

June 6, 2013

Mr. Chad Staniszewski
NYSDEC Region 9
270 Michigan Avenue
Buffalo, New York 14203

**Re: Off-Site Soil Vapor Intrusion Investigation Summary
Standard Portable - OFFSITE
25 West Lake Road
Mayville New York 14757
NYSDEC Site #C907030A**

Dear Mr. Staniszewski:

Please find the results of the soil vapor intrusion (SVI) investigation, which was conducted by Groundwater & Environmental Services, Inc. (GES) at the request of NYSDEC. This report provides a summary of the SVI investigation methodology and results conducted in association with the Standard Portable Facility in Mayville, New York.

SVI Investigation

At the direction of NYSDEC, GES conducted an SVI investigation in accordance with the New York State Department of Health (NYSDOH) *Guidance for Evaluating Soil Vapor Intrusion in the State of New York* (October 2006) (hereto referred to as the “*NYSDOH SVI Guidance*”). SVI samples were collected at one home in close proximity to the Standard Portable facility, located at 25 West Lake Road in the Village of Mayville, New York. The overall goal of the vapor intrusion sampling program was to evaluate potential human exposure to volatile organic compounds (VOCs), especially chlorinated compounds, known to be present in the groundwater at the Standard Portable site.

From April 11 through April 12, 2013, GES conducted a sampling program at one home - House #1. An active approach utilizing laboratory certified canisters were used to evaluate the soil vapor conditions. Samples were collected using 6-liter stainless steel Summa Canisters, provided by the TestAmerica, Inc (a NYSDEC contracted laboratory), of Knoxville, Tennessee.

In accordance with the *NYSDOH SVI Guidance*, a temporary sub-slab sample point was installed in the basement of the home using an electric hammer drill with a 3/4 inch bit to bore through the basement slab and sub-base gravel. Teflon tubing (1/4 inch diameter) was inserted no greater than two inches into the sub-slab material, and sealed from the surface utilizing bentonite clay. After the installation of the tubing, the tubing was purged of any pre-existing air using a hand pump. A tracer test was performed to confirm that the bentonite seal had isolated the sub-slab environment from the basement environment. The tracer test was performed utilizing a capped 3” diameter polyvinyl chloride (PVC) pipe placed over the sample point. A sealed exit point was provided for the sample tubing. The atmosphere inside the PVC tube was enriched with helium through an entry point in the PVC tube. A Dielectric Technologies® MGD2002 Helium-Hydrogen Detector was used to confirm the absence or presence of any helium in the sub-slab environment by measuring through the sample tube. There was no helium detected in the sample tubing, confirming that there was no air communication between the basement environment and the sub-slab



Soil Vapor Intrusion Investigation Summary
Standard Portable - OFFSITE
Mayville, New York
NYSDEC Site #C907030A

environment at the sampling point (See Table 1 for Helium Test Results). Sample collection was started after the tracer test was performed and allowed to collect over a 24 hour period utilizing a preset air intake regulator on the summa canister. The summa canisters were collected at the conclusion of the 24 hour period. After sampling was completed, the tubing from the temporary sample point was removed, and the borehole in the basement slab was backfilled with bentonite and sealed at the surface with concrete patch compound.

The indoor air sample was collected in the basement of the home, at a height of approximately three feet above the floor level, also utilizing Summa Canisters. These samples were collected over the same 24-hour period as each corresponding sub-slab sample. Outside the home an outdoor ambient air sample was collected simultaneously as the sub-slab and indoor samples. The outdoor sample was collected at a height of approximately four to five feet above the ground surface.

At the sub slab and indoor sample locations, quality assurance/quality control samples (as shown in **Table 1** and **Table 2**), in the form of field duplicates samples were collected.

In addition, for the home that was sampled, a questionnaire and product inventory was completed in accordance with Appendix B of the *NYSDOH SVI Guidance* to identify any conditions that may interfere with the sample collection, including the presence of any construction characteristics of the home, mechanical equipment that may cause interference, and/or the use or storage of chemical products containing VOCs. Due to the potentially sensitive nature of the information provided by the homeowners, the completed questionnaire will be included as an attachment to the letter that contains the key for the homeowners' address.

As part of the questionnaire, the presence and description of any odors were noted and portable vapor monitoring equipment readings (utilizing a RAE Systems[®] ppB RAE 3000 photoionization detector) were collected. In the house no elevated readings (>100 parts-per-billion [ppb]) were detected, nor were there any products that exhibited elevated readings. It should be noted that the basement receives water through the surrounding stone foundation. To help mitigate the pooled water, the homeowner has eight holes drilled through the floor along the inside perimeter of the basement. The holes are approximately 5/8" diameter and penetrate the floor to allow drainage. GES screened the holes using the photoionization detector. No readings were detected (0.0 ppb) in any of the eight holes.

Upon collection of the sample canisters, the samples were submitted to TestAmerica under chain of custody for laboratory analysis utilizing Method TO-15. The samples were analyzed under a ten day turnaround. TestAmerica was also instructed to prepare a NYSDEC Analytical Services Protocol (ASP) Category B laboratory data package for the purpose of data validation. A summary of the analytical data is provided in **Table 2**. A third party data validator (Vali-Data of WNY, LLC) was contracted to prepare a Data Usability Summary Report (DUSR) for the laboratory results in accordance with NYSDEC Division of Environmental Remediation (DER)-10 *Technical Guidance for Site Investigation and Remediation* (May 2010). The DUSR reports and associated validated laboratory analytical reports are provided in **Appendix A**. There were no significant observations noted in the report that would affect the validity of the laboratory data.



Soil Vapor Intrusion Investigation Summary
Standard Portable - OFFSITE
Mayville, New York
NYSDEC Site #C907030A

If you have any questions or concerns, please contact GES at 1-800-287-7857.

Sincerely,

GROUNDWATER & ENVIRONMENTAL SERVICES, INC.

A handwritten signature in black ink, appearing to read 'E. Popken', is written over the printed name.

Eric D. Popken
Project Manager

Attachments

Table 1 – Soil Vapor Sampling Field Data

Table 2 – Air Analytical Summary

Appendix A – Laboratory Analytical Report and DUSR

TABLES

Standard Portable
25 West Lake Road
Mayville, New York
NYSDEC Site #C907030A

Table 1
Soil Vapor Sampling Field Data
April 2013

Residence #	Sample Type	Location	Helium Reading (ppm)	Helium Test	Canister #	Regulator #	Date Start	Time Start	Pressure Start ("Hg)	Date End	Time End	Pressure End ("Hg)
1	SS	Basement, Center	0.0	Pass	6634	K464	4/11/2013	12:30 PM	30	4/12/2013	11:30 AM	5
1	SS Duplicate	Basement, Center	0.0	Pass	1122	K167	4/11/2013	12:30 PM	30	4/12/2013	11:30 AM	1
1	Indoor	Basement, Center	NA	NA	1118	K454	4/11/2013	12:41 PM	28	4/12/2013	11:30 AM	5
1	Indoor Duplicate	Basement, Center	NA	NA	93145	K168	4/11/2013	12:41 PM	30	4/12/2013	11:30 AM	6
1	Outdoor	Yard	NA	NA	1539	K095	4/11/2013	1:03 PM	28	4/12/2013	11:30 AM	0

N/A = Not Applicable

Table 2
Air Analytical Summary
Method TO-15
April 2013

Sample Point		SUB SLAB	SUB SLAB DUP	INDOOR	INDOOR DUP	OUTDOOR
Sample Pickup Date		4/11/2013	4/11/2013	4/11/2013	4/11/2013	4/11/2013
CAS #	COMPOUND (ug/m3)					
100-41-4	Ethylbenzene	1.3	1.8	0.83	1.3	U < 0.35
100-42-5	Styrene	0.42	1.7	U < 0.34	U < 0.34	U < 0.34
100-44-7	Benzyl chloride	U < 0.83	U < 0.83	U < 0.83	U < 0.83	U < 0.83
10061-01-5	cis-1,3-Dichloropropene	U < 0.36	U < 0.36	U < 0.36	U < 0.36	U < 0.36
10061-02-6	trans-1,3-Dichloropropene	U < 0.36	U < 0.36	U < 0.36	U < 0.36	U < 0.36
106-46-7	1,4-Dichlorobenzene	U < 0.48	U < 0.48	U < 0.48	U < 0.48	U < 0.48
106-93-4	1,2-Dibromoethane (EDB)	U < 0.61	U < 0.61	U < 0.61	U < 0.61	U < 0.61
107-06-2	1,2-Dichloroethane	U < 0.32	U < 0.32	U < 0.32	U < 0.32	U < 0.32
108-10-1	4-Methyl-2-pentanone (MIBK)	U < 0.82	1.1	0.89	21	U < 0.82
108-67-8	1,3,5-Trimethylbenzene	U < 0.39	U < 0.39	U < 0.39	U < 0.39	U < 0.39
108-88-3	Toluene	7.6	8.7	11	14	2.2
108-90-7	Chlorobenzene	U < 0.37	U < 0.37	U < 0.37	U < 0.37	U < 0.37
110-54-3	n-Hexane	5.8	8.3	6.3	7.0	U < 0.7
110-82-7	Cyclohexane	3.2	3.4	1.5	1.4	U < 0.69
120-82-1	1,2,4-Trichlorobenzene	U < 0.39	U < 0.39	U < 0.39	U < 0.39	U < 0.39
123-91-1	1,4-Dioxane	U < 0.72	U < 0.72	U < 0.72	U < 0.72	2.7
124-48-1	Dibromochloromethane	U < 0.68	U < 0.68	U < 0.68	U < 0.68	U < 0.68
127-18-4	Tetrachloroethene	8.5	U < 0.54	9.6	U < 0.54	2.6
136777-61-2	m-Xylene & p-Xylene	4.1	7.7	3.1	5.9	U < 0.35
156-59-2	cis-1,2-Dichloroethene	U < 0.32	U < 0.32	U < 0.32	U < 0.32	U < 0.32
156-60-5	trans-1,2-Dichloroethene	U < 0.32	U < 0.32	U < 0.32	U < 0.32	U < 0.32
1634-04-4	Methyl tert-butyl ether	U < 0.58	U < 0.58	U < 0.58	U < 0.58	U < 0.58
540-84-1	2,2,4-Trimethylpentane	1.0	U < 0.93	U < 0.93	1.0	U < 0.93
541-73-1	1,3-Dichlorobenzene	U < 0.48	U < 0.48	U < 0.48	U < 0.48	U < 0.48
56-23-5	Carbon tetrachloride	U < 0.25	0.27	0.56	0.56	0.56
64-17-5	Ethanol	6.8	9.1	28	26	16
67-66-3	Chloroform	11	10	U < 0.39	U < 0.39	U < 0.39
71-43-2	Benzene	1.3	1.7	2.4	2.7	37
71-55-6	1,1,1-Trichloroethane	U < 0.44	U < 0.44	U < 0.44	U < 0.44	U < 0.44
74-83-9	Bromomethane	U < 0.31	U < 0.31	U < 0.31	U < 0.31	U < 0.31
74-87-3	Chloromethane	U < 0.41	0.52	1.5	1.3	0.41
75-00-3	Chloroethane	U < 0.21	U < 0.21	U < 0.21	U < 0.21	U < 0.21
75-01-4	Vinyl chloride	U < 0.20	U < 0.20	U < 0.20	U < 0.20	U < 0.20
75-09-2	Methylene chloride	1.1	3.9	2.3	0.71	U < 0.69
75-25-2	Bromoform	U < 0.83	U < 0.83	U < 0.83	U < 0.83	U < 0.83
75-27-4	Bromodichloromethane	2.3	U < 0.54	U < 0.54	U < 0.54	U < 0.54
75-34-3	1,1-Dichloroethane	U < 0.32	U < 0.32	U < 0.32	U < 0.32	U < 0.32
75-35-4	1,1-Dichloroethene	U < 0.32	U < 0.32	U < 0.32	U < 0.32	U < 0.32
75-65-0	tert-Butyl alcohol	2.5	2.6	U < 0.97	U < 0.97	U < 0.97
75-69-4	Trichlorofluoromethane	1.0	1.3	1.2	1.2	1.1
75-71-8	Dichlorodifluoromethane	1.6	1.6	1.3	1.3	1.3
76-13-1	1,1,2-Trichlorotrifluoroethane	U < 0.61	U < 0.61	U < 0.61	U < 0.61	U < 0.61
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane	U < 0.56	U < 0.56	U < 0.56	U < 0.56	U < 0.56
78-87-5	1,2-Dichloropropane	U < 0.37	U < 0.37	U < 0.37	U < 0.37	U < 0.37
78-93-3	2-Butanone (MEK)	5.0	4.9	1.3	1.3	U < 0.94
79-00-5	1,1,2-Trichloroethane	U < 0.44	U < 0.44	U < 0.44	U < 0.44	U < 0.44
79-01-6	Trichloroethene	U < 0.21	U < 0.21	U < 0.21	U < 0.21	U < 0.21
79-34-5	1,1,2,2-Tetrachloroethane	U < 0.55	U < 0.55	U < 0.55	U < 0.55	U < 0.55
87-68-3	Hexachlorobutadiene	U < 0.85	U < 0.85	U < 0.85	U < 0.85	U < 0.85
95-47-6	o-Xylene	1.1	2.3	0.92	1.8	U < 0.35
95-50-1	1,2-Dichlorobenzene	U < 0.48	U < 0.48	U < 0.48	U < 0.48	U < 0.48
95-63-6	1,2,4-Trimethylbenzene	0.44	1.6	0.48	1.4	U < 0.39

U = below detection limit

ug/m3 = micrograms per cubic meter

APPENDIX A

H3D160408 Analytical Report	1
Sample Receipt Documentation	26
Volatiles	30
Raw Sample Data	31
Standards Data	148
Initial Calibration R022013I.pdf.....	149
Continuing Calibration R041613.pdf.....	227
Continuing Calibration R041713.pdf.....	242
Raw QC Data	256
Miscellaneous Data.....	296
Sample Receipt Documentation	302
Total Number of Pages	305

TestAmerica Laboratories, Inc.

ANALYTICAL REPORT

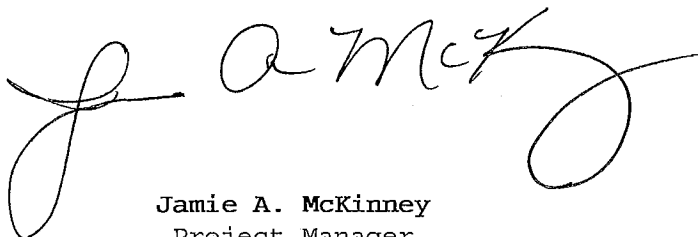
Standard Portable - OFF-SITE

Lot #: H3D160408

Chad Staniszewski

New York State D.E.C.
270 Michigan Avenue
Buffalo, NY 14203-2999

TESTAMERICA LABORATORIES, INC.



Jamie A. McKinney
Project Manager

April 23, 2013

ANALYTICAL METHODS SUMMARY

H3D160408

<u>PARAMETER</u>	<u>ANALYTICAL METHOD</u>
Volatile Organics by TO15	EPA-2 TO-15

References:

EPA-2 "Compendium of Methods for the Determination of Toxic
Organic Compounds in Ambient Air", EPA-625/R-96/010b,
January 1999.

SAMPLE SUMMARY

H3D160408

WO #	SAMPLE#	CLIENT	SAMPLE ID	SAMPLED DATE	SAMP TIME
M0LPM	001	SS		04/12/13	11:30
M0LPQ	002	SS DUP		04/12/13	11:30
M0LPT	003	INDOOR		04/12/13	11:30
M0LPW	004	INDOOR DUP		04/12/13	11:30
M0LP1	005	OUTDOOR		04/12/13	11:30

NOTE(S) :

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

PROJECT NARRATIVE

H3D160408

The results reported herein are applicable to the samples submitted for analysis only. If you have any questions about this report, please call (865) 291-3000 to speak with the TestAmerica project manager listed on the cover page.

This report shall not be reproduced except in full, without the written approval of the laboratory.

The original chain of custody documentation is included with this report.

Sample Receipt

Custody seals were not present.

The "Relinquished by" field on the chain of custody documentation did not contain a signature.

Quality Control and Data Interpretation

Unless otherwise noted, all holding times and QC criteria were met and the test results shown in this report meet all applicable NELAC requirements.

EPA methods TO-14A and TO-15 specify the use of humidified "zero air" as the blank reagent for canister cleaning, instrument calibration and sample analysis. Ultra-high purity humidified nitrogen from a cryogenic reservoir is used in place of "zero air" by TestAmerica Knoxville.

The EPA method requires that all target analytes in the continuing calibration verification standard be within 30% difference from the initial calibration. According to the laboratory standard operating procedure, the continuing calibration is acceptable if it meets the laboratory control sample acceptance criteria. Even though the calibration verifications analyzed on 4/16/13 and 4/17/13 exhibited a % difference of > 30% for bromoform and/or 4-methyl-2-pentanone, the results were within the LCS acceptance limits.

For this method, the continuing calibration verification standard and the LCS are the same sample. While the result for carbon tetrachloride is flagged as being outside limits for batch 3107088, the results met the acceptance criteria which allows for three analytes to be within marginal exceedence limits.

There is a significant contribution from an interfering non-target analyte to the quantitation of tetrachloroethene in sample OUTDOOR. Therefore, the tetrachloroethene results are biased high and should be considered estimated. The result is flagged with "EST".

Quantitation ethanol was based on a minimum 5-point calibration curve. The following interim criteria are being used until the method performance for this additional analyte is fully established:

- The initial calibration acceptance criteria is set at 40% RSD. Any compound greater than 40% RSD was changed to a linear or quadratic model with an $r^2 \geq 0.990$ acceptance criteria.

PROJECT NARRATIVE

H3D160408

- There are no criteria for second source standard verification % D. The second source standard was independently prepared from the same parent mixture (as the primary source).
- The continuing calibration verification criteria are set at 50% D. Any compound greater than 50% D must pass the LCS criteria.
- The LCS recovery criteria are set at 20% to 180%.
- A method detection limit study has not been performed. The detection of the analyte is demonstrated by detection of the calibration standard at the reporting limit. No estimated results are reported below the reporting limit.

CERTIFICATION SUMMARY

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Knoxville	ACLASS	DoD ELAP		ADE-1434
TestAmerica Knoxville	Arkansas	State Program	6	88-0688
TestAmerica Knoxville	California	State Program	9	2423
TestAmerica Knoxville	Colorado	State Program	8	N/A
TestAmerica Knoxville	Connecticut	State Program	1	PH-0223
TestAmerica Knoxville	Florida	NELAC	4	E87177
TestAmerica Knoxville	Georgia	State Program	4	906
TestAmerica Knoxville	Hawaii	State Program	9	N/A
TestAmerica Knoxville	Indiana	State Program	5	C-TN-02
TestAmerica Knoxville	Iowa	State Program	7	375
TestAmerica Knoxville	Kansas	NELAC	7	E-10349
TestAmerica Knoxville	Kentucky	State Program	4	90101
TestAmerica Knoxville	Louisiana	NELAC	6	LA110001
TestAmerica Knoxville	Louisiana	NELAC	6	83979
TestAmerica Knoxville	Maryland	State Program	3	277
TestAmerica Knoxville	Michigan	State Program	5	9933
TestAmerica Knoxville	Minnesota	NELAC	5	047-999-429
TestAmerica Knoxville	Nevada	State Program	9	TN00009
TestAmerica Knoxville	New Jersey	NELAC	2	TN001
TestAmerica Knoxville	New York	NELAC	2	10781
TestAmerica Knoxville	North Carolina	North Carolina DENR	4	64
TestAmerica Knoxville	North Carolina	North Carolina PHL	4	21705
TestAmerica Knoxville	Ohio	OVAP	5	CL0059
TestAmerica Knoxville	Oklahoma	State Program	6	9415
TestAmerica Knoxville	Pennsylvania	NELAC	3	68-00576
TestAmerica Knoxville	South Carolina	State Program	4	84001
TestAmerica Knoxville	Tennessee	State Program	4	2014
TestAmerica Knoxville	Texas	NELAC	6	T104704380-TX
TestAmerica Knoxville	USDA	USDA		P330-11-00035
TestAmerica Knoxville	Utah	NELAC	8	QUAN3
TestAmerica Knoxville	Virginia	State Program	3	165
TestAmerica Knoxville	Washington	State Program	10	C593
TestAmerica Knoxville	West Virginia	West Virginia DEP	3	345
TestAmerica Knoxville	West Virginia	West Virginia DHHR (DW)	3	9955C
TestAmerica Knoxville	Wisconsin	State Program	5	998044300

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

Sample Data Summary

New York State D.E.C.

Client Sample ID: SS

GC/MS Volatiles

Lot-Sample # H3D160408 - 001 Work Order # M0LPM1AA Matrix.....: AIR

Date Sampled...: 04/12/2013 Date Received...: 04/15/2013
 Prep Date.....: 04/16/2013 Analysis Date...: 04/17/2013
 Prep Batch #.....: 3106043
 Dilution Factor.: 1 Method.....: TO-15

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
1,1,1-Trichloroethane	ND	0.080	ND	0.44
1,1,2,2-Tetrachloroethane	ND	0.080	ND	0.55
1,1,2-Trichlorotrifluoroethane	ND	0.080	ND	0.61
1,1,2-Trichloroethane	ND	0.080	ND	0.44
1,1-Dichloroethane	ND	0.080	ND	0.32
1,1-Dichloroethene	ND	0.080	ND	0.32
1,2,4-Trichlorobenzene	ND	0.080	ND	0.59
1,2,4-Trimethylbenzene	0.089	0.080	0.44	0.39
1,2-Dibromoethane (EDB)	ND	0.080	ND	0.61
1,2-Dichlorobenzene	ND	0.080	ND	0.48
1,2-Dichloroethane	ND	0.080	ND	0.32
1,2-Dichloropropane	ND	0.080	ND	0.37
1,3,5-Trimethylbenzene	ND	0.080	ND	0.39
1,4-Dichlorobenzene	ND	0.080	ND	0.48
1,4-Dioxane	ND	0.20	ND	0.72
2-Butanone (MEK)	1.7	0.32	5.0	0.94
1,3-Dichlorobenzene	ND	0.080	ND	0.48
2,2,4-Trimethylpentane	0.22	0.20	1.0	0.93
Benzene	0.40	0.080	1.3	0.26
Benzyl chloride	ND	0.16	ND	0.83
Bromodichloromethane	0.35	0.080	2.3	0.54
Bromoform	ND	0.080	ND	0.83
Bromomethane	ND	0.080	ND	0.31
Carbon tetrachloride	ND	0.040	ND	0.25
Chlorobenzene	ND	0.080	ND	0.37
Chloroethane	ND	0.080	ND	0.21
Chloroform	2.2	0.080	11	0.39
Cyclohexane	0.94	0.20	3.2	0.69
Chloromethane	ND	0.20	ND	0.41
cis-1,2-Dichloroethene	ND	0.080	ND	0.32
cis-1,3-Dichloropropene	ND	0.080	ND	0.36
Dibromochloromethane	ND	0.080	ND	0.68
Dichlorodifluoromethane	0.32	0.080	1.6	0.40
Ethanol	3.6	0.80	6.8	1.5
Ethylbenzene	0.30	0.080	1.3	0.35
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.080	ND	0.56
n-Hexane	1.6	0.20	5.8	0.70
Hexachlorobutadiene	ND	0.080	ND	0.85

New York State D.E.C.

Client Sample ID: SS

GC/MS Volatiles

Lot-Sample # H3D160408 - 001 Work Order # M0LPM1AA Matrix.....: AIR

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
4-Methyl-2-pentanone (MIBK)	ND	0.20	ND	0.82
Methyl tert-butyl ether	ND	0.16	ND	0.58
Methylene chloride	0.32	0.20	1.1	0.69
Styrene	0.10	0.080	0.42	0.34
tert-Butyl alcohol	0.83	0.32	2.5	0.97
Tetrachloroethene	1.3	0.080	8.5	0.54
Toluene	2.0	0.080	7.6	0.30
m-Xylene & p-Xylene	0.94	0.080	4.1	0.35
o-Xylene	0.25	0.080	1.1	0.35
trans-1,2-Dichloroethene	ND	0.080	ND	0.32
trans-1,3-Dichloropropene	ND	0.080	ND	0.36
Trichloroethene	ND	0.040	ND	0.21
Trichlorofluoromethane	0.19	0.080	1.0	0.45
Vinyl chloride	ND	0.080	ND	0.20

SURROGATE	PERCENT RECOVERY	LABORATORY CONTROL LIMITS (%)
4-Bromofluorobenzene	107	60 - 140

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)*(Molecular Weight/24.45)

The 'Reporting Limit' in ug/m3 is calculated using the following equation: (Reporting Limit(before rounding) * Dilution Factor) * (Molecular Weight/24.45)

New York State D.E.C.
Client Sample ID: SS DUP
GC/MS Volatiles

Lot-Sample # H3D160408 - 002 Work Order # M0LPQ1AA Matrix.....: AIR

Date Sampled...: 04/12/2013 Date Received...: 04/15/2013
Prep Date.....: 04/17/2013 Analysis Date...: 04/17/2013
Prep Batch #.....: 3107088
Dilution Factor.: 1 Method.....: TO-15

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
1,1,1-Trichloroethane	ND	0.080	ND	0.44
1,1,2,2-Tetrachloroethane	ND	0.080	ND	0.55
1,1,2-Trichlorotrifluoroethane	ND	0.080	ND	0.61
1,1,2-Trichloroethane	ND	0.080	ND	0.44
1,1-Dichloroethane	ND	0.080	ND	0.32
1,1-Dichloroethene	ND	0.080	ND	0.32
1,2,4-Trichlorobenzene	ND	0.080	ND	0.59
1,2,4-Trimethylbenzene	0.32	0.080	1.6	0.39
1,2-Dibromoethane (EDB)	ND	0.080	ND	0.61
1,2-Dichlorobenzene	ND	0.080	ND	0.48
1,2-Dichloroethane	ND	0.080	ND	0.32
1,2-Dichloropropane	ND	0.080	ND	0.37
1,3,5-Trimethylbenzene	ND	0.080	ND	0.39
1,4-Dichlorobenzene	ND	0.080	ND	0.48
1,4-Dioxane	ND	0.20	ND	0.72
2-Butanone (MEK)	1.7	0.32	4.9	0.94
1,3-Dichlorobenzene	ND	0.080	ND	0.48
2,2,4-Trimethylpentane	ND	0.20	ND	0.93
Benzene	0.54	0.080	1.7	0.26
Benzyl chloride	ND	0.16	ND	0.83
Bromodichloromethane	0.31	0.080	2.1	0.54
Bromoform	ND	0.080	ND	0.83
Bromomethane	ND	0.080	ND	0.31
Carbon tetrachloride	0.042	0.040	0.27	0.25
Chlorobenzene	ND	0.080	ND	0.37
Chloroethane	ND	0.080	ND	0.21
Chloroform	2.1	0.080	10	0.39
Cyclohexane	0.98	0.20	3.4	0.69
Chloromethane	0.25	0.20	0.52	0.41
cis-1,2-Dichloroethene	ND	0.080	ND	0.32
cis-1,3-Dichloropropene	ND	0.080	ND	0.36
Dibromochloromethane	ND	0.080	ND	0.68
Dichlorodifluoromethane	0.33	0.080	1.6	0.40
Ethanol	4.8	0.80	9.1	1.5
Ethylbenzene	0.40	0.080	1.8	0.35
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.080	ND	0.56
n-Hexane	2.4	0.20	8.3	0.70
Hexachlorobutadiene	ND	0.080	ND	0.85

New York State D.E.C.

Client Sample ID: SS DUP

GC/MS Volatiles

Lot-Sample # H3D160408 - 002

Work Order # M0LPQ1AA

Matrix.....: AIR

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
4-Methyl-2-pentanone (MIBK)	0.26	0.20	1.1	0.82
Methyl tert-butyl ether	ND	0.16	ND	0.58
Methylene chloride	1.1	0.20	3.9	0.69
Styrene	0.41	0.080	1.7	0.34
tert-Butyl alcohol	0.84	0.32	2.6	0.97
Tetrachloroethene	ND	0.080	ND	0.54
Toluene	2.3	0.080	8.7	0.30
m-Xylene & p-Xylene	1.8	0.080	7.7	0.35
o-Xylene	0.54	0.080	2.3	0.35
trans-1,2-Dichloroethene	ND	0.080	ND	0.32
trans-1,3-Dichloropropene	ND	0.080	ND	0.36
Trichloroethene	ND	0.040	ND	0.21
Trichlorofluoromethane	0.23	0.080	1.3	0.45
Vinyl chloride	ND	0.080	ND	0.20

SURROGATE	PERCENT RECOVERY	LABORATORY CONTROL LIMITS (%)
4-Bromofluorobenzene	107	60 - 140

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)*(Molecular Weight/24.45)

The 'Reporting Limit' in ug/m3 is calculated using the following equation: (Reporting Limit(before rounding) * Dilution Factor) * (Molecular Weight/24.45)

New York State D.E.C.

Client Sample ID: INDOOR

GC/MS Volatiles

Lot-Sample # H3D160408 - 003 Work Order # M0LPT1AA Matrix.....: AIR

Date Sampled...: 04/12/2013 Date Received...: 04/15/2013
 Prep Date.....: 04/16/2013 Analysis Date...: 04/16/2013
 Prep Batch #.....: 3106043
 Dilution Factor.: 1 Method.....: TO-15

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
1,1,1-Trichloroethane	ND	0.080	ND	0.44
1,1,2,2-Tetrachloroethane	ND	0.080	ND	0.55
1,1,2-Trichlorotrifluoroethane	ND	0.080	ND	0.61
1,1,2-Trichloroethane	ND	0.080	ND	0.44
1,1-Dichloroethane	ND	0.080	ND	0.32
1,1-Dichloroethene	ND	0.080	ND	0.32
1,2,4-Trichlorobenzene	ND	0.080	ND	0.59
1,2,4-Trimethylbenzene	0.097	0.080	0.48	0.39
1,2-Dibromoethane (EDB)	ND	0.080	ND	0.61
1,2-Dichlorobenzene	ND	0.080	ND	0.48
1,2-Dichloroethane	ND	0.080	ND	0.32
1,2-Dichloropropane	ND	0.080	ND	0.37
1,3,5-Trimethylbenzene	ND	0.080	ND	0.39
1,4-Dichlorobenzene	ND	0.080	ND	0.48
1,4-Dioxane	ND	0.20	ND	0.72
2-Butanone (MEK)	0.44	0.32	1.3	0.94
1,3-Dichlorobenzene	ND	0.080	ND	0.48
2,2,4-Trimethylpentane	ND	0.20	ND	0.93
Benzene	0.74	0.080	2.4	0.26
Benzyl chloride	ND	0.16	ND	0.83
Bromodichloromethane	ND	0.080	ND	0.54
Bromoform	ND	0.080	ND	0.83
Bromomethane	ND	0.080	ND	0.31
Carbon tetrachloride	0.089	0.040	0.56	0.25
Chlorobenzene	ND	0.080	ND	0.37
Chloroethane	ND	0.080	ND	0.21
Chloroform	ND	0.080	ND	0.39
Cyclohexane	0.42	0.20	1.5	0.69
Chloromethane	0.71	0.20	1.5	0.41
cis-1,2-Dichloroethene	ND	0.080	ND	0.32
cis-1,3-Dichloropropene	ND	0.080	ND	0.36
Dibromochloromethane	ND	0.080	ND	0.68
Dichlorodifluoromethane	0.27	0.080	1.3	0.40
Ethanol	15	0.80	28	1.5
Ethylbenzene	0.19	0.080	0.83	0.35
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.080	ND	0.56
n-Hexane	1.8	0.20	6.3	0.70
Hexachlorobutadiene	ND	0.080	ND	0.85

New York State D.E.C.

Client Sample ID: INDOOR

GC/MS Volatiles

Lot-Sample # H3D160408 - 003 Work Order # M0LPT1AA Matrix.....: AIR

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
4-Methyl-2-pentanone (MIBK)	0.22	0.20	0.89	0.82
Methyl tert-butyl ether	ND	0.16	ND	0.58
Methylene chloride	0.66	0.20	2.3	0.69
Styrene	ND	0.080	ND	0.34
tert-Butyl alcohol	ND	0.32	ND	0.97
Tetrachloroethene	1.4	0.080	9.6	0.54
Toluene	2.8	0.080	11	0.30
m-Xylene & p-Xylene	0.72	0.080	3.1	0.35
o-Xylene	0.21	0.080	0.92	0.35
trans-1,2-Dichloroethene	ND	0.080	ND	0.32
trans-1,3-Dichloropropene	ND	0.080	ND	0.36
Trichloroethene	ND	0.040	ND	0.21
Trichlorofluoromethane	0.22	0.080	1.2	0.45
Vinyl chloride	ND	0.080	ND	0.20

SURROGATE	PERCENT RECOVERY	LABORATORY CONTROL LIMITS (%)
4-Bromofluorobenzene	111	60 - 140

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)*(Molecular Weight/24.45)

The 'Reporting Limit' in ug/m3 is calculated using the following equation: (Reporting Limit(before rounding) * Dilution Factor) * (Molecular Weight/24.45)

New York State D.E.C.

Client Sample ID: INDOOR DUP

GC/MS Volatiles

Lot-Sample # H3D160408 - 004 Work Order # M0LPW1AA Matrix.....: AIR

Date Sampled...: 04/12/2013 Date Received...: 04/15/2013
 Prep Date.....: 04/16/2013 Analysis Date...: 04/16/2013
 Prep Batch #.....: 3106043
 Dilution Factor.: 1 Method.....: TO-15

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
1,1,1-Trichloroethane	ND	0.080	ND	0.44
1,1,2,2-Tetrachloroethane	ND	0.080	ND	0.55
1,1,2-Trichlorotrifluoroethane	ND	0.080	ND	0.61
1,1,2-Trichloroethane	ND	0.080	ND	0.44
1,1-Dichloroethane	ND	0.080	ND	0.32
1,1-Dichloroethene	ND	0.080	ND	0.32
1,2,4-Trichlorobenzene	ND	0.080	ND	0.59
1,2,4-Trimethylbenzene	0.29	0.080	1.4	0.39
1,2-Dibromoethane (EDB)	ND	0.080	ND	0.61
1,2-Dichlorobenzene	ND	0.080	ND	0.48
1,2-Dichloroethane	ND	0.080	ND	0.32
1,2-Dichloropropane	ND	0.080	ND	0.37
1,3,5-Trimethylbenzene	ND	0.080	ND	0.39
1,4-Dichlorobenzene	ND	0.080	ND	0.48
1,4-Dioxane	ND	0.20	ND	0.72
2-Butanone (MEK)	0.43	0.32	1.3	0.94
1,3-Dichlorobenzene	ND	0.080	ND	0.48
2,2,4-Trimethylpentane	0.22	0.20	1.0	0.93
Benzene	0.83	0.080	2.7	0.26
Benzyl chloride	ND	0.16	ND	0.83
Bromodichloromethane	ND	0.080	ND	0.54
Bromoform	ND	0.080	ND	0.83
Bromomethane	ND	0.080	ND	0.31
Carbon tetrachloride	0.090	0.040	0.56	0.25
Chlorobenzene	ND	0.080	ND	0.37
Chloroethane	ND	0.080	ND	0.21
Chloroform	ND	0.080	ND	0.39
Cyclohexane	0.42	0.20	1.4	0.69
Chloromethane	0.61	0.20	1.3	0.41
cis-1,2-Dichloroethene	ND	0.080	ND	0.32
cis-1,3-Dichloropropene	ND	0.080	ND	0.36
Dibromochloromethane	ND	0.080	ND	0.68
Dichlorodifluoromethane	0.27	0.080	1.3	0.40
Ethanol	14	0.80	26	1.5
Ethylbenzene	0.31	0.080	1.3	0.35
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.080	ND	0.56
n-Hexane	2.0	0.20	7.0	0.70
Hexachlorobutadiene	ND	0.080	ND	0.85

New York State D.E.C.
Client Sample ID: INDOOR DUP
GC/MS Volatiles

Lot-Sample # H3D160408 - 004 Work Order # M0LPW1AA Matrix.....: AIR

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
4-Methyl-2-pentanone (MIBK)	5.1	0.20	21	0.82
Methyl tert-butyl ether	ND	0.16	ND	0.58
Methylene chloride	0.21	0.20	0.71	0.69
Styrene	ND	0.080	ND	0.34
tert-Butyl alcohol	ND	0.32	ND	0.97
Tetrachloroethene	ND	0.080	ND	0.54
Toluene	3.8	0.080	14	0.30
m-Xylene & p-Xylene	1.4	0.080	5.9	0.35
o-Xylene	0.41	0.080	1.8	0.35
trans-1,2-Dichloroethene	ND	0.080	ND	0.32
trans-1,3-Dichloropropene	ND	0.080	ND	0.36
Trichloroethene	ND	0.040	ND	0.21
Trichlorofluoromethane	0.21	0.080	1.2	0.45
Vinyl chloride	ND	0.080	ND	0.20

SURROGATE	PERCENT RECOVERY	LABORATORY CONTROL LIMITS (%)
4-Bromofluorobenzene	109	60 - 140

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)*(Molecular Weight/24.45)

The 'Reporting Limit' in ug/m3 is calculated using the following equation: (Reporting Limit(before rounding) * Dilution Factor) * (Molecular Weight/24.45)

New York State D.E.C.

Client Sample ID: OUTDOOR

GC/MS Volatiles

Lot-Sample # H3D160408 - 005 Work Order # M0LP11AA Matrix.....: AIR

Date Sampled...: 04/12/2013 Date Received...: 04/15/2013
 Prep Date.....: 04/16/2013 Analysis Date...: 04/16/2013
 Prep Batch #.....: 3106043
 Dilution Factor.: 1 Method.....: TO-15

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
1,1,1-Trichloroethane	ND	0.080	ND	0.44
1,1,2,2-Tetrachloroethane	ND	0.080	ND	0.55
1,1,2-Trichlorotrifluoroethane	ND	0.080	ND	0.61
1,1,2-Trichloroethane	ND	0.080	ND	0.44
1,1-Dichloroethane	ND	0.080	ND	0.32
1,1-Dichloroethene	ND	0.080	ND	0.32
1,2,4-Trichlorobenzene	ND	0.080	ND	0.59
1,2,4-Trimethylbenzene	ND	0.080	ND	0.39
1,2-Dibromoethane (EDB)	ND	0.080	ND	0.61
1,2-Dichlorobenzene	ND	0.080	ND	0.48
1,2-Dichloroethane	ND	0.080	ND	0.32
1,2-Dichloropropane	ND	0.080	ND	0.37
1,3,5-Trimethylbenzene	ND	0.080	ND	0.39
1,4-Dichlorobenzene	ND	0.080	ND	0.48
1,4-Dioxane	0.74	0.20	2.7	0.72
2-Butanone (MEK)	ND	0.32	ND	0.94
1,3-Dichlorobenzene	ND	0.080	ND	0.48
2,2,4-Trimethylpentane	ND	0.20	ND	0.93
Benzene	12	0.080	37	0.26
Benzyl chloride	ND	0.16	ND	0.83
Bromodichloromethane	ND	0.080	ND	0.54
Bromoform	ND	0.080	ND	0.83
Bromomethane	ND	0.080	ND	0.31
Carbon tetrachloride	0.090	0.040	0.56	0.25
Chlorobenzene	ND	0.080	ND	0.37
Chloroethane	ND	0.080	ND	0.21
Chloroform	ND	0.080	ND	0.39
Cyclohexane	ND	0.20	ND	0.69
Chloromethane	0.91	0.20	1.9	0.41
cis-1,2-Dichloroethene	ND	0.080	ND	0.32
cis-1,3-Dichloropropene	ND	0.080	ND	0.36
Dibromochloromethane	ND	0.080	ND	0.68
Dichlorodifluoromethane	0.26	0.080	1.3	0.40
Ethanol	8.5	0.80	16	1.5
Ethylbenzene	ND	0.080	ND	0.35
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.080	ND	0.56
n-Hexane	ND	0.20	ND	0.70
Hexachlorobutadiene	ND	0.080	ND	0.85

New York State D.E.C.
Client Sample ID: OUTDOOR
GC/MS Volatiles

Lot-Sample # H3D160408 - 005 Work Order # M0LP11AA Matrix.....: AIR

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
4-Methyl-2-pentanone (MIBK)	ND	0.20	ND	0.82
Methyl tert-butyl ether	ND	0.16	ND	0.58
Methylene chloride	ND	0.20	ND	0.69
Styrene	ND	0.080	ND	0.34
tert-Butyl alcohol	ND	0.32	ND	0.97
Tetrachloroethene	0.38 est	0.080	2.6 est	0.54
Toluene	0.57	0.080	2.2	0.30
m-Xylene & p-Xylene	ND	0.080	ND	0.35
o-Xylene	ND	0.080	ND	0.35
trans-1,2-Dichloroethene	ND	0.080	ND	0.32
trans-1,3-Dichloropropene	ND	0.080	ND	0.36
Trichloroethene	ND	0.040	ND	0.21
Trichlorofluoromethane	0.20	0.080	1.1	0.45
Vinyl chloride	ND	0.080	ND	0.20

SURROGATE	PERCENT RECOVERY	LABORATORY CONTROL LIMITS (%)
4-Bromofluorobenzene	98	60 - 140

Qualifiers

est Estimated value. See narrative for details.

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)*(Molecular Weight/24.45)

The 'Reporting Limit' in ug/m3 is calculated using the following equation: (Reporting Limit(before rounding) * Dilution Factor) * (Molecular Weight/24.45)

New York State D.E.C.
Client Sample ID: INTRA-LAB BLANK
GC/MS Volatiles

Lot-Sample #	H3D170000 - 088B	Work Order #	M0MCP1AA	Matrix.....:	AIR
	04/12/2013	Date Received..:	04/15/2013		
Prep Date.....:	04/17/2013	Analysis Date...	04/17/2013		
Prep Batch #.....:	3107088				
Dilution Factor.:	1	Method.....:	TO-15		

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
1,1,1-Trichloroethane	ND	0.080	ND	0.44
1,1,2,2-Tetrachloroethane	ND	0.080	ND	0.55
1,1,2-Trichlorotrifluoroethane	ND	0.080	ND	0.61
1,1,2-Trichloroethane	ND	0.080	ND	0.44
1,1-Dichloroethane	ND	0.080	ND	0.32
1,1-Dichloroethene	ND	0.080	ND	0.32
1,2,4-Trichlorobenzene	ND	0.080	ND	0.59
1,2,4-Trimethylbenzene	ND	0.080	ND	0.39
1,2-Dibromoethane (EDB)	ND	0.080	ND	0.61
1,2-Dichlorobenzene	ND	0.080	ND	0.48
1,2-Dichloroethane	ND	0.080	ND	0.32
1,2-Dichloropropane	ND	0.080	ND	0.37
1,3,5-Trimethylbenzene	ND	0.080	ND	0.39
1,4-Dichlorobenzene	ND	0.080	ND	0.48
1,4-Dioxane	ND	0.20	ND	0.72
2-Butanone (MEK)	ND	0.32	ND	0.94
1,3-Dichlorobenzene	ND	0.080	ND	0.48
2,2,4-Trimethylpentane	ND	0.20	ND	0.93
Benzene	ND	0.080	ND	0.26
Benzyl chloride	ND	0.16	ND	0.83
Bromodichloromethane	ND	0.080	ND	0.54
Bromoform	ND	0.080	ND	0.83
Bromomethane	ND	0.080	ND	0.31
Carbon tetrachloride	ND	0.040	ND	0.25
Chlorobenzene	ND	0.080	ND	0.37
Chloroethane	ND	0.080	ND	0.21
Chloroform	ND	0.080	ND	0.39
Cyclohexane	ND	0.20	ND	0.69
Chloromethane	ND	0.20	ND	0.41
cis-1,2-Dichloroethene	ND	0.080	ND	0.32
cis-1,3-Dichloropropene	ND	0.080	ND	0.36
Dibromochloromethane	ND	0.080	ND	0.68
Dichlorodifluoromethane	ND	0.080	ND	0.40
Ethanol	ND	0.80	ND	1.5
Ethylbenzene	ND	0.080	ND	0.35
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.080	ND	0.56
n-Hexane	ND	0.20	ND	0.70

New York State D.E.C.
Client Sample ID: INTRA-LAB BLANK
GC/MS Volatiles

Lot-Sample # H3D170000 - 088B Work Order # M0MCP1AA Matrix.....: AIR

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
Hexachlorobutadiene	ND	0.080	ND	0.85
4-Methyl-2-pentanone (MIBK)	ND	0.20	ND	0.82
Methyl tert-butyl ether	ND	0.16	ND	0.58
Methylene chloride	ND	0.20	ND	0.69
Styrene	ND	0.080	ND	0.34
tert-Butyl alcohol	ND	0.32	ND	0.97
Tetrachloroethene	ND	0.080	ND	0.54
Toluene	ND	0.080	ND	0.30
m-Xylene & p-Xylene	ND	0.080	ND	0.35
o-Xylene	ND	0.080	ND	0.35
trans-1,2-Dichloroethene	ND	0.080	ND	0.32
trans-1,3-Dichloropropene	ND	0.080	ND	0.36
Trichloroethene	ND	0.040	ND	0.21
Trichlorofluoromethane	ND	0.080	ND	0.45
Vinyl chloride	ND	0.080	ND	0.20

SURROGATE	PERCENT RECOVERY	LABORATORY CONTROL LIMITS (%)
4-Bromofluorobenzene	113	60 - 140

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)*(Molecular Weight/24.45)

The 'Reporting Limit' in ug/m3 is calculated using the following equation: (Reporting Limit(before rounding) * Dilution Factor) * (Molecular Weight/24.45)

New York State D.E.C.

Client Sample ID: CHECK SAMPLE

GC/MS Volatiles

Lot-Sample # H3D170000 - 088C Work Order # M0MCP1AC Matrix.....: AIR

Prep Date.....: 04/12/2013 Date Received..: 04/15/2013
 Prep Date.....: 04/17/2013 Analysis Date...: 04/17/2013
 Prep Batch #.....: 3107088
 Dilution Factor.: 1 Method.....: TO-15

PARAMETER	SPIKE AMOUNT (ppb(v/v))	MEASURED AMOUNT (ppb(v/v))	SPIKE AMOUNT (ug/m3)	MEASURED AMOUNT (ug/m3)	PERCENT RECOVERY	RECOVERY LIMITS
1,1,1-Trichloroethane	5.00	5.52	27	30.1	110	70 - 130
1,1,2,2-Tetrachloroethane	5.00	4.60	34	31.6	92	70 - 130
1,1,2-Trichlorotrifluoroethane	5.00	5.02	38	38.5	100	70 - 130
1,1,2-Trichloroethane	5.00	4.56	27	24.9	91	70 - 130
1,1-Dichloroethane	5.00	5.80	20	23.5	116	70 - 130
1,1-Dichloroethene	5.00	4.90	20	19.4	98	70 - 130
1,2,4-Trichlorobenzene	5.00	4.28	37	31.7	86	60 - 140
1,2,4-Trimethylbenzene	5.00	4.30	25	21.1	86	70 - 130
1,2-Dibromoethane (EDB)	5.00	4.46	38	34.2	89	70 - 130
1,2-Dichlorobenzene	5.00	3.95	30	23.8	79	70 - 130
1,2-Dichloroethane	5.00	5.78	20	23.4	116	70 - 130
1,2-Dichloropropane	5.00	5.44	23	25.2	109	70 - 130
1,3,5-Trimethylbenzene	5.00	4.15	25	20.4	83	70 - 130
1,4-Dichlorobenzene	5.00	4.06	30	24.4	81	70 - 130
1,4-Dioxane	5.00	5.07	18	18.3	101	60 - 140
2-Butanone (MEK)	5.00	5.11	15	15.1	102	60 - 140
1,3-Dichlorobenzene	5.00	4.01	30	24.1	80	70 - 130
2,2,4-Trimethylpentane	5.00	5.67	23	26.5	113	70 - 130
Benzene	5.00	5.01	16	16.0	100	70 - 130
Benzyl chloride	5.00	4.81	26	24.9	96	70 - 130
Bromodichloromethane	5.00	5.61	34	37.6	112	70 - 130
Bromoform	5.00	4.26	52	44.0	85	60 - 140
Bromomethane	5.00	4.37	19	17.0	87	70 - 130
Carbon tetrachloride	5.00	6.53	31	41.1 a ME	131 a ME	70 - 130
Chlorobenzene	5.00	4.14	23	19.0	83	70 - 130
Chloroethane	5.00	4.93	13	13.0	99	70 - 130
Chloroform	5.00	5.51	24	26.9	110	70 - 130
Cyclohexane	5.00	5.21	17	17.9	104	70 - 130
Chloromethane	5.00	5.40	10	11.1	108	60 - 140
cis-1,2-Dichloroethene	5.00	5.04	20	20.0	101	70 - 130
cis-1,3-Dichloropropene	5.00	5.29	23	24.0	106	70 - 130
Dibromochloromethane	5.00	4.64	43	39.5	93	70 - 130
Dichlorodifluoromethane	5.00	5.09	25	25.2	102	60 - 140
Ethanol	25.0	35.9	47	67.6	144	20 - 180
Ethylbenzene	5.00	4.38	22	19.0	88	70 - 130
1,2-Dichloro-1,1,2,2-tetrafluoroethane	5.00	4.25	35	29.7	85	60 - 140

New York State D.E.C.

Client Sample ID: CHECK SAMPLE

GC/MS Volatiles

Lot-Sample # H3D170000 - 088C Work Order # M0MCP1AC Matrix.....: AIR

PARAMETER	SPIKE AMOUNT (ppb(v/v))	MEASURED AMOUNT (ppb(v/v))	SPIKE AMOUNT (ug/m3)	MEASURED AMOUNT (ug/m3)	PERCENT RECOVERY	RECOVERY LIMITS
n-Hexane	5.00	5.92	18	20.9	118	70 - 130
Hexachlorobutadiene	5.00	3.56	53	38.0	71	60 - 140
4-Methyl-2-pentanone (MIBK)	5.00	6.92	20	28.3	138	60 - 140
Methyl tert-butyl ether	5.00	5.44	18	19.6	109	60 - 140
Methylene chloride	5.00	5.23	17	18.2	105	70 - 130
Styrene	5.00	4.54	21	19.3	91	70 - 130
tert-Butyl alcohol	5.00	6.00	15	18.2	120	60 - 140
Tetrachloroethene	5.00	4.12	34	27.9	82	70 - 130
Toluene	5.00	4.39	19	16.5	88	70 - 130
m-Xylene & p-Xylene	10.0	8.95	43	38.9	90	70 - 130
o-Xylene	5.00	4.41	22	19.1	88	70 - 130
trans-1,2-Dichloroethene	5.00	4.94	20	19.6	99	70 - 130
trans-1,3-Dichloropropene	5.00	4.84	23	22.0	97	70 - 130
Trichloroethene	5.00	4.58	27	24.6	92	70 - 130
Trichlorofluoromethane	5.00	5.21	28	29.3	104	60 - 140
Vinyl chloride	5.00	5.02	13	12.8	100	70 - 130

SURROGATE	PERCENT RECOVERY	LABORATORY CONTROL LIMITS (%)
4-Bromofluorobenzene	112	60 - 140

Qualifiers

a Spiked analyte recovery is outside stated control limits.

ME The percent recovery of the analyte is outside the control limits but within marginal exceedance limits.

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)*(Molecular Weight/24.45)

The 'Reporting Limit' in ug/m3 is calculated using the following equation: (Reporting Limit(before rounding) * Dilution Factor) * (Molecular Weight/24.45)

New York State D.E.C.
Client Sample ID: INTRA-LAB BLANK
GC/MS Volatiles

Lot-Sample # H3D160000 - 043B Work Order # M0L0V1AA Matrix.....: AIR

Prep Date.....: 04/11/2013 Date Received...: 04/15/2013
Prep Date.....: 04/16/2013 Analysis Date...: 04/16/2013
Prep Batch #.....: 3106043
Dilution Factor.: 1 Method.....: TO-15

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
1,1,1-Trichloroethane	ND	0.080	ND	0.44
1,1,2,2-Tetrachloroethane	ND	0.080	ND	0.55
1,1,2-Trichlorotrifluoroethane	ND	0.080	ND	0.61
1,1,2-Trichloroethane	ND	0.080	ND	0.44
1,1-Dichloroethane	ND	0.080	ND	0.32
1,1-Dichloroethene	ND	0.080	ND	0.32
1,2,4-Trichlorobenzene	ND	0.080	ND	0.59
1,2,4-Trimethylbenzene	ND	0.080	ND	0.39
1,2-Dibromoethane (EDB)	ND	0.080	ND	0.61
1,2-Dichlorobenzene	ND	0.080	ND	0.48
1,2-Dichloroethane	ND	0.080	ND	0.32
1,2-Dichloropropane	ND	0.080	ND	0.37
1,3,5-Trimethylbenzene	ND	0.080	ND	0.39
1,4-Dichlorobenzene	ND	0.080	ND	0.48
1,4-Dioxane	ND	0.20	ND	0.72
2-Butanone (MEK)	ND	0.32	ND	0.94
1,3-Dichlorobenzene	ND	0.080	ND	0.48
2,2,4-Trimethylpentane	ND	0.20	ND	0.93
Benzene	ND	0.080	ND	0.26
Benzyl chloride	ND	0.16	ND	0.83
Bromodichloromethane	ND	0.080	ND	0.54
Bromoform	ND	0.080	ND	0.83
Bromomethane	ND	0.080	ND	0.31
Carbon tetrachloride	ND	0.040	ND	0.25
Chlorobenzene	ND	0.080	ND	0.37
Chloroethane	ND	0.080	ND	0.21
Chloroform	ND	0.080	ND	0.39
Cyclohexane	ND	0.20	ND	0.69
Chloromethane	ND	0.20	ND	0.41
cis-1,2-Dichloroethene	ND	0.080	ND	0.32
cis-1,3-Dichloropropene	ND	0.080	ND	0.36
Dibromochloromethane	ND	0.080	ND	0.68
Dichlorodifluoromethane	ND	0.080	ND	0.40
Ethanol	ND	0.80	ND	1.5
Ethylbenzene	ND	0.080	ND	0.35
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.080	ND	0.56
n-Hexane	ND	0.20	ND	0.70

New York State D.E.C.
 Client Sample ID: INTRA-LAB BLANK
 GC/MS Volatiles

Lot-Sample # H3D160000 - 043B Work Order # M0L0V1AA Matrix.....: AIR

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
Hexachlorobutadiene	ND	0.080	ND	0.85
4-Methyl-2-pentanone (MIBK)	ND	0.20	ND	0.82
Methyl tert-butyl ether	ND	0.16	ND	0.58
Methylene chloride	ND	0.20	ND	0.69
Styrene	ND	0.080	ND	0.34
tert-Butyl alcohol	ND	0.32	ND	0.97
Tetrachloroethene	ND	0.080	ND	0.54
Toluene	ND	0.080	ND	0.30
m-Xylene & p-Xylene	ND	0.080	ND	0.35
o-Xylene	ND	0.080	ND	0.35
trans-1,2-Dichloroethene	ND	0.080	ND	0.32
trans-1,3-Dichloropropene	ND	0.080	ND	0.36
Trichloroethene	ND	0.040	ND	0.21
Trichlorofluoromethane	ND	0.080	ND	0.45
Vinyl chloride	ND	0.080	ND	0.20

SURROGATE	PERCENT RECOVERY	LABORATORY CONTROL LIMITS (%)
4-Bromofluorobenzene	114	60 - 140

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)*(Molecular Weight/24.45)

The 'Reporting Limit' in ug/m3 is calculated using the following equation: (Reporting
Limit(before rounding) * Dilution Factor) * (Molecular Weight/24.45)

New York State D.E.C.

Client Sample ID: CHECK SAMPLE

GC/MS Volatiles

Lot-Sample # H3D160000 - 043C Work Order # M0L0V1AC Matrix.....: AIR

Prep Date.....: 04/11/2013 Date Received...: 04/15/2013
 Prep Date.....: 04/16/2013 Analysis Date...: 04/16/2013
 Prep Batch #.....: 3106043
 Dilution Factor.: 1 Method.....: TO-15

PARAMETER	SPIKE AMOUNT (ppb(v/v))	MEASURED AMOUNT (ppb(v/v))	SPIKE AMOUNT (ug/m3)	MEASURED AMOUNT (ug/m3)	PERCENT RECOVERY	RECOVERY LIMITS
1,1,1-Trichloroethane	5.00	5.42	27	29.5	108	70 - 130
1,1,2,2-Tetrachloroethane	5.00	4.50	34	30.9	90	70 - 130
1,1,2-Trichlorotrifluoroethane	5.00	4.91	38	37.6	98	70 - 130
1,1,2-Trichloroethane	5.00	4.46	27	24.3	89	70 - 130
1,1-Dichloroethane	5.00	5.72	20	23.1	114	70 - 130
1,1-Dichloroethene	5.00	4.77	20	18.9	95	70 - 130
1,2,4-Trichlorobenzene	5.00	4.10	37	30.4	82	60 - 140
1,2,4-Trimethylbenzene	5.00	4.25	25	20.9	85	70 - 130
1,2-Dibromoethane (EDB)	5.00	4.33	38	33.3	87	70 - 130
1,2-Dichlorobenzene	5.00	3.90	30	23.4	78	70 - 130
1,2-Dichloroethane	5.00	5.75	20	23.3	115	70 - 130
1,2-Dichloropropane	5.00	5.42	23	25.0	108	70 - 130
1,3,5-Trimethylbenzene	5.00	4.06	25	20.0	81	70 - 130
1,4-Dichlorobenzene	5.00	3.97	30	23.8	79	70 - 130
1,4-Dioxane	5.00	4.90	18	17.7	98	60 - 140
2-Butanone (MEK)	5.00	5.12	15	15.1	102	60 - 140
1,3-Dichlorobenzene	5.00	3.91	30	23.5	78	70 - 130
2,2,4-Trimethylpentane	5.00	5.60	23	26.2	112	70 - 130
Benzene	5.00	4.92	16	15.7	98	70 - 130
Benzyl chloride	5.00	4.72	26	24.4	94	70 - 130
Bromodichloromethane	5.00	5.52	34	37.0	110	70 - 130
Bromoform	5.00	3.47	52	35.8	69	60 - 140
Bromomethane	5.00	4.28	19	16.6	86	70 - 130
Carbon tetrachloride	5.00	6.40	31	40.3	128	70 - 130
Chlorobenzene	5.00	4.03	23	18.5	81	70 - 130
Chloroethane	5.00	4.88	13	12.9	98	70 - 130
Chloroform	5.00	5.45	24	26.6	109	70 - 130
Cyclohexane	5.00	5.08	17	17.5	102	70 - 130
Chloromethane	5.00	5.71	10	11.8	114	60 - 140
cis-1,2-Dichloroethene	5.00	4.97	20	19.7	99	70 - 130
cis-1,3-Dichloropropene	5.00	5.24	23	23.8	105	70 - 130
Dibromochloromethane	5.00	4.35	43	37.0	87	70 - 130
Dichlorodifluoromethane	5.00	5.12	25	25.3	102	60 - 140
Ethanol	25.0	37.5	47	70.7	150	20 - 180
Ethylbenzene	5.00	4.31	22	18.7	86	70 - 130
1,2-Dichloro-1,1,2,2-tetrafluoroethane	5.00	4.24	35	29.6	85	60 - 140

New York State D.E.C.
Client Sample ID: CHECK SAMPLE
GC/MS Volatiles

Lot-Sample # H3D160000 - 043C Work Order # M0L0V1AC Matrix.....: AIR

PARAMETER	SPIKE AMOUNT (ppb(v/v))	MEASURED AMOUNT (ppb(v/v))	SPIKE AMOUNT (ug/m3)	MEASURED AMOUNT (ug/m3)	PERCENT RECOVERY	RECOVERY LIMITS
n-Hexane	5.00	5.76	18	20.3	115	70 - 130
Hexachlorobutadiene	5.00	3.48	53	37.1	70	60 - 140
4-Methyl-2-pentanone (MIBK)	5.00	6.97	20	28.6	139	60 - 140
Methyl tert-butyl ether	5.00	5.42	18	19.5	108	60 - 140
Methylene chloride	5.00	5.08	17	17.6	102	70 - 130
Styrene	5.00	4.41	21	18.8	88	70 - 130
tert-Butyl alcohol	5.00	5.86	15	17.8	117	60 - 140
Tetrachloroethene	5.00	3.92	34	26.6	78	70 - 130
Toluene	5.00	4.24	19	16.0	85	70 - 130
m-Xylene & p-Xylene	10.0	8.79	43	38.2	88	70 - 130
o-Xylene	5.00	4.32	22	18.8	86	70 - 130
trans-1,2-Dichloroethene	5.00	4.84	20	19.2	97	70 - 130
trans-1,3-Dichloropropene	5.00	4.70	23	21.3	94	70 - 130
Trichloroethene	5.00	4.43	27	23.8	89	70 - 130
Trichlorofluoromethane	5.00	5.11	28	28.7	102	60 - 140
Vinyl chloride	5.00	5.05	13	12.9	101	70 - 130

SURROGATE	PERCENT RECOVERY	LABORATORY CONTROL LIMITS (%)
4-Bromofluorobenzene	113	60 - 140

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)*(Molecular Weight/24.45)

The 'Reporting Limit' in ug/m3 is calculated using the following equation: (Reporting Limit(before rounding) * Dilution Factor) * (Molecular Weight/24.45)

Sample Receipt Documentation

TAL Knoxville
5815 Middlebrook Pike
Knoxville, TN 37921
phone 865-291-3000 fax 865-584-4315

H3D160408

Canister Samples Chain of Custody Record

TestAmerica

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

THE LEADER IN ENVIRONMENTAL TESTING

Client Contact Information		Project Manager: CHAD STANISZEWSKI		Sampled By: E. POPKEN (GES)		1 of 1 COCs														
Company: NYSDOC REGION 9		Phone: 716-851-7220 - NYSDOC																		
Address: 270 MICHIGAN AVE		Site Contact: ERIC POPKEN (GES)																		
City/State/Zip: BUFFALO, NY		TAL Contact: JAMIE MCKINNEY																		
Phone: 716-851-7220																				
FAX:																				
Project Name: STANDARD PORTABLE - OFFSITE Analysis Turnaround Time																				
Site/Location: MAYVILLE, NY		Standard (Specify) 10 BUSINESS DAY																		
PO # SITE # C907030A		Rush (Specify)																		
Sample Identification	Sample Date(s)	Time Start	Time Stop	Canister Vacuum in Field, "Hg (Start)	Canister Vacuum in Field, "Hg (Stop)	Flow Controller ID	Canister ID	TO-15	TO-14A	EPA 3C	EPA 25C	ASTM D-1946	Other (Please specify in notes section)	Sample Type	Indoor Air	Ambient Air	Soil Gas	Landfill Gas	Other (Please specify in notes section)	
SS	4/11-4/12/13	1230	1130	30	5	K464	6634	X									X			
SS DUP	/	1230	1130	30	1	K167	1122	X									X			
INDOOR	/	1241	1130	28	5	K434	1118	X							X					
INDOOR DUP	/	1241	1130	30	6	K168	93145	X							X					
OUTDOOR	↓	1303	1130	28	0	K095	1539	X								X				
Sampled by: E. POPKEN (GES)		Temperature (Fahrenheit)																		
		Interior	Ambient																	
EPOPHEN @ GESONLINE.COM		Start	~50°F	~46°F				NO CUSTODY SEALS												
		Stop	~50°F	~40°F				RECEIVED AT AMBIENT TEMP												
								BKO 4-15-13												
								1502 (HDX) 4485 0264 1112												
								50ANS/50ANS/17/S.G.C.												
		Start	Interior	Ambient																
		Stop	Interior	Ambient																
				~30" Hg																
				~30" Hg																
Special Instructions/QC Requirements & Comments:																				
CATEGORY B (ASP) DELIVERABLE																				
Canisters Shipped by:		Date/Time:		Canisters Received by:																
Samples Relinquished by: E. Popken		Date/Time: 4/12/13 1450		Received by: Gary H. Johnson		Date/Time: 4/12/13 14:50														
Relinquished by:		Date/Time:		Received by: Gary H. Johnson		Date/Time: 4-15-13 11:30														

TESTAMERICA KNOXVILLE SAMPLE RECEIPT/CONDITION UPON RECEIPT ANOMALY CHECKLIST

Lot Number: H3D160408

Review Items	Yes	No	NA	If No, what was the problem?	Comments/Actions Taken
1. Do sample container labels match COC? (IDs, Dates, Times)	<input checked="" type="checkbox"/>			<input type="checkbox"/> 1a Do not match COC <input type="checkbox"/> 1b Incomplete information <input type="checkbox"/> 1c Marking smeared <input type="checkbox"/> 1d Label torn <input type="checkbox"/> 1e No label <input type="checkbox"/> 1f COC not received <input type="checkbox"/> 1g Other:	4A 14A
2. Is the cooler temperature within limits? (> freezing temp. of water to 6 °C, VOST: 10°C)			<input checked="" type="checkbox"/>	<input type="checkbox"/> 2a Temp Blank = _____ <input type="checkbox"/> 2b Cooler Temp = _____ <input type="checkbox"/> 2c Cooling initiated for recently collected samples, ice present. <input type="checkbox"/> 3a Sample preservative =	
3. Were samples received with correct chemical preservative (excluding Encore)?			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> 4a Not present <input type="checkbox"/> 4b Not intact <input type="checkbox"/> 4c Other:	
4. Were custody seals present/intact on cooler and/or containers?				<input type="checkbox"/> 5a Samples received-not on COC <input type="checkbox"/> 5b Samples not received-on COC <input type="checkbox"/> 6a Leaking <input type="checkbox"/> 6b Broken	
5. Were all of the samples listed on the COC received?	<input checked="" type="checkbox"/>			<input type="checkbox"/> 7a Headspace (VOA only) <input type="checkbox"/> 8a Improper container	
6. Were all of the sample containers received intact?	<input checked="" type="checkbox"/>			<input type="checkbox"/> 9a Could not be determined due to matrix interference <input type="checkbox"/> 10a Holding time expired	
7. Were VOA samples received without headspace?	<input checked="" type="checkbox"/>			<input type="checkbox"/> Incomplete information If no, was pH adjusted to pH 7 - 9 with sulfuric acid?	
8. Were samples received in appropriate containers?				<input type="checkbox"/> 13a Leaking <input type="checkbox"/> 13b Other:	
9. Did you check for residual chlorine, if necessary?				<input checked="" type="checkbox"/> 14a Not relinquished <input type="checkbox"/> 15a Incomplete information	
10. Were samples received within holding time?	<input checked="" type="checkbox"/>			<input type="checkbox"/> 15a Incomplete information <input type="checkbox"/> 15a Incomplete information	
11. For rad samples, was sample activity info. provided?				<input type="checkbox"/> 15a Incomplete information <input type="checkbox"/> 15a Incomplete information	
12. For 1613B water samples is pH<9?				<input type="checkbox"/> 15a Incomplete information <input type="checkbox"/> 15a Incomplete information	
13. Are the shipping containers intact?	<input checked="" type="checkbox"/>			<input type="checkbox"/> 19a Other	
14. Was COC relinquished? (Signed/Dated/Timed)					
15. Are tests/parameters listed for each sample?	<input checked="" type="checkbox"/>				
16. Is the matrix of the samples noted?	<input checked="" type="checkbox"/>				
17. Is the date/time of sample collection noted?	<input checked="" type="checkbox"/>				
18. Is the client and project name/# identified?	<input checked="" type="checkbox"/>				
19. Was the sampler identified on the COC?	<input checked="" type="checkbox"/>				
Quote #: <u>91289</u> PM Instructions: _____					

Sample Receiving Associate: Ryan Harrison Date: 4-15-13

QA026R23.doc, 022812

Test America - Knoxville ---- Air Canister Dilution Log

Lot Number: H3D160408

Initial Can Pressure					Subsequent Dilutions													
Analyst/Date	Can/ or Tedlar bag prep Time	Baro ID <u>52</u>	Sample ID	Can #	Pres. upon receipt (-in or + psig)	Adj. Initial Pres. (- in or + psig)	Analyst/Date	I / S	Baro ID <u> </u>	Initial Pres. Pi (in)	Final Pres. Pf (psig)	First In-Can Final Pres. Pf (psig)	Second In-Can Final Pres. Pf (psig)	Third In-Can Final Pres. Pf (psig)	Serial Dilution Can #	Vol (mL)	Final Pres. Pf (psig)	Comments
24/10/13	12:34	29.08	M0LPM	6634	-4.5													10463
			M0LPQ	1122	0.0													↓
			M0LPT	1118	6.0													↓
			M0LPW	93145	4.7													↓
			M0LP1	1539	0.0													↓

Volatiles

Raw Sample Data

New York State D.E.C.

Client Sample ID: SS

GC/MS Volatiles

Lot-Sample # H3D160408 - 001

Work Order # M0LPM1AA

Matrix.....: AIR

Date Sampled...: 04/12/2013

Date Received...: 04/15/2013

Prep Date.....: 04/16/2013

Analysis Date...: 04/17/2013

Prep Batch #.....: 3106043

Dilution Factor.: 1

Method.....: TO-15

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
1,1,1-Trichloroethane	ND	0.080	ND	0.44
1,1,2,2-Tetrachloroethane	ND	0.080	ND	0.55
1,1,2-Trichlorotrifluoroethane	ND	0.080	ND	0.61
1,1,2-Trichloroethane	ND	0.080	ND	0.44
1,1-Dichloroethane	ND	0.080	ND	0.32
1,1-Dichloroethene	ND	0.080	ND	0.32
1,2,4-Trichlorobenzene	ND	0.080	ND	0.59
1,2,4-Trimethylbenzene	0.089	0.080	0.44	0.39
1,2-Dibromoethane (EDB)	ND	0.080	ND	0.61
1,2-Dichlorobenzene	ND	0.080	ND	0.48
1,2-Dichloroethane	ND	0.080	ND	0.32
1,2-Dichloropropane	ND	0.080	ND	0.37
1,3,5-Trimethylbenzene	ND	0.080	ND	0.39
1,4-Dichlorobenzene	ND	0.080	ND	0.48
1,4-Dioxane	ND	0.20	ND	0.72
2-Butanone (MEK)	1.7	0.32	5.0	0.94
1,3-Dichlorobenzene	ND	0.080	ND	0.48
2,2,4-Trimethylpentane	0.22	0.20	1.0	0.93
Benzene	0.40	0.080	1.3	0.26
Benzyl chloride	ND	0.16	ND	0.83
Bromodichloromethane	0.35	0.080	2.3	0.54
Bromoform	ND	0.080	ND	0.83
Bromomethane	ND	0.080	ND	0.31
Carbon tetrachloride	ND	0.040	ND	0.25
Chlorobenzene	ND	0.080	ND	0.37
Chloroethane	ND	0.080	ND	0.21
Chloroform	2.2	0.080	11	0.39
Cyclohexane	0.94	0.20	3.2	0.69
Chloromethane	ND	0.20	ND	0.41
cis-1,2-Dichloroethene	ND	0.080	ND	0.32
cis-1,3-Dichloropropene	ND	0.080	ND	0.36
Dibromochloromethane	ND	0.080	ND	0.68
Dichlorodifluoromethane	0.32	0.080	1.6	0.40
Ethanol	3.6	0.80	6.8	1.5
Ethylbenzene	0.30	0.080	1.3	0.35
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.080	ND	0.56
n-Hexane	1.6	0.20	5.8	0.70
Hexachlorobutadiene	ND	0.080	ND	0.85

New York State D.E.C.

Client Sample ID: SS

GC/MS Volatiles

Lot-Sample # H3D160408 - 001

Work Order # M0LPM1AA

Matrix.....: AIR

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
4-Methyl-2-pentanone (MIBK)	ND	0.20	ND	0.82
Methyl tert-butyl ether	ND	0.16	ND	0.58
Methylene chloride	0.32	0.20	1.1	0.69
Styrene	0.10	0.080	0.42	0.34
tert-Butyl alcohol	0.83	0.32	2.5	0.97
Tetrachloroethene	1.3	0.080	8.5	0.54
Toluene	2.0	0.080	7.6	0.30
m-Xylene & p-Xylene	0.94	0.080	4.1	0.35
o-Xylene	0.25	0.080	1.1	0.35
trans-1,2-Dichloroethene	ND	0.080	ND	0.32
trans-1,3-Dichloropropene	ND	0.080	ND	0.36
Trichloroethene	ND	0.040	ND	0.21
Trichlorofluoromethane	0.19	0.080	1.0	0.45
Vinyl chloride	ND	0.080	ND	0.20

SURROGATE	PERCENT RECOVERY	LABORATORY CONTROL LIMITS (%)
4-Bromofluorobenzene	107	60 - 140

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)*(Molecular Weight/24.45)

The 'Reporting Limit' in ug/m3 is calculated using the following equation: (Reporting Limit(before rounding) * Dilution Factor) * (Molecular Weight/24.45)

Data File: /var/chem/gcms/mr.i/R041613.b/m01pm2aa.d
 Report Date: 17-Apr-2013 11:14

TestAmerica Knoxville

Modified Method TO-14/TO-15

Data file : /var/chem/gcms/mr.i/R041613.b/m01pm2aa.d
 Lab Smp Id: M0LPM1AA
 Inj Date : 17-APR-2013 09:53
 Operator : 403648 Inst ID: mr.i
 Smp Info : M0LPM1AA,,0,,
 Misc Info : R041613,TO15,to14nj.sub
 Comment :
 Method : /var/chem/gcms/mr.i/R041613.b/TO15.m
 Meth Date : 16-Apr-2013 19:25 barlozha Quant Type: ISTD
 Cal Date : 20-FEB-2013 20:14 Cal File: ricb205.d
 Als bottle: 5
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: nysdec.sub
 Target Version: 3.50

Concentration Formula: Amt * DF * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Default Calibration Volume
Vo	500.00000	Default Sample Volume

Cpnd Variable

Local Compound Variable

						CONCENTRATIONS		
QUANT SIG						ON- COLUMN	FINAL	
Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ppb (v/v))	(ppb (v/v))
=====		====	==	=====	=====	=====	=====	=====
*	1 Bromochloromethane	128	8.873	8.873	(1.000)	227717	4.00000	4.000
*	2 1,4-Difluorobenzene	114	11.132	11.138	(1.000)	1122651	4.00000	4.000
*	3 Chlorobenzene-d5	117	17.420	17.436	(1.000)	903802	4.00000	4.000
\$	4 4-Bromofluorobenzene	95	20.159	20.170	(1.157)	680257	4.29900	4.299
	7 Dichlorodifluoromethane	85	3.723	3.723	(0.420)	75465	0.31803	0.3180
	20 Trichlorofluoromethane	101	5.249	5.244	(0.592)	42910	0.18612	0.1861
	28 tert-butanol	59	6.096	6.090	(0.687)	130094	0.83377	0.8338
	31 Methylene Chloride	84	6.311	6.312	(0.711)	26069	0.31773	0.3177
	40 Hexane	56	8.177	8.177	(0.922)	128067	1.63682	1.637
	39 2-Butanone	72	8.107	8.107	(0.914)	78026	1.70660	1.706
	43 Chloroform	83	8.894	8.900	(1.002)	405712	2.22259	2.222
	49 Cyclohexane	69	10.566	10.572	(0.949)	41308	0.93725	0.9372
	48 Benzene	78	10.544	10.550	(0.947)	114590	0.40325	0.4032
	53 2,2,4-trimethylpentane	57	11.418	11.424	(1.026)	100960	0.21934	0.2193
	58 Bromodichloromethane	83	12.205	12.205	(1.096)	63201	0.34989	0.3499
	65 Toluene	91	14.546	14.551	(0.835)	754126	2.01102	2.011

Data File: /var/chem/gcms/mr.i/R041613.b/m01pm2aa.d
 Report Date: 17-Apr-2013 11:14

Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ppb (v/v))	FINAL (ppb (v/v))
=====	=====	==	=====	=====	=====	=====	=====
73 Tetrachloroethene	129	16.174	16.180	(0.928)	166956	1.25704	1.257
76 Ethylbenzene	91	17.991	18.008	(1.033)	142995	0.30365	0.3036
78 m&p-Xylene	91	18.256	18.277	(1.048)	342087	0.94101	0.9410
81 Styrene	104	19.016	19.038	(1.092)	25731	0.09966	0.09966
82 o-Xylene	91	19.124	19.140	(1.098)	92948	0.24783	0.2478
94 1,2,4-Trimethylbenzene	105	22.386	22.392	(1.285)	40896	0.08927	0.08927
17 ~ ethanol	31	4.785	4.775	(0.539)	113335	3.62891	3.629

Data File: /var/chem/gcms/mr.i/R041613.b/m01pm2aa.d
 Report Date: 17-Apr-2013 11:14

TestAmerica Knoxville

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: mr.i
 Lab File ID: m01pm2aa.d
 Lab Smp Id: M0LPM1AA
 Analysis Type: OTHER
 Quant Type: ISTD
 Operator: 403648

Calibration Date: 16-APR-2013
 Calibration Time: 10:51

Level: LOW
 Sample Type: AIR

Method File: /var/chem/gcms/mr.i/R041613.b/TO15.m
 Misc Info: R041613,TO15,to14nj.sub

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
1 Bromochloromethan	294767	175386	414148	227717	-22.75
2 1,4-Difluorobenze	1529291	909928	2148654	1122651	-26.59
3 Chlorobenzene-d5	1257555	748245	1766865	903802	-28.13

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
1 Bromochloromethan	8.87	8.54	9.20	8.87	0.00
2 1,4-Difluorobenze	11.14	10.81	11.47	11.13	-0.05
3 Chlorobenzene-d5	17.44	17.11	17.77	17.42	-0.09

AREA UPPER LIMIT = + 40% of internal standard area.
 AREA LOWER LIMIT = - 40% of internal standard area.
 RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
 RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /var/chem/gcms/mr.i/R041613.b/m01pm2aa.d
 Report Date: 17-Apr-2013 11:14

TestAmerica Knoxville

RECOVERY REPORT

Client Name:	Client SDG: R041613
Sample Matrix: GAS	Fraction: OTHER
Lab Smp Id: M0LPM1AA	
Level: LOW	Operator: 403648
Data Type: MS DATA	SampleType: SAMPLE
SpikeList File: allnew.spk	Quant Type: ISTD
Sublist File: nysdec.sub	
Method File: /var/chem/gcms/mr.i/R041613.b/TO15.m	
Misc Info: R041613,TO15,tol4nj.sub	

SURROGATE COMPOUND	CONC ADDED ppb (v/v)	CONC RECOVERED ppb (v/v)	% RECOVERED	LIMITS
\$ 4 4-Bromofluorobenze	4.000	4.299	107.47	60-140

Data File: /var/chem/gcms/mr.i/R041613.b/m01pm2aa.d

Date: 17-APR-2013 09:53

Client ID:

Sample Info: M0LPH1A0,,0,,

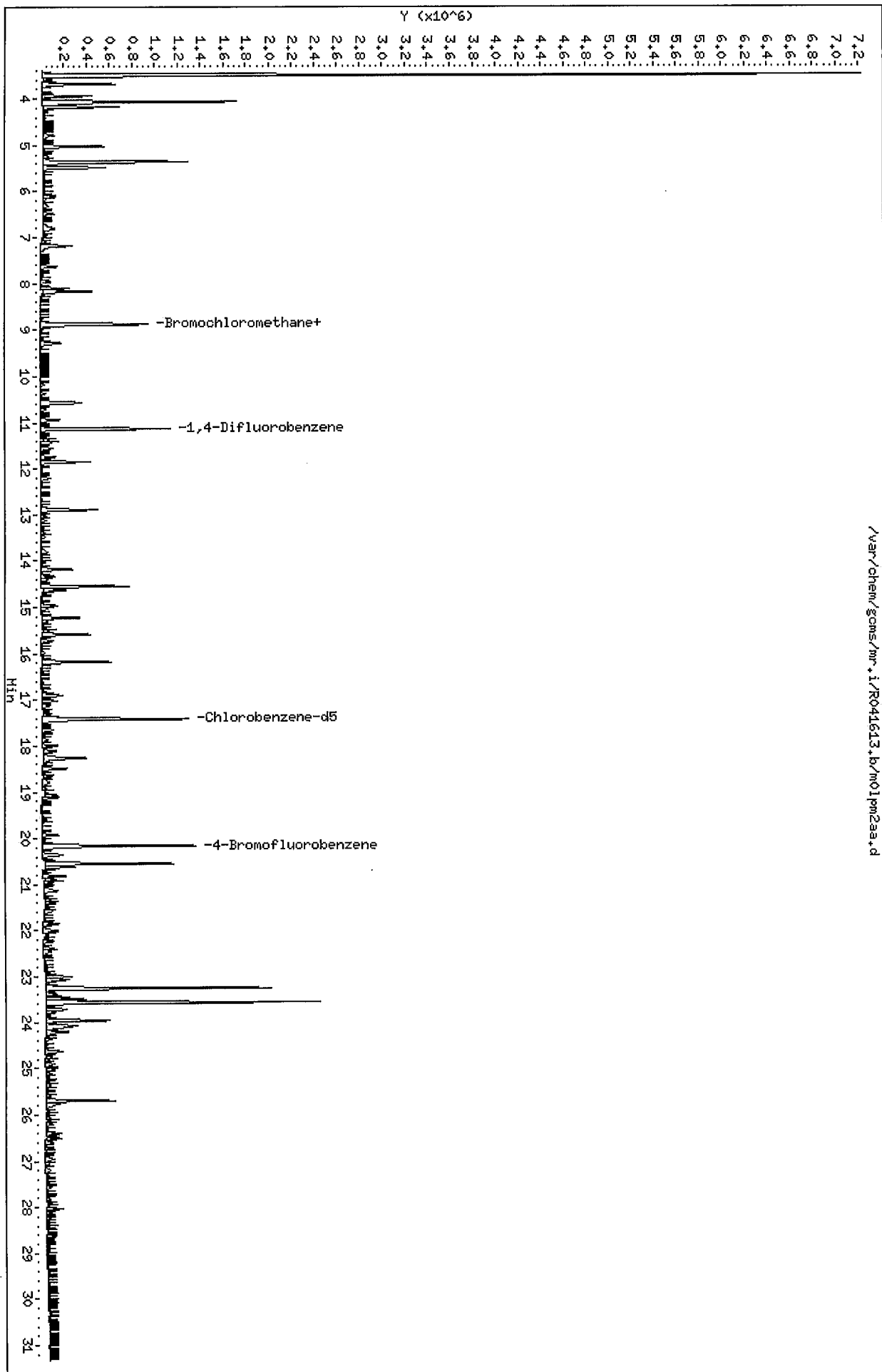
Purge Volume: 500.0

Column phase: Rtx-5

Instrument: mr.i

Operator: 403648

Column diameter: 0.32



Data File: /var/chem/gcms/mr.i/R041613.b/m01pm2aa.d

Date : 17-APR-2013 09:53

Client ID:

Instrument: mr.i

Sample Info: M0LPM1AA,,0,,

Purge Volume: 500.0

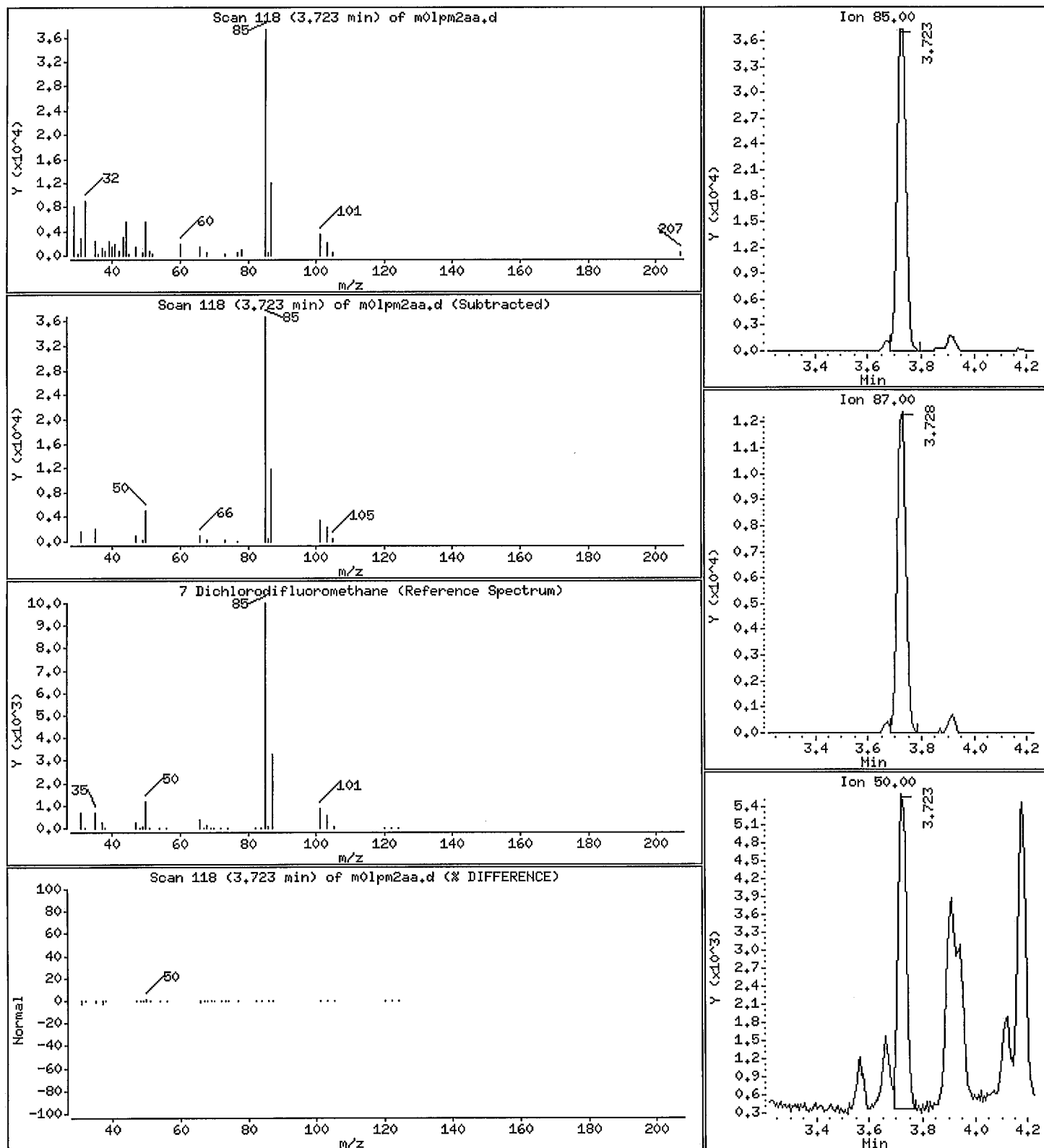
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

7 Dichlorodifluoromethane

Concentration: 0.3180 ppb(v/v)



Data File: /var/chem/gcms/mr.i/R041613.b/m01pm2aa.d

Date : 17-APR-2013 09:53

Client ID:

Instrument: mr.i

Sample Info: M0LPM1AA,,0,,

Purge Volume: 500.0

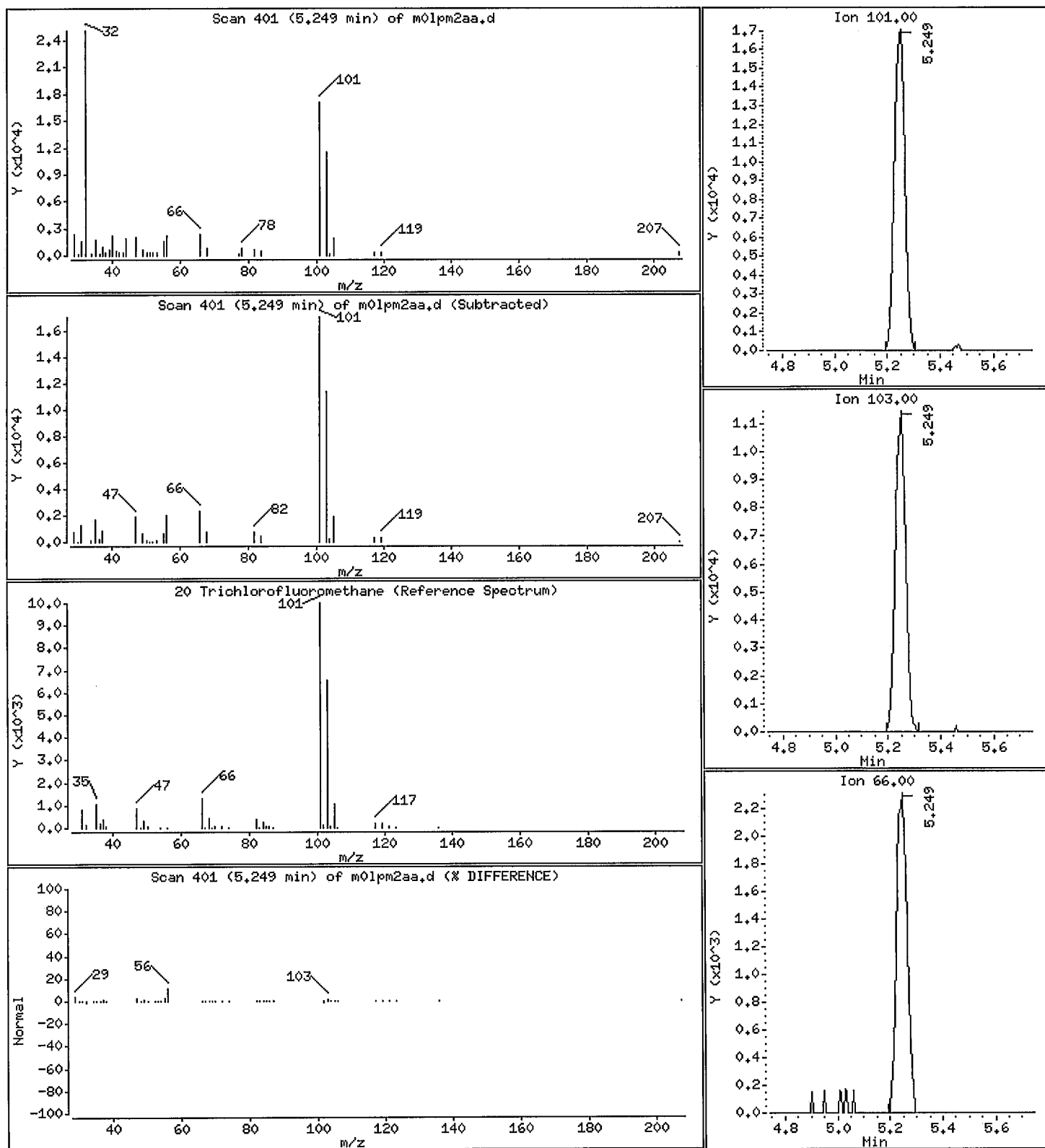
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

20 Trichlorofluoromethane

Concentration: 0.1861 ppb(v/v)



Data File: /var/chem/gcms/mr.i/R041613.b/m01pm2aa.d

Date : 17-APR-2013 09:53

Client ID:

Instrument: mr.i

Sample Info: M0LPM1AA,,0,,

Purge Volume: 500.0

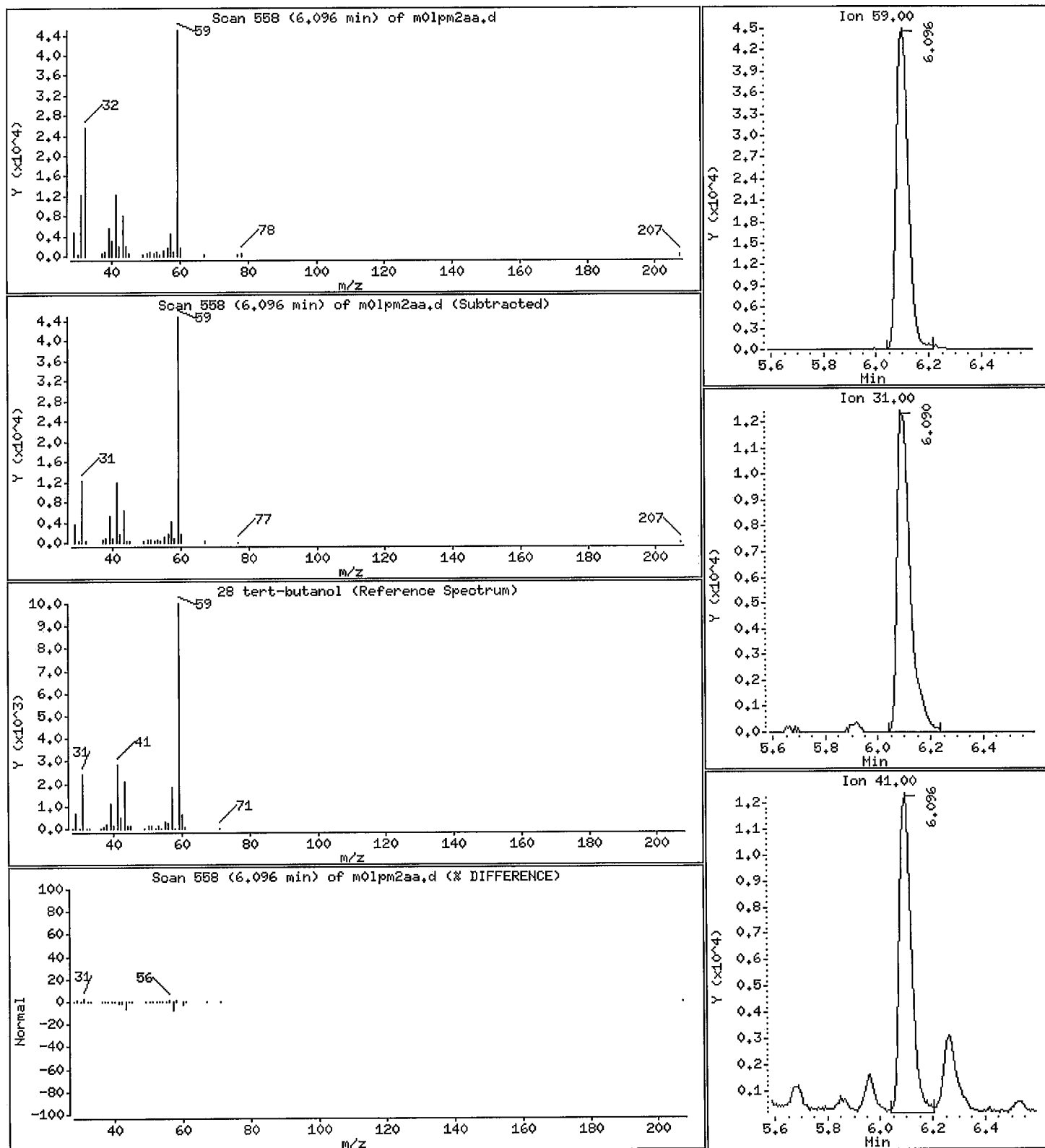
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

28 tert-butanol

Concentration: 0.8338 ppb(v/v)



Data File: /var/chem/gcms/mr.i/R041613.b/m01pm2aa.d

Date: 17-APR-2013 09:53

Client ID:

Instrument: mr.i

Sample Info: M0LPM1AA,,0,,

Purge Volume: 500.0

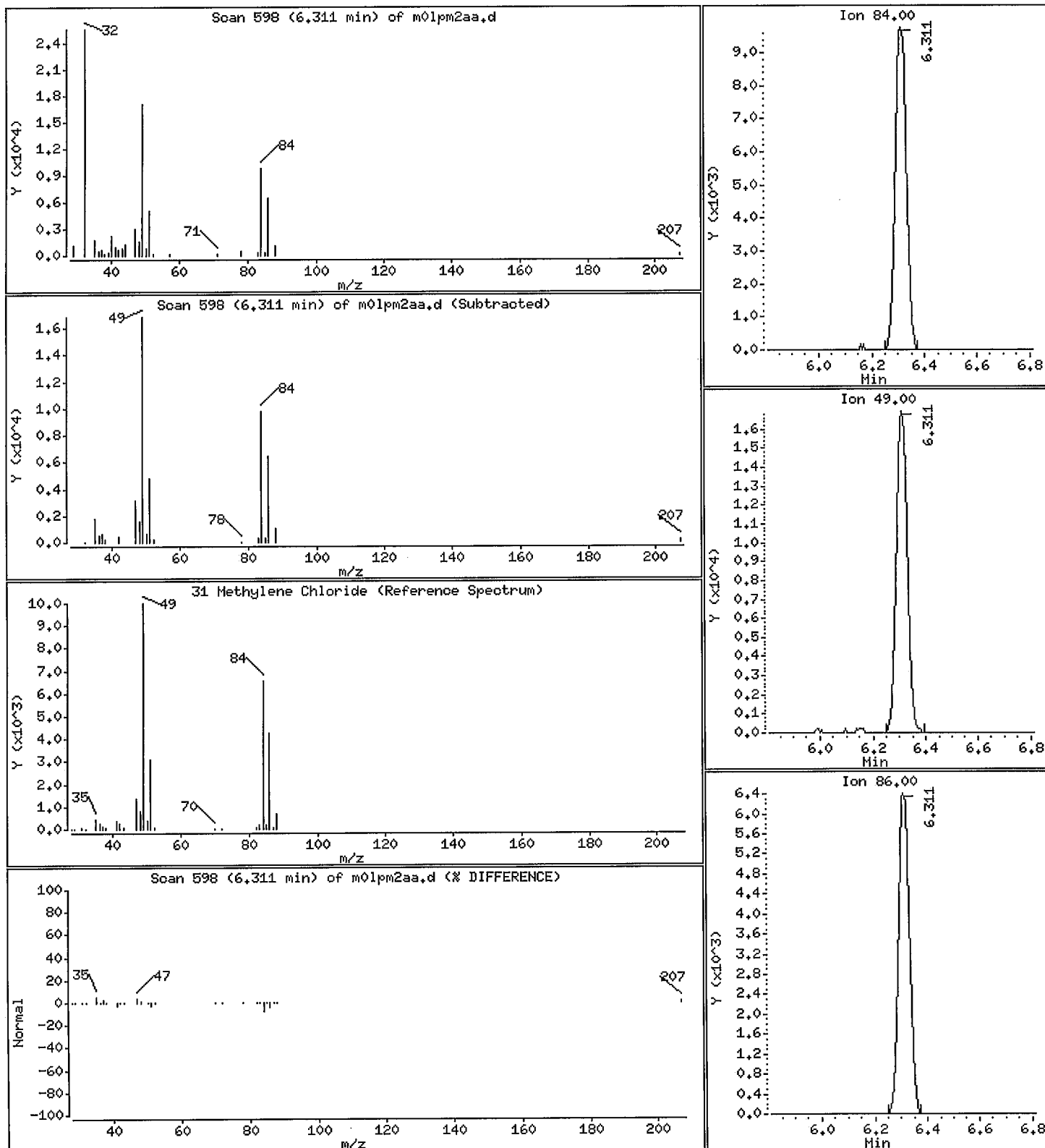
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

31 Methylene Chloride

Concentration: 0.3177 ppb(v/v)



Data File: /var/chem/gcms/mr.i/R041613.b/m01pm2aa.d

Date : 17-APR-2013 09:53

Client ID:

Instrument: mr.i

Sample Info: M0LPM1AA,,0,,

Purge Volume: 500.0

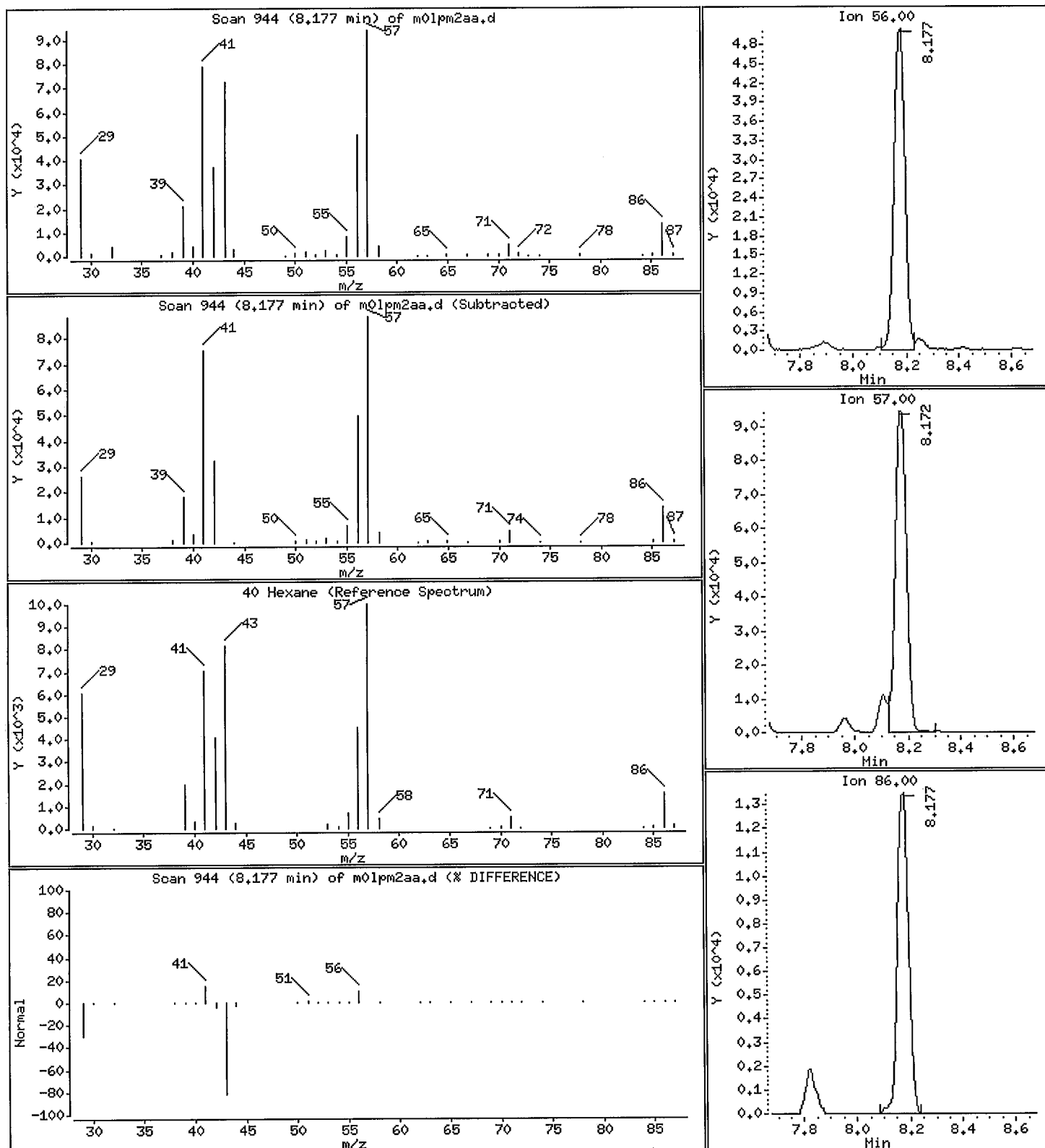
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

40 Hexane

Concentration: 1,637 ppb(v/v)



Data File: /var/chem/gcms/mr.i/R041613.b/m01pm2aa.d

Date : 17-APR-2013 09:53

Client ID:

Instrument: mr.i

Sample Info: M0LPM1AA,,0,,

Purge Volume: 500.0

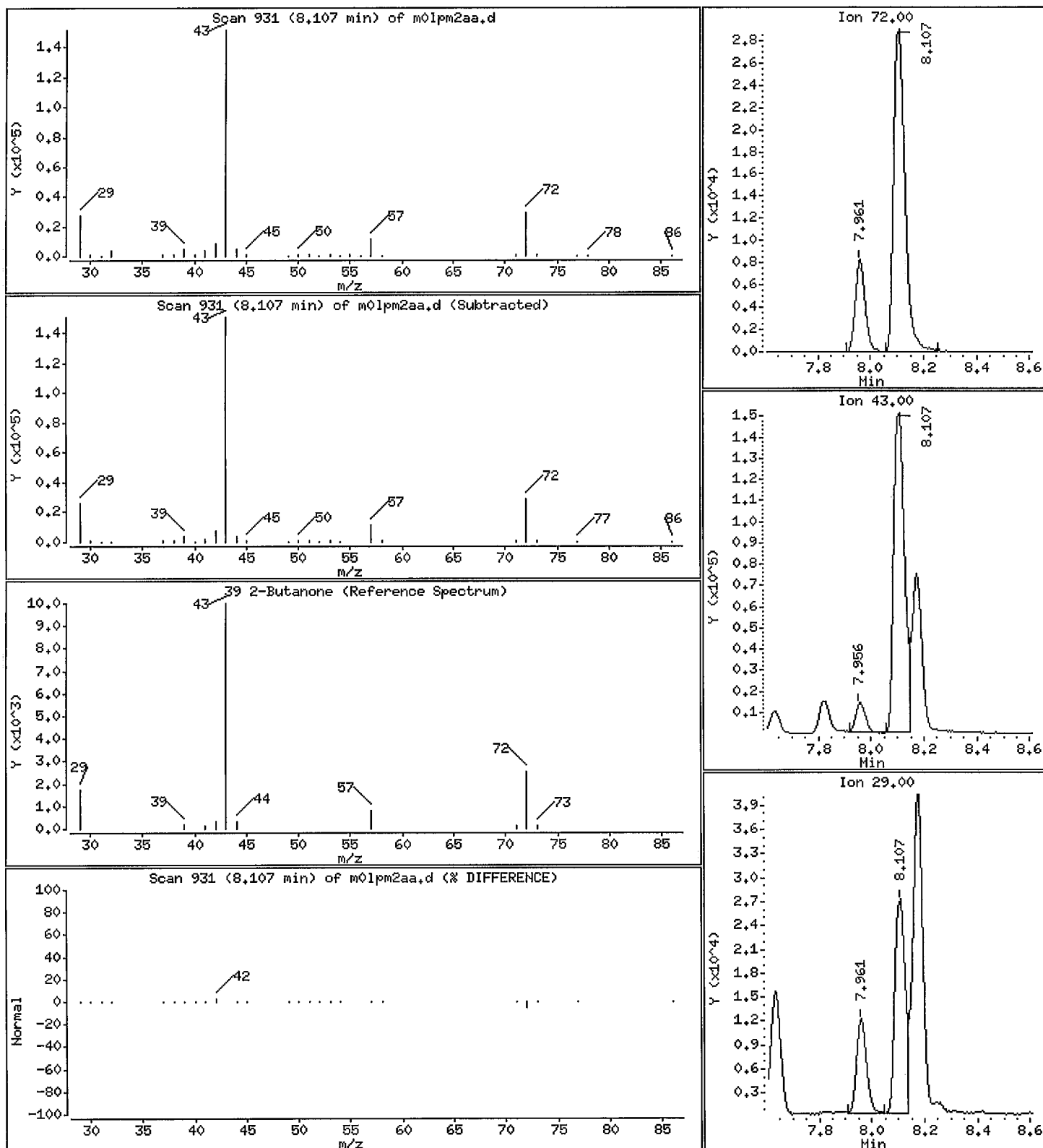
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

39 2-Butanone

Concentration: 1.706 ppb(v/v)



Data File: /var/chem/gcms/mr.i/R041613.b/m01pm2aa.d

Date : 17-APR-2013 09:53

Client ID:

Instrument: mr.i

Sample Info: M0LPM1AA,,0,,

Purge Volume: 500.0

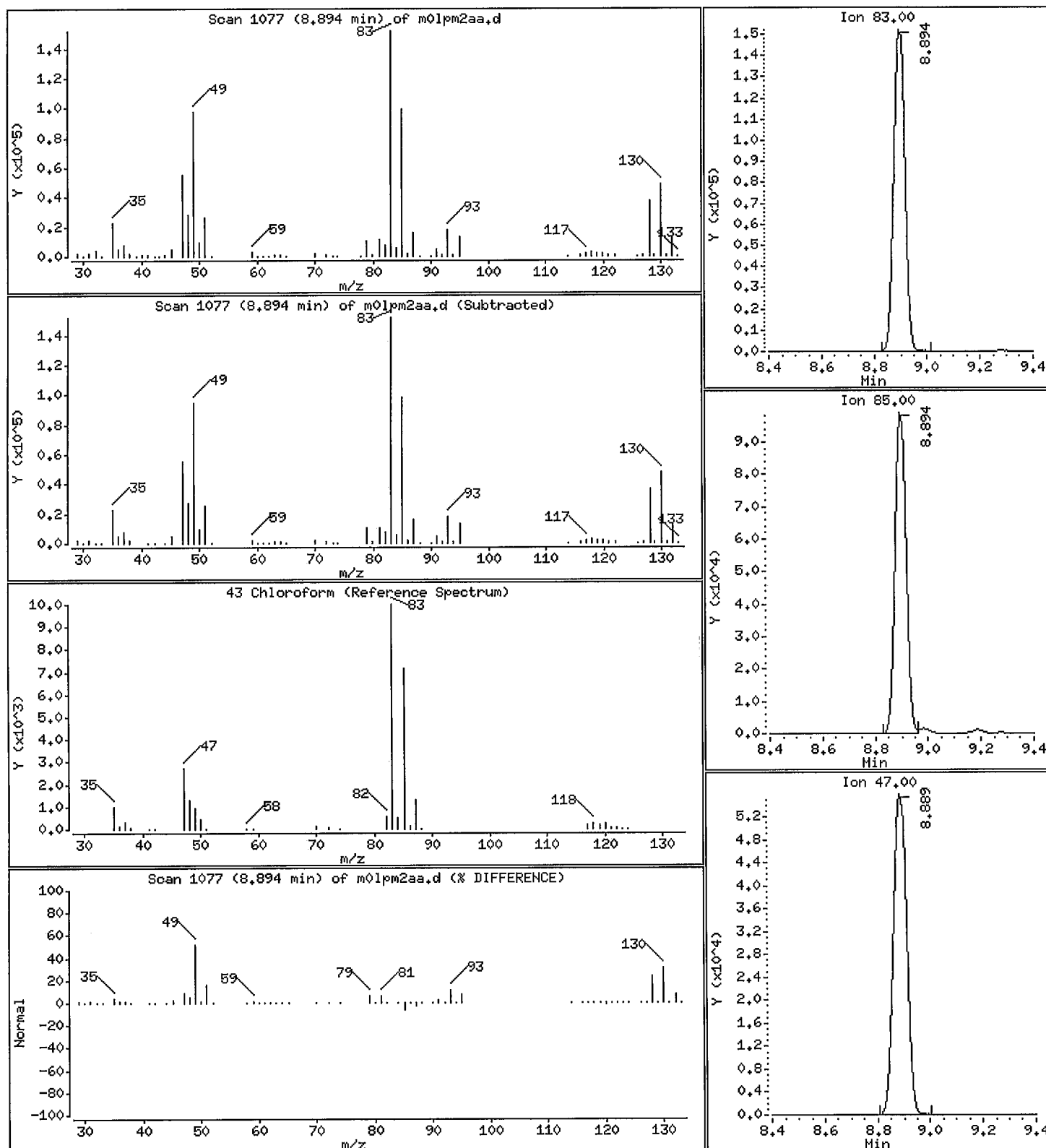
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

43 Chloroform

Concentration: 2,222 ppb(v/v)



Data File: /var/chem/gcms/mr.i/R041613.b/m01pm2aa.d

Date : 17-APR-2013 09:53

Client ID:

Instrument: mr.i

Sample Info: M01PM1AA,,0,,

Purge Volume: 500.0

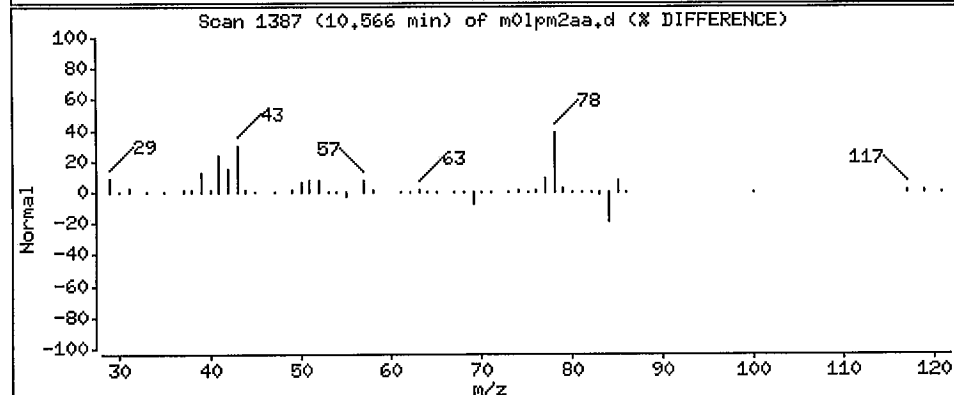
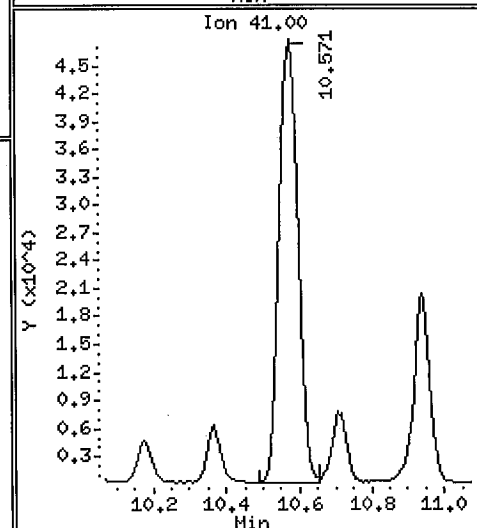
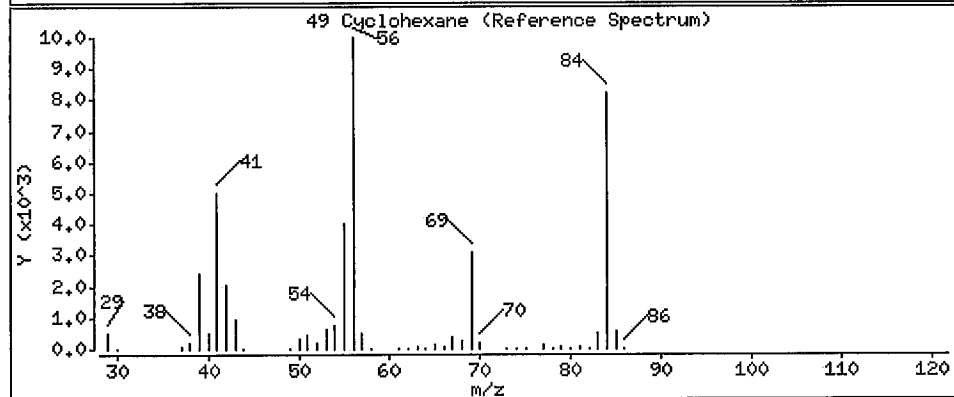
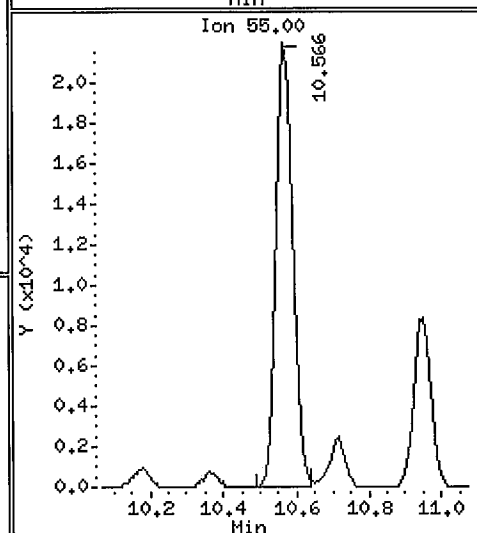
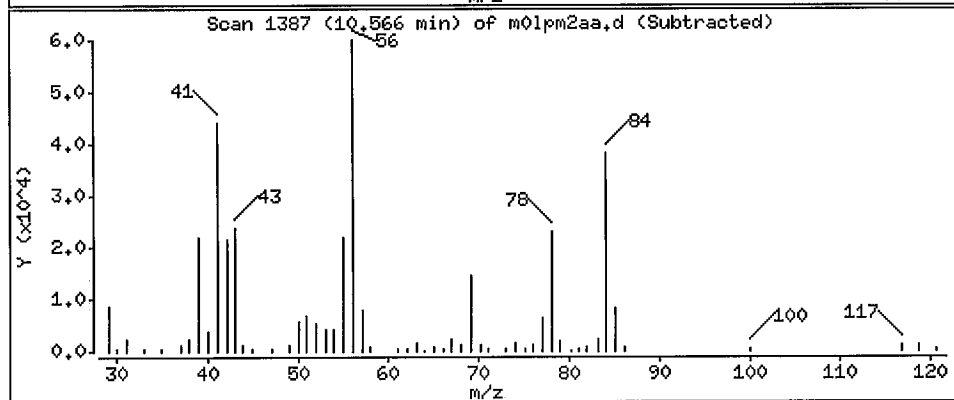
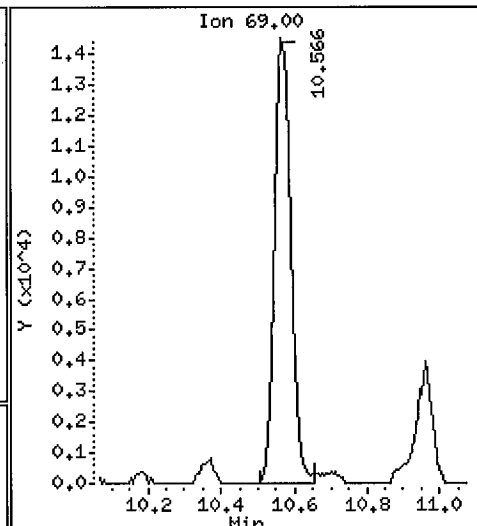
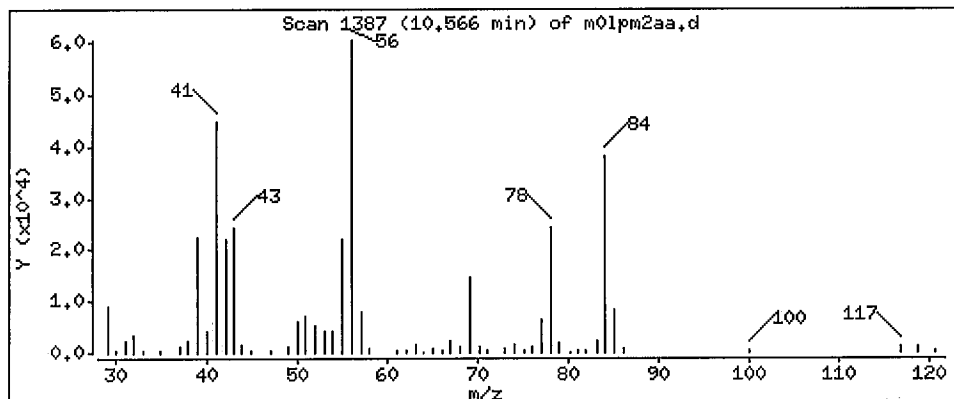
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

49 Cyclohexane

Concentration: 0.9372 ppb(v/v)



Data File: /var/chem/gcms/mr.i/R041613.b/m01pm2aa.d

Date : 17-APR-2013 09:53

Client ID:

Instrument: mr.i

Sample Info: M0LPM1AA,,0,,

Purge Volume: 500.0

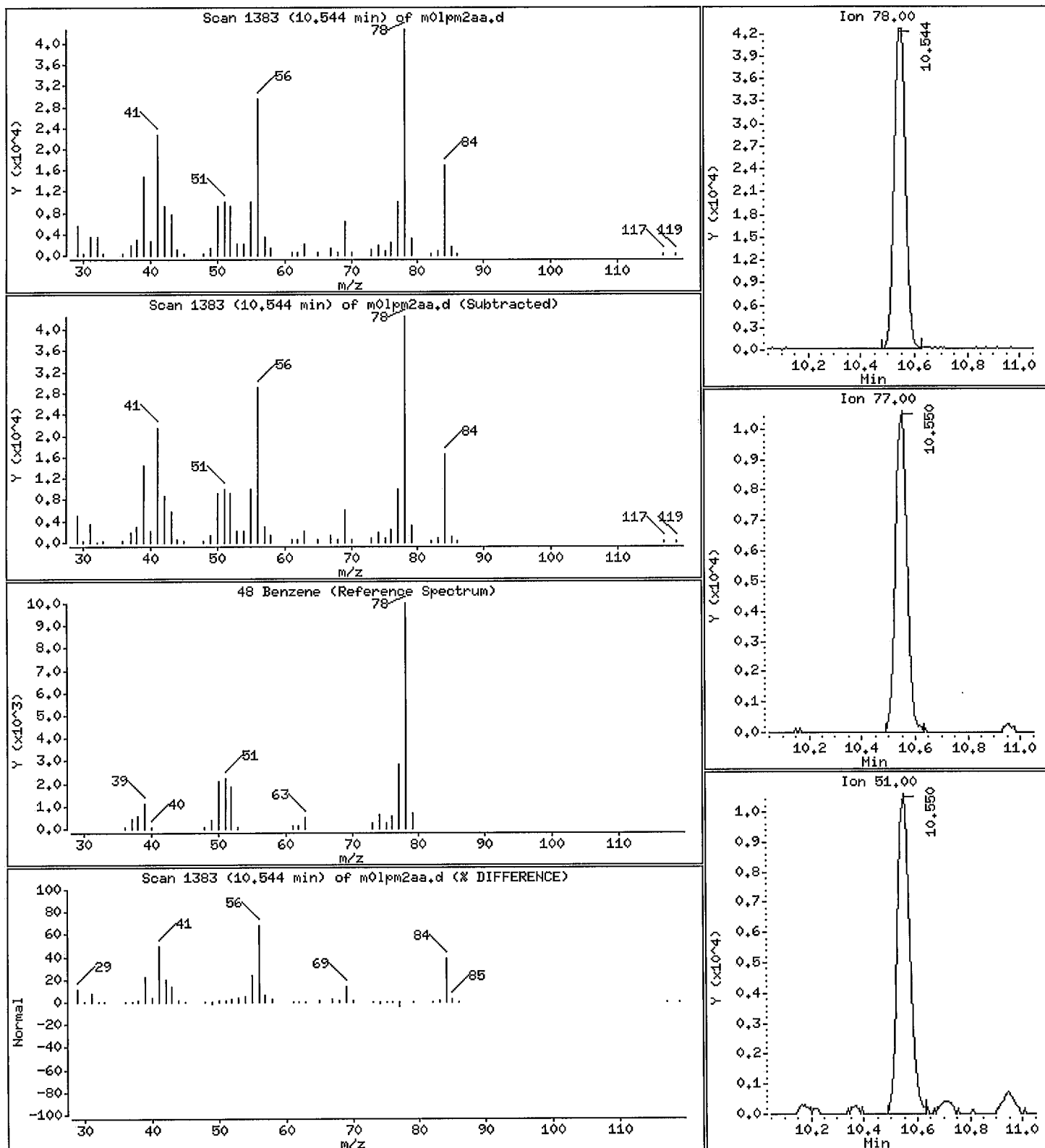
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

48 Benzene

Concentration: 0.4032 ppb(v/v)



Data File: /var/chem/gcms/mr.i/R041613.b/m01pm2aa.d

Date : 17-APR-2013 09:53

Client ID:

Instrument: mr.i

Sample Info: M0LPM1AA,,0,,

Purge Volume: 500.0

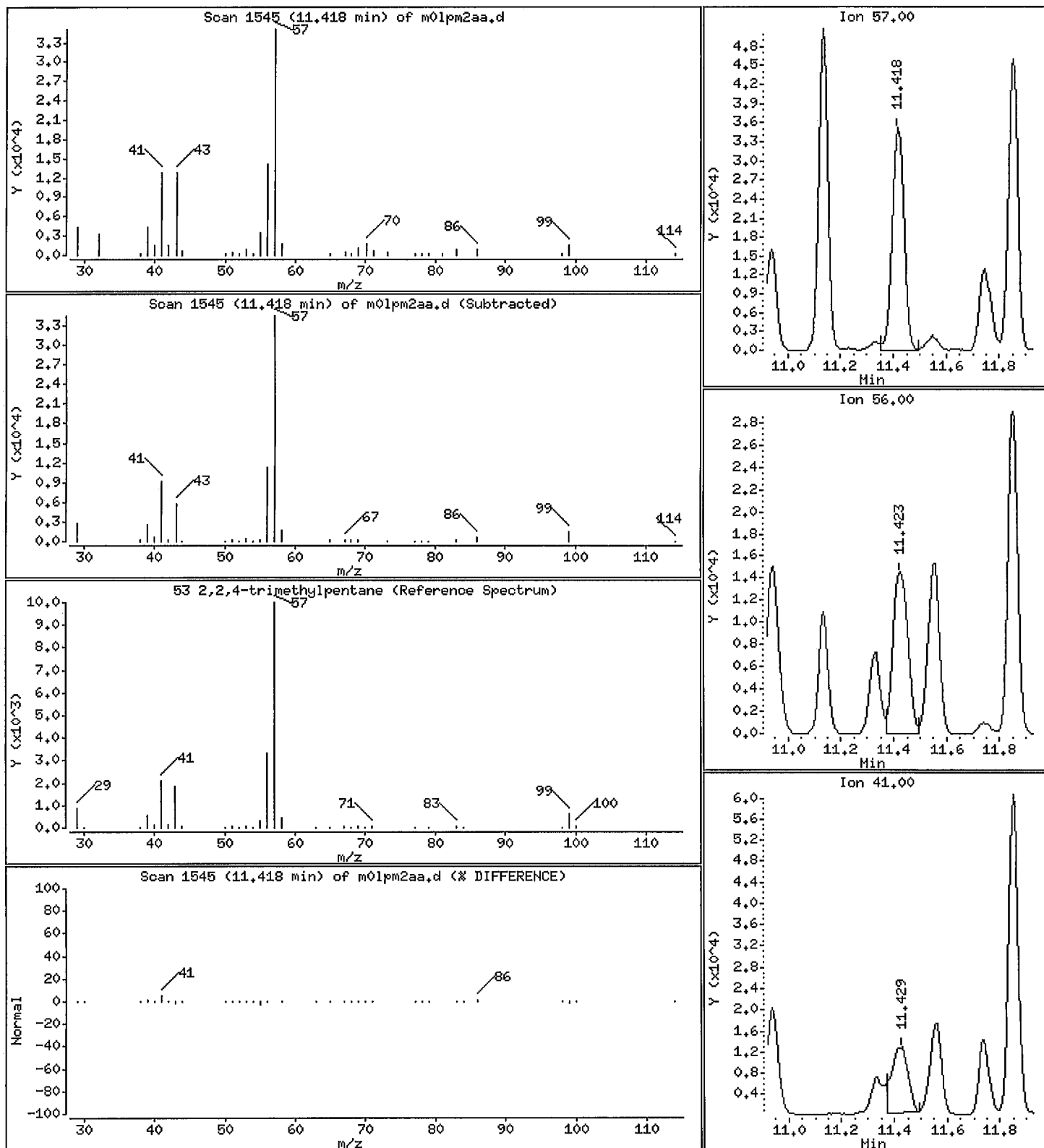
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

53 2,2,4-trimethylpentane

Concentration: 0.2193 ppb(v/v)



Data File: /var/chem/gcms/mr.i/R041613.b/m01pm2aa.d

Date : 17-APR-2013 09:53

Client ID:

Instrument: mr.i

Sample Info: M0LPM1AA,,0,,

Purge Volume: 500.0

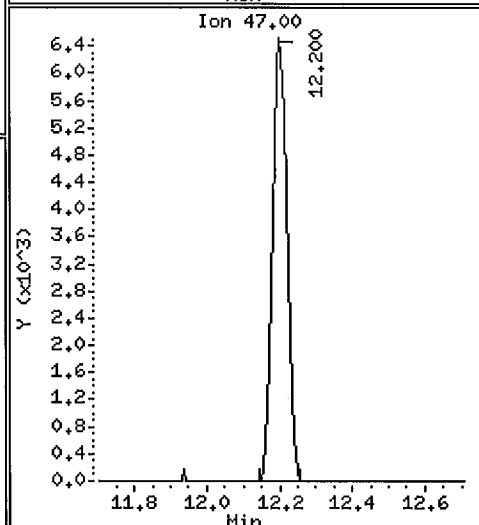
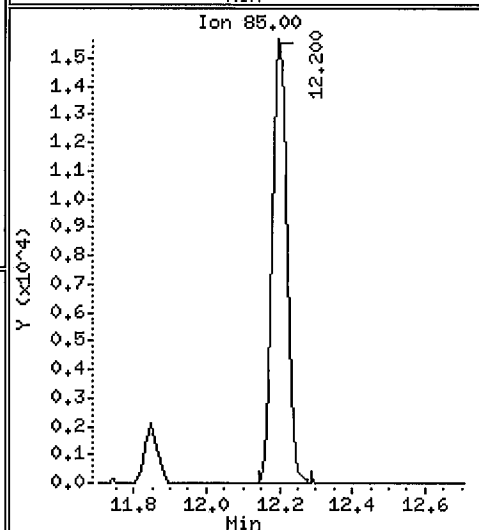
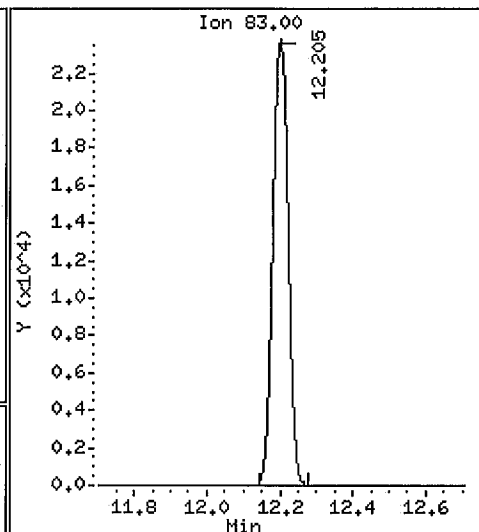
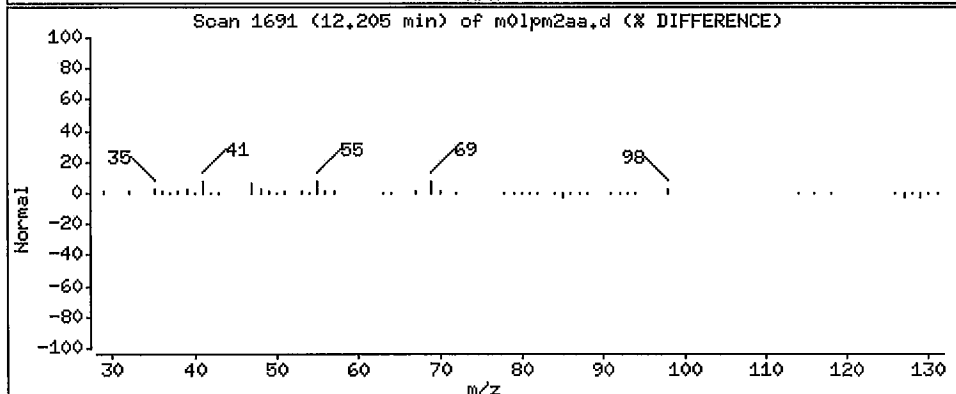
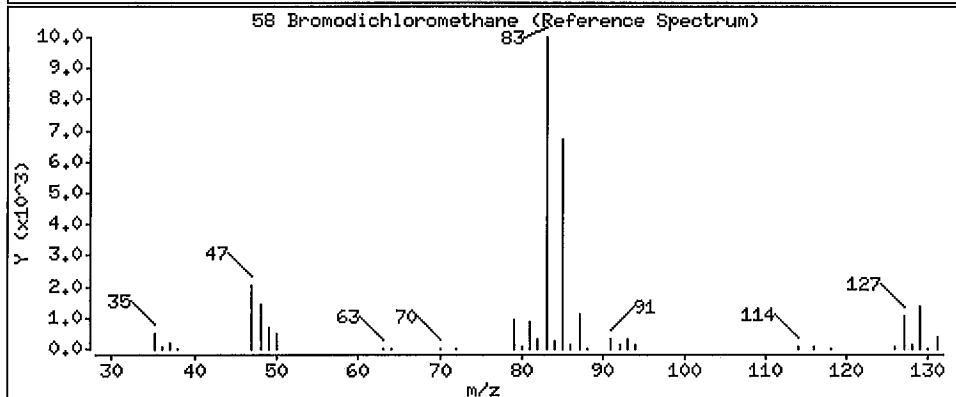
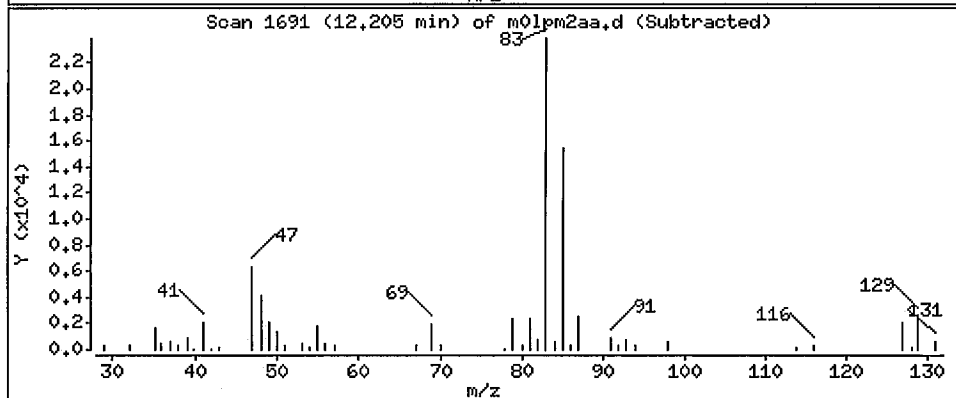
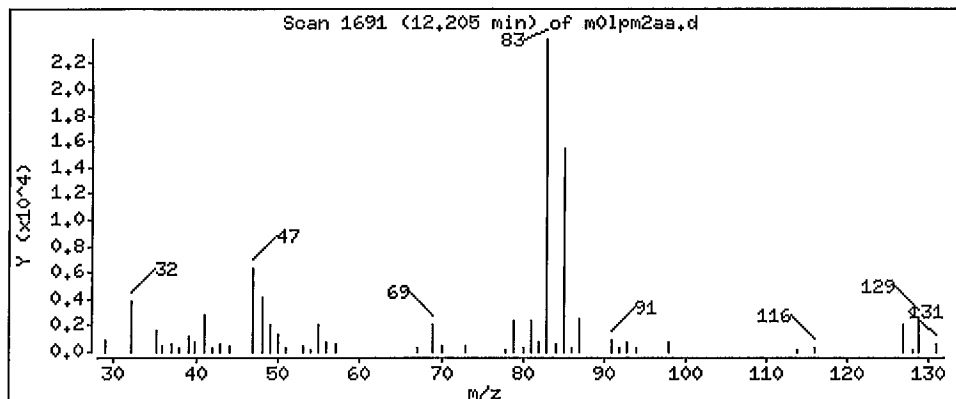
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

58 Bromodichloromethane

Concentration: 0.3499 ppb(v/v)



Data File: /var/chem/gcms/mr.i/R041613.b/m01pm2aa.d

Date : 17-APR-2013 09:53

Client ID:

Instrument: mr.i

Sample Info: M0LPM1AA,,0,,

Purge Volume: 500.0

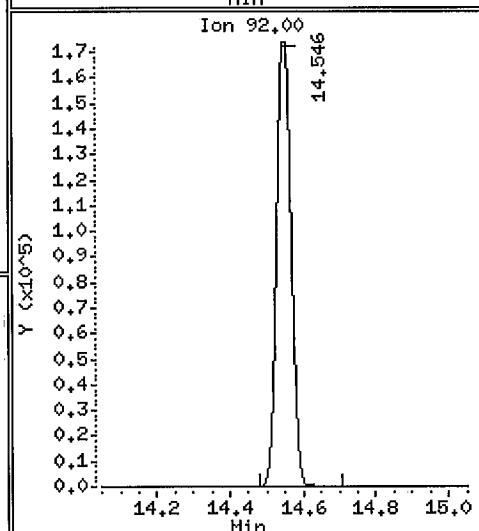
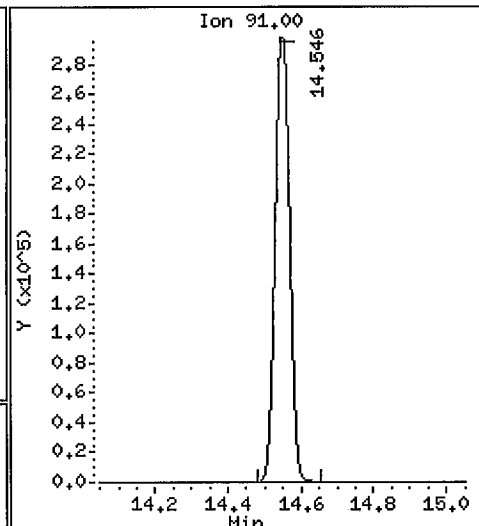
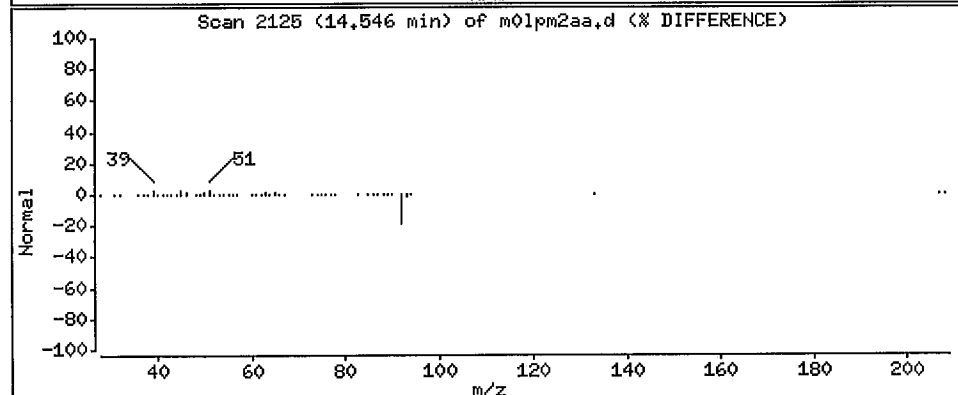
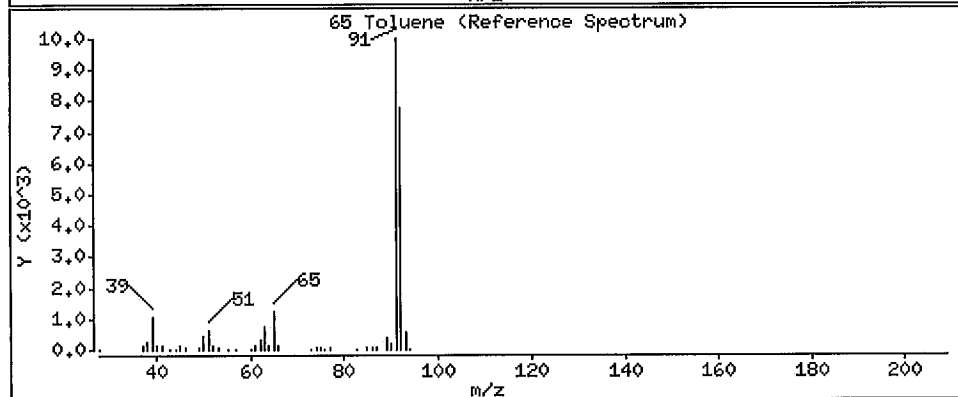
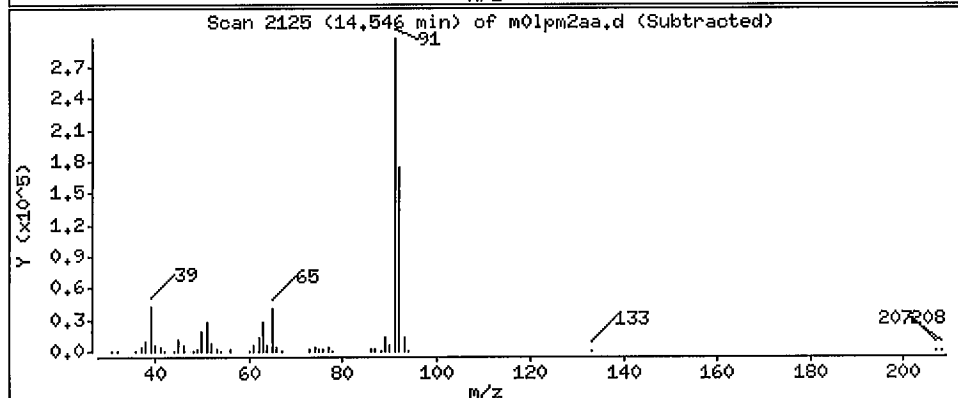
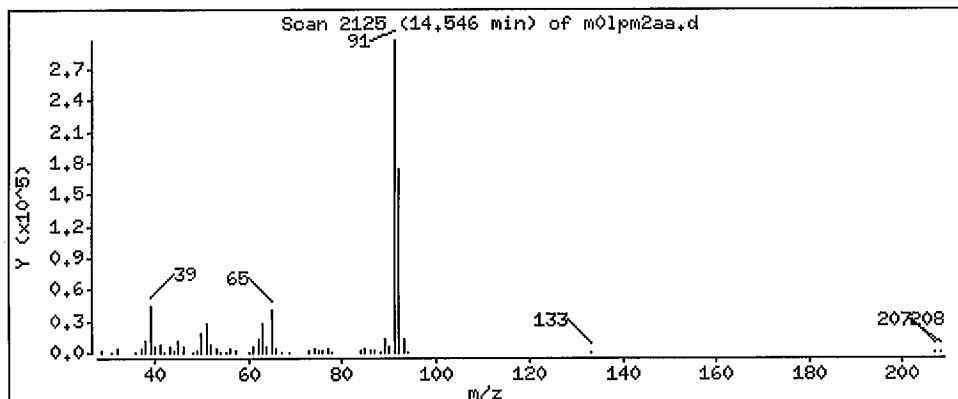
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

65 Toluene

Concentration: 2.011 ppb(v/v)



Data File: /var/chem/gcms/mr.i/R041613.b/m01pm2aa.d

Date : 17-APR-2013 09:53

Client ID:

Instrument: mr.i

Sample Info: M0LPM1AA,,0,,

Purge Volume: 500.0

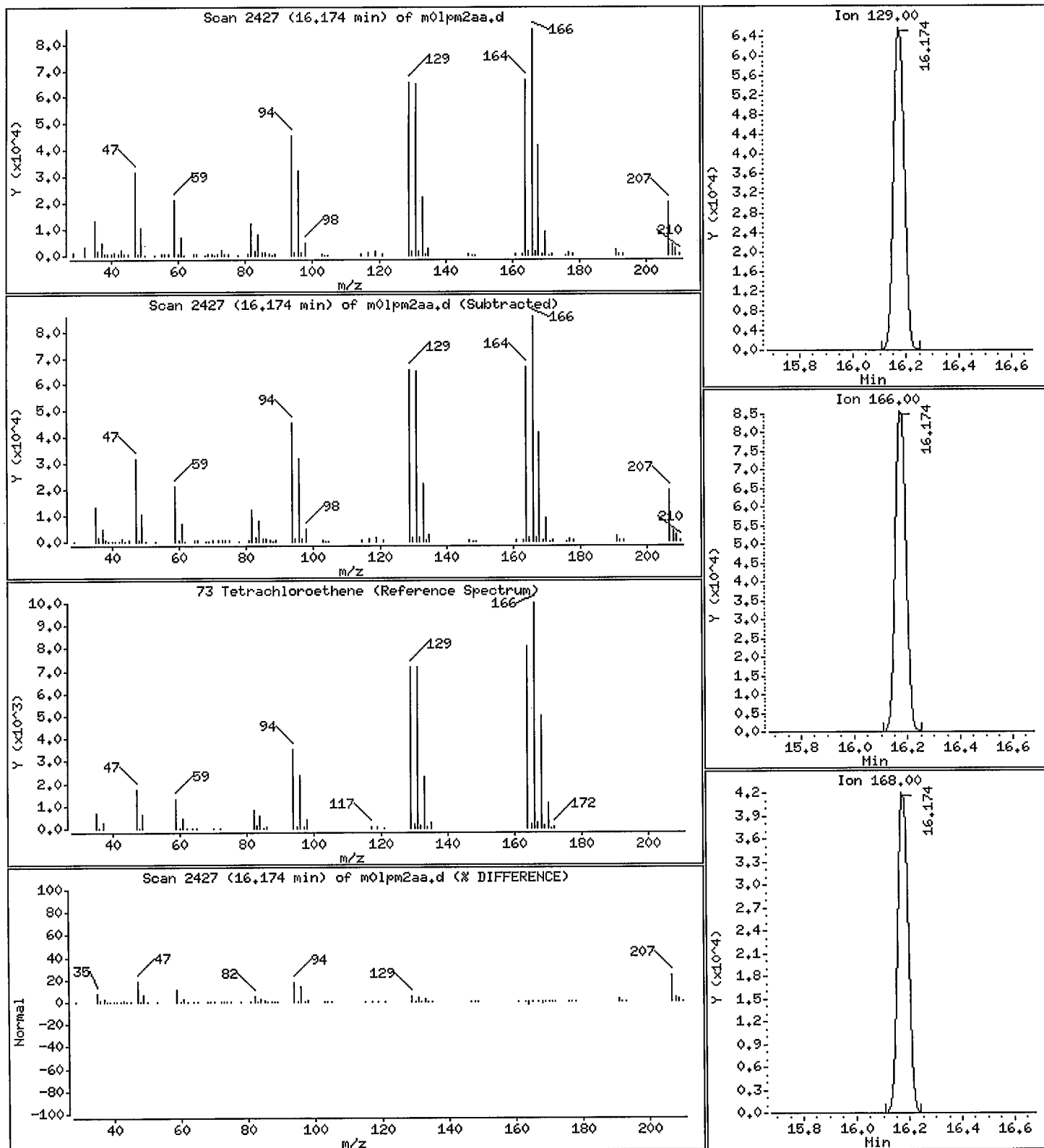
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

73 Tetrachloroethene

Concentration: 1,257 ppb(v/v)



Data File: /var/chem/gcms/mr.i/R041613.b/m01pm2aa.d

Date : 17-APR-2013 09:53

Client ID:

Instrument: mr.i

Sample Info: M0LPM1AA,,0,,

Purge Volume: 500.0

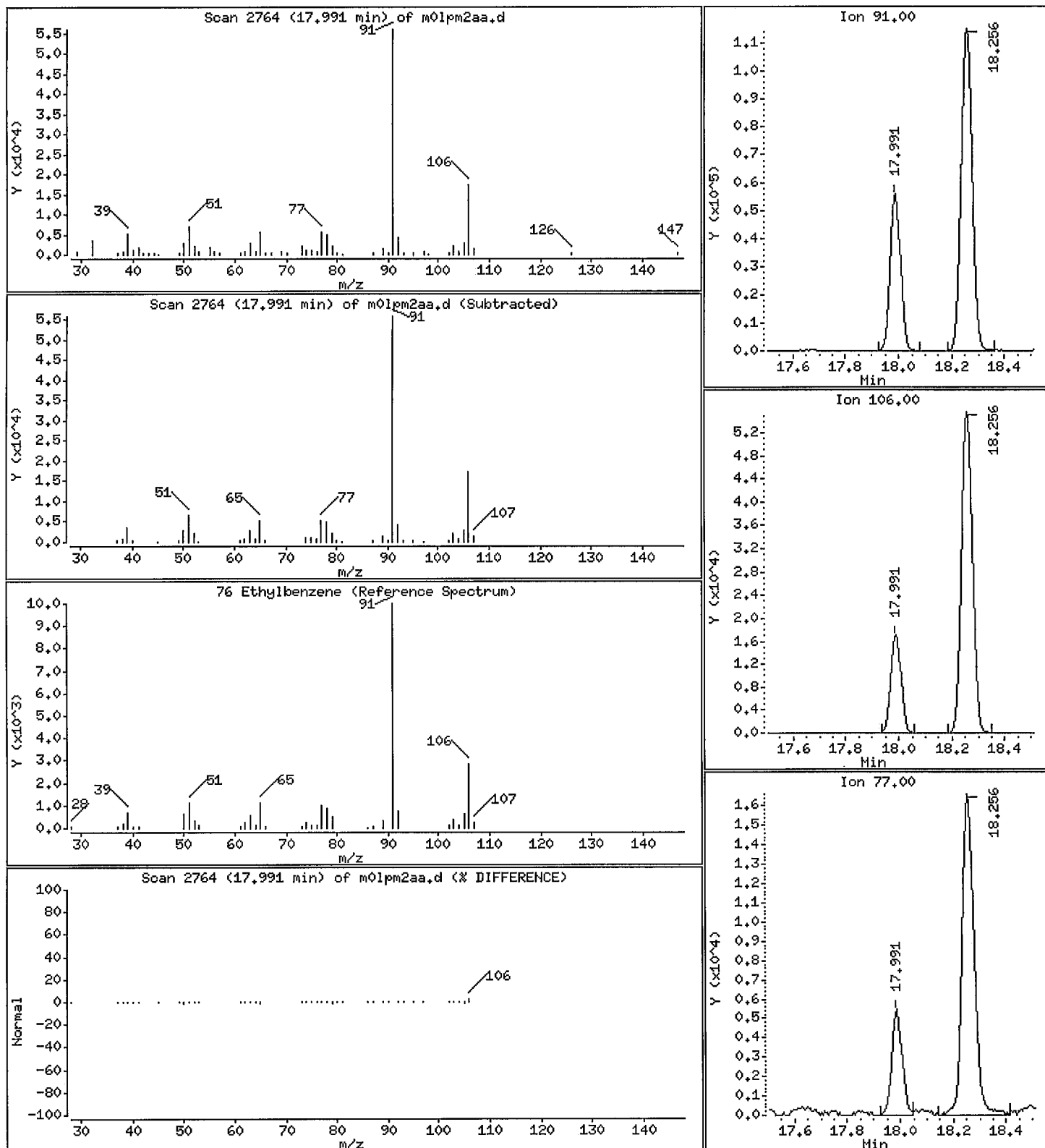
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

76 Ethylbenzene

Concentration: 0.3036 ppb(v/v)



Data File: /var/chem/gcms/mr.i/R041613.b/m01pm2aa.d

Date : 17-APR-2013 09:53

Client ID:

Instrument: mr.i

Sample Info: M0LPM1AA,,0,,

Purge Volume: 500.0

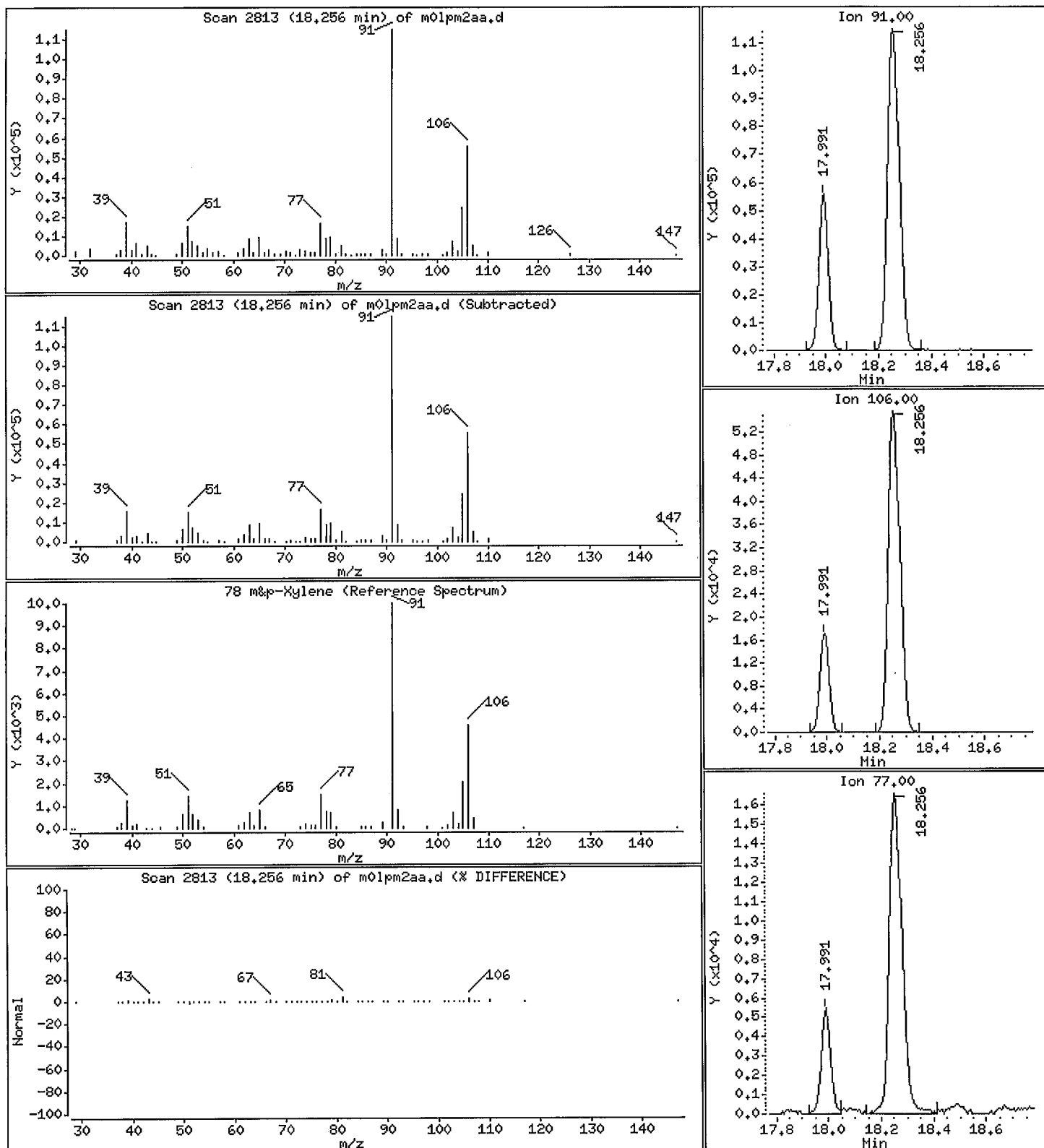
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

78 m&p-Xylene

Concentration: 0.9410 ppb(v/v)



Data File: /var/chem/gcms/mr.i/R041613.b/m01pm2aa.d

Date : 17-APR-2013 09:53

Client ID:

Instrument: mr.i

Sample Info: M0LPM1AA,,0,,

Purge Volume: 500.0

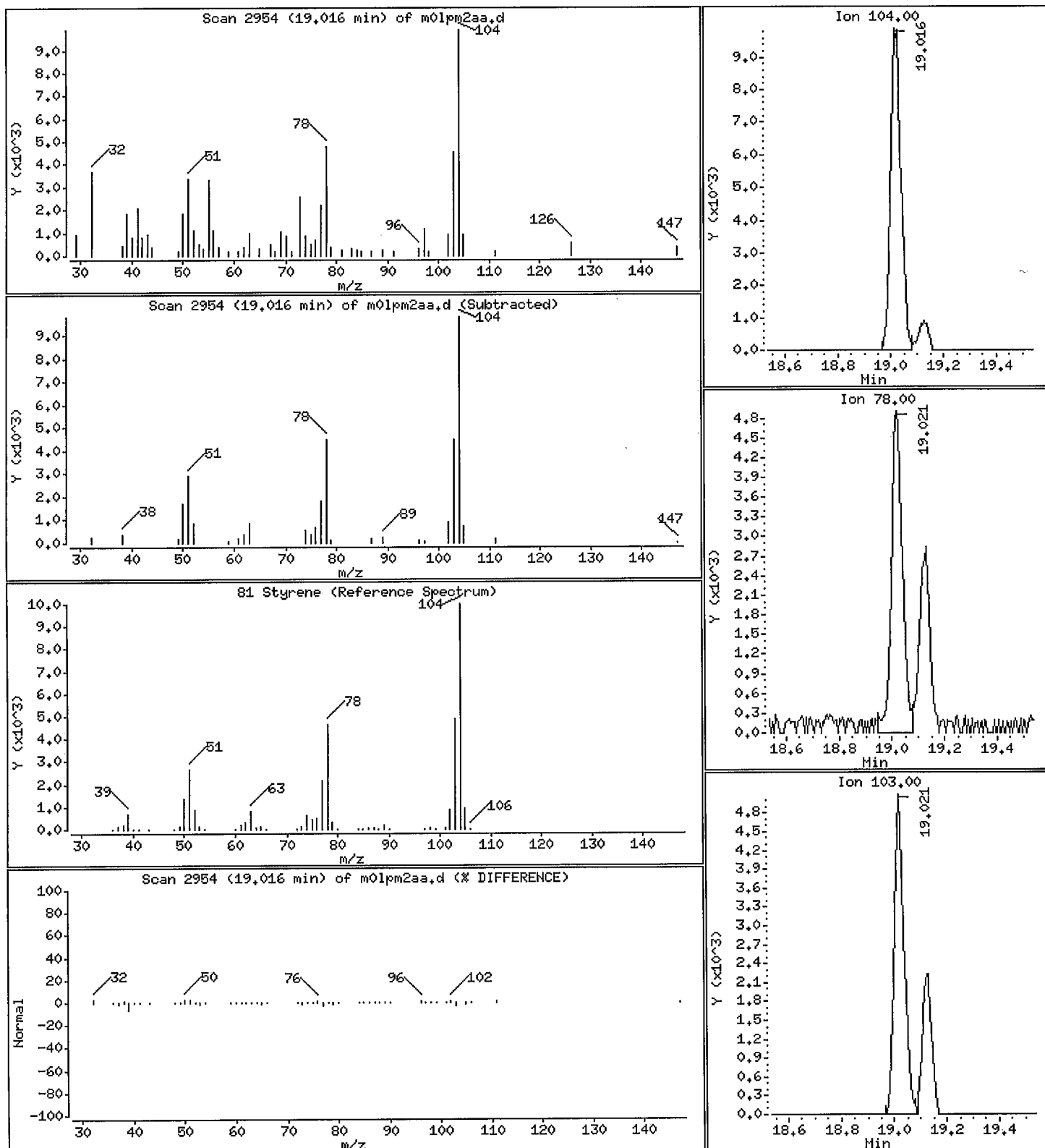
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

81 Styrene

Concentration: 0.09966 ppb(v/v)



Data File: /var/chem/gcms/mr.i/R041613.b/m01pm2aa.d

Date: 17-APR-2013 09:53

Client ID:

Instrument: mr.i

Sample Info: M0LPM1AA,,0,,

Purge Volume: 500.0

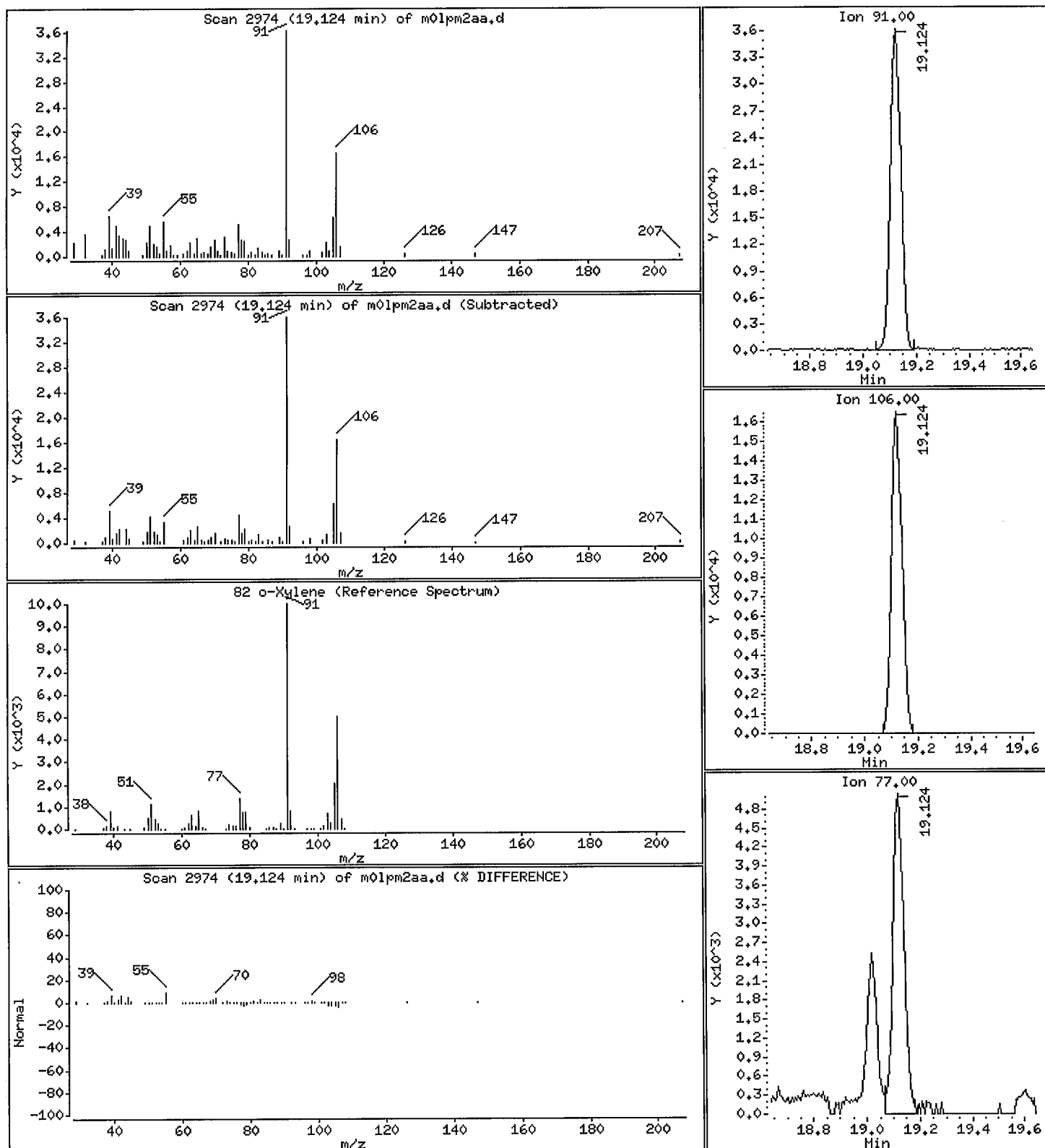
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

82 o-Xylene

Concentration: 0.2478 ppb(v/v)



Data File: /var/chem/gcms/mr.i/R041613.b/m01pm2aa.d

Date : 17-APR-2013 09:53

Client ID:

Instrument: mr.i

Sample Info: M0LPM1AA,,0,,

Purge Volume: 500.0

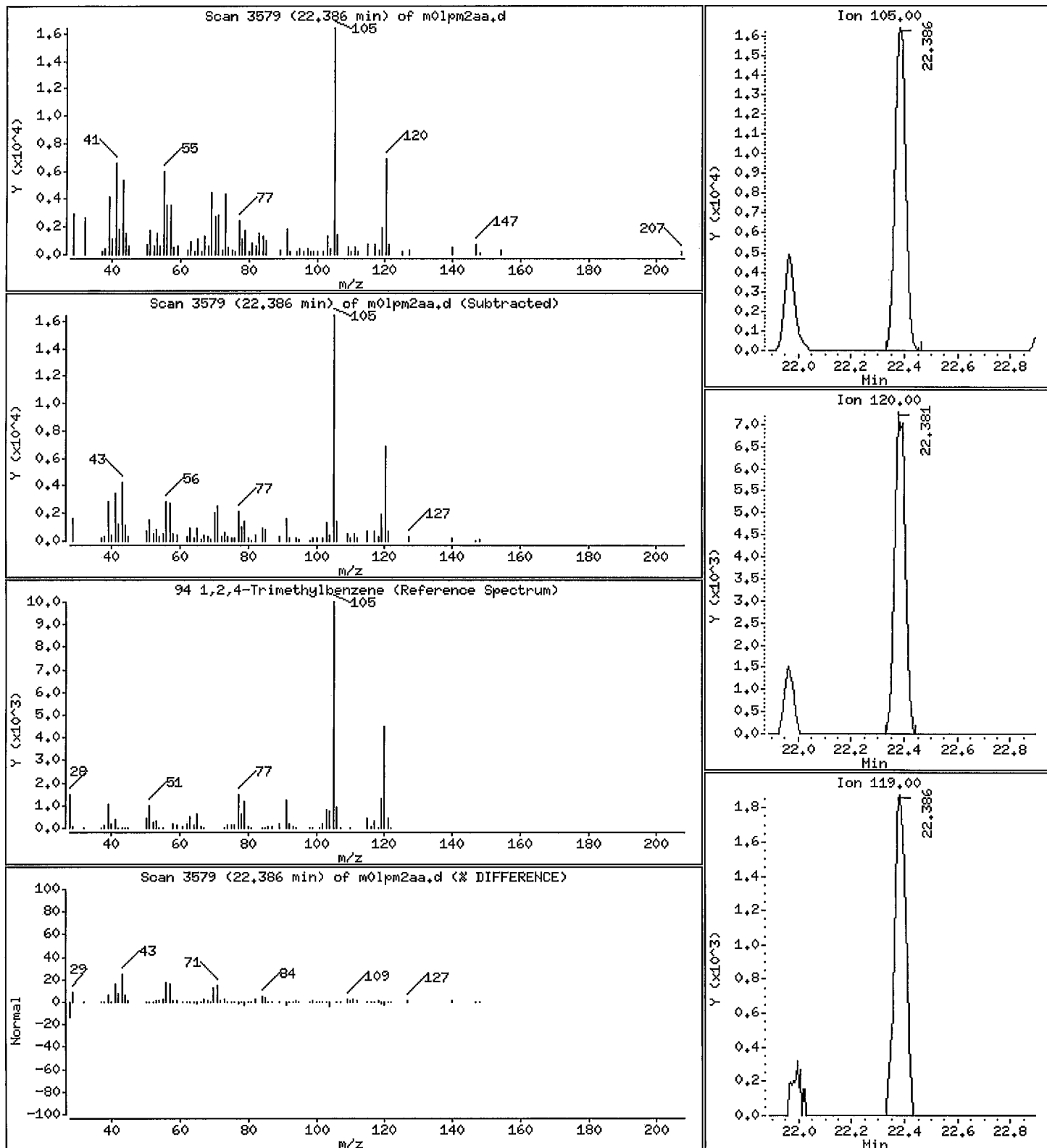
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

94 1,2,4-Trimethylbenzene

Concentration: 0.08927 ppb(v/v)



Data File: /var/chem/gcms/mr.i/R041613.b/m01pm2aa.d

Date : 17-APR-2013 09:53

Client ID:

Instrument: mr.i

Sample Info: M0LPM1AA,,0,,

Purge Volume: 500.0

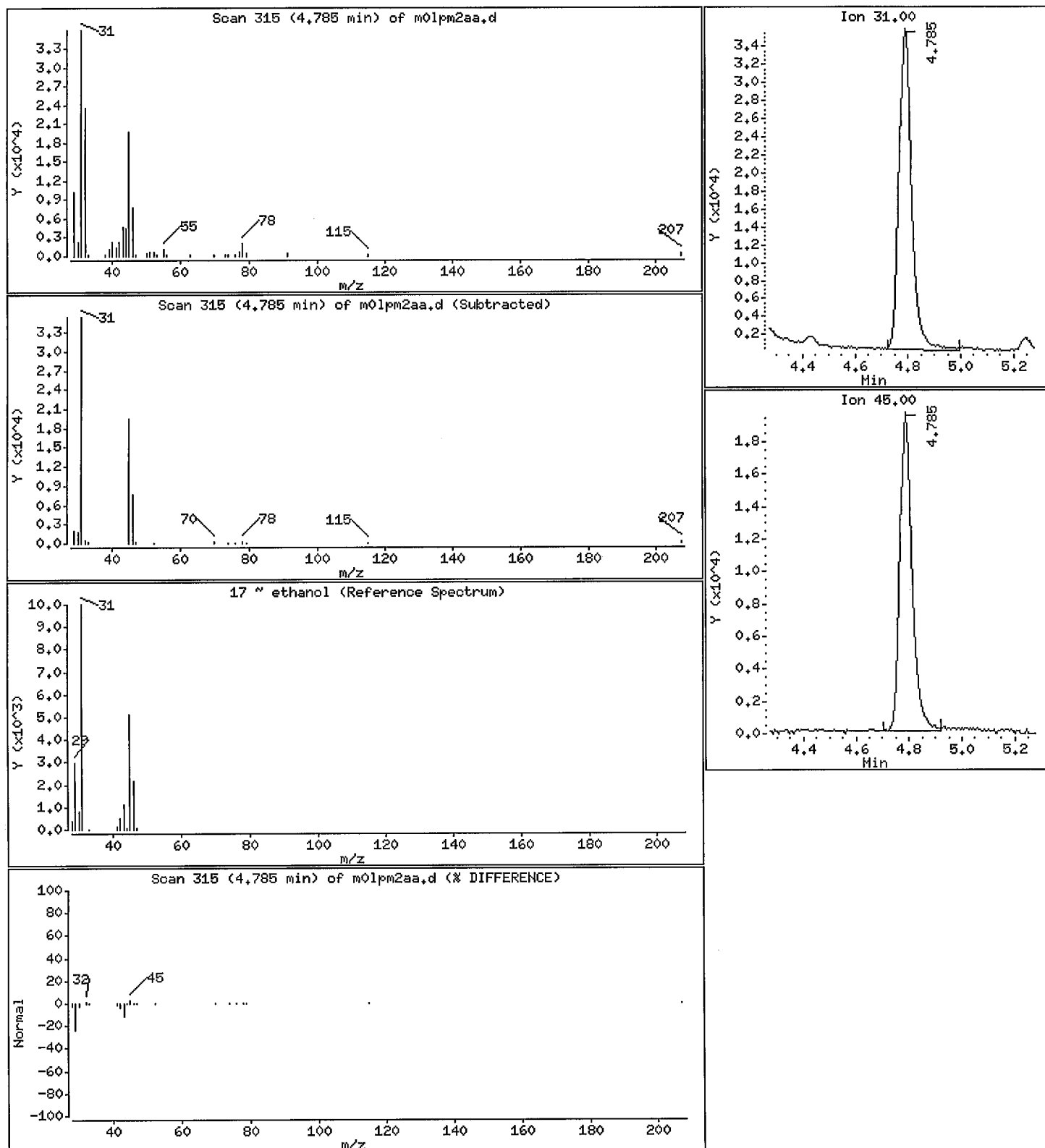
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

17 ~ ethanol

Concentration: 3.629 ppb(v/v)



New York State D.E.C.

Client Sample ID: SS DUP

GC/MS Volatiles

Lot-Sample # H3D160408 - 002 Work Order # M0LPQ1AA Matrix.....: AIR

Date Sampled...: 04/12/2013 Date Received...: 04/15/2013
 Prep Date.....: 04/17/2013 Analysis Date...: 04/17/2013
 Prep Batch #....: 3107088
 Dilution Factor.: 1 Method.....: TO-15

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
1,1,1-Trichloroethane	ND	0.080	ND	0.44
1,1,2,2-Tetrachloroethane	ND	0.080	ND	0.55
1,1,2-Trichlorotrifluoroethane	ND	0.080	ND	0.61
1,1,2-Trichloroethane	ND	0.080	ND	0.44
1,1-Dichloroethane	ND	0.080	ND	0.32
1,1-Dichloroethene	ND	0.080	ND	0.32
1,2,4-Trichlorobenzene	ND	0.080	ND	0.59
1,2,4-Trimethylbenzene	0.32	0.080	1.6	0.39
1,2-Dibromoethane (EDB)	ND	0.080	ND	0.61
1,2-Dichlorobenzene	ND	0.080	ND	0.48
1,2-Dichloroethane	ND	0.080	ND	0.32
1,2-Dichloropropane	ND	0.080	ND	0.37
1,3,5-Trimethylbenzene	ND	0.080	ND	0.39
1,4-Dichlorobenzene	ND	0.080	ND	0.48
1,4-Dioxane	ND	0.20	ND	0.72
2-Butanone (MEK)	1.7	0.32	4.9	0.94
1,3-Dichlorobenzene	ND	0.080	ND	0.48
2,2,4-Trimethylpentane	ND	0.20	ND	0.93
Benzene	0.54	0.080	1.7	0.26
Benzyl chloride	ND	0.16	ND	0.83
Bromodichloromethane	0.31	0.080	2.1	0.54
Bromoform	ND	0.080	ND	0.83
Bromomethane	ND	0.080	ND	0.31
Carbon tetrachloride	0.042	0.040	0.27	0.25
Chlorobenzene	ND	0.080	ND	0.37
Chloroethane	ND	0.080	ND	0.21
Chloroform	2.1	0.080	10	0.39
Cyclohexane	0.98	0.20	3.4	0.69
Chloromethane	0.25	0.20	0.52	0.41
cis-1,2-Dichloroethene	ND	0.080	ND	0.32
cis-1,3-Dichloropropene	ND	0.080	ND	0.36
Dibromochloromethane	ND	0.080	ND	0.68
Dichlorodifluoromethane	0.33	0.080	1.6	0.40
Ethanol	4.8	0.80	9.1	1.5
Ethylbenzene	0.40	0.080	1.8	0.35
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.080	ND	0.56
n-Hexane	2.4	0.20	8.3	0.70
Hexachlorobutadiene	ND	0.080	ND	0.85

New York State D.E.C.
Client Sample ID: SS DUP
GC/MS Volatiles

Lot-Sample # H3D160408 - 002 Work Order # M0LPQ1AA Matrix.....: AIR

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
4-Methyl-2-pentanone (MIBK)	0.26	0.20	1.1	0.82
Methyl tert-butyl ether	ND	0.16	ND	0.58
Methylene chloride	1.1	0.20	3.9	0.69
Styrene	0.41	0.080	1.7	0.34
tert-Butyl alcohol	0.84	0.32	2.6	0.97
Tetrachloroethene	ND	0.080	ND	0.54
Toluene	2.3	0.080	8.7	0.30
m-Xylene & p-Xylene	1.8	0.080	7.7	0.35
o-Xylene	0.54	0.080	2.3	0.35
trans-1,2-Dichloroethene	ND	0.080	ND	0.32
trans-1,3-Dichloropropene	ND	0.080	ND	0.36
Trichloroethene	ND	0.040	ND	0.21
Trichlorofluoromethane	0.23	0.080	1.3	0.45
Vinyl chloride	ND	0.080	ND	0.20

SURROGATE	PERCENT RECOVERY	LABORATORY CONTROL LIMITS (%)
4-Bromofluorobenzene	107	60 - 140

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)*(Molecular Weight/24.45)

The 'Reporting Limit' in ug/m3 is calculated using the following equation: (Reporting Limit(before rounding) * Dilution Factor) * (Molecular Weight/24.45)

Data File: /var/chem/gcms/mr.i/R041713.b/m0lpq1aa.d
 Report Date: 17-Apr-2013 19:56

TestAmerica Knoxville

Modified Method TO-14/TO-15

Data file : /var/chem/gcms/mr.i/R041713.b/m0lpq1aa.d
 Lab Smp Id: M0LPQ1AA Client Smp ID: SS DUP
 Inj Date : 17-APR-2013 16:39
 Operator : 403648 Inst ID: mr.i
 Smp Info : , , 0 , , ,
 Misc Info : R041713,TO15,nysdec.sub
 Comment :
 Method : /var/chem/gcms/mr.i/R041713.b/TO15.m
 Meth Date : 17-Apr-2013 19:55 barlozha Quant Type: ISTD
 Cal Date : 20-FEB-2013 20:14 Cal File: ricb205.d
 Als bottle: 7
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: nysdec.sub
 Target Version: 3.50

Concentration Formula: Amt * DF * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Default Calibration Volume
Vo	500.00000	Default Sample Volume

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ppb (v/v))	FINAL (ppb (v/v))
* 1 Bromochloromethane	128	8.867	8.868	(1.000)	209580	4.00000	4.000	
* 2 1,4-Difluorobenzene	114	11.127	11.132	(1.000)	1121907	4.00000	4.000	
* 3 Chlorobenzene-d5	117	17.414	17.431	(1.000)	992227	4.00000	4.000	
\$ 4 4-Bromofluorobenzene	95	20.154	20.165	(1.157)	744045	4.28308	4.283	
7 Dichlorodifluoromethane	85	3.718	3.718	(0.419)	72334	0.33121	0.3312	
8 Chloromethane	52	3.901	3.896	(0.440)	6697	0.25087	0.2509	
20 Trichlorofluoromethane	101	5.238	5.239	(0.591)	47828	0.22541	0.2254	
28 tert-butanol	59	6.085	6.085	(0.686)	120895	0.84187	0.8419	
31 Methylene Chloride	84	6.306	6.306	(0.711)	84139	1.11424	1.114	
40 Hexane	56	8.166	8.172	(0.921)	169623	2.35557	2.356	
39 2-Butanone	72	8.096	8.102	(0.913)	69759	1.65782	1.658	
43 Chloroform	83	8.889	8.895	(1.002)	351109	2.08992	2.090	
49 Cyclohexane	69	10.561	10.566	(0.949)	43120	0.97901	0.9790	
48 Benzene	78	10.539	10.545	(0.947)	152293	0.53628	0.5363	
50 Carbon Tetrachloride	117	10.582	10.582	(0.951)	6192	0.04221	0.04221	
58 Bromodichloromethane	83	12.194	12.200	(1.096)	55621	0.30813	0.3081	

Data File: /var/chem/gcms/mr.i/R041713.b/m01pq1aa.d
 Report Date: 17-Apr-2013 19:56

Compounds	QUANT SIG				CONCENTRATIONS		
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN	FINAL
						(ppb (v/v))	(ppb (v/v))
=====	====	==	=====	=====	=====	=====	=====
62 4-Methyl-2-pentanone	43	13.386	13.381	(1.203)	51853	0.25866	0.2586
65 Toluene	91	14.546	14.546	(0.835)	950784	2.30949	2.309
76 Ethylbenzene	91	17.986	18.002	(1.033)	208661	0.40360	0.4036
78 m&p-Xylene	91	18.255	18.272	(1.048)	708809	1.77602	1.776
81 Styrene	104	19.021	19.032	(1.092)	114963	0.40559	0.4056
82 o-Xylene	91	19.118	19.129	(1.098)	222471	0.54032	0.5403
94 1,2,4-Trimethylbenzene	105	22.381	22.386	(1.285)	158656	0.31547	0.3155
17 ~ ethanol	31	4.769	4.769	(0.538)	139196	4.84267	4.843

Data File: /var/chem/gcms/mr.i/R041713.b/m0lpq1aa.d
 Report Date: 17-Apr-2013 19:56

TestAmerica Knoxville

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: mr.i
 Lab File ID: m0lpq1aa.d
 Lab Smp Id: M0LPQ1AA
 Analysis Type: OTHER
 Quant Type: ISTD
 Operator: 403648

Calibration Date: 17-APR-2013
 Calibration Time: 12:45
 Client Smp ID: SS DUP
 Level: LOW
 Sample Type: AIR

Method File: /var/chem/gcms/mr.i/R041713.b/TO15.m
 Misc Info: R041713,TO15,nysdec.sub

COMPOUND =====	STANDARD =====	AREA LIMIT		SAMPLE =====	%DIFF =====
		LOWER =====	UPPER =====		
1 Bromochloromethan	281891	167725	396057	209580	-25.65
2 1,4-Difluorobenze	1460036	868721	2051351	1121907	-23.16
3 Chlorobenzene-d5	1172674	697741	1647607	992227	-15.39

COMPOUND =====	STANDARD =====	RT LIMIT		SAMPLE =====	%DIFF =====
		LOWER =====	UPPER =====		
1 Bromochloromethan	8.87	8.54	9.20	8.87	0.00
2 1,4-Difluorobenze	11.13	10.80	11.46	11.13	-0.05
3 Chlorobenzene-d5	17.43	17.10	17.76	17.41	-0.09

AREA UPPER LIMIT = + 40% of internal standard area.
 AREA LOWER LIMIT = - 40% of internal standard area.
 RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
 RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /var/chem/gcms/mr.i/R041713.b/m0lpq1aa.d
Report Date: 17-Apr-2013 19:56

TestAmerica Knoxville

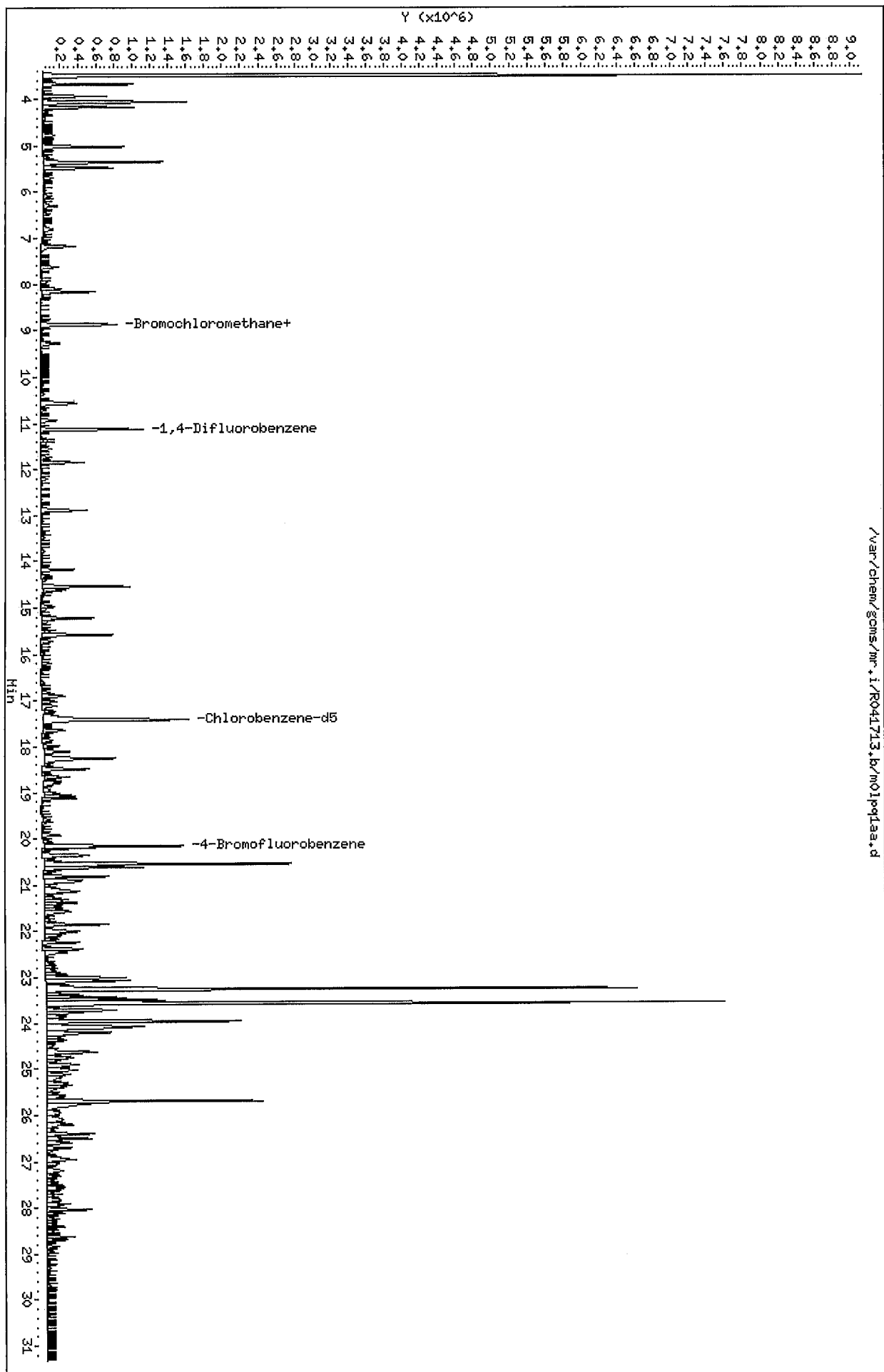
RECOVERY REPORT

Client Name: New York State D.E.C15-APR-2013 00:00 Client SDG: H3D160408
Sample Matrix: GAS Fraction: OTHER
Lab Smp Id: M0LPQ1AA Client Smp ID: SS DUP
Level: LOW Operator: 403648
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: allnew.spk Quant Type: ISTD
Sublist File: nysdec.sub
Method File: /var/chem/gcms/mr.i/R041713.b/TO15.m
Misc Info: R041713,TO15,nysdec.sub

SURROGATE COMPOUND	CONC ADDED ppb (v/v)	CONC RECOVERED ppb (v/v)	% RECOVERED	LIMITS
\$ 4 4-Bromofluorobenze	4.000	4.283	107.08	60-140

Data File: /var/chem/gcms/mr.i/R041713.b/m01p01aa.d
Date : 17-APR-2013 16:39
Client ID: SS DUP
Sample Info: ,,,
Purge Volume: 500.0
Column phase: RTX-5

Instrument: mr.i
Operator: 403648
Column diameter: 0.32



Data File: /var/chem/gcms/mr.i/R041713.b/m01pq1aa.d

Date : 17-APR-2013 16:39

Client ID: SS DUP

Instrument: mr.i

Sample Info: ,,,0,,,

Purge Volume: 500.0

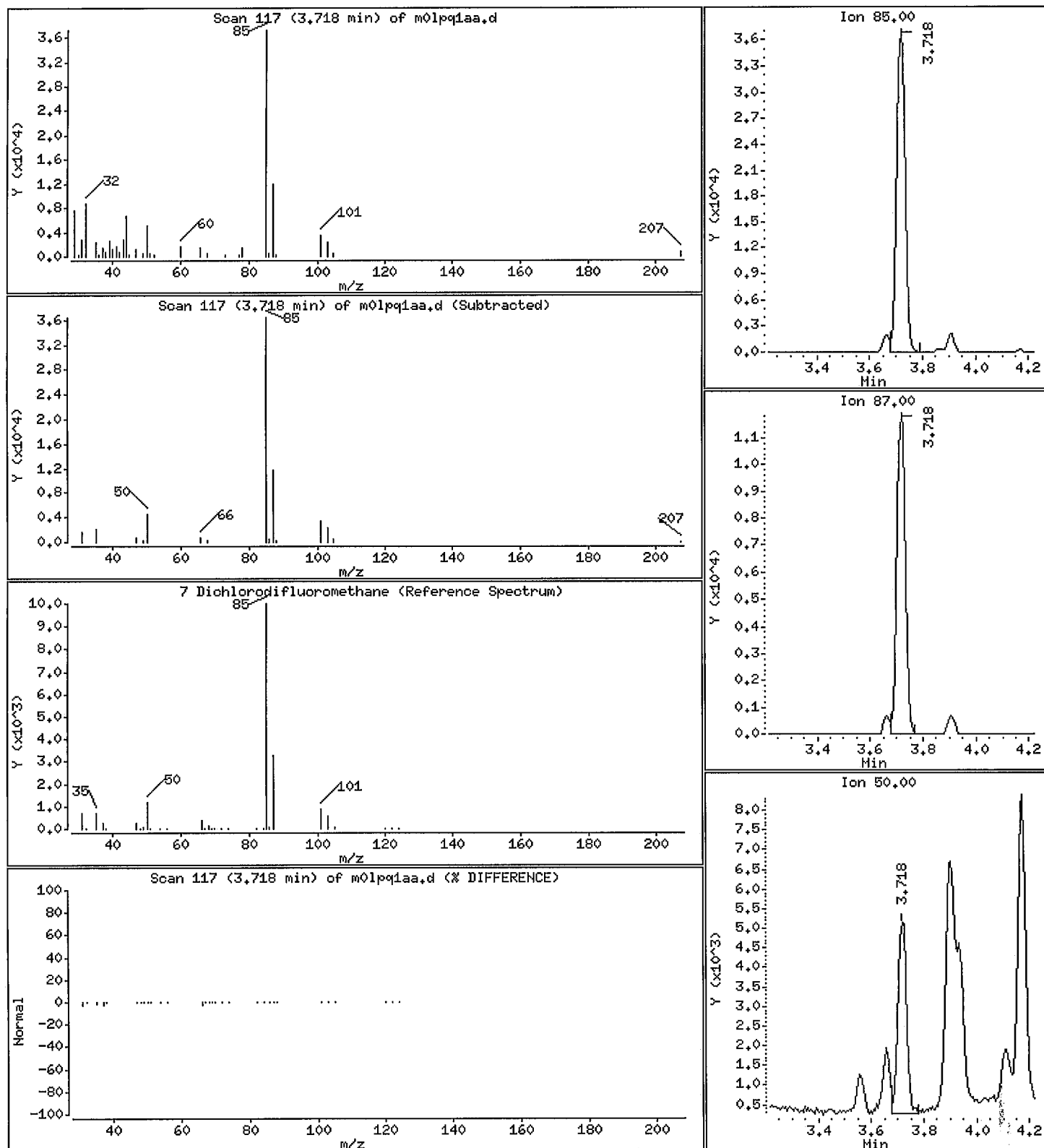
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

7 Dichlorodifluoromethane

Concentration: 0.3312 ppb(v/v)



Data File: /var/chem/gcms/mr.i/R041713.b/m01pq1aa.d

Date : 17-APR-2013 16:39

Client ID: SS DUP

Instrument: mr.i

Sample Info: ,0,,,

Purge Volume: 500.0

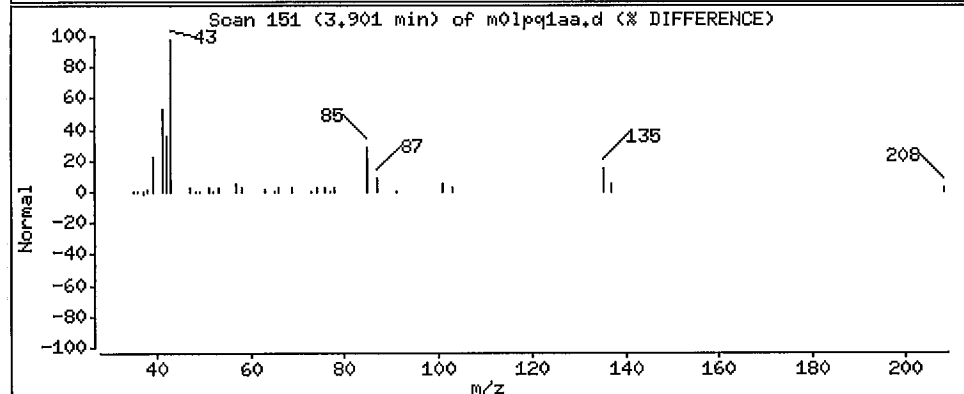
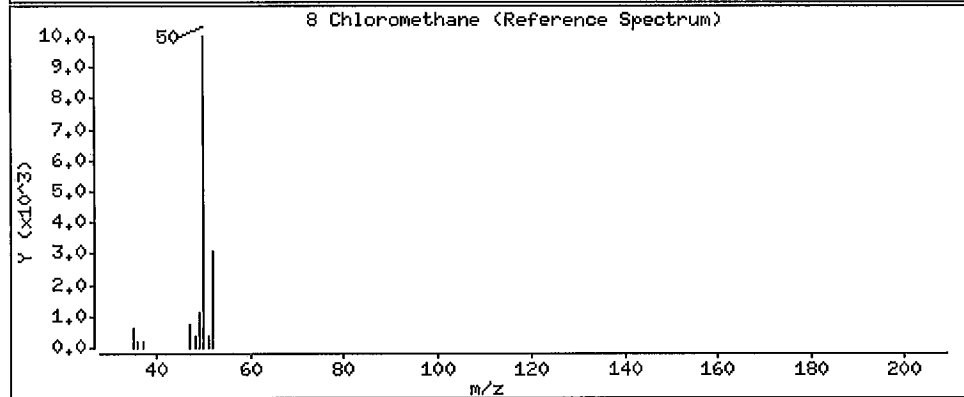
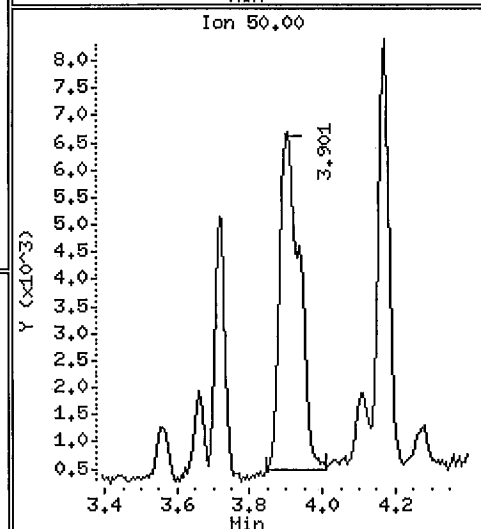
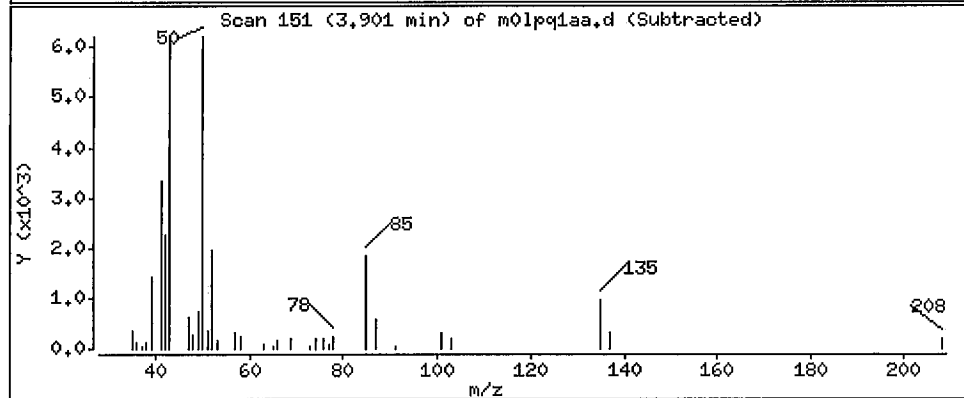
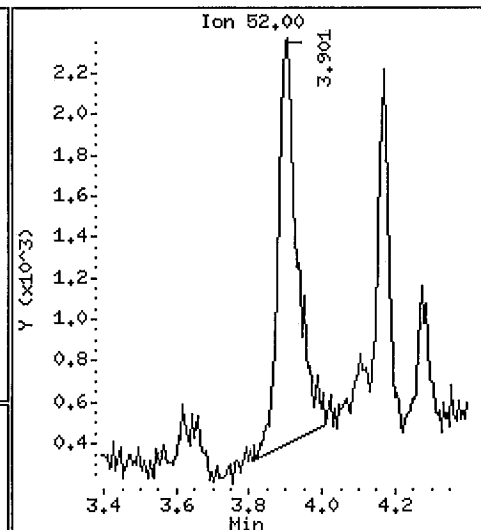
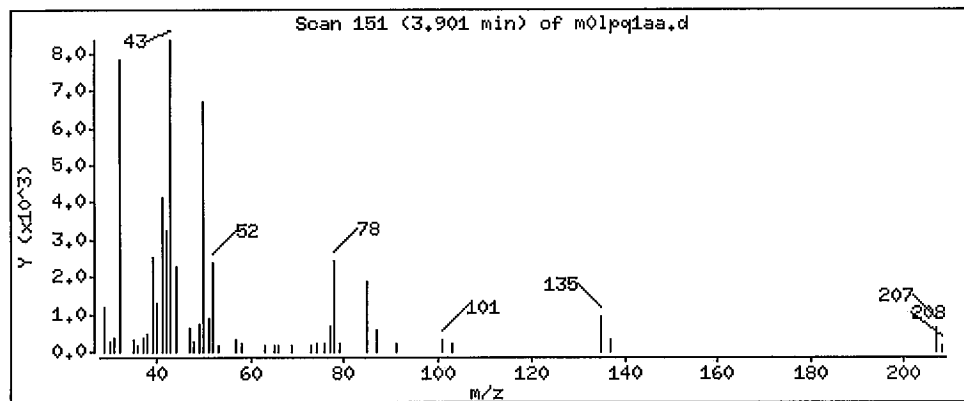
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

8 Chloromethane

Concentration: 0.2509 ppb(v/v)



Data File: /var/chem/gcms/mr.i/R041713.b/m01pq1aa.d

Date : 17-APR-2013 16:39

Client ID: SS DUP

Instrument: mr.i

Sample Info: ,,,0,,,

Purge Volume: 500.0

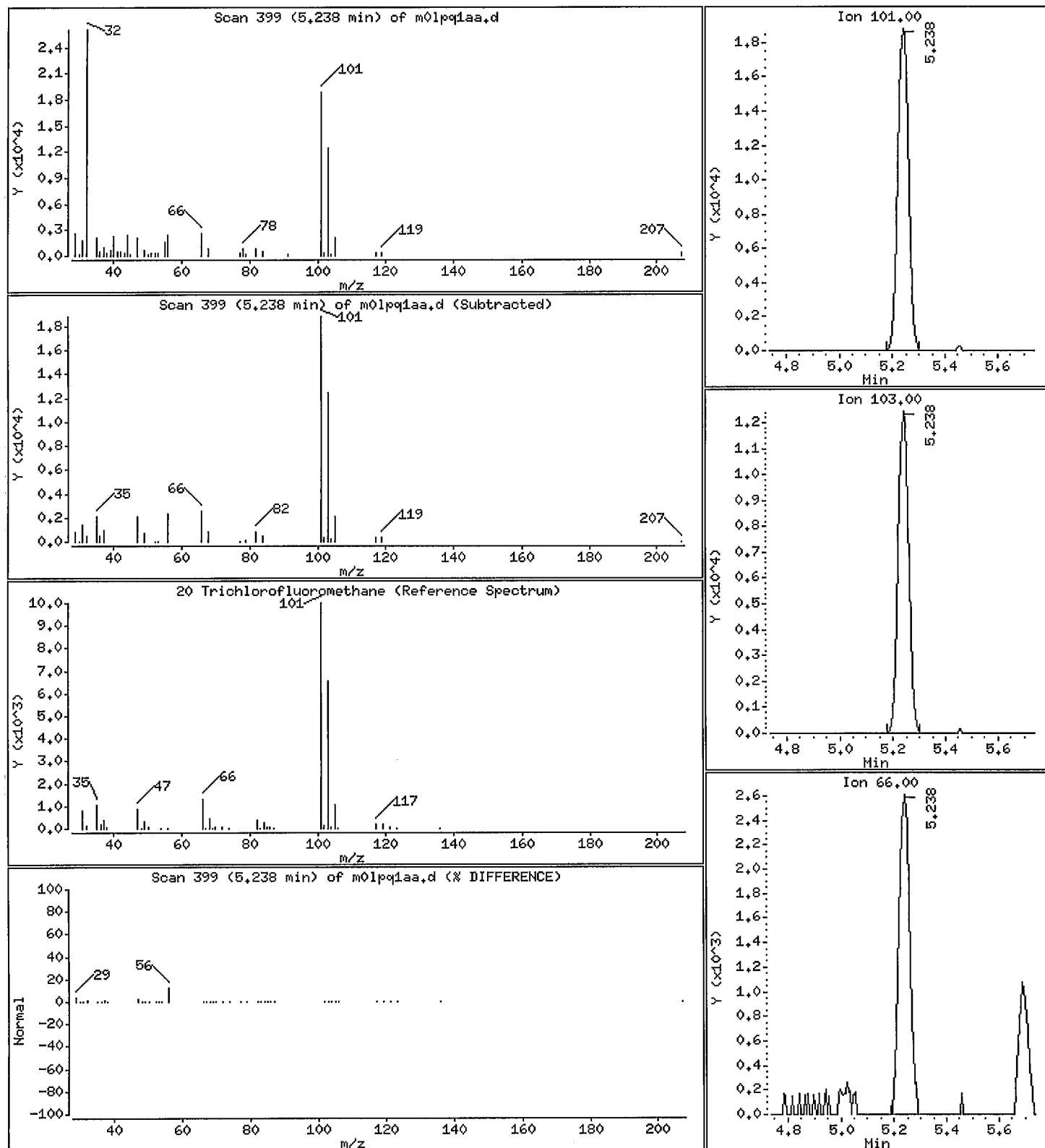
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

20 Trichlorofluoromethane

Concentration: 0.2254 ppb(v/v)



Data File: /var/chem/gcms/mr.i/R041713.b/m01pq1aa.d

Date : 17-APR-2013 16:39

Client ID: SS DUP

Instrument: mr.i

Sample Info: ,0,,

Purge Volume: 500.0

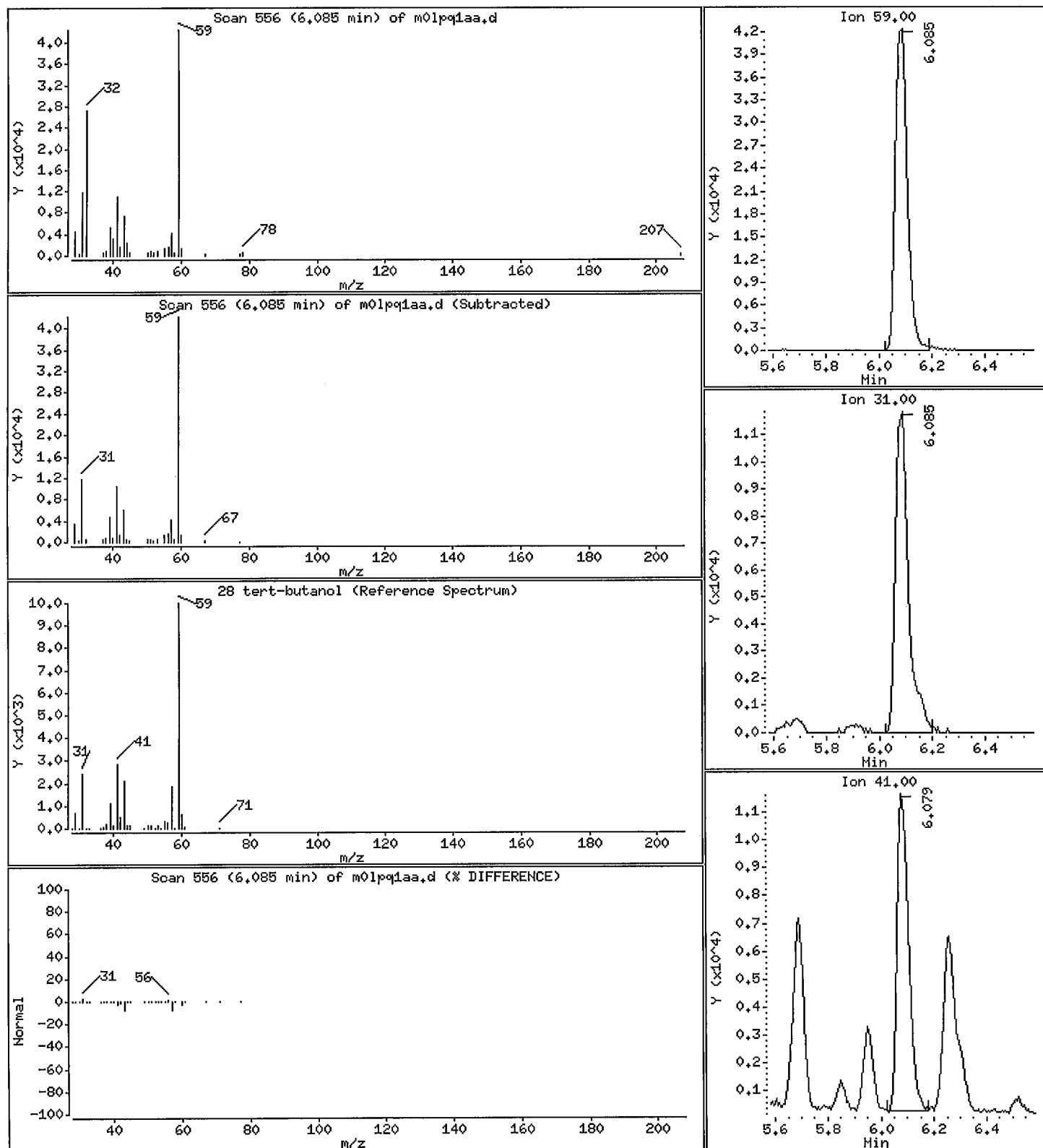
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

28 tert-butanol

Concentration: 0.8419 ppb(v/v)



Data File: /var/chem/gcms/mr.i/R041713.b/m01pq1aa.d

Date: 17-APR-2013 16:39

Client ID: SS DUP

Instrument: mr.i

Sample Info: ,,,0,,,

Purge Volume: 500.0

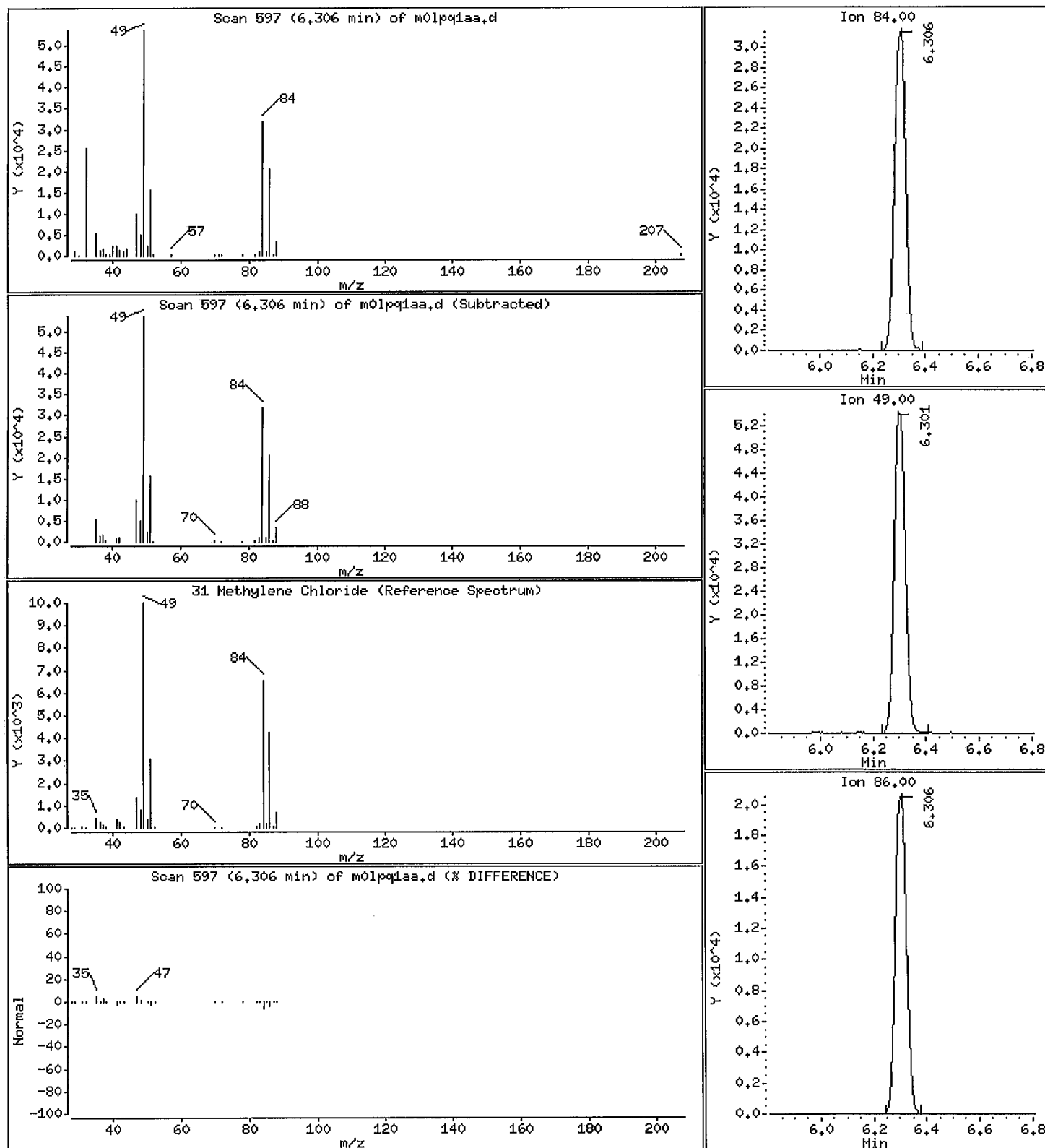
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

31 Methylene Chloride

Concentration: 1.114 ppb(v/v)



Data File: /var/chem/gcms/mr.i/R041713.b/m01pq1aa.d

Date: 17-APR-2013 16:39

Client ID: SS DUP

Instrument: mr.i

Sample Info: ,,,0,,,

Purge Volume: 500.0

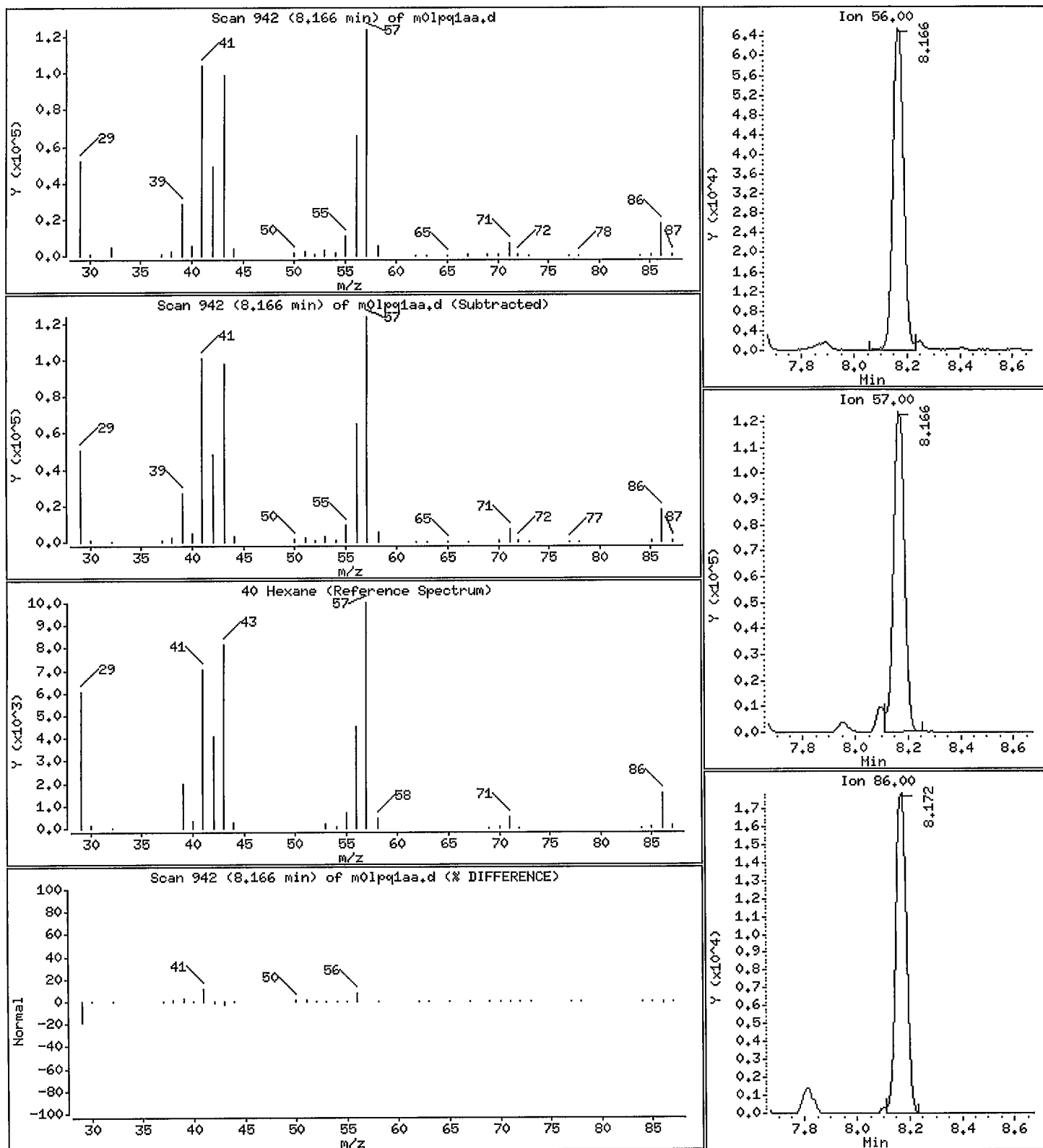
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

40 Hexane

Concentration: 2,356 ppb(v/v)



Data File: /var/chem/gcms/mr.i/R041713.b/m01pq1aa.d

Date : 17-APR-2013 16:39

Client ID: SS DUP

Instrument: mr.i

Sample Info: ,,0,,,

Purge Volume: 500.0

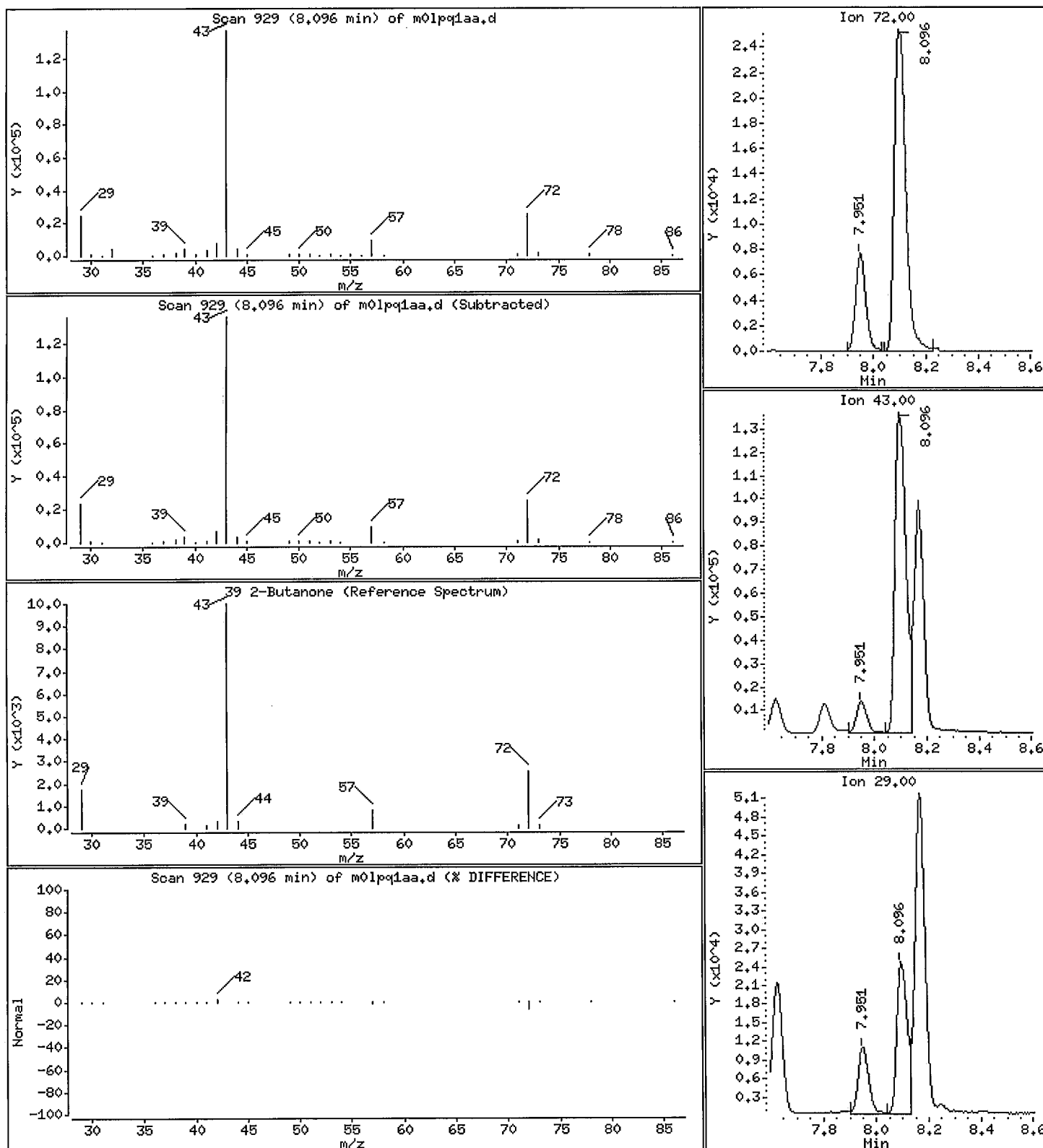
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

39 2-Butanone

Concentration: 1.658 ppb(v/v)



Data File: /var/chem/gcms/mr.i/R041713.b/m01pq1aa.d

Date : 17-APR-2013 16:39

Client ID: SS DUP

Instrument: mr.i

Sample Info: ,,,0,,,

Purge Volume: 500.0

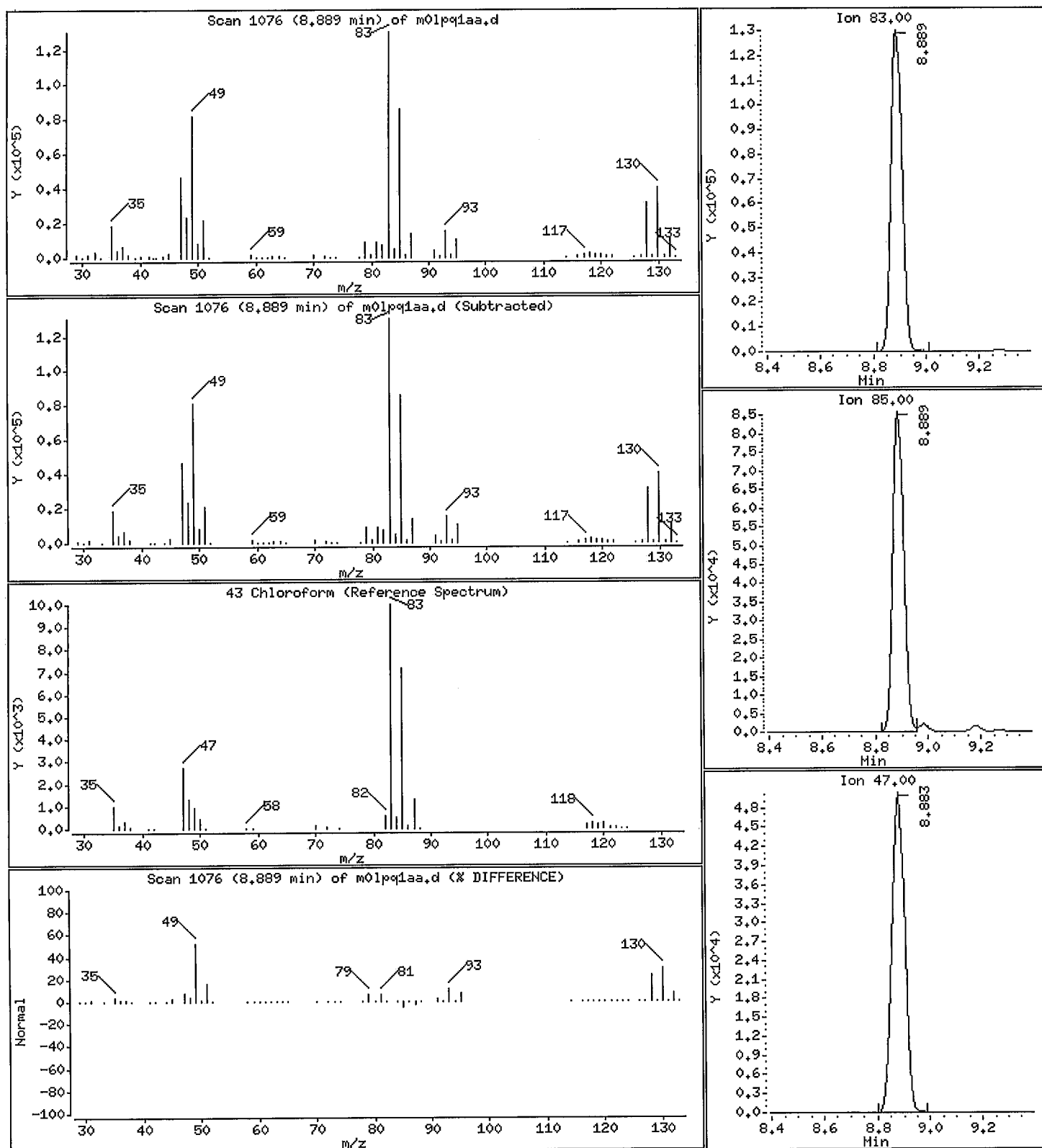
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

43 Chloroform

Concentration: 2.090 ppb(v/v)



Data File: /var/chem/gcms/mr.i/R041713.b/m01pq1aa.d

Date : 17-APR-2013 16:39

Client ID: SS DUP

Instrument: mr.i

Sample Info: ,,0,,,

Purge Volume: 500.0

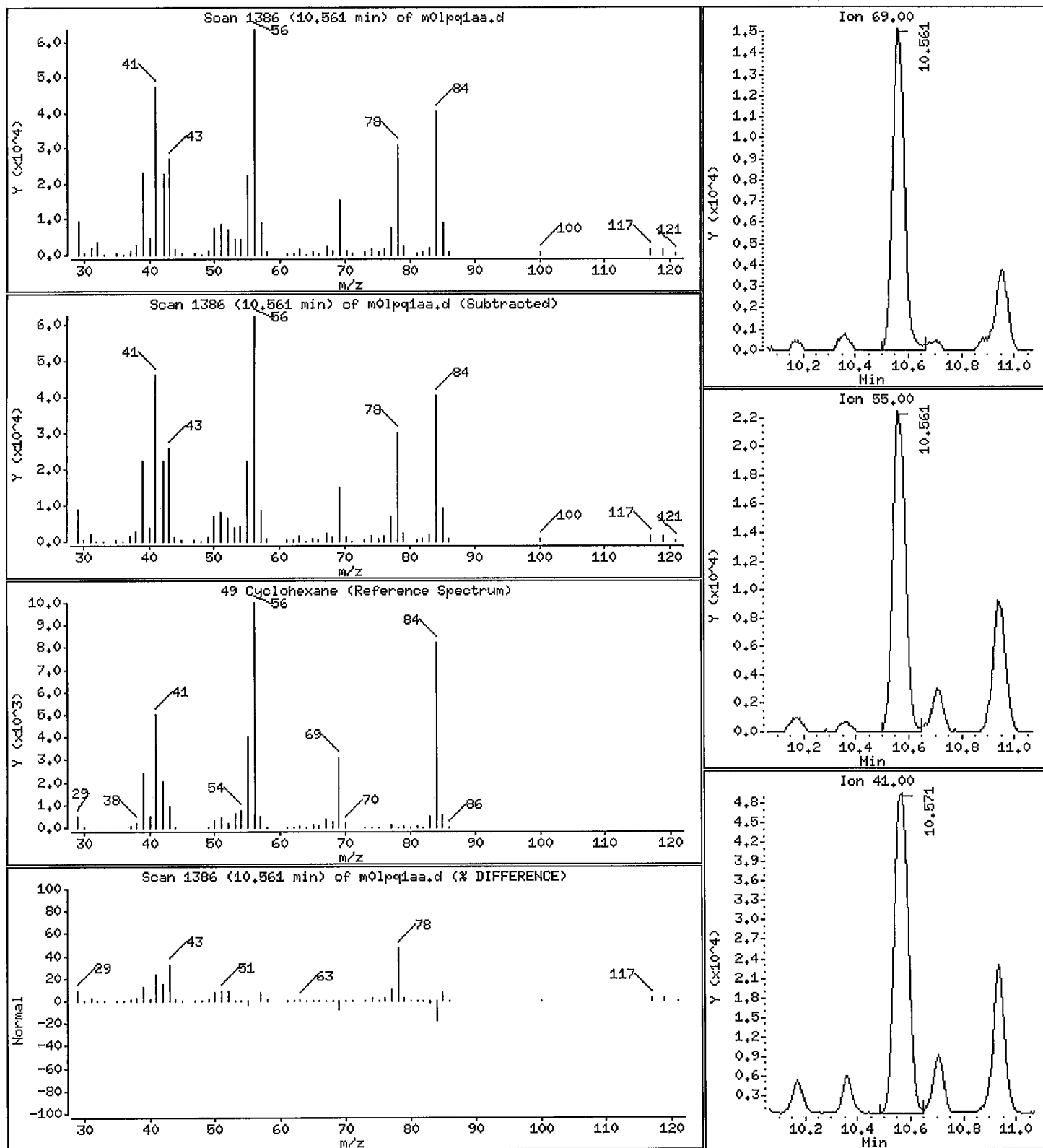
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

49 Cyclohexane

Concentration: 0.9790 ppb(v/v)



Data File: /var/chem/gcms/mr.i/R041713.b/m01pq1aa.d

Date: 17-APR-2013 16:39

Client ID: SS DUP

Instrument: mr.i

Sample Info: ,,0,,,

Purge Volume: 500.0

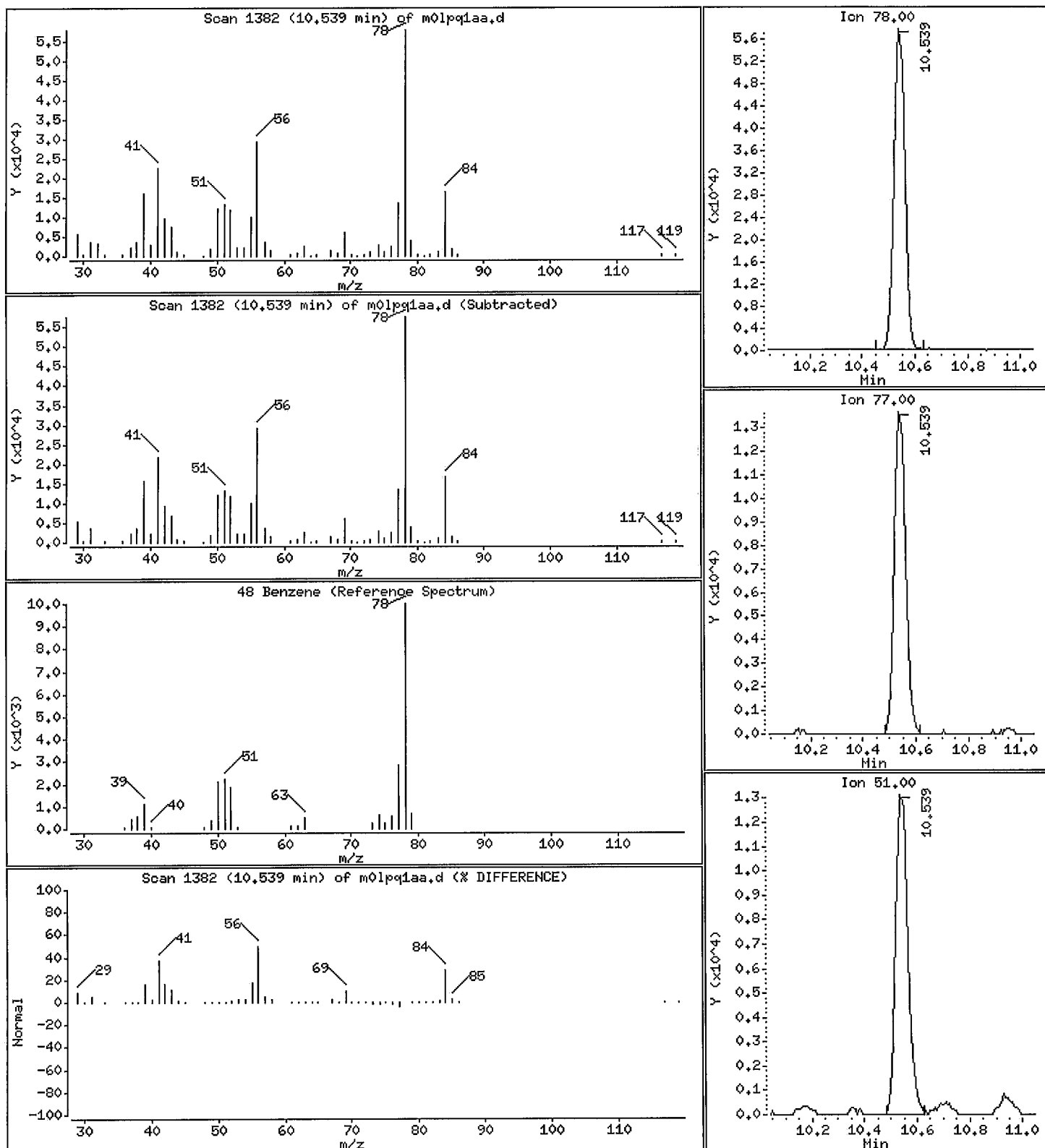
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

48 Benzene

Concentration: 0.5363 ppb(v/v)



Data File: /var/chem/gcms/mr.i/R041713.b/m01pq1aa.d

Date : 17-APR-2013 16:39

Client ID: SS DUP

Instrument: mr.i

Sample Info: ,,,0,,,

Purge Volume: 500.0

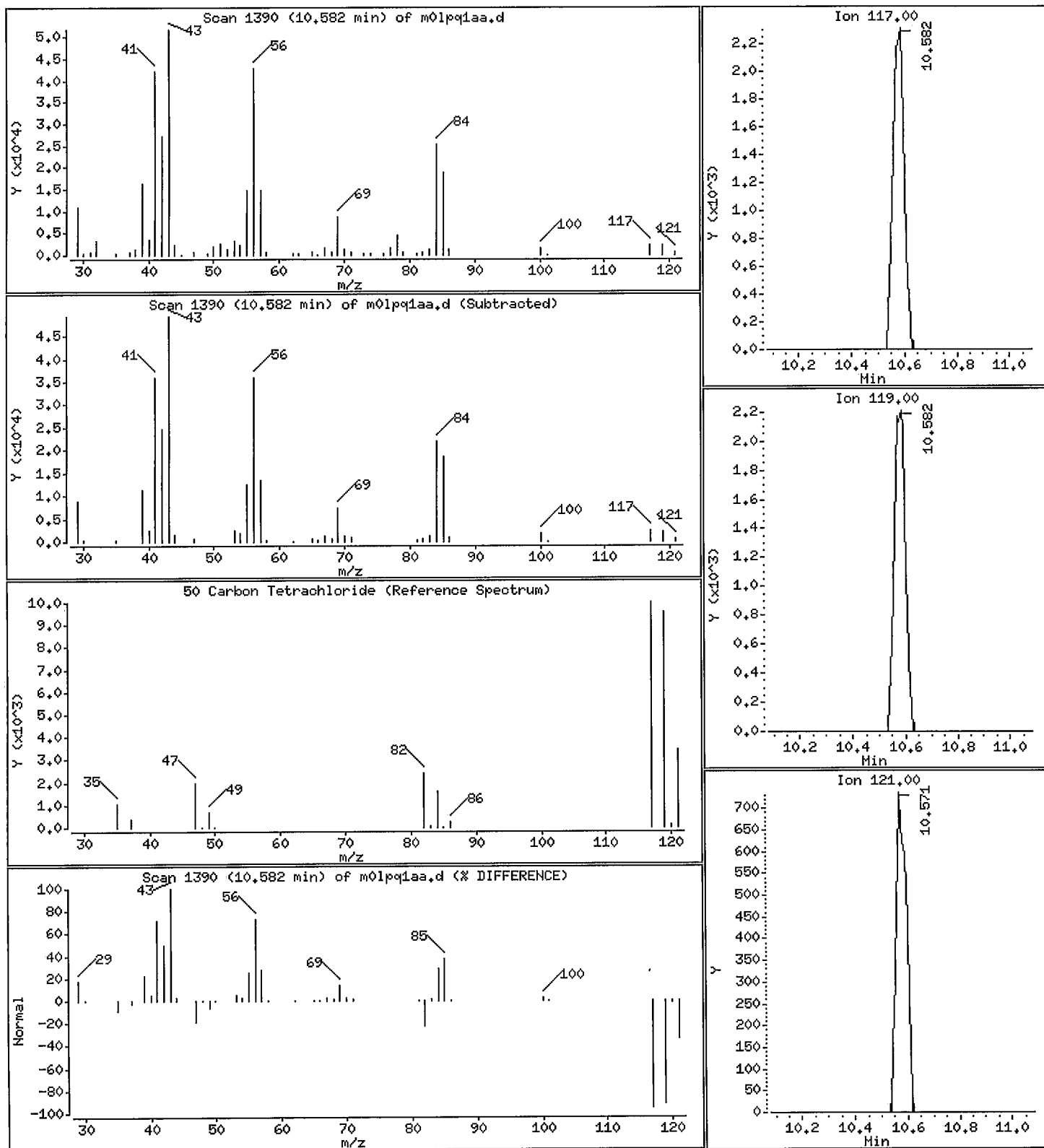
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

50 Carbon Tetrachloride

Concentration: 0.04221 ppb(v/v)



Data File: /var/chem/gcms/mr.i/R041713.b/m01pq1aa.d

Date: 17-APR-2013 16:39

Client ID: SS DUP

Instrument: mr.i

Sample Info: ,,,0,,,

Purge Volume: 500.0

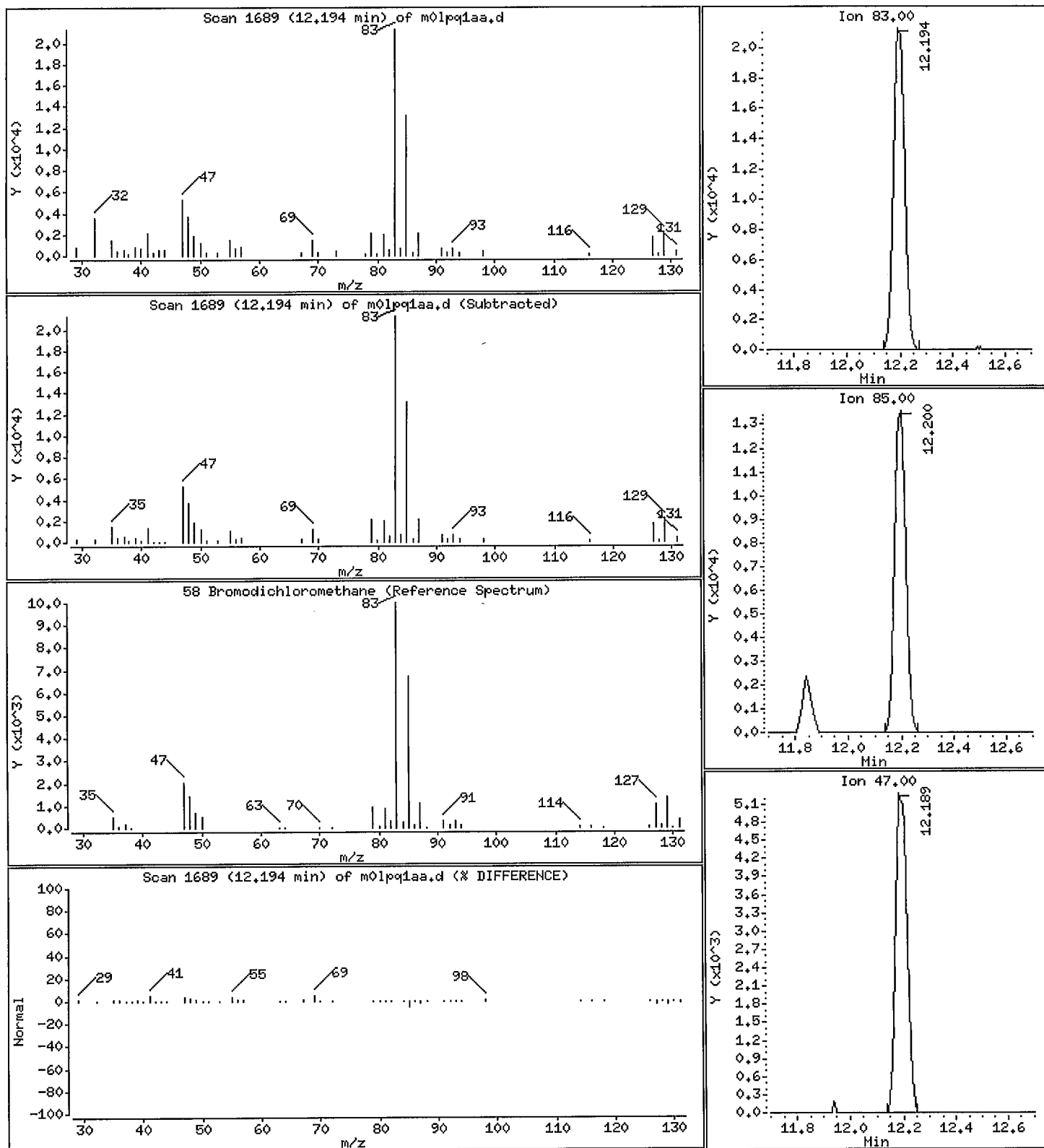
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

58 Bromodichloromethane

Concentration: 0.3081 ppb(v/v)



Data File: /var/chem/gcms/mr.i/R041713.b/m01pq1aa.d

Date : 17-APR-2013 16:39

Client ID: SS DUP

Instrument: mr.i

Sample Info: ,0,,

Purge Volume: 500.0

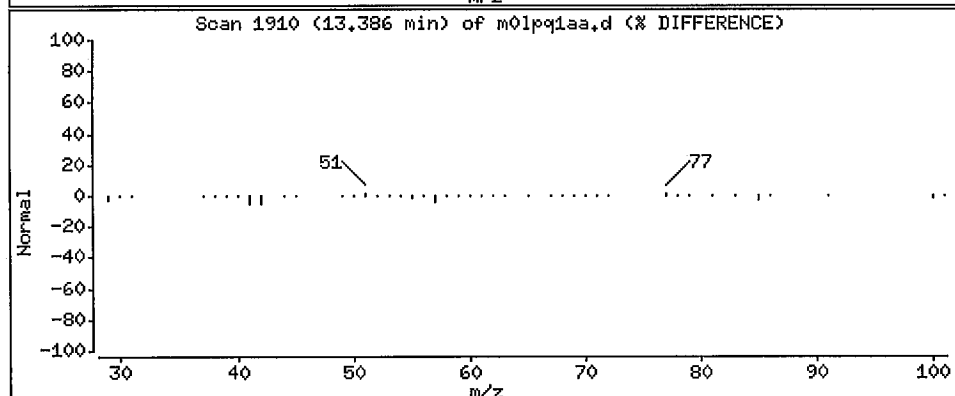
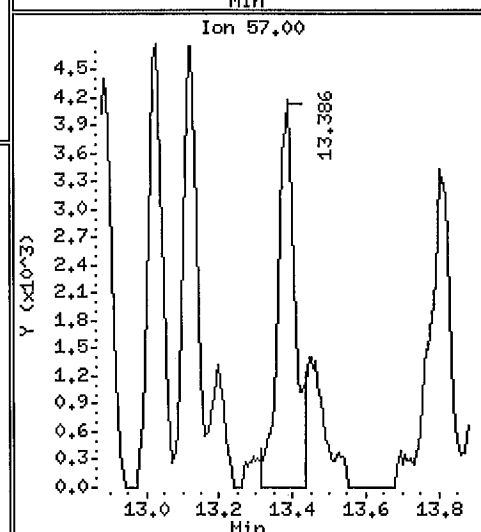
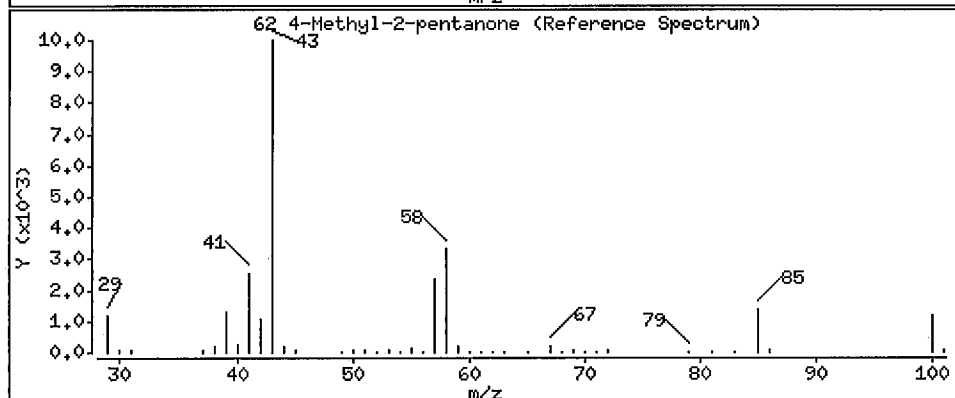
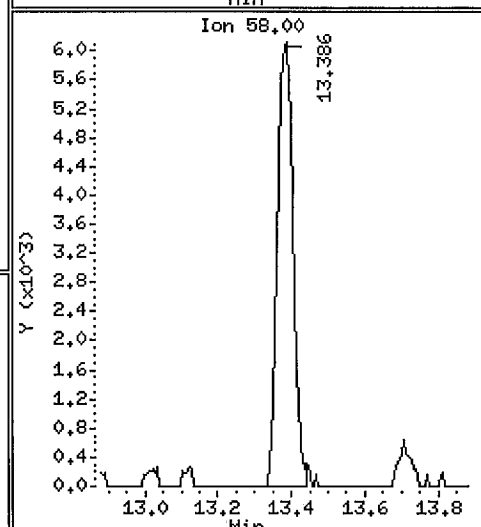
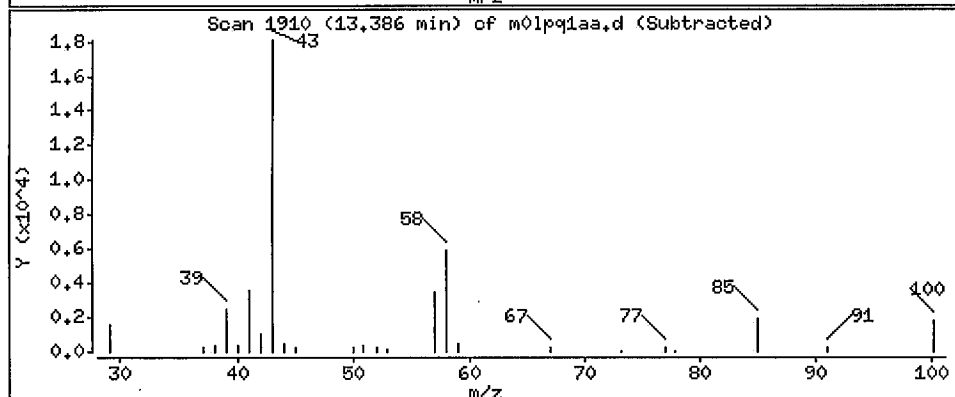
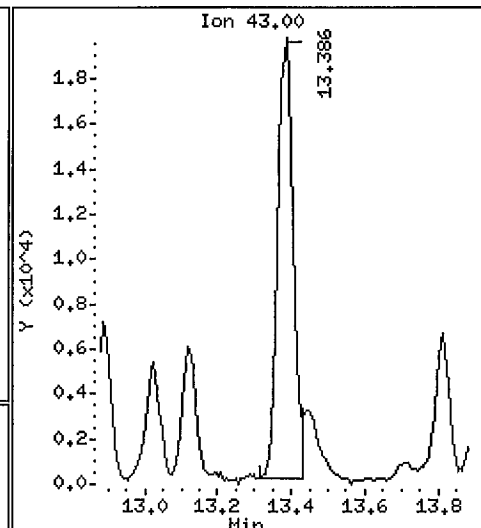
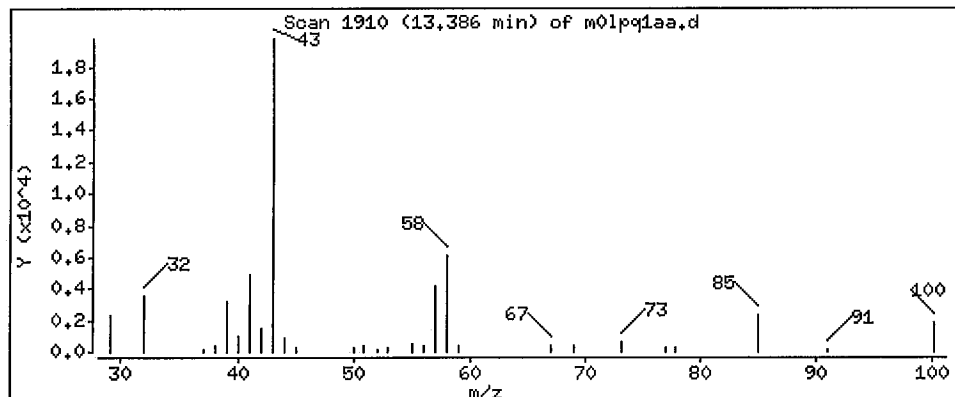
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

62 4-Methyl-2-pentanone

Concentration: 0.2586 ppb(v/v)



Data File: /var/chem/gcms/mr.i/R041713.b/m01pq1aa.d

Date : 17-APR-2013 16:39

Client ID: SS DUP

Instrument: mr.i

Sample Info: ,,,0,,,

Purge Volume: 500.0

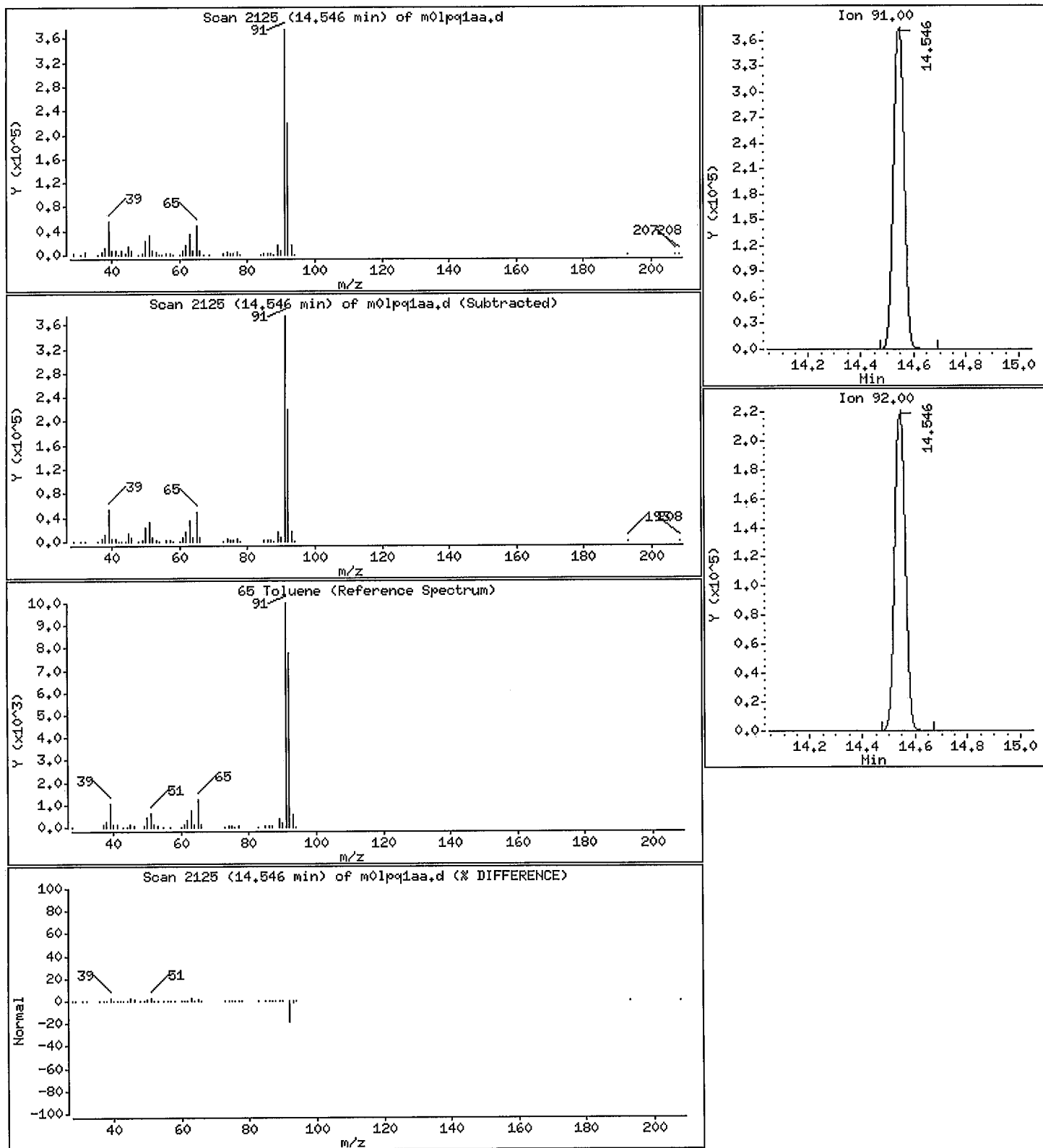
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

65 Toluene

Concentration: 2,309 ppb(v/v)



Data File: /var/chem/gcms/mr.i/R041713.b/m01pq1aa.d

Date: 17-APR-2013 16:39

Client ID: SS DUP

Instrument: mr.i

Sample Info: ,,,0,,,

Purge Volume: 500.0

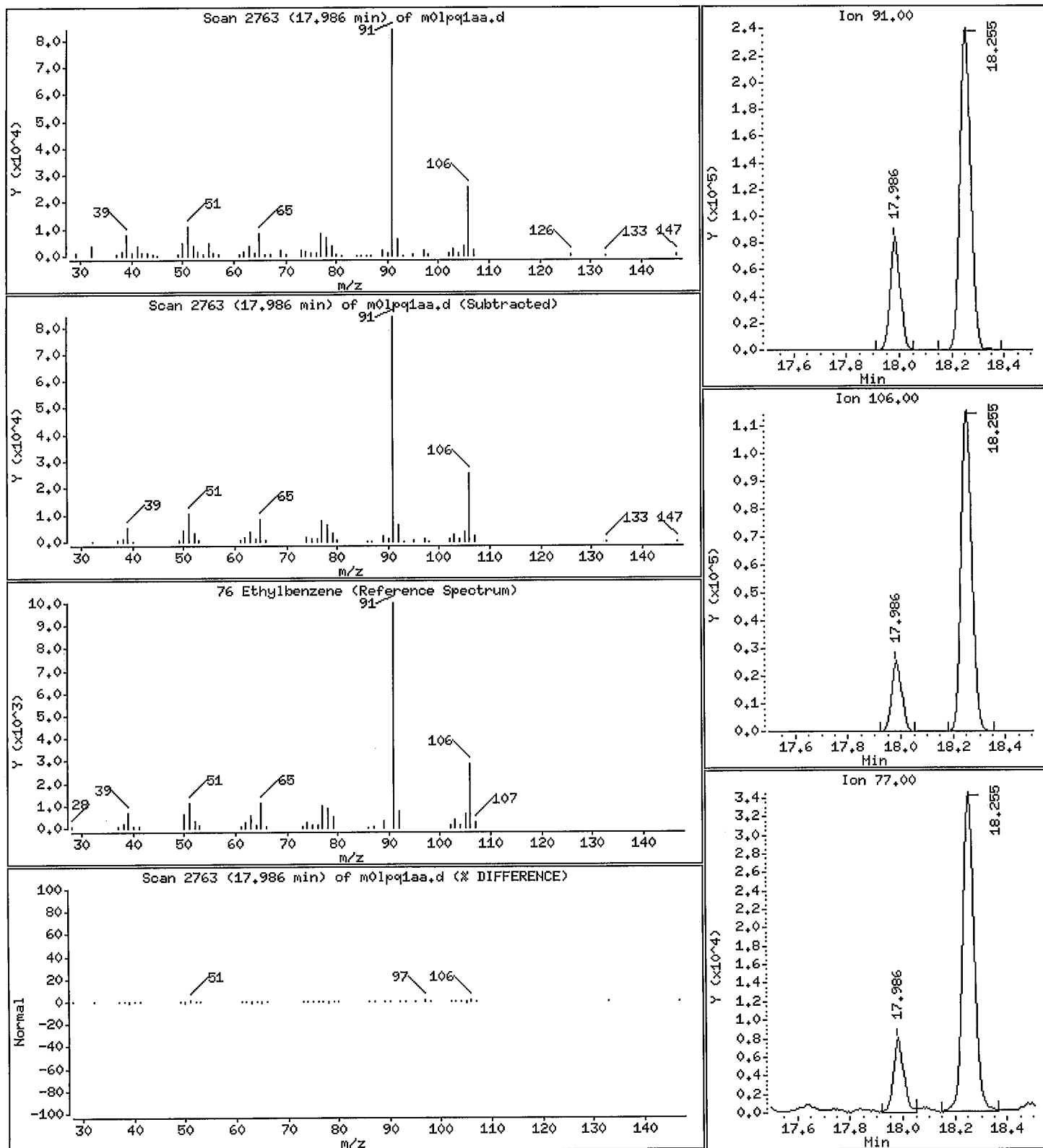
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

76 Ethylbenzene

Concentration: 0.4036 ppb(v/v)



Data File: /var/chem/gcms/mr.i/R041713.b/m01pq1aa.d

Date : 17-APR-2013 16:39

Client ID: SS DUP

Instrument: mr.i

Sample Info: ,,,0,,,

Purge Volume: 500.0

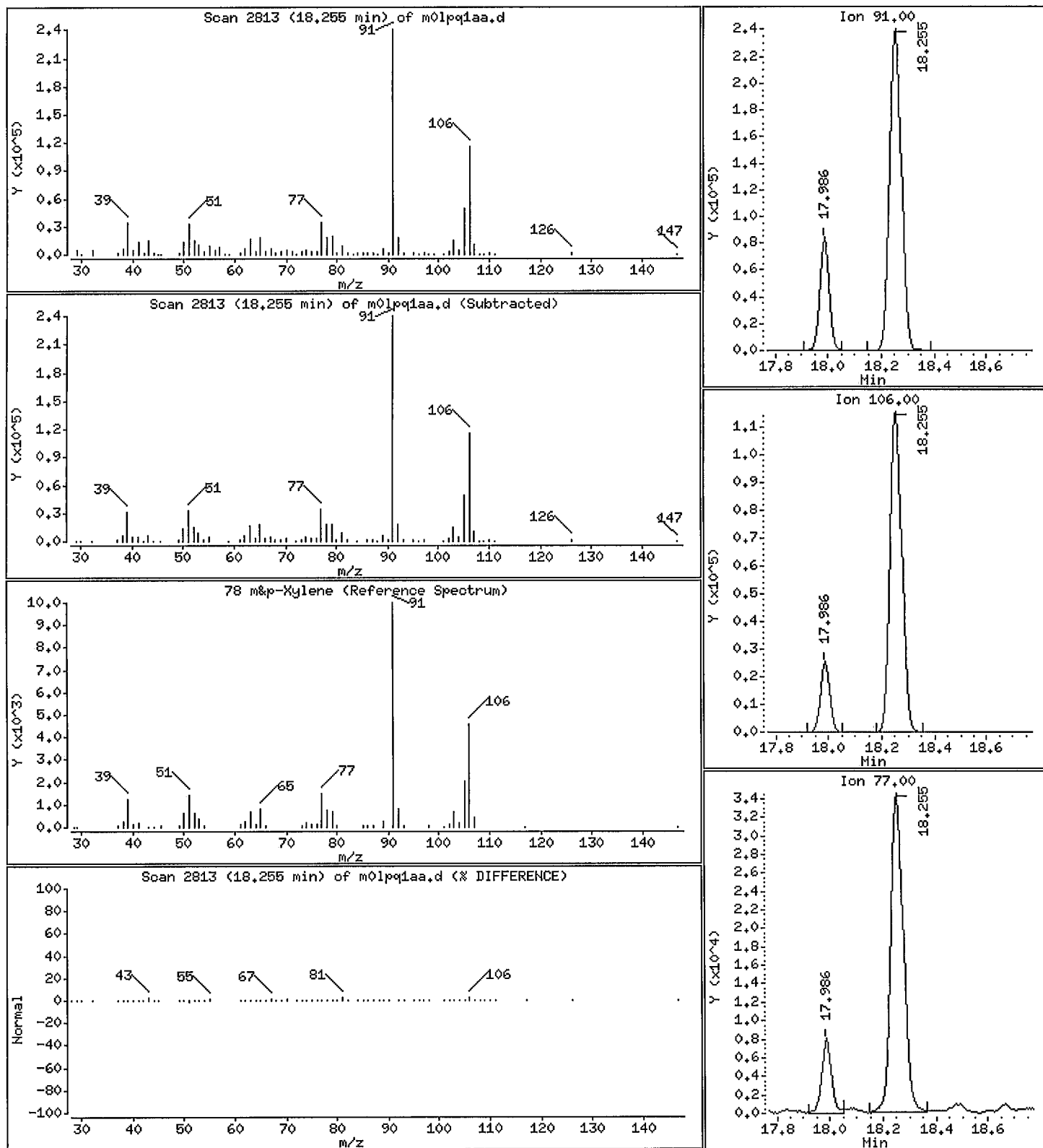
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

78 m&p-Xylene

Concentration: 1.776 ppb(v/v)



Data File: /var/chem/gcms/mr.i/R041713,b/m01pq1aa.d

Date : 17-APR-2013 16:39

Client ID: SS DUP

Instrument: mr.i

Sample Info: ,0,,,

Purge Volume: 500.0

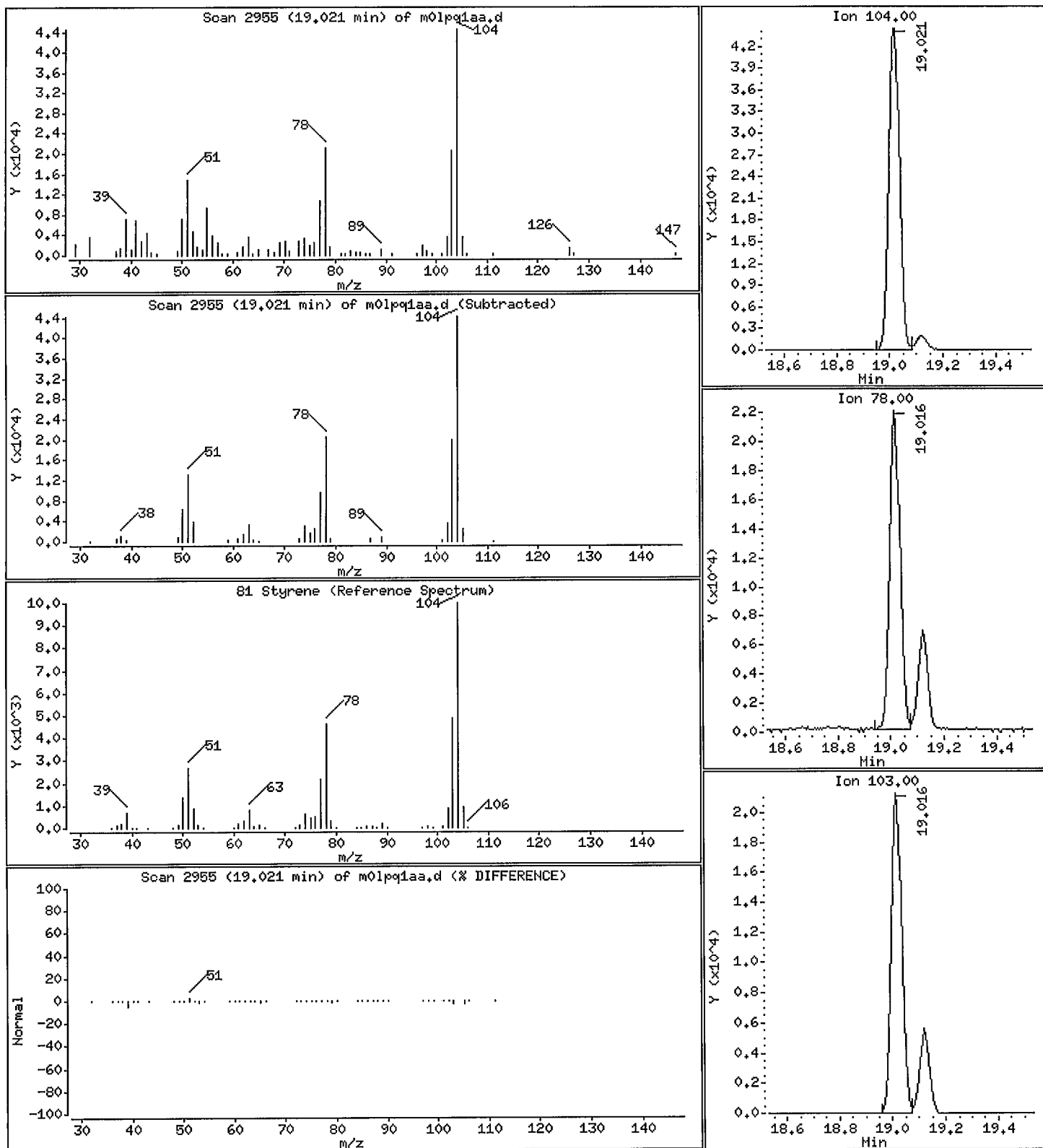
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

81 Styrene

Concentration: 0.4056 ppb(v/v)



Data File: /var/chem/gcms/mr.i/R041713.b/m01pq1aa.d

Date : 17-APR-2013 16:39

Client ID: SS DUP

Instrument: mr.i

Sample Info: ,,0,,,

Purge Volume: 500.0

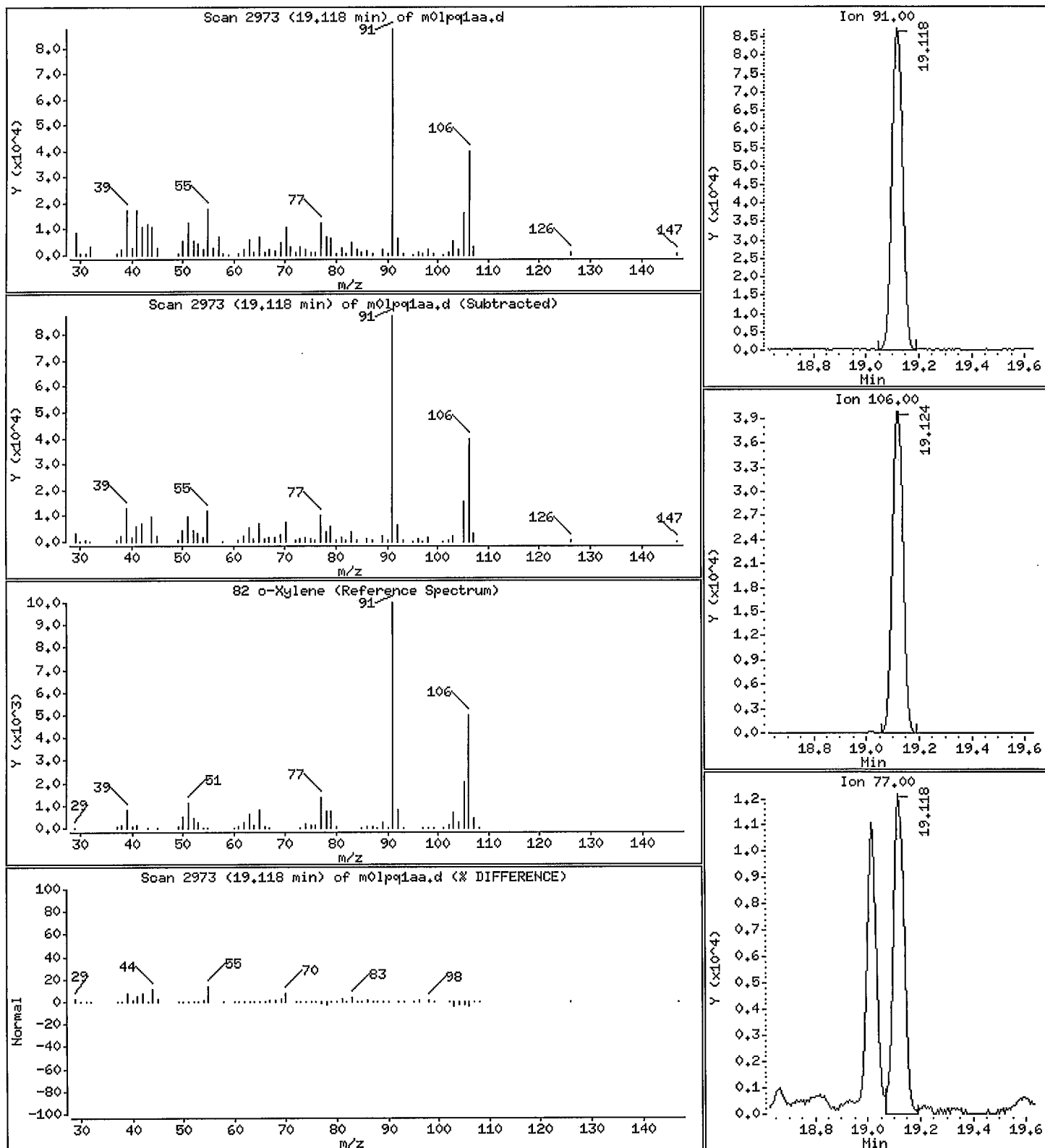
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

82 o-Xylene

Concentration: 0.5403 ppb(v/v)



Data File: /var/chem/gcms/mr.i/R041713,b/m01pq1aa.d

Date: 17-APR-2013 16:39

Client ID: SS DUP

Instrument: mr.i

Sample Info: ,0,,

Purge Volume: 500.0

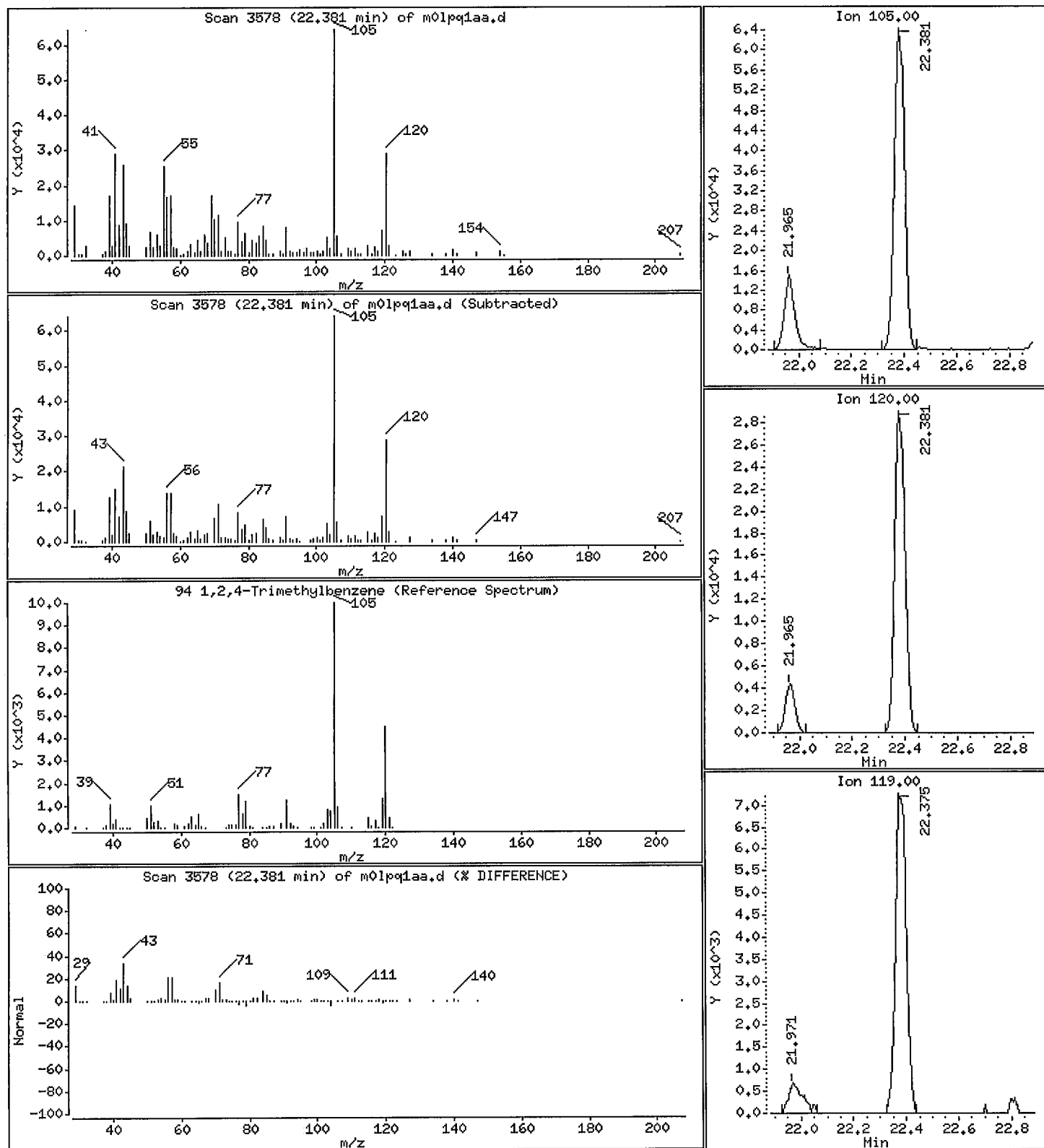
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

94 1,2,4-Trimethylbenzene

Concentration: 0.3155 ppb(v/v)



Data File: /var/chem/gcms/mr.i/R041713.b/m01pq1aa.d

Date : 17-APR-2013 16:39

Client ID: SS DUP

Instrument: mr.i

Sample Info: ,,,0,,,

Purge Volume: 500.0

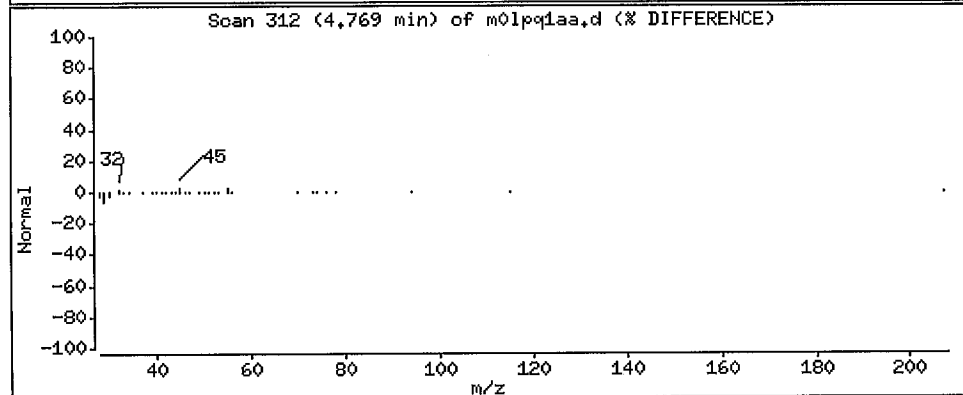
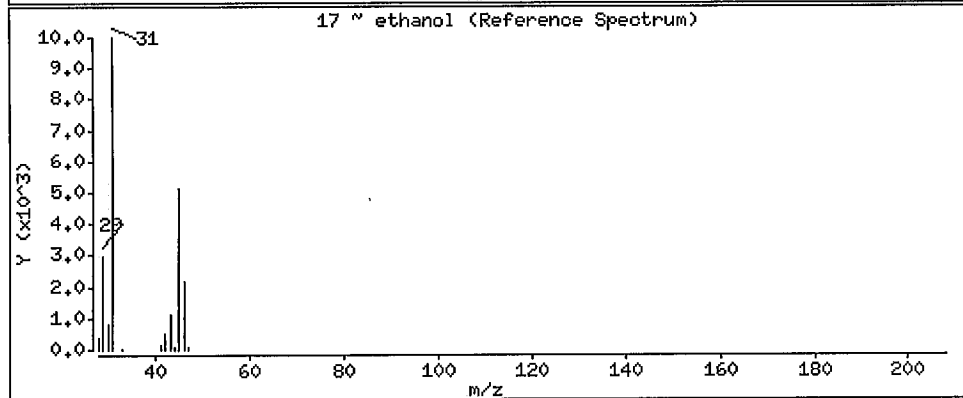
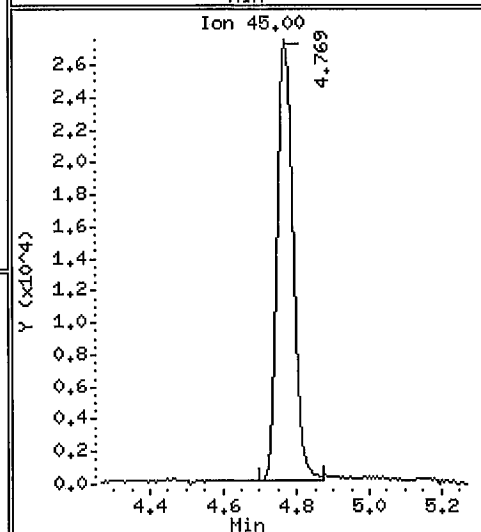
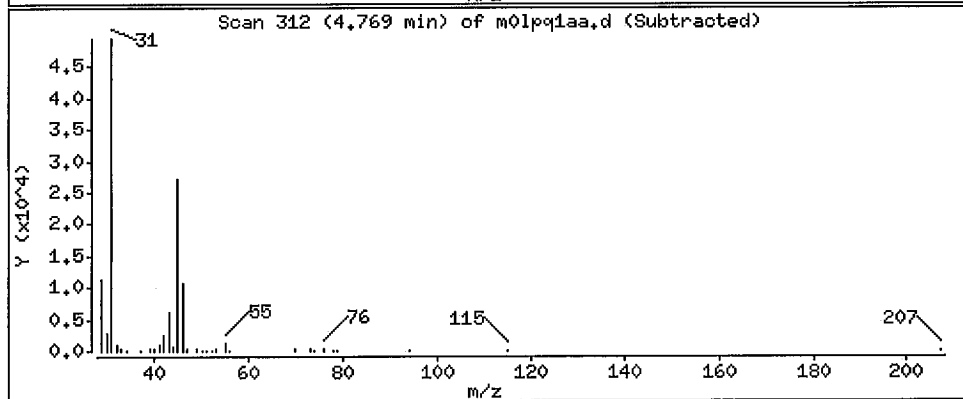
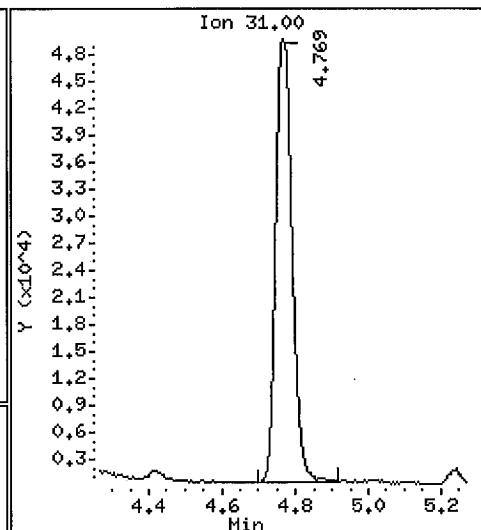
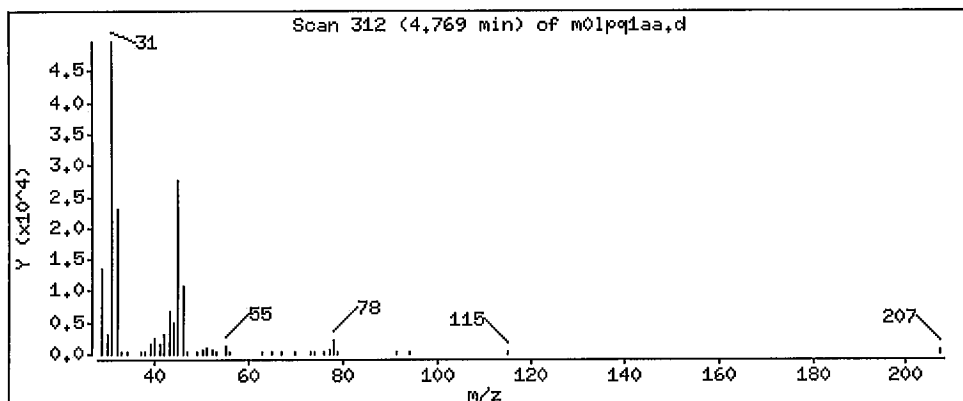
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

17 ~ ethanol

Concentration: 4.843 ppb(v/v)



New York State D.E.C.

Client Sample ID: INDOOR

GC/MS Volatiles

Lot-Sample # H3D160408 - 003 Work Order # M0LPT1AA Matrix.....: AIR

Date Sampled...: 04/12/2013 Date Received...: 04/15/2013
 Prep Date.....: 04/16/2013 Analysis Date...: 04/16/2013
 Prep Batch #.....: 3106043
 Dilution Factor.: 1 Method.....: TO-15

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
1,1,1-Trichloroethane	ND	0.080	ND	0.44
1,1,2,2-Tetrachloroethane	ND	0.080	ND	0.55
1,1,2-Trichlorotrifluoroethane	ND	0.080	ND	0.61
1,1,2-Trichloroethane	ND	0.080	ND	0.44
1,1-Dichloroethane	ND	0.080	ND	0.32
1,1-Dichloroethene	ND	0.080	ND	0.32
1,2,4-Trichlorobenzene	ND	0.080	ND	0.59
1,2,4-Trimethylbenzene	0.097	0.080	0.48	0.39
1,2-Dibromoethane (EDB)	ND	0.080	ND	0.61
1,2-Dichlorobenzene	ND	0.080	ND	0.48
1,2-Dichloroethane	ND	0.080	ND	0.32
1,2-Dichloropropane	ND	0.080	ND	0.37
1,3,5-Trimethylbenzene	ND	0.080	ND	0.39
1,4-Dichlorobenzene	ND	0.080	ND	0.48
1,4-Dioxane	ND	0.20	ND	0.72
2-Butanone (MEK)	0.44	0.32	1.3	0.94
1,3-Dichlorobenzene	ND	0.080	ND	0.48
2,2,4-Trimethylpentane	ND	0.20	ND	0.93
Benzene	0.74	0.080	2.4	0.26
Benzyl chloride	ND	0.16	ND	0.83
Bromodichloromethane	ND	0.080	ND	0.54
Bromoform	ND	0.080	ND	0.83
Bromomethane	ND	0.080	ND	0.31
Carbon tetrachloride	0.089	0.040	0.56	0.25
Chlorobenzene	ND	0.080	ND	0.37
Chloroethane	ND	0.080	ND	0.21
Chloroform	ND	0.080	ND	0.39
Cyclohexane	0.42	0.20	1.5	0.69
Chloromethane	0.71	0.20	1.5	0.41
cis-1,2-Dichloroethene	ND	0.080	ND	0.32
cis-1,3-Dichloropropene	ND	0.080	ND	0.36
Dibromochloromethane	ND	0.080	ND	0.68
Dichlorodifluoromethane	0.27	0.080	1.3	0.40
Ethanol	15	0.80	28	1.5
Ethylbenzene	0.19	0.080	0.83	0.35
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.080	ND	0.56
n-Hexane	1.8	0.20	6.3	0.70
Hexachlorobutadiene	ND	0.080	ND	0.85

New York State D.E.C.
Client Sample ID: INDOOR
GC/MS Volatiles

Lot-Sample # H3D160408 - 003 Work Order # M0LPT1AA Matrix.....: AIR

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
4-Methyl-2-pentanone (MIBK)	0.22	0.20	0.89	0.82
Methyl tert-butyl ether	ND	0.16	ND	0.58
Methylene chloride	0.66	0.20	2.3	0.69
Styrene	ND	0.080	ND	0.34
tert-Butyl alcohol	ND	0.32	ND	0.97
Tetrachloroethene	1.4	0.080	9.6	0.54
Toluene	2.8	0.080	11	0.30
m-Xylene & p-Xylene	0.72	0.080	3.1	0.35
o-Xylene	0.21	0.080	0.92	0.35
trans-1,2-Dichloroethene	ND	0.080	ND	0.32
trans-1,3-Dichloropropene	ND	0.080	ND	0.36
Trichloroethene	ND	0.040	ND	0.21
Trichlorofluoromethane	0.22	0.080	1.2	0.45
Vinyl chloride	ND	0.080	ND	0.20

SURROGATE	PERCENT RECOVERY	LABORATORY CONTROL LIMITS (%)
4-Bromofluorobenzene	111	60 - 140

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)*(Molecular Weight/24.45)

The 'Reporting Limit' in ug/m3 is calculated using the following equation: (Reporting Limit(before rounding) * Dilution Factor) * (Molecular Weight/24.45)

Data File: /var/chem/gcms/mr.i/R041613.b/m0lpt1aa.d
 Report Date: 17-Apr-2013 11:14

TestAmerica Knoxville

Modified Method TO-14/TO-15

Data file : /var/chem/gcms/mr.i/R041613.b/m0lpt1aa.d
 Lab Smp Id: M0LPT1AA Client Smp ID: INDOOR
 Inj Date : 16-APR-2013 17:32 /
 Operator : 403648 Inst ID: mr.i
 Smp Info : ,,0,,
 Misc Info : R041613,TO15,nysdec.sub
 Comment :
 Method : /var/chem/gcms/mr.i/R041613.b/TO15.m
 Meth Date : 16-Apr-2013 19:25 barlozha Quant Type: ISTD
 Cal Date : 20-FEB-2013 20:14 Cal File: ricb205.d
 Als bottle: 1
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: nysdec.sub
 Target Version: 3.50

Concentration Formula: Amt * DF * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Default Calibration Volume
Vo	500.00000	Default Sample Volume

Cpnd Variable

Local Compound Variable

Compounds	QUANT SIG	CONCENTRATIONS					
		MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN FINAL (ppb (v/v)) (ppb (v/v))
=====	=====	==	=====	=====	=====	=====	=====
* 1 Bromochloromethane	128	8.873	8.873	(1.000)	225805	4.00000	4.000
* 2 1,4-Difluorobenzene	114	11.132	11.138	(1.000)	1174174	4.00000	4.000
* 3 Chlorobenzene-d5	117	17.420	17.436	(1.000)	903668	4.00000	4.000
\$ 4 4-Bromofluorobenzene	95	20.159	20.170	(1.157)	705314	4.45801	4.458
7 Dichlorodifluoromethane	85	3.723	3.723	(0.420)	62630	0.26617	0.2662
8 Chloromethane	52	3.901	3.907	(0.440)	20467	0.71160	0.7116
20 Trichlorofluoromethane	101	5.244	5.244	(0.591)	50628	0.22146	0.2215
31 Methylene Chloride	84	6.311	6.312	(0.711)	54099	0.66495	0.6649
40 Hexane	56	8.177	8.177	(0.922)	139115	1.79308	1.793
39 2-Butanone	72	8.113	8.107	(0.914)	20104	0.44344	0.4434
49 Cyclohexane	69	10.571	10.572	(0.950)	19468	0.42233	0.4223
48 Benzene	78	10.545	10.550	(0.947)	220884	0.74319	0.7432
50 Carbon Tetrachloride	117	10.588	10.588	(0.951)	13615	0.08868	0.08868
62 4-Methyl-2-pentanone	43	13.392	13.386	(1.203)	45620	0.21744	0.2174 (M)
65 Toluene	91	14.551	14.551	(0.835)	1053161	2.80887	2.809
73 Tetrachloroethene	129	16.174	16.180	(0.928)	188299	1.41794	1.418

Data File: /var/chem/gcms/mr.i/R041613.b/m01pt1aa.d
 Report Date: 17-Apr-2013 11:14

Compounds	QUANT SIG					CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ppb (v/v))	FINAL (ppb (v/v))
=====	=====	==	=====	=====	=====	=====	=====
76 Ethylbenzene	91	17.986	18.008	(1.032)	90104	0.19136	0.1914
78 m&p-Xylene	91	18.256	18.277	(1.048)	260101	0.71559	0.7156
82 o-Xylene	91	19.118	19.140	(1.097)	79065	0.21084	0.2108
94 1,2,4-Trimethylbenzene	105	22.386	22.392	(1.285)	44476	0.09710	0.09710
17 ~ ethanol	31	4.780	4.775	(0.539)	455434	14.7062	14.71

QC Flag Legend

M - Compound response manually integrated.

Data File: /var/chem/gcms/mr.i/R041613.b/m0lpt1aa.d
 Report Date: 17-Apr-2013 11:14

TestAmerica Knoxville

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: mr.i
 Lab File ID: m0lpt1aa.d
 Lab Smp Id: M0LPT1AA
 Analysis Type: OTHER
 Quant Type: ISTD
 Operator: 403648

Calibration Date: 16-APR-2013
 Calibration Time: 10:51
 Client Smp ID: INDOOR
 Level: LOW
 Sample Type: AIR

Method File: /var/chem/gcms/mr.i/R041613.b/TO15.m
 Misc Info: R041613,TO15,nysdec.sub

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
1 Bromochloromethan	294767	175386	414148	225805	-23.40
2 1,4-Difluorobenze	1529291	909928	2148654	1174174	-23.22
3 Chlorobenzene-d5	1257555	748245	1766865	903668	-28.14

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
1 Bromochloromethan	8.87	8.54	9.20	8.87	0.00
2 1,4-Difluorobenze	11.14	10.81	11.47	11.13	-0.05
3 Chlorobenzene-d5	17.44	17.11	17.77	17.42	-0.09

AREA UPPER LIMIT = + 40% of internal standard area.
 AREA LOWER LIMIT = - 40% of internal standard area.
 RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
 RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /var/chem/gcms/mr.i/R041613.b/m01pt1aa.d
 Report Date: 17-Apr-2013 11:14

TestAmerica Knoxville

RECOVERY REPORT

Client Name: New York State D.E.C15-APR-2013 00:00 Client SDG: H3D160408
 Sample Matrix: GAS Fraction: OTHER
 Lab Smp Id: M0LPT1AA Client Smp ID: INDOOR
 Level: LOW Operator: 403648
 Data Type: MS DATA SampleType: SAMPLE
 SpikeList File: allnew.spk Quant Type: ISTD
 Sublist File: nysdec.sub
 Method File: /var/chem/gcms/mr.i/R041613.b/TO15.m
 Misc Info: R041613,TO15,nysdec.sub

SURROGATE COMPOUND	CONC ADDED ppb (v/v)	CONC RECOVERED ppb (v/v)	% RECOVERED	LIMITS
\$ 4 4-Bromofluorobenze	4.000	4.458	111.45	60-140

Data File: /var/chem/gcms/mr.i/R041613.b/m01pt1aa.d

Date : 16-APR-2013 17:32

Client ID: INDOOR

Sample Info: ,0,,

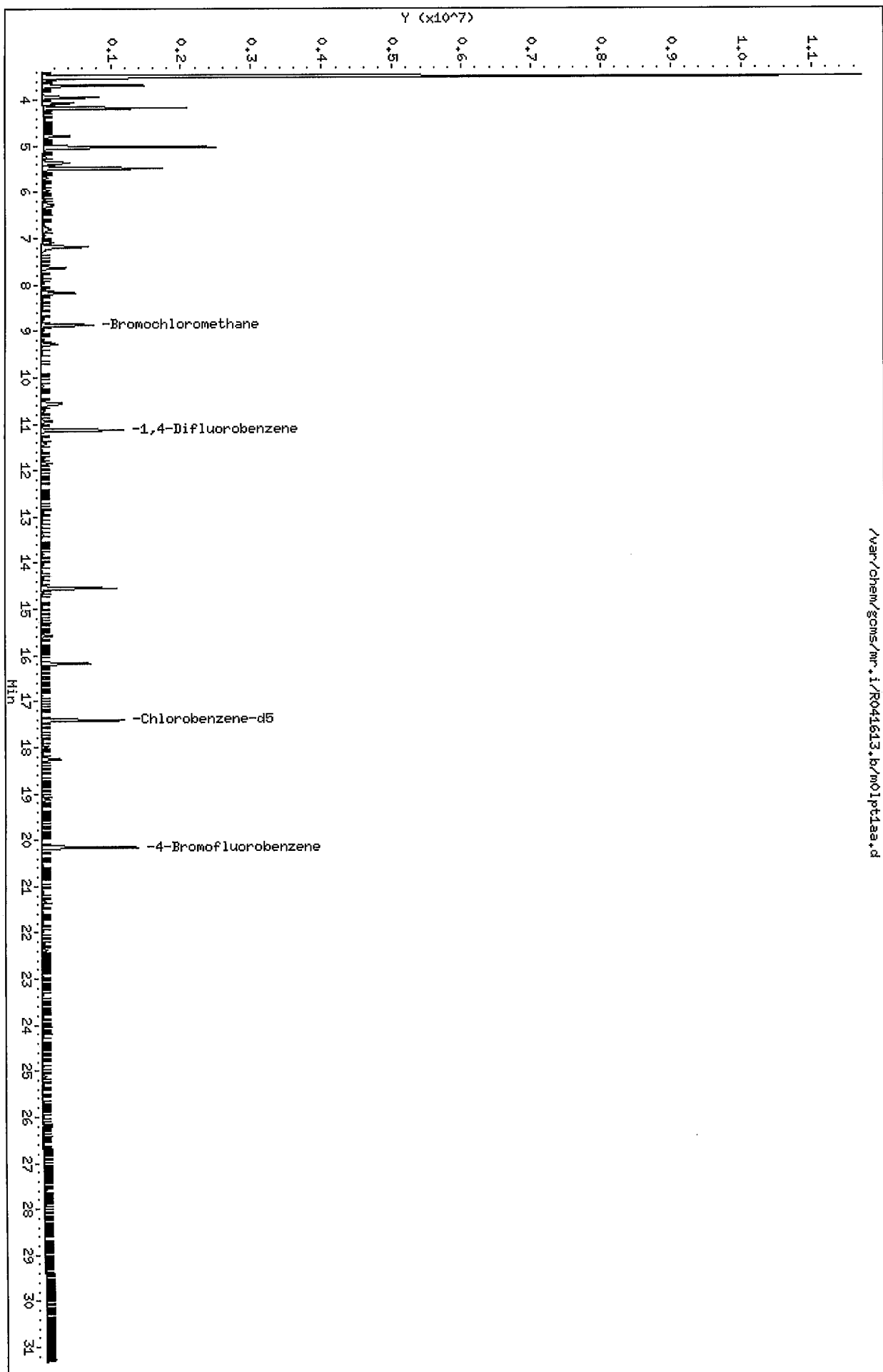
Purge Volume: 500.0

Column phase: Rtx-5

Instrument: mr.i

Operator: 403648

Column diameter: 0.32



Data File: /var/chem/gcms/mr.i/R041613,b/m01pt1aa.d

Date: 16-APR-2013 17:32

Client ID: INDOOR

Instrument: mr.i

Sample Info: ,,0,,

Purge Volume: 500.0

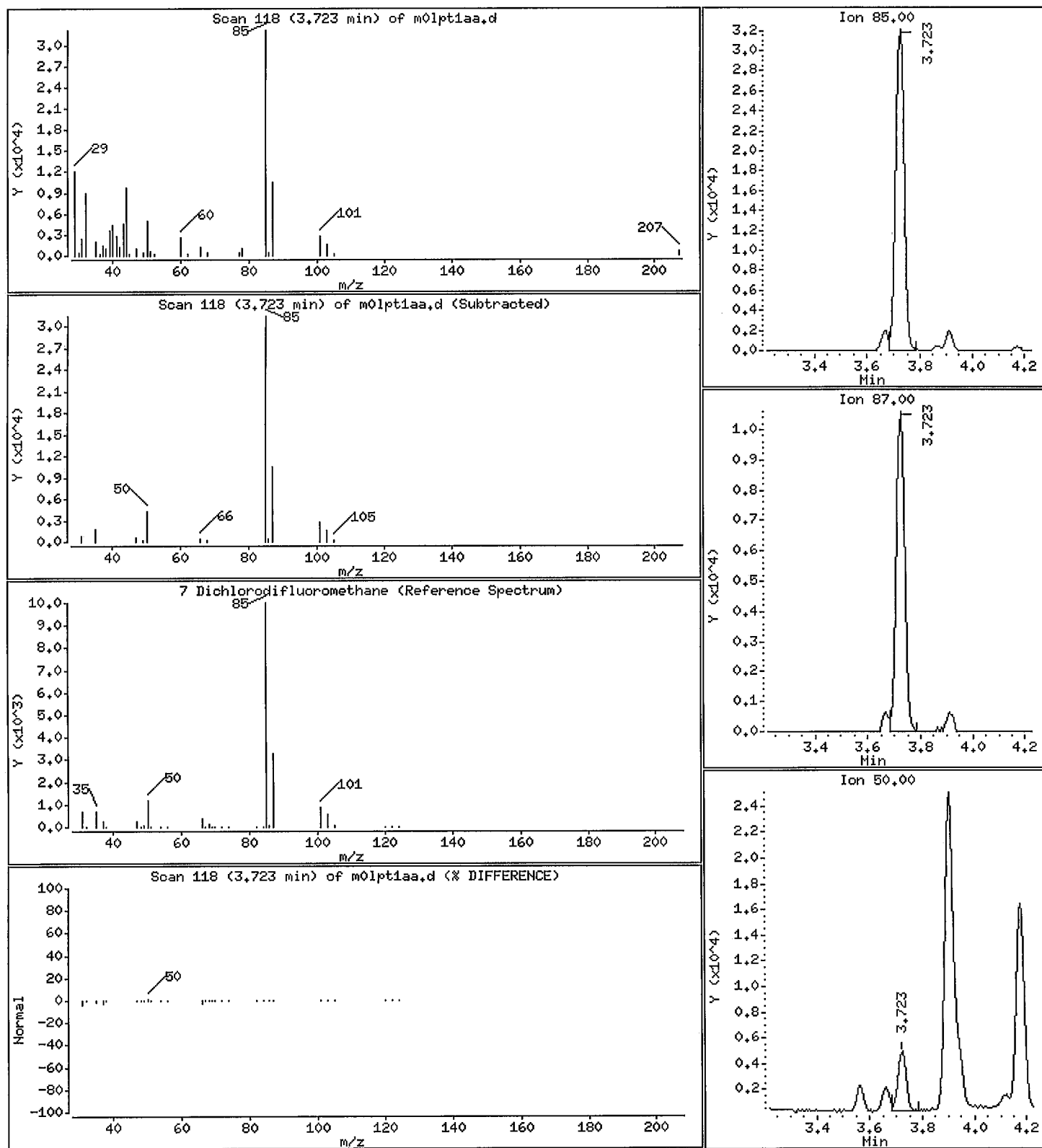
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

7 Dichlorodifluoromethane

Concentration: 0.2662 ppb(v/v)



Data File: /var/chem/gcms/mr.i/R041613.b/m01pt1aa.d

Date: 16-APR-2013 17:32

Client ID: INDOOR

Instrument: mr.i

Sample Info: ,,,0,,

Purge Volume: 500.0

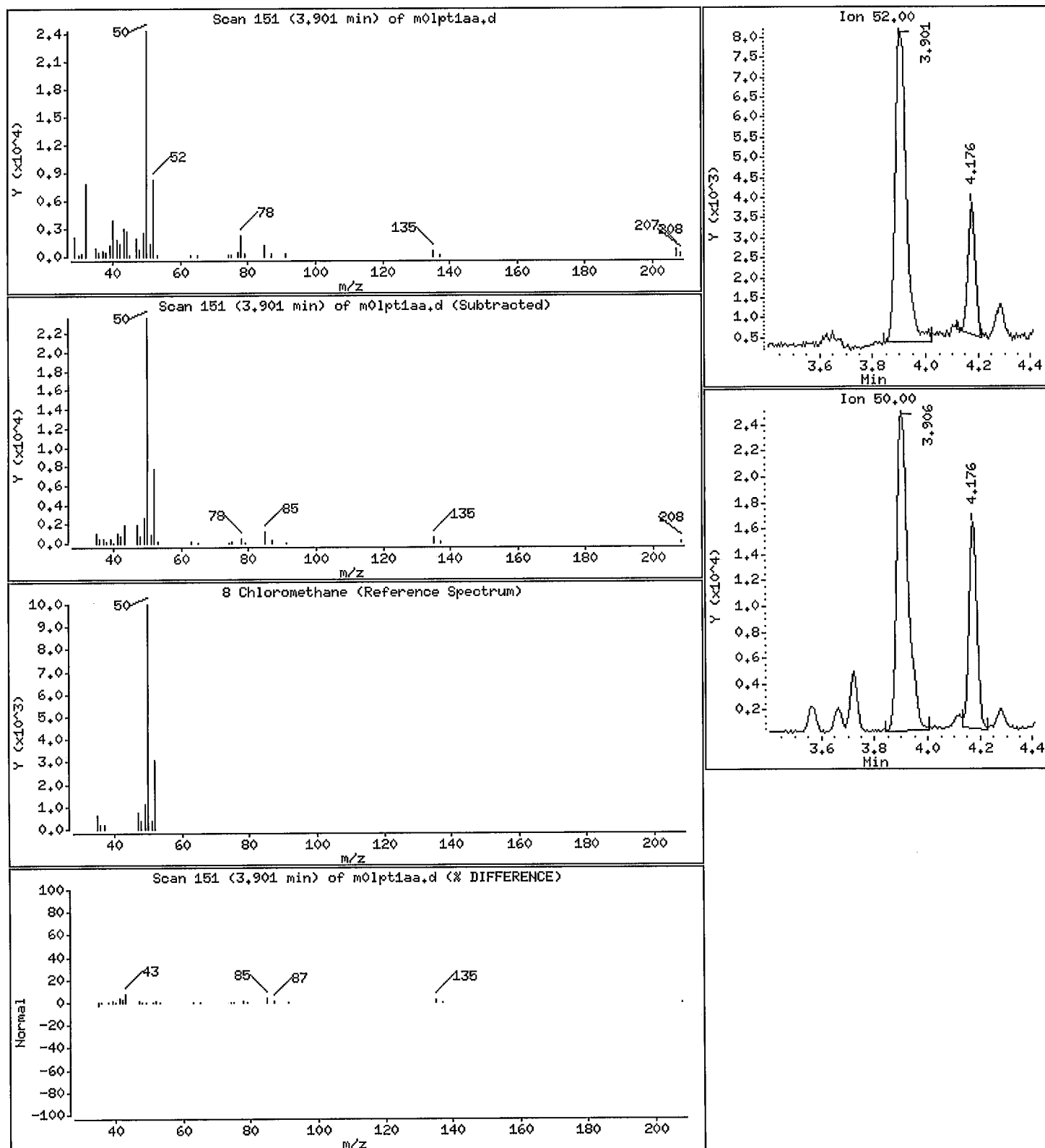
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

8 Chloromethane

Concentration: 0.7116 ppb(v/v)



Data File: /var/chem/gcms/mr.i/R041613.b/m01pt1aa.d

Date: 16-APR-2013 17:32

Client ID: INDOOR

Instrument: mr.i

Sample Info: ,,,

Purge Volume: 500.0

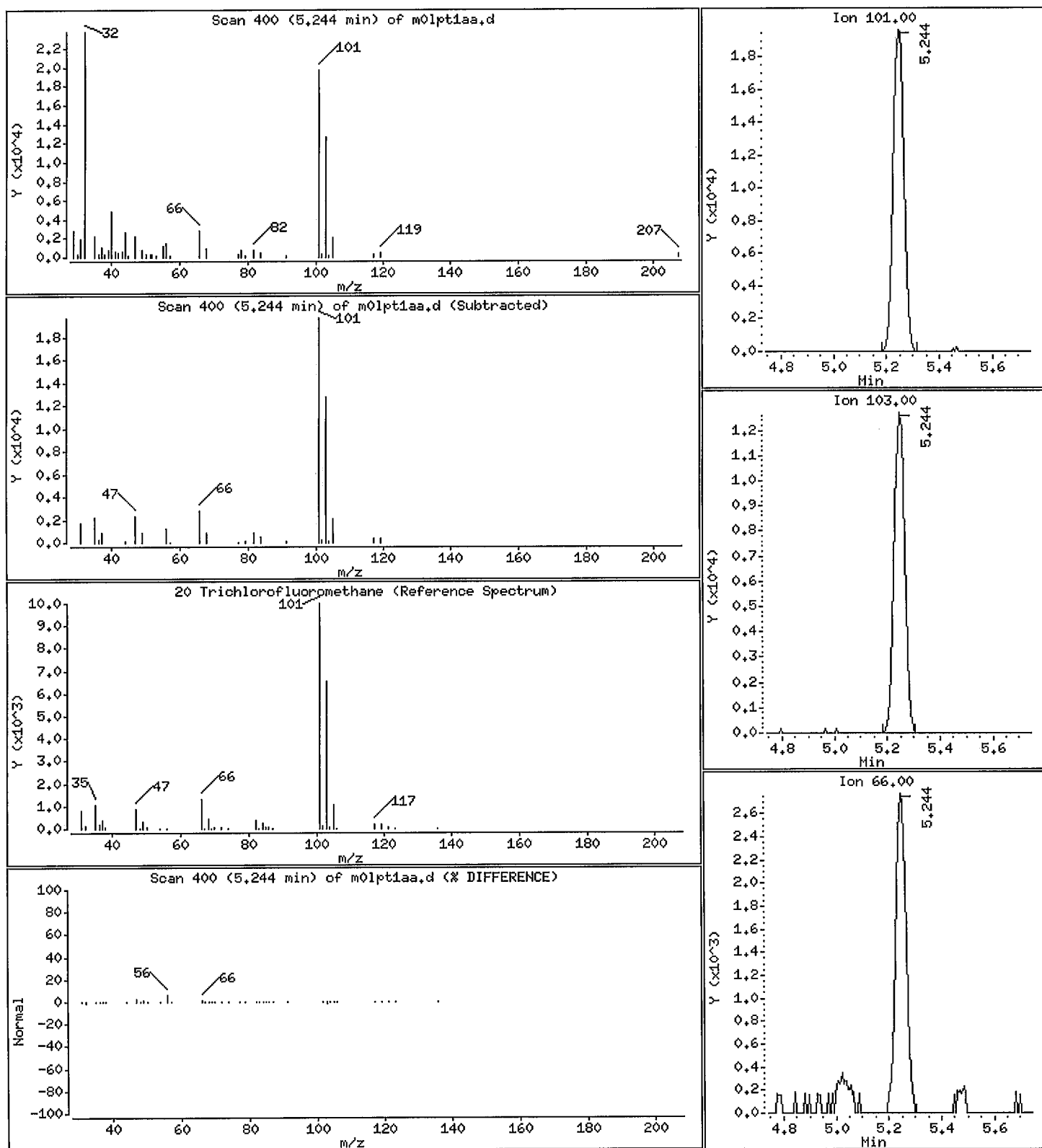
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

20 Trichlorofluoromethane

Concentration: 0.2215 ppb(v/v)



Data File: /var/chem/gcms/mr.i/R041613.b/m01pt1aa.d

Date : 16-APR-2013 17:32

Client ID: INDOOR

Instrument: mr.i

Sample Info: ,0,,

Purge Volume: 500.0

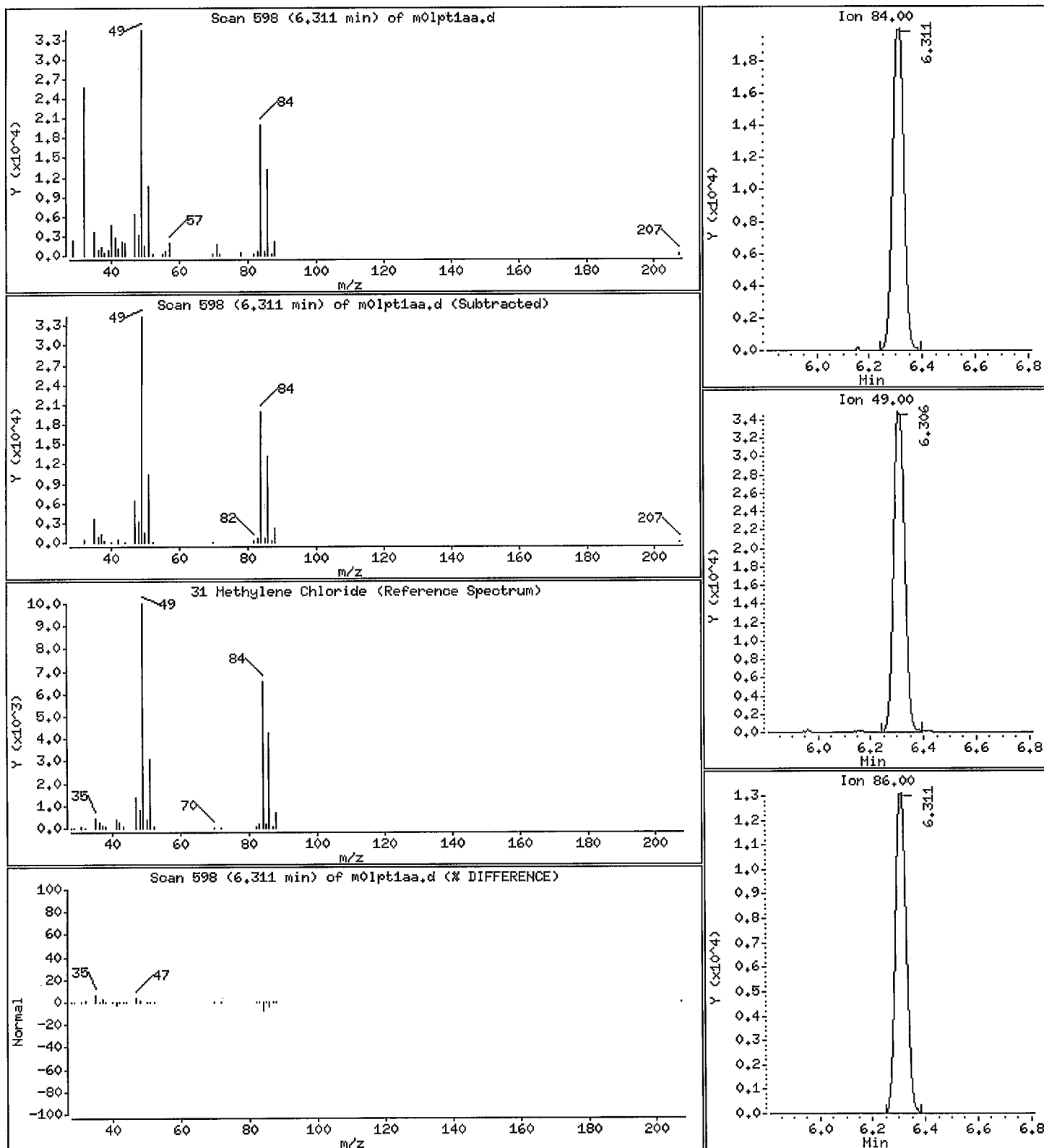
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

31 Methylene Chloride

Concentration: 0.6649 ppb(v/v)



Data File: /var/chem/gcms/mr.i/R041613.b/m01pt1aa.d

Date : 16-APR-2013 17:32

Client ID: INDOOR

Instrument: mr.i

Sample Info: ,,0,,

Purge Volume: 500.0

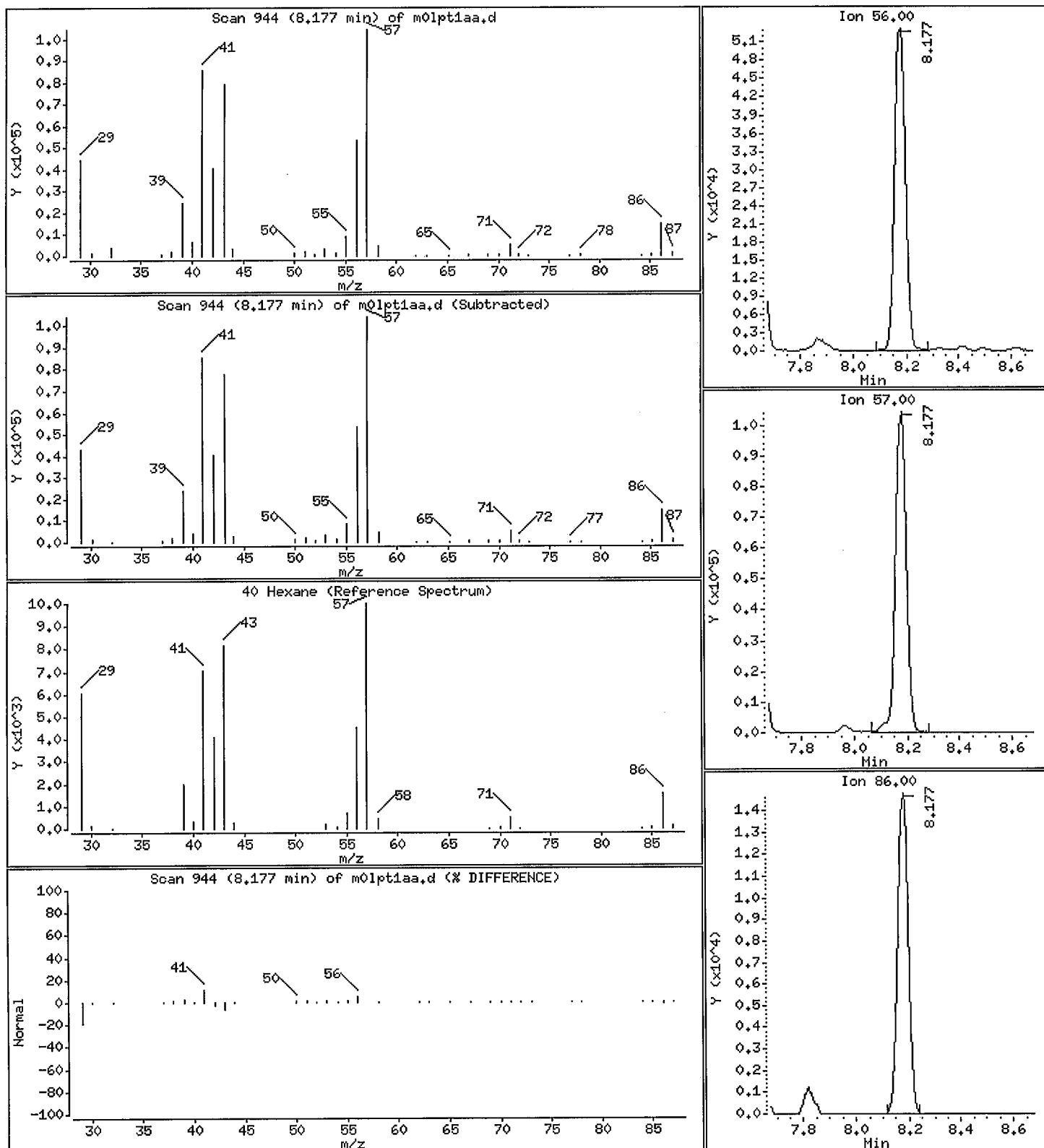
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

40 Hexane

Concentration: 1.793 ppb(v/v)



Data File: /var/chem/gcms/mr.i/R041613,b/m01pt1aa,d

Date : 16-APR-2013 17:32

Client ID: INDOOR

Instrument: mr.i

Sample Info: ,,0,,

Purge Volume: 500.0

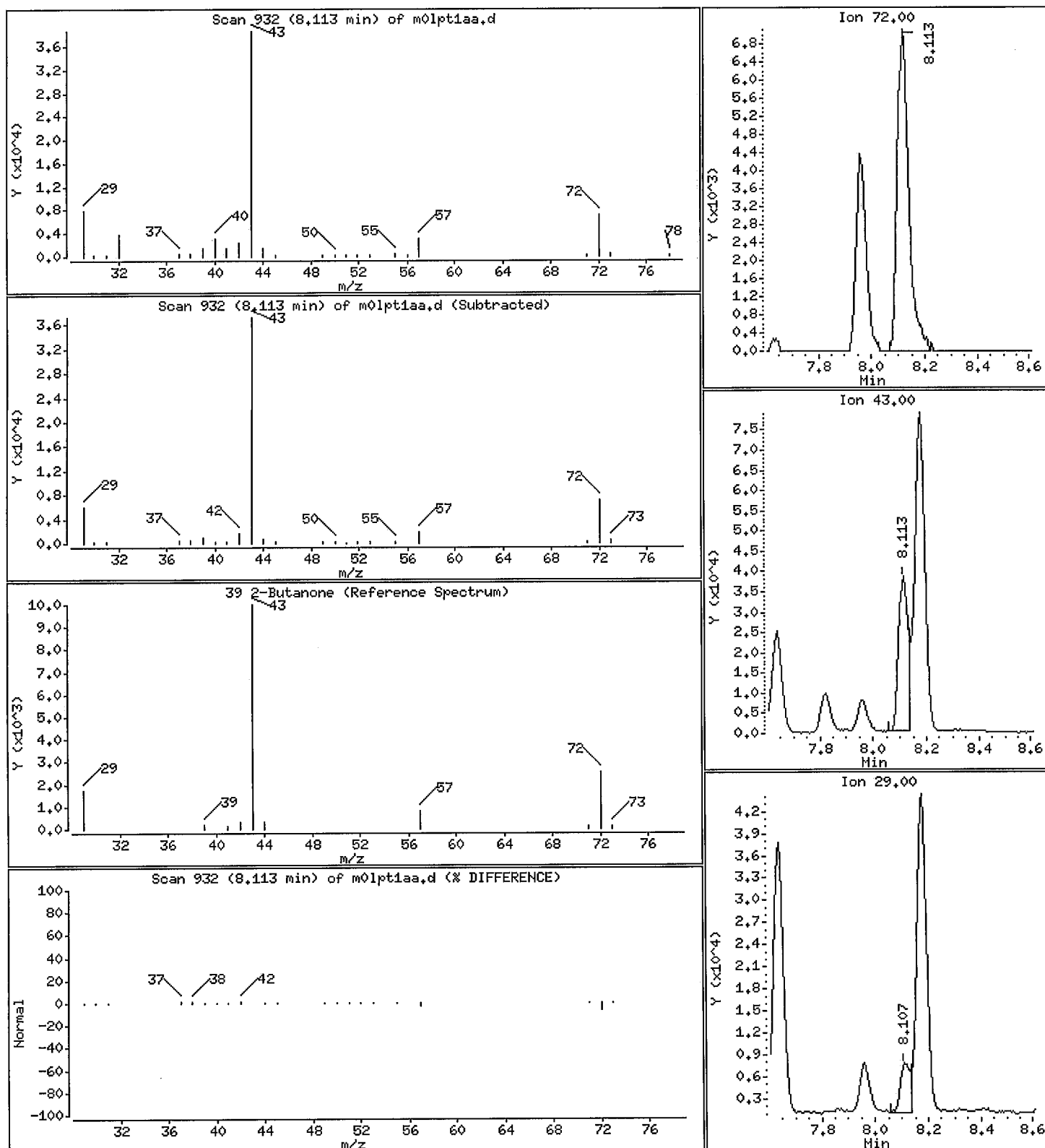
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

39 2-Butanone

Concentration: 0.4434 ppb(v/v)



Data File: /var/chem/gcms/mr.i/R041613,b,m01pt1aa.d

Date : 16-APR-2013 17:32

Client ID: INDOOR

Instrument: mr.i

Sample Info: ,,0,,

Purge Volume: 500.0

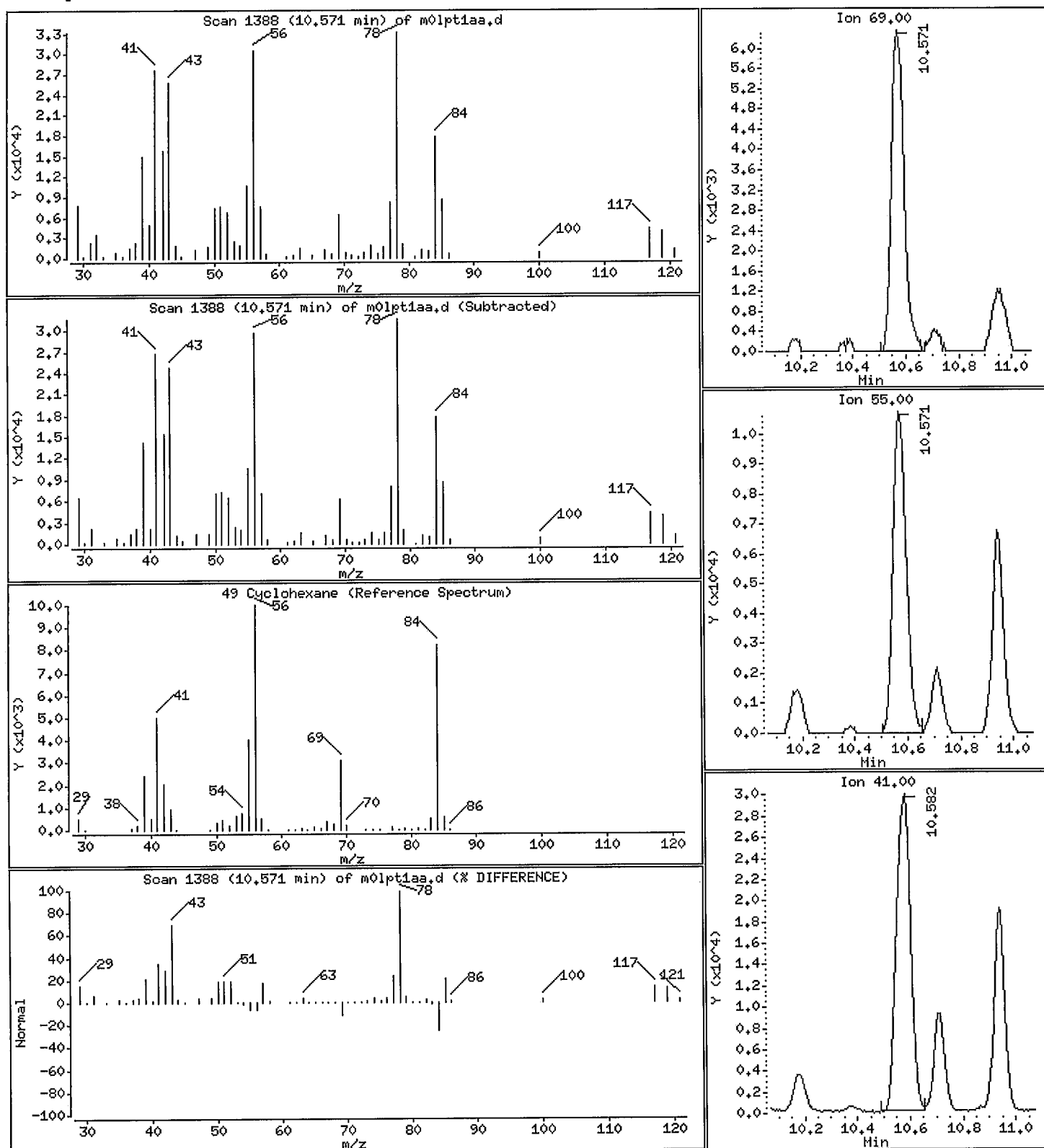
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

49 Cyclohexane

Concentration: 0.4223 ppb(v/v)



Data File: /var/chem/gcms/mr.i/R041613.b/m01pt1aa.d

Date : 16-APR-2013 17:32

Client ID: INDOOR

Instrument: mr.i

Sample Info: ,,,

Purge Volume: 500.0

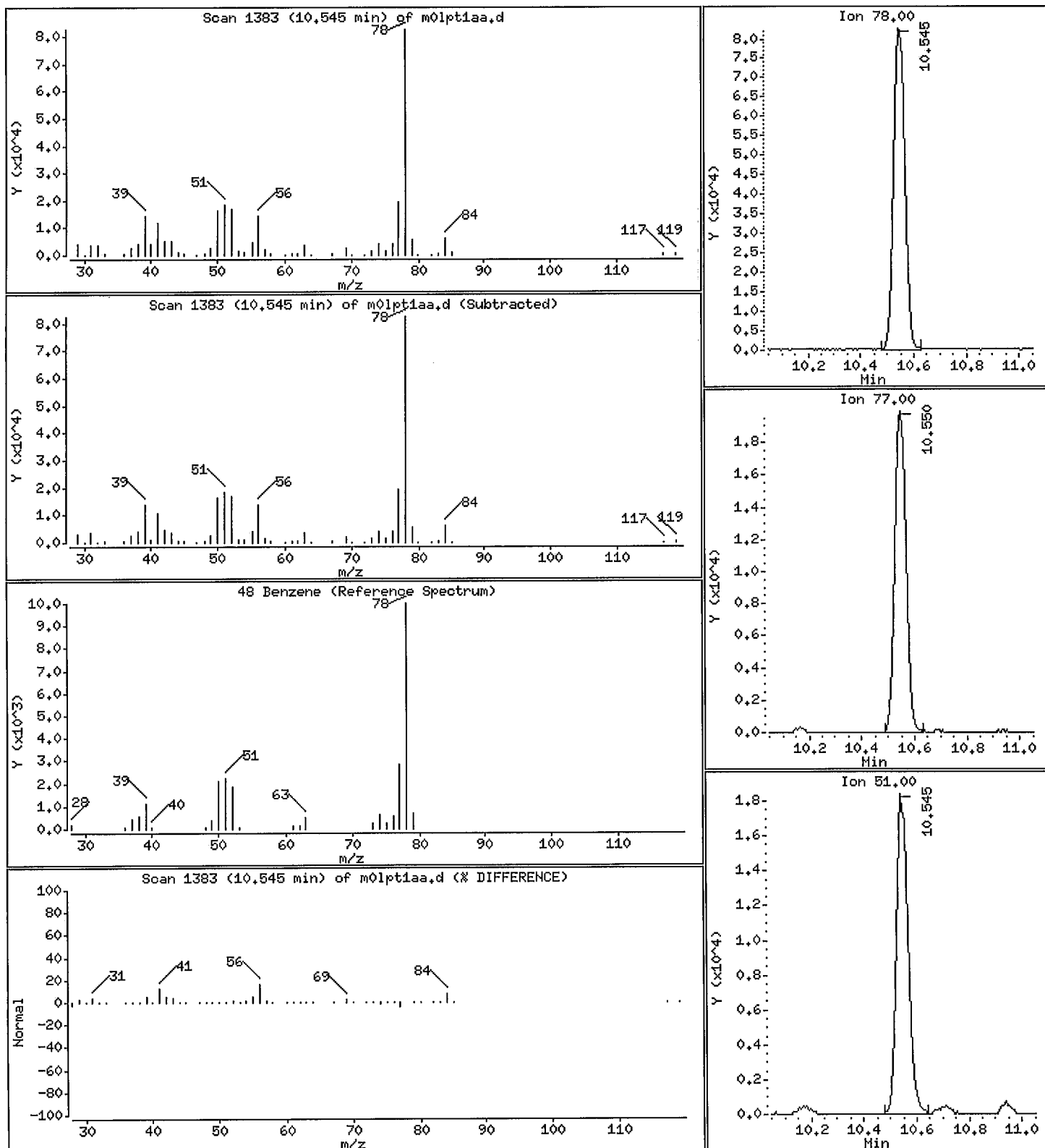
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

48 Benzene

Concentration: 0.7432 ppb(v/v)



Data File: /var/chem/gcms/mr.i/R041613.b/m01pt1aa.d

Date: 16-APR-2013 17:32

Client ID: INDOOR

Instrument: mr.i

Sample Info: ,,,0,,

Purge Volume: 500.0

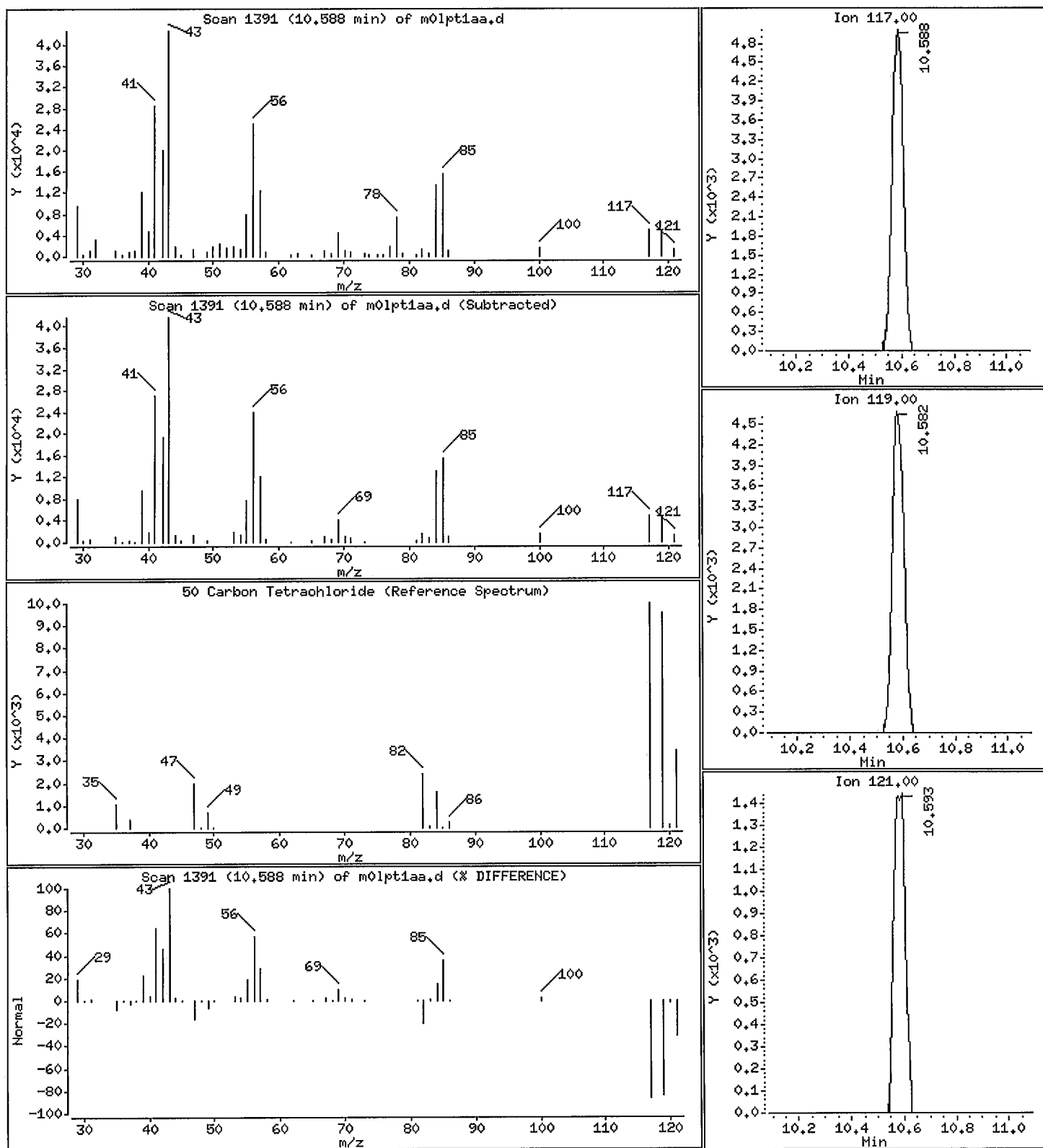
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

50 Carbon Tetrachloride

Concentration: 0.08868 ppb(v/v)



Data File: /var/chem/gcms/mr,i/R041613,b/m01pt1aa.d

Date : 16-APR-2013 17:32

Client ID: INDOOR

Sample Info: ,,,0,,

Purge Volume: 500.0

Column phase: Rtx-5

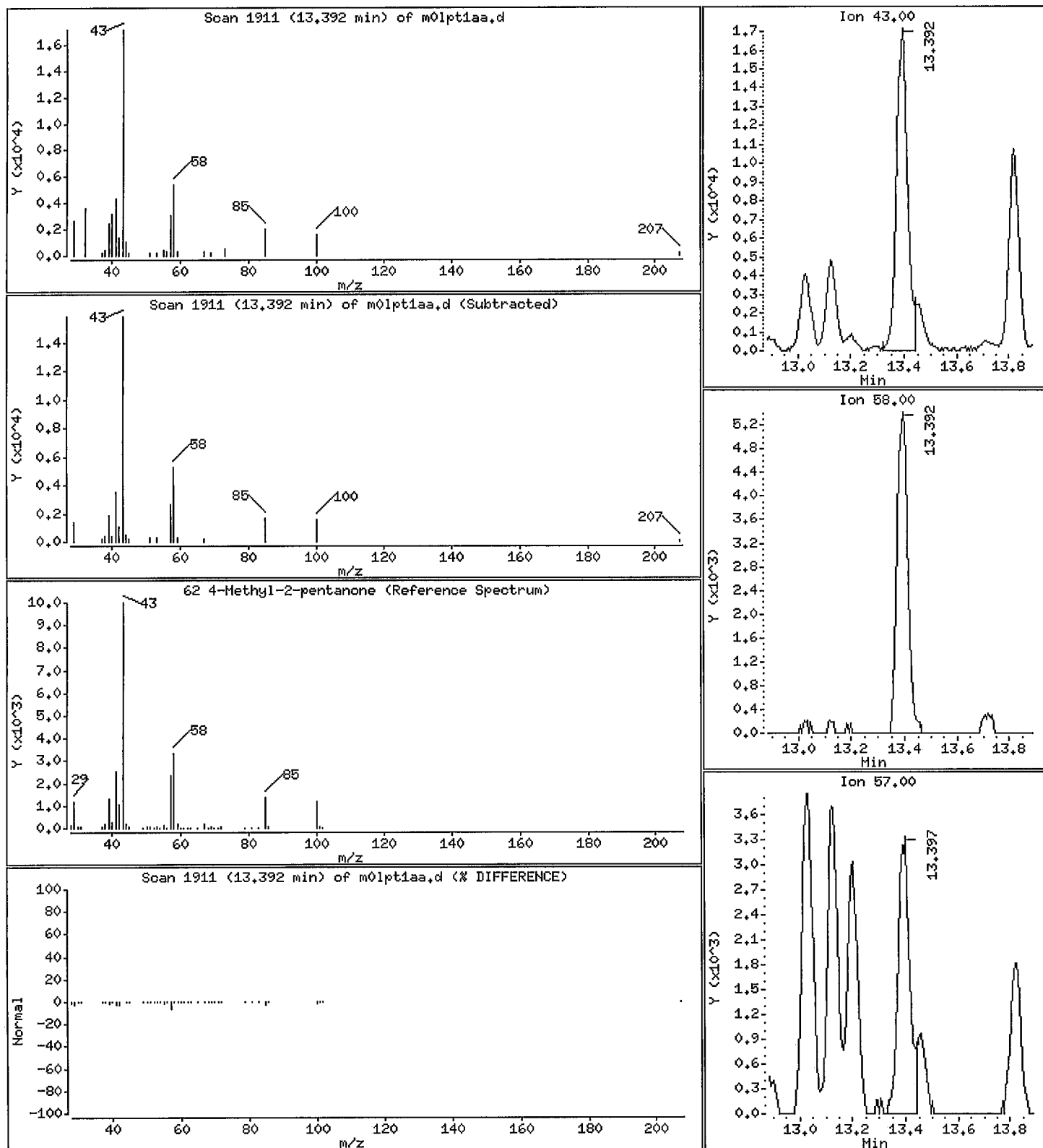
Instrument: mr,i

Operator: 403648

Column diameter: 0.32

62 4-Methyl-2-pentanone

Concentration: 0.2174 ppb(v/v)



Data File: /var/chem/gcms/mr.i/R041613.b/m01pt1aa.d

Date : 16-APR-2013 17:32

Client ID: INDOOR

Instrument: mr.i

Sample Info: ,,0,,

Purge Volume: 500.0

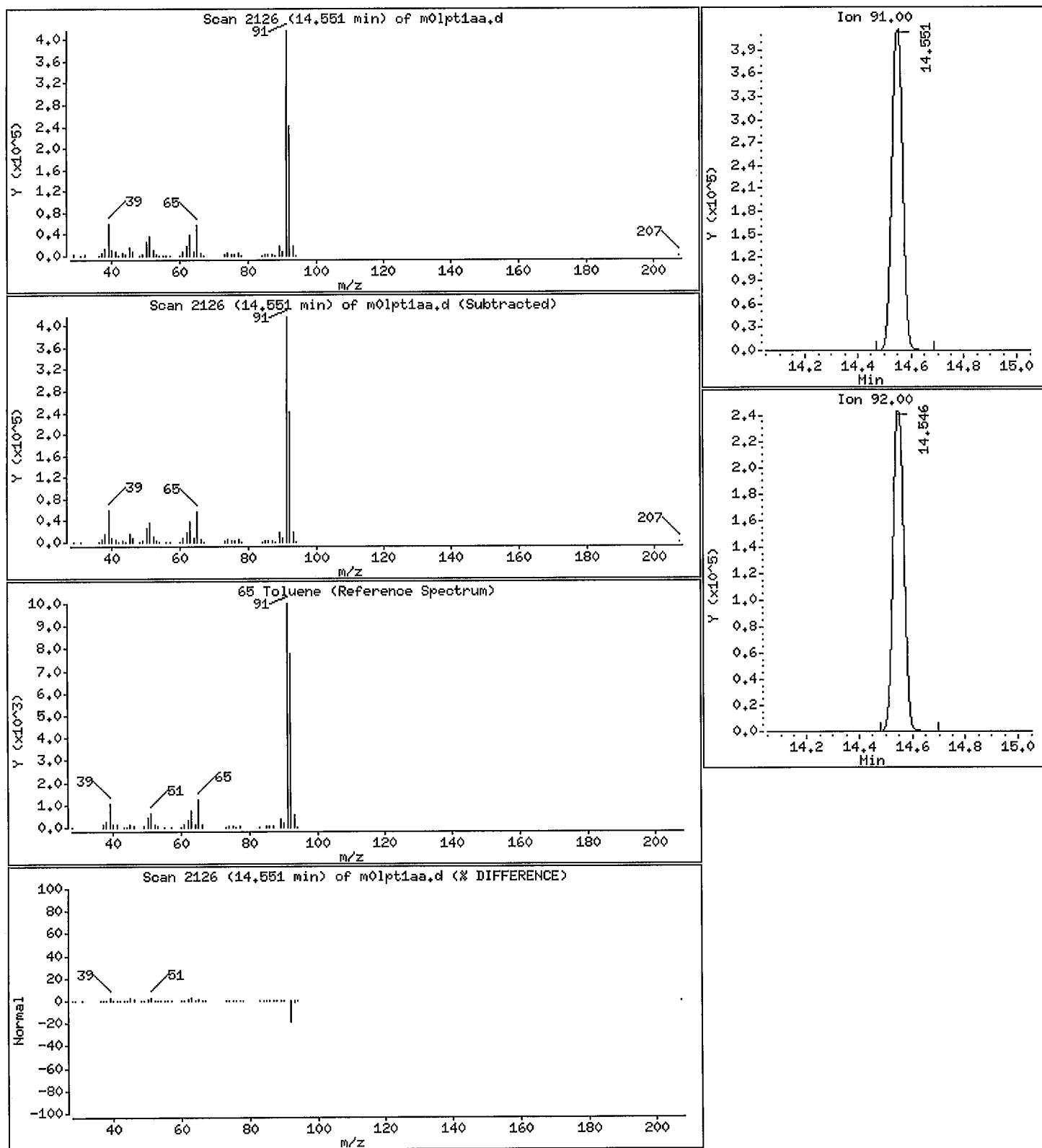
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

65 Toluene

Concentration: 2,809 ppb(v/v)



Data File: /var/chem/gcms/mr.i/R041613.b/m01pt1aa.d

Date : 16-APR-2013 17:32

Client ID: INDOOR

Instrument: mr.i

Sample Info: ,,,0,,

Purge Volume: 500.0

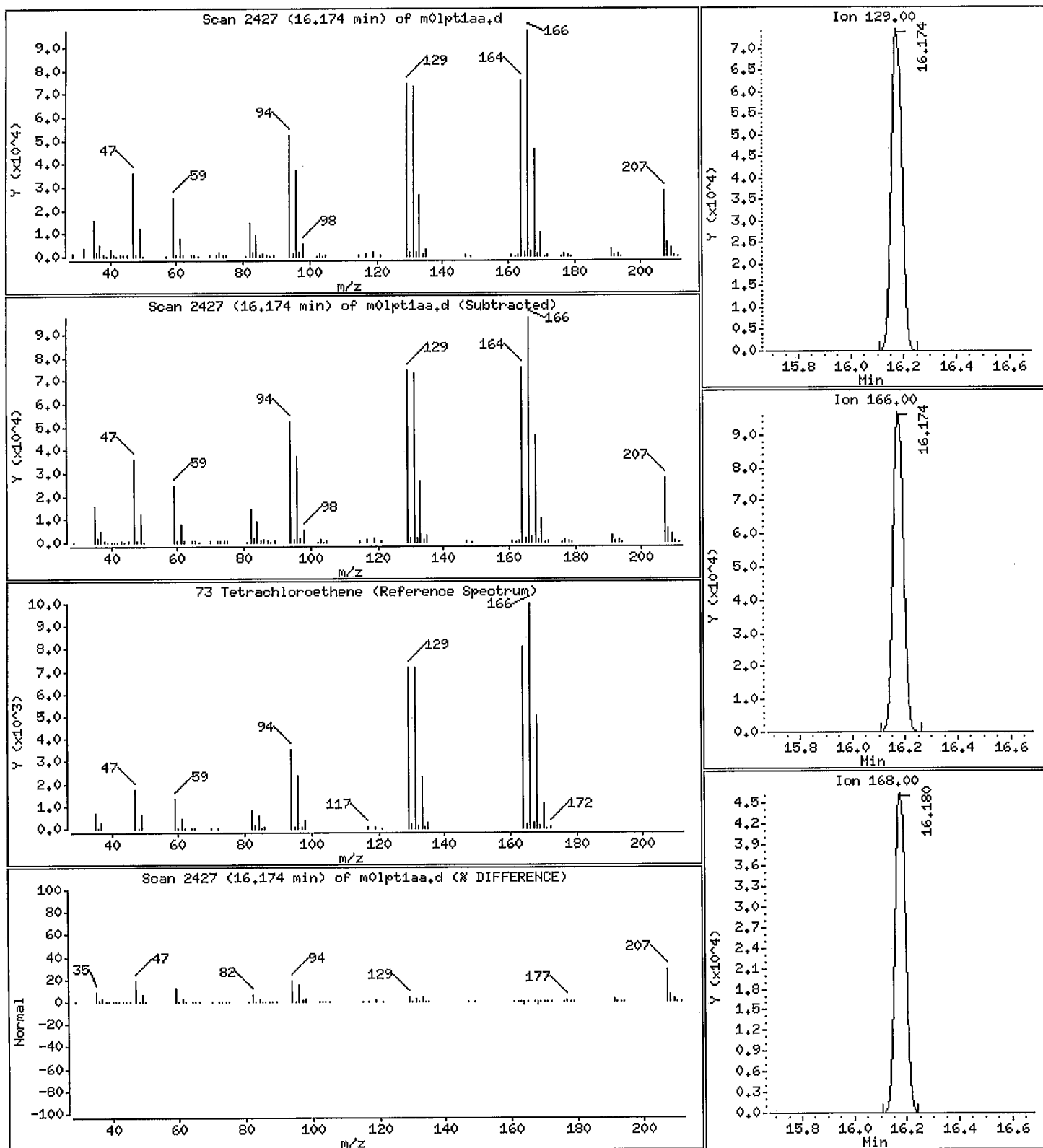
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

73 Tetrachloroethene

Concentration: 1.418 ppb(v/v)



Data File: /var/chem/gcms/mr.i/R041613.b/m01pt1aa.d

Date : 16-APR-2013 17:32

Client ID: INDOOR

Instrument: mr.i

Sample Info: ,,0,,

Purge Volume: 500.0

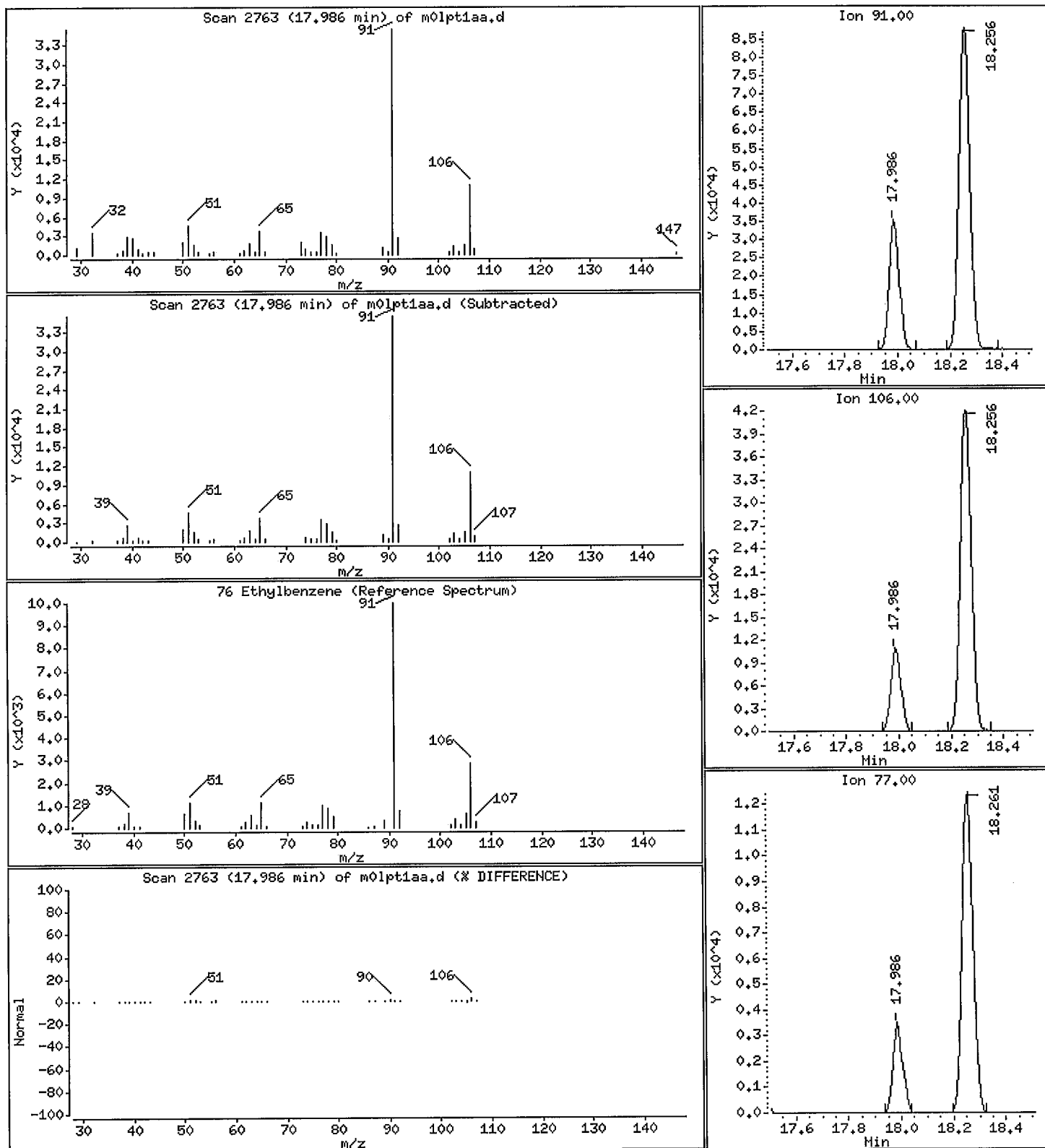
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

76 Ethylbenzene

Concentration: 0.1914 ppb(v/v)



Data File: /var/chem/gcms/mr.i/R041613.b/m01pt1aa.d

Date: 16-APR-2013 17:32

Client ID: INDOOR

Instrument: mr.i

Sample Info: ,,0,,

Purge Volume: 500.0

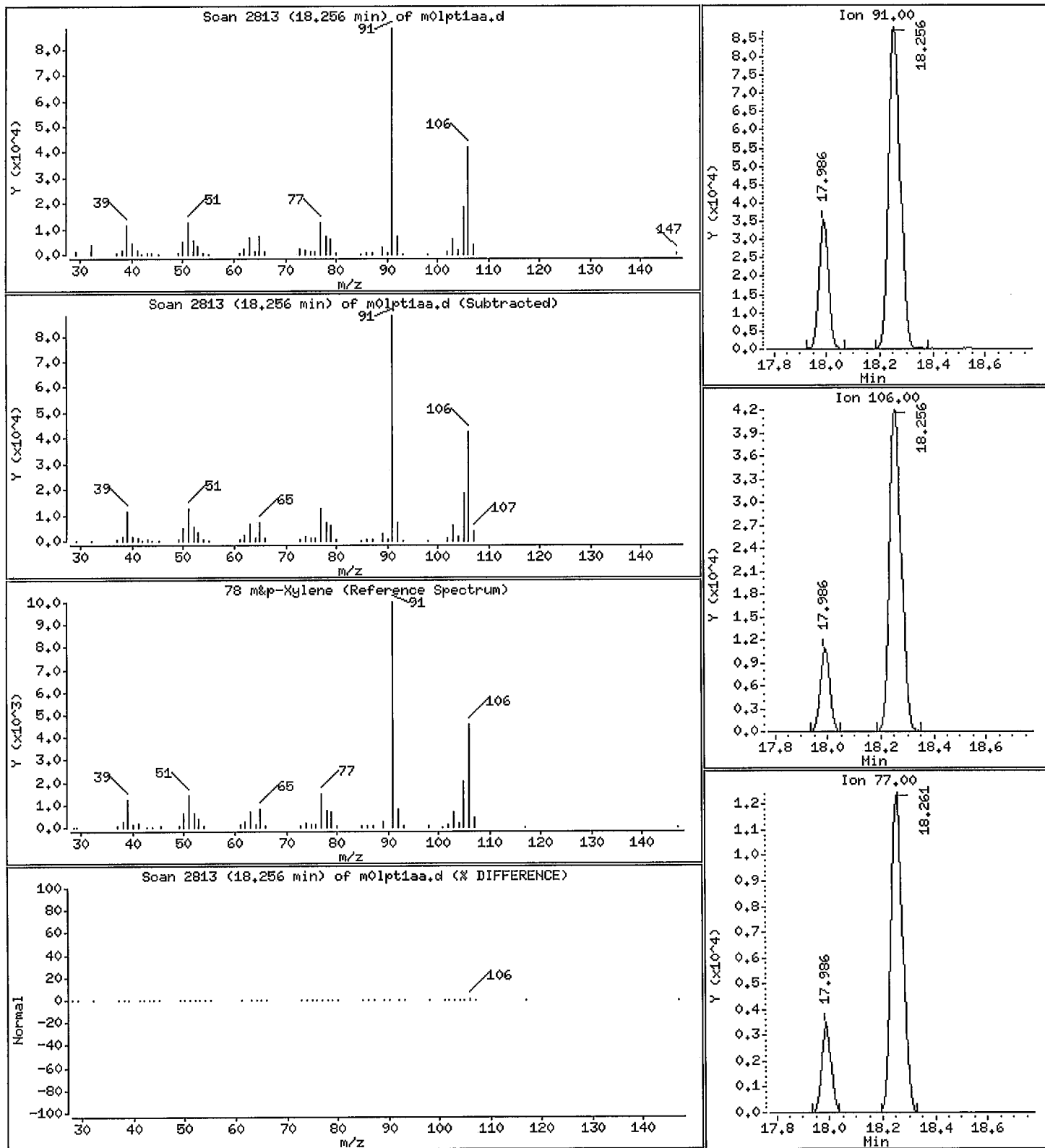
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

78 m&p-Xylene

Concentration: 0.7156 ppb(v/v)



Data File: /var/chem/gcms/mr.i/R041613.b/m01pt1aa.d

Date : 16-APR-2013 17:32

Client ID: INDOOR

Instrument: mr.i

Sample Info: ,,0,,

Purge Volume: 500.0

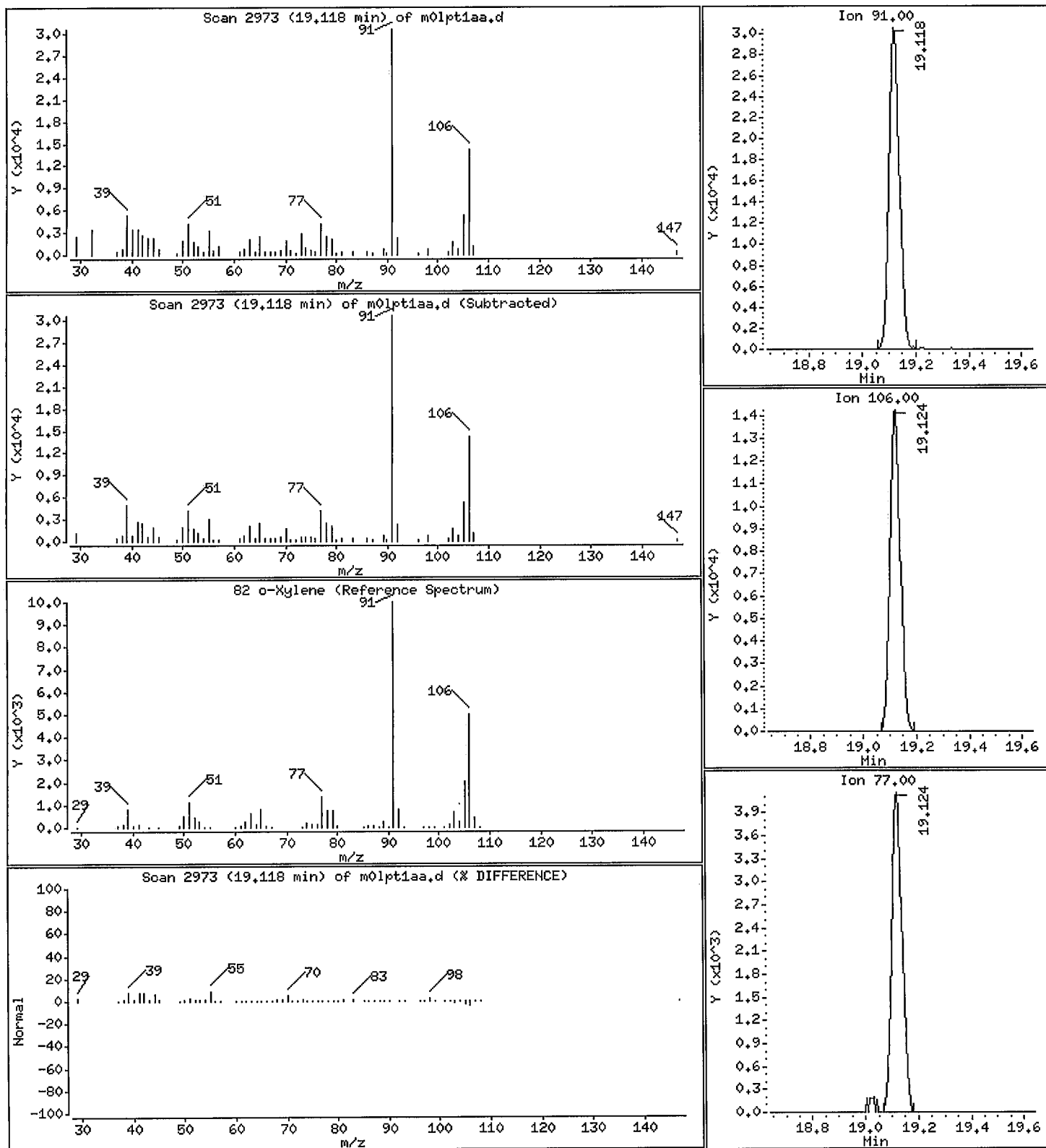
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

82 o-Xylene

Concentration: 0.2108 ppb(v/v)



Data File: /var/chem/gcms/mr.i/R041613,b/m01pt1aa.d

Date: 16-APR-2013 17:32

Client ID: INDOOR

Instrument: mr.i

Sample Info: ,,,

Purge Volume: 500.0

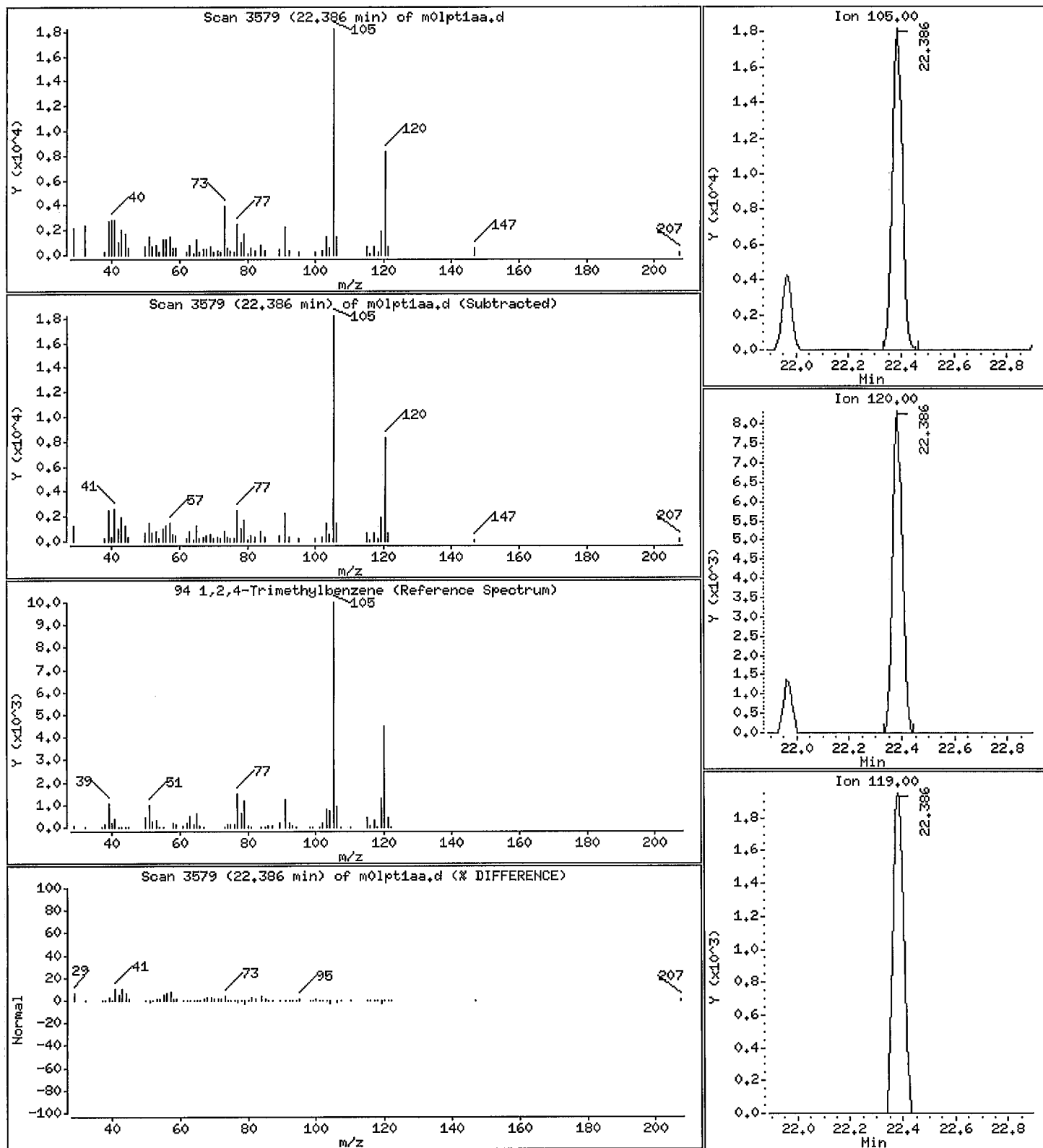
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

94 1,2,4-Trimethylbenzene

Concentration: 0.09710 ppb(v/v)



Data File: /var/chem/gcms/mr.i/R041613.b/m01pt1aa.d

Date : 16-APR-2013 17:32

Client ID: INDOOR

Instrument: mr.i

Sample Info: ,0,,

Purge Volume: 500.0

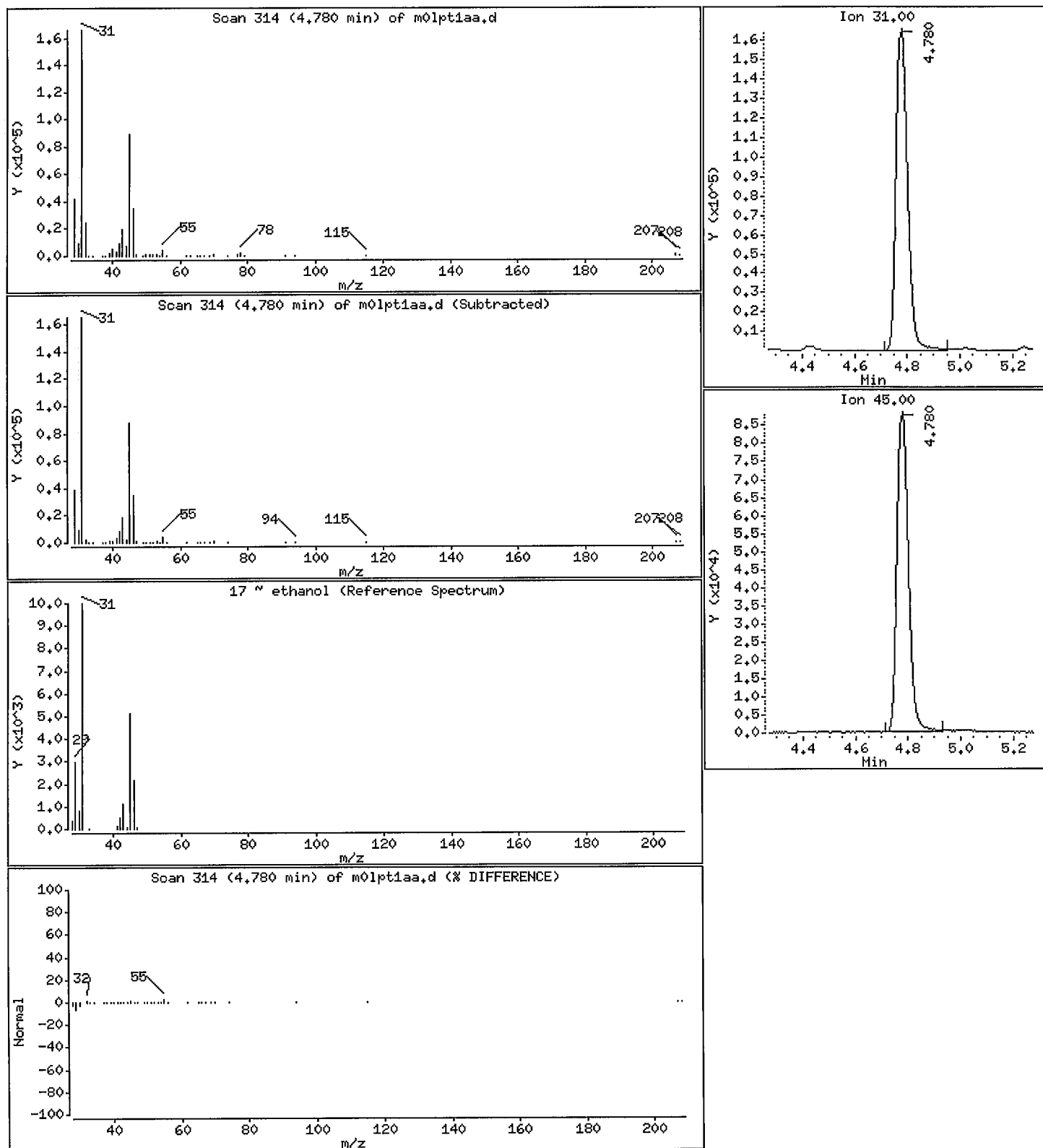
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

17 ~ ethanol

Concentration: 14.71 ppb(v/v)



New York State D.E.C.
Client Sample ID: INDOOR DUP
GC/MS Volatiles

Lot-Sample #	H3D160408 - 004	Work Order #	M0LPW1AA	Matrix.....:	AIR
Date Sampled...:	04/12/2013	Date Received..:	04/15/2013		
Prep Date.....:	04/16/2013	Analysis Date...:	04/16/2013		
Prep Batch #.....:	3106043				
Dilution Factor.:	1	Method.....:	TO-15		

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
1,1,1-Trichloroethane	ND	0.080	ND	0.44
1,1,2,2-Tetrachloroethane	ND	0.080	ND	0.55
1,1,2-Trichlorotrifluoroethane	ND	0.080	ND	0.61
1,1,2-Trichloroethane	ND	0.080	ND	0.44
1,1-Dichloroethane	ND	0.080	ND	0.32
1,1-Dichloroethene	ND	0.080	ND	0.32
1,2,4-Trichlorobenzene	ND	0.080	ND	0.59
1,2,4-Trimethylbenzene	0.29	0.080	1.4	0.39
1,2-Dibromoethane (EDB)	ND	0.080	ND	0.61
1,2-Dichlorobenzene	ND	0.080	ND	0.48
1,2-Dichloroethane	ND	0.080	ND	0.32
1,2-Dichloropropane	ND	0.080	ND	0.37
1,3,5-Trimethylbenzene	ND	0.080	ND	0.39
1,4-Dichlorobenzene	ND	0.080	ND	0.48
1,4-Dioxane	ND	0.20	ND	0.72
2-Butanone (MEK)	0.43	0.32	1.3	0.94
1,3-Dichlorobenzene	ND	0.080	ND	0.48
2,2,4-Trimethylpentane	0.22	0.20	1.0	0.93
Benzene	0.83	0.080	2.7	0.26
Benzyl chloride	ND	0.16	ND	0.83
Bromodichloromethane	ND	0.080	ND	0.54
Bromoform	ND	0.080	ND	0.83
Bromomethane	ND	0.080	ND	0.31
Carbon tetrachloride	0.090	0.040	0.56	0.25
Chlorobenzene	ND	0.080	ND	0.37
Chloroethane	ND	0.080	ND	0.21
Chloroform	ND	0.080	ND	0.39
Cyclohexane	0.42	0.20	1.4	0.69
Chloromethane	0.61	0.20	1.3	0.41
cis-1,2-Dichloroethene	ND	0.080	ND	0.32
cis-1,3-Dichloropropene	ND	0.080	ND	0.36
Dibromochloromethane	ND	0.080	ND	0.68
Dichlorodifluoromethane	0.27	0.080	1.3	0.40
Ethanol	14	0.80	26	1.5
Ethylbenzene	0.31	0.080	1.3	0.35
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.080	ND	0.56
n-Hexane	2.0	0.20	7.0	0.70
Hexachlorobutadiene	ND	0.080	ND	0.85

New York State D.E.C.
Client Sample ID: INDOOR DUP
GC/MS Volatiles

Lot-Sample # H3D160408 - 004 Work Order # M0LPW1AA Matrix.....: AIR

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
4-Methyl-2-pentanone (MIBK)	5.1	0.20	21	0.82
Methyl tert-butyl ether	ND	0.16	ND	0.58
Methylene chloride	0.21	0.20	0.71	0.69
Styrene	ND	0.080	ND	0.34
tert-Butyl alcohol	ND	0.32	ND	0.97
Tetrachloroethene	ND	0.080	ND	0.54
Toluene	3.8	0.080	14	0.30
m-Xylene & p-Xylene	1.4	0.080	5.9	0.35
o-Xylene	0.41	0.080	1.8	0.35
trans-1,2-Dichloroethene	ND	0.080	ND	0.32
trans-1,3-Dichloropropene	ND	0.080	ND	0.36
Trichloroethene	ND	0.040	ND	0.21
Trichlorofluoromethane	0.21	0.080	1.2	0.45
Vinyl chloride	ND	0.080	ND	0.20

SURROGATE	PERCENT RECOVERY	LABORATORY CONTROL LIMITS (%)
4-Bromofluorobenzene	109	60 - 140

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)*(Molecular Weight/24.45)

The 'Reporting Limit' in ug/m3 is calculated using the following equation: (Reporting Limit(before rounding) * Dilution Factor) * (Molecular Weight/24.45)

Data File: /var/chem/gcms/mr.i/R041613.b/m01pw1aa.d
 Report Date: 17-Apr-2013 11:14

TestAmerica Knoxville

Modified Method TO-14/TO-15

Data file : /var/chem/gcms/mr.i/R041613.b/m01pw1aa.d
 Lab Smp Id: M0LPW1AA Client Smp ID: INDOOR DUP
 Inj Date : 16-APR-2013 18:25
 Operator : 403648 Inst ID: mr.i
 Smp Info : ,,0,,
 Misc Info : R041613,TO15,nysdec.sub
 Comment :
 Method : /var/chem/gcms/mr.i/R041613.b/TO15.m
 Meth Date : 16-Apr-2013 19:25 barlozha Quant Type: ISTD
 Cal Date : 20-FEB-2013 20:14 Cal File: rich205.d
 Als bottle: 2
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: nysdec.sub
 Target Version: 3.50

Concentration Formula: Amt * DF * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Default Calibration Volume
Vo	500.00000	Default Sample Volume

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ppb (v/v))	FINAL (ppb (v/v))
* 1 Bromochloromethane	128	8.867	8.873	(1.000)	236295	4.00000	4.000	
* 2 1,4-Difluorobenzene	114	11.132	11.138	(1.000)	1212941	4.00000	4.000	
* 3 Chlorobenzene-d5	117	17.414	17.436	(1.000)	990698	4.00000	4.000	
\$ 4 4-Bromofluorobenzene	95	20.159	20.170	(1.158)	757354	4.36642	4.366	
7 Dichlorodifluoromethane	85	3.723	3.723	(0.420)	66818	0.27136	0.2714	
8 Chloromethane	52	3.901	3.907	(0.440)	18332	0.60907	0.6091	
20 Trichlorofluoromethane	101	5.244	5.244	(0.591)	50346	0.21045	0.2104	
31 Methylene Chloride	84	6.306	6.312	(0.711)	17488	0.20541	0.2054	
40 Hexane	56	8.172	8.177	(0.922)	162328	1.99940	1.999	
39 2-Butanone	72	8.112	8.107	(0.915)	20524	0.43261	0.4326	
49 Cyclohexane	69	10.566	10.572	(0.949)	19788	0.41555	0.4156	
48 Benzene	78	10.544	10.550	(0.947)	255745	0.83298	0.8330	
50 Carbon Tetrachloride	117	10.582	10.588	(0.951)	14236	0.08976	0.08976	
53 2,2,4-trimethylpentane	57	11.418	11.424	(1.026)	108781	0.21874	0.2187	
62 4-Methyl-2-pentanone	43	13.381	13.386	(1.202)	1100340	5.07686	5.077	
65 Toluene	91	14.551	14.551	(0.836)	1571784	3.82381	3.824	

Data File: /var/chem/gcms/mr.i/R041613.b/m01pw1aa.d
 Report Date: 17-Apr-2013 11:14

Compounds	QUANT SIG						CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN	FINAL	
						(ppb (v/v))	(ppb (v/v))	
=====	=====	==	=====	=====	=====	=====	=====	
76 Ethylbenzene	91	17.986	18.008	(1.033)	159581	0.30915	0.3091	
78 m&p-Xylene	91	18.255	18.277	(1.048)	539429	1.35370	1.354	
82 o-Xylene	91	19.118	19.140	(1.098)	169064	0.41124	0.4112	
94 1,2,4-Trimethylbenzene	105	22.381	22.392	(1.285)	145955	0.29066	0.2907	
17 ~ ethanol	31	4.775	4.775	(0.538)	447035	13.7941	13.79	

Data File: /var/chem/gcms/mr.i/R041613.b/m0lpw1aa.d
 Report Date: 17-Apr-2013 11:14

TestAmerica Knoxville

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: mr.i
 Lab File ID: m0lpw1aa.d
 Lab Smp Id: M0LPW1AA
 Analysis Type: OTHER
 Quant Type: ISTD
 Operator: 403648

Calibration Date: 16-APR-2013
 Calibration Time: 10:51
 Client Smp ID: INDOOR DUP
 Level: LOW
 Sample Type: AIR

Method File: /var/chem/gcms/mr.i/R041613.b/TO15.m
 Misc Info: R041613,TO15,nysdec.sub

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
1 Bromochloromethan	294767	175386	414148	236295	-19.84
2 1,4-Difluorobenze	1529291	909928	2148654	1212941	-20.69
3 Chlorobenzene-d5	1257555	748245	1766865	990698	-21.22

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
1 Bromochloromethan	8.87	8.54	9.20	8.87	-0.06
2 1,4-Difluorobenze	11.14	10.81	11.47	11.13	-0.05
3 Chlorobenzene-d5	17.44	17.11	17.77	17.41	-0.12

AREA UPPER LIMIT = + 40% of internal standard area.
 AREA LOWER LIMIT = - 40% of internal standard area.
 RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
 RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /var/chem/gcms/mr.i/R041613.b/m0lpw1aa.d
 Report Date: 17-Apr-2013 11:14

TestAmerica Knoxville

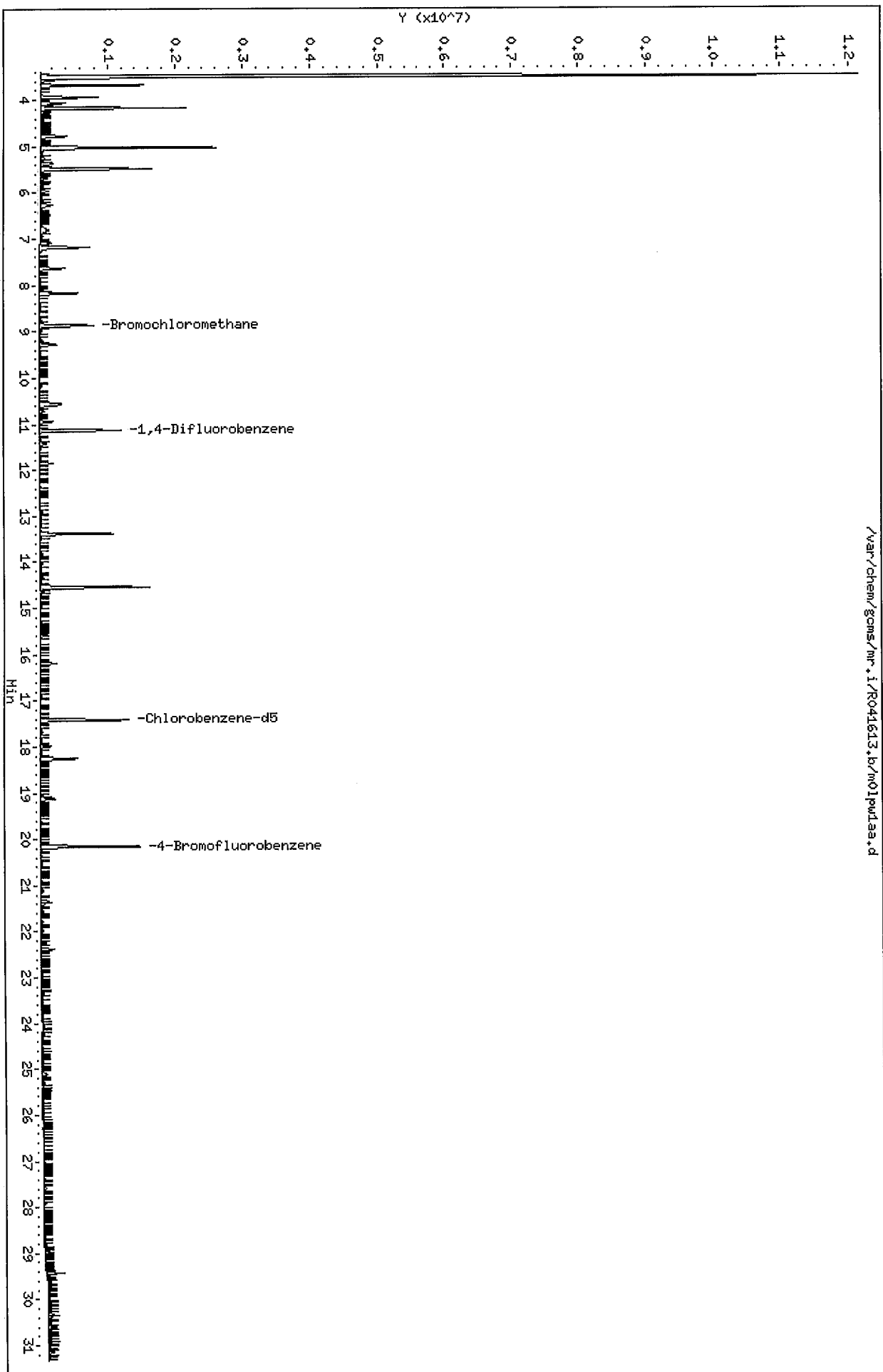
RECOVERY REPORT

Client Name: New York State D.E.C15-APR-2013 00:00 Client SDG: H3D160408
 Sample Matrix: GAS Fraction: OTHER
 Lab Smp Id: M0LPW1AA Client Smp ID: INDOOR DUP
 Level: LOW Operator: 403648
 Data Type: MS DATA SampleType: SAMPLE
 SpikeList File: allnew.spk Quant Type: ISTD
 Sublist File: nysdec.sub
 Method File: /var/chem/gcms/mr.i/R041613.b/TO15.m
 Misc Info: R041613,TO15,nysdec.sub

SURROGATE COMPOUND	CONC ADDED ppb (v/v)	CONC RECOVERED ppb (v/v)	% RECOVERED	LIMITS
\$ 4 4-Bromofluorobenze	4.000	4.366	109.16	60-140

Data File: /var/chem/gcms/mr.i/R041613.b/m01pwl1aa.d
Date: 16-APR-2013 18:25
Client ID: INDOOR DUP
Sample Info: , ,
Purge Volume: 500.0
Column phase: Rtx-5

Instrument: mr.i
Operator: 403648
Column diameter: 0.32



Data File: /var/chem/gcms/mr.i/R041613.b/m01pw1aa.d

Date: 16-APR-2013 18:25

Client ID: INDOOR DUP

Instrument: mr.i

Sample Info: ,,,0,,

Purge Volume: 500.0

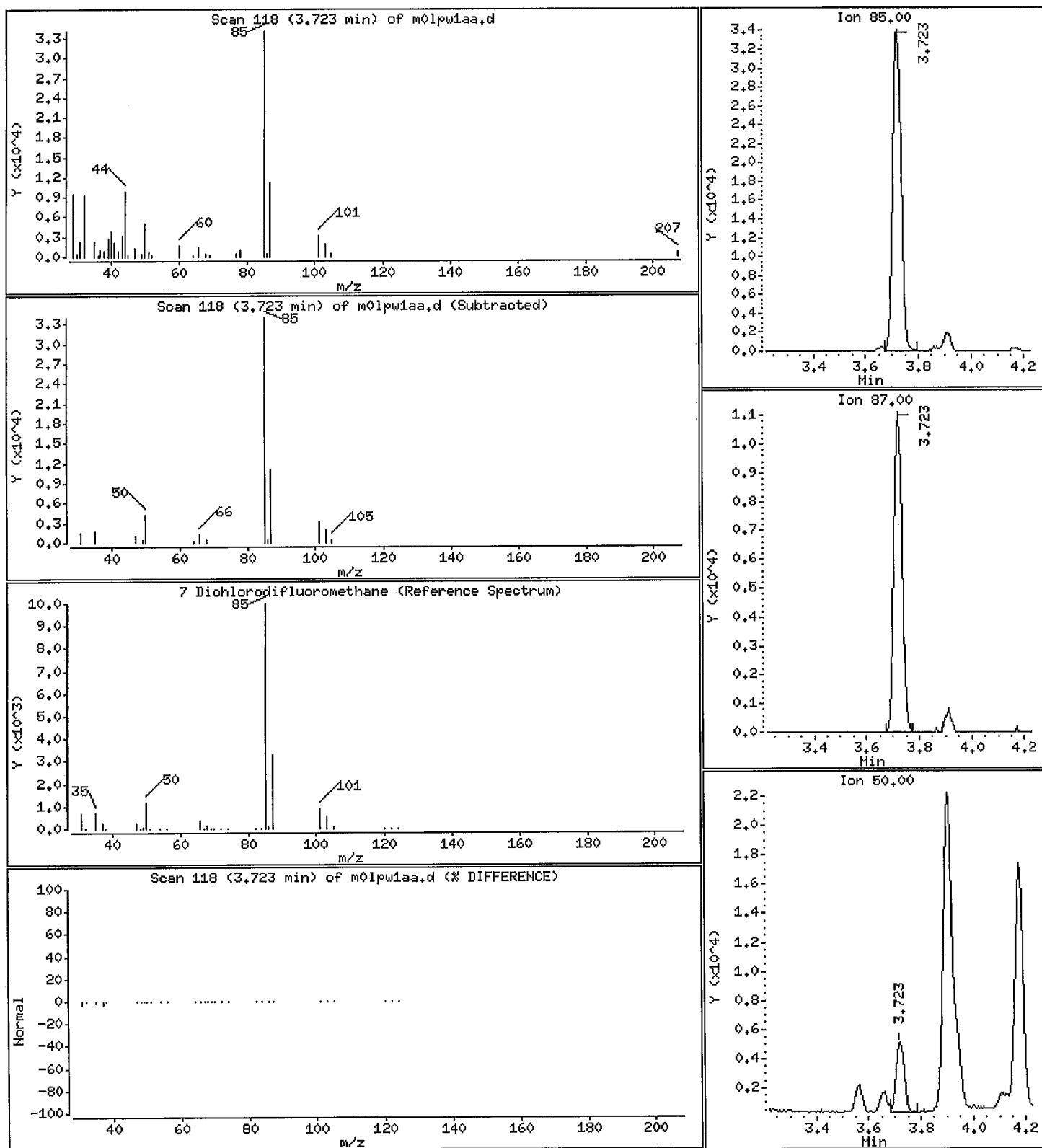
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

7 Dichlorodifluoromethane

Concentration: 0.2714 ppb(v/v)



Data File: /var/chem/gcms/mr.i/R041613.b/m01pw1aa.d

Date : 16-APR-2013 18:25

Client ID: INDOOR DUP

Instrument: mr.i

Sample Info: ,,0,,

Purge Volume: 500.0

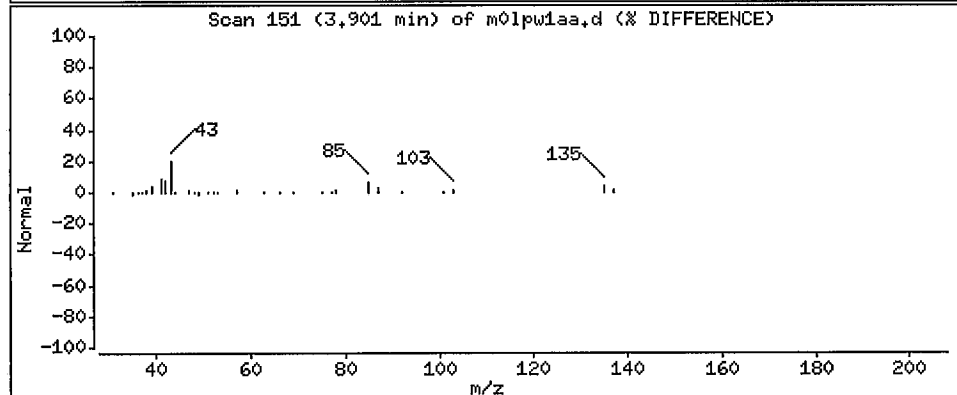
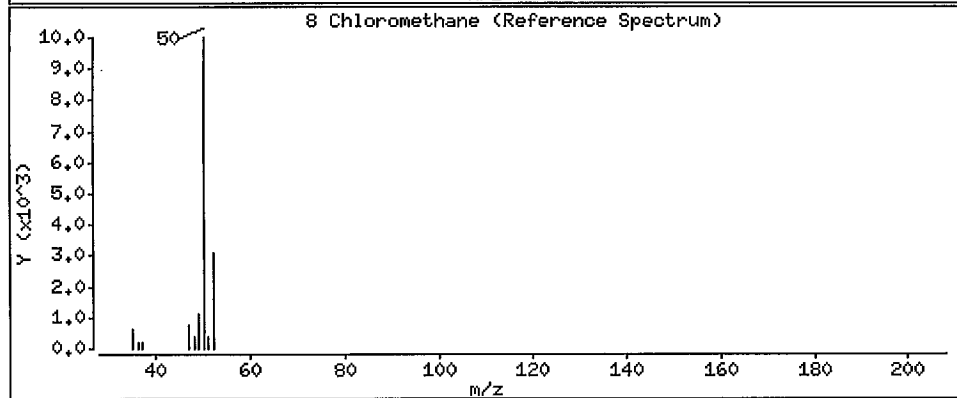
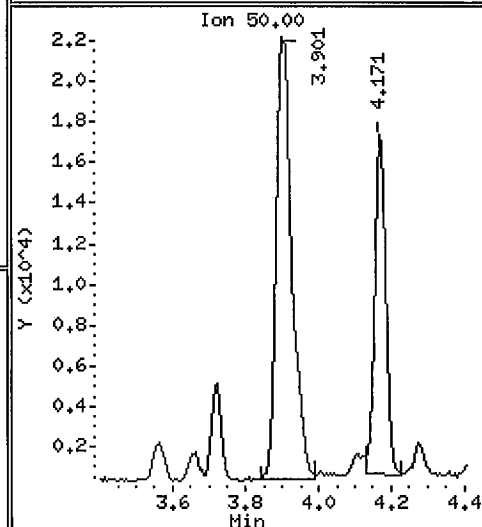
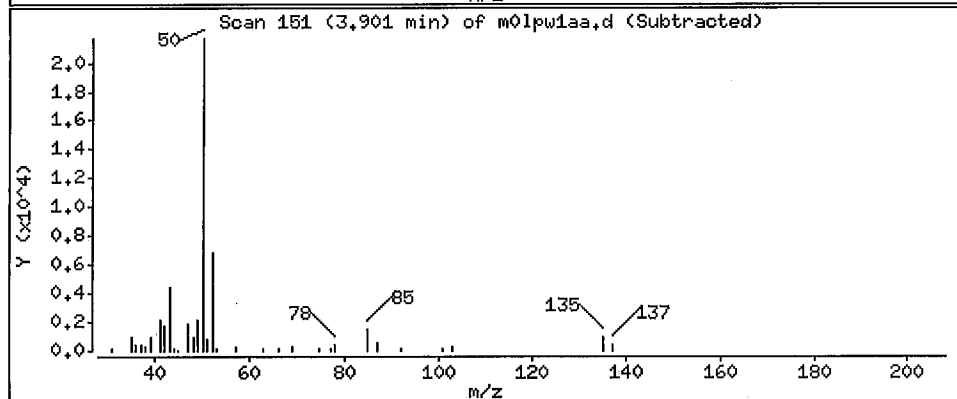
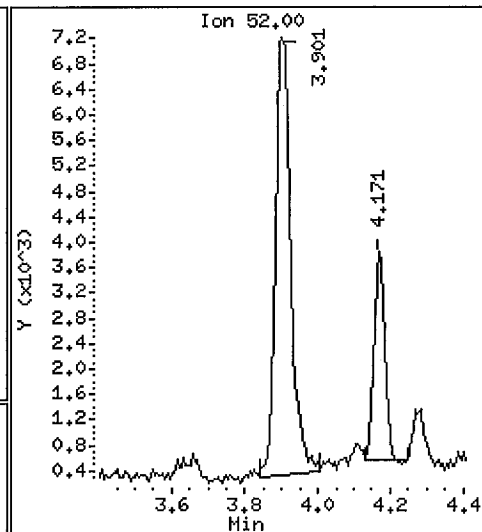
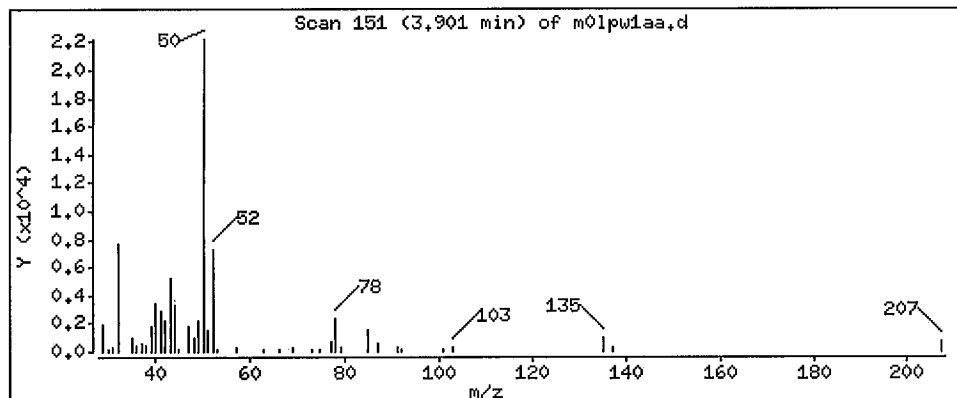
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

8 Chloromethane

Concentration: 0.6091 ppb(v/v)



Data File: /var/chem/gcms/mr.i/R041613.b/m01pw1aa.d

Date: 16-APR-2013 18:25

Client ID: INDOOR DUP

Instrument: mr.i

Sample Info: ,,,

Purge Volume: 500.0

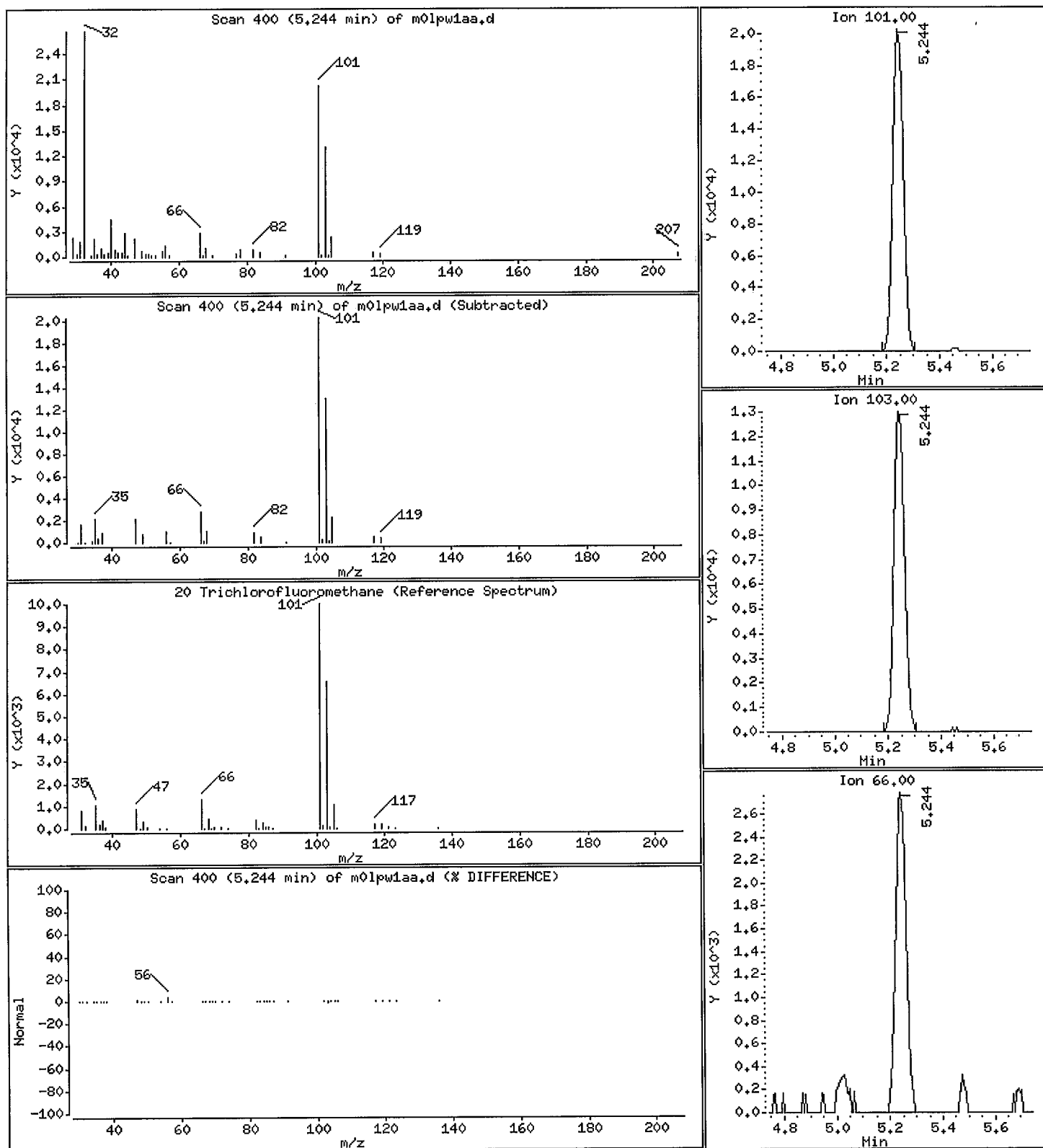
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

20 Trichlorofluoromethane

Concentration: 0.2104 ppb(v/v)



Data File: /var/chem/gcms/mr.i/R041613.b/m01pw1aa.d

Date : 16-APR-2013 18:25

Client ID: INDOOR DUP

Instrument: mr.i

Sample Info: ,,0,,

Purge Volume: 500.0

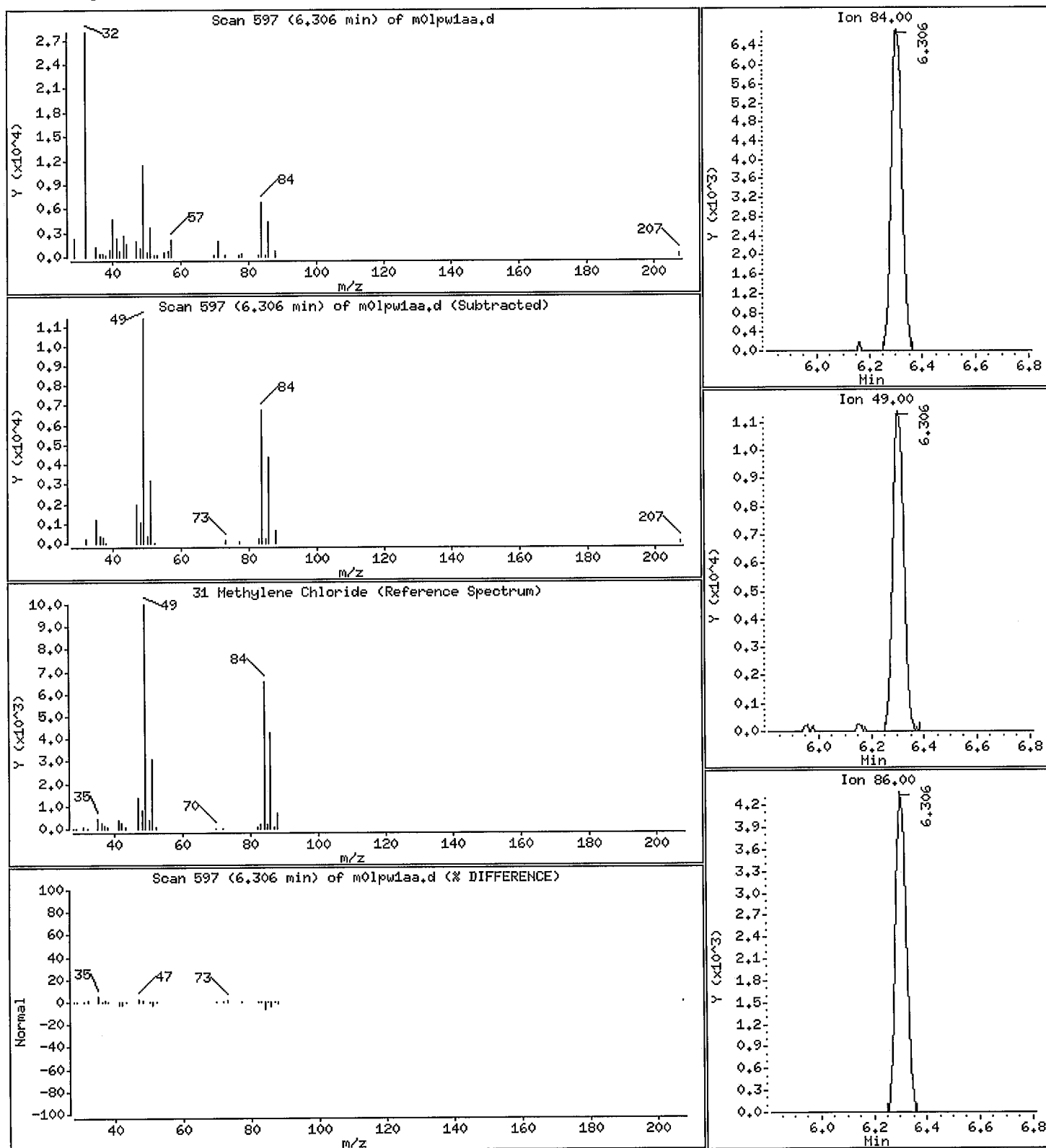
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

Concentration: 0.2054 ppb(v/v)

31 Methylene Chloride



Data File: /var/chem/gcms/mr.i/R041613.b/m01pw1aa.d

Date : 16-APR-2013 18:25

Client ID: INDOOR DUP

Instrument: mr.i

Sample Info: ,,,0,,

Purge Volume: 500.0

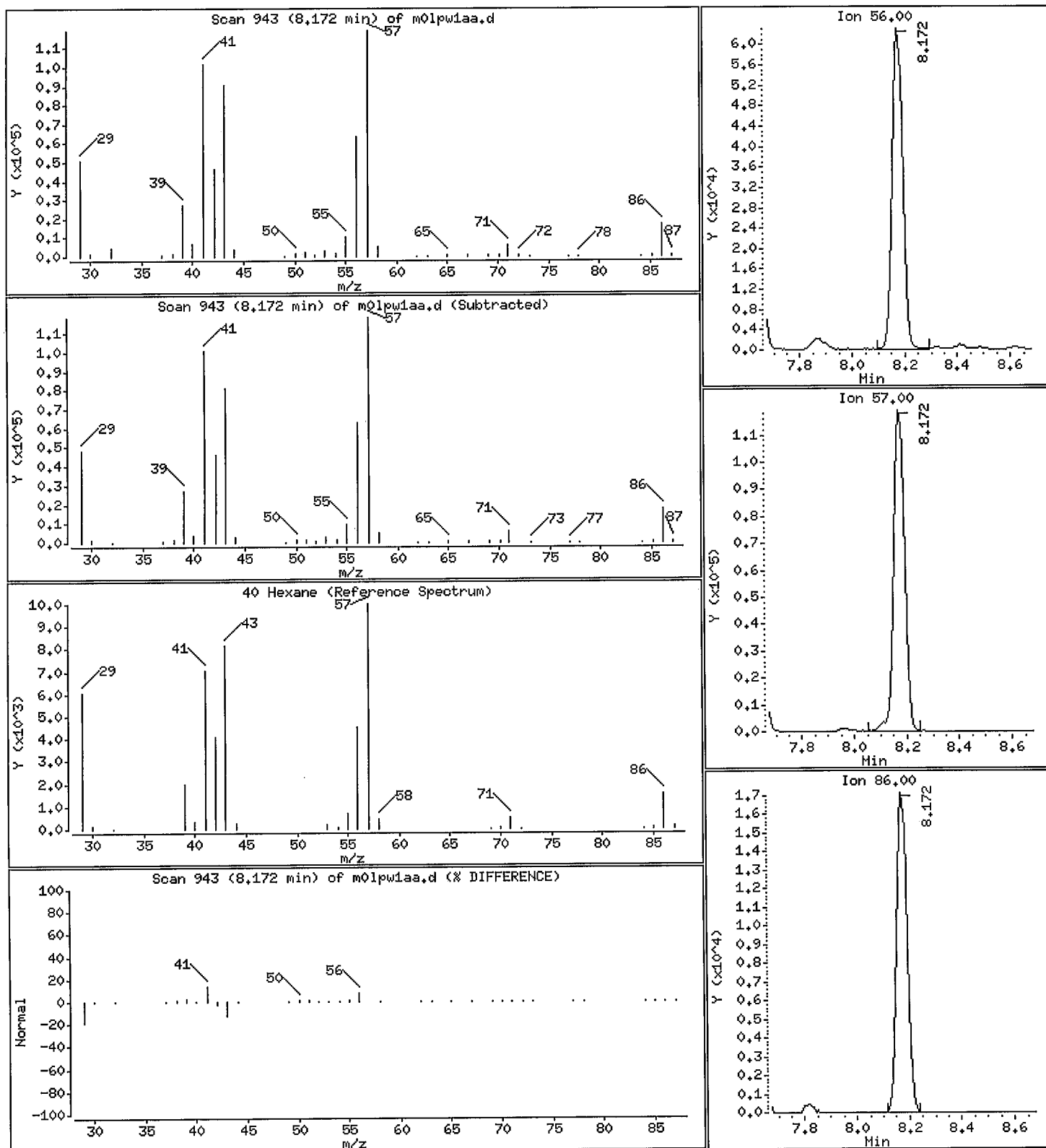
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

40 Hexane

Concentration: 1.999 ppb(v/v)



Data File: /var/chem/gcms/mr.i/R041613.b/m01pw1aa.d

Date : 16-APR-2013 18:25

Client ID: INDOOR DUP

Instrument: mr.i

Sample Info: ,,0,,

Purge Volume: 500.0

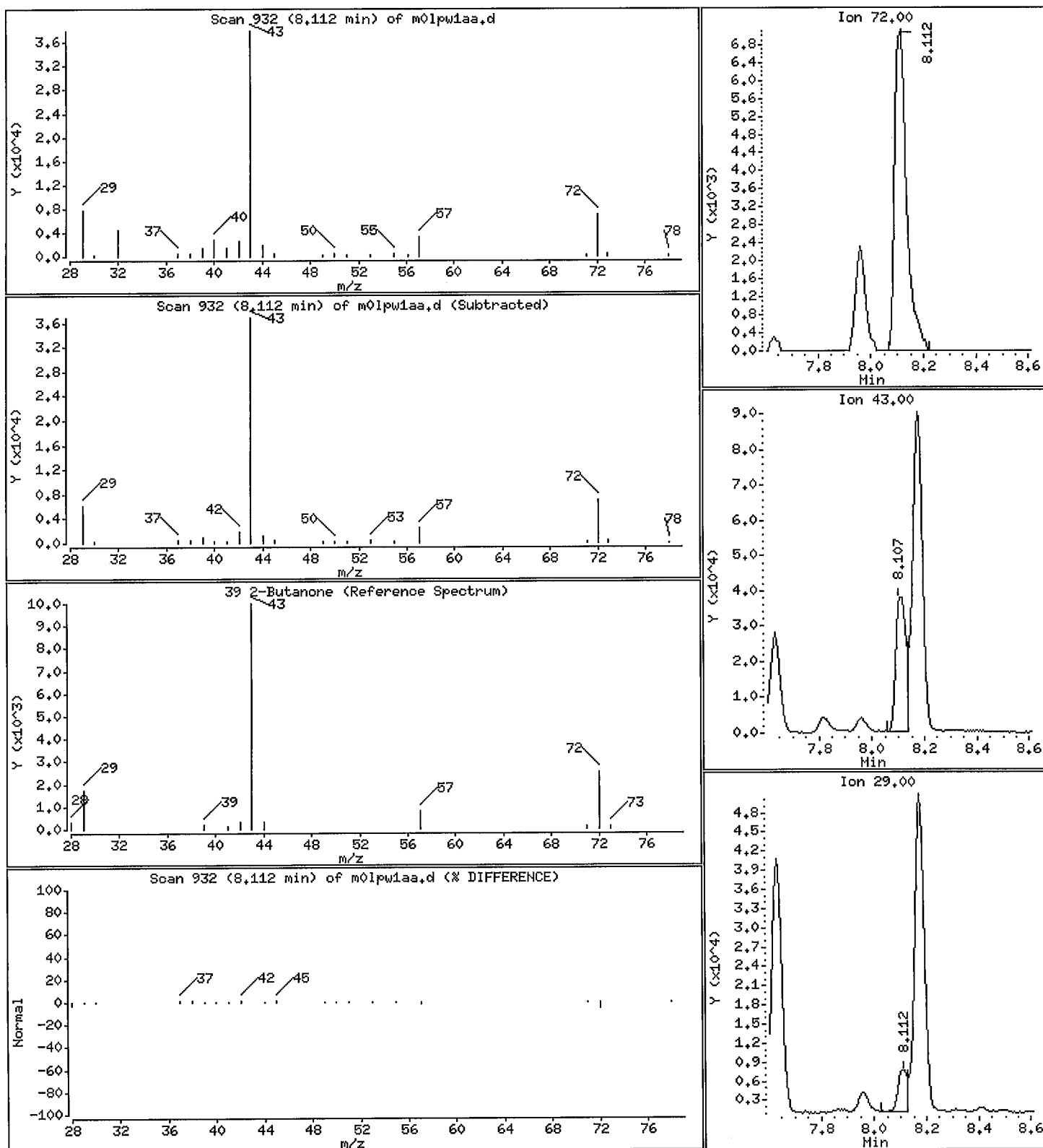
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

39 2-Butanone

Concentration: 0.4326 ppb(v/v)



Data File: /var/chem/gcms/mr.i/R041613.b/m01pw1aa.d

Date: 16-APR-2013 18:25

Client ID: INDOOR DUP

Instrument: mr.i

Sample Info: ,,,

Purge Volume: 500.0

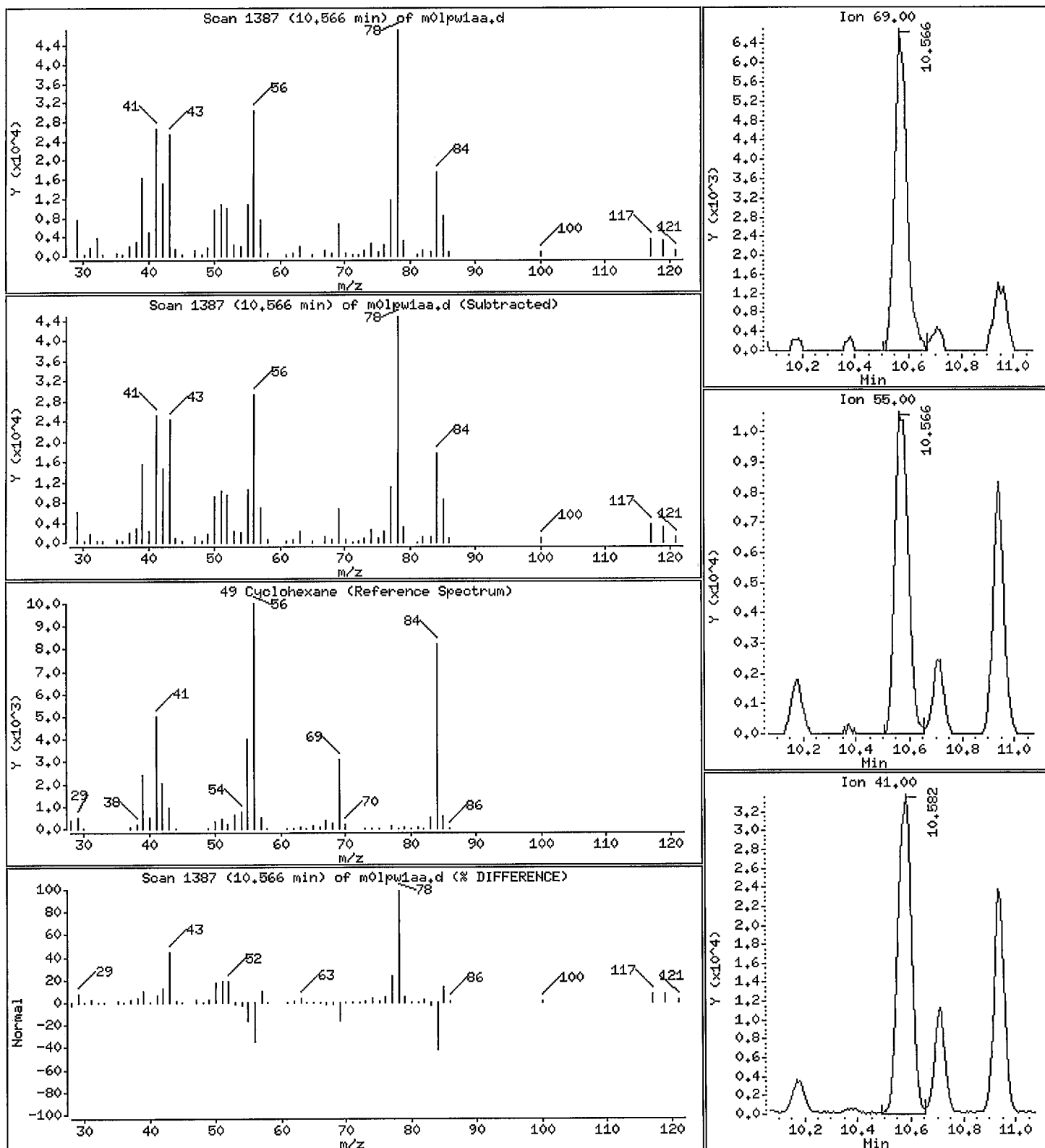
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

49 Cyclohexane

Concentration: 0.4156 ppb(v/v)



Data File: /var/chem/gcms/mr.i/R041613.b/m01pw1aa.d

Date: 16-APR-2013 18:25

Client ID: INDOOR DUP

Instrument: mr.i

Sample Info: ,,,

Purge Volume: 500.0

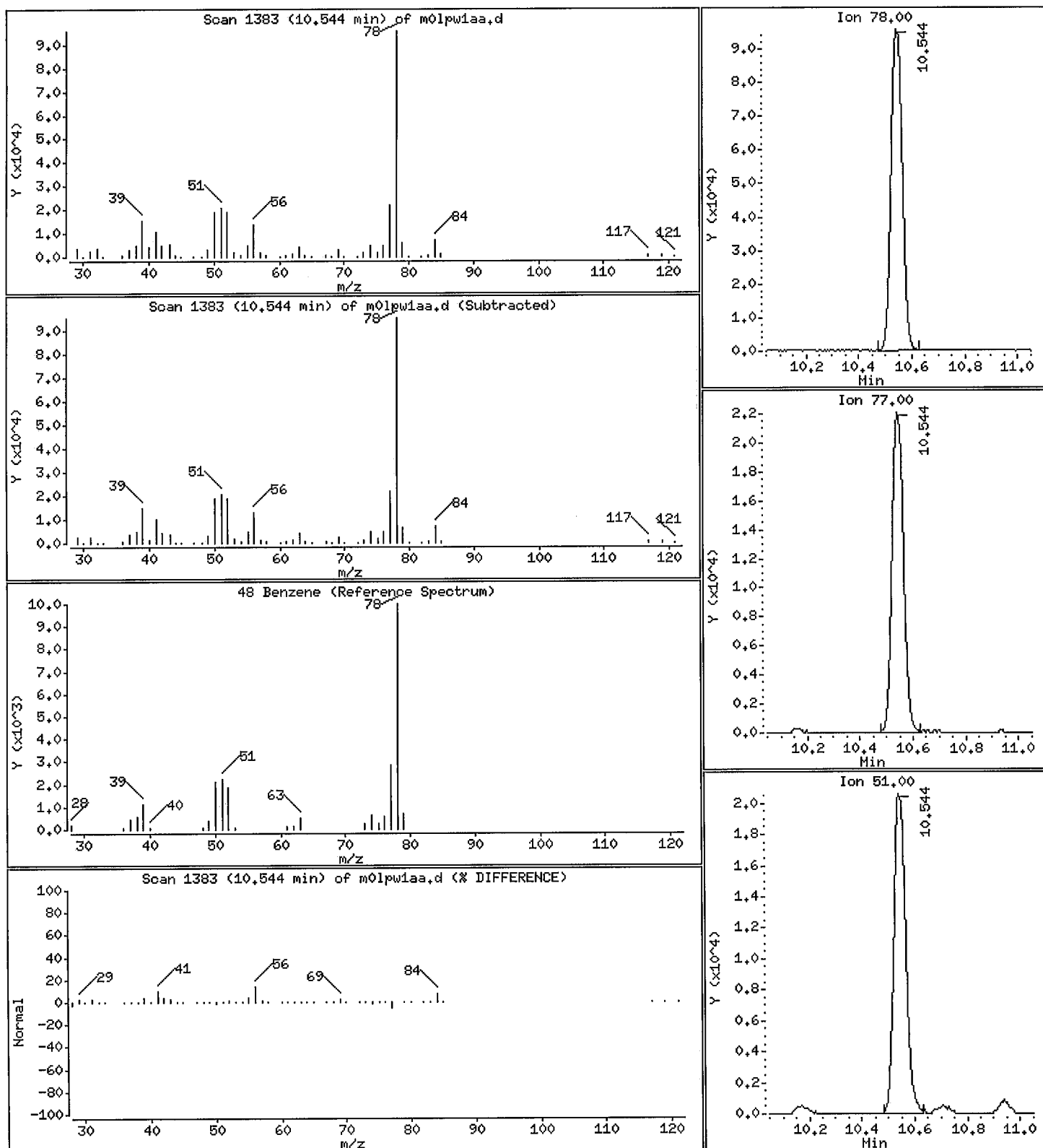
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

48 Benzene

Concentration: 0.8330 ppb(v/v)



Data File: /var/chem/gcms/mr.i/R041613.b/m01pw1aa.d

Date : 16-APR-2013 18:25

Client ID: INDOOR DUP

Instrument: mr.i

Sample Info: ,,,

Purge Volume: 500.0

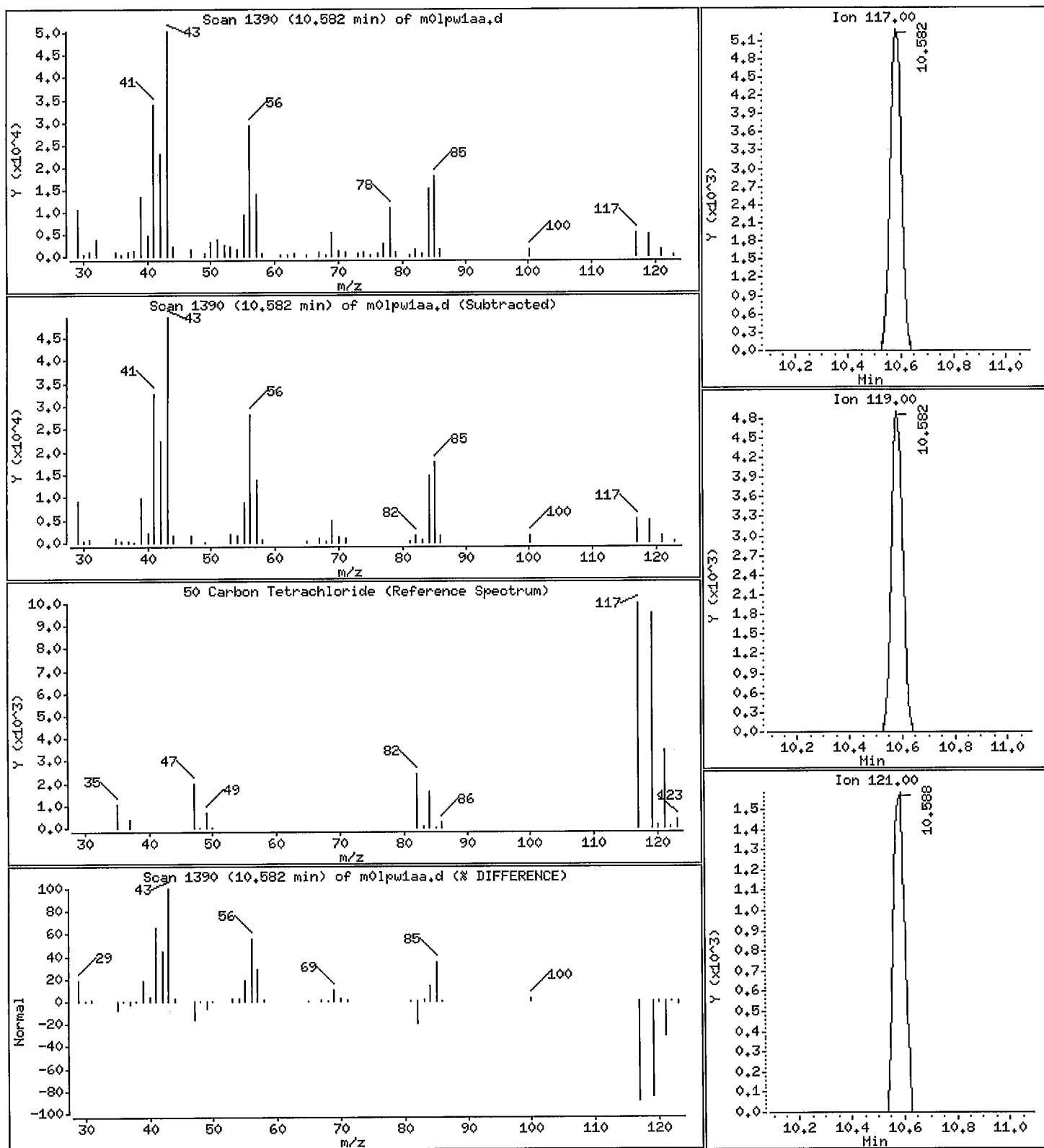
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

50 Carbon Tetrachloride

Concentration: 0.08976 ppb(v/v)



Data File: /var/chem/gcms/mr.i/R041613.b/m01pw1aa.d

Date : 16-APR-2013 18:25

Client ID: INDOOR DUP

Instrument: mr.i

Sample Info: ,,0,,

Purge Volume: 500.0

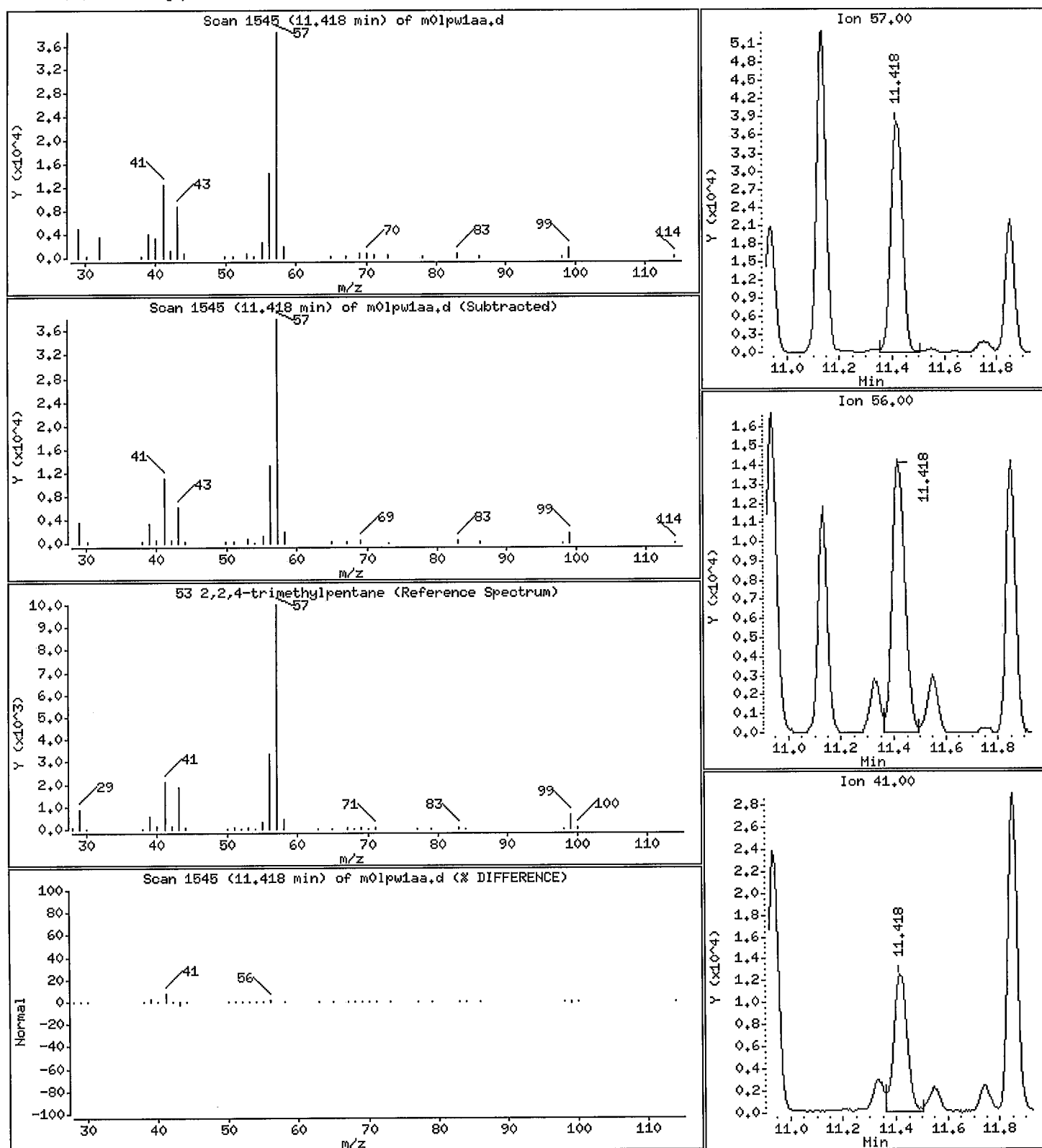
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

53 2,2,4-trimethylpentane

Concentration: 0.2187 ppb(v/v)



Data File: /var/chem/gcms/mr.i/R041613.b/m01pw1aa.d

Date: 16-APR-2013 18:25

Client ID: INDOOR DUP

Instrument: mr.i

Sample Info: ,,,

Purge Volume: 500.0

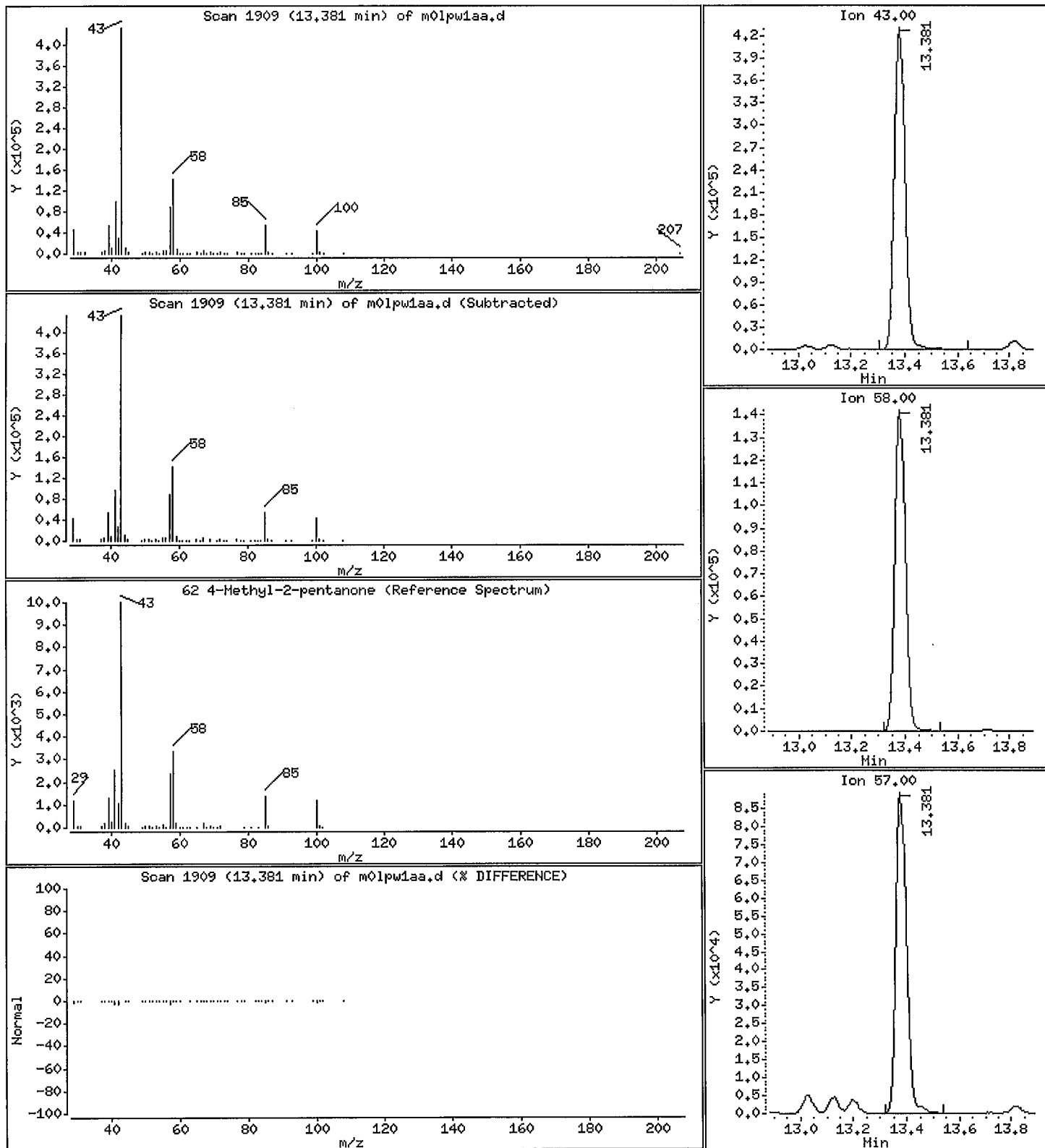
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

62 4-Methyl-2-pentanone

Concentration: 5.077 ppb(v/v)



Data File: /var/chem/gcms/mr.i/R041613.b/m01pw1aa.d

Date: 16-APR-2013 18:25

Client ID: INDOOR DUP

Instrument: mr.i

Sample Info: ,,,0,,

Purge Volume: 500.0

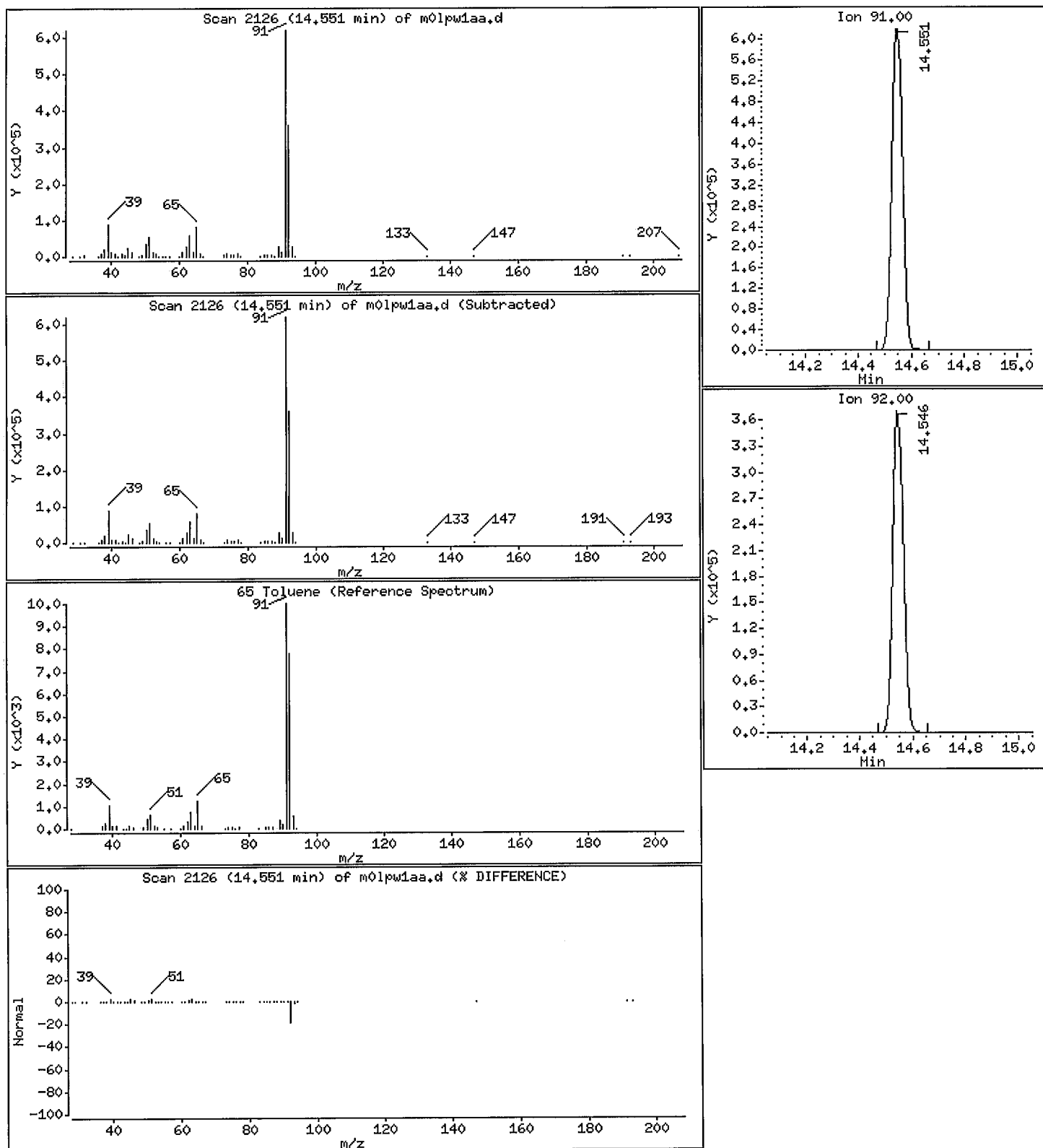
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

Concentration: 3.824 ppb(v/v)

65 Toluene



Data File: /var/chem/gcms/mr.i/R041613.b/m01pw1aa.d

Date: 16-APR-2013 18:25

Client ID: INDOOR DUP

Instrument: mr.i

Sample Info: ,,,

Purge Volume: 500.0

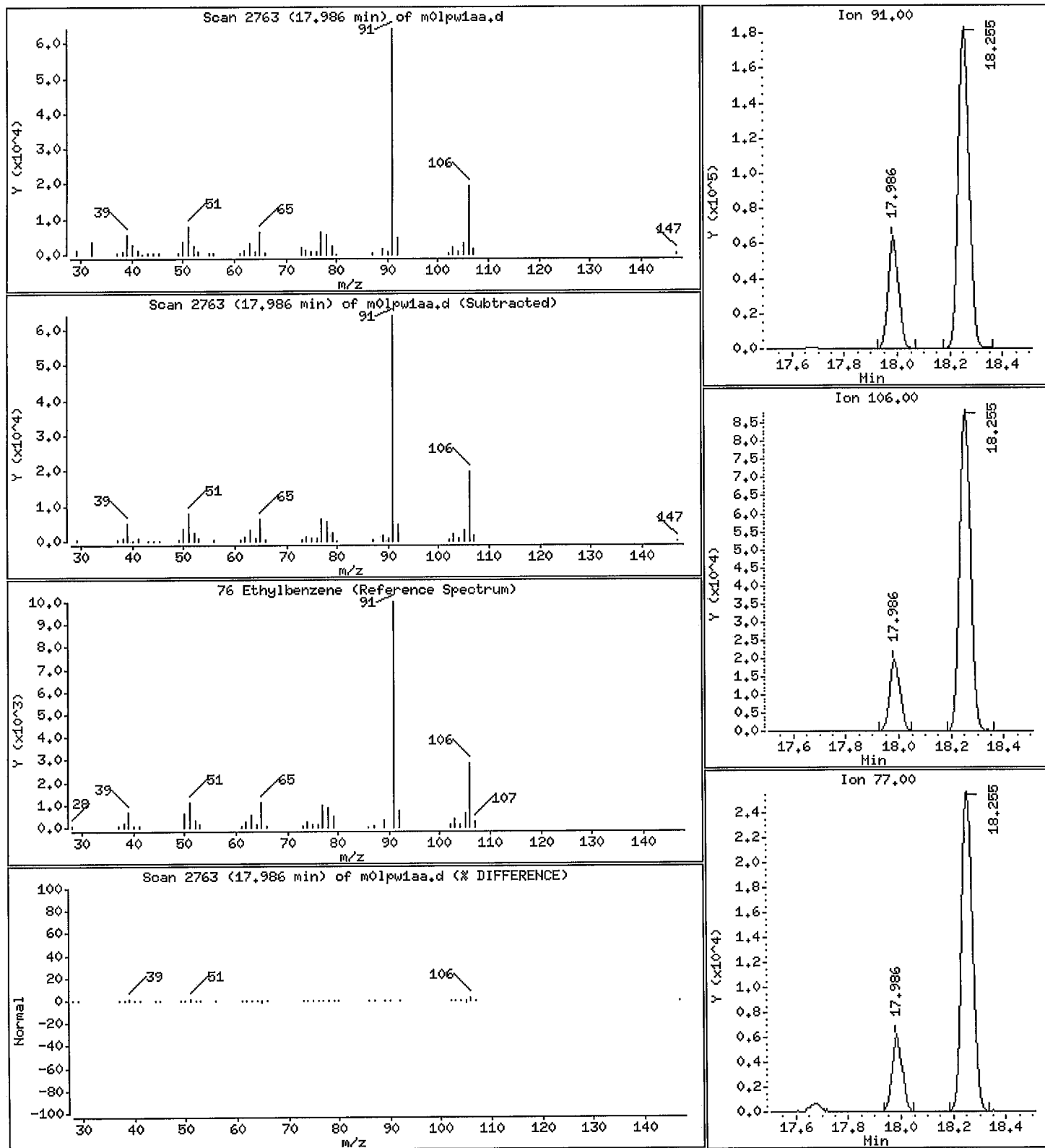
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

76 Ethylbenzene

Concentration: 0.3091 ppb(v/v)



Data File: /var/chem/gcms/mr.i/R041613.b/m01pw1aa.d

Date : 16-APR-2013 18:25

Client ID: INDOOR DUP

Instrument: mr.i

Sample Info: ,,0,,

Purge Volume: 500.0

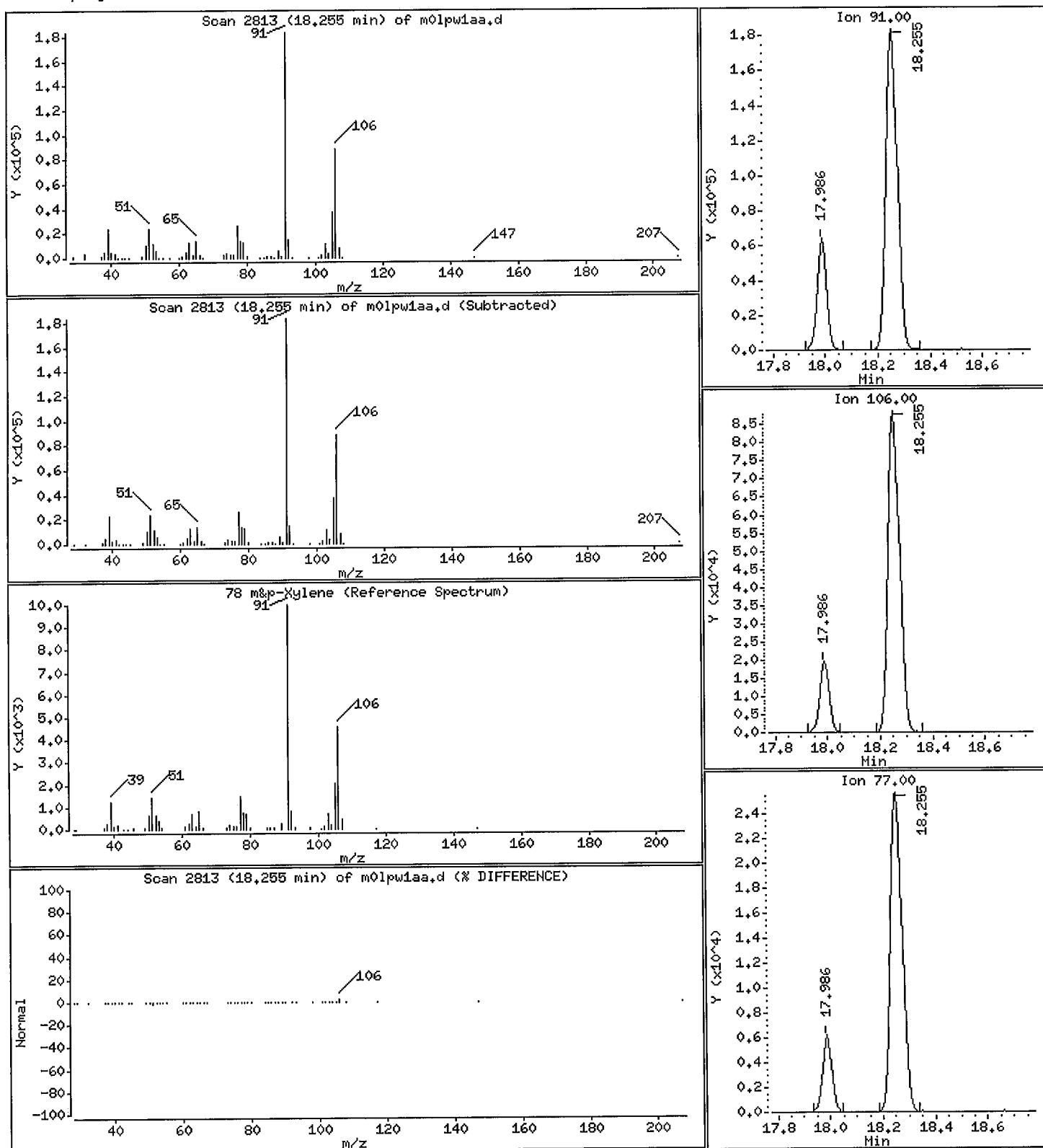
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

Concentration: 1.354 ppb(v/v)

78 m&p-Xylene



Data File: /var/chem/gcms/mr.i/R041613.b/m01pw1aa.d

Date: 16-APR-2013 18:25

Client ID: INDOOR DUP

Instrument: mr.i

Sample Info: ,,,

Purge Volume: 500.0

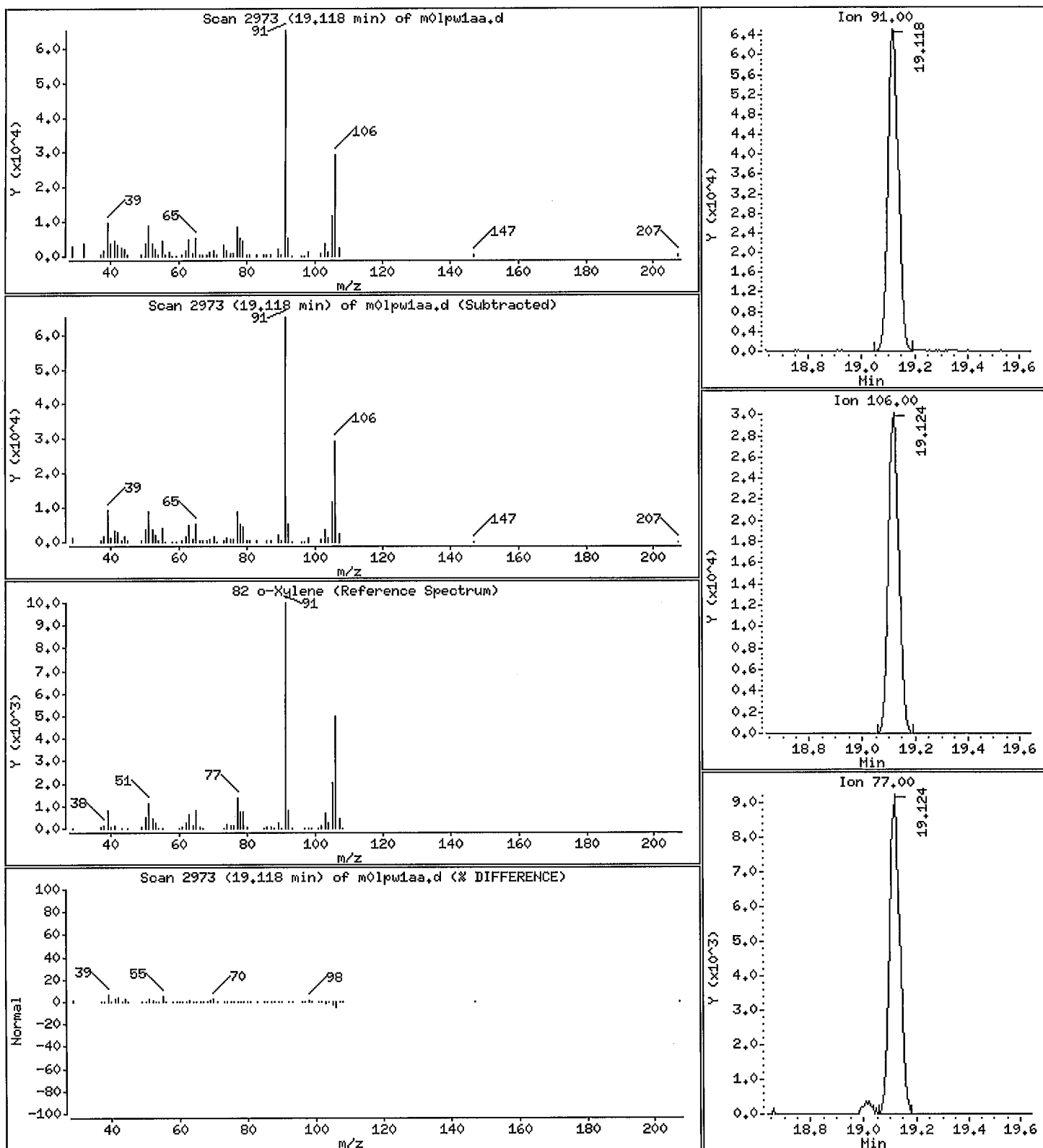
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

82 o-Xylene

Concentration: 0.4112 ppb(v/v)



Data File: /var/chem/gcms/mr.i/R041613,b/m01pw1aa.d

Date : 16-APR-2013 18:25

Client ID: INDOOR DUP

Instrument: mr.i

Sample Info: ,,0,,

Purge Volume: 500.0

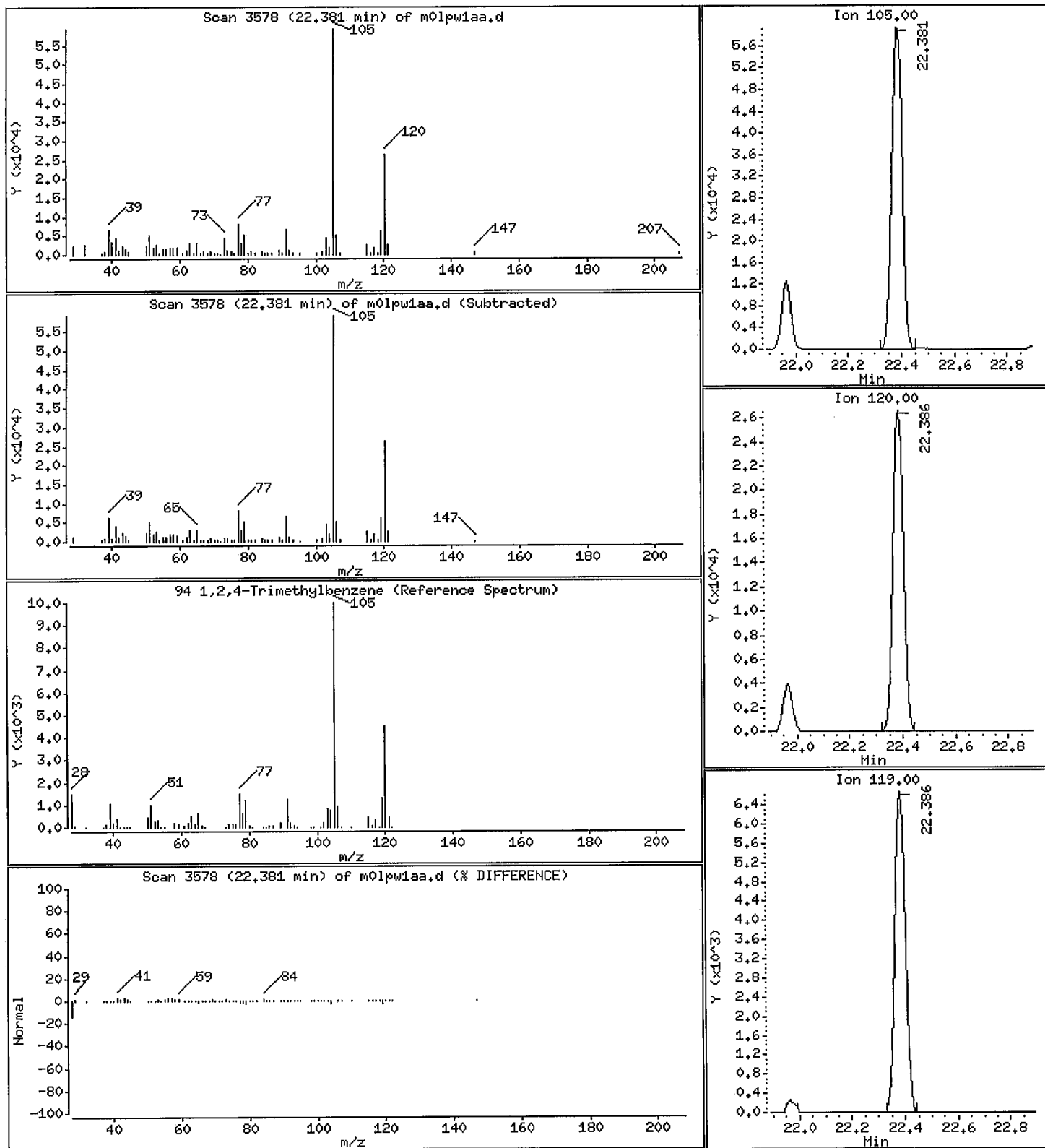
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

94 1,2,4-Trimethylbenzene

Concentration: 0.2907 ppb(v/v)



Data File: /var/chem/gcms/mr.i/R041613.b/m01pw1aa.d

Date : 16-APR-2013 18:25

Client ID: INDOOR DUP

Instrument: mr.i

Sample Info: ,,,

Purge Volume: 500.0

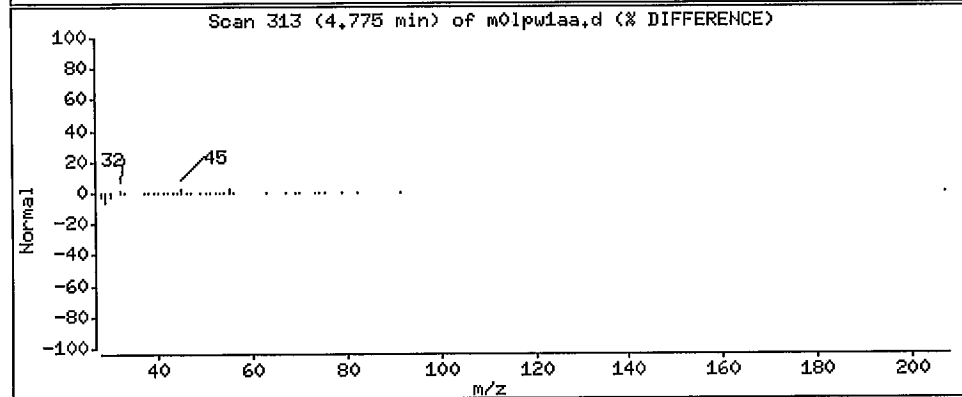
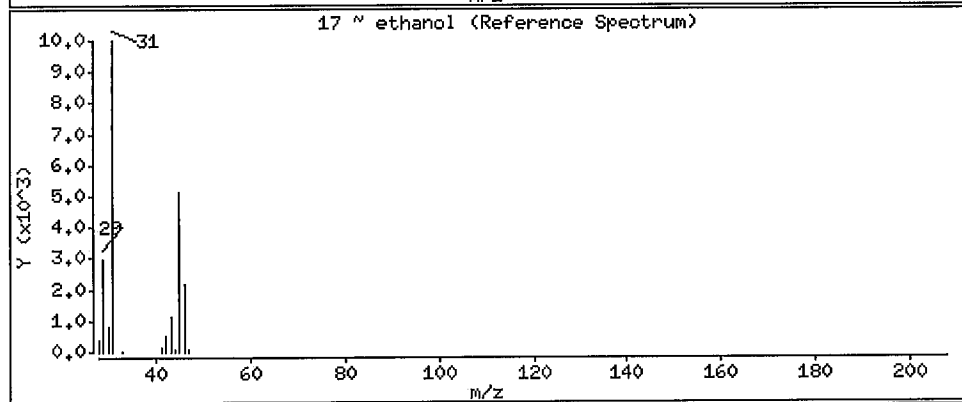
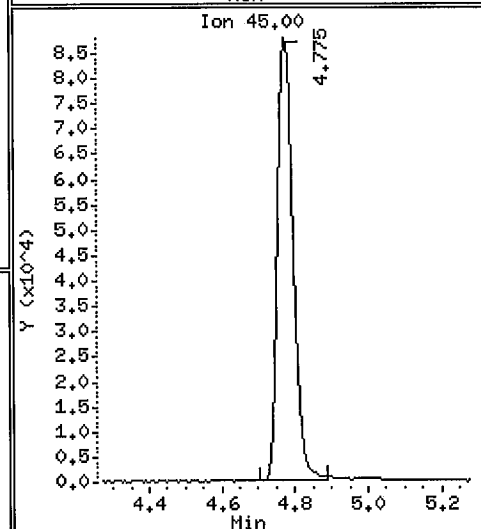
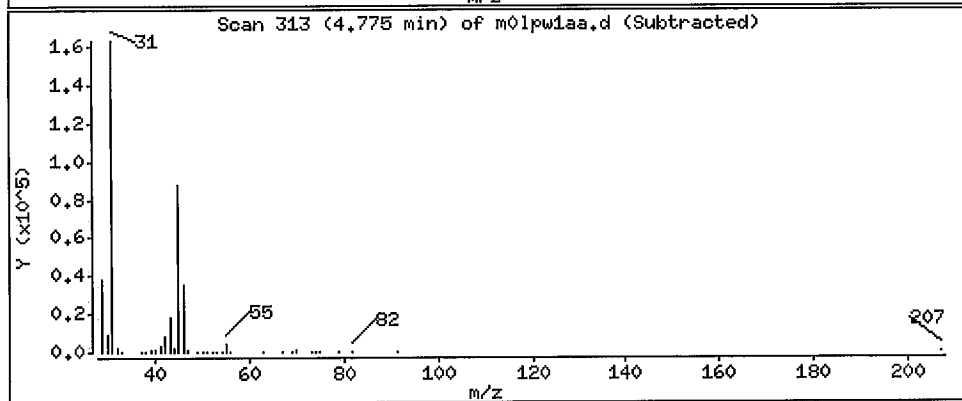
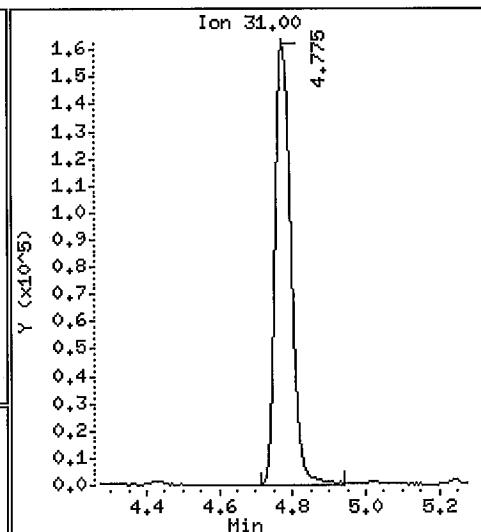
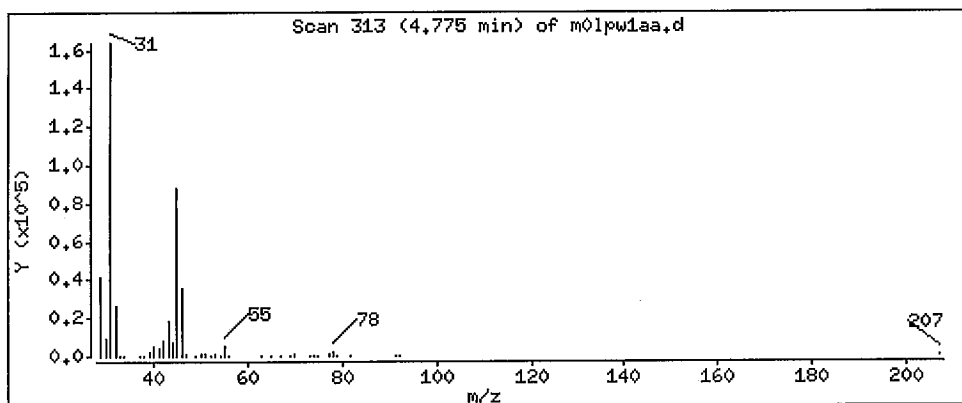
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

17 ~ ethanol

Concentration: 13.79 ppb(v/v)



New York State D.E.C.

Client Sample ID: OUTDOOR

GC/MS Volatiles

Lot-Sample # H3D160408 - 005 Work Order # M0LP11AA Matrix.....: AIR
 Date Sampled...: 04/12/2013 Date Received...: 04/15/2013
 Prep Date.....: 04/16/2013 Analysis Date...: 04/16/2013
 Prep Batch #.....: 3106043
 Dilution Factor.: 1 Method.....: TO-15

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
1,1,1-Trichloroethane	ND	0.080	ND	0.44
1,1,2,2-Tetrachloroethane	ND	0.080	ND	0.55
1,1,2-Trichlorotrifluoroethane	ND	0.080	ND	0.61
1,1,2-Trichloroethane	ND	0.080	ND	0.44
1,1-Dichloroethane	ND	0.080	ND	0.32
1,1-Dichloroethene	ND	0.080	ND	0.32
1,2,4-Trichlorobenzene	ND	0.080	ND	0.59
1,2,4-Trimethylbenzene	ND	0.080	ND	0.39
1,2-Dibromoethane (EDB)	ND	0.080	ND	0.61
1,2-Dichlorobenzene	ND	0.080	ND	0.48
1,2-Dichloroethane	ND	0.080	ND	0.32
1,2-Dichloropropane	ND	0.080	ND	0.37
1,3,5-Trimethylbenzene	ND	0.080	ND	0.39
1,4-Dichlorobenzene	ND	0.080	ND	0.48
1,4-Dioxane	0.74	0.20	2.7	0.72
2-Butanone (MEK)	ND	0.32	ND	0.94
1,3-Dichlorobenzene	ND	0.080	ND	0.48
2,2,4-Trimethylpentane	ND	0.20	ND	0.93
Benzene	12	0.080	37	0.26
Benzyl chloride	ND	0.16	ND	0.83
Bromodichloromethane	ND	0.080	ND	0.54
Bromoform	ND	0.080	ND	0.83
Bromomethane	ND	0.080	ND	0.31
Carbon tetrachloride	0.090	0.040	0.56	0.25
Chlorobenzene	ND	0.080	ND	0.37
Chloroethane	ND	0.080	ND	0.21
Chloroform	ND	0.080	ND	0.39
Cyclohexane	ND	0.20	ND	0.69
Chloromethane	0.91	0.20	1.9	0.41
cis-1,2-Dichloroethene	ND	0.080	ND	0.32
cis-1,3-Dichloropropene	ND	0.080	ND	0.36
Dibromochloromethane	ND	0.080	ND	0.68
Dichlorodifluoromethane	0.26	0.080	1.3	0.40
Ethanol	8.5	0.80	16	1.5
Ethylbenzene	ND	0.080	ND	0.35
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.080	ND	0.56
n-Hexane	ND	0.20	ND	0.70
Hexachlorobutadiene	ND	0.080	ND	0.85

New York State D.E.C.
Client Sample ID: OUTDOOR
GC/MS Volatiles

Lot-Sample # H3D160408 - 005 Work Order # M0LP11AA Matrix.....: AIR

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
4-Methyl-2-pentanone (MIBK)	ND	0.20	ND	0.82
Methyl tert-butyl ether	ND	0.16	ND	0.58
Methylene chloride	ND	0.20	ND	0.69
Styrene	ND	0.080	ND	0.34
tert-Butyl alcohol	ND	0.32	ND	0.97
Tetrachloroethene	0.38 est	0.080	2.6 est	0.54
Toluene	0.57	0.080	2.2	0.30
m-Xylene & p-Xylene	ND	0.080	ND	0.35
o-Xylene	ND	0.080	ND	0.35
trans-1,2-Dichloroethene	ND	0.080	ND	0.32
trans-1,3-Dichloropropene	ND	0.080	ND	0.36
Trichloroethene	ND	0.040	ND	0.21
Trichlorofluoromethane	0.20	0.080	1.1	0.45
Vinyl chloride	ND	0.080	ND	0.20

SURROGATE	PERCENT RECOVERY	LABORATORY CONTROL LIMITS (%)
4-Bromofluorobenzene	98	60 - 140

Qualifiers

est Estimated value. See narrative for details.

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)*(Molecular Weight/24.45)

The 'Reporting Limit' in ug/m3 is calculated using the following equation: (Reporting Limit(before rounding) * Dilution Factor) * (Molecular Weight/24.45)

Data File: /var/chem/gcms/mr.i/R041613.b/m0lp11aa.d
 Report Date: 17-Apr-2013 11:14

TestAmerica Knoxville

Modified Method TO-14/TO-15

Data file : /var/chem/gcms/mr.i/R041613.b/m0lp11aa.d
 Lab Smp Id: M0LP11AA Client Smp ID: OUTDOOR
 Inj Date : 16-APR-2013 20:21 /
 Operator : 403648 Inst ID: mr.i
 Smp Info : ,,0,,
 Misc Info : R041613,TO15,nysdec.sub
 Comment :
 Method : /var/chem/gcms/mr.i/R041613.b/TO15.m
 Meth Date : 16-Apr-2013 19:25 barlozha Quant Type: ISTD
 Cal Date : 20-FEB-2013 20:14 Cal File: ricb205.d
 Als bottle: 3
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: nysdec.sub
 Target Version: 3.50

Concentration Formula: Amt * DF * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Default Calibration Volume
Vo	500.00000	Default Sample Volume

Cpnd Variable Local Compound Variable

Compounds	QUANT	SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
								ON-COLUMN (ppb (v/v))	FINAL (ppb (v/v))
* 1 Bromochloromethane	128		8.873	8.873	(1.000)	250402	4.00000	4.000	
* 2 1,4-Difluorobenzene	114		11.138	11.138	(1.000)	1285634	4.00000	4.000	
* 3 Chlorobenzene-d5	117		17.420	17.436	(1.000)	1078676	4.00000	4.000	
\$ 4 4-Bromofluorobenzene	95		20.159	20.170	(1.157)	742968	3.93411	3.934	
7 Dichlorodifluoromethane	85		3.723	3.723	(0.420)	69003	0.26445	0.2644	
8 Chloromethane	52		3.901	3.907	(0.440)	28870	0.90515	0.9052	
20 Trichlorofluoromethane	101		5.244	5.244	(0.591)	49477	0.19517	0.1952	
48 Benzene	78		10.550	10.550	(0.947)	3766006	11.5726	11.57	
50 Carbon Tetrachloride	117		10.588	10.588	(0.951)	15074	0.08967	0.08967	
59 1,4-dioxane	88		12.232	12.222	(1.098)	33954	0.73836	0.7384	
65 Toluene	91		14.551	14.551	(0.835)	256699	0.57356	0.5736	
73 Tetrachloroethene	129		16.223	16.180	(0.931)	59684	0.37652	0.3765 est	
17 ~ ethanol	31		4.785	4.775	(0.539)	291737	8.49497	8.495	

Data File: /var/chem/gcms/mr.i/R041613.b/m0lp11aa.d
 Report Date: 17-Apr-2013 11:14

TestAmerica Knoxville

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: mr.i
 Lab File ID: m0lp11aa.d
 Lab Smp Id: M0LP11AA
 Analysis Type: OTHER
 Quant Type: ISTD
 Operator: 403648

Calibration Date: 16-APR-2013
 Calibration Time: 10:51
 Client Smp ID: OUTDOOR
 Level: LOW
 Sample Type: AIR

Method File: /var/chem/gcms/mr.i/R041613.b/TO15.m
 Misc Info: R041613,TO15,nysdec.sub

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
1 Bromochloromethan	294767	175386	414148	250402	-15.05
2 1,4-Difluorobenze	1529291	909928	2148654	1285634	-15.93
3 Chlorobenzene-d5	1257555	748245	1766865	1078676	-14.22

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
1 Bromochloromethan	8.87	8.54	9.20	8.87	0.00
2 1,4-Difluorobenze	11.14	10.81	11.47	11.14	0.00
3 Chlorobenzene-d5	17.44	17.11	17.77	17.42	-0.09

AREA UPPER LIMIT = + 40% of internal standard area.
 AREA LOWER LIMIT = - 40% of internal standard area.
 RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
 RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /var/chem/gcms/mr.i/R041613.b/m0lp11aa.d
 Report Date: 17-Apr-2013 11:14

TestAmerica Knoxville

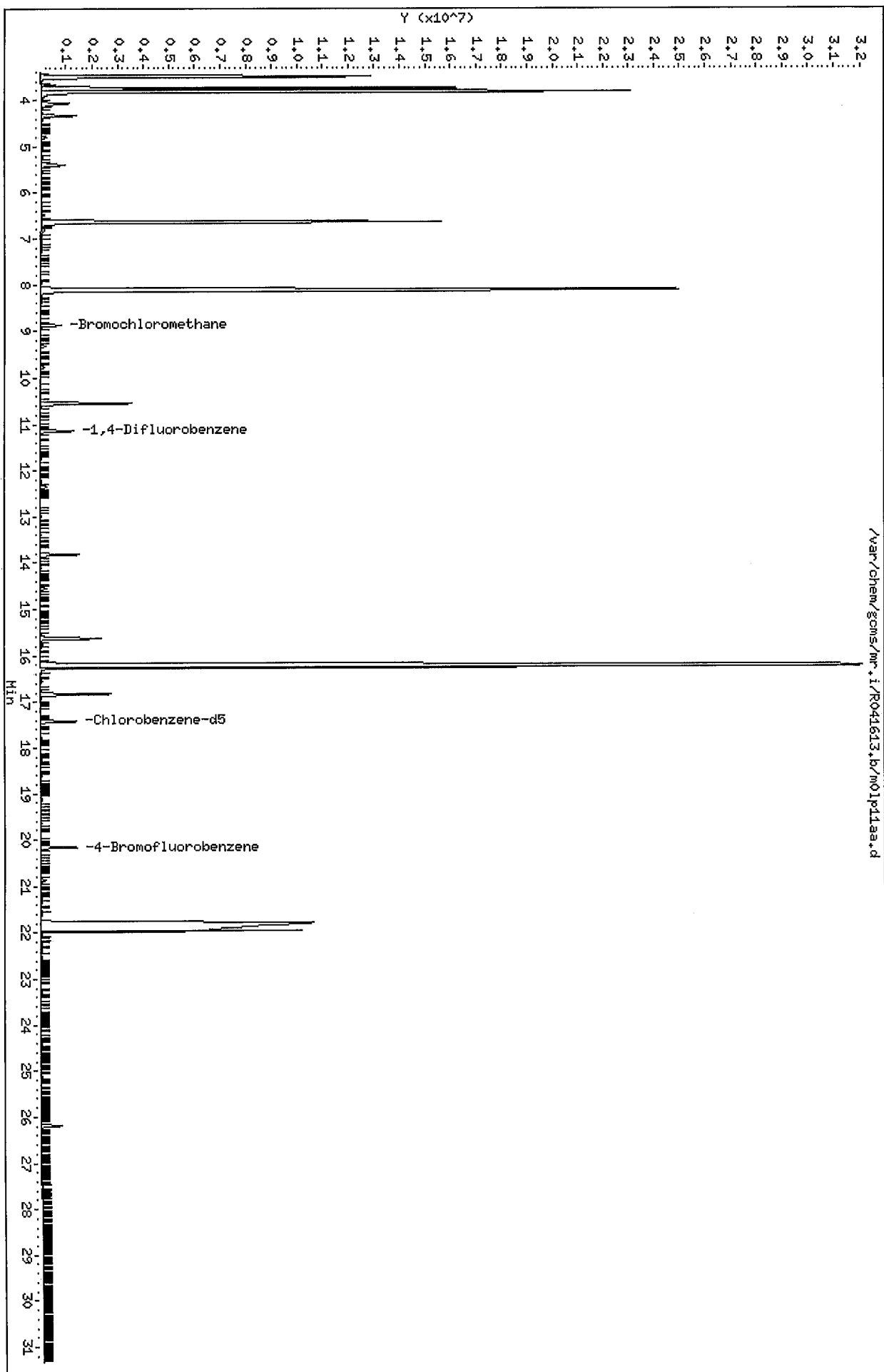
RECOVERY REPORT

Client Name: New York State D.E.C15-APR-2013 00:00 Client SDG: H3D160408
 Sample Matrix: GAS Fraction: OTHER
 Lab Smp Id: M0LP11AA Client Smp ID: OUTDOOR
 Level: LOW Operator: 403648
 Data Type: MS DATA SampleType: SAMPLE
 SpikeList File: allnew.spk Quant Type: ISTD
 Sublist File: nysdec.sub
 Method File: /var/chem/gcms/mr.i/R041613.b/TO15.m
 Misc Info: R041613,TO15,nysdec.sub

SURROGATE COMPOUND	CONC ADDED ppb (v/v)	CONC RECOVERED ppb (v/v)	% RECOVERED	LIMITS
\$ 4 4-Bromofluorobenze	4.000	3.934	98.35	60-140

Data File: /var/chem/gcms/mr.i/R041613.b/m01p11aa.d
Date: 16-APR-2013 20:21
Client ID: OUTD00R
Sample Info: , ,
Purge Volume: 500.0
Column phase: Rtx-5

Instrument: mr.i
Operator: 403648
Column diameter: 0.32



Data File: /var/chem/gcms/mr.i/R041613.b/m01p11aa.d

Date : 16-APR-2013 20:21

Client ID: OUTDOOR

Instrument: mr.i

Sample Info: ,,0,,

Purge Volume: 500.0

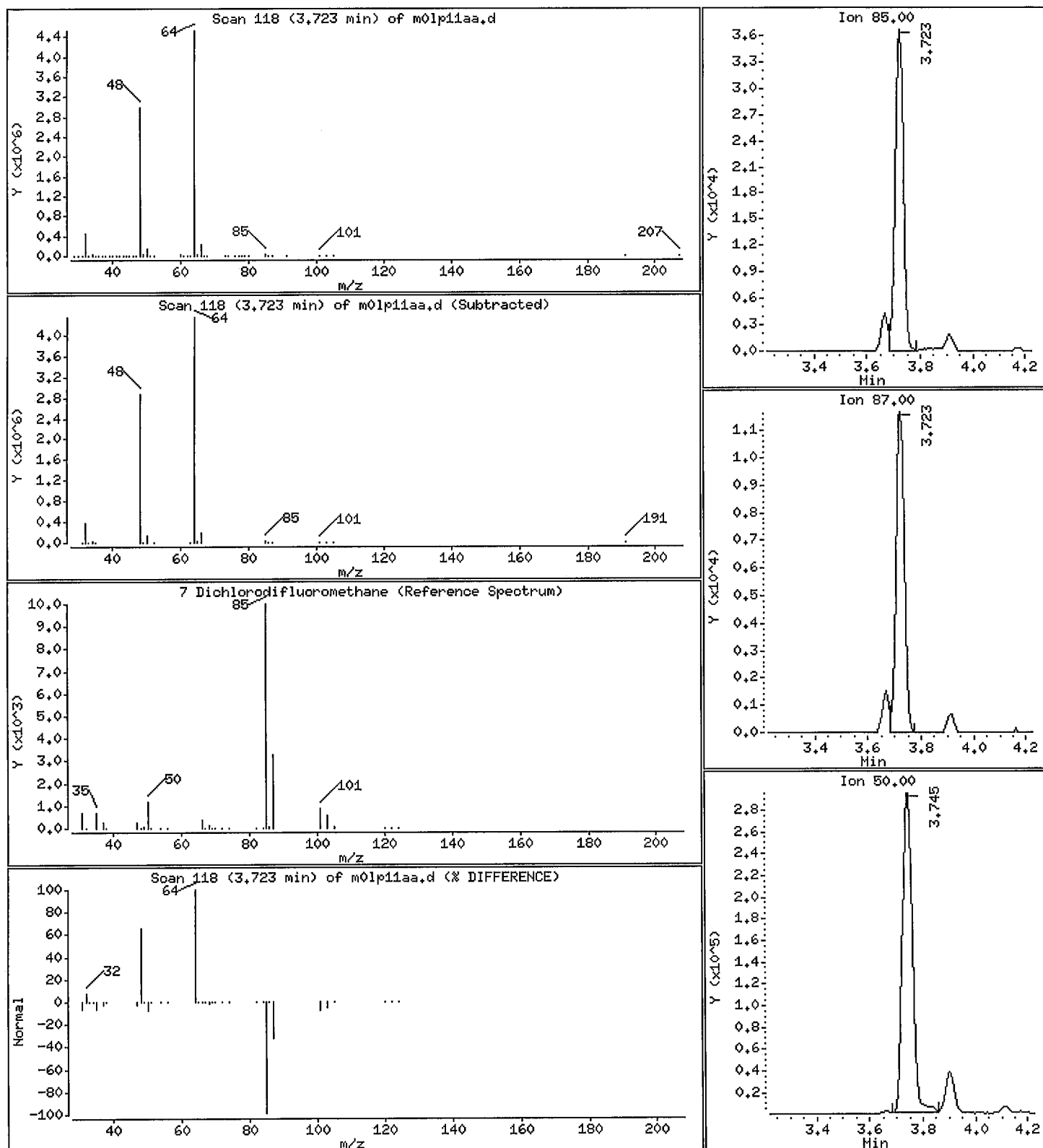
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

7 Dichlorodifluoromethane

Concentration: 0.2644 ppb(v/v)



Data File: /var/chem/gcms/mr.i/R041613.b/m01p11aa.d

Date : 16-APR-2013 20:21

Client ID: OUTDOOR

Instrument: mr.i

Sample Info: ,,0,,

Purge Volume: 500.0

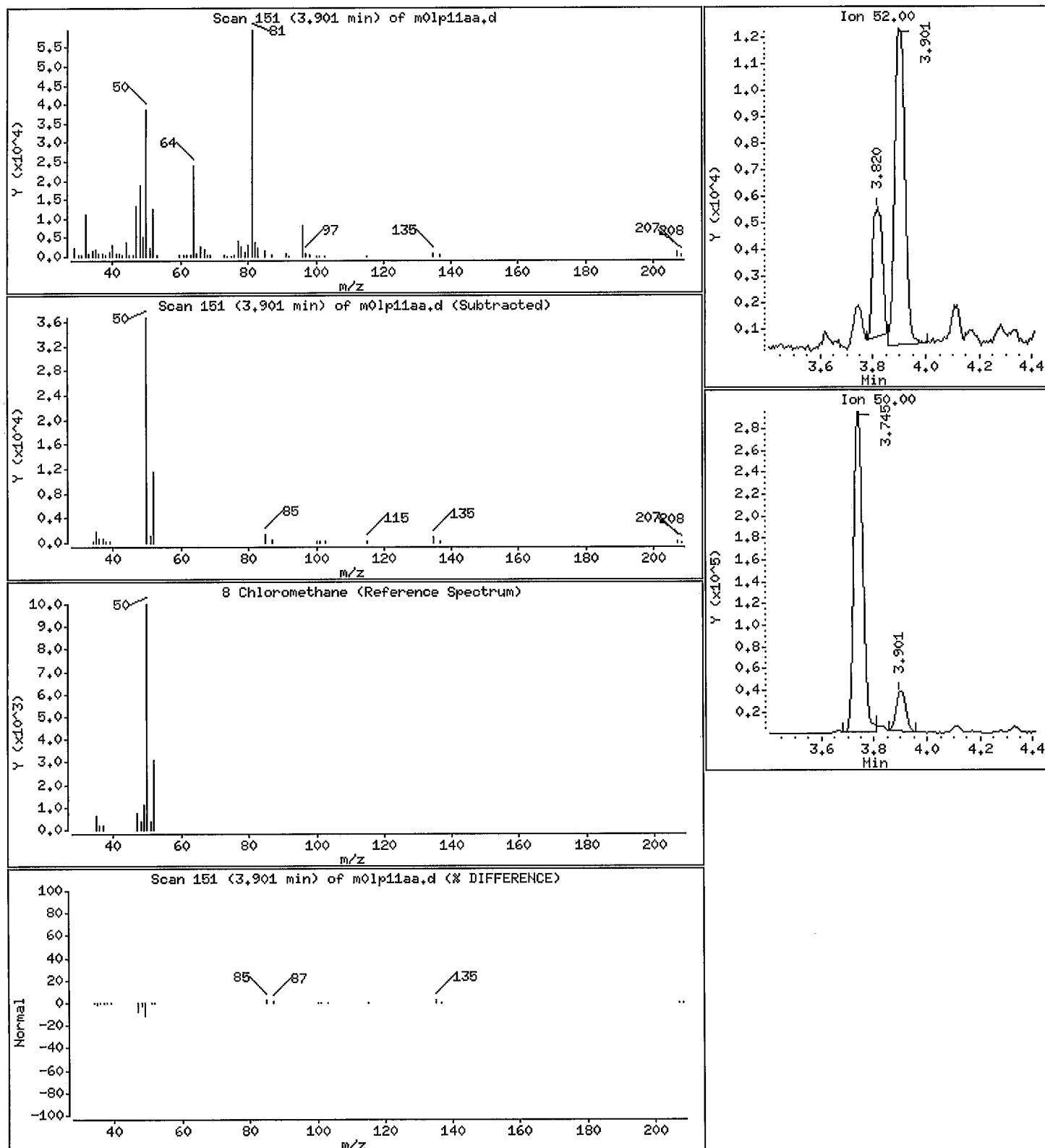
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

8 Chloromethane

Concentration: 0.9052 ppb(v/v)



Data File: /var/chem/gcms/mr.i/R041613.b/m01p11aa.d

Date : 16-APR-2013 20:21

Client ID: OUTDOOR

Instrument: mr.i

Sample Info: ,,,

Purge Volume: 500.0

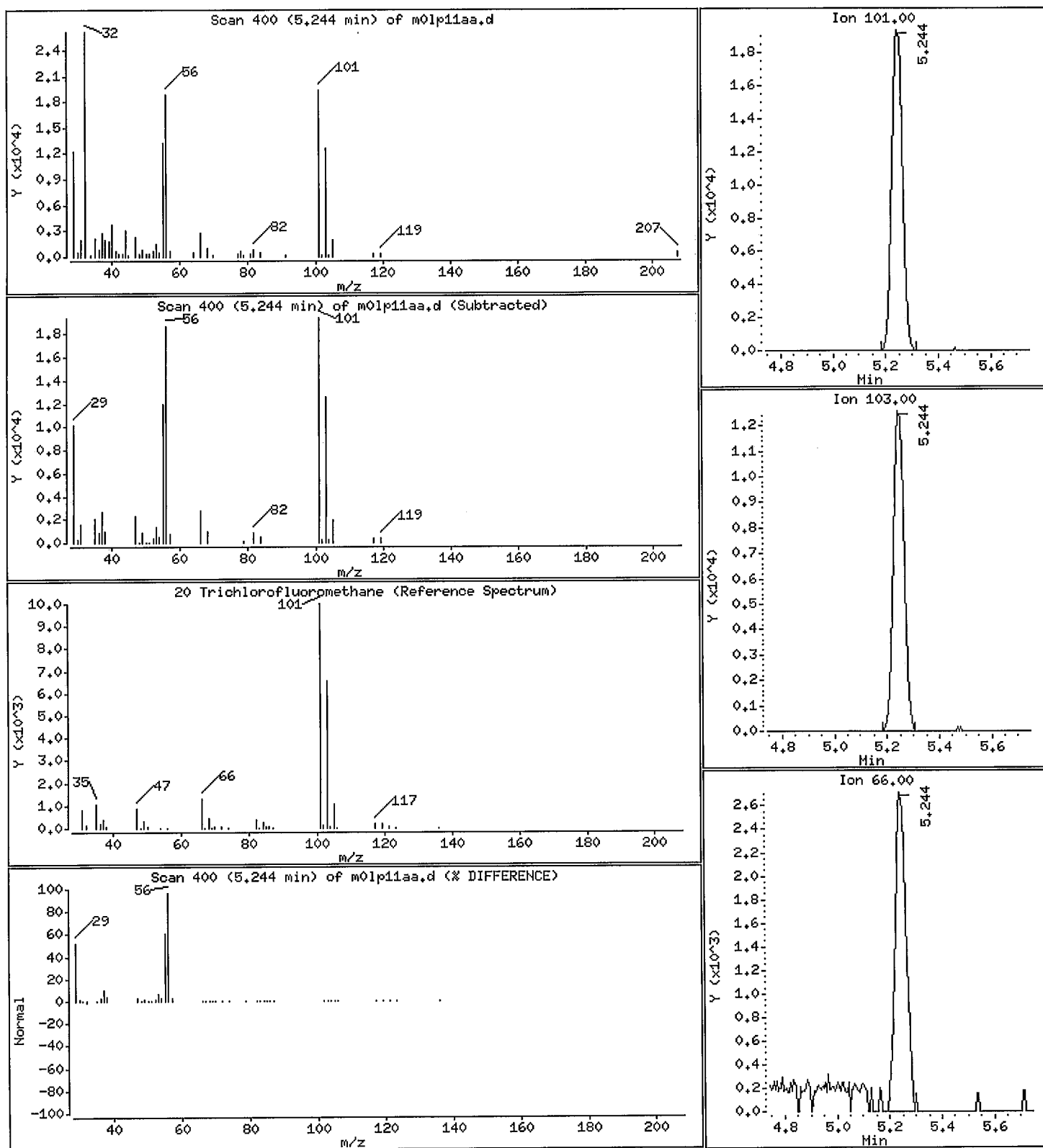
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

20 Trichlorofluoromethane

Concentration: 0.1952 ppb(v/v)



Data File: /var/chem/gcms/mr.i/R041613.b/m01p11aa.d

Date : 16-APR-2013 20:21

Client ID: OUTDOOR

Instrument: mr.i

Sample Info: ,,0,,

Purge Volume: 500.0

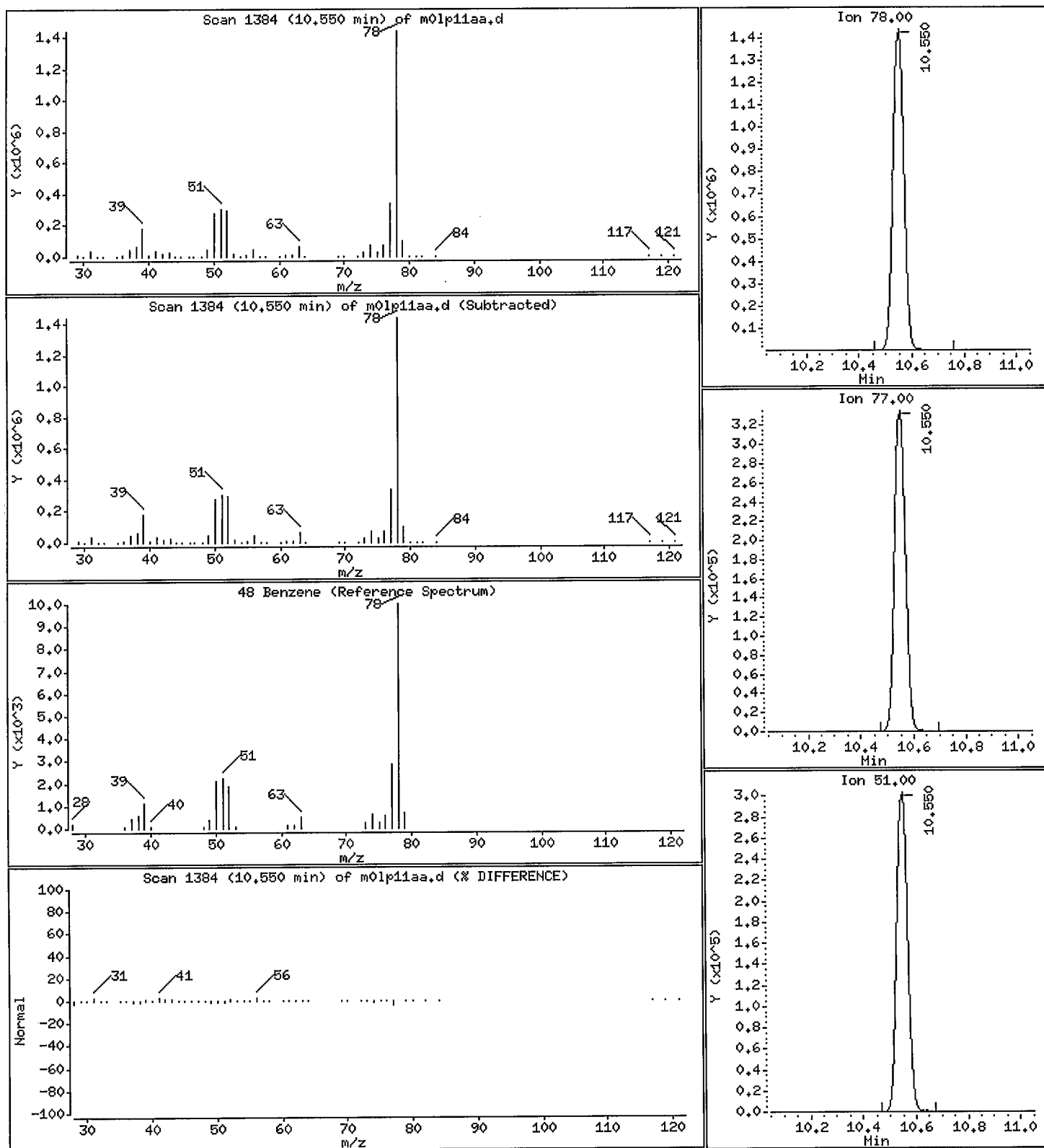
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

Concentration: 11.57 ppb(v/v)

48 Benzene



Data File: /var/chem/gcms/mr.i/R041613.b/m01p11aa.d

Date : 16-APR-2013 20:21

Client ID: OUTDOOR

Instrument: mr.i

Sample Info: ,,0,,

Purge Volume: 500.0

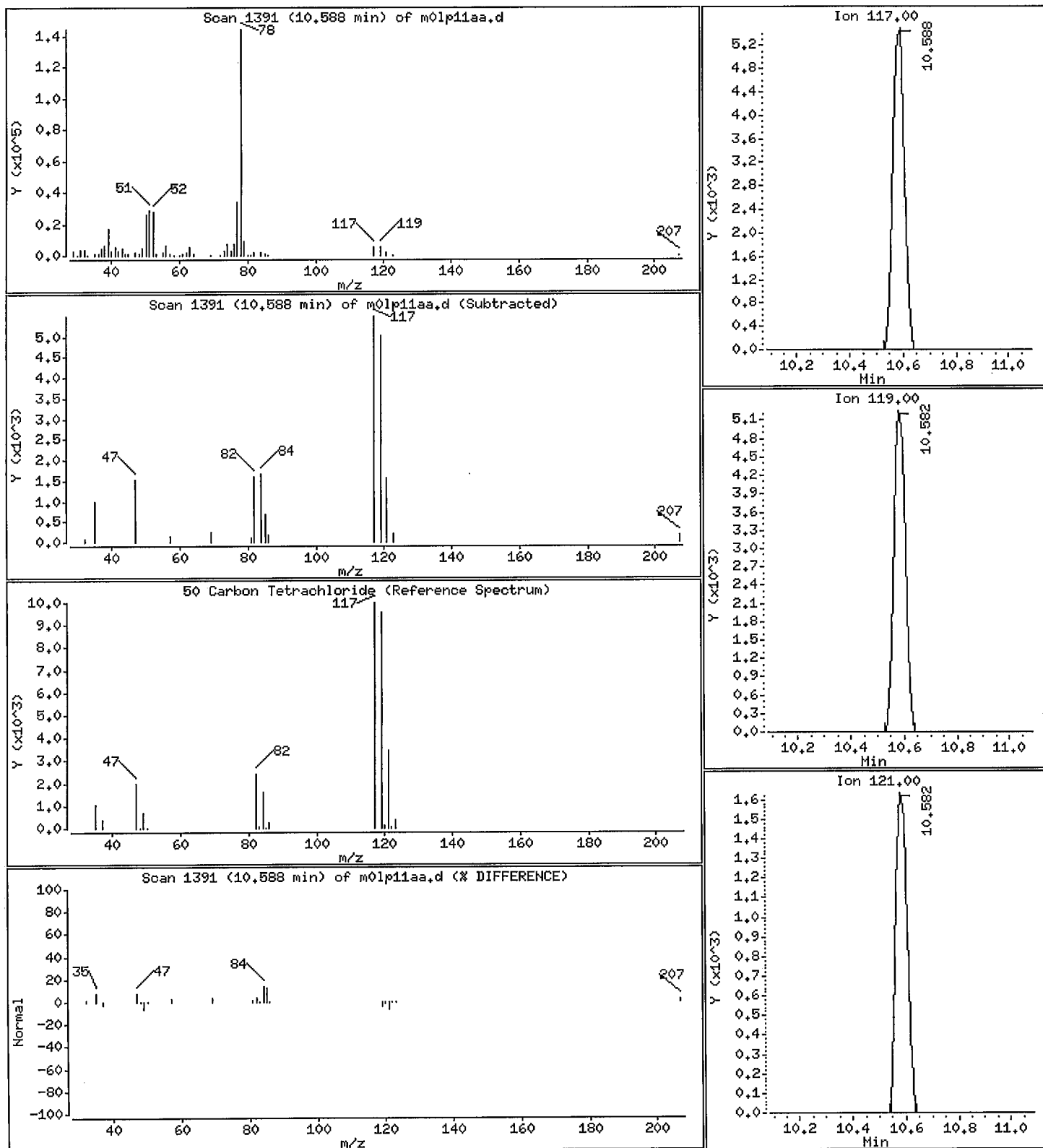
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

50 Carbon Tetrachloride

Concentration: 0.08967 ppb(v/v)



Data File: /var/chem/gcms/mr.i/R041613.b/m01p11aa.d

Date: 16-APR-2013 20:21

Client ID: OUTDOOR

Instrument: mr.i

Sample Info: ,,0,,

Purge Volume: 500.0

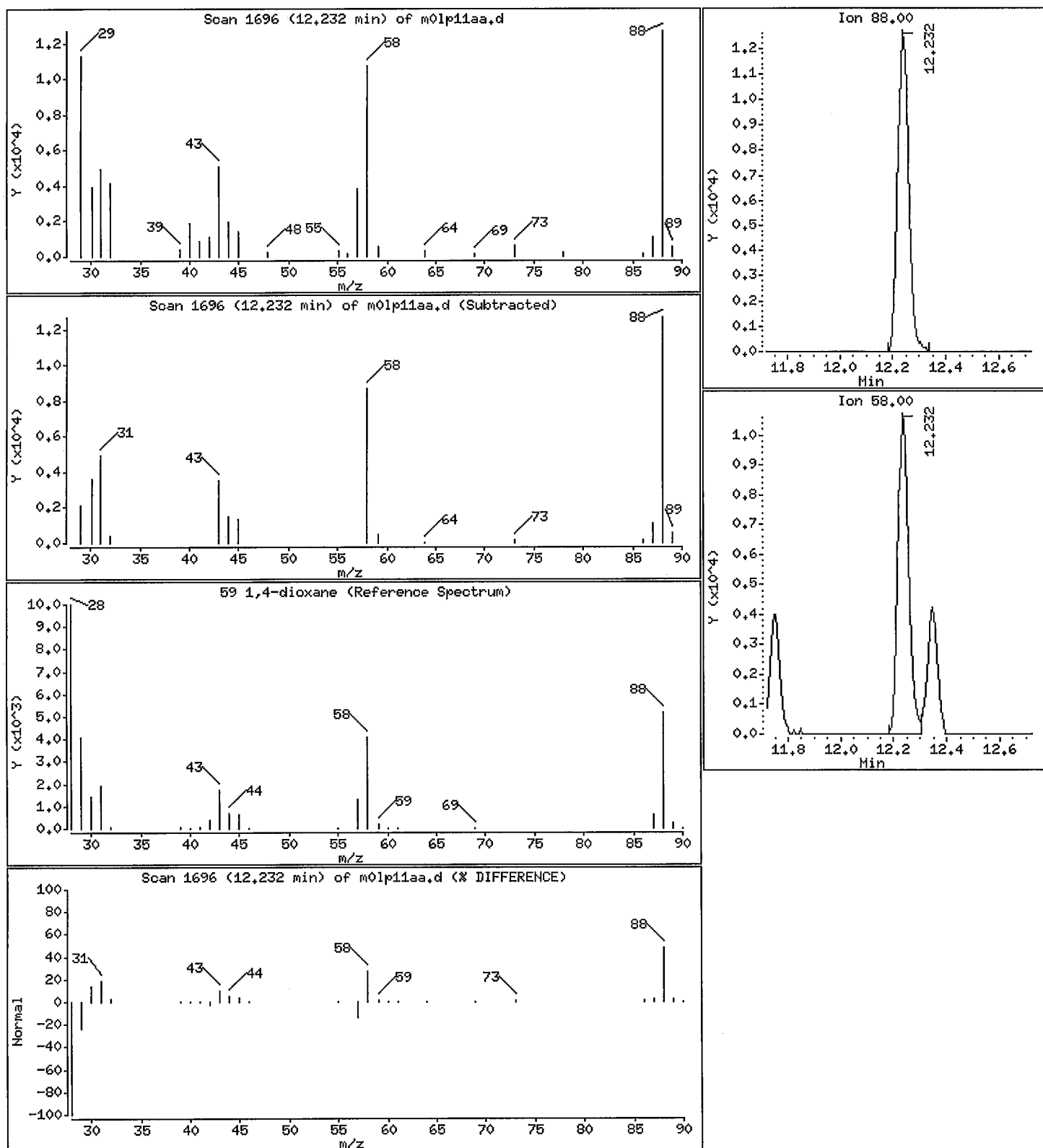
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

Concentration: 0.7384 ppb(v/v)

59 1,4-dioxane



Data File: /var/chem/gcms/mr.i/R041613.b/m01p11aa.d

Date : 16-APR-2013 20:21

Client ID: OUTDOOR

Instrument: mr.i

Sample Info: ,,0,,

Purge Volume: 500.0

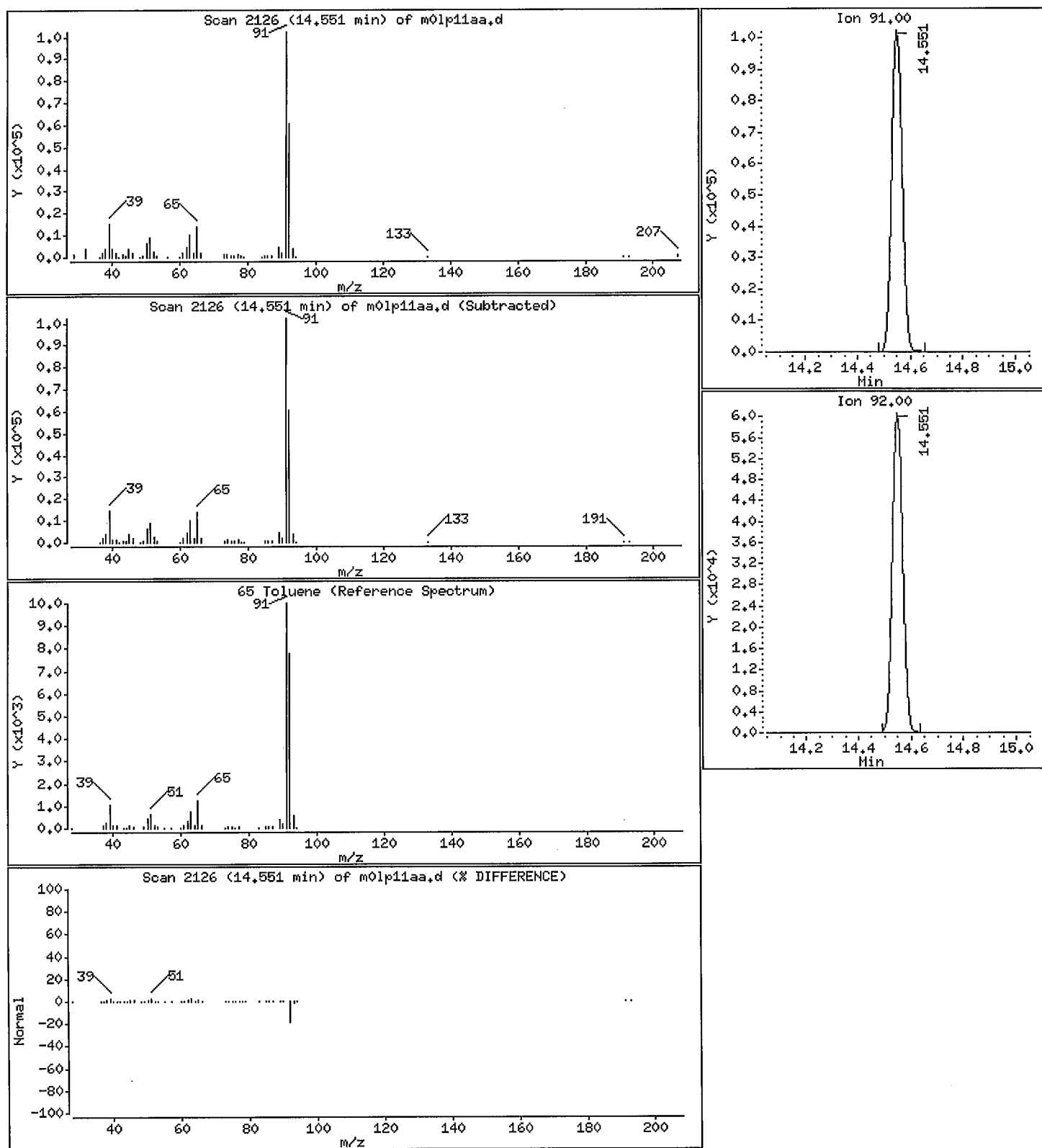
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

65 Toluene

Concentration: 0.5736 ppb(v/v)



Data File: /var/chem/gcms/mr.i/R041613.b/m01p11aa.d

Date: 16-APR-2013 20:21

Client ID: OUTDOOR

Instrument: mr.i

Sample Info: ,,,

Purge Volume: 500.0

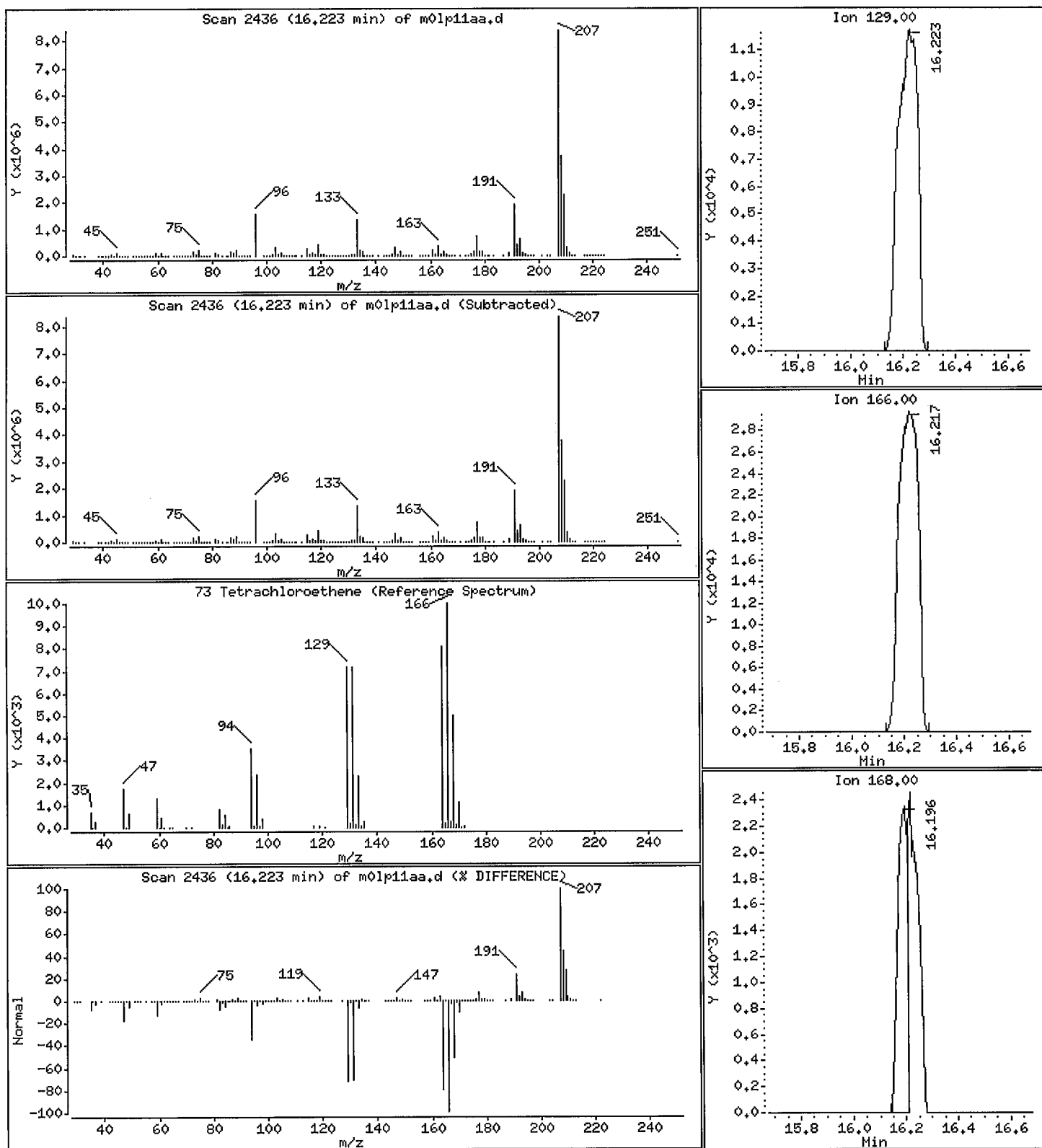
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

73 Tetrachloroethene

Concentration: 0.3765 ppb(v/v)



Data File: /var/chem/gcms/mr.i/R041613.b/m01p11aa.d

Date : 16-APR-2013 20:21

Client ID: OUTDOOR

Instrument: mr.i

Sample Info: ,,0,,

Purge Volume: 500.0

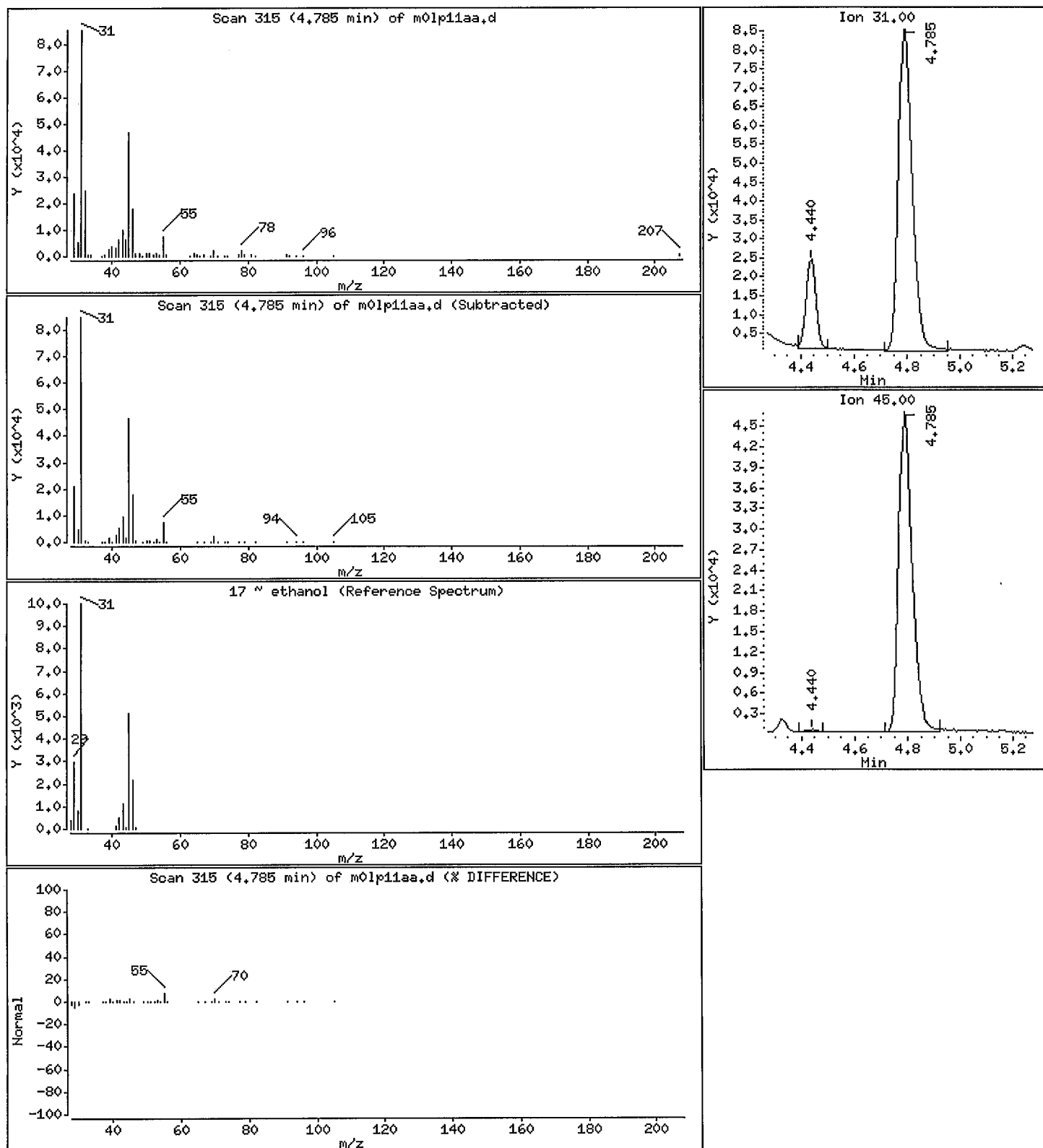
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

17 ~ ethanol

Concentration: 8.495 ppb(v/v)



Standards Data

TestAmerica Knoxville GC/MS Air Initial Calibration Data Review / Narrative Checklist
Method: TO-14 and TO-15 - KNOX-MS-0001, Rev 13 & KNOX-MS-0023, Rev 0

Analysis Date:	2/20/13	Instrument:	MR	ICAL Batch/Scan Name:	R022013 I	Scanned <input type="checkbox"/>
----------------	---------	-------------	----	-----------------------	-----------	----------------------------------

Review Items	N/A	Yes	No	If No, why is data reportable?	2nd
1. Did BFB meet tune criteria?		✓			✓
2. Were all standards injected within 24 hr of BFB?		✓			✓
3. Was date/time of analysis verified and logbook as correct?		✓			✓
4. Is low level std at or <RL and are the remaining points consecutive?		✓			✓
5. Are the calibration levels correct? (Calculate standard concentration & amt. injected with quan rpt at each level)		✓			✓
6. Was ICAL processed using correct methods and files?		✓			✓
7. Are the ICAL start and end dates/times correct?		✓			✓
8. Were at least 5 levels of each compound analyzed?		✓			✓
9. At least 6 consecutive points used for quadratic curves, and at least 5 consecutive points for linear curves? Note: Ohio does not allow Quad	✓				MS
10. Is %RSD for all target analytes ≤ 30%? (with up to 2 compounds with RSD ≤ 40%)		✓			✓
11. If curves were used, is correlation coefficient ≥ 0.990?	✓				MS
12. For quadratic: is a tangent's slope to the curve entirely positive or negative and continuous.	✓				MS
13. For linear or quadratic: origin NOT "included"? (NOTE: OHIO does NOT allow "FORCE" through origin).	✓				MS
14. Is the "Y" intercept less than the RL for each curve?	✓				MS
15. RT for each IS ±20 sec avg. RT?		✓			✓
16. Area for each IS ± 40% avg. area?		✓			✓
17. Each analyte ± 0.06 RRT of avg. RRT?		✓			✓
18. Have all peaks been auto identified? If not, list:		✓			✓
19. If manual integrations were performed, are they clearly identified, initialed, dated and reason given?	✓			Reasons: 1)Corrected split peak; 2)Unresolved peak; 3)tailing; 4)RT shift; 5)wrong peak selected; 6)other	MS
20. Have alternate hits/manual integrations been verified as correct and are correct RFs listed in ICAL summary?	✓				MS
21. Are all the active compounds listed on each quan report?		✓			✓
22. High point checked for saturation and point removed if saturated?		✓			✓
23. Elution order checked on isomeric pairs?					
• dichlorodifluoromethane / 1,2-dichlorotetrafluoroethane		✓			✓
• trichlorofluoromethane / 1,1,2-trichlorotrifluoroethane		✓			✓
• vinyl acetate / hexane		✓			✓
• cis- and trans- isomers		✓			✓
• ethyl benzene / m/p-xylene / o-xylene		✓			✓
• n-propylbenzene/4-ethyl toluene/1,3,5-trimethylbenzene/1,2,4-trimethylbenzene		✓			✓
• tert-butylbenzene/p-cymene		✓			✓
• 1,2,4-trimethylbenzene/sec-butylbenzene		✓			✓
• 1,3-, 1,4-, and 1,2-dichlorobenzene		✓			✓
• 1,2,4-trichlorobenzene/1,2,3-trichlorobenzene		✓			✓
24. Is the second source analysis of a reference standard within limits? (65-135% R)		✓			✓
25. If criteria were not met, was a NCM generated, approved by supervisor, and copy included in folder?	✓				MS
26. Does the ICAL folder contain complete data in the following order: Data review checklist, a complete runlog, BFB info, ICAL summary, curves, followed by [Quan reports, chromatograms, manual integrations], in increasing amount order, 2 nd source info.		✓			✓

Analyst:	MS	Date:	2/21/13	2nd Level Reviewer:	MS	Date:	02/21/13
Comments:				Comments:			

TestAmerica Laboratories, Inc. - Knoxville
CANISTER RUN LOG

GCMS Analysis: AIR

Inst: MR

Analyst: DW Qtimes Batch: 3052022Date: 2/20/13 ICAL Batch: R022013I Target Batch: R022013I IS #1 Area: (11/16): 469377Surr/IS ID & Vol.: V425/40ml System Date/Time ok (y/n): yPreventive Maintenance Performed ☒ Daily

Time	Use	Lot No.	File ID	Can #	Pos	Vol* (mL)	Can DF	Comments
1415	OK	BLANK	BLK1	-	16	200	1	
1502	✓	BFB	RFBFB20	-	1	100		
1528	OK	Blank	BLK2	-	7	200		
1616	✓	MDL CHK 0.02	RMDLB20	CX-2451	8	50		MXXX1AA LODV
1704	✓	ICAL 0.04	RICB201	51	1	100		MXXX01AA
1752	✓	0.08	2	51	7	200		1
1839	✓	0.16	3	50	9			2 LODV
1927	✓	0.4	4	49	10			3
2014	✓	1.0	5	48	11			
2101	✓	2.0	6	47	12			MXXX41AA LODV
2150	✓	4.0	7	46	13			
2237	✓	8.0	8	45	14			
2325	✓	16	9	44	15			
0013	OK	Blank	BLK3	-	16			
0840	OK	Blank	BLK4	-	16			
0927	✓	H3A 230417 (500g)	MXXX51AA	CX-2441	1			Also 2 ³ source for curve
1015	✓		6		1			
1102	✓		7		1			
1150	✓		8		1			

* Entech programmed Volume. If the Entech report amount differs from the programmed amount by >5%, the Entech report amount is used for calculations.

Analyst: DW Date: 2/21/13

MS027r16.DOC, 051210

Data File: /chem/gcms/mr.i/R0220131.b/rbfbb20.d

Date : 20-FEB-2013 15:02

Client ID:

Instrument: mr.i

Sample Info: BFB,1,3

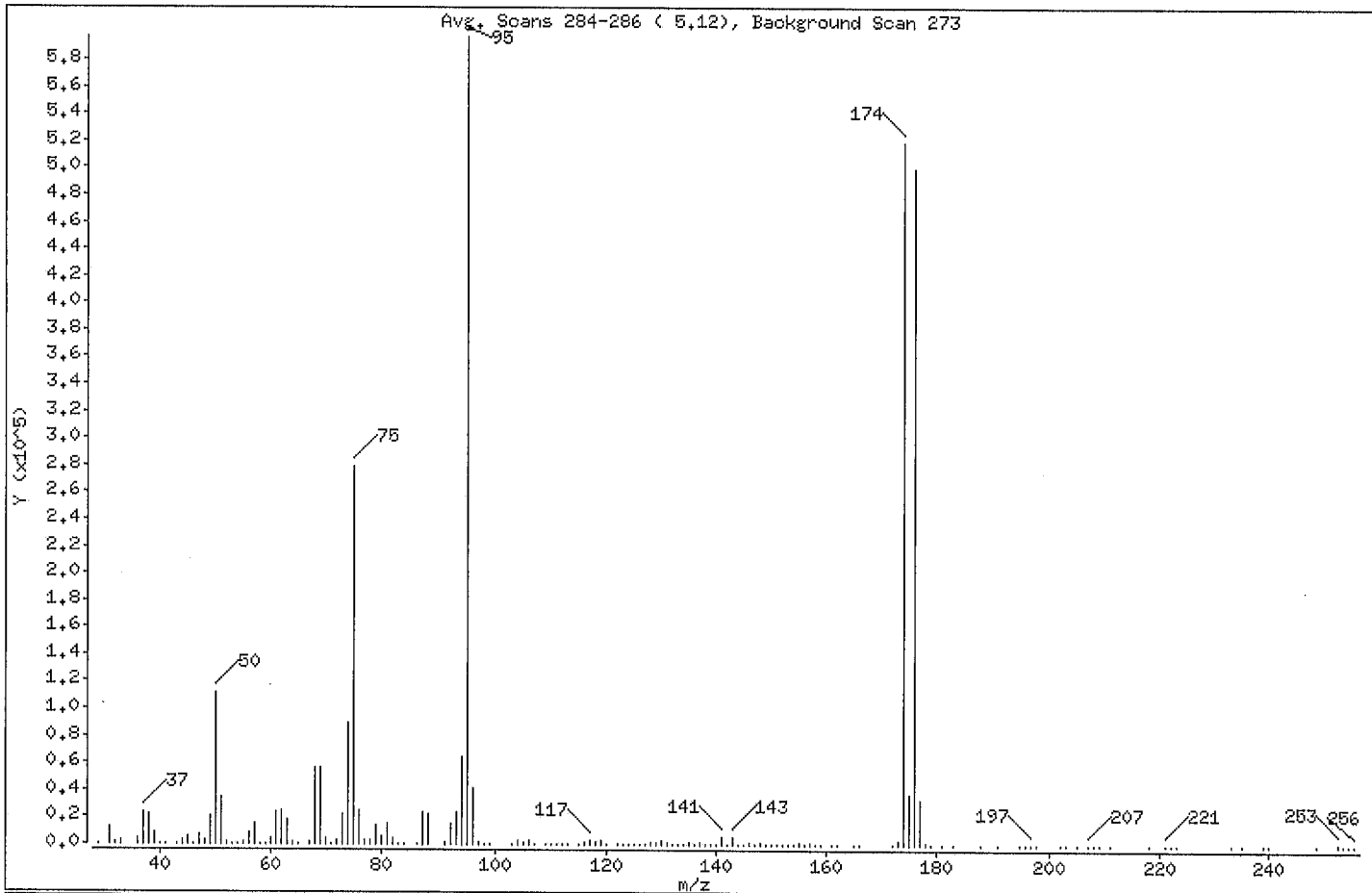
Operator: 060487

Column phase: RTX 624

Column diameter: 0.18

1 bfb

Avg. Scans 284-286 (5.12), Background Scan 273



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	18.52
75	30.00 - 60.00% of mass 95	46.70
96	5.00 - 9.00% of mass 95	6.96
173	Less than 2.00% of mass 174	0.44 (0.51)
174	50.00 - 120.00% of mass 95	86.94
175	5.00 - 9.00% of mass 174	6.20 (7.13)
176	95.00 - 101.00% of mass 174	83.69 (96.27)
177	5.00 - 9.00% of mass 176	5.53 (6.61)

Data File: /chem/goms/mr,i/R022013I,b/rbfb20.d

Date : 20-FEB-2013 15:02

Client ID:

Instrument: mr,i

Sample Info: BFB,1,3

Operator: 060487

Column phase: RTX 624

Column diameter: 0.18

Data File: rbfb20.d

Spectrum: Avg. Scans 284-286 (5,12), Background Scan 273

Location of Maximum: 95.00

Number of points: 157

m/z	Y	m/z	Y	m/z	Y	m/z	Y

29.00	78	74.00	89552	123.00	133	166.00	194
31.00	11773	75.00	278528	124.00	368	172.00	271
32.00	792	76.00	24048	125.00	196	173.00	2636
33.00	2203	77.00	2992	126.00	232	174.00	518592
36.00	3843	78.00	2132	127.00	144	175.00	36960

37.00	23848	79.00	14164	128.00	1888	176.00	499264
38.00	21456	80.00	5324	129.00	823	177.00	32992
39.00	8690	81.00	15382	130.00	2080	178.00	971
40.00	368	82.00	4315	131.00	808	179.00	50
41.00	82	83.00	212	132.00	232	181.00	48

43.00	184	84.00	41	133.00	107	183.00	85
44.00	2936	86.00	550	134.00	124	188.00	33
45.00	4802	87.00	23640	135.00	1560	191.00	88
46.00	337	88.00	22120	136.00	165	195.00	70
47.00	6888	91.00	1644	137.00	990	196.00	126

48.00	2860	92.00	14602	138.00	34	197.00	181
49.00	21224	93.00	23112	139.00	234	198.00	39
50.00	110504	94.00	63976	140.00	345	202.00	34
51.00	33864	95.00	596480	141.00	5134	203.00	134
52.00	1275	96.00	41520	142.00	532	205.00	155

53.00	14	97.00	1206	143.00	5281	207.00	314
54.00	11	98.00	115	144.00	340	208.00	162
55.00	1094	99.00	28	145.00	533	209.00	209
56.00	7641	103.00	188	146.00	864	211.00	25
57.00	14923	104.00	2339	147.00	132	218.00	93

58.00	587	105.00	695	148.00	1216	221.00	151
59.00	97	106.00	2227	149.00	194	222.00	59
60.00	4293	107.00	507	150.00	604	223.00	86
61.00	23104	109.00	135	151.00	42	233.00	36
62.00	24760	110.00	339	152.00	276	235.00	4

63.00	18480	111.00	524	153.00	383	239.00	132
64.00	1694	112.00	309	154.00	367	240.00	7
65.00	256	113.00	492	155.00	1345	249.00	95
67.00	1152	115.00	412	156.00	610	253.00	1177
68.00	56312	116.00	1926	157.00	1475	254.00	163

Data File: /chem/gons/mr.i/R022013I.b/rbfb20.d

Date : 20-FEB-2013 15:02

Client ID:

Instrument: mr.i

Sample Info: BFB,1,3

Operator: 060487

Column phase: RTX 624

Column diameter: 0,18

Data File: rbfb20.d

Spectrum: Avg. Scans 284-286 (5,12), Background Scan 273

Location of Maximum: 95,00

Number of points: 157

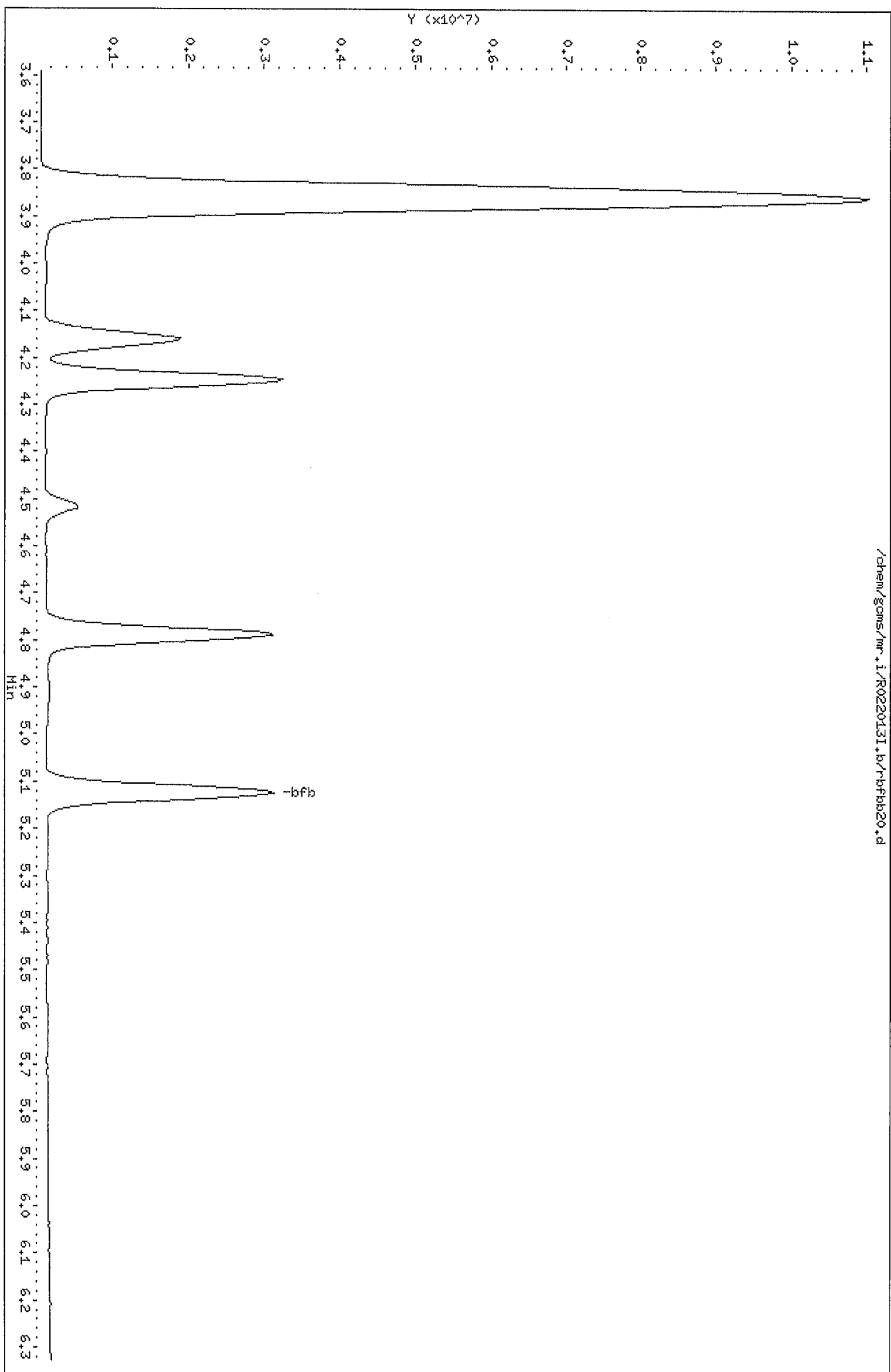
m/z	Y	m/z	Y	m/z	Y	m/z	Y
69,00	56136	117,00	3100	158,00	424	255,00	144
70,00	4605	118,00	1823	159,00	612	256,00	124
71,00	91	119,00	2750	161,00	559		
72,00	2650	120,00	152	162,00	93		
73,00	21976	122,00	164	165,00	175		

Data File: /chem/gcms/mr.i/R0220131.b/r-bfb20.d
Date: 20-FEB-2013 15:02
Client ID:
Sample Info: BFB,1,3

Instrument: mr.i

Column phase: RTX 624

Operator: 060487
Column diameter: 0.18



Report Date : 21-Feb-2013 08:40

TestAmerica Knoxville

INITIAL CALIBRATION DATA

Start Cal Date : 20-FEB-2013 17:04
 End Cal Date : 20-FEB-2013 23:25
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/gcms/mr.i/R022013I.b/TO15.m
 Cal Date : 21-Feb-2013 08:18 wilesd
 Curve Type : Average

Calibration File Names:

Level 1: /chem/gcms/mr.i/R022013I.b/ricb201.d
 Level 2: /chem/gcms/mr.i/R022013I.b/ricb202.d
 Level 3: /chem/gcms/mr.i/R022013I.b/ricb203.d
 Level 4: /chem/gcms/mr.i/R022013I.b/ricb204.d
 Level 5: /chem/gcms/mr.i/R022013I.b/ricb205.d
 Level 6: /chem/gcms/mr.i/R022013I.b/ricb206.d
 Level 7: /chem/gcms/mr.i/R022013I.b/ricb207.d
 Level 8: /chem/gcms/mr.i/R022013I.b/ricb208.d
 Level 9: /chem/gcms/mr.i/R022013I.b/ricb209.d

Compound	0.04000	0.08000	0.16000	0.40000	1.000	2.000	RRF	% RSD
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		
	4.000	8.000	16.000					
	Level 7	Level 8	Level 9					
M 83 Xylene (total)	1.77233	1.69489	1.63144	1.59750	1.62172	1.62426		
	1.56466	1.57106	1.55518				1.62589	4.284
5 Chlorodifluoromethane	0.51972	0.44543	0.43478	0.42969	0.40885	0.39830		
	0.36781	0.34492	0.32802				0.40861	14.257
6 Propene	+++++	+++++	1.51611	1.33167	1.24674	1.22785		
	1.13050	1.05926	0.99947				1.21594	14.374
7 Dichlorodifluoromethane	4.90512	4.67989	4.56342	4.35380	4.21334	4.12427		
	3.81586	3.56506	3.29290				4.16818	12.733
8 Chloromethane	+++++	0.63423	0.58479	0.62411	0.50312	0.49279		
	0.45191	0.41627	0.36880				0.50950	19.128

Report Date : 21-Feb-2013 08:40

TestAmerica Knoxville

INITIAL CALIBRATION DATA

Start Cal Date : 20-FEB-2013 17:04
 End Cal Date : 20-FEB-2013 23:25
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/gcms/mr.i/R022013I.b/TO15.m
 Cal Date : 21-Feb-2013 08:18 wilesd
 Curve Type : Average

Compound	0.04000 Level 1	0.08000 Level 2	0.16000 Level 3	0.40000 Level 4	1.000 Level 5	2.000 Level 6	RRF	% RSD
	4.000	8.000	16.000					
	Level 7	Level 8	Level 9					
9 1,2-Dichlorotetrafluoroethane	3.88680	3.67709	3.55715	3.49073	3.35016	3.28556		
	3.05685	2.88288	2.71016				3.32193	11.505
10 Methanol	+++++	+++++	+++++	+++++	0.48331	0.42031		
	0.35705	0.32521	0.26986				0.37115	22.367
11 ~ acetaldehyde	+++++	+++++	+++++	0.80433	0.64212	0.61523		
	0.56935	0.51177	0.45272				0.59925	20.324
12 Vinyl Chloride	2.07889	1.96139	1.85514	1.83938	1.75976	1.74278		
	1.61427	1.51529	1.41213				1.75322	12.093
13 n-Butane	3.34682	3.19249	2.85787	2.65249	2.50784	2.46837		
	2.26218	2.10051	1.92181				2.59004	18.448
14 1,3-Butadiene	1.62691	1.58572	1.48137	1.42715	1.37309	1.34721		
	1.25410	1.19028	1.10858				1.37716	12.638
15 Bromomethane	2.20871	1.88797	1.68945	1.61986	1.55908	1.54556		
	1.44770	1.37073	1.32305				1.62801	16.988
16 Chloroethane	1.10130	0.99314	0.93374	0.90187	0.87060	0.85829		
	0.80860	0.76427	0.73639				0.88536	12.913
17 ~ ethanol	+++++	0.75362	0.73075	0.54532	0.52892	0.52781		
	0.46607	0.44136	0.39491				0.54860	23.664

Report Date : 21-Feb-2013 08:40

TestAmerica Knoxville

INITIAL CALIBRATION DATA

Start Cal Date : 20-FEB-2013 17:04
 End Cal Date : 20-FEB-2013 23:25
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/gcms/mr.i/R022013I.b/TO15.m
 Cal Date : 21-Feb-2013 08:18 wilesd
 Curve Type : Average

Compound	0.04000 Level 1	0.08000 Level 2	0.16000 Level 3	0.40000 Level 4	1.000 Level 5	2.000 Level 6	RRF	% RSD
	4.000	8.000	16.000					
	Level 7	Level 8	Level 9					
18 Vinyl Bromide	1.89330	1.79309	1.69314	1.64993	1.61674	1.61936		
	1.53054	1.47604	1.47498				1.63857	8.565
19 2-methyl butane	2.33265	2.20256	2.11689	2.00037	1.94598	1.92585		
	1.80081	1.72116	1.66616				1.96805	11.269
20 Trichlorofluoromethane	4.55726	4.39095	4.19150	4.18988	4.08076	4.04052		
	3.78788	3.64080	3.56757				4.04968	8.204
21 Acrolein	+++++	+++++	0.89468	0.62584	0.56422	0.57615		
	0.47790	0.52291	0.53067				0.59891	23.116
22 Acetonitrile	+++++	+++++	0.67975	0.60385	0.65525	0.62295		
	0.58791	0.56568	0.55451				0.60999	7.527
25 Pentane	+++++	0.34947	0.33122	0.33548	0.33282	0.32736		
	0.30895	0.29843	0.29669				0.32255	5.896
23 Acetone	+++++	+++++	+++++	+++++	0.96561	0.86132		
	0.83696	0.73886	0.70166				0.82088	12.745
24 Isopropyl alcohol	+++++	+++++	+++++	2.49698	2.47083	2.39877		
	2.23122	2.13848	2.01358				2.29164	8.510
26 Ethyl Ether	1.91770	1.90933	1.76308	1.75864	1.72398	1.69857		
	1.59301	1.51376	1.44528				1.70260	9.520

Report Date : 21-Feb-2013 08:40

TestAmerica Knoxville

INITIAL CALIBRATION DATA

Start Cal Date : 20-FEB-2013 17:04
 End Cal Date : 20-FEB-2013 23:25
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/gcms/mr.i/R022013I.b/TO15.m
 Cal Date : 21-Feb-2013 08:18 wilesd
 Curve Type : Average

Compound	0.04000 Level 1	0.08000 Level 2	0.16000 Level 3	0.40000 Level 4	1.000 Level 5	2.000 Level 6	RRF	% RSD
	4.000	8.000	16.000					
	Level 7	Level 8	Level 9					
27 1,1-Dichloroethene	1.88633 1.47849	1.76851 1.44511	1.68179 1.44236	1.61624	1.55900	1.56885	1.60519	9.431
29 Acrylonitrile	1.23788 1.19175	1.36000 1.16975	1.29199 1.15791	1.25681	1.24912	1.26009	1.24170	5.082
30 1,1,2-Trichlorotrifluoroethane	3.77179 3.13257	3.62267 3.05022	3.40423 3.03391	3.37541	3.32505	3.32100	3.33743	7.438
28 tert-butanol	++++ 2.64834	2.90806 2.55863	2.94237 2.49121	2.74939	2.82929	2.79899	2.74079	5.914
31 Methylene Chloride	++++ 1.34131	++++ 1.29860	1.71969 1.29635	1.51954	1.47399	1.43905	1.44122	10.449
32 3-Chloropropene	1.39014 1.11560	1.26137 0.83783	1.16198 0.96087	1.17177	1.19842	1.12102	1.13544	14.145
33 Carbon Disulfide	5.25232 4.34562	5.04965 4.18115	4.71422 4.10210	4.64474	4.55099	4.57960	4.60227	8.179
35 ~ 2-Methyl Pentane	++++ 3.41115	4.05447 3.26505	3.82898 3.09498	3.71715	3.64326	3.62959	3.58058	8.675
34 trans-1,2-Dichloroethene	1.98544 1.53436	1.84193 1.49772	1.70523 1.50713	1.65055	1.60414	1.60305	1.65884	9.836

Report Date : 21-Feb-2013 08:40

TestAmerica Knoxville

INITIAL CALIBRATION DATA

Start Cal Date : 20-FEB-2013 17:04
 End Cal Date : 20-FEB-2013 23:25
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/gcms/mr.i/R022013I.b/TO15.m
 Cal Date : 21-Feb-2013 08:18 wilesd
 Curve Type : Average

Compound	0.04000 Level 1	0.08000 Level 2	0.16000 Level 3	0.40000 Level 4	1.000 Level 5	2.000 Level 6	RRF	% RSD
	4.000	8.000	16.000					
	Level 7	Level 8	Level 9					
36 Methyl-t-Butyl Ether	4.76920 4.03881	4.39053 3.90330	4.37086 3.85901	4.29366	4.28204	4.25683	4.24047	6.585
37 1,1-Dichloroethane	3.18912 2.71410	3.12723 2.61727	2.96460 2.56953	2.92903	2.89887	2.88511	2.87721	7.368
38 Vinyl Acetate	4.01423 3.79813	3.96045 3.68563	3.83183 3.62211	3.84992	3.83108	3.85805	3.82794	3.162
39 2-Butanone	+++++ 0.75413	+++++ 0.72601	1.05631 0.72406	0.80470	0.77471	0.78182	0.80311	14.375
40 Hexane	1.57267 1.28078	1.51725 1.23904	1.44939 1.23054	1.37302	1.35924	1.34730	1.37436	8.689
41 cis 1,2-Dichloroethene	2.07540 1.56108	1.79341 1.53378	1.68570 1.53387	1.66460	1.64731	1.63934	1.68161	10.062
42 Ethyl acetate	+++++ 3.29289	3.62460 3.18413	3.55403 3.11501	3.45298	3.44177	3.45320	3.38983	5.230
43 Chloroform	3.65330 3.02233	3.44300 2.91287	3.30035 2.86698	3.24039	3.21043	3.20833	3.20644	7.804
44 Tetrahydrofuran	+++++ 1.70684	2.07162 1.65155	1.95294 1.61042	1.84273	1.82666	1.80487	1.80845	8.510

Report Date : 21-Feb-2013 08:40

TestAmerica Knoxville

INITIAL CALIBRATION DATA

Start Cal Date : 20-FEB-2013 17:04
 End Cal Date : 20-FEB-2013 23:25
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/gcms/mr.i/R022013I.b/TO15.m
 Cal Date : 21-Feb-2013 08:18 wilesd
 Curve Type : Average

Compound	0.04000 Level 1	0.08000 Level 2	0.16000 Level 3	0.40000 Level 4	1.000 Level 5	2.000 Level 6	RRF	% RSD
	4.000 Level 7	8.000 Level 8	16.000 Level 9					
45 1,1,1-Trichloroethane	3.43003 2.97079	3.31892 2.91187	3.15715 2.89151	3.12524	3.12233	3.13343	3.11792	5.727
46 1,2-Dichloroethane	0.48868 0.41470	0.46555 0.41041	0.44440 0.41083	0.43568	0.43444	0.43707	0.43797	5.948
49 Cyclohexane	0.17219 0.15014	0.16961 0.15074	0.15714 0.14786	0.15482	0.15450	0.15630	0.15703	5.380
48 Benzene	1.17353 0.95352	1.09459 0.95536	1.01247 0.96028	0.98560	0.98863	0.98843	1.01249	7.326
50 Carbon Tetrachloride	0.66712 0.66622	0.64752 0.38520	0.39127 0.67018	0.40527	0.46161	0.41298	0.52304	25.697
51 ~ 2,3-dimethylpentane	0.22909 0.20524	0.21601 0.20469	0.21687 0.20770	0.21545	0.21164	0.21187	0.21317	3.515
47 1-Butanol	+++++ 0.10045	+++++ 0.09890	+++++ 0.09933	0.09384	0.09649	0.10225	0.09854	3.025
52 ~ Thiophene	0.63372 0.56984	0.62678 0.56938	0.58561 0.57918	0.58213	0.58765	0.58817	0.59138	3.914
53 2,2,4-trimethylpentane	1.80958 1.56855	1.73001 1.56083	1.66400 1.54195	1.62512	1.62993	1.63027	1.64003	5.229

Report Date : 21-Feb-2013 08:40

TestAmerica Knoxville

INITIAL CALIBRATION DATA

Start Cal Date : 20-FEB-2013 17:04
 End Cal Date : 20-FEB-2013 23:25
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/gcms/mr.i/R022013I.b/TO15.m
 Cal Date : 21-Feb-2013 08:18 wilesd
 Curve Type : Average

Compound	0.04000 Level 1	0.08000 Level 2	0.16000 Level 3	0.40000 Level 4	1.000 Level 5	2.000 Level 6	RRF	% RSD
	4.000 Level 7	8.000 Level 8	16.000 Level 9					
54 Heptane	0.38764 0.34125	0.37561 0.34219	0.35762 0.34861	0.34424	0.35003	0.35040	0.35529	4.508
55 1,2-Dichloropropane	0.39776 0.35504	0.39319 0.35565	0.37887 0.36066	0.36576	0.36597	0.36790	0.37120	4.184
56 Trichloroethene	0.47451 0.43510	0.46215 0.44719	0.44856 0.46167	0.43665	0.44065	0.44702	0.45039	2.926
180 ~ 2-nitropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
57 Dibromomethane	0.37356 0.35654	0.36623 0.36727	0.35995 0.36603	0.35183	0.35788	0.36520	0.36272	1.837
58 Bromodichloromethane	0.62778 0.67158	0.61871 0.66199	0.59522 0.68833	0.61679	0.65003	0.66186	0.64359	4.734
60 Methyl Methacrylate	+++++ 0.41471	0.36775 0.41362	0.37616 0.41411	0.38216	0.41268	0.42215	0.40042	5.321
59 1,4-dioxane	+++++ 0.14107	0.13636 0.14220	0.14618 0.14169	0.13668	0.15069	0.14973	0.14308	3.778
61 ~ methyl cyclohexane	0.63196 0.58222	0.62682 0.58604	0.59603 0.59906	0.59039	0.59690	0.60148	0.60121	2.856

NA

Report Date : 21-Feb-2013 08:40

TestAmerica Knoxville

INITIAL CALIBRATION DATA

Start Cal Date : 20-FEB-2013 17:04
 End Cal Date : 20-FEB-2013 23:25
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/gcms/mr.i/R022013I.b/TO15.m
 Cal Date : 21-Feb-2013 08:18 wilesd
 Curve Type : Average

Compound	0.04000 Level 1	0.08000 Level 2	0.16000 Level 3	0.40000 Level 4	1.000 Level 5	2.000 Level 6	RRF	% RSD
	4.000	8.000	16.000					
	Level 7	Level 8	Level 9					
63 cis-1,3-Dichloropropene	0.54866	0.51886	0.50714	0.50957	0.52690	0.53552		
	0.51879	0.52630	0.53866				0.52560	2.598
62 4-Methyl-2-pentanone	+++++	+++++	0.69267	0.74166	0.72722	0.74025		
	0.72570	0.65403	0.72169				0.71475	4.377
64 trans-1,3-Dichloropropene	0.76187	0.73011	0.69738	0.69411	0.72757	0.73069		
	0.72567	0.71037	0.74941				0.72524	3.064
65 Toluene	1.86689	1.77576	1.66919	1.61149	1.63887	1.62561		
	1.56903	1.58050	1.59947				1.65964	5.970
66 1,1,2-Trichloroethane	0.49900	0.47794	0.46588	0.45386	0.46394	0.46534		
	0.44643	0.44783	0.45660				0.46409	3.535
67 ~ 2-methyl thiophene	1.45624	1.43093	1.39275	1.38031	1.40571	1.41687		
	1.37167	1.38067	1.39914				1.40381	1.938
68 ~ 3-methyl thiophene	1.52198	1.45974	1.42178	1.41173	1.42408	1.44982		
	1.39802	1.40788	1.43347				1.43650	2.618
69 2-Hexanone	+++++	0.45039	0.49999	0.49622	0.53229	0.54498		
	0.54325	0.41201	0.56313				0.50528	10.288
70 Octane	0.59166	0.56694	0.55188	0.52742	0.53207	0.54478		
	0.52725	0.53110	0.53611				0.54547	3.979

Report Date : 21-Feb-2013 08:40

TestAmerica Knoxville

INITIAL CALIBRATION DATA

Start Cal Date : 20-FEB-2013 17:04
 End Cal Date : 20-FEB-2013 23:25
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/gcms/mr.i/R022013I.b/TO15.m
 Cal Date : 21-Feb-2013 08:18 wilesd
 Curve Type : Average

Compound	0.04000 Level 1	0.08000 Level 2	0.16000 Level 3	0.40000 Level 4	1.000 Level 5	2.000 Level 6	RRF	% RSD
	4.000 Level 7	8.000 Level 8	16.000 Level 9					
71 Dibromochloromethane	0.77319 0.95592	0.73564 0.93181	0.68403 1.03578	0.74926	0.84211	0.86764	0.84171	13.858
72 1,2-Dibromoethane	0.76762 0.84100	0.77891 0.86086	0.77193 0.89293	0.79222	0.83839	0.86269	0.82295	5.606
73 Tetrachloroethene	0.64918 0.56335	0.61525 0.57088	0.58528 0.58419	0.56577	0.57576	0.58069	0.58782	4.700
75 ~ 2,3-dimethylheptane	1.64150 1.40878	1.56916 1.37240	1.49940 1.30816	1.47196	1.47997	1.48138	1.47030	6.793
74 Chlorobenzene	1.41048 1.25559	1.37666 1.26904	1.30160 1.31254	1.27461	1.28535	1.29845	1.30937	3.936
76 Ethylbenzene	2.28916 1.99659	2.17575 2.00232	2.09010 2.01941	2.03650	2.07236	2.07542	2.08418	4.536
77 ~ 2-ethyl thiophene	1.65268 1.53874	1.56775 1.54867	1.52802 1.58323	1.53641	1.57148	1.59055	1.56861	2.443
78 m&p-Xylene	1.75008 1.55993	1.66693 1.56898	1.61209 1.53157	1.57107	1.60825	1.61125	1.60891	4.095
79 Nonane	++++ 1.05969	1.14350 1.04904	1.08855 1.03106	1.08137	1.09941	1.10343	1.08201	3.271

Report Date : 21-Feb-2013 08:40

TestAmerica Knoxville

INITIAL CALIBRATION DATA

Start Cal Date : 20-FEB-2013 17:04
 End Cal Date : 20-FEB-2013 23:25
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/gcms/mr.i/R022013I.b/TO15.m
 Cal Date : 21-Feb-2013 08:18 wilesd
 Curve Type : Average

Compound	0.04000 Level 1	0.08000 Level 2	0.16000 Level 3	0.40000 Level 4	1.000 Level 5	2.000 Level 6	RRF	% RSD
	4.000	8.000	16.000					
	Level 7	Level 8	Level 9					
80 Bromoform	+++++	0.58549	0.48268	0.56796	0.72532	0.76322		
	0.94107	0.87794	1.10452				0.75603	27.867
81 Styrene	+++++	0.92265	0.95993	1.04053	1.17419	1.23618		
	1.21081	1.26496	1.33211				1.14267	13.125
82 o-Xylene	1.81683	1.75079	1.67012	1.65037	1.64867	1.65029		
	1.57411	1.57521	1.60241				1.65987	4.817
84 1,1,2,2-Tetrachloroethane	1.18712	1.17802	1.16281	1.17084	1.23940	1.23336		
	1.19041	1.19992	1.22216				1.19823	2.305
85 1,2,3-Trichloropropane	0.38789	0.36618	0.35638	0.35153	0.36580	0.36678		
	0.35282	0.35620	0.36769				0.36347	3.071
86 Cumene	+++++	2.52111	2.42897	2.37526	2.40218	2.41409		
	2.33496	2.35754	2.35118				2.39816	2.478
87 n-Propylbenzene	+++++	0.68948	0.66209	0.66375	0.69241	0.69273		
	0.67484	0.69688	0.72813				0.68754	3.092
88 2-chlorotoluene	0.65746	0.63266	0.61655	0.60786	0.62127	0.62282		
	0.60126	0.61959	0.64450				0.62489	2.811
89 4-Ethyltoluene	+++++	2.47771	2.42741	2.41282	2.50171	2.50448		
	2.41559	2.44827	2.46574				2.45672	1.490

Report Date : 21-Feb-2013 08:40

TestAmerica Knoxville

INITIAL CALIBRATION DATA

Start Cal Date : 20-FEB-2013 17:04
 End Cal Date : 20-FEB-2013 23:25
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/gcms/mr.i/R022013I.b/TO15.m
 Cal Date : 21-Feb-2013 08:18 wilesd
 Curve Type : Average

Compound	0.04000 Level 1	0.08000 Level 2	0.16000 Level 3	0.40000 Level 4	1.000 Level 5	2.000 Level 6	RRF	% RSD
	4.000 Level 7	8.000 Level 8	16.000 Level 9					
90 1,3,5-Trimethylbenzene	+++++ 1.13934	1.15615 1.17348	1.11559 1.21977	1.12855	1.16437	1.17339	1.15883	2.795
91 Alpha-Methylstyrene	+++++ 0.94673	+++++ 1.04393	0.64986 1.12385	0.73641	0.89188	0.97235	0.90929	18.350
92 Decane	1.25917 1.35679	1.36883 1.35098	1.35361 1.31515	1.37898	1.41983	1.41877	1.35801	3.659
93 tert-butylbenzene	+++++ 2.12460	2.25803 2.17436	2.17049 2.19477	2.13747	2.20998	2.19542	2.18314	1.925
94 1,2,4-Trimethylbenzene	1.98615 2.00016	2.03884 2.03786	2.01132 2.03365	1.98752	2.07702	2.07442	2.02744	1.677
95 sec-butylbenzene	+++++ 2.91249	3.08768 2.95742	2.98583 2.90619	2.94495	3.05671	3.04474	2.98700	2.301
96 1,3-Dichlorobenzene	+++++ 1.34600	1.35703 1.41313	1.33100 1.48768	1.30378	1.36475	1.38520	1.37357	4.129
97 Benzyl Chloride	+++++ 1.79391	1.50537 1.87990	1.53560 1.85896	1.59947	1.79790	1.81222	1.72292	8.760
98 1,4-Dichlorobenzene	+++++ 1.36570	1.35234 1.43953	1.33063 1.48277	1.30437	1.37430	1.39509	1.38059	4.196

Report Date : 21-Feb-2013 08:40

TestAmerica Knoxville

INITIAL CALIBRATION DATA

Start Cal Date : 20-FEB-2013 17:04
 End Cal Date : 20-FEB-2013 23:25
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/gcms/mr.i/R022013I.b/TO15.m
 Cal Date : 21-Feb-2013 08:18 wilesd
 Curve Type : Average

Compound	0.04000 Level 1	0.08000 Level 2	0.16000 Level 3	0.40000 Level 4	1.000 Level 5	2.000 Level 6	RRF	% RSD
	4.000 Level 7	8.000 Level 8	16.000 Level 9					
99 p-Cymene	2.48737 2.49779	2.58278 2.53449	2.50462 2.55701	2.47450	2.59100	2.60916	2.53763	1.949
100 ~ 1,2,3- Trimethylbenzene	1.79869 1.77597	1.92345 1.79038	1.79670 1.83262	1.82044	1.82990	1.82013	1.82092	2.359
101 ~ n-butylcyclohexane	++++ 1.59168	1.73107 1.60217	1.69946 1.59739	1.64486	1.69254	1.67673	1.65449	3.220
102 ~ Indane	2.02648 1.89707	2.00499 1.94678	1.95605 1.93578	1.88126	1.97908	1.96361	1.95457	2.392
103 1,2-Dichlorobenzene	++++ 1.29007	1.33673 1.34082	1.28545 1.38446	1.27671	1.33375	1.32581	1.32173	2.718
104 n-butylbenzene	++++ 2.32280	2.36666 2.31182	2.38808 2.28670	2.35156	2.48244	2.45165	2.37021	2.877
105 ~ Indene	++++ 1.87642	1.58132 2.00579	1.65201 2.08364	1.70659	1.87134	1.96019	1.84216	9.702
106 Undecane	++++ 1.64408	1.42638 1.57704	1.59231 1.41293	1.59776	1.68182	1.75934	1.58646	7.469
107 ~ 1,2-dimethyl-4-ethylenzene	++++ 2.49086	2.52925 2.51377	2.52720 2.49274	2.49731	2.59741	2.60941	2.53224	1.832

Report Date : 21-Feb-2013 08:40

TestAmerica Knoxville

INITIAL CALIBRATION DATA

Start Cal Date : 20-FEB-2013 17:04
 End Cal Date : 20-FEB-2013 23:25
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/gcms/mr.i/R022013I.b/TO15.m
 Cal Date : 21-Feb-2013 08:18 wilesd
 Curve Type : Average

Compound	0.04000 Level 1	0.08000 Level 2	0.16000 Level 3	0.40000 Level 4	1.000 Level 5	2.000 Level 6	RRF	% RSD
	4.000 Level 7	8.000 Level 8	16.000 Level 9					
108 ~ 1,2,4,5-tetramethylbenzene	+++++	2.49697	2.61111	2.56694	2.68393	2.72713		
	2.57192	2.57613	2.48406				2.58977	3.231
109 ~ 1,2,3,5-tetramethylbenzene	+++++	1.60107	1.67305	1.61674	1.69271	1.69304		
	1.58031	1.57705	1.55108				1.62313	3.446
110 ~ 1,2,3,4-tetramethylbenzene	+++++	2.00819	2.20753	2.13035	2.25160	2.29507		
	2.12311	2.11511	1.83042				2.12017	6.953
111 Dodecane	+++++	0.76052	1.50459	1.48468	1.32005	1.87071		
	1.66677	1.38645	0.78600				1.34747	29.167
112 1,2,4-Trichlorobenzene	0.81294	1.05916	1.20329	1.15984	1.31259	1.37220		
	1.27704	1.32806	0.83181				1.15077	18.168
113 Napthalene	1.63695	2.48094	2.89698	2.77759	3.12031	3.37106		
	3.05957	3.04561	2.28259				2.74129	19.378
114 ~ benzo(b) thiophene	1.36864	1.79680	2.14757	2.12054	2.21884	2.30385		
	2.07661	2.10319	1.51001				1.96067	16.714
115 Hexachlorobutadiene	+++++	1.15123	1.09395	1.02756	1.20867	1.18281		
	1.11860	1.19842	0.85205				1.10416	10.713
116 1,2,3-trichlorobenzene	0.84347	1.13127	1.26796	1.19139	1.36926	1.40720		
	1.25901	1.29733	0.60097				1.15198	22.949

Report Date : 21-Feb-2013 08:40

TestAmerica Knoxville

INITIAL CALIBRATION DATA

Start Cal Date : 20-FEB-2013 17:04
 End Cal Date : 20-FEB-2013 23:25
 Quant Method : ISTD
 Origin : Disabled
 Target Version : 3.50
 Integrator : HP RTE
 Method file : /chem/gcms/mr.i/R022013I.b/TO15.m
 Cal Date : 21-Feb-2013 08:18 wilesd
 Curve Type : Average

Compound	0.04000	0.08000	0.16000	0.40000	1.000	2.000	RRF	% RSD
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		
	4.000	8.000	16.000					
	Level 7	Level 8	Level 9					
=====	=====	=====	=====	=====	=====	=====	=====	=====
117 ~ 2-Methylnaphthalene	+++++	+++++	0.20537	0.19537	0.17659	0.43038		
	0.36600	0.26573	+++++				0.27324	37.809
-----	-----	-----	-----	-----	-----	-----	-----	-----
118 ~ 1-Methylnaphthalene	+++++	+++++	0.20413	0.18859	0.17211	0.37419		
	0.30406	0.19321	+++++				0.23938	33.854
=====	=====	=====	=====	=====	=====	=====	=====	=====
\$ 4 4-Bromofluorobenzene	0.66144	0.67543	0.68441	0.68829	0.70315	0.71261		
	0.71923	0.72638	0.73188				0.70031	3.468
-----	-----	-----	-----	-----	-----	-----	-----	-----

Report Date:02/21/2013

Page 1

INITIAL CALIBRATION RT and RRT REPORT

STD 1 = /chem/gcms/mr.i/R022013I.b/ricb201.d
 STD 2 = /chem/gcms/mr.i/R022013I.b/ricb202.d
 STD 3 = /chem/gcms/mr.i/R022013I.b/ricb203.d
 STD 4 = /chem/gcms/mr.i/R022013I.b/ricb204.d
 STD 5 = /chem/gcms/mr.i/R022013I.b/ricb205.d
 STD 6 = /chem/gcms/mr.i/R022013I.b/ricb206.d
 STD 7 = /chem/gcms/mr.i/R022013I.b/ricb207.d
 STD 8 = /chem/gcms/mr.i/R022013I.b/ricb208.d
 STD 9 = /chem/gcms/mr.i/R022013I.b/ricb209.d

COMPOUND	STD 1	STD 2	STD 3	STD 4	STD 5	STD 6	STD 7	STD 8	STD 9	MEAN
1,4-Difluorobenzene	11.272	11.272	11.272	11.272	11.278	11.278	11.278	11.283	11.283	11.276
Chlorobenzene-d5	17.484	17.484	17.484	17.484	17.490	17.490	17.490	17.490	17.490	17.487
Bromochloromethane	9.088	9.088	9.088	9.089	9.088	9.094	9.094	9.099	9.105	9.092
4-Bromofluorobenzene	1.156	1.156	1.156	1.156	1.156	1.156	1.156	1.156	1.156	1.156
~ 2-Methylnaphthalene	NA	NA	1.714	1.714	1.714	1.714	1.714	1.714	NA	1.714
Chlorodifluoromethane	0.461	0.461	0.461	0.460	0.461	0.460	0.460	0.460	0.460	0.460
Propene	NA	NA	0.462	0.461	0.461	0.462	0.462	0.461	0.461	0.461
Dichlorodifluoromethane	0.467	0.468	0.467	0.467	0.467	0.468	0.467	0.467	0.467	0.467
Chloromethane	NA	0.487	0.487	0.486	0.487	0.486	0.486	0.486	0.486	0.486
1,2-Dichlorotetrafluoroethane	0.487	0.488	0.487	0.487	0.488	0.488	0.488	0.487	0.488	0.488
Methanol	NA	NA	NA	NA	0.503	0.502	0.502	0.502	0.502	0.502
~ acetaldehyde	NA	NA	NA	0.503	0.503	0.502	0.502	0.503	0.502	0.502
Vinyl Chloride	0.505	0.506	0.505	0.505	0.505	0.505	0.505	0.504	0.505	0.505
n-Butane	0.515	0.515	0.515	0.515	0.515	0.515	0.515	0.515	0.514	0.515
1,3-Butadiene	0.514	0.515	0.515	0.514	0.515	0.514	0.514	0.515	0.514	0.514
Bromomethane	0.549	0.548	0.548	0.548	0.548	0.549	0.549	0.548	0.548	0.548
Chloroethane	0.563	0.564	0.563	0.563	0.564	0.564	0.564	0.563	0.564	0.564
~ ethanol	NA	0.577	0.576	0.575	0.576	0.575	0.575	0.576	0.576	0.576
Vinyl Bromide	0.595	0.596	0.595	0.596	0.596	0.596	0.596	0.596	0.595	0.596
2-methyl butane	0.602	0.602	0.602	0.602	0.602	0.602	0.602	0.602	0.601	0.602
Trichlorofluoromethane	0.624	0.625	0.624	0.624	0.624	0.625	0.625	0.624	0.624	0.624
Acrolein	NA	NA	0.625	0.624	0.624	0.624	0.624	0.624	0.624	0.624
Acetonitrile	NA	NA	0.632	0.630	0.630	0.630	0.630	0.630	0.630	0.630
Acetone	NA	NA	NA	NA	0.636	0.636	0.636	0.636	0.636	0.636
Isopropyl alcohol	NA	NA	NA	0.647	0.648	0.646	0.647	0.647	0.648	0.647
Pentane	NA	0.648	0.648	0.648	0.649	0.648	0.648	0.648	0.648	0.648
Ethyl Ether	0.666	0.666	0.665	0.665	0.665	0.664	0.664	0.664	0.664	0.665
1,1-Dichloroethene	0.698	0.698	0.698	0.698	0.698	0.698	0.698	0.698	0.697	0.698
tert-butanol	NA	0.711	0.709	0.709	0.709	0.708	0.709	0.709	0.709	0.709
Acrylonitrile	0.707	0.707	0.706	0.706	0.706	0.706	0.706	0.706	0.706	0.706
1,1,2-Trichlorotrifluoroethane	0.718	0.718	0.717	0.717	0.718	0.717	0.717	0.717	0.717	0.717
Methylene Chloride	NA	NA	0.732	0.733	0.733	0.733	0.733	0.733	0.733	0.733
3-Chloropropene	0.735	0.735	0.735	0.735	0.735	0.735	0.735	0.735	0.735	0.735
Carbon Disulfide	0.751	0.751	0.751	0.751	0.751	0.751	0.751	0.750	0.751	0.751
trans-1,2-Dichloroethene	0.818	0.819	0.819	0.818	0.819	0.818	0.818	0.819	0.819	0.818
~ 2-Methyl Pentane	NA	0.822	0.822	0.822	0.822	0.822	0.823	0.822	0.822	0.822
Methyl-t-Butyl Ether	0.834	0.834	0.833	0.833	0.833	0.832	0.832	0.832	0.832	0.833

Evaluation Criteria

Internal Standard RT shift within 20 seconds of mean RT

Target compound RRT within 0.06 RRT of the RRT mean

Note: IS data is RT, SS and Target Compound Data is RRT.

INITIAL CALIBRATION RT and RRT REPORT

STD 1 = /chem/gcms/mr.i/R022013I.b/ricb201.d
 STD 2 = /chem/gcms/mr.i/R022013I.b/ricb202.d
 STD 3 = /chem/gcms/mr.i/R022013I.b/ricb203.d
 STD 4 = /chem/gcms/mr.i/R022013I.b/ricb204.d
 STD 5 = /chem/gcms/mr.i/R022013I.b/ricb205.d
 STD 6 = /chem/gcms/mr.i/R022013I.b/ricb206.d
 STD 7 = /chem/gcms/mr.i/R022013I.b/ricb207.d
 STD 8 = /chem/gcms/mr.i/R022013I.b/ricb208.d
 STD 9 = /chem/gcms/mr.i/R022013I.b/ricb209.d

COMPOUND	STD 1	STD 2	STD 3	STD 4	STD 5	STD 6	STD 7	STD 8	STD 9	MEAN
1,1-Dichloroethane	0.862	0.862	0.862	0.862	0.862	0.862	0.862	0.861	0.861	0.862
Vinyl Acetate	0.873	0.873	0.873	0.873	0.873	0.872	0.872	0.872	0.873	0.873
2-Butanone	NA	NA	0.920	0.919	0.919	0.919	0.919	0.918	0.918	0.919
Hexane	0.926	0.927	0.926	0.926	0.926	0.926	0.926	0.926	0.925	0.926
cis 1,2-Dichloroethene	0.966	0.966	0.966	0.965	0.966	0.965	0.966	0.965	0.965	0.966
Ethyl acetate	NA	0.987	0.986	0.986	0.985	0.984	0.984	0.984	0.985	0.985
Chloroform	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002
Tetrahydrofuran	NA	1.049	1.047	1.047	1.046	1.045	1.045	1.044	1.044	1.046
1,1,1-Trichloroethane	1.113	1.113	1.113	1.113	1.113	1.113	1.113	1.112	1.112	1.113
1,2-Dichloroethane	0.904	0.905	0.904	0.905	0.904	0.904	0.905	0.905	0.905	0.904
1-Butanol	NA	NA	NA	0.948	0.947	0.947	0.946	0.946	0.946	0.947
Benzene	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950
Cyclohexane	0.952	0.952	0.952	0.952	0.951	0.951	0.952	0.951	0.952	0.952
Carbon Tetrachloride	0.953	0.953	0.953	0.953	0.953	0.953	0.953	0.953	0.953	0.953
~ 2,3-dimethylpentane	0.964	0.963	0.963	0.964	0.963	0.963	0.963	0.963	0.964	0.963
~ Thiophene	0.975	0.975	0.974	0.975	0.974	0.974	0.975	0.974	0.975	0.974
2,2,4-trimethylpentane	1.025	1.025	1.024	1.024	1.024	1.024	1.024	1.024	1.025	1.024
Heptane	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062
1,2-Dichloropropane	1.066	1.066	1.066	1.066	1.066	1.066	1.066	1.065	1.066	1.066
Trichloroethene	1.071	1.071	1.071	1.071	1.071	1.071	1.071	1.071	1.071	1.071
Dibromomethane	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077
Bromodichloromethane	1.093	1.094	1.093	1.093	1.093	1.093	1.093	1.093	1.093	1.093
1,4-dioxane	NA	1.097	1.096	1.096	1.095	1.094	1.094	1.094	1.094	1.095
Methyl Methacrylate	NA	1.105	1.105	1.104	1.104	1.104	1.104	1.104	1.104	1.104
~ 1-Methylnaphthalene	NA	NA	1.733	1.733	1.732	1.732	1.732	1.732	NA	1.732
~ methyl cyclohexane	1.154	1.154	1.154	1.153	1.153	1.153	1.153	1.153	1.153	1.153
4-Methyl-2-pentanone	NA	NA	1.197	1.196	1.196	1.196	1.196	1.195	1.196	1.196
cis-1,3-Dichloropropene	1.202	1.202	1.202	1.201	1.201	1.201	1.201	1.201	1.202	1.201
trans-1,3-Dichloropropene	0.827	0.827	0.827	0.827	0.827	0.827	0.827	0.827	0.827	0.827
Toluene	0.837	0.837	0.837	0.837	0.837	0.837	0.837	0.837	0.838	0.837
1,1,2-Trichloroethane	0.842	0.842	0.842	0.842	0.842	0.842	0.842	0.842	0.842	0.842
~ 2-methyl thiophene	0.848	0.848	0.848	0.848	0.848	0.848	0.848	0.849	0.849	0.848
~ 3-methyl thiophene	0.865	0.864	0.864	0.864	0.864	0.864	0.864	0.864	0.865	0.864
2-Hexanone	NA	0.874	0.874	0.874	0.874	0.874	0.874	0.874	0.874	0.874
Octane	0.895	0.896	0.895	0.895	0.895	0.895	0.895	0.895	0.896	0.895
Dibromochloromethane	0.898	0.898	0.897	0.897	0.897	0.897	0.897	0.897	0.898	0.897
1,2-Dibromoethane	0.921	0.921	0.921	0.921	0.921	0.921	0.921	0.921	0.921	0.921

Evaluation Criteria

Internal Standard RT shift within 20 seconds of mean RT

Target compound RRT within 0.06 RRT of the RRT mean

Note: IS data is RT, SS and Target Compound Data is RRT.

INITIAL CALIBRATION RT and RRT REPORT

STD 1 = /chem/gcms/mr.i/R022013I.b/ricb201.d
 STD 2 = /chem/gcms/mr.i/R022013I.b/ricb202.d
 STD 3 = /chem/gcms/mr.i/R022013I.b/ricb203.d
 STD 4 = /chem/gcms/mr.i/R022013I.b/ricb204.d
 STD 5 = /chem/gcms/mr.i/R022013I.b/ricb205.d
 STD 6 = /chem/gcms/mr.i/R022013I.b/ricb206.d
 STD 7 = /chem/gcms/mr.i/R022013I.b/ricb207.d
 STD 8 = /chem/gcms/mr.i/R022013I.b/ricb208.d
 STD 9 = /chem/gcms/mr.i/R022013I.b/ricb209.d

COMPOUND	STD 1	STD 2	STD 3	STD 4	STD 5	STD 6	STD 7	STD 8	STD 9	MEAN
Tetrachloroethene	0.929	0.929	0.929	0.929	0.929	0.929	0.929	0.929	0.929	0.929
Chlorobenzene	1.005	1.004	1.004	1.004	1.004	1.004	1.004	1.004	1.005	1.004
~ 2,3-dimethylheptane	1.012	1.012	1.012	1.012	1.012	1.012	1.012	1.012	1.012	1.012
Ethylbenzene	1.033	1.033	1.032	1.032	1.032	1.032	1.032	1.032	1.033	1.032
~ 2-ethyl thiophene	1.042	1.042	1.041	1.041	1.041	1.041	1.041	1.042	1.042	1.041
m&p-Xylene	1.048	1.048	1.048	1.048	1.048	1.048	1.048	1.048	1.048	1.048
Nonane	NA	1.094	1.093	1.094	1.093	1.093	1.093	1.093	1.094	1.093
Bromoform	NA	1.086	1.086	1.086	1.086	1.086	1.086	1.086	1.086	1.086
Styrene	NA	1.092	1.091	1.091	1.091	1.091	1.091	1.091	1.092	1.091
o-Xylene	1.097	1.097	1.097	1.097	1.097	1.097	1.097	1.097	1.097	1.097
1,1,2,2-Tetrachloroethane	1.128	1.128	1.128	1.128	1.128	1.127	1.127	1.128	1.128	1.128
1,2,3-Trichloropropane	1.143	1.143	1.143	1.143	1.143	1.143	1.143	1.143	1.143	1.143
Cumene	NA	1.155	1.155	1.155	1.155	1.155	1.155	1.155	1.156	1.155
n-Propylbenzene	NA	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210	1.210
2-chlorotoluene	1.212	1.212	1.212	1.212	1.212	1.212	1.212	1.212	1.212	1.212
4-Ethyltoluene	NA	1.227	1.227	1.227	1.227	1.227	1.227	1.227	1.227	1.227
1,3,5-Trimethylbenzene	NA	1.236	1.236	1.236	1.235	1.235	1.235	1.236	1.236	1.236
Alpha-Methylstyrene	NA	NA	1.260	1.260	1.260	1.260	1.260	1.260	1.260	1.260
Decane	1.275	1.275	1.274	1.275	1.274	1.274	1.274	1.275	1.275	1.274
tert-butylbenzene	NA	1.282	1.282	1.282	1.281	1.281	1.281	1.281	1.282	1.282
1,2,4-Trimethylbenzene	1.283	1.283	1.283	1.283	1.283	1.283	1.283	1.283	1.284	1.283
sec-butylbenzene	NA	1.313	1.313	1.313	1.313	1.313	1.313	1.314	1.314	1.313
1,3-Dichlorobenzene	NA	1.311	1.311	1.311	1.311	1.311	1.311	1.311	1.311	1.311
Benzyl Chloride	NA	1.321	1.321	1.321	1.321	1.321	1.321	1.321	1.321	1.321
1,4-Dichlorobenzene	NA	1.322	1.322	1.322	1.322	1.322	1.322	1.322	1.322	1.322
p-Cymene	1.335	1.334	1.334	1.334	1.334	1.334	1.334	1.334	1.335	1.334
~ 1,2,3- Trimethylbenzene	1.338	1.338	1.338	1.338	1.338	1.338	1.338	1.338	1.338	1.338
~ n-butylcyclohexane	NA	1.348	1.348	1.348	1.348	1.348	1.348	1.348	1.348	1.348
~ Indane	1.366	1.366	1.366	1.366	1.366	1.366	1.366	1.366	1.366	1.366
1,2-Dichlorobenzene	NA	1.364	1.364	1.364	1.364	1.364	1.364	1.365	1.365	1.364
n-butylbenzene	NA	1.388	1.388	1.388	1.388	1.388	1.388	1.388	1.388	1.388
~ Indene	NA	1.382	1.382	1.382	1.381	1.381	1.381	1.381	1.382	1.382
Undecane	NA	1.439	1.439	1.439	1.439	1.439	1.439	1.439	1.440	1.439
~ 1,2-dimethyl-4-ethylenzene	NA	1.438	1.438	1.437	1.437	1.437	1.437	1.437	1.437	1.437
~ 1,2,4,5-tetramethylbenzene	NA	1.490	1.490	1.490	1.489	1.489	1.490	1.490	1.490	1.490
~ 1,2,3,5-tetramethylbenzene	NA	1.497	1.497	1.497	1.496	1.496	1.497	1.497	1.497	1.497
~ 1,2,3,4-tetramethylbenzene	NA	1.547	1.547	1.547	1.546	1.547	1.547	1.547	1.547	1.547

Evaluation Criteria

Internal Standard RT shift within 20 seconds of mean RT

Target compound RRT within 0.06 RRT of the RRT mean

Note: IS data is RT, SS and Target Compound Data is RRT.

INITIAL CALIBRATION RT and RRT REPORT

STD 1 = /chem/gcms/mr.i/R022013I.b/ricb201.d
 STD 2 = /chem/gcms/mr.i/R022013I.b/ricb202.d
 STD 3 = /chem/gcms/mr.i/R022013I.b/ricb203.d
 STD 4 = /chem/gcms/mr.i/R022013I.b/ricb204.d
 STD 5 = /chem/gcms/mr.i/R022013I.b/ricb205.d
 STD 6 = /chem/gcms/mr.i/R022013I.b/ricb206.d
 STD 7 = /chem/gcms/mr.i/R022013I.b/ricb207.d
 STD 8 = /chem/gcms/mr.i/R022013I.b/ricb208.d
 STD 9 = /chem/gcms/mr.i/R022013I.b/ricb209.d

COMPOUND	STD 1	STD 2	STD 3	STD 4	STD 5	STD 6	STD 7	STD 8	STD 9	MEAN
Dodecane	NA	1.580	1.580	1.580	1.579	1.579	1.579	1.580	1.580	1.580
1,2,4-Trichlorobenzene	1.586	1.586	1.586	1.586	1.585	1.585	1.585	1.585	1.586	1.586
Napthalene	1.599	1.599	1.599	1.599	1.599	1.599	1.599	1.599	1.599	1.599
~ benzo(b) thiophene	1.610	1.610	1.610	1.610	1.610	1.610	1.610	1.610	1.610	1.610
Hexachlorobutadiene	NA	1.628	1.628	1.628	1.628	1.628	1.628	1.628	1.628	1.628
1,2,3-trichlorobenzene	1.631	1.631	1.631	1.631	1.631	1.631	1.631	1.631	1.631	1.631

Evaluation Criteria

Internal Standard RT shift within 20 seconds of mean RT

Target compound RRT within 0.06 RRT of the RRT mean

Note: IS data is RT, SS and Target Compound Data is RRT.

Data File: /chem/gcms/mr.i/R022013I.b/ricb201.d
 Report Date: 21-Feb-2013 12:03

TestAmerica Knoxville

Modified Method TO-14/TO-15

Data file : /chem/gcms/mr.i/R022013I.b/ricb201.d
 Lab Smp Id: ICAL1 Client Smp ID: STD0.04
 Inj Date : 20-FEB-2013 17:04
 Operator : 060487 Inst ID: mr.i
 Smp Info : ICAL1,1,1,1,,STD0.04
 Misc Info : R022013I,TO15,
 Comment :
 Method : /chem/gcms/mr.i/R022013I.b/TO15.m
 Meth Date : 21-Feb-2013 12:03 wilesd Quant Type: ISTD
 Cal Date : 20-FEB-2013 17:04 Cal File: ricb201.d
 Als bottle: 1 Calibration Sample, Level: 1
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: allmdl.sub
 Target Version: 3.50

Concentration Formula: Amt * DF * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Default Calibration Volume
Vo	500.00000	Default Sample Volume

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG		AMOUNTS				
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ppb(v/v))	ON-COL (ppb(v/v))
=====	=====	==	=====	=====	=====	=====	=====
* 1 Bromochloromethane	128	9.089	9.089	(1.000)	459092	4.00000	4.000
* 2 1,4-Difluorobenzene	114	11.273	11.278	(1.000)	2272465	4.00000	4.000
* 3 Chlorobenzene-d5	117	17.485	17.490	(1.000)	1582153	4.00000	4.000
\$ 4 4-Bromofluorobenzene	95	20.218	20.218	(1.156)	1046505	4.00000	3.958
5 Chlorodifluoromethane	67	4.192	4.187	(0.461)	2386	0.04000	0.04308
6 Propene	41	4.198	4.192	(0.462)	9894	0.04000	0.000
7 Dichlorodifluoromethane	85	4.246	4.246	(0.467)	22519	0.04000	0.04094
8 Chloromethane	52	4.424	4.424	(0.487)	4064	0.04000	0.05583
9 1,2-Dichlorotetrafluoroethane	135	4.430	4.435	(0.487)	17844	0.04000	0.04111
10 Methanol	31	4.581	4.570	(0.504)	12791	0.04000	0.000
11 ~ acetaldehyde	44	4.575	4.570	(0.503)	53047	0.20000	0.000
12 Vinyl Chloride	62	4.591	4.591	(0.505)	9544	0.04000	0.04116
13 n-Butane	43	4.678	4.678	(0.515)	15365	0.04000	0.04094
14 1,3-Butadiene	54	4.672	4.678	(0.514)	7469	0.04000	0.04051
15 Bromomethane	94	4.990	4.985	(0.549)	10140	0.04000	0.04313
16 Chloroethane	64	5.120	5.125	(0.563)	5056	0.04000	0.04206

Data File: /chem/gcms/mr.i/R022013I.b/ricb201.d

Report Date: 21-Feb-2013 12:03

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ppb (v/v))	ON-COL (ppb (v/v))
=====	=====	==	=====	=====	=====	=====	=====
17 ~ ethanol	31	5.244	5.233	(0.577)	18350	0.20000	0.2122
18 Vinyl Bromide	106	5.411	5.416	(0.595)	8692	0.04000	0.04109
19 2-methyl butane	43	5.470	5.470	(0.602)	10709	0.04000	0.04115
20 Trichlorofluoromethane	101	5.675	5.675	(0.624)	20922	0.04000	0.04074
21 Acrolein	56	5.681	5.670	(0.625)	4149	0.04000	0.000
23 Acetone	58	5.805	5.783	(0.639)	29728	0.04000	0.000
24 Isopropyl alcohol	45	5.896	5.885	(0.649)	24876	0.04000	0.000
25 Pentane	72	5.886	5.896	(0.648)	1699	0.04000	0.04236
26 Ethyl Ether	31	6.058	6.047	(0.667)	8804	0.04000	0.04009
27 1,1-Dichloroethene	96	6.344	6.344	(0.698)	8660	0.04000	0.04129
28 tert-butanol	59	6.463	6.441	(0.711)	14447	0.04000	0.04328
29 Acrylonitrile	53	6.425	6.419	(0.707)	5683	0.04000	0.03812
30 1,1,2-Trichlorotrifluoroethane	101	6.522	6.522	(0.718)	17316	0.04000	0.04081
31 Methylene Chloride	84	6.662	6.662	(0.733)	11327	0.04000	0.000
32 3-Chloropropene	39	6.678	6.684	(0.735)	6382	0.04000	0.04194
33 Carbon Disulfide	76	6.824	6.824	(0.751)	24113	0.04000	0.04079
34 trans-1,2-Dichloroethene	96	7.439	7.444	(0.818)	9115	0.04000	0.04150
35 ~ 2-Methyl Pentane	43	7.476	7.476	(0.823)	19546	0.04000	0.04200
36 Methyl-t-Butyl Ether	73	7.584	7.568	(0.834)	21895	0.04000	0.04165
37 1,1-Dichloroethane	63	7.832	7.832	(0.862)	14641	0.04000	0.04039
38 Vinyl Acetate	43	7.935	7.935	(0.873)	18429	0.04000	0.04027
39 2-Butanone	72	8.371	8.355	(0.921)	6148	0.04000	0.000
40 Hexane	56	8.415	8.420	(0.926)	7220	0.04000	0.04072
41 cis 1,2-Dichloroethene	96	8.776	8.776	(0.966)	9528	0.04000	0.04292
42 Ethyl acetate	43	8.970	8.954	(0.987)	18393	0.04000	0.04421
43 Chloroform	83	9.105	9.110	(1.002)	16772	0.04000	0.04118
44 Tetrahydrofuran	42	9.542	9.509	(1.050)	10052	0.04000	0.04228
45 1,1,1-Trichloroethane	97	10.113	10.118	(1.113)	15747	0.04000	0.04066
46 1,2-Dichloroethane	62	10.194	10.199	(0.904)	11105	0.04000	0.04097
47 1-Butanol	31	10.701	10.679	(0.949)	2039	0.04000	0.000
48 Benzene	78	10.712	10.712	(0.950)	26668	0.04000	0.04139
49 Cyclohexane	69	10.728	10.728	(0.952)	3913	0.04000	0.04030
50 Carbon Tetrachloride	117	10.744	10.744	(0.953)	15160	0.04000	0.04060
51 ~ 2,3-dimethylpentane	71	10.863	10.863	(0.964)	5206	0.04000	0.04118
52 ~ Thiophene	84	10.987	10.987	(0.975)	14401	0.04000	0.04022
53 2,2,4-trimethylpentane	57	11.553	11.553	(1.025)	41122	0.04000	0.04090
54 Heptane	71	11.968	11.973	(1.062)	8809	0.04000	0.04063
55 1,2-Dichloropropane	63	12.017	12.017	(1.066)	9039	0.04000	0.04023
56 Trichloroethene	130	12.071	12.076	(1.071)	10783	0.04000	0.04053
57 Dibromomethane	93	12.141	12.146	(1.077)	8489	0.04000	0.04040
58 Bromodichloromethane	83	12.324	12.324	(1.093)	14266	0.04000	0.04029
59 1,4-dioxane	88	12.362	12.346	(1.097)	1685	0.04000	0.02818
60 Methyl Methacrylate	41	12.453	12.448	(1.105)	8591	0.04000	0.04112
61 ~ methyl cyclohexane	83	13.003	13.003	(1.154)	14361	0.04000	0.04016
62 4-Methyl-2-pentanone	43	13.494	13.483	(1.197)	16495	0.04000	0.000
63 cis-1,3-Dichloropropene	75	13.553	13.548	(1.202)	12468	0.04000	0.04112
64 trans-1,3-Dichloropropene	75	14.454	14.459	(0.827)	12054	0.04000	0.04085

Data File: /chem/gcms/mr.i/R022013I.b/ricb201.d
Report Date: 21-Feb-2013 12:03

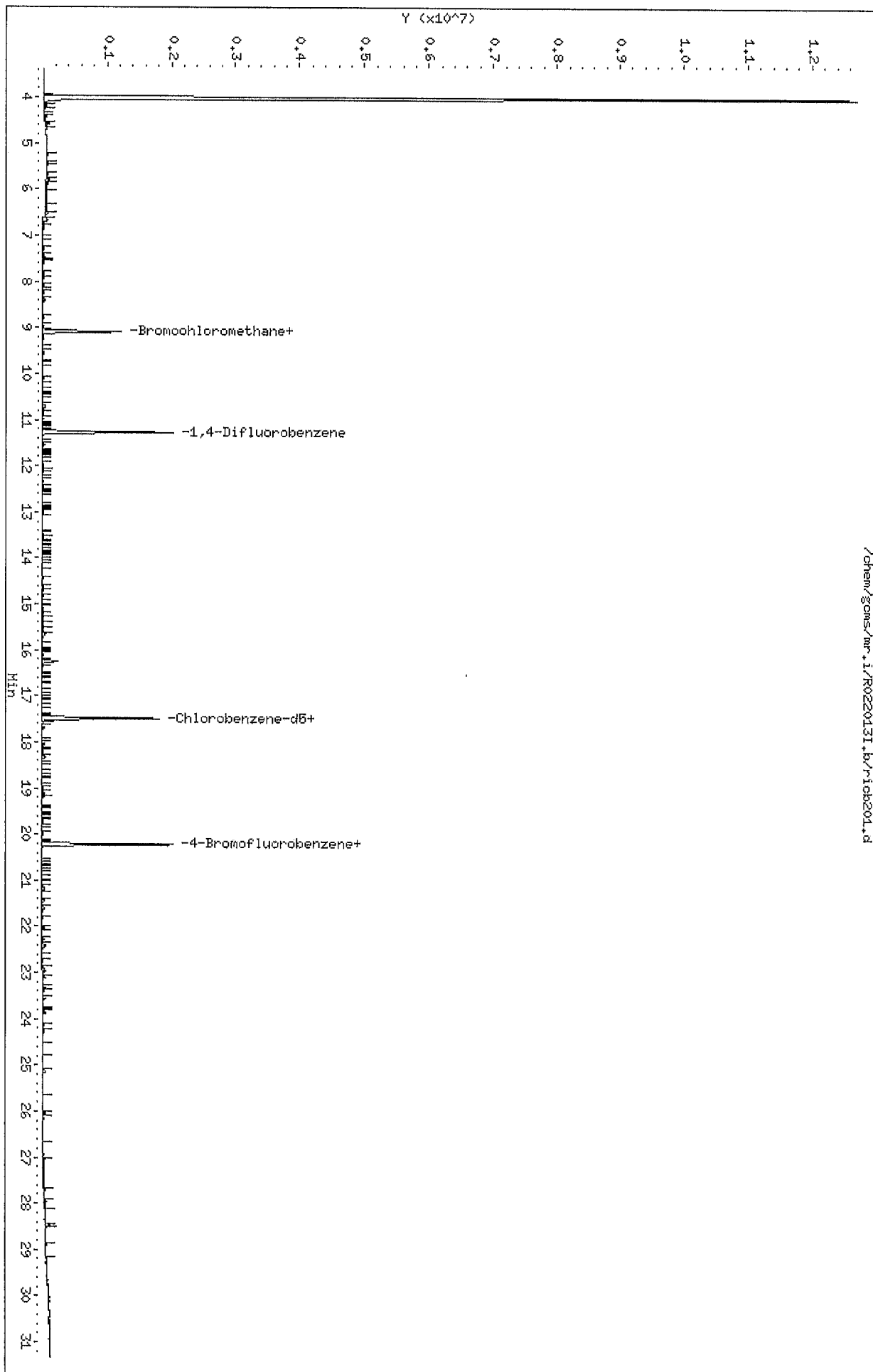
Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ppb (v/v))	ON-COL (ppb (v/v))
=====	=====	==	=====	=====	=====	=====	=====
65 Toluene	91	14.637	14.637	(0.837)	29537	0.04000	0.04100
66 1,1,2-Trichloroethane	83	14.724	14.718	(0.842)	7895	0.04000	0.04086
67 ~ 2-methyl thiophene	97	14.831	14.837	(0.848)	23040	0.04000	0.04035
68 ~ 3-methyl thiophene	97	15.117	15.112	(0.865)	24080	0.04000	0.04083
69 2-Hexanone	58	15.290	15.279	(0.874)	2326	0.04000	0.01306
70 Octane	85	15.656	15.662	(0.895)	9361	0.04000	0.04085
71 Dibromochloromethane	129	15.694	15.689	(0.898)	12233	0.04000	0.04100
72 1,2-Dibromoethane	107	16.104	16.104	(0.921)	12145	0.04000	0.03971
73 Tetrachloroethene	129	16.250	16.250	(0.929)	10271	0.04000	0.04107
74 Chlorobenzene	112	17.565	17.565	(1.005)	22316	0.04000	0.04048
75 ~ 2,3-dimethylheptane	43	17.695	17.695	(1.012)	25971	0.04000	0.04090
76 Ethylbenzene	91	18.056	18.056	(1.033)	36218	0.04000	0.04102
77 ~ 2-ethyl thiophene	97	18.212	18.212	(1.042)	26148	0.04000	0.04105
78 m&p-Xylene	91	18.326	18.326	(1.048)	55378	0.08000	0.08195
79 Nonane	57	19.124	19.124	(1.094)	18030	0.04000	0.03986
80 Bromoform	173	18.994	18.989	(1.086)	9294	0.04000	0.04013
81 Styrene	104	19.081	19.086	(1.091)	14083	0.04000	0.03859
82 o-Xylene	91	19.189	19.183	(1.097)	28745	0.04000	0.04074
M 83 Xylene (total)	100				84123	0.12000	0.1227
84 1,1,2,2-Tetrachloroethane	83	19.717	19.722	(1.128)	18782	0.04000	0.04015
85 1,2,3-Trichloropropane	110	19.981	19.987	(1.143)	6137	0.04000	0.04115
86 Cumene	105	20.208	20.202	(1.156)	41595	0.04000	0.04171
87 n-Propylbenzene	120	21.162	21.162	(1.210)	10791	0.04000	0.03957
88 2-chlorotoluene	126	21.194	21.194	(1.212)	10402	0.04000	0.04077
89 4-Ethyltoluene	105	21.453	21.453	(1.227)	39984	0.04000	0.04080
90 1,3,5-Trimethylbenzene	120	21.604	21.604	(1.236)	18308	0.04000	0.04003
91 Alpha-Methylstyrene	118	22.030	22.036	(1.260)	9092	0.04000	0.000
92 Decane	57	22.289	22.289	(1.275)	19922	0.04000	0.03833
93 tert-butylbenzene	119	22.408	22.408	(1.282)	35823	0.04000	0.04011
94 1,2,4-Trimethylbenzene	105	22.440	22.440	(1.283)	31424	0.04000	0.03948
95 sec-butylbenzene	105	22.969	22.969	(1.314)	48863	0.04000	0.04001
96 1,3-Dichlorobenzene	146	22.925	22.925	(1.311)	21328	0.04000	0.03973
97 Benzyl Chloride	91	23.098	23.098	(1.321)	21580	0.04000	0.03624
98 1,4-Dichlorobenzene	146	23.114	23.114	(1.322)	21021	0.04000	0.03930
99 p-Cymene	119	23.335	23.330	(1.335)	39354	0.04000	0.03925
100 ~ 1,2,3- Trimethylbenzene	105	23.395	23.395	(1.338)	28458	0.04000	0.03866
101 ~ n-butylcyclohexane	83	23.573	23.572	(1.348)	26498	0.04000	0.03870
102 ~ Indane	117	23.885	23.885	(1.366)	32062	0.04000	0.04021
103 1,2-Dichlorobenzene	146	23.858	23.864	(1.365)	21232	0.04000	0.04016
104 n-butylbenzene	91	24.279	24.279	(1.389)	34691	0.04000	0.03706
105 ~ Indene	116	24.160	24.160	(1.382)	23601	0.04000	0.03773
106 Undecane	57	25.163	25.169	(1.439)	18553	0.04000	0.03288
107 ~ 1,2-dimethyl-4-ethylenzene	119	25.136	25.136	(1.438)	36537	0.04000	0.03652
108 ~ 1,2,4,5-tetramethylbenzene	119	26.048	26.048	(1.490)	32982	0.04000	0.03339
109 ~ 1,2,3,5-tetramethylbenzene	119	26.172	26.172	(1.497)	22201	0.04000	0.03506
110 ~ 1,2,3,4-tetramethylbenzene	119	27.045	27.045	(1.547)	25042	0.04000	0.03153
111 Dodecane	57	27.628	27.622	(1.580)	1895	0.04000	0.01088

Data File: /chem/gcms/mr.i/R022013I.b/ricb201.d
 Report Date: 21-Feb-2013 12:03

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT	ON-COL
							(ppb(v/v))	(ppb(v/v))
=====	=====	==	=====	=====	=====		=====	=====
112 1,2,4-Trichlorobenzene	180	27.725	27.725	(1.586)	12862		0.04000	0.03474
113 Napthalene	128	27.962	27.962	(1.599)	25899		0.04000	0.03180
114 ~ benzo(b) thiophene	134	28.156	28.151	(1.610)	21654		0.04000	0.03459
115 Hexachlorobutadiene	225	28.469	28.474	(1.628)	17026		0.04000	0.03739
116 1,2,3-trichlorobenzene	180	28.523	28.523	(1.631)	13345		0.04000	0.03417

Data File: /chem/gcms/mr.i/R0220131.b/r1cb201.d
Date : 20-FEB-2013 17:04
Client ID: STD0.04
Sample Info: ICAL1,4,1,1,STD0.04
Purge Volume: 500.0
Column phase: Rtx-5

Instrument: mr.i
Operator: 060487
Column diameter: 0.32



Data File: /chem/gcms/mr.i/R022013I.b/ricb202.d
 Report Date: 21-Feb-2013 12:03

TestAmerica Knoxville

Modified Method TO-14/TO-15

Data file : /chem/gcms/mr.i/R022013I.b/ricb202.d
 Lab Smp Id: ICAL2 Client Smp ID: STD0.08
 Inj Date : 20-FEB-2013 17:52
 Operator : 060487 Inst ID: mr.i
 Smp Info : ICAL2,1,1,2,,STD0.08
 Misc Info : R022013I,TO15,
 Comment :
 Method : /chem/gcms/mr.i/R022013I.b/TO15.m
 Meth Date : 21-Feb-2013 12:03 wilesd Quant Type: ISTD
 Cal Date : 20-FEB-2013 17:52 Cal File: ricb202.d
 Als bottle: 1 Calibration Sample, Level: 2
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: allmdl.sub
 Target Version: 3.50

Concentration Formula: Amt * DF * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Default Calibration Volume
Vo	500.00000	Default Sample Volume

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT	ON-COL
							(ppb(v/v))	(ppb(v/v))
* 1 Bromochloromethane	=====	128	9.088	9.089	(1.000)	465844	4.00000	4.000
* 2 1,4-Difluorobenzene	=====	114	11.272	11.278	(1.000)	2297612	4.00000	4.000
* 3 Chlorobenzene-d5	=====	117	17.484	17.490	(1.000)	1628035	4.00000	4.000
\$ 4 4-Bromofluorobenzene	=====	95	20.218	20.218	(1.156)	1099623	4.00000	4.042
5 Chlorodifluoromethane	=====	67	4.192	4.187	(0.461)	4150	0.08000	0.07384
6 Propene	=====	41	4.203	4.192	(0.462)	17633	0.08000	0.000
7 Dichlorodifluoromethane	=====	85	4.252	4.246	(0.468)	43602	0.08000	0.07812
8 Chloromethane	=====	52	4.424	4.424	(0.487)	5909	0.08000	0.08000
9 1,2-Dichlorotetrafluoroethane	=====	135	4.435	4.435	(0.488)	34259	0.08000	0.07778
10 Methanol	=====	31	4.575	4.570	(0.503)	18293	0.08000	0.000
11 ~ acetaldehyde	=====	44	4.575	4.570	(0.503)	100183	0.40000	0.000
12 Vinyl Chloride	=====	62	4.597	4.591	(0.506)	18274	0.08000	0.07767
13 n-Butane	=====	43	4.683	4.678	(0.515)	29744	0.08000	0.07811
14 1,3-Butadiene	=====	54	4.678	4.678	(0.515)	14774	0.08000	0.07897
15 Bromomethane	=====	94	4.985	4.985	(0.548)	17590	0.08000	0.07374
16 Chloroethane	=====	64	5.130	5.125	(0.564)	9253	0.08000	0.07587

Data File: /chem/gcms/mr.i/R022013I.b/ricb202.d
Report Date: 21-Feb-2013 12:03

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ppb (v/v))	ON-COL (ppb (v/v))
=====	=====	==	=====	=====	=====	=====	=====
17 ~ ethanol	31	5.244	5.233	(0.577)	35107	0.40000	0.4000
18 Vinyl Bromide	106	5.416	5.416	(0.596)	16706	0.08000	0.07782
19 2-methyl butane	43	5.470	5.470	(0.602)	20521	0.08000	0.07770
20 Trichlorofluoromethane	101	5.680	5.675	(0.625)	40910	0.08000	0.07851
21 Acrolein	56	5.686	5.670	(0.626)	8141	0.08000	0.000
23 Acetone	58	5.804	5.783	(0.639)	55777	0.08000	0.000
24 Isopropyl alcohol	45	5.896	5.885	(0.649)	38867	0.08000	0.000
25 Pentane	72	5.891	5.896	(0.648)	3256	0.08000	0.08000
26 Ethyl Ether	31	6.058	6.047	(0.667)	17789	0.08000	0.07982
27 1,1-Dichloroethene	96	6.349	6.344	(0.699)	16477	0.08000	0.07742
28 tert-butanol	59	6.462	6.441	(0.711)	27094	0.08000	0.08000
29 Acrylonitrile	53	6.425	6.419	(0.707)	12671	0.08000	0.08376
30 1,1,2-Trichlorotrifluoroethane	101	6.522	6.522	(0.718)	33752	0.08000	0.07839
31 Methylene Chloride	84	6.662	6.662	(0.733)	18619	0.08000	0.000
32 3-Chloropropene	39	6.683	6.684	(0.735)	11752	0.08000	0.07611
33 Carbon Disulfide	76	6.829	6.824	(0.751)	47047	0.08000	0.07843
34 trans-1,2-Dichloroethene	96	7.444	7.444	(0.819)	17161	0.08000	0.07700
35 ~ 2-Methyl Pentane	43	7.476	7.476	(0.823)	37775	0.08000	0.08000
36 Methyl-t-Butyl Ether	73	7.579	7.568	(0.834)	40906	0.08000	0.07669
37 1,1-Dichloroethane	63	7.837	7.832	(0.862)	29136	0.08000	0.07922
38 Vinyl Acetate	43	7.934	7.935	(0.873)	36899	0.08000	0.07946
39 2-Butanone	72	8.371	8.355	(0.921)	12026	0.08000	0.000
40 Hexane	56	8.425	8.420	(0.927)	14136	0.08000	0.07856
41 cis 1,2-Dichloroethene	96	8.781	8.776	(0.966)	16709	0.08000	0.07417
42 Ethyl acetate	43	8.970	8.954	(0.987)	33770	0.08000	0.08000
43 Chloroform	83	9.110	9.110	(1.002)	32078	0.08000	0.07763
44 Tetrahydrofuran	42	9.536	9.509	(1.049)	19301	0.08000	0.08000
45 1,1,1-Trichloroethane	97	10.118	10.118	(1.113)	30922	0.08000	0.07868
46 1,2-Dichloroethane	62	10.205	10.199	(0.905)	21393	0.08000	0.07806
47 1-Butanol	31	10.701	10.679	(0.949)	4617	0.08000	0.000
48 Benzene	78	10.712	10.712	(0.950)	50299	0.08000	0.07722
49 Cyclohexane	69	10.733	10.728	(0.952)	7794	0.08000	0.07940
50 Carbon Tetrachloride	117	10.744	10.744	(0.953)	29755	0.08000	0.07881
51 ~ 2,3-dimethylpentane	71	10.857	10.863	(0.963)	9926	0.08000	0.07765
52 ~ Thiophene	84	10.987	10.987	(0.975)	28802	0.08000	0.07956
53 2,2,4-trimethylpentane	57	11.558	11.553	(1.025)	79498	0.08000	0.07820
54 Heptane	71	11.973	11.973	(1.062)	17260	0.08000	0.07874
55 1,2-Dichloropropane	63	12.017	12.017	(1.066)	18068	0.08000	0.07954
56 Trichloroethene	130	12.070	12.076	(1.071)	21237	0.08000	0.07894
57 Dibromomethane	93	12.146	12.146	(1.077)	16829	0.08000	0.07921
58 Bromodichloromethane	83	12.329	12.324	(1.094)	28431	0.08000	0.07942
59 1,4-dioxane	88	12.367	12.346	(1.097)	6266	0.08000	0.1036
60 Methyl Methacrylate	41	12.453	12.448	(1.105)	16899	0.08000	0.08000
61 ~ methyl cyclohexane	83	13.003	13.003	(1.154)	28804	0.08000	0.07967
62 4-Methyl-2-pentanone	43	13.494	13.483	(1.197)	32747	0.08000	0.000
63 cis-1,3-Dichloropropene	75	13.548	13.548	(1.202)	23843	0.08000	0.07777
64 trans-1,3-Dichloropropene	75	14.459	14.459	(0.827)	23773	0.08000	0.07830

Data File: /chem/gcms/mr.i/R022013I.b/ricb202.d
Report Date: 21-Feb-2013 12:03

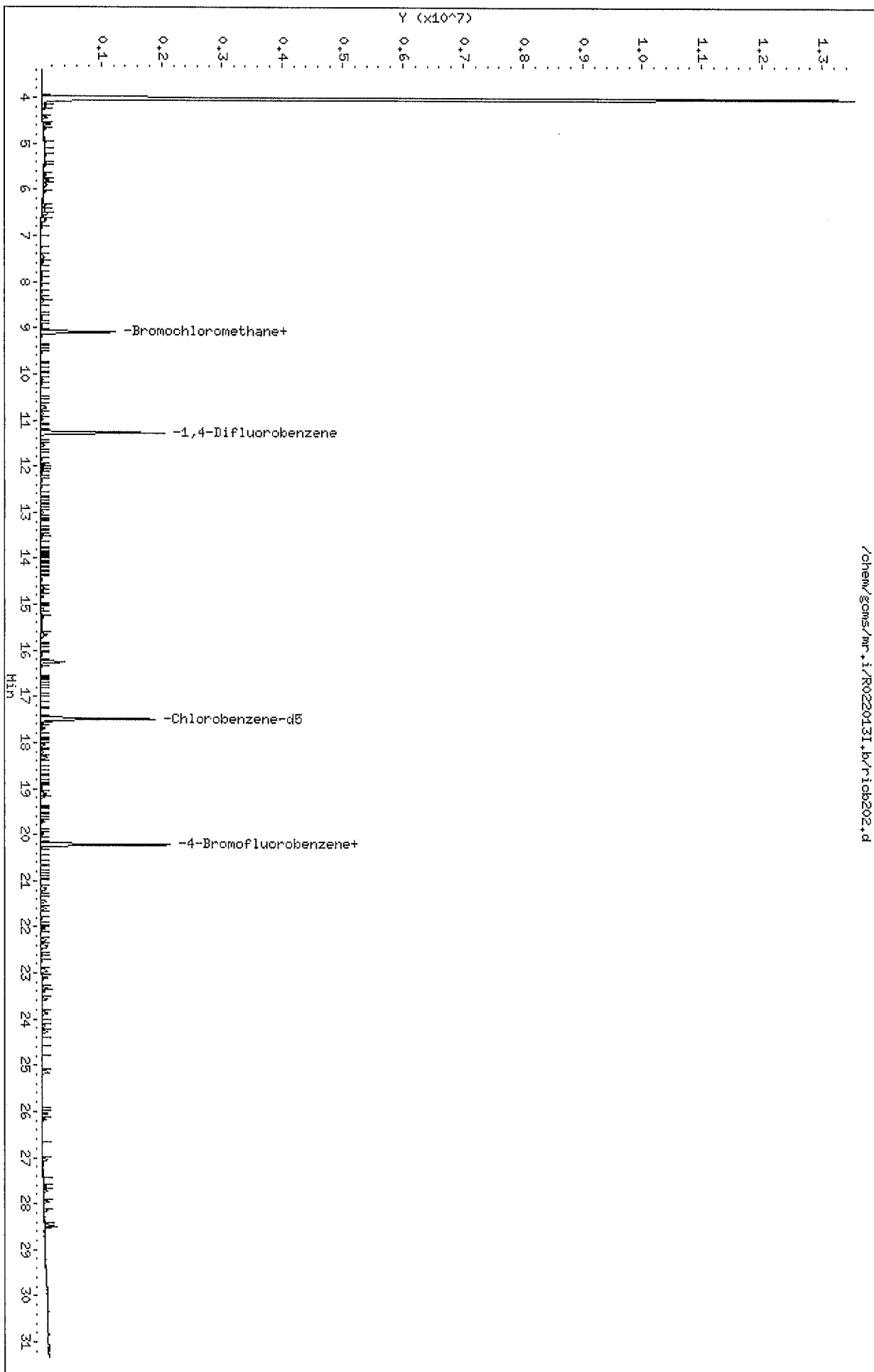
Compounds	QUANT SIG			RESPONSE	AMOUNTS	
	MASS	RT	EXP RT REL RT		CAL-AMT (ppb(v/v))	ON-COL (ppb(v/v))
=====	=====	==	=====	=====	=====	=====
65 Toluene	91	14.637	14.637 (0.837)	57820	0.08000	0.07800
66 1,1,2-Trichloroethane	83	14.723	14.718 (0.842)	15562	0.08000	0.07827
67 ~ 2-methyl thiophene	97	14.837	14.837 (0.849)	46592	0.08000	0.07930
68 ~ 3-methyl thiophene	97	15.112	15.112 (0.864)	47530	0.08000	0.07833
69 2-Hexanone	58	15.290	15.279 (0.874)	14665	0.08000	0.08000
70 Octane	85	15.662	15.662 (0.896)	18460	0.08000	0.07829
71 Dibromochloromethane	129	15.694	15.689 (0.898)	23953	0.08000	0.07801
72 1,2-Dibromoethane	107	16.104	16.104 (0.921)	25362	0.08000	0.08058
73 Tetrachloroethene	129	16.250	16.250 (0.929)	20033	0.08000	0.07785
74 Chlorobenzene	112	17.560	17.565 (1.004)	44825	0.08000	0.07903
75 ~ 2,3-dimethylheptane	43	17.689	17.695 (1.012)	51093	0.08000	0.07820
76 Ethylbenzene	91	18.056	18.056 (1.033)	70844	0.08000	0.07797
77 ~ 2-ethyl thiophene	97	18.212	18.212 (1.042)	51047	0.08000	0.07789
78 m&p-Xylene	91	18.331	18.326 (1.048)	108553	0.16000	0.1561
79 Nonane	57	19.124	19.124 (1.094)	37233	0.08000	0.08000
80 Bromoform	173	18.983	18.989 (1.086)	19064	0.08000	0.08000
81 Styrene	104	19.086	19.086 (1.092)	30042	0.08000	0.08000
82 o-Xylene	91	19.183	19.183 (1.097)	57007	0.08000	0.07852
M 83 Xylene (total)	100			165560	0.24000	0.2346
84 1,1,2,2-Tetrachloroethane	83	19.722	19.722 (1.128)	38357	0.08000	0.07969
85 1,2,3-Trichloropropane	110	19.986	19.987 (1.143)	11923	0.08000	0.07770
86 Cumene	105	20.202	20.202 (1.155)	82089	0.08000	0.08000
87 n-Propylbenzene	120	21.162	21.162 (1.210)	22450	0.08000	0.08000
88 2-chlorotoluene	126	21.194	21.194 (1.212)	20600	0.08000	0.07846
89 4-Ethyltoluene	105	21.453	21.453 (1.227)	80676	0.08000	0.08000
90 1,3,5-Trimethylbenzene	120	21.604	21.604 (1.236)	37645	0.08000	0.08000
91 Alpha-Methylstyrene	118	22.036	22.036 (1.260)	19816	0.08000	0.000
92 Decane	57	22.289	22.289 (1.275)	44570	0.08000	0.08334
93 tert-butylbenzene	119	22.408	22.408 (1.282)	73523	0.08000	0.08000
94 1,2,4-Trimethylbenzene	105	22.440	22.440 (1.283)	66386	0.08000	0.08105
95 sec-butylbenzene	105	22.963	22.969 (1.313)	100537	0.08000	0.08000
96 1,3-Dichlorobenzene	146	22.925	22.925 (1.311)	44186	0.08000	0.08000
97 Benzyl Chloride	91	23.092	23.098 (1.321)	49016	0.08000	0.08000
98 1,4-Dichlorobenzene	146	23.109	23.114 (1.322)	44033	0.08000	0.08000
99 p-Cymene	119	23.330	23.330 (1.334)	84097	0.08000	0.08150
100 ~ 1,2,3- Trimethylbenzene	105	23.389	23.395 (1.338)	62629	0.08000	0.08268
101 ~ n-butylcyclohexane	83	23.572	23.572 (1.348)	56365	0.08000	0.08000
102 ~ Indane	117	23.885	23.885 (1.366)	65284	0.08000	0.07957
103 1,2-Dichlorobenzene	146	23.858	23.864 (1.365)	43525	0.08000	0.08000
104 n-butylbenzene	91	24.279	24.279 (1.389)	77060	0.08000	0.08000
105 ~ Indene	116	24.160	24.160 (1.382)	51489	0.08000	0.08000
106 Undecane	57	25.163	25.169 (1.439)	46444	0.08000	0.08000
107 ~ 1,2-dimethyl-4-ethylenzene	119	25.136	25.136 (1.438)	82354	0.08000	0.08000
108 ~ 1,2,4,5-tetramethylbenzene	119	26.047	26.048 (1.490)	81303	0.08000	0.08000
109 ~ 1,2,3,5-tetramethylbenzene	119	26.172	26.172 (1.497)	52132	0.08000	0.08000
110 ~ 1,2,3,4-tetramethylbenzene	119	27.045	27.045 (1.547)	65388	0.08000	0.08000
111 Dodecane	57	27.622	27.622 (1.580)	24763	0.08000	0.1382

Data File: /chem/gcms/mr.i/R022013I.b/ricb202.d
 Report Date: 21-Feb-2013 12:03

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT	ON-COL
							(ppb(v/v))	(ppb(v/v))
=====	=====	==	=====	=====	=====		=====	=====
112 1,2,4-Trichlorobenzene	180	27.724	27.725	(1.586)	34487		0.08000	0.09052
113 Napthalene	128	27.962	27.962	(1.599)	80781		0.08000	0.09640
114 ~ benzo(b) thiophene	134	28.151	28.151	(1.610)	58505		0.08000	0.09082
115 Hexachlorobutadiene	225	28.474	28.474	(1.629)	37485		0.08000	0.08000
116 1,2,3-trichlorobenzene	180	28.517	28.523	(1.631)	36835		0.08000	0.09166
117 ~ 2-Methylnaphthalene	142	29.979	29.979	(1.715)	1643		0.50000	0.000
118 ~ 1-Methylnaphthalene	142	30.297	30.291	(1.733)	2002		0.50000	0.000

Data File: /chem/gcms/mr.i/R0220131.b/rich202.d
Date: 20-FEB-2013 17:52
Client ID: STD.08
Sample Info: ICAL2,1,1,2,STD0.08
Purge Volume: 500.0
Column phase: Rtx-5

Instrument: mr.i
Operator: 060487
Column diameter: 0.32



Data File: /chem/gcms/mr.i/R022013I.b/ricb203.d
 Report Date: 21-Feb-2013 12:03

TestAmerica Knoxville

Modified Method TO-14/TO-15

Data file : /chem/gcms/mr.i/R022013I.b/ricb203.d
 Lab Smp Id: ICAL2 Client Smp ID: STD0.16
 Inj Date : 20-FEB-2013 18:39
 Operator : 060487 Inst ID: mr.i
 Smp Info : ICAL2,1,1,3,,STD0.16
 Misc Info : R022013I,TO15,
 Comment :
 Method : /chem/gcms/mr.i/R022013I.b/TO15.m
 Meth Date : 21-Feb-2013 12:03 wilesd Quant Type: ISTD
 Cal Date : 20-FEB-2013 18:39 Cal File: ricb203.d
 Als bottle: 1 Calibration Sample, Level: 3
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: allmdl.sub
 Target Version: 3.50

Concentration Formula: Amt * DF * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Default Calibration Volume
Vo	500.00000	Default Sample Volume

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT (ppb(v/v))	ON-COL (ppb(v/v))
* 1 Bromochloromethane		128	9.089	9.089	(1.000)	473631	4.00000	4.000
* 2 1,4-Difluorobenzene		114	11.272	11.278	(1.000)	2340803	4.00000	4.000
* 3 Chlorobenzene-d5		117	17.484	17.490	(1.000)	1654983	4.00000	4.000
\$ 4 4-Bromofluorobenzene		95	20.218	20.218	(1.156)	1132688	4.00000	4.063
5 Chlorodifluoromethane		67	4.187	4.187	(0.461)	8237	0.16000	0.1491
6 Propene		41	4.198	4.192	(0.462)	28723	0.16000	0.1600
7 Dichlorodifluoromethane		85	4.246	4.246	(0.467)	86455	0.16000	0.1548
8 Chloromethane		52	4.424	4.424	(0.487)	11079	0.16000	0.1535
9 1,2-Dichlorotetrafluoroethane		135	4.430	4.435	(0.487)	67391	0.16000	0.1535
10 Methanol		31	4.570	4.570	(0.503)	26405	0.16000	0.000
11 ~ acetaldehyde		44	4.570	4.570	(0.503)	179354	0.80000	0.000
12 Vinyl Chloride		62	4.591	4.591	(0.505)	35146	0.16000	0.1510
13 n-Butane		43	4.678	4.678	(0.515)	54143	0.16000	0.1460
14 1,3-Butadiene		54	4.678	4.678	(0.515)	28065	0.16000	0.1515
15 Bromomethane		94	4.985	4.985	(0.548)	32007	0.16000	0.1402
16 Chloroethane		64	5.120	5.125	(0.563)	17690	0.16000	0.1480

Data File: /chem/gcms/mr.i/R022013I.b/ricb203.d
Report Date: 21-Feb-2013 12:03

Compounds	QUANT SIG			REL RT	RESPONSE	AMOUNTS	
	MASS	RT	EXP RT			CAL-AMT (ppb (v/v))	ON-COL (ppb (v/v))
=====	=====	==	=====	=====	=====	=====	=====
17 ~ ethanol	31	5.233	5.233	(0.576)	69221	0.80000	0.7877
18 Vinyl Bromide	106	5.411	5.416	(0.595)	32077	0.16000	0.1511
19 2-methyl butane	43	5.470	5.470	(0.602)	40105	0.16000	0.1527
20 Trichlorofluoromethane	101	5.675	5.675	(0.624)	79409	0.16000	0.1531
21 Acrolein	56	5.681	5.670	(0.625)	16950	0.16000	0.1600
22 Acetonitrile	40	5.740	5.729	(0.632)	12878	0.16000	0.1600
23 Acetone	58	5.799	5.783	(0.638)	84192	0.16000	0.000
24 Isopropyl alcohol	45	5.891	5.885	(0.648)	59854	0.16000	0.000
25 Pentane	72	5.891	5.896	(0.648)	6275	0.16000	0.1557
26 Ethyl Ether	31	6.047	6.047	(0.665)	33402	0.16000	0.1514
27 1,1-Dichloroethene	96	6.344	6.344	(0.698)	31862	0.16000	0.1513
28 tert-butanol	59	6.446	6.441	(0.709)	55744	0.16000	0.1609
29 Acrylonitrile	53	6.419	6.419	(0.706)	24477	0.16000	0.1594
30 1,1,2-Trichlorotrifluoroethane	101	6.516	6.522	(0.717)	64494	0.16000	0.1513
31 Methylene Chloride	84	6.657	6.662	(0.732)	32580	0.16000	0.1600
32 3-Chloropropene	39	6.684	6.684	(0.735)	22014	0.16000	0.1462
33 Carbon Disulfide	76	6.824	6.824	(0.751)	89312	0.16000	0.1507
34 trans-1,2-Dichloroethene	96	7.444	7.444	(0.819)	32306	0.16000	0.1479
35 ~ 2-Methyl Pentane	43	7.476	7.476	(0.823)	72541	0.16000	0.1554
36 Methyl-t-Butyl Ether	73	7.573	7.568	(0.833)	82807	0.16000	0.1550
37 1,1-Dichloroethane	63	7.832	7.832	(0.862)	56165	0.16000	0.1533
38 Vinyl Acetate	43	7.935	7.935	(0.873)	72595	0.16000	0.1558
39 2-Butanone	72	8.361	8.355	(0.920)	20012	0.16000	0.1600
40 Hexane	56	8.420	8.420	(0.926)	27459	0.16000	0.1533
41 cis 1,2-Dichloroethene	96	8.776	8.776	(0.966)	31936	0.16000	0.1457
42 Ethyl acetate	43	8.965	8.954	(0.986)	67332	0.16000	0.1584
43 Chloroform	83	9.110	9.110	(1.002)	62526	0.16000	0.1524
44 Tetrahydrofuran	42	9.520	9.509	(1.047)	36999	0.16000	0.1553
45 1,1,1-Trichloroethane	97	10.118	10.118	(1.113)	59813	0.16000	0.1530
46 1,2-Dichloroethane	62	10.194	10.199	(0.904)	41610	0.16000	0.1525
47 1-Butanol	31	10.690	10.679	(0.948)	10420	0.16000	0.000
48 Benzene	78	10.706	10.712	(0.950)	94800	0.16000	0.1481
49 Cyclohexane	69	10.728	10.728	(0.952)	14713	0.16000	0.1512
50 Carbon Tetrachloride	117	10.744	10.744	(0.953)	36635	0.16000	0.1101
51 ~ 2,3-dimethylpentane	71	10.857	10.863	(0.963)	20306	0.16000	0.1572
52 ~ Thiophene	84	10.981	10.987	(0.974)	54832	0.16000	0.1523
53 2,2,4-trimethylpentane	57	11.547	11.553	(1.024)	155804	0.16000	0.1535
54 Heptane	71	11.968	11.973	(1.062)	33485	0.16000	0.1531
55 1,2-Dichloropropane	63	12.017	12.017	(1.066)	35474	0.16000	0.1554
56 Trichloroethene	130	12.071	12.076	(1.071)	42000	0.16000	0.1554
57 Dibromomethane	93	12.141	12.146	(1.077)	33703	0.16000	0.1571
58 Bromodichloromethane	83	12.319	12.324	(1.093)	55732	0.16000	0.1551
59 1,4-dioxane	88	12.356	12.346	(1.096)	13687	0.16000	0.1656
60 Methyl Methacrylate	41	12.453	12.448	(1.105)	35221	0.16000	0.1618
61 ~ methyl cyclohexane	83	13.003	13.003	(1.154)	55808	0.16000	0.1542
62 4-Methyl-2-pentanone	43	13.489	13.483	(1.197)	64856	0.16000	0.1600
63 cis-1,3-Dichloropropene	75	13.548	13.548	(1.202)	47485	0.16000	0.1546

Data File: /chem/gcms/mr.i/R022013I.b/ricb203.d
Report Date: 21-Feb-2013 12:03

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ppb (v/v))	ON-COL (ppb (v/v))
=====	=====	==	=====	=====	=====	=====	=====
64 trans-1,3-Dichloropropene	75	14.454	14.459	(0.827)	46166	0.16000	0.1529
65 Toluene	91	14.637	14.637	(0.837)	110499	0.16000	0.1508
66 1,1,2-Trichloroethane	83	14.724	14.718	(0.842)	30841	0.16000	0.1550
67 ~ 2-methyl thiophene	97	14.831	14.837	(0.848)	92199	0.16000	0.1562
68 ~ 3-methyl thiophene	97	15.112	15.112	(0.864)	94121	0.16000	0.1550
69 2-Hexanone	58	15.284	15.279	(0.874)	33099	0.16000	0.1684
70 Octane	85	15.656	15.662	(0.895)	36534	0.16000	0.1549
71 Dibromochloromethane	129	15.689	15.689	(0.897)	45282	0.16000	0.1497
72 1,2-Dibromoethane	107	16.104	16.104	(0.921)	51101	0.16000	0.1598
73 Tetrachloroethene	129	16.250	16.250	(0.929)	38745	0.16000	0.1519
74 Chlorobenzene	112	17.560	17.565	(1.004)	86165	0.16000	0.1528
75 ~ 2,3-dimethylheptane	43	17.689	17.695	(1.012)	99259	0.16000	0.1528
76 Ethylbenzene	91	18.051	18.056	(1.032)	138363	0.16000	0.1530
77 ~ 2-ethyl thiophene	97	18.207	18.212	(1.041)	101154	0.16000	0.1545
78 m&p-Xylene	91	18.326	18.326	(1.048)	213439	0.32000	0.3077
79 Nonane	57	19.118	19.124	(1.093)	72061	0.16000	0.1561
80 Bromoform	173	18.984	18.989	(1.086)	31953	0.16000	0.1446
81 Styrene	104	19.081	19.086	(1.091)	63547	0.16000	0.1632
82 o-Xylene	91	19.183	19.183	(1.097)	110561	0.16000	0.1530
M 83 Xylene (total)	100				324000	0.48000	0.4608
84 1,1,2,2-Tetrachloroethane	83	19.717	19.722	(1.128)	76977	0.16000	0.1582
85 1,2,3-Trichloropropane	110	19.981	19.987	(1.143)	23592	0.16000	0.1540
86 Cumene	105	20.202	20.202	(1.155)	160796	0.16000	0.1570
87 n-Propylbenzene	120	21.162	21.162	(1.210)	43830	0.16000	0.1568
88 2-chlorotoluene	126	21.194	21.194	(1.212)	40815	0.16000	0.1552
89 4-Ethyltoluene	105	21.448	21.453	(1.227)	160693	0.16000	0.1584
90 1,3,5-Trimethylbenzene	120	21.604	21.604	(1.236)	73851	0.16000	0.1571
91 Alpha-Methylstyrene	118	22.030	22.036	(1.260)	43020	0.16000	0.1600
92 Decane	57	22.284	22.289	(1.274)	89608	0.16000	0.1632
93 tert-butylbenzene	119	22.408	22.408	(1.282)	143685	0.16000	0.1568
94 1,2,4-Trimethylbenzene	105	22.440	22.440	(1.283)	133148	0.16000	0.1599
95 sec-butylbenzene	105	22.963	22.969	(1.313)	197660	0.16000	0.1573
96 1,3-Dichlorobenzene	146	22.925	22.925	(1.311)	88111	0.16000	0.1584
97 Benzyl Chloride	91	23.098	23.098	(1.321)	101656	0.16000	0.1616
98 1,4-Dichlorobenzene	146	23.109	23.114	(1.322)	88087	0.16000	0.1587
99 p-Cymene	119	23.330	23.330	(1.334)	165804	0.16000	0.1587
100 ~ 1,2,3- Trimethylbenzene	105	23.389	23.395	(1.338)	118940	0.16000	0.1563
101 ~ n-butylcyclohexane	83	23.572	23.572	(1.348)	112503	0.16000	0.1585
102 ~ Indane	117	23.885	23.885	(1.366)	129489	0.16000	0.1568
103 1,2-Dichlorobenzene	146	23.858	23.864	(1.365)	85096	0.16000	0.1569
104 n-butylbenzene	91	24.279	24.279	(1.389)	158089	0.16000	0.1607
105 ~ Indene	116	24.160	24.160	(1.382)	109362	0.16000	0.1635
106 Undecane	57	25.169	25.169	(1.439)	105410	0.16000	0.1688
107 ~ 1,2-dimethyl-4-ethylenzene	119	25.136	25.136	(1.438)	167299	0.16000	0.1599
108 ~ 1,2,4,5-tetramethylbenzene	119	26.048	26.048	(1.490)	172854	0.16000	0.1636
109 ~ 1,2,3,5-tetramethylbenzene	119	26.172	26.172	(1.497)	110755	0.16000	0.1635
110 ~ 1,2,3,4-tetramethylbenzene	119	27.045	27.045	(1.547)	146137	0.16000	0.1676

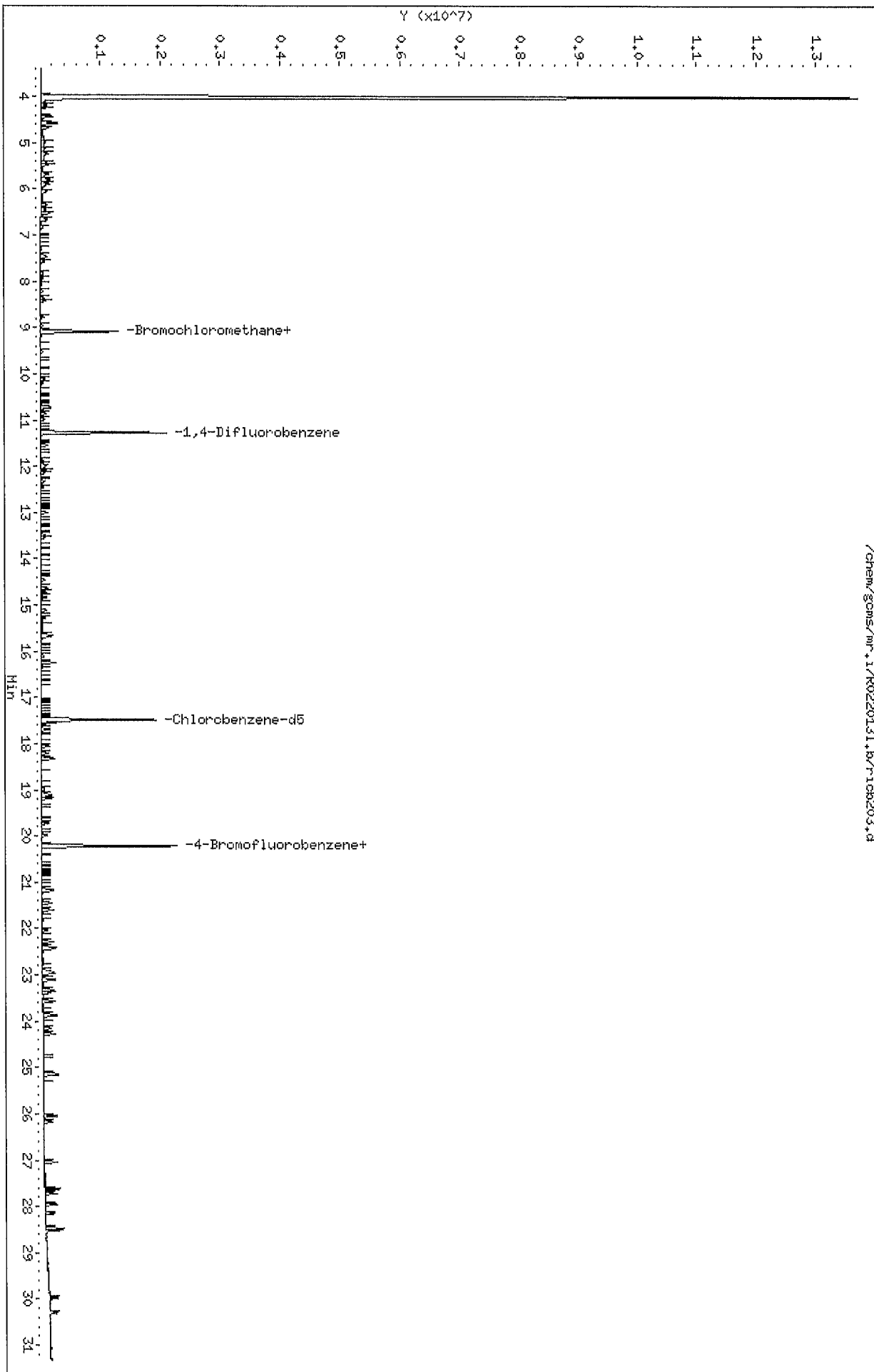
Data File: /chem/gcms/mr.i/R022013I.b/ricb203.d
 Report Date: 21-Feb-2013 12:03

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ppb(v/v))	ON-COL (ppb(v/v))
=====	====	==	=====	=====	=====	=====	=====
111 Dodecane	57	27.622	27.622	(1.580)	99603	0.16000	0.2126
112 1,2,4-Trichlorobenzene	180	27.725	27.725	(1.586)	79657	0.16000	0.1878
113 Napthalene	128	27.956	27.962	(1.599)	191778	0.16000	0.1982
114 ~ benzo(b) thiophene	134	28.151	28.151	(1.610)	142168	0.16000	0.1940
115 Hexachlorobutadiene	225	28.474	28.474	(1.629)	72419	0.16000	0.1559
116 1,2,3-trichlorobenzene	180	28.517	28.523	(1.631)	83938	0.16000	0.1877
117 ~ 2-Methylnaphthalene	142	29.979	29.979	(1.715)	84971	1.00000	1.000
118 ~ 1-Methylnaphthalene	142	30.297	30.291	(1.733)	84458	1.00000	1.000

Data File: /chem/gcms/mr.i/R0220131.b/r1cb203.d
Date : 20-FEB-2013 18:39
Client ID: STD0.16
Sample Info: ICAL2,1,1,3,,STD0.16
Purge Volume: 500.0
Column phase: Rtx-5

Instrument: mr.i
Operator: 060487
Column diameter: 0.32

/chem/gcms/mr.i/R0220131.b/r1cb203.d



Data File: /chem/gcms/mr.i/R022013I.b/ricb204.d
Report Date: 21-Feb-2013 12:03

TestAmerica Knoxville

Modified Method TO-14/TO-15

Data file : /chem/gcms/mr.i/R022013I.b/ricb204.d
Lab Smp Id: ICAL4 Client Smp ID: STD0.4
Inj Date : 20-FEB-2013 19:27
Operator : 060487 Inst ID: mr.i
Smp Info : ICAL4,1,1,4,,STD0.4
Misc Info : R022013I,TO15,
Comment :
Method : /chem/gcms/mr.i/R022013I.b/TO15.m
Meth Date : 21-Feb-2013 12:03 wilesd Quant Type: ISTD
Cal Date : 20-FEB-2013 19:27 Cal File: ricb204.d
Als bottle: 1 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Default Calibration Volume
Vo	500.00000	Default Sample Volume

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG	AMOUNTS					
		MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ON-COL (ppb (v/v)) (ppb (v/v))
=====	=====	==	=====	=====	=====	=====	=====
* 1 Bromochloromethane	128		9.089	9.089	(1.000)	450576	4.00000 4.000
* 2 1,4-Difluorobenzene	114		11.273	11.278	(1.000)	2223161	4.00000 4.000
* 3 Chlorobenzene-d5	117		17.485	17.490	(1.000)	1589024	4.00000 4.000
\$ 4 4-Bromofluorobenzene	95		20.218	20.218	(1.156)	1093713	4.00000 4.064
M 83 Xylene (total)	100					761540	1.20000 1.145
5 Chlorodifluoromethane	67		4.182	4.187	(0.460)	19361	0.40000 0.3758
6 Propene	41		4.192	4.192	(0.461)	60002	0.40000 0.3741
7 Dichlorodifluoromethane	85		4.246	4.246	(0.467)	196172	0.40000 0.3765
8 Chloromethane	52		4.419	4.424	(0.486)	28121	0.40000 0.4063
9 1,2-Dichlorotetrafluoroethane	135		4.430	4.435	(0.487)	157284	0.40000 0.3822
11 ~ acetaldehyde	44		4.570	4.570	(0.503)	181207	2.00000 2.000
12 Vinyl Chloride	62		4.591	4.591	(0.505)	82878	0.40000 0.3805
13 n-Butane	43		4.678	4.678	(0.515)	119515	0.40000 0.3522
14 1,3-Butadiene	54		4.672	4.678	(0.514)	64304	0.40000 0.3730
15 Bromomethane	94		4.985	4.985	(0.548)	72987	0.40000 0.3500
16 Chloroethane	64		5.120	5.125	(0.563)	40636	0.40000 0.3672

Data File: /chem/gcms/mr.i/R022013I.b/ricb204.d

Report Date: 21-Feb-2013 12:03

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ppb(v/v))	ON-COL (ppb(v/v))
=====	=====	==	=====	=====	=====	=====	=====
17 ~ ethanol	31	5.228	5.233	(0.575)	122855	2.00000	1.612
18 Vinyl Bromide	106	5.416	5.416	(0.596)	74342	0.40000	0.3755
19 2-methyl butane	43	5.470	5.470	(0.602)	90132	0.40000	0.3699
20 Trichlorofluoromethane	101	5.675	5.675	(0.624)	188786	0.40000	0.3868
21 Acrolein	56	5.670	5.670	(0.624)	28199	0.40000	0.3293
22 Acetonitrile	40	5.729	5.729	(0.630)	27208	0.40000	0.3764
25 Pentane	72	5.891	5.896	(0.648)	15116	0.40000	0.3962
24 Isopropyl alcohol	45	5.880	5.885	(0.647)	112508	0.40000	0.4000
26 Ethyl Ether	31	6.042	6.047	(0.665)	79240	0.40000	0.3829
27 1,1-Dichloroethene	96	6.344	6.344	(0.698)	72824	0.40000	0.3719
29 Acrylonitrile	53	6.419	6.419	(0.706)	56629	0.40000	0.3907
30 1,1,2-Trichlorotrifluoroethane	101	6.516	6.522	(0.717)	152088	0.40000	0.3810
28 tert-butanol	59	6.446	6.441	(0.709)	123881	0.40000	0.3836
31 Methylene Chloride	84	6.662	6.662	(0.733)	68467	0.40000	0.3753
32 3-Chloropropene	39	6.678	6.684	(0.735)	52797	0.40000	0.3761
33 Carbon Disulfide	76	6.824	6.824	(0.751)	209281	0.40000	0.3780
35 ~ 2-Methyl Pentane	43	7.476	7.476	(0.823)	167486	0.40000	0.3845
34 trans-1,2-Dichloroethene	96	7.439	7.444	(0.818)	74370	0.40000	0.3676
36 Methyl-t-Butyl Ether	73	7.573	7.568	(0.833)	193462	0.40000	0.3854
37 1,1-Dichloroethane	63	7.832	7.832	(0.862)	131975	0.40000	0.3838
38 Vinyl Acetate	43	7.935	7.935	(0.873)	173468	0.40000	0.3934
39 2-Butanone	72	8.355	8.355	(0.919)	36258	0.40000	0.3459
40 Hexane	56	8.415	8.420	(0.926)	61865	0.40000	0.3716
41 cis 1,2-Dichloroethene	96	8.770	8.776	(0.965)	75003	0.40000	0.3689
42 Ethyl acetate	43	8.959	8.954	(0.986)	155583	0.40000	0.3897
43 Chloroform	83	9.110	9.110	(1.002)	146004	0.40000	0.3802
44 Tetrahydrofuran	42	9.515	9.509	(1.047)	83029	0.40000	0.3769
45 1,1,1-Trichloroethane	97	10.113	10.118	(1.113)	140816	0.40000	0.3837
46 1,2-Dichloroethane	62	10.199	10.199	(0.905)	96858	0.40000	0.3800
49 Cyclohexane	69	10.728	10.728	(0.952)	34420	0.40000	0.3789
48 Benzene	78	10.706	10.712	(0.950)	219115	0.40000	0.3696
50 Carbon Tetrachloride	117	10.744	10.744	(0.953)	90097	0.40000	0.3071
51 ~ 2,3-dimethylpentane	71	10.863	10.863	(0.964)	47899	0.40000	0.3929
47 1-Butanol	31	10.685	10.679	(0.948)	20862	0.40000	0.4000
52 ~ Thiophene	84	10.987	10.987	(0.975)	129416	0.40000	0.3836
53 2,2,4-trimethylpentane	57	11.548	11.553	(1.024)	361290	0.40000	0.3808
54 Heptane	71	11.974	11.973	(1.062)	76530	0.40000	0.3759
55 1,2-Dichloropropane	63	12.017	12.017	(1.066)	81314	0.40000	0.3811
56 Trichloroethene	130	12.071	12.076	(1.071)	97075	0.40000	0.3835
180 ~ 2-nitropropane	43	11.968	11.973	(1.062)	130331	0.32000	0.000
57 Dibromomethane	93	12.141	12.146	(1.077)	78218	0.40000	0.3878
58 Bromodichloromethane	83	12.324	12.324	(1.093)	137123	0.40000	0.4014
60 Methyl Methacrylate	41	12.448	12.448	(1.104)	84960	0.40000	0.4072
59 1,4-dioxane	88	12.351	12.346	(1.096)	30387	0.40000	0.3912
61 ~ methyl cyclohexane	83	12.998	13.003	(1.153)	131254	0.40000	0.3863
63 cis-1,3-Dichloropropene	75	13.543	13.548	(1.201)	113285	0.40000	0.3912
62 4-Methyl-2-pentanone	43	13.483	13.483	(1.196)	164884	0.40000	0.4137

Data File: /chem/gcms/mr.i/R022013I.b/ricb204.d
 Report Date: 21-Feb-2013 12:03

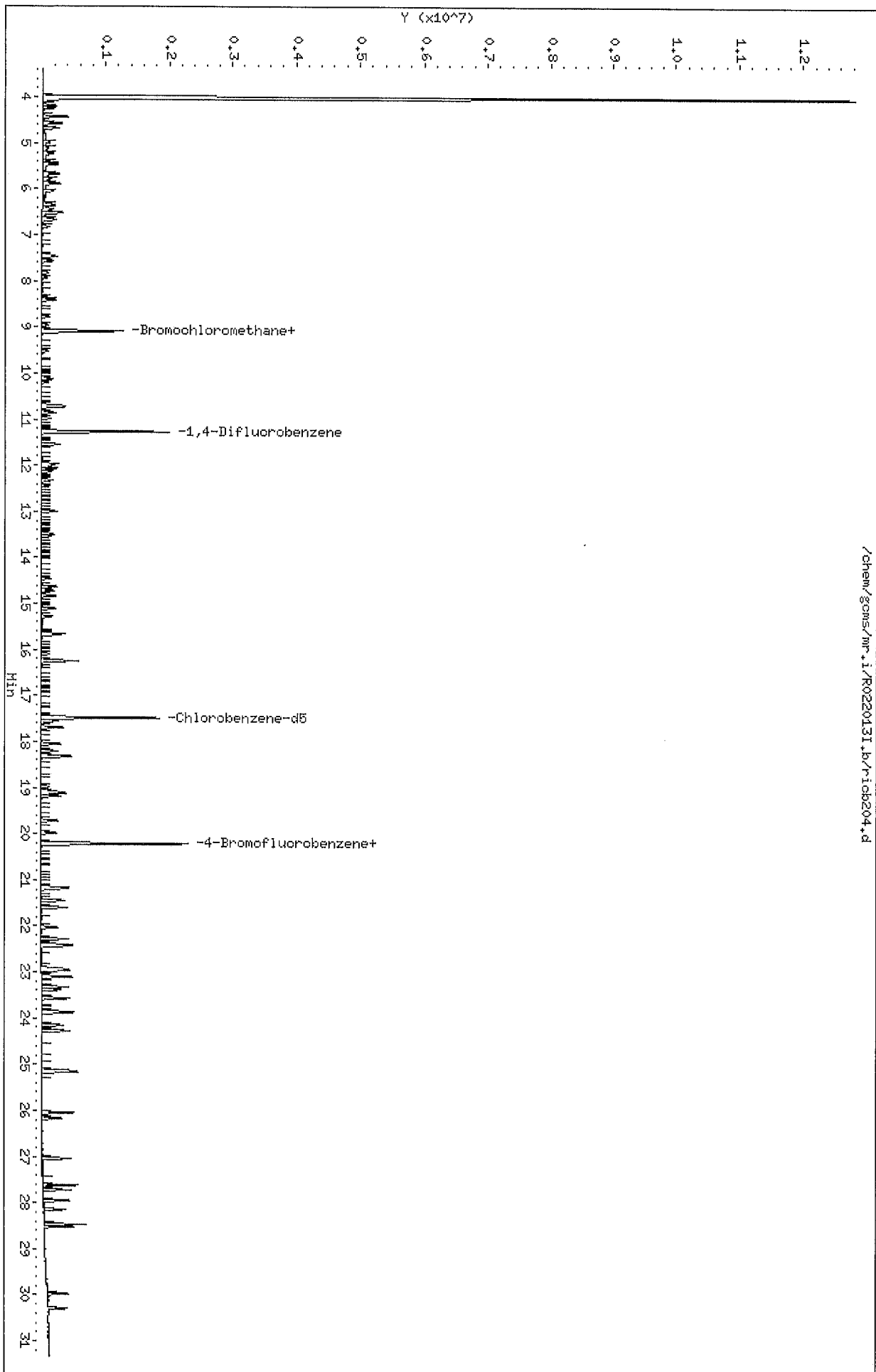
Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ppb (v/v))	ON-COL (ppb (v/v))
=====	=====	==	=====	=====	=====	=====	=====
64 trans-1,3-Dichloropropene	75	14.459	14.459	(0.827)	110296	0.40000	0.3852
65 Toluene	91	14.637	14.637	(0.837)	256069	0.40000	0.3724
66 1,1,2-Trichloroethane	83	14.718	14.718	(0.842)	72119	0.40000	0.3829
67 ~ 2-methyl thiophene	97	14.837	14.837	(0.849)	219334	0.40000	0.3902
68 ~ 3-methyl thiophene	97	15.112	15.112	(0.864)	224328	0.40000	0.3884
69 2-Hexanone	58	15.279	15.279	(0.874)	78850	0.40000	0.4116
70 Octane	85	15.657	15.662	(0.895)	83809	0.40000	0.3771
71 Dibromochloromethane	129	15.689	15.689	(0.897)	119060	0.40000	0.4075
72 1,2-Dibromoethane	107	16.099	16.104	(0.921)	125885	0.40000	0.4075
73 Tetrachloroethene	129	16.250	16.250	(0.929)	89902	0.40000	0.3748
75 ~ 2,3-dimethylheptane	43	17.695	17.695	(1.012)	233898	0.40000	0.3810
74 Chlorobenzene	112	17.560	17.565	(1.004)	202539	0.40000	0.3802
76 Ethylbenzene	91	18.051	18.056	(1.032)	323605	0.40000	0.3792
77 ~ 2-ethyl thiophene	97	18.207	18.212	(1.041)	244140	0.40000	0.3911
78 m&p-Xylene	91	18.326	18.326	(1.048)	499292	0.80000	0.7617
79 Nonane	57	19.124	19.124	(1.094)	171833	0.40000	0.3916
80 Bromoform	173	18.989	18.989	(1.086)	90251	0.40000	0.4166
81 Styrene	104	19.081	19.086	(1.091)	165342	0.40000	0.4272
82 o-Xylene	91	19.183	19.183	(1.097)	262247	0.40000	0.3834
84 1,1,2,2-Tetrachloroethane	83	19.717	19.722	(1.128)	186050	0.40000	0.3987
85 1,2,3-Trichloropropane	110	19.987	19.987	(1.143)	55859	0.40000	0.3847
86 Cumene	105	20.202	20.202	(1.155)	377435	0.40000	0.3891
87 n-Propylbenzene	120	21.162	21.162	(1.210)	105472	0.40000	0.3952
88 2-chlorotoluene	126	21.195	21.194	(1.212)	96591	0.40000	0.3868
89 4-Ethyltoluene	105	21.453	21.453	(1.227)	383403	0.40000	0.3956
90 1,3,5-Trimethylbenzene	120	21.604	21.604	(1.236)	179329	0.40000	0.3983
91 Alpha-Methylstyrene	118	22.036	22.036	(1.260)	117018	0.40000	0.4250
92 Decane	57	22.289	22.289	(1.275)	219123	0.40000	0.4116
93 tert-butylbenzene	119	22.408	22.408	(1.282)	339649	0.40000	0.3906
94 1,2,4-Trimethylbenzene	105	22.440	22.440	(1.283)	315821	0.40000	0.3963
95 sec-butylbenzene	105	22.963	22.969	(1.313)	467960	0.40000	0.3918
96 1,3-Dichlorobenzene	146	22.925	22.925	(1.311)	207173	0.40000	0.3919
97 Benzyl Chloride	91	23.093	23.098	(1.321)	254159	0.40000	0.4136
98 1,4-Dichlorobenzene	146	23.109	23.114	(1.322)	207268	0.40000	0.3926
99 p-Cymene	119	23.330	23.330	(1.334)	393204	0.40000	0.3940
100 ~ 1,2,3- Trimethylbenzene	105	23.395	23.395	(1.338)	289273	0.40000	0.3969
101 ~ n-butylcyclohexane	83	23.573	23.572	(1.348)	261372	0.40000	0.3889
102 ~ Indane	117	23.885	23.885	(1.366)	298937	0.40000	0.3825
103 1,2-Dichlorobenzene	146	23.858	23.864	(1.365)	202873	0.40000	0.3929
104 n-butylbenzene	91	24.279	24.279	(1.389)	373669	0.40000	0.3971
105 ~ Indene	116	24.155	24.160	(1.381)	271181	0.40000	0.4146
106 Undecane	57	25.163	25.169	(1.439)	253888	0.40000	0.4153
107 ~ 1,2-dimethyl-4-ethylenzene	119	25.131	25.136	(1.437)	396828	0.40000	0.3967
108 ~ 1,2,4,5-tetramethylbenzene	119	26.048	26.048	(1.490)	407893	0.40000	0.4013
109 ~ 1,2,3,5-tetramethylbenzene	119	26.172	26.172	(1.497)	256904	0.40000	0.3967
110 ~ 1,2,3,4-tetramethylbenzene	119	27.045	27.045	(1.547)	338518	0.40000	0.4028
111 Dodecane	57	27.622	27.622	(1.580)	235919	0.40000	0.4751

Data File: /chem/gcms/mr.i/R022013I.b/ricb204.d
 Report Date: 21-Feb-2013 12:03

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT	ON-COL
							(ppb(v/v))	(ppb(v/v))
=====	=====	==	=====	=====	=====		=====	=====
112 1,2,4-Trichlorobenzene	180	27.725	27.725	(1.586)	184302		0.40000	0.4382
113 Napthalene	128	27.962	27.962	(1.599)	441365		0.40000	0.4538
114 ~ benzo(b) thiophene	134	28.151	28.151	(1.610)	336959		0.40000	0.4564
115 Hexachlorobutadiene	225	28.474	28.474	(1.629)	163281		0.40000	0.3768
116 1,2,3-trichlorobenzene	180	28.517	28.523	(1.631)	189315		0.40000	0.4299
117 ~ 2-Methylnaphthalene	142	29.979	29.979	(1.715)	194029		2.50000	2.438
118 ~ 1-Methylnaphthalene	142	30.297	30.291	(1.733)	187293		2.50000	2.401

Data File: /chem/gcms/mr.i/R0220131.b/rick204.d
Date: 20-FEB-2013 19:27
Client ID: STD0.4
Sample Info: ICAL4,1,1,4,STD0.4
Purge Volume: 500.0
Column phase: Rtx-5

Instrument: mr.i
Operator: 060487
Column diameter: 0.32



Data File: /chem/gcms/mr.i/R022013I.b/ricb205.d
Report Date: 21-Feb-2013 12:04

TestAmerica Knoxville

Modified Method TO-14/TO-15

Data file : /chem/gcms/mr.i/R022013I.b/ricb205.d
Lab Smp Id: ICAL5 Client Smp ID: STD1
Inj Date : 20-FEB-2013 20:14
Operator : 060487 Inst ID: mr.i
Smp Info : ICAL5,1,1,5,,STD1
Misc Info : R022013I,TO15,
Comment :
Method : /chem/gcms/mr.i/R022013I.b/TO15.m
Meth Date : 21-Feb-2013 12:03 wilesd Quant Type: ISTD
Cal Date : 20-FEB-2013 20:14 Cal File: ricb205.d
Als bottle: 1 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Default Calibration Volume
Vo	500.00000	Default Sample Volume

Cpnd Variable Local Compound Variable

						AMOUNTS			
		QUANT	SIG					CAL-AMT	ON-COL
Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ppb (v/v))	(ppb (v/v))	
=====		====	==	=====	=====	=====	=====	=====	
*	1 Bromochloromethane	128	9.089	9.089	(1.000)	466793	4.00000	4.000	
*	2 1,4-Difluorobenzene	114	11.278	11.278	(1.000)	2287260	4.00000	4.000	
*	3 Chlorobenzene-d5	117	17.490	17.490	(1.000)	1639236	4.00000	4.000	
\$	4 4-Bromofluorobenzene	95	20.218	20.218	(1.156)	1152627	4.00000	4.016	
M	83 Xylene (total)	100				1993789	3.00000	2.992	
	5 Chlorodifluoromethane	67	4.187	4.187	(0.461)	47712	1.00000	1.000	
	6 Propene	41	4.192	4.192	(0.461)	145492	1.00000	1.025	
	7 Dichlorodifluoromethane	85	4.246	4.246	(0.467)	491689	1.00000	1.011	
	8 Chloromethane	52	4.424	4.424	(0.487)	58713	1.00000	0.9875	
	9 1,2-Dichlorotetrafluoroethane	135	4.435	4.435	(0.488)	390958	1.00000	1.008	
10	Methanol	31	4.570	4.570	(0.503)	56402	1.00000	1.302	
11	~ acetaldehyde	44	4.570	4.570	(0.503)	374671	5.00000	5.358	
12	Vinyl Chloride	62	4.591	4.591	(0.505)	205361	1.00000	1.004	
13	n-Butane	43	4.678	4.678	(0.515)	292660	1.00000	0.9683	
14	1,3-Butadiene	54	4.678	4.678	(0.515)	160237	1.00000	0.9970	
15	Bromomethane	94	4.985	4.985	(0.548)	181942	1.00000	0.9577	

Data File: /chem/gcms/mr.i/R022013I.b/ricb205.d
Report Date: 21-Feb-2013 12:04

Compounds	QUANT SIG			REL RT	RESPONSE	AMOUNTS	
	MASS	RT	EXP RT			CAL-AMT (ppb(v/v))	ON-COL (ppb(v/v))
=====	=====	==	=====	=====	=====	=====	=====
16 Chloroethane	64	5.125	5.125	(0.564)	101598	1.00000	0.9833
17 ~ ethanol	31	5.233	5.233	(0.576)	308619	5.00000	4.821
18 Vinyl Bromide	106	5.416	5.416	(0.596)	188671	1.00000	0.9867
19 2-methyl butane	43	5.470	5.470	(0.602)	227092	1.00000	0.9888
20 Trichlorofluoromethane	101	5.675	5.675	(0.624)	476217	1.00000	1.008
21 Acrolein	56	5.670	5.670	(0.624)	65844	1.00000	0.9421
22 Acetonitrile	40	5.729	5.729	(0.630)	76466	1.00000	1.074
25 Pentane	72	5.896	5.896	(0.649)	38840	1.00000	1.032
23 Acetone	58	5.783	5.783	(0.636)	112685	1.00000	1.176
24 Isopropyl alcohol	45	5.885	5.885	(0.648)	288341	1.00000	1.078
26 Ethyl Ether	31	6.047	6.047	(0.665)	201186	1.00000	1.012
27 1,1-Dichloroethene	96	6.344	6.344	(0.698)	181932	1.00000	0.9712
29 Acrylonitrile	53	6.419	6.419	(0.706)	145770	1.00000	1.006
30 1,1,2-Trichlorotrifluoroethane	101	6.522	6.522	(0.718)	388027	1.00000	0.9963
28 tert-Butanol	59	6.441	6.441	(0.709)	330173	1.00000	1.032
31 Methylene Chloride	84	6.662	6.662	(0.733)	172012	1.00000	1.023
32 3-Chloropropene	39	6.684	6.684	(0.735)	139854	1.00000	1.055
33 Carbon Disulfide	76	6.824	6.824	(0.751)	531093	1.00000	0.9888
35 ~ 2-Methyl Pentane	43	7.476	7.476	(0.823)	425162	1.00000	1.018
34 trans-1,2-Dichloroethene	96	7.444	7.444	(0.819)	187200	1.00000	0.9670
36 Methyl-t-Butyl Ether	73	7.568	7.568	(0.833)	499707	1.00000	1.010
37 1,1-Dichloroethane	63	7.832	7.832	(0.862)	338293	1.00000	1.008
38 Vinyl Acetate	43	7.935	7.935	(0.873)	447080	1.00000	1.001
39 2-Butanone	72	8.355	8.355	(0.919)	90407	1.00000	0.9646
40 Hexane	56	8.420	8.420	(0.926)	158621	1.00000	0.9890
41 cis 1,2-Dichloroethene	96	8.776	8.776	(0.966)	192238	1.00000	0.9796
42 Ethyl acetate	43	8.954	8.954	(0.985)	401649	1.00000	1.015
43 Chloroform	83	9.110	9.110	(1.002)	374651	1.00000	1.001
44 Tetrahydrofuran	42	9.509	9.509	(1.046)	213168	1.00000	1.010
45 1,1,1-Trichloroethane	97	10.118	10.118	(1.113)	364370	1.00000	1.001
46 1,2-Dichloroethane	62	10.199	10.199	(0.904)	248419	1.00000	0.9919
49 Cyclohexane	69	10.728	10.728	(0.951)	88345	1.00000	0.9839
48 Benzene	78	10.712	10.712	(0.950)	565311	1.00000	0.9764
50 Carbon Tetrachloride	117	10.744	10.744	(0.953)	263957	1.00000	0.8826
51 ~ 2,3-dimethylpentane	71	10.863	10.863	(0.963)	121018	1.00000	0.9928
47 1-Butanol	31	10.679	10.679	(0.947)	55175	1.00000	0.9792
52 ~ Thiophene	84	10.987	10.987	(0.974)	336028	1.00000	0.9937
53 2,2,4-trimethylpentane	57	11.553	11.553	(1.024)	932021	1.00000	0.9938
54 Heptane	71	11.973	11.973	(1.062)	200155	1.00000	0.9852
55 1,2-Dichloropropane	63	12.017	12.017	(1.065)	209269	1.00000	0.9859
56 Trichloroethene	130	12.076	12.076	(1.071)	251969	1.00000	0.9784
180 ~ 2-nitropropane	43	11.973	11.973	(1.062)	341464	1.00000	0.000
57 Dibromomethane	93	12.146	12.146	(1.077)	204643	1.00000	0.9867
58 Bromodichloromethane	83	12.324	12.324	(1.093)	371695	1.00000	1.010
60 Methyl Methacrylate	41	12.448	12.448	(1.104)	235976	1.00000	1.031
59 1,4-dioxane	88	12.346	12.346	(1.095)	86164	1.00000	1.053
61 ~ methyl cyclohexane	83	13.003	13.003	(1.153)	341319	1.00000	0.9928

Data File: /chem/gcms/mr.i/R022013I.b/ricb205.d
Report Date: 21-Feb-2013 12:04

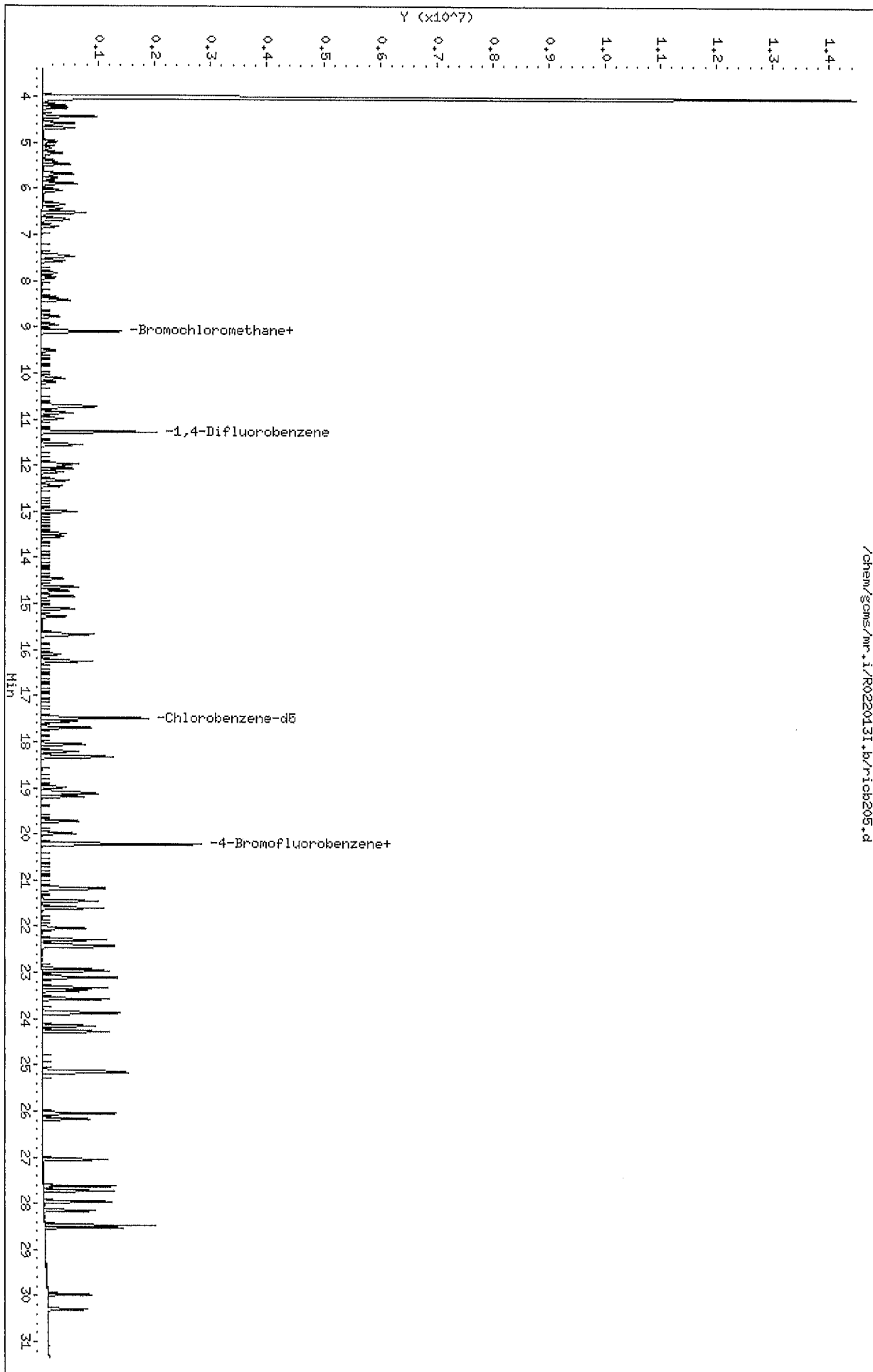
Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
						(ppb (v/v))	(ppb (v/v))
=====	====	==	=====	=====	=====	=====	=====
63 cis-1,3-Dichloropropene	75	13.548	13.548	(1.201)	301289	1.00000	1.002
62 4-Methyl-2-pentanone	43	13.483	13.483	(1.196)	415836	1.00000	1.017
64 trans-1,3-Dichloropropene	75	14.459	14.459	(0.827)	298165	1.00000	1.003
65 Toluene	91	14.637	14.637	(0.837)	671623	1.00000	0.9875
66 1,1,2-Trichloroethane	83	14.718	14.718	(0.842)	190126	1.00000	0.9997
67 ~ 2-methyl thiophene	97	14.837	14.837	(0.848)	576073	1.00000	1.001
68 ~ 3-methyl thiophene	97	15.112	15.112	(0.864)	583599	1.00000	0.9914
69 2-Hexanone	58	15.279	15.279	(0.874)	218139	1.00000	1.053
70 Octane	85	15.662	15.662	(0.895)	218046	1.00000	0.9754
71 Dibromochloromethane	129	15.689	15.689	(0.897)	345106	1.00000	1.000
72 1,2-Dibromoethane	107	16.104	16.104	(0.921)	343579	1.00000	1.019
73 Tetrachloroethene	129	16.250	16.250	(0.929)	235953	1.00000	0.9795
75 ~ 2,3-dimethylheptane	43	17.695	17.695	(1.012)	606505	1.00000	1.006
74 Chlorobenzene	112	17.565	17.565	(1.004)	526748	1.00000	0.9816
76 Ethylbenzene	91	18.056	18.056	(1.032)	849272	1.00000	0.9943
77 ~ 2-ethyl thiophene	97	18.212	18.212	(1.041)	644007	1.00000	1.002
78 m&p-Xylene	91	18.326	18.326	(1.048)	1318151	2.00000	1.999
79 Nonane	57	19.124	19.124	(1.093)	450547	1.00000	1.016
80 Bromoform	173	18.989	18.989	(1.086)	297241	1.00000	0.9594
81 Styrene	104	19.086	19.086	(1.091)	481193	1.00000	1.028
82 o-Xylene	91	19.183	19.183	(1.097)	675638	1.00000	0.9932
84 1,1,2,2-Tetrachloroethane	83	19.722	19.722	(1.128)	507916	1.00000	1.034
85 1,2,3-Trichloropropane	110	19.987	19.987	(1.143)	149910	1.00000	1.006
86 Cumene	105	20.202	20.202	(1.155)	984436	1.00000	1.002
87 n-Propylbenzene	120	21.162	21.162	(1.210)	283756	1.00000	1.007
88 2-chlorotoluene	126	21.194	21.194	(1.212)	254603	1.00000	0.9942
89 4-Ethyltoluene	105	21.453	21.453	(1.227)	1025223	1.00000	1.018
90 1,3,5-Trimethylbenzene	120	21.604	21.604	(1.235)	477170	1.00000	1.005
91 Alpha-Methylstyrene	118	22.036	22.036	(1.260)	365500	1.00000	0.9808
92 Decane	57	22.289	22.289	(1.274)	581860	1.00000	1.046
93 tert-butylbenzene	119	22.408	22.408	(1.281)	905669	1.00000	1.012
94 1,2,4-Trimethylbenzene	105	22.440	22.440	(1.283)	851181	1.00000	1.024
95 sec-butylbenzene	105	22.969	22.969	(1.313)	1252669	1.00000	1.023
96 1,3-Dichlorobenzene	146	22.925	22.925	(1.311)	559285	1.00000	0.9936
97 Benzyl Chloride	91	23.098	23.098	(1.321)	736797	1.00000	1.044
98 1,4-Dichlorobenzene	146	23.114	23.114	(1.322)	563201	1.00000	0.9954
99 p-Cymene	119	23.330	23.330	(1.334)	1061814	1.00000	1.021
100 ~ 1,2,3- Trimethylbenzene	105	23.395	23.395	(1.338)	749908	1.00000	1.005
101 ~ n-butylcyclohexane	83	23.572	23.572	(1.348)	693619	1.00000	1.023
102 ~ Indane	117	23.885	23.885	(1.366)	811044	1.00000	1.012
103 1,2-Dichlorobenzene	146	23.864	23.864	(1.364)	546584	1.00000	1.009
104 n-butylbenzene	91	24.279	24.279	(1.388)	1017327	1.00000	1.047
105 ~ Indene	116	24.160	24.160	(1.381)	766892	1.00000	1.016
106 Undecane	57	25.169	25.169	(1.439)	689225	1.00000	1.060
107 ~ 1,2-dimethyl-4-ethylenzene	119	25.136	25.136	(1.437)	1064441	1.00000	1.026
108 ~ 1,2,4,5-tetramethylbenzene	119	26.048	26.048	(1.489)	1099898	1.00000	1.036
109 ~ 1,2,3,5-tetramethylbenzene	119	26.172	26.172	(1.496)	693689	1.00000	1.043

Data File: /chem/gcms/mr.i/R022013I.b/ricb205.d
 Report Date: 21-Feb-2013 12:04

Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
						(ppb (v/v))	(ppb (v/v))
=====	====	==	=====	=====	=====	=====	=====
110 ~ 1,2,3,4-tetramethylbenzene	119	27.045	27.045	(1.546)	922725	1.00000	1.062
111 Dodecane	57	27.622	27.622	(1.579)	540968	1.00000	0.9796
112 1,2,4-Trichlorobenzene	180	27.725	27.725	(1.585)	537911	1.00000	1.141
113 Napthalene	128	27.962	27.962	(1.599)	1278733	1.00000	1.115
114 ~ benzo(b) thiophene	134	28.151	28.151	(1.610)	909299	1.00000	1.132
115 Hexachlorobutadiene	225	28.474	28.474	(1.628)	495325	1.00000	1.095
116 1,2,3-trichlorobenzene	180	28.523	28.523	(1.631)	561136	1.00000	1.189
117 ~ 2-Methylnaphthalene	142	29.979	29.979	(1.714)	452313	6.25000	4.039
118 ~ 1-Methylnaphthalene	142	30.291	30.291	(1.732)	440815	6.25000	4.494

Data File: /chem/gcms/mr.i/R0220131.b/r1cb205.d
Date : 20-FEB-2013 20:14
Client ID: STD1
Sample Info: ICA15,1,4,5,,STD1
Purge Volume: 500.0
Column phase: Rtx-5

Instrument: mr.i
Operator: 060487
Column diameter: 0.32



Data File: /chem/gcms/mr.i/R022013I.b/ricb206.d
 Report Date: 21-Feb-2013 12:04

TestAmerica Knoxville

Modified Method TO-14/TO-15

Data file : /chem/gcms/mr.i/R022013I.b/ricb206.d
 Lab Smp Id: ICAL6 Client Smp ID: STD2
 Inj Date : 20-FEB-2013 21:01
 Operator : 060487 Inst ID: mr.i
 Smp Info : ICAL6,1,1,6,,STD2
 Misc Info : R022013I,TO15,
 Comment :
 Method : /chem/gcms/mr.i/R022013I.b/TO15.m
 Meth Date : 21-Feb-2013 12:03 wilesd Quant Type: ISTD
 Cal Date : 20-FEB-2013 21:01 Cal File: ricb206.d
 Als bottle: 1 Calibration Sample, Level: 6
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 3.50

Concentration Formula: Amt * DF * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Default Calibration Volume
Vo	500.00000	Default Sample Volume

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG	AMOUNTS					
		MASS	RT	EXP RT	REL RT	RESPONSE	ON-COL
						(ppb(v/v))	(ppb(v/v))
*****	====	==	=====	=====	=====	=====	=====
* 1 Bromochloromethane	128	9.094	9.089	(1.000)	469377	4.00000	4.000
* 2 1,4-Difluorobenzene	114	11.278	11.278	(1.000)	2304849	4.00000	4.000
* 3 Chlorobenzene-d5	117	17.490	17.490	(1.000)	1658847	4.00000	4.000
\$ 4 4-Bromofluorobenzene	95	20.218	20.218	(1.156)	1182105	4.00000	4.165
M 83 Xylene (total)	100				4041598	6.00000	5.857
5 Chlorodifluoromethane	67	4.187	4.187	(0.460)	93476	2.00000	1.788
6 Propene	41	4.198	4.192	(0.462)	288162	2.00000	1.808
7 Dichlorodifluoromethane	85	4.252	4.246	(0.468)	967919	2.00000	1.823
8 Chloromethane	52	4.424	4.424	(0.486)	115652	2.00000	1.688
9 1,2-Dichlorotetrafluoroethane	135	4.435	4.435	(0.488)	771083	2.00000	1.836
10 Methanol	31	4.564	4.570	(0.502)	98641	2.00000	2.000
11 ~ acetaldehyde	44	4.570	4.570	(0.502)	721937	10.0000	8.668
12 Vinyl Chloride	62	4.591	4.591	(0.505)	409011	2.00000	1.839
13 n-Butane	43	4.683	4.678	(0.515)	579297	2.00000	1.700
14 1,3-Butadiene	54	4.678	4.678	(0.514)	316175	2.00000	1.804
15 Bromomethane	94	4.990	4.985	(0.549)	362724	2.00000	1.726

Data File: /chem/gcms/mr.i/R022013I.b/ricb206.d

Report Date: 21-Feb-2013 12:04

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ppb(v/v))	ON-COL (ppb(v/v))
=====	=====	==	=====	=====	=====	=====	=====
16 Chloroethane	64	5.125	5.125	(0.564)	201430	2.00000	1.792
17 ~ ethanol	31	5.233	5.233	(0.575)	619351	10.0000	8.255
18 Vinyl Bromide	106	5.416	5.416	(0.596)	380046	2.00000	1.872
19 2-methyl butane	43	5.476	5.470	(0.602)	451976	2.00000	1.820
20 Trichlorofluoromethane	101	5.681	5.675	(0.625)	948264	2.00000	1.891
21 Acrolein	56	5.675	5.670	(0.624)	135215	2.00000	1.649
22 Acetonitrile	40	5.729	5.729	(0.630)	146200	2.00000	1.960
25 Pentane	72	5.896	5.896	(0.648)	76827	2.00000	1.949
23 Acetone	58	5.783	5.783	(0.636)	202142	2.00000	2.000
24 Isopropyl alcohol	45	5.880	5.885	(0.647)	562963	2.00000	1.960
26 Ethyl Ether	31	6.042	6.047	(0.664)	398634	2.00000	1.877
27 1,1-Dichloroethene	96	6.344	6.344	(0.698)	368191	2.00000	1.841
29 Acrylonitrile	53	6.419	6.419	(0.706)	295729	2.00000	1.967
30 1,1,2-Trichlorotrifluoroethane	101	6.522	6.522	(0.717)	779400	2.00000	1.898
28 tert-butanol	59	6.441	6.441	(0.708)	656891	2.00000	1.964
31 Methylene Chloride	84	6.667	6.662	(0.733)	337728	2.00000	1.846
32 3-Chloropropene	39	6.683	6.684	(0.735)	263090	2.00000	1.836
33 Carbon Disulfide	76	6.829	6.824	(0.751)	1074780	2.00000	1.889
35 ~ 2-Methyl Pentane	43	7.476	7.476	(0.822)	851823	2.00000	1.906
34 trans-1,2-Dichloroethene	96	7.444	7.444	(0.819)	376218	2.00000	1.824
36 Methyl-t-Butyl Ether	73	7.568	7.568	(0.832)	999029	2.00000	1.928
37 1,1-Dichloroethane	63	7.837	7.832	(0.862)	677103	2.00000	1.911
38 Vinyl Acetate	43	7.935	7.935	(0.872)	905440	2.00000	1.977
39 2-Butanone	72	8.355	8.355	(0.919)	183484	2.00000	1.775
40 Hexane	56	8.420	8.420	(0.926)	316195	2.00000	1.856
41 cis 1,2-Dichloroethene	96	8.776	8.776	(0.965)	384735	2.00000	1.850
42 Ethyl acetate	43	8.954	8.954	(0.985)	810427	2.00000	1.961
43 Chloroform	83	9.110	9.110	(1.002)	752958	2.00000	1.904
44 Tetrahydrofuran	42	9.504	9.509	(1.045)	423582	2.00000	1.882
45 1,1,1-Trichloroethane	97	10.118	10.118	(1.113)	735381	2.00000	1.938
46 1,2-Dichloroethane	62	10.199	10.199	(0.904)	503686	2.00000	1.924
49 Cyclohexane	69	10.728	10.728	(0.951)	180126	2.00000	1.930
48 Benzene	78	10.712	10.712	(0.950)	1139096	2.00000	1.881
50 Carbon Tetrachloride	117	10.744	10.744	(0.953)	475928	2.00000	1.636
51 ~ 2,3-dimethylpentane	71	10.863	10.863	(0.963)	244160	2.00000	1.945
47 1-Butanol	31	10.679	10.679	(0.947)	117834	2.00000	2.086
52 ~ Thiophene	84	10.987	10.987	(0.974)	677822	2.00000	1.950
53 2,2,4-trimethylpentane	57	11.553	11.553	(1.024)	1878762	2.00000	1.927
54 Heptane	71	11.973	11.973	(1.062)	403812	2.00000	1.930
55 1,2-Dichloropropane	63	12.017	12.017	(1.065)	423974	2.00000	1.933
56 Trichloroethene	130	12.076	12.076	(1.071)	515155	2.00000	1.970
180 ~ 2-nitropropane	43	11.973	11.973	(1.062)	689316	2.00000	0.000
57 Dibromomethane	93	12.146	12.146	(1.077)	420869	2.00000	2.010
58 Bromodichloromethane	83	12.324	12.324	(1.093)	762742	2.00000	2.121
60 Methyl Methacrylate	41	12.448	12.448	(1.104)	486491	2.00000	2.181
59 1,4-dioxane	88	12.340	12.346	(1.094)	172558	2.00000	2.105
61 ~ methyl cyclohexane	83	13.003	13.003	(1.153)	693156	2.00000	1.974

Data File: /chem/gcms/mr.i/R022013I.b/ricb206.d
Report Date: 21-Feb-2013 12:04

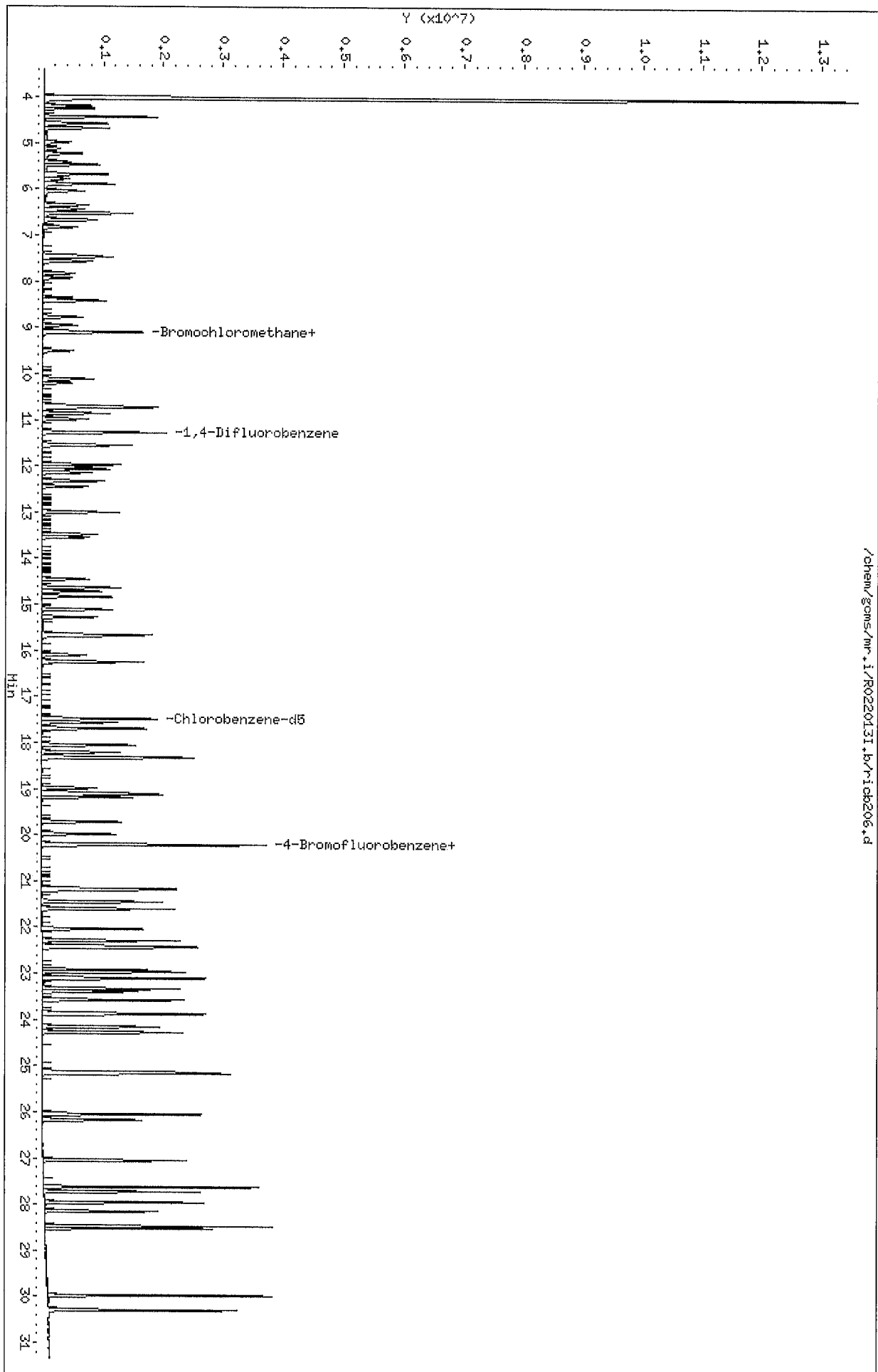
Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
						(ppb (v/v))	(ppb (v/v))
=====	=====	==	=====	=====	=====	=====	=====
63 cis-1,3-Dichloropropene	75	13.548	13.548	(1.201)	617152	2.00000	2.044
62 4-Methyl-2-pentanone	43	13.483	13.483	(1.196)	853085	2.00000	2.042
64 trans-1,3-Dichloropropene	75	14.459	14.459	(0.827)	606049	2.00000	2.022
65 Toluene	91	14.637	14.637	(0.837)	1348321	2.00000	1.902
66 1,1,2-Trichloroethane	83	14.723	14.718	(0.842)	385966	2.00000	1.970
67 ~ 2-methyl thiophene	97	14.837	14.837	(0.848)	1175187	2.00000	2.002
68 ~ 3-methyl thiophene	97	15.112	15.112	(0.864)	1202517	2.00000	1.996
69 2-Hexanone	58	15.279	15.279	(0.874)	452016	2.00000	2.189
70 Octane	85	15.662	15.662	(0.895)	451854	2.00000	1.958
71 Dibromochloromethane	129	15.689	15.689	(0.897)	719639	2.00000	2.277
72 1,2-Dibromoethane	107	16.104	16.104	(0.921)	715536	2.00000	2.171
73 Tetrachloroethene	129	16.250	16.250	(0.929)	481635	2.00000	1.938
75 ~ 2,3-dimethylheptane	43	17.695	17.695	(1.012)	1228688	2.00000	1.933
74 Chlorobenzene	112	17.560	17.565	(1.004)	1076965	2.00000	1.949
76 Ethylbenzene	91	18.056	18.056	(1.032)	1721400	2.00000	1.946
77 ~ 2-ethyl thiophene	97	18.212	18.212	(1.041)	1319238	2.00000	2.020
78 m&p-Xylene	91	18.326	18.326	(1.048)	2672812	4.00000	3.924
79 Nonane	57	19.124	19.124	(1.093)	915207	2.00000	1.998
80 Bromoform	173	18.989	18.989	(1.086)	633029	2.00000	2.545
81 Styrene	104	19.081	19.086	(1.091)	1025316	2.00000	2.378
82 o-Xylene	91	19.183	19.183	(1.097)	1368786	2.00000	1.933
84 1,1,2,2-Tetrachloroethane	83	19.717	19.722	(1.127)	1022978	2.00000	2.079
85 1,2,3-Trichloropropane	110	19.986	19.987	(1.143)	304220	2.00000	2.006
86 Cumene	105	20.202	20.202	(1.155)	2002301	2.00000	1.983
87 n-Propylbenzene	120	21.162	21.162	(1.210)	574568	2.00000	2.046
88 2-chlorotoluene	126	21.200	21.194	(1.212)	516583	2.00000	1.985
89 4-Ethyltoluene	105	21.453	21.453	(1.227)	2077275	2.00000	2.040
90 1,3,5-Trimethylbenzene	120	21.604	21.604	(1.235)	973240	2.00000	2.052
91 Alpha-Methylstyrene	118	22.036	22.036	(1.260)	806486	2.00000	2.474
92 Decane	57	22.289	22.289	(1.274)	1176764	2.00000	2.093
93 tert-butylbenzene	119	22.413	22.408	(1.281)	1820932	2.00000	2.005
94 1,2,4-Trimethylbenzene	105	22.440	22.440	(1.283)	1720570	2.00000	2.054
95 sec-butylbenzene	105	22.968	22.969	(1.313)	2525380	2.00000	2.019
96 1,3-Dichlorobenzene	146	22.925	22.925	(1.311)	1148914	2.00000	2.061
97 Benzyl Chloride	91	23.098	23.098	(1.321)	1503101	2.00000	2.247
98 1,4-Dichlorobenzene	146	23.114	23.114	(1.322)	1157117	2.00000	2.074
99 p-Cymene	119	23.330	23.330	(1.334)	2164101	2.00000	2.061
100 ~ 1,2,3- Trimethylbenzene	105	23.394	23.395	(1.338)	1509662	2.00000	1.987
101 ~ n-butylcyclohexane	83	23.572	23.572	(1.348)	1390723	2.00000	1.987
102 ~ Indane	117	23.885	23.885	(1.366)	1628667	2.00000	1.997
103 1,2-Dichlorobenzene	146	23.858	23.864	(1.364)	1099657	2.00000	2.030
104 n-butylbenzene	91	24.279	24.279	(1.388)	2033460	2.00000	2.052
105 ~ Indene	116	24.160	24.160	(1.381)	1625829	2.00000	2.273
106 Undecane	57	25.169	25.169	(1.439)	1459235	2.00000	2.208
107 ~ 1,2-dimethyl-4-ethylenzene	119	25.136	25.136	(1.437)	2164307	2.00000	2.054
108 ~ 1,2,4,5-tetramethylbenzene	119	26.047	26.048	(1.489)	2261942	2.00000	2.097
109 ~ 1,2,3,5-tetramethylbenzene	119	26.172	26.172	(1.496)	1404249	2.00000	2.057

Data File: /chem/gcms/mr.i/R022013I.b/ricb206.d
 Report Date: 21-Feb-2013 12:04

Compounds	QUANT SIG							AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ppb(v/v))	ON-COL (ppb(v/v))		
=====	=====	==	=====	=====	=====	=====	=====		
110 ~ 1,2,3,4-tetramethylbenzene	119	27.050	27.045	(1.547)	1903586	2.00000	2.125		
111 Dodecane	57	27.622	27.622	(1.579)	1551610	2.00000	2.663		
112 1,2,4-Trichlorobenzene	180	27.725	27.725	(1.585)	1138134	2.00000	2.447		
113 Napthalene	128	27.962	27.962	(1.599)	2796036	2.00000	2.561		
114 ~ benzo(b) thiophene	134	28.151	28.151	(1.610)	1910869	2.00000	2.366		
115 Hexachlorobutadiene	225	28.474	28.474	(1.628)	981048	2.00000	2.124		
116 1,2,3-trichlorobenzene	180	28.523	28.523	(1.631)	1167167	2.00000	2.409		
117 ~ 2-Methylnaphthalene	142	29.979	29.979	(1.714)	2231060	12.5000	19.42		
118 ~ 1-Methylnaphthalene	142	30.297	30.291	(1.732)	1939781	12.5000	18.30		

Data File: /chem/gcms/mr.i/R0220131.b/rick206.d
Date: 20-FEB-2013 21:01
Client ID: STD2
Sample Info: ICAL6,1,1,6,STD2
Purge Volume: 500.0
Column phase: Rtx-5

Instrument: mr.i
Operator: 060487
Column diameter: 0.32



Data File: /chem/gcms/mr.i/R022013I.b/ricb207.d
 Report Date: 21-Feb-2013 12:04

TestAmerica Knoxville

Modified Method TO-14/TO-15

Data file : /chem/gcms/mr.i/R022013I.b/ricb207.d
 Lab Smp Id: ICAL7 Client Smp ID: STD4
 Inj Date : 20-FEB-2013 21:50
 Operator : 060487 Inst ID: mr.i
 Smp Info : ICAL7,1,1,7,,STD4
 Misc Info : R022013I,TO15,
 Comment :
 Method : /chem/gcms/mr.i/R022013I.b/TO15.m
 Meth Date : 21-Feb-2013 12:03 wilesd Quant Type: ISTD
 Cal Date : 20-FEB-2013 21:50 Cal File: ricb207.d
 Als bottle: 1 Calibration Sample, Level: 7
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 3.50

Concentration Formula: Amt * DF * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Default Calibration Volume
Vo	500.00000	Default Sample Volume

Cpnd Variable Local Compound Variable

Compounds	QUANT	SIG	MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
								CAL-AMT (ppb(v/v))	ON-COL (ppb(v/v))
* 1 Bromochloromethane	128			9.094	9.089	(1.000)	499938	4.00000	4.000
* 2 1,4-Difluorobenzene	114			11.278	11.278	(1.000)	2420270	4.00000	4.000
* 3 Chlorobenzene-d5	117			17.490	17.490	(1.000)	1759144	4.00000	4.000
\$ 4 4-Bromofluorobenzene	95			20.219	20.218	(1.156)	1265233	4.00000	4.168
M 83 Xylene (total)	100						8257365	12.0000	11.40
5 Chlorodifluoromethane	67			4.187	4.187	(0.460)	183880	4.00000	3.401
6 Propene	41			4.198	4.192	(0.462)	565178	4.00000	3.474
7 Dichlorodifluoromethane	85			4.246	4.246	(0.467)	1907691	4.00000	3.463
8 Chloromethane	52			4.424	4.424	(0.486)	225928	4.00000	3.242
9 1,2-Dichlorotetrafluoroethane	135			4.435	4.435	(0.488)	1528236	4.00000	3.501
10 Methanol	31			4.564	4.570	(0.502)	178505	4.00000	3.674
11 ~ acetaldehyde	44			4.570	4.570	(0.502)	1423191	20.0000	17.18
12 Vinyl Chloride	62			4.591	4.591	(0.505)	807037	4.00000	3.493
13 n-Butane	43			4.683	4.678	(0.515)	1130949	4.00000	3.235
14 1,3-Butadiene	54			4.678	4.678	(0.514)	626970	4.00000	3.451
15 Bromomethane	94			4.990	4.985	(0.549)	723758	4.00000	3.341

Data File: /chem/gcms/mr.i/R022013I.b/ricb207.d

Report Date: 21-Feb-2013 12:04

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ppb (v/v))	ON-COL (ppb (v/v))
=====	=====	==	=====	=====	=====	=====	=====
16 Chloroethane	64	5.125	5.125	(0.564)	404248	4.00000	3.467
17 ~ ethanol	31	5.233	5.233	(0.575)	1165036	20.0000	15.41
18 Vinyl Bromide	106	5.416	5.416	(0.596)	765176	4.00000	3.608
19 2-methyl butane	43	5.476	5.470	(0.602)	900293	4.00000	3.491
20 Trichlorofluoromethane	101	5.681	5.675	(0.625)	1893703	4.00000	3.614
21 Acrolein	56	5.675	5.670	(0.624)	238921	4.00000	2.970
22 Acetonitrile	40	5.729	5.729	(0.630)	293919	4.00000	3.771
25 Pentane	72	5.896	5.896	(0.648)	154456	4.00000	3.739
23 Acetone	58	5.783	5.783	(0.636)	418428	4.00000	3.943
24 Isopropyl alcohol	45	5.886	5.885	(0.647)	1115470	4.00000	3.757
26 Ethyl Ether	31	6.042	6.047	(0.664)	796407	4.00000	3.593
27 1,1-Dichloroethene	96	6.344	6.344	(0.698)	739154	4.00000	3.548
29 Acrylonitrile	53	6.419	6.419	(0.706)	595800	4.00000	3.764
30 1,1,2-Trichlorotrifluoroethane	101	6.522	6.522	(0.717)	1566090	4.00000	3.645
28 tert-butanol	59	6.446	6.441	(0.709)	1324008	4.00000	3.771
31 Methylene Chloride	84	6.667	6.662	(0.733)	670573	4.00000	3.565
32 3-Chloropropene	39	6.684	6.684	(0.735)	557733	4.00000	3.707
33 Carbon Disulfide	76	6.829	6.824	(0.751)	2172542	4.00000	3.648
35 ~ 2-Methyl Pentane	43	7.482	7.476	(0.823)	1705363	4.00000	3.660
34 trans-1,2-Dichloroethene	96	7.444	7.444	(0.819)	767085	4.00000	3.568
36 Methyl-t-Butyl Ether	73	7.568	7.568	(0.832)	2019155	4.00000	3.711
37 1,1-Dichloroethane	63	7.838	7.832	(0.862)	1356880	4.00000	3.658
38 Vinyl Acetate	43	7.935	7.935	(0.872)	1898829	4.00000	3.910
39 2-Butanone	72	8.355	8.355	(0.919)	377018	4.00000	3.552
40 Hexane	56	8.420	8.420	(0.926)	640309	4.00000	3.599
41 cis 1,2-Dichloroethene	96	8.781	8.776	(0.966)	780443	4.00000	3.596
42 Ethyl acetate	43	8.954	8.954	(0.985)	1646241	4.00000	3.790
43 Chloroform	83	9.116	9.110	(1.002)	1510977	4.00000	3.651
44 Tetrahydrofuran	42	9.504	9.509	(1.045)	853316	4.00000	3.640
45 1,1,1-Trichloroethane	97	10.119	10.118	(1.113)	1485209	4.00000	3.726
46 1,2-Dichloroethane	62	10.205	10.199	(0.905)	1003677	4.00000	3.705
49 Cyclohexane	69	10.733	10.728	(0.952)	363377	4.00000	3.753
48 Benzene	78	10.712	10.712	(0.950)	2307780	4.00000	3.686
50 Carbon Tetrachloride	117	10.744	10.744	(0.953)	1612424	4.00000	5.012
51 ~ 2,3-dimethylpentane	71	10.863	10.863	(0.963)	496747	4.00000	3.805
47 1-Butanol	31	10.674	10.679	(0.946)	243113	4.00000	4.065
52 ~ Thiophene	84	10.992	10.987	(0.975)	1379165	4.00000	3.813
53 2,2,4-trimethylpentane	57	11.553	11.553	(1.024)	3796309	4.00000	3.754
54 Heptane	71	11.974	11.973	(1.062)	825923	4.00000	3.797
55 1,2-Dichloropropane	63	12.017	12.017	(1.065)	859295	4.00000	3.773
56 Trichloroethene	130	12.076	12.076	(1.071)	1053069	4.00000	3.862
180 ~ 2-nitropropane	43	11.974	11.973	(1.062)	1380497	4.00000	0.000
57 Dibromomethane	93	12.146	12.146	(1.077)	862929	4.00000	3.937
58 Bromodichloromethane	83	12.324	12.324	(1.093)	1625407	4.00000	4.250
60 Methyl Methacrylate	41	12.448	12.448	(1.104)	1003714	4.00000	4.225
59 1,4-dioxane	88	12.340	12.346	(1.094)	341427	4.00000	3.974
61 ~ methyl cyclohexane	83	13.004	13.003	(1.153)	1409131	4.00000	3.850

Data File: /chem/gcms/mr.i/R022013I.b/ricb207.d
Report Date: 21-Feb-2013 12:04

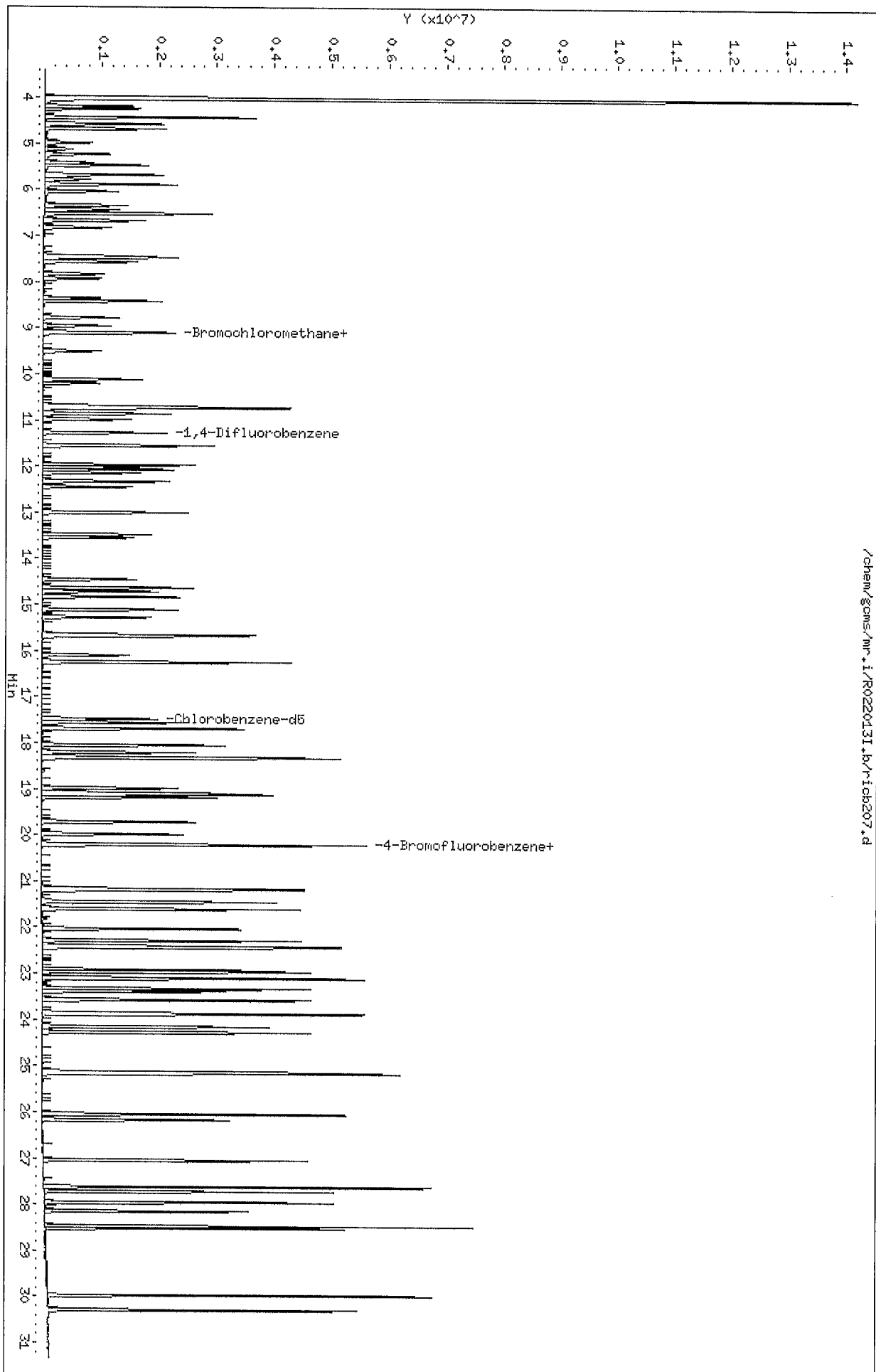
Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ppb(v/v))	ON-COL (ppb(v/v))
=====	=====	==	=====	=====	=====	=====	=====
63 cis-1,3-Dichloropropene	75	13.548	13.548	(1.201)	1255611	4.00000	3.967
62 4-Methyl-2-pentanone	43	13.483	13.483	(1.196)	1756394	4.00000	4.003
64 trans-1,3-Dichloropropene	75	14.459	14.459	(0.827)	1276555	4.00000	4.013
65 Toluene	91	14.637	14.637	(0.837)	2760146	4.00000	3.722
66 1,1,2-Trichloroethane	83	14.724	14.718	(0.842)	785336	4.00000	3.815
67 ~ 2-methyl thiophene	97	14.837	14.837	(0.848)	2412968	4.00000	3.896
68 ~ 3-methyl thiophene	97	15.117	15.112	(0.864)	2459322	4.00000	3.873
69 2-Hexanone	58	15.279	15.279	(0.874)	955656	4.00000	4.286
70 Octane	85	15.662	15.662	(0.895)	927507	4.00000	3.823
71 Dibromochloromethane	129	15.689	15.689	(0.897)	1681599	4.00000	4.814
72 1,2-Dibromoethane	107	16.104	16.104	(0.921)	1479440	4.00000	4.192
73 Tetrachloroethene	129	16.250	16.250	(0.929)	991008	4.00000	3.798
75 ~ 2,3-dimethylheptane	43	17.695	17.695	(1.012)	2478249	4.00000	3.727
74 Chlorobenzene	112	17.565	17.565	(1.004)	2208762	4.00000	3.806
76 Ethylbenzene	91	18.056	18.056	(1.032)	3512281	4.00000	3.784
77 ~ 2-ethyl thiophene	97	18.213	18.212	(1.041)	2706860	4.00000	3.923
78 m&p-Xylene	91	18.331	18.326	(1.048)	5488275	8.00000	7.663
79 Nonane	57	19.124	19.124	(1.093)	1864155	4.00000	3.870
80 Bromoform	173	18.989	18.989	(1.086)	1655476	4.00000	5.634
81 Styrene	104	19.086	19.086	(1.091)	2129995	4.00000	4.509
82 o-Xylene	91	19.189	19.183	(1.097)	2769090	4.00000	3.736
84 1,1,2,2-Tetrachloroethane	83	19.717	19.722	(1.127)	2094098	4.00000	4.011
85 1,2,3-Trichloropropane	110	19.987	19.987	(1.143)	620658	4.00000	3.881
86 Cumene	105	20.208	20.202	(1.155)	4107524	4.00000	3.868
87 n-Propylbenzene	120	21.168	21.162	(1.210)	1187138	4.00000	3.990
88 2-chlorotoluene	126	21.200	21.194	(1.212)	1057707	4.00000	3.860
89 4-Ethyltoluene	105	21.453	21.453	(1.227)	4249373	4.00000	3.948
90 1,3,5-Trimethylbenzene	120	21.604	21.604	(1.235)	2004264	4.00000	3.988
91 Alpha-Methylstyrene	118	22.036	22.036	(1.260)	1665442	4.00000	4.583
92 Decane	57	22.289	22.289	(1.274)	2386788	4.00000	4.002
93 tert-butylbenzene	119	22.413	22.408	(1.281)	3737475	4.00000	3.903
94 1,2,4-Trimethylbenzene	105	22.440	22.440	(1.283)	3518569	4.00000	3.968
95 sec-butylbenzene	105	22.969	22.969	(1.313)	5123491	4.00000	3.890
96 1,3-Dichlorobenzene	146	22.925	22.925	(1.311)	2367800	4.00000	4.004
97 Benzyl Chloride	91	23.098	23.098	(1.321)	3155743	4.00000	4.351
98 1,4-Dichlorobenzene	146	23.114	23.114	(1.322)	2402462	4.00000	4.048
99 p-Cymene	119	23.335	23.330	(1.334)	4393978	4.00000	3.955
100 ~ 1,2,3- Trimethylbenzene	105	23.395	23.395	(1.338)	3124193	4.00000	3.898
101 ~ n-butylcyclohexane	83	23.578	23.572	(1.348)	2799999	4.00000	3.815
102 ~ Indane	117	23.885	23.885	(1.366)	3337214	4.00000	3.882
103 1,2-Dichlorobenzene	146	23.864	23.864	(1.364)	2269421	4.00000	3.960
104 n-butylbenzene	91	24.279	24.279	(1.388)	4086141	4.00000	3.910
105 ~ Indene	116	24.160	24.160	(1.381)	3300898	4.00000	4.276
106 Undecane	57	25.169	25.169	(1.439)	2892176	4.00000	4.100
107 ~ 1,2-dimethyl-4-ethylenzene	119	25.136	25.136	(1.437)	4381789	4.00000	3.937
108 ~ 1,2,4,5-tetramethylbenzene	119	26.053	26.048	(1.490)	4524383	4.00000	3.965
109 ~ 1,2,3,5-tetramethylbenzene	119	26.177	26.172	(1.497)	2779993	4.00000	3.871

Data File: /chem/gcms/mr.i/R022013I.b/ricb207.d
 Report Date: 21-Feb-2013 12:04

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
						(ppb (v/v))	(ppb (v/v))
=====	=====	==	=====	=====	=====	=====	=====
110 ~ 1,2,3,4-tetramethylbenzene	119	27.051	27.045	(1.547)	3734862	4.00000	3.945
111 Dodecane	57	27.622	27.622	(1.579)	2932080	4.00000	4.574
112 1,2,4-Trichlorobenzene	180	27.730	27.725	(1.585)	2246491	4.00000	4.452
113 Napthalene	128	27.962	27.962	(1.599)	5382230	4.00000	4.526
114 ~ benzo(b) thiophene	134	28.151	28.151	(1.610)	3653061	4.00000	4.219
115 Hexachlorobutadiene	225	28.474	28.474	(1.628)	1967777	4.00000	4.014
116 1,2,3-trichlorobenzene	180	28.523	28.523	(1.631)	2214773	4.00000	4.256
117 ~ 2-Methylnaphthalene	142	29.979	29.979	(1.714)	4024073	25.0000	30.57
118 ~ 1-Methylnaphthalene	142	30.297	30.291	(1.732)	3342985	25.0000	28.39

Data File: /chem/gcms/mr.i/R0220131.b/r/bb207.d
Date: 20-FEB-2013 21:50
Client ID: STD4
Sample Info: ICAL7.1.1.7, STD4
Purge Volume: 500.0
Column Phase: Rtx-5

Instrument: mr.i
Operator: 060487
Column diameter: 0.32



Data File: /chem/gcms/mr.i/R022013I.b/ricb208.d
 Report Date: 21-Feb-2013 12:04

TestAmerica Knoxville

Modified Method TO-14/TO-15

Data file : /chem/gcms/mr.i/R022013I.b/ricb208.d
 Lab Smp Id: ICAL8 Client Smp ID: STD8
 Inj Date : 20-FEB-2013 22:37
 Operator : 060487 Inst ID: mr.i
 Smp Info : ICAL8,1,1,8,,STD8
 Misc Info : R022013I,TO15,
 Comment :
 Method : /chem/gcms/mr.i/R022013I.b/TO15.m
 Meth Date : 21-Feb-2013 12:03 wilesd Quant Type: ISTD
 Cal Date : 20-FEB-2013 22:37 Cal File: ricb208.d
 Als bottle: 1 Calibration Sample, Level: 8
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 3.50

Concentration Formula: Amt * DF * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Default Calibration Volume
Vo	500.00000	Default Sample Volume

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT (ppb(v/v))	ON-COL (ppb(v/v))
* 1 Bromochloromethane	128	9.099	9.089	(1.000)	540354	4.00000	4.000	
* 2 1,4-Difluorobenzene	114	11.283	11.278	(1.000)	2546995	4.00000	4.000	
* 3 Chlorobenzene-d5	117	17.490	17.490	(1.000)	1857770	4.00000	4.000	
\$ 4 4-Bromofluorobenzene	95	20.218	20.218	(1.156)	1349445	4.00000	4.178	
M 83 Xylene (total)	100				17511981	24.0000	23.04	
5 Chlorodifluoromethane	67	4.187	4.187	(0.460)	372763	8.00000	6.568	
6 Propene	41	4.198	4.192	(0.461)	1144756	8.00000	6.763	
7 Dichlorodifluoromethane	85	4.252	4.246	(0.467)	3852790	8.00000	6.653	
8 Chloromethane	52	4.424	4.424	(0.486)	449868	8.00000	6.236	
9 1,2-Dichlorotetrafluoroethane	135	4.435	4.435	(0.487)	3115556	8.00000	6.773	
10 Methanol	31	4.570	4.570	(0.502)	351452	8.00000	7.079	
11 ~ acetaldehyde	44	4.575	4.570	(0.503)	2765387	40.0000	32.74	
12 Vinyl Chloride	62	4.591	4.591	(0.505)	1637585	8.00000	6.731	
13 n-Butane	43	4.683	4.678	(0.515)	2270040	8.00000	6.230	
14 1,3-Butadiene	54	4.683	4.678	(0.515)	1286346	8.00000	6.724	
15 Bromomethane	94	4.990	4.985	(0.548)	1481360	8.00000	6.522	

Data File: /chem/gcms/mr.i/R022013I.b/ricb208.d
Report Date: 21-Feb-2013 12:04

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ppb(v/v))	ON-COL (ppb(v/v))
=====	=====	==	=====	=====	=====	=====	=====
16 Chloroethane	64	5.125	5.125	(0.563)	825955	8.00000	6.728
17 ~ ethanol	31	5.238	5.233	(0.576)	2384899	40.0000	30.57
18 Vinyl Bromide	106	5.422	5.416	(0.596)	1595173	8.00000	7.092
19 2-methyl butane	43	5.476	5.470	(0.602)	1860072	8.00000	6.836
20 Trichlorofluoromethane	101	5.681	5.675	(0.624)	3934641	8.00000	7.080
21 Acrolein	56	5.675	5.670	(0.624)	565118	8.00000	6.753
22 Acetonitrile	40	5.735	5.729	(0.630)	611332	8.00000	7.394
25 Pentane	72	5.896	5.896	(0.648)	322511	8.00000	7.342
23 Acetone	58	5.788	5.783	(0.636)	798490	8.00000	7.276
24 Isopropyl alcohol	45	5.891	5.885	(0.647)	2311077	8.00000	7.386
26 Ethyl Ether	31	6.042	6.047	(0.664)	1635935	8.00000	6.975
27 1,1-Dichloroethene	96	6.349	6.344	(0.698)	1561738	8.00000	7.071
29 Acrylonitrile	53	6.425	6.419	(0.706)	1264156	8.00000	7.471
30 1,1,2-Trichlorotrifluoroethane	101	6.527	6.522	(0.717)	3296398	8.00000	7.214
28 tert-Butanol	59	6.452	6.441	(0.709)	2765131	8.00000	7.396
31 Methylene Chloride	84	6.667	6.662	(0.733)	1403404	8.00000	7.098
32 3-Chloropropene	39	6.689	6.684	(0.735)	905451	8.00000	5.821
33 Carbon Disulfide	76	6.829	6.824	(0.750)	4518602	8.00000	7.146
35 ~ 2-Methyl Pentane	43	7.482	7.476	(0.822)	3528570	8.00000	7.154
34 trans-1,2-Dichloroethene	96	7.449	7.444	(0.819)	1618602	8.00000	7.097
36 Methyl-t-Butyl Ether	73	7.568	7.568	(0.832)	4218330	8.00000	7.280
37 1,1-Dichloroethane	63	7.838	7.832	(0.861)	2828507	8.00000	7.175
38 Vinyl Acetate	43	7.940	7.935	(0.873)	3983094	8.00000	7.645
39 2-Butanone	72	8.355	8.355	(0.918)	784610	8.00000	7.044
40 Hexane	56	8.425	8.420	(0.926)	1339039	8.00000	7.095
41 cis 1,2-Dichloroethene	96	8.781	8.776	(0.965)	1657563	8.00000	7.186
42 Ethyl acetate	43	8.959	8.954	(0.985)	3441114	8.00000	7.433
43 Chloroform	83	9.121	9.110	(1.002)	3147960	8.00000	7.160
44 Tetrahydrofuran	42	9.504	9.509	(1.044)	1784841	8.00000	7.187
45 1,1,1-Trichloroethane	97	10.119	10.118	(1.112)	3146884	8.00000	7.396
46 1,2-Dichloroethane	62	10.210	10.199	(0.905)	2090611	8.00000	7.422
49 Cyclohexane	69	10.733	10.728	(0.951)	767890	8.00000	7.599
48 Benzene	78	10.717	10.712	(0.950)	4866573	8.00000	7.468
50 Carbon Tetrachloride	117	10.749	10.744	(0.953)	1962219	8.00000	6.033
51 ~ 2,3-dimethylpentane	71	10.868	10.863	(0.963)	1042671	8.00000	7.646
47 1-Butanol	31	10.679	10.679	(0.946)	503787	8.00000	8.003
52 ~ Thiophene	84	10.992	10.987	(0.974)	2900430	8.00000	7.673
53 2,2,4-trimethylpentane	57	11.558	11.553	(1.024)	7950864	8.00000	7.543
54 Heptane	71	11.979	11.973	(1.062)	1743091	8.00000	7.668
55 1,2-Dichloropropane	63	12.022	12.017	(1.065)	1811670	8.00000	7.619
56 Trichloroethene	130	12.081	12.076	(1.071)	2277990	8.00000	7.947
180 ~ 2-nitropropane	43	11.979	11.973	(1.062)	2879395	8.00000	0.000
57 Dibromomethane	93	12.151	12.146	(1.077)	1870851	8.00000	8.095
58 Bromodichloromethane	83	12.329	12.324	(1.093)	3372192	8.00000	8.323
60 Methyl Methacrylate	41	12.453	12.448	(1.104)	2106982	8.00000	8.354
59 1,4-dioxane	88	12.340	12.346	(1.094)	724353	8.00000	8.009
61 ~ methyl cyclohexane	83	13.009	13.003	(1.153)	2985290	8.00000	7.786

Data File: /chem/gcms/mr.i/R022013I.b/ricb208.d
Report Date: 21-Feb-2013 12:04

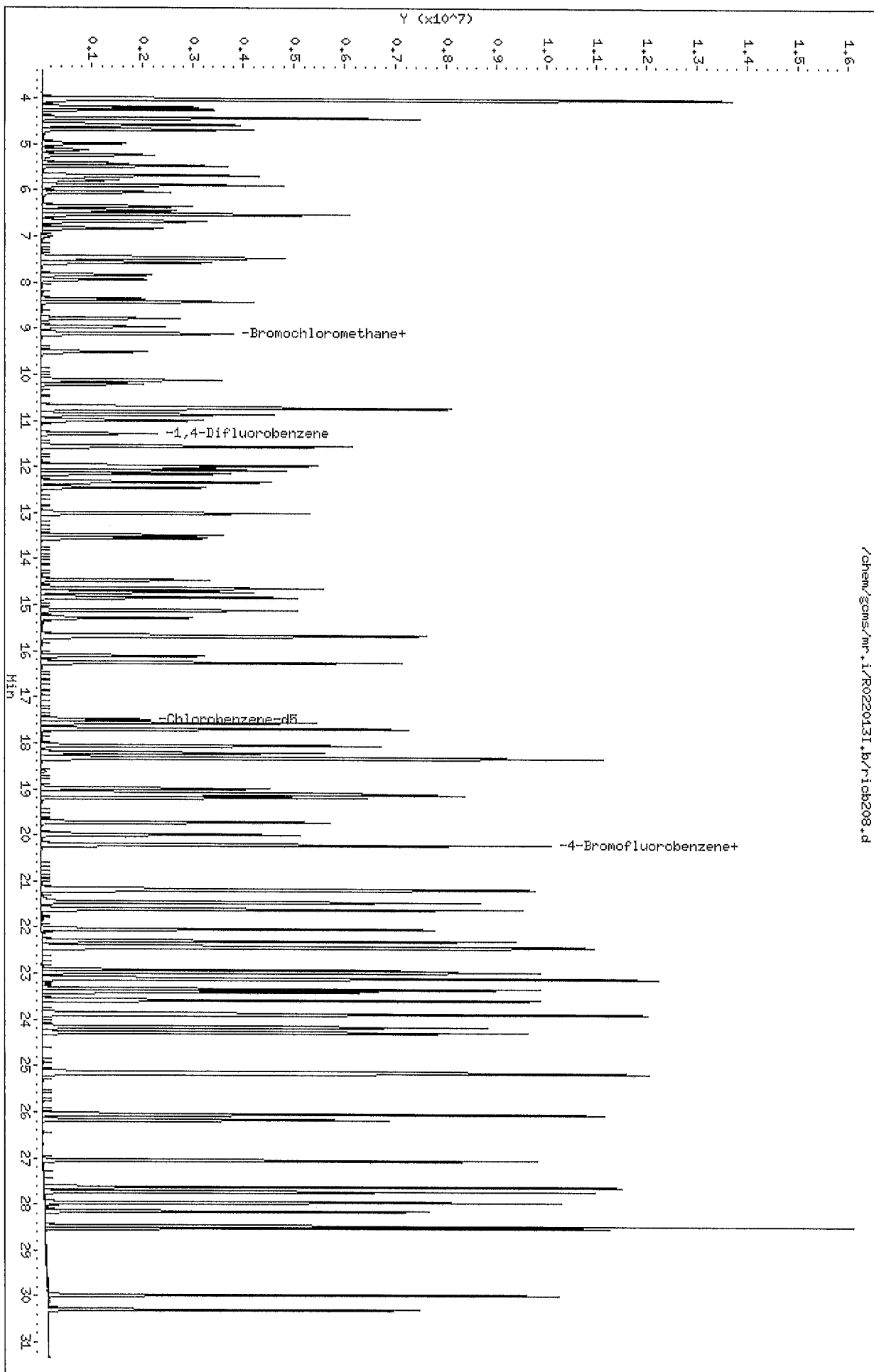
Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ppb (v/v))	ON-COL (ppb (v/v))
=====	=====	==	=====	=====	=====	=====	=====
63 cis-1,3-Dichloropropene	75	13.553	13.548	(1.201)	2680970	8.00000	8.042
62 4-Methyl-2-pentanone	43	13.489	13.483	(1.195)	3331609	8.00000	7.360
64 trans-1,3-Dichloropropene	75	14.465	14.459	(0.827)	2639415	8.00000	7.877
65 Toluene	91	14.643	14.637	(0.837)	5872415	8.00000	7.566
66 1,1,2-Trichloroethane	83	14.724	14.718	(0.842)	1663913	8.00000	7.701
67 ~ 2-methyl thiophene	97	14.842	14.837	(0.849)	5129929	8.00000	7.866
68 ~ 3-methyl thiophene	97	15.117	15.112	(0.864)	5231037	8.00000	7.828
69 2-Hexanone	58	15.279	15.279	(0.874)	1530828	8.00000	6.711
70 Octane	85	15.662	15.662	(0.895)	1973319	8.00000	7.743
71 Dibromochloromethane	129	15.694	15.689	(0.897)	3462170	8.00000	9.159
72 1,2-Dibromoethane	107	16.104	16.104	(0.921)	3198562	8.00000	8.494
73 Tetrachloroethene	129	16.250	16.250	(0.929)	2121111	8.00000	7.740
75 ~ 2,3-dimethylheptane	43	17.695	17.695	(1.012)	5099215	8.00000	7.358
74 Chlorobenzene	112	17.565	17.565	(1.004)	4715186	8.00000	7.736
76 Ethylbenzene	91	18.056	18.056	(1.032)	7439684	8.00000	7.646
77 ~ 2-ethyl thiophene	97	18.218	18.212	(1.042)	5754146	8.00000	7.911
78 m&p-Xylene	91	18.331	18.326	(1.048)	11659207	16.0000	15.50
79 Nonane	57	19.124	19.124	(1.093)	3897760	8.00000	7.716
80 Bromoform	173	18.989	18.989	(1.086)	3262039	8.00000	9.990
81 Styrene	104	19.086	19.086	(1.091)	4700016	8.00000	9.151
82 o-Xylene	91	19.188	19.183	(1.097)	5852774	8.00000	7.547
84 1,1,2,2-Tetrachloroethane	83	19.722	19.722	(1.128)	4458353	8.00000	8.074
85 1,2,3-Trichloropropane	110	19.987	19.987	(1.143)	1323468	8.00000	7.860
86 Cumene	105	20.208	20.202	(1.155)	8759520	8.00000	7.841
87 n-Propylbenzene	120	21.167	21.162	(1.210)	2589274	8.00000	8.199
88 2-chlorotoluene	126	21.200	21.194	(1.212)	2302096	8.00000	7.961
89 4-Ethyltoluene	105	21.453	21.453	(1.227)	9096637	8.00000	8.002
90 1,3,5-Trimethylbenzene	120	21.610	21.604	(1.236)	4360096	8.00000	8.179
91 Alpha-Methylstyrene	118	22.036	22.036	(1.260)	3878760	8.00000	9.601
92 Decane	57	22.294	22.289	(1.275)	5019618	8.00000	7.974
93 tert-butylbenzene	119	22.413	22.408	(1.281)	8078917	8.00000	7.991
94 1,2,4-Trimethylbenzene	105	22.445	22.440	(1.283)	7571746	8.00000	8.073
95 sec-butylbenzene	105	22.974	22.969	(1.314)	10988409	8.00000	7.916
96 1,3-Dichlorobenzene	146	22.931	22.925	(1.311)	5250557	8.00000	8.337
97 Benzyl Chloride	91	23.103	23.098	(1.321)	6984830	8.00000	8.911
98 1,4-Dichlorobenzene	146	23.120	23.114	(1.322)	5348640	8.00000	8.439
99 p-Cymene	119	23.335	23.330	(1.334)	9416986	8.00000	8.023
100 ~ 1,2,3- Trimethylbenzene	105	23.400	23.395	(1.338)	6652212	8.00000	7.878
101 ~ n-butylcyclohexane	83	23.578	23.572	(1.348)	5952940	8.00000	7.732
102 ~ Indane	117	23.891	23.885	(1.366)	7233350	8.00000	7.971
103 1,2-Dichlorobenzene	146	23.869	23.864	(1.365)	4981861	8.00000	8.193
104 n-butylbenzene	91	24.279	24.279	(1.388)	8589652	8.00000	7.819
105 ~ Indene	116	24.160	24.160	(1.381)	7452598	8.00000	8.929
106 Undecane	57	25.174	25.169	(1.439)	5859547	8.00000	7.888
107 ~ 1,2-dimethyl-4-ethylbenzene	119	25.136	25.136	(1.437)	9340017	8.00000	7.955
108 ~ 1,2,4,5-tetramethylbenzene	119	26.053	26.048	(1.490)	9571728	8.00000	7.952
109 ~ 1,2,3,5-tetramethylbenzene	119	26.177	26.172	(1.497)	5859609	8.00000	7.771

Data File: /chem/gcms/mr.i/R022013I.b/ricb208.d
 Report Date: 21-Feb-2013 12:04

Compounds	QUANT	SIG						AMOUNTS	
			MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
								(ppb (v/v))	(ppb (v/v))
=====	=====	==	=====	=====	=====	=====	=====		
110 ~ 1,2,3,4-tetramethylbenzene	119	27.051	27.045	(1.547)	7858767	8.00000	7.883		
111 Dodecane	57	27.628	27.622	(1.580)	5151406	8.00000	7.672		
112 1,2,4-Trichlorobenzene	180	27.730	27.725	(1.585)	4934473	8.00000	9.056		
113 Napthalene	128	27.967	27.962	(1.599)	11316077	8.00000	8.851		
114 ~ benzo(b) thiophene	134	28.156	28.151	(1.610)	7814470	8.00000	8.463		
115 Hexachlorobutadiene	225	28.474	28.474	(1.628)	4452761	8.00000	8.494		
116 1,2,3-trichlorobenzene	180	28.523	28.523	(1.631)	4820268	8.00000	8.651		
117 ~ 2-Methylnaphthalene	142	29.979	29.979	(1.714)	6170828	50.0000	45.41		
118 ~ 1-Methylnaphthalene	142	30.297	30.291	(1.732)	4486664	50.0000	38.21		

Data File: /chem/gcms/mr.i/R0220131.b/r1cb208.d
Date : 20-FEB-2013 22:37
Client ID: STD8
Sample Info: ICA18,1,4-8,,STD8
Purge Volume: 500.0
Column phase: RtX-5

Instrument: mr.i
Operator: 060487
Column diameter: 0.32



Data File: /chem/gcms/mr.i/R022013I.b/ricb209.d
 Report Date: 21-Feb-2013 12:04

TestAmerica Knoxville

Modified Method TO-14/TO-15

Data file : /chem/gcms/mr.i/R022013I.b/ricb209.d
 Lab Smp Id: ICAL9 Client Smp ID: STD16
 Inj Date : 20-FEB-2013 23:25
 Operator : 060487 Inst ID: mr.i
 Smp Info : ICAL9,1,1,9,,STD16
 Misc Info : R022013I,TO15,
 Comment :
 Method : /chem/gcms/mr.i/R022013I.b/TO15.m
 Meth Date : 21-Feb-2013 12:03 wilesd Quant Type: ISTD
 Cal Date : 20-FEB-2013 23:25 Cal File: ricb209.d
 Als bottle: 1 Calibration Sample, Level: 9
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 3.50

Concentration Formula: Amt * DF * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Default Calibration Volume
Vo	500.00000	Default Sample Volume

Cpnd Variable Local Compound Variable

Compounds	QUANT	SIG						AMOUNTS	
			MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
								(ppb(v/v))	(ppb(v/v))
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
* 1 Bromochloromethane	128		9.105	9.089	(1.000)		561398	4.00000	4.000
* 2 1,4-Difluorobenzene	114		11.283	11.278	(1.000)		2583489	4.00000	4.000
* 3 Chlorobenzene-d5	117		17.490	17.490	(1.000)		1896513	4.00000	4.000
\$ 4 4-Bromofluorobenzene	95		20.224	20.218	(1.156)		1388011	4.00000	4.182
M 83 Xylene (total)	100						35393122	48.0000	45.89
5 Chlorodifluoromethane	67		4.187	4.187	(0.460)		736609	16.0000	12.84
6 Propene	41		4.198	4.192	(0.461)		2244400	16.0000	13.21
7 Dichlorodifluoromethane	85		4.252	4.246	(0.467)		7394520	16.0000	12.66
8 Chloromethane	52		4.424	4.424	(0.486)		828183	16.0000	11.56
9 1,2-Dichlorotetrafluoroethane	135		4.440	4.435	(0.488)		6085909	16.0000	13.07
10 Methanol	31		4.570	4.570	(0.502)		606006	16.0000	12.58
11 ~ acetaldehyde	44		4.575	4.570	(0.502)		5083153	80.0000	61.32
12 Vinyl Chloride	62		4.597	4.591	(0.505)		3171058	16.0000	12.89
13 n-Butane	43		4.683	4.678	(0.514)		4315599	16.0000	11.82
14 1,3-Butadiene	54		4.683	4.678	(0.514)		2489412	16.0000	12.87
15 Bromomethane	94		4.990	4.985	(0.548)		2971033	16.0000	12.93

Data File: /chem/gcms/mr.i/R022013I.b/ricb209.d
Report Date: 21-Feb-2013 12:04

Compounds	QUANT SIG			REL RT	RESPONSE	AMOUNTS	
	MASS	RT	EXP RT			CAL-AMT (ppb (v/v))	ON-COL (ppb (v/v))
=====	=====	==	=====	=====	=====	=====	=====
16 Chloroethane	64	5.130	5.125	(0.564)	1653631	16.0000	13.28
17 ~ ethanol	31	5.244	5.233	(0.576)	4434068	80.0000	57.30
18 Vinyl Bromide	106	5.422	5.416	(0.595)	3312200	16.0000	14.38
19 2-methyl butane	43	5.476	5.470	(0.601)	3741507	16.0000	13.53
20 Trichlorofluoromethane	101	5.686	5.675	(0.624)	8011312	16.0000	14.11
21 Acrolein	56	5.680	5.670	(0.624)	1191671	16.0000	14.04
22 Acetonitrile	40	5.740	5.729	(0.630)	1245205	16.0000	14.73
25 Pentane	72	5.896	5.896	(0.648)	666249	16.0000	14.78
23 Acetone	58	5.788	5.783	(0.636)	1575647	16.0000	14.31
24 Isopropyl alcohol	45	5.896	5.885	(0.648)	4521669	16.0000	14.28
26 Ethyl Ether	31	6.047	6.047	(0.664)	3245520	16.0000	13.60
27 1,1-Dichloroethene	96	6.349	6.344	(0.697)	3238941	16.0000	14.32
29 Acrylonitrile	53	6.430	6.419	(0.706)	2600204	16.0000	14.93
30 1,1,2-Trichlorotrifluoroethane	101	6.527	6.522	(0.717)	6812913	16.0000	14.54
28 tert-butanol	59	6.457	6.441	(0.709)	5594252	16.0000	14.61
31 Methylene Chloride	84	6.673	6.662	(0.733)	2911070	16.0000	14.45
32 3-Chloropropene	39	6.689	6.684	(0.735)	2157729	16.0000	13.63
33 Carbon Disulfide	76	6.834	6.824	(0.751)	9211633	16.0000	14.24
35 ~ 2-Methyl Pentane	43	7.487	7.476	(0.822)	6950055	16.0000	13.86
34 trans-1,2-Dichloroethene	96	7.455	7.444	(0.819)	3384390	16.0000	14.48
36 Methyl-t-Butyl Ether	73	7.573	7.568	(0.832)	8665753	16.0000	14.58
37 1,1-Dichloroethane	63	7.843	7.832	(0.861)	5770108	16.0000	14.30
38 Vinyl Acetate	43	7.945	7.935	(0.873)	8133772	16.0000	15.14
39 2-Butanone	72	8.360	8.355	(0.918)	1625945	16.0000	14.34
40 Hexane	56	8.425	8.420	(0.925)	2763285	16.0000	14.31
41 cis 1,2-Dichloroethene	96	8.786	8.776	(0.965)	3444447	16.0000	14.56
42 Ethyl acetate	43	8.964	8.954	(0.985)	6995031	16.0000	14.74
43 Chloroform	83	9.126	9.110	(1.002)	6438069	16.0000	14.31
44 Tetrahydrofuran	42	9.504	9.509	(1.044)	3616349	16.0000	14.27
45 1,1,1-Trichloroethane	97	10.124	10.118	(1.112)	6493142	16.0000	14.84
46 1,2-Dichloroethane	62	10.210	10.199	(0.905)	4245469	16.0000	14.99
49 Cyclohexane	69	10.739	10.728	(0.952)	1527963	16.0000	15.03
48 Benzene	78	10.722	10.712	(0.950)	9923500	16.0000	15.13
50 Carbon Tetrachloride	117	10.749	10.744	(0.953)	6925617	16.0000	20.20(A)
51 ~ 2,3-dimethylpentane	71	10.873	10.863	(0.964)	2146395	16.0000	15.58
47 1-Butanol	31	10.679	10.679	(0.946)	1026454	16.0000	16.06(A)
52 ~ Thiophene	84	10.997	10.987	(0.975)	5985260	16.0000	15.66
53 2,2,4-trimethylpentane	57	11.564	11.553	(1.025)	15934399	16.0000	15.03
54 Heptane	71	11.984	11.973	(1.062)	3602510	16.0000	15.67
55 1,2-Dichloropropane	63	12.027	12.017	(1.066)	3727076	16.0000	15.52
56 Trichloroethene	130	12.081	12.076	(1.071)	4770911	16.0000	16.36(A)
180 ~ 2-nitropropane	43	11.979	11.973	(1.062)	5676520	16.0000	0.000
57 Dibromomethane	93	12.157	12.146	(1.077)	3782526	16.0000	16.12(A)
58 Bromodichloromethane	83	12.335	12.324	(1.093)	7113149	16.0000	17.13(A)
60 Methyl Methacrylate	41	12.459	12.448	(1.104)	4279429	16.0000	16.62(A)
59 1,4-dioxane	88	12.345	12.346	(1.094)	1464223	16.0000	15.97
61 ~ methyl cyclohexane	83	13.014	13.003	(1.153)	6190643	16.0000	15.93

Data File: /chem/gcms/mr.i/R022013I.b/ricb209.d
Report Date: 21-Feb-2013 12:04

Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ppb(v/v))	ON-COL (ppb(v/v))
=====	=====	==	=====	=====	=====	=====	=====
63 cis-1,3-Dichloropropene	75	13.559	13.548	(1.202)	5566452	16.0000	16.40 (A)
62 4-Methyl-2-pentanone	43	13.494	13.483	(1.196)	7457883	16.0000	16.20 (A)
64 trans-1,3-Dichloropropene	75	14.465	14.459	(0.827)	5685037	16.0000	16.54 (A)
65 Toluene	91	14.648	14.637	(0.838)	12133635	16.0000	15.40
66 1,1,2-Trichloroethane	83	14.729	14.718	(0.842)	3463759	16.0000	15.74
67 ~ 2-methyl thiophene	97	14.848	14.837	(0.849)	10613970	16.0000	15.95
68 ~ 3-methyl thiophene	97	15.123	15.112	(0.865)	10874362	16.0000	15.95
69 2-Hexanone	58	15.284	15.279	(0.874)	4271970	16.0000	17.97 (A)
70 Octane	85	15.667	15.662	(0.896)	4066955	16.0000	15.68
71 Dibromochloromethane	129	15.700	15.689	(0.898)	7857478	16.0000	19.69 (A)
72 1,2-Dibromoethane	107	16.115	16.104	(0.921)	6773830	16.0000	17.40 (A)
73 Tetrachloroethene	129	16.255	16.250	(0.929)	4431686	16.0000	15.86
75 ~ 2,3-dimethylheptane	43	17.700	17.695	(1.012)	9923761	16.0000	14.25
74 Chlorobenzene	112	17.571	17.565	(1.005)	9956985	16.0000	16.00 (A)
76 Ethylbenzene	91	18.061	18.056	(1.033)	15319316	16.0000	15.49
77 ~ 2-ethyl thiophene	97	18.218	18.212	(1.042)	12010435	16.0000	16.15 (A)
78 m&p-Xylene	91	18.336	18.326	(1.048)	23237176	32.0000	30.46
79 Nonane	57	19.129	19.124	(1.094)	7821645	16.0000	15.28
80 Bromoform	173	18.994	18.989	(1.086)	8378935	16.0000	23.24 (A)
81 Styrene	104	19.091	19.086	(1.092)	10105442	16.0000	18.73 (A)
82 o-Xylene	91	19.194	19.183	(1.097)	12155945	16.0000	15.43
84 1,1,2,2-Tetrachloroethane	83	19.728	19.722	(1.128)	9271389	16.0000	16.39 (A)
85 1,2,3-Trichloropropane	110	19.992	19.987	(1.143)	2789327	16.0000	16.20 (A)
86 Cumene	105	20.213	20.202	(1.156)	17836176	16.0000	15.69
87 n-Propylbenzene	120	21.173	21.162	(1.211)	5523606	16.0000	16.96 (A)
88 2-chlorotoluene	126	21.205	21.194	(1.212)	4889234	16.0000	16.49 (A)
89 4-Ethyltoluene	105	21.459	21.453	(1.227)	18705230	16.0000	16.10 (A)
90 1,3,5-Trimethylbenzene	120	21.615	21.604	(1.236)	9253203	16.0000	16.85 (A)
91 Alpha-Methylstyrene	118	22.041	22.036	(1.260)	8525568	16.0000	19.71 (A)
92 Decane	57	22.300	22.289	(1.275)	9976807	16.0000	15.58
93 tert-butylbenzene	119	22.424	22.408	(1.282)	16649608	16.0000	16.11 (A)
94 1,2,4-Trimethylbenzene	105	22.451	22.440	(1.284)	15427408	16.0000	16.10 (A)
95 sec-butylbenzene	105	22.979	22.969	(1.314)	22046529	16.0000	15.62
96 1,3-Dichlorobenzene	146	22.936	22.925	(1.311)	11285592	16.0000	17.31 (A)
97 Benzyl Chloride	91	23.109	23.098	(1.321)	14102155	16.0000	17.37 (A)
98 1,4-Dichlorobenzene	146	23.130	23.114	(1.322)	11248407	16.0000	17.17 (A)
99 p-Cymene	119	23.346	23.330	(1.335)	19397581	16.0000	16.16 (A)
100 ~ 1,2,3- Trimethylbenzene	105	23.405	23.395	(1.338)	13902339	16.0000	16.11 (A)
101 ~ n-butylcyclohexane	83	23.583	23.572	(1.348)	12117879	16.0000	15.50
102 ~ Indane	117	23.896	23.885	(1.366)	14684940	16.0000	15.87
103 1,2-Dichlorobenzene	146	23.874	23.864	(1.365)	10502597	16.0000	16.78 (A)
104 n-butylbenzene	91	24.284	24.279	(1.388)	17347017	16.0000	15.54
105 ~ Indene	116	24.171	24.160	(1.382)	15806618	16.0000	18.14 (A)
106 Undecane	57	25.179	25.169	(1.440)	10718532	16.0000	14.37
107 ~ 1,2-dimethyl-4-ethylenzene	119	25.142	25.136	(1.437)	18910082	16.0000	15.81
108 ~ 1,2,4,5-tetramethylbenzene	119	26.058	26.048	(1.490)	18844212	16.0000	15.43
109 ~ 1,2,3,5-tetramethylbenzene	119	26.182	26.172	(1.497)	11766561	16.0000	15.38

Data File: /chem/gcms/mr.i/R022013I.b/ricb209.d
 Report Date: 21-Feb-2013 12:04

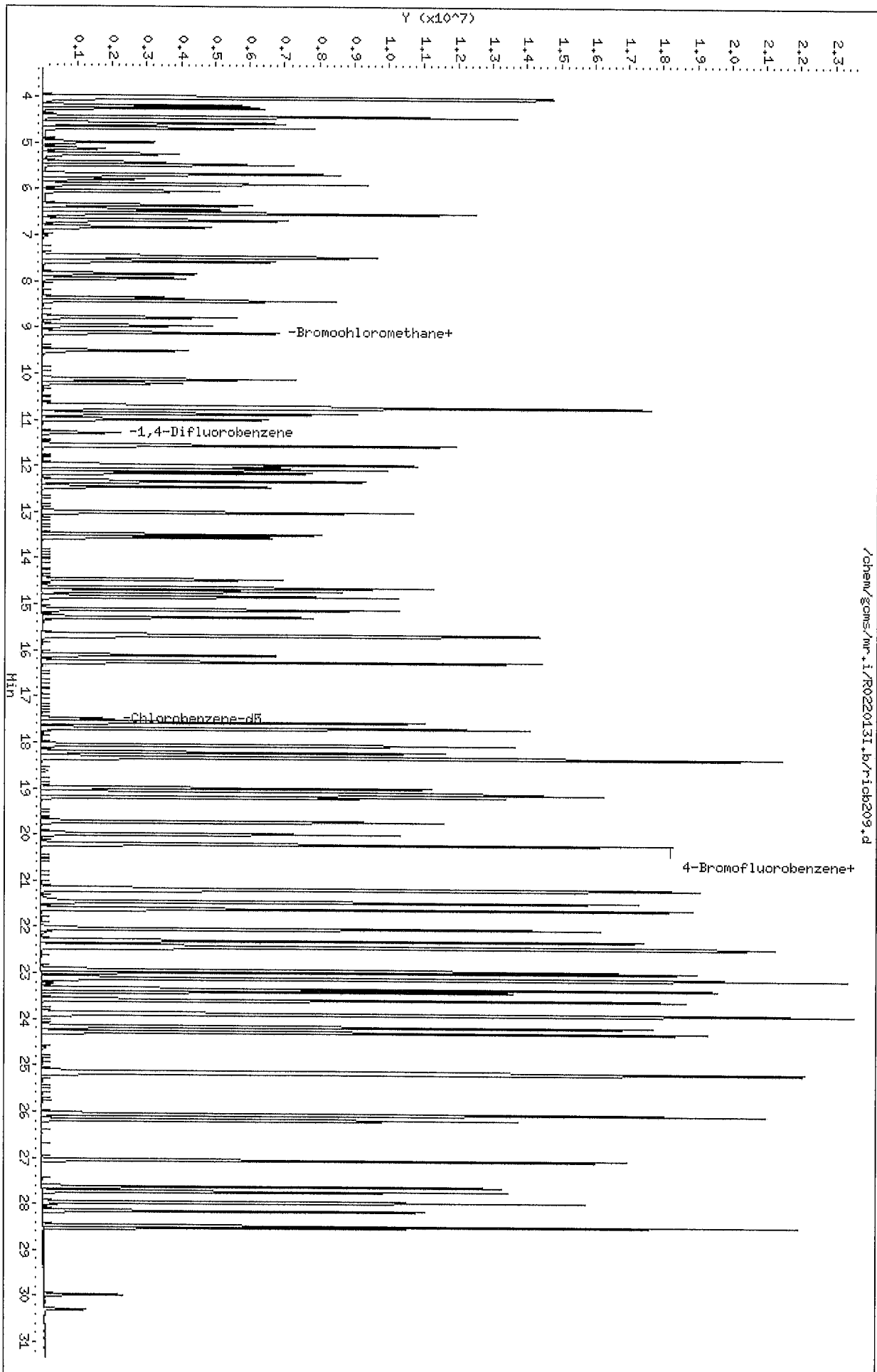
Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ppb(v/v))	ON-COL (ppb(v/v))
=====	====	==	=====	=====	=====	=====	=====
110 ~ 1,2,3,4-tetramethylbenzene	119	27.056	27.045	(1.547)	13885634	16.0000	13.94
111 Dodecane	57	27.627	27.622	(1.580)	5962662	16.0000	9.306
112 1,2,4-Trichlorobenzene	180	27.735	27.725	(1.586)	6310123	16.0000	11.77
113 Napthalene	128	27.967	27.962	(1.599)	17315870	16.0000	13.27
114 ~ benzo(b) thiophene	134	28.156	28.151	(1.610)	11454999	16.0000	12.53
115 Hexachlorobutadiene	225	28.479	28.474	(1.628)	6463681	16.0000	12.52
116 1,2,3-trichlorobenzene	180	28.523	28.523	(1.631)	4559021	16.0000	8.548
117 ~ 2-Methylnaphthalene	142	29.979	29.979	(1.714)	1383818	100.000	9.976
118 ~ 1-Methylnaphthalene	142	30.297	30.291	(1.732)	737945	100.000	6.156

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: /chem/gcms/mr.i/R0220131.b/rich209.d
Date : 20-FEB-2013 23:25
Client ID: STD16
Sample Info: ICAL9,1,1,9,,STD16
Purge Volume: 500.0
Column phase: Rtx-5

Instrument: mr.i
Operator: 060487
Column diameter: 0.32



Data File: /chem/gcms/mr.i/R022013I.b/mxxx51aa.d
 Report Date: 21-Feb-2013 12:09

TestAmerica Knoxville

Modified Method TO-14/TO-15

Data file : /chem/gcms/mr.i/R022013I.b/mxxx51aa.d
 Lab Smp Id: MXXX51AA Client Smp ID: IDOC 1 / 2nd source
 Inj Date : 21-FEB-2013 09:27
 Operator : 060487 Inst ID: mr.i
 Smp Info : ,,,0,,,
 Misc Info : R022013I,TO15,
 Comment :
 Method : /chem/gcms/mr.i/R022013I.b/TO15.m
 Meth Date : 21-Feb-2013 12:03 wilesd Quant Type: ISTD
 Cal Date : 20-FEB-2013 20:14 Cal File: ricb205.d
 Als bottle: 1 QC Sample: BLANK
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 3.50
 Processing Host: qmidhp01

Concentration Formula: Amt * DF * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Default Calibration Volume
Vo	500.00000	Default Sample Volume

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ppb (v/v))	FINAL (ppb (v/v))
* 1 Bromochloromethane	128	9.094	9.089	(1.000)	444415	4.00000	4.000	
* 2 1,4-Difluorobenzene	114	11.278	11.278	(1.000)	2155314	4.00000	4.000	
* 3 Chlorobenzene-d5	117	17.490	17.490	(1.000)	1582730	4.00000	4.000	
\$ 4 4-Bromofluorobenzene	95	20.218	20.218	(1.156)	1158760	4.18171	4.182	
M 83 Xylene (total)	100				8001405	12.4381	12.44	
5 Chlorodifluoromethane	67	4.187	4.187	(0.460)	175968	3.87607	3.876	
6 Propene	41	4.198	4.192	(0.462)	562086	4.16065	4.161	
7 Dichlorodifluoromethane	85	4.251	4.246	(0.468)	1892132	4.08579	4.086	
8 Chloromethane	52	4.424	4.424	(0.486)	229462	4.05354	4.054	
9 1,2-Dichlorotetrafluoroethane	135	4.435	4.435	(0.488)	1491184	4.04028	4.040	
10 Methanol	31	4.570	4.570	(0.502)	162153	3.93230	3.932	
11 ~ acetaldehyde	44	4.575	4.570	(0.503)	1334072	20.0373	20.04	
12 Vinyl Chloride	62	4.591	4.591	(0.505)	799686	4.10538	4.105	
13 n-Butane	43	4.683	4.678	(0.515)	1118918	3.88833	3.888	
14 1,3-Butadiene	54	4.683	4.678	(0.515)	602753	3.93937	3.939	

Data File: /chem/gcms/mr.i/R022013I.b/mxxx51aa.d
 Report Date: 21-Feb-2013 12:09

Compounds	QUANT SIG				CONCENTRATIONS		
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ppb(v/v))	FINAL (ppb(v/v))
=====	=====	==	=====	=====	=====	=====	=====
15 Bromomethane	94	4.990	4.985	(0.549)	737811	4.07905	4.079
16 Chloroethane	64	5.125	5.125	(0.564)	406970	4.13728	4.137
17 ~ ethanol	31	5.238	5.233	(0.576)	1040490	17.0709	17.07
18 Vinyl Bromide	106	5.422	5.416	(0.596)	705190	3.87358	3.874
19 2-methyl butane	43	5.476	5.470	(0.602)	880800	4.02822	4.028
20 Trichlorofluoromethane	101	5.680	5.675	(0.625)	1872199	4.16105	4.161
21 Acrolein	56	5.675	5.670	(0.624)	291553	4.38153	4.382
22 Acetonitrile	40	5.729	5.729	(0.630)	278840	4.11441	4.114
25 Pentane	72	5.896	5.896	(0.648)	153958	4.29608	4.296
23 Acetone	58	5.783	5.783	(0.636)	351036	3.84895	3.849
24 Isopropyl alcohol	45	5.885	5.885	(0.647)	978528	3.84324	3.843
26 Ethyl Ether	31	6.042	6.047	(0.664)	820535	4.33767	4.338
27 1,1-Dichloroethene	96	6.349	6.344	(0.698)	607449	3.40609	3.406
29 Acrylonitrile	53	6.425	6.419	(0.706)	567817	4.11588	4.116
30 1,1,2-Trichlorotrifluoroethane	101	6.522	6.522	(0.717)	1320590	3.56145	3.561
28 tert-butanol	59	6.446	6.441	(0.709)	1206245	3.96124	3.961
31 Methylene Chloride	84	6.667	6.662	(0.733)	568398	3.54972	3.550
32 3-Chloropropene	39	6.689	6.684	(0.736)	451872	3.58196	3.582
33 Carbon Disulfide	76	6.829	6.824	(0.751)	2058766	4.02630	4.026
35 ~ 2-Methyl Pentane	43	7.482	7.476	(0.823)	1671052	4.20057	4.200
34 trans-1,2-Dichloroethene	96	7.444	7.444	(0.819)	734296	3.98417	3.984
36 Methyl-t-Butyl Ether	73	7.568	7.568	(0.832)	1945748	4.12994	4.130
37 1,1-Dichloroethane	63	7.837	7.832	(0.862)	1240308	3.87998	3.880
38 Vinyl Acetate	43	7.934	7.935	(0.872)	1777904	4.18037	4.180
39 2-Butanone	72	8.355	8.355	(0.919)	347275	3.89199	3.892
40 Hexane	56	8.420	8.420	(0.926)	620841	4.06586	4.066
41 cis 1,2-Dichloroethene	96	8.781	8.776	(0.966)	693890	3.71395	3.714
42 Ethyl acetate	43	8.959	8.954	(0.985)	1612334	4.28103	4.281
43 Chloroform	83	9.115	9.110	(1.002)	1390049	3.90192	3.902
44 Tetrahydrofuran	42	9.504	9.509	(1.045)	821800	4.09006	4.090
45 1,1,1-Trichloroethane	97	10.118	10.118	(1.113)	1372706	3.96263	3.963
46 1,2-Dichloroethane	62	10.205	10.199	(0.905)	932611	3.95189	3.952
49 Cyclohexane	69	10.733	10.728	(0.952)	351361	4.15249	4.152
48 Benzene	78	10.712	10.712	(0.950)	2123308	3.89199	3.892
50 Carbon Tetrachloride	117	10.749	10.744	(0.953)	1295965	4.59841	4.598
51 ~ 2,3-dimethylpentane	71	10.868	10.863	(0.964)	479055	4.17063	4.171
47 1-Butanol	31	10.679	10.679	(0.947)	230075	4.33306	4.333
52 ~ Thiophene	84	10.992	10.987	(0.975)	1325908	4.16095	4.161
53 2,2,4-trimethylpentane	57	11.553	11.553	(1.024)	3691250	4.17707	4.177
54 Heptane	71	11.973	11.973	(1.062)	798750	4.17234	4.172
55 1,2-Dichloropropane	63	12.022	12.017	(1.066)	816288	4.08117	4.081
56 Trichloroethene	130	12.076	12.076	(1.071)	984917	4.05845	4.058
180 ~ 2-nitropropane	43	11.973	11.973	(1.062)	1359706		
57 Dibromomethane	93	12.151	12.146	(1.077)	847344	4.33547	4.335
58 Bromodichloromethane	83	12.329	12.324	(1.093)	1563172	4.50763	4.508
60 Methyl Methacrylate	41	12.453	12.448	(1.104)	1011830	4.68968	4.690
59 1,4-dioxane	88	12.340	12.346	(1.094)	304214	3.94607	3.946

Data File: /chem/gcms/mr.i/R022013I.b/mxxx51aa.d
Report Date: 21-Feb-2013 12:09

Compounds	QUANT SIG				CONCENTRATIONS		
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ppb(v/v))	FINAL (ppb(v/v))
=====	=====	==	=====	=====	=====	=====	=====
61 ~ methyl cyclohexane	83	13.003	13.003	(1.153)	1355573	4.18451	4.184
63 cis-1,3-Dichloropropene	75	13.553	13.548	(1.202)	1207118	4.26230	4.262
62 4-Methyl-2-pentanone	43	13.483	13.483	(1.196)	1684167	4.37303	4.373
64 trans-1,3-Dichloropropene	75	14.459	14.459	(0.827)	1218163	4.24498	4.245
65 Toluene	91	14.637	14.637	(0.837)	2619612	3.98910	3.989
66 1,1,2-Trichloroethane	83	14.723	14.718	(0.842)	775499	4.22310	4.223
67 ~ 2-methyl thiophene	97	14.837	14.837	(0.848)	2340202	4.21306	4.213
68 ~ 3-methyl thiophene	97	15.117	15.112	(0.864)	2392528	4.20925	4.209
69 2-Hexanone	58	15.279	15.279	(0.874)	884059	4.42181	4.422
70 Octane	85	15.662	15.662	(0.895)	917039	4.24885	4.249
71 Dibromochloromethane	129	15.694	15.689	(0.897)	1628530	4.88975	4.890
72 1,2-Dibromoethane	107	16.104	16.104	(0.921)	1440482	4.42372	4.424
73 Tetrachloroethene	129	16.250	16.250	(0.929)	954301	4.10296	4.103
75 ~ 2,3-dimethylheptane	43	17.695	17.695	(1.012)	2426539	4.17094	4.171
74 Chlorobenzene	112	17.565	17.565	(1.004)	2119640	4.09122	4.091
76 Ethylbenzene	91	18.056	18.056	(1.032)	3312628	4.01690	4.017
77 ~ 2-ethyl thiophene	97	18.212	18.212	(1.041)	2635498	4.24619	4.246
78 m&p-Xylene	91	18.331	18.326	(1.048)	5294337	8.31638	8.316
79 Nonane	57	19.124	19.124	(1.093)	1857001	4.33746	4.337
80 Bromoform	173	18.989	18.989	(1.086)	1598530	5.34365	5.344
81 Styrene	104	19.086	19.086	(1.091)	2064428	4.56596	4.566
82 o-Xylene	91	19.188	19.183	(1.097)	2707068	4.12173	4.122
84 1,1,2,2-Tetrachloroethane	83	19.722	19.722	(1.128)	2025303	4.27174	4.272
85 1,2,3-Trichloropropane	110	19.986	19.987	(1.143)	609834	4.24024	4.240
86 Cumene	105	20.208	20.202	(1.155)	4127092	4.34930	4.349
87 n-Propylbenzene	120	21.167	21.162	(1.210)	1186463	4.36124	4.361
88 2-chlorotoluene	126	21.200	21.194	(1.212)	1044898	4.22596	4.226
89 4-Ethyltoluene	105	21.453	21.453	(1.227)	4205949	4.32675	4.327
90 1,3,5-Trimethylbenzene	120	21.604	21.604	(1.235)	1956577	4.26708	4.267
91 Alpha-Methylstyrene	118	22.036	22.036	(1.260)	1743522	4.84596	4.846
92 Decane	57	22.289	22.289	(1.274)	2435609	4.53270	4.533
93 tert-butylbenzene	119	22.413	22.408	(1.281)	3767770	4.36170	4.362
94 1,2,4-Trimethylbenzene	105	22.440	22.440	(1.283)	3488270	4.34826	4.348
95 sec-butylbenzene	105	22.968	22.969	(1.313)	5188002	4.38953	4.390
96 1,3-Dichlorobenzene	146	22.925	22.925	(1.311)	2328343	4.28400	4.284
97 Benzyl Chloride	91	23.098	23.098	(1.321)	3171722	4.65247	4.652
98 1,4-Dichlorobenzene	146	23.114	23.114	(1.322)	2356200	4.31320	4.313
99 p-Cymene	119	23.335	23.330	(1.334)	4436007	4.41790	4.418
100 ~ 1,2,3- Trimethylbenzene	105	23.394	23.395	(1.338)	3055752	4.24112	4.241
101 ~ n-butylcyclohexane	83	23.578	23.572	(1.348)	2829958	4.32284	4.323
102 ~ Indane	117	23.885	23.885	(1.366)	3374238	4.36293	4.363
103 1,2-Dichlorobenzene	146	23.864	23.864	(1.364)	2253004	4.30798	4.308
104 n-butylbenzene	91	24.279	24.279	(1.388)	4055539	4.32428	4.324
105 ~ Indene	116	24.160	24.160	(1.381)	3414535	4.68443	4.684
106 Undecane	57	25.169	25.169	(1.439)	2889470	4.60302	4.603
107 ~ 1,2-dimethyl-4-ethylenzene	119	25.136	25.136	(1.437)	4440605	4.43190	4.432
108 ~ 1,2,4,5-tetramethylbenzene	119	26.053	26.048	(1.490)	4603970	4.49287	4.493

Data File: /chem/gcms/mr.i/R022013I.b/mxxx51aa.d
 Report Date: 21-Feb-2013 12:09

Compounds	QUANT SIG						CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN	FINAL	
						(ppb (v/v))	(ppb (v/v))	
=====	=====	==	=====	=====	=====	=====	=====	
109 ~ 1,2,3,5-tetramethylbenzene	119	26.177	26.172	(1.497)	2834329	4.41316	4.413	
110 ~ 1,2,3,4-tetramethylbenzene	119	27.050	27.045	(1.547)	3814315	4.54672	4.547	
111 Dodecane	57	27.622	27.622	(1.579)	2677126	5.02114	5.021	
112 1,2,4-Trichlorobenzene	180	27.724	27.725	(1.585)	1826184	4.01060	4.010	
113 Napthalene	128	27.962	27.962	(1.599)	4223787	3.89404	3.894	
114 ~ benzo(b) thiophene	134	28.150	28.151	(1.610)	3739175	4.81974	4.820	
115 Hexachlorobutadiene	225	28.474	28.474	(1.628)	1773799	4.05999	4.060	
116 1,2,3-trichlorobenzene	180	28.523	28.523	(1.631)	1740437	3.81825	3.818	
117 ~ 2-Methylnaphthalene	142	29.979	29.979	(1.714)	4796178	44.3610	44.36 (R)	
118 ~ 1-Methylnaphthalene	142	30.297	30.291	(1.732)	4019585	42.4372	42.44 (R)	

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: /chem/gcms/mr.i/R022013I.b/mxxx51aa.d
 Report Date: 21-Feb-2013 12:09

TestAmerica Knoxville

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: mr.i
 Lab File ID: mxxx51aa.d
 Lab Smp Id: MXXX51AA
 Analysis Type: OTHER
 Quant Type: ISTD
 Operator: 060487

Calibration Date: 20-FEB-2013
 Calibration Time: 21:01
 Client Smp ID: IDOC 1 / 2nd source
 Level: LOW
 Sample Type: AIR

Method File: /chem/gcms/mr.i/R022013I.b/TO15.m
 Misc Info: R022013I,TO15,

COMPOUND =====	STANDARD =====	AREA LIMIT		SAMPLE =====	%DIFF =====
		LOWER =====	UPPER =====		
1 Bromochloromethan	469377	279279	659475	444415	-5.32
2 1,4-Difluorobenze	2304849	1371385	3238313	2155314	-6.49
3 Chlorobenzene-d5	1658847	987014	2330680	1582730	-4.59

COMPOUND =====	STANDARD =====	RT LIMIT		SAMPLE =====	%DIFF =====
		LOWER =====	UPPER =====		
1 Bromochloromethan	9.09	8.76	9.42	9.09	0.00
2 1,4-Difluorobenze	11.28	10.95	11.61	11.28	0.00
3 Chlorobenzene-d5	17.49	17.16	17.82	17.49	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
 AREA LOWER LIMIT = - 40% of internal standard area.
 RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
 RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/gcms/mr.i/R022013I.b/mxxx51aa.d
 Report Date: 21-Feb-2013 12:09

TestAmerica Knoxville

RECOVERY REPORT

Client Name: TestAmerica Knoxville123-JAN-2013 00:00 Client SDG: H3A230417
 Sample Matrix: GAS Fraction: OTHER
 Lab Smp Id: MXXX51AA Client Smp ID: IDOC 1 / 2nd source
 Level: LOW Operator: 060487
 Data Type: MS DATA SampleType: BLANK
 SpikeList File: allnew.spk Quant Type: ISTD
 Sublist File: all.sub
 Method File: /chem/gcms/mr.i/R022013I.b/TO15.m
 Misc Info: R022013I,TO15,

SPIKE COMPOUND	CONC ADDED ppb (v/v)	CONC RECOVERED ppb (v/v)	% RECOVERED	LIMITS
5 Chlorodifluorometh	4.000	3.876	96.90	60-140
6 Propene	4.000	4.161	104.02	60-140
7 Dichlorodifluorome	4.000	4.086	102.14	60-140
8 Chloromethane	4.000	4.054	101.34	60-140
9 1,2-Dichlorotetra	4.000	4.040	101.01	60-140
10 Methanol	4.000	3.932	98.31	60-140
11 ~ acetaldehyde	20.00	20.04	100.19	70-130
12 Vinyl Chloride	4.000	4.105	102.63	70-130
13 n-Butane	4.000	3.888	97.21	60-140
14 1,3-Butadiene	4.000	3.939	98.48	60-140
15 Bromomethane	4.000	4.079	101.98	70-130
16 Chloroethane	4.000	4.137	103.43	70-130
17 ~ ethanol	20.00	17.07	85.35	70-130
18 Vinyl Bromide	4.000	3.874	96.84	60-140
19 2-methyl butane	4.000	4.028	100.71	70-130
20 Trichlorofluoromet	4.000	4.161	104.03	60-140
21 Acrolein	4.000	4.382	109.54	60-140
22 Acetonitrile	4.000	4.114	102.86	60-140
23 Acetone	4.000	3.849	96.22	60-140
25 Pentane	4.000	4.296	107.40	70-130
24 Isopropyl alcohol	4.000	3.843	96.08	60-140
26 Ethyl Ether	4.000	4.338	108.44	60-140
27 1,1-Dichloroethene	4.000	3.406	85.15	70-130
28 tert-butanol	4.000	3.961	99.03	60-140
29 Acrylonitrile	4.000	4.116	102.90	60-140
30 1,1,2-Trichlorotri	4.000	3.561	89.04	70-130
31 Methylene Chloride	4.000	3.550	88.74	70-130
32 3-Chloropropene	4.000	3.582	89.55	60-140
33 Carbon Disulfide	4.000	4.026	100.66	70-130
34 trans-1,2-Dichloro	4.000	3.984	99.60	70-130
35 ~ 2-Methyl Pentane	4.000	4.200	105.01	70-130
36 Methyl-t-Butyl Eth	4.000	4.130	103.25	60-140
37 1,1-Dichloroethane	4.000	3.880	97.00	70-130

Data File: /chem/gcms/mr.i/R022013I.b/mxxx51aa.d

Report Date: 21-Feb-2013 12:09

SPIKE COMPOUND		CONC ADDED ppb (v/v)	CONC RECOVERED ppb (v/v)	% RECOVERED	LIMITS
38	Vinyl Acetate	4.000	4.180	104.51	60-140
39	2-Butanone	4.000	3.892	97.30	60-140
40	Hexane	4.000	4.066	101.65	70-130
41	cis 1,2-Dichloroet	4.000	3.714	92.85	70-130
42	Ethyl acetate	4.000	4.281	107.03	60-140
43	Chloroform	4.000	3.902	97.55	70-130
44	Tetrahydrofuran	4.000	4.090	102.25	60-140
45	1,1,1-Trichloroeth	4.000	3.963	99.07	70-130
46	1,2-Dichloroethane	4.000	3.952	98.80	70-130
47	1-Butanol	4.000	4.333	108.33	60-140
48	Benzene	4.000	3.892	97.30	70-130
49	Cyclohexane	4.000	4.152	103.81	70-130
50	Carbon Tetrachlori	4.000	4.598	114.96	70-130
51	~ 2,3-dimethylpent	4.000	4.171	104.27	70-130
52	~ Thiophene	4.000	4.161	104.02	70-130
53	2,2,4-trimethylpen	4.000	4.177	104.43	70-130
54	Heptane	4.000	4.172	104.31	70-130
55	1,2-Dichloropropan	4.000	4.081	102.03	70-130
56	Trichloroethene	4.000	4.058	101.46	70-130
57	Dibromomethane	4.000	4.335	108.39	70-130
58	Bromodichlorometha	4.000	4.508	112.69	70-130
59	1,4-dioxane	4.000	3.946	98.65	60-140
60	Methyl Methacrylat	4.000	4.690	117.24	60-140
61	~ methyl cyclohexa	4.000	4.184	104.61	70-130
62	4-Methyl-2-pentano	4.000	4.373	109.33	60-140
63	cis-1,3-Dichloropr	4.000	4.262	106.56	70-130
64	trans-1,3-Dichloro	4.000	4.245	106.12	70-130
65	Toluene	4.000	3.989	99.73	70-130
66	1,1,2-Trichloroeth	4.000	4.223	105.58	70-130
67	~ 2-methyl thiophe	4.000	4.213	105.33	70-130
68	~ 3-methyl thiophe	4.000	4.209	105.23	70-130
69	2-Hexanone	4.000	4.422	110.55	60-140
70	Octane	4.000	4.249	106.22	70-130
71	Dibromochlorometha	4.000	4.890	122.24	70-130
72	1,2-Dibromoethane	4.000	4.424	110.59	70-130
73	Tetrachloroethene	4.000	4.103	102.57	70-130
74	Chlorobenzene	4.000	4.091	102.28	70-130
75	~ 2,3-dimethylhept	4.000	4.171	104.27	70-130
76	Ethylbenzene	4.000	4.017	100.42	70-130
77	~ 2-ethyl thiophen	4.000	4.246	106.15	70-130
78	m&p-Xylene	8.000	8.316	103.95	70-130
M 83	Xylene (total)	12.00	12.44	103.65	70-130
79	Nonane	4.000	4.337	108.44	60-140
80	Bromoform	4.000	5.344	133.59	60-140
81	Styrene	4.000	4.566	114.15	70-130
82	o-Xylene	4.000	4.122	103.04	70-130
84	1,1,2,2-Tetrachlor	4.000	4.272	106.79	70-130

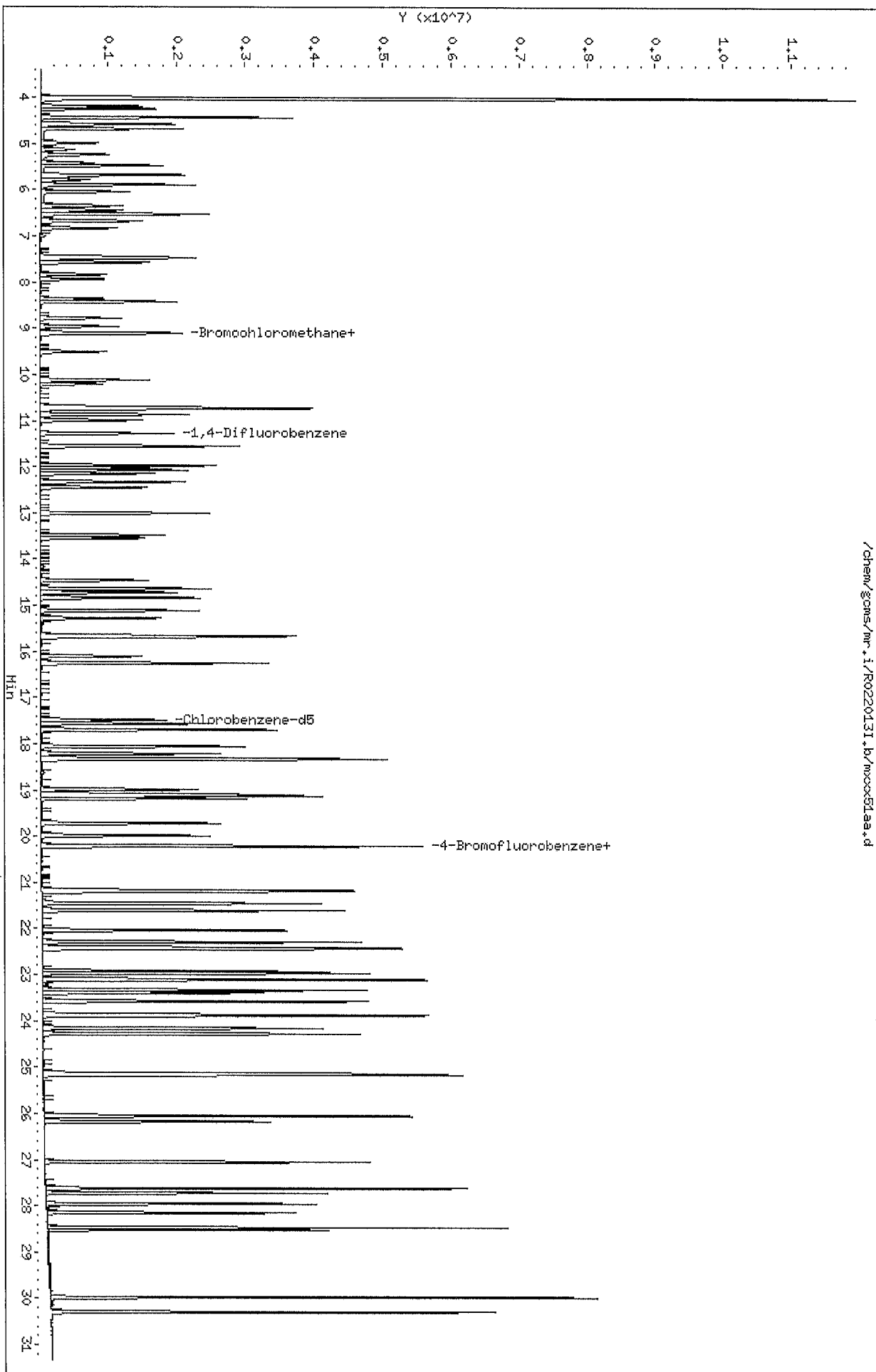
Data File: /chem/gcms/mr.i/R022013I.b/mxxx51aa.d
 Report Date: 21-Feb-2013 12:09

SPIKE COMPOUND	CONC ADDED ppb (v/v)	CONC RECOVERED ppb (v/v)	% RECOVERED	LIMITS
85 1,2,3-Trichloropro	4.000	4.240	106.01	60-140
86 Cumene	4.000	4.349	108.73	70-130
87 n-Propylbenzene	4.000	4.361	109.03	70-130
88 2-chlorotoluene	4.000	4.226	105.65	70-130
89 4-Ethyltoluene	4.000	4.327	108.17	70-130
90 1,3,5-Trimethylben	4.000	4.267	106.68	70-130
91 Alpha-Methylstyren	4.000	4.846	121.15	60-140
92 Decane	4.000	4.533	113.32	60-140
93 tert-butylbenzene	4.000	4.362	109.04	70-130
94 1,2,4-Trimethylben	4.000	4.348	108.71	70-130
95 sec-butylbenzene	4.000	4.390	109.74	70-130
96 1,3-Dichlorobenzen	4.000	4.284	107.10	70-130
97 Benzyl Chloride	4.000	4.652	116.31	70-130
98 1,4-Dichlorobenzen	4.000	4.313	107.83	70-130
99 p-Cymene	4.000	4.418	110.45	70-130
100 ~ 1,2,3- Trimethyl	4.000	4.241	106.03	70-130
101 ~ n-butylcyclohexa	4.000	4.323	108.07	70-130
102 ~ Indane	4.000	4.363	109.07	70-130
103 1,2-Dichlorobenzen	4.000	4.308	107.70	70-130
104 n-butylbenzene	4.000	4.324	108.11	60-140
105 ~ Indene	4.000	4.684	117.11	70-130
106 Undecane	4.000	4.603	115.08	60-140
107 ~ 1,2-dimethyl-4-e	4.000	4.432	110.80	70-130
108 ~ 1,2,4,5-tetramet	4.000	4.493	112.32	70-130
109 ~ 1,2,3,5-tetramet	4.000	4.413	110.33	70-130
110 ~ 1,2,3,4-tetramet	4.000	4.547	113.67	70-130
111 Dodecane	4.000	5.021	125.53	60-140
112 1,2,4-Trichloroben	4.000	4.010	100.26	60-140
113 Napthalene	4.000	3.894	97.35	40-140
114 ~ benzo(b) thiophe	4.000	4.820	120.49	70-130
115 Hexachlorobutadien	4.000	4.060	101.50	60-140
116 1,2,3-trichloroben	4.000	3.818	95.46	40-140
117 ~ 2-Methylnaphthal	25.00	44.36	177.44*	70-130
118 ~ 1-Methylnaphthal	25.00	42.44	169.75*	70-130

SURROGATE COMPOUND	CONC ADDED ppb (v/v)	CONC RECOVERED ppb (v/v)	% RECOVERED	LIMITS
\$ 4 4-Bromofluorobenze	4.000	4.182	104.54	70-130

Data File: /chem/gcms/mr.i/R0220131.b/mxx51aa.d
Date: 21-FEB-2013 09:27
Client ID: ID001 / 2nd source
Sample Info: ,,,
Purge Volume: 500.0
Column phase: Rtx-5

Instrument: mr.i
Operator: 060487
Column diameter: 0.32



TestAmerica Knoxville GC/MS Air Continuing Calibration Review / Narrative Checklist

Method: TO-14 and TO-15 - KNOX-MS-0001, Rev 13 & KNOX-MS-0023, Rev 0

Analysis Date:	4/16/13	CCAL Batch/ Scan Name:	R041613	Instrument:	MR	ICAL Batch/ Scan Name:	R022013I	Scanned <input type="checkbox"/>
----------------	---------	------------------------	---------	-------------	----	------------------------	----------	----------------------------------

Review Items	N/A	Yes	No	If No, why is data reportable?	2nd														
1. Did BFB meet tune criteria?		<input checked="" type="checkbox"/>		<input type="checkbox"/> failed for TO-14A, but passes for TO-15	<input checked="" type="checkbox"/>														
2. Were all standards injected within 24 hr of BFB?		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>														
3. Have the Entech position no. & vol. been verified with run log & sample vol. corrected if actual amount differs >5%?		<input checked="" type="checkbox"/>		checked manually on-screen	<input checked="" type="checkbox"/>														
4. Was date/time of analysis in logbook correct?		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>														
5. Was the CCAL compared to the correct ICAL (date & time on CCAL matches the ICAL)		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>														
6. Is the %D \leq 30% for all target analytes? (Narrative req'd.)		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/> [ccal] analytes > 30% but passes LCS criteria.	<input checked="" type="checkbox"/>														
7. Have all peaks been auto identified? If not, list:		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>														
8. If manual integrations were performed, are they clearly identified, initialed, dated and reason given?	<input checked="" type="checkbox"/>			Reasons: 1)Corrected split peak; 2)Unresolved peak; 3)tailg; 4)RT shift; 5)wrong peak selected; 6)other	NA														
9. Have alternate hits/manual integrations been verified as correct and are correct RFs listed in CCAL summary?	<input checked="" type="checkbox"/>				NA														
10. Is the first IS documented correctly on the log?		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>														
11. Elution order checked on isomeric pairs?		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>														
• dichlorodifluoromethane / 1,2-dichlorotetrafluoroethane		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>														
• trichlorofluoromethane / 1,1,2-trichlorotrifluoroethane		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>														
• vinyl acetate / hexane		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>														
• cis- and trans- isomers		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>														
• ethyl benzene / m/p-xylene / o-xylene		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>														
• n-propylbenzene/4-ethyl toluene/1,3,5-trimethylbenzene/1,2,4-trimethylbenzene		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>														
• tert-butylbenzene/p-cymene		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>														
• 1,2,4-trimethylbenzene/sec-butylbenzene		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>														
• 1,3-, 1,4-, and 1,2-dichlorobenzene		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>														
• 1,2,4-trichlorobenzene/1,2,3-trichlorobenzene		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>														
12. Did the LCS meet criteria (70-130% with a limited # allowed 60-140% (see table) provisional analyte limit 60-140% with a limited # allowed 50-150%, and no two consecutive MEs). Note: Ohio does not allow for ME.		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/> [lcs6] LCS analyte(s) flagged as being outside control limits but within marginal limits <input type="checkbox"/> [lcs5] LCS outside marginal exceedences high, but analytes were not detected 3-chloropropene +47% (ME) Meth. Methacrylate +43% (ME) Vinyl acetate +41% NT ethyl acetate +42% all OK R041513	<input checked="" type="checkbox"/>														
<table border="1"> <thead> <tr> <th>Number of target analytes in LCS</th> <th># marginal exceedences of LCS control limits allowed</th> </tr> </thead> <tbody> <tr> <td>>90</td> <td>5</td> </tr> <tr> <td>71 - 90</td> <td>4</td> </tr> <tr> <td>51 - 70</td> <td>3</td> </tr> <tr> <td>31 - 50</td> <td>2</td> </tr> <tr> <td>11 - 30</td> <td>1</td> </tr> <tr> <td><11</td> <td>0</td> </tr> </tbody> </table>	Number of target analytes in LCS	# marginal exceedences of LCS control limits allowed	>90	5	71 - 90	4	51 - 70	3	31 - 50	2	11 - 30	1	<11	0		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
Number of target analytes in LCS	# marginal exceedences of LCS control limits allowed																		
>90	5																		
71 - 90	4																		
51 - 70	3																		
31 - 50	2																		
11 - 30	1																		
<11	0																		
13. If criteria were not met, was a NCM generated, approved by supervisor, and copy included in folder?	<input checked="" type="checkbox"/>				NA														
14. Does the CCAL folder contain complete data in the following order: data review checklist, a complete runlog, tune pass/fail page, m/z list, tune chromatogram, Target CCAL summary, Quan report, chromatogram, manual integrations.		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>														

Analyst:	Date:	4/16/13	2nd Level Reviewer :	Date:	4/17/13
Comments:					
CCAL -propene +31% -Acetonitrile +38% -IPA +33% -THF +38% -MIBK +39% -Bromotorm -31%	*LCS5* -ethyl ether +58% -1-butanol +64%				

TestAmerica Laboratories, Inc. - Knoxville
CANISTER RUN LOG

GCMS Analysis: AIR

7M Inst: MR

Analyst: AFB Qtimes Batch: 3106042 (MOLOT) 3106043 (MOLOT)Date: 4/16/13 ICAL Batch: R022013I Target Batch: R041613 IS #1 Area: 294767Surr/IS ID & Vol.: 40mL V462 System Date/Time ok (y/n): yPreventive Maintenance Performed ☒ DailyCont. on pg. 48

Time	Use	Lot No.	File ID	Can #	Pos	Vol* (mL)	Can DF	Comments
1026	✓	tune	RBFBD16	—	16	100	1	
1051	✓	ccv	CCV	CX2461	1	↓	↓	
1051	✓	LCS	LCS	↓	↓	↓	↓	
1201	✓	flush	flush	—	↓	500	↓	
1252	✓	Lot ✓	1048PB	7494	↓	↓	↓	daily blk
1252	✓	BK	RBK1616	↓	↓	↓	↓	
1338	✓	H3D120401	MOLCN2AA	12398	8	50	↓	pce
1427	OK	↓	CPR	1397	9	200	↓	tol4n/pce @ 5.0 ✓
1515	✓	H3D150412	FV1AA	6117	12	150	↓	farm (7m)
1640	OK	leak ✓	leak	—	16	500	1	
1732	✓	H3D160408	MOLPT1AA	1118	1	↓	↓	nysdec (7m)
1825	✓	↓	PW	93145	2	↓	↓	
2021	✓	↓	PI	1539	3	↓	↓	
2110	✓	H3D160415	Q3	12492	4	200	↓	tol4n;
2159	chk	↓	Q3D	↓	4	↓	↓	
2247	chk.	↓	Q71AA	11347	5	↓	↓	
1930	✓	leak ✓	leak 2	—	16	200	↓	
2355	chk	H3D160408	MOLPM1AA	6634	6	125	↓	nysdec 200m (7m)
0023	chk	↓	PQ	1122	7	200	↓	↓
0110	✓	H3D160402	MOLNL	12818	8	95	1200	honey 2526.32
0157	✓	↓	NM	1126	9	30	3294.97	21966.47
0245	✓	↓	NN	12161	10	140	316.86	452.66
0352	✓	↓	NQ	93289	11	80	722.2	1805.5
0414	✓	↓	NR	S-1528	12	100	1461.26	2922.52
0506	✓	↓	NT	6606	13	130	356.89	549.06
0552	✓	↓	NX	92035	14	55	10037.16	36498.76
0638	✓	↓	NV	6683	15	20	31755.82	
0725	✓	↓	NW	6596	1	40	103791.35	518956.75
0811	✓	↓	NO	1372	2	45	108310.88	481381.69

* Entech programmed Volume. If the Entech report amount differs from the programmed amount by >5%, the Entech report amount is used for calculations.

Analyst: JADate: 4/17/13

MS027r16.DOC, 051210

Inst: MR

Preventive Maintenance Performed ☒ Daily cont from pg. 47

* Entech programmed Volume. If the Entech report amount differs from the programmed amount by >5%, the Entech report amount is used for calculations.

MS027r16.DOC, 051210

Data File: /chem/goms/mr.i/R041613.b/rbfbd16.d

Date : 16-APR-2013 10:26

Client ID:

Instrument: mr.i

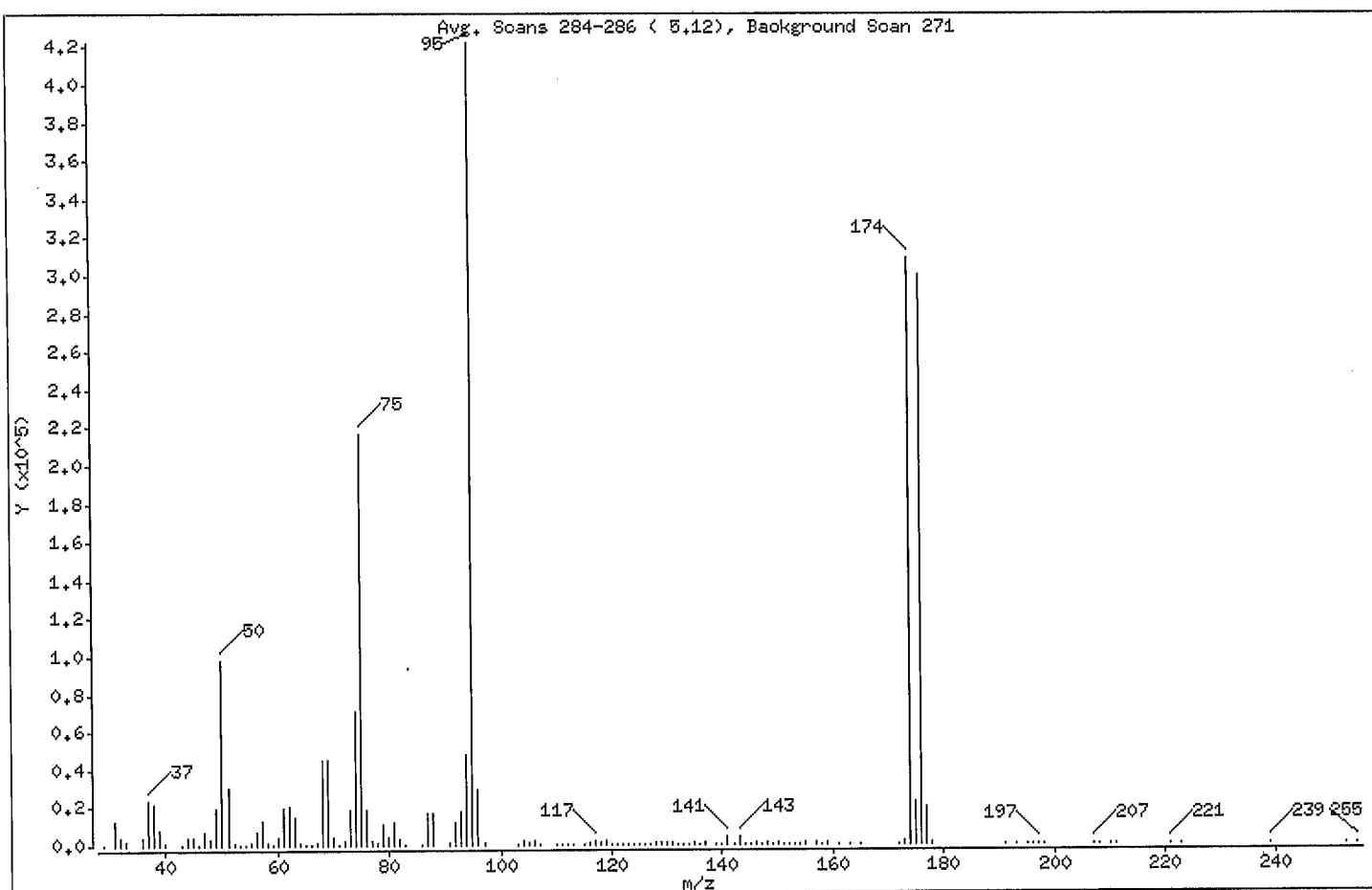
Sample Info: BFB,1,3

Operator: 403648

Column phase: RTX 624

Column diameter: 0.18

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	23.29
75	30.00 - 60.00% of mass 95	51.21
96	5.00 - 9.00% of mass 95	6.93
173	Less than 2.00% of mass 174	0.44 (0.60)
174	50.00 - 120.00% of mass 95	73.07
175	5.00 - 9.00% of mass 174	5.23 (7.16)
176	95.00 - 101.00% of mass 174	70.95 (97.09)
177	5.00 - 9.00% of mass 176	4.62 (6.52)

Data File: /chem/gcms/mr.i/R041613.b/rbfbid16.d

Date : 16-APR-2013 10:26

Client ID:

Instrument: mr.i

Sample Info: BFB,1,3

Operator: 403648

Column phase: RTX 624

Column diameter: 0.18

Data File: rbfbid16.d

Spectrum: Avg. Scans 284-286 (5,12), Background Scan 271

Location of Maximum: 95.00

Number of points: 137

m/z	Y	m/z	Y	m/z	Y	m/z	Y

29.00	172	69.00	44784	116.00	1425	152.00	317
31.00	12707	70.00	3504	117.00	2298	153.00	322
32.00	3714	71.00	157	118.00	1353	154.00	339
33.00	2054	72.00	1967	119.00	1988	155.00	952
36.00	4033	73.00	18480	120.00	181	157.00	803

37.00	23552	74.00	70872	121.00	18	158.00	161
38.00	21432	75.00	216256	122.00	81	159.00	515
39.00	8131	76.00	18824	123.00	133	161.00	415
40.00	933	77.00	2352	124.00	259	163.00	159
43.00	202	78.00	1432	125.00	136	165.00	2

44.00	3540	79.00	10912	126.00	208	172.00	265
45.00	4361	80.00	4083	127.00	157	173.00	1858
46.00	320	81.00	11388	128.00	1335	174.00	308672
47.00	6644	82.00	3160	129.00	740	175.00	22096
48.00	2557	83.00	315	130.00	1369	176.00	299712

49.00	19520	86.00	447	131.00	592	177.00	19528
50.00	98368	87.00	16680	132.00	78	178.00	648
51.00	30040	88.00	16270	133.00	139	191.00	83
52.00	1283	91.00	1250	134.00	192	193.00	39
53.00	27	92.00	11197	135.00	1363	195.00	41

54.00	34	93.00	17192	136.00	211	196.00	120
55.00	1106	94.00	47368	137.00	655	197.00	362
56.00	6537	95.00	422400	139.00	149	198.00	34
57.00	12594	96.00	29272	140.00	215	207.00	174
58.00	607	97.00	971	141.00	3801	208.00	84

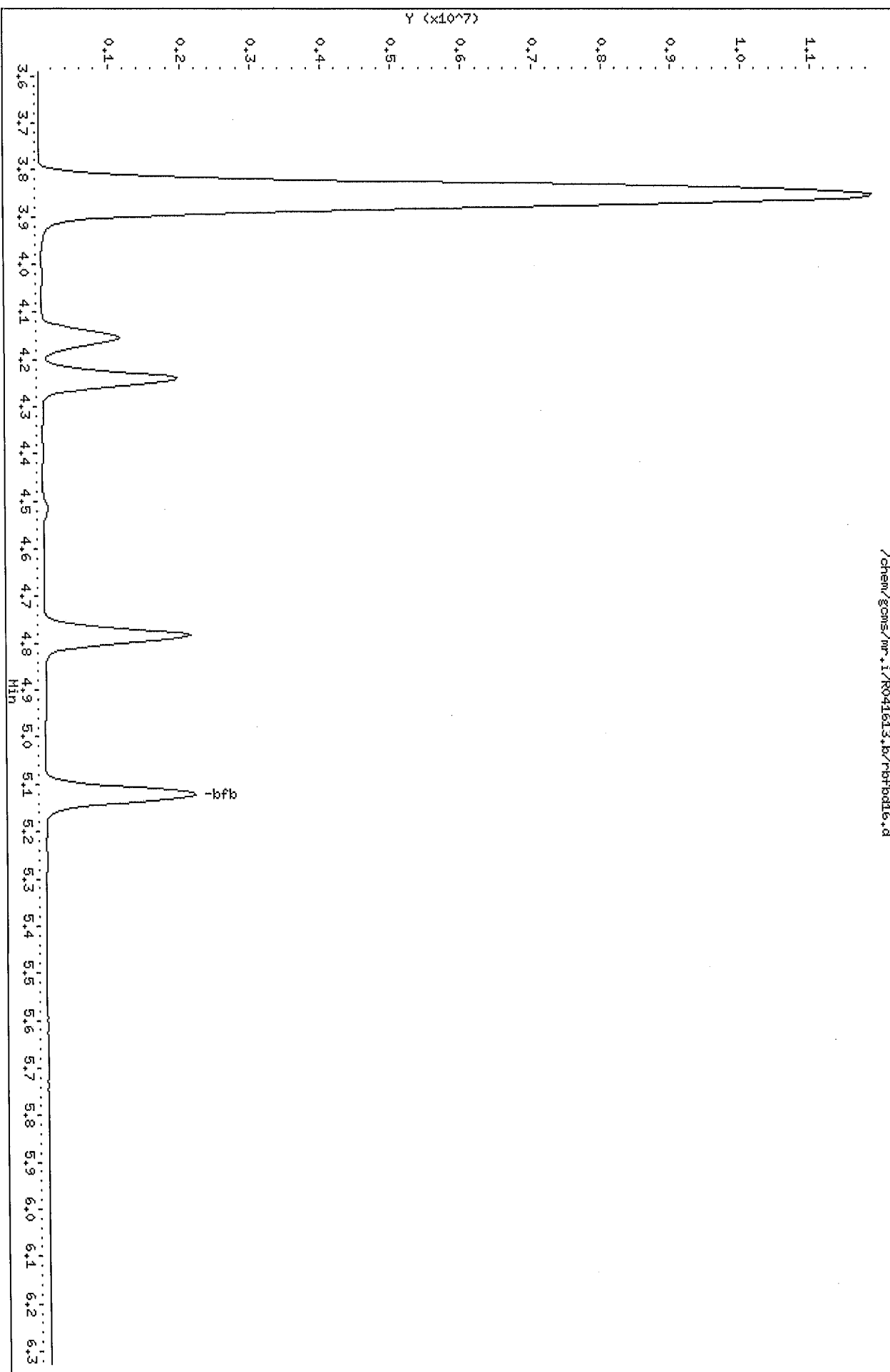
59.00	96	103.00	138	142.00	457	210.00	69
60.00	3487	104.00	1710	143.00	3895	211.00	41
61.00	19576	105.00	651	144.00	246	221.00	29
62.00	20448	106.00	1744	145.00	378	223.00	9
63.00	14965	107.00	410	146.00	563	239.00	167

64.00	1385	110.00	227	147.00	334	253.00	78
65.00	248	111.00	322	148.00	867	255.00	48
66.00	49	112.00	275	149.00	324		
67.00	937	113.00	342	150.00	493		
68.00	45080	115.00	430	151.00	36		

Data File: /chem/gcms/mr.i/R041613.b/rbfbd16.d
Date: 16-APR-2013 10:26
Client ID:
Sample Info: BFB,1,3

Column phase: RTX 624

Instrument: mr.i
Operator: 403648
Column diameter: 0.18
/chem/gcms/mr.i/R041613.b/rbfbd16.d



Data File: /var/chem/gcms/mr.i/R041613.b/rccvd16.d
Report Date: 16-Apr-2013 12:14

TestAmerica Knoxville

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: mr.i Injection Date: 16-APR-2013 10:51
Lab File ID: rccvd16.d Init. Cal. Date(s): 20-FEB-2013 20-FEB-2013
Analysis Type: AIR Init. Cal. Times: 17:04 23:25 ✓
Lab Sample ID: CCV Quant Type: ISTD
Method: /var/chem/gcms/mr.i/R041613.b/TO15.m ✓

COMPOUND	RRF / AMOUNT	RF2	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
4 4-Bromofluorobenzene	0.70031	0.79183	0.000	-13.06861	30.00000	Averaged
M 83 Xylene (total)	1.62589	1.42036	0.000	12.64093	30.00000	Averaged
5 Chlorodifluoromethane	0.40861	0.45099	0.000	-10.37084	30.00000	Averaged
6 Propene	1.21594	1.59866	0.000	-31.47500	30.00000	Averaged
7 Dichlorodifluoromethane	4.16818	4.26942	0.000	-2.42882	30.00000	Averaged
8 Chloromethane	0.50950	0.58155	0.000	-14.13984	30.00000	Averaged
9 1,2-Dichlorotetrafluoroetha	3.32193	2.81700	0.000	15.19986	30.00000	Averaged
10 Methanol	0.37115	0.55958	0.000	-50.76909	30.00000	Averaged
11 ~ acetaldehyde	0.59925	0.73828	0.000	-23.19915	50.00000	Averaged
12 Vinyl Chloride	1.75322	1.76936	0.000	-0.92014	30.00000	Averaged
13 n-Butane	2.59004	3.06317	0.000	-18.26736	30.00000	Averaged
14 1,3-Butadiene	1.37716	1.45641	0.000	-5.75474	30.00000	Averaged
15 Bromomethane	1.62801	1.39291	0.000	14.44101	30.00000	Averaged
16 Chloroethane	0.88536	0.86377	0.000	2.43785	30.00000	Averaged
17 ~ ethanol	0.54860	0.82349	0.000	-50.10974	50.00000	Averaged
18 Vinyl Bromide	1.63857	1.47355	0.000	10.07116	30.00000	Averaged
19 2-methyl butane	1.96805	2.43446	0.000	-23.69898	30.00000	Averaged
20 Trichlorofluoromethane	4.04968	4.13596	0.000	-2.13050	30.00000	Averaged
21 Acrolein	0.59891	0.64543	0.000	-7.76630	30.00000	Averaged
22 Acetonitrile	0.60999	0.84011	0.000	-37.72580	30.00000	Averaged
25 Pentane	0.32255	0.33373	0.000	-3.46626	30.00000	Averaged
23 Acetone	0.82088	0.83847	0.000	-2.14220	30.00000	Averaged
24 Isopropyl alcohol	2.29164	3.04723	0.000	-32.97150	30.00000	Averaged
26 Ethyl Ether	1.70260	2.69757	0.000	-58.43849	30.00000	Averaged
27 1,1-Dichloroethene	1.60519	1.53203	0.000	4.55765	30.00000	Averaged
29 Acrylonitrile	1.24170	1.47212	0.000	-18.55678	30.00000	Averaged
30 1,1,2-Trichlorotrifluoroeth	3.33743	3.27892	0.000	1.75299	30.00000	Averaged
28 tert-butanol	2.74079	3.21506	0.000	-17.30413	30.00000	Averaged
31 Methylene Chloride	1.44122	1.46301	0.000	-1.51207	30.00000	Averaged
32 3-Chloropropene	1.13544	1.67037	0.000	-47.11115	30.00000	Averaged
33 Carbon Disulfide	4.60227	4.82058	0.000	-4.74360	30.00000	Averaged
35 ~ 2-Methyl Pentane	3.58058	4.95734	0.000	-38.45069	50.00000	Averaged
34 trans-1,2-Dichloroethene	1.65884	1.60719	0.000	3.11348	30.00000	Averaged
36 Methyl-t-Butyl Ether	4.24047	4.59231	0.000	-8.29707	30.00000	Averaged
37 1,1-Dichloroethane	2.87721	3.28846	0.000	-14.29343	30.00000	Averaged

60-140

MA

As 4/16/13

OK

60-140

60-140

60-140 ↑↑

60-140 ↑ (ME)

OK R041513

Data File: /var/chem/gcms/mr.i/R041613.b/rccvd16.d
Report Date: 16-Apr-2013 12:14

TestAmerica Knoxville

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: mr.i Injection Date: 16-APR-2013 10:51
Lab File ID: rccvd16.d Init. Cal. Date(s): 20-FEB-2013 20-FEB-2013
Analysis Type: AIR Init. Cal. Times: 17:04 23:25
Lab Sample ID: CCV Quant Type: ISTD
Method: /var/chem/gcms/mr.i/R041613.b/TO15.m

COMPOUND	RRF / AMOUNT	RF2	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
38 Vinyl Acetate	3.82794	5.40271	0.000	-41.13902	30.00000	Averaged
39 2-Butanone	0.80311	0.82242	0.000	-2.40531	30.00000	Averaged
40 Hexane	1.37436	1.58325	0.000	-15.19905	30.00000	Averaged
41 cis 1,2-Dichloroethene	1.68161	1.67016	0.000	0.68068	30.00000	Averaged
42 Ethyl acetate	3.38983	4.79836	0.000	-41.55174	30.00000	Averaged
43 Chloroform	3.20644	3.49796	0.000	-9.09168	30.00000	Averaged
44 Tetrahydrofuran	1.80845	2.50175	0.000	-38.33630	30.00000	Averaged
45 1,1,1-Trichloroethane	3.11792	3.37760	0.000	-8.32852	30.00000	Averaged
46 1,2-Dichloroethane	0.43797	0.50371	0.000	-15.01108	30.00000	Averaged
49 Cyclohexane	0.15703	0.15972	0.000	-1.70881	30.00000	Averaged
48 Benzene	1.01249	0.99675	0.000	1.55475	30.00000	Averaged
50 Carbon Tetrachloride	0.52304	0.66984	0.000	-28.06620	30.00000	Averaged
51 ~ 2,3-dimethylpentane	0.21317	0.21667	0.000	-1.64130	50.00000	Averaged
47 1-Butanol	0.09854	0.16169	0.000	-64.08408	30.00000	Averaged
52 ~ Thiophene	0.59138	0.57807	0.000	2.25062	50.00000	Averaged
53 2,2,4-trimethylpentane	1.64003	1.83649	0.000	-11.97898	30.00000	Averaged
54 Heptane	0.35529	0.36238	0.000	-1.99498	30.00000	Averaged
55 1,2-Dichloropropane	0.37120	0.40241	0.000	-8.40785	30.00000	Averaged
56 Trichloroethene	0.45039	0.39864	0.000	11.48903	30.00000	Averaged
180 ~ 2-nitropropane	++++	0.78990	0.000	++++	30.00000	Averaged
57 Dibromomethane	0.36272	0.36887	0.000	-1.69590	30.00000	Averaged
58 Bromodichloromethane	0.64359	0.71024	0.000	-10.35663	30.00000	Averaged
60 Methyl Methacrylate	0.40042	0.57148	0.000	-42.72185	30.00000	Averaged
59 1,4-dioxane	0.14308	0.14029	0.000	1.94458	30.00000	Averaged
61 ~ methyl cyclohexane	0.60121	0.58897	0.000	2.03686	50.00000	Averaged
63 cis-1,3-Dichloropropene	0.52560	0.55102	0.000	-4.83680	30.00000	Averaged
62 4-Methyl-2-pentanone	0.71475	0.99658	0.000	-39.43170	30.00000	Averaged
64 trans-1,3-Dichloropropene	0.72524	0.68236	0.000	5.91223	30.00000	Averaged
65 Toluene	1.65964	1.40632	0.000	15.26382	30.00000	Averaged
66 1,1,2-Trichloroethane	0.46409	0.41358	0.000	10.88336	30.00000	Averaged
67 ~ 2-methyl thiophene	1.40381	1.19338	0.000	14.98988	50.00000	Averaged
68 ~ 3-methyl thiophene	1.43650	1.21942	0.000	15.11197	50.00000	Averaged
69 2-Hexanone	0.50528	0.53172	0.000	-5.23280	30.00000	Averaged
70 Octane	0.54547	0.46408	0.000	14.92129	30.00000	Averaged
71 Dibromochloromethane	0.84171	0.73204	0.000	13.02884	30.00000	Averaged

60-140 ↑ NT
↑ OK R041513

60-140 ↑ NT
60-140 ✓

60-140 ↑ ↑

MT

60-140 ↑ (ME)
OK R041513

60-140

Data File: /var/chem/gcms/mr.i/R041613.b/rccvd16.d
 Report Date: 16-Apr-2013 12:14

TestAmerica Knoxville

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: mr.i Injection Date: 16-APR-2013 10:51
 Lab File ID: rccvd16.d Init. Cal. Date(s): 20-FEB-2013 20-FEB-2013
 Analysis Type: AIR Init. Cal. Times: 17:04 23:25
 Lab Sample ID: CCV Quant Type: ISTD
 Method: /var/chem/gcms/mr.i/R041613.b/TO15.m

COMPOUND	RRF / AMOUNT	RF2	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
72 1,2-Dibromoethane	0.82295	0.71234	0.000	13.44105	30.00000	Averaged
73 Tetrachloroethene	0.58782	0.46084	0.000	21.60065	30.00000	Averaged
75 ~ 2,3-dimethylheptane	1.47030	1.73523	0.000	-18.01867	50.00000	Averaged
74 Chlorobenzene	1.30937	1.05500	0.000	19.42704	30.00000	Averaged
76 Ethylbenzene	2.08418	1.79572	0.000	13.84011	30.00000	Averaged
77 ~ 2-ethyl thiophene	1.56861	1.36168	0.000	13.19224	50.00000	Averaged
78 m&p-Xylene	1.60891	1.41378	0.000	12.12807	30.00000	Averaged
79 Nonane	1.08201	1.09498	0.000	-1.19933	30.00000	Averaged
80 Bromoform	0.75603	0.52411	0.000	30.67578	30.00000	Averaged
81 Styrene	1.14267	1.00735	0.000	11.84220	30.00000	Averaged
82 o-Xylene	1.65987	1.43354	0.000	13.63513	30.00000	Averaged
84 1,1,2,2-Tetrachloroethane	1.19823	1.07951	0.000	9.90773	30.00000	Averaged
85 1,2,3-Trichloropropane	0.36347	0.30235	0.000	16.81543	30.00000	Averaged
86 Cumene	2.39816	2.02124	0.000	15.71702	30.00000	Averaged
87 n-Propylbenzene	0.68754	0.55714	0.000	18.96541	30.00000	Averaged
88 2-chlorotoluene	0.62489	0.49776	0.000	20.34449	30.00000	Averaged
89 4-Ethyltoluene	2.45672	2.06256	0.000	16.04385	30.00000	Averaged
90 1,3,5-Trimethylbenzene	1.15883	0.94193	0.000	18.71674	30.00000	Averaged
91 Alpha-Methylstyrene	0.90929	0.77834	0.000	14.40099	30.00000	Averaged
92 Decane	1.35801	1.41002	0.000	-3.82938	30.00000	Averaged
93 tert-butylbenzene	2.18314	1.78282	0.000	18.33700	30.00000	Averaged
94 1,2,4-Trimethylbenzene	2.02744	1.72509	0.000	14.91286	30.00000	Averaged
95 sec-butylbenzene	2.98700	2.50996	0.000	15.97050	30.00000	Averaged
96 1,3-Dichlorobenzene	1.37357	1.07490	0.000	21.74427	30.00000	Averaged
97 Benzyl Chloride	1.72292	1.62516	0.000	5.67371	30.00000	Averaged
98 1,4-Dichlorobenzene	1.38059	1.09503	0.000	20.68390	30.00000	Averaged
99 p-Cymene	2.53763	2.08295	0.000	17.91763	30.00000	Averaged
100 ~ 1,2,3- Trimethylbenzene	1.82092	1.55294	0.000	14.71698	50.00000	Averaged
101 ~ n-butylcyclohexane	1.65449	1.45767	0.000	11.89619	50.00000	Averaged
102 ~ Indane	1.95457	1.59019	0.000	18.64243	50.00000	Averaged
103 1,2-Dichlorobenzene	1.32173	1.03080	0.000	22.01143	30.00000	Averaged
104 n-butylbenzene	2.37021	2.13900	0.000	9.75487	30.00000	Averaged
105 ~ Indene	1.84216	1.58757	0.000	13.82025	50.00000	Averaged
106 Undecane	1.58646	1.69956	0.000	-7.12914	30.00000	Averaged
107 ~ 1,2-dimethyl-4-ethylenzen	2.53224	2.10921	0.000	16.70587	50.00000	Averaged
108 ~ 1,2,4,5-tetramethylbenzen	2.58977	2.19007	0.000	15.43394	50.00000	Averaged

<- 60-140

Data File: /var/chem/gcms/mr.i/R041613.b/rccvd16.d
 Report Date: 16-Apr-2013 12:14

TestAmerica Knoxville

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: mr.i Injection Date: 16-APR-2013 10:51
 Lab File ID: rccvd16.d Init. Cal. Date(s): 20-FEB-2013 20-FEB-2013
 Analysis Type: AIR Init. Cal. Times: 17:04 23:25
 Lab Sample ID: CCV Quant Type: ISTD
 Method: /var/chem/gcms/mr.i/R041613.b/TO15.m

COMPOUND	RRF / AMOUNT	RF2	MIN RRF	MAX %D / %DRIFT	CURVE TYPE
109 ~ 1,2,3,5-tetramethylbenzen	1.62313	1.35186	0.000	16.71271	Averaged
110 ~ 1,2,3,4-tetramethylbenzen	2.12017	1.82241	0.000	14.04431	Averaged
111 Dodecane	1.34747	1.68548	0.000	-25.08490	Averaged
112 1,2,4-Trichlorobenzene	1.15077	0.94361	0.000	18.00216	Averaged
113 Napthalene	2.74129	2.47978	0.000	9.53951	Averaged
114 ~ benzo(b) thiophene	1.96067	1.69435	0.000	13.58332	Averaged
115 Hexachlorobutadiene	1.10416	0.76841	0.000	30.40755	Averaged
116 1,2,3-trichlorobenzene	1.15198	0.94220	0.000	18.21100	Averaged
117 ~ 2-Methylnaphthalene	0.27324	0.24506	0.000	10.31537	Averaged
118 ~ 1-Methylnaphthalene	0.23938	0.22448	0.000	6.22320	Averaged

Ok

4/16/13

Data File: /var/chem/gcms/mr.i/R041613.b/rccvd16.d
 Report Date: 16-Apr-2013 12:14

TestAmerica Knoxville

Modified Method TO-14/TO-15

Data file : /var/chem/gcms/mr.i/R041613.b/rccvd16.d
 Lab Smp Id: CCV Client Smp ID: CCV/LCS
 Inj Date : 16-APR-2013 10:51
 Operator : 403648 Inst ID: mr.i
 Smp Info : CCV,,2,6,,CCV/LCS
 Misc Info : R041613,TO15,
 Comment :
 Method : /var/chem/gcms/mr.i/R041613.b/TO15.m
 Meth Date : 16-Apr-2013 12:14 barlozha Quant Type: ISTD
 Cal Date : 20-FEB-2013 20:14 Cal File: ricb205.d
 Als bottle: 1 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 3.50
 Processing Host: qmidhp01

Concentration Formula: Amt * DF * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Default Calibration Volume
Vo	500.00000	Default Sample Volume

Cpnd Variable Local Compound Variable

Compounds	QUANT	SIG	MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
								CAL-AMT (ppb (v/v))	ON-COL (ppb (v/v))
* 1 Bromochloromethane	128		8.873	8.873	(1.000)	294767	4.00000	4.000	
* 2 1,4-Difluorobenzene	114		11.138	11.138	(1.000)	1529291	4.00000	4.000	
* 3 Chlorobenzene-d5	117		17.436	17.436	(1.000)	1257555	4.00000	4.000	
\$ 4 4-Bromofluorobenzene	95		20.170	20.170	(1.157)	995775	4.00000	4.523	
M 83 Xylene (total)	100					2679281	6.00000	5.242	
5 Chlorodifluoromethane	67		3.664	3.664	(0.413)	66468	2.00000	2.207	
6 Propene	41		3.669	3.669	(0.414)	235616	2.00000	2.630	
7 Dichlorodifluoromethane	85		3.723	3.723	(0.420)	629243	2.00000	2.048	
8 Chloromethane	52		3.907	3.907	(0.440)	85710	2.00000	2.283	
9 1,2-Dichlorotetrafluoroethane	135		3.917	3.917	(0.441)	415180	2.00000	1.696	
10 Methanol	31		4.063	4.063	(0.458)	82473	2.00000	3.015	
11 ~ acetaldehyde	44		4.058	4.058	(0.457)	544050	10.0000	12.32	
12 Vinyl Chloride	62		4.079	4.079	(0.460)	260774	2.00000	2.018	
13 n-Butane	43		4.176	4.176	(0.471)	451462	2.00000	2.365	
14 1,3-Butadiene	54		4.171	4.171	(0.470)	214651	2.00000	2.115	

Data File: /var/chem/gcms/mr.i/R041613.b/rccvd16.d
 Report Date: 16-Apr-2013 12:14

Compounds	QUANT SIG			RESPONSE	AMOUNTS	
	MASS	RT	EXP RT REL RT		CAL-AMT (ppb (v/v))	ON-COL (ppb (v/v))
=====	=====	==	=====	=====	=====	=====
15 Bromomethane	94	4.500	4.500 (0.507)	205292	2.00000	1.711
16 Chloroethane	64	4.645	4.645 (0.524)	127306	2.00000	1.951
17 ~ ethanol	31	4.775	4.775 (0.538)	606849	10.0000	15.01
18 Vinyl Bromide	106	4.963	4.963 (0.559)	217177	2.00000	1.798
19 2-methyl butane	43	5.023	5.023 (0.566)	358799	2.00000	2.474
20 Trichlorofluoromethane	101	5.244	5.244 (0.591)	609573	2.00000	2.043
21 Acrolein	56	5.238	5.238 (0.590)	95125	2.00000	2.155
22 Acetonitrile	40	5.303	5.303 (0.598)	123818	2.00000	2.754
25 Pentane	72	5.481	5.481 (0.618)	49186	2.00000	2.069
23 Acetone	58	5.362	5.362 (0.604)	123576	2.00000	2.043
24 Isopropyl alcohol	45	5.481	5.481 (0.618)	449112	2.00000	2.659
26 Ethyl Ether	31	5.643	5.643 (0.636)	397577	2.00000	3.169
27 1,1-Dichloroethene	96	5.966	5.966 (0.672)	225796	2.00000	1.909
29 Acrylonitrile	53	6.047	6.047 (0.682)	216966	2.00000	2.371
30 1,1,2-Trichlorotrifluoroethane	101	6.161	6.161 (0.694)	483260	2.00000	1.965
28 tert-butanol	59	6.090	6.090 (0.686)	473847	2.00000	2.346
31 Methylene Chloride	84	6.312	6.312 (0.711)	215624	2.00000	2.030
32 3-Chloropropene	39	6.333	6.333 (0.714)	246184	2.00000	2.942
33 Carbon Disulfide	76	6.479	6.479 (0.730)	710475	2.00000	2.095
35 ~ 2-Methyl Pentane	43	7.180	7.180 (0.809)	730631	2.00000	2.769
34 trans-1,2-Dichloroethene	96	7.142	7.142 (0.805)	236874	2.00000	1.938
36 Methyl-t-Butyl Ether	73	7.277	7.277 (0.820)	676831	2.00000	2.166
37 1,1-Dichloroethane	63	7.557	7.557 (0.852)	484665	2.00000	2.286
38 Vinyl Acetate	43	7.665	7.665 (0.864)	796272	2.00000	2.823
39 2-Butanone	72	8.107	8.107 (0.914)	121211	2.00000	2.048
40 Hexane	56	8.177	8.177 (0.922)	233344	2.00000	2.304
41 cis 1,2-Dichloroethene	96	8.549	8.549 (0.964)	246155	2.00000	1.986
42 Ethyl acetate	43	8.738	8.738 (0.985)	707200	2.00000	2.831
43 Chloroform	83	8.900	8.900 (1.003)	515542	2.00000	2.182
44 Tetrahydrofuran	42	9.304	9.304 (1.049)	368717	2.00000	2.767
45 1,1,1-Trichloroethane	97	9.941	9.941 (1.120)	497803	2.00000	2.166
46 1,2-Dichloroethane	62	10.027	10.027 (0.900)	385163	2.00000	2.300
49 Cyclohexane	69	10.572	10.572 (0.949)	122127	2.00000	2.034
48 Benzene	78	10.550	10.550 (0.947)	762159	2.00000	1.969
50 Carbon Tetrachloride	117	10.588	10.588 (0.951)	512188	2.00000	2.561
51 ~ 2,3-dimethylpentane	71	10.717	10.717 (0.962)	165677	2.00000	2.033
47 1-Butanol	31	10.534	10.534 (0.946)	123637	2.00000	3.282
52 ~ Thiophene	84	10.836	10.836 (0.973)	442022	2.00000	1.955
53 2,2,4-trimethylpentane	57	11.424	11.424 (1.026)	1404260	2.00000	2.240
54 Heptane	71	11.855	11.855 (1.064)	277089	2.00000	2.040
55 1,2-Dichloropropane	63	11.893	11.893 (1.068)	307701	2.00000	2.168
56 Trichloroethene	130	11.947	11.947 (1.073)	304822	2.00000	1.770
180 ~ 2-nitropropane	43	11.855	11.855 (1.064)	603993	2.00000	
57 Dibromomethane	93	12.022	12.022 (1.079)	282057	2.00000	2.034
58 Bromodichloromethane	83	12.205	12.205 (1.096)	543083	2.00000	2.207
60 Methyl Methacrylate	41	12.340	12.340 (1.108)	436982	2.00000	2.854
59 1,4-dioxane	88	12.222	12.222 (1.097)	107274	2.00000	1.961

Data File: /var/chem/gcms/mr.i/R041613.b/rccvd16.d
Report Date: 16-Apr-2013 12:14

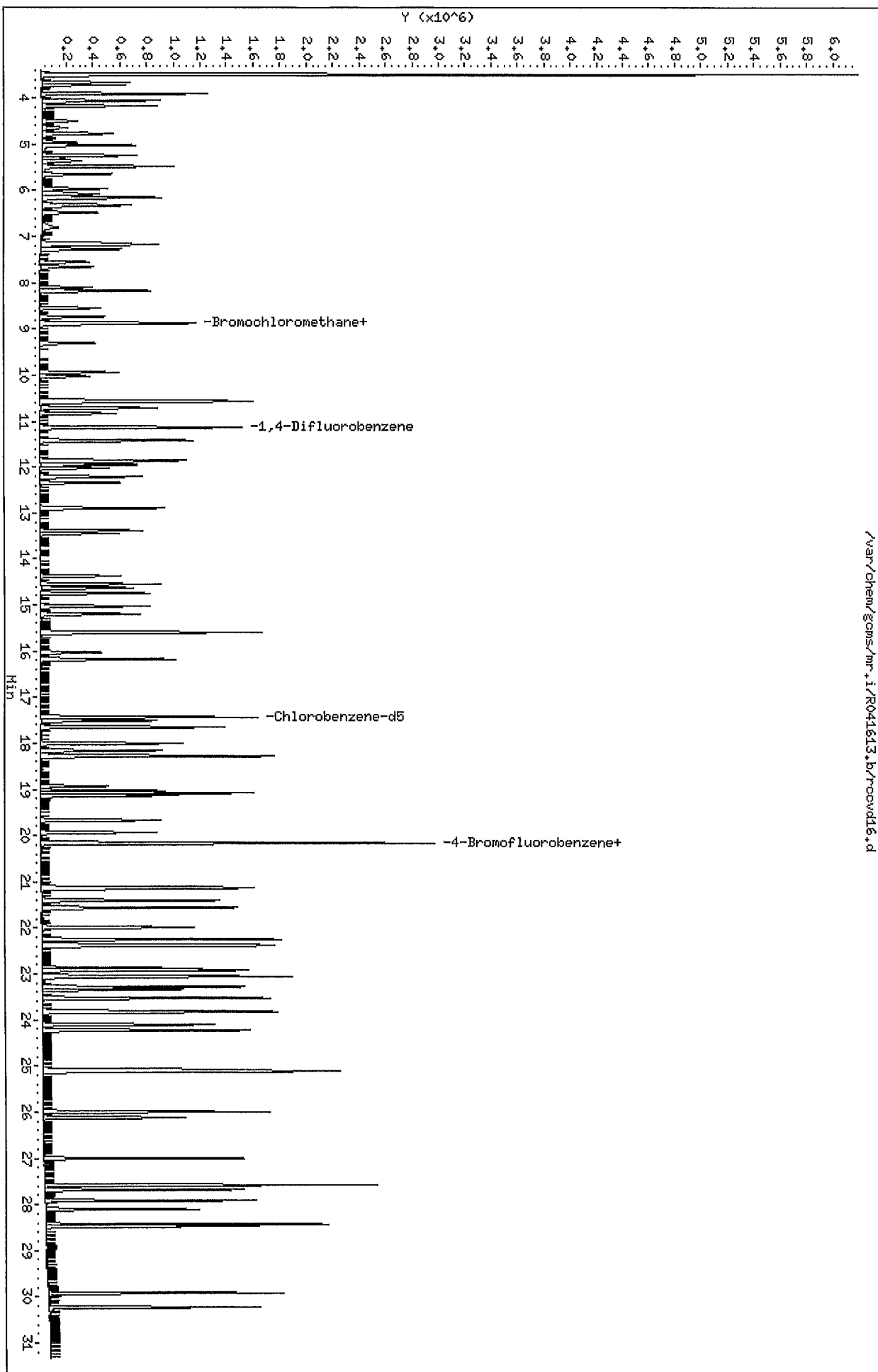
Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ppb (v/v))	ON-COL (ppb (v/v))
=====	=====	==	=====	=====	=====	=====	=====
61 ~ methyl cyclohexane	83	12.896	12.896	(1.158)	450350	2.00000	1.959
63 cis-1,3-Dichloropropene	75	13.451	13.451	(1.208)	421337	2.00000	2.097
62 4-Methyl-2-pentanone	43	13.386	13.386	(1.202)	762032	2.00000	2.789
64 trans-1,3-Dichloropropene	75	14.373	14.373	(0.824)	429055	2.00000	1.882
65 Toluene	91	14.551	14.551	(0.835)	884262	2.00000	1.695
66 1,1,2-Trichloroethane	83	14.637	14.637	(0.839)	260051	2.00000	1.782
67 ~ 2-methyl thiophene	97	14.756	14.756	(0.846)	750371	2.00000	1.700
68 ~ 3-methyl thiophene	97	15.031	15.031	(0.862)	766742	2.00000	1.698
69 2-Hexanone	58	15.198	15.198	(0.872)	334335	2.00000	2.105
70 Octane	85	15.592	15.592	(0.894)	291801	2.00000	1.702
71 Dibromochloromethane	129	15.613	15.613	(0.895)	460293	2.00000	1.739
72 1,2-Dibromoethane	107	16.029	16.029	(0.919)	447901	2.00000	1.731
73 Tetrachloroethene	129	16.180	16.180	(0.928)	289768	2.00000	1.568
75 ~ 2,3-dimethylheptane	43	17.652	17.652	(1.012)	1091073	2.00000	2.360
74 Chlorobenzene	112	17.512	17.512	(1.004)	663359	2.00000	1.611
76 Ethylbenzene	91	18.008	18.008	(1.033)	1129112	2.00000	1.723
77 ~ 2-ethyl thiophene	97	18.164	18.164	(1.042)	856193	2.00000	1.736
78 m&p-Xylene	91	18.277	18.277	(1.048)	1777902	4.00000	3.515
79 Nonane	57	19.081	19.081	(1.094)	688500	2.00000	2.024
80 Bromoform	173	18.935	18.935	(1.086)	329547	2.00000	1.386
81 Styrene	104	19.038	19.038	(1.092)	633401	2.00000	1.763
82 o-Xylene	91	19.140	19.140	(1.098)	901379	2.00000	1.727
84 1,1,2,2-Tetrachloroethane	83	19.668	19.668	(1.128)	678771	2.00000	1.802
85 1,2,3-Trichloropropane	110	19.938	19.938	(1.143)	190114	2.00000	1.664
86 Cumene	105	20.159	20.159	(1.156)	1270911	2.00000	1.686
87 n-Propylbenzene	120	21.114	21.114	(1.211)	350320	2.00000	1.621
88 2-chlorotoluene	126	21.146	21.146	(1.213)	312978	2.00000	1.593
89 4-Ethyltoluene	105	21.405	21.405	(1.228)	1296895	2.00000	1.679
90 1,3,5-Trimethylbenzene	120	21.556	21.556	(1.236)	592267	2.00000	1.626
91 Alpha-Methylstyrene	118	21.987	21.987	(1.261)	489403	2.00000	1.712
92 Decane	57	22.246	22.246	(1.276)	886586	2.00000	2.076
93 tert-butylbenzene	119	22.359	22.359	(1.282)	1120995	2.00000	1.633
94 1,2,4-Trimethylbenzene	105	22.392	22.392	(1.284)	1084697	2.00000	1.702
95 sec-butylbenzene	105	22.920	22.920	(1.315)	1578209	2.00000	1.680
96 1,3-Dichlorobenzene	146	22.877	22.877	(1.312)	675871	2.00000	1.565
97 Benzyl Chloride	91	23.044	23.044	(1.322)	1021867	2.00000	1.886
98 1,4-Dichlorobenzene	146	23.060	23.060	(1.323)	688531	2.00000	1.586
99 p-Cymene	119	23.281	23.281	(1.335)	1309713	2.00000	1.642
100 ~ 1,2,3- Trimethylbenzene	105	23.341	23.341	(1.339)	976451	2.00000	1.706
101 ~ n-butylcyclohexane	83	23.529	23.529	(1.349)	916549	2.00000	1.762
102 ~ Indane	117	23.831	23.831	(1.367)	999875	2.00000	1.627
103 1,2-Dichlorobenzene	146	23.810	23.810	(1.366)	648141	2.00000	1.560
104 n-butylbenzene	91	24.230	24.230	(1.390)	1344957	2.00000	1.805
105 ~ Indene	116	24.106	24.106	(1.383)	998230	2.00000	1.724
106 Undecane	57	25.120	25.120	(1.441)	1068644	2.00000	2.142
107 ~ 1,2-dimethyl-4-ethylenzene	119	25.082	25.082	(1.439)	1326225	2.00000	1.666
108 ~ 1,2,4,5-tetramethylbenzene	119	25.999	25.999	(1.491)	1377067	2.00000	1.691

Data File: /var/chem/gcms/mr.i/R041613.b/rccvd16.d
 Report Date: 16-Apr-2013 12:14

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
						(ppb (v/v))	(ppb (v/v))
=====	====	==	=====	=====	=====	=====	=====
109 ~ 1,2,3,5-tetramethylbenzene	119	26.123	26.123	(1.498)	850021	2.00000	1.666
110 ~ 1,2,3,4-tetramethylbenzene	119	27.002	27.002	(1.549)	1145890	2.00000	1.719
111 Dodecane	57	27.579	27.579	(1.582)	1059794	2.00000	2.502
112 1,2,4-Trichlorobenzene	180	27.682	27.682	(1.588)	593319	2.00000	1.640
113 Napthalene	128	27.913	27.913	(1.601)	1559232	2.00000	1.809
114 ~ benzo(b) thiophene	134	28.108	28.108	(1.612)	1065368	2.00000	1.728
115 Hexachlorobutadiene	225	28.431	28.431	(1.631)	483160	2.00000	1.392
116 1,2,3-trichlorobenzene	180	28.474	28.474	(1.633)	592432	2.00000	1.636
117 ~ 2-Methylnaphthalene	142	29.925	29.925	(1.716)	963035	12.5000	11.21
118 ~ 1-Methylnaphthalene	142	30.227	30.227	(1.734)	882185	12.5000	11.72

Data File: /var/chem/gcms/mr.i/R041613.b/rpcwd16.d
Date: 16-APR-2013 10:51
Client ID: CCV/LCS
Sample Info: CCV,,2,6,,CCV/LCS
Purge Volume: 500.0
Column phase: Rtx-5

Instrument: mr.i
Operator: 403648
Column diameter: 0.32



TestAmerica Knoxville GC/MS Air Continuing Calibration Review / Narrative Checklist
Method: TO-14 and TO-15 - KNOX-MS-0001, Rev 13 & KNOX-MS-0023, Rev 0

Analysis Date: 4/17/13	CCAL Batch/Scan Name: R041713	Instrument: MR	ICAL Batch/Scan Name: R022013I	Scanned <input type="checkbox"/>
-------------------------------	--------------------------------------	-----------------------	---------------------------------------	----------------------------------

Review Items	N/A	Yes	No	If No, why is data reportable?	2nd														
1. Did BFB meet tune criteria?		<input checked="" type="checkbox"/>		<input type="checkbox"/> failed for TO-14A, but passes for TO-15	<input checked="" type="checkbox"/>														
2. Were all standards injected within 24 hr of BFB?		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>														
3. Have the Entech position no. & vol. been verified with run log & sample vol. corrected if actual amount differs >5%?		<input checked="" type="checkbox"/>		<i>checked manually on-screen</i>	<input checked="" type="checkbox"/>														
4. Was date/time of analysis in logbook correct?		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>														
5. Was the CCAL compared to the correct ICAL (date & time on CCAL matches the ICAL)		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>														
6. Is the %D ≤ 30% for all target analytes? (Narrative req'd.)		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/> [ccal] analytes > 30% but passes LCS criteria.	<input checked="" type="checkbox"/>														
7. Have all peaks been auto identified? If not, list:		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>														
8. If manual integrations were performed, are they clearly identified, initialed, dated and reason given?	<input checked="" type="checkbox"/>			Reasons: 1)Corrected split peak; 2)Unresolved peak; 3)tailg; 4)RT shift; 5)wrong peak selected; 6)other	<i>MA</i>														
9. Have alternate hits/manual integrations been verified as correct and are correct RFs listed in CCAL summary?	<input checked="" type="checkbox"/>				<i>MA</i>														
10. Is the first IS documented correctly on the log?		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>														
11. Elution order checked on isomeric pairs?		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>														
• dichlorodifluoromethane / 1,2-dichlorotetrafluoroethane		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>														
• trichlorofluoromethane / 1,1,2-trichlorotrifluoroethane		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>														
• vinyl acetate / hexane		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>														
• cis- and trans- isomers		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>														
• ethyl benzene / m/p-xylene / o-xylene		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>														
• n-propylbenzene/4-ethyl toluene/1,3,5-trimethylbenzene/1,2,4-trimethylbenzene		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>														
• tert-butylbenzene/p-cymene		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>														
• 1,2,4-trimethylbenzene/sec-butylbenzene		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>														
• 1,3-, 1,4-, and 1,2-dichlorobenzene		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>														
• 1,2,4-trichlorobenzene/1,2,3-trichlorobenzene		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>														
12. Did the LCS meet criteria (70-130% with a limited # allowed 60-140% (see table) provisional analyte limit 60-140% with a limited # allowed 50-150%, and no two consecutive MEs). Note: Ohio does not allow for ME.		<input checked="" type="checkbox"/>		<input type="checkbox"/> [lcs6] LCS analyte(s) flagged as being outside control limits but within marginal limits <input type="checkbox"/> [lcs5] LCS outside marginal exceedences high, but analytes were not detected <i>carb tet. +31% (Ok) R041613</i> <i>Vinyl Acet +42% (Ok) last report R041513</i> <i>ethyl Acet. +42% (Ok)</i>	<input checked="" type="checkbox"/>														
<table border="1"> <thead> <tr> <th>Number of target analytes in LCS</th> <th># marginal exceedences of LCS control limits allowed</th> </tr> </thead> <tbody> <tr> <td>>90</td> <td>5</td> </tr> <tr> <td>71 - 90</td> <td>4</td> </tr> <tr> <td>51 - 70</td> <td>3</td> </tr> <tr> <td>31 - 50</td> <td>2</td> </tr> <tr> <td>11 - 30</td> <td>1</td> </tr> <tr> <td>< 11</td> <td>0</td> </tr> </tbody> </table>	Number of target analytes in LCS	# marginal exceedences of LCS control limits allowed	>90	5	71 - 90	4	51 - 70	3	31 - 50	2	11 - 30	1	< 11	0		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
Number of target analytes in LCS	# marginal exceedences of LCS control limits allowed																		
>90	5																		
71 - 90	4																		
51 - 70	3																		
31 - 50	2																		
11 - 30	1																		
< 11	0																		
13. If criteria were not met, was a NCM generated, approved by supervisor, and copy included in folder?	<input checked="" type="checkbox"/>				<i>MA</i>														
14. Does the CCAL folder contain complete data in the following order: data review checklist, a complete runlog, tune pass/fail page, m/z list, tune chromatogram, Target CCAL summary, Quan report, chromatogram, manual integrations.		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>														

Analyst: <i>JS</i>	Date: <i>4/17/13</i>	2nd Level Reviewer: <i>[Signature]</i>	Date: <i>201913</i>
Comments:		Comments:	
<i>*CCAL*</i>			
<i>-Acetonitrile +40% (NT)</i>			
<i>-IPA +36%</i>			
<i>-THF +38%</i>			
<i>-MIBK +38%</i>			

TestAmerica Laboratories, Inc. - Knoxville
CANISTER RUN LOG

GCMS Analysis: AIR

Analyst: FFBQtimes Batch: 3107087(MOMCN)

(7m) Inst: MR

Date: 4/17/13ICAL Batch: R022013ITarget Batch: R041713IS #1 Area: 281891Surr/IS ID & Vol.: 40mL V462 System Date/Time ok (y/n): YPreventive Maintenance Performed ☒ Daily

Time	Use	Lot No.	File ID	Can #	Pos	Vol* (mL)	Can DF	Comments
1106	✓	tune	RBFB D17	-	16	100	1	
1131	✓	ccv	ccv	CX2461	1	1	1	
1245	✓	ccv	ccv A	CX2462	1	1	1	
1245	✓	lcs	lcs A	+	1	+	1	
1403	✓	flush	flush	-	1	500	1	
1454	✓	lot ✓	10489	1125	1	1	1	
1547	✓	+	10490	1353N	2	1	1	daily BLK
1547	✓	BIK	RBIK D17	+	1	1	1	
1639	✓	H3D160408	MOLPQ1AA	1122	7	1	1	nysdec (7m)
1928	✓	leak ✓	leak	-	16	500	1	
2015	N	H3D160415	MOLQ21AA	9376	1	20	1	to 14m
2103	✓	↓	Q5	1531	2	200	1	
2151	✓	↓	Q6	0184	3	1	1	
2238	✓	↓	Q4	12484	4	20	1	ra
2325	✓	H3D170408	3C	92003	5	110	134.33	noisy 244.24
0012	✓	↓	3D	93189	6	70	646.35	1846.71
0059	✓	↓	3E	6685	7	110	367.49	668.16
0145	✓	↓	3F	93009	8	65	1419.35	4367.23
0233	✓	↓	3G	03840	9	115	9728.08	16918.4
0321	✓	↓	3H	03852	10	95	6142.58	12931.75
0407	✓	↓	3J	92090	11	70	9728.08	27794.51
0445	✓	↓	3JD	+	11	1	1	
0544	✓	H3D170409	2H1AA	7510	12	200	1	decn (7m)
1730	✓	lot ✓	10489B	0179	1	500	1	
0633	✓	H3D160415	MOLQ2R	9376	1	200	1	
0722	✓	↓	MOLQ4R	12484	4	200	1	
4/18/13								

* Entech programmed Volume. If the Entech report amount differs from the programmed amount by >5%, the Entech report amount is used for calculations.

Analyst: FFBDate: 4/18/13

MS027r16.DOC, 051210

Data File: /chem/gcms/mr.i/R041713.b/rbfbd17.d

Date : 17-APR-2013 11:06

Client ID:

Instrument: mr.i

Sample Info: BFB,1,3

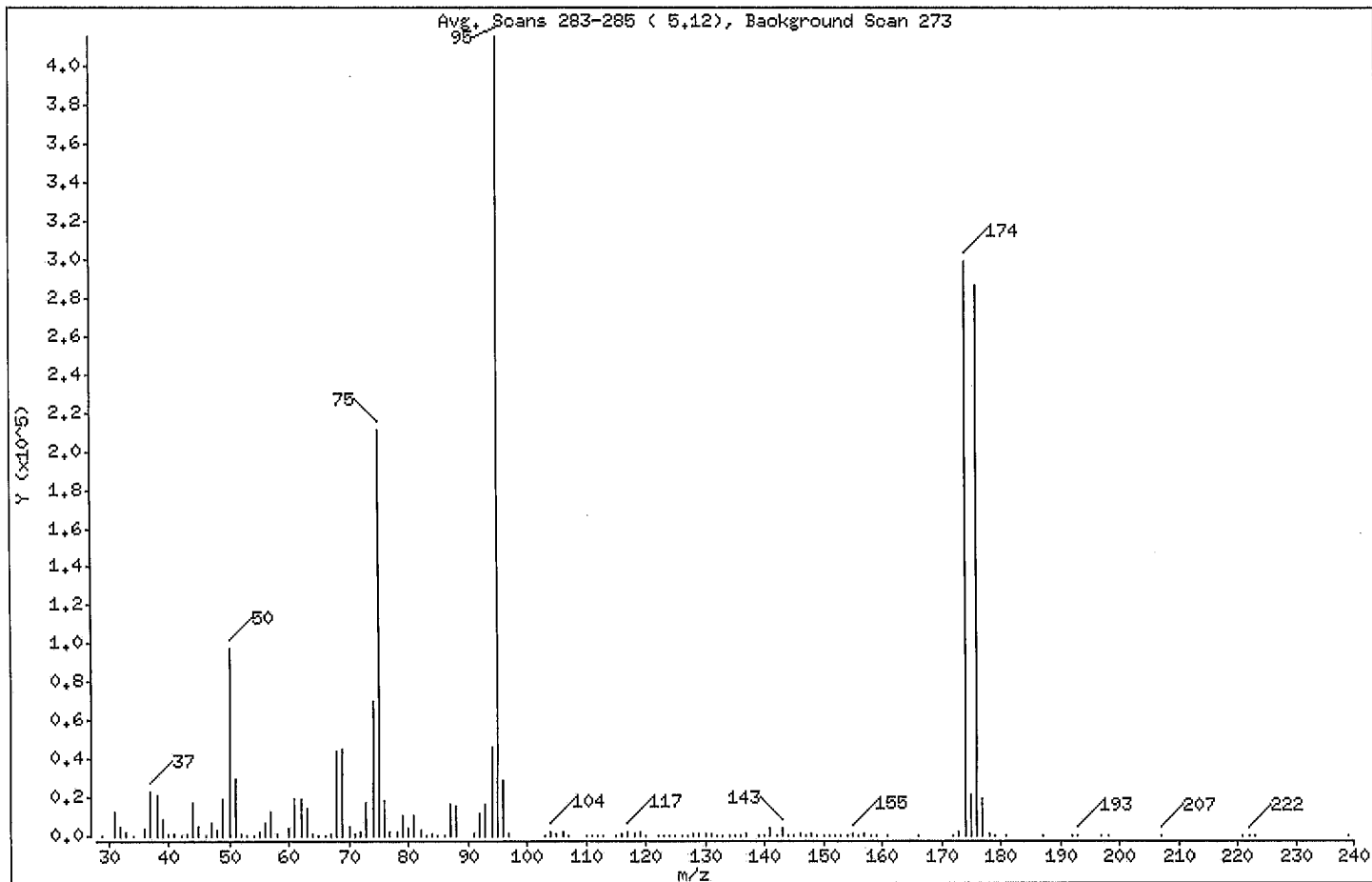
Operator: 22980

Column phase: RTX 624

Column diameter: 0.18

1 bfb

Avg. Scans 283-285 (5.12), Background Scan 273



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	23.55
75	30.00 - 60.00% of mass 95	50.85
96	5.00 - 9.00% of mass 95	6.81
173	Less than 2.00% of mass 174	0.43 (0.60)
174	50.00 - 120.00% of mass 95	72.00
175	5.00 - 9.00% of mass 174	5.05 (7.02)
176	95.00 - 101.00% of mass 174	68.96 (95.78)
177	5.00 - 9.00% of mass 176	4.54 (6.59)

Data File: /chem/gcms/mr.i/R041713.b/rbfbd17.d

Date : 17-APR-2013 11:06

Client ID:

Instrument: mr.i

Sample Info: BFB,1,3

Operator: 22980

Column phase: RTX 624

Column diameter: 0.18

Data File: rbfbd17.d

Spectrum: Avg. Scans 283-285 (5,12), Background Scan 273

Location of Maximum: 95.00

Number of points: 137

m/z	Y	m/z	Y	m/z	Y	m/z	Y

29.00	460	67.00	1186	111.00	367	149.00	233
31.00	12586	68.00	43904	112.00	116	150.00	273
32.00	5170	69.00	44432	113.00	322	151.00	84
33.00	2027	70.00	4597	115.00	366	152.00	290
34.00	112	71.00	545	116.00	1325	153.00	340

36.00	4025	72.00	1990	117.00	2172	154.00	243
37.00	23336	73.00	17536	118.00	1407	155.00	903
38.00	21040	74.00	69328	119.00	1914	156.00	114
39.00	8789	75.00	211328	120.00	119	157.00	517
40.00	847	76.00	18176	122.00	40	158.00	132

41.00	694	77.00	2087	123.00	79	159.00	441
42.00	225	78.00	1562	124.00	242	161.00	447
43.00	1128	79.00	10692	125.00	129	166.00	35
44.00	17528	80.00	3887	126.00	249	172.00	272
45.00	4547	81.00	10871	127.00	164	173.00	1789

46.00	427	82.00	3206	128.00	1315	174.00	299200
47.00	6483	83.00	419	129.00	678	175.00	21000
48.00	2597	84.00	516	130.00	1375	176.00	286592
49.00	19056	85.00	113	131.00	536	177.00	18880
50.00	97888	86.00	388	132.00	36	178.00	602

51.00	29512	87.00	16440	133.00	74	179.00	98
52.00	1249	88.00	15696	134.00	71	181.00	27
53.00	195	91.00	1174	135.00	427	187.00	60
54.00	76	92.00	11085	136.00	47	192.00	41
55.00	1866	93.00	16310	137.00	656	193.00	98

56.00	6299	94.00	46128	139.00	123	197.00	78
57.00	12655	95.00	415616	140.00	305	198.00	2
58.00	622	96.00	28304	141.00	3645	207.00	313
60.00	3585	97.00	799	142.00	435	221.00	57
61.00	19448	103.00	104	143.00	3709	222.00	36

62.00	19552	104.00	1667	144.00	241	223.00	7
63.00	14776	105.00	589	145.00	365	239.00	9
64.00	1340	106.00	1567	146.00	568		
65.00	170	107.00	334	147.00	267		
66.00	150	110.00	63	148.00	768		

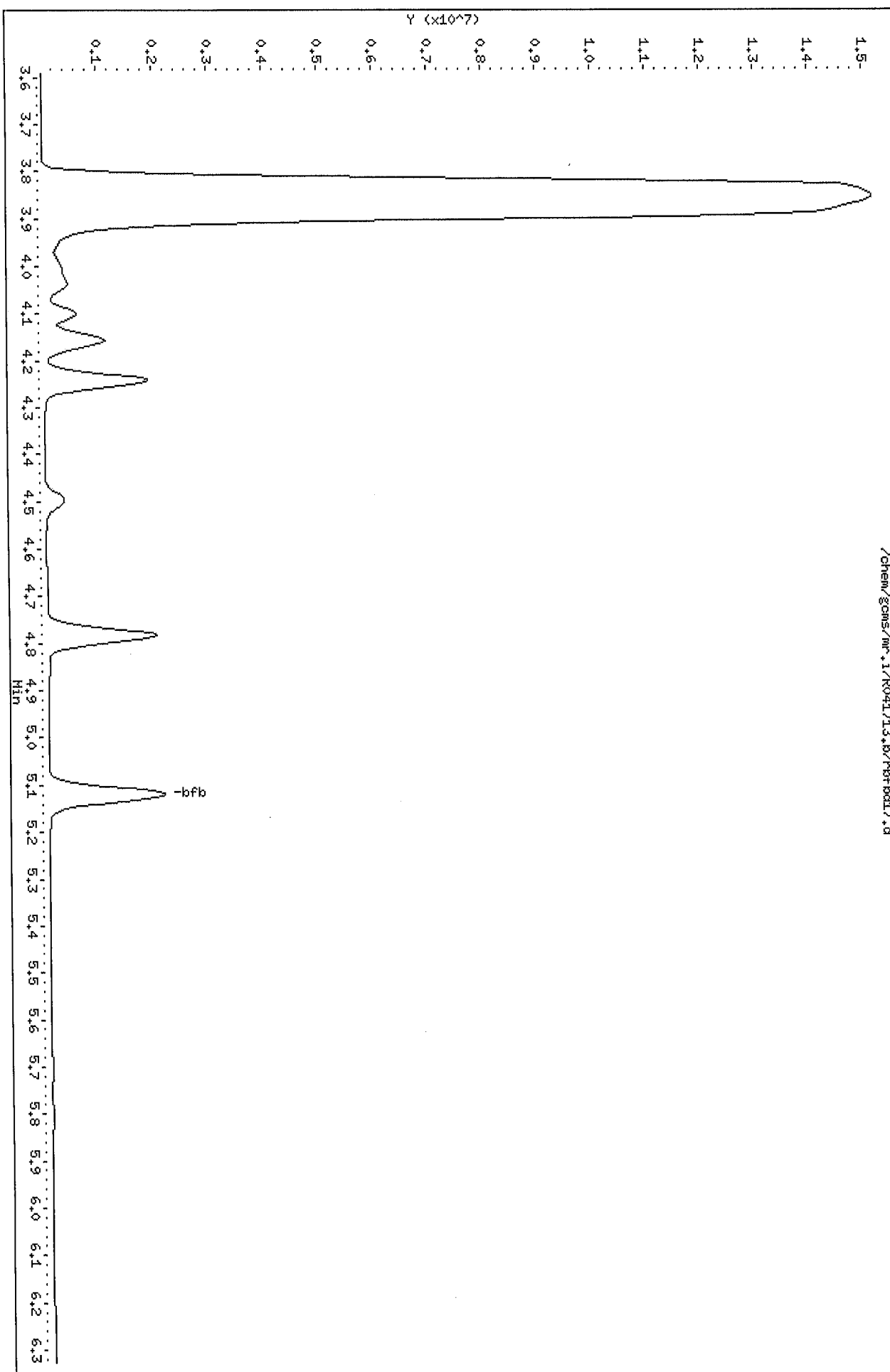
Data File: /chem/gcms/mr.i/R041713.b/rbfbd17.d
Date : 17-APR-2013 11:06
Client ID:
Sample Info: BFB,1,3

Instrument: mr.i

Operator: 22980

Column phase: RTX 624

/chem/gcms/mr.i/R041713.b/rbfbd17.d
Column diameter: 0.18



Data File: /var/chem/gcms/mr.i/R041713.b/rccvd17a.d
Report Date: 17-Apr-2013 13:32

TestAmerica Knoxville

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: mr.i Injection Date: 17-APR-2013 12:45
Lab File ID: rccvd17a.d Init. Cal. Date(s): 20-FEB-2013 20-FEB-2013
Analysis Type: AIR Init. Cal. Times: 17:04 23:25
Lab Sample ID: CCV Quant Type: ISTD
Method: /var/chem/gcms/mr.i/R041713.b/TO15.m

COMPOUND	RRF / AMOUNT	RF2	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
\$ 4 4-Bromofluorobenzene	0.70031	0.78468	0.000	-12.04640	30.00000	Averaged
M 83 Xylene (total)	1.62589	1.44774	0.000	10.95692	30.00000	Averaged
5 Chlorodifluoromethane	0.40861	0.44472	0.000	-8.83618	30.00000	Averaged
6 Propene	1.21594	1.56904	0.000	-29.03940	30.00000	Averaged
7 Dichlorodifluoromethane	4.16818	4.24389	0.000	-1.81632	30.00000	Averaged
8 Chloromethane	0.50950	0.55004	0.000	-7.95571	30.00000	Averaged
9 1,2-Dichlorotetrafluoroetha	3.32193	2.82662	0.000	14.91046	30.00000	Averaged
10 Methanol	0.37115	0.53220	0.000	-43.39309	30.00000	Averaged
11 ~ acetaldehyde	0.59925	0.72463	0.000	-20.92138	50.00000	Averaged
12 Vinyl Chloride	1.75322	1.76203	0.000	-0.50211	30.00000	Averaged
13 n-Butane	2.59004	3.06610	0.000	-18.38042	30.00000	Averaged
14 1,3-Butadiene	1.37716	1.47024	0.000	-6.75890	30.00000	Averaged
15 Bromomethane	1.62801	1.42343	0.000	12.56636	30.00000	Averaged
16 Chloroethane	0.88536	0.87309	0.000	1.38503	30.00000	Averaged
17 ~ ethanol	0.54860	0.78741	0.000	-43.53269	50.00000	Averaged
18 Vinyl Bromide	1.63857	1.48230	0.000	9.53694	30.00000	Averaged
19 2-methyl butane	1.96805	2.36081	0.000	-19.95673	30.00000	Averaged
20 Trichlorofluoromethane	4.04968	4.21788	0.000	-4.15342	30.00000	Averaged
21 Acrolein	0.59891	0.63858	0.000	-6.62375	30.00000	Averaged
22 Acetonitrile	0.60999	0.85668	0.000	-40.44325	30.00000	Averaged
25 Pentane	0.32255	0.34315	0.000	-6.38414	30.00000	Averaged
23 Acetone	0.82088	0.85961	0.000	-4.71796	30.00000	Averaged
24 Isopropyl alcohol	2.29164	3.11151	0.000	-35.77662	30.00000	Averaged
26 Ethyl Ether	1.70260	2.67180	0.000	-56.92515	30.00000	Averaged
27 1,1-Dichloroethene	1.60519	1.57212	0.000	2.05971	30.00000	Averaged
29 Acrylonitrile	1.24170	1.48968	0.000	-19.97072	30.00000	Averaged
30 1,1,2-Trichlorotrifluoroeth	3.33743	3.35437	0.000	-0.50750	30.00000	Averaged
28 tert-butanol	2.74079	3.28636	0.000	-19.90571	30.00000	Averaged
31 Methylene Chloride	1.44122	1.50747	0.000	-4.59706	30.00000	Averaged
32 3-Chloropropene	1.13544	1.65688	0.000	-45.92334	30.00000	Averaged
33 Carbon Disulfide	4.60227	4.89647	0.000	-6.39258	30.00000	Averaged
35 ~ 2-Methyl Pentane	3.58058	5.05681	0.000	-41.22890	50.00000	Averaged
34 trans-1,2-Dichloroethene	1.65884	1.63721	0.000	1.30381	30.00000	Averaged
36 Methyl-t-Butyl Ether	4.24047	4.61082	0.000	-8.73367	30.00000	Averaged
37 1,1-Dichloroethane	2.87721	3.33663	0.000	-15.96780	30.00000	Averaged

MA

60-140 (MT)

60-140 ✓

60-140 ↑↑ (NT)

60-140 ↑ (NT)

(ME ↑ on R041613)

Data File: /var/chem/gcms/mr.i/R041713.b/rccvd17a.d
Report Date: 17-Apr-2013 13:32

TestAmerica Knoxville

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: mr.i Injection Date: 17-APR-2013 12:45
Lab File ID: rccvd17a.d Init. Cal. Date(s): 20-FEB-2013 20-FEB-2013
Analysis Type: AIR Init. Cal. Times: 17:04 23:25
Lab Sample ID: CCV Quant Type: ISTD
Method: /var/chem/gcms/mr.i/R041713.b/TO15.m

COMPOUND	RRF / AMOUNT	RF2	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
38 Vinyl Acetate	3.82794	5.44126	0.000	-42.14615	30.00000	Averaged
39 2-Butanone	0.80311	0.82020	0.000	-2.12881	30.00000	Averaged
40 Hexane	1.37436	1.62609	0.000	-18.31624	30.00000	Averaged
41 cis 1,2-Dichloroethene	1.68161	1.69396	0.000	-0.73451	30.00000	Averaged
42 Ethyl acetate	3.38983	4.80749	0.000	-41.82105	30.00000	Averaged
43 Chloroform	3.20644	3.53302	0.000	-10.18516	30.00000	Averaged
44 Tetrahydrofuran	1.80845	2.49858	0.000	-38.16087	30.00000	Averaged
45 1,1,1-Trichloroethane	3.11792	3.44238	0.000	-10.40624	30.00000	Averaged
46 1,2-Dichloroethane	0.43797	0.50655	0.000	-15.65847	30.00000	Averaged
49 Cyclohexane	0.15703	0.16351	0.000	-4.12366	30.00000	Averaged
48 Benzene	1.01249	1.01446	0.000	-0.19433	30.00000	Averaged
50 Carbon Tetrachloride	0.52304	0.68290	0.000	-30.56451	30.00000	Averaged
51 ~ 2,3-dimethylpentane	0.21317	0.22171	0.000	-4.00557	50.00000	Averaged
47 1-Butanol	0.09854	0.16041	0.000	-62.77835	30.00000	Averaged
52 ~ Thiophene	0.59138	0.59316	0.000	-0.29953	50.00000	Averaged
53 2,2,4-trimethylpentane	1.64003	1.85963	0.000	-13.39039	30.00000	Averaged
54 Heptane	0.35529	0.36613	0.000	-3.05264	30.00000	Averaged
55 1,2-Dichloropropane	0.37120	0.40406	0.000	-8.85241	30.00000	Averaged
56 Trichloroethene	0.45039	0.41210	0.000	8.50152	30.00000	Averaged
180 ~ 2-nitropropane	++++	0.79684	0.000	++++	30.00000	Averaged
57 Dibromomethane	0.36272	0.37569	0.000	-3.57449	30.00000	Averaged
58 Bromodichloromethane	0.64359	0.72181	0.000	-12.15456	30.00000	Averaged
60 Methyl Methacrylate	0.40042	0.57354	0.000	-43.23495	30.00000	Averaged
59 1,4-dioxane	0.14308	0.14514	0.000	-1.44567	30.00000	Averaged
61 ~ methyl cyclohexane	0.60121	0.59958	0.000	0.27108	50.00000	Averaged
63 cis-1,3-Dichloropropene	0.52560	0.55652	0.000	-5.88205	30.00000	Averaged
62 4-Methyl-2-pentanone	0.71475	0.98874	0.000	-38.33393	30.00000	Averaged
64 trans-1,3-Dichloropropene	0.72524	0.70214	0.000	3.18552	30.00000	Averaged
65 Toluene	1.65964	1.45655	0.000	12.23730	30.00000	Averaged
66 1,1,2-Trichloroethane	0.46409	0.42325	0.000	8.79940	30.00000	Averaged
67 ~ 2-methyl thiophene	1.40381	1.23476	0.000	12.04232	50.00000	Averaged
68 ~ 3-methyl thiophene	1.43650	1.25609	0.000	12.55872	50.00000	Averaged
69 2-Hexanone	0.50528	0.55187	0.000	-9.22027	30.00000	Averaged
70 Octane	0.54547	0.47981	0.000	12.03750	30.00000	Averaged
71 Dibromochloromethane	0.84171	0.78056	0.000	7.26534	30.00000	Averaged

60-140 ↑ (ME)
Last Report
R041513
60-140 ↑ (ME)
60-140 ✓
↑ ME OK R041613
60-140 ↑↑ (MT)
MT
60-140 ↑ (MT)
(ME ↑ on R041613)
60-140 ✓

Data File: /var/chem/gcms/mr.i/R041713.b/rccvd17a.d
 Report Date: 17-Apr-2013 13:32

TestAmerica Knoxville

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: mr.i Injection Date: 17-APR-2013 12:45
 Lab File ID: rccvd17a.d Init. Cal. Date(s): 20-FEB-2013 20-FEB-2013
 Analysis Type: AIR Init. Cal. Times: 17:04 23:25
 Lab Sample ID: CCV Quant Type: ISTD
 Method: /var/chem/gcms/mr.i/R041713.b/TO15.m

COMPOUND	RRF / AMOUNT	RF2	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
72 1,2-Dibromoethane	0.82295	0.73338	0.000	10.88422	30.00000	Averaged
73 Tetrachloroethene	0.58782	0.48401	0.000	17.65881	30.00000	Averaged
75 ~ 2,3-dimethylheptane	1.47030	1.77465	0.000	-20.69981	50.00000	Averaged
74 Chlorobenzene	1.30937	1.08318	0.000	17.27460	30.00000	Averaged
76 Ethylbenzene	2.08418	1.82412	0.000	12.47762	30.00000	Averaged
77 ~ 2-ethyl thiophene	1.56861	1.38557	0.000	11.66932	50.00000	Averaged
78 m&p-Xylene	1.60891	1.43996	0.000	10.50088	30.00000	Averaged
79 Nonane	1.08201	1.12181	0.000	-3.67924	30.00000	Averaged
80 Bromoform	0.75603	0.64355	0.000	14.87672	30.00000	Averaged
81 Styrene	1.14267	1.03668	0.000	9.27579	30.00000	Averaged
82 o-Xylene	1.65987	1.46332	0.000	11.84095	30.00000	Averaged
84 1,1,2,2-Tetrachloroethane	1.19823	1.10193	0.000	8.03659	30.00000	Averaged
85 1,2,3-Trichloropropane	0.36347	0.31088	0.000	14.46978	30.00000	Averaged
86 Cumene	2.39816	2.06213	0.000	14.01192	30.00000	Averaged
87 n-Propylbenzene	0.68754	0.56369	0.000	18.01307	30.00000	Averaged
88 2-chlorotoluene	0.62489	0.50564	0.000	19.08333	30.00000	Averaged
89 4-Ethyltoluene	2.45672	2.10124	0.000	14.46947	30.00000	Averaged
90 1,3,5-Trimethylbenzene	1.15883	0.96233	0.000	16.95698	30.00000	Averaged
91 Alpha-Methylstyrene	0.90929	0.78571	0.000	13.59064	30.00000	Averaged
92 Decane	1.35801	1.42069	0.000	-4.61551	30.00000	Averaged
93 tert-butylbenzene	2.18314	1.81097	0.000	17.04749	30.00000	Averaged
94 1,2,4-Trimethylbenzene	2.02744	1.74240	0.000	14.05907	30.00000	Averaged
95 sec-butylbenzene	2.98700	2.53765	0.000	15.04356	30.00000	Averaged
96 1,3-Dichlorobenzene	1.37357	1.10045	0.000	19.88424	30.00000	Averaged
97 Benzyl Chloride	1.72292	1.65698	0.000	3.82703	30.00000	Averaged
98 1,4-Dichlorobenzene	1.38059	1.11993	0.000	18.88021	30.00000	Averaged
99 p-Cymene	2.53763	2.12215	0.000	16.37289	30.00000	Averaged
100 ~ 1,2,3- Trimethylbenzene	1.82092	1.56344	0.000	14.13997	50.00000	Averaged
101 ~ n-butylcyclohexane	1.65449	1.46507	0.000	11.44876	50.00000	Averaged
102 ~ Indane	1.95457	1.59211	0.000	18.54411	50.00000	Averaged
103 1,2-Dichlorobenzene	1.32173	1.04514	0.000	20.92613	30.00000	Averaged
104 n-butylbenzene	2.37021	2.14251	0.000	9.60704	30.00000	Averaged
105 ~ Indene	1.84216	1.59420	0.000	13.46062	50.00000	Averaged
106 Undecane	1.58646	1.69916	0.000	-7.10403	30.00000	Averaged
107 ~ 1,2-dimethyl-4-ethylenzen	2.53224	2.10734	0.000	16.77983	50.00000	Averaged
108 ~ 1,2,4,5-tetramethylbenzen	2.58977	2.18658	0.000	15.56852	50.00000	Averaged

Data File: /var/chem/gcms/mr.i/R041713.b/rccvd17a.d
 Report Date: 17-Apr-2013 13:32

TestAmerica Knoxville

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: mr.i Injection Date: 17-APR-2013 12:45
 Lab File ID: rccvd17a.d Init. Cal. Date(s): 20-FEB-2013 20-FEB-2013
 Analysis Type: AIR Init. Cal. Times: 17:04 23:25
 Lab Sample ID: CCV Quant Type: ISTD
 Method: /var/chem/gcms/mr.i/R041713.b/TO15.m

			MIN		MAX	
COMPOUND	RRF / AMOUNT	RF2	RRF	%D / %DRIFT	%D / %DRIFT	CURVE TYPE
=====	=====	=====	=====	=====	=====	=====
109 ~ 1,2,3,5-tetramethylbenzen	1.62313	1.35358	0.000	16.60702	50.00000	Averaged
110 ~ 1,2,3,4-tetramethylbenzen	2.12017	1.82053	0.000	14.13294	50.00000	Averaged
111 Dodecane	1.34747	1.69664	0.000	-25.91286	30.00000	Averaged
112 1,2,4-Trichlorobenzene	1.15077	0.98401	0.000	14.49117	30.00000	Averaged
113 Napthalene	2.74129	2.54908	0.000	7.01150	30.00000	Averaged
114 ~ benzo(b) thiophene	1.96067	1.75623	0.000	10.42727	50.00000	Averaged
115 Hexachlorobutadiene	1.10416	0.78696	0.000	28.72778	30.00000	Averaged
116 1,2,3-trichlorobenzene	1.15198	0.98674	0.000	14.34429	30.00000	Averaged
117 ~ 2-Methylnaphthalene	0.27324	0.28119	0.000	-2.90934	50.00000	Averaged
118 ~ 1-Methylnaphthalene	0.23938	0.25799	0.000	-7.77404	50.00000	Averaged

Data File: /var/chem/gcms/mr.i/R041713.b/rccvd17a.d
 Report Date: 17-Apr-2013 13:32

TestAmerica Knoxville

Modified Method TO-14/TO-15

Data file : /var/chem/gcms/mr.i/R041713.b/rccvd17a.d
 Lab Smp Id: CCV Client Smp ID: CCV/LCS
 Inj Date : 17-APR-2013 12:45
 Operator : 403648 Inst ID: mr.i
 Smp Info : CCV,,2,6,,CCV/LCS
 Misc Info : R041713,TO15,
 Comment :
 Method : /var/chem/gcms/mr.i/R041713.b/TO15.m
 Meth Date : 17-Apr-2013 13:32 barlozha Quant Type: ISTD
 Cal Date : 20-FEB-2013 20:14 Cal File: ricb205.d
 Als bottle: 1 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 3.50
 Processing Host: qmidhp01

Concentration Formula: Amt * DF * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Default Calibration Volume
Vo	200.00000	Default Sample Volume

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT (ppb (v/v))	ON-COL (ppb (v/v))
* 1 Bromochloromethane	128	8.868	8.868	(1.000)	281891	4.00000	4.000	
* 2 1,4-Difluorobenzene	114	11.132	11.132	(1.000)	1460036	4.00000	4.000	
* 3 Chlorobenzene-d5	117	17.431	17.431	(1.000)	1172674	4.00000	4.000	
\$ 4 4-Bromofluorobenzene	95	20.165	20.165	(1.157)	920169	4.00000	4.482	
M 83 Xylene (total)	100				2546600	6.00000	5.343	
5 Chlorodifluoromethane	67	3.659	3.659	(0.413)	62681	2.00000	2.177	
6 Propene	41	3.669	3.669	(0.414)	221149	2.00000	2.581	
7 Dichlorodifluoromethane	85	3.718	3.718	(0.419)	598157	2.00000	2.036	
8 Chloromethane	52	3.896	3.896	(0.439)	77525	2.00000	2.159	
9 1,2-Dichlorotetrafluoroethane	135	3.912	3.912	(0.441)	398399	2.00000	1.702	
10 Methanol	31	4.063	4.063	(0.458)	75011	2.00000	2.868	
11 ~ acetaldehyde	44	4.052	4.052	(0.457)	510664	10.0000	12.09	
12 Vinyl Chloride	62	4.074	4.074	(0.459)	248350	2.00000	2.010	
13 n-Butane	43	4.171	4.171	(0.470)	432153	2.00000	2.368	
14 1,3-Butadiene	54	4.165	4.165	(0.470)	207223	2.00000	2.135	

Data File: /var/chem/gcms/mr.i/R041713.b/rccvd17a.d
 Report Date: 17-Apr-2013 13:32

Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ppb (v/v))	ON-COL (ppb (v/v))
=====	=====	==	=====	=====	=====	=====	=====
15 Bromomethane	94	4.494	4.494	(0.507)	200626	2.00000	1.749
16 Chloroethane	64	4.640	4.640	(0.523)	123058	2.00000	1.972
17 ~ ethanol	31	4.769	4.769	(0.538)	554912	10.0000	14.35
18 Vinyl Bromide	106	4.958	4.958	(0.559)	208923	2.00000	1.809
19 2-methyl butane	43	5.017	5.017	(0.566)	332745	2.00000	2.399
20 Trichlorofluoromethane	101	5.239	5.239	(0.591)	594491	2.00000	2.083
21 Acrolein	56	5.239	5.239	(0.591)	90005	2.00000	2.132
22 Acetonitrile	40	5.303	5.303	(0.598)	120745	2.00000	2.809
25 Pentane	72	5.476	5.476	(0.618)	48364	2.00000	2.128
23 Acetone	58	5.363	5.363	(0.605)	121158	2.00000	2.094
24 Isopropyl alcohol	45	5.481	5.481	(0.618)	438554	2.00000	2.716
26 Ethyl Ether	31	5.638	5.638	(0.636)	376578	2.00000	3.138
27 1,1-Dichloroethene	96	5.961	5.961	(0.672)	221583	2.00000	1.959
29 Acrylonitrile	53	6.047	6.047	(0.682)	209963	2.00000	2.399
30 1,1,2-Trichlorotrifluoroethane	101	6.155	6.155	(0.694)	472782	2.00000	2.010
28 tert-butanol	59	6.085	6.085	(0.686)	463197	2.00000	2.398
31 Methylene Chloride	84	6.306	6.306	(0.711)	212471	2.00000	2.092
32 3-Chloropropene	39	6.328	6.328	(0.714)	233529	2.00000	2.918
33 Carbon Disulfide	76	6.473	6.473	(0.730)	690135	2.00000	2.128
35 ~ 2-Methyl Pentane	43	7.174	7.174	(0.809)	712735	2.00000	2.824
34 trans-1,2-Dichloroethene	96	7.137	7.137	(0.805)	230757	2.00000	1.974
36 Methyl-t-Butyl Ether	73	7.271	7.271	(0.820)	649874	2.00000	2.175
37 1,1-Dichloroethane	63	7.552	7.552	(0.852)	470283	2.00000	2.319
38 Vinyl Acetate	43	7.665	7.665	(0.864)	766922	2.00000	2.843
39 2-Butanone	72	8.102	8.102	(0.914)	115603	2.00000	2.042
40 Hexane	56	8.172	8.172	(0.922)	229189	2.00000	2.366
41 cis 1,2-Dichloroethene	96	8.544	8.544	(0.964)	238756	2.00000	2.015
42 Ethyl acetate	43	8.738	8.738	(0.985)	677594	2.00000	2.836
43 Chloroform	83	8.895	8.895	(1.003)	497963	2.00000	2.204
44 Tetrahydrofuran	42	9.299	9.299	(1.049)	352163	2.00000	2.763
45 1,1,1-Trichloroethane	97	9.935	9.935	(1.120)	485187	2.00000	2.208
46 1,2-Dichloroethane	62	10.022	10.022	(0.900)	369790	2.00000	2.313
49 Cyclohexane	69	10.566	10.566	(0.949)	119365	2.00000	2.082
48 Benzene	78	10.545	10.545	(0.947)	740572	2.00000	2.004
50 Carbon Tetrachloride	117	10.582	10.582	(0.951)	498532	2.00000	2.611
51 ~ 2,3-dimethylpentane	71	10.712	10.712	(0.962)	161853	2.00000	2.080
47 1-Butanol	31	10.528	10.528	(0.946)	117099	2.00000	3.256
52 ~ Thiophene	84	10.830	10.830	(0.973)	433014	2.00000	2.006
53 2,2,4-trimethylpentane	57	11.418	11.418	(1.026)	1357565	2.00000	2.268
54 Heptane	71	11.850	11.850	(1.064)	267284	2.00000	2.061
55 1,2-Dichloropropane	63	11.887	11.887	(1.068)	294971	2.00000	2.177
56 Trichloroethene	130	11.947	11.947	(1.073)	300840	2.00000	1.830
180 ~ 2-nitropropane	43	11.850	11.850	(1.064)	581706	2.00000	
57 Dibromomethane	93	12.017	12.017	(1.079)	274258	2.00000	2.071
58 Bromodichloromethane	83	12.200	12.200	(1.096)	526936	2.00000	2.243
60 Methyl Methacrylate	41	12.335	12.335	(1.108)	418693	2.00000	2.865
59 1,4-dioxane	88	12.216	12.216	(1.097)	105957	2.00000	2.029

Data File: /var/chem/gcms/mr.i/R041713.b/rccvd17a.d
 Report Date: 17-Apr-2013 13:32

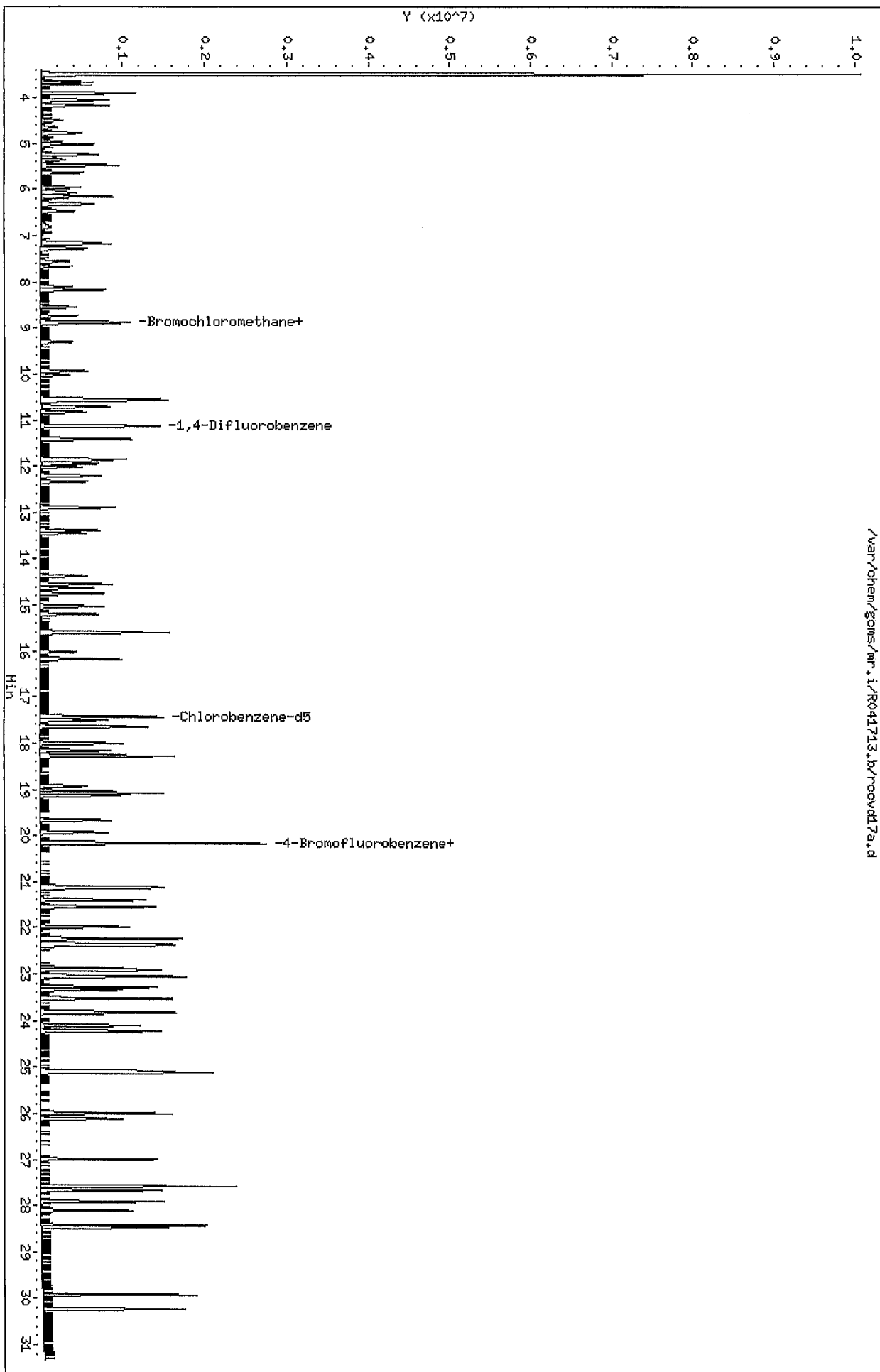
Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
						(ppb (v/v))	(ppb (v/v))
=====	====	==	=====	=====	=====	=====	=====
61 ~ methyl cyclohexane	83	12.896	12.896	(1.158)	437706	2.00000	1.994
63 cis-1,3-Dichloropropene	75	13.446	13.446	(1.208)	406267	2.00000	2.118
62 4-Methyl-2-pentanone	43	13.381	13.381	(1.202)	721795	2.00000	2.767
64 trans-1,3-Dichloropropene	75	14.368	14.368	(0.824)	411690	2.00000	1.936
65 Toluene	91	14.546	14.546	(0.834)	854028	2.00000	1.755
66 1,1,2-Trichloroethane	83	14.632	14.632	(0.839)	248169	2.00000	1.824
67 ~ 2-methyl thiophene	97	14.745	14.745	(0.846)	723985	2.00000	1.759
68 ~ 3-methyl thiophene	97	15.026	15.026	(0.862)	736494	2.00000	1.749
69 2-Hexanone	58	15.193	15.193	(0.872)	323582	2.00000	2.184
70 Octane	85	15.586	15.586	(0.894)	281328	2.00000	1.759
71 Dibromochloromethane	129	15.608	15.608	(0.895)	457668	2.00000	1.855
72 1,2-Dibromoethane	107	16.023	16.023	(0.919)	430007	2.00000	1.782
73 Tetrachloroethene	129	16.174	16.174	(0.928)	283795	2.00000	1.647
75 ~ 2,3-dimethylheptane	43	17.646	17.646	(1.012)	1040543	2.00000	2.414
74 Chlorobenzene	112	17.506	17.506	(1.004)	635109	2.00000	1.654
76 Ethylbenzene	91	18.002	18.002	(1.033)	1069550	2.00000	1.750
77 ~ 2-ethyl thiophene	97	18.159	18.159	(1.042)	812410	2.00000	1.767
78 m&p-Xylene	91	18.272	18.272	(1.048)	1688600	4.00000	3.580
79 Nonane	57	19.075	19.075	(1.094)	657761	2.00000	2.074
80 Bromoform	173	18.930	18.930	(1.086)	377339	2.00000	1.702
81 Styrene	104	19.032	19.032	(1.092)	607843	2.00000	1.814
82 o-Xylene	91	19.129	19.129	(1.097)	858000	2.00000	1.763
84 1,1,2,2-Tetrachloroethane	83	19.663	19.663	(1.128)	646102	2.00000	1.839
85 1,2,3-Trichloropropane	110	19.933	19.933	(1.144)	182280	2.00000	1.711
86 Cumene	105	20.154	20.154	(1.156)	1209104	2.00000	1.720
87 n-Propylbenzene	120	21.114	21.114	(1.211)	330513	2.00000	1.640
88 2-chlorotoluene	126	21.146	21.146	(1.213)	296474	2.00000	1.618
89 4-Ethyltoluene	105	21.399	21.399	(1.228)	1232036	2.00000	1.711
90 1,3,5-Trimethylbenzene	120	21.550	21.550	(1.236)	564247	2.00000	1.661
91 Alpha-Methylstyrene	118	21.982	21.982	(1.261)	460690	2.00000	1.728
92 Decane	57	22.241	22.241	(1.276)	833004	2.00000	2.092
93 tert-butylbenzene	119	22.359	22.359	(1.283)	1061838	2.00000	1.659
94 1,2,4-Trimethylbenzene	105	22.386	22.386	(1.284)	1021633	2.00000	1.719
95 sec-butylbenzene	105	22.915	22.915	(1.315)	1487919	2.00000	1.699
96 1,3-Dichlorobenzene	146	22.872	22.872	(1.312)	645232	2.00000	1.602
97 Benzyl Chloride	91	23.044	23.044	(1.322)	971549	2.00000	1.923
98 1,4-Dichlorobenzene	146	23.060	23.060	(1.323)	656658	2.00000	1.622
99 p-Cymene	119	23.276	23.276	(1.335)	1244295	2.00000	1.672
100 ~ 1,2,3- Trimethylbenzene	105	23.335	23.335	(1.339)	916704	2.00000	1.717
101 ~ n-butylcyclohexane	83	23.524	23.524	(1.350)	859025	2.00000	1.771
102 ~ Indane	117	23.831	23.831	(1.367)	933513	2.00000	1.629
103 1,2-Dichlorobenzene	146	23.804	23.804	(1.366)	612804	2.00000	1.581
104 n-butylbenzene	91	24.225	24.225	(1.390)	1256231	2.00000	1.808
105 ~ Indene	116	24.101	24.101	(1.383)	934737	2.00000	1.731
106 Undecane	57	25.115	25.115	(1.441)	996280	2.00000	2.142
107 ~ 1,2-dimethyl-4-ethylenzene	119	25.077	25.077	(1.439)	1235610	2.00000	1.664
108 ~ 1,2,4,5-tetramethylbenzene	119	25.994	25.994	(1.491)	1282076	2.00000	1.689

Data File: /var/chem/gcms/mr.i/R041713.b/rccvd17a.d
 Report Date: 17-Apr-2013 13:32

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ppb (v/v))	ON-COL (ppb (v/v))
=====	=====	==	=====	=====	=====	=====	=====
109 ~ 1,2,3,5-tetramethylbenzene	119	26.118	26.118	(1.498)	793653	2.00000	1.668
110 ~ 1,2,3,4-tetramethylbenzene	119	26.997	26.997	(1.549)	1067444	2.00000	1.717
111 Dodecane	57	27.579	27.579	(1.582)	994802	2.00000	2.518
112 1,2,4-Trichlorobenzene	180	27.676	27.676	(1.588)	576961	2.00000	1.710
113 Napthalene	128	27.913	27.913	(1.601)	1494622	2.00000	1.860
114 ~ benzo(b) thiophene	134	28.102	28.102	(1.612)	1029741	2.00000	1.791
115 Hexachlorobutadiene	225	28.431	28.431	(1.631)	461424	2.00000	1.425
116 1,2,3-trichlorobenzene	180	28.474	28.474	(1.634)	578562	2.00000	1.713
117 ~ 2-Methylnaphthalene	142	29.925	29.925	(1.717)	1030455	12.5000	12.86
118 ~ 1-Methylnaphthalene	142	30.227	30.227	(1.734)	945429	12.5000	13.47

Data File: /var/chem/gcms/mr.i/R041713.b/rocwd17a.d
Date : 17-APR-2013 12:45
Client ID: GCW/LCS
Sample Info: GCW,,2,6,,GCW/LCS
Purge Volume: 200.0
Column phase: Rtx-5

Instrument: mr.i
Operator: 403648
Column diameter: 0.32



Raw QC Data

New York State D.E.C.
 Client Sample ID: INTRA-LAB BLANK
 GC/MS Volatiles

Lot-Sample #	H3D160000 - 043B	Work Order #	M0L0V1AA	Matrix.....:	AIR
	04/11/2013	Date Received..:	04/15/2013		
Prep Date.....:	04/16/2013	Analysis Date...	04/16/2013		
Prep Batch #.....:	3106043				
Dilution Factor.:	1	Method.....:	TO-15		

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
1,1,1-Trichloroethane	ND	0.080	ND	0.44
1,1,2,2-Tetrachloroethane	ND	0.080	ND	0.55
1,1,2-Trichlorotrifluoroethane	ND	0.080	ND	0.61
1,1,2-Trichloroethane	ND	0.080	ND	0.44
1,1-Dichloroethane	ND	0.080	ND	0.32
1,1-Dichloroethene	ND	0.080	ND	0.32
1,2,4-Trichlorobenzene	ND	0.080	ND	0.59
1,2,4-Trimethylbenzene	ND	0.080	ND	0.39
1,2-Dibromoethane (EDB)	ND	0.080	ND	0.61
1,2-Dichlorobenzene	ND	0.080	ND	0.48
1,2-Dichloroethane	ND	0.080	ND	0.32
1,2-Dichloropropane	ND	0.080	ND	0.37
1,3,5-Trimethylbenzene	ND	0.080	ND	0.39
1,4-Dichlorobenzene	ND	0.080	ND	0.48
1,4-Dioxane	ND	0.20	ND	0.72
2-Butanone (MEK)	ND	0.32	ND	0.94
1,3-Dichlorobenzene	ND	0.080	ND	0.48
2,2,4-Trimethylpentane	ND	0.20	ND	0.93
Benzene	ND	0.080	ND	0.26
Benzyl chloride	ND	0.16	ND	0.83
Bromodichloromethane	ND	0.080	ND	0.54
Bromoform	ND	0.080	ND	0.83
Bromomethane	ND	0.080	ND	0.31
Carbon tetrachloride	ND	0.040	ND	0.25
Chlorobenzene	ND	0.080	ND	0.37
Chloroethane	ND	0.080	ND	0.21
Chloroform	ND	0.080	ND	0.39
Cyclohexane	ND	0.20	ND	0.69
Chloromethane	ND	0.20	ND	0.41
cis-1,2-Dichloroethene	ND	0.080	ND	0.32
cis-1,3-Dichloropropene	ND	0.080	ND	0.36
Dibromochloromethane	ND	0.080	ND	0.68
Dichlorodifluoromethane	ND	0.080	ND	0.40
Ethanol	ND	0.80	ND	1.5
Ethylbenzene	ND	0.080	ND	0.35
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.080	ND	0.56
n-Hexane	ND	0.20	ND	0.70

New York State D.E.C.
 Client Sample ID: INTRA-LAB BLANK
 GC/MS Volatiles

Lot-Sample # H3D160000 - 043B Work Order # M0L0V1AA Matrix.....: AIR

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
Hexachlorobutadiene	ND	0.080	ND	0.85
4-Methyl-2-pentanone (MIBK)	ND	0.20	ND	0.82
Methyl tert-butyl ether	ND	0.16	ND	0.58
Methylene chloride	ND	0.20	ND	0.69
Styrene	ND	0.080	ND	0.34
tert-Butyl alcohol	ND	0.32	ND	0.97
Tetrachloroethene	ND	0.080	ND	0.54
Toluene	ND	0.080	ND	0.30
m-Xylene & p-Xylene	ND	0.080	ND	0.35
o-Xylene	ND	0.080	ND	0.35
trans-1,2-Dichloroethene	ND	0.080	ND	0.32
trans-1,3-Dichloropropene	ND	0.080	ND	0.36
Trichloroethene	ND	0.040	ND	0.21
Trichlorofluoromethane	ND	0.080	ND	0.45
Vinyl chloride	ND	0.080	ND	0.20

SURROGATE	PERCENT RECOVERY	LABORATORY CONTROL LIMITS (%)
4-Bromofluorobenzene	114	60 - 140

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)*(Molecular Weight/24.45)

The 'Reporting Limit' in ug/m3 is calculated using the following equation: (Reporting Limit(before rounding) * Dilution Factor) * (Molecular Weight/24.45)

Data File: /var/chem/gcms/mr.i/R041613.b/rblkd16.d
 Report Date: 16-Apr-2013 19:32

TestAmerica Knoxville

Modified Method TO-14/TO-15

Data file : /var/chem/gcms/mr.i/R041613.b/rblkd16.d
 Lab Smp Id: M0L0V1AA Client Smp ID: cn 7494
 Inj Date : 16-APR-2013 12:52
 Operator : 403648 Inst ID: mr.i
 Smp Info : M0L0V1AA,,3,,,cn 7494
 Misc Info : R041613,TO15,blkchklowny.sub
 Comment :
 Method : /var/chem/gcms/mr.i/R041613.b/TO15.m
 Meth Date : 16-Apr-2013 19:25 barlozha Quant Type: ISTD
 Cal Date : 20-FEB-2013 20:14 Cal File: ricb205.d
 Als bottle: 1 QC Sample: BLANK
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 1-all.sub
 Target Version: 3.50

Concentration Formula: Amt * DF * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Default Calibration Volume
Vo	500.00000	Default Sample Volume

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ppb (v/v))	FINAL (ppb (v/v))
* 1 Bromochloromethane	=====	128	8.867	8.873	(1.000)	260594	4.00000	4.000
* 2 1,4-Difluorobenzene	=====	114	11.132	11.138	(1.000)	1363173	4.00000	4.000
* 3 Chlorobenzene-d5	=====	117	17.414	17.436	(1.000)	1042048	4.00000	4.000
\$ 4 4-Bromofluorobenzene	=====	95	20.154	20.170	(1.157)	834140	4.57214	4.572
13 n-Butane	=====	43	4.176	4.176	(0.471)	7661	0.04540	0.04540
19 2-methyl butane	=====	43	5.028	5.023	(0.567)	4140	0.03230	0.03230
24 Isopropyl Alcohol	=====	45	5.513	5.481	(0.622)	3614	0.02421	0.02421
31 Methylene Chloride	=====	84	6.311	6.312	(0.712)	2143	0.02282	0.02282
65 Toluene	=====	91	14.551	14.551	(0.836)	10478	0.02424	0.02424

Mr. 3

Data File: /var/chem/gcms/mr.i/R041613.b/rblkd16.d
 Report Date: 16-Apr-2013 19:32

TestAmerica Knoxville

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: mr.i	Calibration Date: 16-APR-2013
Lab File ID: rblkd16.d	Calibration Time: 10:51
Lab Smp Id: M0L0V1AA	Client Smp ID: cn 7494
Analysis Type: OTHER	Level: LOW
Quant Type: ISTD	Sample Type: AIR
Operator: 403648	
Method File: /var/chem/gcms/mr.i/R041613.b/TO15.m	
Misc Info: R041613,TO15,blkchkloyny.sub	

COMPOUND =====	STANDARD =====	AREA LIMIT		SAMPLE =====	%DIFF =====
		LOWER =====	UPPER =====		
1 Bromochloromethan	294767	175386	414148	260594	-11.59
2 1,4-Difluorobenze	1529291	909928	2148654	1363173	-10.86
3 Chlorobenzene-d5	1257555	748245	1766865	1042048	-17.14

COMPOUND =====	STANDARD =====	RT LIMIT		SAMPLE =====	%DIFF =====
		LOWER =====	UPPER =====		
1 Bromochloromethan	8.87	8.54	9.20	8.87	-0.06
2 1,4-Difluorobenze	11.14	10.81	11.47	11.13	-0.05
3 Chlorobenzene-d5	17.44	17.11	17.77	17.41	-0.13

AREA UPPER LIMIT = + 40% of internal standard area.

AREA LOWER LIMIT = - 40% of internal standard area.

RT UPPER LIMIT = + 0.33 minutes of internal standard RT.

RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /var/chem/gcms/mr.i/R041613.b/rblkd16.d
 Report Date: 16-Apr-2013 19:32

TestAmerica Knoxville

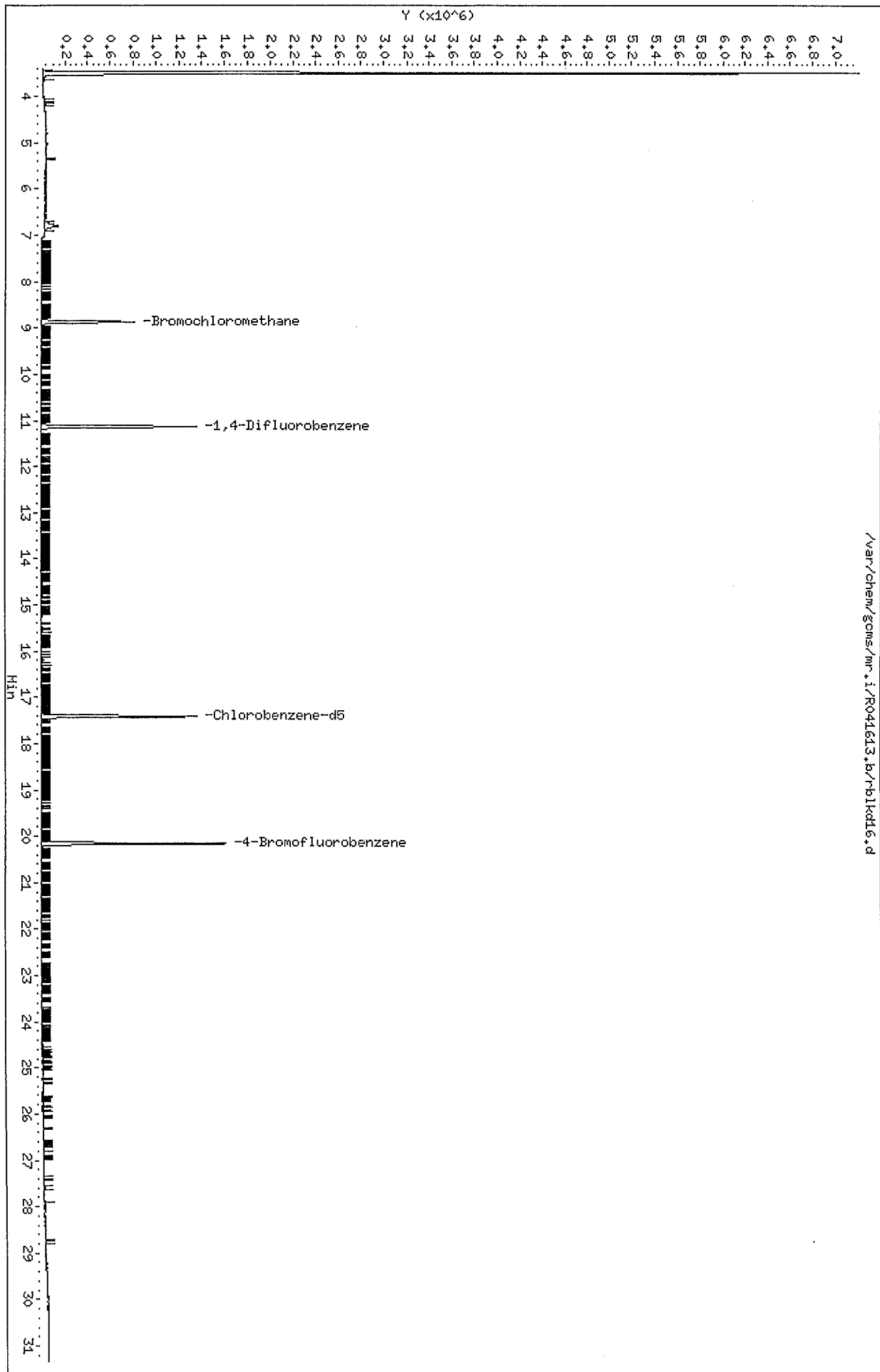
RECOVERY REPORT

Client Name:	Client SDG: R041613
Sample Matrix: GAS	Fraction: OTHER
Lab Smp Id: M0L0V1AA	Client Smp ID: cn 7494
Level: LOW	Operator: 403648
Data Type: MS DATA	SampleType: BLANK
SpikeList File: allnew.spk	Quant Type: ISTD
Sublist File: 1-all.sub	
Method File: /var/chem/gcms/mr.i/R041613.b/TO15.m	
Misc Info: R041613,TO15,blkchkloony.sub	

SURROGATE COMPOUND	CONC ADDED ppb (v/v)	CONC RECOVERED ppb (v/v)	% RECOVERED	LIMITS
\$ 4 4-Bromofluorobenze	4.000	4.572	114.30	70-130

Data File: /var/chem/gcms/mr.i/R041613.b/rb1kd16.d
Date: 16-APR-2013 12:52
Client ID: cn 7494
Sample Info: H0LOV1A6,3,,cn 7494
Purge Volume: 500.0
Column phase: Rtx-5

Instrument: mr.i
Operator: 403648
Column diameter: 0.32



Data File: /var/chem/gcms/mr.i/R041613.b/rblkd16.d

Date: 16-APR-2013 12:52

Client ID: cn 7494

Instrument: mr.i

Sample Info: MOL0V1AA,,3,,,cn 7494

Purge Volume: 500.0

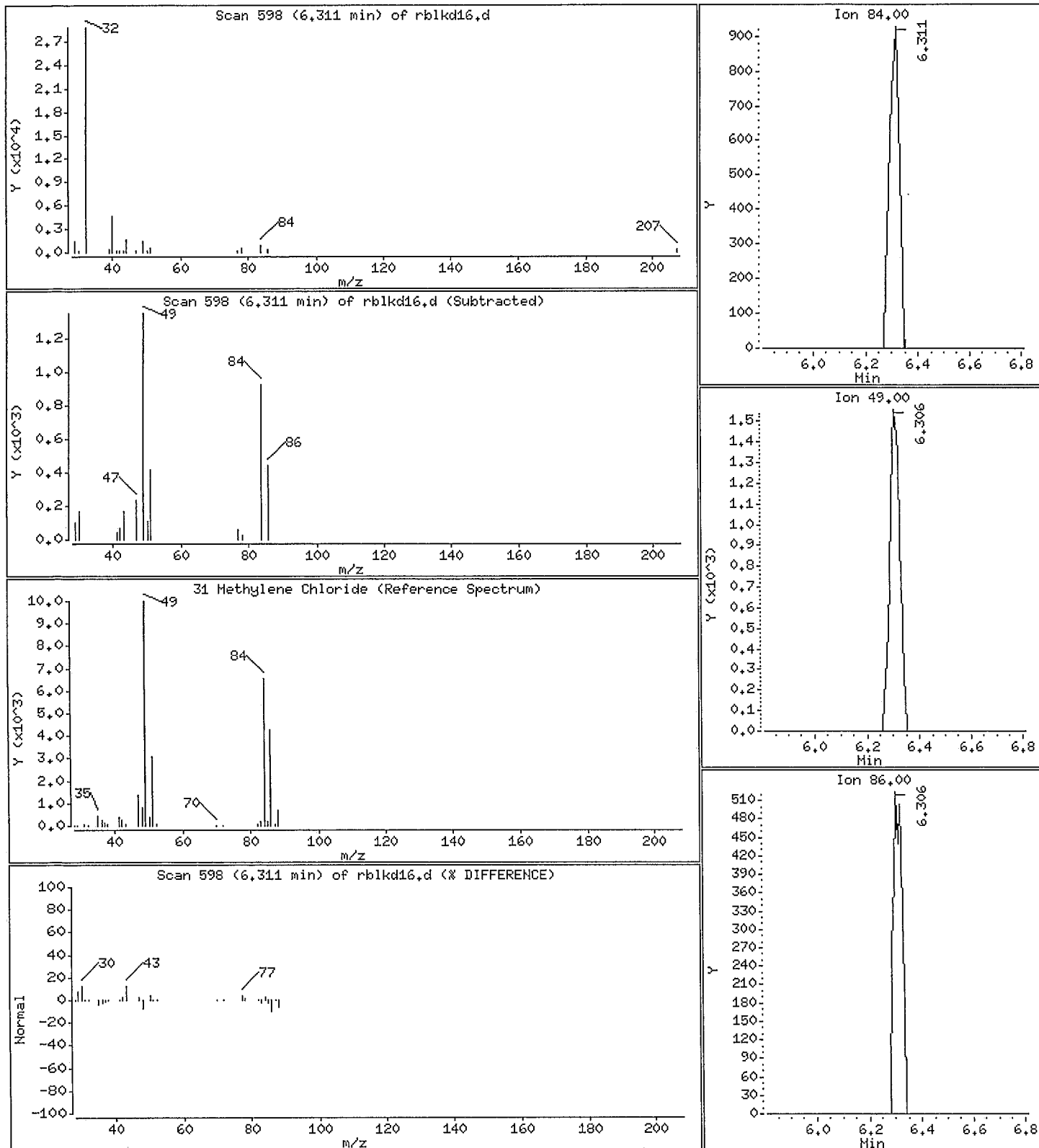
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

31 Methylene Chloride

Concentration: 0.02282 ppb(v/v)



Data File: /var/chem/gcms/mr.i/R041613.b/rblkd16.d

Date: 16-APR-2013 12:52

Client ID: cn 7494

Instrument: mr.i

Sample Info: MOL0V1AA,,3,,,cn 7494

Purge Volume: 500.0

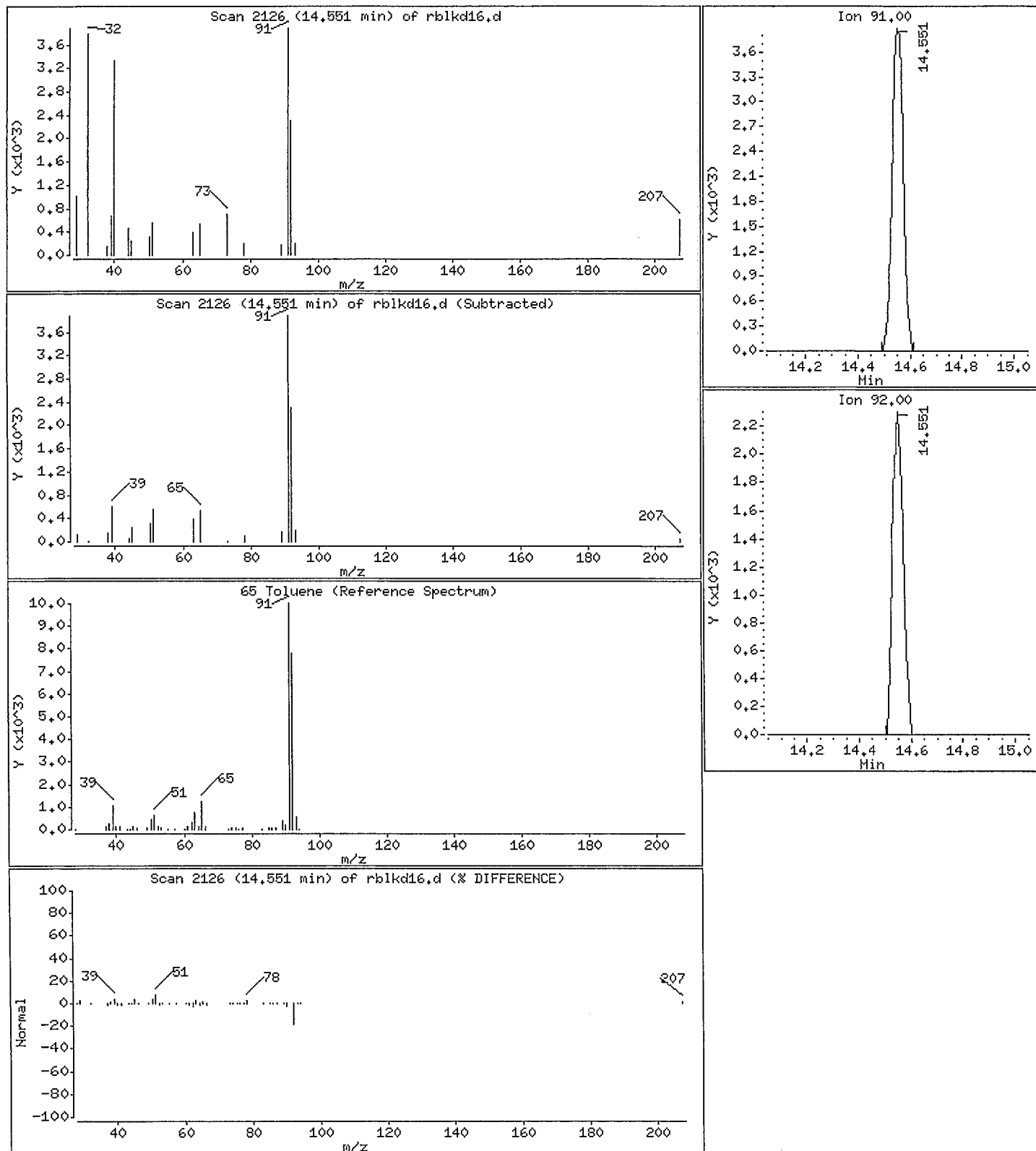
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

65 Toluene

Concentration: 0.02424 ppb(v/v)



New York State D.E.C.

Client Sample ID: CHECK SAMPLE

GC/MS Volatiles

Lot-Sample # H3D160000 - 043C Work Order # M0L0V1AC Matrix.....: AIR

Prep Date.....: 04/11/2013 Date Received...: 04/15/2013

Prep Batch #.....: 3106043 Analysis Date...: 04/16/2013

Dilution Factor.: 1 Method.....: TO-15

PARAMETER	SPIKE AMOUNT (ppb(v/v))	MEASURED AMOUNT (ppb(v/v))	SPIKE AMOUNT (ug/m3)	MEASURED AMOUNT (ug/m3)	PERCENT RECOVERY	RECOVERY LIMITS
1,1,1-Trichloroethane	5.00	5.42	27	29.5	108	70 - 130
1,1,2,2-Tetrachloroethane	5.00	4.50	34	30.9	90	70 - 130
1,1,2-Trichlorotrifluoroethane	5.00	4.91	38	37.6	98	70 - 130
1,1,2-Trichloroethane	5.00	4.46	27	24.3	89	70 - 130
1,1-Dichloroethane	5.00	5.72	20	23.1	114	70 - 130
1,1-Dichloroethene	5.00	4.77	20	18.9	95	70 - 130
1,2,4-Trichlorobenzene	5.00	4.10	37	30.4	82	60 - 140
1,2,4-Trimethylbenzene	5.00	4.25	25	20.9	85	70 - 130
1,2-Dibromoethane (EDB)	5.00	4.33	38	33.3	87	70 - 130
1,2-Dichlorobenzene	5.00	3.90	30	23.4	78	70 - 130
1,2-Dichloroethane	5.00	5.75	20	23.3	115	70 - 130
1,2-Dichloropropane	5.00	5.42	23	25.0	108	70 - 130
1,3,5-Trimethylbenzene	5.00	4.06	25	20.0	81	70 - 130
1,4-Dichlorobenzene	5.00	3.97	30	23.8	79	70 - 130
1,4-Dioxane	5.00	4.90	18	17.7	98	60 - 140
2-Butanone (MEK)	5.00	5.12	15	15.1	102	60 - 140
1,3-Dichlorobenzene	5.00	3.91	30	23.5	78	70 - 130
2,2,4-Trimethylpentane	5.00	5.60	23	26.2	112	70 - 130
Benzene	5.00	4.92	16	15.7	98	70 - 130
Benzyl chloride	5.00	4.72	26	24.4	94	70 - 130
Bromodichloromethane	5.00	5.52	34	37.0	110	70 - 130
Bromoform	5.00	3.47	52	35.8	69	60 - 140
Bromomethane	5.00	4.28	19	16.6	86	70 - 130
Carbon tetrachloride	5.00	6.40	31	40.3	128	70 - 130
Chlorobenzene	5.00	4.03	23	18.5	81	70 - 130
Chloroethane	5.00	4.88	13	12.9	98	70 - 130
Chloroform	5.00	5.45	24	26.6	109	70 - 130
Cyclohexane	5.00	5.08	17	17.5	102	70 - 130
Chloromethane	5.00	5.71	10	11.8	114	60 - 140
cis-1,2-Dichloroethene	5.00	4.97	20	19.7	99	70 - 130
cis-1,3-Dichloropropene	5.00	5.24	23	23.8	105	70 - 130
Dibromochloromethane	5.00	4.35	43	37.0	87	70 - 130
Dichlorodifluoromethane	5.00	5.12	25	25.3	102	60 - 140
Ethanol	25.0	37.5	47	70.7	150	20 - 180
Ethylbenzene	5.00	4.31	22	18.7	86	70 - 130
1,2-Dichloro-1,1,2,2-tetrafluoroethane	5.00	4.24	35	29.6	85	60 - 140

New York State D.E.C.

Client Sample ID: CHECK SAMPLE

GC/MS Volatiles

Lot-Sample #	H3D160000 - 043C	Work Order #	M0L0V1AC	Matrix.....:	AIR	
PARAMETER	SPIKE AMOUNT (ppb(v/v))	MEASURED AMOUNT (ppb(v/v))	SPIKE AMOUNT (ug/m3)	MEASURED AMOUNT (ug/m3)	PERCENT RECOVERY	RECOVERY LIMITS
n-Hexane	5.00	5.76	18	20.3	115	70 - 130
Hexachlorobutadiene	5.00	3.48	53	37.1	70	60 - 140
4-Methyl-2-pentanone (MIBK)	5.00	6.97	20	28.6	139	60 - 140
Methyl tert-butyl ether	5.00	5.42	18	19.5	108	60 - 140
Methylene chloride	5.00	5.08	17	17.6	102	70 - 130
Styrene	5.00	4.41	21	18.8	88	70 - 130
tert-Butyl alcohol	5.00	5.86	15	17.8	117	60 - 140
Tetrachloroethene	5.00	3.92	34	26.6	78	70 - 130
Toluene	5.00	4.24	19	16.0	85	70 - 130
m-Xylene & p-Xylene	10.0	8.79	43	38.2	88	70 - 130
o-Xylene	5.00	4.32	22	18.8	86	70 - 130
trans-1,2-Dichloroethene	5.00	4.84	20	19.2	97	70 - 130
trans-1,3-Dichloropropene	5.00	4.70	23	21.3	94	70 - 130
Trichloroethene	5.00	4.43	27	23.8	89	70 - 130
Trichlorofluoromethane	5.00	5.11	28	28.7	102	60 - 140
Vinyl chloride	5.00	5.05	13	12.9	101	70 - 130
SURROGATE			PERCENT RECOVERY		LABORATORY CONTROL LIMITS (%)	
4-Bromofluorobenzene			113		60 - 140	

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)*(Molecular Weight/24.45)

The 'Reporting Limit' in ug/m3 is calculated using the following equation: (Reporting Limit(before rounding) * Dilution Factor) * (Molecular Weight/24.45)

Data File: /var/chem/gcms/mr.i/R041613.b/rlcsd16.d
 Report Date: 16-Apr-2013 19:34

TestAmerica Knoxville

Modified Method TO-14/TO-15

Data file : /var/chem/gcms/mr.i/R041613.b/rlcsd16.d
 Lab Smp Id: M0L0V1AC Client Smp ID: CCV/LCS
 Inj Date : 16-APR-2013 10:51
 Operator : 403648 Inst ID: mr.i
 Smp Info : M0L0V1AC,,2,6,,CCV/LCS
 Misc Info : R041613,TO15,
 Comment :
 Method : /var/chem/gcms/mr.i/R041613.b/TO15.m
 Meth Date : 16-Apr-2013 19:25 barlozha Quant Type: ISTD
 Cal Date : 20-FEB-2013 20:14 Cal File: ricb205.d
 Als bottle: 1 QC Sample: LCS
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 3.50

Concentration Formula: Amt * DF * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Default Calibration Volume
Vo	200.00000	Default Sample Volume

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG	CONCENTRATIONS					
		MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN FINAL
						(ppb (v/v))	(ppb (v/v))
=====	=====	=====	=====	=====	=====	=====	=====
* 1 Bromochloromethane	128	8.873	8.873	(1.000)	294767	4.00000	4.000
* 2 1,4-Difluorobenzene	114	11.138	11.138	(1.000)	1529291	4.00000	4.000
* 3 Chlorobenzene-d5	117	17.436	17.436	(1.000)	1257555	4.00000	4.000
\$ 4 4-Bromofluorobenzene	95	20.170	20.170	(1.157)	995775	4.52274	11.31
M 83 Xylene (total)	100				2679281	5.24218	13.10
5 Chlorodifluoromethane	67	3.664	3.664	(0.413)	66468	2.20739	5.518
6 Propene	41	3.669	3.669	(0.414)	235616	2.62950	6.574
7 Dichlorodifluoromethane	85	3.723	3.723	(0.420)	629243	2.04858	5.121
8 Chloromethane	52	3.907	3.907	(0.440)	85710	2.28279	5.707
9 1,2-Dichlorotetrafluoroethane	135	3.917	3.917	(0.441)	415180	1.69600	4.240
10 Methanol	31	4.063	4.063	(0.458)	82473	3.01539	7.538 (R)
11 ~ acetaldehyde	44	4.058	4.058	(0.457)	544050	12.3199	30.80
12 Vinyl Chloride	62	4.079	4.079	(0.460)	260774	2.01840	5.046
13 n-Butane	43	4.176	4.176	(0.471)	451462	2.36535	5.913
14 1,3-Butadiene	54	4.171	4.171	(0.470)	214651	2.11510	5.288
15 Bromomethane	94	4.500	4.500	(0.507)	205292	1.71118	4.278

Data File: /var/chem/gcms/mr.i/R041613.b/rlcsd16.d

Report Date: 16-Apr-2013 19:34

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ppb (v/v))	FINAL (ppb (v/v))
=====	=====	==	=====	=====	=====	=====	=====
16 Chloroethane	64	4.645	4.645	(0.524)	127306	1.95124	4.878
17 ~ ethanol	31	4.775	4.775	(0.538)	606849	15.0110	37.53 (R)
18 Vinyl Bromide	106	4.963	4.963	(0.559)	217177	1.79858	4.496
19 2-methyl butane	43	5.023	5.023	(0.566)	358799	2.47398	6.185
20 Trichlorofluoromethane	101	5.244	5.244	(0.591)	609573	2.04261	5.106
21 Acrolein	56	5.238	5.238	(0.590)	95125	2.15532	5.388
22 Acetonitrile	40	5.303	5.303	(0.598)	123818	2.75452	6.886
25 Pentane	72	5.481	5.481	(0.618)	49186	2.06929	5.173
23 Acetone	58	5.362	5.362	(0.604)	123576	2.04284	5.107
24 Isopropyl alcohol	45	5.481	5.481	(0.618)	449112	2.65943	6.648
26 Ethyl Ether	31	5.643	5.643	(0.636)	397577	3.16877	7.922 (R)
27 1,1-Dichloroethene	96	5.966	5.966	(0.672)	225796	1.90885	4.772
29 Acrylonitrile	53	6.047	6.047	(0.682)	216966	2.37113	5.928
30 1,1,2-Trichlorotrifluoroethane	101	6.161	6.161	(0.694)	483260	1.96494	4.912
28 tert-butanol	59	6.090	6.090	(0.686)	473847	2.34609	5.865
31 Methylene Chloride	84	6.312	6.312	(0.711)	215624	2.03024	5.076
32 3-Chloropropene	39	6.333	6.333	(0.714)	246184	2.94222	7.356 (R)
33 Carbon Disulfide	76	6.479	6.479	(0.730)	710475	2.09488	5.237
35 ~ 2-Methyl Pentane	43	7.180	7.180	(0.809)	730631	2.76902	6.922 (R)
34 trans-1,2-Dichloroethene	96	7.142	7.142	(0.805)	236874	1.93773	4.844
36 Methyl-t-Butyl Ether	73	7.277	7.277	(0.820)	676831	2.16594	5.415
37 1,1-Dichloroethane	63	7.557	7.557	(0.852)	484665	2.28587	5.715
38 Vinyl Acetate	43	7.665	7.665	(0.864)	796272	2.82279	7.057 (R)
39 2-Butanone	72	8.107	8.107	(0.914)	121211	2.04810	5.120
40 Hexane	56	8.177	8.177	(0.922)	233344	2.30398	5.760
41 cis 1,2-Dichloroethene	96	8.549	8.549	(0.964)	246155	1.98639	4.966
42 Ethyl acetate	43	8.738	8.738	(0.985)	707200	2.83104	7.078 (R)
43 Chloroform	83	8.900	8.900	(1.003)	515542	2.18184	5.454
44 Tetrahydrofuran	42	9.304	9.304	(1.049)	368717	2.76673	6.917
45 1,1,1-Trichloroethane	97	9.941	9.941	(1.120)	497803	2.16658	5.416
46 1,2-Dichloroethane	62	10.027	10.027	(0.900)	385163	2.30022	5.750
49 Cyclohexane	69	10.572	10.572	(0.949)	122127	2.03417	5.085
48 Benzene	78	10.550	10.550	(0.947)	762159	1.96890	4.922
50 Carbon Tetrachloride	117	10.588	10.588	(0.951)	512188	2.56132	6.403
51 ~ 2,3-dimethylpentane	71	10.717	10.717	(0.962)	165677	2.03282	5.082
47 1-Butanol	31	10.534	10.534	(0.946)	123637	3.28167	8.204 (R)
52 ~ Thiophene	84	10.836	10.836	(0.973)	442022	1.95499	4.887
53 2,2,4-trimethylpentane	57	11.424	11.424	(1.026)	1404260	2.23958	5.599
54 Heptane	71	11.855	11.855	(1.064)	277089	2.03990	5.100
55 1,2-Dichloropropane	63	11.893	11.893	(1.068)	307701	2.16816	5.420
56 Trichloroethene	130	11.947	11.947	(1.073)	304822	1.77022	4.426
180 ~ 2-nitropropane	43	11.855	11.855	(1.064)	603993		
57 Dibromomethane	93	12.022	12.022	(1.079)	282057	2.03392	5.085
58 Bromodichloromethane	83	12.205	12.205	(1.096)	543083	2.20713	5.518
60 Methyl Methacrylate	41	12.340	12.340	(1.108)	436982	2.85443	7.136 (R)
59 1,4-dioxane	88	12.222	12.222	(1.097)	107274	1.96110	4.903
61 ~ methyl cyclohexane	83	12.896	12.896	(1.158)	450350	1.95926	4.898

Data File: /var/chem/gcms/mr.i/R041613.b/rlcsd16.d
 Report Date: 16-Apr-2013 19:34

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ppb (v/v))	FINAL (ppb (v/v))
=====	=====	==	=====	=====	=====	=====	=====
63 cis-1,3-Dichloropropene	75	13.451	13.451	(1.208)	421337	2.09674	5.242
62 4-Methyl-2-pentanone	43	13.386	13.386	(1.202)	762032	2.78863	6.972
64 trans-1,3-Dichloropropene	75	14.373	14.373	(0.824)	429055	1.88175	4.704
65 Toluene	91	14.551	14.551	(0.835)	884262	1.69472	4.237
66 1,1,2-Trichloroethane	83	14.637	14.637	(0.839)	260051	1.78233	4.456
67 ~ 2-methyl thiophene	97	14.756	14.756	(0.846)	750371	1.70020	4.250
68 ~ 3-methyl thiophene	97	15.031	15.031	(0.862)	766742	1.69776	4.244
69 2-Hexanone	58	15.198	15.198	(0.872)	334335	2.10465	5.262
70 Octane	85	15.592	15.592	(0.894)	291801	1.70157	4.254
71 Dibromochloromethane	129	15.613	15.613	(0.895)	460293	1.73942	4.348
72 1,2-Dibromoethane	107	16.029	16.029	(0.919)	447901	1.73118	4.328
73 Tetrachloroethene	129	16.180	16.180	(0.928)	289768	1.56799	3.920
75 ~ 2,3-dimethylheptane	43	17.652	17.652	(1.012)	1091073	2.36037	5.901
74 Chlorobenzene	112	17.512	17.512	(1.004)	663359	1.61146	4.029
76 Ethylbenzene	91	18.008	18.008	(1.033)	1129112	1.72320	4.308
77 ~ 2-ethyl thiophene	97	18.164	18.164	(1.042)	856193	1.73615	4.340
78 m&p-Xylene	91	18.277	18.277	(1.048)	1777902	3.51488	8.787
79 Nonane	57	19.081	19.081	(1.094)	688500	2.02399	5.060
80 Bromoform	173	18.935	18.935	(1.086)	329547	1.38648	3.466
81 Styrene	104	19.038	19.038	(1.092)	633401	1.76316	4.408
82 o-Xylene	91	19.140	19.140	(1.098)	901379	1.72730	4.318
84 1,1,2,2-Tetrachloroethane	83	19.668	19.668	(1.128)	678771	1.80185	4.505
85 1,2,3-Trichloropropane	110	19.938	19.938	(1.143)	190114	1.66369	4.159
86 Cumene	105	20.159	20.159	(1.156)	1270911	1.68566	4.214
87 n-Propylbenzene	120	21.114	21.114	(1.211)	350320	1.62069	4.052
88 2-chlorotoluene	126	21.146	21.146	(1.213)	312978	1.59311	3.983
89 4-Ethyltoluene	105	21.405	21.405	(1.228)	1296895	1.67912	4.198
90 1,3,5-Trimethylbenzene	120	21.556	21.556	(1.236)	592267	1.62567	4.064
91 Alpha-Methylstyrene	118	21.987	21.987	(1.261)	489403	1.71198	4.280
92 Decane	57	22.246	22.246	(1.276)	886586	2.07659	5.191
93 tert-butylbenzene	119	22.359	22.359	(1.282)	1120995	1.63326	4.083
94 1,2,4-Trimethylbenzene	105	22.392	22.392	(1.284)	1084697	1.70174	4.254
95 sec-butylbenzene	105	22.920	22.920	(1.315)	1578209	1.68059	4.201
96 1,3-Dichlorobenzene	146	22.877	22.877	(1.312)	675871	1.56512	3.913
97 Benzyl Chloride	91	23.044	23.044	(1.322)	1021867	1.88653	4.716
98 1,4-Dichlorobenzene	146	23.060	23.060	(1.323)	688531	1.58632	3.966
99 p-Cymene	119	23.281	23.281	(1.335)	1309713	1.64165	4.104
100 ~ 1,2,3- Trimethylbenzene	105	23.341	23.341	(1.339)	976451	1.70566	4.264
101 ~ n-butylcyclohexane	83	23.529	23.529	(1.349)	916549	1.76208	4.405
102 ~ Indane	117	23.831	23.831	(1.367)	999875	1.62715	4.068
103 1,2-Dichlorobenzene	146	23.810	23.810	(1.366)	648141	1.55977	3.899
104 n-butylbenzene	91	24.230	24.230	(1.390)	1344957	1.80490	4.512
105 ~ Indene	116	24.106	24.106	(1.383)	998230	1.72360	4.309
106 Undecane	57	25.120	25.120	(1.441)	1068644	2.14258	5.356
107 ~ 1,2-dimethyl-4-ethylenzene	119	25.082	25.082	(1.439)	1326225	1.66588	4.165
108 ~ 1,2,4,5-tetramethylbenzene	119	25.999	25.999	(1.491)	1377067	1.69132	4.228
109 ~ 1,2,3,5-tetramethylbenzene	119	26.123	26.123	(1.498)	850021	1.66575	4.164

Data File: /var/chem/gcms/mr.i/R041613.b/rlcsd16.d
 Report Date: 16-Apr-2013 19:34

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ppb (v/v))	FINAL (ppb (v/v))
=====	=====	==	=====	=====	=====	=====	=====
110 ~ 1,2,3,4-tetramethylbenzene	119	27.002	27.002	(1.549)	1145890	1.71911	4.298
111 Dodecane	57	27.579	27.579	(1.582)	1059794	2.50170	6.254
112 1,2,4-Trichlorobenzene	180	27.682	27.682	(1.588)	593319	1.63996	4.100
113 Napthalene	128	27.913	27.913	(1.601)	1559232	1.80921	4.523
114 ~ benzo(b) thiophene	134	28.108	28.108	(1.612)	1065368	1.72833	4.321
115 Hexachlorobutadiene	225	28.431	28.431	(1.631)	483160	1.39185	3.480
116 1,2,3-trichlorobenzene	180	28.474	28.474	(1.633)	592432	1.63578	4.089
117 ~ 2-Methylnaphthalene	142	29.925	29.925	(1.716)	963035	11.2106	28.03
118 ~ 1-Methylnaphthalene	142	30.227	30.227	(1.734)	882185	11.7221	29.30

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: /var/chem/gcms/mr.i/R041613.b/rlcsd16.d
 Report Date: 16-Apr-2013 19:34

TestAmerica Knoxville

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: mr.i	Calibration Date: 16-APR-2013
Lab File ID: rlcsd16.d	Calibration Time: 10:51
Lab Smp Id: M0L0V1AC	Client Smp ID: CCV/LCS
Analysis Type: OTHER	Level: LOW
Quant Type: ISTD	Sample Type: AIR
Operator: 403648	
Method File: /var/chem/gcms/mr.i/R041613.b/TO15.m	
Misc Info: R041613,TO15,	

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
1 Bromochloromethan	294767	175386	414148	294767	0.00
2 1,4-Difluorobenze	1529291	909928	2148654	1529291	0.00
3 Chlorobenzene-d5	1257555	748245	1766865	1257555	0.00

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
1 Bromochloromethan	8.87	8.54	9.20	8.87	0.00
2 1,4-Difluorobenze	11.14	10.81	11.47	11.14	0.00
3 Chlorobenzene-d5	17.44	17.11	17.77	17.44	0.00

AREA UPPER LIMIT = + 40% of internal standard area.

AREA LOWER LIMIT = - 40% of internal standard area.

RT UPPER LIMIT = + 0.33 minutes of internal standard RT.

RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /var/chem/gcms/mr.i/R041613.b/rlcsd16.d
 Report Date: 16-Apr-2013 19:34

TestAmerica Knoxville

RECOVERY REPORT

Client Name:	Client SDG: R041613
Sample Matrix: GAS	Fraction: OTHER
Lab Smp Id: M0L0V1AC	Client Smp ID: CCV/LCS
Level: LOW	Operator: 403648
Data Type: MS DATA	SampleType: LCS
SpikeList File: allnew.spk	Quant Type: ISTD
Sublist File: all.sub	
Method File: /var/chem/gcms/mr.i/R041613.b/TO15.m	
Misc Info: R041613,TO15,	

SPIKE COMPOUND	CONC ADDED ppb (v/v)	CONC RECOVERED ppb (v/v)	% RECOVERED	LIMITS
5 Chlorodifluorometh	5.000	5.518	110.37	60-140
6 Propene	5.000	6.574	131.47	60-140
7 Dichlorodifluorome	5.000	5.121	102.43	60-140
8 Chloromethane	5.000	5.707	114.14	60-140
9 1,2-Dichlorotetra	5.000	4.240	84.80	60-140
10 Methanol	5.000	7.538	150.77*	60-140
11 ~ acetaldehyde	25.00	30.80	123.20	70-130
12 Vinyl Chloride	5.000	5.046	100.92	70-130
13 n-Butane	5.000	5.913	118.27	60-140
14 1,3-Butadiene	5.000	5.288	105.75	60-140
15 Bromomethane	5.000	4.278	85.56	70-130
16 Chloroethane	5.000	4.878	97.56	70-130
17 ~ ethanol	25.00	37.53	150.11*	70-130
18 Vinyl Bromide	5.000	4.496	89.93	60-140
19 2-methyl butane	5.000	6.185	123.70	70-130
20 Trichlorofluoromet	5.000	5.106	102.13	60-140
21 Acrolein	5.000	5.388	107.77	60-140
22 Acetonitrile	5.000	6.886	137.73	60-140
23 Acetone	5.000	5.107	102.14	60-140
25 Pentane	5.000	5.173	103.46	70-130
24 Isopropyl alcohol	5.000	6.648	132.97	60-140
26 Ethyl Ether	5.000	7.922	158.44*	60-140
27 1,1-Dichloroethene	5.000	4.772	95.44	70-130
28 tert-butanol	5.000	5.865	117.30	60-140
29 Acrylonitrile	5.000	5.928	118.56	60-140
30 1,1,2-Trichlorotri	5.000	4.912	98.25	70-130
31 Methylene Chloride	5.000	5.076	101.51	70-130
32 3-Chloropropene	5.000	7.356	147.11*	60-140
33 Carbon Disulfide	5.000	5.237	104.74	70-130
34 trans-1,2-Dichloro	5.000	4.844	96.89	70-130
35 ~ 2-Methyl Pentane	5.000	6.922	138.45*	70-130
36 Methyl-t-Butyl Eth	5.000	5.415	108.30	60-140
37 1,1-Dichloroethane	5.000	5.715	114.29	70-130

Data File: /var/chem/gcms/mr.i/R041613.b/rlcsd16.d

Report Date: 16-Apr-2013 19:34

SPIKE COMPOUND	CONC ADDED ppb (v/v)	CONC RECOVERED ppb (v/v)	% RECOVERED	LIMITS
38 Vinyl Acetate	5.000	7.057	141.14*	60-140
39 2-Butanone	5.000	5.120	102.40	60-140
40 Hexane	5.000	5.760	115.20	70-130
41 cis 1,2-Dichloroet	5.000	4.966	99.32	70-130
42 Ethyl acetate	5.000	7.078	141.55*	60-140
43 Chloroform	5.000	5.454	109.09	70-130
44 Tetrahydrofuran	5.000	6.917	138.34	60-140
45 1,1,1-Trichloroeth	5.000	5.416	108.33	70-130
46 1,2-Dichloroethane	5.000	5.750	115.01	70-130
47 1-Butanol	5.000	8.204	164.08*	60-140
48 Benzene	5.000	4.922	98.45	70-130
49 Cyclohexane	5.000	5.085	101.71	70-130
50 Carbon Tetrachlori	5.000	6.403	128.07	70-130
51 ~ 2,3-dimethylpent	5.000	5.082	101.64	70-130
52 ~ Thiophene	5.000	4.887	97.75	70-130
53 2,2,4-trimethylpen	5.000	5.599	111.98	70-130
54 Heptane	5.000	5.100	101.99	70-130
55 1,2-Dichloropropan	5.000	5.420	108.41	70-130
56 Trichloroethene	5.000	4.426	88.51	70-130
57 Dibromomethane	5.000	5.085	101.70	70-130
58 Bromodichlorometha	5.000	5.518	110.36	70-130
59 1,4-dioxane	5.000	4.903	98.06	60-140
60 Methyl Methacrylat	5.000	7.136	142.72*	60-140
61 ~ methyl cyclohexa	5.000	4.898	97.96	70-130
62 4-Methyl-2-pentano	5.000	6.972	139.43	60-140
63 cis-1,3-Dichloropr	5.000	5.242	104.84	70-130
64 trans-1,3-Dichloro	5.000	4.704	94.09	70-130
65 Toluene	5.000	4.237	84.74	70-130
66 1,1,2-Trichloroeth	5.000	4.456	89.12	70-130
67 ~ 2-methyl thiophe	5.000	4.250	85.01	70-130
68 ~ 3-methyl thiophe	5.000	4.244	84.89	70-130
69 2-Hexanone	5.000	5.262	105.23	60-140
70 Octane	5.000	4.254	85.08	70-130
71 Dibromochlorometha	5.000	4.348	86.97	70-130
72 1,2-Dibromoethane	5.000	4.328	86.56	70-130
73 Tetrachloroethene	5.000	3.920	78.40	70-130
74 Chlorobenzene	5.000	4.029	80.57	70-130
75 ~ 2,3-dimethylhept	5.000	5.901	118.02	70-130
76 Ethylbenzene	5.000	4.308	86.16	70-130
77 ~ 2-ethyl thiophen	5.000	4.340	86.81	70-130
78 m&p-Xylene	10.00	8.787	87.87	70-130
M 83 Xylene (total)	15.00	13.10	87.37	70-130
79 Nonane	5.000	5.060	101.20	60-140
80 Bromoform	5.000	3.466	69.32	60-140
81 Styrene	5.000	4.408	88.16	70-130
82 o-Xylene	5.000	4.318	86.36	70-130
84 1,1,2,2-Tetrachlor	5.000	4.505	90.09	70-130

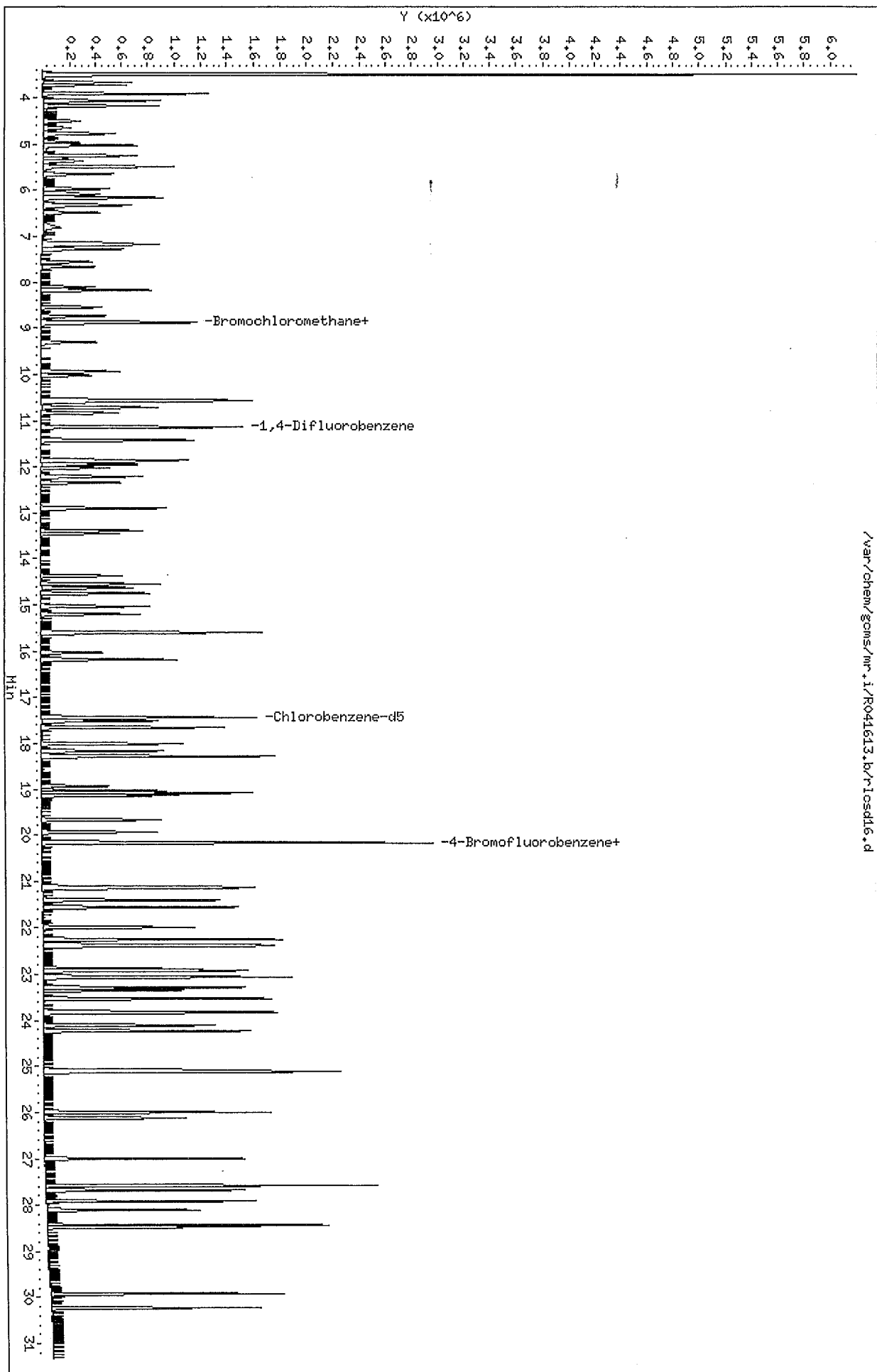
Data File: /var/chem/gcms/mr.i/R041613.b/rlcsd16.d
 Report Date: 16-Apr-2013 19:34

SPIKE COMPOUND	CONC ADDED ppb (v/v)	CONC RECOVERED ppb (v/v)	% RECOVERED	LIMITS
85 1,2,3-Trichloropro	5.000	4.159	83.18	60-140
86 Cumene	5.000	4.214	84.28	70-130
87 n-Propylbenzene	5.000	4.052	81.03	70-130
88 2-chlorotoluene	5.000	3.983	79.66	70-130
89 4-Ethyltoluene	5.000	4.198	83.96	70-130
90 1,3,5-Trimethylben	5.000	4.064	81.28	70-130
91 Alpha-Methylstyren	5.000	4.280	85.60	60-140
92 Decane	5.000	5.191	103.83	60-140
93 tert-butylbenzene	5.000	4.083	81.66	70-130
94 1,2,4-Trimethylben	5.000	4.254	85.09	70-130
95 sec-butylbenzene	5.000	4.201	84.03	70-130
96 1,3-Dichlorobenzen	5.000	3.913	78.26	70-130
97 Benzyl Chloride	5.000	4.716	94.33	70-130
98 1,4-Dichlorobenzen	5.000	3.966	79.32	70-130
99 p-Cymene	5.000	4.104	82.08	70-130
100 ~ 1,2,3- Trimethyl	5.000	4.264	85.28	70-130
101 ~ n-butylcyclohexa	5.000	4.405	88.10	70-130
102 ~ Indane	5.000	4.068	81.36	70-130
103 1,2-Dichlorobenzen	5.000	3.899	77.99	70-130
104 n-butylbenzene	5.000	4.512	90.25	60-140
105 ~ Indene	5.000	4.309	86.18	70-130
106 Undecane	5.000	5.356	107.13	60-140
107 ~ 1,2-dimethyl-4-e	5.000	4.165	83.29	70-130
108 ~ 1,2,4,5-tetramet	5.000	4.228	84.57	70-130
109 ~ 1,2,3,5-tetramet	5.000	4.164	83.29	70-130
110 ~ 1,2,3,4-tetramet	5.000	4.298	85.96	70-130
111 Dodecane	5.000	6.254	125.08	60-140
112 1,2,4-Trichloroben	5.000	4.100	82.00	60-140
113 Napthalene	5.000	4.523	90.46	40-140
114 ~ benzo(b) thiophe	5.000	4.321	86.42	70-130
115 Hexachlorobutadien	5.000	3.480	69.59	60-140
116 1,2,3-trichloroben	5.000	4.089	81.79	40-140
117 ~ 2-Methylnaphthal	31.25	28.03	89.68	70-130
118 ~ 1-Methylnaphthal	31.25	29.30	93.78	70-130

SURROGATE COMPOUND	CONC ADDED ppb (v/v)	CONC RECOVERED ppb (v/v)	% RECOVERED	LIMITS
\$ 4 4-Bromofluorobenze	10.00	11.31	113.07	70-130

Data File: /var/chem/gcms/mr.i/R041613.b/r10sdl6.d
Date : 16-APR-2013 10:51
Client ID: CCV/LCS
Sample Info: H0L0W1AC,,2,6,CCV/LCS
Purge Volume: 200.0
Column phase: Rtx-5

Instrument: mr.i
Operator: 403648
Column diameter: 0.32



New York State D.E.C.
Client Sample ID: INTRA-LAB BLANK
GC/MS Volatiles

Lot-Sample #	H3D170000 - 088B	Work Order #	M0MCP1AA	Matrix.....:	AIR
	04/12/2013	Date Received..:	04/15/2013		
Prep Date.....:	04/17/2013	Analysis Date...	04/17/2013		
Prep Batch #.....:	3107088				
Dilution Factor.:	1	Method.....:	TO-15		

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
1,1,1-Trichloroethane	ND	0.080	ND	0.44
1,1,2,2-Tetrachloroethane	ND	0.080	ND	0.55
1,1,2-Trichlorotrifluoroethane	ND	0.080	ND	0.61
1,1,2-Trichloroethane	ND	0.080	ND	0.44
1,1-Dichloroethane	ND	0.080	ND	0.32
1,1-Dichloroethene	ND	0.080	ND	0.32
1,2,4-Trichlorobenzene	ND	0.080	ND	0.59
1,2,4-Trimethylbenzene	ND	0.080	ND	0.39
1,2-Dibromoethane (EDB)	ND	0.080	ND	0.61
1,2-Dichlorobenzene	ND	0.080	ND	0.48
1,2-Dichloroethane	ND	0.080	ND	0.32
1,2-Dichloropropane	ND	0.080	ND	0.37
1,3,5-Trimethylbenzene	ND	0.080	ND	0.39
1,4-Dichlorobenzene	ND	0.080	ND	0.48
1,4-Dioxane	ND	0.20	ND	0.72
2-Butanone (MEK)	ND	0.32	ND	0.94
1,3-Dichlorobenzene	ND	0.080	ND	0.48
2,2,4-Trimethylpentane	ND	0.20	ND	0.93
Benzene	ND	0.080	ND	0.26
Benzyl chloride	ND	0.16	ND	0.83
Bromodichloromethane	ND	0.080	ND	0.54
Bromoform	ND	0.080	ND	0.83
Bromomethane	ND	0.080	ND	0.31
Carbon tetrachloride	ND	0.040	ND	0.25
Chlorobenzene	ND	0.080	ND	0.37
Chloroethane	ND	0.080	ND	0.21
Chloroform	ND	0.080	ND	0.39
Cyclohexane	ND	0.20	ND	0.69
Chloromethane	ND	0.20	ND	0.41
cis-1,2-Dichloroethene	ND	0.080	ND	0.32
cis-1,3-Dichloropropene	ND	0.080	ND	0.36
Dibromochloromethane	ND	0.080	ND	0.68
Dichlorodifluoromethane	ND	0.080	ND	0.40
Ethanol	ND	0.80	ND	1.5
Ethylbenzene	ND	0.080	ND	0.35
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.080	ND	0.56
n-Hexane	ND	0.20	ND	0.70

New York State D.E.C.
 Client Sample ID: INTRA-LAB BLANK
 GC/MS Volatiles

Lot-Sample # H3D170000 - 088B Work Order # M0MCP1AA Matrix.....: AIR

PARAMETER	RESULTS (ppb(v/v))	REPORTING LIMIT (ppb(v/v))	RESULTS (ug/m3)	REPORTING LIMIT (ug/m3)
Hexachlorobutadiene	ND	0.080	ND	0.85
4-Methyl-2-pentanone (MIBK)	ND	0.20	ND	0.82
Methyl tert-butyl ether	ND	0.16	ND	0.58
Methylene chloride	ND	0.20	ND	0.69
Styrene	ND	0.080	ND	0.34
tert-Butyl alcohol	ND	0.32	ND	0.97
Tetrachloroethene	ND	0.080	ND	0.54
Toluene	ND	0.080	ND	0.30
m-Xylene & p-Xylene	ND	0.080	ND	0.35
o-Xylene	ND	0.080	ND	0.35
trans-1,2-Dichloroethene	ND	0.080	ND	0.32
trans-1,3-Dichloropropene	ND	0.080	ND	0.36
Trichloroethene	ND	0.040	ND	0.21
Trichlorofluoromethane	ND	0.080	ND	0.45
Vinyl chloride	ND	0.080	ND	0.20

SURROGATE	PERCENT RECOVERY	LABORATORY CONTROL LIMITS (%)
4-Bromofluorobenzene	113	60 - 140

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)*(Molecular Weight/24.45)

The 'Reporting Limit' in ug/m3 is calculated using the following equation: (Reporting Limit(before rounding) * Dilution Factor) * (Molecular Weight/24.45)

Data File: /var/chem/gcms/mr.i/R041713.b/rblkd17.d
 Report Date: 17-Apr-2013 19:59

TestAmerica Knoxville

Modified Method TO-14/TO-15

Data file : /var/chem/gcms/mr.i/R041713.b/rblkd17.d
 Lab Smp Id: MOMCP1AA Client Smp ID: can 1353N
 Inj Date : 17-APR-2013 15:47
 Operator : 403648 Inst ID: mr.i
 Smp Info : MOMCP1AA,,3,,,can 1353N
 Misc Info : R041713,TO15,blkchklowny.sub
 Comment :
 Method : /var/chem/gcms/mr.i/R041713.b/TO15.m
 Meth Date : 17-Apr-2013 19:55 barlozha Quant Type: ISTD
 Cal Date : 20-FEB-2013 20:14 Cal File: ricb205.d
 Als bottle: 2 QC Sample: BLANK
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 1-all.sub
 Target Version: 3.50

Concentration Formula: Amt * DF * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Default Calibration Volume
Vo	500.00000	Default Sample Volume

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ppb (v/v))	FINAL (ppb (v/v))
* 1 Bromochloromethane		128	8.889	8.868	(1.000)	247729	4.00000	4.000
* 2 1,4-Difluorobenzene		114	11.148	11.132	(1.000)	1298881	4.00000	4.000
* 3 Chlorobenzene-d5		117	17.420	17.431	(1.000)	988749	4.00000	4.000
\$ 4 4-Bromofluorobenzene		95	20.159	20.165	(1.157)	782013	4.51747	4.517
13 n-Butane		43	4.187	4.171	(0.471)	6123	0.03817	0.03817
19 2-methyl butane		43	5.044	5.017	(0.567)	2708	0.02222	0.02222
24 Isopropyl Alcohol		45	5.546	5.481	(0.624)	3566	0.02513	0.02512
31 Methylene Chloride		84	6.328	6.306	(0.712)	6378	0.07146	0.07146
40 Hexane		56	8.199	8.172	(0.922)	1516	0.01781	0.01781
47 1-Butanol		31	10.588	10.528	(0.950)	2760	0.08625	0.08625
65 Toluene		91	14.551	14.546	(0.835)	9167	0.02235	0.02234

Handwritten signature/initials

Data File: /var/chem/gcms/mr.i/R041713.b/rblkd17.d
 Report Date: 17-Apr-2013 19:59

TestAmerica Knoxville

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: mr.i	Calibration Date: 17-APR-2013
Lab File ID: rblkd17.d	Calibration Time: 12:45
Lab Smp Id: M0MCP1AA	Client Smp ID: can 1353N
Analysis Type: OTHER	Level: LOW
Quant Type: ISTD	Sample Type: AIR
Operator: 403648	
Method File: /var/chem/gcms/mr.i/R041713.b/TO15.m	
Misc Info: R041713,TO15,blkchkloony.sub	

COMPOUND =====	STANDARD =====	AREA LIMIT		SAMPLE =====	%DIFF =====
		LOWER =====	UPPER =====		
1 Bromochloromethan	281891	167725	396057	247729	-12.12
2 1,4-Difluorobenze	1460036	868721	2051351	1298881	-11.04
3 Chlorobenzene-d5	1172674	697741	1647607	988749	-15.68

COMPOUND =====	STANDARD =====	RT LIMIT		SAMPLE =====	%DIFF =====
		LOWER =====	UPPER =====		
1 Bromochloromethan	8.87	8.54	9.20	8.89	0.24
2 1,4-Difluorobenze	11.13	10.80	11.46	11.15	0.14
3 Chlorobenzene-d5	17.43	17.10	17.76	17.42	-0.06

AREA UPPER LIMIT = + 40% of internal standard area.
 AREA LOWER LIMIT = - 40% of internal standard area.
 RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
 RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /var/chem/gcms/mr.i/R041713.b/rblkd17.d

Report Date: 17-Apr-2013 19:59

TestAmerica Knoxville

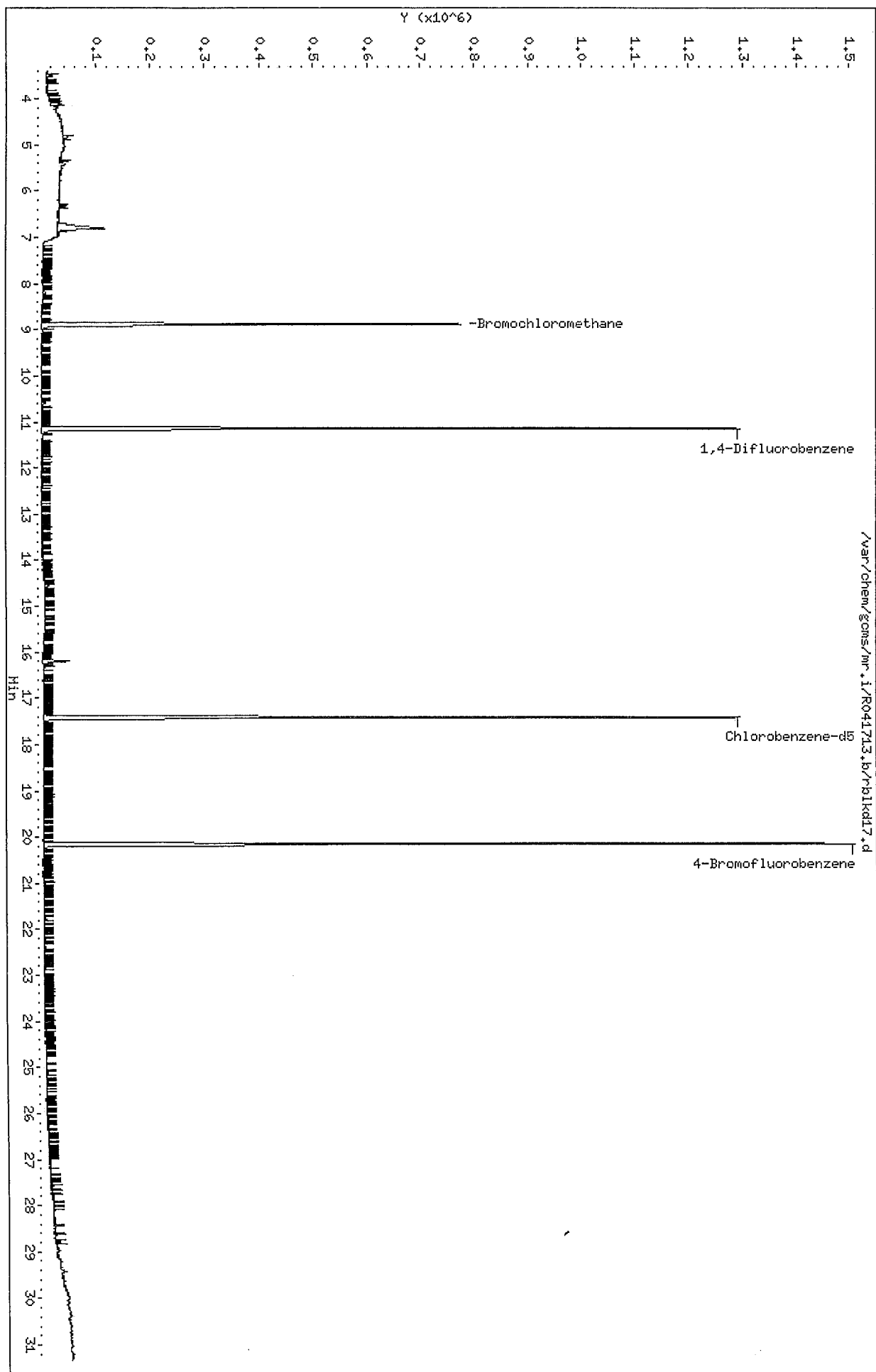
RECOVERY REPORT

Client Name:	Client SDG: R041713
Sample Matrix: GAS	Fraction: OTHER
Lab Smp Id: M0MCP1AA	Client Smp ID: can 1353N
Level: LOW	Operator: 403648
Data Type: MS DATA	SampleType: BLANK
SpikeList File: allnew.spk	Quant Type: ISTD
Sublist File: 1-all.sub	
Method File: /var/chem/gcms/mr.i/R041713.b/TO15.m	
Misc Info: R041713,TO15,blkchkloony.sub	

SURROGATE COMPOUND	CONC ADDED ppb (v/v)	CONC RECOVERED ppb (v/v)	% RECOVERED	LIMITS
\$ 4 4-Bromofluorobenze	4.000	4.517	112.94	70-130

Data File: /var/chem/gcms/mr.i/R041713.b/rb1kd17.d
Date: 17-APR-2013 15:47
Client ID: can 1353N
Sample Info: M0HCP1A0,,3,,can 1353N
Purge Volume: 500.0
Column phase: Rtx-5

Instrument: mr.i
Operator: 403648
Column diameter: 0.32



Data File: /var/chem/gcms/mr.i/R041713,b/rbld17.d

Date : 17-APR-2013 15:47

Client ID: can 1353N

Instrument: mr.i

Sample Info: M0MCP1AA,,3,,,can 1353N

Purge Volume: 500.0

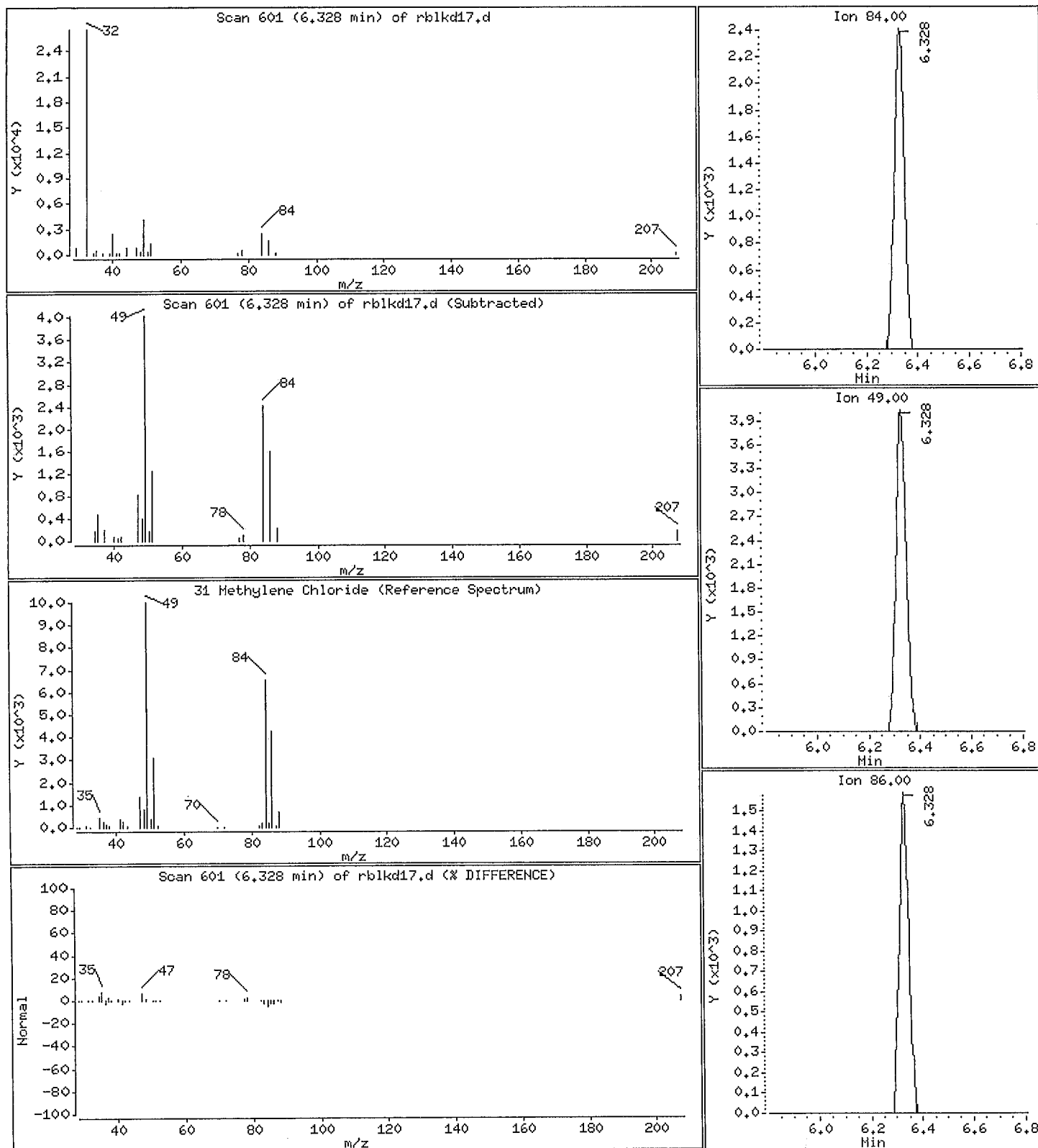
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

31 Methylene Chloride

Concentration: 0.07146 ppb(v/v)



Data File: /var/chem/gcms/mr.i/R041713.b/rblkd17.d

Date : 17-APR-2013 15:47

Client ID: oan 1353N

Instrument: mr.i

Sample Info: MOMCP1AA,,3,,oan 1353N

Purge Volume: 500.0

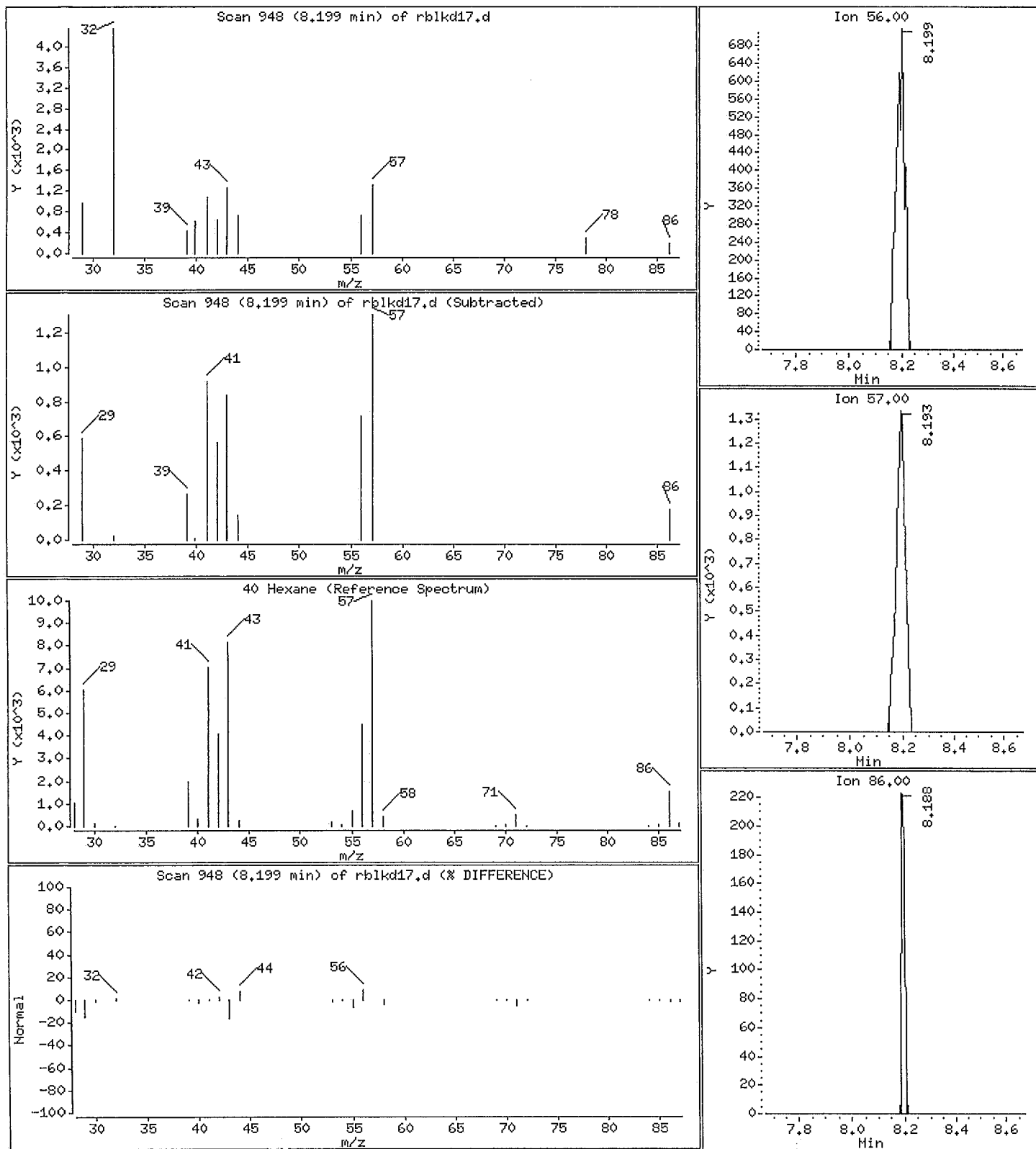
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

40 Hexane

Concentration: 0.01781 ppb(v/v)



Data File: /var/chem/gcms/mr.i/R041713,b/rblkd17.d

Date: 17-APR-2013 15:47

Client ID: oan 1353N

Instrument: mr.i

Sample Info: M0MCP1AA,,3,,,oan 1353N

Purge Volume: 500.0

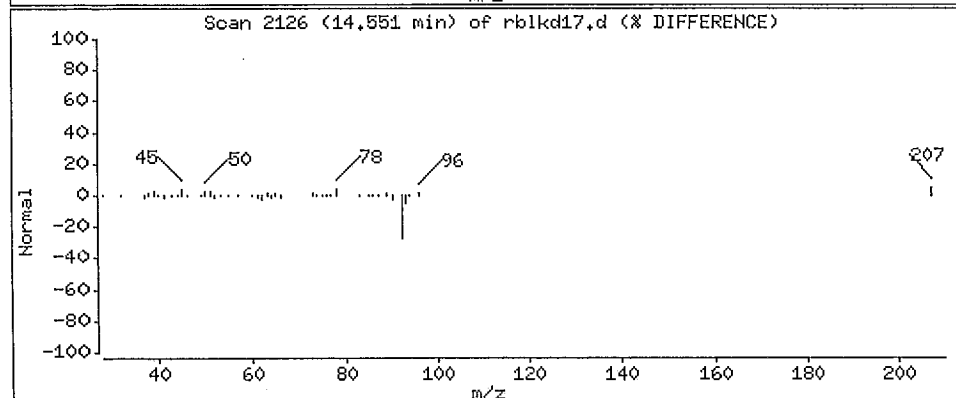
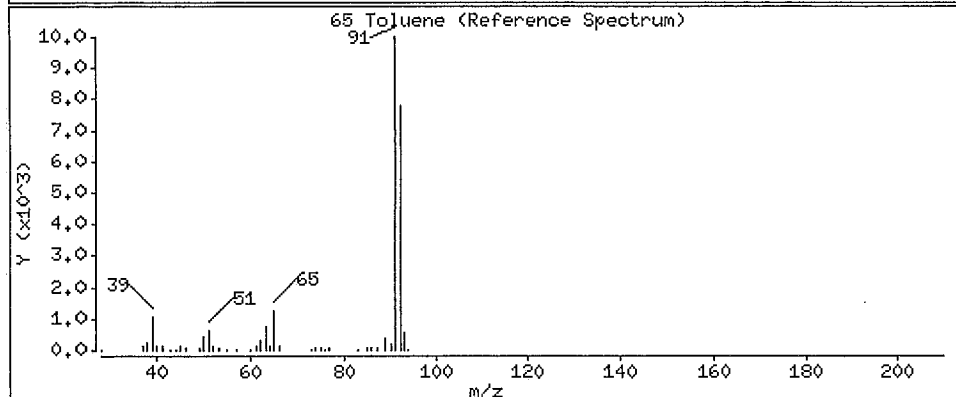
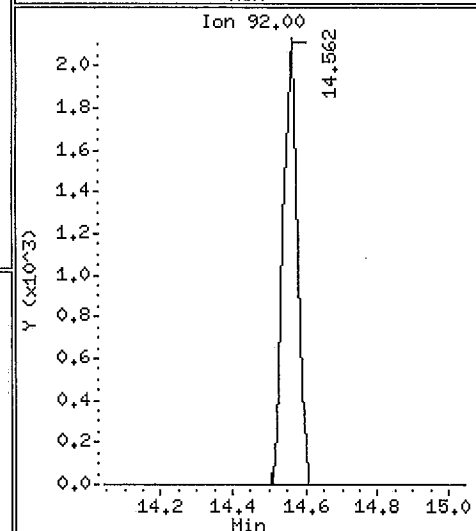
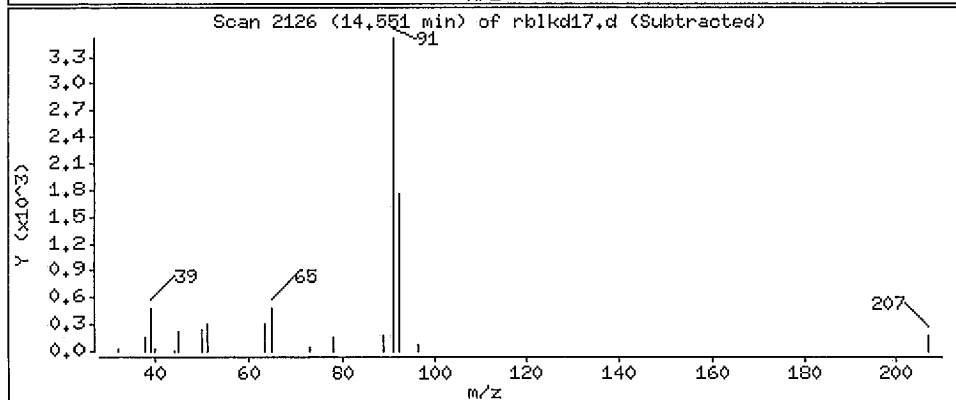
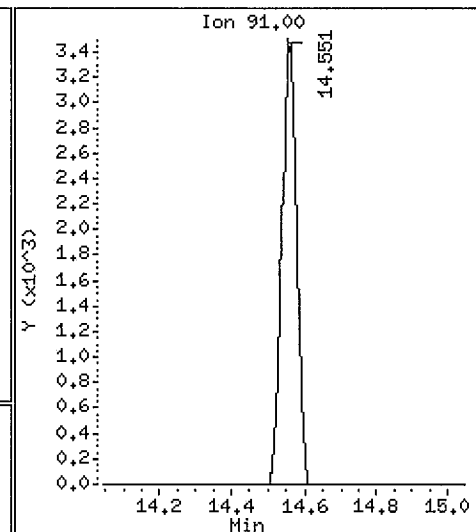
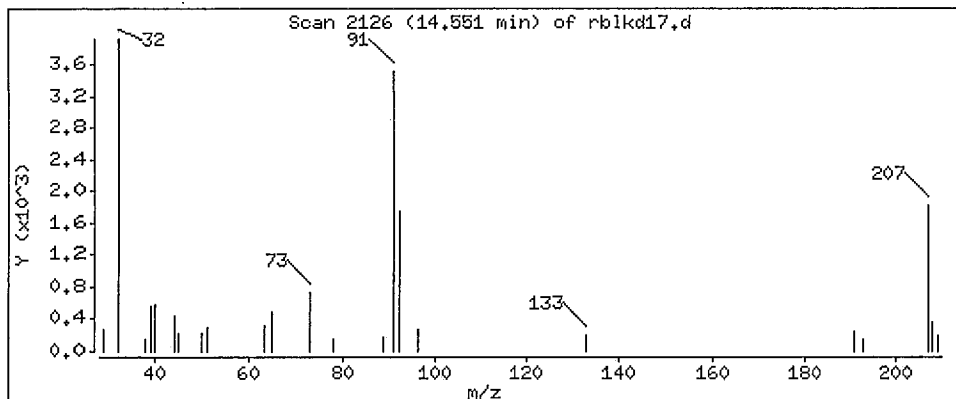
Operator: 403648

Column phase: Rtx-5

Column diameter: 0.32

65 Toluene

Concentration: 0.02234 ppb(v/v)



New York State D.E.C.

Client Sample ID: CHECK SAMPLE

GC/MS Volatiles

Lot-Sample # H3D170000 - 088C Work Order # M0MCP1AC Matrix.....: AIR

Prep Date.....: 04/12/2013 Date Received..: 04/15/2013
 Prep Date.....: 04/17/2013 Analysis Date...: 04/17/2013
 Prep Batch #.....: 3107088
 Dilution Factor.: 1 Method.....: TO-15

PARAMETER	SPIKE AMOUNT (ppb(v/v))	MEASURED AMOUNT (ppb(v/v))	SPIKE AMOUNT (ug/m3)	MEASURED AMOUNT (ug/m3)	PERCENT RECOVERY	RECOVERY LIMITS
1,1,1-Trichloroethane	5.00	5.52	27	30.1	110	70 - 130
1,1,2,2-Tetrachloroethane	5.00	4.60	34	31.6	92	70 - 130
1,1,2-Trichlorotrifluoroethane	5.00	5.02	38	38.5	100	70 - 130
1,1,2-Trichloroethane	5.00	4.56	27	24.9	91	70 - 130
1,1-Dichloroethane	5.00	5.80	20	23.5	116	70 - 130
1,1-Dichloroethene	5.00	4.90	20	19.4	98	70 - 130
1,2,4-Trichlorobenzene	5.00	4.28	37	31.7	86	60 - 140
1,2,4-Trimethylbenzene	5.00	4.30	25	21.1	86	70 - 130
1,2-Dibromoethane (EDB)	5.00	4.46	38	34.2	89	70 - 130
1,2-Dichlorobenzene	5.00	3.95	30	23.8	79	70 - 130
1,2-Dichloroethane	5.00	5.78	20	23.4	116	70 - 130
1,2-Dichloropropane	5.00	5.44	23	25.2	109	70 - 130
1,3,5-Trimethylbenzene	5.00	4.15	25	20.4	83	70 - 130
1,4-Dichlorobenzene	5.00	4.06	30	24.4	81	70 - 130
1,4-Dioxane	5.00	5.07	18	18.3	101	60 - 140
2-Butanone (MEK)	5.00	5.11	15	15.1	102	60 - 140
1,3-Dichlorobenzene	5.00	4.01	30	24.1	80	70 - 130
2,2,4-Trimethylpentane	5.00	5.67	23	26.5	113	70 - 130
Benzene	5.00	5.01	16	16.0	100	70 - 130
Benzyl chloride	5.00	4.81	26	24.9	96	70 - 130
Bromodichloromethane	5.00	5.61	34	37.6	112	70 - 130
Bromoform	5.00	4.26	52	44.0	85	60 - 140
Bromomethane	5.00	4.37	19	17.0	87	70 - 130
Carbon tetrachloride	5.00	6.53	31	41.1 a ME	131 a ME	70 - 130
Chlorobenzene	5.00	4.14	23	19.0	83	70 - 130
Chloroethane	5.00	4.93	13	13.0	99	70 - 130
Chloroform	5.00	5.51	24	26.9	110	70 - 130
Cyclohexane	5.00	5.21	17	17.9	104	70 - 130
Chloromethane	5.00	5.40	10	11.1	108	60 - 140
cis-1,2-Dichloroethene	5.00	5.04	20	20.0	101	70 - 130
cis-1,3-Dichloropropene	5.00	5.29	23	24.0	106	70 - 130
Dibromochloromethane	5.00	4.64	43	39.5	93	70 - 130
Dichlorodifluoromethane	5.00	5.09	25	25.2	102	60 - 140
Ethanol	25.0	35.9	47	67.6	144	20 - 180
Ethylbenzene	5.00	4.38	22	19.0	88	70 - 130
1,2-Dichloro-1,1,2,2-tetrafluoroethane	5.00	4.25	35	29.7	85	60 - 140

New York State D.E.C.

Client Sample ID: CHECK SAMPLE

GC/MS Volatiles

Lot-Sample #	H3D170000 - 088C	Work Order #	M0MCP1AC	Matrix.....:	AIR	
PARAMETER	SPIKE AMOUNT (ppb(v/v))	MEASURED AMOUNT (ppb(v/v))	SPIKE AMOUNT (ug/m3)	MEASURED AMOUNT (ug/m3)	PERCENT RECOVERY	RECOVERY LIMITS
n-Hexane	5.00	5.92	18	20.9	118	70 - 130
Hexachlorobutadiene	5.00	3.56	53	38.0	71	60 - 140
4-Methyl-2-pentanone (MIBK)	5.00	6.92	20	28.3	138	60 - 140
Methyl tert-butyl ether	5.00	5.44	18	19.6	109	60 - 140
Methylene chloride	5.00	5.23	17	18.2	105	70 - 130
Styrene	5.00	4.54	21	19.3	91	70 - 130
tert-Butyl alcohol	5.00	6.00	15	18.2	120	60 - 140
Tetrachloroethene	5.00	4.12	34	27.9	82	70 - 130
Toluene	5.00	4.39	19	16.5	88	70 - 130
m-Xylene & p-Xylene	10.0	8.95	43	38.9	90	70 - 130
o-Xylene	5.00	4.41	22	19.1	88	70 - 130
trans-1,2-Dichloroethene	5.00	4.94	20	19.6	99	70 - 130
trans-1,3-Dichloropropene	5.00	4.84	23	22.0	97	70 - 130
Trichloroethene	5.00	4.58	27	24.6	92	70 - 130
Trichlorofluoromethane	5.00	5.21	28	29.3	104	60 - 140
Vinyl chloride	5.00	5.02	13	12.8	100	70 - 130
SURROGATE			PERCENT RECOVERY		LABORATORY CONTROL LIMITS (%)	
4-Bromofluorobenzene			112			60 - 140

Qualifiers

- a Spiked analyte recovery is outside stated control limits.
- ME The percent recovery of the analyte is outside the control limits but within marginal exceedance limits.

The 'Result' in ug/m3 is calculated using the following equation: Amount Found(before rounding)*(Molecular Weight/24.45)

The 'Reporting Limit' in ug/m3 is calculated using the following equation: (Reporting Limit(before rounding) * Dilution Factor) * (Molecular Weight/24.45)

Data File: /var/chem/gcms/mr.i/R041713.b/rlcsd17a.d
 Report Date: 17-Apr-2013 19:54

TestAmerica Knoxville

Modified Method TO-14/TO-15

Data file : /var/chem/gcms/mr.i/R041713.b/rlcsd17a.d
 Lab Smp Id: MOMCP1AC Client Smp ID: CCV/LCS
 Inj Date : 17-APR-2013 12:45
 Operator : 403648 Inst ID: mr.i
 Smp Info : MOMCP1AC,,2,6,,CCV/LCS
 Misc Info : R041713,TO15,
 Comment :
 Method : /var/chem/gcms/mr.i/R041713.b/TO15.m
 Meth Date : 17-Apr-2013 19:01 barlozha Quant Type: ISTD
 Cal Date : 20-FEB-2013 20:14 Cal File: ricb205.d
 Als bottle: 1 QC Sample: LCS
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 3.50

Concentration Formula: Amt * DF * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Default Calibration Volume
Vo	200.00000	Default Sample Volume

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ppb (v/v))	FINAL (ppb (v/v))
* 1 Bromochloromethane	128	8.868	8.868	(1.000)	281891	4.00000	4.000	
* 2 1,4-Difluorobenzene	114	11.132	11.132	(1.000)	1460036	4.00000	4.000	
* 3 Chlorobenzene-d5	117	17.431	17.431	(1.000)	1172674	4.00000	4.000	
\$ 4 4-Bromofluorobenzene	95	20.165	20.165	(1.157)	920169	4.48186	11.20	
M 83 Xylene (total)	100				2546600	5.34315	13.36	
5 Chlorodifluoromethane	67	3.659	3.659	(0.413)	62681	2.17671	5.442	
6 Propene	41	3.669	3.669	(0.414)	221149	2.58078	6.452	
7 Dichlorodifluoromethane	85	3.718	3.718	(0.419)	598157	2.03632	5.091	
8 Chloromethane	52	3.896	3.896	(0.439)	77525	2.15910	5.398	
9 1,2-Dichlorotetrafluoroethane	135	3.912	3.912	(0.441)	398399	1.70179	4.254	
10 Methanol	31	4.063	4.063	(0.458)	75011	2.86783	7.170 (R)	
11 ~ acetaldehyde	44	4.052	4.052	(0.457)	510664	12.0921	30.23	
12 Vinyl Chloride	62	4.074	4.074	(0.459)	248350	2.01004	5.025	
13 n-Butane	43	4.171	4.171	(0.470)	432153	2.36761	5.919	
14 1,3-Butadiene	54	4.165	4.165	(0.470)	207223	2.13517	5.338	
15 Bromomethane	94	4.494	4.494	(0.507)	200626	1.74867	4.372	

Data File: /var/chem/gcms/mr.i/R041713.b/rlcsd17a.d
Report Date: 17-Apr-2013 19:54

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							(ppb (v/v))	(ppb (v/v))
=====	=====	=====	=====	=====	=====	=====	=====	=====
16 Chloroethane		64	4.640	4.640	(0.523)	123058	1.97229	4.931
17 ~ ethanol		31	4.769	4.769	(0.538)	554912	14.3533	35.88 (R)
18 Vinyl Bromide		106	4.958	4.958	(0.559)	208923	1.80925	4.523
19 2-methyl butane		43	5.017	5.017	(0.566)	332745	2.39913	5.998
20 Trichlorofluoromethane		101	5.239	5.239	(0.591)	594491	2.08307	5.208
21 Acrolein		56	5.239	5.239	(0.591)	90005	2.13247	5.331
22 Acetonitrile		40	5.303	5.303	(0.598)	120745	2.80885	7.022 (R)
25 Pentane		72	5.476	5.476	(0.618)	48364	2.12765	5.319
23 Acetone		58	5.363	5.363	(0.605)	121158	2.09435	5.236
24 Isopropyl alcohol		45	5.481	5.481	(0.618)	438554	2.71553	6.789
26 Ethyl Ether		31	5.638	5.638	(0.636)	376578	3.13850	7.846 (R)
27 1,1-Dichloroethene		96	5.961	5.961	(0.672)	221583	1.95880	4.897
29 Acrylonitrile		53	6.047	6.047	(0.682)	209963	2.39941	5.998
30 1,1,2-Trichlorotrifluoroethane		101	6.155	6.155	(0.694)	472782	2.01015	5.025
28 tert-butanol		59	6.085	6.085	(0.686)	463197	2.39811	5.995
31 Methylene Chloride		84	6.306	6.306	(0.711)	212471	2.09194	5.230
32 3-Chloropropene		39	6.328	6.328	(0.714)	233529	2.91846	7.296 (R)
33 Carbon Disulfide		76	6.473	6.473	(0.730)	690135	2.12785	5.320
35 ~ 2-Methyl Pentane		43	7.174	7.174	(0.809)	712735	2.82458	7.061 (R)
34 trans-1,2-Dichloroethene		96	7.137	7.137	(0.805)	230757	1.97392	4.935
36 Methyl-t-Butyl Ether		73	7.271	7.271	(0.820)	649874	2.17467	5.437
37 1,1-Dichloroethane		63	7.552	7.552	(0.852)	470283	2.31935	5.798
38 Vinyl Acetate		43	7.665	7.665	(0.864)	766922	2.84292	7.107 (R)
39 2-Butanone		72	8.102	8.102	(0.914)	115603	2.04256	5.106
40 Hexane		56	8.172	8.172	(0.922)	229189	2.36632	5.916
41 cis 1,2-Dichloroethene		96	8.544	8.544	(0.964)	238756	2.01469	5.037
42 Ethyl acetate		43	8.738	8.738	(0.985)	677594	2.83642	7.091 (R)
43 Chloroform		83	8.895	8.895	(1.003)	497963	2.20370	5.509
44 Tetrahydrofuran		42	9.299	9.299	(1.049)	352163	2.76322	6.908
45 1,1,1-Trichloroethane		97	9.935	9.935	(1.120)	485187	2.20812	5.520
46 1,2-Dichloroethane		62	10.022	10.022	(0.900)	369790	2.31316	5.783
49 Cyclohexane		69	10.566	10.566	(0.949)	119365	2.08247	5.206
48 Benzene		78	10.545	10.545	(0.947)	740572	2.00388	5.010
50 Carbon Tetrachloride		117	10.582	10.582	(0.951)	498532	2.61129	6.528 (R)
51 ~ 2,3-dimethylpentane		71	10.712	10.712	(0.962)	161853	2.08010	5.200
47 1-Butanol		31	10.528	10.528	(0.946)	117099	3.25556	8.139 (R)
52 ~ Thiophene		84	10.830	10.830	(0.973)	433014	2.00599	5.015
53 2,2,4-trimethylpentane		57	11.418	11.418	(1.026)	1357565	2.26781	5.670
54 Heptane		71	11.850	11.850	(1.064)	267284	2.06105	5.153
55 1,2-Dichloropropane		63	11.887	11.887	(1.068)	294971	2.17705	5.443
56 Trichloroethene		130	11.947	11.947	(1.073)	300840	1.82997	4.575
180 ~ 2-nitropropane		43	11.850	11.850	(1.064)	581706		
57 Dibromomethane		93	12.017	12.017	(1.079)	274258	2.07149	5.179
58 Bromodichloromethane		83	12.200	12.200	(1.096)	526936	2.24309	5.608
60 Methyl Methacrylate		41	12.335	12.335	(1.108)	418693	2.86470	7.162 (R)
59 1,4-dioxane		88	12.216	12.216	(1.097)	105957	2.02891	5.072
61 ~ methyl cyclohexane		83	12.896	12.896	(1.158)	437706	1.99458	4.986

Data File: /var/chem/gcms/mr.i/R041713.b/rlcsd17a.d
 Report Date: 17-Apr-2013 19:54

Compounds	QUANT SIG				RESPONSE	CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT		ON-COLUMN (ppb (v/v))	FINAL (ppb (v/v))
=====	=====	==	=====	=====	=====	=====	=====
63 cis-1,3-Dichloropropene	75	13.446	13.446	(1.208)	406267	2.11764	5.294
62 4-Methyl-2-pentanone	43	13.381	13.381	(1.202)	721795	2.76668	6.917
64 trans-1,3-Dichloropropene	75	14.368	14.368	(0.824)	411690	1.93629	4.841
65 Toluene	91	14.546	14.546	(0.834)	854028	1.75525	4.388
66 1,1,2-Trichloroethane	83	14.632	14.632	(0.839)	248169	1.82401	4.560
67 ~ 2-methyl thiophene	97	14.745	14.745	(0.846)	723985	1.75915	4.398
68 ~ 3-methyl thiophene	97	15.026	15.026	(0.862)	736494	1.74883	4.372
69 2-Hexanone	58	15.193	15.193	(0.872)	323582	2.18440	5.461
70 Octane	85	15.586	15.586	(0.894)	281328	1.75924	4.398
71 Dibromochloromethane	129	15.608	15.608	(0.895)	457668	1.85469	4.637
72 1,2-Dibromoethane	107	16.023	16.023	(0.919)	430007	1.78232	4.456
73 Tetrachloroethene	129	16.174	16.174	(0.928)	283795	1.64682	4.117
75 ~ 2,3-dimethylheptane	43	17.646	17.646	(1.012)	1040543	2.41400	6.035
74 Chlorobenzene	112	17.506	17.506	(1.004)	635109	1.65451	4.136
76 Ethylbenzene	91	18.002	18.002	(1.033)	1069550	1.75045	4.376
77 ~ 2-ethyl thiophene	97	18.159	18.159	(1.042)	812410	1.76661	4.416
78 m&p-Xylene	91	18.272	18.272	(1.048)	1688600	3.57997	8.950
79 Nonane	57	19.075	19.075	(1.094)	657761	2.07358	5.184
80 Bromoform	173	18.930	18.930	(1.086)	377339	1.70246	4.256
81 Styrene	104	19.032	19.032	(1.092)	607843	1.81448	4.536
82 o-Xylene	91	19.129	19.129	(1.097)	858000	1.76318	4.408
84 1,1,2,2-Tetrachloroethane	83	19.663	19.663	(1.128)	646102	1.83927	4.598
85 1,2,3-Trichloropropane	110	19.933	19.933	(1.144)	182280	1.71060	4.276
86 Cumene	105	20.154	20.154	(1.156)	1209104	1.71976	4.299
87 n-Propylbenzene	120	21.114	21.114	(1.211)	330513	1.63974	4.099
88 2-chlorotoluene	126	21.146	21.146	(1.213)	296474	1.61833	4.046
89 4-Ethyltoluene	105	21.399	21.399	(1.228)	1232036	1.71061	4.276
90 1,3,5-Trimethylbenzene	120	21.550	21.550	(1.236)	564247	1.66086	4.152
91 Alpha-Methylstyrene	118	21.982	21.982	(1.261)	460690	1.72819	4.320
92 Decane	57	22.241	22.241	(1.276)	833004	2.09231	5.231
93 tert-butylbenzene	119	22.359	22.359	(1.283)	1061838	1.65905	4.148
94 1,2,4-Trimethylbenzene	105	22.386	22.386	(1.284)	1021633	1.71882	4.297
95 sec-butylbenzene	105	22.915	22.915	(1.315)	1487919	1.69913	4.248
96 1,3-Dichlorobenzene	146	22.872	22.872	(1.312)	645232	1.60232	4.006
97 Benzyl Chloride	91	23.044	23.044	(1.322)	971549	1.92346	4.809
98 1,4-Dichlorobenzene	146	23.060	23.060	(1.323)	656658	1.62239	4.056
99 p-Cymene	119	23.276	23.276	(1.335)	1244295	1.67254	4.181
100 ~ 1,2,3- Trimethylbenzene	105	23.335	23.335	(1.339)	916704	1.71720	4.293
101 ~ n-butylcyclohexane	83	23.524	23.524	(1.350)	859025	1.77102	4.428
102 ~ Indane	117	23.831	23.831	(1.367)	933513	1.62912	4.073
103 1,2-Dichlorobenzene	146	23.804	23.804	(1.366)	612804	1.58148	3.954
104 n-butylbenzene	91	24.225	24.225	(1.390)	1256231	1.80786	4.520
105 ~ Indene	116	24.101	24.101	(1.383)	934737	1.73079	4.327
106 Undecane	57	25.115	25.115	(1.441)	996280	2.14208	5.355
107 ~ 1,2-dimethyl-4-ethylenzene	119	25.077	25.077	(1.439)	1235610	1.66440	4.161
108 ~ 1,2,4,5-tetramethylbenzene	119	25.994	25.994	(1.491)	1282076	1.68863	4.222
109 ~ 1,2,3,5-tetramethylbenzene	119	26.118	26.118	(1.498)	793653	1.66786	4.170

Data File: /var/chem/gcms/mr.i/R041713.b/rlcsd17a.d
 Report Date: 17-Apr-2013 19:54

Compounds	QUANT SIG						CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN	FINAL	
						(ppb (v/v))	(ppb (v/v))	
=====	=====	==	=====	=====	=====	=====	=====	
110 ~ 1,2,3,4-tetramethylbenzene	119	26.997	26.997	(1.549)	1067444	1.71734	4.293	
111 Dodecane	57	27.579	27.579	(1.582)	994802	2.51826	6.296	
112 1,2,4-Trichlorobenzene	180	27.676	27.676	(1.588)	576961	1.71017	4.275	
113 Napthalene	128	27.913	27.913	(1.601)	1494622	1.85977	4.649	
114 ~ benzo(b) thiophene	134	28.102	28.102	(1.612)	1029741	1.79145	4.479	
115 Hexachlorobutadiene	225	28.431	28.431	(1.631)	461424	1.42545	3.564	
116 1,2,3-trichlorobenzene	180	28.474	28.474	(1.634)	578562	1.71311	4.283	
117 ~ 2-Methylnaphthalene	142	29.925	29.925	(1.717)	1030455	12.8637	32.16	
118 ~ 1-Methylnaphthalene	142	30.227	30.227	(1.734)	945429	13.4718	33.68	

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: /var/chem/gcms/mr.i/R041713.b/rlcsd17a.d
 Report Date: 17-Apr-2013 19:54

TestAmerica Knoxville

INTERNAL STANDARD COMPOUNDS
 AREA AND RT SUMMARY

Instrument ID: mr.i	Calibration Date: 17-APR-2013
Lab File ID: rlcsd17a.d	Calibration Time: 12:45
Lab Smp Id: M0MCP1AC	Client Smp ID: CCV/LCS
Analysis Type: OTHER	Level: LOW
Quant Type: ISTD	Sample Type: AIR
Operator: 403648	
Method File: /var/chem/gcms/mr.i/R041713.b/TO15.m	
Misc Info: R041713,TO15,	

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
1 Bromochloromethan	281891	167725	396057	281891	0.00
2 1,4-Difluorobenze	1460036	868721	2051351	1460036	0.00
3 Chlorobenzene-d5	1172674	697741	1647607	1172674	0.00

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
1 Bromochloromethan	8.87	8.54	9.20	8.87	0.00
2 1,4-Difluorobenze	11.13	10.80	11.46	11.13	0.00
3 Chlorobenzene-d5	17.43	17.10	17.76	17.43	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
 AREA LOWER LIMIT = - 40% of internal standard area.
 RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
 RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /var/chem/gcms/mr.i/R041713.b/rlcsd17a.d

Report Date: 17-Apr-2013 20:05

TestAmerica Knoxville

RECOVERY REPORT

Client Name: Client SDG: R041713
 Sample Matrix: GAS Fraction: OTHER
 Lab Smp Id: M0MCP1AC Client Smp ID: CCV/LCS
 Level: LOW Operator: 403648
 Data Type: MS DATA SampleType: LCS
 SpikeList File: allnew.spk Quant Type: ISTD
 Sublist File: all.sub
 Method File: /var/chem/gcms/mr.i/R041713.b/TO15.m
 Misc Info: R041713,TO15,

SPIKE COMPOUND	CONC ADDED ppb (v/v)	CONC RECOVERED ppb (v/v)	% RECOVERED	LIMITS
5 Chlorodifluorometh	5.000	5.442	108.84	60-140
6 Propene	5.000	6.452	129.04	60-140
7 Dichlorodifluorome	5.000	5.091	101.82	60-140
8 Chloromethane	5.000	5.398	107.96	60-140
9 1,2-Dichlorotetra	5.000	4.254	85.09	60-140
10 Methanol	5.000	7.170	143.39*	60-140
11 ~ acetaldehyde	25.00	30.23	120.92	70-130
12 Vinyl Chloride	5.000	5.025	100.50	70-130
13 n-Butane	5.000	5.919	118.38	60-140
14 1,3-Butadiene	5.000	5.338	106.76	60-140
15 Bromomethane	5.000	4.372	87.43	70-130
16 Chloroethane	5.000	4.931	98.61	70-130
17 ~ ethanol	25.00	35.88	143.53*	70-130
18 Vinyl Bromide	5.000	4.523	90.46	60-140
19 2-methyl butane	5.000	5.998	119.96	70-130
20 Trichlorofluoromet	5.000	5.208	104.15	60-140
21 Acrolein	5.000	5.331	106.62	60-140
22 Acetonitrile	5.000	7.022	140.44*	60-140
23 Acetone	5.000	5.236	104.72	60-140
25 Pentane	5.000	5.319	106.38	70-130
24 Isopropyl alcohol	5.000	6.789	135.78	60-140
26 Ethyl Ether	5.000	7.846	156.93*	60-140
27 1,1-Dichloroethene	5.000	4.897	97.94	70-130
28 tert-butanol	5.000	5.995	119.91	60-140
29 Acrylonitrile	5.000	5.998	119.97	60-140
30 1,1,2-Trichlorotri	5.000	5.025	100.51	70-130
31 Methylene Chloride	5.000	5.230	104.60	70-130
32 3-Chloropropene	5.000	7.296	145.92*	60-140
33 Carbon Disulfide	5.000	5.320	106.39	70-130
34 trans-1,2-Dichloro	5.000	4.935	98.70	70-130
35 ~ 2-Methyl Pentane	5.000	7.061	141.23*	70-130
36 Methyl-t-Butyl Eth	5.000	5.437	108.73	60-140
37 1,1-Dichloroethane	5.000	5.798	115.97	70-130

Data File: /var/chem/gcms/mr.i/R041713.b/rlcsd17a.d
 Report Date: 17-Apr-2013 20:05

SPIKE COMPOUND	CONC ADDED ppb (v/v)	CONC RECOVERED ppb (v/v)	% RECOVERED	LIMITS
38 Vinyl Acetate	5.000	7.107	142.15*	60-140
39 2-Butanone	5.000	5.106	102.13	60-140
40 Hexane	5.000	5.916	118.32	70-130
41 cis 1,2-Dichloroet	5.000	5.037	100.73	70-130
42 Ethyl acetate	5.000	7.091	141.82*	60-140
43 Chloroform	5.000	5.509	110.19	70-130
44 Tetrahydrofuran	5.000	6.908	138.16	60-140
45 1,1,1-Trichloroeth	5.000	5.520	110.41	70-130
46 1,2-Dichloroethane	5.000	5.783	115.66	70-130
47 1-Butanol	5.000	8.139	162.78*	60-140
48 Benzene	5.000	5.010	100.19	70-130
49 Cyclohexane	5.000	5.206	104.12	70-130
50 Carbon Tetrachlori	5.000	6.528	130.56*	70-130
51 ~ 2,3-dimethylpent	5.000	5.200	104.00	70-130
52 ~ Thiophene	5.000	5.015	100.30	70-130
53 2,2,4-trimethylpen	5.000	5.670	113.39	70-130
54 Heptane	5.000	5.153	103.05	70-130
55 1,2-Dichloropropan	5.000	5.443	108.85	70-130
56 Trichloroethene	5.000	4.575	91.50	70-130
57 Dibromomethane	5.000	5.179	103.57	70-130
58 Bromodichlorometha	5.000	5.608	112.15	70-130
59 1,4-dioxane	5.000	5.072	101.45	60-140
60 Methyl Methacrylat	5.000	7.162	143.23*	60-140
61 ~ methyl cyclohexa	5.000	4.986	99.73	70-130
62 4-Methyl-2-pentano	5.000	6.917	138.33	60-140
63 cis-1,3-Dichloropr	5.000	5.294	105.88	70-130
64 trans-1,3-Dichloro	5.000	4.841	96.81	70-130
65 Toluene	5.000	4.388	87.76	70-130
66 1,1,2-Trichloroeth	5.000	4.560	91.20	70-130
67 ~ 2-methyl thiophe	5.000	4.398	87.96	70-130
68 ~ 3-methyl thiophe	5.000	4.372	87.44	70-130
69 2-Hexanone	5.000	5.461	109.22	60-140
70 Octane	5.000	4.398	87.96	70-130
71 Dibromochlorometha	5.000	4.637	92.73	70-130
72 1,2-Dibromoethane	5.000	4.456	89.12	70-130
73 Tetrachloroethene	5.000	4.117	82.34	70-130
74 Chlorobenzene	5.000	4.136	82.73	70-130
75 ~ 2,3-dimethylhept	5.000	6.035	120.70	70-130
76 Ethylbenzene	5.000	4.376	87.52	70-130
77 ~ 2-ethyl thiophen	5.000	4.416	88.33	70-130
78 m&p-Xylene	10.00	8.950	89.50	70-130
M 83 Xylene (total)	15.00	13.36	89.05	70-130
79 Nonane	5.000	5.184	103.68	60-140
80 Bromoform	5.000	4.256	85.12	60-140
81 Styrene	5.000	4.536	90.72	70-130
82 o-Xylene	5.000	4.408	88.16	70-130
84 1,1,2,2-Tetrachlor	5.000	4.598	91.96	70-130

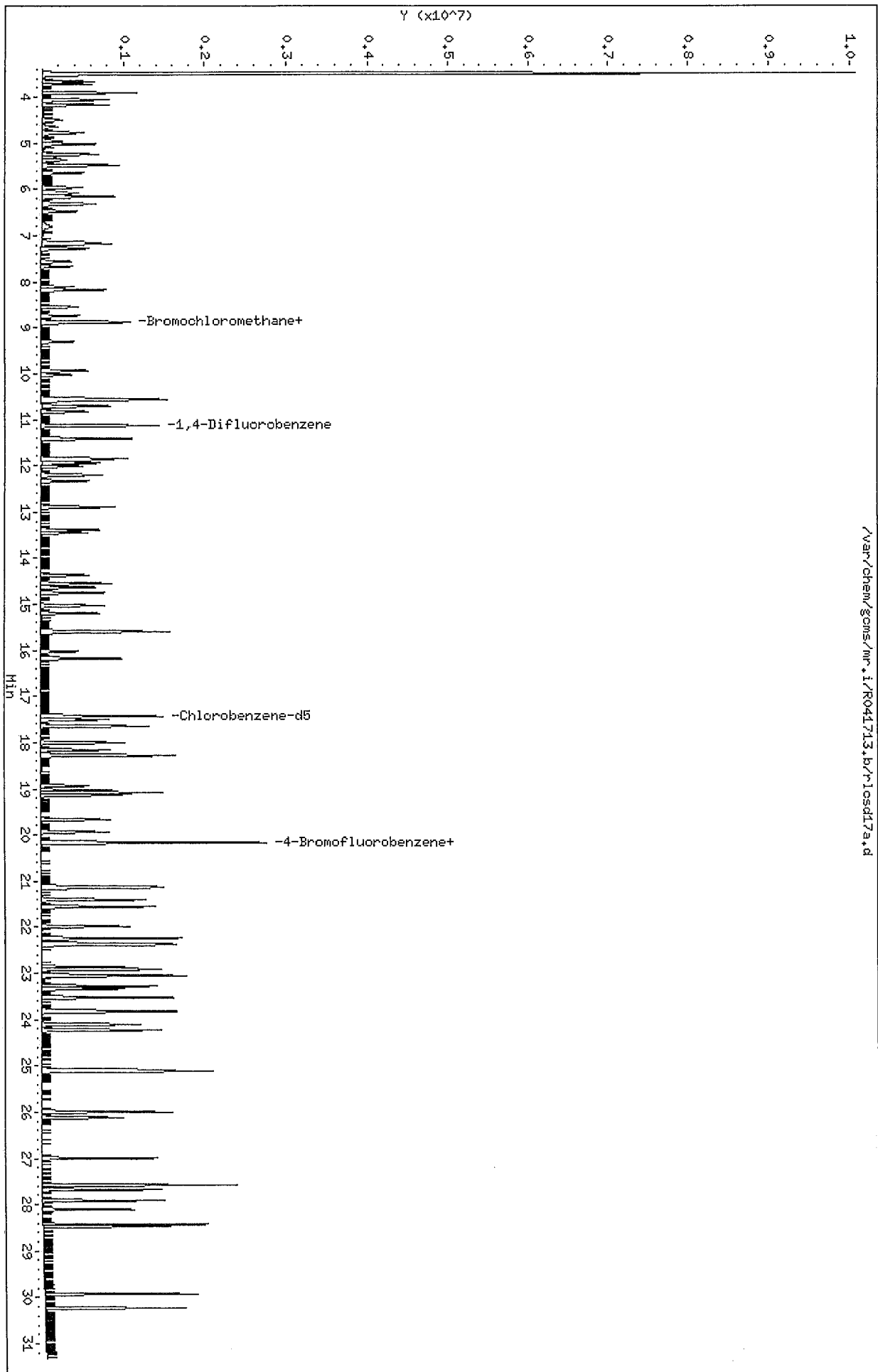
Data File: /var/chem/gcms/mr.i/R041713.b/rlcsd17a.d
 Report Date: 17-Apr-2013 20:05

SPIKE COMPOUND	CONC ADDED ppb (v/v)	CONC RECOVERED ppb (v/v)	% RECOVERED	LIMITS
85 1,2,3-Trichloropro	5.000	4.276	85.53	60-140
86 Cumene	5.000	4.299	85.99	70-130
87 n-Propylbenzene	5.000	4.099	81.99	70-130
88 2-chlorotoluene	5.000	4.046	80.92	70-130
89 4-Ethyltoluene	5.000	4.276	85.53	70-130
90 1,3,5-Trimethylben	5.000	4.152	83.04	70-130
91 Alpha-Methylstyren	5.000	4.320	86.41	60-140
92 Decane	5.000	5.231	104.62	60-140
93 tert-butylbenzene	5.000	4.148	82.95	70-130
94 1,2,4-Trimethylben	5.000	4.297	85.94	70-130
95 sec-butylbenzene	5.000	4.248	84.96	70-130
96 1,3-Dichlorobenzen	5.000	4.006	80.12	70-130
97 Benzyl Chloride	5.000	4.809	96.17	70-130
98 1,4-Dichlorobenzen	5.000	4.056	81.12	70-130
99 p-Cymene	5.000	4.181	83.63	70-130
100 ~ 1,2,3- Trimethyl	5.000	4.293	85.86	70-130
101 ~ n-butylcyclohexa	5.000	4.428	88.55	70-130
102 ~ Indane	5.000	4.073	81.46	70-130
103 1,2-Dichlorobenzen	5.000	3.954	79.07	70-130
104 n-butylbenzene	5.000	4.520	90.39	60-140
105 ~ Indene	5.000	4.327	86.54	70-130
106 Undecane	5.000	5.355	107.10	60-140
107 ~ 1,2-dimethyl-4-e	5.000	4.161	83.22	70-130
108 ~ 1,2,4,5-tetramet	5.000	4.222	84.43	70-130
109 ~ 1,2,3,5-tetramet	5.000	4.170	83.39	70-130
110 ~ 1,2,3,4-tetramet	5.000	4.293	85.87	70-130
111 Dodecane	5.000	6.296	125.91	60-140
112 1,2,4-Trichloroben	5.000	4.275	85.51	60-140
113 Napthalene	5.000	4.649	92.99	40-140
114 ~ benzo(b) thiophe	5.000	4.479	89.57	70-130
115 Hexachlorobutadien	5.000	3.564	71.27	60-140
116 1,2,3-trichloroben	5.000	4.283	85.66	40-140
117 ~ 2-Methylnaphthal	31.25	32.16	102.91	70-130
118 ~ 1-Methylnaphthal	31.25	33.68	107.77	70-130

SURROGATE COMPOUND	CONC ADDED ppb (v/v)	CONC RECOVERED ppb (v/v)	% RECOVERED	LIMITS
\$ 4 4-Bromofluorobenze	10.00	11.20	112.05	70-130

Data File: /var/chem/gcms/mr.i/R041713.b/r1osd17a.d
Date : 17-APR-2013 12:45
Client ID: CCV/LCS
Sample Info: M0HCP1AC,,2,6,,CCV/LCS
Purge Volume: 200.0
Column phase: Rtx-5

Instrument: mr.i
Operator: 403648
Column diameter: 0.32



Miscellaneous Data

TestAmerica Knoxville GC/MS Air Data Review / Narrative Checklist LOT/Project # H3D160408
 Method: TO-14 and TO-15 - KNOX-MS-0001, Rev 13 & KNOX-MS-0023, Rev 0

Instrument:	<u>MR</u>			
Scanned File:	<u>R022013F</u>	<u>R041613</u>	<u>R041713</u>	

Review Items	N/A	Yes	No	Why is data reportable?	2nd													
A. Tune/ Continuing Calibration																		
1. Were all samples injected within 24 hr of BFB?		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>													
2. Has a Continuing Calibration Checklist & run log been completed for each analytical batch and scanned properly?		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>													
3. Was the correct ICAL used for quantitation?		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>													
B. CLIENT SAMPLE AND QC SAMPLE Results																		
1. Were all special project requirements met?		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>													
2. Were samples received in cans?		<input checked="" type="checkbox"/>		<input type="checkbox"/> [Tedlar1] analyzed w/n 72 hours, <input type="checkbox"/> [Tedlar2] X-fer within 72 hours.	<input checked="" type="checkbox"/>													
3. Can pressure/vac on receipt acceptable?		<input checked="" type="checkbox"/>		<input type="checkbox"/> see narrative	<input checked="" type="checkbox"/>													
4. Were dilution factors/can prep information verified?		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>													
5. Have the can number & lab ID been verified between the analysis log & sample prep log?		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>													
6. Sample analyses done within analytical holding time (HT)? If no, list samples: _____		<input checked="" type="checkbox"/>		<input type="checkbox"/> [ht2] Client requested analysis after HT expired. <input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/>													
7. Default sample volume verified?		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>													
8. Are surrogates and internal standards within QC limits? (60-140% R for surr.; 60-140%R from CCAL for IS) If no, list samples/reason (e.g., sur1): Sample _____ Reason _____ Sample _____ Reason _____		<input checked="" type="checkbox"/>		<input type="checkbox"/> [sur7] Obvious matrix effect <input type="checkbox"/> [sur12] high recovery, no hits. <input type="checkbox"/> [sur14] entire sample consumed <input type="checkbox"/> [is1] Per client, reanalysis was not performed * <input type="checkbox"/> [is2] Reanalysis confirmed a matrix effect.	<input checked="" type="checkbox"/>													
9. Were all positive results and false negatives on quan report verified to be correct in LIMS?		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>													
10. For dilutions, is highest concentration hit \geq 20% cal range and not above calibration range? List samples and reason (e.g., elev1): Sample _____ Reason _____ Sample _____ Reason _____		<input checked="" type="checkbox"/>		<input type="checkbox"/> [elev1] Elevated RL for due to sample matrix interferences. <input type="checkbox"/> [elev3] Elevated RLs for all analytes due to difficult sample matrix. <input type="checkbox"/> [elev4] Elevated RLs based on screening <input type="checkbox"/> [elev5] Elevated RLs for all analytes due to presence of non-target compounds. <input type="checkbox"/> [elev7] Elevated RLs due to sample volume	<input checked="" type="checkbox"/>													
11. If manual integrations were performed, are they clearly identified, initialed, dated and reason given & alternate hits verified.		<input checked="" type="checkbox"/>		Reasons: 1)Corrected split peak; 2)Unresolved peak; 3)tail; 4)RT shift; 5)wrong peak selected; 6)other	<input checked="" type="checkbox"/>													
C. Preparation QC																		
1. System blank run every 24 hours prior to samples?		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>													
2. System blank surrogate recoveries within QC limits (60-140% R) ?		<input checked="" type="checkbox"/>		<input type="checkbox"/> [mb1] All sample surrogates OK and there is no analyte >RL in samples associated with blank.*	<input checked="" type="checkbox"/>													
3. Are all analytes present in the system blank < RL? (1/2 RL for DoD). If no, list blank ID: _____		<input checked="" type="checkbox"/>		<input type="checkbox"/> [mb3] No analyte > RL in associated samples.* <input type="checkbox"/> [mb4] Sample results > 10x higher than blank.	<input checked="" type="checkbox"/>													
4. DUP done per 20 samples and are all RPDs within limits? (for target analytes >5x RL, <25% RPD; no criteria for methanol and n-butanol) If no, list DUP ID: _____		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>													
5. Did the LCS meet criteria (70-130% with a limited # allowed 60-140% (see table) provisional analyte limit 60-140% with a limited # allowed 50-150%, and no two consecutive MEs). Note: Ohio does not allow for ME. <table border="1" style="margin: 5px;"> <thead> <tr> <th>Number of target analytes in LCS</th> <th># marginal exceedances of LCS control limits allowed</th> </tr> </thead> <tbody> <tr> <td>>90</td> <td>5</td> </tr> <tr> <td>71 - 90</td> <td>4</td> </tr> <tr> <td>51 - 70</td> <td>3</td> </tr> <tr> <td>31 - 50</td> <td>2</td> </tr> <tr> <td>11 - 30</td> <td>1</td> </tr> <tr> <td><11</td> <td>0</td> </tr> </tbody> </table>	Number of target analytes in LCS	# marginal exceedances of LCS control limits allowed	>90	5	71 - 90	4	51 - 70	3	31 - 50	2	11 - 30	1	<11	0	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/> [lcs6] LCS analyte(s) flagged as being outside control limits but within marginal limits <input type="checkbox"/> [lcs5] LCS outside marginal exceedances high, but analytes were not detected LCS ID: <u>cc/y 31070PP</u>	<input checked="" type="checkbox"/>
Number of target analytes in LCS	# marginal exceedances of LCS control limits allowed																	
>90	5																	
71 - 90	4																	
51 - 70	3																	
31 - 50	2																	
11 - 30	1																	
<11	0																	
D. Other																		
1. Final report acceptable? (Results correct, RLs calculated correctly, units correct, surrogate %R correct, appropriate flags used, dilution factor correct, analysis dates correct.)		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>													
2. Are all nonconformances documented appropriately and copy included with deliverable?	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>													
4. Was a narrative prepared and all deviations noted?		<input checked="" type="checkbox"/>		<input type="checkbox"/> [1pt6]; <input type="checkbox"/> [1pt11]; <input type="checkbox"/> [1ptsur] <input type="checkbox"/> [Extras] <u>ethanol</u>	<input checked="" type="checkbox"/>													
5. TO14A Autotext included in narrative (for TO14A samples only).	<input checked="" type="checkbox"/>			<input type="checkbox"/> [TO14]	<input checked="" type="checkbox"/>													
6. All target analytes on c.cal >30%D but passes LCS criteria noted in the narrative?		<input checked="" type="checkbox"/>		<input type="checkbox"/> [ccal] The ccal exhibited a %D ICAL >30% but passes LCS...list analytes on narrative.	<input checked="" type="checkbox"/>													

Analyst:	<u>[Signature]</u>	Date:	<u>4/17/13</u>	2 nd Level Reviewer:	<u>[Signature]</u>	Date:	<u>04/22/13</u>
----------	--------------------	-------	----------------	---------------------------------	--------------------	-------	-----------------

☐ see following page for comments.

*Such action must be taken in consultation with client.

RQC058

TestAmerica Laboratories, Inc.
EXTRACTION BENCH WORKSHEETRun Date: 4/17/13
Time: 9:19:26

LEV	LEV	LEV	LEV
1	2	1	2
-	-	-	-
-	-	-	-
-	-	-	-

Blank
Check
MS/MSD

Weights/Volumes
Spike & Surrogate Worksheet
Vial contains correct volume
Labels, greenbars, worksheets
computer batch: correct & all match
Anomalies to Extraction Method

Expanded Deliverable
- COC Completed
- Bench Sheet Copied
- Package Submitted to Analytical Group
- Bench Sheet Copied per COC

Extractionist: _____

Concentrationist: _____

* * QC BATCH: 3106043 * *
* * PREP DATE: 4/16/13 * *
* * COMP DATE: 4/17/13 * *

Reviewer/Date: _____ / 0/00/00

Volatile Organics by GC/MS TO-15 low-level
NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION

EXTR EXPR	ANL DUE	LOT# WORK ORDER	TEST FLGS	EXT MTH	MATRIX	INIT/FIN WT/VOL	PH'S INIT ADJ1	ADJ2	EXTRACTION VOL	EXCHANGE VOL	SOLVENTS VOL	SPIKE STANDARD/ SURROGATE ID
0/00/00	4/26/13	H3D150412-001 MOLPV-1-AA	R	88	7M	AIR	NA	NA	NA	.0	.0	.0
COMMENTS:												
0/00/00	4/24/13	H3D160408-001 MOLPM-1-AA	DR	88	7M	AIR	NA	NA	NA	.0	.0	.0
COMMENTS:												
0/00/00	4/24/13	H3D160408-003 MOLPY-1-AA	DR	88	7M	AIR	NA	NA	NA	.0	.0	.0
COMMENTS:												
0/00/00	4/24/13	H3D160408-004 MOLPW-1-AA	DR	88	7M	AIR	NA	NA	NA	.0	.0	.0
COMMENTS:												
0/00/00	4/24/13	H3D160408-005 MOLPI-1-AA	DR	88	7M	AIR	NA	NA	NA	.0	.0	.0
COMMENTS:												
0/00/00	0/00/00	H3D160000-043 MOLGV-1-AAB		88	7M	AIR	500mL 500.00mL	NA	NA	NA	.0	.0
COMMENTS:												
0/00/00	0/00/00	H3D160000-043 MOLGV-1-ACC		88	7M	AIR	100mL 100.00mL	NA	NA	NA	.0	.0
COMMENTS:												

R = RUSH C = CLP
E = EPA 600 D = EXP.DEL)

NUMBER OF WORK ORDERS IN BATCH:

7

RQC058

TestAmerica Laboratories, Inc.
EXTRACTION BENCH WORKSHEET

Run Date: 4/17/13
Time: 17:47:22

LEV	LEV	LEV	LEV
1	2	1	2
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

Blank
Check
MS/MSD
Weights/Volumes
Spike & Surrogate Worksheet
Vial contains correct volume
Labels, greenbars, worksheets
computer batch: correct & all match
Anomalies to Extraction Method

Expanded Deliverable
COC Completed
Bench Sheet Copied
Package Submitted to Analytical Group
Bench Sheet Copied per COC

Extractionist: _____

Concentrationist: _____

* QC BATCH: 3107088 *
* PREP DATE: 4/17/13
* COMP DATE: 4/18/13

Reviewer/Date: _____ / 0/00/00

Volatile Organics by GC/MS TO-15 low-level
NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION

EXTR EXPR	ANL DUE	LOT#, MSRUN#/ WORK ORDER	TEST FLGS	EXT	MTH	MATRIX	INIT/FIN WT/VOL	PH"S ADJ1	ADJ2	EXTRACTION VOL	EXCHANGE VOL	SOLVENTS SURROGATE ID
0/00/00	4/24/13	H3D160408-002 MOLPQ-1-AA	DR	88	7M	AIR	mL	NA	NA	NA	.0	.0
COMMENTS:												
0/00/00	4/26/13	H3D170404-001 MOL2H-1-AA	R	88	7M	AIR	mL	NA	NA	NA	.0	.0
COMMENTS:												
0/00/00	0/00/00	H3D170000-088 MOMCP-1-AAAB		88	7M	AIR	500mL 500.00mL	NA	NA	NA	.0	.0
COMMENTS:												
0/00/00	0/00/00	H3D170000-088 MOMCP-1-ACC		88	7M	AIR	100mL 100.00mL	NA	NA	NA	.0	.0
COMMENTS:												

R = RUSH C = CLP
E = EFA 600 D = EXP.DEL)
M = CLIENT REQ MS/MSD
4

Test America Knoxville GC/MS Volatiles

Lot ID: H3D160408
Matrix: Air
MethCod: 7M

Batch #: 10463
Can #: 1127

Method: EPA-2 TO-15

Parameter	Result	Reporting Limit	Units
1,1,1-Trichloroethane	ND	0.080	ppb (v/v)
1,1,2,2-Tetrachloroethane	ND	0.080	ppb (v/v)
1,1,2-Trichlorotrifluoroethane	ND	0.080	ppb (v/v)
1,1,2-Trichloroethane	ND	0.080	ppb (v/v)
1,1-Dichloroethane	ND	0.080	ppb (v/v)
1,1-Dichloroethene	ND	0.080	ppb (v/v)
1,2,4-Trichlorobenzene	ND	0.080	ppb (v/v)
1,2,4-Trimethylbenzene	ND	0.080	ppb (v/v)
1,2-Dibromoethane (EDB)	ND	0.080	ppb (v/v)
1,2-Dichlorobenzene	ND	0.080	ppb (v/v)
1,2-Dichloroethane	ND	0.080	ppb (v/v)
1,2-Dichloropropane	ND	0.080	ppb (v/v)
1,3,5-Trimethylbenzene	ND	0.080	ppb (v/v)
1,4-Dichlorobenzene	ND	0.080	ppb (v/v)
1,4-Dioxane	ND	0.20	ppb (v/v)
2-Butanone (MEK)	ND	0.32	ppb (v/v)
1,3-Dichlorobenzene	ND	0.080	ppb (v/v)
2,2,4-Trimethylpentane	ND	0.20	ppb (v/v)
Benzene	ND	0.080	ppb (v/v)
Benzyl chloride	ND	0.16	ppb (v/v)
Bromodichloromethane	ND	0.080	ppb (v/v)
Bromoform	ND	0.080	ppb (v/v)
Bromomethane	ND	0.080	ppb (v/v)
Carbon tetrachloride	ND	0.040	ppb (v/v)
Chlorobenzene	ND	0.080	ppb (v/v)
Chloroethane	ND	0.080	ppb (v/v)
Chloroform	ND	0.080	ppb (v/v)
Cyclohexane	ND	0.20	ppb (v/v)
Chloromethane	ND	0.20	ppb (v/v)
cis-1,2-Dichloroethene	ND	0.080	ppb (v/v)
cis-1,3-Dichloropropene	ND	0.080	ppb (v/v)
Dibromochloromethane	ND	0.080	ppb (v/v)
Dichlorodifluoromethane	ND	0.080	ppb (v/v)
Ethanol	ND	0.80	ppb (v/v)
Ethylbenzene	ND	0.080	ppb (v/v)
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.080	ppb (v/v)
n-Hexane	ND	0.20	ppb (v/v)
Hexachlorobutadiene	ND	0.080	ppb (v/v)
4-Methyl-2-pentanone (MIBK)	ND	0.20	ppb (v/v)

Test America Knoxville GC/MS Volatiles

Lot ID: H3D160408
Matrix: Air
MethCod: 7M

Batch #: 10463
Can #: 1127

Method: EPA-2 TO-15

Parameter	Result	Reporting Limit	Units
Methyl tert-butyl ether	ND	0.16	ppb (v/v)
Methylene chloride	ND	0.20	ppb (v/v)
Styrene	ND	0.080	ppb (v/v)
tert-Butyl alcohol	ND	0.32	ppb (v/v)
Tetrachloroethene	ND	0.080	ppb (v/v)
Toluene	ND	0.080	ppb (v/v)
m-Xylene & p-Xylene	ND	0.080	ppb (v/v)
o-Xylene	ND	0.080	ppb (v/v)
trans-1,2-Dichloroethene	ND	0.080	ppb (v/v)
trans-1,3-Dichloropropene	ND	0.080	ppb (v/v)
Trichloroethene	ND	0.040	ppb (v/v)
Trichlorofluoromethane	ND	0.080	ppb (v/v)
Vinyl chloride	ND	0.080	ppb (v/v)

Sample Receipt Documentation

TAL Knoxville
5815 Middlebrook Pike
Knoxville, TN 37921
phone 865-291-3000 fax 865-584-4315

H3D160408 Canister Samples Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

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

Client Contact Information		Project Manager: CHAD STANISZEWSKI		Sampled By: E. POPKEN (GES)		1 of 1 COCs	
Company: NYSDOC REGION 9		Phone: 716-851-7220 - NYSDOC					
Address: 270 NICHIGAN AVE		Site Contact: ERIC POPKEN (GES)					
City/State/Zip: BUFFALO, NY		TAL Contact: JAMIE MCKINNEY					
Phone: 716-851-7220							
FAX:							
Project Name: STANDARD PORTABLE - OPPOSITE Analysis Turnaround Time							
Site/location: MAYVILLE, NY		Standard (Specify) 10 BUSINESS DAY					
PO # SITE # C907030A		Rush (Specify)					
Sample Identification	Sample Date(s)	Time Start	Time Stop	Canister Vacuum in Field, "Hg (Start)	Canister Vacuum in Field, "Hg (Stop)	Flow Controller ID	Canister ID
SS	4/11-4/13/13	1230	1130	30	5	K464	6634
SS DUP	/	1230	1130	30	1	K167	1122
INDOOR	/	1241	1130	28	5	K434	1118
INDOOR DUP	/	1241	1130	30	6	K168	9345
OUTDOOR	↓	1303	1130	28	0	K095	1539
Sampled by: E. POPKEN (GES)		Temperature (Fahrenheit)					
		Interior	Ambient				
		Start	~50°F	~40°F			
		Stop	~50°F	~40°F			
		Pressure (inches of Hg)					
		Interior	Ambient				
		Start	~30" Hg	~30" Hg			
		Stop	~30" Hg	~30" Hg			
Special Instructions/QC Requirements & Comments: CATEGORY B (ASP) DELIVERABLE							
Canisters Shipped by:		Date/Time:		Canisters Received by:			
Samples Relinquished by: E. Popken		Date/Time: 4/12/13 14:50		Received by: TA BULLO			
Relinquished by:		Date/Time:		Received by: E. Popken			

TESTAMERICA KNOXVILLE SAMPLE RECEIPT/CONDITION UPON RECEIPT ANOMALY CHECKLIST

Lot Number: 43D160408

Review Items	Yes	No	NA	If No, what was the problem?	Comments/Actions Taken
1. Do sample container labels match COC? (IDs, Dates, Times)	<input checked="" type="checkbox"/>			<input type="checkbox"/> 1a Do not match COC <input type="checkbox"/> 1b Incomplete information <input type="checkbox"/> 1c Marking smeared <input type="checkbox"/> 1d Label torn <input type="checkbox"/> 1e No label <input type="checkbox"/> 1f COC not received <input type="checkbox"/> 1g Other:	<u>NA</u> <u>NA</u>
2. Is the cooler temperature within limits? (> freezing temp. of water to 6 °C, VOST: 10°C)			<input checked="" type="checkbox"/>	<input type="checkbox"/> 2a Temp Blank = _____ <input type="checkbox"/> 2b Cooler Temp = _____ <input type="checkbox"/> 2c Cooling initiated for recently collected samples, ice present. <input type="checkbox"/> 3a Sample preservative =	
3. Were samples received with correct chemical preservative (excluding Encore)?			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> 4a Not present <input type="checkbox"/> 4b Not intact <input type="checkbox"/> 4c Other:	
4. Were custody seals present/intact on cooler and/or containers?			<input checked="" type="checkbox"/>	<input type="checkbox"/> 5a Samples received-not on COC <input type="checkbox"/> 5b Samples not received-on COC <input type="checkbox"/> 6a Leaking <input type="checkbox"/> 6b Broken <input type="checkbox"/> 7a Headspace (VOA only) <input type="checkbox"/> 8a Improper container <input type="checkbox"/> 9a Could not be determined due to matrix interference <input type="checkbox"/> 10a Holding time expired <input type="checkbox"/> Incomplete information If no, was pH adjusted to pH 7 - 9 with sulfuric acid?	
5. Were all of the samples listed on the COC received?	<input checked="" type="checkbox"/>				
6. Were all of the sample containers received intact?	<input checked="" type="checkbox"/>				
7. Were VOA samples received without headspace?	<input checked="" type="checkbox"/>				
8. Were samples received in appropriate containers?	<input checked="" type="checkbox"/>				
9. Did you check for residual chlorine, if necessary?	<input checked="" type="checkbox"/>				
10. Were samples received within holding time?	<input checked="" type="checkbox"/>				
11. For rad samples, was sample activity info. provided?	<input checked="" type="checkbox"/>				
12. For 1613B water samples is pH<9?	<input checked="" type="checkbox"/>				
13. Are the shipping containers intact?	<input checked="" type="checkbox"/>			<input type="checkbox"/> 13a Leaking <input type="checkbox"/> 13b Other:	
14. Was COC relinquished? (Signed/Dated/Timed)	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/> 14a Not relinquished <input type="checkbox"/> 15a Incomplete information <input type="checkbox"/> 15a Incomplete information <input type="checkbox"/> 15a Incomplete information <input type="checkbox"/> 15a Incomplete information	
15. Are tests/parameters listed for each sample?	<input checked="" type="checkbox"/>				
16. Is the matrix of the samples noted?	<input checked="" type="checkbox"/>				
17. Is the date/time of sample collection noted?	<input checked="" type="checkbox"/>				
18. Is the client and project name/# identified?	<input checked="" type="checkbox"/>				
19. Was the sampler identified on the COC?	<input checked="" type="checkbox"/>				
Quote #: <u>91289</u> PM Instructions: _____					

Sample Receiving Associate: Ryan Danner Date: 4-15-13

QA026R23.doc, 022812

Test America - Knoxville ----- Air Canister Dilution Log

Lot Number: H3D160408

Initial Can Pressure										Subsequent Dilutions									
Analyst/Date	Carl or Tedlar bag prep Time	Baro ID	Sample ID	Can #	Pres. upon receipt (-in or + psig)	Adj. Initial Pres. (- in or + psig)	Analyst/Date	I / S	Baro ID	Initial Pres. Pi (in)	Final Pres. Pf (psig)	First InCan Final Pres. Pf (psig)	Second In-can Final Pres. Pf (psig)	Third InCan Final Pres. Pf (psig)	Serial Dilution Can #	Vol (mL)	Final Pres. Pf (psig)	Comments	
24/10/15	12:34	29.08	M0LPM	6634	-4.5													10463	
			M0LPQ	1122	0.0														
			M0LPT	1118	6.0														
			M0LPW	93145	4.7														
			M0LP1	1539	0.0														

APPENDIX B

Data Usability Summary Report

Vali-Data of WNY, LLC
1514 Davis Rd.
West Falls, NY 14170

Mayville
TestAmerica Laboratories # H3D160408
May 23, 2013
Sampling date: 4/12/2013

Prepared by

Jodi Zimmerman, B.S.
Vali-Data of WNY, LLC
1514 Davis Rd.
West Falls, NY 14170

Mayville
H3D160408

DELIVERABLES

This Data Usability Summary Report (DUSR) was prepared by evaluating the analytical data package for Groundwater and Environmental Services Inc., project in Mayville, TestAmerica Laboratories SDG ID #H3D160408, submitted to Vali-Data of WNY, LLC on May 1, 2013. This DUSR has been prepared in general compliance with NYSDEC Analytical Services Protocol (ASP) and USEPA National Functional Guidelines (NFG). The laboratory performed the analysis using Compendium of Methods for the Determination of Toxic Organic Compounds, Compendium Method TO-15, January 1999.

VOLATILE ORGANIC COMPOUND

The following items/criteria were reviewed for this report:

- Data Completeness
- Narrative and Data Reporting Forms
- Chain-of-Custody and Traffic Reports
- Holding Times
- Internal Standard (IS) Area Performance
- Method Blank
- Laboratory Control Samples
- MS/MSD
- Compound Quantitation
- Initial Calibration
- Continuing Calibration
- GC/MS Tuning
- Canister Certification Blanks

The items listed above were technically in compliance with the method and SOP criteria with the exceptions discussed in the text below. The data have been reviewed according to the procedures outlined above and qualified accordingly.

OVERALL EVALUATION OF DATA AND POTENTIAL USABILITY ISSUES

The data are acceptable for use, but are qualified below in Chain of Custody and Traffic Reports, Laboratory Control Samples and Continuing Calibration.

Ultra-high purity humidified nitrogen was used in place of 'zero-air'.
Interim criteria were utilized for Ethanol.

DATA COMPLETENESS

All criteria were met.

NARRATIVE AND DATA REPORTING FORMS

All criteria were met except TestAmerica did not include a MDL study, thus target analytes detected between the reporting limit and the lowest concentration in the initial calibration should be considered estimated.

CHAIN OF CUSTODY AND TRAFFIC REPORTS

All criteria were met except the final vacuum of samples, Outdoor and SS Dup, was 0 inches of Hg, thus the results for these samples must be qualified as estimated or undetected estimated.

HOLDING TIMES

All criteria were met.

INTERNAL STANDARD (IS)

All criteria were met.

METHOD BLANK

All criteria were met.

TRIP BLANKS

No trip blank was acquired.

FIELD DUPLICATE SAMPLE PRECISION

All criteria were met except Chloromethane, Carbon Tetrachloride and 4-Methyl-2-pentanone were detected in SS Dup but not SS. 2,2,4-Trimethylpentane and Tetrachloroethene were detected in SS but not SS Dup. 2,2,4-Trimethylpentane and o-Xylene were detected in Indoor Dup but not Indoor. Tetrachloroethene and Styrene were detected in Indoor but not Indoor Dup.

LABORATORY CONTROL SAMPLES

All criteria were met except the %Rec of 4-Methyl-2-pentanone was outside NFG QC limits, high in MOLOV1AC and should be qualified as estimated if detected in the associated samples. The %Rec of Bromoform was outside NFG QC limits, low in MOLOV1AC and should be qualified as estimated in the associated samples. The %Rec of 4-Methyl-2-pentanone and Carbon tetrachloride was outside NFG QC limits, high in MOMCP1AC and should be qualified as estimated if detected in the associated samples. The %Rec of Ethanol exceeded NFG QC limits for both laboratory control samples, but was within the laboratories alternate criteria.

MS/MSD

No MS/MSD was acquired.

COMPOUND QUANTITATION

All criteria were met.

INITIAL CALIBRATION

All criteria were met.

CONTINUING CALIBRATION

All criteria were met except the %D of 4-Methyl-2-pentanone, Bromoform and Hexachlorobutadiene were outside NFG QC limits in continuing calibration file #R041613 and should be qualified as estimated in the associated samples, blanks and spikes. The %D of 4-Methyl-2-pentanone and Carbon Tetrachloride were outside NFG QC limits in continuing calibration file #R041713 and should be qualified as estimated in the associated samples, blanks and spikes.

The %D of Ethanol exceeded NFG QC limits for both laboratory control samples, but was within the laboratories alternate criteria.

GC/MS TUNING

All criteria were met.

CANISTER CERTIFICATION BLANKS

All criteria were met.