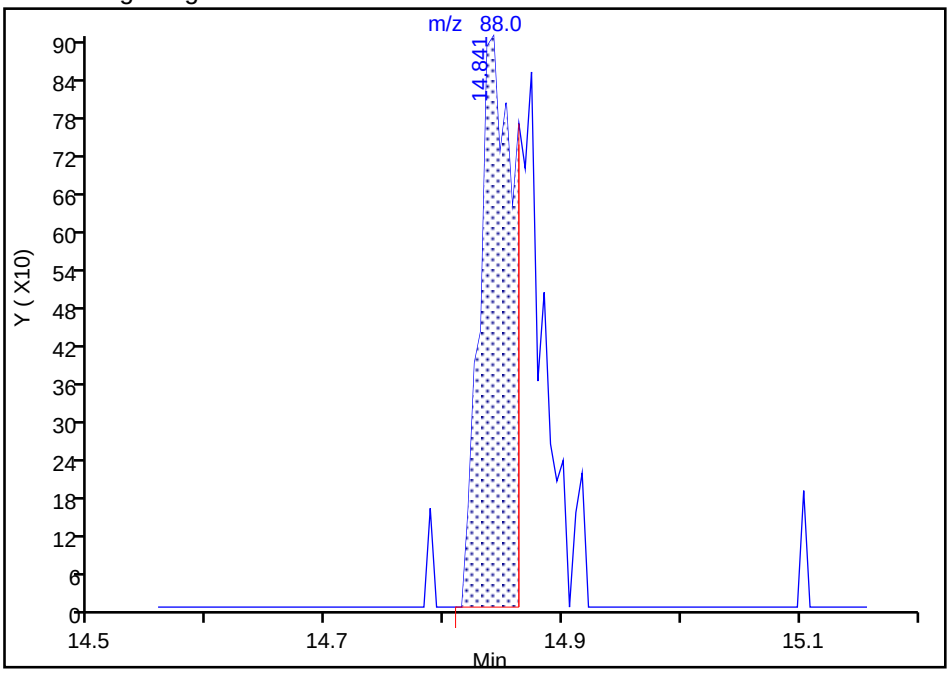
Data File:	\\chromna\Burlington\ChromData\CHX.i\20190116-34174.b\34174-05.D				
Injection Date:	16-Jan-2019 14:52:30	Instrument ID:	CHX.i		
Lims ID:	200-46938-A-7	Lab Sample ID:	200-46938-7		
Client ID:	4557				
Operator ID:	GGG	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

56 1,4-Dioxane, CAS: 123-91-1

Signal: 1

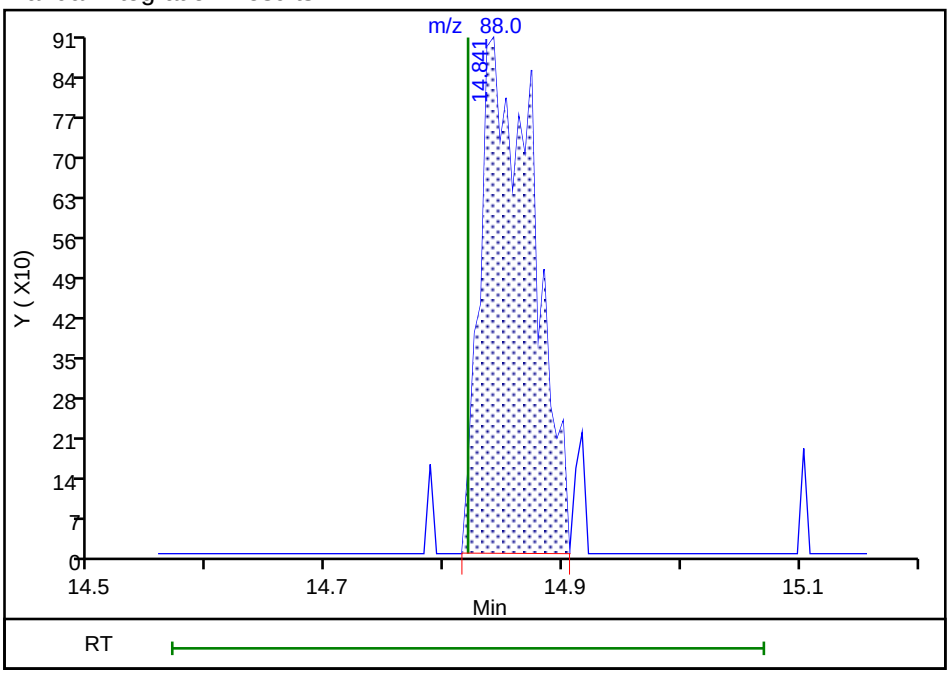
Processing Integration Results

RT: 14.84
Area: 1827
Amount: 0.012504
Amount Units: ppb v/v



Manual Integration Results

RT: 14.84
Area: 2819
Amount: 0.019294
Amount Units: ppb v/v



Reviewer: puangmaleek, 17-Jan-2019 13:20:29

Audit Action: Manually Integrated Audit Reason: Assign Peak

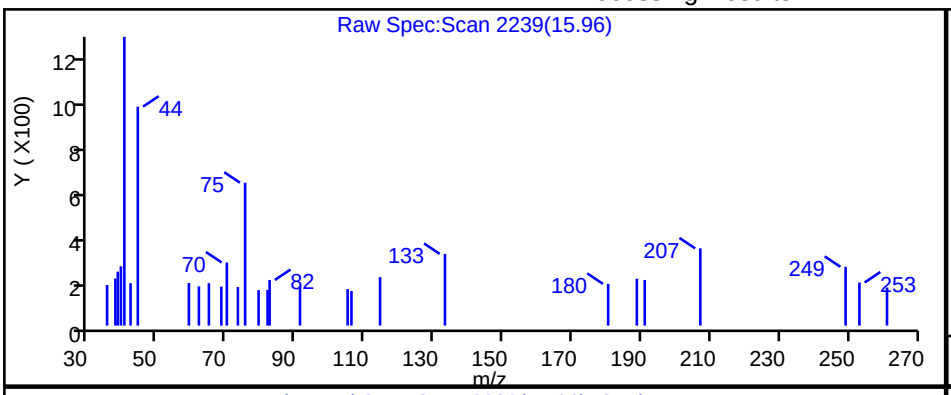
User Disabled Compound Report

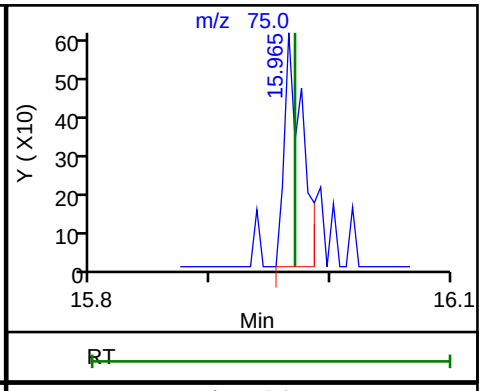
TestAmerica Burlington

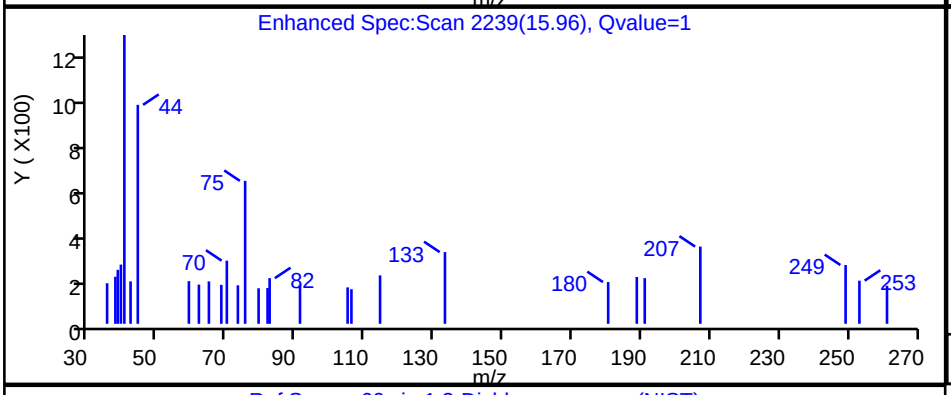
Data File:	\\chromna\Burlington\ChromData\CHX.i\20190116-34174.b\34174-05.D				
Injection Date:	16-Jan-2019 14:52:30	Instrument ID:	CHX.i		
Lims ID:	200-46938-A-7	Lab Sample ID:	200-46938-7		
Client ID:	4557				
Operator ID:	GGG	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

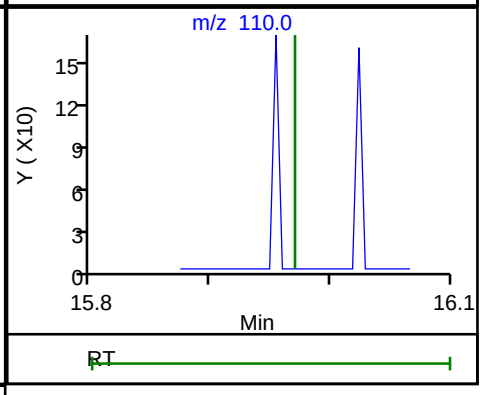
60 cis-1,3-Dichloropropene, CAS: 10061-01-5

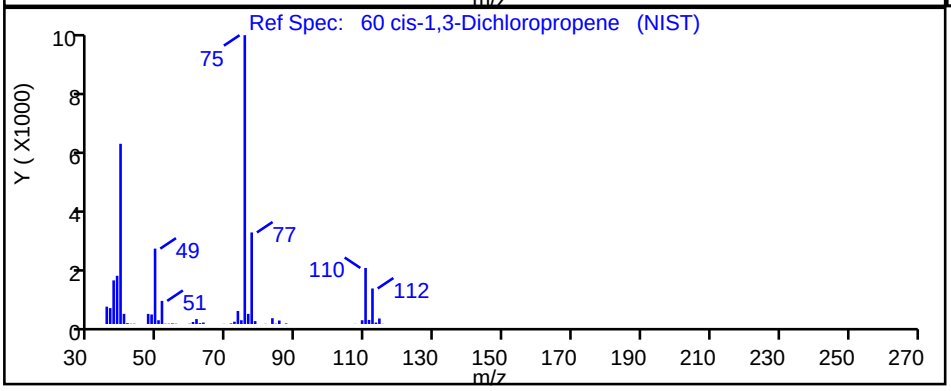
Processing Results











RT	Mass	Response	Amount
15.96	75.00	644	0.001636
15.97	110.00	0	

Reviewer: puangmaleek, 17-Jan-2019 13:20:42

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

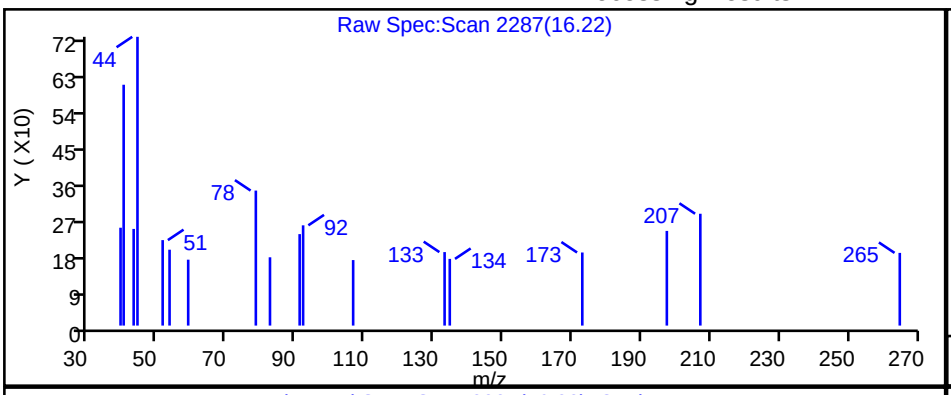
User Disabled Compound Report

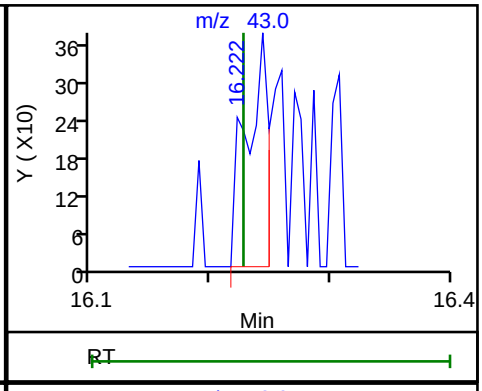
TestAmerica Burlington

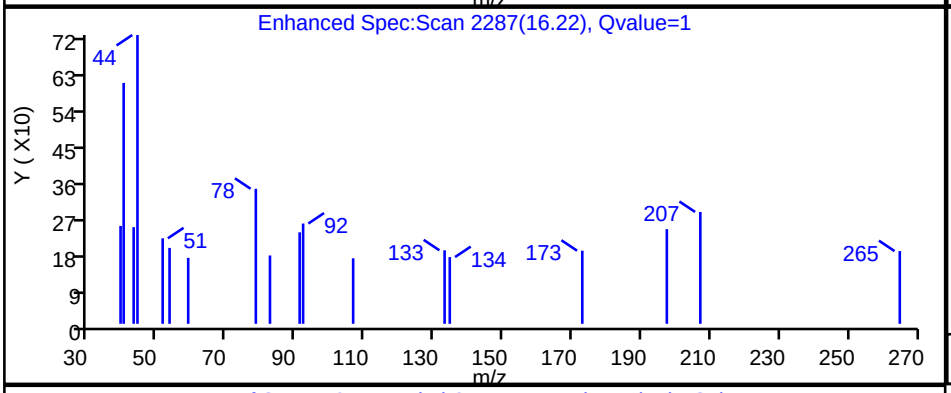
Data File:	\\chromna\Burlington\ChromData\CHX.i\20190116-34174.b\34174-05.D				
Injection Date:	16-Jan-2019 14:52:30	Instrument ID:	CHX.i		
Lims ID:	200-46938-A-7	Lab Sample ID:	200-46938-7		
Client ID:	4557				
Operator ID:	GGG	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

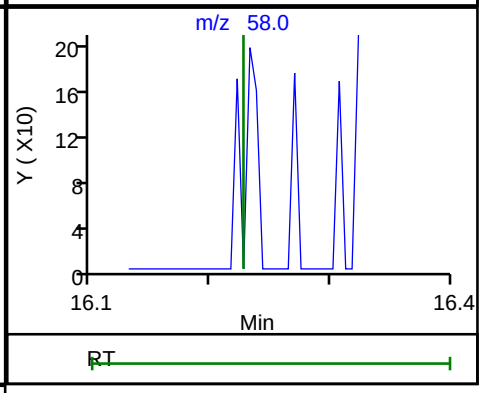
61 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

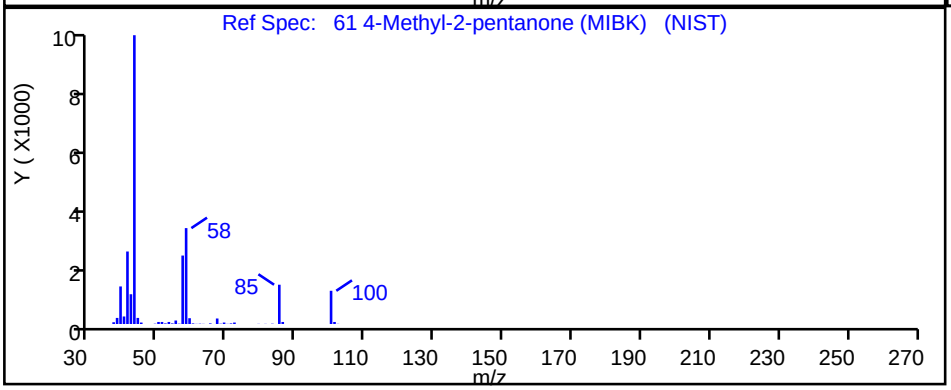
Processing Results











RT	Mass	Response	Amount
16.22	43.00	474	0.001386
16.23	58.00	0	

Reviewer: puangmaleek, 17-Jan-2019 13:20:43

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

TestAmerica Burlington

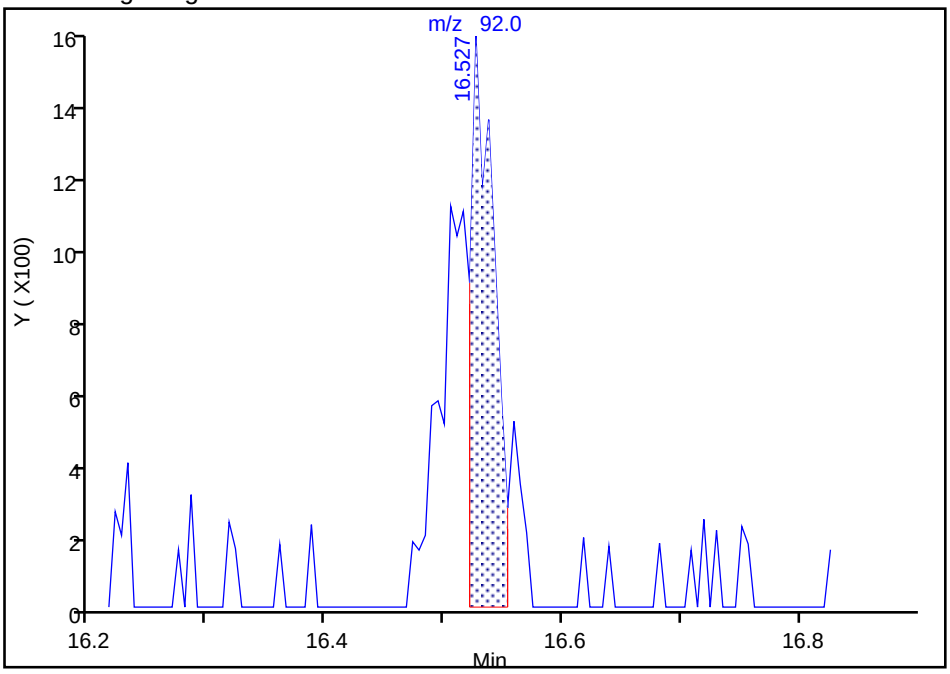
Data File:	\\chromna\Burlington\ChromData\CHX.i\20190116-34174.b\34174-05.D				
Injection Date:	16-Jan-2019 14:52:30	Instrument ID:	CHX.i		
Lims ID:	200-46938-A-7	Lab Sample ID:	200-46938-7		
Client ID:	4557				
Operator ID:	GGG	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

65 Toluene, CAS: 108-88-3

Signal: 1

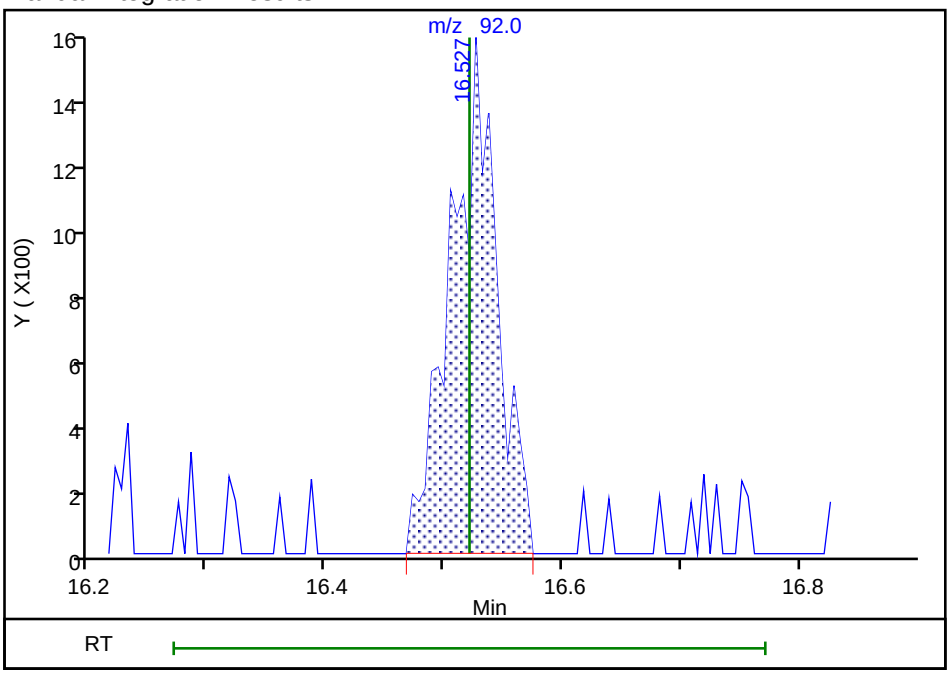
Processing Integration Results

RT: 16.53
Area: 2078
Amount: 0.003874
Amount Units: ppb v/v



Manual Integration Results

RT: 16.53
Area: 4045
Amount: 0.007541
Amount Units: ppb v/v



Reviewer: puangmaleek, 17-Jan-2019 13:20:50

Audit Action: Manually Integrated Audit Reason: Assign Peak

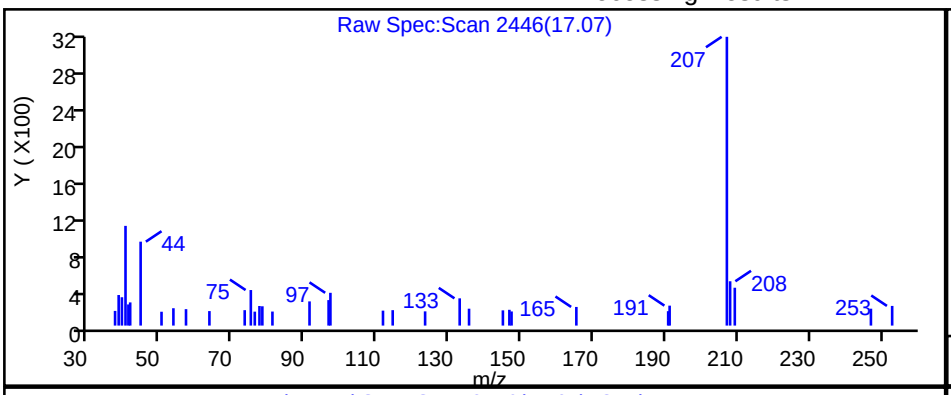
User Disabled Compound Report

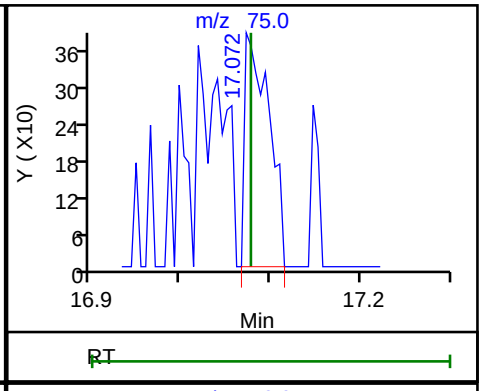
TestAmerica Burlington

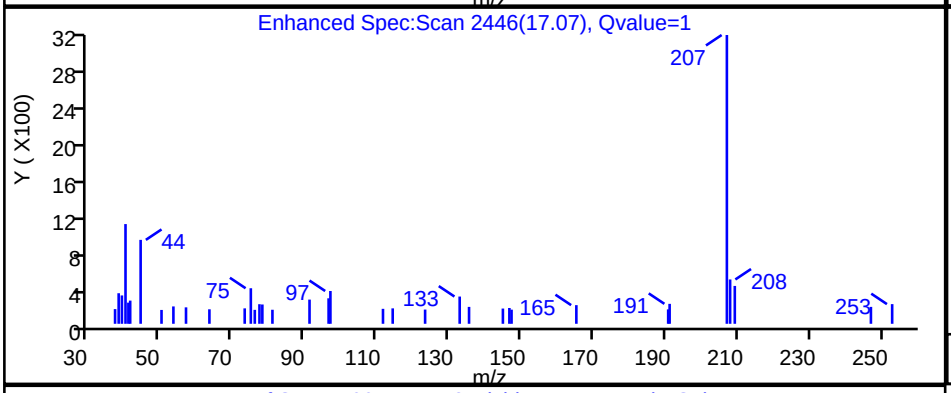
Data File:	\\chromna\Burlington\ChromData\CHX.i\20190116-34174.b\34174-05.D				
Injection Date:	16-Jan-2019 14:52:30	Instrument ID:	CHX.i		
Lims ID:	200-46938-A-7	Lab Sample ID:	200-46938-7		
Client ID:	4557				
Operator ID:	GGG	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

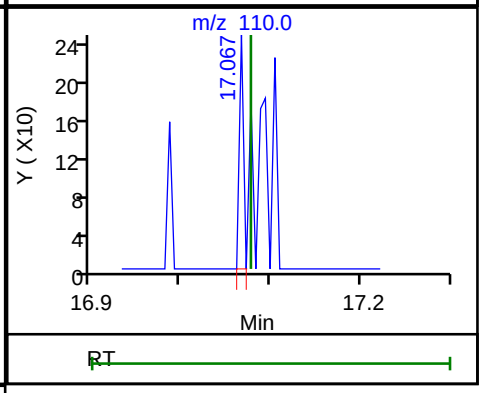
66 trans-1,3-Dichloropropene, CAS: 10061-02-6

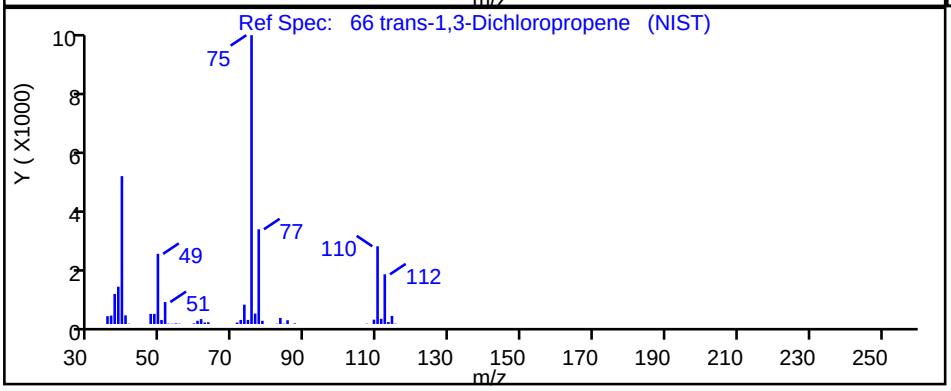
Processing Results











RT	Mass	Response	Amount
17.07	75.00	721	0.001939
17.07	110.00	80	

Reviewer: puangmaleek, 17-Jan-2019 13:20:56

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

TestAmerica Burlington

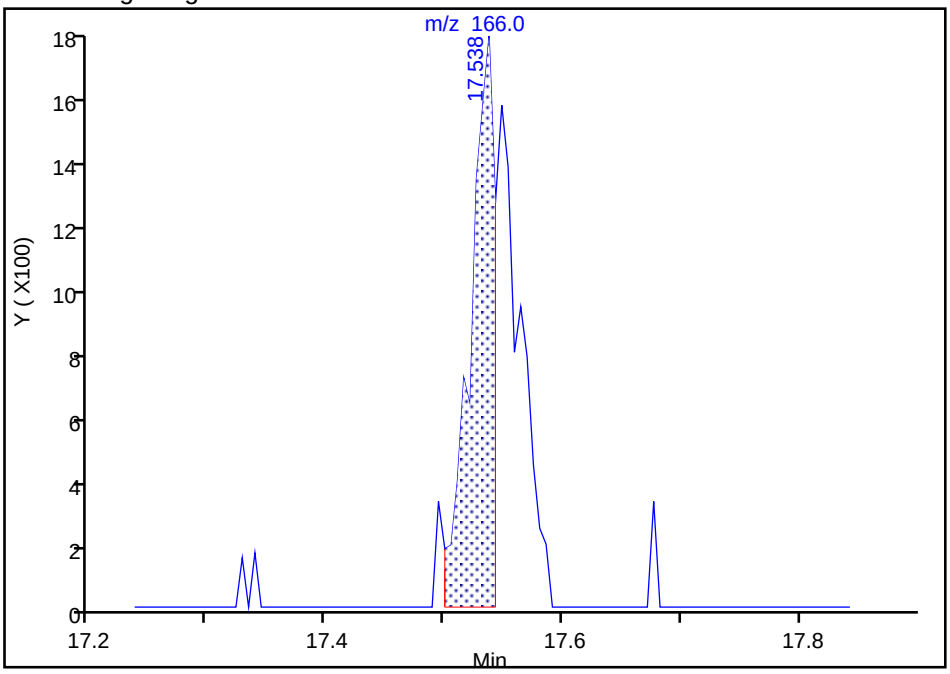
Data File:	\\chromna\Burlington\ChromData\CHX.i\20190116-34174.b\34174-05.D				
Injection Date:	16-Jan-2019 14:52:30	Instrument ID:	CHX.i		
Lims ID:	200-46938-A-7	Lab Sample ID:	200-46938-7		
Client ID:	4557				
Operator ID:	GGG	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

68 Tetrachloroethene, CAS: 127-18-4

Signal: 1

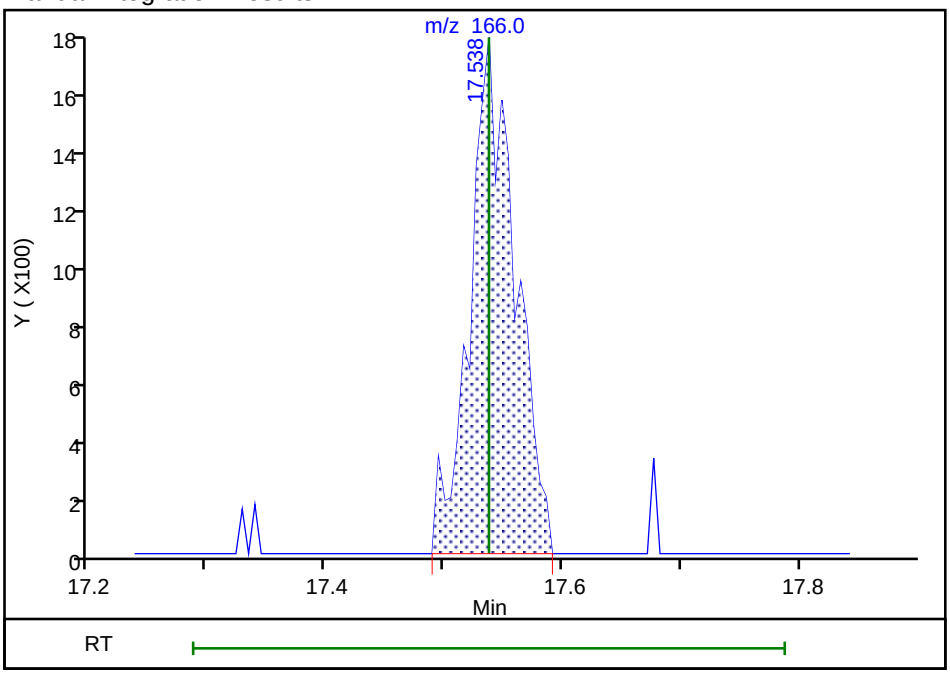
Processing Integration Results

RT: 17.54
Area: 2517
Amount: 0.004728
Amount Units: ppb v/v



Manual Integration Results

RT: 17.54
Area: 4601
Amount: 0.008642
Amount Units: ppb v/v



Reviewer: puangmaleek, 17-Jan-2019 13:21:06
Audit Action: Manually Integrated Audit Reason: Assign Peak

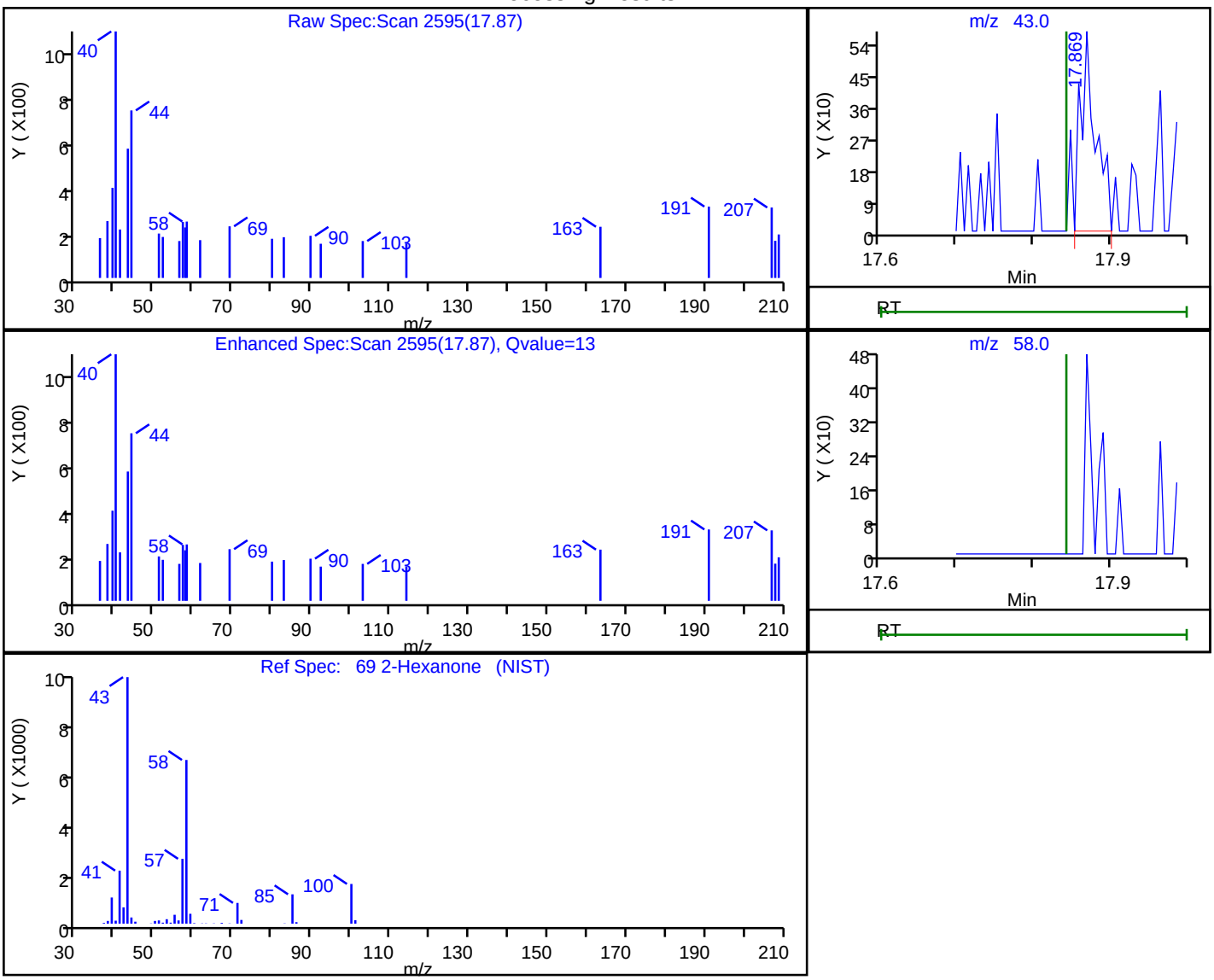
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\chromna\Burlington\ChromData\CHX.i\20190116-34174.b\34174-05.D				
Injection Date:	16-Jan-2019 14:52:30	Instrument ID:	CHX.i		
Lims ID:	200-46938-A-7	Lab Sample ID:	200-46938-7		
Client ID:	4557				
Operator ID:	GGG	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

69 2-Hexanone, CAS: 591-78-6

Processing Results



RT	Mass	Response	Amount
17.87	43.00	788	0.002537
17.84	58.00	0	

Reviewer: puangmaleek, 17-Jan-2019 13:21:11

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

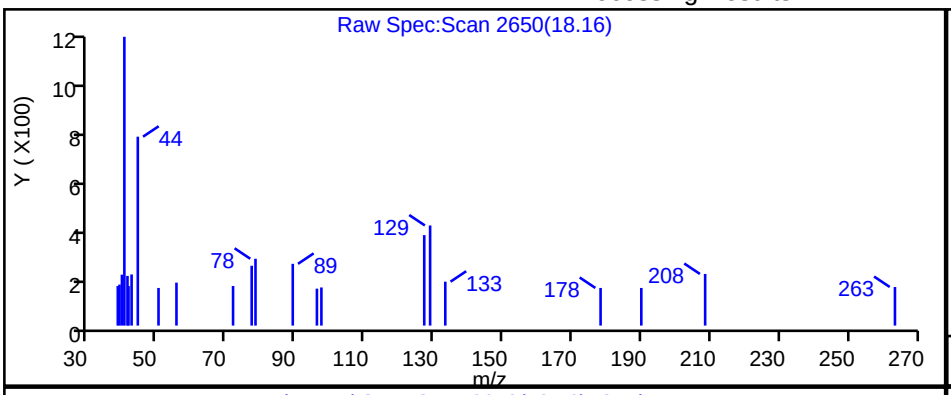
User Disabled Compound Report

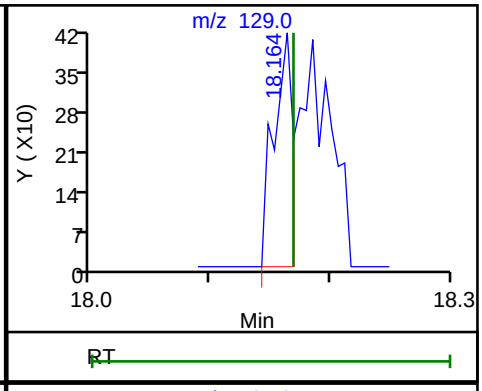
TestAmerica Burlington

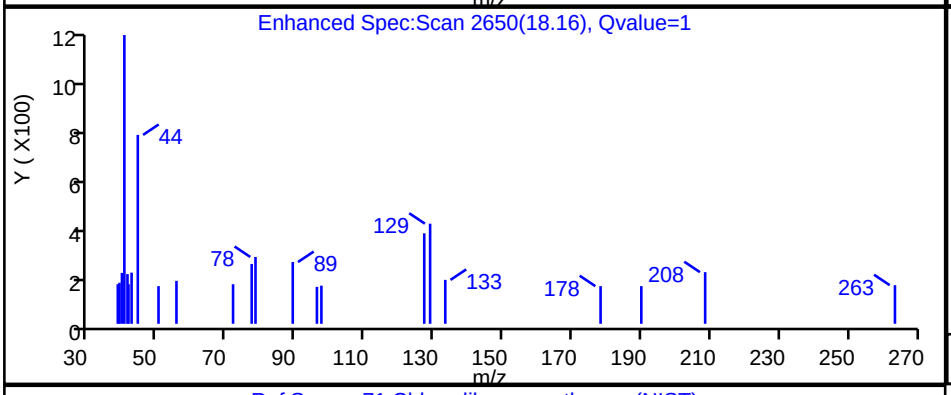
Data File:	\\chromna\Burlington\ChromData\CHX.i\20190116-34174.b\34174-05.D				
Injection Date:	16-Jan-2019 14:52:30	Instrument ID:	CHX.i		
Lims ID:	200-46938-A-7	Lab Sample ID:	200-46938-7		
Client ID:	4557				
Operator ID:	GGG	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

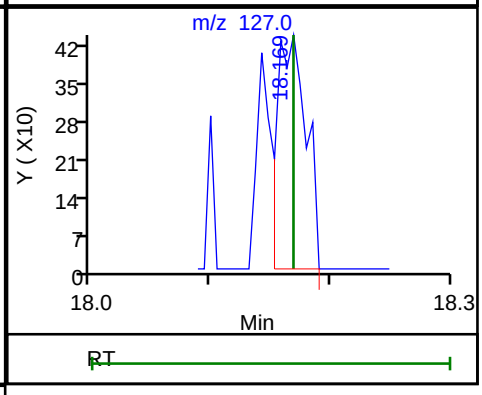
71 Chlorodibromomethane, CAS: 124-48-1

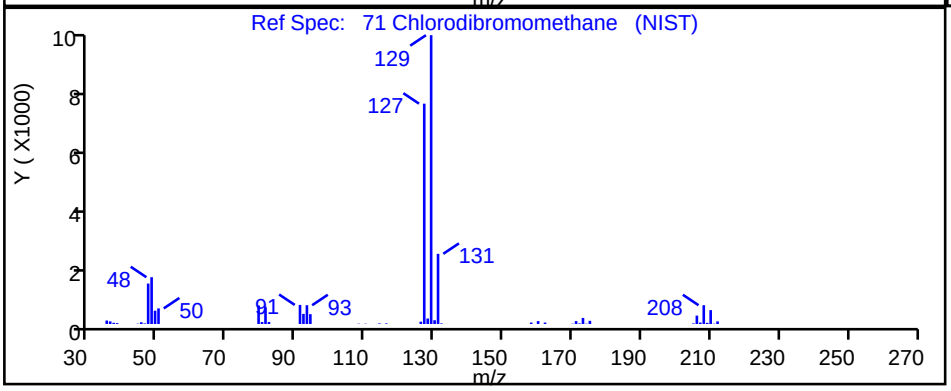
Processing Results











RT	Mass	Response	Amount
18.16	129.00	454	0.000850
18.17	127.00	730	

Reviewer: puangmaleek, 17-Jan-2019 13:21:13

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

TestAmerica Burlington

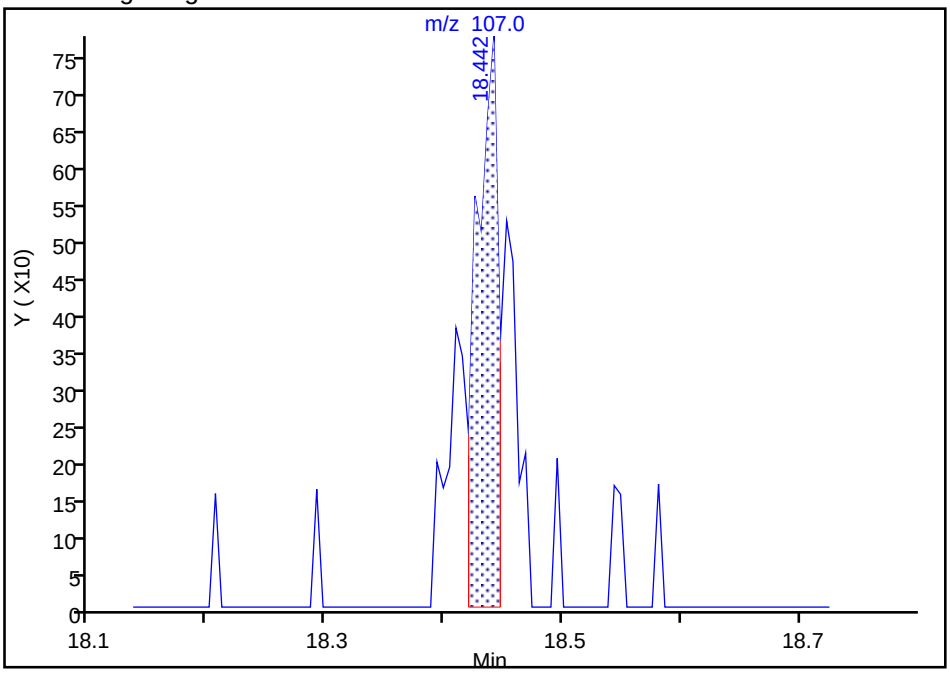
Data File:	\\chromna\Burlington\ChromData\CHX.i\20190116-34174.b\34174-05.D				
Injection Date:	16-Jan-2019 14:52:30	Instrument ID:	CHX.i		
Lims ID:	200-46938-A-7	Lab Sample ID:	200-46938-7		
Client ID:	4557				
Operator ID:	GGG	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

72 Ethylene Dibromide, CAS: 106-93-4

Signal: 1

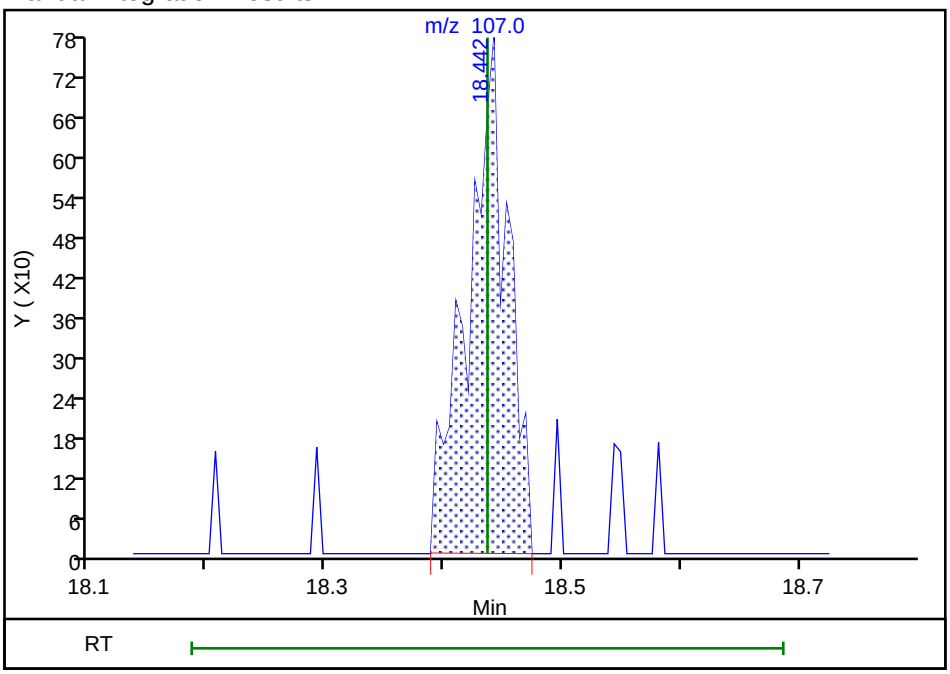
Processing Integration Results

RT: 18.44
Area: 994
Amount: 0.002082
Amount Units: ppb v/v



Manual Integration Results

RT: 18.44
Area: 1839
Amount: 0.003852
Amount Units: ppb v/v



Reviewer: puangmaleek, 17-Jan-2019 13:21:21

Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

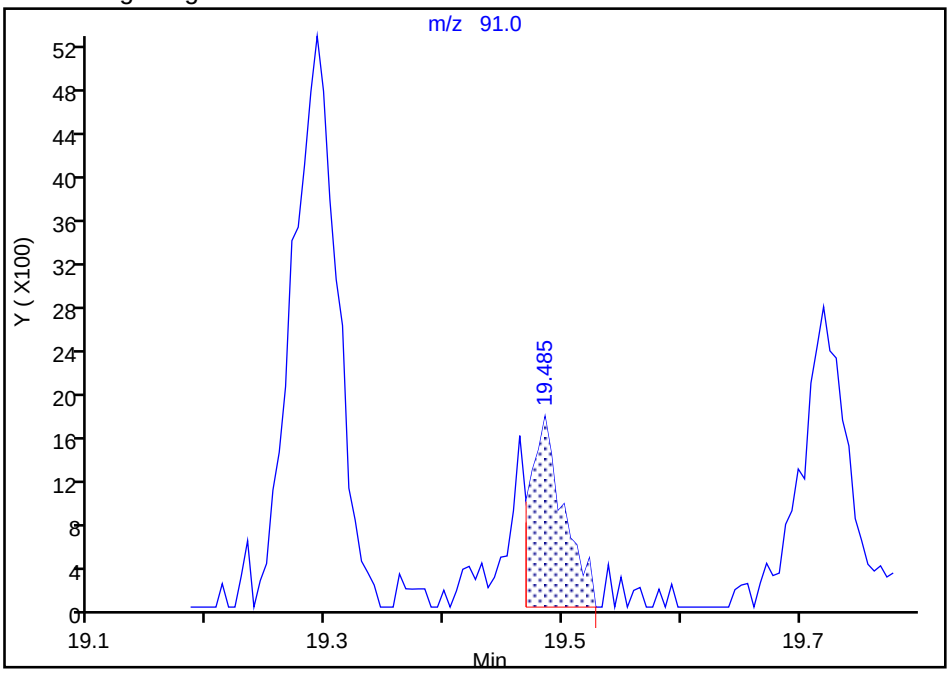
Data File:	\\chromna\Burlington\ChromData\CHX.i\20190116-34174.b\34174-05.D				
Injection Date:	16-Jan-2019 14:52:30	Instrument ID:	CHX.i		
Lims ID:	200-46938-A-7	Lab Sample ID:	200-46938-7		
Client ID:	4557				
Operator ID:	GGG	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

76 Ethylbenzene, CAS: 100-41-4

Signal: 1

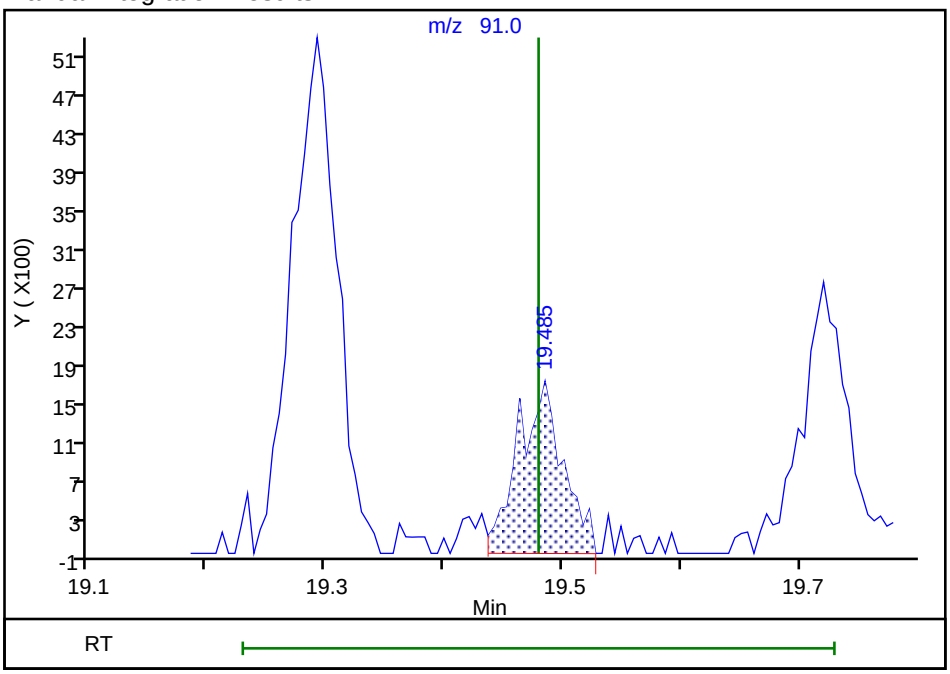
Processing Integration Results

RT: 19.48
Area: 3417
Amount: 0.002742
Amount Units: ppb v/v



Manual Integration Results

RT: 19.48
Area: 4661
Amount: 0.003740
Amount Units: ppb v/v



Reviewer: puangmaleek, 17-Jan-2019 13:21:30

Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

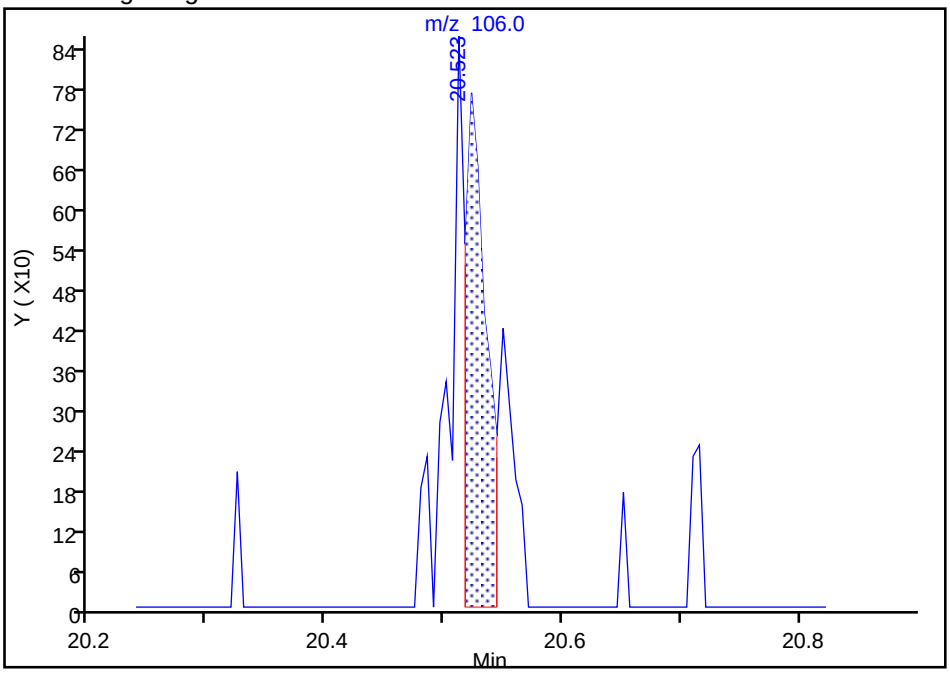
Data File:	\\chromna\Burlington\ChromData\CHX.i\20190116-34174.b\34174-05.D				
Injection Date:	16-Jan-2019 14:52:30	Instrument ID:	CHX.i		
Lims ID:	200-46938-A-7	Lab Sample ID:	200-46938-7		
Client ID:	4557				
Operator ID:	GGG	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

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

Signal: 1

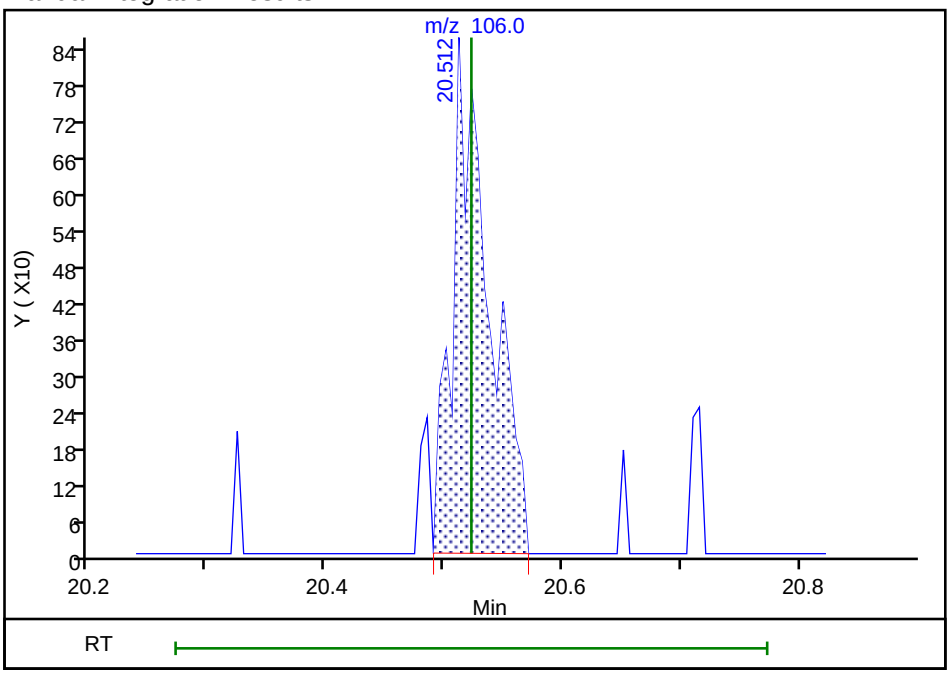
Processing Integration Results

RT: 20.52
Area: 974
Amount: 0.002025
Amount Units: ppb v/v



Manual Integration Results

RT: 20.51
Area: 1856
Amount: 0.003859
Amount Units: ppb v/v



Reviewer: puangmaleek, 17-Jan-2019 13:21:40

Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Burlington

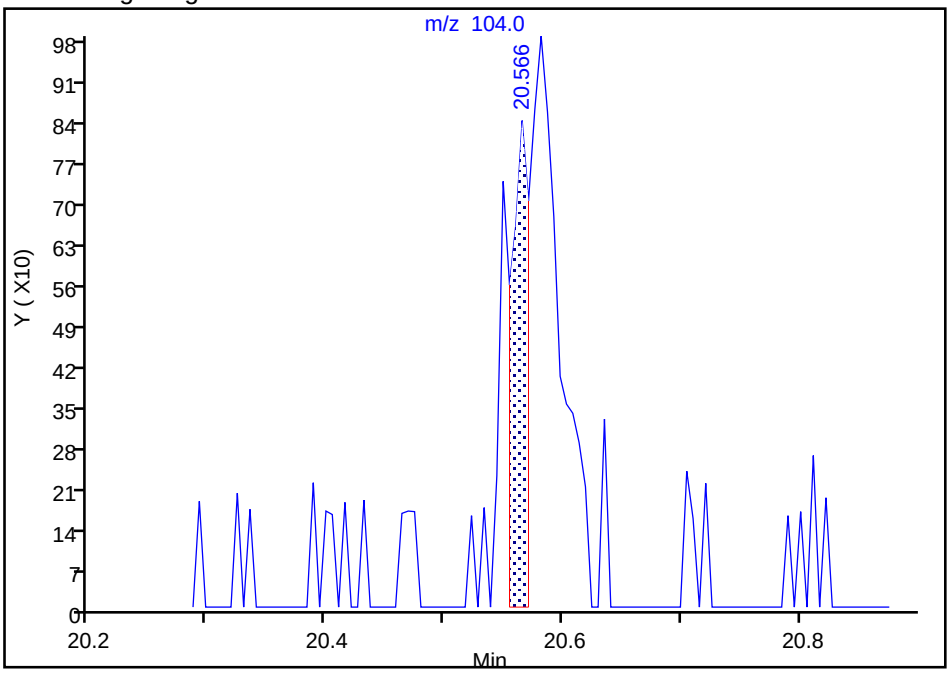
Data File:	\\chromna\Burlington\ChromData\CHX.i\20190116-34174.b\34174-05.D				
Injection Date:	16-Jan-2019 14:52:30	Instrument ID:	CHX.i		
Lims ID:	200-46938-A-7	Lab Sample ID:	200-46938-7		
Client ID:	4557				
Operator ID:	GGG	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

80 Styrene, CAS: 100-42-5

Signal: 1

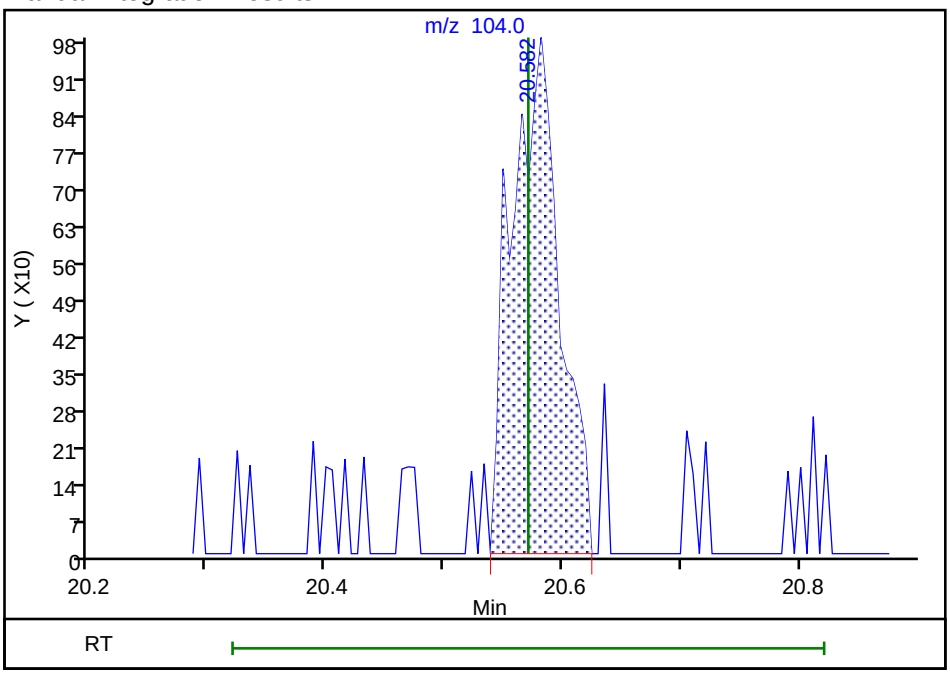
Processing Integration Results

RT: 20.57
Area: 886
Amount: 0.001200
Amount Units: ppb v/v



Manual Integration Results

RT: 20.58
Area: 2786
Amount: 0.003774
Amount Units: ppb v/v



Reviewer: puangmaleek, 17-Jan-2019 13:21:51

Audit Action: Manually Integrated Audit Reason: Assign Peak

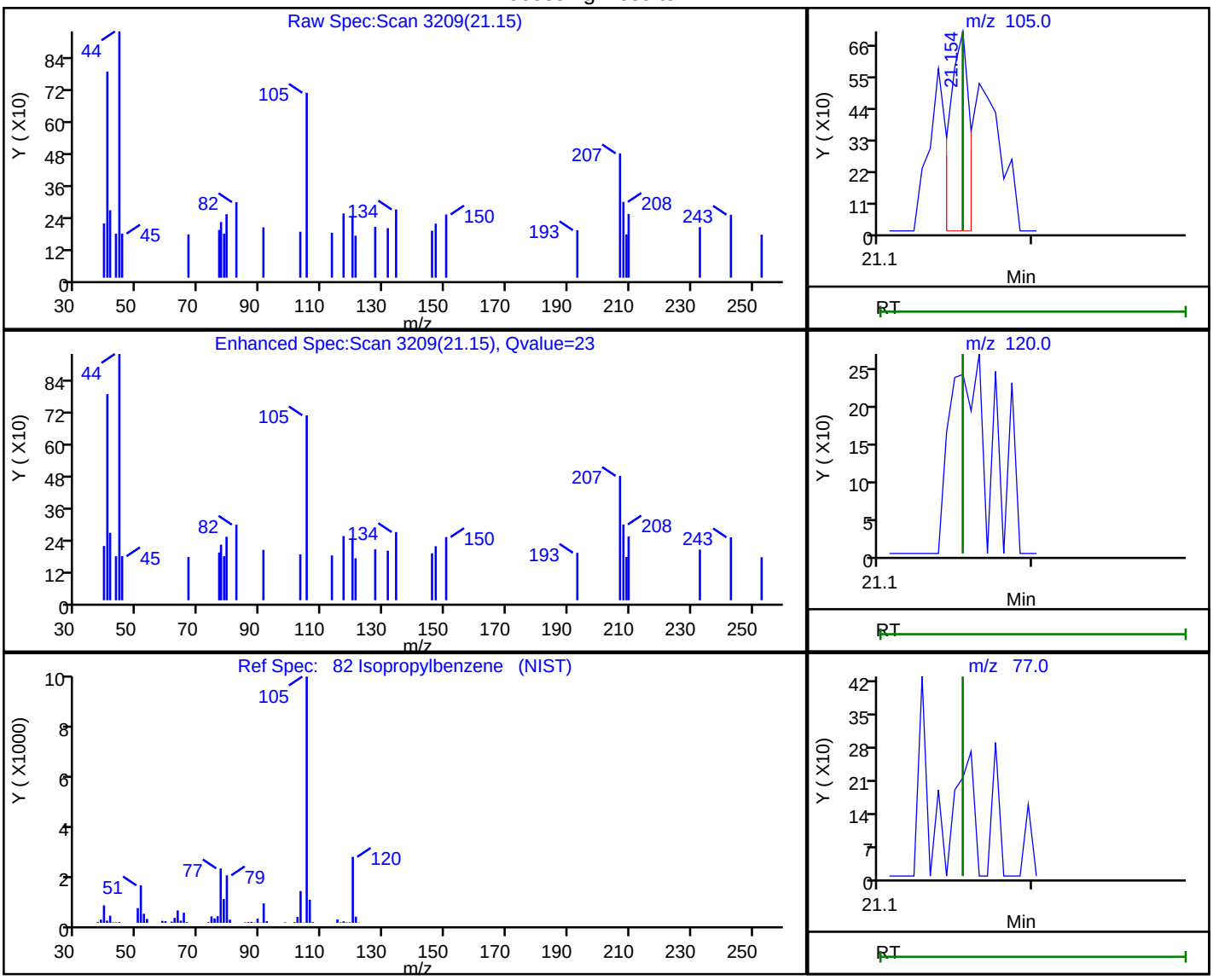
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\chromna\Burlington\ChromData\CHX.i\20190116-34174.b\34174-05.D				
Injection Date:	16-Jan-2019 14:52:30	Instrument ID:	CHX.i		
Lims ID:	200-46938-A-7	Lab Sample ID:	200-46938-7		
Client ID:	4557				
Operator ID:	GGG	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

82 Isopropylbenzene, CAS: 98-82-8

Processing Results



RT	Mass	Response	Amount
21.15	105.00	630	0.000421
21.15	120.00	0	
21.15	77.00	0	

Reviewer: puangmaleek, 17-Jan-2019 13:21:59

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

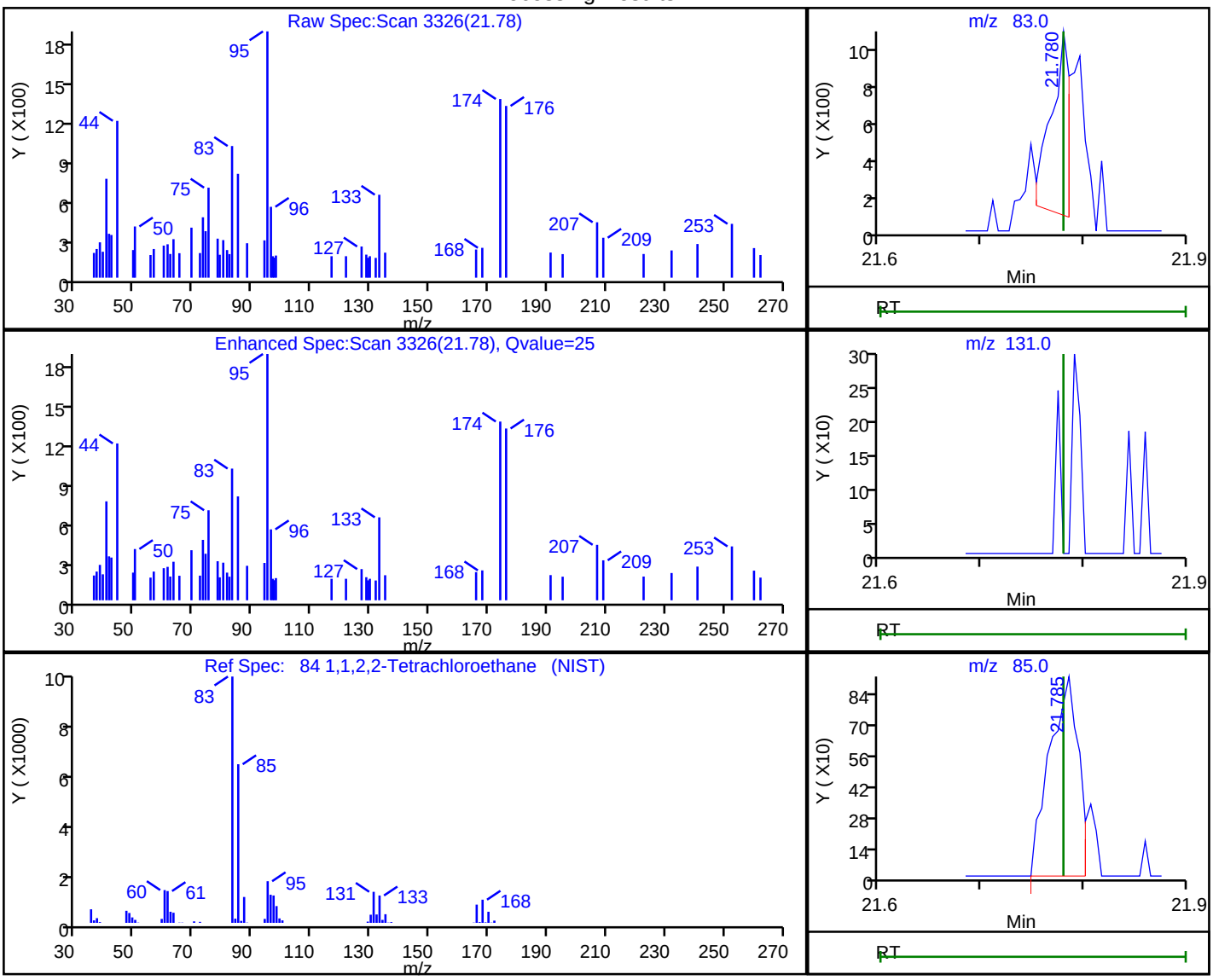
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\chromna\Burlington\ChromData\CHX.i\20190116-34174.b\34174-05.D				
Injection Date:	16-Jan-2019 14:52:30	Instrument ID:	CHX.i		
Lims ID:	200-46938-A-7	Lab Sample ID:	200-46938-7		
Client ID:	4557				
Operator ID:	GGG	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

84 1,1,2,2-Tetrachloroethane, CAS: 79-34-5

Processing Results



RT	Mass	Response	Amount
21.78	83.00	1145	0.001892
21.79	85.00	1806	
21.78	131.00	0	

Reviewer: puangmaleek, 17-Jan-2019 13:22:01

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

TestAmerica Burlington

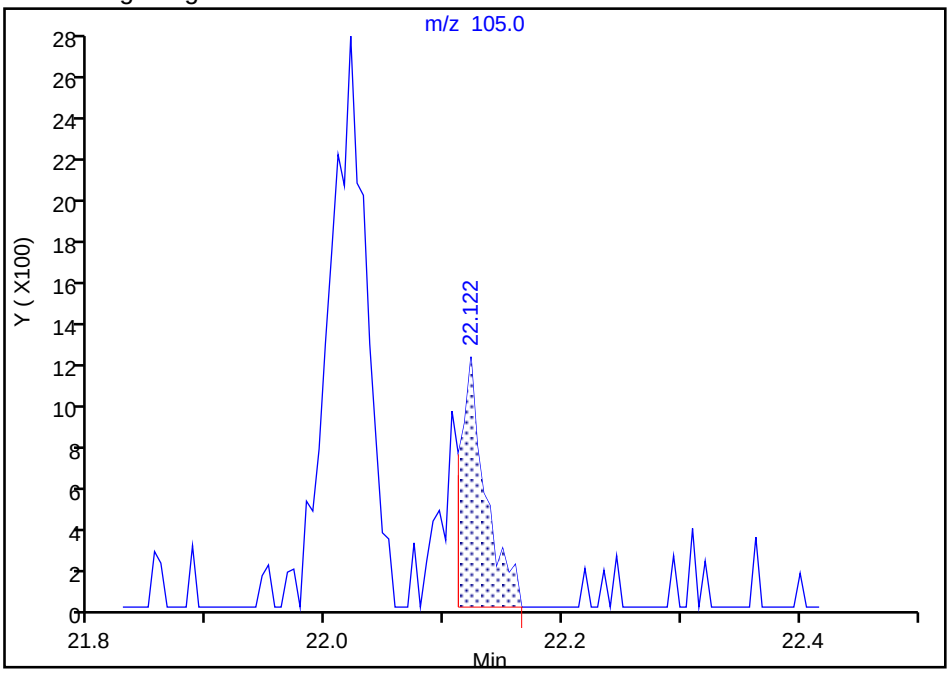
Data File:	\\chromna\Burlington\ChromData\CHX.i\20190116-34174.b\34174-05.D				
Injection Date:	16-Jan-2019 14:52:30	Instrument ID:	CHX.i		
Lims ID:	200-46938-A-7	Lab Sample ID:	200-46938-7		
Client ID:	4557				
Operator ID:	GGG	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

90 1,3,5-Trimethylbenzene, CAS: 108-67-8

Signal: 1

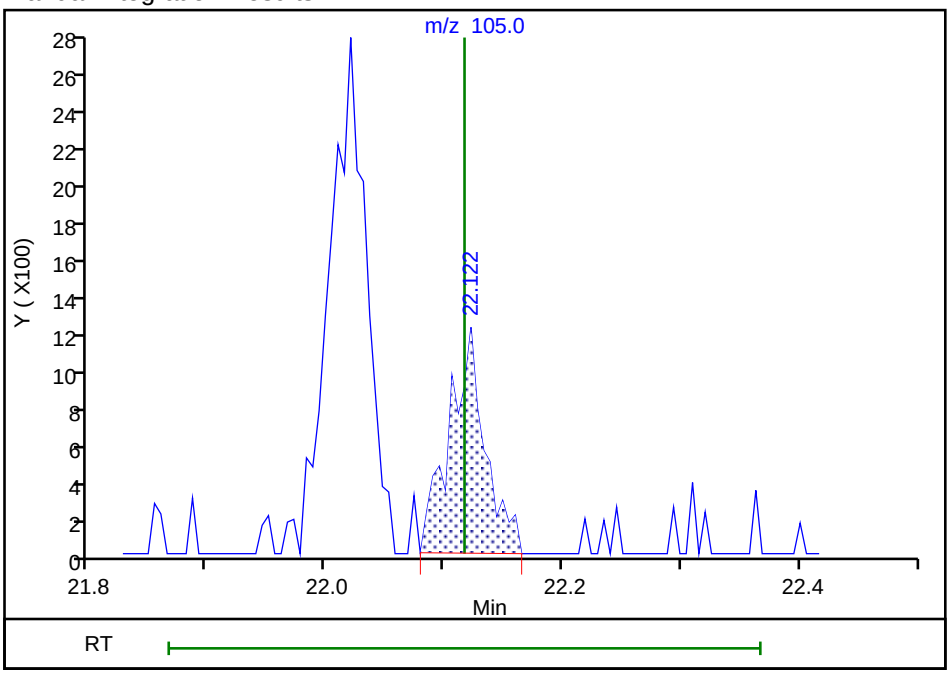
Processing Integration Results

RT: 22.12
Area: 1770
Amount: 0.001363
Amount Units: ppb v/v



Manual Integration Results

RT: 22.12
Area: 2520
Amount: 0.001940
Amount Units: ppb v/v



Reviewer: puangmaleek, 17-Jan-2019 13:22:14
Audit Action: Manually Integrated Audit Reason: Assign Peak

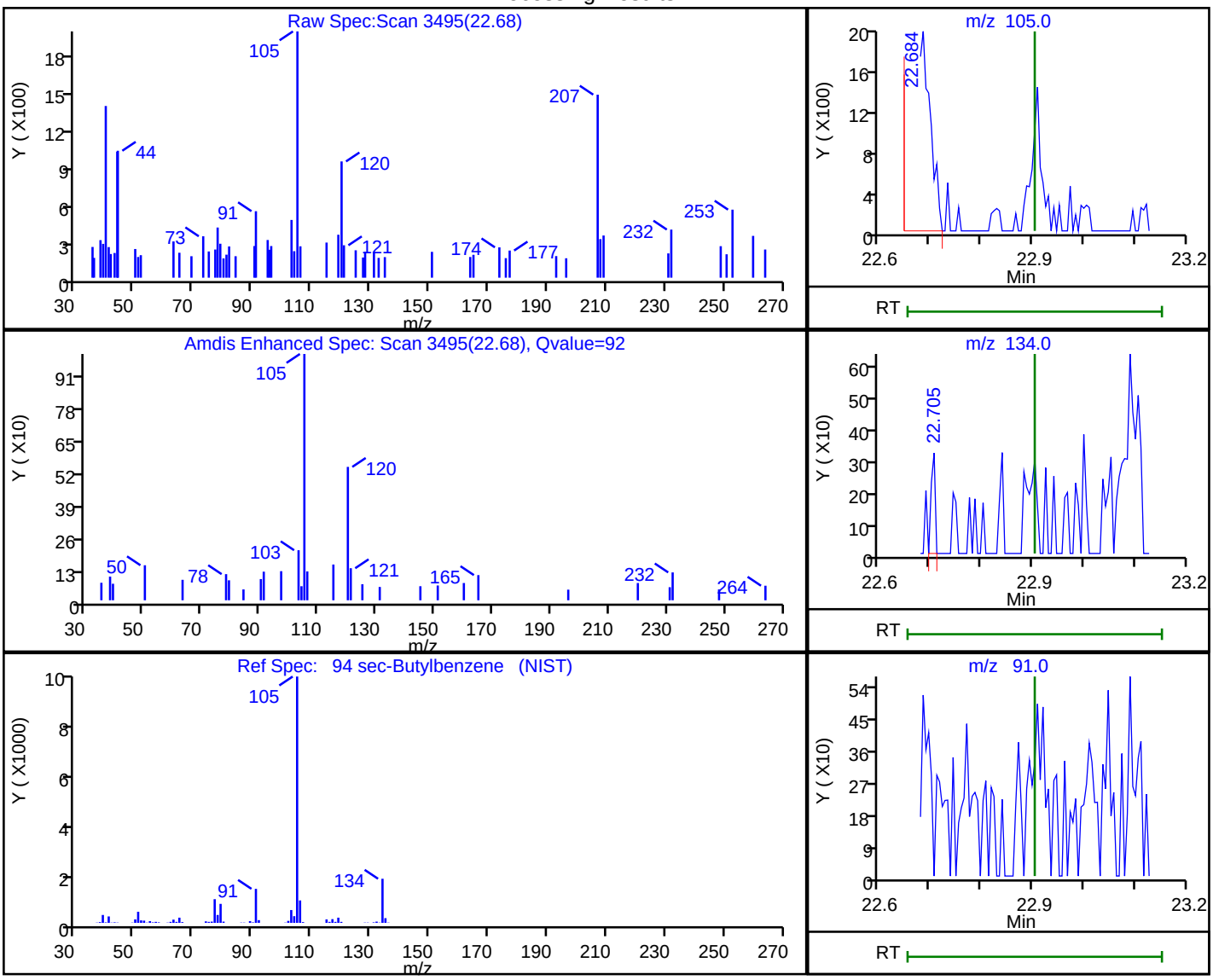
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\chromna\Burlington\ChromData\CHX.i\20190116-34174.b\34174-05.D				
Injection Date:	16-Jan-2019 14:52:30	Instrument ID:	CHX.i		
Lims ID:	200-46938-A-7	Lab Sample ID:	200-46938-7		
Client ID:	4557				
Operator ID:	GGG	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

94 sec-Butylbenzene, CAS: 135-98-8

Processing Results



RT	Mass	Response	Amount
22.68	105.00	3800	0.002100
22.71	134.00	175	
22.90	91.00	0	

Reviewer: puangmaleek, 17-Jan-2019 13:22:20

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

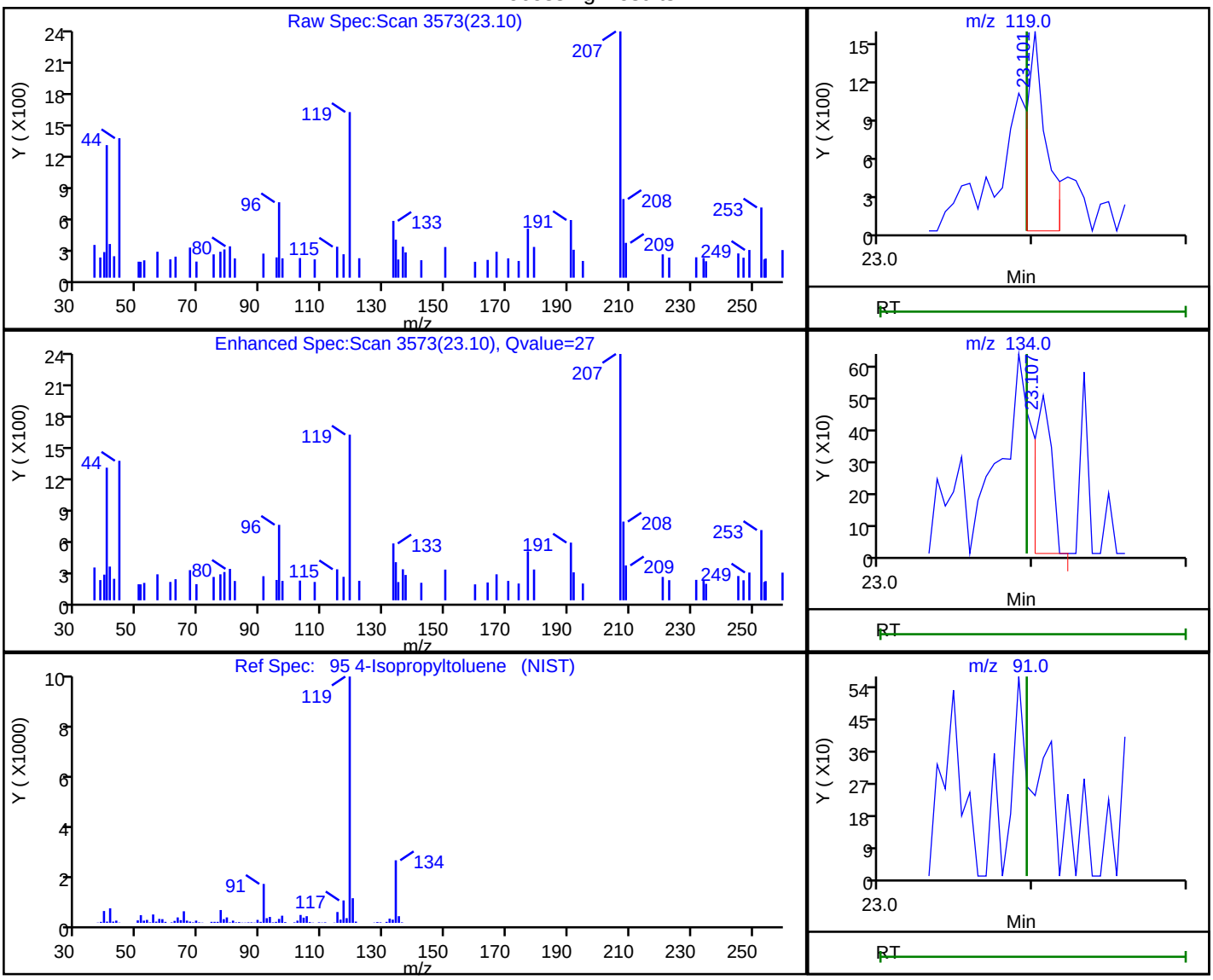
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\chromna\Burlington\ChromData\CHX.i\20190116-34174.b\34174-05.D				
Injection Date:	16-Jan-2019 14:52:30	Instrument ID:	CHX.i		
Lims ID:	200-46938-A-7	Lab Sample ID:	200-46938-7		
Client ID:	4557				
Operator ID:	GGG	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

95 4-Isopropyltoluene, CAS: 99-87-6

Processing Results



RT	Mass	Response	Amount
23.10	119.00	1349	0.000844
23.11	134.00	387	
23.10	91.00	0	

Reviewer: puangmaleek, 17-Jan-2019 13:22:24

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-47009-1

SDG No.:

Client Sample ID: 4299 Lab Sample ID: 200-47009-6

Matrix: Air Lab File ID: 34140-23.D

Analysis Method: TO-15 Date Collected: 01/12/2019 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 01/15/2019 09:10

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 139086 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	1.0	U	1.0	1.0
75-71-8	Dichlorodifluoromethane	0.10	U	0.10	0.10
75-45-6	Freon 22	0.10	U	0.10	0.10
76-14-2	1,2-Dichlorotetrafluoroethane	0.040	U	0.040	0.040
74-87-3	Chloromethane	0.10	U	0.10	0.10
106-97-8	n-Butane	0.10	U	0.10	0.10
75-01-4	Vinyl chloride	0.040	U	0.040	0.040
106-99-0	1,3-Butadiene	0.040	U	0.040	0.040
74-83-9	Bromomethane	0.040	U	0.040	0.040
75-00-3	Chloroethane	0.10	U	0.10	0.10
593-60-2	Bromoethene(Vinyl Bromide)	0.040	U	0.040	0.040
75-69-4	Trichlorofluoromethane	0.040	U	0.040	0.040
64-17-5	Ethanol	1.0	U	1.0	1.0
76-13-1	Freon TF	0.040	U	0.040	0.040
75-35-4	1,1-Dichloroethene	0.040	U	0.040	0.040
67-64-1	Acetone	1.0	U	1.0	1.0
67-63-0	Isopropyl alcohol	1.0	U	1.0	1.0
75-15-0	Carbon disulfide	0.10	U	0.10	0.10
107-05-1	3-Chloropropene	0.10	U	0.10	0.10
75-09-2	Methylene Chloride	0.10	U	0.10	0.10
75-65-0	tert-Butyl alcohol	1.0	U	1.0	1.0
1634-04-4	Methyl tert-butyl ether	0.040	U	0.040	0.040
156-60-5	trans-1,2-Dichloroethene	0.040	U	0.040	0.040
110-54-3	n-Hexane	0.040	U	0.040	0.040
75-34-3	1,1-Dichloroethane	0.040	U	0.040	0.040
108-05-4	Vinyl acetate	1.0	U	1.0	1.0
141-78-6	Ethyl acetate	1.0	U	1.0	1.0
78-93-3	Methyl Ethyl Ketone	0.10	U	0.10	0.10
156-59-2	cis-1,2-Dichloroethene	0.040	U	0.040	0.040
540-59-0	1,2-Dichloroethene, Total	0.080	U	0.080	0.080
67-66-3	Chloroform	0.040	U	0.040	0.040
109-99-9	Tetrahydrofuran	1.0	U	1.0	1.0
71-55-6	1,1,1-Trichloroethane	0.040	U	0.040	0.040
110-82-7	Cyclohexane	0.040	U	0.040	0.040
56-23-5	Carbon tetrachloride	0.040	U	0.040	0.040
540-84-1	2,2,4-Trimethylpentane	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-47009-1

SDG No.:

Client Sample ID: 4299 Lab Sample ID: 200-47009-6

Matrix: Air Lab File ID: 34140-23.D

Analysis Method: TO-15 Date Collected: 01/12/2019 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 01/15/2019 09:10

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 139086 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
71-43-2	Benzene	0.040	U	0.040	0.040
107-06-2	1,2-Dichloroethane	0.040	U	0.040	0.040
142-82-5	n-Heptane	0.040	U	0.040	0.040
79-01-6	Trichloroethene	0.040	U	0.040	0.040
80-62-6	Methyl methacrylate	0.10	U	0.10	0.10
78-87-5	1,2-Dichloropropane	0.040	U	0.040	0.040
123-91-1	1,4-Dioxane	1.0	U	1.0	1.0
75-27-4	Bromodichloromethane	0.040	U	0.040	0.040
10061-01-5	cis-1,3-Dichloropropene	0.040	U	0.040	0.040
108-10-1	methyl isobutyl ketone	0.10	U	0.10	0.10
108-88-3	Toluene	0.040	U	0.040	0.040
10061-02-6	trans-1,3-Dichloropropene	0.040	U	0.040	0.040
79-00-5	1,1,2-Trichloroethane	0.040	U	0.040	0.040
127-18-4	Tetrachloroethene	0.040	U	0.040	0.040
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.10	U	0.10	0.10
124-48-1	Dibromochloromethane	0.040	U	0.040	0.040
106-93-4	1,2-Dibromoethane	0.040	U	0.040	0.040
108-90-7	Chlorobenzene	0.040	U	0.040	0.040
100-41-4	Ethylbenzene	0.040	U	0.040	0.040
179601-23-1	m,p-Xylene	0.10	U	0.10	0.10
95-47-6	Xylene, o-	0.040	U	0.040	0.040
1330-20-7	Xylene (total)	0.14	U	0.14	0.14
100-42-5	Styrene	0.040	U	0.040	0.040
75-25-2	Bromoform	0.040	U	0.040	0.040
98-82-8	Cumene	0.040	U	0.040	0.040
79-34-5	1,1,2,2-Tetrachloroethane	0.040	U	0.040	0.040
103-65-1	n-Propylbenzene	0.040	U	0.040	0.040
622-96-8	4-Ethyltoluene	0.040	U	0.040	0.040
108-67-8	1,3,5-Trimethylbenzene	0.040	U	0.040	0.040
95-49-8	2-Chlorotoluene	0.040	U	0.040	0.040
98-06-6	tert-Butylbenzene	0.040	U	0.040	0.040
95-63-6	1,2,4-Trimethylbenzene	0.040	U	0.040	0.040
135-98-8	sec-Butylbenzene	0.040	U	0.040	0.040
99-87-6	4-Isopropyltoluene	0.040	U	0.040	0.040
541-73-1	1,3-Dichlorobenzene	0.040	U	0.040	0.040
106-46-7	1,4-Dichlorobenzene	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-47009-1

SDG No.:

Client Sample ID: 4299 Lab Sample ID: 200-47009-6

Matrix: Air Lab File ID: 34140-23.D

Analysis Method: TO-15 Date Collected: 01/12/2019 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 01/15/2019 09:10

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 139086 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
100-44-7	Benzyl chloride	0.040	U	0.040	0.040
104-51-8	n-Butylbenzene	0.040	U	0.040	0.040
95-50-1	1,2-Dichlorobenzene	0.040	U	0.040	0.040
120-82-1	1,2,4-Trichlorobenzene	0.10	U	0.10	0.10
87-68-3	Hexachlorobutadiene	0.040	U	0.040	0.040
91-20-3	Naphthalene	0.10	U	0.10	0.10

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\chromna\Burlington\ChromData\CHX.i\20190114-34140.b\34140-23.D
Lims ID: 200-47009-A-6
Client ID: 4299
Sample Type: Client
Inject. Date: 15-Jan-2019 09:10:30 ALS Bottle#: 22 Worklist Smp#: 23
Purge Vol: 200.000 mL Dil. Factor: 0.2000
Sample Info: 200-0034140-023
Misc. Info.: 47009-06
Operator ID: GGG Instrument ID: CHX.i

Method: \\chromna\Burlington\ChromData\CHX.i\20190114-34140.b\TO15_MasterMethod_X.m.m
Limit Group: AI_TO15_ICAL
Last Update: 15-Jan-2019 12:32:46 Calib Date: 12-Jan-2019 21:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Burlington\ChromData\CHX.i\20190112-34115.b\34115-11.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: CTX0315

First Level Reviewer: guazzonig Date: 15-Jan-2019 12:30:46

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
1 Propene	41		4.083				ND	
2 Dichlorodifluoromethane	85		4.169				ND	
3 Chlorodifluoromethane	51		4.233				ND	
4 1,2-Dichloro-1,1,2,2-tetra	85		4.506				ND	
5 Chloromethane	50		4.693				ND	
6 Butane	43		4.923				ND	
7 Vinyl chloride	62		4.982				ND	
8 Butadiene	54		5.067				ND	
10 Bromomethane	94		5.864				ND	
11 Chloroethane	64		6.121				ND	
13 Vinyl bromide	106		6.544				ND	
14 Trichlorofluoromethane	101		6.640				ND	
17 Ethanol	45	7.229	7.223	0.006	83	5667	0.1716	
20 1,1,2-Trichloro-1,2,2-trif	101		7.726				ND	
21 1,1-Dichloroethene	96		7.790				ND	
22 Acetone	43		8.036				ND	
23 Carbon disulfide	76		8.213				ND	
24 Isopropyl alcohol	45		8.309				ND	
25 3-Chloro-1-propene	41		8.593				ND	
27 Methylene Chloride	49		8.903				ND	
28 2-Methyl-2-propanol	59		9.101				ND	
29 Methyl tert-butyl ether	73		9.299				ND	
31 trans-1,2-Dichloroethene	61		9.352				ND	
S 30 1,2-Dichloroethene, Total	61		9.665				ND	
33 Hexane	57		9.722				ND	
34 1,1-Dichloroethane	63		10.257				ND	
35 Vinyl acetate	43		10.310				ND	
37 cis-1,2-Dichloroethene	96		11.375				ND	
38 2-Butanone (MEK)	72		11.412				ND	
39 Ethyl acetate	88		11.434				ND	
* 40 Chlorobromomethane	128	11.835	11.835	0.000	68	1390249	10.0	

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	41 Tetrahydrofuran	42		11.840				ND	
	42 Chloroform	83		11.952				ND	
	43 Cyclohexane	84		12.199				ND	
	44 1,1,1-Trichloroethane	97		12.225				ND	
	45 Carbon tetrachloride	117		12.466				ND	
	46 Isooctane	57		12.851				ND	
	47 Benzene	78		12.910				ND	
	48 1,2-Dichloroethane	62		13.087				ND	
	49 n-Heptane	43		13.204				ND	
*	50 1,4-Difluorobenzene	114	13.675	13.675	0.000	92	6951878	10.0	
	53 Trichloroethene	95		14.114				ND	
	54 1,2-Dichloropropane	63		14.627				ND	
	55 Methyl methacrylate	69		14.745				ND	
	56 1,4-Dioxane	88		14.820				ND	
	57 Dibromomethane	174		14.868				ND	
	58 Dichlorobromomethane	83		15.119				ND	
	60 cis-1,3-Dichloropropene	75		15.975				ND	
	61 4-Methyl-2-pentanone (MIBK	43		16.227				ND	
	65 Toluene	92		16.521				ND	
	66 trans-1,3-Dichloropropene	75		17.077				ND	
	67 1,1,2-Trichloroethane	83		17.436				ND	
	68 Tetrachloroethene	166		17.538				ND	
	69 2-Hexanone	43		17.842				ND	
	71 Chlorodibromomethane	129		18.169				ND	
	72 Ethylene Dibromide	107		18.436				ND	
*	74 Chlorobenzene-d5	117	19.287	19.287	0.000	83	6057830	10.0	
	75 Chlorobenzene	112		19.346				ND	
	76 Ethylbenzene	91		19.479				ND	
S	73 Xylenes, Total	106		19.600				ND	
	78 m-Xylene & p-Xylene	106		19.720				ND	
	79 o-Xylene	106		20.523				ND	
	80 Styrene	104		20.571				ND	
	81 Bromoform	173		20.977				ND	
	82 Isopropylbenzene	105		21.154				ND	
	84 1,1,2,2-Tetrachloroethane	83		21.780				ND	
	85 N-Propylbenzene	91		21.839				ND	
	88 4-Ethyltoluene	105		22.015				ND	
	89 2-Chlorotoluene	91		22.037				ND	
	90 1,3,5-Trimethylbenzene	105		22.117				ND	
	92 tert-Butylbenzene	119		22.588				ND	
	93 1,2,4-Trimethylbenzene	105		22.679				ND	
	94 sec-Butylbenzene	105		22.903				ND	
	95 4-Isopropyltoluene	119		23.096				ND	
	96 1,3-Dichlorobenzene	146		23.139				ND	
	97 1,4-Dichlorobenzene	146		23.272				ND	
	98 Benzyl chloride	91		23.470				ND	
	100 n-Butylbenzene	91		23.668				ND	
	101 1,2-Dichlorobenzene	146		23.813				ND	
	103 1,2,4-Trichlorobenzene	180		26.365				ND	
	104 Hexachlorobutadiene	225		26.546				ND	
	105 Naphthalene	128		26.867				ND	

Reagents:

ATTO15XISs_00002 Amount Added: 20.00 Units: mL Run Reagent

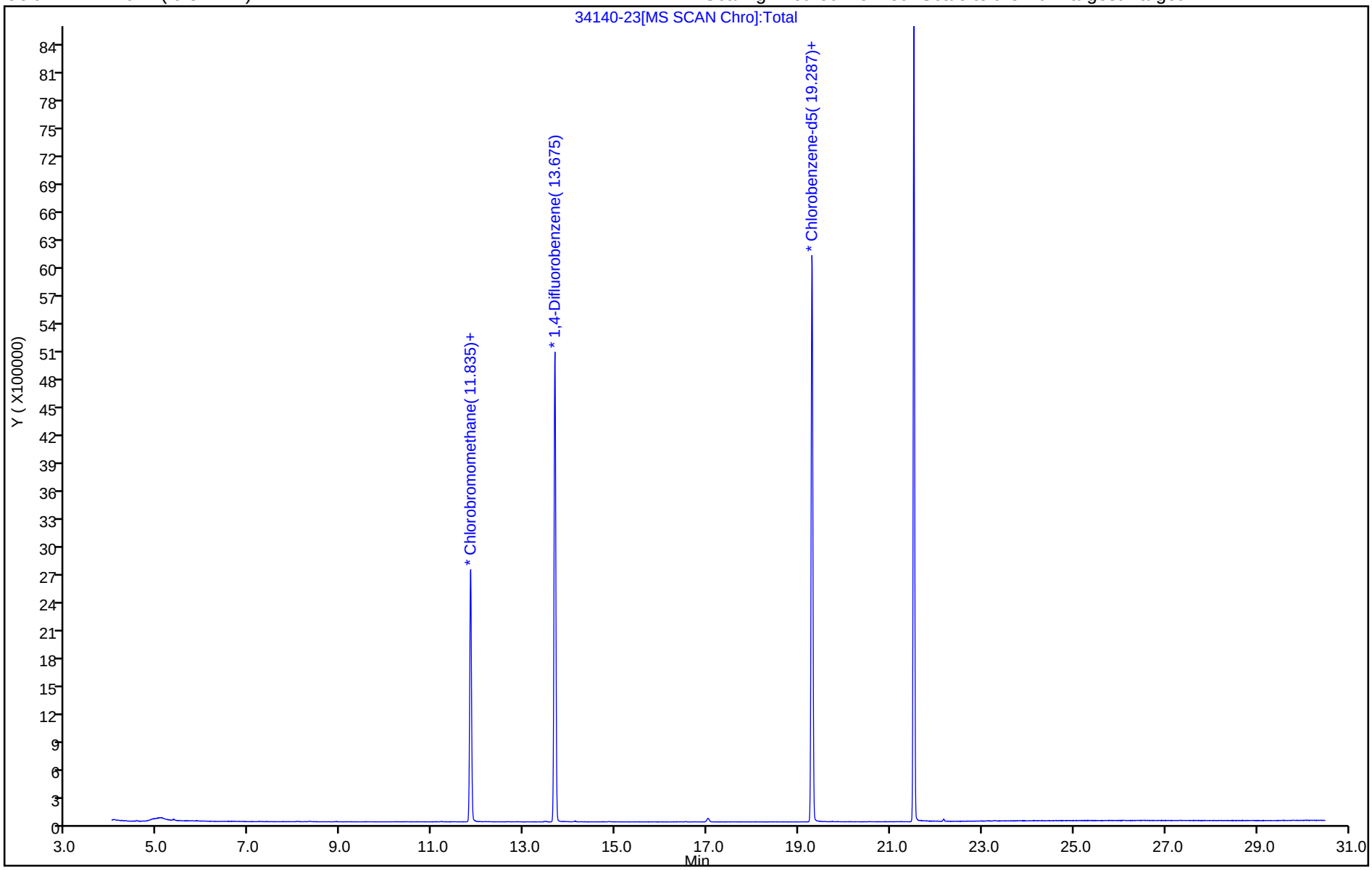
Report Date: 15-Jan-2019 12:34:23 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Burlington

Data File: \\chromna\Burlington\ChromData\CHX.i\20190114-34140.b\34140-23.D

Injection Date:	15-Jan-2019 09:10:30	Instrument ID:	CHX.i	Operator ID:	GGG
Lims ID:	200-47009-A-6	Lab Sample ID:	200-47009-6	Worklist Smp#:	23
Client ID:	4299				
Purge Vol:	200.000 mL	Dil. Factor:	0.2000	ALS Bottle#:	22
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-47057-1

SDG No.:

Client Sample ID: 2745 Lab Sample ID: 200-47057-4

Matrix: Air Lab File ID: 34301-23.D

Analysis Method: TO-15 Date Collected: 01/17/2019 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 01/26/2019 07:57

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 139445 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	1.0	U	1.0	1.0
75-71-8	Dichlorodifluoromethane	0.10	U	0.10	0.10
75-45-6	Freon 22	0.10	U	0.10	0.10
76-14-2	1,2-Dichlorotetrafluoroethane	0.040	U	0.040	0.040
74-87-3	Chloromethane	0.10	U	0.10	0.10
106-97-8	n-Butane	0.10	U	0.10	0.10
75-01-4	Vinyl chloride	0.040	U	0.040	0.040
106-99-0	1,3-Butadiene	0.040	U	0.040	0.040
74-83-9	Bromomethane	0.040	U	0.040	0.040
75-00-3	Chloroethane	0.10	U	0.10	0.10
593-60-2	Bromoethene(Vinyl Bromide)	0.040	U	0.040	0.040
75-69-4	Trichlorofluoromethane	0.040	U	0.040	0.040
64-17-5	Ethanol	1.0	U	1.0	1.0
76-13-1	Freon TF	0.040	U	0.040	0.040
75-35-4	1,1-Dichloroethene	0.040	U	0.040	0.040
67-64-1	Acetone	1.0	U	1.0	1.0
67-63-0	Isopropyl alcohol	1.0	U	1.0	1.0
75-15-0	Carbon disulfide	0.10	U	0.10	0.10
107-05-1	3-Chloropropene	0.10	U	0.10	0.10
75-09-2	Methylene Chloride	0.10	U	0.10	0.10
75-65-0	tert-Butyl alcohol	1.0	U	1.0	1.0
1634-04-4	Methyl tert-butyl ether	0.040	U	0.040	0.040
156-60-5	trans-1,2-Dichloroethene	0.040	U	0.040	0.040
110-54-3	n-Hexane	0.040	U	0.040	0.040
75-34-3	1,1-Dichloroethane	0.040	U	0.040	0.040
108-05-4	Vinyl acetate	1.0	U	1.0	1.0
141-78-6	Ethyl acetate	1.0	U	1.0	1.0
78-93-3	Methyl Ethyl Ketone	0.10	U	0.10	0.10
156-59-2	cis-1,2-Dichloroethene	0.040	U	0.040	0.040
540-59-0	1,2-Dichloroethene, Total	0.080	U	0.080	0.080
67-66-3	Chloroform	0.040	U	0.040	0.040
109-99-9	Tetrahydrofuran	1.0	U	1.0	1.0
71-55-6	1,1,1-Trichloroethane	0.040	U	0.040	0.040
110-82-7	Cyclohexane	0.040	U	0.040	0.040
56-23-5	Carbon tetrachloride	0.040	U	0.040	0.040
540-84-1	2,2,4-Trimethylpentane	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-47057-1

SDG No.:

Client Sample ID: 2745 Lab Sample ID: 200-47057-4

Matrix: Air Lab File ID: 34301-23.D

Analysis Method: TO-15 Date Collected: 01/17/2019 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 01/26/2019 07:57

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 139445 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
71-43-2	Benzene	0.040	U	0.040	0.040
107-06-2	1,2-Dichloroethane	0.040	U	0.040	0.040
142-82-5	n-Heptane	0.040	U	0.040	0.040
79-01-6	Trichloroethene	0.040	U	0.040	0.040
80-62-6	Methyl methacrylate	0.10	U	0.10	0.10
78-87-5	1,2-Dichloropropane	0.040	U	0.040	0.040
123-91-1	1,4-Dioxane	1.0	U	1.0	1.0
75-27-4	Bromodichloromethane	0.040	U	0.040	0.040
10061-01-5	cis-1,3-Dichloropropene	0.040	U	0.040	0.040
108-10-1	methyl isobutyl ketone	0.10	U	0.10	0.10
108-88-3	Toluene	0.040	U	0.040	0.040
10061-02-6	trans-1,3-Dichloropropene	0.040	U	0.040	0.040
79-00-5	1,1,2-Trichloroethane	0.040	U	0.040	0.040
127-18-4	Tetrachloroethene	0.040	U	0.040	0.040
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.10	U	0.10	0.10
124-48-1	Dibromochloromethane	0.040	U	0.040	0.040
106-93-4	1,2-Dibromoethane	0.040	U	0.040	0.040
108-90-7	Chlorobenzene	0.040	U	0.040	0.040
100-41-4	Ethylbenzene	0.040	U	0.040	0.040
179601-23-1	m,p-Xylene	0.10	U	0.10	0.10
95-47-6	Xylene, o-	0.040	U	0.040	0.040
1330-20-7	Xylene (total)	0.14	U	0.14	0.14
100-42-5	Styrene	0.040	U	0.040	0.040
75-25-2	Bromoform	0.040	U	0.040	0.040
98-82-8	Cumene	0.040	U	0.040	0.040
79-34-5	1,1,2,2-Tetrachloroethane	0.040	U	0.040	0.040
103-65-1	n-Propylbenzene	0.040	U	0.040	0.040
622-96-8	4-Ethyltoluene	0.040	U	0.040	0.040
108-67-8	1,3,5-Trimethylbenzene	0.040	U	0.040	0.040
95-49-8	2-Chlorotoluene	0.040	U	0.040	0.040
98-06-6	tert-Butylbenzene	0.040	U	0.040	0.040
95-63-6	1,2,4-Trimethylbenzene	0.040	U	0.040	0.040
135-98-8	sec-Butylbenzene	0.040	U	0.040	0.040
99-87-6	4-Isopropyltoluene	0.040	U	0.040	0.040
541-73-1	1,3-Dichlorobenzene	0.040	U	0.040	0.040
106-46-7	1,4-Dichlorobenzene	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-47057-1

SDG No.:

Client Sample ID: 2745 Lab Sample ID: 200-47057-4

Matrix: Air Lab File ID: 34301-23.D

Analysis Method: TO-15 Date Collected: 01/17/2019 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 01/26/2019 07:57

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 139445 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
100-44-7	Benzyl chloride	0.040	U	0.040	0.040
104-51-8	n-Butylbenzene	0.040	U	0.040	0.040
95-50-1	1,2-Dichlorobenzene	0.040	U	0.040	0.040
120-82-1	1,2,4-Trichlorobenzene	0.10	U	0.10	0.10
87-68-3	Hexachlorobutadiene	0.040	U	0.040	0.040
91-20-3	Naphthalene	0.10	U	0.10	0.10

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\chromna\Burlington\ChromData\CHC.i\20190125-34301.b\34301-23.D
Lims ID: 200-47057-A-4
Client ID: 2745
Sample Type: Client
Inject. Date: 26-Jan-2019 07:57:30 ALS Bottle#: 24 Worklist Smp#: 23
Purge Vol: 200.000 mL Dil. Factor: 0.2000
Sample Info: 200-0034301-023
Misc. Info.: 47057-4
Operator ID: ggg Instrument ID: CHC.i

Method: \\chromna\Burlington\ChromData\CHC.i\20190125-34301.b\TO15_MasterMethod_(v1)_CHC.i.m
Limit Group: AI_TO15_ICAL
Last Update: 28-Jan-2019 14:38:09 Calib Date: 23-Jan-2019 12:53:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Burlington\ChromData\CHC.i\20190122-34255.b\34255-22.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: CTX0330

First Level Reviewer: bunmaa Date: 28-Jan-2019 14:38:09

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
1	Propene	41		2.962				ND	U
2	Dichlorodifluoromethane	85		3.026				ND	
3	Chlorodifluoromethane	51		3.074				ND	U
4	1,2-Dichloro-1,1,2,2-tetra	85		3.282				ND	
5	Chloromethane	50		3.410				ND	U
6	Butane	43		3.613				ND	
7	Vinyl chloride	62		3.651				ND	
8	Butadiene	54		3.725				ND	
10	Bromomethane	94		4.387				ND	
11	Chloroethane	64		4.622				ND	
13	Vinyl bromide	106		5.011				ND	
14	Trichlorofluoromethane	101		5.124				ND	
17	Ethanol	45		5.695				ND	
20	1,1,2-Trichloro-1,2,2-trif	101		6.207				ND	
21	1,1-Dichloroethene	96		6.234				ND	
22	Acetone	43		6.452				ND	U
23	Carbon disulfide	76		6.613				ND	
24	Isopropyl alcohol	45		6.778				ND	
25	3-Chloro-1-propene	41		7.018				ND	
27	Methylene Chloride	49		7.317				ND	
28	2-Methyl-2-propanol	59		7.552				ND	
29	Methyl tert-butyl ether	73		7.733				ND	
31	trans-1,2-Dichloroethene	61		7.765				ND	
33	Hexane	57		8.176				ND	
34	1,1-Dichloroethane	63		8.630				ND	
35	Vinyl acetate	43		8.721				ND	
37	cis-1,2-Dichloroethene	96		9.745				ND	
38	2-Butanone (MEK)	72		9.783				ND	
39	Ethyl acetate	88		9.852				ND	
S 30	1,2-Dichloroethene, Total	61		10.200				ND	
* 40	Chlorobromomethane	128	10.199	10.204	-0.005	96	310861	10.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
41 Tetrahydrofuran	42		10.210				ND	
42 Chloroform	83		10.348				ND	
43 Cyclohexane	84		10.610				ND	
44 1,1,1-Trichloroethane	97		10.621				ND	
45 Carbon tetrachloride	117		10.877				ND	
47 Benzene	78		11.330				ND	U
46 Isooctane	57		11.336				ND	
48 1,2-Dichloroethane	62		11.506				ND	
49 n-Heptane	43		11.736				ND	
* 50 1,4-Difluorobenzene	114	12.184	12.190	-0.006	97	1791688	10.0	
53 Trichloroethene	95		12.659				ND	
54 1,2-Dichloropropane	63		13.198				ND	
55 Methyl methacrylate	69		13.390				ND	
56 1,4-Dioxane	88		13.433				ND	
57 Dibromomethane	174		13.460				ND	
58 Dichlorobromomethane	83		13.775				ND	
60 cis-1,3-Dichloropropene	75		14.725				ND	
61 4-Methyl-2-pentanone (MIBK	43		15.007				ND	
65 Toluene	92		15.317				ND	
66 trans-1,3-Dichloropropene	75		15.920				ND	
67 1,1,2-Trichloroethane	83		16.294				ND	
68 Tetrachloroethene	166		16.422				ND	
69 2-Hexanone	43		16.742				ND	
71 Chlorodibromomethane	129		17.057				ND	
72 Ethylene Dibromide	107		17.313				ND	
* 74 Chlorobenzene-d5	117	18.220	18.226	-0.006	93	1871146	10.0	
75 Chlorobenzene	112		18.284				ND	
76 Ethylbenzene	91		18.444				ND	U
78 m-Xylene & p-Xylene	106		18.695				ND	
79 o-Xylene	106		19.528				ND	
80 Styrene	104		19.581				ND	
81 Bromoform	173		20.014				ND	
S 73 Xylenes, Total	106		20.100				ND	
82 Isopropylbenzene	105		20.243				ND	
84 1,1,2,2-Tetrachloroethane	83		20.910				ND	
85 N-Propylbenzene	91		20.990				ND	
88 4-Ethyltoluene	105		21.188				ND	
89 2-Chlorotoluene	91		21.188				ND	
90 1,3,5-Trimethylbenzene	105		21.294				ND	
92 tert-Butylbenzene	119		21.796				ND	
93 1,2,4-Trimethylbenzene	105		21.892				ND	
94 sec-Butylbenzene	105		22.127				ND	
95 4-Isopropyltoluene	119		22.335				ND	
96 1,3-Dichlorobenzene	146		22.356				ND	
97 1,4-Dichlorobenzene	146		22.495				ND	
98 Benzyl chloride	91		22.682				ND	U
100 n-Butylbenzene	91		22.901				ND	U
101 1,2-Dichlorobenzene	146		23.013				ND	
103 1,2,4-Trichlorobenzene	180		25.414				ND	
104 Hexachlorobutadiene	225		25.607				ND	
105 Naphthalene	128		25.863				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

ATTO15CISs_00010 Amount Added: 20.00 Units: mL Run Reagent

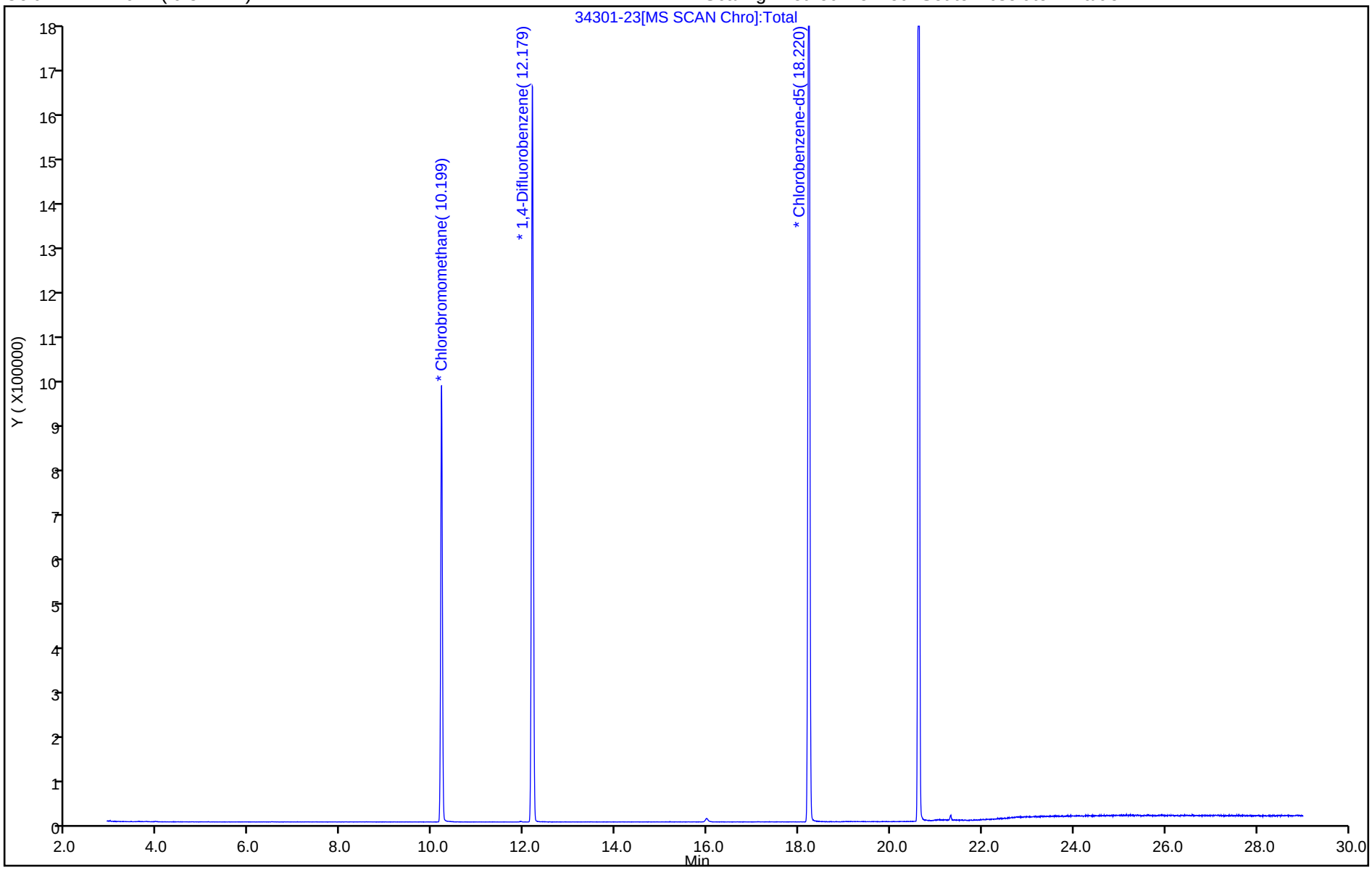
Report Date: 28-Jan-2019 14:38:09 Chrom Revision: 2.3 15-Jan-2019 08:51:34

TestAmerica Burlington

Data File: \\chromna\Burlington\ChromData\CHC.i\20190125-34301.b\34301-23.D

Injection Date:	26-Jan-2019 07:57:30	Instrument ID:	CHC.i	Operator ID:	ggg
Lims ID:	200-47057-A-4	Lab Sample ID:	200-47057-4	Worklist Smp#:	23
Client ID:	2745				
Purge Vol:	200.000 mL	Dil. Factor:	0.2000	ALS Bottle#:	24
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Set to Absolute Y Value



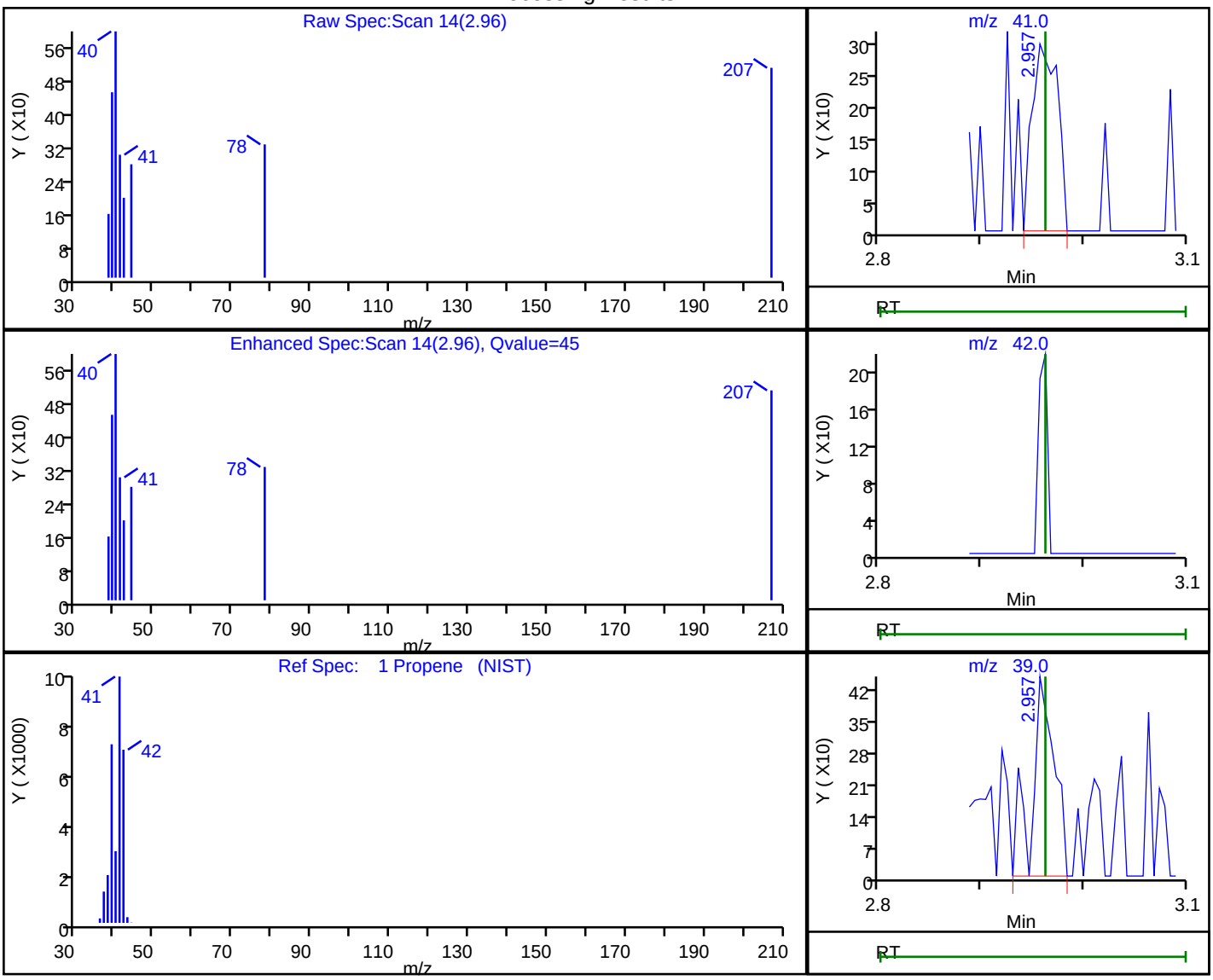
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\chromna\Burlington\ChromData\CHC.i\20190125-34301.b\34301-23.D				
Injection Date:	26-Jan-2019 07:57:30	Instrument ID:	CHC.i		
Lims ID:	200-47057-A-4	Lab Sample ID:	200-47057-4		
Client ID:	2745				
Operator ID:	ggg	ALS Bottle#:	24	Worklist Smp#:	23
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

1 Propene, CAS: 115-07-1

Processing Results



RT	Mass	Response	Amount
2.96	41.00	515	0.031901
2.96	42.00	0	
2.96	39.00	684	

Reviewer: bunmaa, 28-Jan-2019 14:36:44

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

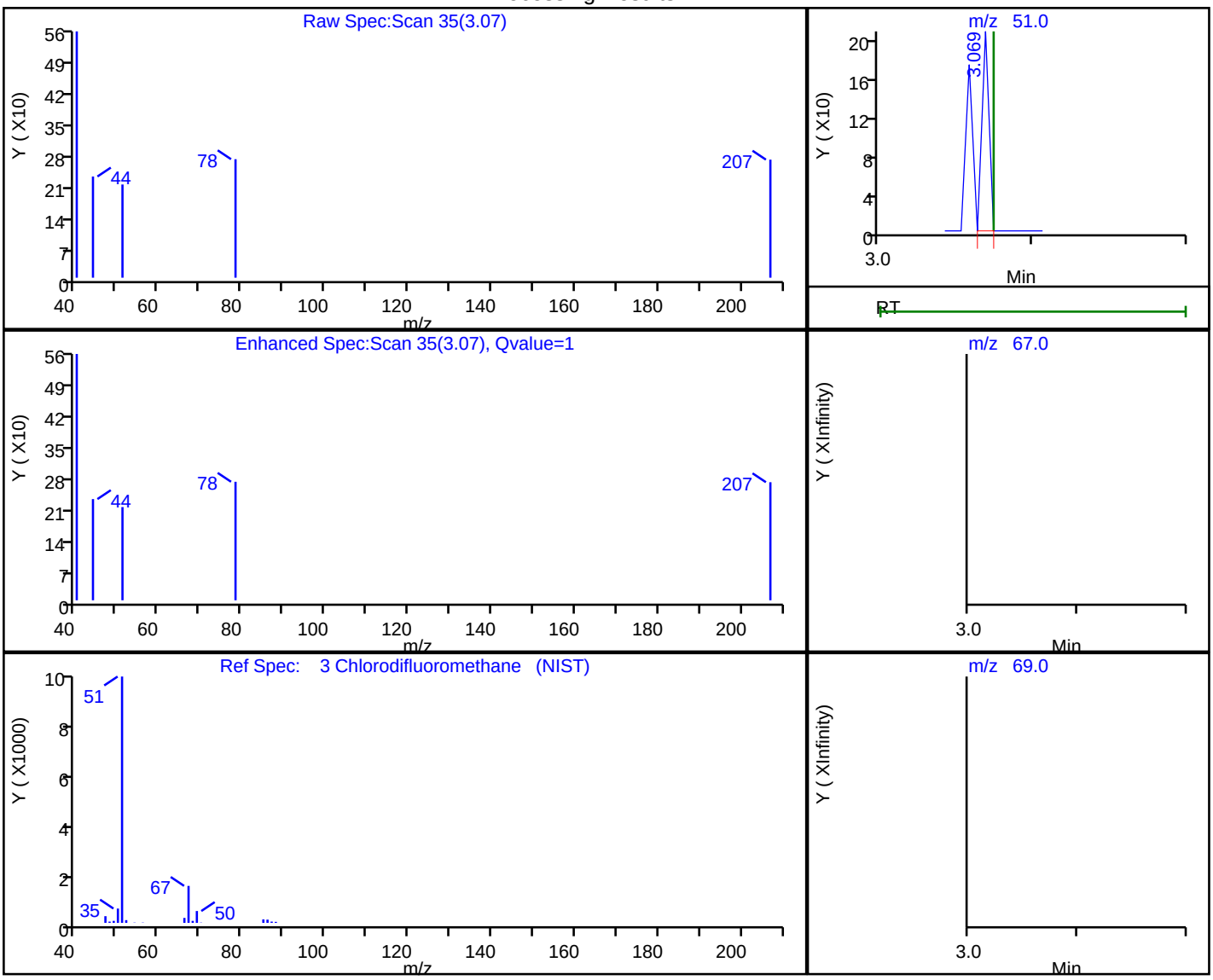
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\chromna\Burlington\ChromData\CHC.i\20190125-34301.b\34301-23.D				
Injection Date:	26-Jan-2019 07:57:30	Instrument ID:	CHC.i		
Lims ID:	200-47057-A-4	Lab Sample ID:	200-47057-4		
Client ID:	2745				
Operator ID:	ggg	ALS Bottle#:	24	Worklist Smp#:	23
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

3 Chlorodifluoromethane, CAS: 75-45-6

Processing Results



RT	Mass	Response	Amount
3.07	51.00	67	0.001860
3.07	67.00	0	
3.07	69.00	0	

Reviewer: bunmaa, 28-Jan-2019 14:36:47

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

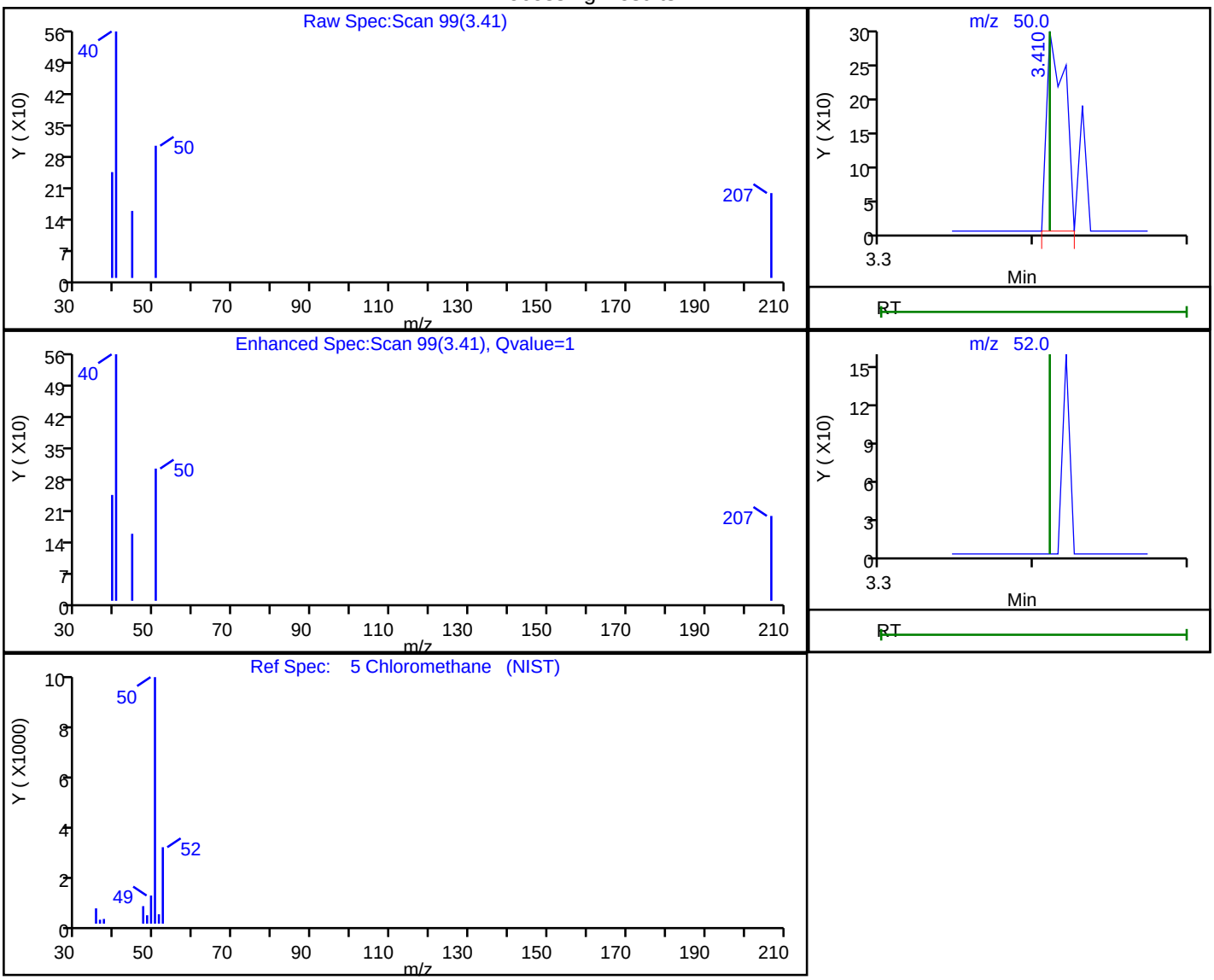
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\chromna\Burlington\ChromData\CHC.i\20190125-34301.b\34301-23.D				
Injection Date:	26-Jan-2019 07:57:30	Instrument ID:	CHC.i		
Lims ID:	200-47057-A-4	Lab Sample ID:	200-47057-4		
Client ID:	2745				
Operator ID:	ggg	ALS Bottle#:	24	Worklist Smp#:	23
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

5 Chloromethane, CAS: 74-87-3

Processing Results



RT	Mass	Response	Amount
3.41	50.00	242	0.015800
3.41	52.00	0	

Reviewer: bunmaa, 28-Jan-2019 14:36:50

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

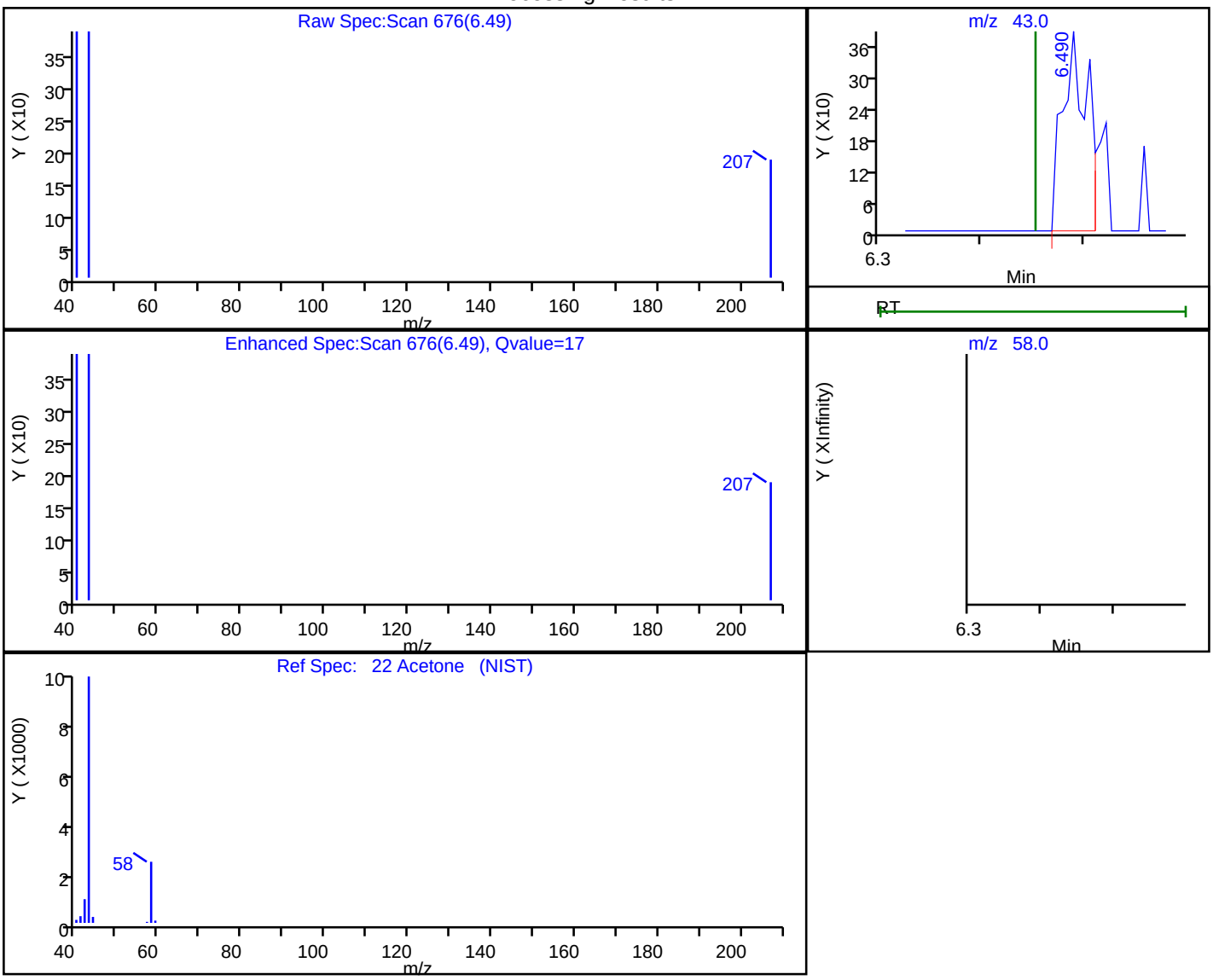
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\chromna\Burlington\ChromData\CHC.i\20190125-34301.b\34301-23.D				
Injection Date:	26-Jan-2019 07:57:30	Instrument ID:	CHC.i		
Lims ID:	200-47057-A-4	Lab Sample ID:	200-47057-4		
Client ID:	2745				
Operator ID:	ggg	ALS Bottle#:	24	Worklist Smp#:	23
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

22 Acetone, CAS: 67-64-1

Processing Results



RT	Mass	Response	Amount
6.49	43.00	649	0.020641
6.45	58.00	0	

Reviewer: bunmaa, 28-Jan-2019 14:37:05

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

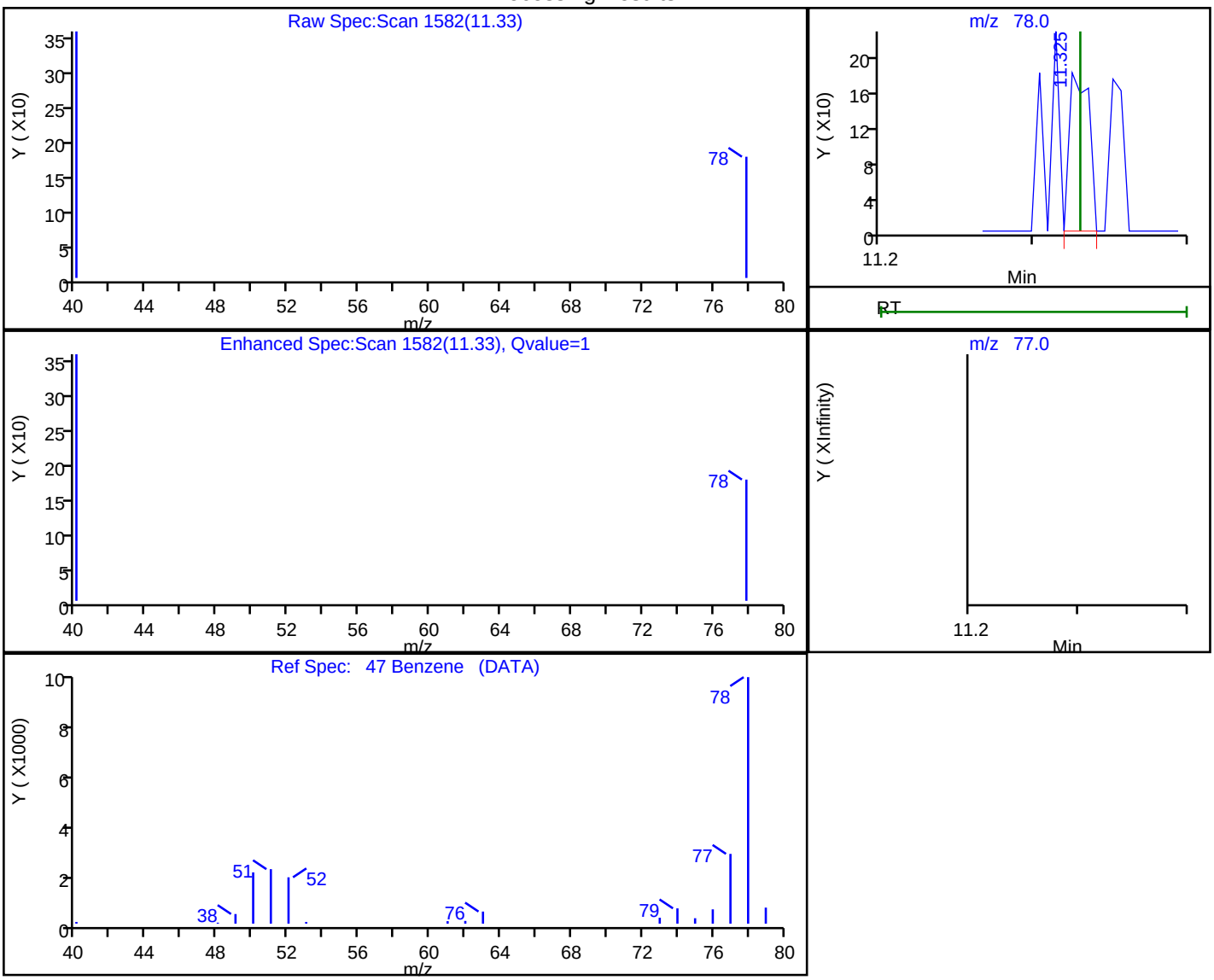
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\chromna\Burlington\ChromData\CHC.i\20190125-34301.b\34301-23.D				
Injection Date:	26-Jan-2019 07:57:30	Instrument ID:	CHC.i		
Lims ID:	200-47057-A-4	Lab Sample ID:	200-47057-4		
Client ID:	2745				
Operator ID:	ggg	ALS Bottle#:	24	Worklist Smp#:	23
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

47 Benzene, CAS: 71-43-2

Processing Results



RT	Mass	Response	Amount
11.33	78.00	156	0.002103
11.33	77.00	0	

Reviewer: bunmaa, 28-Jan-2019 14:37:20

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

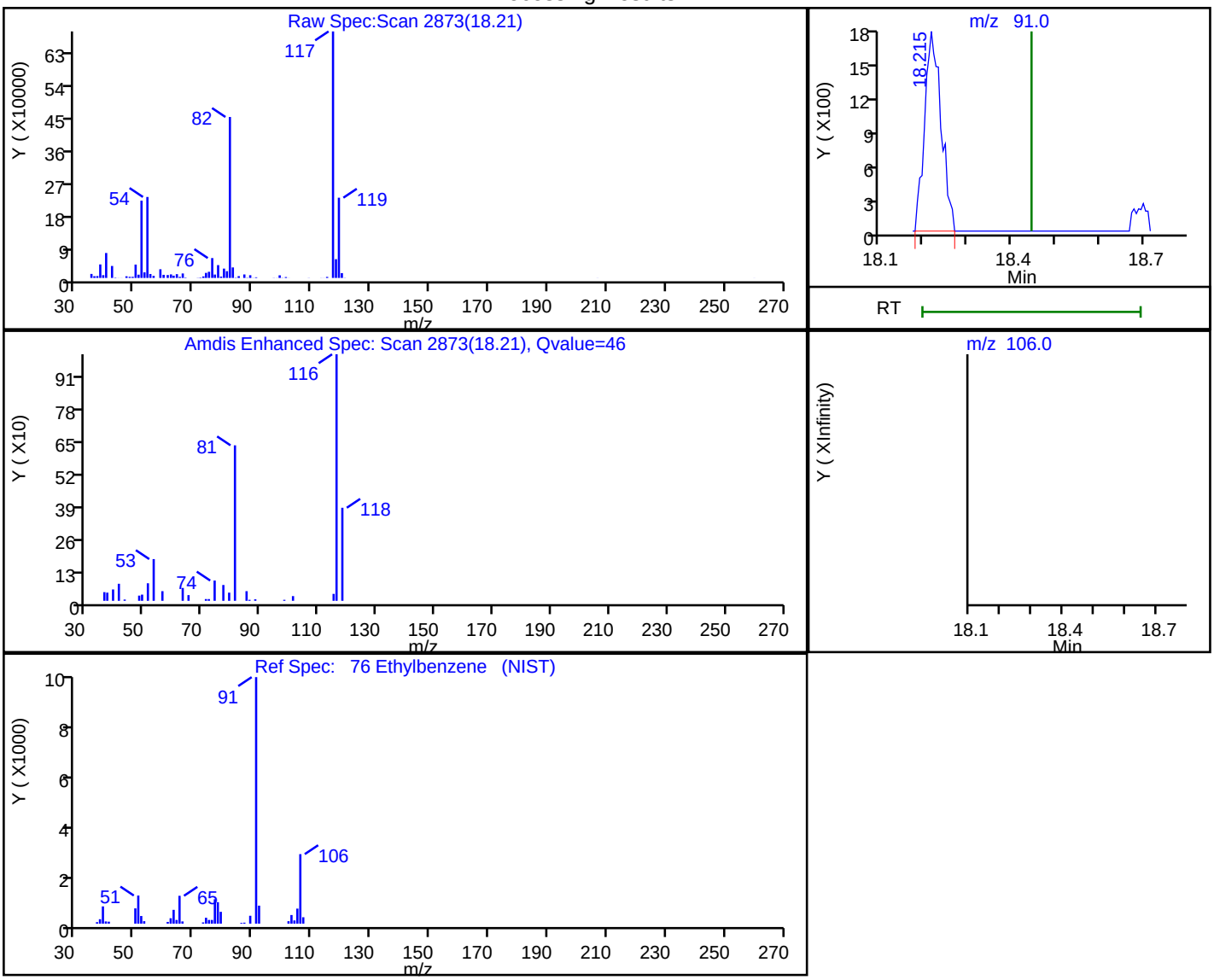
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\chromna\Burlington\ChromData\CHC.i\20190125-34301.b\34301-23.D				
Injection Date:	26-Jan-2019 07:57:30	Instrument ID:	CHC.i		
Lims ID:	200-47057-A-4	Lab Sample ID:	200-47057-4		
Client ID:	2745				
Operator ID:	ggg	ALS Bottle#:	24	Worklist Smp#:	23
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

76 Ethylbenzene, CAS: 100-41-4

Processing Results



RT	Mass	Response	Amount
18.21	91.00	4645	0.030456
18.44	106.00	0	

Reviewer: bunmaa, 28-Jan-2019 14:37:36

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

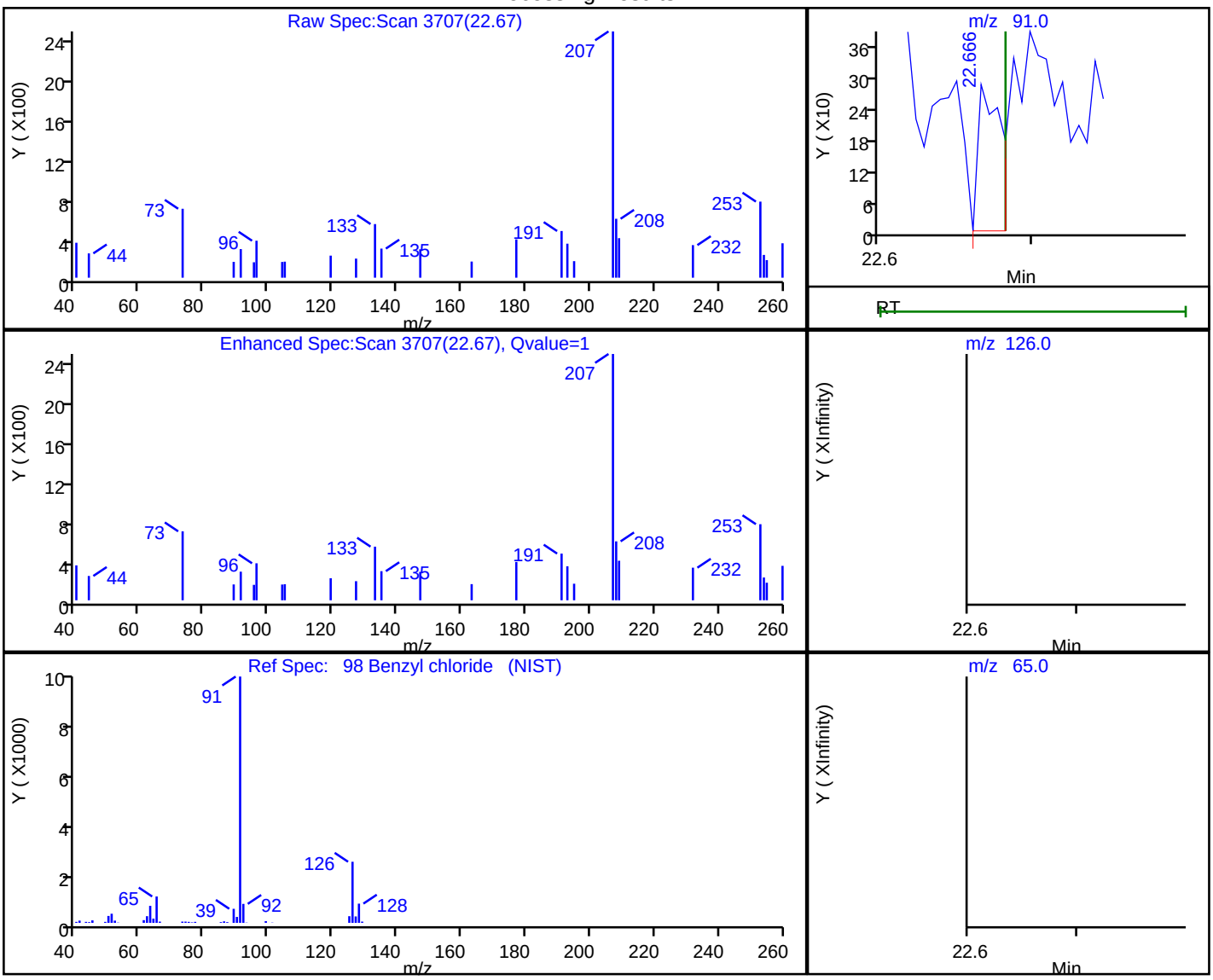
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\chromna\Burlington\ChromData\CHC.i\20190125-34301.b\34301-23.D				
Injection Date:	26-Jan-2019 07:57:30	Instrument ID:	CHC.i		
Lims ID:	200-47057-A-4	Lab Sample ID:	200-47057-4		
Client ID:	2745				
Operator ID:	ggg	ALS Bottle#:	24	Worklist Smp#:	23
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

98 Benzyl chloride, CAS: 100-44-7

Processing Results



RT	Mass	Response	Amount
22.67	91.00	292	0.002240
22.68	126.00	0	
22.68	65.00	0	

Reviewer: bunmaa, 28-Jan-2019 14:37:51

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

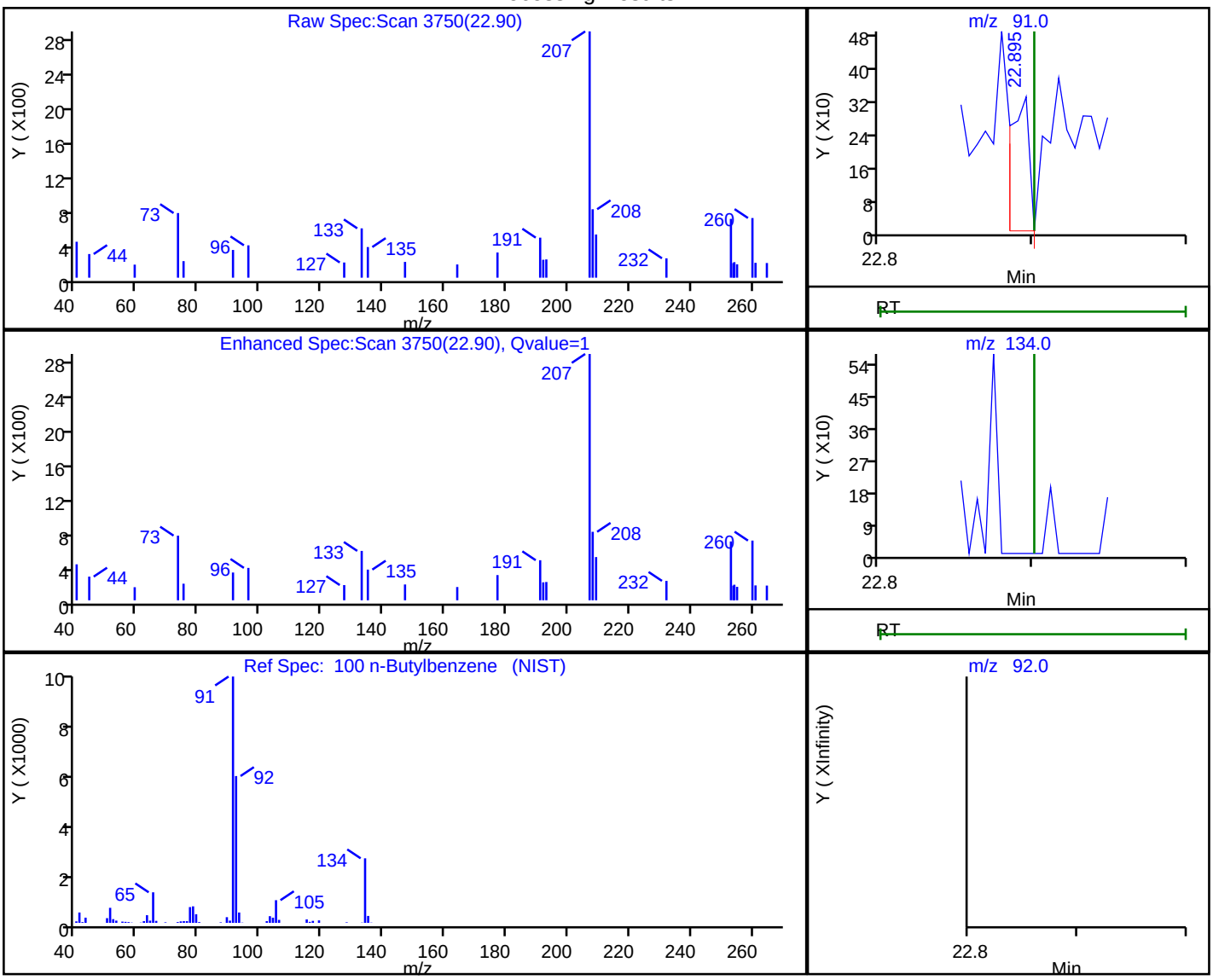
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\chromna\Burlington\ChromData\CHC.i\20190125-34301.b\34301-23.D				
Injection Date:	26-Jan-2019 07:57:30	Instrument ID:	CHC.i		
Lims ID:	200-47057-A-4	Lab Sample ID:	200-47057-4		
Client ID:	2745				
Operator ID:	ggg	ALS Bottle#:	24	Worklist Smp#:	23
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

100 n-Butylbenzene, CAS: 104-51-8

Processing Results



RT	Mass	Response	Amount
22.90	91.00	271	0.001613
22.90	134.00	0	
22.90	92.00	0	

Reviewer: bunmaa, 28-Jan-2019 14:37:53

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-47077-1

SDG No.:

Client Sample ID: 3412 Lab Sample ID: 200-47077-1

Matrix: Air Lab File ID: 34287-11.D

Analysis Method: TO-15 Date Collected: 01/18/2019 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 01/24/2019 21:33

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 139421 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	1.0	U	1.0	1.0
75-71-8	Dichlorodifluoromethane	0.10	U	0.10	0.10
75-45-6	Freon 22	0.10	U	0.10	0.10
76-14-2	1,2-Dichlorotetrafluoroethane	0.040	U	0.040	0.040
74-87-3	Chloromethane	0.10	U	0.10	0.10
106-97-8	n-Butane	0.10	U	0.10	0.10
75-01-4	Vinyl chloride	0.040	U	0.040	0.040
106-99-0	1,3-Butadiene	0.040	U	0.040	0.040
74-83-9	Bromomethane	0.040	U	0.040	0.040
75-00-3	Chloroethane	0.10	U	0.10	0.10
593-60-2	Bromoethene(Vinyl Bromide)	0.040	U	0.040	0.040
75-69-4	Trichlorofluoromethane	0.040	U	0.040	0.040
64-17-5	Ethanol	1.0	U	1.0	1.0
76-13-1	Freon TF	0.040	U	0.040	0.040
75-35-4	1,1-Dichloroethene	0.040	U	0.040	0.040
67-64-1	Acetone	1.0	U	1.0	1.0
67-63-0	Isopropyl alcohol	1.0	U	1.0	1.0
75-15-0	Carbon disulfide	0.10	U	0.10	0.10
107-05-1	3-Chloropropene	0.10	U	0.10	0.10
75-09-2	Methylene Chloride	0.10	U	0.10	0.10
75-65-0	tert-Butyl alcohol	1.0	U	1.0	1.0
1634-04-4	Methyl tert-butyl ether	0.040	U	0.040	0.040
156-60-5	trans-1,2-Dichloroethene	0.040	U	0.040	0.040
110-54-3	n-Hexane	0.040	U	0.040	0.040
75-34-3	1,1-Dichloroethane	0.040	U	0.040	0.040
108-05-4	Vinyl acetate	1.0	U	1.0	1.0
141-78-6	Ethyl acetate	1.0	U	1.0	1.0
78-93-3	Methyl Ethyl Ketone	0.10	U	0.10	0.10
156-59-2	cis-1,2-Dichloroethene	0.040	U	0.040	0.040
540-59-0	1,2-Dichloroethene, Total	0.080	U	0.080	0.080
67-66-3	Chloroform	0.040	U	0.040	0.040
109-99-9	Tetrahydrofuran	1.0	U	1.0	1.0
71-55-6	1,1,1-Trichloroethane	0.040	U	0.040	0.040
110-82-7	Cyclohexane	0.040	U	0.040	0.040
56-23-5	Carbon tetrachloride	0.040	U	0.040	0.040
540-84-1	2,2,4-Trimethylpentane	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-47077-1

SDG No.:

Client Sample ID: 3412 Lab Sample ID: 200-47077-1

Matrix: Air Lab File ID: 34287-11.D

Analysis Method: TO-15 Date Collected: 01/18/2019 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 01/24/2019 21:33

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 139421 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
71-43-2	Benzene	0.040	U	0.040	0.040
107-06-2	1,2-Dichloroethane	0.040	U	0.040	0.040
142-82-5	n-Heptane	0.040	U	0.040	0.040
79-01-6	Trichloroethene	0.040	U	0.040	0.040
80-62-6	Methyl methacrylate	0.10	U	0.10	0.10
78-87-5	1,2-Dichloropropane	0.040	U	0.040	0.040
123-91-1	1,4-Dioxane	1.0	U	1.0	1.0
75-27-4	Bromodichloromethane	0.040	U	0.040	0.040
10061-01-5	cis-1,3-Dichloropropene	0.040	U	0.040	0.040
108-10-1	methyl isobutyl ketone	0.10	U	0.10	0.10
108-88-3	Toluene	0.040	U	0.040	0.040
10061-02-6	trans-1,3-Dichloropropene	0.040	U	0.040	0.040
79-00-5	1,1,2-Trichloroethane	0.040	U	0.040	0.040
127-18-4	Tetrachloroethene	0.040	U	0.040	0.040
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.10	U	0.10	0.10
124-48-1	Dibromochloromethane	0.040	U	0.040	0.040
106-93-4	1,2-Dibromoethane	0.040	U	0.040	0.040
108-90-7	Chlorobenzene	0.040	U	0.040	0.040
100-41-4	Ethylbenzene	0.040	U	0.040	0.040
179601-23-1	m,p-Xylene	0.10	U	0.10	0.10
95-47-6	Xylene, o-	0.040	U	0.040	0.040
1330-20-7	Xylene (total)	0.14	U	0.14	0.14
100-42-5	Styrene	0.040	U	0.040	0.040
75-25-2	Bromoform	0.040	U	0.040	0.040
98-82-8	Cumene	0.040	U	0.040	0.040
79-34-5	1,1,2,2-Tetrachloroethane	0.040	U	0.040	0.040
103-65-1	n-Propylbenzene	0.040	U	0.040	0.040
622-96-8	4-Ethyltoluene	0.040	U	0.040	0.040
108-67-8	1,3,5-Trimethylbenzene	0.040	U	0.040	0.040
95-49-8	2-Chlorotoluene	0.040	U	0.040	0.040
98-06-6	tert-Butylbenzene	0.040	U	0.040	0.040
95-63-6	1,2,4-Trimethylbenzene	0.040	U	0.040	0.040
135-98-8	sec-Butylbenzene	0.040	U	0.040	0.040
99-87-6	4-Isopropyltoluene	0.040	U	0.040	0.040
541-73-1	1,3-Dichlorobenzene	0.040	U	0.040	0.040
106-46-7	1,4-Dichlorobenzene	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-47077-1

SDG No.:

Client Sample ID: 3412 Lab Sample ID: 200-47077-1

Matrix: Air Lab File ID: 34287-11.D

Analysis Method: TO-15 Date Collected: 01/18/2019 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 01/24/2019 21:33

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 139421 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
100-44-7	Benzyl chloride	0.040	U	0.040	0.040
104-51-8	n-Butylbenzene	0.040	U	0.040	0.040
95-50-1	1,2-Dichlorobenzene	0.040	U	0.040	0.040
120-82-1	1,2,4-Trichlorobenzene	0.10	U	0.10	0.10
87-68-3	Hexachlorobutadiene	0.040	U	0.040	0.040
91-20-3	Naphthalene	0.10	U	0.10	0.10

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\chromna\Burlington\ChromData\CHC.i\20190124-34287.b\34287-11.D
Lims ID: 200-47077-A-1
Client ID: 3412
Sample Type: Client
Inject. Date: 24-Jan-2019 21:33:30 ALS Bottle#: 12 Worklist Smp#: 11
Purge Vol: 200.000 mL Dil. Factor: 0.2000
Sample Info: 200-0034287-011
Misc. Info.: 47077-1
Operator ID: ert Instrument ID: CHC.i

Method: \\chromna\Burlington\ChromData\CHC.i\20190124-34287.b\TO15_MasterMethod_(v1)_CHC.i.m
Limit Group: AI_TO15_ICAL
Last Update: 25-Jan-2019 11:16:09 Calib Date: 23-Jan-2019 12:53:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Burlington\ChromData\CHC.i\20190122-34255.b\34255-22.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: CTX0320

First Level Reviewer: bunmaa Date: 25-Jan-2019 11:16:09

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
1 Propene	41		2.967				ND	
2 Dichlorodifluoromethane	85		3.032				ND	
3 Chlorodifluoromethane	51		3.080				ND	U
4 1,2-Dichloro-1,1,2,2-tetra	85		3.288				ND	
5 Chloromethane	50		3.416				ND	U
6 Butane	43		3.619				ND	U
7 Vinyl chloride	62		3.656				ND	
8 Butadiene	54		3.731				ND	
10 Bromomethane	94		4.392				ND	
11 Chloroethane	64		4.633				ND	
13 Vinyl bromide	106		5.017				ND	
14 Trichlorofluoromethane	101		5.129				ND	
17 Ethanol	45		5.700				ND	
20 1,1,2-Trichloro-1,2,2-trif	101		6.218				ND	
21 1,1-Dichloroethene	96		6.239				ND	
22 Acetone	43		6.458				ND	U
23 Carbon disulfide	76	6.612	6.614	-0.006	98	5450	0.0815	
24 Isopropyl alcohol	45		6.783				ND	
25 3-Chloro-1-propene	41		7.024				ND	
27 Methylene Chloride	49		7.317				ND	
28 2-Methyl-2-propanol	59		7.557				ND	
29 Methyl tert-butyl ether	73		7.739				ND	
31 trans-1,2-Dichloroethene	61		7.771				ND	
33 Hexane	57		8.182				ND	
34 1,1-Dichloroethane	63		8.635				ND	
35 Vinyl acetate	43		8.721				ND	
37 cis-1,2-Dichloroethene	96		9.751				ND	
38 2-Butanone (MEK)	72		9.783				ND	
39 Ethyl acetate	88		9.857				ND	
S 30 1,2-Dichloroethene, Total	61		10.200				ND	
* 40 Chlorobromomethane	128	10.204	10.210	-0.006	90	445151	10.0	

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	41 Tetrahydrofuran	42		10.215				ND	
	42 Chloroform	83		10.354				ND	
	43 Cyclohexane	84		10.610				ND	
	44 1,1,1-Trichloroethane	97		10.621				ND	
	45 Carbon tetrachloride	117		10.877				ND	
	47 Benzene	78		11.336				ND	U
	46 Isooctane	57		11.336				ND	
	48 1,2-Dichloroethane	62		11.507				ND	
	49 n-Heptane	43		11.741				ND	
*	50 1,4-Difluorobenzene	114	12.189	12.190	-0.001	96	2640876	10.0	
	53 Trichloroethene	95	12.654	12.659	-0.005	89	2535	0.0448	
	54 1,2-Dichloropropane	63		13.198				ND	
	55 Methyl methacrylate	69		13.396				ND	
	56 1,4-Dioxane	88		13.438				ND	
	57 Dibromomethane	174		13.460				ND	U
	58 Dichlorobromomethane	83		13.775				ND	
	60 cis-1,3-Dichloropropene	75		14.725				ND	
	61 4-Methyl-2-pentanone (MIBK	43		15.008				ND	
	65 Toluene	92		15.322				ND	
	66 trans-1,3-Dichloropropene	75		15.925				ND	U
	67 1,1,2-Trichloroethane	83		16.294				ND	
	68 Tetrachloroethene	166		16.422				ND	
	69 2-Hexanone	43		16.742				ND	
	71 Chlorodibromomethane	129		17.057				ND	
	72 Ethylene Dibromide	107		17.313				ND	
*	74 Chlorobenzene-d5	117	18.225	18.226	-0.001	91	2717325	10.0	
	75 Chlorobenzene	112		18.284				ND	
	76 Ethylbenzene	91		18.445				ND	U
	78 m-Xylene & p-Xylene	106		18.695				ND	
	79 o-Xylene	106		19.528				ND	
	80 Styrene	104		19.581				ND	
	81 Bromoform	173		20.014				ND	
S	73 Xylenes, Total	106		20.100				ND	
	82 Isopropylbenzene	105		20.248				ND	U
	84 1,1,2,2-Tetrachloroethane	83		20.915				ND	
	85 N-Propylbenzene	91		20.990				ND	
	89 2-Chlorotoluene	91		21.188				ND	
	88 4-Ethyltoluene	105		21.188				ND	U
	90 1,3,5-Trimethylbenzene	105		21.294				ND	U
	92 tert-Butylbenzene	119		21.796				ND	
	93 1,2,4-Trimethylbenzene	105		21.892				ND	U
	94 sec-Butylbenzene	105		22.127				ND	U
	95 4-Isopropyltoluene	119		22.335				ND	
	96 1,3-Dichlorobenzene	146		22.356				ND	U
	97 1,4-Dichlorobenzene	146		22.495				ND	U
	98 Benzyl chloride	91		22.687				ND	U
	100 n-Butylbenzene	91		22.901				ND	U
	101 1,2-Dichlorobenzene	146		23.013				ND	U
	103 1,2,4-Trichlorobenzene	180		25.420				ND	U
	104 Hexachlorobutadiene	225		25.612				ND	
	105 Naphthalene	128		25.863				ND	U

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

ATTO15CISs_00010 Amount Added: 20.00 Units: mL Run Reagent

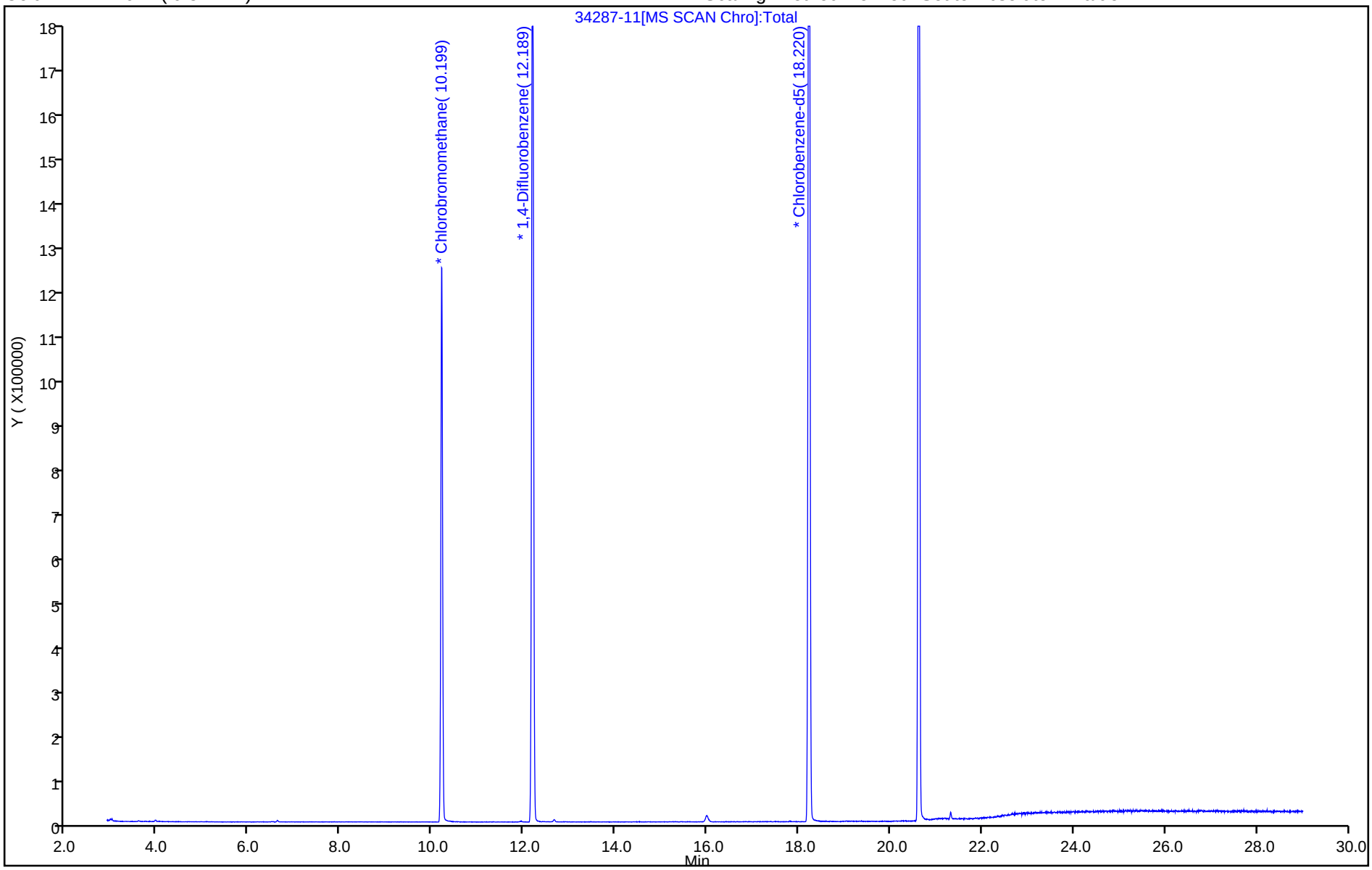
Report Date: 25-Jan-2019 11:16:10 Chrom Revision: 2.3 15-Jan-2019 08:51:34

TestAmerica Burlington

Data File: \\chromna\Burlington\ChromData\CHC.i\20190124-34287.b\34287-11.D

Injection Date:	24-Jan-2019 21:33:30	Instrument ID:	CHC.i	Operator ID:	ert
Lims ID:	200-47077-A-1	Lab Sample ID:	200-47077-1	Worklist Smp#:	11
Client ID:	3412				
Purge Vol:	200.000 mL	Dil. Factor:	0.2000	ALS Bottle#:	12
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Set to Absolute Y Value



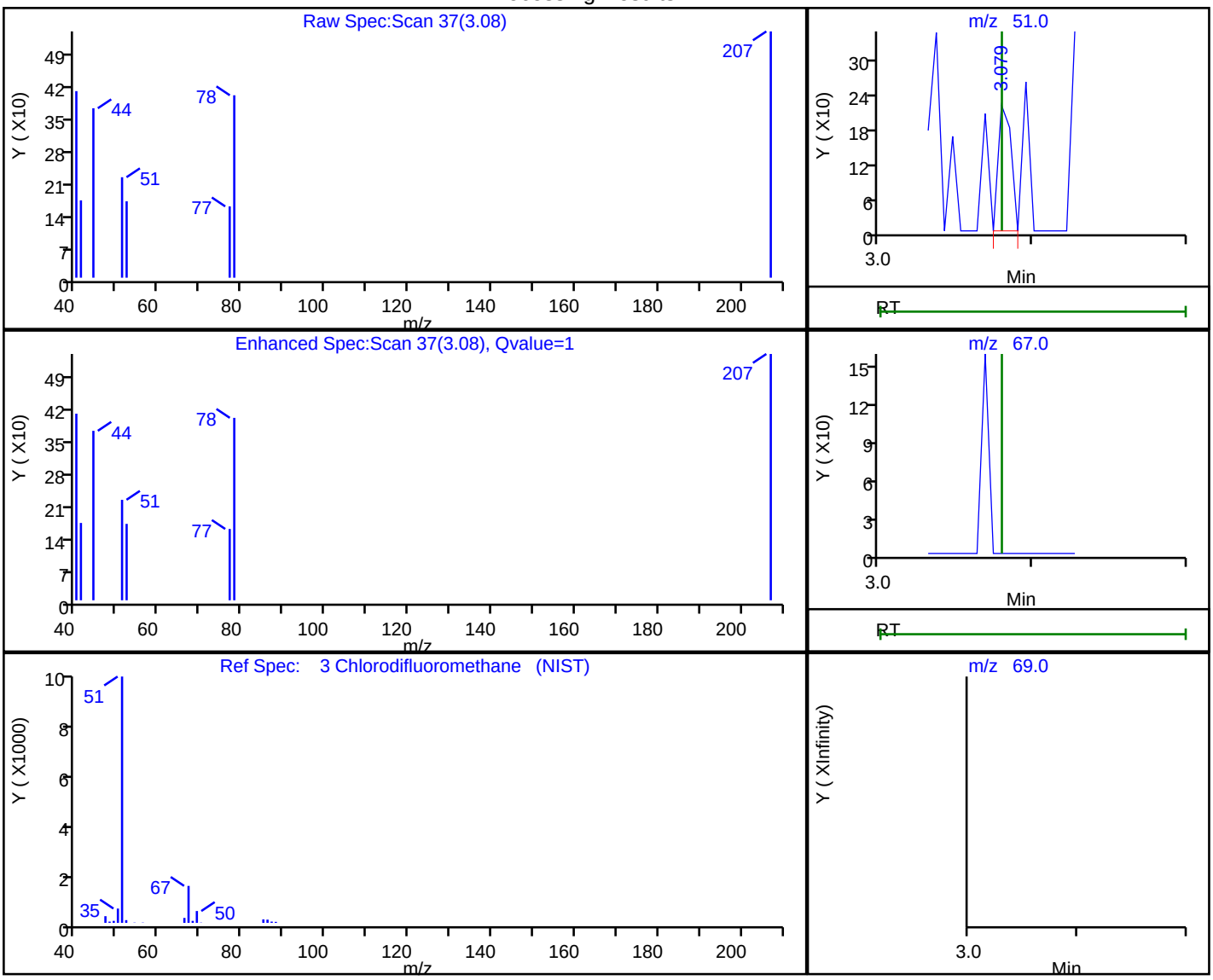
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\chromna\Burlington\ChromData\CHC.i\20190124-34287.b\34287-11.D				
Injection Date:	24-Jan-2019 21:33:30	Instrument ID:	CHC.i		
Lims ID:	200-47077-A-1	Lab Sample ID:	200-47077-1		
Client ID:	3412				
Operator ID:	ert	ALS Bottle#:	12	Worklist Smp#:	11
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

3 Chlorodifluoromethane, CAS: 75-45-6

Processing Results



RT	Mass	Response	Amount
3.08	51.00	126	0.002442
3.08	67.00	0	
3.08	69.00	0	

Reviewer: bunmaa, 25-Jan-2019 11:13:08

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

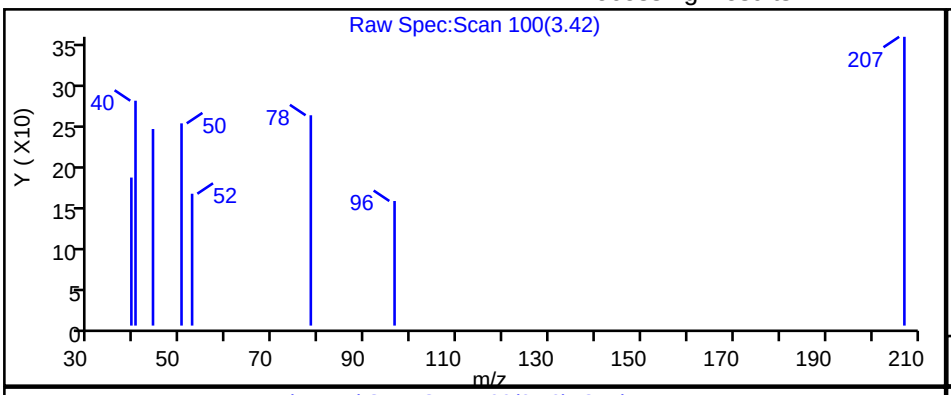
User Disabled Compound Report

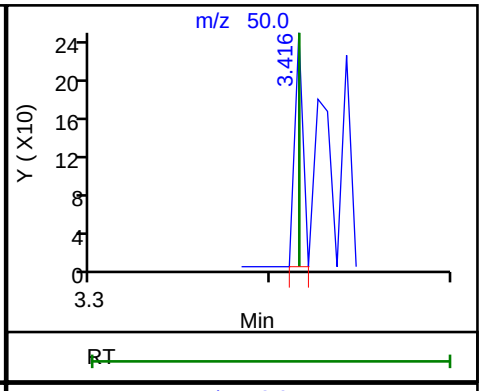
TestAmerica Burlington

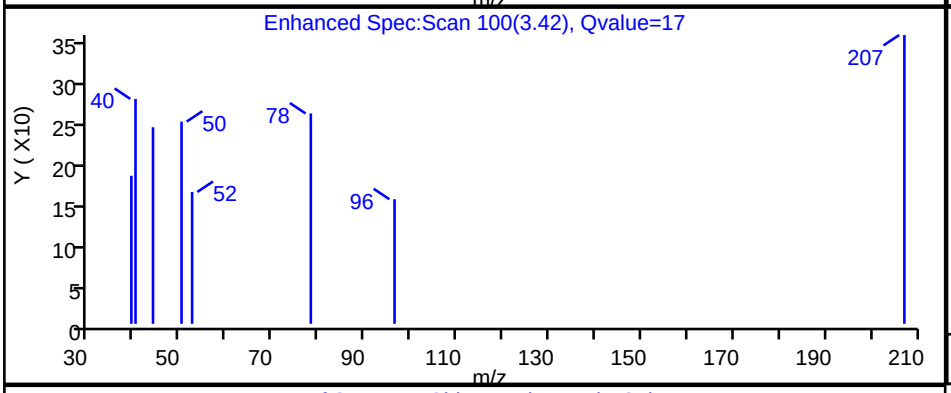
Data File:	\\chromna\Burlington\ChromData\CHC.i\20190124-34287.b\34287-11.D				
Injection Date:	24-Jan-2019 21:33:30	Instrument ID:	CHC.i		
Lims ID:	200-47077-A-1	Lab Sample ID:	200-47077-1		
Client ID:	3412				
Operator ID:	ert	ALS Bottle#:	12	Worklist Smp#:	11
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

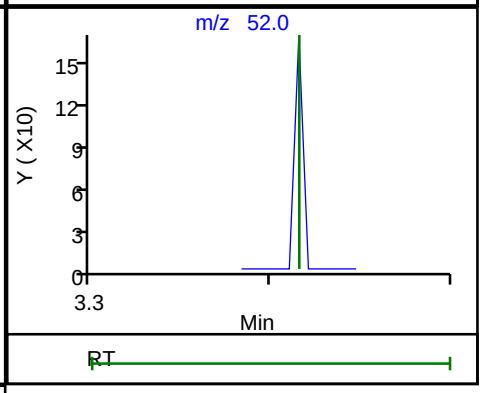
5 Chloromethane, CAS: 74-87-3

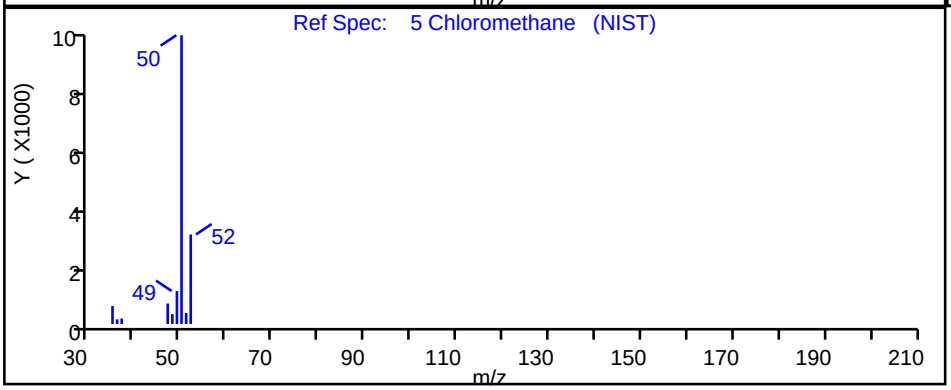
Processing Results











RT	Mass	Response	Amount
3.42	50.00	80	0.003648
3.42	52.00	0	

Reviewer: bunmaa, 25-Jan-2019 11:13:11

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

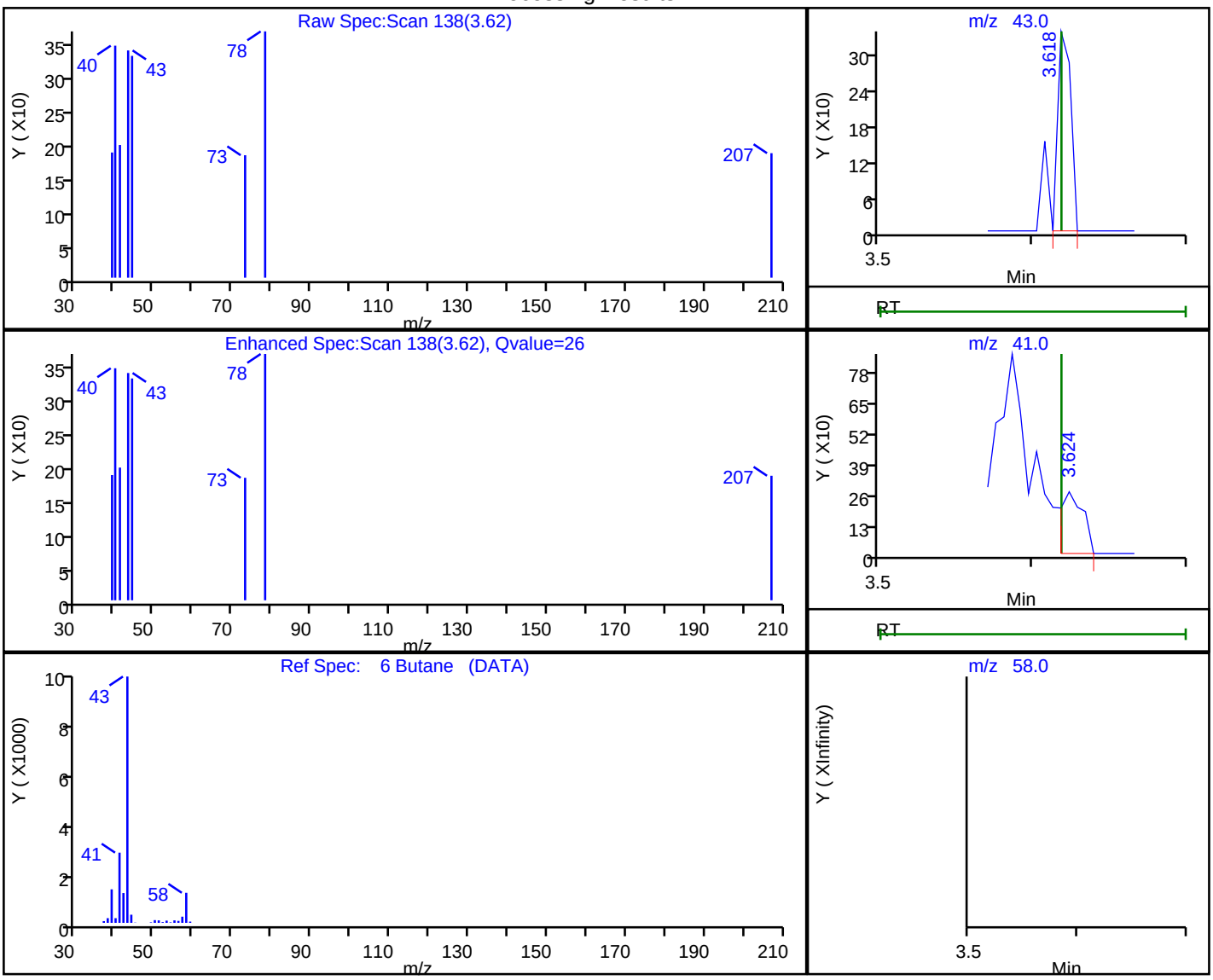
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\chromna\Burlington\ChromData\CHC.i\20190124-34287.b\34287-11.D				
Injection Date:	24-Jan-2019 21:33:30	Instrument ID:	CHC.i		
Lims ID:	200-47077-A-1	Lab Sample ID:	200-47077-1		
Client ID:	3412				
Operator ID:	ert	ALS Bottle#:	12	Worklist Smp#:	11
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

6 Butane, CAS: 106-97-8

Processing Results



RT	Mass	Response	Amount
3.62	43.00	197	0.005712
3.62	41.00	269	
3.62	58.00	0	

Reviewer: bunmaa, 25-Jan-2019 11:13:19

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

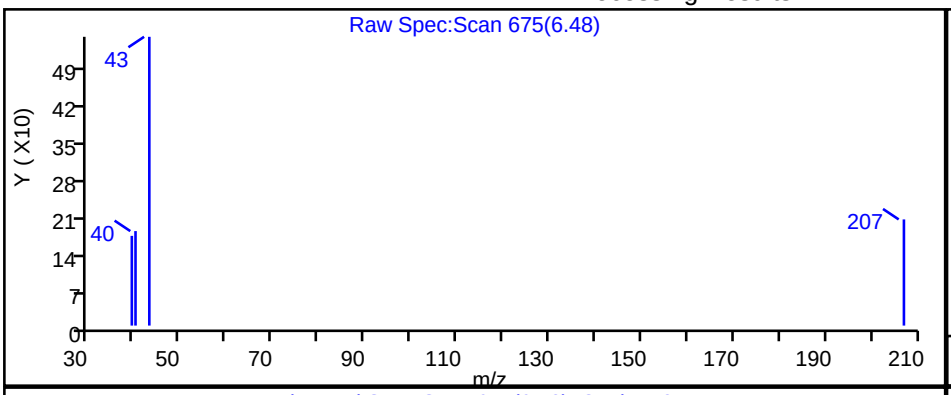
User Disabled Compound Report

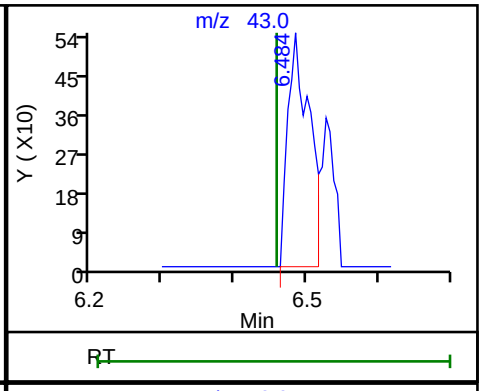
TestAmerica Burlington

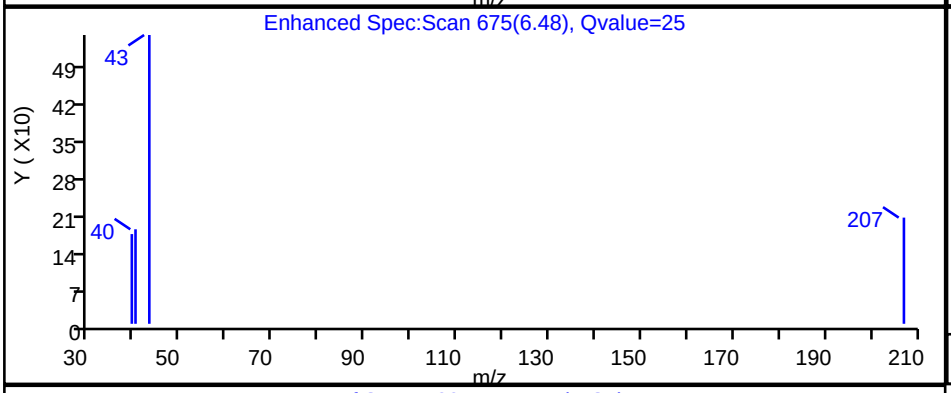
Data File:	\\chromna\Burlington\ChromData\CHC.i\20190124-34287.b\34287-11.D				
Injection Date:	24-Jan-2019 21:33:30	Instrument ID:	CHC.i		
Lims ID:	200-47077-A-1	Lab Sample ID:	200-47077-1		
Client ID:	3412				
Operator ID:	ert	ALS Bottle#:	12	Worklist Smp#:	11
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

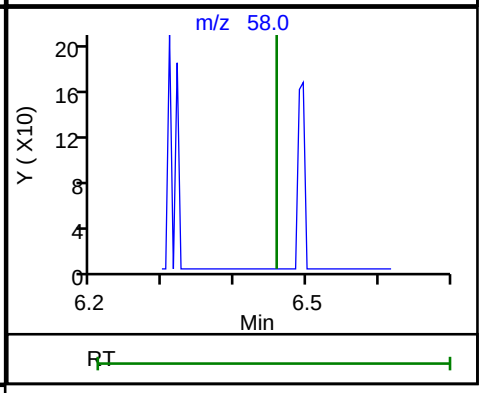
22 Acetone, CAS: 67-64-1

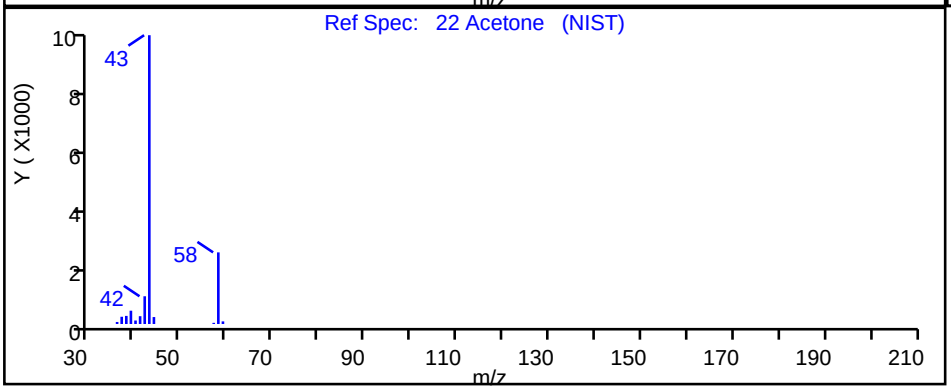
Processing Results











RT	Mass	Response	Amount
6.48	43.00	1140	0.025320
6.46	58.00	0	

Reviewer: bunmaa, 25-Jan-2019 11:13:34

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

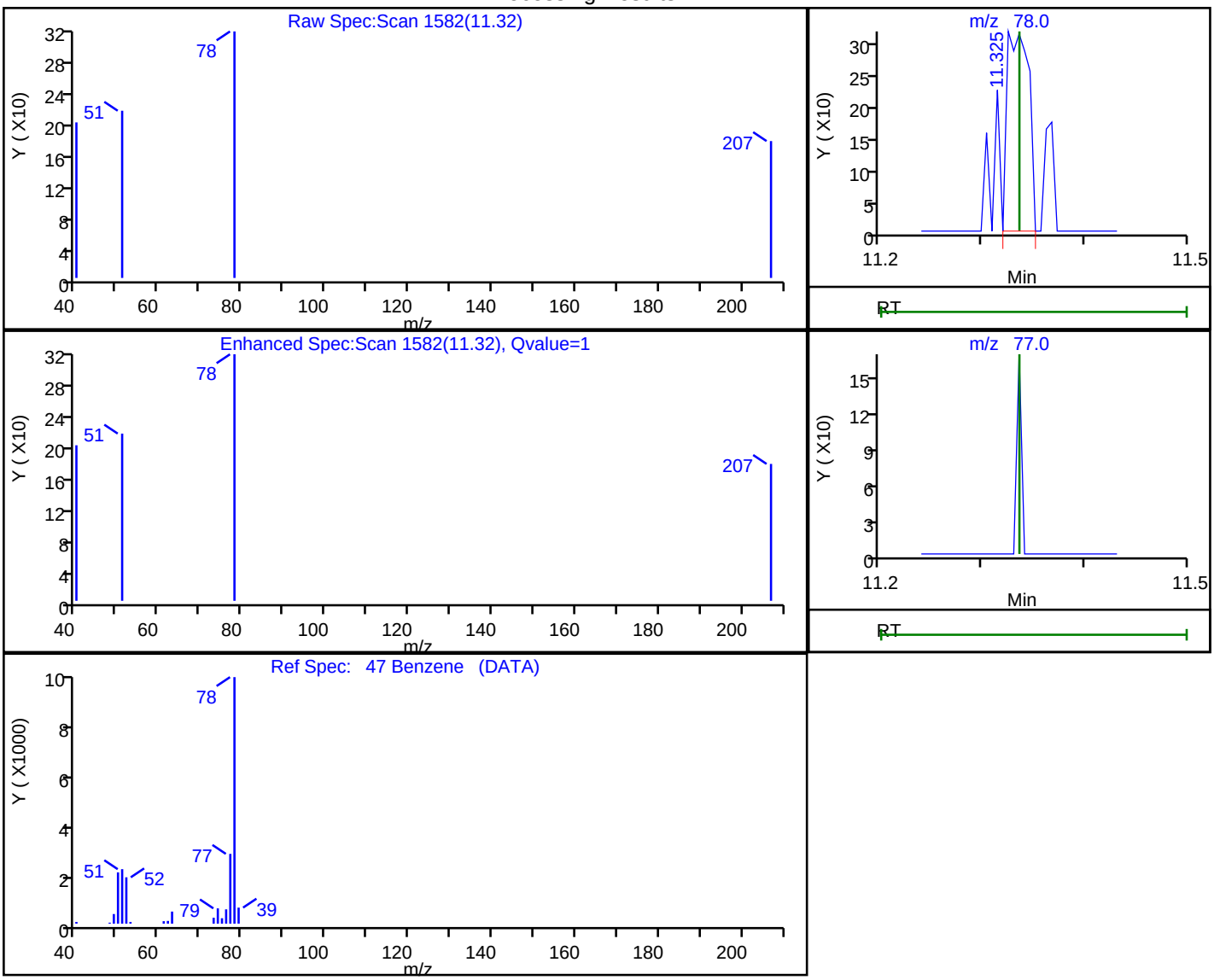
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\chromna\Burlington\ChromData\CHC.i\20190124-34287.b\34287-11.D				
Injection Date:	24-Jan-2019 21:33:30	Instrument ID:	CHC.i		
Lims ID:	200-47077-A-1	Lab Sample ID:	200-47077-1		
Client ID:	3412				
Operator ID:	ert	ALS Bottle#:	12	Worklist Smp#:	11
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

47 Benzene, CAS: 71-43-2

Processing Results



RT	Mass	Response	Amount
11.32	78.00	466	0.004263
11.34	77.00	0	

Reviewer: bunmaa, 25-Jan-2019 11:14:11

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

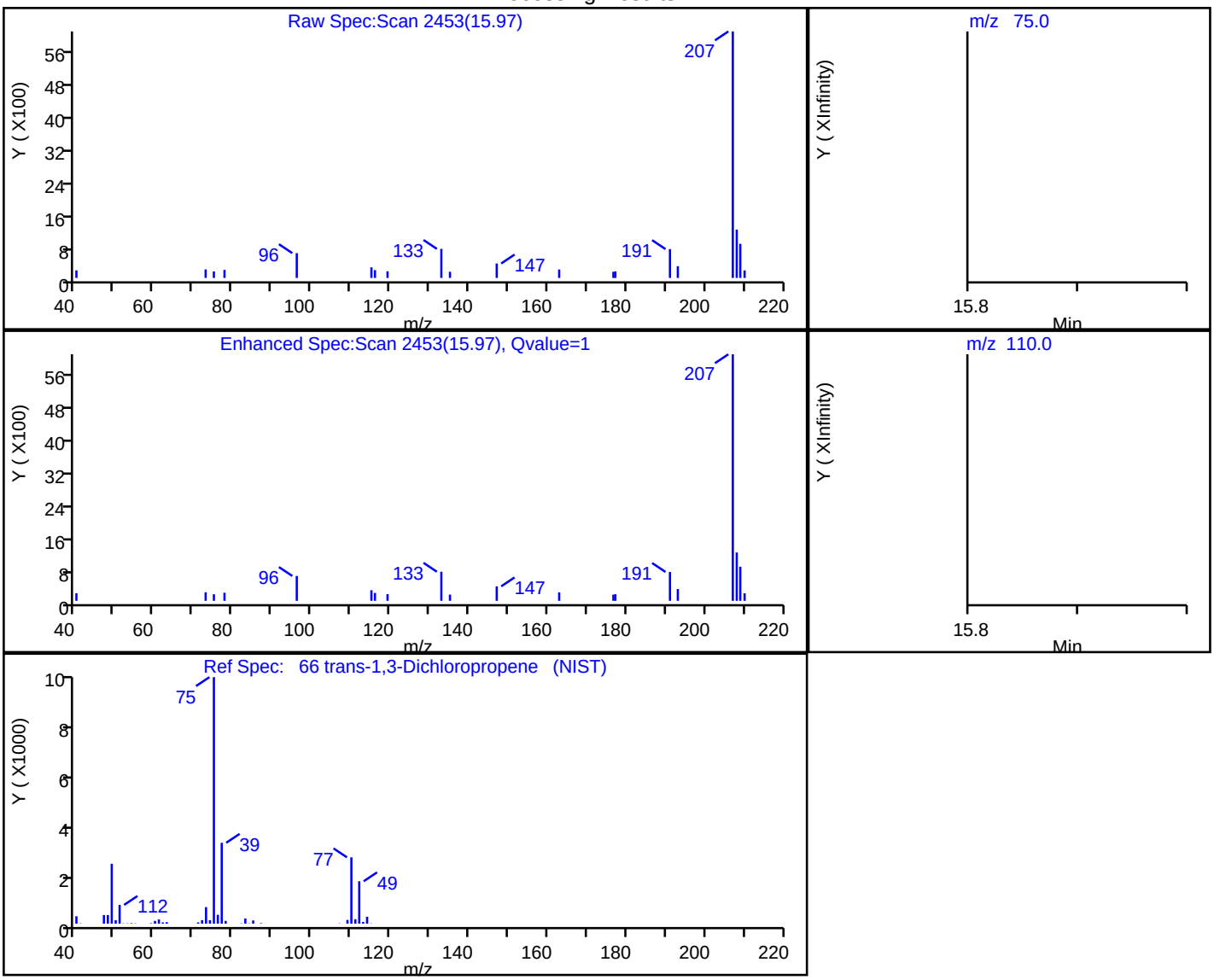
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\chromna\Burlington\ChromData\CHC.i\20190124-34287.b\34287-11.D				
Injection Date:	24-Jan-2019 21:33:30	Instrument ID:	CHC.i		
Lims ID:	200-47077-A-1	Lab Sample ID:	200-47077-1		
Client ID:	3412				
Operator ID:	ert	ALS Bottle#:	12	Worklist Smp#:	11
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

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

Processing Results



RT	Mass	Response	Amount
15.97	75.00	51	0.000585
15.93	110.00	0	

Reviewer: bunmaa, 25-Jan-2019 11:14:35

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

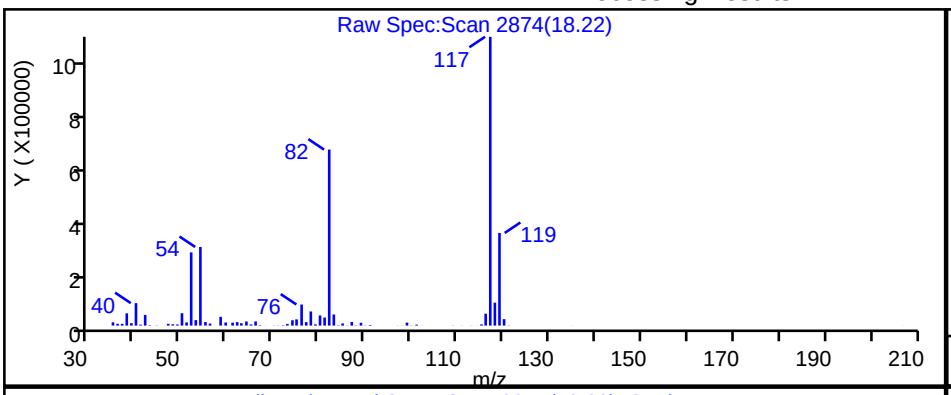
User Disabled Compound Report

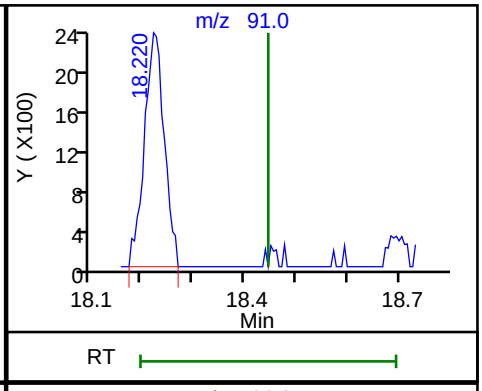
TestAmerica Burlington

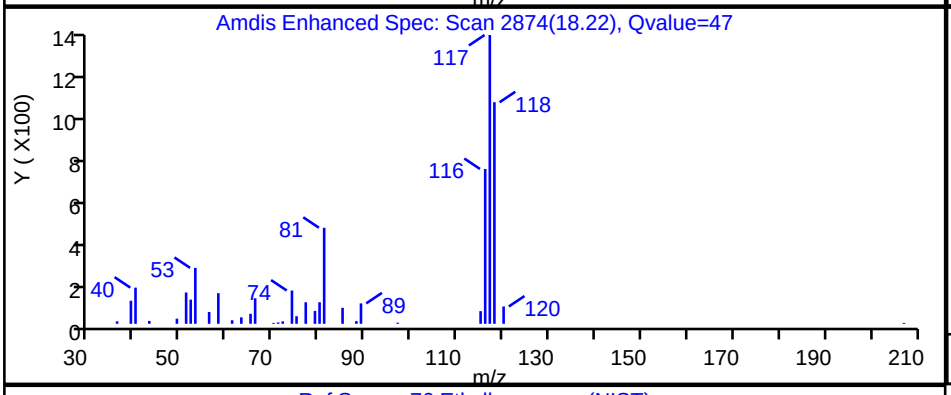
Data File:	\\chromna\Burlington\ChromData\CHC.i\20190124-34287.b\34287-11.D				
Injection Date:	24-Jan-2019 21:33:30	Instrument ID:	CHC.i		
Lims ID:	200-47077-A-1	Lab Sample ID:	200-47077-1		
Client ID:	3412				
Operator ID:	ert	ALS Bottle#:	12	Worklist Smp#:	11
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

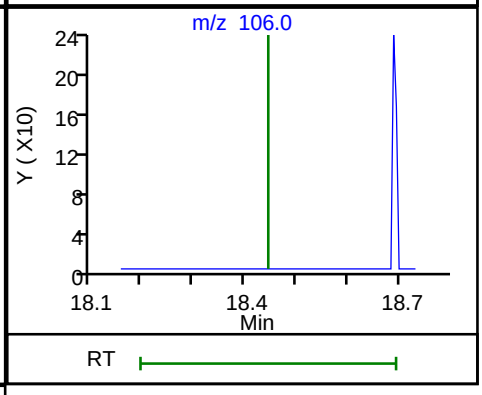
76 Ethylbenzene, CAS: 100-41-4

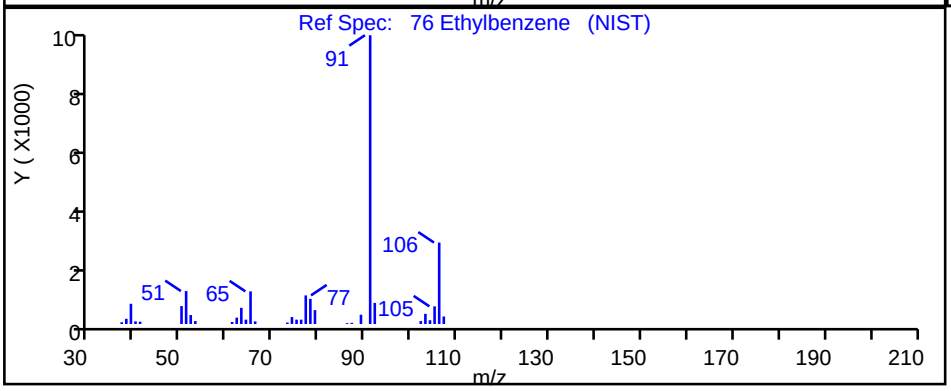
Processing Results











RT	Mass	Response	Amount
18.22	91.00	6218	0.028074
18.44	106.00	0	

Reviewer: bunmaa, 25-Jan-2019 11:14:44

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

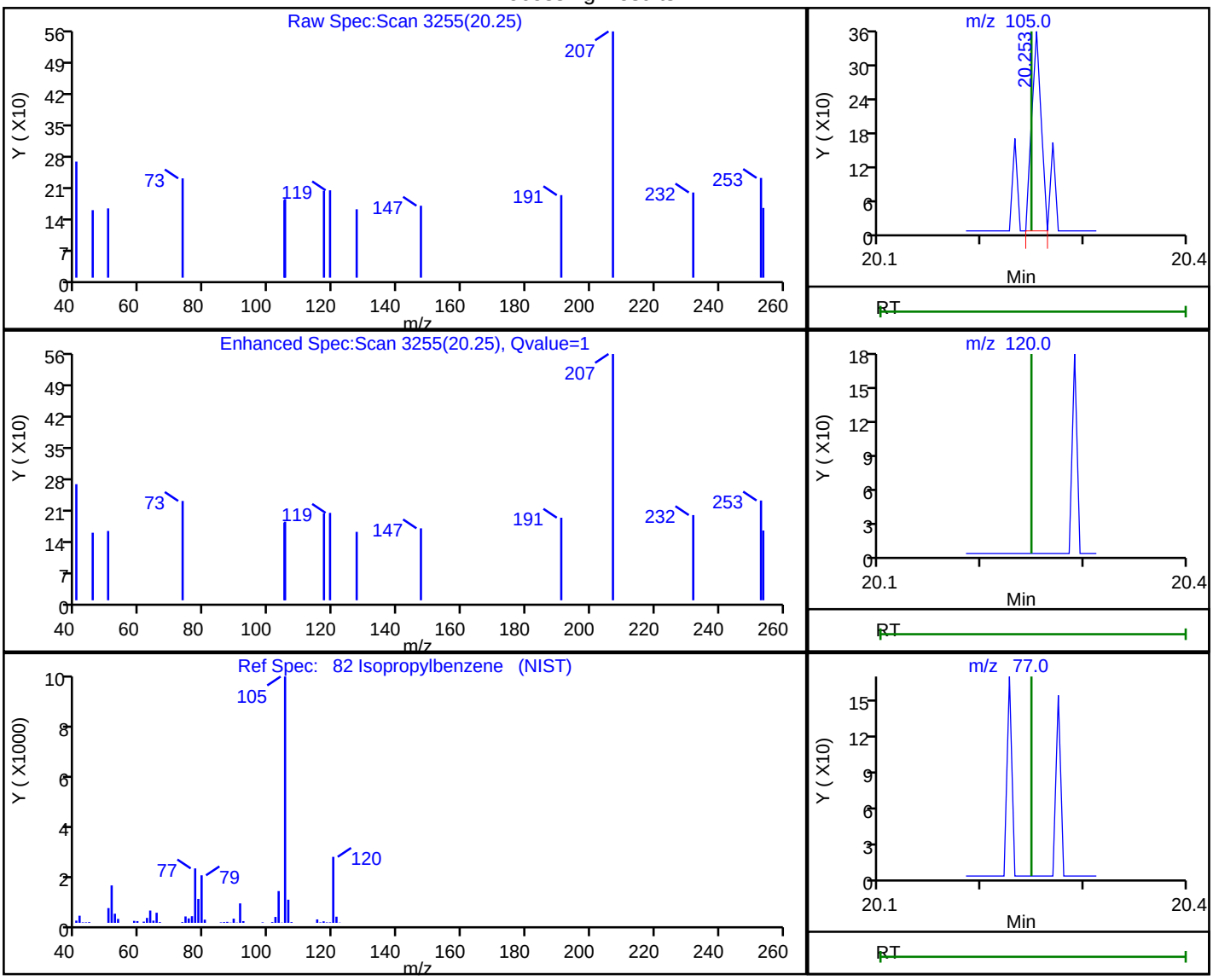
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\chromna\Burlington\ChromData\CHC.i\20190124-34287.b\34287-11.D				
Injection Date:	24-Jan-2019 21:33:30	Instrument ID:	CHC.i		
Lims ID:	200-47077-A-1	Lab Sample ID:	200-47077-1		
Client ID:	3412				
Operator ID:	ert	ALS Bottle#:	12	Worklist Smp#:	11
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

82 Isopropylbenzene, CAS: 98-82-8

Processing Results



RT	Mass	Response	Amount
20.25	105.00	227	0.000939
20.25	120.00	0	
20.25	77.00	0	

Reviewer: bunmaa, 25-Jan-2019 11:14:54

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

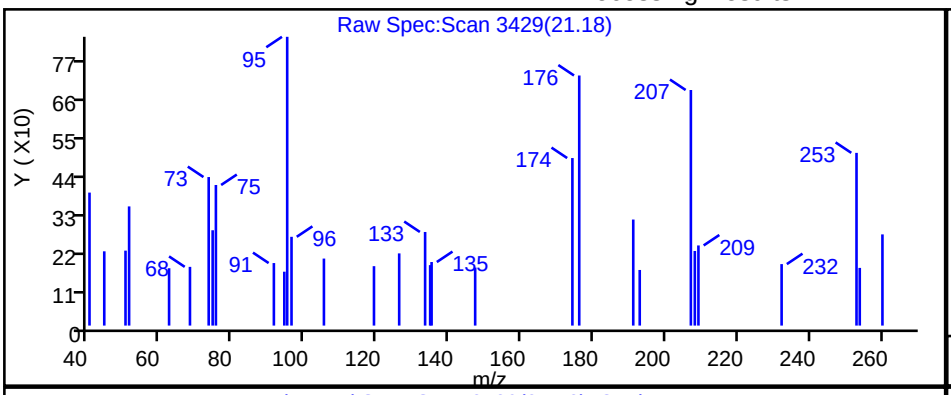
User Disabled Compound Report

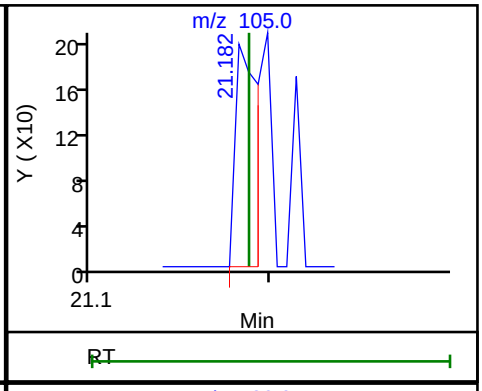
TestAmerica Burlington

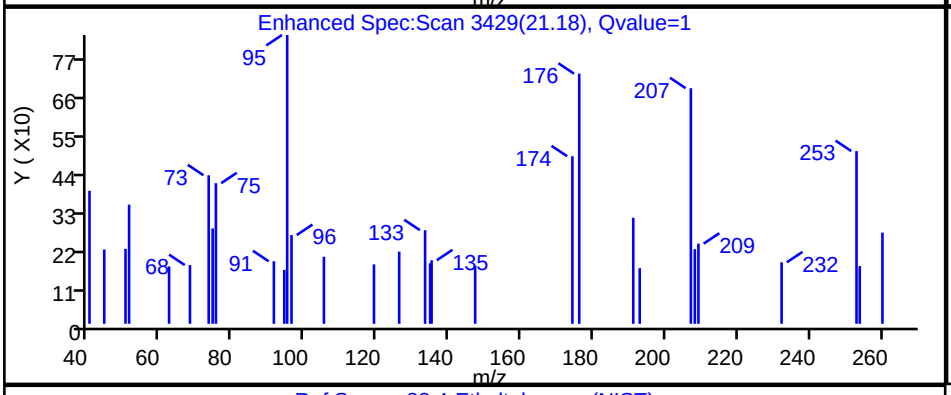
Data File:	\\chromna\Burlington\ChromData\CHC.i\20190124-34287.b\34287-11.D				
Injection Date:	24-Jan-2019 21:33:30	Instrument ID:	CHC.i		
Lims ID:	200-47077-A-1	Lab Sample ID:	200-47077-1		
Client ID:	3412				
Operator ID:	ert	ALS Bottle#:	12	Worklist Smp#:	11
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

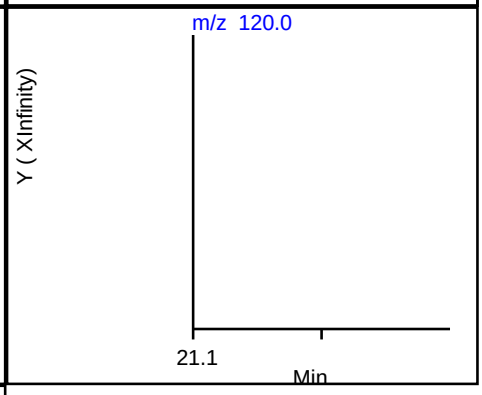
88 4-Ethyltoluene, CAS: 622-96-8

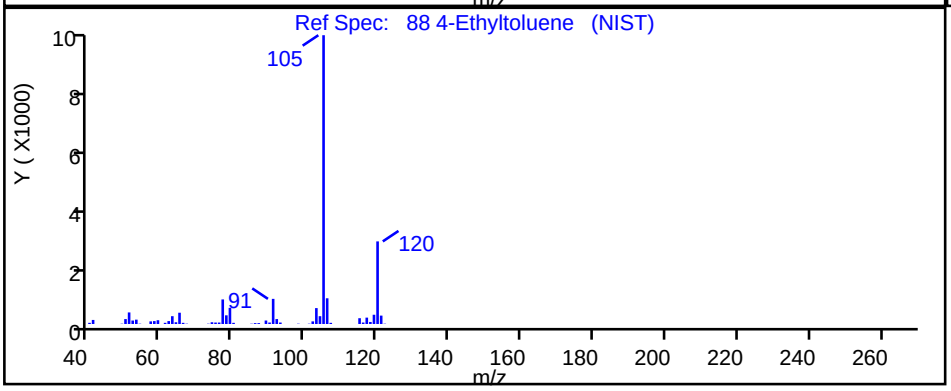
Processing Results











RT	Mass	Response	Amount
21.18	105.00	167	0.000702
21.19	120.00	0	

Reviewer: bunmaa, 25-Jan-2019 11:15:12

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

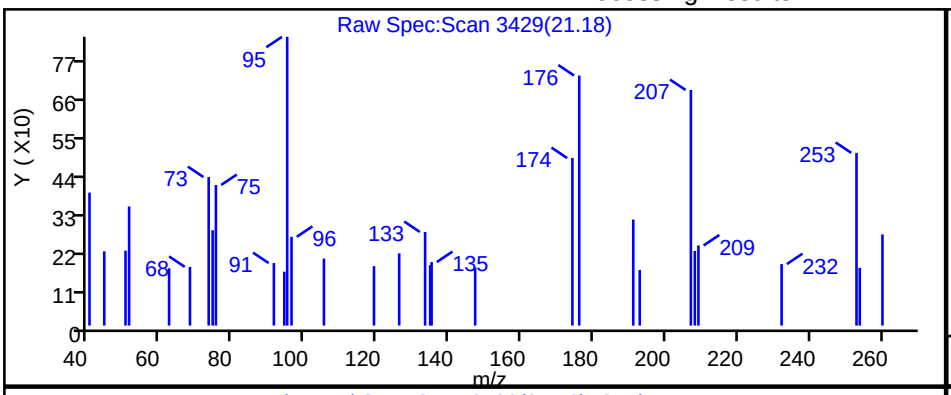
User Disabled Compound Report

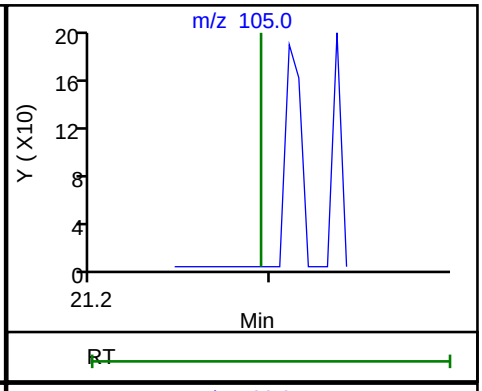
TestAmerica Burlington

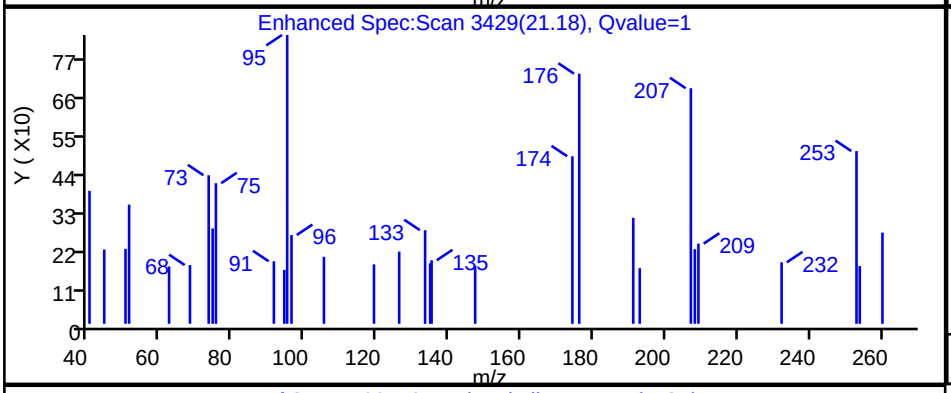
Data File:	\\chromna\Burlington\ChromData\CHC.i\20190124-34287.b\34287-11.D				
Injection Date:	24-Jan-2019 21:33:30	Instrument ID:	CHC.i		
Lims ID:	200-47077-A-1	Lab Sample ID:	200-47077-1		
Client ID:	3412				
Operator ID:	ert	ALS Bottle#:	12	Worklist Smp#:	11
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

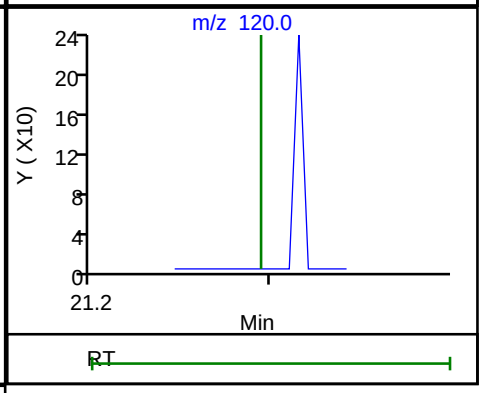
90 1,3,5-Trimethylbenzene, CAS: 108-67-8

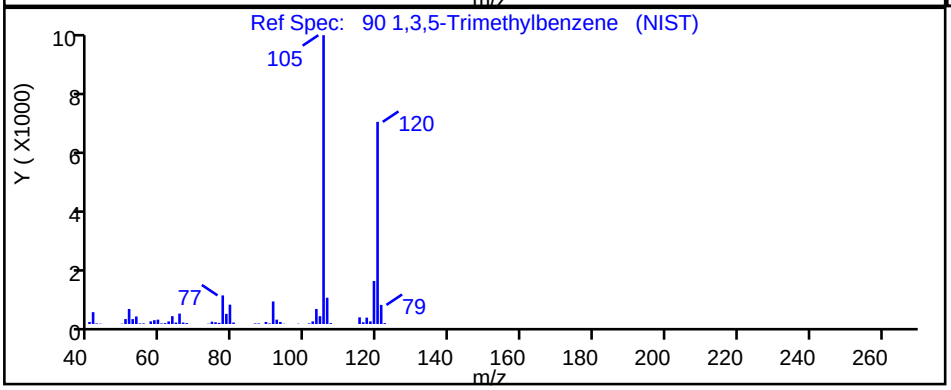
Processing Results











RT	Mass	Response	Amount
21.18	105.00	167	0.000832
21.29	120.00	0	

Reviewer: bunmaa, 25-Jan-2019 11:15:15

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

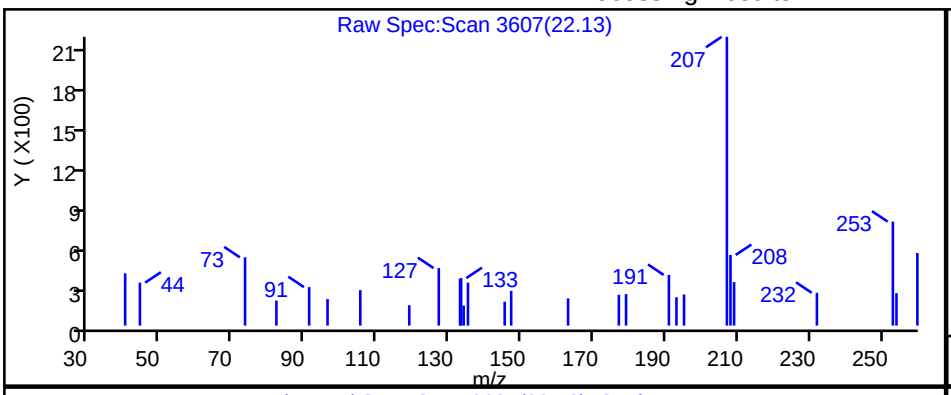
User Disabled Compound Report

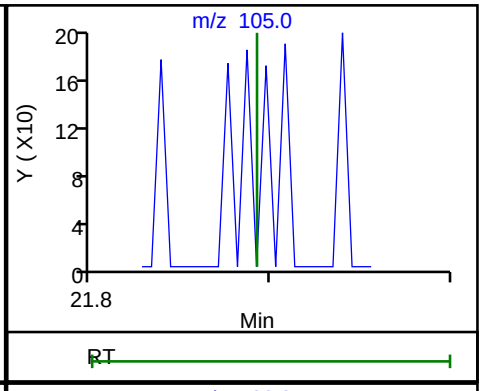
TestAmerica Burlington

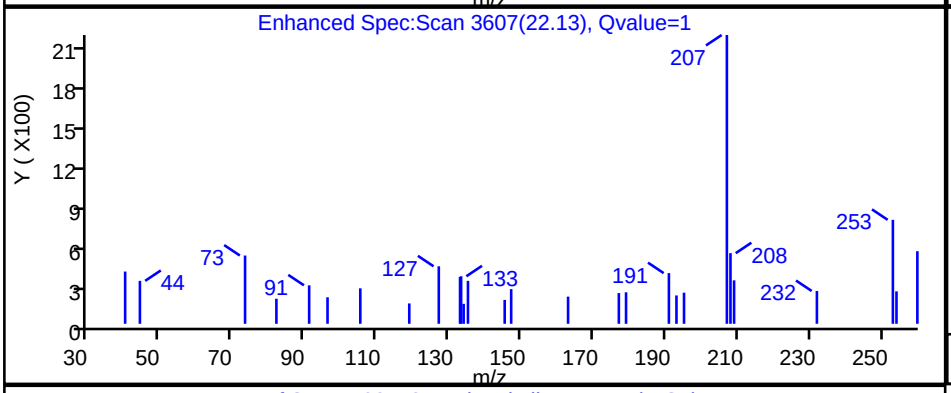
Data File:	\\chromna\Burlington\ChromData\CHC.i\20190124-34287.b\34287-11.D				
Injection Date:	24-Jan-2019 21:33:30	Instrument ID:	CHC.i		
Lims ID:	200-47077-A-1	Lab Sample ID:	200-47077-1		
Client ID:	3412				
Operator ID:	ert	ALS Bottle#:	12	Worklist Smp#:	11
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

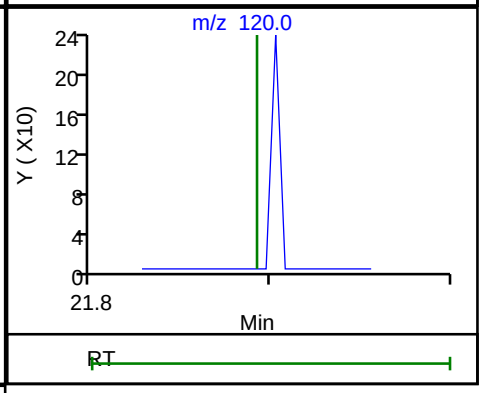
93 1,2,4-Trimethylbenzene, CAS: 95-63-6

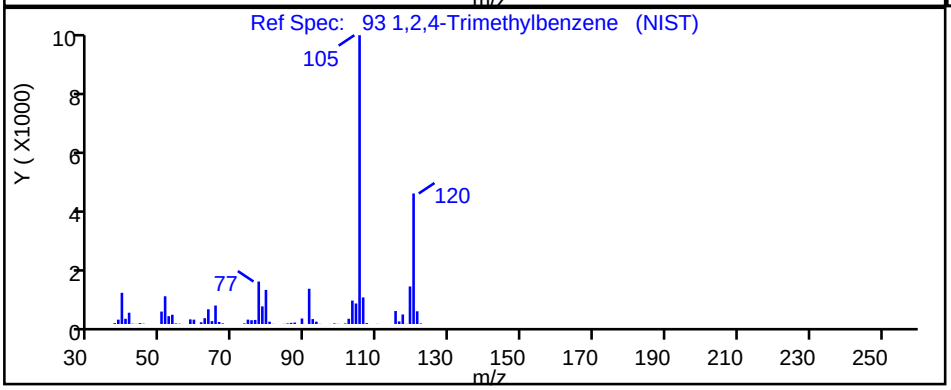
Processing Results











RT	Mass	Response	Amount
22.13	105.00	233	0.001169
21.89	120.00	0	

Reviewer: bunmaa, 25-Jan-2019 11:15:26

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

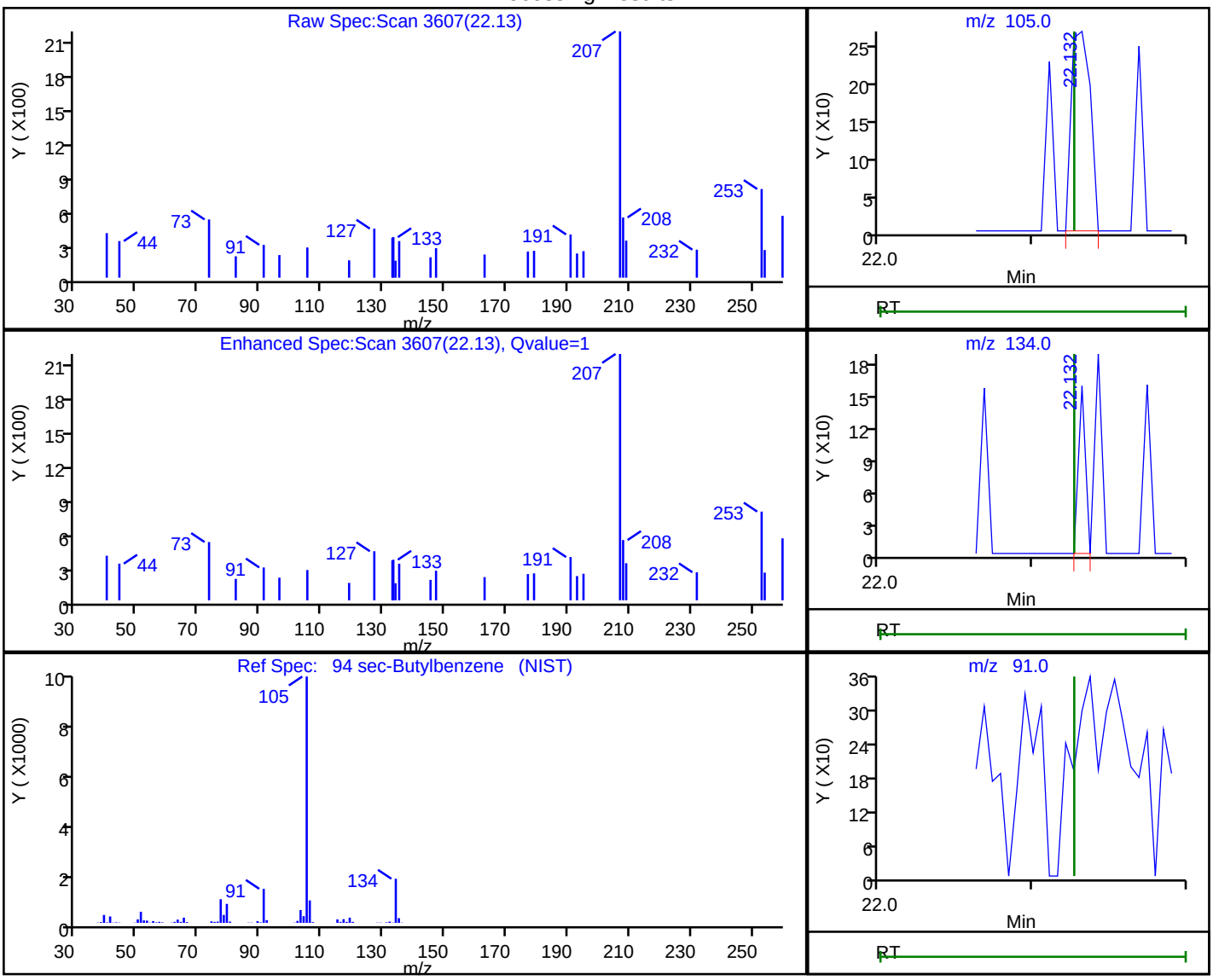
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\chromna\Burlington\ChromData\CHC.i\20190124-34287.b\34287-11.D				
Injection Date:	24-Jan-2019 21:33:30	Instrument ID:	CHC.i		
Lims ID:	200-47077-A-1	Lab Sample ID:	200-47077-1		
Client ID:	3412				
Operator ID:	ert	ALS Bottle#:	12	Worklist Smp#:	11
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

94 sec-Butylbenzene, CAS: 135-98-8

Processing Results



RT	Mass	Response	Amount
22.13	105.00	233	0.000794
22.13	134.00	49	
22.13	91.00	0	

Reviewer: bunmaa, 25-Jan-2019 11:15:29

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

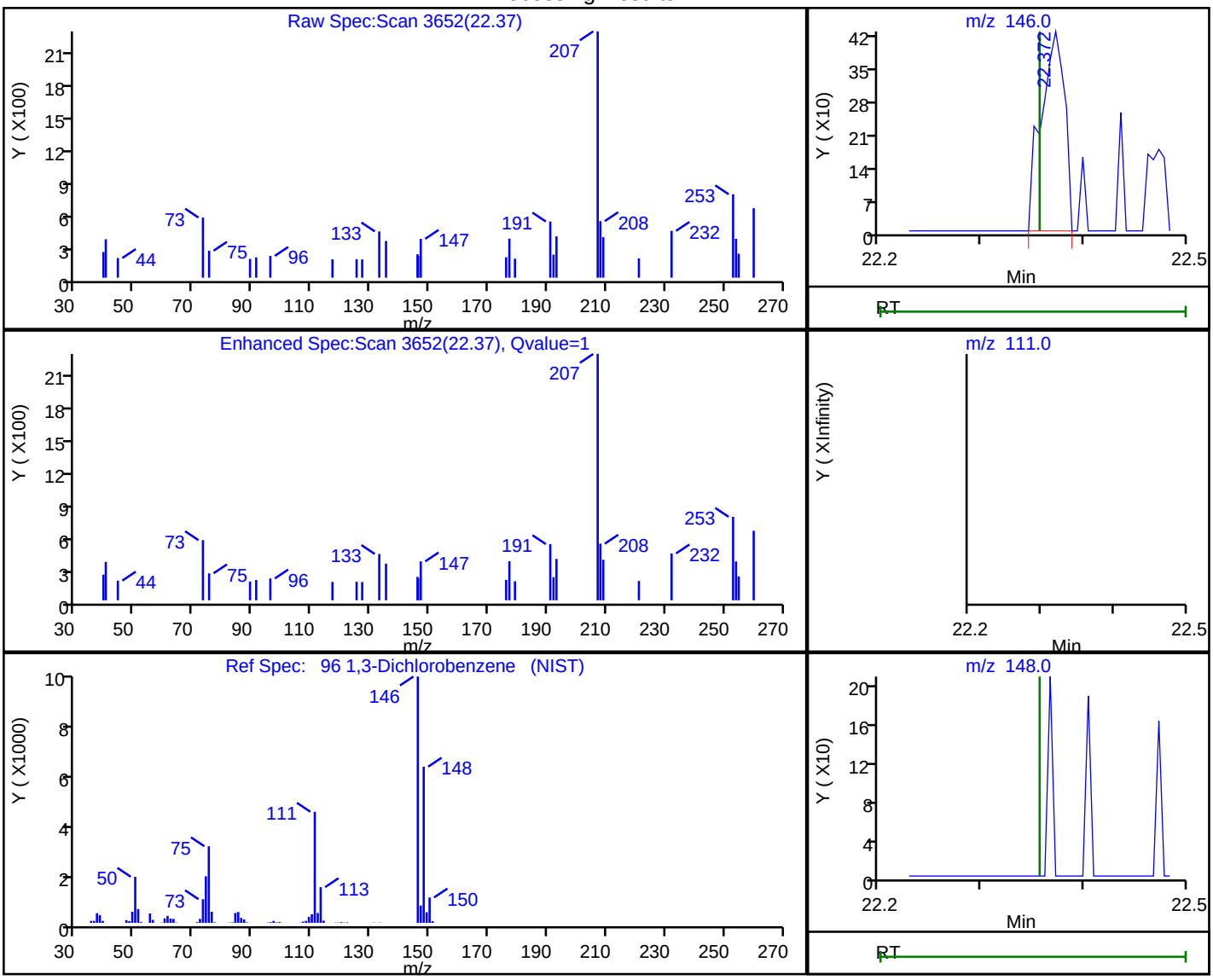
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\chromna\Burlington\ChromData\CHC.i\20190124-34287.b\34287-11.D				
Injection Date:	24-Jan-2019 21:33:30	Instrument ID:	CHC.i		
Lims ID:	200-47077-A-1	Lab Sample ID:	200-47077-1		
Client ID:	3412				
Operator ID:	ert	ALS Bottle#:	12	Worklist Smp#:	11
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

96 1,3-Dichlorobenzene, CAS: 541-73-1

Processing Results



RT	Mass	Response	Amount
22.37	146.00	670	0.005148
22.36	111.00	0	
22.36	148.00	0	

Reviewer: bunmaa, 25-Jan-2019 11:15:33

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

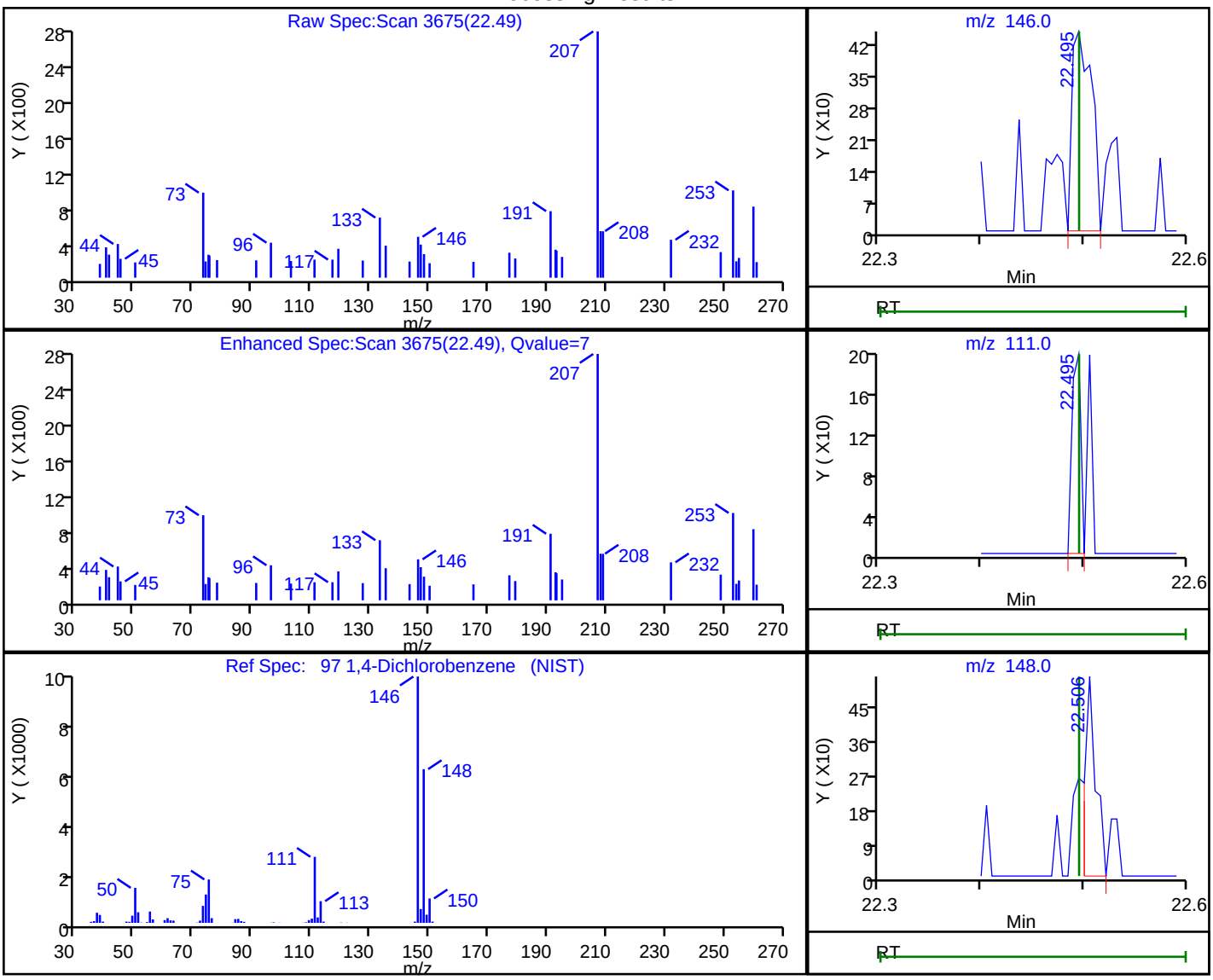
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\chromna\Burlington\ChromData\CHC.i\20190124-34287.b\34287-11.D				
Injection Date:	24-Jan-2019 21:33:30	Instrument ID:	CHC.i		
Lims ID:	200-47077-A-1	Lab Sample ID:	200-47077-1		
Client ID:	3412				
Operator ID:	ert	ALS Bottle#:	12	Worklist Smp#:	11
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

97 1,4-Dichlorobenzene, CAS: 106-46-7

Processing Results



RT	Mass	Response	Amount
22.49	146.00	602	0.004712
22.49	111.00	119	
22.51	148.00	388	

Reviewer: bunmaa, 25-Jan-2019 11:15:38

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

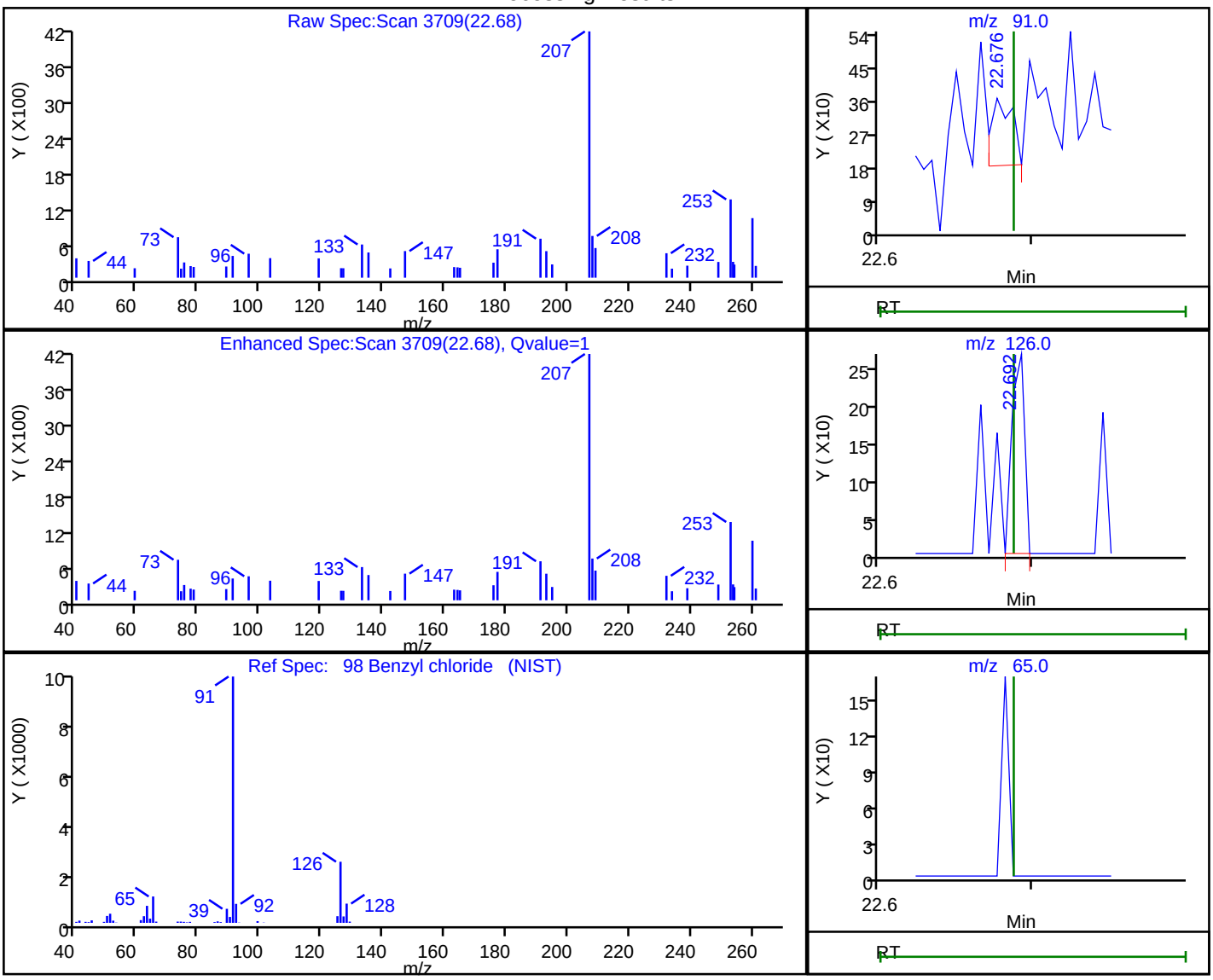
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\chromna\Burlington\ChromData\CHC.i\20190124-34287.b\34287-11.D				
Injection Date:	24-Jan-2019 21:33:30	Instrument ID:	CHC.i		
Lims ID:	200-47077-A-1	Lab Sample ID:	200-47077-1		
Client ID:	3412				
Operator ID:	ert	ALS Bottle#:	12	Worklist Smp#:	11
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

98 Benzyl chloride, CAS: 100-44-7

Processing Results



RT	Mass	Response	Amount
22.68	91.00	179	0.000946
22.69	126.00	151	
22.69	65.00	0	

Reviewer: bunmaa, 25-Jan-2019 11:15:40

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

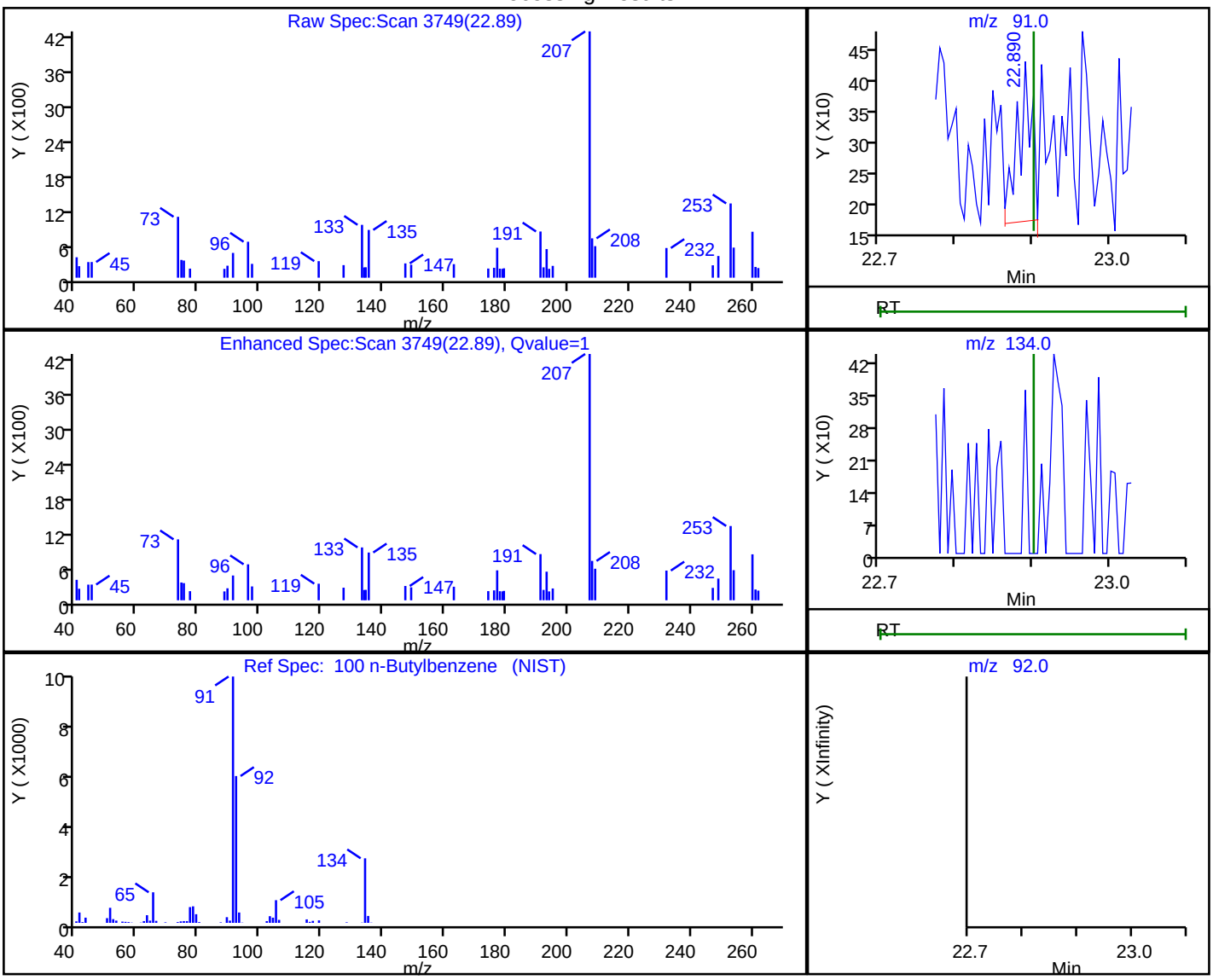
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\chromna\Burlington\ChromData\CHC.i\20190124-34287.b\34287-11.D				
Injection Date:	24-Jan-2019 21:33:30	Instrument ID:	CHC.i		
Lims ID:	200-47077-A-1	Lab Sample ID:	200-47077-1		
Client ID:	3412				
Operator ID:	ert	ALS Bottle#:	12	Worklist Smp#:	11
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

100 n-Butylbenzene, CAS: 104-51-8

Processing Results



RT	Mass	Response	Amount
22.89	91.00	325	0.001332
22.90	134.00	0	
22.90	92.00	0	

Reviewer: bunmaa, 25-Jan-2019 11:15:43

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

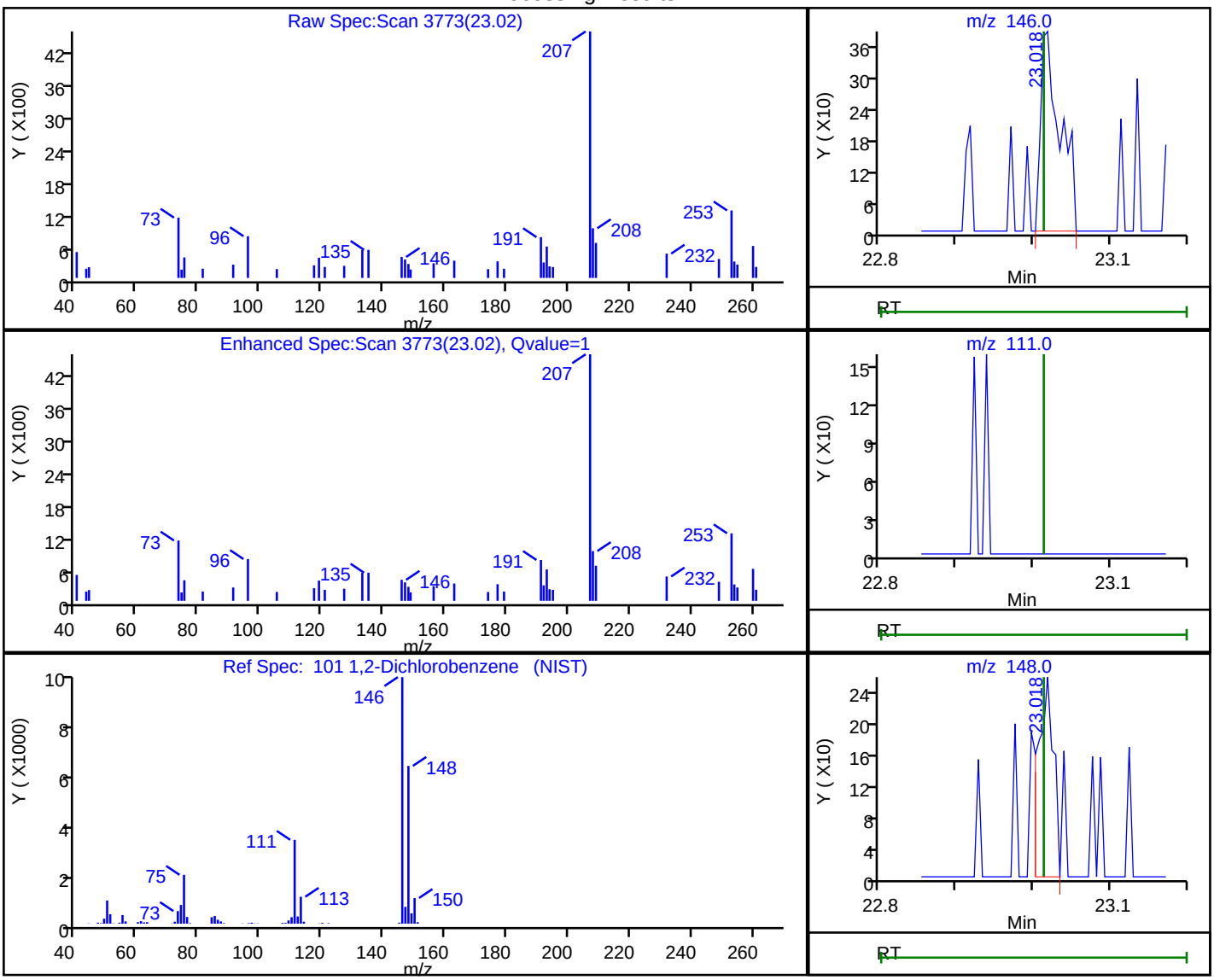
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\chromna\Burlington\ChromData\CHC.i\20190124-34287.b\34287-11.D				
Injection Date:	24-Jan-2019 21:33:30	Instrument ID:	CHC.i		
Lims ID:	200-47077-A-1	Lab Sample ID:	200-47077-1		
Client ID:	3412				
Operator ID:	ert	ALS Bottle#:	12	Worklist Smp#:	11
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

101 1,2-Dichlorobenzene, CAS: 95-50-1

Processing Results



RT	Mass	Response	Amount
23.02	146.00	676	0.005571
23.02	148.00	353	
23.01	111.00	0	

Reviewer: bunmaa, 25-Jan-2019 11:15:45

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

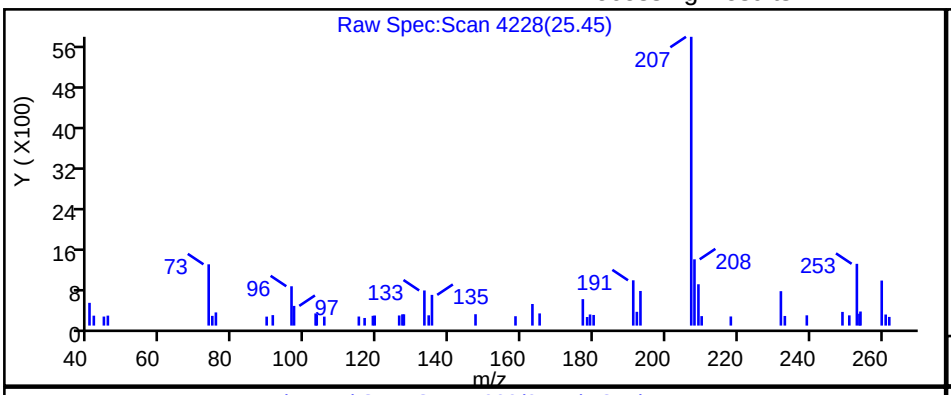
User Disabled Compound Report

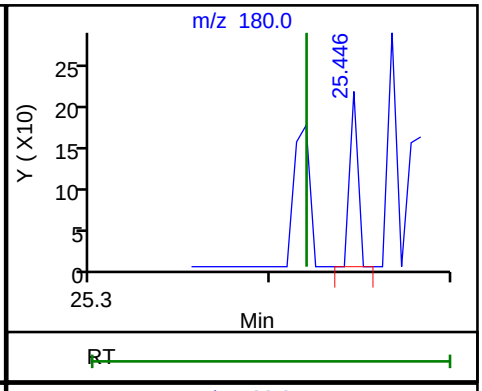
TestAmerica Burlington

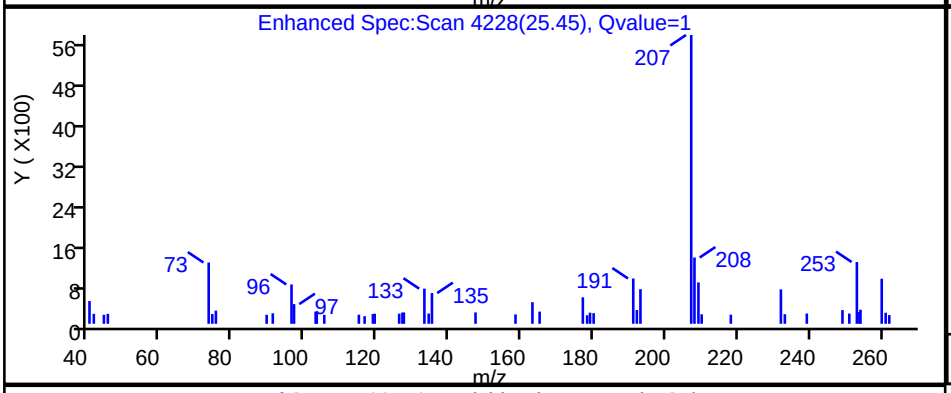
Data File:	\\chromna\Burlington\ChromData\CHC.i\20190124-34287.b\34287-11.D				
Injection Date:	24-Jan-2019 21:33:30	Instrument ID:	CHC.i		
Lims ID:	200-47077-A-1	Lab Sample ID:	200-47077-1		
Client ID:	3412				
Operator ID:	ert	ALS Bottle#:	12	Worklist Smp#:	11
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

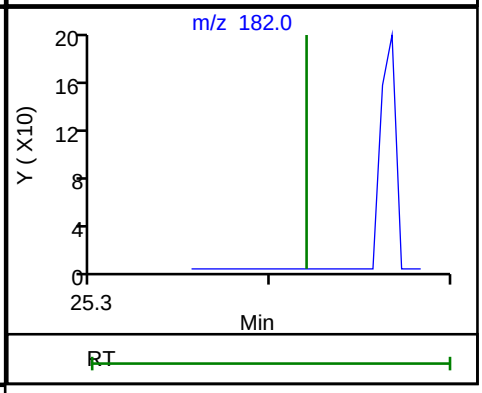
103 1,2,4-Trichlorobenzene, CAS: 120-82-1

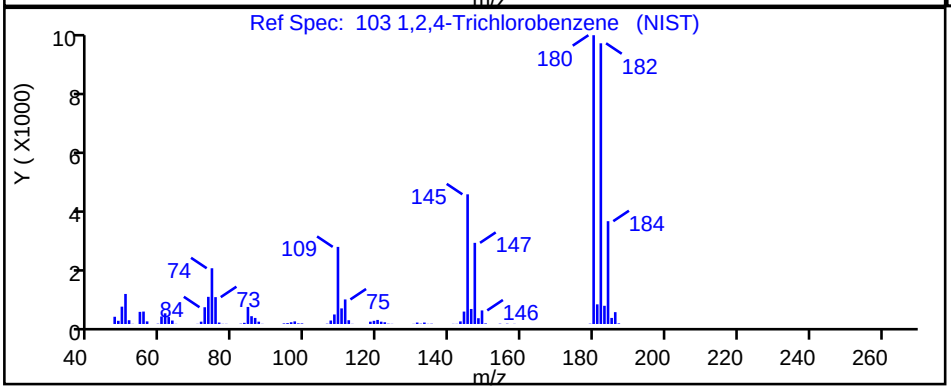
Processing Results











RT	Mass	Response	Amount
25.45	180.00	68	0.000721
25.42	182.00	0	

Reviewer: bunmaa, 25-Jan-2019 11:15:53

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

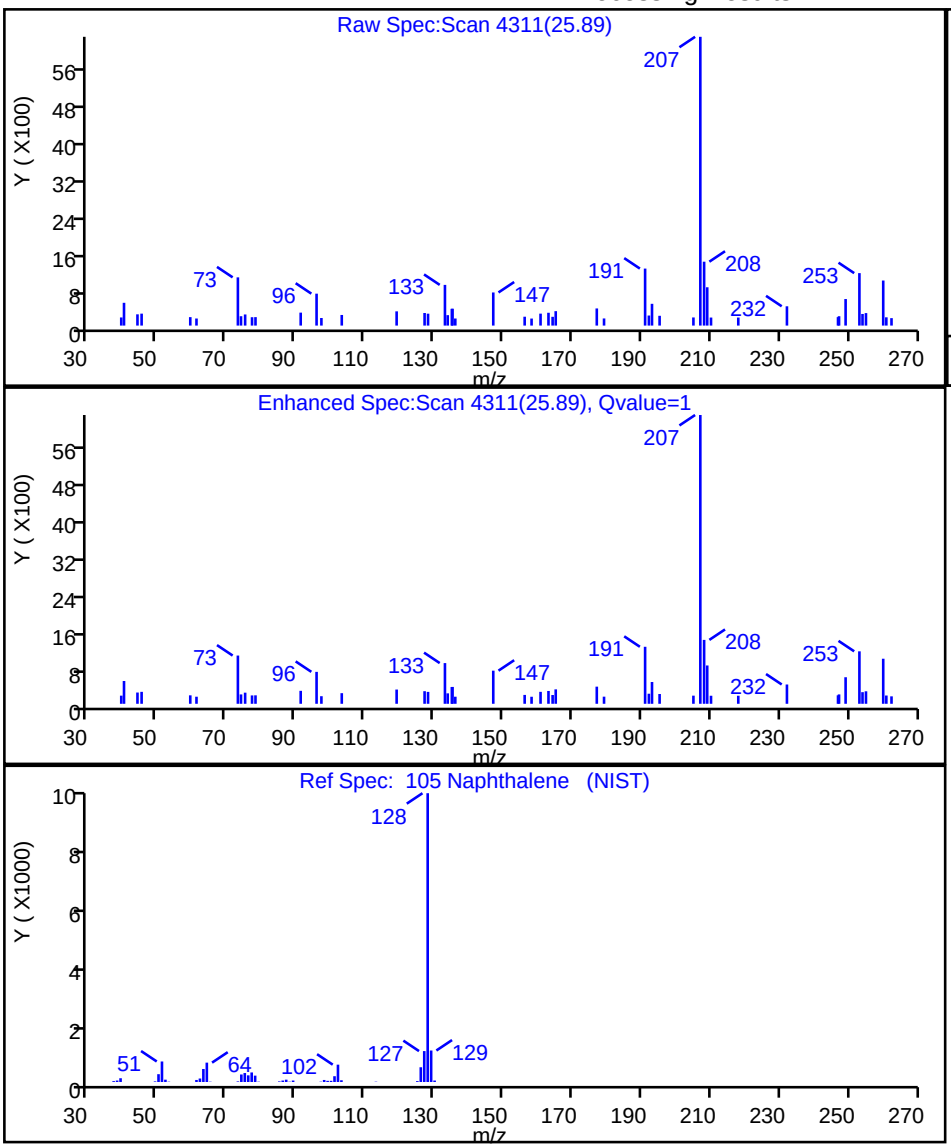
User Disabled Compound Report

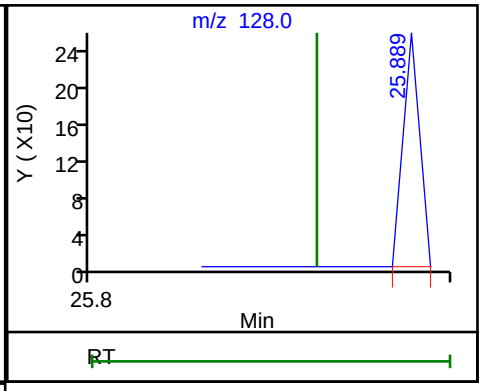
TestAmerica Burlington

Data File:	\\chromna\Burlington\ChromData\CHC.i\20190124-34287.b\34287-11.D				
Injection Date:	24-Jan-2019 21:33:30	Instrument ID:	CHC.i		
Lims ID:	200-47077-A-1	Lab Sample ID:	200-47077-1		
Client ID:	3412				
Operator ID:	ert	ALS Bottle#:	12	Worklist Smp#:	11
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

105 Naphthalene, CAS: 91-20-3

Processing Results





RT	Mass	Response	Amount
25.89	128.00	83	0.000469

Reviewer: bunmaa, 25-Jan-2019 11:15:59

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-47122-1

SDG No.:

Client Sample ID: 3534 Lab Sample ID: 200-47122-7

Matrix: Air Lab File ID: 34301-24.D

Analysis Method: TO-15 Date Collected: 01/22/2019 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 01/26/2019 08:56

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 139445 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	1.0	U	1.0	1.0
75-71-8	Dichlorodifluoromethane	0.10	U	0.10	0.10
75-45-6	Freon 22	0.10	U	0.10	0.10
76-14-2	1,2-Dichlorotetrafluoroethane	0.040	U	0.040	0.040
74-87-3	Chloromethane	0.10	U	0.10	0.10
106-97-8	n-Butane	0.10	U	0.10	0.10
75-01-4	Vinyl chloride	0.040	U	0.040	0.040
106-99-0	1,3-Butadiene	0.040	U	0.040	0.040
74-83-9	Bromomethane	0.040	U	0.040	0.040
75-00-3	Chloroethane	0.10	U	0.10	0.10
593-60-2	Bromoethene(Vinyl Bromide)	0.040	U	0.040	0.040
75-69-4	Trichlorofluoromethane	0.040	U	0.040	0.040
64-17-5	Ethanol	1.0	U	1.0	1.0
76-13-1	Freon TF	0.040	U	0.040	0.040
75-35-4	1,1-Dichloroethene	0.040	U	0.040	0.040
67-64-1	Acetone	1.0	U	1.0	1.0
67-63-0	Isopropyl alcohol	1.0	U	1.0	1.0
75-15-0	Carbon disulfide	0.10	U	0.10	0.10
107-05-1	3-Chloropropene	0.10	U	0.10	0.10
75-09-2	Methylene Chloride	0.10	U	0.10	0.10
75-65-0	tert-Butyl alcohol	1.0	U	1.0	1.0
1634-04-4	Methyl tert-butyl ether	0.040	U	0.040	0.040
156-60-5	trans-1,2-Dichloroethene	0.040	U	0.040	0.040
110-54-3	n-Hexane	0.040	U	0.040	0.040
75-34-3	1,1-Dichloroethane	0.040	U	0.040	0.040
108-05-4	Vinyl acetate	1.0	U	1.0	1.0
141-78-6	Ethyl acetate	1.0	U	1.0	1.0
78-93-3	Methyl Ethyl Ketone	0.10	U	0.10	0.10
156-59-2	cis-1,2-Dichloroethene	0.040	U	0.040	0.040
540-59-0	1,2-Dichloroethene, Total	0.080	U	0.080	0.080
67-66-3	Chloroform	0.040	U	0.040	0.040
109-99-9	Tetrahydrofuran	1.0	U	1.0	1.0
71-55-6	1,1,1-Trichloroethane	0.040	U	0.040	0.040
110-82-7	Cyclohexane	0.040	U	0.040	0.040
56-23-5	Carbon tetrachloride	0.040	U	0.040	0.040
540-84-1	2,2,4-Trimethylpentane	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-47122-1

SDG No.:

Client Sample ID: 3534 Lab Sample ID: 200-47122-7

Matrix: Air Lab File ID: 34301-24.D

Analysis Method: TO-15 Date Collected: 01/22/2019 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 01/26/2019 08:56

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 139445 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
71-43-2	Benzene	0.040	U	0.040	0.040
107-06-2	1,2-Dichloroethane	0.040	U	0.040	0.040
142-82-5	n-Heptane	0.040	U	0.040	0.040
79-01-6	Trichloroethene	0.040	U	0.040	0.040
80-62-6	Methyl methacrylate	0.10	U	0.10	0.10
78-87-5	1,2-Dichloropropane	0.040	U	0.040	0.040
123-91-1	1,4-Dioxane	1.0	U	1.0	1.0
75-27-4	Bromodichloromethane	0.040	U	0.040	0.040
10061-01-5	cis-1,3-Dichloropropene	0.040	U	0.040	0.040
108-10-1	methyl isobutyl ketone	0.10	U	0.10	0.10
108-88-3	Toluene	0.040	U	0.040	0.040
10061-02-6	trans-1,3-Dichloropropene	0.040	U	0.040	0.040
79-00-5	1,1,2-Trichloroethane	0.040	U	0.040	0.040
127-18-4	Tetrachloroethene	0.040	U	0.040	0.040
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.10	U	0.10	0.10
124-48-1	Dibromochloromethane	0.040	U	0.040	0.040
106-93-4	1,2-Dibromoethane	0.040	U	0.040	0.040
108-90-7	Chlorobenzene	0.040	U	0.040	0.040
100-41-4	Ethylbenzene	0.040	U	0.040	0.040
179601-23-1	m,p-Xylene	0.10	U	0.10	0.10
95-47-6	Xylene, o-	0.040	U	0.040	0.040
1330-20-7	Xylene (total)	0.14	U	0.14	0.14
100-42-5	Styrene	0.040	U	0.040	0.040
75-25-2	Bromoform	0.040	U	0.040	0.040
98-82-8	Cumene	0.040	U	0.040	0.040
79-34-5	1,1,2,2-Tetrachloroethane	0.040	U	0.040	0.040
103-65-1	n-Propylbenzene	0.040	U	0.040	0.040
622-96-8	4-Ethyltoluene	0.040	U	0.040	0.040
108-67-8	1,3,5-Trimethylbenzene	0.040	U	0.040	0.040
95-49-8	2-Chlorotoluene	0.040	U	0.040	0.040
98-06-6	tert-Butylbenzene	0.040	U	0.040	0.040
95-63-6	1,2,4-Trimethylbenzene	0.040	U	0.040	0.040
135-98-8	sec-Butylbenzene	0.040	U	0.040	0.040
99-87-6	4-Isopropyltoluene	0.040	U	0.040	0.040
541-73-1	1,3-Dichlorobenzene	0.040	U	0.040	0.040
106-46-7	1,4-Dichlorobenzene	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-47122-1

SDG No.:

Client Sample ID: 3534 Lab Sample ID: 200-47122-7

Matrix: Air Lab File ID: 34301-24.D

Analysis Method: TO-15 Date Collected: 01/22/2019 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 01/26/2019 08:56

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 139445 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
100-44-7	Benzyl chloride	0.040	U	0.040	0.040
104-51-8	n-Butylbenzene	0.040	U	0.040	0.040
95-50-1	1,2-Dichlorobenzene	0.040	U	0.040	0.040
120-82-1	1,2,4-Trichlorobenzene	0.10	U	0.10	0.10
87-68-3	Hexachlorobutadiene	0.040	U	0.040	0.040
91-20-3	Naphthalene	0.10	U	0.10	0.10

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\chromna\Burlington\ChromData\CHC.i\20190125-34301.b\34301-24.D
Lims ID: 200-47122-A-7
Client ID: 3534
Sample Type: Client
Inject. Date: 26-Jan-2019 08:56:30 ALS Bottle#: 25 Worklist Smp#: 24
Purge Vol: 200.000 mL Dil. Factor: 0.2000
Sample Info: 200-0034301-024
Misc. Info.: 47122-7
Operator ID: ggg Instrument ID: CHC.i

Method: \\chromna\Burlington\ChromData\CHC.i\20190125-34301.b\TO15_MasterMethod_(v1)_CHC.i.m
Limit Group: AI_TO15_ICAL
Last Update: 28-Jan-2019 14:41:03 Calib Date: 23-Jan-2019 12:53:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Burlington\ChromData\CHC.i\20190122-34255.b\34255-22.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: CTX0330

First Level Reviewer: bunmaa Date: 28-Jan-2019 14:41:03

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
1 Propene	41		2.962				ND	U
2 Dichlorodifluoromethane	85		3.026				ND	
3 Chlorodifluoromethane	51		3.074				ND	U
4 1,2-Dichloro-1,1,2,2-tetra	85		3.282				ND	
5 Chloromethane	50		3.410				ND	
6 Butane	43		3.613				ND	
7 Vinyl chloride	62		3.651				ND	
8 Butadiene	54		3.725				ND	
10 Bromomethane	94		4.387				ND	
11 Chloroethane	64		4.622				ND	
13 Vinyl bromide	106		5.011				ND	
14 Trichlorofluoromethane	101		5.124				ND	
17 Ethanol	45		5.695				ND	
20 1,1,2-Trichloro-1,2,2-trif	101		6.207				ND	
21 1,1-Dichloroethene	96		6.234				ND	
22 Acetone	43		6.452				ND	
23 Carbon disulfide	76	6.618	6.609	0.005	97	1598	0.0332	
24 Isopropyl alcohol	45		6.778				ND	
25 3-Chloro-1-propene	41		7.018				ND	
27 Methylene Chloride	49		7.317				ND	
28 2-Methyl-2-propanol	59		7.552				ND	
29 Methyl tert-butyl ether	73		7.733				ND	
31 trans-1,2-Dichloroethene	61		7.765				ND	
33 Hexane	57		8.176				ND	
34 1,1-Dichloroethane	63		8.630				ND	
35 Vinyl acetate	43		8.721				ND	
37 cis-1,2-Dichloroethene	96		9.745				ND	
38 2-Butanone (MEK)	72		9.783				ND	
39 Ethyl acetate	88		9.852				ND	
S 30 1,2-Dichloroethene, Total	61		10.200				ND	
* 40 Chlorobromomethane	128	10.199	10.204	-0.005	96	319936	10.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
41 Tetrahydrofuran	42		10.210				ND	
42 Chloroform	83		10.348				ND	
43 Cyclohexane	84		10.610				ND	
44 1,1,1-Trichloroethane	97		10.621				ND	
45 Carbon tetrachloride	117		10.877				ND	
47 Benzene	78		11.330				ND	U
46 Isooctane	57		11.336				ND	
48 1,2-Dichloroethane	62		11.506				ND	
49 n-Heptane	43		11.736				ND	U
* 50 1,4-Difluorobenzene	114	12.184	12.190	-0.006	97	1796560	10.0	
53 Trichloroethene	95		12.659				ND	
54 1,2-Dichloropropane	63		13.198				ND	
55 Methyl methacrylate	69		13.390				ND	
56 1,4-Dioxane	88		13.433				ND	
57 Dibromomethane	174		13.460				ND	
58 Dichlorobromomethane	83		13.775				ND	
60 cis-1,3-Dichloropropene	75		14.725				ND	
61 4-Methyl-2-pentanone (MIBK	43		15.007				ND	
65 Toluene	92	15.322	15.322	0.005	21	718	0.0108	7M
66 trans-1,3-Dichloropropene	75		15.920				ND	
67 1,1,2-Trichloroethane	83		16.294				ND	
68 Tetrachloroethene	166		16.422				ND	
69 2-Hexanone	43		16.742				ND	
71 Chlorodibromomethane	129		17.057				ND	
72 Ethylene Dibromide	107		17.313				ND	
* 74 Chlorobenzene-d5	117	18.220	18.226	-0.006	96	1886335	10.0	
75 Chlorobenzene	112		18.284				ND	
76 Ethylbenzene	91		18.444				ND	Ua
78 m-Xylene & p-Xylene	106	18.706	18.706	0.011	0	903	0.0163	M
79 o-Xylene	106		19.528				ND	
80 Styrene	104		19.581				ND	
81 Bromoform	173		20.014				ND	
S 73 Xylenes, Total	106				0		0.0163	7
82 Isopropylbenzene	105		20.243				ND	
84 1,1,2,2-Tetrachloroethane	83		20.910				ND	
85 N-Propylbenzene	91		20.990				ND	
88 4-Ethyltoluene	105		21.188				ND	U
89 2-Chlorotoluene	91		21.188				ND	
90 1,3,5-Trimethylbenzene	105		21.294				ND	U
92 tert-Butylbenzene	119		21.796				ND	
93 1,2,4-Trimethylbenzene	105		21.892				ND	
94 sec-Butylbenzene	105		22.127				ND	
95 4-Isopropyltoluene	119		22.335				ND	
96 1,3-Dichlorobenzene	146		22.356				ND	U
97 1,4-Dichlorobenzene	146		22.495				ND	U
98 Benzyl chloride	91		22.682				ND	U
100 n-Butylbenzene	91		22.901				ND	U
101 1,2-Dichlorobenzene	146		23.013				ND	
103 1,2,4-Trichlorobenzene	180		25.414				ND	
104 Hexachlorobutadiene	225		25.607				ND	
105 Naphthalene	128		25.863				ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

U - Marked Undetected

a - User Assigned ID

Reagents:

ATTO15CISs_00010 Amount Added: 20.00 Units: mL Run Reagent

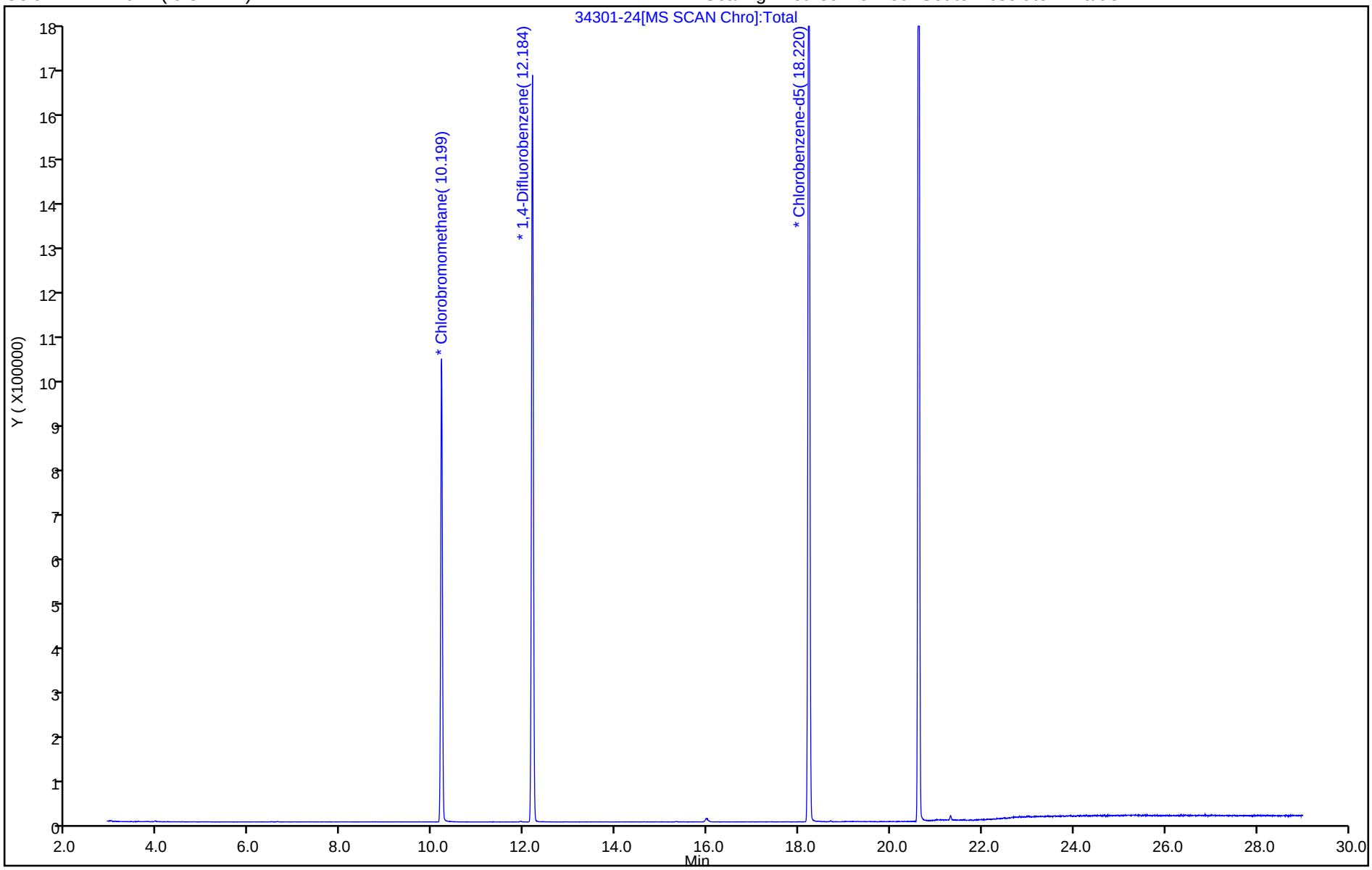
Report Date: 28-Jan-2019 14:41:04 Chrom Revision: 2.3 15-Jan-2019 08:51:34

TestAmerica Burlington

Data File: \\chromna\Burlington\ChromData\CHC.i\20190125-34301.b\34301-24.D

Injection Date:	26-Jan-2019 08:56:30	Instrument ID:	CHC.i	Operator ID:	ggg
Lims ID:	200-47122-A-7	Lab Sample ID:	200-47122-7	Worklist Smp#:	24
Client ID:	3534				
Purge Vol:	200.000 mL	Dil. Factor:	0.2000	ALS Bottle#:	25
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Set to Absolute Y Value



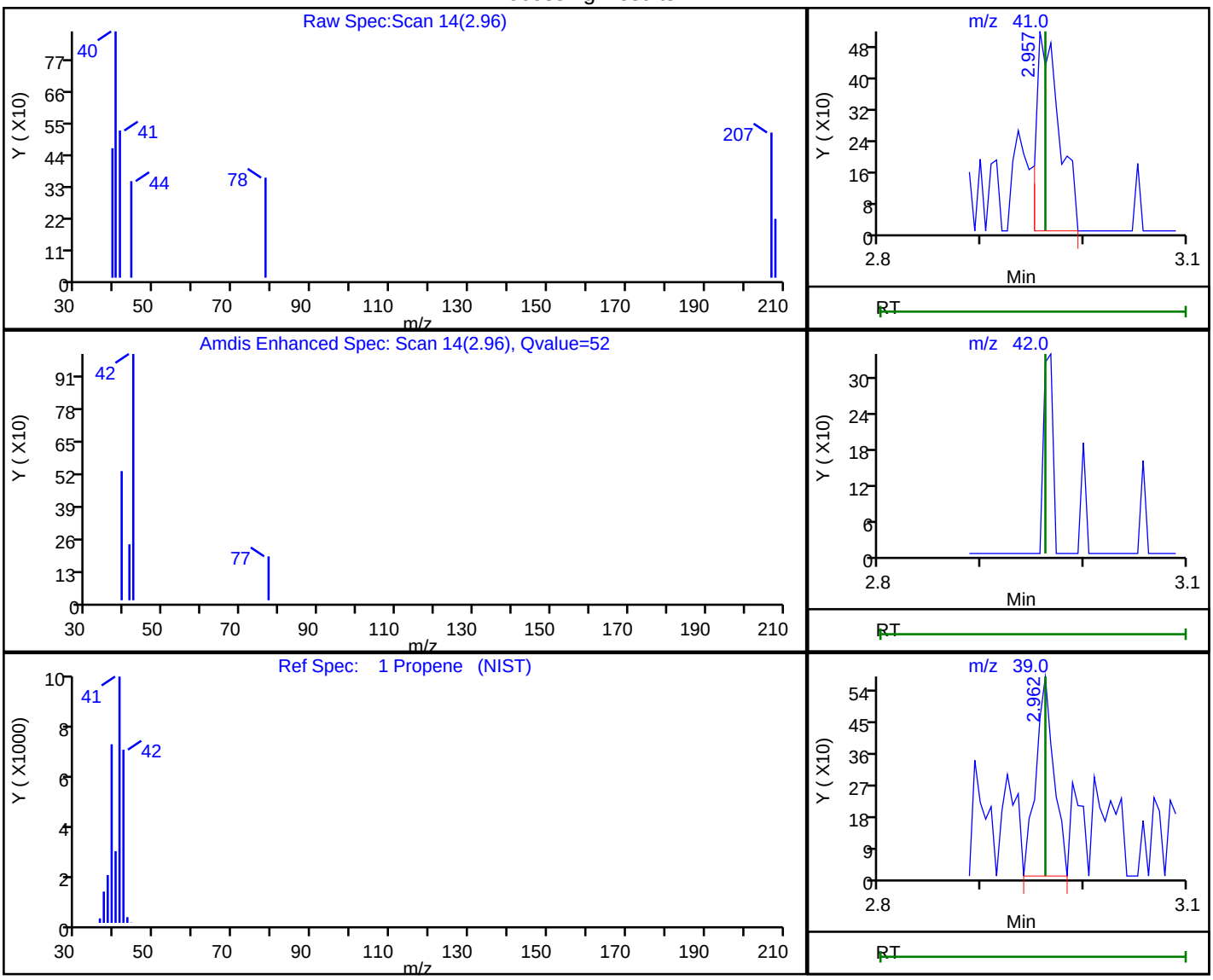
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\chromna\Burlington\ChromData\CHC.i\20190125-34301.b\34301-24.D				
Injection Date:	26-Jan-2019 08:56:30	Instrument ID:	CHC.i		
Lims ID:	200-47122-A-7	Lab Sample ID:	200-47122-7		
Client ID:	3534				
Operator ID:	ggg	ALS Bottle#:	25	Worklist Smp#:	24
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

1 Propene, CAS: 115-07-1

Processing Results



RT	Mass	Response	Amount
2.96	41.00	788	0.047427
2.96	42.00	0	
2.96	39.00	695	

Reviewer: bunmaa, 28-Jan-2019 14:38:31

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

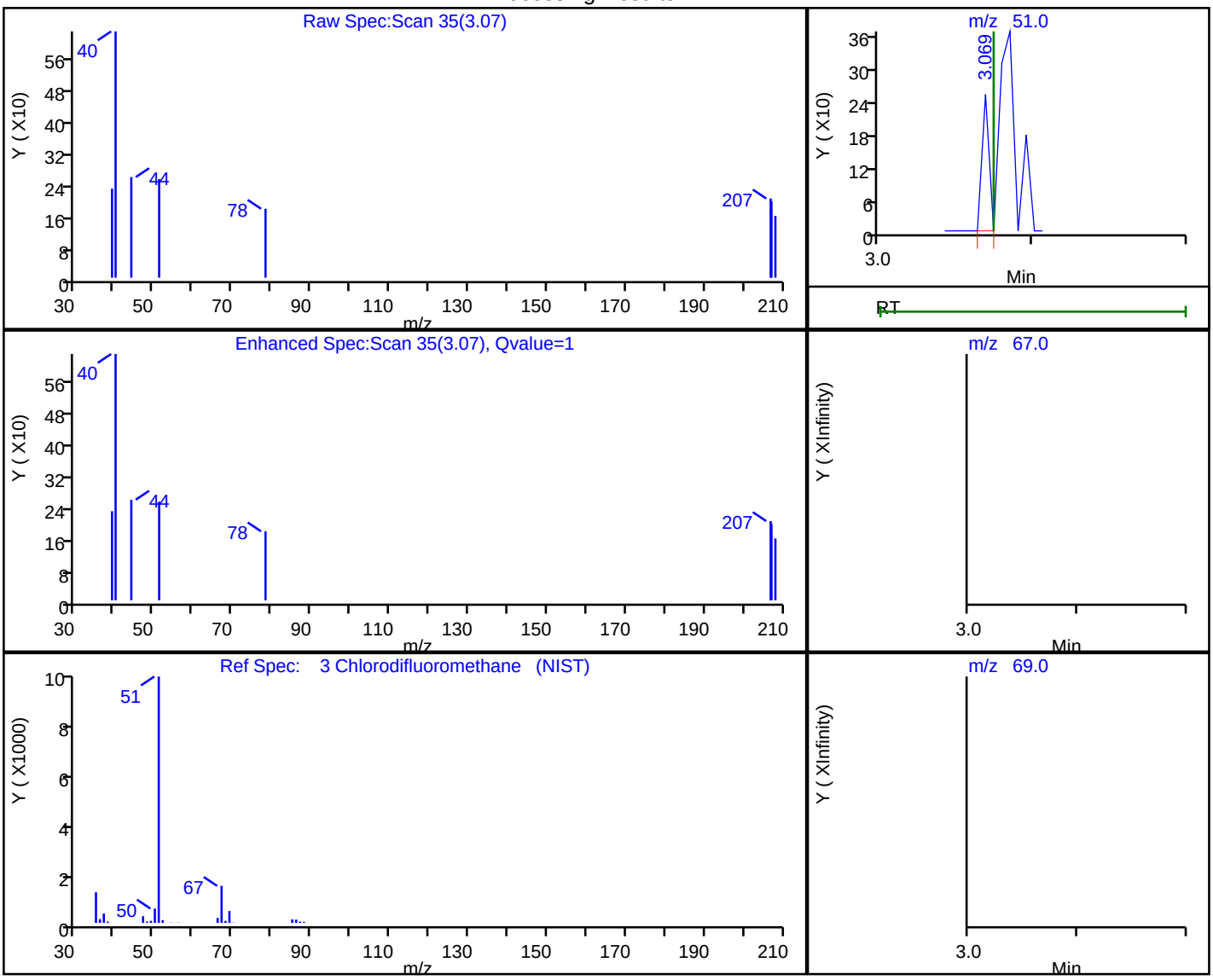
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\chromna\Burlington\ChromData\CHC.i\20190125-34301.b\34301-24.D				
Injection Date:	26-Jan-2019 08:56:30	Instrument ID:	CHC.i		
Lims ID:	200-47122-A-7	Lab Sample ID:	200-47122-7		
Client ID:	3534				
Operator ID:	ggg	ALS Bottle#:	25	Worklist Smp#:	24
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

3 Chlorodifluoromethane, CAS: 75-45-6

Processing Results



RT	Mass	Response	Amount
3.07	51.00	80	0.002157
3.07	67.00	0	
3.07	69.00	0	

Reviewer: bunmaa, 28-Jan-2019 14:38:36

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

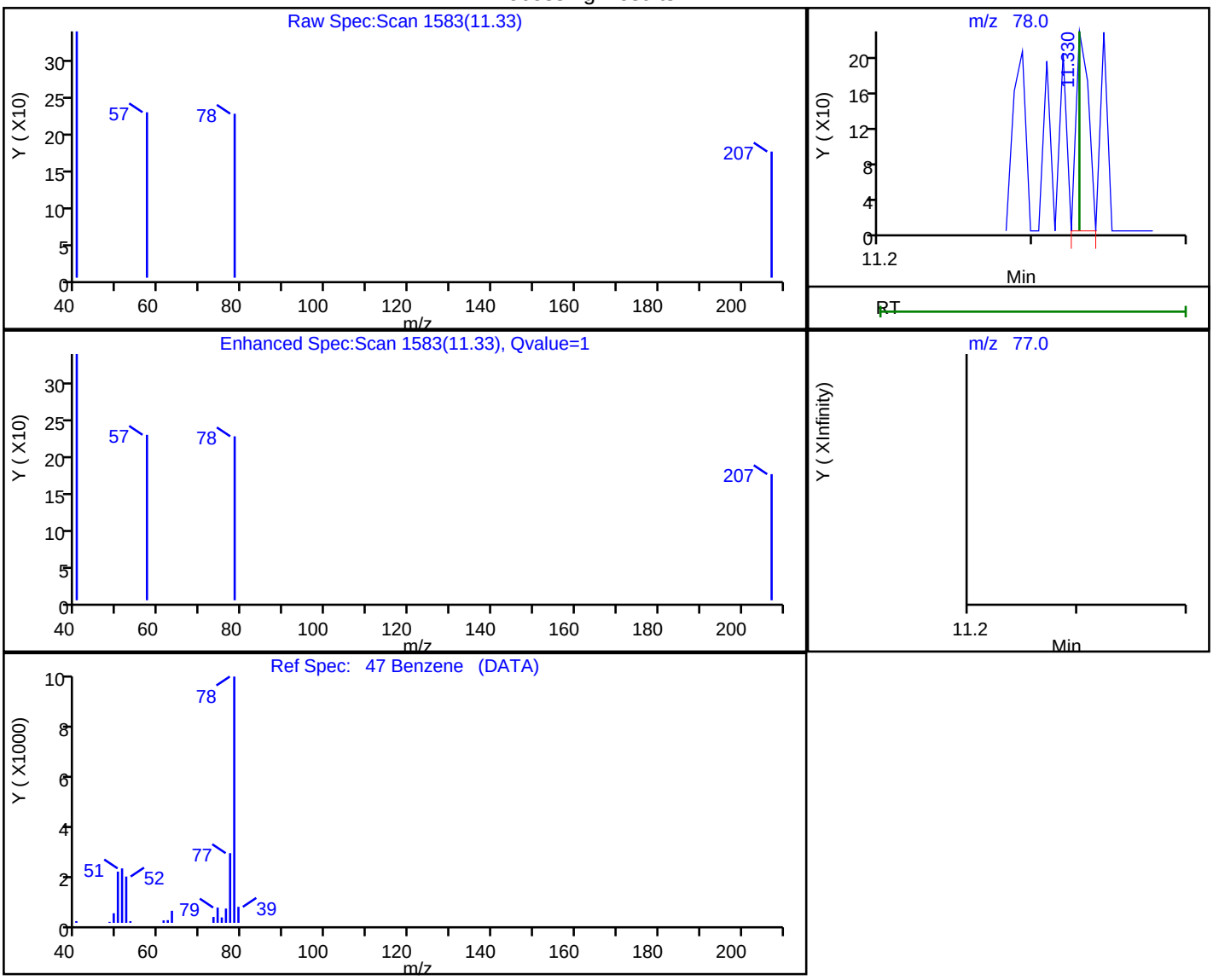
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\chromna\Burlington\ChromData\CHC.i\20190125-34301.b\34301-24.D				
Injection Date:	26-Jan-2019 08:56:30	Instrument ID:	CHC.i		
Lims ID:	200-47122-A-7	Lab Sample ID:	200-47122-7		
Client ID:	3534				
Operator ID:	ggg	ALS Bottle#:	25	Worklist Smp#:	24
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

47 Benzene, CAS: 71-43-2

Processing Results



RT	Mass	Response	Amount
11.33	78.00	124	0.001667
11.33	77.00	0	

Reviewer: bunmaa, 28-Jan-2019 14:39:19

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

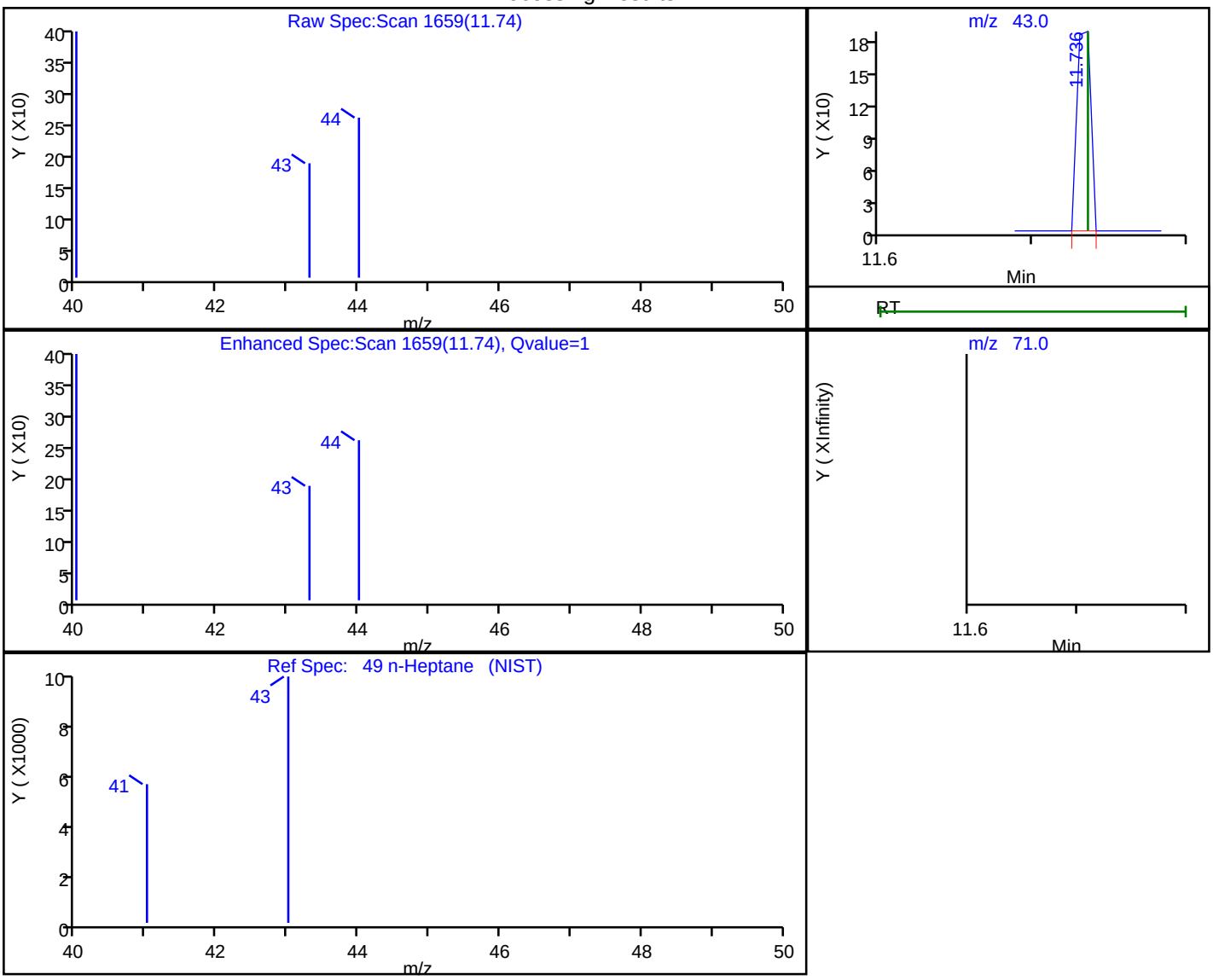
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\chromna\Burlington\ChromData\CHC.i\20190125-34301.b\34301-24.D				
Injection Date:	26-Jan-2019 08:56:30	Instrument ID:	CHC.i		
Lims ID:	200-47122-A-7	Lab Sample ID:	200-47122-7		
Client ID:	3534				
Operator ID:	ggg	ALS Bottle#:	25	Worklist Smp#:	24
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

49 n-Heptane, CAS: 142-82-5

Processing Results



RT	Mass	Response	Amount
11.74	43.00	116	0.002278
11.74	71.00	0	

Reviewer: bunmaa, 28-Jan-2019 14:39:25

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

TestAmerica Burlington

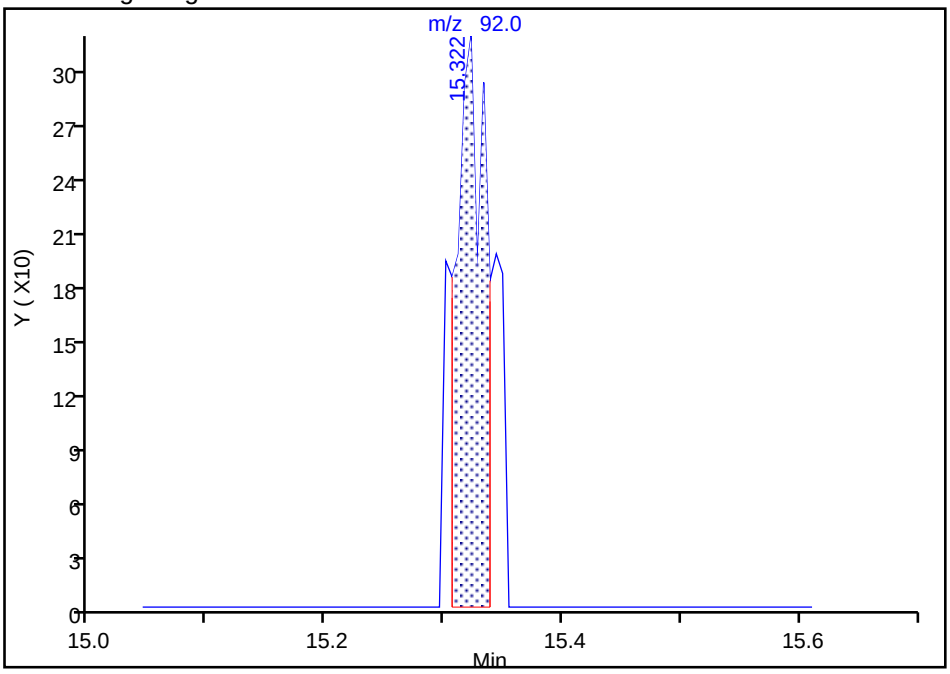
Data File:	\\chromna\Burlington\ChromData\CHC.i\20190125-34301.b\34301-24.D				
Injection Date:	26-Jan-2019 08:56:30	Instrument ID:	CHC.i		
Lims ID:	200-47122-A-7	Lab Sample ID:	200-47122-7		
Client ID:	3534				
Operator ID:	ggg	ALS Bottle#:	25	Worklist Smp#:	24
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

65 Toluene, CAS: 108-88-3

Signal: 1

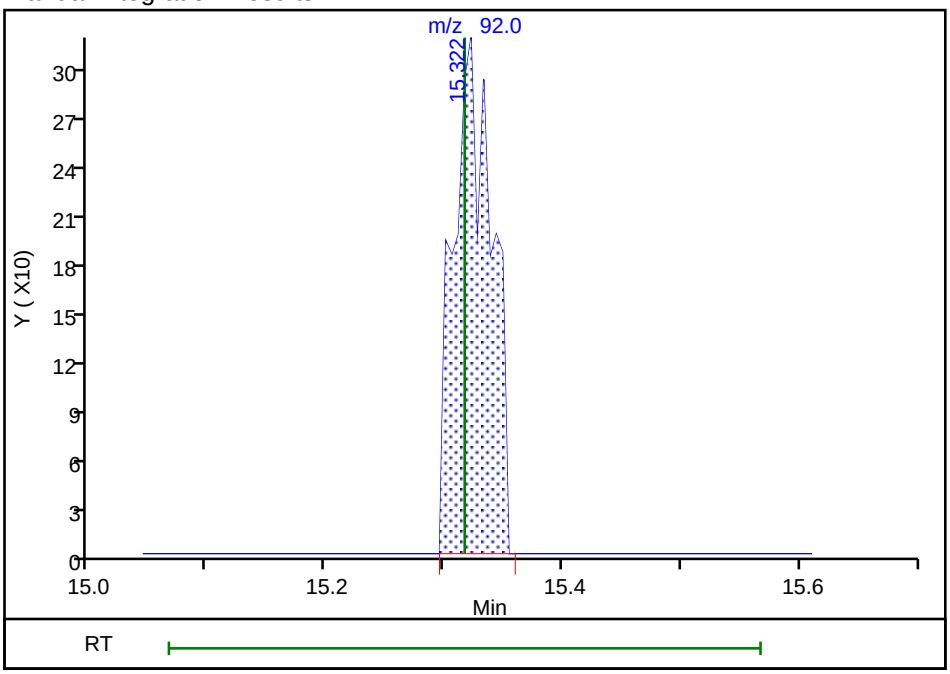
Processing Integration Results

RT: 15.32
Area: 532
Amount: 0.008021
Amount Units: ppb v/v



Manual Integration Results

RT: 15.32
Area: 718
Amount: 0.010825
Amount Units: ppb v/v



Reviewer: bunmaa, 28-Jan-2019 14:39:43

Audit Action: Manually Integrated Audit Reason: Assign Peak

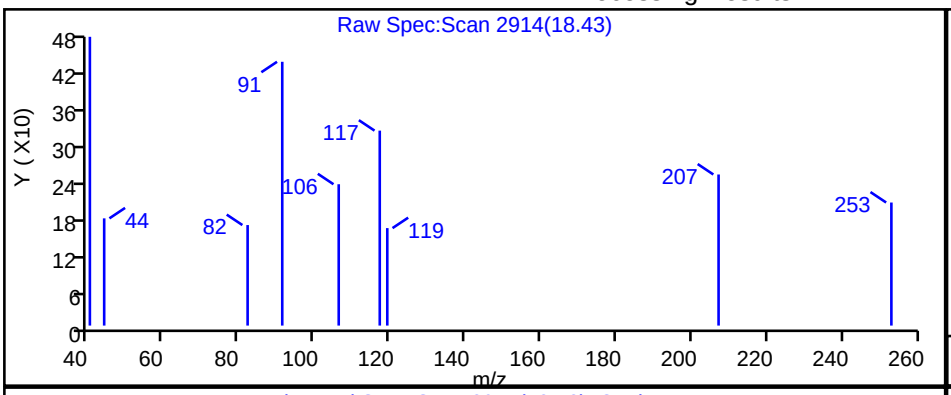
User Disabled Compound Report

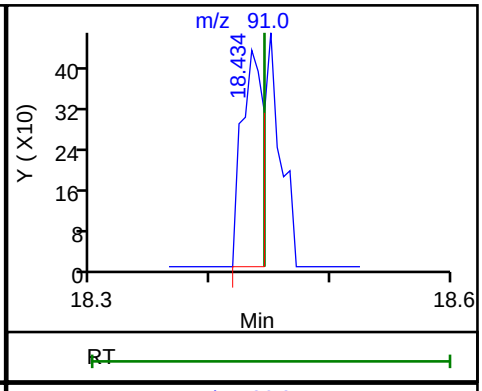
TestAmerica Burlington

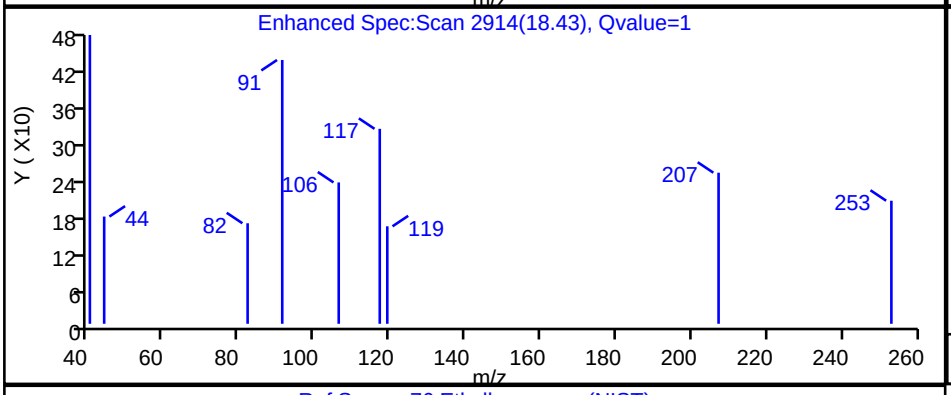
Data File:	\\chromna\Burlington\ChromData\CHC.i\20190125-34301.b\34301-24.D				
Injection Date:	26-Jan-2019 08:56:30	Instrument ID:	CHC.i		
Lims ID:	200-47122-A-7	Lab Sample ID:	200-47122-7		
Client ID:	3534				
Operator ID:	ggg	ALS Bottle#:	25	Worklist Smp#:	24
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

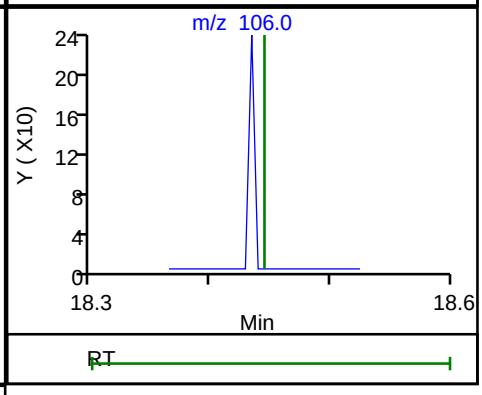
76 Ethylbenzene, CAS: 100-41-4

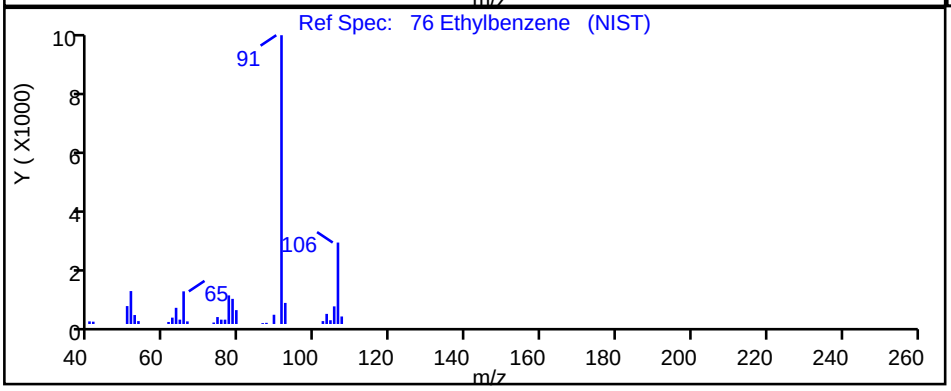
Processing Results











RT	Mass	Response	Amount
18.43	91.00	550	0.003577
18.44	106.00	0	

Reviewer: bunmaa, 28-Jan-2019 14:40:09

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

TestAmerica Burlington

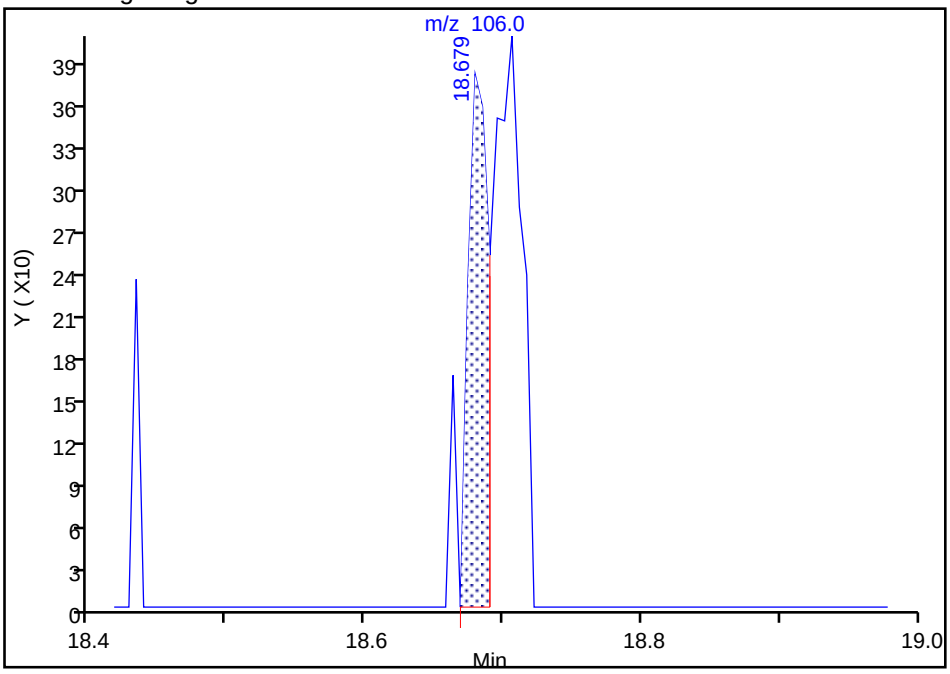
Data File:	\\chromna\Burlington\ChromData\CHC.i\20190125-34301.b\34301-24.D				
Injection Date:	26-Jan-2019 08:56:30	Instrument ID:	CHC.i		
Lims ID:	200-47122-A-7	Lab Sample ID:	200-47122-7		
Client ID:	3534				
Operator ID:	ggg	ALS Bottle#:	25	Worklist Smp#:	24
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

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

Signal: 1

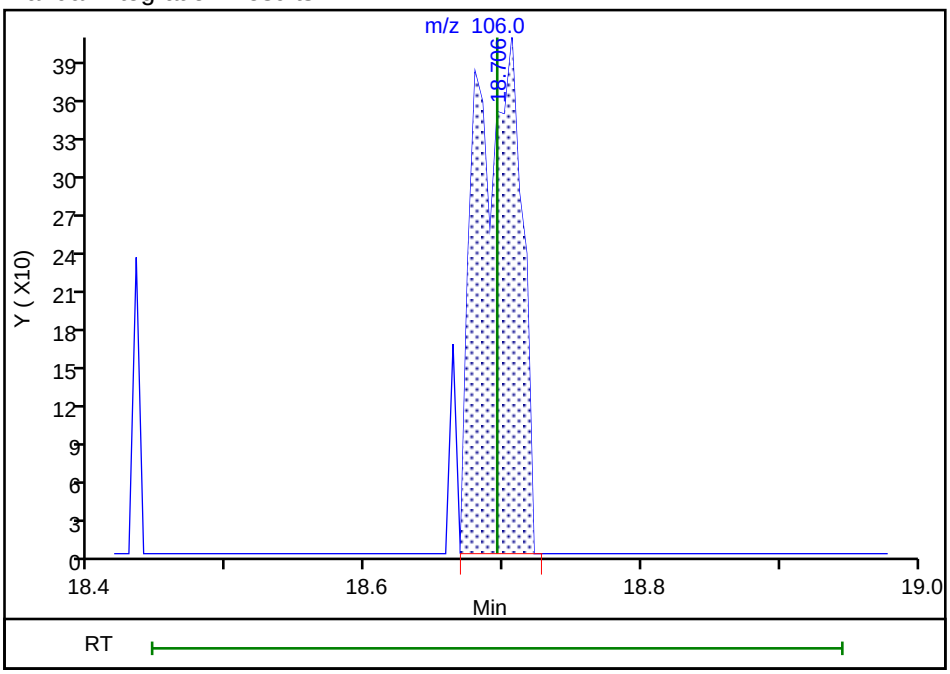
Processing Integration Results

RT: 18.68
Area: 387
Amount: 0.006966
Amount Units: ppb v/v



Manual Integration Results

RT: 18.71
Area: 903
Amount: 0.016254
Amount Units: ppb v/v



Reviewer: bunmaa, 28-Jan-2019 14:40:17

Audit Action: Manually Integrated Audit Reason: Assign Peak

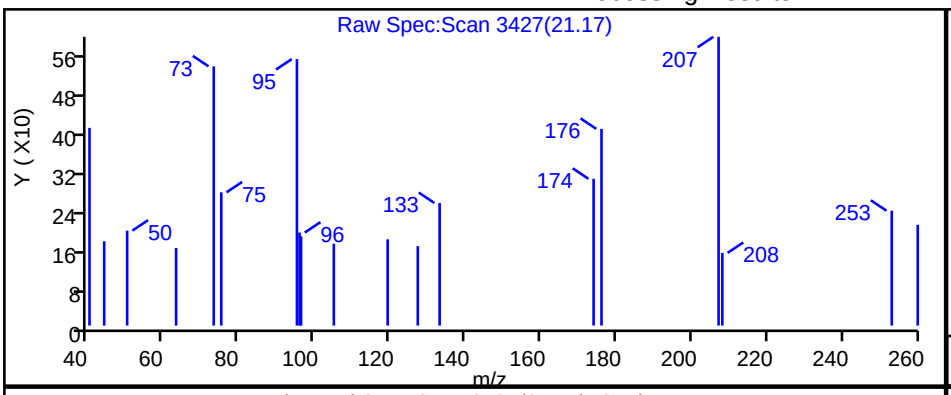
User Disabled Compound Report

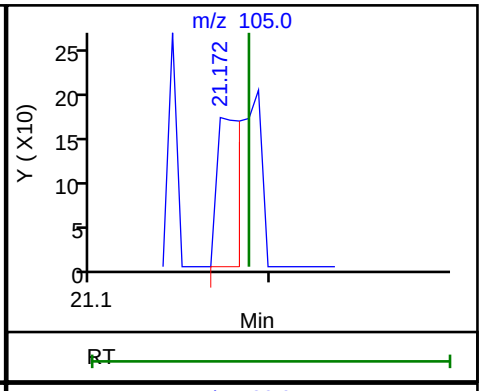
TestAmerica Burlington

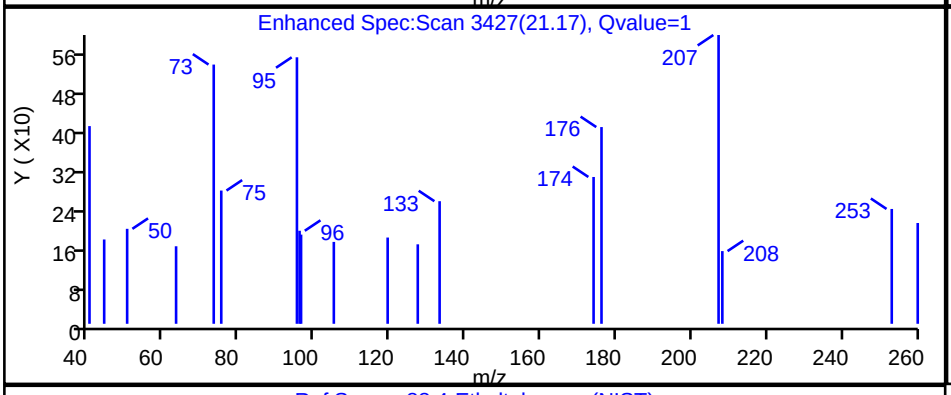
Data File:	\\chromna\Burlington\ChromData\CHC.i\20190125-34301.b\34301-24.D				
Injection Date:	26-Jan-2019 08:56:30	Instrument ID:	CHC.i		
Lims ID:	200-47122-A-7	Lab Sample ID:	200-47122-7		
Client ID:	3534				
Operator ID:	ggg	ALS Bottle#:	25	Worklist Smp#:	24
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

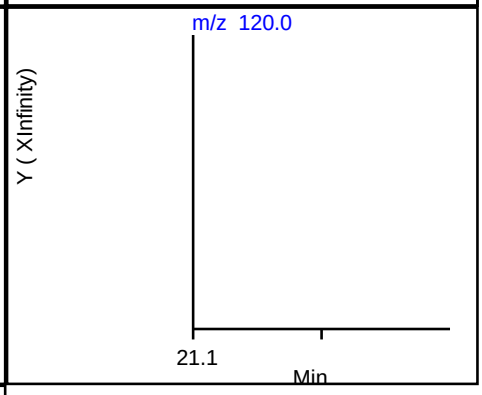
88 4-Ethyltoluene, CAS: 622-96-8

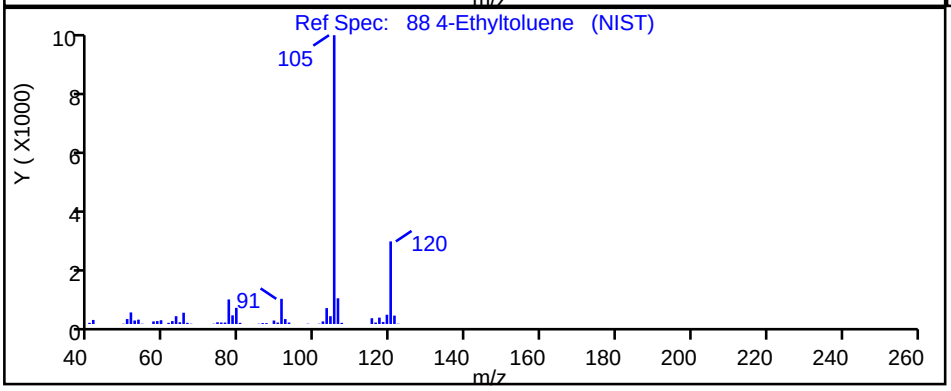
Processing Results











RT	Mass	Response	Amount
21.17	105.00	160	0.000968
21.19	120.00	0	

Reviewer: bunmaa, 28-Jan-2019 14:40:31

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

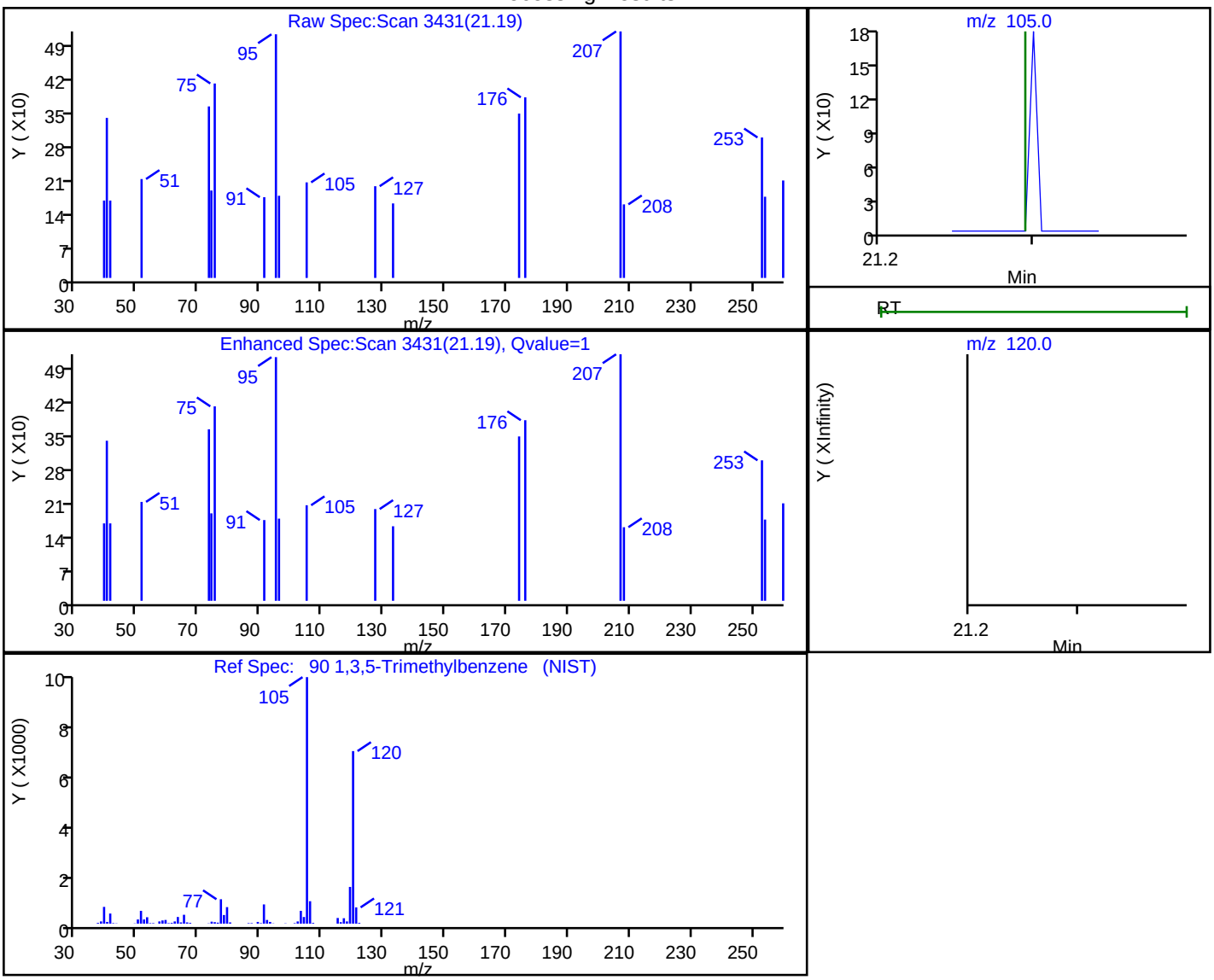
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\chromna\Burlington\ChromData\CHC.i\20190125-34301.b\34301-24.D				
Injection Date:	26-Jan-2019 08:56:30	Instrument ID:	CHC.i		
Lims ID:	200-47122-A-7	Lab Sample ID:	200-47122-7		
Client ID:	3534				
Operator ID:	ggg	ALS Bottle#:	25	Worklist Smp#:	24
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

90 1,3,5-Trimethylbenzene, CAS: 108-67-8

Processing Results



RT	Mass	Response	Amount
21.19	105.00	171	0.001228
21.29	120.00	0	

Reviewer: bunmaa, 28-Jan-2019 14:40:35

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

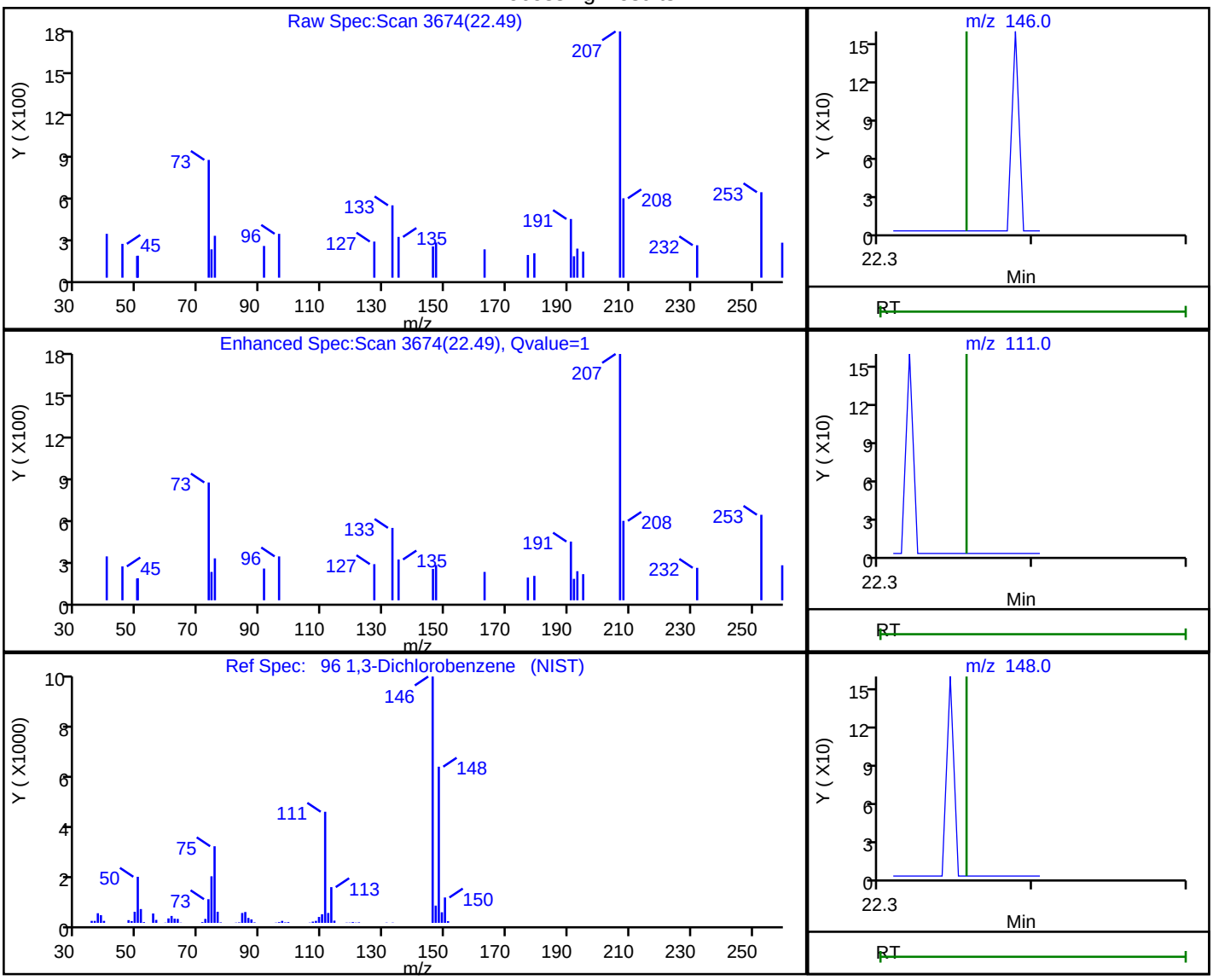
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\chromna\Burlington\ChromData\CHC.i\20190125-34301.b\34301-24.D				
Injection Date:	26-Jan-2019 08:56:30	Instrument ID:	CHC.i		
Lims ID:	200-47122-A-7	Lab Sample ID:	200-47122-7		
Client ID:	3534				
Operator ID:	ggg	ALS Bottle#:	25	Worklist Smp#:	24
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

96 1,3-Dichlorobenzene, CAS: 541-73-1

Processing Results



RT	Mass	Response	Amount
22.49	146.00	125	0.001383
22.36	111.00	0	
22.36	148.00	0	

Reviewer: bunmaa, 28-Jan-2019 14:40:45

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

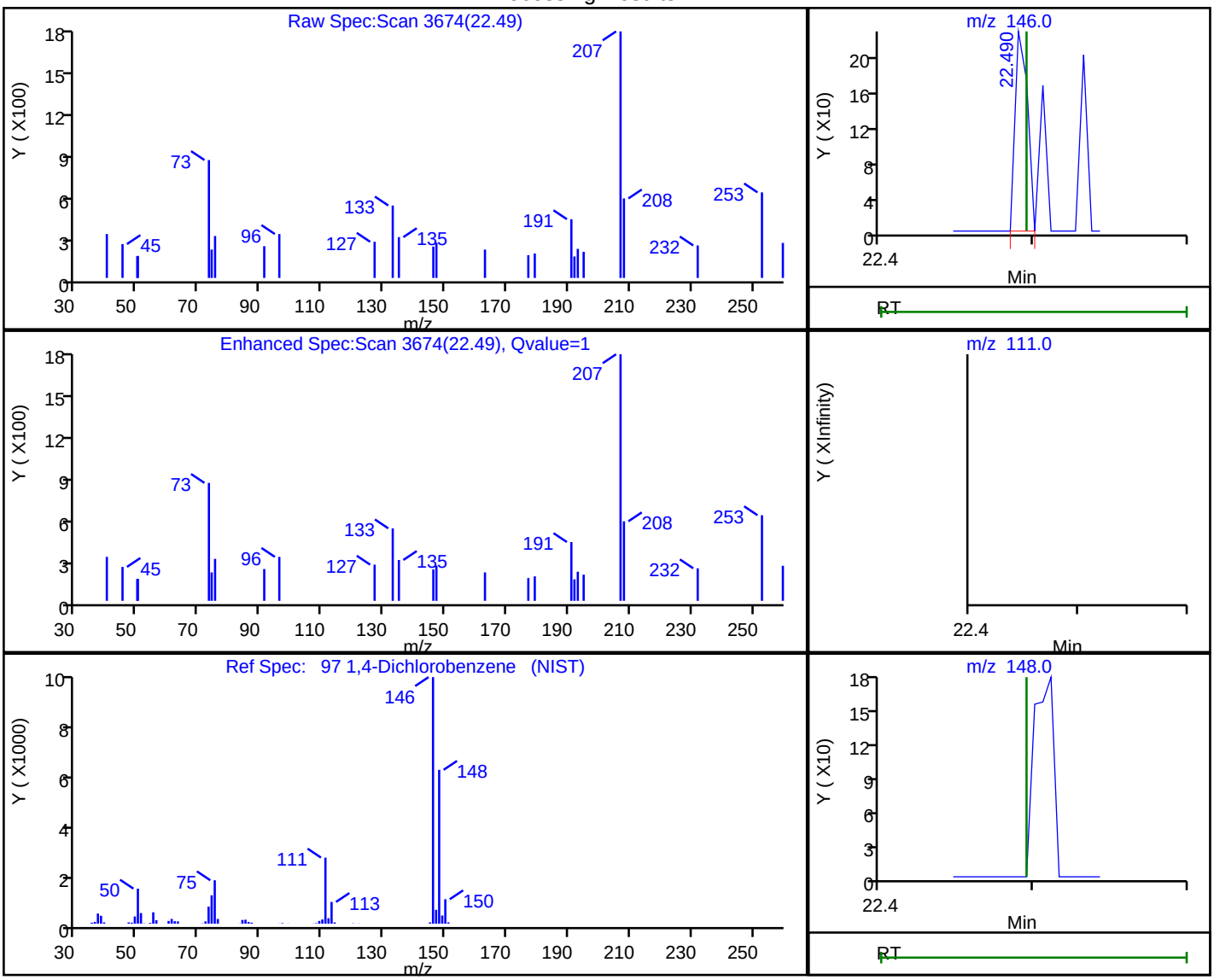
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\chromna\Burlington\ChromData\CHC.i\20190125-34301.b\34301-24.D				
Injection Date:	26-Jan-2019 08:56:30	Instrument ID:	CHC.i		
Lims ID:	200-47122-A-7	Lab Sample ID:	200-47122-7		
Client ID:	3534				
Operator ID:	ggg	ALS Bottle#:	25	Worklist Smp#:	24
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

97 1,4-Dichlorobenzene, CAS: 106-46-7

Processing Results



RT	Mass	Response	Amount
22.49	146.00	125	0.001410
22.50	111.00	0	
22.50	148.00	0	

Reviewer: bunmaa, 28-Jan-2019 14:40:50

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

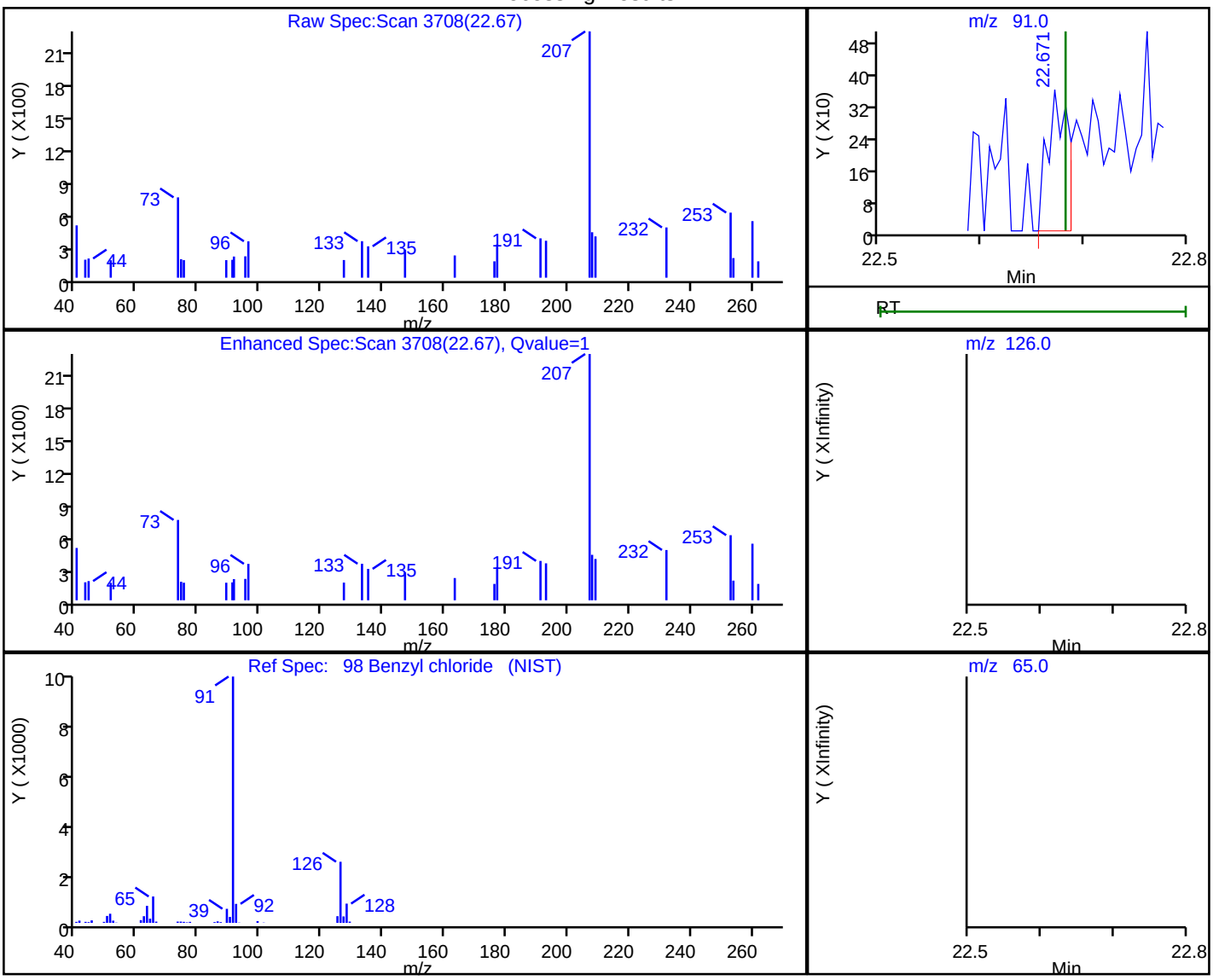
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\chromna\Burlington\ChromData\CHC.i\20190125-34301.b\34301-24.D				
Injection Date:	26-Jan-2019 08:56:30	Instrument ID:	CHC.i		
Lims ID:	200-47122-A-7	Lab Sample ID:	200-47122-7		
Client ID:	3534				
Operator ID:	ggg	ALS Bottle#:	25	Worklist Smp#:	24
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

98 Benzyl chloride, CAS: 100-44-7

Processing Results



RT	Mass	Response	Amount
22.67	91.00	494	0.003759
22.68	126.00	0	
22.68	65.00	0	

Reviewer: bunmaa, 28-Jan-2019 14:40:52

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

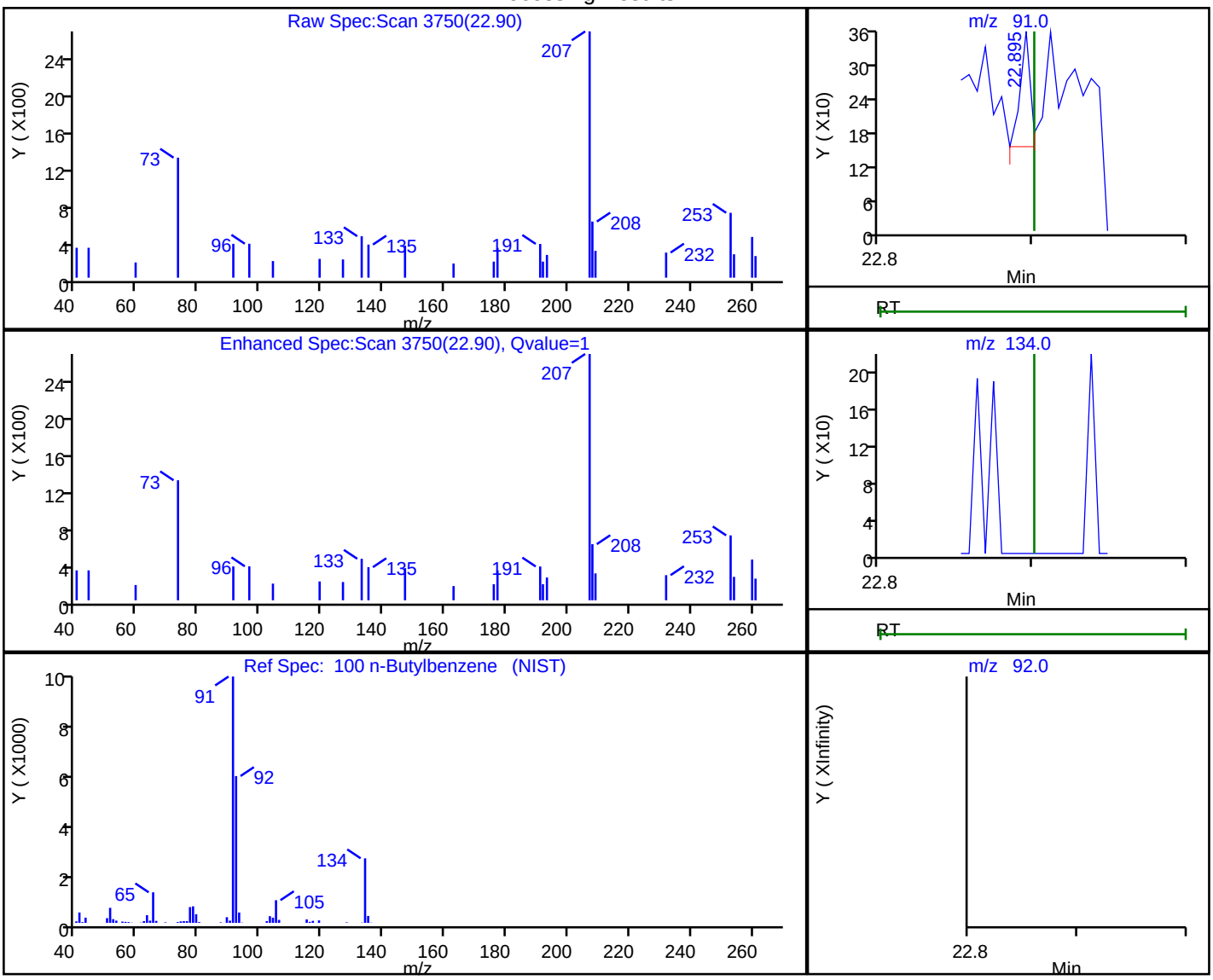
User Disabled Compound Report

TestAmerica Burlington

Data File:	\\chromna\Burlington\ChromData\CHC.i\20190125-34301.b\34301-24.D				
Injection Date:	26-Jan-2019 08:56:30	Instrument ID:	CHC.i		
Lims ID:	200-47122-A-7	Lab Sample ID:	200-47122-7		
Client ID:	3534				
Operator ID:	ggg	ALS Bottle#:	25	Worklist Smp#:	24
Purge Vol:	200.000 mL	Dil. Factor:	0.2000		
Method:	TO15_MasterMethod_(v1)_CHC.i	Limit Group:	AI_TO15_ICAL		
Column:	RTX-624 (0.32 mm)	Detector	MS SCAN		

100 n-Butylbenzene, CAS: 104-51-8

Processing Results



RT	Mass	Response	Amount
22.90	91.00	95	0.000561
22.90	134.00	0	
22.90	92.00	0	

Reviewer: bunmaa, 28-Jan-2019 14:40:54

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID