Screening Level Vapor Intrusion Assessment Report

Former Franklin Power Products
400 Forsythe Street
Indianapolis, Indiana

State Cleanup Site No. 0000807

April 27, 2020
SMA Project No. HH187004A

Prepared By:

St. John-Mittelhauser & Associates, Inc.,
A Terracon Company
1401 Branding Avenue, Suite 315
Downers Grove, Illinois 60515

CONTENTS

1.0 INTRODUCTION

St. John – Mittelhauser & Associates (SMA), a Terracon Company, has prepared this *Screening Level Vapor Intrusion Assessment Report* for the Former Franklin Power Products Facility located at 400 Forsythe Street, Franklin, Indiana (the Site). A Site Vicinity Map is provided as Figure 1. This document summarizes sampling methodologies and results of paired indoor air / sub-slab sampling performed within the Site building by SMA between March 11 and 13, 2020. Outside temperatures during the sampling event, which was conducted on March 13, 2020, were recorded to range between 43° and 48°F, which constitutes conditions considered representative of the winter heating season. Sampling was conducted during the day with all building windows closed and heating systems in operation.

2.0 SITE DESCRIPTION AND SAMPLING RATIONALE

The Site property consists of an irregular shaped parcel totaling approximately 11.4 acres. The property currently contains one building totaling approximately 104,700 ft^2 and is constructed with a slab on grade foundation. A small pre-fabricated building is also present east of the main building at the north end of the property. The main building encompasses approximately 20% of the total footprint of the Site, with the remaining ground cover being asphalt, gravel, or vegetation. The building slab is approximately 6-inches thick and ceiling heights vary between 10 and approximately 30 feet.

The objective of the sampling activities was to screen for the potential for vapor intrusion (VI) in occupied portions of the Site building that are not currently used for warehouse space, and is a follow up to the sampling performed by Keramida Inc. in 2018.

3.0 INVESTIGATION METHODS

3.1 PRE-SAMPLING SURVEYS

A survey of the building was performed on March 11, 2020, prior to initiating sampling activities, in order to identify potential indoor sources of volatile organic compounds (VOCs) that may interfere with an accurate assessment of potential VI and to identify sampling locations. This

inventory of chemical storage containers identified to be present during the time of the sampling. The results of this pre-sampling survey are documented in the Indoor Air Building Survey Checklist provided as Appendix A. Identified chemicals within the building were found to include various cleaning agents, latex-based paints, spray paints and soaps. SMA found no evidence of the storage of chemicals containing constituents of potential concern (COPCs) historically documented in soil and groundwater beneath and in the vicinity of the Site property.

3.2 SUB-SLAB SOIL GAS SAMPLE COLLECTION

A total of eight sub-slab sampling ports (SS-1 through SS-8) were installed within the Site building on March 11, 2020, at the approximate locations shown in Figure 2. Each sampling port was installed using a rotary hammer drill to create a 5/8-inch diameter hole through the concrete slab, approximately 2-inches into the underlying fill material. The hole was then re-drilled with a 1.5-inch diameter drill bit approximately 1.75-inches into the slab. A Vapor Pin sampling port was then installed in the borehole and sealed with a silicon sleeve. The sampling ports were capped following installation, and their integrity confirmed through water dam leak testing. Note that sampling point SS-8 was shifted slightly south of the southern wall of the Powerhouse Athletics tenant space due to issues drilling through the slab to the north of the wall. The area immediately north of the wall corresponds to two loading docks. The concrete floor slab in this area is presumed to be reinforced.

Prior to sample collection on March 13, 2020, each sampling port was purged of approximately three internal volumes (~30 mL) using a plastic syringe. The sampling ports were then connected to 6-liter Summa canisters fitted with 8-hour flow regulators using 0.187-inch ID Teflon tubing. The sampling train also included an isolation valve adjacent to the sampling port; a three-way valve connected to an in-line hand pump, and vacuum gauge between the sampling port and Summa Canister. All connections between the Summa canisters, flow regulators and valving were secured with appropriate Swagelok fittings. The connections between sample tubing and sampling ports were made using short sections of Tygon R-3063 tubing as a bridge. Prior to sample collection, a shut-in test was performed at each location to confirm the airtightness of the fittings between the sample probe and Summa canister. The tests were performed by shutting the isolation valve adjacent to the sample port and using a hand pump to achieve an induced vacuum of 30-inches of water head within the sample train. The vacuum was then monitored for

a minimum of 1-minute to confirm that it remained steady. Following the shut-in tests, samples were collected and submitted to Envision Laboratories in Indianapolis, Indiana for analysis of VOCs using USEPA Test Method TO-15.

It is of note that field personnel suspended the collection of sub-slab sample SS-4 approximately three hours into the sample collection. The initial vacuum measured in the Summa canister for this sample was noted to be 8-inches Hg, indicating the canister had leaked prior to the initiation of sampling.

3.3 INDOOR AIR SAMPLE COLLECTION

A total of eight indoor air samples (IA-1 through IA-8) were collected concurrently with the sub-slab samples discussed in Section 3.2. Each sample was collected from commonly occupied areas using 6-liter Summa canisters fitted with regulators to withdraw time-integrated samples over an 8-hour time period. All connections between the Summa canisters and flow regulators were secured with laboratory-provided Swagelok fittings. The samples were submitted to Envision Laboratories in Indianapolis, Indiana under chain of custody protocols for analysis of VOCs using USEPA Test Method TO-15.

One duplicate sample was initially planned to be performed in conjunction with sample IA-3; however, the initial vacuum measured in the Summa canister for this sample was noted to be 18-inches Hg (compared to an anticipated 28 to 30-inches Hg), indicating the canister had leaked prior to the initiation of sampling. The primary objective of the collection of the duplicate sample was the evaluation of variance and reproducibility during sample collection and analysis. As discussed in Section 4.0, there were no VOCs detected in any indoor air sample collected during the investigation. Therefore, the variance and reproducibility during sample collection and analysis is not in question.

3.4 AMBIENT AIR SAMPLE COLLECTION

One outdoor, ambient air sample was collected concurrently with other investigation samples by placing a 6-L Summa canister at a location determined to be upwind of the facility over the course of the investigation (see Figure 2). The sample was collected using a 6-liter Summa canister

fitted with a laboratory provided regulator to withdraw a time-integrated sample over an 8-hour time period. All connections between the Summa canisters and flow regulators were secured with laboratory-provided Swagelok fittings. The sample was submitted to Envision Laboratories in Indianapolis, Indiana under chain of custody protocols for analysis of VOCs using USEPA Test Method TO-15.

4.0 SAMPLING RESULTS

Laboratory analytical results from the March 2020 vapor intrusion screening sampling are provided as Table 1, and are summarized in Figure 2. In addition, the laboratory analytical report is provided in Appendix B. The analytical results are broken down into two general categories: 1) analytical results obtained from sub-slab locations, and 2) analytical results obtained from locations representative of breathing air (both indoor and outdoor air).

The sampling results indicated the presence tetrachloroethylene (PCE) and trichloroethylene (TCE) at concentrations exceeding laboratory quantification limits in three of the seven sub-slab samples collected during the sampling event; however, neither constituent was detected at concentrations exceeding either residential or commercial/industrial sub-slab screening levels outlined in the Indiana Department of Environmental Management's (IDEM) *Remediation Closure Guide* (RCG; updated March 2020) and *Attenuation Factors* Guidance Document (dated September 29, 2016). There were no detections of any VOCs in indoor air samples.

5.0 CONCLUSION AND RECOMMENDATIONS

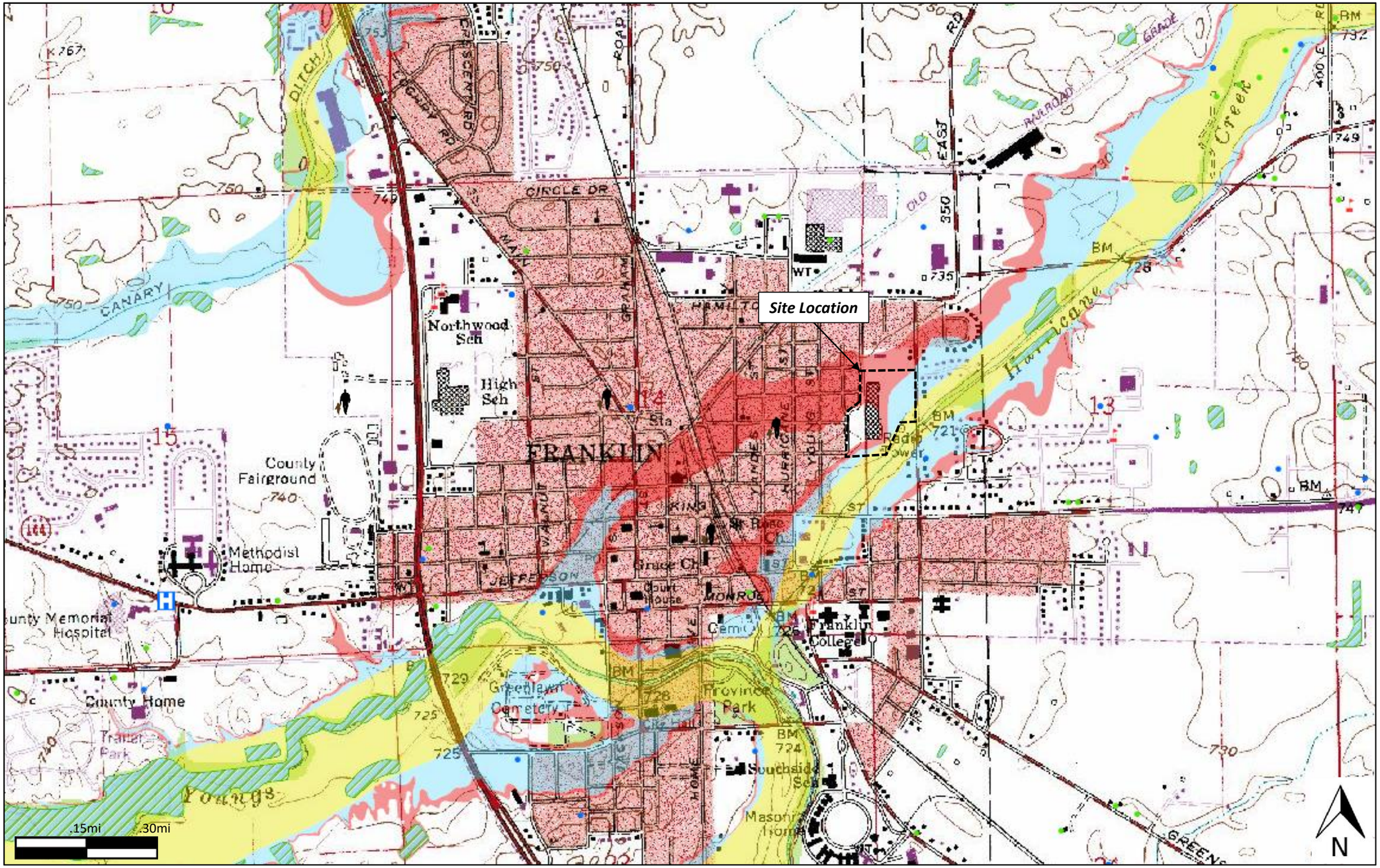
Paired sub-slab and indoor air sampling conducted in the Site building in March 2020 indicate all VOCs were below both residential and commercial/industrial screening levels outlined in the IDEM's RCG. Consistent with guidance set forth in the RCG, SMA recommends an additional round of paired sub-slab and indoor air sampling in the summer months, which, along with the winter sampling conducted in March 2020, are considered to represent conditions most favorable for vapor intrusion.

FIGURES

- *Floodway*
- *500 Year Flood Zone*
- *100 Year Flood Zone*
- *Wetlands*
- *Schools*
- *Hospitals*
- *Daycares*

Water Wells (IDNR)

- *Located*
- *Location Estimated*



Source: Indiana Geological Survey Online Map, http://inmap.indiana.edu/index.html

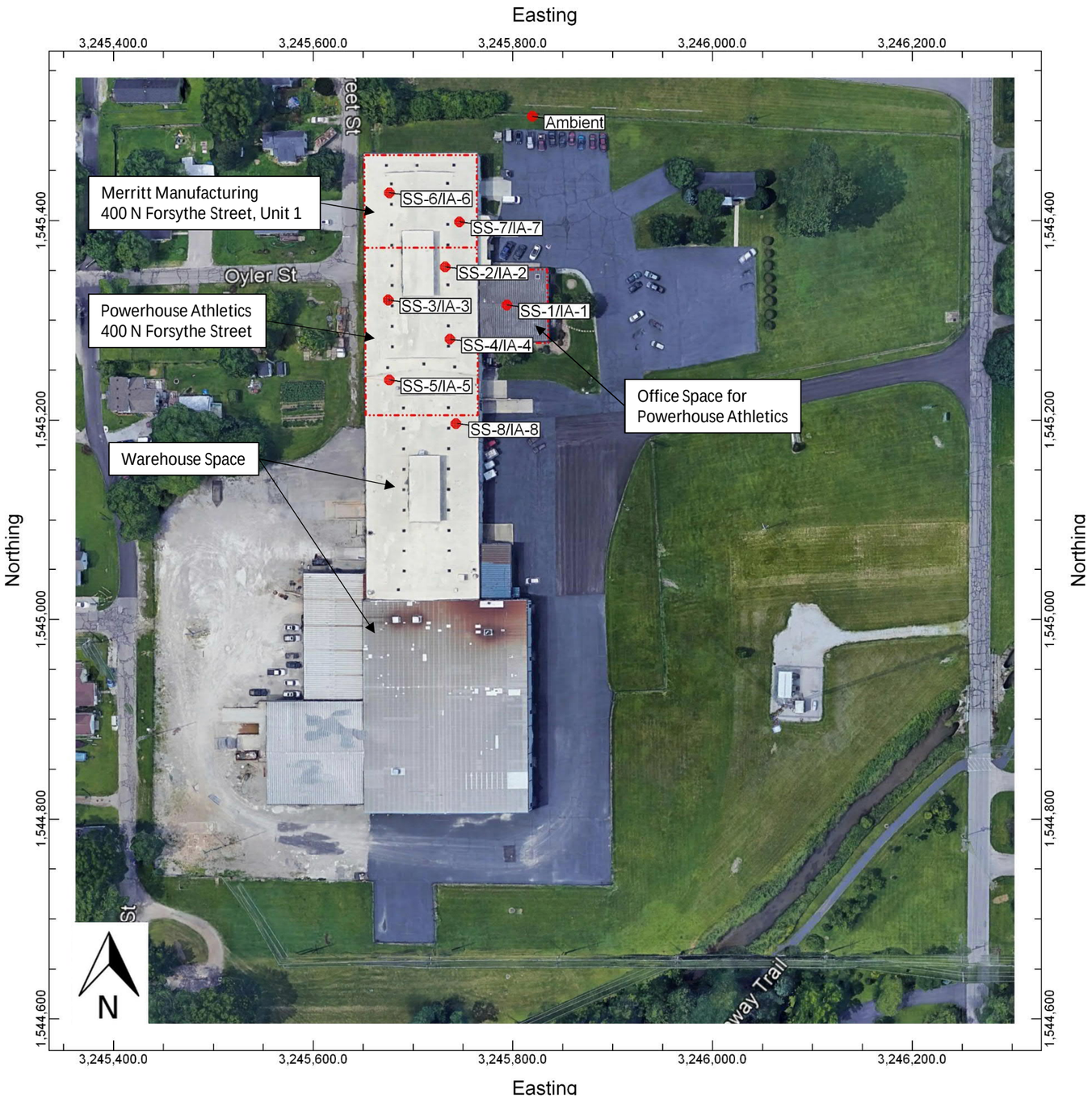
SM&A
St. John - Mittelhauser & Associates

Former Franklin Power Products
400 North Forsythe Street
Franklin, Indiana

Drawn by: AD
12/3/2018
Scale as Shown

Figure 1

Site Vicinity Map



Remediation Colosure Guidelines (RCG) Screening Levels	Tetrachloroethylene	Trichloroethylene
RCG Residential - Indoor Air (µg/m^3)	42	2.1
RCG Residential - Sub Slab (0.03 attenuation factor; µg/m^3)	1400	70
RCG Industrial/Commercial - Indoor Air (µg/m^3)	180	8.8
RCG Industrial/Commercial - Sub Slab (0.03 attenuation factor; µg/m^3)	6000	293.3
Sample ID	**Sample Type**	**Date**		
IA-1	Indoor Air	3/13/2020	<3.19	<1.07
IA-2	Indoor Air	3/13/2020	<3.19	<1.07
IA-3	Indoor Air	3/13/2020	<3.19	<1.07
IA-4	Indoor Air	3/13/2020	<3.19	<1.07
IA-5	Indoor Air	3/13/2020	<3.19	<1.07
IA-6	Indoor Air	3/13/2020	<3.19	<1.07
IA-7	Indoor Air	3/13/2020	<3.19	<1.07
IA-8	Indoor Air	3/13/2020	<3.19	<1.07
Ambient	Indoor Air	3/13/2020	<3.19	<1.07
SS-1	Sub-Slab	3/13/2020	<3.19	28.5
SS-2	Sub-Slab	3/13/2020	<3.19	<1.07
SS-3	Sub-Slab	3/13/2020	36.7	<1.07
SS-5	Sub-Slab	3/13/2020	<3.19	<1.07
SS-6	Sub-Slab	3/13/2020	<3.19	<1.07
SS-7	Sub-Slab	3/13/2020	8.82	<1.07
SS-8	Sub-Slab	3/13/2020	<3.19	<1.07

● Paired Indoor Air / Sub-Slab Sampling Locations

Horizontal Coordinates
Indiana State Plane West (feet)

Analytical Results
All analytical data provided as µg/m^3

ST. JOHN - MITTELHAUSER & ASSOCIATES

Former Franklin Power Products
400 North Forsythe Street
Franklin, Indiana

Drawn by: AD
4/9/2020
Scale as Shown

Figure 2

Vapor Intrusion Screening
Sample Results

TABLES

Table 1. Vapor Intrusion Screening Results (ug/m^3)
Former Franklin Power Products Facility
400 N. Forsythe Street, Franklin, Indiana
(Attenuation Factors for Standard Buildings)

Remediation Colosure Guidelines (RCG)			Tetrachloroethylene	Trichloroethylene
RCG Residential - Indoor Air (µg/m^3)			42	2.1
RCG Residential - Sub Slab (0.03 attenuation factor; µg/m^3)			1400	70
RCG Industrial/Commercial - Indoor Air (µg/m^3)			180	8.8
RCG Industrial/Commercial - Sub Slab (0.03 attenuation factor; µg/m^3)			6000	293.3
Sample ID	Sample Type	Date		
IA-1	Indoor Air	3/13/2020	<3.19	<1.07
IA-2	Indoor Air	3/13/2020	<3.19	<1.07
IA-3	Indoor Air	3/13/2020	<3.19	<1.07
IA-4	Indoor Air	3/13/2020	<3.19	<1.07
IA-5	Indoor Air	3/13/2020	<3.19	<1.07
IA-6	Indoor Air	3/13/2020	<3.19	<1.07
IA-7	Indoor Air	3/13/2020	<3.19	<1.07
IA-8	Indoor Air	3/13/2020	<3.19	<1.07
Ambient	Indoor Air	3/13/2020	<3.19	<1.07
SS-1	Sub-Slab	3/13/2020	<3.19	28.5
SS-2	Sub-Slab	3/13/2020	<3.19	<1.07
SS-3	Sub-Slab	3/13/2020	36.7	<1.07
SS-5	Sub-Slab	3/13/2020	<3.19	<1.07
SS-6	Sub-Slab	3/13/2020	<3.19	<1.07
SS-7	Sub-Slab	3/13/2020	8.82	<1.07
SS-8	Sub-Slab	3/13/2020	<3.19	<1.07

APPENDIX A

Prepared by: Scott Happel (SMA)
March 11, 2020

Vapor Intrusion Investigation Documentation

Part I: General Information

Complete Part I for each sampling event (may involve multiple structures)

Release	*For Known Source(s):*		
	Site Name EPP		Site Number
	400 Forsythe St		
	Franklin, IN		
	☐ Source not known		
Chemicals	*Check all that apply:*		
	☒ Chlorinated solvents ☐ Petroleum hydrocarbons ☐ Unknown		
	☐ Other *(specify)*:		
Rationale	Condition(s) prompting investigation *(check all that apply):*		
	☐ Odor complaint		
	☒ Ground water contamination levels (from offsite)		
	☐ Soil contamination levels		
	☒ Other *(specify)*: To screen for potential VI in occupied portions of the site building not used for warehouse space		
Weather	Precipitation ≤ 12 hours prior to sampling? ☐ Yes ☒ No		
	Outside temperature range: 43 °F to 48 °F		
Personnel	Sampler(s)	Affiliation	Telephone
	Scott Happel	SMA	317-229-6680
	Preparer	Affiliation	Telephone
	Scott Happel	SMA	
	Laboratory: Enviroam Air		

Vapor Intrusion Investigation Documentation

Part II: General Structure Characteristics and Sampling Information

Complete a separate Part II for each structure

	☐ Residential ☒ Non-residential ☐ Multi-unit	Year Constructed: 1940
	Floors at/above grade: 1	Ceiling Height (feet): 20+
	Sensitive population? ☒ No ☐ Yes (*specify*):	
	Surrounding area: ☐ Bare soil/Vegetation ☐ Impervious ☒ Mixed	
	☐ Basement ☐ Crawl space ☒ Slab on grade ☐ Combination	
Basement (if applicable)	Depth of basement floor below ground surface (feet):	
	Basement area: _____ ft^2	
	Floor is ☐ Dirt/stones ☐ Slab ☐ Other (*specify*):	
	Walls are ☐ Block ☐ Poured ☐ Other (*specify*):	
	Floor sealed? ☐ Yes ☐ No	Walls sealed? ☐ Yes ☐ No
	Sump? ☐ Yes ☐ No	Water in sump? ☐ Yes ☐ No
	Floor cracks? ☐ Yes ☐ No	Wall cracks? ☐ Yes ☐ No
Heating	System type (*check all that apply*): ☒ Hot air circulation ☐ Hot air radiation ☐ Steam radiation ☐ Wood ☐ Heat pump ☐ Hot water radiation ☐ Kerosene ☐ Electric baseboard ☐ Other (*specify*):	
	Fuel type (*check all that apply*): ☒ Natural gas ☐ Electric ☐ Oil ☐ Wood ☐ Coal ☐ Kerosene ☐ Other (*specify*):	
Other	Whole house fan? ☒ Yes ☐ No	Septic? ☐ Yes ☒ No
	Well? ☐ Yes ☒ No	
	Sub-slab vapor/moisture barrier? ☐ Yes ☐ No ☒ Don't Know If yes, what kind: Instructions for Occupants followed? ☒ Yes ☐ No If not, describe modifications:	

Part II: Structure Characteristics and Sampling Information *continued*

Sample Location Sketch
See Figure

ID	Type[1]	Floor	Room	Vol (mL)	Time (hrs)	Method[2]
See	Report					

[1] IA = indoor air SS = sub-slab SGe = exterior soil gas CS = crawl space NS = near-slab exterior
[2] TO-14A; TO-15; TO-15SIM; TO-17; Other (specify)

Vapor Intrusion Investigation Documentation

Part III: Indoor Air Background Investigation

Complete a separate Part III for any structure with suspected background source

Structure address:
Potential background contaminant(s):

☐ Yes ☒ No Do structure occupants smoke? Not in building
If yes, last time someone smoked in structure:

☐ Yes ☒ No Garage attached to living space?
If yes, is a vehicle usually parked in the garage?
If yes, are gas cans or gas-powered equipment stored in the garage?

☐ Yes ☒ No Do structure occupants have clothes dry cleaned?
If yes, how often:
If yes, last time newly dry cleaned clothes brought home:

☐ Yes ☒ No Occupants use solvents at place of employment?
If yes, what types:
If yes, are their clothes washed away from home?

☐ Yes ☒ No Are pesticides applied in/around structure?
If yes, which pesticides:
If yes, when:

☐ Yes ☒ No Has there ever been a fire in the structure?
If yes, when:

☐ Yes ☒ No Painting or staining in the building in the last six months?
If yes, when:
If yes, which rooms:

Vapor Intrusion Investigation Documentation
Part III: Indoor Air Background Investigation *continued*
Indoor Chemical Inventory

Potential Sources	Location(s)	Removed? Y/N/NA
Gasoline storage cans		
Gas powered equipment	Go-cart (powerhouse small room)	N
Kerosene storage cans		
Paint/thinner/stripper		
Cleaning solvents		
Oven cleaner		
Carpet/upholstery cleaner		
Other cleaning products	Household cleaning products	N
Moth balls		
Polish/wax		
Insecticide		
Nail polish/polish remover		
Hairspray		
Cologne/perfume		
Air fresheners		
Indoor fuel tank		
Wood stove or fireplace		
New furniture/upholstery		
New carpeting/flooring		
Hobby chemicals: glues, paints, lacquers, darkroom chemicals, etc.	Paint	N
Scented trees, wreaths, potpourri, etc.		
Other		

APPENDIX B

EnvisionAir
1441 Sadlier Circle West Drive
Indianapolis, IN 46239
Ph: 317-351-0885
Fax: 317-351-0882
www.envision-air.com

Mr. Perre Burns
St. John-Mittelhauser & Associates
8541 Bash Street
Suite #102
Indianapolis, IN 46250

March 20, 2020

EnvisionAir Project Number: 2020-192
Client Project Name: Franklin

Dear Mr. Burns,

Please find the attached analytical report for the samples received March 13, 2020. All test methods performed were fully compliant with local, state, and federal EPA methods unless otherwise noted. The project was analyzed as requested on the enclosed chain of custody record. Please review the comments section for additional information about your results or Quality Control data.

Feel free to contact me if you have any questions or comments regarding your analytical report or service.

Thank you for your business. EnvisionAir looks forward to working with you on your next project.

Yours Sincerely,

Stanley A. Hunnicutt

Stan Hunnicutt

Project Manager
EnvisionAir, LLC

EnvisionAir
1441 Sadlier Circle West Drive
Indianapolis, IN 46239
Ph: 317-351-0885
Fax: 317-351-0882
www.envision-air.com

Client Name: ST JOHN MITTELHAUSER

Project ID: FRANKLIN

Client Project Manager: PERRE BURNS

EnvisionAir Project Number: 2020-192

Sample Summary

Canister Pressure / Vacuum

Laboratory Sample Number:	Sample Description:	Matrix:	START Date Collected:	START Time Collected:	End Date Collected:	End Time Collected:	Date Received:	Time Received	Initial Field (in. Hg)	Final Field (in. Hg)	Lab Received (in. Hg)
20-876	IA-1	A	3/13/20	5:49	3/13/20	13:43	3/13/20	15:20	-30	-9.5	-9.5
20-877	SS-1	A	3/13/20	5:48	3/13/20	13:44	3/13/20	15:20	-30	-7.5	-7.5
20-878	IA-2	A	3/13/20	5:56	3/13/20	13:47	3/13/20	15:20	-30	-8.5	-8.5
20-879	SS-2	A	3/13/20	5:55	3/13/20	13:48	3/13/20	15:20	-30	-8	-8
20-880	IA-3	A	3/13/20	6:01	3/13/20	13:58	3/13/20	15:20	-29	-9	-9
20-881	SS-3	A	3/13/20	6:00	3/13/20	14:00	3/13/20	15:20	-28	-7	-7
20-882	IA-4	A	3/13/20	6:07	3/13/20	14:03	3/13/20	15:20	-28	-11	-11
20-884	IA-5	A	3/13/20	6:11	3/13/20	14:05	3/13/20	15:20	-30	-10	-10
20-885	SS-5	A	3/13/20	6:10	3/13/20	14:06	3/13/20	15:20	-30	-9	-9
20-886	IA-6	A	3/13/20	6:18	3/13/20	14:20	3/13/20	15:20	-30	-9.5	-9.5
20-887	SS-6	A	3/13/20	6:17	3/13/20	14:22	3/13/20	15:20	-30	-7	-7
20-888	IA-7	A	3/13/20	6:22	3/13/20	14:24	3/13/20	15:20	-30	-8	-8
20-889	SS-7	A	3/13/20	6:21	3/13/20	14:26	3/13/20	15:20	-29	-8	-8
20-890	IA-8	A	3/13/20	7:05	3/13/20	14:38	3/13/20	15:20	-28	-8	-8
20-891	SS-8	A	3/13/20	7:03	3/13/20	14:40	3/13/20	15:20	-29	-8	-8
20-892	AMBIENT	A	3/13/20	5:40	3/13/20	13:40	3/13/20	15:20	-30	-8	-8

EnvisionAir
1441 Sadlier Circle West Drive
Indianapolis, IN 46239
Ph: 317-351-0885
Fax: 317-351-0882
www.envision-air.com

Client Name: ST JOHN-MITTELHAUSER

Project ID: FRANKLIN

Client Project Manager: PERRE BURNS

EnvisionAir Project Number: 2020-192

Analytical Method: TO-15
Analytical Batch: 031620CAIR(1)

Client Sample ID: IA-1
EnvisionAir Sample Number: 20-876
Sample Matrix: AIR

Sample Collection START Date/Time: 3/13/20 5:49
Sample Collection END Date/Time: 3/13/20 13:43
Sample Received Date/Time: 3/13/20 15:20

Compounds	Sample Results ug/m³	Reporting Limit ug/m³	Flag
4-Ethyltoluene	< 492	492	
4-Methyl-2-pentanone (MIBK)	< 2050	2050	
1,1,1-Trichloroethane	< 546	546	
1,1,2,2-Tetrachloroethane	< 0.34	0.34	1
1,1,2-Trichloroethane	< 0.21	0.21	1
1,1-Dichloroethane	< 4.05	4.05	
1,1-Dichloroethene	< 198	198	
1,2,4-Trichlorobenzene	< 0.74	0.74	
1,2,4-Trimethylbenzene	< 4.92	4.92	
1,2-dibromoethane (EDB)	< 0.03	0.03	1
1,2-Dichlorobenzene	< 60.1	60.1	
1,2-Dichloroethane	< 0.40	0.40	
1,2-Dichloropropane	< 0.46	0.46	
1,3,5-Trimethylbenzene	< 4.92	4.92	
1,3-Butadiene	< 0.22	0.22	
1,3-Dichlorobenzene	< 60.1	60.1	
1,4-Dichlorobenzene	< 0.60	0.60	
1,4-Dioxane	< 1.80	1.80	
2-Butanone (MEK)	< 2950	2950	
2-Hexanone	< 20.5	20.5	
Acetone	< 2380	2380	
Benzene	< 1.60	1.60	
Benzyl Chloride	< 0.41	0.41	1
Bromodichloromethane	< 0.54	0.54	1
Bromoform	< 10.3	10.3	
Bromomethane	< 3.88	3.88	
Carbon Disulfide	< 311	311	
Carbon Tetrachloride	< 0.63	0.63	
Chlorobenzene	< 23.0	23.0	
Chloroethane	< 13.2	13.2	

EnvisionAir
1441 Sadlier Circle West Drive
Indianapolis, IN 46239
Ph: 317-351-0885
Fax: 317-351-0882
www.envision-air.com

Compounds	Sample Results ug/m³	Reporting Limit ug/m³	Flag
Chloroform	< 0.83	0.83	
Chloromethane	< 20.6	20.6	
cis-1,2-Dichloroethene	< 19.8	19.8	
cis-1,3-Dichloropropene	< 4.54	4.54	
Cyclohexane	< 5510	5510	
Dibromochloromethane	< 0.85	0.85	
Dichlorodifluoromethane	< 49.5	49.5	
Ethyl Acetate	< 54.1	54.1	
Ethylbenzene	< 8.68	8.68	
Hexachloro-1,3-butadiene	< 1.07	1.07	
Isooctane	< 467	467	
m,p-Xylene	< 43.4	43.4	
Methylene Chloride	< 41.7	41.7	
Methyl-tert-butyl ether	< 36.1	36.1	
N-Heptane	< 410	410	
N-Hexane	< 176	176	
Naphthalene	< 0.524	0.524	
o-Xylene	< 43.4	43.4	
Propylene	< 172	172	
Styrene	< 426	426	
Tetrachloroethene	< 3.19	3.19	
Tetrahydrofuran	< 295	295	
Toluene	< 3770	3770	
trans-1,2-Dichloroethene	< 39.6	39.6	
trans-1,3-Dichloropropene	< 4.54	4.54	
Trichloroethene	< 1.07	1.07	
Trichlorofluoromethane	< 562	562	
Vinyl Acetate	< 176	176	
Vinyl Bromide	< 0.44	0.44	
Vinyl Chloride	< 1.28	1.28	
4-bromofluorobenzene (surrogate)	90%		
Analysis Date/Time:	3-17-20/06:10		
Analyst Initials	tjg		

EnvisionAir
1441 Sadlier Circle West Drive
Indianapolis, IN 46239
Ph: 317-351-0885
Fax: 317-351-0882
www.envision-air.com

Client Name: ST JOHN-MITTELHAUSER

Project ID: FRANKLIN

Client Project Manager: PERRE BURNS

EnvisionAir Project Number: 2020-192

Analytical Method: TO-15
Analytical Batch: 031620CAIR(2)

Client Sample ID: SS-1
EnvisionAir Sample Number: 20-877
Sample Matrix: AIR

Sample Collection START Date/Time: 3/13/20 5:48
Sample Collection END Date/Time: 3/13/20 13:44
Sample Received Date/Time: 3/13/20 15:20

Compounds	Sample Results ug/m³	Reporting Limit ug/m³	Flag
4-Ethyltoluene	< 492	492	
4-Methyl-2-pentanone (MIBK)	< 2050	2050	
1,1,1-Trichloroethane	< 546	546	
1,1,2,2-Tetrachloroethane	< 0.34	0.34	1
1,1,2-Trichloroethane	< 0.21	0.21	1
1,1-Dichloroethane	< 4.05	4.05	
1,1-Dichloroethene	< 198	198	
1,2,4-Trichlorobenzene	< 0.74	0.74	
1,2,4-Trimethylbenzene	< 4.92	4.92	
1,2-dibromoethane (EDB)	< 0.03	0.03	1
1,2-Dichlorobenzene	< 60.1	60.1	
1,2-Dichloroethane	< 0.40	0.40	
1,2-Dichloropropane	< 0.46	0.46	
1,3,5-Trimethylbenzene	< 4.92	4.92	
1,3-Butadiene	< 0.22	0.22	
1,3-Dichlorobenzene	< 60.1	60.1	
1,4-Dichlorobenzene	< 0.60	0.60	
1,4-Dioxane	< 1.80	1.80	
2-Butanone (MEK)	< 2950	2950	
2-Hexanone	< 20.5	20.5	
Acetone	< 2380	2380	
Benzene	< 1.60	1.60	
Benzyl Chloride	< 0.41	0.41	1
Bromodichloromethane	< 0.54	0.54	1
Bromoform	< 10.3	10.3	
Bromomethane	< 3.88	3.88	
Carbon Disulfide	< 311	311	
Carbon Tetrachloride	< 0.63	0.63	
Chlorobenzene	< 23.0	23.0	
Chloroethane	< 13.2	13.2	

EnvisionAir
1441 Sadlier Circle West Drive
Indianapolis, IN 46239
Ph: 317-351-0885
Fax: 317-351-0882
www.envision-air.com

Compounds	Sample Results ug/m³	Reporting Limit ug/m³	Flag
Chloroform	< 0.83	0.83	
Chloromethane	< 20.6	20.6	
cis-1,2-Dichloroethene	< 19.8	19.8	
cis-1,3-Dichloropropene	< 4.54	4.54	
Cyclohexane	< 5510	5510	
Dibromochloromethane	< 0.85	0.85	
Dichlorodifluoromethane	< 49.5	49.5	
Ethyl Acetate	< 54.1	54.1	
Ethylbenzene	< 8.68	8.68	
Hexachloro-1,3-butadiene	< 1.07	1.07	
Isooctane	< 467	467	
m,p-Xylene	< 43.4	43.4	
Methylene Chloride	< 41.7	41.7	
Methyl-tert-butyl ether	< 36.1	36.1	
N-Heptane	< 410	410	
N-Hexane	< 176	176	
Naphthalene	< 0.524	0.524	
o-Xylene	< 43.4	43.4	
Propylene	< 172	172	
Styrene	< 426	426	
Tetrachloroethene	< 3.19	3.19	
Tetrahydrofuran	< 295	295	
Toluene	< 3770	3770	
trans-1,2-Dichloroethene	< 39.6	39.6	
trans-1,3-Dichloropropene	< 4.54	4.54	
Trichloroethene	**28.5**	1.07	
Trichlorofluoromethane	< 562	562	
Vinyl Acetate	< 176	176	
Vinyl Bromide	< 0.44	0.44	
Vinyl Chloride	< 1.28	1.28	
4-bromofluorobenzene (surrogate)	103%		
Analysis Date/Time:	3-17-20/20:48		
Analyst Initials	tjg		

EnvisionAir
1441 Sadlier Circle West Drive
Indianapolis, IN 46239
Ph: 317-351-0885
Fax: 317-351-0882
www.envision-air.com

Client Name: ST JOHN-MITTELHAUSER

Project ID: FRANKLIN

Client Project Manager: PERRE BURNS

EnvisionAir Project Number: 2020-192

Analytical Method: TO-15
Analytical Batch: 031620CAIR(1)

Client Sample ID: IA-2
EnvisionAir Sample Number: 20-878
Sample Matrix: AIR

Sample Collection START Date/Time: 3/13/20 5:56
Sample Collection END Date/Time: 3/13/20 13:47
Sample Received Date/Time: 3/13/20 15:20

Compounds	Sample Results ug/m³	Reporting Limit ug/m³	Flag
4-Ethyltoluene	< 492	492	
4-Methyl-2-pentanone (MIBK)	< 2050	2050	
1,1,1-Trichloroethane	< 546	546	
1,1,2,2-Tetrachloroethane	< 0.34	0.34	1
1,1,2-Trichloroethane	< 0.21	0.21	1
1,1-Dichloroethane	< 4.05	4.05	
1,1-Dichloroethene	< 198	198	
1,2,4-Trichlorobenzene	< 0.74	0.74	
1,2,4-Trimethylbenzene	< 4.92	4.92	
1,2-dibromoethane (EDB)	< 0.03	0.03	1
1,2-Dichlorobenzene	< 60.1	60.1	
1,2-Dichloroethane	< 0.40	0.40	
1,2-Dichloropropane	< 0.46	0.46	
1,3,5-Trimethylbenzene	< 4.92	4.92	
1,3-Butadiene	< 0.22	0.22	
1,3-Dichlorobenzene	< 60.1	60.1	
1,4-Dichlorobenzene	< 0.60	0.60	
1,4-Dioxane	< 1.80	1.80	
2-Butanone (MEK)	< 2950	2950	
2-Hexanone	< 20.5	20.5	
Acetone	< 2380	2380	
Benzene	< 1.60	1.60	
Benzyl Chloride	< 0.41	0.41	1
Bromodichloromethane	< 0.54	0.54	1
Bromoform	< 10.3	10.3	
Bromomethane	< 3.88	3.88	
Carbon Disulfide	< 311	311	
Carbon Tetrachloride	< 0.63	0.63	
Chlorobenzene	< 23.0	23.0	
Chloroethane	< 13.2	13.2	

EnvisionAir
1441 Sadlier Circle West Drive
Indianapolis, IN 46239
Ph: 317-351-0885
Fax: 317-351-0882
www.envision-air.com

Compounds	Sample Results ug/m³	Reporting Limit ug/m³	Flag
Chloroform	< 0.83	0.83	
Chloromethane	< 20.6	20.6	
cis-1,2-Dichloroethene	< 19.8	19.8	
cis-1,3-Dichloropropene	< 4.54	4.54	
Cyclohexane	< 5510	5510	
Dibromochloromethane	< 0.85	0.85	
Dichlorodifluoromethane	< 49.5	49.5	
Ethyl Acetate	< 54.1	54.1	
Ethylbenzene	< 8.68	8.68	
Hexachloro-1,3-butadiene	< 1.07	1.07	
Isooctane	< 467	467	
m,p-Xylene	< 43.4	43.4	
Methylene Chloride	< 41.7	41.7	
Methyl-tert-butyl ether	< 36.1	36.1	
N-Heptane	< 410	410	
N-Hexane	< 176	176	
Naphthalene	< 0.524	0.524	
o-Xylene	< 43.4	43.4	
Propylene	< 172	172	
Styrene	< 426	426	
Tetrachloroethene	< 3.19	3.19	
Tetrahydrofuran	< 295	295	
Toluene	< 3770	3770	
trans-1,2-Dichloroethene	< 39.6	39.6	
trans-1,3-Dichloropropene	< 4.54	4.54	
Trichloroethene	< 1.07	1.07	
Trichlorofluoromethane	< 562	562	
Vinyl Acetate	< 176	176	
Vinyl Bromide	< 0.44	0.44	
Vinyl Chloride	< 1.28	1.28	
4-bromofluorobenzene (surrogate)	101%		
Analysis Date/Time:	3-17-20/06:52		
Analyst Initials	tjg		

EnvisionAir
1441 Sadlier Circle West Drive
Indianapolis, IN 46239
Ph: 317-351-0885
Fax: 317-351-0882
www.envision-air.com

Client Name: ST JOHN-MITTELHAUSER

Project ID: FRANKLIN

Client Project Manager: PERRE BURNS

EnvisionAir Project Number: 2020-192

Analytical Method: TO-15
Analytical Batch: 031620CAIR(2)

Client Sample ID: SS-2
EnvisionAir Sample Number: 20-879
Sample Matrix: AIR

Sample Collection START Date/Time: 3/13/20 5:55
Sample Collection END Date/Time: 3/13/20 13:48
Sample Received Date/Time: 3/13/20 15:20

Compounds	Sample Results ug/m³	Reporting Limit ug/m³	Flag
4-Ethyltoluene	< 492	492	
4-Methyl-2-pentanone (MIBK)	< 2050	2050	
1,1,1-Trichloroethane	< 546	546	
1,1,2,2-Tetrachloroethane	< 0.34	0.34	1
1,1,2-Trichloroethane	< 0.21	0.21	1
1,1-Dichloroethane	< 4.05	4.05	
1,1-Dichloroethene	< 198	198	
1,2,4-Trichlorobenzene	< 0.74	0.74	
1,2,4-Trimethylbenzene	< 4.92	4.92	
1,2-dibromoethane (EDB)	< 0.03	0.03	1
1,2-Dichlorobenzene	< 60.1	60.1	
1,2-Dichloroethane	< 0.40	0.40	
1,2-Dichloropropane	< 0.46	0.46	
1,3,5-Trimethylbenzene	< 4.92	4.92	
1,3-Butadiene	< 0.22	0.22	
1,3-Dichlorobenzene	< 60.1	60.1	
1,4-Dichlorobenzene	< 0.60	0.60	
1,4-Dioxane	< 1.80	1.80	
2-Butanone (MEK)	< 2950	2950	
2-Hexanone	< 20.5	20.5	
Acetone	< 2380	2380	
Benzene	< 1.60	1.60	
Benzyl Chloride	< 0.41	0.41	1
Bromodichloromethane	< 0.54	0.54	1
Bromoform	< 10.3	10.3	
Bromomethane	< 3.88	3.88	
Carbon Disulfide	< 311	311	
Carbon Tetrachloride	< 0.63	0.63	
Chlorobenzene	< 23.0	23.0	
Chloroethane	< 13.2	13.2	

EnvisionAir
1441 Sadlier Circle West Drive
Indianapolis, IN 46239
Ph: 317-351-0885
Fax: 317-351-0882
www.envision-air.com

Compounds	Sample Results ug/m³	Reporting Limit ug/m³	Flag
Chloroform	< 0.83	0.83	
Chloromethane	< 20.6	20.6	
cis-1,2-Dichloroethene	< 19.8	19.8	
cis-1,3-Dichloropropene	< 4.54	4.54	
Cyclohexane	< 5510	5510	
Dibromochloromethane	< 0.85	0.85	
Dichlorodifluoromethane	< 49.5	49.5	
Ethyl Acetate	< 54.1	54.1	
Ethylbenzene	< 8.68	8.68	
Hexachloro-1,3-butadiene	< 1.07	1.07	
Isooctane	< 467	467	
m,p-Xylene	< 43.4	43.4	
Methylene Chloride	< 41.7	41.7	
Methyl-tert-butyl ether	< 36.1	36.1	
N-Heptane	< 410	410	
N-Hexane	< 176	176	
Naphthalene	< 0.524	0.524	
o-Xylene	< 43.4	43.4	
Propylene	< 172	172	
Styrene	< 426	426	
Tetrachloroethene	< 3.19	3.19	
Tetrahydrofuran	< 295	295	
Toluene	< 3770	3770	
trans-1,2-Dichloroethene	< 39.6	39.6	
trans-1,3-Dichloropropene	< 4.54	4.54	
Trichloroethene	< 1.07	1.07	
Trichlorofluoromethane	< 562	562	
Vinyl Acetate	< 176	176	
Vinyl Bromide	< 0.44	0.44	
Vinyl Chloride	< 1.28	1.28	
4-bromofluorobenzene (surrogate)	108%		
Analysis Date/Time:	3-17-20/21:23		
Analyst Initials	tjg		

EnvisionAir
1441 Sadlier Circle West Drive
Indianapolis, IN 46239
Ph: 317-351-0885
Fax: 317-351-0882
www.envision-air.com

Client Name: ST JOHN-MITTELHAUSER

Project ID: FRANKLIN

Client Project Manager: PERRE BURNS

EnvisionAir Project Number: 2020-192

Analytical Method: TO-15
Analytical Batch: 031620CAIR(1)

Client Sample ID: IA-3
EnvisionAir Sample Number: 20-880
Sample Matrix: AIR

Sample Collection START Date/Time: 3/13/20 6:01
Sample Collection END Date/Time: 3/13/20 13:58
Sample Received Date/Time: 3/13/20 15:20

Compounds	Sample Results ug/m³	Reporting Limit ug/m³	Flag
4-Ethyltoluene	< 492	492	
4-Methyl-2-pentanone (MIBK)	< 2050	2050	
1,1,1-Trichloroethane	< 546	546	
1,1,2,2-Tetrachloroethane	< 0.34	0.34	1
1,1,2-Trichloroethane	< 0.21	0.21	1
1,1-Dichloroethane	< 4.05	4.05	
1,1-Dichloroethene	< 198	198	
1,2,4-Trichlorobenzene	< 0.74	0.74	
1,2,4-Trimethylbenzene	< 4.92	4.92	
1,2-dibromoethane (EDB)	< 0.03	0.03	1
1,2-Dichlorobenzene	< 60.1	60.1	
1,2-Dichloroethane	< 0.40	0.40	
1,2-Dichloropropane	< 0.46	0.46	
1,3,5-Trimethylbenzene	< 4.92	4.92	
1,3-Butadiene	< 0.22	0.22	
1,3-Dichlorobenzene	< 60.1	60.1	
1,4-Dichlorobenzene	< 0.60	0.60	
1,4-Dioxane	< 1.80	1.80	
2-Butanone (MEK)	< 2950	2950	
2-Hexanone	< 20.5	20.5	
Acetone	< 2380	2380	
Benzene	< 1.60	1.60	
Benzyl Chloride	< 0.41	0.41	1
Bromodichloromethane	< 0.54	0.54	1
Bromoform	< 10.3	10.3	
Bromomethane	< 3.88	3.88	
Carbon Disulfide	< 311	311	
Carbon Tetrachloride	< 0.63	0.63	
Chlorobenzene	< 23.0	23.0	
Chloroethane	< 13.2	13.2	

EnvisionAir
1441 Sadlier Circle West Drive
Indianapolis, IN 46239
Ph: 317-351-0885
Fax: 317-351-0882
www.envision-air.com

Compounds	Sample Results ug/m³	Reporting Limit ug/m³	Flag
Chloroform	< 0.83	0.83	
Chloromethane	< 20.6	20.6	
cis-1,2-Dichloroethene	< 19.8	19.8	
cis-1,3-Dichloropropene	< 4.54	4.54	
Cyclohexane	< 5510	5510	
Dibromochloromethane	< 0.85	0.85	
Dichlorodifluoromethane	< 49.5	49.5	
Ethyl Acetate	< 54.1	54.1	
Ethylbenzene	< 8.68	8.68	
Hexachloro-1,3-butadiene	< 1.07	1.07	
Isooctane	< 467	467	
m,p-Xylene	< 43.4	43.4	
Methylene Chloride	< 41.7	41.7	
Methyl-tert-butyl ether	< 36.1	36.1	
N-Heptane	< 410	410	
N-Hexane	< 176	176	
Naphthalene	< 0.524	0.524	
o-Xylene	< 43.4	43.4	
Propylene	< 172	172	
Styrene	< 426	426	
Tetrachloroethene	< 3.19	3.19	
Tetrahydrofuran	< 295	295	
Toluene	< 3770	3770	
trans-1,2-Dichloroethene	< 39.6	39.6	
trans-1,3-Dichloropropene	< 4.54	4.54	
Trichloroethene	< 1.07	1.07	
Trichlorofluoromethane	< 562	562	
Vinyl Acetate	< 176	176	
Vinyl Bromide	< 0.44	0.44	
Vinyl Chloride	< 1.28	1.28	
4-bromofluorobenzene (surrogate)	100%		
Analysis Date/Time:	3-17-20/08:12		
Analyst Initials	tjg		

EnvisionAir
1441 Sadlier Circle West Drive
Indianapolis, IN 46239
Ph: 317-351-0885
Fax: 317-351-0882
www.envision-air.com

Client Name: ST JOHN-MITTELHAUSER

Project ID: FRANKLIN

Client Project Manager: PERRE BURNS

EnvisionAir Project Number: 2020-192

Analytical Method: TO-15
Analytical Batch: 031620CAIR(2)

Client Sample ID: SS-3
EnvisionAir Sample Number: 20-881
Sample Matrix: AIR

Sample Collection START Date/Time: 3/13/20 6:00
Sample Collection END Date/Time: 3/13/20 14:00
Sample Received Date/Time: 3/13/20 15:20

Compounds	Sample Results ug/m³	Reporting Limit ug/m³	Flag
4-Ethyltoluene	< 492	492	
4-Methyl-2-pentanone (MIBK)	< 2050	2050	
1,1,1-Trichloroethane	< 546	546	
1,1,2,2-Tetrachloroethane	< 0.34	0.34	1
1,1,2-Trichloroethane	< 0.21	0.21	1
1,1-Dichloroethane	< 4.05	4.05	
1,1-Dichloroethene	< 198	198	
1,2,4-Trichlorobenzene	< 0.74	0.74	
1,2,4-Trimethylbenzene	< 4.92	4.92	
1,2-dibromoethane (EDB)	< 0.03	0.03	1
1,2-Dichlorobenzene	< 60.1	60.1	
1,2-Dichloroethane	< 0.40	0.40	
1,2-Dichloropropane	< 0.46	0.46	
1,3,5-Trimethylbenzene	< 4.92	4.92	
1,3-Butadiene	< 0.22	0.22	
1,3-Dichlorobenzene	< 60.1	60.1	
1,4-Dichlorobenzene	< 0.60	0.60	
1,4-Dioxane	< 1.80	1.80	
2-Butanone (MEK)	< 2950	2950	
2-Hexanone	< 20.5	20.5	
Acetone	< 2380	2380	
Benzene	< 1.60	1.60	
Benzyl Chloride	< 0.41	0.41	1
Bromodichloromethane	< 0.54	0.54	1
Bromoform	< 10.3	10.3	
Bromomethane	< 3.88	3.88	
Carbon Disulfide	< 311	311	
Carbon Tetrachloride	< 0.63	0.63	
Chlorobenzene	< 23.0	23.0	
Chloroethane	< 13.2	13.2	

EnvisionAir
1441 Sadlier Circle West Drive
Indianapolis, IN 46239
Ph: 317-351-0885
Fax: 317-351-0882
www.envision-air.com

Compounds	Sample Results ug/m³	Reporting Limit ug/m³	Flag
Chloroform	< 0.83	0.83	
Chloromethane	< 20.6	20.6	
cis-1,2-Dichloroethene	< 19.8	19.8	
cis-1,3-Dichloropropene	< 4.54	4.54	
Cyclohexane	< 5510	5510	
Dibromochloromethane	< 0.85	0.85	
Dichlorodifluoromethane	< 49.5	49.5	
Ethyl Acetate	< 54.1	54.1	
Ethylbenzene	< 8.68	8.68	
Hexachloro-1,3-butadiene	< 1.07	1.07	
Isooctane	< 467	467	
m,p-Xylene	< 43.4	43.4	
Methylene Chloride	< 41.7	41.7	
Methyl-tert-butyl ether	< 36.1	36.1	
N-Heptane	< 410	410	
N-Hexane	< 176	176	
Naphthalene	< 0.524	0.524	
o-Xylene	< 43.4	43.4	
Propylene	< 172	172	
Styrene	< 426	426	
Tetrachloroethene	**36.7**	3.19	
Tetrahydrofuran	< 295	295	
Toluene	< 3770	3770	
trans-1,2-Dichloroethene	< 39.6	39.6	
trans-1,3-Dichloropropene	< 4.54	4.54	
Trichloroethene	< 1.07	1.07	
Trichlorofluoromethane	< 562	562	
Vinyl Acetate	< 176	176	
Vinyl Bromide	< 0.44	0.44	
Vinyl Chloride	< 1.28	1.28	
4-bromofluorobenzene (surrogate)	104%		
Analysis Date/Time:	3-17-20/21:56		
Analyst Initials	tjg		

EnvisionAir
1441 Sadlier Circle West Drive
Indianapolis, IN 46239
Ph: 317-351-0885
Fax: 317-351-0882
www.envision-air.com

Client Name: ST JOHN-MITTELHAUSER

Project ID: FRANKLIN

Client Project Manager: PERRE BURNS

EnvisionAir Project Number: 2020-192

Analytical Method: TO-15
Analytical Batch: 031620CAIR(1)

Client Sample ID: IA-4
EnvisionAir Sample Number: 20-882
Sample Matrix: AIR

Sample Collection START Date/Time: 3/13/20 6:07
Sample Collection END Date/Time: 3/13/20 14:03
Sample Received Date/Time: 3/13/20 15:20

Compounds	Sample Results ug/m³	Reporting Limit ug/m³	Flag
4-Ethyltoluene	< 492	492	
4-Methyl-2-pentanone (MIBK)	< 2050	2050	
1,1,1-Trichloroethane	< 546	546	
1,1,2,2-Tetrachloroethane	< 0.34	0.34	1
1,1,2-Trichloroethane	< 0.21	0.21	1
1,1-Dichloroethane	< 4.05	4.05	
1,1-Dichloroethene	< 198	198	
1,2,4-Trichlorobenzene	< 0.74	0.74	
1,2,4-Trimethylbenzene	< 4.92	4.92	
1,2-dibromoethane (EDB)	< 0.03	0.03	1
1,2-Dichlorobenzene	< 60.1	60.1	
1,2-Dichloroethane	< 0.40	0.40	
1,2-Dichloropropane	< 0.46	0.46	
1,3,5-Trimethylbenzene	< 4.92	4.92	
1,3-Butadiene	< 0.22	0.22	
1,3-Dichlorobenzene	< 60.1	60.1	
1,4-Dichlorobenzene	< 0.60	0.60	
1,4-Dioxane	< 1.80	1.80	
2-Butanone (MEK)	< 2950	2950	
2-Hexanone	< 20.5	20.5	
Acetone	< 2380	2380	
Benzene	< 1.60	1.60	
Benzyl Chloride	< 0.41	0.41	1
Bromodichloromethane	< 0.54	0.54	1
Bromoform	< 10.3	10.3	
Bromomethane	< 3.88	3.88	
Carbon Disulfide	< 311	311	
Carbon Tetrachloride	< 0.63	0.63	
Chlorobenzene	< 23.0	23.0	
Chloroethane	< 13.2	13.2	

EnvisionAir
1441 Sadlier Circle West Drive
Indianapolis, IN 46239
Ph: 317-351-0885
Fax: 317-351-0882
www.envision-air.com

Compounds	Sample Results ug/m³	Reporting Limit ug/m³	Flag
Chloroform	< 0.83	0.83	
Chloromethane	< 20.6	20.6	
cis-1,2-Dichloroethene	< 19.8	19.8	
cis-1,3-Dichloropropene	< 4.54	4.54	
Cyclohexane	< 5510	5510	
Dibromochloromethane	< 0.85	0.85	
Dichlorodifluoromethane	< 49.5	49.5	
Ethyl Acetate	< 54.1	54.1	
Ethylbenzene	< 8.68	8.68	
Hexachloro-1,3-butadiene	< 1.07	1.07	
Isooctane	< 467	467	
m,p-Xylene	< 43.4	43.4	
Methylene Chloride	< 41.7	41.7	
Methyl-tert-butyl ether	< 36.1	36.1	
N-Heptane	< 410	410	
N-Hexane	< 176	176	
Naphthalene	< 0.524	0.524	
o-Xylene	< 43.4	43.4	
Propylene	< 172	172	
Styrene	< 426	426	
Tetrachloroethene	< 3.19	3.19	
Tetrahydrofuran	< 295	295	
Toluene	< 3770	3770	
trans-1,2-Dichloroethene	< 39.6	39.6	
trans-1,3-Dichloropropene	< 4.54	4.54	
Trichloroethene	< 1.07	1.07	
Trichlorofluoromethane	< 562	562	
Vinyl Acetate	< 176	176	
Vinyl Bromide	< 0.44	0.44	
Vinyl Chloride	< 1.28	1.28	
4-bromofluorobenzene (surrogate)	94%		
Analysis Date/Time:	3-17-20/09:37		
Analyst Initials	tjg		

EnvisionAir
1441 Sadlier Circle West Drive
Indianapolis, IN 46239
Ph: 317-351-0885
Fax: 317-351-0882
www.envision-air.com

Client Name: ST JOHN-MITTELHAUSER

Project ID: FRANKLIN

Client Project Manager: PERRE BURNS

EnvisionAir Project Number: 2020-192

Analytical Method: TO-15
Analytical Batch: 031620CAIR(1)

Client Sample ID: IA-5
EnvisionAir Sample Number: 20-884
Sample Matrix: AIR

Sample Collection START Date/Time: 3/13/20 6:11
Sample Collection END Date/Time: 3/13/20 14:05
Sample Received Date/Time: 3/13/20 15:20

Compounds	Sample Results ug/m³	Reporting Limit ug/m³	Flag
4-Ethyltoluene	< 492	492	
4-Methyl-2-pentanone (MIBK)	< 2050	2050	
1,1,1-Trichloroethane	< 546	546	
1,1,2,2-Tetrachloroethane	< 0.34	0.34	1
1,1,2-Trichloroethane	< 0.21	0.21	1
1,1-Dichloroethane	< 4.05	4.05	
1,1-Dichloroethene	< 198	198	
1,2,4-Trichlorobenzene	< 0.74	0.74	
1,2,4-Trimethylbenzene	< 4.92	4.92	
1,2-dibromoethane (EDB)	< 0.03	0.03	1
1,2-Dichlorobenzene	< 60.1	60.1	
1,2-Dichloroethane	< 0.40	0.40	
1,2-Dichloropropane	< 0.46	0.46	
1,3,5-Trimethylbenzene	< 4.92	4.92	
1,3-Butadiene	< 0.22	0.22	
1,3-Dichlorobenzene	< 60.1	60.1	
1,4-Dichlorobenzene	< 0.60	0.60	
1,4-Dioxane	< 1.80	1.80	
2-Butanone (MEK)	< 2950	2950	
2-Hexanone	< 20.5	20.5	
Acetone	< 2380	2380	
Benzene	< 1.60	1.60	
Benzyl Chloride	< 0.41	0.41	1
Bromodichloromethane	< 0.54	0.54	1
Bromoform	< 10.3	10.3	
Bromomethane	< 3.88	3.88	
Carbon Disulfide	< 311	311	
Carbon Tetrachloride	< 0.63	0.63	
Chlorobenzene	< 23.0	23.0	
Chloroethane	< 13.2	13.2	

EnvisionAir
1441 Sadlier Circle West Drive
Indianapolis, IN 46239
Ph: 317-351-0885
Fax: 317-351-0882
www.envision-air.com

Compounds	Sample Results ug/m³	Reporting Limit ug/m³	Flag
Chloroform	< 0.83	0.83	
Chloromethane	< 20.6	20.6	
cis-1,2-Dichloroethene	< 19.8	19.8	
cis-1,3-Dichloropropene	< 4.54	4.54	
Cyclohexane	< 5510	5510	
Dibromochloromethane	< 0.85	0.85	
Dichlorodifluoromethane	< 49.5	49.5	
Ethyl Acetate	< 54.1	54.1	
Ethylbenzene	< 8.68	8.68	
Hexachloro-1,3-butadiene	< 1.07	1.07	
Isooctane	< 467	467	
m,p-Xylene	< 43.4	43.4	
Methylene Chloride	< 41.7	41.7	
Methyl-tert-butyl ether	< 36.1	36.1	
N-Heptane	< 410	410	
N-Hexane	< 176	176	
Naphthalene	< 0.524	0.524	
o-Xylene	< 43.4	43.4	
Propylene	< 172	172	
Styrene	< 426	426	
Tetrachloroethene	< 3.19	3.19	
Tetrahydrofuran	< 295	295	
Toluene	< 3770	3770	
trans-1,2-Dichloroethene	< 39.6	39.6	
trans-1,3-Dichloropropene	< 4.54	4.54	
Trichloroethene	< 1.07	1.07	
Trichlorofluoromethane	< 562	562	
Vinyl Acetate	< 176	176	
Vinyl Bromide	< 0.44	0.44	
Vinyl Chloride	< 1.28	1.28	
4-bromofluorobenzene (surrogate)	96%		
Analysis Date/Time:	3-17-20/10:19		
Analyst Initials	tjg		

EnvisionAir
1441 Sadlier Circle West Drive
Indianapolis, IN 46239
Ph: 317-351-0885
Fax: 317-351-0882
www.envision-air.com

Client Name: ST JOHN-MITTELHAUSER

Project ID: FRANKLIN

Client Project Manager: PERRE BURNS

EnvisionAir Project Number: 2020-192

Analytical Method: TO-15
Analytical Batch: 031620CAIR(2)

Client Sample ID: SS-5
EnvisionAir Sample Number: 20-885
Sample Matrix: AIR

Sample Collection START Date/Time: 3/13/20 6:10
Sample Collection END Date/Time: 3/13/20 14:06
Sample Received Date/Time: 3/13/20 15:20

Compounds	Sample Results ug/m³	Reporting Limit ug/m³	Flag
4-Ethyltoluene	< 492	492	
4-Methyl-2-pentanone (MIBK)	< 2050	2050	
1,1,1-Trichloroethane	< 546	546	
1,1,2,2-Tetrachloroethane	< 0.34	0.34	1
1,1,2-Trichloroethane	< 0.21	0.21	1
1,1-Dichloroethane	< 4.05	4.05	
1,1-Dichloroethene	< 198	198	
1,2,4-Trichlorobenzene	< 0.74	0.74	
1,2,4-Trimethylbenzene	< 4.92	4.92	
1,2-dibromoethane (EDB)	< 0.03	0.03	1
1,2-Dichlorobenzene	< 60.1	60.1	
1,2-Dichloroethane	< 0.40	0.40	
1,2-Dichloropropane	< 0.46	0.46	
1,3,5-Trimethylbenzene	< 4.92	4.92	
1,3-Butadiene	< 0.22	0.22	
1,3-Dichlorobenzene	< 60.1	60.1	
1,4-Dichlorobenzene	< 0.60	0.60	
1,4-Dioxane	< 1.80	1.80	
2-Butanone (MEK)	< 2950	2950	
2-Hexanone	< 20.5	20.5	
Acetone	< 2380	2380	
Benzene	< 1.60	1.60	
Benzyl Chloride	< 0.41	0.41	1
Bromodichloromethane	< 0.54	0.54	1
Bromoform	< 10.3	10.3	
Bromomethane	< 3.88	3.88	
Carbon Disulfide	< 311	311	
Carbon Tetrachloride	< 0.63	0.63	
Chlorobenzene	< 23.0	23.0	
Chloroethane	< 13.2	13.2	

EnvisionAir
1441 Sadlier Circle West Drive
Indianapolis, IN 46239
Ph: 317-351-0885
Fax: 317-351-0882
www.envision-air.com

Compounds	Sample Results ug/m³	Reporting Limit ug/m³	Flag
Chloroform	< 0.83	0.83	
Chloromethane	< 20.6	20.6	
cis-1,2-Dichloroethene	< 19.8	19.8	
cis-1,3-Dichloropropene	< 4.54	4.54	
Cyclohexane	< 5510	5510	
Dibromochloromethane	< 0.85	0.85	
Dichlorodifluoromethane	< 49.5	49.5	
Ethyl Acetate	< 54.1	54.1	
Ethylbenzene	< 8.68	8.68	
Hexachloro-1,3-butadiene	< 1.07	1.07	
Isooctane	< 467	467	
m,p-Xylene	< 43.4	43.4	
Methylene Chloride	< 41.7	41.7	
Methyl-tert-butyl ether	< 36.1	36.1	
N-Heptane	< 410	410	
N-Hexane	< 176	176	
Naphthalene	< 0.524	0.524	
o-Xylene	< 43.4	43.4	
Propylene	< 172	172	
Styrene	< 426	426	
Tetrachloroethene	< 3.19	3.19	
Tetrahydrofuran	< 295	295	
Toluene	< 3770	3770	
trans-1,2-Dichloroethene	< 39.6	39.6	
trans-1,3-Dichloropropene	< 4.54	4.54	
Trichloroethene	< 1.07	1.07	
Trichlorofluoromethane	< 562	562	
Vinyl Acetate	< 176	176	
Vinyl Bromide	< 0.44	0.44	
Vinyl Chloride	< 1.28	1.28	
4-bromofluorobenzene (surrogate)	110%		
Analysis Date/Time:	3-17-20/22:30		
Analyst Initials	tjg		

EnvisionAir
1441 Sadlier Circle West Drive
Indianapolis, IN 46239
Ph: 317-351-0885
Fax: 317-351-0882
www.envision-air.com

Client Name: ST JOHN-MITTELHAUSER

Project ID: FRANKLIN

Client Project Manager: PERRE BURNS

EnvisionAir Project Number: 2020-192

Analytical Method: TO-15
Analytical Batch: 031620CAIR(1)

Client Sample ID: IA-6
EnvisionAir Sample Number: 20-886
Sample Matrix: AIR

Sample Collection START Date/Time: 3/13/20 6:18
Sample Collection END Date/Time: 3/13/20 14:20
Sample Received Date/Time: 3/13/20 15:20

Compounds	Sample Results ug/m³	Reporting Limit ug/m³	Flag
4-Ethyltoluene	< 492	492	
4-Methyl-2-pentanone (MIBK)	< 2050	2050	
1,1,1-Trichloroethane	< 546	546	
1,1,2,2-Tetrachloroethane	< 0.34	0.34	1
1,1,2-Trichloroethane	< 0.21	0.21	1
1,1-Dichloroethane	< 4.05	4.05	
1,1-Dichloroethene	< 198	198	
1,2,4-Trichlorobenzene	< 0.74	0.74	
1,2,4-Trimethylbenzene	< 4.92	4.92	
1,2-dibromoethane (EDB)	< 0.03	0.03	1
1,2-Dichlorobenzene	< 60.1	60.1	
1,2-Dichloroethane	< 0.40	0.40	
1,2-Dichloropropane	< 0.46	0.46	
1,3,5-Trimethylbenzene	< 4.92	4.92	
1,3-Butadiene	< 0.22	0.22	
1,3-Dichlorobenzene	< 60.1	60.1	
1,4-Dichlorobenzene	< 0.60	0.60	
1,4-Dioxane	< 1.80	1.80	
2-Butanone (MEK)	< 2950	2950	
2-Hexanone	< 20.5	20.5	
Acetone	< 2380	2380	
Benzene	< 1.60	1.60	
Benzyl Chloride	< 0.41	0.41	1
Bromodichloromethane	< 0.54	0.54	1
Bromoform	< 10.3	10.3	
Bromomethane	< 3.88	3.88	
Carbon Disulfide	< 311	311	
Carbon Tetrachloride	< 0.63	0.63	
Chlorobenzene	< 23.0	23.0	
Chloroethane	< 13.2	13.2	

EnvisionAir
1441 Sadlier Circle West Drive
Indianapolis, IN 46239
Ph: 317-351-0885
Fax: 317-351-0882
www.envision-air.com

Compounds	Sample Results ug/m³	Reporting Limit ug/m³	Flag
Chloroform	< 0.83	0.83	
Chloromethane	< 20.6	20.6	
cis-1,2-Dichloroethene	< 19.8	19.8	
cis-1,3-Dichloropropene	< 4.54	4.54	
Cyclohexane	< 5510	5510	
Dibromochloromethane	< 0.85	0.85	
Dichlorodifluoromethane	< 49.5	49.5	
Ethyl Acetate	< 54.1	54.1	
Ethylbenzene	< 8.68	8.68	
Hexachloro-1,3-butadiene	< 1.07	1.07	
Isooctane	< 467	467	
m,p-Xylene	< 43.4	43.4	
Methylene Chloride	< 41.7	41.7	
Methyl-tert-butyl ether	< 36.1	36.1	
N-Heptane	< 410	410	
N-Hexane	< 176	176	
Naphthalene	< 0.524	0.524	
o-Xylene	< 43.4	43.4	
Propylene	< 172	172	
Styrene	< 426	426	
Tetrachloroethene	< 3.19	3.19	
Tetrahydrofuran	< 295	295	
Toluene	< 3770	3770	
trans-1,2-Dichloroethene	< 39.6	39.6	
trans-1,3-Dichloropropene	< 4.54	4.54	
Trichloroethene	< 1.07	1.07	
Trichlorofluoromethane	< 562	562	
Vinyl Acetate	< 176	176	
Vinyl Bromide	< 0.44	0.44	
Vinyl Chloride	< 1.28	1.28	
4-bromofluorobenzene (surrogate)	98%		
Analysis Date/Time:	3-17-20/12:46		
Analyst Initials	tjg		

EnvisionAir
1441 Sadlier Circle West Drive
Indianapolis, IN 46239
Ph: 317-351-0885
Fax: 317-351-0882
www.envision-air.com

Client Name: ST JOHN-MITTELHAUSER

Project ID: FRANKLIN

Client Project Manager: PERRE BURNS

EnvisionAir Project Number: 2020-192

Analytical Method: TO-15
Analytical Batch: 031620CAIR(2)

Client Sample ID: SS-6
EnvisionAir Sample Number: 20-887
Sample Matrix: AIR

Sample Collection START Date/Time: 3/13/20 6:17
Sample Collection END Date/Time: 3/13/20 14:22
Sample Received Date/Time: 3/13/20 15:20

Compounds	Sample Results ug/m³	Reporting Limit ug/m³	Flag
4-Ethyltoluene	< 492	492	
4-Methyl-2-pentanone (MIBK)	< 2050	2050	
1,1,1-Trichloroethane	< 546	546	
1,1,2,2-Tetrachloroethane	< 0.34	0.34	1
1,1,2-Trichloroethane	< 0.21	0.21	1
1,1-Dichloroethane	< 4.05	4.05	
1,1-Dichloroethene	< 198	198	
1,2,4-Trichlorobenzene	< 0.74	0.74	
1,2,4-Trimethylbenzene	< 4.92	4.92	
1,2-dibromoethane (EDB)	< 0.03	0.03	1
1,2-Dichlorobenzene	< 60.1	60.1	
1,2-Dichloroethane	< 0.40	0.40	
1,2-Dichloropropane	< 0.46	0.46	
1,3,5-Trimethylbenzene	< 4.92	4.92	
1,3-Butadiene	< 0.22	0.22	
1,3-Dichlorobenzene	< 60.1	60.1	
1,4-Dichlorobenzene	< 0.60	0.60	
1,4-Dioxane	< 1.80	1.80	
2-Butanone (MEK)	< 2950	2950	
2-Hexanone	< 20.5	20.5	
Acetone	< 2380	2380	
Benzene	< 1.60	1.60	
Benzyl Chloride	< 0.41	0.41	1
Bromodichloromethane	< 0.54	0.54	1
Bromoform	< 10.3	10.3	
Bromomethane	< 3.88	3.88	
Carbon Disulfide	< 311	311	
Carbon Tetrachloride	< 0.63	0.63	
Chlorobenzene	< 23.0	23.0	
Chloroethane	< 13.2	13.2	

EnvisionAir
1441 Sadlier Circle West Drive
Indianapolis, IN 46239
Ph: 317-351-0885
Fax: 317-351-0882
www.envision-air.com

Compounds	Sample Results ug/m³	Reporting Limit ug/m³	Flag
Chloroform	< 0.83	0.83	
Chloromethane	< 20.6	20.6	
cis-1,2-Dichloroethene	< 19.8	19.8	
cis-1,3-Dichloropropene	< 4.54	4.54	
Cyclohexane	< 5510	5510	
Dibromochloromethane	< 0.85	0.85	
Dichlorodifluoromethane	< 49.5	49.5	
Ethyl Acetate	< 54.1	54.1	
Ethylbenzene	< 8.68	8.68	
Hexachloro-1,3-butadiene	< 1.07	1.07	
Isooctane	< 467	467	
m,p-Xylene	< 43.4	43.4	
Methylene Chloride	< 41.7	41.7	
Methyl-tert-butyl ether	< 36.1	36.1	
N-Heptane	< 410	410	
N-Hexane	< 176	176	
Naphthalene	< 0.524	0.524	
o-Xylene	< 43.4	43.4	
Propylene	< 172	172	
Styrene	< 426	426	
Tetrachloroethene	< 3.19	3.19	
Tetrahydrofuran	< 295	295	
Toluene	< 3770	3770	
trans-1,2-Dichloroethene	< 39.6	39.6	
trans-1,3-Dichloropropene	< 4.54	4.54	
Trichloroethene	< 1.07	1.07	
Trichlorofluoromethane	< 562	562	
Vinyl Acetate	< 176	176	
Vinyl Bromide	< 0.44	0.44	
Vinyl Chloride	< 1.28	1.28	
4-bromofluorobenzene (surrogate)	107%		
Analysis Date/Time:	3-17-20/23:04		
Analyst Initials	tjg		

EnvisionAir
1441 Sadlier Circle West Drive
Indianapolis, IN 46239
Ph: 317-351-0885
Fax: 317-351-0882
www.envision-air.com

Client Name: ST JOHN-MITTELHAUSER

Project ID: FRANKLIN

Client Project Manager: PERRE BURNS

EnvisionAir Project Number: 2020-192

Analytical Method: TO-15
Analytical Batch: 031620CAIR(1)

Client Sample ID: IA-7
EnvisionAir Sample Number: 20-888
Sample Matrix: AIR

Sample Collection START Date/Time: 3/13/20 6:22
Sample Collection END Date/Time: 3/13/20 14:24
Sample Received Date/Time: 3/13/20 15:20

Compounds	Sample Results ug/m³	Reporting Limit ug/m³	Flag
4-Ethyltoluene	< 492	492	
4-Methyl-2-pentanone (MIBK)	< 2050	2050	
1,1,1-Trichloroethane	< 546	546	
1,1,2,2-Tetrachloroethane	< 0.34	0.34	1
1,1,2-Trichloroethane	< 0.21	0.21	1
1,1-Dichloroethane	< 4.05	4.05	
1,1-Dichloroethene	< 198	198	
1,2,4-Trichlorobenzene	< 0.74	0.74	
1,2,4-Trimethylbenzene	< 4.92	4.92	
1,2-dibromoethane (EDB)	< 0.03	0.03	1
1,2-Dichlorobenzene	< 60.1	60.1	
1,2-Dichloroethane	< 0.40	0.40	
1,2-Dichloropropane	< 0.46	0.46	
1,3,5-Trimethylbenzene	< 4.92	4.92	
1,3-Butadiene	< 0.22	0.22	
1,3-Dichlorobenzene	< 60.1	60.1	
1,4-Dichlorobenzene	< 0.60	0.60	
1,4-Dioxane	< 1.80	1.80	
2-Butanone (MEK)	< 2950	2950	
2-Hexanone	< 20.5	20.5	
Acetone	< 2380	2380	
Benzene	< 1.60	1.60	
Benzyl Chloride	< 0.41	0.41	1
Bromodichloromethane	< 0.54	0.54	1
Bromoform	< 10.3	10.3	
Bromomethane	< 3.88	3.88	
Carbon Disulfide	< 311	311	
Carbon Tetrachloride	< 0.63	0.63	
Chlorobenzene	< 23.0	23.0	
Chloroethane	< 13.2	13.2	

EnvisionAir
1441 Sadlier Circle West Drive
Indianapolis, IN 46239
Ph: 317-351-0885
Fax: 317-351-0882
www.envision-air.com

Compounds	Sample Results ug/m³	Reporting Limit ug/m³	Flag
Chloroform	< 0.83	0.83	
Chloromethane	< 20.6	20.6	
cis-1,2-Dichloroethene	< 19.8	19.8	
cis-1,3-Dichloropropene	< 4.54	4.54	
Cyclohexane	< 5510	5510	
Dibromochloromethane	< 0.85	0.85	
Dichlorodifluoromethane	< 49.5	49.5	
Ethyl Acetate	< 54.1	54.1	
Ethylbenzene	< 8.68	8.68	
Hexachloro-1,3-butadiene	< 1.07	1.07	
Isooctane	< 467	467	
m,p-Xylene	< 43.4	43.4	
Methylene Chloride	< 41.7	41.7	
Methyl-tert-butyl ether	< 36.1	36.1	
N-Heptane	< 410	410	
N-Hexane	< 176	176	
Naphthalene	< 0.524	0.524	
o-Xylene	< 43.4	43.4	
Propylene	< 172	172	
Styrene	< 426	426	
Tetrachloroethene	< 3.19	3.19	
Tetrahydrofuran	< 295	295	
Toluene	< 3770	3770	
trans-1,2-Dichloroethene	< 39.6	39.6	
trans-1,3-Dichloropropene	< 4.54	4.54	
Trichloroethene	< 1.07	1.07	
Trichlorofluoromethane	< 562	562	
Vinyl Acetate	< 176	176	
Vinyl Bromide	< 0.44	0.44	
Vinyl Chloride	< 1.28	1.28	
4-bromofluorobenzene (surrogate)	94%		
Analysis Date/Time:	3-17-20/13:26		
Analyst Initials	tjg		

EnvisionAir
1441 Sadlier Circle West Drive
Indianapolis, IN 46239
Ph: 317-351-0885
Fax: 317-351-0882
www.envision-air.com

Client Name: ST JOHN-MITTELHAUSER

Project ID: FRANKLIN

Client Project Manager: PERRE BURNS

EnvisionAir Project Number: 2020-192

Analytical Method: TO-15
Analytical Batch: 031620CAIR(2)

Client Sample ID: SS-7
EnvisionAir Sample Number: 20-889
Sample Matrix: AIR

Sample Collection START Date/Time: 3/13/20 6:21
Sample Collection END Date/Time: 3/13/20 14:26
Sample Received Date/Time: 3/13/20 15:20

Compounds	Sample Results ug/m³	Reporting Limit ug/m³	Flag
4-Ethyltoluene	< 492	492	
4-Methyl-2-pentanone (MIBK)	< 2050	2050	
1,1,1-Trichloroethane	< 546	546	
1,1,2,2-Tetrachloroethane	< 0.34	0.34	1
1,1,2-Trichloroethane	< 0.21	0.21	1
1,1-Dichloroethane	< 4.05	4.05	
1,1-Dichloroethene	< 198	198	
1,2,4-Trichlorobenzene	< 0.74	0.74	
1,2,4-Trimethylbenzene	< 4.92	4.92	
1,2-dibromoethane (EDB)	< 0.03	0.03	1
1,2-Dichlorobenzene	< 60.1	60.1	
1,2-Dichloroethane	< 0.40	0.40	
1,2-Dichloropropane	< 0.46	0.46	
1,3,5-Trimethylbenzene	< 4.92	4.92	
1,3-Butadiene	< 0.22	0.22	
1,3-Dichlorobenzene	< 60.1	60.1	
1,4-Dichlorobenzene	< 0.60	0.60	
1,4-Dioxane	< 1.80	1.80	
2-Butanone (MEK)	< 2950	2950	
2-Hexanone	< 20.5	20.5	
Acetone	< 2380	2380	
Benzene	< 1.60	1.60	
Benzyl Chloride	< 0.41	0.41	1
Bromodichloromethane	< 0.54	0.54	1
Bromoform	< 10.3	10.3	
Bromomethane	< 3.88	3.88	
Carbon Disulfide	< 311	311	
Carbon Tetrachloride	< 0.63	0.63	
Chlorobenzene	< 23.0	23.0	
Chloroethane	< 13.2	13.2	

EnvisionAir
1441 Sadlier Circle West Drive
Indianapolis, IN 46239
Ph: 317-351-0885
Fax: 317-351-0882
www.envision-air.com

Compounds	Sample Results ug/m³	Reporting Limit ug/m³	Flag
Chloroform	< 0.83	0.83	
Chloromethane	< 20.6	20.6	
cis-1,2-Dichloroethene	< 19.8	19.8	
cis-1,3-Dichloropropene	< 4.54	4.54	
Cyclohexane	< 5510	5510	
Dibromochloromethane	< 0.85	0.85	
Dichlorodifluoromethane	< 49.5	49.5	
Ethyl Acetate	< 54.1	54.1	
Ethylbenzene	< 8.68	8.68	
Hexachloro-1,3-butadiene	< 1.07	1.07	
Isooctane	< 467	467	
m,p-Xylene	< 43.4	43.4	
Methylene Chloride	< 41.7	41.7	
Methyl-tert-butyl ether	< 36.1	36.1	
N-Heptane	< 410	410	
N-Hexane	< 176	176	
Naphthalene	< 0.524	0.524	
o-Xylene	< 43.4	43.4	
Propylene	< 172	172	
Styrene	< 426	426	
Tetrachloroethene	**8.82**	3.19	
Tetrahydrofuran	< 295	295	
Toluene	< 3770	3770	
trans-1,2-Dichloroethene	< 39.6	39.6	
trans-1,3-Dichloropropene	< 4.54	4.54	
Trichloroethene	< 1.07	1.07	
Trichlorofluoromethane	< 562	562	
Vinyl Acetate	< 176	176	
Vinyl Bromide	< 0.44	0.44	
Vinyl Chloride	< 1.28	1.28	
4-bromofluorobenzene (surrogate)	103%		
Analysis Date/Time:	3-17-20/23:39		
Analyst Initials	tjg		

EnvisionAir
1441 Sadlier Circle West Drive
Indianapolis, IN 46239
Ph: 317-351-0885
Fax: 317-351-0882
www.envision-air.com

Client Name: ST JOHN-MITTELHAUSER

Project ID: FRANKLIN

Client Project Manager: PERRE BURNS

EnvisionAir Project Number: 2020-192

Analytical Method: TO-15
Analytical Batch: 031620CAIR(1)

Client Sample ID: IA-8
EnvisionAir Sample Number: 20-890
Sample Matrix: AIR

Sample Collection START Date/Time: 3/13/20 7:05
Sample Collection END Date/Time: 3/13/20 14:38
Sample Received Date/Time: 3/13/20 15:20

Compounds	Sample Results ug/m³	Reporting Limit ug/m³	Flag
4-Ethyltoluene	< 492	492	
4-Methyl-2-pentanone (MIBK)	< 2050	2050	
1,1,1-Trichloroethane	< 546	546	
1,1,2,2-Tetrachloroethane	< 0.34	0.34	1
1,1,2-Trichloroethane	< 0.21	0.21	1
1,1-Dichloroethane	< 4.05	4.05	
1,1-Dichloroethene	< 198	198	
1,2,4-Trichlorobenzene	< 0.74	0.74	
1,2,4-Trimethylbenzene	< 4.92	4.92	
1,2-dibromoethane (EDB)	< 0.03	0.03	1
1,2-Dichlorobenzene	< 60.1	60.1	
1,2-Dichloroethane	< 0.40	0.40	
1,2-Dichloropropane	< 0.46	0.46	
1,3,5-Trimethylbenzene	< 4.92	4.92	
1,3-Butadiene	< 0.22	0.22	
1,3-Dichlorobenzene	< 60.1	60.1	
1,4-Dichlorobenzene	< 0.60	0.60	
1,4-Dioxane	< 1.80	1.80	
2-Butanone (MEK)	< 2950	2950	
2-Hexanone	< 20.5	20.5	
Acetone	< 2380	2380	
Benzene	< 1.60	1.60	
Benzyl Chloride	< 0.41	0.41	1
Bromodichloromethane	< 0.54	0.54	1
Bromoform	< 10.3	10.3	
Bromomethane	< 3.88	3.88	
Carbon Disulfide	< 311	311	
Carbon Tetrachloride	< 0.63	0.63	
Chlorobenzene	< 23.0	23.0	
Chloroethane	< 13.2	13.2	

EnvisionAir
1441 Sadlier Circle West Drive
Indianapolis, IN 46239
Ph: 317-351-0885
Fax: 317-351-0882
www.envision-air.com

Compounds	Sample Results ug/m³	Reporting Limit ug/m³	Flag
Chloroform	< 0.83	0.83	
Chloromethane	< 20.6	20.6	
cis-1,2-Dichloroethene	< 19.8	19.8	
cis-1,3-Dichloropropene	< 4.54	4.54	
Cyclohexane	< 5510	5510	
Dibromochloromethane	< 0.85	0.85	
Dichlorodifluoromethane	< 49.5	49.5	
Ethyl Acetate	< 54.1	54.1	
Ethylbenzene	< 8.68	8.68	
Hexachloro-1,3-butadiene	< 1.07	1.07	
Isooctane	< 467	467	
m,p-Xylene	< 43.4	43.4	
Methylene Chloride	< 41.7	41.7	
Methyl-tert-butyl ether	< 36.1	36.1	
N-Heptane	< 410	410	
N-Hexane	< 176	176	
Naphthalene	< 0.524	0.524	
o-Xylene	< 43.4	43.4	
Propylene	< 172	172	
Styrene	< 426	426	
Tetrachloroethene	< 3.19	3.19	
Tetrahydrofuran	< 295	295	
Toluene	< 3770	3770	
trans-1,2-Dichloroethene	< 39.6	39.6	
trans-1,3-Dichloropropene	< 4.54	4.54	
Trichloroethene	< 1.07	1.07	
Trichlorofluoromethane	< 562	562	
Vinyl Acetate	< 176	176	
Vinyl Bromide	< 0.44	0.44	
Vinyl Chloride	< 1.28	1.28	
4-bromofluorobenzene (surrogate)	98%		
Analysis Date/Time:	3-17-20/14:08		
Analyst Initials	tjg		

EnvisionAir
1441 Sadlier Circle West Drive
Indianapolis, IN 46239
Ph: 317-351-0885
Fax: 317-351-0882
www.envision-air.com

Client Name: ST JOHN-MITTELHAUSER

Project ID: FRANKLIN

Client Project Manager: PERRE BURNS

EnvisionAir Project Number: 2020-192

Analytical Method: TO-15
Analytical Batch: 031620CAIR

Client Sample ID: SS-8
EnvisionAir Sample Number: 20-891
Sample Matrix: AIR

Sample Collection START Date/Time: 3/13/20 7:03
Sample Collection END Date/Time: 3/13/20 14:40
Sample Received Date/Time: 3/13/20 15:20

Compounds	Sample Results ug/m³	Reporting Limit ug/m³	Flag
4-Ethyltoluene	< 492	492	
4-Methyl-2-pentanone (MIBK)	< 2050	2050	
1,1,1-Trichloroethane	< 546	546	
1,1,2,2-Tetrachloroethane	< 0.34	0.34	1
1,1,2-Trichloroethane	< 0.21	0.21	1
1,1-Dichloroethane	< 4.05	4.05	
1,1-Dichloroethene	< 198	198	
1,2,4-Trichlorobenzene	< 0.74	0.74	
1,2,4-Trimethylbenzene	< 4.92	4.92	
1,2-dibromoethane (EDB)	< 0.03	0.03	1
1,2-Dichlorobenzene	< 60.1	60.1	
1,2-Dichloroethane	< 0.40	0.40	
1,2-Dichloropropane	< 0.46	0.46	
1,3,5-Trimethylbenzene	< 4.92	4.92	
1,3-Butadiene	< 0.22	0.22	
1,3-Dichlorobenzene	< 60.1	60.1	
1,4-Dichlorobenzene	< 0.60	0.60	
1,4-Dioxane	< 1.80	1.80	
2-Butanone (MEK)	< 2950	2950	
2-Hexanone	< 20.5	20.5	
Acetone	< 2380	2380	
Benzene	< 1.60	1.60	
Benzyl Chloride	< 0.41	0.41	1
Bromodichloromethane	< 0.54	0.54	1
Bromoform	< 10.3	10.3	
Bromomethane	< 3.88	3.88	
Carbon Disulfide	< 311	311	
Carbon Tetrachloride	< 0.63	0.63	
Chlorobenzene	< 23.0	23.0	
Chloroethane	< 13.2	13.2	

EnvisionAir
1441 Sadlier Circle West Drive
Indianapolis, IN 46239
Ph: 317-351-0885
Fax: 317-351-0882
www.envision-air.com

Compounds	Sample Results ug/m³	Reporting Limit ug/m³	Flag
Chloroform	< 0.83	0.83	
Chloromethane	< 20.6	20.6	
cis-1,2-Dichloroethene	< 19.8	19.8	
cis-1,3-Dichloropropene	< 4.54	4.54	
Cyclohexane	< 5510	5510	
Dibromochloromethane	< 0.85	0.85	
Dichlorodifluoromethane	< 49.5	49.5	
Ethyl Acetate	< 54.1	54.1	
Ethylbenzene	< 8.68	8.68	
Hexachloro-1,3-butadiene	< 1.07	1.07	
Isooctane	< 467	467	
m,p-Xylene	< 43.4	43.4	
Methylene Chloride	< 41.7	41.7	
Methyl-tert-butyl ether	< 36.1	36.1	
N-Heptane	< 410	410	
N-Hexane	< 176	176	
Naphthalene	< 0.524	0.524	
o-Xylene	< 43.4	43.4	
Propylene	< 172	172	
Styrene	< 426	426	
Tetrachloroethene	< 3.19	3.19	
Tetrahydrofuran	< 295	295	
Toluene	< 3770	3770	
trans-1,2-Dichloroethene	< 39.6	39.6	
trans-1,3-Dichloropropene	< 4.54	4.54	
Trichloroethene	< 1.07	1.07	
Trichlorofluoromethane	< 562	562	
Vinyl Acetate	< 176	176	
Vinyl Bromide	< 0.44	0.44	
Vinyl Chloride	< 1.28	1.28	
4-bromofluorobenzene (surrogate)	101%		
Analysis Date/Time:	3-18-20/00:12		
Analyst Initials	tjg		

EnvisionAir
1441 Sadlier Circle West Drive
Indianapolis, IN 46239
Ph: 317-351-0885
Fax: 317-351-0882
www.envision-air.com

Client Name: ST JOHN-MITTELHAUSER

Project ID: FRANKLIN

Client Project Manager: PERRE BURNS

EnvisionAir Project Number: 2020-192

Analytical Method: TO-15
Analytical Batch: 031620CAIR(1)

Client Sample ID: AMBIENT
EnvisionAir Sample Number: 20-892
Sample Matrix: AIR

Sample Collection START Date/Time: 3/13/20 5:40
Sample Collection END Date/Time: 3/13/20 13:40
Sample Received Date/Time: 3/13/20 15:20

Compounds	Sample Results ug/m³	Reporting Limit ug/m³	Flag
4-Ethyltoluene	< 492	492	
4-Methyl-2-pentanone (MIBK)	< 2050	2050	
1,1,1-Trichloroethane	< 546	546	
1,1,2,2-Tetrachloroethane	< 0.34	0.34	1
1,1,2-Trichloroethane	< 0.21	0.21	1
1,1-Dichloroethane	< 4.05	4.05	
1,1-Dichloroethene	< 198	198	
1,2,4-Trichlorobenzene	< 0.74	0.74	
1,2,4-Trimethylbenzene	< 4.92	4.92	
1,2-dibromoethane (EDB)	< 0.03	0.03	1
1,2-Dichlorobenzene	< 60.1	60.1	
1,2-Dichloroethane	< 0.40	0.40	
1,2-Dichloropropane	< 0.46	0.46	
1,3,5-Trimethylbenzene	< 4.92	4.92	
1,3-Butadiene	< 0.22	0.22	
1,3-Dichlorobenzene	< 60.1	60.1	
1,4-Dichlorobenzene	< 0.60	0.60	
1,4-Dioxane	< 1.80	1.80	
2-Butanone (MEK)	< 2950	2950	
2-Hexanone	< 20.5	20.5	
Acetone	< 2380	2380	
Benzene	< 1.60	1.60	
Benzyl Chloride	< 0.41	0.41	1
Bromodichloromethane	< 0.54	0.54	1
Bromoform	< 10.3	10.3	
Bromomethane	< 3.88	3.88	
Carbon Disulfide	< 311	311	
Carbon Tetrachloride	< 0.63	0.63	
Chlorobenzene	< 23.0	23.0	
Chloroethane	< 13.2	13.2	

EnvisionAir
1441 Sadlier Circle West Drive
Indianapolis, IN 46239
Ph: 317-351-0885
Fax: 317-351-0882
www.envision-air.com

Compounds	Sample Results ug/m³	Reporting Limit ug/m³	Flag
Chloroform	< 0.83	0.83	
Chloromethane	< 20.6	20.6	
cis-1,2-Dichloroethene	< 19.8	19.8	
cis-1,3-Dichloropropene	< 4.54	4.54	
Cyclohexane	< 5510	5510	
Dibromochloromethane	< 0.85	0.85	
Dichlorodifluoromethane	< 49.5	49.5	
Ethyl Acetate	< 54.1	54.1	
Ethylbenzene	< 8.68	8.68	
Hexachloro-1,3-butadiene	< 1.07	1.07	
Isooctane	< 467	467	
m,p-Xylene	< 43.4	43.4	
Methylene Chloride	< 41.7	41.7	
Methyl-tert-butyl ether	< 36.1	36.1	
N-Heptane	< 410	410	
N-Hexane	< 176	176	
Naphthalene	< 0.524	0.524	
o-Xylene	< 43.4	43.4	
Propylene	< 172	172	
Styrene	< 426	426	
Tetrachloroethene	< 3.19	3.19	
Tetrahydrofuran	< 295	295	
Toluene	< 3770	3770	
trans-1,2-Dichloroethene	< 39.6	39.6	
trans-1,3-Dichloropropene	< 4.54	4.54	
Trichloroethene	< 1.07	1.07	
Trichlorofluoromethane	< 562	562	
Vinyl Acetate	< 176	176	
Vinyl Bromide	< 0.44	0.44	
Vinyl Chloride	< 1.28	1.28	
4-bromofluorobenzene (surrogate)	90%		
Analysis Date/Time:	3-17-20/02:40		
Analyst Initials	tjg		

EnvisionAir
1441 Sadlier Circle West Drive
Indianapolis, IN 46239
Ph: 317-351-0885
Fax: 317-351-0882
www.envision-air.com

Analytical Report

TO-15 Quality Control Data

EnvisionAir Batch Number: 031620CAIR(1)

Method Blank (MB):	MB Results (ppbv)	Reporting Limit (ppbv)	Flags
4-Ethyltoluene	< 100	100	
4-Methyl-2-pentanone (MIBK)	< 500	500	
1,1,1-Trichloroethane	< 100	100	
1,1,2,2-Tetrachloroethane	< 0.049	0.049	1
1,1,2-Trichloroethane	< 0.038	0.038	1
1,1-Dichloroethane	< 1	1	
1,1-Dichloroethene	< 50	50	
1,2,4-Trichlorobenzene	< 0.1	0.1	
1,2,4-Trimethylbenzene	< 1	1	
1,2-dibromoethane (EDB)	< 0.0041	0.0041	1
1,2-Dichlorobenzene	< 10	10	
1,2-Dichloroethane	< 0.1	0.1	
1,2-Dichloropropane	< 0.1	0.1	
1,3,5-Trimethylbenzene	< 1	1	
1,3-Butadiene	< 0.1	0.1	
1,3-Dichlorobenzene	< 10	10	
1,4-Dichlorobenzene	< 0.1	0.1	
1,4-Dioxane	< 0.5	0.5	
2-Butanone (MEK)	< 1000	1000	
2-Hexanone	< 5	5	
Acetone	< 1000	1000	
Benzene	< 0.5	0.5	
Benzyl Chloride	< 0.08	0.08	1
Bromodichloromethane	< 0.08	0.08	1
Bromoform	< 1	1	
Bromomethane	< 1	1	
Carbon Disulfide	< 100	100	
Carbon Tetrachloride	< 0.1	0.1	
Chlorobenzene	< 5	5	
Chloroethane	< 5	5	
Chloroform	< 0.17	0.17	
Chloromethane	< 10	10	
cis-1,2-Dichloroethene	< 5	5	
cis-1,3-Dichloropropene	< 1	1	
Cyclohexane	< 1600	1600	
Dibromochloromethane	< 0.1	0.1	
Dichlorodifluoromethane	< 10	10	
Ethyl Acetate	< 15	15	
Ethylbenzene	< 2	2	
Hexachloro-1,3-butadiene	< 0.1	0.1	
Isooctane	< 100	100	
m,p-Xylene	< 10	10	
Methylene Chloride	< 12	12	
Methyl-tert-butyl ether	< 10	10	
N-Heptane	< 100	100	
N-Hexane	< 50	50	
Naphthalene	< 0.1	0.1	
o-Xylene	< 10	10	
Propylene	< 100	100	
Styrene	< 100	100	
Tetrachloroethene	< 0.47	0.47	
Tetrahydrofuran	< 100	100	

EnvisionAir
1441 Sadlier Circle West Drive
Indianapolis, IN 46239
Ph: 317-351-0885
Fax: 317-351-0882
www.envision-air.com

Analytical Report

Method Blank (MB):	MB Results (ppbv)	Reporting Limit (ppbv)	Flags
Toluene	< 1000	1000	
trans-1,2-Dichloroethene	< 10	10	
trans-1,3-Dichloropropene	< 1	1	
Trichloroethene	< 0.2	0.2	
Trichlorofluoromethane	< 100	100	
Vinyl Acetate	< 50	50	
Vinyl Bromide	< 0.1	0.1	
Vinyl Chloride	< 0.5	0.5	
4-bromofluorobenzene (surrogate)	100%		
Analysis Date/Time:	3-16-20/22:50		
Analyst Initials	tjg		

LCS/LCSD	LCS Results (ppbv)	LCSD Results (ppbv)	LCS/D Conc(ppbv)	LCS Rec.	LCSD Rec.	RPD	Flag
Propylene	9.4	11	10	94%	110%	15.7%	
Dichlorodifluoromethane	9.23	9.78	10	92%	98%	5.8%	
Chloromethane	9.22	9.95	10	92%	100%	7.6%	
Vinyl Chloride	10.5	10	10	105%	100%	4.9%	
1,3-Butadiene	9.78	10.3	10	98%	103%	5.2%	
Bromomethane	9.22	10.3	10	92%	103%	11.1%	
Chloroethane	9.95	10.5	10	100%	105%	5.4%	
Vinyl Bromide	9.94	11.2	10	99%	112%	11.9%	
Trichlorofluoromethane	9.93	11.2	10	99%	112%	12.0%	
Acetone	9.28	9.38	10	93%	94%	1.1%	
1,1-Dichloroethene	10.5	11.1	10	105%	111%	5.6%	
Methylene Chloride	10.2	10.6	10	102%	106%	3.8%	
Carbon Disulfide	10.5	10.7	10	105%	107%	1.9%	
trans-1,2-Dichloroethene	10.1	10.1	10	101%	101%	0.0%	
Methyl-tert-butyl ether	10.1	9.9	10	101%	99%	2.0%	
1,1-Dichloroethane	10.1	10.4	10	101%	104%	2.9%	
Vinyl Acetate	9.26	9.82	10	93%	98%	5.9%	
N-Hexane	9.94	10.4	10	99%	104%	4.5%	
2-Butanone (MEK)	9.79	10.1	10	98%	101%	3.1%	
cis-1,2-Dichloroethene	10	10.4	10	100%	104%	3.9%	
Ethyl Acetate	9.8	9.94	10	98%	99%	1.4%	
Chloroform	10.1	10.6	10	101%	106%	4.8%	
Tetrahydrofuran	10.6	9.86	10	106%	99%	7.2%	
1,2-Dichloroethane	9.74	9.09	10	97%	91%	6.9%	
1,1,1-Trichloroethane	10	8.96	10	100%	90%	11.0%	
Carbon Tetrachloride	10.5	9.37	10	105%	94%	11.4%	
Benzene	11.2	9.92	10	112%	99%	12.1%	
Cyclohexane	11.6	10.2	10	116%	102%	12.8%	
1,2-Dichloropropane	10.9	9.7	10	109%	97%	11.7%	
Trichloroethene	11	9.71	10	110%	97%	12.5%	
Bromodichloromethane	9.96	8.88	10	100%	89%	11.5%	
1,4-Dioxane	11	8.59	10	110%	86%	24.6%	2
Isooctane	10.6	9.68	10	106%	97%	9.1%	
N-Heptane	10.4	9.27	10	104%	93%	11.5%	
cis-1,3-Dichloropropene	10.9	9.73	10	109%	97%	11.3%	
4-Methyl-2-pentanone (MIBK)	11.3	10.1	10	113%	101%	11.2%	
trans-1,3-Dichloropropene	10.6	9.68	10	106%	97%	9.1%	
1,1,2-Trichloroethane	10.2	9.45	10	102%	95%	7.6%	
Toluene	11	10.1	10	110%	101%	8.5%	
2-Hexanone	10	8.91	10	100%	89%	11.5%	
Dibromochloromethane	9.73	9.63	10	97%	96%	1.0%	
1,2-dibromoethane (EDB)	10.8	10.6	10	108%	106%	1.9%	
Tetrachloroethene	10.1	9.76	10	101%	98%	3.4%	
Chlorobenzene	9.6	9.46	10	96%	95%	1.5%	
Ethylbenzene	10.9	10.8	10	109%	108%	0.9%	
m,p-Xylene	20.5	20.1	20	103%	101%	2.0%	
Bromoform	9.95	9.72	10	100%	97%	2.3%	

EnvisionAir
1441 Sadlier Circle West Drive
Indianapolis, IN 46239
Ph: 317-351-0885
Fax: 317-351-0882
www.envision-air.com

Analytical Report

LCS/LCSD	LCS Results (ppbv)	LCSD Results (ppbv)	LCS/D Conc(ppbv)	LCS Rec.	LCSD Rec.	RPD	Flag
Styrene	10.4	10.3	10	104%	103%	1.0%	
1,1,2,2-Tetrachloroethane	9.68	9.94	10	97%	99%	2.7%	
o-Xylene	10	10.3	10	100%	103%	3.0%	
4-Ethyltoluene	10.8	10.9	10	108%	109%	0.9%	
1,3,5-Trimethylbenzene	10.1	9.99	10	101%	100%	1.1%	
1,2,4-Trimethylbenzene	10.7	10.7	10	107%	107%	0.0%	
1,3-Dichlorobenzene	10.9	11.1	10	109%	111%	1.8%	
Benzyl Chloride	9.81	9.45	10	98%	95%	3.7%	
1,4-Dichlorobenzene	8.94	8.81	10	89%	88%	1.5%	
1,2-Dichlorobenzene	9.41	9.56	10	94%	96%	1.6%	
1,2,4-Trichlorobenzene	8.8	9.25	10	88%	93%	5.0%	
Hexachloro-1,3-butadiene	9.26	8.78	10	93%	88%	5.3%	
Naphthalene	9.11	9.94	10	91%	99%	8.7%	
4-bromofluorobenzene (surrogate)	113%	116%					
Analysis Date/Time:	3-16-20/22:39	3-17-20/01:21					
Analyst Initials	tjg	tjg					

EnvisionAir
1441 Sadlier Circle West Drive
Indianapolis, IN 46239
Ph: 317-351-0885
Fax: 317-351-0882
www.envision-air.com

Analytical Report

TO-15 Quality Control Data

EnvisionAir Batch Number: 031620CAIR(2)

Method Blank (MB):	MB Results (ppbv)	Reporting Limit (ppbv)	Flags
4-Ethyltoluene	< 100	100	
4-Methyl-2-pentanone (MIBK)	< 500	500	
1,1,1-Trichloroethane	< 100	100	
1,1,2,2-Tetrachloroethane	< 0.049	0.049	1
1,1,2-Trichloroethane	< 0.038	0.038	1
1,1-Dichloroethane	< 1	1	
1,1-Dichloroethene	< 50	50	
1,2,4-Trichlorobenzene	< 0.1	0.1	
1,2,4-Trimethylbenzene	< 1	1	
1,2-dibromoethane (EDB)	< 0.0041	0.0041	1
1,2-Dichlorobenzene	< 10	10	
1,2-Dichloroethane	< 0.1	0.1	
1,2-Dichloropropane	< 0.1	0.1	
1,3,5-Trimethylbenzene	< 1	1	
1,3-Butadiene	< 0.1	0.1	
1,3-Dichlorobenzene	< 10	10	
1,4-Dichlorobenzene	< 0.1	0.1	
1,4-Dioxane	< 0.5	0.5	
2-Butanone (MEK)	< 1000	1000	
2-Hexanone	< 5	5	
Acetone	< 1000	1000	
Benzene	< 0.5	0.5	
Benzyl Chloride	< 0.08	0.08	1
Bromodichloromethane	< 0.08	0.08	1
Bromoform	< 1	1	
Bromomethane	< 1	1	
Carbon Disulfide	< 100	100	
Carbon Tetrachloride	< 0.1	0.1	
Chlorobenzene	< 5	5	
Chloroethane	< 5	5	
Chloroform	< 0.17	0.17	
Chloromethane	< 10	10	
cis-1,2-Dichloroethene	< 5	5	
cis-1,3-Dichloropropene	< 1	1	
Cyclohexane	< 1600	1600	
Dibromochloromethane	< 0.1	0.1	
Dichlorodifluoromethane	< 10	10	
Ethyl Acetate	< 15	15	
Ethylbenzene	< 2	2	
Hexachloro-1,3-butadiene	< 0.1	0.1	
Isooctane	< 100	100	
m,p-Xylene	< 10	10	
Methylene Chloride	< 12	12	
Methyl-tert-butyl ether	< 10	10	
N-Heptane	< 100	100	
N-Hexane	< 50	50	
Naphthalene	< 0.1	0.1	
o-Xylene	< 10	10	
Propylene	< 100	100	
Styrene	< 100	100	
Tetrachloroethene	< 0.47	0.47	
Tetrahydrofuran	< 100	100	

EnvisionAir
1441 Sadlier Circle West Drive
Indianapolis, IN 46239
Ph: 317-351-0885
Fax: 317-351-0882
www.envision-air.com

Analytical Report

Method Blank (MB):	MB Results (ppbv)	Reporting Limit (ppbv)	Flags
Toluene	< 1000	1000	
trans-1,2-Dichloroethene	< 10	10	
trans-1,3-Dichloropropene	< 1	1	
Trichloroethene	< 0.2	0.2	
Trichlorofluoromethane	< 100	100	
Vinyl Acetate	< 50	50	
Vinyl Bromide	< 0.1	0.1	
Vinyl Chloride	< 0.5	0.5	
4-bromofluorobenzene (surrogate)	92%		
Analysis Date/Time:	3-17-20/18:53		
Analyst Initials	tjg		

LCS/LCSD	LCS Results (ppbv)	LCSD Results (ppbv)	LCS/D Conc(ppbv)	LCS Rec.	LCSD Rec.	RPD	Flag
Propylene	9.94	9.78	10	99%	98%	1.6%	
Dichlorodifluoromethane	10.7	10.9	10	107%	109%	1.9%	
Chloromethane	8.28	8.93	10	83%	89%	7.6%	
Vinyl Chloride	9.12	9.28	10	91%	93%	1.7%	
1,3-Butadiene	9.28	8.33	10	93%	83%	10.8%	
Bromomethane	9.23	9.45	10	92%	95%	2.4%	
Chloroethane	8.84	8.99	10	88%	90%	1.7%	
Vinyl Bromide	10.7	10.8	10	107%	108%	0.9%	
Trichlorofluoromethane	11	10.5	10	110%	105%	4.7%	
Acetone	9.43	9.46	10	94%	95%	0.3%	
1,1-Dichloroethene	10.5	10.5	10	105%	105%	0.0%	
Methylene Chloride	10.2	9.29	10	102%	93%	9.3%	
Carbon Disulfide	10.2	9.47	10	102%	95%	7.4%	
trans-1,2-Dichloroethene	9.53	9.5	10	95%	95%	0.3%	
Methyl-tert-butyl ether	9.49	9.9	10	95%	99%	4.2%	
1,1-Dichloroethane	9.68	9.87	10	97%	99%	1.9%	
Vinyl Acetate	8.69	8.21	10	87%	82%	5.7%	
N-Hexane	9.34	9.72	10	93%	97%	4.0%	
2-Butanone (MEK)	9.02	8.92	10	90%	89%	1.1%	
cis-1,2-Dichloroethene	9.75	9.78	10	98%	98%	0.3%	
Ethyl Acetate	9.18	9.51	10	92%	95%	3.5%	
Chloroform	10.2	10.4	10	102%	104%	1.9%	
Tetrahydrofuran	8.49	8.55	10	85%	86%	0.7%	
1,2-Dichloroethane	8.87	9.14	10	89%	91%	3.0%	
1,1,1-Trichloroethane	9.09	9.35	10	91%	94%	2.8%	
Carbon Tetrachloride	9.82	10.2	10	98%	102%	3.8%	
Benzene	9.57	9.7	10	96%	97%	1.3%	
Cyclohexane	9.44	9.68	10	94%	97%	2.5%	
1,2-Dichloropropane	9.23	9.49	10	92%	95%	2.8%	
Trichloroethene	9.64	9.81	10	96%	98%	1.7%	
Bromodichloromethane	8.86	9.24	10	89%	92%	4.2%	
1,4-Dioxane	9.02	8.29	10	90%	83%	8.4%	
Isooctane	9.14	9.4	10	91%	94%	2.8%	
N-Heptane	8.67	8.81	10	87%	88%	1.6%	
cis-1,3-Dichloropropene	9.84	10.1	10	98%	101%	2.6%	
4-Methyl-2-pentanone (MIBK)	9.09	9.44	10	91%	94%	3.8%	
trans-1,3-Dichloropropene	9.49	9.74	10	95%	97%	2.6%	
1,1,2-Trichloroethane	9.46	9.78	10	95%	98%	3.3%	
Toluene	10	10.3	10	100%	103%	3.0%	
2-Hexanone	9.32	8.73	10	93%	87%	6.5%	
Dibromochloromethane	9.15	9.32	10	92%	93%	1.8%	
1,2-dibromoethane (EDB)	9.67	9.81	10	97%	98%	1.4%	
Tetrachloroethene	9.7	9.89	10	97%	99%	1.9%	
Chlorobenzene	8.81	9.01	10	88%	90%	2.2%	
Ethylbenzene	10.1	10.3	10	101%	103%	2.0%	
m,p-Xylene	19	19.2	20	95%	96%	1.0%	
Bromoform	9.74	10	10	97%	100%	2.6%	

EnvisionAir
1441 Sadlier Circle West Drive
Indianapolis, IN 46239
Ph: 317-351-0885
Fax: 317-351-0882
www.envision-air.com

Analytical Report

LCS/LCSD	LCS Results (ppbv)	LCSD Results (ppbv)	LCS/D Conc(ppbv)	LCS Rec.	LCSD Rec.	RPD	Flag
Styrene	9.72	9.79	10	97%	98%	0.7%	
1,1,2,2-Tetrachloroethane	9.49	9.57	10	95%	96%	0.8%	
o-Xylene	9.6	9.89	10	96%	99%	3.0%	
4-Ethyltoluene	11.2	11	10	112%	110%	1.8%	
1,3,5-Trimethylbenzene	9.92	10.2	10	99%	102%	2.8%	
1,2,4-Trimethylbenzene	11	11.1	10	110%	111%	0.9%	
1,3-Dichlorobenzene	10.9	11	10	109%	110%	0.9%	
Benzyl Chloride	9.11	9.45	10	91%	95%	3.7%	
1,4-Dichlorobenzene	9.46	8.92	10	95%	89%	5.9%	
1,2-Dichlorobenzene	10.2	10.4	10	102%	104%	1.9%	
1,2,4-Trichlorobenzene	11	10.9	10	110%	109%	0.9%	
Hexachloro-1,3-butadiene	10.5	10.3	10	105%	103%	1.9%	
Naphthalene	10.9	10.6	10	109%	106%	2.8%	
4-bromofluorobenzene (surrogate)	98%	99%					
Analysis Date/Time:	3-17-20/19:38	3-17-20/20:15					
Analyst Initials	tjg	tjg					

EnvisionAir
1441 Sadlier Circle West Drive
Indianapolis, IN 46239
Ph: 317-351-0885
Fax: 317-351-0882
www.envision-air.com

Flag Number	Comments
1	Reporting limit is supported by MDL. TJG
2	RPD is biased high, but recoveries are within control. TJG 3/18/20

CHAIN OF CUSTODY RECORD

EnvisionAir | 1441 Sadlier Circle West Drive | Indianapolis, IN 46239 | Phone: (317) 351-0885 | Fax: (317) 351-0882

Client: SMA	P.O. Number:
Report Address: 8435 Keystone Crossing Suite 190 Indianapolis, IN 46240	Project Name or Number: Franklin
Report To: D. Burgas / S. Hoppel	Sampled by: S. Hoppel
Phone: 317-229-6650	QA/QC Required: (circle if applicable) Level III (Level IV)
Invoice Address:	Reporting Units needed: (circle) ug/m³ mg/m³ PPBV PPMV
Desired TAT: (Please Circle One) 1 day 2 days 3 days (Std (5 bus. days))	Media type: 1LC = 1 Liter Canister, 6LC = 6 Liter Canister, TB = Tedlar Bag, TD = Thermal Desorption Tube

REQUESTED PARAMETERS

TO-15 Full List

TO-15 Short List (Specify in notes)

ENVISIONAIR

Sampling Type:
Soil-Gas: ☐
Sub-Slab: ☐
Indoor-Air: ☐

www.envision-air.com

Canister Pressure / Vacuum

Air Sample ID	Media Type (see code above)	Coll. Date (Grab/Comp Start)	Coll. Time (Grab/Comp Start)	Coll. Date (Comp. End)	Coll. Time (Comp. End)				Canister Serial #	Flow Controller Serial #	Initial Field (in. Hg)	Final Field (in. Hg)	Lab Received (in. Hg)	EnvisionAir Sample Number
IA - 1	6LC	3-13-20	5:49	3-13-20	1343	X			14115	08011	30	9.5	-9.5	20-876
SS - 1			5:48		1344	X			91537	08010	30	7.5	-7.5	20-877
IA - 2			5:56		1347	X			19632	07309	30	8.5	-8.5	20-878
SS - 2			5:55		1348	X			4663	05304	30	8	-8	20-879
IA - 3			6:01		1358	X			91567	04652	29	9	-9	20-880
SS - 3			6:00		1400	X			20674	05300	28	7	-7	20-881
IA - 4			6:07		1403	X			14949	07459	28	11	-11	20-882
~~SS 4~~			6:06		~~8:59~~	X			~~4688~~	~~05248~~	~~8~~	0.5	~~-0.5~~	~~20-883~~
IA - 5			6:11		1405	X			17899	05715	30	10	-10	20-884
SS - 5			6:10		1406	X			4662	04144	30	9	-9	20-885

Comments:

AH 3/16 Sample canceled per client

Relinquished by:	Date	Time	Received by:	Date	Time
Scott Hoppel / SMA	3-13-20	1520	Shaw Hunnicutt	3/13/20	1520

CHAIN OF CUSTODY RECORD

EnvisionAir | 1441 Sadlier Circle West Drive | Indianapolis, IN 46239 | Phone: (317) 351-0885 | Fax: (317) 351-0882

Client: SMA	P.O. Number:
Report Address: 8435 Keystone Crossing Suite 190 Indianapolis, IN 46240	Project Name or Number: Franklin
Report To: P. Burns / S. Hoppel	Sampled by: S. Hoppel
Phone: 317-229-6680	QA/QC Required: (circle if applicable) Level III (Level IV)
Invoice Address:	Reporting Units needed: (circle) ug/m³ mg/m³ PPBV PPMV
Desired TAT: (Please Circle One) 1 day 2 days 3 days (Std (5 bus. days))	Media type: 1LC = 1 Liter Canister; 6LC = 6 Liter Canister; TB = Tedlar Bag; TD = Thermal Desorption Tube

REQUESTED PARAMETERS

TO-15 Full List

TO-15 Short List (Specify in notes)

ENVISIONAIR

Sampling Type:
Soil-Gas: ☐
Sub-Slab: ☐
Indoor-Air: ☐

www.envision-air.com

Canister Pressure / Vacuum

Air Sample ID	Media Type (see code above)	Coll. Date (Grab/Comp Start)	Coll. Time (Grab/Comp Start)	Coll. Date (Comp. End)	Coll. Time (Comp. End)					Canister Serial #	Flow Controller Serial #	Initial Field (in. Hg)	Final Field (in. Hg)	Lab Received (in. Hg)	EnvisionAir Sample Number
IA-6	6LC	3-13-20	6:18	3-13-20	1420	X				91543	07304	30	9.5	-9.5	20-886
SS-6			6:17		1422	X				17898	07749	30	7	-7	20-887
IA-7			6:22		1424	X				16104	07256	30	8	-8	20-888
SS-7			6:21		1426	X				14948	05297	29	8	-8	20-889
IA-8			7:05		1438	X				19624	05249	28	8	-8	20-890
SS-8			7:03		1440	X				4658	03054	29	8	-8	20-891
Ambient			5:40		1340	X				16032	05723	30	8	-8	20-892

Comments:

Relinquished by:	Date	Time	Received by:	Date	Time
Scott Hoppel / SMA	3-13-20	1520	Sean Hunnicutt	3/13/20	1520

2020-192

ENVISIONAIR

TO-15 VOC

- Sequence Log

Injection Log

Directory: C:\HPCHEM\1\DATA\031620C

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	0101001.D	1.	BFB/10PPBV TO-15 ICAL	TO-15 QC	16 Mar 2020 14:23
2	2	0201002.D	1.	0.05PPBV TO-15 ICAL	TO-15 QC	16 Mar 2020 15:03
3	3	0301003.D	1.	0.10PPBV TO-15 ICAL	TO-15 QC	16 Mar 2020 15:49
4	4	0401004.D	1.	0.5PPBV TO-15 ICAL	TO-15 QC	16 Mar 2020 16:31
5	5	0501005.D	1.	1PPBV TO-15 ICAL	TO-15 QC	16 Mar 2020 17:16
6	6	0601006.D	1.	2PPBV TO-15 ICAL	TO-15 QC	16 Mar 2020 17:55
7	7	0701007.D	1.	5PPBV TO-15 ICAL	TO-15 QC	16 Mar 2020 18:37
8	8	0801008.D	1.	10PPBV TO-15 ICAL	TO-15 QC	16 Mar 2020 19:22
9	9	0901009.D	1.	20PPBV TO-15 ICAL	TO-15 QC	16 Mar 2020 20:15
10	10	1001010.D	1.	20PPBV TO-15 ICAL	TO-15 QC	16 Mar 2020 21:07
11	11	1101011.D	1.	BFB/CCV 10PPBV TO-15 ICAL RR	TO-15 QC	16 Mar 2020 21:53
12	12	1201012.D	1.	10PPBV TO-15 ICV/LCS	TO-15 QC	16 Mar 2020 22:39
13	13	1301013.D	1.	CSI-16025	TO-15 QC	16 Mar 2020 23:14
14	14	1401014.D	1.	METHOD BLANK	TO-15 QC	16 Mar 2020 23:50
15	15	1501015.D	1.	CSI-91444	TO-15 QC	17 Mar 2020 00:35
16	16	1601016.D	1.	LCSD-10PPBV	TO-15 QC	17 Mar 2020 01:21
17	17	1701017.D	1.	20-870 OA	TO-15 QC	17 Mar 2020 02:00
18	18	1801018.D	1.	20-892 AA	TO-15 QC	17 Mar 2020 02:40
19	19	1901019.D	1.	20-871	TO-15 QC	17 Mar 2020 03:22
20	20	2001020.D	1.	20-872	TO-15 QC	17 Mar 2020 04:03
21	21	2101021.D	1.	20-873	TO-15 QC	17 Mar 2020 04:46
22	22	2201022.D	1.	20-875 DUP	TO-15 QC	17 Mar 2020 05:28
23	23	2301023.D	1.	20-876	TO-15 QC	17 Mar 2020 06:10
24	24	2401024.D	1.	20-878	TO-15 QC	17 Mar 2020 06:52
25	25	2501025.D	1.	20-902 OA	TO-15 QC	17 Mar 2020 07:31
26	26	2601026.D	1.	20-880	TO-15 QC	17 Mar 2020 08:12
27	27	2701027.D	1.	LCSD-10PPBV	TO-15 QC	17 Mar 2020 08:55
28	28	2801028.D	1.	20-882	TO-15 QC	17 Mar 2020 09:37
29	29	2901029.D	1.	20-884	TO-15 QC	17 Mar 2020 10:19
30	30	3001030.D	1.	20-880 RR CON CLEAN	TO-15 QC	17 Mar 2020 11:22
31	31	3101031.D	1.	PORT CLEANOUT	TO-15 QC	17 Mar 2020 12:05
32	32	3201032.D	1.	20-886	TO-15 QC	17 Mar 2020 12:46
33	33	3301033.D	1.	20-888	TO-15 QC	17 Mar 2020 13:26
34	34	3401034.D	1.	20-890	TO-15 QC	17 Mar 2020 14:08
35	35	3501035.D	1.	20-874:10	TO-15 QC	17 Mar 2020 14:46
36	36	3601036.D	1.	LCSDD-10ppbv	TO-15 QC	17 Mar 2020 15:31
37	37	3701037.D	1.	CSI-83841	TO-15 QC	17 Mar 2020 16:15
38	38	3801038.D	1.	LCSDDD 10ppbv	TO-15 QC	17 Mar 2020 17:00
39	39	3901039.D	1.	BFB/CCV 10ppbv	TO-15 QC	17 Mar 2020 17:43
40	40	4001040.D	1.	CSI-4652	TO-15 QC	17 Mar 2020 18:18
41	41	4101041.D	1.	METHOD BLANK	TO-15 QC	17 Mar 2020 18:53
42	42	4201042.D	1.	LCS-10PPBV	TO-15 QC	17 Mar 2020 19:38
43	43	4301043.D	1.	LCSD-10PPBV	TO-15 QC	17 Mar 2020 20:15
44	44	4401044.D	1.	20-877 SS's BEGIN	TO-15 QC	17 Mar 2020 20:48
45	45	4501045.D	1.	20-879	TO-15 QC	17 Mar 2020 21:23
46	46	4601046.D	1.	20-881	TO-15 QC	17 Mar 2020 21:56
47	47	4701047.D	1.	20-885	TO-15 QC	17 Mar 2020 22:30
48	48	4801048.D	1.	20-887	TO-15 QC	17 Mar 2020 23:04
49	49	4901049.D	1.	20-889	TO-15 QC	17 Mar 2020 23:39
50	50	5001050.D	1.	20-891	TO-15 QC	18 Mar 2020 00:12
51	51	5101051.D	1.	20-905 AMB	TO-15 QC	18 Mar 2020 00:44
52	52	5201052.D	1.	20-893	TO-15 QC	18 Mar 2020 01:18
53	53	5301053.D	1.	20-894	TO-15 QC	18 Mar 2020 01:51
54	54	5401054.D	1.	LCSD-10PPBV	TO-15 QC	18 Mar 2020 02:28

IA's

Injection Log

Directory: C:\HPCHEM\1\DATA\031620C

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
55	55	5501055.D	1.	20-895	TO-15 QC	18 Mar 2020 03:01
56	56	5601056.D	1.	20-896	TO-15 QC	18 Mar 2020 03:34
57	57	5701057.D	1.	20-897	TO-15 QC	18 Mar 2020 04:07
58	58	5801058.D	1.	20-898	TO-15 QC	18 Mar 2020 04:40
59	59	5901059.D	1.	20-899	TO-15 QC	18 Mar 2020 05:14
60	60	6001060.D	1.	20-882 CONFIRMATION	TO-15 QC	18 Mar 2020 05:51
61	61	6101061.D	1.	20-895 CONFIRMATION	TO-15 QC	18 Mar 2020 06:24
62	62	6201001.D	1.	LCSDD-10PPBV	TO-15 QC	18 Mar 2020 07:06
63		6301002.D	1.			

Injection Log

Directory: C:\HPCHEM\1\DATA\031620C

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	0101001.D	1.	BFB/10PPBV TO-15 ICAL	TO-15 QC	16 Mar 2020 14:23
2	2	0201002.D	1.	0.05PPBV TO-15 ICAL	TO-15 QC	16 Mar 2020 15:03
3	3	0301003.D	1.	0.10PPBV TO-15 ICAL	TO-15 QC	16 Mar 2020 15:49
4	4	0401004.D	1.	0.5PPBV TO-15 ICAL	TO-15 QC	16 Mar 2020 16:31
5	5	0501005.D	1.	1PPBV TO-15 ICAL	TO-15 QC	16 Mar 2020 17:16
6	6	0601006.D	1.	2PPBV TO-15 ICAL	TO-15 QC	16 Mar 2020 17:55
7	7	0701007.D	1.	5PPBV TO-15 ICAL	TO-15 QC	16 Mar 2020 18:37
8	8	0801008.D	1.	10PPBV TO-15 ICAL	TO-15 QC	16 Mar 2020 19:22
9	9	0901009.D	1.	20PPBV TO-15 ICAL	TO-15 QC	16 Mar 2020 20:15
10	10	1001010.D	1.	20PPBV TO-15 ICAL	TO-15 QC	16 Mar 2020 21:07
11	11	1101011.D	1.	BFB/CCV 10PPBV TO-15 ICAL RR	TO-15 QC	16 Mar 2020 21:53
12	12	1201012.D	1.	10PPBV TO-15 ICV/LCS	TO-15 QC	16 Mar 2020 22:39
13	13	1301013.D	1.	CSI-16025	TO-15 QC	16 Mar 2020 23:14
14	14	1401014.D	1.	METHOD BLANK	TO-15 QC	16 Mar 2020 23:50
15	15	1501015.D	1.	CSI-91444	TO-15 QC	17 Mar 2020 00:35
16	16	1601016.D	1.	LCSD-10PPBV	TO-15 QC	17 Mar 2020 01:21
17	17	1701017.D	1.	20-870 OA	TO-15 QC	17 Mar 2020 02:00
18	18	1801018.D	1.	20-892 AA	TO-15 QC	17 Mar 2020 02:40
19	19	1901019.D	1.	20-871	TO-15 QC	17 Mar 2020 03:22
20	20	2001020.D	1.	20-872	TO-15 QC	17 Mar 2020 04:03
21	21	2101021.D	1.	20-873	TO-15 QC	17 Mar 2020 04:46
22	22	2201022.D	1.	20-875 DUP	TO-15 QC	17 Mar 2020 05:28
23	23	2301023.D	1.	20-876	TO-15 QC	17 Mar 2020 06:10
24	24	2401024.D	1.	20-878	TO-15 QC	17 Mar 2020 06:52
25	25	2501025.D	1.	20-902 OA	TO-15 QC	17 Mar 2020 07:31
26	26	2601026.D	1.	20-880	TO-15 QC	17 Mar 2020 08:12
27	27	2701027.D	1.	LCSD-10PPBV	TO-15 QC	17 Mar 2020 08:55
28	28	2801028.D	1.	20-882	TO-15 QC	17 Mar 2020 09:37
29	29	2901029.D	1.	20-884	TO-15 QC	17 Mar 2020 10:19
30	30	3001030.D	1.	20-880 RR CON CLEAN	TO-15 QC	17 Mar 2020 11:22
31	31	3101031.D	1.	PORT CLEANOUT	TO-15 QC	17 Mar 2020 12:05
32	32	3201032.D	1.	20-886	TO-15 QC	17 Mar 2020 12:46
33	33	3301033.D	1.	20-888	TO-15 QC	17 Mar 2020 13:26
34	34	3401034.D	1.	20-890	TO-15 QC	17 Mar 2020 14:08
35	35	3501035.D	1.	20-874:10	TO-15 QC	17 Mar 2020 14:46
36	36	3601036.D	1.	LCSDD-10ppbv	TO-15 QC	17 Mar 2020 15:31
37	37	3701037.D	1.	CSI-83841	TO-15 QC	17 Mar 2020 16:15
38	38	3801038.D	1.	LCSDDD 10ppbv	TO-15 QC	17 Mar 2020 17:00
39	39	3901039.D	1.	BFB/CCV 10ppbv	TO-15 QC	17 Mar 2020 17:43
40	40	4001040.D	1.	CSI-4652	TO-15 QC	17 Mar 2020 18:18
41	41	4101041.D	1.	METHOD BLANK	TO-15 QC	17 Mar 2020 18:53
42	42	4201042.D	1.	LCS-10PPBV	TO-15 QC	17 Mar 2020 19:38
43	43	4301043.D	1.	LCSD-10PPBV	TO-15 QC	17 Mar 2020 20:15
44	44	4401044.D	1.	20-877 SS's BEGIN	TO-15 QC	17 Mar 2020 20:48
45	45	4501045.D	1.	20-879	TO-15 QC	17 Mar 2020 21:23
46	46	4601046.D	1.	20-881	TO-15 QC	17 Mar 2020 21:56
47	47	4701047.D	1.	20-885	TO-15 QC	17 Mar 2020 22:30
48	48	4801048.D	1.	20-887	TO-15 QC	17 Mar 2020 23:04
49	49	4901049.D	1.	20-889	TO-15 QC	17 Mar 2020 23:39
50	50	5001050.D	1.	20-891	TO-15 QC	18 Mar 2020 00:12
51	51	5101051.D	1.	20-905 AMB	TO-15 QC	18 Mar 2020 00:44
52	52	5201052.D	1.	20-893	TO-15 QC	18 Mar 2020 01:18
53	53	5301053.D	1.	20-894	TO-15 QC	18 Mar 2020 01:51
54	54	5401054.D	1.	LCSD-10PPBV	TO-15 QC	18 Mar 2020 02:28

SS's

Injection Log

Directory: C:\HPCHEM\1\DATA\031620C

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
55	55	5501055.D	1.	20-895	TO-15 QC	18 Mar 2020 03:01
56	56	5601056.D	1.	20-896	TO-15 QC	18 Mar 2020 03:34
57	57	5701057.D	1.	20-897	TO-15 QC	18 Mar 2020 04:07
58	58	5801058.D	1.	20-898	TO-15 QC	18 Mar 2020 04:40
59	59	5901059.D	1.	20-899	TO-15 QC	18 Mar 2020 05:14
60	60	6001060.D	1.	20-882 CONFIRMATION	TO-15 QC	18 Mar 2020 05:51
61	61	6101061.D	1.	20-895 CONFIRMATION	TO-15 QC	18 Mar 2020 06:24
62	62	6201001.D	1.	LCSDD-10PPBV	TO-15 QC	18 Mar 2020 07:06
63	63	6301002.D	1.	20-899	TO-15 QC	18 Mar 2020 07:38

ENVISIONAIR

TO-15 VOC
Initial Calibration Data

- Tune
- Initial Calibration Summary
- Initial Calibration Quant Reports
- Initial Calibration Verification Summary

Injection Log

Directory: C:\HPCHEM\1\DATA\031620C

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	0101001.D	1.	BFB/10PPBV TO-15 ICAL	TO-15 QC	16 Mar 2020 14:23
2	2	0201002.D	1.	0.05PPBV TO-15 ICAL	TO-15 QC	16 Mar 2020 15:03
3	3	0301003.D	1.	0.10PPBV TO-15 ICAL	TO-15 QC	16 Mar 2020 15:49
4	4	0401004.D	1.	0.5PPBV TO-15 ICAL	TO-15 QC	16 Mar 2020 16:31
5	5	0501005.D	1.	1PPBV TO-15 ICAL	TO-15 QC	16 Mar 2020 17:16
6	6	0601006.D	1.	2PPBV TO-15 ICAL	TO-15 QC	16 Mar 2020 17:55
7	7	0701007.D	1.	5PPBV TO-15 ICAL	TO-15 QC	16 Mar 2020 18:37
8	8	0801008.D	1.	10PPBV TO-15 ICAL	TO-15 QC	16 Mar 2020 19:22
9	9	0901009.D	1.	20PPBV TO-15 ICAL	TO-15 QC	16 Mar 2020 20:15
10	10	1001010.D	1.	20PPBV TO-15 ICAL	TO-15 QC	16 Mar 2020 21:07
11	11	1101011.D	1.	BFB/CCV 10PPBV TO-15 ICAL RR	TO-15 QC	16 Mar 2020 21:53
12	12	1201012.D	1.	10PPBV TO-15 ICV/LCS	TO-15 QC	16 Mar 2020 22:39
13	13	1301013.D	1.	CSI-16025	TO-15 QC	16 Mar 2020 23:14
14	14	1401014.D	1.	METHOD BLANK	TO-15 QC	16 Mar 2020 23:50
15	15	1501015.D	1.	CSI-91444	TO-15 QC	17 Mar 2020 00:35
16	16	1601016.D	1.	LCSD-10PPBV	TO-15 QC	17 Mar 2020 01:21
17	17	1701017.D	1.	20-870 OA	TO-15 QC	17 Mar 2020 02:00
18	18	1801018.D	1.	20-892 AA	TO-15 QC	17 Mar 2020 02:40
19	19	1901019.D	1.	20-871	TO-15 QC	17 Mar 2020 03:22
20	20	2001020.D	1.	20-872	TO-15 QC	17 Mar 2020 04:03
21	21	2101021.D	1.	20-873	TO-15 QC	17 Mar 2020 04:46
22	22	2201022.D	1.	20-875 DUP	TO-15 QC	17 Mar 2020 05:28
23	23	2301023.D	1.	20-876	TO-15 QC	17 Mar 2020 06:10
24	24	2401024.D	1.	20-878	TO-15 QC	17 Mar 2020 06:52
25	25	2501025.D	1.	20-902 OA	TO-15 QC	17 Mar 2020 07:31
26	26	2601026.D	1.	20-880	TO-15 QC	17 Mar 2020 08:12
27	27	2701027.D	1.	LCSD-10PPBV	TO-15 QC	17 Mar 2020 08:55
28	28	2801028.D	1.	20-882	TO-15 QC	17 Mar 2020 09:37
29	29	2901029.D	1.	20-884	TO-15 QC	17 Mar 2020 10:19
30	30	3001030.D	1.	20-880 RR CON CLEAN	TO-15 QC	17 Mar 2020 11:22
31	31	3101031.D	1.	PORT CLEANOUT	TO-15 QC	17 Mar 2020 12:05
32	32	3201032.D	1.	20-886	TO-15 QC	17 Mar 2020 12:46
33	33	3301033.D	1.	20-888	TO-15 QC	17 Mar 2020 13:26
34	34	3401034.D	1.	20-890	TO-15 QC	17 Mar 2020 14:08
35	35	3501035.D	1.	20-874:10	TO-15 QC	17 Mar 2020 14:46
36	36	3601036.D	1.	LCSDD-10ppbv	TO-15 QC	17 Mar 2020 15:31
37	37	3701037.D	1.	CSI-83841	TO-15 QC	17 Mar 2020 16:15
38	38	3801038.D	1.	LCSDDD 10ppbv	TO-15 QC	17 Mar 2020 17:00
39	39	3901039.D	1.	BFB/CCV 10ppbv	TO-15 QC	17 Mar 2020 17:43
40	40	4001040.D	1.	CSI-4652	TO-15 QC	17 Mar 2020 18:18
41	41	4101041.D	1.	METHOD BLANK	TO-15 QC	17 Mar 2020 18:53
42	42	4201042.D	1.	LCS-10PPBV	TO-15 QC	17 Mar 2020 19:38
43	43	4301043.D	1.	LCSD-10PPBV	TO-15 QC	17 Mar 2020 20:15
44	44	4401044.D	1.	20-877 SS's BEGIN	TO-15 QC	17 Mar 2020 20:48
45	45	4501045.D	1.	20-879	TO-15 QC	17 Mar 2020 21:23
46	46	4601046.D	1.	20-881	TO-15 QC	17 Mar 2020 21:56
47	47	4701047.D	1.	20-885	TO-15 QC	17 Mar 2020 22:30
48	48	4801048.D	1.	20-887	TO-15 QC	17 Mar 2020 23:04
49	49	4901049.D	1.	20-889	TO-15 QC	17 Mar 2020 23:39
50	50	5001050.D	1.	20-891	TO-15 QC	18 Mar 2020 00:12
51	51	5101051.D	1.	20-902 OA	TO-15 QC	18 Mar 2020 00:44
52	52	5201052.D	1.	20-893	TO-15 QC	18 Mar 2020 01:18
53	53	5301053.D	1.	20-894	TO-15 QC	18 Mar 2020 01:51
54	54	5401054.D	1.	LCSD-10PPBV	TO-15 QC	18 Mar 2020 02:28

Response Factor Report GC/MS Ins

Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Tue Mar 17 09:49:17 2020
Response via : Initial Calibration

Calibration Files
10 =1101011.D .5 =0401004.D 5 =0701007.D
2 =0601006.D 1 =0501005.D 20 =1001010.D

		Compound	10	.5	5	2	1	20	Avg	%RSD
1)	T	Bromochloromethane (I	ISTD							
2)	T	Propylene	0.757	0.838	0.986	0.873	0.777	0.975	0.886	11.41
3)	T	Dichlorodifluoromet	4.068	4.912	4.921	4.826	4.052	3.758	4.399	10.90
4)	T	Chloromethane	1.896	2.308	2.359	2.324	2.212	2.028	2.161	8.53
5)	T	Vinyl Chloride	1.163	1.051	1.320	1.180	1.013	1.196	1.140	9.39
6)	T	1,3-Butadiene	0.446	0.413	0.436	0.505	0.426	0.531	0.457	9.57
7)	T	Bromomethane	1.102	1.040	1.277	1.230	1.108	1.251	1.199	10.07
8)	T	Chloroethane	0.441	0.380	0.427	0.468	0.419	0.474	0.430	7.84
9)	T	Vinyl Bromide	0.999	0.986	1.145	1.064	0.948	1.210	1.037	10.48
10)	T	Trichlorofluorometh	4.484	5.133	5.637	4.346	4.095	4.900	4.682	12.05
11)	T	Acetone	1.572	2.291	1.635	1.737	1.777	1.829	1.800	12.98
12)		Isopropyl Alcohol (	1.587	1.436	1.584	1.686	1.534	1.785	1.594	7.06
13)		1,1-Dichloroethene	2.617	2.319	2.863	2.782	2.300	2.926	2.592	10.52
14)	T	Methylene Chloride	1.446	1.246	1.528	1.471	1.315	1.670	1.483	11.38
15)	T	Carbon Disulfide	4.217	3.411	4.504	4.341	4.535	4.688	4.261	9.88
16)	T	trans-1,2-Dichloroe	1.387	1.335	1.272	1.386	1.267	1.477	1.349	5.51
17)	T	Methyl-tert-butyl e	3.919	3.771	3.475	4.046	3.691	3.987	3.801	5.21
18)	T	1,1-Dichloroethane	3.568	3.413	4.023	3.525	3.654	3.672	3.588	6.65
19)	T	Vinyl Acetate	4.020	4.511	4.531	5.189	3.720	4.561	4.429	10.44
20)	T	N-Hexane	3.003	3.223	3.425	3.134	2.570	2.928	3.092	9.43
21)	T	2-Butanone (MEK)	3.552	3.673	3.495	3.281	3.215	3.920	3.572	7.55
22)	T	cis-1,2-Dichloroeth	2.406	2.269	2.447	2.278	2.284	2.630	2.425	6.83
23)	T	Ethyl Acetate	6.138	5.554	6.403	6.611	6.939	5.932	6.228	7.40
24)	T	Chloroform	3.330	3.632	3.567	3.357	2.978	3.572	3.391	6.65
25)	T	1,4-Difluorobenzene (	ISTD							
26)	T	Tetrahydrofuran	0.539	0.659	0.501	0.525	0.529	0.541	0.559	10.18
27)	T	1,2-Dichloroethane	0.474	0.455	0.427	0.448	0.514	0.510	0.482	8.98
28)	T	1,1,1-Trichloroetha	0.606	0.741	0.573	0.592	0.585	0.662	0.636	10.11
29)	T	1,1-Dichloropropene	0.779	0.868	0.689	0.638	0.737	0.828	0.754	10.45
30)	T	Carbon Tetrachlorid	0.645	0.669	0.595	0.617	0.635	0.700	0.629	8.12
31)	T	Benzene	1.222	0.947	1.163	1.130	1.136	1.243	1.139	8.45
32)	T	Cyclohexane	0.773	0.649	0.766	0.725	0.645	0.781	0.708	9.79
33)	T	1,2-Dichloropropane	0.523	0.460	0.495	0.502	0.474	0.542	0.504	6.10
34)	T	Trichloroethene	0.439	0.389	0.413	0.438	0.407	0.476	0.423	7.13
35)	T	Bromodichloromethan	0.794	0.918	0.745	0.768	0.746	0.826	0.817	9.27
36)	T	1,4-Dioxane	0.143	0.134	0.122	0.124	0.133	0.126	0.135	11.15
37)	T	Isooctane	2.386	1.931	2.433	2.291	2.212	2.306	2.354	12.70
38)	T	N-Heptane	0.822	0.705	0.794	0.839	0.774	0.911	0.836	11.73
39)	T	cis-1,3-Dichloropro	0.779	0.686	0.689	0.622	0.654	0.778	0.712	9.23
40)	T	4-Methyl-2-Penanone	1.001	0.935	0.934	0.866	0.813	1.028	0.919	8.53
41)	T	trans-1,3-Dichlorop	0.528	0.566	0.440	0.447	0.545	0.499	0.498	9.97
42)	T	1,1,2-Trichloroetha	0.415	0.404	0.385	0.396	0.392	0.434	0.412	6.39
43)	T	Toluene	1.191	1.046	1.108	1.055	1.042	1.198	1.107	5.93
44)	T	2-Hexanone	0.727	0.783	0.794	0.808	0.655	0.822	0.791	11.22
45)	I	Chlorobenzene-d5 (IS)	ISTD							
46)	T	Dibromochloromethan	0.941	1.061	0.860	1.034	0.909	1.025	0.986	8.32
47)	T	1,2-Dibromoethane (	0.811	0.770	0.724	0.810	0.738	0.880	0.781	7.17
48)	T	Tetrachloroethene	0.639	0.633	0.573	0.621	0.612	0.719	0.643	7.99
49)	T	Chlorobenzene	1.124	1.271	1.037	1.207	1.143	1.171	1.171	6.80
50)	T	Ethylbenzene	2.062	1.814	1.904	2.069	1.838	1.832	1.908	5.82
51)	T	m,p-Xylene	0.682	0.639	0.606	0.728	0.582	0.716	0.667	8.74
52)	T	Bromoform	0.726	0.692	0.620	0.633	0.676	0.845	0.729	15.14
53)	T	Styrene	0.910	0.867	0.789	0.791	0.866	0.990	0.885	9.18
54)	T	1,1,2,2-Tetrachloro	1.254	1.425	1.194	1.179	1.444	1.308	1.300	7.97
55)	T	o-Xylene	0.609	0.538	0.556	0.600	0.588	0.648	0.601	7.87
56)	S	4-Bromofluorobenzen	0.539	0.517	0.387	0.559	0.482	0.420	0.478	13.44
57)	T	4-Ethyltoluene	1.562	1.248	1.396	1.366	1.417	1.628	1.441	8.77
58)	T	1,3,5-Trimethylbenz	1.353	1.496	1.189	1.129	1.476	1.437	1.377	11.79
59)	T	1,2,4-Trimethylbenz	1.157	1.082	0.936	1.018	1.201	1.300	1.088	12.98
60)	T	1,3-Dichlorobenzene	0.749	0.678	0.646	0.578	0.673	0.723	0.671	8.24
61)	T	Benzyl Chloride	0.751	0.904	0.755	0.753	0.668	0.826	0.781	9.51
62)	T	1,4-Dichlorobenzene	0.281	0.341	0.269	0.329	0.320	0.360	0.323	11.13
63)	T	1,2-Dichlorobenzene	0.609	0.620	0.572	0.619	0.677	0.763	0.639	9.80
64)	T	1,2,4-Trichlorobenz	0.070	0.080	0.071	0.081	0.073	0.080	0.077	6.24

65)		Naphthalene	0.135	0.167	0.135	0.143	0.163	0.139	0.148	9.32
66)	T	Hexachloro-1,3-buta	0.091	0.097	0.094	0.102	0.107	0.100	0.100	6.69

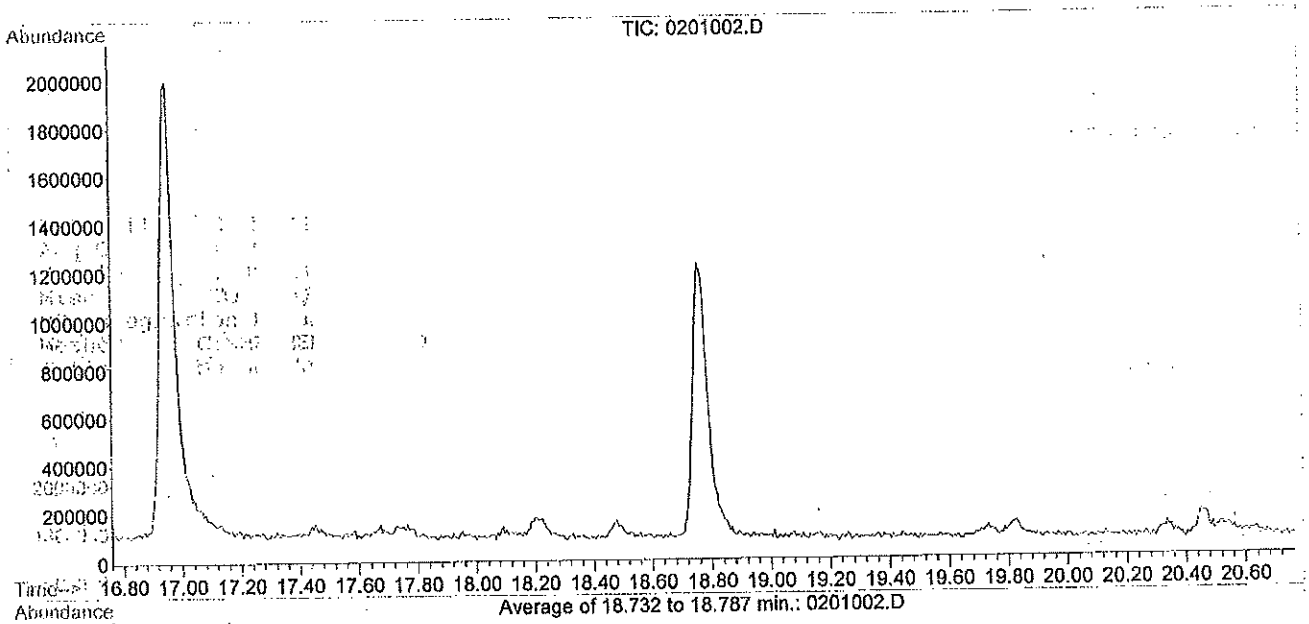
(#) = Out of Range ### Number of calibration levels exceeded format ###

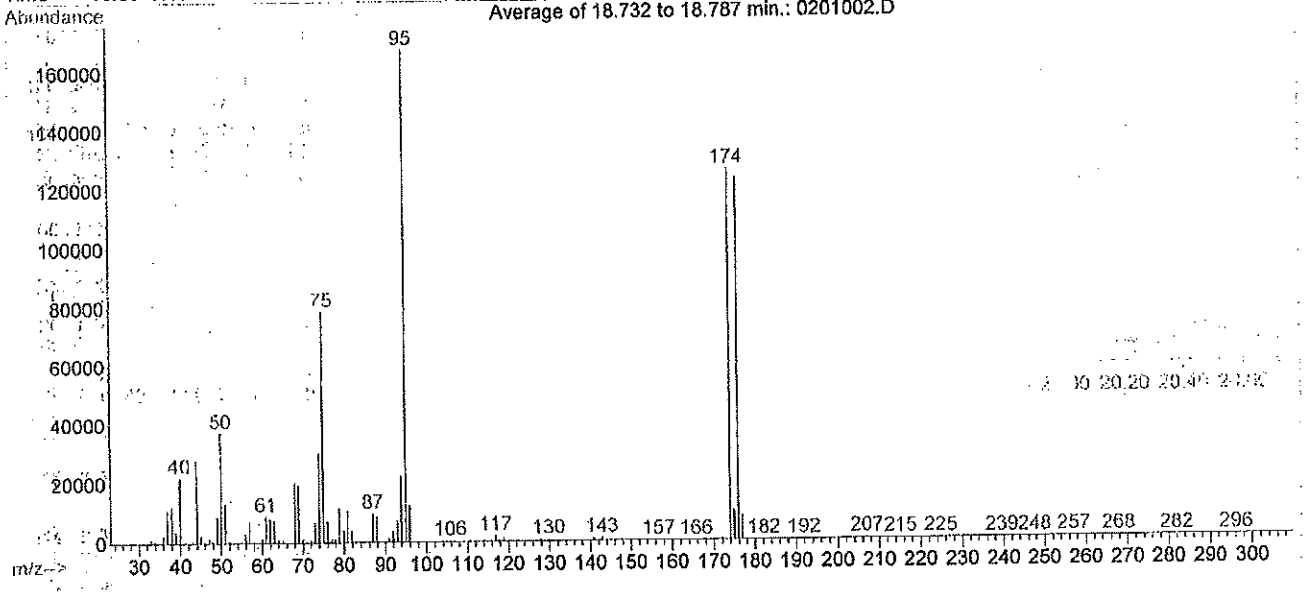
031620AI.M Sun Mar 29 21:41:18 2020

BFB

Data File : C:\HPCHEM\1\DATA\031620C\0201002.D
Acq On : 16 Mar 2020 3:03 pm
Sample : 0.05PPBV TO-15 ICAL
Misc : TO-15 QC
MS Integration Params: rteint.p
Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION

Vial: 2
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00





Spectrum Information: Average of 18.732 to 18.787 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	22.3	37325	PASS
75	95	30	60	46.9	78671	PASS
95	95	100	100	100.0	167636	PASS
96	95	2	9	7.4	12342	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	75.1	125824	PASS
175	174	5	9	7.9	9995	PASS
176	174	95	101	97.7	122946	PASS
177	176	5	9	6.5	7952	PASS

0201002.D 031620AI.M Sun Mar 29 21:41:30 2020

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\031620C\0201002.D
Acq On : 16 Mar 2020 3:03 pm
Sample : 0.05PPBV TO-15 ICAL
Misc : TO-15 QC
MS Integration Params: rteint.p
Quant Time: Mar 16 16:29 2020

Vial: 2
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 031620AI.RES

Quant Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Mon Mar 02 10:20:05 2020
Response via : Initial Calibration
DataAcq Meth : ENV05

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Bromochloromethane (IS)	9.42	128	764309	5.00 ppbv	-0.04
25) 1,4-Difluorobenzene (IS)	11.72	114	3103979	5.00 ppbv	-0.03
45) Chlorobenzene-d5 (IS)	16.95	117	2136266	5.00 ppbv	-0.02
System Monitoring Compounds					
56) 4-Bromofluorobenzene (SURR	18.76	95	788828	4.33 ppbv	-0.03
Spiked Amount 5.000	Range 62 - 145		Recovery = 86.60%		
Target Compounds					Qvalue
2) Propylene	4.07	39	2691	0.04 ppbv #	1
3) Dichlorodifluoromethane	4.16	85	44776	0.07 ppbv	93
4) Chloromethane	4.36	50	2237	0.04 ppbv	
5) Vinyl Chloride	4.59	62	2551	0.05 ppbv	
6) 1,3-Butadiene	4.75	39	3258	0.08 ppbv #	1
7) Bromomethane	5.05	94	3701	0.06 ppbv	
8) Chloroethane	5.26	64	1938	0.07 ppbv #	1
9) Vinyl Bromide	5.64	106	3702	0.06 ppbv #	44
10) Trichlorofluoromethane	6.09	101	46318	0.07 ppbv	86
11) Acetone	5.96	43	2942	0.02 ppbv #	39
12) Isopropyl Alcohol (IPA)	6.24	45	3704m	0.03 ppbv	
13) 1,1-Dichloroethene	6.82	61	17870	0.08 ppbv #	70
14) Methylene Chloride	6.95	84	49150	0.69 ppbv #	76
15) Carbon Disulfide	7.28	76	29396	0.11 ppbv #	100
16) trans-1,2-Dichloroethene	8.02	96	2985	0.02 ppbv #	57
17) Methyl-tert-butyl ether	8.45	73	19509m	0.05 ppbv	
18) 1,1-Dichloroethane	8.27	63	34688	0.13 ppbv #	59
20) N-Hexane	9.51	57	21064	0.13 ppbv #	70
21) 2-Butanone (MEK)	8.73	43	4006	0.02 ppbv #	65
22) cis-1,2-Dichloroethene	9.22	61	9284	0.04 ppbv #	41
23) Ethyl Acetate	9.51	43	18086	0.05 ppbv #	94
24) Chloroform	9.56	83	24157	0.05 ppbv #	82
26) Tetrahydrofuran	10.07	42	1851	0.02 ppbv #	22
27) 1,2-Dichloroethane	10.46	62	4262	0.01 ppbv #	25
28) 1,1,1-Trichloroethane	10.76	97	22343	0.05 ppbv #	57
29) 1,1-Dichloropropene	13.59	75	7299	0.02 ppbv #	54
30) Carbon Tetrachloride	11.47	117	18213	0.03 ppbv #	87
31) Benzene	11.28	78	21253	0.05 ppbv #	79
32) Cyclohexane	11.64	56	9898	0.05 ppbv #	59
33) 1,2-Dichloropropane	12.28	63	14875	0.09 ppbv #	40
34) Trichloroethene	12.56	95	11494	0.05 ppbv #	64
35) Bromodichloromethane	12.50	83	29139	0.06 ppbv #	89
36) 1,4-Dioxane	12.53	88	877	0.01 ppbv #	1
38) N-Heptane	12.94	43	29827	0.13 ppbv #	76
39) cis-1,3-Dichloropropene	13.59	75	7299	0.02 ppbv #	64
41) trans-1,3-Dichloropropene	14.21	75	3408	0.01 ppbv #	15
42) 1,1,2-Trichloroethane	14.44	83	18405	0.09 ppbv #	53
43) Toluene	14.79	91	42693	0.06 ppbv #	92
46) Dibromochloromethane	15.29	129	29900	0.07 ppbv #	80
47) 1,2-Dibromoethane (EDB)	15.68	107	4789	0.02 ppbv	82
48) Tetrachloroethene	16.17	166	17356	0.05 ppbv	
49) Chlorobenzene	17.01	112	37842	0.08 ppbv #	42
50) Ethylbenzene	17.45	91	49682	0.08 ppbv #	90
51) m,p-Xylene	17.64	91	33027	0.14 ppbv	
52) Bromoform	17.75	173	29633	0.07 ppbv #	77
53) Styrene	18.10	104	15781	0.04 ppbv	92
54) 1,1,2,2-Tetrachloroethane	18.19	83	62135	0.14 ppbv #	96
55) o-Xylene	18.22	106	13903	0.06 ppbv #	78
64) 1,2,4-Trichlorobenzene	23.57	180	3683	0.06 ppbv	
65) Naphthalene	23.74	128	5439	0.09 ppbv	

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\031620C\0201002.D
Acq On : 16 Mar 2020 3:03 pm
Sample : 0.05PPBV TO-15 ICAL
Misc : TO-15 QC
MS Integration Params: rteint.p
Quant Time: Mar 16 16:29 2020

Vial: 2
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 031620AI.RES

Quant Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Mon Mar 02 10:20:05 2020
Response via : Initial Calibration
DataAcq Meth : ENV05

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
66) Hexachloro-1,3-butadiene	24.27	225	12841	0.25	ppbv	

(#) = qualifier out of range (m) = manual integration
0201002.D 031620AI.M Sun Mar 29 21:41:33 2020

Quantitation Report

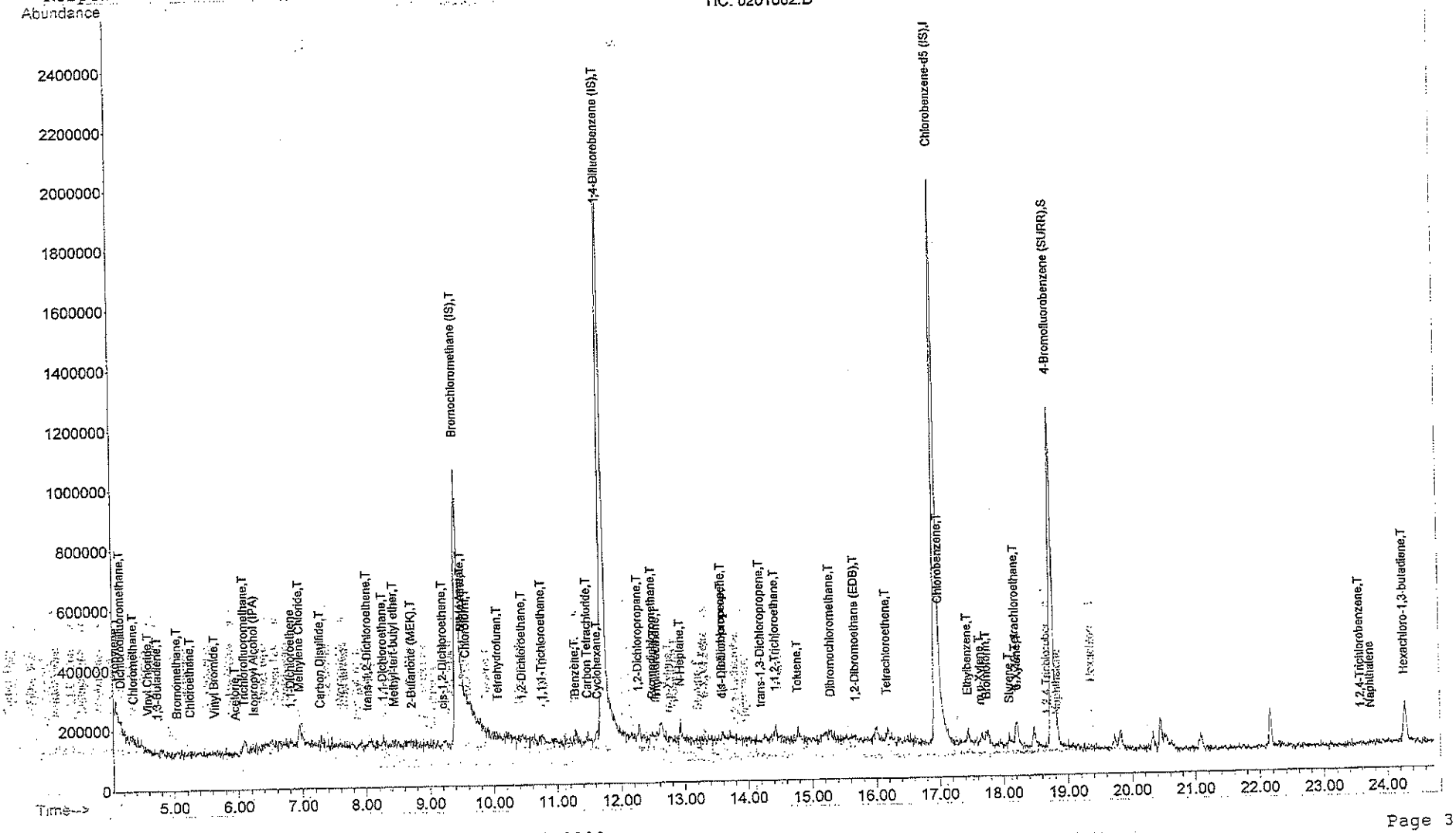
Data File : C:\HPCHEM\1\DATA\031620C\0201002.D
Acq On : 16 Mar 2020 3:03 pm
Sample : 0.05PPBV TO-15 ICAL
Misc : TO-15 QC
MS Integration Params: rteint.p
Quant Time: Mar 16 16:29 2020

Vial: 2
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 031620AI.RES

Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Tue Mar 17 09:49:17 2020
Response via : Initial Calibration

TIC: 0201002.D



0201002.D 031620AI.M Sun Mar 29 21:41:33 2020

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\031620C\0301003.D
Acq On : 16 Mar 2020 3:49 pm
Sample : 0.10PPBV TO-15 ICAL
Misc : TO-15 QC
MS Integration Params: rteint.p
Quant Time: Mar 17 8:47 2020

Vial: 3
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 031620AI.RES

Quant Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Tue Mar 17 08:31:44 2020
Response via : Initial Calibration
DataAcq Meth : ENV05

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Bromochloromethane (IS)	9.44	128	828799	5.00 ppbv	-0.01
25) 1,4-Difluorobenzene (IS)	11.73	114	3236919	5.00 ppbv	0.00
45) Chlorobenzene-d5 (IS)	16.96	117	2294696	5.00 ppbv	0.00
System Monitoring Compounds					
56) 4-Bromofluorobenzene (SURR	18.76	95	1017645	3.39 ppbv	0.00
Spiked Amount 5.000	Range 62 - 145		Recovery = 67.80%		
Target Compounds					Qvalue
2) Propylene	4.07	39	16540	0.12 ppbv	
3) Dichlorodifluoromethane	4.19	85	80550	0.11 ppbv	99
4) Chloromethane	4.37	50	33158	0.11 ppbv	
5) Vinyl Chloride	4.62	62	17525	0.10 ppbv	
6) 1,3-Butadiene	4.79	39	7336	0.10 ppbv	
7) Bromomethane	5.08	94	22958	0.13 ppbv	
8) Chloroethane	5.28	64	6685	0.10 ppbv	
9) Vinyl Bromide	5.65	106	15073	0.10 ppbv	
10) Trichlorofluoromethane	6.12	101	88306	0.11 ppbv	93
11) Acetone	6.11	43	29109	0.10 ppbv	
12) Isopropyl Alcohol (IPA)	6.39	45	25652	0.13 ppbv	
13) 1,1-Dichloroethene	6.83	61	38752	0.10 ppbv	91
14) Methylene Chloride	6.97	84	28219m	0.13 ppbv	
15) Carbon Disulfide	7.33	76	68524	0.13 ppbv #	99
16) trans-1,2-Dichloroethene	8.06	96	14840m	0.08 ppbv	
17) Methyl-tert-butyl ether	8.45	73	31662	0.06 ppbv	
18) 1,1-Dichloroethane	8.28	63	54082	0.11 ppbv #	86
19) Vinyl Acetate	8.47	43	16155	0.04 ppbv	
20) N-Hexane	9.51	57	35724	0.09 ppbv	
21) 2-Butanone (MEK)	8.66	43	34197	0.08 ppbv	
22) cis-1,2-Dichloroethene	9.24	61	27536	0.08 ppbv	97
23) Ethyl Acetate	9.53	43	49890	0.08 ppbv	
24) Chloroform	9.58	83	54769	0.10 ppbv	
26) Tetrahydrofuran	10.18	42	19838	0.08 ppbv	
27) 1,2-Dichloroethane	10.48	62	25557	0.08 ppbv	
28) 1,1,1-Trichloroethane	10.78	97	44795	0.11 ppbv #	84
29) 1,1-Dichloropropene	13.59	75	31866	0.08 ppbv	
30) Carbon Tetrachloride	11.48	117	42141	0.08 ppbv #	91
31) Benzene	11.31	78	65858	0.10 ppbv	
32) Cyclohexane	11.64	56	45005	0.11 ppbv #	87
33) 1,2-Dichloropropane	12.28	63	31683	0.12 ppbv #	85
34) Trichloroethene	12.56	95	25715	0.10 ppbv #	87
35) Bromodichloromethane	12.49	83	59615	0.12 ppbv	
36) 1,4-Dioxane	12.67	88	6728	0.11 ppbv	
37) Isooctane	12.64	57	146046	0.12 ppbv	
38) N-Heptane	12.94	43	49200	0.12 ppbv #	47
39) cis-1,3-Dichloropropene	13.59	75	32311	0.08 ppbv	
40) 4-Methyl-2-Penanone (MIBK)	13.73	43	40083	0.09 ppbv	
41) trans-1,3-Dichloropropene	14.24	75	23028	0.08 ppbv	
42) 1,1,2-Trichloroethane	14.43	83	29734	0.12 ppbv	
43) Toluene	14.78	91	71786	0.10 ppbv #	30
44) 2-Hexanone	15.17	43	40969	0.11 ppbv	
46) Dibromochloromethane	15.29	129	49161	0.11 ppbv	
47) 1,2-Dibromoethane (EDB)	15.62	107	33739	0.10 ppbv #	37
48) Tetrachloroethene	16.18	166	32263	0.10 ppbv #	34
49) Chlorobenzene	17.00	112	57266m	0.11 ppbv	
50) Ethylbenzene	17.45	91	84406	0.10 ppbv #	81
51) m,p-Xylene	17.67	91	65699	0.22 ppbv #	92
52) Bromoform	17.76	173	41938	0.11 ppbv #	92
53) Styrene	18.09	104	37053	0.09 ppbv #	86

(m) = manual integration
(#) = qualifier out of range

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\031620C\0301003.D
Acq On : 16 Mar 2020 3:49 pm
Sample : 0.10PPBV TO-15 ICAL
Misc : TO-15 QC
MS Integration Params: rteint.p
Quant Time: Mar 17 8:47 2020

Vial: 3
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 031620AI.RES

Quant Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Tue Mar 17 08:31:44 2020
Response via : Initial Calibration
DataAcq Meth : ENV05

Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
54) 1,1,2,2-Tetrachloroethane	18.19	83	59560	0.10	ppbv		
55) o-Xylene	18.23	106	30830	0.12	ppbv		98
57) 4-Ethyltoluene	19.73	105	61430	0.10	ppbv	#	90
58) 1,3,5-Trimethylbenzene	19.81	105	71565	0.11	ppbv		
59) 1,2,4-Trimethylbenzene	20.34	105	42123	0.08	ppbv		
60) 1,3-Dichlorobenzene	20.54	146	33830	0.10	ppbv		
61) Benzyl Chloride	20.51	91	27091	0.08	ppbv		
62) 1,4-Dichlorobenzene	20.62	148	16479	0.10	ppbv		
63) 1,2-Dichlorobenzene	21.10	146	28262	0.09	ppbv		
64) 1,2,4-Trichlorobenzene	23.56	180	5310	0.11	ppbv	#	83
65) Naphthalene	23.74	128	7169m	0.10	ppbv		
66) Hexachloro-1,3-butadiene	24.29	225	5227	0.09	ppbv		

(#) = qualifier out of range (m) = manual integration

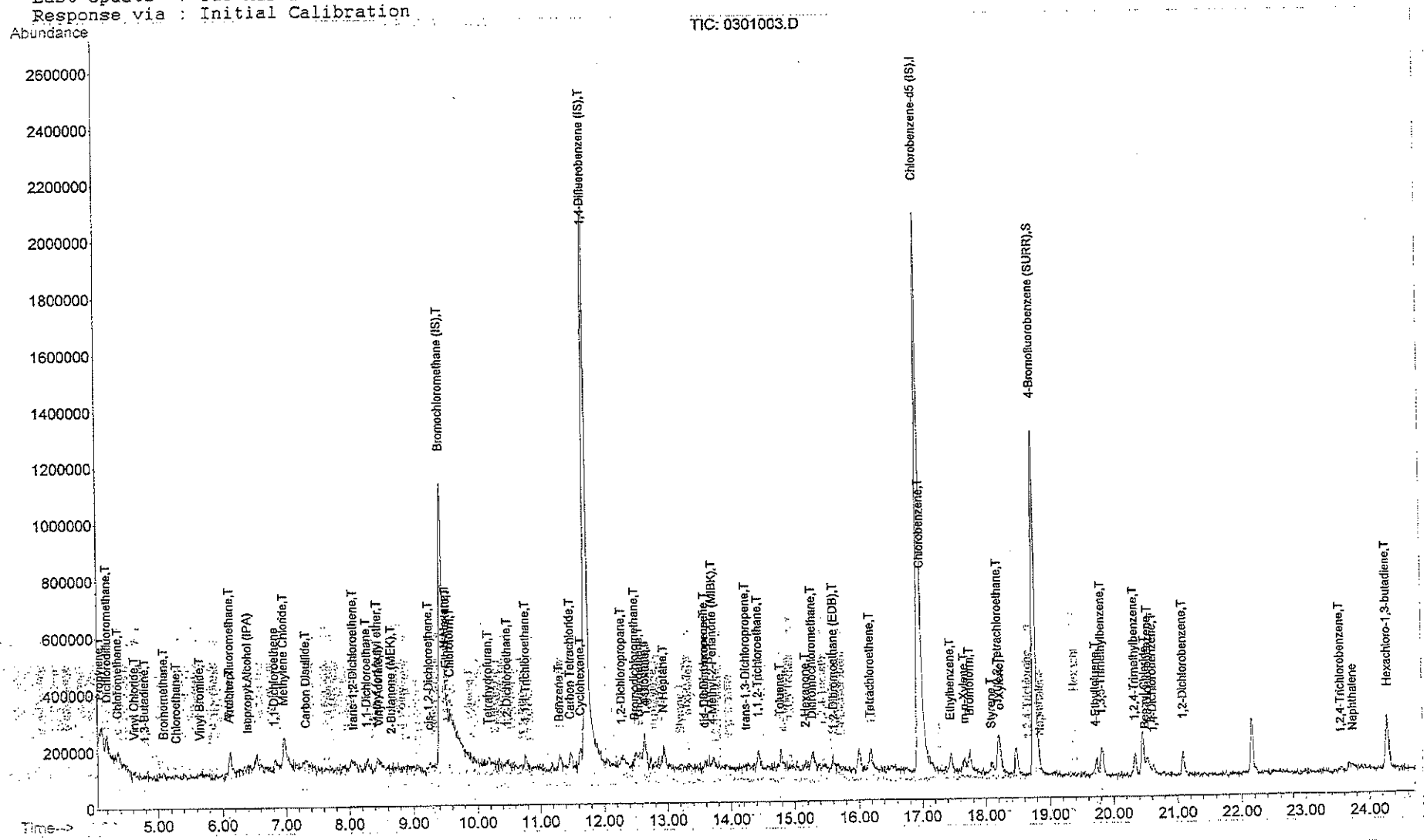
Quantitation Report

Data File : C:\HPCHEM\1\DATA\031620C\0301003.D
Acq On : 16 Mar 2020 3:49 pm
Sample : 0.10PPBV TO-15 ICAL
Misc : TO-15 QC
MS Integration Params: rteint.p
Quant Time: Mar 17 8:47 2020

Vial: 3
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 031620AI.RES

Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Tue Mar 17 09:49:17 2020
Response via : Initial Calibration



0301003.D 031620AI.M Sun Mar 29 21:41:37 2020 Page 3

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\031620C\0401004.D
Acq On : 16 Mar 2020 4:31 pm
Sample : 0.5PPBV TO-15 ICAL
Misc : TO-15 QC
MS Integration Params: rteint.p
Quant Time: Mar 17 9:07 2020

Vial: 4
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 031620AI.RES

Quant Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Tue Mar 17 08:29:05 2020
Response via : Initial Calibration
DataAcq Meth : ENV05

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)	Qvalue
1) Bromochloromethane (IS)	9.43	128	666361	5.00 ppbv	-0.02	
25) 1,4-Difluorobenzene (IS)	11.70	114	2699074	5.00 ppbv	-0.04	
45) Chlorobenzene-d5 (IS)	16.93	117	1598258	5.00 ppbv	-0.03	
System Monitoring Compounds						
56) 4-Bromofluorobenzene (SURR	18.75	95	825913	4.03 ppbv	-0.01	
Spiked Amount 5.000	Range 62 - 145		Recovery = 80.60%			
Target Compounds						
2) Propylene	4.11	39	55870	0.55 ppbv		
3) Dichlorodifluoromethane	4.18	85	327289	0.57 ppbv		
4) Chloromethane	4.39	50	153814	0.77 ppbv		
5) Vinyl Chloride	4.63	62	70007	0.58 ppbv		
6) 1,3-Butadiene	4.77	39	27489	0.54 ppbv		
7) Bromomethane	5.08	94	69281	0.56 ppbv		
8) Chloroethane	5.28	64	25340	0.53 ppbv		
9) Vinyl Bromide	5.67	106	65670	0.58 ppbv #		91
10) Trichlorofluoromethane	6.12	101	412022	0.66 ppbv		97
11) Acetone	6.07	43	152666	0.72 ppbv		
12) Isopropyl Alcohol (IPA)	6.38	45	69791	0.46 ppbv		
13) 1,1-Dichloroethene	6.83	61	154506	0.52 ppbv #		85
14) Methylene Chloride	6.98	84	83053	0.52 ppbv		
15) Carbon Disulfide	7.30	76	227290	0.58 ppbv		
16) trans-1,2-Dichloroethene	8.04	96	68990	0.47 ppbv		
17) Methyl-tert-butyl ether	8.40	73	201316	0.48 ppbv #		83
18) 1,1-Dichloroethane	8.28	63	167485	0.42 ppbv #		72
19) Vinyl Acetate	8.52	43	146627m	0.41 ppbv		
20) N-Hexane	9.51	57	84800	0.27 ppbv		99
21) 2-Butanone (MEK)	8.78	43	14510	0.04 ppbv		98
22) cis-1,2-Dichloroethene	9.25	61	94791	0.35 ppbv		97
23) Ethyl Acetate	9.51	43	50904	0.09 ppbv #		88
24) Chloroform	9.58	83	242006	0.56 ppbv #		60
26) Tetrahydrofuran	10.14	42	100778m	0.54 ppbv		
27) 1,2-Dichloroethane	10.45	62	172972	0.67 ppbv #		62
28) 1,1,1-Trichloroethane	10.74	97	225778	0.71 ppbv		
29) 1,1-Dichloropropene	13.54	75	140890	0.42 ppbv		
30) Carbon Tetrachloride	11.45	117	308465	0.75 ppbv		100
31) Benzene	11.28	78	210094	0.38 ppbv		
32) Cyclohexane	11.61	56	125094	0.39 ppbv		
33) 1,2-Dichloropropane	12.25	63	74369	0.34 ppbv #		47
34) Trichloroethene	12.52	95	105031	0.47 ppbv #		80
35) Bromodichloromethane	12.47	83	247874	0.60 ppbv #		89
36) 1,4-Dioxane	12.57	88	21251	0.41 ppbv		
37) Isooctane	12.60	57	322989	0.31 ppbv #		67
38) N-Heptane	12.89	43	190374	0.55 ppbv		
39) cis-1,3-Dichloropropene	13.54	75	166553	0.50 ppbv		
40) 4-Methyl-2-Pentanone (MIBK)	13.66	43	209479	0.48 ppbv		
41) trans-1,3-Dichloropropene	14.19	75	128653	0.51 ppbv		
42) 1,1,2-Trichloroethane	14.39	83	109129	0.55 ppbv		99
43) Toluene	14.76	91	282375	0.46 ppbv #		89
44) 2-Hexanone	15.14	43	139423m	0.42 ppbv		
46) Dibromochloromethane	15.26	129	169598	0.54 ppbv		96
47) 1,2-Dibromoethane (EDB)	15.58	107	123013	0.52 ppbv #		93
48) Tetrachloroethene	16.15	166	101193	0.45 ppbv		92
49) Chlorobenzene	16.99	112	203063	0.57 ppbv		96
50) Ethylbenzene	17.43	91	289860	0.53 ppbv		98
51) m,p-Xylene	17.65	91	204404	0.97 ppbv		
52) Bromoform	17.74	173	129671	0.46 ppbv		
53) Styrene	18.08	104	138569	0.49 ppbv		

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\031620C\0401004.D
Acq On : 16 Mar 2020 4:31 pm
Sample : 0.5PPBV TO-15 ICAL
Misc : TO-15 QC
MS Integration Params: rteint.p
Quant Time: Mar 17 9:07 2020

Vial: 4
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 031620AI.RES

Quant Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Tue Mar 17 08:29:05 2020
Response via : Initial Calibration
DataAcq Meth : ENV05

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
54) 1,1,2,2-Tetrachloroethane	18.19	83	194862	0.50 ppbv	
55) o-Xylene	18.20	106	85996	0.48 ppbv	98
57) 4-Ethyltoluene	19.71	105	151436	0.33 ppbv #	90
58) 1,3,5-Trimethylbenzene	19.80	105	239132	0.55 ppbv	98
59) 1,2,4-Trimethylbenzene	20.33	105	172887	0.45 ppbv	95
60) 1,3-Dichlorobenzene	20.54	146	98406	0.41 ppbv #	89
61) Benzyl Chloride	20.52	91	104514	0.45 ppbv	
62) 1,4-Dichlorobenzene	20.54	148	54492	0.44 ppbv	83
63) 1,2-Dichlorobenzene	21.07	146	99144	0.43 ppbv	96
64) 1,2,4-Trichlorobenzene	23.56	180	19720	0.58 ppbv #	58
65) Naphthalene	23.75	128	26763	0.56 ppbv	
66) Hexachloro-1,3-butadiene	24.29	225	30702	0.82 ppbv	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

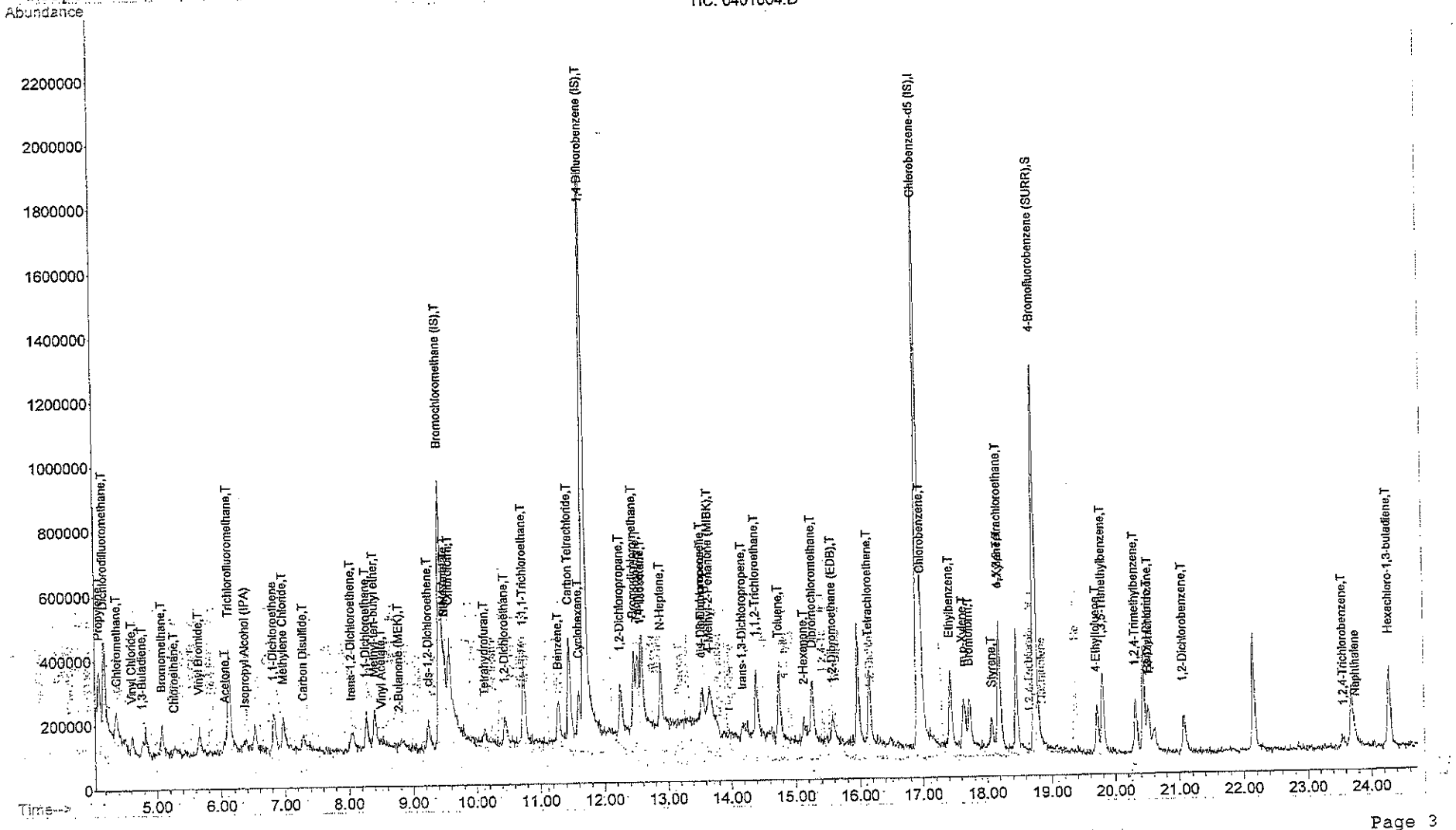
Data File : C:\HPCHEM\1\DATA\031620C\0401004.D
Acq On : 16 Mar 2020 4:31 pm
Sample : 0.5PPBV TO-15 ICAL
Misc : TO-15 QC
MS Integration Params: rteint.p
Quant Time: Mar 17 9:07 2020

Vial: 4
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 031620AI.RES

Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Tue Mar 17 09:49:17 2020
Response via : Initial Calibration

TIC: 0401004.D



0401004.D 031620AI.M Sun Mar 29 21:41:40 2020

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\031620C\0501005.D
Acq On : 16 Mar 2020 5:16 pm
Sample : 1PPBV TO-15 ICAL
Misc : TO-15 QC
MS Integration Params: rteint.p
Quant Time: Mar 17 8:49 2020

Vial: 5
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 031620AI.RES

Quant Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Tue Mar 17 08:27:56 2020
Response via : Initial Calibration
DataAcq Meth : ENV05

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Bromochloromethane (IS)	9.42	128	746236	5.00 ppbv	-0.03
25) 1,4-Difluorobenzene (IS)	11.72	114	3015115	5.00 ppbv	-0.02
45) Chlorobenzene-d5 (IS)	16.96	117	2079678	5.00 ppbv	0.00
System Monitoring Compounds					
56) 4-Bromofluorobenzene (SURR	18.76	95	801943	4.21 ppbv	0.00
Spiked Amount 5.000	Range 62 - 145		Recovery = 84.20%		
Target Compounds					Qvalue
2) Propylene	4.07	39	115942	1.03 ppbv #	83
3) Dichlorodifluoromethane	4.15	85	604737	0.94 ppbv	100
4) Chloromethane	4.32	50	330162m	1.56 ppbv	
5) Vinyl Chloride	4.58	62	151144	1.17 ppbv	
6) 1,3-Butadiene	4.74	39	63602	1.14 ppbv	97
7) Bromomethane	5.04	94	165298	1.22 ppbv	91
8) Chloroethane	5.23	64	62509	1.20 ppbv #	73
9) Vinyl Bromide	5.61	106	141441	1.14 ppbv	94
10) Trichlorofluoromethane	6.09	101	747576	1.08 ppbv	96
11) Acetone	5.99	43	265216	1.15 ppbv #	82
12) Isopropyl Alcohol (IPA)	6.31	45	188964	1.13 ppbv #	91
13) 1,1-Dichloroethene	6.81	61	343304	1.03 ppbv	
14) Methylene Chloride	6.93	84	196269	1.20 ppbv	
15) Carbon Disulfide	7.27	76	676789	1.36 ppbv	
16) trans-1,2-Dichloroethene	8.02	96	189053	1.12 ppbv	
17) Methyl-tert-butyl ether	8.38	73	420932	0.87 ppbv	
18) 1,1-Dichloroethane	8.25	63	514579	1.18 ppbv #	91
19) Vinyl Acetate	8.49	43	455231	1.01 ppbv	
20) N-Hexane	9.50	57	383494	1.10 ppbv	94
21) 2-Butanone (MEK)	8.78	43	519882	1.23 ppbv	
22) cis-1,2-Dichloroethene	9.23	61	280905	0.91 ppbv	
23) Ethyl Acetate	9.55	43	735666	1.06 ppbv	
24) Chloroform	9.57	83	444411	0.90 ppbv	98
26) Tetrahydrofuran	10.10	42	211113	0.93 ppbv	
27) 1,2-Dichloroethane	10.45	62	309811	1.04 ppbv	
28) 1,1,1-Trichloroethane	10.75	97	331705	0.92 ppbv	95
29) 1,1-Dichloropropene	13.60	75	368258	0.95 ppbv	
30) Carbon Tetrachloride	11.48	117	382749	0.80 ppbv	
31) Benzene	11.30	78	685335	1.14 ppbv #	93
32) Cyclohexane	11.63	56	367728	1.04 ppbv #	55
33) 1,2-Dichloropropane	12.28	63	285685	1.18 ppbv #	95
34) Trichloroethene	12.56	95	245363m	0.99 ppbv	
35) Bromodichloromethane	12.49	83	449907	0.96 ppbv	96
36) 1,4-Dioxane	12.61	88	69318	1.05 ppbv	
37) Isooctane	12.63	57	1104348	1.01 ppbv	
38) N-Heptane	12.93	43	466993	1.25 ppbv	93
39) cis-1,3-Dichloropropene	13.60	75	338493	0.88 ppbv	
40) 4-Methyl-2-Pentanone (MIBK)	13.67	43	460067	0.94 ppbv #	89
41) trans-1,3-Dichloropropene	14.23	75	232551	0.81 ppbv	
42) 1,1,2-Trichloroethane	14.44	83	236563	1.07 ppbv	97
43) Toluene	14.80	91	628566	0.91 ppbv	96
44) 2-Hexanone	15.14	43	368910m	0.96 ppbv	
46) Dibromochloromethane	15.29	129	378218	0.91 ppbv	98
47) 1,2-Dibromoethane (EDB)	15.61	107	306872	0.99 ppbv #	85
48) Tetrachloroethene	16.18	166	254516	0.84 ppbv	
49) Chlorobenzene	17.01	112	475229	1.03 ppbv	98
50) Ethylbenzene	17.46	91	764430	1.09 ppbv	97
51) m,p-Xylene	17.67	91	484121	1.99 ppbv	97
52) Bromoform	17.75	173	281111	0.75 ppbv #	96
53) Styrene	18.09	104	277396	0.73 ppbv	95

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\031620C\0501005.D
Acq On : 16 Mar 2020 5:16 pm
Sample : 1PPBV TO-15 ICAL
Misc : TO-15 QC
MS Integration Params: rteint.p
Quant Time: Mar 17 8:49 2020

Vial: 5
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 031620AI.RES

Quant Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Tue Mar 17 08:27:56 2020
Response via : Initial Calibration
DataAcq Meth : ENV05

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
54) 1,1,2,2-Tetrachloroethane	18.19	83	600684	1.22 ppbv	99
55) o-Xylene	18.22	106	244595	1.06 ppbv	95
57) 4-Ethyltoluene	19.73	105	531500	0.88 ppbv	97
58) 1,3,5-Trimethylbenzene	19.81	105	614003	1.09 ppbv	98
59) 1,2,4-Trimethylbenzene	20.34	105	499732	1.00 ppbv	99
60) 1,3-Dichlorobenzene	20.55	146	279866	0.88 ppbv	97
61) Benzyl Chloride	20.52	91	220877	0.70 ppbv	
62) 1,4-Dichlorobenzene	20.54	148	182080	1.16 ppbv	97
63) 1,2-Dichlorobenzene	21.09	146	281529	0.94 ppbv	98
64) 1,2,4-Trichlorobenzene	23.57	180	43213	0.97 ppbv	
65) Naphthalene	23.76	128	67955	1.12 ppbv	
66) Hexachloro-1,3-butadiene	24.29	225	105638	2.61 ppbv	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

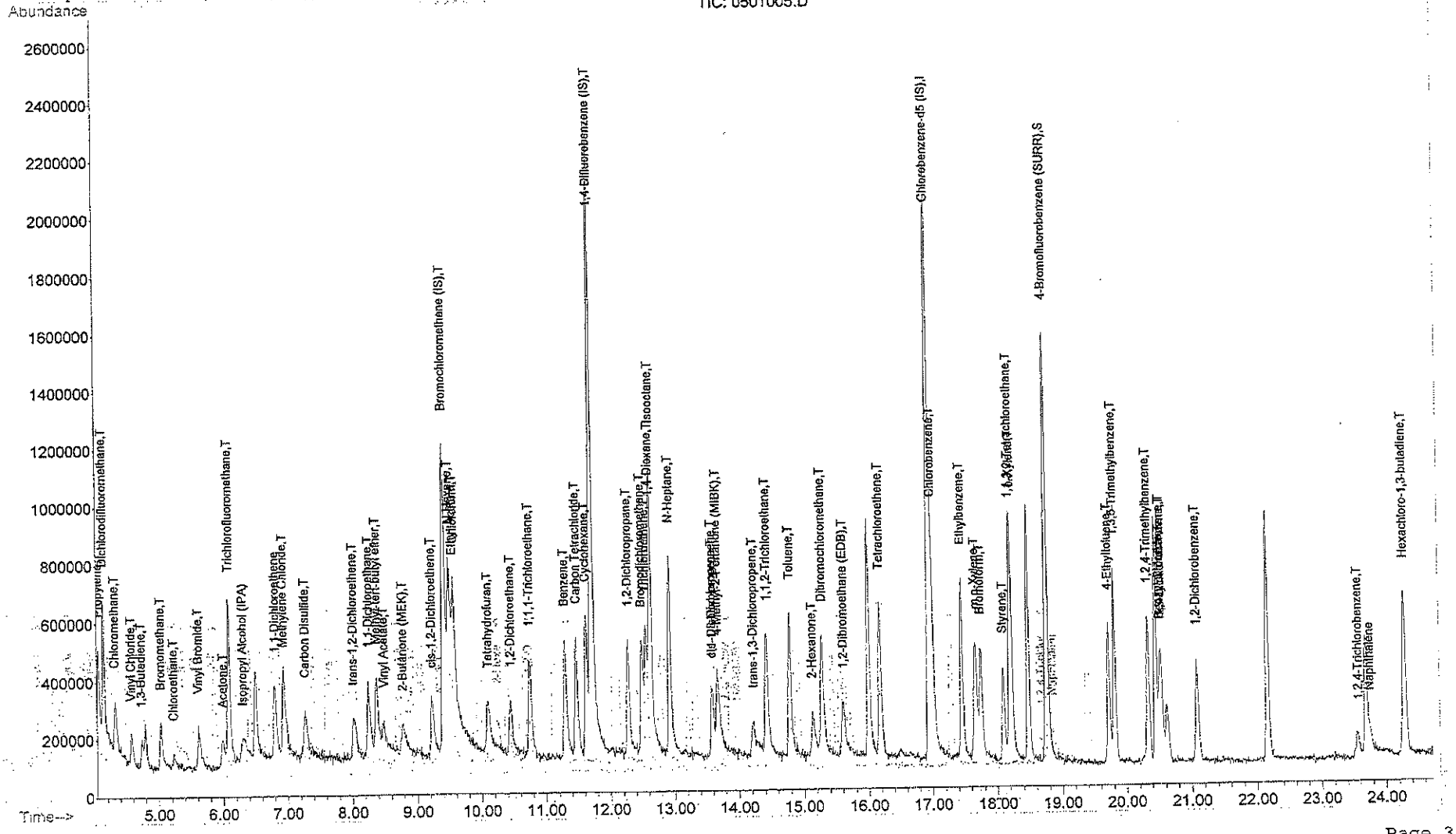
Data File : C:\HPCHEM\1\DATA\031620C\0501005.D
Acq On : 16 Mar 2020 5:16 pm
Sample : 1PPBV TO-15 ICAL
Misc : TO-15 QC
MS Integration Params: rteint.p
Quant Time: Mar 17 8:49 2020

Vial: 5
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 031620AI.RES

Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Tue Mar 17 09:49:17 2020
Response via : Initial Calibration

TIC: 0501005.D



0501005.D 031620AI.M Sun Mar 29 21:41:44 2020

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\031620C\0601006.D
Acq On : 16 Mar 2020 5:55 pm
Sample : 2PPBV TO-15 ICAL
Misc : TO-15 QC
MS Integration Params: rteint.p
Quant Time: Mar 17 8:44 2020

Vial: 6
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 031620AI.RES

Quant Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Tue Mar 17 08:42:10 2020
Response via : Initial Calibration
DataAcq Meth : ENV05

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Bromochloromethane (IS)	9.45	128	710007	5.00 ppbv	0.00
25) 1,4-Difluorobenzene (IS)	11.74	114	3130962	5.00 ppbv	0.00
45) Chlorobenzene-d5 (IS)	16.96	117	1850577	5.00 ppbv	0.00
System Monitoring Compounds					
56) 4-Bromofluorobenzene (SURR	18.76	95	1234920	4.78 ppbv	0.00
Spiked Amount 5.000	Range 62 - 145		Recovery = 95.60%		
Target Compounds					Qvalue
2) Propylene	4.10	39	247868	1.98 ppbv	
3) Dichlorodifluoromethane	4.19	85	1370574	2.00 ppbv	
4) Chloromethane	4.37	50	660038	1.98 ppbv	99
5) Vinyl Chloride	4.63	62	334997	2.03 ppbv	97
6) 1,3-Butadiene	4.78	39	143503	2.08 ppbv	
7) Bromomethane	5.08	94	349441	1.92 ppbv #	96
8) Chloroethane	5.28	64	132841	2.04 ppbv	95
9) Vinyl Bromide	5.66	106	302208	1.99 ppbv	97
10) Trichlorofluoromethane	6.13	101	1557300	2.01 ppbv	99
11) Acetone	6.01	43	493299	1.89 ppbv	
12) Isopropyl Alcohol (IPA)	6.32	45	438899m	1.89 ppbv	
13) 1,1-Dichloroethene	6.84	61	790174	2.08 ppbv	93
14) Methylene Chloride	6.97	84	417703	1.92 ppbv	96
15) Carbon Disulfide	7.32	76	1232951	2.01 ppbv #	15
16) trans-1,2-Dichloroethene	8.06	96	393555	2.09 ppbv	
17) Methyl-tert-butyl ether	8.40	73	949864	1.87 ppbv	
18) 1,1-Dichloroethane	8.29	63	1001034	1.99 ppbv #	96
19) Vinyl Acetate	8.49	43	873553	2.14 ppbv	
20) N-Hexane	9.53	57	890004	2.30 ppbv	98
21) 2-Butanone (MEK)	8.78	43	931868	2.26 ppbv #	87
22) cis-1,2-Dichloroethene	9.26	61	577158m	1.92 ppbv	
23) Ethyl Acetate	9.55	43	1477632	2.17 ppbv #	82
24) Chloroform	9.59	83	953265	1.92 ppbv	98
26) Tetrahydrofuran	10.11	42	517500	1.87 ppbv	91
27) 1,2-Dichloroethane	10.47	62	560669	1.88 ppbv	
28) 1,1,1-Trichloroethane	10.77	97	741427	1.84 ppbv	99
29) 1,1-Dichloropropene	13.60	75	799640	2.00 ppbv	
30) Carbon Tetrachloride	11.50	117	773117	1.73 ppbv	98
31) Benzene	11.32	78	1415508	2.08 ppbv	98
32) Cyclohexane	11.65	56	908006	2.11 ppbv	98
33) 1,2-Dichloropropane	12.29	63	628587	2.13 ppbv	99
34) Trichloroethene	12.57	95	548631	2.10 ppbv	
35) Bromodichloromethane	12.50	83	961222	1.88 ppbv	95
36) 1,4-Dioxane	12.58	88	130177	1.86 ppbv #	75
37) Isooctane	12.64	57	2869759	2.25 ppbv	
38) N-Heptane	12.95	43	1050902	2.27 ppbv	89
39) cis-1,3-Dichloropropene	13.60	75	778483	2.00 ppbv	
40) 4-Methyl-2-Pentanone (MIBK)	13.67	43	1084782	2.32 ppbv #	91
41) trans-1,3-Dichloropropene	14.23	75	468772	1.88 ppbv	
42) 1,1,2-Trichloroethane	14.43	83	495435	1.92 ppbv	97
43) Toluene	14.80	91	1321521	1.91 ppbv	97
44) 2-Hexanone	15.13	43	682931	1.69 ppbv #	84
46) Dibromochloromethane	15.30	129	765436	2.15 ppbv	98
47) 1,2-Dibromoethane (EDB)	15.61	107	599232	2.12 ppbv #	91
48) Tetrachloroethene	16.20	166	460032	1.95 ppbv	
49) Chlorobenzene	17.01	112	893091	2.11 ppbv	99
50) Ethylbenzene	17.46	91	1531221	2.22 ppbv	99
51) m,p-Xylene	17.67	91	1078363	4.02 ppbv	
52) Bromoform	17.75	173	468247	1.77 ppbv #	98
53) Styrene	18.10	104	534676	1.79 ppbv	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\031620C\0601006.D
Acq On : 16 Mar 2020 5:55 pm
Sample : 2PPBV TO-15 ICAL
Misc : TO-15 QC
MS Integration Params: rteint.p
Quant Time: Mar 17 8:44 2020

Vial: 6
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 031620AI.RES

Quant Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Tue Mar 17 08:42:10 2020
Response via : Initial Calibration
DataAcq Meth : ENV05

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
54) 1,1,2,2-Tetrachloroethane	18.20	83	873090	1.85 ppbv	98
55) o-Xylene	18.23	106	444098	2.04 ppbv	97
57) 4-Ethyltoluene	19.73	105	792394	1.62 ppbv	97
58) 1,3,5-Trimethylbenzene	19.82	105	835576	1.67 ppbv	97
59) 1,2,4-Trimethylbenzene	20.33	105	753769	1.90 ppbv	
60) 1,3-Dichlorobenzene	20.55	146	427557	1.70 ppbv	
61) Benzyl Chloride	20.52	91	417124	1.74 ppbv	
62) 1,4-Dichlorobenzene	20.55	148	163687	1.35 ppbv	
63) 1,2-Dichlorobenzene	21.09	146	457937m	2.00 ppbv	
64) 1,2,4-Trichlorobenzene	23.56	180	69781	2.03 ppbv	
65) Naphthalene	23.75	128	105569m	1.92 ppbv	
66) Hexachloro-1,3-butadiene	24.29	225	75833	1.59 ppbv	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

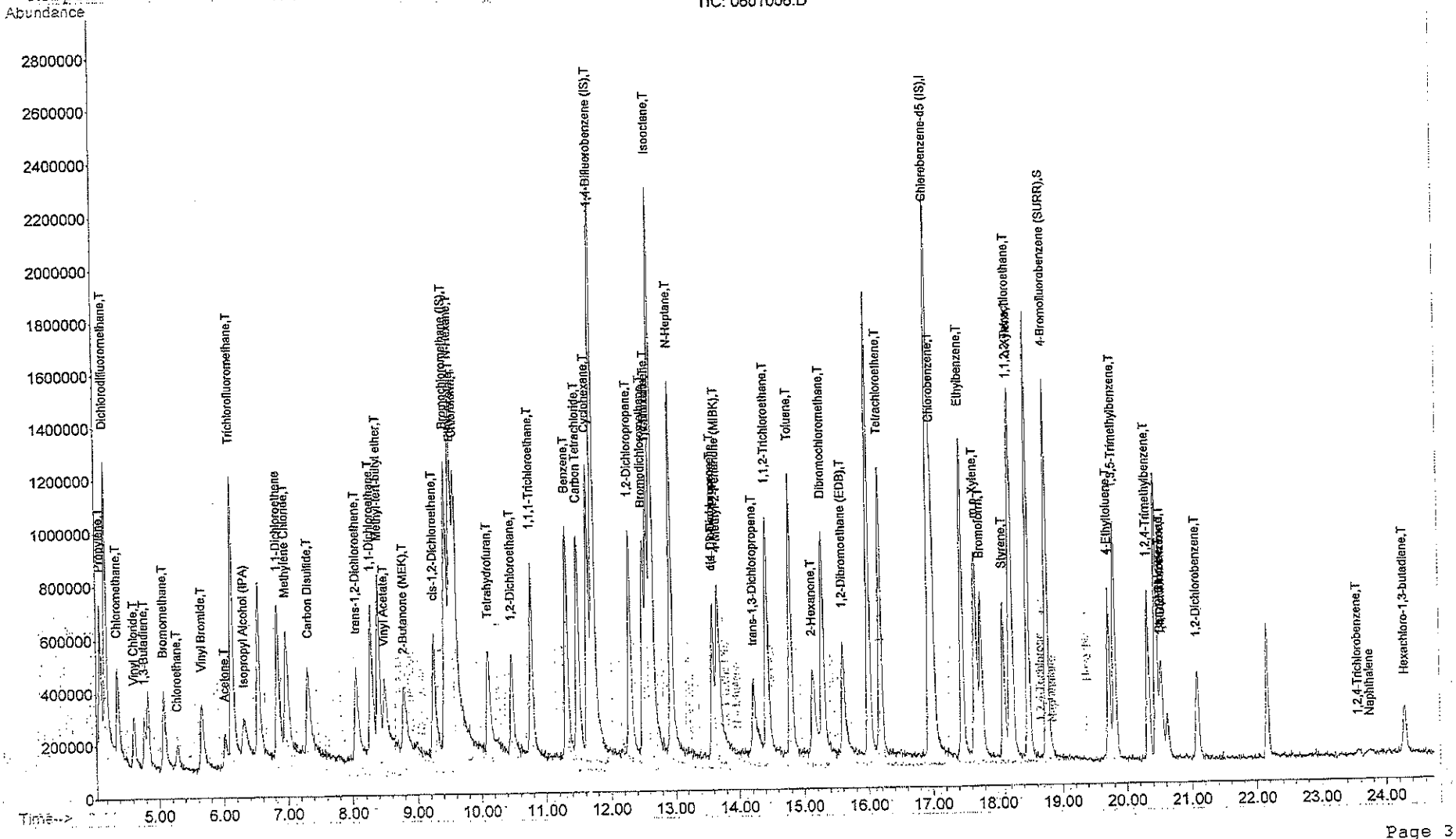
Data File : C:\HPCHEM\1\DATA\031620C\0601006.D
Acq On : 16 Mar 2020 5:55 pm
Sample : 2PPBV TO-15 ICAL
Misc : TO-15 QC
MS Integration Params: rteint.p
Quant Time: Mar 17 8:44 2020

Vial: 6
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 031620AI.RES

Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Tue Mar 17 09:49:17 2020
Response via : Initial Calibration

TIC: 0601006.D



0601006.D 031620AI.M. Sun Mar 29 21:41:55 2020

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\031620C\0701007.D
Acq On : 16 Mar 2020 6:37 pm
Sample : 5PPBV TO-15 ICAL
Misc : TO-15 QC
MS Integration Params: rteint.p
Quant Time: Mar 17 9:54 2020

Vial: 7
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 031620AI.RES

Quant Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Tue Mar 17 09:49:17 2020
Response via : Initial Calibration
DataAcq Meth : ENV05

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane (IS)	9.45	128	836060	5.00	ppbv	0.00
25) 1,4-Difluorobenzene (IS)	11.74	114	3593242	5.00	ppbv	0.00
45) Chlorobenzene-d5 (IS)	16.96	117	2625557	5.00	ppbv	0.00
System Monitoring Compounds						
56) 4-Bromofluorobenzene (SURR	18.77	95	1170257	4.66	ppbv	0.00
Spiked Amount 5.000	Range 62 - 145		Recovery = 93.20%			
Target Compounds						Qvalue
2) Propylene	4.09	39	743258	5.01	ppbv	93
3) Dichlorodifluoromethane	4.17	85	4108901	5.59	ppbv	98
4) Chloromethane	4.36	50	1777705	4.92	ppbv	96
5) Vinyl Chloride	4.61	62	994969	5.22	ppbv	97
6) 1,3-Butadiene	4.77	39	328894	4.30	ppbv	90
7) Bromomethane	5.07	94	962095	4.80	ppbv	99
8) Chloroethane	5.28	64	322114	4.48	ppbv	95
9) Vinyl Bromide	5.66	106	863009	4.98	ppbv	97
10) Trichlorofluoromethane	6.13	101	4248478	5.43	ppbv	100
11) Acetone	6.00	43	1232354	4.10	ppbv #	95
12) Isopropyl Alcohol (IPA)	6.30	45	1293429	4.85	ppbv #	54
13) 1,1-Dichloroethene	6.85	61	2157826	4.98	ppbv	97
14) Methylene Chloride	6.98	84	1151952	4.65	ppbv	89
15) Carbon Disulfide	7.32	76	3394405	4.76	ppbv	97
16) trans-1,2-Dichloroethene	8.05	96	958274	4.25	ppbv	96
17) Methyl-tert-butyl ether	8.39	73	2618873	4.12	ppbv	99
18) 1,1-Dichloroethane	8.29	63	3031854	5.05	ppbv #	96
19) Vinyl Acetate	8.50	43	3349581m	4.52	ppbv	
20) N-Hexane	9.53	57	2580932	4.99	ppbv	99
21) 2-Butanone (MEK)	8.78	43	2633937	4.41	ppbv	98
22) cis-1,2-Dichloroethene	9.26	61	1844121	4.55	ppbv	97
23) Ethyl Acetate	9.54	43	4825710	4.63	ppbv	98
24) Chloroform	9.60	83	2688112	4.74	ppbv	96
26) Tetrahydrofuran	10.10	42	1799835	4.48	ppbv	95
27) 1,2-Dichloroethane	10.48	62	1534158	4.43	ppbv	94
28) 1,1,1-Trichloroethane	10.79	97	2060437	4.50	ppbv	97
29) 1,1-Dichloropropene	13.60	75	2474909	4.57	ppbv	98
30) Carbon Tetrachloride	11.50	117	2137498	4.73	ppbv	99
31) Benzene	11.33	78	4178091	5.11	ppbv	99
32) Cyclohexane	11.65	56	2752198	5.41	ppbv	95
33) 1,2-Dichloropropane	12.30	63	1778064	4.91	ppbv	98
34) Trichloroethene	12.57	95	1483057	4.88	ppbv	97
35) Bromodichloromethane	12.51	83	2675176	4.56	ppbv	98
36) 1,4-Dioxane	12.58	88	438700	4.51	ppbv	98
37) Isooctane	12.65	57	8740711	5.17	ppbv	99
38) N-Heptane	12.95	43	3031049	5.04	ppbv	93
39) cis-1,3-Dichloropropene	13.60	75	2474909	4.84	ppbv	97
40) 4-Methyl-2-Penanone (MIBK)	13.66	43	3355777	5.08	ppbv	97
41) trans-1,3-Dichloropropene	14.22	75	1580798	4.41	ppbv	99
42) 1,1,2-Trichloroethane	14.43	83	1383424	4.67	ppbv	98
43) Toluene	14.80	91	3981990	5.00	ppbv	99
44) 2-Hexanone	15.12	43	2372536	4.18	ppbv	92
46) Dibromochloromethane	15.30	129	2259152	4.36	ppbv	99
47) 1,2-Dibromoethane (EDB)	15.61	107	1900705	4.63	ppbv #	97
48) Tetrachloroethene	16.19	166	1505187	4.46	ppbv	98
49) Chlorobenzene	17.02	112	2722038	4.43	ppbv	99
50) Ethylbenzene	17.46	91	4998355	4.99	ppbv	99
51) m,p-Xylene	17.67	91	3183577	9.09	ppbv	98
52) Bromoform	17.76	173	1626606	4.25	ppbv #	99
53) Styrene	18.09	104	2071485	4.46	ppbv	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\031620C\0701007.D
Acq On : 16 Mar 2020 6:37 pm
Sample : 5PPBV TO-15 ICAL
Misc : TO-15 QC
MS Integration Params: rteint.p
Quant Time: Mar 17 9:54 2020

Vial: 7
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 031620AI.RES

Quant Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Tue Mar 17 09:49:17 2020
Response via : Initial Calibration
DataAcq Meth : ENV05

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
54) 1,1,2,2-Tetrachloroethane	18.20	83	3135303	4.59 ppbv	98
55) o-Xylene	18.23	106	1459353	4.62 ppbv	97
57) 4-Ethyltoluene	19.73	105	3398294	4.49 ppbv	99
58) 1,3,5-Trimethylbenzene	19.82	105	3123082	4.32 ppbv	99
59) 1,2,4-Trimethylbenzene	20.34	105	2458541	4.31 ppbv	99
60) 1,3-Dichlorobenzene	20.54	146	1778264	5.04 ppbv	
61) Benzyl Chloride	20.51	91	1870509	4.56 ppbv	
62) 1,4-Dichlorobenzene	20.62	148	686380	4.05 ppbv	
63) 1,2-Dichlorobenzene	21.09	146	1594708	4.75 ppbv	
64) 1,2,4-Trichlorobenzene	23.56	180	202923	5.05 ppbv	
65) Naphthalene	23.74	128	379773	4.88 ppbv	
66) Hexachloro-1,3-butadiene	24.29	225	187227	3.56 ppbv #	93

(#) = qualifier out of range (m) = manual integration

Quantitation Report

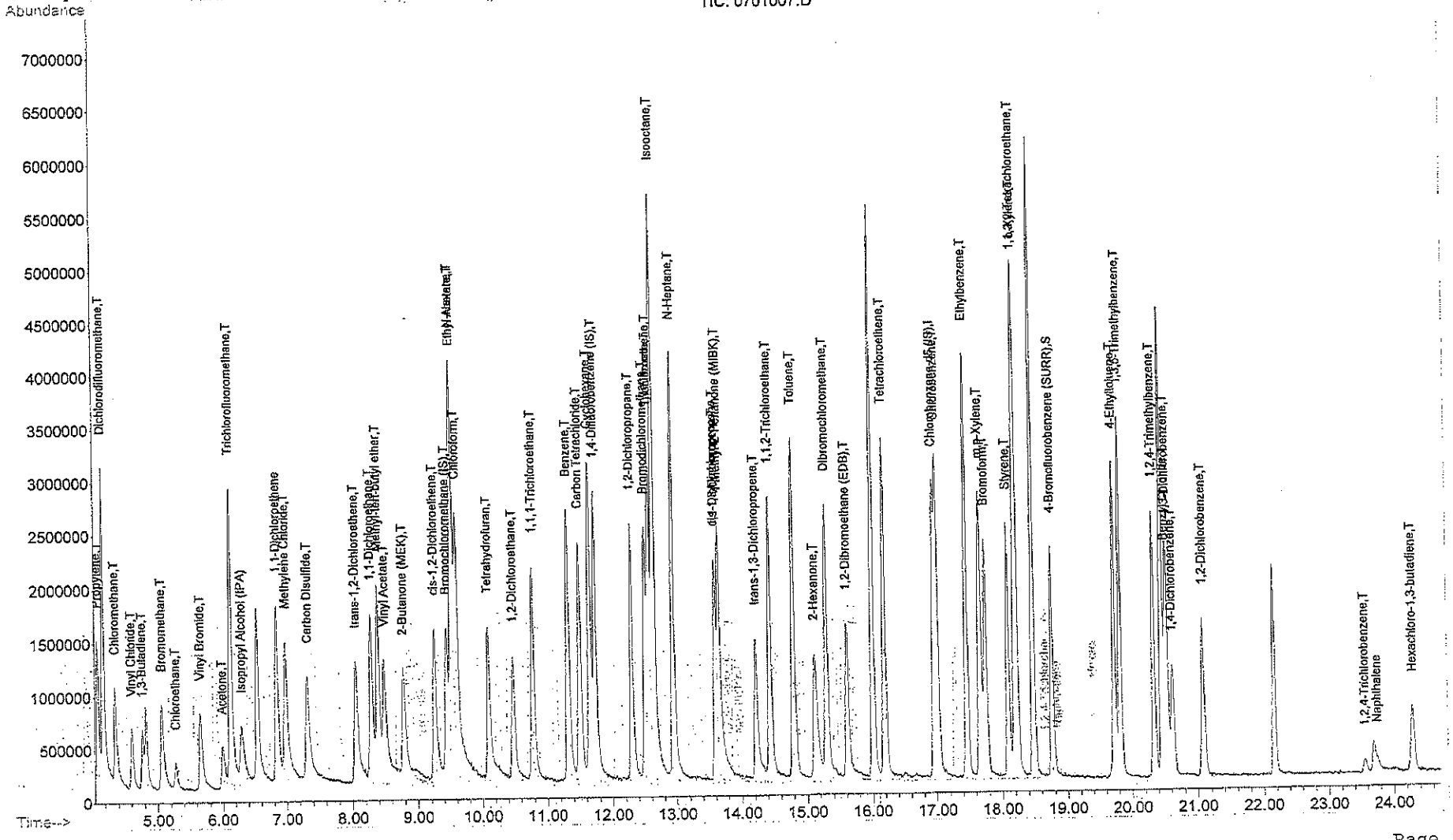
Data File : C:\HPCHEM\1\DATA\031620C\0701007.D
Acq On : 16 Mar 2020 6:37 pm
Sample : 5PPBV TO-15 ICAL
Misc : TO-15 QC
MS Integration Params: rteint.p
Quant Time: Mar 17 9:54 2020

Vial: 7
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 031620AI.RES

Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Tue Mar 17 09:49:17 2020
Response via : Initial Calibration

TIC: 0701007.D



0701007.D 031620AI.M Sun Mar 29 21:41:59 2020

Page 3

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\031620C\1101011.D
Acq On : 16 Mar 2020 9:53 pm
Sample : BFB/CCV 10PPBV TO-15 ICAL RR
Misc : TO-15 QC
MS Integration Params: rteint.p
Quant Time: Mar 17 9:50 2020

Vial: 11
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 031620AI.RES

Quant Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Tue Mar 17 09:49:17 2020
Response via : Initial Calibration
DataAcq Meth : ENV05

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane (IS)	9.45	128	994770	5.00	ppbv	0.00
25) 1,4-Difluorobenzene (IS)	11.74	114	4282523	5.00	ppbv	0.00
45) Chlorobenzene-d5 (IS)	16.96	117	3156797	5.00	ppbv	0.00
System Monitoring Compounds						
56) 4-Bromofluorobenzene (SURR	18.76	95	1702676	5.64	ppbv	0.00
Spiked Amount 5.000	Range 62 - 145		Recovery = 112.80%			
Target Compounds						Qvalue
2) Propylene	4.07	39	1509186	8.56	ppbv	100
3) Dichlorodifluoromethane	4.16	85	8104969	9.26	ppbv	100
4) Chloromethane	4.34	50	3777230	8.79	ppbv	100
5) Vinyl Chloride	4.59	62	2318350	10.22	ppbv	100
6) 1,3-Butadiene	4.74	39	887764	9.76	ppbv	100
7) Bromomethane	5.05	94	2196116	9.21	ppbv	100
8) Chloroethane	5.26	64	877934	10.25	ppbv	100
9) Vinyl Bromide	5.65	106	1991009	9.65	ppbv	100
10) Trichlorofluoromethane	6.11	101	8935276	9.59	ppbv	100
11) Acetone	5.98	43	3132111	8.75	ppbv	100
12) Isopropyl Alcohol (IPA)	6.28	45	3161430	9.97	ppbv	100
13) 1,1-Dichloroethene	6.83	61	5215164	10.11	ppbv	100
14) Methylene Chloride	6.97	84	2882015	9.77	ppbv	100
15) Carbon Disulfide	7.30	76	8403263	9.91	ppbv	100
16) trans-1,2-Dichloroethene	8.04	96	2764027	10.30	ppbv	100
17) Methyl-tert-butyl ether	8.38	73	7809733	10.33	ppbv	100
18) 1,1-Dichloroethane	8.28	63	7109714	9.96	ppbv	100
19) Vinyl Acetate	8.48	43	8009485	9.09	ppbv	100
20) N-Hexane	9.51	57	5983815	9.73	ppbv	100
21) 2-Butanone (MEK)	8.77	43	7077216	9.96	ppbv	100
22) cis-1,2-Dichloroethene	9.25	61	4793829	9.94	ppbv	100
23) Ethyl Acetate	9.53	43	12230095	9.87	ppbv	100
24) Chloroform	9.61	83	6636124	9.84	ppbv	100
26) Tetrahydrofuran	10.08	42	4618328	9.65	ppbv	100
27) 1,2-Dichloroethane	10.47	62	4064008	9.84	ppbv	100
28) 1,1,1-Trichloroethane	10.77	97	5186870	9.51	ppbv	100
29) 1,1-Dichloropropene	13.60	75	6671710	10.33	ppbv	100
30) Carbon Tetrachloride	11.50	117	5528583	10.26	ppbv	100
31) Benzene	11.32	78	10469448	10.74	ppbv	100
32) Cyclohexane	11.65	56	6621786	10.92	ppbv	100
33) 1,2-Dichloropropane	12.30	63	4483024	10.38	ppbv	100
34) Trichloroethene	12.57	95	3762204	10.39	ppbv	100
35) Bromodichloromethane	12.51	83	6803931	9.72	ppbv	100
36) 1,4-Dioxane	12.56	88	1228907	10.59	ppbv	100
37) Isooctane	12.64	57	20436237	10.13	ppbv	100
38) N-Heptane	12.94	43	7041268	9.83	ppbv	100
39) cis-1,3-Dichloropropene	13.60	75	6671710	10.94	ppbv	100
40) 4-Methyl-2-Penanone (MIBK)	13.65	43	8574344	10.89	ppbv	100
41) trans-1,3-Dichloropropene	14.22	75	4519932	10.59	ppbv	100
42) 1,1,2-Trichloroethane	14.44	83	3553627	10.07	ppbv	100
43) Toluene	14.79	91	10201376	10.76	ppbv	100
44) 2-Hexanone	15.11	43	6228030	9.20	ppbv	100
46) Dibromochloromethane	15.30	129	5941146	9.54	ppbv	100
47) 1,2-Dibromoethane (EDB)	15.61	107	5119316	10.38	ppbv	100
48) Tetrachloroethene	16.19	166	4034477	9.94	ppbv	100
49) Chlorobenzene	17.01	112	7097896	9.60	ppbv	100
50) Ethylbenzene	17.46	91	13020747	10.81	ppbv	100
51) m,p-Xylene	17.66	91	8610744	20.45	ppbv	100
52) Bromoform	17.76	173	4584978	9.96	ppbv	100
53) Styrene	18.09	104	5742310	10.28	ppbv	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\031620C\1101011.D
Acq On : 16 Mar 2020 9:53 pm
Sample : BFB/CCV 10PPBV TO-15 ICAL RR
Misc : TO-15 QC
MS Integration Params: rteint.p
Quant Time: Mar 17 9:50 2020

Vial: 11
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 031620AI.RES

Quant Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Tue Mar 17 09:49:17 2020
Response via : Initial Calibration
DataAcq Meth : ENV05

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
54) 1,1,2,2-Tetrachloroethane	18.20	83	7918070	9.64	ppbv	100
55) o-Xylene	18.23	106	3842896	10.12	ppbv	100
57) 4-Ethyltoluene	19.73	105	9859428	10.84	ppbv	100
58) 1,3,5-Trimethylbenzene	19.82	105	8544239	9.83	ppbv	100
59) 1,2,4-Trimethylbenzene	20.33	105	7301914	10.63	ppbv	100
60) 1,3-Dichlorobenzene	20.54	146	4726055	11.15	ppbv	100
61) Benzyl Chloride	20.51	91	4741556	9.62	ppbv	100
62) 1,4-Dichlorobenzene	20.63	148	1777189	8.72	ppbv	100
63) 1,2-Dichlorobenzene	21.09	146	3843798	9.52	ppbv	100
64) 1,2,4-Trichlorobenzene	23.55	180	444194	9.19	ppbv	100
65) Naphthalene	23.75	128	850324	9.08	ppbv	100
66) Hexachloro-1,3-butadiene	24.29	225	573562	9.08	ppbv	100

(#) = qualifier out of range (m) = manual integration
1101011.D 031620AI.M Sun Mar 29 21:42:02 2020

Quantitation Report

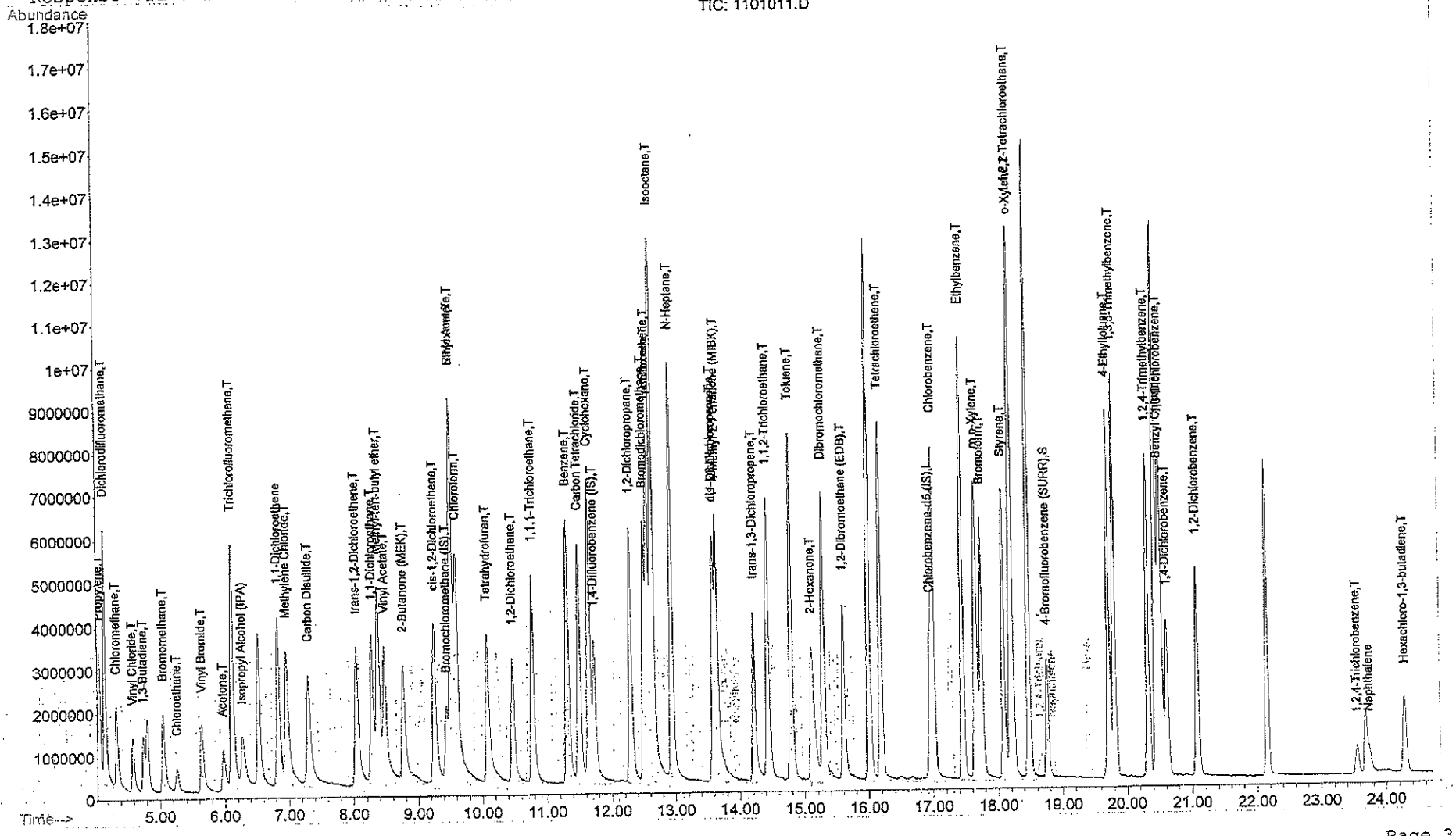
Data File : C:\HPCHEM\1\DATA\031620C\1101011.D
Acq On : 16 Mar 2020 9:53 pm
Sample : BFB/CCV 10PPBV TO-15 ICAL RR
Misc : TO-15 QC
MS Integration Params: rteint.p
Quant Time: Mar 17 9:50 2020

Vial: 11
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 031620AI.RES

Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Tue Mar 17 09:49:17 2020
Response via : Initial Calibration

TIC: 1101011.D



1101011.D 031620AI.M Sun Mar 29 21:42:02 2020

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\031620C\1001010.D
Acq On : 16 Mar 2020 9:07 pm
Sample : 20PPBV TO-15 ICAL
Misc : TO-15 QC
MS Integration Params: rteint.p
Quant Time: Mar 17 9:56 2020

Vial: 10
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 031620AI.RES

Quant Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Tue Mar 17 09:49:17 2020
Response via : Initial Calibration
DataAcq Meth : ENV05

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Bromochloromethane (IS)	9.47	128	965833	5.00 ppbv	0.02
25) 1,4-Difluorobenzene (IS)	11.75	114	4057095	5.00 ppbv	0.01
45) Chlorobenzene-d5 (IS)	16.96	117	3062240	5.00 ppbv	0.00
System Monitoring Compounds					
56) 4-Bromofluorobenzene (SURR	18.77	95	1369886	4.68 ppbv	0.00
Spiked Amount 5.000	Range 62 - 145		Recovery = 93.60%		
Target Compounds					Qvalue
2) Propylene	4.10	39	3733210	21.80 ppbv	91
3) Dichlorodifluoromethane	4.19	85	17361580	20.43 ppbv	
4) Chloromethane	4.37	50	7764066	18.60 ppbv	98
5) Vinyl Chloride	4.63	62	4580419	20.80 ppbv	97
6) 1,3-Butadiene	4.79	39	2032448	23.02 ppbv	90
7) Bromomethane	5.10	94	4789424	20.68 ppbv	98
8) Chloroethane	5.30	64	1816318	21.85 ppbv	98
9) Vinyl Bromide	5.68	106	4634500	23.13 ppbv	99
10) Trichlorofluoromethane	6.15	101	18759440	20.74 ppbv	98
11) Acetone	6.00	43	7003861	20.15 ppbv	97
12) Isopropyl Alcohol (IPA)	6.30	45	6832741	22.20 ppbv #	96
13) 1,1-Dichloroethene	6.87	61	11204029	22.38 ppbv	99
14) Methylene Chloride	6.99	84	6393340	22.32 ppbv	99
15) Carbon Disulfide	7.33	76	17949700	21.81 ppbv	91
16) trans-1,2-Dichloroethene	8.07	96	5656533	21.71 ppbv	92
17) Methyl-tert-butyl ether	8.40	73	15264789	20.79 ppbv	100
18) 1,1-Dichloroethane	8.31	63	14059826	20.28 ppbv #	93
19) Vinyl Acetate	8.50	43	17464043	20.41 ppbv	98
20) N-Hexane	9.54	57	11209020	18.77 ppbv	98
21) 2-Butanone (MEK)	8.79	43	15008945	21.75 ppbv	97
22) cis-1,2-Dichloroethene	9.28	61	10068207	21.49 ppbv	99
23) Ethyl Acetate	9.55	43	22713827	18.88 ppbv	96
24) Chloroform	9.62	83	13677874	20.88 ppbv	98
26) Tetrahydrofuran	10.10	42	9774830	21.57 ppbv	97
27) 1,2-Dichloroethane	10.48	62	8270452	21.13 ppbv	98
28) 1,1,1-Trichloroethane	10.79	97	10741241	20.80 ppbv	99
29) 1,1-Dichloropropene	13.61	75	13430316	21.95 ppbv	99
30) Carbon Tetrachloride	11.51	117	11363131	22.26 ppbv	100
31) Benzene	11.34	78	20177109	21.84 ppbv	99
32) Cyclohexane	11.67	56	12675505	22.06 ppbv	98
33) 1,2-Dichloropropane	12.31	63	8792438	21.49 ppbv	98
34) Trichloroethene	12.58	95	7720594	22.51 ppbv	98
35) Bromodichloromethane	12.52	83	13408218	20.23 ppbv	98
36) 1,4-Dioxane	12.57	88	2349011m	21.37 ppbv	
37) Isooctane	12.65	57	36820644	19.27 ppbv	
38) N-Heptane	12.95	43	12776625	18.83 ppbv	97
39) cis-1,3-Dichloropropene	13.61	75	13430316	23.24 ppbv	99
40) 4-Methyl-2-Penanone (MIBK)	13.67	43	16689706	22.37 ppbv	99
41) trans-1,3-Dichloropropene	14.23	75	9670099	23.92 ppbv	98
42) 1,1,2-Trichloroethane	14.44	83	7037643	21.04 ppbv	99
43) Toluene	14.80	91	19438547	21.64 ppbv	96
44) 2-Hexanone	15.12	43	13416590	20.92 ppbv	98
46) Dibromochloromethane	15.30	129	12551685	20.79 ppbv	99
47) 1,2-Dibromoethane (EDB)	15.62	107	10776932	22.53 ppbv	100
48) Tetrachloroethene	16.20	166	8811306	22.37 ppbv	98
49) Chlorobenzene	17.02	112	14343325	19.99 ppbv	98
50) Ethylbenzene	17.46	91	22442338	19.20 ppbv	91
51) m,p-Xylene	17.67	91	17528284	42.91 ppbv	99
52) Bromoform	17.76	173	10355954	23.18 ppbv #	98
53) Styrene	18.10	104	12130251	22.39 ppbv	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\031620C\1001010.D
Acq On : 16 Mar 2020 9:07 pm
Sample : 20PPBV TO-15 ICAL
Misc : TO-15 QC
MS Integration Params: rteint.p
Quant Time: Mar 17 9:56 2020

Vial: 10
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 031620AI.RES

Quant Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Tue Mar 17 09:49:17 2020
Response via : Initial Calibration
DataAcq Meth : ENV05

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
54) 1,1,2,2-Tetrachloroethane	18.20	83	16026151	20.12 ppbv	98
55) o-Xylene	18.23	106	7935224	21.54 ppbv	99
57) 4-Ethyltoluene	19.73	105	20043302	22.71 ppbv	94
58) 1,3,5-Trimethylbenzene	19.82	105	17604390	20.87 ppbv	97
59) 1,2,4-Trimethylbenzene	20.34	105	14210768	21.34 ppbv	
60) 1,3-Dichlorobenzene	20.54	146	8646525	21.03 ppbv	
61) Benzyl Chloride	20.51	91	9527345	19.93 ppbv	
62) 1,4-Dichlorobenzene	20.62	148	3684554	18.64 ppbv	
63) 1,2-Dichlorobenzene	21.09	146	7790561	19.90 ppbv	
64) 1,2,4-Trichlorobenzene	23.56	180	963776	20.56 ppbv	
65) Naphthalene	23.74	128	1829934m	20.15 ppbv	
66) Hexachloro-1,3-butadiene	24.28	225	1366900	22.30 ppbv	99

(#) = qualifier out of range (m) = manual integration

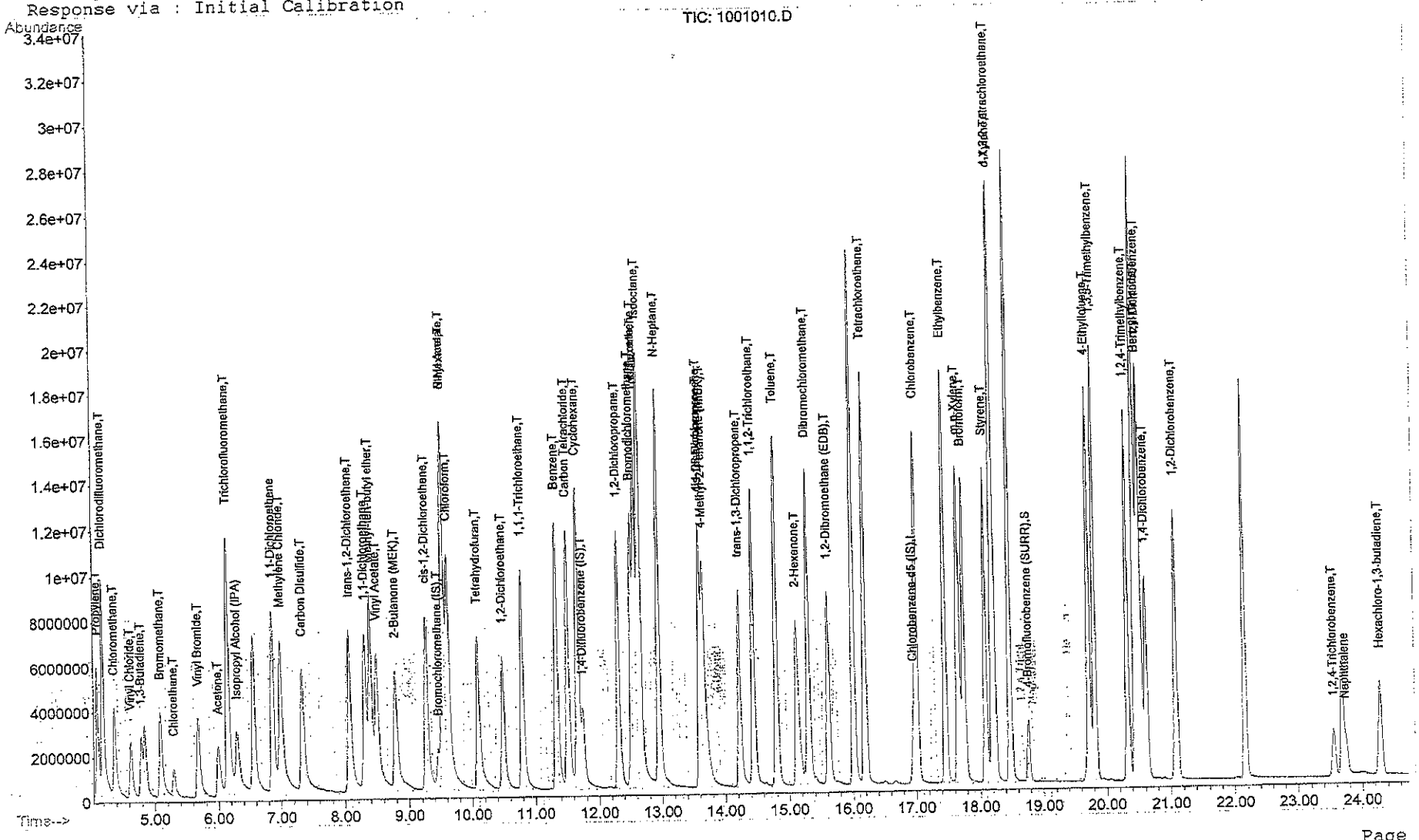
Quantitation Report

Data File : C:\HPCHEM\1\DATA\031620C\1001010.D
Acq On : 16 Mar 2020 9:07 pm
Sample : 20PPBV TO-15 ICAL
Misc : TO-15 QC
MS Integration Params: rteint.p
Quant Time: Mar 17 9:56 2020

Vial: 10
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 031620AI.RES

Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Tue Mar 17 09:49:17 2020
Response via : Initial Calibration



1001010.D 031620AI.M Sun Mar 29 21:42:24 2020

Page 3

61	T	Benzyl Chloride	0.781	0.766	1.9	101	0.00
62	T	1,4-Dichlorobenzene	0.323	0.289	10.5	102	0.00
63	T	1,2-Dichlorobenzene	0.639	0.601	5.9	98	0.00
64	T	1,2,4-Trichlorobenzene	0.077	0.067	13.0	95	0.01
65		Naphthalene	0.148	0.135	8.8	100	0.00
66	T	Hexachloro-1,3-butadiene	0.100	0.093	7.0	101	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
1101011.D 031620AI.M Sun Mar 29 21:42:28 2020

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\031620C\1201012.D
Acq On : 16 Mar 2020 10:39 pm
Sample : 10PPBV TO-15 ICV/LCS
Misc : TO-15 QC
MS Integration Params: rteint.p
Quant Time: Mar 17 9:50 2020

Vial: 12
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 031620AI.RES

Quant Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Tue Mar 17 09:49:17 2020
Response via : Initial Calibration
DataAcq Meth : ENV05

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Bromochloromethane (IS)	9.46	128	1021256	5.00 ppbv	0.02
25) 1,4-Difluorobenzene (IS)	11.75	114	4182341	5.00 ppbv	0.01
45) Chlorobenzene-d5 (IS)	16.97	117	3138039	5.00 ppbv	0.01
System Monitoring Compounds					
56) 4-Bromofluorobenzene (SURR	18.77	95	1701471	5.67 ppbv	0.00
Spiked Amount 5.000	Range 62 - 145		Recovery = 113.40%		
Target Compounds					Qvalue
2) Propylene	4.09	39	1701964	9.40 ppbv	93
3) Dichlorodifluoromethane	4.17	85	8292916	9.23 ppbv	100
4) Chloromethane	4.36	50	4070132	9.22 ppbv	99
5) Vinyl Chloride	4.61	62	2435225	10.46 ppbv	99
6) 1,3-Butadiene	4.78	39	913402	9.78 ppbv	98
7) Bromomethane	5.08	94	2258454	9.22 ppbv	95
8) Chloroethane	5.29	64	874935	9.95 ppbv #	87
9) Vinyl Bromide	5.67	106	2106549	9.94 ppbv	99
10) Trichlorofluoromethane	6.14	101	9494304	9.93 ppbv	98
11) Acetone	6.00	43	3411720m	9.28 ppbv	
12) Isopropyl Alcohol (IPA)	6.29	45	3140543	9.65 ppbv	95
13) 1,1-Dichloroethene	6.85	61	5581354	10.54 ppbv	99
14) Methylene Chloride	6.99	84	3075778	10.16 ppbv	92
15) Carbon Disulfide	7.32	76	9101902	10.46 ppbv	96
16) trans-1,2-Dichloroethene	8.06	96	2768748	10.05 ppbv	97
17) Methyl-tert-butyl ether	8.40	73	7838220	10.10 ppbv	99
18) 1,1-Dichloroethane	8.30	63	7369181	10.05 ppbv #	95
19) Vinyl Acetate	8.49	43	8377519	9.26 ppbv	98
20) N-Hexane	9.53	57	6278909	9.94 ppbv	98
21) 2-Butanone (MEK)	8.78	43	7141576	9.79 ppbv	96
22) cis-1,2-Dichloroethene	9.27	61	4973464	10.04 ppbv	97
23) Ethyl Acetate	9.55	43	12472166	9.80 ppbv	100
24) Chloroform	9.62	83	6975417	10.07 ppbv	97
26) Tetrahydrofuran	10.09	42	4970219	10.64 ppbv	94
27) 1,2-Dichloroethane	10.48	62	3931223	9.74 ppbv	96
28) 1,1,1-Trichloroethane	10.80	97	5331123	10.01 ppbv	99
29) 1,1-Dichloropropene	13.60	75	6468220	10.26 ppbv	99
30) Carbon Tetrachloride	11.51	117	5533062	10.51 ppbv	100
31) Benzene	11.34	78	10646878	11.18 ppbv	99
32) Cyclohexane	11.66	56	6864104	11.59 ppbv	98
33) 1,2-Dichloropropane	12.31	63	4603231	10.91 ppbv	99
34) Trichloroethene	12.58	95	3879801	10.97 ppbv	99
35) Bromodichloromethane	12.51	83	6807714	9.96 ppbv	99
36) 1,4-Dioxane	12.57	88	1248720	11.02 ppbv	95
37) Isooctane	12.65	57	20838199	10.58 ppbv	99
38) N-Heptane	12.95	43	7263417	10.39 ppbv	97
39) cis-1,3-Dichloropropene	13.60	75	6468220	10.86 ppbv	99
40) 4-Methyl-2-Penanone (MIBK)	13.66	43	8718761	11.34 ppbv	100
41) trans-1,3-Dichloropropene	14.22	75	4412549	10.59 ppbv	99
42) 1,1,2-Trichloroethane	14.45	83	3521403	10.21 ppbv	99
43) Toluene	14.80	91	10141435	10.95 ppbv	99
44) 2-Hexanone	15.12	43	6613715	10.00 ppbv	95
46) Dibromochloromethane	15.31	129	6018092	9.73 ppbv	99
47) 1,2-Dibromoethane (EDB)	15.61	107	5294061	10.80 ppbv	97
48) Tetrachloroethene	16.20	166	4078682	10.11 ppbv	98
49) Chlorobenzene	17.01	112	7057587	9.60 ppbv	99
50) Ethylbenzene	17.46	91	12992362	10.85 ppbv	99
51) m,p-Xylene	17.67	91	8594747	20.53 ppbv	100
52) Bromoform	17.76	173	4553469	9.95 ppbv #	99
53) Styrene	18.09	104	5750263	10.36 ppbv	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\031620C\1201012.D
Acq On : 16 Mar 2020 10:39 pm
Sample : 10PPBV TO-15 ICV/LCS
Misc : TO-15 QC
MS Integration Params: rteint.p
Quant Time: Mar 17 9:50 2020

Vial: 12
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 031620AI.RES

Quant Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Tue Mar 17 09:49:17 2020
Response via : Initial Calibration
DataAcq Meth : ENV05

Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
54) 1,1,2,2-Tetrachloroethane	18.20	83	7899714	9.68	ppbv		99
55) o-Xylene	18.23	106	3789030	10.04	ppbv		97
57) 4-Ethyltoluene	19.73	105	9743785	10.77	ppbv		99
58) 1,3,5-Trimethylbenzene	19.82	105	8715323	10.08	ppbv		98
59) 1,2,4-Trimethylbenzene	20.34	105	7277556	10.66	ppbv		99
60) 1,3-Dichlorobenzene	20.54	146	4582599	10.87	ppbv		98
61) Benzyl Chloride	20.51	91	4805662	9.81	ppbv		99
62) 1,4-Dichlorobenzene	20.63	148	1811671	8.94	ppbv		99
63) 1,2-Dichlorobenzene	21.09	146	3774888	9.41	ppbv		98
64) 1,2,4-Trichlorobenzene	23.56	180	422491	8.80	ppbv		98
65) Naphthalene	23.75	128	848157	9.11	ppbv	#	91
66) Hexachloro-1,3-butadiene	24.29	225	581972	9.26	ppbv		99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

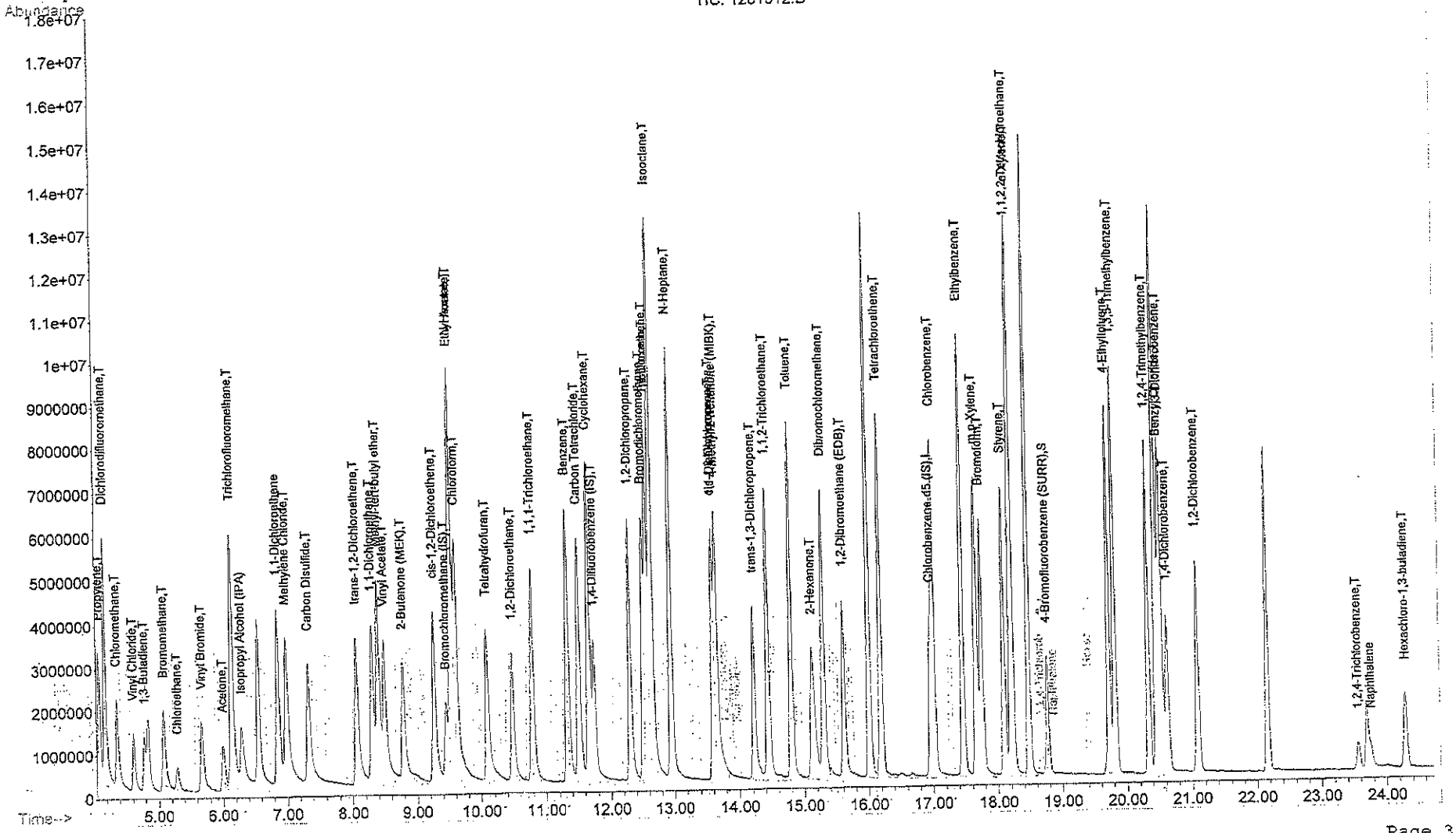
Data File : C:\HPCHEM\1\DATA\031620C\1201012.D
Acq On : 16 Mar 2020 10:39 pm
Sample : 10PPBV TO-15 ICV/LCS
Misc : TO-15 QC
MS Integration Params: rteint.p
Quant Time: Mar 17 9:50 2020

Vial: 12
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 031620AI.RES

Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Tue Mar 17 09:49:17 2020
Response via : Initial Calibration

TIC: 1201012.D



1201012.D 031620AI.M Sun Mar 29 21:42:34 2020

Page 3

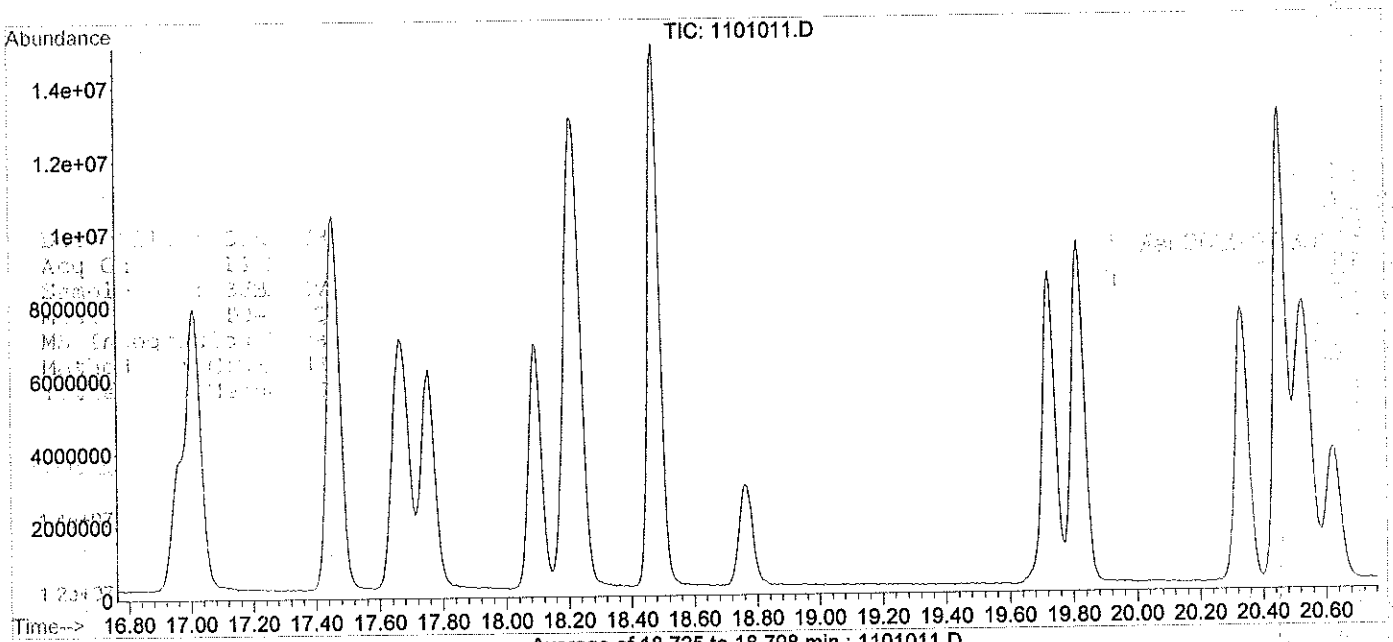
ENVISIONAIR

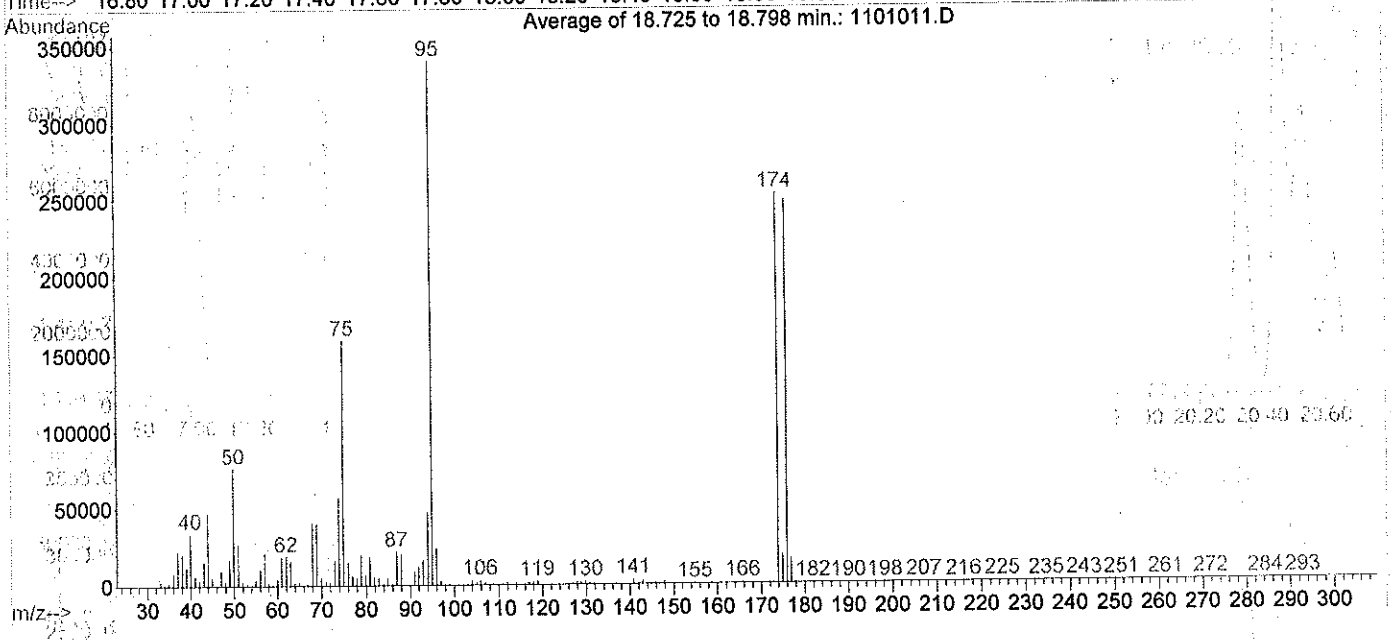
TO-15 VOC
Continuing Calibration Data

- Tune Data
- Continuing Calibration Verification Summary
- Continuing Calibration Verification (CCV) Quant Report
- Internal Standard Area Summary

Data File : C:\HPCHEM\1\DATA\031620C\1101011.D
Acq On : 16 Mar 2020 9:53 pm
Sample : BFB/CCV 10PPBV TO-15 ICAL RR
Misc : TO-15 QC
MS Integration Params: rteint.p
Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION

Vial: 11
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00





Spectrum Information: Average of 18.725 to 18.798 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	22.4	76114	PASS
75	95	30	60	46.8	159244	PASS
95	95	100	100	100.0	340115	PASS
96	95	2	9	6.9	23584	PASS
173	174	0.00	2	0.2	566	PASS
174	95	50	100	74.2	252316	PASS
175	174	5	9	7.3	18477	PASS
176	174	95	101	98.3	248036	PASS
177	176	5	9	6.4	15758	PASS

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\031620C\1101011.D
Acq On : 16 Mar 2020 9:53 pm
Sample : BFB/CCV 10PPBV TO-15 ICAL RR
Misc : TO-15 QC
MS Integration Params: rteint.p

Vial: 11
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Tue Mar 17 09:49:17 2020
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 50% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	T	Bromochloromethane (IS)	1.000	1.000	0.0	100	0.00
2	T	Propylene	0.886	0.759	14.3	100	0.00
3	T	Dichlorodifluoromethane	4.399	4.074	7.4	100	0.00
4	T	Chloromethane	2.161	1.899	12.1	100	0.00
5	T	Vinyl Chloride	1.140	1.165	-2.2	100	0.00
6	T	1,3-Butadiene	0.457	0.446	2.4	100	0.00
7	T	Bromomethane	1.199	1.104	7.9	100	0.00
8	T	Chloroethane	0.430	0.441	-2.6	100	0.00
9	T	Vinyl Bromide	1.037	1.001	3.5	100	0.00
10	T	Trichlorofluoromethane	4.682	4.491	4.1	100	0.00
11	T	Acetone	1.800	1.574	12.6	100	0.00
12		Isopropyl Alcohol (IPA)	1.594	1.589	0.3	100	0.00
13		1,1-Dichloroethene	2.592	2.621	-1.1	100	0.00
14	T	Methylene Chloride	1.483	1.449	2.3	100	0.00
15	T	Carbon Disulfide	4.261	4.224	0.9	100	0.00
16	T	trans-1,2-Dichloroethene	1.349	1.389	-3.0	100	0.00
17	T	Methyl-tert-butyl ether	3.801	3.925	-3.3	100	0.00
18	T	1,1-Dichloroethane	3.588	3.574	0.4	100	0.00
19	T	Vinyl Acetate	4.429	4.026	9.1	100	0.00
20	T	N-Hexane	3.092	3.008	2.7	100	0.00
21	T	2-Butanone (MEK)	3.572	3.557	0.4	100	0.00
22	T	cis-1,2-Dichloroethene	2.425	2.410	0.6	100	0.00
23	T	Ethyl Acetate	6.228	6.147	1.3	100	0.00
24	T	Chloroform	3.391	3.336	1.6	100	0.00
25	T	1,4-Difluorobenzene (IS)	1.000	1.000	0.0	100	0.00
26	T	Tetrahydrofuran	0.559	0.539	3.6	100	0.00
27	T	1,2-Dichloroethane	0.482	0.474	1.7	100	0.00
28	T	1,1,1-Trichloroethane	0.636	0.606	4.7	100	0.00
29	T	1,1-Dichloropropene	0.754	0.779	-3.3	100	0.00
30	T	Carbon Tetrachloride	0.629	0.645	-2.5	100	0.00
31	T	Benzene	1.139	1.222	-7.3	100	0.00
32	T	Cyclohexane	0.708	0.773	-9.2	100	0.00
33	T	1,2-Dichloropropane	0.504	0.523	-3.8	100	0.00
34	T	Trichloroethene	0.423	0.439	-3.8	100	0.00
35	T	Bromodichloromethane	0.817	0.794	2.8	100	0.00
36	T	1,4-Dioxane	0.135	0.143	-5.9	100	0.00
37	T	Isooctane	2.354	2.386	-1.4	100	0.00
38	T	N-Heptane	0.836	0.822	1.7	100	0.00
39	T	cis-1,3-Dichloropropene	0.712	0.779	-9.4	100	0.00
40	T	4-Methyl-2-Penanone (MIBK)	0.919	1.001	-8.9	100	0.00
41	T	trans-1,3-Dichloropropene	0.498	0.528	-6.0	100	0.00
42	T	1,1,2-Trichloroethane	0.412	0.415	-0.7	100	0.00
43	T	Toluene	1.107	1.191	-7.6	100	0.00
44	T	2-Hexanone	0.791	0.727	8.1	100	0.00
45	I	Chlorobenzene-d5 (IS)	1.000	1.000	0.0	100	0.00
46	T	Dibromochloromethane	0.986	0.941	4.6	100	0.00
47	T	1,2-Dibromoethane (EDB)	0.781	0.811	-3.8	100	0.00
48	T	Tetrachloroethene	0.643	0.639	0.6	100	0.00
49	T	Chlorobenzene	1.171	1.124	4.0	100	0.00
50	T	Ethylbenzene	1.908	2.062	-8.1	100	0.00
51	T	m,p-Xylene	0.667	0.682	-2.2	100	0.00
52	T	Bromoform	0.729	0.726	0.4	100	0.00
53	T	Styrene	0.885	0.910	-2.8	100	0.00
54	T	1,1,2,2-Tetrachloroethane	1.300	1.254	3.5	100	0.00
55	T	o-Xylene	0.601	0.609	-1.3	100	0.00
56	S	4-Bromofluorobenzene (SURR)	0.478	0.539	-12.8	100	0.00
57	T	4-Ethyltoluene	1.441	1.562	-8.4	100	0.00
58	T	1,3,5-Trimethylbenzene	1.377	1.353	1.7	100	0.00
59	T	1,2,4-Trimethylbenzene	1.088	1.157	-6.3	100	0.00
60	T	1,3-Dichlorobenzene	0.671	0.749	-11.6	100	0.00

61	T	Benzyl Chloride	0.781	0.751	3.8	100	0.00
62	T	1,4-Dichlorobenzene	0.323	0.281	13.0	100	0.00
63	T	1,2-Dichlorobenzene	0.639	0.609	4.7	100	0.00
64	T	1,2,4-Trichlorobenzene	0.077	0.070	9.1	100	0.00
65		Naphthalene	0.148	0.135	8.8	100	0.00
66	T	Hexachloro-1,3-butadiene	0.100	0.091	9.0	100	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
1101011.D 031620AI.M Wed Mar 18 07:39:58 2020

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\031620C\1101011.D Vial: 11
Acq On : 16 Mar 2020 9:53 pm Operator: TJG
Sample : BFB/CCV 10PPBV TO-15 ICAL RR Inst : GC/MS Ins
Misc : TO-15 QC Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 17 9:50 2020 Quant Results File: 031620AI.RES

Quant Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Tue Mar 17 09:49:17 2020
Response via : Initial Calibration
DataAcq Meth : ENV05

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane (IS)	9.45	128	994770	5.00	ppbv	0.00
25) 1,4-Difluorobenzene (IS)	11.74	114	4282523	5.00	ppbv	0.00
45) Chlorobenzene-d5 (IS)	16.96	117	3156797	5.00	ppbv	0.00
System Monitoring Compounds						
56) 4-Bromofluorobenzene (SURR	18.76	95	1702676	5.64	ppbv	0.00
Spiked Amount 5.000	Range 62 - 145		Recovery = 112.80%			
Target Compounds						Qvalue
2) Propylene	4.07	39	1509186	8.56	ppbv	100
3) Dichlorodifluoromethane	4.16	85	8104969	9.26	ppbv	100
4) Chloromethane	4.34	50	3777230	8.79	ppbv	100
5) Vinyl Chloride	4.59	62	2318350	10.22	ppbv	100
6) 1,3-Butadiene	4.74	39	887764	9.76	ppbv	100
7) Bromomethane	5.05	94	2196116	9.21	ppbv	100
8) Chloroethane	5.26	64	877934	10.25	ppbv	100
9) Vinyl Bromide	5.65	106	1991009	9.65	ppbv	100
10) Trichlorofluoromethane	6.11	101	8935276	9.59	ppbv	100
11) Acetone	5.98	43	3132111	8.75	ppbv	100
12) Isopropyl Alcohol (IPA)	6.28	45	3161430	9.97	ppbv	100
13) 1,1-Dichloroethene	6.83	61	5215164	10.11	ppbv	100
14) Methylene Chloride	6.97	84	2882015	9.77	ppbv	100
15) Carbon Disulfide	7.30	76	8403263	9.91	ppbv	100
16) trans-1,2-Dichloroethene	8.04	96	2764027	10.30	ppbv	100
17) Methyl-tert-butyl ether	8.38	73	7809733	10.33	ppbv	100
18) 1,1-Dichloroethane	8.28	63	7109714	9.96	ppbv	100
19) Vinyl Acetate	8.48	43	8009485	9.09	ppbv	100
20) N-Hexane	9.51	57	5983815	9.73	ppbv	100
21) 2-Butanone (MEK)	8.77	43	7077216	9.96	ppbv	100
22) cis-1,2-Dichloroethene	9.25	61	4793829	9.94	ppbv	100
23) Ethyl Acetate	9.53	43	12230095	9.87	ppbv	100
24) Chloroform	9.61	83	6636124	9.84	ppbv	100
26) Tetrahydrofuran	10.08	42	4618328	9.65	ppbv	100
27) 1,2-Dichlordethane	10.47	62	4064008	9.84	ppbv	100
28) 1,1,1-Trichloroethane	10.77	97	5186870	9.51	ppbv	100
29) 1,1-Dichloropropene	13.60	75	6671710	10.33	ppbv	100
30) Carbon Tetrachloride	11.50	117	5528583	10.26	ppbv	100
31) Benzene	11.32	78	10469448	10.74	ppbv	100
32) Cyclohexane	11.65	56	6621786	10.92	ppbv	100
33) 1,2-Dichloropropane	12.30	63	4483024	10.38	ppbv	100
34) Trichloroethene	12.57	95	3762204	10.39	ppbv	100
35) Bromodichloromethane	12.51	83	6803931	9.72	ppbv	100
36) 1,4-Dioxane	12.56	88	1228907	10.59	ppbv	100
37) Isooctane	12.64	57	20436237	10.13	ppbv	100
38) N-Heptane	12.94	43	7041268	9.83	ppbv	100
39) cis-1,3-Dichloropropene	13.60	75	6671710	10.94	ppbv	100
40) 4-Methyl-2-Penanone (MIBK)	13.65	43	8574344	10.89	ppbv	100
41) trans-1,3-Dichloropropene	14.22	75	4519932	10.59	ppbv	100
42) 1,1,2-Trichloroethane	14.44	83	3553627	10.07	ppbv	100
43) Toluene	14.79	91	10201376	10.76	ppbv	100
44) 2-Hexanone	15.11	43	6228030	9.20	ppbv	100
46) Dibromochloromethane	15.30	129	5941146	9.54	ppbv	100
47) 1,2-Dibromoethane (EDB)	15.61	107	5119316	10.38	ppbv	100
48) Tetrachloroethene	16.19	166	4034477	9.94	ppbv	100
49) Chlorobenzene	17.01	112	7097896	9.60	ppbv	100
50) Ethylbenzene	17.46	91	13020747	10.81	ppbv	100
51) m,p-Xylene	17.66	91	8610744	20.45	ppbv	100
52) Bromoform	17.76	173	4584978	9.96	ppbv	100
53) Styrene	18.09	104	5742310	10.28	ppbv	100

(#) = qualifier out of range (m) = manual integration
1101011.D 031620AI.M Wed Mar 18 07:40:09 2020

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\031620C\1101011.D
Acq On : 16 Mar 2020 9:53 pm
Sample : BFB/CCV 10PPBV TO-15 ICAL RR
Misc : TO-15 QC
MS Integration Params: rteint.p
Quant Time: Mar 17 9:50 2020

Vial: 11
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 031620AI.RES

Quant Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Tue Mar 17 09:49:17 2020
Response via : Initial Calibration
DataAcq Meth : ENV05

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
54) 1,1,2,2-Tetrachloroethane	18.20	83	7918070	9.64	ppbv	100
55) o-Xylene	18.23	106	3842896	10.12	ppbv	100
57) 4-Ethyltoluene	19.73	105	9859428	10.84	ppbv	100
58) 1,3,5-Trimethylbenzene	19.82	105	8544239	9.83	ppbv	100
59) 1,2,4-Trimethylbenzene	20.33	105	7301914	10.63	ppbv	100
60) 1,3-Dichlorobenzene	20.54	146	4726055	11.15	ppbv	100
61) Benzyl Chloride	20.51	91	4741556	9.62	ppbv	100
62) 1,4-Dichlorobenzene	20.63	148	1777189	8.72	ppbv	100
63) 1,2-Dichlorobenzene	21.09	146	3843798	9.52	ppbv	100
64) 1,2,4-Trichlorobenzene	23.55	180	444194	9.19	ppbv	100
65) Naphthalene	23.75	128	850324	9.08	ppbv	100
66) Hexachloro-1,3-butadiene	24.29	225	573562	9.08	ppbv	100

(#) = qualifier out of range (m) = manual integration
1101011.D 031620AI.M Wed Mar 18 07:40:09 2020

Quantitation Report

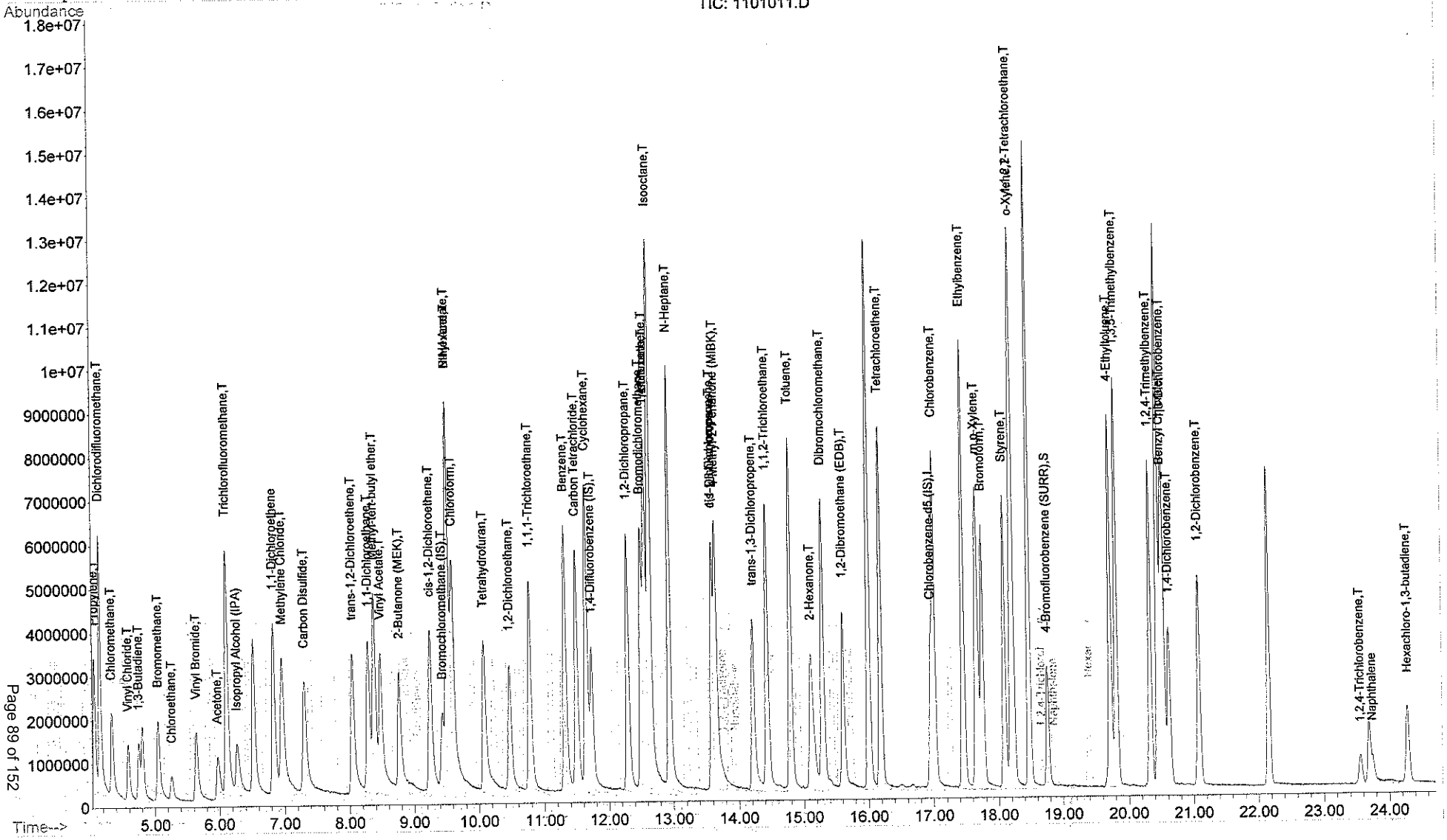
Data File : C:\HPCHEM\1\DATA\031620C\1101011.D
Acq On : 16 Mar 2020 9:53 pm
Sample : BFB/CCV 10PPBV TO-15 ICAL RR
Misc : TO-15 QC
MS Integration Params: rteint.p
Quant Time: Mar 17 9:50 2020

Vial: 11
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 031620AI.RES

Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Tue Mar 17 09:49:17 2020
Response via : Initial Calibration

TIC: 1101011.D



1101011.D 031620AI.M Wed Mar 18 07:40:09 2020

GC/MS QA-QC Check Report

Tune File : C:\HPCHEM\1\DATA\031620C\1101011.D
Tune Time : 16 Mar 2020 9:53 pm

Daily Calibration File : C:\HPCHEM\1\DATA\031620C\1101011.D

			994770	4282520	3156800
File	Sample	Surrogate Recovery %	Internal Standard Responses		
1201012.D	10PPBV	113	1021256	4182341	3138039
1401014.D	METHOD B	100	736385	2597659	1778498
1601016.D	LCSD-10P	116	819606	3965824	2751678
1801018.D	20-892 A	90	645106	2356524	1644844
2301023.D	20-876	90	682703	2166408	1774865
2401024.D	20-878	101	669614	1812240	1504678
2601026.D	20-880	100	707442	2060203	1036484
2801028.D	20-882	94	747250	2586599	2021427
2901029.D	20-884	96	818466	2807792	1990460
3201032.D	20-886	98	716151	2582065	1887131
3301033.D	20-888	94	756924	2557989	1733888
3401034.D	20-890	98	747750	2379769	1708260

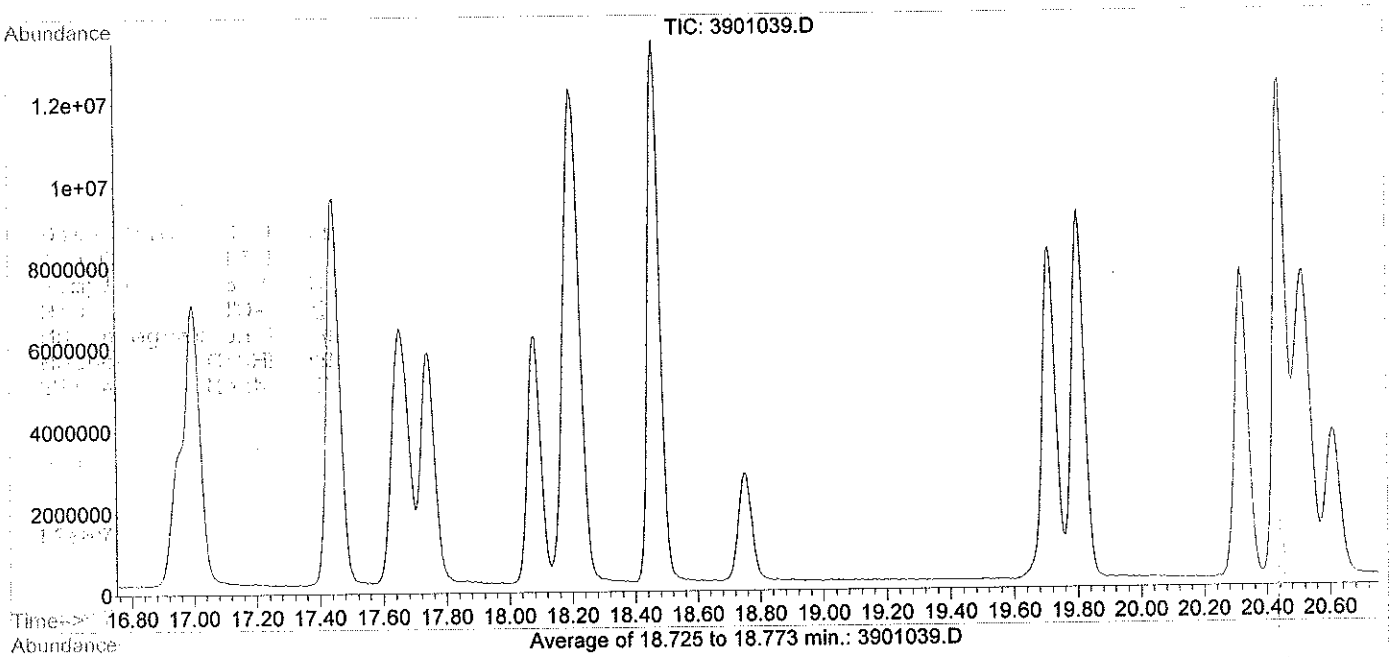
t - fails 24hr time check * - fails criteria

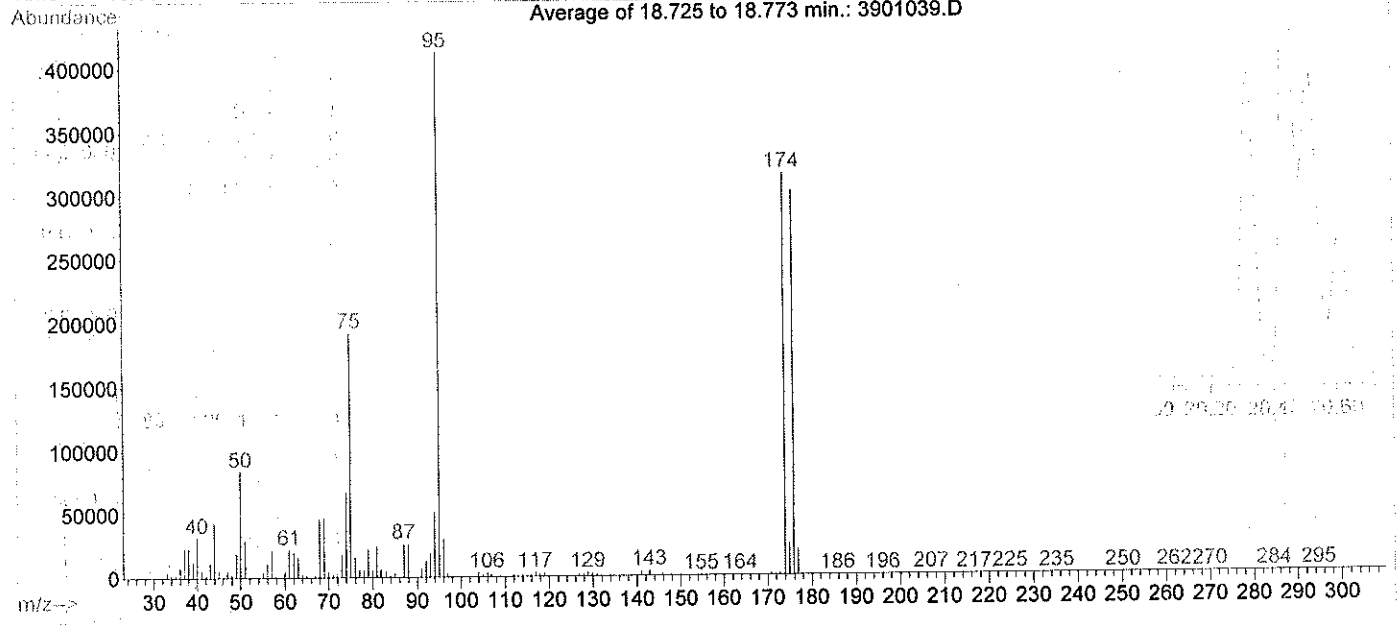
Created: Wed Mar 18 07:42:17 2020 GC

MS Ins

Data File : C:\HPCHEM\1\DATA\031620C\3901039.D
Acq On : 17 Mar 2020 5:43 pm
Sample : BFB/CCV 10ppbv
Misc : TO-15 QC
MS Integration Params: rteint.p
Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION

Vial: 39
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00





Spectrum Information: Average of 18.725 to 18.773 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.4	84168	PASS
75	95	30	60	46.6	192106	PASS
95	95	100	100	100.0	412004	PASS
96	95	2	9	7.2	29661	PASS
173	174	0.00	2	0.4	1196	PASS
174	95	50	100	76.6	315733	PASS
175	174	5	9	8.0	25373	PASS
176	174	95	101	95.8	302315	PASS
177	176	5	9	6.6	19981	PASS

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\031620C\3901039.D
Acq On : 17 Mar 2020 5:43 pm
Sample : BFB/CCV 10ppbv
Misc : TO-15 QC
MS Integration Params: rteint.p

Vial: 39
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Tue Mar 17 09:49:17 2020
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 50% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	T	Bromochloromethane (IS)	1.000	1.000	0.0	86	-0.01
2	T	Propylene	0.886	0.781	11.9	88	0.01
3	T	Dichlorodifluoromethane	4.399	4.917	-11.8	104	0.02
4	T	Chloromethane	2.161	1.843	14.7	83	0.02
5	T	Vinyl Chloride	1.140	1.032	9.5	76	0.02
6	T	1,3-Butadiene	0.457	0.426	6.8	82	0.02
7	T	Bromomethane	1.199	1.163	3.0	90	0.02
8	T	Chloroethane	0.430	0.419	2.6	82	0.02
9	T	Vinyl Bromide	1.037	1.089	-5.0	93	0.01
10	T	Trichlorofluoromethane	4.682	4.985	-6.5	95	0.01
11	T	Acetone	1.800	1.661	7.7	91	0.00
12		Isopropyl Alcohol (IPA)	1.594	1.511	5.2	82	0.00
13		1,1-Dichloroethene	2.592	2.770	-6.9	91	0.01
14	T	Methylene Chloride	1.483	1.458	1.7	86	0.00
15	T	Carbon Disulfide	4.261	4.333	-1.7	88	0.01
16	T	trans-1,2-Dichloroethene	1.349	1.281	5.0	79	0.00
17	T	Methyl-tert-butyl ether	3.801	3.795	0.2	83	0.00
18	T	1,1-Dichloroethane	3.588	3.545	1.2	85	0.00
19	T	Vinyl Acetate	4.429	3.993	9.8	85	0.00
20	T	N-Hexane	3.092	2.980	3.6	85	0.00
21	T	2-Butanone (MEK)	3.572	3.236	9.4	78	-0.01
22	T	cis-1,2-Dichloroethene	2.425	2.387	1.6	85	0.00
23	T	Ethyl Acetate	6.228	5.673	8.9	79	0.00
24	T	Chloroform	3.391	3.483	-2.7	90	-0.01
25	T	1,4-Difluorobenzene (IS)	1.000	1.000	0.0	91	-0.01
26	T	Tetrahydrofuran	0.559	0.464	17.0	78	0.00
27	T	1,2-Dichloroethane	0.482	0.465	3.5	89	0.00
28	T	1,1,1-Trichloroethane	0.636	0.622	2.2	93	0.00
29	T	1,1-Dichloropropene	0.754	0.740	1.9	86	-0.02
30	T	Carbon Tetrachloride	0.629	0.667	-6.0	94	-0.01
31	T	Benzene	1.139	1.165	-2.3	87	-0.01
32	T	Cyclohexane	0.708	0.725	-2.4	85	-0.01
33	T	1,2-Dichloropropane	0.504	0.505	-0.2	88	-0.01
34	T	Trichloroethene	0.423	0.440	-4.0	91	-0.01
35	T	Bromodichloromethane	0.817	0.783	4.2	90	-0.01
36	T	1,4-Dioxane	0.135	0.122	9.6	78	0.00
37	T	Isooctane	2.354	2.282	3.1	87	-0.01
38	T	N-Heptane	0.836	0.766	8.4	85	-0.01
39	T	cis-1,3-Dichloropropene	0.712	0.740	-3.9	86	-0.02
40	T	4-Methyl-2-Penanone (MIBK)	0.919	0.892	2.9	81	0.00
41	T	trans-1,3-Dichloropropene	0.498	0.521	-4.6	90	-0.01
42	T	1,1,2-Trichloroethane	0.412	0.417	-1.2	91	-0.02
43	T	Toluene	1.107	1.178	-6.4	90	0.00
44	T	2-Hexanone	0.791	0.662	16.3	83	-0.01
45	I	Chlorobenzene-d5 (IS)	1.000	1.000	0.0	91	0.00
46	T	Dibromochloromethane	0.986	0.983	0.3	95	-0.02
47	T	1,2-Dibromoethane (EDB)	0.781	0.815	-4.4	92	-0.01
48	T	Tetrachloroethene	0.643	0.674	-4.8	96	-0.01
49	T	Chlorobenzene	1.171	1.112	5.0	90	-0.01
50	T	Ethylbenzene	1.908	2.088	-9.4	92	-0.02
51	T	m,p-Xylene	0.667	0.688	-3.1	92	-0.01
52	T	Bromoform	0.729	0.773	-6.0	97	-0.01
53	T	Styrene	0.885	0.921	-4.1	92	0.00
54	T	1,1,2,2-Tetrachloroethane	1.300	1.318	-1.4	96	-0.02
55	T	o-Xylene	0.601	0.620	-3.2	93	-0.01
56	S	4-Bromofluorobenzene (SURR)	0.478	0.459	4.0	78	-0.01
57	T	4-Ethyltoluene	1.441	1.682	-16.7	98	-0.01
58	T	1,3,5-Trimethylbenzene	1.377	1.439	-4.5	97	-0.01
59	T	1,2,4-Trimethylbenzene	1.088	1.265	-16.3	100	-0.01
60	T	1,3-Dichlorobenzene	0.671	0.791	-17.9	96	-0.01

61	T	Benzyl Chloride	0.781	0.782	-0.1	95	-0.01
62	T	1,4-Dichlorobenzene	0.323	0.317	1.9	103	-0.02
63	T	1,2-Dichlorobenzene	0.639	0.691	-8.1	104	-0.01
64	T	1,2,4-Trichlorobenzene	0.077	0.079	-2.6	102	0.00
65		Naphthalene	0.148	0.145	2.0	98	-0.01
66	T	Hexachloro-1,3-butadiene	0.100	0.100	0.0	101	-0.01

(#) = Out of Range SPCC's out = 0 CCC's out = 0
1101011.D 031620AI.M Wed Mar 18 07:42:33 2020

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\031620C\3901039.D Vial: 39
Acq On : 17 Mar 2020 5:43 pm Operator: TJG
Sample : BFB/CCV 10ppbv Inst : GC/MS Ins
Misc : TO-15 QC Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 18 6:55 2020 Quant Results File: 031620AI.RES

Quant Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Tue Mar 17 09:49:17 2020
Response via : Initial Calibration
DataAcq Meth : ENV05

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS)	9.43	128	854125	5.00	ppbv		-0.01
25) 1,4-Difluorobenzene (IS)	11.73	114	3895359	5.00	ppbv		-0.01
45) Chlorobenzene-d5 (IS)	16.95	117	2881981	5.00	ppbv		0.00
System Monitoring Compounds							
56) 4-Bromofluorobenzene (SURR	18.75	95	1323666	4.80	ppbv		-0.01
Spiked Amount 5.000	Range 62 - 145		Recovery = 96.00%				
Target Compounds							Qvalue
2) Propylene	4.08	39	1333733	8.81	ppbv		92
3) Dichlorodifluoromethane	4.17	85	8399375	11.18	ppbv		98
4) Chloromethane	4.36	50	3148596	8.53	ppbv		99
5) Vinyl Chloride	4.61	62	1763563	9.06	ppbv		99
6) 1,3-Butadiene	4.77	39	728449	9.33	ppbv		97
7) Bromomethane	5.07	94	1987417	9.70	ppbv		98
8) Chloroethane	5.28	64	715971	9.74	ppbv		95
9) Vinyl Bromide	5.66	106	1859921	10.50	ppbv		98
10) Trichlorofluoromethane	6.12	101	8515200	10.65	ppbv		99
11) Acetone	5.98	43	2837878	9.23	ppbv		
12) Isopropyl Alcohol (IPA)	6.27	45	2581967	9.48	ppbv		
13) 1,1-Dichloroethene	6.84	61	4732177	10.69	ppbv		98
14) Methylene Chloride	6.97	84	2491276	9.84	ppbv		96
15) Carbon Disulfide	7.31	76	7401559	10.17	ppbv		89
16) trans-1,2-Dichloroethene	8.04	96	2188289	9.50	ppbv		94
17) Methyl-tert-butyl ether	8.38	73	6482480	9.98	ppbv		99
18) 1,1-Dichloroethane	8.28	63	6056455	9.88	ppbv	#	97
19) Vinyl Acetate	8.47	43	6821661	9.02	ppbv		100
20) N-Hexane	9.51	57	5090762	9.64	ppbv		99
21) 2-Butanone (MEK)	8.76	43	5528413	9.06	ppbv		98
22) cis-1,2-Dichloroethene	9.25	61	4077453	9.84	ppbv		97
23) Ethyl Acetate	9.53	43	9690195	9.11	ppbv		99
24) Chloroform	9.59	83	5949298	10.27	ppbv		99
26) Tetrahydrofuran	10.07	42	3614991	8.31	ppbv		97
27) 1,2-Dichloroethane	10.47	62	3625616	9.65	ppbv		97
28) 1,1,1-Trichloroethane	10.77	97	4848717	9.78	ppbv		97
29) 1,1-Dichloropropene	13.58	75	5766165	9.82	ppbv		98
30) Carbon Tetrachloride	11.48	117	5200286	10.61	ppbv		100
31) Benzene	11.31	78	9078814	10.24	ppbv		99
32) Cyclohexane	11.64	56	5647452	10.24	ppbv		97
33) 1,2-Dichloropropane	12.28	63	3937101	10.02	ppbv		99
34) Trichloroethene	12.56	95	3431558	10.42	ppbv		99
35) Bromodichloromethane	12.50	83	6096604	9.58	ppbv		98
36) 1,4-Dioxane	12.56	88	952970m	9.03	ppbv		
37) Isooctane	12.63	57	17781667	9.69	ppbv		100
38) N-Heptane	12.93	43	5971199	9.17	ppbv		100
39) cis-1,3-Dichloropropene	13.58	75	5766165	10.39	ppbv		99
40) 4-Methyl-2-Penanone (MIBK)	13.64	43	6947351	9.70	ppbv		99
41) trans-1,3-Dichloropropene	14.21	75	4062764	10.47	ppbv		97
42) 1,1,2-Trichloroethane	14.42	83	3245739	10.11	ppbv		99
43) Toluene	14.79	91	9180020	10.64	ppbv		99
44) 2-Hexanone	15.10	43	5160655	8.38	ppbv		99
46) Dibromochloromethane	15.28	129	5667548	9.97	ppbv		99
47) 1,2-Dibromoethane (EDB)	15.60	107	4697087	10.43	ppbv		98
48) Tetrachloroethene	16.18	166	3887332	10.49	ppbv		99
49) Chlorobenzene	17.00	112	6410378	9.49	ppbv		99
50) Ethylbenzene	17.44	91	12035454	10.94	ppbv		99
51) m,p-Xylene	17.65	91	7932375	20.63	ppbv		99
52) Bromoform	17.74	173	4457665	10.60	ppbv		99
53) Styrene	18.08	104	5308054	10.41	ppbv		100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\031620C\3901039.D
Acq On : 17 Mar 2020 5:43 pm
Sample : BFB/CCV 10ppbv
Misc : TO-15 QC
MS Integration Params: rteint.p
Quant Time: Mar 18 6:55 2020

Vial: 39
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 031620AI.RES

Quant Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Tue Mar 17 09:49:17 2020
Response via : Initial Calibration
DataAcq Meth : ENV05

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
54) 1,1,2,2-Tetrachloroethane	18.19	83	7597567	10.14 ppbv	99
55) o-Xylene	18.22	106	3574620	10.31 ppbv	98
57) 4-Ethyltoluene	19.71	105	9696478	11.68 ppbv	99
58) 1,3,5-Trimethylbenzene	19.80	105	8293649	10.45 ppbv	99
59) 1,2,4-Trimethylbenzene	20.32	105	7292909	11.63 ppbv	99
60) 1,3-Dichlorobenzene	20.52	146	4560207	11.78 ppbv	99
61) Benzyl Chloride	20.49	91	4506371	10.01 ppbv	99
62) 1,4-Dichlorobenzene	20.61	148	1827865	9.82 ppbv	98
63) 1,2-Dichlorobenzene	21.08	146	3983495	10.81 ppbv	98
64) 1,2,4-Trichlorobenzene	23.54	180	454476	10.30 ppbv	
65) Naphthalene	23.74	128	834850	9.77 ppbv	
66) Hexachloro-1,3-butadiene	24.28	225	579257	10.04 ppbv	

(#) = qualifier out of range (m) = manual integration

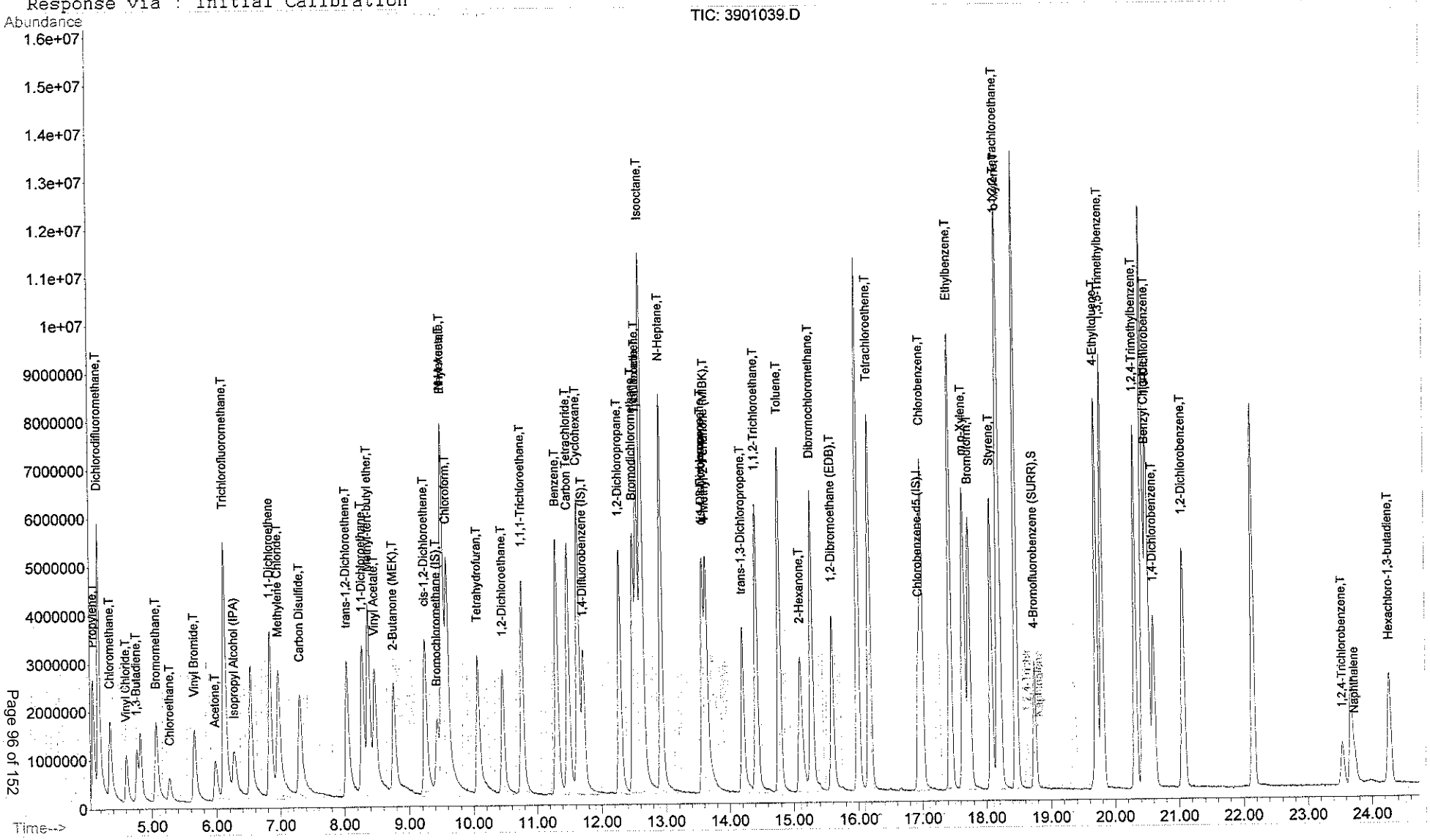
Quantitation Report

Data File : C:\HPCHEM\1\DATA\031620C\3901039.D
Acq On : 17 Mar 2020 5:43 pm
Sample : BFB/CCV 10ppbv
Misc : TO-15 QC
MS Integration Params: rteint.p
Quant Time: Mar 18 6:55 2020

Vial: 39
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 031620AI.RES

Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Tue Mar 17 09:49:17 2020
Response via : Initial Calibration



3901039.D 031620AI.M Wed Mar 18 07:42:40 2020

GC/MS QA-QC Check Report

Tune File : C:\HPCHEM\1\DATA\031620C\3901039.D
Tune Time : 17 Mar 2020 5:43 pm

Daily Calibration File : C:\HPCHEM\1\DATA\031620C\3901039.D

			854125	3895360	2881980
File	Sample	Surrogate Recovery %	Internal Standard Responses		
4101041.D	METHOD B	92	725365	2192265	1410608
4201042.D	LCS-10PP	98	758736	3670951	2789122
4301043.D	LCSD-10P	99	783188	3821190	2947817
4401044.D	20-877 S	103	778379	2594721	2014890
4501045.D	20-879	108	789277	2871598	2141298
4601046.D	20-881	104	742498	2542597	2441256
4701047.D	20-885	110	652086	1634857	1426134
4801048.D	20-887	107	690378	1659803	1636245
4901049.D	20-889	103	688386	1810437	1934286
5001050.D	20-891	101	782549	2515724	2690440

t - fails 24hr time check * - fails criteria

Created: Wed Mar 18 07:51:51 2020 GC
MS Ins

ENVISIONAIR

TO-15 VOC
Quality Control Data

- Method Blank (MB)
- Laboratory Control Standard (LCS)

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\031620C\1201012.D
Acq On : 16 Mar 2020 10:39 pm
Sample : 10PPBV TO-15 ICV/LCS
Misc : TO-15 QC
MS Integration Params: rteint.p
Quant Time: Mar 17 9:50 2020

Vial: 12
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 031620AI.RES

Quant Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Tue Mar 17 09:49:17 2020
Response via : Initial Calibration
DataAcq Meth : ENV05

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS)	9.46	128	1021256	5.00	ppbv		0.02
25) 1,4-Difluorobenzene (IS)	11.75	114	4182341	5.00	ppbv		0.01
45) Chlorobenzene-d5 (IS)	16.97	117	3138039	5.00	ppbv		0.01
System Monitoring Compounds							
56) 4-Bromofluorobenzene (SURR	18.77	95	1701471	5.67	ppbv		0.00
Spiked Amount 5.000	Range 62 - 145		Recovery = 113.40%				
Target Compounds							Qvalue
2) Propylene	4.09	39	1701964	9.40	ppbv		93
3) Dichlorodifluoromethane	4.17	85	8292916	9.23	ppbv		100
4) Chloromethane	4.36	50	4070132	9.22	ppbv		99
5) Vinyl Chloride	4.61	62	2435225	10.46	ppbv		99
6) 1,3-Butadiene	4.78	39	913402	9.78	ppbv		98
7) Bromomethane	5.08	94	2258454	9.22	ppbv		95
8) Chloroethane	5.29	64	874935	9.95	ppbv	#	87
9) Vinyl Bromide	5.67	106	2106549	9.94	ppbv		99
10) Trichlorofluoromethane	6.14	101	9494304	9.93	ppbv		98
11) Acetone	6.00	43	3411720	9.28	ppbv		
12) Isopropyl Alcohol (IPA)	6.29	45	3140543	9.65	ppbv		95
13) 1,1-Dichloroethene	6.85	61	5581354	10.54	ppbv		99
14) Methylene Chloride	6.99	84	3075778	10.16	ppbv		92
15) Carbon Disulfide	7.32	76	9101902	10.46	ppbv		96
16) trans-1,2-Dichloroethene	8.06	96	2768748	10.05	ppbv		97
17) Methyl-tert-butyl ether	8.40	73	7838220	10.10	ppbv		99
18) 1,1-Dichloroethane	8.30	63	7369181	10.05	ppbv	#	95
19) Vinyl Acetate	8.49	43	8377519	9.26	ppbv		98
20) N-Hexane	9.53	57	6278909	9.94	ppbv		98
21) 2-Butanone (MEK)	8.78	43	7141576	9.79	ppbv		96
22) cis-1,2-Dichloroethene	9.27	61	4973464	10.04	ppbv		97
23) Ethyl Acetate	9.55	43	12472166	9.80	ppbv		100
24) Chloroform	9.62	83	6975417	10.07	ppbv		97
26) Tetrahydrofuran	10.09	42	4970219	10.64	ppbv		94
27) 1,2-Dichloroethane	10.48	62	3931223	9.74	ppbv		96
28) 1,1,1-Trichloroethane	10.80	97	5331123	10.01	ppbv		99
29) 1,1-Dichloropropene	13.60	75	6468220	10.26	ppbv		99
30) Carbon Tetrachloride	11.51	117	5533062	10.51	ppbv		100
31) Benzene	11.34	78	10646878	11.18	ppbv		99
32) Cyclohexane	11.66	56	6864104	11.59	ppbv		98
33) 1,2-Dichloropropane	12.31	63	4603231	10.91	ppbv		99
34) Trichloroethene	12.58	95	3879801	10.97	ppbv		99
35) Bromodichloromethane	12.51	83	6807714	9.96	ppbv		99
36) 1,4-Dioxane	12.57	88	1248720	11.02	ppbv		95
37) Isooctane	12.65	57	20838199	10.58	ppbv		99
38) N-Heptane	12.95	43	7263417	10.39	ppbv		97
39) cis-1,3-Dichloropropene	13.60	75	6468220	10.86	ppbv		99
40) 4-Methyl-2-Penanone (MIBK)	13.66	43	8718761	11.34	ppbv		100
41) trans-1,3-Dichloropropene	14.22	75	4412549	10.59	ppbv		99
42) 1,1,2-Trichloroethane	14.45	83	3521403	10.21	ppbv		99
43) Toluene	14.80	91	10141435	10.95	ppbv		99
44) 2-Hexanone	15.12	43	6613715	10.00	ppbv		95
46) Dibromochloromethane	15.31	129	6018092	9.73	ppbv		99
47) 1,2-Dibromoethane (EDB)	15.61	107	5294061	10.80	ppbv		97
48) Tetrachloroethene	16.20	166	4078682	10.11	ppbv		98
49) Chlorobenzene	17.01	112	7057587	9.60	ppbv		99
50) Ethylbenzene	17.46	91	12992362	10.85	ppbv		99
51) m,p-Xylene	17.67	91	8594747	20.53	ppbv		100
52) Bromoform	17.76	173	4553469	9.95	ppbv	#	99
53) Styrene	18.09	104	5750263	10.36	ppbv		99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\031620C\1201012.D
Acq On : 16 Mar 2020 10:39 pm
Sample : 10PPBV TO-15 ICV/LCS
Misc : TO-15 QC
MS Integration Params: rteint.p
Quant Time: Mar 17 9:50 2020

Vial: 12
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 031620AI.RES

Quant Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Tue Mar 17 09:49:17 2020
Response via : Initial Calibration
DataAcq Meth : ENV05

Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
54) 1,1,2,2-Tetrachloroethane	18.20	83	7899714	9.68	ppbv		99
55) o-Xylene	18.23	106	3789030	10.04	ppbv		97
57) 4-Ethyltoluene	19.73	105	9743785	10.77	ppbv		99
58) 1,3,5-Trimethylbenzene	19.82	105	8715323	10.08	ppbv		98
59) 1,2,4-Trimethylbenzene	20.34	105	7277556	10.66	ppbv		99
60) 1,3-Dichlorobenzene	20.54	146	4582599	10.87	ppbv		98
61) Benzyl Chloride	20.51	91	4805662	9.81	ppbv		99
62) 1,4-Dichlorobenzene	20.63	148	1811671	8.94	ppbv		99
63) 1,2-Dichlorobenzene	21.09	146	3774888	9.41	ppbv		98
64) 1,2,4-Trichlorobenzene	23.56	180	422491	8.80	ppbv		98
65) Naphthalene	23.75	128	848157	9.11	ppbv	#	91
66) Hexachloro-1,3-butadiene	24.29	225	581972	9.26	ppbv		99

(#) = qualifier out of range (m) = manual integration
1201012.D 031620AI.M Wed Mar 18 07:40:13 2020

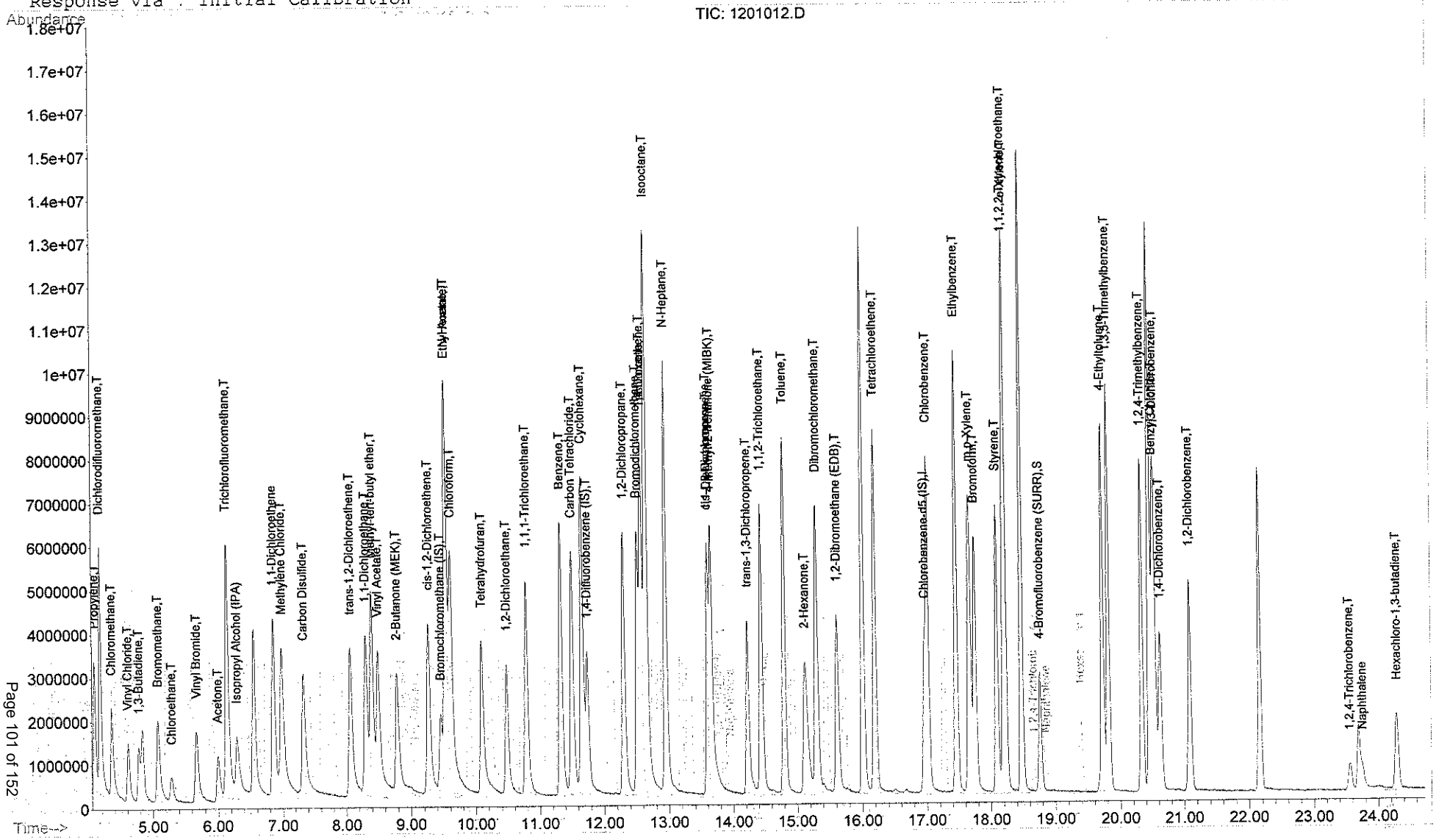
Quantitation Report

Data File : C:\HPCHEM\1\DATA\031620C\1201012.D
Acq On : 16 Mar 2020 10:39 pm
Sample : 10PPBV TO-15 ICV/LCS
Misc : TO-15 QC
MS Integration Params: rteint.p
Quant Time: Mar 17 9:50 2020

Vial: 12
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 031620AI.RES

Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Tue Mar 17 09:49:17 2020
Response via : Initial Calibration



1201012.D 031620AI.M Wed Mar 18 07:40:14 2020

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\031620C\1601016.D Vial: 16
Acq On : 17 Mar 2020 1:21 am Operator: TJG
Sample : LCSD-10PPBV Inst : GC/MS Ins
Misc : TO-15 QC Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 17 15:14 2020 Quant Results File: 031620AI.RES

Quant Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Tue Mar 17 09:49:17 2020
Response via : Initial Calibration
DataAcq Meth : ENV05

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS)	9.46	128	819606	5.00	ppbv		0.01
25) 1,4-Difluorobenzene (IS)	11.75	114	3965824	5.00	ppbv		0.01
45) Chlorobenzene-d5 (IS)	16.97	117	2751678	5.00	ppbv		0.02
System Monitoring Compounds							
56) 4-Bromofluorobenzene (SURR	18.77	95	1525028	5.80	ppbv		0.01
Spiked Amount 5.000	Range 62 - 145		Recovery = 116.00%				
Target Compounds							Qvalue
2) Propylene	4.10	39	1600822	11.02	ppbv		93
3) Dichlorodifluoromethane	4.19	85	7053537	9.78	ppbv		97
4) Chloromethane	4.37	50	3523731	9.95	ppbv		99
5) Vinyl Chloride	4.62	62	1871919	10.02	ppbv		
6) 1,3-Butadiene	4.78	39	774067	10.33	ppbv		99
7) Bromomethane	5.09	94	2019742	10.28	ppbv		97
8) Chloroethane	5.29	64	742016	10.52	ppbv		95
9) Vinyl Bromide	5.68	106	1897905	11.16	ppbv		96
10) Trichlorofluoromethane	6.15	101	8588116	11.19	ppbv		100
11) Acetone	6.00	43	2767626	9.38	ppbv		96
12) Isopropyl Alcohol (IPA)	6.29	45	2831858	10.84	ppbv	#	89
13) 1,1-Dichloroethene	6.86	61	4718192	11.10	ppbv		95
14) Methylene Chloride	6.99	84	2576983	10.60	ppbv		94
15) Carbon Disulfide	7.33	76	7485991	10.72	ppbv		89
16) trans-1,2-Dichloroethene	8.06	96	2229270	10.08	ppbv		96
17) Methyl-tert-butyl ether	8.40	73	6168845	9.90	ppbv		99
18) 1,1-Dichloroethane	8.31	63	6119358	10.40	ppbv	#	97
19) Vinyl Acetate	8.50	43	7126577	9.82	ppbv		99
20) N-Hexane	9.54	57	5243672	10.35	ppbv		98
21) 2-Butanone (MEK)	8.79	43	5907199	10.09	ppbv		96
22) cis-1,2-Dichloroethene	9.27	61	4148068	10.44	ppbv		98
23) Ethyl Acetate	9.54	43	10147015	9.94	ppbv		98
24) Chloroform	9.62	83	5906126	10.62	ppbv		96
26) Tetrahydrofuran	10.09	42	4366556	9.86	ppbv		91
27) 1,2-Dichloroethane	10.48	62	3477599	9.09	ppbv		98
28) 1,1,1-Trichloroethane	10.79	97	4521356	8.96	ppbv		98
29) 1,1-Dichloropropene	13.61	75	5496780	9.19	ppbv		99
30) Carbon Tetrachloride	11.51	117	4676284	9.37	ppbv		100
31) Benzene	11.34	78	8957097	9.92	ppbv		99
32) Cyclohexane	11.67	56	5711072	10.17	ppbv		98
33) 1,2-Dichloropropane	12.31	63	3878681	9.70	ppbv		99
34) Trichloroethene	12.58	95	3256808	9.71	ppbv		99
35) Bromodichloromethane	12.52	83	5756357	8.88	ppbv		99
36) 1,4-Dioxane	12.58	88	923515	8.59	ppbv		98
37) Isooctane	12.66	57	18081278	9.68	ppbv		100
38) N-Heptane	12.95	43	6144100	9.27	ppbv		96
39) cis-1,3-Dichloropropene	13.61	75	5496780	9.73	ppbv		98
40) 4-Methyl-2-Penanone (MIBK)	13.66	43	7386039	10.13	ppbv		98
41) trans-1,3-Dichloropropene	14.23	75	3824721	9.68	ppbv		99
42) 1,1,2-Trichloroethane	14.45	83	3090520	9.45	ppbv		98
43) Toluene	14.81	91	8821527	10.05	ppbv		99
44) 2-Hexanone	15.13	43	5588213	8.91	ppbv		94
46) Dibromochloromethane	15.31	129	5226270	9.63	ppbv		100
47) 1,2-Dibromoethane (EDB)	15.62	107	4557691	10.60	ppbv		95
48) Tetrachloroethene	16.20	166	3454003	9.76	ppbv		99
49) Chlorobenzene	17.02	112	6100947	9.46	ppbv		99
50) Ethylbenzene	17.47	91	11305088	10.77	ppbv		100
51) m,p-Xylene	17.67	91	7382503	20.11	ppbv		100
52) Bromoform	17.76	173	3902571	9.72	ppbv	#	98
53) Styrene	18.10	104	5012569	10.30	ppbv		99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\031620C\1601016.D
Acq On : 17 Mar 2020 1:21 am
Sample : LCSD-10PPBV
Misc : TO-15 QC
MS Integration Params: rteint.p
Quant Time: Mar 17 15:14 2020

Vial: 16
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 031620AI.RES

Quant Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Tue Mar 17 09:49:17 2020
Response via : Initial Calibration
DataAcq Meth : ENV05

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
54) 1,1,2,2-Tetrachloroethane	18.21	83	7111349	9.94	ppbv	99
55) o-Xylene	18.23	106	3397490	10.26	ppbv	99
57) 4-Ethyltoluene	19.74	105	8623805	10.88	ppbv	99
58) 1,3,5-Trimethylbenzene	19.82	105	7568808	9.99	ppbv	99
59) 1,2,4-Trimethylbenzene	20.34	105	6409754	10.71	ppbv	100
60) 1,3-Dichlorobenzene	20.55	146	4082151	11.05	ppbv	99
61) Benzyl Chloride	20.52	91	4059245	9.45	ppbv	100
62) 1,4-Dichlorobenzene	20.63	148	1565425	8.81	ppbv	98
63) 1,2-Dichlorobenzene	21.09	146	3364586	9.56	ppbv	99
64) 1,2,4-Trichlorobenzene	23.57	180	389681	9.25	ppbv	
65) Naphthalene	23.76	128	811154	9.94	ppbv	
66) Hexachloro-1,3-butadiene	24.30	225	483802	8.78	ppbv	96

(#) = qualifier out of range (m) = manual integration

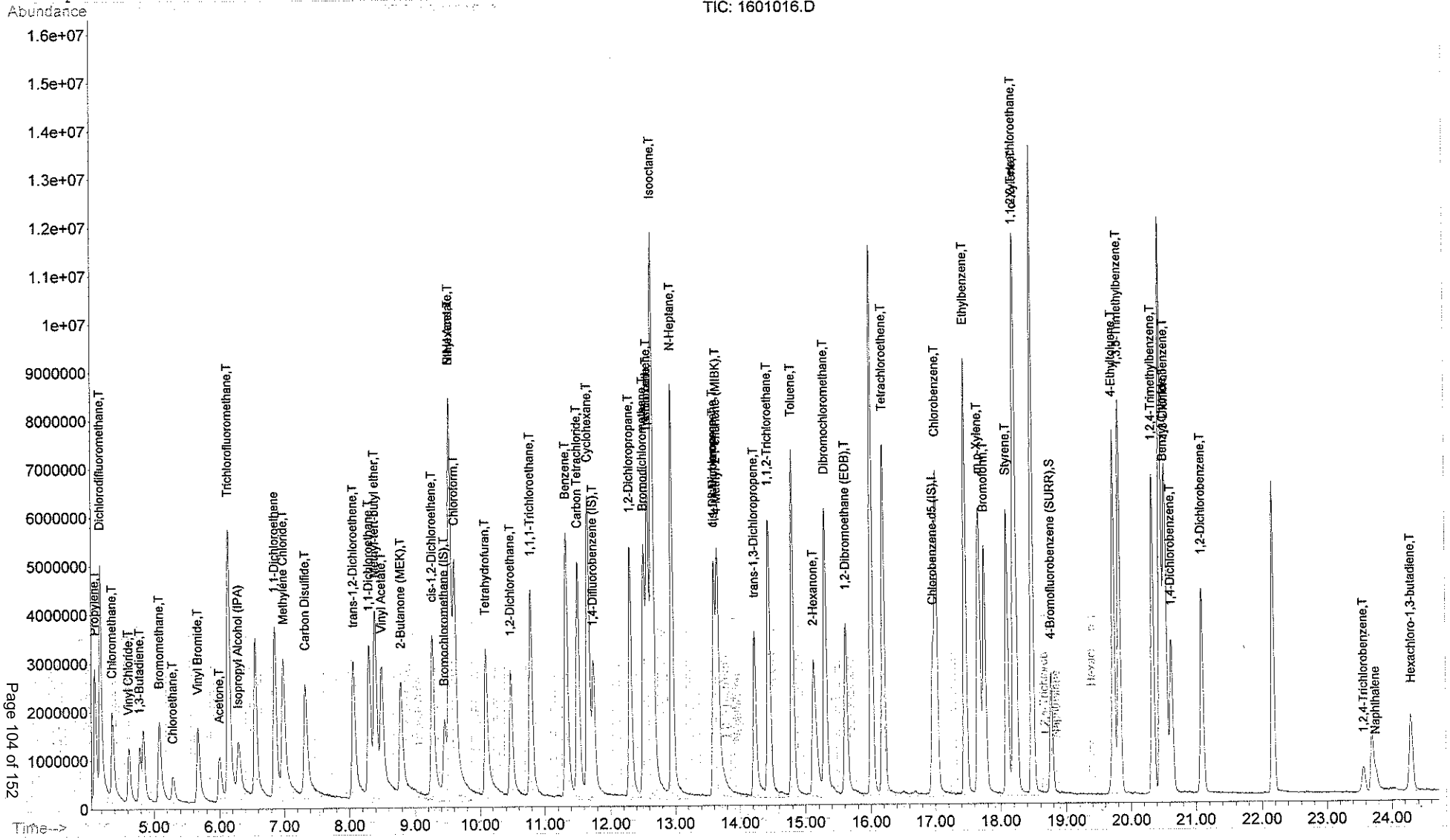
Quantitation Report

Data File : C:\HPCHEM\1\DATA\031620C\1601016.D
Acq On : 17 Mar 2020 1:21 am
Sample : LCSD-10PPBV
Misc : TO-15 QC
MS Integration Params: rteint.p
Quant Time: Mar 17 15:14 2020

Vial: 16
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 031620AI.RES

Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Tue Mar 17 09:49:17 2020
Response via : Initial Calibration



1601016.D 031620AI.M Wed Mar 18 07:40:18 2020

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\031620C\1401014.D
Acq On : 16 Mar 2020 11:50 pm
Sample : METHOD BLANK
Misc : TO-15 QC
MS Integration Params: rteint.p
Quant Time: Mar 17 9:52 2020

Vial: 14
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 031620AI.RES

Quant Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Tue Mar 17 09:49:17 2020
Response via : Initial Calibration
DataAcq Meth : ENV05

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane (IS)	9.44	128	736385	5.00	ppbv	0.00
25) 1,4-Difluorobenzene (IS)	11.73	114	2597659	5.00	ppbv	0.00
45) Chlorobenzene-d5 (IS)	16.96	117	1778498	5.00	ppbv	0.00
System Monitoring Compounds						
56) 4-Bromofluorobenzene (SURR	18.79	95	849704	5.00	ppbv	0.02
Spiked Amount 5.000	Range 62 - 145		Recovery = 100.00%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration

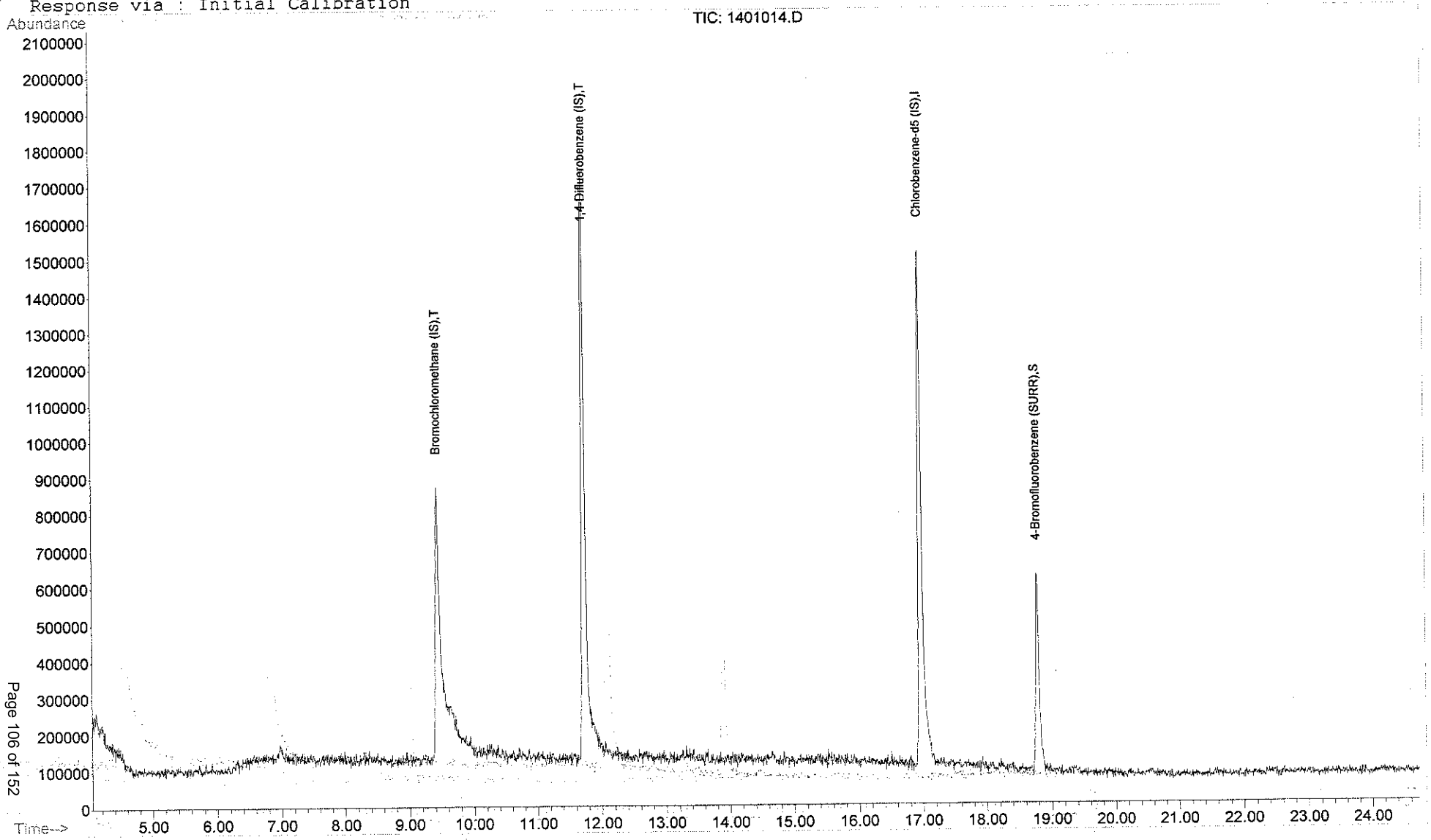
Quantitation Report

Data File : C:\HPCHEM\1\DATA\031620C\1401014.D
Acq On : 16 Mar 2020 11:50 pm
Sample : METHOD BLANK
Misc : TO-15 QC
MS Integration Params: rteint.p
Quant Time: Mar 17 9:52 2020

Vial: 14
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 031620AI.RES

Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Tue Mar 17 09:49:17 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\031620C\4201042.D
Acq On : 17 Mar 2020 7:38 pm
Sample : LCS-10PPBV
Misc : TO-15 QC
MS Integration Params: rteint.p
Quant Time: Mar 18 6:53 2020

Vial: 42
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 031620AI.RES

Quant Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Tue Mar 17 09:49:17 2020
Response via : Initial Calibration
DataAcq Meth : ENV05

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane (IS)	9.44	128	758736	5.00	ppbv	0.00
25) 1,4-Difluorobenzene (IS)	11.73	114	3670951	5.00	ppbv	-0.01
45) Chlorobenzene-d5 (IS)	16.94	117	2789122	5.00	ppbv	-0.01
System Monitoring Compounds						
56) 4-Bromofluorobenzene (SURR	18.75	95	1301580	4.88	ppbv	-0.01
Spiked Amount 5.000	Range 62 - 145		Recovery = 97.60%			
Target Compounds						Qvalue
2) Propylene	4.08	39	1337262	9.94	ppbv	
3) Dichlorodifluoromethane	4.17	85	7147696	10.71	ppbv	97
4) Chloromethane	4.36	50	2716657	8.28	ppbv	100
5) Vinyl Chloride	4.61	62	1578257	9.12	ppbv	
6) 1,3-Butadiene	4.77	39	643738	9.28	ppbv	
7) Bromomethane	5.07	94	1679019	9.23	ppbv	95
8) Chloroethane	5.27	64	577560	8.84	ppbv	92
9) Vinyl Bromide	5.65	106	1679426	10.67	ppbv	96
10) Trichlorofluoromethane	6.13	101	7842637	11.04	ppbv	99
11) Acetone	5.97	43	2574874	9.43	ppbv	
12) Isopropyl Alcohol (IPA)	6.28	45	2488552	10.29	ppbv	
13) 1,1-Dichloroethene	6.83	61	4131945	10.50	ppbv	98
14) Methylene Chloride	6.97	84	2285456	10.16	ppbv	
15) Carbon Disulfide	7.31	76	6618220	10.23	ppbv	95
16) trans-1,2-Dichloroethene	8.04	96	1951260	9.53	ppbv	94
17) Methyl-tert-butyl ether	8.38	73	5476441	9.49	ppbv	97
18) 1,1-Dichloroethane	8.28	63	5272932	9.68	ppbv #	96
19) Vinyl Acetate	8.47	43	5843112	8.69	ppbv	100
20) N-Hexane	9.51	57	4381879	9.34	ppbv	98
21) 2-Butanone (MEK)	8.76	43	4890430	9.02	ppbv	96
22) cis-1,2-Dichloroethene	9.25	61	3588606	9.75	ppbv	98
23) Ethyl Acetate	9.52	43	8675170	9.18	ppbv	99
24) Chloroform	9.59	83	5222530	10.15	ppbv	97
26) Tetrahydrofuran	10.07	42	3483002	8.49	ppbv	98
27) 1,2-Dichloroethane	10.46	62	3140651	8.87	ppbv	99
28) 1,1,1-Trichloroethane	10.77	97	4247405	9.09	ppbv	97
29) 1,1-Dichloropropene	13.58	75	5146506	9.30	ppbv	98
30) Carbon Tetrachloride	11.48	117	4535090	9.82	ppbv	99
31) Benzene	11.31	78	7997607	9.57	ppbv	99
32) Cyclohexane	11.65	56	4905888	9.44	ppbv	98
33) 1,2-Dichloropropane	12.28	63	3415807	9.23	ppbv	97
34) Trichloroethene	12.56	95	2990467	9.64	ppbv	98
35) Bromodichloromethane	12.50	83	5315898	8.86	ppbv	99
36) 1,4-Dioxane	12.55	88	896725	9.02	ppbv	
37) Isooctane	12.63	57	15802028	9.14	ppbv	99
38) N-Heptane	12.93	43	5320424	8.67	ppbv	99
39) cis-1,3-Dichloropropene	13.58	75	5146506	9.84	ppbv	98
40) 4-Methyl-2-Penanone (MIBK)	13.63	43	6138797	9.09	ppbv	99
41) trans-1,3-Dichloropropene	14.20	75	3472756	9.49	ppbv	98
42) 1,1,2-Trichloroethane	14.43	83	2862475	9.46	ppbv	98
43) Toluene	14.79	91	8158220	10.04	ppbv	99
44) 2-Hexanone	15.09	43	5409686m	9.32	ppbv	
46) Dibromochloromethane	15.28	129	5030981	9.15	ppbv	99
47) 1,2-Dibromoethane (EDB)	15.60	107	4213674	9.67	ppbv	97
48) Tetrachloroethene	16.18	166	3479397	9.70	ppbv	98
49) Chlorobenzene	17.00	112	5755304	8.81	ppbv	100
50) Ethylbenzene	17.45	91	10737847	10.09	ppbv	100
51) m,p-Xylene	17.65	91	7065322	18.99	ppbv	100
52) Bromoform	17.74	173	3962820	9.74	ppbv #	99
53) Styrene	18.08	104	4795651	9.72	ppbv	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\031620C\4201042.D
Acq On : 17 Mar 2020 7:38 pm
Sample : LCS-10PPBV
Misc : TO-15 QC
MS Integration Params: rteint.p
Quant Time: Mar 18 6:53 2020

Vial: 42
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 031620AI.RES

Quant Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Tue Mar 17 09:49:17 2020
Response via : Initial Calibration
DataAcq Meth : ENV05

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
54) 1,1,2,2-Tetrachloroethane	18.18	83	6886737	9.49	ppbv	99
55) o-Xylene	18.21	106	3219166	9.60	ppbv	97
57) 4-Ethyltoluene	19.71	105	8974341	11.17	ppbv	99
58) 1,3,5-Trimethylbenzene	19.80	105	7618842	9.92	ppbv	100
59) 1,2,4-Trimethylbenzene	20.32	105	6692689	11.03	ppbv	99
60) 1,3-Dichlorobenzene	20.52	146	4062343	10.85	ppbv	97
61) Benzyl Chloride	20.49	91	3965949	9.11	ppbv	100
62) 1,4-Dichlorobenzene	20.61	148	1703613	9.46	ppbv	
63) 1,2-Dichlorobenzene	21.07	146	3620997	10.15	ppbv	98
64) 1,2,4-Trichlorobenzene	23.55	180	470075	11.01	ppbv	98
65) Naphthalene	23.73	128	902690	10.91	ppbv	98
66) Hexachloro-1,3-butadiene	24.26	225	586519	10.50	ppbv	

(#) = qualifier out of range (m) = manual integration
4201042.D 031620AI.M Wed Mar 18 07:42:48 2020

Quantitation Report

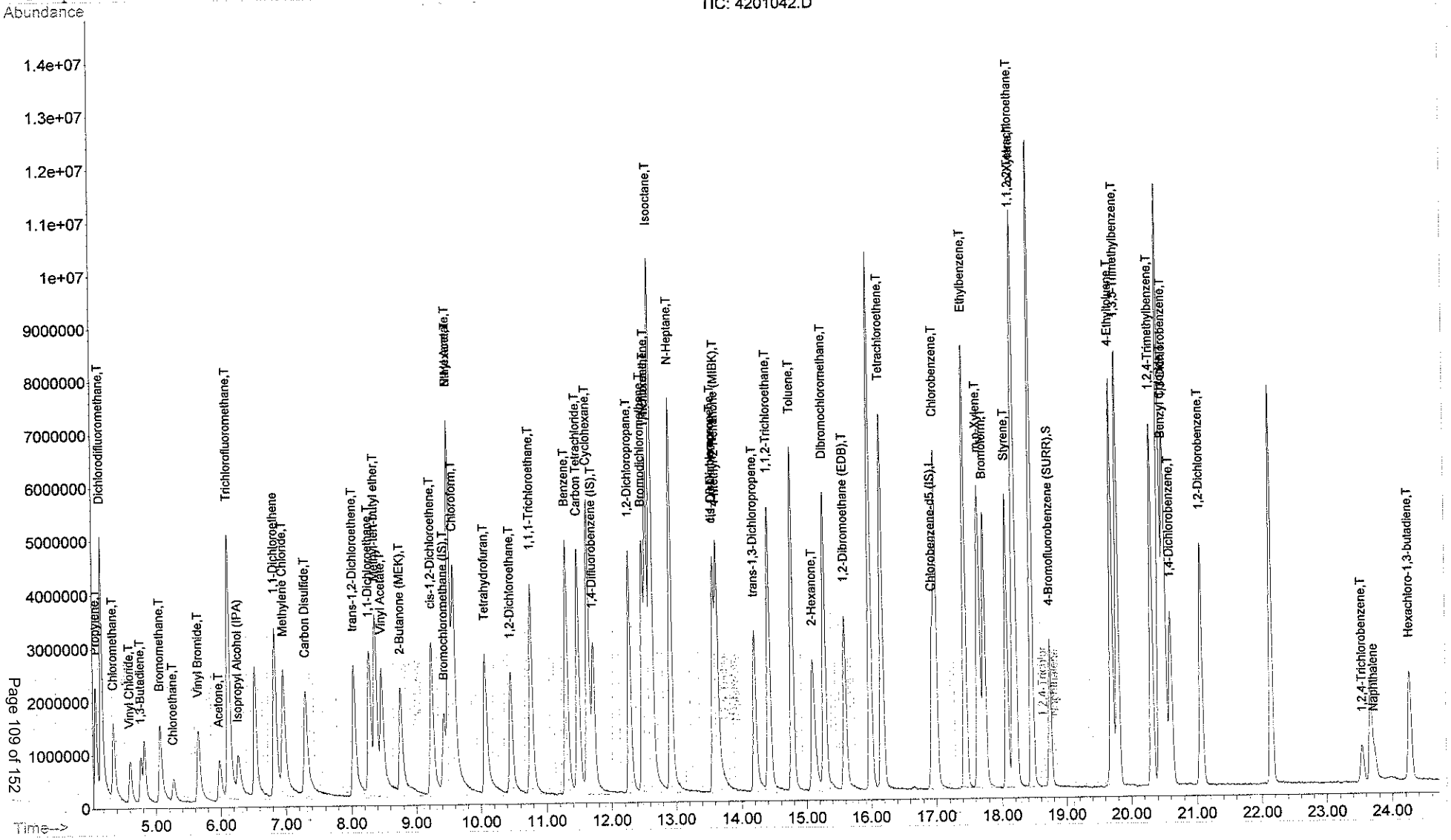
Data File : C:\HPCHEM\1\DATA\031620C\4201042.D
Acq On : 17 Mar 2020 7:38 pm
Sample : LCS-10PPBV
Misc : TO-15 QC
MS Integration Params: rteint.p
Quant Time: Mar 18 6:53 2020

Vial: 42
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 031620AI.RES

Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Tue Mar 17 09:49:17 2020
Response via : Initial Calibration

TIC: 4201042.D



4201042.D 031620AI.M Wed Mar 18 07:42:48 2020

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\031620C\4301043.D Vial: 43
Acq On : 17 Mar 2020 8:15 pm Operator: TJG
Sample : LCSD-10PPBV Inst : GC/MS Ins
Misc : TO-15 QC Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 18 6:54 2020 Quant Results File: 031620AI.RES

Quant Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Tue Mar 17 09:49:17 2020
Response via : Initial Calibration
DataAcq Meth : ENV05

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane (IS)	9.43	128	783188	5.00	ppbv		-0.02
25) 1,4-Difluorobenzene (IS)	11.72	114	3821190	5.00	ppbv		-0.02
45) Chlorobenzene-d5 (IS)	16.94	117	2947817	5.00	ppbv		-0.01
System Monitoring Compounds							
56) 4-Bromofluorobenzene (SURR	18.75	95	1401540	4.97	ppbv		-0.01
Spiked Amount 5.000	Range 62 - 145		Recovery = 99.40%				
Target Compounds							Qvalue
2) Propylene	4.08	39	1357663	9.78	ppbv		
3) Dichlorodifluoromethane	4.16	85	7474224	10.85	ppbv		98
4) Chloromethane	4.34	50	3022978	8.93	ppbv		
5) Vinyl Chloride	4.59	62	1657194	9.28	ppbv		96
6) 1,3-Butadiene	4.76	39	596037	8.33	ppbv		92
7) Bromomethane	5.06	94	1773834	9.45	ppbv		96
8) Chloroethane	5.26	64	605901	8.99	ppbv		96
9) Vinyl Bromide	5.65	106	1760258	10.83	ppbv		93
10) Trichlorofluoromethane	6.11	101	7729832	10.54	ppbv		99
11) Acetone	5.97	43	2667954	9.46	ppbv		
12) Isopropyl Alcohol (IPA)	6.27	45	2430333	9.74	ppbv		
13) 1,1-Dichloroethene	6.83	61	4273263	10.52	ppbv		96
14) Methylene Chloride	6.96	84	2158782	9.29	ppbv		95
15) Carbon Disulfide	7.30	76	6324457	9.47	ppbv	#	84
16) trans-1,2-Dichloroethene	8.04	96	2007798	9.50	ppbv		96
17) Methyl-tert-butyl ether	8.37	73	5896820	9.90	ppbv		99
18) 1,1-Dichloroethane	8.28	63	5549440	9.87	ppbv	#	96
19) Vinyl Acetate	8.47	43	5693285	8.21	ppbv		99
20) N-Hexane	9.51	57	4707413	9.72	ppbv		99
21) 2-Butanone (MEK)	8.76	43	4993053	8.92	ppbv		96
22) cis-1,2-Dichloroethene	9.24	61	3716071	9.78	ppbv		99
23) Ethyl Acetate	9.52	43	9277957	9.51	ppbv		99
24) Chloroform	9.59	83	5516227	10.38	ppbv		99
26) Tetrahydrofuran	10.06	42	3647970	8.55	ppbv		96
27) 1,2-Dichloroethane	10.45	62	3371202	9.14	ppbv		97
28) 1,1,1-Trichloroethane	10.77	97	4546160	9.35	ppbv		96
29) 1,1-Dichloropropene	13.57	75	5478517	9.51	ppbv		98
30) Carbon Tetrachloride	11.48	117	4909837	10.21	ppbv		100
31) Benzene	11.31	78	8438002	9.70	ppbv		100
32) Cyclohexane	11.64	56	5236063	9.68	ppbv		97
33) 1,2-Dichloropropane	12.28	63	3657605	9.49	ppbv		98
34) Trichloroethene	12.56	95	3167812	9.81	ppbv		97
35) Bromodichloromethane	12.49	83	5768130	9.24	ppbv		98
36) 1,4-Dioxane	12.55	88	858539	8.29	ppbv		98
37) Isooctane	12.63	57	16920480	9.40	ppbv		100
38) N-Heptane	12.92	43	5628566	8.81	ppbv		100
39) cis-1,3-Dichloropropene	13.57	75	5478517	10.07	ppbv		99
40) 4-Methyl-2-Penanone (MIBK)	13.63	43	6629952	9.44	ppbv		99
41) trans-1,3-Dichloropropene	14.20	75	3709556	9.74	ppbv		99
42) 1,1,2-Trichloroethane	14.42	83	3079878	9.78	ppbv		98
43) Toluene	14.78	91	8704902	10.29	ppbv		100
44) 2-Hexanone	15.10	43	5275051	8.73	ppbv		97
46) Dibromochloromethane	15.28	129	5417143	9.32	ppbv		99
47) 1,2-Dibromoethane (EDB)	15.59	107	4515576	9.81	ppbv		98
48) Tetrachloroethene	16.17	166	3748976	9.89	ppbv		100
49) Chlorobenzene	17.00	112	6219750	9.01	ppbv		99
50) Ethylbenzene	17.44	91	11606061	10.32	ppbv		100
51) m,p-Xylene	17.65	91	7567932	19.24	ppbv		99
52) Bromoform	17.74	173	4300560	10.00	ppbv	#	99
53) Styrene	18.08	104	5103992	9.79	ppbv		100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\031620C\4301043.D
Acq On : 17 Mar 2020 8:15 pm
Sample : LCSD-10PPBV
Misc : TO-15 QC
MS Integration Params: rteint.p
Quant Time: Mar 18 6:54 2020

Vial: 43
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 031620AI.RES

Quant Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Tue Mar 17 09:49:17 2020
Response via : Initial Calibration
DataAcq Meth : ENV05

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
54) 1,1,2,2-Tetrachloroethane	18.18	83	7339813	9.57	ppbv	100
55) o-Xylene	18.21	106	3508682	9.89	ppbv	99
57) 4-Ethyltoluene	19.71	105	9345848	11.00	ppbv	99
58) 1,3,5-Trimethylbenzene	19.80	105	8272171	10.19	ppbv	98
59) 1,2,4-Trimethylbenzene	20.32	105	7138822	11.13	ppbv	100
60) 1,3-Dichlorobenzene	20.52	146	4332813	10.95	ppbv	98
61) Benzyl Chloride	20.49	91	4347945	9.45	ppbv	99
62) 1,4-Dichlorobenzene	20.61	148	1698306	8.92	ppbv	98
63) 1,2-Dichlorobenzene	21.07	146	3910673	10.38	ppbv	97
64) 1,2,4-Trichlorobenzene	23.54	180	489400	10.85	ppbv	98
65) Naphthalene	23.73	128	929887	10.64	ppbv	99
66) Hexachloro-1,3-butadiene	24.27	225	606723	10.28	ppbv	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

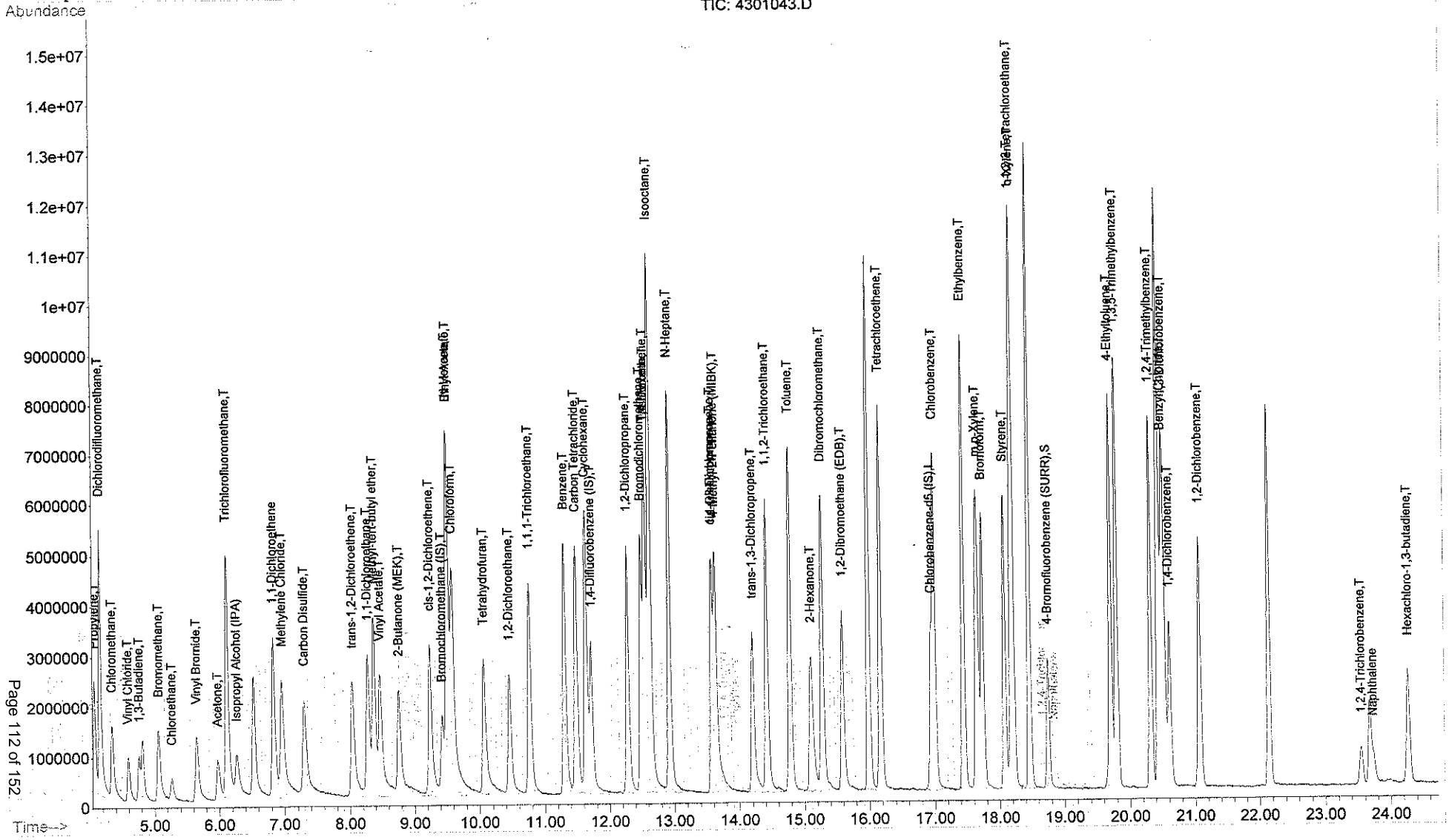
Data File : C:\HPCHEM\1\DATA\031620C\4301043.D
Acq On : 17 Mar 2020 8:15 pm
Sample : LCSD-10PPBV
Misc : TO-15 QC
MS Integration Params: rteint.p
Quant Time: Mar 18 6:54 2020

Vial: 43
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 031620AI.RES

Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Tue Mar 17 09:49:17 2020
Response via : Initial Calibration

TIC: 4301043.D



4301043.D 031620AI.M Wed Mar 18 07:42:53 2020

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\031620C\4101041.D Vial: 41
Acq On : 17 Mar 2020 6:53 pm Operator: TJG
Sample : METHOD BLANK Inst : GC/MS Ins
Misc : TO-15 QC Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 18 6:51 2020 Quant Results File: 031620AI.RES

Quant Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Tue Mar 17 09:49:17 2020
Response via : Initial Calibration
DataAcq Meth : ENV05

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane (IS)	9.42	128	725365	5.00	ppbv	-0.02
25) 1,4-Difluorobenzene (IS)	11.71	114	2192265	5.00	ppbv	-0.03
45) Chlorobenzene-d5 (IS)	16.94	117	1410608	5.00	ppbv	-0.01
System Monitoring Compounds						
56) 4-Bromofluorobenzene (SURR	18.76	95	620427	4.60	ppbv	0.00
Spiked Amount 5.000	Range 62 - 145		Recovery = 92.00%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration

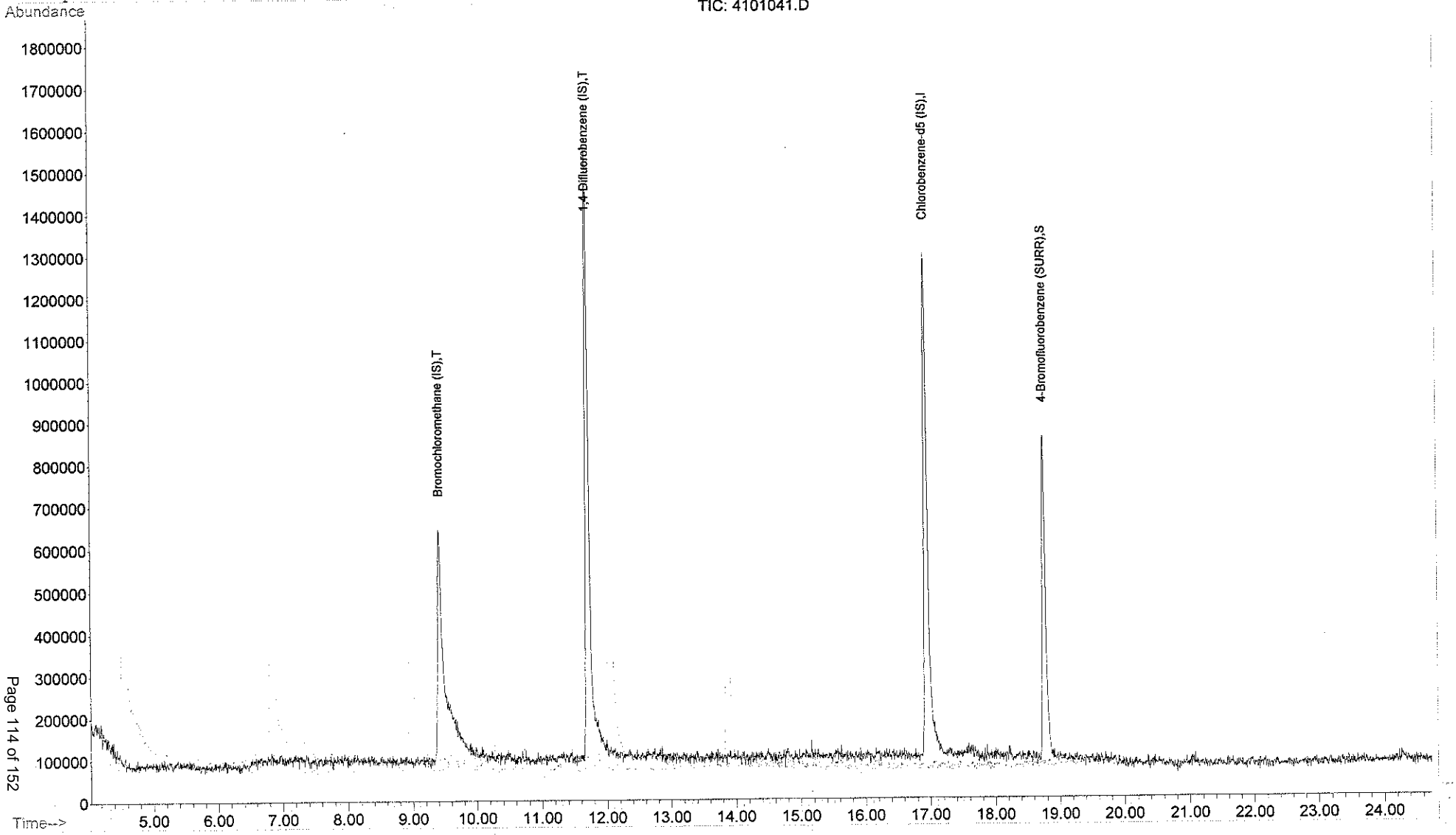
Quantitation Report

Data File : C:\HPCHEM\1\DATA\031620C\4101041.D
Acq On : 17 Mar 2020 6:53 pm
Sample : METHOD BLANK
Misc : TO-15 QC
MS Integration Params: rteint.p
Quant Time: Mar 18 6:51 2020

Vial: 41
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 031620AI.RES

Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Tue Mar 17 09:49:17 2020
Response via : Initial Calibration



4101041.D 031620AI.M Wed Mar 18 07:42:57 2020

ENVISIONAIR

TO-15 VOC

- Raw Sample Data

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\031620C\2301023.D
Acq On : 17 Mar 2020 6:10 am
Sample : 20-876
Misc : TO-15 QC
MS Integration Params: rteint.p
Quant Time: Mar 18 7:37 2020

Vial: 23
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 031620AI.RES

Quant Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Tue Mar 17 09:49:17 2020
Response via : Initial Calibration
DataAcq Meth : ENV05

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane (IS)	9.44	128	682703	5.00	ppbv	0.00
25) 1,4-Difluorobenzene (IS)	11.73	114	2166408	5.00	ppbv	0.00
45) Chlorobenzene-d5 (IS)	16.96	117	1774865	5.00	ppbv	0.00
System Monitoring Compounds						
56) 4-Bromofluorobenzene (SURR	18.77	95	767764	4.52	ppbv	0.00
Spiked Amount 5.000	Range 62 - 145		Recovery = 90.40%			
Target Compounds						Qvalue
26) Tetrahydrofuran	10.10	42	347876	1.44	ppbv #	89

(#) = qualifier out of range (m) = manual integration

Quantitation Report

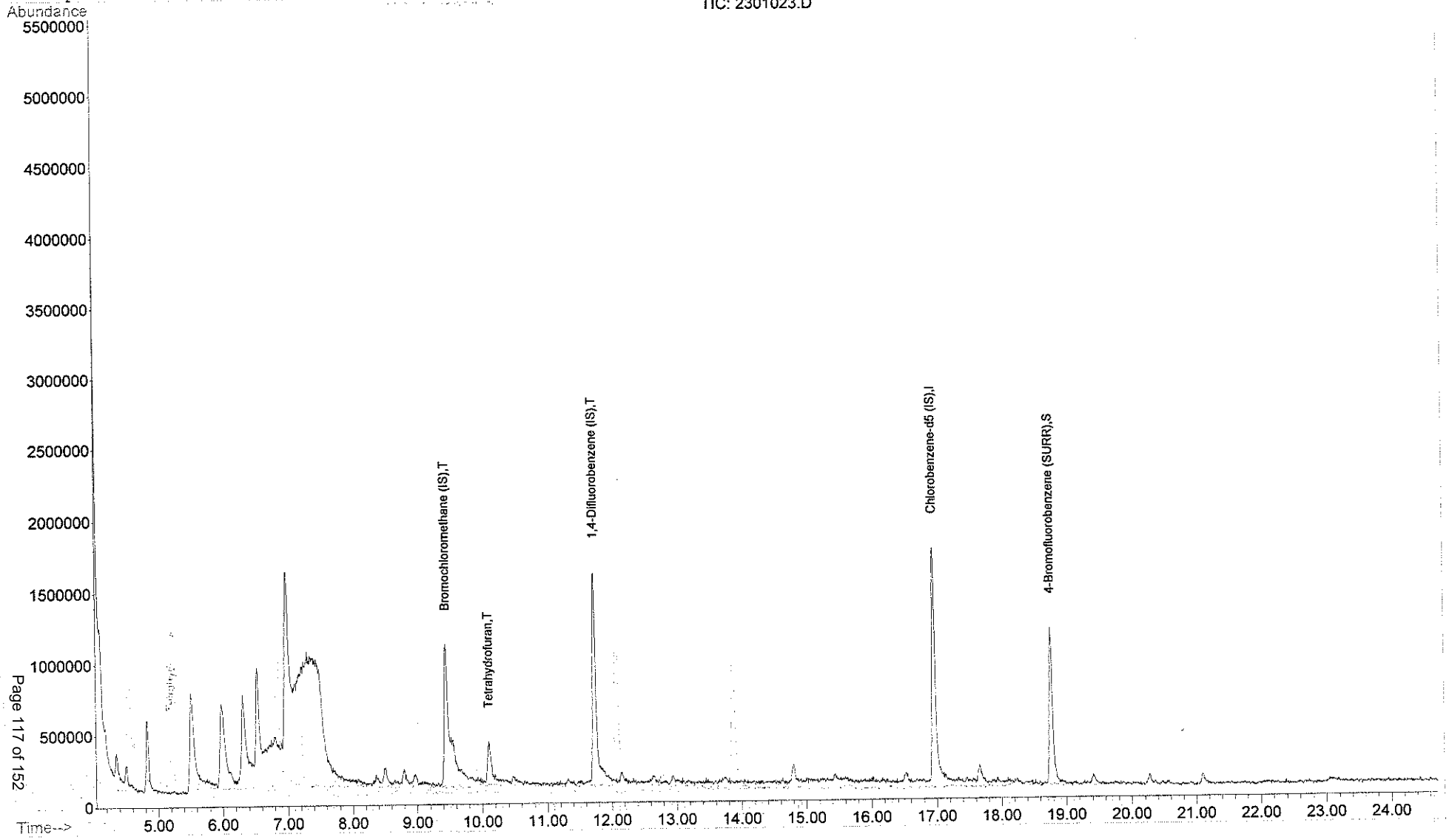
Data File : C:\HPCHEM\1\DATA\031620C\2301023.D
Acq On : 17 Mar 2020 6:10 am
Sample : 20-876
Misc : TO-15 QC
MS Integration Params: rteint.p
Quant Time: Mar 18 7:37 2020

Vial: 23
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 031620AI.RES

Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Tue Mar 17 09:49:17 2020
Response via : Initial Calibration

TIC: 2301023.D



2301023.D 031620AI.M Wed Mar 18 07:40:38 2020

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\031620C\4401044.D
Acq On : 17 Mar 2020 8:48 pm
Sample : 20-877 SS's BEGIN
Misc : TO-15 QC
MS Integration Params: rteint.p
Quant Time: Mar 18 7:43 2020

Vial: 44
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: 031620AI.RES

Quant Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Tue Mar 17 09:49:17 2020
Response via : Initial Calibration
DataAcq Meth : ENV05

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane (IS)	9.42	128	778379	5.00	ppbv	-0.03
25) 1,4-Difluorobenzene (IS)	11.71	114	2594721	5.00	ppbv	-0.03
45) Chlorobenzene-d5 (IS)	16.94	117	2014890	5.00	ppbv	-0.02
System Monitoring Compounds						
56) 4-Bromofluorobenzene (SURR	18.74	95	990742	5.14	ppbv	-0.02
Spiked Amount 5.000	Range 62 - 145		Recovery = 102.80%			
Target Compounds						Qvalue
21) 2-Butanone (MEK)	8.74	43	5134095	9.23	ppbv	97
26) Tetrahydrofuran	10.04	42	5549278	19.14	ppbv	96
28) 1,1,1-Trichloroethane	10.74	97	3619179	10.96	ppbv	98
34) Trichloroethene	12.54	95	1163881	5.31	ppbv	

(#) = qualifier out of range (m) = manual integration

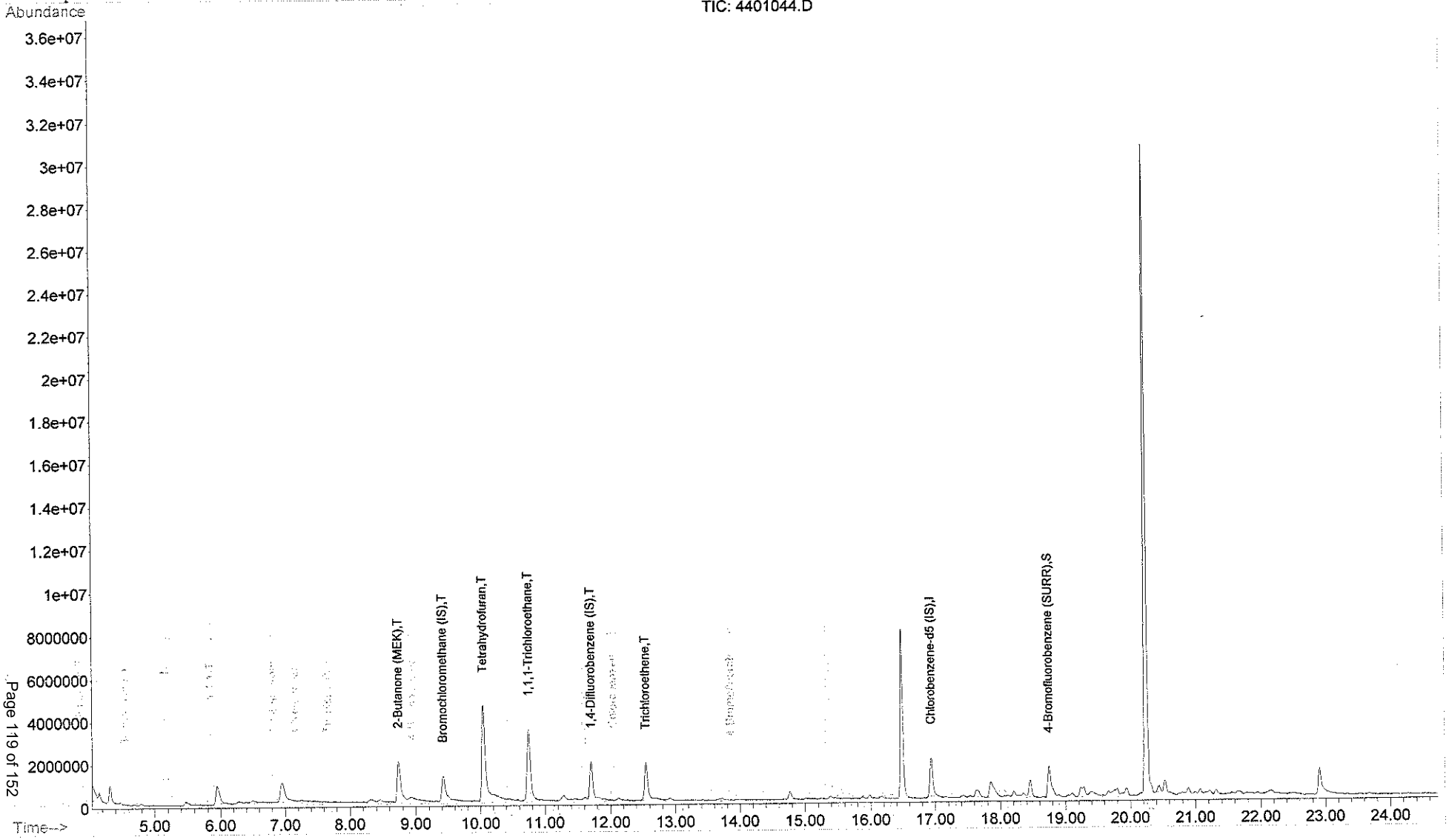
Quantitation Report

Data File : C:\HPCHEM\1\DATA\031620C\4401044.D
Acq On : 17 Mar 2020 8:48 pm
Sample : 20-877 SS's BEGIN
Misc : TO-15 QC
MS Integration Params: rteint.p
Quant Time: Mar 18 7:43 2020

Vial: 44
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 031620AI.RES

Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Tue Mar 17 09:49:17 2020
Response via : Initial Calibration



4401044.D 031620AI.M Wed Mar 18 07:43:46 2020

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\031620C\2401024.D
Acq On : 17 Mar 2020 6:52 am
Sample : 20-878
Misc : TO-15 QC
MS Integration Params: rteint.p
Quant Time: Mar 18 7:37 2020

Vial: 24
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 031620AI.RES

Quant Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Tue Mar 17 09:49:17 2020
Response via : Initial Calibration
DataAcq Meth : ENV05

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane (IS)	9.42	128	669614	5.00	ppbv	-0.02
25) 1,4-Difluorobenzene (IS)	11.69	114	1812240	5.00	ppbv	-0.05
45) Chlorobenzene-d5 (IS)	16.91	117	1504678	5.00	ppbv	-0.04
System Monitoring Compounds						
56) 4-Bromofluorobenzene (SURR	18.74	95	725009	5.04	ppbv	-0.02
MS Spiked Amount 5.000	Range 62 - 145		Recovery = 100.80%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration

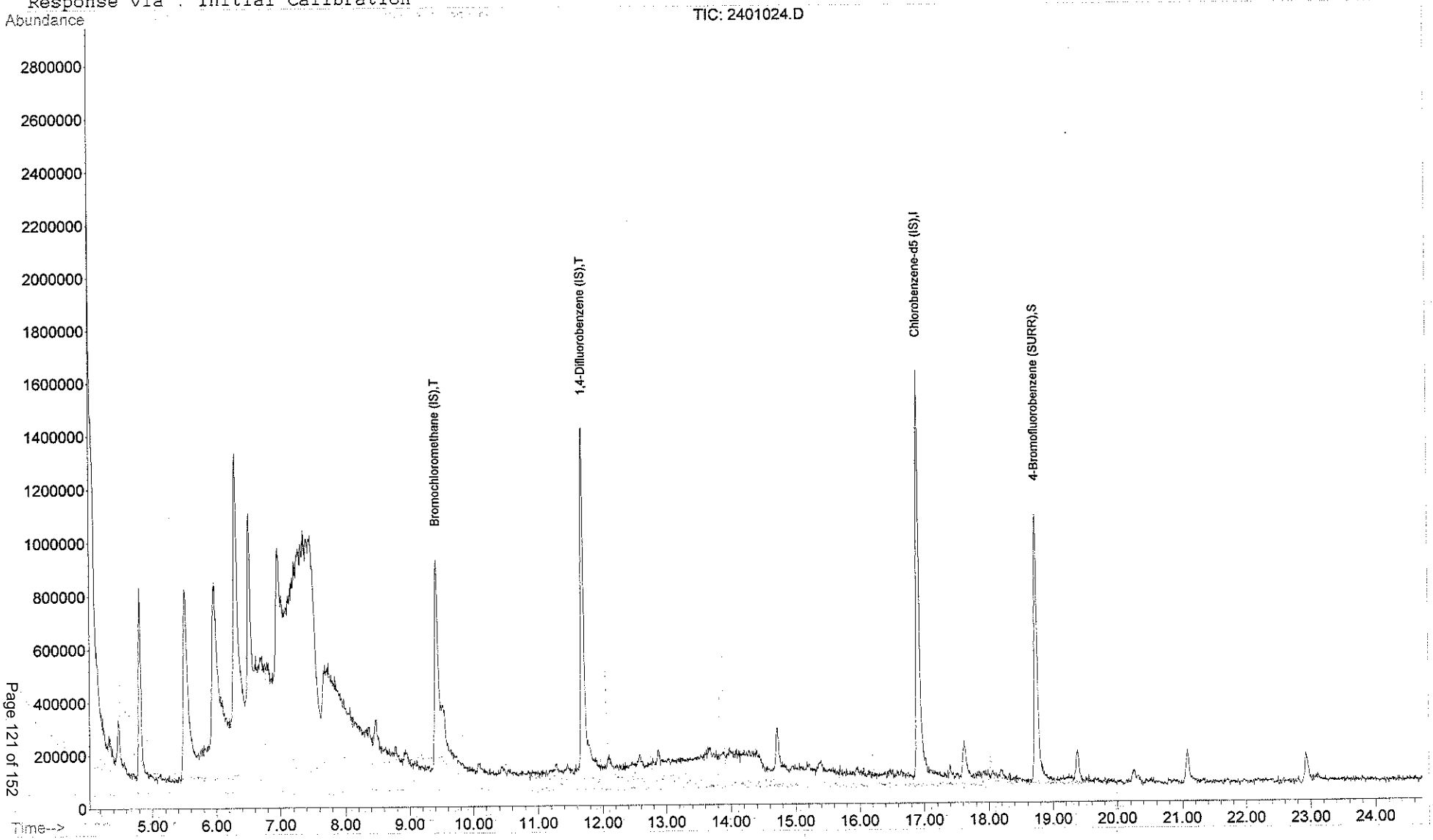
Quantitation Report

Data File : C:\HPCHEM\1\DATA\031620C\2401024.D
Acq On : 17 Mar 2020 6:52 am
Sample : 20-878
Misc : TO-15 QC
MS Integration Params: rteint.p
Quant Time: Mar 18 7:37 2020

Vial: 24
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 031620AI.RES

Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Tue Mar 17 09:49:17 2020
Response via : Initial Calibration



2401024.D 031620AI.M Wed Mar 18 07:40:57 2020

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\031620C\4501045.D
Acq On : 17 Mar 2020 9:23 pm
Sample : 20-879
Misc : TO-15 QC
MS Integration Params: rteint.p
Quant Time: Mar 18 7:44 2020

Vial: 45
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 031620AI.RES

Quant Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Tue Mar 17 09:49:17 2020
Response via : Initial Calibration
DataAcq Meth : ENV05

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane (IS)	9.43	128	789277	5.00	ppbv	-0.02
25) 1,4-Difluorobenzene (IS)	11.71	114	2871598	5.00	ppbv	-0.03
45) Chlorobenzene-d5 (IS)	16.94	117	2141298	5.00	ppbv	-0.02
System Monitoring Compounds						
56) 4-Bromofluorobenzene (SURR	18.74	95	1107477	5.41	ppbv	-0.02
Spiked Amount 5.000	Range 62 - 145		Recovery = 108.20%			
Target Compounds						Qvalue
21) 2-Butanone (MEK)	8.74	43	10605661	18.81	ppbv	
26) Tetrahydrofuran	10.04	42	10946929	34.12	ppbv	
28) 1,1,1-Trichloroethane	10.75	97	949373	2.60	ppbv	
51) m,p-Xylene	17.64	91	884653	3.10	ppbv	97

(#) = qualifier out of range (m) = manual integration

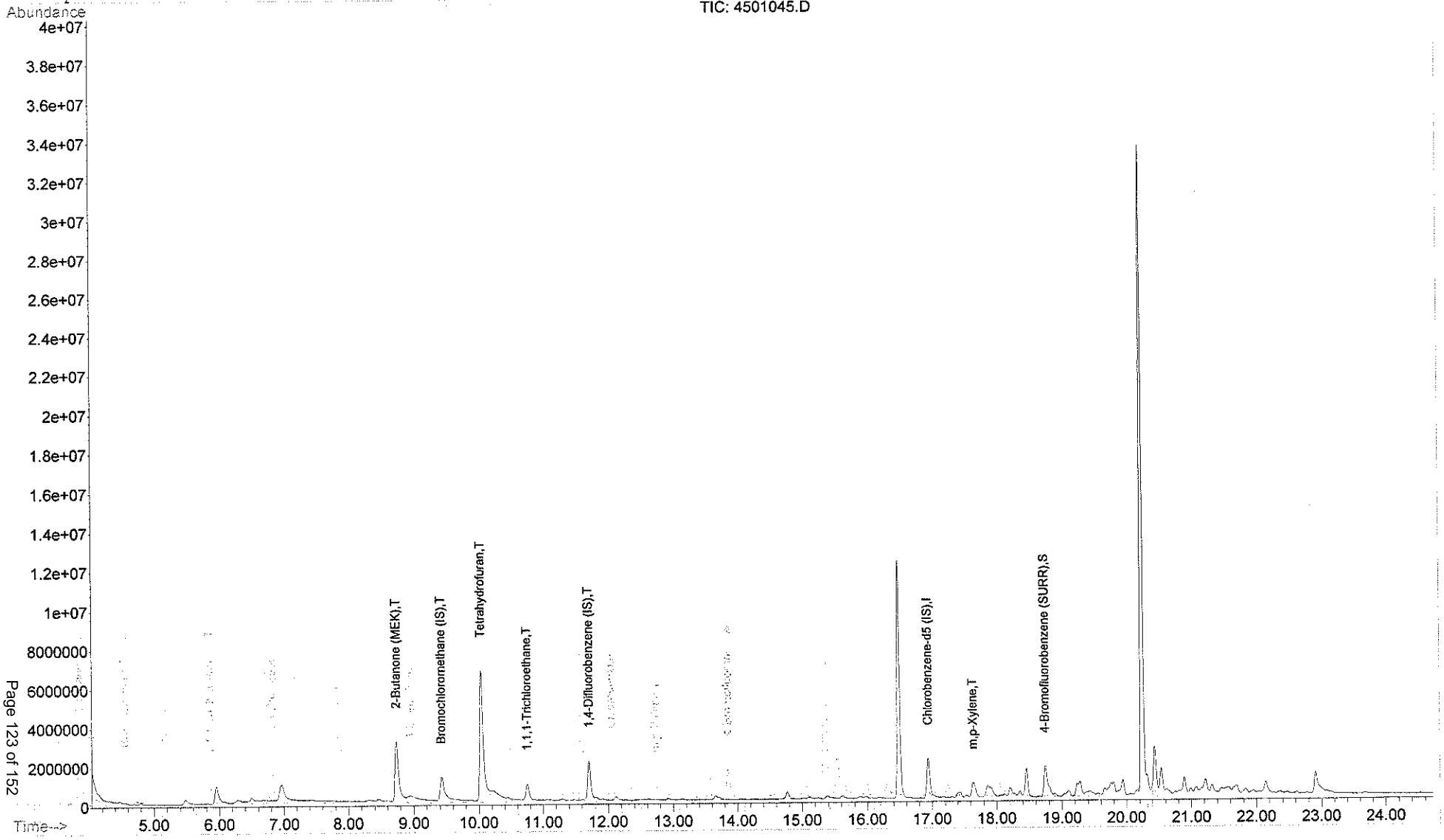
Quantitation Report

Data File : C:\HPCHEM\1\DATA\031620C\4501045.D
Acq On : 17 Mar 2020 9:23 pm
Sample : 20-879
Misc : TO-15 QC
MS Integration Params: rteint.p
Quant Time: Mar 18 7:44 2020

Vial: 45
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 031620AI.RES

Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Tue Mar 17 09:49:17 2020
Response via : Initial Calibration



4501045.D 031620AI.M Wed Mar 18 07:44:49 2020

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\031620C\2601026.D
Acq On : 17 Mar 2020 8:12 am
Sample : 20-880
Misc : TO-15 QC
MS Integration Params: rteint.p
Quant Time: Mar 17 11:47 2020

Vial: 26
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 031620AI.RES

Quant Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Tue Mar 17 09:49:17 2020
Response via : Initial Calibration
DataAcq Meth : ENV05

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane (IS)	9.44	128	707442	5.00	ppbv	0.00
25) 1,4-Difluorobenzene (IS)	11.70	114	2060203	5.00	ppbv	-0.04
45) Chlorobenzene-d5 (IS)	16.40	117	1036484	5.00	ppbv	-0.55
System Monitoring Compounds						
M156) 4-Bromofluorobenzene (SURR	18.27	95	497056	5.01	ppbv	-0.49
Spiked Amount 5.000	Range 62 - 145		Recovery = 100.20%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

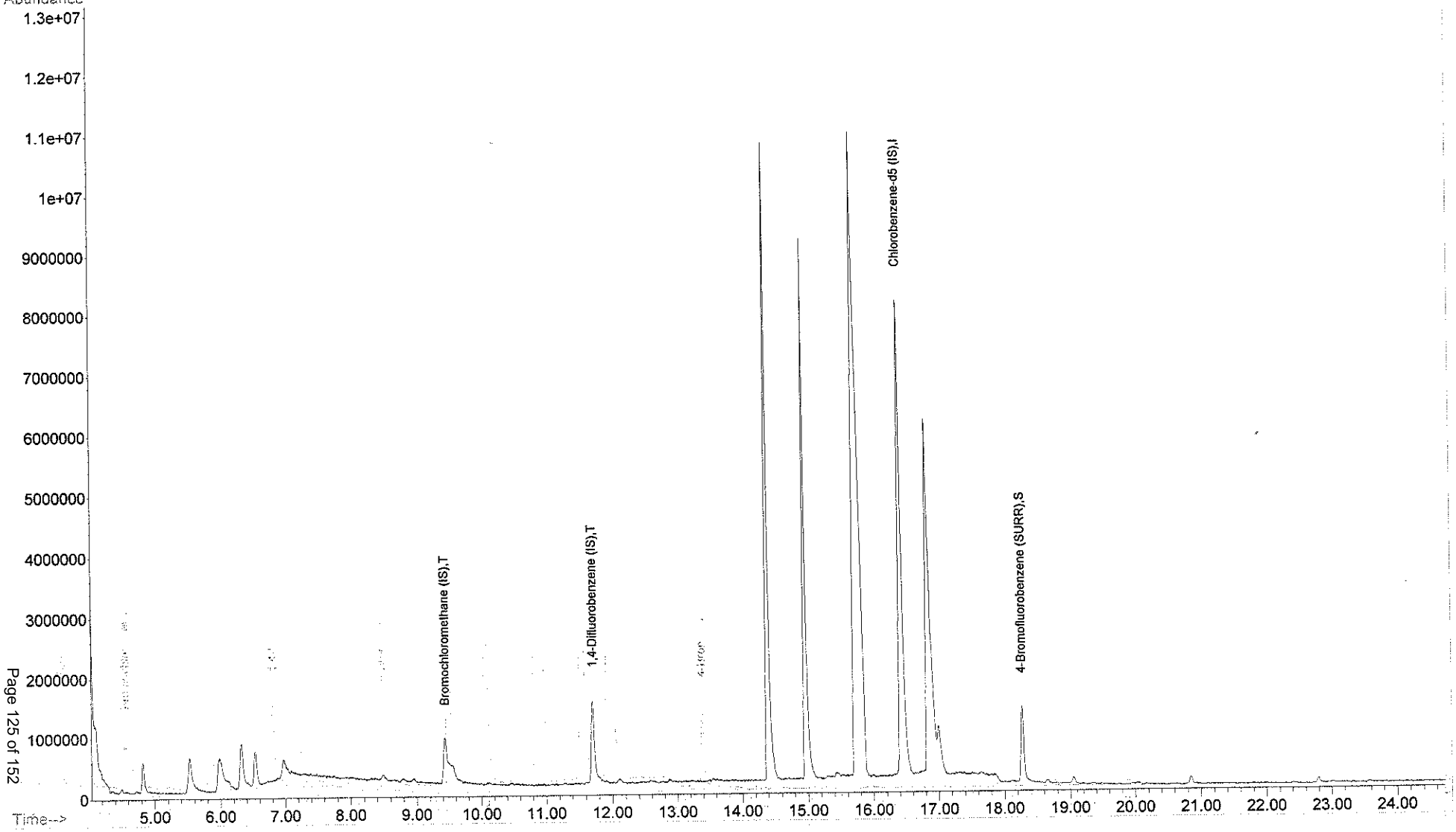
Data File : C:\HPCHEM\1\DATA\031620C\2601026.D
Acq On : 17 Mar 2020 8:12 am
Sample : 20-880
Misc : TO-15 QC
MS Integration Params: rteint.p
Quant Time: Mar 17 11:47 2020

Vial: 26
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 031620AI.RES

Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Tue Mar 17 09:49:17 2020
Response via : Initial Calibration

TIC: 2601026.D



2601026.D 031620AI.M Wed Mar 18 07:41:01 2020

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\031620C\4601046.D
Acq On : 17 Mar 2020 9:56 pm
Sample : 20-881
Misc : TO-15 QC
MS Integration Params: rteint.p
Quant Time: Mar 18 7:45 2020

Vial: 46
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 031620AI.RES

Quant Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Tue Mar 17 09:49:17 2020
Response via : Initial Calibration
DataAcq Meth : ENV05

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane (IS)	9.43	128	742498	5.00	ppbv	-0.02
25) 1,4-Difluorobenzene (IS)	11.71	114	2542597	5.00	ppbv	-0.02
45) Chlorobenzene-d5 (IS)	16.94	117	2441256	5.00	ppbv	-0.02
System Monitoring Compounds						
56) 4-Bromofluorobenzene (SURR	18.74	95	1213348	5.20	ppbv	-0.02
Spiked Amount 5.000	Range 62 - 145		Recovery = 104.00%			
Target Compounds						Qvalue
21) 2-Butanone (MEK)	8.74	43	10305453	19.43	ppbv	
26) Tetrahydrofuran	10.04	42	13307008	46.85	ppbv	
28) 1,1,1-Trichloroethane	10.76	97	343187	1.06	ppbv	
48) Tetrachloroethene	16.17	166	1699254	5.41	ppbv	99
51) m,p-Xylene	17.63	91	733727	2.25	ppbv	100

(#) = qualifier out of range (m) = manual integration

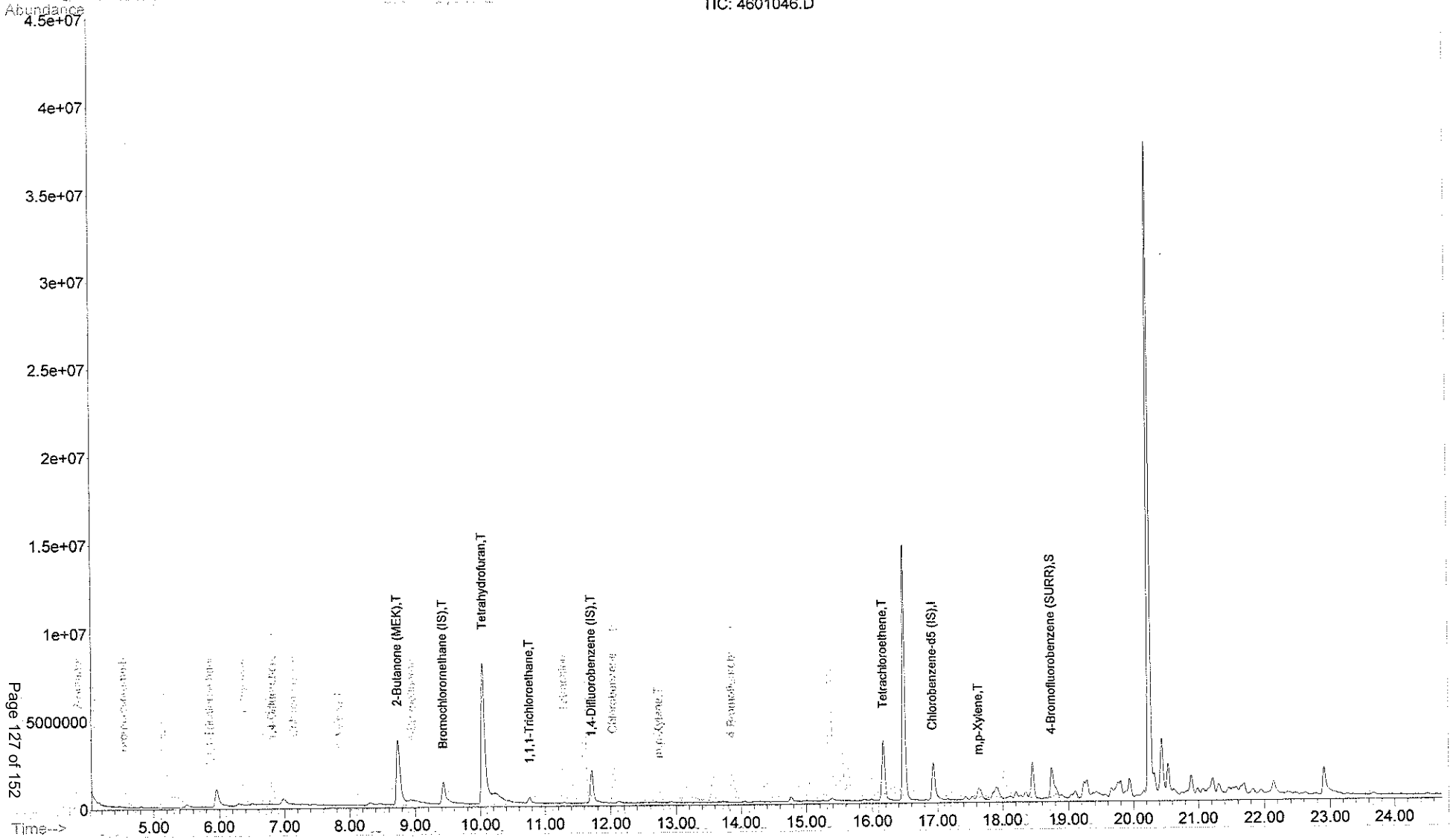
Quantitation Report

Data File : C:\HPCHEM\1\DATA\031620C\4601046.D
Acq On : 17 Mar 2020 9:56 pm
Sample : 20-881
Misc : TO-15 QC
MS Integration Params: rteint.p
Quant Time: Mar 18 7:45 2020

Vial: 46
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: 031620AI.RES

Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Tue Mar 17 09:49:17 2020
Response via : Initial Calibration

TIC: 4601046.D



4601046.D 031620AI.M Wed Mar 18 13:56:15 2020

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\031620C\2801028.D
Acq On : 17 Mar 2020 9:37 am
Sample : 20-882
Misc : TO-15 QC
MS Integration Params: rteint.p
Quant Time: Mar 18 7:38 2020

Vial: 28
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 031620AI.RES

Quant Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Tue Mar 17 09:49:17 2020
Response via : Initial Calibration
DataAcq Meth : ENV05

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane (IS)	9.42	128	747250	5.00	ppbv	-0.02
25) 1,4-Difluorobenzene (IS)	11.71	114	2586599	5.00	ppbv	-0.02
45) Chlorobenzene-d5 (IS)	16.94	117	2021427	5.00	ppbv	-0.01
System Monitoring Compounds						
56) 4-Bromofluorobenzene (SURR	18.76	95	907811	4.70	ppbv	0.00
Spiked Amount 5.000	Range 62 - 145		Recovery = 94.00%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration
2801028.D 031620AI.M Wed Mar 18 07:41:04 2020

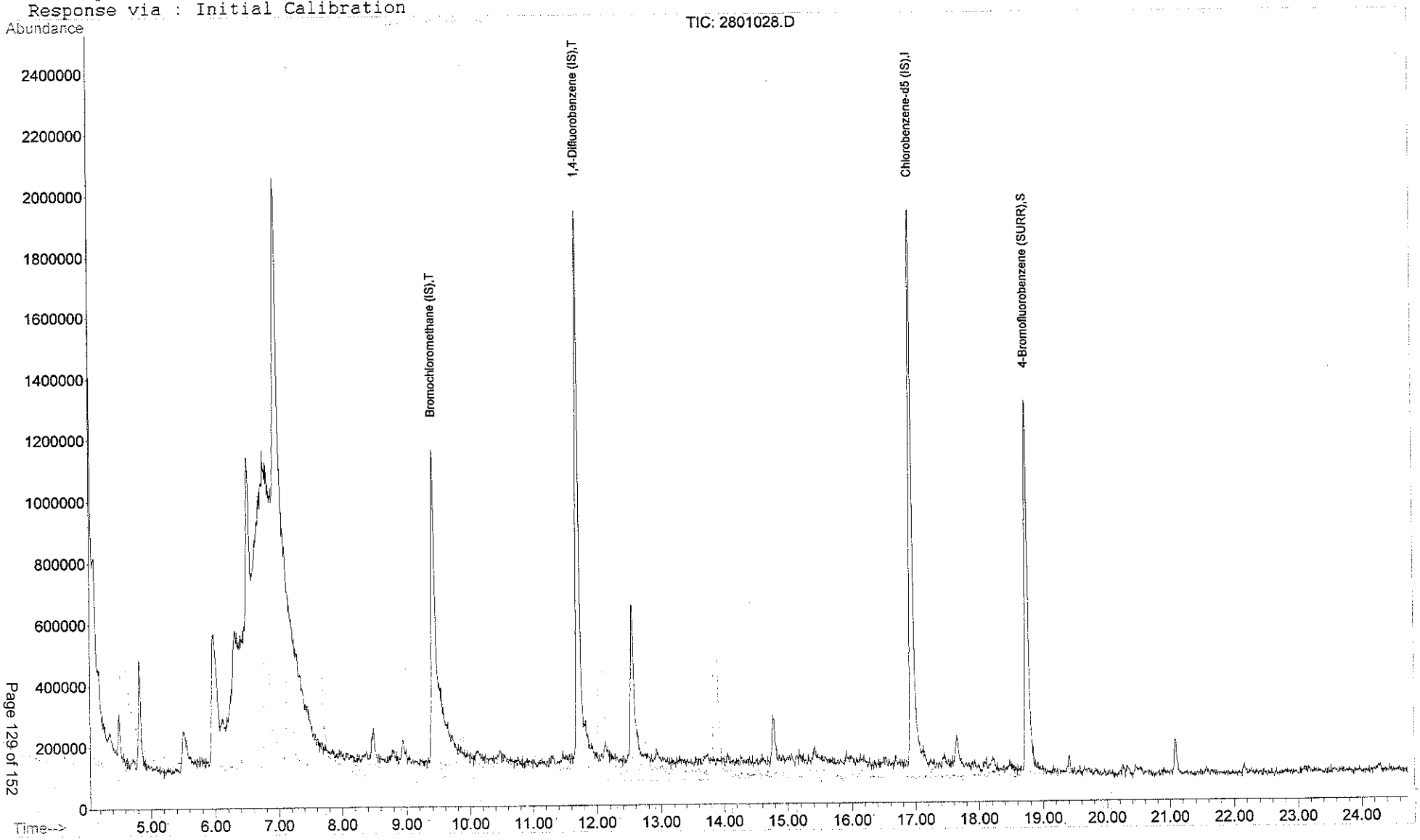
Quantitation Report

Data File : C:\HPCHEM\1\DATA\031620C\2801028.D
Acq On : 17 Mar 2020 9:37 am
Sample : 20-882
Misc : TO-15 QC
MS Integration Params: rteint.p
Quant Time: Mar 18 7:38 2020

Vial: 28
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 031620AI.RES

Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Tue Mar 17 09:49:17 2020
Response via : Initial Calibration



2801028.D 031620AI.M Wed Mar 18 07:41:04 2020

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\031620C\2901029.D
Acq On : 17 Mar 2020 10:19 am
Sample : 20-884
Misc : TO-15 QC
MS Integration Params: rteint.p
Quant Time: Mar 18 7:38 2020

Vial: 29
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 031620AI.RES

Quant Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Tue Mar 17 09:49:17 2020
Response via : Initial Calibration
DataAcq Meth : ENV05

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane (IS)	9.41	128	818466	5.00	ppbv	-0.04
25) 1,4-Difluorobenzene (IS)	11.70	114	2807792	5.00	ppbv	-0.04
45) Chlorobenzene-d5 (IS)	16.94	117	1990460	5.00	ppbv	-0.02
System Monitoring Compounds						
56) 4-Bromofluorobenzene (SURR	18.76	95	917277	4.82	ppbv	0.00
Spiked Amount 5.000	Range 62 - 145		Recovery = 96.40%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration

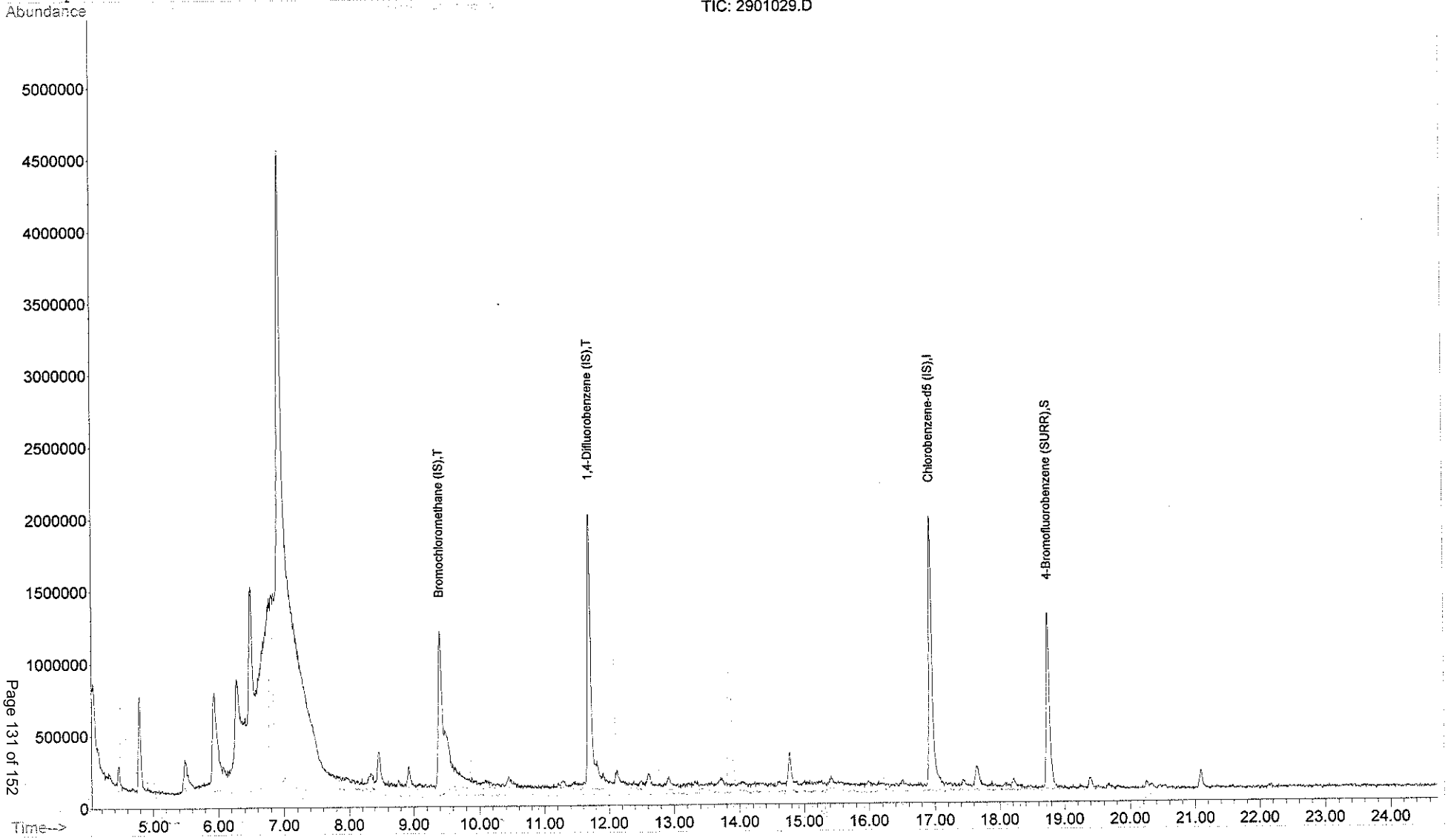
Quantitation Report

Data File : C:\HPCHEM\1\DATA\031620C\2901029.D
Acq On : 17 Mar 2020 10:19 am
Sample : 20-884
Misc : TO-15 QC
MS Integration Params: rteint.p
Quant Time: Mar 18 7:38 2020

Vial: 29
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 031620AI.RES

Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Tue Mar 17 09:49:17 2020
Response via : Initial Calibration



2901029.D 031620AI.M Wed Mar 18 07:41:07 2020

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\031620C\4701047.D
Acq On : 17 Mar 2020 10:30 pm
Sample : 20-885
Misc : TO-15 QC
MS Integration Params: rteint.p
Quant Time: Mar 18 7:46 2020

Vial: 47
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 031620AI.RES

Quant Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Tue Mar 17 09:49:17 2020
Response via : Initial Calibration
DataAcq Meth : ENV05

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane (IS)	9.42	128	652086	5.00	ppbv	-0.03
25) 1,4-Difluorobenzene (IS)	11.68	114	1634857	5.00	ppbv	-0.06
45) Chlorobenzene-d5 (IS)	16.90	117	1426134	5.00	ppbv	-0.06
System Monitoring Compounds						
56) 4-Bromofluorobenzene (SURR	18.71	95	748352	5.49	ppbv	-0.05
Spiked Amount 5.000	Range 62 - 145		Recovery = 109.80%			
Target Compounds						Qvalue
21) 2-Butanone (MEK)	8.75	43	4208253	9.03	ppbv	
26) Tetrahydrofuran	10.04	42	3383444	18.52	ppbv	
28) 1,1,1-Trichloroethane	10.74	97	817843	3.93	ppbv #	88
34) Trichloroethene	12.50	95	25014	0.18	ppbv	
51) m,p-Xylene	17.61	91	439880	2.31	ppbv	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report

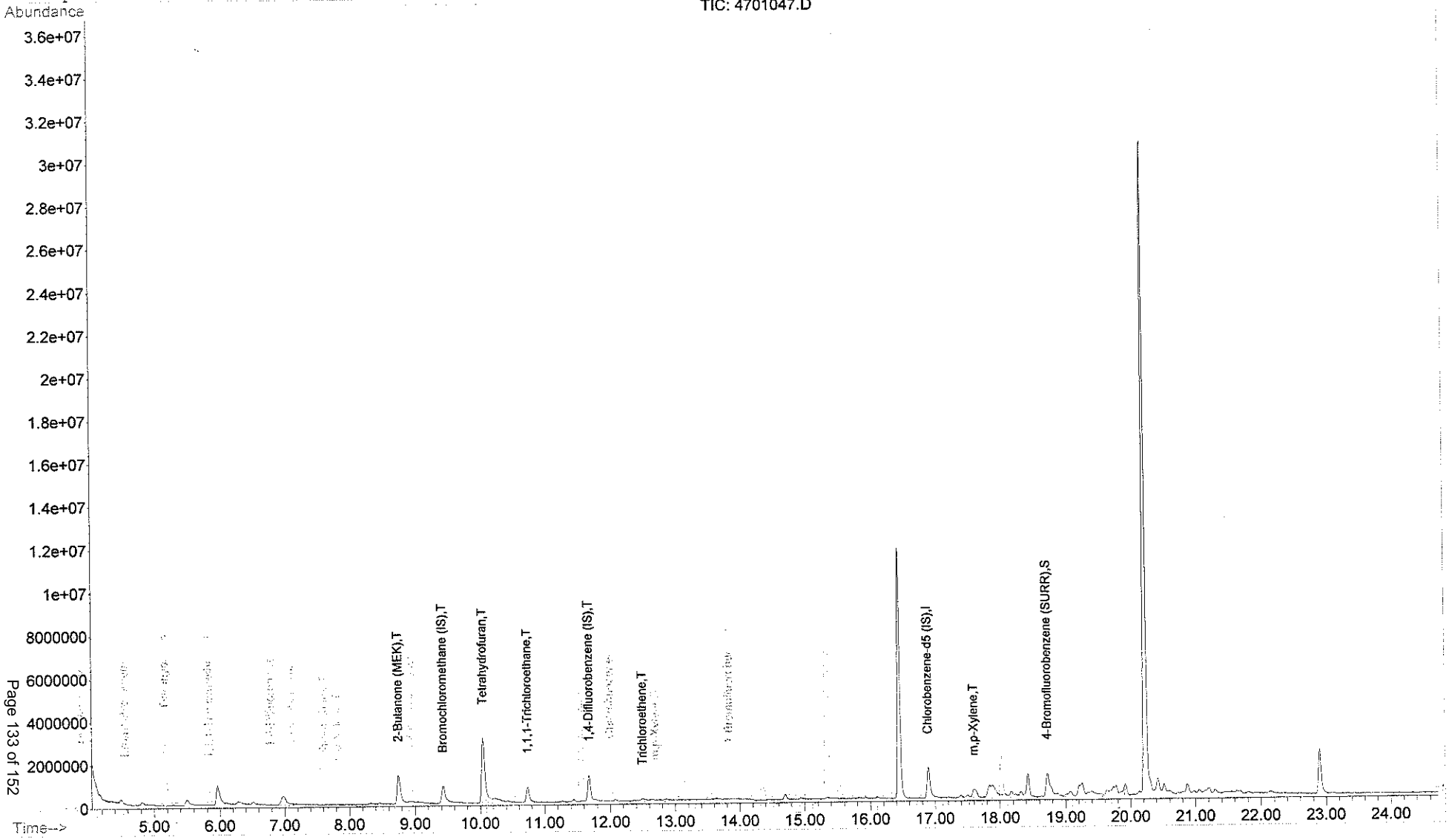
Data File : C:\HPCHEM\1\DATA\031620C\4701047.D
Acq On : 17 Mar 2020 10:30 pm
Sample : 20-885
Misc : TO-15 QC
MS Integration Params: rteint.p
Quant Time: Mar 18 7:46 2020

Vial: 47
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 031620AI.RES

Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Tue Mar 17 09:49:17 2020
Response via : Initial Calibration

TIC: 4701047.D



4701047.D 031620AI.M Wed Mar 18 07:46:21 2020

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\031620C\3201032.D
Acq On : 17 Mar 2020 12:46 pm
Sample : 20-886
Misc : TO-15 QC
MS Integration Params: rteint.p
Quant Time: Mar 18 7:39 2020

Vial: 32
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 031620AI.RES

Quant Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Tue Mar 17 09:49:17 2020
Response via : Initial Calibration
DataAcq Meth : ENV05

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane (IS)	9.44	128	716151	5.00	ppbv	-0.01
25) 1,4-Difluorobenzene (IS)	11.72	114	2582065	5.00	ppbv	-0.02
45) Chlorobenzene-d5 (IS)	16.94	117	1887131	5.00	ppbv	-0.01
System Monitoring Compounds						
56) 4-Bromofluorobenzene (SURR	18.76	95	888010	4.92	ppbv	0.00
Spiked Amount 5.000	Range 62 - 145		Recovery = 98.40%			

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

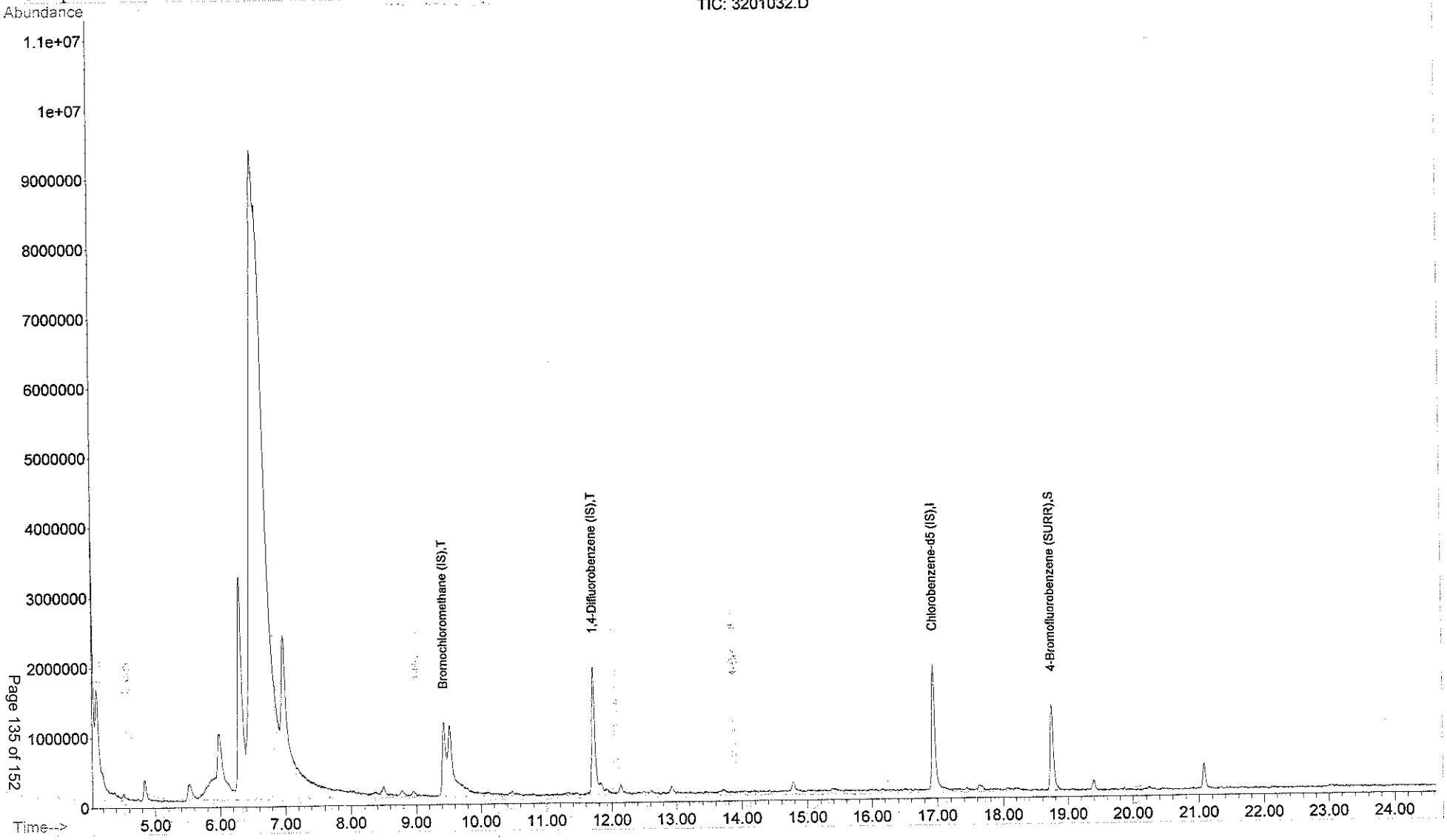
Data File : C:\HPCHEM\1\DATA\031620C\3201032.D
Acq On : 17 Mar 2020 12:46 pm
Sample : 20-886
Misc : TO-15 QC
MS Integration Params: rteint.p
Quant Time: Mar 18 7:39 2020

Vial: 32
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 031620AI.RES

Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Tue Mar 17 09:49:17 2020
Response via : Initial Calibration

TIC: 3201032.D



3201032.D 031620AI.M Wed Mar 18 07:41:11 2020

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\031620C\4801048.D
Acq On : 17 Mar 2020 11:04 pm
Sample : 20-887
Misc : TO-15 QC
MS Integration Params: rteint.p
Quant Time: Mar 18 7:47 2020

Vial: 48
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 031620AI.RES

Quant Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Tue Mar 17 09:49:17 2020
Response via : Initial Calibration
DataAcq Meth : ENV05

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane (IS)	9.42	128	690378	5.00	ppbv	-0.03
25) 1,4-Difluorobenzene (IS)	11.70	114	1659803	5.00	ppbv	-0.04
45) Chlorobenzene-d5 (IS)	16.93	117	1636245	5.00	ppbv	-0.02
System Monitoring Compounds						
56) 4-Bromofluorobenzene (SURR	18.74	95	834347	5.33	ppbv	-0.02
Spiked Amount 5.000	Range 62 - 145		Recovery = 106.60%			
Target Compounds						Qvalue
21) 2-Butanone (MEK)	8.73	43	7600715	15.41	ppbv	
26) Tetrahydrofuran	10.04	42	5943370	32.05	ppbv	
51) m,p-Xylene	17.64	91	855753	3.92	ppbv	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

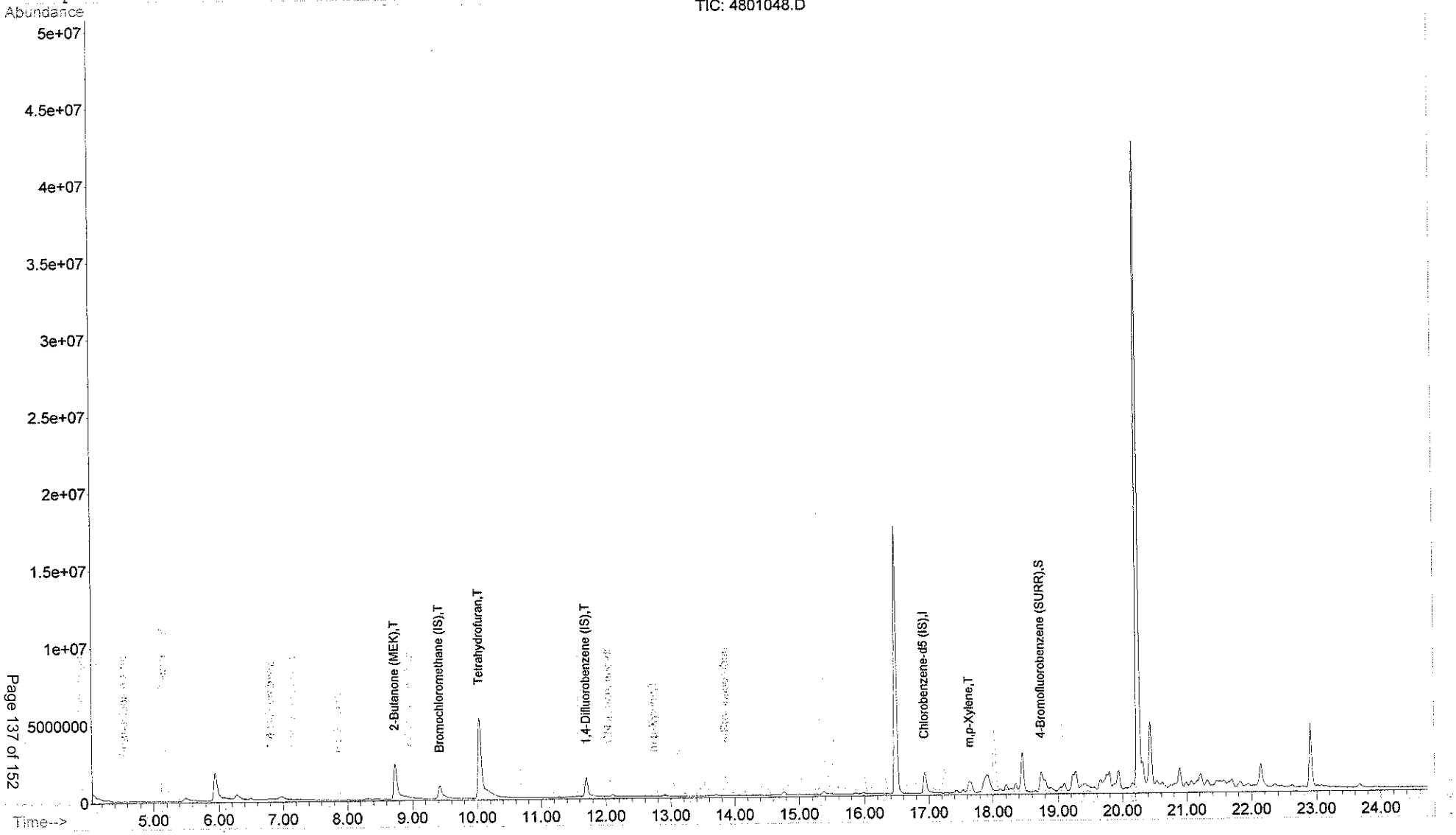
Data File : C:\HPCHEM\1\DATA\031620C\4801048.D
Acq On : 17 Mar 2020 11:04 pm
Sample : 20-887
Misc : TO-15 QC
MS Integration Params: rteint.p
Quant Time: Mar 18 7:47 2020

Vial: 48
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 031620AI.RES

Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Tue Mar 17 09:49:17 2020
Response via : Initial Calibration

TIC: 4801048.D



4801048.D 031620AI.M Wed Mar 18 07:47:17 2020

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\031620C\3301033.D
Acq On : 17 Mar 2020 1:26 pm
Sample : 20-888
Misc : TO-15 QC
MS Integration Params: rteint.p
Quant Time: Mar 18 7:39 2020

Vial: 33
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 031620AI.RES

Quant Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Tue Mar 17 09:49:17 2020
Response via : Initial Calibration
DataAcq Meth : ENV05

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane (IS)	9.41	128	756924	5.00	ppbv	-0.04
25) 1,4-Difluorobenzene (IS)	11.70	114	2557989	5.00	ppbv	-0.04
45) Chlorobenzene-d5 (IS)	16.94	117	1733888	5.00	ppbv	-0.02
System Monitoring Compounds						
56) 4-Bromofluorobenzene (SURR	18.75	95	778525	4.69	ppbv	-0.01
Spiked Amount 5.000	Range 62 - 145		Recovery = 93.80%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

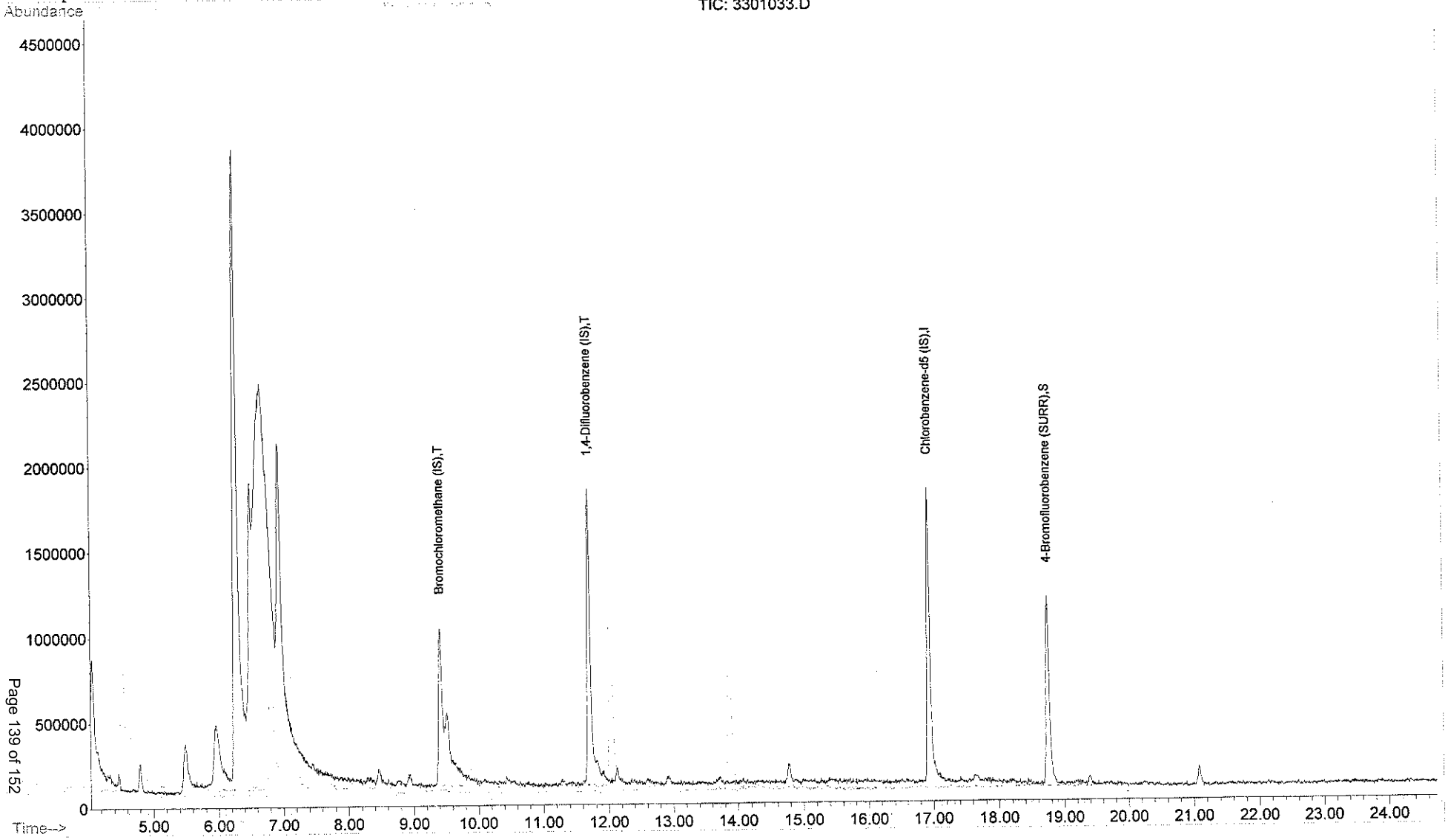
Data File : C:\HPCHEM\1\DATA\031620C\3301033.D
Acq On : 17 Mar 2020 1:26 pm
Sample : 20-888
Misc : TO-15 QC
MS Integration Params: rteint.p
Quant Time: Mar 18 7:39 2020

Vial: 33
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 031620AI.RES

Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Tue Mar 17 09:49:17 2020
Response via : Initial Calibration

TIC: 3301033.D



3301033.D 031620AI.M Wed Mar 18 07:41:14 2020

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\031620C\4901049.D
Acq On : 17 Mar 2020 11:39 pm
Sample : 20-889
Misc : TO-15 QC
MS Integration Params: rteint.p
Quant Time: Mar 18 7:50 2020

Vial: 49
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 031620AI.RES

Quant Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Tue Mar 17 09:49:17 2020
Response via : Initial Calibration
DataAcq Meth : ENV05

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane (IS)	9.42	128	688386	5.00	ppbv	-0.03
25) 1,4-Difluorobenzene (IS)	11.71	114	1810437	5.00	ppbv	-0.03
45) Chlorobenzene-d5 (IS)	16.94	117	1934286	5.00	ppbv	-0.02
System Monitoring Compounds						
56) 4-Bromofluorobenzene (SURR	18.75	95	957191	5.17	ppbv	-0.01
Spiked Amount 5.000	Range 62 - 145		Recovery = 103.40%			
Target Compounds						Qvalue
21) 2-Butanone (MEK)	8.73	43	9576491	19.47	ppbv	97
26) Tetrahydrofuran	10.03	42	18730851	92.61	ppbv	
28) 1,1,1-Trichloroethane	10.75	97	107162	0.46	ppbv	99
32) Cyclohexane	11.62	56	1835877	7.16	ppbv	97
34) Trichloroethene	12.56	95	29800	0.19	ppbv	
48) Tetrachloroethene	16.17	166	324619	1.30	ppbv	
51) m,p-Xylene	17.64	91	636721	2.47	ppbv	99

(#) = qualifier out of range (m) = manual integration
4901049.D 031620AI.M Wed Mar 18 07:50:08 2020

Quantitation Report

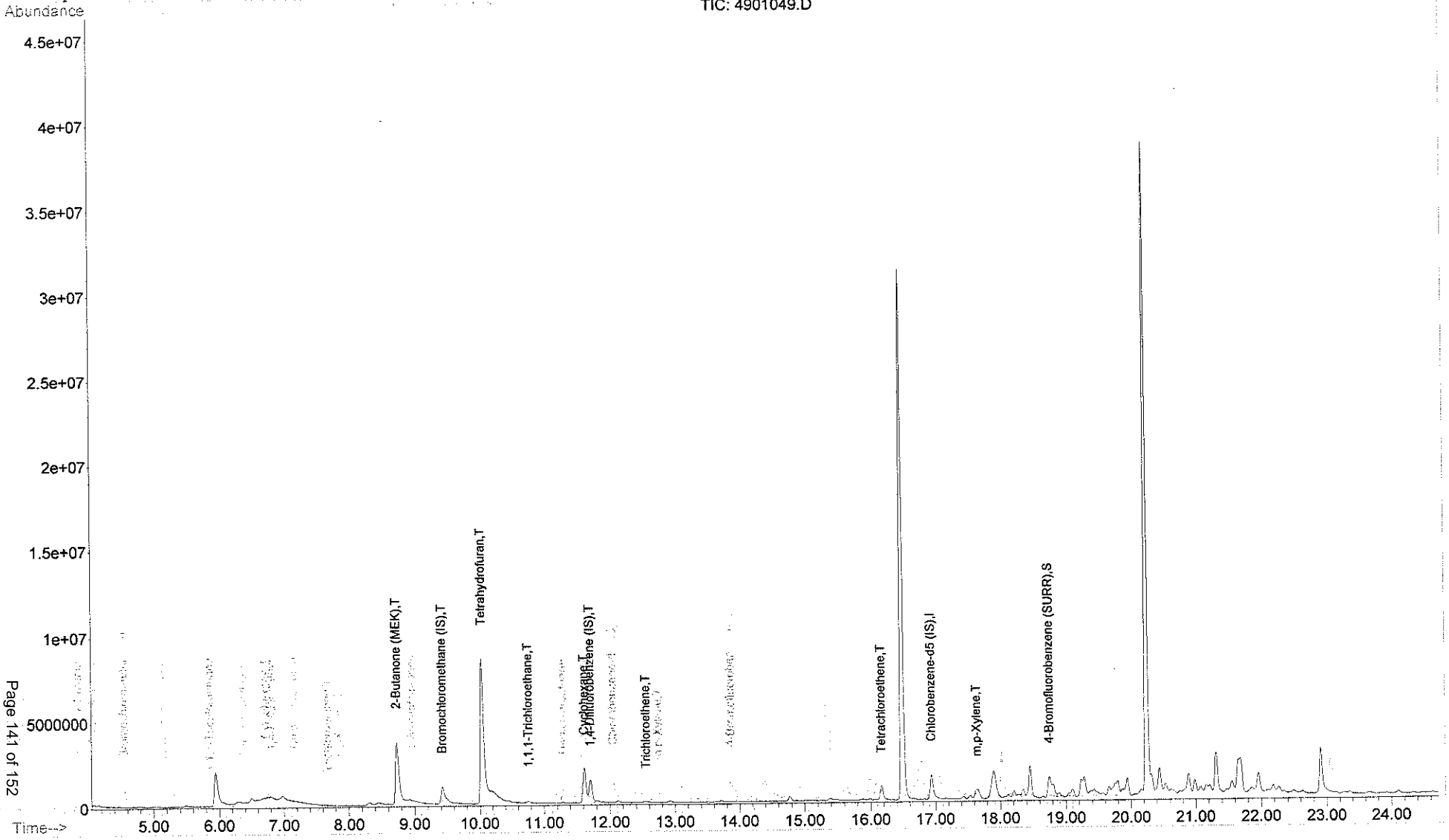
Data File : C:\HPCHEM\1\DATA\031620C\4901049.D
Acq On : 17 Mar 2020 11:39 pm
Sample : 20-889
Misc : TO-15 QC
MS Integration Params: rteint.p
Quant Time: Mar 18 7:50 2020

Vial: 49
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 031620AI.RES

Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Tue Mar 17 09:49:17 2020
Response via : Initial Calibration

TIC: 4901049.D



4901049.D 031620AI.M Wed Mar 18 07:50:08 2020

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\031620C\3401034.D
Acq On : 17 Mar 2020 2:08 pm
Sample : 20-890
Misc : TO-15 QC
MS Integration Params: rteint.p
Quant Time: Mar 18 7:39 2020

Vial: 34
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 031620AI.RES

Quant Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Tue Mar 17 09:49:17 2020
Response via : Initial Calibration
DataAcq Meth : ENV05

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane (IS)	9.41	128	747750	5.00	ppbv	-0.04
25) 1,4-Difluorobenzene (IS)	11.71	114	2379769	5.00	ppbv	-0.03
45) Chlorobenzene-d5 (IS)	16.94	117	1708260	5.00	ppbv	-0.02
System Monitoring Compounds						
56) 4-Bromofluorobenzene (SURR	18.75	95	801336	4.91	ppbv	-0.01
Spiked Amount 5.000	Range 62 - 145		Recovery = 98.20%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration
3401034.D 031620AI.M Wed Mar 18 07:41:17 2020

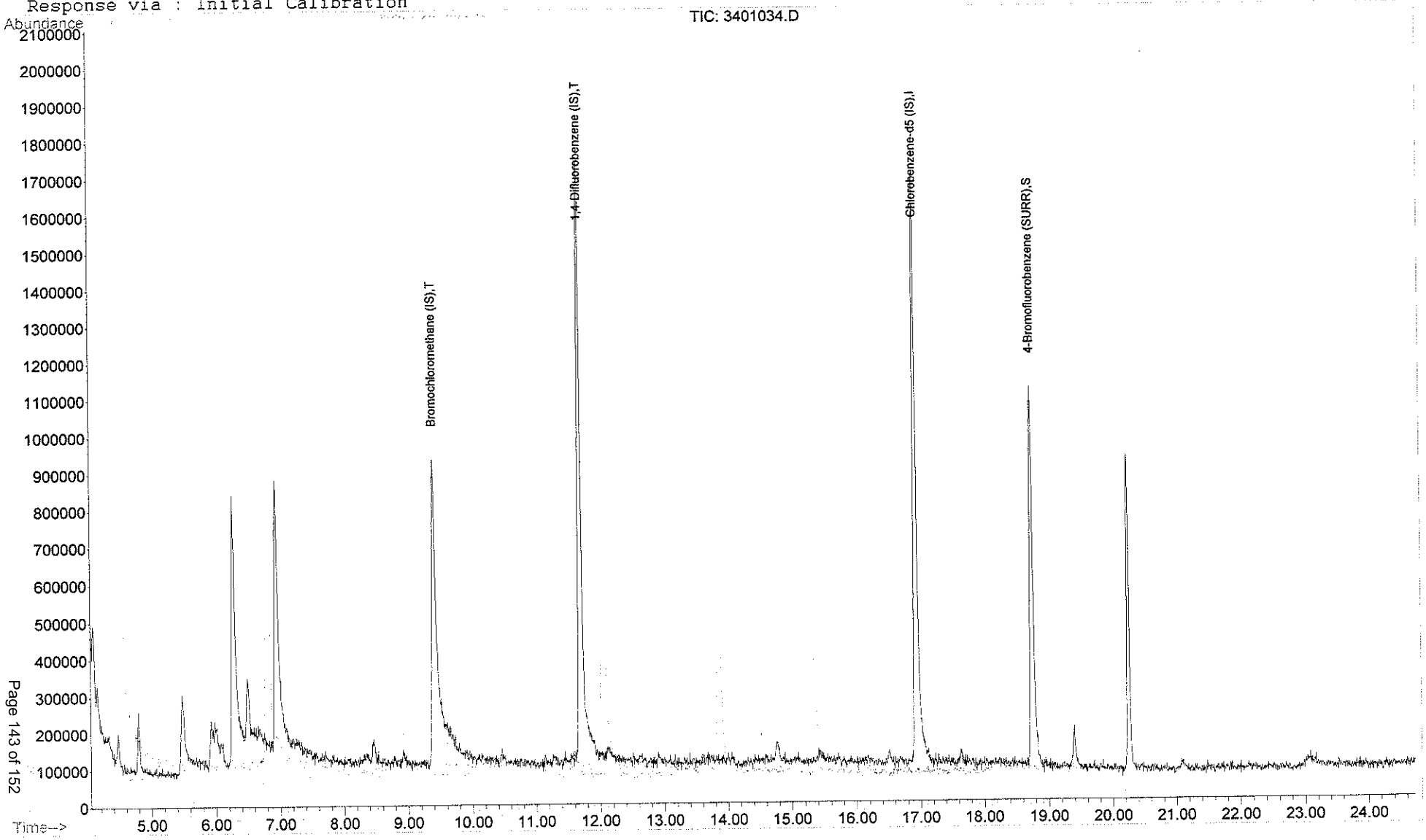
Quantitation Report

Data File : C:\HPCHEM\1\DATA\031620C\3401034.D
Acq On : 17 Mar 2020 2:08 pm
Sample : 20-890
Misc : TO-15 QC
MS Integration Params: rteint.p
Quant Time: Mar 18 7:39 2020

Vial: 34
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 031620AI.RES

Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Tue Mar 17 09:49:17 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\031620C\5001050.D
Acq On : 18 Mar 2020 12:12 am
Sample : 20-891
Misc : TO-15 QC
MS Integration Params: rteint.p
Quant Time: Mar 18 7:51 2020

Vial: 50
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 031620AI.RES

Quant Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Tue Mar 17 09:49:17 2020
Response via : Initial Calibration
DataAcq Meth : ENV05

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane (IS)	9.43	128	782549	5.00	ppbv	-0.02
25) 1,4-Difluorobenzene (IS)	11.71	114	2515724	5.00	ppbv	-0.03
45) Chlorobenzene-d5 (IS)	16.94	117	2690440	5.00	ppbv	-0.02
System Monitoring Compounds						
56) 4-Bromofluorobenzene (SURR	18.75	95	1302717	5.06	ppbv	-0.01
Spiked Amount 5.000	Range 62 - 145		Recovery = 101.20%			
Target Compounds						Qvalue
21) 2-Butanone (MEK)	8.74	43	10987597	19.65	ppbv	
26) Tetrahydrofuran	10.04	42	14328415	50.98	ppbv	
28) 1,1,1-Trichloroethane	10.75	97	688888	2.15	ppbv	
51) m,p-Xylene	17.64	91	769572	2.14	ppbv	98

(#) = qualifier out of range (m) = manual integration
5001050.D 031620AI.M Wed Mar 18 07:51:11 2020

Quantitation Report

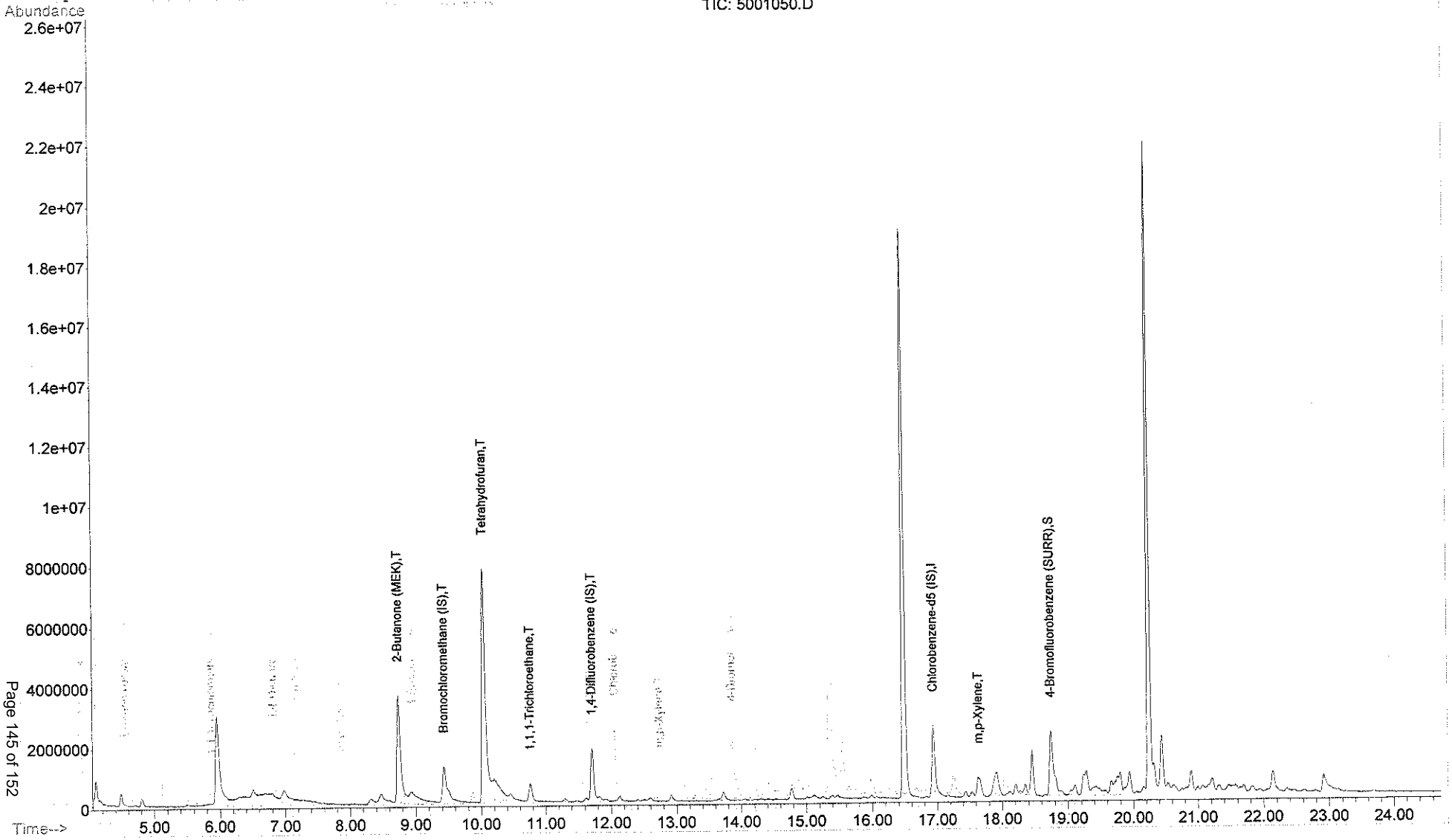
Data File : C:\HPCHEM\1\DATA\031620C\5001050.D
Acq On : 18 Mar 2020 12:12 am
Sample : 20-891
Misc : TO-15 QC
MS Integration Params: rteint.p
Quant Time: Mar 18 7:51 2020

Vial: 50
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 031620AI.RES

Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Tue Mar 17 09:49:17 2020
Response via : Initial Calibration

TIC: 5001050.D



5001050.D 031620AI.M Wed Mar 18 07:51:11 2020

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\031620C\1801018.D
Acq On : 17 Mar 2020 2:40 am
Sample : 20-892 AA
Misc : TO-15 QC
MS Integration Params: rteint.p
Quant Time: Mar 17 9:36 2020

Vial: 18
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 031620AI.RES

Quant Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Tue Mar 17 09:35:29 2020
Response via : Initial Calibration
DataAcq Meth : ENV05

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane (IS)	9.44	128	645106	5.00	ppbv	0.00
25) 1,4-Difluorobenzene (IS)	11.74	114	2356524	5.00	ppbv	0.00
45) Chlorobenzene-d5 (IS)	16.97	117	1644844	5.00	ppbv	0.01
System Monitoring Compounds						
56) 4-Bromofluorobenzene (SURR	18.78	95	678832	4.49	ppbv	0.02
Spiked Amount 5.000	Range 62 - 145		Recovery = 89.80%			
Target Compounds						Qvalue
14) Methylene Chloride	6.98	84	57030	0.29	ppbv	# 1
32) Cyclohexane	11.74	56	68599	0.21	ppbv	# 6

(#) = qualifier out of range (m) = manual integration
1801018.D 031620AI.M Wed Mar 18 07:41:56 2020

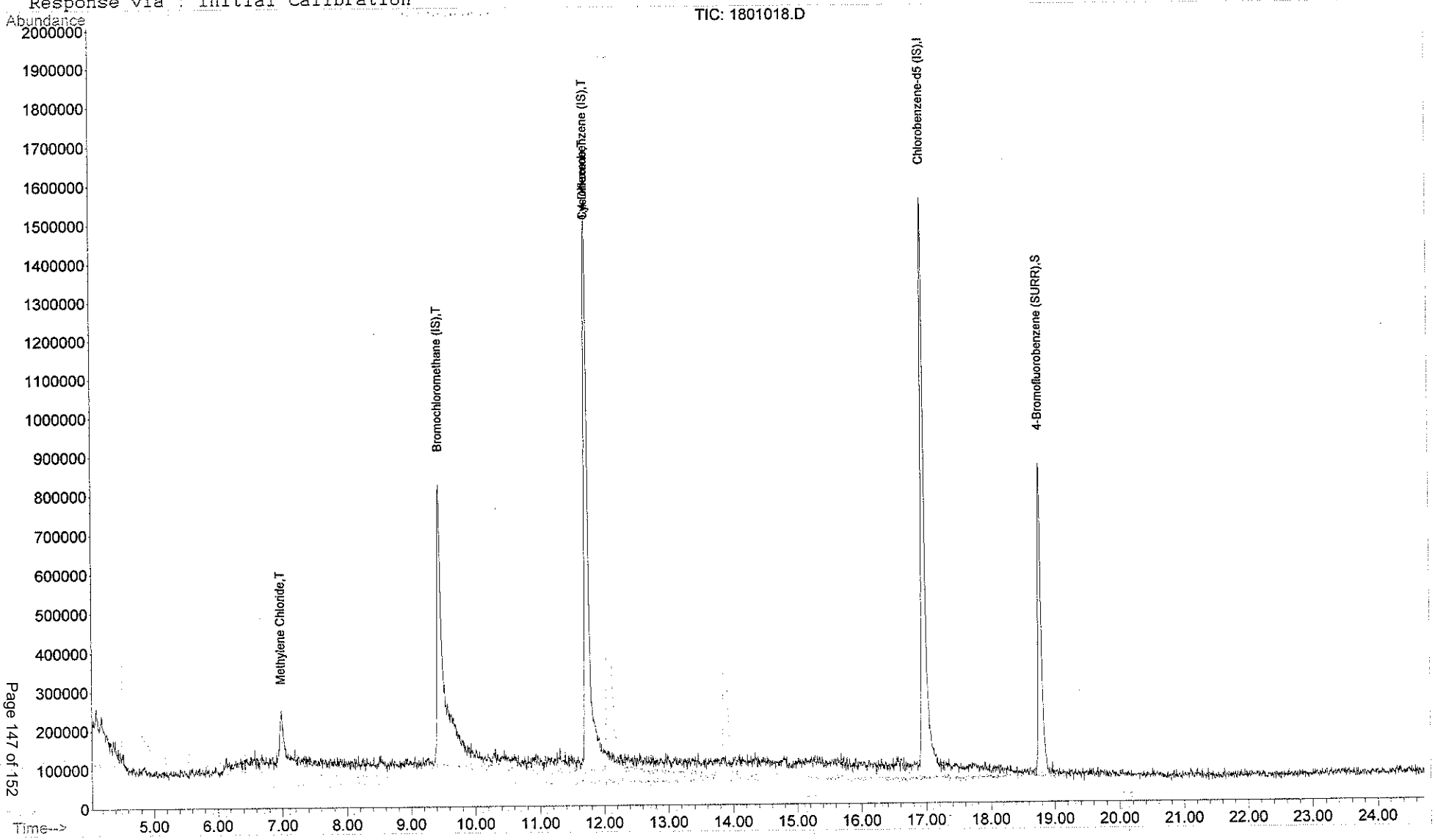
Quantitation Report

Data File : C:\HPCHEM\1\DATA\031620C\1801018.D
Acq On : 17 Mar 2020 2:40 am
Sample : 20-892 AA
Misc : TO-15 QC
MS Integration Params: rteint.p
Quant Time: Mar 17 9:36 2020

Vial: 18
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 031620AI.RES

Method : C:\HPCHEM\1\METHODS\031620AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Tue Mar 17 09:49:17 2020
Response via : Initial Calibration



1801018.D 031620AI.M Wed Mar 18 07:41:56 2020

ENVISIONAIR

TO-15 Certified Canister

- Cleaned Canister Verification Data

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\030920\0501005.D
Acq On : 9 Mar 2020 11:04 am
Sample : CSI-4658-BATCH
Misc : TO-15 QC
MS Integration Params: rteint.p
Quant Time: Apr 3 15:02 2020

Vial: 5
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 022820AI.RES

Quant Method : C:\HPCHEM\1\METHODS\022820AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Mon Mar 02 10:20:05 2020
Response via : Initial Calibration
DataAcq Meth : ENV05

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane (IS)	9.40	128	603250	5.00	ppbv	-0.06
25) 1,4-Difluorobenzene (IS)	11.83	114	91576	5.00	ppbv	0.08
45) Chlorobenzene-d5 (IS)	16.95	117	2468916	5.00	ppbv	-0.03
System Monitoring Compounds						
56) 4-Bromofluorobenzene (SURR	18.75	95	1008314	4.79	ppbv	-0.03
Spiked Amount 5.000	Range 62 - 145		Recovery = 95.80%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration

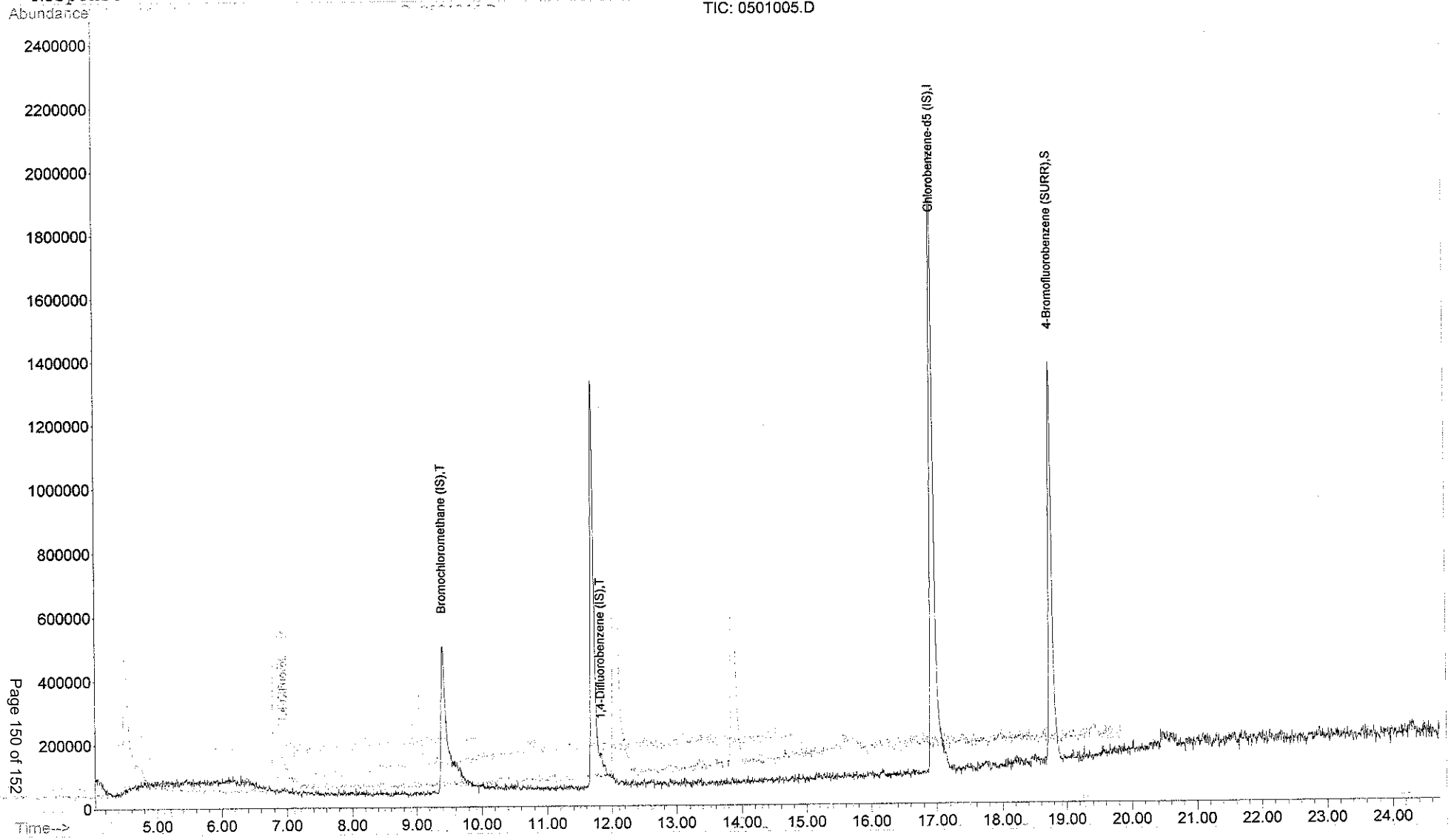
Quantitation Report

Data File : C:\HPCHEM\1\DATA\030920\0501005.D
Acq On : 9 Mar 2020 11:04 am
Sample : CSI-4658-BATCH
Misc : TO-15 QC
MS Integration Params: rteint.p
Quant Time: Apr 3 15:02 2020

Vial: 5
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 022820AI.RES

Method : C:\HPCHEM\1\METHODS\022820AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Mon Mar 02 10:20:05 2020
Response via : Initial Calibration



0501005.D 022820AI.M Fri Apr 03 15:02:25 2020

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\030920\2401024.D
Acq On : 9 Mar 2020 9:44 pm
Sample : CSI-16032-BATCH
Misc : TO-15 QC
MS Integration Params: rteint.p
Quant Time: Apr 3 15:02 2020

Vial: 24
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 022820AI.RES

Quant Method : C:\HPCHEM\1\METHODS\022820AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Mon Mar 02 10:20:05 2020
Response via : Initial Calibration
DataAcq Meth : ENV05

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane (IS)	9.47	128	554374	5.00	ppbv	0.00
25) 1,4-Difluorobenzene (IS)	11.74	114	1835129	5.00	ppbv	0.00
45) Chlorobenzene-d5 (IS)	16.97	117	1890308	5.00	ppbv	0.00
System Monitoring Compounds						
56) 4-Bromofluorobenzene (SURR	18.79	95	879171	5.45	ppbv	0.00
Spiked Amount 5.000	Range 62 - 145		Recovery = 109.00%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration

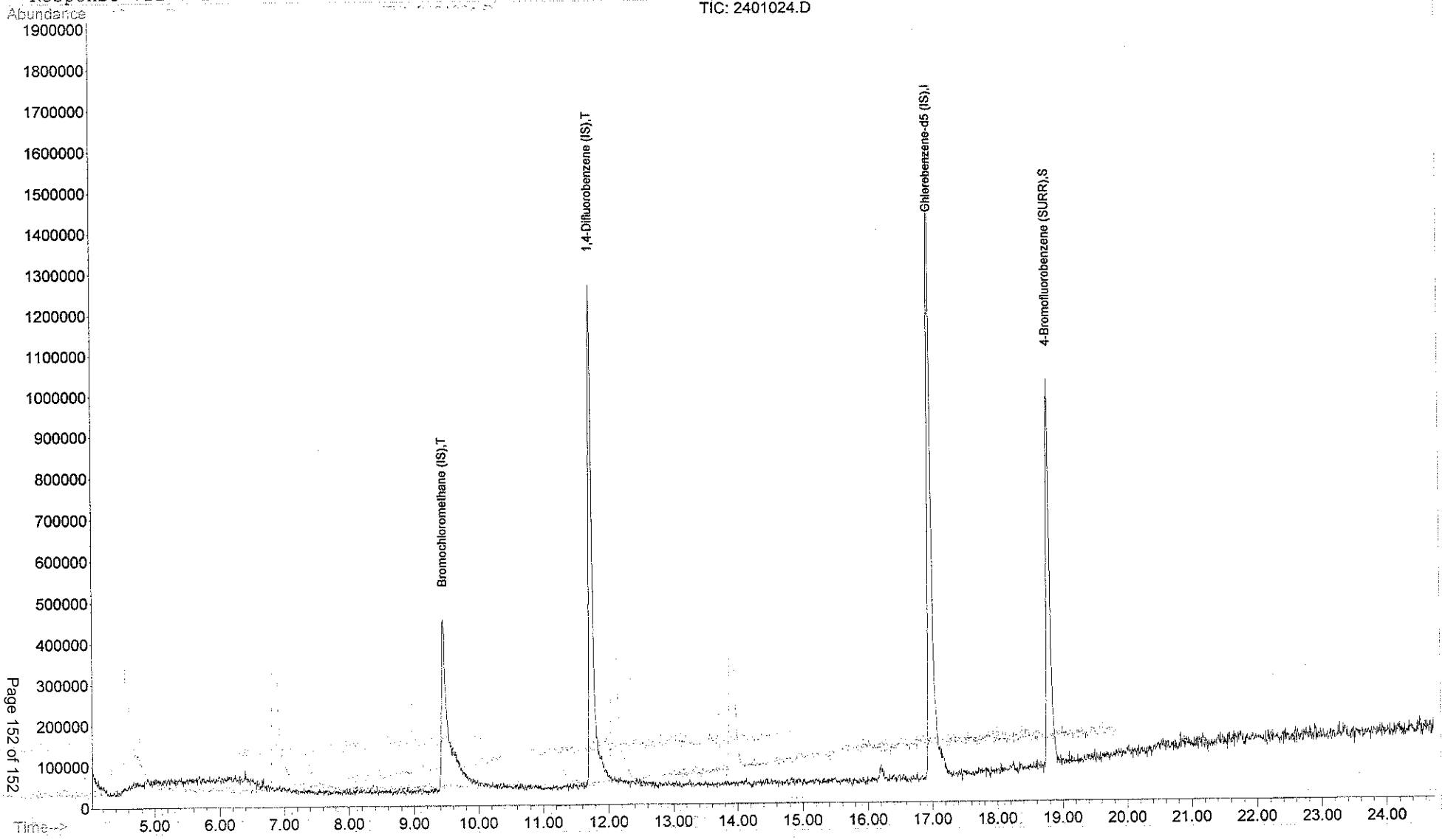
Quantitation Report

Data File : C:\HPCHEM\1\DATA\030920\2401024.D
Acq On : 9 Mar 2020 9:44 pm
Sample : CSI-16032-BATCH
Misc : TO-15 QC
MS Integration Params: rteint.p
Quant Time: Apr 3 15:02 2020

Vial: 24
Operator: TJG
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 022820AI.RES

Method : C:\HPCHEM\1\METHODS\022820AI.M (RTE Integrator)
Title : Method TO-15 CALIBRATION
Last Update : Mon Mar 02 10:20:05 2020
Response via : Initial Calibration



2401024.D 022820AI.M Fri Apr 03 15:02:52 2020